Australian Air Publication 721.79
Volume 2, Part 2
Book 3

ROYAL AUSTRALIAN AIR FORCE

VAMPIRE MODIFICATIONS

(Nos 201 to 300)

ISSUED FOR THE INFORMATION AND GUIDANCE OF ALL CONCERNED,

BY COMMAND OF THE AIR BOARD,

Secretary,

DEPARTMENT OF AIR
CANBERRA A C T

SECRET

WARNING

1. Information contained herein is for official use only.

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ROYAL AUSTRALIAN AIR FORCE

SECRET

VAMPIRE MODIFICATIONS

Nos 201 to 300

AAP. No 7212-002-100-3

I GORDON JARVIS RANK FSGT.

Certify that I have carried out a check of effective pages contained in this publication. It is complete with the exceptions of the following ~~pages~~. MODIFICATION INSTRUCTIONS

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221				
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A.A.P. 721.79, Vol. 2, Pt. 2.
(Books 1, 2, 3, 4 and 5)

VAMPIRE MODIFICATIONS

INTRODUCTION

1. Vampire Modifications are now contained in 5 Books as follows:-

Book 1 - Modifications Nos. 1 to 100 inclusive.

Book 2 - Modifications Nos. 101 to 200 inclusive.

Book 3 - Modifications Nos. 201 to 300 inclusive.

Book 4 - Modifications Nos. 301 to 400 inclusive.

Book 5 - Modifications Nos. 401 and subsequent.

2. One series of amendments will cover the five Books and all amendments are to be recorded in the Amendment Certificate contained in Book 1.

3. The index to the complete set of Vampire Modifications is at the front of Book 1.

 VAMPIRE MODIFICATION NO. 201

Class 2.

MOUNTING BRACKET - V.H.F. CONTROLLER - REPOSITIONING

Reason for and Description of Modification

1. This modification authorizes the tilting of the mounting bracket for V.H.F. controller Y10L/246. This will maintain interchangeability of the two types of V.H.F. controller which are constructed of different materials and vary slightly in size, even though they are being issued under the one Ident No. It is essential that R.A.A.F. Vampire Modification 144 (D.H. Aust. Mod. No. V.660) be incorporated concurrently with or prior to this modification.

Application

2. This work is to be carried out on all Vampire Mk. 33 aircraft A79-801 to A79-836 inclusive, except A79-829 which is being modified during conversion to a Mk. 35 Vampire.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units, aircraft depots or civilian contractors responsible for servicing Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modifications

6. De Havilland (Aust.) Modification V.678 and Air Ministry Modification VAM.3357 are equivalent modifications.

Supply

7. The following parts are required for one complete modification set:-

Item	Ident No.	Part No.	Nomenclature	No.off Per Set	Stores Class
1.		Z15-669	Packing, V.H.F. Controller	1	
2.	H128F/64410	AS2227/405	Rivet, Snap Hd., Al. Alloy, 1/8" dia. x 5/16" long.	4	
3.	K3/321		Enamel, Cellulose, Black.	A.R.	

(Issued with A.L.63 - October, 1956)

Note:- Items 1 and 2 will be assembled into modification sets and retained at De Havilland Modification Centre. Units requiring sets are to demand from De Havilland Modification Centre.

Disposal of Parts Removed

8. No parts are rendered redundant by the incorporation of this modification.

Disposal of Parts in Stock

9. Not applicable.

When the Modification is to be Incorporated

10. This modification is to be modified as soon as practic[illegible], but not later than the next "D" Servicing after receipt of modificat[illegible] sets.

Method of Incorporation

11. (a) Man-hours Involved: Approximately five (5) man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs &c : No special tools or jigs are required.

(c) Sequence of Operations :

(i) Refer to Drawing No. A12693. Raise the gunsights to their operational position and disconnect the aircraft batteries. Release the attachments of the main instrument panel and lower the panel to th[illegible] full extent of its check cables to obtain access to the V.H.F. controller situated on the instrument panel support structure.

(ii) Disconnect the connector from the base of the controller and remove the controller from its mounting bracket, retain the stiffnuts and attachment bolts. Now carefully remove the four rivets securing the bracket to the support structure and remove the bracket from the aircraft.

(iii) Place packing, item 1, on base of mounting bracket and mark through the four 1/8 inch diameter rivet holes, separate items and drill four No. 30 (.128 inch diameter) holes through the packing, deburr all holes.

(iv) Referring to the drawing, mark out the area to be removed from the sides of the cut out for the Controller in the support structure. (This may be done from either above or below the support structure). Remove the areas and deburr. Now position the existing mounting bracket and packing, item 1, in the original position on the support structure and secure with the four 1/8 inch diameter rivets, item 2.

(v) Repair the finish locally using item 3.

(vi) Refit the V.H.F. controller to the mounting bracke and secure, using the existing bolts and stiffnuts Reconnect the connector to the base of the V.H.F. controller and reattach the instrument panel. Reconnect the aircraft batteries and lower the gunsights.

(d) Tests : Test the V.H.F. installation for correct functioning in accordance with current authorised procedure.

(e) Recording : Record the modification in the Airframe Log Book.

Drawings

12. Drawing A12693 is attached.

Effect on Weight and Balance

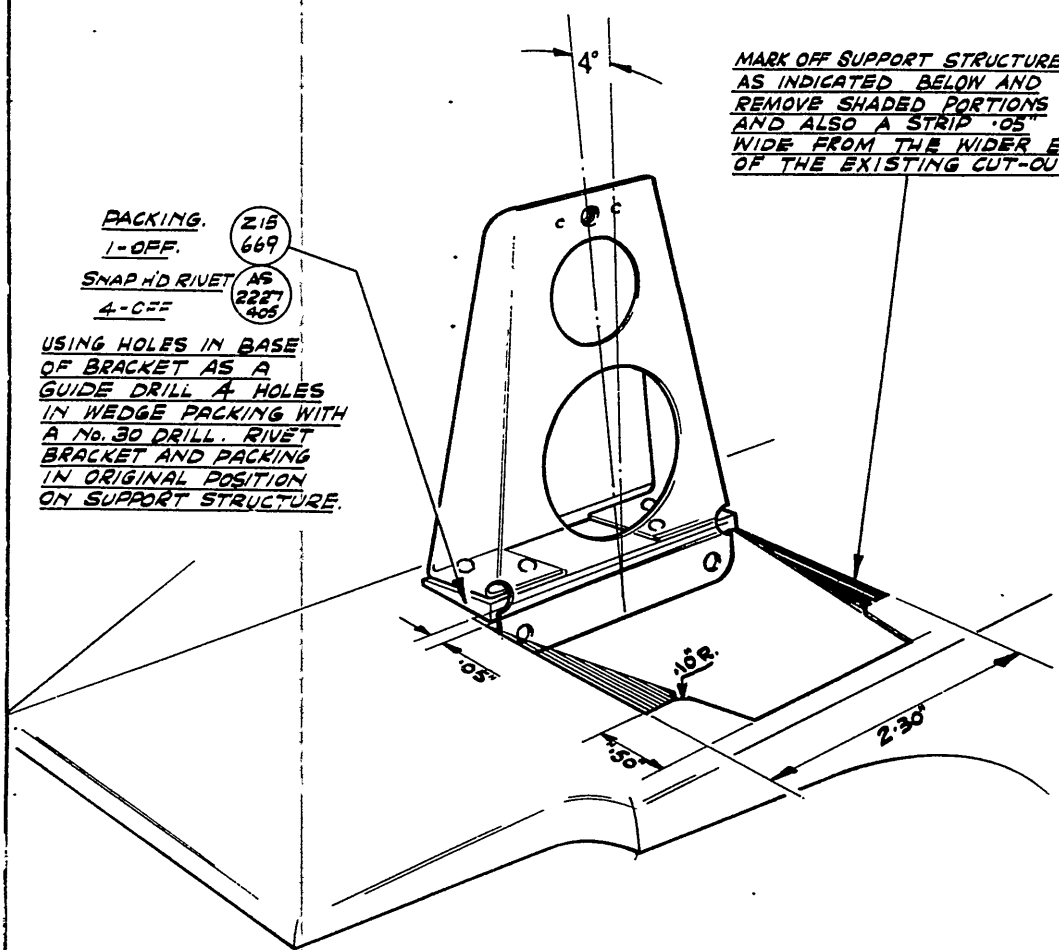
13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files Department of Air 9/84/16 and 150/8/9292

Attachment : Drawing A.12693.

Date of Issue : 1st October, 1956.

(Issued with A.L.63 - October, 1956)



DE HAVILLAND DRWG. No. 00M319. No. OF SHEETS. 1.

REFERENCE	ISSUED BY	TITLE	
	DIRECTORATE OF TECHNICAL SERVICES R.A.A.F.	MOUNTING BRACKET - V.H.F. CONTROLLER. -REPOSITIONING.	
LIMITS UNLESS STATED	MATERIAL	COMPONENT OF	COCKPIT
DECIMALS ± .010"	SPEC.	MACHINE	VAMPIRE MK.33
± ½°	TREATMENT	ENGINE	GOBLIN
		TECH. ORDER	VAMPIRE MOD. No 201
AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.T.E.	APPROVED DATE	DRAWING No	A12693

AAP 721:79, Vol 2, Pt 2. VAMPIRE MODIFICATION NO 204

Class 2

HIGH RATE DISCHARGE FIRE EXTINGUISHER SYSTEM - INTRODUCTION

Reason for and Description of Modification

1. The existing Mk 11 extinguisher and perforated distributor ring are unsuitable for use in aircraft where the extinguishant is discharged into a plenum chamber surrounding the engine. This modification introduces a single high rate discharge extinguisher and redesigned delivery piping to provide a more efficient fire extinguishing system in the engine bay.

NOTE:- Vampire Modification 227 (DH Aust Mod V702) is to be incorporated either prior to, or concurrently with this modification.

Application

2. This work is to be incorporated on all Mk 33 aircraft except A79-829, which was modified by the manufacturer as a trial installation.

Responsibility for Incorporation

3. This modification is to be incorporated by aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters, Maintenance Command:-

(a) All spare tail cones are to be modified in accordance with paras 11(c) Section (lx) to (lxiii) inclusive and when modified as well in accordance with Vampire Mod 227 (DH Aust Mod V702) and Vampire Mod 227 (DH Aust Mod V704), are to be re part numbered EC15-3AND Ident No A79/503799.

(b) Deliveries of spare Port Inner Flaps for Vampire, all marks, after March 1957 to be Part No WF15-1, Ident No A79/503878. The existing spare Port Inner Flaps Part No D001605A Ident No A79/500155 can be retained fur use on Vampire Fighters Mk 30, 31 aircraft, or modified in accordance with paras 11(c) Section (xvii) to (xx) inclusive and re numbered to Ident No A79/503878.

(c) All spare wings are to be modified in accordance with paras 11(c) Sections marked ✱ (e.g: ✱ (vi)) and as well as Vampire Mods to bring it up to Mk 35 standard.

(Issued with A.L.102 - June, 1958)

(d) The spare upper cowl support ring Part No L0055A Ident No A79/502163 can be modified as required for use on Mk 33 Post Mod V690 Vampire Trainers or Mk 35 in accordance with paras 11(c) Section (xiv) and re part numbered to 15EC-53A Ident No A79/503879.

Orders Superseded or Cancelled

5. This order supersedes Vampire Mod 229 (DH Aust Mod V710) and Vampire Mod 279.

Equivalent Modifications

6. De Havilland (Aust) Modification V 690 and Air Ministry Modification Vam 3287 are equivalent modifications.

Supply

7. The following list of parts are required to complete one Modification Set:-

Item No	Ident No	Part No	Nomenclature	No Off per Set	Stores Class
1	W21F/500060	20A-266	Extinghisher Fire Methyl Bromide Graviner Type 20A	1	A
2	J12D/1248	A216	Cartridge, Electric Operating No 1 Mk 1, 2 Pin		A
3	W21F/500061	17B/318	Bracket, Fire Extinguisher	1	A
4	A79/503865	C4370/1B	Clamp "King" 1" O Quick Release	2	C
5	A79/504169	DHS413/4	Washer Sealing	2	C
6	H28/8183	AGS.605/1	Clip	2	C
7	A79/503870	M15-61AND	Pipe Assembly Port Rear	1	C
8	A79/503872	M15-63AND	Pipe Assembly Starboard Rear	1	C
9		M15-67	Label	1	
10	A79/503867	M15-69	Fairlead	2	C
11		15M-169	Bracket Top Rear	1	
12		15M-171	Bracket Bottom Rear	1	

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
13	A79/503866	15M-175	Adapter Flanged Bulkhead	1	C
14	A79/503873	15M-177AND	Pipe Assembly Rear	1	C
15	A79/503871	15M-213AND	Pipe Assembly Starboard For'd	1	C
16	A79/503875	15M-231	Union Body Double Ended	4	C
17		15M-233	Plate Reinforcing	4	
18		15M-241AND	Tube Assembly	1	
19	A79/503868	15M-243	Hose Flexible Metal	2	C
20		15M-249ND	Washer	2	
21		15M-251	Bracket	1	
22	A79/503869	15M-255AND	Pipe Assembly Port For'd	1	C
23		15M-261ND	Washer	2	
24	A79/503876	15M-263A	"Y" Union	1	C
25	A79/503874	15M-265	Union Body Double Ended	1	C
26		15M-271A	Bracket For'd	2	
27		15M-285	Bracket	2	
28		W15-171	Stiffener Flap Shroud	1	
29		15W-185	Plate Blanking	1	
30		15W-187	Stiffner Angle	1	
31		15W-345	Dish Flanged	1	
32	G5X/129286	CZ27004	Socket Breeze Type CZ27004	1	A
33	G5X/3162	Z27973	Nut Coupling Breeze Type Z27973	1	
34	H28/12622	A25/3B	Bolt, HTS Hex Hd 4BA x .70" long	4	C
35	H28/12512	A25/1C	Bot, HTS Hex Hd 2BA x .55" long	14	C
36	H28/12513	A25/2C	Bolt, HTS, Hex Hd 2BA x .65" long	5	C
37	H28/12517	A25/17C	Bolt, HTS, Hex Hd 2BA x 2" .15 long	3	C

Item No	Ident No	Part No	Nomenclature	No off Per Set	Stores Class
38	H28/27024	AGS 2001/B1	Nut, MS Self Locking, Nyloc, 4BA	4	C
39	H28/27025	AGS2001/C1	Nut, MS Self Locking, Nyloc, 2BA	22	C
40	H28/676	AGS207/E/ (DHS514D)	Locknut Union, MS 5/8" BSP	4	C
41	H28/675	AGS207/D/ (DHS514D)	Locknut Union, MS 1/2" BSP	1	C
42	H28C/12252	SP13C	Washer, MS Thin, 2BA	20	C
43	H28C/12306	SP15B	Washer, AL Alloy, Thin, 4BA	4	C
44	H28C/12296	SP15C	Washer, AL Alloy, Thin, 2BA	4	C
45	H28C/12854	AGS1149/7	Washer, Pipe Coupling, Alum	4	C
46		AGS2050/ 413BS	Rivet, Pop, Monel, Domed Hd Break Stem .13" long	4	
46A	HB/26771/ 5x1356	cut Ferrule-Breeze/-Z 2272/2			
47	H128F/61682	AGS2050/ 419BS	Rivet, Pop, Monel, Domed Hd, Break Stem, .19" long	30	C
48	H128F/61685	AGS2050/ 429BS	Rivet, Pop, Monel, Domed Hd, Break Stem, .29" long	8	C
49	H128F/30257	AS2227/204	Rivet, Al Alloy Rd Hd, 1/16" dia x 1/4" long	4	C
50	H128F/66403	AS2227/304	Rivet, Al Alloy, Rd Hd 3/32" dia x 1/4" long	22	C
51	H128F/64409	AGS2227/404	Rivet, Al Alloy, Rd Hd, 1/8" dia x 1/4" long	2	C
52	H128F/64421	AS2227/504	Rivet, Al Alloy, Rd Hd 5/32" dia x 1/4" long	2	C
53	H128F/64432	AS2227/605	Rivet, Al Alloy, Rd Hd 3/16" dia x 5/16" long	2	C
54	H128F/64443	AS2230/303	Rivet, Al Alloy, C's'k Hd, 120°, 3/32" dia x 3/16" long	1	C
55	H128F/64444	AS2230/304	Rivet, Al Alloy, C's'k Hd, 120°, 3/32" dia x 1/4" long	2	C

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
56	H128F/64452	AS2230/404	Rivet, Al Alloy, C's'k Hd, 120°, 1/8" dia x 1/4" long	7	C
57	H128F/64459	AS2230/504	Rivet, Al Alloy C's'k Hd, 120° 5/32" dia x 1/4" long	1	C
58	H128F/63545	AS2230/604	Rivet, Al Alloy, C's'k Hd, 120°, 3/16" dia x 1/4" long	1	C
59	H28/140827	AS3181/10C	"P" Clip	4	C
60	H28/9620	AGS1142D	Olive	3	C
61	H28/8278	AGS1142E	Olive	5	C
62	A79/501670	DHS180/3/X	Tag, Chain	1	C
63	I1/9505		Wire, Locking, 20 SWG Soft Iron	As Reqd	C

NOTES:- (a) Items 1 to 62 inclusive will be delivered from De Havilland Aircraft Pty Ltd to De Havilland Modification Centre.

(b) Item 63 is to be drawn from unit stores. Units requiring modification sets are to demand from De Havilland Modification Centre.

Disposal of Parts Removed

8. The following parts will be rendered redundant upon incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
64	W21F/5613	753	Extinghisher, Fire Methyl Bromide Mk 11	1	A
65	G5C/4021	842/E	Socket, Resistance, Graviner Type 842/E	1	A

(Issued with A.L.102 - June, 1958)

Item No.	Ident No	Part No	Nomenclature	No off per Set	Stores Class
66	A79/503336	L00826A	Bracket, Mounting	1	A
67	A79/502921	L001132A	Hose	1	C
68	A79/502924	L003623AND	Pipe Assy	1	C
69	A79/502922	L003627AND	Pipe Assy	1	C
70	A79/502903	L003681AND	Pipe Assy	1	C
71	A79/503740	L003705AND	Pipe Assy	1	C
72	A79/503657	E15-5AND	Pipe Assy	1	C
73		L00179	Bracket	1	
74		L00397	Bracket, Rear Attachment LH	1	
75		L00398	Bracket, Rear Attachment RH	1	
76		L00638	Angle	1	
77		L00784	'T' Piece	1	
78		L001407ND	'P' Clip	1	
79		L003609	'P' Clip	8	
80		D00695	Stiffener, Flap Shroud	1	
81		13W-225ND	Plate, Blanking	1	
82		13W-227ND	Plate, Blanking	1	

NOTES:- (a) Items 64 and 65 are to be examined and, if serviceable, returned to store for use on other Vampire Mk 33 aircraft not incorporating this modification.

(b) Item 66 is to be examined to determine whether the junction box on the base of the bracket is marked L33, 428, or not marked at all. Brackets incorporating junction boxes which are unmarked, or marked 428, are to be placed on Board of Survey for disposal action in accordance with current authorized procedure. Brackets incorporating junction boxes marked L33 are to be corrected by Voucher action to W21F/5616, Bracket Type 2B and returned to No 2 Stores Depot.

NOTE:- Any markings such as 21F/372 which may be stamped on the brackets are to be obliterated with an 8 oz ball pein hammer.

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(c) Items 67 to 72 inclusive are to be examined and, if serviceable, returned to stores for use on Mk 33 aircraft. Pre Mod 204 (DH Aust Mod V690), this is to be done only on the first ten (10) aircraft to be modified and thereafter they are to be disposed of in accordance with current authorized procedure.

(d) Items 73 to 82 inclusive are obsolete and are to be disposed of in accordance with current authorized procedure.

Disposal of Parts in Stock

9. Any spare parts, listed in paragraph 8, are to be held until all Vampire Mk 33 aircraft have this modification incorporated.

When the Modification is to be Incorporated

10. The Modification is to be incorporated as soon as practicable, but not later than the next "E" servicing or when the aircraft is allotted for fitment of retrospective modifications.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 195 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, &c. : No special tools and jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Disconnect the aircraft accumulators.

(ii) Remove all engine cowls.

(iii) Remove the tail cone.

(iv) Remove the engine.

(v) Remove the port inner flap.

(vi) Disconnect and remove fire extinguisher bottle (Item 64) and mounting bracket (Item 66). Retain the distance tubes (3-off), for reassembly later.

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*(vii) Remove both halves of blanking plates (Items 81 and 82) over the lightening hole on the web of the port flap shroud.

(viii) Disconnect and remove pipe assemblies (Items 68 & 69) and hose (Item 67) and 'P' clip (Item 78).

(ix) Remove angle (Item 76) from engine and refit the bolt and nut assembly.

*(x) Remove front attachment bracket (L00396A) and retain for re-assembly later.

*(xi) Remove top and bottom rear attachment brackets (Items 74 and 75).

(xii) Disconnect the spray ring from the 'T' piece and 'P' clips (Item 79) 8 off from the diffuser casing, remove spray ring (Items 70, 71 and 72). Refit nuts to the studs.

(xiii) Remove 'T' piece (Item 77) from the bracket on the upper cowl support ring.

(xiv) Remove the bracket (Item 73) from the upper cowl support ring by chiselling off the tails of six rivets. Remove the two rivets from the flange of the support ring, leaving the holes redundant. Peen over the other four rivets.

"(xv) The Socket (Item 65) of the fire bottle cable assembly is to be removed and replaced with socket (Item 32), cut ferrule (Item 46A) and coupling nut (Item 33), and the cable assembly re-part numbered to 15N - 1611A".

*(xvi) Refer to DH Drawing Z15-1125 at Zone FG-10, 11, remove the flap shroud stiffener (Item 80), and replace with stiffener (Item 28) and rivets (Items 51 and 56) 2 off and 7 off respectively.

MODIFICATION TO FLAP - PORT INNER

Refer to DH Drawing Z15-1125 Zone AC-8, 11.

*(xvii) Remove mod plate and re-part number to WF15-1/V690 and assemble to position shown with 4 off rivets (Item 46).

*(xviii) Mark position of flanged dish (Item 31) and cut out.

(Issued with A.L.102 - June, 1958)

(xix) Cut away portion of rib to enable flanged dish (Item 31) to seat.

(xx) Assemble flanged dish (Item 31) with rivets (Items 47 and 54).

MODIFICATION TO FLAP SHROUD

Refer to DH drawing Z15-1125 Zone EG-6, 10.

(xxi) Drill out 2 - 3/32" dia rivets between the 2-2BA holes of the top and bottom rear attachment brackets (para 11(c) section (xi) refers).

(xxii) Csk 120° x .38" dia outboard face the bottom rear attachment bracket, and plug hole with rivet (Item 58).

(xxiii) Remove 2BA bolt and nut assembly for the top stay and temporarily secure angle stiffener (Item 30).

(xxiv) Drill 1 - No 11 (.191") dia hole from the top stay and former through the angle stiffener.

(xxv) Drill 8 - No 41 (.096") dia holes from the angle stiffener through the former and web of flap shroud. Drill 1 - No 21 (.159") dia hole from the web through the angle stiffener.

(xxvi) Remove angle stiffener and deburr all holes.

(xxvii) Assemble angle stiffener (Item 30) with 7 rivets (Item 50) - omitting the lower hole through angle stiffener and web of flap shroud - and with the existing 2BA bolt and nut assy (para 11(c) section (xxiv) refers).

(xxviii) The top 2BA hole of the front attachment bracket (para 11(c) section (x) refers) is redundant and to be plugged with rivet (Item 53).

(xxix) Temporarily secure - on port outboard face of flap shroud web - blanking plate (Item 29) picking up with 2 existing 2BA holes.

(xxx) Drill 6 No 11 (.191") dia holes coded ⊗
drill 6 No 41 (.096") dia holes coded ——— ◐
and 2 No 26 (.147") dia holes coded ◎
from the blanking plate through the web.

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*(xxxi) Drill 3 No 21 (.159") dia holes coded ✱ drill 5 No 41 (.096") dia holes coded ◐ Δ from the web through the blanking plate, drill 1 No 41 (.096") dia hole coded ▲+ from the web through the blanking plate then back spot onto the angle stiffener (Item 30).

*(xxxii) Scribe the 1" dia and the 1.12" dia holes from the blanking plate onto the web. Remove the blanking plate.

*(xxxiii) Cut-out holes just scribed.

*(xxxiv) Deburr all holes.

*(xxxv) Assemble blanking plate (Item 29) with 11-off rivets (Item 50) 2-off rivets (Item 55) csk blanking plate 120° x .19" dia, 2-off rivets (Item 52) 1-off rivet (Item 53) and 1-off rivet (Item 57) csk blanking plate 120° x.31" dia.

*(xxxvi) Locate label (Item 9) and drill 4-No 51 (.067") dia holes. Deburr holes and assemble label with 4 rivets (Item 49).

*(xxxvii) Assemble front attachment bracket (Para 11(c) section (x) refers) with bolt, nut and washers (Items 36, 39 and 44) 2-off each.

*(xxxviii) Assemble top (Item 11) and bottom (Item 12) rear attachment bracket with bolt, nut, washer (Items 35, 39 and 44) 2-off each and 4-off rivets (Item 50). Drill No 41 (.096") dia holes.

N.B. Prior to drilling and rivetting into position the top and bottom rear attachment brackets, offer up fire extinguisher mounting bracket (Item 3) to ensure that the brackets are correctly aligned.

MODIFICATION TO FRONT RIB POSTS - PORT & STBD
(Part No LO0375-6A)

Refer to DH Drawing Z15-1125 Zone B2, 3 and drawing ~~0375~~ A 12969 Sheet 3.

(Issued with A.L.102 - June, 1958)

*(xxxix) Remove flanged portion of eliptical hole on the port rib post as shown on drawing OOM347 Sheet 3.

*(xl) Assemble 2-off reinforcing plates (Item 17) with 4-off rivets (Item 48) drill No 30 (.128") dia to each port and starboard rib post.

MODIFICATION TO RIB STIFFENER - PORT AND STBD
(Part No LO0353-4)

Refer to DH Drawing Z15-1125 Zone B, C, 1.

*(xli) Drill 2-No 11 (.191") dia holes as shown to port and starboard rib stiffeners.

*(xlii) Assemble bracket (Item 26) to Port and Stbd rib stiffeners with bolt, nut and washer (Items 35, 39 and 42).

*(xliii) Assemble flanged bulkhead connection (Item 13) to the web of the flap shroud as shown on DH drawing Z15-1125 Zone C6 with bolt, nut and washer (Items 36, 39 and 42) 3-off each, and tag (Item 62) 1-off.

*(xliv) Run fire bottle cable assembly (para 11(c) section (xv) refers) through the hole adjacent to the flanged bulkhead connection (Item 13).

*(xlv) Assemble fairlead (Item 10) 2-off either side of cable assembly, and drill 2-No 26 (.147") dia hole from the fairlead through the blanking plate and web. Assemble fairleads with bolt, nut and washer (Items 34, 38 and 43) 4-off each.

*(xlvi) Assemble fire bottle mounting bracket (Item 3) with bolt, nut and washer (Items 37, 39 and 42) 3-off each and using existing distance tubes (para 11(c) section (vi) refers) 3-off.

(xlvii) Offer up and temporarily secure fire bottle (Item 1) and cartridge (Item 2) to the mounting bracket.

*(xlviii) Connect rear pipe assembly (Item 14) to the fire bottle and flanged bulkhead connection, with quick release clamp (Item 4) and sealing ring (Item 5) 2-off each.

(Issued with A.L.102 - June, 1958)

(xlix) Connect the fire bottle cable assembly (para 11(c) section (xv) refers) to the fire bottle.

(l) Locate the fire bottle to its correct position (see Important Note at Zone D4-11 on drawing Z15-1125).

*(li) Assemble 'Y' union (Item 24) to the flanged bulkhead connection.

*(lii) Assemble union body to port and starboard rib stiffeners (para 11(c) Section (xlii) and (xliii) refers) as follows:-

To the port stiffener, union body (Item 25) 1-off, locknut (Item 41) 1-off and washer (Item 23) 2-off. To the starboard rib stiffener, union body (Item 16) 1-off, locknut (Item 40) 1-off and washer (Item 20) 2-off.

*(liii) Wire lock, locknuts (Items 40 and 41) to rib stiffener.

*(liv) Assemble port (Item 22) and starboard (Item 15) forward pipe assemblies with clips (Item 6) 2-off and nipple-olive (Item 60) port and (Item 61) starboard 1-off each.

*(lv) Remove the flame switch bracket (as shown on DH drawing Z15-1125 Zone B4) then assemble port rear pipe assembly (Item 7) with nipple-olive (Item 60) 2-off. Check clearance between pipe and pulley block, and pipe and flame switch bracket - see note at Zone B3 on DH Drawing Z15-1125.

*(lvi) Check tighten nut on 'Y' union and wire lock to tag (Item 62).

*(lvii) Assemble bracket (Item 21) (Refer to DH Drawing Z15-1125 Zone CD-12, 13), firstly opening out existing tooling hole with No 11 (.191") dia drill and locating on this hole drill top stay from bracket. Assemble with bolt, nut and washer (Items 36, 39 and 42) 2-off each.

(Issued with A.L.102 - June, 1958)

*(lviii) Assemble union body (Item 16) 1-off to bracket (Item 21) with locknut (Item 40) 1-off. Wire lock, lock nut to bracket.

*(lix) Assemble starboard rear pipe assembly (Item 8) with nipple-olive (Item 61) 2-off.

MODIFICATION TO TAIL CONE

*(lx) Reposition breeze plug as shown on leaflet drawing No ~~[illegible]~~ A12969 Sheet No 1.

*(lxi) Drill 8-No 11 (.191") dia holes on front bulkhead of cone as shown on leaflet drawing No ~~[illegible]~~ A12969 Sheet 1 & 2 and assemble bracket (Item 27) 2-off with bolts, nuts and washers (Items 35, 39 and 42) 4-off each.

*(lxii) Assemble union body (Item 16) 2-off with washer (Item 45) 4-off and locknut (Item 40) 2-off to bracket (Item 27).

*(lxiii) Assemble tube assembly (Item 18) with nipple (Item 61) 2-off and secure tube assembly with 'P' clips (Item 59) 4-off and bolts, nut and washer (Items 35, 39 and 42) 4-off each.

(lxiv) Refit port inner flap.

(lxv) Refit engine.

(lxvi) Refit tail cone.

(lxvii) Connect flex-metal hose (Item 19) 2-off to the union bodies on the cone onto the union body on the starboard rib and the 'Y' union on the port rib. Ensure that it takes a normal run without kinks or sharp bends.

(lxviii) Refit all engine cowls.

(lxix) Reconnect the aircraft accumulators.

(d) Tests : Not applicable.

(e) Recording : Record this modification in the Airframe Log Book and on the Wing Mod plate.

(Issued with A.L.102 - June, 1958)

Drawings

12. Drawing A12969 consisting of three sheets are attached herewith. DH (Aust) drawing Z15-1125 (Issue 2) may be obtained upon demand from De Havilland Aircraft Pty Ltd, Bankstown, N.S.W.

Effect on Weight and Balance of the Aircraft

13. The effect of this modification on weight and balance is negligible.

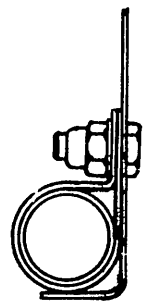
References: Files, Department of Air, 84/1/442 Pt II, 9/84/114 and 150/8/1199.

Attachments: Drawings A12969/1, -/2 and -/3.

Date of Issue: 20th June, 1958.

(Issued with A.L.102 - June, 1958)

(59) DENOTES ITEM NOS.



VIEW ON A-A

SEE DETAIL 'X' ON SHEET 2

LOCKNUT (REF)

15M243 FLEX HOSE (REF)

FOR CONTINUATION REFER TO D.H. DRG. 215-1125

℄ REAR CONE

VIEW LOOKING AFT ON FWD BULKHEAD OF REAR CONE

(59)	AS 3181 10C	P CLIP	4 OFF
(38)	A2S 1-C	2 BA BOLT	4 OFF
(39)	AGS 2001 C1	2 BA NUT	4 OFF
(42)	SP 13 C	WASHER	4 OFF

NOTE! CLIPPING IS SYMETRICAL ABOUT CENTRE LINE

SEE DETAIL 'Y' ON SHEET 2

LOCKNUT (REF)

UNION BODY 2 OFF	15M 231	(16)	
WASHER 4 OFF	AGS 1149 7	(43)	
LOCK NUT 2 OFF	AGS 207 E/ DHS 514D	(40)	
PIPE ASSY 1 OFF	15M 241 AND	(18)	
OLIVE 2 OFF	AGS 1142 E	(61)	

REPOSITION BREEZE PLUG LEAVE HOLE REDUNDANT

.72 sq.

NEW POSITION OF BREEZE PLUG 0·8" DIA CLEAR HOLE & 4 No 32 DRILL HOLES

2·5"

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D.I.L.	INITIALS	APPROVED

REFERENCE

ISSUED BY

LIMITS UNLESS STATED — MATERIAL

DECIMALS ± .010" — SPEC.

FRACTIONS ± 1/32" — TREATMENT

ANGLES ± 1° — FINISH

SURFACE FINISH

AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.21

SCALE

DRAWN B.J.G.

TRACED

APPROVED

CHECKED

TITLE: INSTALLATION OF FIRE EXTINGUISHER ON REAR CONE

COMPONENT OF: SAFETY EQUIPMENT

MACHINE: VAMPIRE MK 33

ENGINE: GOBLIN

TECH. ORDER: VAMPIRE MOD NO 204

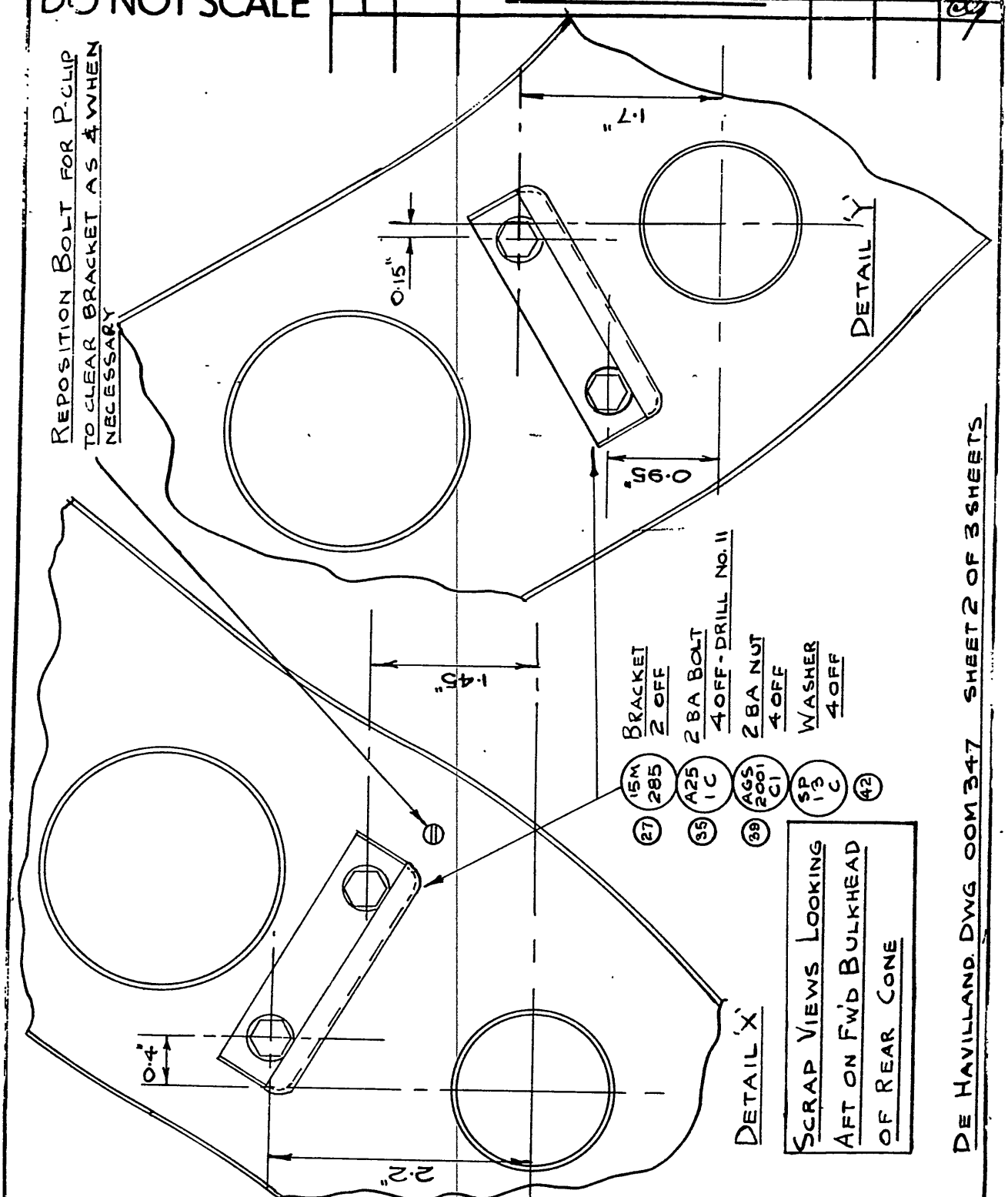
DRAWING NO. A12969/1

BRWG. SIZE A

DE HAVILLAND DWG NO OOM 347 SHEET 1 OF 3 SHEETS

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. T. L	INITIALS	APPROVED



DE HAVILLAND DWG 00M 347 SHEET 2 OF 3 SHEETS

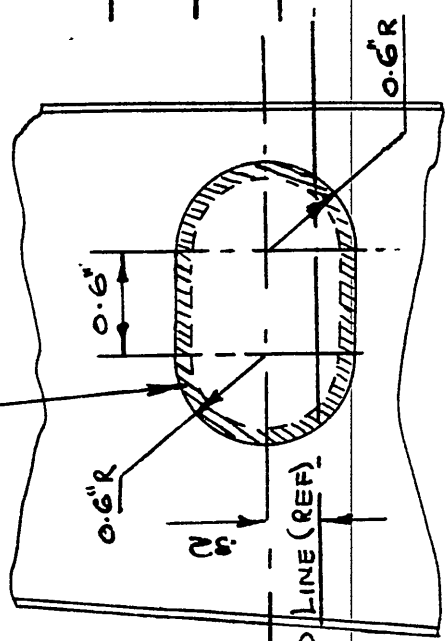
REFERENCE	ISSUED BY	TITLE
		INSTALLATION OF FIRE EXTINGUISHER MOUNTING BRACKETS ON REAR CONE

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	SAFETY EQUIPMENT
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 33
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN
ANGLES	± 1°	FINISH		TECH. ORDER	VAMPIRE MOD. NO 204
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.CZ.		SCALE		DRAWING NO.	A 12969/2
		DRAWN	B.J.G.	APPROVED	DRWG. A SIZE
		TRACED		CHECKED	

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. L. L.	INITIALS	APPROVED
					CG

HATCHED SECTION REMOVED



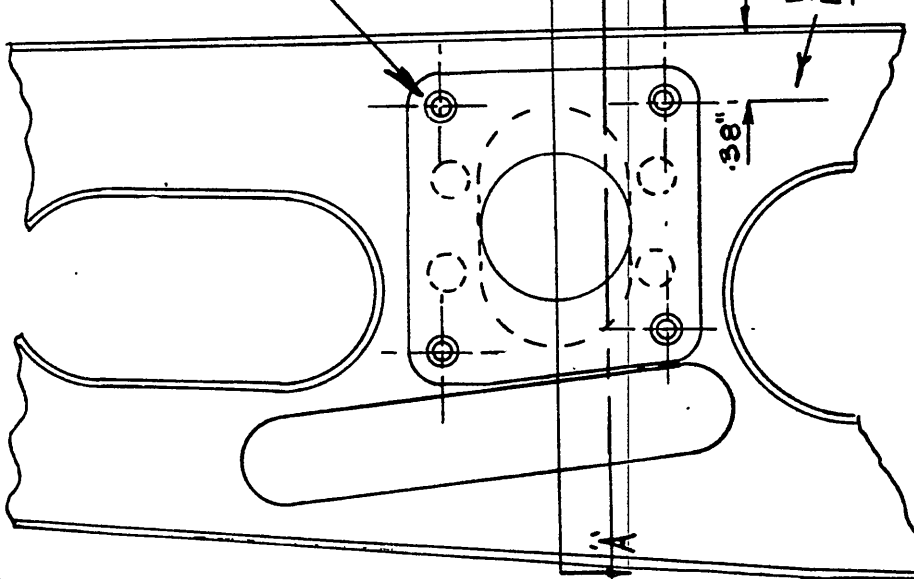
SCRAP VIEW SHOWING CUT OUT FOR LOO-376A-RH

REINFORCING PLATE 2 OFF-PER RIB POST
TUCKER POP RIVET 4 OFF PER RIB POST

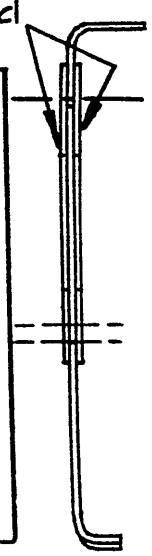
(17) 15M 233
(48) AGS 2-50 1-65

.8" WING CHORD LINE (REF)

LOO 375A LH (REF)
LOO 376A RH (REF)



REINFORCING PLATES (REF)



VIEW LOOKING FWD ON LEFT HAND RIB POST

SECTION A-A

DE HAVILLAND DWG 00M347 SHEET 3 OF 3 SHEETS

REFERENCE	ISSUED BY

TITLE: MODIFICATION TO RIB POSTS FOR H.R.D. FIRE EXTINGUISHER

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	SAFETY EQUIPMENT
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 33
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD. 204
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.(Z)1		SCALE		DRAWING NO.	A 12969/3
		DRAWN	BJG.	APPROVED	DRWG. A SIZE
		TRACED		CHECKED	

AAP 721:79, Vol 2, Pt 2 VAMPIRE MODIFICATION NO 211

Class 2

MK 16 OXYGEN REGULATORS AND AUTOMATIC LINE VALVE

INTRODUCTION

Reason for and Description of Modification

1. This modification authorizes the introduction of Mk 16B and Mk 16C Oxygen Regulators and an automatic line valve in order to provide additional safety features. The line valve will turn the oxygen "ON" at 8000 feet if the pilot omits to operate the switch, and the regulators will automatically switch to "HIGH" flow at 30,000 feet.

The following modifications are to be incorporated either prior to, or concurrently with this order:-

RAAF Order	DH Mod	Title
140	V 641	To introduce an Improved Type Canopy.
161	V 642	To introduce a Martin-Baker Mk 3B Ejection Seat.
235	V 711	High pressure Connection between Port and Starboard Oxygen Regulators.

Application

2. This work is to be carried out on all Vampire Trainer Mk 33 aircraft except A79-829, which was modified by the manufacturer as a Trial Installation.

Responsibility for Incorporation

3. This modification is to be incorporated by aircraft depots or the civilian contractor reponsible for the repair or Vampire aircraft. The trade musterings responsible are instrument, airframe and armament fitters.

Action in Respect of Spares

4. No action required.

Orders Superseded or Cancelled

5. This order supersedes Vampire Mod 147 (DH Aust Mod V 665) and partly supersedes Vampire Mod 235 (DH Aust Mod V 711).

(Issued with A.L. 106 - August, 1958)

Equivalent Modifications

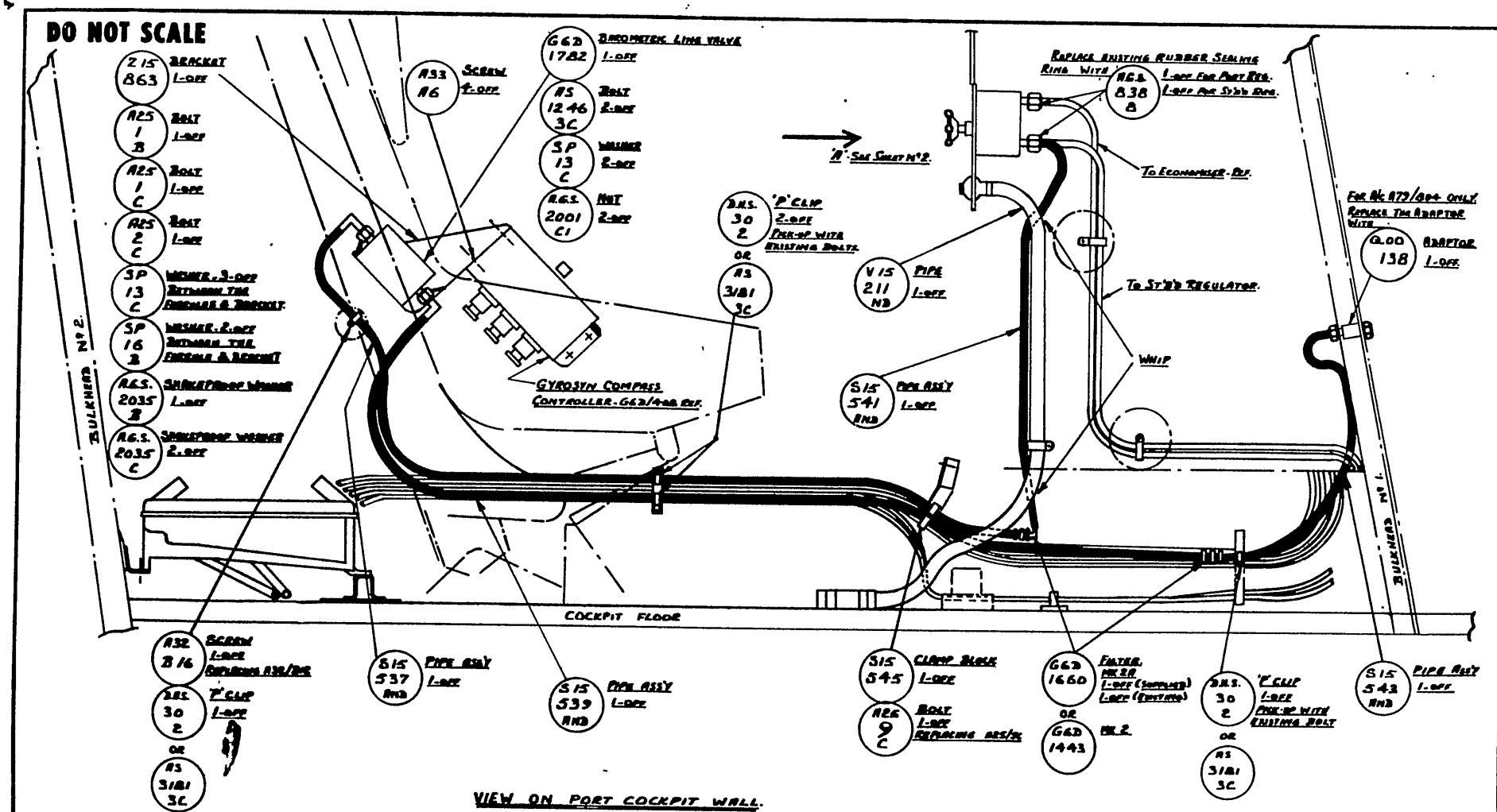
6. De Havilland (Aust) Mod V 697 is the equivalent modification.

Supply

7. The following list of parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1.	G6D/1588		Regulator, Oxygen Mk 16B	1	A
2.	G6D/1589		Regulator, Oxygen Mk 16C	1	A
3.	G6D/1660 or G6D/1443		Filter, Mk 2A) Filter, Mk 2)	1	A
4.	G6D/1782		Valve, Barometric Line	1	A
5.		F15-485A	Bracket, Regulator, LH	1	
6.		F15-493A	Bracket, Regulator, RH	1	
7.		S15-537AND	Pipe Assembly	1	
8.		S15-539AND	" "	1	
9.		S15-541AND	" "	1	
10.		S15-543AND	" "	1	
11.	A79/504066	S15-949	Clamp Block	1	C
12.		V15-211ND	Pipe, Cold Air	1	
13.		Z15-863	Bracket, Barometric Line Valve, Mounting	1	
14.	H28/26099 or H28/14077	DHS.30/2 AS3181/3C	Clip, Pipe, 3/16" i/d x 22 SWG) Clip, Pipe, 2BA x 3/16" i/d)	4	C
15.	H28/26078	DHS103 Mk II	Ferrule, Brass, Hex Hd 2BA	1	C
16.	A79/501670	DHS180/3/X	Tag, Chain	1	C
17.	H28/12528	A25/1B	Bolt, HTS, Hex Hd 4BA x .5" long	1	C
18.	H28/12512	A25/1C	Bolt, HTS, Hex Hd 2BA x .55" long	1	C
19.	H28/12513	A25/2C	Bolt, HTS, Hex Hd 2BA x .65" long	1	C

(Issued with A.L. 106 - August, 1958)



De Havilland Drawing N° DOM 356 Sheet N° 1 of 3 Sheets.

ISSUE NO.	DATE	ALTERATION	D.I.L.	INITIALS	APPROVED
1					

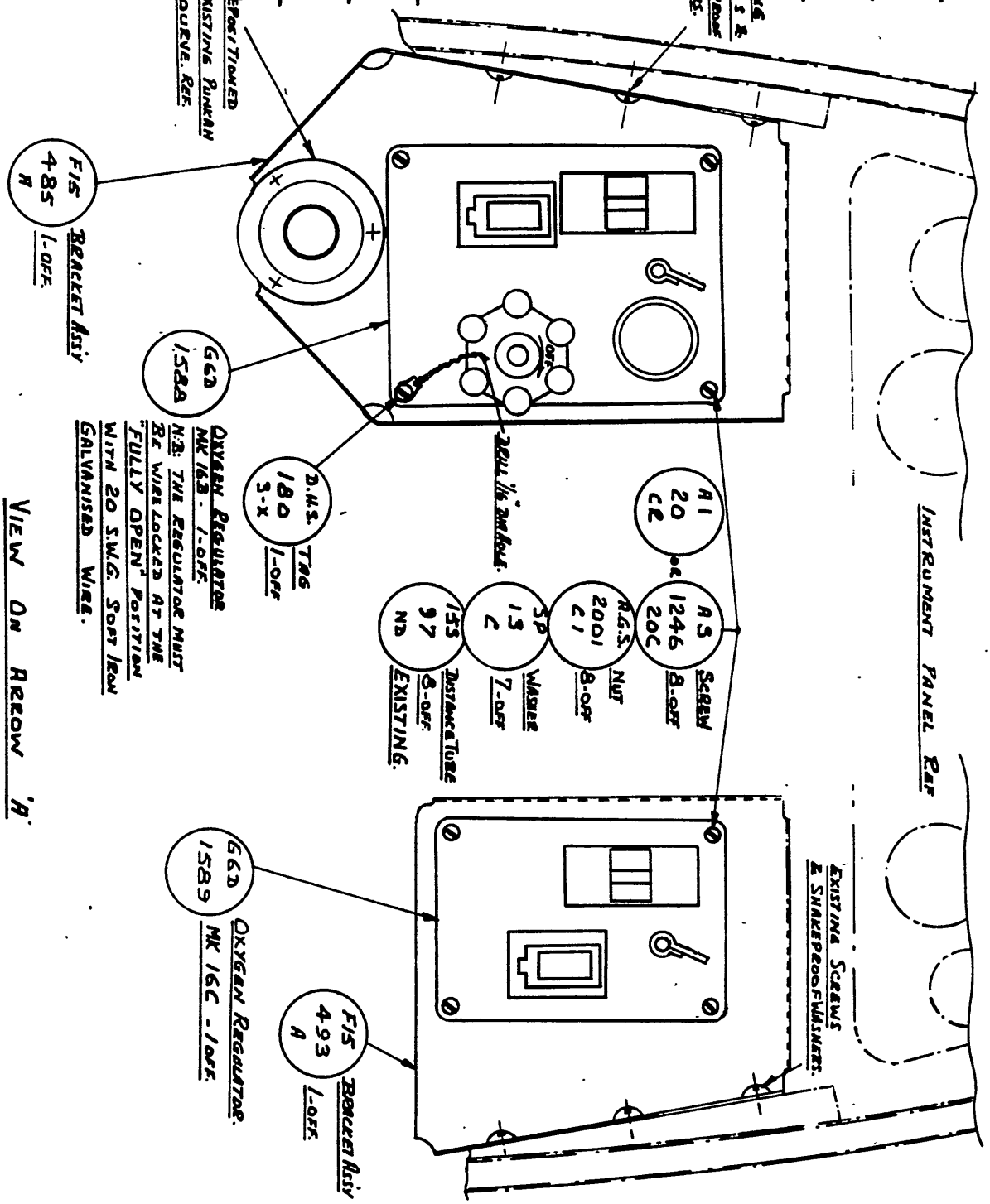
REFERENCE		ISSUED BY	
		DEPARTMENT OF AIR DIRECTOR GENERAL OF ENGINEERING	
UNLESS STATED		MATERIAL	
DECIMALS	± .010"	SPEC.	
FRACTIONS	± 1/64"	TREATMENT	
ANGLES	± 1°	FINISH	
SURFACE FINISH AUSTRALIAN STANDARD		SCALE	
		DRAWN	APPROVED
		TRACED	CHECKED

TITLE: INSTALLATION OF MK 1 & 2 & MK 1 & C OXYGEN REGULATORS & BAROMETRIC LINK VALVE

COMPONENT OF	
MACHINE	
ENGINE	
TECH. ORDER	MOD. NO. 211
DRAWING NO.	A 12894 SHEET 1.
SIZE	B

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L.	INITIALS	APPROVED



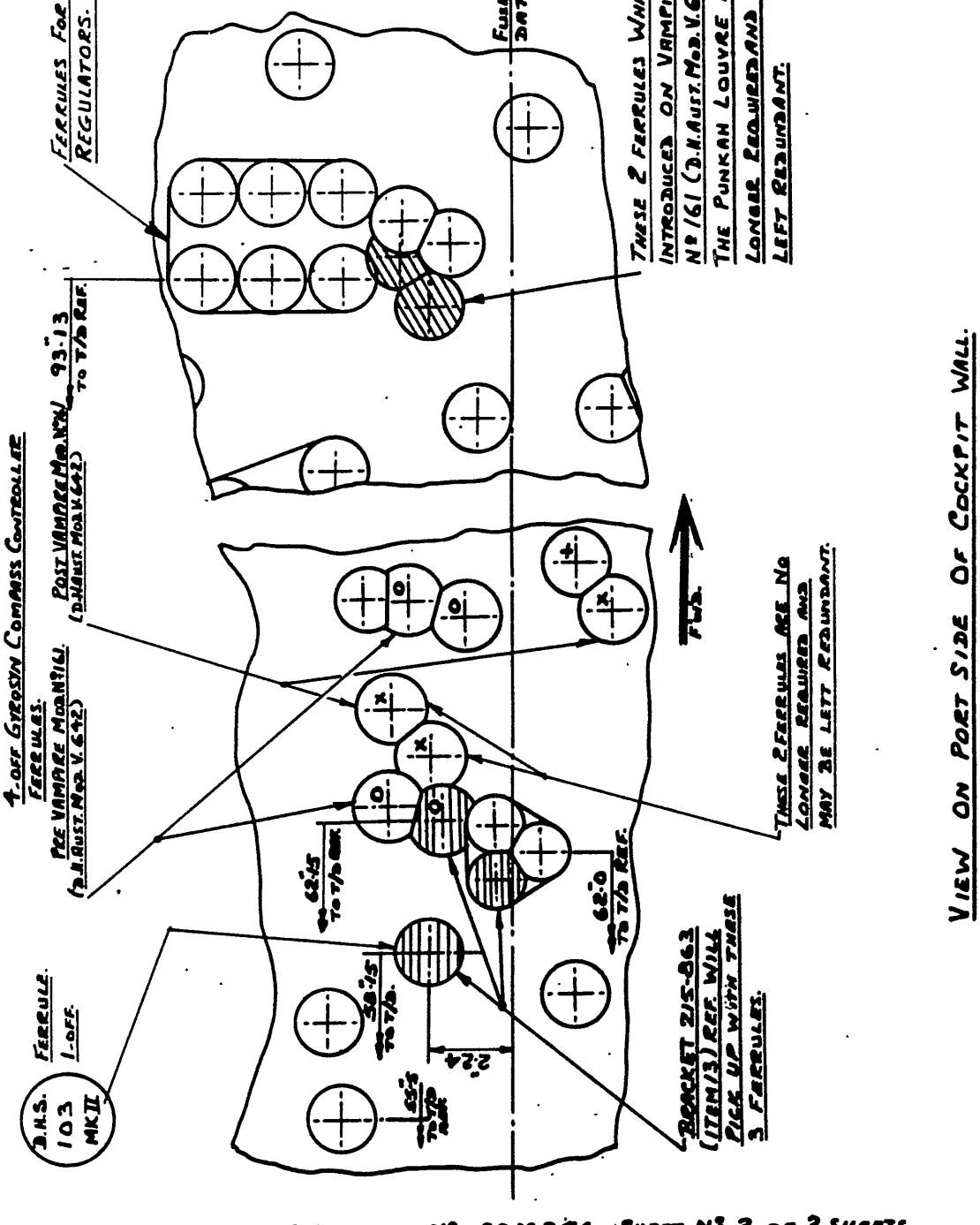
D. HAVILLAND DRAWING N° OOM 356 SHEET N° 2 OF 3 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTOR GENERAL OF ENGINEERING	ASSEMBLY OF OXYGEN REGULATORS & MOUNTING BRACKETS.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MARK 55
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN
ANGLES	± ½°	FINISH		TECH. ORDER	
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.CZI		SCALE		DRAWING NO.	A 12894 SHEET 2
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L.	INITIALS	APPROVED



DE HAVILLAND DRAWING Nº 00M356 SHEET Nº 3 OF 3 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTOR GENERAL OF ENGINEERING	ADDITION OF FERRULE IN COCKPIT.

LIMITS UNLESS STATED		MATERIAL				COMPONENT OF	
DECIMALS	± .010"	SPEC.				MACHINE	
FRACTIONS	± 1/32"	TREATMENT				ENGINE	
ANGLES	± ½°	FINISH				TECH. ORDER	
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.(E)1		SCALE				DRAWING NO.	A12694 SHEET 8
		DRAWN		APPROVED			DRWG. A SIZE
		TRACED		CHECKED			

Class 4

FLEXIBLE JOINT - FUEL FEED LINE - INTRODUCTION

Reason for and Description of Modification

1. This modification authorizes the introduction of a flexible fuel joint to the fuel feed lines, that run from the port and starboard No. 1 wing tanks, at the rear of rib 1, past the lower cowl supporting ring, to elbows on the fireproof bulkhead. Difficulty has been experienced when it became necessary to replace, on the aircraft, either a port, or starboard pipe in one length. This modification now allows the fitting of the pipe line in two separate lengths, joined by a rubber hose connection.

Application

2. This work is to be carried out on all Vampire Mk.33 aircraft, Serial Nos. A79-801 to A79-836 inclusive, only when replacement of the fuel feed lines is necessary. Either the new pipes Part No. P15.27AND, Ident No. A79/503756 for the forward portion and Part No. P.15.29AND, Ident No. A79/503757 for the aft portion, starboard side or Part No. P.15.23AND, Ident No. A79/503758 for the forward portion and Part No. P15.25AND, Ident No. A79/503759 for the aft portion port side, may be used or alternatively the old pipes Part No. P0036;5AND, Ident No. A79/503134 starboard side, and Part No. P003611AND, Ident No. A79/503133 port side, may be reworked (if they will not fit) in accordance with paragraphs 11.c.(iv) to (vi).

Responsibility for Incorporation

3. This modification is to be incorporated by operating units, aircraft depots or civilian contractors responsible for servicing Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. Part No. P003611AND, Ident No. A79/503133, are to be modified if necessary and when required, in accordance with paragraphs 11.c.(iv) to (vi) inclusive.

Part No. P003615AND, Ident No. A79/503134, are to be modified if necessary and when required, in accordance with paragraphs 11.c.(iv) to (vi) inclusive.

(Issued with A.L.52 - August, 1956)

Class 4

Future spare pipes will be supplied in two pieces. Part No. P003615AND, Ident No. A79/503134, will be superseded by Part No. P15.27AND, Ident No. A79/503756 for the forward portion, and P15.29AND, Ident No. A79/503757 for the aft portion.. Part No. P002611AND, Ident No. A79/503133 will be superseded by Part No. P15.23AND, Ident No. A79/503758 for the forward portion, and Part No. P15.25AND, Ident No. A79/503759 for the aft portion. AL 70.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modifications

6. De Havilland (Aust.) Mod.V.687 is an equivalent modification.

Supply

7. The following parts are required for one complete modification set:-

Item	Ident No.	Part No.	Nomenclature	No. off per set	St. Cl.
1.	A79/503756	P15.27AND	Pipe, Fuel, forward portion, Stbd.	1	
2.	A79/503757	P15.29AND	Pipe, Fuel aft portion, Stbd.	1	
3.	A79/503758	P15.23AND	Pipe, Fuel, forward portion, Port	1	
4.	A79/503759	P15.25AND	Pipe, Fuel, aft portion, Port	1	
5.	A79/503760	DAS.502/16/4.25	Hose, Coupling, Flame-proof, Dunlop. 1" i/d x 4.25" long	2	
6.	H28/8184	AGS.605/2	Clip, Jubilee	4	
7.	H28/27247	DHS.209/5	Guard, Hose Clip	8	
8.			* Pipe, Fuel, forward portion, Stbd.	1	

(Issued with A.L.52 - August, 1956)

Item	Ident No.	Part No.	Nomenclature	No. off per set	St. Cl.
9.			* Pipe, Fuel, aft portion, Stbd.	1	
	* Made from Fuel Feed Pipe Part No. P003615AND.				
10.			∅ Pipe, Fuel, forward portion, Port.	1	
11.			∅ Pipe, Fuel, aft portion, Port.	1	
	∅ Made from Fuel Feed Pipe Part No. P003611AND.				

Note:- Items 1 to 7 inclusive are to be drawn from unit stores. Items 8 to 11 inclusive may be used as substitutes for items 1 to 4. They are to be cut from pipes marked * and ∅, if these pipes are difficult to fit to the aircraft in one length.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification.

Item	Ident No.	Part No.	Nomenclature	No. off per set	St. Cl.
12.	A79/503134	P003615AND	Pipe Assembly, Fuel Transfer, Stbd.	1	
13.	A79/503133	P003611AND	Pipe Assembly, Fuel Transfer, Port.	1	

Note:- Items 12 and 13 only become redundant when it is necessary to remove them from the aircraft, because of damage or wear which makes them unserviceable. In such case, the items will be disposed of in accordance with current authorized procedure.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. This modification is only to be incorporated when it is necessary to replace fuel feed lines in the aircraft.

(Issued with A.L.52 - August, 1956)

Method of Incorporation

11. (a) Man-hours Involved : Approximately 20 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs &c : No special tools are required.

(c) Sequence of Operations :

Notes:- (1) The following operations are common to both port and starboard fuel pipes. Provided that items 1 and 2 are substituted for items 3 and 4, and also if applicable, items 8 and 9 for items 10 and 11.

(2) It is assumed that fuel tanks have been drained and redundant pipes removed from the aircraft. New fuel pipes items 1 to 4 inclusive are in two pieces and are to be fitted to aircraft in accordance with paragraphs (i) to (iii) inclusive. Items 8 to 11 inclusive can be used in place of items 1 to 4. If the pipe lines which are in one length are difficult to fit to the aircraft, rework them as in paragraph (iv) to (vi) inclusive.

(i) Refer to A.A.P. 702.1 A.E.I.G.s, Part 6, Instruction No. 5. Place the hose coupling, item 5, jubilee clips item 6 and hose clip guards, item 7, in position on the two port fuel transfer pipes items 3 and 4. Ensure that pipe item 3 is fitted so as to be in the forward position and pipe, item 4, in the aft position.

(ii) Fit the pipes to the connection at the aft end of No. 1 rib and at the elbow on the fireproof bulkhead. When the pipes are secured, position the hose clip guards under the jubilee clips and tighten the clips with a screwdriver.

(Issued with A.L.52 - August, 1956)

Ensure that clips have a secure hold on the pipes through the rubber hose connection.

(iii) Refill the fuel tanks.

(iv) Refer to A.A.P. 702.1 A.E.I.Gs Part 6, Instruction No. 5. If fuel feed pipes Part No. P003615AND, Ident No.A79/503134 Starboard or Part No. P0036-11AND, Ident No. A79/503133 are to be placed in the aircraft and they are found difficult to fit, refer to attached drawing, cut the pipe, clean with file, and remove the filings, bell to suit.

AL70.

(v) Attach the aft and forward ends of the pipe, items 10 and 11, to the connections on the aircraft and observe if the cut ends line up. If they do not line up to within approximately 1/8 inch, rework the pipes by bending or shortening until satisfactory.

(vi) Remove the two pipes and attach the hose connection, item 5, jubilee clip, item 6, and clip hose guard, item 7. Attach the pipes to the aircraft at the aft end of rib 1, and at the elbow on the fireproof bulkhead. When the pipes are secured, position the hose clip guards under the jubilee clips and tighten the clips with a screwdriver. Ensure that the clips have a secure hold on the rubber hose connection.

(vii) Refill the fuel tanks.

(d) Tests : Ensure that there is no fuel leaks from either end of the pipe and at the new rubber joint.

(e) Recording : Record this modification in Aircraft Log Book.

Drawings

12. Drawing A.12640 is attached.

(Issued with A.L. 52 - August, 1956)

Effect on Weight and Balance

13. The effect of this modification on the weight and balance of the aircraft is negligible.

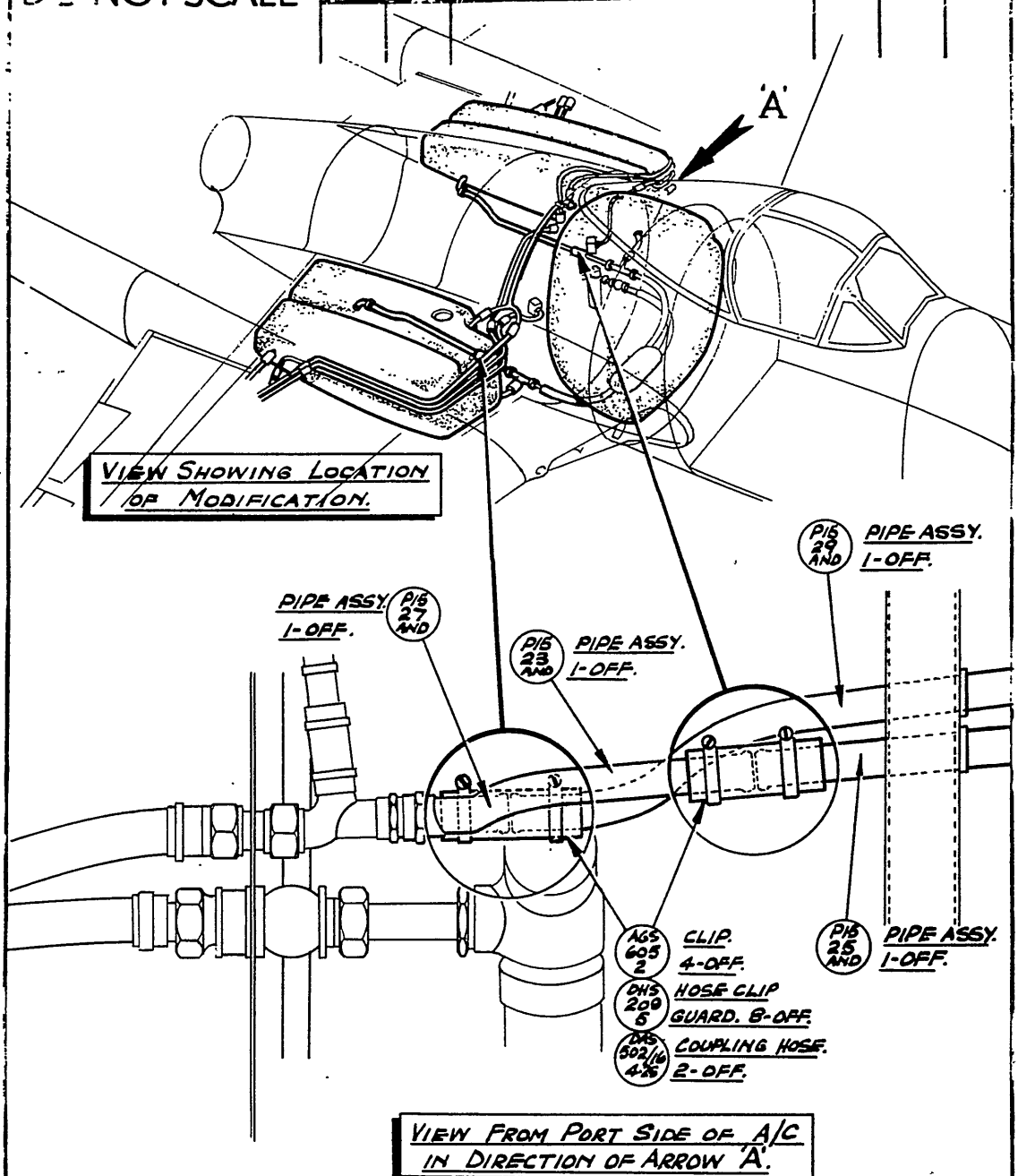
References : Files Department of Air, 9/84/74 and 150/4/9266

Attachment : Drawing. A. 12640.

Date of Issue : 3rd August, 1956.

(Issued with A.L.52 - August, 1956)

DO NOT SCALE



DE HAVILLAND DRWG. No. 00M316. NO OF SHEETS. 1.

REFERENCE	ISSUED BY	TITLE
		FUEL FEED LINES - FLEXIBLE JOINTS - INTRODUCTION.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± 1°	FINISH		TECH. ORDER	
SURFACE FINISH AUSTRALIAN STANDARD ENG DRWG. PRACTICE A.S.C.2.		SCALE		DRAWING NO.	A12640
		DRAWN	APPROVED		
		TRACED	CHECKED		

AAP 721:79, Vol 2 Pt 2 VAMPIRE MODIFICATION NO 219

Class 2

LP AND HP FUEL COCK AND THROTTLE TELEFLEX GREASERS - INTRODUCTION

Reason for and Description of Modification

1. This modification authorises the introduction of "Teleflex" greasers in the low pressure fuel cock, high pressure fuel cock, and throttle, Teleflex controls, to prevent the Teleflex cable chaffing the conduit, due to insufficient lubrication.

NOTE: Vampire Modification 36 (DH Modification V116) must be incorporated on the HP cock conduit prior to or concurrently with this modification.

Application

2. This modification is to be incorporated on all Mk 30 and 31 aircraft.

Responsibility for Incorporation

3. The modification is to be incorporation by aircraft depots or civilian contractor responsible for servicing vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modifica

Equivalent Modification

6. De Havilland (Aust) Modification V216 is the equivalen Modification.

Supply

7. The following parts are required to complete one Modification Set :-

(Issued with A/L 101 - June, 1958)

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1	T27K/717	B10898	Greaser, Teleflex	5	C
2	T27K/505	B10140	Washer, Tab, Teleflex	2	C
3	I1/2700		Wire, Iron, Soft Galv 20 SWG	AR	C
4	K2/65		Grease, XG.290	AR	C

NOTE: (a) Items 1 and 2 will be assembled into modification sets and retained by De Havilland Aircraft Pty Ltd Bankstown in their Modification Centre store. Units requiring modification sets are to demand from De Havilland Modification Centre.

(b) Items 3 and 4 are to be drawn from unit store as required.

Disposal of Parts Removed

8. No parts have been rendered redundant by the incorporation of this modification.

Disposal of Parts in Stock

9. Not Applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable, but not later than the next "E" servicing after receipt of modification or when the aircrafts are allotted for retrospective modification fitment.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 130 man-hours are required to incorporate this modification.

(b) Special Tools, Jigs, Etc. : No special tools or jigs are required.

(c) Method of Incorporation :

(i) Remove the gun bay doors and lower engine cowl. Disconnect and remove the aircraft batteries.

(Issued with A/L 101 - June, 1958)

(ii) Remove the guns and the main fuel tank from the aircraft.

(iii) Open the port ammunition door and remove and retain the Teleflex cable guard on the port side of the ammunition bay between the fuselage wall and the ammunition box. Retain all attachment items.

(iv) In the ammunition bay undo the connector on the top (HP cock) Teleflex conduit.

(v) In the ammunition bay remove and retain the two Teleflex turnbuckles on the LP cock and throttle cables.

(vi) At the HP cock and throttle Teleflex boxes on the rear face of bulkhead 4 remove and retain the 12 2BA Teleflex box mounting bracket bolts through the bulkhead. Undo and retain the 2 2BA bolts through the sliding section of each shaft and the 2BA clamp bolt on the serrated end and slide the control shafts clear of the serrated shafts protruding from each Teleflex box. Remove the Teleflex conduit unions at each box. Disconnect the Teleflex cable from each box by withdrawing the box and mounting bracket aft and downward.

(vii) At the LP cock Teleflex box in the main tank bay remove and retain the three Teleflex box mounting bolts and the Teleflex conduit unions. Prise the Teleflex box up to disengage the serrated shaft and lift the box off of the mounting bracket. Disconnect the Teleflex cable from the box by withdrawing the box to starboard and down.

(viii) Remove the Teleflex control clamp block from the forward face of bulkhead 3 retaining all attachment items.

(xi) Refer to drawing A12970 and mark the conduits in the tank bay in the positions to be cut.

(x) Undo and retain all clipping on the HP cock, LP cock, and throttle conduits in the main tank bay.

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(xi) Pull the throttle control and LP cock control cables through into the ammunition bay.

(xii) Withdraw the free end of the rear portion of the HP control Teleflex conduit into the main tank bay to uncover a portion of the Teleflex cable sufficiently long to permit withdrawal of the Teleflex cable into the ammunition bay. Withdraw the Teleflex cable into the ammunition bay.

(xiii) Remove the two LP cock conduits from the aircraft and cut as marked in para (ix). Place the unions on the conduits and flare the cut ends.

(xiv) Cut the throttle and HP cock conduits in place as marked in para (ix).

(xv) Remove the forward section of the two throttle conduits and the HP cock conduit from the aircraft and flare the ends to fit in the greasers.

(xvi) Place unions on and flare the cut ends of the rear sections of the two throttle conduits and the HP cock conduit in place.

(xvii) Assemble the unions on the two forward throttle conduits and the forward section of the HP cock conduit.

(xviii) Re-part number the conduits as shown on the drawing A12970.

(xix) Thread the conduits, greasers, item 1, and Teleflex boxes in the appropriate order on the Teleflex cables in the aircraft, ensuring that the conduits, Teleflex boxes are well greased while being assembled.

(xx) Join all conduit unions and clip the conduits in the main tank bay using the clipping items retained in para (x).

(xxi) Re-assemble the Teleflex boxes to the corresponding control systems and secure with attachment items retained in para (vi) and (vii).

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(xxii) Replace the Releflex control clamp block removed in para (viii) using the attachment items retained in the same paragraph.

(xxiii) Re- rig the engine controls as per RAAF Publication No 828 Sect 4 Chapter 3 Para 124 and 125, and AEIG 7/1/7, using tab washers, item 2, on the turnbuckle connectors in the ammunition bay.

(xxiv) Wire lock all unions, connectors and greasers using locking wire, item 3.

(xxv) Apply grease, item 4, to all greasers on the Teleflex systems and ensure that the Teleflex controls are operating freely.

(xxvi) Replace the Teleflex control guard in the ammuniti bay using the attachment items retained in para (iii).

(xxvii) Replace the main fuel tank, guns and aircraft batteries.

(xxviii) Replace the gun bay doors and low engine cowl.

(d) Tests : Carry out fuel flow checks in accordan with current authorised procedure.

(e) Recording : Record the Modification in the Airfram Log Book as Vampire Modification No 21

Drawings

12. Drawing A12970 is attached herewith.

Effect on Weight and Balance of Aircraft

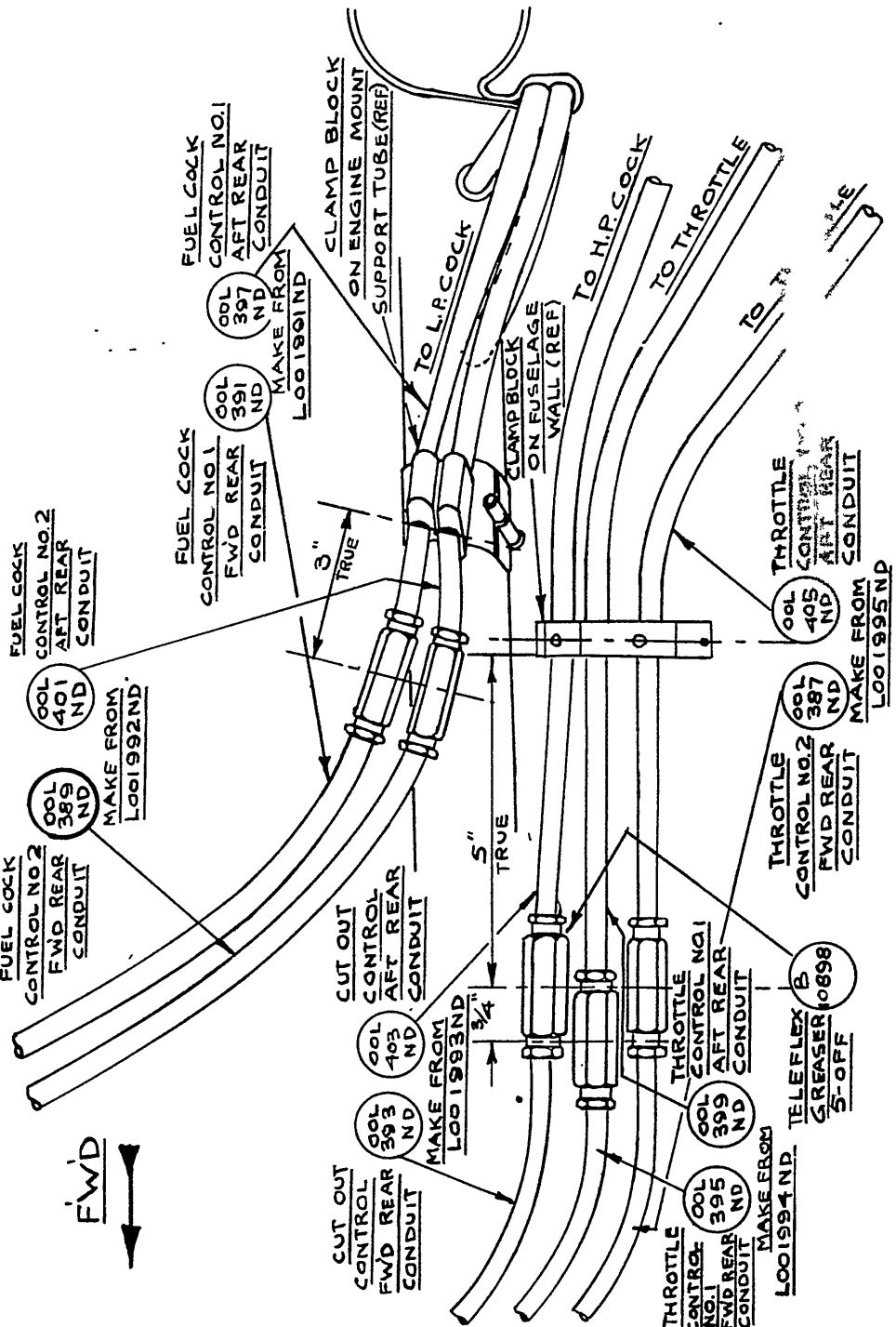
13. The weight and balance effect of this modification is negligible.

References : Files, Department of Air, 9/84/16 and 150/8/1200
Attachment : Drawing No A12970
Date of Issue : 20th June, 1958

(Issued with A/L 101 - June, 1958)

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	INITIALS	APPROVED



VIEW ON TELEFLEX CONTROLS IN MAIN TANK BAY
LOOKING TO STARB'D WITH FUSELAGE SKIN REMOVED

DE HAVILLAND DWG 00M-346 SHEET 1 OF 1 SHEET

REFERENCE	ISSUED BY	TITLE
		INSTALLATION OF GREASERS IN THROTTLE, H.P. COCK & L.P. COCK TELEFLEX CONTROLS

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	FUEL SYSTEM
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 30 & 31
FRACTIONS	± 1/32"	TREATMENT		ENGINE	NENE
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD. NO 219
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.CZI		SCALE		DRAWING NO.	A12970
		DRAWN	B.J.G.	APPROVED	DRWG. A SIZE
		TRACED		CHECKED	

AAP 721:79 Vol 2 Pt 2

VAMPIRE MODIFICATION NO 222

Class 2

IFF RADIO - REMOVAL

Reason for and Description of Modification

1. This modification authorises the removal of the IFF radio and the installation of lead ballast in lieu. IFF Radio is no longer a service requirement.

Application

2. This work is to be incorporated on all Mks 30 & 31 aircraft.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depot or the civilian contractor responsible for the repair of Vampire Aircraft. The trade mustering responsible are radio technician (Air) and airframe and electrical fitters.

Action in Respect of Spares

4. No action required.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modifications

6. De Havilland (Aust) Modification No V 219 is the equivalent modification.

Supply

7. The following parts are required for one complete Modification Set:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1		00B141	Plate, blanking, Instrument Panel	1	

(Issued with A/L 129)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
2		00B143ND	Ballast Weight	1	
3		D006823	Plate, blanking, Aerial	1	
4		00N1113	Plate, blanking, Rib 1	1	
5		00N1115	Plate, blanking, JB1	1	
6		N001229	Fairlead	2	
7	H28/ 14053	AS.3181/ 6C	Clip, P, LA, 2BA	1	
8	H28C/ 2863	A32/B16	Screw, MS, Rd, Hd, 4BA x $\frac{1}{2}$" long	2	
9	H28/ 27024	AGS.2001B /1	Nut, MS Nyloc Insert, 4BA	2	
10	H28C/ 12305	SP13/B	Washer, Steel, Plain 4BA	2	
11	H28/ 27023	AGS.2001A /1	Nut, MS, Nyloc Insert 6BA	2	
12	H28C/ 2858	A32/A12	Screw, MS, Rd, Hd, 6BA x $\frac{3}{8}$" long	2	
13	H28C/ 12332	SP 13/A	Washer, Steel, Plain 6BA	2	
14	H28/ 12716	A25/16E	Bolt, HTS, Hex Hd, $\frac{1}{4}$" BSF x 1.6" long	4	
15		00B23A	Ballast Weight	1	
16	H28B/ 12262	SP9/E6	Pin, Split, 3/32" dia x $\frac{3}{4}$" long	2	
17	H28B/ 12462	SP9/C8	Pin, Split, 1/16" dia x 1" long	2	

(Issued with A/L 129)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
18	I32A/ 2006		Twine, binder, coreless	AR	
19	G5F/ 500001		Tape, insulating, PVC $\frac{5}{8}$" wide	AR	

NOTES : (a) Items 1 to 14 inclusive will be assembled into modification sets and retained at the De Havilland Modification Centre pending issue or demand. Operating units and aircraft depots requiring modification sets are to demand from De Havilland Modification Centre.

(b) Items 15, 16 and 17 are to be drawn from unit stores if required (see paras 11(c)-xv and xliv).

(c) Items 18 and 19 are to be drawn from unit stores.

Disposal of Parts Removed

8. The following parts are redundant on the incorporation of this modification.

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
20	Y110L/59A		Control Unit, Type BC9665A	1	
21	Y110L/58A		Control Unit, Type BC958A	1	
22	Y10BB/879 or Y10BB/867		Aerial, Type 93 or Aerial, Type 90	1 1	
23	Y110B/12		Receiver, Type SCR695	1	

(Issued with A/L 129)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
24	G5C/ 2289		Switch, inertia, Birdax	1	
25	Y110H/ 1555		Plug	1	
26	G5C/ 898		Switch, Press, button single pole	1	
27	G5C/ 432		Block, Terminal	1	
28		OON173A	Assembly, Switch & Cable	1	
29		NOO194A	Assembly, Cable	1	
30		OON193A	Bracket Assy, Detonator Warning Light	1	
31		NOO335A	Assembly, Switch & Cable	1	
32		NOO343A	Assembly, Mounting Plate terminal block	1	
33		OON169A	Assembly, Cable	1	
34		OON177A	Assembly, Cable	1	
35		OON167A	Assembly, Cable	1	
36		NOO1215A	Connector, Aerial	1	
37		NOO1217A	Connector, Aerial	1	
38		OON179A	Assembly, Cable	1	
39		NOO174	Assembly, Cable	1	
40	A79/ 500961	N98415A	Cover, Switch	1	

(Issued with A/L 129)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
41	Y10AB/ 3259	AS509	Label, On	1	
42	Y10AB/ 3245	AS510	Label, Off	1	
43	A79/ 500077	DHS-109 /30	Label, Auto-Manual	1	
44		00N163 Mk 6	Assembly, Cable	1	
45		N00271A	Assembly, Cable	1	
46		B00255	Plate, Support	1	
47		D003717	Block, Packing	1	
48	A79/ 500078	DHS-109 /50	Label, G Switch	1	
49		D003716	Ring, Clamping	1	
50	A79/ 500943	N00444A	Bracket, Inertia Switch Mounting	1	
51		N00496A	Bag, Stowage, Flag	1	
52		N001227	Fairlead	1	
53		00N47 or 00N47 Mk 2	Label, Ident SW or Label SCR 1695	1 or 1	

NOTES : (a) Items 20 to 24 inclusive are to be examined and if serviceable returned to store for use on other aircraft.

(b) Items 25 to 27 inclusive are to be examined and if serviceable returned to stock.

(c) Items 28 to 53 inclusive are obsolete and are to be disposed of in accordance with current authorised procedure.

(Issued with A/L 129)

(Note : The switch, ident No Y10F/11714, on item 31 if serviceable may be salvaged and returned to store for use in other aircraft.)

Disposal of Parts in Stock

9. As in para 8 Note (c).

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" Servicing.

Method of Incorporation

11. (a) Man-Hours Involved : Approx 32 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Remove cannon doors and disconnect the aircraft batteries.

(ii) Remove pilots seat in accordance with current authorised procedure.

(iii) Note : Certain parts of this system may be already removed from the aircraft notably - control units, items 20 and 21, see para (viii), Cable assy, item 38, see para (ix), SCR 695 receiver, item 23, see para (xiv), "Birdax" inertia switch, item 24, see para (xxiii).

(iv) Locate automatic and manual G-switches in lower LH instrument panel. Remove and discard four 6BA mounting screws and nuts for each switch. Disconnect cable assys from switches to terminal block at rear at rear of LH instrument panel. Remove switches and cable assys, items 28 and 31, and switch cover, item 40 from aircraft.

(v) Remove and retain 6BA screws and nuts from "G-switch" and "Auto Manual"labels, items 48 and 43, and discard labels.

(vi) Assemble blanking plate item 1, in place of switches using four 6BA Rd Hd screws and four self-locking nuts retained in para (iv).

(vii) From LH instrument panel below G-switch remove four 4BA Csk Hd mounting screws on terminal block and bracket assy item 32. Remove and discard four 'P' clips on cable assy from this terminal block to bulkhead 1. Disconnect plug on cable assy at plug sealing plate on lower LH side of rear face of bulkhead 1. Remove terminal block and mounting brkt assy item 32, and cable assy, item 33, from aircraft.

(viii) Locate control units, items 20 and 21, on lower RH instrument panel. Disconnect four sockets on face of control units. Remove two flat head screws from upper control unit and remove control unit from aircraft. Remove three flat head screws from lower control unit and remove this control unit from aircraft. Remove six 4BA screws and nuts from control unit support plate and remove support plate, item 46, from aircraft.

(ix) If De Havilland Mod V154 RAAF Mod 226 has not been incorporated, at plug sealing plate on RH side of rear face of bulkhead 1 disconnect lower plug from socket. Temporarily remove two saddle clips from RH side of fuselage wall, retaining screws and clips. Undo lashing as necessary and remove cable assy, item 38, which runs from control units to bulkhead 1 from aircraft.
If De Havilland Mod V154, RAAF Mod 226, has been incorporated remove lashing as necessary and remove this cable assy from the aircraft.

(x) On junction box 1 disconnect all plugs from their respective sockets and remove two 2BA screws plain washers and shakeproof washers mounting JB1. Remove JB1 from the aircraft retaining all screws and washers for re-assembly.

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(xi) In JB1 at terminal block 2 disconnect two leads marked E from SCR 695 plug to negative terminal of terminal block 2. Disconnect lead marked QS+ from SCR 695 10 amp circuit breaker. Mark this circuit breaker label as SPARE. Remove SCR 695 cable assy, item 39. Disconnect lead marked Q+ from detonator switch to "Klixon" auto circuit breaker and remove from junction box. Disconnect and remove lead marked Q2 from detonator switch to pin L on plug C3. Disconnect and remove lead marked Q+ from detonator switch to pin K on plug C3. Remove four 4BA screws mounting detonator switch and remove detonator switch, item 26, from JB1. Drill out two 3/32 rivets holding label "SCR 695" or "Ident SW", item 51, alongside detonator switch and discard label. Assemble blanking plate, item 5, in place of detonator switch, using two 6BA rd. hd. screws, item 12, two 6BA nuts, item 11 and two 6BA washers, item 13.

(xii) Replace JB1 in aircraft using two 2BA screws, plain washers and shakeproof washers retained in para (x). Reconnect all plugs to their respective sockets.

(xiii) Remove nose panel of aircraft.

(xiv) If SCR 695 receiver is fitted to aircraft, disconnect the four plugs from cable assys, items 29, 34 and 35, on fwd face of receiver and disconnect aerial connector, item 36, from receiver. Remove receiver, item 23, from aircraft leaving tray in position.

(xv) If SCR 695 receiver was removed in previous para, instal ballast weight, item 15, on receiver tray along with the new extra ballast weight, item 2, by discarding the four bolts in the large ballast weight and fitting ballast weight, item 2, using 4 - $\frac{1}{4}$" BSF hex hd bolts item 14.

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(xvi) If ballast weight, item 15, is already fitted, discard the four mounting bolts and instal ballast weight, item 2, on top of existing ballast using four longer $\frac{1}{4}$" BSF bolts, item 14.

Note : If Lear Radio is fitted, DH Mod V154 RAAF Mod 226, the ballast weight, item 15, will have been reworked to DH drg 00Z427 as in the Lear Modification.

(xvii) Locate socket sealing plate on Stbd side of fwd face of bulkhead 1. Disconnect lower plug and undo any lashing on the cabin assy from this plug and remove the cable assy, item 34, from the aircraft.

(xviii) At detonator warning light bracket located in fwd Port side of nose, remove plug of cable assy, item 29, remove 'P' clip from this assy and remove cable assy, from aircraft.

(xix) Disconnect cable assy, item 44, from detonator warning lights. Remove 'P' clips clamping this cable assy and disconnect cable assy from terminal block, item 27, in Stbd side of nose. Remove cable assy from aircraft.

(xx) Remove two 4BA screws and two 4BA nuts from detonator warning light bracket assy, item 30 and remove assy from aircraft.

(xxi) At terminal block, item 27, in Stbd side of nose, on camera mounting plate, disconnect leads marked Q2, Q+ and E coil and stow securely.
Disconnect leads from cable assy to SCR 695 inertia switch, item 45, undo mounting screws of terminal block, item 27, and remove terminal block from aircraft.

(xxii) From inertia switch, item 24, on RH side of nose wheel housing disconnect cable assy, item 45. Remove any lashings necessary and remove this cable assy from aircraft.

(Issued with A/L 129)

(xxiii) Remove Stbd cannon fairing and in nose wheel bay remove three 2BA bolts, nuts and washers from inertia switch mounting bracket and remove inertia switch, item 24, and mounting bracket, item 50, from aircraft.

(xxiv) Remove LH Cannon fairing.
Locate inertial switch flag stowage bag, item 51, on LH side of nose wheel well. Remove four 4BA Rd Hd screws, nuts and washers from flag stowage bag and remove bag from aircraft.

(xxv) If fixed nose panel is being removed concurrently, disconnect cable assy, item 35, from plug on lower LH side of bulkhead 1. Unlash cable from nose wheel support and remove from aircraft.
If fixed nose panel is not being removed cut this cable as close as possible to to bulkhead 1 and lash the loose end securely.

(xxvi) Unlash aerial connector, item 36, from nose wheel supports and cut as close as possible above clamp block on nose floor. Remove and discard eight 'P' clips under cockpit floor. Pull aerial through clamp block on nose floor. Undo and retain 2BA bolt through clamp block on side of tank bay. Undo and retain bolt holding double 'P' clip to clamp block.

(xxvii) Replace the double 'P' clip in para (xxvi) with single 'P' clip, item 7. Re-assemble clamp block on tank bay wall leaving aerial connector, item 36, loose.

IF ENGINE AND FUEL TANKS ARE BEING REMOVED CONCURRENTLY WITH THIS MOD

(xxviii) Remove and retain six 4BA screws and washers from aerial fairlead, item 52, on bulkhead 4. Remove fairlead from bulkhead retaining screws, nuts and washers. Pull aerial connector, item 36, through bulkhead. Unclip the aerial across the rear face of

bulkhead 4 and discard all clips and replace all bolts in their respective anchor nuts. Disconnect the aerial at the connector plug, item 25, and remove aerial from aircraft.

(xxix) Undo six 4BA screws, nuts and washers through aerial fairlead, in Rib 1 and remove fairlead from aircraft and retain.

(xxx) Replace the fairlead on bulkhead 4 with the fairlead retained in para (xxix) using six 4BA Rd Hd screws and washers retained in para (xxviii).

(xxxi) Pull the aerial connector, item 37, through Rib 1. Assemble blanking plate, item 4, on Rib 1 using two 4BA Rd Hd screws, item 8, two 4BA self-locking nuts, item 9, and two 4BA plain washers, item 10.

(xxxii) Locate SCR 695 aerial, item 22, in lower outboard surface of stbd wing. Undo and retain ten 4BA Csk Hd screws through clamping ring and lower aerial out of wing. Disconnect the aerial connector from the aerial and remove the aerial item 22 from the aircraft.

(xxxiii) In Tank 1 bay undo all 'P' clips holding the aerial connector. Undo the 2BA csk screws in the two hand holes on the aft side of the wheel well. From these hand holes locate two 'P' clips holding aerial connector with other cables. Undo two 2BA bolts nuts and washers and remove these two 'P' clips. Now follow aerial connector run through wing undoing any lashing as found necessary.

(xxxiv) At outboard end of aerial connector, item 37, remove the terminals by cutting the aerial if necessary. From Rib 2 and wheel well pull aerial connector through wing conduits and discard.

(xxxv) Bind all cables where 'P' clips have been removed with PVC tape, item 19, and re-assemble 'P' clips.

(Issued with A/L 129)

(xxxvi) Assemble blanking plate, item 3, in place of aerial in lower surface of outer Stbd wing using screws retained in para (xxxii).

IF ENGINE IS REMOVED CONCURRENTLY AND STBD TANKS ARE NOT

(xxxvii) Carry out para (xxviii) then, remove aerial plug, item 25, from aerial connector, item 37, and securely lash the end of aerial connector, item 37, which is protruding through fairlead on Rib 1 into engine bay.

(xxxviii) Assemble fairlead (item 6) on bulkhead 4 using screws and washers retained in para (xxviii).

(xxxix) Locate SCR 695 aerial, item 22, in lower surface of stbd outer wing. Undo and retain ten 4BA csk screws in clamping ring, item 49, and lower aerial from wing. Disconnect the aerial connector, item 37, at the aerial and securely coil and stow the aerial connector in the wing.

(xl) Assemble blanking plate, item 3, in place of aerial using screws retained in para (xxxix).

IF ENGINE AND STBD TANKS ARE NOT BEING REMOVED

(xli) Cut aerial connector, item 36, inside main tank bay leaving about 6" of aerial inside of the fairlead on bulkhead 4. Lash the aerial securely to the adjacent pipes.

(xlii) Carry out paras (xxxix) and (xl).

GENERAL - ALL CASES

(xliii) If ejection seat is fitted replace the seat in accordance with current authorised procedure.

(xliv) If standard pilots seat is fitted replace the seat using split pins item 16 and 17.

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(xlv) Re-connect the aircraft batteries and replace all cowls, fairings and doors removed.

(d) Tests : Function the electrical system in accordance with current authorised procedure.

(c) Recording : Record this modification in the airframe log book but add note if wing wiring (see para 11(c)-xxxiii) or engine bay and wing wiring (see para 11(c)-xli) or plug on cable loom (item 33) (see para 11(c)-xxv) have not been removed.

Drawings

12. Nil.

Effect on Weight and Balance

13.

Item	Weight (lb) ±	Arm (in) ±	Moment (lb in) ±
Control Unit	-1.0	-84.0	+ 84
Control Unit	-1.5	-84.0	+126
Inertia SW & Bracket	-1.4	-106.0	+148
Aerial Connector	-3.9	-48.0	+187
Aerial & Mtg	-1.8	+ 8	- 14
Cockpit Cables	-1.0	-90.0	+ 90
Nose Cables	-1.0	-100	+100
Ballast wt added	+6.72	-107.3	-721

Amendment to the weight sheet summaries will be consolidated and issued by Department of Air.

References : Files, Department of Air, 214/14/3 and 150/8/1616

Date of Issue : 2nd January, 1959

(Issued with A/L 129)

VAMPIRE MODIFICATION NO. 224

Class 2

LARGER TAIL CONE AFT RING - INTRODUCTION

Reason for and Description of Modification

1. This modification authorizes the introduction of dished brackets in the tail cone aft ring to provide clearance for the larger diameter jet pipe introduced by Goblin Modification 938.

Application

2. This modification is to be incorporated on all Vampire Mk. 33 aircraft Serial No. A79-801 to A79-836 inclusive.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots, or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. As directed by Headquarters, Maintenance Command, spare tail cones are to be modified in accordance with paragraphs 11(c) (ii) to (vii) inclusive and when modified as well in accordance with Vampire Modification 227 (D.H. Aust.Mod. V.702) and Vampire Modification 204 (D.H. Aust.Mod. V.690), are to be re-partnumbered EC15-3AND Ident No. A79/503799.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modifications

6. De Havilland (Aust.) Modification C.704 and Air Ministry VAM.3226 are the equivalent modifications.

Supply

7. The following parts are required to complete one modification set:-

Item No.	Ident No.	Part No.	Nomenclature	No. off per Set	Stores Class
1	-	L00389 5A	Bracket	2	C
2	H128F/ 60868	AGS2048 /423/BH	Rivet, Tucker 'POP' Al. Alloy $\frac{1}{8}$" dia. x .23" long	14	C
3	H128F/ 63365	AS2229/ 404	Rivet, Al.Alloy, Csk. Hd., 90°, $\frac{1}{8}$" dia. x $\frac{1}{4}$" long.	10	C
4	K3/175	RAAF 2K7	Primer, Zinechromate	AR	C
5	K3/353	BALMS1 3895	Compound, Seaming	AR	C
6	K3/162	DTD63A	Enamel, Cellulose Aluminium Pig.	AR	C

Notes:- (a) As directed by Department of Air items 1 to 3 inclusive will be delivered from Messrs. De Havilland Aircraft Pty. Ltd., Bankstown, N.S.W. to their own Modification Centre. Units requiring Modification sets are to demand from De Havilland Modification Centre.

(b) Items 4 to 6 are to be drawn from unit stores.

Disposal of Parts Removed

8. No parts are removed on the incorporation of this modification.

Disposal of Parts in Stock

9. Not applicable.

(Issued with A.L. 85 - May, 1957)

When the Modification is to be incorporated

10. This modification is to be incorporated when engines with Goblin Modification No. 938 incorporated are fitted to the aircraft.

Method of Incorporation

11. (a) Man-Hours Involved: Approximately 12 (twelve) man hours are required to incorporate this modification.

(b) Special Tools, Jigs, &c. : Pins gripping, $\frac{1}{8}$", ident No. DIB/4271, 12 off will be required to incorporate this modification.

(c) Sequence of Operations :

(i) Disconnect the aircraft batteries and remove the tail cone from the aircraft retaining all attachment items.

(ii) Refer to drawing A12830 and on the aft ring of the tail cone mark out and cut the areas to be removed.

(iii) Drill out 5 (five) $\frac{1}{8}$" dia. countersunk rivets through each side of the rear ring and the tailcone, which will be positioned immediately under the rear flange of the brackets to be positioned in paragraph (iv).

(iv) Offer up the brackets, item 1, and drill 7 holes from each bracket through the rear ring using a No. 30 (.128") drill, care being taken not to damage the inner surface of the skin. Drill also 5 holes through the rear flange of the brackets from the holes where the rivets were removed in paragraph (iii) using the same drill.

(Issued with A.L. 85 - May, 1957)

(v) Remove the bracket and deburr all holes.

(vi) Apply primer, item 4, to all exposed surfaces and apply seaming compound, item 5, to the mating surfaces of the brackets, item 1. Skin clamp the brackets in position.

(vii) Using the tucker pop rivets, item 2, where the holes have only been drilled through the rear ring and solid countersunk rivets, item 3, where the holes have been drilled in the outer skin rivet the brackets to the tail cone.

(viii) Repair the finish as necessary using aluminium cellulose enamel, item 6.

(ix) If Vampire Mods. 227 and 204 (D.H. Aust. Mods. V. 702 and V. 609) are being incorporated concurrently, re part-number the cone EC15-3AND, and re-assemble on the aircraft using existing attachment items. If the other modification is not being incorporated do not alter the part number.

(x) Reconnect the aircraft batteries.

(d) Tests : Carry out function of the downward identification lights and flame switches on the rear cone, if fitted, in accordance with current authorized procedure.

(e) Recording : Record the modification in the Airframe Log Book.

Drawings

12. Drawing No. A12830 is attached.

(Issued with A.L. 85 - May, 1957)

Effect on Weight and Balance of Aircraft

13. The weight and balance effect of this modification is negligible.

References : Files Department of Air 9/84/16II and 150/4/9422.

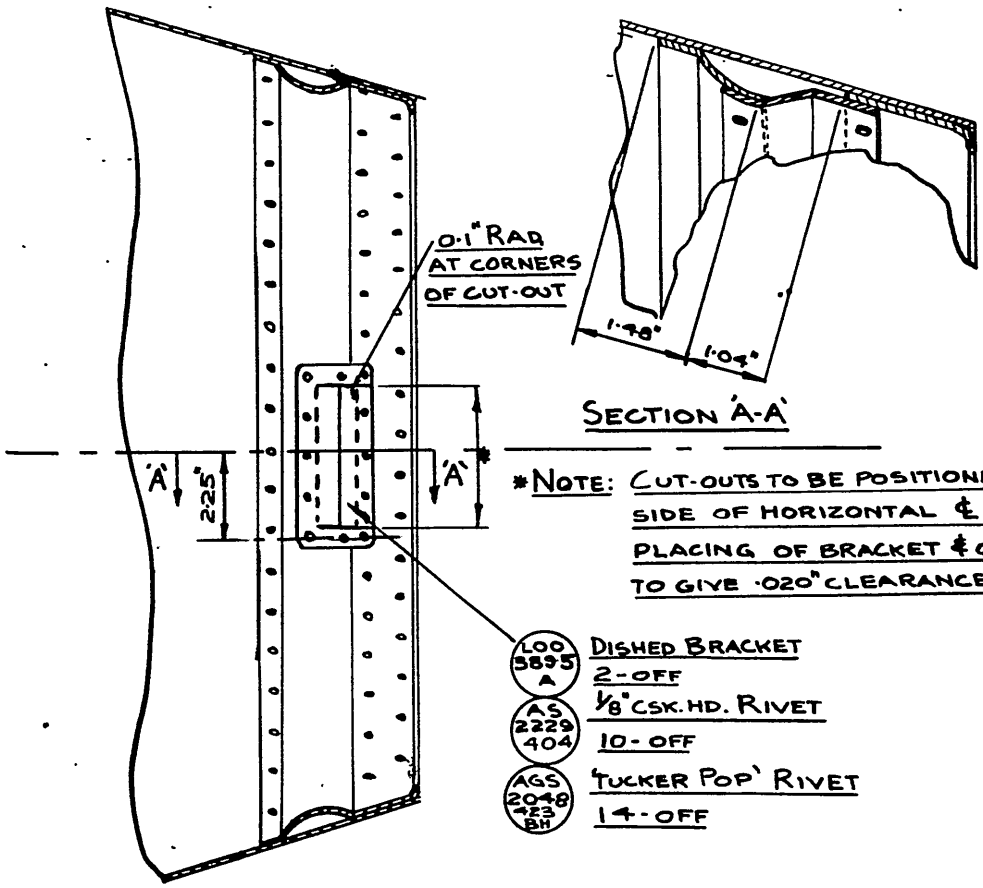
Attachments : Drawing No. A12830.

Date of Issue : 3rd May, 1957.

(Issued with A.L. 85 - May, 1957)

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L.	INITIALS	APPROVED



SECTION 'A-A'

*NOTE: CUT-OUTS TO BE POSITIONED EITHER SIDE OF HORIZONTAL ℄ TO SUIT PLACING OF BRACKET & OF SUCH LENGTH TO GIVE ·020" CLEARANCE AT EITHER END

LOO 5895 A	DISHED BRACKET 2-OFF
AS 2229 404	1/8" CSK. HD. RIVET 10-OFF
AGS 2048 423 BH	'TUCKER POP' RIVET 14-OFF

VIEW ON INSIDE OF STB'D SIDE-TAIL CONE REAR RING

R.H. DRAWN

DE HAVILLAND DWG OOM-342 NO OF SHEETS 1 SHEET NO. 1

REFERENCE	ISSUED BY	TITLE
	Department of Air Directorate of Technical Services	TAIL CONE - REAR RING - REWORK

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	Vampire
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	Vampire Mod. 224
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.121		SCALE		DRAWING NO.	A12830
		DRAWN	B.J.G.	APPROVED	DRWG. A SIZE
		TRACED		CHECKED	

ACCESS DOOR IN THE FORWARD WALL OF THE AMMUNITION BOX - INTRODUCTION

Reason for and Description of Modification

1. Improve maintenance. This modification provides improved accessibilit for inspection and adjustment of the Control Cables.

Application

2. All Mk 35 Vampire aircraft. Except A79-600

Responsibility for Incorporation

3. This modification will be incorporated on Mk 35 Vampire Trainer aircraft A79-601 and subsequent during manufacture.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modifications

6. De Havilland (Aust) Modification No V705 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No		Qty	Stores Class
1		13FS2557AND	Forward End Assembly-Ammo Boxes	1	
2		13FS2558AND	Forward End Assembly-Ammo Boxes	1	
3	K3/407 (K3/411		Glue, beetle, type "A" Hardener, beetle, V15 (voilet)	AR AR	
4	(or (K3/412 (or (K3/410		Hardener, beetle, G30 (yellow) Hardener, beetle, 2B (blue	AR AR	

(Issued with A/L 134 - April, 1959)

Note. Items 1 and 2 will be made up as modification set at the De Havilland Modification Centre only against special orders.

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Store

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of parts or when the aircraft are allotted for retrospective modification fitment.

10. THIS MODIFICATION HAS BEEN INCORPORATED DURING PRODUCTION IN MK 55 VAMPIRE AIRCRAFT A79-601 AND SUBSEQUENT

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 16 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, &c : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Open and secure the port ammunition door, remove the woodscrews on the four sides of the forward wall of the ammunition box, retain all screws.

(ii) Carefully prise the forward wall of the ammunition box from the aft face of bulkhead No 2 and the vertical and bottom members of the ammunition box.

Note: The forward wall of the ammunition box may be destroyed to ensure that the vertical and bottom members are not damaged during this operation.

(iii) Glue and screw the new forward wall, item 1.

(iv) Solder the bonding strip from the new forward wall to the existing bonding strip on the aft face of bulkhead No 2.

(Issued with A/L 134 - April 1959)

(v) Carry out the above operations (i) to (iv) inclusive to the starboard ammo box, using new forward wall item 2.

(d) Tests : Nil.

(e) Recording : Record this modification in the airframe log book.

Drawings

12. Nil.

Effect on Weight and Balance of Aircraft

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air 9/84/1057 and 150/8/1617

Date of Issue : 20th April, 1959.

(Issued with A/L 134 - April, 1959)

Class 2

INTRODUCTION OF LEAR RADIO COMPASS ADF-14

Reason for and Description of Modification

1. This modification authorizes the introduction of the Lear Radio Compass ADF-14 to provide adequate "Homing" facilities. This modification consists of five (5) parts, ie A, B, C, D and E :-

Part A - Modification of Aircraft, which includes Parts B, C, D and E.

Part B - Sliding Hood Assembly.

Part C - Door, Ammunition access.

Part D - Panel, Detachable, Fuselage Nose.

Part E - Stowage Map.

Application

2. This modification is applicable to all Vampire Mk 30 and 31 aircraft. It is essential that Vampire Modification No 62 - Introduction of G3F Compass is incorporated prior to or concurrently with this modification.

Responsibility for Incorporation

3. This modification is to be incorporated by De Havilland Aircraft Pty Ltd.

Action in Respect of Spares

4. The following spares are affected and are to be modified as directed by Headquarters, Maintenance Command.

Ident No	Part No	Nomenclature	Remarks	Stores Class
A79/501702	A004929A	Sliding Hood Assy	Rework to 00A299 AND A79/503822 as per paras 11(c) (ii) to (v).	A

(Issued with A/L 123)

Ident No	Part No	Nomenclature	Remarks	Stores Class
A79/500577	A002571/3	Door, Ammunition Access	Rework to 00A289 AND, A79/503823 as per paras 11 (c) (vi) to (xi)	C
A79/501997	A00891A/2	Panel, Detachable fuselage nose	Rework to 00A301 AND, A79/503824 as per paras 11 (c) to (xii)	C
A79/501594	00A41A	Stowage, Map	Rework to 00Z417A A79/503825 as per paras 11 (c) to (xiii)	C

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modifications

6. DH Aust Mod V 154 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set :-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1		00A129ND	Spruce Insert	1	
2		00A221ND	Spruce Insert	1	
3		00A223ND	Spruce Insert	1	
4		00A225ND	Spruce Insert	1	
5		00A311	Bracket	1	
6		00B69A	Ballast Weight Cable	1	
7		00N559ND	Masking Plate	1	
8		00N563A	Bracket Assembly	1	
9	Y10H/500625	00N601A	Cable Assembly	1	
10		00A315AND	Bracket	1	
11		00N775	Support Bracket, Forward	1	
12		00N777	Support Bracket, Rear	1	
13		00N779A	Dish - Cockpit Floor	1	

(Issued with A/L 123)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
14		00N931A	Channel Section LH	1	
15		00N932A	Channel Section RH	1	
16		00N935A/1	Bracket	1	
17	Y10B/500322	00N939	Corrector Strip	2	C
18		00N1099	Housing Strip	2	
19		00N945	Contact Plate	1	
20		00N947	Insulator	1	
21		00N949	Insulator	2	
22		00N951	Insulator	2	
23		00N953	Insulating Washer	2	
24		00N957	Contact Spring	1	
25		00N959ND	Stiffener	1	
26		00N961ND	Washer	4	
27	Y10H/500627	00N963A	Lead Assembly	1	A
28		00N965	Bracket	1	
29		00N967	Bracket	1	
30		00N969	Spacer	4	
31		00N973	Packing Piece	2	
32		00N975	Sealing Plate	1	
33		00N977	Bearing Plate	1	
34	Y10H/500629	00N981A	Loop Cable Assembly	1	A
35	Y10H/500624	00N985A	Amp to Blk Hd Cable Assy.	1	A
36		00N989ND	Spruce Insert	1	
37	Y10H/500628	00N991A	Cockpit Cableform Assy	1	A
38		00N997	Gasket	1	
39		00N1071A	Suppressor Mtg Assy	1	
40		00N1081A	Suppressor and Mtg Plate Assy	1	
41		00N1011ND	"U" Base	1	
42	Y10H/500626	00N1021AND	Lead Assembly	1	A
43	Y10H/500623	00N1023A	Cable Assy	1	A
44		00N1025	Retainer Plate	1	
45		00N1027	Insulating Plate	1	
46	A79/500934	N0055	Sealing Gasket	1	C
47	Y10H/500622	00N623A	Cable Assembly	1	A
48	Y110D/ 500076		Tuner Unit (Lear Radio)	1	A
49	Y110U/ 500005		Amplifier Unit (Lear Radio)	1	A
50	Y110Q/12		Azimuth Indicator (Lear Radio)	1	A

(Issued with A/L 123)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
51	Y110B/500048		Antenna, Loop (Lear Radio)	1	A
52	A79/504067		Housing, Loop (Lear Radio)	1	A
53	Y110M/501125		Tray, Amplifier (Lear Radio)	1	A
54	G5C/868		Block, Terminal	1	A
55	G105C/1867		Breaker, Circuit, 5 amp	1	A
	or		or		
	G105C/1881		Breaker, Circuit, 5 amp	1	A
56	G5E/30161		Cable, AN16 one core Spec G107 (a)	48"	C
57	Y10B/13339		Aerial, Whip Type 147-27"	1	A
58		00A317	Plywood Patch	1	
59	H28C/13889	SP.47/C	Washer, Single Coil Spring, Steel, 0.195" i/d x .048" thick	2	C
60	H28C/2886	A32/C32	Screw, MS RD HD, 2 BA x 1" long	4	C
61	H28C/2821	A33/B20	Screw, MS Csk Hd, 4 BA x 5/8" long	26	C
62	H28C/NIV	A43/B16	Screw, Brass, Ch Hd,		C
	or	or			
	H28C/2073	AGS.246/22)	4 BA x 1/2" long	12	C
63	H28C/35821	DHS.95	Cup Washer, 4BA x .44" o/d x 90°	26	C
	or	or	or		
	A17/10815	ØNo.227	Cup Washer, No 4 x 4BA "Nettlefolds"	26	
64	H28C/2133	A45/B20	Screw, Brass, Csk Hd, 4BA x 5/8" long	2	C
65	H28/NIV	A54/B	Nut, Lock, Brass, 4BA	3	
66	H28C/2863	A32/B16	Screw, Steel, Rd Hd, 4BA x 1/2" long	16	C
67	H28C/2869	A32/B20	Screw, Steel, Rd Hd, 4BA x 5/8" long	4	C
68	H28/5316	A16Y/CP	Nut, Plain, Steel, Hex 2BA	8	C
69	H28/753	A16Y/CT	Nut, Thin, Steel, Hex 2BA	1	C
70	H28/756	A16Y/EP	Nut, Plain, Steel, Hex 1/4" BSF	3	C
71		NPN	Screw, Comm Brass, Csk Hd 1/8" Whit, x 2.0" long	2	

(Issued with A/L 123)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
72	H28/776	A16Y/ET	Nut, Thin, Steel, Hex 1/4" BSF	2	C
73	H28/6998	6A1/1C	Bolt, LTS Hex Hd, 2BA x 1/2" long	6	C
74	H28/7110	6A1/11C	Bolt, LTS Hex Hd, 2BA x 1.5" long	11	C
75	H28/7177	6A1/15C	Bolt, LTS Hex Hd, 2BA x 1.9" long	9	C
76	H28/7151	6A1/18C	Bolt, LTS Hex Hd, 2BA x 2.2" long	1	C
77	H28/7625	6A1/29C	Bolt, LTS Hex Hd, 2BA x 3.3" long	2	C
78	H28/7083	6A1/7E	Bolt, LTS Hex Hd, 1/4" BSF x 1.15" long	3	C
79	H28C/12306	SP 15/B	Washer, A1 Alloy, 4BA	2	C
80	H28/10571	AS 1242/13E	Bolt, HTS Csk Hd, 1/4" BSF x 1.75" long	4	C
	or	or	or		
		AS 1882/13E	Bolt, LTS Csk Hd, 1/4" BSF x 1.75" long	4	
81	H28/8462	AS 1882/8C	Bolt, LTS Csk Hd 2BA x 1.23" long	2	C
82	H28/8464	AS 1882/10C	Bolt, LTS Csk Hd, 2BA x 1.43" long	4	C
83	H128F/5636	AS 2227/302	Rivet, Al Alloy, snap Hd 3/32" dia x 3/16" long	8	C
84					
85	H128F/5725	AS 2230/405	Rivet, Al Alloy, Csk Hd 1/8" dia x 5/16" long	8	C
86		AS 2807/4/018	Spacer, MS 1/4" o/d x 20G x 3/16" long	1	
86a	H28/27034	AGS2002E/1	Nut, Stiff, Steel, 1/4" BSF	2	C
86b			Washer, Comm Brass, 1/8" Whit	4	
87	G5A/27705	AGS 1651/3	Ferrule, Cut	1	C
88	G5A/27686	AGS 1658/0	Nut, Coupling	1	C
89	H28C/3071	AGS 160C	Washer, Steel, 1/2" o/d x 3/16" i/d/ x .05" thick	8	C
90	H28C/3072	AGS 160D	Washer, .6" o/d x .19" i/d x .05" thick	2	C

(Issued with A/L 123)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
91	H28C/2184	AGS 250/38	Screw, Wood, Brass, No 6 x 5/8" long	6	C
92	H28C/2649	AGS 253/20	Screw, Wood, Steel, No 4 x 1/2" long	40	C
93	H28C/2664	AGS 253/39	Screw, Wood, Steel, No 6 x 3/4" long	4	C
94	H28C/2657	AGS 253/38	Screw, Wood, Steel, No 6 x 5/8" long	2	C
95	H28/27024	AGS 2001B/1	Nut, Stiff, Steel, 4BA	46	C
96	H28/27002	AGS 2001B/4	Nut, Stiff, Brass, 4BA	7	C
97	H28/27025	AGS 2001C/1	Nut, Stiff, Steel, 2BA	25	C
98	H28/27026	AGS 2001E/1	Nut, Stiff, Steel, 1/4" BSF	4	C
99	H128F/61359	AGS2050/ 413/BH	Rivet, Tucker Pop, Monel 1/8" dia x 1/8" long	4	C
100	H128F/61682	AGS 2050/ 419/BS	Rivet, Tucker Pop, Monel 1/8" dia x 3/16" long	1	C
101	H128F/61686	AGS 2050/ 524/BS	Rivet, Tucker Pop, Monel 5/32" dia x 1/4" long	4	C
102			Nut, Comm Brass, Hex, 1/8" Whit	5	
103	H28B/5037	AGS 784/10	Pin, Split, Ni Alloy 3/32" dia x 3/4" long	2	C
	or	or	or		
	H28B/5037	SP 9/E6	Pin, Split, Ni Alloy 3/32" dia x 3/4" long	2	C
104	H28/14036	AS 3180/3 /B	Clip, Al Alloy, Rubber covered, 3/16" i/d x 22G	5	C
	or	or	or		
	H28/26099	XDHS 30/2	Clip, Al Alloy, 3/16" i/d x 22G	5	C
105	H28/14038	AS 3180/5 /B	Clip, Al Alloy, Rubber covered, 5/16" i/d x 22G	2	C
	or	or	or		
	H28/26101	XDHS 30/4	Clip, Al Alloy, 5/16" i/d x 22G	2	C
106	H28/14040	AS 3180/7 /B	Clip, Al Alloy, Rubber covered, 7/16" i/d x 22G	17	C
	or	or	or		
	H28/26103	XDHS 30/6	Clip, Al Alloy, 7/16" i/d x 22G	17	C
107	H28/14041	AS 3180/8 /B	Clip, Al Alloy, Rubber covered, 1/2" i/d	3	C
	or	or	or		
	H28/26104	XDHS 30/7	Clip, Al Alloy, 1/2" i/d x 22G	3	C

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
108	H28/14042	AS 3180/9 /B	Clip, Al Alloy, Rubber Covered 9/16" i/d x 22G	4	C
	or	or	or		
	H28/26105	~~X~~DHS 30/8	Clip, Al Alloy, 9/16" i/d x 22G	4	C
109	H28/14043	AS 3180/10 /B	Clip Al Alloy, Rubber covered, 5/8" i/d x 22G	2	C
	or	or	or		
	H28/26106	~~X~~DHS 30/9	Clip, Al Alloy, 5/8" i/d x 22G	2	C
110	H28/27204	AS 3180/18 /B	Clip, Al Alloy, Rubber covered, 1 1/8" i/d x 20G	5	C
	or	or	or		
	H28/26933	~~X~~DHS 30/55	Clip, Al Alloy, 1 1/8" i/d x 18G	5	C
111	H28/14307	AS 3180/20 /B	Clip, Al Alloy, Rubber covered, 1 1/4" i/d x 20G	1	C
	or	or	or		
	H28/26001	~~X~~DHS 30/20	Clip, Al Alloy, 1 1/4" i/d x 18G	1	C
112	H28/26014	DHS 28/37	Clip, Al Alloy, 1 1/4" i/d/ x 20G	1	C
113	H28C/35826	DHS 33/1	Shrinkage Washer, Sp. St.l 13/64" i/d x 5/8" o/d	20	C
114	H28C/35812	DHS 34/C	Washer, Alclad, 3/16" i/d x 1 1/4" o/d x .06"	11	C
115	H28C/26078	DHS 103/2	Ferrule, 2BA	6	C
116	G5A/500247	Type '0'	Terminal "Rose Courtney"	1)	C
117		Type '00'	Terminal "Rose Courtney"	1)	C
118	Y10H/19493	CZ 62277	Bulkhead Connector	1	A
119	T27H/2806	LAI/B6/SD	Vibration Absorber, Ascoy Series	4	
120	H128F/59794	1210	Washer, Shakeproof, 3/16" i/d x 3/8" o/d	4	C
121	H28/7034	2A15/1C	Bolt, HTS Hex Hd, 2BA x 1/2" long	1	C
122	H128F/2662	No 4 x 3/8" Type 'Z'	"Parker Kalon" Screw, Rd Hd, 4BA x 3/8" long (Drill No 42)	2	C

(Issued with A/L 123)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
123	I32A/2006		Twine, Binder, Waxed	AR	C
124	G5F/500001		Tape, Insulating, PVC 5/8" wide	AR	C
125	I1/2700		Wire, Locking, Soft Iron Galv, 20G	AR	C
126	K3/321		Enamel, Cellulose, Black	AR	C
127	K3/322		Enamel, Cellulose, Green	AR	C
128	K3/386		Bostik, 1751 Primer	AR	C
129	K3/387		Bostik, 1790 Sealing	AR	C
130	W3/1372		Brad, Brass, 20G x 1/2" long	AR	C
131	K4/10864	K3/407	Glue, Beetle "A"	AR	C
132	K4/10866	K3/411	Hardener, Beetle, Violet V15	AR	C
	or	or	or		
133	K4/10867	K3/412	Hardener, Beetle, Yellow GP 30	AR	C
	or	or	or		
134	K4/10868	K3/410	Hardener, Beetle, Blue 2B	AR	C
135	I31A/1018		Ply Wood, 5/64" thick, to Spec 6/V3, Grade A	AR	C
136	K3/353		Varnish Compound, Jointing, Spec DTD 369A	AR	C
		ø See note (d) at end of this para.			
		¥ See note (e) at end of this para.			

NOTES :- (a) Items 48 to 53 inclusive will be delivered by RAAF direct to the De Havilland Modification Centre Store for all Mod Sets.

(b) Items 1 to 47 inclusive and items 54 to 122 inclusive will be delivered from De Havilland Aircraft Pty Ltd to their own Modification Store which will issue these sets on demand.

(c) Items 123 to 136 inclusive are to be drawn from unit stores.

(Issued with A/L 123)

(d) Ø this alternative item is used on first 2 aircraft only in lieu of item 63.

(e) ¥ these alternative items are used on first 5 aircraft only in lieu of items 104 to 111 inclusive.

Disposal of Parts Removed

8. The following parts are rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
137	A79/501734	12 F 239	Piece, Packing (Ammo Door)	2	C
138		00N413	Plate, Sealing	1	
139	G105C/1870		Breaker, Circuit, 20 amp		
			or		
140	G105C/1400		Breaker, Circuit, 20 amp	1	
141	A79/501781	B001077A	Cable, Ballast, Weight	1	C
142		00N393	Plate, Blanking	1	
143	H28/10042	81/2	Clip "Terry"	1	C
144		A004770	Bracket, Stowage, (G.G.S. Rec)	1	C
145	A79/500935	N0057	Gasket, Rubber	1	C
146	A79/500936	N0058	Plate	1	C
147	G5C/430		Block Terminal	2	A
148	G5C/870		Suppressor	1	A
	or				
	G5C/1002				

NOTES :- (a) Items 137, 139, 140, 143, 147 and 148 are to be returned to store after checking that they are serviceable for use on other aircraft.

(b) Items 138, 141, 142, 144, 145 and 146 are to be disposed of in accordance with the current authorized procedure.

Disposal of Parts in Stock

9. Items 141, 145 and 146 are to be retained in Store for use on other Vampire Mk 30 and 31 aircraft until all are modified and then they are to be disposed of in accordance with current authorized procedure.

(Issued with A/L No 123)

When the Modification is to be Incorporated

10. This modification is to be incorporated as directed by Headquarters, Maintenance Command.

Method of Incorporation

11. (a) Man-Hours Involved : Approx 330 man-hours will be involved to incorporate this modification.

(b) Special Tools, Jigs, Etc. : Nil.

(c) Sequence of Operations :

PART "A"

(i) The method of incorporation for Part "A" of this modification is not necessary, as applicable aircraft have been modified by the Contractor (De Havilland Pty Ltd).

PART "B"

Rework and Installation of the Sense Aerial on to the Rear Fairing of the Canopy.

(ii) Place the canopy on a bench in the inverted position on clean felt, chocking up as necessary.

(iii) Refer to drawing A12745 Sheet 14 and 15 and rework the Rear Fairing and the Lead Ballast Container as shown. Assemble the Stiffener (Item 25) on to the side of the fairing using the eight rivets (Item 83). Assemble the Contact Spring (Item 24) Retainer Plate (Item 44) and Insulating Plate (Item 45) on the cockpit side of the Lead Ballast Container, using the two long insulators (Item 22) two Screws (Item 71) insulating Washers (Item 23) Nuts and Washers (Items 96 and 86B respectively) and securing the small Terminal End of the Lead Assembly (Item 27) under the nut on the Port Side of the Contact Spring Installation.

(iv) Remove and discard the cover on the Sense Aerial (Item 57) and insert the Aerial from the inside of the Rear Fairing. Secure the Aerial to the Fairing, using four washers (Item 26) four screws and four nuts (Items 60 and 97 respectively).

(v) Remove the Lower Lock Nut, located in the centre on the under side of the Aerial Mounting and assemble the other end of the Lead Assembly (item 27) replacing the Lock Nut and ensuring that it is tight.

PART "C"

Rework of the port side Ammunition Door.

(vi) Remove the six Countersunk Headed Screws and six Stiff nuts securing the Ammunition Door Hinge to the Fuselage and retain.

(vii) Remove the Assembly of the Strut and the Terry Clip from their present positions. Remove the bracket from the Strut and discard. Re-locate the Assembly of the Strut and the Terry Clip to the measurements indicated on Drawing A12745 Sheet 8, using the new Bracket (item 5) four Rivets (item 101) and one Rivet (item 100).

(viii) Refer to drawing A12745 Sheet 8 and remove the Latches by carefully undoing the two 1/4" BSF nuts. Undo the other six nuts by removing the Bolts and Washers, take off the Budget Lock Handle Assembly (Ident No A79/500546). Remove the existing 1/8" thick Packing Piece (item 137) and replace with two new Packing Pieces (item 4).

(ix) Place the brackets (items 28 and 29) on the top of the new Packing Pieces, cutting back the Retainer Strip on the edge of the door as necessary and re-assemble the Latches to the door using two bolts (Item 81) four bolts (item 82) six nuts (item 68) two nuts (item 72) and two washers (item 90).

(x) Repaint the reworked portions of the door with Cockpit Green Cellulose Paint (item 127) as required.

(xi) Assemble the four Vibration Absorbers (item 119) to the two brackets (items 5 and 29) using sixteen screws and Stiffnuts (items 66 and 95).

PART "D"

Nose Installation

(xii) Remove the detachable nose. Refer to Drg A12745 Sht 4 and rework it as indicated.

PART "E"

Rework and Installation of the Map Stowage

(xiii) Refer to drawing A12745 Sheet 11 and rework the Map Stowage using the "U" Base (item 41) and the four Rivets (item 99).

(d) Tests : Test in accordance with AOF14 Handbook, Section 11, Part C.

(e) Recording : Record this modification in the Airframe Log Book.

Drawings

12. Drawing A12745, Sheets 1 to 20. Units requiring drawings are to demand from Department of Air.

Effect on Weight and Balance

13. The effect on weight and balance of the Aircraft is as follows :-

Description	Weight (lb)	Arm (in) - All Forward from T. DATUM	Moment
Loop Antenna Bracket, Correctors, Channel Sections and Cable	2. 7	-108.9	-2940
Assemblies	2. 3	-106	- 244
Tuner	3. 9	- 62.9	- 245
Amplifier	9. 0	- 35.0	- 315
Cables in Ammo Bay	1. 5	- 43.0	- 65
Cables in Cockpit	4. 5	- 70.0	- 315
Indicator	.82	- 84.0	- 69
Dimmer Switch Assy	. 5	- 61.0	- 31
Loop Housing and Stiffeners less holes	1	-111.0	- 111
Aerial and Controls	. 6	- 21.0	- 13
Ballast Weight Pt No 00B23A	-33	-107.3	3541
Ballast Weight Pt No 00Z427	18.25	-107.3	-1958

(Issued with A/L 123)

NOTE :- Amendment to the Weight Sheet Summaries will be consolidated and issued by the Department of Air.

References : Files, Department of Air, 9/84/630 and 150/4/9330

Date of Issue : 7th November, 1958

(Issued with A/L 123)

A.A.P. 721:79, Vol.2, Pt.2. VAMPIRE MODIFICATION NO.228

Class 2

MOLLART JOINT - FLEXIBLE COVER - INTRODUCTION

Reason for and Description of Modification

1. This modification authorizes the introduction of a Flexible Plastic Cover to the Mollart Joint on the Aileron Drive. Cases have been reported of seizure of the Mollart Joint, this has been due to the presence of grit and other foreign matter. The Flexible Plastic Cover will protect the Joint and at the same time retain adequate lubrication.

Application

2. This work is to be carried out on all Vampire Mk. 33 aircraft A79-801 to A79-836 inclusive.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units, aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modifications

6. De Havilland (Aust.) Modification 706 and Air Ministry Modification VAM.3449 are equivalent modifications.

Supply

7. The following parts are required for one complete modification set:-

(Issued with A.L.78 - February, 1957)

Item No.	Ident No.	Part No.	Nomenclature	No. off per Set	Stores Class
1.	A79/503833	A.7517	Cover, Flexible for Mollart Joint.	2	
2.	H28B/5032	SP9/C8	Pin, Split.	6	
3.	H28B/5034	SP9/C12	Pin, Split.	4	
4.	A52/K9894	K9894	Pin, Tapered.	4	
5.	H28/27025	AGS2001C/1	Nut, Stiff, M.S. Hex. Thick, 2BA.	4	
6.	K3/386		Bostik Primer 1751.	A.R.	
7.	K2/210		Grease, XG275, DTD. 825	A.R.	
8.	I1/493		Wire, Copper, Soft, 18 SWG.	A.R.	
9.	132A/94		Flax Cord, Spec. 4F35, No. 5 Size	AR.	
10.	K4/152		Beeswax	AR	

Notes:- (a) Items 1 to 5 inclusive will be retained as a modification set at the De Havilland Modification Centre pending issue or demand. Units requiring modification sets are to demand from the De Havilland Modification Centre.

(b) Items 6 to 10 inclusive are to be drawn from Unit Store.

Disposal of Parts Removed

8. The following parts are rendered redundant by the incorporation of this modification:

Item No.	Ident No.	Part No.	Nomenclature	No. off per Set	Stores Class
11	A52/K9894	K9894	Pin, Tapered.	4	
12	H28/27025	AGS2001C/1	Nut, Stiff, M.S. Hex. Thick 2BA.	4	

(Issued with A.L.78 - February, 1957)

Notes: (a) Item 11 is to be examined and, if serviceable, is to be returned to store.

(b) Item 12 is to be discarded as being damaged and of no value.

Disposal of Parts in Stock

9. Not applicable.

When the Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable, but not later than the next "D" Servicing after receipt of modification sets or when the aircraft is allotted for retrospective modification fitment.

Method of Incorporation

11. (a) Man-hours Involved : Approximately 23 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, etc. : No special tools or jigs are required.

(c) Sequence of Operations :

(i) Remove both of the pilot's seats, in accordance with current authorized procedure. Remove the protecting gaiters from the base of each control column, also remove the rear plates of the false floor, retaining all items for subsequent reassembly.

Note: The following operations apply to both port and starboard control columns and aileron drive assemblies.

Remove upper & lower cowls

(ii) Release the tension on the aileron control cables, in the engine bay by slacking off the turnbuckles, see A.A.P. 721:79/33 Sect. 3, Chap. 4, Fig. 10. Refer to A.A.P. 721:79/33 Sect. 3, Chap. 4, Fig. 14 and locate at the base of the control column, the housing which secures the Mollart Ball Joint into position. Remove the two split pins and remove and retain the nuts, bolts and washers securing this housing to the control column.

From the sides of the housing, remove the two stiffnuts and washers and then knock out the two tapered pins, retaining the washers for subsequent reassembly and discarding the tapered pins, item 9, and stiffnuts, item 10.
11 12

(iii) At the aft end of the aileron drive assembly, locate the pedestal which supports the assembly and remove and retain the two securing bolts; this will allow the aileron drive assembly to be moved sufficiently to allow the housing to be removed from the Ball Joint.

(iv) ~~Clean away any foreign matter and grit from the joint and repack with grease (Item 7). Now fit the grease retaining cover. (Item 1). (Check that the forward end of the grease cover has two holes 7/32" diameter punched diametrically opposite each other at an edge distance of .26". Rework if necessary to provide for this).~~ "Stretch grease retaining cover over tapered pin and nut at housing so that they protrude through the hole in cover. Bind cover securely at forward end (and rear end if necessary) to housing using twine (item 9) which has been thoroughly waxed with Bees wax (item 10) prior to use." (Issued with A/L 113)

V(Contd.)

(vi) Reset the aileron controls, as detailed in A.A.P. 721:79/33 Sect. 3, Chap. 4, making sure that all turnbuckles are in safety and relocking them where necessary using locking wire, item 8. Replace Engine Cowls

(vii) Refit the false floors and replace the gaiters around the control column, refit the pilot's seats in accordance with current authorized procedure, secure with attaching items retained in operation (i) and new split pins, items 2 and 3.

Note: These split pins are only needed for aircraft in which R.A.A.F. Vampire Mod. No. 161 (D.H. (Aust.) Mod. V.642) has not been incorporated, e.g., Ejection Seats fitted.

(Issued with A.L.78 - February, 1957)

(d) Tests : Check the ailerons for full and free range of movement in accordance with current authorized procedure.

(e) Recording : Record the modification in the Airframe Log Book.

Drawings

12. No drawings issued.

Effect on Weight and Balance of Aircraft

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References: Files Department of Air 9/84/1057 and 150/4/9331.

Date of Issue: 11th February, 1957.

(Issued with A.L.78 - February, 1957)

A.A.P. 721:79, Vol. 2, Pt. 2. Vampire Modification No. 230

Class 2.

FILLER CAP SPANNER - REPOSITIONING

Reason for and Description of Modification

1. This modification authorizes the removal of the Tank Filler Cap Spanner from the nose of aircraft which have not yet been modified to R.A.A.F. Mod. No. 135 (D.H. Aust. Mod. V.662) or from the top deck of the fuselage of those aircraft which have been modified to R.A.A.F. Mod. No. 135 (D.H. Aust. Mod. V.662) and the repositioning of this spanner on the forward face of No. 3 bulkhead, accessible through the Starboard ammunition door. This modification will eliminate the possibility of further damage to the "Perspex" in the cockpit canopy, while retaining the good accessibility.

Application

2. This work is to be carried out on all Mk. 33 aircraft with the exception of aircraft A79-829 which will be modified by the manufacturer during conversion to a Mk. 35 aircraft.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots, or civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. R.A.A.F. Mod. No. 135 (D.H. Aust. Mod. No. V.662) is cancelled by this modification.

Note:- Modification sets for R.A.A.F. Mod. No. 135 (D.H. Aust. Mod. No. 662) are obsolete and are to be disposed of in accordance with current authorized procedure.

Equivalent Modifications

6. De Havilland (Aust.) Mod. V.708 is the manufacturer's equivalent modification.

(Issued with A.L.76 - January, 1957)

Supply

7. The following parts are required for one complete modification set:-

Item No.	Ident No.	Part No.	Nomenclature	No. Off Per Set	Stores Class
1.		FS15-355ND	Plate, Mounting	1	
2.	H28C/ 2295	AGS.252/20	Woodscrew, brass, rd.hd. No.4 x $\frac{1}{2}$" lg.	3	
3.	H28C/ 2301	AGS.252/4	Woodscrew, brass, rd.hd. No. 2 x 5/8" lg.	1	
4.	H128F/ 63365	AS.2229/ 404	Rivet, alum. alloy csk.hd. 90°, $\frac{1}{8}$" dia. x $\frac{1}{4}$" lg.	2	
5.	H28/ 10038	AS.2294/3	Clip, spring	1	

Note:- Items 1 to 5 inclusive will be retained as a modification set at the De Havilland Modification Centre. Units requiring modification sets are to demand from the De Havilland Modification Centre.

Disposal of Parts Removed

8. The following part is rendered redundant by the incorporation of this modification:

Item No.	Ident No.	Part No.	Nomenclature	No. Off Per Set	Stores Class
6.	H28/10038	AS.2294/3	Clip, spring	1	

Note:- Item 6 is to be examined and, if serviceable, is to be returned to store.

Disposal of Parts in Stock

9. Not applicable.

(Issued with A.L.76 - January, 1957)

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable, but not later than the next "D" servicing after receipt of modification sets or when the aircraft is allotted for retrospective modification fitment.

Method of Incorporation

11. (a) Man-hours Involved : Approximately three (3) man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs &c : No special tools or jigs are required.

(c) Sequence of Operations :

(i) Remove the tank filler cap spanner and the three spring clips, positioned Pre Mod. No. 135 in the nose of the aircraft on the starboard side of the batteries or Post Modification No. 135 on the top deck of the fuselage behind the first pilot's seat. Retain the tank filler cap spanner and the two large spring clips, discard the small spring clip, item 6.

(ii) Refer to Sheet 1, of Drawing A.12748 and secure the two spring clips retained in operation (i) to the mounting plate, item 1, with two rivets, item 4, then re-part number the mounting plate assembly to read FS15-353A.

(iii) Open the starboard ammunition door, refer to the same drawing and mark off the positions for the mounting plate assembly and the spring clip, item 5, on the forward face of No. 3 bulkhead. Secure the mounting plate assembly into position with 3 woodscrews, item 2. Secure the spring clip, item 5, into position, with one woodscrew, item 3. Replace the tank filler cap spanner in the three clips and close the starboard ammunition door.

(d) Tests : No tests are necessary.

(e) Recording : Record the modification in the Airframe Log Book.

(Issued with A.L.76 - January, 1957)

Drawings

12. Drawing A.12748 is attached.

Effect on Weight and Balance of Aircraft

13. The effect of the incorporation of this modification on the weight and balance of the aircraft is negligible.

References : Files Department of Air 9/84/1057 and 150/4/9332.

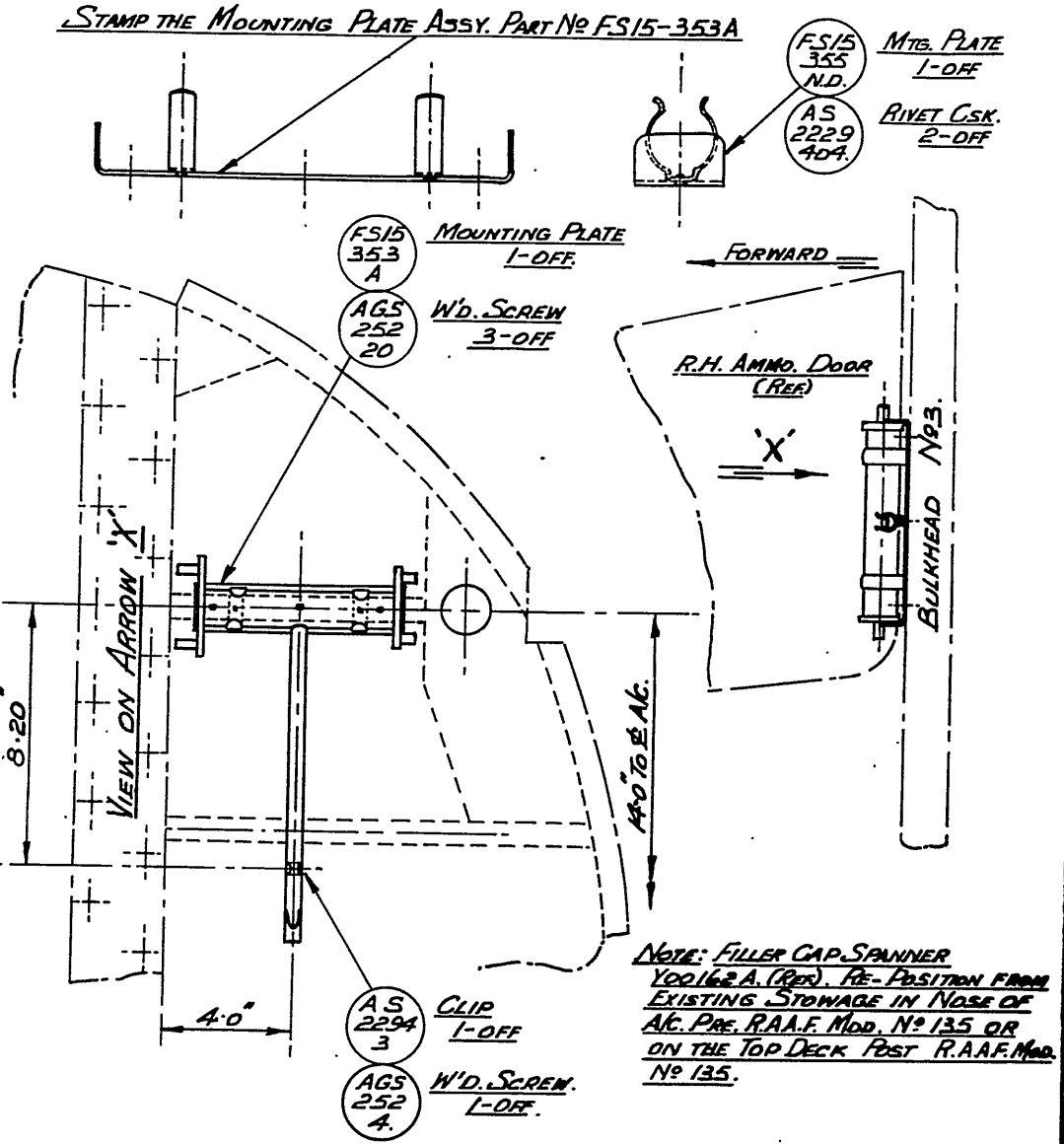
Attachment : Drawing A.12748

Date of Issue : 3rd January, 1957.

(Issued with A.L.76 - January, 1957)

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. I. L	INITIALS	APPROVED



NOTE: FILLER CAP SPANNER Y00162A. (REF). RE-POSITION FROM EXISTING STOWAGE IN NOSE OF AC. PRE. R.A.A.F. MOD. No 135 OR ON THE TOP DECK POST R.A.A.F. MOD. No 135.

SHEET No 1.
DE HAVILLAND DRWG. No 00M329. No OF SHEETS 1.

REFERENCE	ISSUED BY	TITLE
		FILLER CAP SPANNER. — RE-POSITIONING.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	
SURFACE FINISH AUSTRALIAN STANDARD ENG DRWG. PRACTICE A.S.CZ1		SCALE		DRAWING NO.	A-12748
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

A.A.P. 721:79, Vol.2, Pt.2. Vampire Modification No. 231

Class 2

STOP CLOCK TYPE V.308 INTRODUCTION - REPOSITIONING OF FUEL CONTENTS GAUGE

Reason for and Description of Modification

1. This modification authorizes the introduction of a stop clock type V.308 ident No. G6A/3157 in aircraft not yet modified to Vampire Modification No. 160. It also authorizes the repositioning of the main fuel contents gauge and the stop clock on aircraft that are modified to Vampire Modification No. 160, to enable both instruments to be within the pilots vision.

The stop clock is now to be located on the lower right instrument panel and the main fuel gauge is to be located in its former position prior to the introduction of Vampire Modification No. 160.

Application

2. The modification is divided into two parts as follows:-

Part "A" is to be carried out on Vampire aircraft Mk. 30 & 31 that have already been modified to Vampire Modification No. 160.

Part "B" is to be carried out on Vampire aircraft Mk. 30 & 31 not yet modified to Vampire Modification No. 160.

Responsibility for Incorporation

3. The modification is to be incorporated by the instrument personnel of units holding the applicable aircraft.

Action in respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. This modification supersedes and cancels Vampire Modification No. 160 (De Havilland Aust. Mod. V204).

(Issued with A.L.65 - October, 1956)

Equivalent Modifications

6. De Havilland (Aust.) Modification V.224 is the manufacturers equivalent modification.

Supply

7. The following parts are required to complete one modification set:

Item No.	Ident No.	Part No.	Nomenclature	No. off per Set	Stores Class
1.	I1/9913		ALCLAD 18 S.W.G. Spec. DTD.610 3 ins. x 3 ins. (To make adapter plate)	1	C
2.	H28/11210	AS.1246/ 3C	Bolt, H.T.S., Rd. Hd. 2BA x .70" long	2	C
3.	H28/27062	AGS.2002/ C1	Nut, M.S. HEX. Thin Nyloc Insert, 2 B.A.	2	C
4.	H28/8300	AS.1242/ B1	Bolt, H.T.S. Csk. Hd. 4BA x .45" long	4	C
5.	H28/27024	AGS.2001/ B1	Nut M.S. HEX. Thick Nyloc Insert, 4 B.A.	4	C
6.	G6AA/ 500571	G11784	Screw 4 B.A. Shear Head	4	C
7.	K3/321		Enamel, cell-ulose Black	A.R.	C
8.	G6A/3157		Clock stop Type V.308	1	A

(Issued with A.L.65 - October, 1956)

Notes.- (a) Item Nos. 1 to 7 inclusive are to be drawn from unit stores for use against Part "A" of the modification only.

(b) Item No. 8 which is required for part "B" only is to be demanded for, from Modification Centre, De Havilland Aircraft Pty. Ltd. N.S.W., by user units.

(c) It may be found that where Part "A" has already been incorporated that an item part No. OB115 Screw one way 4 B.A. has been used in lieu of item No. 6 G6AA/500571 Screw 4 B.A. Shear Head.

Disposal of Parts Removed

8. No parts are rendered redundant by part "A" of this modification but the following part is rendered redundant by the incorporation of part "B".

Item No.	Ident No.	Part No.	Nomenclature	No. off per Set	Stores Class
9.	G6A/1275		Clock 8 day Mk.2D (Fluor-escent).	1	A

Notes.- (a) Item No. 9 is to be retained against current usage.

(b) The unused portions of Vampire Modification No. 160 modification sets are to be disposed of in accordance with authorized procedure.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated not later than the next "C" inspection after receipt of parts.

(Issued with A.L.65 - October, 1956)

Method of Incorporation

11. (a) Man-hours Involved : Approximately fifteen (15) man-hours will be required to incorporate part "A" of this modification and twelve (12) man-hours for part "B".

(b) Special Tools, Jigs, etc. : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

PART "A"

(i) Disconnect the aircraft batteries in accordance with current authorized procedure. Locate the bottom centre instrument panel, disconnect it by removing the four attachment bolts thus allowing it to drop backwards and rest on the control column facilitating easy access to the rear of the panel.

(ii) To withdraw to stop clock from the panel it will first be necessary to remove the four shear-head attachment screws. Retain the clock and dispose of the screws which will have been mutilated on removal.

(iii) Disconnect the electrical connections to the main tank fuel contents gauge and remove it complete with its packing base from the bottom centre of the panel by undoing the four 2 B.A. bolts, the gauge can now be separated from its base by undoing the remaining two 2 B.A. bolts. Retain the gauge for refitting. The packing together with the six attachment bolts and the six nuts are of no further use and may be discarded.

(Issued with A.L.65 - October, 1956)

(iv) Refer to sheet 3 of the attached drawing and make the necessary new adapter plate from 18 S.W.G. Alclad, item 1.

(v) Drill four holes, for attachment to the panel, using a No. 26 drill; also two holes, for attachment of the gauge, using a No. 11 drill.

(vi) Referring to sheet No. 1, attach the adapter plate to the rear of the panel with the four 4 B.A. Csk. bolts and stiffnuts, items 4 and 5).

(vii) Insert the main tank fuel contents gauge from the front of the panel and secure with the two 2 B.A. bolts and nuts, items 2 and 3.

(viii) Replace the bottom centre instrument panel, using the existing bolts. Reconnect the electrical connections to the main tank gauge and repair any paint finish locally with item 7.

(ix) Refer to sheet 2 of the attached drawing. Locate starboard instrument panel and proceed to cut out aperture which is to be the new position for the stop clock, item No. 8.

Note.- If Vampire Modification No.222 (De Havilland Aust. Mod. V.219) has not been carried out, it will be necessary to remove the I.F.F. control units from this panel and tidily stow the cable assemblies. Similarly, if vampire Modification No.143 (De Havilland Aust. Mod. V.202) has not been carried out, it will be necessary to remove and discard the wedge mounting plate for the camera footage indicator. In either case the discarded parts are to be disposed of in accordance with current authorized procedure.

(Issued with A.L.65 - October, 1956)

(x) Fit the new clock from the rear of the panel and secure with four shear head screws, item No. 6.

Note.- If item No. 6 is not available, four C.S.K. 4 B.A. screws reworked as shown on sheet 2 may be used.

(xi) In order to fit the clock from the rear of the instrument panel it will be necessary to bend locally any pipes in that area to suit the contours of the clock. Remove and rework the windscreen de-icing pipe, as indicated on Sheet 2, to run between the clock and brake pressure gauge.

(xii) Repair any paint finish locally using item No. 7.

(xiii) Reconnect the aircraft batteries.

(xiv) Locate bottom centre instrument panel and remove and discard the clock Mk. 2 8 day, item No. 9, from the bottom centre position on the panel.

(xv) Obtain the new stop clock, item No. 8, together with its attachment screws (supplied with the clock) and proceed as indicated by operations (ix) to (xii) inclusive in Part "A" with the exception of operation (x) where instead of using item No. 6, the attachment screws obtained with the clock may be used.

(d) Tests : Check the fuel tank gauges for normal functioning.

(e) Recording : Record the modification in the Airframe Log Book.

Drawings

12. Drawing No. A12692, sheets 1, 2 and 3 is attached.

(Issued with A.L.65 - October, 1956)

Effect on Weight and Balance

13. The weight and balance effect of the modification is negligible.

References: Files Department of Air 150/4/9291 and 9/84/203.

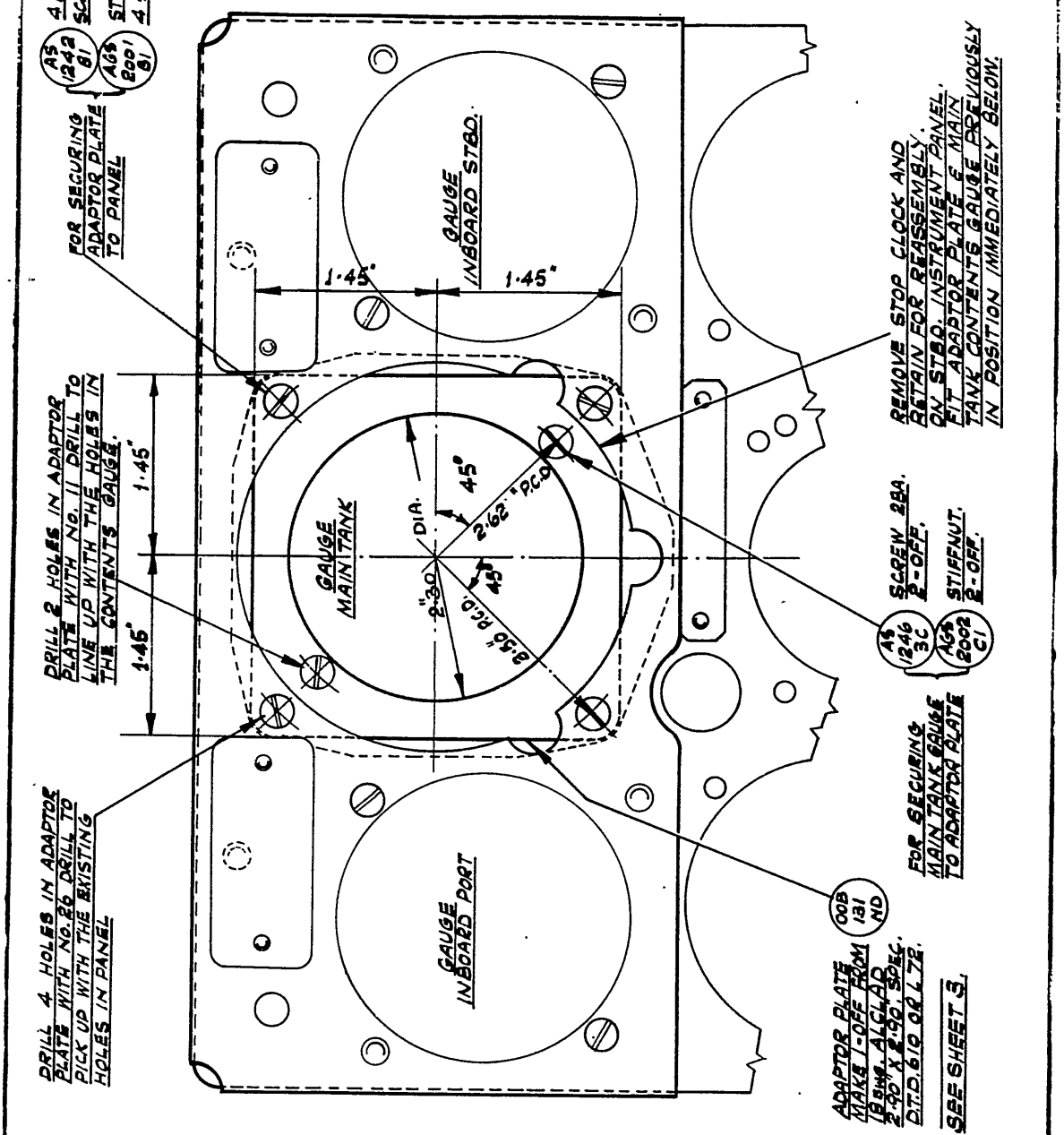
Attachments: Drawing A.12692, Sheets 1, 2 and 3.

Date of Issue: 1st October, 1956.

(Issued with A.L.65 - October, 1956)

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D I L	INITIALS	APPROVED



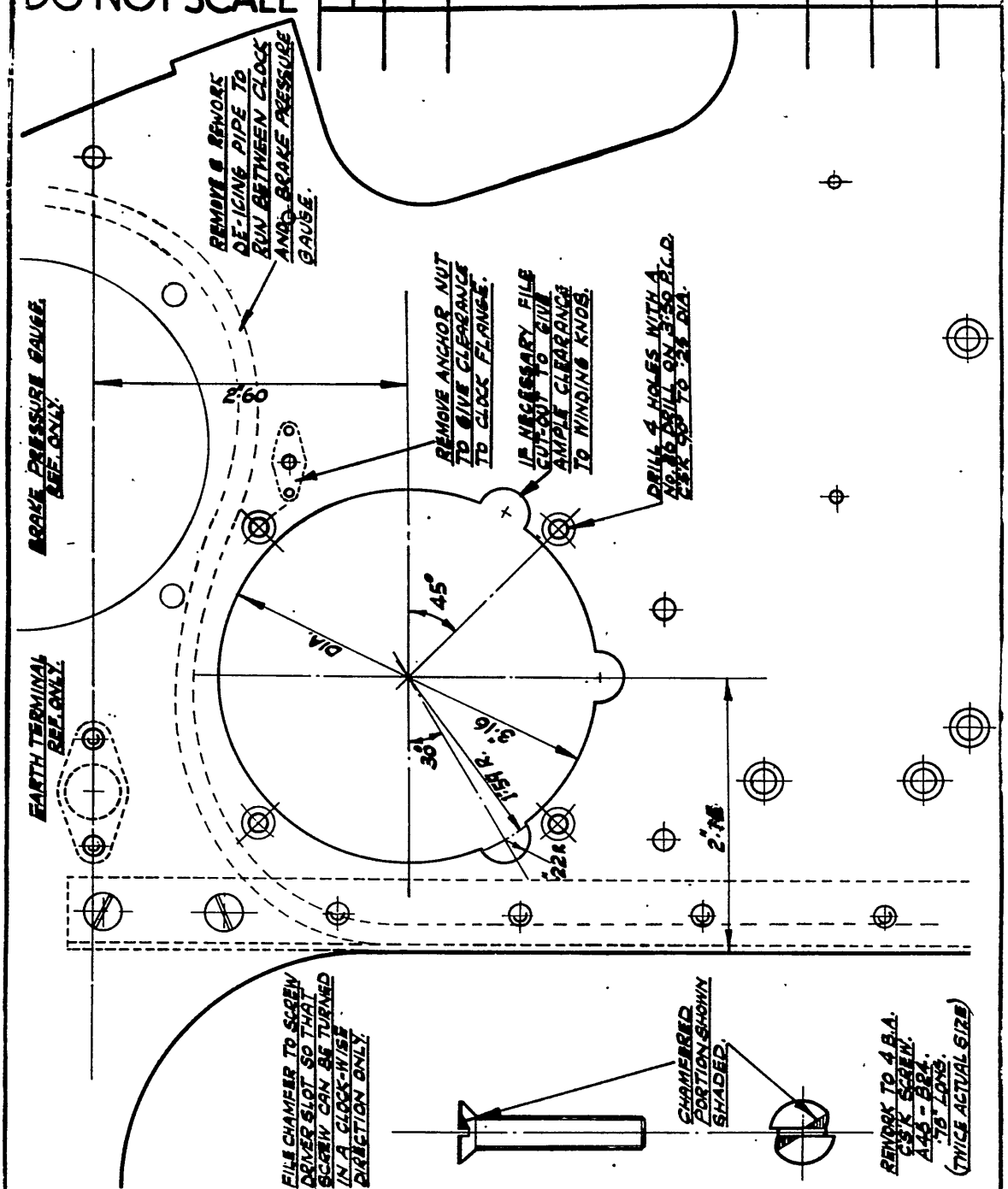
DE HAVILLAND DRWG. OOM. 327. No. OF SHEETS 3. SHEET No. 1.

REFERENCE	ISSUED BY	TITLE.
	DIRECTORATE OF TECHNICAL SERVICES R.A.A.F.	FUEL CONTENTS GAUGE & STOP CLOCK. - INTRODUCTION.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 30 & 31
FRACTIONS	± 1/32"	TREATMENT		ENGINE	NENE 2 V.H.
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD. No 231
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.121		SCALE		DRAWING NO.	A12692
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L	INITIALS	APPROVED



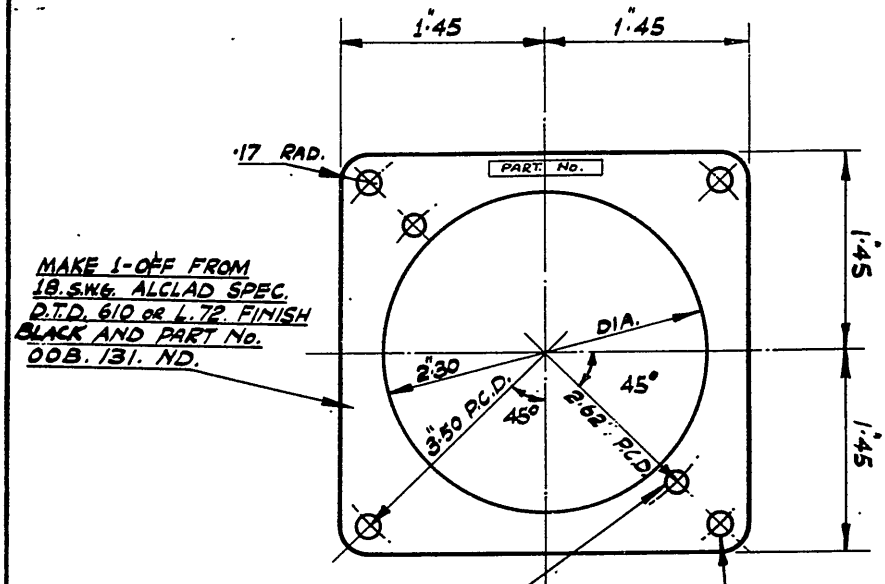
DE HAVILLAND DRWG. 00M.327. NO. OF SHEETS 8. SHEET NO. 2.

REFERENCE	ISSUED BY	TITLE
	DIRECTORATE OF TECHNICAL SERVICES R.A.A.F.	FUEL CONTENTS GAUGE & STOP CLOCK. ~ REPOSITIONING.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 30 & 31
FRACTIONS	± 1/32"	TREATMENT		ENGINE	NENE 2 VH
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD. No 231
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		SCALE		DRAWING NO.	A12692
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D I L	INITIALS	APPROVED



DE HAVILLAND DRWG. 00M327. No. OF SHEETS. 3. SHEET No. 3.

REFERENCE	ISSUED BY	TITLE
	DIRECTORATE OF TECHNICAL SERVICES R.A.A.F.	FUEL CONTENTS GAUGE & STOP CLOCK ~ INTRODUCTION.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 30 & 31
FRACTIONS	± 1/32"	TREATMENT		ENGINE	NENE 2 VH
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD. No 231
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.21		SCALE		DRAWING NO.	A12692 — DRWG. A SIZE
		DRAWN	APPROVED		
		TRACED	CHECKED		

Class 2

PROVISION FOR FIRING ROCKET PROJECTILES SINGLY IN PAIRS OR IN SALVO

Reason for and Description of Modification

1. To improve facilities for operational training by extending the number of runs that may be made in any one flight. This modification is to be carried out on all Vampire Mk 31, 33 and 35 aircraft in accordance with the relevant parts of the modification as follows :-

PART 'A' - Mk 31 Vampire Fighter aircraft.

PART 'B' - Mk 35 Vampire Trainer aircraft.

PART 'C' - Mk 33 Vampire Trainer aircraft.

PART 'A'

Application

2. This work is to be carried out on all Vampire Mk 31 aircraft.

Responsibility for Incorporation

3. The electrical fitters of operating units, aircraft depots and contractors concerned are responsible for the incorporation of this modification.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. DTS Special Instruction Vampire/150 is superseded by the issue of this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V 221 is the equivalent modification.

(Issued with A/L 122)

Supply

7. The following parts are required for one complete modification set :-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1	G5C/930		SPDT Switch	1	A
2		N15-853	Label	1	
3		OON1121ND	Spacer	2	
4		OON1125A	Mounting Bracket	1	
5	G5C/3945		Relay Type 'S4'	1	A
6	H28C/2863	A32/B16	Screw, Steel, Mild, Metal Rd Hd 4BA x ½"	4	C
7	H28C/2134	A45/A20	Screw, Brass, Metal, Csk Hd 6BA x 5/8"	4	C
8	H128F/64410	AS 2227/405	Rivet, Alum Alloy Rd Hd 1/8" D x 5/16" long	8	C
9	H28/27023	AGS 2001/A1	Nut, Steel Mild, Hex Nyloc insert 6BA	4	C
10	G5E/30156		Cable AA18 two core vin spec AS No U1	7' 10"	C
11	G5E/30155		Cable AA18 one core vin spec AS No U1	27' 3"	C
12	G5E/30157		Cable AA18 three core vin spec AS No U1	10' 8"	C

(Issued with A/L 122)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
13	~~G5E/30159~~		~~Cable AA18 five core vin spec AS No U1~~	~~5' 2"~~	~~C~~
14	G5E/30161		Cable AA16 one core vin spec AS No U1	3' 9"	C
15	G5F/20058		Tubing, insulating, PVC 5 M/M, i/d Black	13' 1½" long	C
16	132A/94		Cord, Stringing, spec 4F35	AR	C
17	K4/152		Beeswax	AR	C

NOTES :- (a) Items 1 to 15 inclusive will be delivered to the De Havillands modification centre. Units requiring modification sets are to demand from De Havilland Modification Centre.

(b) Items 16 and 17 are to be drawn from unit stores.

Disposal of Parts Removed

3. The following parts will be rendered redundant by the incorporation of this modification.

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
18	G5C/2497		Switch, SP 7 amp	1	A
19		OON323A	Mounting Bracket	1	
20		DHS 90/64	Label	1	

NOTES :- (a) Item 18 is to be examined and if found serviceable return to store for further use.

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(b) Items 19 and 20 are to be disposed of by current authorized procedure.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable, and not later than the next 'D' servicing of aircraft after the receipt of parts required.

Method of Incorporation

11. (a) Man-Hours Involved : Approx 72 man-hours will be required to carry out this modification.

(b) Special Tools, Jigs, &c : No special tools and jigs are required to carry out this modification.

(c) Sequence of Operations :

(i) Remove Gun Bay doors.

(ii) Remove bottom engine cowls.

(iii) Disconnect accumulator leads and remove accumulators.

(iv) Remove Pilot's seat.

(v) Locate the cable loom running from the aft end of the RP and bombs junction box, mounted on the starboard cockpit floor, to the plug sealing plate at the base of bulkhead No 2, and disconnect both socket ends. Also unclip the smaller cables (part of this loom) running across the bottom of the bulkhead close to the floor, enough to allow the section of the loom running between the junction box and the sealing plate to be modified without removing it from the aircraft.

(vi) Disconnect the remaining wiring at the RP and bombs junction box and remove the box from the aircraft and retain it and the attachment screws for further use.

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(vii) At the lower aft side of Bulkhead No 4 locate the RP relay and resistance unit and adjacent five way terminal block. Disconnect the three cable looms at these units, remove the terminal block and retain it and its mounting screws for further use.

(viii) Note where each of the above three disconnect cable looms connect to, then remove them from the aircraft and retain for modifying.

(ix) Locate the mounting bracket for the above 5-way terminal block, drill out the rivets securing it to bulkhead No 4 and remove and dispose of as per para 8.

(x) Refer to Drawing A12980 sheets 1 and 2. Obtain the RP and bombs junction box and modify as shown using switch (item 1), Label (item 2) 1 off of each; spacer (item 3) 2 off; screw (item 7) and stiffnut (item 9) 4 off of each. After fitting the new equipment add new wiring as shown using cable (item 14) length to suit.

NOTE: Care must be taken to prevent dirt and swarf entering the junction box whilst modifying. After modifying the junction box re-part number to 00N301A/2.

(xi) Refer to Drawing A12980 sheets 3 and 5. At the aft face of bulkhead No 4 proceed to modify by adding new mounting bracket (item 4) 1 off using rivets (item 8) 8 off; Relay type 'S4' (item 5) 1 off using screws (item 6) 4 off and also re-fit the 5 way terminal block (retained in para vii) to the mounting bracket (item 4) using existing screws (also retained in para (vii).

(xii) Refer to Drawing A12980 sheet 4. Obtain two of the three cable looms disconnected and removed in para (viii), one previously running to the plug on Rib 1 (Port) the other previously running to the plug on Rib 1 (Stbd) and proceed to modify them as shown using cable (Item 12) and (Item 11), 5 M/M i/d black nylex tubing (Item 15) and cord (Item 16) treated with Beeswax (Item 17). After modifying the two cable looms re-part number them viz.

00N1129A for cable loom port - (Red Socket)

00N1131A for cable loom stbd - (Green Socket)

(xiii) The remaining cable loom disconnected and removed in para (viii) is to be modified as follows:-

At the large socket end of the cable loom, unscrew coupling nut, cut binding around the cut ferrule and slide the coupling nut and cut ferrule back away from the socket. Cut binding around the open end of the large nylex tubing and then obtain cable (Item 10) 7' - 10" long and push the cable through the open end of the large nylex tubing and finally connect the red core to pin 'M' and the green core to pin 'N' at the large socket. Over the cable protruding from the large nylex tubing slide a piece of 5 M/M Nylex tubing 8".0 long and telescope for 1".0.

(xiv) Re-assemble the coupling nut and cut ferrule, and add whipping at original places and also at the end of the new piece of nylex tubing, using cord (Item 16) treated with Beeswax (Item 17) as required. Code the new two core cable - red core "RP20" and green core "E". After modifying the loom re-part number 00N333A/1.

(xv) In the cockpit, locate the cable loom disconnected as detailed in para v, and at the breeze socket ends uncouple the coupling nuts and ferrules and slide them back along the cable. Remove whipping two places on the loom and then proceed to add two new cores of cable (Item 14) each 10".5 long running through the existing nylex covering connecting one core to pin '1' in the large socket and pin 'M' in the smaller socket, the other core to pin '2' in the large socket and pin 'N' in the smaller socket. Code the above cables 'RP20' and 'E' respectively.

(xvi) Locate the RP/Bombs Master Switch on the port cockpit wall and disconnect one cable coded 'RP3' (the other end connects to pin 'F' plug 'C17') recode it 'CG8' and reconnect it to the existing 'CG8' terminal in the switch.

(xvii) Assemble all parts back to original positions and use cord (Item 16) treated with Beeswax (Item 17) for whipping. After modifying the cable loom repart number 00N1123A.

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(xviii) Obtain the modified RP and bombs junction box and assemble it back to its original position on the cockpit floor using the existing attachment items retained in para (vi) and connect up all the existing wiring disconnected in para (vi), including the modified loom Part No 00N1123A. Also connect up the remaining loose end of the modified loom at the bulkhead sealing plate and re-clip the smaller cables (part of this loom) running across the bottom of the bulkhead close to the floor using existing clips.

(xix) Refer to Drawing A12980 sheet 5. Install the three modified cable looms part No 's 00N1129A, 00N1131A and 00N333A/1 by routing them in a similar manner to the previous installation, using cord (Item 16) treated with Beeswax (Item 17) for whipping to existing cables and/or structure. For details of wiring connections at equipment on aft face of bulkhead No 4 refer closely to the attached drawing.

(xx) Replace Pilot's seat.

(xxi) Install and reconnect the aircraft accumulators.

(xxii) Replace the gun bay doors.

(xxiii) Replace the bottom engine cowls.

PART 'B'

Application

12. This work is to be carried out on 10 Mk 35 aircraft Serial No's A79-601 to A79-610 inclusive.

13. The following parts are required for one complete modification set:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
21		N15-855	Lighting Panel insert	1	
22		N15-1055A	Modified SPDT Switch	1	
23	G5C/3945		Relay Type 'S4'	1	C
24	G5A/500057	Z.49428	Sleeve (5X/3148)	14	C
25	G5A/500313	Z.27329	Thimble (5X/3149)	8	C

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Item No	Ident No	Part No	Nomenclature	No off per Set	Stores Class
26	H28C/28	A32/B20	Screw, Steel, Mild, Metal Rd Hd 4BA x 5/8"	4	C
27	H28/27024	AGS.2001/B1	Nut, Steel Mild, Hex Nyloc insert	6	C
28	H28/27001	AGS.2001/A4	Nut, Brass Hex Nyloc insert, 6BA	4	C
29	H28/27138	SP.40/A10	Grommet	1	C
30	G5E/30154		Cable, Electric, LT AA20, one core vin, spec AS No U1 - 24' -0" long		C
31	G5E/30157		Cable Electric, LT AA18, three core, vin spec AS No U1 - 11' -3" long		C
32	G5E/30155		Cable electric, LT AA18, one core vin, spec AS No U1 - 3' -0" long		C
33	G5F/20058		Tubing, insulating, PVC 5 M/M, i/d, black - 14" lg		C
34	G5F/20059		Tubing, insulating, PVC 6 M/M, i/d, black 10" lg		C
35		IG28	Pax Paint	AR	
36	K4/10219		Perspec cement, clear	AR	
37	G5F/500001		Tape, Insulating PVC, $\frac{5}{8}$" wide	AR	C
38	I32A/94		Cord, Stringing Spec 4F35	AR	
39	K4/152		Beeswax	AR	

NOTES: (a) Items 21 to 34 inclusive will be delivered to the contractors modification centre and will be issued out on demand.

(b) Items 35 to 39 inclusive are to be drawn from unit stores.

Disposal of Parts Removed

14. The following part will be rendered redundant by the incorporation of this modification.

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Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
40	G5C/2497		Switch SP 7 Amp	2	C

NOTE: Item 40 is to be examined and if found serviceable return to store for further use.

Disposal of Parts in Stock

15. No Action.

Method of Incorporation

16. (a) Man-Hours Involved: Approximately 70 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, &c : No special tools and jigs are required to carry out this modification.

(c) Sequence of Operations :

(i) Disconnect the aircraft accumulators.

(ii) On the main instrument panel, unscrew all the "Thorn" lamp caps and remove the coupling bar from the interlinked starter switches, thus allowing the three pieces of perspex lighting panel to be removed. Temporarily replace the lamp caps and the coupling bar to avoid misplacing same.

(iii) Remove top and bottom engine inspection panels on forward end of engine cowls to gain access to junction box 2 and wiring on engine bulkhead.

(iv) Disconnect all electrical looms at junction box 2 and remove the box from the aircraft together with the two cable looms which were assembled to the inboard side of the resistance box on junction box 2 and running to rib 1, port and stbd. Retain these items together with the junction box mounting screws for reworking and further use.

(v) Locate the RP selector switch (Item 40) and the adjacent "spare" switch mounted on the RH side of the instrument panel and immediately above the landing light switch, disconnect wiring and remove them from the panel and dispose of as per chapter 8(a), retaining the four attachment screw for further use.

(vi) Refer to Drawing A12980 sheet 6 and proceed to modify the instrument panel according to details given.

NOTE:- Particular care must be taken to ensure that no dirt and swarf enters the back of adjacent switches and also that instruments and electrical cables are not damaged in the process of filing the new cut-out.

(vii) After modifying the instrument panel assemble switch (Item 22) 1 off, using screws (retained in para (v)) and stiffnuts (Item 28) 4 off and re-part number the modified instrument panel to F15-551A/1.

(viii) Refer to Drawing A12980 sheet 6 and connect cable coded 'RP2' (disconnected in sub-para (v)) to the new switch. Remove existing cable coded 'RP3" (disconnected in sub-para (v)), re-code 'CG7' and then install as shown on drawing.

(ix) Disconnect loom 'C8B' (Part of Instrument Panel wiring with socket marked 'Red') from starboard disconnect panel. Unscrew the coupling nut, remove the nylex wrapping at the socket outlet and slide the existing nylex sleeve, coupling nut and cut ferrule down the cable.

(x) Obtain a piece of cable (Item 32) 2' - 11" long and push one end through the sleeve, cut ferrule and coupling nut and connect to the existing spare pin 'A' in the socket using sleeve (Item 24) and thimble (Item 25) 1 off of each.

(xi) Re-assemble cut ferrule and coupling nut to socket, push nylex sleeve back to its original position and warp the cable outlet for a distance of 1".5 approx using insulating tape (Item 37) as required.

(xii) Push the remaining end of the above cable through the existing binding (approx 24" from the socket outlet) and finally code the cable 'RP20'. After modification re-part number loom 'C8B' N15-869A.

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(xiii) Refer to Drawing A12980 sheet 7 and run the new cable coded 'RP20' along with existing instrument panel wiring in the most convenient manner, securing the cable at various intervals using insulating tape (Item 37) and thence connecting up with a terminal on the new switch (fitted in operation (vii) as shown.

(xiv) Reconnect the socket end of the reworked loom 'C8B' to the original position on the starboard disconnect panel.

(xv) Raise instrument panel to its vertical position and secure fasteners.

(xvi) Refer to drawing A12980 sheet 8. Obtain the perspex lighting panel for RH instruments and switches, previously removed in para (ii) and proceed to rework it as shown using insert (Item 21) 1 off and cement (Item 36) as required.

NOTE: Care must be taken to cut the panel accurately to dimensions given on the drawing and that the insert is fitted in flush with the front face of the panel. All excess cement is to be thoroughly removed.

(xvii) After allowing the insert joints to thoroughly dry apply Pax Black paint (Item 35) over joint lines and also along the top edge of the insert.

(xviii) When the black paint is dry the lighting panel is to be re-part numbered N15-867A on the back.

(xix) Re-assemble the above lighting panel together with the two others removed in para (ii), to their original positions on the instrument panel.

(xx) Refer to drawing A12980 sheets 8 & 9. Obtain junction box 2 previously removed in para (iv) and modify as shown using relay (Item 3); Grommet (Item 29) 1 off of each, screw (Item 26) 4 off, stiffnut (Item 27) 6 off and cable (Item 30) and Nylex tubing

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(Item 34) part of each. After reworking the complete box, re-part number to N15-155A/2.

(xxi) Refer to drawing A12980 sheet 10. Modify the two looms (removed in para (iv) as shown using sleeve (Item 24) thimble (Item 25) 8 off each, cable (Item 31), cable (Item 30) nylex tubing 5 M/M, i/d (Item 33), nylex tubing 6 M/M i/d, (Item 34) and cord (Item 38) suitably treated with Beeswax (Item 39). After modifying these looms re-part number them:

N15-877A	Port
N15-879A	Stbd

(xxii) Re-assemble the above looms making sure to route them in the same manner as before, using cord (Item 38) suitably treated with Beeswax (Item 39), to bind them to the engine mounting structure at various intervals.

(xxiii) Obtain the modified junction box 2 and re-assemble it to its original position using screws retained in para (iv).

(xxiv) Refer to drawing A12980 sheet 11 and reconnect all the electrical looms, previously disconnected in para (iv), and the new wiring from the junction box, making sure that all loose ends are reconnected correctly as shown.

(xxv) Replace top and bottom engine inspection panels on the forward end of the engine cowls.

(xxvi) Re-connect the aircraft accumulator leads.

PART 'C'

Application

17. This work is to be carried out on 15 Mk 33 Trainer aircraft which have already had RAAF Vampire Mod 171 (DH Aust Mod V677 embodied, plus 18 Mk 33 Trainer aircraft which have neither RAAF Vampire Mod 171 (DH Aust Mod V677) or RAAF Vampire Mod 205 (DH Aust Mod V691) embodied. All the above aircraft are to be modified concurrently with RAAF Vampire Mod 205.

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Supply

18. The following parts are required for one complete modification set:

Item No	Ident No	Part No	Nomenclature	No off per Set	Stores Class
41		N15-1055A	Modified SPDT Switch	1	A
42	G5C/3945		Relay type 'S4'	1	A
43	G5A/500057	Z.49428	Sleeve (5X/3148)	14	C
44	G5A/500313	Z.27329	Thimble (5X/3149)	8	C
45	H28C/28	A32/B20	Screw, steel, mild, metal Rd Hd 4BA x 5/8"	4	C
46	H28/27024	AGS.2001/B1	Nut, steel mild, Hex Nyloc insert	6	C
47	H28/27001	AGS.2001/A4	Nut, Brass Hex Nyloc insert 6BA	4	C
48	H28/27138	SP.40/A10	Grommet	1	C
49	G5E/30154		Cable, Electric, LT AA20 one core vin spec AS No U1	24'-0" long	C
50	G5E/30157		Cable, Electric, LT AA18 three core vin spec AS No U1	11'-3" long	C
51	G5E/30155		Cable, electric, LT AA18 one core vin spec AS No U1	3'-0"	C
52	G5F/20058		Tubing, insulating, PVC 5 M/M i/d black	14" long	C
53	G5F/20059		Tubing, Insulating, PVC 6 M/M, i/d, black	10" long	C
54	G5F/500001		Tape, Insulating PVC 5/8" wide	AR	C
55	132A/94		Cord, Stringing, Spec 4F35	AR	C
56	K4/152		Beeswax	AR	C

NOTES: (a) Items 41 to 53 inclusive will be delivered to the contractors modification centre and will be issued out on demand.

(b) Items 54 to 56 inclusive are to be drawn from Unit Stores.

(Issued with A.L. 122)

Disposal of Parts Removed

19. The following part will be rednered redundant by the incorporation of this modification:-

Item No	Ident No	Nomenclature	No off per set	Stores Class
57	G5C/2497	Switch SP 7 Amp	2	C

NOTE: Item 17 is to be examined and if found serviceable return to store for further use.

Method of Incorporation

20. (a) Man-Hours Involved : Approximately 54 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, &c : No special tools and jigs are required to carry out this modification.

(c) Sequence of Operations :

(i) Disconnect the aircraft accumulators.

(ii) Remove top and bottom engine inspection panels on forward end of engine cowls to gain access to junction box 2 and wiring on engine bulkhead.

(iii) Disconnect all electrical looms at Junction Box 2 and remove the box from the aircraft together with the two cable looms which were assembled to the inboard side of the resistance box on Junction Box 2 and running to rib 1, port & stbd. Retain these items together with the Junction Box mounting screws for reworking and further use.

(iv) On the instrument panel supplied with modification set for RAAF Vampire Mod 205 (DH Aust Mod V 691) assemble the switch (Item 41) using existing screws and stiffnuts (Item 46) 4 off as shown on Drawing A12980 sheet 6.

(v) From the modification set for RAAF Vampire Mod 205 (DH Aust Mod V691) obtain cable loom C83 Part No N15-631A and modify as follows prior to installation in the aircraft.

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(vi) Unscrew the coupling nut, remove the nylex wrapping at the socket outlet and slide the existing nylex sleeve, coupling nut and ferrule down the cable.

(vii) Obtain a piece of cable (Item 51) 2' - 11" long and push one end through the sleeve, cut ferrule and coupling nut and connect to the existing "spare" pin 'A' in the socket using sleeve (Item 43) and thimble (Item 44) 1 off each.

(viii) Re-assemble cut ferrule and coupling nut to socket, push nylex sleeve back to its original position and wrap the cable outlet for a distance of 1".5 approx using insulating tape (Item 54) as required.

(ix) Push the remaining end of the above cable through the existing binding (Approx 24" from the socket outlet) and finally code the cable 'RP20'. After the modification re-part number LOOM '38B' N15-869A.

(x) Install the reworked loom in accordance with instructions laid down in RAAF Vampire Mod 205 (DH Aust Mod V691) and make connections to new switch (refer para (iv) above) as shown on Drawing A12980 sheet 6.

(xi) Refer to Drawing No A12980 sheets 8 & 9. Obtain Junction Box 2 previously removed in para (iii) and modify as shown using relay (Item 42) and Grommet (Item 48) 1 off each; screws (Item 45) 4 off, stiffnut (Item 46), and cable (Item 49), and nylex tubing (Item 53) part of each. After reworking, the part no of the complete junction box is to be altered to N15-155A/2.

(xii) Refer to Drawing A12980 sheet 10. Modify the two looms (removed in para (iii)) as shown using sleeve (Item 43). Thimble (Item 44) 8 off each; cable (Item 50), cable (Item 49) nylex tubing (Item 52), nylex tubing (Item 53) and cord (Item 55) suitably treated with Beeswax (Item 56). After modifying these looms re-part number them as follows:

N15-877A Port
N15-879A Starboard

(xiii) Re-assemble the above looms making sure to route them in the same manner as before, using cord (Item 55) suitably treated with Beeswax (Item 56) to bind them to the engine mounting structure at various intervals.

(xiv) Obtain the modified junction Box 2 and re-assemble it to its original position using screws retained in para (iii).

(xv) Refer to Drawing A12980 sheet 11 and reconnect all the electrical looms previously disconnected in para (iii), and the new wiring from the junction box, making sure that all loose ends are reconnected correctly as shown.

(xvi) Replace top and bottom engine inspection panels on the forward end of the Engine Cowls.

(xvii) Re-connect the aircraft accumulator leads.

(d) Tests : Function the circuit to check the installation.

(e) Recording : Record this modification in the aircraft Log Book.

Drawings

21. Eleven (11) sheets of Drawing No 12980 are attached.

Effect on Weight and Balance

22. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 150/8/1210, 150/4/8621

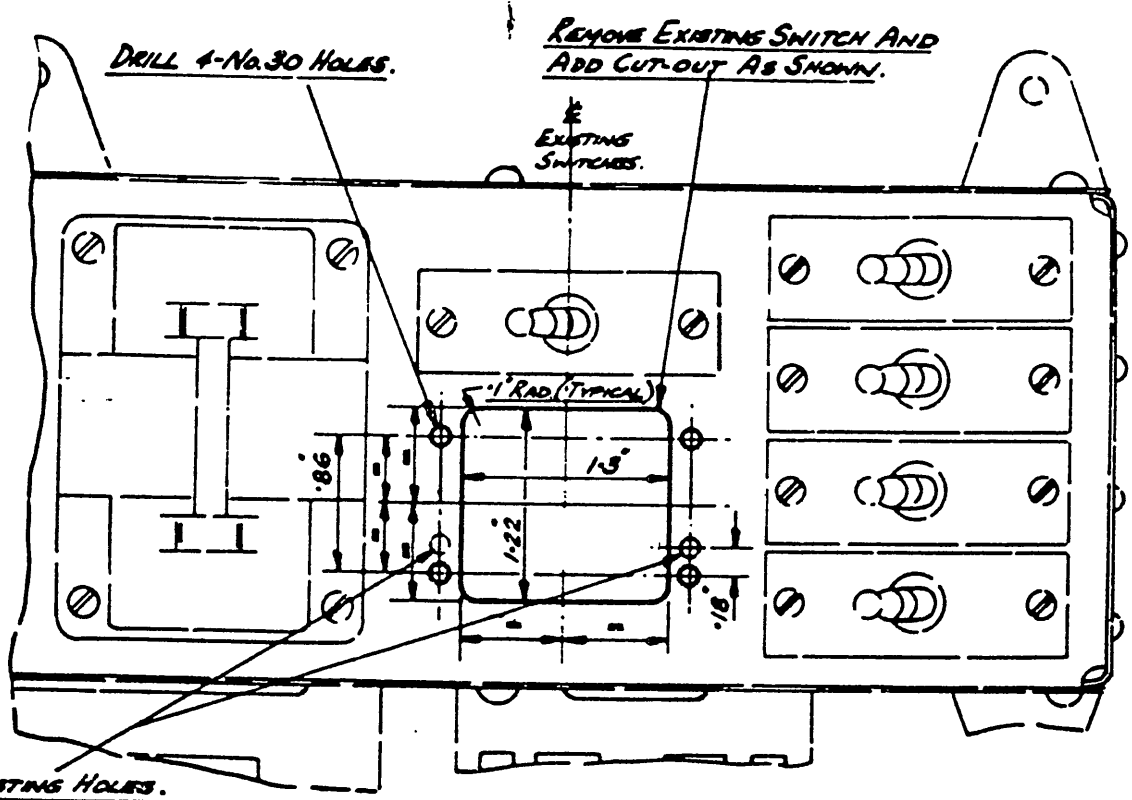
Attachments : Drawing A12980 (11 sheets)

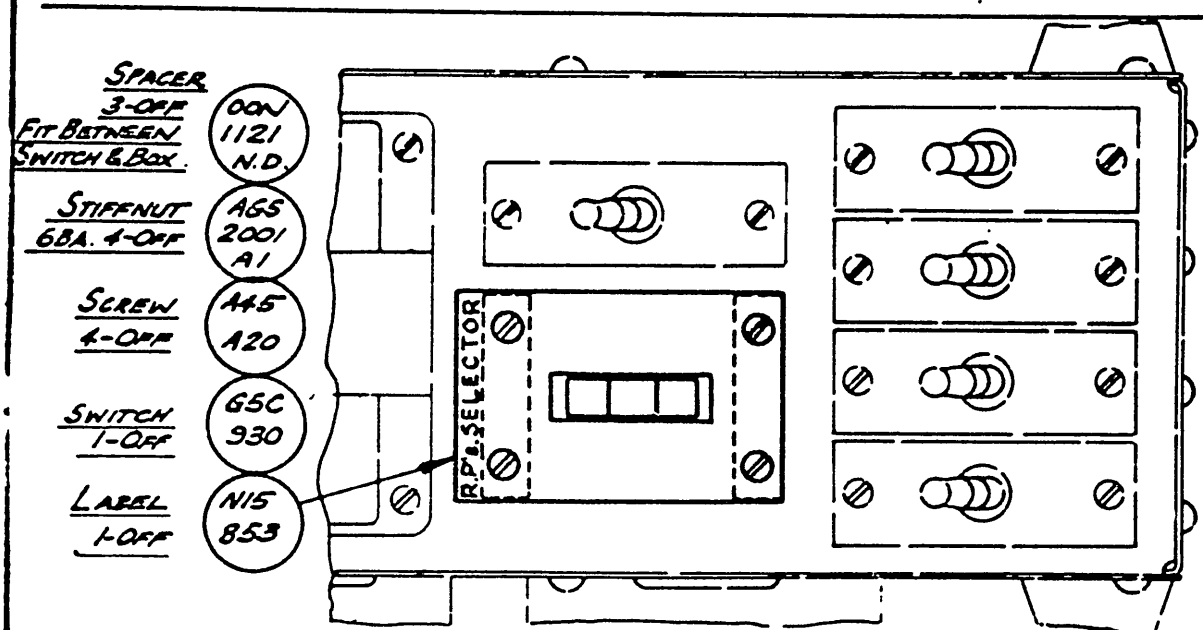
Date of Issue : 7th November, 1958

(Issued with A.L. 122)

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	INITIALS	APPROVED





MODIFICATIONS TO R.P. & BOMBS JUNCTION BOX. (Mk.31 A/C ONLY)

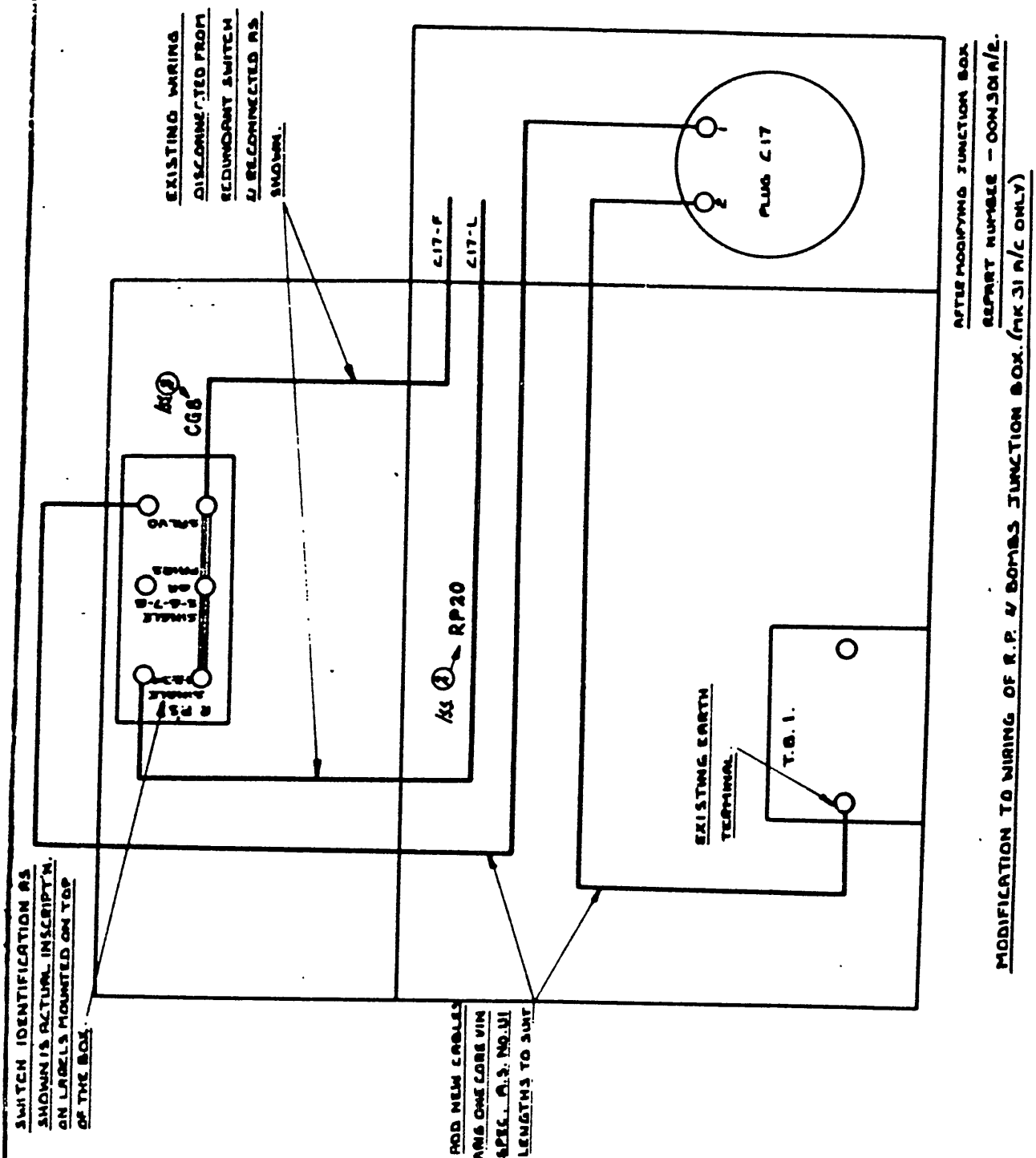
DE HAVILLAND DRG. No. 00M341 SHT. 1 OF 11

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	PROVISION FOR FIRING ROCKET PROJECTILES SINGLY, IN PAIRS OR SALVO

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD 232
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.121		SCALE		DRAWING NO.	A 12980 SHEET 1 OF 11
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. L	INITIALS	APPROVED
2	27.10.58	Code CG8, 4 RP20 added to Drg.	1		



DE HAVILLAND DRAWING NO. 00M341 SHEET 2 OF 11 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	PROVISION FOR FIRING ROCKET PROJECTILES SINGLY, IN PAIRS OR SALVO.

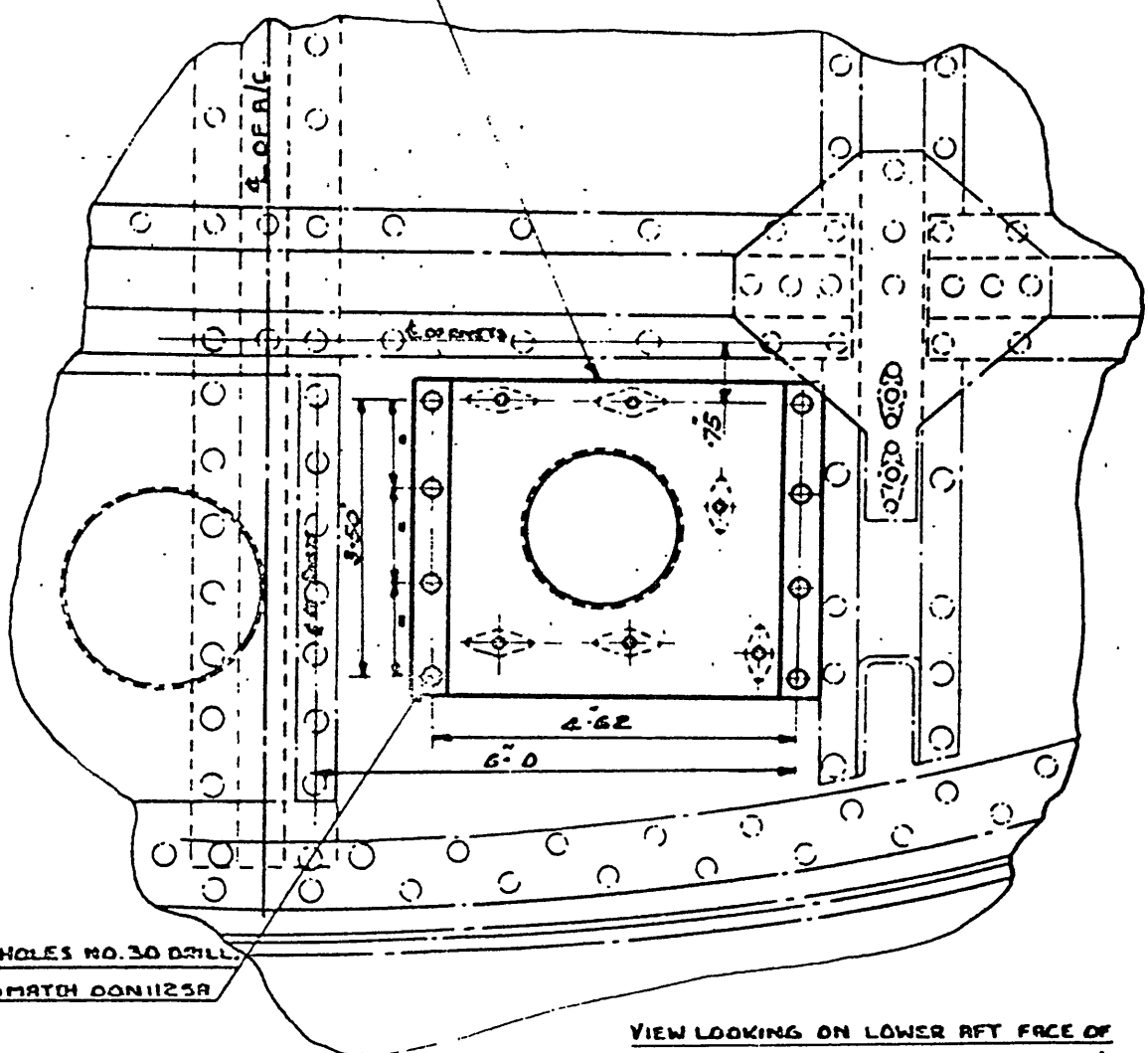
LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECN. ORDER	VAMPIRE MOD. 232
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE		SCALE		DRAWING NO.	A 12980 SHEET 2 OF 11
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	BY	INITIALS	APPROVED

DON 1125 A MOUNTING BRACKET

AS 2227 405 RIVETS B OFF



VIEW LOOKING ON LOWER RFT FACE OF BULKHEAD NO.4. (MK.31 A/C. ONLY)

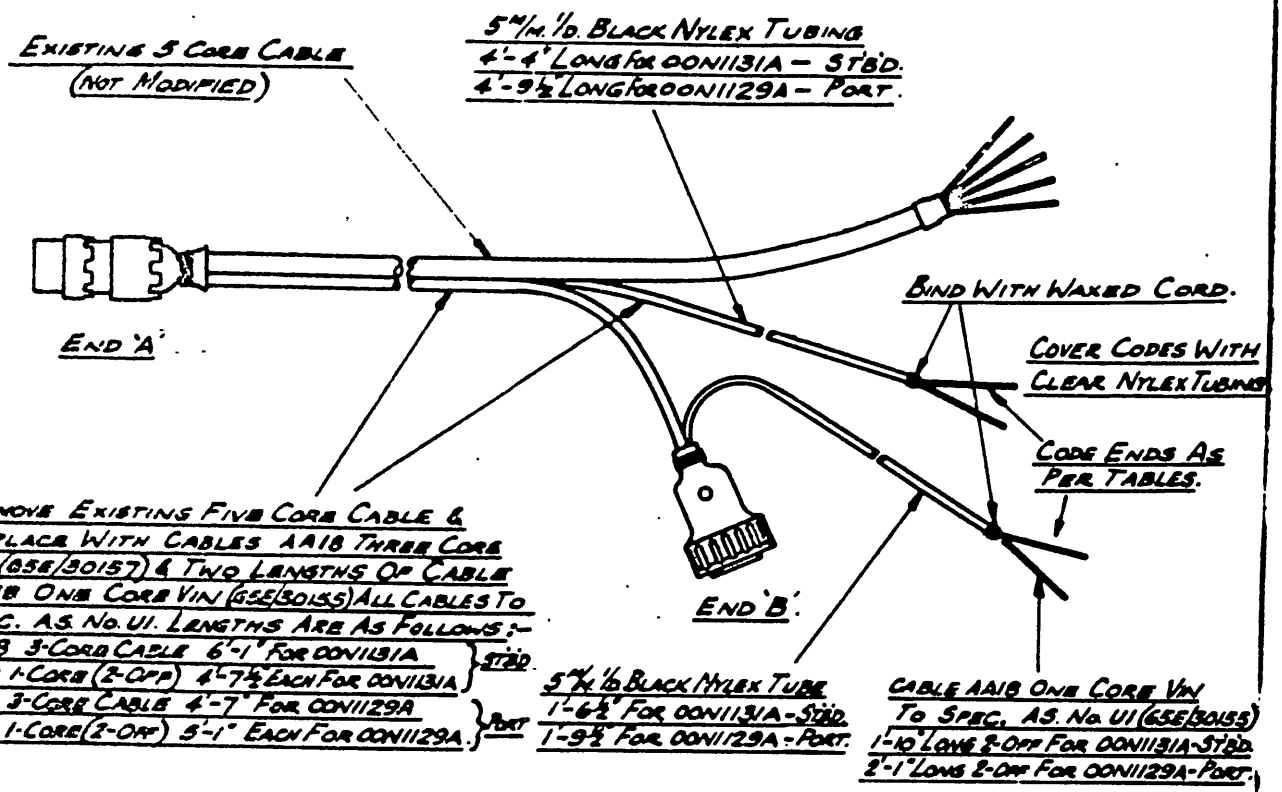
DE HAVILLAND DRAWING NO. DOM341 SHEET 3 OF 11 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	PROVISION FOR FIRING ROCKET PROJECTILES SINGLY, IN PAIRS OR SALVO.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	= 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD 252
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.D.		SCALE		DRAWING NO.	A 12980 SHEET 3 OF 11
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	B I L	INITIALS	APPROVED



REMOVE EXISTING FIVE CORE CABLE & REPLACE WITH CABLES AA18 THREE CORE VIN(6SE/30157) & TWO LENGTHS OF CABLE AA18 ONE CORE VIN (6SE/30155) ALL CABLES TO SPEC. A.S. No. U1. LENGTHS ARE AS FOLLOWS:–

AA18 3-CORE CABLE 6'-1" FOR 00N1131A } STBD.
AA18 1-CORE (2-OFF) 4'-7½ EACH FOR 00N1131A }

AA18 3-CORE CABLE 4'-7" FOR 00N1129A
AA18 1-CORE (2-OFF) 5'-1" EACH FOR 00N1129A. } PORT

5" M. ½ D. BLACK NYLEX TUBE
1'-6½" FOR 00N1131A-STBD.
1'-9½" FOR 00N1129A-PORT.

CABLE AA18 ONE CORE VIN TO SPEC. A.S. No. U1 (6SE/30155)
1'-10" LONG 2-OFF FOR 00N1131A-STBD.
2'-1" LONG 2-OFF FOR 00N1129A-PORT.

CONNECTIONS AT END 'A'

00N1129A			00N1131A		
PIN CODE	CABLE CODE	COLOUR CODE	PIN CODE	CABLE CODE	COLOUR CODE
6	RP9	RED	6	RP14	RED
7	RP10	BLUE	7	RP15	BLUE
8	RP11	GREEN	8	RP16	GREEN
9	RP12	——	9	RP17	——
10	RP13	——	10	RP18	——

CONNECTIONS AT END 'B'

00N1129A			00N1131A		
PIN CODE	CABLE CODE	COLOUR CODE	PIN CODE	CABLE CODE	COLOUR CODE
1	RP9	RED	1	RP14	RED
2	RP10	BLUE	2	RP15	BLUE
3	RP11	GREEN	3	RP16	GREEN
4	RP23	——	4	RP22	——
5	RP24	——	5	RP21	——
6			6		

CABLES IN PINS 1 TO 5 INCLUSIVE IN ABOVE LOOMS ARE NOT AFFECTED BY THIS MOD'N.

AFTER MODIFYING EXISTING LOOMS THEY ARE TO BE RE-PART-NUMBERED VIZ:–

LOOM ASSY. PORT —— 00N1129A
LOOM ASSY. STBD. —— 00N1131A.

MODIFICATIONS TO PORT & STBD. R.P. & BOMBS CABLE LOOMS.

(MK31 A/C. ONLY)

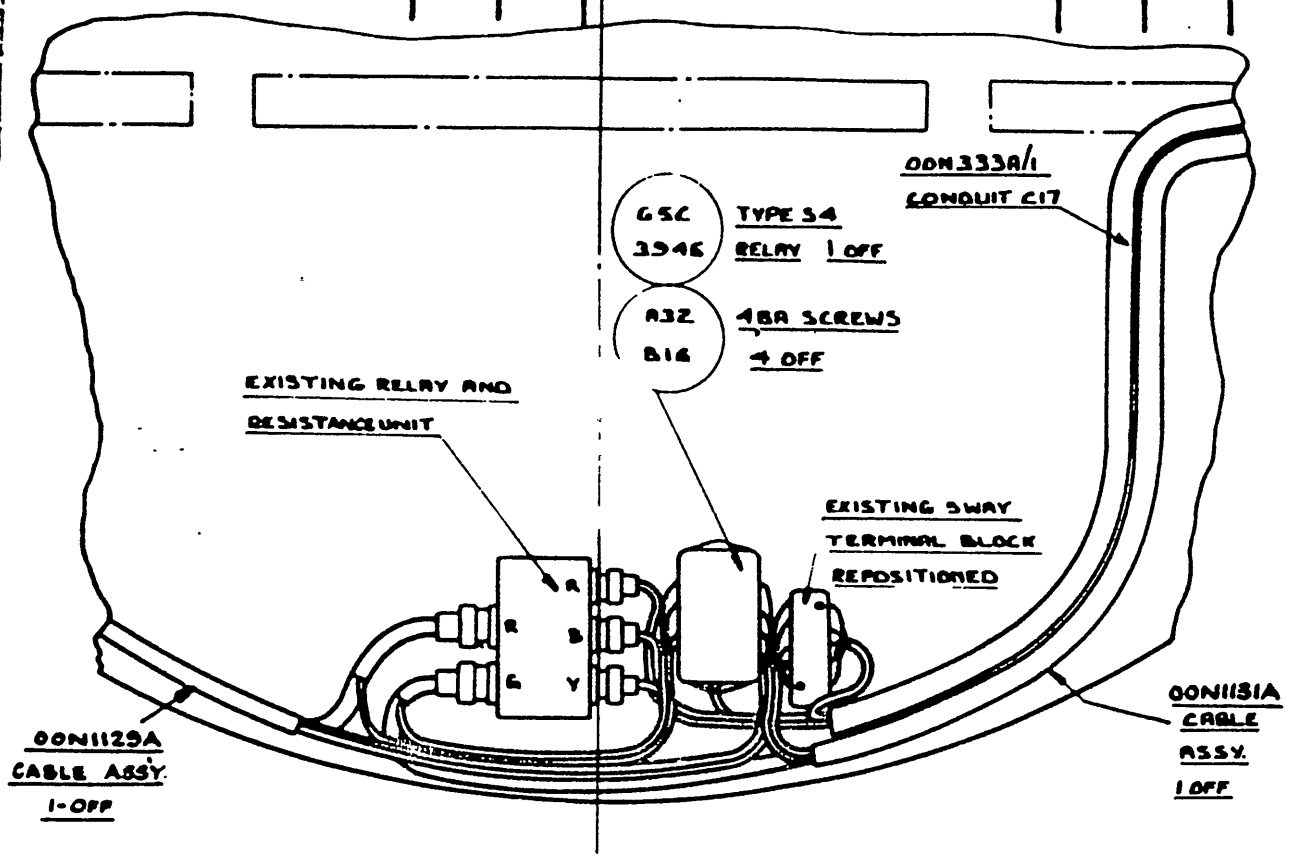
DE HAVILLAND DRAWING No. 00M341 SHT. 4 OF 11 SHTS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	PROVISION FOR FIRING ROCKET PROJECTILES SINGLY, IN PAIRS OR SALVO.

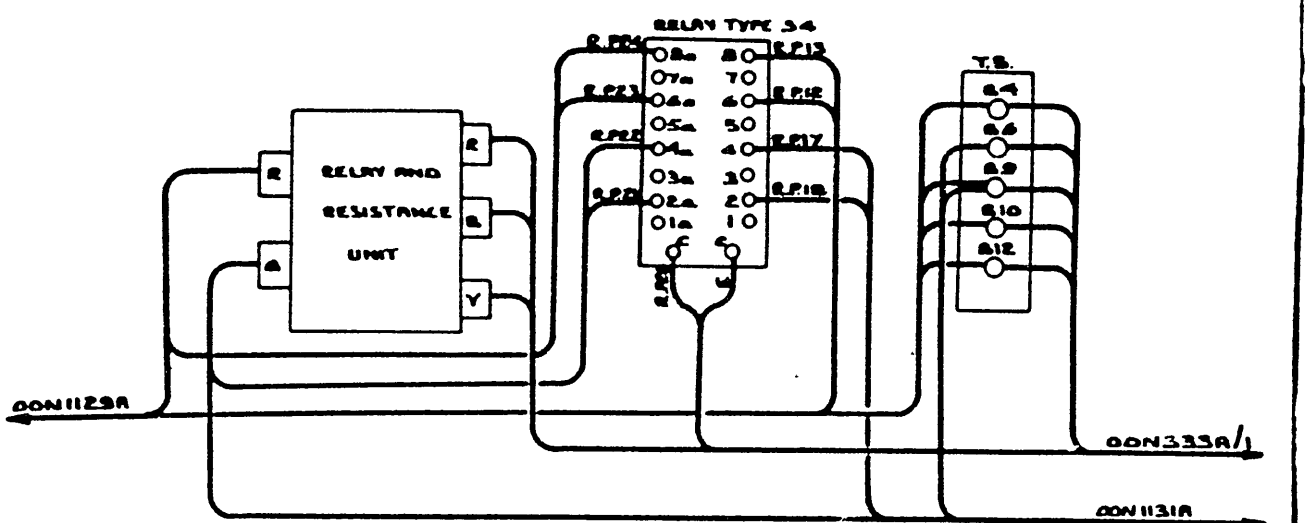
LIMITS UNLESS STATED		MATERIAL				COMPONENT OF	
DECIMALS	± .010"	SPEC.				MACHINE	
FRACTIONS	± 1/32"	TREATMENT				ENGINE	
ANGLES	± ½°	FINISH				TECH. ORDER	VAMPIRE MOD. 232
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A9.021		SCALE				DRAWING NO.	A12080 SHEET 4 OF 11
		DRAWN		APPROVED			DRWG. A SIZE
		TRACED		CHECKED			

DO NOT SCALE

ISSUE | DATE | ALTERATION | INITIALS | APPROVED



INSTALLATION OF EQUIPMENT ON LOWER AFT FACE OF BULKHEAD NO.4 (MK.31A/C. ONLY)



WIRING OF EQUIPMENT

DE HAVILLAND DRAWING NO. OOM 341 SHEET 5 OF 11 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	PROVISION FOR FIRING ROCKET PROJECTILES SINGLY, IN PAIRS OR SALVO.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	= 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD. 282
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S. C21		SCALE		DRAWING NO.	A 12980 SHEET 5 OF 11 — DRWG. A SIZE
		DRAWN	APPROVED		
		TRACED	CHECKED		

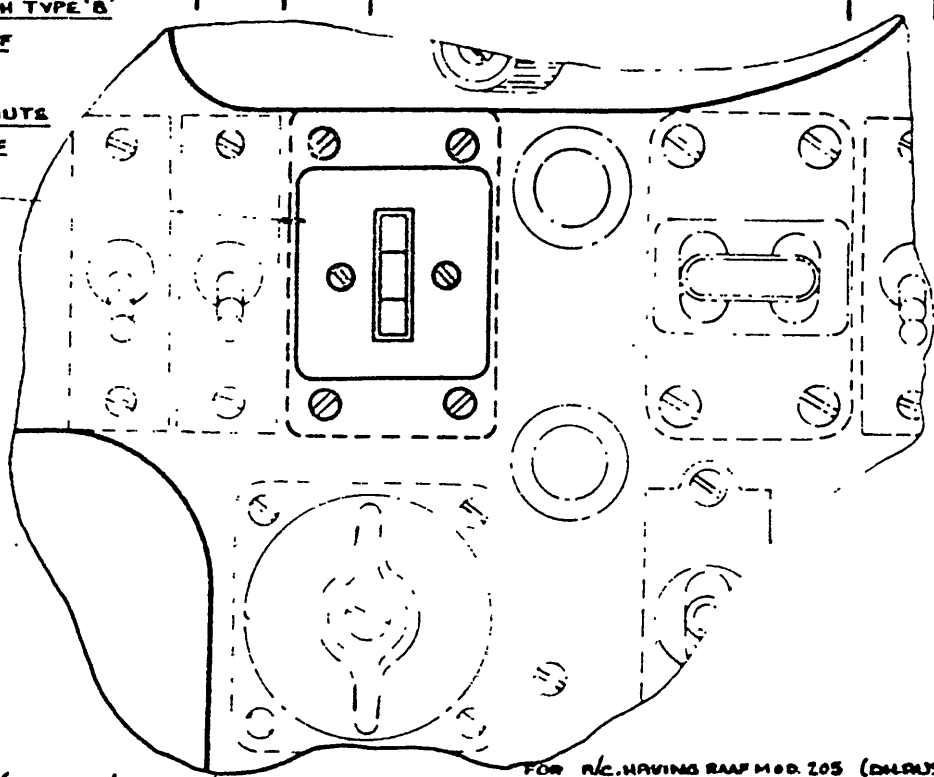
DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D + L	INITIALS	APPROVED
2	27.10.58	Alterations & additions to Drg. as indicated by 'Iss. 2'			

NIS 1055 B — SWITCH TYPE 'B' 1 OFF

AGS 2001 A4 — STIFFNUTS 2 OFF

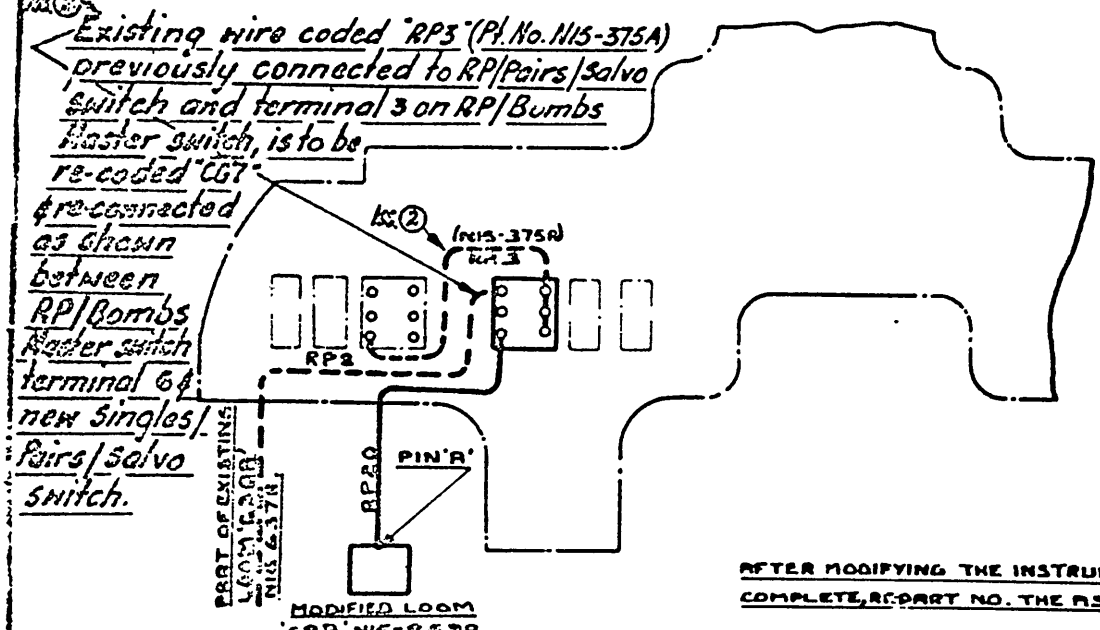
USE EXISTING SCREWS.



(MK 35 A/C ONLY)

FOR A/C HAVING RAAF MOD. 205 (DH AUST. MOD. V691)

ADDITION OF NEW EQUIPMENT ON INSTRUMENT PANEL



AFTER MODIFYING THE INSTRUMENT PANEL COMPLETE, RC PART NO. THE ASSY. FIS-551A/1

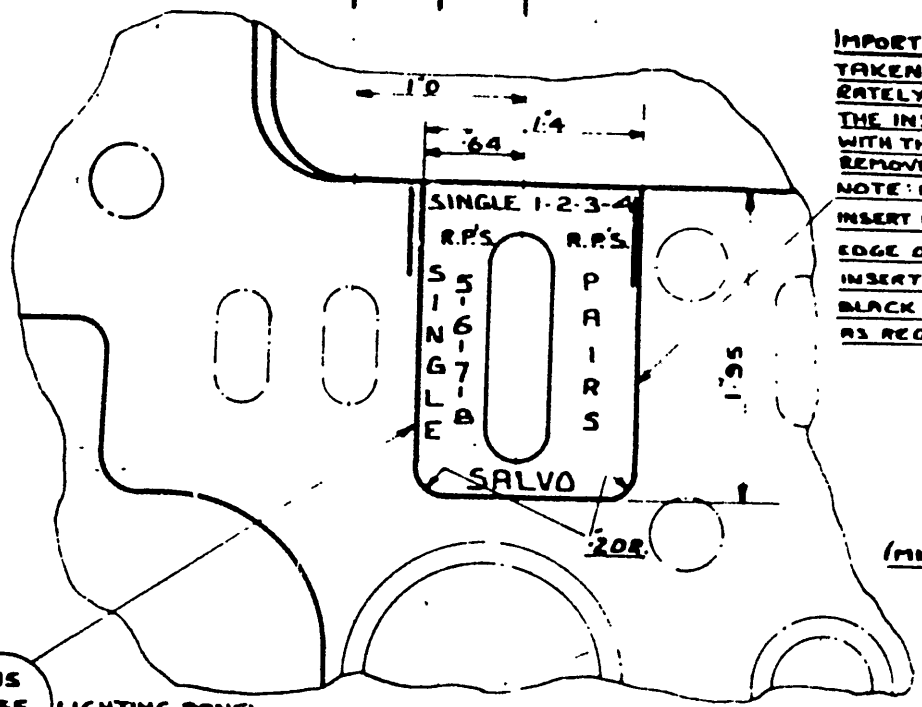
MODIFICATION TO INSTRUMENT PANEL WIRING FOR A/C HAVING R.A.A.F. MOD. 205 (D.H. AUST. MOD. V691) INCORPORATED. (MK. 35 A/C ONLY)

DE HAVILLAND DRAWING NO. DOM 341 SHEET 6 OF 11 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	PROVISION FOR FIRING ROCKET PROJECTILES SINGLY, IN PAIRS OR SALVO.

LIMITS UNLESS STATED	MATERIAL		COMPONENT OF
DECIMALS ± .010"	SPEC.		MACHINE
FRACTIONS ± 1/32"	TREATMENT		ENGINE
ANGLES ± ½°	FINISH		TECH. ORDER: VAMPIRE MOD. 232
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A	SCALE		DRAWING NO: A 12980 SHEET 6 OF 11 — DRWG. A SIZE
	DRAWN	APPROVED	
	ISSUED	CHECKED	

DO NOT SCALE



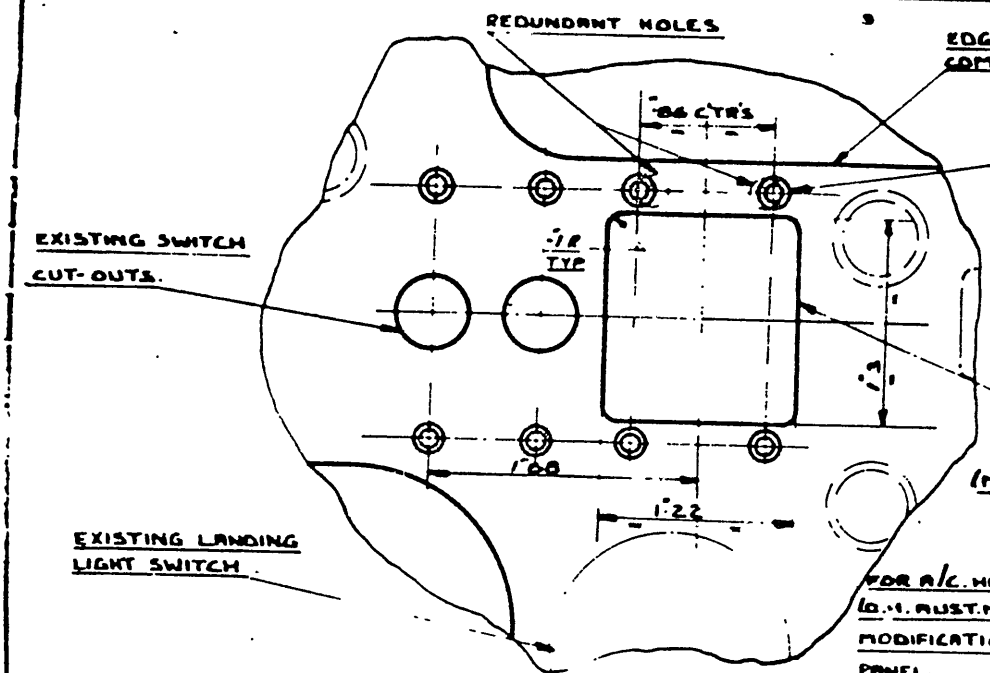
IMPORTANT NOTE: CARE MUST BE TAKEN TO CUT THE PANEL ACCURATELY TO DIMS. SHOWN AND THAT THE INSERT IS FITTED IN FLUSH WITH THE FRONT FACE OF THE PANEL. REMOVE ALL EXCESS CEMENT. NOTE: AFTER CEMENTING THE INSERT IN POSITION, THE NEW EDGE ON FOUR SIDES OF THE INSERT IS TO BE PAINTED OVER BLACK USING PAX PAINT (1 G.28) AS REQUIRED

(MK 35 A/C ONLY)

NIS 855 LIGHTING PANEL INSERT 1 OFF TO BE CEMENTED IN, USING CEMENT AS REQ.

AFTER MODIFICATION RE-PART NO. TO NIS-867

FOR A/C HAVING R.A.A.F. MOD. 205 (D.H. AUST. MOD. V691) INCORPORATED MODIFICATION TO LIGHTING PANEL (R.H. INSTRUMENTS & SWITCHES)



EDGE OF CUT-OUT FOR RADIO COMPASS CONTROLLER.

4 HOLES NO. 32 DRILL C'SK ·20 X 90° ON FRONT FACE.

EXISTING SWITCH CUT-OUTS.

NEW CUT-OUT IN PANEL.

(MK 35 A/C ONLY)

EXISTING LANDING LIGHT SWITCH

FOR A/C HAVING R.A.A.F. MOD. 205 (D.H. AUST. MOD. V691) INCORPORATED, MODIFICATION TO INSTRUMENT PANEL.

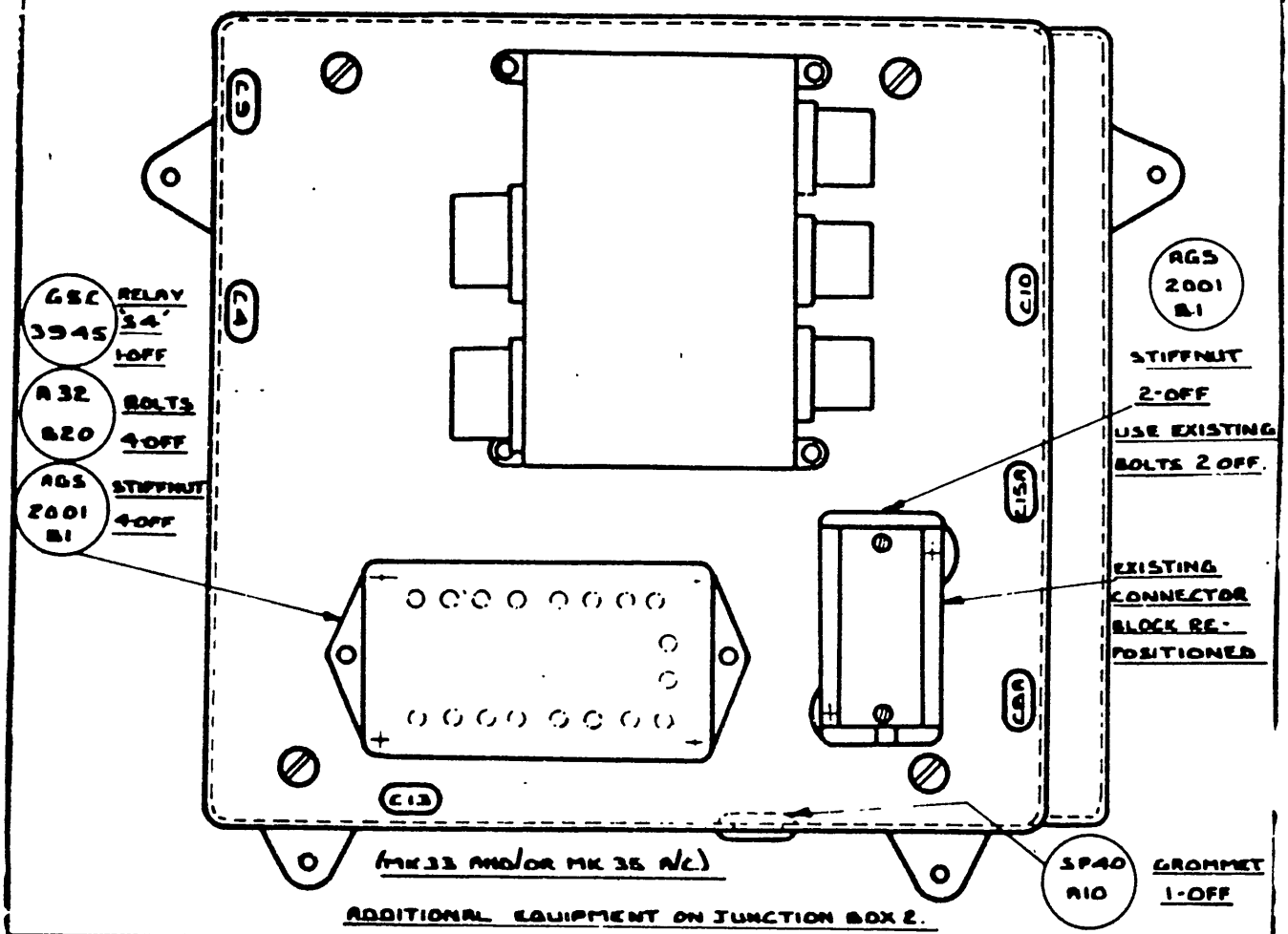
DE HAVILLAND DRAWING NO. DOM 341 SHEET 7 OF 11 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	PROVISION FOR FIRING ROCKET PROJECTILES SINGLY, IN PAIRS OR SALVO.

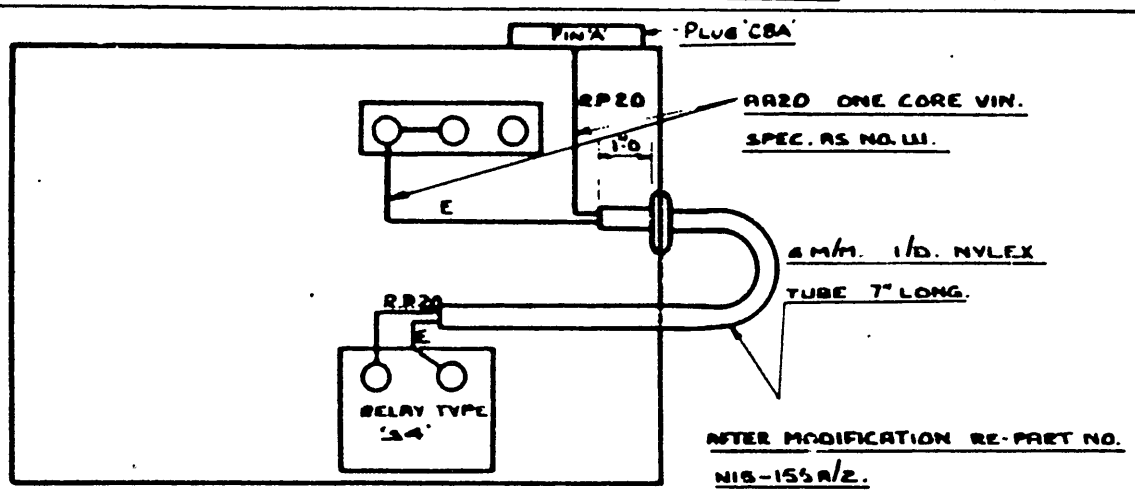
LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD. 232
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.21		SCALE		DRAWING NO.	A 12980 SHEET 7 OF 11
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D + L	INITIALS	APPROVED



ADDITIONAL EQUIPMENT ON JUNCTION BOX 2.

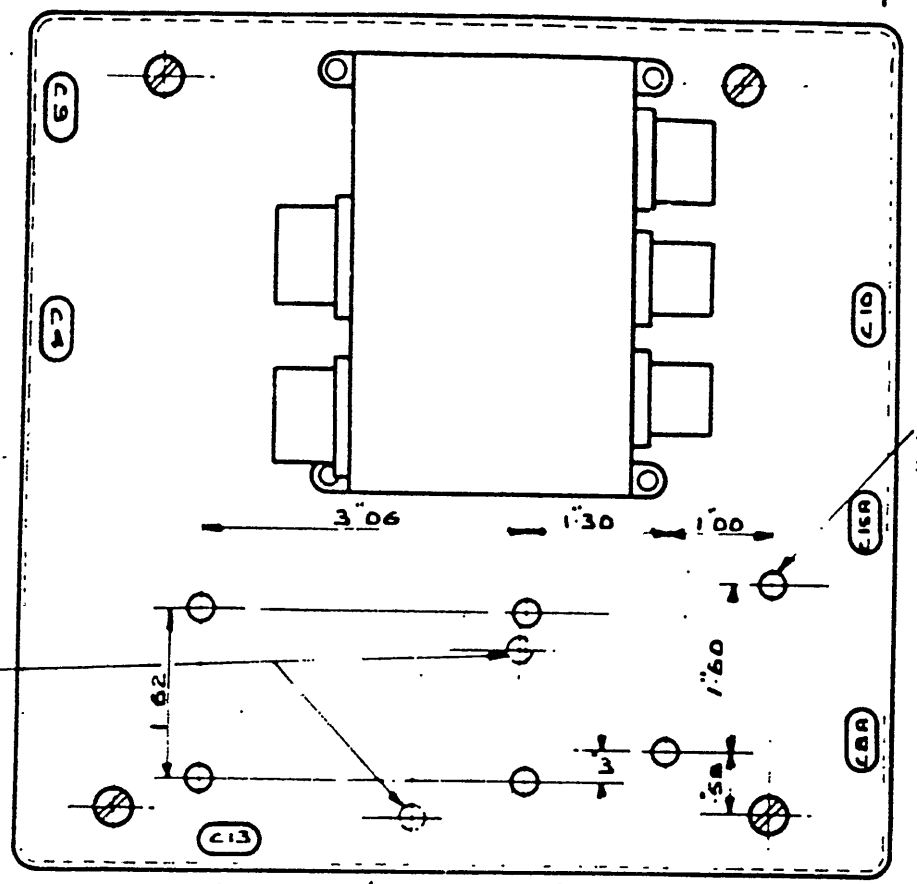


MODIFICATION TO JUNCTION BOX 2 WIRING.
(MK. 33 AND/OR MK. 35 A/C)

DE HAVILLAND DRAWING NO DOM 341 SHEET 8 OF 11 SHEETS.

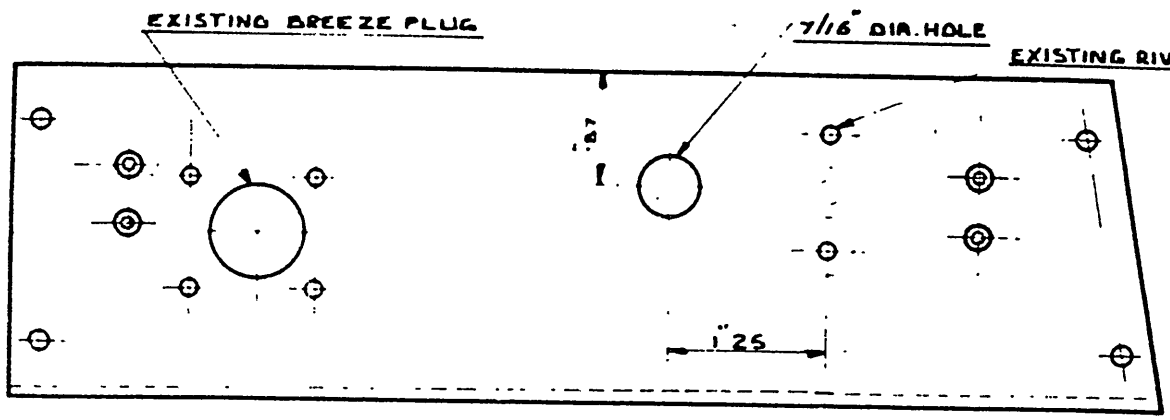
REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	PROVISION FOR FIRING ROCKET PROJECTILES SINGLE, IN PAIRS OR SALVO.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	= 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD. 232
SURFACE FINISH AUSTRALIAN STANDARD ENG DRWG. PRACTICE A		SCALE		DRAWING NO	A 12980 SHEET 8 OF 11
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		



(MK33 AND/OR MK 35 A/C.)

MODIFICATION TO JUNCTION BOX '2' LID ASSY.



MODIFICATION TO BASE PLATE OF BOX. (MK.33 AND/OR MK.35 A/C.)

DE HAVILLAND DRAWING NO. DOM341 SHEET 9 OF 11 SHEETS

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	PROVISION FOR FIRING ROCKET PROJECTILES SINGLY, IN PAIRS OR SALVO.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD 232
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A 3 (2)		SCALE		DRAWING NO.	A 12980 SHEET 9 OF 11
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	DRN	INITIAL	APPROVED

GSA S00313 THIMBLES 8 OFF (5X/3149)

GSA S0005T SLEEVES 8 OFF (5X/3148)

6m/m I/D NYLEX TUBING, BLACK, LENGTH 3'0

EXISTING 14 m/m I/D NYLEX TUBING

BIND WITH WAXED CORD

PIN	RED CABLE CODE NIS-877A	GREEN CABLE CODE NIS-879A
1	RP 9	RP 14
2	RP 10	RP 15
3	RP 11	RP 16
4	RP 21	RP 23
5	RP 22	RP 24
6		

EXISTING PIECE OF 10 m/m. NYLEX TUBING IS TO BE CUT BACK TO 2" LONG & REFITTED.

EXISTING SOCKET

EXISTING CABLE

EXISTING FITTINGS

5m/m I/D NYLEX TUBE 6'5 LONG.

6 m/m. I/D NYLEX TUBE 7" LONG

8 RP12 OR RP17

8 RP13 OR RP18

CABLE SENDS TO BE CODED W CODING COVERED WITH SLEEVE OF CLEAR NYLEX TUBING.

AA20 ONE CORE VIN. SPEC. UI LENGTH 14"0 BOTH ASSY'S.

AA20 ONE CORE VIN SPEC. UI. LENGTH 13"0 BOTH ASSY'S

BREEZE SOCKET ORD NO.	CABLE	NIS-877A CABLE CODE		NIS-877A LENGTH	NIS-879A CABLE CODE		NIS-879A LENGTH	
1								
2	AA20 THREE CORE SPEC AS NO UI	B 4	R	EXISTING LENGTHS	B 6	R	EXISTING LENGTHS.	USE EXISTNG CABLE
3		B 5	B		B 5	B		
4		B 10	Y		B 10	Y		
5								
6	AA20 THREE CORE SPEC AS NO UI	R P 9	R	6'-1½"	R P 14	G	5'-0"	NEW CABLE
7		R P 10	B		R P 15	B		
8		R P 11	G		R P 16	R		
9	AA20 ONE CORE SPEC UI	R P 12		6'-2½"	R P 17		5'-2½"	NEW CABLE
10		R P 13		6'-1½"	R P 18		6'-1½"	

AFTER MODIFYING PORT CABLE LOOM (15N 829A) RE-PART NUMBER NIS-877A.

AFTER MODIFYING STB'D. CABLE LOOM (16N 83A) RE-PART NUMBER NIS-879A

MODIFICATION TO RP AND BOMBS CABLE ASSY: (MK 33 AND/OR MK 35 A/C)

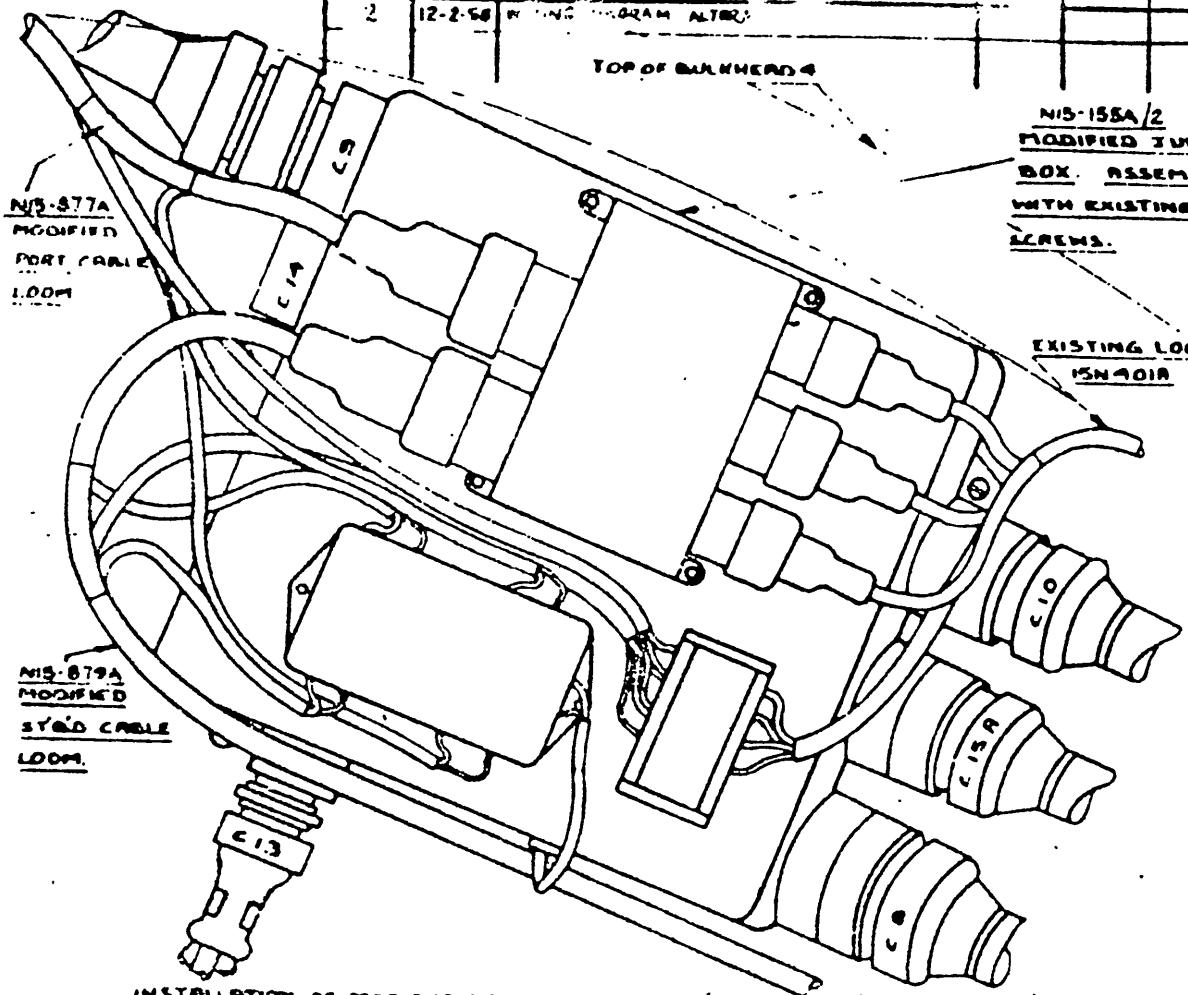
DE HAVILLAND DRAWING NO. OOM 341 SHEET 100F11SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	PROVISION FOR FIRING ROCKET PROJECTILES SINGLY, IN PAIRS OR SALVO.

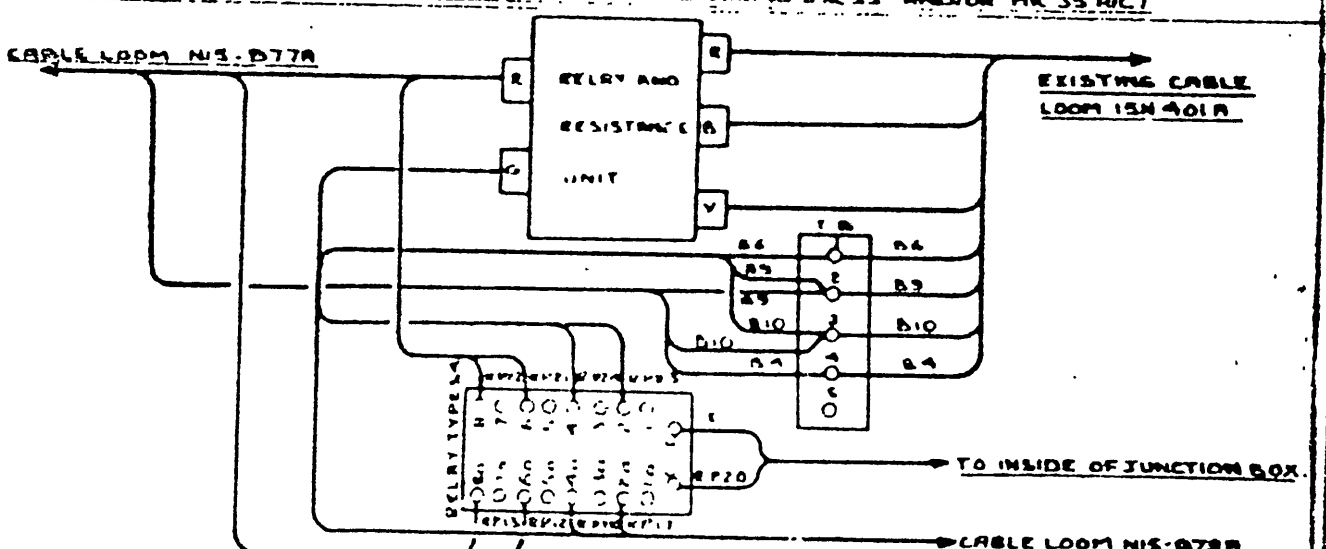
LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± 010"	SPEC.		MACHINE	
FRACTIONAL	= 1/32"	TREATMENT		ENGINE	
ANGLES	± 1°	FINISH		TECH OFFICER	VAMPIRE MOD 232
SURFACE FINISH AUSTRALIAN STANDARD ENG DRWG PRACTICE A 252.		SCALE		DRAWING NO.	A 12980 SHEET 10 OF 11
		DRAWN	APPROVED		SIZE A
		TRACED	CHECKED		

DO NOT SCALE

2 12-2-58 WIRING DIAGRAM ALTERED



INSTALLATION OF MODIFIED J.B. 2 AND WIRING (MK 33 AND/OR MK 35 A/C)



WIRING DETAILS OF ABOVE EQUIPMENT (MK 33 AND/OR MK 35 A/C.)

DE HAVILLAND DRAWING NO OOM 341 SHEET 11 OF 11 SHEETS

ORIGINATED	ISSUED BY	TITLE: PROVISION FOR FIRING ROCKET PROJECTILES SINGLY, IN PAIRS OR SALVO.
LIMITS UNLESS STATED: DECIMALS ± .1, .01, .001; FRACTIONS ±; ANGLES ±; SURFACE FINISH; AUTOMATIC SCREW MACHINE PARTS	MATERIAL; FINISH; HEAT TREATMENT; DRN; CHK'D; APPROVED; DATE	COMPONENT; MARK; ENGINE; AIRFRAME: VAMPIRE MOD. N° 232
		DRAWING NO: A 12980 SHEET 11; DRWG. A SIZE

A.A.P.721:79, Vol.2, Pt.2. Vampire Modification No. 233

Class 2.

SPECIAL BOLTS IN RUDDER TIP - INTRODUCTION

Reason for and Description of Modification

1. This modification authorizes the fitment and wire locking of four special bolts, in the rudder tip, in lieu of the standard 4BA bolts at present used. This action will prevent failure of the rudder spar at the top end (refer D.T.S. S.I. Vampire/113), due to looseness of these 4BA bolts.

Note:- Fitment of spare reinforcing bracket as per drawing A12694 (refer D.T.S. S.I. Vampire/113) does not affect the incorporation of this modification.

Application

2. This modification is to be incorporated on all Mk. 30, 31 and 33 aircraft.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units, aircraft depots or civilian contractors responsible for the repair of Vampire Aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters, Maintenance Command:

Ident No.	Part No.	Nomenclature	Remarks
A79/500313	J00583A	Rudder, C/W Tab Mk. 30 & 31	Those delivered before July, 1956 must be modified to instructions contained in para.11(c)ii to iv inclusive and 11(e).
	and		
A79/502103	13TR1A/3	Rudder, C/W Tab Mk. 33	

(Issued with A.L.81 - March, 1957)

Ident No.	Part No.	Nomenclature	Remarks
A79/500327	J00770A	Tip, Rudder, C/W) Mass Balance) Weight Mk.30 &) 31)))))))	Those delivered before August, 1956 must be modified but this is to be done when tips are fitted to rudders. Special bolts & washers required are to be salvaged from damaged tip.
	and		
A79/502105	13TR3A/2	Tip, Rudder C/W) Mass Balance) Weight Mk.33)	

Orders Superseded or Cancelled

5. Incorporation of this modification will make the inspection of bolts, called for in D.T.S. S.I. Vampire/113 unnecessary. However, the inspection for cracks in spar must still be carried out prior to modification.

Equivalent Modifications

6. De Havilland (Australia) Modification V.225 is the manufacturer's equivalent modification.

Supply

7. The following parts are required to complete one aircraft modification set (i.e. two rudders):

Item No.	Ident No.	Part No.	Nomenclature	No. off per Set	Stores Class
1		00J55	Bolt, special.	8	
2	H28C/12731	SP.16B	Washer, al.al., plain, thick.	4	
3	II/9715		Wire, locking 22G (DTD189)	A.R.	

(Issued with A.L.81 - March, 1957)

Notes:- (a) Items 1 and 2 will be retained as a modification set at the De Havilland Modification Centre. Units requiring modification sets are to demand from De Havilland Modification Centre.

(b) Item 3 is to be drawn from unit stores.

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Stock

9. Not applicable. ~~No parts are rendered redundant by the incorporation of this modification~~.

When the Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of modification sets or when the aircraft is allotted for retrospective modification fitment.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 9 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs &c. : No special tools or jigs are required.

(c) Sequence of Operations :

(i) Refer to paragraph 165 in the Vampire Descriptive Manual for Mks. 30 and 31 and to Section 3, Chapter 3, paragraph 8 in the Vampire Trainer Maintenance and Repair Manual for Mk. 33 and remove both rudders from the aircraft.

(Issued with A.L.81 - March, 1957)

(ii) Remove and discard the two 4BA bolts attaching the top spar flange and the two 4BA bolts and plain washers attaching the front end of the lower tip rib.

(iii) Fit four special bolts, item 1, in lieu of the 4BA bolts removed. One washer, item 2, must be used with each of the bolts attaching the lower tip rib. Washers must not be fitted to bolts used to attach the top spar flange.

(iv) Lock the four bolt heads as shown in the attached drawing, using locking wire, item 3.

(v) Assemble rudders to aircraft, reversing procedure adopted in paragraph 11(c)i.

(d) Tests : Check rudders for full and free operation.

(e) Recording : Record this modification in the Aircraft Log Book and on the rudder modification plate.

Drawings

12. Drawing A12749 attached herewith.

Effect on Weight and Balance of Aircraft

13. The effect of this modification on weight and balance of rudders and aircraft is negligible.

References : Files Department of Air 9/84/275 and 150/4/9360.

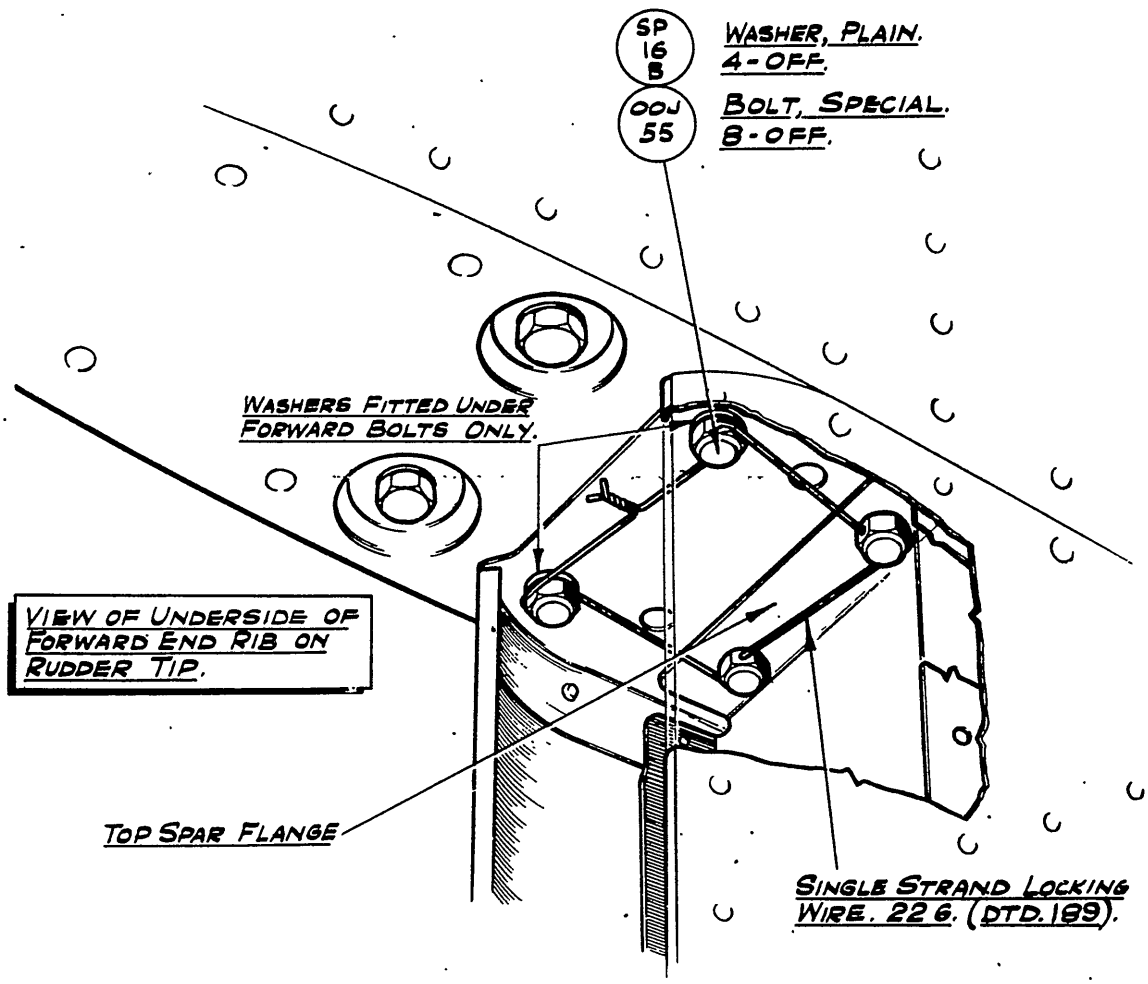
Attachment : Drawing A12749.

Date of Issue : 20th March, 1957.

(Issued with A.L.81 - March, 1957)

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. I. L	INITIALS	APPROVED



REMOVE AND DISCARD THE EXISTING 2-4BA. BOLTS ATTACHING THE TOP SPAR FLANGE AND THE 2-4BA. BOLTS AND PLAIN WASHERS ATTACHING THE FRONT END OF THE LOWER TIP RIB.
FIT THE 4 NEW SPECIAL BOLTS, FIT ONE PLAIN WASHER UNDER FORWARD 2 BOLTS ONLY. LOCK THE 4 BOLTS AS SHOWN ABOVE..
REPEAT ON SECOND RUDDER.

DE HAVILLAND DRWG. OOM332. NO. OF SHEETS 1.

REFERENCE	ISSUED BY	TITLE
		SPECIAL BOLTS IN RUDDER TIP. ~ INTRODUCTION.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	Vampire
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	Vampire Mod. 233
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.121		SCALE		DRAWING NO.	A-12749
		DRAWN	APPROVED		BRWG. A SIZE
		TRACED	CHECKED		

A.A.P. 721:79, Vol.2, Pt.2. Vampire Modification No.234

Class 2

V.H.F. AERIAL TYPE 226 - LENGTHENING OF AERIAL ROD TYPE 266

Reason for and Description of Modification

1. (a) Investigations into the efficiency of TR.1520 and TR.1936 installations in Vampire aircraft have revealed that it is desirable to use an aerial which resonates at 130 mcs.

(b) This modification provides for the lengthening of the aerial rod by one inch to achieve this result.

(c) After this modification has been carried out the items affected are to be re-identified as follows:-

(i) Aerial Type 226 (Y10B/16566) is to be re-identified as Aerial Type 226/1 (Y10B/500123).

(ii) Rods Aerial Type 266 (Y10B/2138) is to be re-identified as Rods Aerial Type 266/1 (Y10B/500124).

Unit accounts are to be adjusted accordingly.

Application

2. This modification is applicable to all aerials type 226 fitted to Vampire aircraft. Mks. 30 and 31.

Responsibility for Incorporation

3. R.A.A.F. Units holding the applicable aircraft are to incorporate this modification.

Action in Respect of Spares

4. No action is to be taken to modify spares stocks of this equipment, such equipment is to be modified prior to installation in applicable aircraft.

Orders Superseded or Cancelled

5. This modification supersedes and cancels D.T.S. Special Instruction/Radio (Airborne) No. 4.

(Issued with A.L.73 - November, 1956)

Equivalent Modifications

6. Nil.

Supply

7. The following part is required to complete one modification set:-

Item No.	Ident No.	Part No.	Nomenclature	No. off per Set	Stores Class
1	I1/794		¼" steel rod (steel, carbon round)	As Reqd.	C

Note.- Units are to obtain item No. 1 from unit stores stocks.

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Stock

9. Not applicable.

When the Modification is to be Incorporated

10. This modification is to be incorporated at or before the next "D" servicing.

Method of Incorporation

11. (a) Man-hours Involved : The approximate man-hours required to effect this installation are:-

Radio Technician "Air"	1 hour
Welder	½ hour
Electro-plater	½ hour.

(b) Special Tools, Jigs, etc. : Nil.

(Issued with A.L.73 - November, 1956)

(c) Sequence of Operations :

(i) Remove the aerial assembly from the airframe.

(ii) Remove the aerial rod from the aerial block.

(iii) Weld a one inch piece of $\frac{1}{4}$ inch steel rod, item 1, onto the tip.

(iv) Smooth the weld.

(v) Cadmium plate the new section.

(vi) If the rod is badly scored or scratched the whole aerial rod is to be plated.

(vii) Replace the aerial rod in the aerial block.

(viii) Replace the aerial assembly on the airframe.

(d) Tests : Retune the transmitter if necessary.

(e) Recording : Log book action is required.

Drawings

12. Nil.

Effect on Weight and Balance of Aircraft

13. Nil.

References: Files Department of Air 201/60/404, 201/59/297 and 150/4/9326.

Date of Issue: 9th November, 1956.

(Issued with A.L.73 - November, 1956)

A.A.P. 721:79 Vol .2. Pt.2. VAMPIRE MODIFICATION 235

Class 2.

OXYGEN PIPE - REPLACEMENT OF JOINT

Reason for and Description of Modification

1. This modification authorises the introduction of a high pressure connection in lieu of the low pressure connection which has been fitted to some aircraft in the oxygen pipe line between the Port and Starboard Regulators. The introduction of this modification reduces the possibility of an oxygen leak, as all other connections on this pipe line are of the high pressure type and the pressure at this point may be 50 pounds per square inch.

Application

2. This work is to be carried out on all Vampire aircraft from A79-825 to A79-836 inclusive (except A79-829). The high pressure connection will become standard in all Vampire Mk.33 aircraft on the introduction of D.H. Aust. Mod. V.697.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units, aircraft depots, or civilian contractors responsible for the repair of Vampire Aircraft. The trade mustering responsible is instrument fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the inclusion of this modification.

Equivalent Modifications

6. The manufacturer's equivalent modification is De Havilland (Aust). Mod. V.711.

Supply

7. The following parts are required to complete one modification set:-

(Issued with A.L.77 - January, 1957)

Item No.	Ident No.	Part No.	Nomenclature	No.off per Set	Stores Class
1.	H28C/8294	AGS.1102/ BB	Coupling, Pipe Cone, Union Body Alum. Alloy.	1	
2.	H28/5723	AGS.904/ BB	Sleeve, Outer Alum.Alloy.	2	
3.	H28/8297	AGS.952/ BB	Collar, Pipe Coupling Steel S.2.	2	
4.	K4/10969	-	Compound, Sealing Aquadag.	A.R.	

Disposal of Parts Removed.

8. The following parts are rendered redundant by the incorporation of this modification:-

Item No.	Ident No.	Part No.	Nomenclature	No.off per set	Stores Class
5.	H28C/ 5104	AGS.838/1	Union Body. Straight Alum. Alloy.	1	
6.	H28/ 5108	AGS.838/4	Nut, Union, Alum. Alloy.	2	
7.	H28B/ 5109	AGS.838/5	Bush, Rubber DTD. 227.	2	

Notes: (a) Items 5 and 6 are to be examined and if serviceable, are to be returned to stores.

(b) Item 7 is to be disposed of in accordance with current authorized procedure.

Disposal of Parts in Stock

9. Not applicable.

(Issued with A.L.77 - January, 1957)

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable, but not later than the next "D" servicing after receipt of modification sets or when the aircraft is allotted for retrospective modification fitment.

Method of Incorporation

11. (a) Man-hours Involved.

Approximately twelve (12) man-hours are required to incorporate this modification.

(b) Special Tools, Jigs, etc.:

No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

Important Note:

Fittings and other parts with threads that tend to bind are not to be oiled, but may be lightly lubricated with K4/10969 compound, sealing, Aquadag, Item 4, which is an approved jointing compound for oxygen equipment. Cleanliness is essentail, clean all pipes and fittings before assembling. Blank off all pipes and fittings removed with masking tape or blanking off nipples. Refer to A.E.I.G.'s. Book 3, Part 19, Section 1, Page.5.

(i) Remove both the pilot's seats in accordance with current authorized procedure, retaining all attaching items for subsequent reassembly. Remove the forward and mid sections of the false floor from the starboard side of the cockpit, retain all screws for subsequent reassembly.

(ii) Locate on the aft face of No. 1 Bulkhead, the oxygen pipe line which runs between the port and starboard regulators, remove the pipe line from its attaching brackets, then remove and dispose the union, union nuts and bushes, Items 5 to 7 inclusive.

(Issued with A.L.77 - January, 1957)

(iii) On to the two pipes, thread firstly the sleeve, item 2, and secondly the collar, item 3 then using a pipe expanding tool expand the open end of each pipe in accordance with current authorized procedure, refer to A.A.P. 702.1 A.E.I.G. Pt. 6, Sect. 1, Inst. No. 1, Drg. No. A744. Following this operation the pipes must be reidentified as follows:-

S15-41AND to be Z15-899AND
S15-45ND to be S15-535AND

(iv) Place the pipe coupling, item 1 in position between the pipes and secure at each end with the sleeve, item 2. Secure the pipe line in the clips on the aft face of No. 1 bulkhead, carry out test as in para. 11, sub-para. (d), replace the false floor panels and secure with screws retained in operation (i). Refit both the pilot's seats in accordance with current authorized procedure and secure with attachment items retain in operation (i).

(d) Tests:

Charge the oxygen system to a minimum pressure of 1000 P.S.I., turn the port regulator to "On" and the starboard regulator to "Normal", test the joint in accordance with current authorised procedure.

(e) Recording:

Record the Modification in the Aircraft Log Book.

Drawings

12. No drawings are required.

(Issued with A.L.77 - January, 1957)

 VAMPIRE MODIFICATION 235.

Class 2.

Effect on Weight and Balance

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files Department of Air 9/84/365, 150/4/9333.

Date of Issue : 17th January, 1957.

(Issued with A.L.77 - January, 1957)

A.A.P. 721:79, Vol. 2, Pt. 2. VAMPIRE MODIFICATION NO. 236

Class 2

CONNECTOR BLOCK GUARD - INTRODUCTION

Reason for and Description of Modification

1. This modification authorizes the introduction of a guard over the connector blocks on the starboard cockpit wall to obviate cracking of the connector blocks due to safety harness clasps striking them.

Application

2. This work is to be incorporated on all Mk. 33 aircraft serial Nos. A79-801 to A79-836 inclusive.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade musteringsresponsible are airframe and electrical fitters.

Action in Respect of Spares

4. No action required.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modifications

6. De Havilland (Aust.) Modification V.709 is the equivalent modification.

Supply

7. The following part is required to complete one modification set. Note that aircraft, with Vampire Modification 163 (D.H. Aust. Mod. V.604) incorporated, which have NOT had Vampire Modification 171 (D.H. Aust. Mod. V.677) incorporated, will require TWO modification sets. Units requiring modification sets are to demand from De Havillands Modification Centre:-

(Issued with A.L.88 - July, 1957)

Item No.	Ident. No.	Part No.	Nomenclature	No. Off Per Set	Stores Class
		N15-675	Guard, connector block	1	

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Stock

9. No parts are rendered redundant by the incorporation of this modification.

When Modification is to be Incorporated

10. This Modification is to be incorporated as soon as practicable but not later than the next "D" Servicing after receipt of modification sets.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately four (4) man-hours will be required to incorporate Part A or five (5) man-hours to incorporate Part B of this modification.

(b) Special Tools, Jigs &c. : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

PART A

For aircraft in which Vampire Modification 163 (D.H. Aust. Mod. V.604) has not been incorporated and aircraft which have Vampire Modification 163 (D.H. Aust. Mod. V.604) incorporated along with Vampire Modification 171 (D.H. Aust. Mod. V.677).

(Issued with A.L.88 - July, 1957)

(i) Lift the nose panel and disconnect the aircraft batteries, then locate the single connector block on the starboard cockpit wall just above the flase floor and just aft of junction box one.

(ii) Remove and retain the connector block cover and disconnect all the leads to the connector block.

(iii) Undo and retain the 2 woodscrews mounting the connector block and remove and retain the connector block.

(iv) Assemble the connector block guard, item 1, underneath the connector block using the screws retained in paragraph (iii). Note that it may be necessary to plug the holes in the mounting block on the cockpit side before replacing the screws.

(v) Replace all leads in their respective terminals and replace the connecting block cover.

(vi) Reconnect the aircraft batteries.

PART B

For aircraft in which Vampire Modification 163 (D.H. Aust. Mod. V.604) has been incorporated but in which Vampire Modification 171 (D.H. Aust. Mod. V.677) has NOT been incorporated.

(i) Lift the nose panel and disconnect the aircraft batteries, then locate the two connector blocks on the starboard cockpit wall just above the false floor and just aft of junction box one.

(ii) Repeat paragraphs (ii) to (v) of Part A for each connector block.

(iii) Reconnect the aircraft batteries.

(d) Tests : Function the electrical system in accordance with current authorized procedure.

(Issued with A.L.88 - July, 1957)

(e) Recording : Record this modification in the airframe log book.

Drawings

12. Nil.

Effect on Weight and Balance of Aircraft

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files Department of Air 9/84/1057 and 150/4/9420.

Date of Issue : 11th July, 1957.

(Issued with A.L.88 - July, 1957)

AAP 721:79, VOL 2, PART 2. VAMPIRE MODIFICATION NO 237

Class 2

INTRODUCTION OF AN ALKALINE BATTERY TYPE MP.04 PROVIDE EMERGENCY POWER TO THE TURN & SLIP INDICATOR & LIGHTING OF INSTRUMENT PANEL

Reason for and Description of Modification

1. To provide a source of emergency power for the cockpit lights and Turn & Slip Indicator in the event of failure of the aircraft main power supply.

Application

2. The work is to be carried out on all Vampire Mk 33 aircraft (excluding A/c Serial No A79-829), concurrently with or after, the embodiment of Vampire Mod 205 (DH Aust Mod V.691) and ten Mark 35 aircraft Serial Nos A79-601 to A79-610 inclusive. This modification assumes that Vampire Mod 232 (DH Aust Mod V221) has already been embodied, or is being embodied concurrently.

Responsibility for Incorporation

3. The modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe and electrical fitters.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V.707 is an equivalent modification.

Supply

7. The following parts are required for one complete modification set:-

(Issued with A.L. 99 - June, 1958)

Item No.	Ident. No.	Part No.	Nomenclature	No. off per Set	Stores Class
1	G5A/501157		Accumulator 24V. .4 A.H. Type M.P.O.4 C/N Cable Assemblies	1	A
2	G5A/28713	AS2634	Connector Block	1	C
3	G5A/28717	AS2602	Cover	1	C
4	G5A/28722	AS2605	Socket, Clamp, single tier	3	A
5	G5A/28719	AS2672	Ferrule	1	C
6	G5A/28720	AS2674	Ferrule	2	C
7	G5C/4179	D5406	Switch, Rotax	1	A
8	G5C/4222		Switch Guard	1	C
9	G5A/501174	5LX/ 951278	Lamp Filament 28V. 3.5W	2	C
10		N15-765A	Cable Assembly	1	C
11		N15-797A	Cable Assembly	1	C
12		N15-799 AND	Cable Assembly	1	C
13		N15-803A	Cable Assembly	1	C
14		N15-805 AND	Cable Assembly	1	C
15					
16					
17		N15-787A	Mounting Bracket Assy	1	C
18		Z15-1123 ND	Plug $\frac{3}{4}$" o/d x 7/16" (Make from Dowel Section Z15-657)	1	C
19	H28/26078	DHS103 Mk.2	Ferrule, Brass, Hex, 2BA	3	C
20	H28C/NIV	A45/B10	Screw, Brass, Metal, Csk Hd, 4BA x 5/16" long	1	C
21	H28C/NIV	A44/B10	Screw, Brass, Metal, Rd Hd, 4BA x 5/16" long	1	C

Item No.	Ident. No.	Part No.	Nomenclature	No. off per Set	Stores Class
22	H28C/2869	A32/B20	Screw, MS, Metal, Rd Hd, 4BA x 5/8" long	2	C
23	H28/7034	A25/1C	Bolt, Steel, HT, Hex Hd, 2BA x .55" long	4	C
24	H28C/11067	AGS2035/ B	Washer, Shake-proof, Steel, Internal Teeth	2	C
25	H28C/11069	AGS2035/ C	Washer, Shake-proof, Steel, Internal Teeth	4	C
26	H28C/12355	SP16/C	Washer, Alum Alloy, Plain, Thick, 12SWG, 2BA	4	C
27	H28/27167	AGS2007/ B1	Nut, Stiff, MS, Plain, 4BA	2	C
28	H128F/ 62229	AS2229/ 303	Rivet, Al Alloy, Csk Hd, 90°, 3/32" d x 3/16" long	4	C
29	G5E/30154		Cable AA20, one Core vin spec AS. No.U1	3'-0"	C
30	G5F/20058		Tubing, Insulating, PVC, 5M/M.i/d. Black	8".5	C
31	132A/2006		Twine, Binder, Coreless	AR	C
32	W3/1372		Brad, Brass, 20SWG ½" long	AR	C
33	K4/10864		Glue, Beetle, Type 'A'	AR	C
34	K4/10866 or K4/10867 or K4/10868		Hardener, Beetle, Violet V15 Hardener, Beetle, Yellow GP30 Hardener, Beetle, Blue 2B	AR AR AR	C C C
35	I1/2700		Wire, Locking, Soft Iron, Galvanised 20SWG	AR	C

NOTE: (a) Items 1 to 30 inclusive will be delivered to the contractors modification centre stores, which will issue items on demand.

(b) Items 31 to 35 inclusive are to be drawn from unit stores.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification:-

Item No.	Ident. No.	Part No.	Nomenclature	No. off per Set	Stores Class
36	G5A/1961		Accumulator, Alkaline, 2.4V, 3AH	1	A
37	G5A/553		Lamp Filament	2	C
38		15N-627	Bracket	1	C
39		15N-849A	Cable Assembly	1	C
40		N15-731A	Cable Assembly	1	C

NOTE: (a) Items 36 and 37 are to be examined and if found serviceable are to be returned to stores.

(b) Items 38, 39 and 40 are to be disposed of in accordance with current authorized procedure.

Disposal of Parts in Stock

9. Not applicable.

When the Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable, and not later than the next 'D' servicing of aircraft, after receipt of parts required.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 28 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, &c. : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Disconnect the aircraft Main Accumulator leads.

(ii) Remove ejection seats from aircraft.

(iii) Locate the existing Emergency Accumulator (Item 36) mounted on the upper forward LH face of Bulkhead No 2 and remove from the aircraft together with its mounting Bracket (Item 38) and Cable Assembly (Item 39) and dispose of as noted in paragraph 8.

(iv) On the main instrument panel, unscrew all the "Thorn" lamp caps and remove the coupling bar from the interlinked starter switches thus allowing the three pieces of perspex lighting panel to be removed. Temporarily replace the lamp caps and the coupling bar to avoid misplacing same, and then remove the instrument panel from the aircraft, retaining the attachment bolts and nuts for re-assembly.

(v) Remove the six screws securing the starboard disconnect panel to the fuselage, the underside of the canopy rail, and the reinforcing bracket and retain screws and washers for re-assembly. Disconnect cables at terminal blocks and gently ease the disconnect panel aft thus allowing access to back of panel to remove the breeze plug attachment screws. Remove the disconnect panel from the aircraft.

NOTE: It should not be necessary to remove the Stbd GGS retractable mounting from the aircraft.

(vi) Refer to RAAF Drawing A12971 Sheet 3 and rework the Instrument Panel as shown.

(Issued with A.L.99 - June, 1958)

NOTE: Particular care must be taken to prevent any dirt and swarf from entering back of switches and Instruments whilst modifying panel.

(vii) Assemble switch (Item 7) and Switch Guard (Item 8) to panel using screws (Items 20 & 21) 1-off each and washers (Item 24) 2-off.

(viii) Remove from the instrument panel existing cable assy Part No N15-731A (Item 40) coded 'EM+' and 'EM2' connecting to Emergency Lights switch and replace with new Cable Assy (Item 11) connecting core coded 'EM2' to Lower Terminal on Emergency Lights switch and core coded 'EM+' to Lower Terminal on Emergency change-over switch. The other end of this cable with ferrules attached will be connected to the Port disconnect panel upon re-assembly of instrument panel to aircraft. Run with existing cables on back of panel.

(ix) Add new Cable Assy (Item 10) coded 'EM+' linking between the Lower terminal on the Emergency change-over switch and the top terminal on the Emergency Lights switch.

(x) Next add new Cable Assy (Item 13) to connect core coded 'TB2' to top terminal on the Emergency change-over switch and the core coded 'TB3' to the centre terminal on same switch. The remaining ends with ferrules attached will be connected to the Stbd disconnect panel upon re-assembly of Instrument panel to aircraft. Run with existing cables on back of panel.

(xi) Existing cable assy Part No N15-773A coded EM3 & EM2 (linking between port and stbd disconnect panels) on Instrument Panel is to be reworked by removing core coded 'EM3'. Remaining core is to be re-part-numbered N15-767A.

NOTE: After embodying the changes shown above on the instrument panel the Part No of the complete panel assembly is to be altered to F15-551A/2.

(Issued with A.L.99 - June, 1958)

(xii) Refer to RAAF Drg A12971 Sheet 2 and rework the stbd Disconnect Bracket (previously removed from aircraft in operation v) using items 12, 2 & 3, 1-off each, item 4, 3-off; items 6, 22 & 27, 2-off each; and item 28, 4-off, and cable (part of item 29) 3" long.

(xiii) Existing cable assy Part No N15-301A on disconnect panel is to be reworked by disconnecting the two, twin core cables from the miniature Breeze Plug and replacing with two new lengths of single core cable (Part of item 29). Cut one length 12" long, the other 20" long. Code the short cable 'TB3' and add Ferrule (item 5) 1 off and code the longer cable 'E' leaving this end plain. Connect the other ends of the cable into the same miniature breeze plug, soldering cable coded 'TB3' to pin 'A' and cable coded 'E' to pin 'B'. Push PVC tubing (Item 30) over the two cables and slide along to fit under the existing cable clamp attached to the breeze plug. Re-assemble miniature breeze plug and its components together again and then bind the open end of 5 M/M tubing lightly using twine (Item 31).

NOTE: After the modification the part no of the Cable assy is to be re-part-numbered N15-789A.

(xiv) Fit the Cable assy back to Disconnect Panel and connect loose ends to connector Blocks as shown on drawing.

NOTE: After modifying the disconnect panel re-part-number the complete assy N15-~~[illegible]~~909A.

(xv) Refer to RAAF drg A12971 Sht. 1 and remove existing redundant ferrule on top LH side of bulkhead No 2. Plug the redundant hole using plug (Item 18) 1-off glue (Item 33) and hardener (Item 34) as required. Add ferrules (Item 19) 3-off as shown using brads (Item 32), glue (Item 33) and hardener (Item 34) as required.

(Issued with A.L.99 - June, 1958)

(xvi) Assemble new Mounting Bracket (Item 17) 1-off to above new ferrules using bolts (Item 23) andwashers (Items 25 and 26) 4-off of each.

(xvii) Locate existing Emergency L'ts Cable Assy Part No N15-433A, running from existing connector block on Bulkhead No 2, (above new accumulator mounting bracket) to existing port disconnect panel by way of port cockpit wall. The cable core coded 'EM3' is to be recorded 'E' both ends.

NOTE: After modifying this cable assy it is to be re-part-numbered N15-791A.

(xviii) The coding on the connector Block on bulkhead No 2 referred to in the preceding para must also be changed from 'EM3' to 'E'.

(xix) Refer to RAAF Drg A12976 sheet 4 and add new link cable assy (Item 14) 1-off to Port Disconnect Panel forward of Instrument Panel, connecting to terminals as shown. The coding 'EM3' on the cover of the Port Upper Connector Block is to be changed to 'E'.

NOTE: After modifying the disconnect panel as above re-part-number the complete assy N15-667A/1.

(xx) Locate the two existing Cockpit Emergency Lights Cable Assys Port and Stbd part-numbered N15-605A and N15-663A respectively and remove the existing Lamp Filaments (Item 37) 2-off and dispose of as per chapter 8 note (a). Replace these items with new Filaments (Item 9) 2-off.

NOTE: After modifying the above Assemblies re-part-number them N15-807A (Port) and N15-809A (Stbd).

(Issued with A.L.99 - June, 1958)

(xxi) Refer to RAAF Drg A12971 Sheet 4. Replace Stbd Disconnect Panel using existing attachment items retained in para v and connect up existing wiring to Port & Stbd disconnect panels to original positions and new wiring as shown detailed on drawing.

(xxii) Refer to RAAF Drg A12971 Sheet 3. Replace Instrument Panel using existing attachment items previously retained in para iv and connect existing wiring to original positions and new wiring as shown detailed on drawing.

(xxiii) Re-assemble the three perspex lighting panels previously removed in para iv to original positions on Instrument Panel.

(xxiv) Refer to RAAF Drg A12971 Sheet 1 and install the new emergency accumulator (Item 1) 1-off on the mounting bracket installed in para xvi, together with two new cable Assy's which are to be connected between the Accumulator and the existing connector Block terminals on Bulkhead No 2. Wirelock the wing nut to the hole provided in the clamp strap using (Item 35).

(xxv) Assemble Ejection seats back in position.

(xxvi) Reconnect the aircraft Accumulator Leads.

(d) Tests :

1. Function the Turn & Slip Indicator Circuit with Emergency change-over switch in "Normal" position.

2. Function the Turn & Slip Indicator and Emergency Lighting circuits with Emergency change-over switch in the "Emergency" position.

3. Function all Equipment on Instrument Panel to check for correct electrical and hose connections.

(Issued with A.L.99 - June, 1958)

(e) Recording : Record the incorporation of this modification in the airframe Log Book.

Drawings

12. Drawing A12971, Sheet 1 to 4 (Issue 2), attached herewith.

Effect on Weight and Balance of Aircraft

13. The effect of this modification on the weight and balance of the aircraft is negligible.

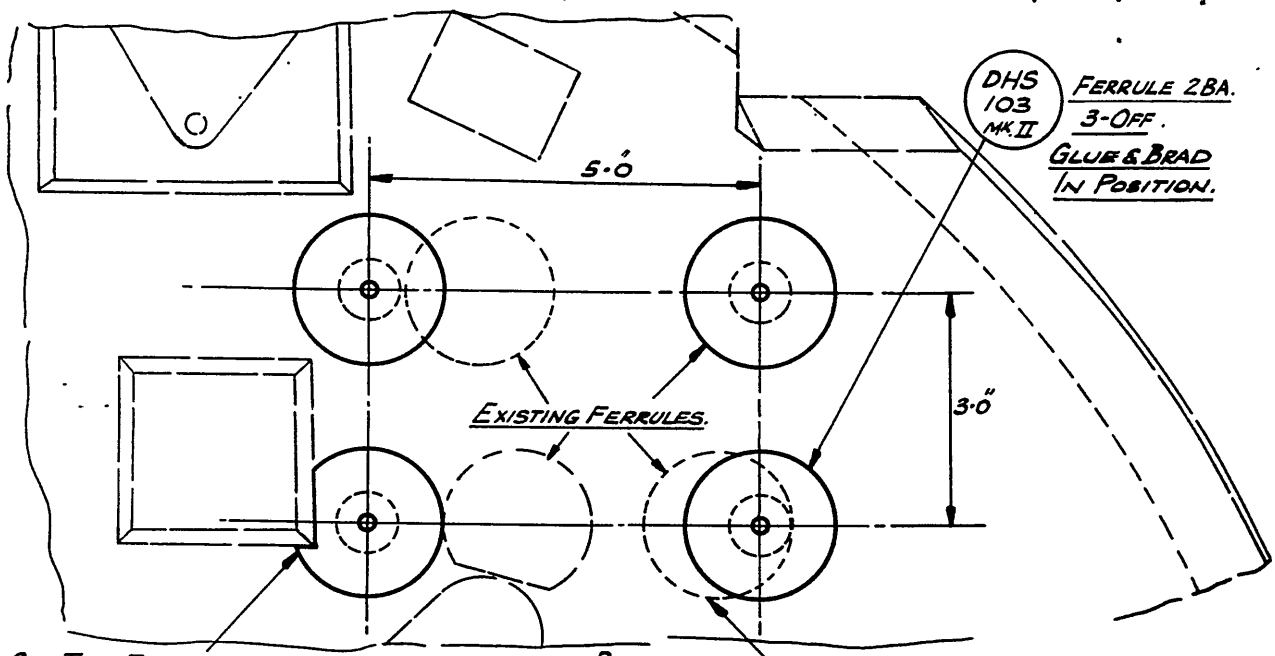
References: Files, Department of Air, 150/8/1201 and 150/4/8621.

Attachment: Drawing No A12971, Sheet 1 to 4 (Issue 2).

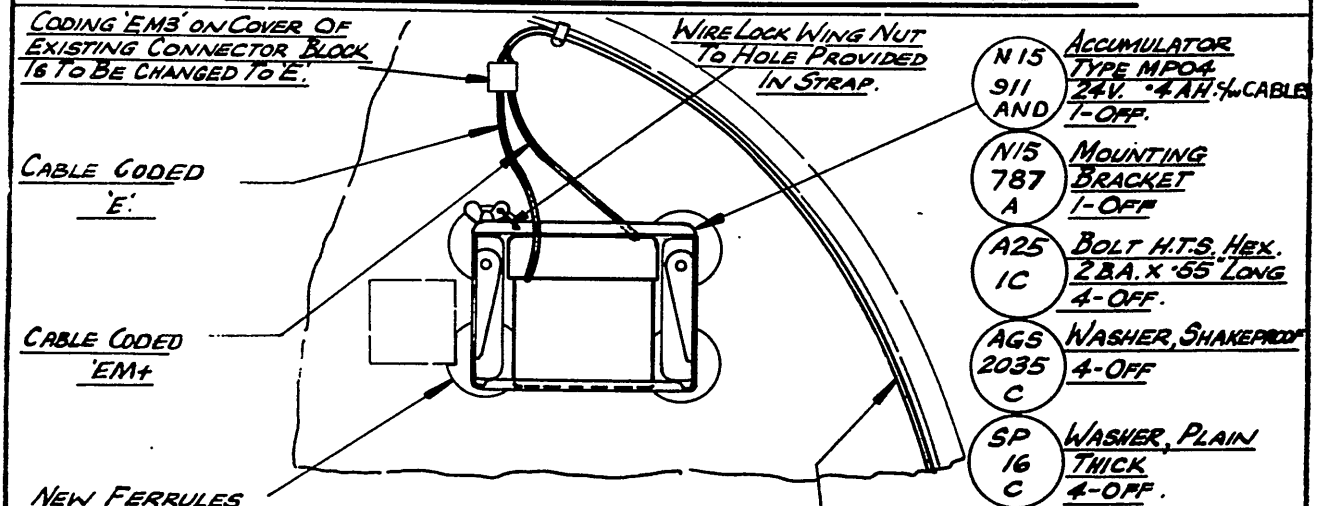
Date of Issue : 6th June, 1958.

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D + L	INITIALS	APPROVED
2	2-458	'E' WAS N15/811A, 'EM+' WAS N15 811A N15/911 WAS SJ/3340			



ADDITIONAL FERRULES ON FOR'D. FACE OF BULKHEAD No.2.



VIEW ON FOR'D. FACE OF BULKHEAD No.2 LOOKING AFT.

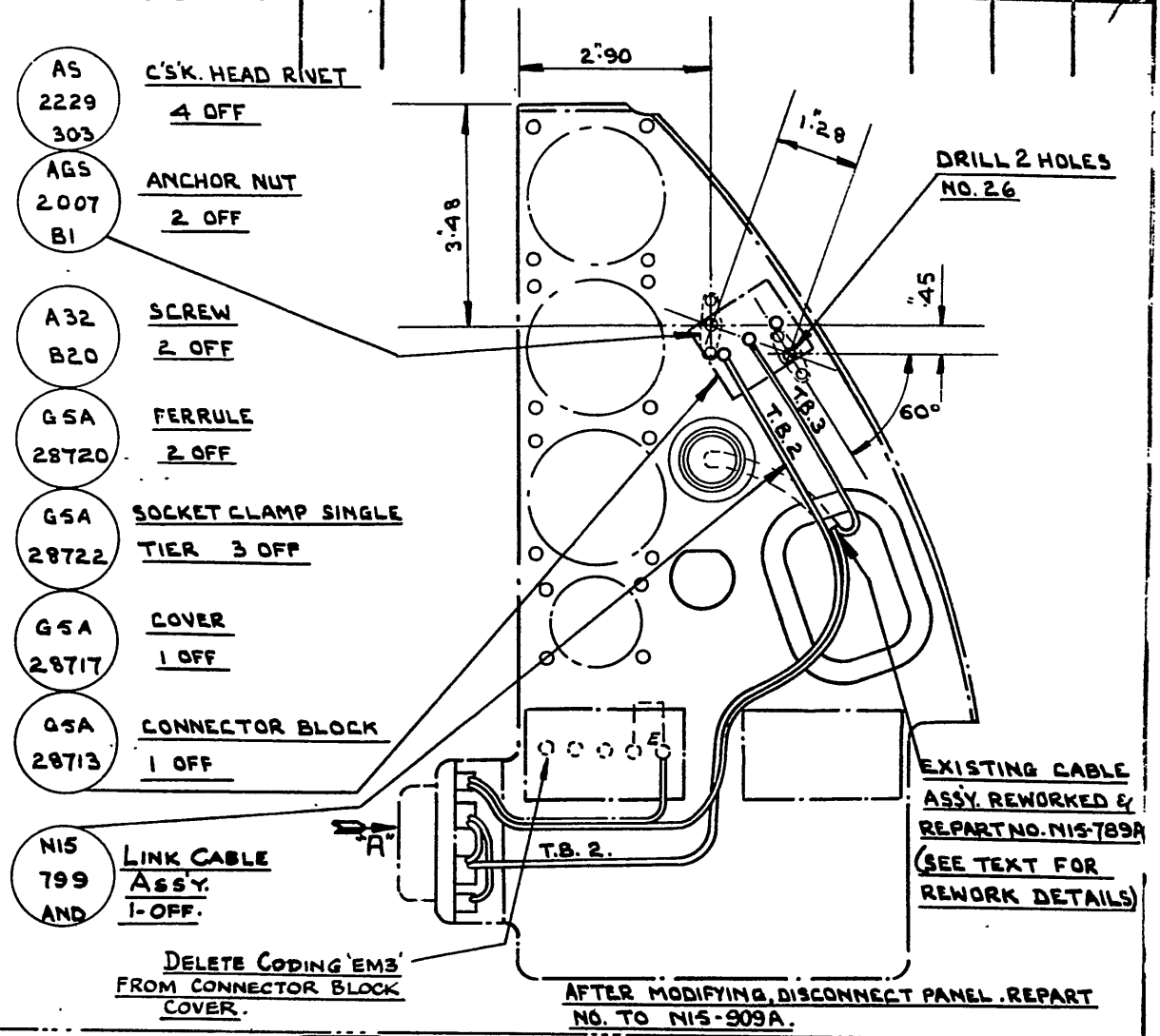
DE HAVILLAND DRG. No. 00M348 SHT. 1. No. OF SHEETS 4.

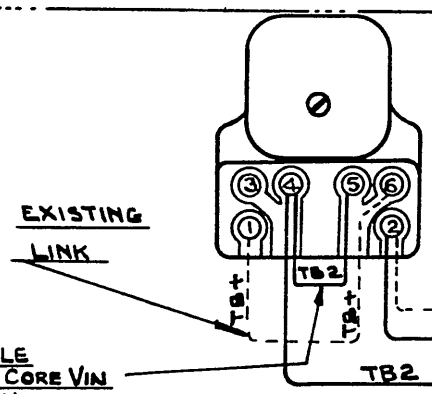
REFERENCE	ISSUED BY	TITLE
		INTRODUCTION OF AN ALKALINE BATTERY TYPE MP04.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	ELECTRICAL SYSTEM
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 33
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN
ANGLES	± 1/2°	FINISH		TECH. ORDER	VAMPIRE MOD NO 237
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.21		SCALE		DRAWING NO.	A12971/1 DRWG. A SIZE
		DRAWN	APPROVED		
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D + L	INITIALS + APPROVED
1				





DE HAVILLAND DRAWING NO. 00M348 SHEET 2 OF 4 SHEETS.

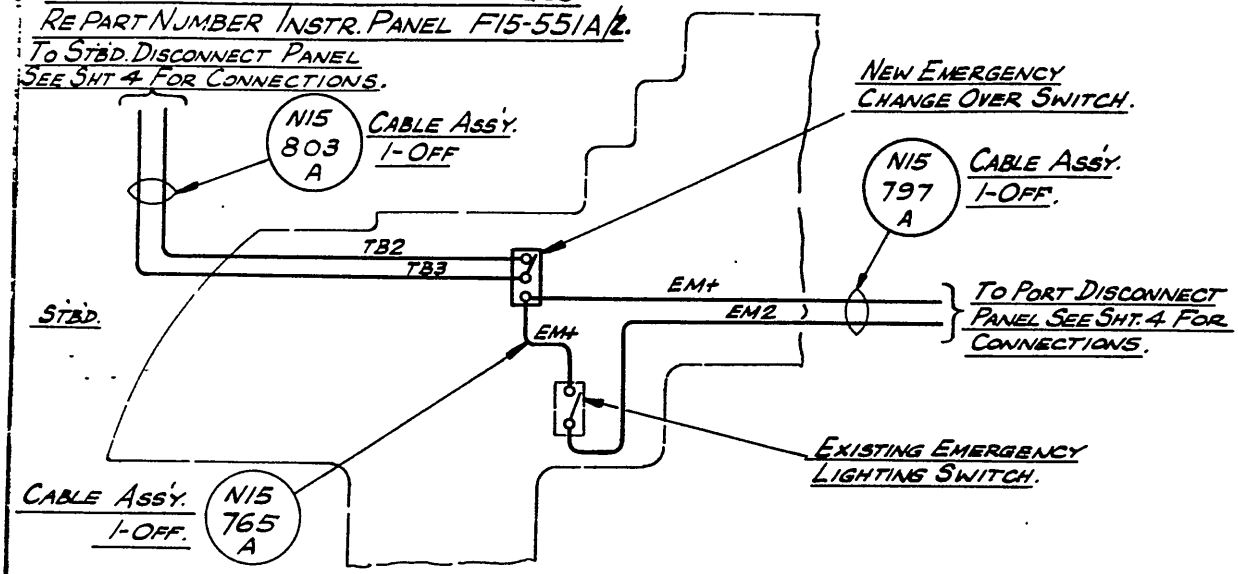
REFERENCE	ISSUED BY	TITLE
		INTRODUCTION OF AN ALKALINE BATTERY TYPE MP.04.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	ELECTRICAL SYSTEM
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 33
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD 237
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.I.		SCALE		DRAWING NO.	A 12971/2
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

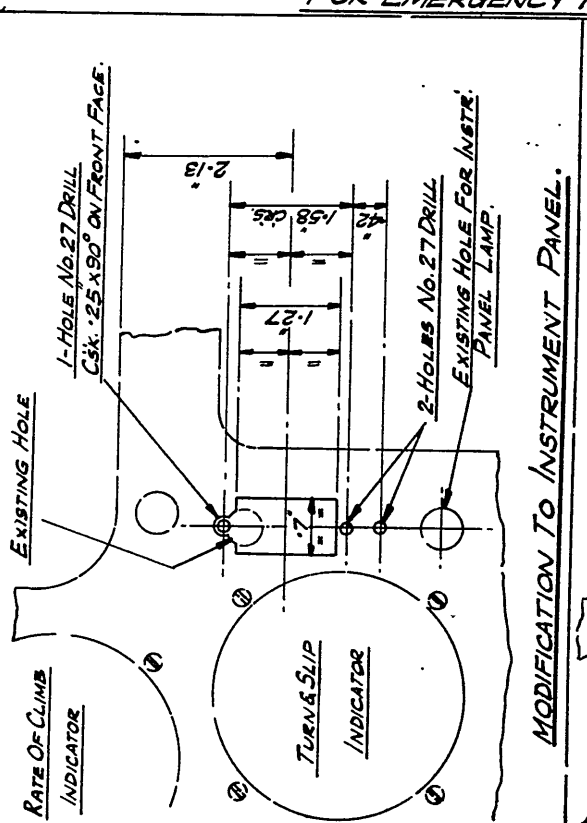
DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. L.	INITIALS	APPROVED

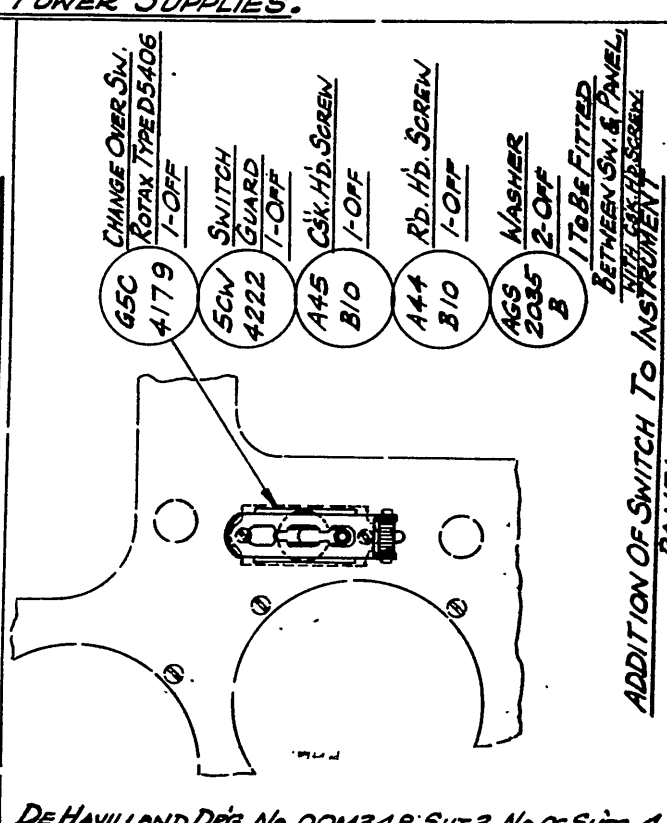
NOTE:-
AFTER CARRYING OUT ALL CHANGES
RE PART NUMBER INSTR. PANEL F15-551A/2.
TO STBD. DISCONNECT PANEL
SEE SHT 4 FOR CONNECTIONS.



VIEW ON BACK OF INSTRUMENT PANEL SHOWING CONNECTIONS FOR EMERGENCY POWER SUPPLIES.



MODIFICATION TO INSTRUMENT PANEL.



ADDITION OF SWITCH TO INSTRUMENT PANEL.

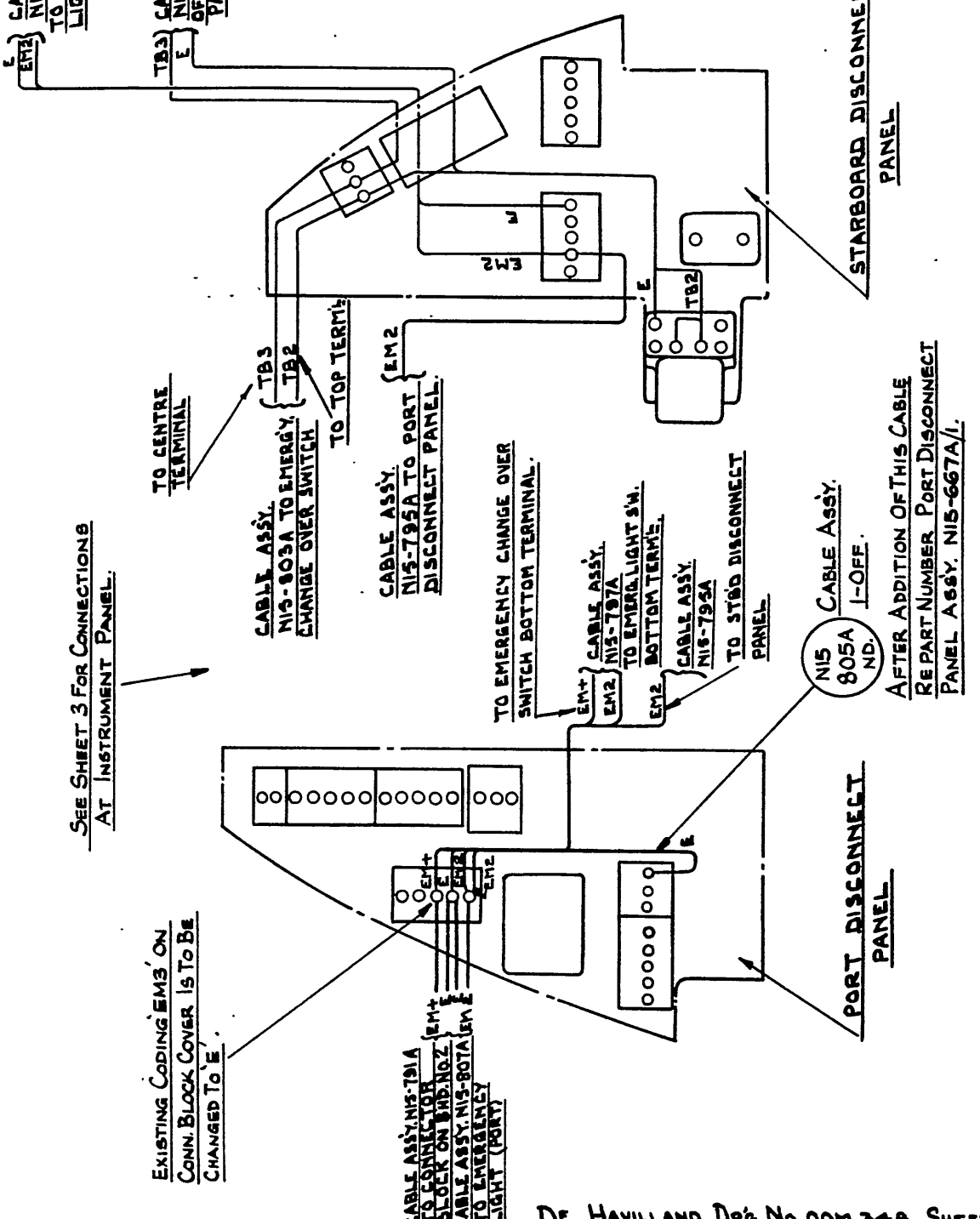
DE HAVILLAND DRG. No. 00M348 SHT. 3 No. OF SHTS. 4.

REFERENCE	ISSUED BY	TITLE
		INTRODUCTION OF AN ALKALINE BATTERY TYPE MP04.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	ELECTRICAL SYSTEM
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 33
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD NO. 237
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.2		SCALE		DRAWING NO.	A 12071/3
		DRAWN	APPROVED		DRWG. SIZE A
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. L.	INITIALS	APPROVED



DE HAVILLAND DRG. NO. 00M 348 SHEET 4 OF 4 SHEETS

REFERENCE	ISSUED BY	TITLE
		INTRODUCTION OF ALKALINE BATTERY TYPE MP.04.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	ELECTRICAL SYSTEM
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 33
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD NO 237.
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.CZI		SCALE		DRAWING NO.	A 12971/4
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

AAP 721:79, Vol 2, Pt 2 VAMPIRE MODIFICATION NO 239

Class 2

TO MAKE PROVISION FOR A GSAP CAMERA IN LIEU OF G45B CAMERA - INTRODUCTION

Reason for and Description of Modification

1. This modification is introduced to satisfy an operational training requirement as the GSAP., AN-N6, Camera has improved performance over the G45B camera. Modifications are made to the Gun Camera wiring and a new Camera mounting adapter is introduced.

Application

2. This work is to be carried out on all Vampire Mk 30-31 aircraft, except A79-996 which was modified by the manufacturer as a trial installation.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade musterings responsible are airframe, electrical and instrument fitters.

Action in Respect of Spares

4. The following spares are affected, and are to be modified at the direction of Headquarters Maintenance Command.

Ident No	Part No	Nomenclature	Remarks
A79/501996	A00717/5	Fixed Nosing	Rework to para 11 (c) xv and re-identify as Part No 00A375AND and Ident No A79/504111.
A79/501847	12.UN.91A	Mud Guard	Rework to para 11 (c) v and re-identify as Part No 00B155A and Ident No A79/504112.
A79/501561	B00933A	Mud Guard	Rework by adding a 1" dia hole as shown on sheet 4 of Drg A12982 attached and then modify and identify as for Part No 12 UN 91A above.

(Issued with A.L. 125 - November, 1958)

Orders Superseded or Cancelled

5. Nil.

Equivalent Modifications

6. De Havilland (Aust) Mod V227 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set.

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1		00N1107A	Cable Assy	1	
2		00A369A	Window Mounting Assy	1	
3		N15-153ND	Washer Special	1	
4	F14A/501218	A11264/8	Adapter, Assy Camera Mtg	1	
5	H128F/18764		Nut, Coupling "Breeze" Type AN3054-4	1	
6	H28C/2459	AGS 251/19	Woodscrew, MS, Csk Hd, No 4 x $\frac{3}{8}$" long	2	
7	H28C/2470	AGS 251/20	Woodscrew, MS Csk Hd, No 4 x $\frac{1}{2}$" long	6	
8	H28/27024	AGS-2001B/1	Nut, MS Self Locking, Nyloc, 4BA	1	
9	H28C/2815	A33/B16	Screw, MS, Metal, Csk Hd, 4BA x $\frac{1}{2}$" long	1	
10	G5E/30155	NPN	Cable, AA18, one core, Vin AS No U1	18"	
11	G5E/30157	NPN	Cable, AA18, three core, Vin AS No U1	24"	
12	K3/385	252	Cement, Ahesive, Bostik	AR	
13	K3/365		Covering, Camouflage, High Speed, Aluminium	AR	
14	G5F/500001		Tape, Insulating PVC 5/8" wide	AR	
15	I32A/94		Cord Stringing, Spec 4F35, No 1 size	AR	

(Issued with A.L. 215 - November, 1958)

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
16	K4/152		Beeswax	AR	
17	F14A/1042		Mounting	1	
18	H23/12544	A25/8E	Bolt, HTS, Hex Hd $\frac{1}{4}$" BSF x 1.3" long	4	
19	I1/2700	NPN	Wire, Locking, Soft Iron, Galvanised, 20 SWG	AR	

NOTES: (a) Items 1 to 11 inclusive will be delivered from De Havilland Aircraft Pty Ltd to the De Havillands Modification Section. Units requiring modification sets are to demand from De Havillands Modification Centre.

(b) Items 12 to 16 inclusive will be drawn from unit stores.

(c) Items 17 to 19 inclusive are to be drawn from unit stores if a ballast weight only is installed in the aircraft.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification.

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
20		N00272A	Cable, Camera Gun	1	
21		00Z25ND	Cover, Camera Aperture	1	
22	A79/500582	A004077	Seal, Camera Aperture	1	
23	F14A/1423		Adapter, Type 32	1	
24	G5L/1004		Stowage, Dummy, Type 'B'	1	
25		00B21	Weight, Ballast	1	
26	G5C/958		Socket, (Remove from cable, Item 20)	1	

NOTES: (a) Items 20, 21 and 22 are obsolete and are to be disposed of in accordance with current authorized procedure.

(b) Items 23, 24 and 26 are to be examined and if serviceable, returned to store for use on other aircraft.

(c) Item 25 is to be returned to store for salvage of the lead.

Disposal of Parts in Store

9. Stocks of item 22 are obsolete and are to be disposed of in accordance with current authorized procedure after all applicable aircraft have been modified.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable, but not later than the next "D" servicing after receipt of parts or when the aircraft are allotted for retrospective modification fitment.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 54 man-hours will be required for the completion of this modification.

(b) Special Tools Jigs, &c : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Disconnect the aircraft batteries in accordance with current authorized procedure.

(ii) Remove the Upper Nose Cowl.

(iii) If a G45B Camera is fitted remove the Camera, Camera Seal, Item 22, and its Adapter, item 23, from the Mounting by Slackening off the two bolts. Replace in the Mounting the new adapter item 4 and retighten the two bolts.

(iv) If a G45B Camera is not fitted locate and remove the ballast weight item 25 which is bolted to the nosewheel mud guard. Assemble the new adapter, item 4, to the new mounting, item 17, and tighten the two bolts. Locate this assembly on the four attachment holes in the nose wheel mud guard and attach with four new bolts, item 18. These bolts are to have a No 58 (.042) hole drilled in the head for wirelocking before assy. When bolts are tight wirelock them in pairs using wire, item 19.

(v) On the mud guard it will be necessary to make the small cut out shown on sheet 4 drawing A12982.

(vi) The Cable Assy, item 20, which runs from the terminal block to the camera is to be completely removed from the aircraft and discarded. The socket, item 26, if serviceable, may be salvaged from this cable.

(vii) Replace this cable by a new cable, item 1, connecting the three ends to their respective terminals CG6, CG4 and E. Refer to sheet 4 of drawing A12982.

(viii) The dummy stowage, item 24, which was used for the now redundant cable, item 20, is to be removed and returned to store if serviceable. Discard its two attaching countersunk screws and nuts.

(ix) Offer up in place of the dummy stowage a "Breeze" Coupling nut, item 5, which is attached by means of a washer, screw and stiffnut, items 3, 9 and 8 respectively to one of the now redundant holes in the mudguard. The plug assembly which is at the end of the new cable, item 1, is screwed to the coupling nut when the the new GSAP AN-N6 Camera is not fitted.

(x) Locate and remove the cable loom assembly C4, Part No N0042A/1 Ref, which is attached to the Fwd face of Bulkhead No 1 by a "breeze" plug and runs to the camera terminal block.

(xi) This loom is to be reworked as shown on sheet 3 of Drawing A12982 using items 12, 14, 15 and 16, after rework repart No this Loom Assy 00N1109A and reinstall in its former position in the aircraft.

(xii) Now locate and remove the cable loom assembly C3 Part No 00N1007A Ref, which is attached to the aft face of bulkhead No 1 and runs to a breeze plug in Junction Box No 1. This loom is to be reworked as shown on sheet 3 of Drawing A12982 using items 12, 14, 15 and 16. After rework repart No this Loom 00N1133A and reinstall in its former position in the aircraft.

(xiii) NOTE: This paragraph is applicable to Mk 31 aircraft only.

Locate and remove the rocket projectile and Bomb Junction Box DH Part No 00N301A/2 Ref situated adjacent to Junction Box No 1. Remove the front cover and rework as shown on sheet 2 of Drawing A12982. Replace the front cover and repart number the box 00N301A/3 before re-installing in the aircraft.

(xiv) NOTE: This para is applicable to Mk 30 Aircraft only.

Locate armament relays situated under side of Ammo Floor. Refer to sheet 5 of drawing A12982. Delete Link coded 'E' between terminals 2 and 4 on Camera Gun Relay.

Reconnect cable coded 'E' from terminal 4 on Camera Gun Relay to Terminal 2.
Locate a lead coded GF8 in loom C6A which is not used and should be coiled and stowed in the gun bay. This lead is to be recoded CG6 and connected to terminal 4 on the Camera Gun relay.
Now working in Junction Box No 1 remove the front cover and locate the lead coded GF8 which goes from Pin 'F' on Plug 'C6' to terminal block 3. Recode this lead CG6 and remove from GF8 terminal and reconnect to CG6 Terminal on the same terminal block.

(Issued with A.L. 125 - November, 1958)

(xv) Working now on the Fixed nosing DH Part No A00717A/5 Ref locate the Camera Aperture and remove and discard if fitted, the cover plates, item 21, and its attaching bolt. Attach the window mounting assembly, item 2, to the fixed nosing as per sheet 1 of DH drawing A12982 using items 6 and 7.

NOTE: Before attaching window mounting assy the mating faces must be liberally coated with Bostik item 12, and allowed to dry before screwing together.
After reworking repart number the fixed nosing Part No 00A375AND and Ident No A79/504111.

(xvi) Replace the upper nose cowl.

(xvii) Replace the aircraft batteries.

(d) Tests : Complete electrical function of aircraft.

(e) Recording : Record this Modification in the Airframe Log Book.

Drawings

12. Drawing A12982 consisting of five (5) sheets is attached herewith.

Effect on Weight and Balance

13. Effect on weight and balance of the aircraft is as follows:-

Item	Weight (lbs) ±	Arm (ins) ±	Moment (lb ins) ±
Camera G45B	-7.6	-117.6	+893.9
Adapter (F14A/1423)	- .75	-117.6	+ 88.2
Ballast Weight	-8.00	-117.6	+941.0
Camera GSAP	+2.75	-117.6	-323.4
Adapter (F14A/501218)	+ .50	-117.6	- 58.8

NOTE; Amendments to Weight Sheet Summaries will be consolidated and issued by Department of Air.
(Issued with A.L. 125 - November, 1958)

References : Files, Department of Air, 9/84/16 and 150/8/1211

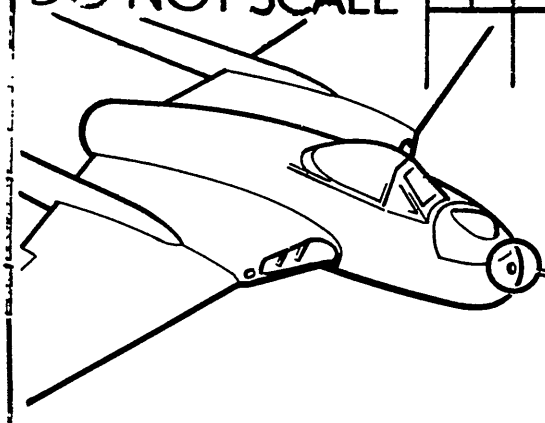
Attachments : Drawing A12982 (5 sheets)

Date of Issue : 14th November, 1958.

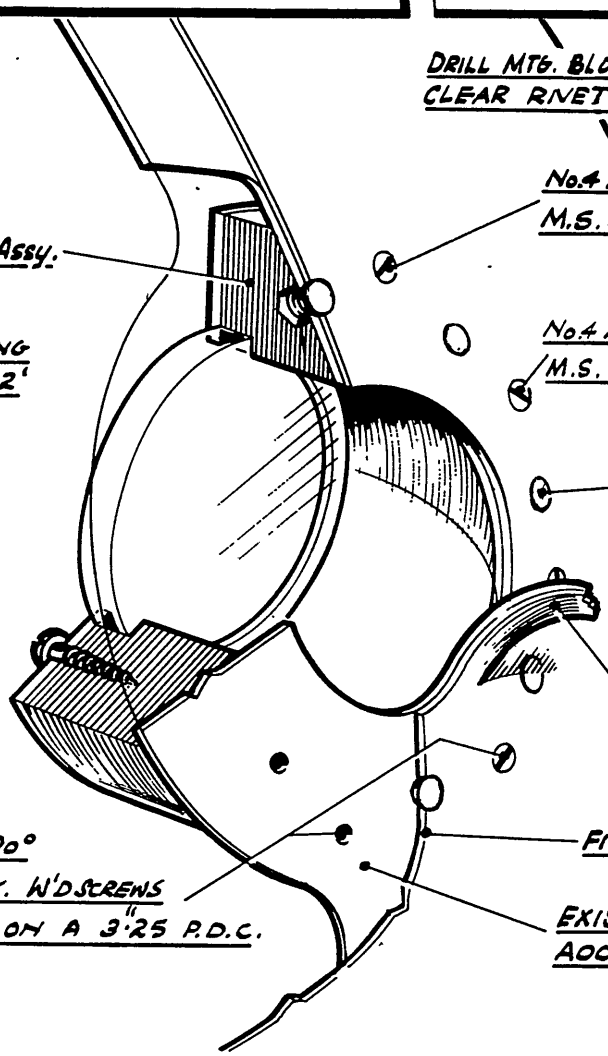
(Issued with A.L. 125 - November, 1958)

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. L	INITIALS	APPROVED



ATTACHMENT OF WINDOW MOUNTING TO FIXED NOSING.



DRILL MTG. BLOCK 1/4" D.A. x .26" DEEP TO CLEAR RIVET TAILS AS SHOWN.

No.4 x 3/8" W'dscrew M.S. Csk Hd - 2 off. (AGS 251 19)

00A 369 A Window Mtg. Block Assy. 1-off.

No.4 x 1/2" W'dscrew M.S. Csk Hd - 6 off. (AGS 251 20)

ASSEMBLE TO FIXED NOSING WITH SCREWS & BOSTIK '262'

EXISTING RIVETS - SKIN TO BUTT STRAP 8 - OFF.

TRIM EXISTING HOLE IN FIXED NOSING TO SUIT MOUNTING BLOCK ASSY.

DRILL No.30 AND CSK AT 90° TO .216 FOR No.4 CSK. W'DSCREWS 8-OFF IN FIXED NOSING ON A 3.25 P.D.C.

FIXED NOSING SKIN

EXISTING BUTT STRAP A00 718 ND. REF. ONLY

DE HAVILLAND DRWG. No. 00M 360. No of SHTS. 5 SHT. No. 1

REFERENCE	ISSUED BY	TITLE
	Dept. of Air Directorate of Mechanical and Electrical Engineering	TO MAKE PROVISION FOR A G.S.A.P. CAMERA IN LIEU OF A G45B CAMERA.

LIMITS UNLESS STATED	MATERIAL		COMPONENT OF
DECIMALS ± .010"	SPEC.		MACHINE
FRACTIONS ± 1/32"	TREATMENT		ENGINE
ANGLES ± 1/2°	FINISH		TECH. ORDER: Vampire Mod. 239
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.2	SCALE		
	DRAWN	APPROVED	DRAWING NO.: A 12982 Sheet 1 of 5
	TRACED	CHECKED	DRWG. SIZE: A

DO NOT SCALE

RP3

RP3

CG9

CG9

TO POLE SECTION POLE

REMOVE EXISTING LINK BETWEEN TERMINALS P2 & P6

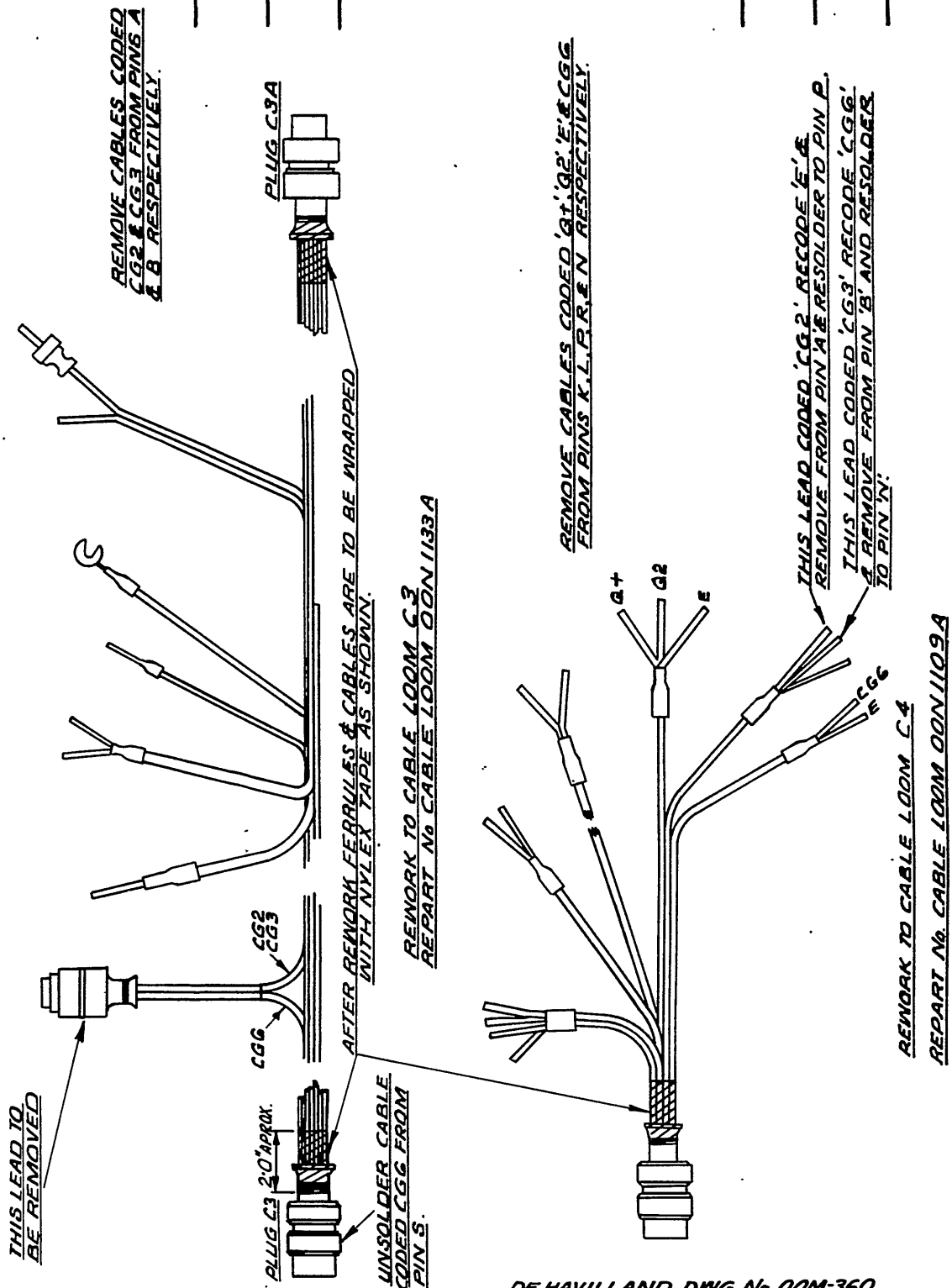
ECT EXISTING WIRE RELOCATED FROM AL 6 TO TERMINAL P2

JUNCTION BOX.

ISSUE NO.	DATE	ALTERATION	INITIALS	APPROVED
			DLL	

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. I. L.	INITIALS	APPROVED



DE HAVILLAND DWG No. OOM-360
SHEET 3 OF 5

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AERONAUTICAL ENG.	TO MAKE PROVISION FOR A G.S.A.P. CAMERA IN LIEU OF A G45B CAMERA

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD Nº 239.
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.CZ1		SCALE		DRAWING NO.	A12982 SHEET 3.
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

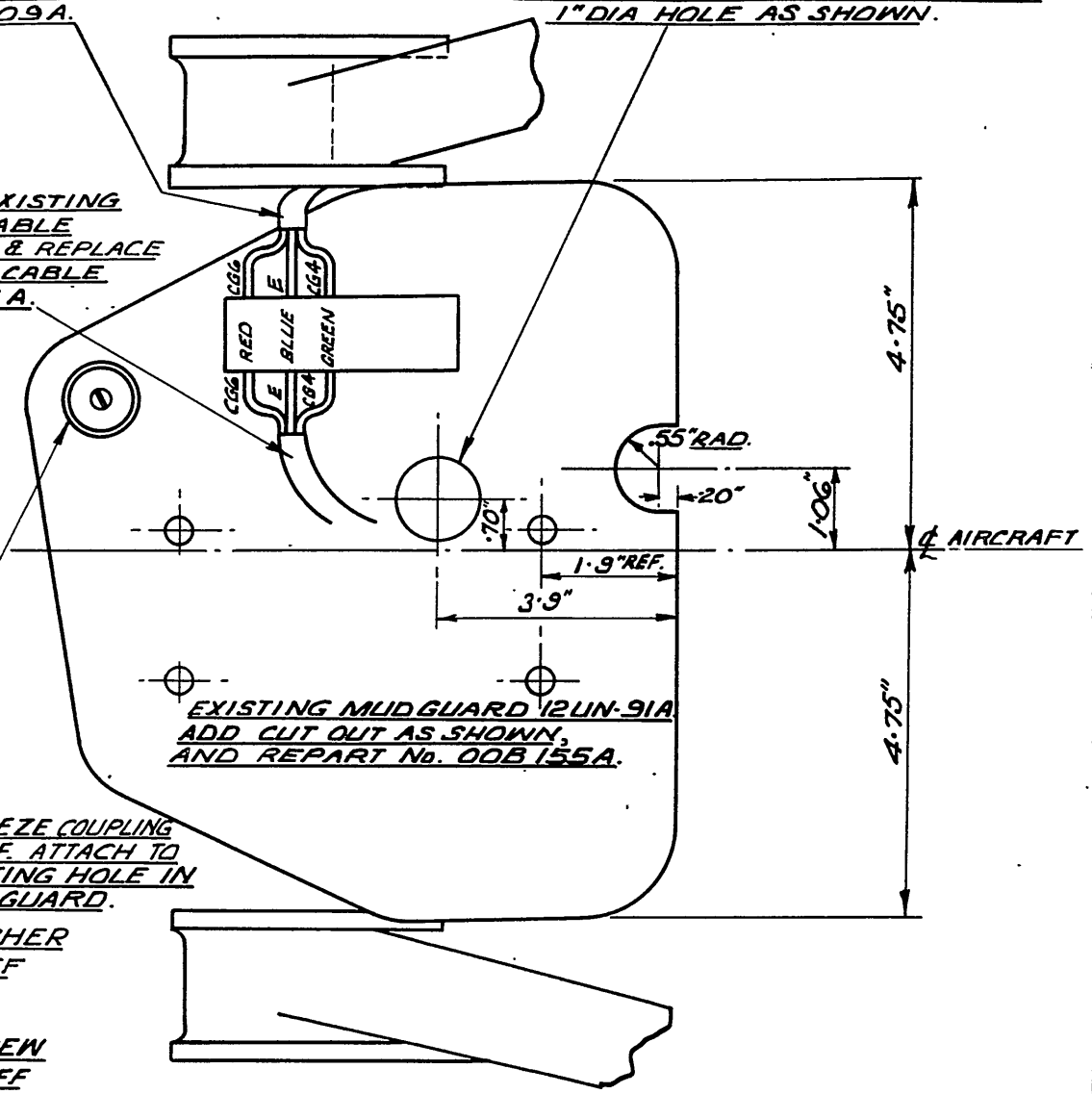
DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. I. L	INITIALS	APPROVED

REMOVE EXISTING CABLE LOOM C4 - N00 42 A/L REWORK & REPART No. OON-1109A.

MUDGUARD B00-933A MAY BE MODIFIED TO 12 UN 91A BY ADDING 1" DIA HOLE AS SHOWN.

REMOVE EXISTING CAMERA CABLE N00-272A & REPLACE WITH NEW CABLE OON-1107A.



EXISTING MUDGUARD 12UN-91A ADD CUT OUT AS SHOWN, AND REPART No. 00B 155A.

H12BF 18764	1-OFF	BREEZE COUPLING ATTACH TO EXISTING HOLE IN MUDGUARD.
N15 153 N.D	1-OFF	WASHER
A33 B 16	1-OFF	SCREW
AGS 2001 B1	1-OFF	NUT

DE HAVILLAND DWG. No. 00M 360 SHEET 4 OF 5

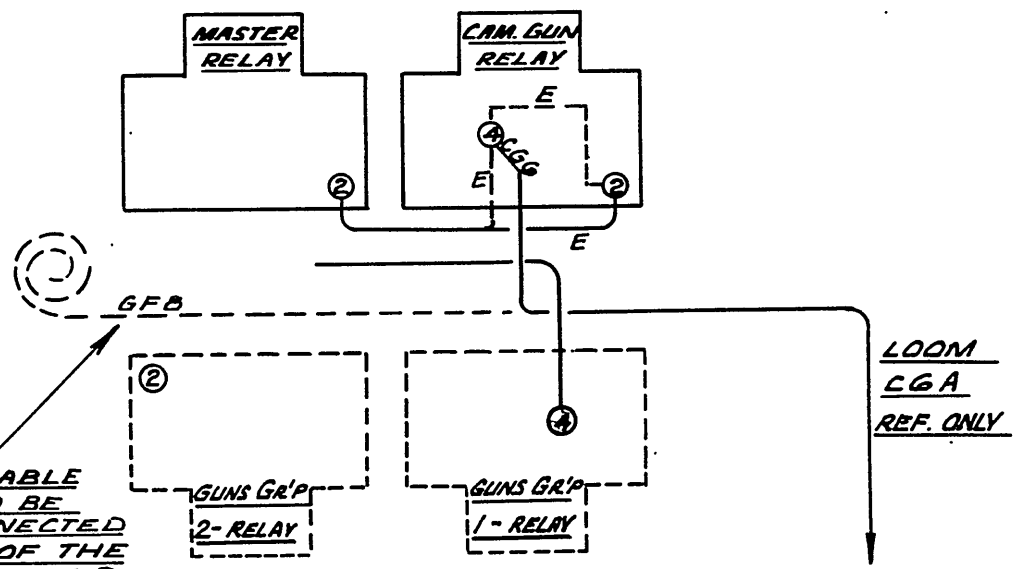
REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AERONAUTICAL ENG.	TO MAKE PROVISION FOR A G.S.A.P. CAMERA IN LIEU OF A G45B CAMERA.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD Nº239
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.T.I.		SCALE		DRAWING NO.	A12982 SHEET 4
		DRAWN	APPROVED		DRWG. A SIZE

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D I L	INITIALS	APPROVED

NOTE: CABLE CODED 'E' IS NOW TO BE TAKEN FROM TERMINAL 4 & RECONNECTED TO TERMINAL 2. DELETE LINK CODED 'E' BETWEEN 4 & 2.



THIS EXISTING CABLE CODED GFB IS TO BE UNCOILED & CONNECTED TO TERMINAL 4 OF THE CAMERA GUN RELAY & RECODED CGG.

VIEW ON RELAYS SITUATED UNDER AMMUNITION COMP'T FLOOR.

MK. 30 ONLY

DE HAVILLAND DRAWING DOM 360 SHEET 5 OF 5

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AERONAUTICAL ENG.	TO MAKE PROVISION FOR A G.S.A.P. CAMERA IN LIEU OF A G 45B CAMERA

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD Nº239
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		SCALE		DRAWING NO.	A12982 SHEET 5
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

AAP 721:79, Vol 2, Pt 2.

VAMPIRE MODIFICATION NO 240

Class 2

MK 16A OXYGEN REGULATOR AND AUTOMATIC LINE VALVE - INTRODUCTION

Reason for and Description of Modification

1. This modification authorizes the introduction of a Mk 16A Oxygen Regulator and a automatic line valve, to provide an additional safety feature. The line valve will turn the oxygen on at 8,000 feet if the pilot omits to operate the switch, and the regulator will automatically switch to "High" flow at 30,000 feet. Vampire Mod 131 (DH Aust Mod V100), Vampire Mod 143 (DH Aust Mod V202), and Vampire Mod 222 (DH Aust Mod V219) are to be incorporated either prior to, or concurrently with this order.

Application

2. ~~Th~~ ~~fighter aire~~

"This work is to be incorporated on all MK 30 and 31, Vampire Fighter Aircraft. In paragraph 11(c), Operations (X), (XL), (XLi) and (XLii) are applicable to MK 31 Aircraft only".
(issued with A/L No 110)

Responsibility for Incorporation

3. This modification is to be incorporated by aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade musterings responsible are instrument, airframe and armament fitters.

Action in Respect of Spares

4. As directed by Headquarters Maintenance Command, all spare de-icer pump brackets B002525 Ident No A79/503330 are to be modified in accordance with paragraph 11(c), operation (ix)(b) then re part numbered 00B153, Ident No A79/504020. Future deliveries of de-icer pump brackets to be Part No 00B153, Ident No A79/504020.

Orders Superseded or Cancelled

5. Vampire Mod 122 (DH Aust Mod V190) is partly superseded in so far as the accelerometer is now rigidly mounted whilst previously it was shock mounted.

Equivalent Modifications

6. De Havillan (Aust) Mod V229 is an equivalent modification.

Supply

7. The following list of parts are required to complete one modification set:-

(Issued with A.L.105 - July, 1958)

Item No	Ident No	Part No	Nomenclature	No off per Set	Stores Class
1	G6D/487		Nut, union, Mk 4A	1	C
2	G6D/791		Nipple, Spherical, Mk 4B	1	C
3	G6D/1587		Regulator, oxygen Mk 16A	1	A
4	G6D/1660 or G6D/1443		Filter, Mk 2A) Filter Mk 2)	1	A
5	G6D/1782		Valve, Barometric Line	1	A
6		OOB 135A	Bracket, angle	1	A
7		OON 1105	Bracket, R.P. Auto Selector mounting	1	
8		OOQ 389ND	Pipe assy	1	
9		OOQ 391ND	Pipe assy	1	
10		OOZ 445	Plate	1	
11	A79/501670	DHS.180/3/X	Tag, chain	1	C
12	H28C/3419	A33/C8	Screw, MS Metal C'sk 2 BA x ¼" lg	2	C
13	H28B/13603	AGS.838/8	Ring, sealing, rubber	1	C
14	H28B/27024	AGS.2001B/1	Nut, MS Self locking, Nyloc 4 BA	6	C
15	H28/27025	AGS.2001C/1	Nut, MS Self Locking, Nyloc 2 BA	4	C
16	H28C/11067	AGS.2035/B	Washer, lock shakeproof steel, 4 BA	3	C
17	H28/11937	AS.1246/1B	Bolt, HTS Rd Hd 4 BA x ".45 long	3	C
18	H28/11540	AS.1246/2B	Bolt, HTS Rd Hd 4 BA x ".55 long	3	C
19	H28/12137	AS.1246/4B	Bolt, HTS Rd Head, 4 BA x ".75 long	3	C
20	H28/11255	AS.1246/2C	Bolt, HTS Rd Hd 2 BA x ".6 long	4	C
21	H28/11210	AS.1246/3C	Bolt, HTS Rd Hd 2 BA x ".7 long	2	C
22	H28/11890	AS.1246/5C	Bolt, HTS Rd Hd 2 BA x ".9 long	2	C

Item No	Ident No	Part No	Nomenclature	No off per Set	Stores Class
23	H128F/62230	AS.2229/304	Rivet, Al Alloy, C's'k Hd 90° 3/32" dia x $\frac{1}{4}$" long	2	C
24	H128F/62231	AS.2229/306	Rivet, Al Alloy C's'k Hd 90° 3/32" dia x $\frac{3}{8}$" long	3	C
25	H128F/62510	AS.2229/406	Rivet, Al Alloy, C's'k Hd 90°, $\frac{1}{8}$" dia x $\frac{3}{8}$" long	10	C
26	H28C/12305	SP.13/B	Washer, MS Thin, 4 BA	3	C
27	H28C/12252	SP.13/C	Washer, MS Thin, 2 BA	3	C
28	H28C/12355	SP.16/C	Washer, Al Alloy, thick, 2 BA	2	C
29	G5E/30055		Wire, Fuse, 10 amp	as reqd.	C
30	I1/9505		Wire, locking, 20 SWG soft iron	as reqd.	C

NOTES:- (a) Items 1 to 28 inclusive will be delivered from De Havilland Aircraft (Aust) Pty Ltd to De Havilland Modification Section.

(b) Units requiring modification sets are to demand from De Havillands Modification Section.

(c) Items 29 and 30 are to be drawn from Unit Stores.

Disposal of Parts Removed

8. The following parts will be rendered redundant upon incorporation of this modification.

Item No	Ident No	Part No	Nomenclature	No off per Set	Stores Class
31	G6D/574		Filter	1	A
32	G6D/642		Label, Filter	1	C
33	G6D/10966		Regulator, Oxygen, Mk 11C	1	A
34	A79/503702	00B 81A	Bracket, Assy Centre (Accelerometer)	1	

(Issued with A.L.105 - July, 1958)

Item No	Ident No	Part No	Nomenclature	No off per Set	Stores Class
35	A79/503700	00B 87A	Bracket Assy, Top (Accelerometer)	1	
36	A79/503701	00B 91A	Bracket Assy, Bottom (Accelerometer)	1	
37		B00 54A	Bracket, Instrument panel attachment	1	
38		00N 1097	Bracket RP Auto Selector, mounting	1	

NOTES:- (a) Items 31, 32 and 33 are to be examined and, if serviceable, returned to store for use on other aircraft.

(b) Items 34 to 38 inclusive are obsolete and are to be disposed of in accordance with correct authorized procedure.

Disposal of Parts in Stock

9. Any spare parts, listed in paragraph 8 are to be disposed of as indicated in that paragraph.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable but not later than the next "E" servicing after receipt of parts or when the aircraft is allotted for retrospective modification fitment.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 45 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, &c. : No special tools and jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Open the starboard ammunition door and turn "off" the oxygen control valve (G6D/223) situated on the aft face of the bulkhead No 2. Open the gun bay doors and disconnect the aircraft accumulators.

(ii) Disarm and remove the pilot's ejection seat in accordance with current authorized procedure.

(iii) Disconnect and remove the high pressure oxygen pipe (Q00416AND Ref) between the oxygen regulator and bulkhead No 2, together with filter and label (Items 31, 32). Retain pipe for rework and reassembly later.

Modification to Right Hand Instrument Panel

(iv) Remove the oxygen regulator (Item 33).

(v) Remove the accelerometer, and retain for reassembly later.

(vi) Remove the centre, top and bottom bracket (accelerometer) assemblies (Items 34, 35 and 36).

(vii) Remove the cabin pressure warning light, and retain for reassembly later.

(viii) Remove and relocate earth terminal as shown on drawing A12882 Sheet No 1. Assemble with rivet (Item 24) 2 off, drill No 41 (".096) dia holes to match earth terminal and C's'k front fac 90° x ".16 dia.

(ix) (A) Pre Vampire Mod 85 (DH Aust Mod V173)

Drill No 11 (".191) dia hole 2.2" above and in line with the top outboard hole in the de-icer pump bracket B00 217 as shown on drawing A12882 sheet No 1.

(B) Post Vampire Mod 85 (DH Aust Mod V173)

Remove de-icer pump bracket (B00 2525) and rework as shown on drawing A12882 sheet No 1.

Repart number to 00B153.

Reassemble reworked de-icer pump bracket, and drill No 11 (".191) dia hole through the panel from new hole in bracket.

(x) Remove the RP Auto-selector switch from its mounting on the Instrument Panel. Disconnect the three Kland nuts and ferrules and wiring from the switch, making sure to note where each lead was connected

to facilitate reconnection. Retain the Auto-selector switch for reassembly.

(xi) Remove and discard the RP auto-selector mounting bracket (Item 38).

N.B. Operations (x) and (xi) assume that Vampire Mod 143 (DH Aust Mod V202) has been incorporated.

(xii) Remove and discard the angle bracket (Item 37) situated on the aft face of the panel and just below the regulator. Retain the bolt assembly which attached the angle bracket to the support strut (BOO 51A Ref).

(xiii) Slacken off the bolts securing the support strut (B0051A Ref) at the cross tube.

(xiv) Attach new angle bracket (Item 6) to the support strut (B0051A Ref) with existing bolt assembly (refer to operation (xii) above). Do not fully tighten the bolt assembly.

(xv) Attach bracket (Item 6) to the instrument panel as shown on drawing A12882 sheet No 1, drill 2 No 11 (".191) dia holes and assemble with screw (Item 20) and nut (Item 15) 2 off each. Then drill 2 No 41 (".096) dia holes from the angle bracket (Item 6) through the angle stiffener, assemble with rivets (Item 23) 2 off.

(xvi) Tighten up the bolts securing the support strut (B0051A Ref) at the cross tube and the bolt assembly attaching the new angle bracket (Item 6) to the support strut. (Refer to operation (xiii) and (xiv)).

(xvii) Temporarily remove the top screw through the angle bracket (Item 6) and panel.

(xviii) Offer up plate (Item 10) locating the plate with the top hole of the angle bracket, see drawing A12882 sheet No 1.

(xix) Relieve the plate locally to clear the head of the screw of the brake gauge.

(Issued with A.L.105 - July, 1958)

(xx) With the plate (Item 10) correctly located, drill 10 No 30 (".128) dia holes and 1 No 41 (."096) dia holes from the plate through the panel and 3 No 26 (".147) dia holes from the panel through the plate.

(xxi) Remove the plate and de-burr all holes.

(xxii) Assemble plate (Item 10) with rivets (Item 25) 10 off (Item 24) 1 off and bolts and nuts (Items 18 and 14) 3 off each. Refit screw, removed in operation (xvii).

(xxiii) Remove material in the panel to suit the cut out in the plate.

(xxiv) Re-assemble the cabin pressure warning light. (Refer to operation (vii)).

(xxv) Re-assemble the accelerometer (refer operation (v)) with screw, nut and washer (Items 19, 14 and 26) 3 off each.

(xxvi) Assemble oxygen regulator (Item 3) to panel with screw (Items 20 and 21) 2 off each, washer (Item 27) 3 off and tag (Item 11) 1 off.

N B If Vampire Mod 231 (DH Aust Mod V224) has not been incorporated, rework de-icing pipe to run between clock and brake pressure gauge.

(xxvii) Turn the regulator control knob to the "FULLY OPEN" position, drill 1/16" dia hole through knob and wire lock (Item 30).

(xxviii) Reconnect the existing low pressure pipe (disconnected in operation (iv) to the regulator after replacing the existing rubber ring with new rubber ring (Item 13) 1 off. See drawing A12882 sheet No 2.

(xxix) Offer up the barometric line valve (Item 5) and locating on existing 2 BA hole (refer to operation (ix)), drill No 11 (".191) dia hole from the line valve through the panel, 5.50" from the left hand edge of panel. See drawing A12882 sheet No 1.

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(xxx) Assemble the barometric line valve (Item 5) to the panel with screw, washer and nut (Items 22, 28 and 15) 2 off each.

(xxxi) Assemble pipe assembly (Item 8) to the barometric line valve and the regulator.

(xxxii) Assemble pipe assembly (Item 9) to the barometric line valve.

(xxxiii) Assemble the filter (Item 4) to pipe assembly (Item 9). Ensure that the arrow on the filter is pointing downwards towards the barometric line valve, as that is the direction of flow of oxygen.

(xxxiv) Refer to drawing A12882 sheets Nos 1 and 2. Rework the HIGH pressure oxygen pipe (Q00 416AND ref) removed in operation (iii) so that it is routed in front of the instrument panel.

(xxxv) Cut off the high pressure oxygen pipe (Q00 416 AND ref) to enable a connection to be made to the filter (refer to operation (xxxiv).

(xxxvi) Remove the high pressure oxygen pipe from the cockpit and assemble the nut (Item 1), solder on the nipple (Item 2).

N B Soft solder RAAF Ident No I 1/45, and flux RAAF Ident No K4/10431 shall only be used for soldering nipple to the pipe. After soldering thoroughly, clean pipe and test for leaking nipples.

(xxxvii) Repart number the high pressure oxygen pipe assembly from Q00 416AND to 00Z 451AND.

(xxxviii) Re-install the reworked high pressure oxygen pipe assembly (00Z 451 AND ref).

(xxxix) Assemble the RP Auto-selector (Removed in operation (x)) to the mounting bracket (Item 7) with C's'k screws (Item 12) 2 off. Centre pop the heads of screws to lock.

(Issued with A.L.105 - July, 1958)

(xl) Refer to drawing A12882 sheet No 3. Assemble the RP Auto-Selector together with its mounting onto the three ferrules (made redundant upon the introduction of Vampire Mod 143 (DH Aust Mod V202) which discards the compass junction box in this position, on bulkhead No 2 forward face adjacent to the conduit sealing plate with screw and shakeproof washer (Items 17, 16) 3 off each.

(xli) Prior to reconnecting the wiring to the RP Auto Selector (refer to operation (x)) reduce the length of the cable by approximately 2 ft, lash the cable as required".
(Issued with A/L No 110)

(xlii) Ensure that the barometric line valve is turned "OFF" then turn "ON" the oxygen control valve (refer to operation ( )), wire lock using Item 30, in this position.

(xliii) Carry out test as laid down in section 11 (d).

(xliv) Refit and arm pilots ejection seat in accordance with the current authorized procedure.

(d) Tests :

(i) Turn the control valve on the regulator fully "ON" and wirelock in this position, and the barometric line valve is to be "OFF".

(ii) Connect the charging valve to a source of oxygen and charge bottles to approx 100 lb pressure and check system for bad leaks. This may be done by listening or feeling by hand at joints etc.

(iii) Continue charging to 1500-1800 lb/sq inch and check with soap solution, that no connections leak and that no flow passes the barometric line valve.

(iv) When the cylinders cool down, open the barometric line valve and accurately record the regulator contents gauge - should show 7/8 full at 1500 lbs or at 1800 lbs pressure, gauge should read full - close the barometric line valve and leave for two (2) hours. After this period open the barometric line valve and no fall of pressure must be shown on the contents gauge.

(Issued with A.L.105 - July, 1958)

NOTE:- The zero error of the contents gauge must not exceed 1/10th inch on the dial. A hissing noise will be heard when the barometric line valve is turned "ON" but this is the expanding gases in the regulator reducing valve and should not be mistaken for a leak. A leak of .2 litres/min. is permitted from the relief valve but can only be checked with suitable equipment. Any barometric line valve which is suspected of excessive leaking should be replaced.

(v) When the barometric line valve is turned "ON" the small ball in the RH flow indicator tube of the oxygen regulator should rise halfway up the tube to its stop when the flow change switch is in the normal position, and the balls in both tubes should appear when the switch is in the high position. With emergency switch full "ON" flow should be about 8 times NORMAL or 4 times HIGH.

(vi) With the barometric line valve still "ON" hold the open end of the flexible hose from the economiser against the sides of the face and note that oxygen is emmitted in regular puffs. If this is not so, replace this economiser.

(vii) With the barometric line valve "ON" no leaks should occur at any low pressure unions when tested with soap solution. Rubber rings AGS838/8 must not be used more than once and should be replaced if for any reason the joint is undone.

(viii) Turn the barometric line valve "OFF".

(e) Recording : Record this modification in the Airframe Log Book.

Drawings

12. Drawing A12882, consisting of three (3) sheets are attached herewith.

(Issued with A.L.105 - July, 1958)

Effect on Weight and Balance of the Aircraft

13. The effect of this modification on weight and balance is negligible.

References: Files, Department of Air, 9/84/365 and 150/8/1232.

Attachments: Drawing A12882 (Shts 1, 2 & 3).

Date of Issue: 2nd July, 1958.

(Issued with A.L.105 - July, 1958)

DO NOT SCALE

NOTE!! (1) FINISH ON RIVET AND SCREW HEADS TO BE MATT BLACK.

(2) COLOUR BAND PIPE WITH WHITE AND BLUE IN ACCORDANCE WITH A.E.I.G. PART 6, SECTION NO.1, INST. NO.2.

REPOSITION EXISTING EARTH TERMN'L. 3N 418A REF, AS SHOWN

(24) AS 2229 306 RIVET 2 OFF

DRILL NO.41 DIA. HOLES C'S'K. FRONT FACE 90° x 1/16 DIA.

RELIEVE LOCALLY TO CLEAR HEAD OF SCREW

DRILL NO.26 THROUGH PLATE FROM PANEL AND REASSEMBLE WITH:-

(18) AS 1246 26 6 B.D. HEAD SCREW 3 OFF

(14) AGS 2001 B1 NUT 3 OFF

(5) GAD 1782 BAROMETRIC LINE VALVE 1 OFF EL/DAP

(22) AS 1246 3C SCREW 2 OFF

(23) SP 16 C WASHER 2 OFF

(15) AGS 2001 C1 NUT 2 OFF

DOG 391 IND PIPE ASSY. 1 OFF (REF.)

DRILL NO.11 DIA. HOLES

DOG 389 IND PIPE ASSY. 1 OFF (REF.)

GAD 1443 OR AC DELCO FILTER 1 OFF REF. ONLY

REWORKED PIPE ASSY DOG 416 AND REF. (GAD/781 NIPPLE 1 OFF. GAD/487 NUT 1 OFF) FOR CONTINUATION SEE SHEET NO.2.

NOTE: THE REGULATOR MUST BE WIRE LOCKED IN THE "FULLY OPEN" POSITION WITH 20 SWG. SOFT IRON GALVANISED WIRE

(3) GAD 1687 OXYGEN REG. MK 16 A 1 OFF

(28) AS 1246 2C EL/DAP SCREW 2 OFF

(21) AS 1246 3C SCREW 2 OFF

(27) SP 13 C WASHER 3 OFF

(11) DHS 180 MK3X TAG 1 OFF

PRE. VAMPIRE MOD. 85 (DH. AUST. MOD. V173) ONLY. NO REWORK OF DEICER PUMP BRK'T. DOG 217 REF. IS NECESSARY, BUT DRILL NO.11 HOLE AS SHOWN BY DIM. CODED THUS *.

POST VAMP. MOD. 85 (DH. AUST. MOD. V173) ONLY. REWORK DE-ICER PUMP BRACKET DOG 252S REF. AS SHOWN.

(10) DOZ 445 PLATE 1 OFF

(22) AS 2229 406 C'S'K. RIVETS 10 OFF CODED ⊕

(24) AS 2229 306 C'S'K. RIVET 1 OFF CODED ⊖

REMOVE THE ACCELEROMETER TOGETHER WITH ITS MTG. & REASSEMBLE ACC'TR. TO PLATE DOZ 445 (REF.) AS SHOWN WITH:-

(18) AS 1246 4B 6 B.D. HD SCREW 3 OFF

(22) SP 13 B WASHER 3 OFF

(14) AGS 2001 B1 NUT 3 OFF

REPOSITION CABIN AIR PRESSURE WARNING LIGHT AS SHOWN.

LOCATE DOZ 445 PLATE WITH THIS HOLE THEN REMOVE MATERIAL IN PANEL TO SUIT CUTOUTS IN PLATE.

FOR THIS VIEW SEE SHEET 2 OF 3

REWORK AIR DEICER PIPE ASSY TO CLEAR REGULATOR.

(6) DOG 135 A BRACKET 1 OFF

(20) AS 1246 2C SCREW 2 OFF

(15) AGS 2001 C1 NUT 2 OFF

(23) AS 2229 304 RIVET 2 OFF

NOTE: ATTACH DOG 135A BRACKET TO DOG 51A SUPPORT STRUT THEN DRILL THROUGH FROM LOCATING HOLE IN DOZ 445 PLATE WITH 3/16" DIA. DRILL, OPEN OUT LOWER HOLE.

DRILL NO.41 HOLES IN ANGLE FROM BRACKET DOG 135A. REF.

DE HAVILLAND DRG. NO. DOM 349 SHEET 1 OF 3 SHEETS.

ISSUE NO.	DATE	ALTERATION	D.L.L.	INITIALS	APPROVED
1					
2					

REFERENCE

ISSUED BY: Department of Air, Directorate of Mechanical & Electrical Engineering

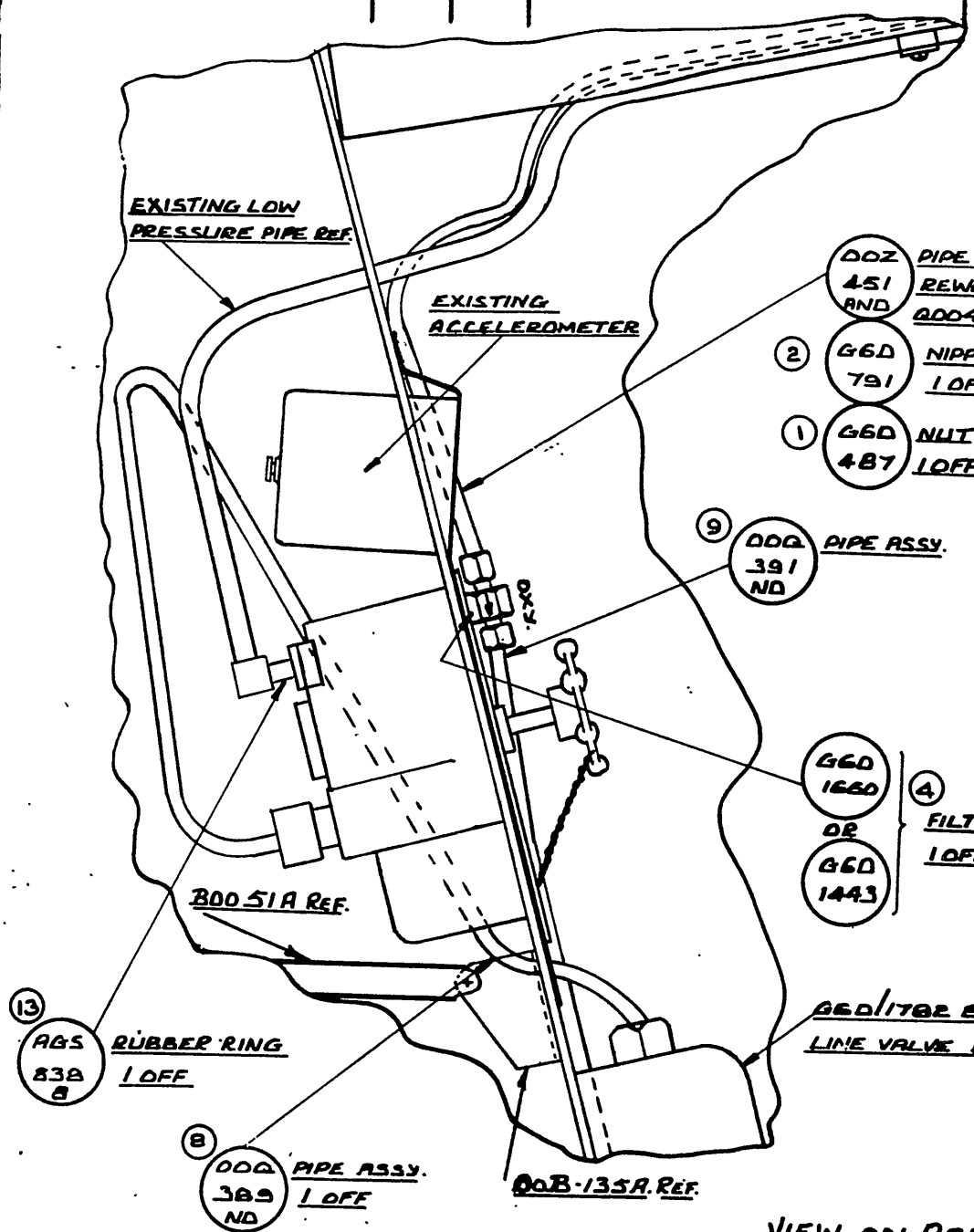
LIMITS UNLESS STATED		MATERIAL
DECIMALS	±.010"	SPEC.
FRACTIONS	±1/64"	TREATMENT
ANGLES	±1°	FINISH
SURFACE FINISH AUSTRALIAN STANDARD BRS. BRSS. PRACTICE A.S.C.E.		SCALE
		APPROVED
		H.C.P.R.O. CHECKED

TITLE: R.H. INSTRUMENT PANEL — REWORK.

COMPONENT OF	
MACHINE	Vampire
ENGINE	
TECH. ORDER	Vampire Mod. 240
DRAWING NO.	A12-68 SH1
DRWG. SIZE	B

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L	INITIALS	APPROVED



VIEW ON ARROW 'A'
SEE SHEET No. 1.

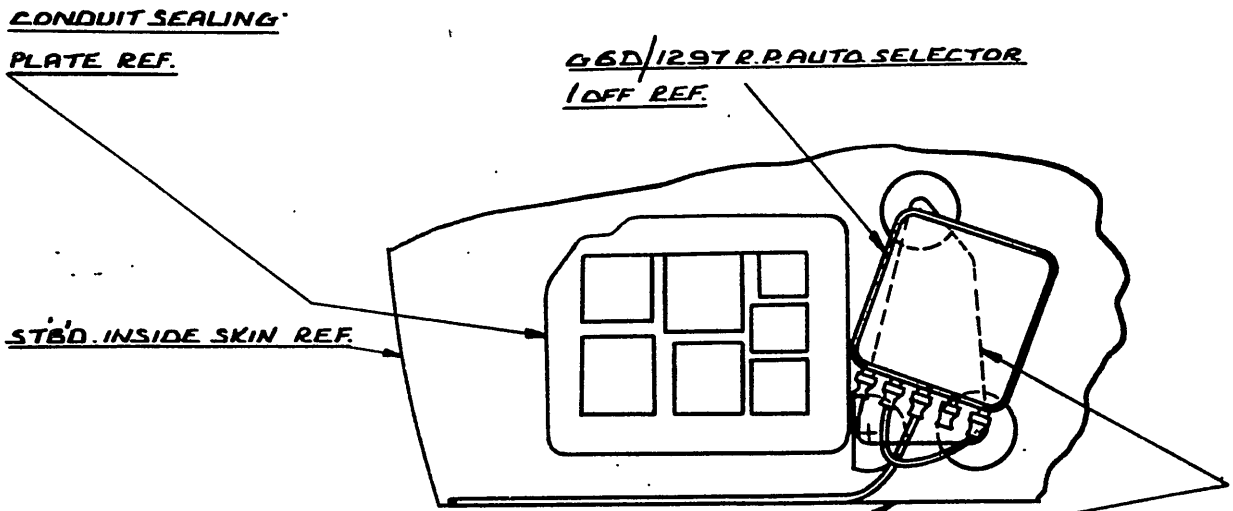
DE HAVILLAND DRAWING NO. DOM349 SHEET 2 OF 3 SHEETS.

REFERENCE	ISSUED BY	TITLE
	Department of Air Directorate of Mechanical & Electrical Engineering.	R.H. INSTRUMENT PANEL — REWORK.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	Vampire
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	Vampire Mod. 240
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.21		SCALE		DRAWING NO.	A128825 Sht 2
		DRAWN	APPROVED		DRW A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L.	INITIALS	APPROVED



DDN 1105	BRACKET 1 OFF
AGS 2035 B	SHAKEPROOF WASHER 3 OFF
AS 1246 1B	SCREW 3 OFF
A33 C.B.	C'S'K. SCREW 2 OFF CENTRE POP HEAD TO LOCK.

VIEW ON F'W'D. FACE OF BULKH'D. Nº2.

DE HAVILLAND DR'G. NO. DDM 349 SHEET 3 OF 3 SHEETS.

REFERENCE	ISSUED BY	TITLE
	Department of Air Directorate of Mechanical & Electrical Engineering	R.H. INSTRUMENT PANEL — REWORK

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	Vampire
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	Vampire Mod. 240
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.21		SCALE		DRAWING NO.	A12882 SH.3
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED H. CARD.	CHECKED		

AAP 721:79, Vol 2, Pt 2. VAMPIRE MODIFICATION NO 241

Class 2

EXTENDED FUSELAGE FUEL TANK VENT AND IMPROVED SEALING BETWEEN VENT AND COWLING

Reason for and Description of Modification

1. The existing main fuel tank vent allows fuel to be carried back into the cowling under negative "G" flight conditions. This modification introduces an extended vent to clear the boundary layer and improved sealing at the cowling vent aperture.

The following modification is to be incorporated either prior to or concurrently with this order:-

RAAF Order	DH Mod.	Title
101	181	To introduce light weight packing in wing tank bays between tanks and wing structure.

Note:- It will also be necessary to utilize some of the items from the modification kit for R.A.A.F. Vampire Mod No 100 (DH (Aust) Mod V 174) if this modification is not already embodied.

Application

2. This work is to be carried out on all Vampire Mk 33 aircraft except A79-836 and A79-829, which were modified by the manufacturer concurrently with other trial installations.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command:-

A79-02157	L0051A/1	Door Inspec. lower	Rework to paras 11(c)(ix), (x) and (xi) and re-identify as part No L00-51A/41, Ident No A79/504031"

(Issued with A.L. 114)

Ident No	Part No	Nomenclature	Remarks
A79/503539	15.V.36IND	Pipe	Rework to Para 11 (c) xiv and re-identify as Part No 15.V.1007ND Ident No A79/504034
A79/503345	15.FS.1061A /3	Bulkhead, Fireproof	Rework to Para 11 (c) v and re-identify as Part No FS15-505AND Ident No A79/ 504061(Z)
A79/503538	13.V.101AND	Pipe Assy.	Rework to Para 11 (c) xiv and re-identify as Part No 15.V.999AND Ident No A79/504032

Orders Superseded or Cancelled

5.

RAAF Order	DH Mod.	Title
100	V.174	To introduce a relief valve in the Fuel system vent line.

(See note in para 1)

This modification also cancels Special Flying Instruction 161.

Equivalent Modifications

6. De Havillands (Aust) Mod V713 and Air Ministry Modification Vam 3500 are equivalent modifications.

Supply

7. The following parts are required to complete one Modification Set:-

Item No.	Ident. No.	Part No.	Nomenclature	No. off per Set	Stores Class
1		Z15-1203	Blanking Plate	1	
2		15.EC.83	Insert Plate	1	

Item No.	Ident. No.	Part No.	Nomenclature	No. off per Set	Stores Class
3		15.FS.3669	Packing	1	
4		15.FS.3679	Packing Block	1	
5	A79/504158	15.S.1355A	Bracket Assy, Vent Pipe	1	C
6	A79/504037	15.S.1357 AND	Pipe	1	C
7	A79/504036	15.S.1359 AND	Pipe	1	C
8	A79/504035	S15-1083A	Clamp Block	1	C
9		15.V.997ND	Pipe	1	
10		DHS.159/ B20	Hose Connection	1	
11	H28/12513	A25/2C	Bolt, HTS Hex Hd, 2BA x .65" long	2	C
12	H28/12528	A25/1B	Bolt, HTS Hex Hd 4BA x .5" long	6	C
13	H28/12624	A25/7B	Bolt, HTS Hex Hd, 4BA x 1.1" long	2	C
14	H28C/7034	A25/1C	Bolt, HTS Hex Hd, 2BA x .55" long	2	C
15	H28/10154	AGS.605/00	Clip, Hose	2	C
16	H28/27024	AGS.2001B/ 1	Nut, MS, Self Locking, Nyloc, 4BA	14	C
17	H28/27025	AGS.2001C/ 1	Nut, MS Self Locking, Nyloc, 2BA	2	C
18	H28/27167	AGS.2007B/ 1	Nut, Anchor, Double MS x 4BA	2	C
19	H28/8300	AS.1242/1B	Bolt, HTS, Csk Hd, 90°, 4BA x .45" long	8	C
20	H128F/ 62229	AS.2229/ 303	Rivet, Al Alloy, Csk Hd, 90°, 3/32" dia x 3/16" long	4	C

(Issued with A.L.98 - June, 1958)

Item No.	Ident. No.	Part No.	Nomenclature	No. off per Set	Stores Class
21	H128F/ 62510	AS.2229/ 406	Rivet, Al Alloy, Csk Hd, 90°, $\frac{1}{8}$" dia x $\frac{3}{8}$" long	4	C
22	H128F/ 62317	AS.2229/ 408	Rivet, Al Alloy, Csk Hd, 90°, $\frac{1}{8}$" dia x $\frac{1}{2}$" long	2	C
23	H128F/ 64444	AS.2230/ 304	Rivet, Al Alloy, Csk Hd, 120°, 3/32" dia x $\frac{1}{4}$" long	28	C
24	H128F/ 64453	AS.2230/ 405	Rivet, Al Alloy, Csk Hd, 120°, $\frac{1}{8}$" dia x 5/16" long	6	C
25	H128F/ 64460	AS.2230/ 505	Rivet, Al Alloy, Csk Hd, 120°, 5/32" dia x 5/16" long	5	C
26	H28C/12305	SP.13/B	Washer, MS Plain, Thin, .157" i/d x .3 o/d	14	C
27	H128F/ 64452	AS.2230/ 404	Rivet, Al Alloy, Csk Hd, 120°, $\frac{1}{8}$" dia x $\frac{1}{4}$" long	12	C
28		N.P.N. or N.P.N.	(Ferodo Bonnet (Tape 1" wide x ($\frac{1}{8}$" thick (Ferro Restos (Tape, 1" wide x ($\frac{1}{8}$" thick	6"	
29	I1/2700		Wire locking, Soft Iron Galvanised 22 SWG	A.R.	C
30	K3/175		Primer, Zinc Chromate	A.R.	C
31	K3/176		Thinners, Zinc Chromate	A.R.	C

Item No.	Ident. No.	Part No.	Nomenclature	No. off per Set	Stores Class
32	K3/365		Covering, High Speed, Aluminium DTD 772A	A.R.	C
33	K3/353		Compound, Jointing to Spec DTD 369A	A.R.	C

NOTE:- (a) Items 1 to 28 inclusive will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland modification section. Units requiring modification sets are to demand from De Havilland Modification Centre.

(b) Items 29 to 33 inclusive are to be drawn from unit stores.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification.

NOTE:- In compiling this list it has been assumed that RAAF Vampire Mod No 100 (DH (Aust) Mod V.174) has been incorporated.

Item No.	Ident. No.	Part No.	Nomenclature	No. off per Set	Stores Class
34	A79/503098	A001298A	Bracket, Bottom Centre	1	
35	A79/503452	P003727A/1	Valve Vent, Relief	1	
36		P003897	Packing	1	
37	A79/500977	Q00108A	Block, Clamp	1	
38	A79/503535	Q003697A/ND	Pipe Assy, Pump Pressure	1	
39	A79/503534	Q003701A/ND	Pipe Assy, Pump Suction	1	

(Issued with A.L.98 - June, 1958)

NOTE:- (a) Items 34, 36, 38 and 39 are obsolete and are to be disposed of in accordance with current authorized procedure.

(b) Item 37 is to be examined and if serviceable returned to store.

(c) Item 35 is to be returned to store for dismantling. Refer Para 9 (b).

Disposal of Parts in Store

9. (a) Stocks of Items 34, 38 and 39 are obsolete and are to be disposed of in accordance with current authorized procedure.

(b) Stocks of Item 35 are to be dismantled. The following parts are to be inspected and if serviceable are to be held in store for use on Mk 35 Vampire aircraft.

Ident. No.	Part No.	Nomenclature	No. off per Set	Stores Class
A79/503453	P003713	Cap, end	1	
A79/503454	P003709	Head, valve	1	
A79/503455	P003725ND	Spindle	1	
A79/503458	P003947	Washer, Spigot	1	
A79/503459	P003719	Washer, Shim	2	

Note:- Any unserviceable items and the balance of the parts are to be disposed of in accordance with current authorized procedure.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable, but not later than the next "D" servicing after receipt of modification sets.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 16 man-hours will be required for the completion of this modification.

(Issued with A.L.98 - June, 1958)

(b) Special Tools, Jigs, &c. : Nil.

(c) Sequence of Operations :

(i) Lower and remove the cannon bay doors. Release the hydraulic accumulator pressure and drain the hydraulic fluid from the aircraft in accordance with current authorized procedure. Release and remove the lower engine cowling retaining the screws supporting the hinge to the cowl support channel.

(ii) Working now on the lower aft face of the fire-proof bulkhead, the location is shown on sheet 1 of the drawing, remove the two now redundant hydraulic pipes, Item Nos. 38 and 39, from the ground test connection on the port side of the coupling support bracket starboard of the bulkhead centre line and blank off the adapters. Retain all clips and attaching items.

(iii) Disconnect and retain the lower hose clip connecting the vent pipe assembly to the vent pipe, remove the now redundant vent relief valve assembly and packing, Item Nos 35 and 36 discarding its attaching items. Remove the now redundant cowling support bracket, Item No 34, which is situated about the centre line of the lower bulkhead, and also the clamp block, Item No 37 which is mounted on the port side of the redundant cowling support bracket. Retain the clip securing the main tank vent pipe to the forward face of the fireproof bulkhead.

(iv) Locate and remove the barometric pressure control drain assembly, Part No 13.V.101AND (ref only) situated to port of the centre line, retain this assembly for further modification. Also retain the two hose joints and four clips and one 'P' clip and its

attaching items. Redundant is one 'P' clip, Part No DHS.30/4 (ref only) which provided anchorage for the barometric pressure control pipe at the redundant clamp block position.

(v) Refer now to sheet 3 of the drawing and working on the cowl support channel, cut away the section from the port side of the centre line 2.5 in x 0.15 in and a 0.53 in radius cut-out about the centre line. Offer up to the existing cut-out, starboard of the centre line (vacated by the redundant relief valve assembly) a packing, Item No. 3, trim this packing to suit the contour of the cut-out and remove. Temporarily offer up to the support channel the new vent pipe and drain assembly, Item No 5, ascertain the landing for this assembly on the port side of the vent pipe on the support channel and drill out the mushroom head rivets necessary to allow the vent pipe assembly to seat flush. Again temporarily offer up the vent pipe assembly, ensure that the assembly is centrally mounted about the bulkhead line. (The centre line can be ascertained by marking a vertical line in the centre of the two vertical rows of three holes which secured the now redundant cowling support bracket removed in operation (i)).

(vi) Now using a No 26 (0.147 in dia) drill, drill back from the bulkhead two holes at positions 'DE' and two holes No 11 (0.191 in dia) at positions 'BC', sheet 3 of the drawing refers. Temporarily secure the assembly at these positions. Working now to starboard of the centre line and using the No 26 drill, drill back from the bulkhead three holes, and drill back from the support channel four holes. Working now to port of the centre line drill the

bulkhead one No 26 hole to suit the vent pipe assembly and drill the support channel four holes No 26 to suit the vent pipe assembly, countersink these four holes 90 deg x 0.25 in on the undersurface. Temporarily secure the vent pipe assembly at all its attaching points.

(vii) Offer up to the cut out, to starboard of the centre line, in the support channel, the packing which was trimmed to fit in operation 5. Drill in this packing eight holes No 41 (0.096 in dia) to suit the vent pipe assembly and remove the packing. Countersink these eight holes in the packing on its undersurface 120 deg x 0.193 in dia. Now remove the vent pipe assembly from the support channel, deburr all holes and edges on the packing and rivet it to the vent pipe assembly using eight 120 deg countersunk 3/32 in dia rivets, Item No 23, having first coated the mating surfaces with compound, pigmented varnish, jointing. Ascertain which holes on the bulkhead and support channel were being used for attachment, fill up the remainder of the holes with 120 deg countersunk head 5/32 in dia rivets, Item No 25, countersink the inner surface of the support channel 120 deg x 0.316 in dia. Deburr all holes drilled and remove all swarf.

(viii) Finally offer up the vent pipe assembly to its position and referring to sheets 3 and 4 of the drawing secure in position with two 2BA bolts and stiffnuts, Item No 14 and Item No 17 respectively, and six 4BA bolts, Item No 12 and eight 4BA 90 deg countersunk bolts, Item 19, using fourteen stiffnuts, Item No 16 and twelve washers, Item No 26, reattaching the main fuel tank vent pipe clip at its original position on the forward face of the bulkhead. Reconnect the hose pipe to the existing vent pipe using the retained clip.

(Issued with A.L.98 - June, 1958)

(ix) Working now on the lower cowling, Part No L0051A/1 (ref only) and referring to sheets 4 and 5 of the drawing trim back the lower hinge, hinge rail and packing 1.6 in from the forward edge of the cowling drill out the rivets securing the redundant part of the hinge, fill the redundant holes to port of the centre line with two 90 deg countersunk head rivets, Item No 21, flush on the outer surface. Refer to sheet 5 of the drawing and drill out the two rivets on the hinge as indicated, countersink both surfaces 90 deg x 0.22 in dia and rivet the hinge with two 90 deg countersunk head 1/8 in dia rivets, Item No 21, flush these two rivets both sides. Refer now to section 'A-A' on sheet 4 of the drawing and trim off 0.52 in from the centre flange of the lower hinge rail, now re-shape the forward end of the hinge rail as detailed. Deburr all edges.

(x) Refer now to sheet 5 of the drawing, and offer up the cut-out to starboard of the centre line on the cowling an insert plate, Item No 2, trim this plate to suit the shape required, mark off the plate as detailed on the drawing and drill in eight No 41 holes and deburr. Now offer up to the underside of the cowling a blanking plate, Item No 1, trim this plate to suit, then using a No 30 (0.1285 in dia) drill, drill twelve holes in the plate to suit the cowling, remove the plate and countersink these twelve holes, on the underside 120 deg x 0.25 in dia deburr all holes, coat the mating surfaces with compound, pigmented varnish, jointing and finally secure to the cowling using twelve 120 deg countersunk head 1/8 in dia rivets, Item No 27.

(xi) Offer up to the cowling on the inside of the plate just fitted, the insert plate, trimmed to suit in the previous operation, and drill the blanking plate eight No 41 holes to suit the insert

plate. Remove the insert plate, countersink the under surface of the blanking plate 120 deg x 0.19 in dia. and deburr. Coat the mating surfaces of the blanking and insert plates with compound, pigmented varnish jointing and finally secure the insert plate to the blanking plate with eight 120 deg countersunk head 3/32 in dia rivets, Item No 23. Refinish the cowling locally using Zinc Chromate primer and finally with finish, cellulose, aluminium, Spec DTD 772. Renumber the lower cowling, Part No L0051A/41 (Ref only).

(xii) Refer now to sheet 2 of the drawing and ascertain the position of the new clamp block, top anchorage, and drill a No 26 hole, drill the lower anchorage No 26 to suit the clamp block. Slave up to each of these two holes an anchor nut, Item No 18, and drill the bulkhead four No 41 holes to suit the anchor nuts, countersink these four holes 90 deg x 0.16 in dia on the aft face of the bulkhead. Deburr all holes drilled and secure the two anchor nuts with four 90 deg countersunk head 3/32 in dia rivets. Item No 20 on the forward face of the fireproof bulkhead, having first coated the mating surfaces with compound, pigmented varnish, jointing. Offer up the two new clamp blocks, Item No 8 to this position and temporarily secure in position with two 4BA bolts and washers, Item No 13 and 26 respectively.

(xiii) Refer now to sheet 1 of the drawing and offer up to the hydraulic test. connection on the port side, two new pipes, Item No 6 Pump Suction and Item No 7 Pump Pressure, route these pipes as detailed and connect to the coupling support bracket to starboard of the centre line, wire lock the pipe union nuts with 20 SWG soft iron locking wire. Route the pump pressure pipe through the new clamp block, lower channel, and

the pump suction aft of the new vent drain, ensure a minimum clearance of 0.15 in between this pipe and the vent assembly bracket, sheet 2 of the drawing refers. Secure the existing barometric pressure control pipe to the new suction pipe with the retained 'P' clips.

(xiv) Working now on the barometric drain assembly, Part No 13.V.101AND (Ref only), removed in Operation 4 cut back the two connecting pipes 1 inch and deburr, the modified assembly now becomes Part No 15.V.999AND (Ref only), sheet 1 of the drawing refers. Refit the assembly using the retained hose connections and clips to the existing BPC pipe on the port side, also fit the assembly to the existing clamp block using the retaining 'P' clip. To the other side of this drain assembly fit a new pipe, Item No 9 again using the retained hose connection and clips, route this new pipe through the new clamp block, upper channel and through the grommet in the coupling support bracket. Now cut the existing BPC Pipe Part No 15.V.36IND (Ref only) routed from the starboard wing root, at a position to suit the new pipe just fitted, deburr the modified pipe which now becomes, Part No 15.V.1007ND (Ref only). Connect these pipes using a hose connector, Item No 10 and two hose clips, Item No 15.

(xv) Refit the lower engine cowling at the aft anchorage using its retained attaching items and drill the hinge at its forward anchorage two No 11 holes to suit the anchor nuts on the vent pipe assembly. Secure the cowling at this front anchorage with its retained attaching items.

(xvi) Refer now to sheet 3 of the drawing and offer up to the cowling support channel outer face, two pieces of ferobestos tape, to fit port of the centre line, and to fit starboard of the centre line,

each piece of the ferobestos tape is to finish 0.75 ins from the bulkhead centre line. Secure this ferobestos tape to the landing channel by using 120 deg countersunk head 1/8 in dia rivets, Item No 24 where necessary, drill 1/8 in dia holes through the ferobestos tape and landing channel in the centre ensure these rivets do not foul any fittings.

(xvii) Again refer to sheet 3 of the drawing and offer up a packing block, Item No 4, to the area aft of the vent pipe and forward of the cowling hinge, trim this packing on the edges indicated on the drawing ensuring a maximum clearance of 0.020 in chamfer the bottom edge 0.030 in x 45 deg to clear the cowling. Drill the bracket support to suit this packing and finally rivet the packing to the support with two 90 deg countersunk head 1/8 in dia rivets, Item No 22 having first coated the mating surfaces with compound, pigmented varnish jointing.

(xviii) Re-charge the hydraulic system in accordance with current authorized procedure and replace the cannon bay doors and lower cowls.

(d) Tests : Hydraulic function.

(e) Recording : Record this Modification in the Airframe Log Book.

Drawings

12. Drawing A12977, consisting of six (6) sheets, is attached herewith.

Effect on Weight and Balance of Aircraft

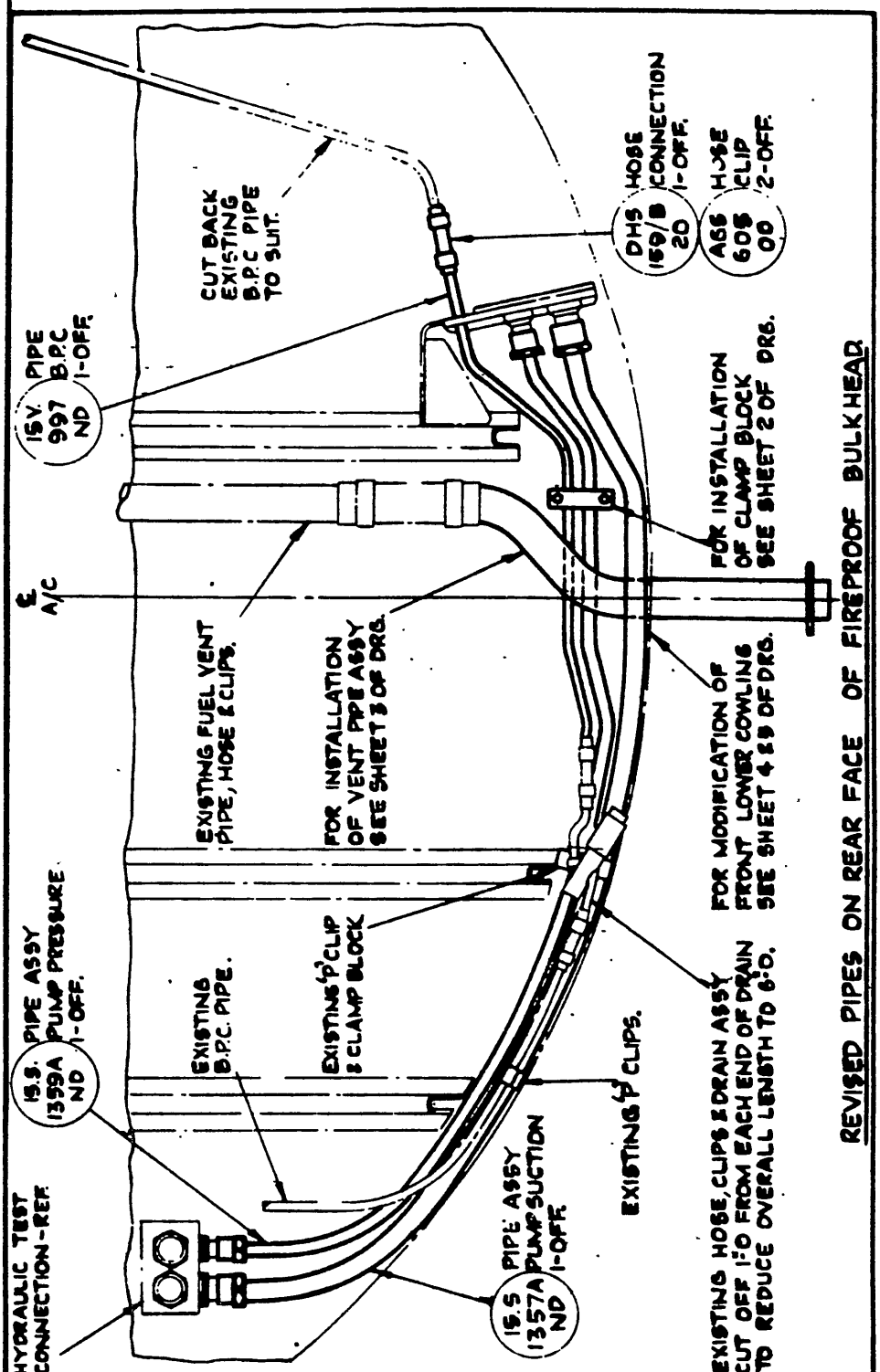
13. The effect of this Modification on the weight and balance of the aircraft is negligible.

References: Files, Department of Air, 9/84/74^{II} and 150/8/1212.
Attachment: Drawing A12977 (6 sheets).
Date of Issue: 6th June, 1958.

(Issued with A.L.98 - June, 1958)

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D.I.L.	INITIALS	APPROVED



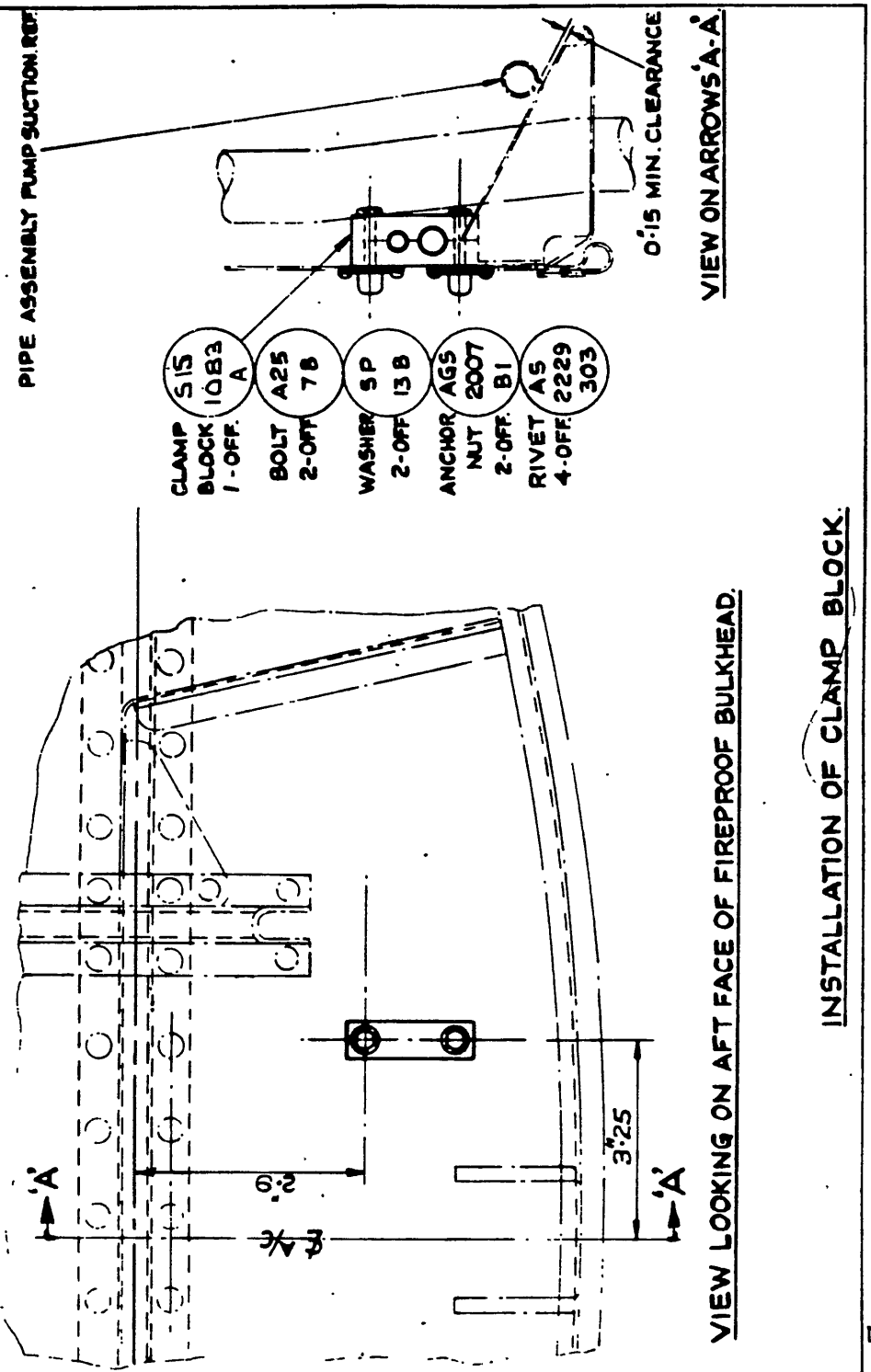
DEHAVILLAND DRG. No. 00M 352
SHEET No. 1 OF 6 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	TO EXTEND FUSELAGE FUEL TANK VENT AND INTRODUCE IMPROVED SEALING BETWEEN VENT AND COWLING VAMPIRE TRAINER.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± 1/2°	FINISH		TECH. ORDER.	MOD. 241. (VAMPIRE)
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE. A.S.C.21.		SCALE		DRAWING NO.	A 12977 SHEET 1 OF 6
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D.I.L.	INITIALS	APPROVED



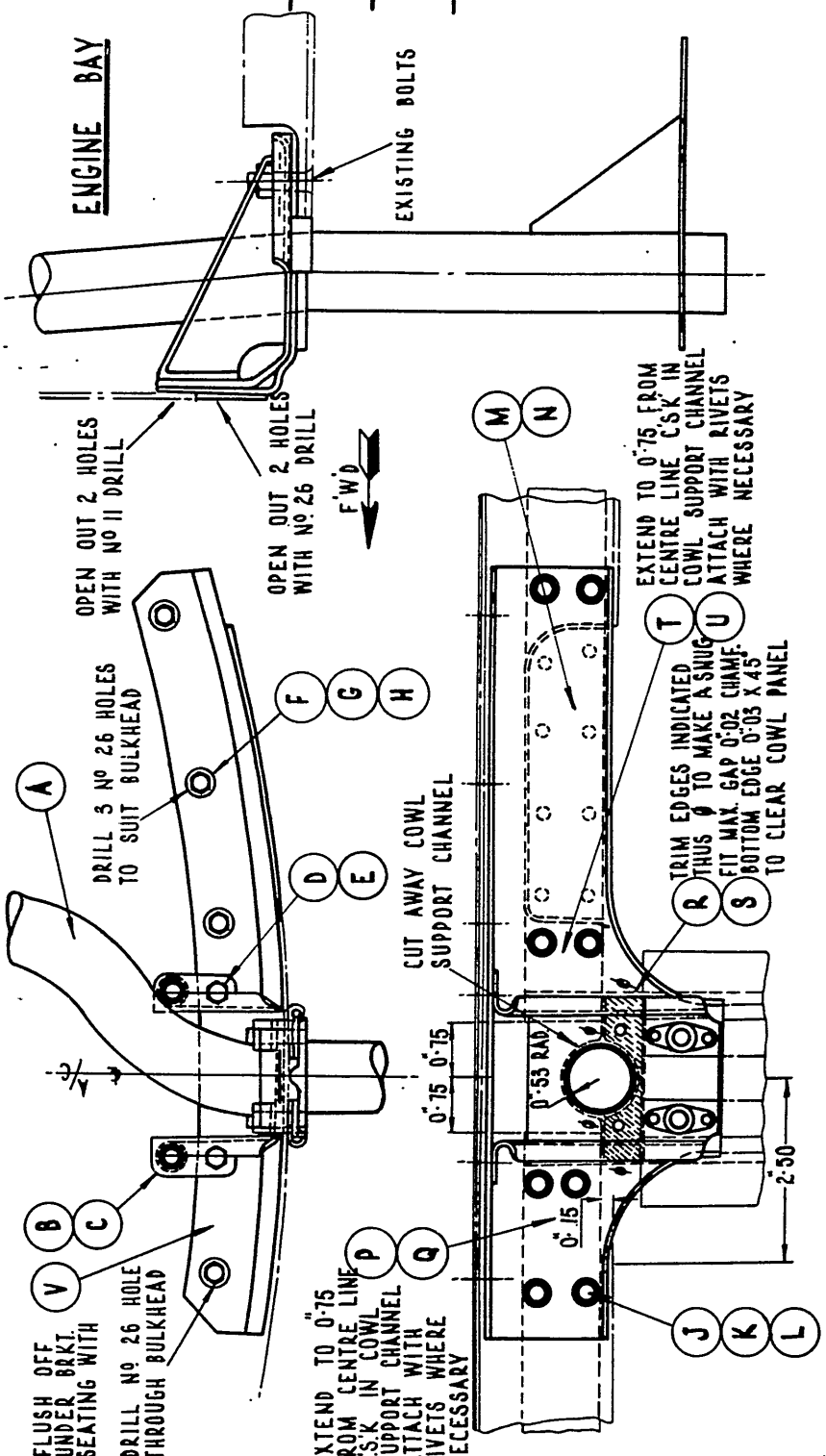
DEHAVILLAND DRG. Nº. 00M 352.
SHEET Nº. 2 OF 6 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	TO EXTEND FUSELAGE FUEL TANK VENT AND INTRODUCE IMPROVED SEALING BETWEEN VENT AND COWLING – VAMPIRE TRAINER.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± 010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH ORDER	MOD. 241 (VAMPIRE)
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.2		SCALE		DRAWING NO.	A 12977 SHEET 2 OF 6
		DRAWN	APPROVED		DRWG A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	INITIALS	APPROVED
	4·7·58			



SEE SHEET 4 FOR KEY

INSTALLATION OF VENT PIPE ASSY. ON REAR FACE OF FIREPROOF BULKHEAD

REFERENCE	ISSUED BY	TITLE
DEHAVILLAND DRG. No 00M352	DEPARTMENT OF AIR DIRECTORATE OF MECHNICAL & ELECTRICAL ENGINEERING	TO EXTEND FUSELAGE FUEL TANK VENT AND INTRODUCE IMPROVED SEALING BETWEEN VENT AND COWLING - VAMPIRE TRAINER

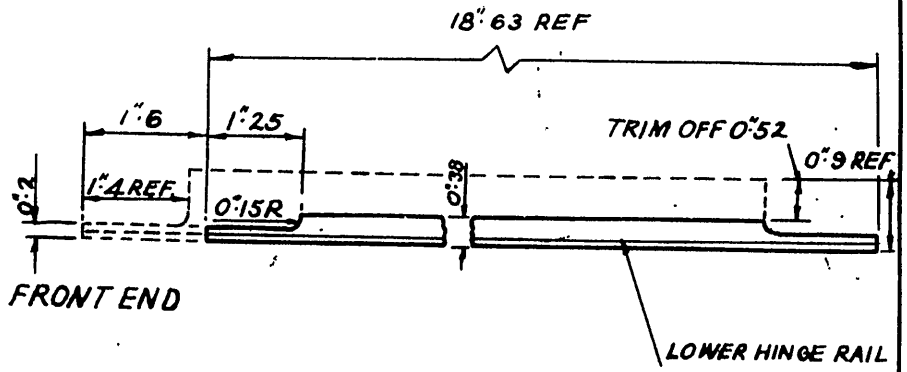
LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	MOD. 241 (VAMPIRE)
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		SCALE		DRAWING NO.	A12977 SHT. 3 OF 6 SHTS
		DRAWN		APPROVED	
		TRACED	L.O.W.	CHECKED	A.R.

DRWG. SIZE A

DO NOT SCALE

KEY

CODE	PART No.	NOMENCLATURE	QTY
A	155 1355 A	VENT PIPE & BRKT ASSY.	1
B	A25/1C	BOLT 2BA.	2
C	AGS 2001/2	NUT 2BA.	2
D	A25/1B	BOLT 4BA.	2
E	ABS 2001/4	NUT 4BA.	2
F	A25/1B	BOLT 4BA.	4
G	SP 13/B	WASHER 4BA.	4
H	ABS 2001/4	NUT 4BA.	4
J	AS1242/1B	BOLT 4BA.	8
K	SP 13/B	WASHER 4BA.	8
L	AGS 2001/4	NUT 4BA.	8
M	15FS3669	PACKING.	1
N	AS2250/3C	RIVET 3/32" DIA.	8
P		FEROBESTOS.	1
Q	AS2230/4C	RIVET 1/8" DIA.	3
R	15FS3675	PACKING BLOCK	1
S	AS2229/4C	RIVET 1/8" DIA.	2
T		FEROBESTOS.	1
U	AS2230/4C	RIVET 1/8" DIA.	3
V	AS2230/5C	RIVET 5/32" DIA.	5



TRIM THE HINGE AND PACKING 1"·6
TRIM THE HINGE RAIL TO THE NEW SHAPE DETAILED
FINISH THE HINGE RAIL WITH MATCHING CELLULOSE TO SPEC. D.T.D 772 ALUMINIUM.

SECTION 'A'-'A' SEE SHEET 5

EQUIPMENT FOR VENT PIPE INSTALLATION AND FURTHER DETAILS OF COWLING.

ISSUE NO.	DATE	ALTERATION	B.L.L.	INITIALS	APPROVED
	12-6-56				

REFERENCE

ISSUED BY

DEPARTMENT OF AIR
DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING

TITLE

TO EXTEND FUSELAGE FUEL TANK VENT TO INTRODUCE IMPROVED SEALING BETWEEN VENT & COWLING FRAME TRAILING

DEHAVILLAND DRG
No. 00 M.-352.
SHEET No. 4 OF 6 SHEETS

LIMITS UNLESS STATED
DECIMALS ±.010"
FRACTIONS ± 1/32"
ANGLES ± 1°
SURFACE FINISH
AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.21

MATERIAL
SPEC.
TREATMENT
FINISH
SCALE
DRAWN
TRACED M.I.E.
CHECKED
APPROVED
A.R.

COMPONENT OF
MACHINE
ENGINE
TECH. ORDER MOD. 241 (AMENDED)

DRAWING NO. A/12977 SHEET 4 OF 6

DWG. SIZE A

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D.I.L.	INITIALS	APPROVED

SEE SHEET 4 FOR SECTION 'A-A'

RENUMBER –

LOWER HINGE RAIL. PART Nº 15.EC.97- REF. 1- OFF
LOWER COWL RAIL PACKING. PART Nº 15.EC.99. REF 4 - OFF.
LOWER DOOR HINGE L.H. PART Nº 15.EC.101- REF 1-OFF.
LOWER DOOR HINGE R.H. PART Nº 15 EC.102- REF 1 - OFF

2- Nº 11 DRILL HOLES TO BE DRILLED ON ASSEMBLY TO SUIT SUPPORT BRACKET PART Nº 15 FS.3661- REF. C'SK UNDERSURFACE OF HINGE 90°X0·22D.

AS 2229 406 — RIVET 1/8 DIA. 90° C'SK HD. 2-OFF.

RIVET 3/32 DIA. 120° C'SK HD 8-OFF. AS 2230 304 — DRILL Nº 41 C'SK 120° X 0·19 DIA IN OUTER FACE OF BLANKING.

INSERT PLATE 15 EC 83 * 1-OFF. TRIM ON ASSY

ALL RIVETS FLUSH ON OUTER SURFACE

SECTION 'B-B'

Z 15 1203 * BLANKING PLATE 1-OFF. TRIM ON ASSY

RIVET 1/8 DIA. 90° C'SK HD. 2-OFF AS 2229 406

DRILL OUT EXISTING RIVETS FROM THIS POSITION C'SK HINGE 90°X 0·22 DIA. AND RE-RIVET HINGE- FLUSH RIVET BOTH SIDES

AS 2230 404 — RIVET 1/8 DIA. 120° C'SK HD. 12-OFF. DRILL Nº 30 FROM EXISTING RIVET HOLES C'SK 120° X 0·25 DIA IN OUTER FACE OF BLANKING

VIEW INSIDE LOWER COWLING

NOTE! ON PRE MOD V174. AIRCRAFT ITEMS MARKED * ARE TO BE REPLACED BY ITEMS BELOW SEE SHEET 6.

1 SEC 119 BLANKING PLATE 1-OFF TRIM ON ASSY.

1 SEC 121 INSERT PLATE 1-OFF TRIM ON ASSY

DEHAVILLAND DRG Nº COM-352 SHEET Nº 5 OF 6 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	TO EXTEND FUSELAGE FUEL TANK VENT AND INTRODUCE IMPROVED SEALING BETWEEN VENT AND COWLING JAMMLE TRUNNER.

LIMITS UNLESS STATED	MATERIAL	COMPONENT OF
DECIMALS ± .010"	SPEC.	MACHINE
FRACTIONS ± 1/32"	TREATMENT.	ENGINE
ANGLES ± ½°	FINISH.	TECH. ORDER MOD 241 (VAMPIRE)

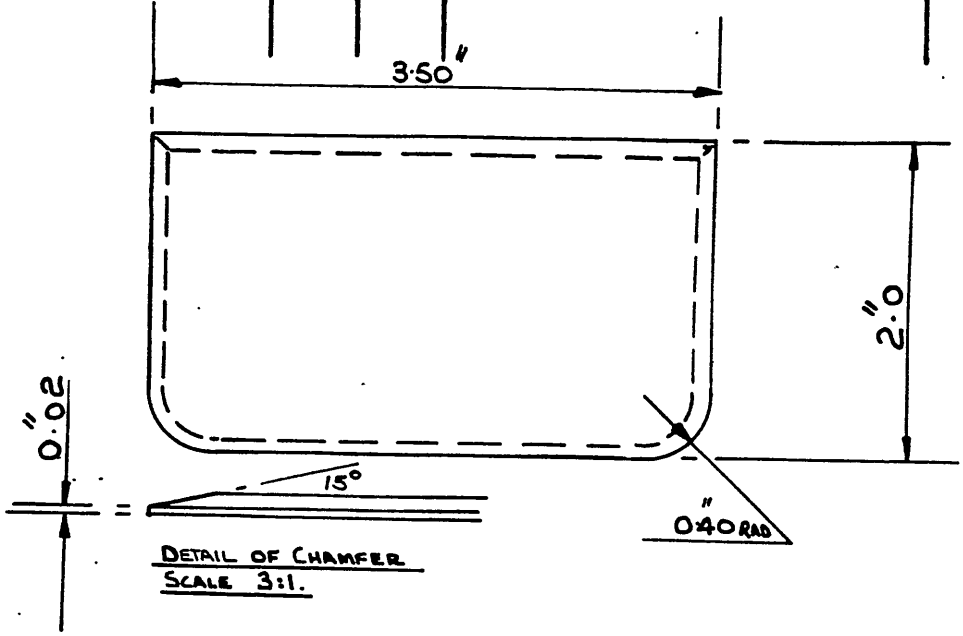
SURFACE FINISH AUSTRALIAN STANDARD DRG PRACTICE A.S.C.E.

SCALE	DRAWING NO	DRWG SIZE
DRAWN	A 12077 SHEET 5 OF 6	A
TRACED		

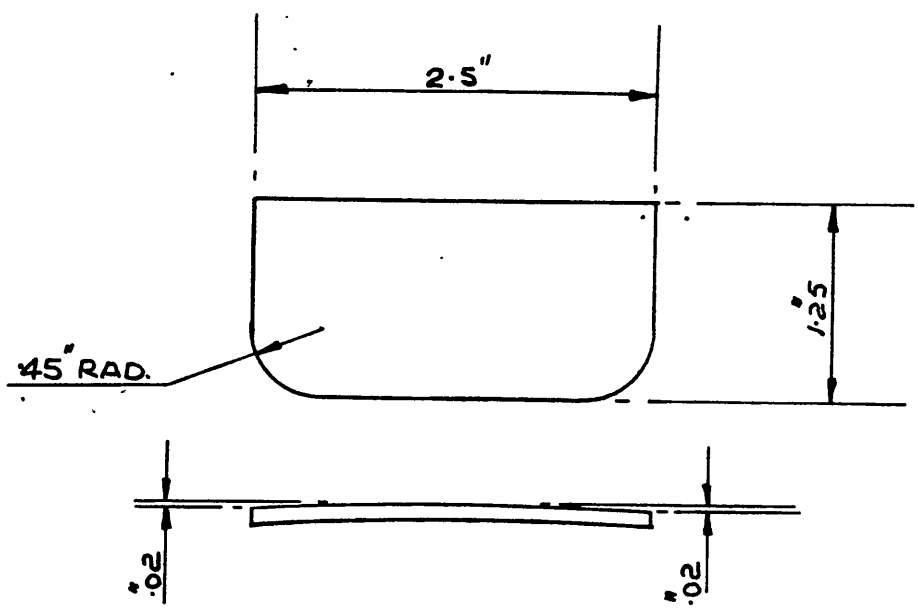
CHECKED	APPROVED

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. L	INITIALS	APPROVED



MAKE FROM ALCLAD-L72-18SWG FINISH ANODISE & CRICKPIT GREEN BLANKING PLATE 1SEC-119



MAKE FROM ALCLAD-L72-12SWG FINISH ANODISE & CRICKPIT GREEN. INSERT PLATE 1SEC 121

DEHAVILLAND DRG Nº OOM 352
SHEET 6 OF 6.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	MOD 241 (VAMPIRE)
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.2.1		SCALE		DRAWING NO.	A 12977 SHEET 6 OF 6
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

STANDARD US TYPE EXTERNAL POWER SUPPLY SOCKETS - INTRODUCTION

Reason for and Description of Modification

1. The existing type E2 socket is considered to be unsatisfactory. This modification standardises the external power supply sockets by introducing sockets to "NATO" design.

The following modifications are to be incorporated either prior to or concurrently with this order:-

RAAF Mod	DH (Aust) Mod	Title
183	V214	Improved ground starting facilities (introduction)

Application

2. This work is to be carried out on all Vampire Mk 30 and Mk 31 aircraft except aircraft serial No A79-450, which has had this modification incorporated as a trial installation.

Responsibility for Incorporation

3. Operating units, aircraft depots and contractors concerned will be responsible for the incorporation of this modification. The trade mustering responsible is : Electrical Fitters.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Support Command:-

Ident No	Part No	Nomenclature	Remarks
A79/500240	00D25A	Wing complete LH (spare)	Rework to paras 11(c), (3) to (14) and certify for DH (Aust) Mod V226 on the wing modification plate.
A79/501851	00D1103A	Wing complete LH (spare)	Rework to paras 11(c), (3) to (14), and if DH (Aust)

(Issued with A/L 188 - April 1960)

Ident No	Part No	Nomenclature	Remarks
			Mods V245, V240, V234, V181, RAAF Mods 290, 270, 253, 101 have been or are being incorporated concurrently with this order, re-identify as Part No 00D1523A/1 Ident No A79/504197.
A79/504133	00D1523A	Wing complete LH (spare)	Rework to paras 11(c) (3) to (14), and re-identify as Part No 00D1523A/1, Ident No A79/504197.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V226 is an equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No Off	Stores Class
1		00D1535A	Angle, mounting	1	
2		00D1539A	Bracket, side mounting, assembly	1	
3		00D1545A	Bracket, mounting	1	
4		00D1551A	Bracket, mounting, assembly	1	
5		00D1555A	Plate, mounting	1	
6		00D1561A	Label	1	
7		00N1141A	Cable assembly (starter)	1	
8		00N1143A	Cable assembly (starter socket to push button switch)	1	
9		00N1145A	Cable assembly (test socket to C/breaker)	1	
10		00N1147A	Cable assembly (test socket)	1	
11		00N1149A	Cable assembly (starter panel to - 'VE' of test)	1	

(Issued with A/L 188 - April 1960)

Item No	Ident No	Part No	Nomenclature	No Off	Stores Class
12		OON1151A	Cable assembly, link (- 'VE' of start to - 'VE' of test)	1	
13		OON1159	Clip 'P'	1	
14		OON1173	Clip, 'P'	1	
15		OON1175	Clip, 'P'	1	
16	G5C/931		Block, terminal, type F, 3 way	1	
17	G5A/26689	AN2552/3A	Receptacle, external power, 28 VDC	2	
18	G5C/4056		Covers, terminal lugs, synthetic	4	
19		H204	Hoelle terminal	1	
20	H28/12528	A25/1B	Bolt, HTS, hex hd 4BA x .5" long	2	
21	H28/12511	A25/2B	Bolt, HTS, hex hd 4BA x .6" long	2	
22	H28/8310	AS1242/6C	Bolt, HTS, csk hd 90°, 2BA x 1.0" long	2	
23	H28/12690	AS1246/5B	Bolt, HTS, rd hd 4BA x .85" long	2	
24	H28/11564	AS1246/1C	Bolt, HTS, rd hd 2BA x .5" long	8	
25	H28/9354	AS1248/6C	Bolt, HTS, brazier head, 2BA x 1.0" long	12	
26	H28C/12305	SP.13/B	Washer, MS plain, thin, .157" I/D x .301" O/D	6	
27	H28/27024	AGS2001/B1	Nut, MS self locking, nyloc, 4BA	4	
28	H128F/61684	AGS2050/424/BS	Rivet, pop, domed head, $\frac{1}{8}$" dia x .24" long	14	
29	H128F/64452	AS2230/404	Rivet, Al Al, csk hd 120°, $\frac{1}{8}$" dia x $\frac{1}{4}$" long	15	
30	H128F/64453	AS2230/405	Rivet, Al Al, csk hd 120°, $\frac{1}{8}$" dia x 5/16" long	2	
31	G5F/20110		Tubing, insulating, PVC, 18 m/m I/D x 18" long, black	1	
32	G5F/20063		Tubing, insulating, PVC 10 m/m I/D x 23" long, black	1	
33	K3/175		Primer, zinc chromate	AR	
34	K3/176		Thinners, zinc chromate	AR	
35	K3/344		Colour, identification, glossy black	AR	
36	K3/346		Colour, identification, red matching, BSI, colour 358, spec 3K5	AR	
37	K3/353		Compound, jointing, to spec DTD 369A	AR	
38	K3/365		Covering, camouflage, high speed aluminium	AR	
39	K3/371		Stopper, oil base	AR	
40	K4/152		Beeswax	AR	
41	I32A/94		Cord, stringing, spec 4F35	AR	
42	I1/9510		Solder, grade "C"	AR	

Notes: (a) Items 1 to 32 inclusive will be retained as a modification set at the De Havilland Modification Centre pending issue or demand. Units requiring modification sets are to demand from the De Havilland Modification Centre.

(b) Items 33 to 42 inclusive are to be drawn from Unit Stores.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No Off	Stores Class
43	G5C/2225		Socket	1	
44	G5C/859		Socket	1	
45		NO01327	Panel, starter socket, mounting	1	
46		D005268A	Starter socket mounting bracket	1	
47		NC0955A	Cable assembly	1	
48		OON1045A	Cable assembly	1	
49		OON1047A	Cable assembly	1	

Notes: (a) Items 45 to 49 are obsolete and are to be disposed of in accordance with current authorised procedure.

(b) Items 43 and 44 become redundant after incorporation of this modification and are to be disposed of in accordance with current authorised procedure.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable and not later than the next 'D' servicing after receipt of parts.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 28 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, etc: None required.

(Issued with A/L 188 - April 1960)

(c) Sequence of Operations

(i) Remove the gun bay doors and disconnect the aircraft batteries.

(ii) Ensure that the flaps are selected in the down position, release hydraulic pressure and locate the now redundant starter and test sockets under the port, inboard, flap shroud and outboard of the starter control panel.

(iii) Release the socket mounting panel, Part No N001327 item 45, by unscrewing five bolts. Lower the panel, disconnect the cables from the sockets and remove the sockets, items 43 and 44, from the panel, item 45.

(iv) Disconnect cable item 48 from the circuit breaker, on shroud Rib No 1 (D001731), and remove it from the aircraft. Also disconnect and remove from the aircraft item 49, cable assembly, which is attached to the press button switch adjacent to the circuit breaker on the shroud Rib No 1.

(v) Release four fasteners on the lid of the Rotax starter control panel and remove the lid. Now disconnect item 47 from the terminal block inside the starter panel, and remove it from the aircraft. Also inside the starter panel, disconnect the cables coded, SA21, SA31, SA23 and E. Remove the 'P' clip from the forward mounting flange of the starter panel and free the cables.

(vi) If serviceable, rework cable assembly N00959A by shortening its length by 6.0" and adding a new terminal, item 19, then re-part number this cable assembly 00N1157A.

(vii) Rework harness assy N00945A/1 to drawing A13212 sheet 2 using items 31 and 32. If DH (Aust) Mod V240, RAAF Mod 270 has been, or is concurrently being, incorporated with this order, repart No this harness assembly from 00N1161A to 00N1161A/1.

(viii) Locate the starter socket mounting bracket, item 44, which is attached to the flap shroud skin by means of fourteen 3/32" dia countersunk rivets. Using a No 41 (0.096" dia) drill, carefully drill out these rivets. Also securing this bracket to span wise stiffeners are six 3/32" dia snap head rivets. Carefully drill out these six rivets with a No 41 drill, then discard this bracket which is redundant.

(Issued with A/L 188 - April 1960)

(ix) Refer to drawing A13212, sheet 2, position the mounting bracket, item 3 and drill off it six holes, in the flanges of the flap shroud stiffeners with a No 30 drill, using the holes in the bracket as a guide. De-burr all holes. Coat the mating surfaces of the bracket and the flanges with pigmented varnish jointing compound, item 37 and rivet the bracket into position, using six $\frac{1}{8}$" dia pop rivets, item 28. Assemble the terminal block, item 16, to the above mounting bracket, using two 4BA bolts, item 23 and two washers, item 26.

(x) Temp assemble items 1, 2, 4 and 5 into a unit by means of eight round head bolts, item 24. Refer to drawing A13212, sheet 1 of 3 and offer the above unit up, inside the flap shroud, to the shroud skin. Now slide the unit aft and inboard, until the flange of item 2 bears on the stiffener D001849 and item 4 bears on the shroud Rib No 1. Using a No 30 drill (0.1285 in dia) drill from the 3/32" dia holes in the skin several holes through item No 2 and pin the unit in place. Drill off fourteen No 30 holes from the skin. Drill back three No 30 holes from item No 1, two through item No 2 and the skin, and one only through the skin. Through shroud Rib No 1 drill three No 30 holes from item No 4 and two No 26 holes from item No 5. Drill 3 No 30 holes through the flange of item No 2 from the holes in stiffener D001849 (existing 3/32 dia). Remove the unit and deburr all holes. In the top face of item No 2 countersink the sixteen holes to 120° x .27 dia and one in item No 1. Dismantle item 5 from the unit. Dimple seventeen holes in the skin for 120° x $\frac{1}{8}$" dia rivets. Coat with pigmented varnish jointing compound, item 37, all mating surfaces of the parts which are to be riveted together. Rivet items 2 and 1 to the skin with fifteen rivets, item 29, two rivets, item 30, and three rivets, item 28. Rivet item 4 to Rib No 1 with three pop rivets, item 28. Position the label, item 6, as per drawing A13212, sheet 1, and drill two No 30 holes from the label. Apply jointing compound item 37 and secure the label with pop rivets, item 28.

(xi) Refer to drawing A13212 sheet 1 and assemble the sockets, item 17, to item 5 using two mushroom head bolts, item 25, for the starter socket and two countersunk bolts, item 22 for the test socket. (Assemble the above to the shroud).

(xii) The electrical connections on the sockets are to be protected with boots, Item 18. Connect items 9, 10 and 11 to the test socket and items 7 and 8 and cable assembly OON1157A (see operation 6) to the starter socket. The free ends of these items are to be connected as follows: Item 10 to the terminal block installed in

operation No 9, item 9 to the circuit breaker on Rib No 1, item 8 to the press button switch, item 7 to the starter panel terminal block, item 11 to the - "VE" terminal in the starter panel. Use item 14 to clip items 8, 9 and 10 to the outboard, aft, corner, mounting bolt of the starter panel. Whip with item 41, items 7, 8, 9 and 10 and cable assembly NO0957A to the bottom flange of shroud Rib No 1 at the centre lightening hole. The cable with ends coded "E" and "+" of cable assembly OON1161A/1 is run between the starter panel and the rear cone support, clipped with item 15 to the inboard, aft, corner, mounting bolt of the panel and connected to the respective terminals of the terminal block installed in operation 8. Run the cable of this assembly which has ends coded SA21, SA23 and SA31 along the forward face of the starter panel and clip it with two off each, "P" clips, bolts, nuts and washers, item 13, 21, 27 and 26 respectively. To do this it is necessary to drill two No 26 holes in the side of the panel. Refer view on arrow 'A' on drawing A13212 sheet 2. The ends of the cable are to be connected to their respective terminals in the starter panel. Then replace the starter panel lid.

(xiii) Repair the finish to both inner and outer surfaces of the flap shroud, using items 33, 34 and 39, and finish using item 38. Rework the external markings to drawing A13212, sheet 3, using items 35 - 36.

(xiv) The flap shroud is now to be re-identified as part number D006251A/41. Locate No on shroud rib No 1.

(xv) Re-connect the aircraft batteries and replace the gun bay doors. Re-charge hydraulic system.

(d) Tests

Select the flaps in the up position and slowly raise. Ensure that the sockets do not foul on the flap in the fully raised position. Test the circuit and function check.

(e) Recording

Record the modification in the airframe log book.

Drawings

12. Drawing A13212 consisting of sheets 1 to 3 is attached.

Effect on Weight and Balance of the Aircraft

13. The effect of this modification on the weight and balance of the aircraft is as follows:-

Item	Weight	Arm	Moment
Fixed Equipment	(lb ±) + 1.12	(ins ±) + 67"	(lb ins ±) + 75.04

Amendments to Weight Sheet Summaries, will be issued and consolidated by Department of Air.

References : Files, Department of Air, 150/8/1595, 150/4/862 III.

Attachments : Drawing A13212 Sheets 1 to 3.

Date of Issue : 21st April, 1960.

(Issued with A/L 188 - April 1960)

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D.I.L.	INITIALS	APPROVED

DRILL 3 Nº30 HOLES IN SHROUD RIB FROM MOUNTING BRACKET.

AGS 2050 424 — RIVET 'POP' 3-OFF

OOD 1551 A — MOUNTING BRACKET 1-OFF

FLAP SHROUD SKIN 4 AVE.

AGS 2050 424 — RIVET 'POP' 2-OFF

DRILL 2 HOLES Nº30 IN STIFFENER FROM LABEL

OOD 1561 — LABEL 1-OFF

OUTBOARD

TRAILING EDGE

STIFFENER DOO 1849

1·75"

TEST

OOD 1535 A — MOUNTING ANGLE 1-OFF

VIEW ON ARROW 'A'

(SIDE MOUNTING BRACKET OMITTED FOR CLARITY)

BOLT 2 BA. C'S'K 2-OFF — AS 1242 6C

A

SIDE MOUNTING BRACKET 1-OFF — OOD 1539 A

AGS 2050 424 — RIVET 'POP' 3-OFF

DRILL 3 Nº30 HOLES IN FLANGE FROM EXISTING 4 BA. DIA. HOLES IN STIFFENER DOO 1849.

STIFFENER DOO 2381

A25 1B — BOLT 4 BA. HEX. HD. 2-OFF

SP 13 B — WASHER 2-OFF

AGS. 2001 B1 — STIFFNUT 2-OFF

BOLT 2 BA. BRAZIER HD. 2-OFF — AS 1248 6C

STARTER

MOUNTING PLATE 1-OFF — OOD 1555 A

BOLT 2 BA. ROUND HD. 2-OFF — AS 1246 1C

AN 2552 3A — RECEPTACLE 'POWER' 2-OFF

FLAP SHROUD RIB Nº1 DOO 1731

DRILL 2 HOLES Nº26 IN RIB FROM HOLES IN BRACKET.

VIEW LOOKING UP FROM UNDERNEATH PORT INBOARD FLAP SHROUD.

DE HAVILLAND DRAWING Nº OOM 404 SHEET 1 OF 3

REFERENCE	ISSUED BY
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING

TITLE

STANDARD U.S. TYPE EXTERNAL POWER SUPPLY SOCKETS

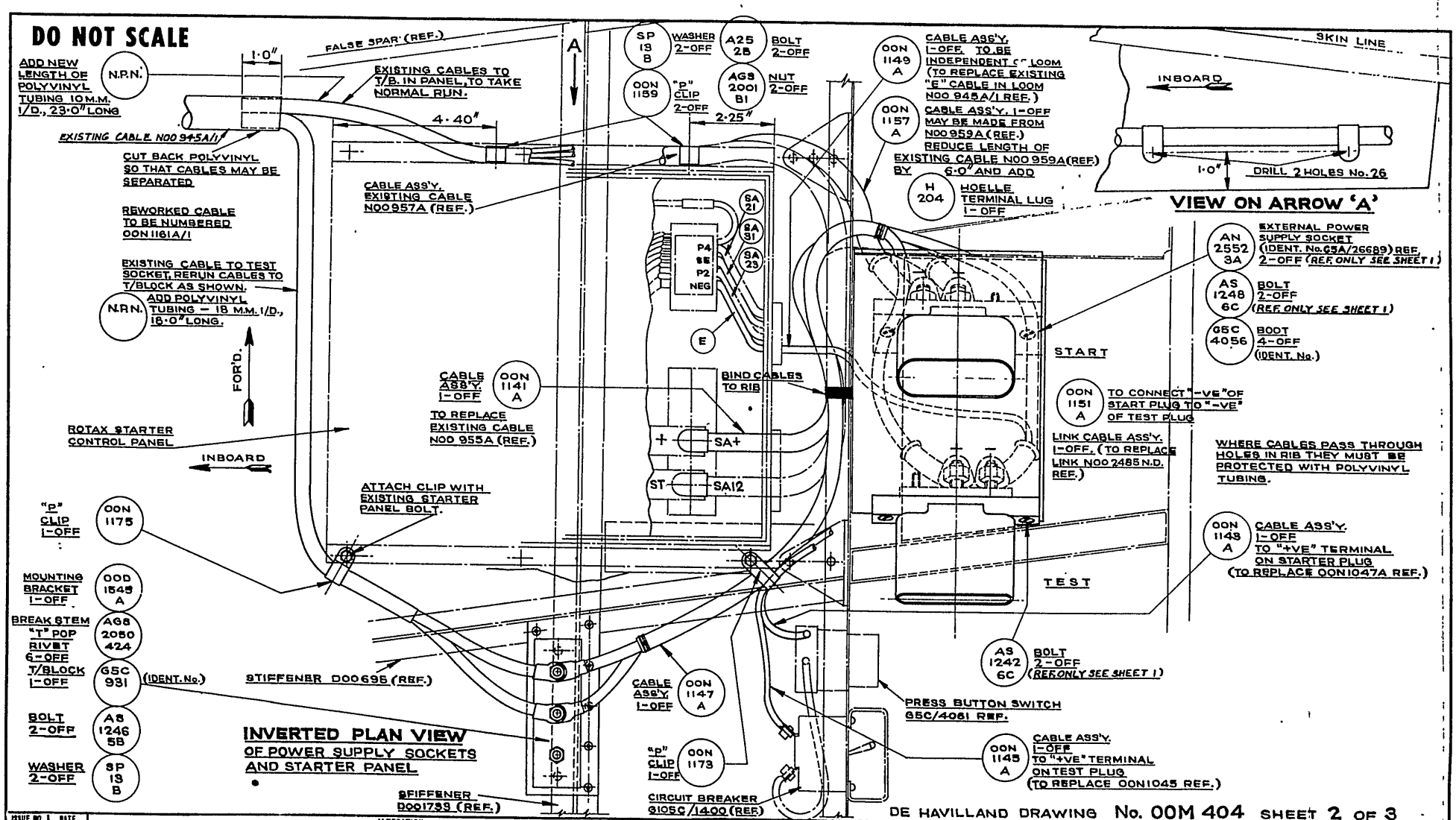
LIMITS. UNLESS STATED	MATERIAL		
DECIMALS ± .010"	SPEC.		
FRACTIONS ± 1/32"	TREATMENT		
ANGLES ± 1°	FINISH		
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.21	SCALE		
DRAWN		APPROVED	
CHECKED			
TRACED			

COMPONENT OF
MACHINE
ENGINE
TECH. ORDER

DRAWING NO. A13212 SHEET 1 OF 3

VAMPIRE MOD Nº 244

DRWG. A SIZE



DE HAVILLAND DRAWING No. 00M 404 SHEET 2 OF 3

ISSUE NO.	DATE	ALTERATION	D.I.L.	INITIALS	APPROVED
1					

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING	STANDARD U.S. TYPE EXTERNAL POWER SUPPLY SOCKETS.

LIMITS UNLESS STATED		MATERIAL			COMPONENT OF	
DECIMALS	± .010"	SPEC.			MACHINE	
FRACTIONS	± 1/32"	TREATMENT			ENGINE	
ANGLES	± ½°	FINISH			TECH. ORDER	VAMPIRE MOD N°244
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		SCALE			DRAWING NO.	A13212 SHEET 2 OF 3
		DRAWN	APPROVED			DRW. B SIZE
		TRACED	CHECKED			

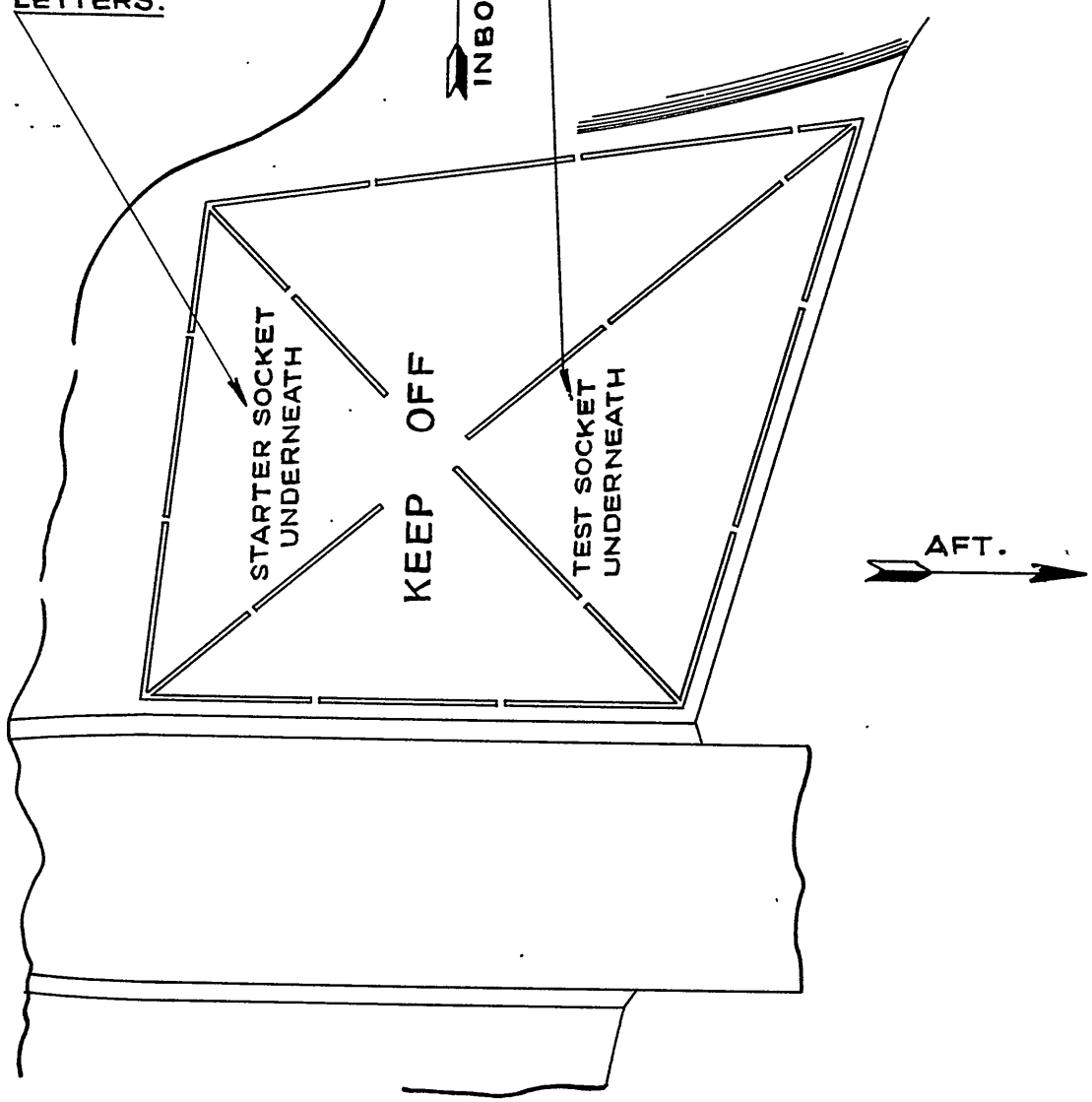
DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L	INITIALS	APPROVED

PORT SIDE ONLY

ALTER EXISTING NOTE "TEST SOCKET UNDERNEATH" TO READ "STARTER SOCKET UNDERNEATH" (AS DRAWN) PRINT IN 1·0" BLACK LETTERS.

ALTER EXISTING NOTE "STARTER SOCKET UNDERNEATH" TO READ "TEST SOCKET UNDERNEATH" (AS DRAWN) PRINT IN 1·0" BLACK LETTERS.



VIEW ON TOP SURFACE OF PORT FLAP SHROUD (INBOARD)

DE HAVILLAND DRAWING **No. 00M404** SHEET 3 OF 3

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR. DIRECTORATE OF AIRCRAFT ENGINEERING	STANDARD U.S.TYPE EXTERNAL POWER SUPPLY SOCKETS

LIMITS UNLESS STATED		MATERIAL		COMPONENT	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD N°244
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.2I		SCALE		DRAWING NO.	A13212 SHEET 3 OF 3.
		DRAWN	APPROVED		
		TRACED	CHECKED		

CLASS 2

IMPROVED HEATING CONTROL IN GUN BAY - INTRODUCTION

Reason for and Description of Modification

1. Tests carried out at ARDU indicate excessive temperatures in the gun bay when carrying out low level gunnery exercises. This modification provides improved heating control in gun bay, by introducing a thermo-switch controlled shut off valve, in the hot air supply line.

The following modifications are to be incorporated either prior to or concurrently with this order.

RAAF Mod	DH Mod	Title
207	V693	Hydraulic brakes including maxaret torque limiters.
205	V691	Redesigned instrument panel with concealed lighting.

Application

2. This work is to be carried out on all Vampire Mk 33/35A aircraft except aircraft Serial No A79-834 which was modified as a trial installation, and all Vampire Mk 35 aircraft Serial Nos A79-600 to A79-640 inclusive. Aircraft A79-641 onwards will have this modification incorporated during manufacture.

Responsibility for Incorporation

3. Operating units, aircraft depots and contractors concerned will be responsible for the incorporation of this modification. The trade musterings responsible are airframe and electrical fitters.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Support Command:-

Ident No	Part No	Nomenclature	Remarks
(a) A79/503017	13A155A	Pipe, cannon heater	Rework to paragraph 11 (c) v and re-identify as Part No A15-103A and Ident No A79/504256

(Issued with A/L 176 - December 1959)

Ident No	Part No	Nomenclature	Remarks
(b) A79/503901	15FS1061A/41	Fireproof Bulkhead	Rework to paragraph 11 (c) vi and re-identify as Part No 15FS1061A/42 and Ident No A79/504257.
(c) A79/503919	FS15-423AND	Bottom half sub-assy (fireproof bulkhead)	Rework to paragraph 11 (c) vi and re-identify as Part No FS15-565AND and Ident No A79/504258.

Note: Partial modification sets for spares will be delivered from De Havilland Aircraft Pty Ltd, to the De Havilland Modification Centre. Units requiring partial modification sets are to demand from the De Havilland Modification Centre, Bankstown NSW.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modification

6. De Havilland (Aust) Mod V712 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item	Ident No	Part No	Nomenclature	No Off	Stores Class
1	A79/504278	A15-55A	Valve, control, hot air	1	
2		A15-99	Bracket	1	
3		A15-101ND	Piece, reduction	1	
4		FS15-527ND	Plate, reinforcing	1	
5	G5C/500443	N15-1119A	Switch, thermo & cable assy	1	
6		N15-1125A	Cable assy (TB to test switch)	1	
7	5CW/4323	D5407	Switch, test (Rotax)	1	
	or			or	
	G5C/6434	XD782	Switch, test (Reglo)	1	
8	G5C/430		Block, terminal	1	

(Issued with A/L 176 - December 1959)

Item	Ident No	Part No	Nomenclature	No Off	Stores Class
9	G5C/880		Fuse, 5 amp	2	
10	G5X/3149	Z27329	Thimble, 7 amp	1	
11	G5E/30155		Cable AA18 one core vin spec AS No U1	5'0"	
12	G5F/20056		Tubing, insulating, PVC, 3mm I/D Black	2'0"	
13	H128F/62240	AS2229/403	Rivet, C'sk H'd, 90° Al Alloy, $\frac{1}{8}$" dia x 3/16" long	2	
14	H128F/63365	AS2229/404	Rivet, C'sk H'd, 90° Al Alloy, $\frac{1}{8}$" dia x $\frac{1}{4}$" long	2	
15	H128F/64409	AS2227/404	Rivet, R'd H'd, Al Alloy, $\frac{1}{8}$" dia x $\frac{1}{4}$" long	1	
16	H128F/64423	AS2227/506	Rivet, R'd H'd, Al Alloy, 5/32" dia x $\frac{3}{8}$" long	7	
17	H28/12513	A25/2C	Bolt, HTS, Hex H'd, 2BA x .6" long	4	
18	H28/9294	AS1242/5B	Bolt, HTS, C'sk H'd 90°, 4BA x .85" long	2	
19	H28C/3426	A32/B8	Screw, MS, R'd H'd, 4BA x $\frac{1}{4}$" long	2	
20	H28/27024	AGS2001B/1	Nut, MS, self-locking, nyloc, 4BA	2	
21	H28/27025	AGS2001C/1	Nut, MS, self-locking, nyloc, 2BA	4	
22	H28C/12252	SP13/C	Washer, MS, plain, thin, .202 I/D x .391 O/D	4	
23		DHS59/19	Cropped washer, 4BA, Al Alloy, 1" dia	2	
24	H28C/2176	AGS250/20	Woodscrew, brass, C'sk H'd, No 4 x $\frac{1}{8}$" long	2	
25	H28C/2190	AGS250/22	Woodscrew, brass, C'sk H'd, No 4 x $\frac{3}{4}$" long	2	
26	H28C/11069	AGS2035/C	Washer, shakeproof, steel, internal teeth, 2BA	2	
27	K3/175		Primer, zinc chromate Spec 2K7	AR	
28	K3/322		Enamel, cellulose, green, BSC 221 Spec K18	AR	
29	K3/353		Varnish Pigmented jointing compound to Spec DTD 369A	AR	
30	I32B/500082		Lacing, PVC, black, 1/16" dia	AR	

(Issued with A/L 176 - December 1959)

Notes: (a) Items 1 to 26 inclusive will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland Modification Centre. Units requiring modification sets are to demand from the De Havilland Modification Centre, Bankstown, NSW.

(b) Items 27 to 30 inclusive are to be drawn from unit stores.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification:-

Item	Ident No	Part No	Nomenclature	No Off	Stores Class
32	A79/501101	R00239	PIPE CLAMP ASSY	1	
31	A79-503016	R00178	Adaptor	1	
33		13A125	PIPE CLAMP BRACKET	1	

AL192

Note: Item 31-33 are obsolete and are to be disposed of in accordance with current authorised procedure.

Disposal of Parts in Stock

9. Stocks of item 31 to 32 are obsolete and are to be disposed of in accordance with current authorised procedure.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable and not later than the next "D" servicing of aircraft after receipt of parts required.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 30 man-hours will be required for the completion of this modification.

(b) Special Tools, Jigs, etc: No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Open nose cap and disconnect the aircraft batteries. Working to current authorised procedure remove the lower inspection and gun bay doors.

(ii) In the gun bay locate the cannon heating pipe assembly the
"Remove the two jubilee clips, one at each A/L 192 ids
end of the pipe, one support clip R00246, ach
one pipe clamp item 32, and one bracket 33, ipe
which are attached to the hinge rail. Retain > the
the support and jubilee clips for replacement at
of the pipe and discard items 32 and 33.
Remove the pipe assembly from the aircraft."

(iii) Working now in the starboard side of the engine bay, locate the flexible pipe Part No R00302 (ref only) which is attached, by means of two Jubilee clips, to a heating pipe from the engine and an adaptor, item 31, on bulkhead No 4. Release these two clips and remove the pipe from the aircraft.

(iv) Unscrew three bolts which secure the adaptor, item 31 to the forward face of bulkhead No 4, remove the adaptor from the aircraft and discard.

(v) Rework the pipe assembly Pt No 13A155A (ref only) to Drawing A13271, Sheet 1, using item 3. Deflux the welded area using a 5% Nitric acid bath in accordance with current authorised procedure. Clean the pipe internally using the hot trichlorethylene method in accordance with AAP 702.1, Book 1, Part 2, Section 1, Instruction 7. Prime the pipe externally using item 27 and finish green with item 28. Re-identify the pipe as part number A15-103A.

(vi) Working to Drawing A13271 Sheet 2 and using items 4, 29, and 13 to 16 inclusive, rework the lower starboard side of the fireproof bulkhead (Bulkhead No 4). Prime the re-worked area with item 27 and re-finish green with item 28.

(vii) Refer to Drawing A13271 Sheet 3, offer up the valve assembly (item 1) to the forward face of bulkhead No 4 and secure using items 17, 21, 22 and 29. Do not break down the assembly of the solenoid to the valve body as the adjustment between them is critical and may affect operation of the valve.

(viii) Refer to Drawing A13271 Sheet 4 and position the thermo switch assembly, item 5, and the terminal block, item 8 on the starboard, under, face of the ammunition box floor using two screws (item 24) to secure the switch assembly and two screws (item 25) to secure the terminal block. Assemble the test switch, item 7, to the mounting bracket, item 2, with item 19 and mount this assembly on the

starboard, gun bay door, hinge rail, using items 18, 20 and 23.

(ix) "Using the existing clips which were retained in operation (ii), replace the cannon heating pipe which was reworked to A15-103A in operation (v). AL.192

assembly (item 17 instead of the [illegible] which was discarded in operation (iv).

(x) Replace the flexible pipe Part No R00302 (ref only) with its existing clips, all of which were removed from the aircraft in operation (iii).

(xi) Modify Junction Box No 1 by adding two 5 amp fuses item 9, one working and one as a spare. Add the fuse legend "4-5-GUN HEAT" to the lid of the fuse box. Cut a 15.0" length of cable, item 11, add coding "GH+" and run from No 4 fuse to pin "V" on plug "C12". The junction box must now be re-identified as Part No N15-617A/1.

(xii) Modify loom C12A by dismantling the socket and adding to pin "V" a 45.0" length of cable, item 11, on the end of which has been fitted a thimble item 10. Feed the new cable through the existing nylex tubing so that it leaves the loom with the wiring for the canopy hatch valve. Cover the exposed wire with a 24.0" length of PVC tubing, item 12, and add code "GH+" to the free end which is to be bared on assembly. The loom must now be re-identified as Pt No N15-1127A.

(xiii) Working to Drawing A13271 sheet 4, attach the earth cable (E) on the solenoid to the earth terminal on the forward, starboard, lower, face of bulkhead No 4 and attach the other cable (coded "GH3") to the test switch, (item 7) which was installed in operation (viii).

(xiv) Connect cable assembly item 6 to the terminal block (item 8) and the test switch (item 7). Run this cable with the existing cables which run along the starboard hinge rail and whip together using PVC Lacing item 30.

(xv) Connect the thermo switch cables, which are coded "GH2" and "GH+", to their respective terminals on the terminal block (item 8). Also connect to the "GH+" terminal, the "GH+" cable which was added to loom C12A in operation (xii). Refer to Drawing A13271, sheet 4.

(Issued with A/L 176 - December 1959)

(xvi) Reconnect the aircraft batteries, close the nose cap and replace the lower inspection doors. The gun bay doors are to be replaced after the function tests have been carried out.

(d) Tests

Test the circuit and carry out a function check as below. Set the ground, flight switch in the ground position if a battery cart is being used or in the flight position if the aircraft batteries are being used. Then break the circuit by means of the "Gun Heat Test" switch which was installed in operation (viii). The solenoid plunger must then extend freely, under spring force, to close the butterfly valve. On releasing the spring loaded test switch the solenoid must energise drawing in the plunger to close the valve.

(e) Recording

Record the modification in the airframe log book.

Drawings

12. Drawing A13271 consisting of four (4) sheets is issued herewith.

Effect on Weight and Balance of the Aircraft

13. The effect of this modification on the weight and balance of the aircraft is as follows:-

Fixed Equipment

Items	Weight (lb)±	Arm (ins) ±	Moment (lb ins)±
Heat Control Equipment	+ 4.7	3.67	+17.25

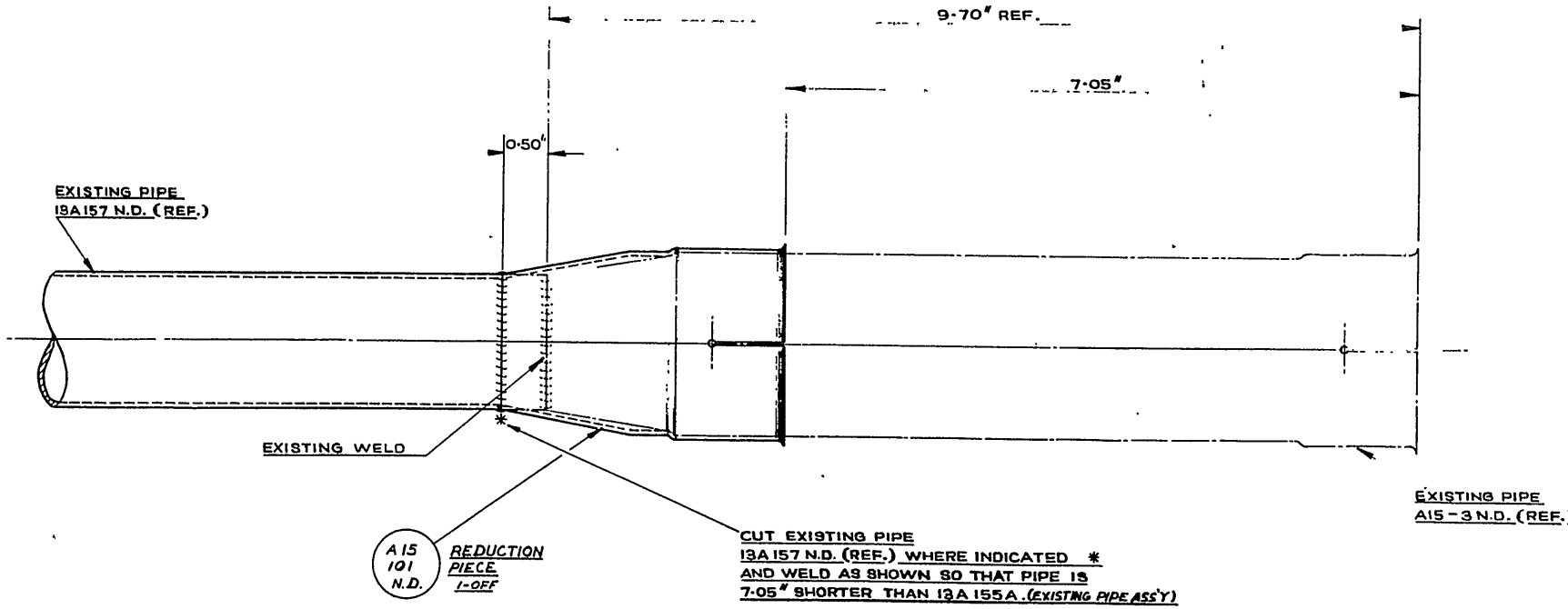
Note: Amendments to weight sheet summaries will be consolidated and issued by Department of Air.

References : Files, Department of Air, 150/8/1694, 150/4/8621 (ii).

Attachments : Drawing A13271 Sheets 1 to 4 inclusive.

Date of Issue : 29th December, 1959.

DO NOT SCALE



AFT END OF CANNON HEATING PIPE
13A 155A (REF.)

NOTE: REMOVE EXISTING PIPE ASS'Y 13A-155A FROM AIRCRAFT AND REWORK AS SHOWN. AFTER REWORK RE-PART Nº AS A15-103A.

FINISH CLEAN PIPE INTERNALLY WITH HOT TRICHLORETHYLENE
PRIME EXTERNALLY WITH ZINC CHROMATE AND FINISH WITH COCKPIT GREEN.

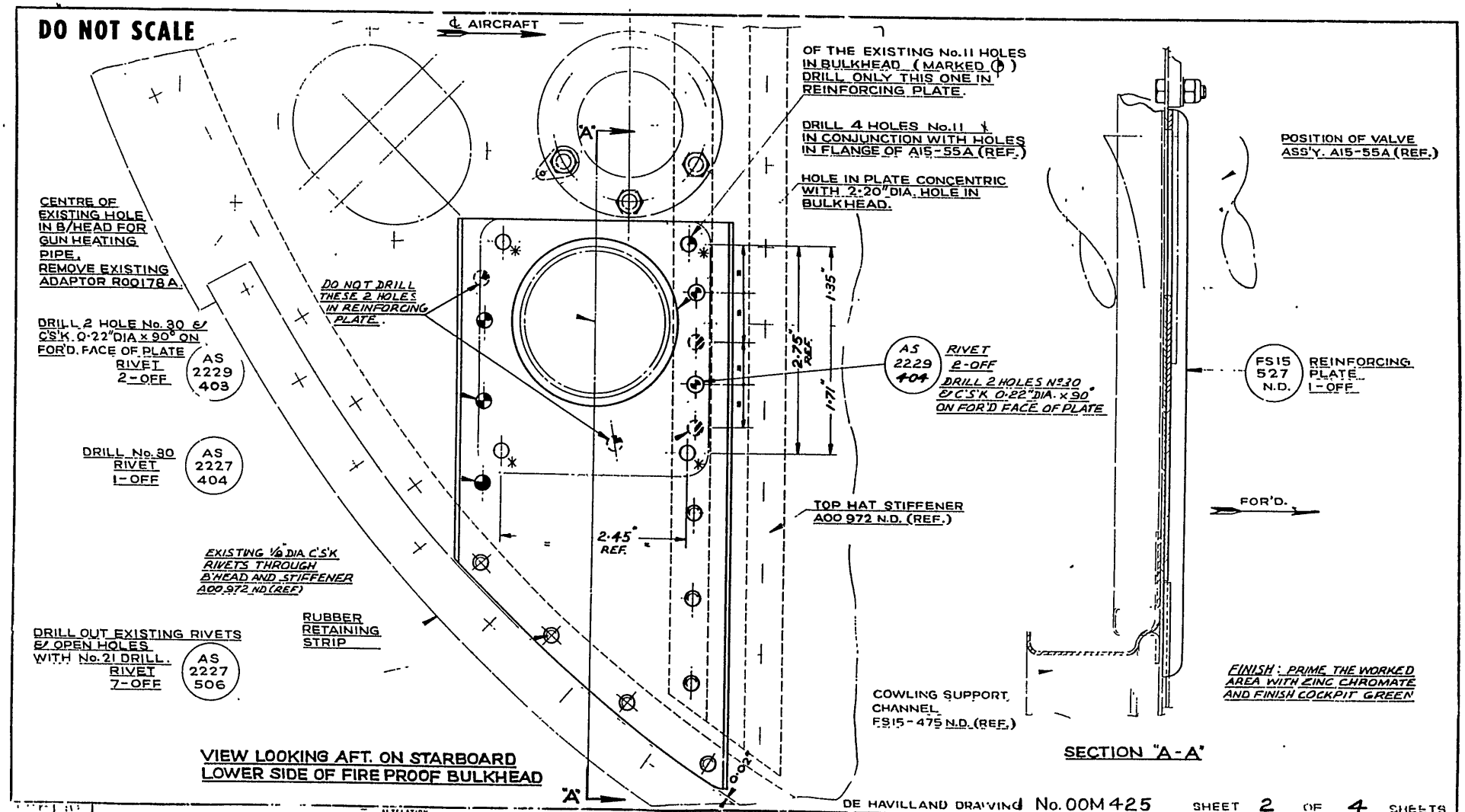
ISSUE NO.	DATE	ALTERATION	B.I.L.	INITIALS	APPROVED
1					

DE HAVILLAND DRAWING No. 00M 425 SHEET 1 OF 4 SHEETS

REFERENCE		ISSUED BY
		DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING
LIMITS UNLESS STATED		MATERIAL
DECIMALS	±.010"	SPEC.
FRACTIONS	±1/64"	TREATMENT
ANGLES	±½°	FINISH
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		SCALE
		DRAWN / APPROVED
		TRACED / CHECKED

TITLE	
	IMPROVED CONTROL OF GUN BAY HEATING
COMPONENT OF	
MACHINE	VAMPIRE MKs 33/35A & 35I
ENGINE	GOBLIN
TECH. ORDER	VAMPIRE MOD 246
DRAWING NO.	A13271 SHEET 1 OF 4
DRWG. SIZE	B

DO NOT SCALE



DE HAVILLAND DRAWING No. 00M425 SHEET 2 OF 4 SHEETS

ALTERATION	D.L.L.	INIT'LS	APPROVED

REFERENCE

LIMITS UNLESS STATED
DECIMALS ±.010"
FRACTIONS ±1/64"
ANGLES ±1°
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE ASP.

DEPARTMENT OF AIR
DIRECTORATE OF AIRCRAFT ENGINEERING

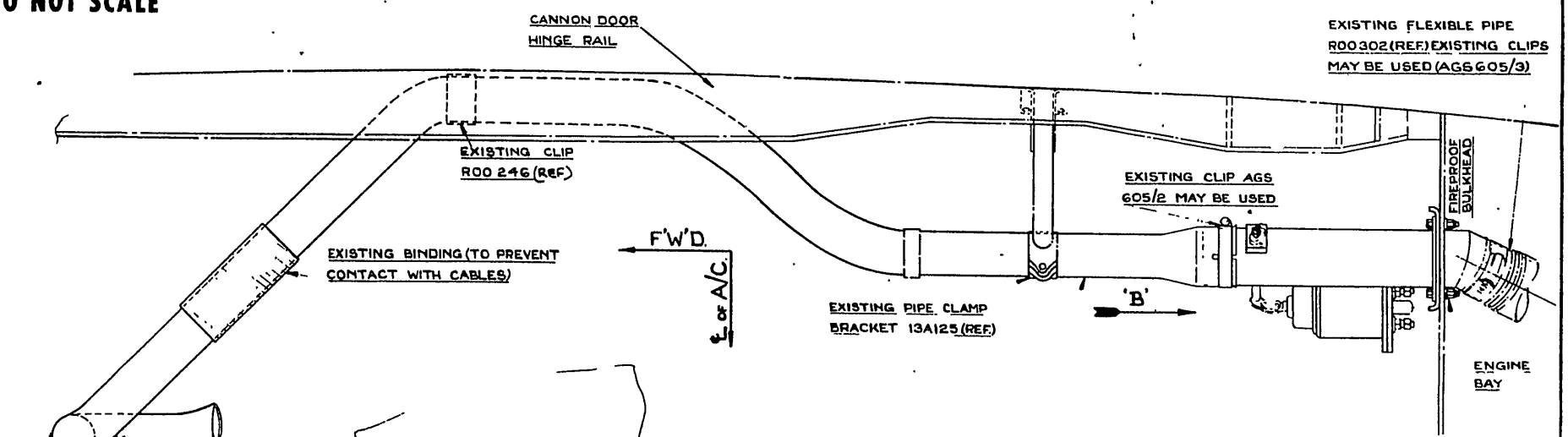
MATERIAL
SPEC.
TREATMENT
FINISH
SCALE
DRAWN
TRACED
APPROVED
CHECKED

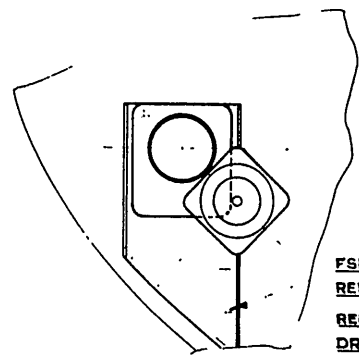
TITLE: IMPROVED CONTROL OF GUN BAY HEATING

COMPONENT OF
MACHINE VAMPIRE MK'S 33/35A & 35
ENGINE GOBLIN
TECH ORDER VAMPIRE MOD 246

DRAWING NO. A 13271 SHEET 2 OF 4
DRWG. SIZE B

DO NOT SCALE





FS15-527ND (REF.) REINFORCING PLATE

REFER DE HAVILLAND DR'G. 00M425 SHT. 2.

VIEW ON ARROW 'B'

CANNON BAY
STARBOARD SIDE

A15 103 A — CANNON HEATING PIPE 1-OFF REWORK FROM EXISTING PIPE ASS'Y. 13A155A TO DE HAVILLAND DR'G 00M425 SHEET 1, REASSEMBLE USING EXISTING CLIPS & CLAMPS.

AGS 2001 C1	STIFFNUT	4-OFF
SP 13 C	WASHERS	4-OFF
A25 2C	BOLTS	4-OFF
A15 55 A	HOT AIR CONTROL VALVE ASS'Y.	1-OFF

PLAN VIEW ON ST'BD. SIDE OF GUN BAY.

DE HAVILLAND DRAWING NO 00M425 SHEET 3 OF 4 SHEETS

ISSUE NO	DATE	ALTERATION	FILE	INITIALS	APPROVED
1					

REFERENCE

LIMITS UNLESS STATED
DECIMALS
FRACTIONS
ANGLES
SURFACE FINISH
AUSTRALIAN STANDARD

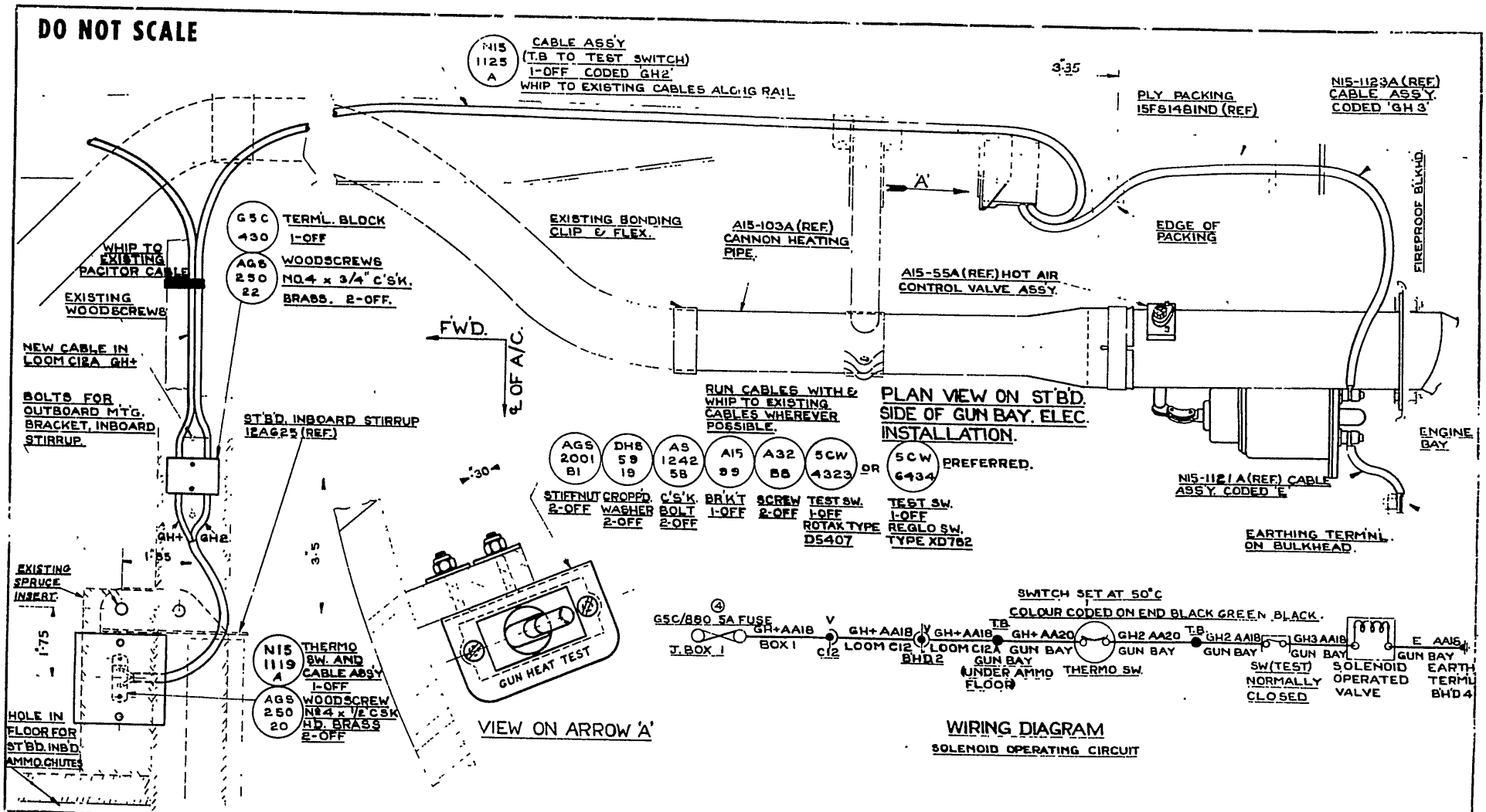
ISSUED BY: DEPARTMENT OF AIR, DIRECTORATE OF AIRCRAFT ENGINEERING.

MATERIAL
SPEC
TREATMENT
FINISH
SCALE
DRAWN
CHECKED

TITLE: IMPROVED CONTROL OF GUN BAY HEATING

COMPONENT OF	
AIRCRAFT	VAMPIRE MK 33/35A&35
ENGINE	GOBLIN
TECH. ORDER	VAMPIRE MOD. NO.
DRAWING NO	A 13271
DRWG SIZE	B

DO NOT SCALE



DE HAVILLAND DRAWING NO. 00M425 SHEET 4 OF 4 SHEETS

NOTE NO.	DATE	ALTERATION	D.O.L.	INITIALS	APPROVED
1					

RE. REFERENCE

ISSUED BY
DEPARTMENT OF AIR
DIRECTORATE OF
AIRCRAFT ENGINEERING

LIMITS UNLESS STATED
DECIMALS ± .01
FRACTIONS ± 1/64
ANGLES ± 1°
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE No. 1

MATERIAL
SPEC
TREATMENT
FINISH
SCALE
DRAWN
TRACED
APPROVED
CHECKED

TITLE
IMPROVED CONTROL OF GUN BAY HEATING.

COMPONENT OF
MACHINE VAMPIRE MKS 33, 35A & 35
ENGINE GOBLIN
TECH. SPEC. NO. VAMPIRE MOD 2156
DRAWING NO. A13271
SHEET 4 OF 4
DRWG. NO.

AAP 721:79 VOL 2, PART 2

VAMPIRE MODIFICATION NO 247
Class 2

STANDARD AMERICAN EXTERNAL POWER SUPPLY SOCKETS IN LIEU OF THE TYPE E2 SOCKET - INTRODUCTION

Reason for and Description of Modification

1. The existing type E2 sockets are considered to be unsatisfactory, and it is proposed to standardise on the external power supply receptacles to the NATO design. AL 226 714 Introduction of standard American external power supply socket in lieu of the type E2 socket".

Application

2. This work is to be carried out [illegible] aircraft and on Vampire Mk 35 aircraft, Serial Nos A79-836, A79-602 to A79-605 inclusive, A79-607 to A79-609 inclusive and A79-611 to A79-620 inclusive.

Aircraft A79-606 was modified by the manufacturer as a trial installation. Aircraft A79-621 and subsequent will be modified during manufacture.

Responsibility for Incorporation

3. Aircraft depots and contractors concerned will be responsible for the incorporation of this modification. The trade musterings responsible are electrical and airframe fitters.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command:-

Ident No	Part No	Nomenclature	Remarks
A79/504031	L0051A/41	Door, inspection, lower, assembly	Rework in accordance with para 11C, sub-para (viii), and re-identify as Pt No L0051A/42 and Ident No A79-504147

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the introduction of this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V714 is an equivalent modification.

(Issued with AL 148 - May 1959)

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1.	A79/504173	EC15-49A	Door, access	1	
2.		EC15-57ND	Stiffener	1	
3.		EC15-59ND	Patch, skin	1	
4.		EC15-77A	Plate, reinforcing	1	
5.		FS15-509A	Plate, clip support	1	
6.		FS15-511ND	Washer	2	
7.	A79/504172	FS15-513AND	Door, access, assy	1	
8.		FS15-519ND	Ring, reinforcing	1	
9.		FS15-523	Gasket	1	
10.	A79/504165	N15-1067A	Bracket Assy	1	
11.		N15-1075	Bracket, mounting	1	
12.	G5A/26689	AN2552/3A	Receptacles, power, external	2	
13.	H28/27024	AGS2001/B1	Nut, MS, self locking, nyloc 4BA	7	
14.	H28/27025	AGS2001/C1	Nut, MS, self locking, nyloc 2BA	6	
15.	H28/27026	AGS2001/E1	Nut, MS, self locking, nyloc, $\frac{1}{4}$" BSF	2	
16.	H28/8304	AS1242/6B	Bolt, HTS, csk hd 90°, 4BA x .90" long	2	
17.	H28/11021	AS1242/8B	Bolt, HTS, csk, hd, 90°, 4BA x 1.15" long	5	
18.	H28/8507	AS1242/5C	Bolt, HTS, csk hd 90°, 2BA x .9" long	4	
19.	H28/9435	AS1242/8E	Bolt, HTS, csk hd 90°, $\frac{1}{4}$" BSF x 1.25" long	2	
20.	H128F/63365	AS2229/404	Rivet, Al Alloy, csk hd 90°, $\frac{1}{8}$" dia x $\frac{1}{4}$" long	58	
21.	H128F/62509	AS2229/405	Rivet, Al Alloy, csk hd, 90°, $\frac{1}{8}$" dia x 5/16" long	30	
22.	H28/14053	AS3180/6C	Clip	1	
23.	H28/12629	A25/8C	Bolt, HTS, hex hd, 2BA x 1.25" long	2	
24.	H28C/35821	DHS-95	Washer Cup	2	
25.	G5C/4056		Covers, terminal lugs, sythetic	4	
26.		H204	Lug, terminal, "Hoelle"	2	
27.	H28C/12356	SP16/C	Washer, MS, plain, .202" I/D x .391" O/D x 12 SWG	1	
28.	G5F/1377		Tape, nylex, PVC insulating, $\frac{1}{2}$" wide	AR	
29.	I1/9510		Solder, grade "C"	AR	
30.	I32B/5079		Fabric, mercerised, to spec DTD 407A	AR	

(Issued with AL 148 - May 1959)

Item No	Ident No	Part No	Nomenclature	No off per set	Store Class
31.	K3/167		Dope, AWD, clear, 3K5 or DTD 752	AR	
32.	K3/370		Thinners, dope, covering Spec DTD 843	AR	
33.	K3/175		Primer, zinc chromate	AR	
34.	K3/176		Thinners, zinc chromate	AR	
35.	K3/361		Colour, identification glossy, black DTD 772A	AR	
36.	K3/353		Compound, jointing to spec DTD 369A	AR	
37.	K3/365		Covering, high speed aluminium	AR	
38.	K3/371		Stopper, oil base	AR	
39.	K3/374		Paint, Acid resisting (white) SAA INT17	AR	
40.	K3/385		Cement, adhesive, Bostik 252	AR	
41.	K3/407		Glue, beetle, type A	AR	
42.	K3/410		Hardener, beetle, 2B (blue)	AR	
43.	K3/411		Hardener, beetle, V15 (violet)	AR	
44.	K3/412		Hardener, beetle, G30 (yellow)	AR	
45.	K4/37		Solution, copper, Napthenate	AR	
46.	K4/10612		Lacquer, tropic, proofing	AR	
47.	W3/1372		Brads, brass, 20 SWG, $\frac{1}{2}$" long	AR	

Notes: (a) Items 1 to 27 inclusive will be delivered from De Havilland Aircraft Pty Ltd, to the Modification Centre, De Havilland. Modification Centre will issue these items on demand for Vampire Modification No 247.

(b) Items 28 to 47 inclusive will be drawn from unit stores.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
48.		A00/1224A/1	Bracket, mounting, starter plug	1	
49.		L00/1148	Ring, reinforcing	1	
50.		15N/181	Ring, ground test socket	1	
51.	A79/502982	15N/183	Plate, cover, external supply socket	1	
52.		15N/747ND	Washer, cup	1	
53.		N00/643	Washer, special	2	
54.	C5C/2225		Socket, external power	2	

(Issued with AL 148 - May 1959)

Notes: (a) Items 48 to 53 inclusive are to be disposed of in accordance with current authorised procedure.

(b) Item 54 is to be inspected and if serviceable returned to store.

Disposal of Parts in Stock

9. Stores stocks of item 51 and of Bracket, Mounting A79/502913 which is one of the components used to make Item 48, are rendered obsolete by this modification and are to be disposed of in accordance with current authorised procedure.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable and not later than the next "E" servicing after receipt of parts required.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 42 man-hours will be required for the completion of this

"(b) Special Tools, Jigs etc.

The following jigs will be required to incorporate this modification.

Part No.	Nomenclature
SDW152/1	Common Base
SDW152/2	Drilling Jig
TFW5255/2	Routing Jig
TFW5255/3	Routing Jig

One set of the above tools will be supplied to the De Havilland Modification Centre and will be made available under special arrangements.

The Routing Jigs have been designed with a 3/16" oversize routing profile to be used with a 5/8" dia. template guide and 1/4" cutter. Stanley Routers Type 8 Model B with Base Type GA Model 197A has been found suitable.

(A/L 199)"

(c) Modification Procedure. Remove the redundant external power supply socket Item 54 which is mounted in the nose on the port side. Replace nuts and washers on socket terminals and discard terminal lug covers.

(Issued with AL 148 - May 1959)

(iii) Remove this redundant external power socket, Item 54 by removing and discarding the 3 off 2BA bolts and spring washers which secure it to the mounting plate item 51.

(iv) Remove the fabric locally around the heads of the 3 off $\frac{1}{4}$" BSF countersunk bolts item 55, remove these bolts, the attaching nuts, plain washers and redundant Items 50, 51 and 52. Retain 2 off only of Item 52 for refitment. (Refer para C, vi, (a)). Discard plain washers and nuts.

(v) Refer to "View on Port Side of Fuselage" on drawing Z15-1301A.

"Rework fuselage as per drawing using Items 8,30, 31, 38, 41 to 44 inclusive and 47, and tools SDW152/1, SDW152/2, TFW5255/2, TFW5255/3. (A/L 199)"

~~Repair internal paint finish where necessary with 1 coat~~ of item 45, 2 coats of item 46, and 1 coat of item 39. Thin item 46 with item 32 as necessary.

(vi) Refer to "View Showing Installation of External Supply Socket" on drawing Z15-1301A.

(a) Install Items 5, 7, 9, 11 and 12 (1 off) using items 6, 13, 14 (2 off), 15, 16, 17, 18 (2 off), 19, 24, 36, 40 and 52 (2 off).

(b) Rework and re-attach cables 15N/119A and 15N/121A to socket item 12 using Items 25 (2 off) and 28. Refer to Note 2 on drawing Z15-1301A and fit additional clip, Item 22 and washer, Item 27.

(vii) Remove starboard lower inspection door from aircraft.

(viii) Refer to "View Showing Rework of Starboard Lower Inspection Door L0051A" and "Section A.A" on drawing Z15-1301A.

Rework lower inspection door as per drawing using Items 1 to 4 inclusive, 20 and 21.

(ix) Refer to "View Showing Fitment of Starter Socket to Engine Mounting" on drawing Z15-1301A.

(a) Install items 10 and 12 (1 off) using 14 (4 off) 18 (2 off), 23 and 36.

(Issued with AL 148 - May 1959)

(b) Rework cables 13N-339A, 13N-379A and 13N-391A, using items 26 and 29. Alter part number of 13N-379A to read N15-1087A and of 13N-391A to read N15-1085A.

Attach cables to socket item 12, using items 25 (2 off) and 28.

(x) Check that the cables referred to in para 11C, (vi) and (ix) are connected correctly.

(xi) Refit and close lower inspection doors, removed in operation (vii).

(xii) Re-connect the aircraft batteries.

(xiii) Close and fasten nose cap.

(xiv) Repair external paint finish with 1 coat of item 33, thinned as necessary with item 34, and 1 coat of item 37.

(xv) Add a "Lock" mark and a letter "L" to fasteners on the doors, items 1 and 7, using item 35, thinned as necessary with item 32, size and location relative to fasteners, as for existing Dzus fasteners.

(d) Tests :

(i) Function starter circuit.

(ii) With ground supply connected to external supply socket check that generator warning light and A/C power failure warning light are on, with ground/flight switch at ground position.

(e) Recording : Record this modification in the airframe log book.

Drawings

12. DH drawing Z15-1301A refers. Units requiring this drawing are to demand from Department of Air.

Effect on Weight and Balance

13. The incorporation of this modification will have negligible effect on the weight and balance of an aircraft.

References : Files, Department of Air, 150/8/1382, 150/4/8621^{II}, 9/84/36 (IV)

Date of Issue : 26th May 1959

(Issued with AL 148 - May 1959)

AAP 721:79 Vol 2 Pt 2

VAMPIRE MODIFICATION NO 248

Class 2

FALSE FLOOR - ELIMINATION OF GAPS

Reason for and Description of Modification

1. Reports have been received in the United Kingdom of foreig matter being found under the Pilot's and 2nd pilot's floor, thus creating a flying hazard. This modification seals off all apertures in the floor to obviate this.

The following modification is to be incorporated, either prior to or concurrently with:-

RAAF Order	DH Mod	Title
	V641-2	To introduce ejection seats and a modified canopy.

Application

2. This work is to be carried out on all Vampire Mk 33 aircrai and on Vampire Mk 35 Aircraft, Serial Nos A79-602 to A79-620 inclusive, except aircraft A79-604 which was modified by the manufacturer as a trial installation.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command :-

Ident No	Part No	Nomenclature	Remarks
A79/504110	F15-479A	Panel RH	Rework to para 11(c) vi and re-identify as Part No F15-685A Ident No A79/504103
A79/503811	F15-353A	Panel, Centre RH	Rework to para 11(c) vii and re-identify as Part No F15-791A Ident No A79/504105

(Issued with A/L 133 - March 1959)

Ident No	Part No	Nomenclature	Remarks
A79/503813	F15-331A	Panel, Rear RH	Rework to para 11(c) ix and re-identify as Part No F15-797A Ident No A79/504107
A79/503814	F15-359A	Panel, Rear, Centre	Rework to para 11(c) ix and re-identify as Part No F15-683A Ident No A79/504108
A79/503812	F15-373A	Panel, Rear LH	Rework to para 11(c) x and re-identify as Part No F15-817A Ident No A79/504106
A79/503810	F15-409A	Panel, Centre, LH	Rework to para 11(c) v and re-identify as Part No F15-777A Ident No A79/504104
A79/502403	15.F.655A	Panel, Front, LH	Rework to para 11(c) iv and re-identify as Part No F15-687A Ident No A79/504102

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modification

6. De Havilland (Aust) Mod V715 and Air Ministry Modification VAM 3405 are equivalent Modifications.

Supply

7. The following parts are required to complete one Modification set :-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1		F15-663A	Guard Assy	1	
2		F15-669A	Guard Assy	1	

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
3		F15-671	Screen	1	
4	A79/504109	F15-753	Panel, Access	1	
5		F15-763A	Guard Assy	1	
6		F15-769A	Cover Assy	1	
7		F15-775A	Bracket Assy	1	
8		F15-785A	Guard Assy	1	
9		Z15-1261	Extension Piece	1	
10		Z15-1265ND	Packing	1	
11		F15-839	Plate, Patch LH	1	
12		F15-840	Plate, Patch RH	1	
13		F15-823A	Plate, Patch Assy LH	1	
14		F15-824A	Plate, Patch Assy RH	1	
15	H28/12528	A25/1B	Bolt, HTS Hex Hd 4BA x 1/2" long	5	
16	H28/8337	AS 1248/1B	Bolt, HTS, Mush Hd 4BA x 1/2" long	2	
17	H28C/12305	SP 13/B	Washer, MS Thin, 4BA	5	
18	H28/27267	AGS 2007B/1	Anchor Nut, Standard 4BA	7	
19		SP 40/B20	Grommet, Rubber o.625" i/d x 1.063" o/d	1	
20	H128F/ 64403	AS 2227/ 304	Rivet, Al Alloy, Snap Hd, 3/32" dia x 1/4" long	28	

(Issued with A/L 133 - March, 1959)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
21	H128F/ 64404	AS 2227/ 305	Rivet, Al Alloy, Snap Hd 3/32" dia x 5/16" long	6	
22	H128F/ 64409	AS 2227/ 404	Rivet, Al Alloy, Snap Hd 1/8" dia x 1/4" long	11	
23	H128F/ 64410	AS 2227/ 405	Rivet, Al Alloy, Snap Hd, 1/8" dia x 5/16" long	10	
24	H128F/ 64222	AS 2228/ 303	Rivet, Al Alloy, Mush room Hd, 3/32" dia x 3/16" long	6	
25	H128F/ 62229	AS 2229/ 303	Rivet, Al Alloy, Csk Hd 90° 3/32" dia x 3/16" long	10	
26	H128F/ 63365	AS 2229/ 404	Rivet, Al Alloy, Csk Hd 90°, 1/8" dia x 1/4" long	10	
27	H128F/ 64444	AS 2230/ 304	Rivet, Al Alloy, Csk Hd, 120° 3/32" dia x 1/4" long	18	
28	H128F/ 64452	AS 2230/ 404	Rivet, Al Alloy, Csk Hd 120°, 1/8" dia x 1/4" long	1	
29	T32C/ 500191	AJ 1060	Section, Synthetic Rubber 16" long	2	
30	T32C/ 500192	AJ 1061	Section, Synthetic Rubber 18" long	4	
31	K3/401	NPN	Compound Sealing, Pliobond"	AR	
32	K3/353	NPN	Compound Jointing, to Spec DTD 369A	AR	

(Issued with A/L 133 - March, 1959)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
33	K3/321	NPN	Enamel Cellulose, Spec K18	AR	
AL. 169 34	1328/500085 ~~115A/365~~		Tape Lassoband Black 2" ~~Tape adhesive white 1"~~	AR	

Notes :- (a) Items 1 to 30 inclusive will be delivered from De Havilland Aircraft Pty Ltd to De Havilland Modification Centre.

Units requiring modification sets are to demand from De Havilland Modification Centre.

(b) Items 31 to 34 inclusive will be drawn from Unit Stores.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification :-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
35	A79/503815	F15-337	Panel, Access	1	
36		F15-39	Plate, Cover	1	
37		F15-40	Plate, Cover	1	

Note :- Items 35 to 37 inclusive are obsolete and are to be disposed of in accordance with current authorised procedure.

Disposal of Parts in Store

9. Stocks of item 35 are obsolete and are to be disposed of in accordance with current authorised procedure when all applicable aircraft are modified.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of modification sets.

(Issued with A/L 133 - March 1959)

Method of Incorporation

11. (a) Man-Hours Involved : Approx 42 man-hours will be required for the completion of this modification.

(b) Special Tools, Jigs, etc : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Disarm both ejection seats in accordance with AP 4288 Vol 1, Part 2, Sect 2. Remove aircraft canopy hatch in accordance with AAP 721:79/33 Vol 1, Sect 3, Chapter 1, Page 4.

(ii) Remove both ejection seats in accordance with AAP 721:79/33, Volume 1, Section 3, Chapter 1.

(iii) Release the dust covers around the foot of each control column and remove from aircraft. Then refer to Drawing A12981, sheet 1 and remove each panel of the false floor as required.

(iv) Remove panel F15-655A, Ident No A79/502403 and modify as per Detail 'F' of Drawing A12981, sheet 7. Drill out the three rivets in the stiffener as indicated. Use these three holes to position guard assy, item 2, and drill two holes No 30 as indicated. Remove guard assy and debur holes. Coat the mating surfaces with pigmented varnish jointing compound, item 32. Re-assemble and using 3-off rivets, item 23, and 2-off rivets, item 22 rivet as indicated in drg.

Refer to Sheet 8 of Drawing A12981 Section 'G' and position patch assy, item 13 as shown in drawing. Drill 4 holes No 41 in panel in conjunction with patch assy. Countersink the under surface of the two holes in the Panel as indicated in drawing, 90° x 0.18 inch dia. Thoroughly debur holes, apply pigmented varnish jointing compound, item 32 to mating surfaces, re-assemble and using 4-off rivets item 20, rivet as indicated in drawing.

(Issued with A/L 133 - March, 1959)

Refer to Drawing A12981 sheet 1, and trim synthetic rubber sponge section, item 30 to suit panel as indicated, and attach using 'Pliobond' item 31. Re-identify panel as part No F15-687A Ident No A79/504102.

(v) Remove panel F15-409A ident No A79/503810 and modify as per Detail 'E' of drawing A12981 sheet 6. Position guard assy, item 5 as indicated. Drill 5 holes No 41 in panel in conjunction with guard assy. Thoroughly debur holes; apply pigmented varnish jointing compound item 32 to mating surfaces. Reassemble and using 5-off rivets item 20 rivet as indicated in drg. Trim synthetic rubber sponge section item 29 to suit guard assy, as indicated and attach using (Pliobond) item 31. Refer to drg A12981 sheet 1, trim synthetic rubber sponge section item 30 as indicated and attach to panel using 'Pliobond' item 31. Re-identify panel as Part No F15-777A, ident No A79/504104.

(vi) Remove panel F15-479A ident No A79/504110 and modify as per Detail 'A' of drawing A12981 sheet 2. Remove snap head rivet in the end of stiffener as indicated. Countersink the top face of panel 90° to 0.22" dia. Refill the rivet hole with 1-off rivet item 26 as indicated. Position bracket assy item 7 as indicated. Drill 7 holes No 41 in panel in conjunctio with bracket assy. Thoroughly debur holes, apply pigmented varnish jointing compound item 32 to mating surfaces, re-assemble and using 7-off rivets item 20 rivet as indicated in drawing. Refer to drawing A12981 sheet 8, detail 'G' and position patch assy item 14, as indicated in drawing. Drill 4 holes No 41 in panel in conjunction with patch assy. Countersink the under surface of the two holes in panel, as indicated in drawing, 90° x 0.18 in dia. Thoroughly debur all holes, apply pigmented varnish jointing compound item 32 to mating surfaces; re-assemble and using 4-off rivets item 20 rivet as indicated in drawing.

Refer to drawing A12981 sheet 1, and trim synthetic rubber sponge section item 30 to suit panel as indicated, and attach using 'Pliobond' item 31. Re-identify panel as part No F15-685A Ident No A79/504103.

(Issued with A/L 133 - March 1959)

(vii) Remove Panel F15-353A, ident No A79/503811 and modify as per detail 'B' of drawing A12981 sheet 3. Drill out four rivets in the stiffener as indicated. Use these four holes to position guard assy item 8 and drill three further holes No 30 in the panel in conjunction with the guard assy. Remove guard assy and countersink the bottom surface of 1-off hole, 90° x 0.2" dia as indicated in drawing. Thoroughly debur all holes; apply pigmented varnish jointing compound item 32 to mating surfaces and using 7-off rivets item 23 rivet as indicated in drawing. Trim synthetic rubber sponge section item 29 to suit guard assy as indicated and attach using 'Pliobond' item 31.

Refer to drawing A12981, sheet 1 and trim synthetic rubber sponge section item 30 to suit panel as indicated and attach using 'Pliobond' item 31. Re-identify panel as part No F15-791A, ident No A79/504105.

(viii) Remove access panel F15-337 ident No A79/503815 item 35 and discard. Retain attaching screws.

This panel is replaced by F15-753 A, ident No A79/504109, item 4, and re-assembly.

(ix) Remove panel F15-331A ident No A79/503813 and modify as per detail 'C' of drawing A12981, Sheet 4. 0.15 inch will be trimmed off the panel as indicated in the drawing. Debur trimmed edge. Position extension piece item 9 on panel as indicated. Cut out panel to suit extension piece where grommet is to be fitted. Drill 4 holes No 41 in panel in conjunction with extension piece. Countersink the 4 holes as indicated in drawing, 120° x 0.181" dia. Thoroughly debur; apply pigmented varnish jointing compound item 32 between mating surfaces; re-assemble and using 4-off rivets item 27, rivet as indicated in drawing.

Position cover assy item 6 as indicated and insert the packing piece item 10 between the flange and extension piece. Drill 4 holes No 41 in panel and 3 holes No 41 through packing into the Extension piece, in conjunction with cover assy. Countersink the bottom hole in extension piece as shown in drawing.

(Issued with A/L 133 - March 1959)

Thoroughly debur, apply pigmented varnish jointing compound item 32 between all mating surfaces. Re-assemble and using 7-off rivets item 20, rivet as indicated in drawing.

Position grommet item 19 as indicated and trim to suit hole in panel. Attach using 'Pliobond' item 31. Refer to drawing A12981 sheet 1, trim synthetic rubber sponge section item 30 as indicated and attach to panel using 'Pliobond' item 31. Re-identify panel as part No F15-797A, ident No A79/504107.

(x) Remove panel F15-373A, ident No A79/503812. Refer to drawing A12981 sheet 1, trim synthetic rubber sponge section item 30, to suit flange (Both horizontal and vertical surfaces) as indicated and attach to panel with 'Pliobond' item 31. Re-identify as Part No F15-817A ident No A79/504106.

(xi) Remove panel F15-359A ident No A79/503814 and modify as per detail 'D' of drawing A12981 sheet 5. Remove and discard existing cover plates item 36 and 37 and replace with patch plates items 11 and 12 as indicated in drg. Countersink two holes in panel 90° x 0.18" dia on under surface. Thoroughly debur, apply pigmented varnish jointing compound item 32 between mating surfaces, re-assemble and using 6-off rivets item 24, rivet as indicated.

Position guard assy item 1. Drill 5 holes No 26 in panel in conjunction with guard assy. Attach 5-off anchor nuts item 18 using 10-off rivets item 25. Rivets to be flush on top surface of panel. Position screen item 3 as indicated. Drill 2 holes No 26 in panel in conjunction with screen. Attach 2-off anchor nuts item 18 using 4-off rivets item 25. Assemble guard assy to panel using 5-off bolts item 15 and 5-off washers item 17. After the panel has been replaced in the aircraft the screen can be assembled on to the panel using 2-off bolts item 16. Re-identify Panel as Part No F15-638A, Ident No A79/504108.

(xii) Touch up all panels with matt black cellulose enamel item 32.

(xiii) Thoroughly check cleanliness and then replace all sections of the false floor using all screws, bolts and washers removed in operations (iii) to (xi) inclusive.

(Issued with A/L 133 - March 1959)

(xiv) Any gaps remaining which could allow foreign objects to find their way under the false floor are to be sealed with "Lassoband" adhesive tape item 34. If white tape is used it must be sprayed lightly with matt black cellulose enamel item 33, after fitting.

(xv) Resecure the dust covers around each control column using existing screws, washers etc removed in paragraph (iii).

(xvi) Replace both ejection seats in accordance with AAP 721:79/33, Vol 1, Section 3, Chapter 1.

(xvii) Re-assemble the aircraft canopy hatch in accordance with AAP 721:79/33, Vol 1, Section 3, Chapter 1, Page 4.

(d) Tests : Check functioning of canopy hatch mechanism.

(e) Recording : Record this Modification in the airframe log book.

Drawings

12. Drawing A12981 consisting of eight (8) sheets is attached herewith.

Effect on Weight and Balance

13. The effect of the incorporation of this Modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/1057 and 150/8/1213

Attachments : Drawing A12981, Sheets 1 to 8 inclusive

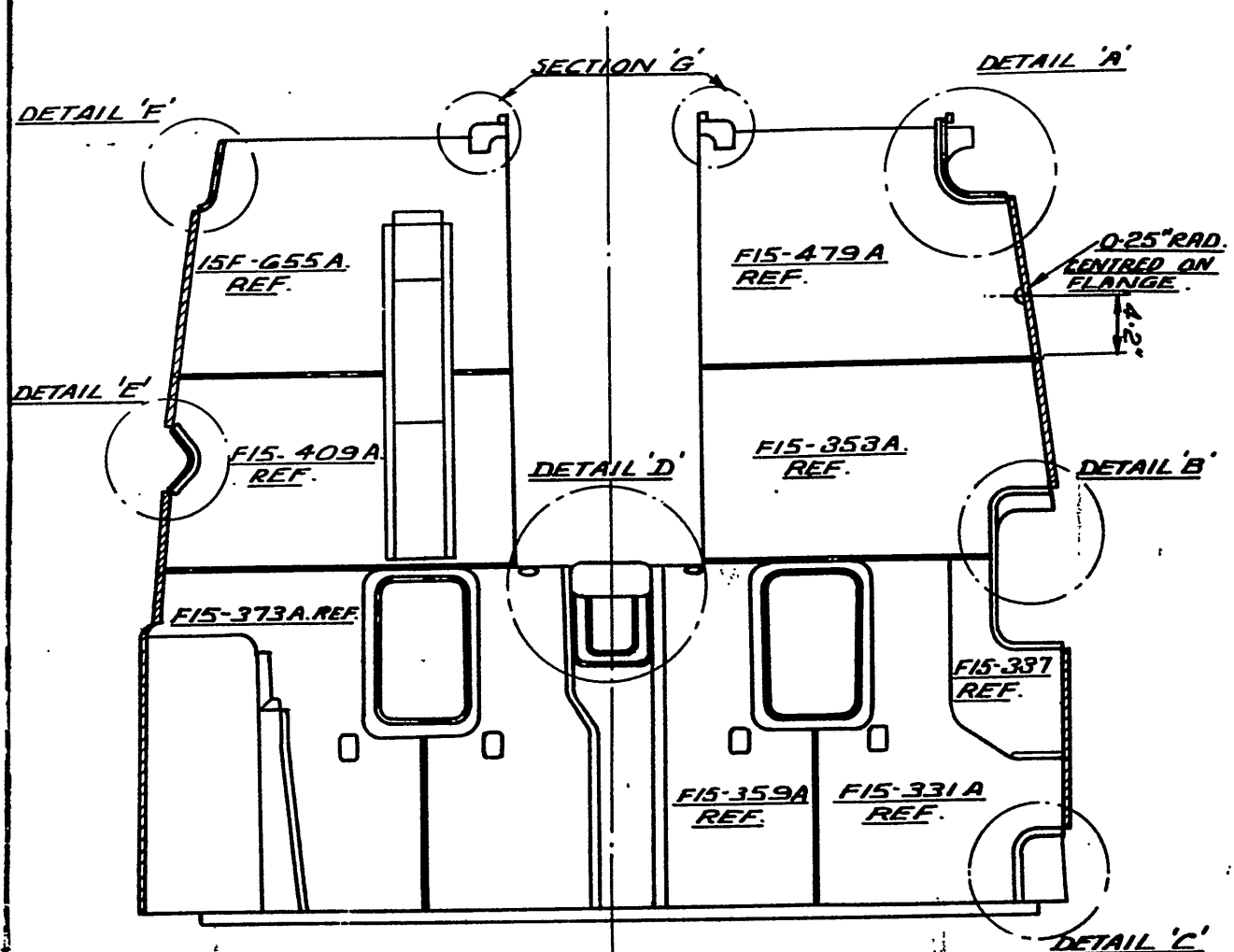
Date of Issue : 10th March, 1959

(Issued with A/L 133 - March 1959)

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D.L	INITIALS	APPROVED

ALL AREAS MARKED THUS ▨ REPRESENTS SYNTHETIC RUBBER SPONGE SECTION AJ1061. TRIM TO SUIT ON ASS'Y & ATTACH WITH "PLIOBOND".



ANY GAPS REMAINING WHICH COULD ALLOW FOREIGN OBJECTS TO FIND THEIR WAY UNDER THE FALSE FLOOR TO BE SEALED WITH 'LASSOBAND' ADHESIVE TAPE

PANEL PART Nos. REFER TO EXISTING PANELS.

DE HAVILLAND DRAWING OOM 358

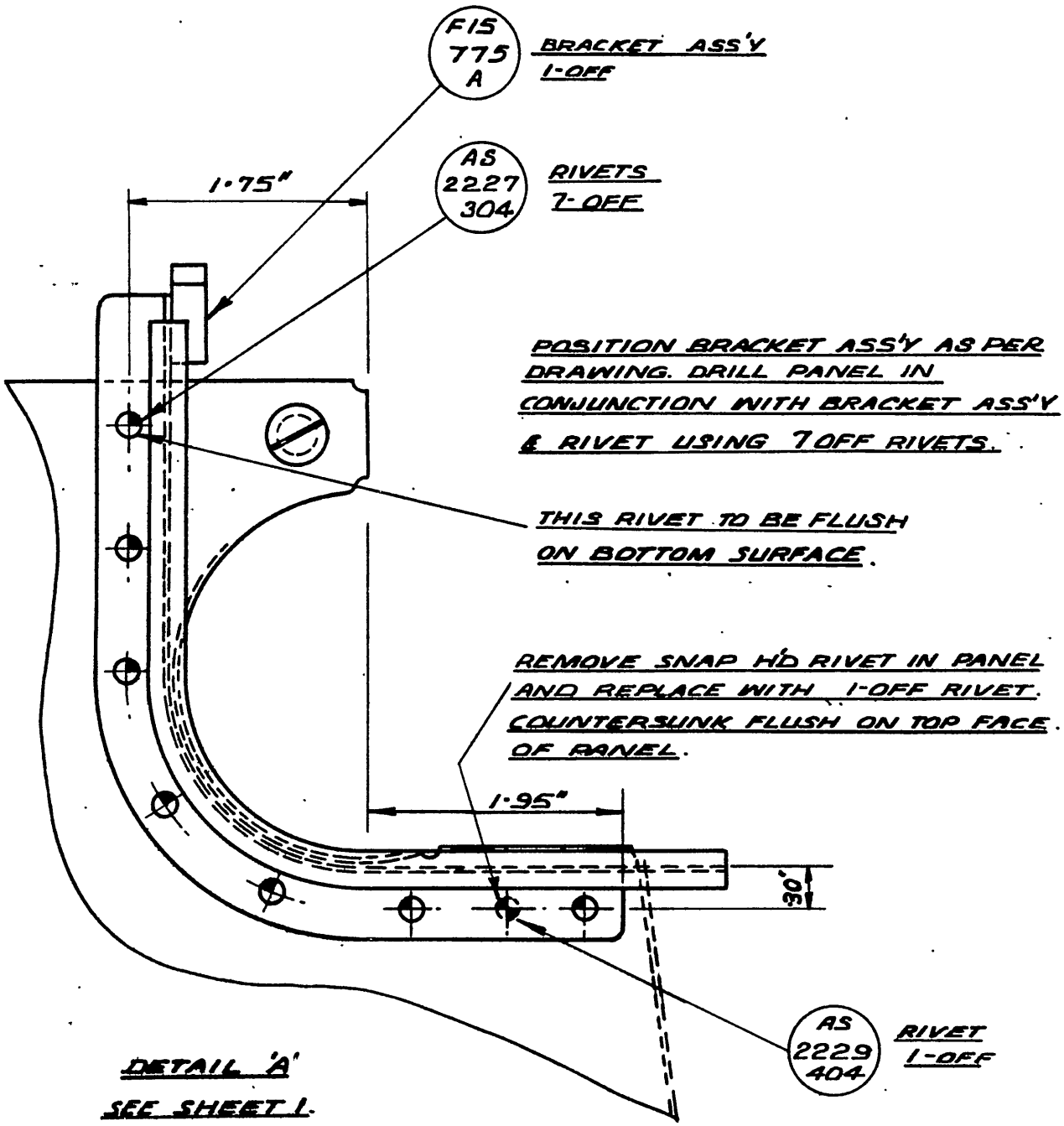
SHEET 1. OF 8 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	TO ELIMINATE GAPS IN FALSE FLOOR.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD. 248
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		SCALE		DRAWING NO.	A 12981 SHEET 1 OF 8
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L.	INITIALS	APPROVED



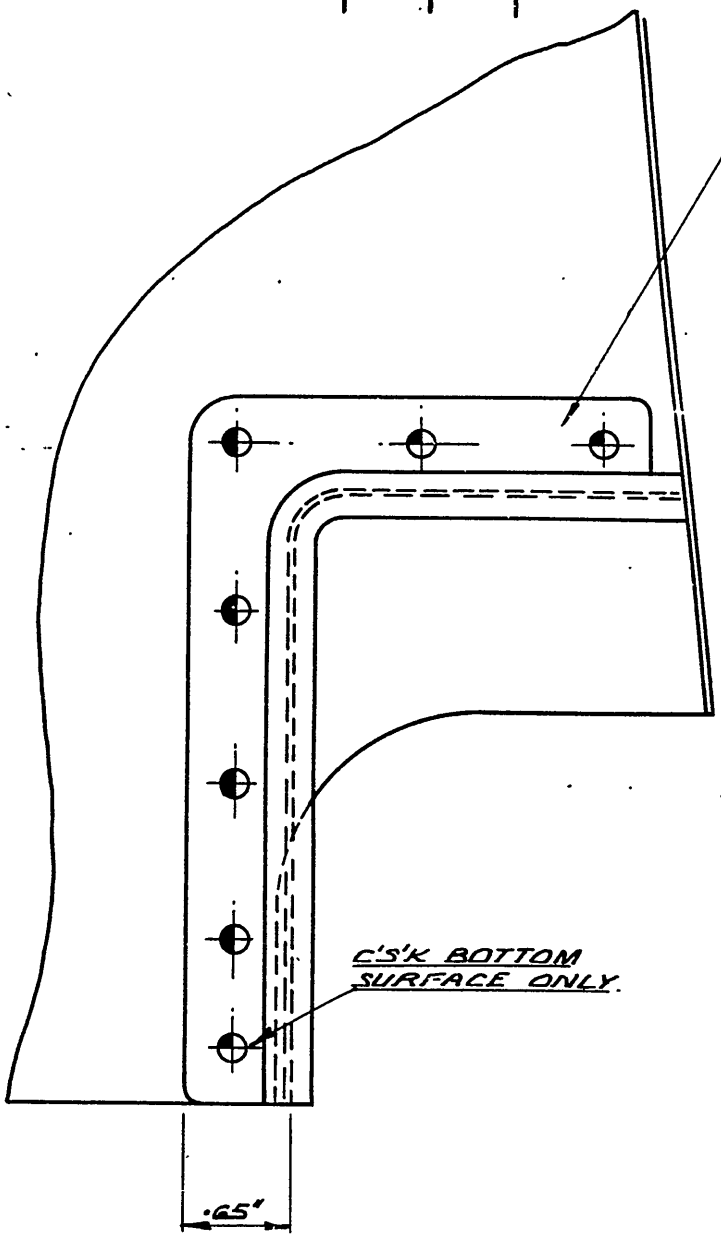
DE HAVILLAND DRAWING OOM 358 SHEET 2. OF 8 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	TO ELIMINATE GAPS IN FALSE FLOOR

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD. 248
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.CZI		SCALE		DRAWING NO.	A 12981 SHEET 2 OF 8
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	DRN.	INITIALS	APPROVED



F15 785 A — GUARD ASS'Y 1-OFF

AS 2227 405 — RIVETS 7-OFF

N.P.N. MAKE FROM SPONGE RUBBER SECTION AJ 1060 ATTACH WITH "PLIOBOND"

REMOVE FOUR RIVETS SHOWN THUS ⊕.
POSITION GUARD ASS'Y ITEM 8 USING FOUR RIVET HOLES FROM ABOVE. DRILL THREE HOLES IN PANEL SHOWN ⊕ IN CONJUNCTION WITH GUARD RIVET AS PER DRAWING.

DETAIL 'B'
SEE SHEET 1.

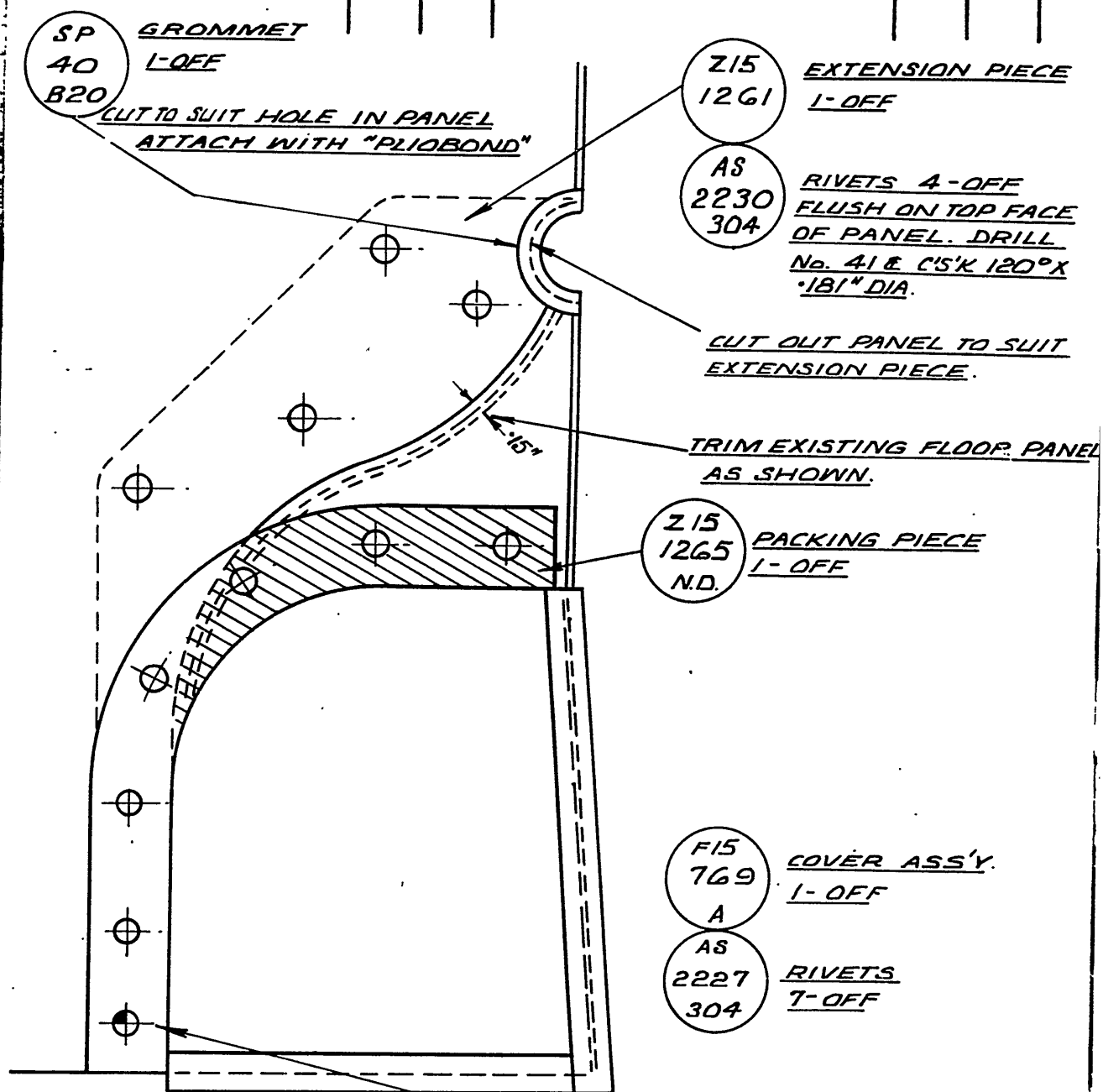
DE HAVILLAND DRAWING OOM 358 SHEET 3 OF 8 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	TO ELIMINATE GAPS IN FALSE FLOOR

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD. 248
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.2.1		SCALE		DRAWING NO.	A 12981 SHEET 3 OF 8
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. I. L	INITIALS	APPROVED



DETAIL 'C'
SEE SHEET 1

DE-HAVILLAND DRAWING OOM358 SHEET 4 OF 8 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	TO ELIMINATE GAPS IN FALSE FLOOR

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD. 248
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		SCALE		DRAWING NO.	A 12981 SHEET 4 OF 8
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	DRN	INITIALS	APPROVED

REMOVE EXISTING COVER PLATES F15-39 & F15-40 & REPLACE WITH:-

Z15 1299 PATCH PLATE 1-OFF L.H.

Z15 1300 PATCH PLATE 1-OFF R.H.

AS 2228 303 RIVET 6-OFF

F15 671 SCREEN 1-OFF

C'S'K ON BOTTOM FACE

C'S'K ON BOTTOM FACE

'F'

'F'

DRILL 2 HOLES No.26 IN CONJUNCTION WITH SCREEN.

DRILL 5 HOLES No.26 DRILL IN CONJUNCTION WITH GUARD ASS'Y. ATTACH 5 ANCHOR NUTS WITH C'S'K RIVETS. 10-OFF. FOR RIVETS DRILL No.40.

AGS 2007 B1 ANCHOR NUT 5-OFF

AS 2230 304 RIVETS 10-OFF

F15 663 GUARD ASS'Y. 1-OFF

A25 1B BOLT 5-OFF.

SP 13 8 WASHER 5-OFF

AS 1248 1B BOLT 2-OFF

AGS 2007 B1 ANCHOR NUT. 2-OFF.

AS 2230 304 RIVET 4-OFF

0.75"

SECTION F-F

DETAIL 'D' SEE SHEET 1.

DE HAVILLAND DRAWING OOM358

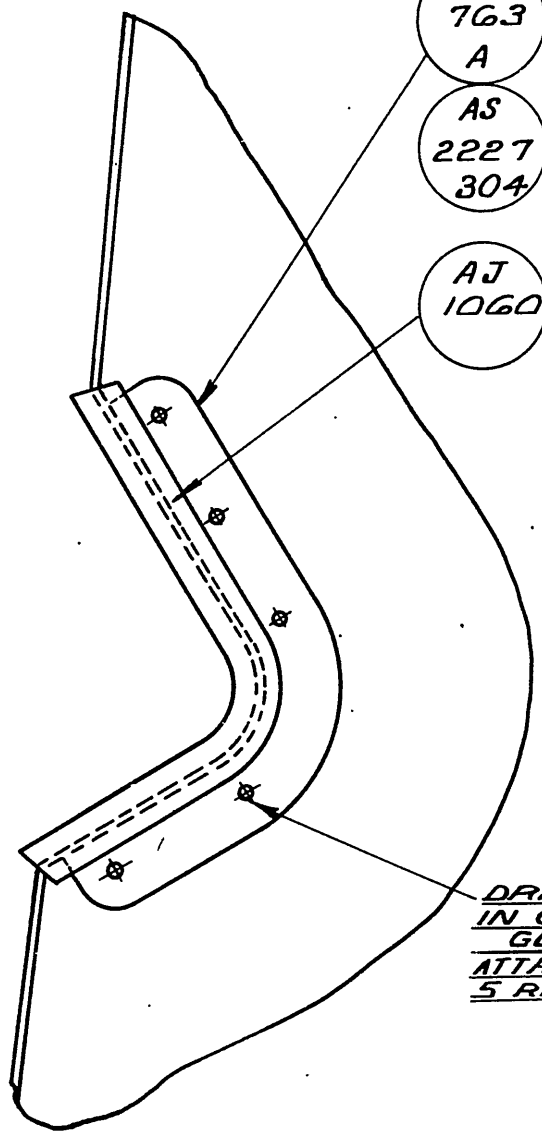
SHEET 5 OF 8 SHEETS

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	TO ELIMINATE GAPS IN FALSE FLOOR

LIMITS UNLESS STATED	MATERIAL		COMPONENT OF
DECIMALS ± .010"	SPEC.		MACHINE
FRACTIONS = 1/32"	TREATMENT		ENGINE
ANGLES ± ½°	FINISH		TECH. ORDER: VAMPIRE MOD 248
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.CZI	SCALE		DRAWING NO.: A 12981 SHEET 5 OF 8
	DRAWN	APPROVED	DRWG. SIZE: A
	TRACED	CHECKED	

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D I L	INITIALS	APPROVED



DETAIL 'E'
SEE SHEET 1.

DE HAVILLAND DRAWING OOM 358 . SHEET 6 OF 8 SHEETS

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	TO ELIMINATE GAPS IN FALSE FLOOR

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± 1°	FINISH		TECH. ORDER	VAMPIRE MOD. 248
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.2I		SCALE		DRAWING NO.	A 12981 SHEET 6 OF 8
		DRAWN	APPROVED		SIZE A
		TRACED	CHECKED		

DO NOT SCALE

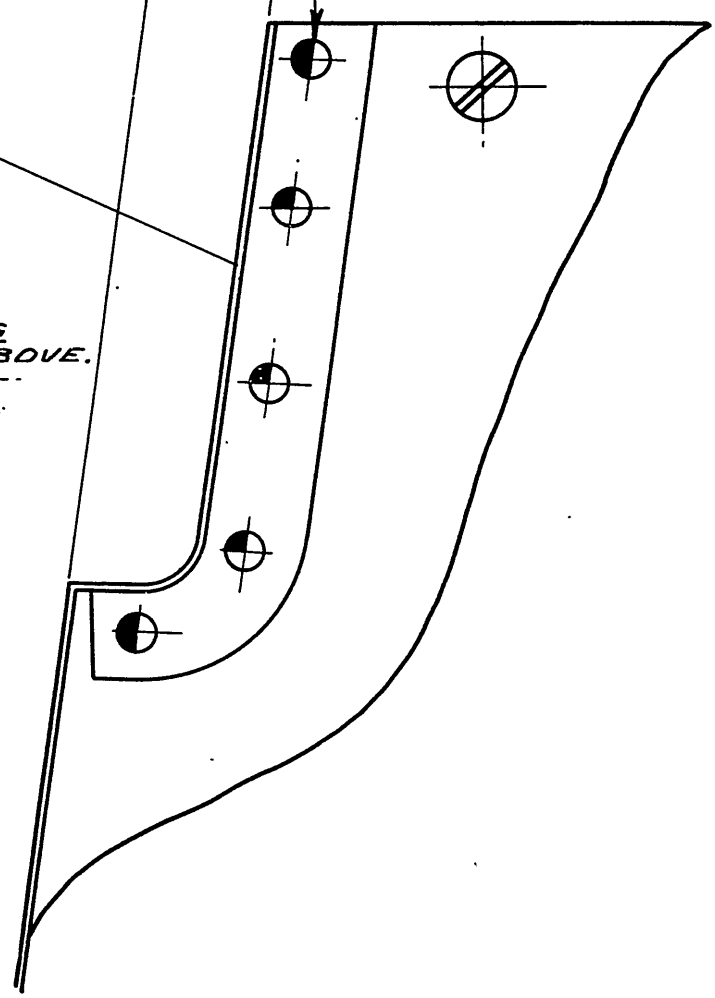
ISSUE NO.	DATE	ALTERATION	D. L	INITIALS	APPROVED

AS 2227 404 RIVET. 2-OFF C'S'K ON UNDER SURFACE.

F15 669 A GUARD ASS'Y 1-OFF

AS 2227 405 RIVET 3-OFF

.75"



REMOVE THREE OFF RIVETS SHOWN THUS ⊕
POSITION GUARD ASS'Y USING THREE RIVET HOLES FROM ABOVE.
DRILL TWO HOLES MARKED ⊕
AND RIVET AS PER DRAWING.

DETAIL 'F'
SEE SHEET 1.

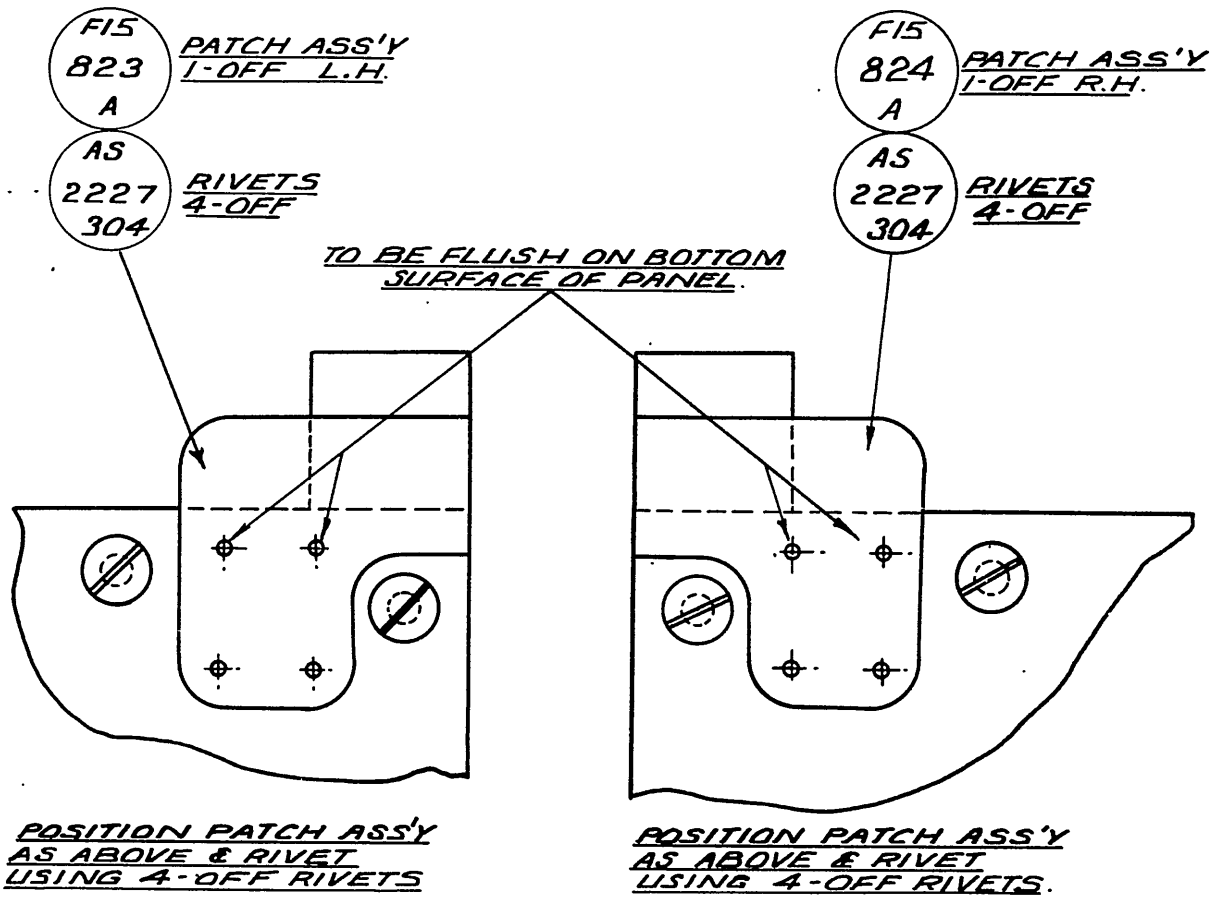
DE HAVILLAND DRAWING ODM 358 SHEET 7 OF 8 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	TO ELIMINATE GAPS IN FALSE FLOOR

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD. 248
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.2		SCALE		DRAWING NO.	A 12981 SHEET 7 OF 8
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. I. L	INITIALS	APPROVE



DETAIL 'G'
SEE SHEET 1.

DE HAVILLAND DRAWING 00M358

SHEET 8 OF 8 SHEETS

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	TO ELIMINATE GAPS IN FALSE FLOOR

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD. 248
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.CZI		SCALE		DRAWING NO.	A 12981 SHEET 8 OF 8
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

Class 2

PROVISION FOR TESTING CAMERA GUN CIRCUIT WITHOUT INTERFERING WITH THE GUN FIRING CIRCUIT

Reason for and Description of Modification

1. To eliminate risk of injury from guns whilst depressing the nose wheel safety micro switch, a new "Camera Test" switch is embodied to by-pass the nose wheel micro switch, whilst testing the camera gun circuit.

2. The following modification must be incorporated prior to or concurrently with this order:-

RAAF Mod	DH (Aust) Mod	Title
222	V219	Deletion of IFF Radio

Application

3. This modification is to be carried out in accordance with the relevant parts of the modification as follows:-

Part "A" - Mk 30 Vampire Fighter Aircraft.

Part "B" - Mk 31 Vampire Fighter Aircraft

PART "A"

Responsibility for Incorporation

4. Aircraft depots, operating units and contractors concerned are responsible for the incorporation of this modification. Trade mustering responsible: Electrical Fitter.

Action in Respect of Spares

5. Junction Boxes No 1 Part Nos OON857A/7 (Ident No A79/504183) and OON13A/10 (A79/504191) which have been ordered as spares for Mk 30 and 31 aircraft respectively are to be modified in accordance with chapter 11(c) paras (v), (vi), and (vii) of this order.

Orders Superseded or Cancelled

6. No orders are superseded or cancelled by this modification.

Equivalent Modifications

7. De Havilland (Aust) Mod V231 and Air Ministry Modification VAM3489 (Issued with A/L 189 - April 1960)

are equivalent modifications.

Supply

8. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1	G5C/4226	D5507	Switch, Rotax, Type	1	
2	H28C/6287	A32/B6	Screw, metal R'd H'd 4 BA x 3/16" long	4	
3	H28C/11067	AGS2035/B	Washer, Lock, Shakeproof	4	
4	G5A/500247	No 0	Lug, terminal	1	
5	H128F/64444	AS2230/304	Rivet, Alum Alloy, Csk H'd 3/32" D x $\frac{1}{4}$" long	2	
6	G5E/30161		Cable AA16 one core vin spec AS No 2U1	8'4"	
7	G5E/30155		Cable AA18 one core vin spec AS No 2U1	8'9"	
8	G5F/20060		Tubing, insulating, PVC 7 mm I/D, black	2'6"	
9	G5F/20057		Tubing, insulating, PVC 4 mm I/D, black	3'7"	
10	I32B/500082		Lacing, black PVC 1/16" dia	AR	
11	G5F/1378		Tape, insulating, PVC $\frac{5}{8}$" wide	AR	

Notes: (a) Items 1 to 9 inclusive will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland Modification Section. Units requiring modification sets are to demand from De Havilland Modification Centre, Bankstown.

(Issued with A/L 189 - April 1960)

(b) Items 10 and 11 are to be drawn from unit stores.

Disposal of Parts Removed

9. The following part will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
12		OON1115	Blanking Plate	1	

Note: Item 12 is to be disposed of by current authorised procedure.

Disposal of Parts in Stock

10. No action.

When the Modification is to be Incorporated

11. This modification is to be incorporated as soon as practicable and not later than the next aircraft "D" servicing after receipt of parts required.

PART A - MK 30 AIRCRAFT

Method of Incorporation

12. (a) Man-Hours Involved :

Approximately 34 man-hours will be required to carry out this modification.

(b) Special Tools, Jigs, etc:

No special tools and jigs are required to carry out this modification.

(c) Sequence of Operations :

(i) Remove gun bay doors.

(ii) Disconnect the accumulator leads.

(iii) Remove ejection seat.

(iv) Disconnect all wiring at Junction Box 1 and remove the box from the aircraft, retaining attachment items for further use.

(v) Remove front cover of Junction Box 1 and locate the existing Blanding Plate (item 12) (fitted by Vampire Mod 222-DH Mod V219) adjacent to the generator field switch on the top panel of the box. Remove and discard this item together with its fixing screws and nuts.

(vi) Refer to Drawing A13215 sheet 1 and proceed to modify the Junction Box as shown using switch (item 1) 1 off; screw (item 2) 4 off; washer (item 3) 4 off and rivet (item 5) 2 off.

Note: Care must be taken not to damage existing equipment and to prevent swarf and dirt from entering the box whilst carrying out modification.

(vii) Refer to drawing A13215 sheet 2. Rewire the Junction Box as shown using terminal lug (item 4) cable (item 7) as required, and cable (item 6) as required, and route the new cables with existing wiring, whipping with PVC lacing (item 10) as required at suitable intervals. After modifying the Junction Box replace front cover and repart number it to 00N857A/8.

(viii) Refit the modified junction box to its original position using attachment items retained in para (iv) and connect up all existing wiring previously disconnected.

(ix) Locate existing loom "C16A" fitted to the plug sealing plate on the aft face of Bulkhead No 2 and disconnect it at this point and remove whipping securing it along its route so that it may be lowered approximately two feet to enable modification to be carried out.

(x) Refer to drawing A13215 sheet 3 and modify the above loom as shown using cable AA16 one core vin (item 6) 3' - 3" long; nylex tubing (item 9) 2' - 6" long and PVC lacing (item 10) as required. After modifying the loom repart number it to 00N1169A.

(xi) Assemble the main section of the loom back to its original position using PVC lacing (item 10) as required.

(xii) At the relay panel locate the existing link cable coded "GF9" running between terminal 4 on the "camera gun" relay and terminal 1 on the "Guns Group 1 & 2" relay and remove it from the panel.

(xiii) Route the new cable coded "GF9" with existing cable (part of Loom "C16A") up along the rear face of Bulkhead No 2 and then into terminal 4 on the "Camera Gun" Relay. Whip the new cable to the existing cable at various intervals.

(xiv) Assemble ejection seat into position.

(xv) Connect up leads to accumulators.

(xvi) Refit gun bay doors.

(d) Tests : Function the circuit to check the installation.

(e) Recording : Record the incorporation of this modification in airframe log book.

PART B - MK 31 AIRCRAFT

Method of Incorporation

13. (a) Man-Hours Involved : Approximately 36 man-hours will be required to carry out this modification.

(b) Special Tools, Jigs, etc : No special tools and jigs are required to carry out this modification.

(c) Sequence of Operations :

(i) Remove gun bay doors.

(ii) Disconnect the accumulator leads.

(iii) Remove ejection seat.

(iv) Disconnect all wiring at Junction Box 1 and remove the box from the aircraft, retaining attachment items for further use.

(v) Remove front cover of the Junction Box 1 and locate the existing Blanking Plate (item 12) (fitted by Vampire Mod 222 - DH Mod V219) adjacent to the generator field switch on the top panel of the box. Remove and discard this item together with its fixing screws and nuts.

(vi) Refer to DH drawing 00M410 sheet 1 and proceed to modify the Junction Box as shown using switch (item 1) 1 off; screw (item 2) 4 off; washer (item 3) 4 off and rivet (item 5) 2 off.

Note: Care must be taken not to damage any existing equipment and to prevent swarf and dirt from entering the box whilst carrying out modifications.

(vii) Refer to drawing A13215 sheet 2. Rewire the Junction Box as shown using terminal lug (item 4), cable AA16 one core vin (item 6) as required, cable AA18 one core vin (item 7) as required and route the new cables with existing wiring whipping with PVC lacing (item 10) as required at suitable intervals.

(viii) After modifying the Junction Box, replace front cover and repart number it to 00N13A/11.

(ix) Locate existing Loom "C16A" fitted to the Plug Sealing Plate on the Aft face of Bulkhead No 2 and disconnect it at this point and remove whipping securing it along its route so that it can be lowered approximately two feet to enable modifications to be carried out.

(x) Refer to drawing A13215 sheet 3 and modify the above Loom as shown using cable AA16 one core vin (item 6) as required, 7 mm I/D PVC Tubing (item 8) as required and black PVC Lacing (item 10) as required. After modifying the Loom, repart number it to 00N1165A.

(xi) At the relay panel locate existing link cable coded "GF6" running between terminal 2 on the "Guns Group 1 &2" relay and terminal 5 on the "Master" relay and remove it from the panel.

(xii) Assemble the main section of loom C16A back to its original position using black PVC lacing (item 21) as required. Route the new cables coded "GF6" & "GF6A" with existing cable (part of Loom "C6A") up along the rear face of Bulkhead No 2 to the relay panel on underside of ammo-bay floor whipping with black PVC lacing (item 10) as required four places. Connect ends coded "GF6" "GF6A" as follows:-

"GF6A" connect to terminal 2 - Gun Group 1 & 2 relay.

"GF6" connect to terminal 5 - Master relay.

(Issued with A/L 189 - April 1960)

(xiii) Refer to drawing A13215 sheet 4. In the cockpit, locate existing loom "C2" previously disconnected from Junction Box 1 in para (iv) and modify the loom as shown using cable AA18 one core vin (item 7) as required, 4 mm I/D PVC Tubing (item 9) as required and black PVC Lacing (item 10) as required. After modifying Loom "C2" repart number it to OON1163A.

(xiv) Route new cable coded "GF5" forward with existing looms on stbd cockpit wall, across behind the instrument panels and down into the existing terminal "GF5" on the 5 way terminal block on the bottom aft face of the lower centre Instrument Panel whipping with Black PVC lacing (item 10) at various intervals.

(xv) Assemble the modified Junction Box 1 back to its original position using existing attachment items retained in para (iv) and connect up all existing wiring previously disconnected.

(xvi) Assemble ejection seat into position.

(xvii) Connect up leads to accumulators.

(xviii) Refit gun bay doors.

(d) Tests : Function the circuit to check the installation.

(e) Recording : Record this modification in the aircraft log book.

Drawings

14. Four (4) sheets of drawing A13215 are attached.

Effect on Weight and Balance of the Aircraft

15. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 150/8/1596 and 150/4/8621[II]

Attachments : Drawing A13215 Sheets 1 to 4.

Date of Issue : 27th April 1960.

(Issued with A/L 189 - April 1960)

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L	INITIALS	APPROVE

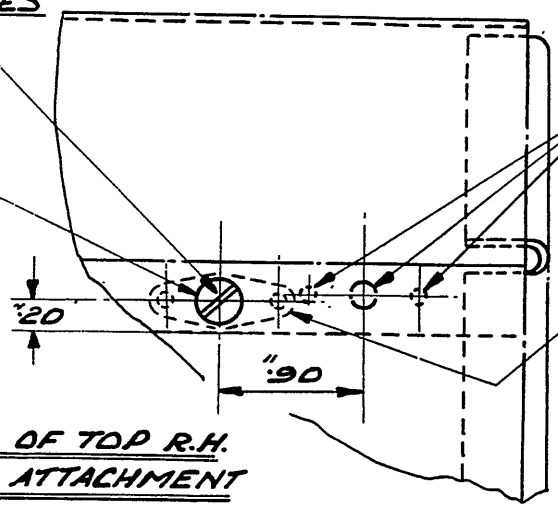
DRILL NO.26 HOLES IN LID & FLANGE

RETAIN EXISTING SCREW

EXISTING ANCHOR NUT REDUNDANT HOLES IN LID & TOP PANEL FLANGE.

EXISTING ANCHOR NU REPOSITIONED. ATTAC WITH:-

AS 2230 304 RIVET 2 OFF



REPOSITIONING OF TOP R.H. END LID FIXING ATTACHMENT

THESE PARTS INTRODUCED ON VAM. MOD. 222 - D.H. MOD. NO. 1919.

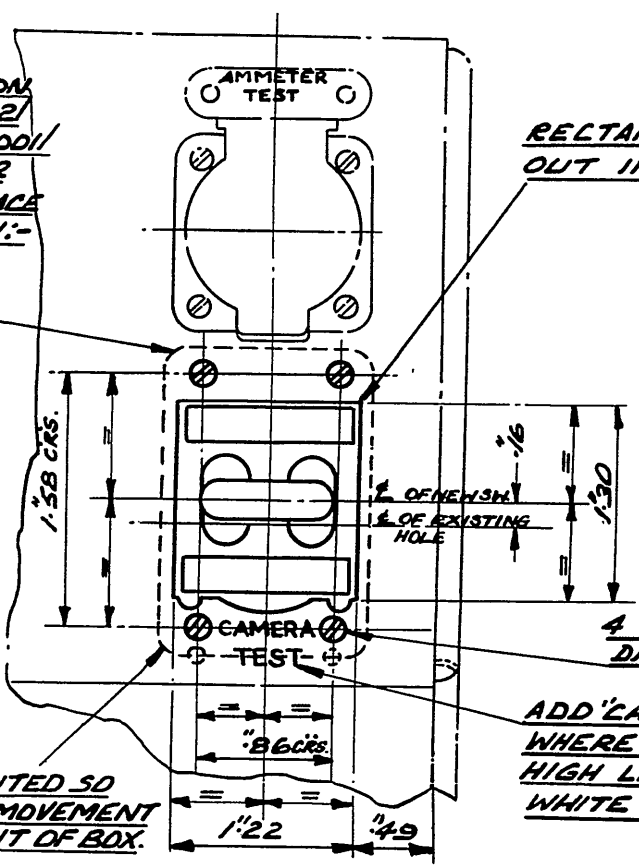
REMOVE EXISTING BLANKING PLATE ODN 1115 1-OFF, SCREW A32/A12 2 OFF, NUT AGS2001/A1 2 OFF AND WASHER 3P13/A 2 OFF & REPLACE AFTER REWORK WITH:-

SW. ROTAX TYPE D5507 1 OFF — G5C/4226

R'D H'D SCREW 4 OFF — A32 B6

SHAKEPROOF WASHER 4BA 4 OFF — AGS 2035 B

FIT WASHERS BETWEEN PANEL AND SWITCH



RECTANGULAR CUT-OUT IN TOP PANEL

4 HOLES NO.32 DRILL

ADD "CAMERA TEST" WHERE SHOWN IN 1/8" HIGH LETTERS USING WHITE PAINT.

SWITCH TO BE MOUNTED SO THAT TOGGLE 'ON' MOVEMENT IS TOWARDS FRONT OF BOX.

DETAIL SHOWING MODIFICATIONS AND ADDITION OF SWITCH ON JUNCTION BOX 1.

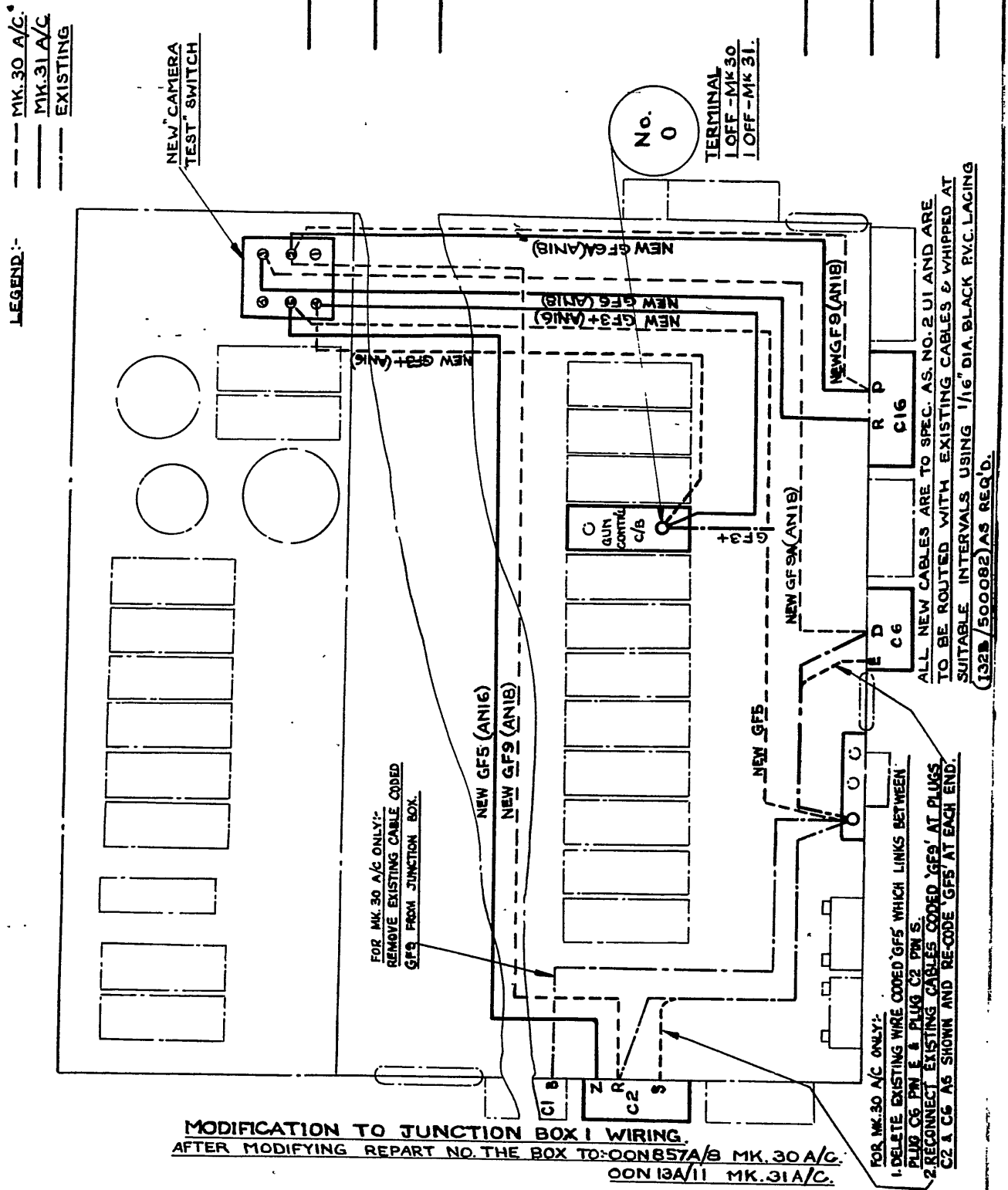
DE HAVILLAND DRAWING NO. 00M410 SHEET 1 OF 4 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING.	PROVISION FOR TESTING CAMERA GUN CIRCUIT IN SAFETY.

LIMITS UNLESS STATED		MATERIAL			COMPONENT OF	
DECIMALS	± .010"	SPEC.			MACHINE	
FRACTIONS	± 1/32"	TREATMENT			ENGINE	
ANGLES	± ½°	FINISH			TECH. ORDER	VAMPIRE MOD N°251
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		SCALE			DRAWING NO.	A13215 SHEET 1 OF 4
		DRAWN		APPROVED		
		TRACED		CHECKED		

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. T. L	INITIALS	APPROVED



MODIFICATION TO JUNCTION BOX 1 WIRING.
AFTER MODIFYING REPART NO. THE BOX TO:- OON 857A/8 MK. 30 A/C.
OON 13A/11 MK. 31 A/C.

DE HAVILLAND DRAWING NO. OOM 410 SHEET 2 OF 4 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING.	PROVISION FOR TESTING CAMERA GUN CIRCUIT IN SAFETY.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD N°251.
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.2		SCALE		DRAWING NO.	A13215 SHEET 2 OF 4
		DRAWN	APPROVED		
		TRACED	CHECKED		

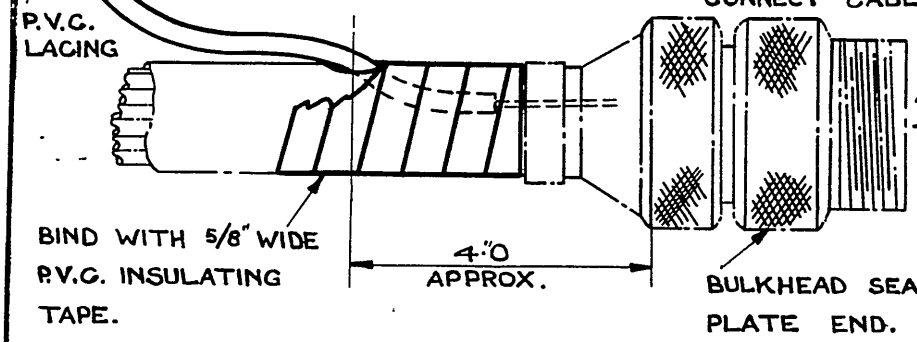
DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L.	INITIALS	APPROV

GF9

CABLE TO CONSIST OF AA16 ONE CORE VIN. TO SPEC. AS NO.2U1, 3'3" LONG, COVERED WITH 4 M/M. I/DIA. NYLEX TUBING AS SHOWN. (2'6" LONG)

INTRODUCE A HOLE IN THE OUTER NYLE TUBE OF THE CONDUIT ASS'Y. TO ACCEPT THE CABLE, THEN UNSCREW THE COUPLIN NUT AND PULL BACK THE NYLEX TUBING. CONNECT CABLE END TO PIN 'P.'



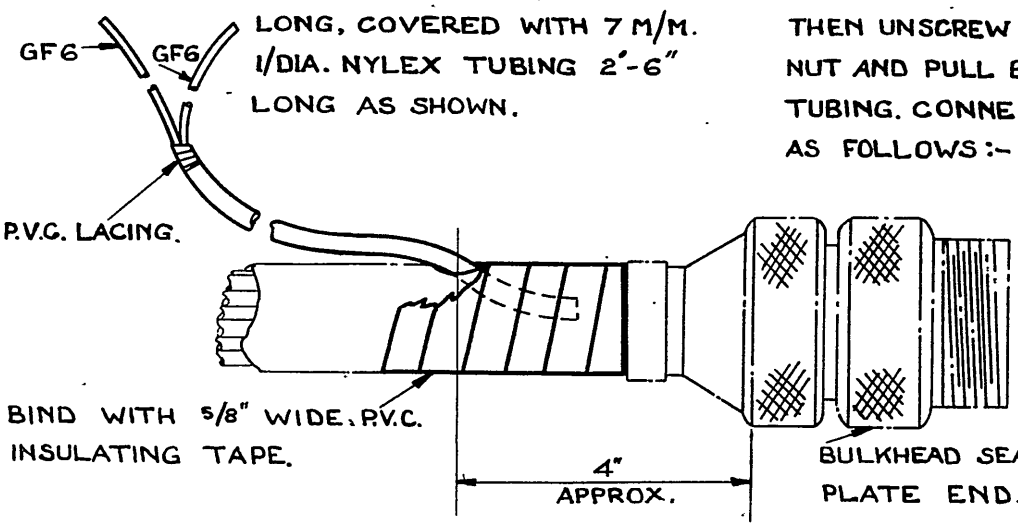
AFTER REWORK RE-PART NO TO 00N1169A

REWORK TO CONDUIT ASS'Y. "C16A" MK.30.A/C. (MODIFIED IN AIRCRAFT)

CABLE TO CONSIST OF TWO AA16 ONE CORE VIN. CABLES TO SPEC. AS NO.2U1, EACH 3'-3" LONG, COVERED WITH 7 M/M. I/DIA. NYLEX TUBING 2'-6" LONG AS SHOWN.

INTRODUCE A HOLE IN THE OUTER NYLEX TUBE OF THE CONDUIT ASS'Y. TO ACCEPT THE CABLE, THEN UNSCREW THE COUPLING NUT AND PULL BACK THE NYLEX TUBING. CONNECT CABLE ENDS AS FOLLOWS:-

PIN	CODE
P	GF6A
R	GF6



AFTER REWORK RE-PART NO. TO 00N1165A

REWORK TO CONDUIT ASS'Y. 'C16A' MK.31A/C. (MODIFIED IN AIRCRAFT)

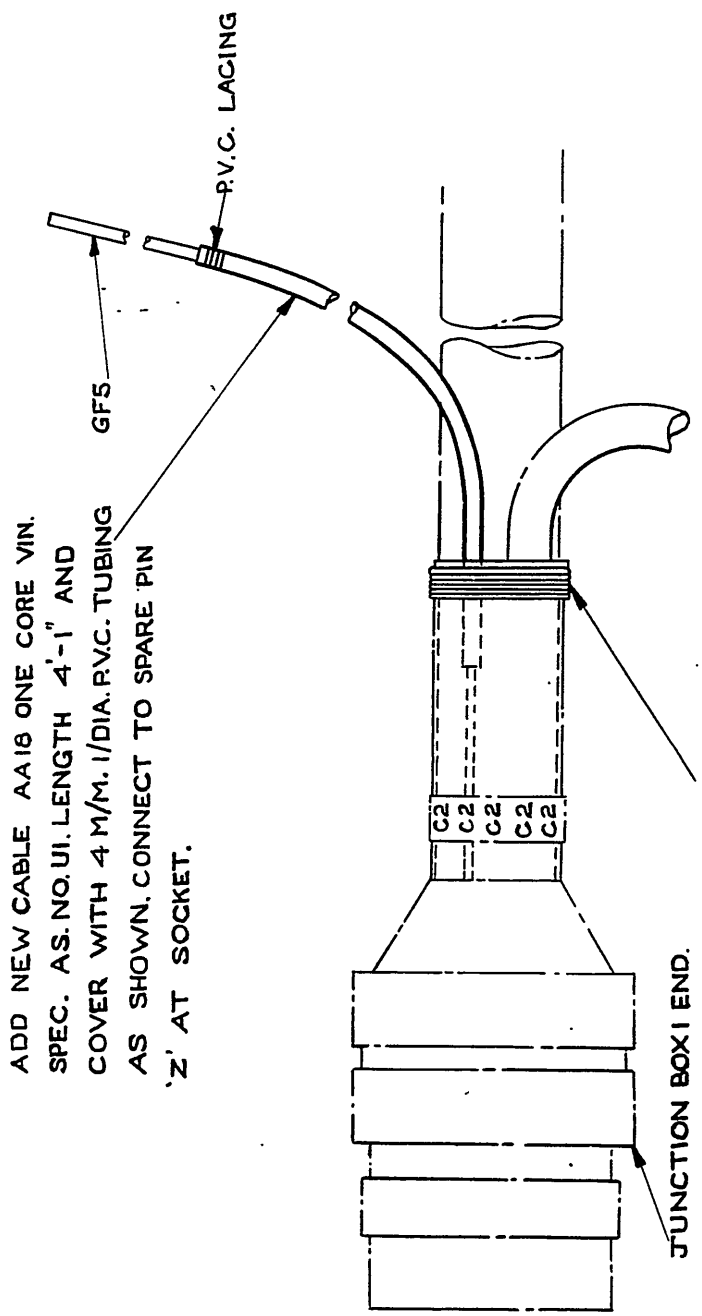
DE HAVILLAND DRAWING NO. 00M410 SHEET 3 OF 4 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR. DIRECTORATE OF AIRCRAFT ENGINEERING	PROVISION FOR TESTING CAMERA GUN CIRCUIT IN SAFETY.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± 1°	FINISH		TECH. ORDER	VAMPIRE MOD N°251
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		SCALE		DRAWING NO.	A13215 SHEET 3 OF 4
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L.	INITIALS	APPROVED



AFTER REWORK RE-PART NO. TO 00N1163A

REWORK TO CONDUIT ASS'Y 'C2' MK.31 A/C. ONLY. (MODIFIED IN AIRCRAFT)

DE HAVILLAND DRAWING NO. 00M 410 SHEET 4 OF 4 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR. DIRECTORATE OF AIRCRAFT ENGINEERING.	PROVISION FOR TESTING CAMERA GUN CIRCUIT IN SAFETY.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD N°251
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C21		SCALE		DRAWING NO.	A13215 SHEET 4 OF 4
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

AAP 721:79, VOL 2, PART 2

VAMPIRE MODIFICATION NO 252

Class 2

PROVISION FOR TESTING GUNS WHEN AIRCRAFT IS ON THE GROUND

Reason for and Description of Modification

1. Prior to embodying this modification it is necessary, in order to function the gun firing circuit, to depress the nose wheel gun safety micro switch manually. To perform this operation ground personnel are, of necessity, in close proximity to the gun muzzles and therefore subject to some degree of danger due to possible inadvertent firing of the guns. This modification therefore introduces a spring return (to OFF position) toggle switch in the gun bay, this switch being connected in parallel with the nose wheel gun safety micro switch thereby "shorting" it out of the circuit when the toggle is operated.

This modification is written in two parts as follows:-

PART "A" - Vampire Mk 30 Aircraft

PART "B" - Vampire Mk 31 Aircraft

Application

2. This work is to be carried out on all Vampire Mk 30 and Mk 31 aircraft.

Responsibility

3. Operating units, aircraft depots and contractors concerned, will be responsible for the incorporation of this modification. The mustering responsible is Electrical Fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modification

6. De Havilland (Aust) Mod V232 is the equivalent modification.

PART "A"

Supply

7. The following parts are required for one complete modification set:-

(Issued with A/L 151 - June 1959)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1	G5C/4221	D5405	Switch, Rotax	1	
2	G5C/4320		Switch Guard	1	
3	-	N003983	Bracket	1	
4	-	OON1137A	Cable Assembly	1	
5		15N2963	Label	1	
6	H28C/3426	A32/B8	Screw, MS, Metal, Rd Hd, 4BA x $\frac{1}{4}$" long	2	
7	H28C/2288	AGS252/19	Woodscrew Brass Rd Hd No 4 x $\frac{3}{8}$" long	4	
8	H28C/11067	AGS2035/B	Washer, Shakeproof, Steel, internal teeth, 4BA	2	
9	H28/26101	DHS30Mk4	"P" Clips	9	
10	H28C/2649	AGS253/20	Woodscrew, MS Rd Hd No 4 x $\frac{1}{2}$" long	9	
11	I32A/94		Cord, Stringing, Spec 4F35	AR	
12	K4/152		Beeswax	AR	
13	K3/346		Colour, Identification, Red Matching, BSI, Colour 358, Spec 3K5	AR	

Notes: (a) Items 1 to 10 inclusive will be delivered to De Havilland Modification Section. De Havilland Modification Section will issue these items on demand for "Part "A" of Vampire Modification No 252" by units concerned.

(b) Items 11 to 13 inclusive will be drawn from unit stores as required.

(Issued with A/L 151 - June 1959)

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Stock

9. Not applicable.

When the Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable and not later than the next "D" servicing of aircraft after receipt of parts required.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 10 man-hours will be required to carry out this modification.

(b) Special Tools, Jigs, etc : No special tools and jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Remove gun bay doors.

(ii) Disconnect accumulator leads.

(iii) Remove detachable nose panel.

(iv) Remove port cannon spout fairing.

(v) Refer to drawing A13095, sheet 2, and install switch (item 1), switch guard (item 2), bracket (item 3), and label (item 5) as shown using screws (item 6), washers (item 8) 2 off each and woodscrews (item 7) 4 off.

(vi) Refer to drawing A13095, sheet 1 and install cable (item 4) as shown, routing it along the port side and clipping it to existing ferrules on underside of cockpit floor using clips (item 9) and woodscrews (item 10) 9 off each.

(vii) Connect the cable to the centre and forward terminals of the new switch in the gun bay, and to terminals GF10 and GF5 at the two way terminal block on the starboard side of bulkhead 1 in the nose compartment.

(viii) Refer to drawing AL3095, sheet 2, clean exterior of aircraft locally at new stencil position and add new lettering using paint (item 13) as required.

(ix) Replace the port cannon spout fairing.

(x) Function gun firing circuit (see para (d) Tests).

(xi) Reconnect accumulator leads.

(xii) Replace the gun bay doors.

(xiii) Replace the detachable nose panel.

(d) Tests : Function the gun firing circuit whilst operating the test switch.

PART B

Supply

12. The following parts are required for one modification set:-

Item No	Ident No	Part No	Nomenclature	No Off	Stores Class
14	5CW/4221	D5405	Switch, Rotax	1	
15	5CW/4320		Switch Guard	1	
16		N003983	Bracket	1	
17		N003989	Cable Assembly	1	
18		15N2963	Label	1	
19	H28C/3426	A32/B8	Screw, MS, Metal, RD HD, 4BA x $\frac{1}{4}$" long	2	
20	H28C/2288	AGS252/19	Woodscrew Brass Rd Hd, No 4 x $\frac{3}{8}$" long	4	
21	H28C/11067	AGS2035/B	Washer, Shakeproof, Steel, internal teeth, 4BA	2	

Item No	Ident No	Part No	Nomenclature	No Off	Stores Class
22	H28/26101	DHS30Mk4	"P" Clips	9	
23	H28C/2649	AGS253/20	Woodscrew, MS, Rd Hd, No 4 x $\frac{1}{2}$" long	9	
24	I32A/94		Cord, Stringing, Spec 4F35	AR	
25	K4/152		Beeswax	AR	
26	K3/346		Colour, Identification, Red Matching, BSI, Colour 358, Spec 3K5	AR	

Notes: (a) Items 14 to 23 inclusive will be delivered to De Havilland modification Section. De Havilland Modification Section will issue these items on demand for Part "B" Vampire Modification No 252" by Units concerned.

(b) Items 24 to 26 inclusive will be drawn from unit stores as required.

Disposal of Parts Removed

13. Not applicable.

Disposal of Parts in Stock

14. Not applicable.

When the Modification is to be Incorporated

15. See Part "A".

Method of Incorporation

16. (a) Man-Hours Involved : Approximately 10 man-hours will be required to carry out this modification

(b) Special Tools, Jigs, etc : No special tools and jigs are required to incorporate this modification.

(Issued with A/L 151 - June 1959)

(c) Sequence of Operations :

(i) Remove gun bay doors.

(ii) Disconnect accumulator leads.

(iii) Remove detachable nose panel.

(iv) Remove port cannon spout fairing.

(v) Refer to DH (Aust) drawing A13095, sheet 2 and install switch (item 14), switch guard (item 15), bracket (item 16), and label (item 18), as shown using screws (item 19), washers (item 21) 2 off each and woodscrews (item 20) 4 off.

(vi) Refer to DH (Aust) drawing A13095, sheet 1 and install cable (item 17) as shown, routing it along the port side and clipping it to existing ferrules on underside of cockpit floor using clips (item 22) and woodscrews. (item 23) 9 off each.

(vii) Connect the cable to the centre and forward terminals of the new switch in the gun bay, and to terminals GF3+ and GF5 at the two way terminal block on the starboard side of bulkhead 1 in the nose compartment.

(viii) Refer to drawing A13095, sheet 2, clean exterior of aircraft locally at new stencil position and add new lettering using paint (item 26) as required.

(ix) Replace the port cannon spout fairing.

(x) Function gun firing circuit (see para (d) Tests).

(xi) Reconnect accumulator leads.

(xii) Replace the gun bay doors.

(xiii) Replace the detachable nose panel.

(d) Tests : Function the gun firing circuit whilst operating the test switch.

(e) Recording : Record the modification in the aircraft log book.

(Issued with A/L 151 - June 1959)

Drawings

18. Drawing No A13095 consisting of 2 sheets is attached.

Effect on Weight and Balance

19. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, Nos 150/8/1396 and 150/4/8621^{II}.

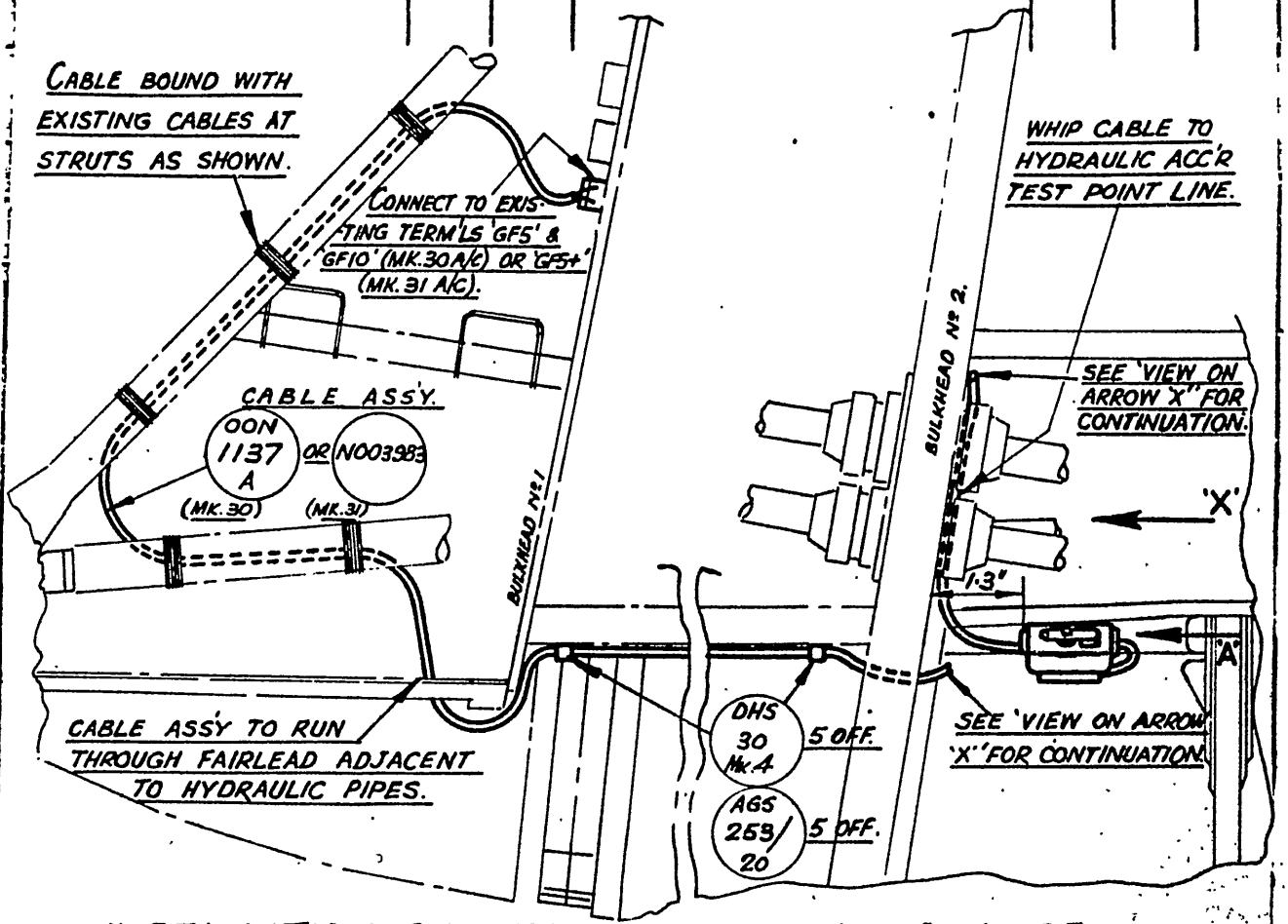
Attachments : Drawing A13095 Sheets 1 and 2.

Date of Issue : 3rd June 1959.

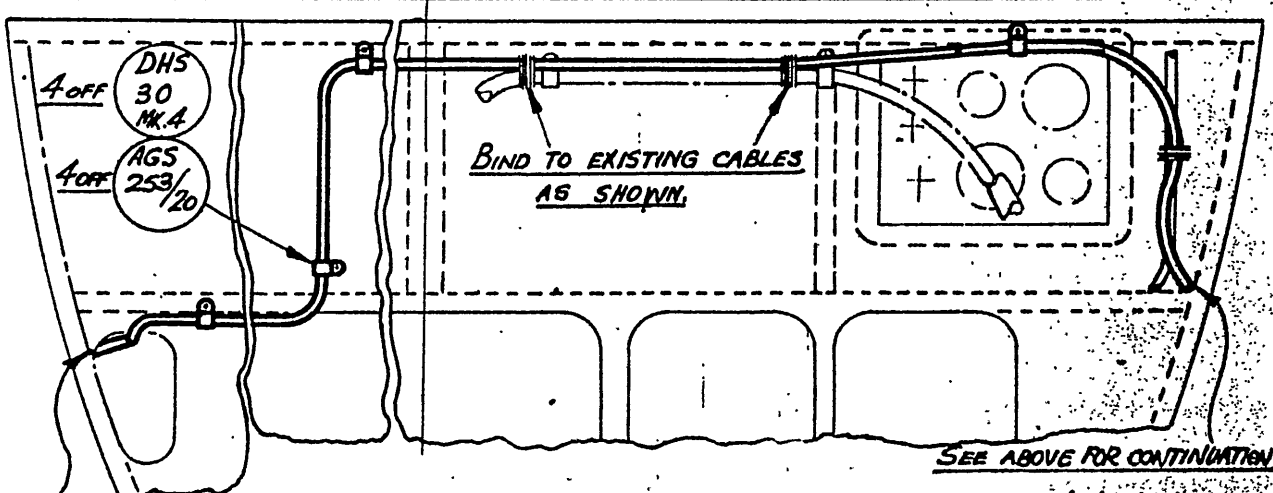
(Issued with A/L 151 - June 1959)

DO NOT SCALE

ISSUE NO	DATE	ALTERATION



INSTALLATION OF WIRING IN GUN BAY & NOSE.



VIEW ON ARROW 'X' (REAR OF B'HD. 2)

DE HAVILLAND DR'G No 00M384 Sht. 1

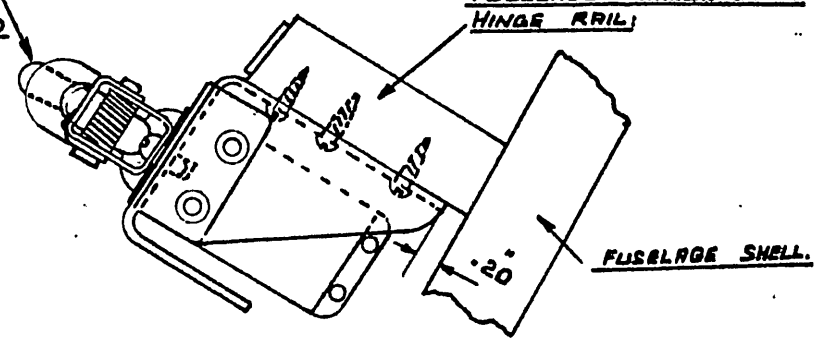
REFERENCE	ISSUED BY	TITLE
		PROVISION FOR TESTING GUNS WHEN AIRCRAFT IS ON THE GROUND.

LIMITS UNLESS STATED	MATERIAL	COMPONENT OF	
DECIMALS ± .010"	SPEC.	MACHINE	VAMPIRE.
FRACTIONS ± 1/64"	TREATMENT	ENGINE	
ANGLES ± 1°	FINISH	TECH. ORDER	VAMPIRE MOD. 252
SURFACE FINISH	SCALE	DRAWING No.	A-13095 SHEET 1.
AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.D.	DRAWN	APPROVED / CHECKED	ISSUE A

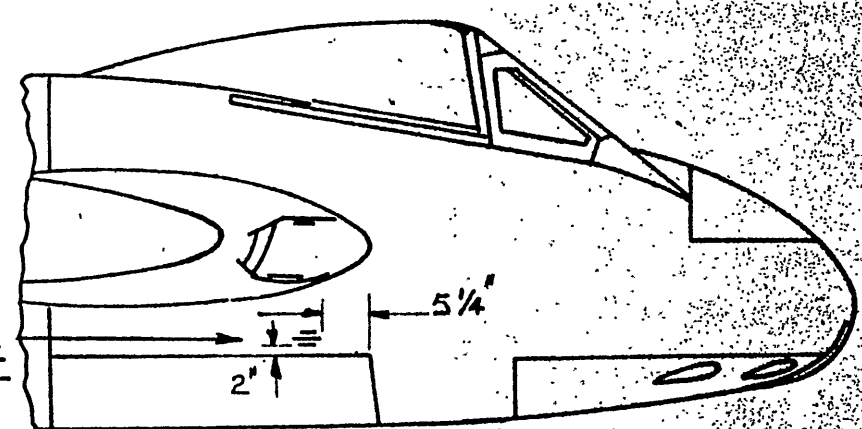
DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. I. L.	INITIALS	APPROVED

SCW 4221	SWITCH 1-OFF	TERMINAL No. 1 OF THIS SWITCH TO FACE FORWARD.
SCW 4320	SWITCH GUARD 1-OFF	
NAA 3983	BRACKET 1-OFF	
ISN 2963	LABEL 1-OFF	
A32 B8	SCREW 4BA x 1/4" RD. HD MILD STEEL 2-OFF	
AGS 252 19	WOODSCREW No. 4 x 3/8" RD. HD. BRASS 4-OFF	
AGS 2035 B	SHAKE PROOF WASHER 2-OFF	



VIEW ON ARROW "A" (See SHEET 1)



ADD THE FOLLOWING STENCIL ON STB'D SIDE OF AIRCRAFT IN RED LETTERS.

GUNFIRE — 1/2" HIGH LETTERS.
TEST SWITCH — 1/2" " "
INSIDE 1/4" " "
.2 BETWEEN LETTERS.

ADDITION OF EXTERNAL MARKING.

DE HAVILLAND DR'G. No. DOM 384 SHT. 2

REFERENCE	ISSUED BY	TITLE
		PROVISION FOR TESTING GUNS WHEN AIRCRAFT IS ON THE GROUND

LIMITS UNLESS STATED	MATERIAL	COMPONENT OF	
DECIMALS ± .010"	SPEC.	MACHINE	VAMPIRE.
FR ST. ± 1/64"	TREATMENT	ENGINE	
ANGLES ± 1°	FINISH	TECH. ORDER	VAMPIRE MOD 252
SURFACE FINISH		DRAWING NO.	A-13095 SHEET 2.
AUSTRALIAN STANDARD ENG DRWG. PRACTICE A.S.C.2	DRAWN / TRACED	APPROVED / CHECKED	DRWG. SIZE A

AAP 721:79, Vol 2 Pt 2 VAMPIRE MODIFICATION NO 253

Class 2

TO REINFORCE OUTER FLAP AND SPEED BRAKE SHROUD

Reason for and Description of Modification

1. It has been found that rivets have become loose on the outer flap shroud and speed brake shroud stiffener rib attachment, and that several cracks have occurred in these shroud skins. To obviate these defects, this modification introduces additional reinforcing to strengthen these areas.

Application

2. This work is to be carried out on all Mk 30, 31 33/35A aircraft and on Mk 35 aircraft A79/600 to A79-630 inclusive. A79-631 and subsequent Mk 35 aircraft will have this modification incorporated by the manufacturer.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command. Future spare wings will have this modification incorporated.

Ident No	Part No	Nomenclature	Remarks
A79/500240	00D25A	Wing complete LH (spares)	Rework to paras 11(c) (ii) to (xiii) inclusive and if DH (Aust) Mods V245; V130 Pt B; 181; 240; RAAF Mod No 290; 132; 101; 270 have been, or are being, incorporated concurrently with this order re-identify as Part No 00D1523A LH Ident No A79/504133.
A79/500241	00D26A	Wing complete RH (spares)	Rework to para 11(c) (ii) to (xiii) inclusive and if DH (Aust) Mods V245; V102; V130 Pt B; V181; V240; RAAF Mod Nos 290; 62; 132; 101;

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Ident No	Part No	Nomenclature	Remarks
			270 have been, or are being incorporated concurrently with this order, re-identify as Part No OOD1525A RH Ident No A79/504134.
A79/501851	OOD1103A	Wing complete LH (spares) Mk 31	Rework to paras 11 (c) (ii) to (xiii) inclusive and if DH (Aust) Mods V181; V240; V245 RAAF Mod Nos 101, 270, 290 have been, or are being, incorporated concurrently with this order re-identify as Part No OOD1523A LH Ident No A79/504133.
A79/501852	OOD1104A	Wing complete RH (spares) Mk 31	Rework to paras 11 (c) (ii) to (xiii) inclusive and if DH (Aust) Mods V181; V240; V245; RAAF Mod Nos 101; 270; 290 have been, or are being, incorporated concurrently with this order re-identify as Part No OOD1525A RH Ident No A79/504134.
A79/502151 A79/502152	W15-15A W15-17A	Wing spare LH Wing spare RH	Rework to para 11 (c) (ii) to (xiii) inclusive and if DH (Aust) Mods V245; V690; V693; V702; V729 RAAF Mod Nos 245; 204; 207; 227; 271 have been incorporated, or are being incorporated concurrently with this order re-identify as Part No W15-1407A LH and W15-1409A RH and Ident No A79/504137 and A79/504138 respectively.

Orders Superseded or Cancelled

5. This modification supersedes Vampire Mod No 110 (DH (Aust) Mod V185).

Equivalent Modification

6. De Havilland (Aust) Mod V234 and Air Ministry Mod VAM 3493 are equivalent modifications.

(Issued with A/L 149 - May, 1959)

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1		D007967	Angle cleat 90 deg	4	
2		D007969	Angle cleat 97 deg	4	
3		D007971	Angle cleat 83 deg	4	
4		D007975	Angle cleat (port) 97 degrees	1	
5		D007976	Angle cleat (stbd) 97 degrees	1	
6		D007977	Angle cleat (port) 83 degrees	1	
7		D007978	Angle cleat (stbd) 83 degrees	1	
8		00D1577	Stiffener speed brake shroud (port)	1	
9		00D1578	Stiffener speed brake shroud (stbd)	1	
10		00D1575	Stiffener speed brake shroud (port)	1	
11		00D1576	Stiffener speed brake shroud (stbd)	1	
12		D007985	Gusset plate	2	
13		00D1569	Stiffener outer flap shroud (port)	1	
14		00D1570	Stiffener outer flap shroud (stbd)	1	
15		00D1567	Stiffener outer flap shroud (port)	1	
16		00D1568	Stiffener outer flap shroud (stbd)	1	
17		00D1579	Stiffener No 2 flap shroud (port)	1	
18		00D1580	Stiffener No 2 flap shroud (stbd)	1	
19		D007995	Stiffener outer flap shroud (port)	1	
20		D007996	Stiffener outer flap shroud (stbd)	1	
21		D007997	Stiffener outer flap shroud (port)	1	

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Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
22		D007998	Stiffener outer flap shroud (stbd)	1	
23		D007999	Angle cleat 80 deg	2	
24		D008001	Angle cleat 80 deg	8	
25		D008003	Angle cleat 100 "	2	
26		D008005	Angle cleat 100 "	10	
27		00D1573	Stiffener, speed brake shroud (port)	1	
28		00D1574	Stiffener, speed brake shroud (stbd)	1	
29		00D1505	Angle cleat	1	
30		00D1506	Angle cleat	1	
31		00D1507	Angle cleat	1	
32		00D1508	Angle cleat	1	
33		00D1509	Angle cleat	1	
34		00D1510	Angle cleat	1	
35		00D1511	Angle cleat	1	
36		00D1512	Angle cleat	1	
37		00D1517	Gusset plate (port)	1	
38		00D1518	Gusset plate (stbd)	1	
39		00D1585	Angle cleat	2	
40	H128F/61190 (Z)	AGS2051/ 413/BH	Rivet 'pop' 120 deg csk head, nickel alloy, with break head mandrel, $\frac{1}{8}$ in dia x .13 in long	24	
41	H28/7921	A25/15B	Bolt steel HTS hex head 4BA x 1.9 in long	4	
42	H28/12528	A25/1B	Bolt steel HTS hex head 4BA x .5 in long	8	
43	H28/27024	AGS2001B/1	Nut MS hex Nyloc insert 4BA	12	
44	H28C/12305	SP13/B	Washer MS plain thin 18 SWG x .157 in I/D x .301 O/D	8	
45	H128F/61175	AGS2050/ 419/BH	Rivet 'Pop' domed head, nickel alloy, with break head mandrel, $\frac{1}{8}$ in dia x .19 in long	82	

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Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
46	H128F/61185(Z)	AGS2050/519/BH	Rivet 'Pop' domed head nickel alloy, with break head mandrel, 5/32 in dia x .19 in long	6	
47	H128F/64409	AS2227/404	Rivet R'd head, al. alloy L69, $\frac{1}{8}$ in dia x $\frac{1}{4}$ in long	24	
48	H128F/64410	AS2227/405	Rivet R'd head, al alloy L69, $\frac{1}{8}$ in dia x 5/16 in long	44	
49	H128F/64422	AS2227/505	Rivet R'd head, al alloy L69, 5/32 in dia x 5/16 in long	4	
50	H128F/64452	AS2230/404	Rivet csk head 120°, al alloy DTD327, $\frac{1}{8}$ in dia x $\frac{1}{4}$ in long	198	
51	H128F/64453	AS2230/405	Rivet csk head 120 deg al alloy DTD327, $\frac{1}{8}$ in dia x 5/16 in long	4	
52	H128F/64459	AS2230/504	Rivet csk head 120° alloy DTD327, 5/32 in dia x $\frac{1}{4}$ in long	56	
53	H128F/64460	AS2230/505	Rivet csk head 120° al alloy DTD327, 5/32 in dia x 5/16 in long	6	
54	I1/9715		Wire locking, nickel alloy DTD189, 22 SWG	AR	
55	K3/371		Stopper, oil base	AR	
56	K3/175		Primer, zinc chromate	AR	
57	K3/176		Thinners, zinc chromate	AR	
58	K3/365		Covering, camouflage high speed aluminium	AR	
59	K3/353		Compound, jointing, to spec. DTD369A	AR	

Notes : (a) Items 1 to 53 inclusive will be delivered from De Havilland Aircraft Pty Ltd to De Havilland Modification Section. Units requiring modification sets are to demand from De Havilland Modification Section.

(b) Items 54 to 59 inclusive are to be drawn from unit stores.

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Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
60		D001719	Stiffener No 2 flap shroud (port)	1	
61		D001720	Stiffener No 2 flap shroud (stbd)	1	
62		D002843	Stiffener (port; aft)	1	
63		D002844	Stiffener (stbd; aft)	1	
64		D002845	Stiffener (port; fwd)	1	
65		D002846	Stiffener (stbd; fwd)	1	
*66		00D1399	Stiffener bracket		
*67		00D1401	Stiffener bracket		
*68		00D1403	Stiffener bracket		
*69		00D1405	Stiffener bracket		
70		00D1407	Stiffener bracket	1	
71		00D1408	Stiffener bracket	1	
72	H28/13182	A25/14B	Bolt steel h't's hex head 4BA 1.8 in long	4	
73	H28/27024	AGS2001B/1	Nut MS Hex, Nyloc insert 4BA.	4	

Notes : (a) Items 60 to 65 inclusive and items 70 to 71 inclusive are obsolete.

(b) Items 60 to 73 inclusive are to be disposed of in accordance with authorised current procedure.

(c) Items marked * may be left on aircraft.

Disposal of Parts in Stock

9. Modification kits for RAAF Modification 110 DH (Aust) Modification V185 to be disposed of in accordance with authorised procedure.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of parts or when the aircraft are allotted for retrospective modification fitment.

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Method of Incorporation

11. (a) Man-Hours Involved : Approximately 85 man-hours will be required for the completion of this modification.

(b) Special Tools, Jigs &c : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Lower flaps and place the speed brake in the 'OUT' position. Release the hydraulic pressure and drain the fluid from the system in accordance with current authorised procedure. Remove the lower detachable panel from the speed brake shroud. Retaining it with its attachment items for subsequent re-assembly. Disconnect the hydraulic pipes in the flap bay, which run to the speed brake jack and remove and retain the pipe clamps, which secure these pipes together with their attaching items.

Note : Extreme care must be taken to ensure that all pipe lines are blanked off, to prevent the ingress of foreign matter.

(ii) Working in the outer flap bay, locate the inboard longitudinal stiffener item 60 (D001719; port); item 61 (D001720; stbd) and its two attaching outboard transverse stiffeners item 62 (D002843; port aft); item 64 (D002845; port fwd); item 63 (D002844; stbd aft); item 65 (D002846; stbd fwd). Remove these now redundant stiffeners from the aircraft by drilling out their attaching rivets using a No 30 (.1285 in dia) drill. Increase the dia of the 120° dimple countersinks on the top surface of the flap shroud to .313 in dia for 5/32 in dia rivets and increase the size of the rivet holes using a No 21 (0.1590 in dia) drill.

(iii) Refer to drawing A13213 Sheets 1, 2 and 6 now using transverse stiffeners item 19 (D007995; port aft); item 20 (D007996; stbd aft); item 21 (D007997; port fwd); item 22 (D007998; stbd fwd); position the transverse stiffeners on the underside of skin on flap shroud, taking the same position as those of the redundant stiffeners removed in operation 2

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using the existing holes in the flap shroud as guides and using a No 28 drill, drill through the stiffeners. Remove the stiffeners and thoroughly deburr them, dimple countersink the No 28 holes in the stiffener to suit the dimpling in the shroud skin and temporarily secure in position using locating pins.

(iv) Now using the new inboard longitudinal stiffener item 17 (OOD1579; port); item 18 (OOD1580; stbd); remove the transverse stiffeners temporarily secured with locating pins in operation (iii) position the longitudinal stiffener, ensuring that the inboard lip fits under the ends of the two existing transverse stiffeners and that the double joggled end is seated on the false spar (drill out rivets in false spar in way of stiffener flange). It may be found necessary to reduce flange lip locally to clear joggle on existing transverse stiffener D001843-4 and D001845-6 to ensure the fitment of the new transverse stiffeners at their lug positions. Now working from the top and using the existing rivet holes as guides drill through the stiffener at the inboard end of the top hat stiffener using a No 28 (0.1405" dia) drill, thoroughly deburr the stiffener, now working from the underside of the shroud enlarge the hole in the trailing edge member using a No 20 (.160" dia drill) drill a hole in the rear end of the inboard flange on the stiffener using the No 20 drill to mate up with the hole just drilled, and remove burrs. Mark off and drill the outboard flange of the stiffener and shroud skin using a No 35 (0.110"dia) drill as shown on drawing A13213 sheets 1 and 2 drill the hole at the rear end of the stiffener and trailing edge member using the No 30 drill. Remove the stiffener and thoroughly deburr all the holes dimple countersink No 35 holes in the flap shroud 120° x .25" dia and the No 28 holes in the stiffener flange to suit the dimpling in shroud skin.

(v) Now coat the mating surface of the transverse and longitudinal stiffener with pigmented varnish jointing compound Item 59. Secure the longitudinal stiffener to flap shroud using sixteen 5/32" dia 120° c's'k hd' rivets Item 52 (AS2230/504) as shown for the inboard row, and fourteen $\frac{1}{8}$" dia 120° c's'k Hd' rivets Item 50 (AS2230/404) for the outboard row. At the trailing edge member, secure the inboard flange with a 5/32" dia tucker "pop" rivet Item 46 (AGS2050/519/BH), the outboard

flange with a $\frac{1}{8}$" dia tucker pop rivet item 45 (AGS2050/419/BH). At the rear spar spot through the rivet holes using a No 21 (0.159) drill, and secure with 5/32" dia 120° csk head rivets item 53 (AS2230/505). Refer to fig 1 on sheet 7 of drawing A13213 and drill the angle attachments on the two transverse stiffeners, using a No 30 (0.1285) drill, for the inboard end and the No 21 drill for the outboard ends. Secure the stiffeners to the flap shroud, using approximately twelve 5/32" dia 120° csk head rivets item 52 (AS2230/504). The outboard angle attachments to be secured to the existing trailing edge rib No 2 with two 5/32" dia r'd head rivets 49 (AS2227/505), first enlarging the existing rivet hole. The inboard angle attachments are to be secured with two $\frac{1}{8}$" dia tucker "Pop" rivets item 45 (AGS2050/419/BH) having first drilled the two No 30 holes in the top hat stiffener, to mate up with the holes in the angle attachment. At the inboard end of the longitudinal stiffener use tucker pop rivets 5/32" dia item 46 (AGS2050/519/BH), first enlarge the existing rivet hole.

(vi) Mark a centre line for the new top hat stiffeners item 13 (OOD1569; port); item 14 (OOD1570; stbd); item 15 (OOD1567; port); item 16 (OOD1568; stbd). The whole length of the outer flap bay, measuring on the underside 8.07" to the rear of the false spar, and along the centre line of the new top hat stiffener fitted in operation (v) and 7.51" to the rear of the false spar along the outboard edge of trailing edge No 3, as shown on drawing A13213 sheet No 1. Now refer to drawing A13213 sheet 7 fig 2 and 3, and drill the angle attachments at each end using a No 30 drill as shown. Referring now to sheet 11 of the drawing A13213, remove the now redundant stiffener angle item 70 (OOD1407; port); item 71 (OOD1408; stbd), at the outboard side of trailing edge rib No 3, by drilling out their attachment rivets. Redundant rivet holes in top surface, to be sealed with $\frac{1}{8}$" dia tucker pop rivets 120° csk head item 40 (AGS2051/413/BH) holes in trailing edge rib No 3 left redundant. Referring now to sheets 2,3, 4 and 5 of drawing A13213, mark out and centre punch the rivet pitches (rivet pitch along stiffeners 1.0 approximately pitched between pre-drilled holes at ends of flanges) offer up the stiffeners to centre line, and using

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the No 35 (.110 in dia) drill, drill through the stiffener and flap shroud. Dimple countersink these holes on the top surface 120° x .25 in dia and the hole in the stiffeners to suit the dimpling in the skin.

Note: It may be found necessary to rivet cleats at forward face to top hat stiffener before rivetting top hat stiffener to shroud skin.

(vii) Coat the mating surfaces of the stiffeners, and the shroud with pigmented varnish jointing compound item 59. Now secure the inboard top hat stiffeners using twelve rivets item 50 (AS2230/404); two rivets item 51 (AS2230/405); two rivets item 45 (AGS2050/419/BH), for the outboard top hat stiffener, twenty eight rivets item 50 (AS2230/404); two rivets item 48 (AS2227/405) and two rivets item 47 (AS2227/404).

(viii) Refer again to sheet 4 of drawing A13213 and locate the position for the two new gusset plates item 12 (D007985, port and stbd aft); item 37 (00D1517; port fwd); item 38 (00D1518; stbd fwd) and position them as detailed and drill to suit. Deburr stiffeners. Coat the mating surfaces with pigmented varnish jointing compound item 59. Secure gusset plates using ten rivets item 47 (AS2227/404), and two rivets item 50 (AS2230/404) for the forward gusset plate.

(ix) Refer to sheets 1, 2, 3, 4 and 5 of the drawing A13213 and establish the positions of the twelve new angle attachment cleats, item 26 (D008005) item 39 (00D1585) item 24 (D008001); item 25 (D008003) and item 23 (D007999). Then using a No 30 drill, drill the stiffeners using the holes in the angle cleats as guides, deburr the holes. Coating the mating surfaces with pigmented varnish jointing compound, rivet them at their respective stiffeners using rivets item 48 (AS2227/405); rivets item 45 (AGS2050/419/BH) and rivets item 47 (AS2227/404).

(x) Refer to sheets 8 and 9 of the drawing A13213 and remove the two redundant 4BA bolts and nuts item 72 and item 73, from the main hinge bracket in the speed brake compartment, as shown on drawing. Retain the washers for re-assembly. Mark a centre line from the main hinge bracket to trailing edge rib No 5, in conjunction with angle

cleats which control the position of the stiffeners, this line to be paralleled to the false spar. The second centre line is also controlled from the main hinge bracket by the angle cleats, at trailing edge rib No 3, it should measure 6.18 ins (this line is not paralleled with the false spar). As shown on sheet 8 of the drawing A13213. Refer again to sheet 8. Now using the top hat stiffeners item 8 (OOD1577; port); item 9 (OOD1578; stbd); item 10 (OOD1575; port) item 11 (OOD1576; stbd); item 27 (OOD1573; port); item 28 (1574; stbd). Mark out and centre punch the rivet pitches on the three stiffeners (rivet pitch along stiffeners 1.0 in approximately pitched between pre-drilled holes) offer up the stiffeners to the centre lines at the undersurface of the skin and position them as shown on the drawing using the No 35 (0.110 in dia) drill, drill through the stiffeners and the skin. Deburr the holes and dimple countersink the skin, on the top surface 120° x .25 in dia and the holes in the stiffener to suit the dimpling in the skin. Coat the mating surfaces, with pigmented varnish jointing compound item 59 and rivet the stiffeners to the under surface of the shroud. Using approximately thirty eight rivets item 50 (AS2230/404).

Note : It may be found necessary to rivet cleats at forward face to top hat stiffener before rivetting top hat stiffener to skin.

(xi) Refer again to sheets 8 and 9 of the drawing A13213 and establish the position of the angle cleats item 1 (DOO7967); item 2 (DOO7969); item 3 (DOO7971); item 4 (DOO7975); item 5 (DOO7976); item 6 (DOO7977); item 7 (DOO7978); item 29 (OOD1505); item 30 (OOD1506); item 31 (OOD1507); item 32 (OOD1508); item 33 (OOD1509); item 34 (OOD1510); item 35 (OOD1511) and item 36 (OOD1512). Offer up these angle cleats to their respective top hat stiffeners and trailing edge ribs. At trailing edge rib No 3 drill the angle cleats from the inboard side using a No 26 drill, all other holes drill with a No 30 drill using cleats as guides, remove the cleats and thoroughly deburr the holes. Rivet the cleats in their respective positions, using twenty six rivets item 45 (AGS2050/419/BH) for the top hat stiffeners and trailing edge rib No 5,

two bolts, nuts and washers item 42, 43 and 44, for trailing edge rib No 4, two bolts 4BA item 42 (A25/1B); nuts item 43 (AGS2001B/1) and washers Item 44 (SP13/B) for trailing edge rib No 3. At main hinge bracket use two longer 4 BA bolts item 41 (A25/15B) with nuts item 43 and washers retained in operation (x).

(xii) Remove the blanks from the disconnected hydraulic pipes reconnect and secure them in their correct position, using the retained pipe clamp and attaching items. Replenish the hydraulic system, and check all disturbed unions for leaks, then wire lock with 22 SWG locking wire item 54.

(xiii) Renew the finish locally using items 55 to 58 inclusive.

(xiv) Replace the lower detachable panel to the speed brake shroud using the original attachment items.

(d) Tests : Function and check the flaps and speed brake, to ensure there are no fouls in the housed position.

(e) Recording : Record this modification in the airframe log book and on the Wing Modification Plate.

Drawings

12. Drawings A13213 consisting of eleven (11) sheets. Units requiring drawings are to demand from Department of Air.

Effect on the Weight and Balance of Aircraft

13. The effect of this modification on the weight and balance is negligible.

References : Files, Department of Air, 9/84/242 and 150/8/1597.

Date of Issue : 26th May, 1959.

(Issued with A/L 149 - May, 1959)

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VAMPIRE MODIFICATION NO 254

Class 2

PROVISION FOR TESTING GUNS WHEN AIRCRAFT IS ON THE GROUND

Reason for and Description of Modification

1. Prior to embodying this modification it is necessary, in order to function the gun firing circuit, to depress the nose wheel micro switch manually. To carry this out ground personnel are alongside the gun muzzles and subject to some degree of danger due to possible inadvertant firing of the guns, and the modification therefore introduces a spring-return (to OFF position) toggle switch in the gun bay connected in parellel with the nosewheel micro switch thereby "shorting" it out of the circuit when the toggle is operated.

Application

2. This work is to be carried out on all Mk 33 Vampire aircraft and on Mk 35 Vampire aircraft A79-602 to A79-630 inclusive. Mk 35 Vampire aircraft A79-631 and subsequent will be modified during manufacture.

Note:- "Vampire MK 33/35A aircraft A79-6 810, 813, 821, 822, 827, 831, 833 and 834 which have been modified are to be reworked in accordance with sub para 11 (c)(v)

Responsibility for Incorporation

3. The electrical fitters of operating units, aircraft depots and contractors concerned will be responsible for the incorporation of this modification.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modification

6. De Havilland (Aust) Mod V717 is the equivalent Modification.

(Issued with A/L 121)

Supply

7. The following parts are required to complete one modification set :-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1	G5C/4221	D5405	Switch, Rotax	1	A
2	G5C/4320		Switch, Guard	1	A
3		N003983	Bracket	1	
4		15 N 2961A	Cable Assembly	1	
5		N15-1151 → ~~15 N 2963~~	Label (See Note C)	1	
6	H28C/3426	A32/B8	Screw, MS Metal Rd Hd, 4BA x $\frac{1}{4}$" long	2	C
7	H28C/2288	AGS 252/19	Woodscrew, Brass Rd Hd, No 4 x $\frac{3}{8}$" long	4	C
8	H28C/11067	AGS 2035/B	Washer, Shake-proof, steel, internal teeth 4BA	2	C
9	I32A/94		Cord, Stringing, Spec 4F35	AR	C
10	K4/152		Beeswax	AR	C
11	K3/346		Colour, Identification Red matching, BSI, Colour 358, spec 3K5.	AR	C

NOTES :- (a) Items 1 to 8 inclusive will be delivered from De Havilland aircraft Pty Ltd to the master modification section. Master modification section will issue these items on demand.

(b) Items 9 to 11 inclusive will be drawn from unit stores as required.

"(C) Early modification sets delivered include Label 15N2963 in lieu of new Label N15-1151 (Item 5). These labels are to be reworked in accordance with sub-para 11(c)(iva) prior to fitment."
(A/L 141)

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Stock

9. Not applicable.

(Issued with A/L 121)

When the Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable, and not later than the next "D" servicing of aircraft after receipt of parts required.

Method of Incorporation

11. (a) Man-Hours Involved : Approx 12 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, Etc : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Open the hinged nose cap of the aircraft and disconnect the accumulator leads.

(ii) Remove the Gun Bay doors.

(iii) Remove the starboard detachable nose fairing.

(iv) Remove Inspection Panel over bank of nose-

"(iva) If ~~bracket~~ label part No. 15N2963 is included in the modification set it is to be reworked by altering the internal angle from 90° to 135° and re-part numbering to N15-1151."

(A/L 141)

N15-1151

screws A32/B8, (item 6), Washers, AGS 2035/B (item 2), 2 off of each and woodscrews AGS 252/19 (item 7) 4 off.

(vi) Refer to Drawing sheet 1 and install new cable assembly 15 N 2961A (item 4) 1 off as shown routing it with existing large cables running along the starboard side, binding at intervals of approximately 18 inches.

(vii) Connect the two aft outboard ends of the cable to the centre and ~~forward~~ terminals of the new switch and the forward ends of the cable, to the existing "GF5+" and GF9" terminals at the 3-way terminal block forward of Bulkhead No 1.

(Issued with A/L 121)

~~NOTE~~: ~~Care should be taken to keep the new Cable assembly away from hot air pipes adjacent to the new switch in the gunbay~~.

(viii) Refer to Drawing Sheet 2. Clean exterior of aircraft locally at the new stencil position and add the lettering as shown using Red Paint (Item 11) as required.

(ix) Replace Inspection cover over the bank of terminal blocks in the nose compartment.

(x) Replace the starboard detachable nose fairing.

(xi) Assemble Gun Bay doors after functioning gun firing circuit (see para (d) Tests).

(xii) Reconnect leads to Accumulators.

(xiii) Close hinged nose cap.

(d) Tests : Function Gun Firing circuit operating the test switch.

(e) Recording : Record the incorporation of this modification in the Aircraft Log Book.

Drawings

12. Drawing A12979 consisting of two (2) sheets are attached.

Effect on Weight and Balance of Aircraft

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 150/8/1214 and 150/4/8621

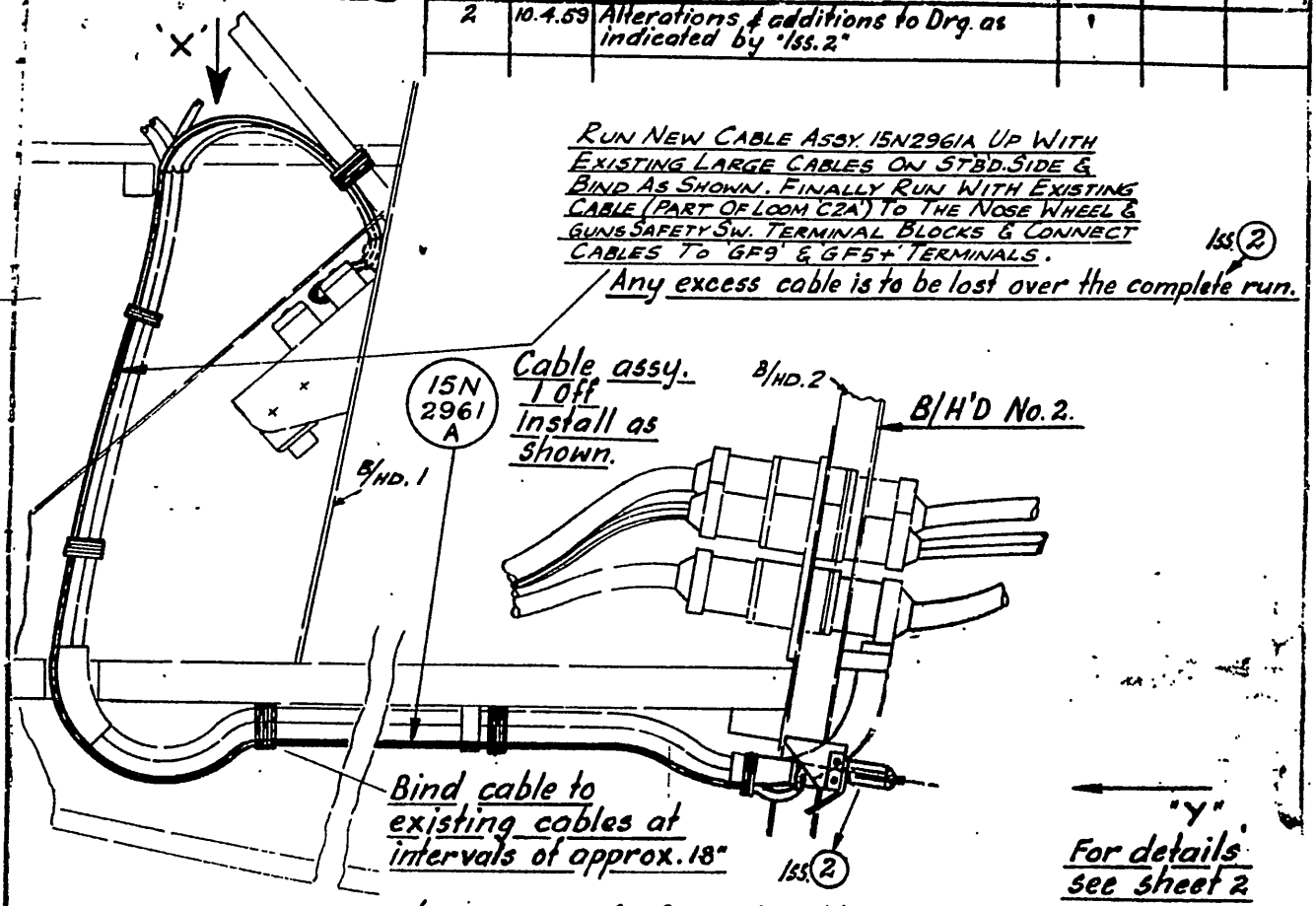
Attachment : Drawing A12979 (2 sheets)

Date of Issue : 7th November, 1958

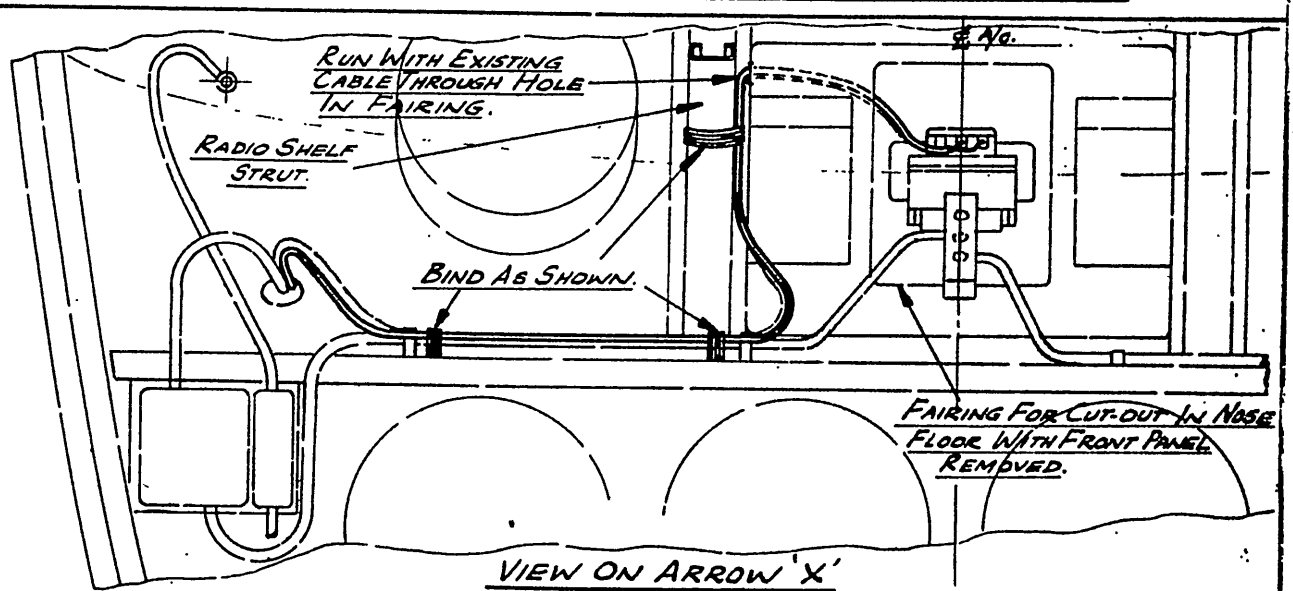
(Issued with A/L 121)

DO NOT SCALE

		ALTERATION			
2	10.4.63	Alterations & additions to Drg. as indicated by "Iss. 2"			



INSTALLATION OF CABLE ON STBD. SIDE OF FUSELAGE.



VIEW ON ARROW 'X'

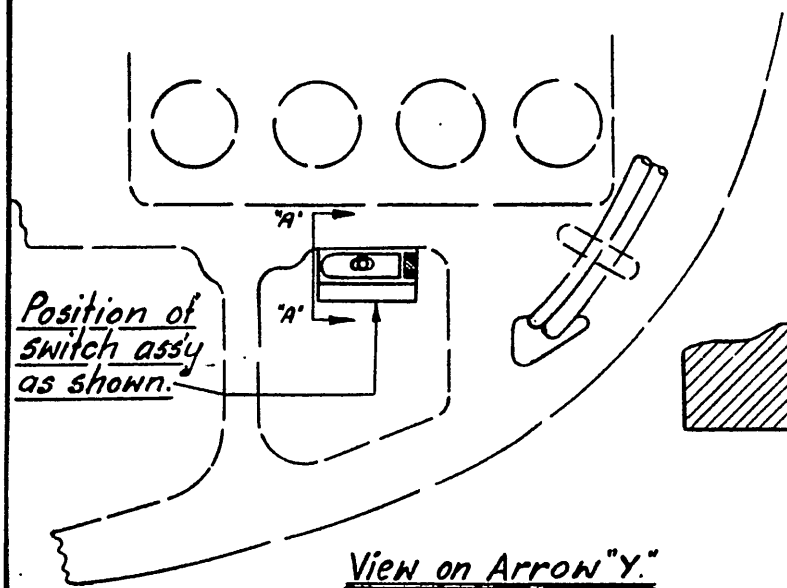
DE HAVILLAND DRG. No. 00M367 SHT. 1 OF 2.

REFERENCE	ISSUED BY	TITLE
	DEPT. OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	PROVISION FOR TESTING GUNS WHEN AIRCRAFT IS ON THE GROUND.

LIMITS UNLESS STATED	MATERIAL		COMPONENT OF
DECIMALS ± .010"	SPEC.		MACHINE
ANGLES ± 30'	TREATMENT		TRAINER
RADII ± 1/64"	FINISH		TECH. SPEC'N
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A 3 67	SCALE		MOD. 264 (VAMPIRE)
	DRAWN	APPROVED	DRAWING NO. A 12979 SHEET 1 OF 2
	TRACED	CHECKED	DRWG. SIZE A

DO NOT SCALE

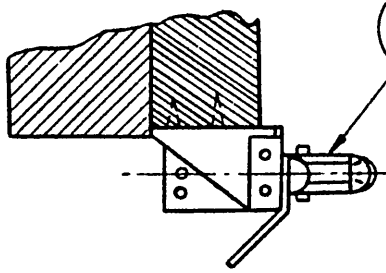
ISSUE NO	DATE	ALTERATION	D. L.	INITIALS	APPROVED
2	9.4.59	Retraced			



Position of switch assy as shown.

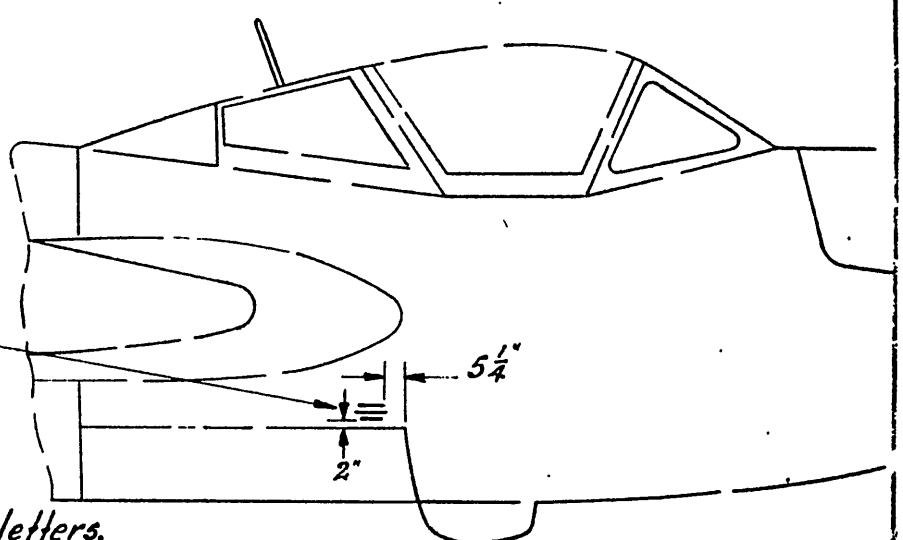
View on Arrow "Y."
See Sheet 1.

Screw. 2-Off.	A32 BB	G5C 4320	Switch guard. 1 Off.
Wood-screw. 3-Off.	A.G.S. 252 19	G5C 4221	Switch. 1-Off.
Washer. 2-Off.	A.G.S. 2035 B	N00 3983	Bracket. 1-Off.
		N15 1151	Label. 1-Off.



Section "A-A"

Note:- Terminal No.1 on switch to free inboard.



Add the following stencil on starboard side of aircraft in red letters.

- 2" between letters.

Gunfire - ½" High letters.
Test Switch - ½" High letters.
inside. - ¼" High letters.

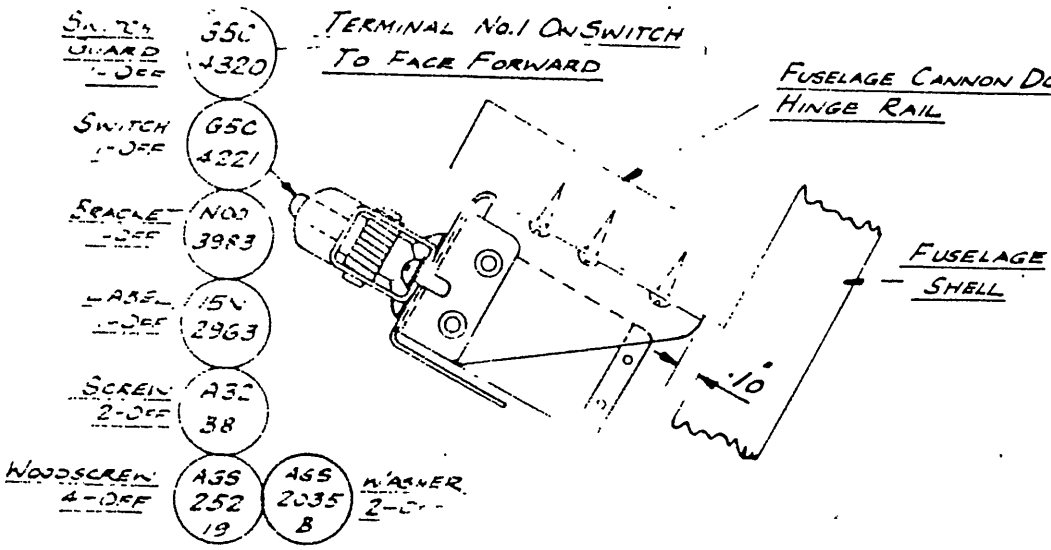
Addition of External Marking.

De Havilland Drawing No.00M 367. Sheet 2 of 2.

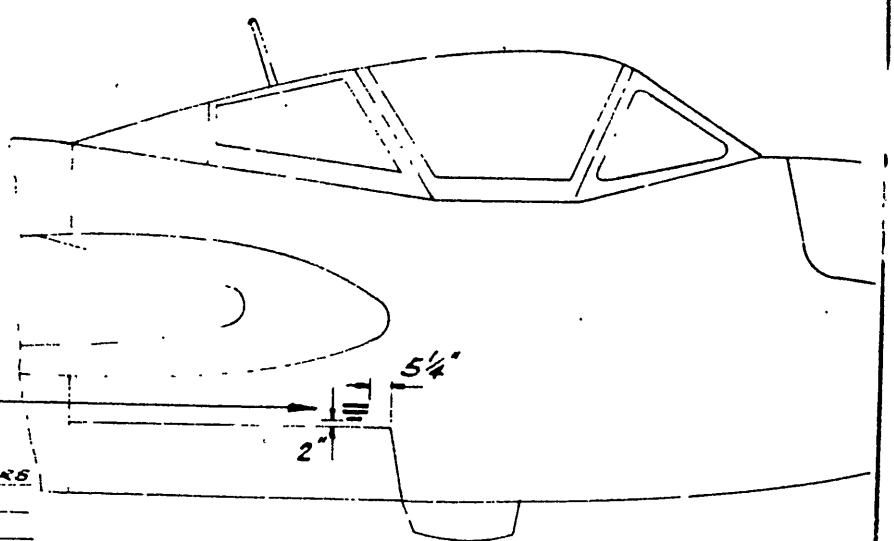
REFERENCE	ISSUED BY	TITLE
	Department of Air Directorate of Mechanical & Electrical Engineering	Provision for Testing Guns when Aircraft is on the Ground.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	Vampire Mod. No. 254
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.CZI		SCALE		DRAWING NO.	A 12979 Sheet 2 of 2
		DRAWN	APPROVED		SIZE A
		TRACED	CHECKED		

DO NOT SCALE



VIEW ON ARROW 'Y' (SEE SHEET 1)



ADD THE FOLLOWING STENCIL ON STBD SIDE OF AIRCRAFT IN RED LETTERS.

GUNFIRE — ½" HIGH LETTERS
TEST SWITCH — ½"
INSIDE — ¼"
2 BETWEEN LETTERS.

ADDITION OF EXTERNAL MARKING.

DE HAVILLAND DRG. No. 00M367 SHT. 2 OF 2.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	PROVISION FOR TESTING GUNS WHEN AIRCRAFT IS ON THE GROUND.

LIMITS UNLESS STATED	MATERIAL			COMPONENT OF	
[illegible] MAL ± .010"	SPEC.			MACHINE	
[illegible] DEC. ± .1"	TREATMENT			ENGINE	
[illegible] FRAC. ± 1/64"	FINISH			TECH. ORDER	MOD. 254 (VAMPIRE)
SURFACE FINISH AUSTRALIAN STANDARD ENG. LANG. PRACTICE A 53 [illegible]	SCALE			DRAWING NO	A 12979 SHEET 2 OF 2
	DRAWN		APPROVED		DRWG. A SIZE
	TRACED		CHECKED		

AAP 721:79 Vol 2, Pt 2

VAMPIRE MODIFICATION NO 255

Class 2

REDESIGNED SPACER WASHER IN THE RUDDER DAMPER STRUT - INTRODUCTION

Reason for and Description of Modification

1. Defects have been experienced in service of restricted Rudder Control due to jamming of the Damper Strut with the existing spacer washer fouling in the threaded recess between the end nut and body of the strut. This modification provides a washer with an extended skirt to prevent this.

Application

2. This work is to be carried out on all Vampire Mk 33 aircraft and on Vampire Mk 35 aircraft Serial Nos A79-601 to A79-610 inclusive.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command:-

Ident No	Part No	Nomenclature	Remarks
A79/502146	13CF493A	Rudder Damper	Rework to paras 11(c) vi to viii and reidentify as Pt No CF15-509A Ident No A79/504046
A79/503764	TB15-23A	Fin & Boom Assy LH	Rework to TB15-23A/2 Ident No A79/504048. Refer also RAAF Vampire Mod No 177.

(Issued with A/L 126)

Ident No	Part No	Nomenclature	Remarks
A79/503765	T315-25A	Fin & Boom Assy RH	Rework to TB15-25A/2 Ident No A79/504049. Refer also RAAF Vampire Mod No 177.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modifications

6. The manufacturer's equivalent modification is V718.

Supply

7. The following items are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1		CF15-475	Distance Piece	2	
2		CF15-477	Distance Piece	2	
3	H28/5032	SP.9/C8	Pin, Split, Nickel Alloy, 1/16" x 1" long.	6	

NOTE : Items 1 to 3 inclusive will be delivered from De Havillands Aircraft Pty Ltd to the De Havilland Modification Section.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification.

(Issued with A/L 126)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
4		13CF-503	Distance Piece	2	
5		13CF-505	Distance Piece	2	

NOTE : Items 4 and 5 are obsolete and are to be disposed of in accordance with current authorized procedure.

Disposal of Parts in Store

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable but not later than "D" servicing after receipt of modification sets.

Method of Incorporation

11. (a) Man-Hours Involved : Approx 13 man-hours will be required for the completion of this modification.

(b) Special Tools Jigs, etc : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

The following is the sequence of operations and is applicable to both port and starboard Rudder Dampers. Refer to illustrations in AAP 721:79/33 Vol 1 Sect 3 Chap 4 Page 14.

(i) Remove the rear outboard inspection hole Cover Plate on the Tail Boom. Retain this plate and its attaching screws for re-assembly.

(ii) Remove the Rudder Damper Mounting Clips (Part No AS 448/14 and 13CF 511A Ref) and their retaining screws.

(iii) Remove the bolt, nut and washer attaching the Rudder Damper Eye End to the Rudder Contral Lever. Discard the Split Pin.

(iv) Remove the forward bolt attaching Link Plates (Part No K00376 Ref) to the Rudder Control Lever.

(v) Remove the Rudder Damper from the Tail Boom

(vi) Remove the retaining cap from the aft end of the damper. Remove the Split Pin from the slotted nut on the Centre Shaft and discard. Carefully remove the slotted nut and washer (Part No 13CF 509ND ref) as this holding aft spring in compression. Remove the distance piece (Part No 13CF 503 Ref) Item 4 and discard.

Now carefully remove the front retaining cap as this is holding the forward spring in compression. Pull out the centre shaft, ...ce (Part In its place ...o CF15-475 Ref) ...nd is ...ing and re-

"Note: Rudder Damper Barrels (Pt. No. 13CR495 ref) are to be inspected for ridges in the bore. These are acceptable provided they do not extend any further than .55" from each end and are no deeper than the depth of thread".

(A/L 128)

(vii) Replace ... ...e Damper, the other new Distance Piece (Part No CF15-477 Ref) Item 2, making sure that the Cup end is seated on the rear spring. Replace the special Washer with the radiused side toward the Distance Piece, Compress the Spring, and replace the slotted nut and retaining Cap. Lock the slotted nut using a new Split Pin Item 3.

(viii) After reworking the Rudder Damper is to be reidentified as Part No CF15-509A, Ident No A79/504046.

Before re-assembling Rudder Damper in the aircraft, check the deflection load. This should be 80 lbs ± 5 lbs with a .6" deflection. Figures other than this are indicative of faulty assembly.

(ix) When these tests have been carried out the Damper is to be replaced in the Tailboom. Replace Damper Mounting Clips (Removed in operation ii) making sure that the forward clip is fitted in the groove of the Damper Barrel.

(x) Reconnect Link Plates using existing Nut and Bolt and Lock with new Split Pin, Item 3.

(Issued with A/L 126)

(xi) Set the Rudders in the Neutral Position and check that the attachment hole in the Eye End lines up with the hole in the Rudder Control Lever. Adjust the Eye End to line up the two holes before inserting the Bolt. Lock this bolt with existing nut and new Split Pin, Item 3.

(xii) Before replacing inspection hole cover, refer to paragraph 11(d) of this modification, when this has been carried out replace cover using existing screws.

(d) Tests :

(i) Check for unrestricted Rudder movement.

(ii) Also check that Rear Rudder & Elevator stops are set to give the correct travel on these Control Surfaces when operated by pedal and stick pressures in the cockpit. Then with rear stops engaged Cockpit Rudder Stops should have .2" clearance and Elevator stop should have .03" clearance. If these are not correct refer to para 11(c) sub-para's 35 - 39 of Vampire Mod 177, (De Havillands Instruction Leaflet No 317).

(e) Recording : Record this modification in the Airframe Log Book, and on the tailboom Modification Plate.

Drawings

12. No drawings are required.

Effect on Weight and Balance

13. The effect on the incorporation of this modification on weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/275 and 150/8/1338

Date of Issue : 28th November, 1958

(Issued with A/L 126)

AAP 721:79 VOLUME 2, PART 2 VAMPIRE MODIFICATION NO 256

Class 2

FUEL CONTENTS GAUGE IN MASS UNITS - CALIBRATE

Reason for and Description of Modification

1. Department of Air require the existing Pacitor Fuel Contents Gauge be calibrated in mass units, instead of gallons, in order to give the same instrument presentation as the Mk 35 Vampire. This modification introduces a recalibrated fuel contents gauge and a new rectifier.

Application

2. This work is to be carried out on all Mk 35A aircraft.

Responsibility for Incorporation

3. This modification is to be incorporated by the civilian contractor responsible for the repair of Vampire aircraft.

Action in Respect of Spares

4. The following spares are affected and are to be modified to Inst Mod 1.50/7 at the direction of Headquarters Support Command:-

Ident No	Part No	Nomenclature	Remarks
G6A/2819	GP251/001	Fuel Contents Gauge - Pacitor	Rework to para 11(c) (iii) (Inst Mod 1.50/ Reidentify as Part No GP250/016 Ident No G6A/4333

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V719 and Air Ministry Mod VAM3314 are the equivalent modifications.

Supply

7. The following part is required to complete one modification set.

(Issued with AL 202 - July 1960)

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
1	G6A/4991	GP644/032/2	Rectifier	1	A

Note: Item 1 will be delivered from De Havilland Aircraft (Aust) Pty Ltd, to the De Havilland modification section. Units requiring modification sets are to demand from De Havilland Modification Section.

Disposal of Parts Removed

8. The following parts will be removed by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
2	G6A/2823	GP642/001	Rectifier	1	A

Note: Item 2 is to be the subject of a Board of Survey.

Disposal of Parts in Store

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as directed by Headquarters Support Command.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 20 man-hours will be required for the completion of this modification.

(b) Special Tools, Jigs, &c : A Hydrometer will be required to facilitate embodiment of this modification.

(c) Sequence of Operations :

(i) Disconnect the aircraft accumulators.

(Issued with AL 202 - July 1960)

(ii) Disconnect and remove the existing Pacitor Fuel Contents gauge Ident No G6A/2819 - Pt No GP251/001 from the main instrument panel, retain existing screws, etc.

(iii) Despatch the gauge for re-calibration to De Havilland Aircraft (Aust) Pty Ltd, Bankstown, NSW.

(iv) Upon receipt of re-calibrated gauge now Ident No G6A/4333 Pt No GP250/016, assemble the gauge to the main instrument panel, using existing screws and reconnect.

(v) Remove the cannon bay doors and remove the starboard inner gun in accordance with current authorised procedure.

(vi) Disconnect and remove the now redundant rectifier unit, Item 2, situated on the starboard underside of the cannon bay floor, retaining its attaching items. Offer up to this position a new rectifier unit, item 1, secure in position with the existing attaching items and reconnect.

(vii) After test, replace the starboard inner gun in accordance with current authorised procedure, refit the cannon bay doors and reconnect the aircraft accumulators.

(d) Tests :

(i) When setting up the indicator in situ, the aircraft must be rigged in a +5 degrees nose-up attitude. Rigging details and instructions are contained in AAP 721:79/33 Vol 1 Sect 2 Chap 4.

(ii) Check that system as a whole is correctly wired, and switch ON. Allow 15 minutes for the power unit to warm up.

(iii) With fuel tanks completely drained, adjust the EMPTY resistor, marked E, on the rectifier, so that the indicator reads exactly zero.

(iv) Completely fill the aircraft fuel tanks, checking that the gauge reading alters during filling and that the pointer moves steadily and freely. This will indicate that the units are functioning correctly.

(v) Using an accurate hydrometer, measure the specific gravity of the fuel used, within the tolerance of $\pm$ 0.002.

(Issued with AL 202 - July 1960)

(vi) Note total contents of aircraft excluding "dead" fuel (5 galls approx) and convert from gallons to mass units (lbs) at the specific gravity determined in (v) above. From this total, subtract a figure of 2400 lbs, and drain from the aircraft an amount of fuel equivalent to the difference between these two figures.

(vii) Allow sufficient time for the fuel to settle, then adjust the FULL, marked F, trimmer on the rectifier so that the indicator pointer reads exactly 2400 lbs.

Note: The indicator readings should be multiplied by 100 to read the correct weight, as marked on the indicator face.

(viii) The system is then aligned.

(e) Recording : Record this modification in the airframe log-book.

Drawings

12. Nil.

Effect on Weight and Balance

13. The effect on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 113/1/1173, 150/8/1397

Date of Issue : 5th July 1960

(Issued with AL 202 - July 1960)

GUARD FOR THE AILERON CHAIN AND SPROCKET AT THE BASE OF THE CONTROL COLUMN - INTRODUCTION

Reason for and Description of Modification

1. During investigation in UK of a crashed Venom aircraft pieces of foreign matter were found lodged between the aileron drive sprocket and chain at the base of the control column. This modification provides a guard over the chain and sprocket.

Application

2. This work is to be carried out on all Mk 35A and 35 Vampire Trainer aircraft. Aircraft A79-651 and subsequent Mk 35 aircraft will be modified during manufacture.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. No spares are affected by the incorporation of this modification.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modifications

6. De Havilland (Aust) Modification No V720 and Air Ministry Mod No VAM 3532 are equivalent modifications.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
1		12-2CF253	Washer, special	8	
2		15CF499A	Guard assy, chain, front cover	2	
3		CF15-559A	Guard assy, chain, half back, LH	2	

(Issued with A/L 187 - April 1960)

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
4		CF15-560-A	Guard assy, chain, half back, RH	2	
5	H28/7921	A25/15B	Bolt, HTS, Hex Hd, 4BA x 1.90" long	4	
6	H28/12538	A25/15C	Bolt, HTS, Hex Hd, 2BA x 1.95" long	4	
7	H28/27024	AGS2001B/1	Nut, MS, self locking Nyloc, 4BA	4	
8	H28/27025	AGS2001C/1	Nut, MS, self locking Nyloc, 2BA	4	
9	H28C/12296	SP15/C	Washer, Al Al thin, 2BA	4	
10	H28/8324	AS1242/3E	Bolt, CSK 90° HD, 1/4" x .8 lg	2	
11	H28/27034	AGS2002E/1	Nut, 1/4" BSF, Nyloc insert	2	

Notes: (a) Items 1 to 11 inclusive will be retained as a modification set at the De Havilland Modification Centre pending issue or demand.

(b) Units requiring modification sets are to demand from the De Havilland Modification Centre.

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of modification sets.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 20 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, etc: No special tools or jigs are required to incorporate this modification.

(Issued with A/L 187 - April 1960)

(c) Sequence of Operations

(i) Disarm and remove the first and second pilots' ejection seats in accordance with current authorised procedure.

(ii) Remove the protective gaiters and the false floor panelling from the base of the control columns, retaining the gaiters, panelling and their attaching items for subsequent re-assembly.

The following operations (iii), (iv), (v) and (vi) are applicable to both first and second pilots' control columns.

(iii) Locate and remove the chain guide at the base of the control column, consisting of C's'k head bolt, spacer and nut. Reduce the length of the spacer from .5" to .2" then refit the reworked spacer using new C's'k head bolt and nut, Items 10 and 11.

(iv) Referring to the drawing A13131, locate at the base of the control column the lug on the pivot casting which houses the existing chain guard assembly. Drill two holes through the lug using a No 27 (0.144" dia) drill, each hole being 1.85" from the centre line of the pivot casting and on the centre line of the lug. Deburr both the holes after drilling.

(v) Offer up to the control column the new chain guard front cover assembly, item 2, and position over the exposed chain and sprocket at the base of the column. Then offer up the two new half back assemblies, items 3 and 4, position between the column and the sprocket and drill each assembly to suit the holes previously drilled in the pivot casting lug using the No 27 drill.

(vi) Now secure the chain guard front and half back assemblies to the pivot casting lug using two new 4BA bolts and nuts, items 5 and 7 with four washers, item 1. Secure the new chain guard assemblies together at the base using two new 2BA bolts, nuts and washers, items 6, 8 and 9.

(vii) Clean the cockpit floor of all foreign matter and refit the false floor panelling using the retained attaching items. Where necessary trim or dress the edges of the panelling around the control columns, to give a minimum clearance of .05" between the panelling and the control columns. Refit the protective gaiters.

(viii) After test, operation 11(d), refit and arm the first and second pilots' ejection seats in accordance with current authorised procedure.

(Issued with A/L 187 - April 1960)

(d) Tests

Check the ailerons and elevator for full and free range of movement, in accordance with current authorised procedure.

(e) Recording

Record this modification in the Airframe Log Book.

Drawings

12. Drawing A13131 attached herewith.

Effect on Weight and Balance of Aircraft

13. The effect on the weight and balance of the aircraft is as follows:-

Weight (lbs) ±	Arm (ins) ±	Moment (lb in) ±
+ 0.11	- 109.08	- 11.99

Note: Amendments to the weight sheet summaries will be consolidated and issued by Department of Air.

References : Files, Department of Air, 9/84/1057 and 150/8/1456

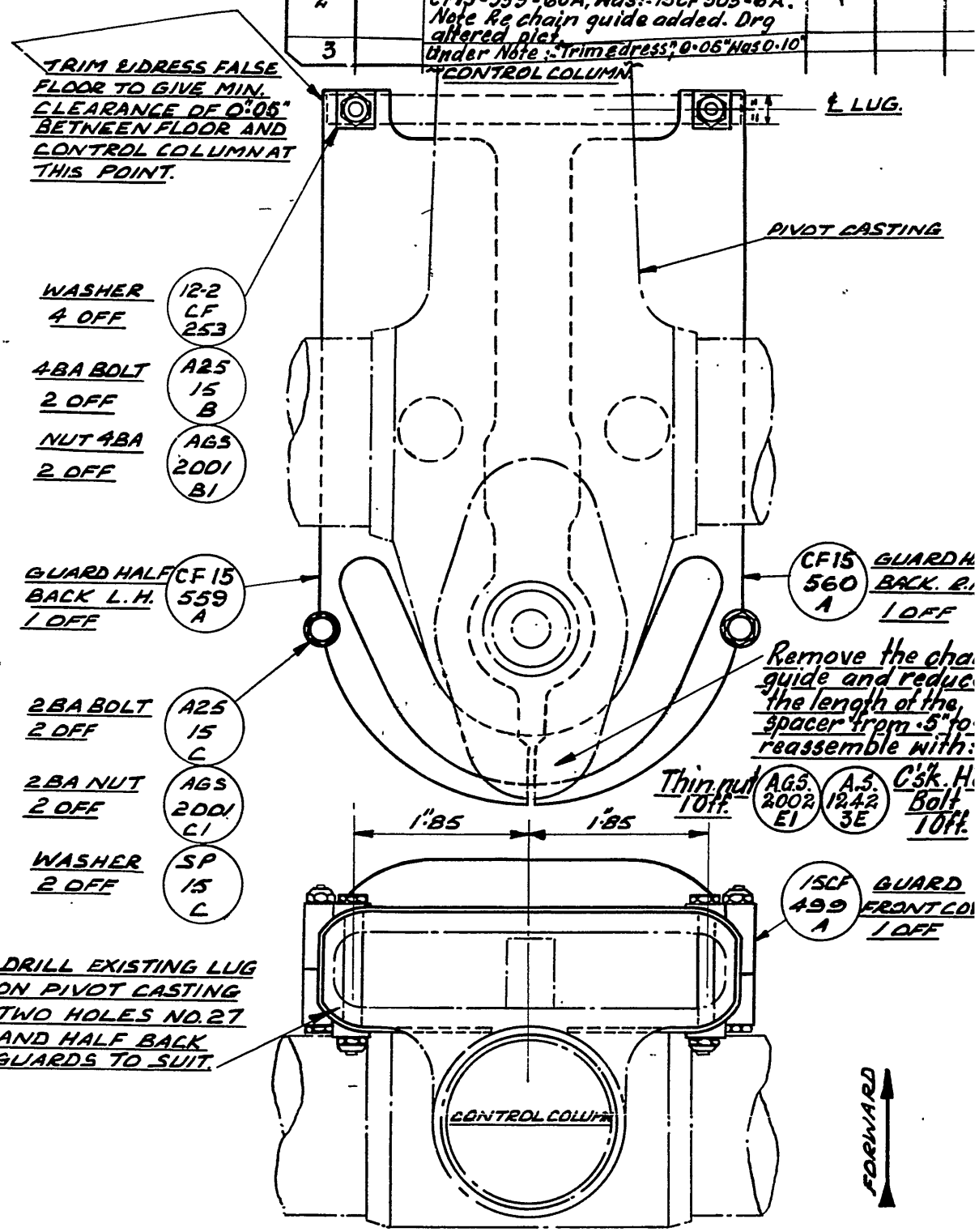
Attachment : Drawing No A13131

Date of Issue : 21st April, 1960.

(Issued with A/L 187 - April 1960)

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. I. L	INITIALS	APP
2		CF15-559-60A, was:-15CF 505-6A. Note Re chain guide added. Drg altered pict			
3		Under Note :- Trim & dress" 0·06" Was 0·10" "CONTROL COLUMN"			



DE HAVILLAND DRAWING NO. OOM409 SHEET 1 OF 1 SHEETS.

REFERENCE	ISSUED BY	TITLE
		INSTALLATION OF CHAIN GUARD ASS'Y. BASE OF CONTROL COLUMN

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE.
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.U.Z.		SCALE		DRAWING NO.	A13131
		DRAWN	APPROVED		
		TRACED	CHECKED		

GUARD FOR ELEVATOR CONTROL QUADRANT IN COCKPIT - INTRODUCTION

Reason for and Description of Modification

1. This modification is introduced to:-

(a) Provide a detachable cover over the elevator control quadrant to obviate fouling by loose articles.

(b) Improve the accessibility of the adjustable stops for the elevator quadrant by making the lower portion of the backplate detachable.

Note: The following modification is to be incorporated either prior to, or concurrently with, this modification.

RAAF Mod No	DH Mod No	Title
	V641-2	Ejection Seats and Modified Canopy

Application

2. This work is to be carried out on all Mk 35A aircraft and on Vampire Mk 35 aircraft, Serial Nos A79-602 to A79-630 inclusive. Serial No A79-631 and subsequent will be modified by the manufacturer.

Notes: (a) Aircraft A79-604 has ferrules fitted to the cockpit floor and wall. These were fitted by the manufacturer as a trial installation.

(b) Aircraft A79-813, 831 and 833 have only been partially modified to para 1(a) and are to be modified to para 1(b).

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for servicing Vampire aircraft. The trade mustering responsible is airframe fitter assisted by armament and electrical fitters.

Action in Respect of Spares

4. No action required.

(Issued with A/L 203 - July 1960)

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V721 and Air Ministry Mod VAM 3545 are the equivalent modifications.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No off per Set	Stores Class
1	-	F15-599A/1	Plate Assembly, Cover	1	
2	-	F15-601A	Plate Assembly, Top	1	
3	-	F15-891AND	Plate Assembly, Back	1	
4	A79/504144	F15-607ND	Fairlead	1	C
5	-	F15-605	Angle Assembly	1	
6	H28B/12462	SP 9/C8	Pin, split, nickle alloy, 1/16" dia x 1" long	16	
7	A79/504145	F15-617A	Fairlead Assembly	1	A
8	A79/504143	F15-825	Fairlead	1	A
9	-	N15-153ND	Washer, Special	4	
10	-	DHS 3/5	Terminal, Bonding	1	
11	H28/26078	DHS 103 Mk 2	Ferrule, Brass, Hex, 2BA	6	C
12	H28/12512	A25/1C	Bolt HTS Hex Hd, 2BA x .5" long	1	C
13	H28/11540	AS1246/2B	Bolt, HTS Rd Hd, 4BA x .5" long	2	C
14	H28/11564	AS 1246/1C	Bolt, HTS Rd Hd, 2BA x .5" long	13	C
15	H28/11255	AS 1246/2C	Bolt, HTS Rd Hd, 2BA x .6" long	4	C
16	H28C/12305	SP 13/B	Washer, steel, mild, plain, thin 18 SWG x 4BA	2	C
17	H28C/12252	SP 13/C	Washer, steel, mild, plain, thin 18 SWG x 2BA	8	C
18	H28C/416643	SP 47/C	Washer, steel, cad plated, single spring	6	C
19	H128F/64411	AS 2227/406	Rivet, alum alloy, snap head, $\frac{1}{8}$" dia x 3/8" long	4	C
20	I1/10283	-	Commercial strip, copper, 22 SWG x 1/2" wide	AR	C
21	I1/10281	-	Solder Electrician's, resin cored, Spec BS219G or DTD599	AR	C
22	W3/1372	-	Brad brass, 20 SWG x 1/2" long	AR	C
23	K3/407	-	Glue, Beetle, Type 'A'	AR	C

Item No	Ident No	Part No	Nomenclature	No off per Set	Stores Class
24	(K3/411 or (K3/412 or (K3/410	-	Hardner, Beetle, V15 (Violet) Hardner, Beetle, G30 (Yellow) Hardner, Beetle, 2B (Blue)	AR AR AR	C C C
25	K4/37	-	Solution - Copper, Napthenate	AR	C
26	K4/10612	-	Lacquer, Tropic Proofing, BAIM Spec S 2027	AR	C
27	K3/321	-	Enamel, Cellulose, Black, Spec K18	AR	C
28	I1/493	-	Wire, soft, 18 SWG, (.048")	AR	C
29	K3/386	-	Cement Bostik 1751	AR	C
30	K3/387	-	Cement Bostik 1790	AR	C
31	I1/9715	-	Wire, locking, 22 SWG	AR	C

Notes: (a) Items 1 to 19 inclusive will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland Modification Section. Units requiring modification sets are to demand from De Havilland Modification Section.

(b) Items 20 to 31 inclusive are to be drawn from unit stores.

Disposal of Parts Removed

8. The following part will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No off per Set	Stores Class
32	-	15 CF 407AND	Guard Assy Elevator Quadrant	1	

Note: Item 32 is obsolete and is to be disposed of in accordance with the current authorised procedure.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of parts or when the aircraft are allotted for retrospective fitment.

(Issued with A/L 203 - July 1960)

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 63 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, etc: No special tools, jigs, etc, will be required.

(c) Sequence of Operations :

Refer to De Havilland Drawing No A13001 Sheets 1-3.

(i) Raise the nose cap and disconnect the aircraft accumulators, then revert to the cockpit and render the ejection seats safe. Remove the canopy hatch, the port ejection seat and guide rail in accordance with the current authorised procedure.

(ii) Remove from the aircraft the port aft and the centre aft section of the false floor, and retain for re-assembly later.

(iii) Working on the port side of the cockpit, disconnect the three connecting rod assemblies, running from the engine control box to the torque tube assembly at the torque tube assembly end, and swing up away from the elevator quadrant.

(iv) Refer to AAP 721:79/33 Vol 1, Sect 3, Chap 4, Fig 14, and relieve the tension on the eight control cables. Disconnect the two rudder cables from the rudder pedals, the two aileron cables from the aileron differential pulleys and the four elevator control cables from the elevator control quadrant. Stow cables near the control cable seal assembly.

(v) Remove and dispose of the now redundant elevator quadrant cable guard, Part No 15 CF407AND, (item 32) which is attached to the elevator quadrant casting with four 2BA stiffnuts, bolts and washers.

(vi) Refer now to sheet 1 of the drawing and mark off on the port fuselage wall the positions for the two new 2BA ferrules. Bore two holes .75" dia x .43" deep, then remove the finish around the bores, glue and brad ferrules, (item 11) into position using items 22 and 23.

(vii) Refer to sheet 3 of the drawing and mark off on the port fuselage floor the positions for the four new 2BA ferrules. Bore four holes .75" dia x .43" deep, then

remove the finish around the bores, glue and brad ferrules, (item 11) into position using items 22 and 23.

(viii) Restore the finish to the newly fitted ferrules and the surrounding area on the fuselage wall and floor.

(ix) Refer again to sheet 1 of the drawing and attach the new angle assembly Part No F15-605A, (item 5) to the ferrules on the floor using two 2BA round head bolts, (item 14) and two 2BA washers, (item 18).

(x) Refer to sheet 2 of the drawing and secure the fairlead Part No F15-607ND, (item 4) to the back plate assembly Part No F15-891AND, (item 3) with 1/8" dia rivets, (item 19).

On aircraft Pre Mod Vampire 207 (DH Mod No V693) it may be necessary to trim the lower edge of the fairlead to clear the pneumatic brake pipes. This should be done before riveting the fairlead to the back plate.

Attach the back plate assembly to the ferrules on the floor using two 2BA round head bolts, (item 14) and two 2BA washers, (item 18). Fit between the back plate assembly and the washer the bonding terminal, (item 10) and electrically bond the back plate assembly to the existing bonding strip by using tinned copper strip, (item 20) and resin cored electricians solder, (item 21).

(xi) Thread the aileron and elevator control cables stowed at the control cable seal assembly through their retrospective positions in the new back plate assembly and connect the two aileron cables to the aileron differential pulleys and the four elevator control cables to the elevator control quadrant. Connect the two remaining rudder cables to the rudder pedals. Remove the bottom plate F15-881ND retaining screws and retain for re-assembly. Slide the bottom plate aft along the two elevator cables passing through it to permit improved access to the aft elevator quadrant stop. Tension and function the control cables, locking the turnbuckles with item 28 and adjust and wirelock the elevator quadrant stops with item 31. Replace bottom plate and attach to top plate F15-879ND and cockpit floor with attaching screws removed above.

(Issued with A/L 203 - July 1960)

(xii) Refit the centre aft and the port aft section of the false floor after thoroughly cleaning and removing any loose articles.

(xiii) Refer to sheet 3 of the drawing and attach the new top plate assembly Part No F15-601A, (item 2) to the ferrules on the port fuselage wall using two 2BA round head bolts, (item 14) and two 2BA washers, (item 18). Also secure the top plate assembly to the back plate assembly using a 2BA round head bolt, (item 14), a 2BA hexagon head bolt, (item 12) and two 2BA washers, (item 17). Finally locate the dive brake control rod adjacent to the inboard edge of the new back plate assembly, and ensure that the head of the close tolerance pin is positioned outboard.

(xiv) Connect the three connecting rod assembly to the torque tube assembly.

(xv) Refer again to sheet 2 of the drawing and fit the fairlead assembly Part No F15-617A, (item 7) to the back plate assembly using four 2BA round head bolts, (item 15) and four special washers, (item 9), so that the fairlead holes evenly surround the cables. Next fit the fairlead Part No F15-825, (item 8) to the back plate assembly using two 4BA round head bolts, (item 13) and two 4BA washers, (item 16), so that the fairlead slots clear the cables.

(xvi) Refer again to sheet 1 of the drawing and fit the new cover plate Part No F15-599A/1, (item 1) using six 2BA round head bolts, (item 14) and six 2BA washers, (item 17).

(xvii) Replace the port guide rail, the ejection seat and the canopy hatch in accordance with current authorised procedure.

(xviii) Re-arm the ejector seats as and when necessary.

(xix) Reconnect the aircraft accumulators and close the nose cap.

(d) Tests

(i) Check the functioning of the elevator and ailerons to determine whether the cable guard fouls the elevator quadrant pulleys and that the cables are free to move through the new elevator quadrant guard. Also check that the dive brakes, flaps and undercarriage controls do not foul on the new guard.

(Issued with A/L 203 - July 1960)

(ii) Check the functioning of the canopy hatch mechanism.

(e) Recording

Record this modification in the airframe log book.

Drawings

12. Drawing A13001, sheets 1 and 2, issue 2 and sheet 3, issue 1.

Effect on Weight and Balance

13. The effect on the weight and balance of the aircraft is as follows:-

Item	Weight (lb) ±	Arm (ins) ±	Moment (lb ins) ±
Cover Plate Assembly	+ 1.9	- 63.7	- 121

References : Files, Department of Air, 9/84/1057 and 150/8/1254

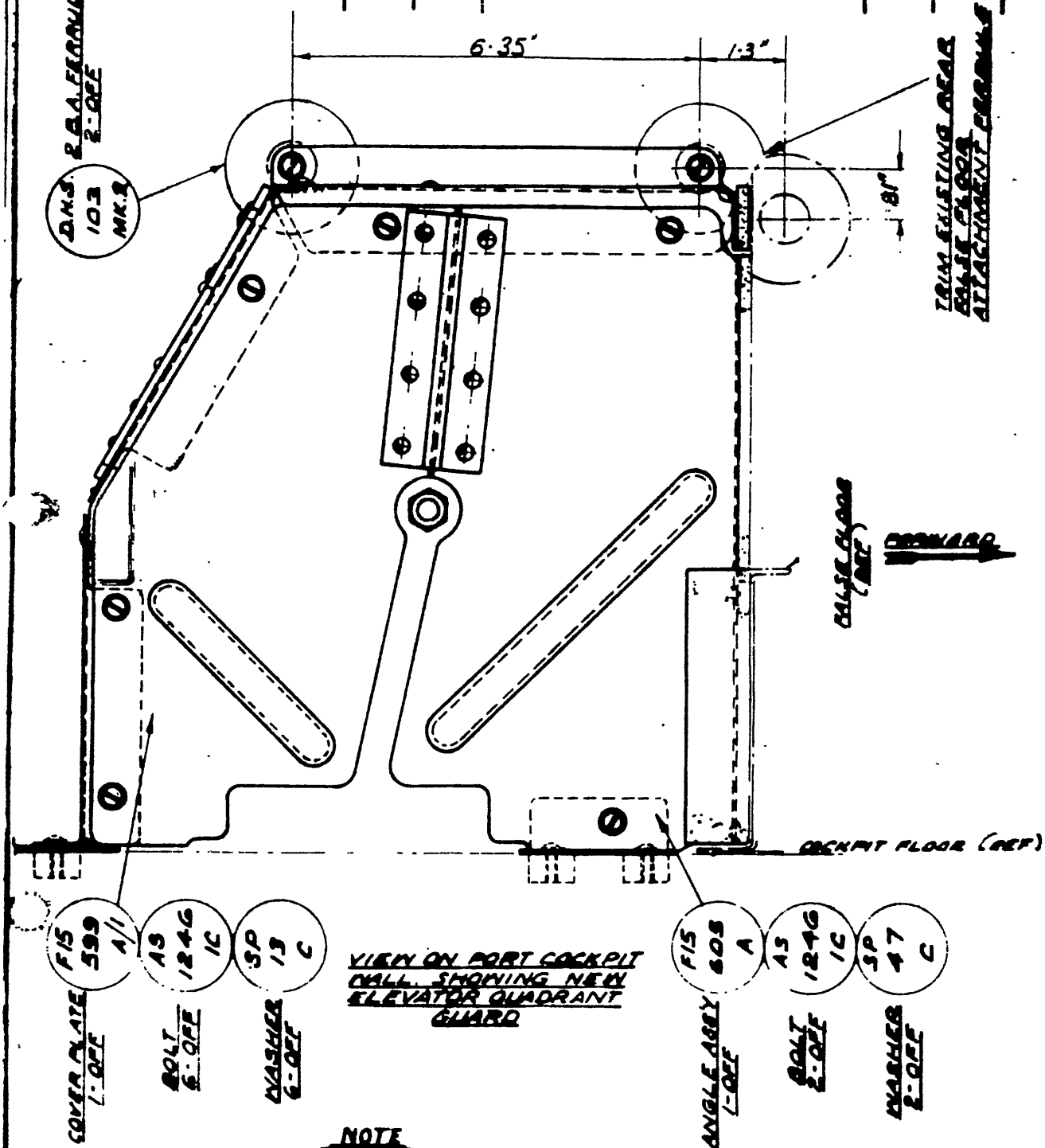
Attachments : Drawing A13001 Sheets 1 and 2 (Issue 2), Sheet 3 (Issue 1)

Date of Issue : 8th July, 1960.

(Issued with A/L 203 - July 1960)

DO NOT SCALE

2 ALIGG DRG. ALT. PICT. TO AGREE WITH ALIGG



VIEW ON PORT COCKPIT WALL SHOWING NEW ELEVATOR QUADRANT GUARD

NOTE

SEAL HEADS OF RIVETS USED WITH FERRULES & BONDING STRIP WITH AEROSTIK 1751, 1798

DE HAVILLAND DRAWING No DOM 372 SHEET 1 OF 3 SHEETS

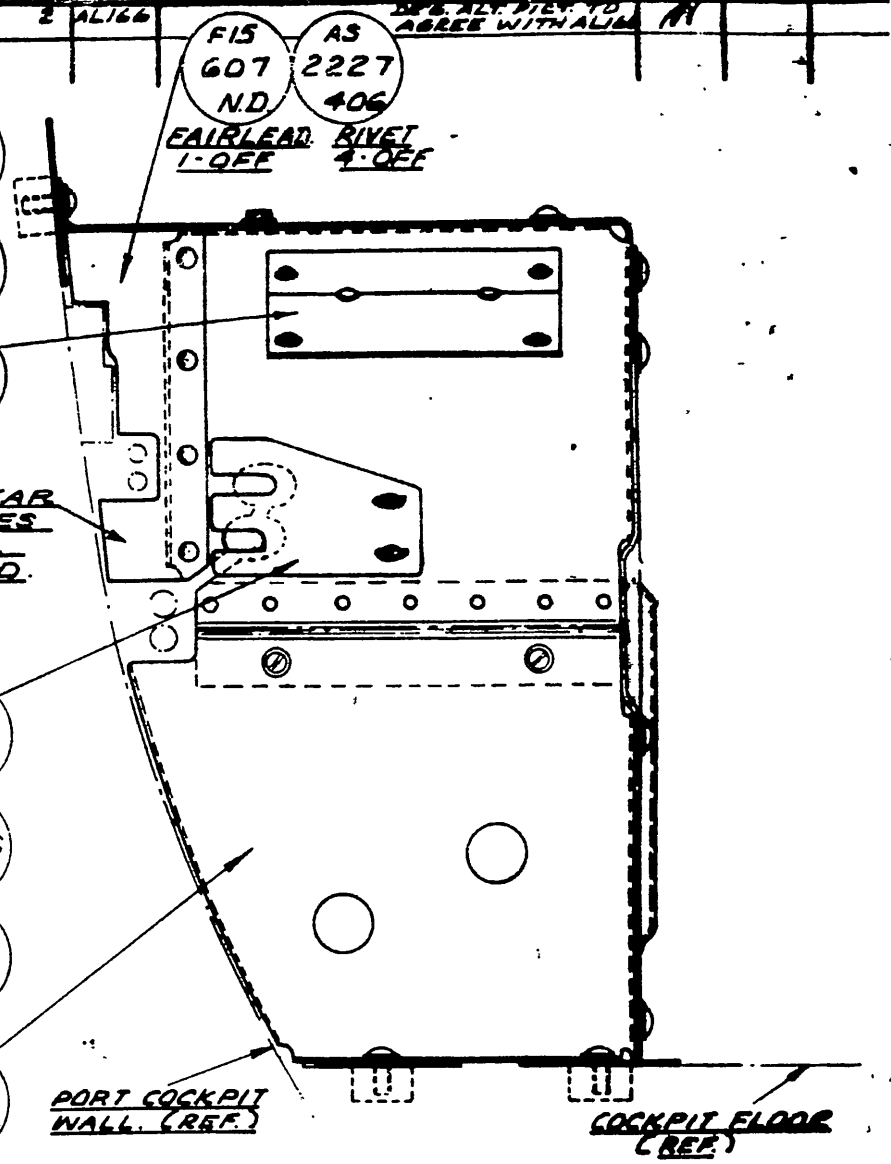
REFERENCE	ISSUED BY	TITLE
		GUARD FOR ELEVATOR CONTROL QUADRANT IN COCKPIT

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± 0·01"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± 1°	FINISH		TECH. ORDER	
SURFACE FINISH AUSTRALIAN STANDARD		SCALE		DRAWING No.	A13001 Sht. 1
		DRAWN	APPROVED		DRWG A SIZE
		TRACED	CHECKED		

DO NOT SCALE

2 AL166

DIM'S. ALT. DIEV. TO AGREE WITH ALIG



VIEW LOOKING FORWARD ON NEW ELEVATOR QUADRANT GUARD.

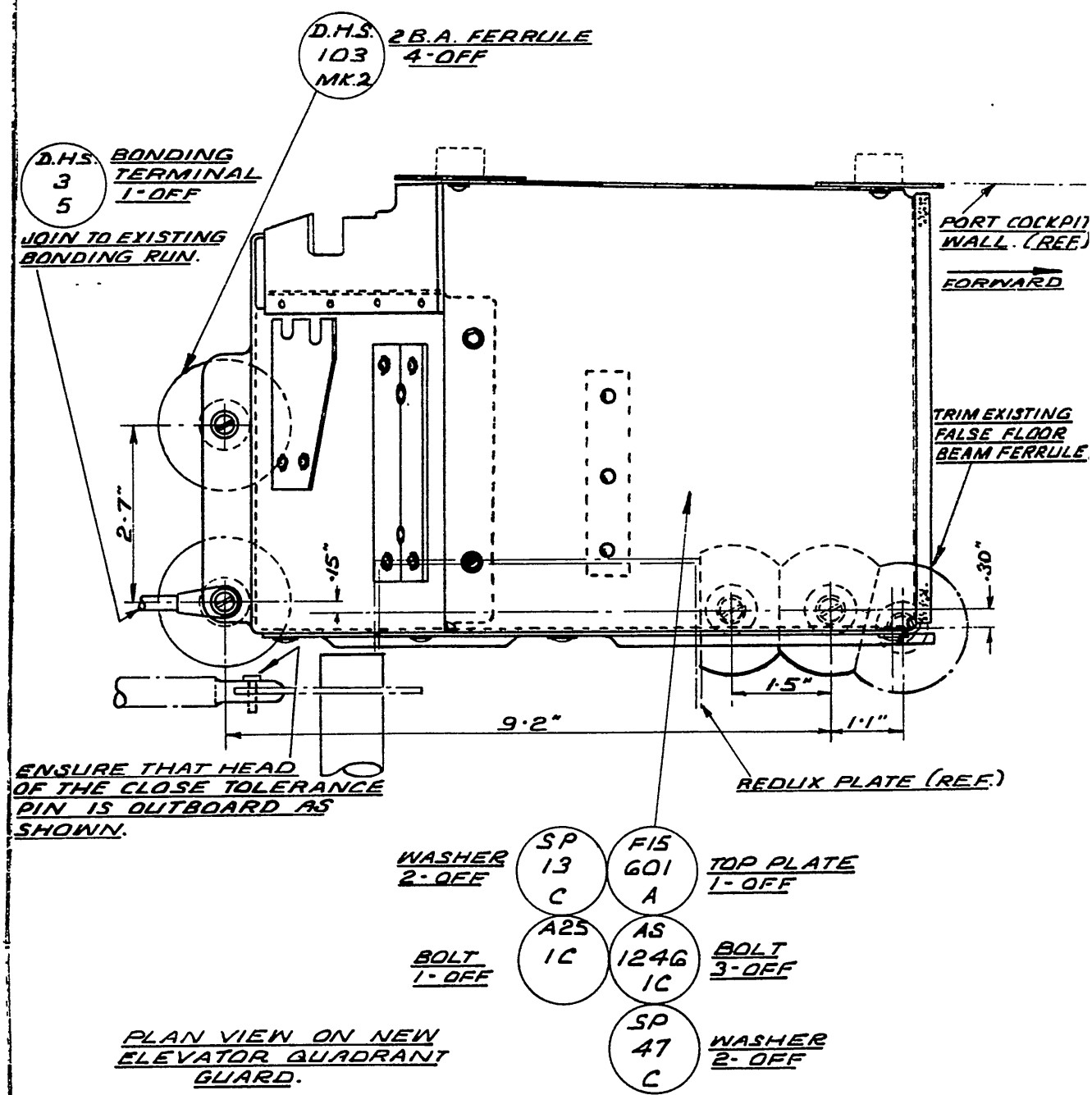
DE HAVILLAND DRG. No. OOM 372. SHEET 2 OF 3 SHEETS.

REFERENCE	ISSUED BY	TITLE
		GUARD FOR ELEVATOR CONTROL QUADRANT IN COCKPIT

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± 0.01"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± 1°	FINISH		TECH ORDER	
SURFACE FINISH AUSTRALIAN STANDARD		SCALE		DRAWING NO.	A13001 Sht 2
		DRAWN	APPROVED		
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L.	INITIALS	APPROVED



DE HAVILLAND DRAWING OOM372 SHEET 3 OF 3 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING	GUARD FOR ELEVATOR CONTROL QUADRANT IN COCKPIT

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	FLYING CONTROLS.
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MKS 33, 35 & 35A
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN.
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD Nº 258
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.I.		SCALE		DRAWING NO.	A/1300/ SHEET 3.
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

AAP 721:79, Vol 2, Part 2 VAMPIRE MODIFICATION NO 259

Class 2

REINFORCING OF TOP RUDDER HINGE IN FIN - INTRODUCTION

Reason for and Description of Modification

1. Cases have been discovered where the Nut Plate on the Fin Rib No 5, forward of the fin rear spar, at the rudder top hinge, has cracked, thus releasing the rudder top hinge bracket attachment nuts and allowing flexing of the hinge attachment, with subsequent cracking of the fin spar web at this point. This modification strengthens this region by the introduction of Doubler Plates and a reinforced hinge bracket.

Application

2. This work is to be carried out on all Mk 33 aircraft except A79-817, A79-802 and A79-805 (NOTE: These aircraft have been modified to DTS SI Vamp/127) and all Mk 35 aircraft from A79-601 to A79-620 inclusive.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters, Maintenance Command:-

Ident No	Part No	Nomenclature	Remarks
A79/504048	TB15-23A/2	Fin & Boom Assembly LH	Rework to paragraphs 11 (c) ii to xi inc and reidentify as Part No TB15-23A/3 Ident No A79/504062
A79/504049	TB15-25A/2	Fin & Boom Assembly RH	Rework to paragraphs 11 (c) ii to xi inc and reidentify as Part No TB15-25A/3 Ident No A79/504063
A79/500331	J00 825	Hinge Bracket	Rework to paragraph 11 C iv and reidentify as Part No J001981 Ident No A79/504065

Orders Superseded or Cancelled

5. This modification cancels DTS Special Inistruction Vampire/127.

(Issued with A.L. 100 - June, 1958)

Equivalent Modifications

6. De Havilland (Aust) Mod V722 and Air Ministry Modification Vam 3508 are equivalent modifications.

Suppy

7. The following parts are required to complete one modification set:-

Item	Ident No	Part No	Nomenclature	No Off	Stores Class
1		12.TF.53	Box Bracket	2	
2		J00.1973ND	Doubling Plate LH	2	
3		J00.1974ND	Doubling Plate RH	2	
4		J00.1975ND	Packing Plate	4	
5		J00.1977ND	Tapered Packing	4	C
6	H128F/61192(Z)	AGS.2051/419 (B.H.)	Rivet, Pop, 120°, Csk Hd x 1/8" dia	60	C
7	H128F/61194(Z)	AGS.2051/424 (B.H.)	Rivet, Pop, 120°, Csk HD x 1/8" dia	20	C
8	H128F/62504(Z)	AGS.2051/524 (B.H.)	Rivet, Pop, 120o, Csk HD x 5/32" dia	16	C
9	H128F/63365	AS.2229/404	Rivet, 90° Csk HD, 1/8" dia x 1/4" long	16	C
10	H128F/62510	AS.2229/406	Rivet, 90° Csk HD, 1/8" dia x 3/8" long	20	C
11	H128F/62070	AS.2229/505	Rivet, 90° Csk HD, 5/32" dia x 5/16" long	32 ~~20~~	C (A.L. 147)
12	H128F/62071	AS.2229/506	Rivet, 90° Csk HD, 5/32" dia x 3/8" long	12 ~~8~~	C (A.L. 147)
13	H28B/5032	SP.9/C8	Split Pin, Nickel Alloy, 1/16" dia x 1.0" long	6	C
14	K3/175		Primer, Zinc Chromate	AR	C
15	K3/176		Thinners, Zinc Chromate	AR	C

Item	Ident No	Part No	Nomenclature	No Off	Stores Class
116	K3/365		Covering, Camouflage high speed, aluminium	AR	C
17	K3/353		Compound, Jointing to Spec DTD 369A	AR	C

Notes:- 1. Items 1 to 13 inclusive will be delivered from De Havilland Aircraft Pty.Ltd to the De Havilland Modification Section. Units requiring modification sets are to demand from De Havilland Modification Centre Bankstown, New South Wales.

2. Items 14 to 17 inclusive are to be drawn from unit stores.

Disposal of Parts Removed

8. The following part will be rendered redundant by the incorporation of this modification:

Item	Ident No	Part No	Nomenclature	No Off	Stores Class
18		J00.556 ND	Plate Packing	2	

Note:- Item 18 is to be disposed of in accordance with current authorised procedure.

Disposal of Parts in Store

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable, but not later than the next "D" servicing after receipt of sets or when the aircraft is allotted for retrospective modification fitment.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 63 man-hours will be required for the completion of this modification.

(Issued with A.L. 100 - June, 1958)

(b) Special Tools, Jigs, Etc : Nil.

(c) Note: Throughout this modification all mating surfaces are to be treated with pigmented varnish jointing compound prior to assembly.

The following is the sequence of operations and is applicable to both Port and Starboard Fins and Rudders:

(i) Remove the rudder as detailed in AP 721:79/33, Vol 1, Section 3, Chapter 3, page 3 and stow safely, together with its attaching items (except split pins) until required for reassembly.

(ii) Locate the small fin skin reinforcing angles fixed either side of the top rudder hinge, (refer to sheet 2 of drawing A12978) and drill out the ~~ten~~ eight rivets securing these angles, using a No 21 (0.159 in dia) drill. Retain these angles for reassembly.

(iii) Carefully slacken off, but do not remove, the four bolts securing the top hinge bracket. Now test the security of the nuts by gentle "working" the bolts. If the nuts are found to be loose, then in this case ONLY, cut a 1.0 in dia hole in the fin skin adjacent to each loose nut as detailed on sheet 1 of the drawing. Working through these holes, hold the loose nutes while removing the bracket bolt and after removal of the bracket, Part No J00.825 (ref only) from the aircraft replace the bolts before releasing the nuts.

Note: On aircraft with loose nuts, the bolts must be left in situ throughout embodiment of this modification and the technique detailed above of holding the nuts must be used whenever items are being removed from, or assembled to, the spar web.

(iv) Now modify the hinge bracket as detailed in fig 1 of sheet 2 of the drawing and re-Part No J00.1981 (Ref only).

(v) Offer up the new doubling plates, Item No's 2 and 3 to either side of the fin and ensure correct positioning to the dimensions given on sheet 1 of the drawing. Now carefully mark around these plates in pencil and remove them from the aircraft. Clean away the existing finish in this area and locate the two existing rivets in the fin skin which are shown marked ("E") on the drawing. Using a No 21 drill, carefully drill out these rivets.

(Issued with A.L. 100 - June, 1958)

(vi) Locate the top hinge bracket packing plate, Item No 4 and carefully drill out the eight rivets attaching this item to the fin spar web. Remove and dispose of the packing, taking the precautions noted in operation iii where necessary.

(vii) Offer up the new box bracket, Item No 1, together with its packing plates, Item No 4 and the tapered packings, Item No 5, if necessary, and drill back the eight rivet holes in the spar web and the fourteen rivet holes in the fin skin, using the No 21 drill. Also drill back the four bracket attachment bolt holes, using a No 11 (0.1910 in dia) drill Remove the bracket and packings from the aircraft, and deburr all new holes. Countersink the eight holes mating with the spar web to take the head of a 5/32 in dia 120 de countersunk head pop rivet.

(viii) Reassemble the bracket and packings and offer up the doubler plates. Now drill through the existing holes back into the plates and open up and drill through the pil holes in the plates into the fin skin, using a No 30 (0.1285 in dia) and No 21 drill as appropriate.

Note that where the 1·00 in dia. access hole has been cut it will be necess to fill the pre-drilled holes in the doubler, marked "Ø" with rivets (Item 6) 2· (HL 144)

Remove the bracket, packings and doubler plates from the aircraft. Countersink all the new holes as required to suit their various rivets and also countersink the holes in the bracket which lie under the holes dimpled in the fin skin (Marked ("E") on the drawing). Deburr all holes and clean away all swarf.

(ix) Correctly position the box bracket and its packing and riv to the spar web using eight 5/32 in dia 120 deg c'sk head pop rivets, Item No 8.

(x) Offer up and bolt into position the modified hinge bracket Part No J00.1981 (ref only) and on aircraft with loose nut peen or centre pop the bolts to lock after tightening.
Note: To facilitate rivetting, on aircraft where the nuts were not loose, refitment of this bracket may be delayed until after the doubler plates have been fitted.

(xi) Now position the Doubler Plates items 2 and 3 and reposition the existing reinforcing angles removed in paragraph 11 (c) (ii) then complete the rivetting as shown on sheet 1 of the drawing.

(xii) Renew the finish locally using Items 14 - 16 incl.

(Issued with A.L. 100 - June, 1958)

(xiii) Refit the rudder in accordance with the procedure detailed in AAP 721:79, Vol 1, using the original attachments and three new split pins Item No 13. (Refer paragraph 11 (c) i).

(d) Tests : Check the rudders for correct function and range of movement.

(e) Recording : Record this modification in the Airframe Log Book and on the Tailboom Modification Plate.

Drawings

12. Drawing A12978, sheets 1 and 3 (Issue 2) and sheet 2 (Issue 1) are ~~consisting of three (3) sheets is~~ attached herewith.

Effect on Weight and Balance of Aircraft

13. The effect of this modification on the wight and balance of the aircraft is as follows:-

FIXED EQUIPMENT

	WEIGHT + (lb) -	Arm + (ins) -	Moment + (lb in) -
Fin reinforcing installation consisting of reinforcing plates box brackets and packings.	+ 0.7	+ 223	+ 156

Note: Amendments to Weight Sheet Summaries will be consolidated and issued by Department of Air.

Reference : File, Department of Air, 150/8/1215.

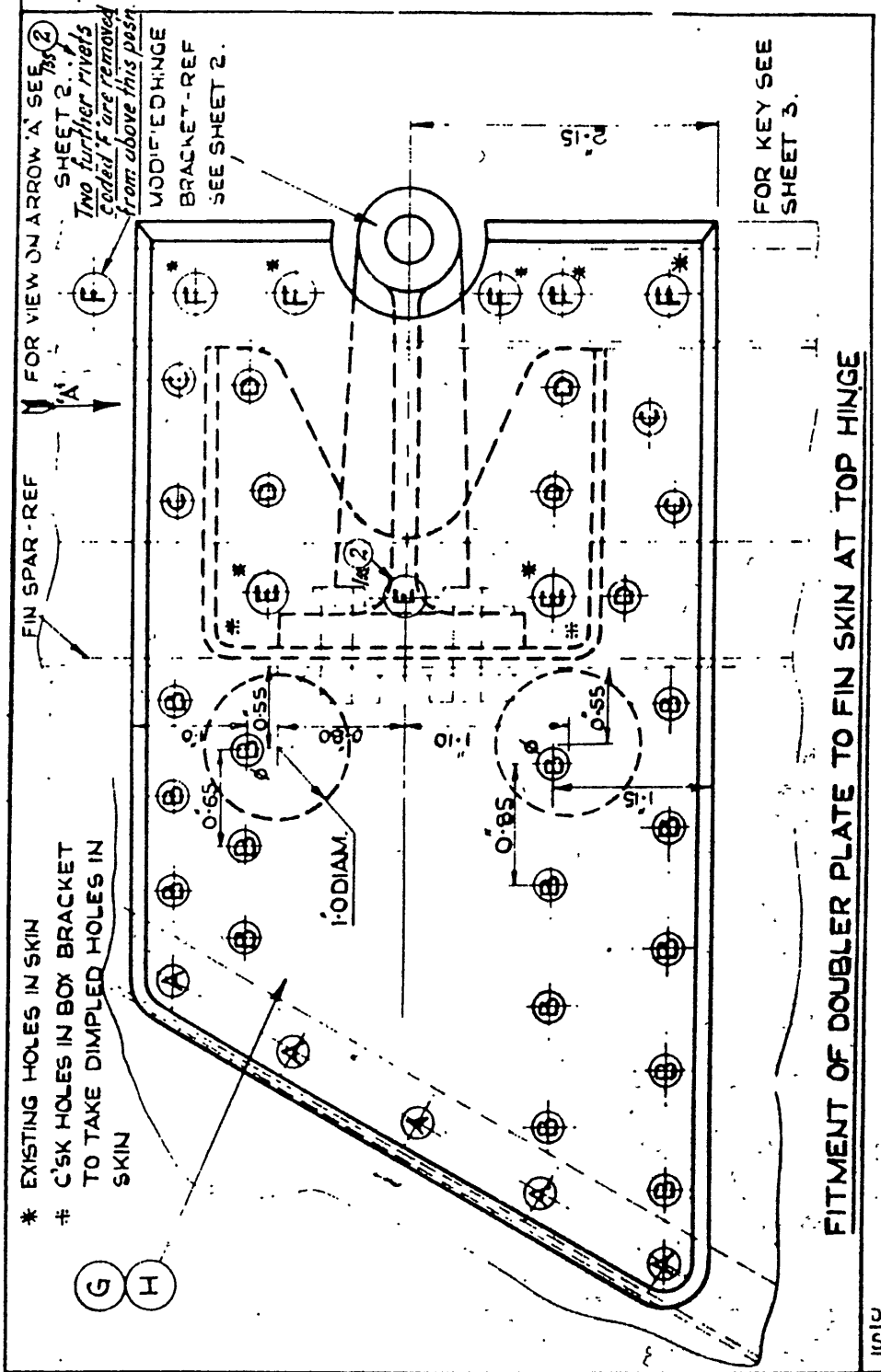
Attachments : Drawing No A12978, Sheets 1 (Issue 2), 2 and 3 (Issue 2).

Date of Issue : 6th June, 1958.

(Issued with A.L. 100 - June, 1958)

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D.I.L.	INITIALS	APPROVED
2	27.1.59.	Additional symbols "E" & "F" with note, "Two further rivets" etc, added to Drg.	AL184		



DE HAVILLAND DRG. N° OOM 357
SHEET 1 OF 3.

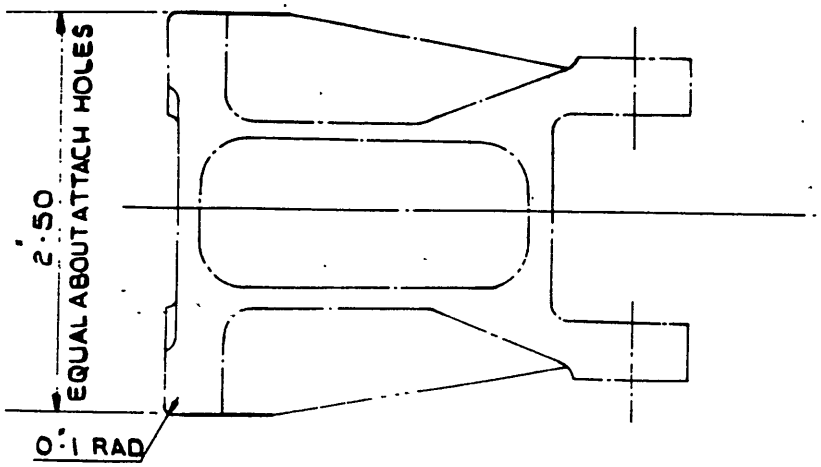
REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	REINFORCING OF TOP RUDDER HINGE IN FIN — INTRODUCTION

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	MOD 259 (VAMPIRE)
SURFACE FINISH AUSTRALIAN STANDARD ENG DRWG PRACTICE A.S.C.21		SCALE		DRAWING NO	A 12078 SHEET 1 OF 3
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

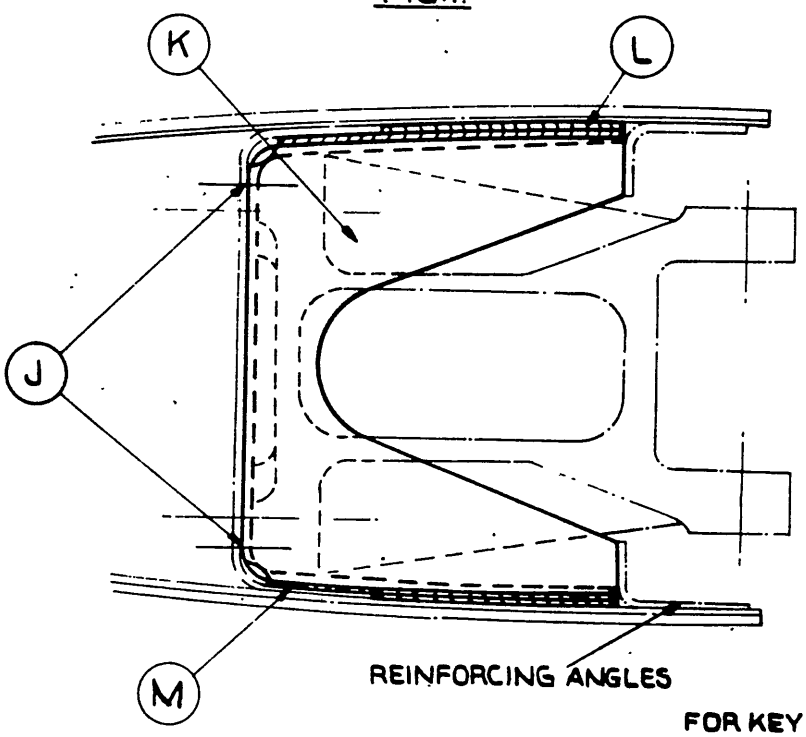
DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D.I.L.	INITIALS	APPROVED

AFTER MODIFICATION RE-NUMBER
BRACKET J001981 -REF.



MODIFICATION TO UPPER HINGE BRACKET J00825 -REF FIG.1.



FOR KEY SEE SHEET 3.

VIEW ON ARROW 'A' -SEE SHEET 1.

FIG.2.

DE HAVILLAND DRG. Nº OOM-357
SHEET 2 OF 3.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR, DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	REINFORCING OF TOP RUDDER HINGE IN FIN INTRODUCTION

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	MOD. 259 (VAMPIRE)
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRNG. PRACTICE AS.CZI		SCALE		DRAWING NO.	A 12978 SHEET 2 OF 3
		DRAWN	APPROVED		DRWG A SIZE
		TRACED	CHECKED		

DO NOT SCALE

2	26.6.59	Quantity of "Key Items "E & F" as shown were :— 4 & 10 respectively.	1

KEY	PART No.	NOMENCLATURE	QTY
A	A.G.S 2051/424	RIVET, PoP, .120 DEG. COUNTERSINK HEAD, 1/8 IN. DIA	10
B	A.G.S 2051/419	RIVET, PoP .120 DEG. COUNTERSINK HEAD, 1/8 IN. DIA.	30
C	A.S. 2229/404	RIVET, 90 DEG. COUNTERSINK HEAD, 1/8 IN. DIA.	8
D	A.S. 2229/406	RIVET, 90 DEG. COUNTERSINK HEAD, 1/8 IN. DIA	10
E	A.S. 2229/506	RIVET, 90 DEG. COUNTERSINK HEAD, 5/32 IN. DIA	6
F	A.S. 2229/505	RIVET, 90 DEG. COUNTERSINK HEAD, 5/32 IN. DIA.	16
G	J.00 1973 ND.	PLATE DOUBLING, L.H.	1
H	J.00 1974 ND.	PLATE DOUBLING. R.H.	1
J	A.G.S 2051/524	RIVET, PoP. .120 DEG. COUNTERSINK HEAD, 5/32 IN. DIA.	8
K	12. TF. 53	BOX BRACKET	1
L	J.00 1975 ND.	PACKING, 20 S.W.G.	2
M	J.00 1977 ND	PACKING, TAPERED (NOMINAL 16 S.W.G.)	2

(2) 1st.

NOTE :- QUANTITIES GIVEN ARE PER FIN

RIVET AND PARTS REQUIRED KEY.

DEHAVILLAND DRG. No. OOM-3

SHEET 3 OF 3

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF MECHANICAL & ELECTRICAL ENGINEERING	REINFORCING OF TOP RUDDER HINGE IN F INTRODUCTION

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	MOD 259 (VAMPIRE)
SURFACE FINISH AUSTRALIAN STANDARD ENG DRWG PRACTICE A.S.C.D.		SCALE		DRAWING NO.	A 12978 SHEET 3 OF 3
		DRAWN	APPROVED		DRWG SIZE A
		TRACED	CHECKED		

AAP 721:79 Vol 2 Pt 2

VAMPIRE MODIFICATION NO 260

Class 2

SPECIAL COVERS OVER BATTERY VENTS - INTRODUCTION

Reason for and Description of Modification

1. Corrosion of equipment in the vicinity of the batteries has been experienced due to gassing from the batteries. This modification introduces special covers over the vents to neutralize the acid vapour.

Application

2. This work is to be carried out on all Vampire Mk 33 aircraft and Vampire Mk 35 aircraft serial Nos A79-602 to A79-630 inclusive. Aircraft A79-631 and subsequent will be modified during manufacture.

Responsibility for Incorporation

3. This modification is to be incorporated by electrical fitters of operating units, aircraft depots and contractors concerned.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modification

6. De Havilland (Aust) Mod V 723 and Air Ministry Modification Vam 3391 are equivalent modifications.

Supply

7. The following part is required to complete one Modification Set :-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1	A79/504123	15.F.2597A	Vent, Cover Ass	12	C

NOTES :- (a) Item 1 will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland Modification Section.

(b) De Havilland Modification Section will issue this item on demand by units and contractors concerned.

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Store

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable and not later than the next "D" servicing of aircraft after receipt of parts required.

Method of Incorporation

11. (a) Man-Hours Involved : Approx 1 man-hour will be required for the completion of this modification.

(b) Special Tools, Jigs, Etc. : None required.

(c) Sequence of Operations :

(i) Raise the nose cap and disconnect the aircraft batteries.

(ii) Affix over each of the twelve battery vents a vent cover, item 1, ensuring a good snug fit.

(iii) Reconnect the aircraft batteries and lower the nose cap.

(Issued with A/L 120)

NOTE : When the Indicator Pad, located in the top of the vent cover, item 1, changes colour from orange to red it must be replaced as follows.

Remove the circlip, Part No 15 F 2601ND Ref and remove and discard the indicator pad and the felt pad underneath it. Fit a new felt pad Part No 15 F 2601ND, Ident No A79/504120 and a new indicator pad Part No 15 F 2987ND, Ident No A79/504119 and replace the existing circlip.

(d) Tests : No tests are required

(e) Recording : Record this Modification in the Airframe Log Book.

Drawings

12. No drawings are required.

Effect on Weight and Balance

13. Amendments to weight sheet summaries will be issued and consolidated by Department of Air. The effect of this modification on the weight and balance of the aircraft is as follows :-

Fixed Equipment

Item No	Weight (lbs)±	Arm (ins)±	Moment (lb ins) ±
Battery Vent Covers	+.54	-133.32	-71.99

Reference : Files, Department of Air, 150/8/1216 and 150/4/8621

Date of Issue : 7th November, 1958

(Issued with A/L 120)

A.A.P. 721:79, Vol. 2, Pt. 2. VAMPIRE MODIFICATION NO. 261

Class 2.

PROVISION OF ADDITIONAL HOLES IN KNURLED TURNBUCKLE ON REAR END OF TUBE STAY

Reason for and Description of Modification

1. Difficulty has been experienced in fitting the "C" spanner to the turnbuckle when adjusting the stay tube to obtain the correct rack and roller clearance on the B.F.M. in the aircraft gunnery installation. The modification consists of drilling four additional holes in the turnbuckle to permit ease of adjustment.

Application

2. This modification is applicable to all Mk. 30, 31, 33 and 35 Vampire aircraft not incorporating Armament Modification No. 104 or De Havilland (Aust.) Modification V235.

Responsibility for Incorporation

3. The modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for servicing Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spare is affected by this modification and is to be modified at the direction of Headquarters, Maintenance Command.

Item No.	Ident. No.	Part No.	Nomenclature	Remarks
1.	A79/503941	S.98762	Turnbuckle	Rework to 00A339

Orders Superseded or Cancelled

5. This modification cancels and supersedes Armament Modification No. 104.

Equivalent Modifications

6. De Havillands (Aust.) Modification No. 235 is an equivalent modification.

Supply

7. No parts are required for the incorporation of this modification.

(Issued with A.L.93 - January, 1958)

A.A.P. 721:79, Vol. 2, Pt. 2. VAMPIRE MODIFICATION NO. 251

Disposal of Parts Removed

8. No parts are rendered redundant by the incorporation of this modification.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable, but not later than the next "D" servicing.

Method of Incorporation

11. (a) Man-Hours Involved: Approximately two (2) man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs &c. : Nil.

(c) Sequence of Operations :

(i) Remove knurled turnbuckle from end of tube stay.
(ii) Using a 1/8" drill, drill four additional holes in the turnbuckle so that holes are spaced at 45° around the circumference of the turnbuckle instead of 90° as at present. Holes to be drilled to a depth of a 1/4".
(iii) Assemble turnbuckle to end of tube stay.
(iv) Re-identify Turnbuckle A79-503963 Pt. No. 00A339.

(d) Tests : No special tests are required.

(e) Recording : Record the modification in the airframe log book.

Drawings

12. No drawings are required.

(Issued with A.L.93 - January, 1958)

Effect of Weight and Balance of Aircraft

13. The effect of the incorporation of the modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/364 and 150/8/1131

Date of Issue : 30th January, 1958.

(Issued with A.L.93 - January, 1958)

A.A.P. 721:79, Vol. 2, Pt. 2. VAMPIRE MODIFICATION NO. 262

Class 2.

FRONT GUN MOUNTING UNIT - PROVISION OF FINER ADJUSTMENT

Reason for and Description of Modification

1. It has been found during harmonization of the aircraft that it is occasionally necessary to disturb guns after final alignment to ensure positive engagement of the locking screw in the ball eccentric of the front mounting unit. The modification provides two additional positions for the locking screw in the ball housing to permit a finer adjustment during harmonization.

Application

2. This modification is applicable to all Mk. 30, 31, 33 and 35 Vampire aircraft not incorporating Armament Modification No. 105 or De Havillands (Aust.) Mod. V236.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for servicing Vampire aircraft. The trade mustering responsible is armament fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters, Maintenance Command.

Item No.	Ident. No.	Part No.	Nomenclature	Class
1.	A79/501119	S.0041	Housing Ball	A
2.	A79/501120	S.0042	Housing Ball	A
3.	A79/501121	S.0044	Housing Ball	A
4.	A79/501122	S.0043	Housing Ball	A

Orders Superseded or Cancelled

5. This modification cancels and supersedes Armament Modification No. 105.

Equivalent Modifications

6. De Havillands (Aust.) Modification No. 236 is an equivalent modification.

(Issued with A.L. 94 - January, 1958)

Supply

7. No parts are required for the incorporation of this modification.

Disposal of Parts Removed

8. No parts are rendered by the incorporation of this modification.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing.

Method of Incorporation

11. (a) Man-Hours Involved: Approximately eight (8) man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs &c. : Nil.

(c) Sequence of Operations:

(i) Remove the guns from aircraft.
(ii) Remove the housing ball from the aircraft and remove the ball eccentrics from the housing.
(iii) Referring to drawing A12974 drill two additional locking screw holes at positions indicated, using a No. 26 drill.
(iv) Tap the two holes, 2 BA.
(v) Remove all sharp edges, swarf, &c. from the holes where they break through the housing.
(vi) Replace the ball eccentric in the housing and check for freedom of movement.
(vii) Replace the mountings in their appropriate positions in the aircraft and replace the guns.

(d) Tests : No special tests are required other than those detailed in sequence of operations.

(e) Recording : Record the modification in the airframe log book.

Drawings

12. Drawing A12974 attached herewith.

Effect on Weight and Balance of Aircraft

13. The effect of the incorporation of the modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/1057 and 150/8/1132.

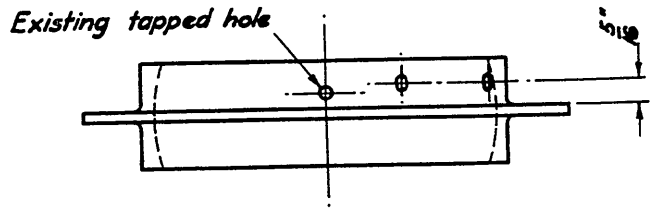
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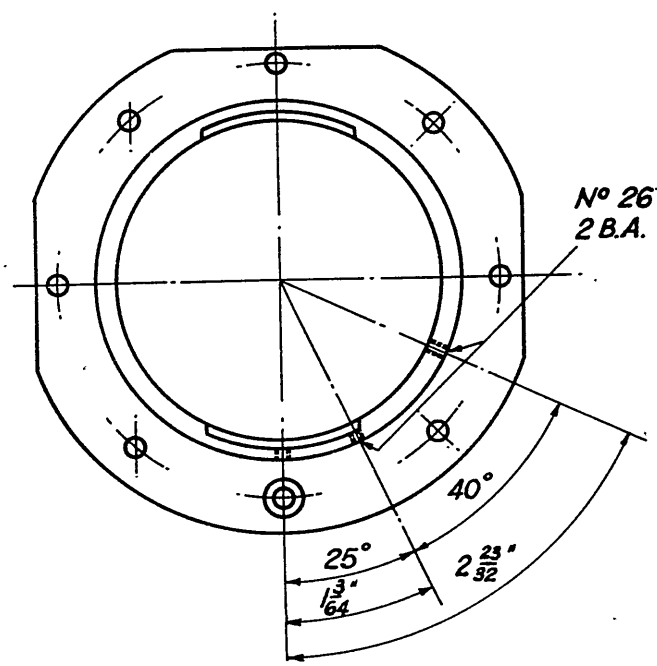
Date of Issue : 30th January, 1958.

(Issued with A.L. 94 - January, 1958)

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L	INITIALS	APPROVED
	3-7-56			W.R.	
2	27-11-56	Vampire Mod. 262 was Armament Mod 105 Drg Nº A12974 was D-ARM 1382		W.R.	





Note : Part Nos S0041 & S0042 modified as drawn.
Part Nos S0043 & S0044 modified opposite hand.

REFERENCE	ISSUED BY	TITLE
	DIRECTORATE OF AIRCRAFT ENGINEERING	MODIFICATION TO BALL HOUSING 20 MM. CANNON

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	Vampire
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	Vampire Mod 262
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.CZI		SCALE	Half Full Size	DRAWING N	A-12974
		DRAWN	RACKHAM	APPROVED	
		TRACED	W.R.	CHECKED	

BRWG. A SIZE

AAP 721:79, Vol 2, Pt 2 VAMPIRE MODIFICATION NO 263

Class 2

TO INCREASE THE GAUGE OF THE HYDRAULIC PIPE FROM BULKHEAD 4 TO CUT-OUT - INTRODUCTION

Reason for and Description of Modification

1. Failures have been experienced in service with the existing Hydraulic Pipes, 13.S.1005 AND and S15-737 AND. The modification is introduced to increase the gauge of pipe from 22 or 24 gauge to 20 gauge.

Application

2. This work is to be carried out on all Vampire Mk33 aircraft and on Vampire Mk35 aircraft, Serial Nos A79-602 to A79-620 inclusive.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsibl for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V725 and Air Ministry Mod Vam 3554 are equivalent modifications.

Supply

7. The following parts are required to complete one modification set.

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1	A79/504162	S15-1135 AND	Pipe Assy Engine	1	C
2	I1/2700		Pressure, Wire, Locking, Soft Iron, Galvanised, 20 SWG	A.R.	C

(Issued with A/L No 103 - July, 1958)

NOTES: (a) Item 1 will be delivered from De Havilland Aircraft Pty Ltd to the De Havillands Modification Section. Units requiring modification sets are to demand from De Havillands Modification Section.

(b) Item 2 will be drawn from unit stores.

Disposal of Parts Removed

The following parts will be rendered redundant by the incorporation of this modification.

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
3	A79/504073	13.S.1005 AND	Pipe, Assy Engine Pressure 24 SWG	1	
4		S15-737 AND	Pipe, Assy Engine Pressure 22 SWG	1	

NOTES: (a) Items 3 & 4 are obsolete and are to be disposed of in accordance with current authorized procedure.

(b) Item 3 is applicable to Mk 33 aircraft.

(c) Item 4 is applicable to Mk 35 aircraft.

Disposal of Parts in Stock

Stocks of item 3 are obsolete and are to be disposed of in accordance with current authorized procedure when all applicable aircraft have been modified.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable, but not later than the next "D" servicing after receipt of parts or when the aircraft are allotted for retrospective modification fitment.

(Issued with A/L 103 - July, 1958)

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 4 man-hours will be required for the completion of this modificatio less tests and function.

(b) Special Tools, Jigs, Etc. : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Remove Port Cannon Door in accordance with current authorized procedure.

(ii) Locate in the Cannon Bay the manual pressure release valve and operate to release all the pressure in the hydraulic accumulator.

(iii) Locate engine pressure pipe on Port side of the cannon bay running between the forward face of bulkhead No 4 and the automatic cut-out. This pipe ($\frac{3}{8}$" o/d) is the smaller of two pipes, which are run together through two clamp blocks secured to cannon bay wall.

(iv) Taking every precaution against fluid spillage, release the two clamp blocks securing the now redundant pipe, item 3 or 4 as applicable.

(v) Break locking wires which safety the union nuts on both ends of pipe, item 3 or 4, as applicable and remove pipe.

(vi) Replace this pipe with item 1, using the clamp blocks, nuts and washers removed in para iv.

NOTE: Care must be taken in the proceding operation to avoid damaging the flared joints of the new pipe by overtightening.

(Issued with A/L 103 - July, 1958)

Sequence of Operations (contd)

(vii) Wire lock both union nuts with galvanised soft iron wire, item 2, in accordance with current authorized procedure.

(viii) Top up hydraulic reservoir, and ensure that the air pressure in the hydraulic accumulator is correct.

(ix) Before replacing cannon door on aircraft refer to tests.

(x) Replace cannon door after test has proved satisfactory.

(d) Tests : With cannon door removed refer to the appropriate aircraft handbook and, as detailed carry out a functional test to ensure correct functioning of the hydraulic system. Check the new pipe connections for possible leakage.

(e) Recording : Record this modification in the Airframe Log Book.

Drawings

12. No drawings are required.

Effect on Weight and Balance of Aircraft

13. The effect of the incorporation of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/63 and 150/8/1217

Date of Issue : 2nd July, 1958

(Issued with A/L 103 -

AAP 721:79, Vol 2, Pt 2

VAMPIRE MODIFICATION NO 264

Class 2

MODIFIED TAIL CONE - INTRODUCTION

Reason for and Description of Modification

1. It has been found, on aircraft where Goblin engines with DH Goblin Modification No 1064 installed, that a foul occurs between the Jet Pipe Thermocouple lead and three of the formers in the Rear Tail Cone. To eliminate any such foul, this modification introduces cut-outs in the three rear tail cone formers.

Application

2. This work is to be carried out on all Vampire Mk 33 Aircraft and on Vampire Mk 35 aircraft Serial Nos A79-602 to A79-620 inclusive. Aircraft A79-621 and subsequent will be modified during manufacture.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair or Vampire aircraft. The trade mustering responsible is airframe fitter assisted by electrical fitter.

Action in Respect of Spares

4. The following spare is affected and is to be modified at the direction of headquarters Maintenance Command.

Ident No	Part No	Nomenclature	Remarks
A79/503799	EC15-3AND	Tail cone	Rework to para 11(c) (ii) to (viii) and reidentify as Part No EC15-71AND Ident No A79/504121

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modification

6. De Havilland (Aust) Mod V726 and Air Ministry Modification Vam 3575 are equivalent modifications.

Supply

7. The following parts are required to complete one modification set.

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1		15 EC 211	Plate, Cut-out Reinforcing	1	
2		15 EC 213	Plate, Cut-out Reinforcing	1	
3		15 EC 215ND	Plate, Stiffner	1	
4		15 EC 217ND	Plate, Stiffner	1	
5		15 EC 219ND	Packing Piece	1	
6		15 EC 221ND	Packing Piece	1	
7	H128F/64409	AS 2227/404	Rivet, Al Alloy, Rd Hd $\frac{1}{8}$" dia x $\frac{1}{4}$" long	34	C
8	H128F/64410	AS 2227/405	Rivet, Al Alloy, Rd Hd, $\frac{1}{8}$" dia x 5/16" long	14	C
9	H128F/64452	AS 2230/404	Rivet, Al Alloy, Csk Hd, 120° $\frac{1}{8}$" dia x $\frac{1}{4}$" long	8	C
10	H128F/64453	AS 2230/405	Rivet, Al Alloy, Csk Hd, 120°, $\frac{1}{8}$" dia x 5/16" long	23	C
11	H128F/64454	AS 2230/406	Rivet, Al Alloy, Csk Hd, 120°, $\frac{1}{8}$" dia x $\frac{3}{8}$" long	7	C
12	K3/353		Compound Jointing To Spec DTD 369A	AR	C
13	K3/175		Primer, Zinc Chromate	AR	C
14	K3/176		Thinners, Zinc Chromate	AR	C
15	K3/365		Covering, Camoflage, High Speed, Aluminium	AR	C

NOTES: (a) Items 1 to 11 will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland Modification Section Units requiring modification sets are to demand from De Havilland Modification Section, Bankstown NSW.

(b) Items 12 to 15 will be drawn from Unit Stores.

(Issued with A.L. 124)

Disposal of Parts Removed

8. The following part will be rendered redundant by the incorporation of this modification.

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
16		L00146	Fish Plate Rear	1	

NOTE: Item 16 is obsolete and is to be disposed of in accordance with current authorized procedure.

Disposal of Parts in Store

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable, but not later than the next "D" servicing after receipt of parts or when the aircraft are allotted for retrospective modification fitment.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 18 man-hours will be required for the completion of this modification.

(b) Special Tools, Jigs, &c : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Disconnect the aircraft batteries and remove the tail cone from the aircraft, retaining all attachment items.

(ii) Locate the centre former bulkhead, Part No L0075A, Reference to Drawing A13016 Sheet 1, will facilitate location of this position. At the top, mid position of this Bulkhead, Detail 'X' will be found two Fish Plates, one each side of the Bulkhead, secured by eighteen $\frac{1}{8}$ inch dia snaphead rivets. Carefully drill out these securing rivets using a No 30 (0.1285 in dia) drill. Then discard the Rear Fish Plate, Item 16, which is now rendered redundant.

(iii) Refer now to drawing A13016, sheet 2, mark off and cut the cut-out in the Bulkhead to the measurements shown, blending in the redundant rivet hole. Remove any sharp edges from the newly cut edge. Trim the existing Front Fish plate, Part No L0077 as shown on sheet 2 of the drawing, rounding the corners with a 0.25 in radius. Remove any sharp edges. Offer up the new cut-out reinforcing plate, item 2, the rear face of the centre bulkhead, in the position shown, and drill off it eighteen rivet attachment holes in the Bulkhead with the No 30 drill, using the holes in the reinforcing plate as a guide. Drill off the remaining rivet attachment holes in the reinforcing plate from the existing holes in the Bulkhead. De-burr all holes. Coat the mating surfaces of the new plate, the modified Fish Plate and the Bulkhead with Pigmented varnish jointing compound item 12, then rivet these plates into position on the Bulkhead using thirty five $\frac{1}{8}$ in dia Snap Head rivets, fourteen off item 8 and twenty one off, item 7, the longer of these rivets being used for securing both the fish plate and the new reinforcing plate to the bulkhead.

(iv) Locate the rear Bulkhead Part No L00856 in the Tail Cone. Reference to Drawing A13061 sheet 1, detail 'Y' will show where it is situated. Refer now to sheet 3 of the drawing, mark off and cut the cut-out to the measurements shown, removing any sharp edges. Place the new cut-out reinforcing plate, item 1, onto the rear face of the Bulkhead in the Position shown and using the No 30 drill, drill of the attachment rivet holes, using the holes in the reinforcing plate as a guide. Deburr all holes. Coat the mating surfaces of the new plate and the bulkhead with pigmented varnish jointing compound, item 12, then rivet the plate to the bulkhead using thirteen $\frac{1}{8}$ in dia snaphead rivets, item 7.

(v) Refer to drawing A13061 sheet 1, and locate the position of the forward ring, part No L00855. Having located the ring, refer to sheet 5 of the drawing, then mark off and cut the cut-out to the measurements shown removing any sharp edges.

(Issued with A.L. 264)

Refer to sheet 4 of the drawing and using the No 30 drill, drill out the seven rivets securing the forward edge of the forward ring between the two longitudinal top hat stiffeners and the two rivets securing the two rivets securing the end of the inboard flanges on each of the top hat stiffeners adjacent to the forward ring.

(vi) Offer up the two new packing pieces, items 5 and 6 and the new forward stiffener, item 3, into the positions illustrated, and trim the edges, as necessary, to maintain the dimensions given on the drawing. Remove any sharp edges. Mark and drill off the rivet attaching holes from the existing rivet holes in the tail cone, using a No 35 (0.110 in dia) drill, then deburr and dimple countersink these holes to suit the existing dimpling. Mark off on the new stiffener plate the positions for the new rivet holes, to the dimensions shown in the drawing, then once again offer up these items into position and drill off the holes just marked using the No 35 drill. Deburr these holes and dimple countersink them 120 deg x 0.25 in dia. Coat the mating surfaces of the packings, stiffener plate and the inside of the cone skin with pigmented varnish jointing compound, item 12, then rivet them together using twenty three $\frac{1}{8}$ in dia 120 deg countersunk head rivets, sixteen off, item 10, and seven off item 11.

(vii) Still referring to sheet 4 of the drawing locate the aft edge of the forward ring, Part No L00855. Now locate the securing rivet nearest the centre line of the newly made cut-out. Using the No 30 drill, drill out this rivet, and the three rivets each side of it. Offer up the new aft stiffener plate, item 4, and mark off and drill both the vacated and the new rivet attachment holes in the stiffener. Deburr all holes. Dimple countersink the holes in the cone skin and the holes in the stiffeners 120 deg x 0.25 in dia. Coat the mating surfaces of the cone and the stiffener with pigmented varnish jointing compound, item 12, then rivet the stiffener into position, using fifteen $\frac{1}{8}$ in dia x 120 deg countersunk head rivets, seven off, item 10 and eight off, item 9.

(Issued with A.L. 264)

(viii) Repair the finish to the outer surface of the tail cone and the inside surface, using items 13 and 14, and finish using item 15.

(ix) Before refitting the cone it is to be re-identified as Part No EC15-71AND and Ident No A79/504121. This is to be done only if RAAF Vampire Mods 204 and 227 (DH Mods V690 and V702) are embodied.

(x) Refit the Tail Cone using the attachment items removed in para 1 reconnect all electrical connections.

(d) Tests : Carry out a function of the downward identification lights and Flame Switches on the Rear Cone in accordance with current authorized procedure.

(e) Recording : Record the modification in the airframe long book and on the tail cone modification plate.

Drawings

12. Drawing A13016 consisting of 5 sheets is attached herewith.

Effect on Weight and Balance of Aircraft

13. The effect of this modification on the weight and balance of the aircraft is as follows:-

Fixed Equipment

	Weight (lb) ±	Arm (ins) ±	Moment (lb ins) ±
Cone Modification Installation comprising Plates and Packing etc	+0.26	+92.4	+24.0

NOTE: Amendments to Weight Sheet Summaries will be consolidated and issued by Department of Air.

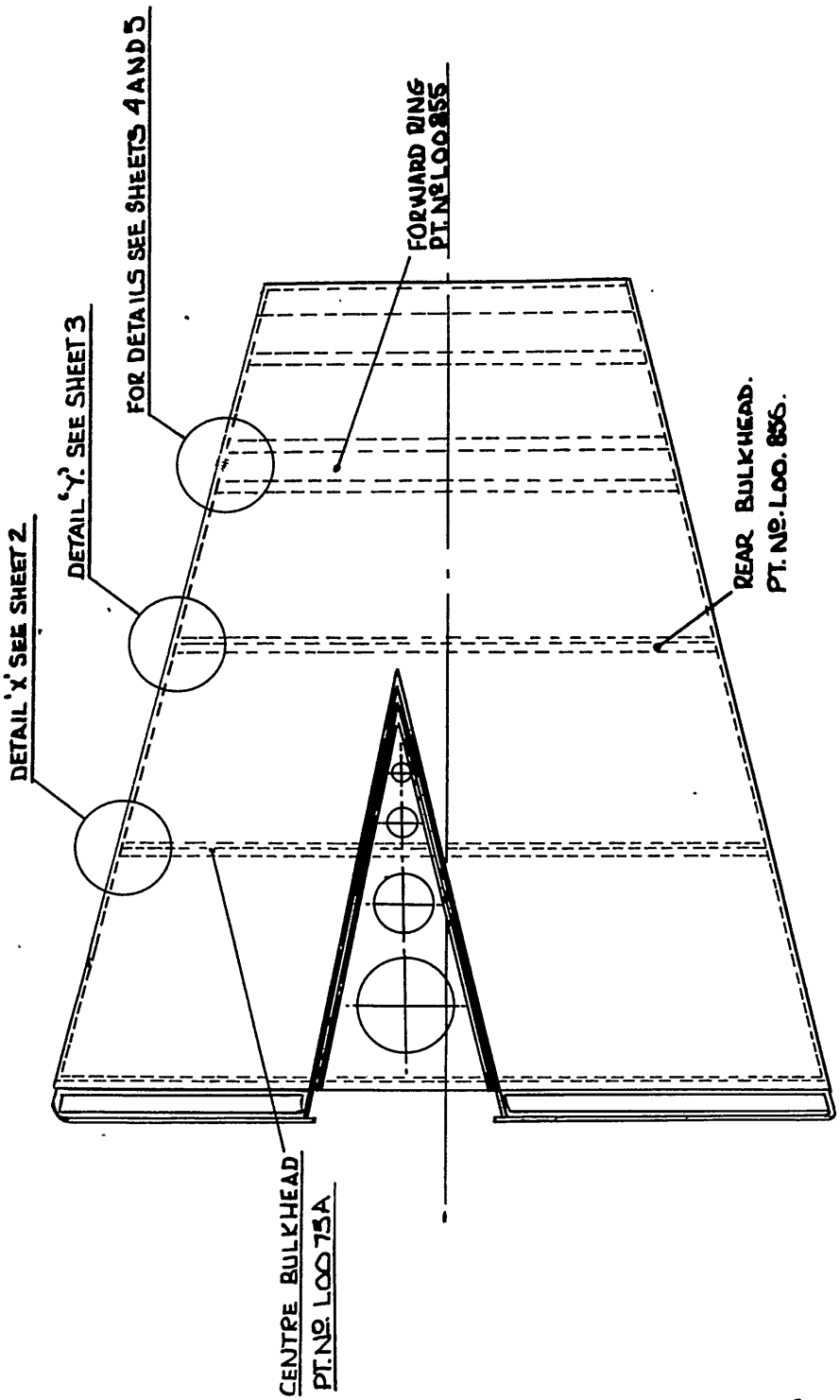
References : Files, Department of Air 9/84/16^{II} and 150/8/1278

Attachment : Drawing A13016 (5 sheets)

Date of Issue : 14th November, 1958

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L	INITIALS	APPROVED



VIEW OF REAR CONE SHOWING THE THREE POINTS TO BE MODIFIED

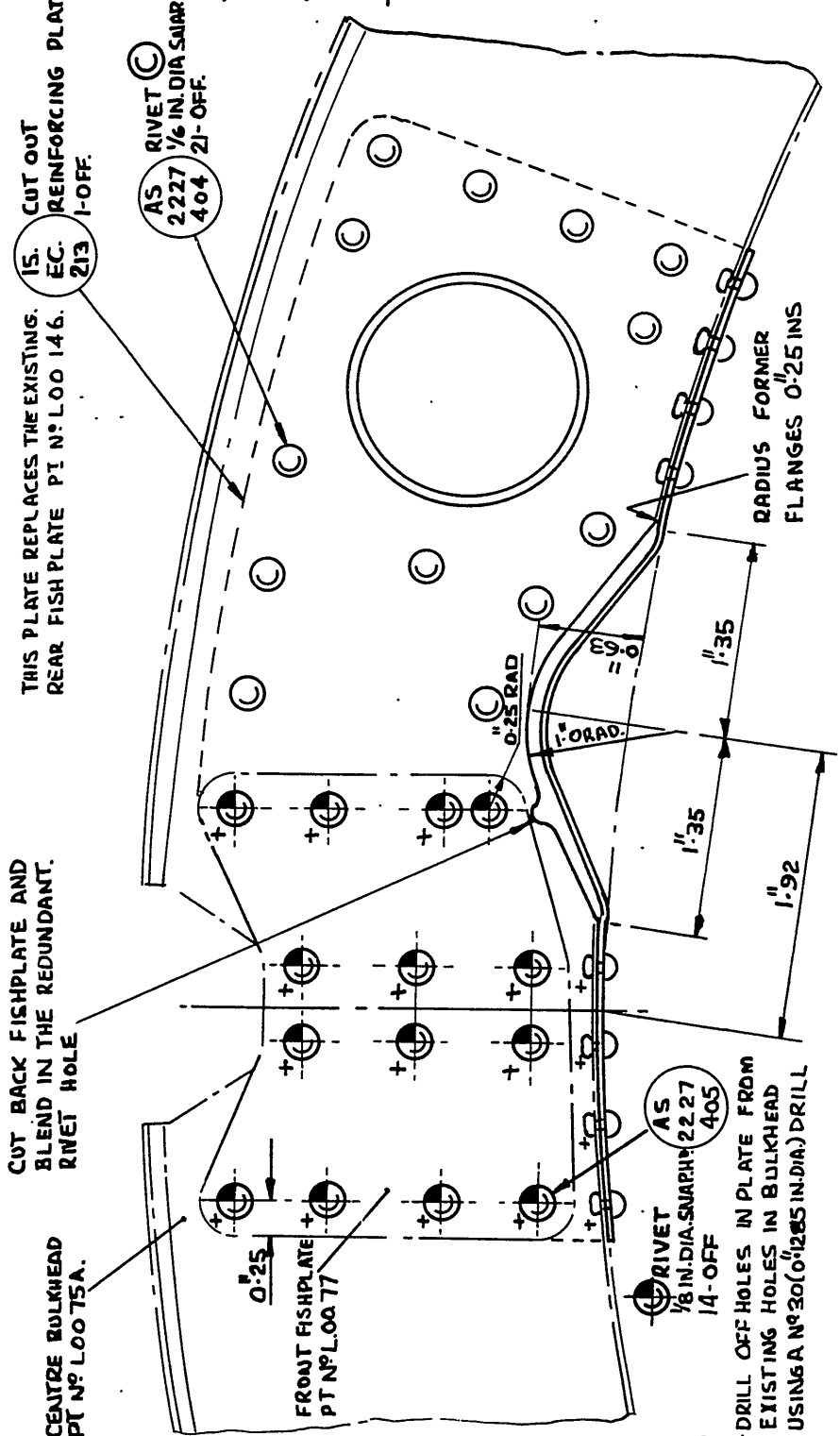
DE HAVILLAND DRAWING COM369. SHEET 1. OF 5. SHEETS

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING.	MODIFIED TAIL CONE INTRODUCTION.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 33 & 35.
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN.
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MODN° 264
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.2I		SCALE		DRAWING NO.	A13016. SHEET 1.
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D I L	INITIALS	APPROVED



DETAIL 'X' FROM SHEET 1. VIEW LOOKING AFT. SHOWING CUT OUT IN CENTRE BULKHEAD OF TAIL CONE AND FITMENT OF REINFORCING PLATE.

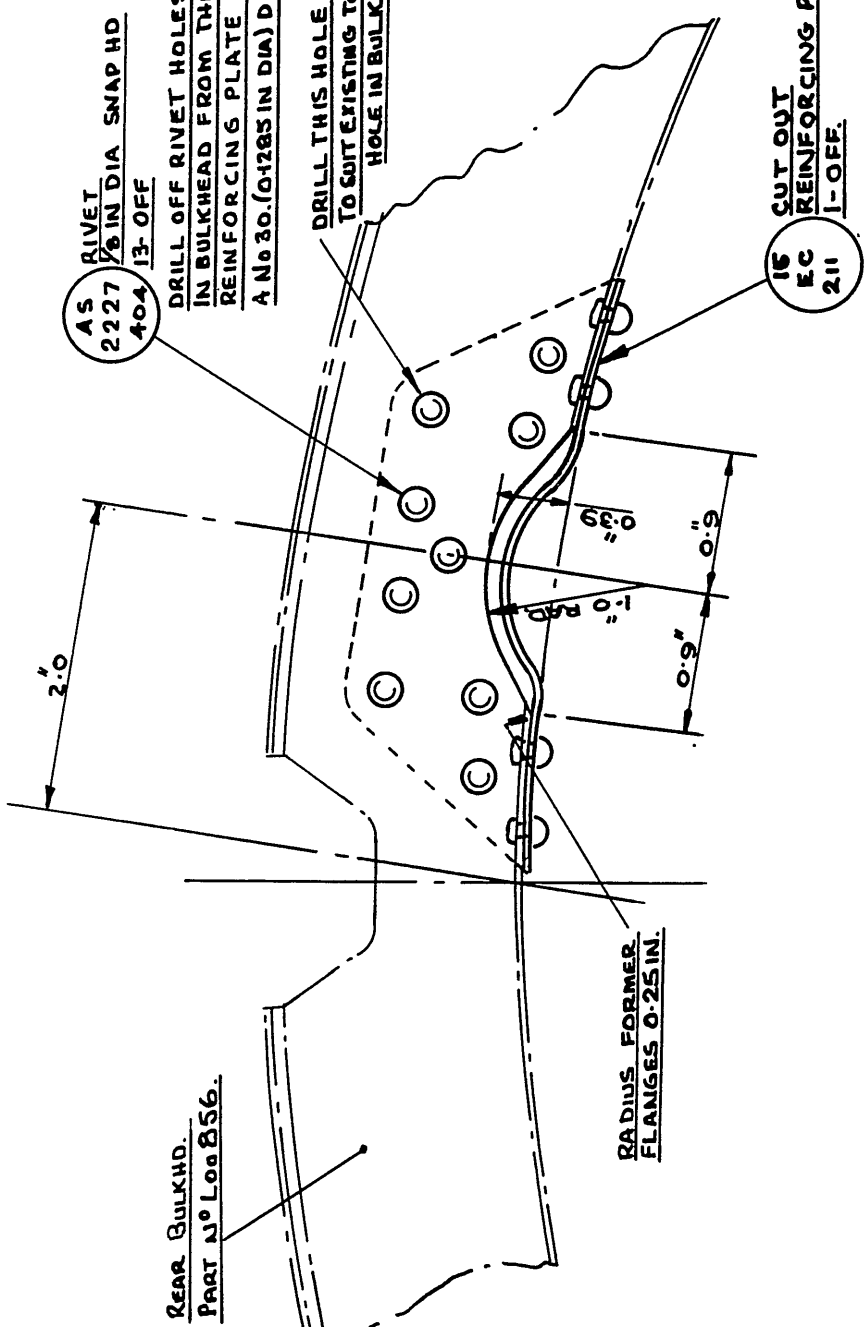
DE HAVILLAND DRAWING 00M369. + SHEET 2 OF 5 SHEETS

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING	MODIFIED TAIL CONE INTRODUCTION.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK33 &35.
FRACTIONS	= 1/32"	TREATMENT		ENGINE	GOBLIN.
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD Nº 264
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.CZI		SCALE		DRAWING NO.	A13016. SHEET 2.
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L	INITIALS	APPROVED



DETAIL Y FROM SHEET 1 VIEW LOOKING AFT SHOWING CUT-OUT IN REAR BULKHEAD OF TAIL CONE AND FITMENT OF REINFORCING PLATE

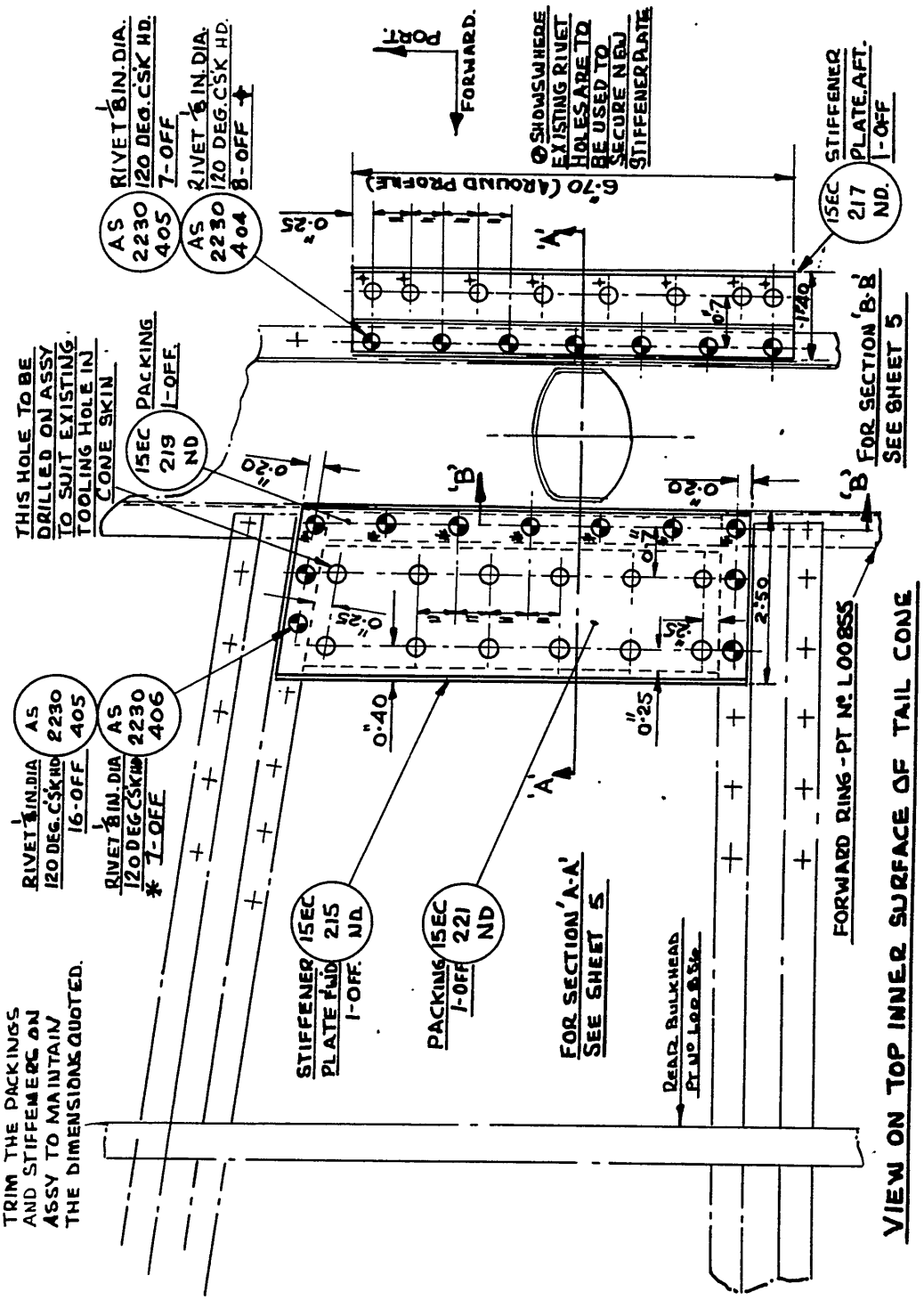
DE HAVILLAND DRAWING DOM 369. SHEET 3 OF 5 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING	MODIFIED TAIL CONE INTRODUCTION

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 33 & 35
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN.
ANGLES	± 1°	FINISH		TECH. ORDER	VAMPIRE MOD No 264
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.CZI		SCALE		DRAWING NO.	A13016. SHEET 3.
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D I L	INITIALS	APPROVED



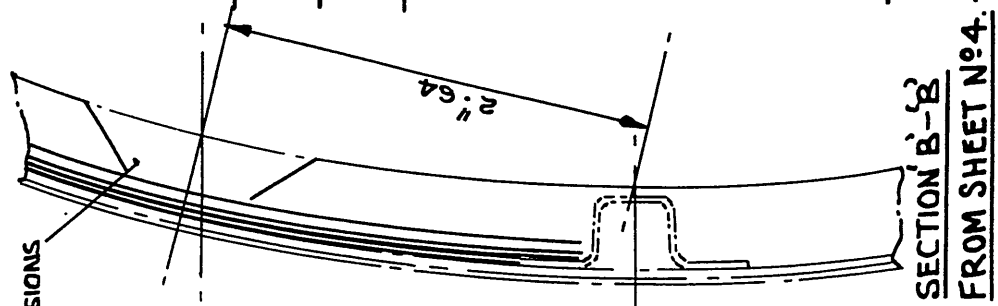
DE HAVILLAND DRAWING 00M369 SHEET 4 OF 5 SHEETS

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING.	MODIFIED TAIL CONE INTRODUCTION

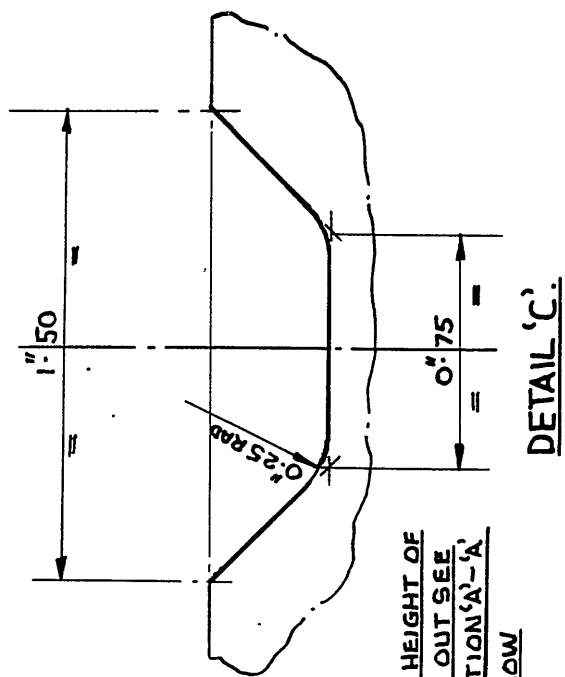
LIMITS UNLESS STATED	MATERIAL		COMPONENT OF		
DECIMALS ± .010"	SPEC.		MACHINE	VAMPIRE MK 33 & 35.	
FRACTIONS ± 1/32"	TREATMENT		ENGINE	GOBLIN.	
ANGLES ± 1°	FINISH		TECH. ORDER	VAMIRE MOD N° 264.	
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.121	SCALE		DRAWING NO.	A/3016. SHEET 4.	DRWG. A SIZE
	DRAWN	APPROVED			
	TRACED	CHECKED			

DO NOT SCALE

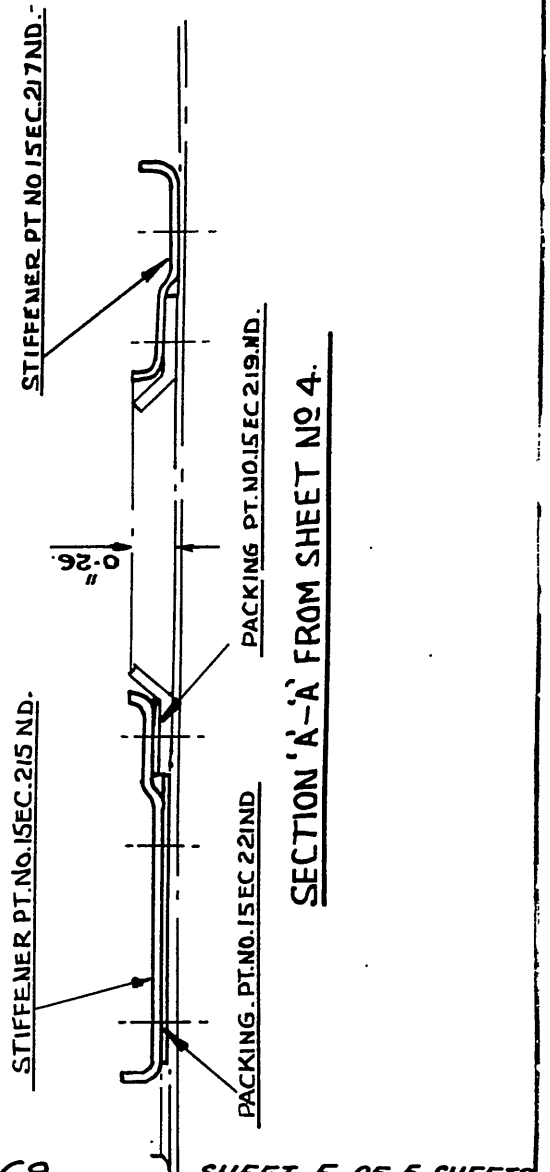
ISSUE NO.	DATE	ALTERATION	D. I. L	INITIALS	APPROVED



FOR CUTOUT DIMENSIONS SEE DETAIL 'C'



FOR HEIGHT OF CUT OUT SEE SECTION 'A'-'A' BELOW



DE HAVILLAND DRAWING OOM 369

SHEET 5 OF 5 SHEETS

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING.	MODIFIED TAIL CONE INTRODUCTION.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 33 & 35
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN.
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD N° 264
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.2.1		SCALE		DRAWING NO.	A13016. SHEET 5.
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

AAP 721:79 VOLUME 2, PART 2 VAMPIRE MODIFICATION NO 265

Class 3

ADDITIONAL CLEARANCE FOR THE APEX BOLT AT THE MAIN UNDERCARRIAGE TORQUE LINKS - INTRODUCTION

Reason for and Description of Modification

1. To eliminate scoring of the Torque Link and bolt by providing additional clearance for the Apex Bolt at the Main Undercarriage Torque Links.

Application

2. This work is to be carried out on all Vampire Mk 30, 31 and 33 aircraft, only when replacement of the Torque Links is necessary.

Responsibility for Incorporation

3. This modification is to be incorporated by Aircraft Depots or the Civilian Contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Support Command.

Ident No	Part No	Nomenclature	Remarks
T27M/8904	AIR52552	Link, Lower, Torque	Rework to paragraph 11(c)ii and re-identify as part number Z15-1225ND - T27M/500174
T27M/8913	AIR52553	Link, Lower, Torque	Z15-1226ND - T27M/500175
T27M/500060	AIR42270	Leg, Compression	Remove Lower Torque Link T27M/8904 and rework to para 11(c)
T27M/584	AIR51756	Shock Absorber	
T27M/500061	AIR42271	Leg, Compression	Remove Lower Torque Link T27M/8913 and rework to para 11(c)
T27M/583	AIR51757	Shock Absorber	

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

(Issued with AL 207 - July 1960)

Equivalent Modifications

6. De Havilland (Aust) Mod V233 is the equivalent modification.

Supply

7. Not applicable.

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated when replacement of torque links is necessary.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 1½ man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, &c : It will be necessary for the .50" dia hole in the Lower Torque Link to be enlarged (see para 11(c)ii below) by machine honing or grinding.

(c) Sequence of Operations : Paragraphs i, ii and iii apply to spare Compression Legs, paragraph ii applies only to spare Lower Torque Links.

Note: Before removing the Compression Leg and or the Lower Torque Link from the aircraft it will be necessary to trestle the aircraft.
Refer AAP 721:79/33 Vol 1, Chapter 4.

(i) Locate the Lower Torque Link on the Compression Leg Assembly and after removing the split pins and nuts withdraw the Torque Link Centre Hinge Pin, Ident No T27M/8885, and the Torque Link Lower Hinge Pin, Ident No T27M/8908, freeing the Lower Torque Link from the Assembly.

(ii) Proceed to rework the Lower Torque Link by machine honing or grinding the Torque Link Centre Hinge Pin hole from .5000" to .5006"
.5008" .5014",
then re-identify Port as part No Z15-1225ND Ident No T27M/500174 and Stbd as part No Z15-1226ND Ident No T27M/500175.

(iii) Assemble the Lower Torque Link to the Compression Leg Assembly and thoroughly grease the hinge pins with grease K2/210.

(d) Tests : No tests are necessary.

(e) Recording : Record the modification in the airframe log book.

Drawings

12. No drawings are required.

Effect on Weight and Balance

13. The effect of the incorporation of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/91 and 150/8/1398

Date of Issue : 20th July 1960

(Issued with AL 207 - July 1960)

AAP 721:79, Vol 2, Pt 2

VAMPIRE MODIFICATION NO 266

Class 2

G4B COMPASS MASTER INDICATOR - SHOCK MOUNTING - INTRODUCTION

Reason for and Description of Modification

1. The G4B Compass Master Indicator in Mk 33 Vampire aircraft is rigidly mounted on No. 2 bulkhead. Vibration of the indicator during gun firing has rotated the variation setting scale from its pre-set position.

This modification introduces rubber shock mounts which reduce the vibration of the Master Indicator.

Application

2. This Modification is to be carried out on all Vampire Mk 33 aircraft, except aircraft A79-831 which was modified as a trial installation at ARDU Laverton.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is instrument fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V727 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1	A79/504277	N15-1077A	Shock Mounting Assy	1	
2	H28/11886	AS 2920/15C	Bolt, SS Csk Hd, 90° x 1.5" long	4	
3	-	AS 2810/5/06	Tube Distance	4	

(Issued with A/L 136 - April, 1959)

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
4	-	A25/6C DHS 514D	Bolt, Special	4	
5	H28C/12252	SP 13/C	Washer, MS, Plain, Thin 2BA	4	
6	H28C/9416643	SP 47/C	Washer, Lock, Single Spring 2BA	4	
7	H28/27025	AGS 2001C/1	Stiffnut, MS, Self Locking Nyloc, 6BA	4	
8	I1/2700		Wire, Locking, Soft Iron Galvanised, 20 SWG	AR	

Note : Items 1 to 7 inclusive will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland Modification Section. Units requiring modification sets are to demand from De Havilland Modification Section. Item 8 will be drawn from Unit stores as required.

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable but not later than the first "D" servicing after receipt of parts.

Method of Incorporation

11. (a) Man-Hours Involved : Approx 4 man-hours will be required for the completion of this modication.

(b) Special Tools, Jigs &c : No special tools are required.

(c) Sequence of Operations:

(i) Ensure that Aircraft Power Supply is switched off.

(ii) Remove the port Pilot's seat from the aircraft in accordance with current authorised procedure.

(Issued with A/L 136 - April, 1959)

(iii) Disconnect Electrical Leads and remove the G4B Master Indicator from its mounting.

(iv) Remove the existing Indicator Mountings from No 2 bulkhead by undoing the four 2BA Bolts. Discard these bolts and their spring washers.

(v) Refer to drawing No A13015 attach existing mountings removed in para (iv) above to new shock mounting assy, item 1, using bolts, nuts and washers, items 2, 7 and 6. To do this it will be necessary to undo the sixteen 4BA bolts holding the square alclad attaching plates. (The nuts on these bolts will only be finger tight). Fit the four bolts, item 2, and re-assemble the attaching plates.

(vi) This whole unit is then to be mounted on the existing Ferrules in bulkhead No 2 using bolts, washers and spacer tubes, items 4, 5 and 3, and then wire lock using wire, item 8.

(vii) Reinstal Master Indicator in mounting and reconnect Electrical Leads.

(viii) Replace the port Pilot's seat from the aircraft in accordance with current authorised procedure.

(d) Tests :

(i) Check functioning of Canopy Hatch Mechanism.

(ii) Test Indicator for freedom of movement and that it does not foul any other existing equipment.

(iii) Check operation of compass.

(e) Recording : Record this modification in the airframe log book.

Drawings

12. Drawing No A13015.

Effect on Weight and Balance

13. The effect of this Modification on the weight and balance of the aircraft is negligible.

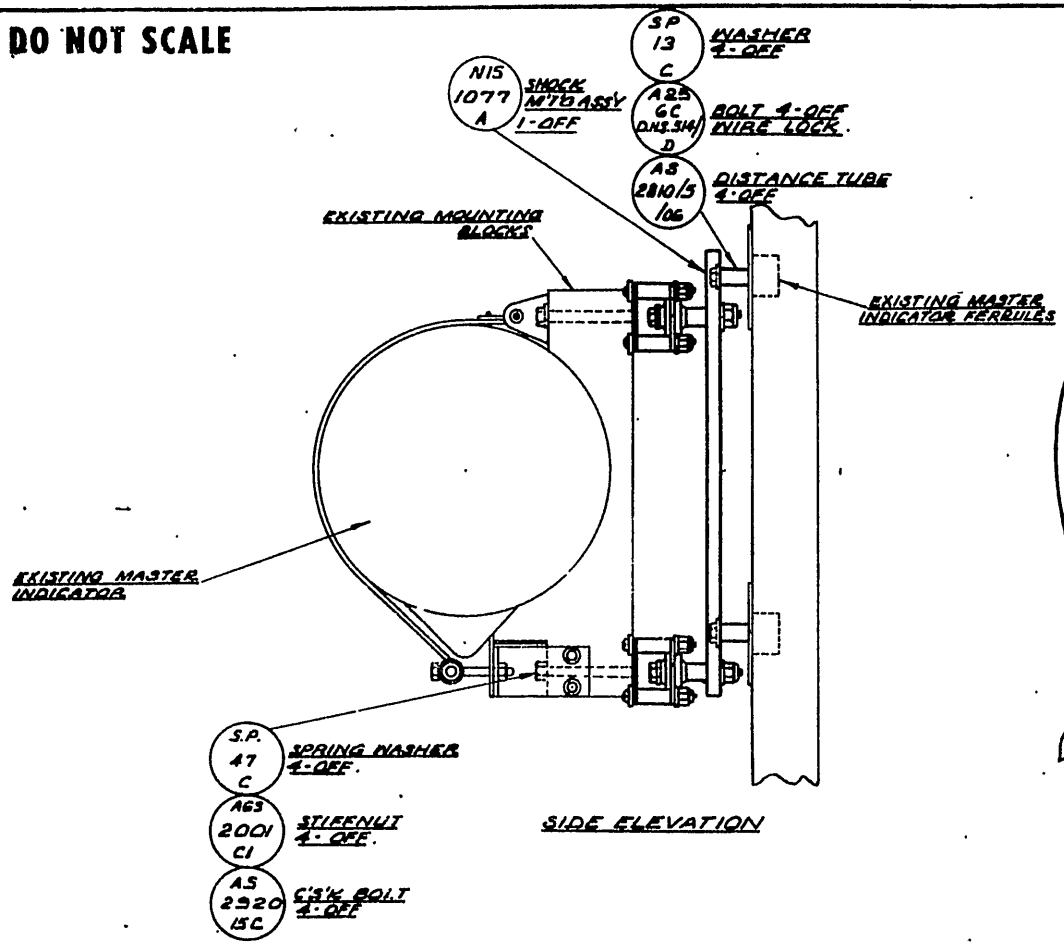
References : Files, Department of Air 113/2/1371 II and 150/4/9481.

Attachments : Drawing A 13015

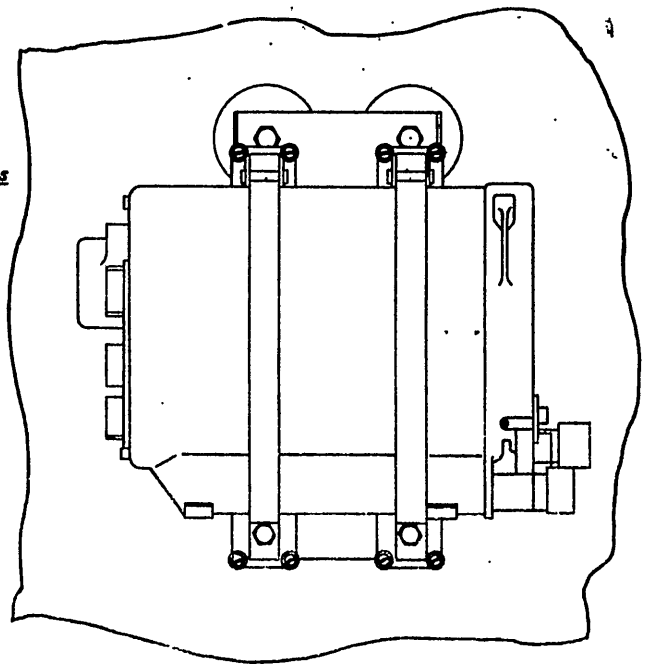
Date of Issue: 20th April, 1959.

(Issued with A/L 136 - April, 1959)

DO NOT SCALE



SIDE ELEVATION



VIEW ON BULKHEAD 2 LOOKING AFT.

DE HAVILLAND DRAWING NO. M 371. SHEET 1 OF 1 SHEET.

ISSUE NO	DATE	ALTERATION	D.T.L.	INITIALS	APPROVED
1					

REFERENCE

ISSUED BY: DEPARTMENT OF AIR, DIRECTORATE OF AIRCRAFT ENGINEERING

LIMITS UNLESS STATED		MATERIAL	
DECIMALS	± .010"	SPEC.	
FRACTIONS	± 1/32"	TREATMENT	
ANGLES	± ½°	FINISH	
SURFACE FINISH AUSTRALIAN STA... ENG. DRWG. PRACTICE		SP... FR...	

APPROVED
CHECKED

TITLE: G.4.B. COMPASS INDICATOR SHOCK MOUNTING INTRODUCTION.

COMPONENT OF	
MACHINE	
ENGINE	
TECH. ORDER	VAMPIRE MOD NO 268.
DRWG. NO.	A 130

AAP 721:79, VOLUME 2 PART 2 VAMPIRE MODIFICATION NO 267

Class 2

REVISED DIVE BRAKE LABEL - INTRODUCTION

Reason for and Description of Modification

1. It is a Department of Air requirement that the existing label be revised to read "Speed Brakes, In - Out" in lieu of "Dive Brakes, On - Off".

This order is devided into two (2) parts

Part A - Applicable to Mk 30 - 31 Vampire aircraft
Part B - Applicable to Mk 33 - 35 Vampire aircraft

Application

2. This work is to be carried out on all Vampire Mk 30, 31 and 33 aircraft and on Vampire Mk 35 aircraft Serial Nos A79-602 to A79-620 inclusive. Vampire Mk 35 aircraft Serial Nos A79-621 onwards will be modified during manufacture.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters, Maintenance Command:-

Ident No	Part No	Nomenclature	Remarks
A79/502217	15.CE.365	Label	Rework in accordance with paras 11(c) (iv) & (v) and reidentify as Part No CE15-339A and Ident No A79/504132.
A79/502196	15.CE.199A	Label	Rework in accordance with para 11(c) (iv)

"Note:- Upon assembly of spare wings to the fuselage rework in accordance with sub-paragraph 11 (c) (xiv). 1

or Cancelled

5. No orders are superseded or cancelled by the incorporation of this Modification

(Issued with A.L. 104 - July, 1958)

Equivalent Modifications

6. De Havilland (Aust) Mod V237 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1.		CE15-331	Label, Speed Brakes	1	
2.		CE15-331	Label, Speed Brakes	2	
3.	K4/11061	N.P.N.	Cleaner, Spirit, Shell X95 or equivalent	AR	C
4	K3/346	-	Glossy, red matching colour identification	AR	-
5	K3/344	-	Glossy, black colour identification	AR	-

(Issued with A L 115)

(b) Items 3, ~~will~~ be drawn from unit stores ~~as required.~~

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated as soom as practicable, but not later than the next "D" servicing after receipt of modification sets or when the aircraft is allotted for retrospective modification fitment.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 3 man-hours will be required for the completion of this modification.

(b) Special Tools, Jigs, &c : No special tools are required.

(Issued with A.L. 104 - July, 1958)

(c) Sequence of Operations:

PART A

(i) Locate on the port side of the cockpit wall the pilot's control box.

(ii) Locate on this control box the dive brake label, situated adjacent to the dive brake lever.

(iii) Remove two of the three bolts holding this label to the control box and slide label to one side. Replace the two bolts in the cover plate under this label so that the spring and stop button are not dislodged. Remove the third bolt and remove the label. Replace this bolt in the cover plate also.

(iv) Soak the new "Met-Cal" speed brake label, Item 1, in water for 4 - 5 minutes and wipe all surplus water from it. Remove the cellophane backing from the label and place it over the old dive brake label. Note: The old label should be cleaned by wiping with X55 or X95 solvent, Item 3. Apply sufficient pressure to remove all air bubbles.

(v) Trim surplus material from the label using a knife or razor blade when using a sharp pointed object pierce the three existing holes.

(vi) Carefully replace this label, as shown as sheet 1, of Drawing A13011, on the control box using the three existing bolts, taking care not to dislodge the spring and stop button behind the cover plate.

PART B

(vii) Locate in the cockpit the 1st pilot's control box located on the port side of the cockpit wall.

(viii) Locate on this control box the existing dive brake label.

(ix) Attach new "Met-Cal" speed brake label as in para 11 (c) (iv) above.

(x) Using a knife or razor blade trim the surplus material from the label.

"Part A or B

(xiv) On the under surface of dive brakes port and starboard sides, amend the warning to read "Warning - KEEP AWAY DURING OPERATION OF SPEED BRAKES", with red paint, item 4.

(xv) On the port side of the fuselage only, amend the notice to read "SPEED BRAKE NON RETURN VALVE INSIDE", with black paint, item 5."

(Issued with A.L 115)

(e) Recording : Record this modification in the Airframe Log Book.

Drawings

12. Drawing A13011, consisting of one (1) sheet is attached herewith.

Effect on Weight and Balance of Aircraft

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/242 and 150/8/1276

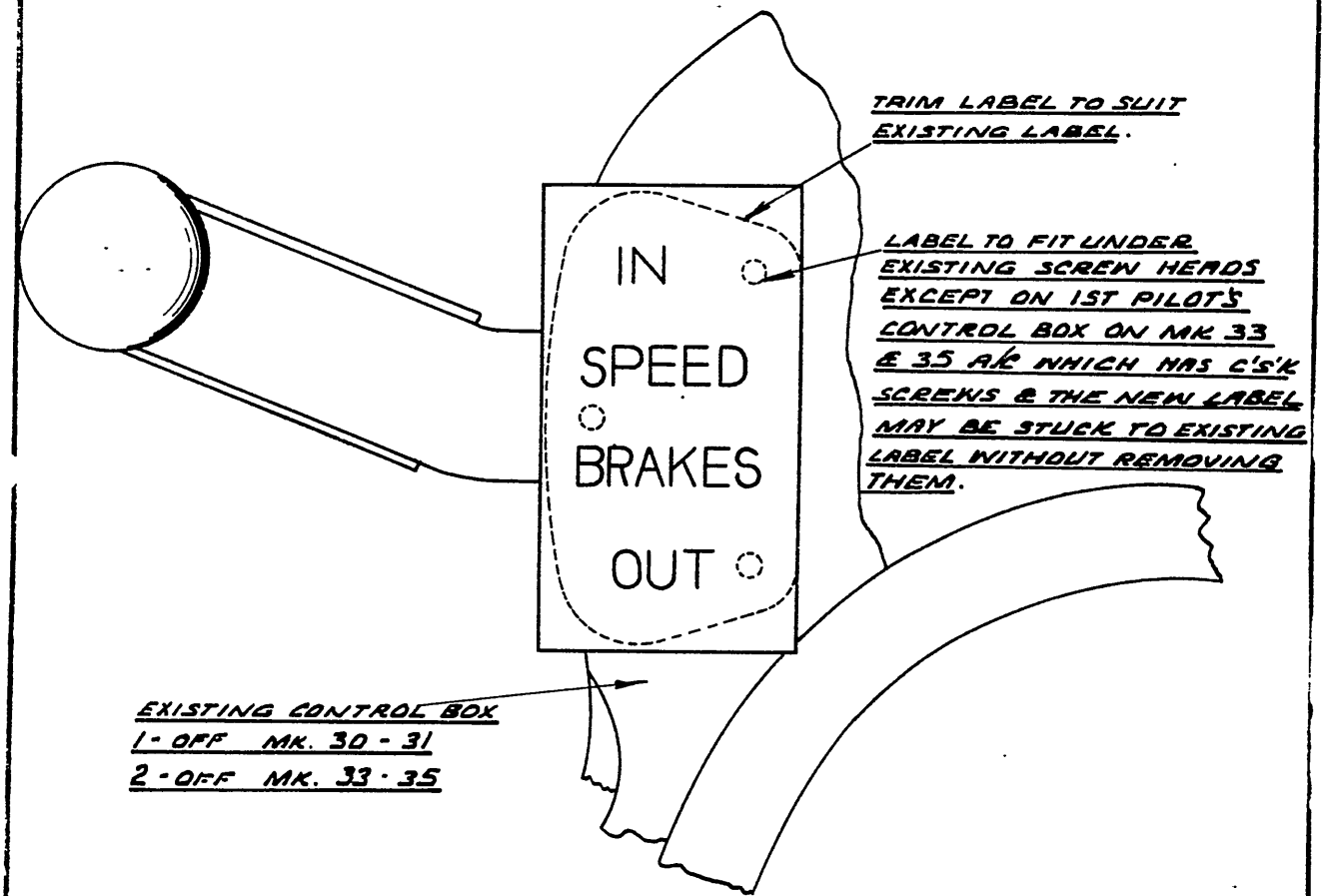
Attachment : Drawing No A13011

Date of Issue : 2nd July, 1958

(Issued with A.L. 104 - July, 1958)

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION
	28/2/58	



DE-HAVILLAND DRAWING 60M 377 SHEET 1 OF 1 SHEET

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING.	REVISED DIVE BRAKE LABEL INTRODUCTION.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	Vampire Mod. 267
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.CZI		SCALE		DRAWING NO.	A13011
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

AAP 721:79, VOL 2, PART 2

VAMPIRE MODIFICATION NO 269

Class 2

TO BLANK OFF THE HOLES IN THE ELEVATOR CONTROL QUADRANT PULLEYS IN THE COCKPIT

Reason for and Description of Modification

1. To blank off the holes in the Elevator Control Quadrant Pulleys to obviate the possible entry of loose articles which could cause jamming of the controls.

Application

2. This work is to be carried out on all Vampire Mks 30 and 31 aircraft.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and Aircraft Depots or the Civilian Contractor responsible for servicing Vampire aircraft. The trade mustering responsible is Airframe Fitter.

Action in respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command:-

Ident No	Part No	Nomenclature	Remark
A79/500394	K0062	Pulley, Elevator Quadrant	Rework to paragraph 11(c) viii and reidentify as part No K001581 and Ident No A79/504139

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this Modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V239 and Air Ministry Mod VAM3547 are the equivalent modifications.

Supply

7. The following parts are required to complete one modification set:-

(Issued with A/L 152 - June 1959)

Item No	Ident No	Part No	Nomenclature	No Off	Stores Class
1.	-	13CF613ND	Plate, blanking	2	
2.	-	13CF615ND	" "	2	
3.	-	13CF617ND	" "	2	
4.	H128F/64411	AS2227/406	Rivet, alum alloy, Snap Head, $\frac{1}{8}$" dia x $\frac{3}{8}$" long	20	
5.	H28/12547	A25/15E	Bolt, HTS, Hex Hd, $\frac{1}{4}$" BSF x 2.0" long	8	
6.	H28/27026	AGS2001E/1	Nut, MS, Hex, Nyloc insert, $\frac{1}{4}$" BSF	8	
7.	H28C/35827	DHS.33/2	Washer, shrinkage, .265" i/d, .75" o/d .028" thick	16	
8.	H28B/12462	SP.9/C8	Pin, split, nickel alloy, 1/16" dia x 1" long	16	
9.	I1/493	-	Wire, copper, soft, 18 SWG (.048)"	AR	
10.	K3/321	-	Enamel, Cellulose, Black, spec K18	AR	
11.	K3/386	-	Cement Bostik 1751	AR	
12.	K3/353	-	Compound Jointing to Spec. DTD 369A	AR	

Notes: (a) Items 1 to 8 inclusive will be delivered from De Havilland Aircraft Pty Ltd, to the De Havilland Modification Section. Units requiring modification sets are to demand from De Havilland Modification Section.

(b) Items 9 to 12 inclusive are to be drawn from unit stores.

Disposal of Part Removed

8. Not applicable.

Disposal of Parts in Stock

9. Not applicable.

(Issued with A/L 152 - June 1959)

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of modification sets or when the aircraft is allotted for retrospective modification fitment.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 56 man-hours will be required to incorporate this modificatio

(b) Special Tools, Jigs, etc : No special tools, jegs, etc will be required.

(c) Sequence of Operations : Refer to drawing A13096.

(i) Remove the Gun Bay Doors and disconnect the Aircraft accumulators, also remove the Lower Engine Cowl.

(ii) Remove the Gun Blast Fairings and the outboard Cannons in accordance with current authorised procedure.

(iii) Remove the Canopy then disarm and remove the Pilot's ejection seat in accordance with AP4288, Volume 5, Section 10 (AL8), Chapter 2, Appendix D.

(iv) Locate the turnbuckles on the Elevator Control Cables on Rib No 1 and relieve the tension.

(v) Working in the cockpit on the starboard side, temporarily remove the following electrical equipment to give access to the starboard Elevator Quadrant Pulley. Unscrew all the electrical sockets from the plugs on the underside of Junction Box No 1. For aircraft Serial Nos 4030 to 4080 inclusive, unscrew the elctrical socket from the plug, on the aft end of the RP and Bomb Junction Box and remove the RP and Bomb Junction Box and retain the attaching items for subsequent re-assembly.

(vi) The port Elevator Quadrant Pulley is accessible by disconnecting the three Connecting Rod Assemblies, running from the Engine Control Box to the Selectors, at the selectors end, and swing up away from the Elevator Quadrant Pulley.

(vii) From both the port and starboard Elevator Quadrant Assembly, remove and discard the eight peened bolts and nuts holding the Assembly to the cockpit floor. With the Assemblies free but in their relative position proceed to remove the Elevator Quadrant Pulleys by disconnecting the Control Connecting Rod, Control Cables, Stay Tube and Pulley from the Elevator Control Quadrant Bracket, retaining all the attaching items except the split pins.

(viii) Refer to the drawing and approximately position as shown, the three new Blanking Plates (items 1, 2 and 3) on the inboard side of the Port Pulley and on the outboard side of the Starboard Pulley. Drill the attachment rivet holes in the Pulley with a No 30 (.1285 in dia) drill, using the holes in the Blanking Plates as a guide. Deburr all holes. Coat the mating surfaces of the new Blanking Plates and the Pulleys with pigmented varnish jointing compound (item 12), then rivet together using $\frac{1}{8}$" dia. Snap Head rivets (item 4). Repair the finish locally using black enamel (item 10) and re-identify as part No K001581.

(ix) Re-assemble the modified Pulleys to the respective Elevator Control Quadrant Brackets and connect the Stay Tube, Control Cables and the Control connecting rod using the retained attaching items and new split pins (item 8). Attach the Elevator Quadrant Assemblies to the cockpit floor using new bolts dipped in Bostik cabin sealant (item 11) nuts and shrinkage washers (items 5, 6 and 7).

(x) Reconnect the three Control Rod Assemblies to the Selectors.

(xi) For aircraft Serial Nos 4030 to 4080 inclusive, replace the RP and Bomb Junction Box using the retained attachment items, and connect the electrical socket into the plug on the aft end of the RP and Bomb Junction Box. Connect the sockets into the correct plugs on the underside of Junction Box No 1.

(xii) Tension and function the Elevator Control Cables as detailed in AAP 828 Section 4, Chapter 3, locking the turnbuckles with 18 SWG copper locking wire (item 9).

(xiii) Replace and arm the Pilot's ejection seat in accordance with AP4288, Volume 5, Section 10 (AL8), Chapter 2, Appendix E and replace the Canopy.

(xiv) Replace the outboard cannons to the current authorised procedure, and the Gun Blast Fairings.

(xv) Reconnect the Aircraft Accumulators and replace the Gun Bay Doors, and the Lower Engine Cowl.

(d) Tests :

(i) Functional test all electrical circuits, disturbed by the embodiment of this modification.

(ii) Check the Elevator Controls for correct and free full range of movement.

(iii) Check the Dive Brakes, Flaps and Undercarriage Controls for freedom of movement.

(iv) Check function of canopy.

(e) Recording : Record this modification in the Airframe Log Book.

Drawings

12. Drawing A13096, consisting of one (1) sheet is attached herewith.

Effect on Weight and Balance

13. The affect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/1057 and 150/8/1399.

Attachment : Drawing A13096

Date of Issue : 3rd June 1959.

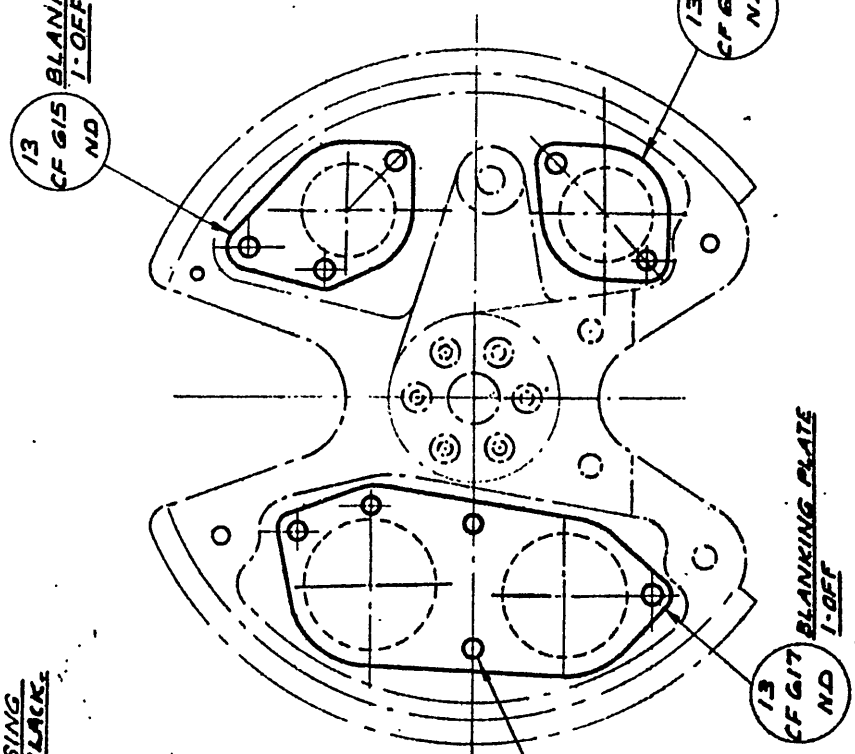
(Issued with A/L 152 - June 1959)

DO NOT SCALE

NOTE: COAT THE MATING SURFACES OF THE PLATES AND PULLEY WITH COMPOUND, PIGMENTED VARNISH JOINTING.

POSITION BLANKING PLATES TO COVER HOLES AS SHOWN.

QUADRANT PULLEY K0062 (REF.) WITH PLATES ATTACHED BECOMES PART No. K00158 (REF.)



NOTE: REPAIR FINISH WHERE NECESSARY USING FINISH - MAT. BLACK.

DE HAVILLAND DR'G No. 00M380.

SHEET 1 OF 1 SHEET.

REFERENCE	ISSUED BY	TITLE
		ASSEMBLY OF BLANKING PLATES TO ELEVATOR QUADRANT PULLEY.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD Nº269
SURFACE FINISH AUSTRALIAN STANDARD ENG DRWG. PRACTICE A.S.C.2.1		SCALE		DRAWING NO.	A-13096
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

Class 2

FIRE WARNING SYSTEM AND CONNECTIONS - REVISION

Reason for and Description of Modification

1. To introduce a switch having combined fire warning light and fire extinguisher switch and to revise connection of fire circuits to give direct operation from the battery.

As directed by the Department of Air in order to satisfy AP 970 requirement for combined fire warning switch and to cover Air Ministry Mod Vam 3522 for direct operation from the battery.

Application

2. This modification is applicable to all Mk 30, 31 Vampire Fighter aircraft.

Responsibility for Incorporation

3. Operating units aircraft depots and contractors concerned will be responsible for the incorporation of this modification. The trade mustering responsible is; Electrical Fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command:-

Ident No	Part No	Nomenclature	Remarks
A79/500240	00D25A	Wing complete LH (spare)	Rework to paras 11(c) (ii) to (iii) inclusive and certify for Mod 270 on the wing modification plate.
A79/500241	00D26A	Wing complete RH (spare)	Rework to paras 11 (c) (ii) to (iii) inclusive and certify for Mod 270 on the wing modification plate.

(Issued with AL 153 - June 1959)

Ident No	Part No	Nomenclature	Remarks
A79/501851	00D1103A	Wing complete LH (spare) Mk 31	Rework to paras 11(c) (ii) to (iii) inclusive and if DH (Aust) Mods V181; V234, RAAF Mod Nos 101; 253, have been or are being incorporated concurrently with this order reidentify as Part No 00D1523A, Ident No A79/504133.
A79/501852	00D1104A	Wing complete RH (spare) Mk 31	Rework to paras 11(c) (ii) to (iii) inclusive and if DH (Aust) Mods V181; V234, RAAF Mod Nos 101; 253, have been or are being incorporated concurrently with this order reidentify as Part No 00D1525A Ident No A79/504134.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V240 and Air Ministry Modification VAM3522 are equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1.	G5A/107(Z)		Filament (5L/X951232)	1	

(Issued with AL 153 - June 1959)

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
2.	G5C/6311	5CW/6311	Switch, push button combined fire warning	1	
3.		00B159	Label "GEN"	1	
4.		00N1139	Label "FIRE WARN LAMP TEST"	1	
5.	H28C/2407	A44/B12	Screw, Brass, Rd Hd 4BA x $\frac{3}{8}$" long	4	
6.	H128F/64444	AS2230/304	Rivet, Al Al Csk Hd 120°, 3/32" DIA x $\frac{1}{4}$" long	2	
7.	H28C/11057	AGS203 7B	Washer, shakeproof	4	
8.		H133	Hoelle Terminal, 5/16" I/DIA	1	
9.	G5E/30173		Cable, AN12 one core vin spec AS No U1	18"	
10.	G5E/30155		Cable, AN18 one core vin spec AS No U1	25"	
11.	G5F/20059		Tubing, insulating, PVC, 6 m/m I/DIA Black	19"	
12.	G5F/20060		Tubing, insulating, PVC, 7 m/m I/DIA Black	1"	
13.	G5F/20063		Tubing, insulating, PVC, 10 m/m I/DIA Black	9"	
14.	K3/346		Colour, identification, glossy, Red matching	AR	
15.	I32A/94		Cord stringing, spec 4F35	AR	
16.	G5F/1378		Tape, insulating, PVC $\frac{5}{8}$" wide	AR	

Notes: (i) Items 1 to 13 inclusive will be retained as a modification set at the De Havilland Modification Centre pending issue or demand.

Units requiring modification sets are to demand from the De Havilland Modification Centre.

(Issued with AL 153 - June 1959)

(ii) Items 14, 15 and 16 are to be drawn from unit stores.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
17.	G5A/1553		Light, warning	1	
18.	G5C/1928		Filament	1	
19.		B00475	Label, "FIRE"	1	
20.		B00476	Label, "GEN"	1	
21.		DHS 107 Mk 43	Label, "ENGINE FIRE"	1	

Notes: (i) Items 17 and 18 are to be examined and if serviceable returned to store.

(ii) Items 19, 20 and 21 are obsolete and are to be disposed of in accordance with current authorised procedure.

Disposal of Parts in Store

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable and not later than the next "D" servicing of aircraft after receipt of parts required.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 70 man-hours will be required for the completion of this modification.

(b) Special Tools, Jigs, &c : No special tools are required.

(Issued with AL 153 - June 1959)

(c) Sequence of Operations :

(i) Disconnect aircraft accumulators and remove the top and bottom engine cowls.

(ii) Refer to drawing A13129 Sheet 1. Rework NO0945A/1 Cable Harness Assy "C13A" as shown on drawing A13129 Sheet No 2 using items 8, 9 and 11.

(iii) Reconnect the reworked Cable Harness Assy "C13A" back to its original position and connect new end to the "FL" terminal on the Battery Master Switch, refer to drawing.

(iv) Remove NO0943A Conduit Assy "C13" routed from the disconnect point on Port Rib 1 (refer to drawing) to junction box 2 on the aft face of bulkhead 4.

(v) Unscrew the coupling nuts and pull back the nylex tube, insert cable AA12 one core vin, item 9, (length to suit the conduit assembly) covered in its entire length with 6 mm ID Nylex tubing, item 11. Connect to pins 4 at both sockets, refit the coupling nuts. Re-part number the reworked assembly to OON1187A.

(vi) Install reworked Conduit Assy C13 now OON1187A back to its original position.

(vii) Remove the cover of Junction Box 2. Connect a new cable, AA12 one core vin, item 9, covered in its entire length with 6 m/m I/DIA Nylex Tubing, item 11 - to pin 4 at plug "C13" and to pin 4 at plug "C7A", route with existing cables, refit the cover to the junction box. Re-part number Junction Box 2 from OON153A/1 to OON153A/2.

(viii) Remove the starboard gun bay door and link chute in accordance with current authorised procedure.

(ix) Refer to drawing A13129, Sheet No 7. Make up a cable assembly of 8 ft length, consisting of Cable AA12 one core vin, item 9 and the entire length to be covered with 6 m/m I/DIA and again with 10 m/m I/DIA in Nylex Tubing items 11 and 13.

(Issued with AL 153 - June 1959)

(x) Route the cable assembly with the existing 00N97A Conduit Assy "C7A", routed between junction box 2 and the sealing plate on bulkhead 2.

(xi) At the plug ends of Conduit Assy "C7A" at junction box 2 and sealing plate at bulkhead 2 connect the new cable assembly - operation (ix) refers - as shown on drawing Sheet No 7, using item 16. Repart number the reworked conduit assembly to 00N1193A.

(xii) Bind the new cable - operation (ix) refers - to the existing run of cables.

(xiii) Disarm and remove the pilots ejection seat in accordance with current authorised procedure.

(xiv) Disconnect wiring and remove Junction Box 1 from the cockpit.

(xv) Refer to drawing A13129 Sheet No 4. On the top panel of Junction Box 1 remove the label "ENGINE FIRE" and replace with new label 00N1139, item 4, attach with rivets item 6. Obliterate from the push button cover "ENGINE EXTINGUISHER" with red paint item 14.

(xvi) Remove the existing cable assembly N00223A, routed from Junction Box 1 to the Fire Extinguisher Micro Switch on Cabin Blower and rework to drawing Sheet No 6, using items 10, 12 and 15. Repart number cable assembly to 00N1185A.

(xvii) Rewire Junction Box 1 to drawing A13129 Sheet No 3, using items 9, 10 and 11.

(xviii) Refer to drawing A13129 Sheet No 7. Route part of Cable Assy 00N1185A (operation (xvi) refers) coded "FA1", behind Junction Box 1.

(xix) Rework Top Centre Instrument Panel as shown on drawing sheet No 5 using items 1, 2, 3, 5 and 7.

(xx) Wire up the switch as shown on drawing A13129 Sheet No 4.

(xxi) Carry out Test as laid down in operation 11 (d).

(Issued with AL 153 - June 1959)

(xxii) Re-fit the starboard gun bay door and link chute in accordance with current authorised procedure.

(xxiii) Re-fit top and bottom engine cowls in accordance with current authorised procedure.

(xxiv) Re-fit and arm the pilot's ejection seat in accordance with current authorised procedure.

(xxv) Re-connect aircraft accumulators.

(d) Tests : Carry out a functional test in accordance with current authorised procedure.

(e) Recording : Record this modification in the airframe log book.

Drawings

12. RAAF drawing A13129, consisting of seven (7) sheets, is attached herewith.

Effect on Weight and Balance

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 150/8/1455, II
150/4/8621

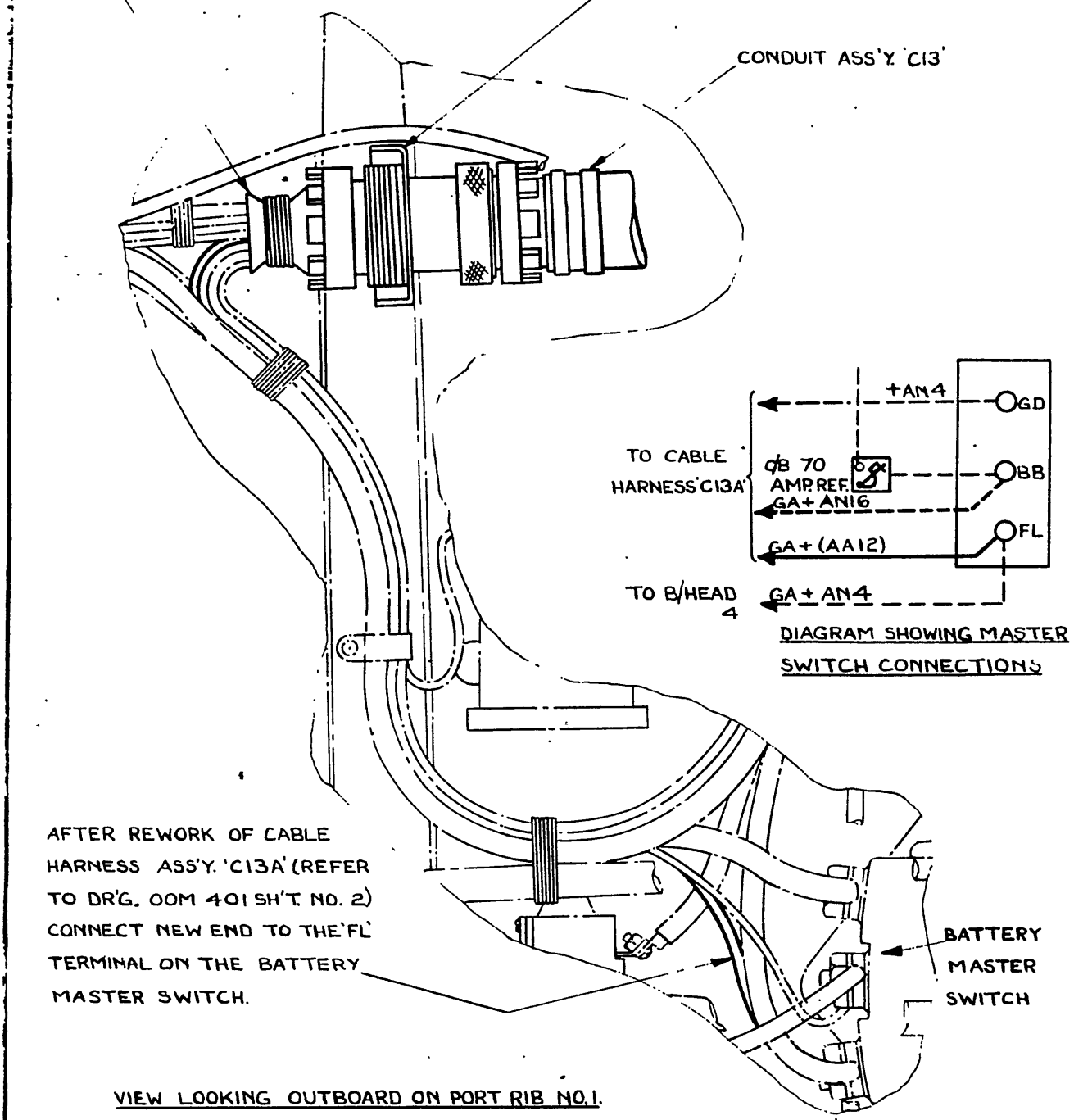
Attachments : Drawing A13129 Sheets 1 to 7

Date of Issue : 3rd June, 1959.

(Issued with AL 153 - June 1959)

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D I L	INITIALS



VIEW LOOKING OUTBOARD ON PORT RIB NO.1.

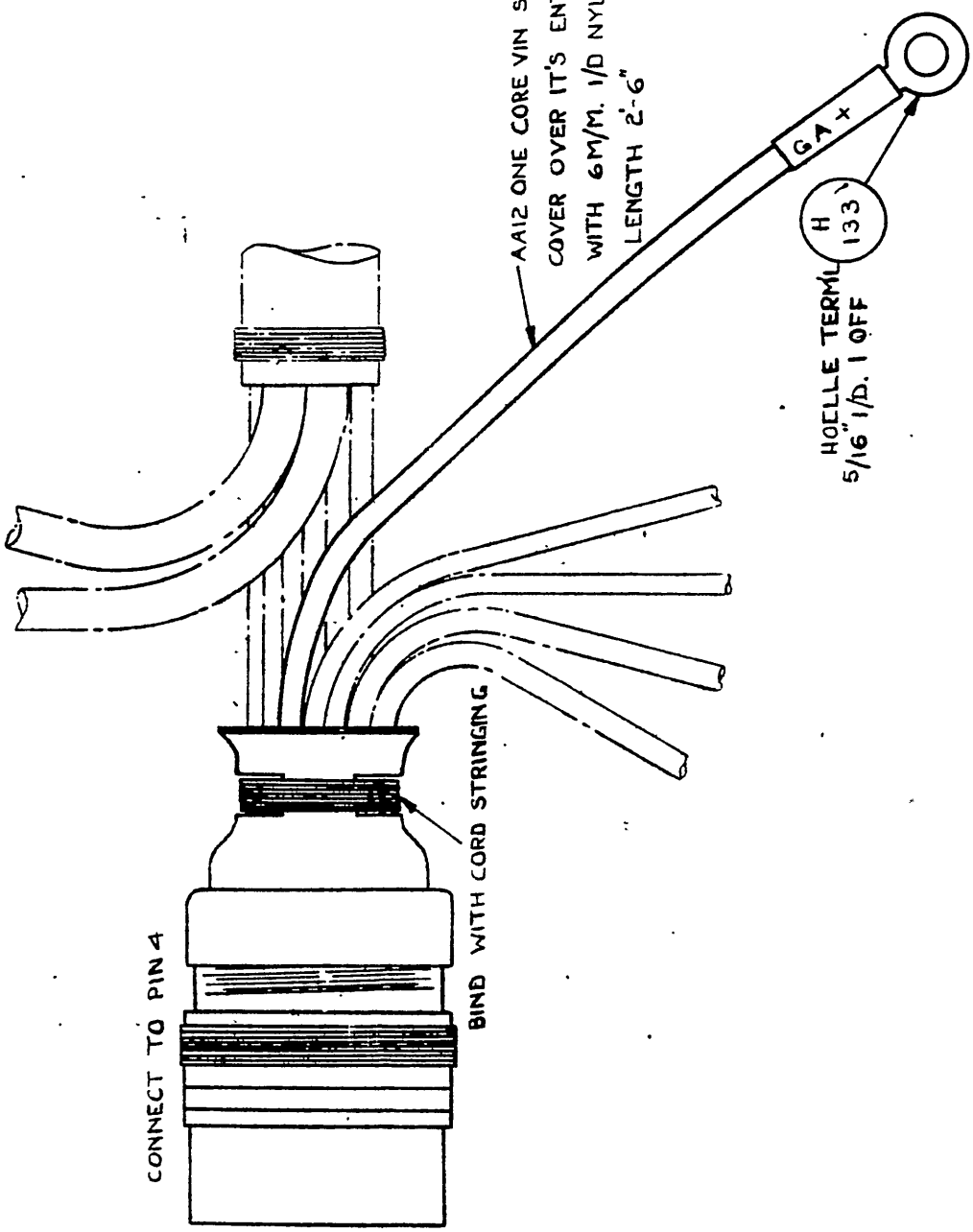
DE HAVILLAND DRAWING NO. OOM401 SHEET 1 OF 7 SHEETS

REFERENCE	ISSUED BY	TITLE
		REVISION OF FIRE WARNING SYSTEM AND CONNECTIONS.

LIMITS UNLESS STATED	MATERIAL			COMPONENT OF	
DECIMALS ± .010"	SPEC.			MACHINE	VAMPIRE.
[illegible] = 1/32"	TREATMENT			ENGINE	
ANGLES ± ½°	FINISH			TECH. ORDER	VAMPIRE MOD N°270
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21	SCALE			DRAWING NO.	A13129 SHEET 1
	DRAWN		APPROVED		
	TRACED		CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D I L	INITIALS	APPROVED



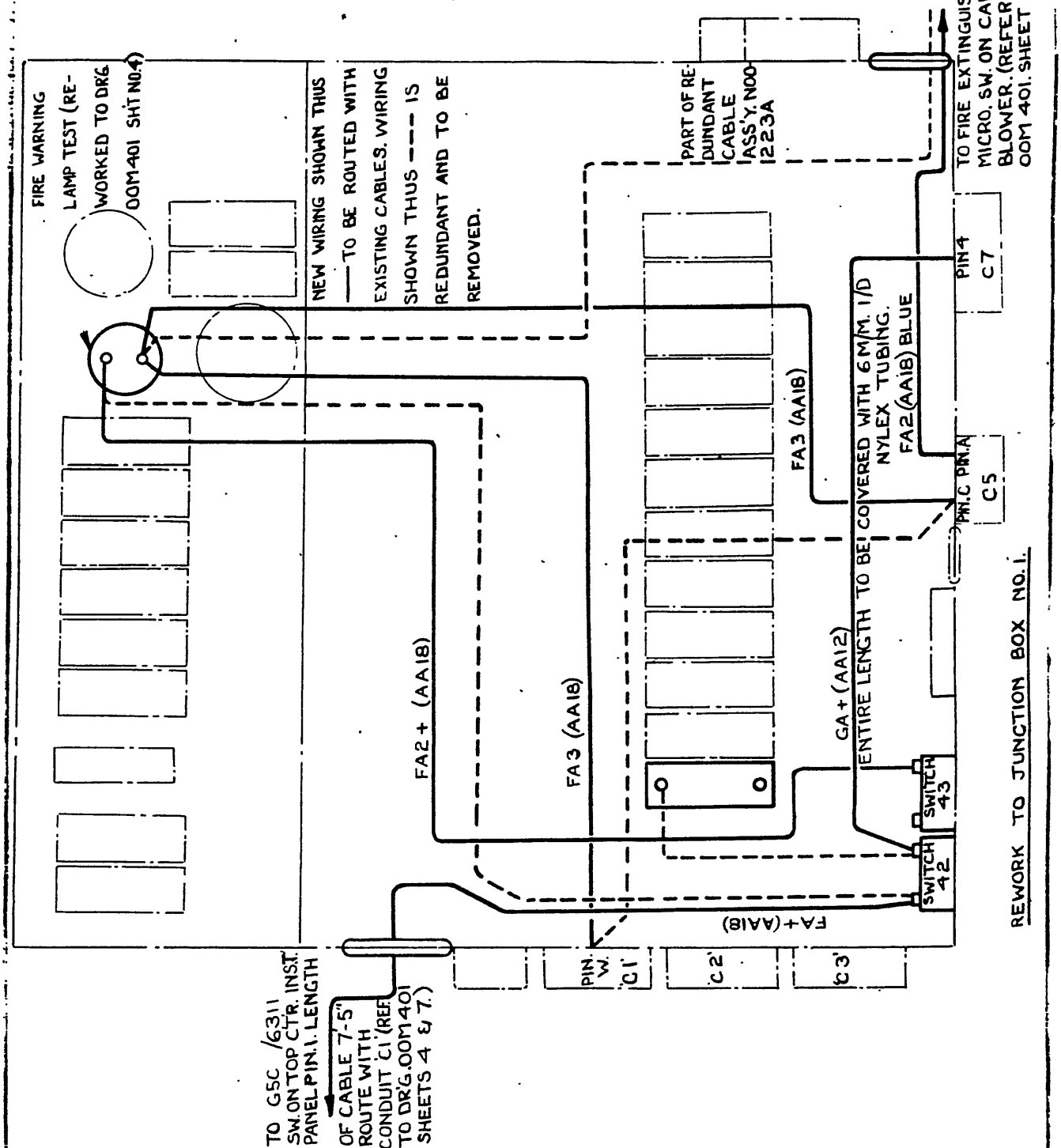
DE HAVILLAND DRAWING NO. 00M401 SHEET 2 OF 7 SHEETS.

REFERENCE	ISSUED BY	TITLE
		REVISION OF FIRE WARNING SYSTEM AND CONNECTIONS

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE.
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD N°270
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.(2)		SCALE		DRAWING NO.	A13129 SHEET 2
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D I L	INITIALS



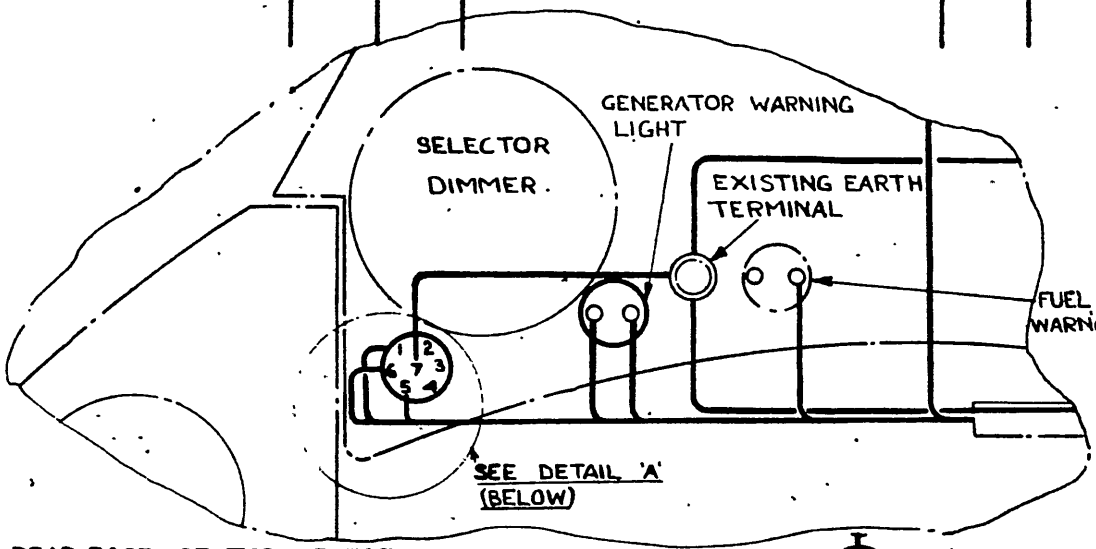
DE HAVILLAND DRAWING NO. OOM 401 SHEET 3 OF 7 SHEETS

REFERENCE	ISSUED BY	TITLE
		REVISION OF FIRE WARNING SYSTEM AND CONNECTIONS.

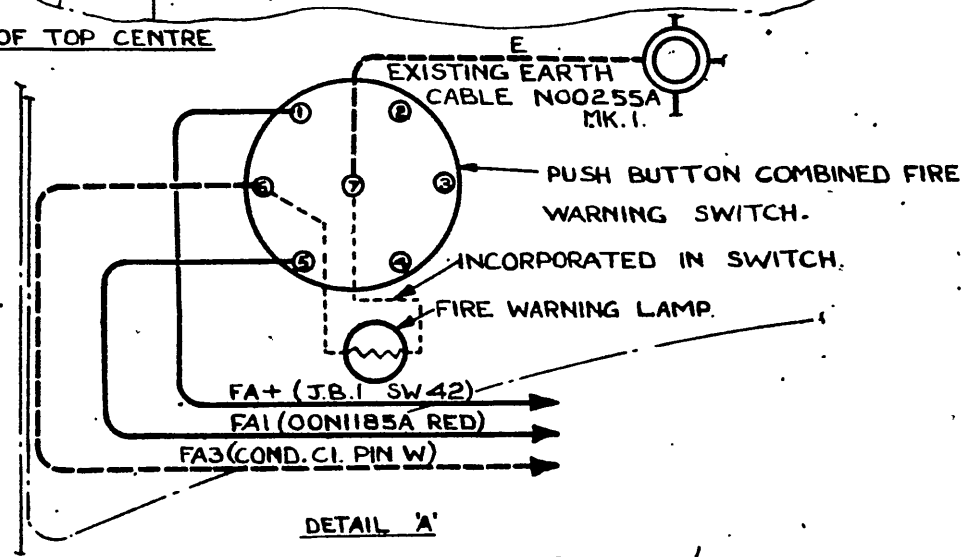
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DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE.
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH ORDER	VAMPIRE MOD N°270
SURFACE FINISH AUSTRALIAN STANDARD ENG DWG. PRACTICE A.S.C.E.I		SCALE		DRAWING NO.	A13129 SHEET 3.
		DRAWN	APPROVED		SIZE A
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. I. L	INITIALS	APPROVED

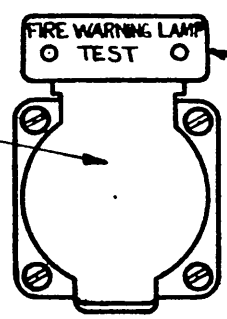


VIEW ON REAR FACE OF TOP CENTRE INSTRUMT PANEL.



EXISTING CABLE SHOWN THUS - - - -
NEW CABLE SHOWN THUS ———

DETAIL 'A'
SHOWING CONNECTIONS TO SWITCH G5C./6311



OBLITERATE "ENGINE EXTINGUISHER" WITH RED PAINT.

REMOVE EXISTING LABEL "ENGINE FIRE" & REPLACE WITH NEW LABEL 00N1139 AND AS2230/304 RIVETS 2 OFF

DETAIL SHOWING REWORK AT THE EXISTING PUSH BUTTON SWITCH LOCATED ON THE TOP PANEL OF J.B. NO.1.

DE HAVILLAND DRAWING NO. 00M401 SHEET 4 OF 7 SHEETS

REFERENCE	ISSUED BY	TITLE
		REVISION OF FIRE WARNING SYSTEM AND CONNECTIONS

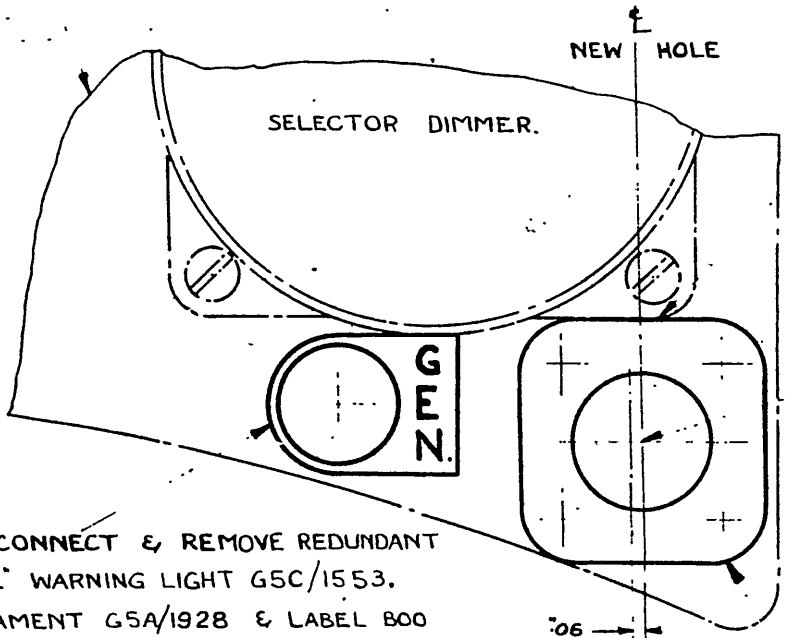
LIMITS UNLESS STATED	MATERIAL			COMPONENT OF	
DECIMALS ± .010"	SPEC.			MACHINE	VAMPIRE.
FRACTIONS ± 1/32"	TREATMENT			ENGINE	
ANGLES ± 1°	FINISH			TECH. ORDER	VAMPIRE MOD N°270
SURFACE FINISH AUSTRALIAN STANDARD ENG DRWG. PRACTICE A.S.E.21	SCALE			DRAWING NO.	A13129 SHEET 4
	DRAWN		APPROVED		DWG. SIZE A
	TRACED		CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	BY	INITIALS	APPD

B001221A REF TOP CENTRE INSTRUMENT PANEL

SWITCH GUARD TO BE UP AGAINST THE G.G.S. CONTROL UNIT & OFFSET AS SHOWN. THEN DRILL 4 NO. 26 DIA. HOLES & OPEN OUT THE HOLE TO SUIT THE GUARD (.875 DIA. REF.)



THE EXISTING EARTH CABLE (N00255 MK.1) DISCONNECTED FROM REDUNDANT FIRE W'RNG LIGHT TO BE CONNECTED TO TERMINAL NO. 7. (CENTRE)

DISCONNECT & REMOVE REDUNDANT "FIRE" WARNING LIGHT G5C/1553. FILAMENT G5A/1928 & LABEL B00 475 & IN IT'S PLACE REPOSITION THE "GEN." WARNING LIGHT. ASSEMBLE WITH NEW LABEL 00B 159

REWORK TO TOP CENTRE INSTRUMENT PANEL

G5C 6311	PUSH BUTTON COMBINED FIRE WARNING SW 1 OFF
G5A 107	FILAMENT 1 OFF
A44 B12	SCREW 4 OFF
AGS 2037 B	SHAKEPROOF WASHER 4 OFF

DE HAVILLAND DRAWING NO. 00M401 SHEET 5 OF 7 SHEETS.

REFERENCE	ISSUED BY	TITLE
		REVISION OF FIRE WARNING SYSTEM & CONNECTIONS.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE.
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD Nº 270
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E2.		SCALE		DRAWING NO.	A 13129 SHEET 5. SIZE A4
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		TRACED	CHECKED		

DO NOT SCALE

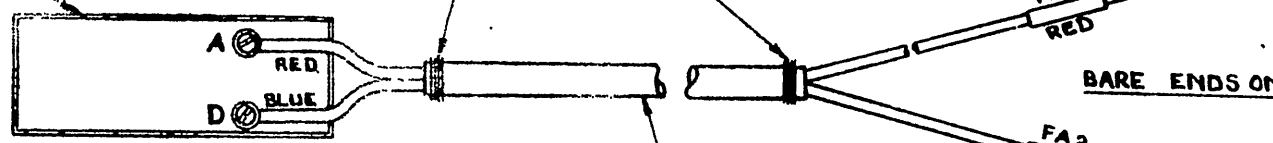
ISSUE NO. | DATE | ALTERATION | D.T.L. | INITIALS | APPROVED

CONNECT TO PIN 5 ON G5C/6311 ON TOP CENTRE INSTRUMENT PANEL ROUTE WITH CONDUIT C1 (REFER TO DR'G. OOM 401 SH'TS. 4 & 7.

OVERALL LENGTH 8'-7"

EXISTING G5C/4099 MICRO SWITCH REMOVED FROM CABLE ASS'Y N00223A

BIND WITH CORD STRINGING



BARE ENDS ON ASS'Y.

7 M/M I/D. NYLEX TUBE 12" LONG.

OVERALL LENGTH 2'-3"

AA18 ONE CORE VIN. SPEC. AS NO. U1

CONNECT TO PIN A AT PLUG C5 IN J.B.1 (REFER TO DR'G. OOM401 SHEET NO. 3.)

PART NO. CABLE ASS'Y. OON1185A

CABLE ASS'Y. J.B.1. TO FIRE EXT. MICRO. SWITCH ON CABIN BLOWER

DE HAVILLAND DRAWING NO. OOM 401 SHEET 6 OF 7 SHEETS.

REFERENCE | ISSUED BY

TITLE: FIRE WARNING SYSTEM AND CONNECTIONS.

REVISION.

COMPONENT OF

MACHINE: VAMPIRE.

ENGINE

TECH. ORDER

DRAWING NO. A/3129 SHEET 6

VAMPIRE MOD N°270

SIZE: A

LIMITS UNLESS STATED

DECIMALS ± .010"

FRACTIONS = 1/32"

ANGLES ± 1°

SURFACE FINISH

AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.21

MATERIAL

SPEC.

TREATMENT

FINISH

SCALE

DRAWN

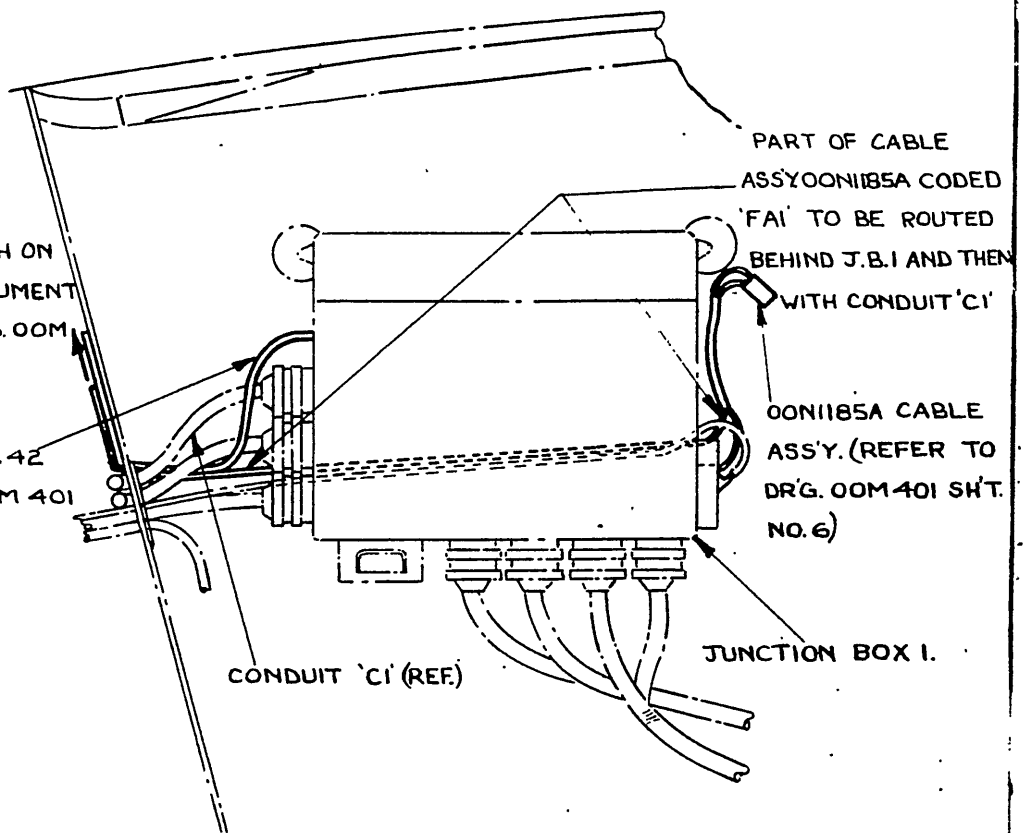
TRACED

APPROVED

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DO NOT SCALE

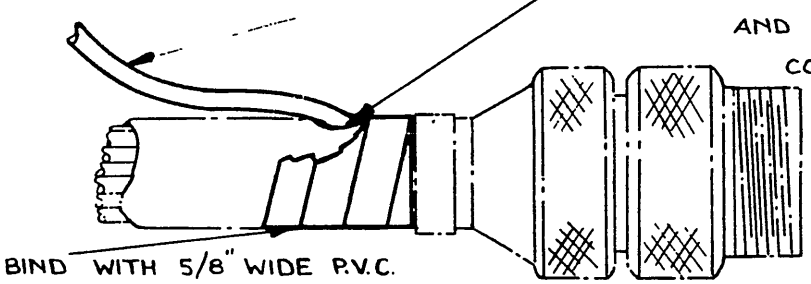
ISSUE NO	DATE	ALTERATION	D I L	INITIALS & APPROVED



CABLE CONSISTING OF AA12 ONE CORE VIN COVERED IN IT'S ENTIRE LENGTH WITH 6 M/M 1/DIA. AND AGAIN WITH 10 M/M. 1/DIA. NYLEX TUBING.

AT EACH END :-
INTRODUCE A HOLE IN THE OUTER NYLEX TUBE OF THE CONDUIT ASS'Y. TO ACCEPT THE CABLE, THEN UNSCREW THE COUPLING NUT AND PULL BACK THE NYLEX TUBING.
CONNECT CABLE ASS'Y. TO 'PIN 4.'

AFTER REWORK RE-PART NO. TO OON1193A



BIND WITH 5/8" WIDE P.V.C. INSULATING TAPE.

REWORK TO CONDUIT ASS'Y. "C7A"

DE HAVILLAND DRAWING NO. OOM 401 SHEET 7 OF 7 SHEETS.

REFERENCE	ISSUED BY	TITLE
		REVISION OF FIRE WARNING SYSTEM AND CONNECTIONS.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE.
[illegible]	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD Nº270
SURFACE FINISH AUSTRALIAN STANDARD ENG DRWG. PRACTICE A.S.E.		SCALE		DRAWING NO.	A13129 SHEET 7
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

Class 2

RESETTING TYPE FIRE DETECTORS IN LIEU OF NON-RESETTING TYPE INTRODUCTION

Reason for and Description of Modification

1. This modification introduces 10 off resetting type fire detectors in lieu of 10 off non-resetting type, which not only indicate a fire in the engine bay but also indicate when the fire is extinguished.

The following modification is to be incorporated either prior to or concurrently with this modification:

RAAF Mod	DH Mod	Title
227	V702	To delete Flame Switches located at Port and Stbd Rib No 1 and introduce additional switches.

It is preferred that the following modifications are also incorporated either prior to or concurrently with this modification:

RAAF Mod	DH Mod	Title
204	V690	HRD Fire Extinguisher System.
224	V704	To introduce redesigned Engine Rear cone to suit larger diameter Jet-pipe.
264	V726	To provide clearance in the Rear Cone for engines with re-routed Jet-pipe thermo couple.

Note: This instruction assumes that the above modifications are being incorporated either prior to or concurrently with this modification.

Application

2. This modification is to be incorporated on all Vampire Trainer Mk 33 and Mk 35 aircraft, A79-602 to A79-635 inclusive. Aircraft A79-636 and subsequent will be modified during manufacture.

Responsibility for Incorporation

3. Operating units, aircraft depots and contractors concerned will be responsible for the incorporation of this modification. Mustering responsible; Electrical Fitter.

(Issued with A/L 135 - April, 1959)

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command.

Ident No	Part No	Nomenclature	Remarks
A79/504121	EC15-71AND	Tail Cone	Rework to para 11(c) (xix) to (xxii) and reidentify as Part No EC15-91AND, Ident No A79/504152.
A79/502151	W15-15A	Wing, Spare LH	Rework to para 11(c) (vi) to (viii) (xi) to (xiii).
A79/502152	W15-17A	Wing, Spare RH	~~After rework of~~ DH (Aust) Mods V234, V690 and V693, RAAF Mods 253, 204 and 207 have been incorporated or are being incorporated concurrently with this order, reidentify as Part No W15-1407A LH and W15-1409A RH and Ident No A79/504137 and A79/504138 respectively.

Orders Superseded or Cancelled

5. This modification partly supersedes Vampire Modification No 227 (De Havilland Aust Mod V702).

Equivalent Modifications

6. De Havilland (Aust) Modification V729 and Air Ministry Modification VAM3418 are equivalent modifications.

Supply

7. The following parts are required to complete one Modification set:-

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
1	W21F/5642	D399	Detector, Flame Resetting Graviner HS/RS, 4D/3	10	
2		15EM3	Mtg Plate Flame Switch	2	
3		15EM5	Mtg Plate Flame Switch	2	
4		EC15-47	Bracket - Flame Switch	4	

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
5		N15-941A	Cable Assembly	1	
6		Z15-1379AND	Cable Assembly	2	
7	H28/12512	A25/1C	Bolt, HTS, Hex Hd, 2BA x .55" long	8	C
8	H28/12516	A25/11C	Bolt, HTS, Hex Hd, 2BA x 1.55" long	8	C
9	H28/12535	A25/12C	Bolt, HTS, Hex Hd, 2BA x 1.65" long	8	C
10	H28/12630	A25/19C	Bolt, HTS, Hex Hd, 2BA x 2.35" long	4	C
11	G5A/28663	AGS1651/6	Ferrule	16	
12	G5A/27686	AGS1658/0	Nut, Gland	16	
13	H28/27025	AGS2001C/1	Nut, MS, Self Locking Nyloc, 2BA	16	C
14	H28/27033	AGS2002C/1	Nut, Thin MS, Self Locking, Nyloc, 2BA	20	C
15	H28/8306	AS1242/1C	Bolt, HTS, Csk Hd, 90°, 2BA x .5" long	8	C
16		AS2808/5/038	Distance Tube, MS, 17 SWG, 5/16" dia x .38" long	8	
17	G5X/3238	Z27323	Pins Plug 7 AMP	4	C
18	H28C/12252	SP13/C	Washer, MS, Thin, 2BA	60	C
19		H608	Terminals, Hoelle, Solderless, 4BA	32	
19A		E15-27	Plate Washer	4	
20	I32A/94		Cord, Stringing, Spec 4F35	AR	
20A	K4/152		Beeswax	AR	

Notes: (a) Items 1 to 19A inclusive will be retained as a Modification Set at the De Havillands Modification Centre pending issue or demand. Units requiring Modification Sets are to demand from the De Havilland Modification Centre.

(b) Items 20 and 20A to be drawn from unit stores.

(Issued with A/L 135 - April, 1959)

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
21	W21F/5614	2D/100	Switch, Flame, Graviner, Type 2D	10	
22		L003777	Bracket	4	
23		N15-539A	Cable Assembly	1	
24		W15-257	Bracket	2	

Notes: (a) Item 21 is to be examined and if serviceable returned to store for use on other aircraft.

(b) Items 22, 23 and 24 are obsolete and are to be disposed of in accordance with current authorised procedure.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable and not later than the next "D" servicing of aircraft after receipt of parts required.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 55 man-hours will be required for the completion of this modification.

(b) Special Tools, Jigs, &c. : No special tools are required.

(c) Sequence of Operations :

(i) Disconnect aircraft accumulators and remove the top and bottom engine cowls and tail cone.

(ii) Refer to Drawing A13098 attached.

(Issued with A/L 135 - April, 1959)

(iii) Disconnect and remove the four flame switches, item 21, from the engine mounts, retain L003779 and AGS605/1 Clips from the top engine mounts and L00190A and its respective bolts and nuts from the bottom engine mounts.

(iv) Rework the cable ends of loom C13 at the top engine mounts as shown at "Detail A" on drawing, Sheet 4, with items 11, 12, 19, 20 and 20A and repart number Loom C13 from N15-557A to N15-1097A.

(v) Rework the cable ends of flame switch cable assembly routed between the flame switches on the top and bottom engine mounts as shown at "Detail A" on drawing, Sheet 4, with items 11, 12, 19, 20 and 20A and repart number the cable assemblies from N15-549A to N15-947A.

(vi) Disconnect and remove the two flame switches, item 21, one on each port and stbd middle engine cowling fastener rib post, together with the redundant bracket item 24.

(vii) Rework the cable ends of the flame switch cable assembly routed from the flame switch on the bottom engine mounts to the flame switch on rib No 1 as shown at "Detail A" on drawing, Sheet 4, with items 11, 12, 19, 20 and 20A and repart number the cable assemblies from N15-551A to N15-949A.

(viii) Rework the cable ends of the flame switch cable assembly N15-553A disconnected in operation (vi) as shown at "Detail A" on drawing, Sheet 4, with items 11, 12, 19, 20 and 20A and repart number the cable assemblies from N15-553A to N15-951A.

(ix) Install four off Fire Detectors, item 1, on the top and bottom engine mounts as shown on drawing, Sheet 1 and 2, using items retained in operation (iii) and items 2, 3, 9, 13, 15, 18 and 19A.

(x) Connect the flame switch cable assemblies to the four Fire Detectors on the engine mounts.

(xi) Drill two No 11 holes in forward and rear rib posts as shown at Fig 1 on drawing, Sheet 4. Repart number the rib posts as indicated on drawing, Sheet 3.

(xii) Install Fire Detectors, item 1, to the port and stbd rib posts as shown on drawing, Sheet 3, using items 10, 13, 16 and 18.

(Issued with A/L 135 - April, 1959)

(xiii) Connect the Flame Switch Cable Assemblies to the flame switches on the rib posts as shown at Fig 2 on drawing, Sheet 4.

Rework of Tail Cone: Refer to drawing, Sheets 5 and 6

(xiv) Disconnect and remove the four flame switches, item 21, from the tail cone.

(xv) Remove the four redundant flame switch brackets, item 22.

(xvi) Remove both Cable and Plate Assembly Part No N15-543A and retain the screws and nuts.

(xvii) Salvage the Plug G5X/6001, Cut Ferrule G5X/1351 and Plate N15-545ND from the Cable and Plate Assembly N15-543A. Then assemble them to Cable Assembly, item 6 using new pins item 17, connecting cable coded FA2+ to Pin A and FA3 to Pin B. Repart number the Cable Plate Assembly to N15-945A.

(xviii) Reinstall the reworked Cable and Plate Assembly now N15-945A to the tail cone, with the screws and nuts retained from operation (xvi).

(xix) Rework the flame switch cable assembly N15-541A by reducing the length to 3'2" and the cable ends as shown at "Detail A" on drawing Sheet 4, and repart number to N15-941A.

(xx) Replace cable assembly N15-539A, item 23, with cable assembly N15-941A, item 5.

(xxi) Install four off Fire Detectors and brackets as shown on drawing, Sheets 5 and 6.

(xxii) Connect the flame switch cable assemblies to the four Fire Detectors.

(xxiii) Reidentify the tail cone as Part No EC15-91AND and Ident No A79/504152.

NOTE: If RAAF Vampire Mods 204, 224 & 264 ~~has~~ have not been or ~~is~~ are not being incorporated concurrently with this modification, record RAAF Mod No 271 or DH Mod No V729 on the tail cone.

(xxiv) After test reinstall all cowls and rear cone in accordance with current authorised procedure, and reconnect the aircraft accumulators.

(Issued with A/L 135 - April, 1959)

(d) Tests : Carry out a function of the fire warning circuit in accordance with the current authorised procedure.

(e) Recording : Record the modification in the airframe log book as Vampire Modification No 271.

Drawings

12. Drawing No A13908, 6 Sheets attached.

Effect on Weight and Balance of the Aircraft

13. The effect of this modification on weight and balance is negligible.

References: Files, Department of Air, 150/8/1400 and 150/4/8621^{II}.

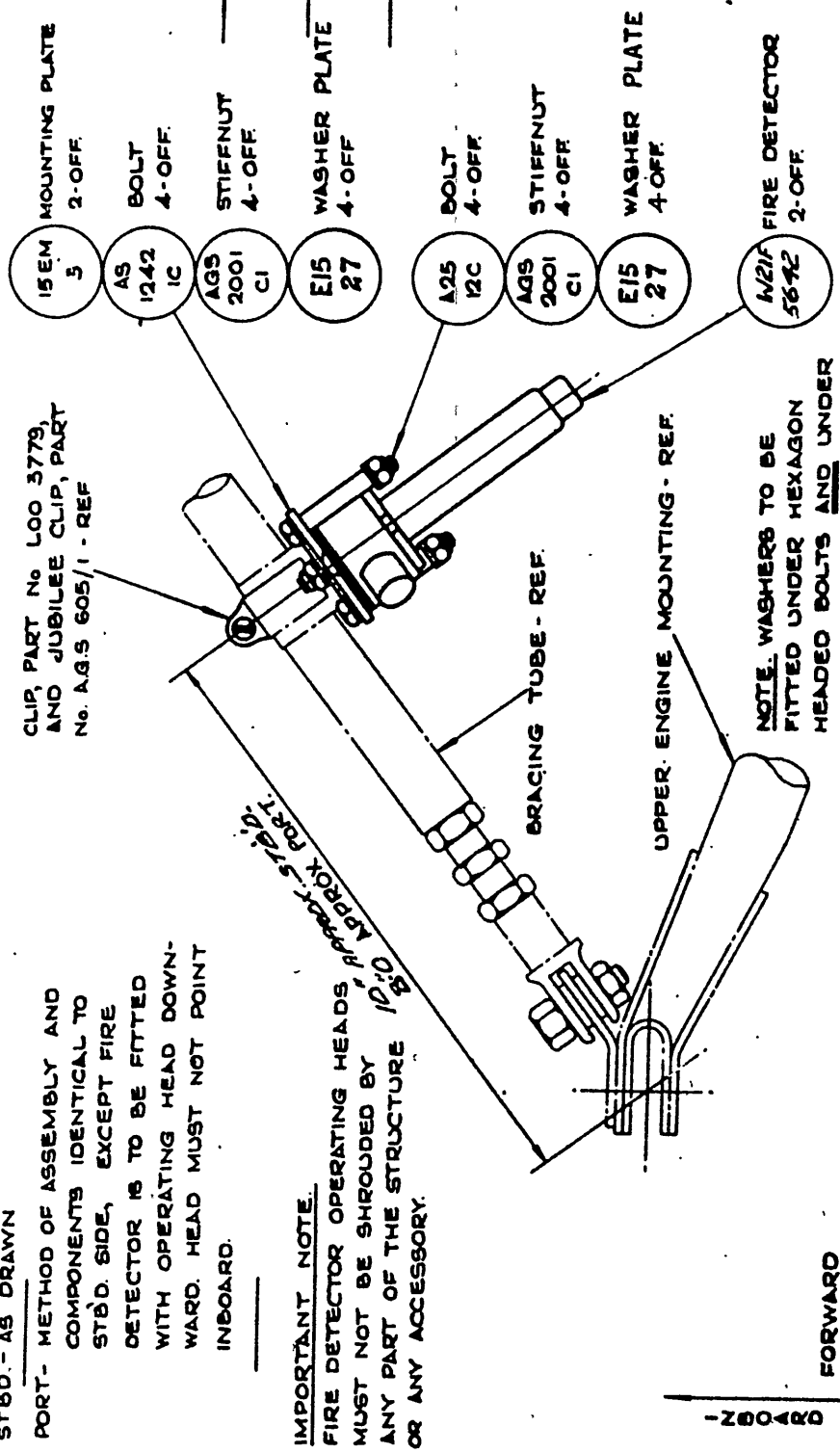
Attachments: Drawing A13098, Sheets 1 to 6 inclusive.

Date of Issue: 13th March, 1959.

(Issued with A/L 135 - April, 1959)

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	L.A.E.	INITIALS	APPROVED



STB'D. - AS DRAWN

PORT- METHOD OF ASSEMBLY AND COMPONENTS IDENTICAL TO STB'D. SIDE, EXCEPT FIRE DETECTOR IS TO BE FITTED WITH OPERATING HEAD DOWNWARD. HEAD MUST NOT POINT INBOARD.

IMPORTANT NOTE.
FIRE DETECTOR OPERATING HEADS MUST NOT BE SHROUDED BY ANY PART OF THE STRUCTURE OR ANY ACCESSORY.

INSTALLATION OF FIRE DETECTORS ON UPPER ENGINE MOUNTING BRACING TUBE.

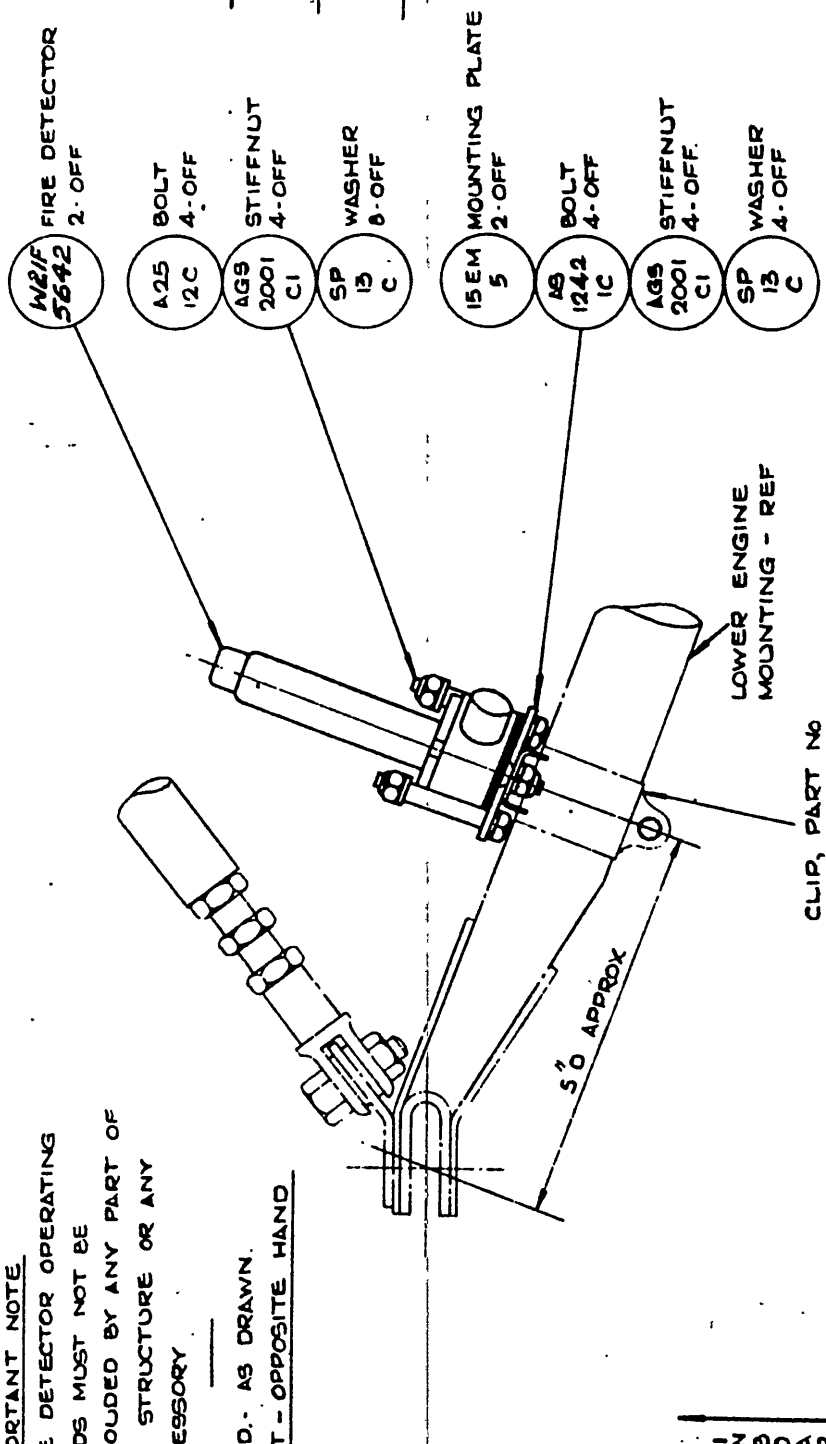
DHAVILLAND DRAWING NO. OOM387 SHEET 1 OF 6 SHEETS.

REFERENCE	ISSUED BY	TITLE
		POWER UNIT:- TO INTRODUCE RESETTING TYPE DETECTORS IN LIEU OF NON-RESETTING TYPE.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	±.010"	SPEC.		MACHINE	VAMPIRE.
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD N° 271
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.Z1		SCALE		DRAWING NO.	A-13098 SHEET 1
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ALTERATION	D.I.L.	INITIALS.	APPROVED



INSTALLATION OF FIRE DETECTORS ON LOWER ENGINE MOUNTING

IMPORTANT NOTE

FIRE DETECTOR OPERATING HEADS MUST NOT BE SHROUDED BY ANY PART OF THE STRUCTURE OR ANY ACCESSORY.

STBD.- AS DRAWN.
PORT - OPPOSITE HAND

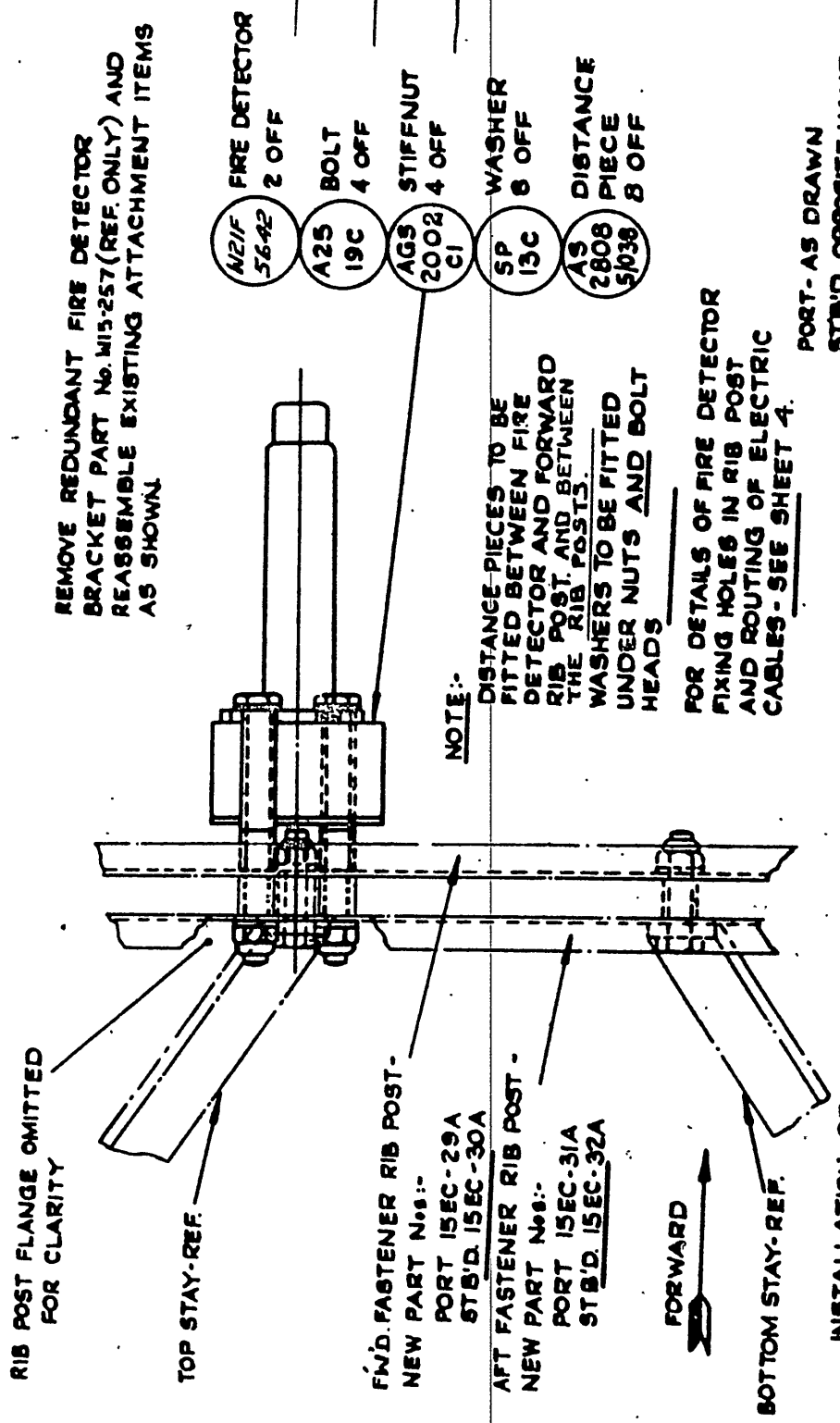
DE HAVILLAND DR'G. NO. OOM387 SHEET 2 OF 6 SHEETS.

REFERENCE	ISSUED BY	TITLE
		POWER UNIT:- TO INTRODUCE RE-SETTING TYPE FIRE DETECTORS IN LIEU OF NON-RESETTING TYPE.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	±.010"	SPEC.		MACHINE	VAMPIRE.
FRACTIONS	±1/32"	TREATMENT		ENGINE	
ANGLES	±½°	FINISH		TECH. ORDER	VAMPIRE MOD Nº 271
SURFACE FINISH TO AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.121		SCALE		DRAWING NO.	A-13098 SHEET 2
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D.I.L.	INITIALS	APPROVED



DE HAVILLAND DRG. NO. 00M387 SHEET 3 OF 6 SHEETS.

REFERENCE	ISSUED BY	TITLE
		POWER UNIT:- TO INTRODUCE RE-SETTING TYPE FIRE DETECTORS IN LIEU OF NON-RESETTING TYPE.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE.
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD Nº 271
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		SCALE		DRAWING NO.	A-13098 SHEET 3
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DE HAVILLAND DRG. NO. COM387 SHEET NO. 4 OF 6 SHEETS.

REFERENCE	ISSUED BY	TITLE
		POWER UNITS TO INTRODUCE RE-SETTING TYPE FIRE DETECTORS IN LIEU OF NON-RESETTING TYPE.

LIMITS UNLESS STATED	MATERIAL		
DECIMALS ± .010"	SPEC.		
FRACTIONS ± 1/32"	TREATMENT		
ANGLES ± 1°	FINISH		
SURFACE FINISH AUSTRALIAN STANDARD	SCALE		
	DRAWN		APPROVED
	TRACED		CHECKED

COMPONENT OF	
MACHINE	VAMPIRE
ENGINE	
TECH. ORDER	VAMPIRE MOD. NO 271

DRAWING NO. A-13098 SHEET 4

DRAWING SIZE A SHEET

SECURE CABLES TO CUT FERRULES USING BEESWAX TREATED BRAIDED STRING ING CORD

1.25

FA2

FA3

G5A 38663 FERRULE

G5A 27486 GLAND NUT.

H 608 HOELLE TERMINAL

DETAIL 'A' SHOWING METHOD OF REWORKING CABLE ENDS AT FIRE DETECTORS.

24°

MIDDLE ENGINE COWLING AFT FASTENER RIB POST - REF

DRILL TWO No 11 HOLES IN FORWARD AND REAR RB POSTS ON 1·81 PCD

CABLE ASSEMBLY TO TAIL CONE PT No NIS-951A - REF

CABLE ASSEMBLY FROM FIRE DETECTOR ON LOWER ENGINE MOUNTING NIS-949A (REF.)

PORT - AS DRAWN

STBD - OPPOSITE HAND

FIG 1 DETAILS OF FIXING HOLES

FIG 2 ROUTING OF CABLE ASSEMBLIES

INSTALLATION OF FIRE DETECTOR ON MIDDLE ENGINE COWLING AFT FASTENER RIB POST

VIEW LOOKING AFT

FULL SCALE

3	18-11-58	CABLES RE-ROUTED PICTORIALLY & CLIP AS 31/81/EC 2-OFF DELETED.	AL.165	J.L.
2	15-9-58	DIM. 1·25 WAS 2·0	AL.182.	J.L.

DONUT SCALE

A	A25/1C AGS 2002/C1 SP 13/C	BOLT STIFFNUT THIN WASHER	8 8 16
B	A25/11C AGS 2002/C1 SP 13/C	BOLT STIFFNUT THIN WASHER	8 8 16
C	EC15-47	BRACKET	4
D	W21F/5642	FIRE DETECTOR	4

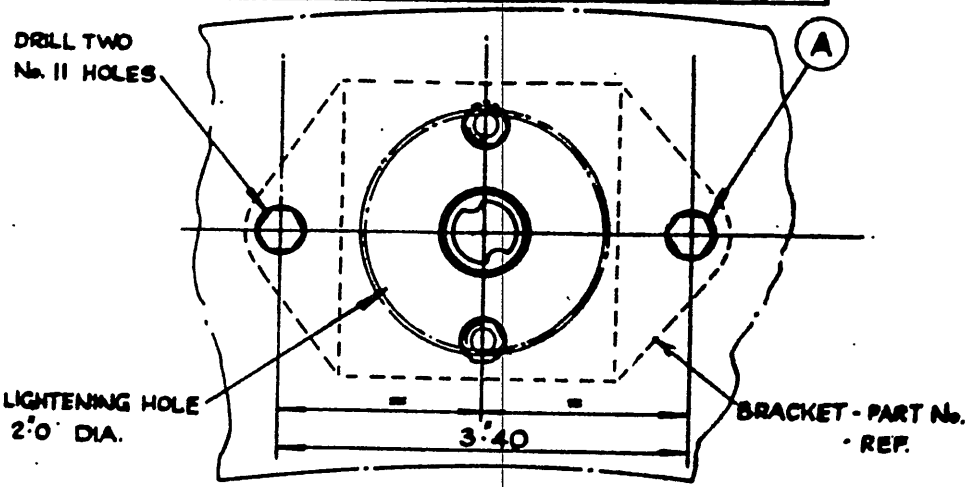


FIG. 1 VIEW ON ARROW 'A'

NOTE:-
WASHERS TO BE FITTED
UNDER NUTS AND BOLT HEADS

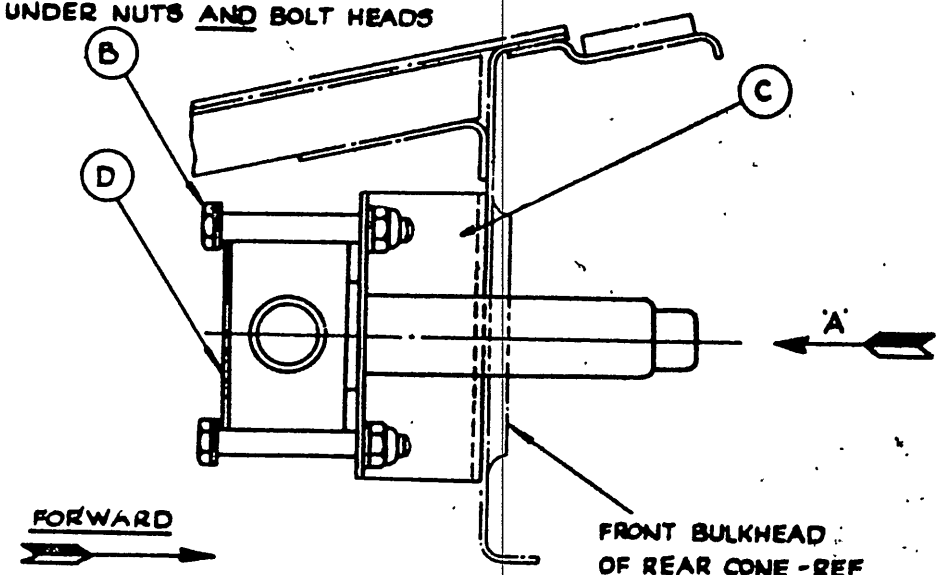


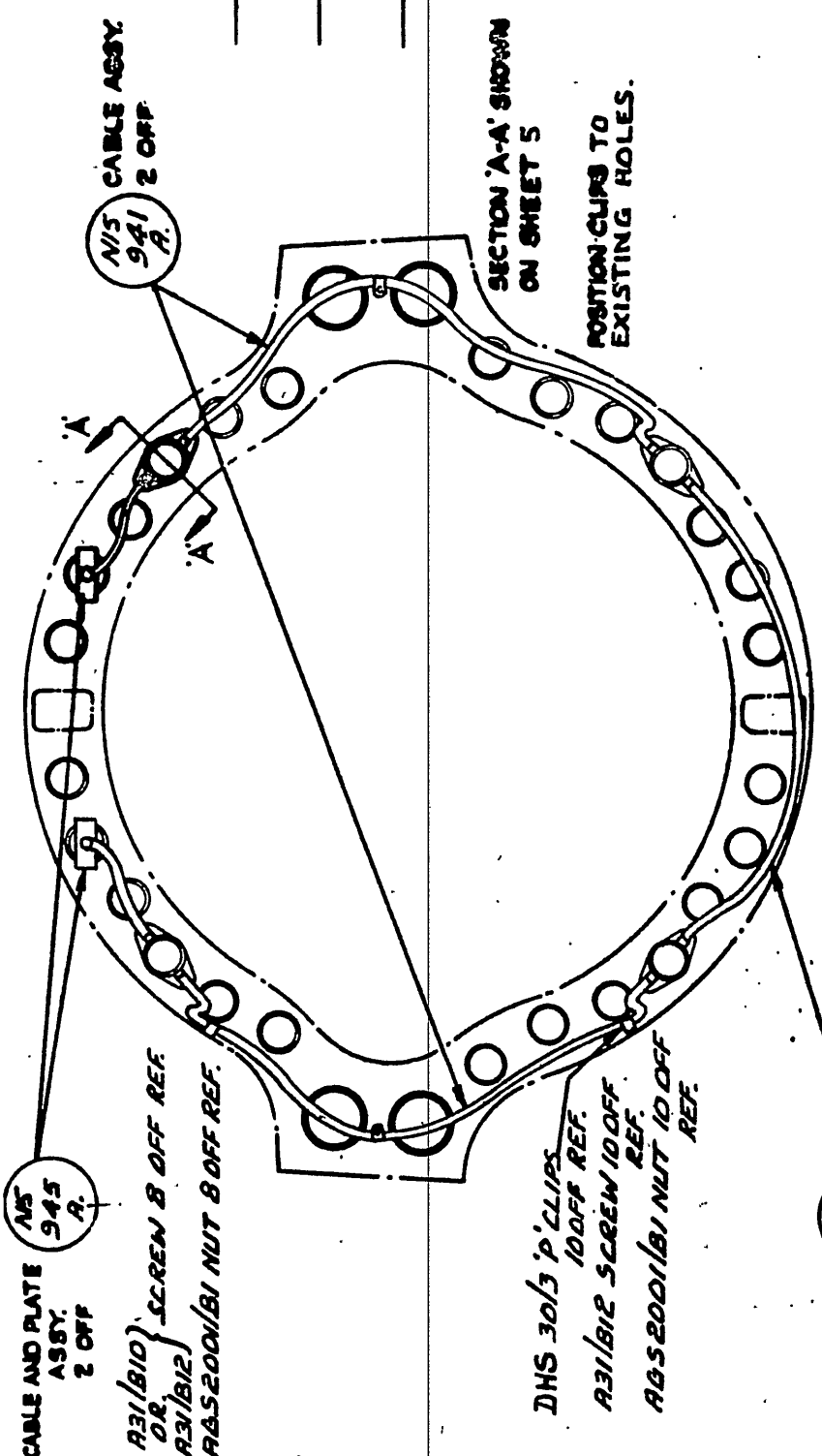
FIG. 2 SECTION 'A-A' - SHEET 6

DE HAVILLAND. DR'G. NO. DOM 387 SHEET NO. 5 OF 6 SHEETS

REFERENCE	ISSUED BY	TITLE
		POWER UNIT :- TO INTRODUCE RE-SETTING TYPE FIRE DETECTORS IN LIEU OF NON-RESETTING TYPE

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	±.010"	SPEC.		MACHINE	VAMPIRE
FRACTIONS	±1/32"	TREATMENT		ENGINE	
ANGLES	±½°	FINISH		TECH. ORDER	VAMPIRE MOD Nº 271
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		SCALE		DRAWING NO.	A-13098 SHEET 5.
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE



DE HAVILLAND DRG. NO. 00M387 SHEET 6 OF 6 SHEETS

REFERENCE	ISSUED BY	TITLE
		POWER UNIT:- TO INTRODUCE RE-SETTING TYPE FIRE DETECTORS IN LIEU OF NON-RESETTING TYPE.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD N°271
SURFACE FINISH AUSTR'LIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		SCALE		DRAWING NO.	A-13098 SHEET 6.
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

AAP 721:79, VOLUME 2, PART 2

VAMPIRE MODIFICATION NO 272

Class 2

FIRE WARNING CIRCUIT - REVISION

Reason for and Description of Modification

1. This modification takes the electrical supply for the fire services direct from the aircraft battery thus enabling the Pilot to switch off the battery isolation switch in the event of a forced landing and still enable the fire indication or fire extinguisher service to operate.

The following modification is to be incorporated either prior to, or concurrently with, this order.

RAAF Order	DH Mod	Title
205	V691	Modified Instrument Panel.

Application

2. This work is to be carried out on all Mk 33/35A and 35 including A79/836 Vampire Trainer aircraft. Aircraft A79-631 and subsequent Mk 35 aircraft will be modified during manufacture.

Responsibility for Incorporation

3. Operating units, aircraft depots and contractors concerned will be responsible for the incorporation of this modification. The mustering applicable is : Electrical Fitter.

Action in Respect of Spares

4. No spares are affected by the incorporation of this modification.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modification

6. De Havilland (Aust) Modification No V730 and Air Ministry Mod No VAM. 3524 are equivalent modifications.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No		Nomenclature	Qty	Stores Class
1		00N19		Lug	1	

(Issued with A/L 158 - August 1959)

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
2	A79/500959	98N2105	Nut Square, 4BA	1	
3	G5A/500313	Z27329	Thimble, 7 Amp	4	
4	-	H247A	Heolle Terminal 5/16" I/DIA	2	
5	H28/12528	A25/1B	Bolt, HTS, Hex Hd 4BA x .5" long	1	
6	H28C/11067	AGS2035/B	Washer, Lock, Shake-proof, steel, .148" I/DIA x .3" O/DIA	1	
7	H28/14307	AS3180/20B	Clip, Al. Al, Type "P" Rubber covered, 4BA x 1¼ DIA	2	
8	H28/12305	SP 13 B	Washer, MS Plain, Thin .157" I/DIA x .301" O/DIA	1	
9	G5E/30161		Cable AA16 one core vin, Spec AS No U1	20 ft	
10	G5F/20057		Tubing, Insulating, Flexible, PVC 4 MM I/DIA	20 ft	
11	G5F/20061		Tubing, Insulating, Flexible PVC 8 mm I/DIA	10 ft	
12	G5F/500001		Tape, Insulating, PVC ⅝" wide Spec DTD602	AR	
13	I32A/94		Cord, stringing, Spec 4F35"	AR	
14	K4/152		Beeswax	AR	

Notes: (a) Items 1 to 11 inclusive will be retained as a modification set at the De Havilland Modification Centre pending issue or demand.

Units requiring modification sets are to demand from the De Havilland Modification Centre.

(Issued with A/L 158 - August 1959)

(b) Items 12, 13 and 14 are to be drawn from unit stores.

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Stores

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable and not later than the next "D" servicing of aircraft after receipt of parts required.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 21 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, etc: No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Ensure that Gyro Gunsight is in combat (up) position, raise nose cap and disconnect the aircraft accumulators.

(ii) Remove canopy jettison handle and lower Instrument Panel.

(iii) Disconnect Conduit "C2" (N15-263A) at Junction Box No 1, Bulkhead No 1 and at Port Disconnect Panel and remove it from the cockpit for rework.

(iv) Rework Conduit "C2" as per drawing A13217 Sheet No 1 usin items 1, 3, 9, 10, 11, 13 and 14, then re-part number No N15-1101A.

(v) Remove and rework bus bar as shown on Detail A on drawing A13217 Sheet No 2.

(vi) Install reworked bus bar as shown on drawing A13217 Sheet No 2.

(vii) Refer to drawing A13217 Sheet No 3. Install reworked Conduit "C2" (new part No N15-1101A) back to its original position, connecting ends to Junction Box No 1, Bulkhead No 1 and the Port Disconnect Panel as before. Connect new end (para (iii) refers) to the top terminal

on the existing "Fire Warning" circuit breaker as shown, using items 2, 5, 6 and 8.

(viii) Completely wrap bare lug, bus bar and terminal screws with black nylex insulating tape, Item 12.

(ix) Raise and secure instrument panel. Replace canopy jettison handle and re-wire lock.

(x) Disconnect Loom "C2A" at the starboard side, forward face of Bulkhead No 1, and rework as per drawing A13217 Sheet No 4, using items 4, 9, 10, 11 and 12. Re-part number to N15-1103A.

(xi) Reconnect reworked Loom "C2A".

(xii) Route the new cable which is now part of Loom "C2A" as per drawing A13217 Sheet No 5, and replacing 2 off existing Clips with item 8.

(xiii) Connect the two ends of the new cable coded "GA+" to the "FL" terminal on the Ground/Flight switch.

(xiv) After "Test", reconnect aircraft accumulators and secure the nose cap.

(d) Test : Carry out a function test of the fire warning and extinguisher circuit in accordance with current authorised procedure.

(e) Recording : Record the modification in the Airframe Log Book.

Drawings

12. Drawing A13217 consisting of five sheets are attached herewith.

Effect on Weight and Balance

13. The effect on this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 150/8/1401, 150/4/8621^{II}.

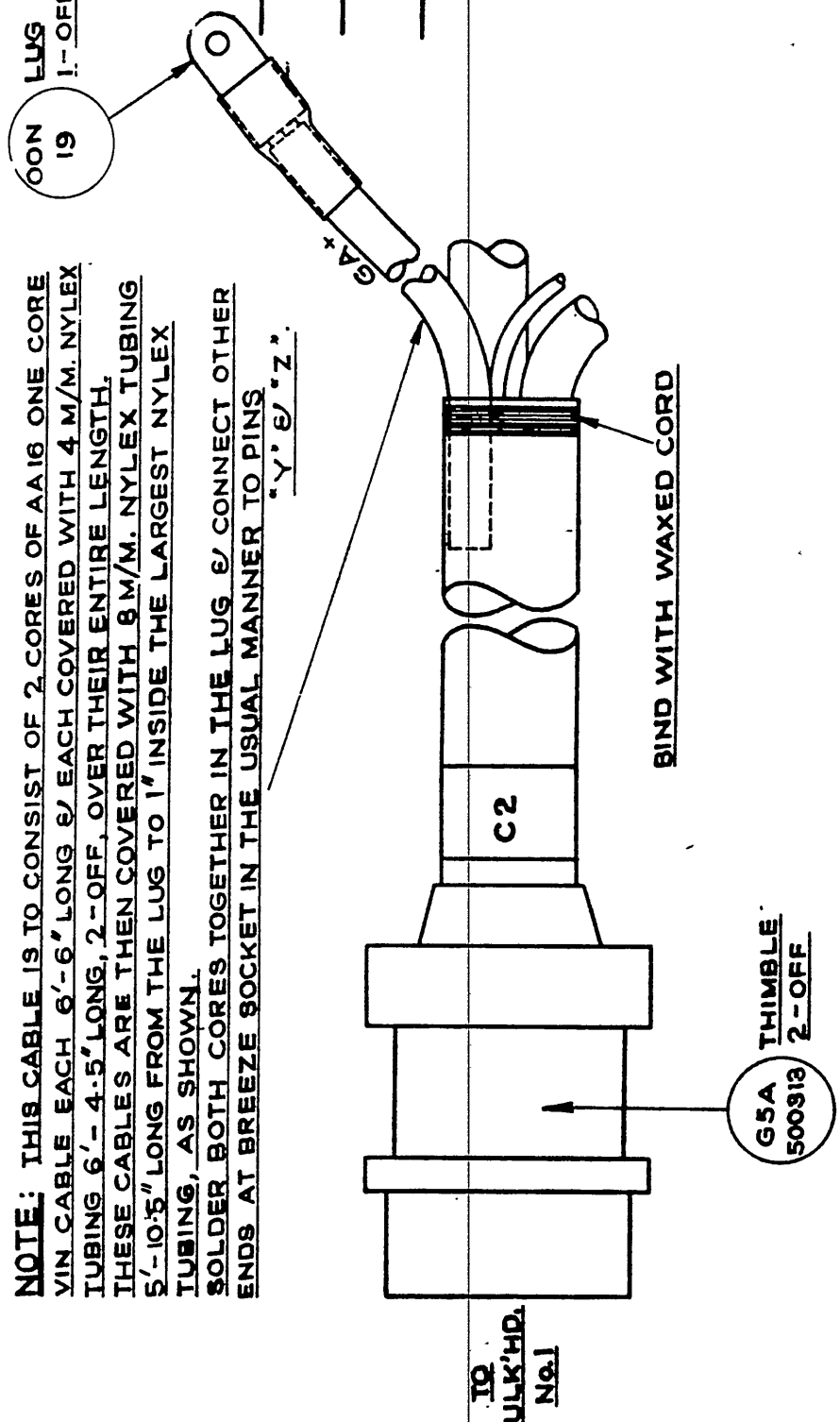
Attachments : Drawing A13217 Sheets 1 to 5.

Date of Issue : 4th August 1959.

(Issued with A/L 158 - August 1959)

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	B. I. L.	INITIALS	APPROVED



NOTE: THIS CABLE IS TO CONSIST OF 2 CORES OF AA 16 ONE CORE VIN CABLE EACH 6'-6" LONG & EACH COVERED WITH 4 M/M. NYLEX TUBING 6'-4·5" LONG, 2-OFF, OVER THEIR ENTIRE LENGTH. THESE CABLES ARE THEN COVERED WITH 8 M/M. NYLEX TUBING 5'-10·5" LONG FROM THE LUG TO 1" INSIDE THE LARGEST NYLEX TUBING, AS SHOWN. SOLDER BOTH CORES TOGETHER IN THE LUG & CONNECT OTHER ENDS AT BREEZE SOCKET IN THE USUAL MANNER TO PINS "Y" & "Z".

DE HAVILLAND DRG. No. 00M389 No. OF SHTS. 5, SHT. No. 1.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING.	FIRE WARNING CIRCUIT REWORK OF CONDUIT "C2"

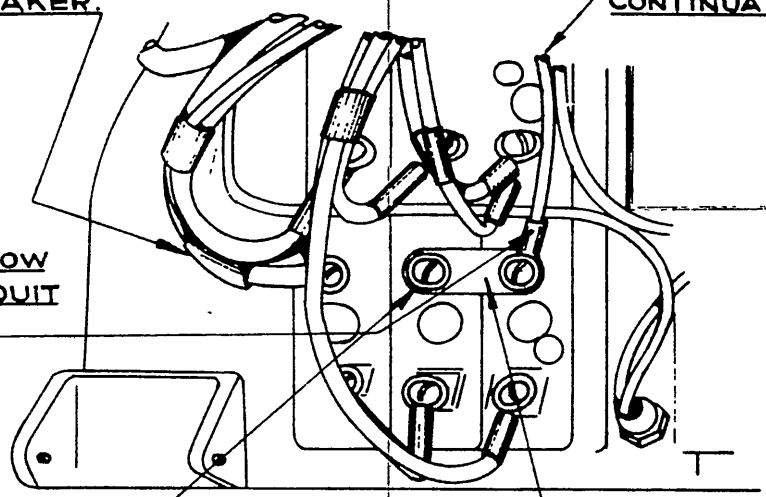
LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MR 33, 35A, 35
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN.
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD 272
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.D.1		SCALE		DRAWING NO.	A 13217 SHEET 1 OF 5
		DRAWN	APPROVED		SIZE A
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. I. L	INITIALS	APPROVED

EXISTING CABLE RECONNECTED TO TOP TERMINAL OF SPARE CIRCUIT BREAKER.

SEE SHT. 3 FOR CONTINUATION

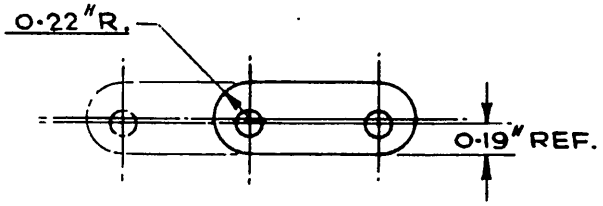


NEW CABLE NOW PART OF CONDUIT "C2" REF.

NOTE: COMPLETLY WRAP BARE LUG, BUS BAR AND TERMINAL SCREWS WITH BLACK NYLEX TAPE.

VIEW ON BACK OF INSTRUMENT PANEL -LOWER STB'D. CORNER-

REMOVE BUS BAR AND REWORK AS SHOWN AT DETAIL "A"



DETAIL "A"
SHOWING REWORK TO EXISTING BUS BAR OON 837

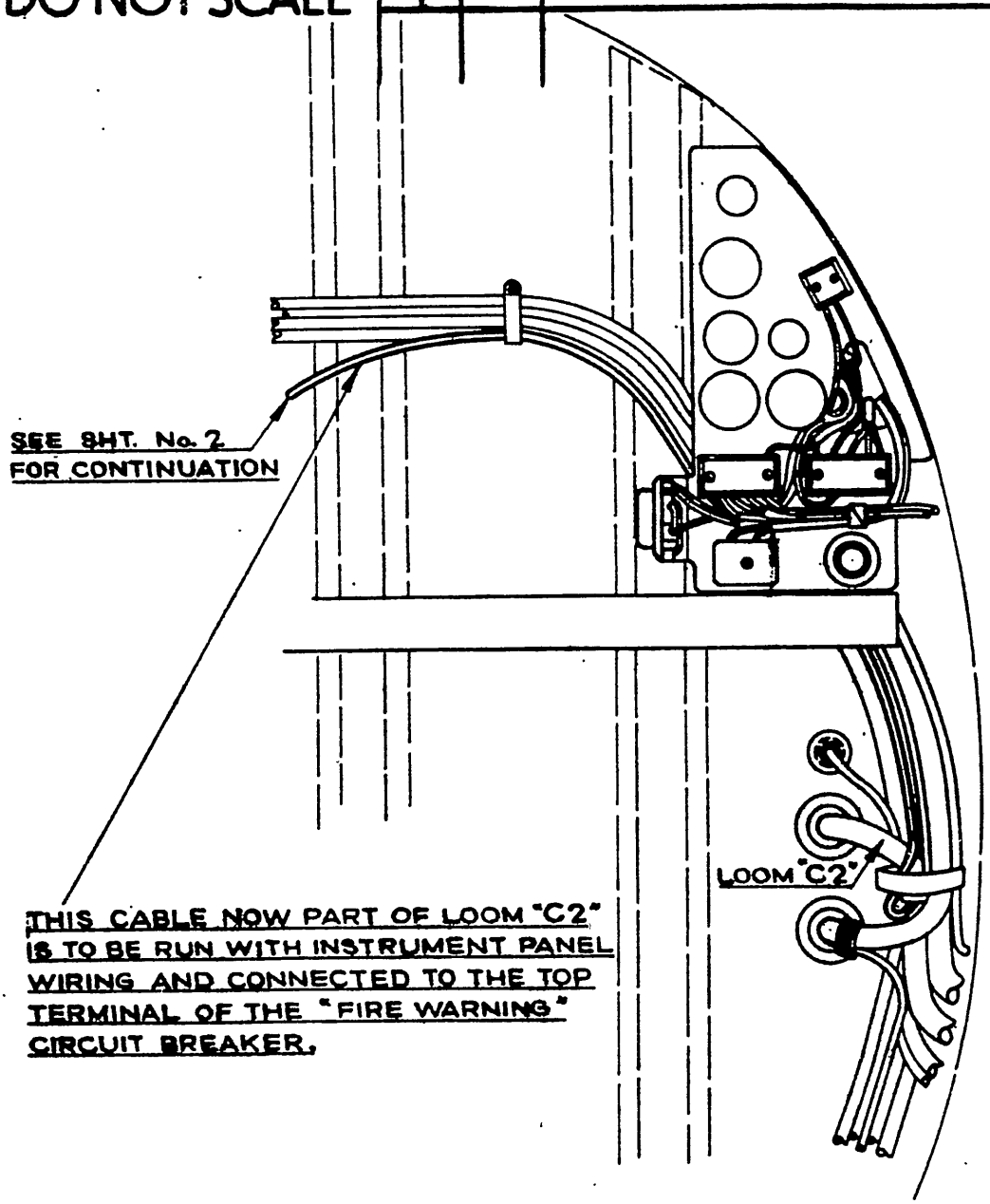
DE HAVILLAND DRG. No. OOM 389 NO. OF SHTS. 5, SHT. No. 2.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR. DIRECTORATE OF AIRCRAFT ENGINEERING.	FIRE WARNING CIRCUIT REWORK TO INSTRUMENT PANEL

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MR 33, 35A, 35.
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN.
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD 272.
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.121		SCALE		DRAWING NO.	A13217 SHEET 2 OF 5
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	B I L	INITIALS	APPROVED



VIEW LOOKING FORWARD ON BULKHEAD No. 1

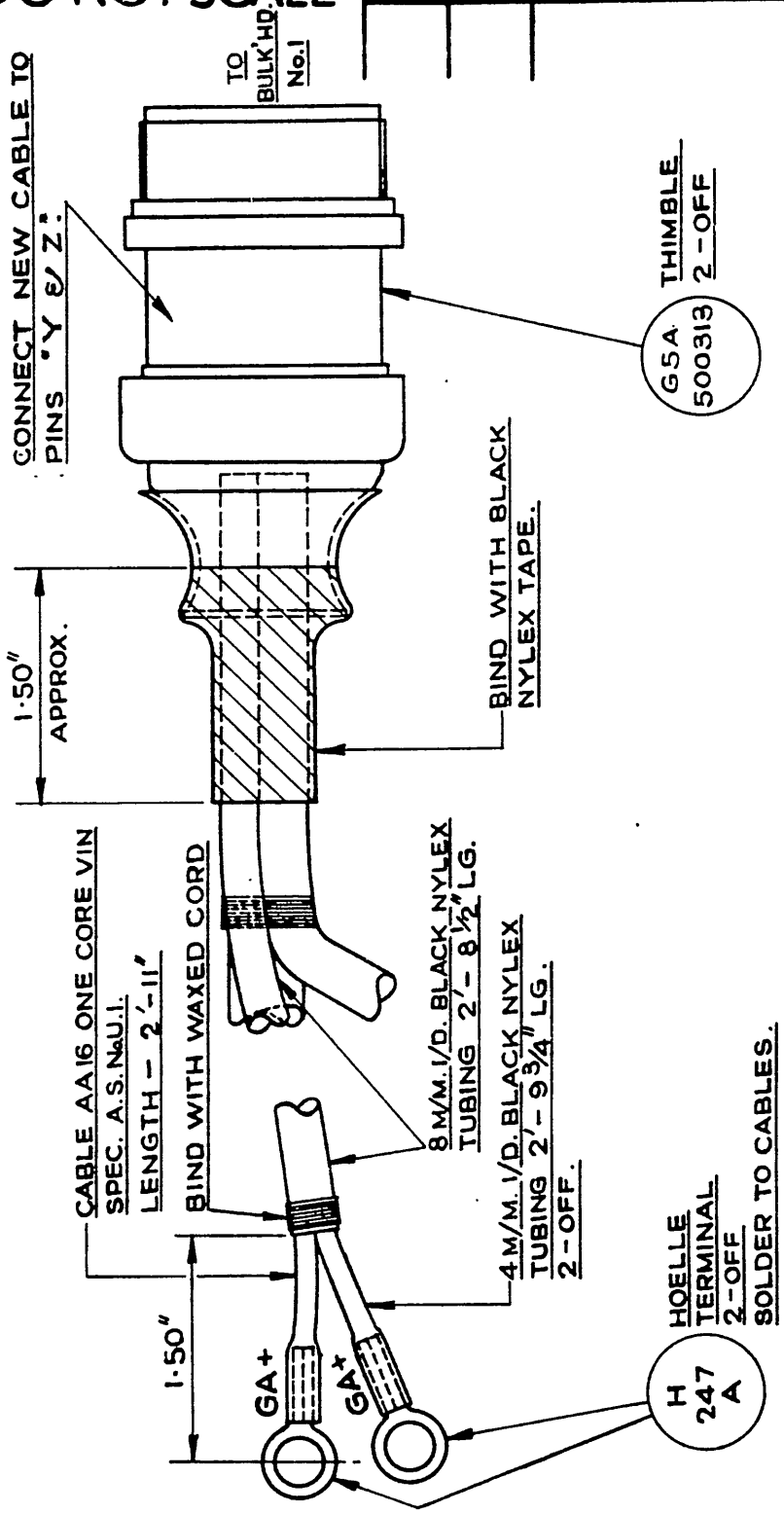
DE HAVILLAND DRG. No. 00M389 No. OF SHTS. 5, SHT. No. 3.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR. DIRECTORATE OF AIRCRAFT ENGINEERING.	FIRE WARNING CIRCUIT ROUTING OF LOOM C2

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MR 33,35A,35
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN.
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD 272.
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.D.		SCALE		DRAWING NO.	A13217 SHEET 3 OF 5
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. I. L	INITIALS	APPROVED



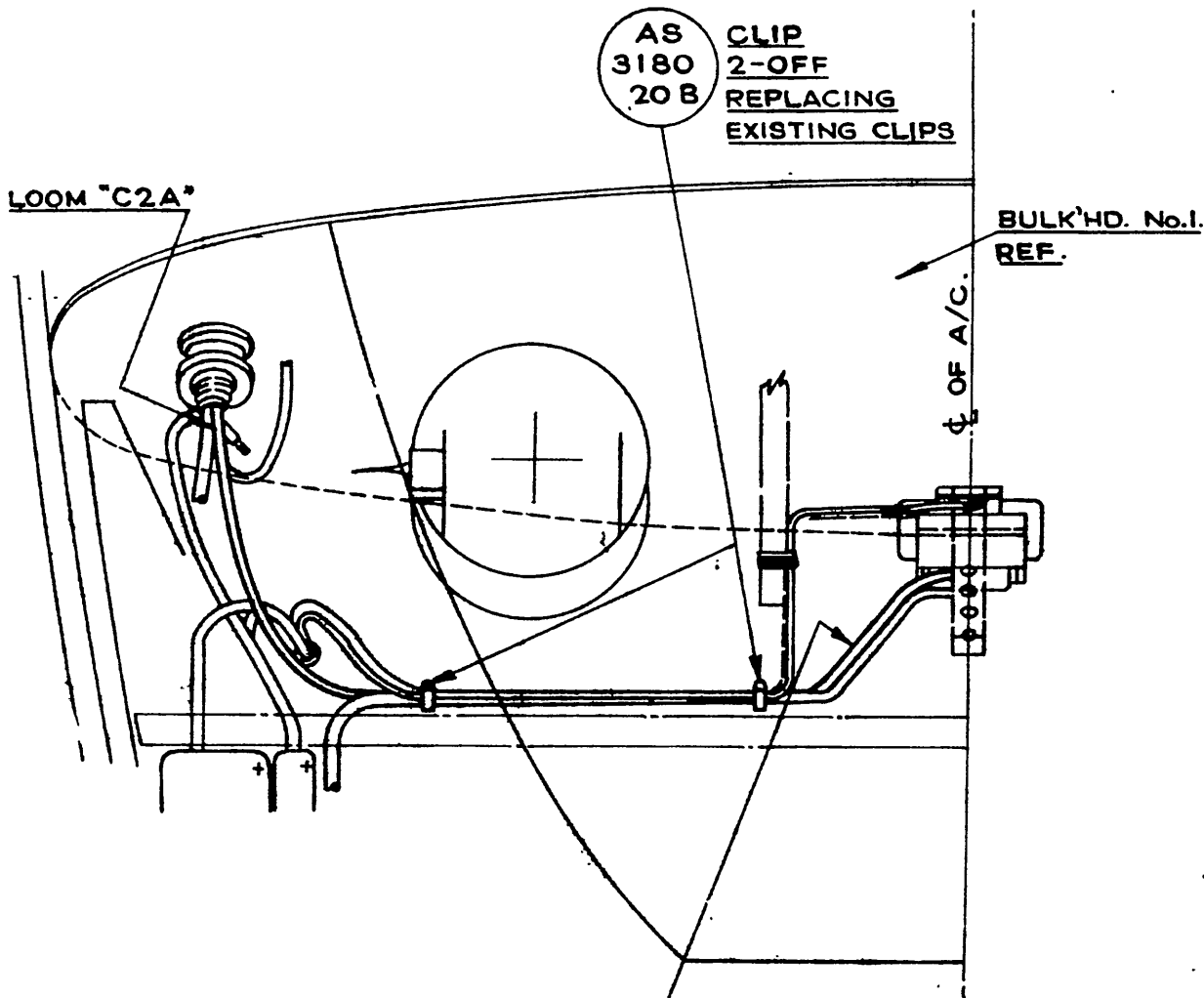
DE HAVILLAND DRG. No. OOM 389 No. OF SHTS. 5, SHT. No. 4.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR. DIRECTORATE OF AIRCRAFT ENGINEERING.	FIRE WARNING CIRCUIT REWORK OF LOOM C2A"

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MR33.35A35
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN.
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD 272.
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.2.		SCALE		DRAWING NO.	A13217 SHEET 4 OF 5.
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. I. L	INITIALS	APPROVED



DE HAVILLAND DRG. No. 00M 389 No. OF SHTS. 5, SHT. No. 5

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING.	FIRE WARNING CIRCUIT INSTALLATION OF LOOM C2A

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MR 33,35A,35
FRACTIONS	± 1/64"	TREATMENT		ENGINE	GOBLIN.
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD 272.
SURFACE FINISH AUSTRALIAN STANDARD		SCALE		DRAWING NO.	A13217 SHEET 5 OF 5.
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

AAP 721:79, Vol 2, Pt 2 VAMPIRE MODIFICATION NO 273

Class 2

MAIN FUEL TANK FILLER CAP INCORPORATING RUBBER SEALING - INTRODUCTION

Reason for and Description of Modification

1. The rubber sealing ring introduced by this modification prevents fuel escaping past the inward venting fuel plate to the outside of the cowlings during inverted flight or negative 'G'. This fuel could create a fire hazard by entering the engine bay.

Application

2. (a) This work is to be carried out on all Vampire Mk 33, 35A and 35 aircraft, Serial Nos A79-600 to A79-627. Aircraft A79-628 onwards will be modified during manufacture.

(b) All Vampire Fighter aircraft Mks 30 and 31 are to be modified in accordance with para 11 (c) (viii) to enable the new type filler caps Part No 15 PT 19A Ident No A79/504129 to be used as an alternative.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for servicing Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command:-

Ident No	Part No	Nomenclature	Remarks
A79/501319	P001152A	Cap Filler	Rework in accordance with paras 11 (c) (iii) to (v) inclusive, test and re-identify as Part No 15 PT 19A and Ident No A79/504129.
A79/501320	P001154	Valve	Rework in accordance with para 11 (c) (iv) and reidentify as Part No P15-553A Ident No A79/504130.

(Issued with A/L 137 - May, 1959)

Ident No	Part No	Nomenclature	Remarks
A79/501320	P001154	Valve	Rework in accordance with para 11 (c) (iv) and reidentify as Part No P15-553A Ident No A79/504130.
A79/502153	P003279A/1	Tank, Fuel	Rework in accordance with para 11(c) (ii) to (v) inclusive and re-identify as Part No P003279A/2 Ident No A79/504140.
A79/503585	P15-17AND	Tank, Fuel	Rework in accordance with paras 11(c) (ii) to (v) inclusive and reidentify as Part No P15-559AND Ident No A79/504141.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V731 and Air Ministry Mod VAM 3575 are the equivalent modifications.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
1		15PT17A	Plate, Backing	1	
2	A79/504142	P15-551	Seating, Valve	1	C
3	H28/8303	AS1242/4B	Bolt, HTS, Csk Hd 90°, 4BA, .75" lg	4	C
4	H28C/12346	SP 10/B	Washer, MS, Thin, 4BA	4	C
5	H28/13086	A27/BP	Nut, MS, Hex, Plain, 4BA	4	C

(Issued with A/L 137 - May, 1959)

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
6	K3/436	1410	Adhesive "Bostik"	AR	C
7	K3/346(Z)		Colour, Identification, Red, Matching BS1 Colour 358 Spec 3K5	AR	C
	or				
	K3/358	BSC/538	Colour Identification Glossy Bright Red	AR	C

Notes: (a) Items 1 to 5 inclusive will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland Modification Section.

Units requiring modification sets are to demand from De Havilland Modification Section.

(b) Items 6 and 7 will be drawn from unit stores as required.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
8		P001155A	Plate Assy Backing	1	

Note: Item 8 is obsolete and is to be disposed of in accordance with current authorised procedure.

Disposal of Parts in Store

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of parts or when the aircraft are allotted for retrospective fitment.

(Issued with A/L 137 - May, 1959)

Method of Incorporation

11. (a) Man-Hours Involved : Mks 33/35A and 35 : Approx. 4 man-hours

Mks 30 and 31 : Approx. ½ man-hour

(b) Special Tools, Jigs, &c : No special tools are required.

(c) Sequence of Operations:

(i) Locate on the fuselage the fuel tank filler cap access cover. Undo Dzus fastener and lift access cover.

(ii) Remove the fuel tank filler cap and dismantle as follows.

(iii) Remove and retain the swivel plate complete with chain and locking ring from the filler cap. Remove and discard the four 4BA bolts, nuts and washers. Remove and discard the backing plate Part No P001155A, Item 8, remove and retain the spring and valve for re-assembly after rework.

(iv) Rework the valve Part No P001154 Ident No A79/501320 as shown on drawing A13000 Sheet 1 of 1. Attach the new valve seating, Item 2, using Bostik adhesive 1410 taking care to see that there are no air bubbles. After rework re-identify as Part No P15-553A and Ident No A79/504130.

(v) Reassemble filler cap as per drawing A13000 using a new backing Plate, Item 1, and new 4BA bolts, nuts and washers, Item 3, 4 and 5. After rework re-identify as 15 PT 19A and Ident No A79/504129.

(vi) After tests are satisfactory replace filler cap and close filler cap access cover.

(vii) Locate note on fuselage outer skin adjacent to the fuel tank access cover which reads "Filler Cap P001152A must be used here". This note is to altered to read - "Filler Cap 15 PT 19A must be used here". Use colour identification, Item 7, as required.

(Issued with A/L 137 - May, 1959)

PART "B"

(viii) This note, located as in sub-para (vii), on Mks 30 and 31, aircraft is to be modified to read as follows:-

"Filler Cap P001152A OR 15 PT 19A must be used here".

Use colour identification, Item 7, as required.

(d) Tests : Ensure that at 1/3 PSI of turbine fuel applied in direction of arrow 'A' (Refer Drawing A13000). The leak rate must not be more than 10 drops per minute.

(e) Recording:

Record this Modification in the Airframe Log Book for Mk 33, 35 and 35A aircraft.

Record this Mod 'Part B' in the Airframe Log Book for Mk 30 - 31 A/C.

Drawings

12. Drawing A13000 consisting of 1 sheet is attached herewith.

Effect on Weight and Balance

13. The effect on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/74 and 150/8/1255.

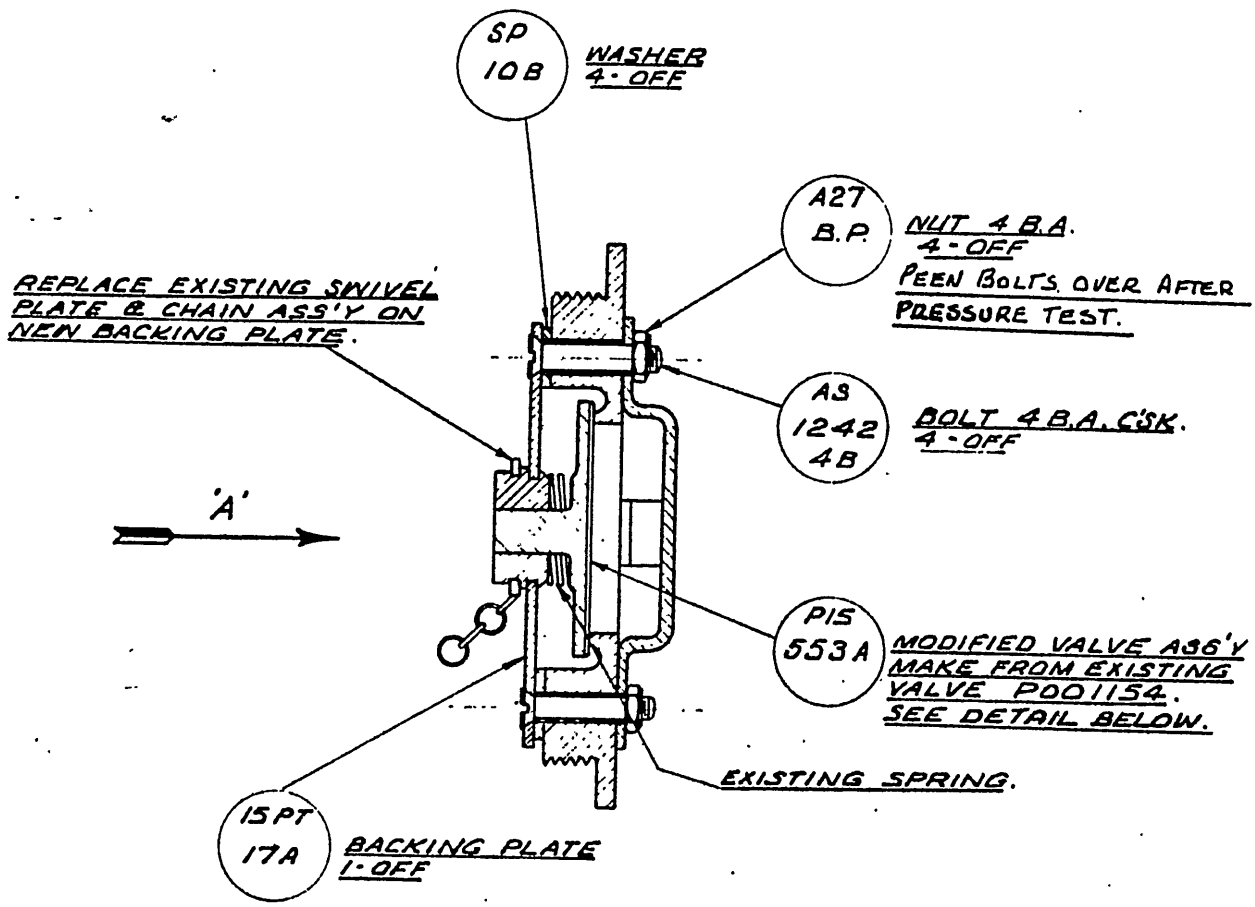
Attachment : Drawing A13000

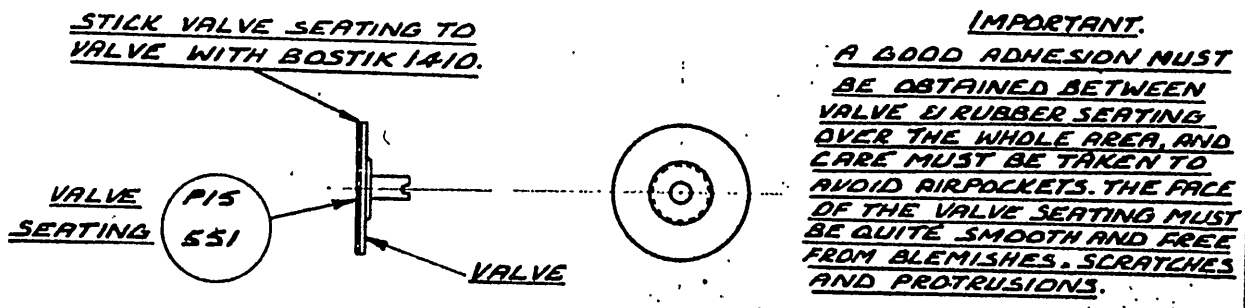
Date of Issue : 8th May, 1959.

(Issued with A/L 137 - May, 1959)

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D I L	INITIALS





IMPORTANT.
A GOOD ADHESION MUST BE OBTAINED BETWEEN VALVE & RUBBER SEATING OVER THE WHOLE AREA, AND CARE MUST BE TAKEN TO AVOID AIRPOCKETS. THE FACE OF THE VALVE SEATING MUST BE QUITE SMOOTH AND FREE FROM BLEMISHES, SCRATCHES AND PROTRUSIONS.

FITMENT OF VALVE SEATING TO VALVE

DE HAVILLAND DRAWING 00M381. SHEET 1 OF 1 SHEET.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING	MAIN FUEL TANK FILLER CAP INCORPORATING RUBBER SEALING. INTRODUCTION.

LIMITS UNLESS STATED	MATERIAL	COMPONENT OF	MAIN FUEL TANK.
DECIMALS ± .010"	SPEC.	MACHINE	VAMPIRE MK 33, 35 & 35A
FRACS ± 1/64"	TREATMENT.	ENGINE	GOBLIN.
ANGLES ± 1°	FINISH	TECH. SPEED	VAMPIRE MOD No 273
SURFACE FINISH AUSTRALIAN STANDARD ENG. DWG. PRACTICE A 3 001	SCALE	DRAWING NO.	A 13000
	DRAWN	APPROVED	
	TRACED	CHECKED	

Class 2

LOW BACK PRESSURE NON-RETURN VALVE PART NO AIR 665.76 IN LIEU OF PART NO UMC 703 IN CANOPY JETTISON JACK RETURN LINE - INTRODUCTION

Reason for and Description of Modification

1. Loss of the Canopy Hatch during flight has been reported in UK. This modification introduces a low back pressure non-return valve which will allow the accepted seepage to return to the header tank without the inadvertent operation of the Canopy Jettison Jack.

The following modifications are to be incorporated either prior to or concurrently with this order:-

RAAF Mod	DH (Aust) Mod	Title
Vampire 140	V 641	Improved Canopy
Vampire 161	V 642	Ejection Seat

Application

2. This work is to be carried out on all Vampire Mk 33 and Mk 35A aircraft, and on Vampire Mk 35 Aircraft Serial Nos A79-600 to A79-640 inclusive. Vampire Mk 35 Aircraft Serial No A79-641 and subsequent will have this modification fitted by the manufacturer.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V732 and Air Ministry Mod VAM 3550 are the equivalent modifications.

(Issued with AL 138 - May 1959)

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1.	T27M/698	AIR 66576	Valve, hydraulic, non return	1	
2.	I1/9715	-	Wire, Steel, corrosion resistant, 22SWG	AR	
3.	I1/1010	-	Wire, copper, soft 26 SWG	AR	
4.	H28C/10785	AGS 1145A	Union, Al Al, cone type, 3/16 in O/D x 2.21 in long	1	
5.	H28C/10858	AGS 1149/1	Union, Al Al, washer plate, .40 in I/D x 1.00 in O/D x 18 SWG	2	

Notes: (a) Item 1 will be retained as a modification set at the De Havilland Modification Centre, pending issue or demand. Units requiring modification sets are to demand from De Havilland Modification Centre.

(b) Items 2 and 5 inclusive are to be drawn from unit stores.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
6.	T27W/7	UMC703	Valve, Hydraulic, non return	1	A
7.	H28C/9703	AGS 1102A	Union, cone type, 3/16 in O/D x 1.66 in long	1	

Note: Items6 and 7 are to be examined and if serviceable returned to store. This item is used in other positions on all marks of Vampire aircraft.

Disposal of Parts in Stock

9. Not applicable.

(Issued with AL 138 - May 1959)

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing or when the aircraft are allotted for retrospective modification fitment.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 18 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, &c : No special tools, jigs, etc will be required.

(c) Sequence of Operations :

(i) Raise the nose cap and disconnect the aircraft batteries, then revert to the cockpit and render the ejection seats safe.

(ii) Remove the gun bay doors and the starboard gun blast fairing. Remove the starboard cannon in accordance with current authorised procedure.

(iii) In order to check the level of the hydraulic reservoir in operation ix ensure that the undercarriage is selected down, the flaps selected down and the speed brakes selected out.

(iv) To release the accumulator fluid pressure on Mk 33 aircraft locate the accumulator pressure release valve which is positioned on the roof of the gun bay and to the port of the accumulator. Depress this valve manually until satisfied that all the pressure has been released.

(v) To release the fluid pressure in both accumulators on Mk 35 and Mk 35A Aircraft each accumulator must be released separately. For the general services accumulator proceed as detailed in operation iii. For the brakes accumulator, the fluid pressure is exhausted by "Pumping" the wheel brake pedals until the brake supply gauge in the cockpit shows zero, and continue to operate slowly for a further six times.

(vi) Locate the now redundant non return valve, (item 6) which is situated in the canopy jettison return lines, on the rear face of the nosewheel diaphragm (Pt No 13FS2373A Ref)

(Issued with AL 138 - May 1959)

in English Mk 33 fuselages, and on the starboard side under the cockpit floor in all other aircraft.
Cut the locking wire and remove the redundant valve taking care to catch the hydraulic fluid from the pipe lines, in a suitable receptacle. Fit blanking plugs to the open ends of the pipes and to the redundant valve. Also in aircraft with English Mk 33 fuselages, locate the union (item 7), situated on the starboard side under the cockpit floor in the canopy jettison return line and remove it from the aircraft retaining its attaching nut (Pt No AGS 1148A Ref) for re-assembly.

(vii) Ensure that the new non return valve (item 1) is scrupulously clean and after removing the blanking plugs from the pipe ends, fitted in operation (vi), secure it into position in place of the redundant union (item 7) on aircraft with English fuselages and in place of the redundant non return valve (item 6) removed in para (vi). The new non return valve (item 1) is to be positioned with the arrow (stamped on the valve body) pointing towards the rear of the aircraft.
On English fuselages, secure the union (item 4) onto the diaphragm (Pt No 13FS2373A Ref), in place of the redundant non return valve (item 6) removed in para (vi), using washers (item 5) one each side of the diaphragm, and existing nut (Pt No AGS 1148A Ref) removed in para (vi) and connect up canopy jettison return line to the union.
On the satisfactory completion of a leak test on the disturbed connections, wire lock the union nuts, on either side of the valve (and the union, item 4, on English fuselages) with 22 SWG locking wire (item 2).

(viii) Again release the fluid pressure in the accumulator, as detailed in operations (ix and x) and check that the accumulator air inflation pressure is correct, recharge if necessary.

(ix) Replenish the hydraulic reservoir, if necessary, to the level marked "Accum empty". Check that the selectors are in the positions as detailed in operation iii.

(x) Replace the starboard cannon in accordance with current authorised procedure. Replace the starboard gun blast fairing and the gun bay doors.

(xi) Connect the aircraft batteries and close the nose cap. Rearm the ejection seats as, and when necessary.

(Issued with AL 138 - May 1959)

(d) Tests : Carry out a hydraulic pressure leak test of the newly installed valve connections, and a canopy jettison jack functional test as follows:-

Disconnect the tie rod from the canopy jettison jack by removing the quick release pin. Operate the canopy jettison selector carefully and check the operation of the jack. On the return of the selector to the normal position, the jack should return under the influence of the integral spring.

(e) Recording : Record this modification in the airframe log book.

Drawings

12. Nil.

Effect on Weight and Balance

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/67 and 150/8/1339

Date of Issue : 8th May, 1959

(Issued with AL 138 - May 1959)

Class 2

RUDDER BALANCE LEVER - STRENGTHENING

Reason for and Description of Modification

1. This modification authorises the introduction of steel levers in lieu of the existing light alloy levers. The increased strength is provided as case have been reported in UK of these rudder balance levers breaking away.

Application

2. This work is to be carried out on all Vampire Mk 30-31 aircraft.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraf depots or the civilian contractor responsible for the repair of Vampire aircraf The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters, Support Command.

Ident No	Part No	Nomenclature	Remarks
A79/500348	00J9A	Fin & Boom Assy LH	Rework to para 11(c)(to xviii inclusive an re-identify as Part N 00J9A/1 and Ident No A79/504166.
A79/500349	00J10A	Fin & Boom Assy RH	Rework to para 11(c)(to xviii inclusive an re-identify as Part N 00J10A/1 and Ident No A79/504167.

Orders Superseded or Cancelled

5. No order are superseded or cancelled by this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V241 and Air Ministry Mod VAM 3344 are equivalent modifications.

(Issued with AL 173 - December 1959)

Supply

7. The following parts are required for one complete modification set:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1	A79/503648	12CF.503A	Lever, Rudder Balance	2	A
2	H28/5316	A16Y/CP	Nut, Plain, MS Hex 2BA	4	C
3	H28/12541	A25/24C	Bolt, Steel, Hex Hd 2BA x 2.8"	4	C
4	H28B/12462	SP9/G8	Pin, Split, Nickel Alloy 1/16" dia	36	C
5	K2/210		Grease XG275 Spec DTD 825	AR	C
6	K3/353		Compound Jointing DTD 369A	AR	C
7	I1/9715	DTD 189	Wire Steel CR 22 SWG	AR	C

Notes: (a) Items 1 to 4 inclusive will be assembled into modification sets and retained at the De Havilland Modification Centre pending issue or demand. Units requiring modification sets are to demand from De Havilland Modification Centre.

(b) Items 5 to 7 inclusive are to be drawn from unit stores.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No.	Nomenclature	No off per set	Stores Class
8	A79/500469	K00339A	Lever, Rudder Balance	2	

Note: Stocks of Item 8 are obsolete and are to be disposed of in accordance with current authorised procedure.

Disposal of Parts in Stock

9. Item 8 is obsolete. Stock of this item are to be disposed of in accordance with authorised current procedure when all applicable aircraft have been modified.

(Issued with AL 173 - December 1959)

When the Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of modification sets or when the aircraft is allotted for retrospective modification fitment.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 52 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, &c : No special tools are required.

(c) Sequence of Operations :

(i) Remove the tail boom rear end fairing. Retain the attachment screws for re-assembly. Disconnect the navigation lamp in th port boom.

(ii) Remove the rear access panels on the outboard side of the booms. Retain panels and screws for re-assembly.

(iii) Refer to AAP 828, Figure 21 and remove the balance weights from the rudder balance lever and retain for re-assembly.

(iv) Remove the bonding strip attached to rudder, then proceed to remove the two bolts attaching the rudder to the rudder pedestal also the bolt from the top rudder hinge. Retain bolts and nuts also bonding strip for re-assembly. Remove th rudder.

(v) Remove fairleads where pitot head pipes pass through casting on port boom only. Then proceed to disconnect pitot head pipes inside the boom and at the rear of the port fin. When withdrawing the pipes be careful not to twist or bend them. Retain the pipes for re-assembly.

(vi) Remove the 5 bolts in each boom attaching control links to rudder and elevator control levers, then remove a nut and bolt attaching the link plates to the rudder static balance lever. Retain bolts and nuts for re-assembly.

(Issued with AL 173 - December 1959)

(vii) Remove the eight retaining nuts from rear end of boom casting, taking care to number nuts and washers as they are removed to ensure they go back on the same bolts (re split pinning).

(viii) Manipulate casting assembly until clear of boom.

(ix) Remove split pin and nut attaching rudder balance lever Pivot Bolt, then remove the bolt. Retain the nut, bolt and washer for re-assembly and discard the lever (item 8).

(x) Clean the bore of the new rudder balance lever (item 1) and apply XG275 spec DTD 825 grease (item 5) to the bore. Insert the lever in position in preparation for assembly.

(xi) Using the retaining bolts and nuts removed in operation (ix) insert the bolt in position and secure with nut and new split pins (item 4).

(xii) Apply jointing compound (item 6) to the balance weights and secure them to the lever by means of two new bolts (item 3) and nuts (item 2). The bolt shanks having been coated with the compound. Peen the bolts to lock taking care to use a suitable backing when peening over to ensure no strain is brought to bear on the lever or its attachment bolt.

(xiii) Replace casting in rear of boom taking care to replace nuts and washers on correct bolts, tighten and lock with new split pins (item 4). Connect rudder static balance lever using original bolt and nut (operation) (vi) using new split pin (item 4) to lock.

(xiv) Replace pitot head pipes tighten joints and lock with 22 SWG lock wire (item 7). Replace fairleads around pipes on casting, being careful to position pipes correctly.

(xv) Re-attach controls to elevator and rudder control levers using bolts and nuts removed in operation (vi). Lock with new split pins (item 4). Ensure that heads of bolts attaching control links to control levers are placed on inside of each lever to prevent fouling of movement.

(xvi) Replace rudder using original bolts as in operation (iv) locking with new split pins (item 4). Connect bonding strap to bottom of rudder ensuring that the tongue of the clip faces towards the nose of the aircraft, this is to prevent fouling on the boom rear end fairing. Ensure that the clip has good contact on rudder torque tube, restore finish.

(Issued with AL 173 - December, 1959)

Note: It is to be ensured that there is at least a 0.06" clearance between the rudder static balance lever and the rudder hinge spigot. If there is insufficient clearance, file the excess thread from the rudder hinge spigot bolt to obtain the necessary clearance.

(xvii) Secure access panels in position using the original screws.

(xviii) Reconnect the navigation lamp in the port boom and replace the tail rear end fairing.

(d) Tests : Check the rudder and elevator for correct and free movement. Megger Rudder for bonding check. Test ASI lines as per AAP 828 Section 4, para 13

(e) Recording : Record this Modification in aircraft log book.

Drawings

12. Nil.

Effect on Weight and Balance

13. The effect on the weight and balance of the aircraft is as follows:-

Description	Weight (lb) ±	Arm (in) ±	Moment (lb in) ±
Rudder Balance Lever Installation	+ 1.2	+ 227	+ 272

Amendments to the Weight Sheet Summaries will be consolidated and issued by Air Force Headquarters.

References : Files, Department of Air, 9/84/275 and 150/8/1402

Date of Issue : 7th December, 1959

(Issued with AL 173 - December, 1959)

Class 4

CABIN PRESSURE CONTROL VALVE MK 12 IN LIEU OF MK 11 - INTRODUCTION

Reason for and Description of Modification

1. The Mk 12 Control Valve embodied a design change to obviate fluctuating cabin pressure arising from instability of the existing discharge valve. This modification replaces the Mk 11 Cabin Pressure Control Valve with the improved Mk 12 Control Valve. All Mk 11 Control Valves are being progressively converted to Mk 12 Control Valves in accordance with Instrument Modification 1.60/7.

Application

2. This modification is to be carried out on all marks of Vampire aircraft.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft.

Action in Respect of Spares

4. Refer to Instrument Modification 1.60/7.

Orders Superseded or Cancelled

5. Vampire Modification 199 (DH (Aust) Mod V686) is rendered unnecessary by the incorporation of this modification.

Equivalent Modifications

6. De Havilland (Aust) Modification V243 and Air Ministry Modification VAM 3499 are the equivalent modifications.

Supply

7. The following parts are required to complete one modification set :-

(Issued with A/L No 118 - October, 1958)

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
1	T27H/501095	512360	Valve Cabin Press. Control Normalair Mk 12	1	A
2	K3/387	-	Compound Pressure Sealing Bostik 1790	AR	C
3	K3/386	-	Compound Pressure Sealing Bostik 1751	AR	C

NOTE :- Items 1 to 3 inclusive will be drawn from unit stores are required.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification.

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
4	T27H/2896	501820	Valve Cabin Press. Control Normalair Mk 11	1	

NOTE :- Item 4 to be reworked in accordance with Instrument Modification 1.60/7.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated when it is necessary to replace existing Cabin Pressure Control Valve, item 4.

(Issued with A/L No 118 - October, 1958)

Method of Incorporation

11. (a) Man-Hours Involved : Not applicable.

(b) Special Tools, Jigs, Etc. : Not applicable.

(c) Sequence of Operations : Follow normal replacement procedure.

NOTE :-
On Vampire Trainer aircraft, the Coarse Mesh Grid introduced by Instrument Modification 1.60/5 is positioned on the Cockpit side of No 1 Bulkhead.

On Vampire Fighter aircraft this Coarse Mesh Grid is discarded and replaced by the Special Grid ROO 2709A, Ident No A79/503831, refer Vampire Mod 220 (DH (Aust) Mod V217).

(d) Tests : For Vampire Trainer aircraft refer AAP 721:79/33. Vol 1, AL 7, Sect 3, Chap 8 Para 7.

(e) Recording : Record this modification in the Airframe Log Book.

Drawings

12. Nil.

Effect on Weight and Balance

13. The effect of this modification on the weight and balance of the aircraft is negligible.

Reference : File, Department of Air, 150/8/1340

Date of Issue : 23rd October, 1958

(Issued with A/L No 118 - October, 1958)

Class 2

OXYGEN CHARGING POINT - REPOSITIONING

Reason for and Description of Modification

1. To enable standard high pressure oxygen charging equipment to be used a modified mounting bracket is introduced.

Application

2. This work is to be carried out on all Vampire Mk 33 aircraft except aircraft serial Nos A79-823, 827, 836 which have this modification incorporated with RAAF Modification 207 (DH Aust Mod No V693) and on Mk 35 aircraft serial No A79-602, 607, 608 and 609. Mk 35 aircraft other than the above will be modified by the manufacturer.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is intrument fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V733 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1		S15-1139	Mounting Bracket LH	1	

(Issued with A/L 127)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
2		S15-1140	Mounting Bracket RH	1	
3	H28C/ 12252	SP 13/C	Washer, Thin MS 2BA	8	
4	H28/ 27025	AGS 2002C/1	Nut, MS, Self Locking, Nyloc, 2BA	8	
5	H28/ 12513	A25/2C	Bolt HTS, Hex Hd 2BA x .65" long	4	
6	H28/ 12512	A25/1C	Bolt, HTS, Hex Hd 2BA x .55" long	4	
7	H128F/ 64443	AS2230/ 303	Rivet, Al Alloy Csk Hd, 120° 3/32" dia x 3/16" long	8	
8	I1/2700	NPN	Wire, Locking, Soft Iron, Galvanised, 20 SWG	AR	
9	K3/386	NPN	Primer, Bostik 1751	AR	

NOTES : 1. Items 1 to 7 inclusive will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland Modification Section. Units requiring modification sets are to demand from De Havilland Modification Section.

2. Items 8 and 9 will be drawn from unit stores.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
10		15.S.507AND	Packing	2	
11		DHS 157/14	Captive Bolt	4	
12		A16Y/CP	Nut, MS 2BA	4	

(Issued with A/L 127)

NOTE : Items 10 to 12 inclusive are to be disposed of in accordance with current authorised procedure.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of parts or when the aircraft is allotted for retrospective modification fitment.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 8 man-hours will be required for completion of this modification.

(b) Special Tools, Jigs, etc : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

WARNING Special attention must be paid to keep Oil, Grease and Moisture away from the Charging connection and other components, due to the danger of an explosion. Where connections are broken blanking caps must be fitted.

(i) Open the nose cap and locate the oxygen charging valve (G6D/223 Ref) on the Stbd side of Bulkhead No 1.

(ii) Disconnect the pipe assy (15 S.49AND Ref) at the charging valve only.

(iii) Remove the charging valve (G6D/223 Ref), Label (Q.98580 Ref), Packing 15.S.507AND Item 10 2-off and Nut 2BA, Item 12 4-off. Retain the chargin valve and label for re-assembly.

(Issued with A/L 127)

(iv) Drill out the rivets holding captive bolts to Bulkhead using a No 41 drill. Remove captive bolts Item 11. Plug redundant holes using 120° Csk head rivets AS 2230/303 Item 7 8-off.

(v) Refer to Drawing A-13097 and fit Mounting Bracket S15-1140 Item 2 and Mounting Bracket S15-1139 Item 1 to bulkhead pick up on holes left on removal of captive bolts using washer SP 13/C item 3 4-off, Nuts AGS 2002C/1 item 4 4-off and Bolts A25/1C item 6 4-off (Bolt heads facing forward) assemble and seal with Sealing compound Bostik 1790 Item 9.

(vi) Again refer to Drawing A-13097 assemble Charging valve (G6D/223 Ref) Label (Q 98580 Ref) removed in operation (iii) to Bracket using Washer SP 13/C Item 3 4-off, Nut AGS 2002C/1 Item 4 4-off, and Bolts A25/2C Item 5 4-off. (Assemble label so that notice can be read from Stbd side).

(vii) Re-shape pipe Assy 15.S.49AND to suit inclined Valve connection. Reconnect to Charging valve and wire lock with 20SWG locking wire item 8 as shown on drawing after test.

(d) Tests : Charge system to 1800 lbs sq in as detailed in AAP 721/33 Chapt 10 Sect 3 para 4 checking for leaks in pipe connection with Charging valve. Close Charging valve after test.

(e) Recording : Record this modification in the Airframe Log Book.

Drawings

12. Drawing A-13097 is attached herewith.

Effect on Weight and Balance of the Aircraft

13. The effect of this modification on weight and balance is negligible.

References : Files, Department of Air, 9/84/365 and 150/8/1403

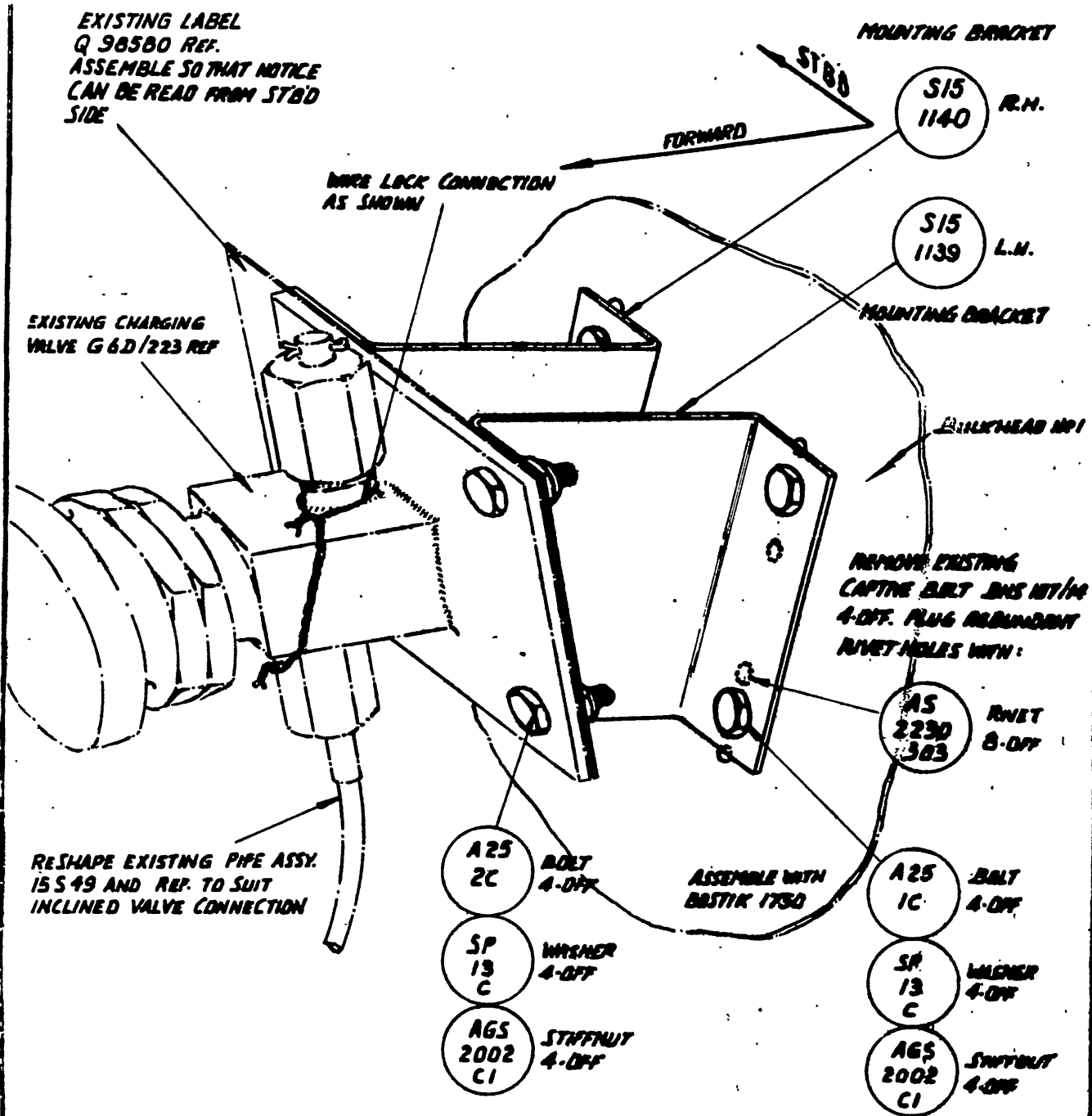
Attachment : Drawing No A-13097

Date of Issue : 19th December, 1958

(Issued with A/L 127)

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L.	INITIALS	APPROVED



DE HAVILLAND DRAWING NO. OOM 386 SHEET 1 OF 1 SHEET

REFERENCE	ISSUED BY	TITLE
		OXYGEN CHARGING POINT – REPOSITIONING

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE.
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD No. 277
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRNG. PRACTICE A.S.C.2.1		SCALE		DRAWING NO.	A-13097
		DRAWN	APPROVED		DRNG. A SIZE
		TRACED	CHECKED		

AAP 721:79 Vol 2 Pt 2 VAMPIRE MOD NO 278

Class 4

NOSE WHEEL OUTER COVER PT NO NFR 31 IN LIEU OF PT NO NFR 30 - INTRODUCTION

Reason for and Description of Modification

1. This modification introduces an eight ply rating tyre instead of six ply and gives additional clearance between the nose wheel outer cover and fork of the shock absorber strut.

Application

2. This modification is to be incorporated on all marks of Vampire Trainer Aircraft ~~and MK 30 and 31.~~ A/L 236

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. No action required.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modification

6. De Havilland (Aust) Mod V734 and Air Ministry Modification VAM 3571 are equivalent modifications.

Supply

7. The following part is required to complete one (1) modification set :-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1	T27A/500757	NFR 31	Tyre, cover outer 8 ply rating.	1	A

NOTE :- Item 1 is to be drawn from unit stores.

Disposal of Parts Removed

8. The following part has been rendered redundant by the incorporation of this modification.

(Issued with A/L No 108 - September, 1958)

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
2	T27A/2070	NFR 30	Tyre cover outer, 6 ply.	1	A

NOTE :- Item 2 is obsolescent and is to be disposed of in accordance with authorized procedure.

Disposal of Parts in Store

9. Item T27A/2070 is rendered obsolescent and is to be used on MK ~~30~~ 35 and MK ~~31~~ 35A aircraft only until ~~present stocks exhausted~~. ITEM 1, T27A/500757 IS AVAILABLE AL 236

When Modification is to be Incorporated

10. This modification is to be incorporated on MK's 33, 35A and 35 on replacement. ~~MK's 30 and 31 aircraft are to be modified only when stocks of item 2, T27A/2070 are exhausted~~. AL 236

Method of Incorporation

11. (a) Man-Hours Involved : Not applicable.

(b) Special Tools, Jigs, Etc. : Refer to AP 2337, Vol 1, Book 2, Sect 2.

(c) Sequence of Operations :

(i) Remove nose wheel in accordance with AAP 721:79/33, Vol 1, Sect 3, Chap 5, Para 29.

(ii) Replace tyre in accordance with AAP 2337, Vol 1, Book 2, Sect 2, (AL 6).

(iii) Refit nose wheel in reverse to operation (i).

(iv) Check inflation to 70 psi.

(d) Tests : Not applicable.

(e) Recording : Record this modification in the airframe log book.

Drawings

12. Nil.

(Issued with A/L No 108 - September, 1958)

Effect on Weight and Balance of Aircraft

13. Not applicable.

References : Files, Department of Air, 9/84/162 and 150/8/1341

Date of Issue : 4th September, 1958

(Issued with A/L No 108 - September, 1958)

Class 2

DATA PLATE - GOBLIN ENGINE - REVISION

Reason for and Description of Modification

1. To introduce a revised Goblin engine operating Data Plate. This modification is raised to introduce the revised engine operating limitations issued under DTS Special Instructions Goblin/42.

Application

2. This work is to be carried out on all Mk 33/35A and 35 Vampire Trainer aircraft.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. No spares are affected by the incorporation of this modification.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V735 is the equivalent modification.

Supply

7. The following part is required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No off Per Set	Stores Class
1	B24/500192	F15-865	Data plate, Goblin engine	1	

(Issued with A/L 139 - May, 1959)

Note: Item 1 will be retained as a modification set at the De Havilland Modification Centre pending issue or demand. Units requiring modification sets are to demand from the De Havilland Modification Centre.

Disposal of Parts Removed

. The following part will be rendered redundant by the ncorporation of this modification.

Item No	Ident No	Part No	Nomenclature	No off Per Set	Stores Class
2	B24/5343	F15-37	Data plate, Goblin engine	1	

Note: Item 2 is obsolete and is to be disposed of in accordance with current authorised procedure.

isposal of Parts in Stock

. Not applicable.

hen Modification is to be Incorporated

0. This modification is to be incorporated as soon as racticable but not later than the next "D" servicing after eceipt of modification sets.

ethod of Incorporation

1. (a) Man-Hours Involved : Approximately ½ man-hour will be required for the completion of this modification.

(b) Special Tools, Jigs, &c. : No special tools are required.

(c) Sequence of Operations : Replace existing engine Data Plate, item 2, situated on the port canopy rail with the new Data Plate, item 1, using existing woodscrews.

(d) Tests : Not applicable.

(e) Recording : Record this modification in the airframe log book.

(Issued with A/L 139 - May, 1959)

Drawings

12. Nil.

Effect on Weight and Balance

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References: Files, Department of Air, 9/84/1057 and 150/8/1453.

Date of Issue: 8th May, 1959.

AAP 721:79 VOLUME 2 PART 2 VAMPIRE MODIFICATION NO 281

Class 2

TO IMPROVE DEMISTING OF CANOPY AND WINDSCREEN

Reason for and Description of Modification

1. Unit reports have indicated that the demisting function of the air conditioning system is unsatisfactory at altitudes above 30,000 feet. This modification provides extra plumbing in the air conditioning system so as to improve the rate of flow of hot air through ducting.

The following modification is to be incorporated either prior to or concurrently with this order:-

RAAF Mod	DH Mod	Title
	Goblin Mod 1049	Introduction of a ten point collector system embodying an additional outlet point.

Application

2. This modification is to be incorporated on all Mk 35 and Mk 35A aircraft except A79-807 and A79-608 which were modified as trial installations. Aircraft A79-661 and subsequent will have this modification incorporated during manufacture.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units, aircraft depots and the civilian contractor responsible for servicing Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modifications

6. De Havilland (Aust) Modification V736 is the equivalent modification.

(Issued with AL 193 - May 1960)

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1	A79-504357	V15-255AND	Pipe Assy	1	
2	A79-504358	V15-259AND	Pipe Assy	1	
3	A79-504359	V15-263AND	Pipe Assy	1	
3A	N/I	V15-39ND	100-120 Mesh Phosphor Bronze Gauze 14.0" Long x 3.25" Wide	1	
4	-	V15-275	Pipe Clip	1	
5	-	V15-277	Pipe Clip	2	
6	-	V15-279	Pipe Clip	1	
7	-	V15-281A	Pipe Support	1	
8	H28C/NIC	AGS 1103/H	Union, Standard, 1" BSP	1	
9	-	AS 2809/4/075	Tube, distance, 1/4" O/D, 22 SWG x 0.75" lg	1	
10	-	AS 2809/4/100	Tube, distance, 1/4" O/D, 22 SWG x 1.00" lg	1	
11	-	F15-593P/30	Coupling, Rubber, Synthetic Pipe, 1.0" I/D x 3.0" long	1	
12	H28/8183	AGS 605/1	Clip, Jubilee	3	
13	-	AS 3360/B6B	Flexible, Bonding, Copper Braided	1	
14	H28/26126	DHS 31/33	Clip, Brass	2	
15	H28/8300	AS 1242/1B	Bolt, Steel, HT, Csk Hd 90° 4BA x 045" long	1	
16	H28/12534	A25/9C	Bolt, Steel, HT, Hex Hd, 2BA x 1.35" lg	1	
17	H28/12535	A25/12C	Bolt, Steel, HT Hex Hd, 2BA x 1.65" long	1	
18	H28/12528	A25/1B	Bolt, Steel HT, Hex Hd, 4BA x 0.55" long	2	
19	H28/27025	AGS2001C/1	Nut, Steel, Mild, Hex, Nyloc Insert, 2BA	2	
20	H28/27024	AGS2001B/1	Nut, Steel, Mild, Hex, Nyloc Insert, 4BA	3	
21	H28C/12252	SP 13/C	Washer, Steel, Mild, Plain, Thin, 18 SWG, 2BA	2	
22	H28C/12305	SP 13/B	Washer, Steel, Mild, Plain, Thin 18 SWG, 4BA	3	
23	K3/353		Compound, Jointing to Spec DTD 369A	AR	

(Issued with AL 193 - May 1960)

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
24	I32A/94		Flex Cord, Spec 4F35, No 1 Size	AR	
25	K4/152		Beeswax	AR	
26	I1/9715		Wire, Locking, Non Corrod 22 SWG	AR	
27	G5F/500001) (Z))Alt G5F/1377)		Tape, Insulating, PVC 5/8" wide, Spec DTD 602	AR	

Notes: (a) Items 1 to 22 inclusive will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland Modification Centre. Units requiring modification sets are to demand from the De Havilland Modification Centre, Bankstown.

(b) Items 23 to 27 inclusive are to be drawn from unit stores.

Disposal of Parts Removed

8. The following parts will be removed by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
28	A79/502364	15 V 165AND or	Pipe Assy, Mk 35A Aircraft	1	C
29	A79/504354	V15-227AND	Pipe Assy, Mk 35 Aircraft	1	C
30	H28/5725	AGS 904/H	Sleeve, Outer, Al Alloy, 1" BSP	1	C
31	H28/9733	AGS 1140/H	Nipple, Plug, Al Alloy 1" BSP	1	C

Note: Items 28 to 31 are to be discarded.

Disposal of Parts in Stock

9. Obsolete/obsolescent action will be taken through "N" Orders when all aircraft are modified.

(Issued with AL 193 - May 1960)

hen Modification is to be Incorporated

0. The modification is to be incorporated as soon as practicable but ot later than the next "D" servicing after modification sets are available.

ethod of Incorporation

1. (a) Man-Hours Involved : Approximately 6 man-hours will be required for completion of this modification.

(b) Special Tools, Jigs, &c : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Open and secure the upper engine bay inspection doors and the lower starboard inspection door. Remove the bottom middle cowl.

(ii) Refer to Drawing A13391 Sheet 1 and locate the forked pipe assy, Item 28 or 29 as applicable to the aircraft mark. This assy is attached to the upper face of the temperature control box.

(iii) Remove this pipe assy from the aircraft and discard; in its place offer up pipe assy, item 3.

(iv) Moving to the lower starboard side of the engine, locate the collector ring outlet point between flame tubes, numbers 11 and 12. Remove and discard the blanking plug, and union nut Items 31 and 30 respectively. Reference to Sheet 5 Drawing A13391 will indicate the position of the outlet relative to the flame tubes.

(v) To this position offer up pipe assy Item 1 and connect the lower end of the collector ring outlet point as indicated on Sheets 1 and 5 of the drawing.

(vi) Refer to sheets 1 and 4 of the drawing and offer up pipe assy item 2. Attach the lower end of this pipe to the upper end of item 1 as indicated using one double ended nipple union item 8.

(Issued with AL 193 - May 1960)

(vii) The remaining free end of this assy is to be coupled to the free end of pipe assy item 3 - see para 3 - using one pipe coupling item 11, one phosphor bronze gauze item 3A and two clips item 12. Reference Drawing A13391, sheets 2 and 3 will indicate the run of the pipe and the method of coupling same. For bonding of pipes refer AEIG Pt 16, Sect 1, Inst No 1.

(viii) Refer to sheet 2 of the drawing, bond the pipes across the hose coupling as indicated, using items 13, 14, 18, 20 and 22.

(ix) Refer to Detail "A" on sheet 2 of the drawing and secure pipe assy item 2, to the generator cold air delivery pipe using items 4, 5, 10, 17, 19 and 21, one off each. Before clamping pipe clip, item 4 to the generator cold air pipe, bind the area under the clip with Nylex tape, item 27 as indicated in drawing.

(x) Refer to Drawing A13391, sheet 3 Detail "B" and clamp pipe assy item 2 to the rear bearing cooling pipe using items 5, 6, 16, 19 and 21, one off each as indicated.

(xi) Refer to Drawing A13391, sheet 4 Detail "C" and loosely attach the pipe support, item 7 to pipe item 1 using one clip item 12. Then position the mounting plate of the pipe support up against the lower cowl support ring in such a way that it suits the run of the pipe. If necessary the mounting plate of the pipe support may be bent slightly so that it fits flush up against the flange of the cowl ring whilst allowing the saddle of the support to seat itself around the pipe. Using the mounting plate as a guide drill a No 26 hole through the flange. Thoroughly deburr the holes and apply jointing compound item 23 to the mating surfaces. Then attach the mounting plate to the cowl ring using items 15, 20 and 22, one off each.

(xii) Finish securing the pipe to the pipe support by tightening clip.

(xiii) After ensuring that the new pipe run does not foul any of the existing installations tighten all coupling nuts and clips and wire lock where indicated on sheets 1 to 5 of the drg using item 26. If it is found that any of the rubber holes appear to be in danger of fouling the pipe run the hoses should be tied out of the way using waxed cord items 24 and 25.

(xiv) Replace the bottom middle engine cowl and close all engine bay inspection doors.

(Issued with AL 193 - May 1960)

(d) Tests : Not applicable.

(e) Recording : Record this modification in the airframe log book.

Drawings

12. Drawing A13391 consisting of five sheets issued herewith.

Effect on Weight and Balance of the Aircraft

13. The effect of this modification on the weight and balance of this aircraft is as follows:-

Fixed Equipment

Item	Weight (lb) ±	Arm (in) ±	Moment (lb in) ±
Additional fittings	+ 4.3	+ 17	+ 73

Amendments to Weight Sheet Summaries will be consolidated and issued by Department of Air.

References : Files, Department of Air, 9/84/162 and 150/8/2037

Attachment : Drawing A13391 Sheets 1 to 5

Date of Issue : 9th May 1960

(Issued with AL 193 - May 1960)

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D.I.L.	INITIALS	APPRO.

DE HAVILLAND DRAWING COM/446

SHEET 1 OF 5 SHEETS

DETAIL 'A' REFER TO SHEET 2 OF DRAWING FOR METHOD OF COUPLING AND SECURING PIPES INDICATED

COLLECTOR RING (REF)

REMOVE EXISTING FORK PIPE ASSY. AND REPLACE WITH PIPE ASSY. 1 OFF

V15 263 AND

V15 259 AND

PIPE ASSY. 1 OFF

TEMPERATURE CONTROL BOX (REF)

EXISTING PIPE RUN TO COLD AIR UNIT IN WING

EXISTING AIR SUPPLY PIPE TO COCKPIT

DETAIL 'B' REFER TO SHEET 3 OF DRAWING FOR RUN OF PIPE ASSY. AND METHOD OF SECURING THE PIPE INDICATED

DETAIL 'C' REFER TO SHEET 4 OF DRAWING FOR DETAILS OF RUN OF PIPE AND METHOD OF COUPLING AND SECURING THE SAME

V15 255 AND

PIPE ASSY. 1 OFF

REFER TO SHEET 5 OF DRAWING FOR DETAILS OF RUN OF PIPE AND METHOD OF CONNECTING IT TO THE COLLECTOR RING OUTLET POINT

GENERAL ARRANGEMENT OF MODIFICATION TO AIR CONDITIONING SYSTEM

REFERENCE		ISSUED BY	
LIMITS UNLESS STATED		MATERIAL	
DECIMALS	± .010"	SPEC.	
FRACTIONS	± 1/64"	TREATMENT	
ANGLES	± 1/2°	FINISH	
SURFACE FINISH		SCALE	
AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.21		DRAWN	
		TRACED	
		CHECKED	
		APPROVED	

IMPROVE DEMISTING OF WINDSCREEN AND CANOPY

COMPONENT OF

MACHINE

ENGINE

TECH. ORDER

VAMPIRE MOD 281

DRAWING NO. A13391 SHEET 1 OF 5

DRWG. SIZE A

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D.L.L.	INITIALS	APPROVED

DE HAVILLAND DRAWING Nº OOM 445 SHEET 2 OF 5 SHEETS

V15 275 — PIPE CLIP 1 OFF

V15 277 — PIPE CLIP 1 OFF

AS 2809 4/100 — DISTANCE TUBE 1 OFF

A26 12C — BOLT 1 OFF

AGS 2001 C1 — STIFFNUT 1 OFF

SP 13 C — WASHER 1 OFF

N·P·N — NYLEX TAPE BIND GENERATOR COOLING PIPE IN VICINITY OF CLIP

V15 39 ND. — BRONZE GAUZE-1-OFF WRAP AROUND RUBBER HOSE JOINT 2 COMPLETE TURNS UNDER JUBILEE CLIP.

P15 593 P. 30 — PIPE COUPLING 1 OFF

AGS 606 1 — HOSE CLIP 2 OFF

DHS 31 33 — CLIP BONDING 1 OFF

AS 3360 B6B — BONDING FLEX 1 OFF

A25 1B — BOLT 1 OFF

AGS 2001 B1 — STIFFNUT 1 OFF

SP 13 B — WASHER 2 OFF

VIEW ON UPPER ENGINE BAY BETWEEN FIREPROOF BULKHEAD AND COWL SUPPORT RING

LIMITS UNLESS STATED	MATERIAL			REFERENCE	
DECIMALS ± .010"	SPEC.			ISSUED BY	
FRACTIONS ± 1/32"	TREATMENT				
ANGLES ± 1°	FINISH				
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.21	SCALE				
	DRAWN	B.G.G.			
	CHECKED		APPROVED		
	TRACED	K.E.Ø			

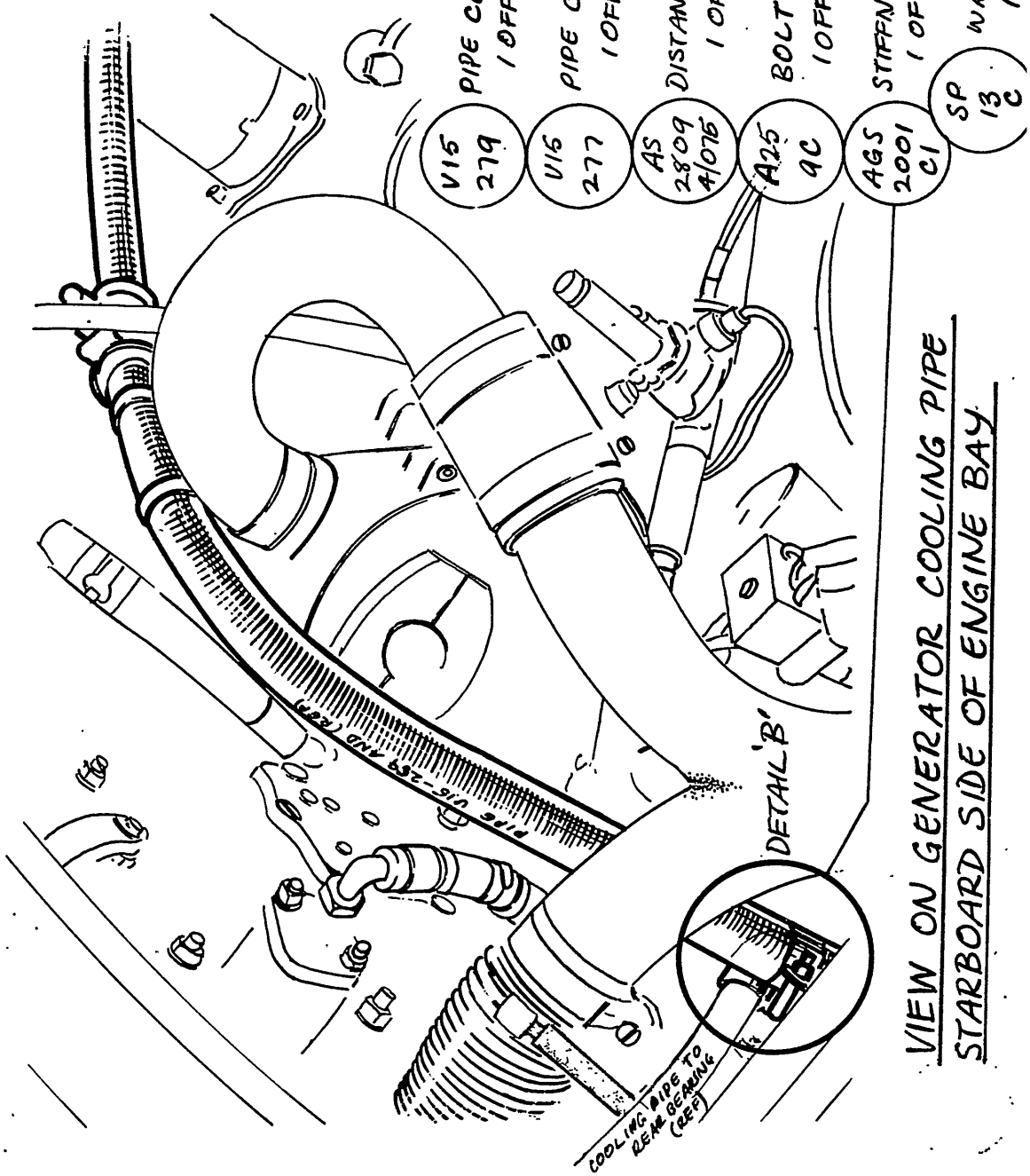
DRAWING NO.	A13391 SHEET 2 OF 5	COMPONENT OF	
		MACHINE	
		ENGINE	
TECH. ORDER	VAMPIRE MOD 281		

TITLE: IMPROVE DEMISTING OF WINDSCREEN AND CANOPY

A SIZE — DWG.

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L.	INITIALS	APPROVED



VIEW ON GENERATOR COOLING PIPE STARBOARD SIDE OF ENGINE BAY.

DE HAVILLAND DRAWING Nº OOM 446

SHEET 3 OF 5 SHEETS

REFERENCE	ISSUED BY	TITLE
		IMPROVE DE-MISTING OF CANOPY AND WINDSCREEN

LIMITS UNLESS STATED		MATERIAL				COMPONENT OF	
DECIMALS	± .010"	SPEC.				MACHINE	
FRACTIONS	± 1/32"	TREATMENT				ENGINE	
ANGLES	± ½°	FINISH				TECH. ORDER	VAMPIRE MOD 281
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.(E)1		SCALE				DRAWING NO.	A13391 SHEET 3 OF 5
		DRAWN	B.G.G	APPROVED			DRWG. A SIZE
		TRACED		CHECKED	K.E.O.		

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D.I.L.	INITIALS	APPROVED

DE HAVILLAND DRAWING No COM 445

SHEET 4 OF 6 SHEETS

DETAIL 'C'

VIEW ON LOWER COWL SUPPORT RING STARBOARD SIDE.

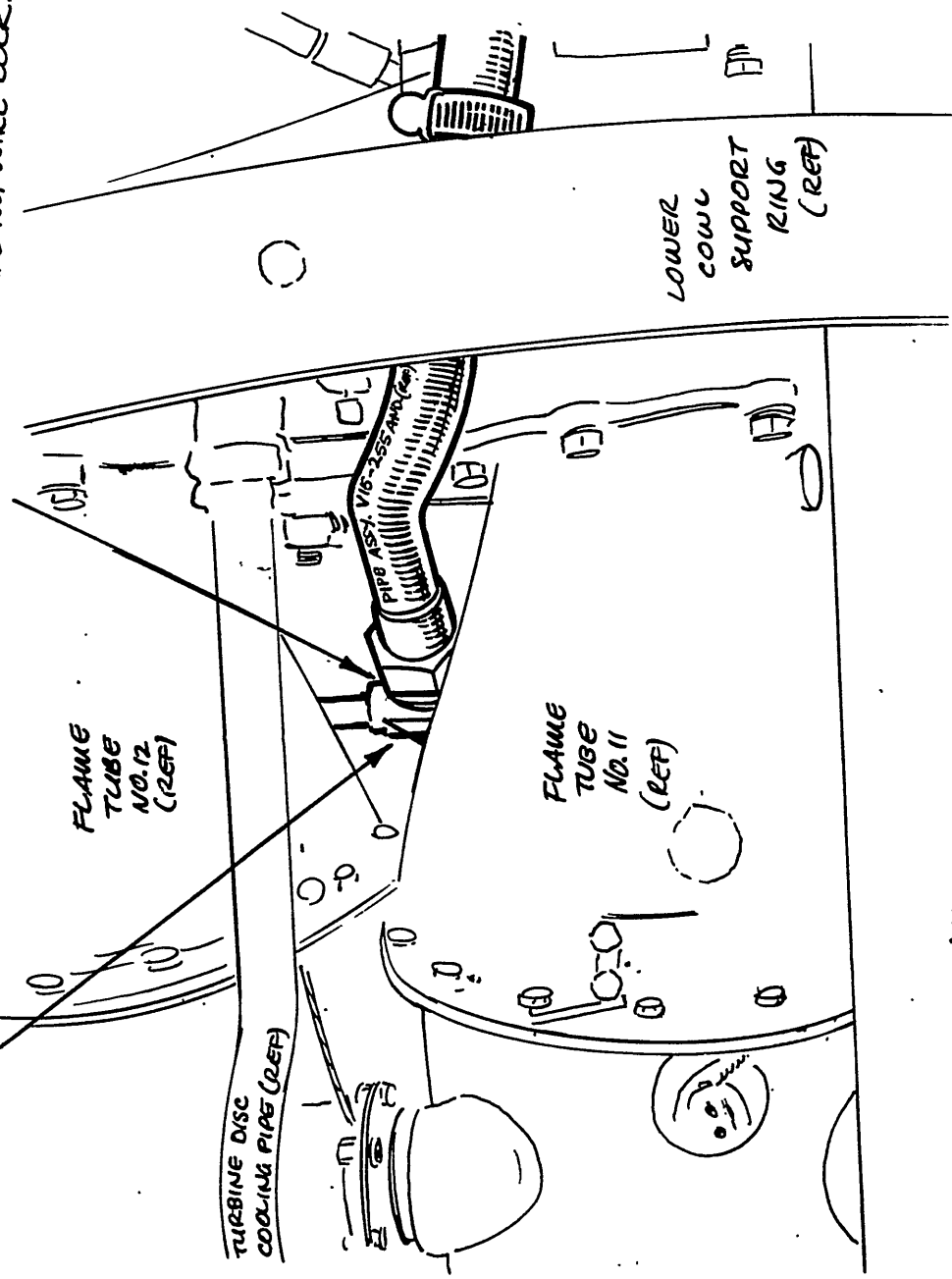
REFERENCE	ISSUED BY	TITLE
		IMPROVE DE-MISTING OF CANOPY AND WINDSCREEN

LIMITS UNLESS STATED	MATERIAL			COMPONENT OF	
DECIMALS ± .010"	SPEC.				
FRACTIONS ± 1/32"	TREATMENT			MACHINE	
ANGLES ± 1°	FINISH			ENGINE	
SURFACE FINISH	SCALE			TECH. ORDER	VAMPIRE MOD 281
AUSTRALIAN STANDARD ENG. DWG. PRACTICE A.S.E.211	DRAWN	B.G.G.	APPROVED	DRAWING NO.	A13391 SHEET 4 OF 5
	TRACED		CHECKED	K.E.O.	DRWG. SIZE A

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L.	INITIALS	APPROVED

REMOVE EXISTING BLANKING SLEEVE, NIPPLE PLUG AND SPLIT PIN, AND POSITION PIPE ASSY. V16-255 AND. AFTER CONNECTING THE COUPLING WIRE LOCK.



VIEW ON COLLECTOR OUTLET POINT BETWEEN FLAME TUBES 11 and 12

DE HAVILLAND DRAWING Nº 00M 445 SHEET 5 OF 5 SHEETS

REFERENCE	ISSUED BY	TITLE
		IMPROVE DEMISTING OF WINDSCREEN AND CANOPY

LIMITS UNLESS STATED	MATERIAL			COMPONENT OF	
DECIMALS ± .010"	SPEC.			MACHINE	
FRACTIONS ± 1/32"	TREATMENT			ENGINE	
ANGLES ± ½°	FINISH			TECH. ORDER	VAMPIRE MOD 281
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21	SCALE			DRAWING NO.	A13391 SHEET 5 OF 5
	DRAWN	B.G.G	APPROVED		DRWG. A SIZE
	TRACED		CHECKED	K.E.O	

AAP 721:79 VOLUME 2, PART 2 VAMPIRE MODIFICATION NO 282

Class 3

IMPROVED VENTING OF WING FUEL TANKS - INTRODUCTION

Introduction

1. Reports received from units have indicated stoppages of fuel transfer from wing tanks when towing banner targets and with the aircraft in attitudes of high angles of incidence. ARDU confirms that the existing venting contributes to this defect.

The modification provides for re-routing of the vent lines along the rear face of the main spar.

Application

2. This modification is applicable to all Mk 35A aircraft.

Man-Hours and Trade Mustering Involved

3. Approximately two hundred and thirty (230) man-hours will be required to incorporate the modification.

The trade mustering responsible is airframe fitter.

When Modification is to be Incorporated

4. This modification is to be incorporated as soon as possible but not later than the next "E" servicing after modification sets are available.

Responsibility for Incorporation

5. This modification is to be incorporated by aircraft depots and the civilian contractor, responsible for servicing Vampire aircraft.

Equivalent Modification

6. De Havilland (Aust) Mod V242 and AM Mod VAM 3599 are equivalent modifications.

Orders and Instructions Superseded or Cancelled

7. Nil.

Special Tools, Jigs, &c

8. Nil.

(Issued with AL 241 - April 1962)

Drawings

9. Drawing A13340, sheets 1 to 6 inclusive. Units requiring drawings are to demand from Headquarters Support Command.

Modification Parts List

10. The following items are required to complete one modification set:

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1		W15-1263ND	Plate, Reinforcing, LH	1	
2		W15-1264ND	Plate, Reinforcing, RH	1	
3		00D1591	Bracket, LH	1	
4		00D1592	Bracket, RH	1	
5		00D1593	Bracket	2	
6		00P225ND	Pipe, LH	1	
7		00P226ND	Pipe, RH	1	
8		00P227AND	Pipe Assy, LH	1	
9		00P228AND	Pipe Assy, RH	1	
10		00P235ND	Pipe LH	1	
11		00P236ND	Pipe RH	1	
12		00P237ND	Pipe LH	1	
13		00P238ND	Pipe RH	1	
14		00P243AND	Pipe Assy, LH	1	
15		00P244AND	Pipe Assy, RH	1	
16		00P249ND	Pipe, LH	1	
17		00P247	Block, Clamp, Half	8	
18		P15-245ND	Pipe, LH	1	
19		P15-246ND	Pipe, RH	1	
20		W15-1265ND	Plate Reinforcing	2	
21		W15-1267ND	Plate Reinforcing	2	
22	H28/12528	A25/1B	Bolt, HTS, Hex, Hd 4BA x .5" long	16	
23	H28/12513	A25/2C	Bolt, HTS, Hex Hd 2BA x .6" long	4	

(Issued with AL 241 - April 1962)

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
24	H28/12535	A25/12C	Bolt, HTS, Hex Hd 2BA x 1.65" long	8	
25	H28/27024	AGS 2001/B1	Nut, MS Self-locking Nyloc, 4BA	16	
26	H28/27025	AGS 2001/C1	Nut, MS Self-locking Nyloc, 2BA	12	
27	H28/27012	AGS 2008/C1	Nut, MS Self-locking Nyloc, Thin, Double Anchor 2BA	4	
28	NIV	AS 2227/507	Rivet, Rd Hd Al Alloy 5/32" dia x 7/16" long	24	
29	NIV	AS 2227/509	Rivet, Rd Hd Al Alloy 5/32" dia x 9/16" long	28	
30	NIV	AS 2227/510	Rivet, Rd Hd Al Alloy 5/32" dia x 5/8" long	4	
31	NIV	AS 2227/610	Rivet, Rd Hd Al Alloy 3/16" dia x 5/8" long	36	
32	NIV	AS 2229/303	Rivet, Csk Hd 90° Al Alloy 3/32" dia x 3/16" long	2	
33	NIV	AS 2229/307	Rivet, Csk Hd 90° Al Alloy 3/32" dia x 7/16" long	8	
34	H28C/12252	SP 13/C	Washer, MS Plain Thin, .202" I/D x .391" O/D	12	
35	H28C/12305	SP 13/B	Washer, MS Plain, Thin, .157" I/D x .301" O/D	16	
36	H28/8183	AGS 605/1	Clip, Hose Pipe, Type "J" Mark 1	16	
37	H28/26124	DHS 31/31	Clip, Brass, Tube .75" O/D 24G	16	
38		AS 3360/B5B	Flex, Bonding	8	
39	T32C/5574	DHS 160D/20	Hose, Braided, 3/4" I/D	8	
40	G5F/20160		Tubing, Insulating, PVC, 20 M/M I/D, Black	12.0"	

(Issued with AL 241 - April 1962)

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
41	G5F/500001(Z)		Tape, Insulating, PVC 5/8" wide	A/R	
42	132A/94		Cord, Stringing, Spec 4F35	A/R	
43	K4/152		Beeswax	A/R	

Supply

11. Modification sets are to be obtained as follows:-

(a) Items 1 to 40 inclusive will be delivered to De Havilland Modification Centre, Bankstown, NSW.

Units requiring modification sets are to demand from De Havilland Modification Centre for Vampire Modification No 282.

(b) Items 41 to 43 inclusive are to be drawn from unit stores.

Method and Sequence of Incorporation

12. The following operations apply to both port and stbd main planes.

(a) Drain the aircraft fuel tanks in accordance with AAP 721L79/33 Vol 1, Sect 2, Chap 2, Para 5.

(b) Working to current authorised procedure, remove the inboard and outboard tank doors. It is not necessary to remove the leading edge door.

(c) Remove the inboard and outboard wing tanks in accordance with AAP 721:79/33 Vol 1, Sect 4, Chapter 2A, para 14. In tank bay No 1 locate and remove the tank screen (Part No D002521-2A Ref). Retain the bolts and washers for reassembly of the screen.

(d) Locate the now redundant vent pipes Item 50 (LH), 51 (RH), 44 (LH), 45 (RH) and 46 (LH), 47 (RH) which runs along the inboard face of rib 2, between ribs 2 and 5 aft of the wheel well and along the outboard face of rib 5. See drawing A13340 Sheet 4.

(Issued with AL 241 - April 1962)

(e) Release the clamp blocks (Part No P002584A Ref) which support these pipes at ribs 3 and 4. Remove bonding flexes and clips from the pipes at the hose connections. Release the hose pipe clips, (item 53) and free the hoses, (item 52). Remove the pipes and hose connections from the aircraft and discard.

(f) Refer to drawing A13340 sheets 4, 5 and 6 and locate the now redudant vent pipe, item 48 (LH), 49 (RH) which is situated in the fwd inboard corner of tank bay No 1.

(g) Free the clamp blocks part Nos P00723 and 725 LH, P00724 and 726 RH, and clamp block (Part No 00P51A). Free also the clamp block (Part No P002588A Ref) on the aft face of the main spar. Retain all of these blocks for use with the new pipes. Remove the pipe from the aircraft.

(h) Rework centre rib No 2, using items 1 (LH), 2(RH), 27, 28, 31, 32 and 33. Work to drawing A13340 Sheet 1.

(j) Working to drawing A13340, Sheet 2, rework centre rib No 3 using items 5, 17, 20, 21, 24, 26, 29, 30 and 34.

(k) Using items 3 (LH), 4 (RH), 17, 23, 24, 26 and 34, rework centre rib No 4 to drawing A13340, Sheet 3.

(l) Refer to drawing A13340 sheets 5 and 6 and rerun the existing fuel line in the lower position from which the vent lines were removed in operations (d), (e), (f) and (g). Transfer to the top position the existing vent pipe (Part No 00P59ND LH and 00P60ND RH Ref) which is still used.

(m) Assemble the new vent pipes items 6 (LH), 7 (RH), 8 (LH), 9 (RH), 12 (LH), 13 (RH), 14 (LH) and 15 (RH) using hoses and clips, items 39 and 36. The vent pipe, where it passes through rib 2, is to be protected against chafing by sleeving with a 6.0" length of item 40, the ends of which are to be whipped with item 42 which has been waxed with item 43. Bond the pipe connections using items 22, 25, 35, 37 and 38. Refer drawing A13340 Sheet 4.

(n) Assemble pipes, items 10 (LH), 11 (RH), 16 (LH only) 18 (LH) and 19 (RH), as per drawing A13340, Sheets 5 and 6 using existing hose connections, clips and bonding. Using item 42 waxed with item 43, whip the vent, fuel and dive brake hydraulic lines as indicated on the above drawings.

(Issued with AL 241 - April 1962)

(o) Check the fuel lines for leaks and pressure test the vent system to 40 PSI.

(p) Using the retained bolts re-assemble the tank screen (Part No D002521-2A Ref) which was removed from tank bay No 1 in operation (c).

(q) Re-install the fuel tanks, the procedure being, the reversal of the removal as described in AAP 721:79/33 Vol 1, Section 4, Chapter 2A, para 15.

(r) Replace the tank doors in accordance with current authorised procedure. Reference must be made to AAP 721:79/33 Vol 1, Sect 3, Chap 2, Fig 1, to ensure that bolts which are numbered to indicate differences, are returned to their correct positions. Tighten bolts to a torque loading of 7 ft lb in accordance with AEIG Book 1, Part 1, Section 1, Instruction 8.

Items Removed

13. The following items are removed on incorporation of the modification:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
44		P002707ND	Pipe, Vent, LH	1	
45		P002708ND	Pipe, Vent, RH	1	
46		P002719AND	Pipe, Vent, Assy, LH		
47		P002720AND	Pipe, Vent, Assy, RH	1	
48		P15-3ND	Pipe, Vent, LH	1	
	or	P15-1ND	Pipe, Vent, LH		
49		P15-4ND	Pipe, Vent, RH	1	
50		P002819ND	Pipe, Vent, LH	1	
	or	00P201ND			
51		P002820ND	Pipe, Vent, RH	1	
	or	00P202ND			
52	T32C/5574	DHS 160D/20	Hose, Braided, 3/4" I/D	4	
53	H28/8183	AGS 605/1	Clip, Hose, Pipe, Type "J", Mark 1	8	

Action on Items Removed

14. The removed items listed above have no further application to this use and are to be actioned as follows:-

Items 44 to 53 inclusive are to be disposed of in accordance with authorised current procedure.

Action on Stock Holdings of Removed Items

15. Not applicable.

Modification of Spares

16. The following spares are affected and are to be modified at the direction of Headquarters Support Command:-

	Ident No	Part No	Nomenclature	Remarks
(a)	A79/504264	W15-1407A/1	Wing Spare, LH Mk 35A	Rework to para 12 (b) to (p) inclusive and (u). Reidentify as Part No W15-1407A/2 and Ident No A79/504320.
(b)	A79/504265	W15-1409A/1	Wing, Spare, RH Mk 35A	Rework para 12 (b) to (p) inclusive and (u). Reidentify as Part No W15-1409A/2 and Ident No A79/504321.

Partial modification sets for spares will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland Modification Centre. Units requiring partial modification sets are to demand from the De Havilland Modification Centre, Bankstown NSW.

Additional Information

17. Nil.

Tests

18. Fuel flow tests and fuel tank calibrations are to be carried out in accordance with AAP 721:79/33, Vol 1, Sect 4, Chap 2A, para 8 and Sect 5, Chap 2, para 71 and 73 respectively. This assumes that Vampire Modification 256 (V719) has been carried out.

(Issued with AL 241 - April 1962)

Recording

19. Record incorporation of the modification as follows:-

(a) In the airframe log book.

(b) On form E/E 78.

(c) Modification Incorporation Certificates are to be completed and forwarded by units and aircraft depots in accordance with RMGI 1/3/4. Forms E/E 9 are to be submitted by civilian contractors.

Weight Sheet Summary

20. The effect of the incorporation of the modification on the weight and balance of the aircraft is negligible.

Reference : File, Headquarters Support Command, 2501/110/3168

Date of Issue : 2nd April 1962

(Issued with AL 241 - April 1962)

Class 2

NUT PLATE, DE-ICER PUMP - INTRODUCTION

Reason for and Description of Modification

1. It has been found that due to inaccessibility of the nuts on the de-icing pump attachment screws, considerable time is spent in the removal and installation of this pump. To obviate this fault and for ease of servicing, a nut plate is introduced in place of the individual nuts.

Application

2. This modification is to be carried out on all Vampire Mk 33 and Mk 35A aircraft and on Vampire Mk 35 aircraft Serial No A79-602 to A79-640 inclusive. Mk 35 aircraft A79-641 and subsequent will be modified during manufacture.

Responsibility for Incorporation

3. This modification is to be incorporated by Operating Units and aircraft depots or the civilian contractor responsible for the repair of Vampire Aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V739 and Air Ministry Modification VAM 3509 are equivalent modifications.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1		15F3325A	Plate Nut	1	
2	H28C/2869	A32/B20	Screw, MS, Metal Rd Hd	3	
3	H28C/11067	AGS2035/B	Washer, Lock, Shakeproof Int Teeth, 4BA	3	
4	I1/9715	NPN	Wire, Locking, Non Corrod, 22 SWG	AR	

(Issued with A/L 156 - July 1959)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
5	K3/175		Primer, Zinc, Chromate	AR	
6	K3/321		Enamel, Cellulose, Black, to Spec K18	AR	

Notes: (a) Items 1 to 3 inclusive will be retained as a modification Centre pending issue or demand. Units requiring modification sets are to demand from the De Havilland Modification Centre.

(b) Items 4 to 6 inclusive will be drawn from Unit Stores as required.

isposal of Parts Removed

. Not applicable.

isposal of Parts in Stock

. Not applicable.

hen Modification is to be Incorporated

). This modification is to be incorporated as soon as practicable but ot later than the next "D" servicing after receipt of modification sets.

ethod of Incorporation

. (a) Man-Hours Involved : Approximately 12 man-hours will be required for the completion of this modification.

(b) Special Tools, Jigs etc : No special tools are required.

(c) Sequence of Operations :

(i) Open nose cap and disconnect aircraft batteries.

(ii) Working now in the cockpit locate and remove the canopy jettison handle. Retain this handle and attaching bolt etc for reinstallation.

(iii) Remove and retain the operating knob from the de-icing pump for re-installation.

(Issued with A/L 156 - July 1959)

(iv) Carefully lower the instrument panel.

(v) Locate the de-icing pump, break lockwire and remove the two pipes attached to it. Suitably blank off the pipes to prevent any leakage of glycol.

(vi) Remove the de-icing pump from its mounting. Discard its attaching screws and nuts etc retaining the label for re-installation.

(vii) Refer now to Drawing A13130, Sheet 1 and fit the new nut plate item 1 to the pump as shown.

Note: It will be necessary to file one corner of the nut plate as shown to allow it to seat correctly on th mounting bracket. Retouch reworked area using items 5 and 6.

(viii) Secure the whole assembly to the mounting bracket in the cockpit using three new shakeproof washers, item 3, and three new 4BA screws, item 2. Note, fit the existing label removed in (vi) above, under the two top screws before assembly.

(ix) Re-connect pipes to their original positions and wire lock using wire, Item 4.

(x) Raise the instrument panel and secure.

(xi) Replace the knob on the de-icing pump, and the canopy jettison handle using existing bolts, screws, etc.

(xii) Reconnect the aircraft batteries and close the nose cap.

(d) Tests : Operate the de-icing pump and ensure correct functioning.

(e) Recording : Record this modification in the airframe log book.

Drawings

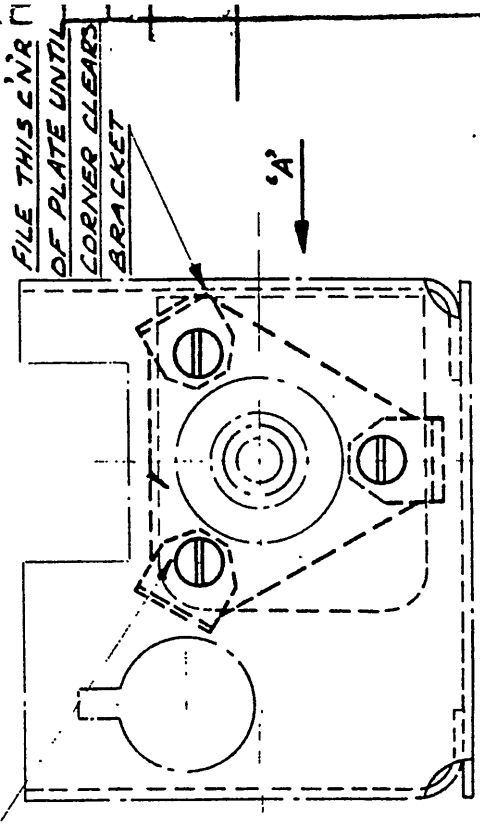
12. Drawing A13130 attached herewith.

Effect on Weight and Balance

13. The effect of this modification on the weight and balance of the aircraft is negligle.

References : Files, Department of Air, 9/84/1057 and 150/8/1454.
Attachment : Drawing A13130.
Date of Issue : 28th July 1959. (Issued with A/L 156 - July 1959)

DO NOT SCALE



FILE THIS C'NR OF PLATE UNTIL CORNER CLEARS BRACKET

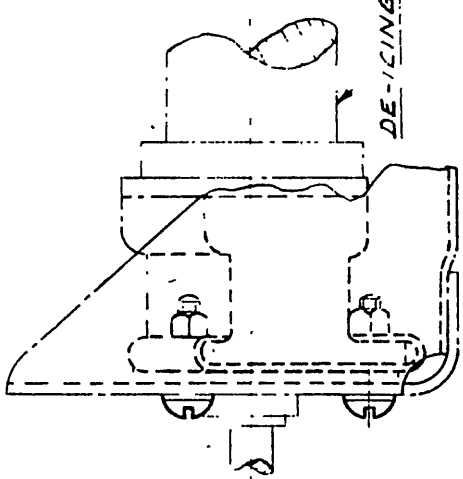
FIT NUT PLATE OVER PUMP AND ROTATE 60 DEG. TO OBTAIN CORRECT POSITION.

VIEW SHOWING NUT PLATE IN POSITION ON DE-ICER PUMP

15F 3325 A — NUT PLATE 1 OFF

A32 820 — R'D. HD. SCR'W 4BA 3 OFF

AGS 2035 B. — SP. WASHER 3 OFF



DE-ICING PUMP

REMOVE KNOB FROM END OF PUMP TO FACILITATE FITMENT OF NEW NUT PLATE

VIEW ON ARROW 'A'

DE HAVILLAND DRAWING NO. DOM408 SHEET 1 OF 1 SHEETS.

REFERENCE	ISSUED BY	TITLE
		INTRODUCTION OF NUT PLATE ON DE-ICER PUMP IN LIEU OF NUT

LIMITS UNLESS STATED	MATERIAL		COMPONENT OF
DECIMAL ± .010"	SPEC.		MACHINE: VAMPIRE.
	TREATMENT		ENGINE
ANGLES ± 1°	FINISH		TECH. ORDER
SURFACE FINISH AUSTRALIAN STANDARD	SCALE		DRAWING NO. A13130
	[illegible]	APPROVED	

AAP 721:79, VOL 2, PART 2 VAMPIRE MODIFICATION NO 285

Class 2

GGS SELECTOR DIMMER MOUNTING

Reason for and Description of Modification

1. The GGS Selector Dimmer is to be mounted flush with the instrument Panel to give additional clearance for the pilot's knee.

Application

2. This modification is to be embodied on all MK 33/35A aircraft either concurrently with or after the embodiment of Vampire Mod 205 (DH Mod V691) and on MK 35 aircraft A79-602 to A79-640 inclusive.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is instrument fitter.

Action in Respect of Spares

4. No action required.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V740 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set.

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1		F15-867	Packing Block	2	
2	H28C/2150	A45/C32	Screw, Brass, Metal Csk Hd 2BA x 1.0" long	4	
3	H28/27003	AGS/2001/C4	Nut, Brass Self-locking, Nyloc 2BA	4	

(Issued with A/L 131 - February 1959)

NOTES: (a) Items 1 to 3 inclusive will be retained as a modification set at the De Havilland Modification Centre pending issue on demand.

(b) Units requiring modification sets are to demand from the De Havilland Modification Centre.

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of modification sets.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 4 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, Etc : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Open nose cap and disconnect aircraft accumulators.

(ii) Remove perspex lighting panel from LH side of instrument panel.

(iii) Remove canopy jettison handle.

(iv) Unfasten and lower instrument panel. Care must be taken not to damage the remaining perspex panels on the Instrument Panel whilst carrying out the modification.

(v) Locate the GGS Selector/Dimmer and remove its four fixing screws and nuts.

(vi) Insert packing blocks (item 1) 2 off, one top and one bottom, between the Instrument Panel and GGS Selector/Dimmer mounting flange and attach using screws (item 2) and stiffnuts (item 3) 4 off of each.

(Issued with A/L 131 - February 1959)

(vii) Raise Instrument Panel and fasten.

(viii) Replace canopy jettison handle and wire lock using 26G locking wire (Ident No I1/1010).

(ix) Replace perspex lighting panel.

(x) Connect aircraft accumulators and close nose cap.

(d) Tests : No tests are required.

(e) Recording : Record the modification in the airframe log book.

Drawings

12. No drawing issued with this modification.

Effect on Weight and Balance of Aircraft

13. The effect of this modification on the weight and balance of this aircraft is negligible.

References : Files, Department of Air, 9/84/1057 and 150/8/1452.

Date of Issue : 6th February 1959.

(Issued with A/L 131 - February1959)

WASHER RETAINING SPRING ON THE RUDDER DAMPER STRUT - INTRODUCTION

Reason for and Description of Modification

1. During ground testing it was found that on the return stroke of the rudder, after full rudder had been applied, the loose fitting special washer could foul the inner edge of the bore of the retaining cap. This modification introduces a spiral spring which retains the washer on the face of the retaining cap.

Application

2. This work is to be carried out on all Vampire Trainer Mk 33, 35A aircraft and on Mk 35 aircraft Serial Nos A79-602-607-608-609 and 611. All other Mk 35 aircraft will be modified during manufacture.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire Aircraft. The trade mustering is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command.

Ident No	Part No	Nomenclature	Remarks
A79/504046	CF15-509A	Rudder Damper	Rework to paras 11 (c) (vi) to (viii) and re-Part No as CF15-509A/1, retaining the existing Ident No
A79/504062	TB15-23A/3	Fin and Boom Assy LH	Rework in accordance with paras. 11 (c) (i) to (x) and certify Mod 286 on the Tailboom Modification Plates
A79/504063	TB15-25A/3	Fin and Boom Assy RH	

Orders Superseded or Cancelled

5. DTS SI VAM/148 is cancelled by the incorporation of this modification.

(Issued with A/L 140 - May, 1959)

Equivalent Modification

6. De Havilland (Aust) Mod V741 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set.

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1	A79/504186	CF15-535	Spring, Retaining	2	
2	H28C/12255	AP 13/J	Washer, Steel, Mild Plain Thin 18 SWG x 3/8 BSF	2	
3	H28B/12462	SP 9/C8	Pin, Split, Nickel Alloy 1/16" x 1" long	2	

Note : Items 1 to 3 inclusive will be retained as a modification set at the De Havilland Modification Centre pending issue or demand. Units requiring modification sets are to demand from the De Havilland Modification Centre.

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of modification sets.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 15 man-hours will be required for the completion of this modification.

(Issued with A/L 140 - May, 1959)

(b) Special Tools, Jigs, &c : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations:

The following is the sequence of operations and is applicable to both Port and Stbd rudder dampers. Refer to Illustrations in AP721:79/33 Volume 1, Section 3 Chapter 4, Page 14.

(i) Remove the rear outboard inspection hole cover plate on the tailboom. Retain this plate and its attaching screws for re-assembly.

(ii) Remove the rudder damper mounting clips (Part No AS448/14 and 13CF511A Ref) and their retaining screws.

(iii) Remove the bolt, nut and washer attaching the rudder damper eye end to the rudder control lever. Discard the split pin.

(iv) Remove the forward bolt attaching link plates (Part No K00376 Ref) to the rudder control lever.

(v) Remove the rudder damper from the tailboom.

(vi) Working now on the rudder damper, unlock and remove the rod end bearing and lock nut from the shaft. Place the new retaining spring, Item 1, over shaft and retaining nuts so it bears on existing washer, Part No CF15-535 Ref.

(vii) Compress this spring and place the new washer Item No 2, on the shaft to bear against the smaller section of the spring.

(viii) Restore rod end bearing with lock nut to shaft and adjust so as to establish a dimension of 2.3" between C/L of ball bearing and end face of damper barrel end cap. If (DH Modication V718) RAAF Vampire Modification No 255 has been incorporated re-identify damper as Part No CF15-509A/1.

(ix) Replace the rudder damper in the tailboom. Replace the damper mounting clips making sure that the forward clip is fitted in the groove of the damper barrel.

(Issued with A/L 140 - May 1959)

(x) Re-connect link plates using existing nut and bolt and lock with new split pin, Item 3.

(xi) Set the rudder in the neutral position and check that the attachment hole in the eye end lines up with the hole in the rudder control lever. Adjust the eye end to line up the two holes before inserting the bolt. Lock this bolt with existing nut and new split pin, Item 3.

(xii) Before replacing inspection hole cover, refer to para 11 (d) of this modification, when this has been carried out replace cover plates using existing screws.

(d) Tests : Check for unrestricted rudder movement.

(e) Recording : Record this modification in the airframe log book and on the Tailboom Modification Plate, located on inner face of boom skin aft of fin spar.

Drawings

12. No drawings are required.

Effect on Weight and Balance

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air 9/84/275 and 150/8/1674.

Date of Issue: 8th May, 1959.

(Issued with A/L 140 - May, 1959)

Class 2

TO PROVIDE AN INDICATOR-KNOB ON THE CABIN TEMPERATURE CONTROL WHEEL

Reason for and Description of Modification

1. Experience has shown that it is practically impossible to view the cabin temperature control wheel when strapped in the ejection seat. This modification provides an indicating knob on the periphery of the control wheel to enable the Pilot to determine by feel, when the control wheel is in the fully opened position.

The following modifications are to be incorporated either prior to or concurrently with this order:-

RAAF Mod	DH Mod	Title
140-161	V641-2	Ejection Seat and Modified Canopy.
103	V650	To reset the cabin air temperature control.

Application

2. This work is to be carried out on all Mk 33/35A and Mk 35 aircraft A79-600 to A79-640 inclusive. Aircraft A79-641 and subsequent will have this modification incorporated by the manufacturer.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the introduction of this modification.

Equivalent Modification

6. The De Havilland (Aust) Mod No V742 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1.		CE15-341	Indicator knob	1	
2.	H128F/5308		Screw, PK Type Z No 4 x ½" long, R'd H'd, Cadmium plated steel	2	
3.	K3/353		Varnish pigmented compound jointing DTD 369A	AR	

Notes: (a) Items 1 to 2 inclusive will be retained as a modification set at the De Havilland modification centre pending issue or demand. Units requiring modification sets are to demand from the De Havilland modification centre.

(b) Item 3 will be drawn from unit store.

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Store

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of parts.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately one (1) man-hour will be required for the completion of this modification.

(b) Special Tools & Jigs etc : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operation :

(i) Locate the temperature control wheel situated in the cockpit between the ejection seats.

Note: Before commencing work ensure that a suitable receptacle is used to collect the swarf and shavings. Also if other work permits it will be found more convenient to remove ejection seats.

(ii) Refer to drawing A13216 sheet 1. Offer up the indicator knob item 1 (CE15-341). Position on handwheel as shown, make the two hole positions, from indicator knob and drill with a No 39 drill and de-burr.

(iii) Liberally coat the two holes with jointing compound item 3 and screw indicator knob in position using two Parker Kalor screws, item 2.

(iv) After above rework is completed reidentify control wheel as Part No CE15-209A/1. Ident No A79/504198.

(d) Test : Not required.

(e) Recording : Record this modification in the airframe log book.

Drawings

12. Drawing A13216 consisting of one (1) sheet is attached herewith.

Effect on the Weight and Balance of the Aircraft

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/105 and 150/8/1598.

Attachment : Drawing A13216.

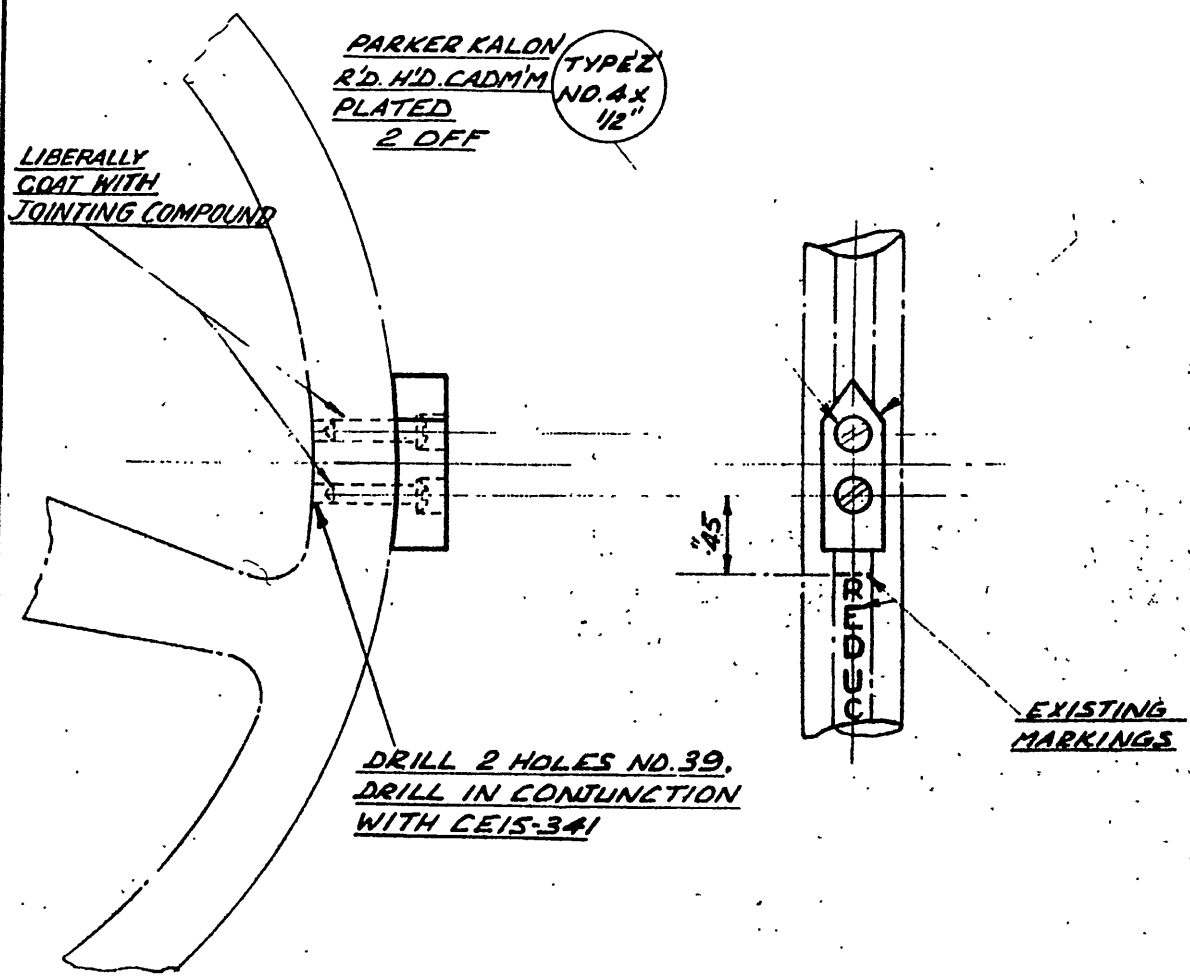
Date of Issue : 3rd June 1959.

(Issued with A/L 154 - June 1959)

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. L	N.T.A.	APPROVED

INDICATOR KNOB 1 OFF — CE15 341



DE HAVILLAND DRAWING NO. OOM 415 SHEET 1 OF 1 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR. DIRECTORATE OF AIRCRAFT ENGINEERING.	PROVISION OF INDICATOR KNOB ON THE CABIN TEMP CONTROL WHEEL

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD N°287
SURFACE FINISH AUSTRALIAN STANDARD ENG DWG. PRACTICE A.S.C.21		SCALE		DRAWING NO.	A13216
		DRAWN	APPROVED		
		TRACED	CHECKED		

Class 2

MICRO SWITCH G5C/4639 AT UNDERCARRIAGE SELECTOR LEVER IN LIEU OF SWITCH G5C/1789 - INTRODUCTION

Reason for and Description of Modification

1. The switch G5C/1789 is now obsolete and has been superseded by switch G5C/4639.

Application

2. This work is to be carried out on all Mk 33/35A and 35 Vampire Trainer aircraft. Aircraft A79-651 and subsequent Mk 35 aircraft will be modified during manufacture.

Responsibility for Incorporation

3. Aircraft depots, operating units and contractors concerned are responsible for the incorporation of this modification. Trade mustering responsible - Electrical Fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command:-

Ident No	Part No	Nomenclature	Remarks
A79/503464	CE15-17A	Lever Assembly U/C Selector	Rework to para 11(c)(vii) and re-identify as Part No CE15-357 Ident No A79/504188.
A79/503473	CE15-49A	Control Box, Engine, Port	Rework to para 11(c)(vi) to (xi) inclusive and if DH (Aust) Mods V237; V642; & V672, RAAF Mod Nos 267; 161 & 158, have been or are being incorporated with this order re-identify as Part No CE15-49 A/5, Ident No A79/50418

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modification

6. De Havilland (Aust) Modification No V743 is the equivalent modification.

(Issued with A/L 159 - August 1959)

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1	A79/501932	00L213A	Lever, actuating	1	
2	A79/504189	CE15-349	Bracket, Micro Switch mounting	1	
3	A79/504190	CE15-351A	Stud assembly, contact	1	
4	G5C/4639		Switch, micro, Mk 4A 5 amp	1	
5	H28/11021	AS1242/8B	Bolt, HTS, csk hd, 4BA x 1.25" long	2	
6	H28/11126	AS1242/9B	Bolt, HTS, csk hd 4BA x 1.35" long	1	
7	H28/12931	A27/ET	Lock nut, steel, RH thread, $\frac{1}{4}$" BSF	1	
8	H28/27024	AGS2001B/1	Nut, MS, self locking, nyloc, 4BA	3	
9	H28C/12305	SP13/B	Washer, MS plain, .157" I/D x .301" O/D	3	
10	H28C/12252	SP13/C	Washer, MS plain, .202" I/D x .391" O/D	1	
11	H28B/5032	SP9/C8	Pin, split, Ni Alloy, 1/16" DIA x 1" long	3	

Notes: (a) Items 1 to 11 inclusive will be delivered from De Havilland Aircraft Pty Ltd, to the De Havilland Modification Centre.

(b) Units requiring modification sets are to demand from the De Havilland Modification Centre, Bankstown, N.S.W.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification.

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
12	G5C/1789		Switch micro	1	
13	A79/500836	L00336	Spring, micro switch	1	
14	A79/503468	CE15-33	Stud, contact	1	
15	A79/503471	CE15-59	Bracket, micro switch	1	

Note: Items 12 to 15 inclusive are obsolete and are to be disposed of in accordance with current authorised procedure.

Disposal of Parts in Store

9. Store stocks of items 13, 14, 15 and of Micro Switch Cable Assembly Part No N00267A, Ident No A79/502781, are rendered obsolete by this modificatior and are to be disposed of in accordance with current authorised procedure.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable and not later than the next "D" servicing of aircraft after receipt of parts required.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 15 man-hours will be required for the completion of this modification.

(b) Special Tools, Jigs, etc : No special tools are required.

(c) Sequence of Operations :

(i) Open nose cap and disconnect aircraft accumulators.

(ii) Ensure the main undercarriage is locked in accordance with AAP 721:79/33 Vol 1, Sect 2, Chap 1, Para 3.

(iii) Disarm and remove the first pilot's ejection seat in accordance with current authorised procedure.

(iv) Disconnect the undercarriage, flap and speed brake connecting rods from the port engine control box. Retain all attaching items except for the split pins, for reassembly later.

(v) Disconnect the undercarriage selector micro switch cable at the connector block, taking note of the connections.

(vi) Remove the micro switch bracket (item 15) complete with the spring (item 13) and micro switch (item 12) by unscrewing the two 2BA screws, the undercarriage, flap and speed brake selector levers may be operated as required to provide access to the nuts. Retain all attaching items for reassembly later.

(vii) Refer to drawing A13214. On the undercarriage selector lever replace the contact stud item 14 with the new contact stud assembly item 3 using a new nut item 7, peen over to lock the nut.

(viii) Salvage the cable from the micro switch removed in operation (vi) and connect in the similar manner to the new micro switch item 4.

(ix) Assemble the actuating lever item 1, to the bracket item 2 using items 6, 8 & 9, 1 off each, taking note not to over tighten the nut, so as to allow the actuating lever to pivot.

(x) Assemble the new micro switch - operation (viii) refers - to the bracket - operation (ix) refers - as shown on drawing OOM414 using items 5, 8 & 9, 2 off each.

(xi) Now install the assembly to the control box as shown, taking note to fit a washer item 10 between each lag of the bracket and the gate, attach with items retained in operation (vi).

(xii) Reconnect the micro switch cable to the connector block.

(xiii) Reconnect the undercarriage, flap and speed brake connecting rods, attach with items retained in operation (iv) and new split pins item 11.

(xiv) Carry out Test as laid down in operation 11(d).

(xv) Re-fit and arm the first pilot's ejection seat in accordance with current authorised procedure.

(xvi) Re-connect aircraft accumulators and close the nose cap.

(d) Tests :

Carry out a functional test of the undercarriage selector as follows:-

(i) Ensure the main undercarriage is still locked as called for in operation 11(c) (ii).

(ii) With the micro switch on the port undercarriage depressed, select undercarriage "UP" and ensure that U/C lever lock operates correctly.

(iii) Select undercarriage "DOWN".

(e) Recording : Record this modification in the Airframe Log Book.

Drawings

12. RAAF drawing A13214 consisting of one (1) sheet, is attached herewith.

Effect on Weight and Balance of Aircraft

13. The effect on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 150/8/1599 and 150/4/8621^{II}.

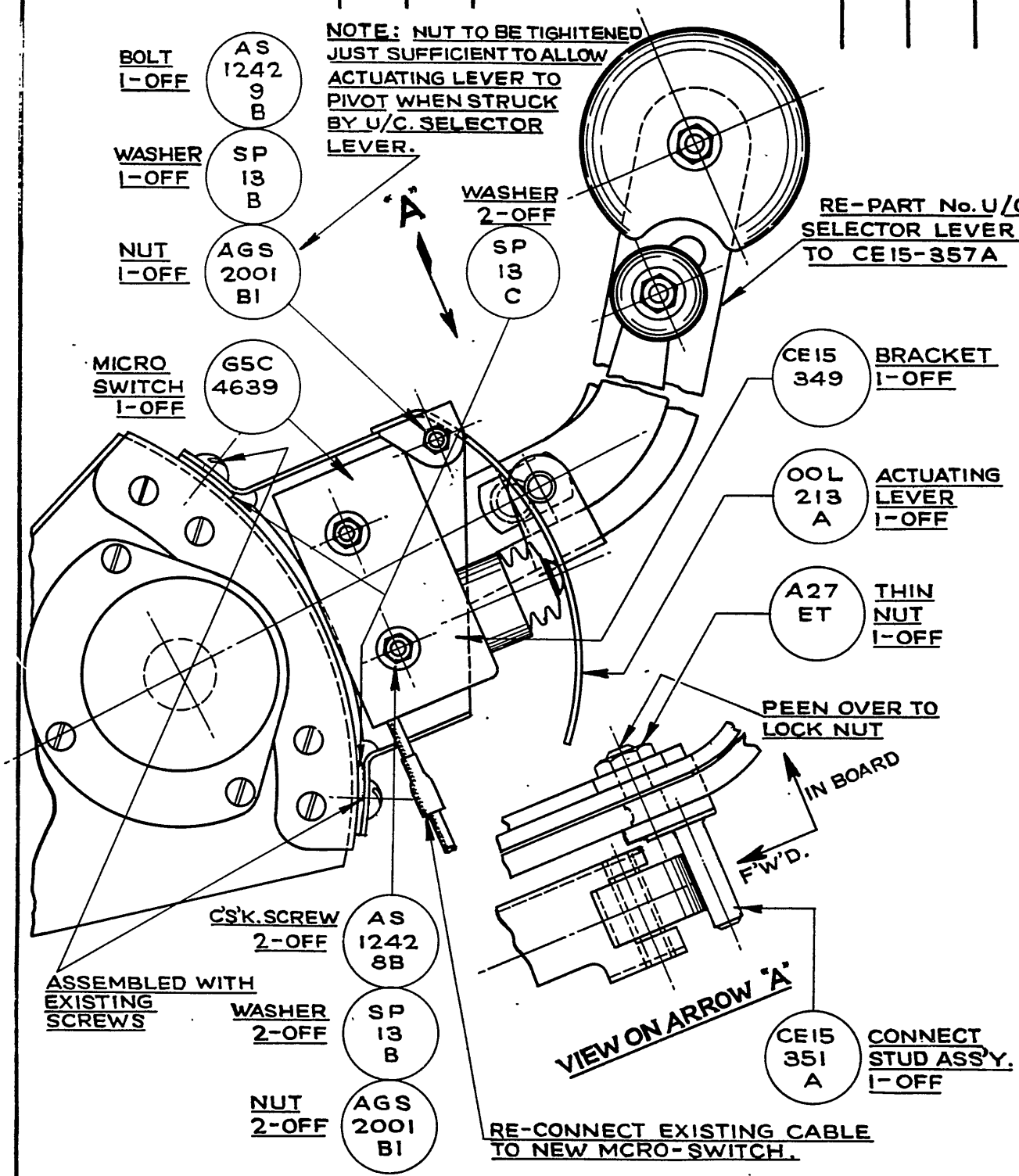
Attachment : Drawing A13214.

Date of Issue : 4th August 1959.

(Issued with A/L 159 - August 1959)

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L	INITIALS	APPROVED



DE HAVILLAND DRAWING No. 00M 414 SHEET 1 OF 1

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR. DIRECTORATE OF AIRCRAFT ENGINEERING.	MICRO-SWITCH (G5C/4639) AT U/C. SELECTOR LEVER IN LIEU OF SWITCH (G5C/1789) - INTRODUCTION

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	288
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD Nº251
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.2.1		SCALE		DRAWING NO.	A13214
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

Class 2

DEFLECTOR PLATE ON BOTTOM COWL - INTRODUCTION

Reason for and Description of Modification

1. Hot air from the rear bearing vent blows directly onto the Perspex cov of the downward identification lights, causing them to distort, discolour and crack. This modification introduces a deflector plate to deflect the hot air a from the covers.

Application

2. This modification is applicable to all Mk 30 and Mk 31 Vampire aircraf

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraf depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the directi of Headquarters, Support Command:-

Ident No	Part No	Nomenclature	Remarks
A79/503604	00L321A	Cowling Panel, Bottom	Rework to paras 11 (c) (ii) to (v) inclusive and re-identify as Part No 00L321A/1 and Ident No A79/504203

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modifications

6. De Havilland (Aust) Modification No V244 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item	Ident No	Part No	Nomenclature	Qty	Stores Class
1		00L447ND	Plate, Deflector	1	
2	H28/8341	AS1248/1C	Bolt, HTS Mush Hd 2BA x .50" long	4	
3	H28/12929	A27/CP	Nut, MS, Plain, 2BA	4	
4	H28C/12252	AP 13/C	Washer, MS Standard 2BA	4	
5	-3/353		Varnish pigmented jointing compound to Spec DTD 369A	AR	

Notes: (a) Items 1 to 4 inclusive will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland Modification Centre.
Units requiring modification sets are to demand from the De Havilland Modification Centre, Bankstown, NSW.

(b) Item 5 to be drawn from unit store as required.

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Store

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of modification sets.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 3 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, etc : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Remove Bottom Cowling Panel from aircraft in accordance with current authorised procedure.

(ii) Drill 4 x No 11 holes in bottom cowl as detailed on drawing No A13262.

(iii) Hold deflector plate, item 1 in position as detailed on drawing No A13262 and drill the 4 x No 11 holes through the deflector plate from those already drilled in the cowl in para (ii).

(iv) De-burr holes in bottom cowl and deflector plate.

(v) Attach deflector plate to bottom cowl using items 2 to 4 inclusive and coating mating surfaces with item 5.

(vi) Re-identify bottom cowling panel as P/No 00L321A/1 and Ident No A79/504203, and replace on aircraft in accordance with current authorised procedure.

(d) Tests : Nil.

(e) Recording : Record this modification in the Airfram Log Book.

Drawings

12. Drawing No A13262 consisting of 1 sheet is attached.

Effect on Weight and Balance.

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/1057 and 150/8/1675.

Attachment : Drawing A13262.

Date of Issue : 8th February 1960.
(Issued with A/L 179 - February 1960)

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	INITIALS	APPROVED

ATTACH DEFLECTOR PLATE TO BOTTOM COWL AS SHOWN WITH:-

WASHERS 4 OFF — SP 13 C

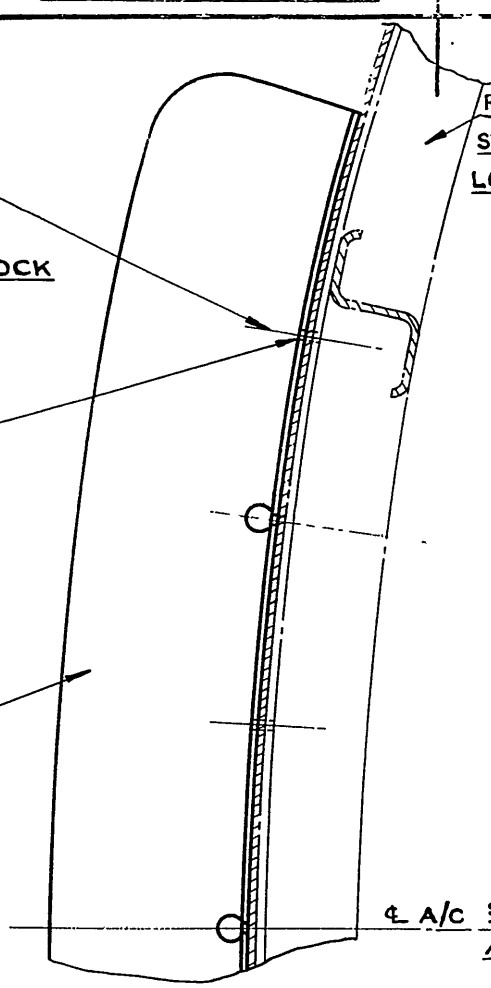
NUTS 4 OFF — A27 CP — PEEN TO LOCK

SCREWS 4 OFF — AS 1248 1C

4 NO. 11 DRILL HOLES SPACED APPROX. AS SHOWN MIDWAY BETWEEN EXISTING RIVETS. MINIMUM EDGE DISTANCE .25 .

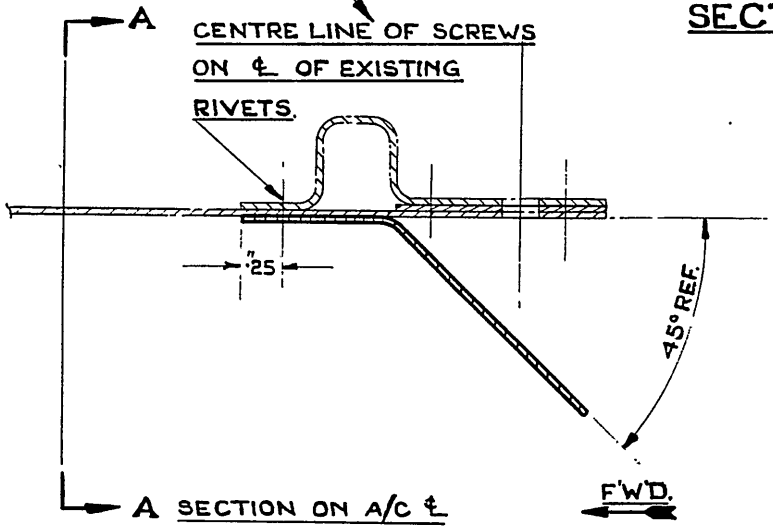
DEFLECTOR PLATE 1 OFF — 00L 447 ND

REAR END STIFFENER L001845ND REF.



℄ A/C SYMMETRICAL ABOUT ℄

SECTION 'A-A'



DE HAVILLAND DRAWING NO. 00M 419 SHEET 1 OF 1 SHEET

REFERENCE	ISSUED BY	TITLE
		TO INTRODUCE A DEFLECTOR PLATE ON BOTTOM COWL.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MKs30 & 31
FRACTIONS	± 1/32"	TREATMENT		ENGINE	NENE.
ANGLES	± ½°	FINISH		TECH. OFFICER	VAMPIRE MOD N°289
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A S.C.21		SCALE		DRAWING NO.	A13262 SIZE A
		DRAWN	APPROVED		
		TRACED	CHECKED		

Class 2

TO INTRODUCE [redacted]ECTIVE STRIP ON MAIN AND TAIL[redacted] LEADING EDGES

Reason for and Descriptio[redacted]odification

1. To preve[redacted]sion and removal of paint from leading edges, a protective stri[redacted]otch-Cal 455 is introduced on wings and tailplane of aircraft.

Application

2. This work is to be carried out on all Mks 30, 31 aircraft (except A79-390), all Mk 33/35A aircraft and on all Mk 35 aircra A79-600 to A79-619 inclusive (except A79-612). A79-621 and subsequent will be modified by the manufacturer.

NOTE: A79-390 and A79-612 have this modification incorporated as trial installations.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is safety equipment worker.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command. (Future spare wing and tailplanes will have this modification incorporated.

Ident No	Part No	Nomenclature	Remarks
A79/500240	00D25A	Wing Complete LH (Spares)	Rework to para 11 (c) (i) to (ix) inclusive and ~~if DH (Aust) Mods V130 Pt B, 181, 240, 234, RAAF Mod Nos 132, 101, 270, 253 have been or are being incorporated concurrently with this order re-identify as Pt No 00D1523A LH Ident No A79/504133.~~ certify for Vampire Mod No. 290 on the wing modification plate

(Issued with AL 130 - January 1959)



Certify for Vampire Mod. No 290 on the wing Notification plate

Ident No	Part No	Nomenclature	Remarks
A79/500241	00D26A	Wing Complete RH (Spares)	Rework to para 11 (c) (i) to (viii) inclusive and ~~if DH (Aust) Mods V102, V130, V181, V240, V234, RAAF Mod Nos 101, 132, 101, 270, 253 have been or are being incorporated concurrently with this order re-identify as Part No 00D1525A RH Ident No A79/504134.~~
A79/501851	00D1103A	Wing Complete LH (Spares) Mk 31	Rework to para 11 (c) (i) to (ix) inclusive and if DH (Aust) Mods V181, V240, V234 RAAF Mod Nos 101, 270, 253 have been or are being incorporated concurrently with this order re-identify as Pt No 00D1523A LH Ident No A79/504133.
A79/501852	00D1104A	Wing Complete RH (Spares) Mk 31	Rework to para 11 (c) (i) to (viii) inclusive and if DH (Aust) Mods V181, V240, V234 RAAF Mod Nos 101, 270, 253 have been or are being incorporated concurrently with this order re-identify as Pt No 00D1525A RH Ident No A79/504134.
A79/502151	W15-15A	Wing Spare LH	Rework to para 11.
A79/502152	W15-17A	Wing Spare RH	(c) (i) to (ix) incl. Port (i) to (viii) incl Stbd and if DH (Aust) Mods V690, V693, V702, V727, V234, RAAF Mod Nos 204, 207, 227, 271, 253 have been or are being incorporated concurrently with this order re-identify as Pt No W15-1407 LH & W15-1409 RH & Ident No A79/504137 and A79/504138 respectively.
A79/502104	12.TP. 1A/1	Tailplane	Rework the para 11 (c) (i) to (x)

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

(Issued with AL 130 - January 1959)

Equivalent Modifications

6. The De Havilland (Aust) Mod V245 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	Qty
1.	I32B/500088		Scotch-Cal Film 455 8 in width	40 feet per A/C
2.	K4/11137		Activator A2	AR
3.	K3/175		Primer Zinc Chromate	AR
4.	K3/176		Thinners, Zinc Chromate	AR
5.	K3/365		Covering, Camouflage High Speed Aluminium	AR
6.	K3/371		Stopper, Oil Base	AR
7.	K4/10603		Turpentine (Low Aromatic Spec AS K8)	AR
		or		
8.			White Spirit	AR
9.	K3/450		Enamel White PVC Base	AR
		or		
10.			Paint White, Murian Transfer Co 3903	AR
11.	K3/344(2)		Colour, Glossy Black (Spec 3K5)	AR
		or		
12.	K3/361		Colour, Ident, Glossy Black (Spec DDT 772A)	AR

NOTES: (1) Item 1 will be retained as a modification set at the De Havilland Modification Centre pending issue or demand. Units requiring modification sets are to demand from the De Havilland Modification Centre.

(Issued with AL 130 - January 1959)

(2) Items 2 to 11 inclusive will be drawn from unit stores.

Disposal of Parts Removed -

8. Not applicable.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of parts.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 5 man-hours will be required to incorporate this modification, excluding repair of finish on leading edge, prior to application of Scotch-Cal film.

(b) Special Tools, Jigs, &c : No special tools are required.

(c) Sequence of Operations :

(Applicable for both port and stbd wings or tailplane) Refer to Drg A13171 Sheet 1.

(i) Ensure that the surface to which the Scotch-Cal film 455 is to be applied, is thoroughly clean and not damaged in any way.

(ii) If damaged, restore finish locally using items 3 to 6 inclusive in accordance with recognised procedure.

(iii) Offer up the Scotch-Cal film 455 Item 1 to the leading edge (It may be found convenient to cut in 5 ft length for ease of application. Ensure that if cut to these lengths that end overlap as shown on view on arrow "A" on A13121 Sheet 1). Trim Scotch-Cal film 455 at tank door also ensure position, to be equidistant between top and bottom of leading edge.

(Issued with AL 130 - January 1959)

(iv) Clean the surface under the Scotch-Cal with white spirit Item 8 or Turpentine Item 7.

(v) Remove the protective backing paper from the Scotch-Cal film 455 lay the Scotch-Cal film 455 on a flat smooth surface (adhesive side facing up). Care must be taken to ensure that the adhesive side is not touched, or this portion will not adhere to the surface to which it is applied.

(vi) Using a rectangular piece (approx 3" x 2") of $\frac{1}{4}$" thick felt dip this lightly with one edge in the activator A2 item 2. Wipe the wetted edge of the felt several times on a clean piece of paper to remove all excess activator.

(vii) Carefully activate the adhesive side of the Scotch-Cal film in one direction only. Do not go twice over the same area as excessive activation will cause wrinkling of the Scotch-Cal film. This however will not become apparent until 24 to 72 hours after application of the Scotch-Cal film to the aircraft.

(viii) When the adhesive has become tacky apply Scotch-Cal film to leading edge of wing and tailplane over area as indicated on drawing. Start from the extreme leading edge of wing or tailplane, with a plastic squeegee work towards the rear, progressively smoothing out all air bubbles and creases, pressing Scotch-Cal film smoothly to the skin. Repeat until leading edge on wing and tailplane is covered.

NOTES: 1. Care must be taken to avoid tearing the Scotch-Cal film with the applicator.

2. If the air bubbles cannot be removed by smoothing out, puncture the Scotch-Cal film, with a pin to release the trapped air and press down.

3. If the Scotch-Cal will not form smoothly to the aerofoil shape this may be due to low temperatures and may be overcome by warming the Scotch-Cal slightly.

(ix) Refer to drg A13171 and paint marking as indicated. this is applicable for Port wing only, using paint Item 9 or Item 10.

(Issued with AL 130 - January 1959)

(x) Ref to drg A13171 and paint markings on tail plane for 'plumb bob' as indicated on drg on port side only using item 9 or item 10 & item 11.

(d) Tests : Flight test aircraft for stall characteristics, if any extensive patching of leading edge paint has been necessary.

(e) Recording : Record this modification in the Airframe Log Book and on the Wing and Tailplane Modification plate.

Drawings

12. Drawing A13171 consisting of one sheet attached herewith.

Effect on Weight and Balance

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/242 and 150/8/1474

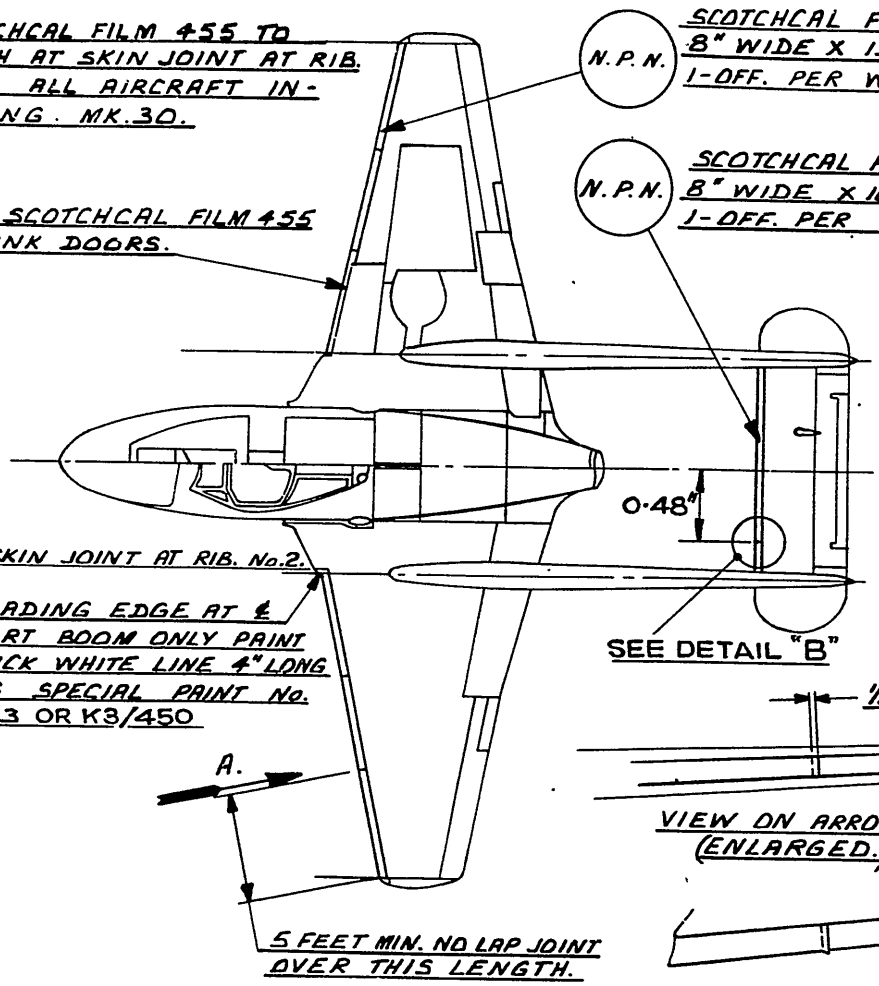
Attachment : Drawing A13171

Date of Issue : 20th January 1959

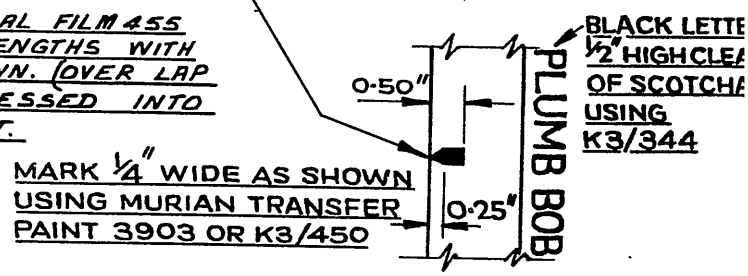
(Issued with AL 130 - January 1959)

DO NOT SCALE

ALTERATION



NOTE: FOR CONVENIENCE. THE SCOTCHCAL FILM 455 MAY BE APPLIED IN 5FEET LENGTHS WITH LAP JOINT MADE AS SHOWN. (OVER LAP 1/8" - 1/4") & IS TO BE PRESSED INTO THE RIDGES OF THE JOINT.



DETAIL "B" (ENLARGED

PORT SIDE OF TAIL PLANE ONLY

DE HAVILLAND DRG No. ODM 411 SHEET 1 OF 1 SHEET.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING.	TO INTRODUCE A PROTECTIVE STRIP ON MAIN & TAIL PLANE LEADING EDGE.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD 290
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.2		SCALE		DRAWING NO.	A13171
		DRAWN	APPROVED		SIZE A
		TRACED	CHECKED		

AAP 721:79, VOL 2, PART 2 VAMPIRE MODIFICATION NO 291

Class 3

RE-ROUTING THE RUN OF THE HYDRAULIC BRAKE LINES TO IMPROVE BLEEDING OF THE BRAKE SYSTEM

Reason for and Description of the Modification

1. Some brake failures have led to the belief that air was being generated and trapped in the existing system. This modification re-routes the pipes to ensure that air cannot be trapped in any part of the run and generally facilitat bleeding.

Application

2. This modification is applicable to all Mk's 35 and 35A Vampire aircraft

Responsibility for Incorporation

3. This modification is to be incorporated by the civilian contractor responsible for the repair of Vampire aircraft.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by this modification.

Equivalent Modification

6. De Havilland (Aust) Mod V745 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1.		S15-1163	Nipple Plug	4	
2.		S15-1153AND	Pipe	1	
3.		S15-1155AND	Pipe	1	
4.		S15-1157AND	Pipe	1	
5.		S15-1159AND	Pipe	1	
6.		S15-1161AND	Pipe	1	

(Issued with A/L 155 - June 1959)

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
7.	A79/504237	S15-1195ND	Block, Clamp	1	C
8.	A79/504238	S15-1197ND	Block, Clamp	1	C
9.		FS15-553AND	Patch Plate Assy	1	
10.	A79/504233	FS15-557A	Manifold Assy	1	C
11.	H28/12630	A25/16C	Bolts, HTS, Hex Hd 2BA x 2.35" long	2	
12.	H28/8309	AS1242/4C	Bolt, HTS, Csk Hd 2BA x .80" long	1	
13.	A79/504232	FS15-543	Gasket	1	C
14.		S15-1169 AND	Pipe	1	
15.		S15-1171 AND	Pipe	1	
16.		S15-1173 AND	Pipe	1	
17.		S15-1175 AND	Pipe	1	
18.		AS2806/4/025	Tube, Distance	1	
19.		S15-1179	Clip	1	
20.		S15-1177	Clip	1	
21.		S15-1187 AND	Pipe	1	
22.		S15-1189 AND	Pipe	1	
23.		S15-1191 AND	Pipe	1	
24.		S15-1193 AND	Pipe	1	
25.		FS15-541A	Plate, Nut, Assy	1	
26.	H128F/62202	AS163/304	Rivet, Csk. Hd. 120° L36 3/32" dia x $\frac{1}{4}$" long	2	
27.	H128F/64405	AS2227/306	Rivet, Rd Hd A1 A1 L69, 3/32" dia x $\frac{3}{8}$" long	13	
28.	H28/12529	A25/4B	Bolt, HTS, Hex Hd 4BA x .80" long	1	

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
29.	H28/12531	A25/3C	Bolt, HTS, Hex Hd 2BA x .75" long	18	
30.	H28C/12252	SP13/C	Washer, MS Plain, .202" i/d x .391" o/d	20	
31.	H128F/63365	AS2229/404	Rivet, Csk Hd 90°, A1 A1 $\frac{1}{8}$" dia x $\frac{1}{4}$" long	2	
32.	H128F/64421	AS2227/505	Rivet, Rd Hd 120°, A1 A1 5/32" dia x $\frac{1}{4}$" long	4	
33.	H28/14065	AS3181/3B	Clip, A1 A1 Type "P" 4BA x 3/16" dia	1	
34.	I1/9715	Wire Steel Corrosion Resisting 22 SWG	Lock Wire, 22 SWG Noncorod	AR	
35.	K3/353		Varnish Pigmented Jointing to Spec DTD369A	AR	
36.	K3/387		Cement Adhesive Bostik 1790	AR	
37.	K3/386		Cement Adhesive Bostik 1751	AR	
38.	I32A/94		Cord, Stringing, Spec 4F35	AR	
39.	K4/152		Beeswax	AR	

Notes: (a) Items 1 to 33 inclusive will be retained as a modification set at the De Havilland Modification Centre pending issue or demand. Units requiring modification sets are to demand from the De Havilland Modification Centre.

(b) Items 34 to 39 inclusive are to be drawn from unit stores.

(Issued with A/L 155 - June 1959)

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification.

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
40		S15-965AND	Pipe	1	
41		S15-967AND	Pipe	1	
42		S15-971AND	Pipe	1	
43		S15-969AND	Pipe	1	
44		S15-987AND	Pipe	1	
45		S15-937AND	Pipe	1	
46		S15-939AND	Pipe	1	
47		S15-941AND	Pipe	1	
48		S15-943AND	Pipe	1	
49		S15-933AND	Pipe	1	
50		S15-935AND	Pipe	1	
51		S15-929AND	Pipe	1	
52		S15-931AND	Pipe	1	
53		FS15-441	Bracket	1	

Note: Items 40 to 53 inclusive are obsolete and are to be disposed of in accordance with current authorised procedure.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated when the aircraft are allotted for retrospective modification fitment.

Method of Incorporation

(a) Man-Hours Involved : Approxaimately 120 man-hours will be required to incorporate this modification.

(Issued with A/L 155 - June 1959)

Method of Incorporation (Cont'd)

(b) Special Tools, Jigs, etc : No special tools or jigs will be required to incorporate this modification.

(c) Sequence of Operations :

(i) Open nose cap and disconnect aircraft batteries.

(ii) Lower the gun bay doors and completely release all hydraulic pressure in accordance with current authorised procedure.

(iii) Drain all hydraulic fluid into a suitable container from the foot motor system.

(iv) Remove the canopy hatch and ejection seats in accordance with current authorised procedure.

(v) Remove the pilots false floor.

(vi) Remove the canopy jettison lever and lower the instrument panel.

(vii) Working now on the front face of bulkhead No 1 remove the four pipe assemblies running from the brake control valve to the four rubber hoses mounted on the bulkhead. Remove these four rubber hoses from the mounting bracket and retain for reinstallation.

(viii) Carefully drill out rivets attaching bracket, Item 53, to bulkhead and discard bracket. Rework this area on the bulkhead as shown on Drg A13128, Sheet 1, using items 10, 13, 25, 29 and 30. Seal all surfaces with Bostik 1751-1790 items 36 and 37.

(ix) Referring also to the same drawing rework the header tank support bracket as shown using items 31 and 32.

(x) Working now inside the cockpit, remove and discard the pipes, items 45, 46, 47 and 48, running from the four foot motors to the four bulkhead adapters located in the bottom port side of bulkhead No 1. Remove the bulkhead adaptors and discard.

(xi) Also remove and discard the four pipes items 49, 50, 51 and 52 running up from the foot motors to the junction block on the aft face of bulkhead No 1.

(Issued with A/L 155 - June 1959)

(c) Sequence of Operations (Cont'd)

(xii) Refer to Drg A13128, Sheets 1 and 3. Rework bulkhead and install clamp block and patch plate items 7, 8 and 9 using items 11, 12, 27 and 30.

(xiii) Refer to Drg A13128, Sheet 2 - Detail "B" and install new pipe, item 6, to header tank as shown.

Note: When installing pipes ensure that they run upwards and do not contain air traps.

(xiv) Refer now to Drg A13128, Sheet 2, - Detail "C" and install pipes items 2, 3, 4 and 5 as shown. Before assembling existing Dunlop hoses, they are to be bled and completely filled with hydraulic oil. While bleeding is in progress fit nipple plugs item 1 and flex hoses to displace any air bubbles. When hoses are completely free from air install in aircraft as per drawing.

(xv) Working now in the cockpit install new pipes items 14, 15, 16, 17, 21, 22, 23 and 24 as per Drg A13128, Sheet 2, - Detail "A" using Items 19, 20, 18, 28 and 33.

(xvi) When all items are installed in aircraft wirelock all connections using lockwire item 34, in accordance with current authorised procedure.

(xvii) Raise the instrument panel and replace the canopy jettison lever.

(xviii) Replace the pilots false floor.

(xix) Re-install the ejection seats and canopy.

(xx) Close the gun bay doors.

(xxi) Connect the aircraft batteries.

(xxii) Fill the header tank with hydraulic fluid and bleed the foot motor system in accordance with current authorised procedure.

(xxiii) When bleeding is complete close the nose cap.

(d) Tests : Ensure that when brakes are applied with full pressure in the hydraulic system, the dual brake gauge reads between 1300 and 1550 PSI.

(Issued with A/L 155 - June 1959)

(e) Recording : Record this modification in the airframe log book.

Drawings

12. Drawing A13128 consisting of (3) three sheets is attached herewith.

Effect on Weight and Balance

13. The effect of this modification on the weight and balance is negligible

References : Files, Department of Air, 9/84/1113 and 150/8/1451.

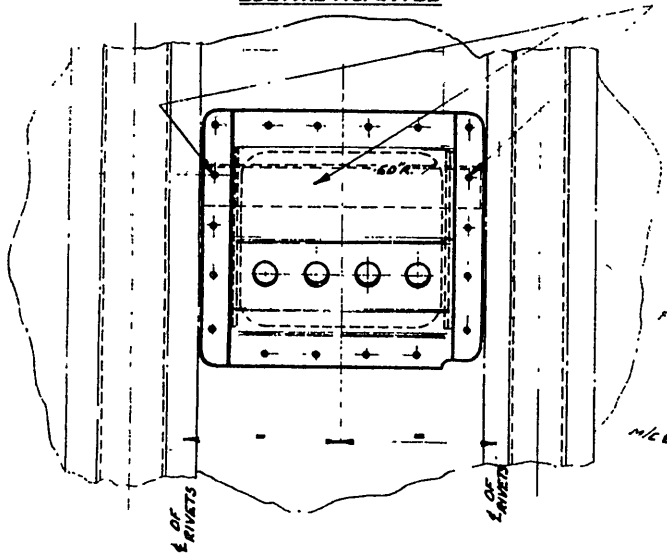
Attachments : Drawing A13128 Sheets 1 to 3.

Date of Issue : 29th June 1959.

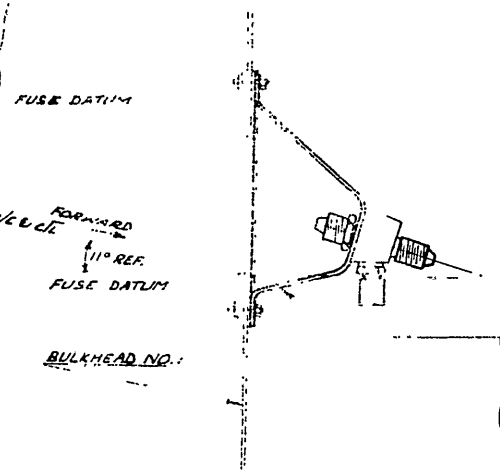
(Issued with A/L 155 - June 1959)

DO NOT SCALE

NOTE:- ALL SEALING SURFACES TO BE COATED WITH BOSTIK'S 1751 & 1780



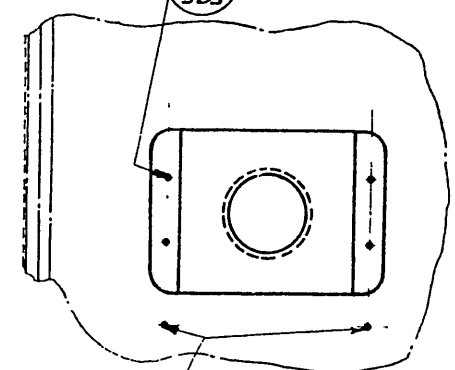
REMOVE ANGLE BRACKET FS15-441 ATTACH NUT PLATE FS15-541 PICKING UP 2 HOLES IN B/HEAD AS SHOWN. USING NUT PLATE AS GUIDE SCRIBE OUT CUT-OUT IN B/HEAD. DRILL 18 OFF HOLES USING A NO.11 DRILL. USING A MANIFOLD FS15-537A AS A TEMPLATE.



REWORK TO HEADER TANK SUPPORT BRACKET

BRACKET ASS'Y. TO BE MOVED UP 0.5 THE UPPER 4 OF THE EXISTING HOLES ARE TO BE BACK DRILLED THROUGH BRACKET USING A NO.21 DRILL. BRACKET TO BE RE-ATTACHED USING:-

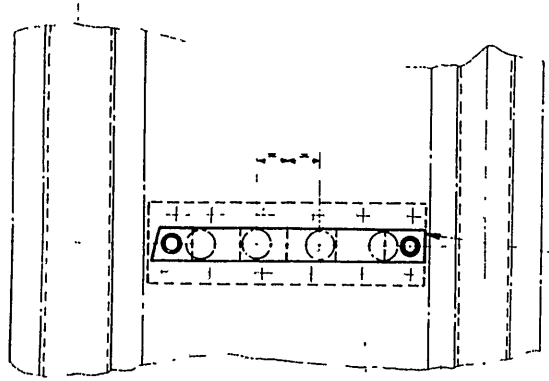
AS 2227 505 — R'D. H'D. RIVET — 4 OFF



THESE TWO REDUNDANT HOLES TO BE FILLED USING:-

AS 2229 404 — C'S'K. RIVET — 2 OFF

C'S'K. TO BE ON FWD. FACE



REFER SHEET 3 INSTALLATION OF CLAMP BLOCK & PATCH PLATE.

REMOVE 4 OFF EXISTING B/HEAD CONNECTIONS. DRILL 12 OFF HOLES IN B/HEAD. IN CONJUNCTION WITH SUPPORT BRACKET USING A NO. 40 DRILL.

FS15 557 A	MANIFOLD Ass'y.	1 OFF
FS15 541 A	NUT PLATE	1 OFF
FS15 543	GASKET	1 OFF
A2S 3C	BOLT	18 OFF
SP 13 C	WASHER	18 OFF

DE HAVILLAND DRAWING NO. OOM.393 SHEET 1 OF 3 SHEETS

ALTERATIONS	DATE	BY	APPROVED

REFERENCE	ISSUED BY

LIMITS UNLESS STATED		MATERIAL	
DECIMALS	± .010	SPEC	
FRACTIONS	± 1/64"	TREATMENT	
ANGLES	± 1°	FINISH	
SURFACE FINISH AUSTRALIAN STANDARD		SCALE	

TITLE

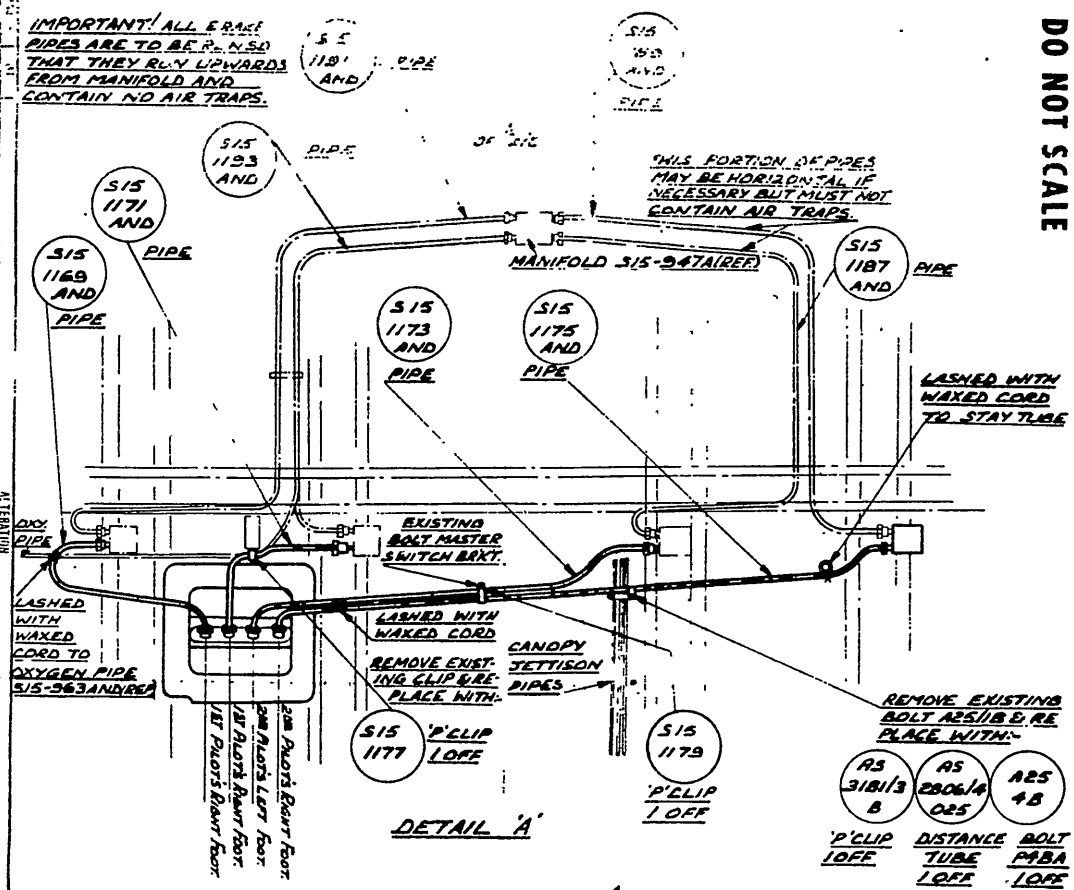
RE-ROUTING THE RUN OF THE HYDRAULIC BRAKE LINES TO IMPROVE BLEEDING OF THE BRAKE SYSTEM.

COMPONENT OF
AIRFRAME
ENGINE
PROPELLER

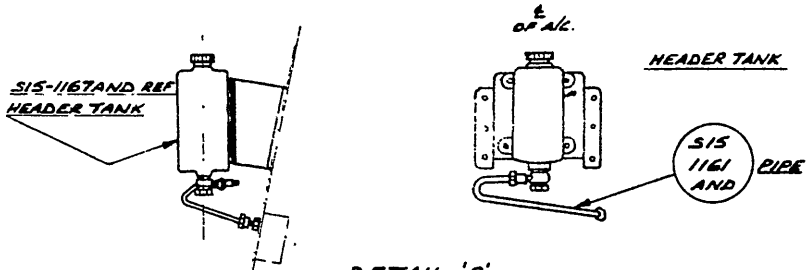
A13128
SHEET 1

DO NOT SCALE

IMPORTANT! ALL BRAKE PIPES ARE TO BE RUN SO THAT THEY RUN UPWARDS FROM MANIFOLD AND CONTAIN NO AIR TRAPS.

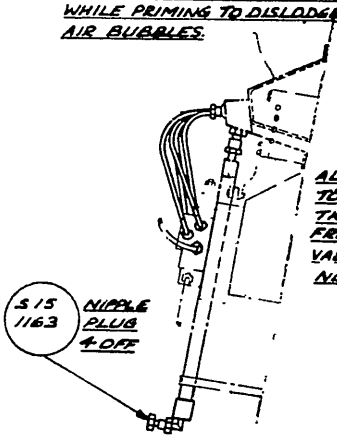


DETAIL 'A'



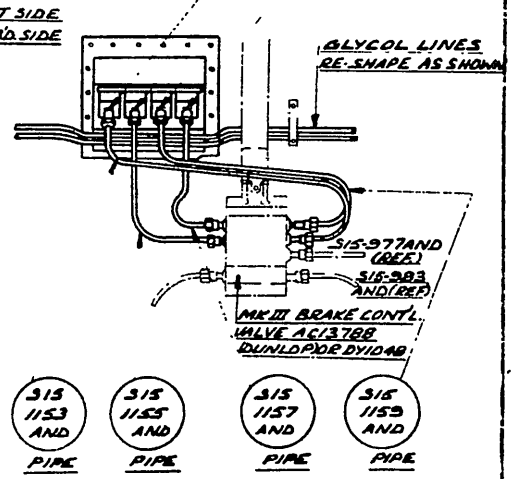
DETAIL 'B'

IMPORTANT!
NOTE: HOSES ARE TO BE PRIMED AND COMPLETELY FREE OF AIR BEFORE INSTALLATION IN AIRCRAFT. HOSES ARE TO BE FLEXED WHILE PRIMING TO DISLODGE AIR BUBBLES.



FROM 1ST PILOT'S LEFT FOOT
FROM 1ST PILOT'S RIGHT FOOT
FROM 2ND PILOT'S LEFT FOOT
FROM 2ND PILOT'S RIGHT FOOT

NOTE!
1ST PILOT PORT SIDE
2ND PILOT ST'BD SIDE



DETAIL 'C'

DE HAVILLAND DRAWING NO. DOM 993. SHEET 2 OF 3 SHEETS

ISSUED BY

TITLE: RE-ROUTING THE RUN OF THE HYDRAULIC BRAKE LINES TO IMPROVE BLEEDING OF THE BRAKE SYSTEM.

DRAWING NO.	A/3128 SHEET 2	COMPONENT OF	
		MACHINE	
		ENGINE	
		TECH. ORDER	

DRWG. B SIZE

ALTERATION	D.I.L.	INITIALS	APPROVED

REFERENCE

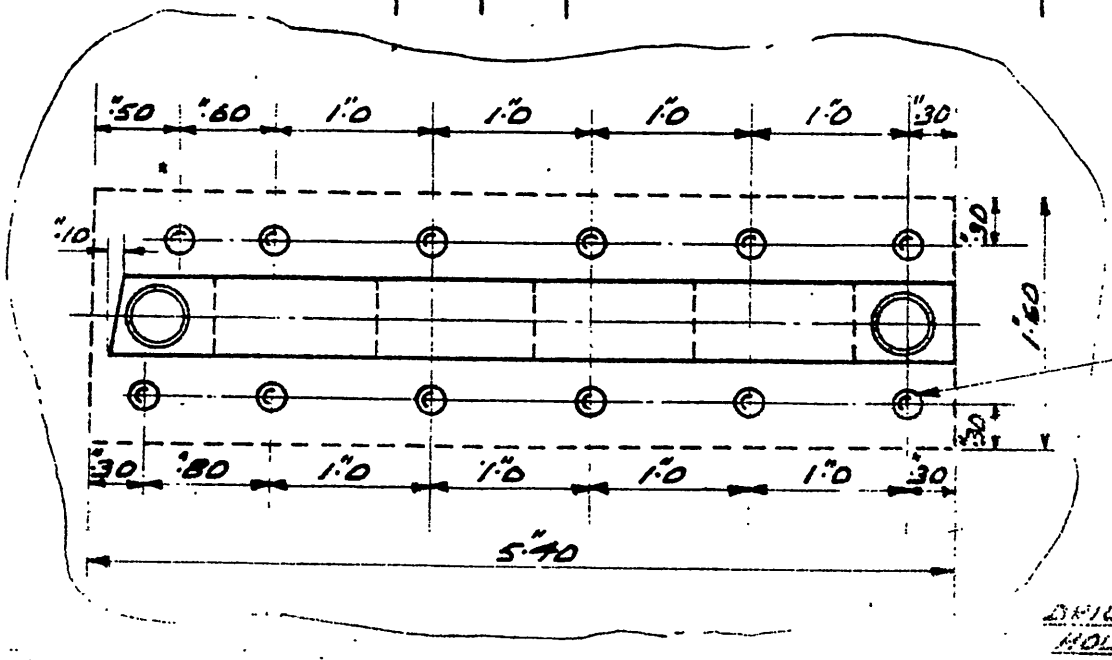
LIMITS UNLESS STATED	DECIMALS	± .010"
	FRACTIONS	± 1/64"
	ANGLES	± 1°
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A & CH.		

MATERIAL		
SPEC.		
TREATMENT		
FINISH		
SCALE		
DRAWN		
TRACED		

APPROVED	
CHECKED	

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D I L	INITIALS	APPROVAL



AS 2227 306

RIVETS
12 OFF
DRILL 12 NO. 40 HOLES

S15 1197 ND — CLAMP BLOCK HALF(FWD)

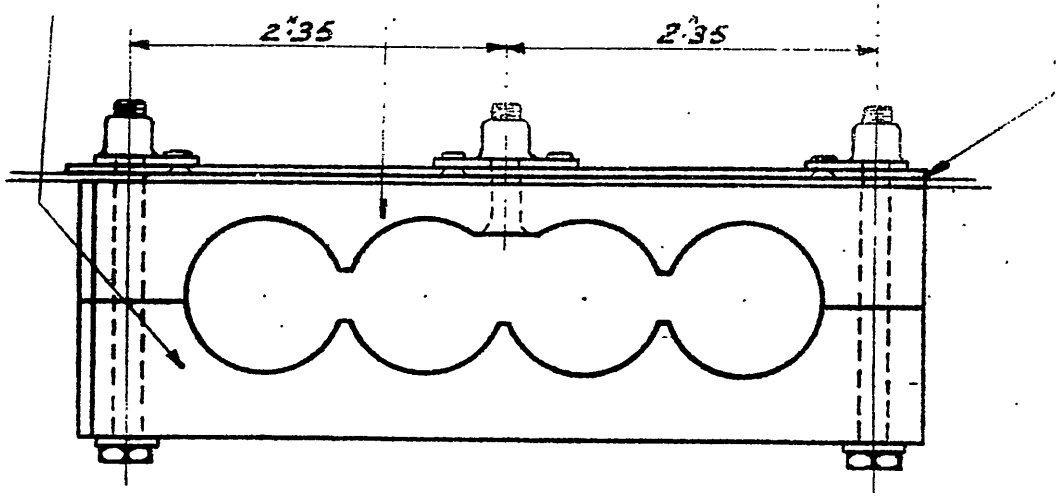
S15 1195 ND — CLAMP BLOCK HALF(REAR)

A2S 16C — 2BA HEX. HD. BOLT 2 OFF

SP 13C — WASHER 2BA 2 OFF

AS 1242 4C — BOLT 2BA. CSK. 1 OFF

FS15 553 AND — REINFORCG. PLATE ASS'Y.



DE HAVILLAND DR'G. NO. 00M393 SHEET 3 OF 3 SHEETS.

REFERENCE	ISSUED BY	TITLE
		REROUTING THE RUN OF THE HYDRAULIC BRAKE LINES TO IMPROVE BLEEDING OF THE BRAKE SYSTEM

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	
FRACTIONS	± 1/32"	TREATMENT		ENGINE	
ANGLES	± ½°	FINISH		TECH. ORDER	
SURFACE FINISH AUSTRALIAN STANDARD DRG. PRACTICE A.S.D.(1)		SCALE		DRAWING NO.	A13128 SHEET 3
		DRAWN	APPROVED		DRWG. D
		TRACED	CHECKED		

AAP 721:79, VOLUME 2, PART 2 VAMPIRE MODIFICATION NO 292

Class 2

TO INTRODUCE A GUARD IN THE FILLER NECK OF NO 4 WING FUEL TANK TO PREVENT DAMAGE TO THE TANK WHEN REFUELLING

Reason for and Description of Modification

1. Unless extreme care is exercised the No 4 Wing fuel tank can be damaged if a refuelling nozzle more than 7 in. length is used. Nozzles in excess of this length can ground on and pierce the button of the tank. To avoi this defect, this modification introduces filler cages at the outboard fillers.

Application

2. This modification is to be embodied on all Mk 35 aircraft. Aircraft A79-600 to A79-640 inclusive, A79-641 and subsequent will have this modification incorporated by the manufacturer.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the introduction of this modification.

Equivalent Modification

6. De Havilland (Aust) Mod V737 is the equivalent modification.

Supply

7. The following part is required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
1	A79/504181	P15-567	Filler Cage	2	

Notes: (a) Item 1 will be retained as a modification set at the De Havilland Modification Centre pending issue or demand.

(b) Units requiring modification sets are to demand from the De Havilland Modification Centre.

(Issued with A/L 157 - July 1959)

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Store

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of parts.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately $\frac{1}{2}$ man-hour will be required for completion of this modification.

(b) Special Tools, Jigs, etc : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations (applicable to both port and starboard main planes)

(i) Locate and remove the special tank spanner from the compartment between bulkheads Nos 2 and 3, access is gained through the hinged ammunition door in the starboard side of the fuselage.

(ii) Remove the filler cap sub-assembly (BM1593/14) and retain for reassembly.

Note: Care must be taken that extreme cleanliness is exercised.

(iii) Now offer up filler cage item 1 (P15-567) again this part is to be examined for cleanliness. Refer to AAP 721:79/33, Volume 1, Section 4, Chapter 2, Page 22, Figure 11, and assembly filler cage with filler cap sub-assembly, in position as shown. Before reassembly of the filler cap sub-assembly ensure that gasket washer is in serviceable condition.

(iv) Screw filler cap firmly in position using special tank spanner.

(v) Replace filler cap spanner removed in operation (i).

(d) Tests : Not required.

(e) Recording : Record this modification in the airframe log book.

Drawings

12. Not required.

Effect on the Weight and Balance

13. The effect of this modification on the weight and balance is negligible.

References : Files, Department of Air, 9/84/612 and 150/8/1600.

Date of Issue : 28th July 1959.

Class 2

TEMPORARY DELETION OF MAXARET UNITS AND REDUCTION OF BRAKE OPERATING PRESSURE

Reason for and Description of Modification

1. To allow aircraft to continue operating pending further investigations into defects in the maxaret installation, the maxaret units on the following aircraft are to be replaced by dummy units. The pressure reducin valve mounted on Bulkhead No 1 is to be re-adjusted to give a lower brake operating pressure.

Application

2. This work is to be carried out on all Mk 35 and Mk 35A except A79-606 and A79-612, pending introduction of Vampire Mod No 294 (V 746) - Introduction of Redesigned 107 degrees Torque Plates and Re-Introduction of Maxaret Units.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. Nil.

Orders Superseded or Cancelled

5. Nil.

Equivalent Modifications

6. De Havilland (Aust) Mod No V744 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:

Item No	Ident No	Part No	Nomenclature	No off per set
1.		Z15-1405AND	Block, Junction, Assy, LH	1
2.		Z15-1406AND	Block, Junction, Assy, RH	1
3.		SP13E	Washer	12
4.	I1/9715	NPN	Wire Locking Non-Corrodible 22 SWG	AR

(Issued with AL 162 - August, 1959)

Notes: (a) Items 1 to 3 inclusive will be retained as a modification set at the De Havilland Modification Centre pending issue or demand. Units requiring modification sets are to demand from the De Havilland Modification Centre.

(b) Item 4 is to be drawn from unit stores as required.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification.

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
5.	T27A/500730	AC14434	Unit, Maxaret (Dunlop's)	1	
6.	T27A/500731	AC14436	Unit, Maxaret (Dunlop's)	1	

Note: (a) Items 5 and 6 are to be returned to Store pending instructions for overhaul and/or modification prior to re-fitment.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of modification sets.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 24 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, &c : No special tools are required to incorporate this modification.

(c) Sequence of Operations :

(i) Open Nose Cap.

(ii) Completely release all hydraulic pressure in accordance with current authorised procedure.

(iii) Locate on the port and starboard undercarriage legs the maxaret units and disconnect all the hydraulic connections.

(Issued with AL 162 - August, 1959)

(iv) Remove the maxaret units by undoing the two hex. head belts attaching the units to the undercarriage legs and fit in place the new junction block assemblies, items 1 and 2 using the existing belts. It may be necessary to use up to 3 off extra washers, item 3 under the heads of each bolt to compensate for the difference in flange thickness between the new junction block mounting flange and the flange on the maxaret unit.

(v) Reconnect all hydraulic connections to the blocks similar to the connections on the maxaret units and wire lock in accordance with current authorised procedure.

(vi) Bleed the high pressure hydraulic brake system in accordance with authorised procedure.

(vii) Now working on the pressure reducing valve located on the port side of bulkhead No 1, break the wire locking the adjusting screw.

(viii) Operate the hydraulic hand pump in the cockpit until the relief valve operates. Then with toe brakes full on adjust the adjusting screw on the pressure reducing valve until the pressure shown on the dual brake gauge reads 1425 lb (sq in) + or - 125 lb (sq in) when this figure is obtained wire lock the adjusting screw.

(ix) Close the Nose Cap.

(d) Tests : With engine running check that pressure shown on the dual brake gauge still reads between 1300 and 1550 psi when brake pedals are operated.

Note: The brakes now will not hold the aircraft against full RPM and pilots should be advised accordingly.

(e) Recording : Record this modification in the Airframe Log Book. Identify the re-adjusted pressure reducing valve with a blue dot of paint on the front face of the filter housing.

Drawings

12. No drawings are required.

Effect on Weight and Balance

13. The effect of this modification on the weight and balance of the aircraft is neglibile.

References : Files, Department of Air, 9/84/1113 and 150/8/1601

Date of Issue : 19th August, 1959.

(Issued with AL 162 - August, 1959)

RE-INTRODUCTION OF MAXARET UNITS AND REDESIGNED TORQUE PLATES

Reason for and Description of Modification

1. It is suspected that some of the defects being experienced with the hydraulic brake system can be attributed to a high frequency vibration which occurs within the lower speed ranges during the landing and taxying run. This Modification introduces a redesigned torque plate (Dunlop wheels and brakes Mod No 11) to raise the frequency and reduce the amplitude of this vibration within the lower speed ranges where the effect is more prolonged. These torque plates are attached in an improved manner by two special fitted bolts and remaining bolts are fitted to the best possible fit. Modified feed pipes (Dunlop wheels and brakes Mod No 12) are introduced and Maxaret units reworked in accordance with Dunlop Engineering Order No 159 are re-introduced.

Application

2. This work is to be carried out on all Vampire Mk 35A and Mk 35 aircraft except Mk 35 aircraft Serial No A79-606 which was modified by the manufacturer as a Trial Installation.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command:-

Ident No	Part No	Nomenclature	Remarks
(a) A79/504137	W15-1407A	Wing, Spare, LH, Mk 35A	Rework to paras 11(c) (iv) to (xxiii) and re-identify as Part No W15-1407A/1 and Ident No A79/504264.
(b) A79/504138	W14-1409A	Wing, Spare, RH, Mk 35A	Rework to paras 11(c) (iv) (xxiii) incl and re-identify as Part No W15-1409A/1 and Ident No A79/504265.

(Issued with A/L 163 - August 1959)

Ident No	Part No	Nomenclature	Remarks
(c) A79/504195	W15-1041A/1	Wing, Spare, LH Mk 35	Rework to paras 11(c) (iv) to (xxiii) incl and re-identify as Part No W15-1041A/2 and Ident No A79/504266.
(d) A79/504196	W15-1043A/1	Wing, Spare, RH, Mk 35	Rework to paras 11(c) (iv) to (xxiii) incl and re-identify as Part No W15-1043A/2 and Ident No A79/504267.

Partial modification sets for spares will be delivered from De Havilland Aircraft Pty Ltd, to the De Havilland Modification Centre, Bankstown, NSW. Units requiring mod sets are to demand from the DH Mod Centre, Bankstown NSW. A partial modification set will comprise :

For Spare (a) 1 off item 1, 1 off item 3, 1 off item 5, 7 off item 9
2 off item 10, 5 off item 11, 7 off item 12, 2 off item 13.
Set to be marked Spares/Mod V746/A79/504137.

For Spare (b) 1 off item 2, 1 off item 4, 1 off item 6, 7 off item 9
2 off item 10, 5 off item 11, 7 off item 12, 2 off item 13.
Set to be marked Spares/Mod V746/A79/504138.

For Spare (c) 1 off item 1, 1 off item 3, 1 off item 5, 7 off item 9
2 off item 10, 5 off item 11, 7 off item 12, 2 off item 13.
Set to be marked Spares/Mod V746/A79/504195.

For Spare (d) 1 off item 2, 1 off item 4, 1 off item 6, 7 off item 9
2 off item 10, 5 off item 11, 7 off item 12, 2 off item 13.
Set to be marked Spares/Mod V746/A79/504196.

Orders Superseded or Cancelled

5. This modification supersedes Vampire Mod No 293 (De Havilland (Aust) Mod V744) Vampire Mod No 296 (DH (Aust) Mod V748) and cancels RAAF STI Vampire/7 and DTS/SI Vampire 154.

Equivalent Modifications

6. De Havilland (Aust) Mod No V746 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	Qty	Stores Class
1	T27A/500854	DB 1250	Brake Assy LH (Dunlops)	1	A
2	T27A/500855	DB 1252	Brake Assy RH (Dunlops)	1	A
3	T27A/500811	DB 1259	Pipe, Feed, Lower, LH (Dunlops)	1	C
4	T27A/500810	DB 1263	Pipe, Feed, Lower, RH (Dunlops)	1	C
5	T27A/500839	DB 1257	Pipe, Feed, Upper, LH (Dunlops)	1	C
6	T27A/500838	DB 1261	Pipe, Feed, Upper, RH (Dunlops)	1	C
7	T27A/500730	ACM 14434	Maxaret Unit, Complete with Shims, LH (Dunlops)	1	
8	T27A/500731	ACM 14436	Maxaret Unit, Complete with Shims, RH (Dunlops)	1	
9	A79/504315	U15-95	Bolt, Brake Attachment, Special	14	
10		0001649ND	Nut, Thin, Special	4	
11	H28/13122	A27/GS	Nut, Steel, Med Tensile Slotted, 5/16" BSF	10	
12	H28B/12462	SP 9/C8	Pin, Split, Ni Alloy, 1/16" x 1" long	14	
13		A55/B4	Screw, Grub, Steel, 4BA x .025" long	4	
14	A79/504316	U15-95 Mk A	Bolt, Special, Fit 'A'	AR	
15	A79/504317	U15-95 Mk B	Bolt, Special, Fit 'B'	AR	
16	A79/504318	U15-95 Mk C	Bolt, Special, Fit 'C'	AR	
17	I1/9715	NPN	Wire, Locking, Non-corred 22 SWG	AR	
18	K3/353	NPN	Compound, Jointing, to Spec DTD 369A	AR	
19	K3/175	NPN	Primer, Zinc Chromate	AR	
20	K3/365	NPN	Covering, High Speed, Alum	AR	

Notes: (a) Items 1 to 13 inclusive will be delivered from De Havilland Aircraft Pty Ltd, to the De Havilland Modification Centre. Units requiring modification sets are to demand from the De Havilland Modification Centre, Bankstown, NSW.

(b) Each Modification Kit includes 14 off Bolts (item 9) as indicated above. The other 4 bolts required to complet the installation are to be either item 14, 15 or 16 as

determined below. Also following implementation of RAAF STI Vampire/7 oversize bolts may be required in the other fourteen positions. Provision therefore has been made for three grades referred to as Mks A, B and C being .004", .009" and .013" oversize.

(c) In anticipation of Unit requirements of bolts items Nos 14, 15 and 16, quantities determined by RAAF HQ are forwarded with the Modification Kit. Any of these bolts and unused standard size bolts (item 9) not required must be returned to the De Havilland Modification Centre Bankstown, NSW, immediately after incorporation of the modification in the aircraft. Additional quantities if required, may however, be demanded from the De Havilland Modification Centre.

(d) Items 17 to 20 inclusive are to be drawn from unit stores.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No off	Stores Class
21	T27A/500548	DB 1160	Brake Assy, LH (Dunlops)	1	
22	T27A/500547	DB 1162	Brake Assy, RH (Dunlops)	1	
23	T27A/500841	DB 1220	Pipe, Feed, Lower (Dunlops)	1	
24	T27A/500840	DB 1221	Pipe, Feed, Lower (Dunlops)	1	
25		Z15-1429 AND	Block, Junction Assy, LH (Post V 748)	1	
26		Z15-1430 AND	Block, Junction Assy, RH (Post V 748)	1	
27		Z15-1405 AND	Block, Junction Assy, LH (Pre V 748)	1	
28		Z15-1406 AND	Block, Junction Assy, RH (Pre V 748)	1	
29	T27A/500849	DB 1286	Pipe Feed Upper (Dunlops) LH (Post V 748)	1	
30	T27A/500850	DB 1288	Pipe Feed Upper (Dunlops) RH (Post V 748)	1	
		or			
31	T27A/500847	DB 1274	Pipe Feed Upper (Dunlops) LH (Post V 748)	1	
32	T27A/500846	DB 1276	Pipe Feed Upper (Dunlops) RH (Post V 748)	1	

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Item No	Ident No	Part No	Nomenclature	No off	Stores Class
33	T27A/500799(Z)	DB 1240	Pipe Feed (Dunlops) LH Pre V 748	1	
34	T27A/500800(Z)	DB 1241	Pipe Feed (Dunlops) RH (Pre V 748)	1	

Notes: (a) Items 21 and 22 are required for rework by Dunlop Rubber Aust Ltd Bayswater Vic. Units are to notify Maintenance Command immediately these items become available and await despatch authority.

(b) Pipes removed from aircraft embodying Vampire Mod 296 (DH Aust Mod V748) items 29 and 30 or 31 and 32, are to be returned promptly to the Master Modification Centre Bankstown. ELO De Havillands to be advised of despatch details.

(c) Pipes removed from aircraft NOT embodying Vampire Mod No 296 DE (Aust) Mod V 748 items 33 and 34 are obsolete and are to be disposed of in accordance with current authorised procedure.

(d) Items 25 and 26 or 27 and 28 are to be returned to store for despatch to the embodiment loan store, De Havilland Aircraft Pty Ltd, NSW, for use on Mk 35 and Mk 35A aircraft. De Havilland ELO to be advised of despatch details.

Disposal of Parts in Stock

9. (a) Stocks of items 21 and 22 are to be returned to "Dunlops", refer para 8 (a).

(b) Stocks of items 23, 24, 29, 30, 31, 32, 33 and 34 are obsolete and are to be disposed of in accordance with current authorised procedure.

(c) Stocks of items 25, 26, 27 and 28 are to be returned to De Havilland Aircraft Pty Ltd, refer para 8(c).

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of modification sets.

(Issued with A/L 163 - August 1959)

Method of Incorporation

11. (a) Man Hours Involved : Approximately 40 man hours will be required to incorporate this modification.

(b) Special Tools, Jigs, Etc. : No special tools will be required to incorporate this modification.

(c) Sequence of Operations :

(i) Lower gun bay doors and release all hydraulic pressure in accordance with current authorised procedure.

Note: Ensure all brake pressure is released by operating pedals in the cockpit until dual brake gauge reads zero.

(ii) Open nose cap and disconnect aircraft batteries.

(iii) Trestle aircraft in accordance with current authorised procedure.

Note: Operations (iv) to (xxiii) inclusive are applicable to both port and stbd main undercarriage legs.

(iv) Unlock the piston rod locking plate and screw in the piston adjusting rods until pressure is exerted to hold the brake plates firmly in position.

(v) Remove the main wheel.

(vi) Disconnect and discard the hydraulic pipes running from the dummy Maxaret Unit to the brake cylinders on the torque plate.

(vii) Disconnect the main supply and return hoses from the dummy Maxaret unit and remove the unit, complete with mounting bracket, retaining the two attaching bolts.

(viii) Remove the torque plate to axle attaching bolts and carefully remove the complete brake assy, items Nos 21 and 22, discard the bolts, nuts and split pins.

Note: Care must be taken undoing the two blind bolts which hold the maxaret mounting plate to the axle flange. These bolts are locked by two grub screws in the mounting plate.

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(ix) Inspect axles for serviceability including a dye check, or other authorised process, for cracks in vicinity of axle flange.

(x) Temporarily offer up the Maxaret unit and recess the stub axle mounting flange to accommodate the head of the top special wirelocked bolt on the Maxaret unit. When recessing flange care must be taken to ensure that the edg distance on flange bolt holes does not fall below 0.15". Locally restore finish to the axle flange using primer ite 19 and finish item 20.

(xi) Ensure that axle flange mounting face is clean and free fr all paint finish.

Important Note: In order to obviate the opening out of holes unnecessarily and yet still ensure the greatest possible degree of interchangeability of axles and torque plate when they are separated for servicing or recondition ing, it is essential that the instructions contained in the next three paragraphs, 11(c) (xii) to (xiv) inclusive, are strictly adhered to.

(xii) Offer up the torque plate assembly and locate the bolt holes at approx 11 o'clock and 5 o'clock positions as viewed from the axle nut or outboard position. Ream the torque plate and axle in conjunction to .316"/.317" if possible and fit 2 Mk A bolts, to provide a light tap fit through the torque plate and axle flange. If, owing to positional tolerances this cannot be achieved, then the holes should be reamed again in conjunction to .320"/.321" or .324"/.325" whichever is applicable - to provide a ligh tap fit with a Mk B or a Mk C bolt respectively.

(xiii) Selective fit bolts, ie, standard or oversize, are to be fitted in the remaining positions if possible without reaming. In certain cases these bolts will form a "wedge fit depending on the positional error between the corresponding holes. If the positional error does not allow this operation completely, the affected hole or holes may be opened to the next standard oversize.

(xiv) All reamed holes are to have their bolt sizes marked initially with pencil ie "A", "B" or "C" and when bolt selection and fitment has been confirmed, these holes are to be lightly stamped or "vibro-etched" at positions as indicated on Drawing A13273 Sheet 4. When bolt holes require reaming, the greatest possible care is to be taken to ensure that such reaming is kept to an absolute minimum. Any axles with holes larger than .330 are to be replaced by a serviceable item.

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(xv) Refer to drawing A13273 sheet 3 and position new brake unit assembly Part No DB 1250 LH and DB 1252 RH Item Nos 1 and 2 respectively on the axle flange and bolt together using new bolts and nuts items 9, 10 and 11, or oversize bolts items 14, 15 and 16 as determined in preceding paragraphs.

Note: All mating faces must be very lightly smeared with jointing compound before assembly.

(xvi) All slotted nuts are to be torque loaded to 14 to 17 ft/lbs and split pinned using new split pins item 12.

(xvii) The two bolts attaching the maxaret mounting plate are to be tightened to a minimum of 17 ft/lbs and locked using new grub screws item 11 well coated with jointing compound.

(xviii) Refer to drawing A13273 Sheet 2 and install maxaret unit, item Nos 27 and 28, using existing bolts and washers. Wirelock bolts when adjustments are complete using lockwire item 17.

(xix) Reconnect main supply and return hoses to the maxaret unit and wirelock the connections using lockwire item 17.

(xx) Instal new upper feed pipe Part Nos DB 1257 LH and DB 1261 RH items 5 and 6 between maxaret unit and upper brake cylinder. Tighten banjo bolt to a torque loading of 150 - 180 lbs/ins and wirelock as shown on drawing A13273 Sheet 1 using lockwire item 17.

(xxi) Assemble new bottom feed pipe items 3 and 4 between maxaret unit and lower brake cylinder again tightening cylinder banjo bolts to 150 - 180 lbs/ins and wirelock using lockwire item 17. Refer to drawing A13273 Sheet 1.

(xxii) Bleed high pressure hydraulic brake system in accordance with current authorised procedure. Refer AAP 721:79/33, Vol 1, Sect 3, Chapt 6, para 30 (vi).

Note: (a) With two bleed adaptors on each wheel instead of one it will be necessary to always bleed the bottom adaptors first.

(b) For information, clamping of pressure relay valves see AP 1803S, Vol 1, Sect 8, Chap 6.

(xxiii) It will now be necessary to release the air pressure in the shock absorber strut in each U/C leg and slowly

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collapse each leg to ensure that new brake assembly does not foul the leg fairing. Recharge leg in accordance with current authorised procedure upon completion of Test.

(xxiv) Replace gun bay doors.

(xxv) Remove trestles.

(xxvi) Connect aircraft batteries and close nose cap.

(d) Tests

Operate the hydraulic hand pump in the cockpit, obtain brake pressure, apply parking brake, and let aircraft stand for 1 hour to ensure that the items modified are free from hydraulic leaks.

(e) Recording

Record this modification in the airframe log book.

Drawings

12. Drawing A13273 consisting of 4 sheets is attached herewith.

Effect on Weight and Balance of the Aircraft

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air 9/84/1113 and 150/8/1709

Attachments : Drawing A13273 Sheets 1 to 4 inclusive

Date of Issue : 31st August 1959.

(Issued with A/L 163 - August 1959)

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L.	INITIALS	APPROVED
2	22.4.59	"2BA Nut" added to Drawing			
3	13-1-60	"IMPORTANT" ..... BLOCK" WAS "IMPORTANT! ENSURE CLAMP BLOCK IS .20" TO .30" FROM WHEEL FACE AND PARALLEL TO IT.	AL 206		

DB 1257 PIPE. L.H. 1-OFF.

DB 1261 PIPE. R.H. 1-OFF.

MAX. UNIT. L.H. ACM 14434

MAX. UNIT. R.H. ACM 14436

FOR FITTING & ADJUSTING OF UNIT SEE SHEET 2.

WIRELOCK TOGETHER.

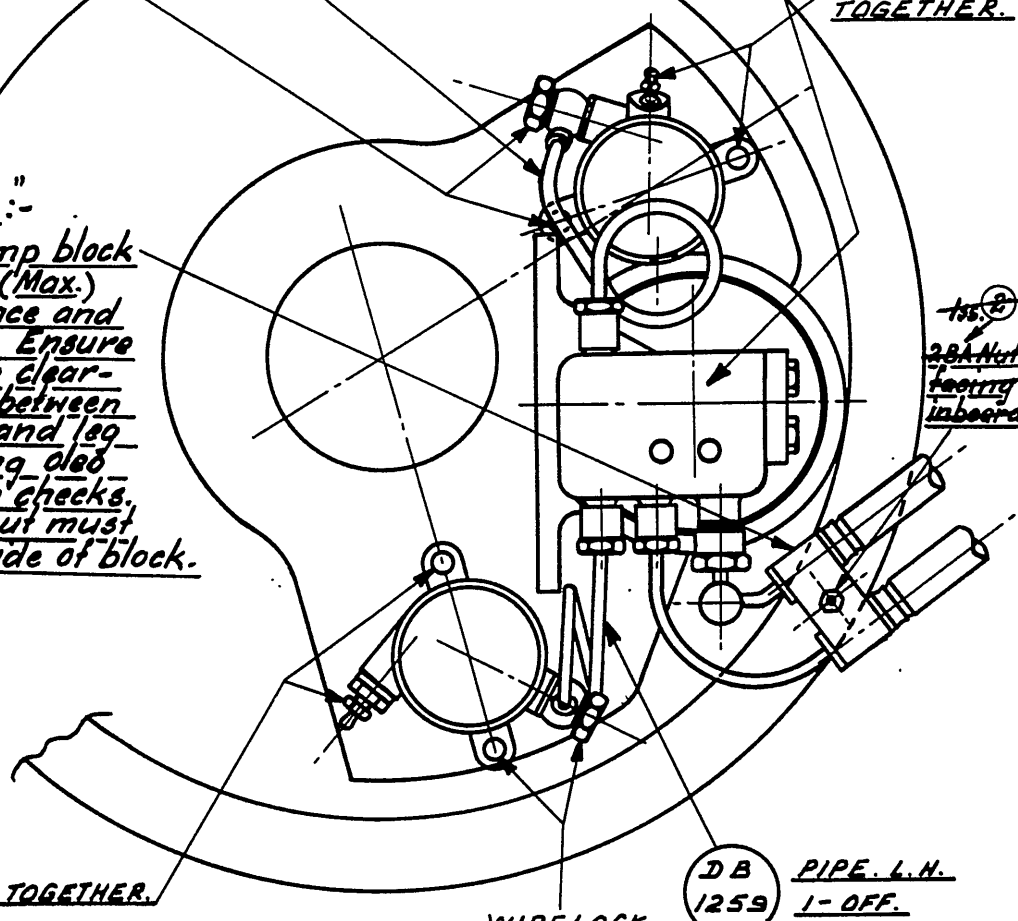
WIRELOCK TOGETHER.

Iss. ③

"Important":-
Ensure clamp block is .50" to .70" (Max.) from wheel face and parallel to it. Ensure that adequate clearance exists between clamp block and leg fairing during oleo compression checks. Clamp block nut must be on wheel side of block.

~~Iss. 2~~

~~2BA Nut~~ facing inboard.



WIRELOCK TOGETHER.

WIRELOCK TOGETHER.

DB 1259 PIPE. L.H. 1-OFF.

DB 1263 PIPE. R.H. 1-OFF.

VIEW LOOKING OUTBOARD.
LEG OMITTED FOR CLARITY.

L.H. DRAWN.

DE HAVILLAND DRAWING No. OOM444. SHEET 1. OF 4 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING	REINTRODUCTION OF MAXARET UNITS & REDESIGNED TORQUE PLATES.

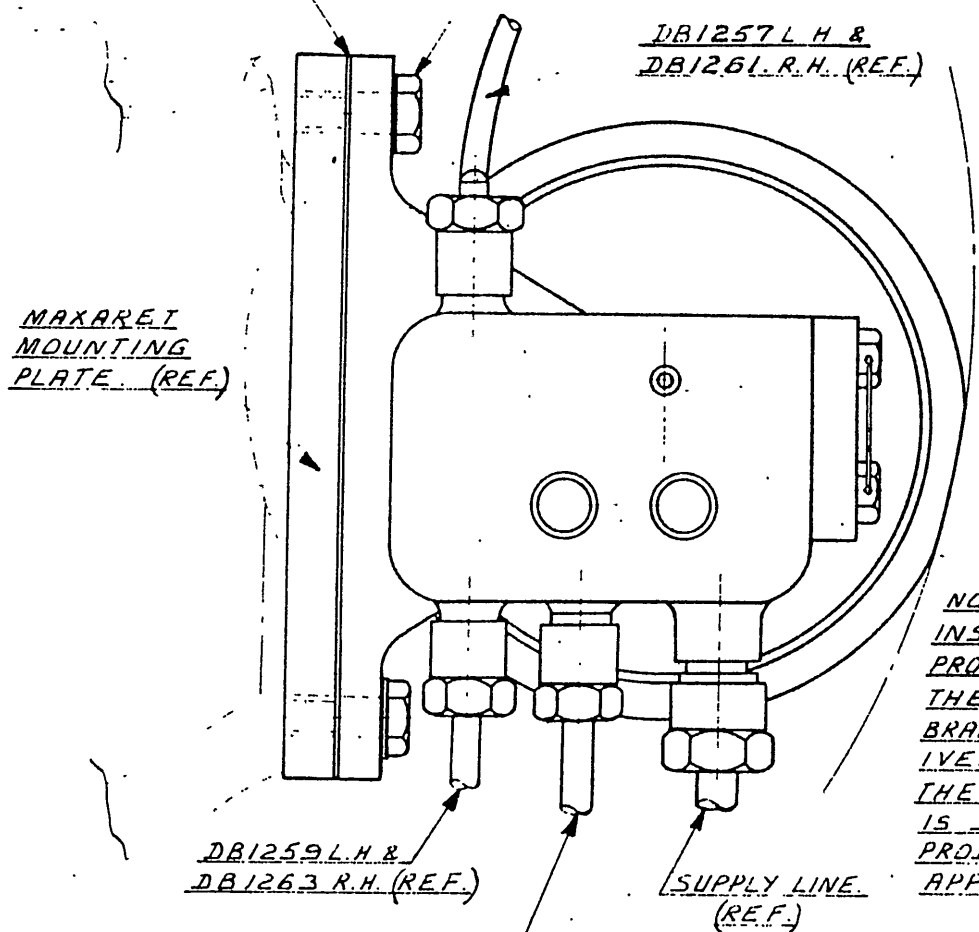
LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 33/35 A + 35
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD 294
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		SCALE		DRAWING NO.	A-13273 SHT. 1 OF 4 SHTS.
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D.L.	INITIALS	APPROVED

* SHIMS.
AHO 27450
AHO 27451
AHO 27452
SUPPLIED WITH
MAXARET
UNITS.

ATTACH MAXARET UNIT, USING EXISTING BOLTS & WASHERS & WIRELOCK BOLTS ON ASSY.



NOTE:-
INSERT THE SHIMS * PROVIDED, UNDER THE MOUNTING BRACKET & SELECTIVELY ADJUST UNTIL THE MAXARET TYRE IS DEFLECTED TO PRODUCE A FLAT OF APPROX. 1"0

INSTALLATION OF MAXARET UNIT.

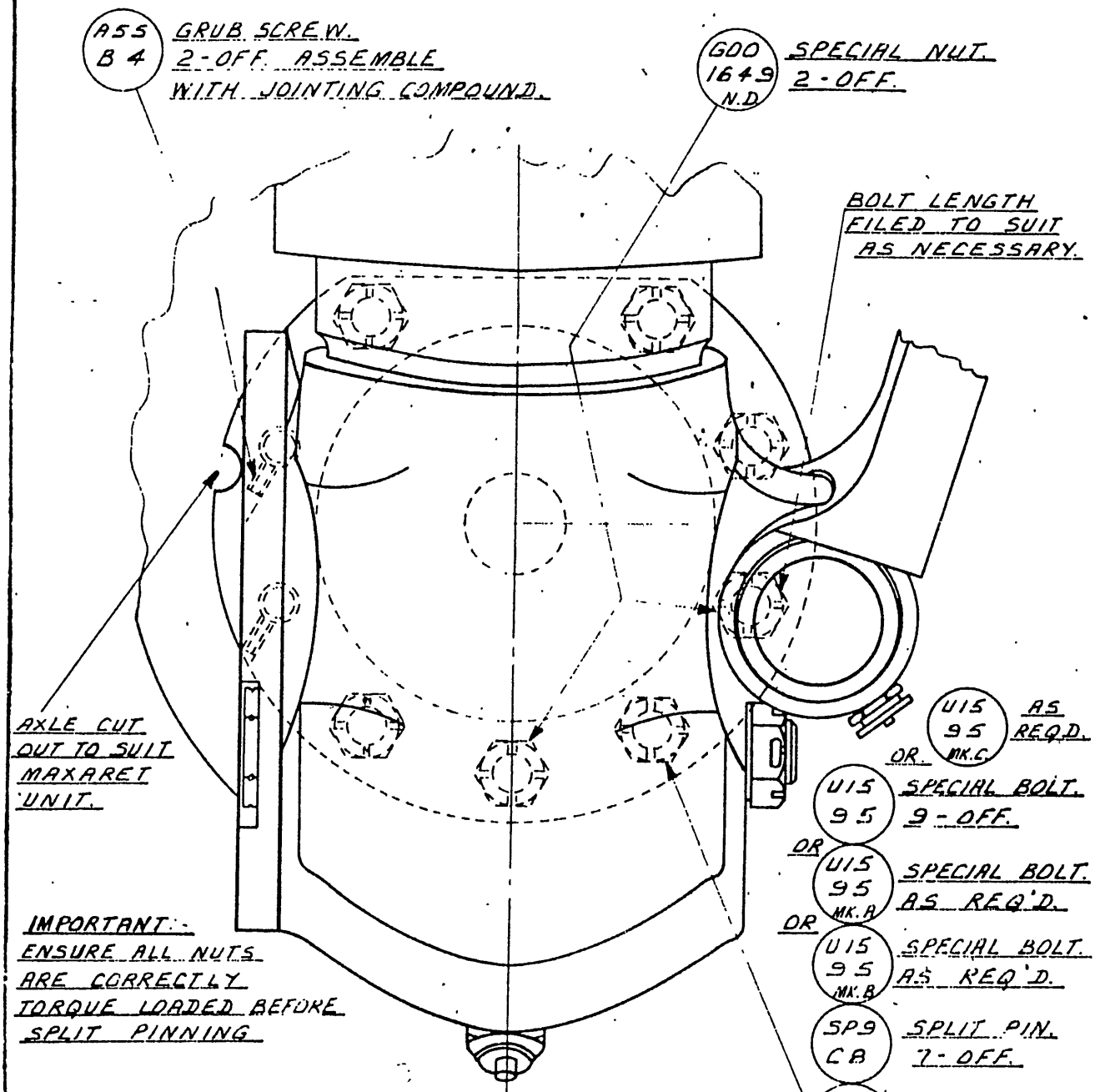
DE HAVILLAND DRAWING No. DOM444. SHEET 2. OF 4. SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING	REINTRODUCTION OF MAXARET UNITS & REDESIGNED TORQUE PLATES.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 33/35 A + 35
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD 284
SURFACE FINISH AUSTRALIAN STANDARD ENG DRWG. PRACTICE A.S.E.21		SCALE		DRAWING NO.	A-13273 SHT 2 OF 4 SHTS
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D I L	INITIALS	APPROVE



ATTACHMENT OF TORQUE PLATE TO AXLE FLANGE.

DE HAVILLAND DRAWING No. OOM444. SHEET 3. OF 4 SHEETS

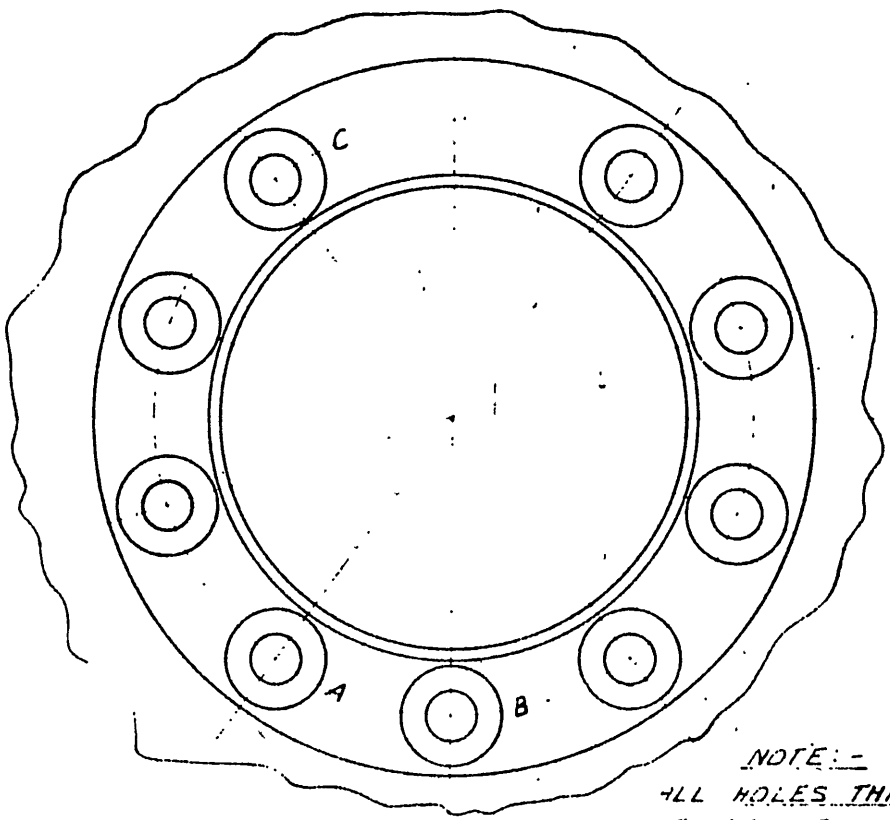
REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING	REINTRODUCTION OF MAXARET UNITS & REDESIGNED TORQUE PLATES.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 33/35 A + 35
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD 294
SURFACE FINISH AUSTRALIAN STANDARD ENG DRWG. PRACTICE A.S.C.21		SCALE		DRAWING NO.	A-13273 SHT 3 OF 4 SHTS.
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

DO NOT SCALE

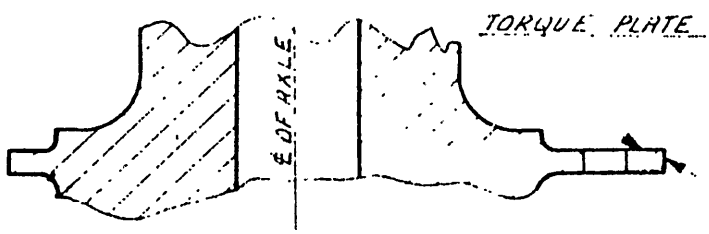
ISSUE NO	DATE	ALTERATION	D. I. L	INITIALS	APPROVED

NOTE!
LETTERS ARE TO BE VIBRO ETCHED OR LIGHTLY STAMPED.



MARKING OF TORQUE PLATE.

NOTE:-
ALL HOLES THAT HAVE TO BE REAMED OVERSIZE, ARE TO HAVE THE APPROPRIATE LETTER STAMPED AS SHOWN.



MARKING OF AXLE.

APPROPRIATE LETTERS TO BE STAMPED ON THIS FACE ADJACENT TO O/S. HOLES.

DE HAVILLAND DRAWING No. OOM 444. SHEET 4. OF 4. SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING	REINTRODUCTION OF MAXARET UNITS & REDESIGNED TORQUE PLATES.

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MK 33/35A + 35
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN
ANGLES	± ½°	FINISH		TECH ORDER	VAMPIRE MOD 294
SURFACE FINISH AUSTRALIAN STANDARD ENG DRWG. PRACTICE A S.C.21		SCALE		DRAWING NO.	A-13273 SHT 4 OF 4 SHTS.
		DRAWN	APPROVED		DRWG. A SIZE
		TRACED	CHECKED		

TO STRENGTHEN THE EMERGENCY HYDRAULIC HAND PUMP HANDLE ALSO PROVIDE LOCKING FOR THE HANDLE IN THE EXTENDED POSITION

Reason for and Description of Modification

1. This modification is introduced to overcome defects, experienced in service both locally and overseas in which the handle cracked in vicinity of th welded section joint, this modification replaces the lever portion of the handl with one of heavier gauge and also provides locking action in the extended position of the handle.

Application

2. This work is to be carried out on all Mk 35A and Mk 35 Vampire Trainer aircraft A79-600 to 650 inclusive. Aircraft A79-651 and subsequent will be modified by the manufacturer.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. No action required.

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modification

6. De Havilland (Aust) Mod V747 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item	Ident No	Part No	Nomenclature	Qty	Stores Class
1		S15-1215AND	Lever	1	
2		DHS94/6/105	Pin dowel 3/16" dia 1.05" long HTS	1	

Item	Ident No	Part No	Nomenclature	Qty	Stores Class
3	K3/356		Colours Identification glossy white. To spec DTD 772A	AR	
4	K3/321		Enamel Cellulose black to Spec K18	AR	
5	K2/210		Grease	AR	
6		S15-1229A	Retainer Band	1	
7	H28/12528	A25-1B	Bolt, HTS Hex Hd, 4BA .50" Long	1	
8	H28/27032	AGS 2002B/1	Nuts MS Self Locking Nylok Insert 4BA	1	
9	K3/368		Primer, synthetic resin, Spec DTD772A	AR	

Notes: (a) Items 1, 2, 6, 7 and 8 inclusive will be retained as a modification set at the De Havillands Modification Centre pending issue or demand.

(b) Units requiring modification sets are to demand from De Havilland Modification Centre. Items 3, 4, 5 and 9 inclusive will be drawn from unit store.

Disposal of Parts Removed

8. The following part will be rendered redundant by the incorporation of this modification:-

Item	Ident No	Part No	Nomenclature	Qty	Stores Class
10		15S-951AND	Lever	1	

Note: Item 10 is obsolete and is to be disposed of in accordance with current authorised procedure.

Disposal of Parts in Store

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of modification sets.

Method of Incorporation

11. (a) Man-hours Involved : Approximately $2\frac{1}{2}$ man-hours will be required for the completion of this modification.

(b) Special Tools and Jigs Etc : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Locate the emergency hydraulic hand pump handle in cockpit at tie beam between the two seats.

(ii) Refer to drawing A13261 remove handle assembly from pump retaining the two bolts, nuts and washers for re-assembly.

(iii) Separate the outer and inner tubes of the handle by removing and discarding the pin located near the welded joint, the 2BA screw and its lockwasher. Discard the lever item 10 (15S-951AND). Remove the nut from the handle by grinding and filing, leaving the outside surface smooth and free from irregularities and treat re-work surface with items 9 and 4. Remove all swarf, grease using item 5 and retain for re-assembly.

Note: Handles fitted to some aircraft have already been reworked as above and are retained with a band, bolt and nut in lieu of the 2BA screw and lockwasher. The band, bolt and nut removed from such handles are to be discarded.

(iv) Using new lever item 1 (S15-1215AND) and 3/16" dia pin item 2. Re-assemble handle with tension spring to lever ensuring that tension spring is held in position as shown on drawing A13261. Ends of pin to be lightly rivetted over to retain.

(v) Line up the 3/16" dia hole in handle with the slot in lever (item 1), position the Retainer Band (item 6) as shown on drawing OOM 420 and retain using Bolt and Nut (items 7 and 8).

(vi) Obliterate part Nos on handle using black paint (matt) item 3. Stencil in 3/8" high lettering "pull and twist" using white paint item 4 as shown on drawing. Also add new handle assembly No as indicated A13261.

(vii) Check hand grip slides and locks freely on lever and assemble handle assembly to pump using the 2 bolts nuts and washers retained for re-assembly in operation (ii)

(d) Tests

Nil.

(e) Recording

Record this modification in the airframe log book.

Drawings

12. Drawing A13261 consisting of one (1) sheet is attached herewith.

Effect on the Weight and Balance of the Aircraft

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References: Files, Department of Air, 9/84/63 and 150/8/1676

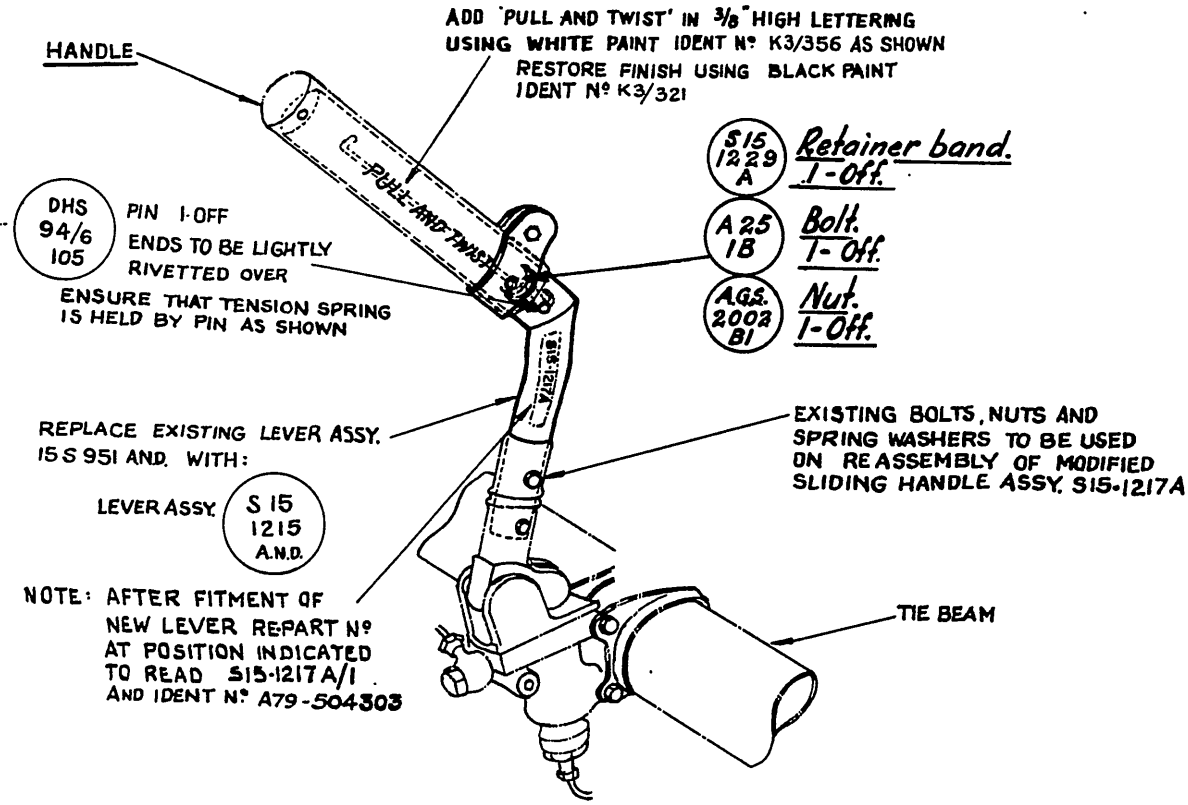
Attachments: Drawing A13261

Date of Issue: 19th November, 1959.

(Issued with A/L 172 - November 1959)

DO NOT SCALE

ISSUE NO.	DATE	ALTERATION	D. I. L.	INITIALS	APPROVED
2	29.5.59	Retainer band called for and shown pictorially.	"		
3.	17.6.59	Position of Retainer band reversed pictorially.	"		



DE HAVILLAND DRG. Nº 00M420 Nº OFF SHEETS 1 SHEET Nº 1

REFERENCE	ISSUED BY	TITLE
		TO STRENGTHEN THE EMERGENCY HYDRAULIC HAND PUMP LEVER

LIMITS UNLESS STATED		MATERIAL		COMPONENT OF	
DECIMALS	± .010"	SPEC.		MACHINE	VAMPIRE MKS 33/35A&35
FRACTIONS	± 1/32"	TREATMENT		ENGINE	GOBLIN
ANGLES	± ½°	FINISH		TECH. ORDER	VAMPIRE MOD Nº 295
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.CZI		SCALE		DRAWING NO.	A13261
		DRAWN	APPROVED		
		TRACED	CHECKED		

Class 2

TO PROVIDE A SEPARATE FEED PIPE TO THE UPPER BRAKE PRESSURE CYLINDER FROM JUNCTION BLOCK INTRODUCED BY DH(AUST) MOD NO V744 - INTRODUCTION

Reason for and Description of Modification

1. To prevent further fracturing of the feed pipe between the cylinders on the torque plate, a redesigned pipe run has been introduced. This necessitates a new union in the dummy maxaret units and provision for a bleeding point on the lower brake cylinder.

Application

2. (a) This work is to be carried out on all Vampire Mk 35A aircraft and on Vampire Mk 35 aircraft Serial No A79-600 to A79-650 inclusive except those aircraft which are modified to RAAF Vampire Mod No 294 (V746) - redesigned 107° torque plates. A79-651 and subsequent will have Mod 296 incorporated during manufacture.

(b) Aircraft embodied with Mod 296 at any time prior to 1st February 1959 and are not yet fitted with Mod 294, are to have the upper feed pipes Part Nos DB1274 and DB1276 removed and replaced by the modified pipes DB1286 and DB1288.

Note: The incorporation of Mod 294 will supersede and cancel Mod 296.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares will be affected and are to be modified at the direction of Headquarters Maintenance Command:-

(Issued with A/L 168 - October, 1959.)

Ident No	Part No	Nomenclature	Remarks
(a) A79/504137	W15-1407A	Wing spare, LH, Mk 35A	Rework to paras 11 (c) (viii) to (xi) inclusive and certify for Mod on the wing modification plate
(b) A79/504138	W15-1409A	Wing spare, RH, Mk 35A	
(c) A79/504195	W15-1041A/1	Wing spare, LH, Mk 35	
(d) A79/504196	W15-1043A/1	Wing spare, RH, Mk 35	

Partial modification sets for spares will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland Modification Centre.

Units requiring partial modification sets are to demand from the De Havilland Modification Centre, Bankstown, NSW.

A partial modification set will comprise.

For spare (a) Item 1, 2 off item 3, 1 off item 4, 1 off item 5, 1 off, item 6, 2 off item 7.
Set to be marked "Spares/Mod V748/A79/504137".

(b) Item 2, 2 off item 3, 1 off item 4, 1 off item 5, 1 off item 6, 2 off item 7.
Set to be marked "Spares/Mod V748/A79-504138".

(c) Refer (a) above
Set to be marked "Spares/Mod V748/A79-504195".

(d) Refer (b) above
Set to be marked "Spares/Mod V748/A79-504196".

Orders Superseded or Cancelled

5. DTS SI/Vampire No 154 will be cancelled by the introduction of this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V748 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No off per Set	Stores Class
1	T27A/500849	DB1286	Pipe, feed, port, upper, (Dunlops)	1	
2	T27A/500850	DB1288	Pipe, feed, stbd, upper, (Dunlops)	1	
3	H28C/12047	AGS1186/A	Washer, composite, sealing	4	
4	T27A/500847	DB1256	Bolt, banjo (Dunlops)	2	
5	T27A/500848	DB1277	Adapter, bleed screw (Dunlops)	2	
6	H28B/11966	AGS1174	Screw, bleed	2	
7	T27A/500637	DB1198	Washers, soft alum (Dunlops)	4	
8	H28C/12425	AGS1109K	Union, reducing	2	
9	H28C/8215	AGS1186B	Washer, jointing	8	
10	H28B/12462	SP9/C8	Pin, split, nickel alloy, 1/16" x 1" long	4	
10a	H28C/8225	AGS1138A	Washer, jointing	2	
11	I1/9715	NPN	Wire, steel, 22 SWG	AR	

Notes: (a) Items 1 to 10a inclusive will be retained as a modification set at the De Havilland Modificatio Centre pending issue or demand. Units requirin modification sets are to demand from the De Havilland Modification Centre.

(b) Item 11 is to be drawn from unit stores as required.

(c) For aircraft already embodying RAAF Vampire Mod No 296, (DH Mod V748) a mod kit comprising Items 1 to 3 inclusive will be retained as a modification set at the De Havilland Modificatio Centre pending issue or demand. Units requirin these modification sets are to demand from the De Havilland Modification Centre specifying the applicable aircraft Serial No.

(Issued with A/L 168 - October, 1959)

Disposal of Parts Removed

8. The following parts are rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No off per Set	Stores Class
12	T27A/500799	DB1240	Pipe, feed, s/assy, port, (Dunlops)	1	
13	T27A/500800	DB1241	Pipe, feed, s/assy, stbd, (Dunlops)	1	
14	T27A/500637	DB1198	Washer, soft alum, (Dunlops)	4	
15	T27A/500845	DB1274	Pipe, feed, port, upper (Dunlops)	1	
16	T27A/500846	DB1276	Pipe, feed, stbd, upper (Dunlops)	1	

Notes: (a) Items 12, 13 and 14 are obsolete and are to be disposed of in accordance with current authorised procedure.

(b) Items 15-16 when applicable are to be returned to "Dunlop Aviation Division", Mountain Highway, Bayswater, Victoria, for salvage of end fittings.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of parts.

Method of Incorporation

10. (a) Man-Hours Involved : Approximately 32 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs, &c. : No special tools are required to incorporate this modification.

(Issued with A/L 168 - October, 1959)

(c) Sequence of Operations :

(i) Open nose cap and disconnect aircraft batteries.

(ii) Lower gun bay doors and completely release all hydraulic pressure in accordance with current authorised procedure.

(iii) Locate on the port and stbd U/carriage legs the dummy maxaret units and disconnect all hydraulic connections.

(iv) Remove these dummy units by undoing their two 2BA attachment bolts. Retain these bolts nuts etc for re-attachment. Discard the split pins.

(v) Completely dismantle dummy unit and drill and tap hole for union adapter as shown in drawing A13090 Sheet 1 of 2. Replace all existing union adapters using new jointing washers item Nos 9 and 10a, new union adapter and joining washer item Nos 8 and 9.

Note: It is important that all swarf and foreign objects are removed from inside the unit.

(vi) Re-install dummy unit to its mounting bracket using nuts bolts and washers removed in Para (iv) and new split pin item No 10.

(vii) Wire lock all unions replaced in para (v) and re-connect all hydraulic connections.

(viii) Working now on the port and stbd wheel brakes remove the brake feed pipes Part Nos DB1240 (Port) and DB1241 (Stbd) items 12 and 13 as shown on drawing A13090 Sheet 2 of 2. Retain the Banjo Bolt attaching the bottom end of this pipe and discard the existing jointing washers.

(ix) Fit the new pipes item Nos 1 and 2 to their respective sides using new Banjo Bolts item 4 and new bonded seals item 3, (refer to drawing A13090 Sheet 2 of 2) at the top brake cylinder.

(x) At the bottom brake cylinder fit the new bleeding adapter and bleed nipple items 5 and 6 using existing Banjo Bolt and new jointing washers item 7.

(Issued with A/L 168 - October, 1959)

Note: These bolts should be tightened to a torque loading of 150 - 180 lbs ins.

(xi) Wire lock all connections in accordance with current authorised procedure. Both bleed screws on each wheel may be left until after bleeding is completed.

(xii) Bleed the high pressure brake system in accordance with current authorised procedure except for the new bleed nipple which must be opened first and bled until oil stream is clear of air bubbles then the top cylinder bled as normal. Wire lock bleed nipples.

(xiii) After bleeding is complete close the gun bay doors, reconnect the aircraft batteries and close the nose cap.

(d) Tests : Operate the hydraulic hand pump in the cockpit and obtain brake pressure, apply parking brake, and let aircraft stand for 1 hour to ensure that the items modified are free from hydraulic leaks.

(e) Recording : Record this modification in the Airframe Log Book.

Drawings

12. Drawing A13090 consisting of two (2) sheets is attached herewith.

Effect on Weight and Balance of the Aircraft

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References: Files, Department of Air, 9/84/1113 and 150/8/1385.

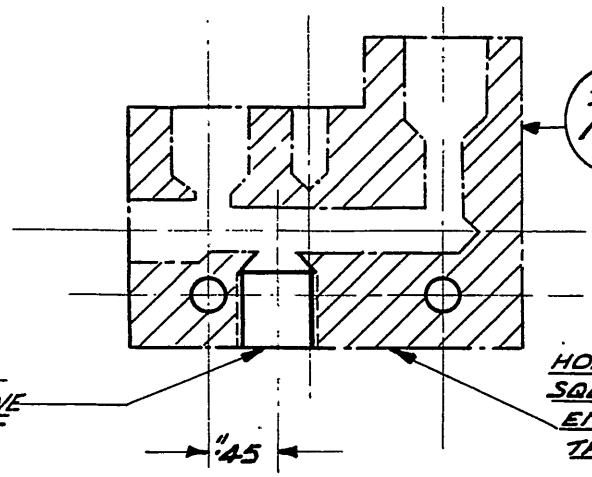
Attachments: Drawing A13090 Sheets 1 and 2.

Date of Issue: 15th October, 1959.

(Issued with A/L 168 - October, 1959)

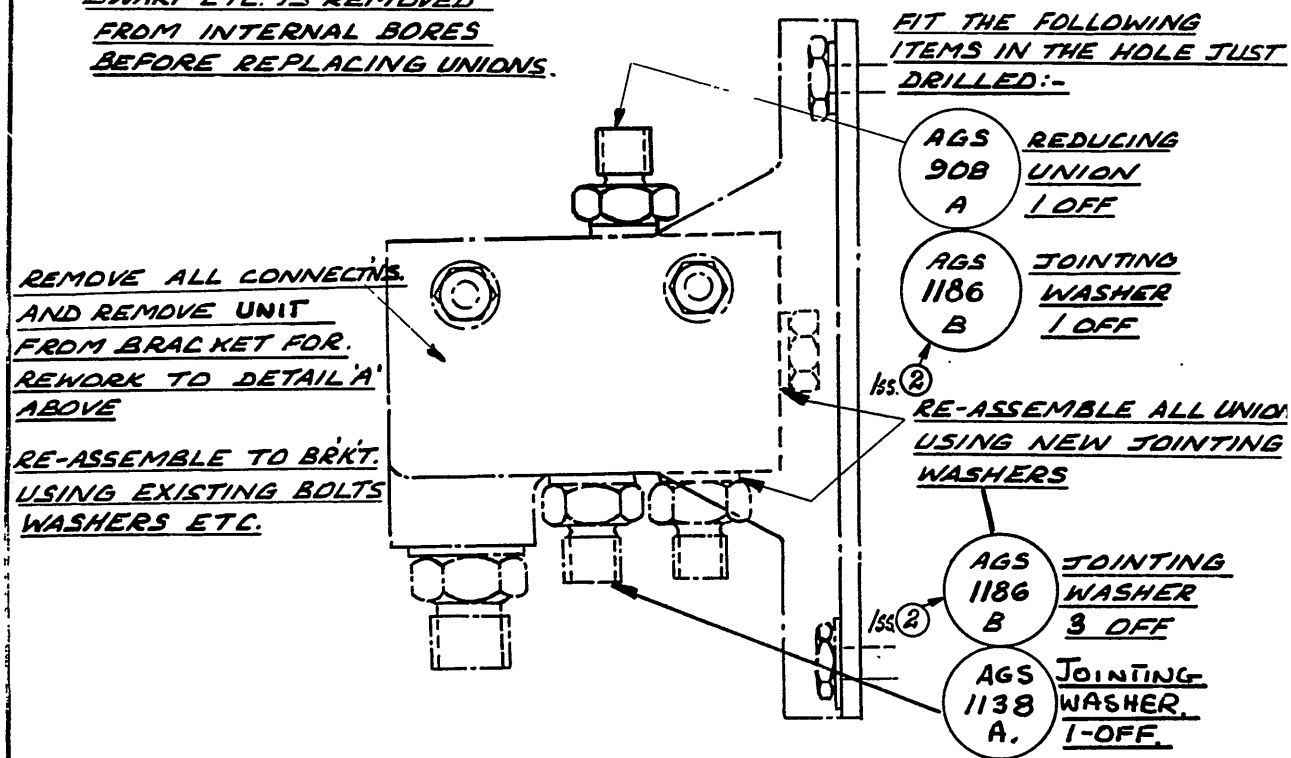
DO NOT SCALE

ISSUE No.	DATE	ALTERATION	CHK'D	INITIALS	APPROVED
2	19.12.58	A.G.S.1186B was :- A.G.S.1138B	✓		



DETAIL 'A'

IMPORTANT! ENSURE ALL SWARF ETC. IS REMOVED FROM INTERNAL BORES BEFORE REPLACING UNIONS.

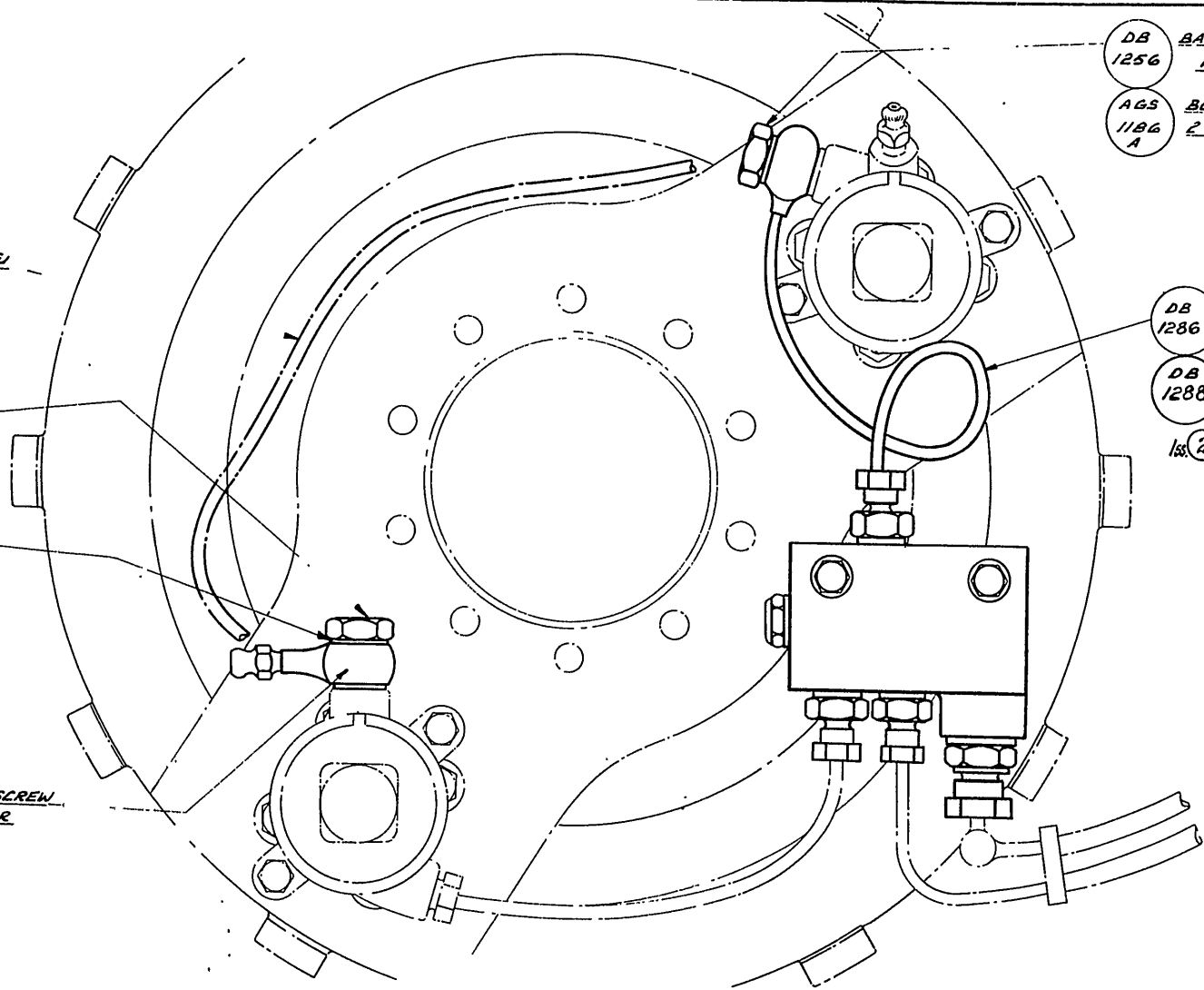


DE HAVILLAND DRAWING NO. DOM 406 SHEET 1 OF 2 SHEETS.

REFERENCE	ISSUED BY	TITLE
		RE-ROUTING OF BRAKE PIPES ON THE PORT & STBD. BRAKE TORQUE PLATES

LIMITS UNLESS STATED	MATERIAL		COMPONENT OF
DECIMALS ± .010"	SPEC.		MACHINE: VAMPIRE.
[illegible]	TREATMENT		ENGINE
[illegible]	FINISH		TECH. ORDER: VAMPIRE MOD Nº 296.
[illegible]	SCALE		DRAWING NO. A-13090
AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.E.1	[illegible]	APPROVED / CHECKED	SHEET 1.

DO NOT SCALE



DB 1256 — BANJO BOLT — 1 OFF

AGS 1186 A — BONDED SEAL — 2 OFF

REMOVE PIPES DB1240 & DB1241

DB 1286 — PORT

DB 1288 — ST'B'D

1 OFF EACH

Iss. 2

EXISTING BANJO BOLT

DB 1198 — WASHERS — 2 OFF

AGS 1174 — BLEED SCREW — 1 OFF

BB 1277 — BLEED SCREW ADAPTOR — 1 OFF

ALL CONNECTIONS TO BE WIRE LOCKED

PORT SIDE SHOWN
ST'B'd. SIDE OPPOSITE

ISSUE NO	DATE	ALTERATION	D.I.L.	INITIALS	APPROVED
2	11.1258	DB1286 and DB1288 were :- DB1274 and DB1276 respectively.			

DE HAVILLAND DRAWING NO. OOM 406 SHEET 2 OF 2 SHEETS.

REFERENCE	ISSUED BY

LIMITS UNLESS STATED		MATERIAL	
DECIMALS	± .010"	SPEC.	
FRACTIONS	± 1/32"	TREATMENT	
ANGLES	± 1°	FINISH	

SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.Z.

TRACED | APPROVED | CHECKED

TITLE: RE-ROUTING OF BRAKE PIPES ON THE PORT & ST'B'D. BRAKE TORQUE PLATES

COMPONENT OF	
MACHINE	VAMPIRE.
ENGINE	
TECHNOGRAPH	VAMPIRE M[illegible] No 1

DWG. NO. A-1305 SHEET 2. SIZE

AAP 721:79 VOL 2 PART 2 VAMPIRE MODIFICATION NO 297

Class 2

INTRODUCTION OF 3/16" RETAINING PINS IN BRAKE PRESSURE PLATE (WHEELS AND BRAKES MOD NO 10)

Reason for and Description of Modification

1. Investigation following recent defects revealed signs of shear marking on the retaining pins in the brake pressure plate.

Wheels and brakes modification No 10 provides for larger pins with an interference fit.

Application

2. This modification is to be carried out on MK 35 aircraft Serial Nos 600 and 617 inclusive. MK 35 aircraft A79-618 and subsequent will be modified by the manufacturer. This modification is also to be carried out on MK 35A aircraft Serial Nos A79-823, 827, 810, 822, 803 and 821. All other MK 35A aircraft have this modification incorporated concurrently with RAAF Vampire Modification 207 DH Modification V693.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depot or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command.

Ident No	Part No	Nomenclature	Remarks
(a) A79/504137	W15-1407A	Wing, spare, LH MK 35A	Rework in accordance with para 11 (c) (ii) to (ix) inclusive and certify for Mod 297 on the wing modification plate
(b) A79/504138	W15-1409A	Wing, spare, RH MK 35A	
(c) A79/504195	W15-1041A/1	Wing, spare, LH MK 35	
(d) A79/504196	W15-1043A/1	Wing, spare, RH MK 35	

Notes: (a) Partial modification sets for spares will be delivered from Dunlop Aviation Division to De Havillands Modification Centre.

(b) Units requiring partial modification sets are to demand from De Havilland Modification Centre.

(c) A partial modification set will comprise

(Issued with AL 143 - May 1959)

For spare (a))
For spare (b)) These spares will be modified when RAAF Modification 207 (DH Mod V693) is incorporated

For spare (c) Items 1 and 2, 2-off each and 4-off item 3. Set to be marked "Spares/Mod V749/A79-504195".

For spare (d) Items 1 and 2, 2-off each and 4-off item 3. Set to be marked "Spares/Mod V749/A79-504196".

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the incorporation of this modification.

Equivalent Modifications

6. The De Havilland (Aust) Mod V749 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
1.	T27A/500825	DB1271	Plate, pressure	4	
2.	T27A/500826	DB1272	Nut, piston rod	4	
3.	H28C/13770	SP41/C	Washer, DTD171, lock, tab, straight, .195" I/D	8	

Note: Items 1 to 3 will be delivered from Dunlop Aviation Division to De Havilland Modification Centre. Units requiring modification sets are to demand from the De Havilland Modification Centre, Bankstown, NSW.

Disposal of Parts Removed

8. The following parts will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
4.	T27A/500627	DB1189	Plate, pressure	4	
5.	T27A/500771	DB1218	Nut, piston rod	4	

(Issued with AL 143 - May 1959)

Note: Items 4 and 5 are to be returned to "Dunlop Aviation Division", Mountain Highway, Bayswater, Victoria, to be reworked to Dunlop wheels and brakes Mod No 10.

Disposal of Parts in Stock

9. Any stocks of items 4 and 5 are to be returned to "Dunlop Aviation Division", Mountain Highway, Bayswater, Victoria, to be reworked to Dunlop Wheels and Brakes Mod No 10.

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "D" servicing after receipt of modification sets.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 12 man-hours will be required to incorporate this modification

(b) Special Tools, Jigs, &c : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Trestle aircraft in accordance with current authorised procedure.

Note: Operations (ii) to (ix) inclusive refer to both port and starboard brake units.

(ii) Locate the operating cylinders on the wheel brake unit. Depress the locking collar on both wheel cylinders and turn the piston rods until the wheel locks.

(iii) Unlock the axle nut by removing the 2BA locking bolt. Unscrew the axle nut, remove the axle collar and then remove the wheel.

(iv) Working on the upper cylinder, unscrew the piston rod until the piston rod nut (item 5) is free. The nut may then be taken off and the pressure plate (item 4) removed.

(v) Working on the pressure plate (item 4), remove two 2BA backing plate screws (Part No DB1197 (ref) and discard tab washers. Remove the backing plate (Part No DB1174 ref) and using the existing screws and new tab washers, (item 3) re-assemble it on the new pressure plate (item 1).

Note: The screws must be tightened before locking with tab washers (item 3).

(vi) Now assemble the new pressure plate (item 1) and piston rod, nut (item 2) to the brake assembly. Engage the piston rod in the nut and screw in the rod until this unit is locking the wheel.

(vii) Repeat operations (iv), (v) and (vi) on the lower operating cylinder.

(viii) Replace the wheel, axle collar and axle nut. Relock the axle nut with the 2BA bolt.

(ix) The piston rods may then be slackened off and the brake adjusted in accordance with current authorised procedure.

(x) Lower the aircraft and remove the jacks.

(d) Tests : No tests are required for this modification.

(e) Recording : Record this modification in the airframe log book.

Drawings

12. No drawings are, required.

Effect on Weight and Balance of the Aircraft

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/1113 and 150/8/1700

Date of Issue : 21st May 1959

(Issued with AL 143 - May 1959)

AAP 721:79, Vol 2, Pt 2

VAMPIRE MODIFICATION NO 298

Class 3

TO PROVIDE IMPROVED FIT FOR RUDDER DAMPER STRUT MOUNTING BRACKET

Reason for and Description of Modification

1. The existing bracket TB15-5A is unsatisfactory in that the damper is only located fore and aft by the shoulders of a locating groove seating on the bend radius of the bracket. This modification provides an improved fit for the rudder damper strut mounting bracket.

Application

2. This work is to be carried out on all Mk 33/35A aircraft and Mk 35 aircraft Serial Nos A79-600 to A79-633 inclusive. Aircraft A79-634 and subsequent will have this modification incorporated during manufacture.

Responsibility for Incorporation

3. This modification is to be incorporated by operating units and aircraft depots or the civilian contractor responsible for the repair of Vampire aircraft. The trade mustering responsible is airframe fitter.

Action in Respect of Spares

4. The following spares are affected and are to be modified at the direction of Headquarters Maintenance Command.

Ident No	Part No	Nomenclature	Remarks
A79/504062	TB15-23A/3	Fin and Boom Assy LH	Rework to paras 11(c) (i) to (x) and certify for Mod 298 on the tail boom modification plates.
A79/504063	TB15-25A/3	Fin and Boom Assy RH	

(Issued with A/L 144 - May, 1959)

Orders Superseded or Cancelled

5. No orders are superseded or cancelled by the introduction of this modification

Equivalent Modification

6. De Havilland (Aust Mod No V750) is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1	H28/ 8301	AS 1242/2B	Bolt, HTS 90° C's'k H'd 4BA x .55" long	8	C
2	H28C/ 12305	SP 13B	Washer, MS Standard, 4BA	AR	C
3	H28/ 27024	AGS 2001B/1	Nut, MS self locking, nyloc, 4BA	8	C
4	K3/ 368		Primer, synthetic resin, DTD 772A	AR	C
5	K3/ 365		Paint, high speed, Aluminium. DTD 772A	AR	C
6	K3/ 353		Spec DTD 369A. Varnish Pigmented Jointing Compound	AR	C

NOTE : Items 1 to 6 inclusive are to be drawn from Unit Stores.

Disposal of Parts Removed

8. Not applicable.

Disposal of Parts in Stock

9. Not applicable.

(Issued with A/L 144 - May, 1959)

When Modification is to be Incorporated

10. The modification is to be incorporated as soon as practicable but not later than the next "E" servicing after receipt of modification sets.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 16 man-hours will be required for the completion of this modification.

(b) Special Tools, Jigs, Etc : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations: (Applicable to Port and Stbd Booms)

(i) Remove the extreme aft access panel on the tail boom and locate the forward rudder damper strut mounting bracket, Part No TB15-5A (ref). Retain access panel and its mounting screws for re-assembly.

(ii) Remove screws securing strap to bracket and retain for re-assembly.

(iii) Drill out 4 rivets securing bracket Part No TB15-5A to tail boom skin.

(iv) Remove bracket from tail boom.

(v) Modify bracket as detailed on Drawing A13260, Sheet 1.

(vi) Open up the 4 rivet holes in the underside of the tail boom with a No 27 drill (.144 in dia) and countersink 90^{o} x .25 in dia on the external face.

(vii) Refit bracket under damper unit.

(Issued with A/L 144 - May, 1959)

(viii) Attach bracket to boom as detailed on drawing No A13260 sheet 1 with screws, washers and nuts, (items 1 to 3 inclusive). Coating jointing surfaces with item 6.

(ix) Replace existing strap and screws as removed in para (ii).

(x) Replace access panel on tailboom with existing screws removed in para (i).

(d) Tests : Check rudder control system for freedom and full movement.

(e) Recording : Record this modification in the airframe log book, and on the tail boom modification plate.

Drawings

12. Drawing No A13260 consisting of 1 sheet is issued herewith.

Effect on Weight and Balance of the Aircraft

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, 9/84/275 and 150/8/1627

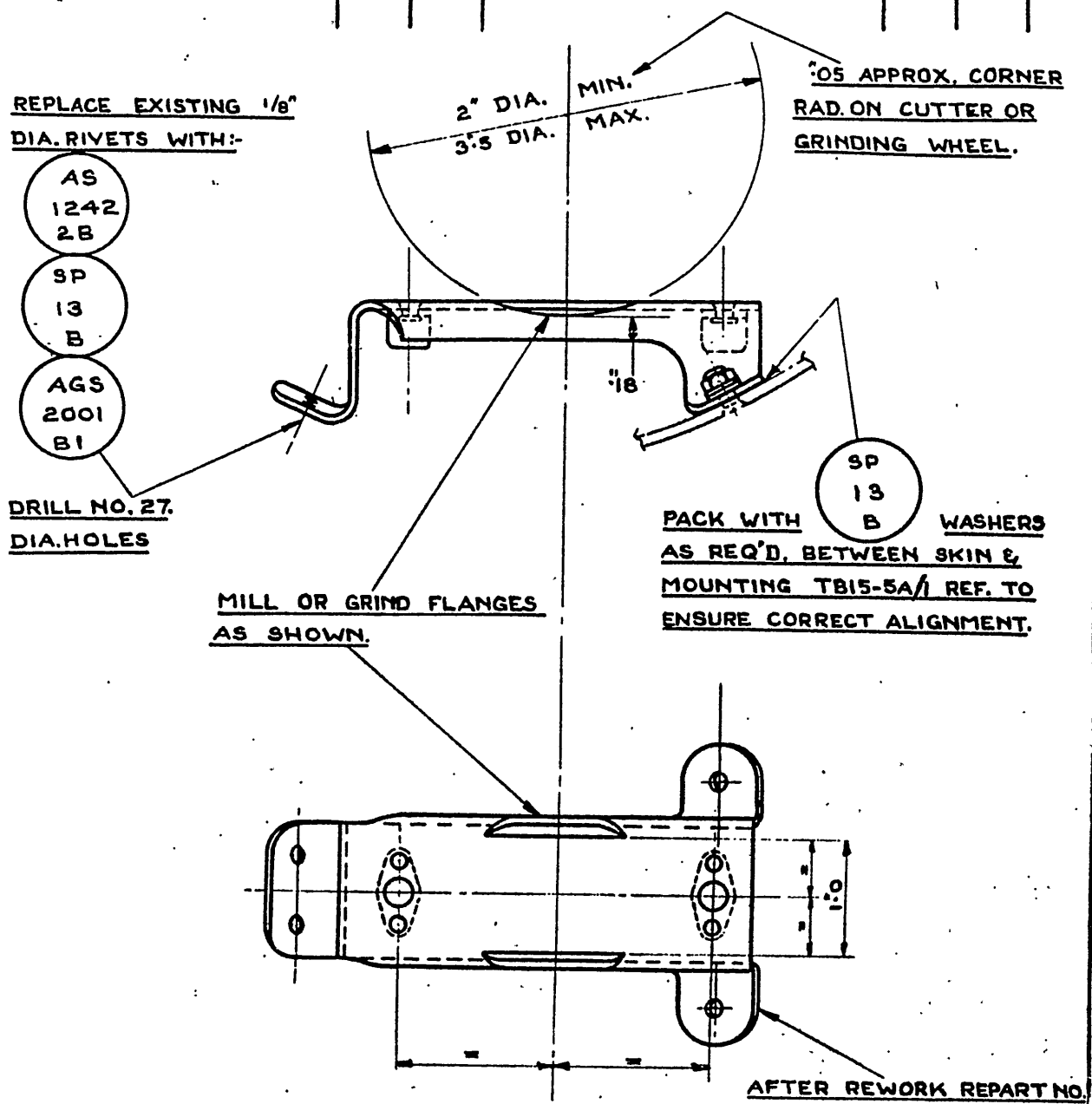
Attachments : Drawing A13260

Date of Issue : 21st May, 1959

(Issued with A/L 144 - May, 1959)

DO NOT SCALE

ISSUE NO	DATE	ALTERATION	D. L	INITIALS	APPROVED



DE HAVILLAND DRAWING NO. 00M418 SHEET 1 OF 1 SHEETS.

REFERENCE	ISSUED BY	TITLE
	DEPARTMENT OF AIR DIRECTORATE OF AIRCRAFT ENGINEERING	PROVISION OF IMPROVED FIT FOR RUDDER DAMPER STRUT MOUNTING BRACKET

LIMITS UNLESS STATED					
DECIMALS	± .010"	MATERIAL		COMPONENT OF	
[illegible]	= 1/32"	SPEC.		MACHINE	VAMPIRE MKS 33/35A&35
ANGLES	± ½°	TREATMENT		ENGINE	GOBLIN
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		FINISH		TECH. ORDER	VAMPIRE MOD N° 298
		SCALE		DRAWING NO.	A13260
		DRAWN	APPROVED		SIZE A
		TRACED	CHECKED		

AAP 721:79, VOLUME 2 PART 2 VAMPIRE MODIFICATION NO 299

Class 2

SUPPRESSOR, TYPE B5, IN THE FUEL BOOSTER PUMP CIRCUIT - INTRODUCTION

Reason for and Description of Modification

1. To reduce the level of noise interference in the radio compass installation this modification introduces a Type B5 suppressor, in lieu of the existing Type P1 suppressor, in the booster pump circuit.

Application

2. This work is to be carried out on Mk 35 aircraft, A79-600 to A79-623 inclusive and on all Mk 33/35A aircraft which have not already had De Havilland Modification No V751 embodied and recorded in the log book. Mk 35 aircraft A79-624 and subsequent will have this modification incorporated during manufacture. It is desirable that this modification be embodied concurrently with Vampire Modification No 300 (DH Modification V 752).

Responsibility for Incorporation

3. Operating units, aircraft depots and contractors concerned will be responsible for the incorporation of this modification. The trade mustering responsible is Electrical Fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. There are no orders superseded or cancelled by the incorporation of this modification.

Equivalent Modifications

6. De Havilland (Aus) V751 is the equivalent modification.

Supply

7. The following part is required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
1	G5C/4317	5CY/4317	Suppressor, Type B5	1	

Note: Item 1 will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland Modification Centre. Units requiring modification sets are to demand from the De Havilland

Modification Centre, Bankstown, NSW

Disposal of Parts Removed

8. The following part will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No Off Per Set	Stores Class
2	G5C/1002		Suppressor, type P1	1	

Note: Item 2 is to be examined and if serviceable, returned to store.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable and not later than the next "D" servicing of aircraft after receipt of parts required.

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 3 man-hours will be required to incorporate this modification.

(b) Special Tools, Jigs etc : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Raise nose cap and disconnect the aircraft batteries.

(ii) Remove gun-bay doors and retain for re-assembly.

(iii) Disconnect cables from the G5C/1002 suppressor.

(iv) Remove, G5C/1002 suppressor (item 2), and retain mounting bolts for re-assembly.

(v) Dispose of G5C/1002 suppressor (item 2) as detailed in para 8.

(vi) Mount G5CY/4317 suppressor (item 1) in place of the G5C/1002 suppressor (item 2) using the mounting bolts removed above.

(vii) Re-connect cables to the G5CY/4317 suppressor (item 1) as previously connected to the G5C/1002 suppressor (item 2).

(viii) Replace gun-bay doors removed above.

(ix) Re-connect the aircraft batteries and close the nose-cap.

(d) Test : Test circuit for correct functioning.

(e) Recording : Record this modification in the airframe log book.

Drawings

12. Not required.

Effect on Weight and Balance of the Aircraft

13. The effect of this modification on the weight and balance of the aircraft is negligible.

References : Files, Department of Air, No 150/8/1678, 150/4/8621, 9/84/36.

Date of Issue : 4th August 1959.

(Issued with A/L 160 - August 1959)

Class 2

SUPPRESSOR, TYPE P1, IN THE AC OUTPUT SUPPLY FROM THE TYPE 100A INVERTER-INTRODUCTION

Reason for and Description of Modification

1. To reduce noise level interference in the radio compass installati this modification introduces a Type P1 suppressor in the AC output supply line from the Type 100A inverter.

Application

AL.171

2. This work is to be carried out on Mk 35 aircraft, A79-602 to A79-623 inclusive and on all Mk 33/35A aircraft which have not already had De Havilland Mod V752 embodied and recorded in the log book. Mk 35 aircraft A79-624 and subsequent will have this modification incorporated during manufacture. It is desirable that this modification be embodied concurrentl with Vampire Mod No 299 (DH Mod V751).

Responsibility for Incorporation

3. Aircraft depots, operating units and contractors concerned are responsible for the incorporation of this modification. The trade mustering responsible is electrical fitter.

Action in Respect of Spares

4. Not applicable.

Orders Superseded or Cancelled

5. There are no orders Superseded or Cancelled by the incorporation of this modification.

Equivalent Modifications

6. De Havilland (Aust) Mod V752 is the equivalent modification.

Supply

7. The following parts are required to complete one modification set:-

Item No	Ident No	Part No	Nomenclature	No off per set	Sto Cla
1	NIV	N15-1141A	Assembly - suppressor and cable	1	
2	NIV	Z15-1451	Bracket, mounting - suppressor	1	

(Issued with AL 164 - September 1959)

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
3	H28/14065	AS3181/3B	Clip, Al Alloy	1	
4	H28/12622	A25/3B	Bolt, HTS Hex Hd, 4BA x .70" long	4	
5	H28/12512	A25/1C	Bolt, HTS Hex Hd, 2BA x .55" long	1	
6	H28C/2857	A32/B12	Screw, MS Rd Hd, 4BA x .55" long	1	
7	H28/27024	AGS2001B/1	Nut, MS Self Locking, nyloc, S/A, 4BA	5	
8	H28/27025	AGS2001C/1	Nut, MS Self Locking, nyloc, S/A, 2BA	1	
9	H28C/12297	SP 16/E	Washer, Al Alloy, thick $\frac{1}{4}$" BSF	2	

Note: Items 1 to 9 inclusive will be delivered from De Havilland Aircraft Pty Ltd to the De Havilland Modification Centre. Units requiring modification sets are to demand from the De Havilland Modification Centre, Bankstown, NSW.

Disposal of Parts Removed

8. The following part will be rendered redundant by the incorporation of this modification:-

Item No	Ident No	Part No	Nomenclature	No off per set	Stores Class
10	NIV	N15-103A	Cable assembly, bulkhead No 1 to control panel	1	

Note: Item 10 is obsolete and is to be disposed of in accordance with current authorised procedure.

Disposal of Parts in Stock

9. Not applicable.

When Modification is to be Incorporated

10. This modification is to be incorporated as soon as practicable and not later than the next 'D' servicing of aircraft after receipt of parts required.

(Issued with AL 164 - September 1959)

Method of Incorporation

11. (a) Man-Hours Involved : Approximately 6 man-hours will be required to incorporate this modificatio

(b) Special Tools, Jigs, &c : No special tools or jigs are required to incorporate this modification.

(c) Sequence of Operations :

(i) Open the nose cowl and disconnect the aircraft batteries

(ii) Remove the four mounting bolts of the type 100A inverter control panel and retain for re-assembly.

(iii) Insert an SP 16/E washer (item 9) between the inverter control panel and the mounting plate, at each end of the two rear mounting positions of the inverter control panel.

(iv) Insert the suppressor mounting bracket (item 2) between the inverter control panel and the mounting plate at the two forward mounting bolt positions as detailed on Drawing A13263 sheet 1.

(v) Re-assembly the four inverter control panel mounting bol removed above. Drill a No 11 hole through the inverter control panel mounting plate from the No 11 hole in the suppressor mounting bracket. De-burr the hole and assem nut and bolt (items 5 and 8) as detailed on Drawing A13263 sheet 1.

(vi) Attach suppressor and cable assembly (item 1) to the suppressor mounting bracket (item 2) with bolts and nuts four off each (items 4 and 7), with the unscreened end facing inboard and the screened end facing outboard.

(vii) Remove cable assembly, N15-103A (item 10) at the control panel and bulkhead No 1, slide it out of the retaining clips and dispose of as detailed in para 8.

(viii) Connect up the suppressor cables to the inverter control panel, the earth terminal and to bulkhead No 1, the cabl from the unscreened end of the suppressor being attached to the radio shelf with clip, screw and nut (items 3, 6 and 7) as detailed on Drawing A13263, sheet 1.

(ix) Re-connect the aircraft batteries and close the nose cowl

(Issued with AL 164 - September 1959)

(d) Tests : Function the inverter and ensure that the relevant instruments are operating correctly.

(e) Recording : Record this modification in the airframe log book.

Drawings

12. The Drawing A13263 consisting of one sheet is issued herewith.

Effect on Weight and Balance of the Aircraft

13. The effect of this modification on the weight and balance of the aircraft is as follows:

Item	Weight	Arm	Moment
Suppressor, type P1	+ 1.1 lbs	- 128 ins	- 140.8 lb ins

Note: Amendments to weight sheet summaries will be consolidated and issued by Department of Air.

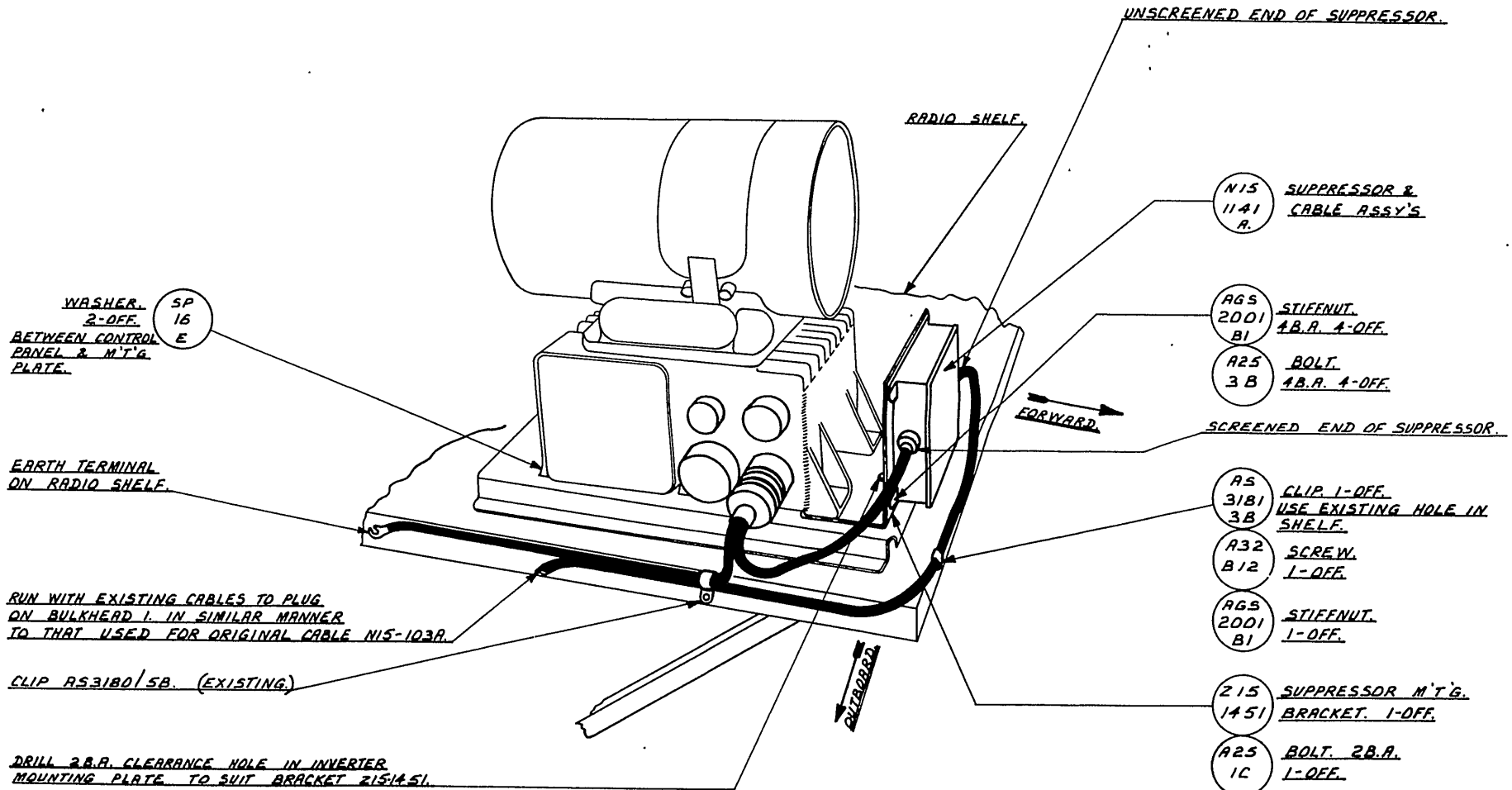
References : Files, Department of Air, 150/8/1679, 150/4/8621^{II}

Attachment : Drawing A13263

Date of Issue : 3rd September, 1959

(Issued with AL 164 - September 1959)

DO NOT SCALE



DE HAVILLAND DRAWING No. 00M422. SHEET 1. OF 1.

ISSUE NO.	DATE	ALTERATION	B.I.L.	INITIALS	APPROVED
1					

REFERENCE

ISSUED BY

LIMITS UNLESS STATED		MATERIAL
DECIMALS	± .010"	SPEC.
FRACTIONS	± 1/32"	TREATMENT
ANGLES	± ½°	FINISH
SURFACE FINISH AUSTRALIAN STANDARD ENG. DRWG. PRACTICE A.S.C.21		SCALE
		DRAWN D.W. APPROVED

TITLE

SUPPRESSOR TYPE P1 IN THE OUTPUT SUPPLY FROM THE TYPE 100A. INVERTER.

COMPONENT OF	
MACHINE	VAMPIRE MKS 33/35A&35.
ENGINE	GOBLIN.
TECH. ORDER	VAMPIRE MOD 300.
DRAWING NO.	A 13263

DRWG. B


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