

CHAP	2	SP 106 B	SERVICING PROCEDURES				AP 101B-1000-5A3 E (Section 1 (1st Edition))				TIME	ACT			
TRADE	FLT SYST		LIGHTNING												
SHEET	1	OF	21	SHEET/S		3		5	6	AL NO	12	DATE		EST	
TITLE	Air Data System - Calibration Test									SERVICING RECORD - RAF F.29888 AC NO DATE					
Safety and Servicing Notes are to be complied with throughout the work detailed on this Card.										(1)	(2)	(3)	(4)	(5)	
Special Tools and Equipment										MAN HOURS	TRADESMEN INIT	BRIEF DETAILS OF OR SUSPECTED DEFECT	F. 7208 NO	N.C.O. INITIALS	
Test Set P-V Mk 1. 6C/3154. Control Valve, Independent. Test Set Pitot/Static Mk 3. 6C/2106 Test Set Type 8A.															
NB 1 This Procedure is applicable only to systems fitted with Air Data Computer (Post Mod ADS 89) and Static Transducer (Post Mod ADS 88). NB 2 During this Procedure, the aircraft power supply is to be set to 'OFF' before plugging in or unplugging from aircraft test socket 'L'. NB 3 If when setting the instrument master switch to 'ON', runaway of pointer occurs the switch is to be set to 'OFF' immediately.															
FLT SYST 1. Preparation 1.1 Pitot/Static test set Mk 3. (a) External supply lead. Connect to external supply. (b) Test set. Connect to pressure head. (c) Pitot and static control valves. Close. 1.2 P-V test set. (a) Supply outlets. Connect to appropriate connectors on Mk 3 test set. (b) Pressure and vacuum controls. Close. (c) Supply lead. Connect to external supply.															
Sms/80/453/5										Continued				ASSOCIATED TRADES	SP NO

ASSOCIATED PROCEDURE CARDS

ASSOCIATED TRADES

SP NO

106 B

CHAP	2	FLT SYST	SERVICING PROCEDURES		AP101B-1000-5A3	
SP NO	106	B CONTINUED	LIGHTNING		Section (1st Edition)	
SHEET	2	AL 12			AC NO DATE	
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD	
					(1)	(2)
					(3)	(4)
					(5)	
<p>FLT SYST</p> <p>1. <u>Preparation</u> (Contd)</p> <p>1.3 Independent control valve.</p> <p>(a) Inlet. Tee into pitot line between pressure head and Mk 3 test set.</p> <p>(b) Outlet. Ensure open to atmosphere.</p> <p>1.4 Test set Type 8A.</p> <p>(a) PL1. Connect to AD4 on the Air Data computer.</p> <p>(b) PL2. Connect to FC5 on the Flight Control computer.</p> <p>(c) PL3. Connect to Test Sockets F and L aircraft test panel.</p> <p>1.5 External power supplies. (A.c. and d.c.).</p> <p>(i) Connect.</p> <p>(ii) Switch on.</p> <p>1.6 Instrument master switch.)</p> <p>1.7 PCU master switch.) Set to 'ON'.</p> <p>1.8 Height and speed display units power failure warning flags. Ensure show Black.</p> <p>1.9 System. Allow 3 minute warm up period.</p> <p>2. <u>Airspeed and Mach No. Calibration Test - 0 Feet</u></p> <p>2.1 P-V test set controls.</p> <p>(a) Pressure.) Close.</p> <p>(b) Vacuum.)</p> <p>(c) Pump. Set to 'OFF'.</p> <p>(d) Source. Set to 'PRESSURE'.</p> <p>2.2 Independent control valve. Close.</p> <p>2.3 Mk 3 test set equalizing control. Open.</p>						
SMS/80/453/51A					Continued	

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CHAP	2	NAV INST	SERVICING PROCEDURES		AP101B-1000-5A3 E	
SP NO	106	B CONTINUED	LIGHTNING		Section 1 (1st Edition)	
SHEET	3				AC NO DATE	
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD	
					(1)	(2)
					(3)	(4)
					(5)	
NAV INSTRUMENTS						
2.	<u>Airspeed and Mach No.</u>					
	<u>Calibration Test - 0 Feet</u>					
2.4	Test set Type 8A.					
	(a) ADS O/P control.	Set to 'TEST 2'.				
	(b) Servo indicator.	Check indicates 00000 PLUS OR MINUS 00002.				
2.5	Height display.					
	(a) Millibar scale	Set to '1013.25'.				
	(b) VSI pointer.	Check indicates zero PLUS OR MINUS 120 ft/min.				
2.6	Strip speed display.		Ensure White leader spot is located between the two White reference bars on left hand side.			
2.7	Mk 3 test set controls.					
	(a) Pitot/Static change-over.	Operate to obtain P-S mb indication of zero and S mb indication of 1013.25.				
	(b) Supply change-over.					
	(c) Pitot.					
	(d) Static.					
2.8	Test set Type 8A ADS O/P control.		Set to 'OFF'.			
2.9	Height display.		Check indication is zero PLUS OR MINUS 90 feet.			
2.10	Mk 3 test set controls.					
	(a) Equalizing.	Close.				
	(b) Supply change-over.	Set to 'EX-PRESS'.				
	(c) Pitot/Static change-over.	Set to 'PITOT INPUT'.				
	(d) Pitot.	Close.				
	(e) Static.					
2.11	P-V test set controls					
	(a) Pump.	Set to 'ON'.				
	(b) Pressure.	Open.				
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CHAP	2	NAV INST	SERVICING PROCEDURES LIGHTNING		AP101B-1000-5A3 E Section 1 (1st Edition)				
SP NO	106	B CONTINUED			AC NO DATE				
SHEET	4				SERVICING RECORD				
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					(1)	(2)	(3)	(4)	(5)
NAV INSTRUMENTS									
2. <u>Airspeed and Mach No.</u> <u>Calibration Test - 0 Feet (Contd)</u>									
2.12 Mk 3 test set (i) Open slowly and ensure strip pitot control. speed display White leader spot starts to move.									
(ii) Operate to increase P-S mb indication to 10.43.									
2.13 Strip speed display. Check airspeed pointer visible at 80 PLUS OR MINUS 5 kt.									
2.14 Mk 3 test set pitot control. Operate to increase P-S mb indication to 50.59.									
2.15 Strip speed display. Check airspeed indication is 175 PLUS OR MINUS 3 kt.									
2.16 Mk 3 test set pitot control. Operate to increase P-S mb indication to 128.18.									
2.17 Test set Type 8A 275 kt switch lamp. Check lights at 128.18 PLUS OR MINUS 10 mb.									
2.18 Strip speed display. (i) Check airspeed indication is 275 PLUS OR MINUS 3 kt.									
(ii) Check Mach No. indication is 0.425 PLUS OR MINUS 0.02M.									
2.19 Mk 3 test set pitot control. Operate to increase P-S mb indication to 284.36.									
2.20 Test set Type 8A 400 kt switch lamp. Check lights at 284.36 PLUS OR MINUS 19 mb.									
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CHAP	2	NAV INST	SERVICING PROCEDURES LIGHTNING		AP101B-1000-5A3 E Section 1 (1st Edition)				
SP NO	106	B CONTINUED			AC NO DATE				
SHEET	5								
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD				
					(1)	(2)	(3)	(4)	(5)
NAV INSTRUMENTS									
2.	<u>Airspeed and Mach No.</u> <u>Calibration Test - 0 Feet</u> (Contd)								
2.21	Strip speed display.	(i)	Check airspeed indication is 400 PLUS OR MINUS 4 kt.						
		(ii)	Check Mach No. indication is 0.625 PLUS OR MINUS 0.02M.						
2.22	Mk 3 test set pitot control.	Operate to increase P-S mb indication to 488.83.							
2.23	Height display.	Check indication is zero PLUS OR MINUS 90 feet.							
2.24	Strip speed display.	(i)	Check airspeed indication is 510 PLUS OR MINUS 4 kt.						
		(ii)	Check Mach No. indication is 0.80 PLUS OR MINUS 0.02M.						
2.25	Mk 3 test set pitot control.	Operate to increase P-S mb indication to 632.85.							
2.26	Strip speed display.	(i)	Check airspeed indication is 570 PLUS OR MINUS 5 kt.						
		(ii)	Check Mach No. indication is 0.90 PLUS OR MINUS 0.02M.						
2.27	Mk 3 test set pitot control.	Operate to increase P-S mb indication to 746.70.							
2.28	Test set Type 8A 0.98 Mach switch lamp.	Check lights at 746.70 plus 17.81 minus 57.23 mb.							
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CHAP	2	NAV INST	SERVICING PROCEDURES LIGHTNING		AP101B-1000-5A3 E Section 1 (1st Edition)				
SP NO	106	B CONTINUED			AC NO DATE				
SHEET	6								
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD				
					(1)	(2)	(3)	(4)	(5)
NAV INSTRUMENTS									
2.	<u>Airspeed and Mach No.</u> <u>Calibration Test - 0 Feet</u> (Contd)								
2.29	Strip speed display.	(i)	Check airspeed indication is 611 PLUS OR MINUS 5 kt.						
		(ii)	Check Mach No. indication is 0.98 PLUS OR MINUS 0.02M.						
2.30	Mk 3 test set pitot control.	Operate to increase P-S mb indication to 810.37.							
NB	Sub-items 2.31 and 2.32 are to be carried out simultaneously.								
2.31	Mk 3 test set pitot control.	Operate to increase P-S mb indication to 904.68.							
2.32	Strip speed display.	Check Mach No. indication decreases and then increases between airspeed indications of 632 and 661 kt.							
2.33	Mk 3 test set pitot control.	Operate to increase P-S mb indication to 1046.18.							
2.34	Test set Type 8A. 1.06 Mach switch lamp.	Check lights at 1046.18 plus 76.30 minus 73.91 mb.							
2.35	Mk 3 test set controls.								
	(a) Pitot.	(i)	Operate to increase P-S mb indication to 1131.60.						
		(ii)	Close.						
	(b) Pitot/Static change-over.	Set to 'PITOT VENT'.							
2.36	P-V test set controls.								
	(a) Pump.	Set to 'OFF'.							
	(b) Pressure.	Close.							
2.37	Mk 3 test set pitot control.	Operate to decrease P-S mb indication to 1046.18.							
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CHAP	2	NAV INST	SERVICING PROCEDURES LIGHTNING		AP101B-1000-5A3 E Section 1 (1st Edition)				
SP NO	106	B CONTINUED			AC NO DATE				
SHEET	7								
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD				
					(1)	(2)	(3)	(4)	(5)
NAV INSTRUMENTS									
2. <u>Airspeed and Mach No.</u> <u>Calibration Test - 0 Feet (Contd)</u>									
2.38 Test set Type 8A 1.06 Mach switch. Check extinguishes at 1046.18 plus 76.30 minus 73.91 mb.									
2.39 Mk 3 test set pitot control. Operate to decrease P-S mb indication to 746.70.									
2.40 Test set Type 8A 0.98 Mach switch. lamp. Check extinguishes at 746.70 plus 17.81 minus 57.23 mb.									
2.41 Strip speed display. (i) Check airspeed indication is 611 PLUS OR MINUS 5 kt. (ii) Check Mach No. indication is 0.98 PLUS OR MINUS 0.02M.									
2.42 Mk 3 test set pitot control. Operate to decrease P-S mb indication to 632.85.									
2.43 Strip speed display. (i) Check airspeed indication is 570 PLUS OR MINUS 5 kt. (ii) Check Mach No. indication is 0.90 PLUS OR MINUS 0.02M.									
2.44 Mk 3 test set pitot control. Operate to decrease P-S mb indication to 488.33.									
2.45 Height display. Check indication is zero PLUS OR MINUS 90 feet.									
2.46 Strip speed display. (i) Check airspeed indication is 510 PLUS OR MINUS 4 kt. (ii) Check Mach No. indication is 0.80 PLUS OR MINUS 0.02M.									
2.47 Mk 3 test set pitot control. Operate to decrease P-S mb indication to 284.36.									
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CHAP	2	NAV INST	SERVICING PROCEDURES LIGHTNING		AP101B-1000-5A3 E Section 1 (1st Edition)				
SP NO	106	B CONTINUED			AC NO DATE				
SHEET	8								
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD				
					(1)	(2)	(3)	(4)	(5)
NAV INSTRUMENTS									
2. <u>Airspeed and Mach No.</u> <u>Calibration Test - 0 Feet (Contd)</u>									
2.48	Test set Type 8A 400 kt switch lamp.	Check extinguishes at 284.36 PLUS OR MINUS 19 mb.							
2.49	Strip speed display.	(i) Check airspeed indication is 400 PLUS OR MINUS 4 kt. (ii) Check Mach No. indication is 0.625 PLUS OR MINUS 0.02M.							
2.50	Mk 3 test set pitot control.	Operate to decrease P-S mb indication to 128.18.							
2.51	Test set Type 8A 275 kt switch lamp.	Check extinguishes at 128.18 PLUS OR MINUS 10 mb.							
2.52	Strip speed display.	(i) Check airspeed indication is 275 PLUS OR MINUS 3 kt. (ii) Check Mach No. indication is 0.425 PLUS OR MINUS 0.02M.							
2.53	Mk 3 test set pitot control.	Operate to decrease P-S mb indication to 50.59.							
2.54	Strip speed display.	Check airspeed indication is 175 PLUS OR MINUS 3 kt.							
2.55	Mk 3 test set pitot control.	Operate to decrease P-S mb indication to 10.43.							
2.56	Strip speed display.	Check airspeed pointer disappears at 80 PLUS OR MINUS 5 kt.							
2.57	Mk 3 test set pitot control.	Operate to decrease P-S mb indication to zero.							
2.58	Height display.	Check indication is zero PLUS OR MINUS 90 feet.							
2.59	Strip speed display.	Ensure White leader spot is located between the two White reference bars.							
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CHAP	2	NAV INST	SERVICING PROCEDURES		AP101B-1000-5A3 E	
SP NO	106	B CONTINUED	LIGHTNING		Section 1 (1st Edition)	
SHEET	9				AC NO DATE	
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD	
					(1)	(2)
NAV INSTRUMENTS						
3.	<u>Airspeed and Mach No.</u>					
	<u>Calibration Test - 30000 Feet</u>					
3.1	P-V test set vacuum control.	Open.				
3.2	Mk 3 test set controls.					
	(a) Pitot.	Close.				
	(b) Pitot/Static change-over.	Set to 'STATIC INPUT'.				
	(c) Supply change-over.	Set to 'EX-SUCT'.				
	(d) Equalizing.	Open.				
3.3	P-V test set pump control.	Set to 'ON'.				
3.4	Mk 3 test set static control.	Operate to decrease S mb indication to 696.814.				
3.5	Height display.	Check indication is 10000 PLUS OR MINUS 90 ft.				
3.6	Strip speed display.	Ensure White leader spot is located between the two White reference bars.				
3.7	Mk 3 test set static control	Operate to decrease S mb indication to 465.630.				
3.8	Height display.	Check indication is 20000 PLUS OR MINUS 120 ft.				
3.9	Mk 3 test set static control.	Operate to decrease S mb indication to 300.893.				
3.10	Test set Type 8A.					
	(a) 30000 ft switch lamp.	Check lights between 307.807 and 294.107 mb.				
	(b) ADS O/P control.	Set to 'AP HEIGHT'.				
	(c) Servo indicator.	Check indicates 20571 PLUS OR MINUS 00178.				
3.11	Height display.	Check indication is 30000 PLUS OR MINUS 180 ft.				
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SP NO	106	B CONTINUED	LIGHTNING		Section 1	
SHEET	10				(1st Edition)	
					AC NO DATE	
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.			SERVICING RECORD			
			(1)	(2)	(3)	(4) (5)
NAV INSTRUMENTS						
3.	<u>Airspeed and Mach No.</u> <u>Calibration Test - 30000 Feet (Contd)</u>					
3.12	Strip speed display.	Ensure White leader spot is located between the two White reference bars				
3.13	Mk 3 test set equalizing control.	Close.				
3.14	Independent control valve.	Operate to increase P-S mb indication to 110.43.				
3.15	Height display.	Check indication is 30000 PLUS OR MINUS 180 ft.				
3.16	Strip speed display.	(i) Check airspeed indication is 256 PLUS OR MINUS 3 kt. (ii) Check Mach No. indication is 0.70 PLUS OR MINUS 0.02M.				
3.17	Independent control valve.	Operate to increase P-S mb indication to 148.43.				
3.18	Strip speed display.	(i) Check airspeed indication is 295 PLUS OR MINUS 3 kt. (ii) Check Mach No. indication is 0.80 PLUS OR MINUS 0.02M.				
3.19	Independent control valve.	Operate to increase P-S mb indication to 188.05.				
3.20	Strip speed display.	(i) Check airspeed indication is 330 PLUS OR MINUS 3 kt. (ii) Check Mach No. indication is 0.90 PLUS OR MINUS 0.02M.				
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CHAP	2	NAV INST	SERVICING PROCEDURES		AP101B-1000-5A3E	
SP NO	106	B CONTINUED	LIGHTNING		Section 1 (1st Edition)	
SHEET	11				AC NO DATE	
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD	
					(1)	(2)
NAV INSTRUMENTS						
3.	<u>Airspeed and Mach No.</u>					
	<u>Calibration Test - 30000 Feet (Contd)</u>					
3.21	Independent control valve.	Operate to increase P-S mb indication to 236.00.				
3.22	Strip speed display.	(i) Check airspeed indication is 367 PLUS OR MINUS 4 kt.				
		(ii) Check Mach No. indication is 1.00 PLUS OR MINUS 0.02M.				
3.23	Independent control valve.	Operate to increase P-S mb indication to 341.86.				
3.24	Strip speed display.	(i) Check airspeed indication is 435 PLUS OR MINUS 4 kt.				
		(ii) Check Mach No. indication is 1.10 PLUS OR MINUS 0.025M.				
3.25	Independent control valve.	Operate to increase P-S mb indication to 419.95.				
3.26	Strip speed display.	(i) Check airspeed indication is 477 PLUS OR MINUS 4 kt.				
		(ii) Check Mach No. indication is 1.20 PLUS OR MINUS 0.025M.				
3.27	Independent control valve.	Operate to increase P-S mb indication to 511.08.				
3.28	Height display.	Check indication is 30000 PLUS OR MINUS 180 ft.				
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CHAP	2	NAV INST	SERVICING PROCEDURES		AP101B-1000-5A3 E				
SP NO	106	B CONTINUED	LIGHTNING		Section 1				
SHEET	12				(1st Edition)				
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					AC NO DATE				
					SERVICING RECORD				
					(1)	(2)	(3)	(4)	(5)
NAV INSTRUMENTS									
3.29	Strip speed display.	(i)	Check airspeed indication is 520 PLUS OR MINUS 5 kt.						
		(ii)	Check Mach No. indication is 1.30 PLUS OR MINUS 0.025M.						
NB	During Sub-items 3.30 to 3.45 inclusive, height is to be maintained at 30000 ft using Mk 3 test set static control.								
3.30	Independent control valve.	(i)	Operate to increase P-S mb indication to 540.00.						
		(ii)	Close.						
3.31	Mk 3 test set equalizing control.		Operate to decrease P-S mb indication to 511.08.						
3.32	Strip speed display.	(i)	Check airspeed indication is 520 PLUS OR MINUS 5 kt.						
		(ii)	Check Mach No. indication is 1.30 PLUS OR MINUS 0.025M.						
3.33	Mk 3 test set equalizing control.		Operate to decrease P-S mb indication to 419.95.						
3.34	Strip speed display.	(i)	Check airspeed indication is 477 PLUS OR MINUS 4 kt.						
		(ii)	Check Mach No. indication is 1.20 PLUS OR MINUS 0.025M.						
3.35	Mk 3 test set equalizing control.		Operate to decrease P-S mb indication to 341.86.						
3.36	Strip speed display.	(i)	Check airspeed indication is 435 PLUS OR MINUS 4 kt.						
		(ii)	Check Mach No indication is 1.10 PLUS OR MINUS 0.025M.						
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CHAP	2	NAV INST	SERVICING PROCEDURES LIGHTNING		AP101B-1000-5A3 E Section 1 (1st Edition)				
SP NO	106	B CONTINUED							
SHEET	13				AC NO DATE				
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD				
					(1)	(2)	(3)	(4)	(5)
NAV INSTRUMENTS									
3.	<u>Airspeed and Mach No.</u> <u>Calibration Test - 30000 Feet (Contd)</u>								
3.37	Mk 3 test set equalizing control.	Operate to decrease P-S mb indication to 237.00.							
3.38	Strip speed display.	(i)	Check airspeed indication is 367 PLUS OR MINUS 4 kt.						
		(ii)	Check Mach No. indication is 1.00 PLUS OR MINUS 0.02M.						
3.39	Mk 3 test set equalizing valve.	Operate to decrease P-S mb indication to 188.05.							
3.40	Strip speed display.	(i)	Check airspeed indication is 330 PLUS OR MINUS 3 kt.						
		(ii)	Check Mach No indication is 0.90 PLUS OR MINUS 0.02M.						
3.41	Mk 3 test set equalizing valve.	Operate to decrease P-S mb indication to 148.43.							
3.42	Strip speed display.	(i)	Check airspeed indication is 295 PLUS OR MINUS kt.						
		(ii)	Check Mach No indication is 0.80 PLUS OR MINUS 0.02M.						
3.43	Mk 3 test set equalizing valve.	Operate to decrease P-S mb indication to 110.43.							
3.44	Strip speed display.	(i)	Check airspeed indication is 256 PLUS OR MINUS 3kt.						
		(ii)	Check Mach No indication is 0.70 PLUS OR MINUS 0.02M.						
3.45	Mk 3 test set equalizing valve.	Operate to decrease P-S mb indication to zero.							
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CHAP	2	NAV INST	SERVICING PROCEDURES		AP101B-1000-5A3 E	
SP NO	106	B CONTINUED	LIGHTNING		Section 1 (1st Edition)	
SHEET	14				AC NO DATE	
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD	
					(1)	(2)
					(3)	(4)
					(5)	
NAV INSTRUMENTS						
3.	<u>Airspeed and Mach No.</u> <u>Calibration Test - 30000 Feet (Contd)</u>					
3.46	Strip speed display.	Ensure White leader spot is located between the two White reference bars.				
4.	<u>Airspeed and Mach No.</u> <u>Calibration Test - 50000 Feet</u>					
4.1	Mk 3 test set static control.	Operate to decrease S mb indication to 187.538				
4.2	Height display.	Check indication is 40000 PLUS OR MINUS 300 ft.				
4.3	Mk 3 test set static control.	Operate to decrease S mb indication to 152.00				
NB	Sub-items 4.4 and 4.5 are to be carried out simultaneously.					
4.4	Mk 3 test set static control.	Operate to decrease S mb indication to 143.00.				
4.5	Test set Type 8A 45000 ft switch lamp.	Ensure lights.				
4.6	Mk 3 test set static control.	Operate to decrease S mb indication to 115.972.				
4.7	Height display.	Check indication is 50000 PLUS OR MINUS 650 ft.				
4.8	Strip speed display.	Ensure White leader spot is located between the two White reference bars.				
4.9	Mk 3 test set equalizing control.	Close.				
4.10	Independent control valve.	Operate to increase P-S mb indication to 236.00.				
4.11	Strip speed display.	(i) Check airspeed indication is 367 PLUS OR MINUS 4 kt. (ii) Check Mach No. indication is 1.40 PLUS OR MINUS 0.025M.				
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SP NO	106	B CONTINUED	LIGHTNING		Section 1 (1st Edition)	
SHEET	15				AC NO DATE	
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD	
					(1)	(2)
					(3)	(4)
					(5)	
NAV INST						
4.	<u>Airspeed and Mach No.</u> <u>Calibration Test - 50000 Feet</u> (Contd)					
4.12	Independent control valve.	Operate to increase P-S mb indication to 279.95.				
4.13	Strip speed display.	(i) Check airspeed indication is 397 PLUS OR MINUS 4 kt. (ii) Check Mach No. indication is 1.50 PLUS OR MINUS 0.025M.				
4.14	Independent control valve.	Operate to increase P-S mb indication to 324.76.				
4.15	Strip speed display.	(i) Check airspeed indication is 425 PLUS OR MINUS 4 kt. (ii) Check Mach No. indication is 1.60 PLUS OR MINUS 0.025M.				
4.16	Independent control valve.	Operate to increase P-S mb indication to 372.23.				
4.17	Strip speed display.	(i) Check airspeed indication is 452 PLUS OR MINUS 4 kt. (ii) Check Mach No. indication is 1.70 PLUS OR MINUS 0.025M.				
4.18	Independent control valve.	Operate to increase P-S mb indication to 425.91.				
4.19	Strip speed display.	(i) Check airspeed indication is 480 PLUS OR MINUS 4 kt. (ii) Check Mach No. indication is 1.80 PLUS OR MINUS 0.025M.				
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CHAP	2	NAV INST	SERVICING PROCEDURES		AP101B-1000-5A3 E	
SP NO	106	B CONTINUED	LIGHTNING		Section 1 (1st Edition)	
SHEET	16				AC NO DATE	
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD	
					(1)	(2)
NAV INSTRUMENTS						
4.	<u>Airspeed and Mach No.</u>					
	<u>Calibration Test - 50000 Feet (Contd)</u>					
4.20	Independent control valve.	Operate to increase P-S mb indication to 480.09.				
4.21	Strip speed display.	(i) Check airspeed indication is 506 PLUS OR MINUS 4 kt. (ii) Check Mach No. indication is 1.90 PLUS OR MINUS 0.025M.				
4.22	Independent control valve.	Operate to increase P-S mb indication to 538.71.				
4.23	Height display.	Check indication is 50000 PLUS OR MINUS 650 ft.				
4.24	Strip speed display.	(i) Check airspeed indication is 532 PLUS OR MINUS 5 kt. (ii) Check Mach No. indication is 2.00 PLUS OR MINUS 0.025M.				
4.25	Independent control valve.	Close.				
NB	During Sub-items 4.26 to 4.39 inclusive, height is to be maintained at 50000 ft using Mk 3 test set static control.					
4.26	Mk.3 test set equalizing control.	Operate to decrease P-S mb indication to 480.09.				
4.27	Strip speed display.	(i) Check airspeed indication is 506 PLUS OR MINUS 4 kt. (ii) Check Mach No. indication is 1.90 PLUS OR MINUS 0.025M.				
4.28	Mk 3 test set equalizing control.	Operate to decrease P-S mb indication to 425.09.				
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CHAP	2	NAV INST	SERVICING PROCEDURES		AP101B-1000-5A3 E	
SP NO	106	B CONTINUED	LIGHTNING		Section 1 (1st Edition)	
SHEET	17				AC NO DATE	
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD	
					(1)	(2)
					(3)	(4)
					(5)	
NAV INSTRUMENTS						
4.	<u>Airspeed and Mach No.</u> <u>Calibration Test - 50000 Feet (Contd)</u>					
4.29	Strip speed display.	(i)	Check airspeed indication is 480 PLUS OR MINUS 4 kt.			
		(ii)	Check Mach No. indication is 1.80 PLUS OR MINUS 0.025M.			
4.30	Mk 3 test set equalizing control.	Operate to decrease P-S mb indication to 372.23.				
4.31	Strip speed display.	(i)	Check airspeed indication is 452 PLUS OR MINUS 4 kt.			
		(ii)	Check Mach No. indication is 1.70 PLUS OR MINUS 0.025M.			
4.32	Mk 3 test set equalizing control.	Operate to decrease P-S mb indication to 324.76				
4.33	Strip speed display.	(i)	Check airspeed indication is 425 PLUS OR MINUS 4 kt.			
		(ii)	Check Mach No. indication is 1.60 PLUS OR MINUS 0.025M.			
4.34	Mk 3 test set equalizing control.	Operate to decrease P-S mb indication to 297.75.				
4.35	Strip speed display.	(i)	Check airspeed indication is 397 PLUS OR MINUS 4 kt.			
		(ii)	Check Mach No. indication is 1.50 PLUS OR MINUS 0.025M.			
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CHAP	2	NAV INST	SERVICING PROCEDURES LIGHTNING		AP101B-1000-5A3 E Section 1 (1st Edition)				
SP NO	106	B CONTINUED			AC NO DATE				
SHEET	18								
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD				
					(1)	(2)	(3)	(4)	(5)
NAV INSTRUMENTS									
4.	<u>Airspeed and Mach No.</u> <u>Calibration Test - 50000 Feet (Contd)</u>								
4.36	Mk 3 test set equalizing control.	Operate to decrease P-S mb indication to 236.00							
4.37	Strip speed display.	(i) Check airspeed indication is 367 PLUS OR MINUS 4 kt. (ii) Check Mach No. indication is 1.40 PLUS OR MINUS 0.025M.							
4.38	Mk 3 test set equalizing control.	Operate to decrease P-S mb indication to zero.							
4.39	Strip speed display.	Ensure White leader spot is located between the two White reference bars.							
5.	<u>Altitude Checks</u>								
5.1	Mk 3 test set static control.	Operate to decrease P-S mb indication to 71.716.							
5.2	Height display.	Check indication is 60000 PLUS OR MINUS 650 ft.							
5.3	Mk 3 test set controls. (a) Static.	(i) Operate to decrease S mb indication to 68.350. (ii) Close. Set to 'STATIC VENT'.							
	(b) Pitot/Static change-over.								
	(c) Static.	Operate to increase S mb indication to 71.716.							
5.4	Height display.	Check indication is 60000 PLUS OR MINUS 650 ft.							
5.5	Mk 3 test set static control.	Operate to increase S mb indication to 115.972.							
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CHAP	2	NAV INST	SERVICING PROCEDURES		AP101B-1000-5A3 E	
SP NO	106	B CONTINUED	LIGHTNING		Section 1 (1st Edition)	
SHEET	19				AC NO DATE	
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD	
					(1)	(2)
					(3)	(4)
					(5)	
NAV INSTRUMENTS						
5.	<u>Altitude Checks</u>		(Contd)			
5.6	Height display.	Check indication is 50000 PLUS OR MINUS 650 ft.				
5.7	Mk 3 test set static control.	Operate to increase S mb indication to 143.00				
NB	Sub-items 5.8 and 5.9 are to be carried out simultaneously.					
5.8	Mk 3 test set static control.	Operate to increase S mb indication to 152.00.				
5.9	Test set Type 8A 45000 ft lamp.	Ensure extinguishes.				
5.10	Mk 3 test set static ontrol.	Operate to increase S mb indication to 187.538.				
5.11	Height display.	Check indication is 40000 PLUS OR MINUS 300 ft.				
NB	During Sub-items 5.12 to 5.15 Operation (i), the test set Type 8A 30000 ft lamp is to extinguish between S mb indications of 294.107 and 307.807.					
5.12	Mk 3 test set static control.	(i)	Operate to increase S mb indication to 294.107.			
		(ii)	Operate to increase S mb indication to 300.893.			
5.13	Test set Type 8A servo indicator.	Check indicates 20571 PLUS OR MINUS 00178.				
5.14	Height display.	Check indication is 30000 PLUS OR MINUS 180 ft.				
5.15	Mk 3 test set static control.	(i)	Operate to increase S mb indication to 307.807.			
		(ii)	Operate to increase S mb indication to 465.630.			
RM 52010 /56.					Continued	

CHAP	2	NAV INST	SERVICING PROCEDURES LIGHTNING		AP101B-1000-5A3 E	
SP NO	106	B CONTINUED			Section 1 (1st Edition)	
SHEET	20				AC NO DATE	
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD	
					(1)	(2)
					(3)	(4)
					(5)	
NAV INSTRUMENTS						
5.	<u>Altitude Checks</u> (Contd)					
5.16	Height display.	Check indication is 20000 PLUS OR MINUS 120 ft.				
5.17	Mk 3 test set static control.	Operate to increase S mb indication to 696.814.				
5.18	Height display.	Check indication is 10000 PLUS OR MINUS 90 ft.				
5.19	Mk 3 test set static control.	Operate to increas S mb indication to 1013.25.				
5.20	Test set Type 8A indicator.	Check indicates 00000 PLUS OR MINUS 00082.				
5.21	Height display.	Check indication is zero PLUS OR MINUS 90 ft.				
6.	<u>VSI Calibration Tests</u>					
6.1	Height display.	Check VSI pointer indicates zero PLUS OR MINUS 120 ft/min.				
6.2	Mk 3 test set controls.					
	(a) Static.	Close.				
	(b) Pitot/Static change-over.	Set to 'STATIC INPUT'.				
	(c) Static.	Operate to maintain height display VSI pointer at plus 3000 ft/min.				
6.3	Height display.	Check height changes by 3000 fit in 60 PLUS OR MINUS 6 seconds.				
6.4	Mk 3 test set controls.					
	(a) Static.	Close.				
	(b) Pitot/Static change-over.	Set to 'STATIC VENT'.				
	(c) Static.	Operate to maintain height display VSI pointer at minus 3000 ft/min.				
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CHAP	2	NAV INST	SERVICING PROCEDURES LIGHTNING		AP101B-1000-5A3 E Section 1 (1st Edition)				
SP NO	106	B CONTINUED			AC NO DATE				
SHEET	21								
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.					SERVICING RECORD				
					(1)	(2)	(3)	(4)	(5)
NAV INSTRUMENTS									
6. <u>VSI Calibration Tests</u> (Contd)									
6.5 Height display. Check height changes by 3000 ft in 60 PLUS OR MINUS 6 seconds.									
6.6 Mk 3 test set static control. Operate to reduce P-S mb indication to zero.									
6.7 P-V test set controls.									
(a) Pump. Set to 'OFF'.									
(b) Pressure.) Close.									
(c) Vacuum.)									
6.8 Mk 3 test set controls.									
(a) Static.) Close.									
(b) Pitot.)									
7. <u>General</u>									
7.1 External power supplies. (A.c. and d.c.).					(i)	Switch off.			
					(ii)	Disconnect.			
					(iii)	Remove.			
7.2 Instrument master switch.) Set to 'OFF'.									
7.3 PCU master switch.)									
7.4 Mk 3 test set.					(i)	Disconnect external supply.			
					(ii)	Disconnect from pressure head.			
7.5 P-V test set.					(i)	Disconnect external supply.			
					(ii)	Disconnect from Mk 3 test set.			
7.6 Independent control valve.					(i)	Disconnect.			
					(ii)	Remove.			
7.7 Test set Type 8A.									
(a) Connector PL1. Disconnect from AD4 on air data computer.									
(b) Connector LP2. Disconnect from FC5 on flight control computer									
(c) Connector LP3. Disconnect from aircraft test sockets F and L.									
RM 52010/57									



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