RESTRICTED

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VOLUME 3 PART 1
PUBLISHED APRIL 1961
1st EDITION

PALOUSTE MK. 104 ENGINE
FOR
LOW PRESSURE AIR SUPPLY
AERO-ENGINE STARTING

SCHEDULE
OF
SPARE PARTS

Contents Unclassified

CONDITIONS OF RELEASE

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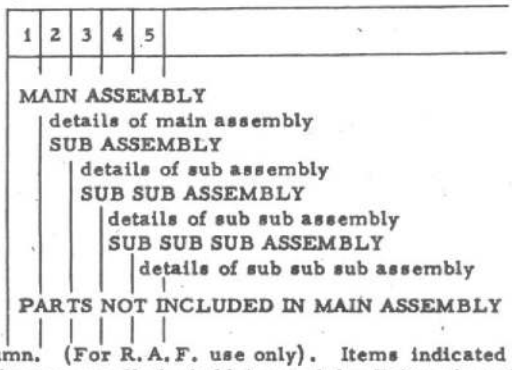
ENGINE SPARES	R.A.F. VOCABULARY SECTION 36BB
FUEL CONTROL UNIT SPARES	R.A.F. VOCABULARY SECTION 36LL
FUEL PUMP SPARES	R.A.F. VOCABULARY SECTION 65D

RESTRICTED

MEMORANDUM OF INSTRUCTIONS

1. Contents. This Schedule contains a complete list of Parts embodied in the Palouste Mk. 104 Engine, as installed in Ground Starter Trolley.

2. Multi-Indentation System. The parts in the Schedule are arranged in alphabetical order and items are indented to show their correct relationship to each other. The following is a key diagram of the lay-out as used throughout the body of this Schedule.



3. MR and C/S Column. (For R.A.F. use only). Items indicated M/ are required for Major Repair purposes only and will not normally be held in stock by Units other than those carrying out major repair work. A, B or C indicates class of store.

4. Number off Column. The number off shown against an Assembly or detail Part indicates the quantity required in the position shown and does not preclude the recurrence of the Assembly or detail Part in other positions in the complete major Assembly. In order to assess whether or not the Part recurs, reference should be made to the Reference/Part Number Index which quotes all pages where the Part/Assembly appears.

5. Demands. Normally only those Parts which have been allotted Reference Numbers in this Schedule are to be demanded from the appropriate R.A.F. Maintenance Unit or R.N. Store Depot under the Royal Air Force Vocabulary Section quoted. Demands and Issue Vouchers are to be prepared in accordance with the procedure laid down in Air Publication 830, Vol. 1, or A.P. (N) 5.

For further details of items shown in this Schedule under Sections other than 36AB or 65B, reference should be made to the relevant Section or A.P. 1086.

6. Establishment. The normal establishment of spares to be maintained is to be in accordance with the procedure laid down in Air Publication 830, Vol. 1, or A.P. (N) 5.

7. Obsolescent Stock. An asterisk placed against a part or Assembly indicates that further purchases to that design will not be made, but existing stocks are to be used until stocks are exhausted.

8. Amendments. Amendments to this Schedule will be published as and when necessary. Amendment Lists will be numbered consecutively, and the Commanding Officer will give the necessary instructions for the upkeep of the Schedule and completion of the Amendment Certificate.

A summary of all Amendment Lists distributed will be published in Air Ministry Orders and/or Admiralty Fleet Orders.

9. Illustrations. Since it is not practicable to correct the illustrations in the Schedule at the time of amending the text, new plates will be issued at a later date.

10. Modifications. Modifications incorporated in this Schedule are indicated on the Modification Record Sheet.

PERIODICAL INSPECTION OF SPARE PARTS STORAGE CATEGORIES

For details of different storage categories see A. P. 1086, Book 1, Second Edition, Memorandum of Instructions, Part 3.

A. P. 4677C, VOL. 3, PART 1

Engine - PALOUSTE MK. 104

Section - 36BB.

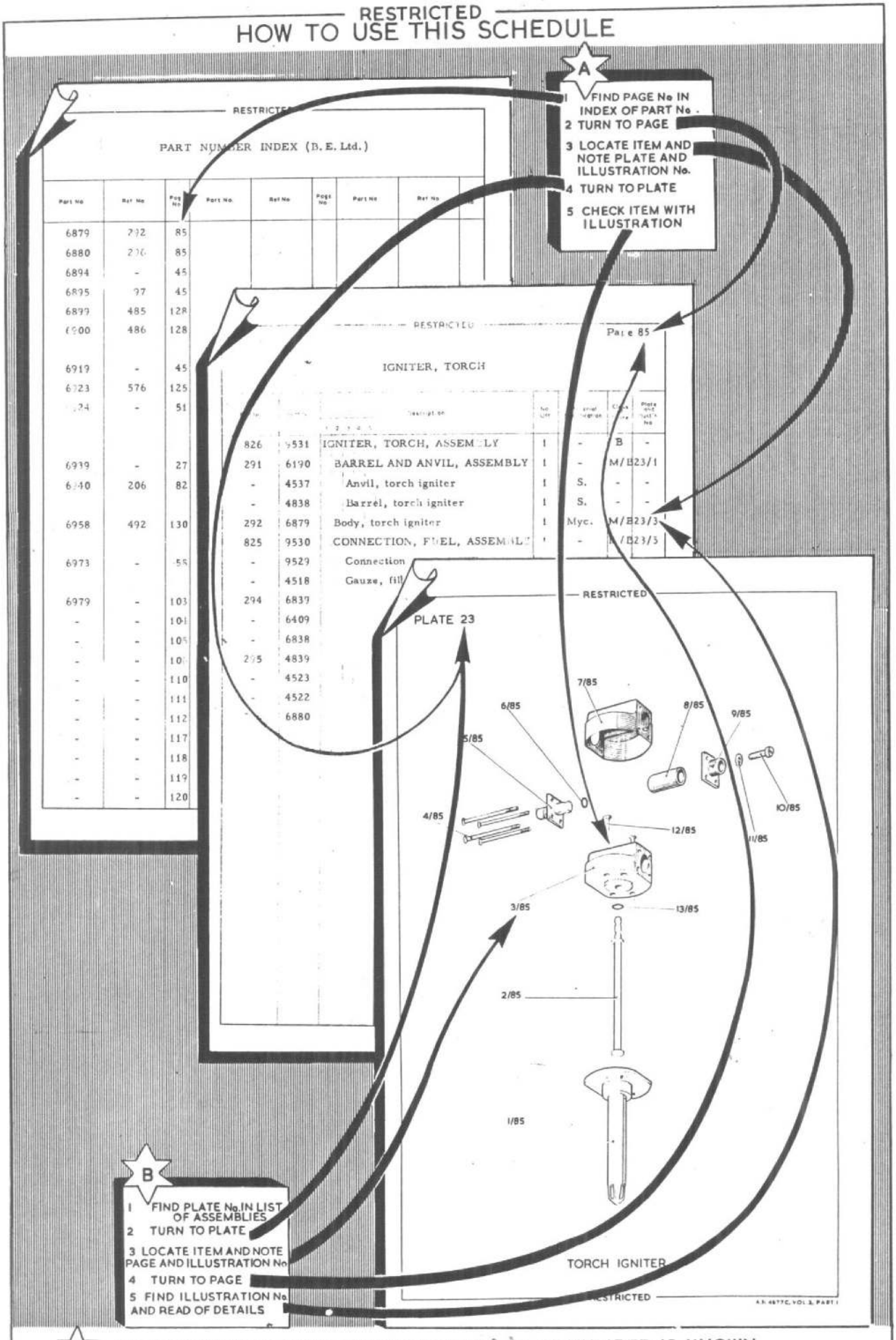
Note:- Items which are shown in this publication with an A. P. 1086 reference number are not included below. Details of categorisation and periodicity are stated in the relevant sub-section of A. P. 1086.

Generic Heading	Category	Periodicity of Inspection in Temperate Climate *	
		Packaged *	Unpackaged
Boxes, High Energy Ignition	1	3 years	1 year
Control Units, Air Bleed Valve	1	3 years	1 year
Control Units and Functional Assemblies - Fuel System	1	3 years	1 year
Coolers, Oil, (Fuel Cooled)	1	3 years	1 year
Diaphragms, (Non-Metallic)	2	3 years	1 year
Filters, Filter Elements; (Non-Metallic)	2	3 years	1 year
Gears and Pinions in Mesh	1	3 years	1 year
Grommets, Inserts, Bushes, Pads, Mountings (Rubber or Synthetic Rubber Materials)	2	3 years	1 year
Harness Assemblies Leads and Wiring	1	3 years	1 year
Pipes, Flexible	2	3 years	1 year
Pumps	1	3 years	1 year
Rams, Operating	1	3 years	1 year
Seals, Packing, and Sealing Rings, Jointings, (Non-Metallic)	2	3 years	1 year
Sleeves, (Rubber or Synthetic Rubber Materials)	2	3 years	1 year
Thermocouples and Cabling	1	3 years	1 year
Valves, (Functional Assemblies - Relief - Solenoid, etc.)	1	3 years	1 year

* Where equipment is packed to method 2 (using desiccant) the periodicity of inspection is to coincide with the periodicity of the renewal of the desiccant.

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HOW TO USE THIS SCHEDULE



A — TO IDENTIFY AN ITEM WHEN ONLY THE PART NUMBER IS KNOWN

B — TO SECURE THE PART NUMBER WHEN THE NAME AND LOCATION IN THE ENGINE IS KNOWN OR TO SECURE THE PART NUMBER WHEN ONLY THE APPEARANCE AND LOCATION IS KNOWN

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AMENDMENT CERTIFICATE

The amendments promulgated in the undermentioned Amendment Lists have been incorporated in this Publication.

Amendment List		Amendment Incorporated by	Date
Number	Date		
A.L.1		Incorporated before publication	
A.L.2			
A.L.3			
A.L.4			
A.L.5			
A.L.6		Ist Calcutta	6/3/86
A.L.7		"	"
A.L.8		"	"
A.L.9		"	"

MODIFICATION/AMENDMENT RECORD

Mod. No.	A.L. No.	Mod. No.	A.L. No.	Mod. No.	A.L. No.	Mod. No.	A.L. No.	Mod. No.	A.L. No.	Mod. No.	A.L. No.	Mod. No.	A.L. No.	Mod. No.	A.L. No.
67	*	139	NA	187	5	235	7								
74	*	140	4	188	5	236	5								
79	*	141	4	189	5	237	NA								
84	*	142	NA	190	5	238	6								
87	*	143	NA	191	5	239	7								
88	*	144	4	192	NA	240	6								
89	*	145	4	193	5	241	5								
90	*	146	4	194	NA	242	NA								
91	*	147	4	195	C	243	5								
93	*	148	NA	196	5	244	C								
94	*	149	NA	197	5	245	7								
95	*	150	4	198	C	246	6								
96	*	151	4	199	5	247	C								
97	*	152	4	200	5	248	7								
98	*	153	NA	201	5	249	C								
99	*	154	NA	202	5	250	6								
102	*	155	NA	203	5	251	6								
104	*	156	NA	204	NA	252	8								
105	*	157	5	205	NA	253	6								
106	*	158	5	206	5	254	6								
108	*	159	NA	207	NA	255	7								
109	*	160	5	208	5	256	7								
110	*	161	5	209	5	257	8								
114	*	162	5	210	5	258	8								
115	*	163	NA	211	5	259	8								
116	4	164	5	212	5	260	8								
117	4	165	5	213	5	261	C								
118	4	166	5	214	5	262	9								
119	4	167	5	215	5	263	8								
120	4	168	5	216	5	264	8								
121	4	169	5	217	5	265	9								
122	4	170	5	218	5	266	9								
123	NA	171	5	219	5	267	C								
124	NA	172	5	220	5	268									
125	4	173	5	221	5	269	9								
126	4	174	5	222	5	270	9								
127	NA	175	5	223	C	271	C								
128	4	176	5	224	5										
129	NA	177	5	225	5										
130	*	178	5	226	NA										
131	NA	179	5	227	5										
132	*	180	5	228	5										
133	4	181	5	229	5										
134	4	182	5	230	NA										
135	4	183	5	231	5										
136	4	184	5	232	5										
137	4	185	5	233	5										
138	4	186	5	234	5										

* Incorporated before publication
NA Not applicable
C Cancelled

AIR MINISTRY CHECKING LIST FOR THE PALOUSTE Mk.104 ENGINE AS INSTALLED IN GROUND STARTER TROLLEY

This checking list has been prepared to show only those items of a readily detachable nature or about which doubt may exist whether they should form part of, or should be transferred with the Engine. The list consequently excludes those other Engine components which are not liable to incidental removal, but personnel are not thereby relieved of the responsibility for checking and recording, in accordance with the regulations, discrepancies of such components.

The Engine is to be vouched as instructed in A.P.830, Vol.1, 6th Edition, Part 2, Leaflet BT 2/4 (as qualified by BG7 Series Voucher Procedure) quoting the Air Publication and latest issue number of the checking list.

1. The fitting of an approved alternative item of different type or part number but falling within the same generic heading of a checking list does not constitute a discrepancy.

2. During storage or transit of the Engine all exposed apertures, pipe ends, unions etc., are to be suitably blanked off to prevent the ingress of foreign matter.

3. Every effort should be made to despatch the log book with the Engine and the log book should record the shortage of major components.

4. It must be clearly understood that all items included in the checking lists are to be accounted for and the relevant issue or receipt vouchers and Forms 640 are to be suitably endorsed to show the shortages. Similar action is to be taken regarding surplus items (Forms 729 are also to be suitably endorsed by the Resident Officer-in-Charge, A.Q.D. at Contractor's works).

5. The Engine is to be transferred complete to checking lists unless instructions are issued to the contrary, or through exceptional circumstances.

6. The items listed below are not to be regarded as part of, or transferred with, the Engine.

   1. Tool Kit
   2. Generator, Rotax B1825
   3. Motor starter, Plessey C3616/A/6
   4. Coil, boost, B.T.H. C7TS/1
   5. Generator, tachometer, Smiths 122RV/SB

7. The amendment list number quoted in the issue number chart is the latest affecting the checking list, and may not necessarily be in numerical order, or the latest amendment to the Volume 3.

ISSUE NUMBER OF CHECKING LIST

Issue No.	1	2	3	4
Amendment List No.	-	3	5	7
Date	Jan. 1, 1961	May. 1, 1962	Oct. 1, 1968	Jan, 1, 1970

AIR MINISTRY CHECKING LIST FOR THE PALOUSTE MK. 104 ENGINE
AS INSTALLED IN GROUND STARTER TROLLEY

Item No.	Description	Qty Per Unit
1	ENGINE, PALOUSTE MK. 104	1
2	Valve, pressure reducing, fuel, complete with blank	1
3	Cock, shut-off	1
4	Filter, oil, assembly, front and rear bearings	2
5	Box, relay, electric	1
6	Covers, blanking, air intake casing	2
7	Leads, electrical, general services	1 set
8	Lead, H. T., booster coil to torch igniter	1
9	Torch igniter	1
10	Unit, fuel control	1
11	Unit, spill control, complete with solenoid valves	1
12	Bracket, lifting, and retainer	1
13	Mounting, engine, upper	1
14	Mounting, engine, lower	2
15	Valve, air delivery, complete with blank	1
16	Clamp-ring, securing air delivery valve	1
17	Valve, solenoid, air delivery valve	1
18	Chamber expansion, complete with anti-surge valve lid	1
19	Fishtail and attachment bracket (attached to expansion chamber)	1
20	Unit, exhaust, complete with blanking cover	1
21	Cover, blanking, rear bearing	1
22	Bracket, thermocouple	1
23	Banjo-union and bolt, combustion chamber	1
24	Cap, oil tank filler	1
25	Valve, solenoid, torch igniter	1
26	Hand starter assembly, complete with blanking cover	1
27	Breather vent pipes, port and starboard, oil tank, complete with blanking covers	2
28	Leads, electric starter	2
29	Pump, oil, and filter	1
30	Clutch, roller	1

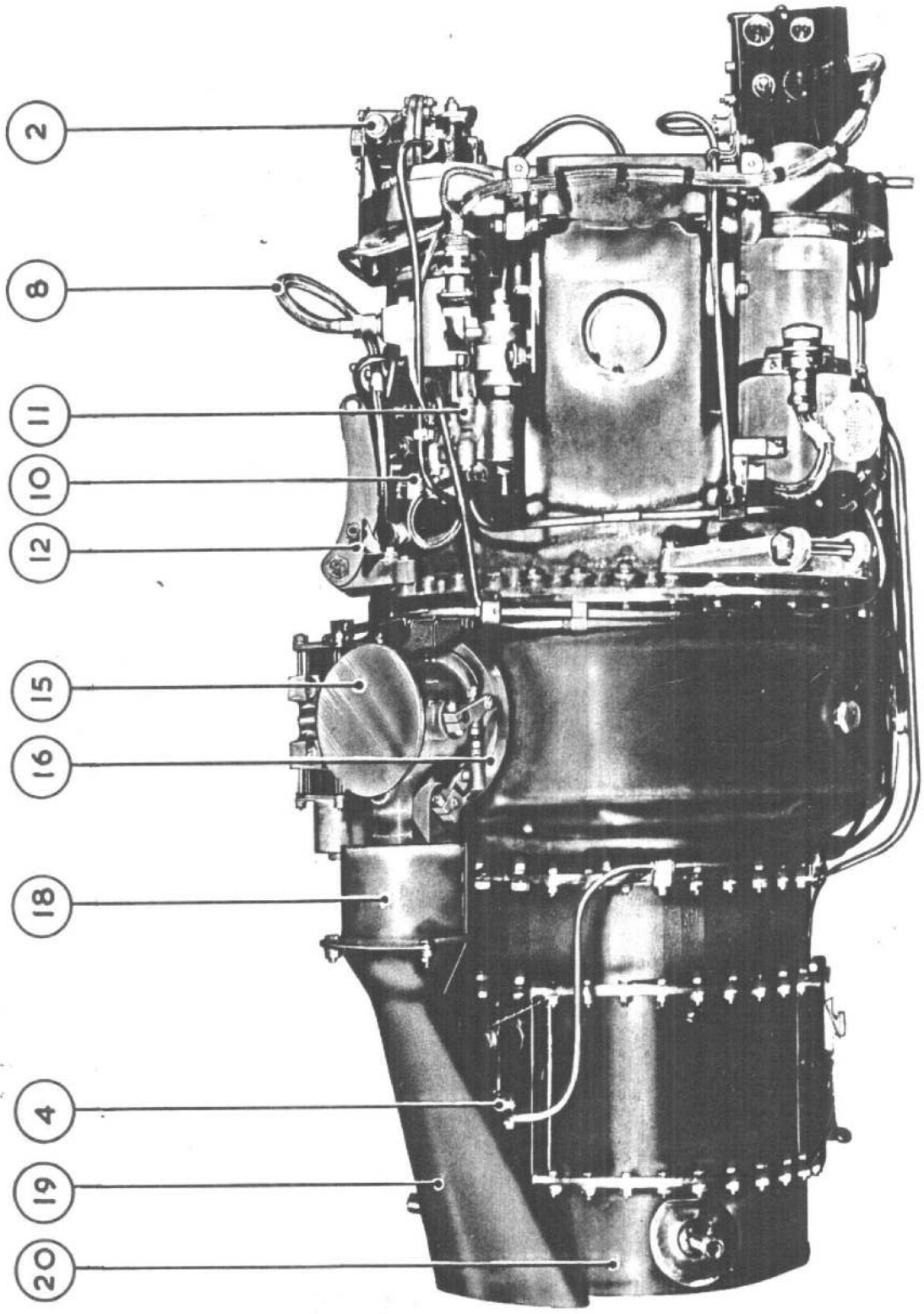


FIG. I RH QUEUE V-1710-G4 ENGINE RIGHT HAND SIDE

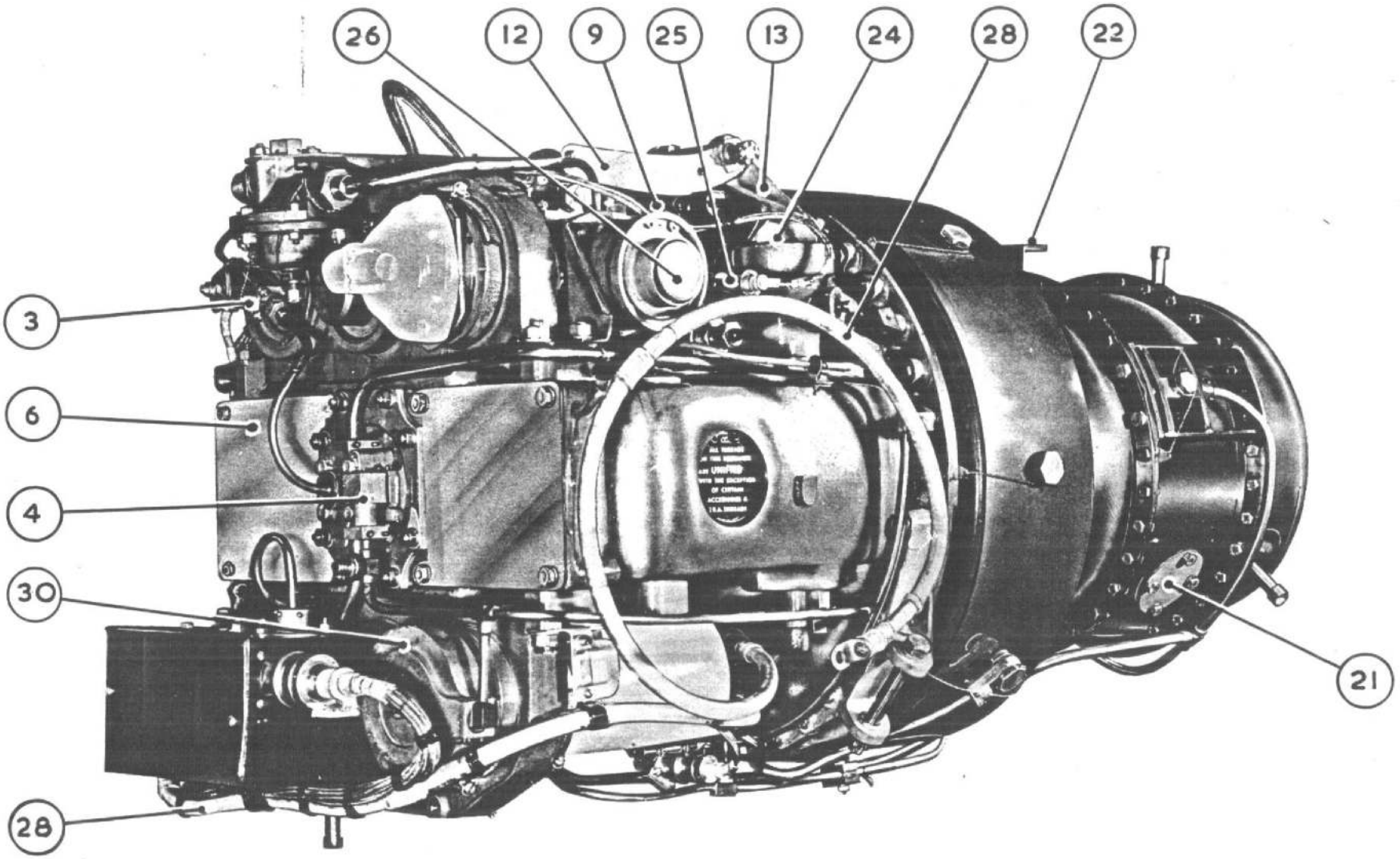


FIG.2 PALOUSTE MK.104 ENGINE LEFT HAND SIDE

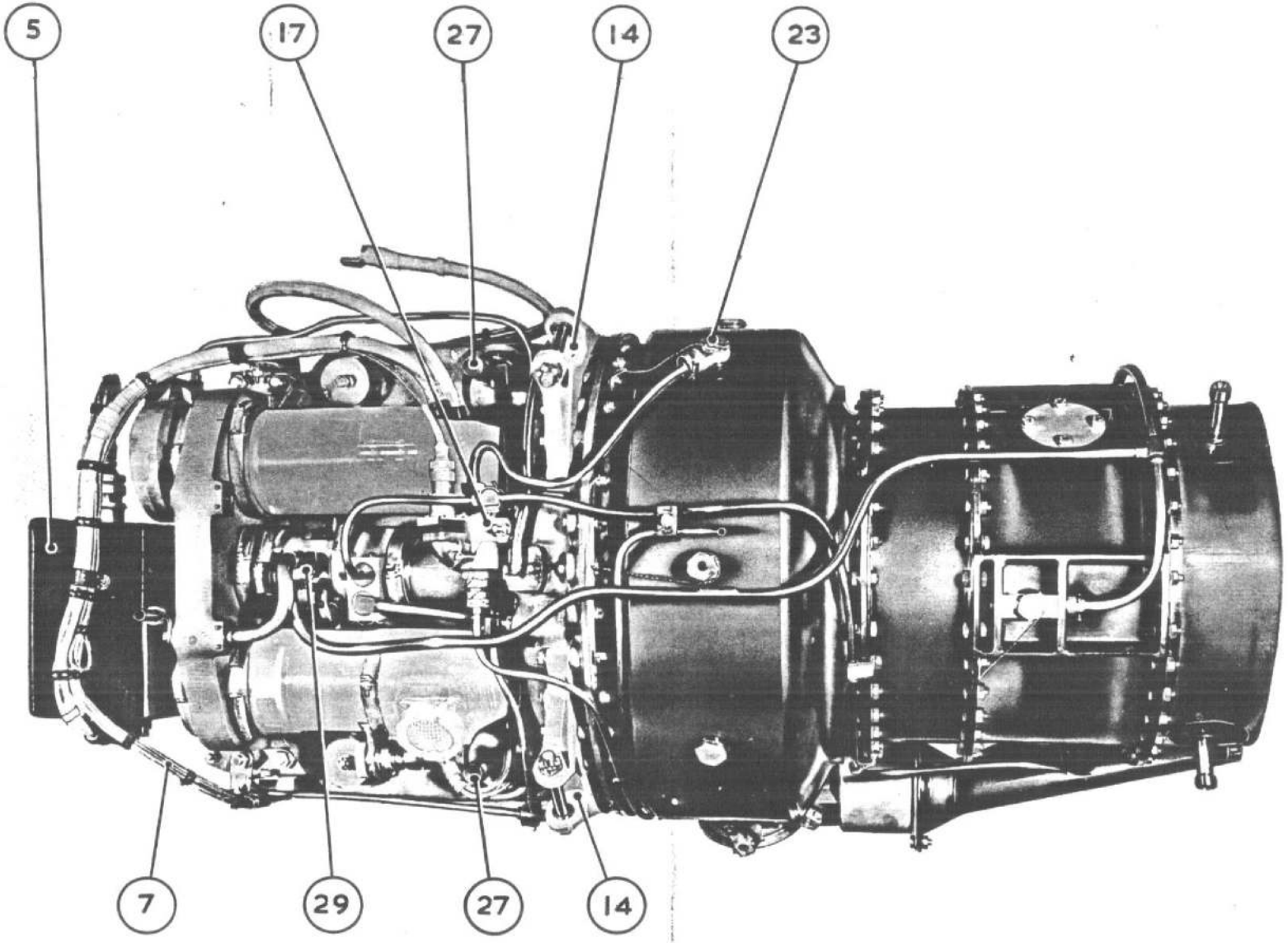


FIG.3 PALOUSTE MK. 104 ENGINE UNDERNEATH VIEW

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ACCESSORIES

PALOUSTE Mk.104 ENGINE

Description	No. Off.	Stores Vocab. Section Ref.No.	Air Publication
Relay, electro-magnetic, Rotax D.0209	1	5CW/860	A.P.1086
Actuator, Burgess VL/1 modified	1	36BB/45	A.P.4677C
Micro-switchette, Burgess V3	1	5CW/4615	A.P. 1086
Unit, fuel spill control	1	36BB/1417	A.P.4677C
Valve, solenoid, Teddington FAW/A330	3	27V/4011	A.P.1086
Cock, shut-off, Saunders SP 11A02	1	36BB/429	A.P.4677C
Valve, fuel pressure regulating, Amal 272/1/019	1	36BB/890	A.P.4677C
Fuel pump and control unit, consisting of:-	1	36BB/1527	A.P.4677C
Control Unit, Lucas CCU 108	1	36LL/7574	A.P.4677C
Fuel Pump, Plessey F.O. 43 BT Mk.1	1	65D/750	A.P.4677C
The following accessories are not supplied with spare engines			
Generator, Rotax B1825	1	5UA/6644	A.P.1086
Motor, starter, Plessey C3616/A/6	1	37F/6080998	
Coil, boost, B.T.H. C7TS/1	1	37A/1700	A.P.1374E
Generator, tachometer, Smiths 122RV/SB	1	6A/4280	A.P.1086

LIST OF ASSEMBLIES

Description	C.A. No.	Page No.	Plate No.
Assemblies and Attachment Parts	-	1	1
Box, Relay Assembly	BN14835	15	3
Casing, Air-Intake Assembly	BN13722	22	4
Unit, Fuel Spill Control Assembly	L3679	25	5
Casing, Main Assembly	BN6750	35	6
Casing, Rear Bearing Assembly	BN12753	38	7
Casing, Second Stage Turbine Assembly	BN4732	42	8
Chamber, Combustion, and First Stage Nozzles Assembly	BN15229	44	9
Diffusers and Compressor Backplate Assembly	L3453	51	10
Duct, Exhaust Assembly	-	54	11
Gearbox, Accessories, Lower, Assembly	BN7240	56	12
Clutch, Roller Assembly	L14801	56	13
Drive, Generator, 7929 rev/min Assembly	L14994	57	14
Gearbox, Lower, and Oil Pump Drive Assembly	L15698	58	15
Generator Coupler Socket Cable Assembly	BN7765	59	25
Pump, Oil, and Filter Assembly	L12037	60	16
Gearbox, Accessories, Upper Assembly	BN7210	70	17
Adapter, Boost Coil Assembly	BN7718	70	18
Drive, Fuel Pump Assembly	L8630	71	19
Gearbox, Hand Starter Assembly	BN13730	71	20
Valve, Fuel, Pressure Regulating Assembly	L15360	74	21
Housing, Fuel Inlet, and Accessories Drive Pinion Assembly	BN7151	82	22
Igniter, Torch Assembly	B280785	85	23
Lead, High Tension Ignition Assembly	-	87	24
Leads, Low Tension Assembly	L12872	89	25
Mounting, Engine Assembly	-	96	26
Nozzles, Second Stage Assembly	BN9926	100	27
Oversize, Undersize and Special Repair Parts	-	191	-
Pipes, Air Assembly	BN12826	102	28
Pipes, Fuel Assembly	BN11658	110	29
Pipes, Oil Assembly	BN4270	117	30
Rotating and Balanced Assembly	L16258	125	31
Valve, Air Delivery Assembly	L9398	128	32
Duct, Bleed Assembly	BN11694	129	33
Transit Blanks	-	137	34
Fuel Metering System	BN14748	138	35
Fuel Metering System Components, Lucas and Plessey:-	-	-	-
Pump, Fuel Assembly (Plessey)	CA1726	143	36
Unit, Fuel Control Assembly (Lucas)	-	150	37
			38

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