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AMENDMENT RECORD

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PREFACE

- 1 Amendments are identified by side lining.
- 2 Comments on this publication are to be forwarded in accordance with AESP 0100-P-011-013 to Vehicles and Weapons Branch REME, Chobham Lane, Chertsey, Surrey, KT16 0EE.

Associated Publications

AESP 2815-B-641 Octad Engine, diesel 1 and 2 cylinder Lister Petter.
A range, air and water cooled

AESP 6115-G-350-201

WARNINGS AND CAUTION

WARNINGS ...

- (1) THE OUTPUT VOLTAGE FROM THIS GENERATOR CAN ENDANGER LIFE. CARELESSNESS CAN BE FATAL. ENSURE THAT THE CHASSIS IS CORRECTLY EARTHED AND THAT THE EARTH LEAKAGE CIRCUIT BREAKER FUNCTIONS CORRECTLY FOR OUTPUT 4.
- (2) BEFORE OPENING THE ACCESS COVER TO THE EMERGENCY TERMINALS, THE EMERGENCY TERMINALS 13A CIRCUIT BREAKER SHOULD BE AT THE OFF POSITION.
- (3) THIS GENERATOR SET IS FITTED WITH RFI/EMP FEED THROUGH FILTERS. THE GENERATOR SET MUST BE CORRECTLY EARTHED BEFORE USE.
- (4) ANY GUARD OR COVER REMOVED FOR MAINTENANCE IS TO BE REPLACED BEFORE OPERATING THE MACHINE.
- (5) KEEP CLEAR OF HOT, MOVING OR ELECTRICAL PARTS.
- (6) ENSURE ADEQUATE VENTILATION WHEN USING IN ENCLOSED SPACES.
- (7) WHEN MOVING THE GENERATOR SET OR REMOVING THE ENGINE/ALTERNATOR, PREVENT INJURY TO PERSONNEL BY USING ADEQUATE SUPPORT DURING THE LIFTING OPERATION.
- (8) CARE SHOULD BE TAKEN TO PREVENT THE SPILLAGE OF FUEL ONTO THE SOFT NOISE ABSORBENT AREAS WITHIN THE ENGINE ENCLOSURE AND THE ACOUSTIC COVER. ANY SUCH SPILLAGES SHOULD BE ATTENDED TO IMMEDIATELY. ANY SPILLAGES MUST BE CLEANED UP BEFORE RUNNING THE GENERATOR SET.
- (9) THE GENERATOR SET IS FITTED WITH A SEALED FOR LIFE BATTERY. ANY BOOST CHARGE MUST BE FROM A CONSTANT VOLTAGE SOURCE NOT EXCEEDING 15 VOLTS AND A MAXIMUM CHARGE CURRENT OF 35 AMPERES (30 AMPERES NOMINAL).

CAUTION ...

Do not stop the engine by means of the decompressors.

RESUSCITATION

TREATMENT OF THE NON-BREATHING CASUALTY

NOTICE

The inclusion of the emergency resuscitation placard (MOD Form 656) in Military Technical Publications has been discontinued.

This notice is to be retained in the publication until removed by amendment instruction.

MAINTENANCE SCHEDULE

INTRODUCTION

Authority

1 This Maintenance Schedule is the authority for carrying out all maintenance tasks on the subject equipment.

Responsibilities

2 The unit commander is responsible for ensuring that the operations detailed in this schedule are properly carried out. He may order any operation to be carried out more frequently than is specified if the conditions under which his equipments are operating render it necessary. He should consult his REME advisor before ordering such changes.

3 The unit commander may adjust the specified maintenance intervals by plus or minus 10 per cent to suit local circumstances.

4 The operator/driver is responsible for ensuring the equipment is fit for task. If the mechanical fitness is in doubt, the equipment is not to be used until advice has been sought.

Inspection and examinations

5 The unit commander is advised to arrange inspections to be carried out on receipt of the equipment and thereafter in accordance with JSP 341 Chap 16 para 16.454.

6 Examination are carried out by REME in accordance with AGAI Vol 4 para 142.031 - 142.036.

Records

7 Maintenance and inspections are to be recorded in the equipment documents.

Serial numbers

8 Serial numbers left blank may be taken up by amendment action at a later date.

Abbreviations

- 9 L1 - Level 1 (User Unit Maintenance)
- L2 - Level 2 (REME Unit Maintenance)
- L3 - Level 3 (REME Field Repair)
- L4 - Level 4 (Base Repair, including contract repair and Manufactures Repair)

TABLE 1 EQUIPMENT APPLICABILITY

Note ...

The information in this schedule applies to the following equipment.

Ser	Equipment Code No	Designation
(1)	(2)	(3)
1	N/K	Generator Set, Diesel Engine Driven, 4.5kW (5.6KVA) 240V AC, Single Phase, 50Hz (Air Log 4169A)

TABLE 2 FUELS, LUBRICANTS AND ASSOCIATED PRODUCTS

Notes ...

- (1) Only the F & L products listed below are to be used on this equipment.
- (2) The local REME advisor may authorise the use of OMD 30 where the ambient temperature is persistently below -15°C and the oil temperature is likely to reach -15°C for a significant period of time.

Ser	Assembly/System	Product		Capacity	
		Above -15°C	Below -15°C	Litres	Pints
(1)	(2)	(3)	(4)	(5)	(6)
1	Engine:				
	1.1 Sump	OMD 80	OMD 30	3.7	6.5
	1.2 Fuel tank	Local instructions apply		25	44
2	General lubrication	OMD 80	OMD 80	As required	
3	General grease	XG 279	XG 279	As required	
4	Battery terminals	PX 7	PX 7	As required	

TABLE 3 EQUIPMENT DATA

Ser	Item	Detail
(1)	(2)	(3)
1	Valve/rocker arm clearnace, (engine cold):	
	1.1 Inlet valve	0.10mm (0.004in)
	1.2 Exhaust valve	0.10mm (0.004in)
2	Torque settings:	
	2.1 Cylinder head nuts	27Nm (20 lbf ft)
	2.2 Injector clamp nuts	8Nm (6 lbf ft)
	2.3 Oil filter centre bolt	14Nm (10 lbf ft)
3	Engine speed:	
	3.1 Governed - mechanically	3300 rpm
	3.2 Governed - electrically	3000 rpm
4	Engine oil pressure (minimum)	2.4 bar (35 lbf/in ²)
5	Injector release pressure	200 Atmospheres

TABLE 4 ACTION ON RECEIPT OF EQUIPMENT

Ser	Operation
(1)	(2)
1	<p>Check:</p> <p>1.1 Equipment for damage</p> <p>1.2 Tools and equipment against CES</p>
2	Remove preservation, sealing and packaging where applicable
3	Refit any components removed to aid transit
4	Clean equipment, tools and attachments
5	Read Operator/User Handbook and learn position and function of all controls
6	Report any defect or damage
7	Maintenance:
	7.1 Carry out column (5) tasks of table 6
8	Inspection:
	8.1 Request L2 to carry out a receipt inspection

TABLE 5 DAILY OPERATOR'S CHECKS

Notes ...

- (1) This maintenance is to be carried out on those days when the equipment is to be used.
- (2) All faults are to be reported as soon as possible to L2.

Ser	Task	Support Level	Product
(1)	(2)	(3)	(4)
	WARNING ...		
	<u>BEFORE CARRYING OUT ANY MAINTENANCE TASK READ AND ABIDE BY WARNINGS AND CAUTIONS ON PAGE (VI)</u>		
1	Before starting engine:		
	1.1 Check and top up engine oil level	L1	OMD 80
	1.2 Visually check equipment for damage	L1	
	1.3 Ensure all air passages are clear	L1	
	1.4 Ensure fuel tank is full	L1	
	1.5 Ensure the fire extinguisher is serviceable	L1	
2	After starting and during running:		
	2.1 Check for oil, fuel and exhaust leaks	L1	
	2.2 Check all gauges and warning lights are functioning correctly	L1	
	2.3 Listen for any unusual running noises	L1	
	Note ...		
	The engine oil level must be checked every 30 hours if being run continuously		
3	At conclusion of work/day:		
	3.1 Close down	L1	
	3.2 Check for damage/faults	L1	
	3.3 Ensure fuel tank is full	L1	
	3.4 Ensure equipment is ready for use	L1	
	3.5 Ensure all relevant entries are made in equipment documents	L1	

TABLE 6 GENERATOR PERIODIC MAINTENANCE

Note ...

Column (6) tasks are to be carried out after a new or reconditioned engine has been fitted.

Ser	Task	Support Level	Product	Int Maint	First 20 Hrs	Every 250 Hrs	Every 500 Hrs	Every 2000 Hrs
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
WARNING ...								
BEFORE CARRYING OUT ANY MAINTENANCE TASK READ AND ABIDE BY WARNINGS AND CAUTIONS ON PAGE (VI)								
1	Renew:							
	1.1 Engine sump oil and filter	L1	OMD 80		X	X	X	X
	Note ...							
	The engine oil and filter should be changed at least once a year							
	1.2 Air cleaner element	L1					X	X
	1.3 Fuel filter element	L1					X	X
2	Tighten/adjust:							
	2.1 Cylinder head nuts	L2			X			
	2.2 Valve clearances	L2			X	X	X	X
	2.3 Decompressor setting	L2			X	X	X	X
	2.4 All hoses, pipes mounting securing bolts/screws and electrical connections	L1			X	X	X	X
3	Lubricate/grease:							
	3.1 Fuel pump linkage ball joints	L1	OMD 80	X		X	X	X
	3.2 Cover, access hatch hinges	L1	OMD 80	X		X	X	X
	3.3 Cover, over centre catches	L1	OMD 80	X		X	X	X
	3.4 Battery terminals	L1	PX 7	X		X	X	X

(continued)

TABLE 6 GENERATOR PERIODIC MAINTENANCE (continued)

Ser	Task	Support Level	Product	Int Maint	First 20 Hrs	Every 250 Hrs	Every 500 Hrs	Every 2000 Hrs
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4	Clean/drain/test:							
	4.1 Cylinder head and barrel fins	L2					X	X
	4.2 Fuel injector	L2				X	X	X
	4.3 Carry out cylinder head overhaul	L2						X
	4.4 Remove excess carbon from exhaust system	L2					X	X
	4.5 Fuel tank filler cap vent hole	L1				X	X	X
	4.6 Fuel tank neck, metal and plastic mesh filters	L1				X	X	X
5	Examine generator set for damage/deterioration	L1		X	X	X	X	X

TABLE 7 OUT OF USE MAINTENANCE

Notes ...

- (1) An equipment taken out of use for periods not exceeding one year is to be put into preservation in accordance with these instructions. These instructions follow the procedures laid down in EMER Whld Vehs A019 Miscellaneous Instruction No 9.
- (2) An equipment taken out of use for periods exceeding one year or in depot stock is to be put into preservation in accordance with current procedures.

Ser	Task
(1)	(2)
1	Equipments are to be stored, where possible, under cover. If equipments have to be stored in the open they should not be placed under overhanging trees or structures and covered with a canvas cover.
2	Periodic maintenance, if circumstances permit, is to coincide with inspection by L2 at the following intervals: 2.1 6 months - open storage 2.2 12 months - covered storage
3	Prior to storage, the equipment is to be fully inspected by L2 and necessary repairs completed. During storage equipments are to be visually inspected at monthly intervals, or more frequently if considered necessary, for signs of deterioration due to age or storage conditions.
4	Prior to storage, all lubrication points are to be oiled or greased in accordance with Table 6 of this maintenance schedule.
5	Unit fire orders should be displayed and cover any fire risk created by the choice of location for stored equipment. Units must observe the Regulations for Fire Services in the Army (1952) and the recommended action of fire service advisers.
6	Equipments are to be thoroughly cleaned, signs of rust removed and coats of primer and finishing paints applied to the surface. For details of paints and methods of application see Wksp G500. Items liable to rust are to be smeared with a coating of oil or grease.
7	The battery is to be removed and stored in the battery charging shop.

(continued)

TABLE 7 OUT OF USE MAINTENANCE (continued)

Ser	Task
(1)	(2)
8	<p>Every two months during storage, refit battery, carry out Table 5 Daily Operator's Checks and run engine up to full working temperature. Return the battery to the charging shop after this operation.</p> <p>Note ...</p> <p>The engine should be rotated 5 times on the pull start, with the ignition OFF, before attempting to start the engine, to allow the engine lubrication oil to circulate.</p>
9	<p>When an equipment is brought back into service, degrease all items that were greased in Serial 6 above, refit the battery and carry out any overdue maintenance.</p>