

GENERATOR SET, GASOLINE ENGINE, 15KVA
115/200V, 408HZ, 3 PHASE, ELECTRIC START

DATA SUMMARY

General

1. The Generator Set, Gasoline Engine, 15kVA 115/200V, 408Hz, three phase, consists of an ac generator coupled to a Volkswagen Industrial type 126A gasoline, electric start engine via a flexible coupling.

Note:

1. NSN and Designation used in this instruction were current at the date of issue. If twelve months or more have expired since issue, the NSN should be checked for supersession.

2. The equipment is intended as the prime power source for the AN/TPQ-36 Weapon Locating Radar and is mounted on the radar's pallet assembly. There are two generators per radar.

3. The internal 3.5 litre fuel tank is not used for normal operation and the generator is fuelled from an external 240 litre fuel tank mounted on the pallet assembly.

Manufacturer's Detail and Physical Data

4. Manufacturer's Detail.

a. Designed and : Engineering Development
Developed by Establishment (EDE)
Raleigh Road
MARIBYRNONG VIC 3032

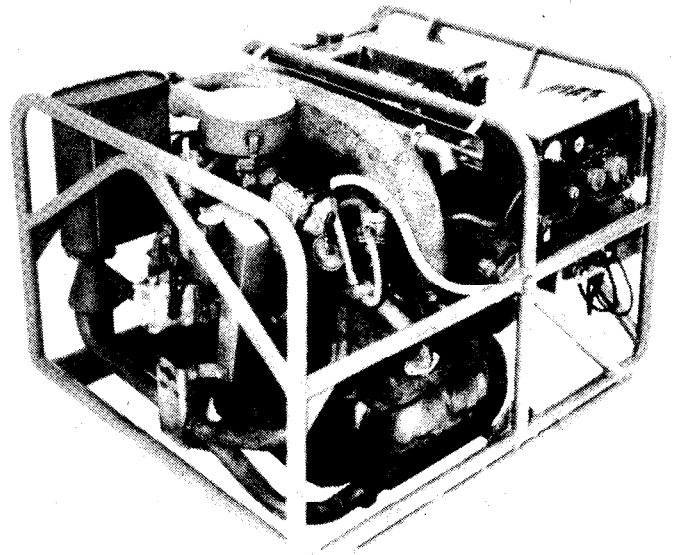
b. Manufactured : Australian Defence
by Industries
West Road
MARIBYRNONG VIC 3032

5. Dimensions and Mass

a. Height : 650mm
b. Width : 930mm
c. Depth : 800mm
d. Mass : 251kg

6. Engine

a. Make : Volkswagen
b. Model : Industrial
Type
126A
c. Rated Output : 27kW at 3100 rev/min
d. Design : Air-cooled,
4 cylinders, 4 cycle,
OHV, with two
pairs of cylinders
horizontally
opposed



e. Bore : 85.5mm
f. Stroke : 69mm
g. Capacity : 1584cc
h. Compression Ratio : 7.7:1
i. Governed Speed : 3060 rev/min
j. Valve Clearance
(1) Intake : 0.15mm
(2) Exhaust : 0.15mm

Up to max oil temp of 50°C

k. Cooling : Radial blower driven
by V-belt. Fitted with
Thermostat M813
l. Lubrication : Force fed by
gear pump

- j. Valve Clearance
- (1) Intake : 0.15mm
- (2) Exhaust : 0.15mm

Up to max oil temp of 50°C

- k. Cooling : Radial blower driven by V-belt. Fitted with Thermostat M813

- l. Lubrication : Force fed by gear pump

- m. Oil : OMD 115 (Normal)
OMD 40 (Below 0°C)

- n. Oil Capacity : 2.5 litres

- o. Oil Capacity : Flat tube cooler in air stream

- p. Fuel : Gasoline, minimum octane rating - 74

- q. Fuel Supply : By fuel pump

- r. Carburettor : Solex downdraught 28 VF15-1

- s. Air Cleaner : Paper element type

- t. Ignition : High tension magneto Scintilla or Ronco Type VW 122.905.705H (suppressed) Contact breaker gap 0.3mm

- u. Spark Plugs

- (1) Heat Range : 175

- (2) Thread : 14mm

- (3) Gap : 0.3mm

- (4) Types : Bosch WC175ERT1 or Champion RML12

- v. Firing Order : 1-4-3-2

- w. Firing Point : 7.5° before TDC

- x. Governor : Centrifugal, acting on carburettor throttle

- y. Oil : OMD 40

- z. Starting System : Electric with crank handle supplied for emergency use

7. Generator

- a. Make : EDE design

- b. Type of Frame : Totally enclosed, fan cooled, brushless

- c. Drive : Direct, flexible coupling

- d. Bearings : Two double sealed type ball bearings

- e. Field System : Rotating, salient pole

- f. Rated Speed : 3100 rev/min

- g. Rated Output : 15kVA

- h. Power Factor : 0.8 lagging

- i. Battery : 12V, 44 Ampere Hour (@ 20 hour rate)

- j. Battery Charge System : Bosch 12V generator and regulator

8. Associated Information

- a. NSN : 6115-66-123-1804

- b. RPS : 13068

- c. SCES : 17680/1

- d. Workshop Manual : EDE Provisional User Notes for Generator Set, Gasoline Engine, 15kVA, 115/200V, 408HZ, 3 Phase, (Electrical Start), Publication number EDE 1/86

- e. Associated EMEIs : RGW J 100 Series AN/TPQ-36 Weapon Locating Radar

E N D