



SCOPE OF WORK

MAJOR PM Service

The service to be performed during a MAJOR PM is as follows.

1.0 LUBRICATION

- 1.1 Check engine crankcase oil level.
- 1.2 Visually check for coolant contamination.
- 1.3 Change engine oil and filters using a multi-viscosity oil
- 1.4 Clean crankcase breather.
- 1.5 Lubricate generator bearing.

2.0 COOLING SYSTEM

- 2.1 Check engine coolant level. Add coolant if level is low.
- 2.2 Inspect unit for a low coolant sensor. If unit is not equipped, note in recommendations.
- 2.3 Check Supplemental Coolant Additive (SCA).
- 2.4 Inspect coolant line connections and hoses.
- 2.5 Check fan/alternator belt tension and wear.
- 2.6 Inspect the fan idler pivot and grease.
- 2.7 Inspect the cooling fan and grease the drive bearing, and inspect the fan hub for proper clearance.
- 2.8 Inspect the fan idler pulley assembly.
- 2.9 Change coolant element with Fleetguard filter (or equivalent).
- 2.10 Inspect coolant block heaters' operation and record temperatures.
- 2.11 Inspect coolant pump.



3.0 FUEL SYSTEM

3.1 Diesel fuel generators.

3.1.1 Replace fuel filters with 10 micron Fleetguard fuel filter (or equivalent).

3.1.2 Inspect main tank and day tank (if applicable).

- A. Check piping and correct minor leaks.
- B. Check motor and wiring for overheat.
- C. Check pump and float switch for continuity.
- D. Check level indicator and indicate level in sight glass.

3.2 Gaseous generators.

3.2.1 Inspect main tank and day tank (if applicable).

- A. Check piping, vales & fittings
- B. Correct minor leaks.

4.0 AIR INDUCTION AND EXHAUST

4.1 Check air cleaner and service indicator.

4.2 Check/clean dust collector cap.

4.3 Inspect manifold and air piping.

4.4 Inspect intake hoses and clamps.

4.5 Inspect intake and exhaust openings.

4.6 If equipped with automatic louver system, verify automatic louver system operation. Ensure louvers are wired to generator.

5.0 ELECTRICAL SYSTEM

5.1 Check battery electrolyte.

5.2 Load test batteries and record findings

5.3 Clean and inspect battery cables and electrical connections.

5.4 Inspect alternator drive belt.

5.5 Check shutoff controls.

5.6 Inspect starter.

5.7 Check cold weather starting aids.



- 5.8 Check Battery Charger operation. Make sure light indicator is correct and "green" is on.
- 5.9 Record high and low rate in volts. Voltage tests are to be taken for battery charger (low) in OFF mode and for alternator charging (high) while the generator is running.
- 5.10 Clean voltage regulator (if needed).
- 5.11 Record battery date and date of battery replacement.

6.0 ENGINE AND ALARM VERIFICATION AND TESTING

- 6.1 Record engine crank time.
- 6.2 Record engine RPM voltage and adjust if necessary.
- 6.3 Record no load frequency and adjust if necessary.
- 6.4 Check and record engine oil pressure.
- 6.5 Check and record engine operating temperature.
- 6.6 Check and record engine charging system.
- 6.7 Check and Record: Generator Instruments
 - A. Frequency Reading
 - B. Voltmeter Reading

7.0 GENERAL CONDITIONS .

- 7.1 Inspect all belts and ensure proper adjustment.
- 7.2 Inspect control panel for frayed or damaged wires.
- 7.3 Visually inspect the vibration damper for rips, tears, broken springs or leaks in liquid isolators.
- 7.4 Inspect the generator and engine hold down bolts.
- 7.5 Inspect the engine for oil and coolant leaks and note.
- 7.6 Record run hours.
- 7.7 Report condition of generator enclosure and exhaust system including leaks, holes, rust, etc.
- 7.8 Report overall condition of the area surrounding the generator.
- 7.9 Record whether ethylene or propylene glycol and the ratio.



9.0 **OPTIONAL TESTS AT CUSTOMER'S REQUEST** – To Be Billed in Addition to Standard PM Price at Pre-Determined Prices Per Service at on a Time & Materials basis

- 9.1 Replace Battery(ies)
- 9.2 Replace Air Cleaner
- 9.3 Oil Analysis
- 9.4 Fuel Analysis (Diesel only)
- 9.5 Coolant Flush & Replacement
- 9.6 Load Bank Test