

## **Scheduled Maintenance LEVEL 1 - ~~Emergency~~**

### **GENERAL**

- Visual Inspection - Visual inspection of overall condition of unit to identify foreign objects, loose or broken fittings, guards, and components.
- Wipe off unit - Clean oil, coolant, fuel, and acid deposits. Police generator area.

### **COOLING SYSTEM**

- Radiator/Heat Exchanger - Visual inspection for leaks, damage, and debris. Check louver operation.
- Coolant - Visual inspection for correct level and condition of coolant (rust, oil, and contaminants). Check coolant conditioner concentration and temperature protection. Check filler cap gasket and sealing surface. Replace filler cap as required at additional cost.
- Hoses and Connections - Visual inspection of all hoses for deterioration. Check tightness of connections.
- Fan Drive Pulley and Fan - Check for loose or worn pulleys. Check fan operation and clearance.
- Fan Belts - Inspect for wear or deterioration. Check tension and adjust as necessary.
- Jacket Water Heater - Inspect for proper operation. Record engine temperature prior to starting unit.
- Water Pump - Visual and operational inspection for leaks or unusual noises.

### **FUEL SYSTEM – LIQUID (DIESEL/GASOLINE)**

- Fuel Tank - Visually inspect fuel tank system for leaks and fuel level (Natural gas and LP as well). Test day tank pump for proper operation.
- Water Trap/Separator - Drain water from fuel tank if possible or water separator if applicable.
- Fuel Lines and Connections - Inspect for leaks and check line brackets mounting (Natural gas and LP as well).
- Governor and Controls - Inspect governor oil level. Inspect controls and linkage for proper operation. Add oil as necessary.
- Fuel Filters (Primary/Secondary) - Inspect for damage, leaks, and proper operation.
- Fuel Pressure- Record if available.

### **AIR INDUCTION AND EXHAUST SYSTEM**

- Air Filter Service Indicator - Record reading. Inspect for proper operation. Reset indicator.
- Air Filter - Inspect. Clean as necessary. Replace as required at additional cost.
- Air Inlet System - Inspect piping and air filter housing for damage, loose connections, and evidence of leaks. Clean air filter housing if air filter is cleaned or replaced. Check housing seals and gaskets.
- Turbocharger - Inspect for oil leakage, exhaust leakage, or unusual noises.
- Exhaust Manifold - Inspect for damage, loose or missing hardware, evidence of exhaust leakage, and wet-stacking. Provide load bank recommendation.
- Exhaust System - Inspect silencer and piping for damage, corrosion, or leakage. Check rain cap. Check supports for vibration damage and loose connections.

### **LUBE OIL SYSTEM**

- Oil Level - Inspect for correct oil level. Visually inspect unit for leaks. Add as required at additional cost.
- Oil Pressure - Record oil pressure reading. Operational and visual inspection of prelube pump if applicable.
- Crankcase Breather - Inspect for proper operation. Check connections and inspect hose for deterioration. Visual inspection for excessive blowby.
- S.O.S. - Obtain oil sample for analysis.

### **STARTING SYSTEM**

- Batteries - Inspect for damage or leakage, clean battery with acid neutralizer. Clean and tighten all battery cable connections. (Lead acid batteries only)
- Batteries (Specific Gravity) - Check electrolyte level and specific gravity. (Lead acid batteries only)
- Battery Charger - Inspect for proper operation, loose terminals, and deteriorated wiring. Record output.
- Starting Motor - Inspect electrical connections and wiring. For air starters, inspect oil jar and feeder operation. Perform operational check for abnormal engagement and cranking noises.
- Alternator - Inspect for proper operation, loose connections, and mounting hardware. Check belts, pulley, and voltage output. Record output if applicable.

### **ENGINE MONITORS AND SAFETY CONTROLS**

- Safety Controls - Inspect for loose connections, wiring deterioration, and proper operation.
- Remote Annunciator and Alarms - Inspect and test all panel and system alarms for proper operation..

### **CONTROL PANEL**

- Start Controls-Manual/Auto - Operational check for proper operation. Check automatic start: with customer approval.
- Voltmeter - Operational check for correct readings. Record readings.
- Ammeter - Operational check for correct readings if load is available. Record readings.
- Frequency Meter - Operational check for correct readings. Load and no load readings if load is available.

### **GENERATOR**

- Verify anti-condensation heater operation if applicable. Record temperature.
- Vibration Isolators - Check for proper adjustment and condition.
- Check reduction gearbox oil level if applicable.