

Power Systems Division

Milton CAT Contract Service Content Guide

PM1 Service (Inspection/Minor):

Cooling System

- Inspect radiator/heat exchanger for leaks, exterior cleanliness and/or deterioration
- Check and record coolant level
- Check and record coolant freeze protection
- Obtain coolant sample and send out for laboratory analysis
- Inspect hoses and connections for signs of leaks and/or deterioration
- Inspect fan drive pulley and fan for signs of wear or cracks
- Inspect fan drive belts for signs of cracking or deterioration
- Confirm jacket water heater is working and record coolant temperature (engine not running)
- Inspect water pump for any indication of leaks

Fuel System

- Inspect fuel water separator (if equipped), drain any water from water/sediment bowl (if equipped)
- Check and record fuel tank level (if equipped with gauge)
- Visually inspect fuel tank and fuel piping for any indication of leaks
- Inspect fuel lines and connections for leaks
- Inspect governor linkage (if equipped) for free movement and signs of wear
- Record fuel pressure (if equipped) while engine is running

• Air Intake and Exhaust System

- Check air filter restriction gauge (if equipped) for amount of filter restriction
- Inspect filter element visually to confirm it is seating properly
- Inspect air intake system for any loose components or signs of wear/rubbing
- Inspect turbocharger(s) (if equipped) for loose intake or exhaust components

• Lube Oil System

- Verify oil level is between "add" and "full" marks on dipstick
- Inspect crankcase breather and related tubing for signs of leaks or excessive pressure
- Crankcase fumes disposal tube/piping should be extended beyond radiator to prevent oil mist contamination of radiator core
- Note and record oil pressure on gauge with engine running
- Obtain oil sample (via sample port with engine running) and send out for laboratory analysis
- *IF engine is not currently equipped with a sample valve, Milton CAT will install one at no
- cost during first scheduled service
- Check for any signs of oil leaks

Starting System

- Check and record specific gravity reading of each cell (if maintainable)
- Check for proper level of electrolyte in each cell
- Check battery charger for proper operation and record amperage reading



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- Check and record the last date that batteries were replaced. Recommend that batteries be replaced every three years, regardless of condition.
- Control Panel
 - Verify gauges are operating and record readings
 - Check for presence of any warning lights/alarms
 - Perform lamp/bulb test
- Safety Controls- check for proper operation of safety devices below:
 - Overcrank
 - Overspeed
 - High Coolant Temperature
 - Low Oil Pressure
 - Not-in-Auto
 - Emergency Stop
- Natural Gas or Propane Generator Sets
 - Inspect engine gas lines, regulator and carburetor for signs of leaks/corrosion
 - Inspect carburetor and linkage (if equipped) for proper operation
 - Inspect ignition system (magneto/distributor/spark plugs/wires)
- Operational checks with engine running:
 - Check for any leaks or unusual noises
 - Verify proper voltage and frequency via control panel gauges
 - Check for proper air inlet and outlet louver operation (if equipped)
 - Operate for no more than five (5) minutes without load. Longer periods not recommended without a minimum of 30% of nameplate capacity load applied
 - Perform (5) minute confidence test/ available building load test if permitted by customer. Customer representative must be present to operate necessary circuit breaker to allow transfer to emergency source
- Walk-around inspection
 - visual inspection of generator and environment
 - Check for signs of rodent/insect activity
- Conclusion of visit / Recommendations:
 - Control panel: confirm control switch is in "auto" position
 - Circuit breaker: confirm breaker is in "ON" position
 - Provide written recommendation(s) for any suggested repairs
 - Leave copy of inspection report on site at conclusion of visit
 - Make electronic copy of inspection report available to customer
 - Provide written estimate of additional work to customer within one week of service visit
 - Technician will clean up and dispose of any waste generated during service visit

PM2 Service (Inspection plus oil change/ Major):

- Perform all work required under PM1 Inspection plus;
 - Replace lubricating oil and lubricating oil filters and fuel filters (including fuel/water separators)