

Maintenance Inspection Schedule

Pretrip	Every 1,500 Hours	Every 3,000 Hours*	Annual/ 4,500 Hours	Inspect/Service These Items	Completed
Microprocessor:					
•				Run Pretrip Test (see "Performing a Pretrip Test").	
Engine:					
•				Check fuel supply.	
•				Check engine oil level.	
•	•	•	•	Inspect belts for condition and proper tension.	
•	•	•	•	Check engine oil pressure hot, on high speed (should display "OK").	
•	•	•	•	Listen for unusual noises, vibrations, etc.	
•	•	•	•	Check engine coolant level and antifreeze protection (-30 F [-40 C]).	
	•	•	•	Drain water from fuel tank and check vent.	
	•	•	•	Inspect/clean electric fuel pump filter.	
	•	•	•	Check and adjust engine speeds (high and low speed).	
	•	•	•	Check condition of drive coupling bushings per Service Bulletin TT171.	
			•	Check engine mounts for wear.	
		•		Replace EMI 3000 air cleaner element (see "EMI 3000 Air Cleaner") at 3,000 hours or two years (whichever occurs first). See Note.	
		•		Replace EMI 3000 fuel filter/water separator. See Note.	
		•		Change engine oil and oil filter (hot). Requires oil with API Classification CJ-4 or CK-4 (ACEA Rating E6 for Europe). See Note.	
		•		Adjust engine valve clearance.	
		•		Test fuel injection nozzles at least every 3,000 hours. Based on EPA 40 CFR Part 89.	
			—	Change ELC (red) engine coolant every 5 years or 12,000 hours. Units equipped with ELC have an ELC nameplate on the expansion tank (see "Engine Cooling System").	
			—	Replace fuel return lines between fuel injection nozzles every 10,000 hours.	
			—	Note: Units equipped with Severe Duty Filtration Package - Replace air cleaner element, replace fuel filter/water separator, and change engine oil and oil filter every 4,000 hours.	
Electrical:					
	•	•	•	Inspect battery terminals and electrolyte level.	
	•	•	•	Inspect wire harness for damaged wires or connections.	
			•	Inspect AC generator and alternator wire connections for tightness.	
			•	Inspect electric motors.	
			•	Inspect and, if required, re-torque all electrical connections on the contactors in the Fan Control Box to 15 in-lb (1.7 N•m).	
			•	Inspect and, if required, re-torque all electrical connections on the contactors in the High Voltage Box in SmartPower units. Torque the connections on the Compressor Motor Contactor, Phase Contactors, and Overload Relay to 22 in-lb (2.5 N•m). Torque the connections on all other contactors to 15 in-lb (1.7 N•m).	

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Refrigeration:					
•	•	•	•	Check refrigerant level.	
	•	•	•	Check for proper suction pressure.	
	•	•	•	Check compressor oil level and condition.	
			•	Check compressor efficiency and pump down refrigeration system.	
			•	Empty oil collection container mounted on compressor.	
			—	Replace dehydrator and check discharge and suction pressure every two (2) years.	
Structural:					
•	•	•	•	Visually inspect unit for fluid leaks.	
•	•	•	•	Visually inspect unit for damaged, loose, or broken parts (includes air ducts and bulkheads).	
	•	•	•	Visually inspect the top of the unit for debris, soot build up, branches, and bird nesting material – remove debris.	
	•	•	•	Inspect idlers for bearing wear (noise).	
	•	•	•	Clean entire unit including condenser and evaporator coils and defrost drains.	
	•	•	•	Check all unit and fuel tank mounting bolts, brackets, lines, hoses, etc.	