

## 8.2 SCHEDULED MAINTENANCE

For the most reliable operation and for maximum life, your unit requires regular maintenance. This includes oil and filter changes, fuel and air cleaner replacement, coolant replacement and pre-trip inspections. Maintenance is to be performed in accordance with the procedures provided in [Table 8–1](#).

## 8.3 PRE-TRIP INSPECTION

Pre-trip inspection should be performed before every trip and at regular maintenance intervals. Pre-trip procedures are provided in the Trailer Refrigeration Pre-trip Inspection document 62-90490.

**Table 8–1 Maintenance Schedule**

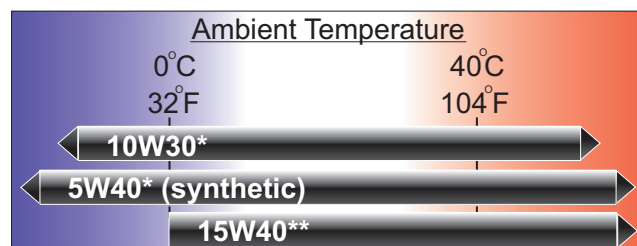
System	Operation	Reference Section
<b>a. Pre-Trip Inspections</b>		
	1. Pre-Trip Inspection - before starting	<a href="#">Section 8.3</a>
	2. Pre-Trip Inspection - after starting	<a href="#">Section 8.3</a>
	3. Run Microprocessor Pretrip - Before loading	<a href="#">Section 3.7</a>
	4. Check Engine Hours	<a href="#">Section 3.17</a>
<b>b. Every Service Interval or Yearly</b>		
Engine	1. Check engine oil and filter change interval (refer to Section d. of this table)	Section d.
	2. Check low oil pressure switch	Engine Manual
	3. Clean crankcase breather	<a href="#">Section 8.6.16</a>
	4. Check fuel injectors every 1,500 hours*	Engine Manual
	5. Check injection pump every 3,000 hours*	Engine Manual
	6. Check and adjust engine valves every 4,000 hours	Engine Manual
Fuel System	1. Clean mechanical and electric (if equipped) fuel pump screens	<a href="#">Section 8.6.3</a> & <a href="#">Section 8.6.4</a>
	2. Change fuel filter	<a href="#">Section 8.6.5</a>
	3. Check fuel heater (if equipped)	<a href="#">Section 8.6.8</a>
Cooling System	1. Check coolant change interval (refer to Section c. of this table). If replacement is not required, check antifreeze concentration using a refractometer, (Carrier Transicold P/N 07-00435-00).	<a href="#">Section 8.6.14</a>
	2. Clean condenser/radiator surfaces	<a href="#">Section 8.6.14</a>
	3. Check water pump	Check
	4. Check water temperature sensor	Check
Exhaust System	1. Check mounting hardware	Check
	2. Check muffler and exhaust pipes	Check
Air Intake System	1. Change air cleaner element	<a href="#">Section 8.6.10</a>
	2. Check and reset air cleaner indicator	<a href="#">Section 8.6.10</a>
Starting Circuit	1. Clean battery connections and cable ends	Check/Replace
	2. Check battery hold down clamps	Check/Replace
	3. Check battery condition	Check
	4. Check starter operation	Check

**Table 8–1 Maintenance Schedule**

System	Operation	Reference Section
Charging Circuit	1. Check battery charger output voltage	Section 8.10.12
	2. Check battery charger amperage	Section 8.10.12
*Based upon EPA 40 CFR Part 89		
Unit	1. Check unit mounting bolts	Check
	2. Check engine and compressor mounting bolts	Engine Manual
	3. Check door latches & hinges	Section 8.5.4
	4. Check condition of water pump belt	Check
Refrigeration System	1. Check defrost air switch and calibrate as necessary	Section 8.9.12
	2. Check & clean the evaporator coil and all defrost drain hoses	Section 8.9.1
	3. Install manifold gauge set and check refrigerant pressure	Section 8.7
	4. Run APX Control System Pretrip	Section 3.7
	5. Check calibration of suction pressure transducer	Section 8.7.1
	6. Check manual defrost operation	Section 3.12
Electrical System	1. Check unit switches and electrical connections	Check
	2. Check all ground connections for corrosion & tightness	Check
	3. Check stand-by plug for signs of wear or damage	Check
	4. Check condenser fan amperage	Section 2.10
	5. Check evaporator fan amperage	Section 2.10
	6. Check compressor amperage	Section 2.10
	7. Check heater amperage	Section 2.10
c. 5 year or 12,000 Hour Maintenance		
Coolant System	1. Drain and flush cooling system	Section 8.6.14
	2. Refill with Extended Life Coolant	Section 8.6.14
d. Oil Change Intervals		
Oil Type	Oil Change / ESI Filter Change	
Petroleum	3000 hours or 2 years (Maximum oil drain interval is 2 years)	
Mobil Delvac 1 ESP*	4000 hours or 2 years (Maximum oil drain interval is 2 years)	
* Mobil Delvac 1 ESP is the only approved synthetic oil		

These maintenance schedules are based on the use of approved oils and regular Pre-trip inspections of the unit. Failure to follow the recommended maintenance schedule may affect the life and reliability of the refrigeration unit.

## 8.4 OIL VISCOSITY



\*10W30 & 5W40 (synthetic) are recommended for ALL climates

\*\*15W40 is NOT recommended for climates < 32°F (0°C)