Your PROHEAT has been designed to operate with a minimum of maintenance. To ensure the efficient operation of your heater a FALL TUNE-UP is strongly recommended to be performed each year.

A higher duty cycle may require a more frequent maintenance schedule.

Proper maintenance will result in the following benefits:
- Maximum heat transfer to the coolant
- Minimum battery power draw
- Long term cost savings
- Increased reliability

1. **Clean Heater Enclosure**
   - Remove the heater enclosure cover.
   - Clean any accumulated debris or dust from the components.
   - Blow out the compartment with compressed air.
   - Do not pressure wash.
   - Make sure the opening around the exhaust pipe is clear.
   - Visually inspect all the components for wear or damage.

**CHECK COMBUSTION AIR INLET FOR RESTRICTIONS. CLEAN AS REQUIRED**
2 Check Exhaust System
- Make sure the exhaust pipe is fully installed and vents outside if the engine compartment.
- Check the pipe for dents, restrictions or severely corroded areas.
- Ensure exhaust pipe clamps are tight.
- Replace the exhaust pipe and clamps if necessary.

3 Check Heat Exchanger
- To maintain optimum heat output, clean any combustion deposits that may have accumulated on the heat exchanger fins.
- Remove the fan end assembly and combustion tube to access the inside of the heat exchanger.
- Ensure exhaust pipe is clean and free from restriction.
- Use a wire brush to loosen the deposits and a vacuum to remove debris.
- Torque securing screws to 25 in. lbs. (2.9 Nm).

4 Check Cooling System
- Check coolant pump, all coolant hoses and connections for signs of leakage or damage.
- Repair or replace as required.

5 Check Batteries
- Check the condition of batteries and the power connections. The heater will not function properly with weak batteries or corroded connections.
- Note For best results load test each battery individually.

6 Check Fuel System
- Check Fuel Pick-Up tube and line to the heater for damage, cracks from aging or leakage.
- Check Internal Fuel and Air hoses for damage and cracks from aging or leakage.
- Check Fuel Regulator for damage or leakage.
- Ensure all Fuel and Air line clamps are secure.
7 Check Fuel Filter
- Remove and inspect filter. Replace as necessary.

TORQUE TO 150 IN. LBS. (17.35 Nm)

FILTER
O-RING
O-RING

8 Clean Nozzle
- Remove and install Nozzle as per Service Manual 925830. Torque to 150 in. lbs. (17.35 Nm).
- To properly clean the nozzle use a degreaser/cleaner or carburetor cleaner in a spray can. This will wash any dirt out and leave no residue. When using compressed air, blow into the nozzle orifice from the head end ONLY.

APPLY COMPRESSED AIR IN THIS DIRECTION

COUNTER BORE

DISTRIBUTOR

NOZZLE

HOLE & GROOVES CLEAR

STEM

HOLD UPRIGHT TO ASSEMBLE

TORQUE TO 30 IN. LBS. (3.5 Nm)

9 Compressor Air Filter
- Replace inlet air filter annually or more often if dusty conditions are encountered.

TORQUE TO 50 IN. LBS. (5.78 Nm)
**10 Electrical System**

- Check the internal and the external wire harnesses for damage. Replace if required.
- Refer to Service Bulletin SB0049 ‘Annual Servicing Instructions for X45 Ignition Lead and Ignition Coil’.

**11 Timer / Toggle Switch**

- Check to see that both operate as described in the Operation Manual.

**12 Air Pressure Check**

- Please refer to the X45 service manual 925830 for further information.

**13 Operation Test**

- Run the system for at least 15 minutes or until the heater cycles “OFF” and then “ON” again.
- Alternate the thermostat for the sleeper heater (if connected) between the lowest and highest settings to ensure that the sleeper heater fan cycles “ON” and “OFF”.

**Replacement Parts**

<table>
<thead>
<tr>
<th>PART #</th>
<th>QTY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>825730K</td>
<td>1</td>
<td>Air Filter, X45.</td>
</tr>
<tr>
<td>880035K</td>
<td>1</td>
<td>Fuel Filter, X45</td>
</tr>
<tr>
<td>PK0094</td>
<td>1</td>
<td>X45 Fall Service Kit includes:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 x Air Filter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 x Fuel Filter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 x O-Ring</td>
</tr>
</tbody>
</table>

**NOTICE**

Please refer to the X45 Parts Book at [www.proheat.com](http://www.proheat.com)