



## FUEL PUMP PRESSURE CHECK AND SERVICE

### Instructions

#### ⚠ WARNING

To avoid the risk of shock, ensure to disconnect power to heater unit during disassembly/reassembly.

#### ⚠ WARNING

Fire Hazard. DO NOT place any flammable items around the heater and exhaust pipe.

1. Disconnect power to heater.
2. Remove air compressor hose to ensure heater will not run in full output during test.
3. Remove fuel outlet hose from fuel pump.

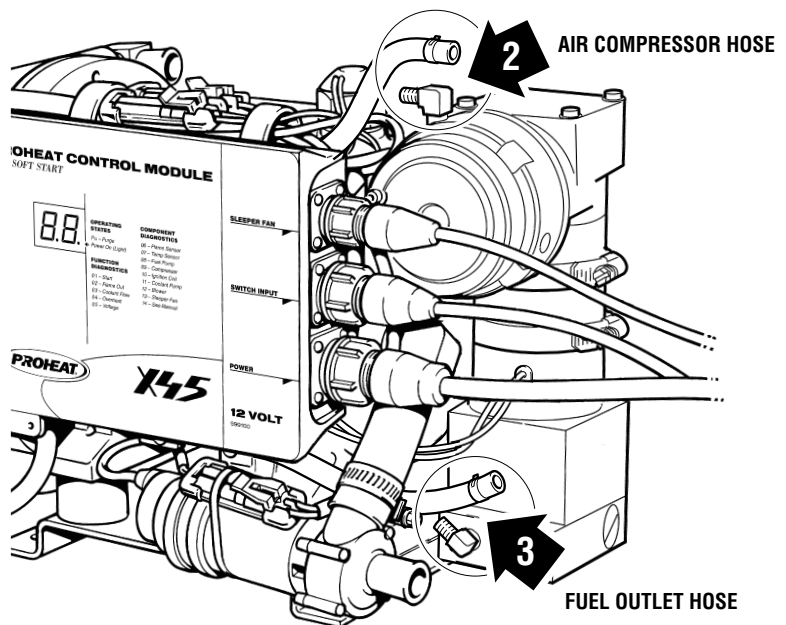


Figure A.

4. Remove 'T' fitting from test gauge PK0060.

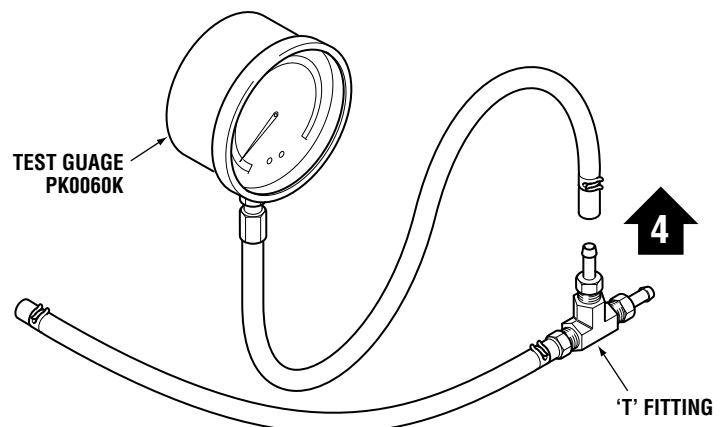


Figure B.

## NOTICE

Calibrate gauge before each use see [www.proheat.com/PDFs/990614.pdf](http://www.proheat.com/PDFs/990614.pdf) for more information.

## NOTICE

It is normal to get a Start Error Code 1 or a Flame out Code 2 during the test. The Compressor/Fuel pump motor will only run for the first 60 seconds during this test. See Service Manual for operating sequence.

5. Install test gauge PK0060K on fuel pump outlet.

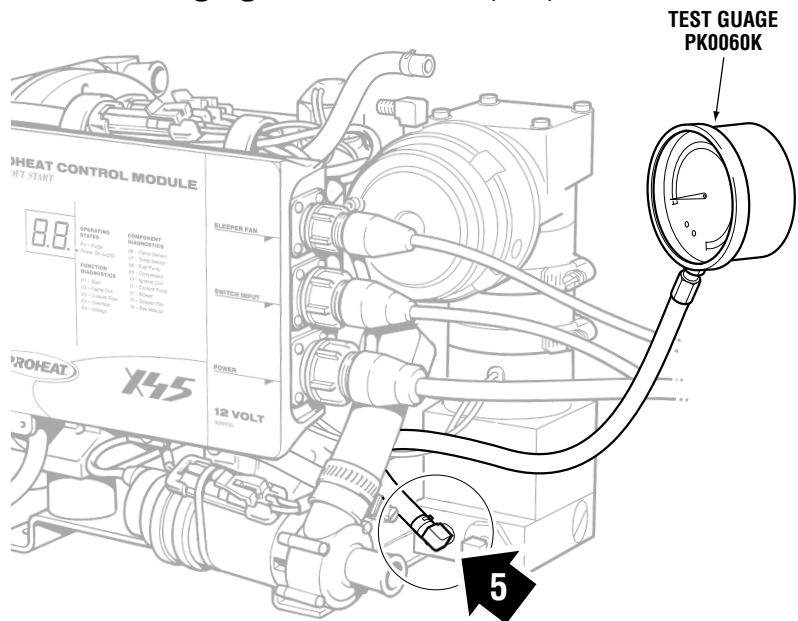


Figure C.

6. Switch the PROHEAT on and read the fuel pressure on test gauge. A reading of 5 – 10 PSI is normal and no further action is required.

## IF READING IS ABOVE 10 PSI

1. Locate the pressure relief valve cap and remove with a slot screwdriver. Be careful not to lose any of the internal components that may fall out.

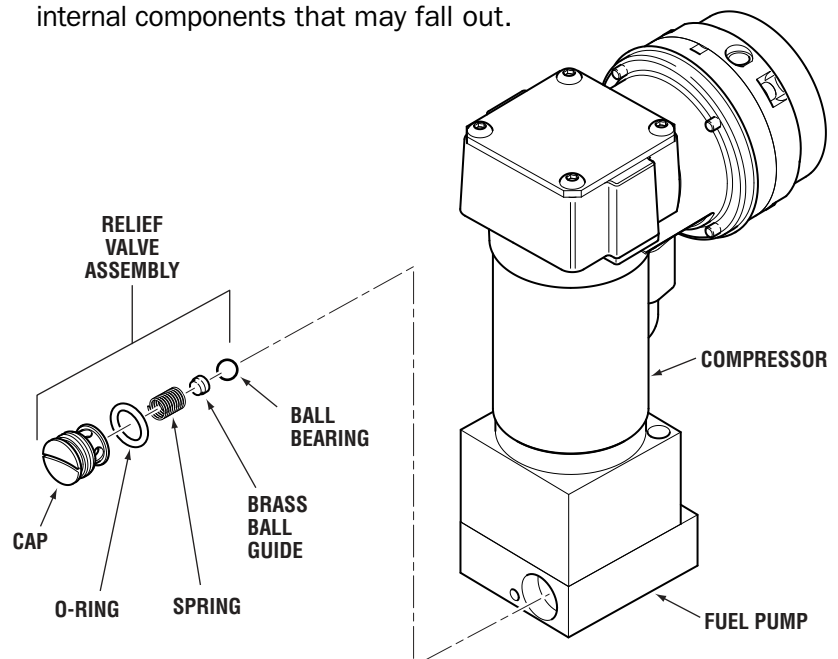
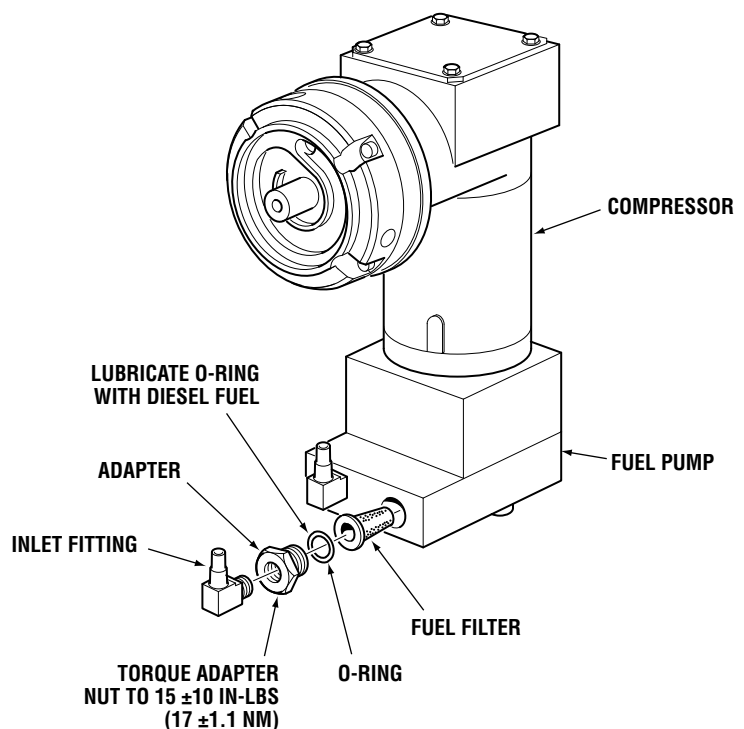


Figure D.

2. Remove the spring and brass ball guide from the cavity.
3. Carefully separate and discard the brass ball guide from the pressure relief valve spring. DO NOT stretch or damage the spring.
4. Remove the ball bearing from the cavity.
5. Inspect and clean all components.
6. Inspect and clean the cavity. Pay close attention to the center hole in the cavity for any debris or a damaged edge. The edge of the hole should be smooth with no nicks, DO NOT use any tool that may damage the edge as this will cause loss of fuel pressure.
7. Place ball bearing back in cavity on the center hole.
8. Place spring back in hole on top of ball bearing.
9. Lubricate O-ring with diesel fuel.
10. Install pressure relief valve cap and torque relief valve to  $22 \pm 2$  in-lbs ( $2.5 \pm 0.2$  Nm)
11. Re-test the fuel pressure.
12. If fuel pressure is still above 10 PSI replace relief valve assembly or fuel pump assembly.

**IF READING IS BELOW 5 PSI**

1. Check that there is fuel in the fuel tank.
2. Check the fuel filter for contamination.

*Figure E.*

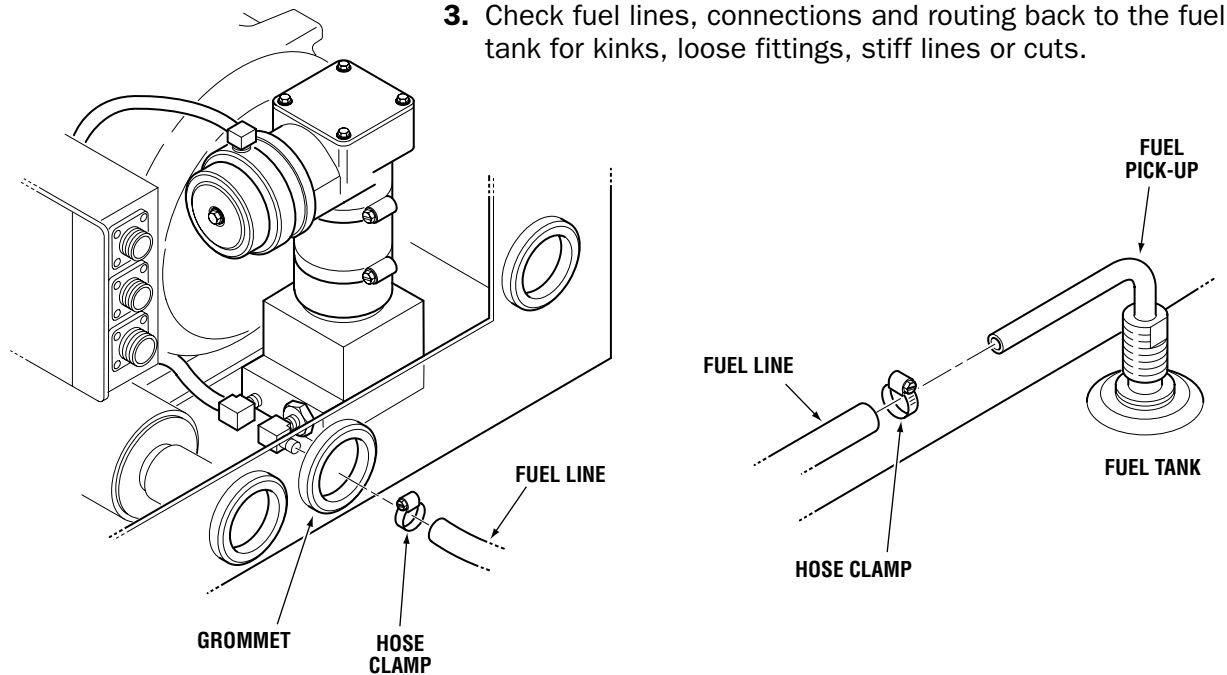


Figure F.

4. Check pressure relief valve. Locate the pressure relief valve cap and remove with a slot screwdriver. Be careful not to lose any of the internal components that may fall out.
5. Remove the spring and brass ball guide from the cavity.
6. Remove the ball bearing from the cavity.

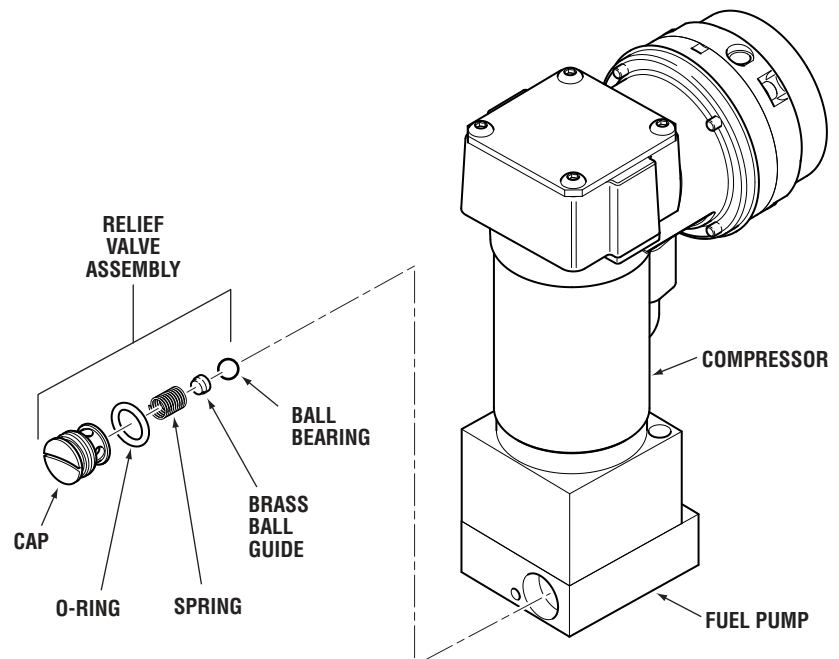


Figure G.

7. Inspect and clean all components.
8. Inspect and clean the cavity. Pay close attention to the center hole in the cavity for any debris or a damaged edge. The edge of the hole should be smooth with no nicks, DO NOT use any tool that may damage the edge as this will cause loss of fuel pressure.
9. Place ball bearing back in cavity on the center hole.
10. Place spring back in hole with brass ball guide on top of ball bearing.
11. Lubricate O-ring with diesel fuel.
12. Install pressure relief valve cap and torque relief valve to  $22 \pm 2$  in-lbs ( $2.5 \pm 0.2$  Nm)
13. Re-test the fuel pressure.
14. If fuel pressure is still below 5 PSI replace relief valve or fuel pump assembly.

## Reassembly

1. Remove test gauge PK0060K.

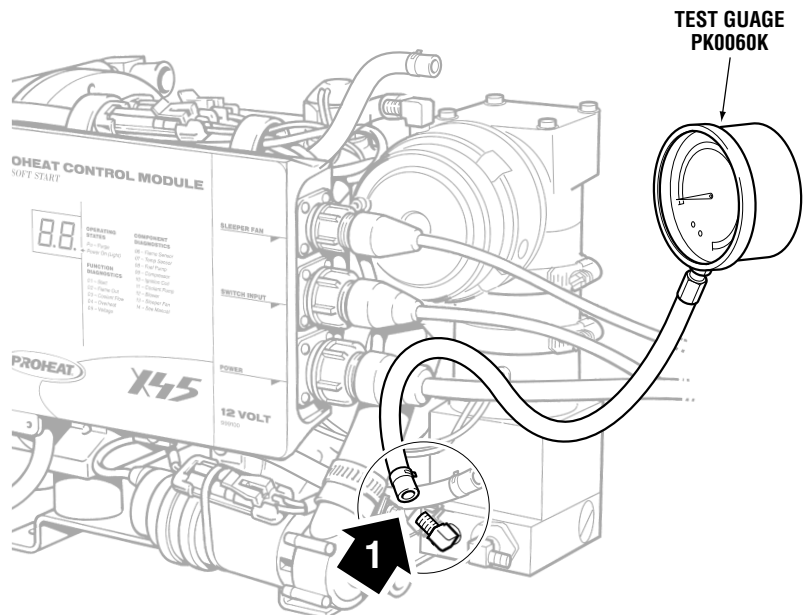


Figure H.

2. Reconnect fuel line to fuel pump outlet.
3. Reconnect air hose at compressor.

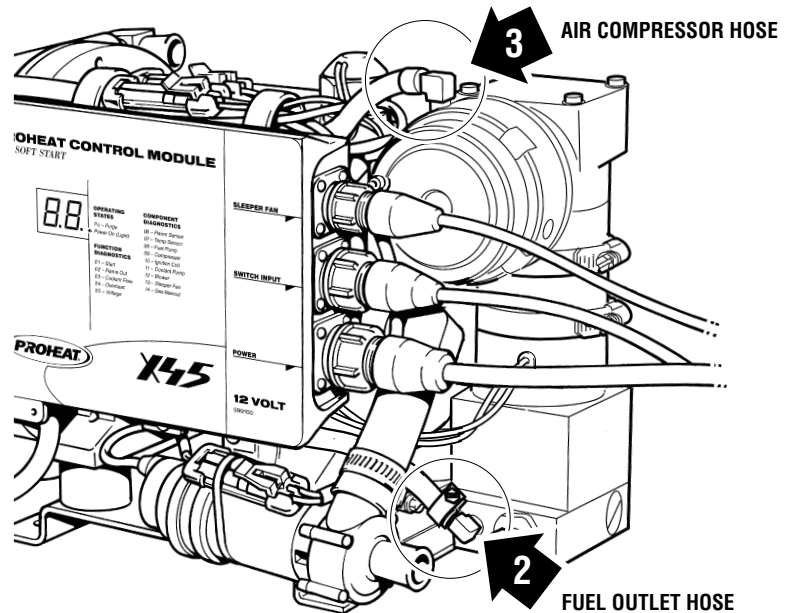


Figure 1.

4. Run heater for a full cycle and inspect for proper operation.