

**INSTALLATION
INSTRUCTIONS****ENGINE HEATER
FOR IMMERSION HEATER: P/N 3500147 120V - 400W****HEATER INSTALLATION PROCEDURE**

1. Drain coolant from engine and radiator into a clean container.
2. Remove the clip and plug from heater manifold. See Figure 1.
3. Apply a light coating of lubricating grease around heater O-ring.
4. Insert heater into manifold port. See Figure 2.
5. Insert clip through manifold slot to secure heater in bore.
6. Attach the electrical lead wire supplied with the immersion heater and fasten with ties to prevent contact with moving engine parts (i.e., drive pulley, cooling fan).
7. Pour the engine coolant into the radiator. Check for leaks and correct if necessary.
8. Start the engine and let run for 5 minutes (minimum).
9. Shut engine off and recheck coolant level.
10. Before heater is to be used, recheck coolant level, then plug heater into a 115V power supply by means of an extension cord (which has a ground).

**WARNING**

Before connecting heater to power source, make certain that the element is immersed in coolant. NEVER energize heater in air. If so energized, element sheath could burst causing personal injury.

The heater in this kit is provided with a grounding three prong plug and should always be connected to a properly grounded 115-Volt supply outlet. If an extension cord is used, always ensure that the wire gauge of the cord is adequate for the load and distance from the heater to the outlet.

**WARRANTY**

The Phillips & Temro Industries warranty statement is located on the website at phillipsandtemro.com/terms.