

**INSTALLATION
INSTRUCTIONS**

48mm OIL PAN HEATERS

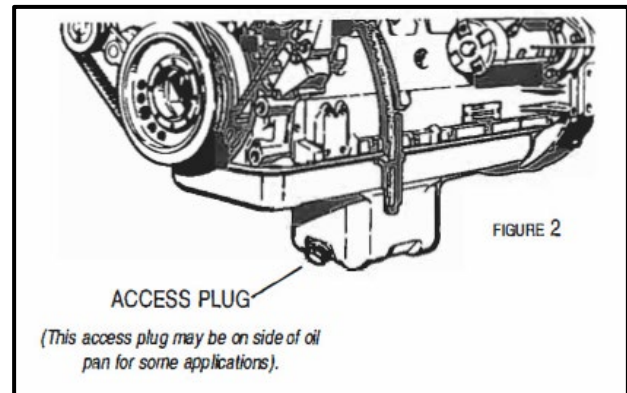
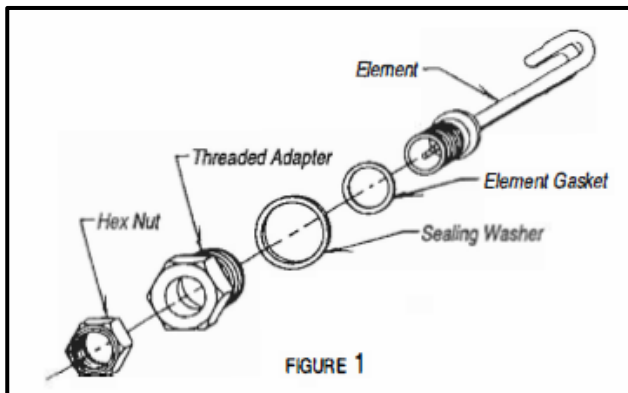
CAUTION



DO NOT plug in heater if heating element is not immersed in coolant. If not immersed, element sheath may burst and could result in personal injury.
In extremely cold weather, heaters should be connected to power source **when engine oil is warm** to eliminate possibility of oil coking on the heating element. Severe coking may cause heater failure.

HEATER INSTALLATION PROCEDURE

1. Drain oil from pan.
2. Check for oil pump screen baffles, etc., which would interfere with heater.
3. Remove available access plug as shown in FIGURE 2.
4. Assemble heater as shown in FIGURE 1. Tighten hex nut to 20 to 30 ft-lbs. (27 to 40 Nm). Do not allow element to turn while tightening hex nut.
5. Place sealing washer on threaded adapter and install assembly into oil pan. If there is no sealing washer in kit, the composite metal/rubber seal supplied on the access plug by the engine manufacturer may be used. Tighten securely.
6. Insert power cord connector firmly into socket, taking care to align pins with sockets of connector on cord. Tighten strain relief nut securely by hand. Secure cord to prevent chafing and damage from excessive heat.
7. Fill oil pan to proper level with engine manufacturer's approved lubricating oil.



NOTE



In cold weather, oil changes should be performed more frequently, due to contamination caused by cold starts.

WARRANTY

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