

**INSTALLATION  
INSTRUCTIONS**

**1" NPT OIL PAN HEATER  
3/4" NPT OIL PAN HEATER**



**WARNING**

Do not plug in heater if element is not immersed in oil. If not immersed, element sheath may burst and could result in personal injury.

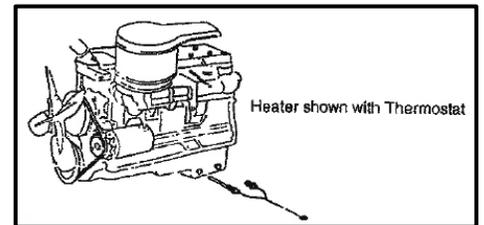
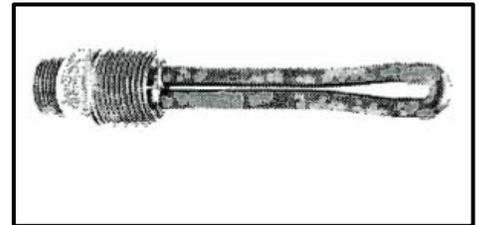
**HEATER**

Check pan for heater installation and port size (a 3/4" NPT thread is approximately 1-1/16" diameter. A 1" NPT thread is about 1-5/16" diameter). Depending on heater purchased, a 3/4" NPT or 1" NPT port that is approximately 2" or more below the oil level is required. For steel pans without a port, a weld flange may be used. For cast aluminum pans with a minimum wall thickness of 11/16" or more, drill and tap the proper size hole to accommodate the heater.

**THERMOSTAT**

The thermostat requires a 1/2" NPT port, preferably located on or below the horizontal plane of the heater. The port should be approximately 4 - 8" away from the heater to accurately sense the oil temperature. A weld flange is available for steel pans with the 1/2" NPT port.

1. Drain oil and remove pan if necessary.
2. Check for oil pump screen baffles, etc., which would interfere with the heater.
3. Remove available access plug or drill and tap available boss.
4. Reassemble oil pan to engine (if removed) using new gasket to ensure against all leaks.
5. Install oil pan heater (and thermostat, if used) using good grade of non-hardening gasket cement on threads.
6. Connect wiring to heater (and thermostat, if used). Take care to align pins with the sockets of the cord connector. Tighten strain relief nut securely by hand. Route cord to outside, allowing slack for engine vibration and protect cord from excessive heat or chafing due to moving parts.
7. Fill oil pan to proper level with lubricating oil approved by engine manufacturer.



**IMPORTANT**

In extremely cold weather, heaters should be connected to power source when engine oil is warm to eliminate possibility of oil coking on heater. Severe coking may cause heater failure.

8. 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](http://phillipsandtemro.com/terms).