

**INSTALLATION
INSTRUCTIONS****OIL PAN HEATER
WITH M22 X 1.5 METRIC THREAD****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 INSTALLATION PROCEDURE**HEATER**

A 22mm threaded plug that is approximately 2" or more below the oil level is required.

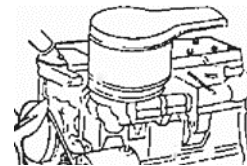
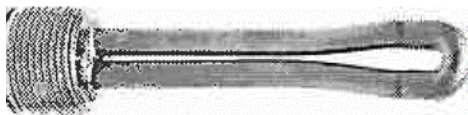
THERMOSTAT (if included in kit)

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 with the 1/2" NPT port is available for steel pans.

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 with gasket or sealing washer if one was used on plug and tighten securely. Install thermostat (if used), using good grade of non-hardening gasket cement on the 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.
8. In cold weather, oil changes should be performed more frequently, due to contamination caused by cold starts.

**IMPORTANT**

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



HEATER SHOWN WITH THERMOSTAT

WARRANTY

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