INSTALLATION INSTRUCTIONS

Universal Oil Pan Heaters
5 1/4" x 1/2" NPT & 8" x 1/2" NPT

WARNING DO NOT PLUG IN HEATER IF HEATING ELEMENT IS NOT IMMERSED IN OIL. IF NOT IMMERSED, ELEMENT SHEATH MAY BURST AND COULD RESULT IN PERSONAL INJURY.

1. Drain oil and remove pan if necessary.
2. Check for oil pump screen baffles, etc., which would interfere with the heater.

FOR STEEL PAN

3. Drill or punch 1" hole for adapter bushing on side or end of pan approximately 1" from bottom of pan, if possible. Install adapter bushing or bushings from outside of pan. Braze in place.

FOR ALUMINUM PAN

Aluminum oil pans will normally have an available threaded hole or provisions where a hole may be drilled and tapped. The adapter bushing cannot be brazed into an aluminum pan. The access hole needed for both the heater and thermostat (if used) is a 1/2 - 14 NPT. If a larger threaded opening is available, a reducing bushing will be required.

3. Remove available access plug or drill and tap available boss.

4. Install reducer bushing if required. Use gasket cement on threads.

5. Reassemble oil pan to engine (if removed) using new gasket to ensure against leaks.

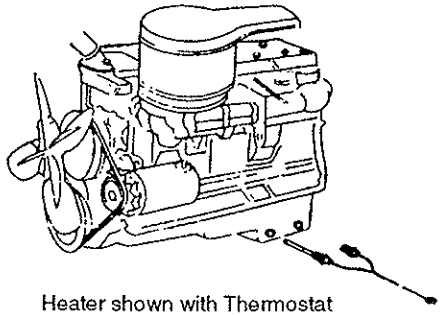
6. Install oil pan heater (and thermostat, if used) using good grade of non-hardening gasket cement on threads.

7. Connect wiring to heater (and thermostat, if used). Protect cords from chafing on moving parts, heat from manifold, and exhaust pipe.

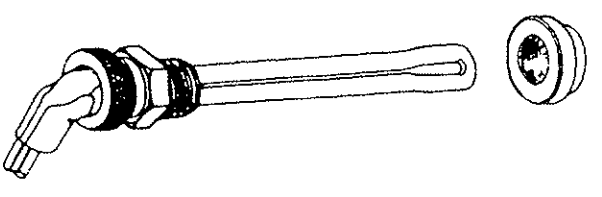
8. Fill oil pan to proper level with lubricating oil approved by the engine manufacturer.

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.

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



Heater shown with Thermostat



Heating element and bushing

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