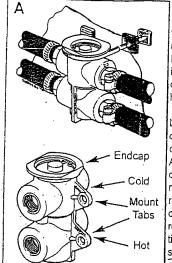
Remote Oil or Fluid Thermostat System

IMPORTANT! READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION.

An oil or fluid thermostat provides quick engine or transmission warm-up in extreme cold climates and will assure cooling when needed. The remote oil/fluid thermostat has fail safe features that are built-in to avoid all possible problems. The valve is partially open when cold, to allow oil/fluid in cooler system to be pre-warmed or to avoid air pockets. When the valve is closed, it has a slight relief to make up for restrictions elsewhere in the system; such as a stacked plate coil, a coil that is too small, or small restrictive oil lines. The thermostat begins to activate between 180° and 190° F (82° and 88° C). The valve closes and forces the oil/fluid through the oil/fluid cooler coil, thus cooling the oil/fluid. The oil/fluid cooler coil remains full of oil/fluid at all times, and avoids trapping air or foaming the oil/fluid. Each pre-tested thermostat can handle flow rates up to 200 GPM (750 LPM), and pressure rates up to



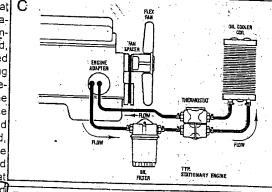
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Install fittings into the four threaded ports. If the threads are NPT (tapered pipe thread) use Teflon® tape or appropriate sealant and torque to 28 ft. lbs.(38 Nm). Secure with hose clamps positioned 1/8" (4mm) from the ends of hose. Do not over tighten the clamps. The proper tension is when the hose surface bulges up slightly through the slots in the bands (see illustration A). If -AN/SAE fittings are used, the fittings must be modified before installing into the thermostat. Sand or machine the chamfer off the fitting, to avoid obstructing the flow or damaging the valve mechanism. If the valve has been machined for -AN. SAE, or metric threads, you will need to determine the correct ports when installing the unit. The entry ports are always on the same side, as are the cooler ports. The ports closest to the end cap of the thermostat unit are for cold oil/fluid, thus lower ports are for hot oil/fluid. Mount tabs are marked cold and hot for reference to the adjacent ports.

Locate a convenient location to interrupt BOTH oil/fluid cooler lines. Be sure to keep the lines free from sharp edges or bends. The thermostat can be secured using any standard tie wrap, or with Perma-Cool's nylon tie & button kit, or by attaching the two metal straps to a frame member, firewall or fender well using two #14-sheet_metal screws. Attach the metal straps to the thermostat mount tabs using two #10 screws, flatwashers and nuts. Connect the nect to the oil/fluid cooler coil. Then connect the remaining "cold" port to the other end of the oil/fluid cooler coil. Then

remaining "hot" port would then complete the circuit by connecting to the engine or transmission to the line that returns TO the engine or transmission. Refer to illustration B or C. Under severely extreme cooling circumstances it may be possible to over-cool the oil/fluid, even with the thermostat in place. This can be caused

by the cooled oil fluid moving through the thermostat and creating a false reading from the thermostat actuator. In these instances, it is recommended that the "cold" port be plugged, and that the return line from the oil/fluid cooler coil be connected via a "T" fitting, to the line that is run between "cold" port and



the engine or transmission (see illustration D).

CAUTION: Thermostats with 3/8" NPT (int.), -6AN, and M16 ports are for use with transmission fluid systems. Thermostats with 3/8" & 1/2" NPT (int.) (with 1/2" [13mm] I.D. hose fittings), -8AN, -10AN, and M18 ports are for use with engine oil systems.

