Congratulations, you have made a wise decision. Thank you for purchasing our product.

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 assures cooling when needed. The remote oil/fluid thermostat has fail safe features built-in to avoid all possible problems. The valve is open when cold, to allow oil/liquid in the cooler circuit 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 180º and 190º F (82º and 88º C). The valve closes forcing the oil/liquid through the oil/liquid cooler coil, thus cooling the oil/liquid. The oil/liquid cooler coil remains full of oil/liquid at all times, to avoid trapping air or foaming the oil/liquid. Each pre-tested thermostat can handle flow rates up to 200 GPM (750 LPM), and pressure rates up to 200 PSI.

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). Slide loose hose clamps over the ends of the hose prior to installing on hose barbs. Secure with hose clamps positioned 1/8” (3mm) 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. The entry ports are always on the same side, as are the cooler ports. The ports closest to the endcap of the thermostat unit are for cold oil/liquid, thus lower ports are for hot oil/liquid. Mount tabs are marked cold and hot for reference to the adjacent ports.

Select a convenient location to interrupt BOTH oil/liquid 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 Perma-Cool’s nylon tie & button kit, (P/N 105) or by attaching 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, flat washers and nuts, (see illustration A). Connect the oil/liquid lines FROM the engine or transmission to the “hot” port on the thermostat. From the opposite side “hot” port, connect to the oil/liquid cooler coil. Connect the “cold” port to the other line from the oil/liquid cooler coil. The remaining “cold” port will complete the circuit by connecting to the engine or transmission. (See illustration B or C). Under extreme cooling circumstances the oil/liquid may be overcooled, even with the thermostat in place. This can be caused by the cooled oil/liquid moving through the thermostat and creating a false reading from the thermostat. In these instances, it is recommended that the “cold” port on the cooler coil side of the thermostat be plugged, and the return line from the oil/liquid cooler coil be connected via a “T” fitting, to the line running between the “cold” port and the engine or transmission (see illustration D).

For easy installation use Perma-Cool part number 1161 Thermostat Mounting Kit for Transmissions or part number 1171 Thermostat Mounting Kit for Engine applications.

CAUTION: Thermostats with 3/8” NPT (int.) ports, P/N 1060, are for use with transmissions. Thermostats with 1/2” NPT (int.) ports, P/N 1070, or -10AN ports, P/N 1071, are for use with engines.

For additional accessories or replacement parts visit www.perma-cool.com