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Continental Oval Oil Sump Heater INSTALLATION & OPERATING INSTRUCTIONS

Failure to follow these instructions may result in product failure.
If any of these instructions are unclear, please call for clarification before beginning.

- 1)** Test each heating element before installation by plugging it in 2-3 seconds to verify that it gets warm. Do NOT cut them. Refer to Fig C showing how the parts plug together. Pick a spot to install the heater(s) horizontally on a smooth surface on the front and/or rear of the oil tank below the oil level as shown in Fig B. Do not install over dents or weld seams.
- 2) Surface preparation is critical.** The paint MUST be removed (use paint remover) and tank surface must be scuffed with a Scotchbrite pad, cleaned with alcohol, lacquer thinner, or acetone, and dry.
- 3) Thorough mixing is critical.** Mix the Aremco epoxy following the instructions on the package. Lay the bag on a table and roll the two parts back and forth in the bag **for several minutes** with a large socket. Simply kneading the bag a few times with your fingers is NOT sufficient. Lay a piece of foil duct tape sticky side up and lay the heater on the tape with the printed side down (Fig A). Apply a bead of epoxy adhesive along the entire length of the heater. Position the heater on the tank as shown in Fig B and use the tape to hold it down. Using a roller or fingers, firmly press the heater onto the tank surface. If a thermostat (P/N HSTS) came with your system, bond it to the tank using the same procedure. Install it below the oil level a few inches from the heating elements. JB Weld epoxy (available in most hardware stores) is a suitable substitute epoxy but **do not substitute any other adhesive**.
- 4) Proper curing is critical.** Aremco epoxy cures in 48 hrs at 75° F. Temps cooler than that will inhibit curing. For cold weather installations, it is not necessary to have the hangar at 75°. Tent the engine with a blanket and use a heat lamp or space heater to warm the bottom of the crankcase to at least 75°. After the epoxy is fully cured (when it's hard), power up the heating elements (with sump full of oil) and watch the heater closely as it heats up. Probe the epoxy as it heats up and if it gets goeey, unplug it and allow it to cure longer. If using JB Weld follow the curing instructions on their package, except that 75°F is required to be fully cured in the 24 hrs stated in their instructions. Curing of either epoxy is complete when the epoxy is solid. **IMPORTANT:** Place a gob of epoxy or RTV over the lead wires for strain relief.
- 5)** Using good aircraft practice route the power cord (P/N HSPC or HSH). P/N HSH plugs into a connector on the cylinder heater harness (P/N CH4, CH6, CH7, or CH9). For P/N HSPC locate the AC plug so it will be accessible with an extension cord, typically through a front air inlet or oil access door. Follow the routing of existing lines or wiring if possible. Secure the wires using cable ties, clamps, or by bonding to the sump with epoxy. Avoid interference with any moving parts such as throttle linkage and heat sources such as exhaust pipes. Attach the green ground wire to the engine, and test the connection by checking for continuity between the engine and the ground pin on the AC plug. Before installing the cowling have someone get in the cockpit and move all controls while you watch to see if there is any interference with any parts.
- 6)** Installation of these FAA-PMA parts is a minor alteration and does not require an STC or Form 337. For type certificated aircraft an A&P is required to install them (or supervise owner installation) and document the engine logbook and W&B. The weight of the oil sump heater components used in each of our systems is as follows: HotPad Oil Sump Heater System is 0.5 lbs, on the Standard System 0.2 lbs, and on the Turbo & Turbo XP Systems 0.5 lbs. Note if you are installing the Standard, Turbo, or Turbo XP System you will also need to add to the above the weight of the cylinder heat system which is indicated in the cylinder heating system installation instructions.

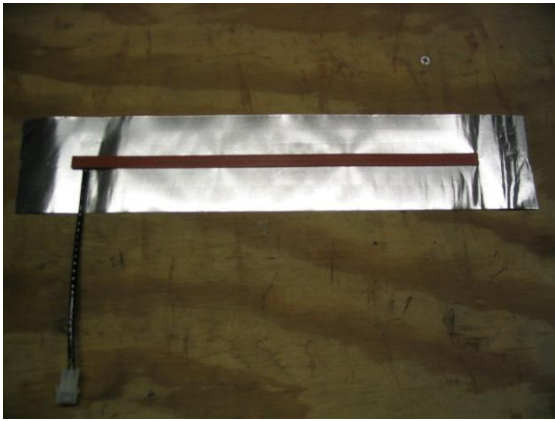


Fig A



Fig B

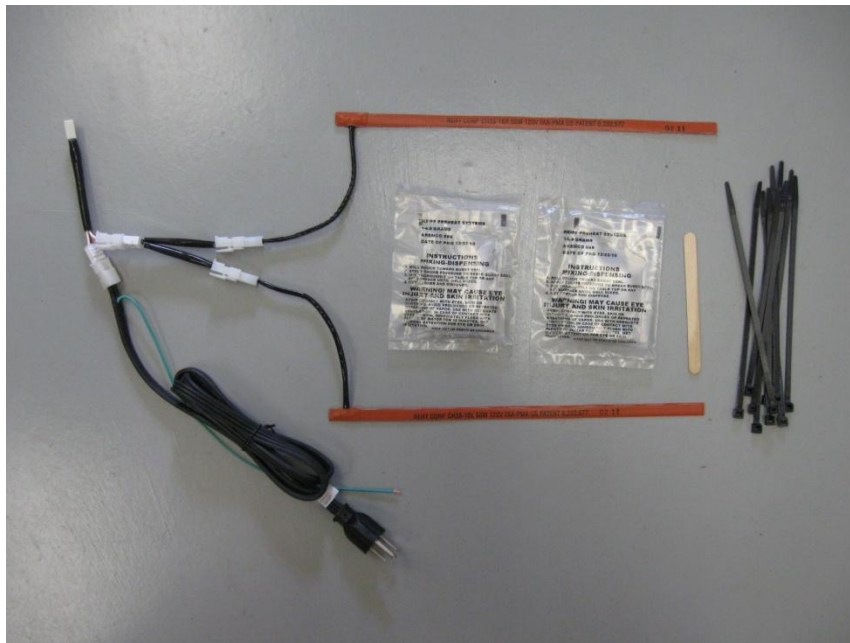


Fig C

OPERATING INSTRUCTIONS

Place a blanket over the engine cowling and plug all cowl openings to retain heat in the engine compartment. Plug in the heater at least 3-5 hours before engine start, 10-12 hours for maximum heating. We suggest using a WI-FI or cellular remote control to make it convenient for you to turn the preheater on prior to a flight. Continuous use during long periods of aircraft inactivity is not recommended, nor do we advocate continuous preheater use as a means to prevent corrosion in inactive engines. Corrosion can occur in engines that are not flown frequently, whether they are warm or not. Always use a grounded outlet for safety. For the best protection against shock, use a ground fault type outlet or extension cord. During each annual inspection the heaters and harnesses should be checked to make sure they are secure and undamaged.

For improved performance our **HotBand Cylinder Heater System** may be added to your engine at any time. When this system is used along with the HotStrip oil heater, the engine temperature will be much higher and the preheat time will be reduced.

No Fault Warranty

Install it, try it, and if you are unsatisfied for any reason, send it back within 30 days of purchase.
Up to 5 years after purchase we will replace or repair any part that fails for any reason.