

# Reiff Preheat Systems

*Long engine life starts with Reiff.*

*Aircraft preheating systems & related products*

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## HotStrip Oil Sump Heater

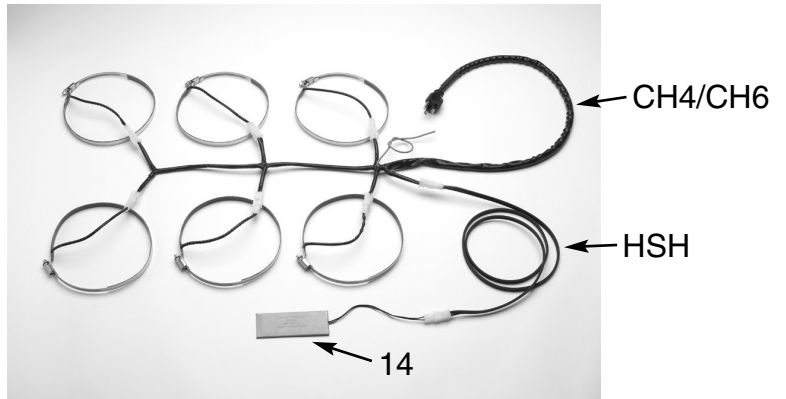
### INSTALLATION INSTRUCTIONS

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

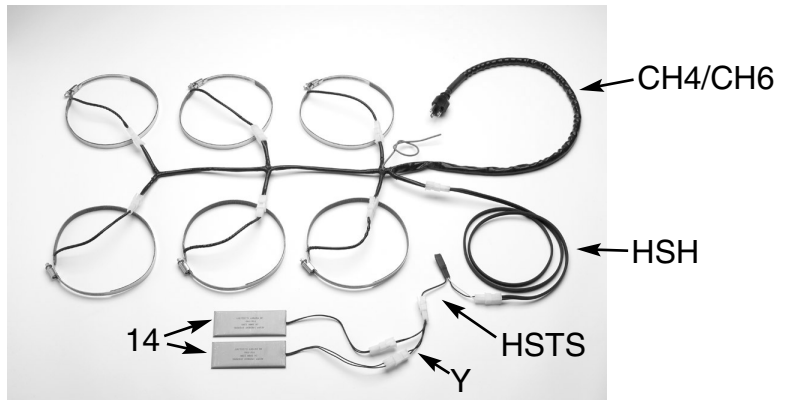
- 1)** Test each heating element before installation by plugging it in just long enough to verify that it gets warm.
- 2)** See photos on pg. 2 showing how the parts plug together, and do a trial fit. Pick a spot to install the heater(s) that is a flat, smooth area on the bottom or side of the oil sump below the oil level. Do not install on a surface that is not flat, or over raised letters, gaps, dents, etc. Continental 360, 470, 520, 550: heater must go on side, the bottom is not flat. Locate it as far away as possible from controls like the throttle and mixture arms, to insure there can be no interference with them. Do not bond to composite (non-metallic) sumps.
- 3) Surface preparation is critical.** The paint **MUST** be removed (use paint remover) and both of the surfaces (sump and heater) must be scuffed, cleaned with lacquer thinner or acetone, and dry.
- 4)** Aremco 568 and JB Weld and are the only tested and authorized epoxies. **Do not substitute any other adhesive.** Mix the epoxy following the instructions on the package. For Aremco, laying the bag on a table and rolling the two parts back and forth in the bag with a large socket works well for mixing. Apply a coating of epoxy onto the **unprinted side** of the heater (the side with flaps), P/N 14. Position the heater onto the sump and apply firm pressure and use duct tape to hold the heater tightly to the sump while the epoxy cures.
- 5) Proper curing is critical.** Aremco cures in 24-48 hrs at 75° F. Once the Aremco has partially hardened the curing may be accelerated by plugging in the heater. Do not plug it in if the Aremco is still soft. If using JB Weld follow the curing instructions on the package, except that 75° F is required to be fully cured in the 16 hrs stated in their instructions. Do NOT plug in the heater to accelerate the curing of JB Weld. Curing of either epoxy is complete when the epoxy is solid. Note that cooler temps will lengthen the cure time considerably. Form a generous bead around and over the heater edges to "lock" the heater in place, and to seal the openings in the corners and the lead wire exit hole to keep out oil, water, or other foreign matter which can short out the heater. Allow this edge bead to cure before running the engine.
- 6)** If your system includes a thermostat P/N HSTS it should be bonded to the oil sump with the flat side against the sump using the same procedure and epoxy as for the heater. Install it below the oil level at least 3" from the heater.
- 7)** Using good aircraft practice route the power cord P/N HSPC or HSH (depending on the system you have). P/N HSH plugs into a connector on the cylinder heater harness P/N CH4 or CH6. 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, RTV, or high temp foil tape. 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.
- 8)** Installation of these FAA-PMA parts is a minor alteration and does not require an STC or Form 337. An A&P is required to install them and document the engine logbook and W&B. HotStrip elements weigh 2 oz each, and the power cord is 4 oz.

## ASSEMBLY PHOTOS

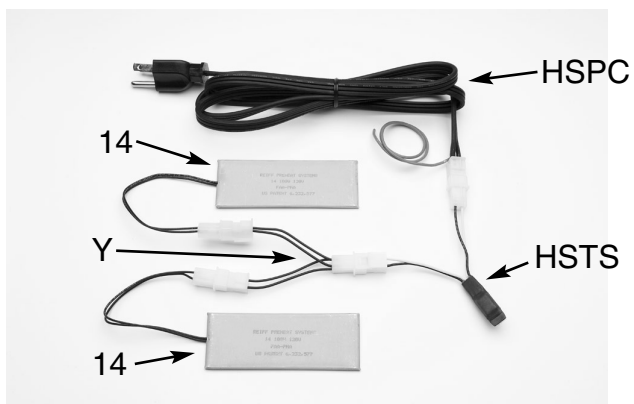
Standard System



Turbo & Turbo XP System



HotStrip  
Oil Sump Heater  
System



## OPERATING INSTRUCTIONS

Place a blanket over the engine cowling and plug the air inlets to retain heat in the engine compartment. Plug in the heater several hours before engine start, 10-12 hours for maximum heating. With no blanket or cowl plugs the engine will not be heated well due to heat loss to the outside air. The heater is built for continuous use, but we don't recommend it unless the aircraft is flown frequently because such use may create condensation inside the engine which may cause internal corrosion. If you use our cylinder heaters with the oil sump heater, or if you fly the aircraft frequently, condensation is less likely but still possible. Use our digital timer, thermostat, or Beeper Box remote activated switch to turn the heater on in your absence. 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 or 100 hr. inspection the heater and cord should be checked to make sure they are secure, undamaged, and functioning.

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 2 years after purchase we will replace or repair any part that fails for any reason.