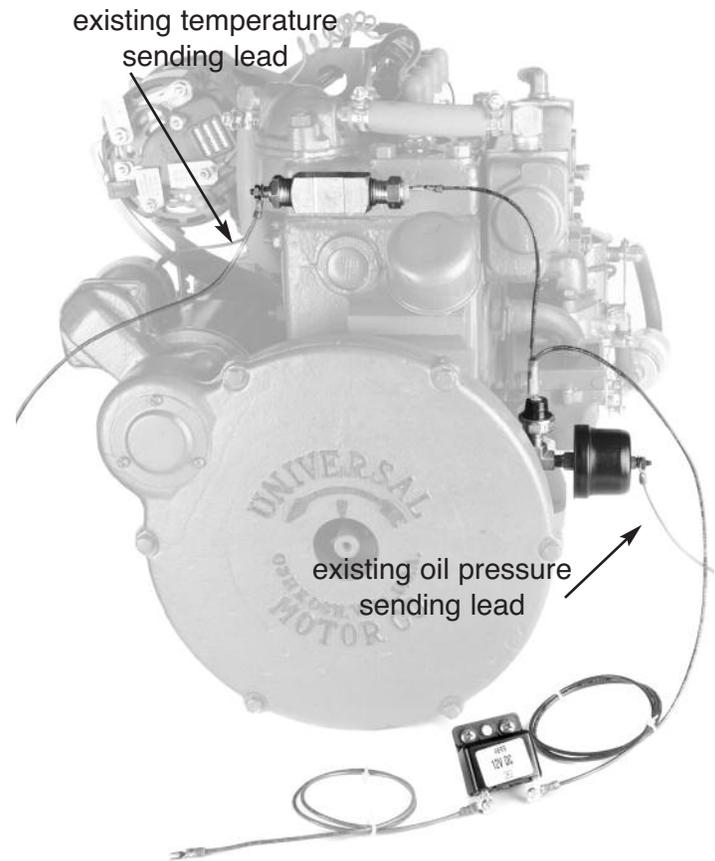




DESCRIPTION OF KIT: This kit is based on the popular Cole Hersee marine engine warning system, PN M-40177-BP. In operation, a warning buzzer located near the helm will signal anytime that engine temperature rises above 200 degrees, or oil pressure drops below 6 psi. The kit includes supplemental instructions by Moyer Marine Inc., and additional fittings and electrical connections to facilitate adopting the Cole Hersee kit to the Atomic 4 engine. See photo 1 for general layout of the kit.

As supplemented, the kit is ideally suited for late model engines with temperature sending units located in front of the head, and oil pressure sending units located just behind the flywheel housing on the carburetor side of the engine. Early model engines may need additional fittings, depending on the plumbing arrangement between the water outlet on the manifold and the exhaust system.



PLUMBING MODIFICATIONS:

1) Remove the temperature sending unit from the front of the head.

CAUTION: Teflon tape should not be used in any of the following steps involving installation of temperature or oil pressure sending units and switches. Each of these devices relies on a connection to ground to function correctly, and Teflon tape has a very real potential of electrically insulating pipe threaded connections.

2) Install the 1/2" branch "T" fitting into the front of the head into the 1/2" pipe threaded hole that used to accommodate the temperature sending unit.

3) Install the original temperature sending unit, and the Cole Hersee warning switch (the switch with 3/8" pipe threads) into each end of the branch "T" fitting. It is usually most convenient to install the Cole Hersee switch in the right branch of the "T" so as to make the electrical connections with the oil pressure switch more easily. See photo 1.

4) Remove the oil pressure sending unit and the 1/8" pipe fittings from the block just behind the flywheel housing on the carburetor side of the engine.

5) Install the 1/8" brass nipple and 1/8" brass "T" fitting into the 1/8" pipe threaded hole in the block. Install the "T" fitting so that its two branch ends line up with the 1/8" nipple, and the stem of the "T" is facing upward.

6) Install the Cole Hersee oil pressure switch in the upward facing stem of the 1/8" "T" fitting. See photo 2.

ELECTRICAL CONNECTIONS:

1) Mount the Cole Hersee warning buzzer in some convenient location, normally where its signal can be heard from the helm.

2) Cut a small length of black wire supplied in kit to connect the temperature and oil pressure warning switches. Use the yellow (10 gauge) quick disconnect to accommodate the two wires joined at the oil pressure switch, and the blue quick disconnect (the 14 gauge) for the temperature switch. See photo 1.

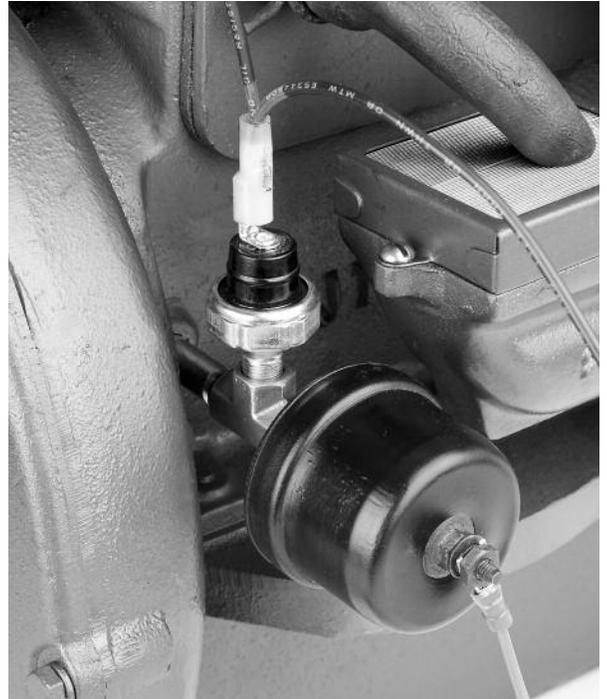


photo 2

NOTE: A mix of "spade" and "ring" terminals are included in the kit for the following electrical connections. Spade terminals are usually the best choice for connections in close quarters, where it is convenient to not have to remove a screw completely from a terminal and risk dropping it into the bilge.

3) Run the remaining black wire from the double connection on the oil pressure switch to one of the terminals of the warning buzzer.

4) Connect the red wire from the remaining terminal on the buzzer to a source of 12 volt DC power. It is usually preferable to connect this lead to a source of power that is switched on and off by the ignition switch. If available, the "Ign" terminal on the rear face of the ignition switch is ideal for this purpose.

TESTING THE SYSTEM:

1) The warning buzzer should sound whenever the ignition switch is turned on, and before the engine is started.

2) The water temperature system can be checked by grounding the terminal of the temperature switch to the head using a short piece of wire.