

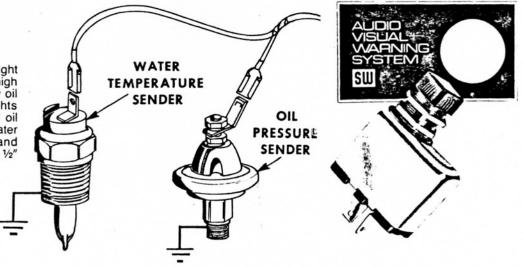
SHADE TREE TIP OF THE MONTH

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EARLY WARNING SYSTEM

AUDIO-VISUAL ENGINE WARNING SYSTEMS

High intensity cold cathode diode light and buzzer warn you of impending high engine water temperature and/or low oil pressure. This unit sounds and lights each time the engine is started until oil pressure builds up, and at any time water temperature is excessive. Shock and vibration resistant. Mounts in panel to ½" thick.



Some of the less fortunate ones of us have incurred large repair expenses to our motohome engines due to loss of oil pressure or an over-heated engine that may have been avoided had we known what was happening at the time.

To help catch these two problems soon enough to circumvent major engine damage, I believe a good form of insurance is to have an "audio/visual warning system" to alert us of extreme heat or oil pressure loss in our engine. An easy and inexpensive (approx. \$60.00 total parts) application of a warning system to your motorhome is the Stewart-Warner Warning System available from auto/truck parts stores that carry Stewart-Warner gauges.

The parts that will be needed are:

- 1. One Stewart-Warner #D-825104 light and buzzer warning device.
- 2. One S/W #363G 225° F. Temperature Sender Switch.
- 3. One S/W #364L 6 PSI Pressure Sender Switch.
- 4. One ½" pipe tee.
- 5. One 'z" pipe "male to female" coupling.
- 6. One 'z" pipe "close" nipple. (1" long nipple)
- 7. One 1/8" pipe tee.
- 8. One 1/8" pipe 2" long nipple.
- 9. Sixteen feet of #18 stranded electrical wire.

Items 4 thru 9 are available in the plumbing and electrical depts. at a hardware store.

Instructions:

- A. Engine must be cold.
- B. Place drip pan or other protection under front of engine and radiator to catch any small loss of oil and coolant.
- C. Clamp-off coolant recovery hose from radiator to plastic reservoir to help prevent drainage of coolant when removing existing heat sender switch.

Oil Sender Switch:

- Remove existing wire-connector from oil sender switch located at front left of engine block. Remove sender switch and save for reinstallation.
- 2. Screw new 1/8" pipe 2" long nipple into new 1/8" pipe tee as shown:
 use teflon tape or pipe dope.
- Screw the assembled nipple with tee fitting into block where old oil sender switch was located.
- 4. Add old and new oil pressure senders to installed tee fitting. You may use sealing compound on these sender threads.
- 5. Reconnect old wire onto old sender switch.
- 6. Wiring of new sender switch will be explained in following steps.

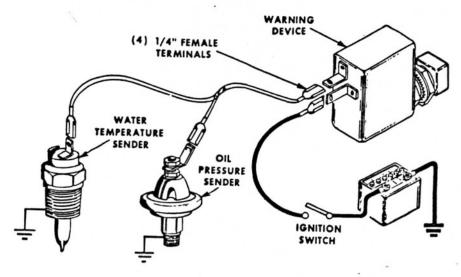
Temperature Sender Switch:

- Remove existing wire-connector from temperature sender switch located just back of the oil sender switch. Remove sender switch and save for re-installation.
- 2. Screw new 2" pipe "close" nipple into 2" pipe tee as shown:
- 3. Screw the assembled nipple with tee fitting into manifold where old temperature sender switch was located. Add "male to female" coupling to horizontal (side) hole of tee.

- 4. Add old and new temperature senders to installed tee fitting. Do not use sealing compound on threads of the temperature senders to assure proper grounding of senders.
- 5. Reconnect old wire onto old sender switch.

Wiring:

- Route a new wire from each of the new sender switchs from the top of the engine across to the left front of the motorhome near the steering column seen thru the left hood-access door. Secure wire with plastic ties
- Find the rubber gromet on the outside of the firewall above the steering column and feed the two sender switch wires thru the gromet into the dash instrument area.
- Locate an area on the dash board for mounting the "Warning Device" that provides an unrestricted view when driving.
- 4. Proceed with the wiring instructions shown below:



WIRING

Speed grip 1/4" female terminals are supplied for connecting senders to warning device and warning device to ignition switch. It is recommended that No. 18 AWG stranded wire be used for this hookup.

Four lengths of wire are needed. Crimp terminals to wire and connect as shown.

CAUTION: When routing wire, guard its insulation against damage. Sharp edges may short the wire to ground causing a failure of the system. Wire must not contact hot engine parts or interfere with moving parts (linkage, exhaust, etc.).

5. Start engine and test for coolant and oil leaks.

When installation is completed, the "Warning Device" buzzer will sound and the light will flash each time the engine is started until oil pressure builds above 6 lbs. giwing a constant check on the operation of the system.

Normal operating temperature of our 455 C.I.D. engines is in the area of 190° to 210°. The "Warning Device" alarm will activate at 225° or above temperature.

Normal operating oil-pressure of our 455 C.I.D engine is 8 lbs. at idle and 15 to 35 lbs. at 2000 R.P.M. The "Warning Device" alarm will activate at 6 p.s.i. or less oil-pressure.

REMEMBER, THIS "WARNING DEVICE" IS ONLY EFFECTIVE WHEN USED PROPERLY. YOU

MUST TAKE IMMEDIATE ACTION WHEN THE "WARNING DEVICE" ACTIVATES....PULL OFF

THE ROAD AND IMMEDIATELY SHUT DOWN THE ENGINE....DETERMINE CORRECTIVE REPAIRS

NEEDED AND SAVE YOURSELF TIME AND MONEY ON MAJOR REPAIR PROBLEMS.

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