

3 FINISH HERE

4. Ground the sender wire. On all pressure and fuel gauges, the pointer will go to "0". On all temperature gauges, the pointer will go to the extreme right.

NOTE: Items 2,3, & 4 will be in the reverse operating condition when you are using

SW senders.

If these four functions occur as stated, the instrument is in proper working order. If the gauges do not respond as described above, you probably have a faulty sender or other sender problem.

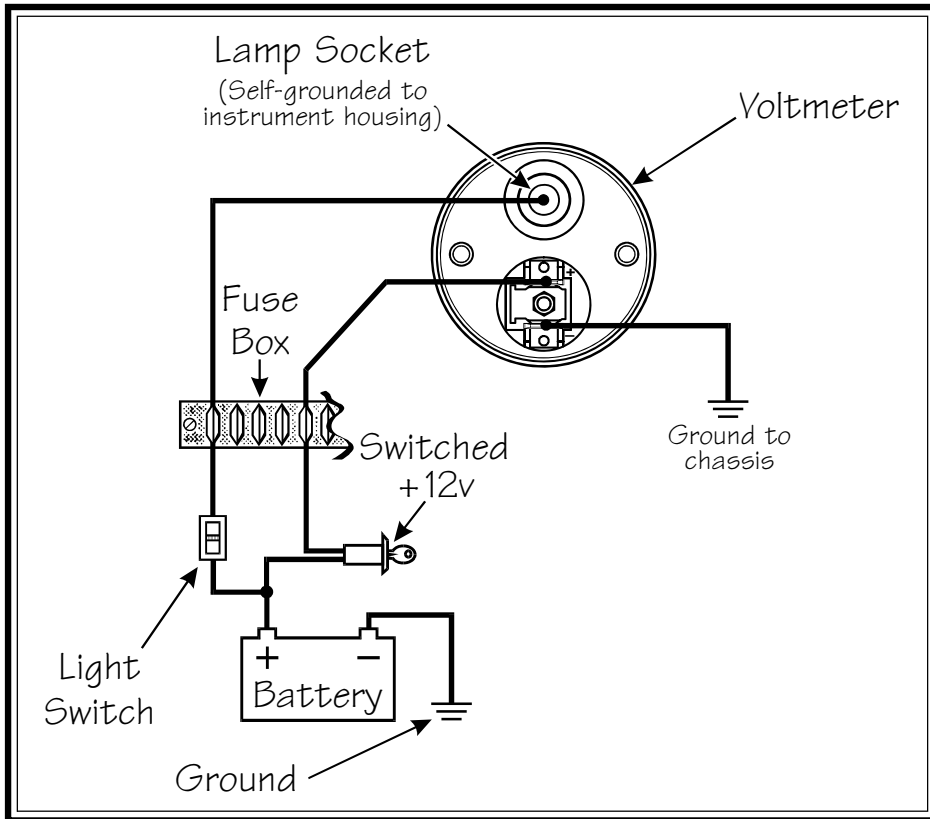


Diagram D
Proper wiring of the Voltmeter

Merchandise warranted against defects in factory workmanship and materials for a period of 24 months after purchase. This warranty applies to the first retail purchaser and covers only those products exposed to normal use or service. Provisions of this warranty shall not apply to a VDO product used for a purpose for which it is not designed, or which has been altered in any way that would be detrimental to the performance or life of the product, or misapplication, misuse, negligence or accident. On any VDO part or VDO product found to be defective after examination by manufacturer, manufacturer will only repair or replace the merchandise through the original selling dealer. Manufacturer assumes no responsibility for diagnosis, removal and/or installation labor, loss of vehicle use, loss of time, inconvenience or any other consequential expenses. The warranties herein are in lieu of any other expressed or implied warranties, including any implied warranty of merchantability of fitness, and any other obligation on the part of manufacturer, or selling dealer.

(NOTE: This is a "Limited Warranty" as defined by the Magnuson-Moss Warranty Act of 1975.)

1 BEGIN HERE

CAUTION: Read these instructions thoroughly before making installation. Do not deviate from assembly or wiring instructions. Always disconnect battery ground before making any electrical connections.

1-800-265-1818

IMPORTANT: Mounting dimensions vary for different gauges. Please be certain to follow the instructions for your specific gauge as described below.

Gauge Installation:

1. Select the location for the instrument and cut either a 2 5/8" hole (or use a VDO mounting accessory [1,2, & 3 hole chrome and black] or VDO mounting cup [chrome

[text continues at #2] →

Parts List

Item	Description	Quantity
1.	Temperature, Pressure, Fuel Gauge or Voltmeter (2 5/8" [65 mm] diameter)	1
2.	Lamp Socket	1
3.	Light Bulb	1
4.	Mounting bracket	1
5.	Installation Instructions	1

Tools and Materials Needed For Installation:

- 16 Gauge stranded, insulated wire
- Insulated 1/4" spade connectors
- 2 5/8" hole saw
- Drill and drill bit set
- Half-round file
- Tape measure or ruler
- Small tools: wrench or nut driver, utility knife, pliers, etc.
- Various engine adapters

- or black]).
- 2. Insert the gauge and secure it. **DO NOT OVERTIGHTEN.** (Refer to Diagram A)

Wiring the Gauge:

NOTE: On all oil and water temperature gauges, 14-gauge wire is required for gauge ground; it must be a dedicated ground to insure gauge accuracy and to eliminate any erratic gauge readings.

1. Run wires from the instrument location through the firewall to:

- a) the positive (+) terminal on the battery (after the ignition switch, and after the fuse box);
- b) the light switch (also after the fuse in the fuse box);

CAUTION!!!

The bezel diameter is only a few millimeters larger than the gauge itself. **With that in mind, measure and precisely mark the gauge location before cutting any holes!**

VDO

Electric Temperature, Pressure, Fuel Gauge or Voltmeter

Installation Instructions

Instruction Sheet #0 511 011 812
Rev. 03/09

INSTRUCTIONS FOR THE INSTALLATION OF THE ELECTRIC TEMPERATURE, PRESSURE, FUEL GAUGE AND/OR VOLTMEETER ARE CONTAINED HEREIN. USE IS RESTRICTED TO 12-VOLT NEGATIVE GROUND ELECTRICAL SYSTEMS. LIGHT BULB, IF SUPPLIED, IS 12 VOLT.

To Begin, go to #1

2 CONTINUE HERE

- c) a good, dedicated ground location (i.e., where the negative (-) battery pole is connected to the chassis of the vehicle); and
- d) from the instrument sender terminal to the terminal on the sending unit.

2. Connect the appropriate positive (+),

ground (negative [-]), and signal wires to the gauge and gauge lamp socket as shown in Diagram B or C.

3. If you are using a VDO sender with a built-in warning contact terminal, run a wire (again, minimum 16-gauge, stranded) from the sender terminal marked "WK" to one terminal on the warning light.

Run another wire from the other warning light terminal to a switched ignition source.

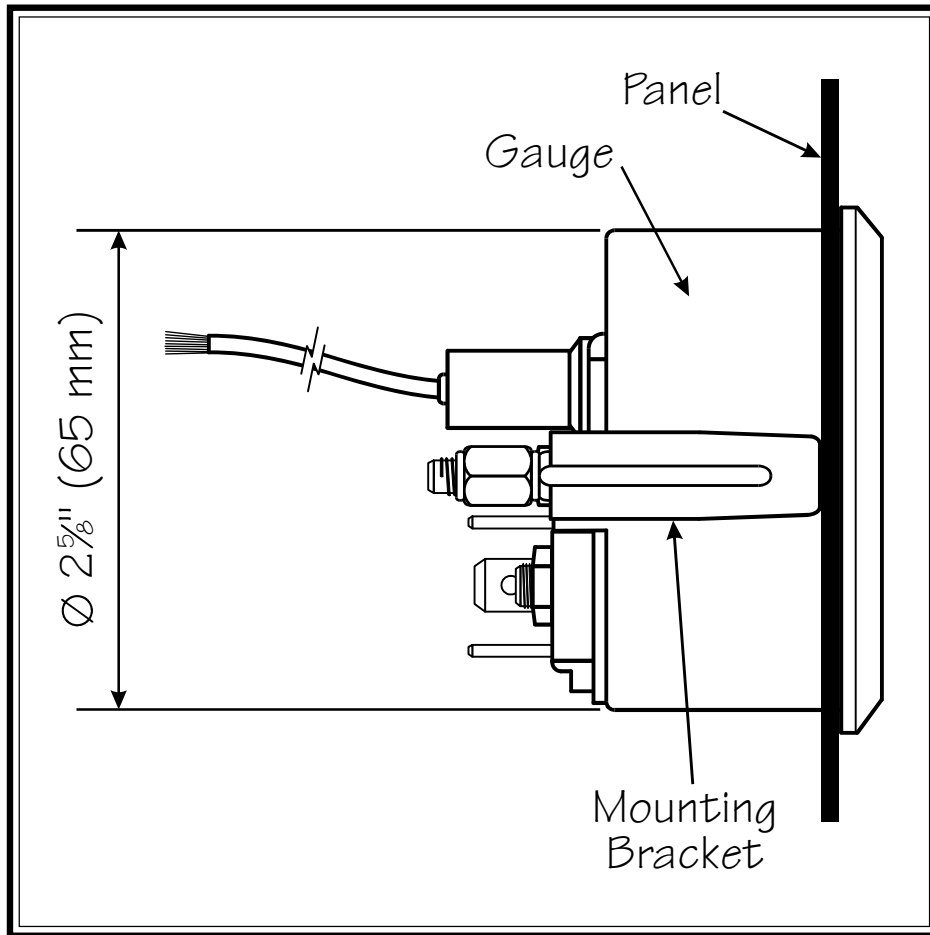


Diagram A
Gauge dimensions

NOTE: Do not use teflon tape on the sender threads which act as an electrical ground source for the unit.

Water temperature senders work best if they are installed near the thermostat housing. Oil temperature senders can be used to replace the manufacturer's oil pan drain plug. The oil pressure sender is installed in the same location as the factory sender or warning light switch.

Remember: These gauges measure ohm resistance which is created by the sender. The ohm range of the sender and gauge MUST MATCH or the gauge will not be accurate. VDO sells many gauges which work with other manufacturer's senders; but you must know the correct sender ohm range before you buy any of these gauges.

Troubleshooting:

Make sure the instrument is wired properly, then:

1. On all electric instruments, the pointer will be to the extreme left when power is off.
2. On pressure instruments, the pointer will go to "0" when the power is turned on. On temperature gauges, the pointer will indicate current fluid temperature when power is turned on. When power is applied to fuel gauges, the pointer will show how much fuel is currently in the tank.
3. Pull the sender wire off the sender. On pressure and fuel gauges, pointers go to the extreme right; pointers go to the extreme left on temperature instruments.

[text continues at #6] →

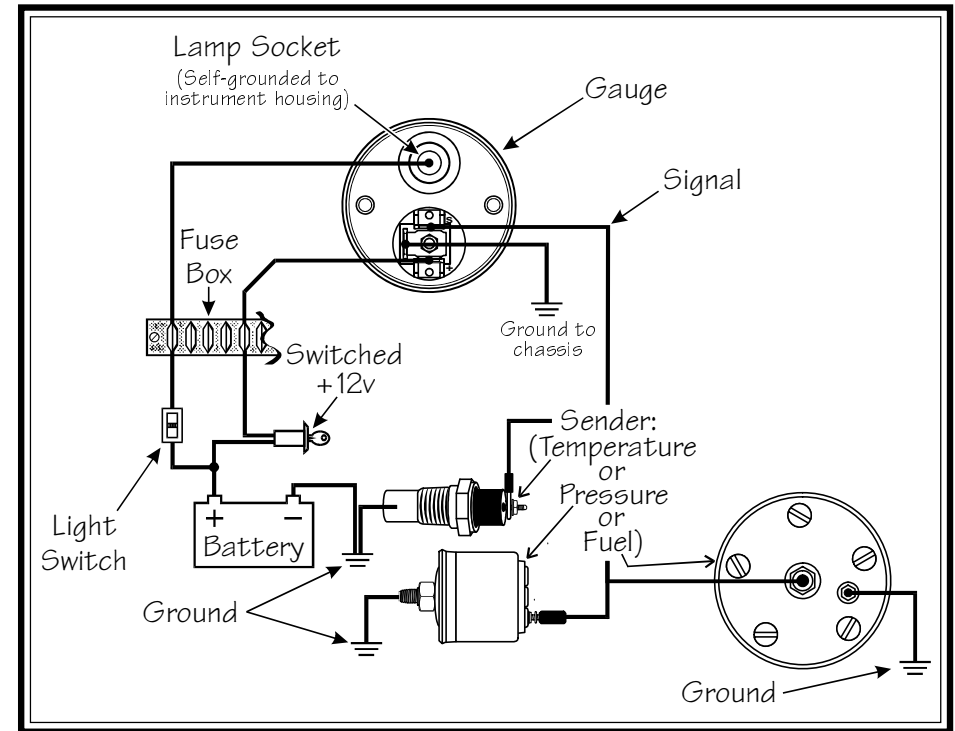


Diagram B
Proper wiring of the Temperature, Pressure or Fuel Gauge