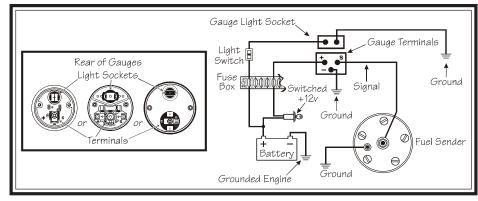


**Diagram D**Temperature/Pressure Gauge Wiring



**Diagram E**Fuel Gauge Wiring

## **VDO Limited Warranty**

VDO North America warrants all merchandise 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 part or product found to be defective after examination by VDO North America, VDO North America will only repair or replace the merchandise through the original selling dealer or on a direct basis. VDO North America 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 herin are in lieu of any other expressed or implied warranties, including any implied warranty of merchantability or fitness, and any other obligation on the part of VDO North America, 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. If in doubt, please contact your dealer or VDO Instruments at (540) 665-2428.

<u>IMPORTANT:</u> 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  $2\frac{1}{16}$ " or  $2\frac{5}{8}$ " hole .
- 2. Insert the gauge and secure it with ei-

ther the VDO Spin-Lok  $^{\text{\tiny TM}}$  Clamp or mounting bracket.

#### DO NOT OVERTIGHTEN.

(Refer to Diagram C)

## 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, <u>and after the fuse box</u>);
  - b) the light switch (also after the fuse in the fuse box);

[text continues at #❷] →

#### **CAUTION!!!**

These instructions contain information about gauges of different sizes. You must determine the size of your gauge before cutting any holes!

Parts List		
<u>Item</u>	Description	Quantity
1.	Temperature, Pressure or Fuel Gauge	
	(21/16" [52 mm] diameter)	1 <i>or</i>
	Temperature, Pressure or Fuel Gauge	
	(2 %" [66 mm] diameter)	1
2.	Lamp Socket (Push in, wedge-type)	1
3.	Light Bulb (12-volt / G.E. #158 or equivalent	) 1
4.	VDO Spin-Lok™ Clamp or mounting bracke	t 1
5.	Installation Instructions	1

#### Tools and Materials Needed For Installation:

16 Gauge stranded, insulated wire Non-insulated ½" spade connectors 2½"6" or 25%" 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

# **VDO**<sup>®</sup> North America

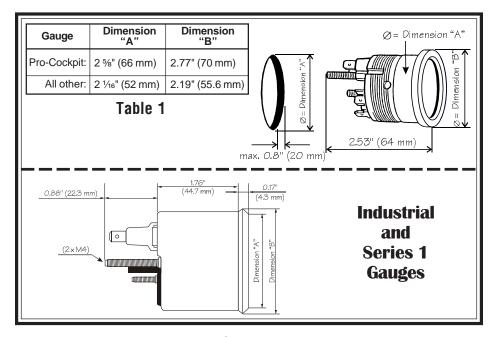
# Electric Temperature, Pressure or Fuel Gauge

#### **Installation Instructions**

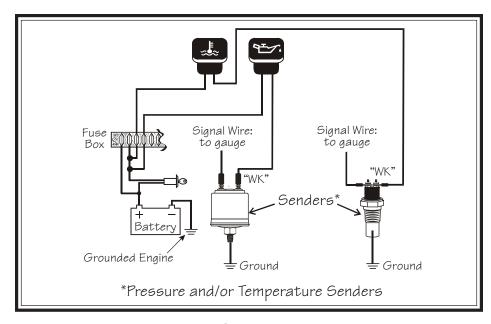
Instruction Sheet #0 515 012 123 Rev. 03/00

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

To Begin, go to #1



**Diagram A**Gauge dimensions



**Diagram B**Wiring Warning Lights and Senders with Warning Indicator Terminals

# **2** CONTINUE HERE

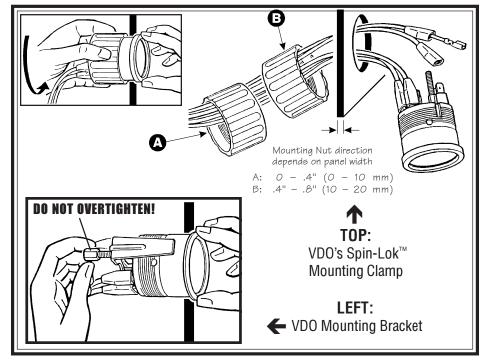
- c) a good, dedicated ground location (i.e., where the negative (–) battery pole is connected to the chassis of the vehicle); and
- d) from the instrument sender terminal to the terminal on the sending unit.
- 2. Connect the appropriate positive (+), ground (negative [–]), and signal wires to the gauge and gauge lamp socket as shown in Diagram D or E.
- 3. If you are using a VDO sender with a built-in warning contact terminal, run a wire (min. 16-gauge, stranded) from the sender terminal marked "WK" to one terminal on the warning light. (Diagram B)

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

**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.



**Diagram C**Mounting using VDO Mounting Bracket or VDO Spin-Lok™ Clamp