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.

**Gauge Installation:**

1. Insert the bulb into the lamp socket. Snap the socket into the socket hole on the back of the gauge. (Diagram A)
2. Select the location where you will mount the gauge, and mark a center point.
3. Cut either a 2 ¼” (52 mm) or a 2 ¼” (66 mm) diameter hole, depending on which gauge you are installing. Place the instrument into the hole. If the gauge is too snug, use a file to slightly enlarge the opening until the gauge fits properly. See Diagram B.
4. Slip the mounting bracket over the mounting bolts on the back of the gauge. Screw on the accompanying nuts. Tighten the nuts until the gauge can no longer be rotated by hand. **DO NOT OVER-TIGHTEN!**

**Diagram C**
Proper hookup of the tubing from the gauge to the engine

**Diagram D**
Proper hookup of the tubing from the gauge to the manifold vacuum hose

**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 herein 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.

**Parts List**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pressure Gauge (2 ¼” [52 mm] diameter)</td>
<td>1 or</td>
</tr>
<tr>
<td></td>
<td>Vacuum Gauge (2 ¼” [52 mm] diameter)</td>
<td>1 or</td>
</tr>
<tr>
<td></td>
<td>Pressure Gauge (2 ¼” [52 mm] diameter)</td>
<td>1 or</td>
</tr>
<tr>
<td>2.</td>
<td>Lamp Socket (Push in, wedge-type)</td>
<td>1</td>
</tr>
<tr>
<td>3.</td>
<td>Light Bulb (12-volt / G.E. #158 or equivalent)</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>VDO Mounting Bracket and nuts</td>
<td>1</td>
</tr>
<tr>
<td>5.</td>
<td>Installation Instructions</td>
<td>1</td>
</tr>
</tbody>
</table>

**Tools and Materials Needed For Installation:**

16 Gauge stranded, insulated wire
Non-insulated ½” spade connectors
2 ¼” or 2 ¼” hole saw
Drill and drill bit set
Half-round file
Tape measure or ruler
Small tools: wrench or nut driver, utility knife, pliers, etc.
Tubing kit and various engine adapters

**General Information:**

Your VDO mechanical pressure gauge features the latest illumination technology and a rugged design to insure years of durable and reliable operation. These instruments require a tubing kit to complete installation with various engines. You may purchase such a kit (with different lengths of tubing and of different styles) from your VDO dealer.

**CAUTION!!!**

These instructions contain information about gauges of different sizes. **You must determine the size of your gauge before cutting any holes!**
To Mount:
Slip Mounting Bracket over studs on back of gauge. Align the gauge for easy readability, then tighten the nuts until the gauge no longer rotates in the panel.

Gauge Dimensions and Mounting Information

<table>
<thead>
<tr>
<th>Gauge</th>
<th>Dimension &quot;A&quot;</th>
<th>Dimension &quot;B&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro-Cockpit</td>
<td>2 3/4&quot; (66 mm)</td>
<td>2.77&quot; (70 mm)</td>
</tr>
<tr>
<td>All other</td>
<td>2 3/4&quot; (52 mm)</td>
<td>2.19&quot; (55.6 mm)</td>
</tr>
</tbody>
</table>

Diagram A
Proper installation and wiring of lamp socket on all gauges

Diagram B
Gauge dimensions and mounting information

Diagram C

Diagram D

Table 1

Gauge Hookup and Lamp Wiring:
1. Route the tube from the gauge to the engine. DO NOT CRIMP the tubing closed during routing. A rubber grommet is recommended around the tubing where it passes through the firewall.

2. For the pressure gauge, attach one end of the tubing to the gauge using a 1/8” adapter, ferrule and sealing nut (Diagram C). For the vacuum gauge, attach one end of the tubing to the barb adapter, then connect the adapter to the gauge [Diagram D].

3. Attach the other end of the tubing to the engine. For the pressure gauge, use a 1/8” adapter, a ferrule and a sealing nut. Do not overtighten the sealing nuts or you will damage the tubing. For the vacuum gauge, cut the original manifold line and attach each end to the T-fitting, as shown in Diagram D.

4. Run a length of wire from one terminal on the gauge lamp socket to the lighting circuit (+12 volt source, usually to the light switch, after the lighting fuse in the fuse box). See Diagram A.

5. Run a wire from the other lamp socket terminal to a good ground (i.e., where the negative (–) battery terminal is grounded either to a frame or to a ground bus. At this point, installation is complete. Before starting the engine, re-check the routing of all tubing. Start the engine and turn on the lights to make sure the gauge illuminates properly. If it doesn’t, recheck your connections and your wiring. Check all tubing connections for leaks.

CAUTION: Make sure all tubing is absolutely free from moving and/or hot engine components, and that it is totally free of kinks.