

CAUTION:

Wires to the shunt, and from the battery, starter and alternator must be the same size as the original wires used by the original equipment manufacturer.

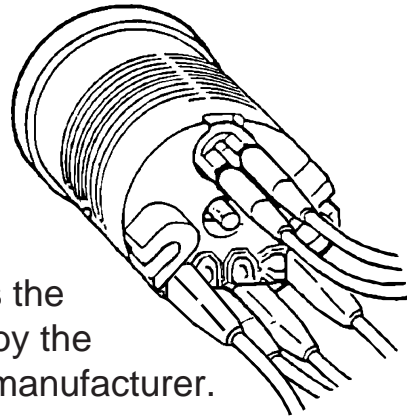


Diagram C

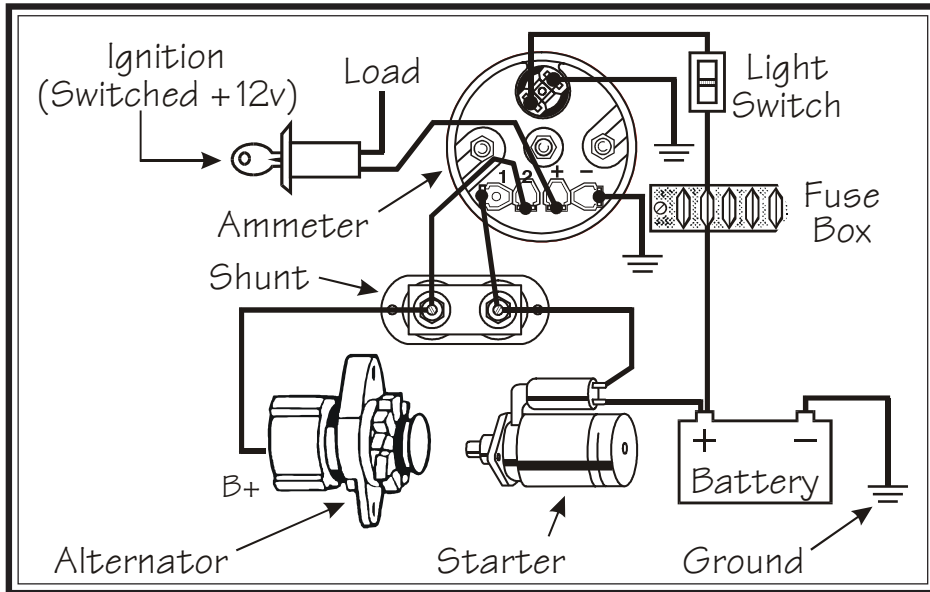


Diagram D

Proper wiring of the VDO Shunted Ammeter

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

Shunted Ammeter Installation:

Note: We recommend this instrument be installed by a trained professional.

1. Select the location where you will mount the gauge, and mark a center point.

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!**

Tools and Materials Needed For Installation:

Insulated wire (gauge must be the same as that used by the manufacturer)
Non-insulated 1/4" spade connectors
2 1/16" hole saw
Drill and drill bit set
Half-round file
Tape measure or ruler
Small tools: wrench or nut driver, utility knife, pliers, etc.

2. Cut a 2 1/16" (52 mm) diameter hole. If the gauge is too snug, use a file to slightly enlarge the opening. (Diagram A)

3. Slip the VDO Spin-Lok™ Mounting Clamp over the back of the instrument. It's direction depends on the thickness of the panel (Diagram B). Tighten the clamp until the gauge can no longer be rotated by hand.

DO NOT OVERTIGHTEN.

Wiring the Shunted Ammeter:

1. Determine the wire gauge needed to install the ammeter safely and properly; wires from the shunt can be 18 gauge; **HOWEVER... wires to the shunt, and from the alternator, starter and battery should be the same as the O.E.M size.**

[text continues at #2] →

Parts List

| Item | Description | Quantity |
|------|--|----------|
| 1. | Shunted Ammeter (2 1/16" [52 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 | 1 |
| 5. | Installation Instructions | 1 |

VDO

Shunted Ammeter

Installation Instructions

Instruction Sheet # 0 515 012 082
Rev. 03/09

INSTRUCTIONS FOR THE INSTALLATION OF THE SHUNTED AMMETER 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

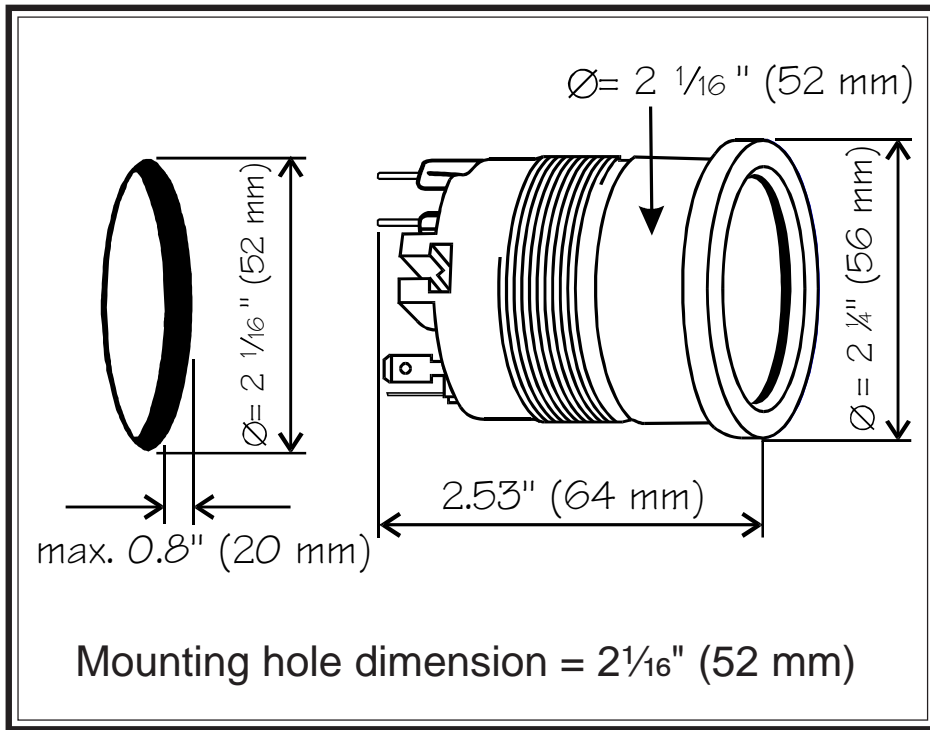


Diagram A
Gauge dimensions

24 Volt Application

The ammeter can also be used with a nominal voltage of 24 V if an external dropping resistor (optional) is installed on the **GROUND** side of the circuit. Connect this dropping resistor directly to the (-) terminal of the gauge, and then connect it directly to ground.



Replace the 12 V light bulb with the 24 V light bulb included in the resistor kit.

2 CONTINUE HERE

2. Run a series of wires from the ammeter location through the firewall to:

- the shunt
- the positive (+) terminal on the alternator;
- the positive (+) terminal on the starter;
- the positive (+) terminal on the ignition switch;
- the light switch (also after the fuse in the fuse box); and
- a good ground location (i.e., where the negative (-) battery pole is bolted to the chassis of the vehicle).

3. Please see the caution described in Diagram C. *In wiring the starter and alternator to the shunt, you must use wires of the same gauge as those installed by the manufacturer.*

4. Connect the proper wires to the shunt, starter, ignition, alternator, ground and to the ammeter as shown in Diagram D.

5. Wire the light socket as shown in Diagram D, making sure the positive (+12) lead comes from the light switch, after the fuse box.

At this point, the installation and wiring of your shunted ammeter is complete. Turn on the ignition and start the engine to be sure the ammeter is working properly. If it isn't, recheck your wiring.

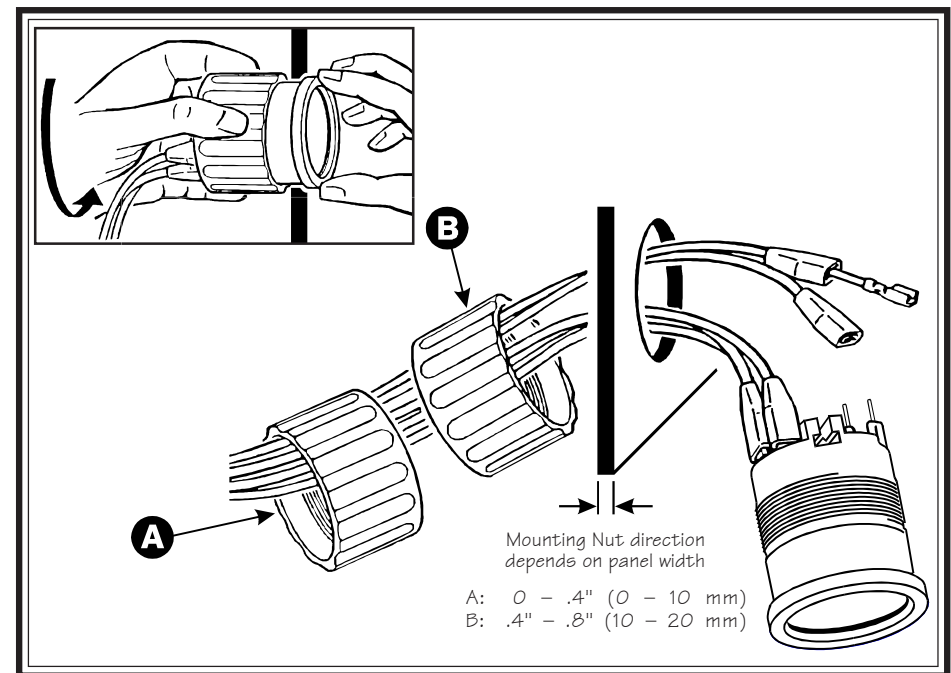


Diagram B
Proper mounting using VDO's Spin-Lok™ Mounting Clamp