

Sunpro[®] VOLTMETER GAUGE INSTALLATION INSTRUCTIONS

A voltmeter measures the voltage between the two points where the leads are connected. Most vehicles exhibit between 13 and 15 volts while being operated above idle speed. Check your owners manual or dealer for a more exact normal voltage for your vehicle. A voltmeter is useful in that it can give a warning of many electrical problems.

PRECAUTIONS

1. Follow the instructions carefully for the sequence of nuts and washers on the connection posts of the voltmeter. Refer to Figure 2.
2. Disconnect the battery ground cable before performing any electrical work.
3. Route all wiring away from linkages, engine parts that become hot, or moving parts.
4. Never smoke while working on your vehicle and always keep a fire extinguisher nearby. It should be rated for gas/chemical/electrical fires.
5. Never lay tools on top of the battery or wear jewelry during electrical work to avoid severe electrical shorts.
6. Locate and operate gauges so that driving visibility is not compromised.

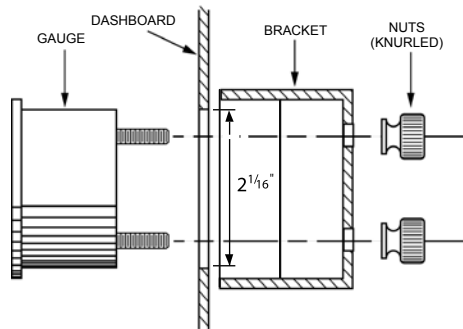
INSTALLATION

Make temporary test connection before permanently mounting hardware or drilling holes.

This gauge can be mounted into any surface or into a gauge pod. Refer to Figure 1.

Figure 1

Gauge Mounting:
Do not install bracket and nuts until step 9.

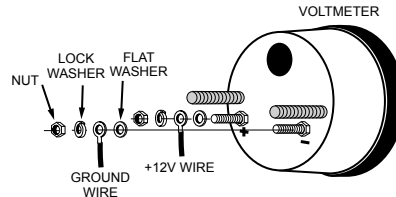


1. Disconnect the ground cable from the battery.
2. Choose a location to mount the gauge where it will be viewable from a normal driving position.

3. If you are installing the gauge into a surface (for example the dashboard) make a 2-1/16" hole for the gauge. Do not accidentally cut any wires or hoses. Be sure there is clearance around the hole for the gauge mounting bracket.
4. Connect a length of 18-gauge insulated copper wire to a good ground source. Be sure the grounding surface is a good ground source as not all metal surfaces inside the vehicle are well grounded. This wire should be long enough to reach the voltmeter's mounting location.
5. Connect another length of 18-gauge wire to a location on the fuse box where the wire will receive power whenever the ignition key is in the START, ON or ACCESSORY positions. This wire should also be long enough to reach the voltmeter.
6. After mounting the gauge, the wire from the ground source (Step 4) should be connected as shown in Figure 2, to the voltmeter's connection post marked "-".
7. The wire from the fuse box (Step 5) should be connected as shown in Figure 2, to the voltmeter's connection post marked "+".

NOTE: Do NOT leave any hardware out of these connections.

Figure 2
Wire Connections



8. Connect the blue and white wires using either Figure 3a or Figure 3b.

Figure 3a
For Positive Dimmer Controls

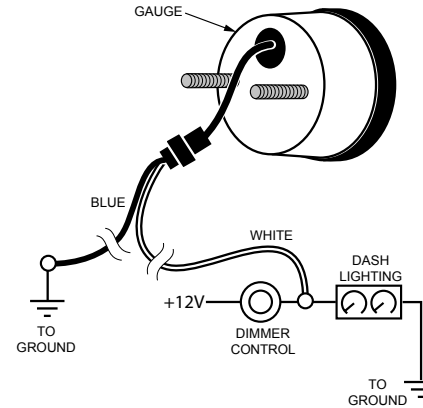
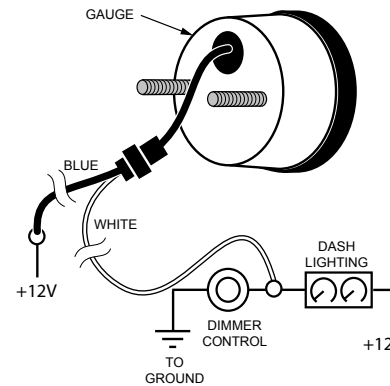


Figure 3b
For Negative Dimmer Controls



9. Complete the mounting of the gauge.
10. Reconnect the battery ground cable.

TROUBLESHOOTING

1. If, when you reconnected the battery ground cable, you noticed sparks or any of the wiring getting warm, check that all connections are properly located, and insulated from grounding.
2. If the reading on the gauge stays at the lowest marked voltage when the ignition is switched on, then try reversing the wires on the gauge's connection posts "+-" and "-".
3. If the gauge reads lower than you expect, check all connections, especially those to a ground source. A poor connection causes resistance which gives a false low reading.