

EV Electrical Gauge Installation Instruction

Installation (see Diagram on reverse)

1. Disconnect the negative (-) battery cable.
2. Mount gauge to dash in a 2 5/8" hole for 2 5/8" gauges, 2 1/16" hole for 2 1/16" gauges, or 1/32 larger than gauge case diameter. Insert gauge into hole, connect all wire terminations (including lighting), then secure with supplied mounting hardware.
3. Check voltage printed on gauge case to ensure it is correct for your application.

270° Full Sweep Temperature and Pressure Gauges

1. Determine signal AMP box mounting location, preferably inside firewall (passenger compartment) for protection from engine compartment environment. Before selecting location, check that the cable harness length is sufficient to reach both gauge and sender. If mounting with screws (not included), drill holes to match case mounting holes (11/64"). If module will be mounted with double-sided adhesive tape (not included), surface must be free of dirt and grease before mounting, then mount module to pre-selected location. Double sided tape is not recommended for warm climates.
2. Install sender. (Use a cut-away socket in tight or recessed locations.) Route sender wires through existing hole in firewall or drill a 3/4" dia. Hole and use a grommet (not included) to protect wires. Connect wires to sender, once sending unit is installed.

3. Locate a clean chassis ground near the module. Ground module using black 18-gauge wire with lug terminal (wire not included).
4. Locate a terminal on vehicle's fuse panel to supply 12v ignition power to the module, using 18 gauge red wire (not included).
5. Connect module harness to gauge.
6. Use wire ties to hold wire assemblies together, along vehicle chassis.
7. Reconnect negative (-) battery cable.

Tech Tips

1. If proper module location cannot be found (protected from engine compartment), use electrical grade R.T.V. silicone to seal case around terminal block assembly.
2. To insure proper operation, check that the terminal block terminations are free from contaminants and are securely fastened for good electrical connections.
3. Preferred electrical connection is direct to ignition source protected by a one Amp fuse and switch.

Note: Gauge to be used only with original module to achieve accurate gauge readings (calibrated together).

90° Electrical Gauges

Gauges have three terminal studs, one marked "+" for system voltage, one marked "S" to be used to connect to the appropriate sending unit, and one marked "≡" to be connected to a clean chassis ground. Exception: ammeter has only two studs (see diagram). Do not connect sending unit to system voltage terminal, damage can occur!

Troubleshooting

90° Electrical gauges that show full scale reading upon installation: Remove sending unit wire at gauge. Gauge pointer should return to left side of scale. **Solution:** sending unit or wire is shorted to ground. Check leads, if good then ground sending unit wire to ground terminal. Gauge pointer should go to full scale. If it does, sending unit is not functional. If it does not, gauge is not functional.

270° Electrical gauges that exhibit non-operational indications: To individually check components (gauges & sending units) for proper operation, remove the sending unit connector and short the two wires together coming from the driving circuit box. When shorting these wires together, watch the gauge for pointer movement. A momentary pointer movement from low scale to approximately 45 degrees and then back to the low scale limit (stop pin) will be seen if the gauge and driving circuit box are functioning properly. If not, then the gauge and or driving circuit box have a problem. If the gauge and driving circuit box are functional, then the sending unit should be checked next. This means that the sending unit needs to be measured. You can measure resistance by attaching an ohmmeter to the two leads in the sending unit's connector. You should see a measurement of approximately 1000 Ohms at room temperatures. Sending unit AMP signal box gauges are a calibrated unit. If any portion of the unit is inoperable, entire "set" must be replaced.

90° Electrical gauges that do not operate (no reading):

Wiring

Use 18 AWG wire and eyelet terminals (not included). Ammeters require at least a 10 AWG wire. **Note:** 18 AWG wire may be used to extend module-to-gauge distance for pillar-mount installation of Full Sweep pressure and temperature gauges.

Lighting

Gauges have one or two twist-base lamp assemblies with two 1/4" blade terminations for easy hookup. Attach a wire from one blade terminal to dash lights, or dash light dimmer switch and second wire to ground from other blade terminal. Either wire can be connected to either blade terminal. If replacing a gauge with one wire, the second wire can be grounded to gauge ground terminal for 90° electrical gauges, or if a metal dash is involved, it can be fastened to a mounting bracket stud.

Limited Warranty

ISSPRO, Inc. warrants to the consumer that its analog gauge products will be free from defects in materials or workmanship for 12 months following purchase by the end user. Warranty is limited to replacement or credit at Isspro's option, of defective parts within the warranty period. Parts must be returned, prepaid, to the original purchase point for warranty inspection. This warranty does not apply to misapplication, misuse, negligence, or accident. This warranty is in lieu of any other expressed or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose, and of any other obligation on the part of the seller. In no event will the seller be liable for incidental or consequential damages

TYPICAL GAUGE WIRING DIAGRAM

