

INSTALLATION INSTRUCTIONS

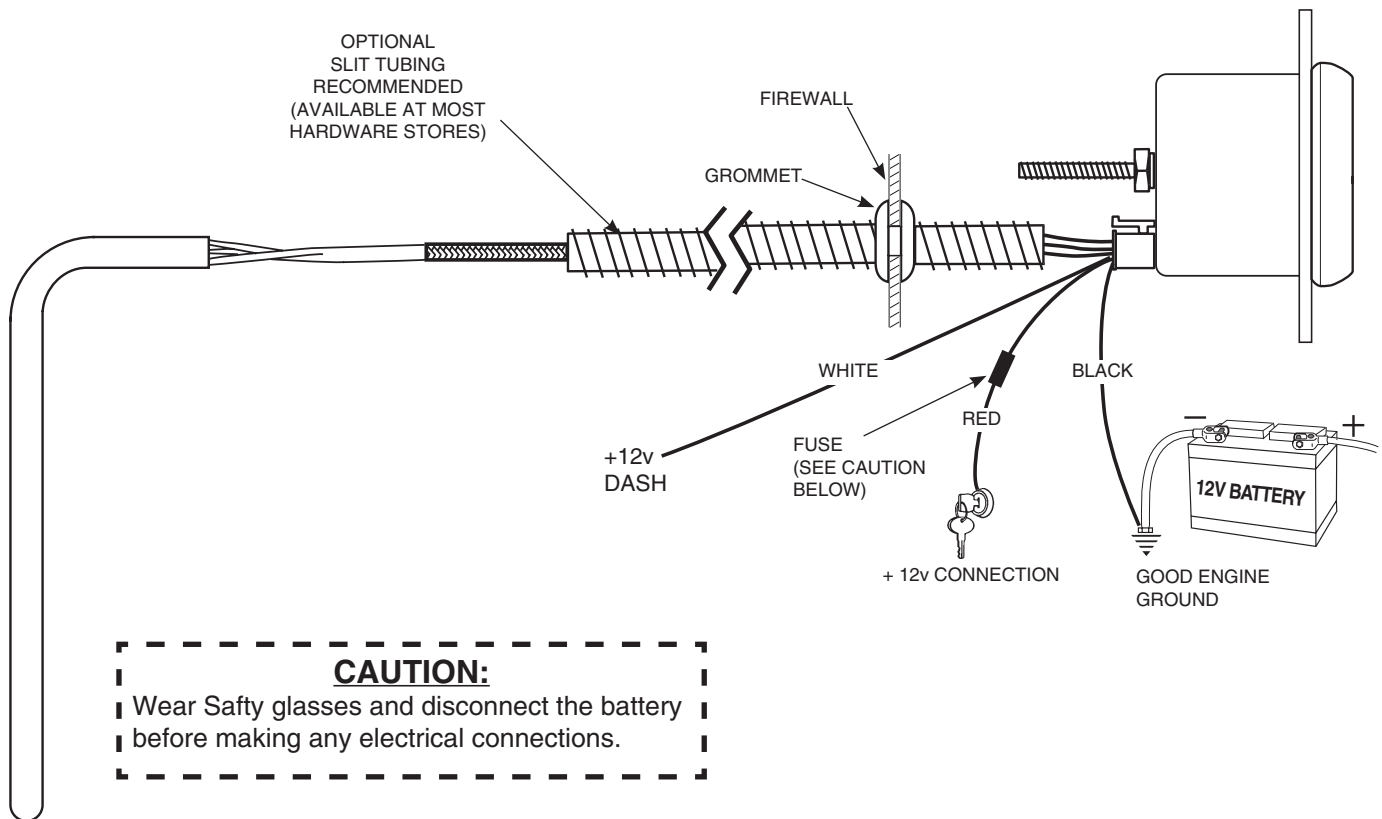
DIGITAL PYROMETER GAUGES

2650-1240-00



Important

Pyrometers are sensitive, high accuracy instruments. They must be handled and installed with care to insure proper performance. Carefully read and follow these instructions, and your pyrometer will provide you with a long and accurate life.



CAUTION:
Wear Safety glasses and disconnect the battery before making any electrical connections.

CAUTION:
As a safety precaution, the +12V terminal of this product should be fused before connecting to the 12V ignition switch. We recommend using a 1 Amp, 3AG fast-acting type cartridge fuse (Littlefuse® # 312 001 or an equivalent).

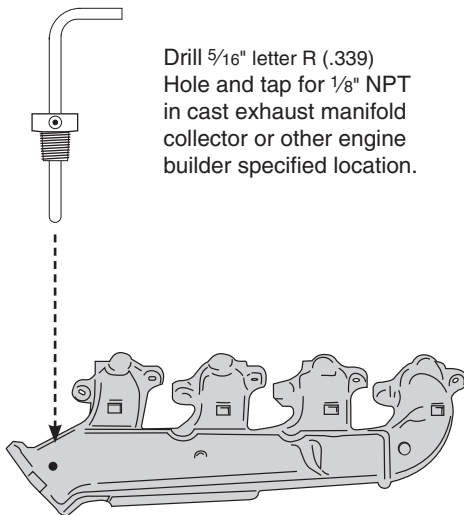
INSTALLATION

1. Check that you have all parts required for installation, and the engine is cool.
2. Disconnect the negative (-) battery cable.
3. Gauge mounts in a 2 1/16" hole. Use supplied brackets and nuts to secure gauge to dash.
4. Drill 1" diameter hole where wires pass through sheet metal (such as firewall) and install rubber grommet provided. (Grommet will require slit.)
5. Connect the white wire to dash lighting or switchable 12v light source, the red wire to switched +12V source and the black wire to ground. (see diagram for details) Digital display will dim when power is applied to the white wire.

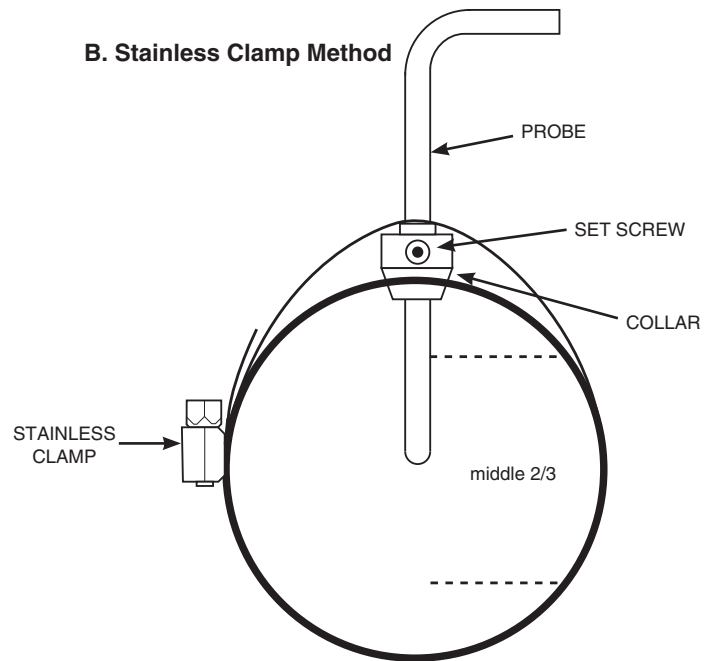
PROBE INSTALLATION

- Begin by installing the Thermocouple in the exhaust, then work back to the gauge. For turbo engines, install the probe 1-2 inches from the turbo exhaust outlet or you may install the probe prior to the turbo. You may consult an engine builder or tuner for recommendations for which probe location is best for you. If installing pre-turbo, removal of the pipe or manifold may be necessary to avoid metal shavings in the turbo. For non-turbo engines, install the probe 1-2 inches from the cylinder head.
 - 1/8" NPT Threaded Hole:** Simply screw the threaded fitting into the hole, insert the probe, and tighten the set screw snugly onto the probe. (Caution: do not over tighten set screw or damage to probe may occur.) Make sure the probe is oriented so the wires do not come in contact with, or become too close to the manifold or other hot engine parts. See illustration for details.
 - Stainless Clamp Method:** This method is for applications that require frequent removal of the manifold or header for service, or just faster and easier installation. Drill a 7/16" diameter hole about 6" down from the junction of the exhaust pipe to manifold junction. Undo the clamp and slide the probe into the hole in the clamp. Slide the set screw collar onto the probe. Before tightening the collar in position make sure that when inserted, the probe will have its tip in the middle two-thirds of the exhaust stream. Tighten screw collar in position. (Caution: do not over tighten set screw or damage to probe may occur.) Hold the clamp open when inserting the probe into the 13/32" hole. Re-join the clamp ends and tighten in position. Make sure the probe is oriented so the wires do not come in contact with, or become too close to the manifold or other hot engine parts. See the illustration below for details.
- With the probe installed, the wire harness can now be routed to the gauge. The wire harness is an integral part of the pyrometer calibration. It may not be shortened or lengthened without affecting the gauge calibration. You will need to determine a suitable location to coil the excess wire, and tie it loosely with a wire tie. (Loosely tying the excess coil prevents embrittlement caused by vibration.) Pass the harness through the fire wall using an existing hole, or drill a 1" diameter hole and use the rubber grommet provided to protect the wire from damage.

A. 1/8" NPT Threaded Hole or Drill & Tap into Manifold (D)



B. Stainless Clamp Method



Power-Up

When power is applied to the gauge, the display will light up with all eights immediately followed by the gauge firmware version. After the firmware version is momentarily displayed, the gauge will begin normal operation and display real time sender readings.
