



2650-1375-00

INSTALLATION INSTRUCTIONS TEMPERATURE PROBE FOR USE WITH ULTRA-LITE PRO SYSTEM



Installation These instructions contain the necessary steps of installing all temperature probes. Information specific to each type of probe will be discussed first, followed by the necessary steps common to all units.
IT IS IMPORTANT TO READ ALL RELATED INSTRUCTIONS PRIOR TO BEGINNING THE INSTALLATION!

NOTE: The length of the wire attached to the probe cannot to be modified (either lengthened or shortened) without affecting the calibration and readings on the gauge. If there is excess left after routing the wire, please coil it up and wire tie it loosely under hood.

Intake Temp

Installation with compression fitting

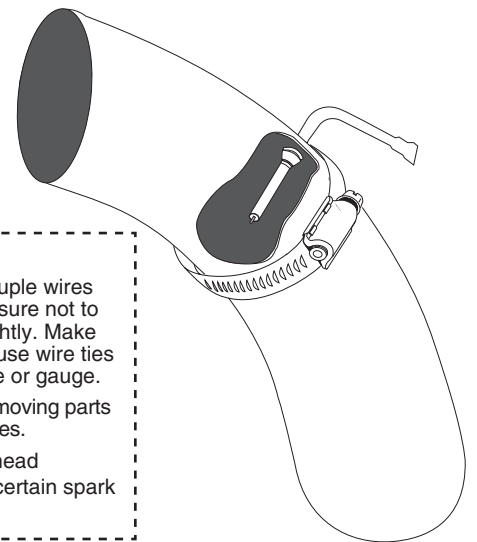
1. These fittings are to be used on existing 1/8" NPT hole or on weld connector (see below). Make sure that material is of proper thickness to accept 1/8" pipe thread if weld connector is not used.
2. If used on turbo model, mount probe after turbo unit.
3. Now, using a marker or pencil, make a mark on the probe that is half the diameter of the header pipe plus one inch (the length of the compression fitting) from the exposed tip of the probe. Screw fitting tube body into 1/8" NPT hole (either existing or weld connector) and tighten securely.
4. Slip the nut (with the cup side to the exposed tip of the probe) and the ferrule onto the probe.
5. Insert the probe into the compression fitting base to the point where the ferrule and the line on the probe come together.
6. Holding the probe in place, tighten the compression nut 1-1/4 turns after finger tight (Caution, do not over tighten). This will insure that the probe is in the middle of the air stream and will set the ferrule on the probe sheath.
7. Connect wires from probe to the Temperature Module.

Installation with weld connector

1. Select the intake/ header tube in which you wish to mount the probe.
2. On intake tube/duct install probe in a location where intake temperatures need to be measured.
3. Once a spot has been located, drill a 9/16" diameter hole in the intake/header tube.
4. Center the weld-in connector around the hole and weld to the intake/header pipe a full 360 degrees with the compression fitting removed.
5. Continue with Step 3 above in the compression fitting section.

Tech Tips

1. When routing thermocouple wires to module or gauge, be sure not to bend or secure wires tightly. Make large radius bends and use wire ties to guide leads to module or gauge.
2. Route leads away from moving parts and extremely hot surfaces.
3. When using a cylinder head temperature probe, be certain spark plug seals properly.



NOTE: The length of the wire attached to the probe is not able to be modified (either lengthened or shortened) without affecting the calibration and readings on the gauge. If there is excess left after routing the wire, please coil it up and wire tie it loosely under hood.

Cylinder-Head Temp. Probe

1. Remove Spark Plug.
2. Place Probe under spark plug bending probe slightly if necessary (careful not to break- See Illustration 2 and Warning) to clear head casting or any cooling fins (See Illustration 1). Make sure probe sits flat on cylinder head. Re-install spark plug.
3. Proper position of probe should not interfere with any other components.
4. Tighten spark plug to manufacturers specifications.

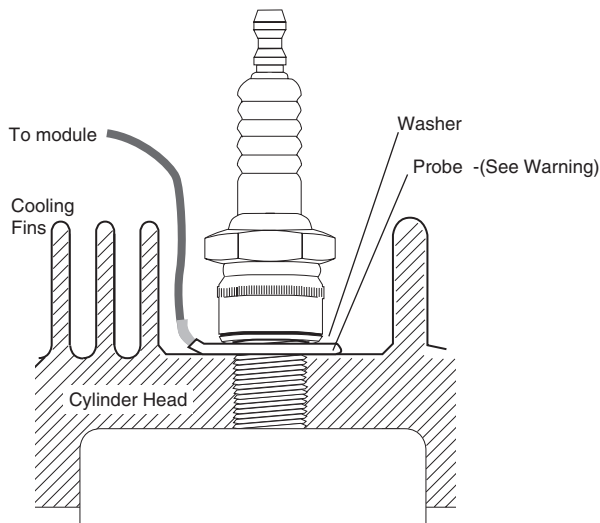


Illustration 1

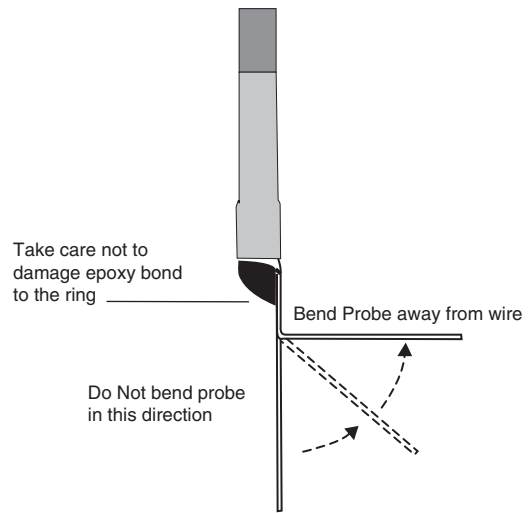
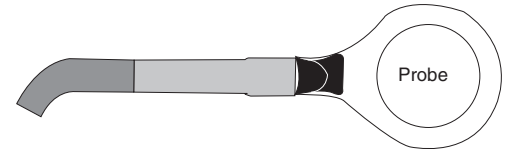


Illustration 2

Tech Tips

1. When routing thermocouple wires to module, be sure not to bend or secure wires tightly. Make large radius bends and use wire ties to guide leads to module.
2. Route leads away from moving parts and extremely hot surfaces.
3. When using a cylinder head temperature probe, be certain spark plug seals properly.

WARNING

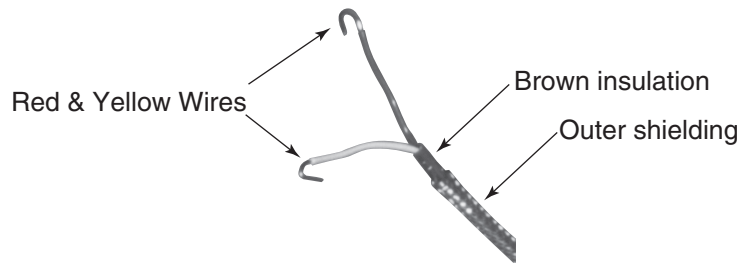
The Probe wire must not be bent toward the wire side of the Probe, but away from it. Bending Probe toward wire will cause damage to Probe. See Illustrations above.

Wiring EGT Probes:

The EGT cables on the probes can be trimmed to fit, stripped and separated for thermocouple connector installation. Each connector has a male and female end, for consistency install all female ends on the EGT probe wires. EGT polarity is very critical and it must be noted the **red** wire is **negative**.

Follow these steps for connector installation:

- Install a 2" piece of heat shrink tubing on the wire. Slide tubing up the wire to get it out of the way.
- Remove 1-1/4" of the outer braided shielding from the end of the wire.
- Remove 1" of the newly exposed brown insulation from the wire.
- Remove 5/16" of insulation off both the red and yellow wire.
- Bend the bare wire to fit around the screws. The wire should now look like Figure 4.



- Install the two wires on the screw terminals of the connector (Red wire negative (-)/Yellow wire positive (+)).
- Twist the connector 1-1/2 turns (Figure 5) and slide the Heat Shrink Tubing into the connector (Figure 6).

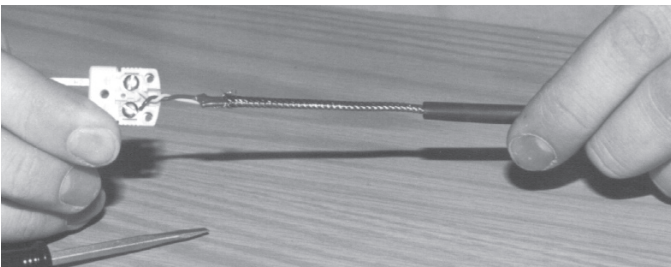


Figure 5. Wires installed and twisted

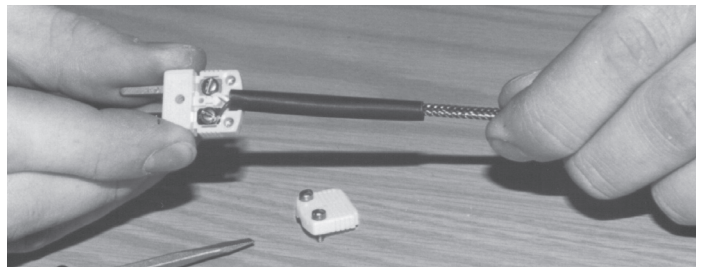
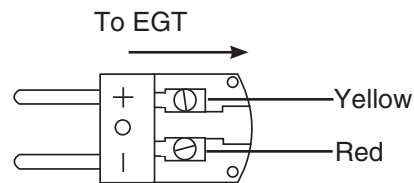


Figure 6. Heat shrink in place

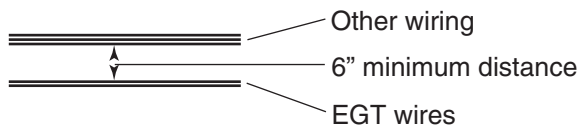
- Shrink the heat shrink tubing with a lighter.
- Install the top of the connector and tighten the screws.

Figure 8. EGT Connector
(P/N 9382)



NOTE: When routing EGT cables, the cables must be a minimum of 6 inches from all other ignition wiring (Figure 9). If wired to close to other wires, erratic EGT readings could occur.

Figure 9. EGT Minimum Distance



SERVICE

For service send your product to Auto Meter in a well packed shipping carton. Please include a note explaining what the problem is along with your phone number. Please specify when you need the product back. If you need it back immediately mark the outside of the box "RUSH REPAIR," and Auto Meter will service product within two days after receiving it. (\$10.00 charge will be added to the cost of "RUSH REPAIR.") If you are sending product back for Warranty adjustment, you must include a copy (or original) of your sales receipt from the place of purchase.

FOR SERVICE SEND TO: **AUTO METER PRODUCTS, INC.** 413 W. Elm St., Sycamore, IL 60178 (866) 248-6356

Email: datalogger@autometer.com

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