ISSPRO, INC. 2515 N.E. Riverside Way, Portland OR 97211
Telephone: (503) 288-4488 ◆ Toll Free: (800) 888-8065
FAX: (503) 249-2999

R609 Turbocater
Installation Instructions

A. Thermocouple Installation:

The thermocouple mounts into a ¼" pipe thread. If the exhaust manifold is already drilled and tapped, install the thermocouple at that location. If none I provided, make a ¾" hole in the exhaust pipe not more than 6" below the exhaust manifold to exhaust pipe connection and weld the R680 bushing into the exhaust pipe (note that the bushing should not be installed backwards, the thermocouple will only install into one side of the bushing).

B. Leadwire Installation:

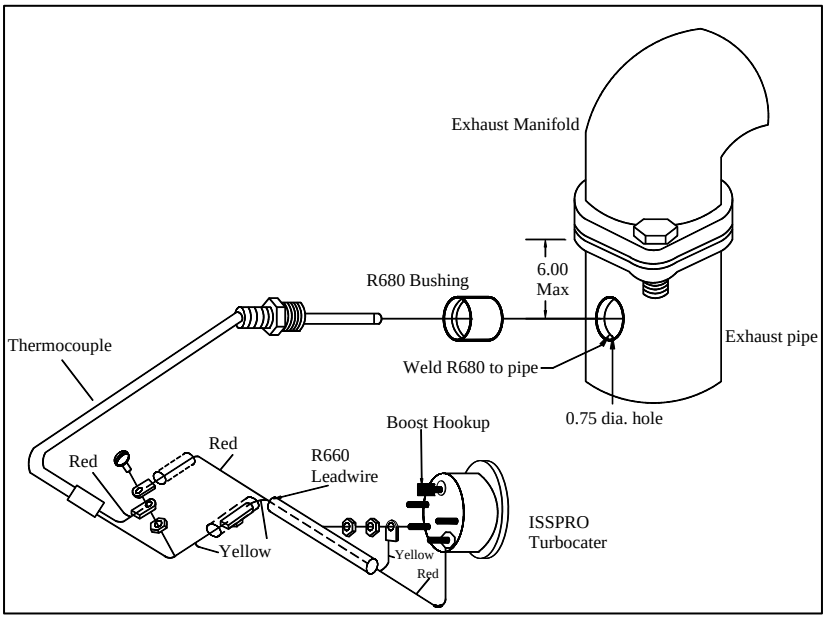
The R660 leadwire assembly and the thermocouple are supplied with screw and ring terminals for assembly convenience. Connect the longer red leadwire to the red thermocouple wire and the shorter yellow leadwire to the yellow thermocouple wire with the screws and nuts provided. Cover these connections with the protective sleeves provided. Route the other end of the R660 leadwire assembly to the turbocator, making sure the leadwire is clear of obstructions that might cut or otherwise damage it. (If it should become necessary to replace any of the terminal ends, use only crimp or clamp types. NEVER solder terminals to the wires.

C. Turbo-Boost Airline Installation:

Install the 1/8" tube fitting supplied with the kit into the engine intake manifold tapped opening, and connect one end of the 1/8" nylon tubing to the fitting. Route the other end of the nylon tubing to the turbocator, making certain it is routed away from sharp edges and hot spots and that no kinks are made in the line.

D. Turbocator Installation:

The turbocator requires a 3" mounting hole. Remove the dampening wire across the meter terminals. Install the 1/8" pipe coupling and the 1/8" tube fitting to the pressure gauge side of the turbocator. Mount the turbocator through the instrument panel or use a mounting bracket at the desired position. Connect the light wires to the existing instrument light switch (12 VDC). Connect the R660 leadwire to the meter terminals, making sure that the yellow leadwire is connected to the positive (+) terminal and the red leadwire is connect to the other terminal. (If the leadwires are connected backwards, the pyrometer will read backwards). Connect the nylon tube to the 1/8" tub fitting. Check the boost-air system for tightness after the engine has been started.



Notes:

1. If the pyrometer is slow or erratic, check the leadwires and thermocouple with an ohmmeter for continuity and check the leadwires for resistance (wire resistance is 0.23 ohms per foot per wire). Check also for oil, grease, or looseness at the terminals. The connections must be clean and tight.
2. The pyrometer is calibrated for use with 6 to 15 foot leadwires.
3. When properly installed, the accuracy of the system will be within 2% at 1200°F under average operating conditions.