# **EV3 SEALED PYROMETER**

# & THERMOCOUPLE INSTALLATION INSTRUCTIONS

## ICON KEY

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## S ★ Disconnect batteries.

Do not reconnect battery power until system is fully configured to avoid risk of shock or fire.

## THERMOCOUPLE INSTALLATION

**KII** Install Thermocouple: The Thermocouple mounts into a 1/8" pipe thread. If the exhaust manifold is already drilled and tapped, the thermocouple can be installed at the location. If none is provided, drill (with letter "R" bit) and tap the hole using 1/8" NPT tap. Apply a small amount of anti-seize lubricant to the exposed threads of the fitting and tighten using the hex (wrench flats) which are closer to the tip of the thermocouple. Adjust the depth of the probe (tip of the probe should be approximately at the center of the exhaust flow) and tighten the outermost nut no more than one half turn past finger tight.

Connect the thermocouple connector to the connector on the leadwire.



Route the thermocouple lead wire to and through the vehicle's firewall into the cabin to the intended gauge location.

### CONNECTING THE TERMOCOUPLE WIRES TO THE 6-PIN CONNECTOR

Remove connector wedge with a small flathead screwdriver to expose inter connections

Remove the silicone seal

At the rear of the connector press and insert the YELLOW wire into PIN 4 and the RED wire into PIN 5. When these wires are fully seated, they will click in place.



Reinstall silicone seal, then press connector wedge back into place

## GAUGE INSTALLATION

Connect the 6-pin sealed connector to the back of the gauge (with the gauge near its final mounting location), then route the red, orange, and black wires with cut ends towards the fuse panel or other area where the power, dimmer, ground and optional output relay connections will be made, leaving enough length at the 6-pin connector to allow you to remove the gauge from the mount without unplugging it from the gauge.





5

Ш The remaining four wires with cut ends are to be connected as follows:



PIN 1 - Red: Ignition; Connect to one wire of the included fuse holder using the included crimp splice, and the other wire of the fuse holder connected to a circuit that switches on with the key switch. Install the included 1- amp fuse in the fuse holder.

#### Use only 1-amp fuses, higher amperage fuses may cause damage to the gauge or to the vehicle.

**PIN 2 – Orange** Dimmer; Connect to the factory gauge dimmer circuit by either tapping into the in-cab fuse block or by connecting directly to the wire running from the dimmer on the headlight switch. **NOTE:** The gauge backlighting will only illuminate if both the ignition AND the dimmer circuits are on.

PIN 3 - Black: Ground: Connect to ground on the vehicle such as the battery negative terminal or a factory ground bolt.

PIN 4 - Yellow: Thermocouple Signal (+); See step 2, Thermocouple Installation.

PIN 5 - Red: Thermocouple Ground (-); See step 2. Thermocouple Installation.

PIN 6 - Brown: Programmable Output Driver can switch devices that draw up to 1.3 Amps (60V) so a 1A (1 Amp) fuse should be used. Devices include customer supplied Relay Coils, Solenoids, Warning Buzzers, and Lamps. These devices are not included in gauge kits. The Output Driver activates these devices at a programmed level. The Output Driver (pin 6) is on J2 for 3 3/8" sealed gauges and J1 for 2 1/16" sealed gauges. When wiring to polarized devices always wire pin 6 to the negative side of the device.

For battery connection: Wire pin 6 to one side of the device (see above) with the other side of the device wired to a positive battery connection fused for no more than 1A.

For ignition connection: Wire pin 6 to one side of the device (see above) with the other side of the device wired to a connection that switches on with the key switch fused for no more than 1A.

Secure all wiring so that it does not interfere with moving parts or chafe on sharp edges. This may be accomplished by routing the wiring within the factory wire harness sheath, using wire ties, and sheathing, and using appropriate grommets when passing through the firewall.

#### EV3 ATTRIBUTE PROGRAMMER INSTALLATION

🛠 Android - Open the Google Play Store application. In the Search box, type "Attribute Programmer". Select the EV3 Attribute Programmer from ISSPRO and install it on your device. iOS (Apple) - Open the App Store. In the Search box, type "Attribute Programmer". Select the EV3 Attribute Programmer from ISSPRO and install it on your device.

ONCE INSTALLED - APP INSTRUCTIONS ARE LOCATED IN "EXTRAS"