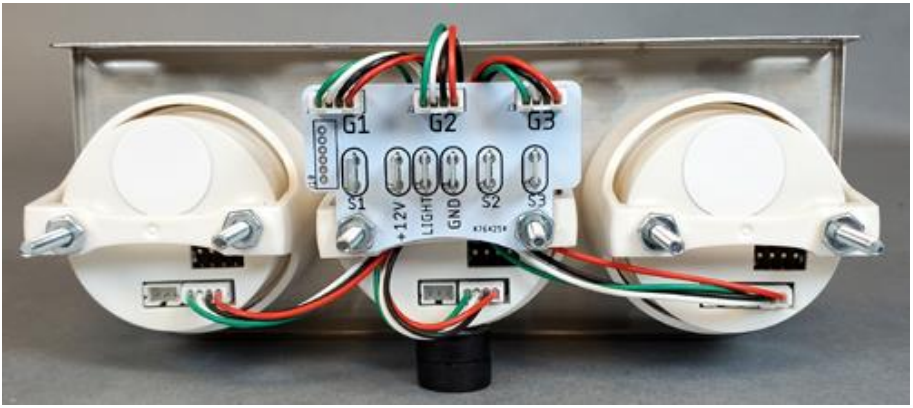
NEW VINTAGE USA
DETROIT

3 GAUGE PANEL KITS



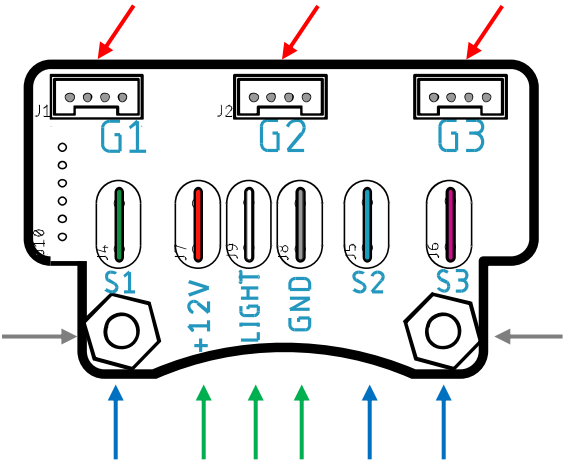
JUMPER BOARD

The Jumper board included in your 3-gauge kit can be used to simplify your wiring. It is designed to commonize the power, ground and lighting for the 3 gauges as well as make connecting the senders (resistance inputs only for temp, fuel, pressure) easy to connect. While the jumper board is not required, its just something we do to make it easier on the installer.

Mount the board on the back of the center gauge back clamp using the nuts and washers that hold the gauge in place.

On resistance gauges (temperature, fuel and oil pressure), the sender is incorporated into the 4-pin harnesses and the board. THE 3 PIN CONNECTOR IS NOT USED ON THESE.
VOLTS: The 3-pin connector is not used on the voltmeter and no sender connection is required; the gauge reads voltage internally from the power source.

The jumper board is designed to be universal for NVU gauges and is labelled as such. Please refer the following diagrams for more information.



G1, G2, G3 (RED ARROWS)
This is where each gauge is plugged in using the 4-pin harness. We suggest keeping each one in order the gauges are in, for example" G1 is the gauge on the left, G2 center, G3 right.

S1, S2, S3 (BLUE ARROWS)
These are the corresponding sender connections for G1,2,3. this is used to connect the resistance-based senders (oil, temp , fuel). The voltmeter does not require a sender connection.

COMMON CONNECTIONS (GREEN ARROWS).
+12V: Connect the 12V+ to a 12V+ switched source that turns on when the key is on.
LIGHT: Connect to a 12V+ power source that will be on when you want the klgits to be on. We suggest the parking lamp switch as factory dimmers usually do not work with LEDs. If you need the lights to be dimmer our 99003-04 dimmer would work great.
GND: A good ground on the chassis or body is recommended.
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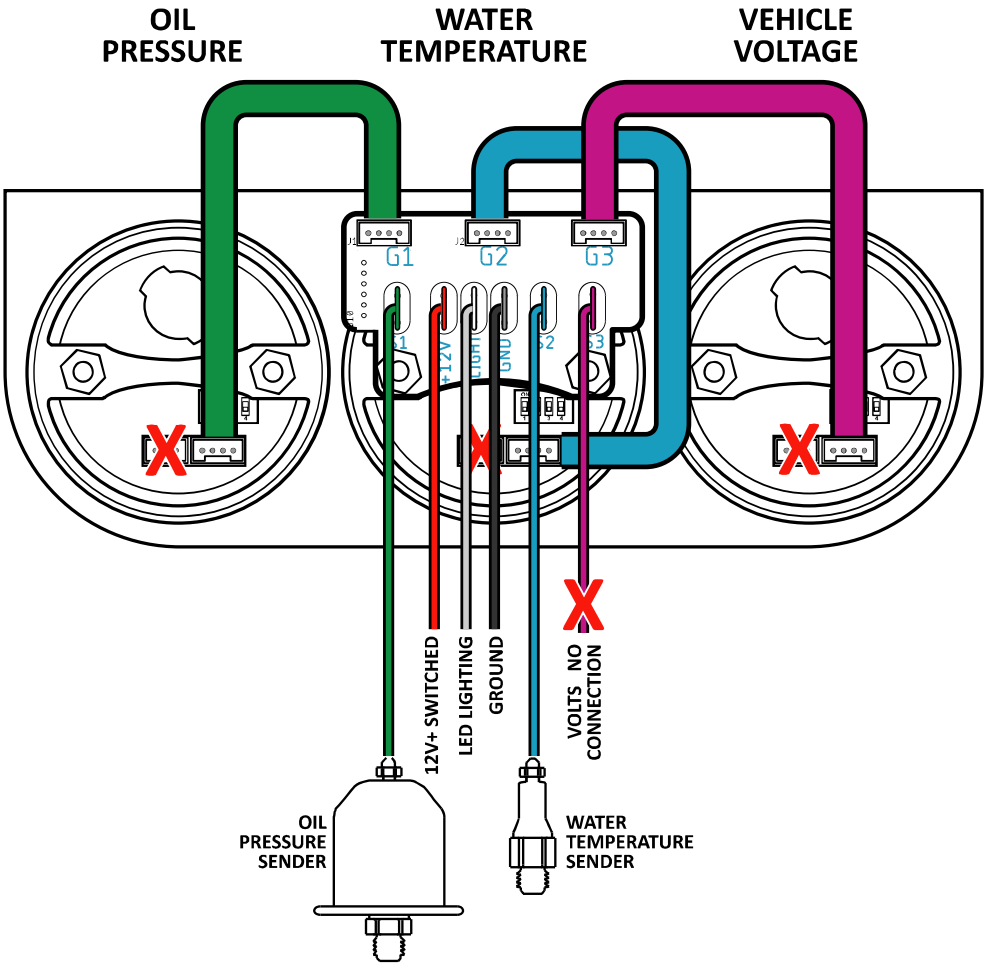
3 GAUGE OIL, TEMP, VOLTS EXAMPLE



The illustration above shows a typical installation and wiring. Follow the individual gauge instructions later in the book for more information on each plug,.

HINTS:

Use the included spade terminals to connect to the connections on the board

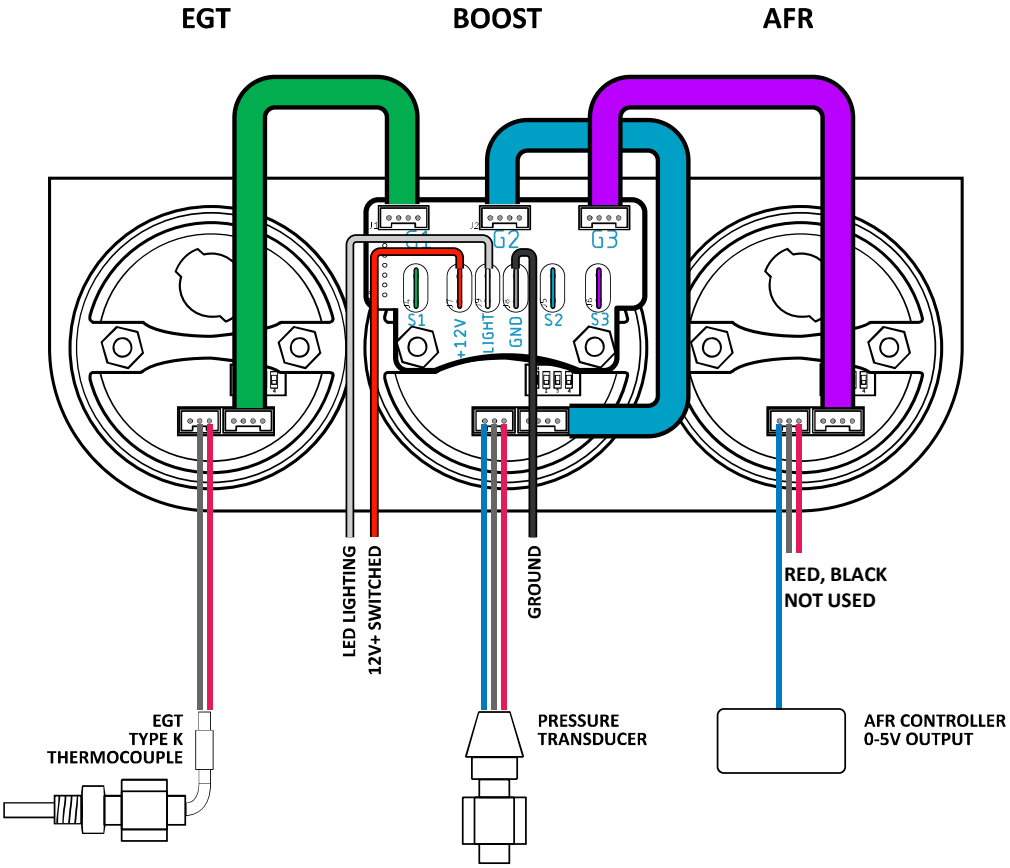
The resistance-based gauges (temp, pressure, fuel) do not use the 3-pin plug, and the sender is connected via the 4-pin plug and spade terminals.

The voltmeter does not require the 3-pin connector and does not use a sender, the voltage is measured internally.

Connect the power to a 12V switched source such as your current cluster power, this should already be a fused circuit.

Do not use Teflon tape on the sender threads, only use liquid sealant to maintain a good ground.

3 GAUGE EGT, BOOST, AFR



The illustration above shows a typical installation and wiring. Follow the individual gauges instructions later in the book for more information on each plug,

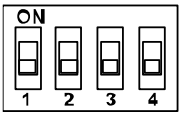
NOTE: The gauges shown here utilize the 3-pin connector which as the 5V and EGT input on that plug.

The spade terminals for the senders (S1, S2, S3) are not used in these applications, only for resistance-based senders (temp, oil, fuel)

ANALOG INPUT MINOR GAUGES

DIP switches are used on the back of some of the gauges to set ranges for your application. This can be changes at any time but in general They are set at the factory or on site during installation and are left in that position for the life of the vehicle.

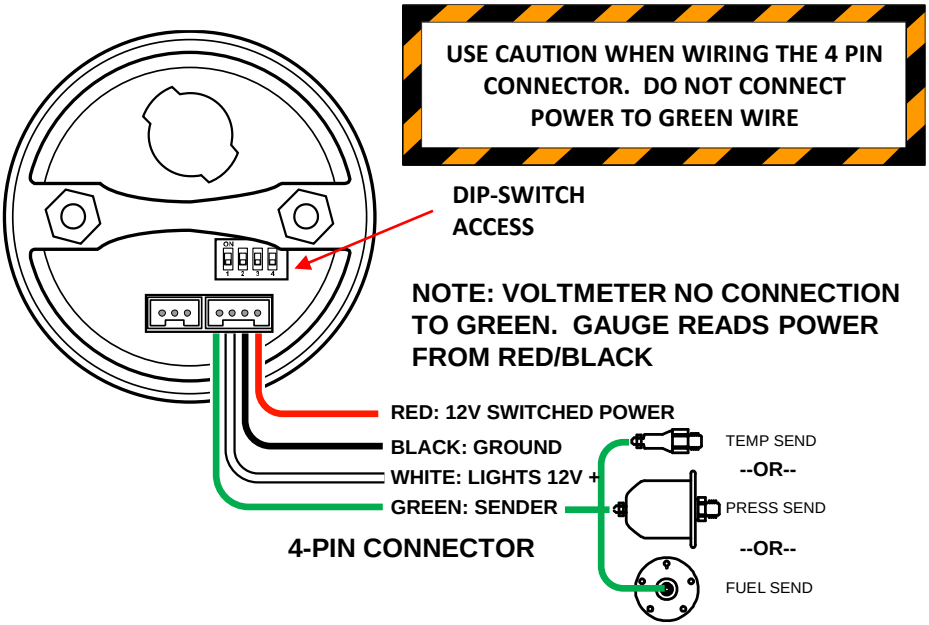
When setting DIP switches, ON should be in the up position.



NOTE: TO CHANGE THE SETTING , AFTER SELECTING THE DIP SWITCH, POWER MUST BE CYCTLED OFF/ON FOR THE NEW SETTINGS TO TAKE EFFECT.

FUEL GAUGE:

All fuel gauges are programmable by the DIP switches on the driver gauge or the 2-1/16" gauge itself. All fuel gauges and ranges are identical on all instruments. Set the switches as shown in the chart below for your application.



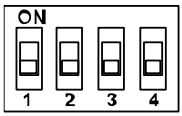
ANALOG INPUT	INPUT Ω	1	2	3	4
OIL PRESS 0-100 PSI	240-33	OFF	OFF	OFF	OFF
WATER TEMPERATURE	500-19	OFF	OFF	ON	ON
OIL/TRANS TEMP	500-19	OFF	ON	OFF	ON
VOLTAGE	10-18V	OFF	ON	ON	ON

SENDER TYPE MAKE/YEAR	RANGE E-F Ω	1	2	3	4
EARLY GM/FORD PRE 65	0-30	OFF	OFF	ON	OFF
GM 65-89	0-90	OFF	ON	OFF	OFF
GM 90S-UP	40-250	OFF	ON	ON	OFF
FORD/AMC/MOPAR 65-86	73-10	OFF	OFF	OFF	ON
FORD 87-UP	20-145	ON	ON	OFF	OFF
UNIVERSAL/SW	240-33	ON	OFF	OFF	OFF
CUSTOM/EARLY FORD	168-15	ON	OFF	ON	OFF

ANALOG INPUT MINOR GAUGES - CONTINUED

ANALOG INPUT 0-5v OR .5-4.5V INSTRUMENTS

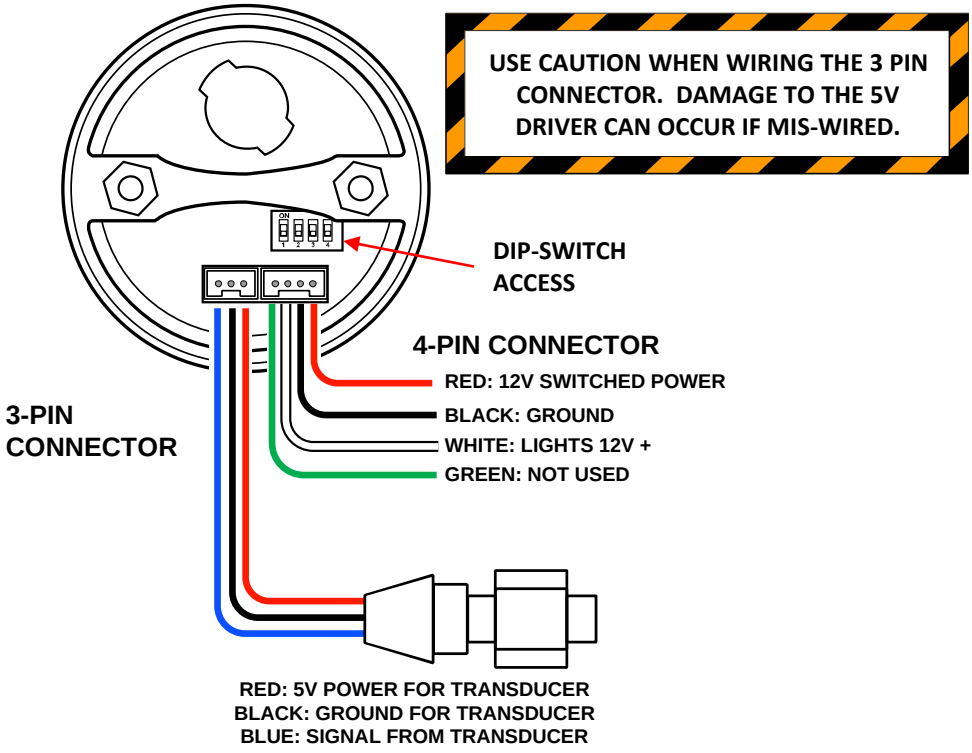
DIP switches are used on the back of some of the gauges to set ranges for your application. This can be changes at any time but in general They are set at the factory or on site during installation and are left in that position for the life of the vehicle.
When setting DIP switches, ON should be in the up position.



2-1/16" 0-5V INPUT MINOR GAUGES

This applies to all standalone 2-1/16" gauges with a 0-5 or .5-4.5V input (transducer). The instrument will have BOTH a 4 and a 3 pin plug. The 3 pin plug will power your transducer. Please refer to the chart below for input DIP switch settings required for your application.

Transducers operate on .5-4.5V range. AFR and 0-5V output devices use 0-5V. The input for both ranges should be on the BLUE wire on the 3-pin harness. The GREEN wire on the 4-pin harness is not used.

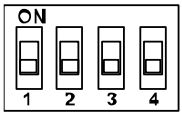


VOLTAGE INPUT	INPUT Ω	1	2	3	4
TRANSDUCER	.5-4.5V	ON	OFF	OFF	ON
0-5 INPUT (AFR, OTHER)	0-5V	ON	OFF	ON	ON

DIP SWITCHES – ANALOG GAUGES - CONTINUED

DIP switches are used on the back of some of the gauges to set ranges for your application. This can be changes at any time but in general They are set at the factory or on site during installation and are left in that position for the life of the vehicle.

When setting DIP switches, ON should be in the up position.



NOTE: TO CHANGE THE SETTING , AFTER SELECTING THE DIP SWITCH, POWER MUST BE CYCTLED OFF/ON FOR THE NEW SETTINGS TO TAKE EFFECT.

FUEL GAUGE:

All fuel gauges are programmable by the DIP switches on the driver gauge or the 2-1/16" gauge itself. All fuel gauges and ranges are identical on all instruments. Set the switches as shown in the chart below for your application.

SENDER TYPE MAKE/YEAR	RANGE E-F Ω	1	2	3	4
EARLY GM/FORD PRE 65	0-30	OFF	OFF	ON	OFF
GM 65-89	0-90	OFF	ON	OFF	OFF
GM 90S-UP	40-250	OFF	ON	ON	OFF
FORD/AMC/MOPAR 65-86	73-10	OFF	OFF	OFF	ON
FORD 87-UP	20-145	ON	ON	OFF	OFF
UNIVERSAL/SW	240-33	ON	OFF	OFF	OFF
CUSTOM/EARLY FORD	168-15	ON	OFF	ON	OFF

2-1/16" ANALOG MINOR GAUGES

This applies to all standalone 2-1/16" gauges. Driven instruments are adjustable at the master gauge on the back under the plug. On the back of the 2-1/16"gauge the switches are visible without removing any covers/plugs.

Analog instruments refer to fuel, temperature, volts and pressure that use a traditional resistance to ground sender (not a transducer). All gauges are set at the factory to match the gauge dial range. The only time the end user will need to change the settings is for the fuel range. Use the settings below as a reference if needed.

ANALOG INPUT	INPUT Ω	1	2	3	4
OIL PRESS 0-100 PSI	240-33	OFF	OFF	OFF	OFF
WATER TEMPERATURE	500-19	OFF	OFF	ON	ON
OIL/TRANS TEMP	500-19	OFF	ON	OFF	ON
VOLTAGE	10-18V	OFF	ON	ON	ON

2-1/16" 0-5V INPUT MINOR GAUGES

This applies to all standalone 2-1/16" gauges with a 0-5 or .5-4.5V input (transducer). The instrument will have BOTH a 4 and a 3 pin plug. The 3 pin plug will power your transducer. Please refer to the chart below for input DIP switch settings required for your application.

VOLTAGE INPUT	INPUT Ω	1	2	3	4
TRANSDUCER	.5-4.5V	ON	OFF	OFF	ON
0-5 INPUT (AFR, OTHER)	0-5V	ON	OFF	ON	ON

EGT/PYROMETER TYPE-K THERMOCOUPLE

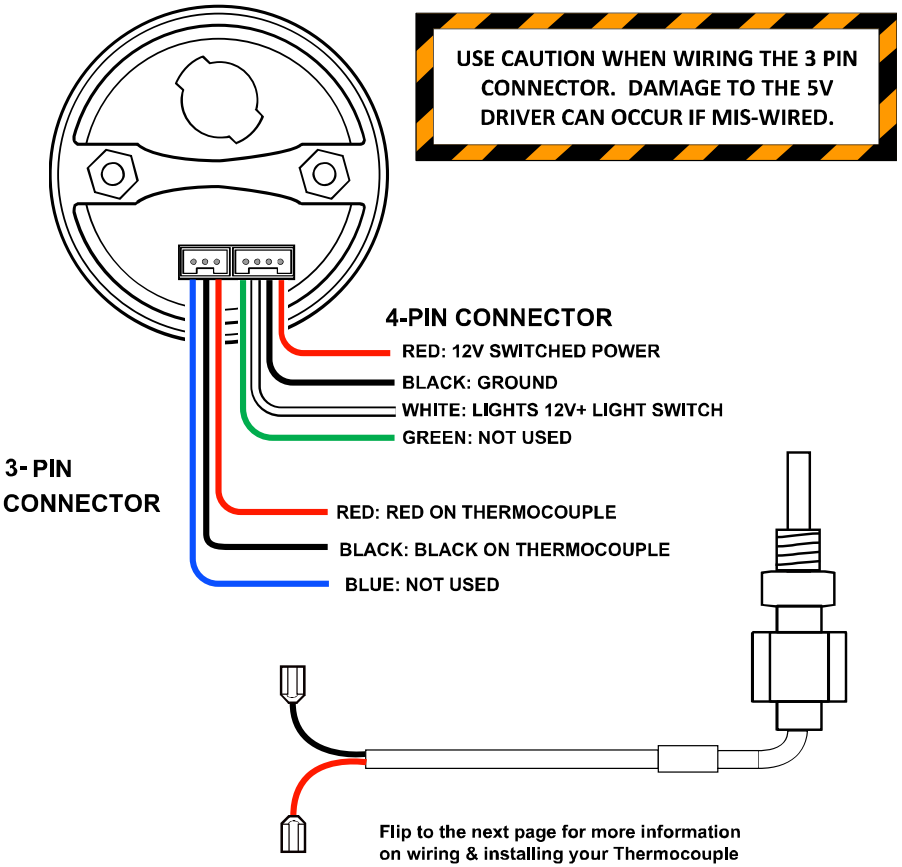
THE BACK OF YOURE GAUGE

Your EGT gauge has internal illumination and the bulb socket is not used. Follow diagram below for light witring.

The supplied Thermocouple is very sensitive. DO NOT CUT THE WIRE TO A SHORTER LENGTH

The thermocouple is a TYPE K which reads up to 1800 F

Wire the supplied harnesses as shown below.

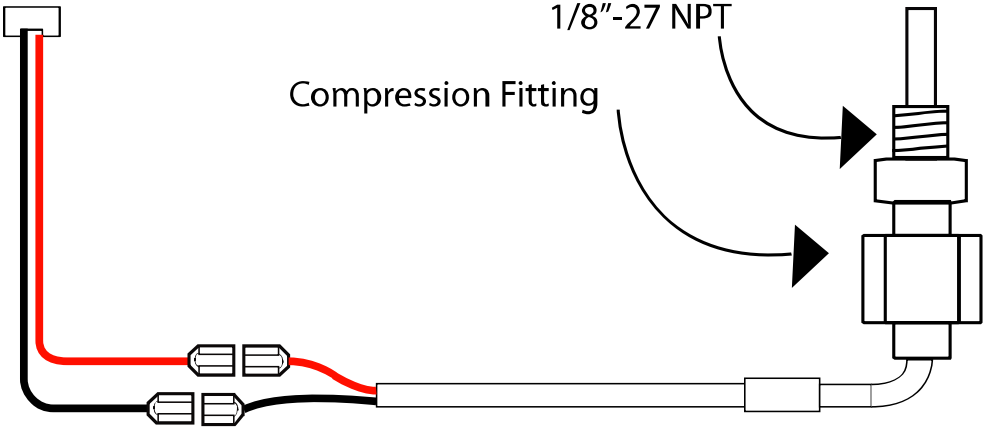


EGT/PYROMETER TYPE-K THERMOCOUPLE - CONTINUED

1. Trim off the BLUE wire on the 3 wire harness, it will not be used on the EGT gauge

2. Crimp Male Quick Connect to the ends of the RED & BLACK wires. Be Sure to fold wire over insulation and then Crimp

3. Connect Male connections between your harness and your EGT K Type Thermocouple



NOTE: DO NOT CUT ANY OF THE THERMOCOUPLE WIRES, THIS WILL DAMAGE THE ITEM AND TRESULT IN INCORRECT READINGS!

MOUNTING THE THERMOCOPULE

Ensure the probe is mounted before the first bend, mark the distance on the header tube that has the first bend closest to the head.

NOTE: MANY AFTERMARKET HEADERS, DOWNPIPES AND HOUSINGS HAVE A BUNG ALREADY MOPUNTED. IF NOT A BUNG WILL BE REQUIRED (NOT INCLUDED)

FOR BEST RESULTS INSTALL PRE-TURBO ON THE SYSTEM

Drill and tap the exhaust manifold to 1/8-27 NPT. Install the supplied EGT probe directly into the exhaust manifold. Note: We recommend using anti-seize lubricant on the male threads of the EGT probe fitting. After drilling and tapping the exhaust manifold be sure to use both a magnet and vacuum to safely remove all shavings from the manifold.

Feed the EGT harness with the RED and BLACK wires from the engine bay through an available port through the firewall and plug into the back of the gauge. Take the wiring from the probe that is installed into the exhaust and plug both connector ends together until they are fully seated. Be sure to use a rubber grommet when routing all wires through the firewall to protect them from being cut or damaged.

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HELPFUL LINKS:

TROUBLESHOOTING

TECH VIDEOS

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