TS-0701-2011 - Electrical EGT Gauge - Instructions

Product Name:	Electrical EGT Gauge
Product Description:	EGT Electrical Gauge 200 to 1200 DEG C *OR* EGT Electrical Gauge 400 to 2200 DEG F
Product Number:	TS-0701-2011, TS-0701-2012

Important Notes

- Please thoroughly read and understand these instructions before commencing this installation
- Ensure that the car and exhaust system are cold before commencement of installation.

Recommendations

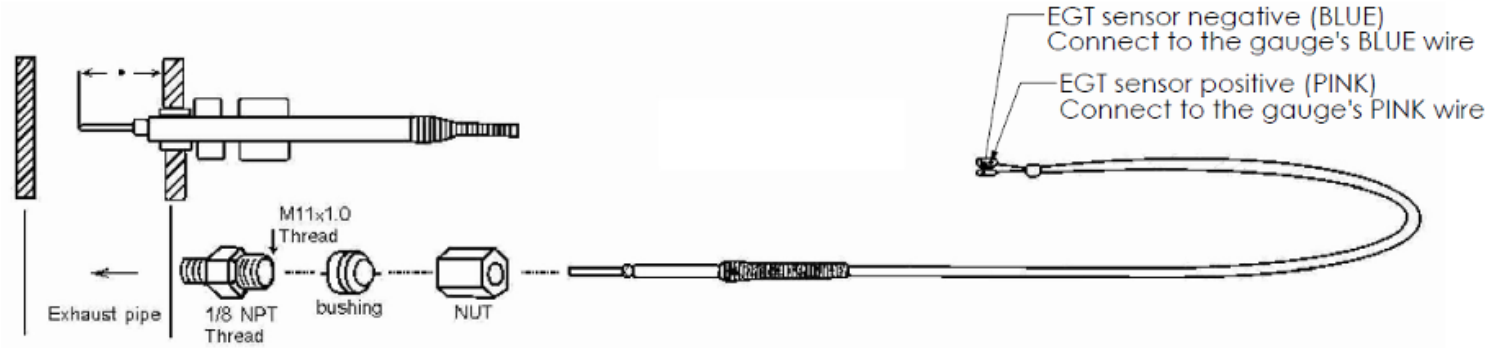
- Turbosmart recommends that your gauge is fitted and adjusted by an appropriately qualified technician.
- Gauge mount cup (TS-0101-2024) Sold separately

How to Install Your Exhaust Gas Temperature Gauge

Exhaust Gas Temperature Sensor

- The exhaust gas temperature (EGT) gauge requires a reliable temperature signal from the exhaust system to provide an appropriate EGT indication.
- After deciding the sensor's location, drill an 8.70 mm diameter hole. Use a 1/8 NPT tap to thread the hole for the included NPT fitting.
- First, secure the 1/8 NPT fitting by hand, then turn 1.5 revolutions using a socket/spanner. Torque to 3 Nm (2.2 ft. lbf)
- After the 1/8 NPT fitting is securely fastened, insert the bush, nut and thermocouple in series, as shown in the figure below.
- The thermocouple depth is to be set at approximately half the diameter of the exhaust pipe.
- Secure the sensor assembly by tightening the securing nut. Torque to 6Nm (4.4 ft. lbf)
- Keep the EGT sensor manageable, as it may cause sensor failure or thread damage.

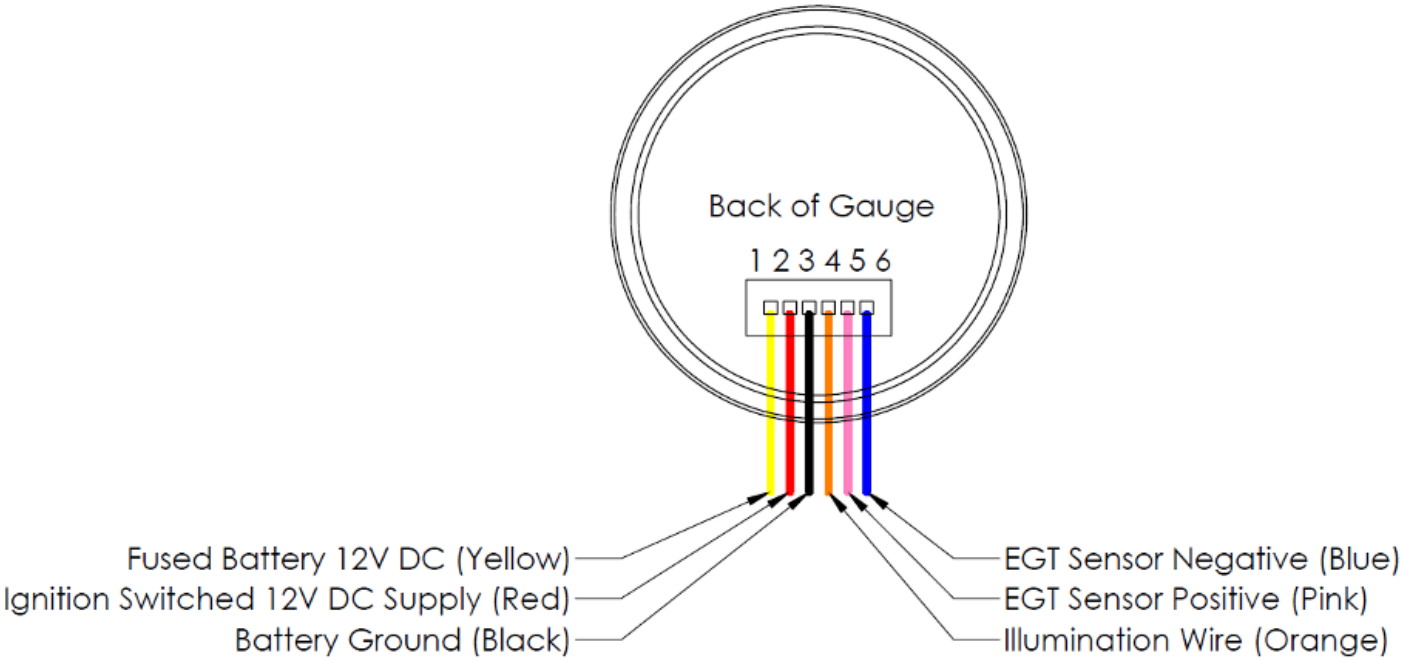
- Route the sensor cable to the gauge. Ensure the cable is kept away from heat as much as possible.



Wiring

- Both exhaust gas temperature gauges and sensors must be connected to the vehicle’s ground (chassis or earth).
- Soldering or crimping on electrical connectors must be used on all electrical connections.
- Unused wires must be insulated with electrical tape to prevent unwanted electrical connections.
- Follow safe electrical operating practices.
- Refer to the table and diagrams below for further details
- The illumination wire is activated with 12V input into the sensor. This is common with most stereos to activate the dimming feature.

Component	**Wire**	**Connect to**
Gauge	Yellow	Fused +12VDC battery supply
Gauge	Red	Ignition switched +12VDC supply
Gauge	Black	Ground (Vehicle chassis or earth)
Gauge	Orange	Illumination Wire to Dim gauge
Gauge	Pink	EGT sensor positive voltage supply
Gauge	Blue	EGT sensor negative voltage supply
EGT Sensor	Pink	Positive voltage supply (connect to gauge pink wire)
EGT Sensor	Blue	negative voltage supply (connect to gauge blue wire)



Operation & Troubleshooting

- Once the electrical connections and EGT sensor installation are completed, turn the car key to “on” position. The EGT gauge will illuminate, and the needle will be positioned at a temperature reading.
- Start the car and check for any exhaust leaks.
- The needle position will change relative to the exhaust gas temperature. If the needle does not move relative to the exhaust gas temperature, ensure that all electrical connections are correct and that the EGT sensor is installed correctly as per instructions above.
- Gauge doesn’t dim, check that 12V is wired to the orange wire with switched 12V from dimming input like radio dimming.
- Monitor the gauge reading against the operating conditions of the engine. The temperature should be at a minimum during cold start then slowly increase and remain at a normal operating temperature.
- If the display does not illuminate, ensure that the gauge electrical connections are correct.
- If the display illumination (Not Dimmed)/operation is not switched with ignition, ensure that the red wire, is connected to an ignition switched source not a constant +12VDC source.
- If the display needle is erratic, ensure that all electrical connections to the EGT sensor are correct.