

mycruiseagent's simple TDI EGT probe

Congratulations on the purchase of the best EGT probe on the market for your TDI!

Caution!: This probe and the required modifications for its use are strictly for off-road use only. The defeating of federal and state EPA mandated emission controls is a crime *punishable by death or castration* in some communities in Southern California.

Now that's out of the way and we're all on the same page that this will only be used off-road – let's figure out how to install this very special sensor.

The use of this probe requires the removal of the pipe that feeds exhaust gases from the exhaust manifold to the EGR cooler. This is typically done in conjunction with the elimination of the cooler itself and some means of removing or completely defeating the EGR valve.

The EGR valve can be replaced with the TDI "race-pipe" or the EGR valve itself can be modified into a "stealth race-pipe". Alternatively, the EGR valve can be capped off with a second block-off plate (also sold as an option by mycruiseagent).

This procedure will not go into details of the removal of the EGR valve/cooler system, but assumes this equipment is no longer in the way to facilitate the installation of the EGT probe.

Remove the probe and blocking plate from the package. It works much better out of the envelope. To properly fit into the EGR port on your turbo the probe must be bent to fit the passage and reach the exhaust gas stream.

First, make sure that any twist-tie or rubber washer used to hold the fitting on the probe is removed.

Thread the compression fitting into the tapped hole in the blocking plate and tighten until snug with a open-end or adjustable wrench.

TIP: the tapped hole is tapered – the fitting will thread easily into the hole for close to half the thickness of the plate if you are threading it the right way. If it is immediately tight try turning the plate around and thread the fitting in from the other side.

For the ALH engine set the probe so about ¼" of the probe is above the top of the compression nut and snug the nut just until it holds the probe.

Bend the probe as shown in the following photograph:



Loosen the compression nut and turn the probe to position it as shown:



Test fit the probe on the engine and make sure it does not make contact with the manifold – adjust the bend or position of the rotation as necessary. Once the configuration is correct, tighten the compression fitting until the probe no longer moves – then put one more turn on the compression nut to crimp the ferrule and hold the probe in place permanently.

Install a gasket between the blocking plate and EGR port of the turbo just as if installing the pipe from turbo to EGR cooler. The procedure in the Bentley manual calls out a torque of 25 Nm (18 ft-lb) for the nuts that hold the plate to the EGR port.

For BEW engines similar bending and setting of depth needs to be done – but we have not had a turbo from one of those cars on the bench to write a procedure. Proceed carefully to position the tip of the probe near the bottom of the EGR port passage so it is in the exhaust gas stream.

Feed the wire through the firewall and neatly route the cable to the location of your gauge using zip ties to hold it in place where appropriate.

Caution: MAKE SURE YOU ROUTE THE WIRE AWAY FROM OPEN

ELECTRICAL SOURCES – THE STAINLESS STEEL OVERBRAIDING CAN CAUSE AN ELECTRICAL SHORT AND A FIRE!

The mycruiseagent EGT probe is a type K thermocouple made using the best materials of construction available – we use actual thermocouple wire rather than cheaper extension wire. What does this mean? It means that you can cut the wire to the length that you need to connect directly to your gauge with no significant loss of accuracy!

Depending on the type of gauge you have, you can terminate the probe wires as needed to fit your gauge. Some gauges use spade terminals – you can crimp on spade connectors for these types. Other gauges have screw terminals – simply tighten the screw terminal onto the exposed thermocouple leads slipped under the screw heads.

That's it! Reassemble all dash cover plates and enjoy your new-found performance in EGT responsiveness!

For questions about, or corrections of this procedure, please contact: mcatdi@gmail.com

Thanks for your purchase!

Mark