

CHIP TUNING EGT ECU INSTALL GUIDE

NB: THIS GUIDE IS SPECIFICALLY FOR THE NS/NT PAJERO HOWEVER IT WILL ALSO SUIT AS A GENERIC FITMENT GUIDE FOR ALL VEHICLES



ON NS/NT PAJERO, THIS WIRE PROVIDES 12 VOLTS ON IGNITION.

ON OTHER VEHICLES, FIND A SIMILAR 12V SOURCE FOR EGT ECU

PUSH PROBE WIRE & 2 CORE WIRE THROUGH FIREWALL GROMMET AT STEERING SHAFT OR OTHER THROUGHPUT

FIT EGT ECU WHERE DESIRED

ND

Sensor Installation Guide

- Locate the sensor (probe) position point on the dump pipe. Separate the fittings carefully making sure you do not lose the little olive that is currently in there. It is easy to lose so please be careful opening the parts.
- Drill a 7.5mm hole in the dump pipe. Tap the hole with 1/8th NPT / BSTP thread tap. TIP. Start the engine before drill bit penetrates the exhaust so the swarf is blown outwards. *NB: You may use the fitting as a tap if needed.*
- If needed, use a small mechanics magnet that will pass through the hole to the bottom wall to retrieve drill and tap shavings. Clean shavings from magnet and search for more shavings until the magnet comes back clean.
- With the sensor inserted through the hole, measure the sensors immersion depth into the exhaust stream. The correct immersion should be $1/3^{rd}$ to $1/2^{th}$ the diameter of the exhaust pipe. This probe will not cause a significant restriction in exhaust flow. When the depth has been selected, mark the sensor at the location just above the compression nut with a marker. Now remove the senor from the mounting hardware.
- Install the mounting adaptor to the drilled hole. Tighten it with a 14 mm wrench and secure with strong Loctite and leave to set for a few minutes.
- Insert the sensor through the mounting hardware until the depth mark reaches the top of the compression nut.

- With the sensor spring lead wire running the way you like it, using a short 12 mm open end wrench, tighten the compression nut until the sensor probe is unable to rotate in the hardware. If necessary, support the square portion of the fitting body with a 14 mm open end wrench.
- Route the lead wire toward the firewall taking precaution to keep it away from hot and moving parts. Do not secure the wire tightly. Make long sweeping bends and loosely guide the lead wire to the instrument using the harness ties. This will allow the wire to absorb the engine vibration along the wires length,
- NOTE: Do NOT cut or splice the thermocouple lead wire as it is special wire that provides correct reading to the gauge. Simply coil any excess wire out of the way. When disassembling the sensor, place the ferrule (olive) in a safe place for later use.



DRILL 1/8 BSPT HOLE IN DUMP PIPE HERE

7.5mm



FIT THE SUPPLIED FITTING INTO DUMP PIPE. SECURE WITH LOCTITE FIT PROBE INTO FITTING AND TIGHTEN NUT OVER OLIVE TO SECURE

INSTALLATION COMPLETE



Powering up your EGT Controller

- Your EGT controller should come pre programmed and not require any further setting, however, adjusting parameters are listed below if you need to do a custom set up.
- Ensure E.G.T controller is powered, either via 12v power adaptor that simply plugs into the vehicles 12v accessory power socket/cigarette lighter adaptor or wired directly to 12v accessory/ignition power supply.

EGT CONTROLLER SET UP

•As stated, your EGT Controller is preset from factory. You can alter the settings using the guide below.

•Pressing the **MODE** button will display the Performance Tune trigger **OFF** point. At this temp a signal is sent to the Performance Module to turn OFF and use the vehicle manufacturer's factory tune setting. Default 650 Deg Cel.

•Press the **MODE** button again and it will then display the Performance Tune trigger **ON** point. Default 500 Deg Cel

• Press the **MODE** button again and it will show Celsius or Fahrenheit format option.

•These settings can be changed by pressing **ARROW** buttons.

We recommended that the factory MAX EGT TEMPS be ascertained. Do this by running the vehicle WITHOUT the Performance Module connected (leave the EGT controller connected) and taking the vehicle for a hard long drive up a steep hill preferably with a load. Note the temps. From there you can safely add 10% to the highest recorded figure.

Pin Out And Trouble Shooting EGT Controller

Fig 1 shows the correct wiring configuration for Normally Open connection (N.O.) or Normally Closed configuration.

From top the bottom as seen in Fig 1:

12V DC and GND are Positive and Negative on battery or ignition source RY - NO = Relay Normally Open - Wired to**Common Rail Performance Module** RY – COM = Signal - Wired to Common Rail & Pre-Common Rail Performance Module RY – NC = Relay Normally Closed Wired to Pre Common Rail Modules use only +5V = Not UsedMAP-SENSOR = not usedGND = Not Used TK1 = Temp Sensor -TK2 = Temp Sensor +



TROUBLE SHOOTING

- If you remove the Probe from the EGT, it will always say "OPEN", as there is no probe attached.
- If you know how to use a multimeter, measure the Probe to help to deduce which part may be faulty.
- With a digital multimeter set it to OHMS/Resistance, and measure. You should see a value of no more than 10 ohms.
- No value = probe broken/faulty. You should check for broken wires or send the probe back to us.
- If value is VERY low, say 0.3 to 1 ohm, There is a Short somewhere along the wires. You need to check the wires and probe.
- If the value is greater than 10 ohms, then the EGT controller problem.
- Whatever part is faulty, please feel free to inspect and send only this part back for warranty.



ON PRE COMMON RAIL PERFORMANCE MODULES THE EGT CONTROLLER NEEDS TO BE IN THE NORMALLY OPEN CONFIGURATION.

ON COMMON RAIL PERFORMANCE MODULES THE EGT CONTROLLER NEEDS TO BE IN THE NORMALLY CLOSED CONFIGURATION.

REFER PIN OUT ABOVE.



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