



McNally Electronics Blue Max Series II Boost EGT Combo Gauge Installation and Operation

Introduction

You have purchased the McNally Electronics Blue Max Series II Boost/EGT Combo Gauge for your automobile. This document explains how to hook it up and use it. The gauge measures exhaust gas temperature using a Type K thermocouple and displays degrees F or degrees C on the three digit LED display. The gauge also reads an external pressure sensor and displays PSI of boost on the dial.

Installation

The gauge is supplied with a connector and pigtails for power and ground, and comes with a pinned thermocouple and external pressure sensor and pinned cable. Mount the gauge in the desired location, connect the black wire from rear connector pin 7 to ground, and connect the red wire, pin 9 to switched 12V under the dash. Mount the thermocouple in the desired location in exhaust stream using supplied compression fitting. (Needs 1/8 NPT hole) and route the two leads up to the rear of the gauge. Connect thermocouple and pressure sensor to gauge rear connector using the pinned cables provided.

Thermocouple

The Type K thermocouple is supplied with a compression fitting threaded with 1/8th inch NPT threads. It screws into a tapped hole in the exhaust manifold. Use a letter R drill or .3390" and use tap 1/8-27 NPT. Route the thermocouple wire through the firewall to the gauge. Note the ends of the wires have the correct pin crimped on the wire to fit in the rear connector. Once you have the leads for the thermocouple in position near the gauge in its installed location, insert the pins rear connector. Make sure the tabs on the pins face the little square holes on the outside of the white connector. This tiny pin is somewhat fragile, so route the cable carefully. Thermocouple T- is the Red wire. Plug this into the pigtail in hole 6, top right. The little barb on the pin installs on the outside to click into the hole. Insert the yellow wire T+ in hole 1, bottom right. The pins should lock into position.

Pressure Sensor

The external pressure sensor also needs the 1/8-NPT hole. It comes with a pinned connector. Red is regulated 5V to the sensor from pin 4 on the rear connector, Blue is signal to gauge pin 8; Black goes to a local ground. A good ground is essential for proper pressure reading. Caution: DO NOT POWER UP the gauge and sensor without hooking the black ground wire from the sensor to ground, or the sensor output will be severely stressed perhaps to the point of failure!

Operation

The button on the front selects normal, peak, volts or temperature units' mode. Mode 0 is 'normal' mode and shows current Boost and EGT. A Short Push (just a quick peck!) changes to mode 1 and shows the peak Boost and EGT readings since last reset. Holding button in for 2 seconds will reset the peak values. The next Short Push shows 2 and volts is displayed n the LEDs. Next Short Push shows F or C. If you want to toggle from F to C or C to F, select with a Long Push (1/4 of a sec). If the thermocouple is not connected, the display shows ---.

Rear connector pin location:

Rear view of connector. Pin number locations

10	9	8	7	6
5	4	3	2	1

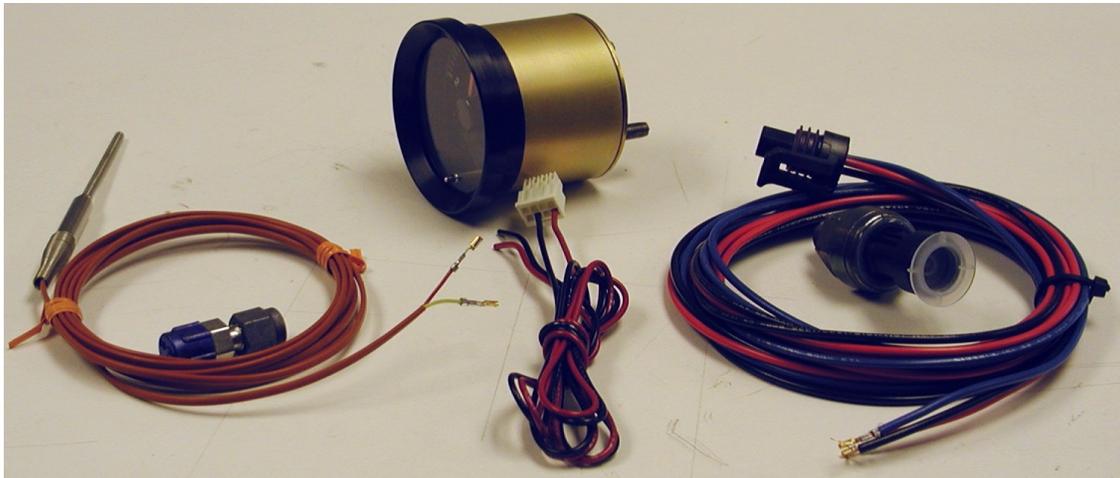


Pin function:

- 1 thermocouple T+ Yellow wire
- 2 RX to external RS232 chip
- 3 TX to external RS232 chip
- 4 internal regulated 5V to external sensor Red wire
- 5 pulse input pin
- 6 thermocouple T- (TC red wire)/ground
- 7 ground
- 8 0-5V analog input 1 from first external sensor – Blue wire
- 9 +12V gauge power from ignition on circuit
- 10 0-5V analog input 2 from second external sensor – Blue wire

If you purchased a full kit the typical contents should include:

- Gauge, mounting bracket, power connector with red and black cable
- Thermocouple and compression fitting
- Pressure Sensor and pinned cable and connector
- This Instruction sheet (dl the pdf from the web site to see color photos)



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