

2 and 3 Bar Map Sensor Kit Instructions

Part # Sens004/Sens005

These 2 and 3 bar MAP (manifold air pressure) sensors measure air pressure up to 14.8 psig (2 bar) and 29.7 psig (3 bar). The kit contains the sensor and appropriate weatherpack mating connector and pigtail. Connect the red wire (pin C) to +5v, the black (pin A) to ground, and white (pin B : output) to one of the Interceptor scan gauge's analog inputs or other data device. The 5v excitation can be obtained from our 5v sensor power supply (part number Sens010), or the 5v wire going to other sensors such as the stock MAP, throttle position, or at the ECM/PCM. You can splice into the ground wire at the same sensor where 5v was obtained or using chassis ground. **DO NOT ALLOW THE SENSOR TO BE POWERED WITHOUT THE OUTPUT CONNECTED. IN OTHER WORDS, DO NOT APPLY 5V TO THE RED WIRE UNLESS THE WHITE WIRE IS CONNECTED TO OUR GAUGE OR OTHER DEVICE. THIS WILL DAMAGE THE SENSOR AND IS NOT COVERED UNDER THE WARRANTY.**

The output of the sensor ranges from 0 - 4.9v at full scale. To configure the Interceptor, Analogic, or other device to read pressure in psi using a 3 bar sensor, you will enter 9.2 as the slope (entered as 009.2), and -14.7 as the intercept following the instructions for these devices. This equates to multiplying the output voltage by 9.2, and subtracting the result by 14.7 to display pressure in psi. For a 2 bar sensor, enter 5.8 for slope, and -13.2 for the intercept. Note this important point. The above equation assumes that you are at sea level or close to it. For best accuracy, check the value displayed on the gauge with the ignition on, engine off. At this condition the gauge should be reading "0" for MAP pressure. If it's off by more than you are comfortable with, perhaps 0.3 psi or more, you can adjust the intercept value to correct for this offset. For example, if you see -0.4 psi with the engine off, add 0.4 (-14.7 + 0.4 = -14.3) to correct the reading. The higher your altitude, the smaller in absolute terms the intercept will be. In Denver Colorado for example you may need to reduce it to -13.5 or more. This action will correct the MAP reading over its entire range and can also be used to cancel out an offset due to grounding issues. The same process can be used to read pressure in Bar, kPa, etc.

Warranty

This product is Aeroforce Technology warrants this product and its accessories against defects in material and workmanship for a period of 90 days from the date of purchase.

Aeroforce Technology Inc.

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