Daytona Sensors LLC
Engine Controls and Instrumentation Systems

MAP Sensor Tech Note

CAUTION: CAREFULLY READ INSTRUCTIONS BEFORE PROCEEDING. NOT LEGAL FOR USE OR SALE ON POLLUTION CONTROLLED VEHICLES.

OVERVIEW

Gen 1 style MAP sensors (P/N 115011 1 Bar, P/N 115012 2 Bar, and P/N 115013) are supplied with a mating connector kit. Installation of a new mating connector on the engine wire harness may be required for some applications.

1 Bar Gen 3 style MAP sensor P/N 119008 is intended for use with our SmartSpark system and will mate with the Smartspark wire harness.

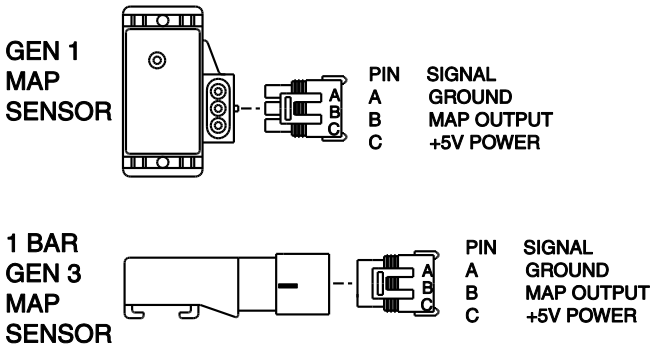

Figure 1 – MAP Sensor Pin Assignments

MAP Sensor Scale Factors				
Part Number	115011	119008	115012	115013
Type	1 bar	1 bar	2 bar	3 bar
Pressure Range (kPa)	15-102	20-102	20-200	40-304
Configuration	Full size	Gen III	Full size	Full size
Mating connector	12020403	12129946	12105796	12015796
Transfer Function				
For Vout=Vref*(K2*P + K1)				
K2 (Slope)	0.01059	0.01059	0.005	0.00318
K1 (Offset)	-0.10941	-0.10941	-0.04	-0.00353
Sensor Output (Vref=5V)				
Output at minimum pressure (V)	0.247	0.512	0.300	0.618
Output at maximum pressure (V)	4.854	4.854	4.800	4.816
Standard atmosphere (atm) = 14.696 psi = 29.92 in-Hg = 101.325 kPa				
Common conversions:				
Ppsi = .145038 x PkPa				
Pin-Hg = .2953 x PkPa				
Pin-Hg = 2.03602 x Ppsi				

Table 1 – MAP Sensor Scale Factors