

Current Atmospheric Pressure :

1022.7 hPa

102.27 kPa

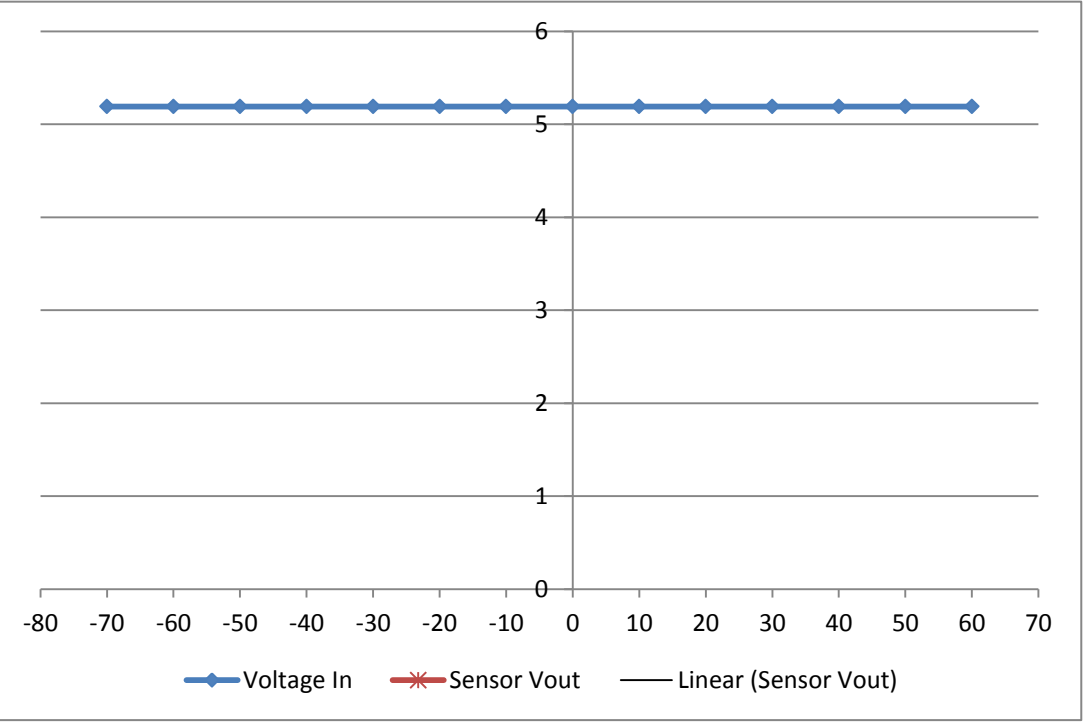
This spread sheet is being aimed at comparing as many OEM Manifold Air Pressure (MAP) sensors as I can get my hands on, the idea is to take the guess work out of which is the best OEM sensor for your setup, where to find them and obtaining the correct calibration data. It will be updated as new ones are located.

Every attempt has been made to maintain the same conditions for every test, so a dedicated testing rig has been built (shown right) and will be used for further tests.

How to use : Enter your 'current atmospheric pressure' in the **green** field above, this information can be obtained from a barometer or a local weather station webpage.



	Calculated kPa	Gauge increment KPA	Measured Voltage In	Measured Sensor Vout
	32.27	-70	5.19	
	42.27	-60	5.19	
	52.27	-50	5.19	
	62.27	-40	5.19	
	72.27	-30	5.19	
	82.27	-20	5.19	
	92.27	-10	5.19	
Current ATM kPa	102.27	0	5.19	
	112.27	10	5.19	
	122.27	20	5.19	
	132.27	30	5.19	
	142.27	40	5.19	
	152.27	50	5.19	
	162.27	60	5.19	
	172.27	70	5.19	

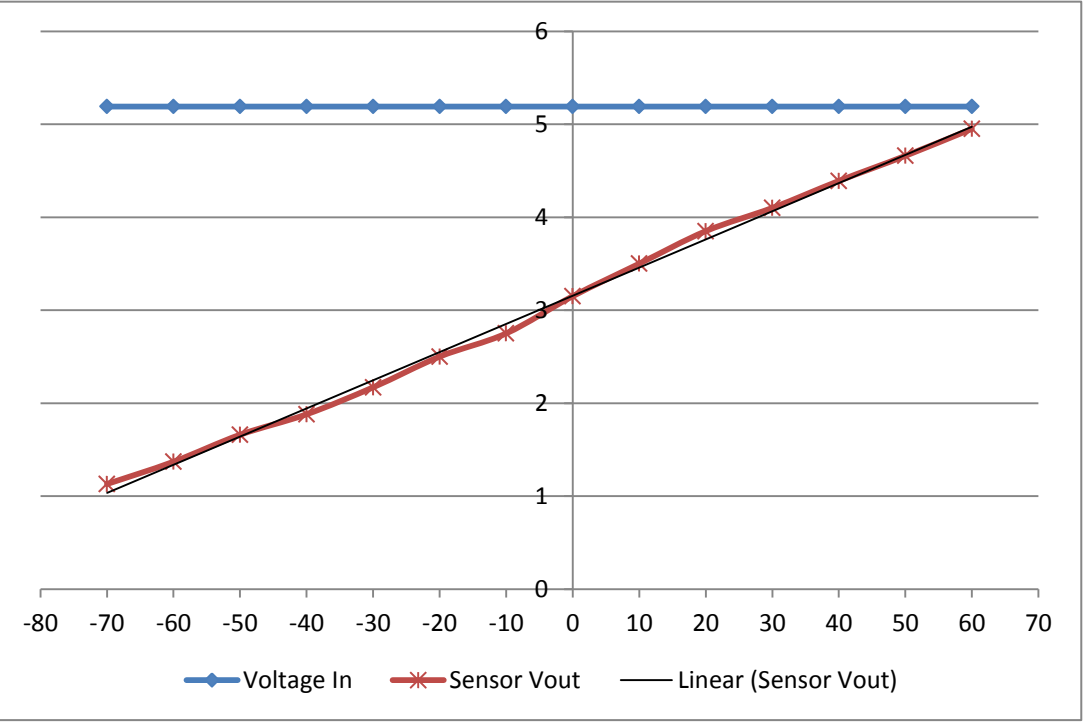


****Testing Notes****

- Donner vehicle = Honda NA engine (Manifold/throttle body mounted)
- Part # 079800-3280
- Voltage rating: 5V
- Wire colour coding :
 - Red with Green Strip (RG) = V+
 - Yellow with Red Strip (YR) = Vout
 - Greenn with White Strip (GW) = GND
- Measured Resistance Readings :
 - RG ---> YR = X.XXkΩ
 - RG ---> GW = X.XXkΩ
 - YR ---> GW = X.XXkΩ
- MAP Test date : 24-12-2011 @ 2115hrs : 1022 hPa



Calculated kPa	Gauge increment KPA	Measured Voltage In	Measured Sensor Vout
32.27	-70	5.19	1.13
42.27	-60	5.19	1.37
52.27	-50	5.19	1.66
62.27	-40	5.19	1.88
72.27	-30	5.19	2.17
82.27	-20	5.19	2.50
92.27	-10	5.19	2.75
Current ATM kPa	0	5.19	3.15
102.27	10	5.19	3.50
112.27	20	5.19	3.85
122.27	30	5.19	4.10
132.27	40	5.19	4.39
142.27	50	5.19	4.66
152.27	60	5.19	4.95
162.27	70	5.19	5.14

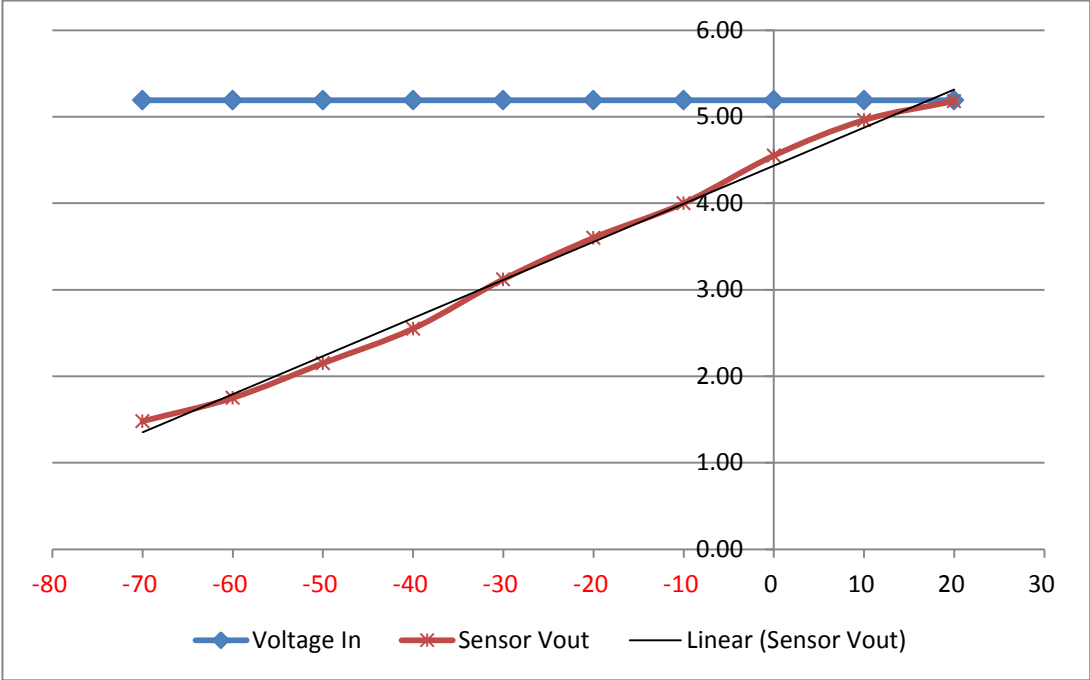


****Testing Notes****

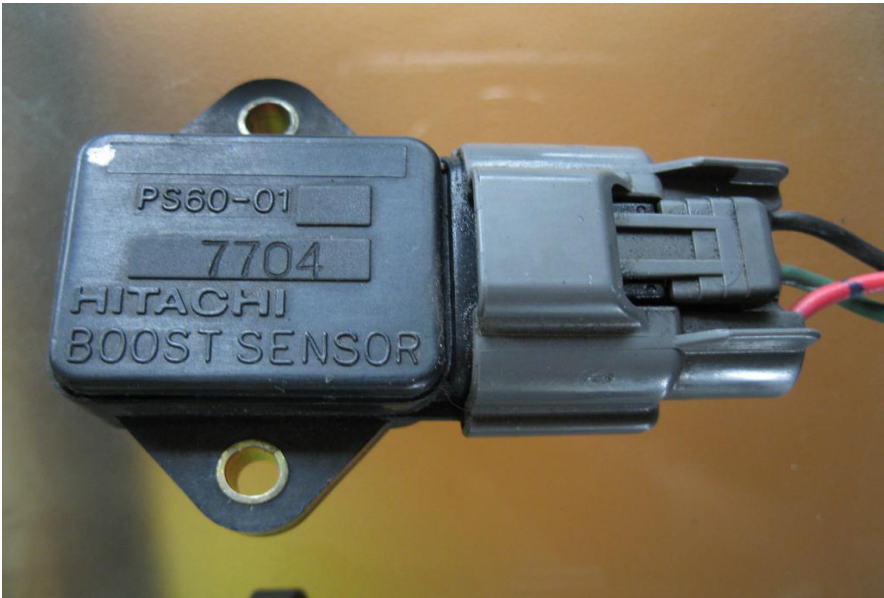
- Donner vehicle = Honda NA engine (Manifold/throttle body mounted)
- Part # 079800-4250
- Voltage rating: 5V
- Wire colour coding :
 - Red *with* Green Strip (RG) = V+
 - Yellow *with* Red Strip (YR) = Vout
 - Greenn *with* White Strip (GW) = GND
- Measured Resistance Readings :
 - RG ---> YR = 2.17k Ω
 - RG ---> GW = 5.94k Ω
 - YR ---> GW = 4.00k Ω
- MAP Test date : 24-12-2011 @ 2300hrs : 1022 hPa



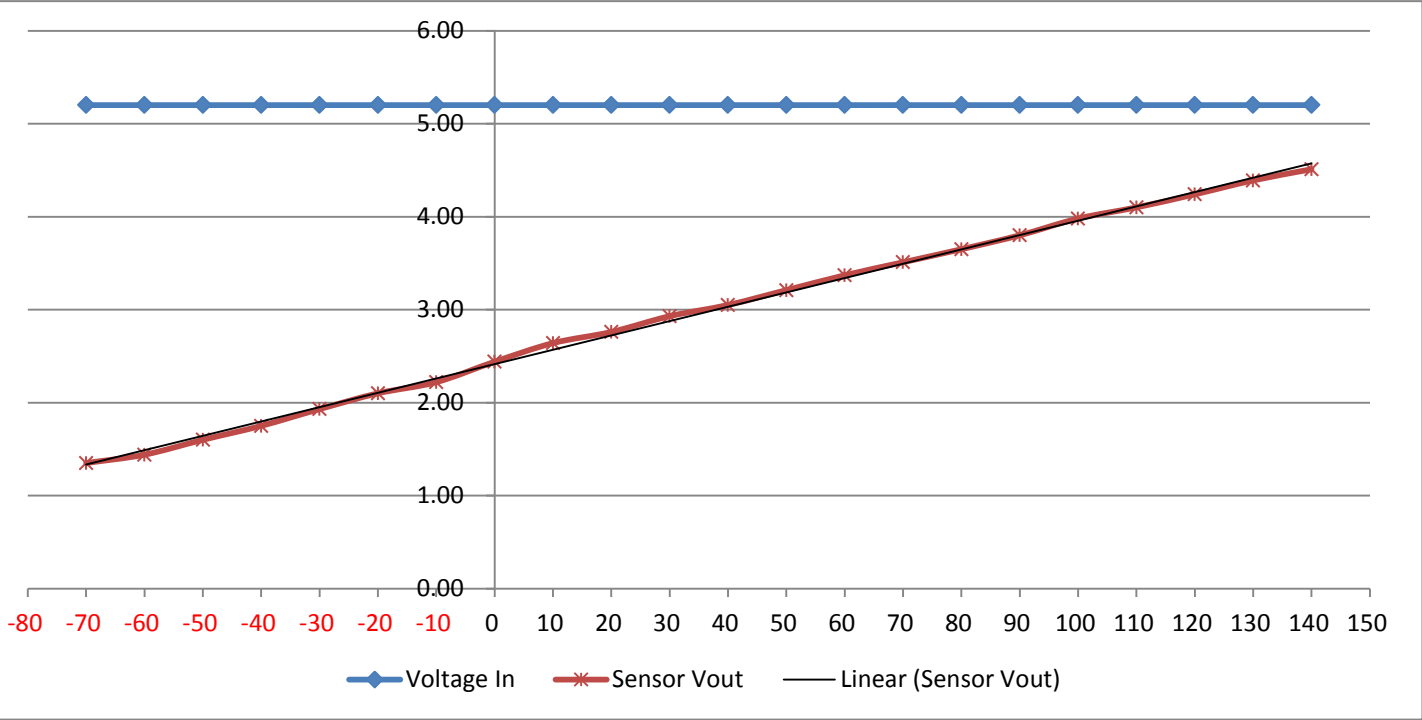
Calculated kPa	Gauge increment KPA	<i>Measured</i> Voltage In	<i>Measured</i> Sensor Vout
32.27	-70	5.19	1.48
42.27	-60	5.19	1.75
52.27	-50	5.19	2.15
62.27	-40	5.19	2.55
72.27	-30	5.19	3.12
82.27	-20	5.19	3.60
92.27	-10	5.19	4.00
Current ATM kPa	0	5.19	4.55
	10	5.19	4.96
	20	5.19	5.18



- **Testing Notes****
- Donner vehicle = Subaru legacy turbo engine (located on right strut tower)
 - Part # PS60-01 7704
 - Voltage rating: 5V
 - Colour Coding :
 - Red (R) = +5V
 - Black (B) = GND
 - Green (G) = Vout
 - Measured Resistance Readings :
 - R ---> G = 15.3k Ω
 - R ---> B = 3.44k Ω
 - G ---> B = 15.9k Ω
 - MAP Test date : 24-12-2011 @ 2230hrs : 1022 hPa



Calculated kPa	Gauge increment KPA	Measured Voltage In	Measured Sensor Vout
32.27	-70	5.20	1.35
42.27	-60	5.20	1.44
52.27	-50	5.20	1.60
62.27	-40	5.20	1.75
72.27	-30	5.20	1.93
82.27	-20	5.20	2.10
92.27	-10	5.20	2.22
Current ATM kPa	102.27	0	2.44
	112.27	10	2.64
	122.27	20	2.76
	132.27	30	2.93
	142.27	40	3.05
	152.27	50	3.21
	162.27	60	3.37
	172.27	70	3.51
	182.27	80	3.65
	192.27	90	3.80
	202.27	100	3.98
	212.27	110	4.10
	222.27	120	4.24
	232.27	130	4.39
	242.27	140	4.51

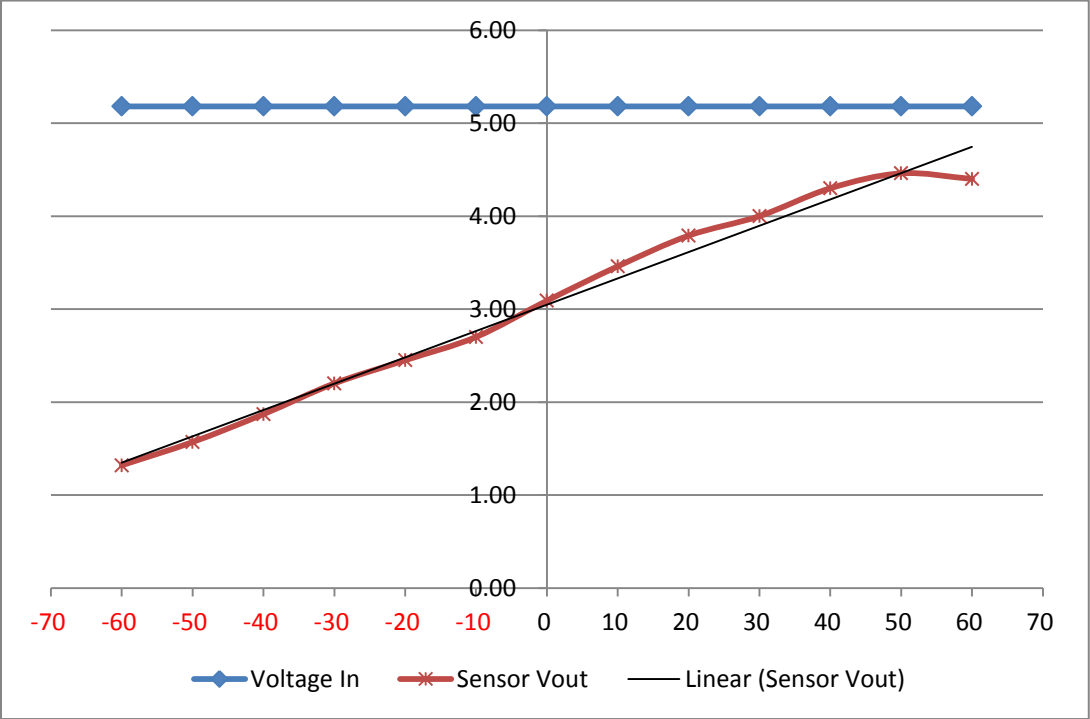


- **Testing Notes****
- Donner vehicle = Subaru legacy turbo engine (located on right strut tower)
 - Part # PS60-01 7704
 - Voltage rating: 5V
 - Colour Coding :
 - Black *with* Yellow Strip (BY) =GND
 - Yellow *with* Black Strip (YB) = Vout
 - Red (R) = +5V
 - Measured Resistance Readings :
 - BY ----> YB = 7.46k Ω
 - BY ----> R = 3.64k Ω
 - YB ----> R = 7.82k Ω
 - MAP Test date : 24-12-2011 @ 2400hrs : 1022 hPa

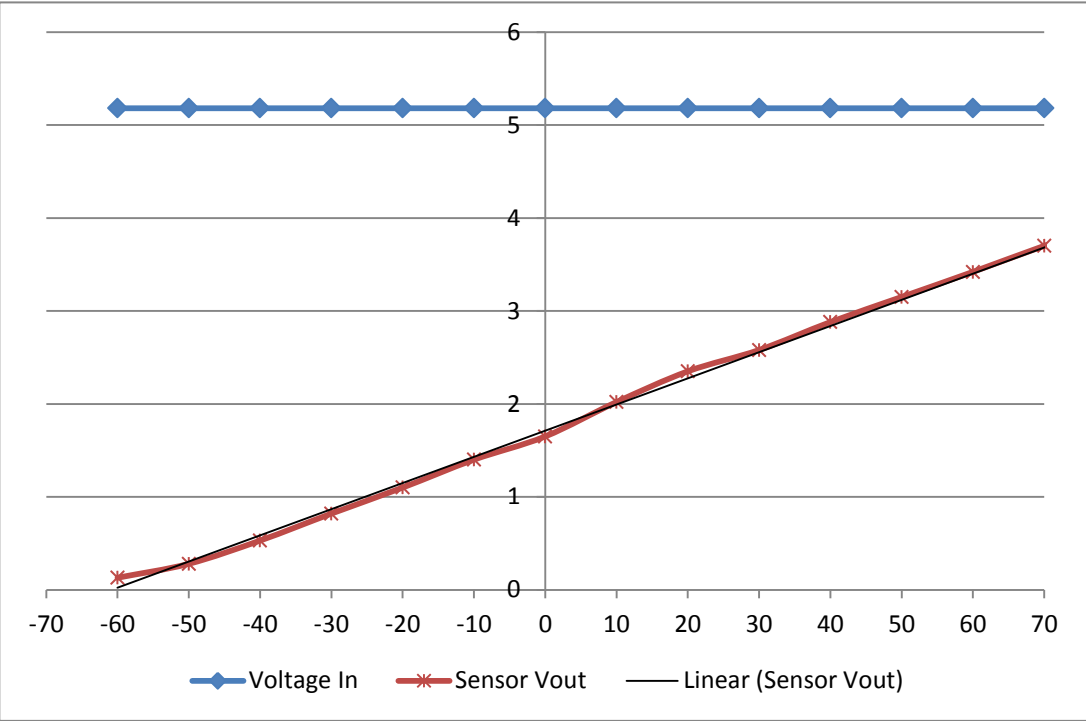
	Calculated kPa	Gauge increment KPa	Measured Voltage In	Measured Sensor Vout
	42.27	-60	5.18	1.32
	52.27	-50	5.18	1.57
	62.27	-40	5.18	1.87
	72.27	-30	5.18	2.20
	82.27	-20	5.18	2.45
	92.27	-10	5.18	2.70
Current ATM kPa	102.27	0	5.18	3.09
	112.27	10	5.18	3.46
	122.27	20	5.18	3.79
	132.27	30	5.18	4.00
	142.27	40	5.18	4.30
	152.27	50	5.18	4.46
	162.27	60	5.18	4.40

****Testing Notes****

- Donner vehicle = Honda NA engine (Mounted against front left strut)
- Part # MNS-151 3Z104
- Voltage rating: 5V
- Wire colour coding :
 - Yellow *with* White Strip (YW) = V+
 - Green *with* White Strip (GW) = GND
 - White *with* Yellow Strip (WY) = Vout
- Measured Resistance Readings :
 - YW ---> GW = 6.04kΩ
 - YW ---> WY = 11.74kΩ
 - GW ---> WY = 10.07kΩ
- MAP Test date : 24-12-2011 @ 2130hrs : 1022 hPa



	Calculated kPa	Gauge increment KPa	Measured Voltage In	Measured Sensor Vout
	42.27	-60	5.18	0.13
	52.27	-50	5.18	0.28
	62.27	-40	5.18	0.53
	72.27	-30	5.18	0.82
	82.27	-20	5.18	1.1
	92.27	-10	5.18	1.4
Current ATM kPa	102.27	0	5.18	1.65
	112.27	10	5.18	2.02
	122.27	20	5.18	2.35
	132.27	30	5.18	2.58
	142.27	40	5.18	2.88
	152.27	50	5.18	3.15
	162.27	60	5.18	3.42
	172.27	70	5.18	3.7
	182.27	80	5.18	3.96
	192.27	90	5.18	4.2
	202.27	100	5.18	4.55
	212.27	110	5.18	4.76
	222.27	120	5.18	5.09



****Testing Notes****
- Doner vehicle = Toyota (ask spankme)