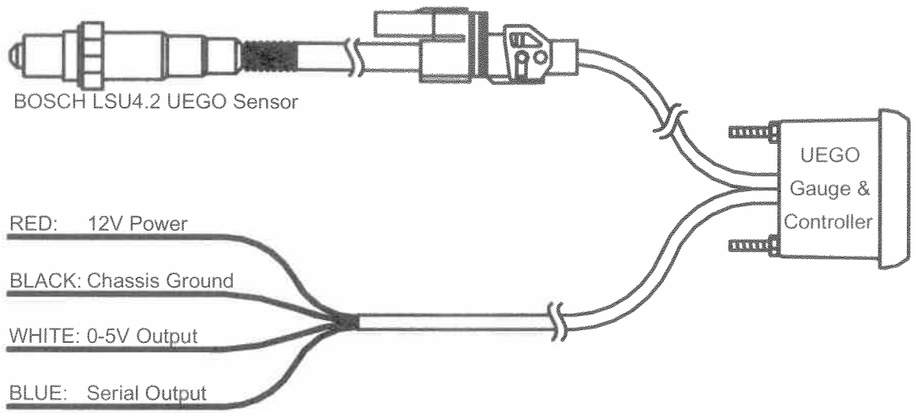

Figure 3. Gauge Installation Connections

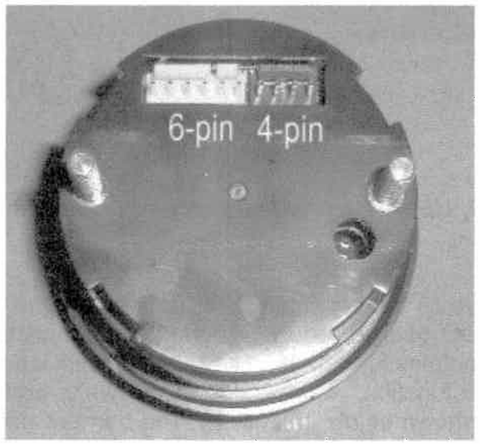

Figure 4. Gauge Side Harness Connections

RED <*Power*>
Connect to a switched 10-18 volt power source utilizing a 10A fuse.

BLACK <*Ground*>
Connect to a clean power ground.

*WHITE <*Analog Output*>
Connects to any auxiliary unit that accepts a 0-5 volt input.

*BLUE <*Serial Output*>
Connects to a RS-232 com port for hyper-terminal data logging.

**optional*

Analog Output
If the AEM UEGO gauge is to be connected to an AEM EMS, the UEGO gauge's WHITE Analog Output wire shall be connected to an EMS Lambda input. Locating a suitable Lambda input channel can be done using the Application Notes provided with the EMS. If the Application Notes are not readily accessible, a current list of AEM Engine Management Systems is illustrated below. (Table 1)

AEM EMS P/N	Lambda #1 Pin	Lambda #2 Pin
30-1000/1001/1002/1040	D14	D16
30-1010/1012/1050/1052	C16	A23
30-1020/1060	D7	D14
30-1030/1031/1070	C13	C14
30-1100/1101	B47	B48
30-1110	1C	9C
30-1120/1121/1130	B6	B14
30-1200	26	52
30-1300	4	66
30-1310/1311/1312/1313	76	75
30-1400	29	43
30-1401	44	43
30-1510	C2-31	C2-33
30-1600/1601/1602/1603	19	NA
30-1610/1611/1612	46	52
30-1620/1621/1622	29	55
30-1710	2N	4J
30-1720	C3	D3
30-1800	C3	A2
30-1810	D19	B17

Table 1. Lambda input channel locations for AEM EMS

Below (Table 2) is a list of AFR values that should be entered into the 02 Sensor #1(#2) Cal Table if inputting the analog signal to an AEM EMS. These calibration table(s) are found in the AEMPro software: Setup | Sensors | Oxygen Sensor | Oxygen Sensor #1(#2)

02 Volts	Lambda	Gasoline AFR	Methanol AFR	Propane AFR	Ethanol AFR	CNG AFR
0.00	0.683	10.00	4.42	10.72	6.15	9.90
0.16	0.705	10.32	4.56	11.07	6.34	10.22
0.31	0.725	10.62	4.69	11.39	6.53	10.52
0.47	0.747	10.94	4.83	11.73	6.73	10.84
0.62	0.768	11.24	4.97	12.05	6.91	11.13
0.78	0.790	11.56	5.11	12.40	7.11	11.45
0.94	0.811	11.88	5.25	12.74	7.30	11.77
1.09	0.832	12.18	5.38	13.06	7.49	12.06
1.25	0.854	12.50	5.52	13.41	7.68	12.38
1.40	0.874	12.80	5.66	13.73	7.87	12.68