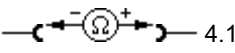
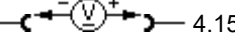
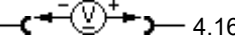
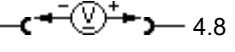
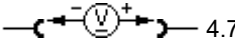
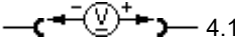
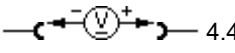

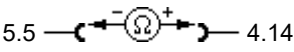

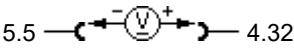
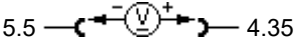
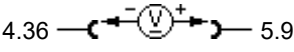

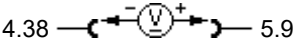



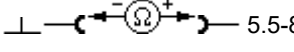
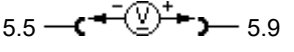


All values measured to ground unless otherwise noted

| Conn./Plug/Pin        | Pin Information  | Test Equipment/Pins  | Conditions  | Test values/Comments               |
|-----------------------|--|--|---|------------------------------------|
| <a href="#">N3/10</a> |  |  |   | <b>Note 1</b>                      |
| 4.1                   | CAN Class C bus (high side).                           | 4.11    | Ignition: OFF<br>Disconnect: Plug 4   | 120 Ohms                           |
| 4.11                  | CAN Class C bus (low side).                            | See pin 4.1  |   | <b>Note 2</b>                      |
| 4.2-4                 | Pins not used  |  |   |                                    |
| 4.5                   | Left/right O2S signal input (after TWC) sensors ground | 4.5     | Engine: 2000-3000 rpm (2 min)<br>ECT: > 80 °C,  | 1/min<br><450 mVDC or<br>>550 mVDC |
| 4.15                  | Right O2S signal input (after TWC) high side           | See pin 4.5  |   |                                    |
| 4.16                  | Left O2S signal input (after TWC) high side            | 4.5     | See pin 4.5   |                                    |
| 4.6                   | Pedal value sensor 1 signal input (-)                  | 4.6     | Ignition: ON<br>Pedal position:   | CTP 0.2-0.5 VDC<br>WOT 4.3-4.8 VDC |
| 4.7                   | Pedal value sensor 2 signal input (+)                  | 4.18   | Ignition: ON<br>Pedal position:   | CTP 0.1-0.4 VDC<br>WOT 2.1-2.5 VDC |
| 4.8                   | Pedal value sensor 1 signal input (+)                  | See pin 4.6  |   |                                    |
| 4.18                  | Pedal value sensor 2 signal input (-)                  | See pin 4.7  |   |                                    |
| 4.19                  | Pedal value sensor voltage supply                      | 4.18  | Ignition: ON  | 4.75 - 5.25 VDC                    |
| 4.9                   | Pin not used   |  |   |                                    |
| 4.10                  | Fuel tank pressure sensor ground                       | 4.10  | Ignition: ON  | 5 VDC<br>(or 0 VDC to ground)      |
| 4.40                  | Fuel tank pressure sensor power output                 | See pin 4.10   |   |                                    |
| 4.17                  | Fuel tank pressure sensor signal input                 | 4.10  | Disconnect:<br>Vacuum line at sensor<br>Connect:<br>Vacuum tester<br>Ignition: ON<br>Apply:300 mbar | >3.5 VDC<br><3 VDC                 |
| 4.12,13               | Pins not used  |  |   |                                    |

|               |   |   |   |   |
|---------------|---|---|---|---|
| 4.14          | Kickdown ground signal input  |    |   | 0 Ohm   |
| 4.20-28       | Pins not used   |   |   |   |
| 4.29          | "Diagnostic port" for DTC readout and diagnostic purpose                  |    | Ignition: ON  | 12 VDC  |
| 4.30,31       | Pins not used   |   |   |   |
| 4.32          | Engine rpm signal output  |    | Engine: At Idle   | 7.5-9 VDC                                       |
| 4.33,34       | Pins not used   |   |   |   |
| 4.35          | Circuit 50 signal output  |    | Start: Engine   | 12 VDC (starter turning)                        |
| 4.36          | Fuel pump activation signal output  |    | Ignition: ON<br><br>Engine: Running   | 12 VDC for 1 sec<br><br>12 VDC<br><b>Note 3</b> |
| 4.37          | Activated charcoal canister shut-off valve switched ground signal output  |    | Ignition: ON  | 0.5-0.9 A                                       |
| 4.38          | Air pump activation signal output   |    | Disconnect: B11/4<br>Connect:<br>2.5 KOhm resistor across pin 1 and 2 of B11/4 plug | 12 VDC while pump is running (2 min)            |
| 4.39          | Engine climate control cooling fan activation signal output               |   | When system operational   | > 3 VDC   |
| 5.1           | Left O2S heater (after TWC)   |  | Ignition: ON<br>Engine:<br>At idle (2 min)<br>ETC > 80 °C                           | 1-12 VDC (varies)                               |
| 5.2           | Purge valve control switched ground signal output, initializes purge mode |  | Ignition: ON  | 0.3-0.5 A                                       |
| 5.3           | Circuit 30 main power input   |  | At all times  | 12 VDC  |
| 5.4           | Right O2S heater (after TWC)  | See pin 5.1   |   |   |
| 5.5-8         | Main ground to W15/3  |  |   | 0 Ohm   |
| 5.9           | Circuit 87 power input  |  | Ignition: ON  | 12 VDC  |
| <b>Note 1</b> | For pins of connectors 1, 2 and 3 see diagram PE07.61-U-2101DB            |   |   |   |

|               |   |  |  |                            |
|---------------|---|--|--|----------------------------|
| <b>Note 2</b> | High speed data transfer bus input and output, shares data with other ECMs<br>See PE00.19-U-2200DA      | No reliable test. Also check continuity to other ECMs. |  | 5 VAC when data is on bus. |
| <b>Note 3</b> | Activation of the FP at "Ignition" occurs only once. For next activation, engine must have run briefly. |  |  |                            |