

# **OT02-P1 Harness**

## **Products that can use this harness**

- Orion2, Orion, Saturn, Pluto, Venus, Titan

## **History**

- This new style Level 1 harness is part of the easy install series for Orion2. The harness contains most TCU connections from the 12 Way Connector for most transmission combinations.

## **Design Points to take Notice of.**

- This harness is used as a standalone application where the RPM and TPS wires is shielded to connect to sensors on the engine. They come with Power and earth included for the sensor. This is handy for Carburetted engines or Diesel engines with mechanical fuel pump.
- 2 Oil temperature sensor wires are enclosed in one shield. They share a common earth wire. Some firmware will use one wire and some firmware will use the other. This is determined by the sensor value for each firmware to read as accurate as possible. On each transmission connection drawing is specified which harness and sensor connection is required. Consult the drawings in the manual for more information.
- The Map Switch and Shifter Sensor has 1K resistors built into this harness. If you use a different harness be sure to add these resistors like this harness drawing indicates.
- All the input wires are shielded and is earthed on the TCU side with the small black lead that must be connected to the TCU earth. Never connect a shield on the transmission or chassis of the car.

## **Wire Names and connections on this harness:**

### ***Speed/Oil*** (Shielded) contains:

- Speed Sensor (Blue)
- Speed Sensor Reference (Red)
- Speed Sensor Earth (White)
- Oil Temperature Sensor 2K (Green)
- Oil Temperature Sensor 10K (Yellow)
- Earth (Black)

### ***Map*** (Shielded) contains:

- 4 Way Map Switch Sensor (Red)
- Earth (Blue)

### ***Shift*** (Shielded) contains:

- Shifter Sensor (Blue)
- +12V Ignition (Red)(For shifter lights)
- Earth (Black)

### ***TPS*** (Shielded)

- TPS Sensor (Blue)
- +5V (Red)
- Earth (Black)

### ***RPM*** (Shielded)

- RPM Sensor (Blue)
- +12V Ignition (Red)
- Earth (Black)

Ignition Power (Orange)

Earth Wire for Screens and sensors (Black)

See the design drawing for thickness and lengths of wires. See the connection drawings in the specific product manual on how to connect the harness to each item it was designed for.

***NB! Wires that are not connected must be isolated to prevent shorts or interference.***