E22-P1 Harness

Products that can use this harness

• Orion2, Orion, Saturn, Pluto, Venus, Titan

History

- This is one of the preferred harnesses because it contains wires for all the options on Orion2. The manual drawings for explanation is based on its wire colours. If you select another P1 harness look at the GP Priority layout for the correct wire colours.
- This old style Level 1 harness was part of the economy series and some people still prefer them today to save on expenses. The harness contains all ECU connections from the 12 Way Connector for most engine combinations.
- It has Crank TDC and CAM Home signals which is required for Full Sequential features.

Design Points to take Notice of.

- Crank and Cam sensor wires are enclosed in one shield. They share common power and earth wires. This is suitable for complex Distributor type pickups where the sensors are close together. If you use this harness where the sensors is apart you may need to splice in a separate shielded wire for the other sensor. Connect the shields together for interference protection on the spliced section. Alternatively use the E29-P1 harness instead where the 2 signals have separate shielded wires.
- TPS, Air and Water sensors also share a shielded wire. Take the shielded part as close to the sensors as possible. They share common earth wires. Solder these connections and insolate them properly.
- All the input wires are shielded and is earthed on the ECU side with the small black lead that must be connected to the ECU earth. Never connect a shield on the engine or chassis of the car.

Wire Names and connections on this harness:

Crank (Shielded) contains:

- Crank Sensor (Green)
- Crank Sensor Reference Power (Red)
- Cam Sensor (Yellow)
- Cam Sensor Reference Power (Blue)
- Earth (Black)

Map (Shielded)

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

Engine (Shielded)

- Water Temperature Sensor (Green)
- Air Temperature Sensor (Yellow)
- TPS Sensor (Blue)
- +5V (Red)
- Earth (Black)
- Earth (White)

Lambda (Shielded)

- Lambda Sensor (Red)
- Earth (Blue)

Ignition Power (Red)

TPS Output signal for TCU or other systems (Yellow) Earth Wire for Screens and sensors (Black)

See the design drawing for thickness and lengths or 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.