# MTWX02-2 Harness

#### Products that can use this harness

• Mercury2

#### History

- This new style Level 2 harness was developed for Mercury2 to save install time and minimise fault-finding afterwards. The harness contains all TCU connections from all of the Connectors and will serve most engine combinations.
- This harness is designed to use with ECU systems. It has the RPM and TPS wires unshielded to connect directly to the ECU signals. Om Spitronics ECU's there is already wires included in the loom with the same colours where it must be connected. On OEM ECU's you may need to splice into the signal wires.
- It is the recommended Wire and Play loom that has the relay and fuse pre-wired in the loom. No need for extra power wires etc. It is designed to contain all the TCU connection wires so that all connection options on any transmission are possible. The manual is also based on this harness structure for wire colours and placement.
- Due to the different nature of transmission wiring each harness requires different diode boards and shifter converter boards. This is not wired into the loom and has to be added afterwards.

## Design Points to take Notice of.

- It comes with PVC sleeving, heat shrink and a roll of cloth tape to dress up upon final installation. You will still need the connectors of the transmission as this is an universal harness. It is not Plug and Play. Note that other items like diode boards and shifter converter boards are still add-on's and has to be connected or wired in according to the manual drawings and recommendations.
- This harness comes with a Mechanical relay that are wired according to TCU requirements. The Relay has a Inline Fuse for protection.
- 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.
- Speed and Oil sensor wires are enclosed in one shield. They share common power and earth wires. If you use this harness where the sensors are apart you may need to splice in a separate shielded wire for the other sensors. Connect the shields together for interference protection on the spliced section.

## Wire Names and connections on this harness:

Speed/Oil (Shielded) contains:

- Speed Sensor (Blue)
- Oil Sensor 2K (Green)
- Oil Sensor 2K (Yellow)
- +12V Ignition (Red)
- Earth (White)
- Earth (Black)

## **Profile SW** (Shielded)

- Switch Signal (Blue)
- +5V (Red)
- Earth (Black)

Shift (Shielded)

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

Buttons (Shielded)

- Up Shift (Red)
- Down Shift (Blue)
- Earth (Black)

Gearbox (Sleeved) contains:

- 8x Positive outputs (Various Colours)
- 8x Negative outputs (Various Colours)
- +12V Relay Power (Red)
- Earth (Black)

Ignition Power (Orange) TPS input signal (Yellow) RPM input signal (Green) Speed Output signal for Speedometer (Green) BAT+ 1xRed Earth Wire for Screens and sensors (Black) 1x Relay Set of wires (4)

See the design drawing for thickness and lengths or wires.

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