

OLDtronics External ECU Battery

Many motorsport ECUs are fitted with an internal battery that is not rechargeable. Depending on the ECU, these typically need changing every 1-3 years. Many are also soldered to the electronic circuit board and old batteries need to be de-soldered and new ones soldered back in. There is a limited number of times this can be done before the electronic circuit board becomes damaged. The battery change also involves returning the ECU somewhere for the work to be done, the shipping carrying its own risk of loss.

Depending on the ECU, it's functions will be reduced when the battery is not present, such as, but not limited to:

1. Losing settings such as throttle/pedal open/closed positions resulting in incorrect fuelling. Very noticeable on the McLaren F1 GTR where it will run rough for 30-60 seconds until the throttle closed position has been adapted again.
2. Losing logging set-up and logged data
3. Losing adapted lambda/knock/wastegate correction
4. Failing to start correctly as the boot-up sequence fails as processors try to clear corrupt memory (TAG2000/TAG310B).
5. Loss of firmware, requiring complete reprogramming (TAG320).

OLDtronics have built a small box, in a similar style to an ECU that contains the battery. The ECU needs to be adapted to have a flying lead bringing out the battery connections. The battery is of a larger capacity than is typically fitted inside the ECU, therefore should last between 3-6 years. When the battery needs to be changed, all that needs to be done is:

- Turn the car's ignition on (to keep ECU memory active)
- Disconnect the remote battery
- Unscrew the lid
- Replace the battery (can be ordered from RS/Farnell etc for around £10/\$12)
- Connect the remote battery
- Turn the car's ignition off





Note on Electrolytic Capacitors

There are electrolytic capacitors fitted to all TAG/McLaren Electronics' ECUs. These have a limited life, after which they can start to leak and cause damage to the PCBs, in some cases irreversible. McLaren Applied recommend replacing these capacitors every 10 years. **OLDtronics** does not have the facilities to do this, only McLaren Applied can do this.

Ordering

The OLDtronics' Battery Conversions can be ordered by contacting:

OLDtronics
33 St John's Road
Bathwick
Bath
BA2 6PX
Phone: +44 (0) 7791 975874

E-mail: sales@oldtronics.com

Components (Refer to OLDtronics Price List)

Part No	Description
OTExtBatBox	OLDtronics external ECU battery unit
OTEcuConv	ECU conversion to install flying lead to external battery box Excluding return shipping.