

# ECU reprogramming for independents

Engine Control Units (ECU) sometimes require reprogramming and with the change in EU technical information rules and access to Pass Thru equipment, independent garages can now provide this service to customers.

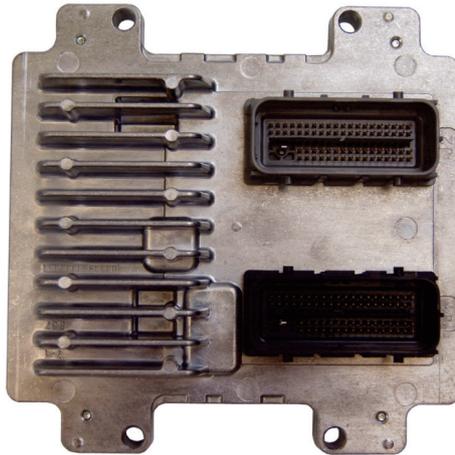
The complexity of the latest onboard electronic systems on new vehicles, means that vehicle ECUs will sometimes require reprogramming or reflashing, in order to ensure they are fully up to date. This is viewed by most independent technicians as a complex process best tackled by the dealership, but the availability of special Pass Thru equipment, together with EU technical information rules, means that the process is now within the capability of many technicians, with reasonable computer skills and reliable broadband. This opens up new areas of potential business for garages and can put them at the forefront of technical and diagnostic ability in the independent sector.

To make the connection between the vehicle and the OEM programming files, requires a good laptop and a J2534 Pass Thru tool. This provides a compatible interface to reprogramme control units on all EURO 5 compatible vehicles.

OEMs provide access to the calibration files necessary for updating an ECU through their service websites. These were originally set-up for their dealers, but now also have to be accessible to independents for designated vehicles.

The service sites require users to set up an account in order to obtain access to the calibration files, this maybe daily, weekly or an annual subscription and in some instances, also gives access to dealer-level diagnostic software. Each OEM will vary with respect to the process, but the reprogramming philosophy remains the same. ECU calibration files are downloaded from the service website to a computer utilising the OEM software programme, to transfer the calibration files from the laptop to the ECU. OEM's and some pass-thru providers provide comprehensive directions on how to manage the process, allowing for successful reprogramming of an ECU.

Most OEM's require technicians to connect the pass-thru device to the vehicle and to the connected laptop to transfer vehicle information, such as the VIN, to the site, to identify and display the available vehicle calibration files. Once the calibration files are downloaded the reflash process can begin. Before reflashing is executed, it is highly recommended to follow the instructions provided by the OEM and/or pass-thru tool manufacturer. A battery maintainer should also be connected to the battery prior to reflashing, to prevent voltage drops or spikes during the flashing process.



The time it takes to reflash an ECU varies greatly depending on the OEM and the type of ECU being reflashed. Some OEM's provide a labour guide to help the technician make a well informed decision on how much to charge for the service. Once an ECU has been successfully reflashed, it doesn't mean the process is complete. Some OEM's require additional steps to help the vehicle relearn the freshly programmed ECU. Be sure to follow the process in its entirety before turning the vehicle over to the customer.

## Dealer Level Diagnostics for the Independent Garage

A number of the car makers also provide access to dealer level diagnostic functionality, through their service websites and use of a J2534 Pass Thru tool.

A list of the OEM websites that offer this subscription based service are below.

The VSI-2534 from ADS is a J2534 pass-thru tool, that supports both ECU reprogramming and diagnostics and is suitable for both dealers and independents. Increasingly OEM applications and tools are being made available to independents and this VSI tool and OEM software subscription opens up access.

An example of this is the Toyota Techstream application, which is a laptop based software, that now allows technicians to use Toyotas OE software to diagnose all Toyota and Lexus vehicles starting from 2000. All that is required is a J2534 programmer and a subscription. Other OEM's are likely to provide similar offerings in the near future and the VSI-2534 provides the best way to access this growing functionality.

**For more information contact A.D.S on 051-424-799 or logon to ryansautomotive.ie**

## EU Law concerning OEM data and some on-line sources

Changes in EU law, now mean that all car manufacturers must provide access to reprogramming files and software for reprogramming ECUs for all EURO 5 compatible vehicles. This means new models from the 1st September 2009 and new registrations from 1st January 2011. Some

manufacturers have actually gone further than required and provided access to technical information and reprogramming as far back as 2000. A valid subscription is required to access data and costs to subscribe vary, but with this access, technicians can open up a whole new world of job possibilities.

<b>Audi</b>	<a href="https://erwin.audi.de">https://erwin.audi.de</a>
<b>BMW</b>	<a href="https://oss.bmw.de/index.jsp">https://oss.bmw.de/index.jsp</a>
<b>Landrover</b>	<a href="https://topix.landrover.jlrext.com/topix/vehicle/lookupForm">https://topix.landrover.jlrext.com/topix/vehicle/lookupForm</a>
<b>Lexus</b>	<a href="http://www.lexus-tech.eu/default.aspx">http://www.lexus-tech.eu/default.aspx</a>
<b>Opel</b>	<a href="http://www.gme-infotech.com">www.gme-infotech.com</a>
<b>Seat</b>	<a href="https://erwin.seat.com/erwin/showHome.do">https://erwin.seat.com/erwin/showHome.do</a>
<b>Skoda</b>	<a href="https://erwin.skoda-auto.cz/erwin/showHome.do">https://erwin.skoda-auto.cz/erwin/showHome.do</a>
<b>Toyota</b>	<a href="http://www.toyota-tech.eu/default.aspx">http://www.toyota-tech.eu/default.aspx</a>
<b>Volvo</b>	<a href="https://tis.volvocars.biz/tis/main.do">https://tis.volvocars.biz/tis/main.do</a>
<b>VW</b>	<a href="https://erwin.volkswagen.de/erwin/showHome.do">https://erwin.volkswagen.de/erwin/showHome.do</a>