

J2534 FAQs

Frequently Asked Questions



BOSCH

Q. What is J2534?

A. J2534 is an interface standard designed by SAE (Society of Automotive Engineers) and mandated by the US EPA (Environmental Protection Agency) for vehicle ECU reprogramming. Its purpose is to create an API (Application Programming Interface) which would be adopted by all vehicle manufacturers, allowing the Independent Aftermarket (IAM) the ability to reprogram ECU's without the need for a special dealer-only tool.

Q. What vehicles are affected?

A. The EPS regulation mandates that automotive OEMs must comply with SAE J2534 pass-through reprogramming from model year 2004 and forward for their Powertrain ECU's. If an OEM cannot comply with J2534 by model year 2004, they may request one year additional extension to become J2534 compliant. Additionally, the specification includes a provision that allows OEMs to use the J2534 reprogramming method on 1996 through 2003 model year vehicles as long as OEMs make all necessary additional hardware (i.e. cables) available to the aftermarket. If an OEM cannot retroactively implement the J2534 pass-through reprogramming solution with or without special cables, they must make available to equipment and tool companies any information needed to develop aftermarket equivalents of their OEM-specific reprogramming hardware and software.

Q. Can I reprogram all vehicle ECUs?

A. No, J2534 pass-through reprogramming is mandatory on all vehicles from model year 2004 and forward, but it is only required for emissions-based ECU's (e.g. Powertrain, Engine, Transmission). Additional

ECU support (Chassis and Body) will be dependent on each individual manufacturer's implementation priorities and reprogramming application capabilities.

Q. Can I reprogram any Powertrain ECU?

A. No, only those ECU's which are emissions-related and Flash reprogrammable.

Q: Does J2534 affect all OEMs?

A. Yes, all OEM's that sell vehicles in North America and support ECU reprogramming of calibration files for emissions-related systems must comply.

Q: When does the legislation take effect?

A. All OEM's must have their ECU calibrations available by June 2005. This date is subject to EPA revision.

Q. Where do I get the ECU calibrations from?

A. Each OEM is required to make available their ECU calibrations on their own service information web sites. It is the responsibility of each OEM to maintain and update their own sites, and keep current calibrations available for download.

Q. Are the ECU calibrations free downloads?

A. No, each OEM typically charges a fee for use of their site and/or for the ECU calibration download. These fees vary from OEM to OEM.

Q: Does the reprogramming event utilize my Scan Tool?

A. No, the J2534 Flasher is a stand-alone hardware interface device, requiring only a Windows-based PC with a USB or RS-232 serial port, and an internet connection (to access the calibration files).

Q. Will I still need my Scan Tool?

A. Yes, J2534 typically does not incorporate traditional scan tools functions (read/clear DTCs, read PIDs, bi-directional control testing). Your scan tool may also be required for post programming re-learn procedures. This is dependent upon the make and model of vehicle.

Q. How long does a J2534 ECU reprogramming event take?

A. The programming time varies among vehicles based on the protocol used, the calibration file size, and the total number of calibration files, Expect a range between 2 minutes and 75 minutes.

Q. Is high-speed internet access required?

A. No, but it is highly recommended. You will be required to download the calibration files directly from the OEM websites, so shorter downloads equate to quicker reprogram times. Also, in some cases the OEM will require a direct connection between the vehicle, the in-shop PC and the OEM server.

Q. What is critical for successful reprogramming?

- A.** There are 3 key points that need to be followed for successful reprogramming.
1. The vehicle's system voltage must remain constant (specified by OE) during the reprogramming.
 2. The vehicle's electrical system needs to be functioning properly (e.g. battery state of charge and state of health, cable connections and alternator charge performance). Note: Tools like the BAT 151 can be a key addition to ensure these systems are up to the task of reprogramming.
 3. Follow the manufacturer's reprogramming instructions to the "T"!

Q. What tools does Bosch Diagnostic offer to fill my J2534 reprogramming needs?

A. Mastertech VCI
Flasher Pro
General Motors MDI
Tech 2
Flasher LT