

SAE J2534

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 target 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.

The EPS regulation mandates that automotive OEMs must comply with SAE J2534 pass-through reprogramming from model year 2004 and forward for their Power train ECU's. 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. 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. Power train, Engine, Transmission). Additional ECU support (Chassis and Body) will be dependent on each individual manufacturer's implementation priorities and reprogramming application capabilities. Many of manufacturers introducing J2534 not only like reprogramming standard they using it like standard for common diagnostic activities.

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. Here is present information about sites from where is accessible J2534 reprogramming and diagnostic: manufacturers online

Here we will not some of most important points 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**

Star Diagnosis 09.2011 with AVDI Passthru

090211 (2011-08-18) - AAK09: 1943,1945,1946,1949 Battery voltage: 12.5 V

Vehicle Vehicle Ignition State ON OFF Control unit

CDI 4 - Common Rail Diesel Injection

- Control unit version
- Fault codes**
- Event memory
- Test standby (Readiness-Codes)
- Tests conducted
- Actual values
- Actuations
- Initial startup
- Control unit adaptations
- Complete list of guided tests
- Full list of fault codes and events
- Troubleshooting by means of complaints or symptoms
- Recording of performance data
- Control unit log OLD
- Control unit log
- Prüfabläufe zur Garantie Rücklieferung
- Development data
- Finding performance tuning kits
- Order form for control unit replacement (event log 'Engine control unit')

ESC F1 F3 F6 F11

Start PasThru Entry 09/2011 (2011-08-18) Vehicle Ignition State 12:23