

“KRAFTWERK” ECU Module

Noticeably more power and torque

Fitting the KRAFTWERK ECU module enables a performance and torque increase of up to 20% for various engines.

The KRAFTWERK ECU module sets new German standards within the range of “Plug & Drive” engine tuning. Sophisticated firmware and custom made looms allow the Module to be used both for diesel and petrol engines.

The KRAFTWERK ECU module is attached to the engine’s periphery and takes control over ECU’s (engine control unit) signals. These changes show up to 20% more power and torque output whereas the ECU’s engine protective functions remain fully functional.

In order to meet all demanded requirements, the KRAFTWERK ECU module is thoroughly tested by German TÜV and complies with EMC tests and its certification processes, which ensures the adherence to European emission laws.

The raised performance output is arranged by our engineers in a way that neither the permissible exhaust gas temperature nor the individual part’s load limits are exceeded.

Simple and fast fitting

Custom made looms and original connectors reduce fitting time on most vehicles to approx 15 minutes.

The simple and professional fitting was the priority in development this product.

Over 15 years of German automotive engineering bring immediate results after installation. Since no mechanical interference takes place, the KRAFTWERK ECU module is easily installed by an experienced mechanic.

When changing your car the KRAFTWERK ECU module can be re-used on the next vehicle.

An update of the firmware is in some cases necessary.

It is important that the injection system of the new car is compatible with that of the old car. For example when changing from a Peugeot HDI to a Mercedes CDI the KRAFTWERK ECU module can be re-used with a new loom and a firmware update: both engines use the Commonrail injection system.

Less fuel consumption

The torque increase also gives more power in the lower rev range and at part throttle. Therefore fuel consumption is usually reduced by 5-8% when the driver is consciously using this advantage.

Absolutely maintenance neutral

Your vehicle can be serviced at the workshop as if it was a standard vehicle. You can either unplug it within few minutes or leave it.

The KRAFTWERK ECU module behaves completely neutral and shows standard parameters on the diagnostic tools. All diagnostic functions remain fully.

In case you want to remove the ECU Module, it can be easily done without any trace. The KRAFTWERK ECU module does not leave any faulty codes in the ECU memory.

The product comes with a full 2 years warranty

Technical background

The Plug & Drive module can be connected to sensors, actuators or data buses.

The KRAFTWERK ECU modules are fully digital microcontroller circuits, which monitor the ECU signals and if necessary change the signals in order to increase engine performance.

KRAFTWERK ECU modules, which are attached to sensors (e.g. rail pressure sensor on Commonrail engines), monitor the output signal of the sensor and forward it depending upon operating conditions modified or unmodified to the engine control unit. This way a higher fuel pressure raises engine performance at certain load conditions. Firstly our engineers read maps and limiters from the ECU memory and develop a basic map for the Power Module. Then they start fine tuning the system on road, dyno and rolling road tests. Here they determine the best values for driving dynamics, engine performance, exhaust gas temperatures and emissions.

Other Power ECU Modules are attached to actuators. Example: the injectors of a TDi engine's UIS system. Here the module monitors the output signals of the ECU and forwards these modified or unmodified to the actuator. Thus in this example injection time is expanded in dependence of engine speed and engine load.

The software of the ECU is thoroughly analysed and tested within strict limits of the ECU's protective parameters.

The fine tuning of the software is a major part of the development.

Our engineers perfectly translate the performance increase which represents the best compromise between driving fun, engine durability and exhaust gas emission laws.