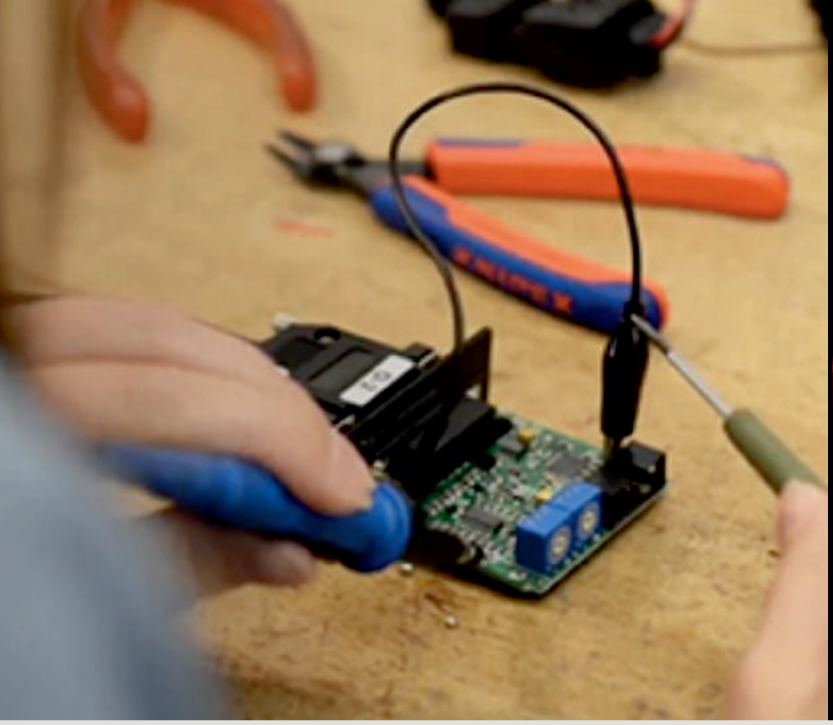
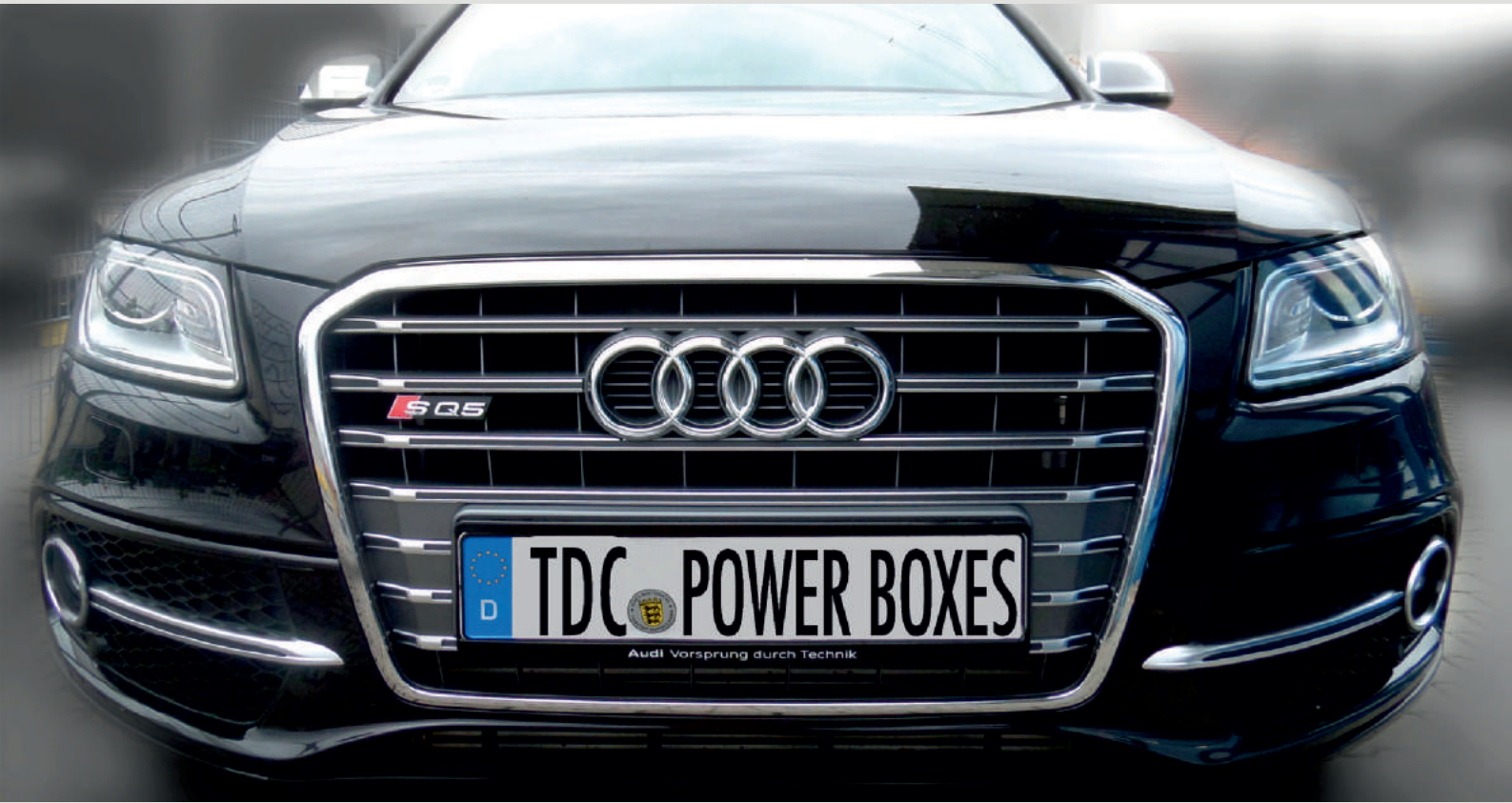


TDC

Installation Instructions



Our core business is the PowerBox. This revolutionary product originated in Europe where its increasing popularity has made it today's product of choice among thousands of diesel owners who desire more power and overall performance.

TDC PowerBoxes are Made in Germany and designed to deliver more power and torque in order to improve responsiveness, towing capacity, and top-end speed. The PowerBox is fuel-efficient and features integrated technology to ensure optimal performance. TDC offers the most innovative and reliable power conversion devices on the market -

Welcome to the New Dimension of Power!

The TDC value proposition - Quality and reliability at a competitive price! We offer a durable product made to exacting specifications. Each unit is meticulously designed, assembled, and tested. Our units are programmed to ensure that engine performance is optimized, while ensuring that safe operating parameters are not exceeded. Each PowerBox is backed by our satisfaction guarantee, and includes a 3-year limited warranty against defects in materials or workmanship.

Customer Pledge - Our customers are the voice of our company. In this specialized market, we realize that each satisfied customer lends more credibility to our products than any amount of marketing can do justice. We value your business. To that end, we will make every reasonable effort to ensure that you are completely satisfied - our reputation depends on it.

Our product line include the following Chiptuning modules....

PowerBox CR
PowerBox CRD
PowerBox CR*plus*
PowerBox TDI PD*adjust*
PowerBox VP37
PowerBox TFSI

Dear Valued Customer,

Thank you for your purchase. Each unit has been meticulously designed, assembled, and tested by our German engineering team. We are confident that our product will meet or exceed your expectations.
To protect your investment, we have provided you with a 3-year limited warranty. Please take a few moments to review the warranty terms stated below.

3-Year Limited Warranty

Within three (3) years from the date of purchase, we will repair or replace, at no charge, the original product purchased, with the exceptions stated below:

- Coverage terminates if you sell or otherwise transfer the original PowerBox
- This warranty covers any defects in materials or workmanship
- This warranty does not cover physical damage caused to the unit
- This warranty is void if:
  1) the “warranty seal” has been broken, tampered with, or removed from the unit; or
  2) if the connections have been modified in any way
- Before returning any product, contact us at: **info@tdc-technologies.com**
- Purchaser must pay all shipping charges

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Table of contents

PowerBox CR, PowerBox CRD, and digital PowerBox CR*plus*

The PowerBox CR, CRD and CR*plus* was developed for Common Rail Systems.

Operating Principle

A larger amount of fuel injected into a diesel engine creates a significant increase in power and torque. Unlike the gasoline engine where airflow is proportionate to acceleration, the diesel engine typically runs with an excess airflow, causing it to run well below its maximum combustion capacity. This means that more fuel can be injected without causing over-fueling.

The Common Rail (CR) PowerBoxes work by modifying the electronic signals that control fuel pressure produced by the pump in order to optimize engine performance. The PowerBox senses and responds to a change in engine load/speed throughout the range of acceleration. With the PowerBox, pressure accumulates faster in the rail and is readily maintained to deliver more power and torque. The result is smooth and responsive acceleration that produces sportier handling. In addition, the increased torque produced by the PowerBox enables the vehicle to operate more efficiently, so fuel consumption is minimized. Please note that for best results your vehicle should be properly maintained and serviced in accordance with manufacturer recommendations. As maximum airflow is vital to PowerBox functioning, we encourage the use of a high-performance air filter to enhance operating efficiency.

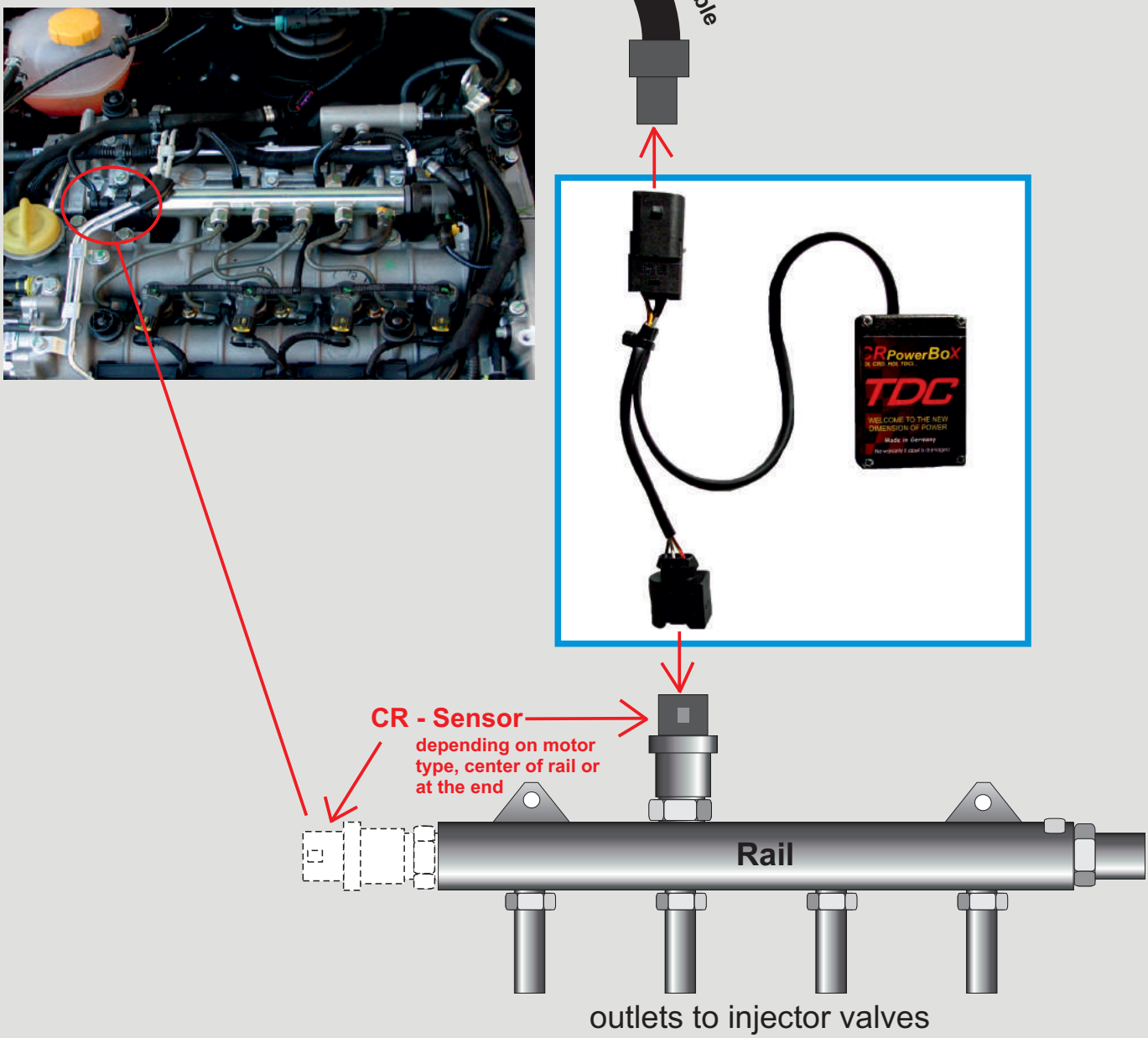
Safety

The PowerBox will not change the service intervals or reduce the life of your engine. The performance enhancement offered by all of our units takes into account the safe operating limits of your engine; the PowerBox CR can not change or interfere with the ECU's internal programming, nor can it override the external tolerances permitted by the ECU that allow for slight deviations in system parameters. Remember, only fuel pump output is optimized based on changes in engine load and acceleration, while injection pressure and fuel/air ratios internally controlled by the ECU remain unchanged.

Some Alfa Romeo, Fiat, Lancia and BMW models have two identical connectors that are positioned vertically (one above the other) in the vehicle's engine compartment. Please do not attempt to install the PowerBox unless you are certain that you have located the common rail sensor plug. Connecting the PowerBox to the wrong sensor will permanently damage the unit!

Figure 1

Connecting the PowerBox to the wrong sensor will permanently damage the unit!



For further assistance in confirming the location of your CR Sensor, please email two digital photos:

1) A close-up photo of the connection/plug that you have identified; and

2) A photo showing the connection relative to the high-pressure rail and surrounding components.

Connector and pin assignment of the most common plug types:

System BOSCH

PIN 1 Ground
PIN 2 CR-Signal
PIN 3 +5 Volt

System TM

PIN 1 Ground
PIN 2 CR-Signal
PIN 3 +5 Volt

System D

Denso

PIN 1 Ground
PIN 2 CR-Signal
PIN 3 +5 Volt

System K

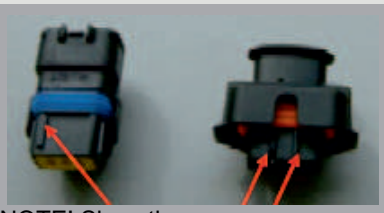
	Siemens	Bosch
PIN 1	CR-Signal	Ground
PIN 2	Ground	CR-Signal
PIN 3	+5 Volt	+5 Volt

Pinning depending on manufacturer

System FCI

	Siemens/Delphi	Bosch
PIN 1	CR-Signal	Ground
PIN 2	Ground	CR-Signal
PIN 3	+5 Volt	+5 Volt

Pinning depending on manufacturer



NOTE! Since there are numerous alignment keys for plug connectors of the same manufacturer, the basic OEM plugs may require modification in order to allow connection. Using a utility knife or finger nail file, simply remove the excess material that prevents connection to the vehicle's sensor cable plug.

Ignition should be in the OFF position when installing or making adjustments!

General Installation Instructions for PowerBox CR, PowerBox CRD and PowerBox CR*plus*

1.) Remove the plastic engine cover if applicable.

2.) Locate the (CR) sensor. The CR sensor is located in the high-pressure fuel line (common rail), which typically runs parallel to the cylinder heads. See diagram on next page.

3.) Disconnect the 3-pin plug from the CR sensor and connect the male and female PowerBox connectors to the CR sensor and the sensor cable plug previously removed; the circuit is now complete.

4.) Secure the PowerBox away from parts that produce excessive heat.
Congratulations! You are now ready to experience the New Dimension of Power.
Drive safely!

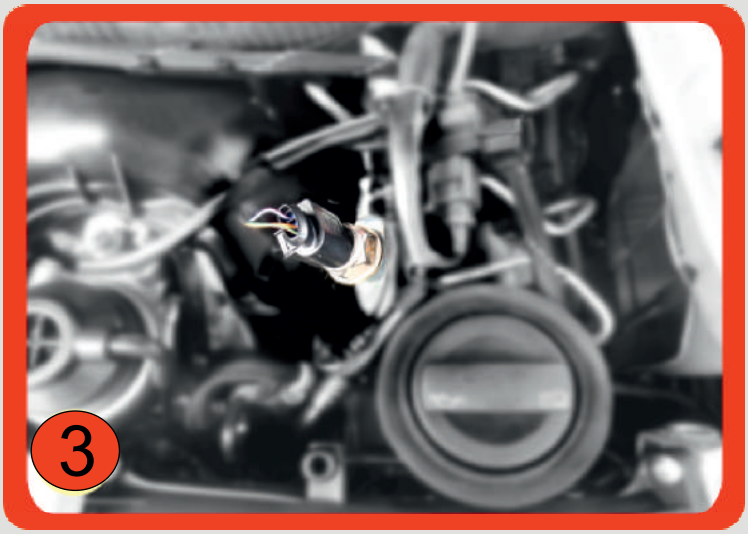
For BMW vehicles using the "System K" plug

On some BMW models, the inner sleeve surrounding the contacts must be removed. Using pliers, carefully remove the inner sleeve according to the photos.

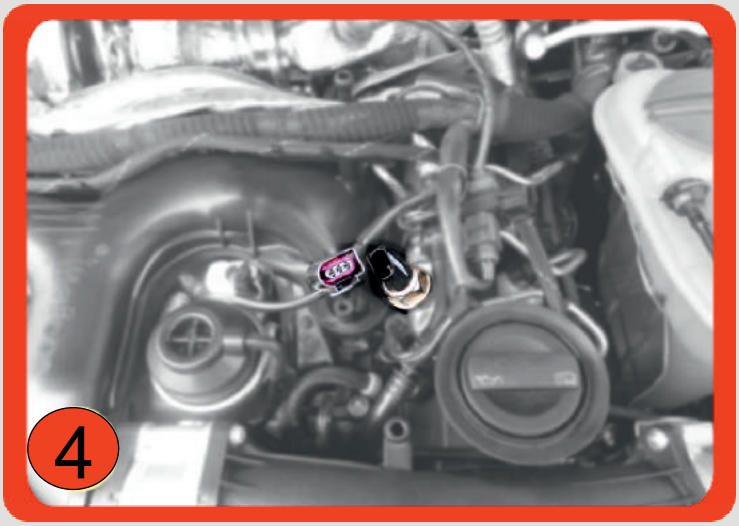
Installation Common Rail PowerBox
(shown below on an Audi SQ5)

open hood

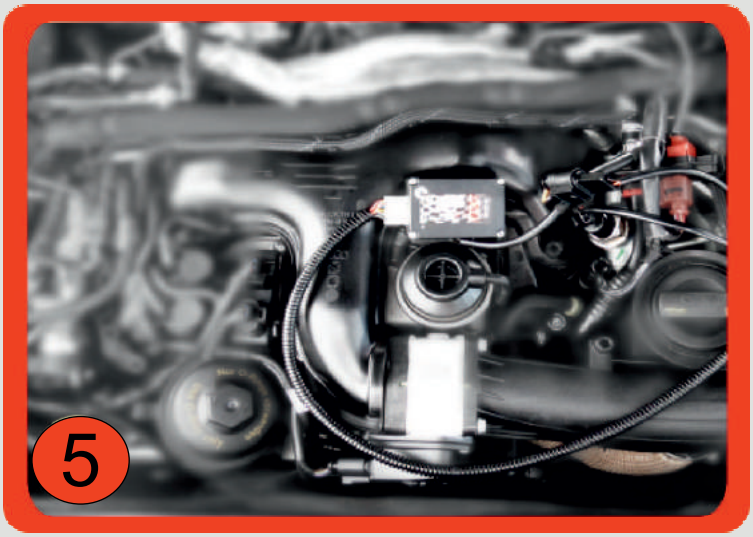
remove engine cover



locate Common Rail sensor



unplug CR sensor plug



install PowerBox

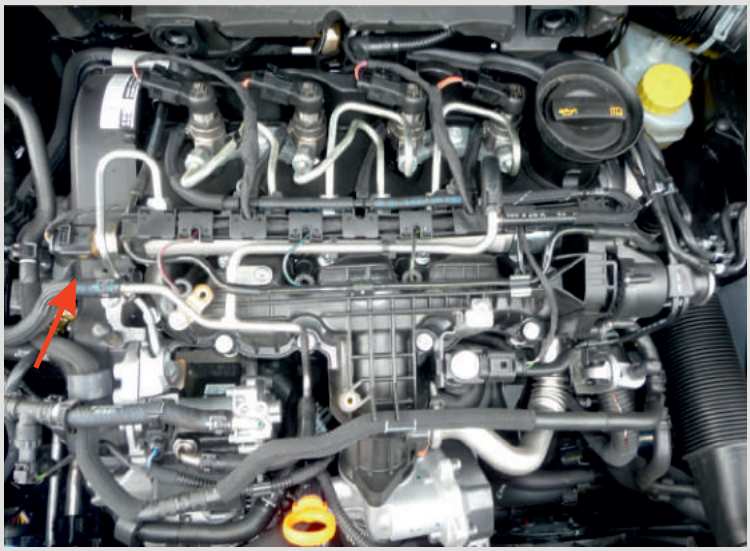
Drive safely!

CR sensor locations / configuration

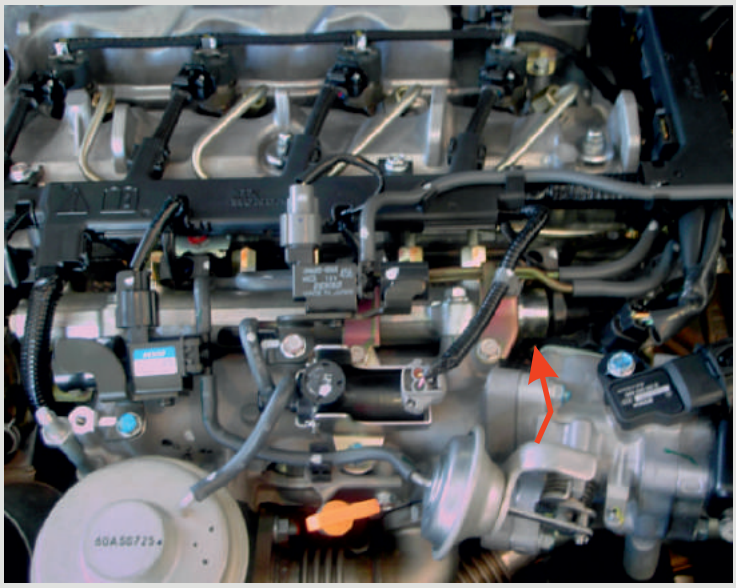
BMW 120 / 320 / 520 d

Mercedes Benz 220 CDi

Ford S-MAX 2.0



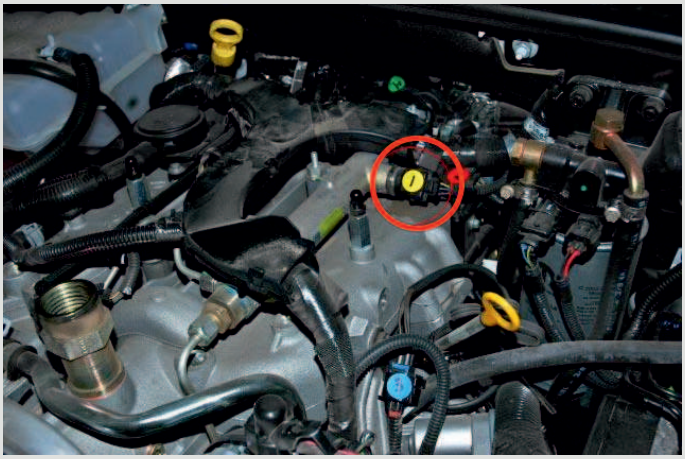
VAG 1.6 TDi



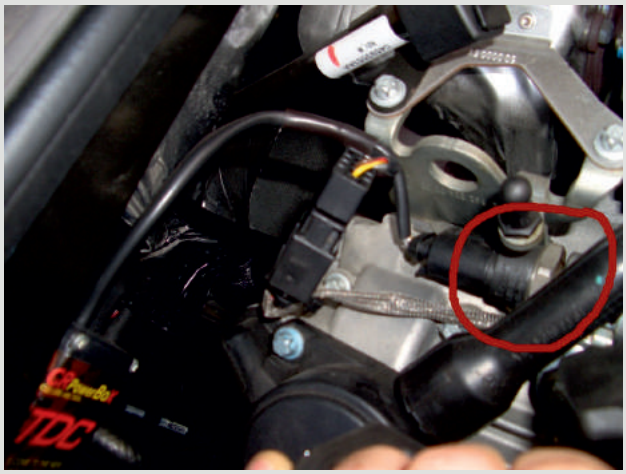
Honda 2.0

Hyundai IX35

CR sensor locations / configuration

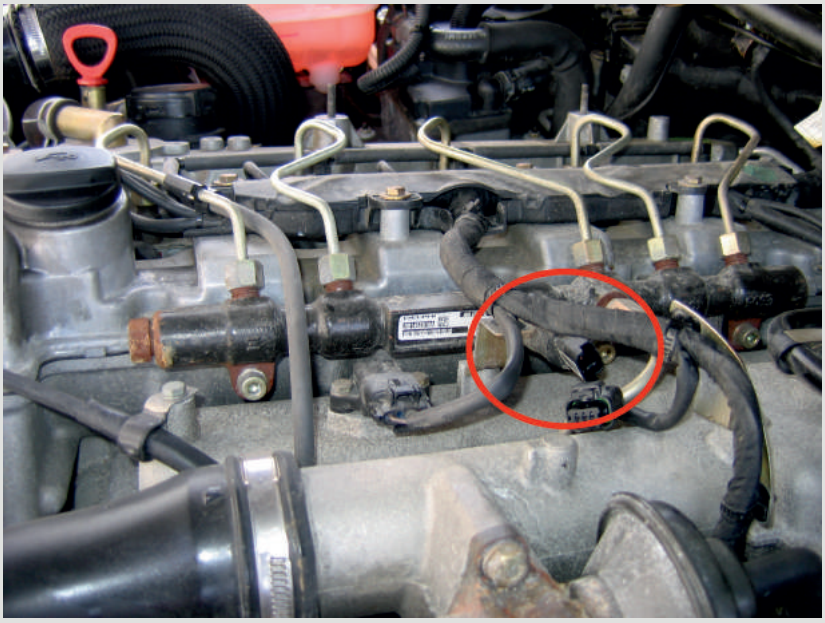


Jeep Liberty 2.8 CRD

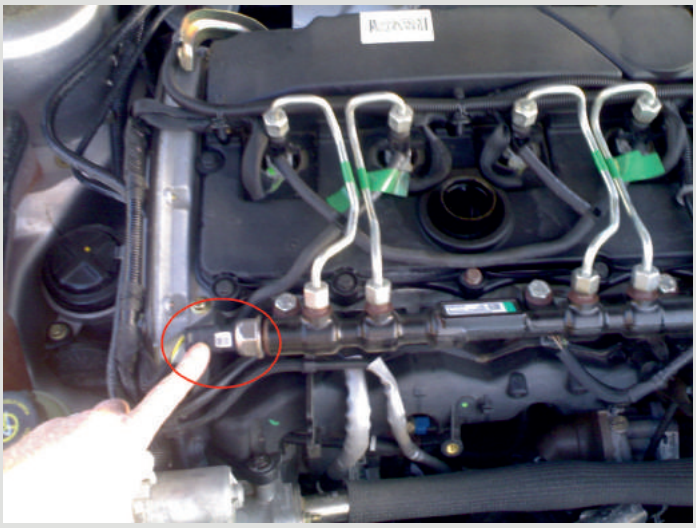


Chrysler 300C 3.0 CRD

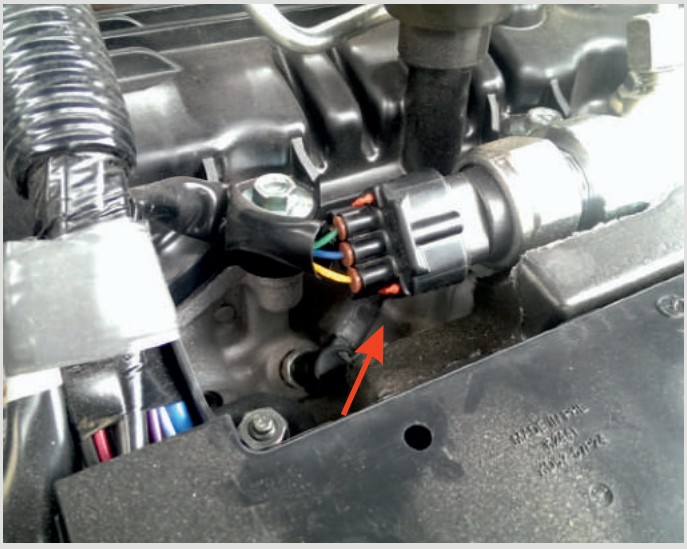
Nissan Navara 2.5 Dci



Ssangyong Rexton RX 270 XDI

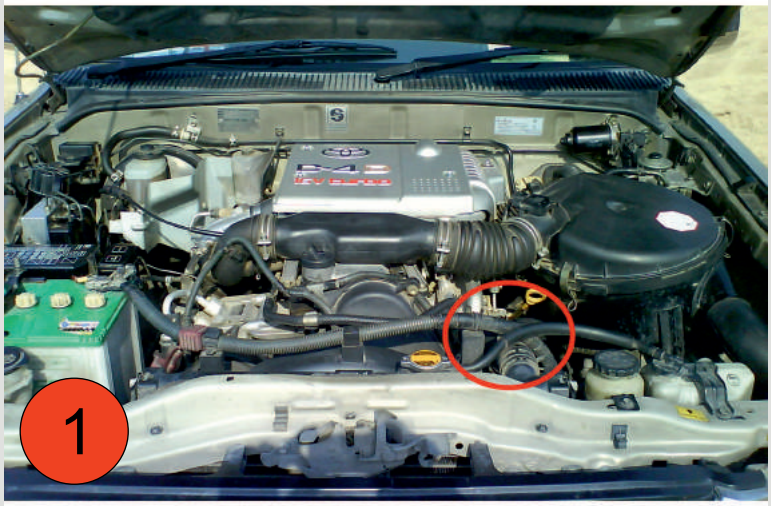


Ford Mondeo 2.2 TDCI



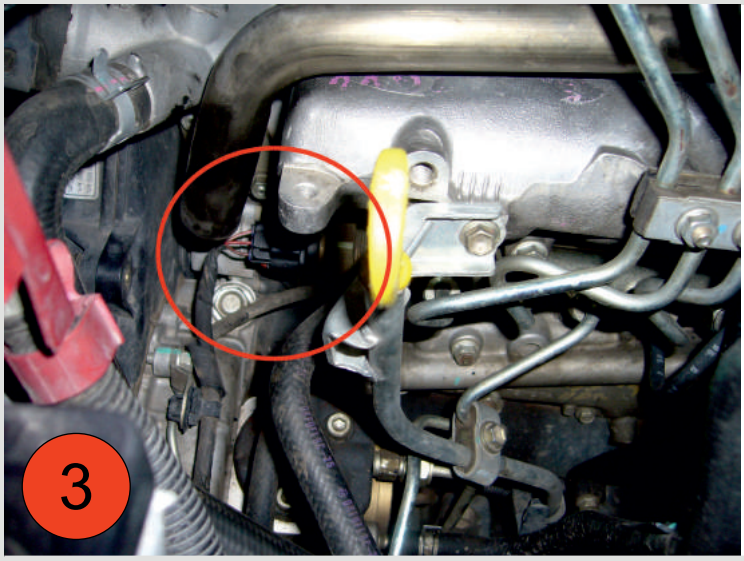
Mazda CX 5

CR sensor location / configuration
Toyota (Hilux) D4D

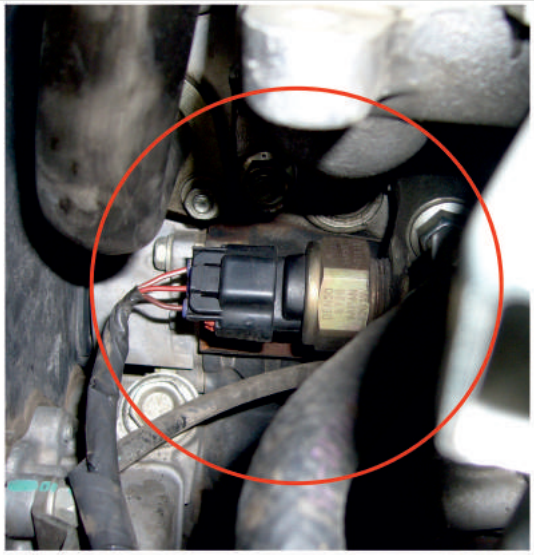


location of CR sensor

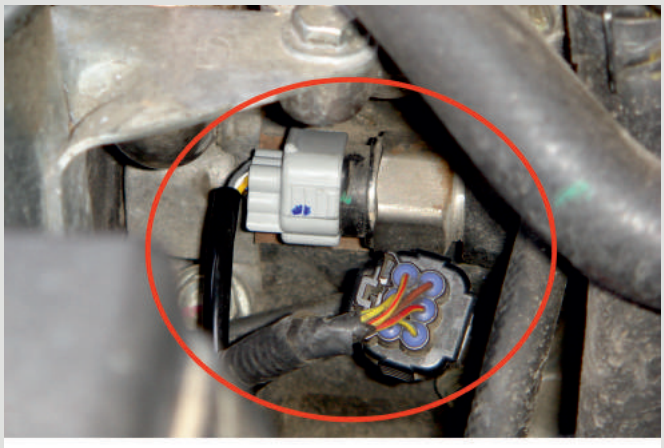
location of CR sensor



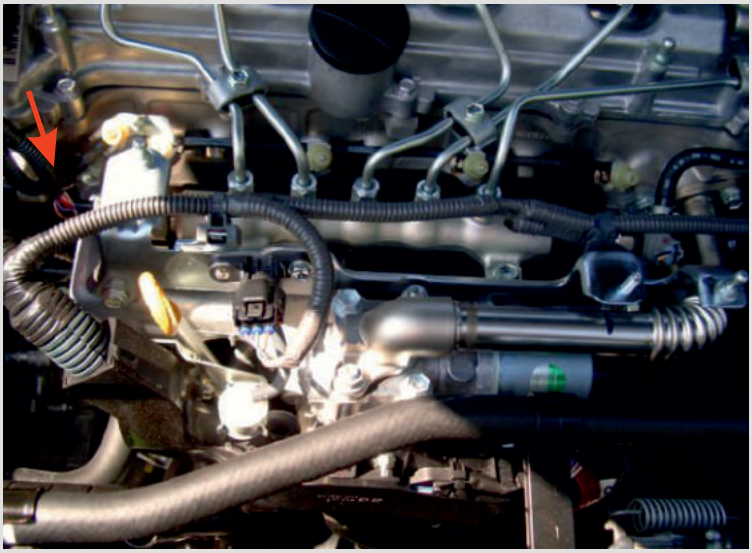
location of CR sensor - at end of rail



Toyota 3pin CR sensor



Toyota 6pin CR sensor



Toyota 2.2

PowerBox CR Settings

The PowerBox has been preset; however, higher output can be achieved by turning the adjustment screw. Turn the adjustment screw counterclockwise (“max.”) to increase power and clockwise (”min.”) to decrease power (see Figure 2).
When making adjustments in the higher ranges, an error code may be generated. If this occurs, simply turn back (clockwise) the adjustment screw 1 to 2 rotations. Please refer to the Troubleshooting Guide for more information.

Always note the position of the adjustment screw using the table provided. We have identified the current position as “12.” Example**:** If you rotate the adjustment screw 3 rotations counterclockwise, your next entry on the table would be “15.” Remember to *add* when making counterclockwise adjustments, and *subtract* when making clockwise adjustments.

To re-set the PowerBox to the center of the power range, turn the adjustment screw 24 rotations in either direction. Then turn 12 rotations in the opposite direction. This power setting represents approximately 60% of the available power.

Note: The adjustment screw has 24 effective revolutions with no “**stop**.”

PowerBox CR

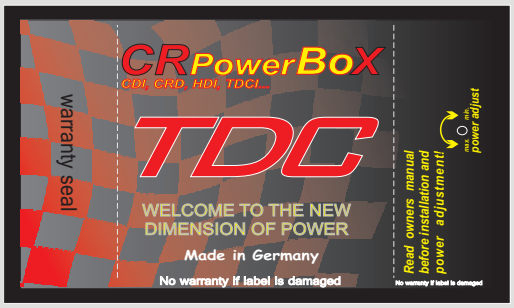


Figure 2

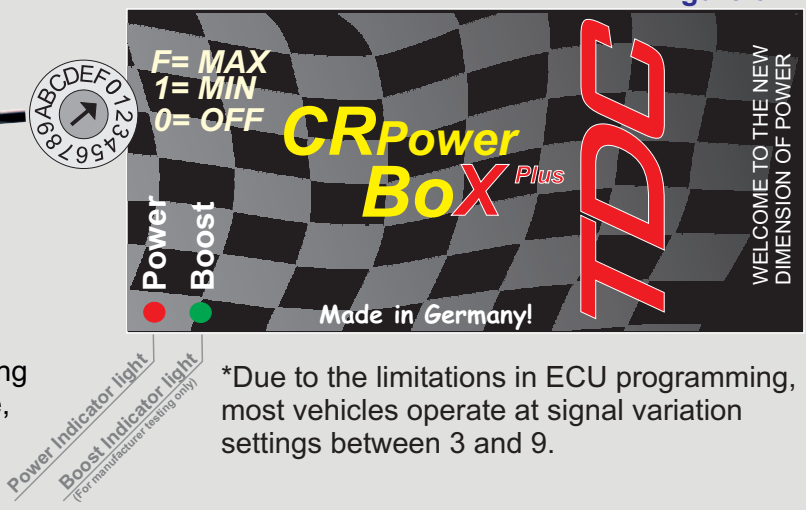
Power adjustment screw

PowerBox CRD and PowerBox CR*plus* Signal Variation Switch*

0 = device OFF
1 = minimum variation
F = maximum variation

The standard setting of “3” is sufficient to produce a noticeable power gain in most vehicles. At higher settings, an error message may be generated.
If this occurs, simply lower the setting until the error message terminates. To identify the setting most suitable for your vehicle and driving style, incrementally increase from “3” to test the signal tolerance at each setting.

Figure 3



*Due to the limitations in ECU programming, most vehicles operate at signal variation settings between 3 and 9.

Adjustment Table “0 - 24”

12													

Troubleshooting Guide

1.) No noticeable power improvement

Check to ensure that the PowerBox connectors are attached securely to the **CORRECT** sensor and that the circuit is complete.

2.) Engine running rough, hesitation, or smoke from exhaust

a.) Check to ensure that the PowerBox connectors are attached securely to the **CORRECT** sensor and that the circuit is complete.

b.) Decrease power adjustment 1 to 4 revolutions/positions with engine ignition in the OFF position. Amount of power decrease varies. Your vehicle may require further downward adjustments until the upper limits of tolerance can be identified.

c) Change air filter

3.) Engine error code

a.) Decrease power adjustment 1 to 2 revolutions/positions with engine ignition in the OFF position.

b.) Turn ignition ON. If the error light is still on, turn ignition OFF and decrease power adjustment an additional 1 to 2 revolutions/positions; drive vehicle for 10 to 15 minutes*

c.) If error light is still on, turn ignition OFF. Re-set power adjustment screw in accordance with instructions. Repeat steps a.) and b.) Above. If light remains on, go to Step 4.

Note:
Factory set ECU tolerances vary slightly depending on vehicle make and may limit power adjustment settings at the higher end of the adjustment range.

4.) Engine error code light remains on

a.) Perform corrective action described in step 3. Change air filter to provide maximum air flow required to achieve highest PowerBox settings.

b.) Drive vehicle for 10-15 minutes. If the error light remains on, turn OFF the ignition, and disconnect the PowerBox. Reconnect the sensor cable to the sensor, and turn the ignition ON. If the error light does not terminate, a vehicle maintenance condition may be present. Remove the PowerBox and have your local service center/dealer identify and correct the condition causing the error code.

Note: Remember, the PowerBox has been programmed to work within the tolerances permitted by the ECU for a vehicle that has been properly maintained and serviced in accordance with the manufacturer's recommendations. The PowerBox relies on optimal airflow through the air filter and the precise measurement of engine load indicated by the Mass Airflow (MAF) Sensor.

When vehicle airflow is insufficient or slightly obstructed (before the installation of the PowerBox), an engine error code may not be present. However, once the PowerBox is installed, additional fueling provided by the PowerBox requires maximum air flow and a precise reading of engine load/speed measured by the MAF sensor. When these conditions are not present, the change in fueling, actual speed, and required airflow become disproportionate and may exceed the tolerances of the ECU; thus triggering an error code. Notwithstanding any other maintenance condition and the factory-set tolerances of the ECU, these factors limit the operation of the PowerBox.

*If your vehicle is exhibiting excessive hesitation, rough idling, knocking, unusual noises, etc., it may not be safe to operate. If these or other similar conditions are present, a vehicle maintenance condition unrelated to the PowerBox may exist.

PowerBox TDI PD (Pumpe Düse) Direct Unit Injection System

Product Overview

- For all PD Pumpe Düse (Unit Injector) engines (VW, Audi, Ford)
- Up to 30% increase in power and 25% increase in torque
- Improved fuel economy
- Original ECU settings are not altered
- Original VAG connectors
- Will not harm your engine; does not increase injection pressure; uses temperature-compensated electronics
- Will not void vehicle warranty, or alter engine diagnostics functioning; will not interfere with engine error code sensing
- Does not change the service intervals required for your vehicle
- Will not alter vehicle emmissions; no increased formation of soot

Operating Principle

With the PD (Pumpe Düse) or direct unit injection system, the diesel fuel is heated to a very high temperature due to its thermal properties. The direct injection system has a temperature sensor that communicates with the Electronic Control Unit. When diesel fuel is heated to substantially higher temperatures, its density decreases. When this occurs, the fuel temperature sensor communicates the change, and the ECU compensates by injecting more fuel for combustion.

This is where the PowerBox intervenes. Integrated electronics communicates a higher temperature to the ECU, causing more fuel to be injected. The additional fuel is burned along with the excess air, which leads to a proportionate increase in output. The increased fueling will not override the safe operating parameters of your engine and does not change or interfere with ECU functioning.

Increased Efficiency Means Increased Fuel Economy

It may seem ironic that increased fuel injection can lead to improved fuel economy, but that's exactly what happens under certain conditions. This is possible due to the increased torque, which enables the engine to operate in higher gears at lower speeds. By adjusting the PowerBox to achieve a modest improvement in power/torque, slightly more fuel is used.

However, the fuel consumption required to increase torque is offset by the increased fuel economy resulting from better operating efficiency in that range. Of course, someone with a radical driving style would see no improvement in gas mileage.

Reliability and Safety

The PowerBox will not change the service intervals or reduce the life of your engine. The performance enhancement offered by all of our units takes into account the safe mechanical limits of your engine. Remember, only the parameters of the injection timing are altered, while pressure and fuel/air ratios controlled by the ECU remain unchanged. The result is smooth and responsive acceleration that produces sportier handling.

Installation Instructions for TDI PD engines

Ignition should be in the OFF position when installing or making adjustments!

1) Open the hood, and remove the engine oil dipstick.

2) Remove the plastic engine cover.

3) Locate the fuel temperature sensor. In the majority of vehicles, the sensor is located at the front of the engine on the right side, as you are facing the front of the vehicle. On some makes/models, the sensor is located at the rear of the engine on the right side.

4) Disconnect the plug from the sensor. To disconnect the plug, you must pull back on the plug's locking lever. The functioning of the locking lever can be closely examined on the female PowerBox plug.

5) Connect the female and male PowerBox plugs to the sensor and the cable that you previously removed.

6) Secure the PowerBox so that it is not in direct contact with other parts that produce excessive heat.

7) Replace the engine oil dipstick and the engine cover. Close the hood.

8) Congratulations! You are now ready to experience enhanced performance. Drive Safely!

PowerBox Settings

The PowerBox has been preset; however, higher output can be achieved by turning the adjustment screw. Turn the adjustment screw clockwise (“max.”) to increase power and counterclockwise (”min.”) to decrease power. When making adjustments in the higher ranges, an error code may be generated. If this occurs, simply turn back (counterclockwise) the adjustment screw 1 to 2 rotations. Refer to the Troubleshooting Guide for more information.

Always note the position of the adjustment screw using the table provided. We have identified the current position as “12.” Example**:** If you rotate the adjustment screw 3 rotations counterclockwise, your next entry on the table would be “15.” Remember to *add* when making clockwise adjustments, and *subtract* when making counterclockwise adjustments.

To re-set the PowerBox to the center of the power range, turn the adjustment screw 24 rotations in either direction. Then turn 12 rotations in the opposite direction.

Note: The adjustment screw has 24 effective revolutions with no “**stop**.”

power adjustment screw

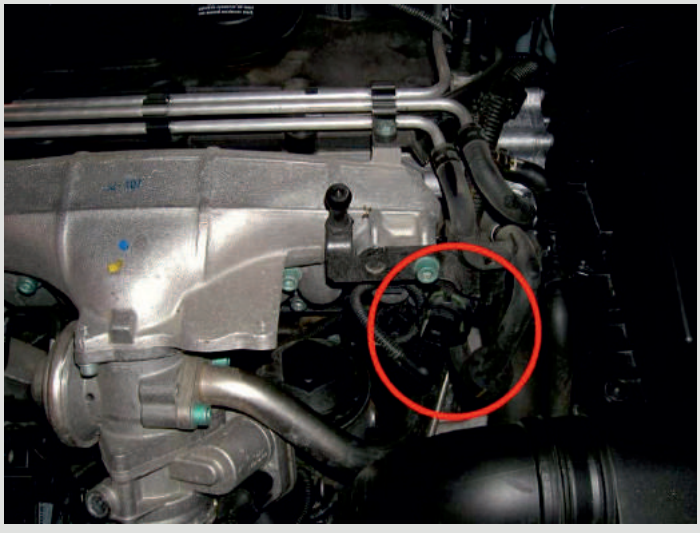
Adjustment Table “0 - 24”

12													

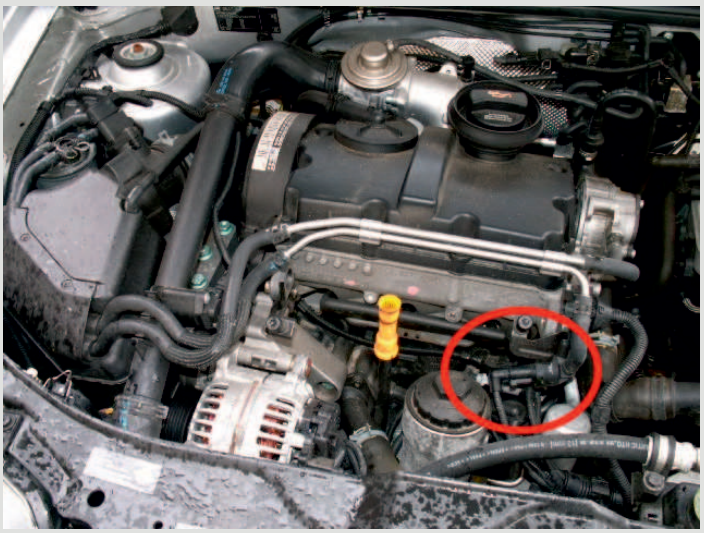
For further assistance in confirming the location of your fuel temperature sensor, please email two digital photos:

1) A close-up photo of the connection (at the fuel temperature sensor); and

2) A photo showing the connection relative to surrounding components.



Audi TDI



Seat TDI

Troubleshooting Guide

1.) No noticeable power improvement

Check to ensure that the PowerBox connectors are attached securely to the **CORRECT** sensor and that the circuit is complete.

2.) Engine running rough, hesitation, or smoke from exhaust

a.) Check to ensure that the PowerBox connectors are attached securely to the **CORRECT** sensor and that the circuit is complete.

b.) Decrease power adjustment 1 to 4 revolutions/positions with engine ignition in the OFF position. Amount of power decrease varies. Your vehicle may require further downward adjustments until the upper limits of tolerance can be identified.

c) Change air filter

3.) Engine error code

a.) Decrease power adjustment 1 to 2 revolutions/positions with engine ignition in the OFF position.

b.) Turn ignition ON. If the error light is still on, turn ignition OFF and decrease power adjustment an additional 1 to 2 revolutions/positions; drive vehicle for 10 to 15 minutes*

c.) If error light is still on, turn ignition OFF. Re-set power adjustment screw in accordance with instructions. Repeat steps a.) and b.) Above. If light remains on, go to Step 4.

Note:
Factory set ECU tolerances vary slightly depending on vehicle make and may limit power adjustment settings at the higher end of the adjustment range.

4.) Engine error code light remains on

a.) Perform corrective action described in step 3. Change air filter to provide maximum air flow required to achieve highest PowerBox settings.

b.) Drive vehicle for 10-15 minutes. If the error light remains on, turn OFF the ignition, and disconnect the PowerBox. Reconnect the sensor cable to the sensor, and turn the ignition ON. If the error light does not terminate, a vehicle maintenance condition may be present. Remove the PowerBox and have your local service center/dealer identify and correct the condition causing the error code.

Note: Remember, the PowerBox has been programmed to work within the tolerances permitted by the ECU for a vehicle that has been properly maintained and serviced in accordance with the manufacturer's recommendations. The PowerBox relies on optimal airflow through the air filter and the precise measurement of engine load indicated by the Mass Airflow (MAF) Sensor.

When vehicle airflow is insufficient or slightly obstructed (before the installation of the PowerBox), an engine error code may not be present. However, once the PowerBox is installed, additional fueling provided by the PowerBox requires maximum air flow and a precise reading of engine load/speed measured by the MAF sensor. When these conditions are not present, the change in fueling, actual speed, and required airflow become disproportionate and may exceed the tolerances of the ECU; thus triggering an error code. Notwithstanding any other maintenance condition and the factory-set tolerances of the ECU, these factors limit the operation of the PowerBox.

*If your vehicle is exhibiting excessive hesitation, rough idling, knocking, unusual noises, etc., it may not be safe to operate. If these or other similar conditions are present, a vehicle maintenance condition unrelated to the PowerBox may exist.

PowerBox TDI VP37

Product Overview

- For virtually all TDI engines with the VP37 pump
- Up to 30% power enhancement without affecting emissions
- Improved fuel efficiency
- No interference to the electronic control unit (ECU); original settings are not altered
- Will not harm your engine; does not increase injection pressure
- Uses OEM plugs (no soldering required)
- Will not void vehicle warranty, or alter engine diagnostics functioning; will not interfere with engine error code sensing
- Does not change the service intervals required for your vehicle

Operating Principle

The PowerBox is an adjustable plug-in power conversion that provides up to 30% more horsepower (HP) and torque (results vary by make and model). The unit is digital and consists of a microprocessor housed in a shock-resistant casing. The PowerBox is also equipped with OEM plugs that are inserted into the wiring loom between the fuel injection system and the vehicle's electronic control unit (ECU).

The PowerBox intercepts the signals that pass back and forth and modifies them to create an increase in power by altering the timing and duration of injection. A larger amount of fuel injected into a diesel engine creates a significant increase in power and improves overall performance. Unlike the gasoline engine that provides airflow that is proportionate to acceleration, the diesel engine typically runs with an excess airflow, causing it to run well below its maximum combustion capacity. This means that more fuel can be injected without causing over-fueling.

Increased Efficiency Means Increased Fuel Economy

It may seem ironic that increased fuel injection can lead to improved fuel economy, but that’s exactly what happens under certain conditions. This is possible due to the increased torque, which enables the engine to operate in higher gears at lower speeds. By adjusting the PowerBox to achieve a modest improvement in power/torque, slightly more fuel is used.

However, the fuel consumption required to increase torque is offset by the increased fuel economy resulting from better operating efficiency in that range. Of course, someone with a radical driving style would see no improvement in gas mileage.

Reliability and Safety

The PowerBox will not change the service intervals or reduce the life of your engine. The performance enhancement offered by all of our units takes into account the safe mechanical limits of your engine. Remember, only the parameters of the injection timing are altered, while pressure and fuel/air ratios controlled by the ECU remain unchanged. The result is smooth and responsive acceleration that produces sportier handling.

Installation Instructions for TDI Engines

Ignition should be in the OFF position when installing or making adjustments!

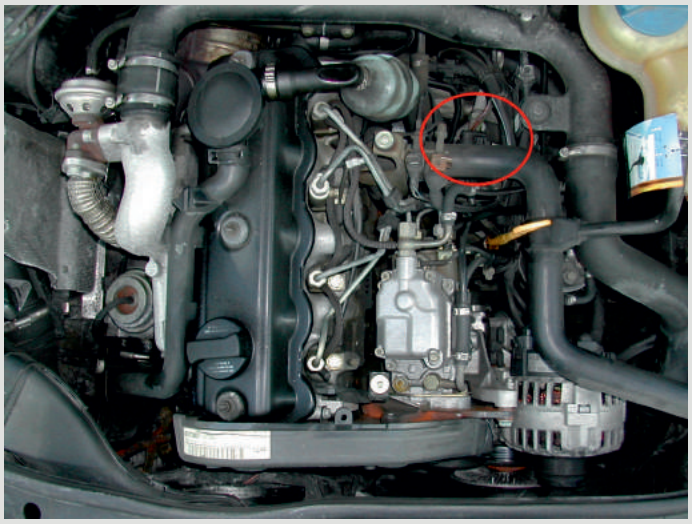
1) Remove the plastic engine cover if applicable.

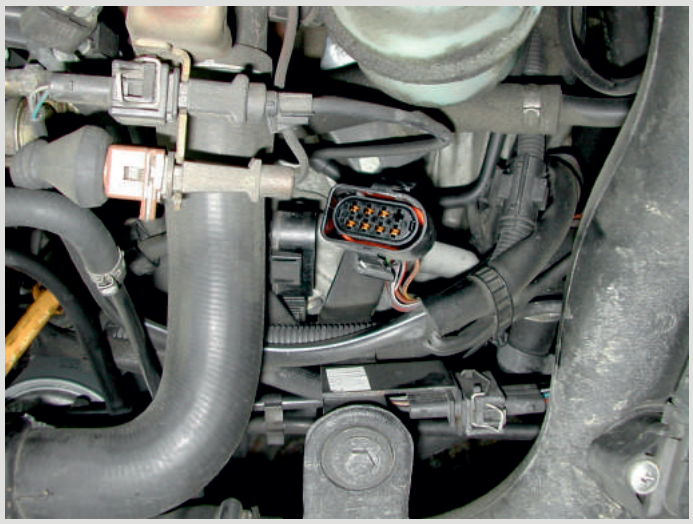
2) Locate the injection pump at the front of the engine (in cars such as the Audi A4 and VW Passat, the engine is mounted longitudinal, and the injection pump is located on the right side, as you face the engine from the front of the car). Near the side of the injection pump where the lines are connected, look for the 8/10-pin connector that is compatible with the PowerBox plugs.

3) Disconnect the 8/10-pin connector and attach each end to the male and female PowerBox plugs; the circuit is complete.

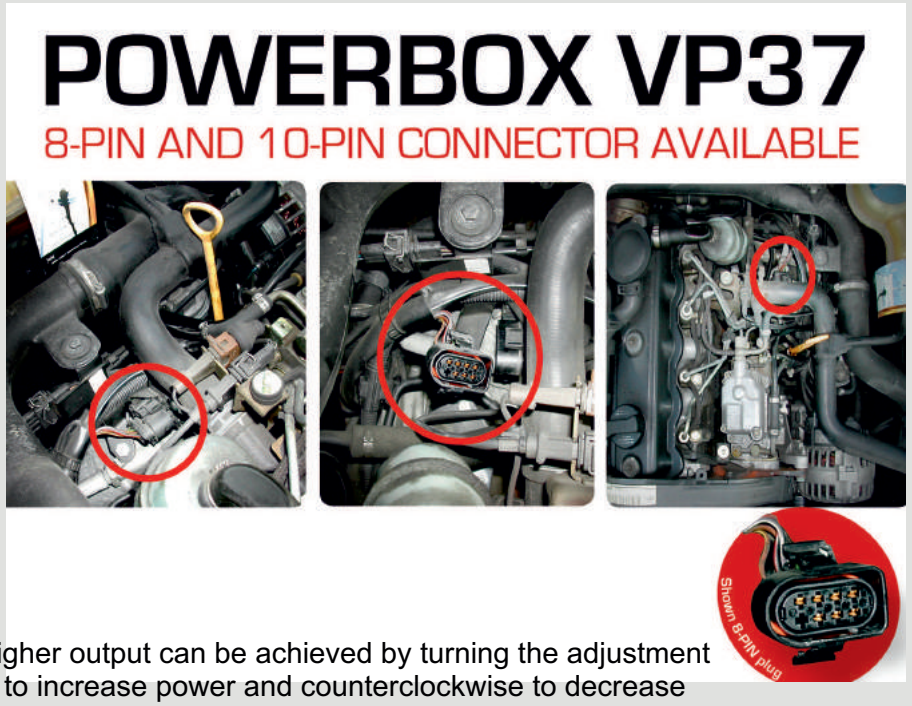
4) Secure the PowerBox so that it is not in direct contact with other parts that produce excessive heat.

5) Congratulations! You are now ready to experience enhanced performance.
Drive Safely!





Audi A4 TDI



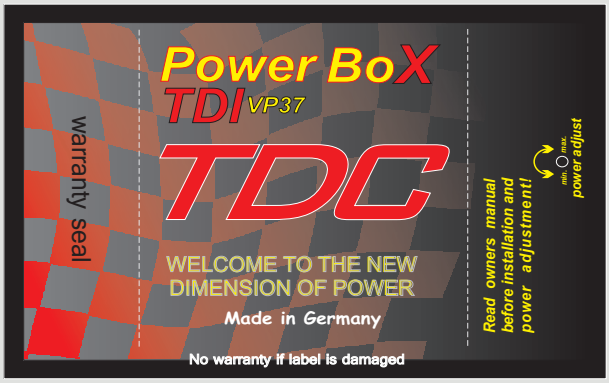
PowerBox Settings

The PowerBox has been preset; however, higher output can be achieved by turning the adjustment screw. Turn the adjustment screw clockwise to increase power and counterclockwise to decrease power. When making adjustments in the higher ranges, an error code may be generated. If this occurs, simply turn back (counterclockwise) the adjustment screw 1 to 2 rotations.

Always note the position of the adjustment screw using the table provided. We have identified the current position as “12.” Example: If you rotate the adjustment screw 3 rotations clockwise, your next entry on the table would be “15.” Remember to add when making clockwise adjustments, and subtract when making counterclockwise adjustments.

To re-set (center of adjustment. range) the PowerBox, turn the adjustment screw 24 rotations in either direction, and then 12 rotations in the opposite direction.

Note: The adjustment screw has 24 effective revolutions with no “**stop**”.



power adjustment screw

The YELLOW wire loop protruding from the box can be used to connect an “ON/OFF” switch, which may be routed to the inside of your vehicle.

Adjustment Table “0 - 24”

12													

Troubleshooting Guide

1.) No noticeable power improvement

Check to ensure that the PowerBox connectors are attached securely to the **CORRECT** sensor and that the circuit is complete.

2.) Engine running rough, hesitation, or smoke from exhaust

a.) Check to ensure that the PowerBox connectors are attached securely to the **CORRECT** sensor and that the circuit is complete.

b.) Decrease power adjustment 1 to 4 revolutions/positions with engine ignition in the OFF position. Amount of power decrease varies. Your vehicle may require further downward adjustments until the upper limits of tolerance can be identified.

c) Change air filter

3.) Engine error code

a.) Decrease power adjustment 1 to 2 revolutions/positions with engine ignition in the OFF position.

b.) Turn ignition ON. If the error light is still on, turn ignition OFF and decrease power adjustment an additional 1 to 2 revolutions/positions; drive vehicle for 10 to 15 minutes*

c.) If error light is still on, turn ignition OFF. Re-set power adjustment screw in accordance with instructions. Repeat steps a.) and b.) Above. If light remains on, go to Step 4.

Note:
Factory set ECU tolerances vary slightly depending on vehicle make and may limit power adjustment settings at the higher end of the adjustment range.

4.) Engine error code light remains on

a.) Perform corrective action described in step 3. Change air filter to provide maximum air flow required to achieve highest PowerBox settings.

b.) Drive vehicle for 10-15 minutes. If the error light remains on, turn OFF the ignition, and disconnect the PowerBox. Reconnect the sensor cable to the sensor, and turn the ignition ON. If the error light does not terminate, a vehicle maintenance condition may be present. Remove the PowerBox and have your local service center/dealer identify and correct the condition causing the error code.

Note: Remember, the PowerBox has been programmed to work within the tolerances permitted by the ECU for a vehicle that has been properly maintained and serviced in accordance with the manufacturer's recommendations. The PowerBox relies on optimal airflow through the air filter and the precise measurement of engine load indicated by the Mass Airflow (MAF) Sensor.

When vehicle airflow is insufficient or slightly obstructed (before the installation of the PowerBox), an engine error code may not be present. However, once the PowerBox is installed, additional fueling provided by the PowerBox requires maximum air flow and a precise reading of engine load/speed measured by the MAF sensor. When these conditions are not present, the change in fueling, actual speed, and required airflow become disproportionate and may exceed the tolerances of the ECU; thus triggering an error code. Notwithstanding any other maintenance condition and the factory-set tolerances of the ECU, these factors limit the operation of the PowerBox.

*If your vehicle is exhibiting excessive hesitation, rough idling, knocking, unusual noises, etc., it may not be safe to operate. If these or other similar conditions are present, a vehicle maintenance condition unrelated to the PowerBox may exist.

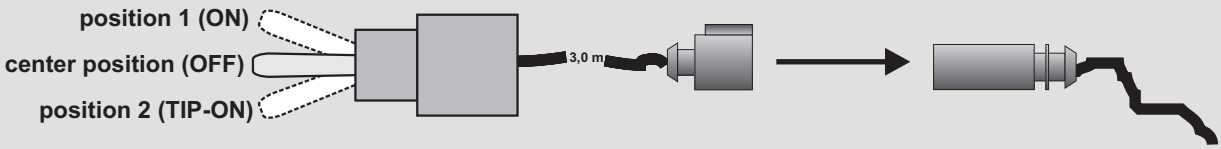
digital PowerBox TFSI/FSI

Remove the plastic engine cover if applicable. Locate the fuel pressure sensor 1. The sensor is located in the high-pressure fuel line (common rail), which typically runs parallel to the cylinder head. Disconnect the 3 pin plug from the sensor and connect the male and female PowerBox connectors to the sensor and the sensor cable plug previously removed.Locate the turbo pressure sensor 2. The sensor is located at the intake air line. Disconnect the 4 pin plug from the sensor and connect the male and female PowerBox connectors to the sensor and the sensor cable plug previously removed; the circuit is now complete. Secure the PowerBox away from parts that produce excessive heat.

Congratulations! You are now ready to experience the new dimension of power. Drive safely!

Optional switch-kit for PowerBox:

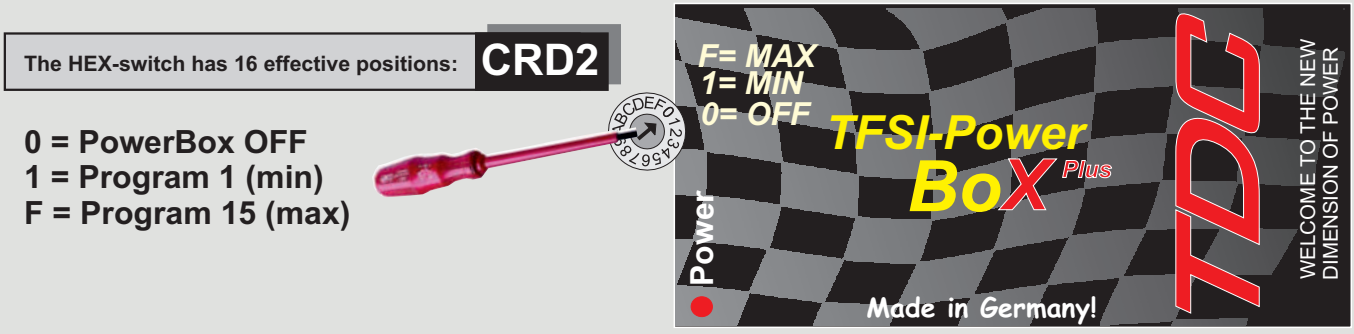
The optional switch-kit can be used to activate or deactivate the power increase while driving.
The PowerBox is off when switch is set in the middle position. On position “1” the PowerBox will be activated all the time and on position 2 unless you push the switch.



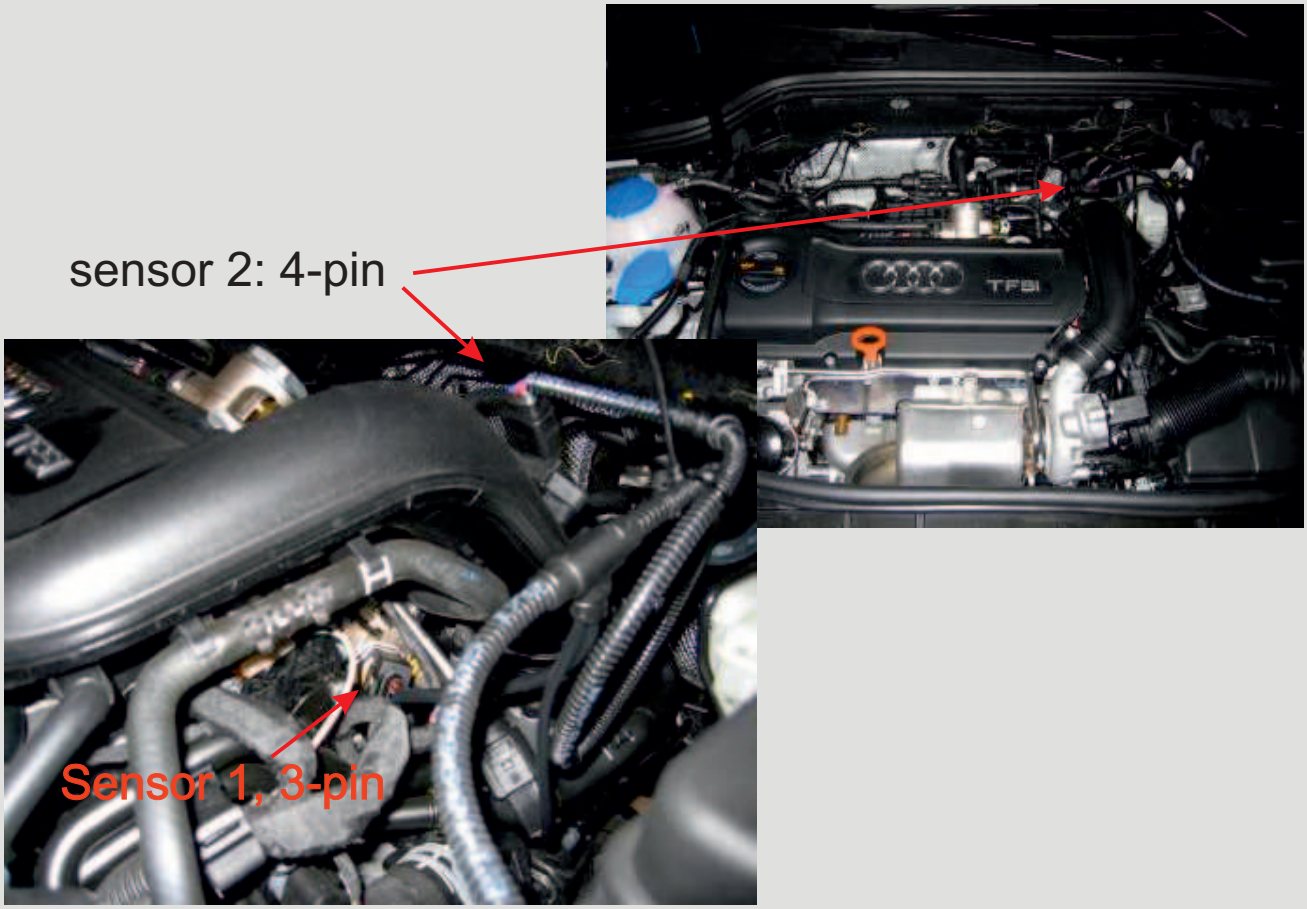
Connect the connector of the switch-kit with the harness of the PowerBox.
Note: The PowerBox has no function without the switch-kit!

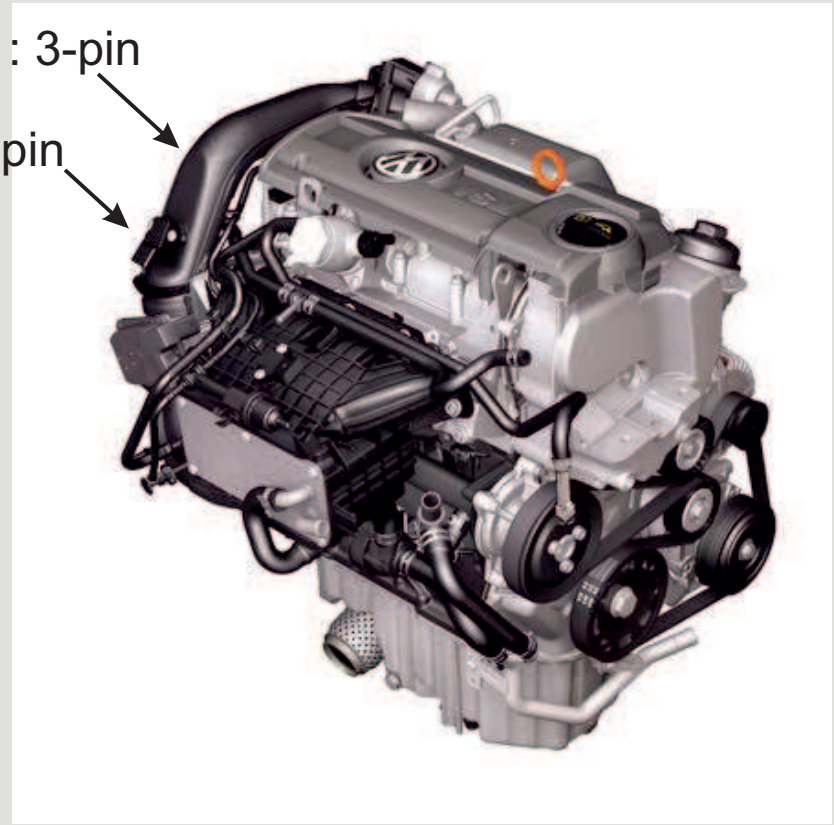
!!! CAUTION !!!
Use the switch only if there is no possible risk for you and others!

Adjustment of the PowerBox CRD2 with HEX switch



The standard setting of "3" is sufficient to produce a noticeable power gain in most vehicles. At higher settings, an error message may be generated. If this occurs, simply lower the setting until the error message terminates. To identify the power setting most suitable for your vehicle and driving style, incrementally increase power from "3" to test performance and handling at each setting.





Due to the variety of injection systems, the above pictured diagram is only an example of the installation. If you have questions in locating the sensor in your vehicle, please contact us.

We will send you car specific pictures according to the type of your car. We always need to know: make, model, engine size/type, horsepower (HP/bhp/PS), kilowatts (kW), torque/NM and year.