

## Sophisticated functionality – simple installation

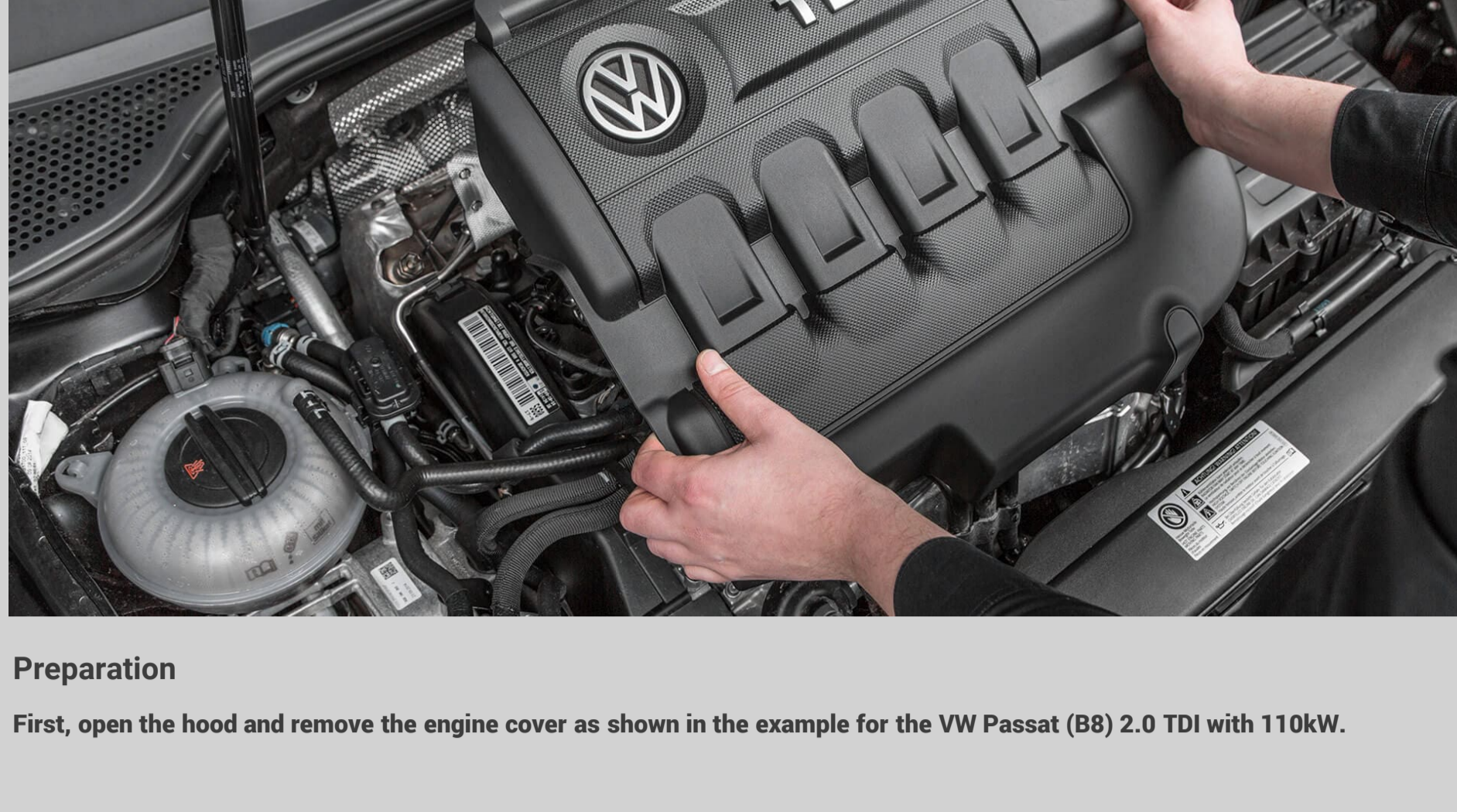
Easy to use plug & drive system



- ✔ DIY installation in just a few steps
- ✔ No expertise necessary for installation
- ✔ No special tools necessary
- ✔ Vehicle-specific installation instructions

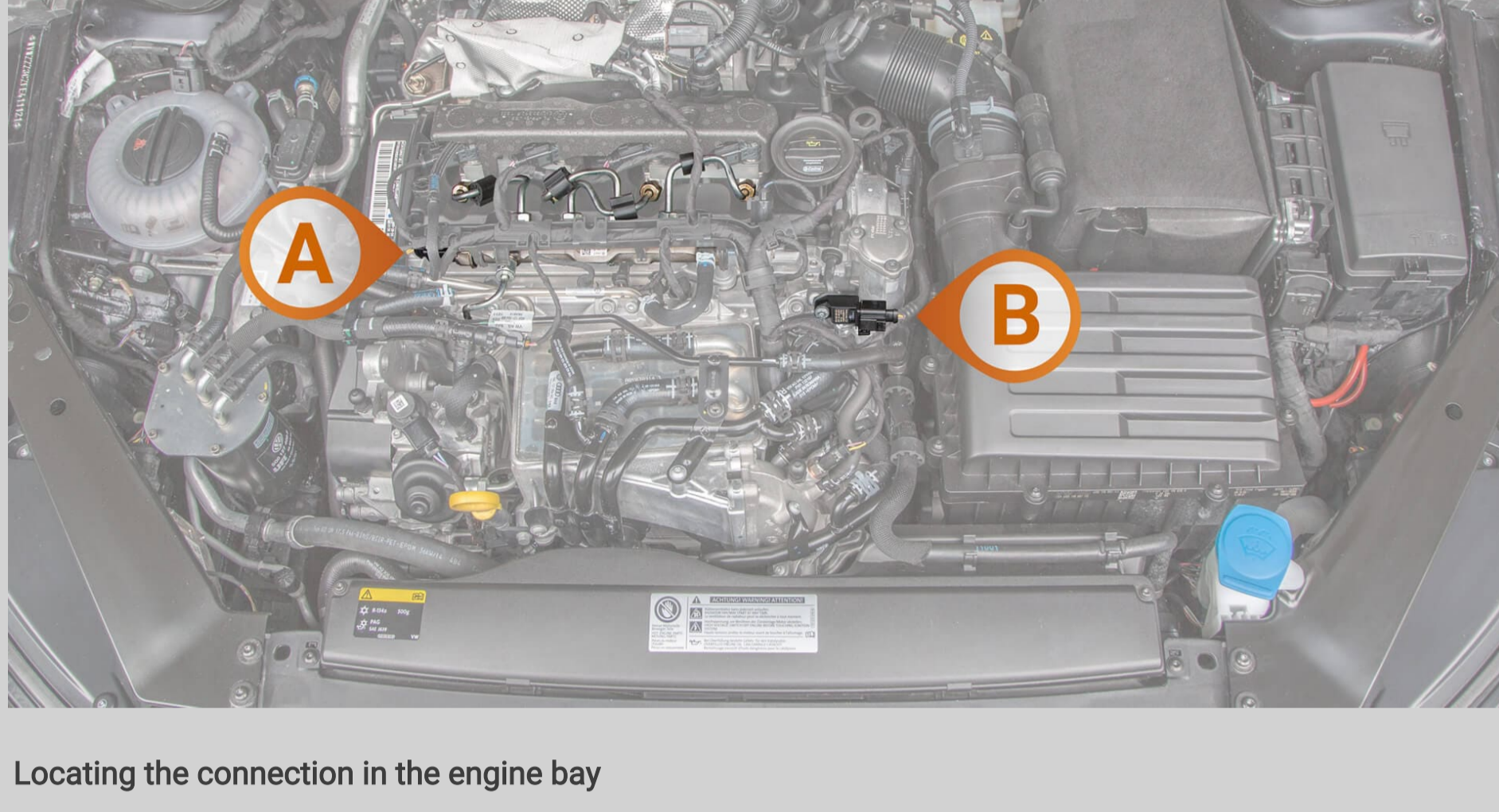
Every RaceChip product follows our plug & play principle, which means that you can install it yourself in just a few minutes. We believe that even complex and sophisticated products should be as easy as possible to use.

You'll receive vehicle-specific installation instructions with your order. Moreover, our technical support is always glad to assist you.



### Preparation

First, open the hood and remove the engine cover as shown in the example for the VW Passat (B8) 2.0 TDI with 110kW.



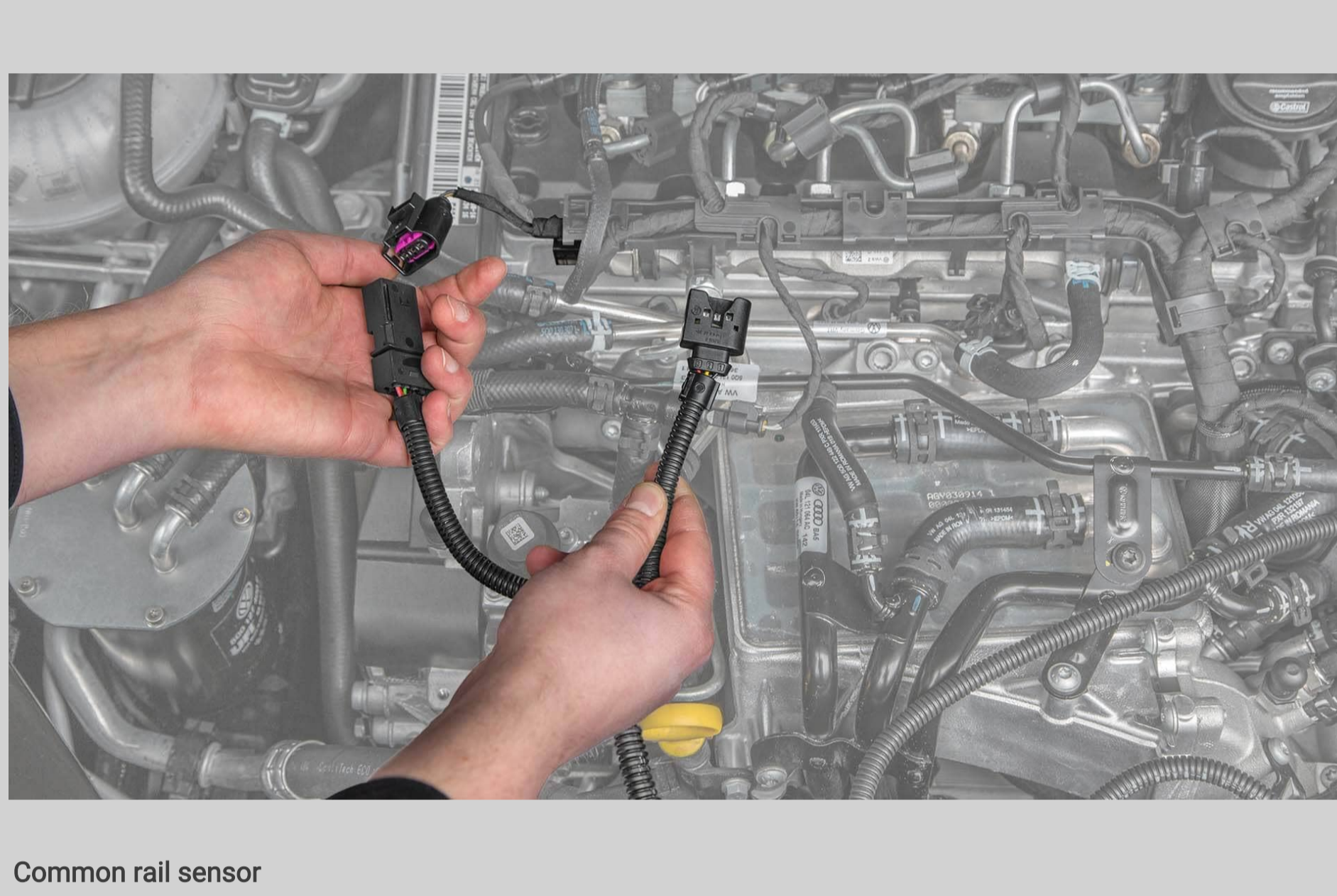
### Locating the connection in the engine bay

Once the wiring harness is connected, the engine setup should look like the image below. The RaceChip wiring harness is connected to the sensors at the points marked A and B.



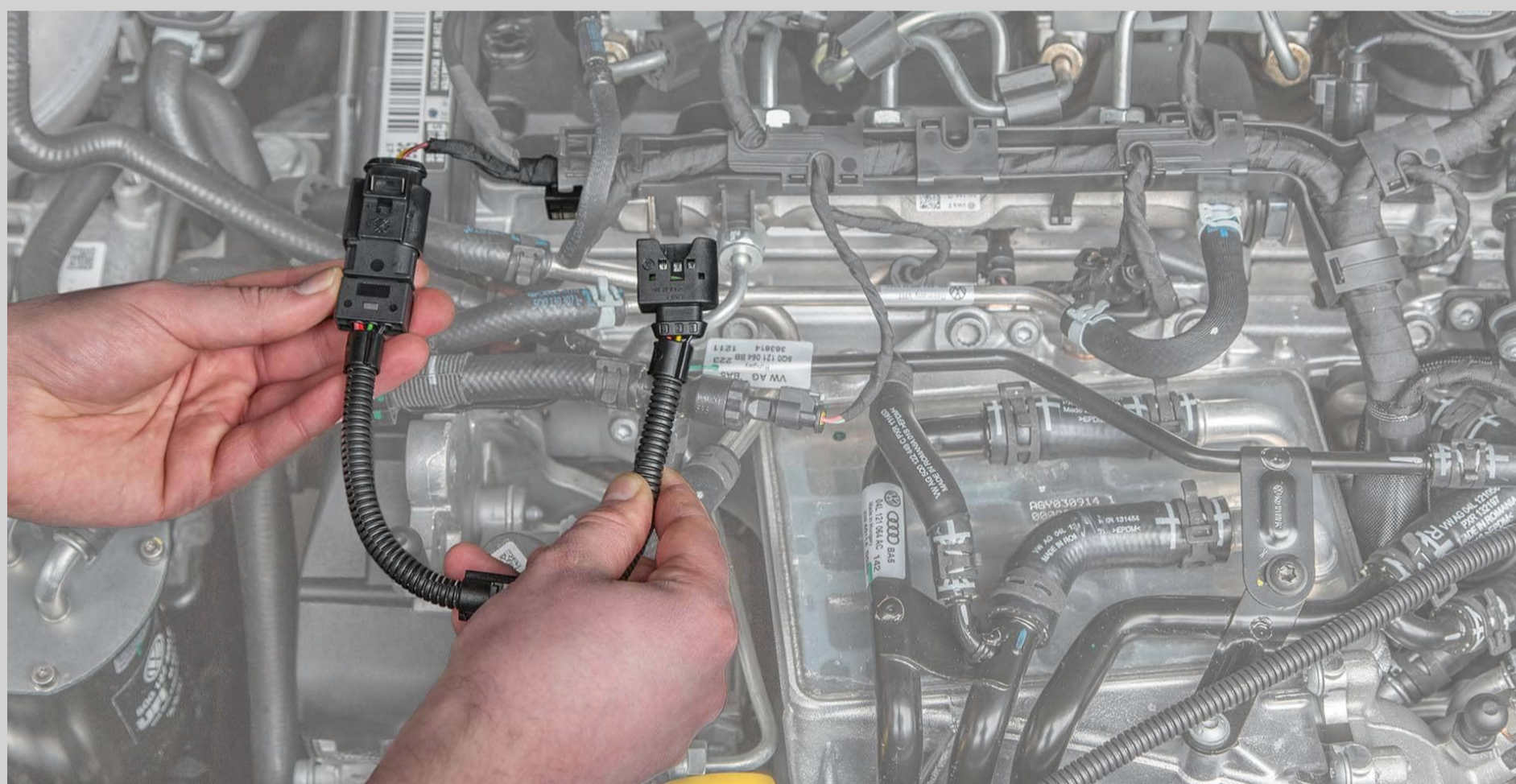
### Connection to the common rail sensor

First, the connection to the common rail sensor (A) needs to be made. Pull out the plug by its sensor. Note: only pull on the plug, never the cable.



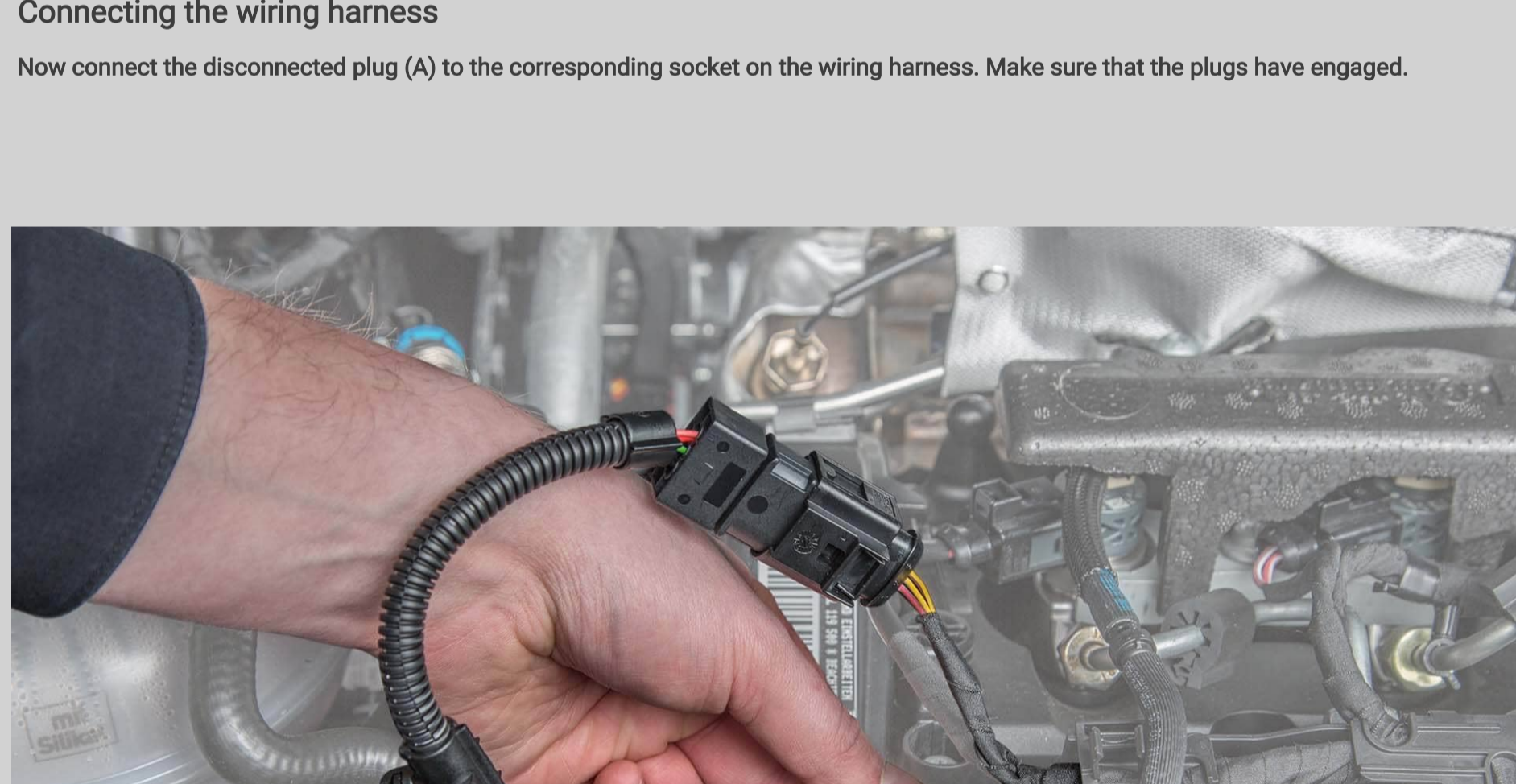
### Common rail sensor

Here you can see the disconnected plug of the common rail sensor (A), as well as the corresponding mating part on the wiring harness of your chip.



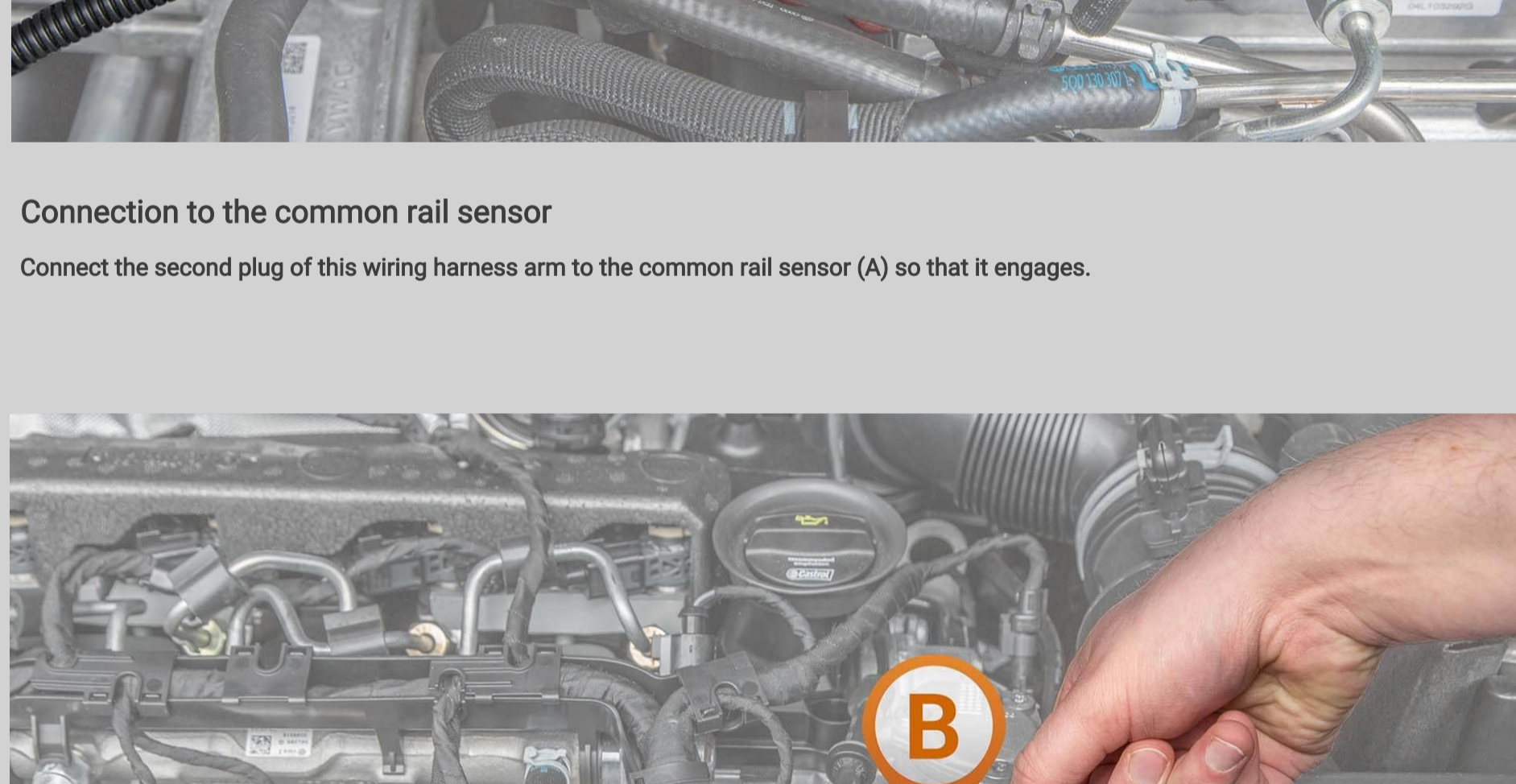
### Connecting the wiring harness

Now connect the disconnected plug (A) to the corresponding socket on the wiring harness. Make sure that the plugs have engaged.



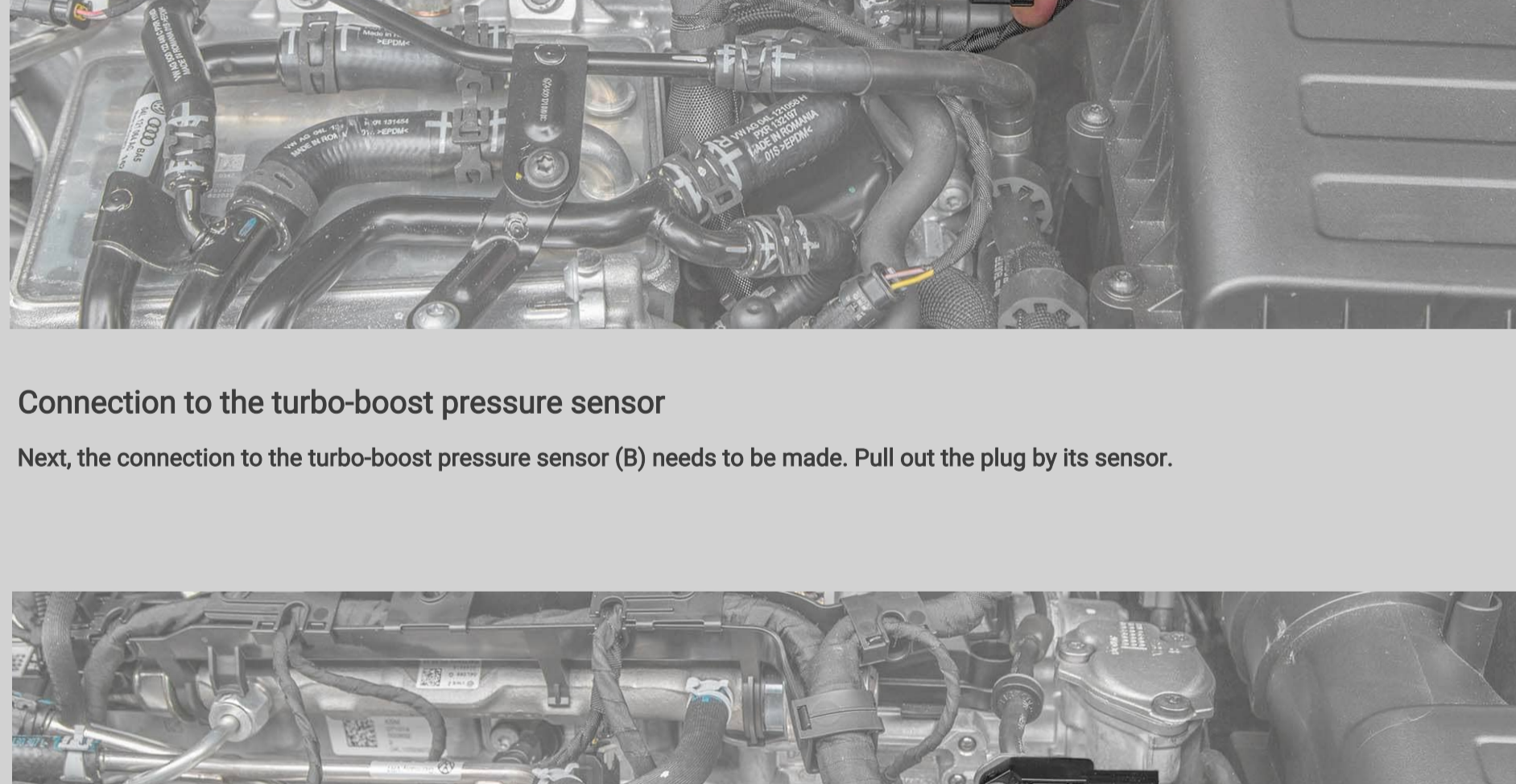
### Connection to the common rail sensor

Connect the second plug of this wiring harness arm to the common rail sensor (A) so that it engages.



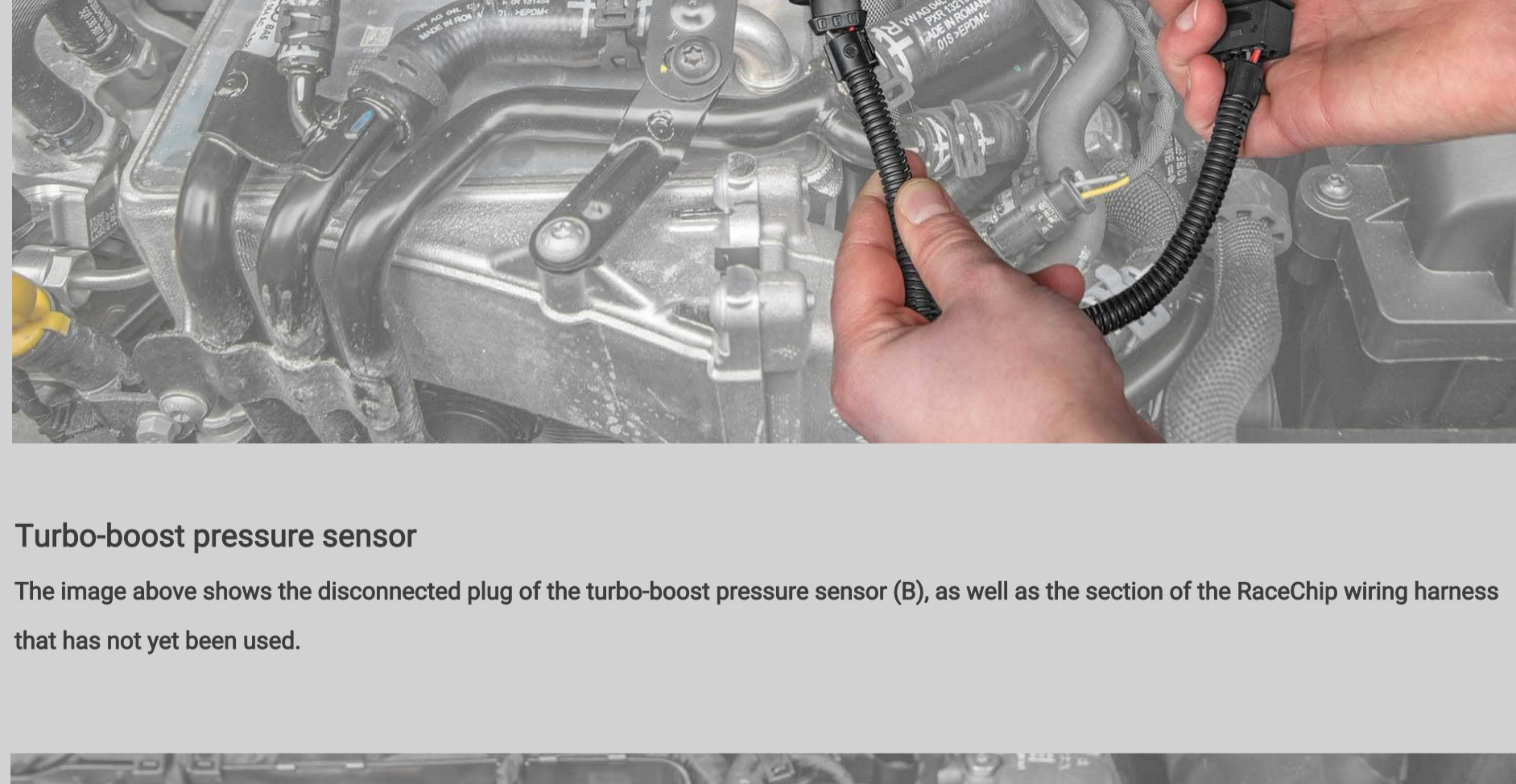
### Connection to the turbo-boost pressure sensor

Next, the connection to the turbo-boost pressure sensor (B) needs to be made. Pull out the plug by its sensor.



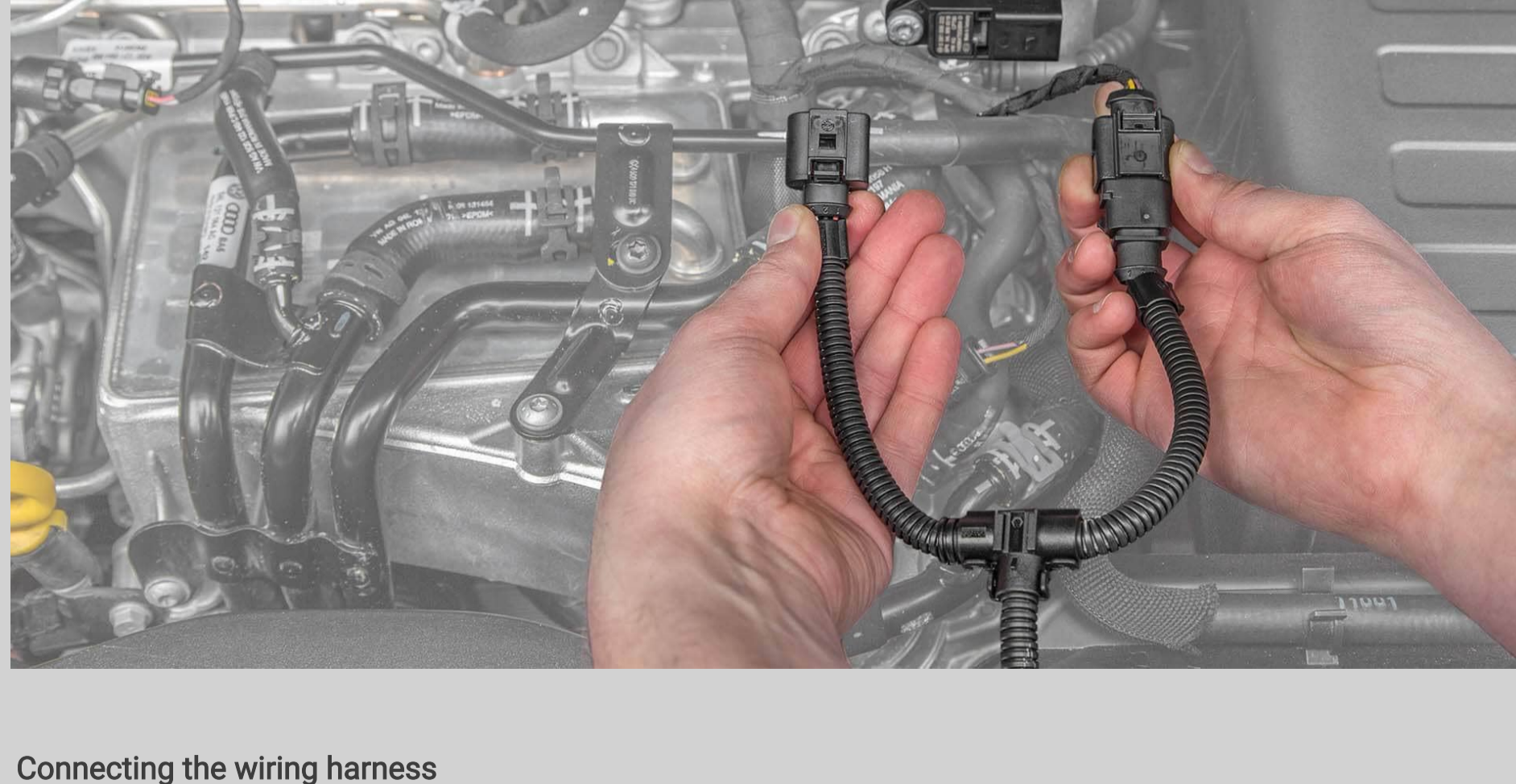
### Turbo-boost pressure sensor

The image above shows the disconnected plug of the turbo-boost pressure sensor (B), as well as the section of the RaceChip wiring harness that has not yet been used.



### Connecting the wiring harness

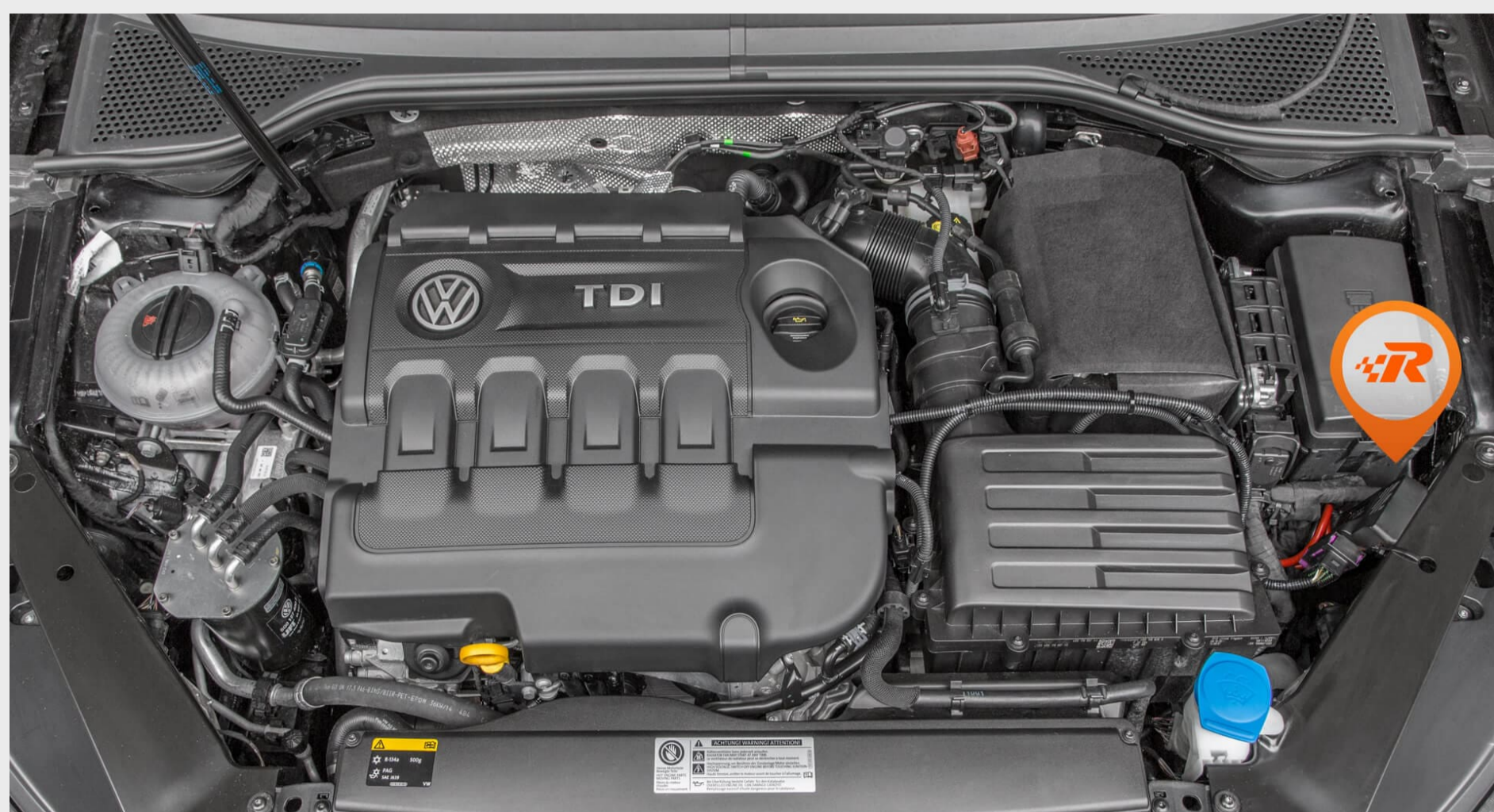
Connect the disconnected plug (B) to the corresponding socket on the RaceChip wiring harness. Ensure that the plugs engage properly.





#### Connection to the turbo-boost pressure sensor

Connect the remaining plug on the wiring harness to turbo-boost pressure sensor (B). Push it into the mating piece so that it engages.



#### Connecting the RaceChip

Your engine is about to get more power. Connect the RaceChip to the FCI connector of the wiring harness.

## You can reset your vehicle to series configuration at all time If it's necessary at some point

Whether chip tuning or accelerator tuning, our products can be reset at any time to return your vehicle to series configuration.



#### Quickly reset to series configuration

A blind plug is included with the product. If you wish to temporarily reset your vehicle to series configuration, then you can simply replace the module with the blind plug. The signal from the engine control unit will then be transmitted directly.



#### Complete reset to series configuration

If necessary, our chip tuning products can be completely removed in just a few steps – just like RaceChip installation, but in the reverse order (although we're sure that once you've experienced our products, you won't want to part with them again).

## FAQ regarding installation And the corresponding answers

#### What should I know about taking my vehicle to customer service at a garage?

We generally recommend completely removing the RaceChip module prior to service in order to allow the garage to provide service based on a series vehicle.

We also wish to point out that some manufacturers, when performing a readout of the vehicle's memory, also analyze relevant vehicle performance data, and in doing so they may try to determine whether a performance enhancement has been installed. In the case of OBD tuning (i.e. an active alteration of the manufacturer's software), the presence of a performance enhancement can be determined and verified. But with RaceChip technology (an additional control unit) the manufacturer's hardware and software remain unchanged. If chip tuning is not located in the engine, then the data can only hint at an electronic performance enhancement. Similar data can also be produced, in some cases, by series production deviations on the part of the manufacturer.

You don't have to do anything special for automotive service at the garage, as all of the manufacturer systems remain unchanged with performance enhancement from RaceChip.

The chip tuning can be easily re-installed after service.

#### Does the diagnostic device show that performance enhancement has been installed?

No. A diagnostic device only reads out the data saved to the vehicle's own engine control unit. The RaceChip has absolutely no interaction with the engine control unit.

Sometimes diagnostic devices show error messages stemming from the control unit. However, these cannot be attributed to the installation of the RaceChip.

#### Is it possible to install a RaceChip even without any technical know-how?

Yes. RaceChip products are designed for problem-free installation with the aid of our instructions and videos provided.

In some individual cases where users have issues, our customer service is available for advice.

#### Do I need special tools for installation?

No. You can install RaceChip with no specialist mechanical know-how.

In rare cases the air filter box must be disassembled in order to reach the sensor. In these cases we recommend finding a garage if you don't have mechanical know-how. Special tools are not necessary for the actual installation of the chip.

#### Where is the best place for the module in the engine compartment?

You should install RaceChip products according to installation instructions. Use the existing vehicle cable harness for the auxiliary cable harness. The module itself must be firmly attached and may not be attached on the following areas: Very hot components, strongly vibrating components, moist spaces

#### Can I have the module installed at a garage?

The RaceChip module can be installed at independent garages.

#### Can I damage anything when installing in my engine?

This cannot happen when you follow proper procedure. Our products are developed according to the Plug&Drive principle. This means that their functions may be complex, but installation should be as simple as possible. All of our products are delivered with extensive tips for installation.

#### What should I do if the control plug doesn't illuminate, even though I'm sure I've done the installation correctly?

Please contact our technical customer support. If the LED does not light up, this can have various causes.

#### Can I remove the tuning and return my vehicle to series condition?

Yes! As soon as you've completely uninstalled the RaceChip product and all plug connections are connected in the original condition, then the vehicle is in series condition.

#### Is my vehicle really in series condition after uninstalling RaceChip?

Yes. After full de-installation, there are no discernible signs that an additional device was installed in the engine bay.

A readout of the performance data from a vehicle memory can provide an indication that a performance enhancement was installed. However, this cannot give concrete evidence of the installation of an electronic performance enhancement that uses auxiliary boxes. In addition, this data is read out and assessed in the workshop by very few manufacturers. You can find more information in our Questions and Answers section under the Installation and Removal topic. Our Customer Service staff is of course also available to help and advise you.

Other types of tuning (e.g. OBD) overwrite the engine's control software directly, in a way that is recognizable.

#### How do I remove the plug in the event of deinstallation?

The plug is affixed with a simple locking mechanism at the sensor. Loosen this latch and the plug can be pulled off easily.

#### Why does the manufacturer's plug look different from the plug you delivered?

Sometimes the plug delivered looks a little different than the vehicle's plugs. However, the plugs can still connect together without any problem and the technical function of the connector will not be affected because we use OEM quality plugs.

#### What should I do if the included plug doesn't fit?

Sometimes a manufacturer uses different connection types in a series. If this is the case for your vehicle, please contact our customer service. Then we can arrange to switch out the cable.