

# GFB DV+

## Installation Instructions

### Part #T9358



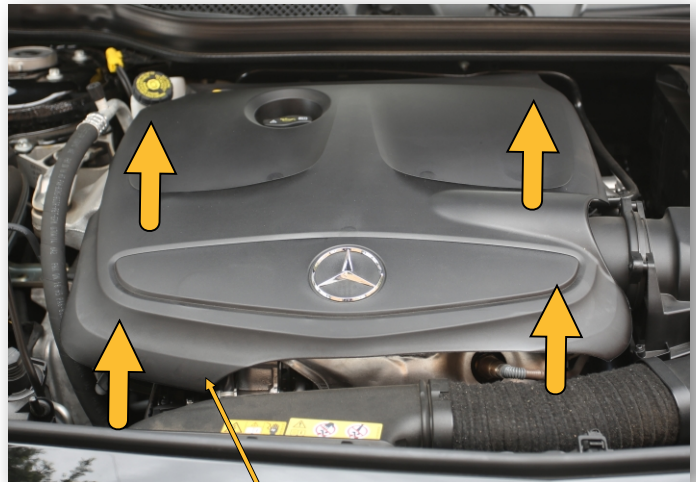
**IMPORTANT!** All GFB pistons are checked for fitment and tolerance before shipment. Please do not drop the GFB piston onto a hard surface as this may cause (invisible) damage that could result in boost leaks or sticking.

**WICHTIG!** Alle Kolben wurden vor Versand auf Freigängigkeit geprüft. Bitte achten Sie bei der Montage darauf, dass \*der Kolben nicht auf den Boden fällt\*, da dieser schon bei kleinster (evtl. Nicht sichtbarer) Beschädigung zur Undichtigkeit oder Kolbenklemmen führen kann!

# INSTALLATION

These instructions show installation on an A250 with transverse engine layout. For installation on other models with longitudinal engine layout, the procedure is the same, but the turbo is found on the left-hand side of the engine (looking from the front of the car), and the diverter is lower down.

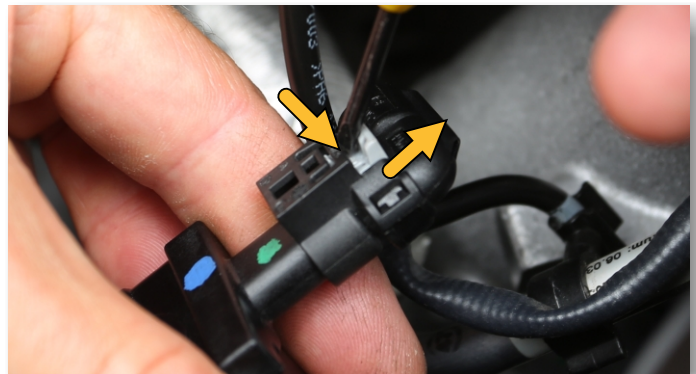
- Remove the engine cover by pulling up on each side in the locations indicated ( → ), to pop the rubber grommets that hold it on. Remove and set aside.



- Locate the factory diverter valve, which is mounted on the front left side of the turbo next to the intake pipe. Using a 5mm hex driver/key, undo the 3 screws holding the diverter - take care not to drop them!



- The electrical connector features a double-locking clip. It helps to use a small flat screwdriver to carefully push the grey tab down and simultaneously slide it out.



You can then push the top of the grey latch down and slide the connector off the diverter.

- Separate the factory valve mechanism from the solenoid body by pulling on the plastic sleeve ( → ) that surrounds the diaphragm - don't pull on the valve itself as the diaphragm may tear.

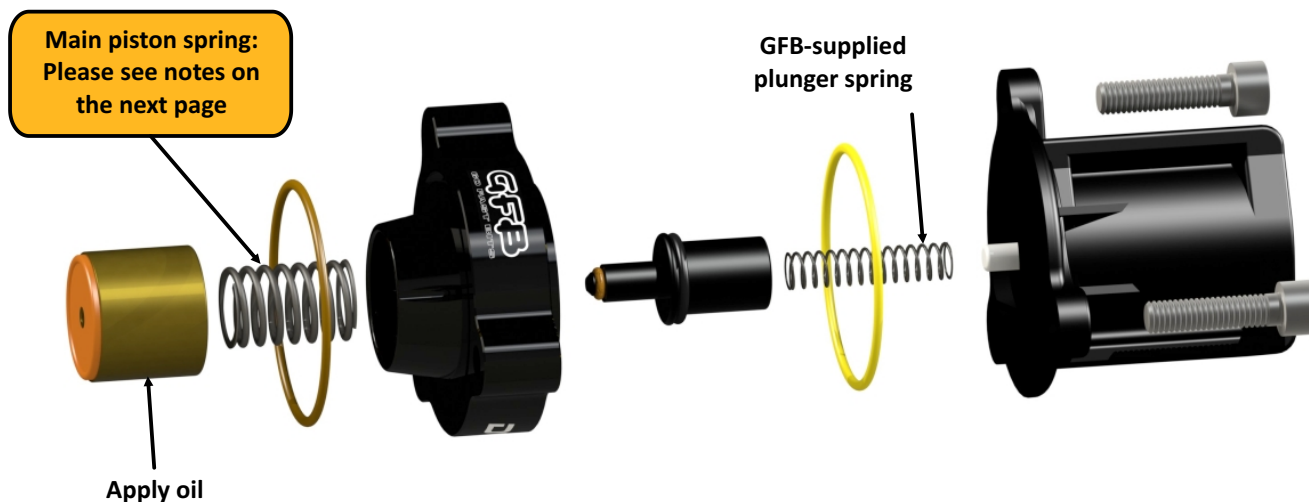


Leave the yellow o-ring in place as this is re-used.

Remove the valve, plastic sleeve, and spring. Keep these pieces in a safe place together with the 3 bolts, as these parts are not re-used.

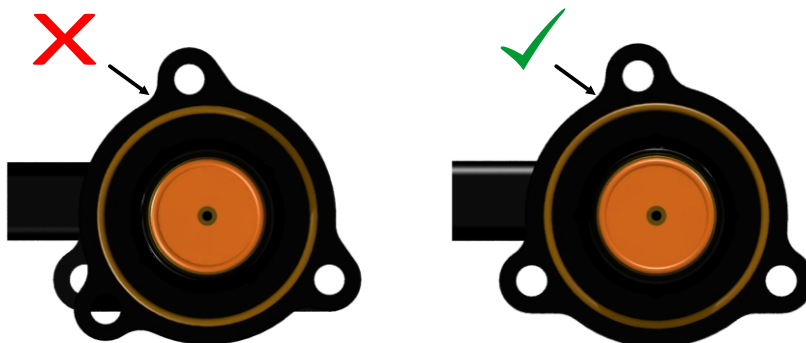
## ASSEMBLING THE DV+

- Assemble the GFB DV+ parts onto the factory solenoid body as shown in the exploded view below, making sure to use the GFB-supplied plunger spring and longer bolts.



During assembly, check that the piston slides freely in the body without sticking or binding. It is a very close fit and can sometimes be difficult to get started into the bore, but once in it should move without needing to be forced. Apply some engine oil onto the piston during assembly.

Note that the bolt holes are NOT SYMMETRICAL. When you assemble the DV+ body onto the solenoid body, check the alignment of the holes - if they do not line up properly, rotate the DV+ body until the bolt holes line up correctly before installing on the car.



## INSTALLATION - CONTINUED

- Install the DV+ assembly onto the turbo, making sure to hold the piston with your finger so it doesn't fall out during this process. Don't forget to use the supplied longer screws. Because of the asymmetric bolt holes, the assembly can only be installed in one orientation.

- Clip the electrical connector back on, then re-install the engine cover.



## USING THE MAIN SPRING

The DV+ can be configured in two different ways, depending on your desired outcome. Fitting the DV+ with the main spring installed as shown on the previous page can be thought of as a “Sport” mode, offering the best possible throttle response and boost recovery during on/off throttle applications (i.e. during gearshift with a manual transmission).

Using the main spring means the DV+ can open and close progressively in response to how much boost pressure is present, unlike the factory diverter which just opens fully regardless of whether there is boost to vent or not. Because this operation method is different from the factory diverter, it is not unusual (or detrimental) to hear a different sound from the intake when lifting off the throttle at low RPM, especially if you have an aftermarket intake or a larger turbo installed.

If a different sound does occur and bothers you, it is possible to install the DV+ WITHOUT the main spring behind the piston. This configuration can be thought of as an improved “Standard” mode, which behaves just like the factory diverter, but with the added benefits of better boost-holding, strength, and reliability.

**This product is intended for racing use only, and it is the owner's responsibility to be aware of the legalities of fitting this product in his or her state/territory regarding noise, emissions and vehicle modifications.**

**GFB products are engineered for best performance, however incorrect use or modification of factory systems may cause damage to or reduce the longevity of the engine/drive-train components.**

**GFB recommends that only qualified motor engineers fit this product. Warranty is for the period of one year from the date of purchase and is limited only to the repair or replacement of GFB products provided they are used as intended and in accordance with all appropriate warnings and limitations. No other warranty is expressed or implied.**