## GFB DV+ Installation Instructions Part # T9359



**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!

## FACTORY DIVERTER REMOVAL

The GFB DV+ T9359 is designed for use on VW Mk7 Golf R and Audi 8V S3.

For video installation instructions, scan the QR code below or visit:

www.gfb.com.au/downloads/gfb-tv

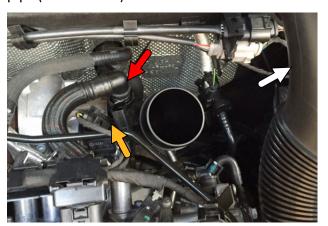


Remove the engine cover by pulling up on each side where indicated (yellow arrow) to pop the rubber grommets. Remove and set aside.

The factory diverter valve is located on the front of the turbo, as indicated by the red arrow.



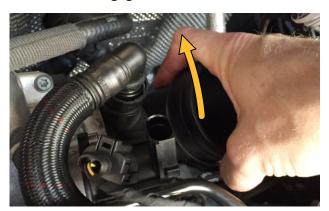
Unclip the breather pipe (red arrow) and diverter valve electrical connector (yellow arrow), then loosen the hose clamp and remove the intake pipe (white arrow).



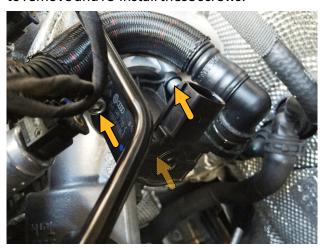
Using a Torx T30 driver, loosen the single screw (yellow arrow) that retains the hard plastic turbo intake elbow. This screw usually has an o-ring under it to prevent it from falling out as it is loosened, but take care not to drop it anyway.



Rotate the top of the intake elbow towards the firewall to disengage it from the turbo.



Now unscrew the 3 bolts holding the diverter valve (5mm metric hex key), then remove it from the car. Again, take care not to drop these screws as they can be difficult to retrieve. A driver extension with a 5mm hex bit can make it easier to remove and re-install these screws.



## DV+ INSTRALLATION

Pull the piston from the diverter valve solenoid and remove the spring.



Remove the plastic piston shroud from the solenoid. This should be able to be removed by hand, but if it does need to be levered out take care not to damage any of the plastic pieces. Store the piston, shroud and spring safely as these are not used, and keep the yellow o-ring and bolts for the DV+ installation.



Check the fit of the piston in the DV+ body. It is a very tight tolerance and can sometimes be tricky to get started into the bore. Once inserted, it should slide freely without sticking.

Smear some engine oil onto the piston, then insert it and the main spring into the DV+ body.



Hold the piston to prevent it from falling out, then install the DV+ body onto the turbo.



Insert the GFB plunger spring into the diverter solenoid, followed by the plunger. Put the yellow factory o-ring on top of the DV+ body. Hold the plunger with your finger and fit the solenoid assembly onto the DV+ body.



Fasten the solenoid using 3 screws (GFB or factory screws, they are the same). Re-install the turbo intake elbow, intake pipe, breather hose, and electrical connector in the reverse order of disassembly.



## 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.