# GFB VTA

## Installation Instructions

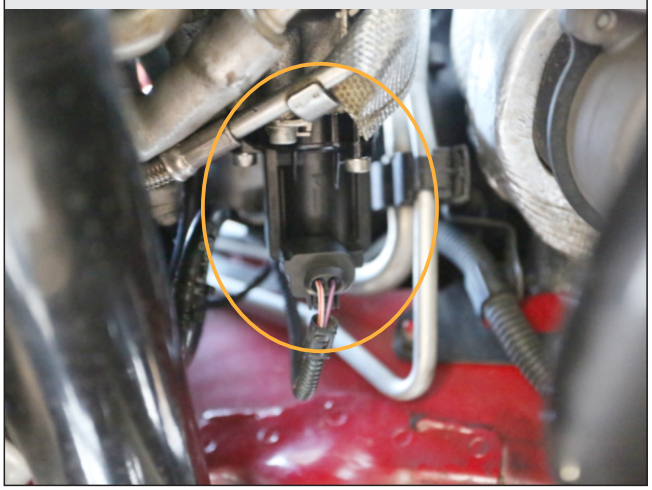
## Part #T9481

MADE IN AUSTRALIA

# INSTALLATION

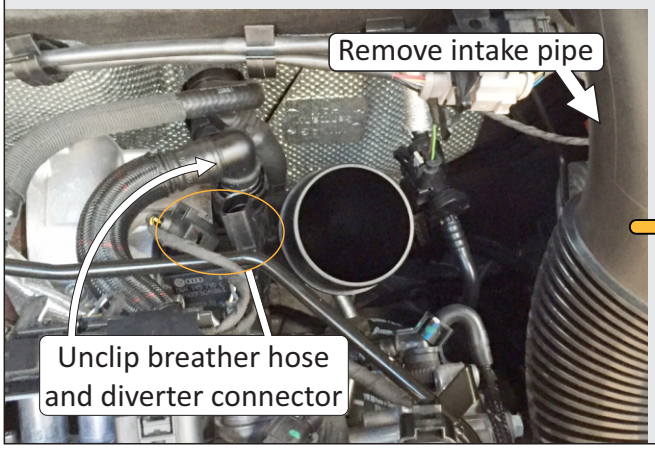
Locate and remove the factory diverter valve. It will either be mounted directly on the turbo compressor cover, or it can be mounted remotely. Examples of the factory diverter valve locations are shown below:

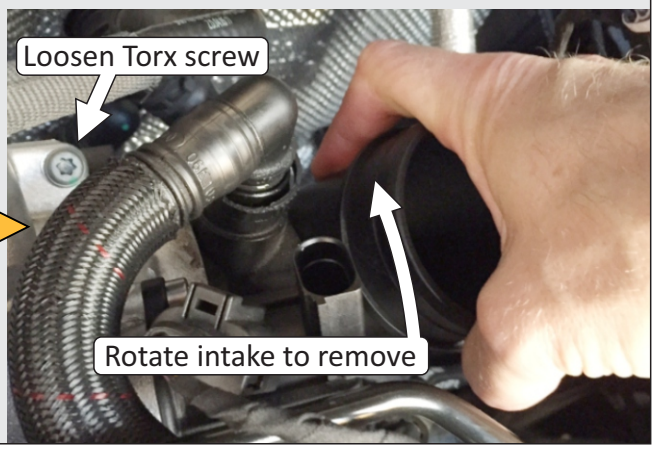
Mk5/Mk6 GTI - access is from underneath the vehicle.
**WARNING -** Always use jack stands or a hoist. Do NOT work under a vehicle supported only by a jack



Mk6 Golf R and 8P S3 - access is easy from the top of the engine bay once the engine cover is removed.

Mk7 GTI and Golf R, 8V A3 and S3 - diverter valve is on the front of the turbo. Remove engine cover, then turbo intake as shown above to access the diverter.

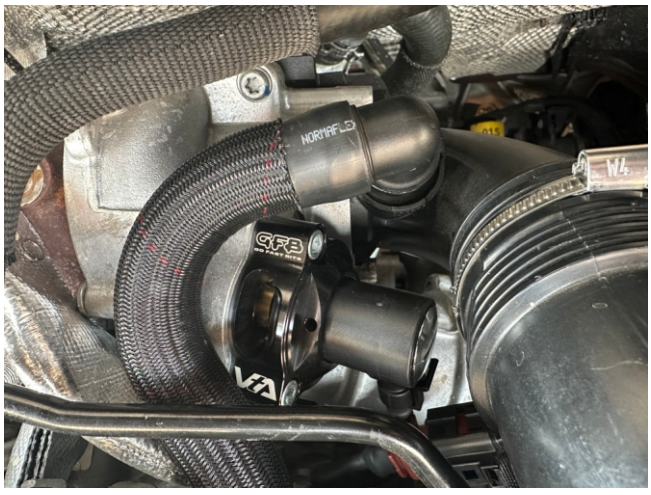



Install the VTA onto the vehicle using the supplied screws. The bolt pattern is symmetrical, so you can choose whichever orientation you prefer. The solenoid can also be rotated to the most appropriate direction for your application.

Use the supplied “plug-and-play” adaptor loom to connect the VTA to the vehicle’s wiring harness, ensuring the loom is positioned so it is protected from abrasion and heat.

Replace any other parts that were removed during installation.



# WHAT TO EXPECT FROM YOUR VTA

***Venting Duration/Timing:***

You might hear the VTA vent at seemingly odd times, but this is determined by the ECU and is not a fault with the VTA. The ECU turns on the solenoid to vent the diverter any time the throttle is closing faster than a specific rate. The throttle doesn't even have to be completely closed - as long as the rate of closure meets the ECU's requirements, it will attempt to open the diverter. The ECU turns the solenoid on for approximately 2 seconds, unless the throttle is re-opened sooner, in which case it turns the solenoid off immediately.

It is also common for the ECU to trigger the diverter when traction control engages. This is not for boost control, it's because the ECU is manipulating the throttle and the diverter's operation is linked to throttle movements.

***Oily Residue:***

It is normal to find some oil around the venting outlets, which is from the oil vapour recirculated through the turbo intake by the PCV. This is not a fault of the VTA or anything to be concerned about.

***Maintenance:***

There are many online discussions on the topic of regular maintenance or lubrication of a VTA. The fact is that periodic maintenance or re-lubrication for correct operation or longevity is NOT required! Simply install it and forget about it.

***Boost holding:***

There are a number of revisions of factory diverter valves, each with their shortcomings. The diaphragm types typically seal well, until they begin to fail - which is almost assured on a tuned engine. The piston-type revision D and later model C valves are not as fragile, but their ability to seal ranges dramatically from average to terrible, even when brand new.

The VTA will seal properly even up to 50psi, ensuring all of your hard-earned boost gets to the engine. Of course, the performance benefits you notice from the driver's seat will depend entirely on the condition of the factory diverter you replace. For example, if your factory valve is not (yet) leaking significantly, there will be no change to your peak boost.

However, if your factory diverter is leaking only a small amount, a VTA may show the same peak boost, but with an improvement in the amount of boost held to redline. If your factory valve is leaking significantly, fitting the VTA will result in higher peak boost pressure, as well as less drop-off at high RPM.

***Throttle response:***

Unlike the factory diverter, when you lift off the throttle the VTA piston only opens as much as required to vent the resulting pressure spike. Once that's done, the VTA piston will progressively begin to close to preserve as much residual boost pressure as possible. This means that when you re-open the throttle soon after lifting off, the VTA can help recover boost faster.

# TECH SUPPORT

Just installed your shiny new VTA and something doesn't seem right? Do you have a question about the product? Have you heard conflicting information and need some clarity?

We want you to get the best advice, first time. No-one has as much experience with these products as our own engineers, so make us your first point of contact!

Head to www.gfb.com.au/contact-us to get in touch, or use the QR code:

# WARRANTY

**WARNING:**

GFB recommends that only qualified motor engineers fit this product. GFB products are engineered for best performance, however incorrect use or modification may cause damage to or reduce the longevity of the engine/drive-train components.

**GFB LIFETIME WARRANTY:**

Our commitment to quality means that when we put our name to something, we are also staking our reputation on it. That's why we back our products with the best warranty in the business!

You should expect a lifetime of use from a well-engineered product, so if your GFB product fails as a result of defective materials or faulty workmanship whilst you remain the original owner, we will repair or replace it (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).

If a fault occurs as a result of usage outside of the terms of the warranty, or you are not the original owner, fear not, we can still help you.  You should never need to throw a GFB product away, as spare parts are available and won't cost the earth.