# **GFB VTA**

# Installation Instructions Part #T9480





# **OEM VALVE REMOVAL**

The T9480 VTA is for VW, Audi, SEAT, and Skoda engines with a Continental brand OEM diverter valve (shown opposite). If your car's diverter is Pierburg branded do NOT attempt to fit this product, contact GFB or your seller.

The location of the factory diverter depends on the vehicle. E.g. on Mk8 GTI models it's found on the turbo and is easily accessible from the top of the engine bay. On the Mk8 R it is mounted to the charge pipe and must be accessed from underneath. In this case, make sure to use axle stands or a hoist. **NEVER** work under a car supported only with a jack.



**Continental OEM diverter** 

#### Mk8 R Diverter Removal

1) Remove the plastic undertray, locate the diverter valve:



2) Using a T25 Torx driver, remove the 3 screws holding the diverter. NOTE, the tight location makes it difficult to access one of the screws. You can either use a flexible drive extension (or series of extensions, wobble drive/universal joints), or remove the screws that hold the charge pipe to the engine block, then remove the rubber intercooler hose so you can gently pull the charge pipe forward. This gives you better access to the last screw on the diverter valve:



3) Unplug the connector and remove the factory diverter valve:



#### **Other Applications**

- 1) Remove the engine cover and locate the diverter valve on the turbocharger
- 2) Unplug the diverter valve's electrical connector, remove the 3 screws, then remove the diverter from the car

# **INSTALLING THE VTA**



Position the VTA onto the car. NOTE: The bolt pattern is NOT symmetrical, so you will need to ensure the body is oriented correctly so all three screw holes line up. Don't worry about the orientation of the connector, as it can be rotated by hand to a position that best suits your application.

Tighten all 3 screws. For coarse threaded screws in plastic mounts, take care not to strip the threads - use a maximum of 3Nm (2.2lbf-ft). For metal threads, tighten to 6-8Nm (4.4-6lbf-ft).

Use the supplied "plug-and-play" adaptor loom to connect the VTA to the vehicle's wiring loom, ensuring it is protected from abrasion, heat and vibration.

Replace any hose clamps, screws, and engine cover/undertray in the reverse order of removal to complete the installation.

#### Installation on Mk8 R Charge Pipe



#### **Installation on Mk8 GTI**



# 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 typically turns on the solenoid to vent the diverter any time the throttle is closing faster than a specific rate. This can occur even during partial throttle lift, when going over bumps and the pedal moves slightly, and also when traction control intervenes. In these cases the ECU is not doing this to regulate boost pressure, the opening of the diverter/VTA is directly linked to the engine's throttle movement.

*Oily Residue:* It is normal to find some oil around the atmosphere outlet, which is from the oil vapour recirculated through the turbo intake by the PCV system. This is not a fault of the VTA or anything to be concerned about.

**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.

**Boost holding:** The OE diverter valve uses all plastic valve components that simply do not seal well, especially when mounted on a plastic pipe. By using metal valve components with viton seals, the VTA will hold pressure up to 50psi, ensuring all of your hard-earned boost gets to the engine regardless of the level of tune.

*Maintenance:* Periodic maintenance or re-lubrication of the VTA for correct operation or longevity is NOT required! Simply install it and forget about it.

## **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 <a href="www.gfb.com.au/contact-us">www.gfb.com.au/contact-us</a> 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.