

GFB VTA

Installation Instructions

Part #T9488



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TURBO MANAGEMENT SYSTEMS



PERFORMANCE WITHOUT COMPROMISE

OEM VALVE REMOVAL

The T9488 VTA is for Mercedes engines that feature either a Pierburg or AMG branded OEM diverter valve.

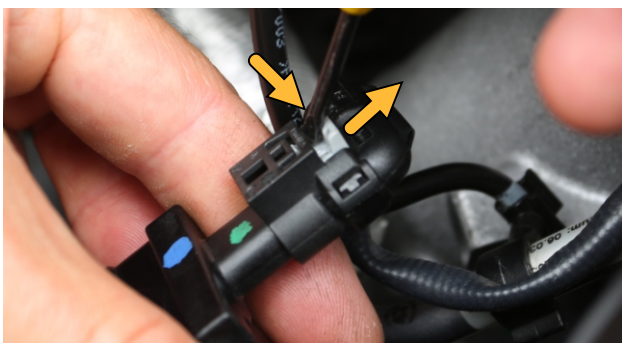
The location of the factory diverter and the installation method depends on the vehicle. On some engines it is found on the turbocharger, on others it is mounted onto the end-tank of the intercooler. Twin-turbo engines require two VTA valves.

Pierburg Branded Diverter Valve, Turbo Mounted (e.g. C43, A250 etc)



- 1) Using a 5mm hex driver/key, undo the 3 screws holding the diverter - take care not to drop them!
- 2) 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:

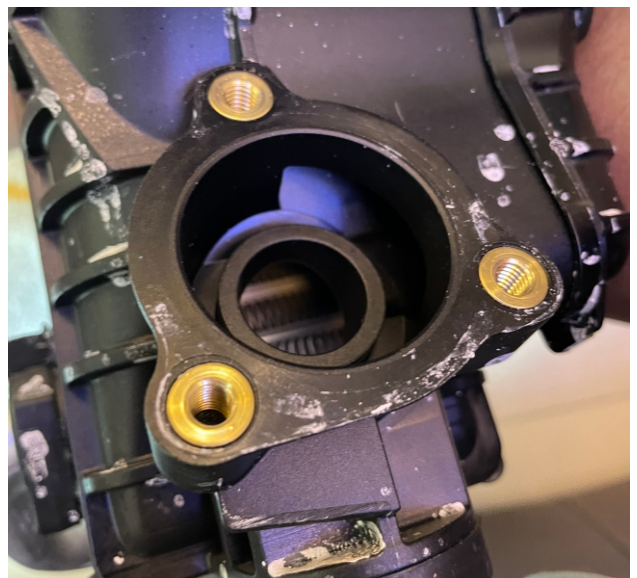


- 3) Remove the diverter valve from the car.

AMG Branded Diverter Valve, Intercooler Mounted (e.g. A35, C63S etc)



- 1) The screws on the AMG diverter require different drivers depending on the application. e.g. on the A35 a female Torx socket (E Torx) is required, whilst others use a male Torx bit. Make sure you have the correct driver before removing the 3 diverter screws.
- 2) Unclip the electrical connector (same method as shown opposite)
- 3) Remove the diverter valve/s from the car.



INSTALLING THE VTA

Before installation, ensure the two o-rings are installed in the VTA as shown opposite:

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 to 6-8Nm (4.4-6lbf-ft).



Make sure these two o-rings are installed

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.

Completed installation of one of two VTA on a C63S shown below:



Replace any hose clamps, screws, and engine cover/undertray in the reverse order of removal to complete the 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 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 some cases when lifting off, the ECU pulses the diverter signal rapidly, causing a “stuttering” blow-off sound. The same behaviour occurs with the factory valve, but it is more noticeable with the VTA because you can hear the venting behaviour of the valve.

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 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.