





PERFORMANCE WITHOUT COMPROMISE

# **OEM VALVE REMOVAL**

Installation of the GFB VTA is simply a matter of removing the factory diverter valve, and replacing it with the T9484.

However, the location of the factory diverter valve, the tools required, and the installation method does vary depending on the vehicle. Before installation, it is a good idea to first locate the factory diverter valve and identify the tools required to remove it. In most cases it is found high in the engine bay mounted on the plastic intercooler piping, as shown in two examples below:



1) Remove the electrical connector from the factory diverter valve. First slide the grey locking tab out, then push it down to unclip the connector:





2) Remove the 3 mounting screws. Depending on the vehicle, you may require a 5mm hex key, E5 socket (female Torx, shown below), or a regular hex socket.

3) The diverter valve can now be removed from the engine.



## **INSTALLATION CONTINUED**

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

5. Select the correct screws. The T9484 is supplied with two different sets of screws to ensure correct fitment as described below:

When screwing directly into plastic (shown below), use the supplied coarse-threaded screws. Take care not to strip the thread, tighten to 4Nm (3lbf-ft).



Where the diverter valve mount has metal threaded inserts as shown below, use the supplied fine-pitch screws (requires a 5mm hex key). Tighten to 6-8Nm (4.4-6lbf-ft).



6. 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.

7. Ensure all 3 screws are tightened to the torque recommended above, then use the supplied "plug-andplay" adaptor loom to connect the VTA to the vehicle's wiring loom.

Ensure the loom is routed and secured in a way that it is protected from abrasion, heat and vibration.



### 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 traction control intervenes, and in some cases during cruise at freeway speeds.

*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 <u>www.gfb.com.au/contact-us</u> 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.

