

# GFB VTA

## Installation Instructions

Part #T9489



+61 2 9534 0099

sales@gfb.com.au

www.gfb.com.au

facebook.com/GFBturbo

instagram.com/gofastbits



## TURBO MANAGEMENT SYSTEMS



PERFORMANCE WITHOUT COMPROMISE

## OEM VALVE REMOVAL

The T9489 VTA is for Toyota GR Yaris and Corolla applications, and can also be used on other Toyota/Lexus models such as C-HR and IS200t.

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.

### Transverse Engines (e.g Toyota C-HR with 8NR-FTS):

The OEM diverter valve is found on the front of the turbo, which is down low, between the engine and firewall. Access in this case is from underneath the car.

Use of a vehicle hoist, ramps or axle stands is required - do NOT work under a vehicle supported only by a jack.



### Longitudinal Engines (e.g Lexus IS200t with 8AR-FTS):

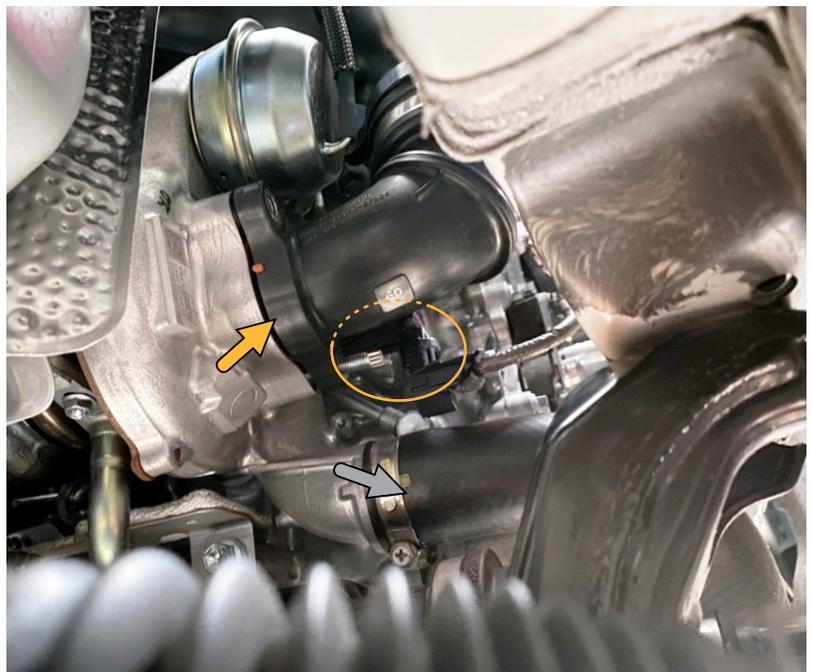
The OEM diverter valve is mounted on the front of the turbo, on the side that is closest to the engine. DV+ installation can usually be performed from above, but due to the tight location it is usually necessary to remove the turbo intake pipe, or use a flexible driver attachment to access the screws.



### GR Yaris and Corolla:

Use of a vehicle hoist, ramps or axle stands is required - do NOT work under a vehicle supported only by a jack.

The plastic turbo intake pipe (→) and rubber outlet hose (→) need to be removed to gain access to the OEM diverter valve.



## 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.

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 may turn on the solenoid to vent the diverter under conditions such as when traction or stability control activates, under certain cruise conditions, or even briefly during seemingly steady-state throttle. It is important to understand that the ECU determines diverter opening based off the movement of the throttle, not the accelerator pedal - the throttle does not always do what the pedal tells it to!

**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](http://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.