

GFB VTA

Installation Instructions

Part # T9430



+61 2 9534 0099

sales@gfb.com.au

www.gfb.com.au

facebook.com/GFBturbo

instagram.com/gofastbits



TURBO MANAGEMENT SYSTEMS



PERFORMANCE WITHOUT COMPROMISE

Installation

The VTA replaces the short plastic joiner connecting the turbo outlet to the charge pipe.

Begin by removing the main charge pipe. First unplug the connector from the pressure sensor so the wiring does not get damaged (⇨). There are 2 plastic clips (⇨) on each end of the charge pipe that must be spread apart whilst wiggling the pipe free. Remove the charge pipe and set aside.

Now remove the short joiner section from the turbo, again by spreading the 2 clips apart and wiggling it free. Carefully remove the o-rings from the joiner and install them onto the VTA.

Before re-installing the charge pipe and VTA, the manifold vacuum tap now needs to be installed to supply manifold pressure/vacuum to the VTA.

Follow the plastic vacuum hose shown (⇨) downwards to where it connects to the intake manifold.

This hose needs to be unclipped, which is done by sliding the tab in the direction shown (⇨). Unclip and pull it free from the metal barb.

The GFB manifold tap has two 1/16" NPT ports. One is for the VTA, and the other is an optional secondary port that you can use for a boost gauge or any other device that needs manifold reference. If you aren't using the second port, a plug is provided. Both port threads should be sealed with thread tape or sealant.

Push the supplied hose onto the manifold tap hose barb, then slide the manifold tap onto the metal barb on the intake manifold. Secure it with the supplied plastic clip as shown (⇨).

Push the plastic vacuum hose onto the end of the GFB manifold tap until it clicks into place (⇨).

Feed the supplied vacuum hose towards the location where the VTA will sit. It is neatest to run it towards the firewall, then under the turbo intake pipe.



Installation - Continued

Now the VTA and charge pipe can be assembled and fitted back onto the car.

Ensure the o-rings have a light coat of oil, then clip the VTA on to the charge pipe first (not the turbo first). It is important to orient the VTA so that the notch lines up with the corresponding arrow on the charge pipe (→), then press them together until the clips lock into place.

Now clip the charge pipe and VTA assembly into place, ensuring all clips are securely attached, and the wiring connector is plugged back onto the pressure sensor on the charge pipe.

Now connect the vacuum hose from the manifold tap to the port on the VTA. The hose should be trimmed to length so there is no excessive slack.



Spring Adjustment

The GFB VTA **DOES NOT** require spring pre-load adjustment to suit specific boost pressures. The pressure-balancing design means that whilst the throttle is open, the pressure on both sides of the piston is equal so it will stay shut under boost REGARDLESS of the spring setting or the boost pressure.

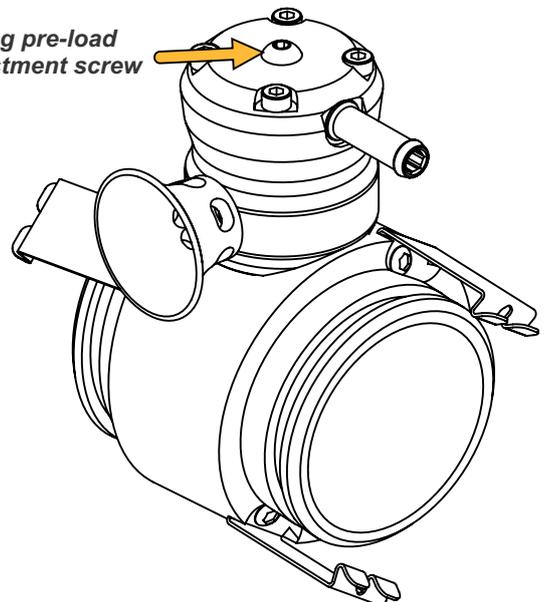
The spring pre-load on the VTA is used to adjust how easily the valve vents, and how long it vents for when lifting off the throttle.

A softer spring pre-load will allow the valve to vent easily, and the sound will trail on for a longer time. A firmer pre-load will mean you need to drive the car harder before you start to hear the valve vent, and the venting duration will be shorter.

The screw in the centre of the VTA's cap is the spring pre-load screw. To change the spring pre-load, you simply swap the screw for a longer or shorter one. The VTA comes supplied with 4 different length screws, the shortest of which is installed in the valve from the factory. The longer the screw, the firmer the spring pre-load.

Take the car for a test drive to decide if you prefer a different pre-load screw. It is generally best to choose a screw that allows you to drive the car sedately without hearing the valve vent.

Spring pre-load adjustment screw



This product is intended for racing use only, and it is the owner's responsibility to be aware of the legalities of fitting this product in his or her state/territory regarding noise, emissions and vehicle modifications.

GFB products are engineered for best performance, however incorrect use or modification of factory systems may cause damage to or reduce the longevity of the engine/drive-train components.

GFB recommends that only qualified motor engineers fit this product. Warranty is for the period of one year from the date of purchase and is 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.