

GFB DV+

Installation Instructions

Part #T9357



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GFB
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TURBO MANAGEMENT SYSTEMS



PERFORMANCE WITHOUT COMPROMISE

IMPORTANT! All GFB pistons are checked for fitment and tolerance before shipment. Please do not drop the GFB piston onto a hard surface as this may cause (invisible) damage that could result in boost leaks or sticking.

WICHTIG! Alle Kolben wurden vor Versand auf Freigängigkeit geprüft. Bitte achten Sie bei der Montage darauf, dass *der Kolben nicht auf den Boden fällt*, da dieser schon bei kleinster (evtl. Nicht sichtbarer) Beschädigung zur Undichtigkeit oder Kolbenklemmen führen kann!

INSTALLATION

Note that the DV+ part # T9357 is used on a variety of models and therefore the location of the factory diverter valve may differ, but the procedure is the same regardless.

Begin by locating the factory diverter valve, which will be found mounted to the turbo compressor cover by 3 screws. Disconnect the electrical connector and remove the 3 screws.

With the factory diverter valve removed from the car, pull the piston out of the diverter body, then remove the spring and set aside.

Remove the yellow o-ring from the factory diverter. This should be done carefully to avoid damage, as the o-ring will be re-used on the DV+.

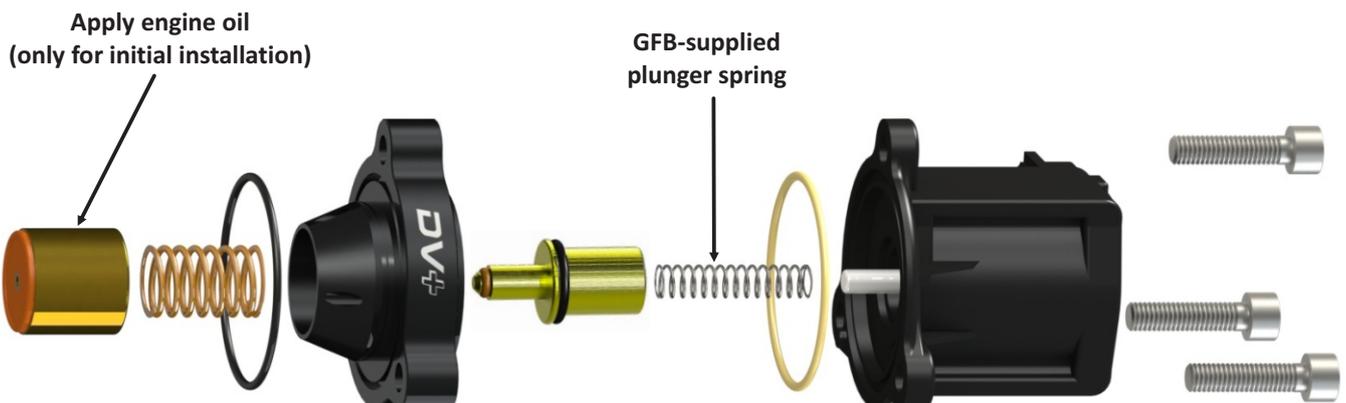


CAREFULLY pry the piston sleeve out of the diverter body, using the inside lip near the blue seal or the lip where the o-ring was. Lever it gently and work your way around so it pops out evenly.

Note that this piece is fragile and can break easily (as you can see in the photo) - if this happens, you'll still be able to carry on with the installation, but you won't be able to re-fit the factory piston.



Assemble the GFB parts onto the factory solenoid body as shown in the exploded view below, making sure to use the GFB-supplied plunger spring, and the yellow o-ring removed from the factory valve. Apply some engine oil to the piston during this process. Note that regular re-lubrication is NOT required.



INSTALLATION - CONTINUED

Install the DV+ assembly onto the turbo, making sure to hold the piston so it doesn't fall out during this process. Don't forget to use the supplied longer screws.

Clip the electrical connector back on, then re-install the turbo intake pipe and any other parts that have been removed during the installation process.



TECH SUPPORT

Just installed your shiny new DV+ 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.

WHAT TO EXPECT FROM YOUR DV+

Sound:

The DV+ is not a blow-off valve and is not designed to make louder or different sounds. It fully recirculates the vented air to the turbo intake in the same way as the OEM diverter. If you hear a loud fluttering sound when lifting off the throttle from full boost, that indicates the valve is not opening correctly and you should contact our tech support using the details on the previous page.

Maintenance:

There are many forum discussions on this topic that often draw the incorrect conclusion that you need to frequently remove the DV+ and oil the piston. The fact is that periodic maintenance or re-lubrication of the DV+ for correct operation or longevity is NOT required!

Similar to an engine breaking in, once the DV+ has been used for about a week the microscopic machining high spots are flattened and smoothed, after which it will continue operation almost indefinitely without wear, irrespective of lubrication.

Longevity:

The DV+ will outlast any version of the factory diverter, especially on tuned engines. If you've ever replaced a factory diverter, chances are it won't be your last. Fitting a DV+ is good insurance and pays for itself after one or two factory diverter replacements.

Boost holding:

There are a number of revisions of factory diverter valves, each with their shortcomings. The diaphragm types typically seal well, until they begin to fail - which is almost assured on a tuned engine. The piston-type revision D and later model C valves are not as fragile, but their ability to seal ranges dramatically from average to terrible, even when brand new.

The DV+ will seal properly even up to 50psi, ensuring all of your hard-earned boost gets to the engine. Of course, the performance benefits you notice from the driver's seat will depend entirely on the condition of the factory diverter you replace. For example, if your factory valve is not (yet) leaking significantly, there will be no change to your peak boost.

However, if your factory diverter is leaking only a small amount, a DV+ may show the same peak boost, but with an improvement in the amount of boost held to redline. If your factory valve is leaking significantly, fitting the DV+ will result in higher peak boost pressure, as well as less drop-off at high RPM.

Throttle response:

When using the DV+ with the main spring installed, it will preserve as much boost pressure as possible when the throttle is lifted. This means that when you lift off to shift, or when using slight on-off-on throttle modulation, the DV+ can help recover boost faster.

What the DV+ can't do however, is create more boost, or cause the turbo to spool faster. Quite simply, whatever boost the turbo makes, the DV+ will deliver to the engine, and it will also preserve as much boost pressure as possible during a brief throttle lift-off, which is where the faster boost recovery comes from. If there is no boost to preserve, or if boost still drops off at high RPM, that is simply highlighting the limitations of the turbo.