GFB Deceptor Pro II

Part # T9519

WARNING: If you are not experienced in automotive wiring, GFB recommendeds that this installation is carried out by a professional. Irreversible damage could occur if wired incorrectly, which is not covered by warranty.

Do not manually rotate the internal sleeve on the valve, always apply power and use the controller to change the venting bias. DO NOT put fingers or foreign objects into the valve's ports. Doing so may result in personal injury or damage to the blow-off valve.

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Configuring Your Valve

The T9519 Deceptor Pro II kit is intended for custom installations where the valve is to be rigidly mounted to your aluminium or stainless steel intercooler piping using a v-clamp system.

PLEASE NOTE: The valve is supplied without a recirc outlet or weld-on flange. To finish the installation, you will need to purchase the appropriate weld-on flange to suit your intercooler pipe material, and an outlet fitting to suit your recirc hose internal diameter.

Weld on flanges available:

Part #5352 - 6061 Aluminium, suits aluminium intercooler piping Part # 5353 - 304 Stainless Steel, suits steel or stainless steel intercooler piping

Outlet sizes available:



Part # 5220



Part # 5225





Part # 5230



Part # 5233



Part # 5238

Installing the Control Box

Connect the red wire to a +12V switched power source inside the cabin. For safety, it is recommended to use a 5A (max) fused supply. The Deceptor Pro II draws approx. 1A when adjusting the position.

Connect the black wire to ground, most commonly this is a bolt on the chassis.

Part # 5227

Find a suitable mounting location for the control box. Ensure both mating surfaces are clean and dry, then secure the control box using the supplied double-sided tape. Press hard and hold for 30 seconds.

At this point it is worth testing the wiring before continuing. Plug the Deceptor Pro II valve cable into the wiring loom as shown, then turn on the ignition. Please read the *Adjusting the Sound* section, then confirm correct operation of the control box and valve before proceeding with the installation.



Feed the primary servo cable through the firewall into the engine bay. Ensure that the cable is protected where is passes through the firewall to prevent shorting out.

Now proceed with the valve installation.

Valve Installation

1) Find a suitable location for the valve on the intercooler piping between the turbo outlet and the throttle body.

NOTE: it is possible to mount the valve on either side of the intercooler, there is no measurable performance difference between either location.

2) Ensure you have the correct v-clamp flange to suit your intercooler pipe material, then weld it into place.



3) Clamp the Deceptor Pro II onto the flange, then connect the recirc hose.

4) Connect the vacuum nipple on the top of the Deceptor Pro II to a suitable manifold vacuum source (after the throttle body), using vacuum hose of at least 4mm I.D. It is preferable to use a single, dedicated vacuum source for the valve, with a hose as short as practical to ensure rapid response from your GFB BOV. DO NOT CONNECT THE BOV VACUUM HOSE TO BOOST CONTROL, FUEL PRESSURE REGULATOR OR BRAKE BOOSTER HOSES.

5) If necessary, the cap can be rotated so the vacuum nipple points in a different direction. Simply unscrew the 4 cap screws and rotate the cap to a new position, then reinstall the screws.

Adjusting the Spring Pre-Load

Scan the QR code for a video tutorial of setting the spring pre-load:



The spring pre-load DOES NOT need to be adjusted to suit different boost pressure. All GFB valves will stay shut under full throttle conditions regardless of boost pressure or spring pre-load.

Rather, the spring pre-load affects how easily the valve opens when you lift the throttle, and how long it stays open when it vents.

The screw in the centre of the head is the spring adjuster. Use the supplied 5mm hex key to make adjustments.

The softest spring setting is achieved when the top of the adjustment screw is 3mm above the head of the valve (shown opposite). Do not exceed this setting as you run the risk of the screw working loose and falling out.



The following steps will guide you to the optimum spring range. For cars with a MAF sensor, it is important to find the correct setting to prevent idling issues. There is no magic setting that suits every car, and some cars may be happy within a large range of spring adjustment, others may need a little more experimentation to find their happy place.

Do not be afraid to experiment with the spring pre-load adjustment, you can't cause any damage by doing so, and getting the setting right to suit your car can help to optimise throttle response.

Put simply, if the car has idle or stalling issues, backfires or hesitates, the spring is too soft. If fluttering is heard when lifting off from medium to high boost, the spring is too hard.

- Set the spring to the softest setting, and adjust the venting bias to at least 50% atmosphere so you can hear when the valve vents and visually observe the movement of the piston during this process
- With the engine warm and A/C off, give it a good hard rev. The valve should blow off with a short "whoosh"
- If the engine stumbles, stalls, or generally struggles to return smoothly to idle, it means the valve is venting too long. Turn the adjustment screw clockwise one turn at a time until the engine returns smoothly to idle after revving
- Now take the car for a drive. Accelerate enough to build some boost, then lift off and clutch in, letting the engine come back to idle. This is the driving condition most likely to cause the idle to dip, so make any further increases in spring pre-load to ensure no idle issues under these conditions
- If the spring pre-load alone is not able to ensure smooth idle, reduce the venting bias so that more air is recirculated (see next page)
- If a loud flutter is heard when lifting off sharply after accelerating hard at high RPM, wind the adjustment screw in the "-" direction one turn at a time until the noise disappears. Note that it is not uncommon to hear a slight fluttering at low RPM under certain conditions. This is a result of the different way in which this valve operates compared to the factory unit, and is perfectly normal and is not detrimental

Adjusting the Sound

The control box dial controls the patented venting bias adjustment system of the Deceptor Pro II BOV. Turning the dial fully anticlockwise sets the valve to 100% recirc for silent operation, full clockwise results in 100% atmosphere venting for maximum sound, and any ratio is possible between these limits.

The control box features a "sleep" mode that dims the dial lighting after approximately 10 seconds. This reduces power consumption and also prevents accidental adjustment of the valve position. Simply press the dial to wake before making adjustments.

The control box also has a range limiting feature. This can be used to limit the maximum atmosphere-venting bias position of the Deceptor Pro valve. To use this feature, set the dial to the position that you want as your new maximum, then press and hold the dial until the light flashes. Now when you move the dial to the maximum position, the valve will only open as far as the position which you have just set as your new limit.

To reset the range to maximum again, turn the dial fully clockwise, then press and hold the dial.

If you're looking for a different sound, the GFB Whistling trumpet (part #5702) can be purchased separately. It changes the venting sound from a "whoosh" to a high-pitch whistle.

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.

TECH SUPPORT:

We want you to get the best advice, first time. That's why our engineers are available to answer any technical questions you may have. Head to <u>www.gfb.com.au/contact-us</u> to get in touch.

Push to activate, turn to adjust



