



## Installing the Blow-Off Valves

Make sure to fit the valves on the correct side of the engine bay. On both valves, the trumpet and servo motor should point downwards, and the writing on the cap should be upright.

1) Begin by removing the two factory diverter valves using a 12mm socket or wrench to remove the mounting bolts, then removing the vacuum and recirc hoses. The factory gaskets are NOT re-used, as the Deceptor Pro II valves feature an o-ring embedded into the flange to seal the join.

2) To make the next step easier, loosen the hose clamps on either end of the metal section of intercooler pipe, then remove or rotate the pipe to gain access to the flange – it's a good idea to stuff a rag into the open end of the intercooler to prevent anything falling in during installation.



3) Screw the short end of one of the supplied threaded studs into the lower hole of the valve mounting flange as shown opposite ( → ).

4) Fit the appropriate Deceptor Pro II valve (for the side you're working on) over the stud and onto the flange. Lift it back up just far enough to slip the supplied nut ( → ) under the servo motor, then tighten the nut by hand for now (note the image shows a gasket, however this is not supplied or required as the o-ring in the BOV flange now performs this task).



5) Now thread one of the factory bolts into the other hole, then tighten both fasteners fully.

6) Re-fit the section of intercooler pipe, and tighten both hose clamps. Push the recirc and vacuum hoses onto the Deceptor Pro II, then re-fit both the hose clamps.

7) Connect the valve's servo motor plug to the corresponding loom from the controller (i.e. connect the servo plug with the white band to the connector with the white band), and make sure the cable is securely routed through the engine bay away from sources of heat and abrasion.



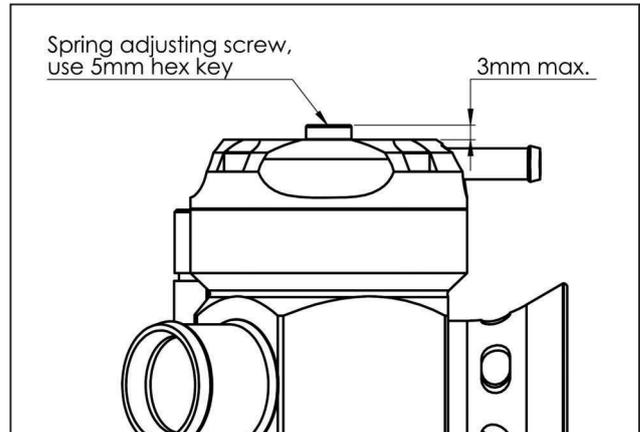
## Adjusting the Spring Pre-Load

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.

The spring pre-load affects how easily the valve opens when you lift the throttle, and how long it stays open when it vents. Adjusting the spring is a simple matter of ensuring the valve opens enough to release the air, but not long enough to cause idling problems. The guide below will walk you through the steps involved.

The screw in the centre of the cap is the spring adjuster, use the supplied 5mm hex key for adjustments.

- Set the spring to the softest setting (no more than 3mm above the head of the valve as shown), and set the venting bias (via the electronic controller) to at least 50% atmosphere venting so you can see the piston through the trumpet.
- Start the car and let it warm up for a few minutes, and ensure the A/C is off. If the piston is visibly hanging open, increase the spring pre-load until it just closes.
- Now rev the engine once and watch the piston - **WARNING: Keep your face away from the trumpet opening when revving the engine. View the piston from an angle away from the blast of air. The piston should lift a little and vent with a "whoosh", then close slowly and smoothly (the GTR will prevent you from revving the engine too hard in neutral, so it will never generate enough boost to open the valves fully when free revving).**
- If the piston stays open too long and does not close before the revs drop back to idle, the engine may "stumble". If this happens, wind the adjustment screw in the "+" direction one turn at a time until the engine returns smoothly to idle after revving.
- For the final fine-tune, take the car for a drive. Watch the tacho as you pull up to a stop - if the revs dip below idle and then rise again, tighten the spring another 1-2 turns.



## Adjusting the Sound

The control box dial controls the patented venting bias adjustment system of the Deceptor Pro II BOVs. Turning the dial fully anti-clockwise sets the valves 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.

To make position adjustments, wake the unit up by pressing the dial briefly (lighting will brighten), at which point the valves will respond to dial position adjustments. The unit will return to sleep mode after 10 seconds.



**Push to activate, turn to adjust**

## Adjusting the Sound - Continued

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 valves. 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 valves 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.

You can also purchase whistling trumpets (part # 5702, two required) to change the venting sound from a "whoosh" to a high-pitch whistle.



## Leak Testing

If you or your tuner pressure test your car's intake system as part of routine maintenance, or to troubleshoot a problem, please note that it is common to detect a false leak from a Deceptor Pro II BOV (or indeed any type of dual-port BOV), which does not necessarily indicate a fault or boost leak. This is due to the test method (even when done "correctly") and is explained in detail in the tech articles and video below:

[www.gfb.com.au/tech/tech-articles/15-smoke-testing-boost-leaks](http://www.gfb.com.au/tech/tech-articles/15-smoke-testing-boost-leaks)  
[www.gfb.com.au/images/tech-articles/GFB\\_DP\\_Diverter%20leak.pdf](http://www.gfb.com.au/images/tech-articles/GFB_DP_Diverter%20leak.pdf)

**WARNING:** GFB recommends that only qualified motor engineers fit this product. 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 Limited Lifetime Warranty:**

We live in a throw-away society, conditioned by cheap products and built-in obsolescence to expect eventual failure and discard something when it stops working or is superseded. However, pride in workmanship and our commitment to quality means that when we put our name to something, we are also staking our reputation on it.

That is 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.