

GFB Deceptor Pro II

Part # T9514

WARNING: If you are not experienced in automotive wiring, GFB recommends 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.

+61 2 9534 0099

sales@gfb.com.au

www.gfb.com.au

facebook.com/GFBturbo

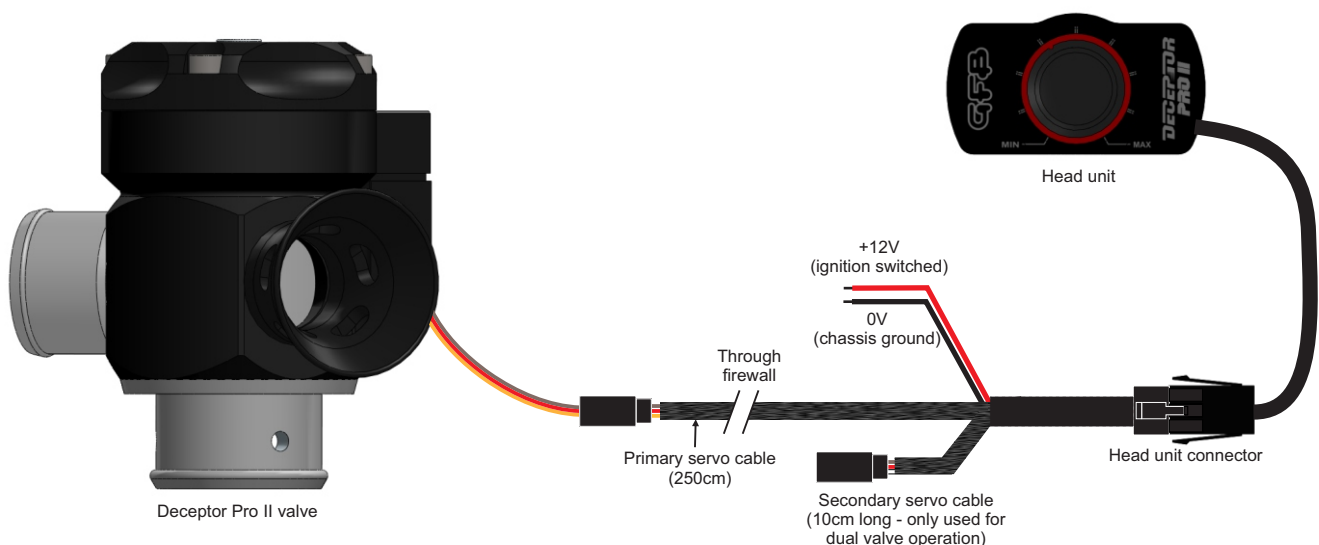
Installing the Control Box

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.

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 the ignition on. Please read the **Adjusting the Sound** section, then confirm correct operation of the control box and valve before proceeding with the installation.

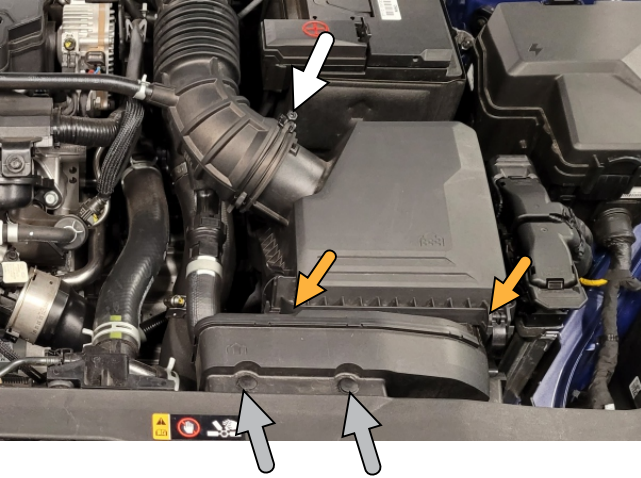


Feed the primary servo cable through the firewall into the engine bay. Ensure that the cable is protected where it passes through the firewall to prevent shorting out.

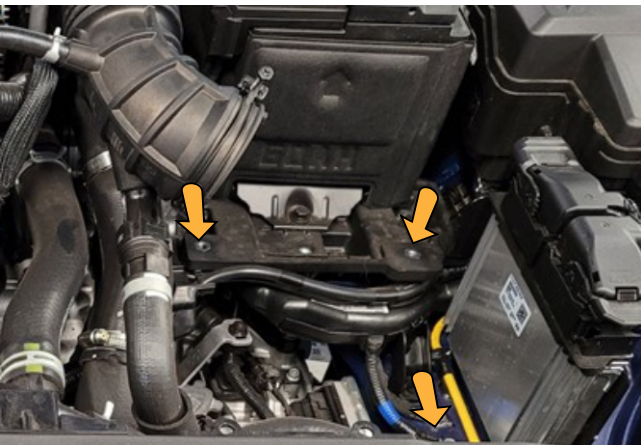
Now proceed with the blow-off valve installation.

Installation

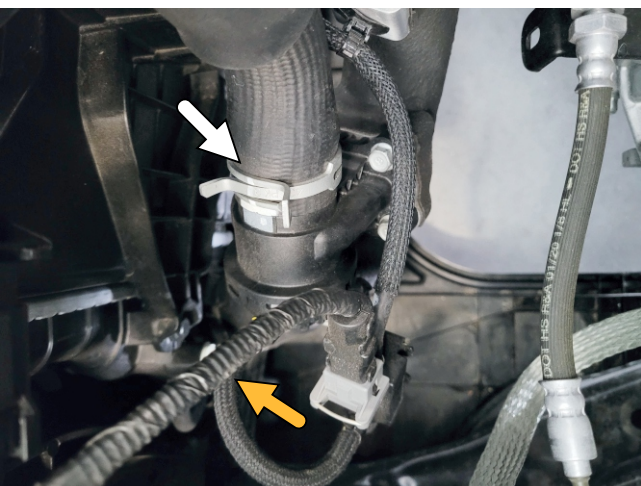
1) Remove Airbox: Loosen the intake hose clamp (⇨), then unclip and remove the airbox lid and filter (⇨):



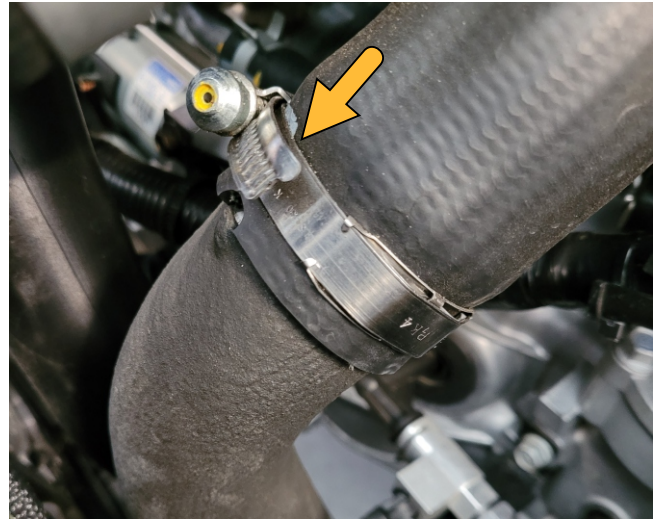
2) Remove the two plastic clips on the intake, followed by the 3 bolts that hold the lower half of the airbox (⇨). Carefully remove it from the car and set aside:



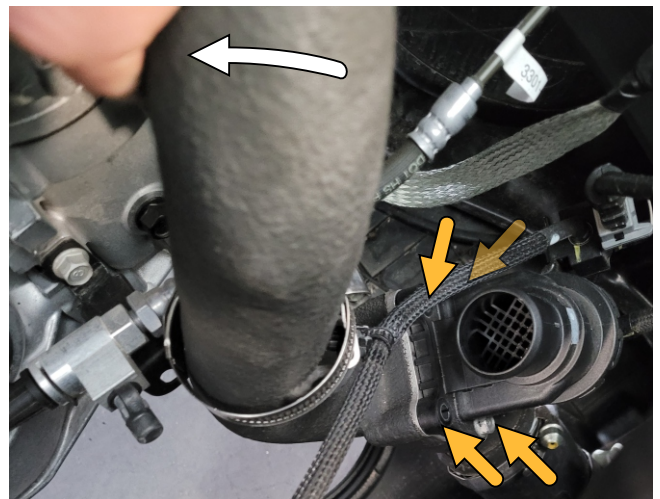
3) Remove the recirc hose (⇨) and vacuum hose (⇨) from the factory valve:



4) Loosen the top clamp (⇨) on the metal intercooler pipe, then pull it free of the hose:



5) Bend the top of the pipe towards the engine (⇨) to allow access to remove the four screws on the factory diverter valve (⇨):



6) Install the GFB valve using the supplied screws and shortened 5mm hex key. It's easiest to start with the screw beneath the electric motor:



- 7) Fit the recirc and vacuum hoses and their clamps to the Deceptor Pro II valve.
- 8) Push the top of the metal intercooler pipe back into its hose, and tighten the clamp.
- 9) Connect the cable from the Deceptor Pro II to the wiring loom, and secure to ensure the loom cannot rub or touch hot or moving parts in the engine bay.
- 10) Re-install the airbox, intake hose, and intake snorkel in the reverse order of removal.



Adjusting the Spring Pre-Load

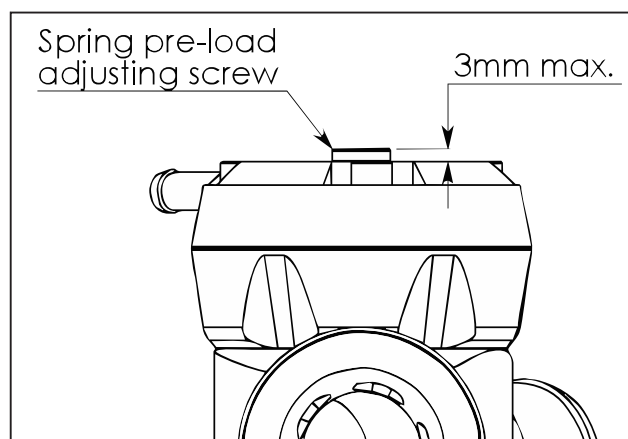
The spring pre-load **DOES NOT** need to be adjusted to suit different boost pressure. **All GFB valves will stay shut** under full throttle conditions **regardless** of boost pressure or spring pre-load.

Because Hyundai uses an ECU-controlled solenoid valve to switch the top port of the BOV from boost to vacuum when it requires it to open, the conditions under which the BOV vents are largely determined by the ECU. However, the duration of the sound and how easily it blows off is controlled by the spring pre-load.

The ECU typically triggers the solenoid immediately on throttle lift off (even if the throttle is only slightly lifted), but usually only above a certain RPM and load. Therefore, the Deceptor Pro II may appear to vent at odd times, or at low load it may appear not to vent at all, this is normal and is determined by the ECU.

Since there is no MAF sensor on these cars, the ECU is completely unaffected by atmosphere venting or spring pre-load, and therefore the spring pre-load can simply be set to your preference to control how easily the valve blows off when you lift off the throttle.

The screw in the centre of the Deceptor Pro II cap is the spring adjuster, which requires the supplied 5mm hex key for adjustments. The softest spring setting is achieved when the top of the adjustment screw is 3mm above the head of the valve as shown opposite. Do not set the screw more than 3mm above the head.



Start by setting the venting bias adjustment to full atmosphere (so you can hear the valve venting during setup), then set the spring pre-load screw level with the top of the valve.

Take the car for a drive, and note how easily the valve vents when you lift off. Making the spring softer will allow the valve to open easier and vent longer, and increasing the pre-load means you will need to drive the car harder (i.e. more boost) before you start to hear the valve venting, and the blow-off sound will be shorter in duration.

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.



Push to activate, turn to adjust

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.

Do not be afraid to experiment with the spring and sound settings, as the car’s air/fuel ratio cannot be affected, nor is it possible to damage the engine or turbo with BOV adjustments.

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 www.gfb.com.au/contact-us to get in touch.