

GFB DECEPTOR PRO II 179507

INSTRUCTION MANUAL



GFB DECEPTOR PRO II

Thank you for purchasing the GFB Deceptor Pro II blow off valve. We highly recommend that you familiarize yourself with the operation and adjustments of the Deceptor Pro II before installing it.

Included in the T9507 kit:

- Deceptor Pro II blow-off valve
- Electronic in-car volume controller
- Vacuum hose

- Double-sided mounting tape
- · Wiring loom

INSTRALLING THE CONTROL BOX

1) Test the unit before installation by connecting the Deceptor Pro II's plug to the in-car controller. Connect the red wire to the positive terminal of your car's battery or a 12V source. Connect the black wire to the negative terminal. Upon initial power-up, the unit will perform an open/close cycle before reverting to the position indicated on the controller dial. By turning the dial and watching through one of the valve's venting outlets, you will see the inner sleeve move to open or close each of the venting ports alternately, which is how the venting volume is adjusted.

WARNING: Do not manually rotate the noise adjustment, always apply power and use the controller to change the venting bias. When testing your Deceptor Pro II, DO NOT put fingers or foreign objects through the trumpet or plumb back ports. Doing so may result in personal injury or damage to the blow-off valve.

- 2) Find a suitable location on or around the dashboard, steering column or instrument binnacle for your in-car volume controller. Clean both mating surfaces with Methylated Spirits or similar cleaner and secure the controller using the supplied double-sided tape. Press hard and hold the unit for about 30 seconds, and note that it takes up to 24 hours for the tape to develop a strong bond.
- 3) Using a multi-meter or voltmeter, find a suitable power wire that reads 12V only when the ignition is turned on. Solder the end of the volume controller positive (red) wire to the 12V source. It is possible to use a wire tap or crimp instead, but soldering is the most reliable joint. Make sure to insulate the joint properly.
- 4) Find a suitable bolt on the body/chassis and connect the ground (black) wire to it.
- 5) At this point you should plug the Deceptor Pro II back into the in-car volume controller, and test its operation again to ensure the electrical connections are good. Make sure the unit powers on and off with the ignition.
- 6) Unplug the Deceptor Pro II and pass the controller's extension lead through the firewall into the engine bay. Often there is an existing grommet that can be used for this purpose. In any case, it is important to ensure that the lead is protected where it passes through the firewall to prevent wear or damage.

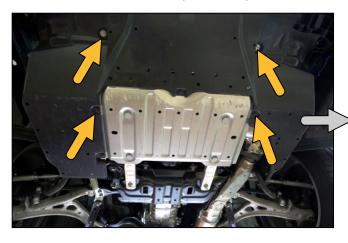
INSTRALLING THE VALVE

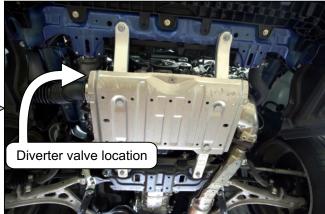
Note that installing the Respons T9007 must be done from underneath the car, which requires raising the car on ramps or axle supports, or a hoist.

WARNING:

NEVER work under a car supported only with a jack.

1) Remove the plastic section of the under tray by popping the plastic clips and the two bolts. Note that there are more plastic clips than indicated by the arrows.

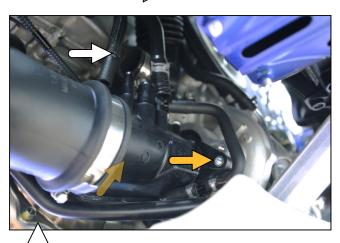




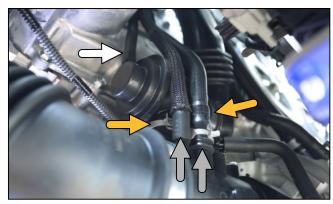
2) Remove the two hoses from in front of the diverter to gain access to the clamps behind.

Remove the vacuum hose from the top of the diverter valve.

Loosen the two hose clamps that retain the diverter valve.



- 4) TRemove the diverter vacuum hose from the car and replace with the hose supplied with the GFB Respons TMS kit.
- 5) Install the Deceptor Pro II valve, then re-connect the vacuum hose, the two hoses in front of the valve, and the turbo intake pipe, making sure to replace and tighten all bolts and hose clamps. Connect the cable to the control box extension loom and make sure to bundle excess cable securely.



3) Using a 10mm socket, remove the two bolts that hold the turbo intake pipe onto the turbo.

Pull down on the pipe and push up on the diverter valve simultaneously to pop it out of the intake pipe. Then pull the diverter valve out of the vertical charge pipe and set aside.



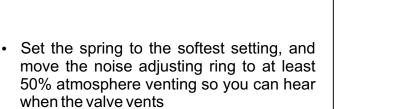
adjustring trite spring preload

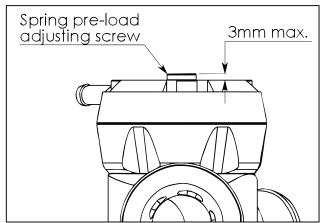
Contrary to popular belief, the spring pre-load **DOES NOT need to be adjusted to suit different boost pressure**. The Deceptor Pro II will stay shut under full throttle conditions regardless of boost pressure or spring pre-load.

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. 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 screw in the centre of the head is the spring adjuster. Use the supplied 5mm hex key to make adjustments. It is easiest to do this from above the valve by removing the intake air snorkel at the front of the engine bay, so you can reach down to adjust it.

The softest spring setting is achieved when the top of the adjustment screw is 3mm above the head of the valve (figure 4). Do not set the screw more than 3mm above the head.





- Start the car and let it warm up. Make sure the A/C is off
- Give the engine a good hard rev. The valve should blow off, then close before the revs drop back down to idle.
- If the valve stays open and blows off for too long, and is still open when the revs drop back to idle, the engine will "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 1-2 turns
- If a loud flutter is heard when lifting off sharply after accelerating hard above 3500RPM, 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 to the turbo

A video example of setting up the spring pre-load can be seen at: http://www.youtube.com/watch?v=iqQR5WUF9lc

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. What you are looking for is a setting somewhere in between too soft (which can cause bogging, poor idle, or backfiring), and too hard (which will cause significant fluttering).

BOUDE THE SOUND

When powered up the volume dial rim will glow red, and will automatically dim 3 seconds after the last adjustment to reduce unnecessary glare. The position of the dial is directly proportional the venting bias - turning the dial fully anti-clockwise sets the valve to 100% recirc, fully clockwise results in 100% atmosphere venting, and any ratio is possible in between.

The controller also features a program button on the rear of the casing. This can be used to limit the range of the atmosphere-venting bias of the Deceptor Pro II. For example, if you find through experimentation that your car does not like more than 60% atmosphere venting, you can program the controller so full travel on the dial gives you only 60% movement at the valve.

To use this feature, set the dial in a position that you want as your maximum atmosphere-venting limit, then press and hold the program button until the dial flashes. The unit will now record this position as the maximum atmosphere-venting limit. Now when you turn the dial fully clockwise, the Deceptor Pro II will only open as far as the point which you have just set. For example, if you pushed the button with the dial set in the middle (50% atmosphere venting), full travel of the dial will now move the valve from full recirc to 50% atmosphere-venting only.

Every time the button is pushed and held, the position of the dial will determine the maximum venting bias of your Deceptor Pro. So to re-set the controller to allow the full range again, simply turn the dial fully clockwise and push the button.

Typically, most un-modified engines will allow 100% atmosphere venting with no problems. However, some combinations of modifications can result in backfiring if high proportion of atmosphere venting is used, in which case the solution is simply to dial back the amount of air vented to atmosphere until the problem is resolved – this is one of the key benefits of the venting bias adjustment feature.

Do not be afraid to experiment with the spring and noise settings, no harm will come to the engine if wrong setting is used.

Maintenance

GFB blow-off valves are designed to be as maintenance-free as possible. In most cars the small amount of crankcase and rocker-cover oil vapor that is directed into the intake system is enough to keep the piston well lubricated indefinitely. However, if you notice the sound of the valve changing over time (e.g. slow response time, intermittent operation), or if you can see that the piston is not moving smoothly, it may require a clean and re-lube.

Cleaning Procedure: Remove the four screws holding on the cap, taking care as the spring will try to push the cap off as the last screw is removed. Remove the spring and the brass piston, and wipe any grime from the inside of the valve and the piston with a rag. Apply normal engine oil to the piston and the inside of the bore, and re-assemble.

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.