



GrimmSpeed Manual Boost Controller

Installation Instructions

Manual 300016 RevA



All GrimmSpeed products are intended for Off-Road use only.

Warning (read before installing):

Before moving forward with the setups outlined below, insure that you have the experience and confidence to properly tune your car. If not, please consult a tuning professional. Without a proper tune you can overboost and damage your engine.

Under no circumstances is the GrimmSpeed Manual Boost Controller to be used in any applications where failure of the valve to operate as intended could jeopardize the safety of the operator or any other person or property.

NOTE: You **MUST** run a boost gauge to properly tune the Manual Boost Controller. Raising your boost level may destroy your engine if you raise it too high without proper tuning.

A. Basics

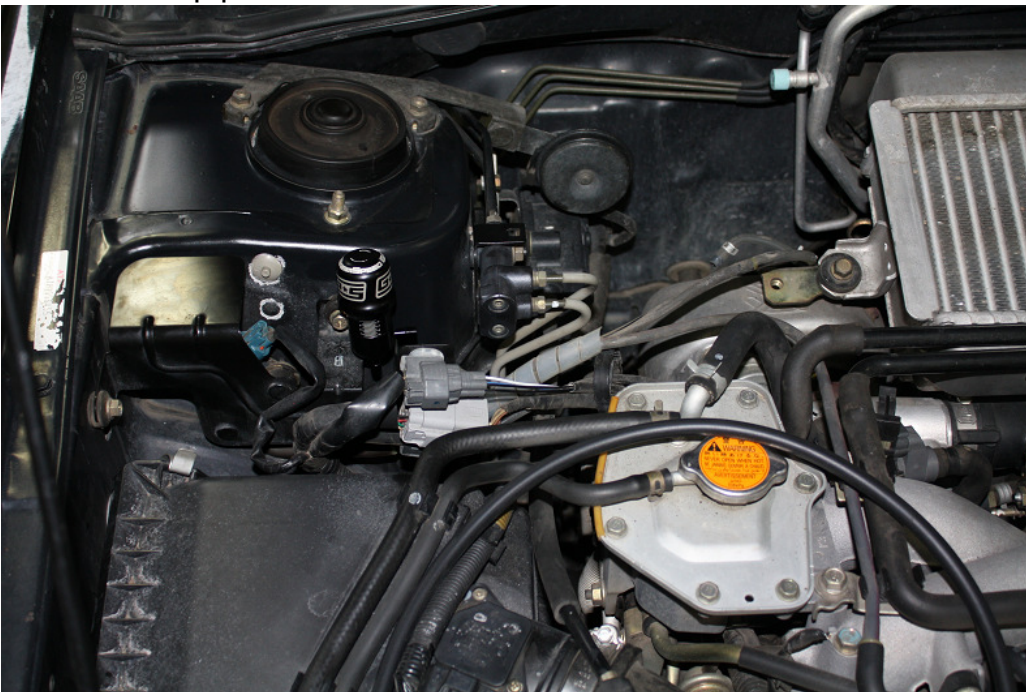
Our boost controller works by interrupting the pressure seen by the wastegate. If you were running no boost controller and your turbo was outputting 15psi then your wastegate would also be seeing 15psi. By placing our boost controller in between the pressure source and wastegate you are able to limit the amount of pressure that makes its way to the wastegate, thus you are able to efficiently increase boost pressure. Many OEM wastegates are only able to handle low psi, however with our boost controller, your vehicle will be able to produce much higher boost levels than your wastegate would normally allow.

B. Installation

1. Attach supplied mounting bracket to manual boost controller using a 3mm hex wrench.



2. Find a proper location in the engine bay to mount the manual boost controller. You can either use the included bolt and nut (for through hole mounting), reuse a factory bolt, or use a zip tie to attach the boost controller. Be sure to mount it away from anything that would rub against it and make sure it is not mounted too close to an exhaust manifold or other hot pipe.



3. You will now remove all OEM boost controlling vacuum lines. (This includes removing any restrictive pills). If the vehicle uses a boost control solenoid, we recommend leaving the electrical connector plugged in to avoid check engine lights but you will still remove the vacuum lines that are connected to it.

4. Remove hose from wastegate actuator.



5. And remove the hose from the pressure side of the turbo.



6. Connect the pressure source (compressor side of turbo, intake manifold, etc) to the inlet on the GrimmSpeed manual boost controller using the supplied vacuum line. The inlet side is at the bottom of the manual boost controller. See Fig. A. Tighten hose ends with zip ties.

7. If you need to reduce the size of the hose coming from the manual boost controller, utilize the included reducer fittings.



8. Connect the wastegate actuator to the outlet of the manual boost controller with the supplied vacuum line. The outlet side of the manual boost controller is on the side of the boost controller. See Fig. A. Tighten hose ends with supplied zip ties.
9. View Fig. A below to ensure you have installed the vacuum lines correctly.

Fig. A



10. Turn adjustment knob **CLOCKWISE** to **INCREASE** boost pressure. Turn adjustment knob **COUNTER-CLOCKWISE** to **DECREASE** boost pressure (see end of adjuster for correct rotation direction). We advise starting at a lower boost pressure and then working your way up to your desired target boost pressure. Each click equals approximately one quarter of a psi. Each rotation equals one line on the scale and there are 16 clicks per rotation.

