



AGP Wastegate Actuator Installation Instructions for SRT-4 – For WGA shipped after 7/29/13
NOTE: IT IS COMPLETELY NORMAL FOR THE ARM OF THE WASTEGATE TO BE LOOSE AND ROTATE AROUND AND BACK AND FORTH. IT IS NOT BROKEN.

As of 7/29/13, we now pre-install an 8psi spring in the wastegate actuator which is the optimal spring rate when tuning your boost via flash device like a Diablosport or SCT. We still include the 12psi spring and the 19psi spring in the box.

Choosing your spring rate:

8psi spring (already installed) – Use the standard wastegate spring if you desire to use the factory PCM's solenoid to control boost. If you choose the 8psi spring setup, you install the wastegate exactly the same way as the factory wastegate. There is no need to change any vacuum lines.

12psi spring – Install the 12psi spring in the wastegate assembly (shown below) if you are running a stock turbo and you do not want to run your car on PCM controlled boost. If you want to eliminate your boost solenoid, you would choose this spring rate. This requires the re-running of your vacuum lines to eliminate the “green line”, which is detailed on page 2 of this instruction sheet.

19psi spring – Install the 19psi spring in the wastegate assembly (shown below) if you are running an upgraded stock turbo and you want to run it as balls out as possible. Most people will never need to run this spring, however we include it just in case. Additionally, you are probably not running PCM controlled boost so you will need to re-route some vacuum lines as outlined on page 2.

Changing your spring:

With a pair of good snap ring pliers and a bench vice, swapping springs will take you less than one minute. If you don't have snap ring pliers or a vice, go buy them now. Those are always good tools to have around the garage.



1. Place the assembly in the vice and tighten the vice ever so slightly until you notice the tension is taken off of the snap ring.
2. Insert the snap ring pliers on to the snap ring, squeeze the pliers and work the snap ring off its groove.
3. Once the snap ring is out of the way, loosen the vice slowly and you will see it separate in two pieces. Make sure you have the wastegate in the vice square, otherwise you may damage the wastegate or it may shoot out of the vice.
4. As you separate the two halves, you will pull the spring out and replace the spring with the desired one. You will be able to tell the difference in all three springs just by looking at them. Obviously the 8psi spring is the thinnest, and the 19psi spring is the thickest.
5. Once you place the desired spring in the actuator, place it back in the vice square, and tighten the vice until it bottoms out. Once it is bottomed out, re-install the snap ring in its groove, and release the pliers. Slowly loosen the vice and you should be all complete.

Installation Procedure.

1. Remove the five 10mm bolts holding on the top portion of the heat shield. (You might want to use WD-40, Liquid Wrench, or PB Blaster to help in the removal process of the bolts.)
2. Remove factory actuator by pulling the pin out of the flapper arm and taking out the two 12mm bolts holding the body to the compressor housing.
3. Line the new bracket assembly up to the compressor housing and tighten down the two 12mm mounting bolts. Hand tight will work just fine.
4. Loosen the jamb nut on the arm so you can adjust the length of the rod end to match up to the flapper arm on the manifold. Pull the flapper arm towards the driver's side of the vehicle so the flapper door is closed.
5. Slip the rod end over the flapper arm and reinstall the pin to hold in place. At this point you want to make certain there is a little tension on the wastegate actuator. Turn the adjustment nut towards the firewall of the vehicle about one full turn.
6. You may need to bend the corner of your heat shield to clear the new actuator, and reinstall.

Running the Vacuum Lines

1. If you are choosing to run PCM controlled boost, install the wastegate exactly like the factory wastegate was installed, and move on to "Adjusting the Actuator below. You will not need to route any vacuum lines differently.
2. If you are eliminating PCM controlled boost, remove both of the associated vacuum lines from the number 2 solenoid that is located on top of the stock airbox. One line comes from the turbo (green line), the other line goes to the stock WGA (black line). These lines will not be used anymore. You do NOT need to cap these lines at the solenoid.
3. Attach vacuum line with bleed fitting to the turbo (where you removed the green line), and run that directly to the top of the new WGA. You may want to secure both sides of the vacuum fittings with zip ties to prevent them from blowing off. If you are using a boost controller, you will NOT use the supplied bleed fitting.
4. At this point if you are not running the Mopar Stage 1 or Stage 2 PCM, you'll want to remove the red vacuum line going to the TIP sensor solenoid (red line). Cap the nipple on your upper IC hose with a vacuum cap. This will eliminate the Part Throttle Overboost Check Engine Light that is common on Stage 0 vehicles when upgrading the actuator and/or boost controller. If you have a 2005 vehicle, you may need to order stage 1 to completely eliminate check engine lights.

Adjusting the Actuator

In order to achieve the best performance out of this modification, you will need to "preload" the tension on the actuator. This is accomplished by loosening the jamb nut from the rod end and turning the 5/16" adjustment rod towards the firewall. Every car is different, so there is no set number of turns to get the correct tension. Start out with your boost controller completely open (wg duty on the lowest setting if you're tuning it) and adjust the tension on the wastegate actuator so that the car will produce approximately 15 psi of boost. You can adjust more boost out of it by increasing your duty on the tuner, or tightening the rod tension more. Once you have achieved your desired boost, This process may take a while to dial in perfectly, but it's definitely worth it. **You might experience "spark blowout" with the higher boost, so we recommend gapping your spark plugs down to .030 to .032.** Keep in mind that you might not want to take the car beyond 16 psi at redline because you are reaching the limit of the stock fuel system.

