



**GrimmSpeed Install Guide Series**  
**Installing the GrimmSpeed Universal Internal Wastegate Bracket**  
**Updated 10/16/12**

**Introduction:** This guide will illustrate the installation of the GrimmSpeed Universal Internal Wastegate Bracket. The difficulty here is relatively low, so take your time and enjoy the job!

**Tools:** The tools listed below are suggested for this task (figure 1). Optional tools are noted.

- 4.5mm Allen
- 7/16in wrench
- Whichever wrench you need to remove/install IWG bracket on your particular turbo



**Figure 1: Tools**

**Tips:** If the c-clip on your turbo is very small, using a thin washer will ensure that the GrimmSpeed rod end doesn't slip off, allowing your IWG to leak. Also, a dab of red Loctite will ensure that the machine screw holding your tensioner to the bracket stays put.

**Procedure:**

1. Begin by collecting your tools and popping your hood. This'll be quick!
2. *If installed, remove your OEM internal wastegate. You'll need to remove it from both the wastegate flapper arm and the compressor housing.*
3. Collect the parts to your GrimmSpeed Universal IWG Bracket and assemble as shown below. Don't worry too much about length, as you'll adjust it once mounted. Note that the tensioner assembly may be mounted on the top or the bottom of the bracket, depending on your turbo fitment.



**Figure 2: Included hardware**



**Figure 3: Assembled tensioner**

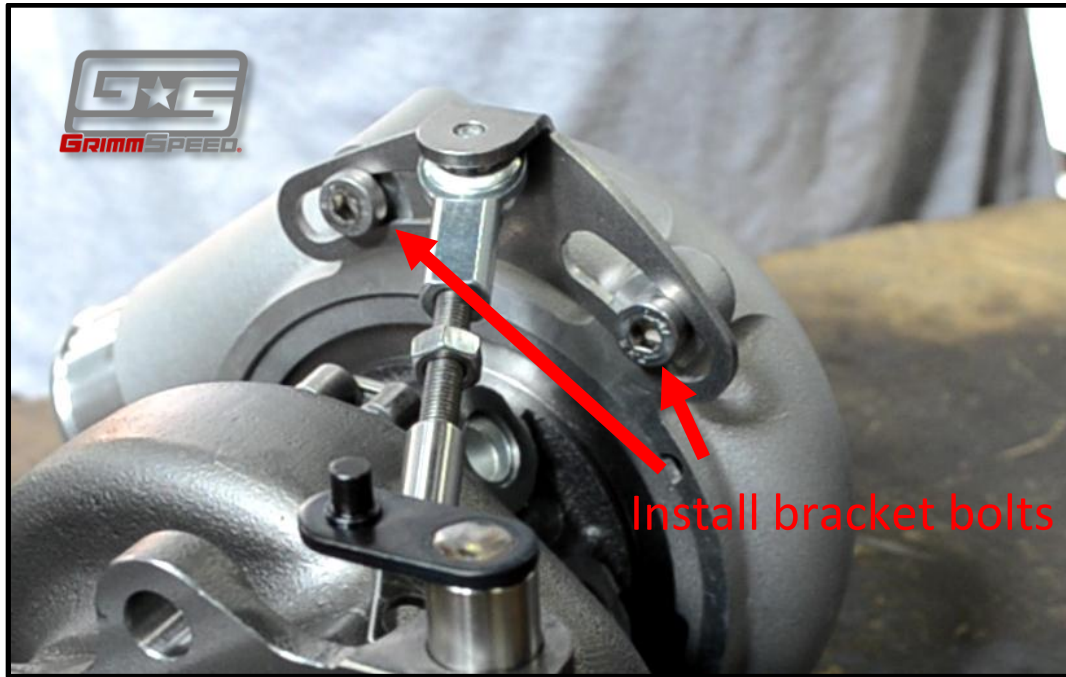


**Figure 4: Assembled bracket**

4. Next, install the complete assembly onto your turbo. Reusing the bolts that held your OEM internal wastegate to the compressor housing, loosely install the GrimmSpeed bracket. Now is the appropriate time to decide whether the tensioner fits best on the top or the bottom of the bracket, depending on your



application. You can see on our MAP 20g that the tensioner fits better below the bracket than above.



**Figure 5: Installing bracket**

5. Now we'll tension and finish installation. The length of the tensioner is adjusted by  $\frac{1}{2}$  turn at a time. With the mounting bracket slightly loose, set the length of the tensioner such that it just fits over your stud, as shown below. Using a  $\frac{7}{16}$ in wrench, tighten the jam nut against the rod end to lock the location of the threaded stud.



Figure 6: Setting tension



Figure 7: Tighten tensioner to bracket

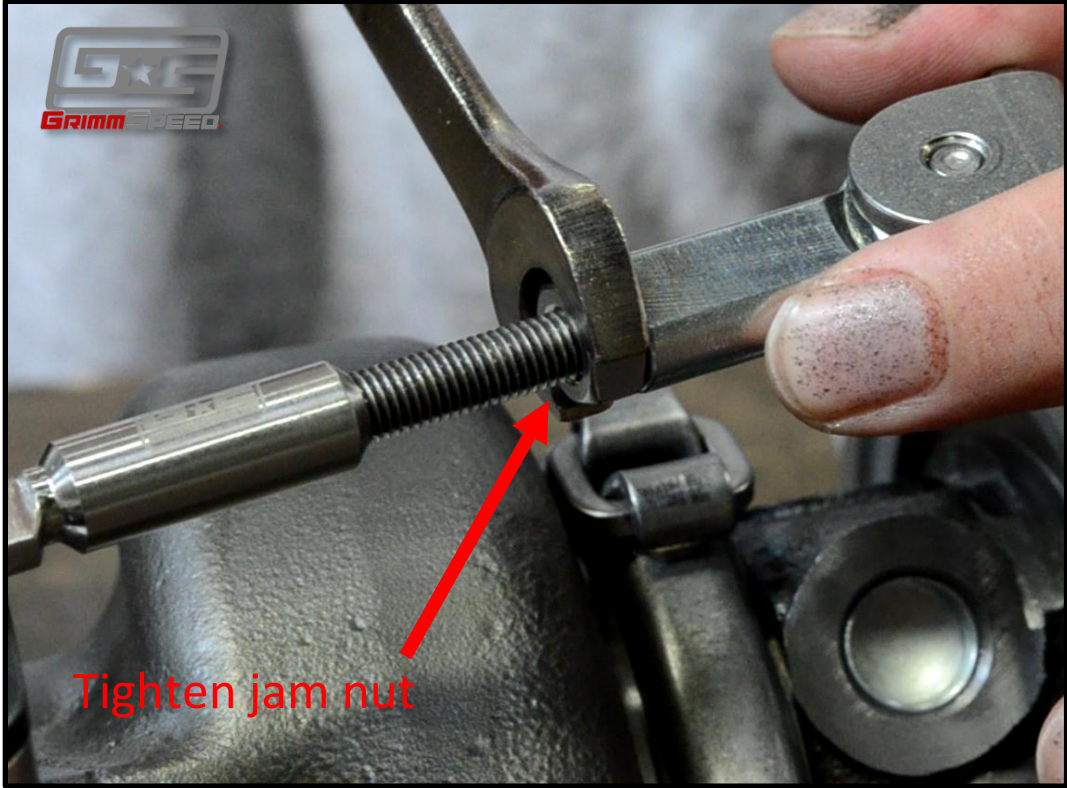


Figure 8: Tighten jam nut

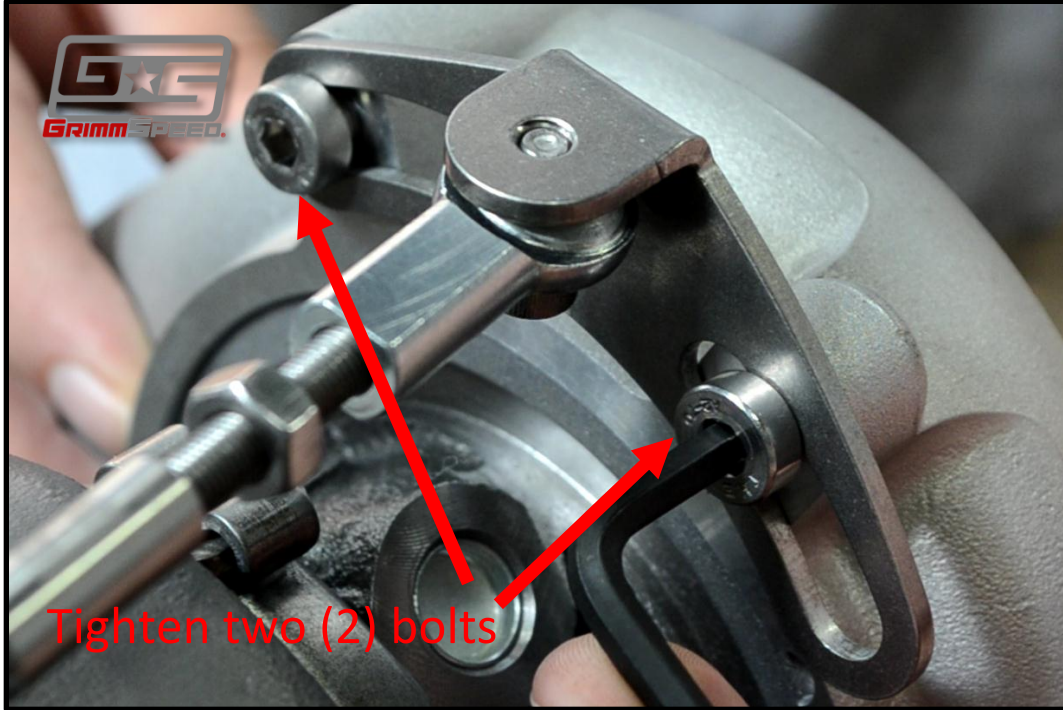
6. Reinstall the c-clip or pin onto your flapper arm stud. If your clip or pin is very small, you may wish to use a thin washer to ensure that the tensioner doesn't slip off during use.



**Figure 9: Install c-clip or pin**

7. Reinstall the c-clip or pin onto your flapper arm stud. If your clip or pin is very small, you may wish to use a thin washer to ensure that the tensioner doesn't slip off during use.





**Figure 10: Tighten compressor housing bolts**

That's it! You should be all set to go. If you notice that your IWG is leaking, check your tension and shorten the tensioner if necessary.