



Angle Drive Brace by DDMWorks



Installation time of the Angle drive brace depends on you and your mechanical skills. It is suggested that you read through the directions a couple times to familiarize yourself with the components of the kit, and your vehicle.

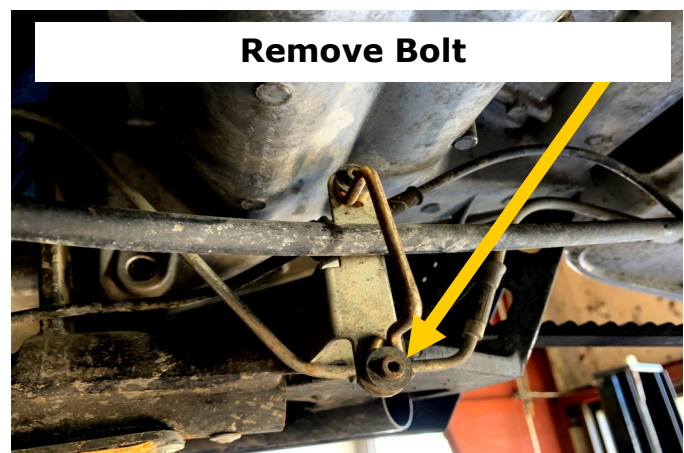
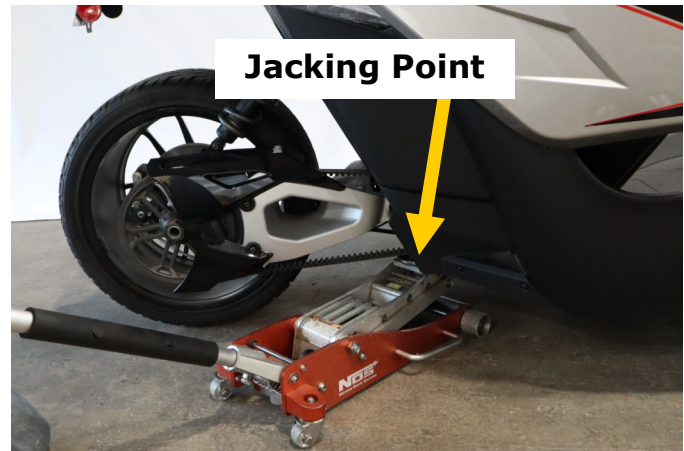
If you are pretty handy with tools, the angle drive can be installed in an hour, however we suggest that you schedule at least a couple of hours for the installation just incase.

If you have any questions during the installation you can call or text us at (864) 907-6004. Email support is also available - Tech@ddmworks.com.

DDMWorks - 119-A Hwy 183 Piedmont, SC 29673
Tech Support (864) 907-6004 - Tech@DDMWorks.com

Installing Angle Drive Brace

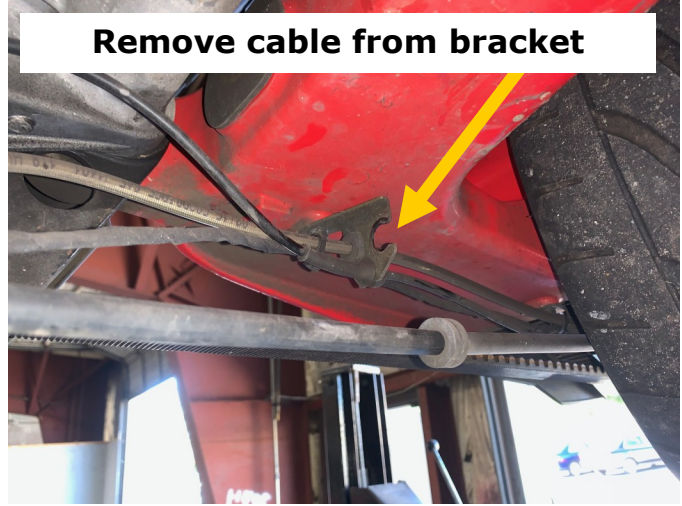
1. Make sure your Slingshot is on a level surface and is in neutral.
2. You will be installing the angle drive brace under the vehicle, which requires the Slingshot to be placed on Jackstands. Carefully jack the back of the Slingshot up and place Jackstands securely under the metal tube frame of the Slingshot. Also place wheel chocks on the front wheels to keep the Slingshot from potentially rolling while you are under the Slingshot. If you have a Welter/Twist rear exit exhaust, the section of the exhaust that passes by the angle drive will have to be removed before installing the brace.
3. Make sure the parking brake is all the way down and the parking brake is off.
4. Look under the back of the Slingshot and you will see the angle drive. It is a large cast aluminum piece that has a driveshaft coming into the front of it and the belt drive going to the back of the Slingshot on the passenger side of it.
5. Beneath the angle drive, you will see a black plastic cable leading to the back of the Slingshot. This is the cable that engages the parking brake. This parking brake cable goes through a metal bracket that holds it in place beneath the angle drive. There are 2 screws that are holding this bracket, remove the lower screw in this bracket and you will be able to swing the metal bracket up, allowing you to move the parking brake caliper.



Installing Angle Drive Brace—Prep and Mount Bolt

6. Follow the parking brake cable back further and you will see where it is held to the rear swingarm with a rubber bushing. Pull that rubber bushing out of the metal bracket that is holding the cable to the swing arm.
7. Next remove the lower bolt by the belt drive on the passenger side of the angle drive. (see picture to right)
8. Start to install the new 95mm long black bolt in place of the bolt you just removed. Make sure to use the supplied washer under the head of the bolt.
9. Thread the new bolt in until it starts to protrude from the angle drive, continue to thread the bolt in until about 3/4" extends beyond the angle drive, then slide the supplied aluminum spacer onto the protruding bolt.

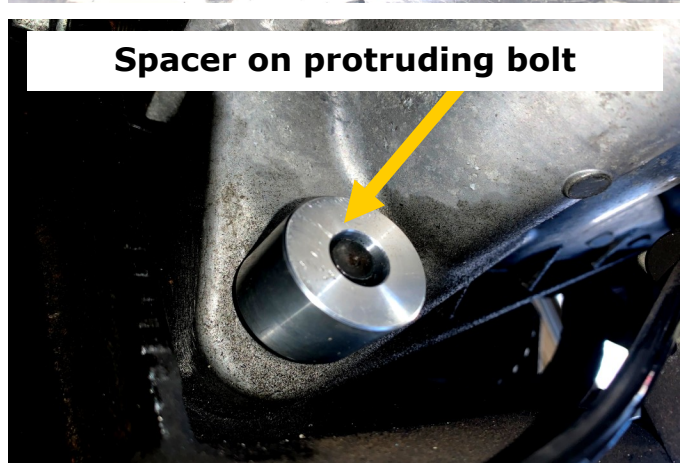
Remove cable from bracket



Remove lower bolt by belt drive, replace with new bolt.



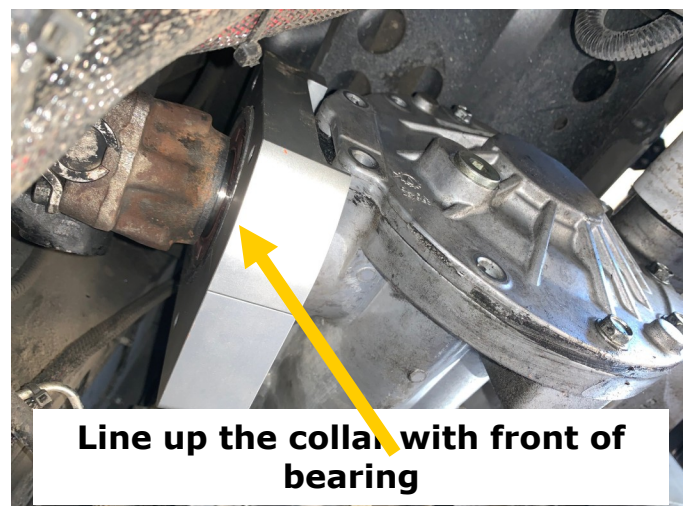
Spacer on protruding bolt



Installing Angle Drive Brace—Collar

10. Next step is to assemble the pinion collar onto the angle drive brace. Before starting, make sure you wipe around the front of the angle drive brace where the driveshaft comes into the angle drive. This area should be clean of debris, dirt and grease. In your kit you will see 2 large aluminum pieces. There are 2 - 90mm long yellowish bolts that will bolt these pieces together. One of the 2 aluminum pieces is slightly smaller than the other, lift the smaller piece up around the front of the angle drive brace where the driveshaft comes into the brace. Make sure the flat side of the collar is facing toward the front of the Slingshot. Next lift the other aluminum piece up to the other piece, also with the flat portion of that piece facing forward. You will see 2 holes in the larger aluminum piece, insert a bolt up through the hole and start to thread the bolt into the other aluminum piece. Once you catch a couple of threads, insert the second bolt and start to thread that bolt also. While doing this the bolt heads can be pointing down to make it easier to tighten those bolts.

11. Continue to tighten the bolts, but stop before the bolts completely tighten up (about 1 full turn loose). With those 2 bolts slightly loose, you can now rotate the collar so the 2 bolts you installed face the passenger side of the Slingshot and slide the collar over the neck of the angle drive. Slide the collar back until the flat front of the collar is lined up with the front of the bearing where the driveshaft goes into the angle drive.



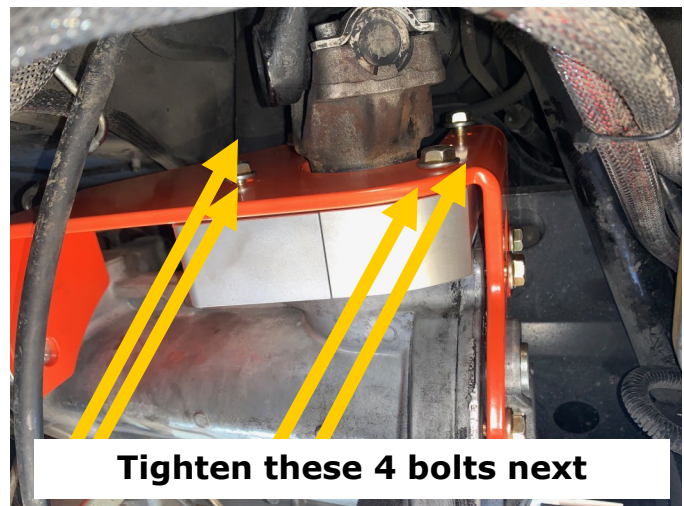
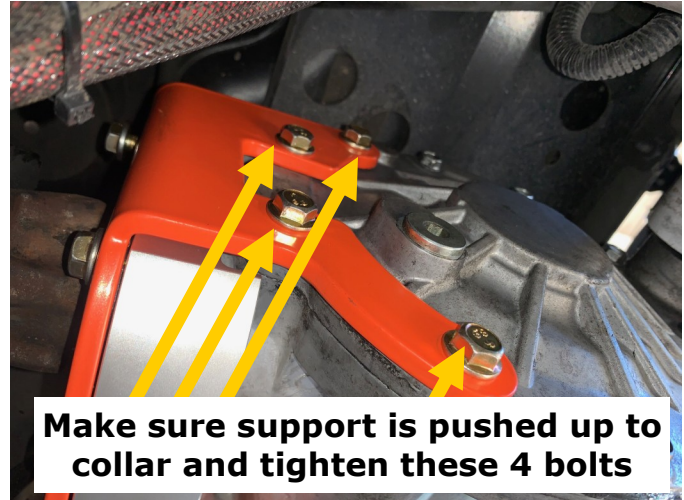
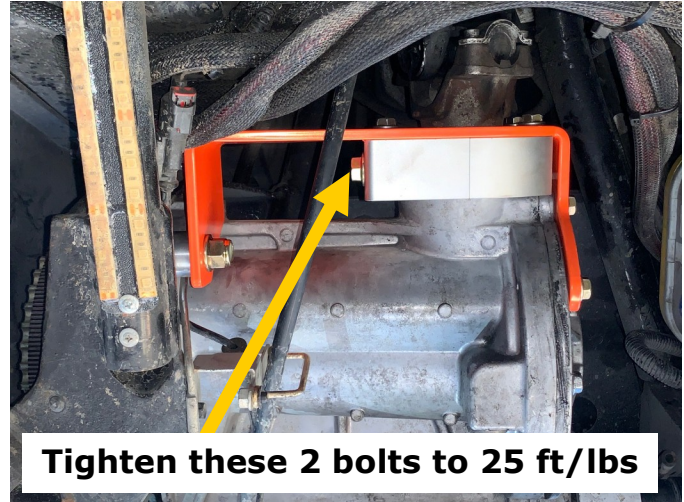
Installing Angle Drive Brace—Collar support

12. With the collar installed, next step is to install the collar support, which is 1/4" thick steel sheet metal. Start by removing the 4 bolts on the side of the angle drive brace shown to the right.
13. With those 4 bolts removed, the angle drive collar support will lift into place. You will need to angle the collar support up into place, lifting the passenger side up first, then making sure the "U" portion of the collar support goes around the driveshaft and then lastly the drivers side of the support goes up into place. The parking brake caliper cable removed earlier will need to be pushed to the side to get the support up into place.
14. In the hardware bag supplied, you will find 4 yellowish bolts that are 35mm long, they are slightly longer than the other 4 yellowish bolts that are 25mm long. These 35mm bolts go in the drivers side of the support. Start to install the bolts, but do not tighten them down yet, leave a couple of threads showing.
15. Now start to thread in the 4 shorter yellowish bolts that are 25mm long in the front of the support into the aluminum collar you installed earlier. We suggest starting with the 2 lower bolts first to help get the alignment correct, then start the 2 upper bolts. Once again, do not tighten these bolts yet, leave a couple threads showing.



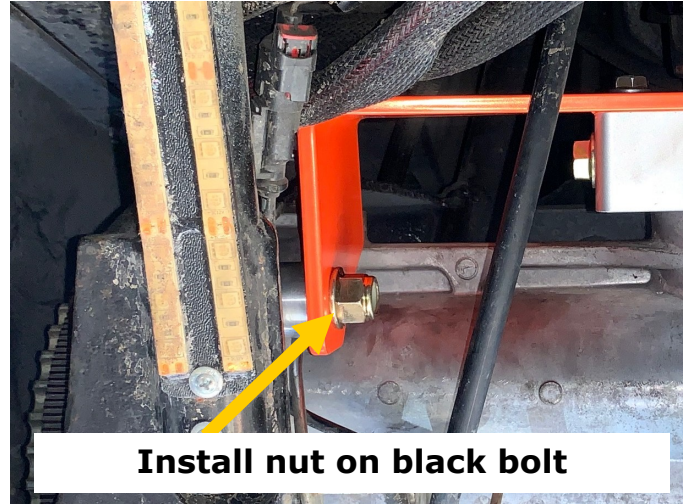
Installing Angle Drive Brace—Collar support

16. The sequence of tightening the bolts is important to make sure the brace is installed correctly, please follow the order of tightening the bolts instructed. With the side bolt tightened down. Make sure the aluminum collar is still lined up with the front of the angle drive and then tighten the 2 bolts that hold the aluminum collar together to—25 ft/lbs
17. Make sure the support is pushed back toward the aluminum collar as much as possible and then tighten the 4 bolts on the drivers side of the support to— 18 ft/lbs
18. With the side bolts tight and the aluminum collar bolts tight, tighten the 4 bolts on the front of the support to— 18 ft/lbs
19. Tighten the black bolt you installed earlier by the belt drive all the way now, it will go through the hole on the passenger side of the support. Tighten this bolt to—85 ft/lbs



Installing Angle Drive Brace—Collar support

16. The last piece of hardware to install is the yellowish flanged nut that goes on the black bolt you installed earlier. While holding the head of the black bolt, torque the nut to 85 ft/lbs.
17. Install the parking brake cable back into the holder on the swingarm you removed it from earlier.
18. Install the parking brake cable back into the metal bracket that holds it just below the angle drive and install the bolt to secure the bracket.
19. If you remove any sections of your exhaust to do the installation earlier, install those sections of the exhaust back now.



Congratulations! You have successfully installed your new DDMWorks angle drive brace.

Let us know how enjoyed this product with a review on our website, Google or Facebook.

If you have any questions about your installation, feel free to give us a call on the tech line at 864-907-6004. You can also email us at Tech@ddmworks.com