

ADAPTING A '13/'14 CF SHAFT TO A '07-'12 GT500

Hopefully you've had the opportunity to go through the thread at SVTP.

<http://www.svtperformance.com/forums/showthread.php?896908-Retrofitting-a-13-GT500-carbon-fiber-driveshaft-to-an-07-12-GT500>

There's a lot of data there, I readily admit, but you'll have a pretty good understanding of this particular mod when done. Everything you need is there should there be any question but I've put together a quick guide here in order to save time.

I highly suggest a good understanding of factory service procedures, as well as using the proper pullers, etc, to both remove the factory flange as well as installing the modified unit back into place. Closely inspect the shaft you plan on using for any serrations in the fiber or any damage that may have occurred due to mishandling during shipping. Be adamant with the vendor you purchase your CF shaft from to carefully protect/pack the shifter beyond the factory box prior to shipping it to you.

In addition to the factory shaft and adapter ring you will need the following:

- (8) M10 x 1.5 x 30mm socket headed cap screws (30mm is UHL or under head length) in 12.9 with a zinc coating
- (6) M10 x 1.5 x 50mm socket headed cap screws (50mm is under head length) in a 12.9 with a zinc coating
- Red thread locker for the (8) M10 x 1.5 x 30mm bolts and Blue thread locker (Loctite 242) for the (6) M10 x 1.5 x 50mm bolts. The Blue is used on the driveshaft side bolts since you may want to remove the shaft at some point (installing a shifter, clutch, etc). Red thread locker (Loctite 271) on the short bolts since you won't ever be removing them.
- Ford part no. 4R3Z-7B340-AA (NUT). This is the nut that retains the flange and holds it onto the output shaft. You could reuse your original nut but I recommend a new one because your original will have threads cut into the locking Nylon portion.
- Ford part no. 7R3Z-7F273-A (SEAL). This is the O-ring that fits into the groove on your factory flange. Be sure to clean the splines prior to reinstalling your flange of any and all debris. Be very careful while pulling the flange on that the O-ring doesn't unseat. Install it properly and your assembly will be leak-free.
- The paired washers (two washers connected together – Ford part no. DR3Z-4B496-A) that are used on the center CV joint on your original GT500 two piece steel driveshaft. Use these under the socket heads on the driveshaft side of the flange, beneath the socket heads of the long, 50mm bolts (there is no washer used on the transmission side of the flange under the 30mm bolts).

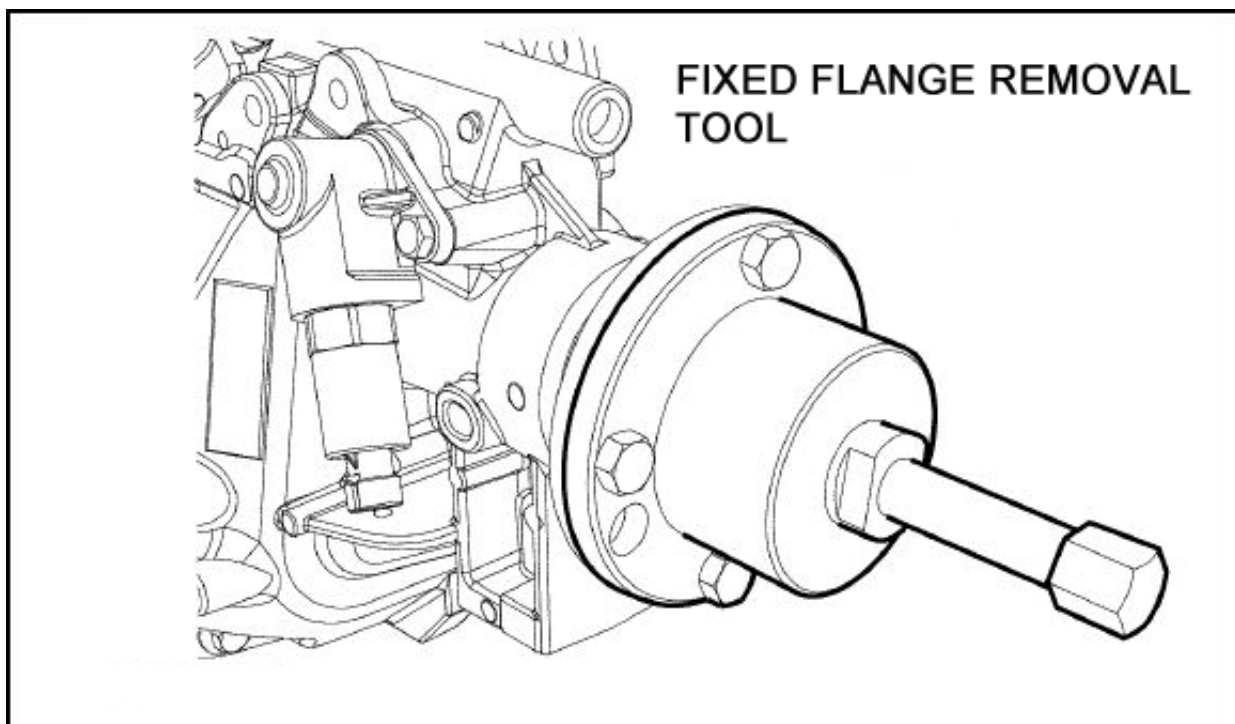
The socket headed cap screws are available at your local Fastenal (etc.) or online from McMaster Carr (www.mcmaster.com). Make sure they are a high quality fastener in a 12.9 class.



HARDWARE INSTALL

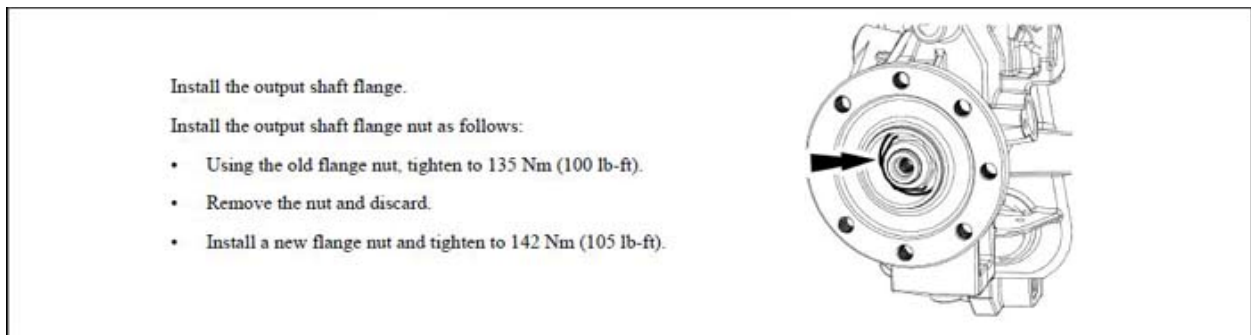
Once your vehicle is safely in a position to be worked on, remove your factory driveshaft. Save the bolts/washers at the back or axle end of the shaft as you will reuse them (remember, you also need the paired washers found on the CV joint in the middle of your original shaft as well).

Remove the nut that holds your flange on at the end of the splined/threaded output shaft. Save the nut and washer underneath. Use an appropriate puller to remove the factory flange.

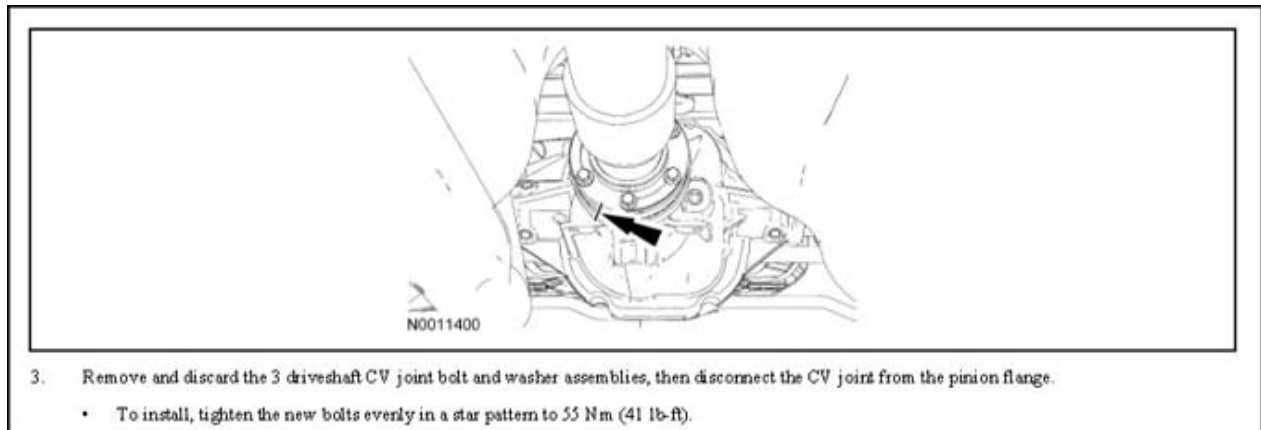


If you have an early GT500 your flange will have an iron ring pressed onto it. It needs to be pressed off and discarded or stored as it will not be reused. You can then attach the supplied adapter via the (8) M10 x 1.5 x 30 mm bolts. Use a couple of drops of Red Loctite (271) on each bolt and torque in a crisscross pattern to 60 ft/lbs. Remove and discard the rubber O-ring from inside the flange and install a new O-ring, lightly lubricated.

You can now install the flange/adapter assembly. Make sure the splines are clean and free of debris. Do not beat or hammer the flange on. It needs to be pulled into place. Use your original washer and nut for this. Pull the flange all the way back on until it is seated. Torque the old nut to 100 lb-ft. Remove the old nut and thread on a new nut, torque to 105 lb.-ft.



You can now install your '13/'14 GT500 CF driveshaft. Carefully raise the CF shaft into place taking care not to damage it. Install the rear CV joint to the pinion flange first. Torque the factory bolts/paired washers to 41 lb.-ft.



I suggest smearing a couple of dabs of anti-seize on the inner lip of the adapter flange where the CV joint will make contact. It is an interference fit and you may not line the holes up correctly on the first try. Once lined up, install the (6) M10 x 1.5 x 50mm (UHL) socket headed cap screws and paired washers (Do not use or try to use the factory bolts!). Use Blue Loctite (242) on the threads and torque your bolts to 60 ft./lbs.



Verify that the installation was done properly. Unless the vehicle was on a slope during the install there should have been almost no transmission fluid loss. Verify proper fluid level. Note that you won't need the center bearing spacers/bolts that held the factory two piece shaft in place. Discard or store.

You can now service the CF shaft as if it were factory. Enjoy the benefit of a much lighter and stronger driveshaft!