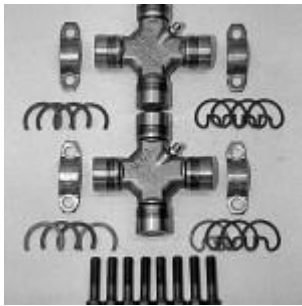


## C1, C2 & C3 Driveshaft U-Joint Replacement (1956-1982 Corvette)

<http://www.corvettemagazine.com/tech-articles/1956-1982-corvette-driveshaft-u-joint-replacement/>

The only link between your Corvette's transmission and the rear end is the driveshaft. All of your car's power is transferred to the rear end through the driveshaft. It is an integral part of the drivetrain which is often overlooked. A driveshaft with loose or worn u-joints can cause vibrations, loss of power, worn seals and bearings, not to mention transmission or rear end damage. Worn u-joints are also dangerous. If a u-joint breaks during speed, it can cause the driveshaft to break. Damage from a broken or seized u-joint is never minimal. The u-joints should be tight, never loose or sloppy. They should be checked every 10,000 miles or more in extreme conditions. U-joints should be changed in a press, but since most home workshops do not have one, we are going to show you how it can easily be done using a bench vise. While we are at it, we will also freshen up the driveshaft's outward appearance using some simple products and a little manual labor. Our Project 1977 Corvette needed a pair of new u-joints so we contacted Zip [Corvette Parts](#) 8067 Fast Lane, Mechanicsville, VA 23111 (800) 962-9632 and they were able to supply everything we needed.



Step 1: Zip supplied us with the following Corvette parts: 2 u-joints with internal and external clips, 4 driveshaft u-joint straps and 8 driveshaft strap bolts. You will also need some common hand tools, 4 jack stands, a hydraulic jack and a bench vise.



Step 2: After the Corvette is securely on jack stands, start the disassembly by marking the transmission end of the driveshaft. This way the driveshaft will be re-installed in the same position that it was when it was removed.



Step 3: Remove the u-joint straps and bolts and remove the driveshaft.



Step 4: I like to use a punch to make a more permanent mark on the transmission yoke end of the driveshaft. This will be very helpful during reassembly.



Step 5: Remove the u-joint cup retaining clips. Use vise grips, needle nose pliers or small pliers to squeeze the ends of the clips together, then pull the clip out.



Step 6: With the clips removed you can then press out the u-joint cups. Always support the driveshaft itself while pressing out the cups. Never let it hang. Use a 1 1/16" socket as a support and receiver on one end and place an 11/16" socket into the center of the opposite u-joint cup. (If your vise will not open up far enough to use the 11/16" socket, start with a 1/2" lug nut when it is pressed in far enough. Change to the socket.) Slowly close the vise and press the 11/16" socket into the center of the u-joint. This will push the entire u-joint toward the other side and push out the opposite u-joint cup into the 1 1/16" socket support. The u-joint will bottom out against the driveshaft yoke.



Step 7: Remove the driveshaft from the vise and use pliers or vise grips to pull the cup the remaining way out of the driveshaft yoke. Put the driveshaft yoke back into the vise set up the same way as before and push the u-joint and remaining cup back into and then out of the driveshaft yoke. Now remove it from the vise and again use either vise grips or pliers to remove the remaining u-joint cup. Now you can totally remove the u-joint. Repeat this process on the opposite end of the driveshaft.



Step 8: With the u-joints removed it would be a good time to clean the driveshaft. Grease and grime can be easily removed with mineral spirits and a brush.



Step 9: If you would like to refinish the driveshaft, start with a coarse wire brush to remove any rust or scale deposits. Then start with 220 grit sandpaper and sand the entire driveshaft. When this is done move on to 320 grit and repeat the process. Then finish up with 400 grit sandpaper to smooth out the surface.



Step 10: For a clean natural steel appearance without a lot of effort use Stainless Steel Spray. This will give the driveshaft a new look.



Step 11: Start the u-joint reassembly by pressing in one cup about half way into the yoke. Make sure you keep the cup centered and support the driveshaft.



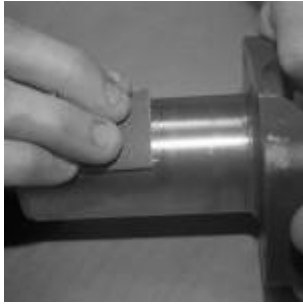
Step 12: Install the u-joint into the installed cup. Make sure that all of the needle bearings are in place and have not fallen down into the bottom of the cup. Also check the direction of the grease fitting. You want to be able to get to it when the driveshaft is installed. Now place the other cup into the yoke and center the u-joint into it. It is very important to keep the cup centered. If it becomes cocked, you can damage the cup or the yoke. By keeping the u-joint centered in each cup, the needle bearings are less likely to fall out of place. Use the 11/16" socket to press the u-joint cup back into the driveshaft yoke. Press the cup in far enough to install the retaining clip. Remove the driveshaft from the vise and install the one clip. Remember to support the driveshaft when installing the u-joints.



Step 13: Now place the driveshaft back into the vise and use the 11/16" socket to press the other cup in far enough to install the other clip. NOTE: If the cup on either end will not go in far enough to install the cup, the problem will usually be a needle bearing that has fallen down into the bottom of the cup. The solution is to remove the entire u-joint, press out the cups and start over.



Step 14: With the u-joint in place, install the grease fitting.



Step 15: Before you re-install the driveshaft, you may want to remove the transmission yoke and check it for wear. I like to clean up any slight grooves or knicks with emery cloth or 400 grit sandpaper.



Step 16: Remember to look for your identification mark so that you can re-install the driveshaft in its original position.



Step 17: Use new u-joint straps and bolts or Zip's [Driveshaft U-Bolt Kit](#) (depending on the slip yoke configuration) and re-install the driveshaft. A large flat blade screwdriver will work to hold the shaft in place while you tighten the bolts.



Step 18: After the driveshaft is installed, use your grease gun to lube both u-joints. Put the car back on the ground and you are set for thousands of trouble-free miles.