

# Driveshaft/Axle shaft Installation

<http://www.chevydiv.com/restore-c2-corvettes-driveline-cheat-sheet/>

## Step-1: Replace Universal Joints



Here's a handy way to replace the U-joints. The chrome socket is large enough to allow the U-joint cup to receive it. Use a smaller-diameter U-joint cup than the one you are removing, so you can apply force and press the U-joint out. If the parts have not been corroded, this often works well. If the cup is old and corroded, it is often frozen in place and this won't work; you may need to use a vise.



This method also works well, but you must be careful to hit between the weld and yoke flange. The sharp impact of a hammer and tool loosens corroded, stubborn, universal joints. This large hammer works well to get them moving when the vise attempt fails. Be sure to hit squarely at the weld area.



have grease fittings to remove.

You can apply localized heat with a Map Gas torch to the yoke to help break the corrosion loose. In some cases, a big hammer is also required to get badly corroded U-joints loose. Remember that as the joint heats, the resulting grease expansion can cause a loud bang. Be prepared for the bang if the U-joints do not

## Step-2: Replace Universal Joints (Continued)



This is the preferred method of universal joint replacement. This massive OTC tools C-clamp has multiple uses, and here it pushes the U-joints out effortlessly. The C-clamp also makes easy work of installing the new U-joint cups.

### Step-3: Check Axle Flange Trueness



After removing stubborn universal joints, you typically find axle shaft flanges have been distorted. Use a straight-edge to check for distortion. In this case, I found one that is bent. Oh well, it is to be expected when extra force is necessary to remove stubborn U-joints.

### Step-4: Straighten Axle Flange



Careful work at the hydraulic press can straighten the flanges for reuse. The trick is to go beyond straight slightly, then when the flange springs back it is straight. If you leave them distorted it is almost impossible to seat the universal joint retaining clips

### Step-5: Remove Corrosion from Shafts



Once the driveshaft or axle shaft has been disassembled and cleaned, use a 3/4-inch-diameter flap wheel to remove any remaining corrosion. Tread lightly here because it is easy to remove too much material and have loose-fitting universal joint cups.

### **Step-6: Install U-Joint Cups**



Carefully and precisely use a light-duty hammer to install the U-joint cups. Lift the U-joint up and out of the previously installed cup just enough, so that the one you are installing has the rollers on the U-joint trunnions. This is somewhat tricky so avoid letting the U-joint trunnions drop. If it does drop, it can knock a roller loose.

### **Step-7: Seat U-Joint Retaining Clips**



Make sure that the U-joint retaining clips are fully seated in the groove. If the retaining clip comes out of the flange, the U-joint cup follows. It does not matter how tight the cup fits in the flange.