

# Tech Tip®

## HOW TO REPLACE YOUR U-JOINTS

Fig.1

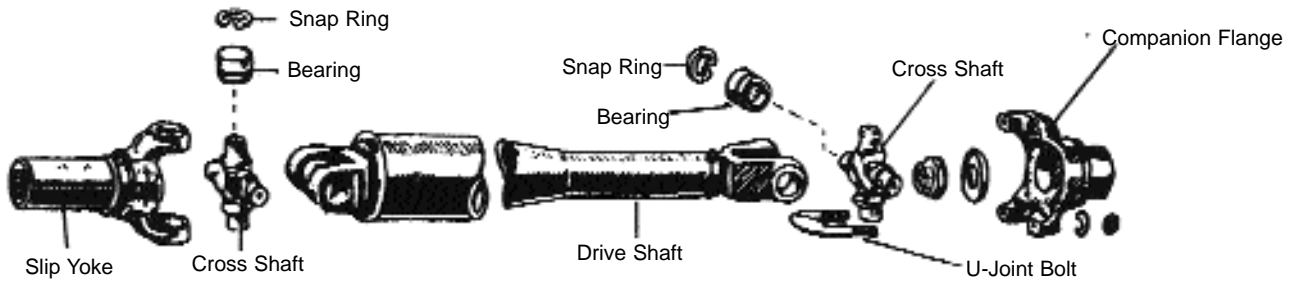


Fig.2

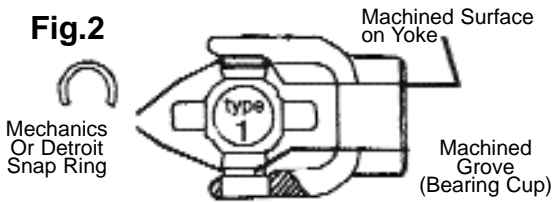
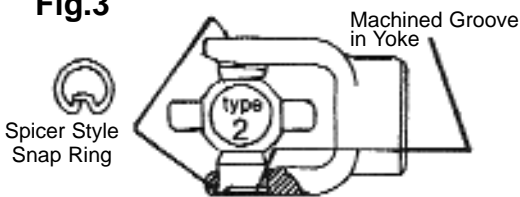


Fig.3



**Tools Needed:**

- Jack Stands
- Hammer or Vise
- Punch
- Pliers
- Socket Set
- Grease Gun
- Shop Rags

Universal joints (or U-joints) are a vital link in your vehicle's driveline. If these joints fail, you could be left stranded. Fortunately this can be prevented through periodic maintenance and/or replacement

1

A bad U-joint can most commonly be detected by a metallic dunking sound when the vehicle is placed in gear. This indicates play in the U-joint and should be investigated as soon as possible. Other symptoms of a failing U-joint are vibrations from the driveshaft, noticeable especially between 25 and 35 mph; shudder on acceleration and/or squeaking noises.

2

To check a U-joint for play, raise the vehicle and support the rear axle with jack stands. Place the vehicle in neutral and set the parking brake. Now rotate the driveshaft back and forth by hand, checking the joint for any play if any play is detected, the U-joint will have to be replaced.

3

To replace a U-joint, first remove the driveshaft from the car by removing the bolts holding the rear joint to the companion flange (see Figure 1). If the front joint is to be replaced, mark the relationship of the transmission slip yoke to the shaft to ensure proper reassembly. Remove the snap rings that retain the bearing cups in the yoke and driveshaft. They may be either of the two types (see Figures 2 and 3). Type 1 can be removed by driving the snap ring out with a hammer and punch. Type 2 must be removed by squeezing the retainer with a pliers and lifting it out of the groove in the bore.

4

Select a socket with an outside diameter slightly smaller than the U-joint bearing cup (about 9/16") and another socket with an inside diameter larger than the bearing cup (about 1"). Place the sockets at opposite ends of the driveshaft yoke so the small socket becomes the driver and the large socket becomes the receiver (see Figure 4). Use a vise or hammer to drive the bearing cups until the one bearing cup is free from the yoke. Remove it and turn the shaft 180 degrees. Drive the remaining cup out in the same manner from the other direction.

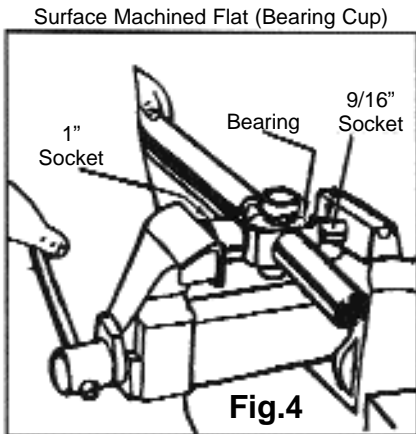
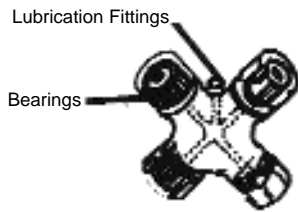
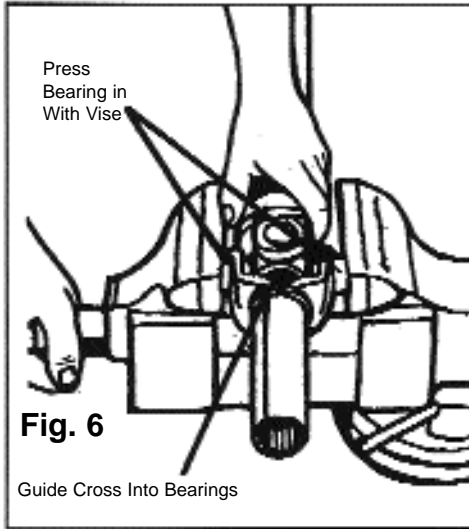


Fig.4

If both U-joints are being replaced, align the grease zerks so they point the same direction. This will allow easier service in the future.



**Fig. 5**



**Fig. 6**

Guide Cross Into Bearings

- 5 Check the new bearings for adequate grease before assembling DO NOT USE EXCESSIVE AMOUNTS OF GREASE AS OVER LUBRICATION MAY DAMAGE THE SEALS UPON REASSEMBLY. Use the small socket to press one bearing cup partially into the driveshaft. Position the cross shaft into this bearing. If the new U-joint has a grease fitting, point it towards the center section of the driveshaft. Place the other bearing cup into the driveshaft. Be very careful not to dislodge the needle bearings in the bearing cup. The grease in the bearing should hold the needles in place (see Figure 5).
- 6 Use your vise, or a hammer and socket to press the bearings the rest of the way into the yoke (see Figure 6). Never strike the bearing cups directly with a hammer as this could damage them. If the bearing will not go in all the way do not use excessive pressure, as one of the needle bearings has probably fallen out of place. If this is the case, the U-joint must be disassembled and the problem corrected. Once the bearings are in place, the snap rings should be installed, using the same method as their removal. On front joint replacements use the same procedure to install the bearing in the slip yoke. Once the installation is complete, check the U-joint for any roughness or binding if any is present, correct the problem and then reinstall the shaft on the vehicle in the same manner in which it was removed.
- 7 Once the driveshaft is reinstalled, grease the U-joint with the grease gun. We recommend you grease and inspect your U-joints every 10,000 miles or twice per year, which ever is more frequent it's easy and only takes a few minutes.