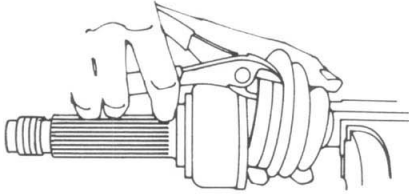


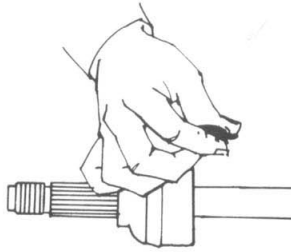
# C.V. JOINT REMOVAL AND INSPECTION

1.



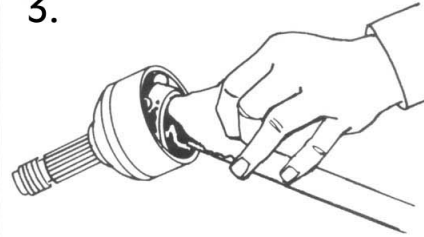
Clamp the axle shaft in a soft jawed vice. Cut the boot clamps at each end of the boot with side cutters. Cut the boot lengthwise and discard

2.



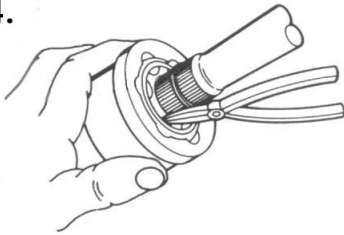
Rub grease from the C.V. Joint between your finger and thumb. If the grease feels gritty you can assume there has been damage.

3.



Wipe away all grease from the face of the joint and determine how the joint is retained on the shaft. (Incidentally, you should remove the grease anyplace you find it throughout your inspection to allow a more careful analysis of the unit.

4.



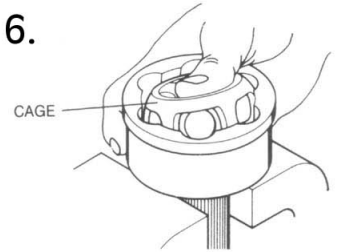
C.V. Joints are held on to the axle shaft by two different methods. Some Polaris & Bombardier can be released by expanding a front facing snap ring and sliding the C.V. housing off the bar.

5.



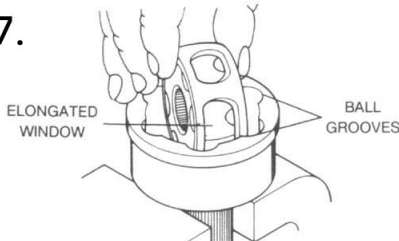
Most other outboard C.V. Joints are held on to the axle shaft with an internal snap ring. These C.V. Joints can be removed by striking the joint face with a mallet.

6.



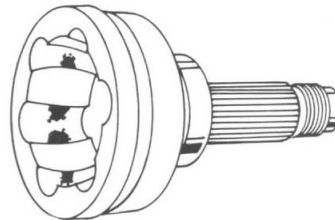
Place the joint face up in a vise. Press downward on one side of the inner race to tilt the bearing cage high enough to remove a ball from the opposite side. If the joint is tight, use a mallet and brass drift to tap the inner race. Repeat this step until all six balls are removed.

7.



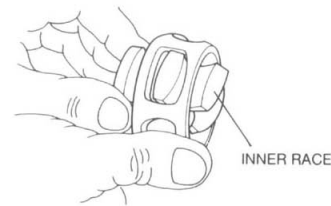
Tilt the cage assembly vertically and position two opposing windows in the area between the ball grooves. Most cages have elongated windows specifically for this purpose. Remove the cage and inner race assembly by pulling them upwards from the housing.

8.



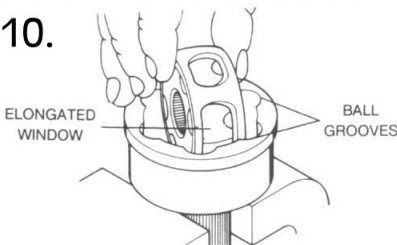
After degreasing the outboard housing you should look for contact wear in the area where the ball moves back and forth in the grooves. Housing wear is normal and advances as mileage on the joint increases. Rebuilding should not be performed on a joint when the wear pattern becomes extreme.

9.



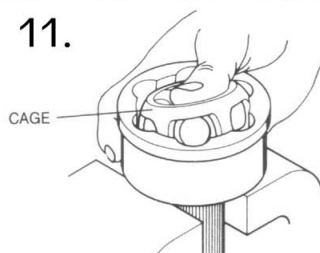
Assemble the new cage & race by turning the inner race 90 degrees to the cage and align one of the race spherical lands with an elongated cage window. Raise and install the inner race by swinging inward.

10.



Reinstall the cage assembly by sliding it down between the ball grooves into the housing, reversing the disassembly procedure.

11.



Tilt the bearing cage assembly high enough to install a new ball. Use a mallet and a brass drift to tap the ball down the groove of the housing, exposing the window on the opposite side for another ball. Repeat this process until all six balls have been installed.

12.

When greasing the joint it is best to remove one of the corners of the package and insert it into the hole of the inner race. When the grease is squeezed into the bottom of the joint, grease will be forced around the bearings, assuring that the proper amount of lubrication has been used in the CV Joint.

