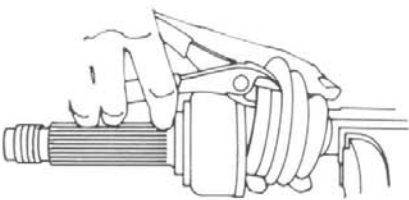
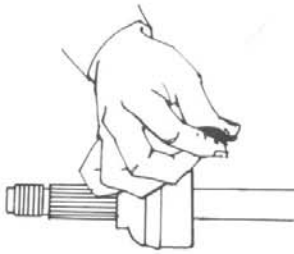

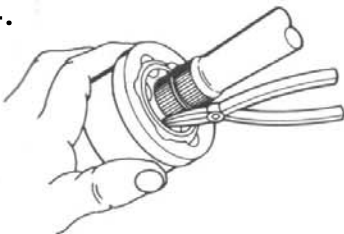

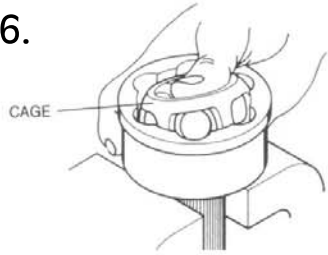
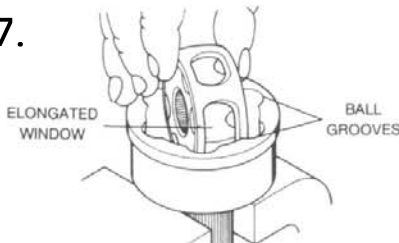
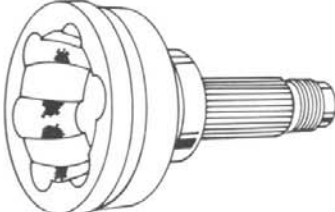
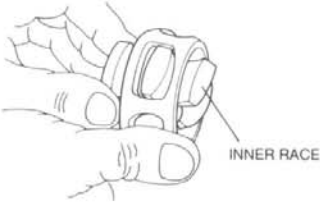
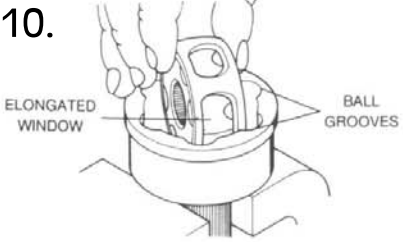
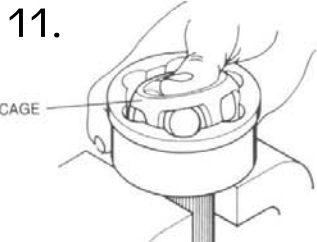
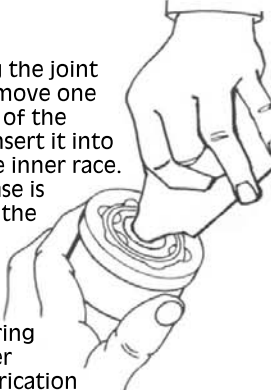
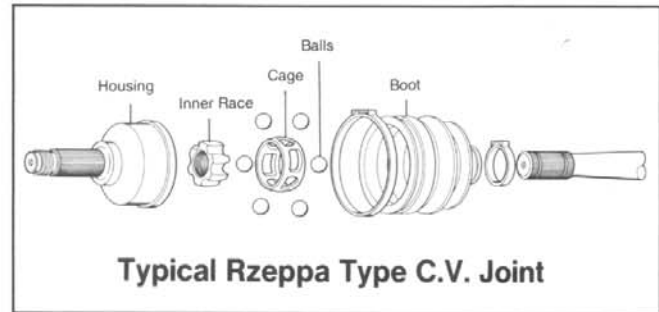


OUTBOARD JOINT REMOVAL AND INSPECTION

<p>1.</p>  <p>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</p>	<p>2.</p>  <p>Rub grease from the C.V. Joint between your finger and thumb. If the grease feels gritty you can assume there has been damage.</p>	<p>3.</p>  <p>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.</p>
<p>4.</p>  <p>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.</p>	<p>5.</p>  <p>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.</p>	<p>6.</p>  <p>CAGE</p> <p>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.</p>
<p>7.</p>  <p>ELONGATED WINDOW</p> <p>BALL GROOVES</p> <p>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.</p>	<p>8.</p>  <p>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.</p>	<p>9.</p>  <p>INNER RACE</p> <p>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.</p>
<p>10.</p>  <p>ELONGATED WINDOW</p> <p>BALL GROOVES</p> <p>Reinstall the cage assembly by sliding it down between the ball grooves into the housing, reversing the disassembly procedure.</p>	<p>11.</p>  <p>CAGE</p> <p>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.</p>	<p>12.</p>  <p>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.</p>

SIMPLE STEPS FOR REMOVAL AND SERVICE OF ALL TERRAIN VEHICLE C.V. JOINTS

The following procedures are recommended for the removal and inspection of most typical CV axles found on All Terrain Vehicles. These sample steps are for general information purposes only and do not apply for all ATV's. Make sure you observe good safety practices for the time the ATV goes on the lift until the job is finished.



<p>1.</p> <p>Loosen lug nuts and wheel spindle nut. Lift and block vehicle. Remove wheel nuts and wheel. Then remove the wheel spindle nut.</p>	<p>2.</p> <p>Remove the nut holding the lower ball joint to the hub assembly.</p>	<p>3.</p> <p>Some applications have a transverse bolt that retains the ball joint stud to the hub assembly. This should be removed.</p>
<p>4.</p> <p>Loosen the ball joint stud from the hub assembly with a fork, being careful not to damage the flexible seal that protects the ball joint.</p>	<p>5.</p> <p>Using the leverage of a pry bar, completely separate the lower ball joint stud from the hub assembly. Push the hub assembly to one side of the lower control arm.</p>	<p>6.</p> <p>Free the C.V. Joint from the hub assembly by tapping the spindle. Be careful not to damage the spindle threads.</p>
<p>7.</p> <p>Using the leverage of a pry bar, separate the axle shaft from the transmission. On some models, the axle shaft is held onto the output shaft by a cotter pin and must be removed.</p>	<p>8.</p> <p>Support both ends of the axle shaft when removing it from the vehicle.</p>	<p>9.</p> <p>Most typical axle shafts have (2) C.V. Joints, an outboard and inboard. Each joint is lubricated with special high temperature grease, and protected with a C.V. boot seal.</p>