



ATV Steering Stem Bearings

Note: These instructions are very general, and you should have a service manual for your particular vehicle to get a better understanding of your particular setup and have factory recommended torque levels and specifications on hand.

Prep

Thoroughly clean the vehicle to make the job easier and prevent contamination of the new components during installation.



Get your ATV steering stem bearing kit from [ALL BALLS RACING](http://www.allballs.com).



Remove the contents of your ALL BALLS RACING carrier kit. Layout the components in an organized manner for easy installation. Place the new bearings in the freezer for about an hour before installing them.

Removal

Support the vehicle with a suitable stand or jack.



Free the steering stem from its upper bushing.



Disconnect the tie-rods from the pitman arm.

Remove the cotter pin from the steering stem.





Remove the steering stem nut and washer.



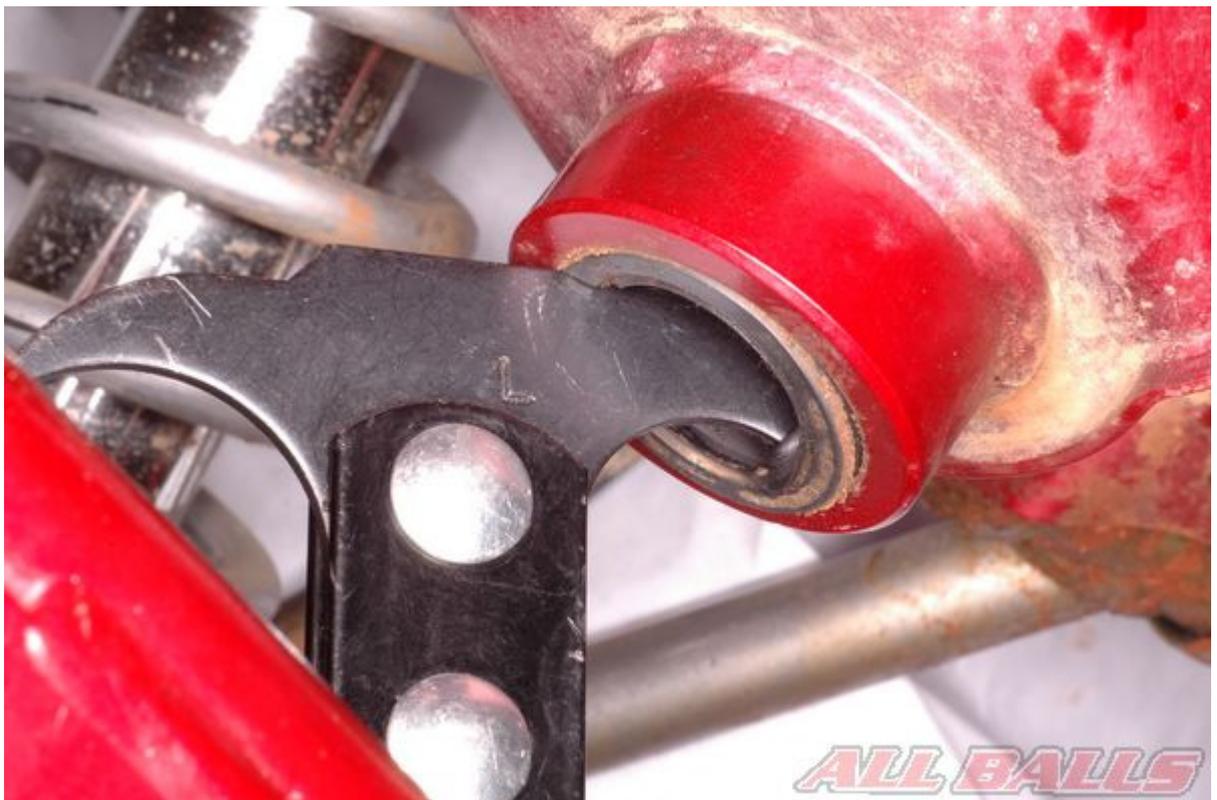
Remove the pitman arm.



Lift the steering stem up and free it from the bearing and frame.



Clean the steering stem and inspect it for wear and damage. Replace the stem if it is bent or otherwise damaged.





Remove the steering stem collars and dust seals.



Some steering stem bearings are held in by an inner locknut. Use the appropriate special tool and remove the inner locknut.



Some steering stem bearings are held in by snap rings.



Remove the snap ring with snap ring pliers.





Use a suitable bearing puller to remove the steering stem bearing from the frame.



Clean away all of the old grease, grime, and rust from the bearing bore.

Inspect the bearing bore for wear and damage. Make sure the bore is free of damage or burrs that may cause the new bearings to hang during installation.

Bearing Installation



Heat the bearing area with a heat gun, take the bearing out of the freezer and install it into the frame.



Drive the bearing into place with a bearing installer tool or a socket that matches up with the outer race of the bearing. Only press on the outer race of the bearing.



Make sure the bearing is fully seated. The snap ring groove should be visible if the frame requires a snap ring to secure the bearing.



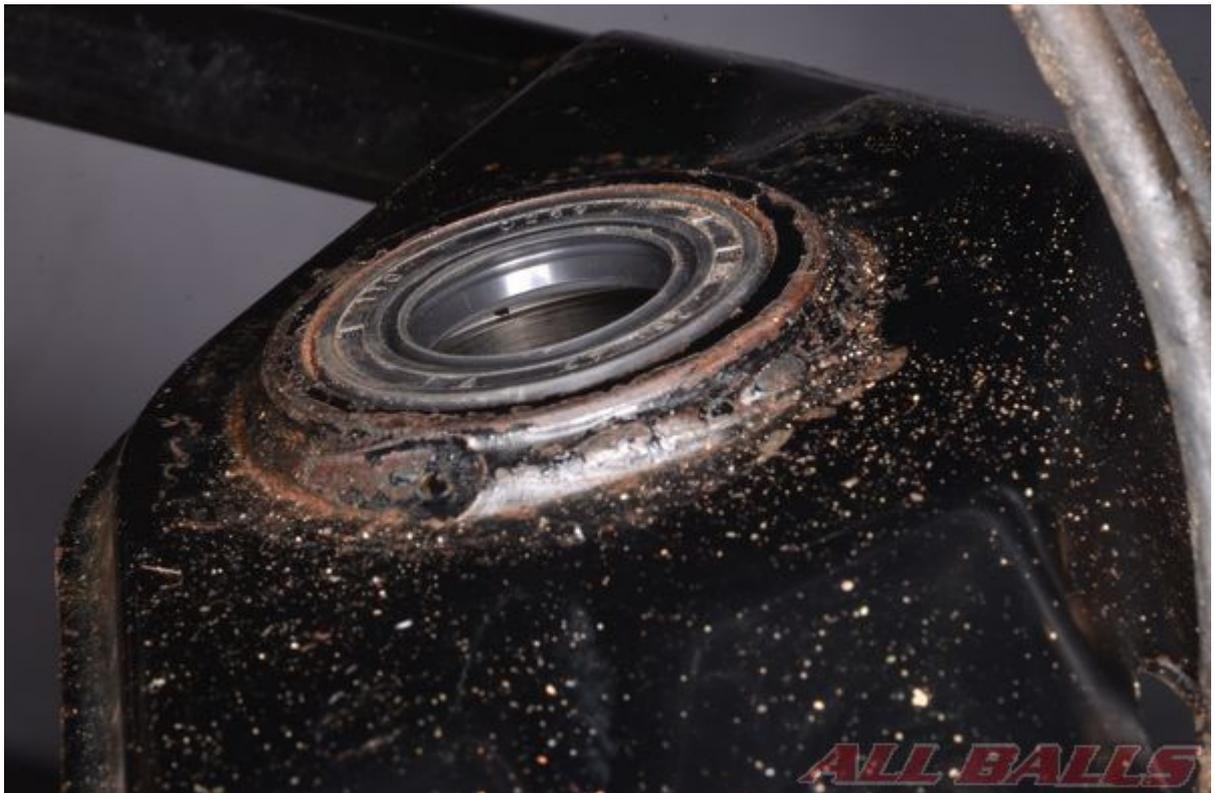
Install the snap ring into the snap ring groove with snap ring pliers.



Install the steering stem bearing inner locknut if the bearing is secured in the frame in this manner. Tighten the inner locknut to specification with the special tool.



Lubricate the lips of the dust seals with grease.





Press in the seals by hand or use a suitable driver that matches up with the outside diameter as the dust seal if needed.



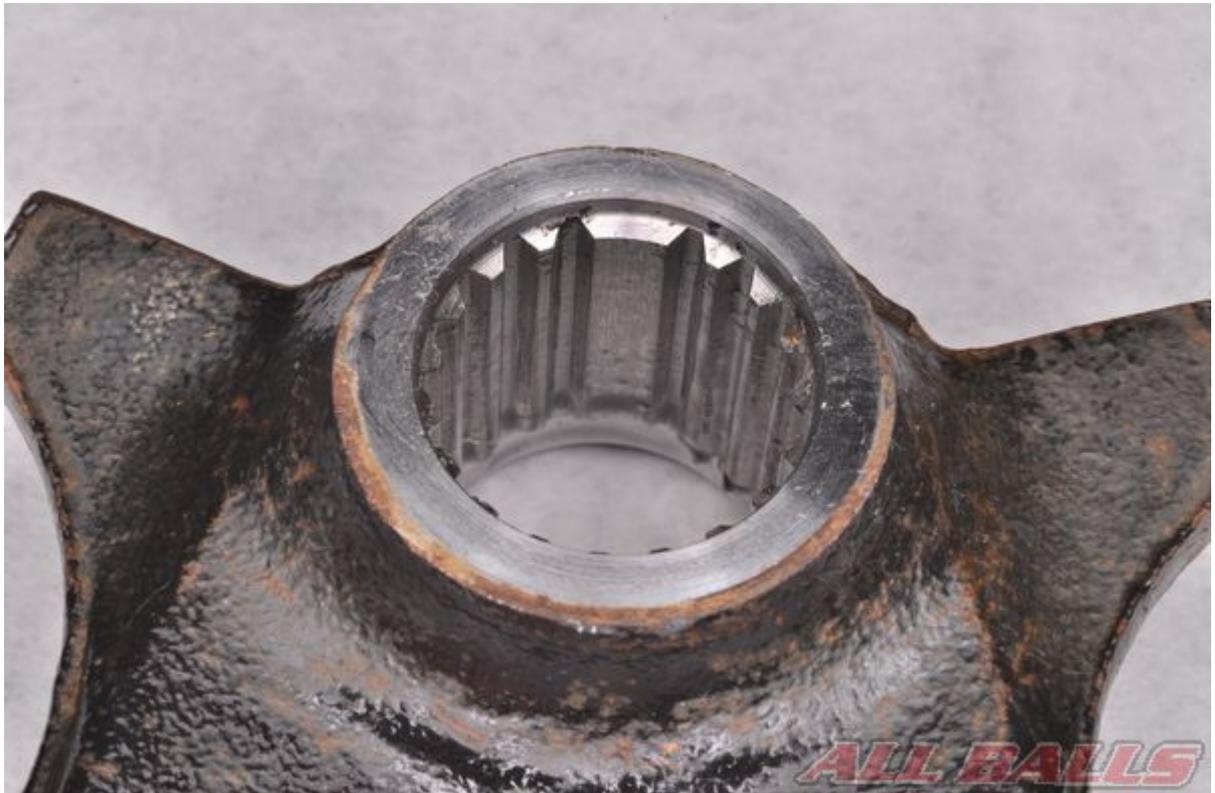
Install the collar/s if used.



Guide the steering stem into place.



Secure the upper length of the steering stem in its bushing.





Align the splines correctly and install the pitman arm onto the steering stem.





Install the washer and nut. Tighten the steering stem nut to specification.



Install the the new steering stem nut cotter pin.

Install the tie-rods, assemble the vehicle, and inspect the front end alignment.

To make your bearings last longer- avoid pressure washing around the bearing seals for extended periods of time. Pressure washers will push water right around seals causing premature rusting of the bearings.



INSTALL ALL BALLS RACING STICKER!



ALL BALLS
Better Bearings & Components

The Industry's Deepest,
Broadest Product Range.

TECHNICAL INNOVATION

DATE: 05/2007

APPLICATIONS: Street

CATEGORY: Steering Bearing

DESCRIPTION: Use of Spacer Washers for Honda Applications

This kit (22-1011) contains 2 washers. **One of the washers may be required in some applications.** To determine whether and which washer is required, the total height of the original lower bearing stack must be measured.

Take the 2 old bottom races (one from the lower frame and one from the lower triple tree) and place the balls into the races. Compare the total thickness (stack height) of the original bearing set to the total height of the taper bearing replacement set. If the thickness of the original bearing set is within +/- 1mm of the taper bearing replacement, discard the washers. If the thickness of the original bearing set is greater than 1mm, use the appropriate spacer washer to bring the total height of the taper bearing replacement set to within 1mm.