



## 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.



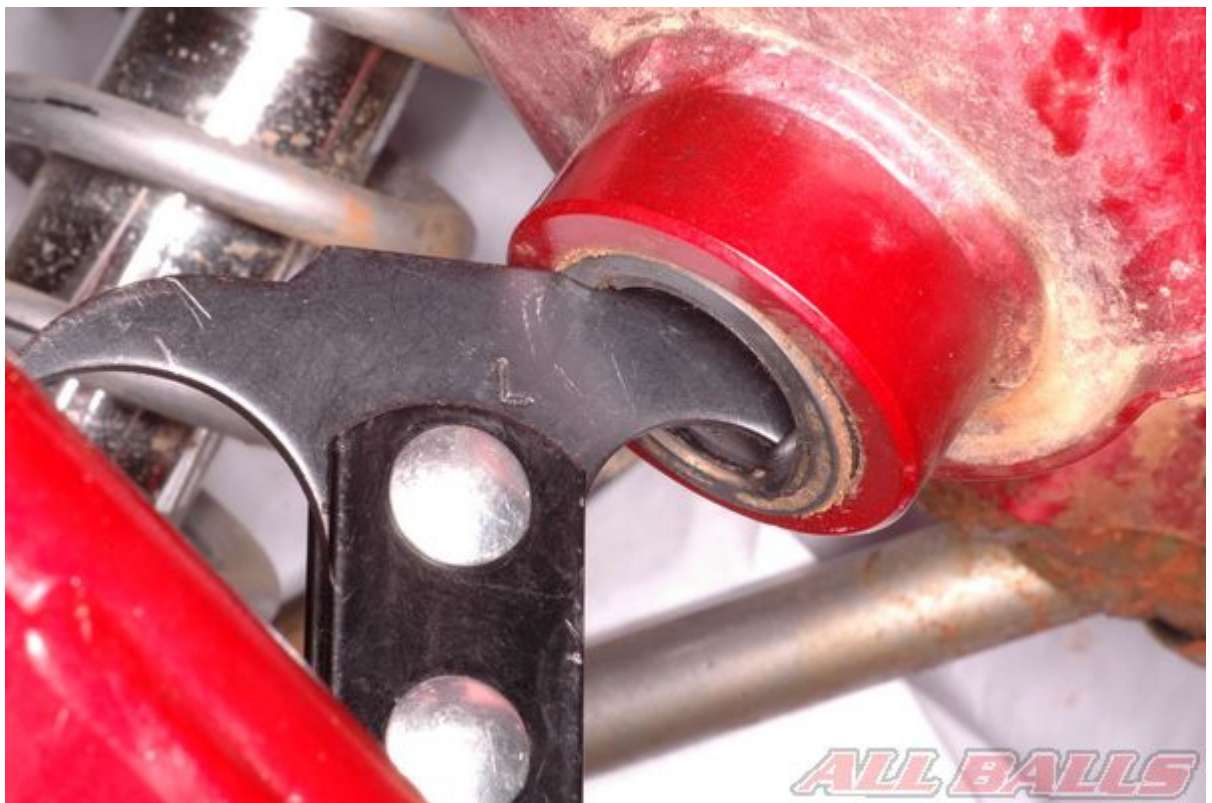
Remove the pitman arm.



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.



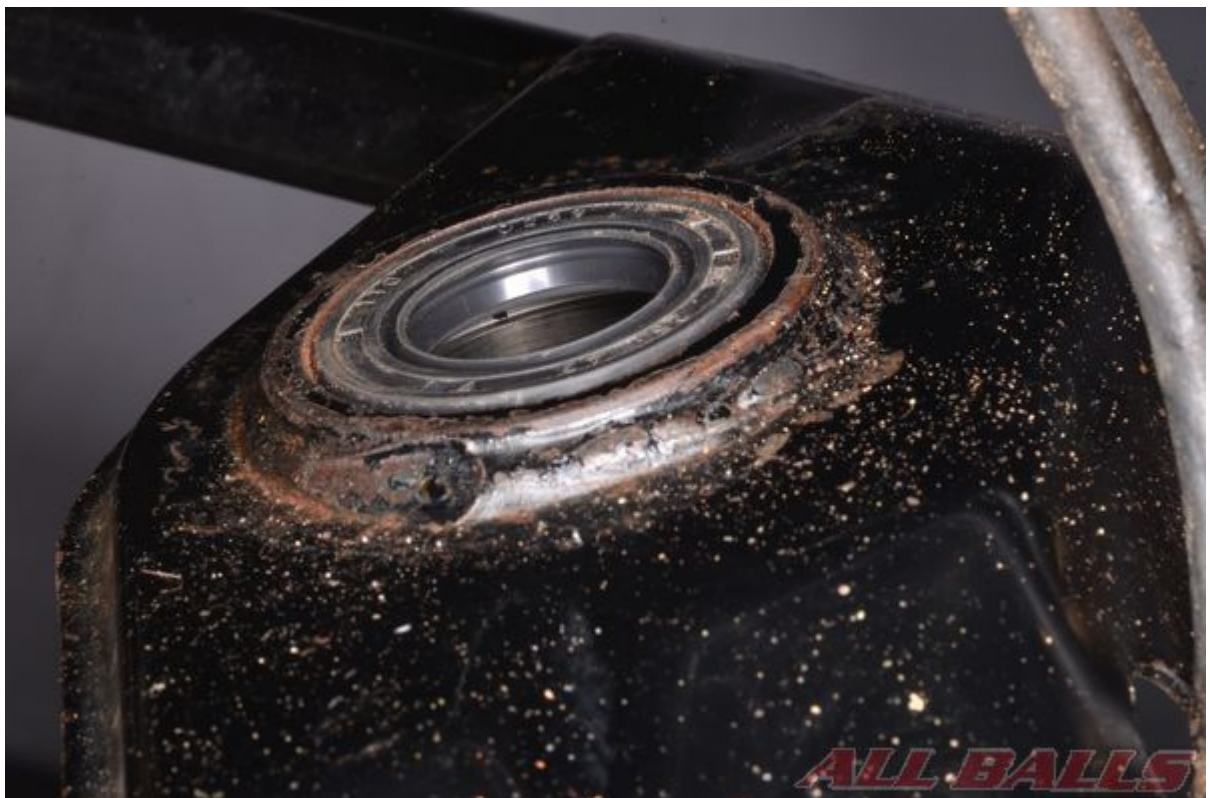
Install the snap ring into the snap ring groove with snap ring pliers.



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!

## **TECHNICAL INNOVATION**

DATE: 05/2007

<b>APPLICATIONS:</b>	Street
<b>CATEGORY:</b>	Steering Bearing
<b>DESCRIPTION:</b>	Gold Wing Taper Bearing Replacement

Remove both ball races from frame and from the stem. The bearing races (cup) are pressed into the frame. The bottom bearing seal is placed onto the stem followed by the bottom bearing (cone). The stem is placed into the frame followed by the upper bearing and finally the upper seal.

Torque the bearing assembly to fully locked position to remove any excess grease. Set final torque to 28 – 30 ft lbs.

