

9.3 Trailer Bearings

Items Needed:

Tire Blocks



Jack



Jack Stand



Lug Nut Wrench



Dead Blow Mallet (block of wood and a hammer can be used instead)



Needle Nose Pliers



Hammer



Long Counterpunch or Screwdriver



Channel Locks



Carburetor or Brake Cleaner



Rags/Paper Towels



New Set of Bearings/ Grease Cap



New Cotter Pin/Retaining Clip



Race Punch (a block of wood and counterpunch can be used instead)

Bearing Greaser (Bearings can also be hand packed)

Grease Gun



Tips:

Check bearings every morning by placing pressure against the wheel. If there is any lateral movement of the hub against the axle, the hub should be taken apart and bearings inspected.

Make sure to remove the flat washer from the front of the bearing assembly and to remove all of the bearing casing from the axle.

Clean ALL old grease and metal shavings from the axle and hub before installing new bearings, races, and grease caps.

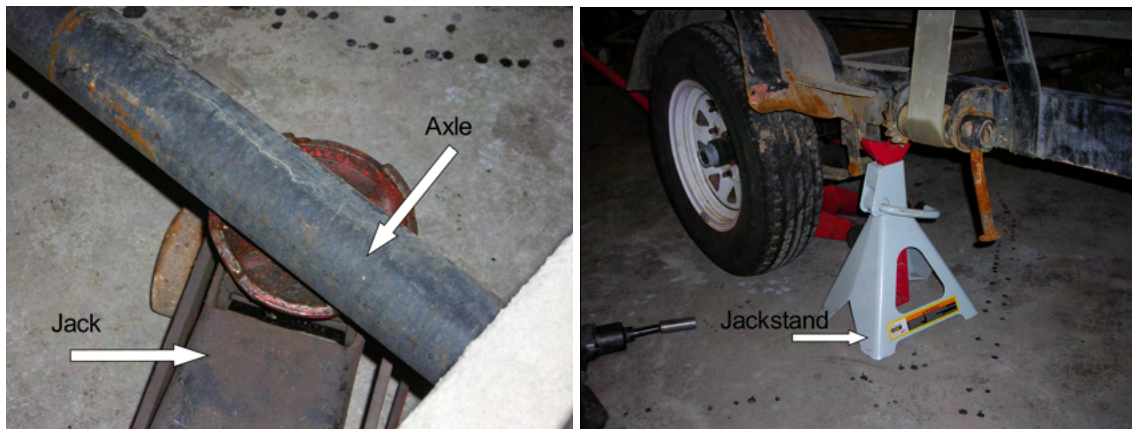
Make sure that races, grease covers, and bearing caps are tapped on evenly.

Procedure:

Park the trailer on flat, level ground. Block the wheels on the other side of the trailer to ensure that the trailer is secure and will not roll. Loosen the lug nuts on the wheel that the bearings are going to be replaced.



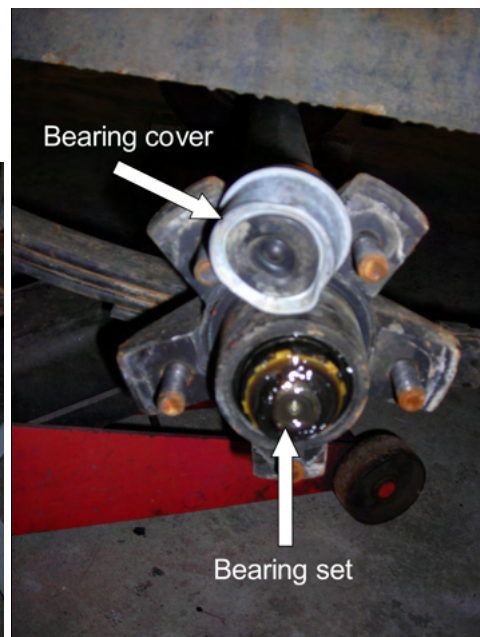
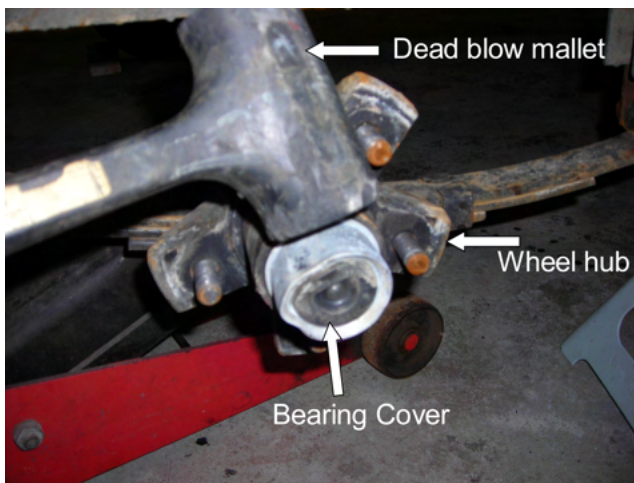
Jack up the side of the trailer where the bearing set is going to be replaced by placing the jack under the axle or under the frame close to the tire. Place jack stand(s) under the frame or axle to ensure that the trailer does not fall suddenly.



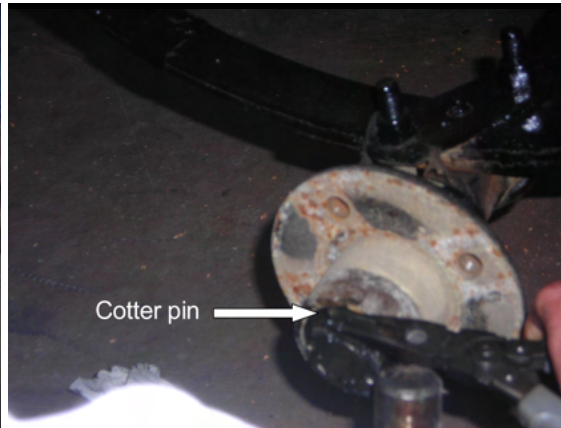
Remove the tire from the trailer by further loosening the lug nuts. This would be a good time to inspect the tire for any unusual wear or signs of dry rot on the tire wall.



Remove the bearing cover by tapping it from all sides with a dead blow or rubber mallet. A hammer and a block of wood can also be used. Be careful not to damage the bearing cover.



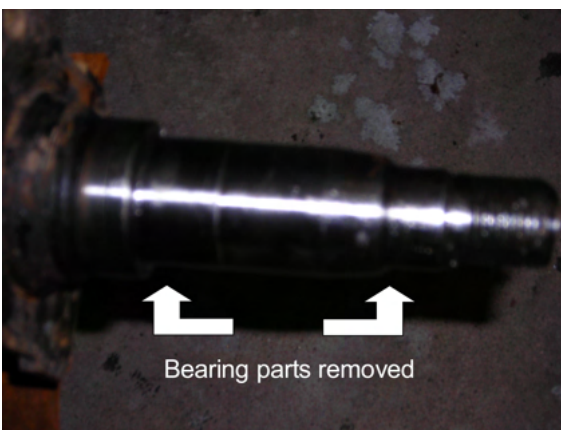
Remove the cotter pin or bearing nut retaining clip. These should be replaced with a new pin or clip during reassembly.



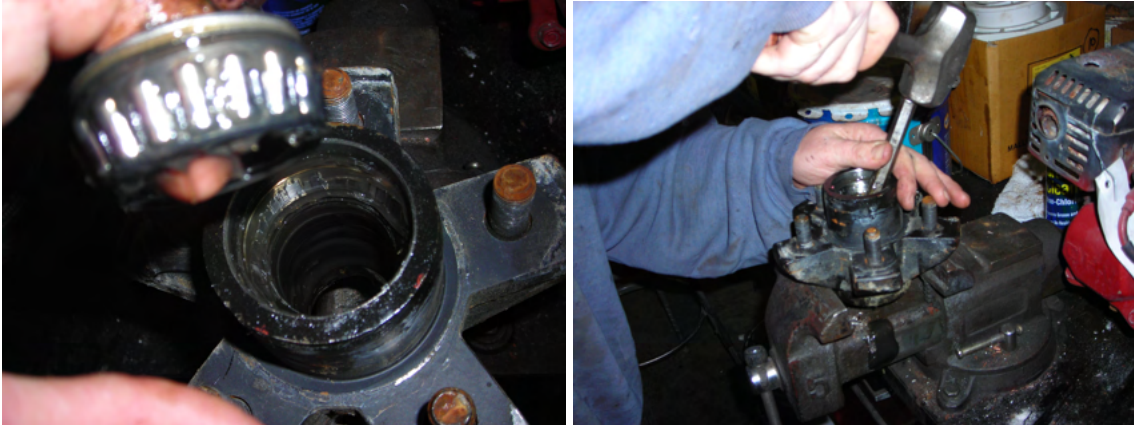
Remove the large bearing nut and flat washer from the axle then remove the hub from the axle.



Make sure that you remove ALL of the bearing parts from the axle. The picture below shows part of the bearing casing still on the axle. This commonly happens when bearings go bad.



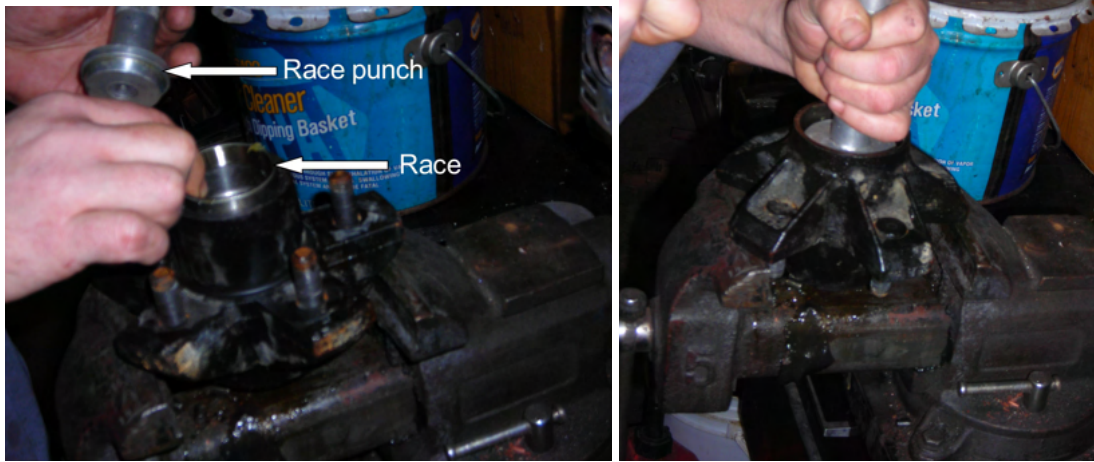
Remove the old bearings from the hub. Next take a long punch or screwdriver and gently tap out the races and bearings from the front and back of the hub. **MAKE SURE THAT YOU REMOVE THE FLAT WASHER FROM THE FRONT SET OF BEARINGS!!**



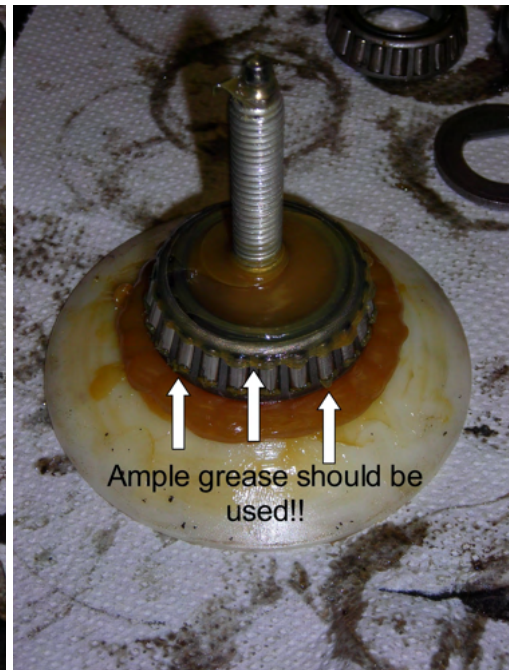
Clean all grease and metal shavings from the inside of the hub. Brake or carburetor cleaning does an excellent job of removing the grease. Also make sure to clean the axel of all grease and metal shavings/parts.



Tap the race into place on the front and back sides of the hub. A race punch and hammer is the way to seat the races. If a punch is not available, a block of wood can be used to get it started. A counterpunch can then be used to finish installing the races. Be careful and make sure that the race goes in evenly on all sides.



Next, grease the new bearings. Place the new bearings into the bottom part of the bearing greaser, screw the top half on and add grease until it is coming out of each bearing slot. If a bearing greaser is not available, the grease should be hand packed into each bearing compartment. This is no time to be stingy with the grease!



Place the back set of bearings into the hub and tap the grease cover on.



Place the new bearings in the front side of the hub so it sits in the race. Place the flat washer on and tighten the nut until the hub is snug. Spin the hub around a little then loosen the nut about $\frac{1}{16}$ th of a turn. Make sure that the hub moves freely but that it not “sloppy” (space) between the back of the hub and the axel.



Put on a new retaining clip (or, sometimes cotter pin) and add grease to the bearings until it is full.



Replace the bearing cap by gently tapping down evenly on all sides.



Replace the wheel and tighten all lug nuts. Remove the jack stand and carefully lower the jack. Perform a final tightening on all lug nuts with the wheel on the ground.

