



Installation Guide

Replacing a Differential Bearing Kit Installation Guide

*As always, these instructions are a general guide to help you. Always check with your service manual for your machine to make sure that you have a clear understanding of the setup. If you are not experienced with installing parts on your machine, Boss Bearing always recommends taking your machine to a mechanic to ensure proper installation. You can buy the bearings through us, save a few bucks, and take them to your local mechanic to be installed!

Instructions:

*It is important to make sure you clean your machine to prevent any problems going forward with the installation.

*Please be sure to follow the instructions thoroughly! If the steps to replacing any parts on your motorcycle or ATV/UTV are done improperly, this can lead to parts failure or possible injury.

Tip: Once you take the new parts are out of the packaging, place the bearings in the freezer for around one hour; this will allow the bearings to contract to a smaller tolerance.

Remove the Old Bearings:

1. Drain all the oil out from the differential and then remove the actual differential from the frame.
2. Loosen the differential case bolts evenly and remove them. Next, remove the case cover by finding and using the pry points.
3. Remove the old bearings and seals out from the differential housing. Match up the seals from the new kit with the old seals that you pulled out.

Please Note: there may be extra seals because most of these kits are designed to fit multiple machines.

4. Now you will want to remove the ring gear bearings. Once you remove this, inspect the bearings for any wear and tear. Then use a seal pick or any type of flat blade to remove the oil seals.
5. Next, drive the old bearings out from the differential case. You will want to clean the bearing bore and make sure it is free of any grease or rust. Inspect it closely for any wear and tear. This is important to do so that the new bearings do not hang during the installation.

6. Remove the pinion gear seal using a pick. Next you will remove the inner lock nut. A special lock nut tool is usually used for the gear shafts that are held in place by an inner lock nut. Be careful not to damage the case or threads while you drill out the stake in the inner lock nut. Now use a special lock nut wrench to loosen up the inner lock nut. Remove the pinion gear next. You can use a special puller tool for this. Remove the bearing from the pinion gear shaft.

Installing the New Bearings:

1. Use a bearing driver to install the shim and bearing into the pinion shaft.
2. Follow the OEM instructions to remove the needle bearing retaining ring.
3. Next, use a bearing puller to remove the needle bearing. If the needle bearing is still in the freezer, remove it and install the retainer ring onto it. Now try and fit the needle bearing and ring into a compressor tool (common for Hondas).
4. Use the heat gun to heat up the case and then drive the bearing into the heated case. Use one solid strike if the bearing uses a retaining ring.
5. Now you will want to make sure the bearing is fully seated in the case. If it uses a retaining ring, make sure it is seated fully in the groove.
6. Next, install the pinion into the case. Drive it into the case with a driver that contacts the outer race of the bearing.
7. Now you can install the gear shaft inner lock nut. Tighten it to your OEM specification with the wrench. Without damaging the threads or the case, strike the inner lock nut with a hammer.
8. Apply grease to the new pinion oil seal and install it so it is fully seated on the bearing.
9. Place the ring gear with the correct shims. If this gives you any backlash, you should get it inspected to be sure everything is set correctly.
10. Using a heat gun, heat up the bearing bore and install the bearing that was in the freezer. Drive the bearing into its correct place using a bearing driver that matches the outer race and make sure it is fully seated in the bore.
11. Now, depending on the type, install the cover with the O-ring, sealant, or gasket. Put the case bolts in and tighten them evenly to the OEM specific torque.
12. Now you are ready to install the differential back to the frame/swingarm, and put the machine back together.
13. Lastly, fill the final drive oil, and you are done!