

INSTALLATION INSTRUCTIONS

CARRIER BEARING XPEDITION 4S



TOOLS REQUIRED

Jack stands
Jack
Bearing puller
Bearing press
15mm 17mm 13mm wrench
10mm 12mm 13mm 15mm
17mm socket
1/4" wrench or socket
T40 torx
6mm Allen wrench
Torque wrench
2 or 3 jaw gear puller
1.5" x 8" pipe/sleeve
Hammer

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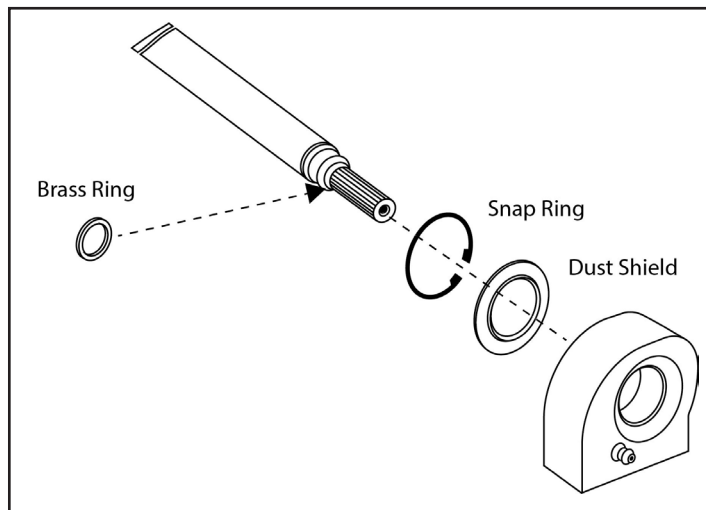
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REMOVAL OF OE CARRIER BEARING

NOTE: Removal of the differential is the easiest method we have found for driveline replacement. Because of the tight quarters location of the OE carrier bearing, you may need to destroy the OE carrier bearing to remove it. The SANDCRAFT Carrier Bearing has a 2 piece design for easy removal/maintenance.

1. Remove skid plates.
2. Raise all 4 wheels and support securely with jack stands.
3. Remove both front wheels.
4. Remove the front lower bumper to access the Front Differential (6X 15mm) 4 bolts and two bolts/nuts.
5. Remove both front ball joint bolts & nuts to access the axles.
6. Remove both front axles from the vehicle.
7. Remove 2X 6mm allen screws from the front driveline shaft at the differential. With the transmission in neutral, you will need to rotate the driveline to access both screws.
8. Disconnect the differential vent hose and wiring harness.
9. Remove 2X 18mm differential mounting bolts & nuts.
10. Slide the differential out through the front of the vehicle.
11. Remove 2X T40 bolts and remove safety hoop from the front half of the driveline.
12. Remove the front shaft of the driveline out through the front of the vehicle.
13. Loosen 2X 6mm allen screws on the pinch bolt from the rear shaft of the driveline at the transmission.
14. Remove 2X 15mm bolts from the OE carrier bearing.
15. The OE carrier bearing needs to be removed from the rear driveshaft before it can be pulled from the vehicle. Use a 6" jaw puller OR cut away the housing from the OE bearing using a cutting tool. You can also wrestle the rubber housing off of the bearing.
16. Remove the rear section of the driveline out through the front of the vehicle.



INSTALLATION OF SANDCRAFT CARRIER BEARING

NOTE: You now need to install the SANDCRAFT Carrier Bearing onto the OE drive shaft before re installing it into the vehicle. Make sure all surfaces are clean and free of contaminants before installing.

INSTALLATION STEP 1:

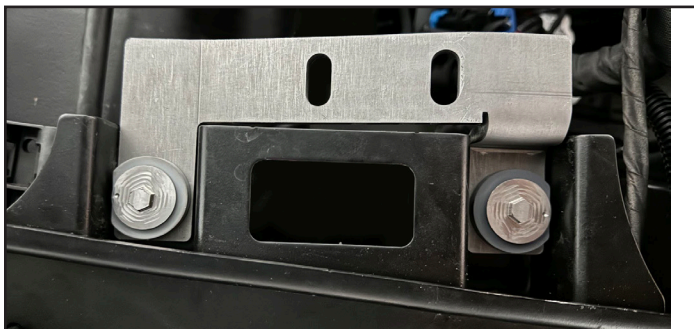
Disassemble the SANDCRAFT carrier bearing carrier from the carrier bearing base plate by removing 2X bolts. (size 17mm).

INSTALLATION STEP 2:

Supplied is a brass ring. This brass ring goes on the OE driveline before the bearing installation. Pay attention to the chamfer on the brass ring. The chamfer side goes on first so that it is against the driveline shoulder. Using a press, install the new carrier bearing with green threadlocker with the snap ring facing the brass ring. Use green threadlocker on the inner surface of bearing and on the shoulder of the driveshaft. Press bearing until it is fully seated against the brass ring.

!!TAKE CARE WHEN PRESSING THE CARRIER BEARING ONTO THE SHAFT. USE A PIPE OR TUBE AND CAREFULLY PRESS THE BEARING INTO PLACE. APPLY PRESSURE ONLY TO THE INNER RACE OR YOU WILL DAMAGE THE BEARING!!

Be careful not to over press the bearing – this will cause excessive side load pressure and potentially damage bearing. The snap ring side of the bearing housing must go on first. The snap ring side of the bearing housing will be pressed up against the brass ring.
THIS IS CRITICAL



INSTALLATION OF DRIVELINE/CARRIER BEARING

1. The SANDCRAFT Carrier Bearing corrects the driveline angle from TWO axis points. First install the 2X 17mm Carrier Bearing Base Plate bolts down THROUGH the OE carrier bearing mounting locations. Once installed, they should spin freely.
2. Prepare the Carrier Bearing Base Plate for mounting. Install 2X grey bushings with recessed sections at the top of the Carrier Bearing Base Plate. Install 2X grey bushings with flange nut into the bottom of the Carrier Bearing Base Plate. Make sure the flat sides of all bushings line up with the outside edges of the bracket.
3. Use an 8mm wrench to ensure the dots on the flange nuts are both FACING OUT. They should be FACING OUT when installation is complete.
4. The bracket can only be installed in one orientation. Align the recessed sections of the dark grey bushings with the weld nuts at the OE carrier bearing position.
5. IMPORTANT: Hold the lower flange 8mm nuts in place with the dots FACING OUT and tighten the 2X 17mm Carrier Bearing Base Plate bolts. Torque to 18 ft lbs.
6. Install the Rear Shaft with Carrier Bearing through the front of the vehicle and connect to the output shaft of the transmission. Tighten 2X 6mm allen pinch clamp bolts. Torque to 18 ft lbs.
7. Align the SANDCRAFT Carrier Bearing to the Base Plate and install 2X 17mm bolts. Torque to 18 ft lbs.
8. Install the Front Shaft through the front of the vehicle. Align with the master spline on the middle slip yoke.
9. Insert the Differential into the vehicle, align the input shaft with the SANDCRAFT Front Driveshaft.
10. Install 2X 18mm differential mounting bolts. Follow manufacturer torque spec.
11. Tighten 4X 12 point 1/4" bolts at the differential. Torque to 8 ft lbs.
12. Re connect differential vent hose and wiring harness.
13. Re install the axles and ball joints.
14. Re install the front bumper.
15. Re install the wheels.
16. Safely lower the vehicle to the ground and re-install skid plates.

NOTE: The safety hoop is not re installed with the SANDCRAFT Driveline & Carrier Bearing Combo BUT IS RE-INSTALLED WHEN INSTALLING THE CARRIER BEARING ONLY.

**PLEASE CONTACT US AT (480)-539-4438 OR
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IF YOU HAVE ANY QUESTIONS.**

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