

MAX IV

Max IV Bearing.doc
1/14/05


Axle Bearing Replacement

Tools Required:

9/16" Wrench	Rubber Mallet
9/16" Socket	Ratchet
Torque Wrench	Jack Stands
Grease Gun	7/16" Wrench
Floor Jack	

Procedure:

1. Move the vehicle to a level surface.
2. Place the gear shift lever in REVERSE gear.
3. Remove the front and rear floorboards and remove the engine cover. Disconnect the negative battery cable.
4. Raise the vehicle so the tires are off the ground.

 **WARNING** Securely support the vehicle so there is no danger of it falling.

5. Place the vehicle in NEUTRAL gear.
6. Remove the tire from the axle with the bearing to be replaced.
7. Follow the removal procedure under the *Axle Replacement* section for the appropriate axle bearing to be replaced.
8. Upon removing the axle from the vehicle, determine which bearing needs to be replaced (inner chassis bearing or outer chassis bearing). Follow the appropriate section to replace the bearing:

Part I - Outer chassis Bearing Replacement

Part II - Inner Chassis Bearing Replacement (Locking collar type)

Part III - Inner Chassis Bearing Replacement (Turned down splined axle/non-locking collar type)

Part I - Outer Chassis Bearing Replacement


1. Set the new bearing into the inner bearing flange. Make sure that the eccentric locking surface on the bearing is positioned towards the outside of the vehicle (towards the tire).
2. Install the nuts and lock washers which were removed during the axle removal. Do not tighten the nuts down at this time.
3. Follow the steps for the installation procedure in the *Axle Replacement* section for the appropriate axle to be installed. Begin with Step 2.

Part II - Inner Chassis Bearing Replacement (Locking Collar Type)

1. Locate the four 3/8" bolts securing the inner bearing and flange assembly to the inner chassis rail. Remove the nuts and lock washers. Remove the outer flange and bearing.
2. Set the new inner bearing into the inner bearing flange. Make sure that the eccentric locking surface on the bearing is positioned towards the outside of the vehicle (towards the tire).
3. Install the outer flange and the nuts and lock washers removed in step 1. Tighten these down hand tight.
4. Install the outer chassis bearing and flange as described in step 1 of the *Axle Replacement - Installation* section. With the outer and new inner bearing loosely installed, slide the axle through both bearings. Tighten down the inner and outer bearing flange bolts to 23 ft-lbs. Once tight, the axle should slide in and out of both bearings with ease. If not, the bearings are not in line with each other. Slide the axle out of the inner bearing and tap the axle flange (where the wheel bolts to) with a rubber mallet to change the position of the outer bearing in the bearing flange. Check to see if the axle will slide in and out of both bearings with ease. Repeat this procedure until the bearings are aligned properly. Remove the axle and set it aside.

 **CAUTION** Failure to align bearings will result in vehicle damage.

5. Follow the installation procedure in the *Axle Replacement* section for the appropriate axle to be installed. Begin with step 2.

 **CAUTION** Do not over grease the inner bearing. It has been pre-lubed by the manufacturer. Too much grease will damage the bearing. Be certain that the axle and bearing are aligned.


Part III - Inner Chassis Bearing Replacement


(Turned Down Splined Axle/Non-Locking Collar Type)


1. Locate the four 3/8" bolts securing the inner bearing and flange assembly to the inner chassis rail. Remove the nuts and lock washers. Remove the outer flange and bearing.
2. Set the new inner bearing into the inner bearing flange. Make sure that the set screw locking side on the bearing is positioned towards the outside of the vehicle (towards the tire). See Figure VI in the *Axle Replacement* section.
3. Install the outer flange and the nuts and lock washers removed in step 1. Tighten these down hand tight.
4. Install the outer chassis bearing and flange as described in step 1 of the *Axle Replacement - Installation* section. With the outer and new inner bearing loosely installed, slide the axle through both bearings. Tighten down the inner and outer bearing flange bolts to 23 ft-lbs. Once tight, the axle should slide in and out of both bearings with ease. If not, the bearings are not in line with each other. Slide the axle out of the inner bearing and tap the axle flange (where the wheel bolts to) with a rubber mallet to change the position of the outer bearing in the bearing flange. Check to see if the axle will slide in and out of both bearings with ease. Repeat this procedure until the bearings are aligned properly. Remove the axle and set it aside.


 **CAUTION** Failure to align bearings will result in vehicle damage.

5. Follow the installation procedure in the *Axle Replacement* section for the appropriate axle to be installed. Begin with step 2.

 **CAUTION** Do not over grease the inner bearing. It has been pre-lubed by the manufacturer. Too much grease will damage the bearing. Be certain that the axle and bearing are aligned.

 **CAUTION** A CAUTION indicates special precautions that must be taken to avoid damage to the vehicle.

 **WARNING** Failure to follow WARNING instructions could result in severe injury or death the vehicle operator, any passenger, or a bystander.

 **NOTE** A note provides key information to make procedures more clear and easier.