

Axle Shaft, Hub, Oil Seal and Outer Wheel Bearing**SPECIAL SERVICE TOOL(S)
REQUIRED**

| Description | Tool Number |
|----------------|--------------|
| Locknut Wrench | T85T-4252-AH |

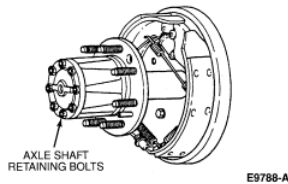
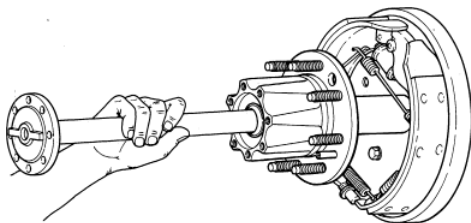
Removal

NOTE: If, for any reason, the rear hub (1109) is removed from the spindle, the old hub seal must be removed and a new hub seal installed.

1. Set the parking brake and loosen the eight axle shaft retaining bolts.
2. Raise the vehicle to the desired working height, keeping the axle parallel with the floor.
3. Release parking brake and back off the rear brake adjustment, if necessary.
4. Remove the wheel (1007).
5. Remove brake drum (1126). Push-on (sheet metal) drum retainer nuts may be discarded. Push-on retainer nuts are used for shipping purposes only and have no vehicle function. If retainers are not flush against the drum, the retainers can prevent the wheel from being flat against the drum, which could contribute to vibration.

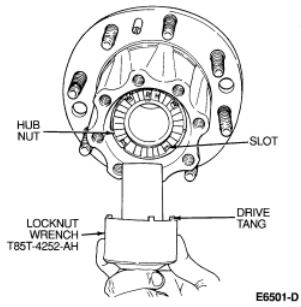


6. Place a drain pan under the axle shaft (4234) and rear hub. Remove the eight 7/16-inch axle shaft bolts and remove the axle shaft.

**Axle Shaft Removal**

7. **CAUTION:** The right hub nuts are right-hand thread; the left hub nuts are left-hand thread. Each hub nut is stamped RH for the right hub nut or LH for the left hub nut.

Install Locknut Wrench T85T-4252-AH so that the drive tangs of the tool engage the four slots in the hub nut.

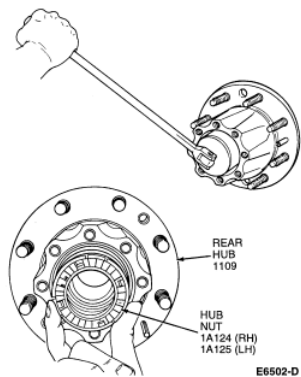


8. **CAUTION:** A new hub nut must be installed if used hub nut comes apart during removal or installation.

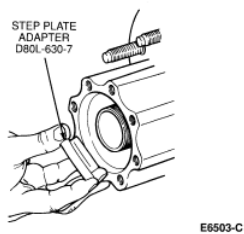
CAUTION: Under no circumstances are power impact tools to be used when performing these operations.

NOTE: The hub nut will ratchet during this operation.

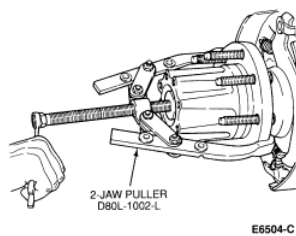
Remove hub nut (counterclockwise for right-hand thread; clockwise for left-hand thread).



9. Install Step Plate Adapter D80L-630-7 (Part of Step Plate Adapter Set D80L-630-A) or equivalent.

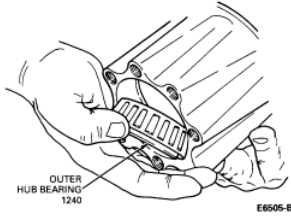


10. Install 2-Jaw Puller D80L-1002-L or equivalent and loosen rear hub to the point of removal.



11. **CAUTION:** Do not drop outer hub bearing when removing.

Remove rear hub assembly.

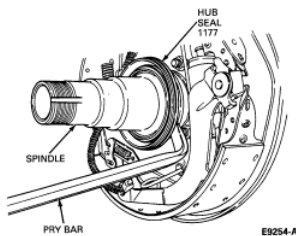


12. Replace hub oil seal. Refer to [Rear Hub, Full-Floating Axle](#) in the Disassembly and Assembly portion of this section.

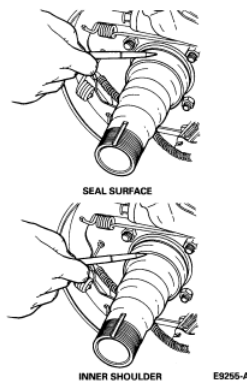
13. **CAUTION:** Extreme care should be taken not to scratch or gouge seal or bearing surfaces.

NOTE: The rear wheel bearing inner cone and roller (1244) is located behind the hub oil seal. A new hub seal must be installed each time the hub assembly is removed.

If after hub removal, the hub seal or seal inner slinger remains on the spindle, remove it as shown.



14. Inspect seal surface for scratches or damage. Inspect inner shoulder for damage from bearing cone turning. Remove all scratches, gouges or galling damage with No. 600 or finer wet or dry sandpaper.



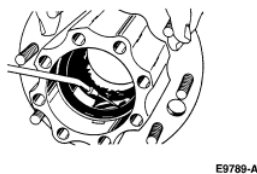
Installation

1. Clean spindle thoroughly after removing rear hub, then coat the spindle with axle lubricant.

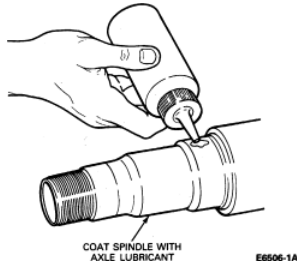
2. **NOTE:** Hub bearings must be prelubed with grease prior to installation. Use Premium Long-Life Grease XG-1-C or -K or equivalent meeting Ford specification ESA-M1C75-B.

Pack each bearing cone and roller with a bearing packing tool, using Premium Long-Life Grease XG-1-C or -K or equivalent meeting Ford specification ESA-M1C75-B.

3. Fill the hub cavity with 29.6 ml (1 oz.) of clean motor oil.

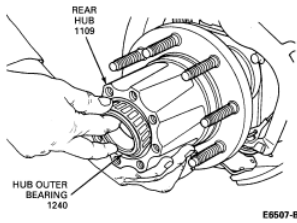


4. Coat the spindle with recommended axle lubricant.



5. **NOTE:** Installing the rear hub in the following manner causes the hub outer bearing to act as a pilot, making the installation easier.

Push rear hub (with hub outer bearing seated in outer cup) onto spindle.

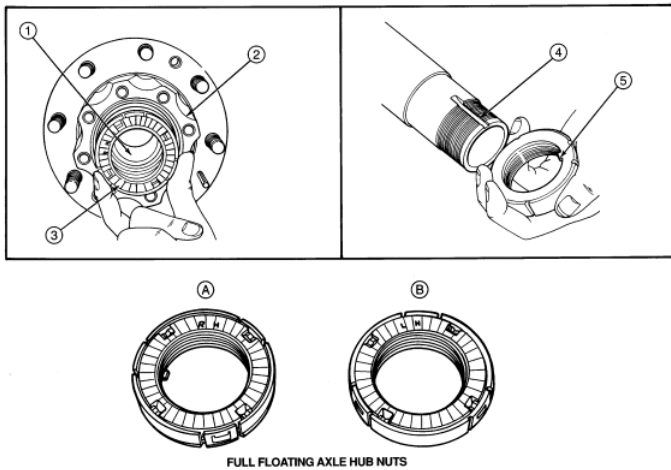


6. **CAUTION:** A new hub nut must be installed if hub nut comes apart during installation or removal.

CAUTION: Make sure the hub nut tab is located in the keyway prior to thread engagement.

Install the hub nut on the spindle. Turn hub nut clockwise for right-hand thread, counterclockwise for left-hand thread.

Hub Nut Installation



FULL FLOATING AXLE HUB NUTS

E6508-E

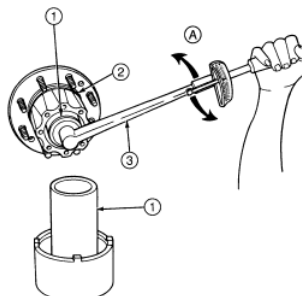
| Item | Part Number | Description |
|------|-------------|--------------------------------------|
| 1 | — | Spindle (Part of 4010) |
| 2 | 1109 | Rear Hub |
| 3 | 1A124 | Hub Nut |
| 4 | — | Keyway (Part of 4010) |
| 5 | — | Hub Nut Tab (Part of 1A124) |
| A | — | RH Thread (Install Clockwise) |
| B | — | LH Thread (Install Counterclockwise) |

7. Install Locknut Wrench T85T-4252-AH on spindle.

8. **CAUTION:** After tightening hub nut to 75-88 Nm (55-65 lb-ft), ratchet back eight teeth or notches on the hub nut (1/6 turn). Eight clicks must be heard in order to have performed the procedure correctly.

NOTE: The hub nut will ratchet as torque is applied.

Tighten hub nut to 75-88 Nm (55-65 lb-ft). Rotate rear hub occasionally while tightening. Ratchet back eight teeth or notches (1/6 turn) on the hub nut.



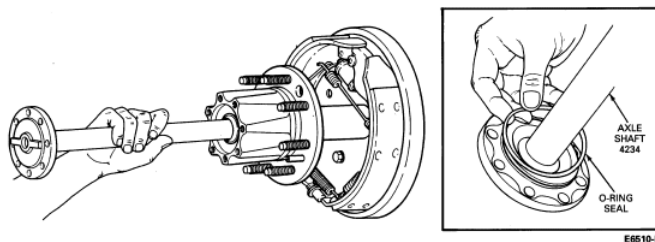
CAUTION: THIS OPERATION PICTURES A RIGHT-HAND THREAD NUT BEING TIGHTENED. REVERSE THIS PROCEDURE FOR LEFT-HAND THREAD NUT. E8946-C

| Item | Part Number | Description |
|------|--------------|---|
| 1 | T85T-4252-AH | Locknut Wrench |
| 2 | 1109 | Rear Hub |
| 3 | — | Torque Wrench |
| A | — | Tighten to 75-88 Nm (55-65 Lb-Ft); Back Off 8 Clicks (1/6 Turn) |

9. Inspect axle shaft O-ring seal for cracks, nicks or wear and replace if required.
10. Install the axle shaft.
11. Coat the threads of all eight axle shaft retaining bolts with Loctite® or equivalent.
12. **CAUTION:** Do not tighten the axle shaft bolts to specification at this time.

Install and tighten axle shaft retaining bolts only until they seat.

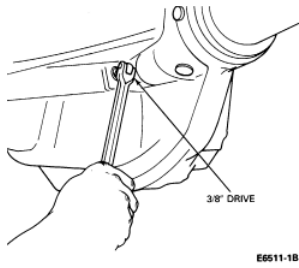
Axle Shaft Installation



13. **NOTE:** Prior to installing brake drum, adjust brake so that brake diameter is 0.762 mm (0.030 inch) less than drum diameter.

Install brake drum.

14. **CAUTION:** Do not tighten lug nuts (1012) to specification at this time. Tighten only until they seat.
- Install wheel, tire and lug nuts.
15. Loosen filler plug. If axle lube begins to seep out, retighten filler plug. If there is no lubricant seepage, remove filler plug and fill to bottom of filler plug hole with Premium Rear Axle Lubricant XY-80W90-QL or equivalent meeting Ford specification WSP-M2C197-A.
16. Wipe any particles off magnetic fill plug.
17. Install filler plug and tighten to 20-40 Nm (15-30 lb-ft).



18. Lower the vehicle.
 19. Make brake adjustments if necessary.
 20. Tighten lug nuts to 170-230 Nm (126-170 lb-ft).
 21. Tighten eight axle shaft retaining bolts to 95-115 Nm (75-85 lb-ft).
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