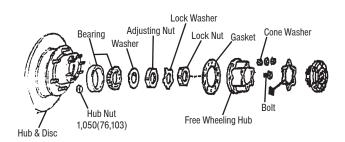


# TOYOTA LOCKING HUB MODEL 11041-02 / 11039-02 / 11010-02 / 490 / 466

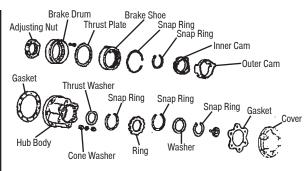
#### STOCK HUB REMOVAL:

- 1. Set control knob to "FREE" or 4x2 position.
- 2. Remove cover mounting bolts and pull cover off.
- 3. Remove the bolt and washer from end of the axle shaft, if applicable. Some models use a snap ring at end of axle shaft, remove snap ring. Remove hub body mounting nuts and remove hub body. To dislodge and remove locking cones, place a socket slightly larger than cones over cones against hub flange, rap sharply with a hammer.

4. Automatic Hubs Only: After removing hub body from axle hub, use a screw driver or needle nose pliers to remove snap ring from the automatic hub. (See illustration) Using a torx screw driver, remove screws that hold break drum to the adjusting nut. Using a large spindle nut socket (hub wrench) remove adjusting nut. This will complete the automatic hub removal.



MANUAL HUBS

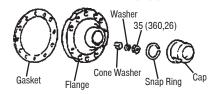


## **AUTOMATIC HUBS**

#### DRIVE FLANGE REMOVAL:

NOTE - 1989 - Newer models equipped with "Automatic Differential Disconnect" are not equipped with locking hubs. Drive flange must be removed to allow locking hub installation.

- 5. If applicable, use a hammer and chisel (or straight slot screw driver) to knock off flange cap. Remove bolt and washer from end of axle shaft.
- **6.** Remove six flange mounting nuts. Follow procedure described in step #3 for locking cone removal.
- 7. Install and tighten two 8mm bolts into threaded holes in flange. Tighten evenly until flange brakes are loose and can be removed.

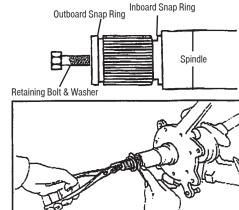


#### **SERVICE INSTRUCTIONS:**

Hubs should be serviced at same time as wheel bearings. Clean and coat with oil. The hubs should never be packed with grease. We recommend checking wheel bearing adjustment and locknut torque to be sure they are within vehicle manufacturer's specifications. Engage hubs one mile monthly.

#### STOCK HUB REMOVAL:

- **8.** Models originally equipped with automatic hubs DO NOT have spindle locking washers and nuts. These items are necessary to lock axle hub onto spindle. These parts are not available through Mile Marker, contact your Toyota dealer.
  - a) Install thrust washer onto spindle. Install adjusting nut onto spindle. Torque adjusting nut to 43 ft. lbs. Loosen nut until Axle hub can be turned by hand, then torque nut to 18ft. lbs.
  - b) Install lock washer, then install lock nut. Torque lock nut to 35 ft. lbs. Assure there is no play between axle hub and bearings. Secure lock nuts by bending one lock washer tab inward and one tab outward.
- **9.** You must have at least one of the three provisions listed below:
  - **a)** Nobody has claimed they do not have Outboard Snap Ring Groove, but they do claim Mile Marker female hub splines cover the groove. This groove and snap ring would NOT be necessary if you had the Retainer Bolt or Inboard snap ring provision.
  - **b)** Toyota parts manuals show that all models have the Inboard Snap Ring. After-Market axles may not have this snap ring groove, consequently Retaining Bolt is essential.
  - c) You may or may not have an axle retainer bolt, or may not have been supplied one with the hubs. You do not need an axle retainer bolt if you are using an inboard snap ring.
- 10. Install spacer shim and snap ring onto axle shaft at end of spindle. You may assume that models with Automatic Hubs or Automatic Differential Disconnect do not have spacer shims or snap rings. These items are necessary to prevent axle from traveling inward, out of spindle. These parts are available from any Toyota dealer. Using a feeler gauge, measure clearance between spacer shim and end of spindle. Clearance should be between .030 and .027. If clearance is not within specifications, Select appropriate spacer shim from chart at the right.



TOYOTA PART #	DESCRIPTION	SIZE
90502-27023	Snap Ring	
90560-27010	Spacer Shim	1.80mm
90560-27005	Spacer Shim	2.00mm
90560-27011	Spacer Shim	2.25mm

#### MANUAL HUB INSTALLATION:

- 11. Remove control knob and clutch from Mile Marker manual hub body.
- 12. Place new gasket onto axle shaft.
- 13. Install manual hub body onto axle hub aligning axle hub dowel pins, with corresponding holes in Mile Marker hub body. It may be necessary to turn internal splines by finger tip to align splines while seating hub body against axle hub.
- **14.** Install six provided locking plates or lock washers onto original studs. Install original mounting nuts (do not use original flat or cone washers). Torque nut to 16 ft. lbs. Bend locking plate tabs flat against mounting nuts.
- **15.** Install Mile Marker control knob and clutch into hub body. Install six allen head screws. torque to 7 ft. Lbs.
- **16.** Turn knob to 4x2 position for highway driving.

### **WARRANTY INFORMATION**

#### Mile Marker/Selectro hubs, and Conversion Kits limited warranty

Mile Marker Inc. warrants directly to the first purchaser that all Mile Marker Hub Part Numbers 427, 428, and all "Selectro Classic" models will be free from defect in material and workmanship appearing under normal use and service for a period of one year. Mile Marker Inc. warrants directly to the first purchaser that all Mile Marker Hub Part Numbers 460, 426, and 438 will be free from defect in material and workmanship appearing under normal use and service for a period of two years. Mile Marker Inc. warrants directly to the first purchaser that Mile Marker Locking Hub Part Numbers 104, 302, 420, 423, 430, 432, 435, 449SS, 459SS, 457, 466, 470, 481, and 490 will be free from defect in material and workmanship appearing under normal use and service for as long as said purchaser owns the locking hub. Mile Marker Inc. warrants directly to the first purchaser that all Mile Marker Conversion Kits will be free from defect in material and workmanship appearing under normal use and service for a period of one year, except for the Four Wheel Drive Chain included in some kits, which has a 90-day warranty.

Warranty registration cards for each product must be submitted at the time of purchase or within 30 days by the end user. If you discover a hidden defect, Mile Marker will, as its option, repair or replace the product or necessary replacement parts at no charge to you, provided you remove the product from the vehicle and return it prepaid to Mile Marker Inc. If the product was purchased in the United States, the owner must contact our warranty department to get a Return Goods Authorization (RGA) Number before returning the product. If the product was purchased outside the United States, the owner must return the product to the original place of purchase.