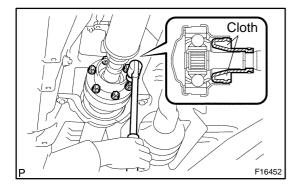
OVERHAUL

300B0-01

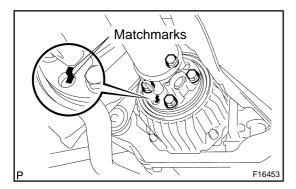


1. REMOVE PROPELLER W/CENTER BEARING SHAFT ASSY

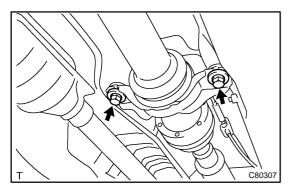
- (a) Depress the brake pedal and hold it.
- (b) Using a hexagon wrench (6 mm), loosen the cross groove joint set bolts 1/2 turn.

HINT:

Put a piece of cloth inside the cross groove joint cover so that the boot does not touch the inside of the cross groove joint cover.



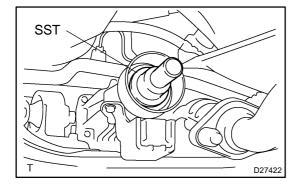
- (c) Place matchmarks on the propeller shaft sub–assy and differential carrier assy.
- (d) Remove the 4 bolts and washers, separate the propeller shaft sub-assy.



- (e) Remove the 2 bolts and 2 bearing washer No.2, separate the propeller w/ center bearing shaft assy.
- (f) Pull out the propeller w/ center bearing shaft assy from the transfer.

NOTICE:

- When removing the propeller shaft, do not apply a large force to the universal joint.
- During and after the removal of the propeller shaft, keep the universal joint angle straight (within 15 degrees).
- · Be careful not to damage the oil seal.

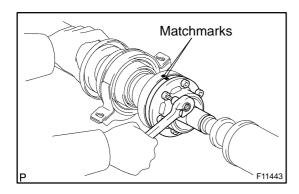


(g) Insert SST into the transfer to prevent oil leakage. SST 09325–20010

NOTICE:

Be careful not to damage the oil seal.

2003 COROLLA MATRIX (RM940U)



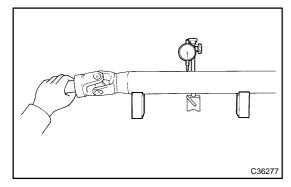
2. REMOVE INTERMEDIATE SHAFT

(a) Place matchmarks on the propeller shaft sub–assy and universal joint flange.

NOTICE:

Do not place the matchmarks with a punch.

(b) Using a hexagon wrench (6 mm), remove the 6 bolts and 2 washers to separate intermediate shaft sub–assy and propeller shaft sub–assy.



3. INSPECT INTERMEDIATE SHAFT

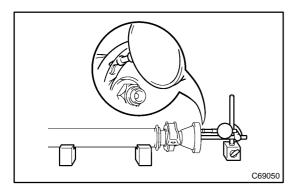
(a) Using a dial indicator, inspect the intermediate shaft subassy.

Maximum runout: 0.4 mm (0.016 in.)

NOTICE:

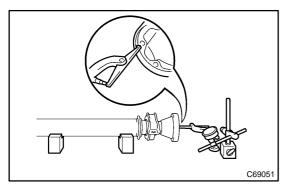
The dial indicator must be set at a right angle to the center of the propeller shaft.

If the shaft runout is greater than the maximum, replace the propeller w/ center bearing shaft assy.



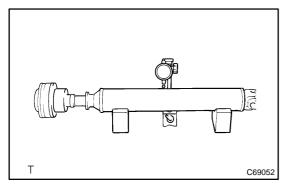
(b) Using a dial indicator, inspect the rear side of universal joint flange runout in the vertical direction.

Maximum runout: 0.1 mm (0.004 in.)



(c) Using a dial indicator, inspect the rear side of universal joint flange runout in the horizontal direction.

Maximum runout: 0.1 mm (0.004 in.)



4. INSPECT PROPELLER SHAFT

(a) Using a dial indicator, inspect the propeller shaft subassy.

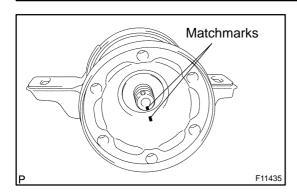
Maximum runout: 0.4 mm (0.016 in.)

NOTICE:

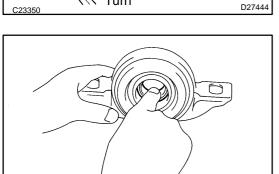
The dial indicator must be set at a right angle to the center of the propeller shaft.

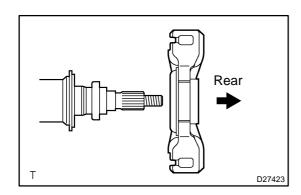
If the shaft runout is greater than the maximum, replace the propeller w/ center bearing shaft assy.

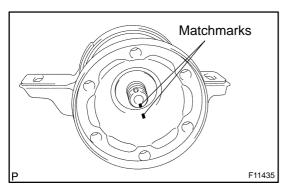
2003 COROLLA MATRIX (RM940U)



SST Hold Turn







5. REMOVE CENTER SUPPORT BEARING ASSY NO.1

- (a) Using a hammer and a chisel, loosen the staked part of the nut
- (b) Using a soft vise to hold the universal joint flange, remove the nut and washer.

NOTICE:

Do not overtighten the vise.

- (c) Place matchmarks on the universal joint flange and intermediate shaft sub–assy.
- (d) Using SST, remove the universal joint flange. SST 09950-40011 (09951-04020, 09952-04010, 09953-04030, 09954-04010, 09955-04061, 09957-04010, 09958-04011)

NOTICE:

Be careful not to damage the universal joint flange.

(e) Remove the center support bearing assy No.1 and washer.

6. INSPECT CENTER SUPPORT BEARING ASSY NO.1

- (a) Turn the center support bearing assy No.1 by hand with applying force in the rotation direction. Check the bearing turns smoothly.
- (b) Check that the seals and bracket are not cracked or damaged.

If the center support bearing assy No.1 is damaged, worn, or does not turn freely, replace it.

7. INSTALL CENTER SUPPORT BEARING ASSY NO.1

(a) Set the center support bearing No.1 on the intermediate shaft sub–assy as shown in the illustration.

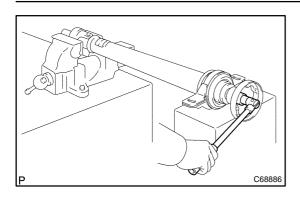
NOTICE:

C22188

Be sure to install the bearing in the correct orientation.

- (b) Install the new washer to the intermediate shaft subassy.
- (c) Align the matchmarks on the universal joint flange and intermediate shaft sub—assy, place the flange on the shaft.

2003 COROLLA MATRIX (RM940U)



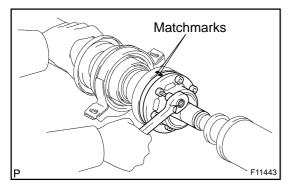
(d) Using a soft vise to hold the universal joint flange, press the bearing into position by tightening down a new nut and washer.

Torque: 181.4 N·m (1,850 kgf·cm, 134 ft·lbf)

- (e) Loosen the nut.
- (f) Torque the nut again.

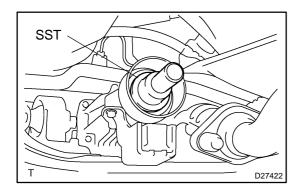
Torque: 68.6 N·m (700 kgf·cm, 51 ft·lbf)

(g) Using a chisel and a hammer, stake the nut.



8. INSTALL INTERMEDIATE SHAFT

- (a) Align the matchmarks on the intermediate shaft sub–assy and propeller shaft sub–assy.
- (b) Using a hexagon wrench (6 mm), tighten the 6 bolts with 2 washers temporarily.

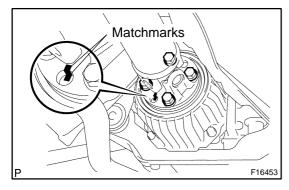


9. TEMPORARY TIGHTEN PROPELLER W/CENTER BEARING SHAFT ASSY

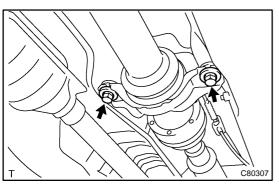
- (a) Remove SST from the transfer.
- (b) Insert the propeller w/ center bearing shaft assy.

NOTICE:

- Be careful not to damage the oil seal.
- Be careful not to damage the universal joint boot when installing the propeller shaft.



(c) Align matchmarks on the propeller shaft sub–assy and differential carrier assy, install the 4 bolts and washers temporarily.

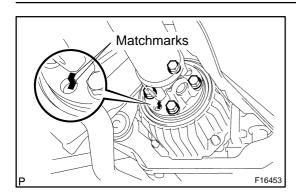


d) Connect the center support bearing assy No.1 with 2 bolts and 2 center support bearing washer No.2.

NOTICE:

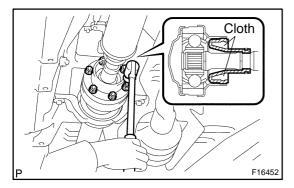
Use the removed washers when installation.

2003 COROLLA MATRIX (RM940U)



(e) Tighten the 4 bolts.

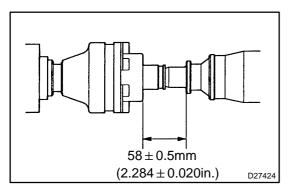
Torque: 73.5 N·m (749 kgf·cm, 54 ft·lbf)



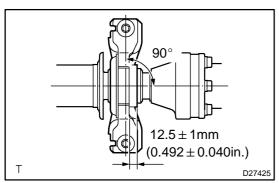
10. FULLY TIGHTEN PROPELLER W/CENTER BEARING SHAFT ASSY

- (a) Remove the cloth from the universal joint.
- (b) Depress the brake pedal and hold it.
- (c) Using a hexagon wrench (6 mm), tighten the 6 bolts.

Torque: 27 N·m (275 kgf·cm, 20 ft·lbf)



(d) With the vehicle in the unladen condition, adjust the dimension between the rear side of cover and the shaft, as shown in the illustration.



- (e) With the same condition, adjust the dimension between the rear side of center bearing housing and the rear side of cushion, as shown in the illustration.
- (f) Check that the center line of the bracket is at right angles at the shaft axial direction.
- (g) In case of being a strange sound or noise: Select the center support bearing washer No.2 for adjusting.

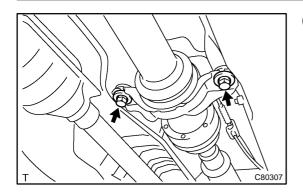
NOTICE:

- Make sure to use the washer of the same thickness on both right and left sides.
- Do not use 2 or more washers on a bolt.

Washer thickness:

Thickness mm (in.)	Thickness mm (in.)
3.6 (0.142)	6.5 (0.256)
4.5 (0.177)	9.0 (0.354)

2003 COROLLA MATRIX (RM940U)



(h) Tighten the 2 bolts.

Torque: 36.8 N m (374 kgf cm, 27 ft lbf)