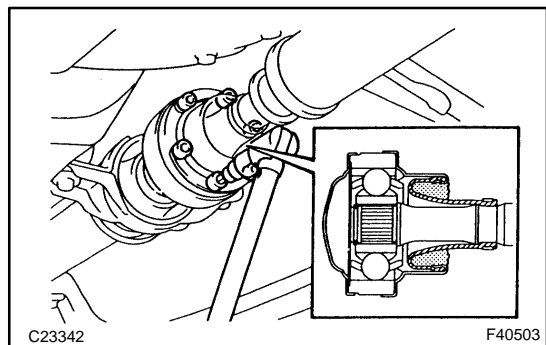


PROPELLER W/CENTER BEARING SHAFT ASSY (4WD) OVERHAUL

HINT:

COMPONENTS:SEE PAGE 30-4

1. REMOVE EXHAUST PIPE ASSY

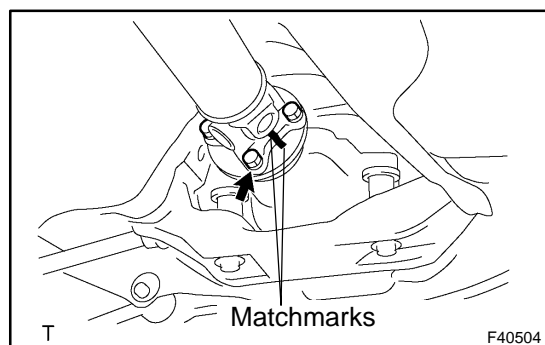


2. REMOVE PROPELLER W/CENTER BEARING SHAFT ASSY

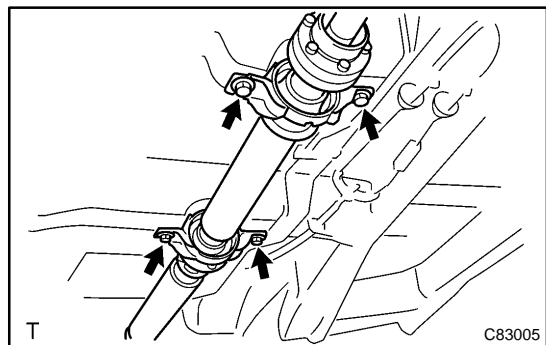
- Depress the brake pedal and hold it.
- Using a hexagon wrench (6 mm), loosen the cross groove joint set bolts 1/2 turn.

HINT:

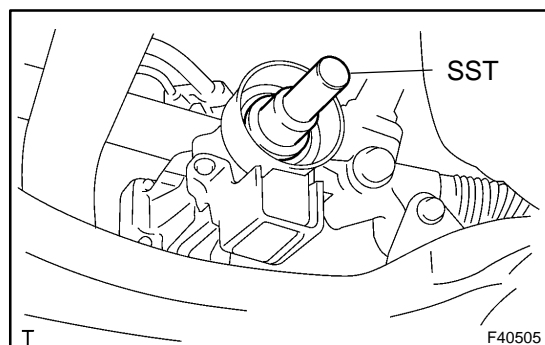
Put a piece of shop rag or equivalent into the inside of the universal joint cover so that the boot does not touch the inside of the universal joint cover.



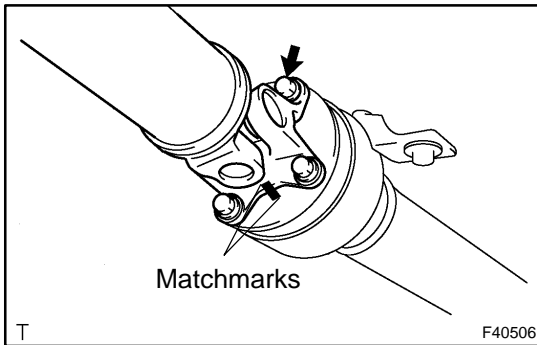
- Place matchmarks on both the flanges.
- Remove the 4 nuts, bolts and washers.



- Remove the 4 bolts, 2 adjusting shims and propeller shaft w/ center bearing shaft assy.

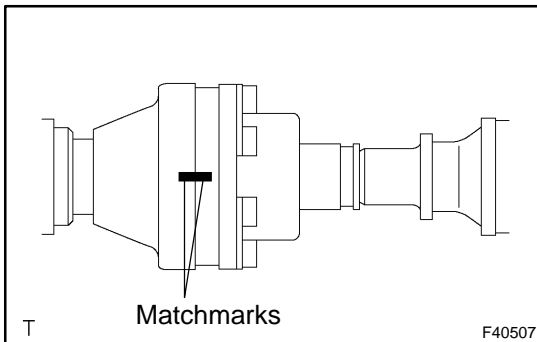


- Insert SST in the transfer to prevent oil leakage.
SST 09325-20010



3. REMOVE PROPELLER SHAFT ASSY

- Place matchmarks on both the flanges.
- Remove the 4 nuts, bolts and washers.



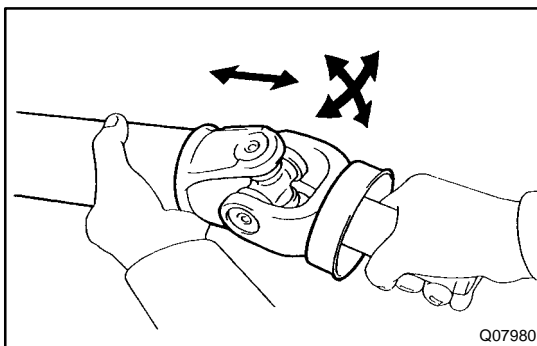
4. REMOVE INTERMEDIATE SHAFT

- Place matchmarks on the joint and flange.

NOTICE:

Do not make matchmarks with a punch.

- Using a hexagon wrench (6 mm), remove the 6 bolts and 2 washers and separate the intermediate shaft from the rear propeller shaft.

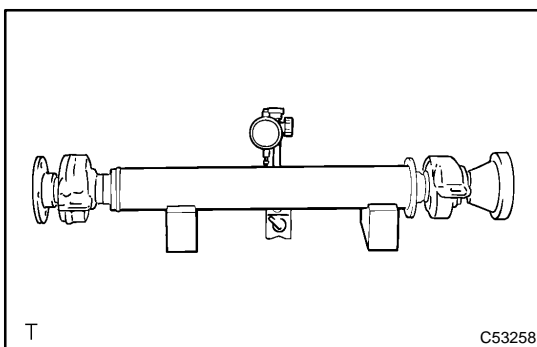


5. INSPECT SPIDER BEARING

- Check the spider bearing axial play by turning the flange while holding the shaft tightly.

HINT:

If necessary, replace the shaft.

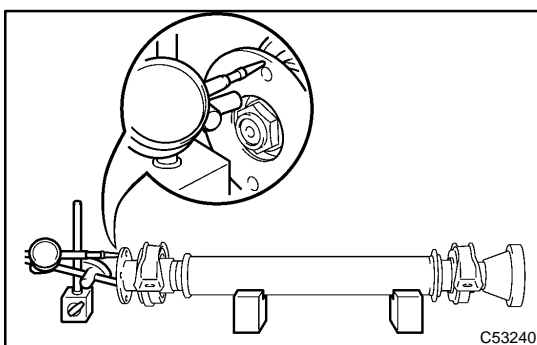


6. INSPECT INTERMEDIATE SHAFT

- Using a dial indicator, inspect the runout of the shaft.
Maximum runout: 0.8 mm (0.031 in.)

HINT:

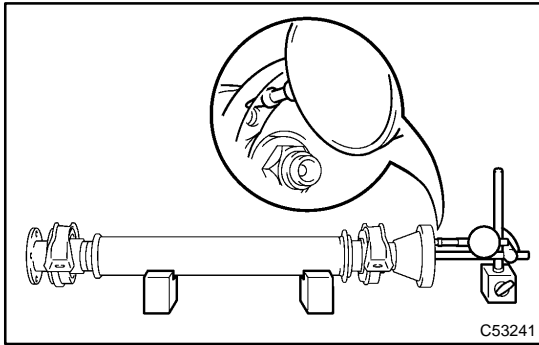
If the shaft runout exceeds the maximum, replace the shaft.



- Using a dial indicator, inspect the front side of the intermediate shaft flange runout.
Maximum runout: 0.1 mm (0.004 in.)

HINT:

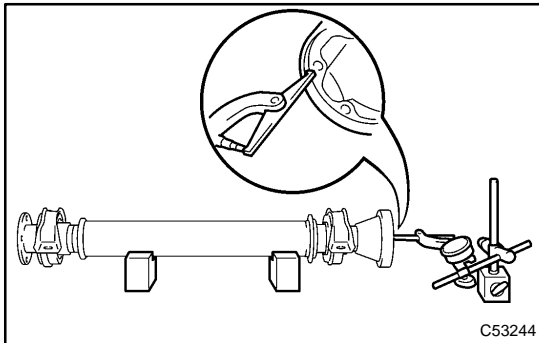
If the shaft runout exceeds the maximum, replace the shaft.



- (c) Using a dial indicator, inspect the rear side of the intermediate shaft flange runout in the horizontal direction.
Maximum runout: 0.1 mm (0.004 in.)

HINT:

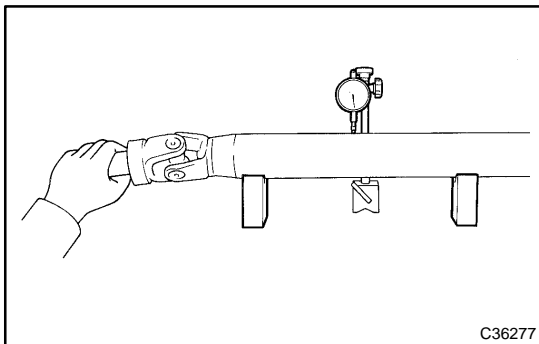
If the intermediate shaft flange runout exceeds the maximum, replace the intermediate shaft.



- (d) Using a dial indicator, inspect the rear side of the intermediate shaft flange runout in the vertical direction.
Maximum runout: 0.1 mm (0.004 in.)

HINT:

If the intermediate shaft flange runout exceeds the maximum, replace the intermediate shaft.



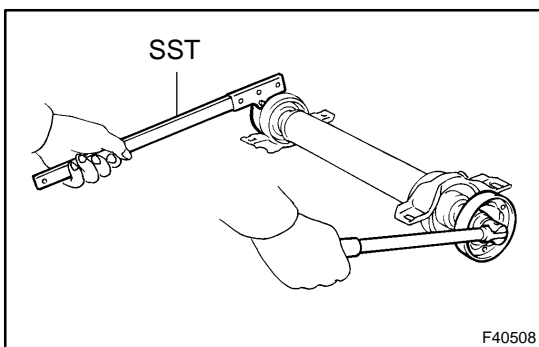
7. INSPECT PROPELLER SHAFT ASSY

- (a) Using a dial indicator, inspect the runout of the propeller shaft.

Maximum runout: 0.8 mm (0.031 in.)

HINT:

If the shaft runout exceeds the maximum, replace the propeller shaft.

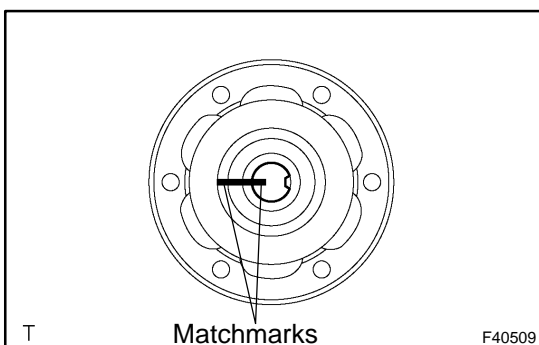


8. REMOVE CENTER SUPPORT BEARING ASSY NO.2

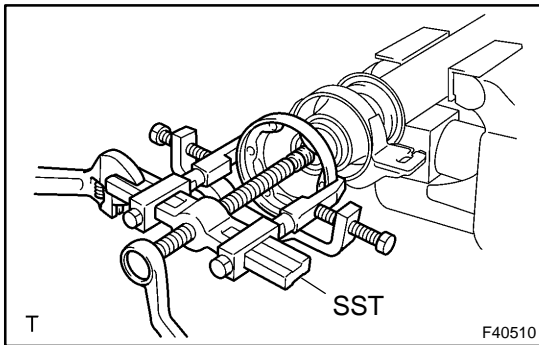
- (a) Using a chisel and a hammer, loosen the staked part of the nut.

- (b) Using SST to hold the front flange, remove the nut and plate washer.

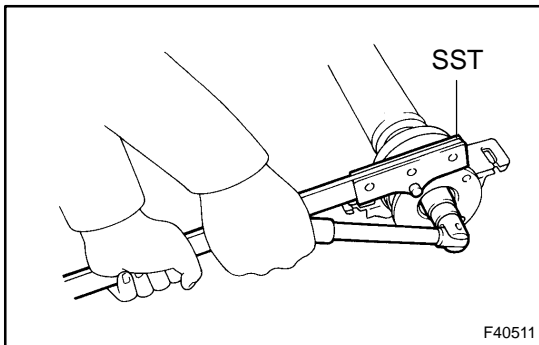
SST 09330-00021



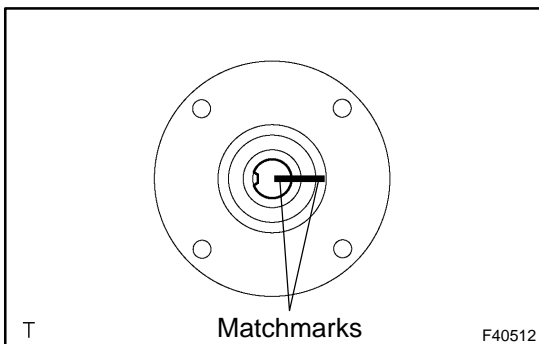
- (c) Place matchmarks on the rear flange and shaft.



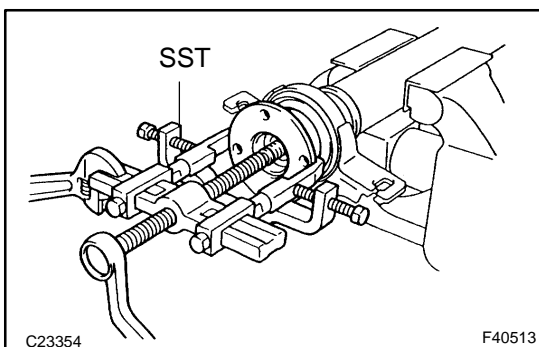
- (d) Using SST, remove the rear flange.
SST 09950- 40011 (09951- 04020, 09952- 04010, 09953- 04030, 09954- 04010, 09955- 04061, 09957-04010, 09958-04011)
- (e) Remove the center support bearing assy No.2 and plate washer.



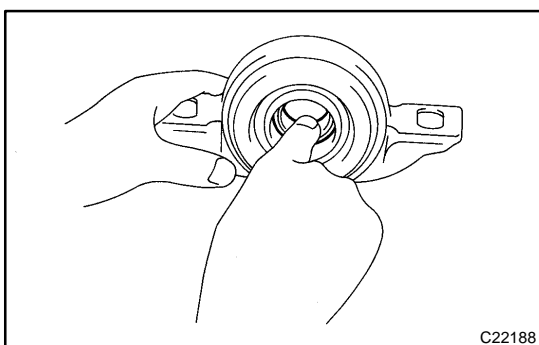
- 9. REMOVE CENTER SUPPORT BEARING ASSY NO.1**
- (a) Using a chisel and a hammer, loosen the staked part of the nut.
- (b) Using SST to hold the front flange, remove the nut and plate washer.
SST 09330-00021



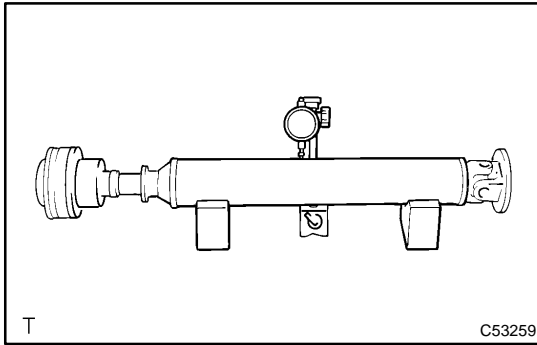
- (c) Place matchmarks on the front flange and shaft.



- (d) Using SST, remove the front flange.
SST 09950- 40011 (09951- 04020, 09952- 04010, 09953- 04030, 09954- 04010, 09955- 04061, 09957-04010, 09958-04011)
- (e) Remove the center support bearing assy No.1 and plate washer.



- 10. INSPECT CENTER SUPPORT BEARING ASSY NO.2**
- (a) Turn the bearing by hand with applying force in the rotation direction. Check the bearing turns smoothly.
- (b) Check that the seals are not cracked or damaged.
- HINT:**
If the bearing is damaged, worn, or does not turn freely, replace it.
- 11. INSPECT CENTER SUPPORT BEARING ASSY NO.1**
- (a) Inspect the center support bearing assy No.1 by the same procedures with center support bearing assy No.2.

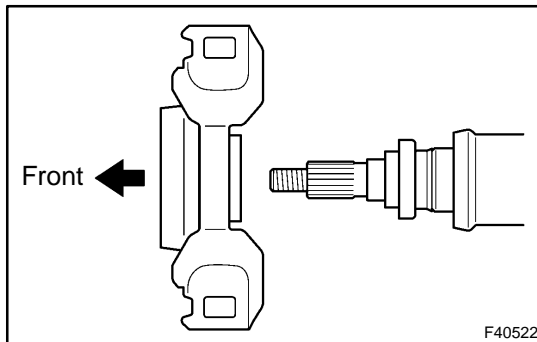
**12. INSPECT PROPELLER SHAFT**

- (a) Using a dial indicator, inspect the runout of the rear propeller shaft.

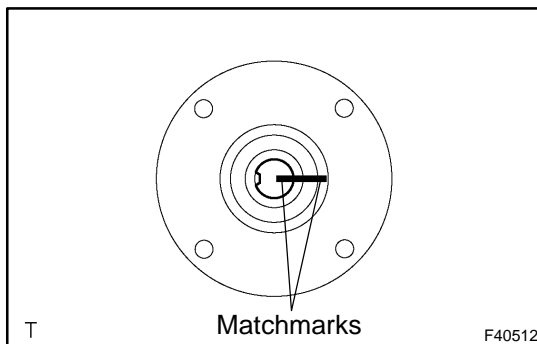
Maximum runout: 0.8 mm (0.031 in.)

HINT:

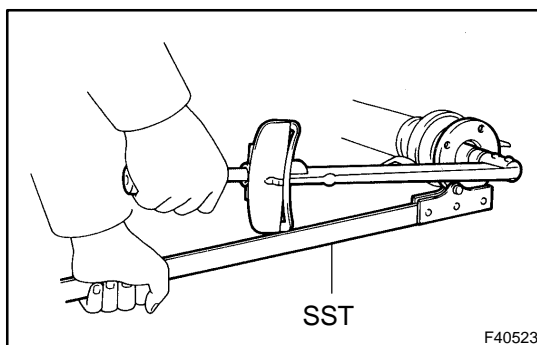
If the shaft runout exceeds the maximum, replace the rear propeller shaft.

**13. INSTALL CENTER SUPPORT BEARING ASSY NO.1**

- (a) Set the center support bearing assy No.1 on the intermediate shaft, as shown in the illustration.
(b) Install the plate washer to the intermediate shaft.



- (c) Align the matchmarks on the front flange and shaft and place the flange on the shaft.



- (d) Using SST to hold the front flange, press the center support bearing assy No.1 into position by tightening down a new nut and plate washer.

SST 09330-00021

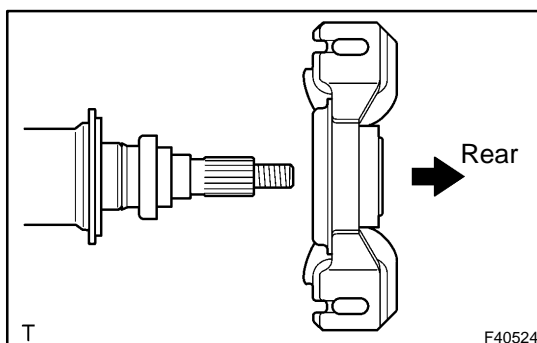
Torque: 182 N·m (1,850 kgf·cm, 134 ft·lbf)

- (e) Loosen the nut.

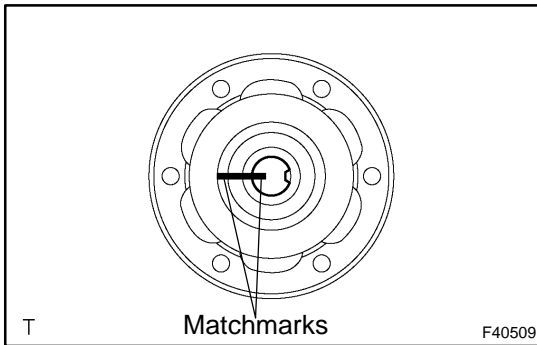
- (f) Torque the nut again.

Torque: 69 N·m (700 kgf·cm, 51 ft·lbf)

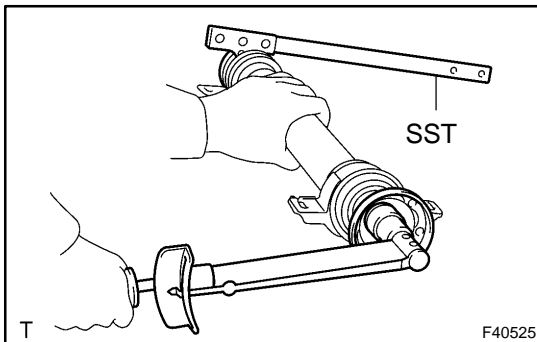
- (g) Using a chisel and a hammer, stake the nut.

**14. INSTALL CENTER SUPPORT BEARING ASSY NO.2**

- (a) Set the center support bearing assy No.2 on the shaft as shown in the illustration.
(b) Install the plate washer to the shaft.



- (c) Align the matchmarks on the rear flange and shaft and place the flange on the shaft.

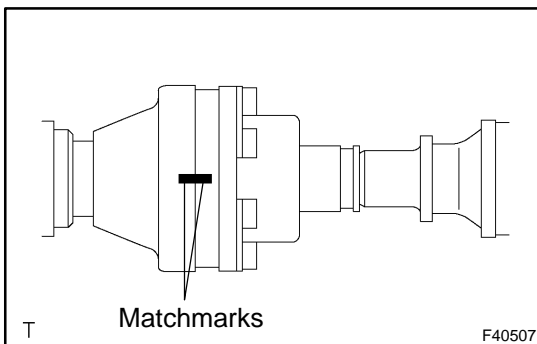


- (d) Using SST to hold the front flange, press the center support bearing assy No.2 into position by tightening down a new nut and plate washer.

SST 09330-00021

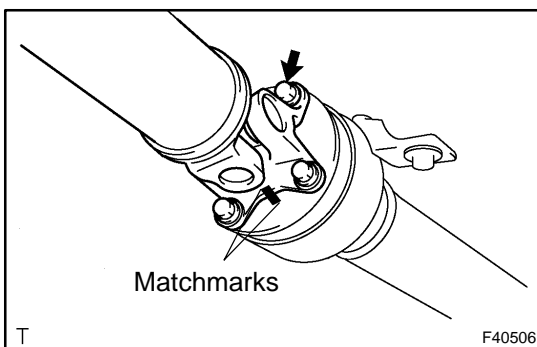
Torque: 182 N·m (1,850 kgf-cm, 134 ft-lbf)

- (e) Loosen the nut.
(f) Torque the nut again.
Torque: 69 N·m (700 kgf-cm, 51 ft-lbf)
(g) Using a chisel and a hammer, stake the nut.



15. INSTALL INTERMEDIATE SHAFT

- (a) Align the matchmarks on the intermediate shaft and rear propeller shaft, then install the 2 washers and 6 bolts.
(b) Using a hexagon wrench (6 mm), tighten the 6 bolts temporarily.

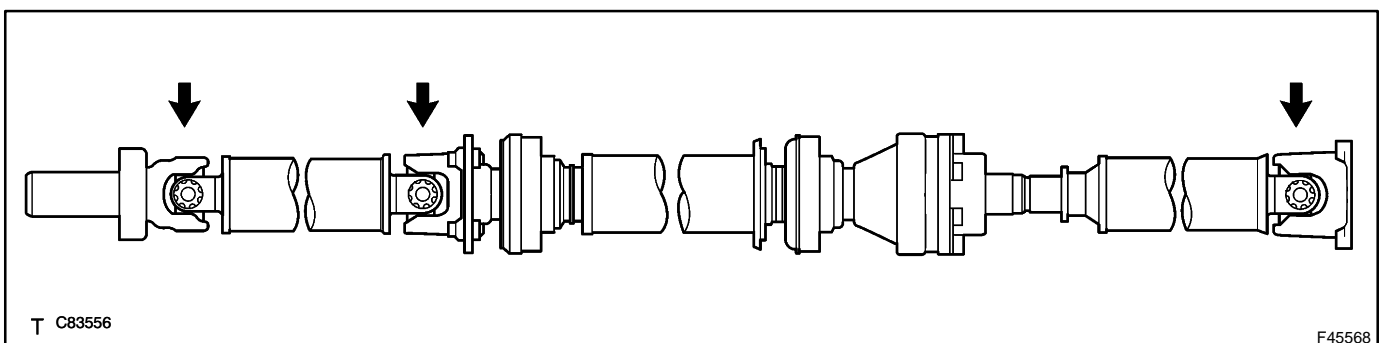


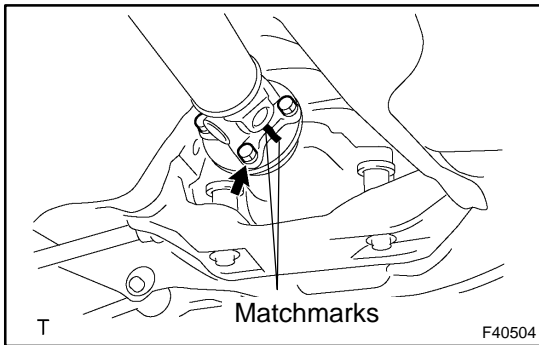
16. INSTALL PROPELLER SHAFT ASSY

- (a) Align the matchmarks on the propeller shaft flange and differential companion flange, and connect the shaft with the 4 bolts, washers and nuts.

Torque: 74 N·m (750 kgf-cm, 54 ft-lbf)

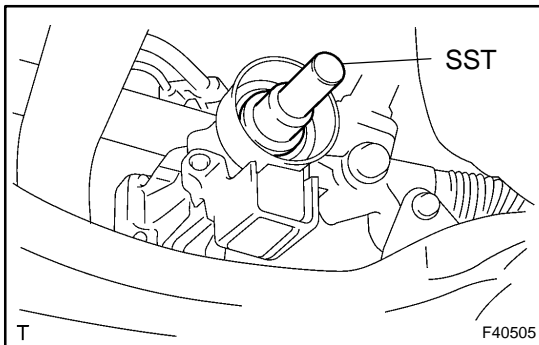
- (b) Check that the each joint of the propeller shaft is facing to the direction, as shown in the illustration.



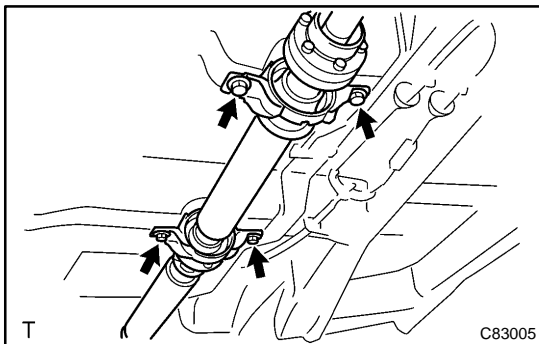


17. INSTALL PROPELLER W/CENTER BEARING SHAFT ASSY

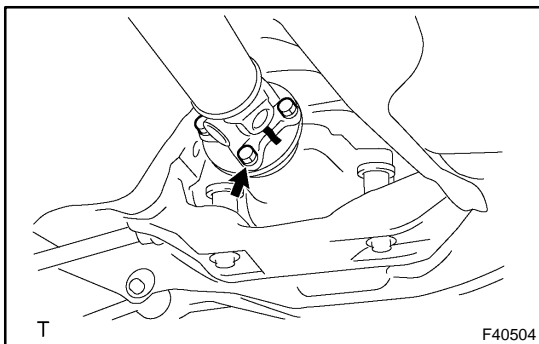
- (a) Align the matchmarks on the propeller shaft flange and differential companion flange, and connect the shaft with the 4 bolts, washers and nuts.



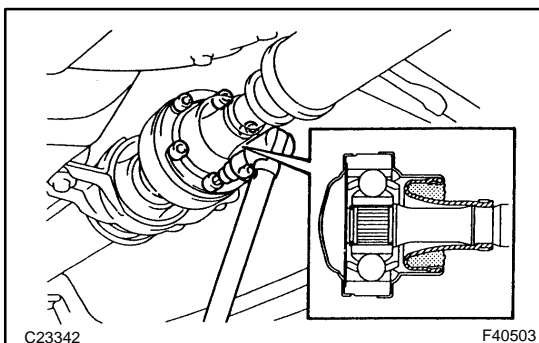
- (b) Remove SST from the transaxle.
(c) Insert the yoke into the transaxle.



- (d) Install the 2 adjusting shims and propeller shaft w/ center bearing, and temporarily tighten the 4 bolts.

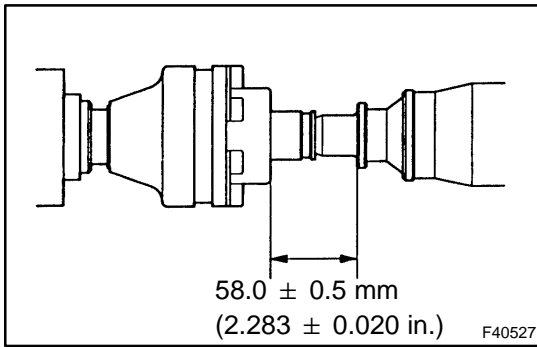


- (e) Tighten the 4 nuts.
Torque: 74 N·m (750 kgf-cm, 54 ft-lbf)

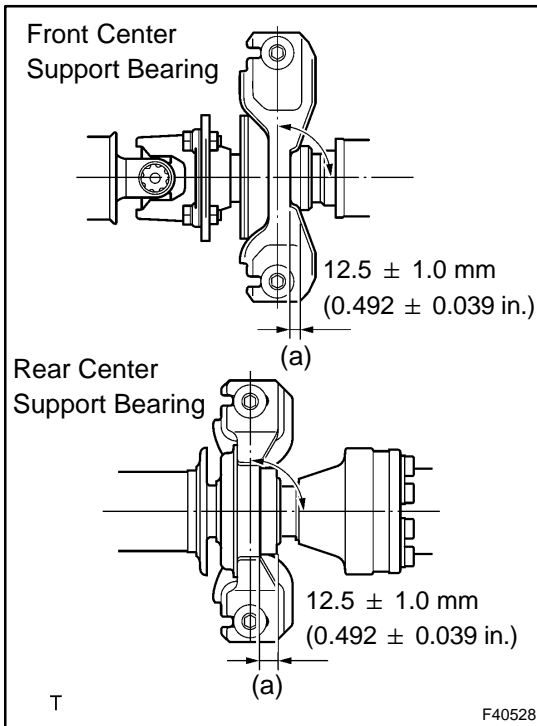


18. FULLY TIGHTEN PROPELLER W/CENTER BEARING SHAFT ASSY

- (a) Remove the shop rag to the joint.
(b) Using a hexagon wrench (6 mm), tighten the 6 bolts.
Torque: 29 N·m (296 kgf-cm, 21 ft-lbf)



- (c) With the vehicle unloaded, adjust the dimension between the rear side of the cover and shaft, as shown in the illustration.



- (d) Under the same condition as (a), adjust the front and rear dimensions between edge surface of the center support bearing and the edge surface of the cushion to 12.5 ± 1.0 mm (0.492 ± 0.039 in.) respectively as shown, then torque the bolts.
Torque: 37 N·m (375 kgf·cm, 27 ft·lbf)
- (e) Check that the center line of the bracket is at the right angle in the shaft axial direction.

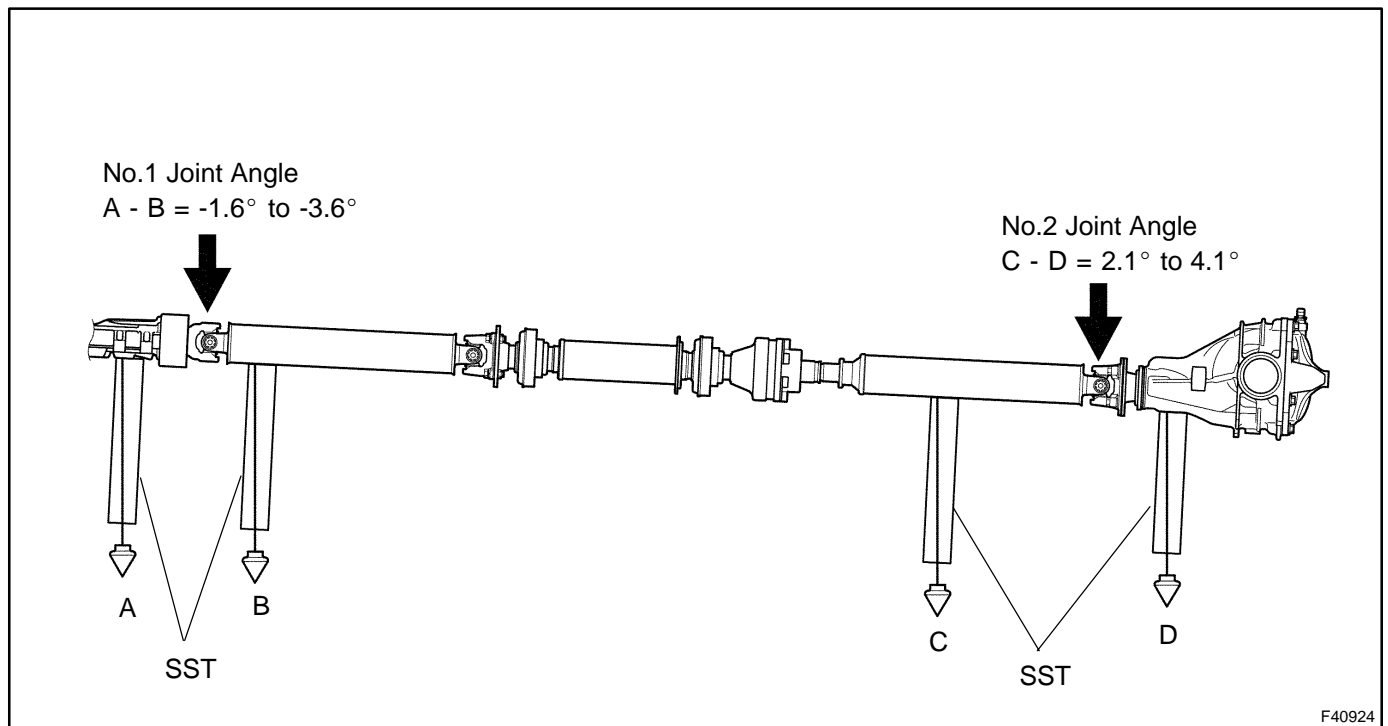
- (f) If any vibration or noise occurs, perform joint angle check as follows and replace the adjusting shim with proper one.
- (1) Turn the propeller shaft several times by hand to stabilize the center support bearings.
 - (2) Using a jack, raise and lower the differential to stabilize the differential mounting cushion.
 - (3) Remove the transfer dynamic damper.
 - (4) Using SST, measure the installation angle of the transfer (A) and front propeller shaft (B).

SST 09370-50010

No.1 joint angle: A - B = -1.6° to -3.6°

- (5) Using SST, measure the installation angle of the rear propeller shaft (C) and rear differential (D).

SST 09370-50010

No.2 joint angle: C - D = 2.1° to 4.1° 

F40924

HINT:

If the measured angle is not within the specification, adjust it with the center support bearing adjusting shim.

Center support bearing adjusting shim thickness:

| Thickness mm (in.) | Thickness mm (in.) |
|--------------------|--------------------|
| 3.2 (0.126) | 11.0 (0.433) |
| 4.5 (0.177) | 13.5 (0.531) |
| 6.5 (0.256) | 15.5 (0.610) |
| 9.0 (0.354) | 17.5 (0.689) |

- (g) Install the transfer dynamic damper.
Torque: 26 N·m (260 kgf·cm, 19 ft·lbf)
19. **INSTALL EXHAUST PIPE ASSY**
 20. **CHECK FOR EXHAUST GAS LEAKS**
 21. **INSPECT AND ADJUST TRANSFER OIL**