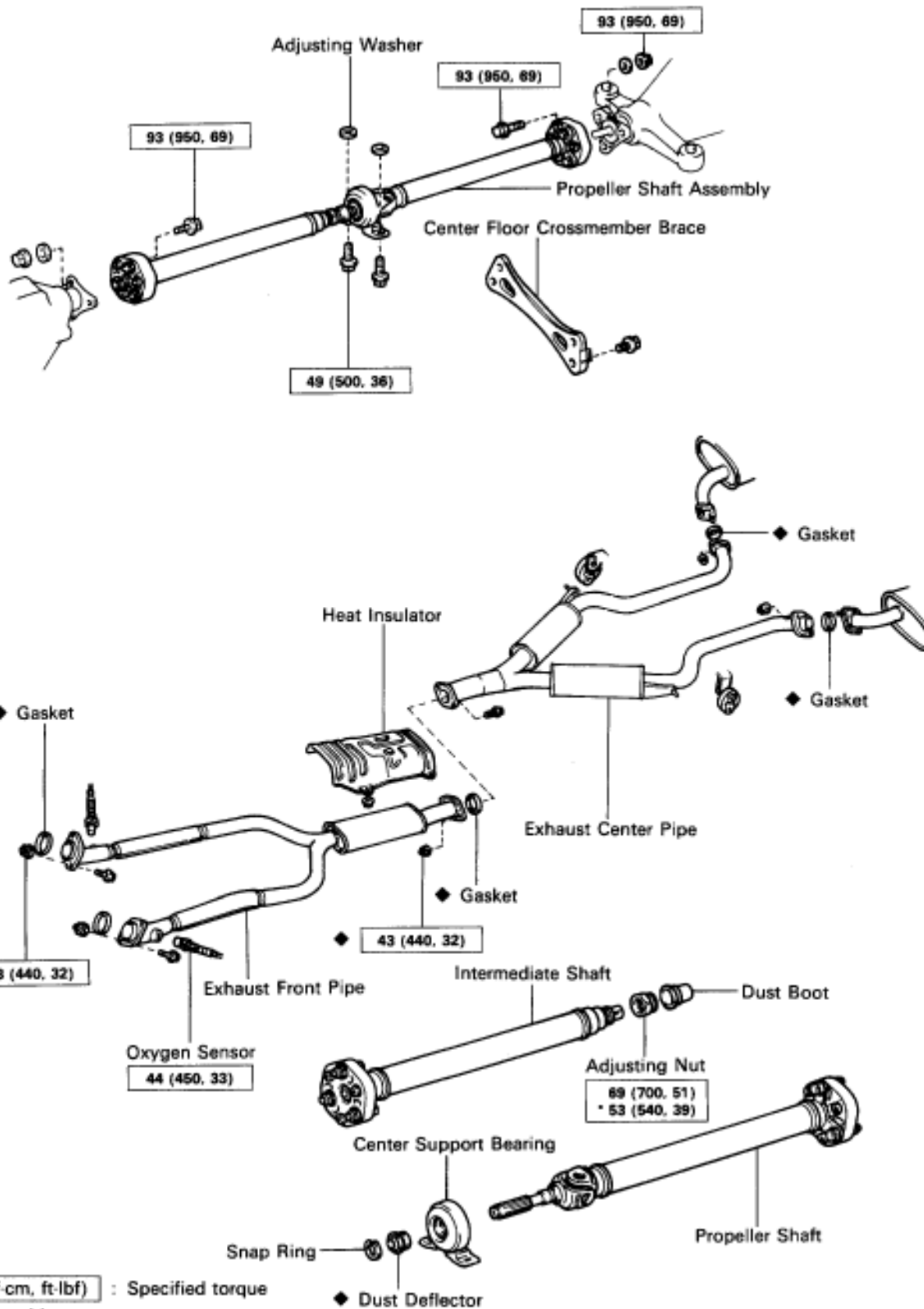
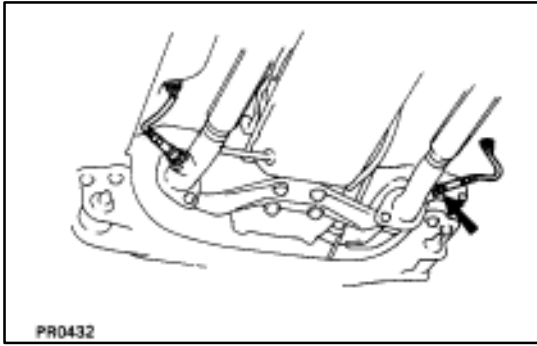


PROPELLER SHAFT COMPONENTS

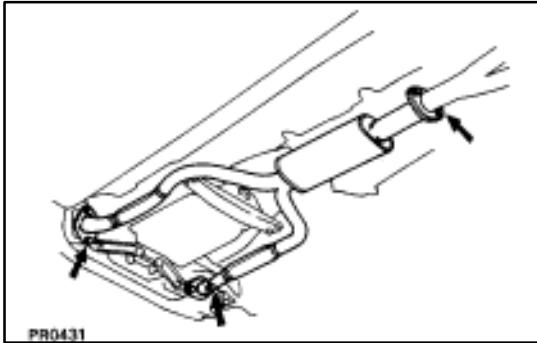




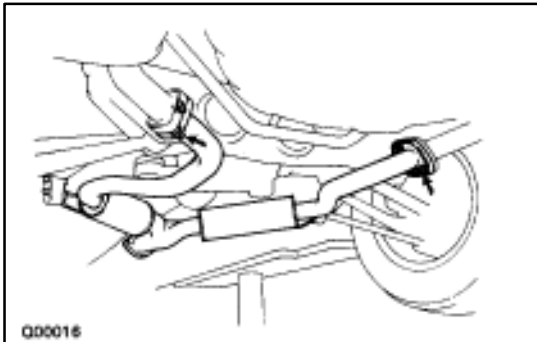
REMOVAL OF PROPELLER SHAFT

1. REMOVE EXHAUST FRONT PIPE

- (a) Disconnect the sub-oxygen sensor grommets from the floor.
- (b) Disconnect the sub-oxygen sensors.



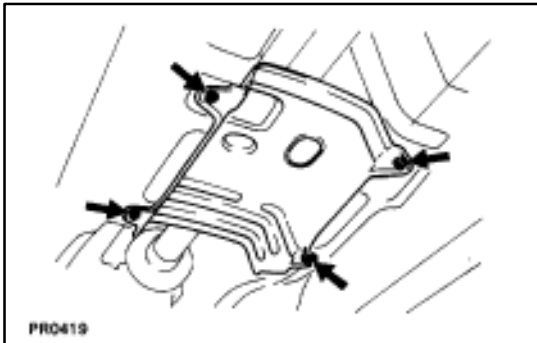
- (c) Remove the six bolts and nuts.
- (d) Disconnect the exhaust front pipe.



2. REMOVE EXHAUST CENTER PIPE

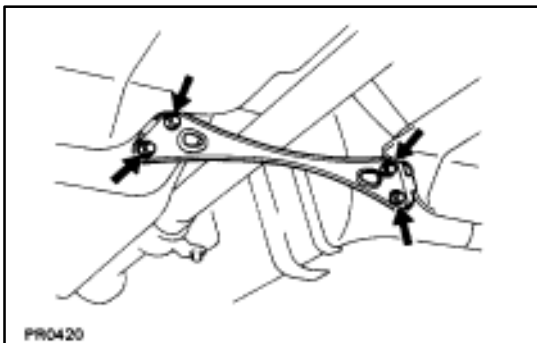
HINT: To prevent interference of the tail pipe from with the rear bumper, the front side of the tail pipe is suspended from the stabilizer bar.

- (a) Disconnect the exhaust center pipe from the two rings.
- (b) Remove the four nuts.
- (c) Disconnect the exhaust center pipe.



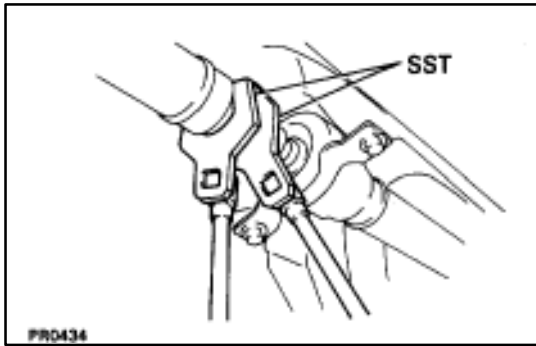
3. REMOVE HEAT INSULATOR

Remove the four nuts and the heat insulator.



4. REMOVE CROSSMEMBER BRACE

Remove the four bolts and the center floor crossmember brace.

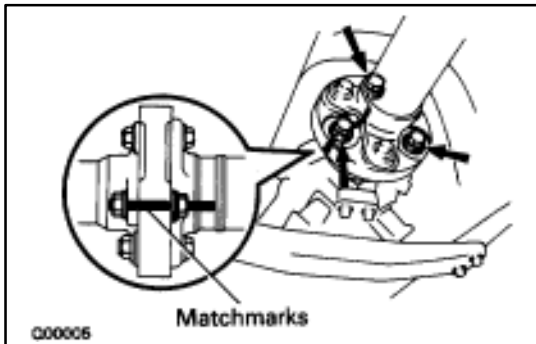


5. REMOVE PROPELLER SHAFT

- (a) Using SST, loosen the adjusting nut until it can be turned by hand.

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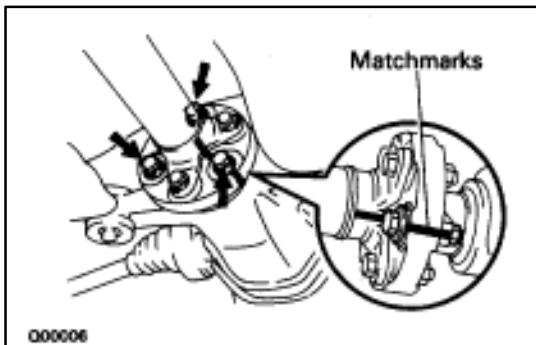
HINT: Use two of the same type of SST.



- (b) Place matchmarks on the transmission companion flange and flexible coupling.

- (c) Remove the three bolts inserted in the transmission companion flange.

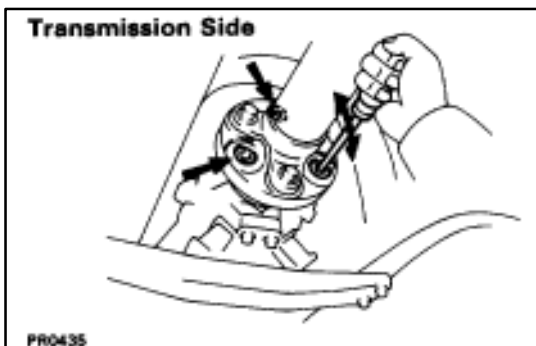
NOTICE: The bolts inserted in the propeller shaft flange should not be removed.



- (d) Place matchmarks on the differential companion flange and flexible coupling.

- (e) Remove the three bolts inserted in the differential companion flange.

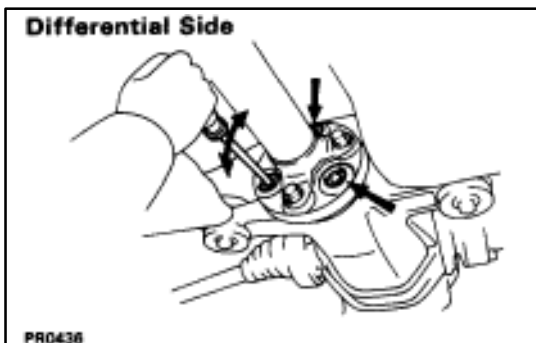
NOTICE: The bolts inserted in the propeller shaft companion flange should not be removed.

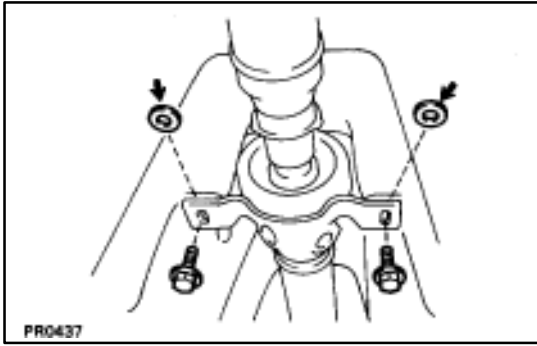


- (f) Separate the flexible couplings from the transmission side and differential side.

HINT: If the flexible coupling can not be easily separated by hand, insert a screwdriver into the bolt hole of the flexible coupling as shown in the illustration, then pry the coupling out.

NOTICE: Do not bring the screwdriver blade in direct contact with the flexible coupling's rubber portion.



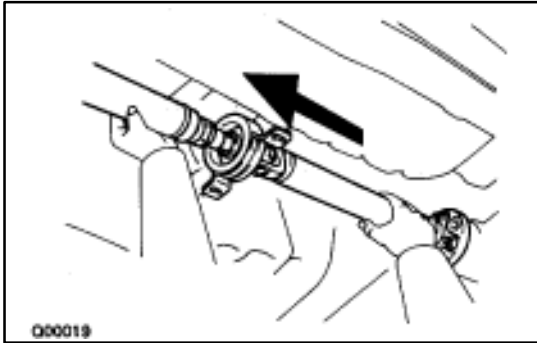


- (g) Remove the two center support bearing set bolts and the adjusting washers.

HINT: Some vehicles are not equipped with an adjusting washer.

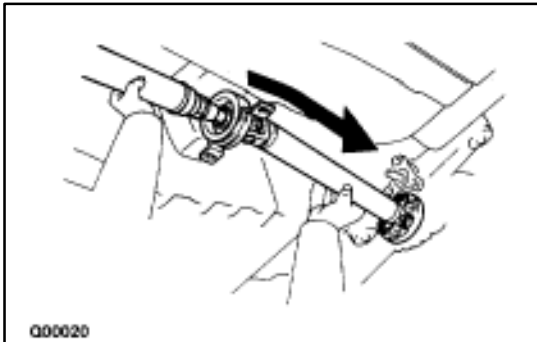
NOTICE: When removing the set bolts, support the center support bearing by hand so that the transmission and intermediate shaft, and propeller shaft and differential, remain in a straight line.

Maximum joint angle: 5°



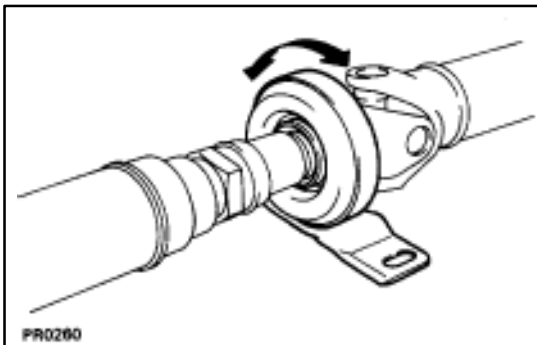
- (h) Push the rear propeller shaft straight forward to compress the propeller shaft and pull out the propeller shaft from the centering pin of the differential.

NOTICE: Press the propeller shaft straight ahead to keep the transmission and intermediate shaft aligned straight.



- (i) Pull the propeller shaft out toward the vehicle's rear.

NOTICE: The intermediate shaft and propeller shaft should not be separated.



INSPECTION OF CENTER SUPPORT BEARING AND FLEXIBLE COUPLING

1. INSPECT CENTER SUPPORT BEARING

Check for cracks in or damage to the cushion.

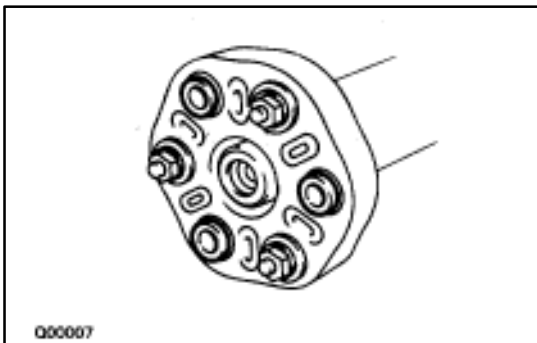
Check if the bearing turns smoothly.

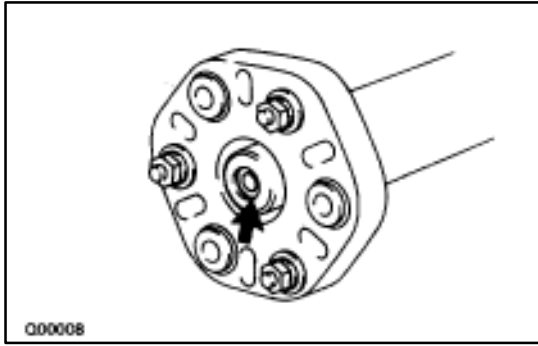
If the center support bearing is damaged, worn or does not turn smoothly, replace it.

2. INSPECT FLEXIBLE COUPLINGS

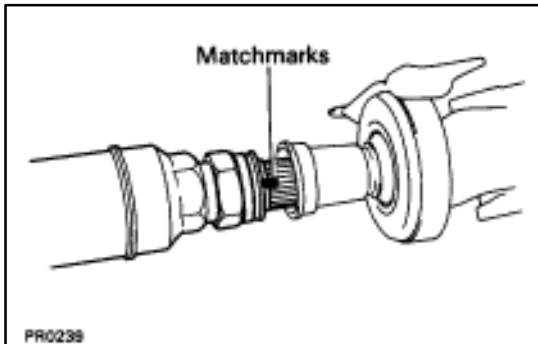
Check for cracks in or damage to the front and rear flexible couplings.

If the flexible coupling is damaged, replace the propeller shaft assembly.





3. **INSPECT FLEXIBLE COUPLING CENTERING BUSHING**
Check for damage to the bushing.
If the bushing is damaged, replace the propeller shaft assembly.

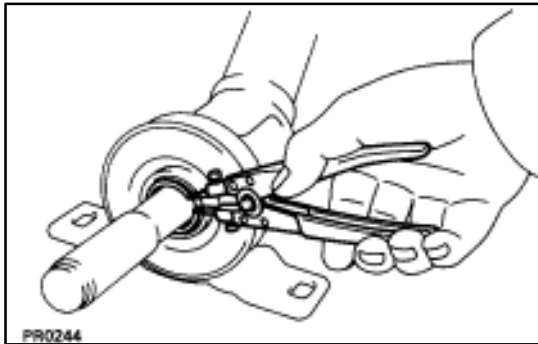


REPLACEMENT OF CENTER SUPPORT BEARING

1. SEPARATE INTERMEDIATE SHAFT AND PROPELLER SHAFT

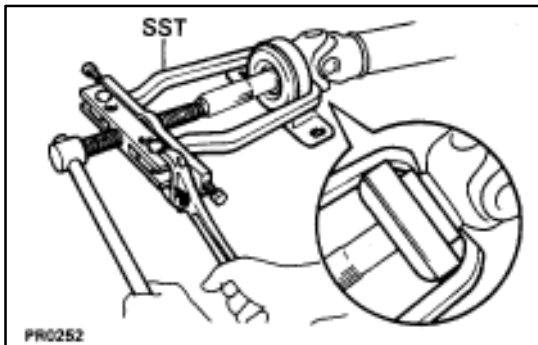
- (a) Place matchmarks on the intermediate shaft and propeller shaft.
- (b) Separate the intermediate shaft and propeller shaft.
- (c) Remove the dust boot from the propeller shaft.

HINT: If the dust boot is reused, remove it after wrapping vinyl tape around the spline, so it will not be damaged.



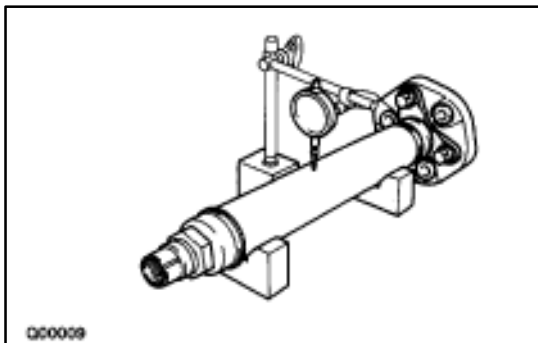
2. REMOVE CENTER SUPPORT BEARING

- (a) Using a snap ring expander, remove the snap ring.



- (b) Using SST, remove the center bearing and dust deflector.

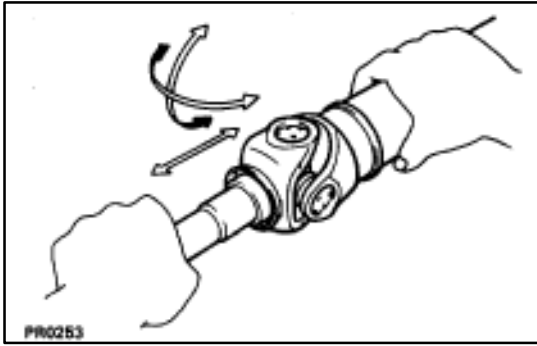
SST 09950-20017



3. INSPECT RUNOUT OF INTERMEDIATE SHAFT AND PROPELLER SHAFT

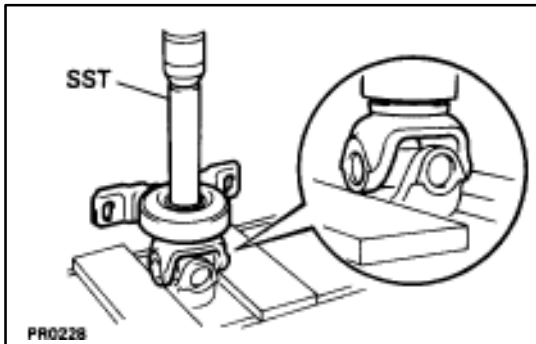
Maximum runout: 0.8 mm (0.0031 in.)

If the runout is greater than the maximum, replace the propeller shaft assembly.



4. INSPECT SPIDER BEARING

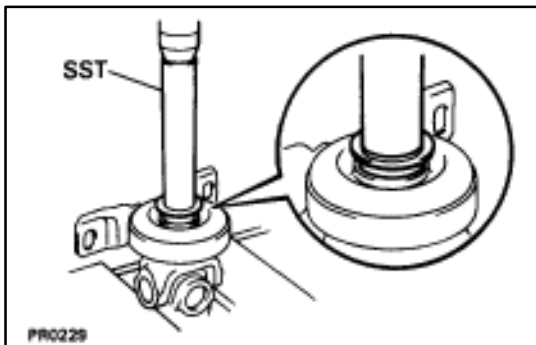
- (a) Check if the spider bearing rotates smoothly.
 - (b) Check if there is any play in the spider bearing.
- If necessary, replace the propeller shaft assembly.



5. INSTALL CENTER SUPPORT BEARING

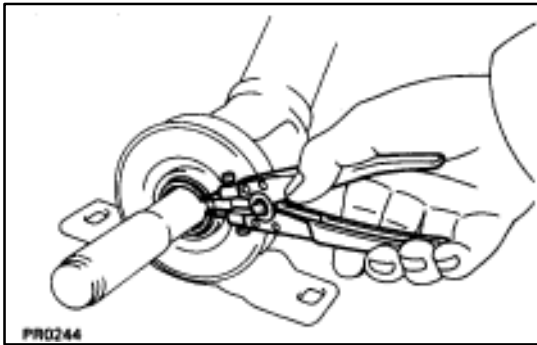
- (a) Using SST and a press, install the center support bearing.

SST 09330-50010

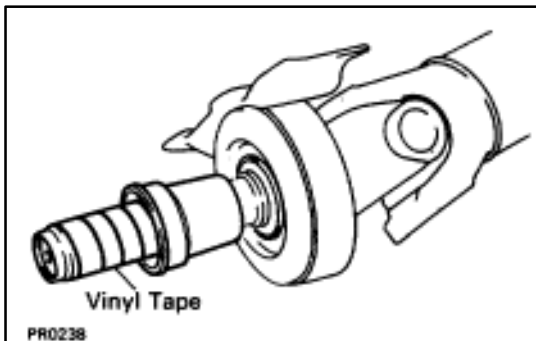


- (b) Using SST and a press, install a new dust deflector.

SST 09330-50010



- (c) Using a snap ring expander, install the snap ring.



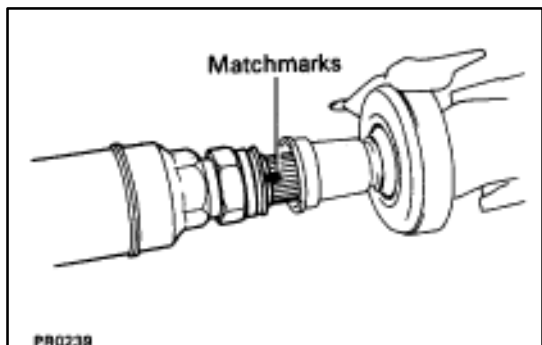
6. ASSEMBLE INTERMEDIATE SHAFT AND PROPELLER SHAFT

- (a) Install the dust boot.

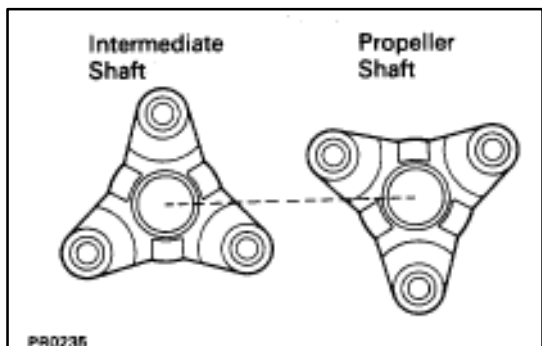
NOTICE: Assemble after wrapping vinyl tape around the spline so it will not damage the boot.

- (b) Apply grease to the spline.

Grease: Molybdenum disulphide lithium base, NLGI No. 2.



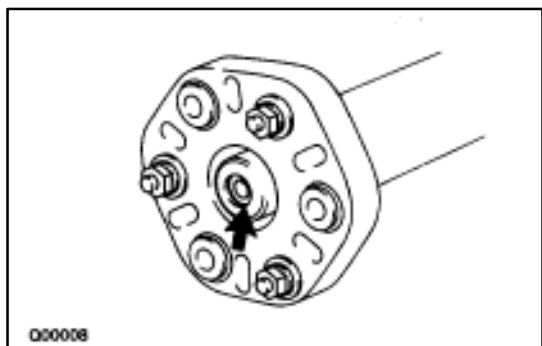
- (c) Align the matchmarks and assemble the intermediate shaft and propeller shaft.
- (d) Cover the adjusting nut with the dust boot.



NOTICE: The directions of the intermediate shaft companion flange and the propeller shaft companion flange should differ by 180°.



- (e) Tighten the adjusting nut fully by hand.

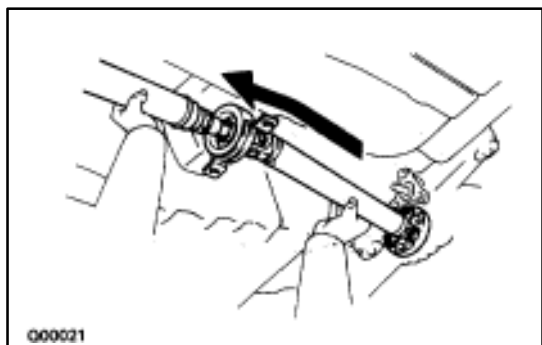


INSTALLATION OF PROPELLER SHAFT

1. INSTALL PROPELLER SHAFT

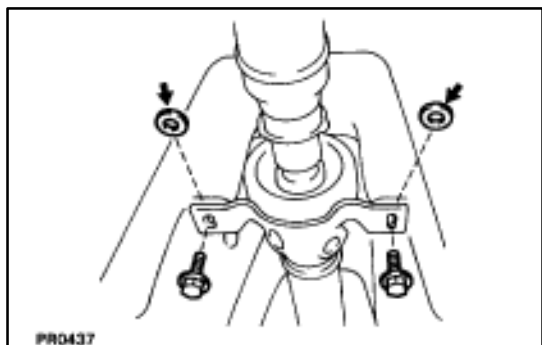
- (a) Apply grease to the flexible coupling centering bushings.

Grease: Molybdenum disulphide lithium base, NLGI No. 1 or No. 2.



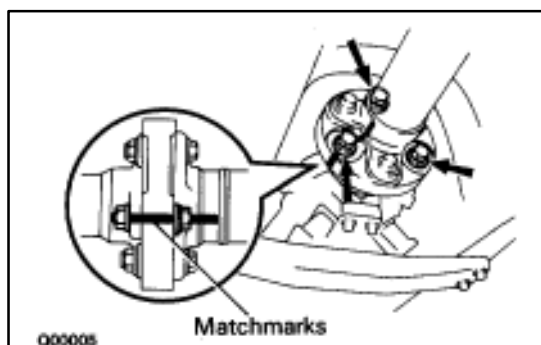
- (b) Insert the propeller shaft from the vehicle's rear and connect the transmission and differential.

NOTICE: Support the center support bearing by hand so that the transmission and intermediate shaft, and propeller shaft and differential, remain in a straight line.



- (c) Temporarily install the center support bearing set bolts with the adjusting washers.

HINT: Use the adjusting washers which were removed.



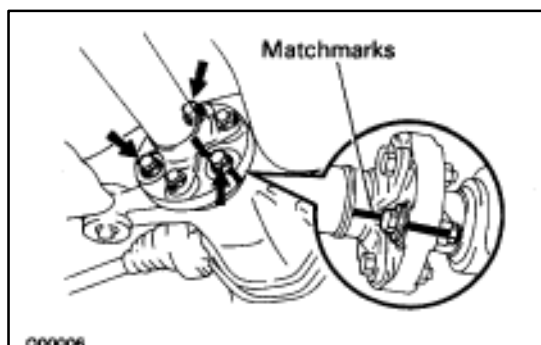
- (d) Align the matchmarks and connect the propeller shaft to the transmission.

- (e) Coat the threads of the three bolts with engine oil.

- (f) Install the three bolts, washers and nuts.

NOTICE: Bolts should be inserted from the transmission side.

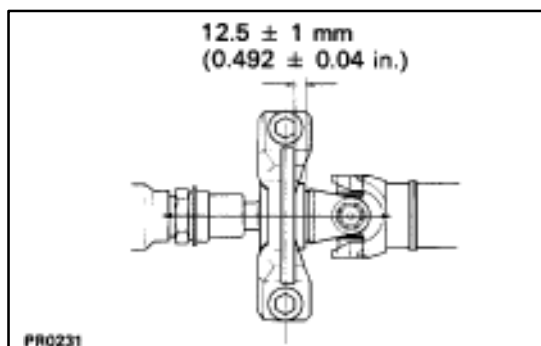
Torque: 93 N·m (950 kgf·cm, 69 ft·lbf)



- (g) Align the matchmarks and install the propeller shaft on the differential with the three bolts, washers and nuts.

NOTICE: Bolts should be inserted from the propeller shaft side.

Torque: 93 N·m (950 kgf·cm, 69 ft·lbf)

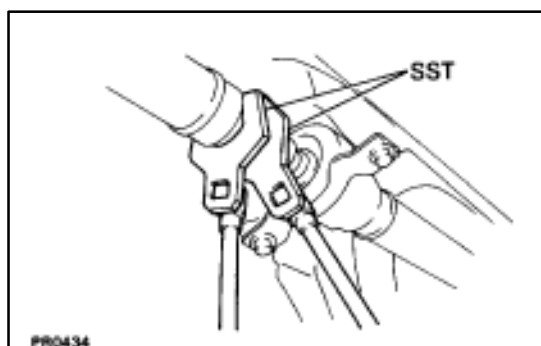


- (h) Torque the center support bearing set bolts.

Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)

HINT: Adjust the center support bearing to keep the intervals as shown with the vehicle in the unladen condition.

Under the same condition, check if the center line of the center support bearing is at right angles to the shaft axial direction.

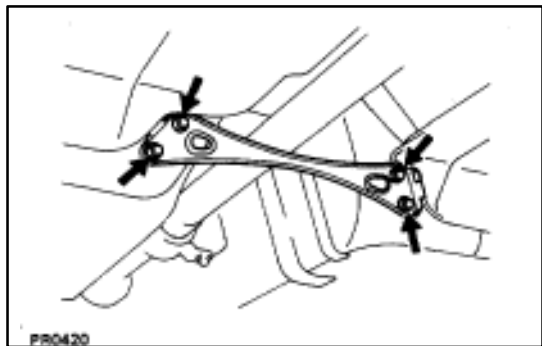


- (i) Using SST, tighten the adjusting nut.

SST 09631-22050

Torque: 53 N·m (540 kgf·cm, 39 ft·lbf)

HINT: Use a torque wrench with a fulcrum length of 35 cm (13.8 in.).



2. INSPECT JOINT ANGLE

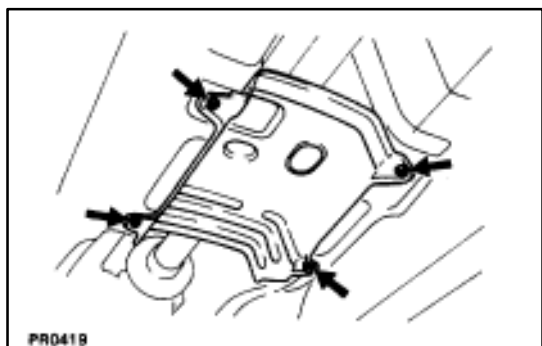
(See page [PR-13](#))

NOTICE: The joint angle should by all means be checked when the propeller shaft is removed and installed.

3. INSTALL CROSSMEMBER BRACE

Install the center floor crossmember brace and torque the four bolts.

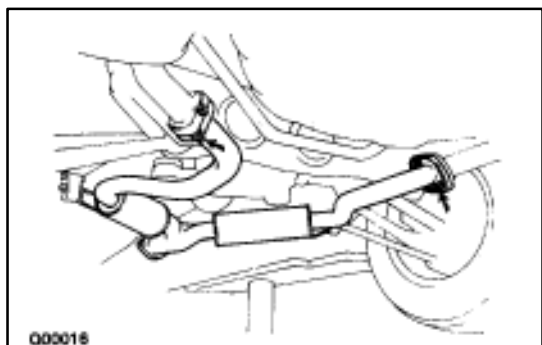
Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)



4. INSTALL HEAT INSULATOR

Install the heat insulator and torque the new four nuts.

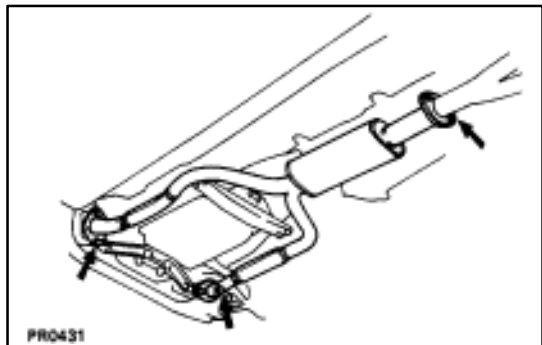
Torque: 5.4 N·m (55 kgf·cm, 48 in·lbf)



5. INSTALL EXHAUST CENTER PIPE

- Install new gaskets.
- Connect the exhaust center pipe.
- Connect the exhaust center pipe to the two rings.
- Install and torque the new four nuts.

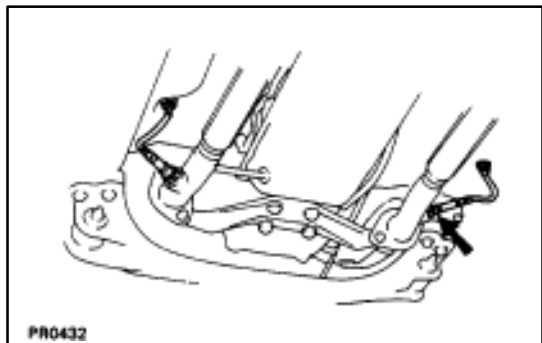
Torque: 19 N·m (195 kgf·cm, 14 ft·lbf)



6. INSTALL EXHAUST FRONT PIPE

- Install new gaskets.
- Connect the front pipe.
- Install and torque the six bolts and new nuts.

Torque: 43 N·m (440 kgf·cm, 32 ft·lbf)



- Connect both oxygen sensors.

HINT: When connecting the sensor, turn it to the left about 3 times.

NOTICE: After installing the oxygen sensor, check that the wire is not twisted.

- Tighten the sensors.

Torque: 44 N·m (450 kgf·cm, 33 ft·lbf)

- Connect the sensor grommets to the floor.