

PROPELLER SHAFT

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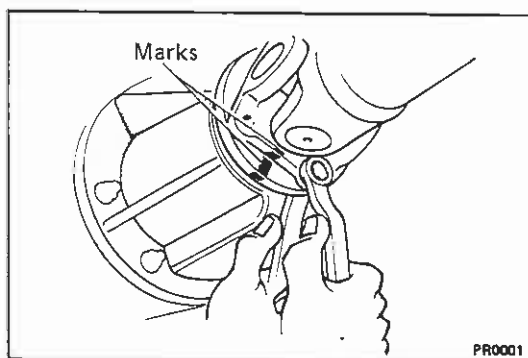
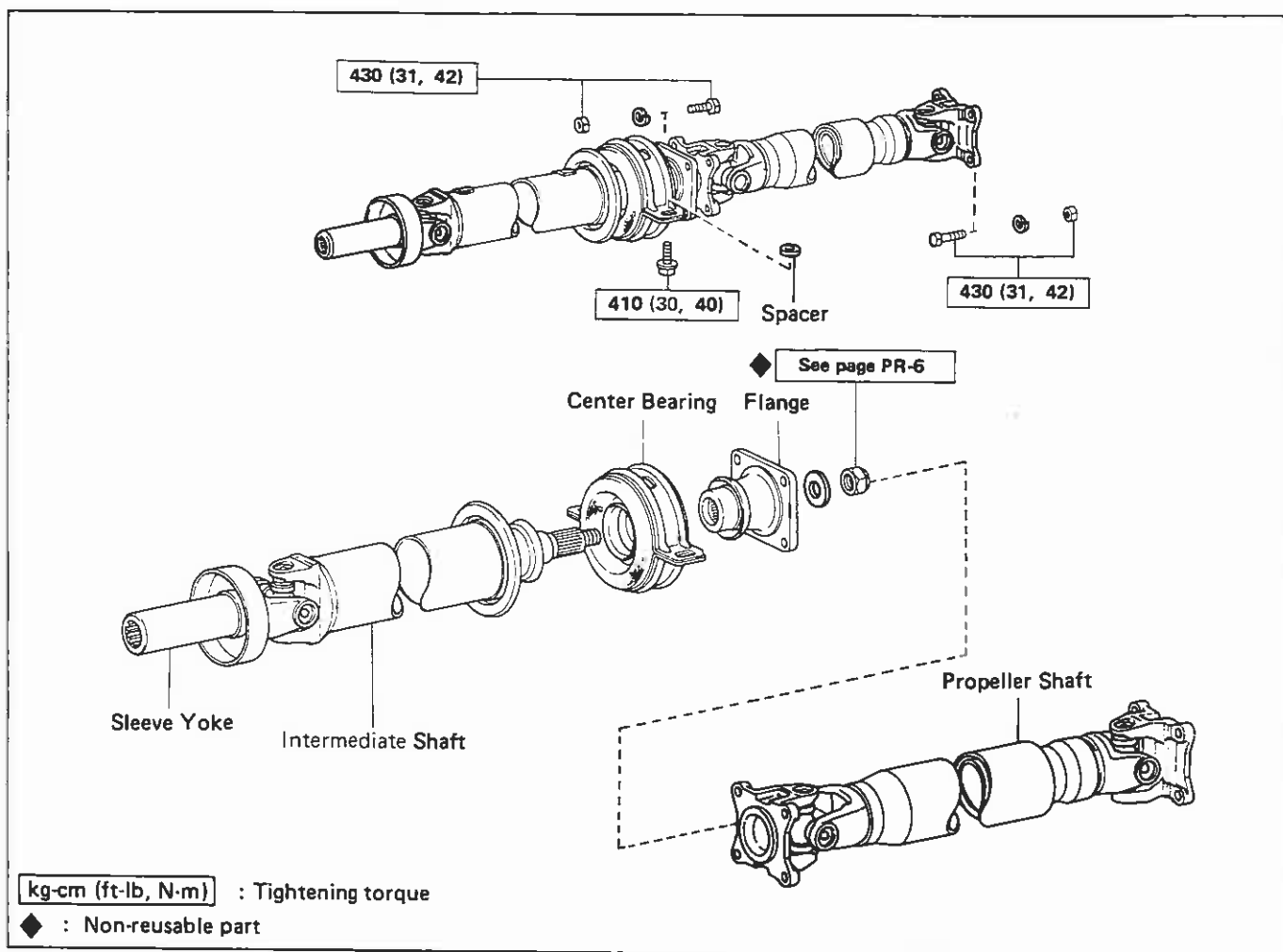
PRECAUTIONS

1. As the universal joint is a non-disassembly type, the propeller shaft or intermediate shaft must be replaced as an assembly in event of universal joint trouble.
2. Be careful not to grip the propeller shaft tube too tightly in the vise as this will cause deformation.

TROUBLESHOOTING

Problem	Possible cause	Remedy	Page
Noise	Sleeve yoke spline worn	Replace intermediate shaft	PR-4
	Center bearing worn	Replace center bearing	PR-4
	Spider bearing worn or stuck	Replace intermediate shaft or propeller shaft	PR-4
Vibration	Propeller shaft runout	Replace propeller shaft	PR-4
	Propeller shaft unbalance	Balance propeller shaft	PR-4
	Transmission extension housing rear bushing worn	Replace bushing	MT-15
	Sleeve yoke spline stuck	Replace intermediate shaft	PR-4

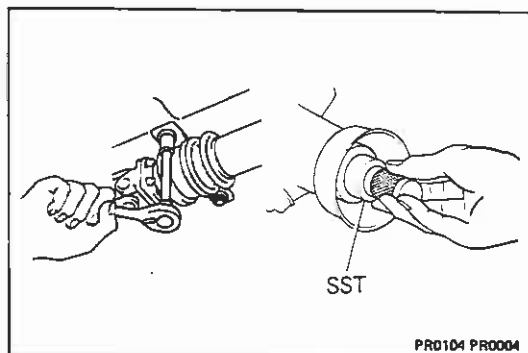
PROPELLER SHAFT COMPONENTS



REMOVAL OF PROPELLER SHAFT

1. DISCONNECT PROPELLER SHAFT FLANGE FROM FLANGE ON DIFFERENTIAL

- Place matchmarks on the flanges.
- Remove the four bolts and nuts.



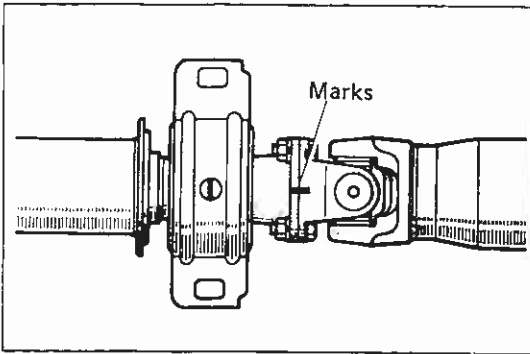
2. REMOVE CENTER SUPPORT BEARING FROM BODY

3. REMOVE PROPELLER SHAFT

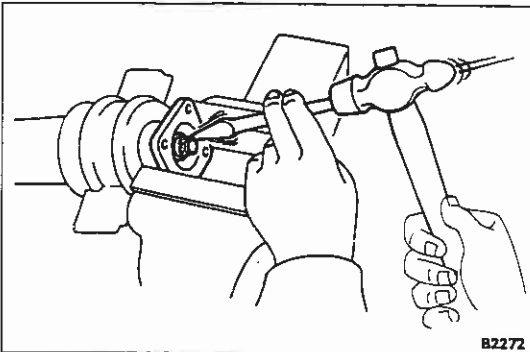
- Remove the center bearing mounting bolts.
 - Pull out the propeller shaft from the transmission.
 - Insert SST in the transmission to prevent oil leakage.
- SST 09325-20010

DISASSEMBLY OF PROPELLER SHAFT**1. SEPARATE PROPELLER SHAFT AND INTERMEDIATE SHAFT**

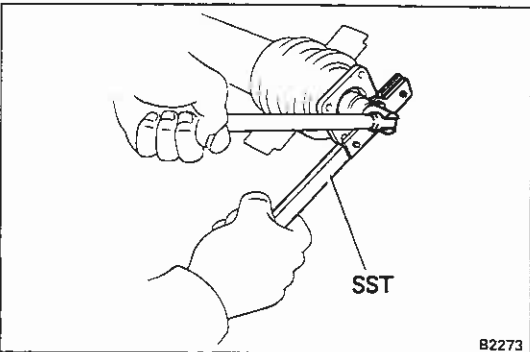
- (a) Place matchmarks on the flanges.
- (b) Remove the four bolts and nuts.

**2. REMOVE CENTER SUPPORT BEARING FROM INTERMEDIATE SHAFT**

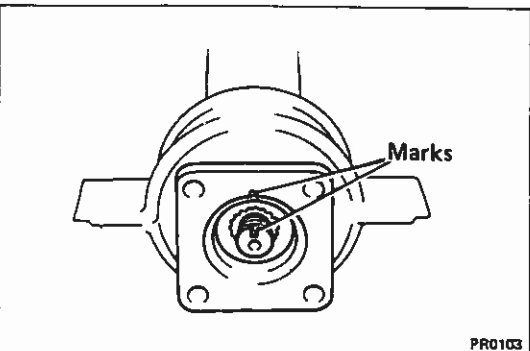
- (a) Using a hammer and chisel, loosen the staked part of the nut.



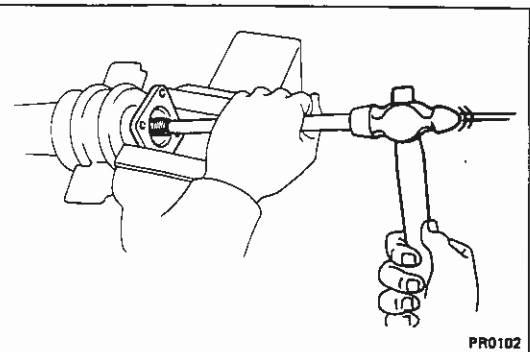
- (b) Using SST to hold the flange, remove the nut.
SST 09330-00020

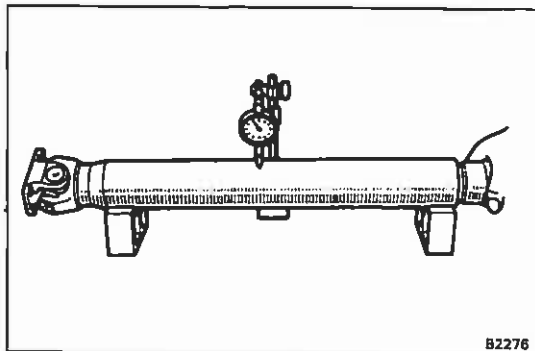


- (c) Place alignment marks on the flange or yoke and shaft.



- (d) Clamp the flange or yoke in a vise and tap off the shaft.



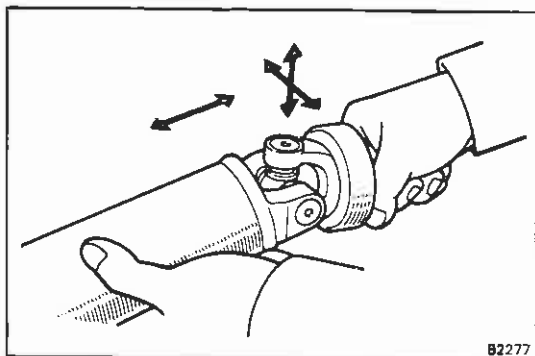


INSPECTION OF PROPELLER SHAFT COMPONENTS

1. INSPECT PROPELLER AND INTERMEDIATE SHAFTS FOR DAMAGE OR RUNOUT

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

Maximum runout: 0.8 mm (0.031 in.)



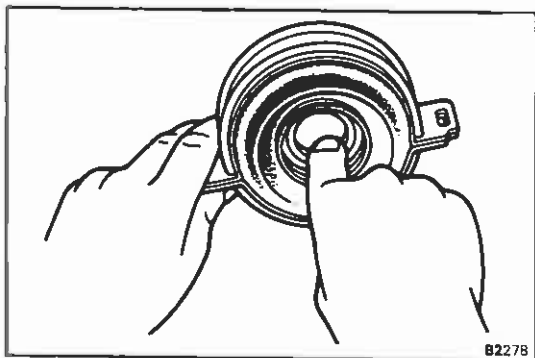
2. INSPECT SPIDER BEARINGS

(a) Inspect the spider bearings for wear or damage.

(b) Check the spider bearing axial play by turning the yoke while holding the shaft tightly.

Bearing axial play: 0 mm (0 in.)

If necessary, replace the propeller shaft.



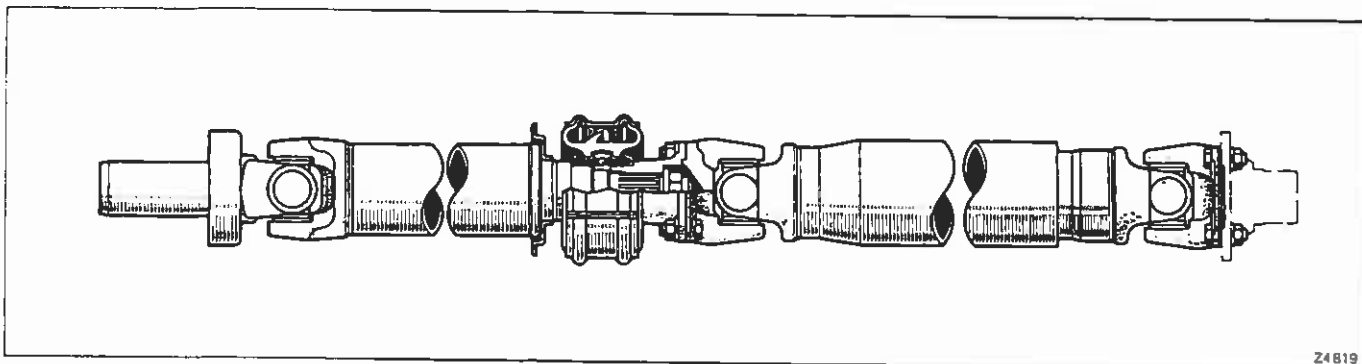
3. INSPECT CENTER SUPPORT BEARING FOR WEAR OR DAMAGE

Check that the bearing turns freely.

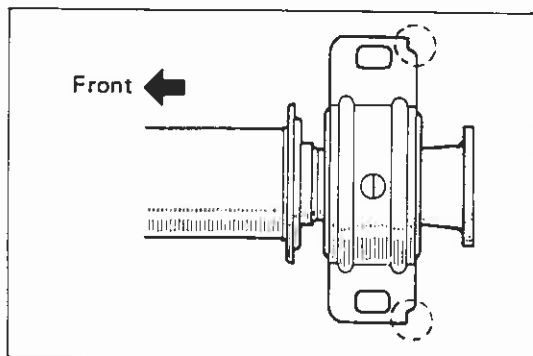
If the bearing is damaged, worn, or does not turn freely, replace it.

ASSEMBLY OF PROPELLER SHAFT

NOTE: If replacing either the center flange or intermediate shaft, reassemble them so that the front yoke of the intermediate shaft and the rear yoke of the propeller shaft are facing in the same direction shown in the figure below.

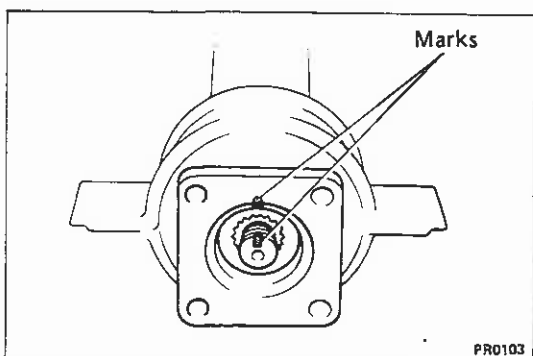


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1. INSTALL CENTER SUPPORT BEARING ON INTERMEDIATE SHAFT

NOTE: Install the center support bearing with the cutout toward the rear.

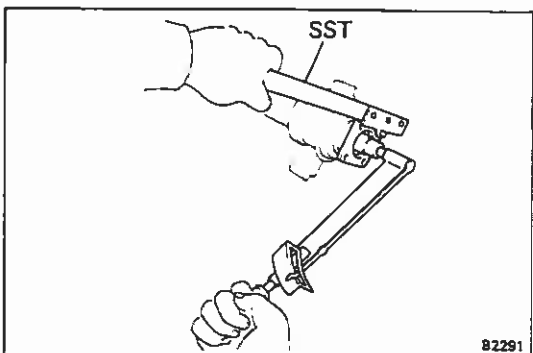


PR0103

2. INSTALL FLANGE ON INTERMEDIATE SHAFT

(a) Coat the splines of the intermediate shaft with MP grease.

(b) Align the matchmarks and install the flange to the intermediate shaft.



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(c) Using SST to hold the flange, press the bearing into position by tightening down a new nut.

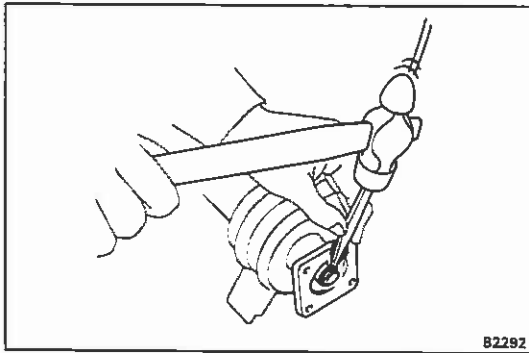
SST 09330-00020

Torque: 1,850 kg-cm (134 ft-lb, 181 N·m)

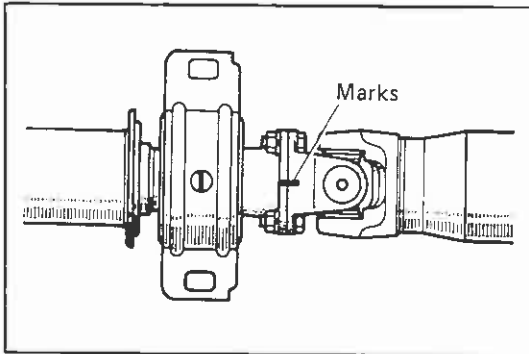
(d) Loosen the nut.

(e) Torque the nut again.

Torque: 700 kg-cm (51 ft-lb, 69 N·m)



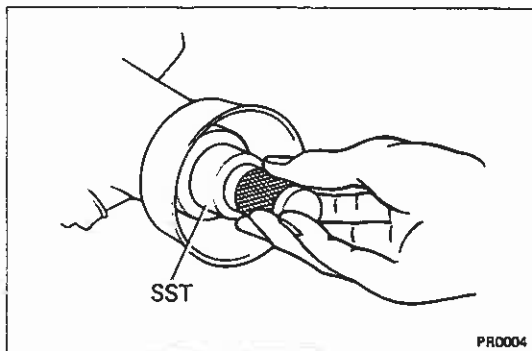
(f) Using a hammer and punch, stake the nut.



3. INSTALL PROPELLER SHAFT

- (a) Align the marks on the flanges and connect the flanges with four bolts and nuts.
- (b) Torque the bolts and nuts.

Torque: 430 kg-cm (31 ft-lb, 42 N-m)

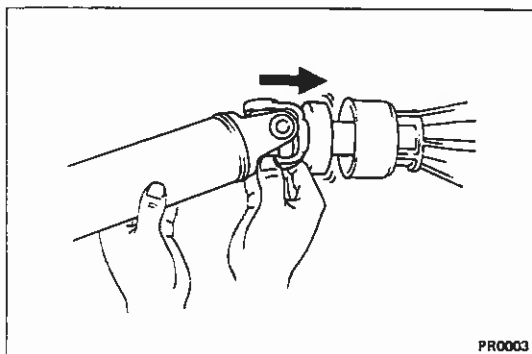


INSTALLATION OF PROPELLER SHAFT

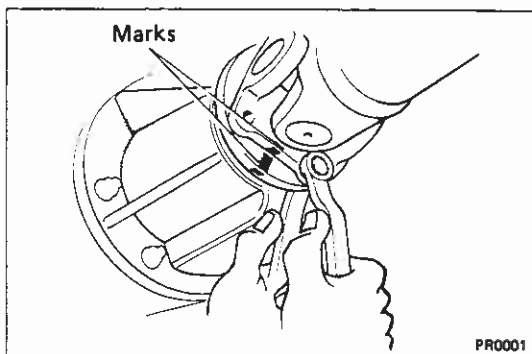
(See page PR-3)

1. INSERT YOKE IN TRANSMISSION

- (a) Remove SST from the transmission.
SST 09325-20010



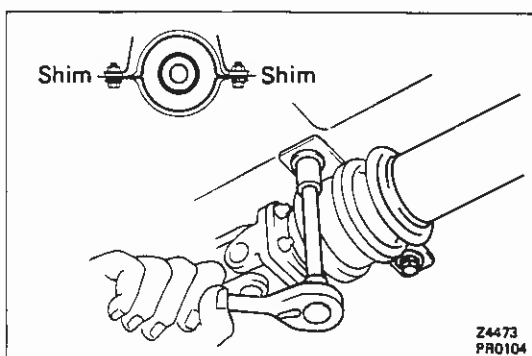
- (b) Push the yoke into the transmission.



2. CONNECT PROPELLER SHAFT FLANGE TO COMPANION FLANGE ON DIFFERENTIAL

- (a) Align the marks on the flanges and connect the flanges with four bolts and nuts.
- (b) Torque the bolts and nuts.

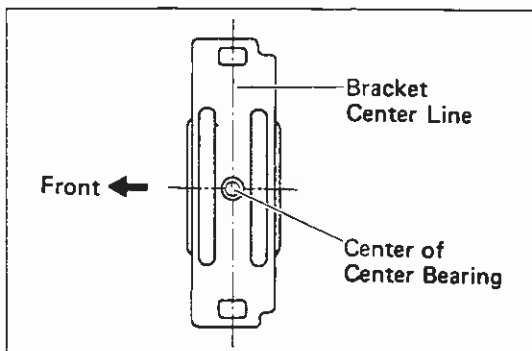
Torque: 430 kg-cm (31 ft-lb, 42 N·m)



3. CONNECT CENTER SUPPORT BEARING TO BODY

- (a) Place a height spacer between the body and center support bearing, and install the two mounting bolts finger tight.

NOTE: Some vehicles do not have a spacer. In this case, it is not necessary to insert one.



- (b) Check that the bearing bracket is at right angle to the propeller shaft. Adjust the bracket if necessary.
- (c) Check that the center line of the center bearing is set to the center line of the bracket when the vehicle is in a no-load condition. Adjust the bracket if necessary.
- (d) Torque the mounting bolts.

Torque: 410 kg-cm (30 ft-lb, 40 N·m)