

PROPELLER SHAFT

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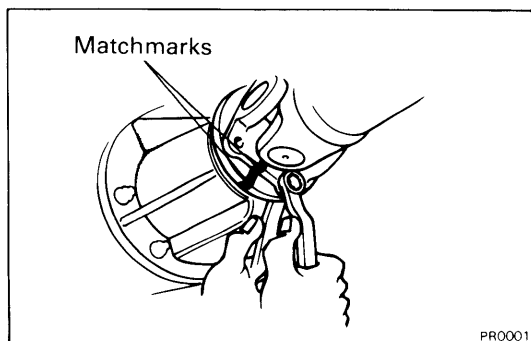
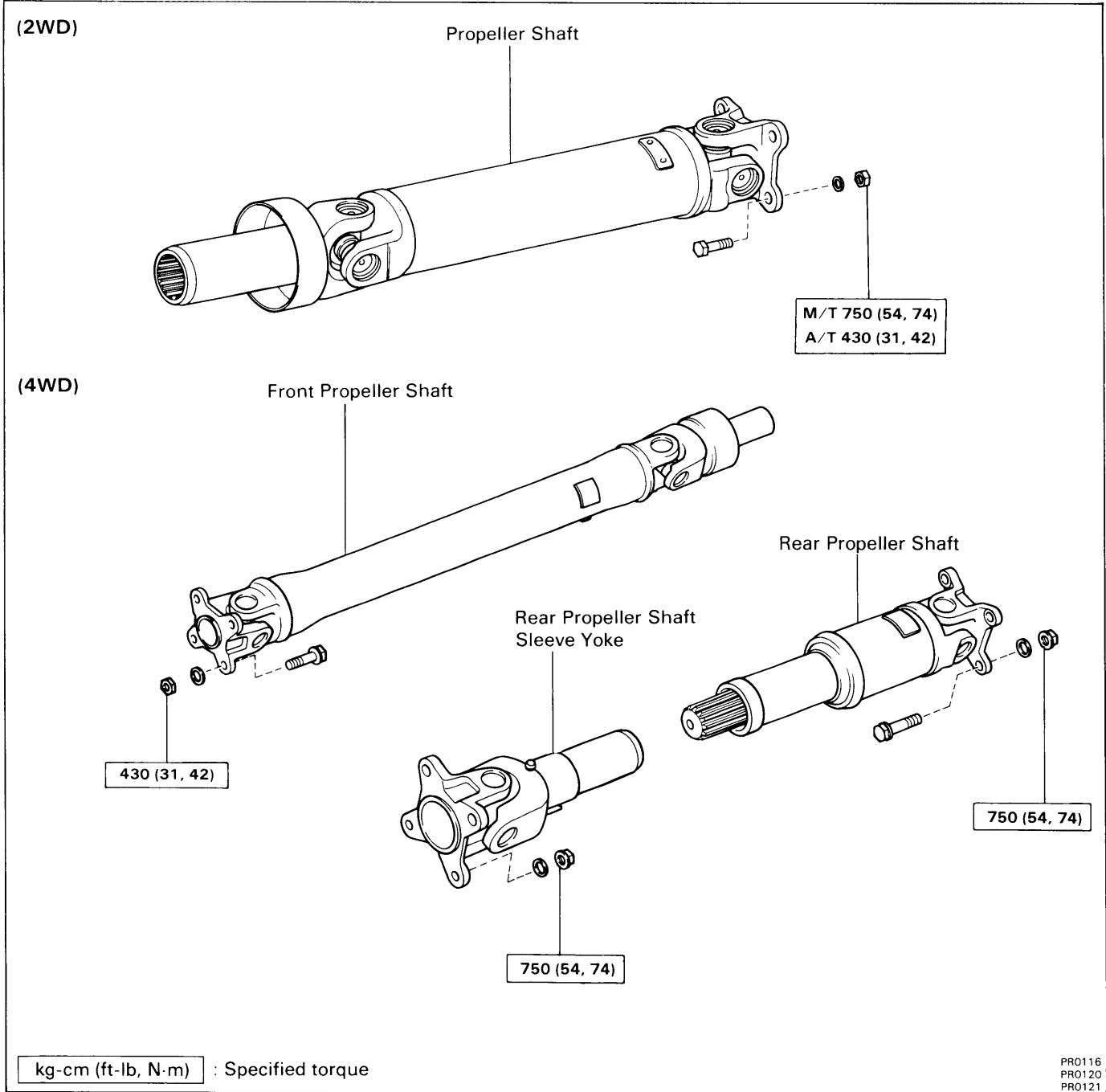
PRECAUTIONS

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 propeller shaft	PR-3
	Spider bearing worn or stuck	Replace propeller shaft	PR-3
Vibration	Propeller shaft runout	Replace propeller shaft	PR-3
	Propeller shaft imbalance	Balance propeller shaft	
	Transmission extension housing or transfer front case bushing worn	Replace extension housing bushing or transfer front case	PR-3
	Sleeve yoke spline stuck	Replace propeller shaft	

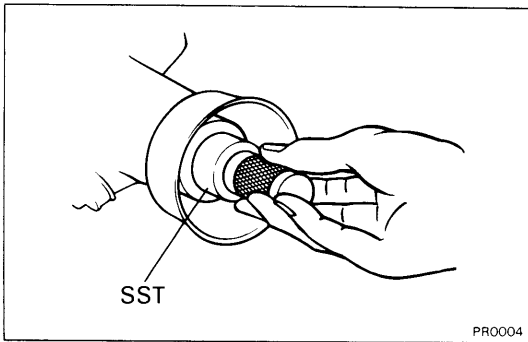
PROPELLER SHAFT COMPONENTS



(2WD)

REMOVAL OF PROPELLER SHAFT

1. DISCONNECT PROPELLER SHAFT FROM DIFFERENTIAL
 - (a) Place the matchmarks on the differential and propeller shaft flanges.
 - (b) Remove the four bolts, washers and nuts, disconnect the propeller shaft from the differential.



2. REMOVE PROPELLER SHAFT FROM TRANSMISSION

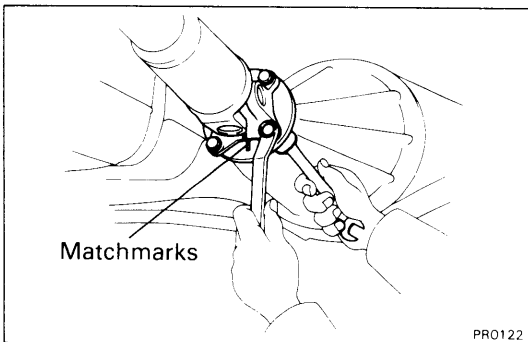
- (a) Pull out the propeller shaft yoke from the transmission.
- (b) Insert SST in the transmission to prevent oil leakage.
SST 09325-20010

(4WD)

REMOVAL OF REAR PROPELLER SHAFT

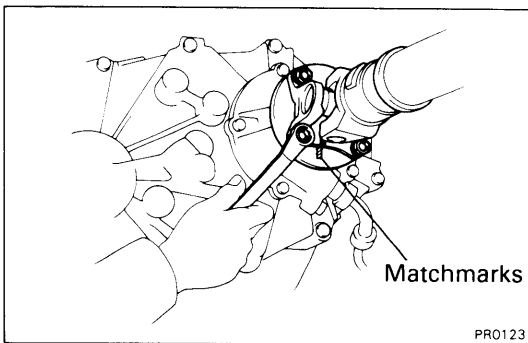
1. DISCONNECT REAR PROPELLER SHAFT FROM DIFFERENTIAL

- (a) Place the matchmarks on the differential and propeller shaft flanges.
- (b) Remove the four bolts, washers and nuts, disconnect the propeller shaft from the differential.



2. REMOVE REAR PROPELLER SHAFT

- (a) Place the matchmarks on the transfer and propeller shaft flanges.
- (b) Remove the four nuts and washers, remove the propeller shaft from the transfer.

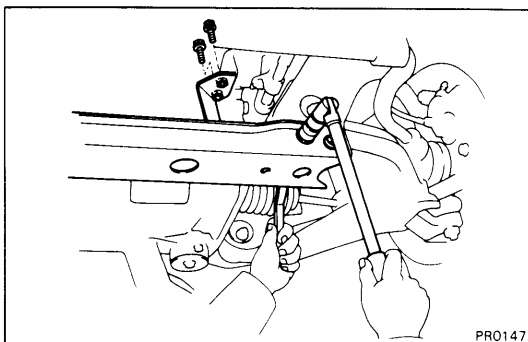


(4WD)

REMOVAL OF FRONT PROPELLER SHAFT

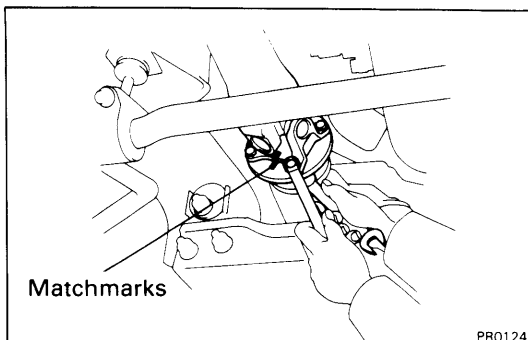
1. DISCONNECT DIFFERENTIAL SUPPORT MEMBER FROM BODY

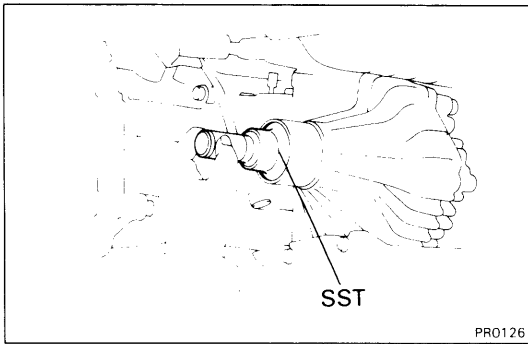
- (a) Remove the two bolts from the bracket.
- (b) Remove the four bolts and nuts, disconnect the differential support member from the body.



2. DISCONNECT FRONT PROPELLER SHAFT FROM DIFFERENTIAL

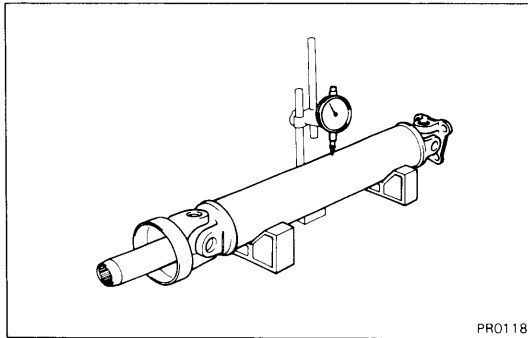
- (a) Place the matchmarks on the differential and propeller shaft flanges.
- (b) Remove the four bolts, washers and nuts, disconnect the propeller shaft from the differential.





3. REMOVE FRONT PROPELLER SHAFT

- (a) Pull out the propeller shaft yoke from the transfer.
 - (b) Insert SST in the transfer to prevent oil leakage.
- SST 09325-20010

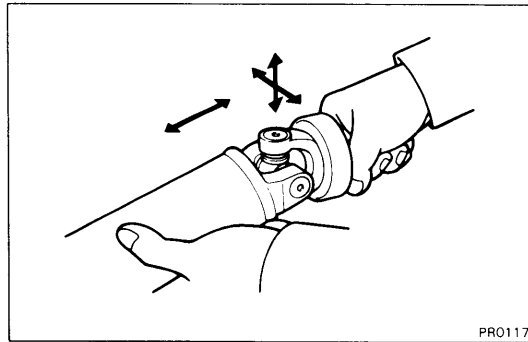


INSPECTION OF PROPELLER SHAFT

1. INSPECT PROPELLER SHAFT RUNOUT

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

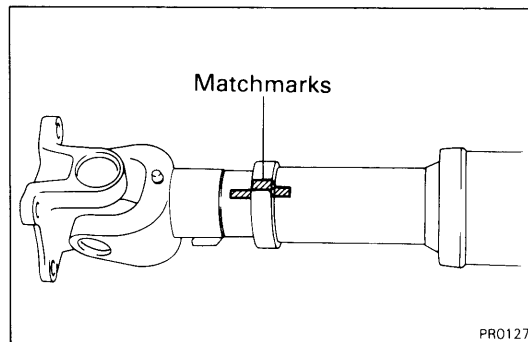
Maximum runout: 0.8 mm (0.031 in.)



2. INSPECT SPIDER BEARINGS

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

Bearing axial play: 0 mm (0 in.)



(4WD)

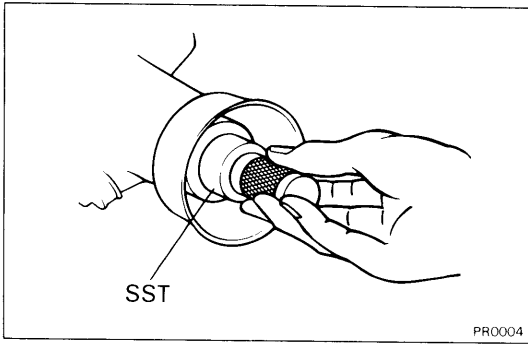
DISASSEMBLY AND ASSEMBLY OF REAR PROPELLER SHAFT

1. REMOVE YOKE FROM PROPELLER SHAFT

- (a) Place the matchmarks on the sleeve yoke and shaft.
- (b) Pull out the sleeve yoke from the shaft.

2. INSERT SLEEVE YOKE INTO PROPELLER SHAFT

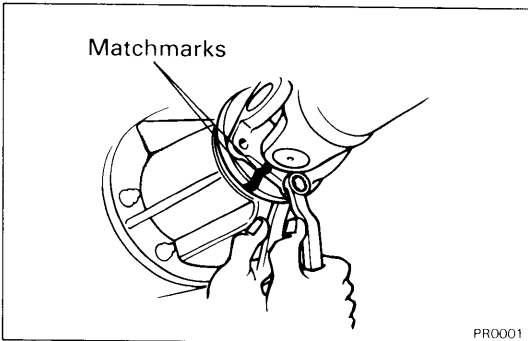
- (a) Apply MP grease to the propeller shaft spline and sleeve yoke sliding surface.
- (b) Align the matchmarks on the sleeve yoke and shaft.
- (c) Insert the sleeve yoke into the shaft.



(2WD)

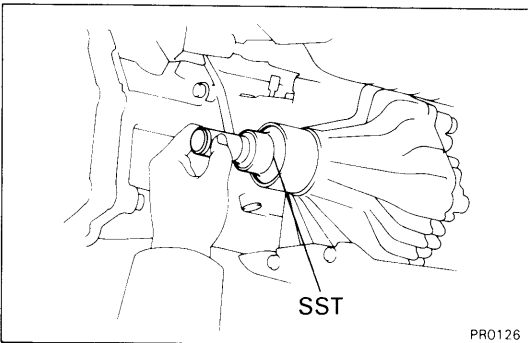
INSTALLATION OF PROPELLER SHAFT**1. INSERT PROPELLER SHAFT YOKE INTO TRANSMISSION**

- (a) Remove SST from the transmission.
SST 09325-20010
- (b) Insert the yoke into the transmission.

**2. CONNECT PROPELLER SHAFT TO DIFFERENTIAL**

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

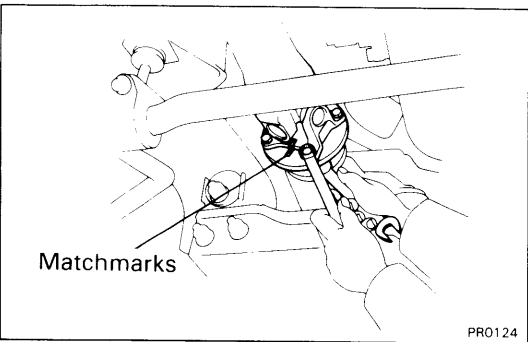
Torque: M/T 750 kg-cm (54 ft-lb, 74 N·m)
A/T 430 kg-cm (31 ft-lb, 42 N·m)



(4WD)

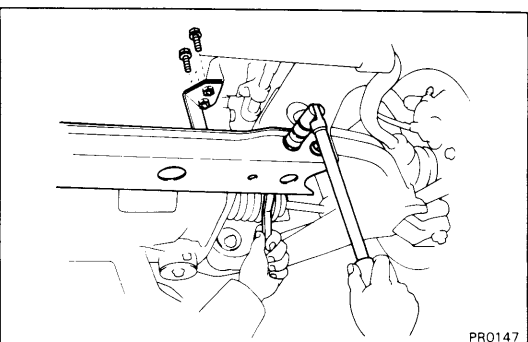
INSTALLATION OF FRONT PROPELLER SHAFT**1. INSERT PROPELLER SHAFT YOKE INTO TRANSFER**

- (a) Remove SST from the transfer.
SST 09325-20010
- (b) Insert the yoke into the transfer.

**2. CONNECT FRONT PROPELLER SHAFT TO DIFFERENTIAL**

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

Torque: 430 kg-cm (31 ft-lb, 42 N·m)

**3. CONNECT DIFFERENTIAL SUPPORT MEMBER TO BODY**

- (a) Connect the differential support member to the body with the four bolts and nuts.

Torque: 970 kg-cm (70 ft-lb, 95 N·m)

- (b) Install the two bolts to the bracket. Torque the bolts.

(4WD)**INSTALLATION OF REAR PROPELLER SHAFT****1. CONNECT REAR PROPELLER SHAFT TO TRANSFER FLANGE**

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

Torque: 750 kg-cm (54 ft-lb, 74 N·m)**2. CONNECT REAR PROPELLER SHAFT TO DIFFERENTIAL**

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

Torque: 750 kg-cm (54 ft-lb, 74 N·m)