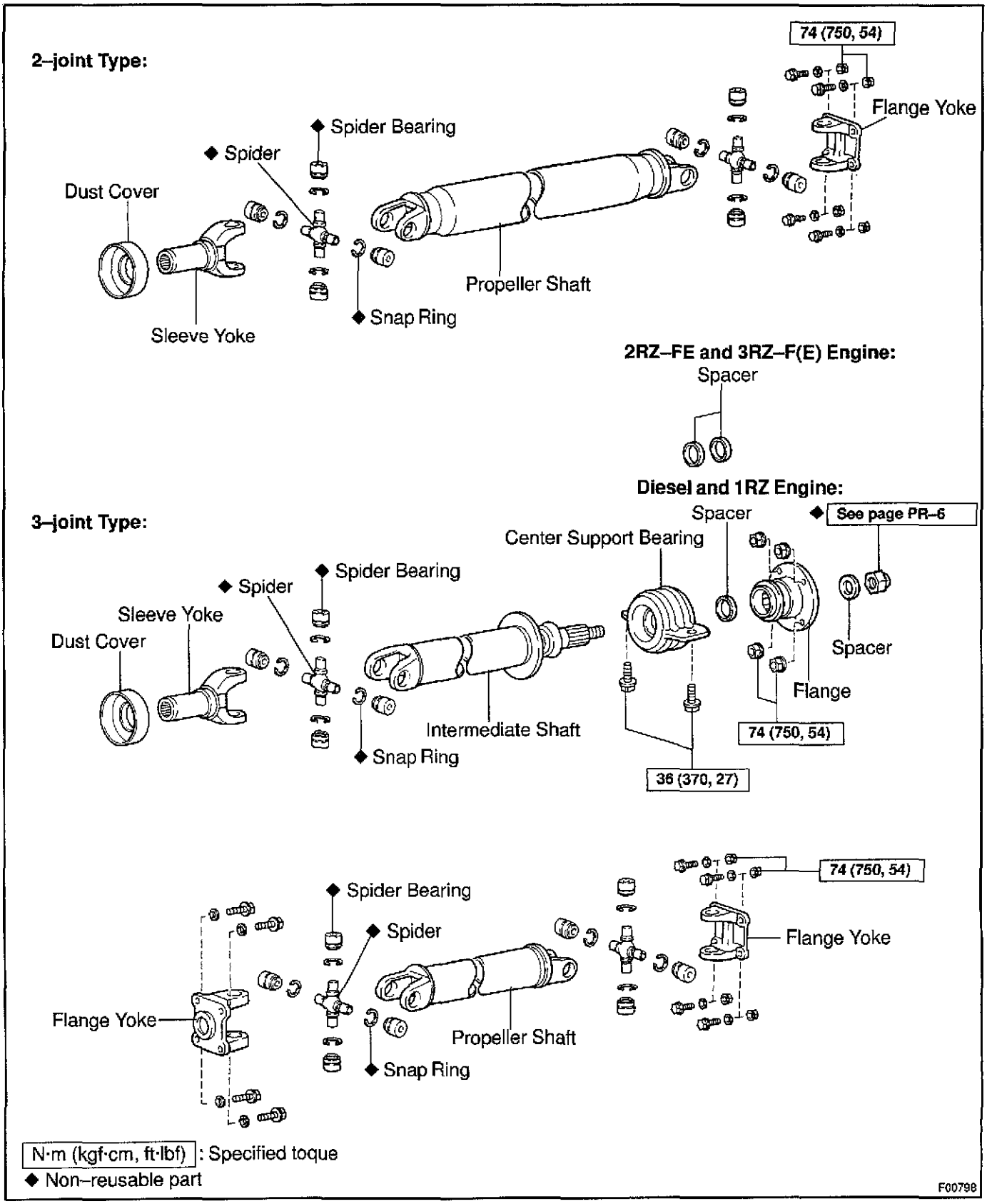
PROPELLER SHAFT ASSEMBLY (2WD)

COMPONENTS

PR01V-01



N·m (kgf·cm, ft·lbf) : Specified toque

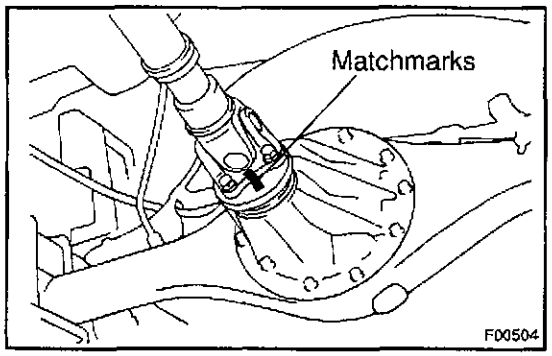
◆ Non–reusable part

F00798

PR01W-01

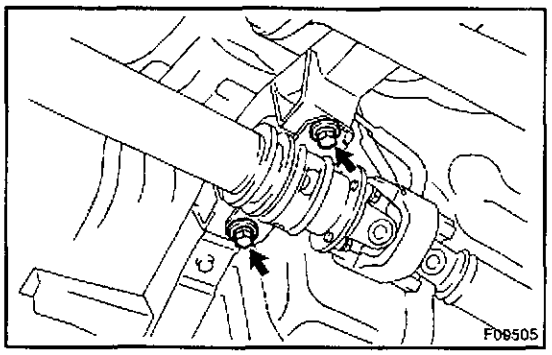
REMOVAL

REMOVE PROPELLER SHAFT



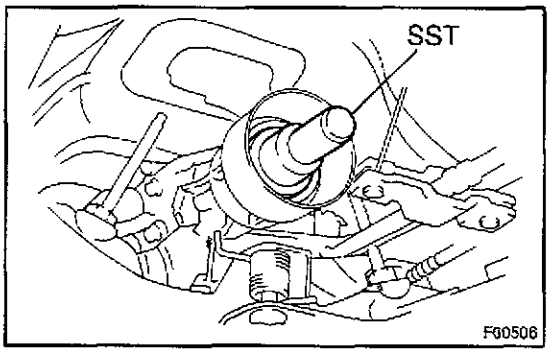
(a) Place matchmarks on the propeller shaft and differential flange.

(b) Remove the 4 nuts, bolts and washers.
Torque: 74 N·m (750 kgf·cm, 54 ft·lbf)



(c) 3–joint type:
Remove the 2 bolts and center support bearing from the frame crossmember.
Torque: 36 N·m (370 kgf·cm, 27 ft·lbf)

(d) Pull the yoke from the transmission.



(e) 2–joint type:
Insert SST in the transmission to prevent oil leakage.
SST 09325–20010

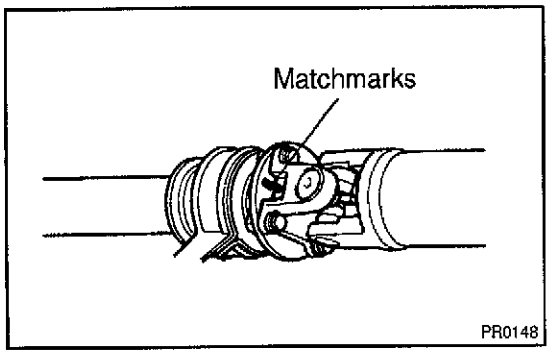
(f) 3–joint type:
Insert SST in the transmission to prevent oil leakage.
SST 09325–40010

PR

PR01X-01

DISASSEMBLY

NOTICE:
Be careful not to grip the propeller shaft tube too tightly in a vise as this will cause deformation.

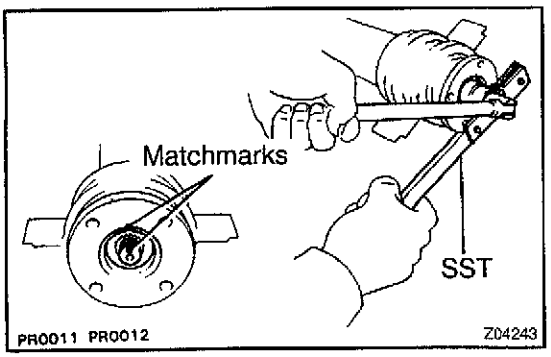


1. 3–JOINT TYPE:
SEPARATE PROPELLER SHAFT AND INTERMEDIATE SHAFT

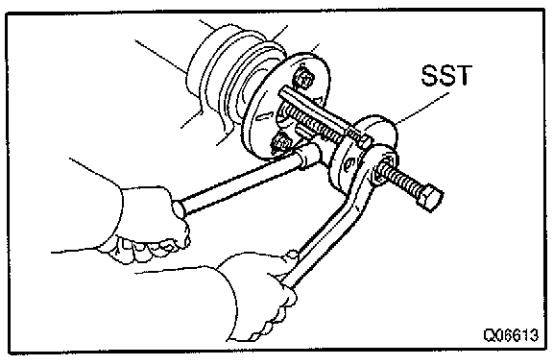
(a) Place matchmarks on the flanges.
(b) Remove the 4 nuts, bolts the washers.

2. 3–JOINT TYPE:
REMOVE CENTER SUPPORT BEARING FROM INTERMEDIATE SHAFT

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

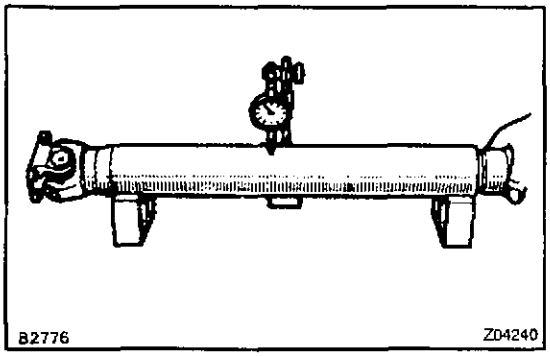


(b) Using SST to hold the flange, remove the nut and spacer.
SST 09930–00021
(c) Place matchmarks on the flange and shaft.



(d) Using SST, remove the flange from the intermediate shaft.
SST 09950–30010 (09951–03010, 09953–03010, 09954–03010, 09955–03030, 09956–03020)
(e) Diesel and 1RZ engine:
Remove the spacer.
(f) 2RZ–FE and 3RZ–F(E) engine:
Remove the 2 spacers.

3. 3–JOINT TYPE:
REMOVE CENTER SUPPORT BEARING



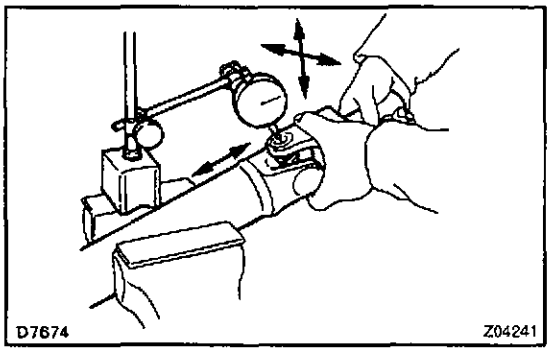
INSPECTION

1. INSPECT PROPELLER SHAFT AND INTERMEDIATE SHAFT FOR DAMAGE OR RUNOUT

Using a dial indicator, check the runout of shafts.

Maximum runout: 0.8 mm (0.031 in.)

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



2. INSPECT SPIDER BEARINGS

NOTICE:

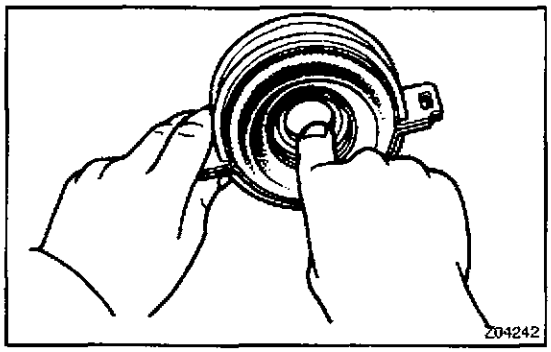
Be careful not to grip the propeller shaft tube too tightly in a vise as this will cause deformation.

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

(b) Using a dial indicator, check the spider bearing axial play by turning the yoke with holding the shaft tightly.

Bearing axial play: Maximum 0.05 mm (0.0020 in.)

If necessary, replace the spider bearing.



3. 3–JOINT TYPE:
INSPECT CENTER SUPPORT BEARING FOR WEAR OR DAMAGE

Check that the bearing turns freely.

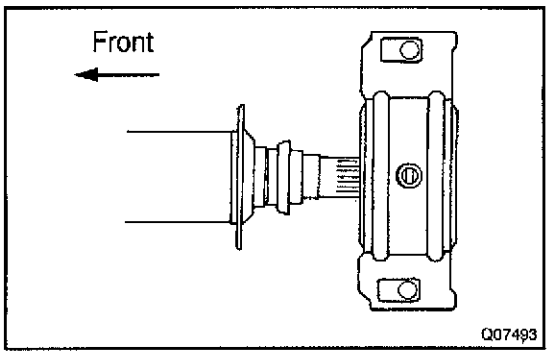
If the bearing is damaged, worn, or does not turn freely, replace it.

PR01Z-01

REASSEMBLY

NOTICE:

Be careful not to grip the propeller shaft tube too tightly in a vise as this will cause deformation.



1. 3–JOINT TYPE:
INSTALL CENTER SUPPORT BEARING ON INTERMEDIATE SHAFT

(a) Diesel and 1RZ engine:
Install the center support bearing and spacer.

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

(b) 2RZ–FE and 3RZ–F(E) engine:
Install the center support bearing and 2 spacers.

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

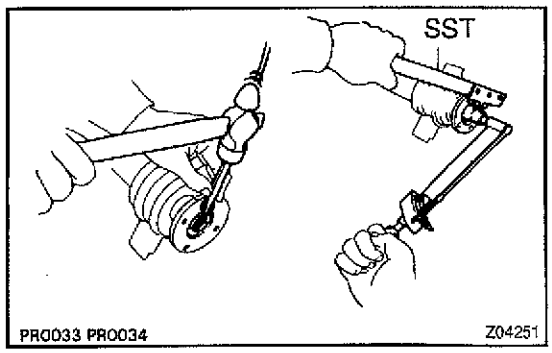
2. 3–JOINT TYPE:
INSTALL FLANGE ON INTERMEDIATE SHAFT

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

(b) Place the flange on the shaft and align the matchmarks.

HINT:
If replacing either the center flange or intermediate shaft, reassemble it so that the front flange yoke of the intermediate shaft and the rear flange yoke of the propeller shaft are facing in the same direction.

(c) Install the spacer.



(d) Using SST to hold the flange, press the bearing into position by tightening down a new nut.
SST 09930–00021
Torque:
Diesel and 1RZ engine:
167 N·m (1,700 kgf·cm, 123 ft·lbf)
2RZ–FE and 3RZ–F(E) engine:
181 N·m (1,850 kgf·cm, 134 ft·lbf)

(e) Loosen the nut.

(f) Torque the nut again.

Torque:
Diesel and 1RZ engine: 44 N·m (450 kgf·cm, 33 ft·lbf)
2RZ–FE and 3RZ–F(E) engine:
69 N·m (700 kgf·cm, 51 ft·lbf)

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

3. 3–JOINT TYPE:
INSTALL PROPELLER SHAFT

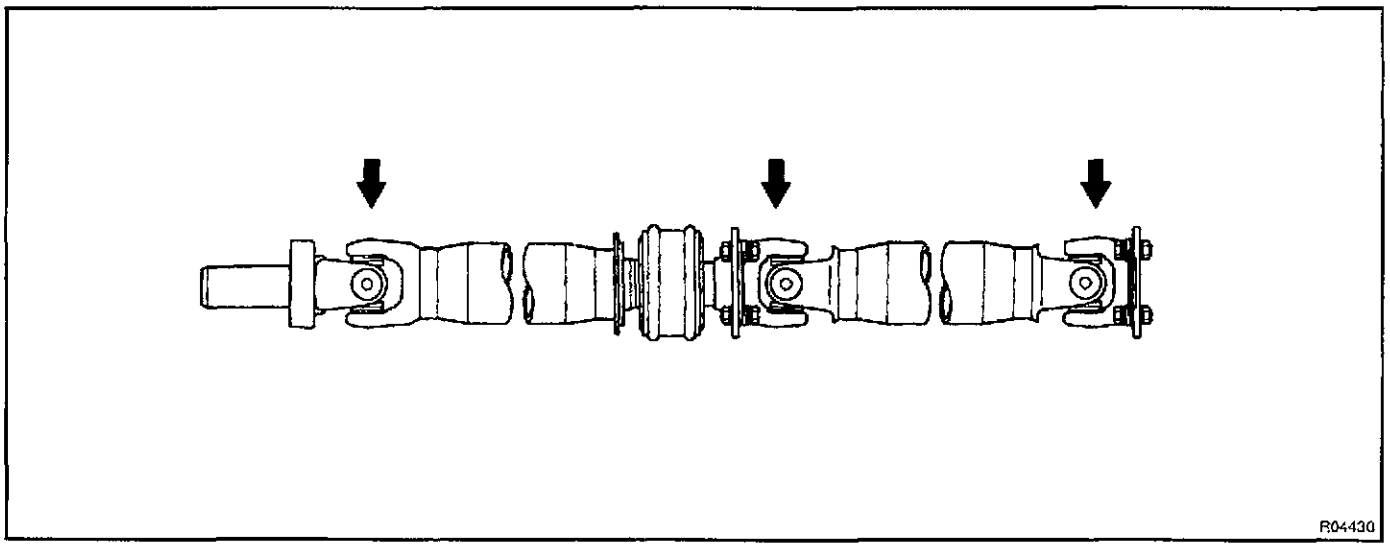
(a) Align the matchmarks on the flanges and connect the flanges with 4 bolts, washers and nuts.

HINT:
If replacing either the center flange or intermediate shaft, reassemble it so that the front flange yoke of the intermediate shaft and the rear flange yoke of the propeller shaft are facing in the same direction.

(b) Torque the bolts.

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

HINT:
When removing or installing any part, make sure that each joint is facing in the correct direction, as shown in the illustration below.



PR020-01

INSTALLATION

Installation is in the reverse order of removal (See page PR–3).