# **DISASSEMBLY**

#### 1. INSPECT FRONT PROPELLER SHAFT ASSEMBLY

(a) Check that the propeller shaft is not damaged or deformed.

If necessary, replace the propeller shaft.

(b) Using a dial indicator, check the propeller shaft runout.

#### **Maximum runout:**

0.3 mm (0.012 in.)

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

#### 2. INSPECT UNIVERSAL JOINT SPIDER BEARING

- (a) Check that the joints move smoothly.
- (b) Check the spider bearings for wear and damage.
- (c) Check the spider bearing axial play by turning the yoke while holding the shaft tightly.

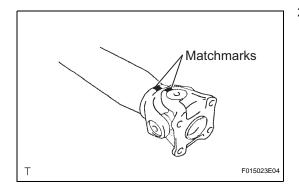
# Maximum bearing axial play:

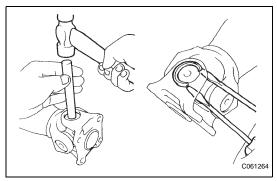
0 mm (0 in.)

If necessary, replace the spider bearing.

# 3. REMOVE FRONT PROPELLER SHAFT UNIVERSAL JOINT SPIDER KIT

(a) Place matchmarks on the flange yoke and sleeve yoke.





SST F015025E05

- (b) Using a brass bar and a hammer, slightly tap in the spider bearing outer races.
- (c) Using 2 screwdrivers, remove the 4 snap rings from the grooves.

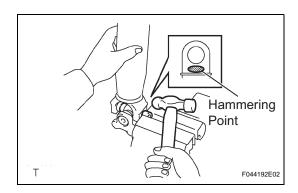
(d) Using SST, push out the spider bearing from the propeller shaft.

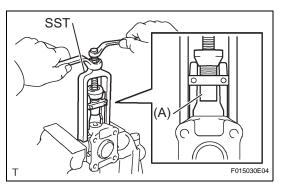
SST 09332-25010

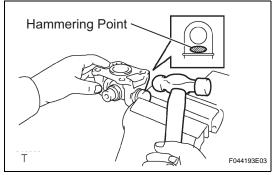
HINT:

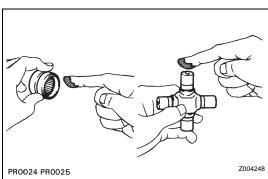
Sufficiently raise the part indicated by (A) so that it does not come into contact with the spider bearing.

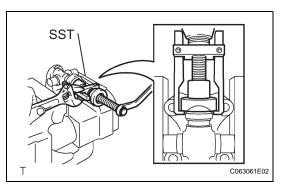












(e) Clamp the spider bearing outer race in a vise and tap off the propeller shaft with a hammer.

### **NOTICE:**

Do not tap the shaft.

HINT:

Remove the bearing on the opposite side in the same procedure.

- Install the 2 removed spider bearing outer races onto the spider.
- (g) Using SST, push the bearing out of the yoke.

SST 09332-25010

HINT:

Sufficiently raise the part indicated by (A) so that it does not come into contact with the bearing.

- (h) Clamp the outer bearing race in a vise and tap off the flange yoke with a hammer.
- Remove the spider. (i)

# REASSEMBLY

- **INSTALL FRONT PROPELLER SHAFT UNIVERSAL JOINT SPIDER KIT** 
  - (a) Apply MP grease to a new spider and spider bearings.
  - (b) Fit the spider into the flange yoke.

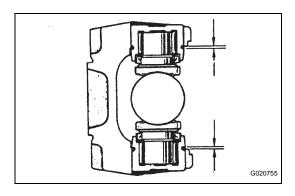
(c) Using SST, install the spider bearings onto the spider.

SST 09332-25010

(d) Using SST, adjust both bearings so that the snap ring grooves are at maximum and equal in width.

SST 09332-25010





(e) Install 4 new snap rings of equal thickness which will allow no axial play.

HINT:

Do not reuse the snap rings.

# Thickness of snap ring

	····ouries or orial ring				
Parts No.	Thickness mm (in.)	Mark			
90520-25039	2.28 to 2.30	1			
90520-25040	2.30 to 2.32	2			
90520-25041	2.32 to 2.34	-			
90520-25042	2.34 to 2.36	Brown			
90520-25043	2.36 to 2.38	Blue			
90520-25044	2.38 to 2.40	6			
90520-25045	2.40 to 2.42	7			
90520-25046	2.42 to 2.44	8			
90520-25047	2.44 to 2.46	9			
90520-25048	2.46 to 2.48	10			
90520-25049	2.48 to 2.50	A			
90520-25050	2.50 to 2.52	В			
90520-25051	2.52 to 2.54	С			
90520-25052	2.54 to 2.56	D			
90520-25053	2.56 to 2.58	E			
90520-25054	2.18 to 2.20	J			
90520-25055	2.20 to 2.22	К			
90520-25056	2.22 to 2.24	F			
90520-25057	2.24 to 2.26	G			
90520-25058	2.26 to 2.28	Н			
		•			

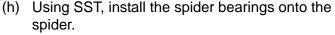
#### NOTICE:

- Use a new snap ring.
- Use snap rings as close as possible to the same thickness on both ends.
- (f) Using a hammer, tap the yoke until there is no clearance between the spider bearing outer race and the snap ring.

HINT:

Install a new spider bearing on the sleeve side in the procedure described above.

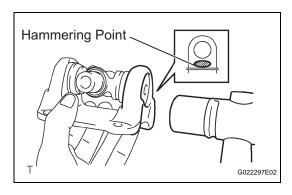
(g) Align the matchmarks on the flange yoke and the sleeve yoke.

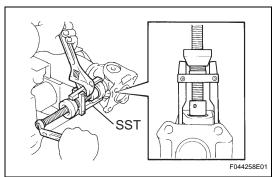


#### SST 09332-25010

- (i) Using SST, adjust both bearings so that the snap ring grooves are at maximum and equal in width. SST 09332-25010
- (j) Install 4 new snap rings of equal thickness which will allow no axial play. HINT:

Do not reuse the snap rings.







		-	
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Thickness of shap ring				
Parts No.	Thickness mm (in.)	Mark		
90520-25039	2.28 to 2.30	1		
90520-25040	2.30 to 2.32	2		
90520-25041	2.32 to 2.34	-		
90520-25042	2.34 to 2.36	Brown		
90520-25043	2.36 to 2.38	Blue		
90520-25044	2.38 to 2.40	6		
90520-25045	2.40 to 2.42	7		
90520-25046	2.42 to 2.44	8		
90520-25047	2.44 to 2.46	9		
90520-25048	2.46 to 2.48	10		
90520-25049	2.48 to 2.50	A		
90520-25050	2.50 to 2.52	В		
90520-25051	2.52 to 2.54	С		
90520-25052	2.54 to 2.56	D		
90520-25053	2.56 to 2.58	Е		
90520-25054	2.18 to 2.20	J		
90520-25055	2.20 to 2.22	K		
90520-25056	2.22 to 2.24	F		
90520-25057	2.24 to 2.26	G		
90520-25058	2.26 to 2.28	Н		

#### NOTICE:

- Use a new snap ring.
- Use snap rings as close as possible to the same thickness on both ends.
- (k) Using a plastic hammer, tap the yoke until there is no clearance between the spider bearing outer race and the snap ring.

HINT:

Install a new spider bearing on the sleeve side in the procedure described above.

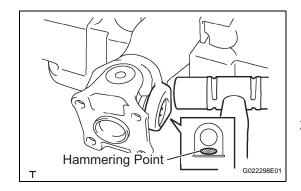
#### 2. INSPECT UNIVERSAL JOINT SPIDER BEARING

- (a) Check that the joints move smoothly.
- (b) Check the spider bearing axial play by turning the yoke while holding the shaft tightly.

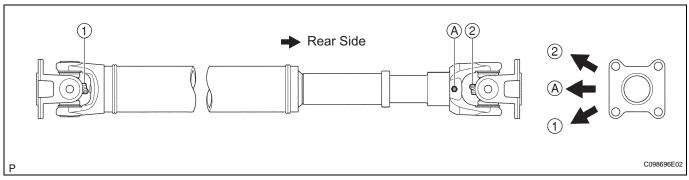
Maximum bearing axial play: 0 mm (0 in.)

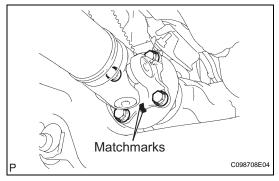
# 3. INSPECT FRONT PROPELLER SHAFT ASSEMBLY HINT:

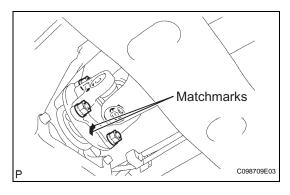
When replacing the spider bearing, be sure that the grease fitting hole is facing in the direction shown in the illustration.











# **INSTALLATION**

# 1. INSTALL FRONT PROPELLER SHAFT ASSEMBLY

- (a) Align the matchmarks on the yoke and differential flange.
- (b) Install the propeller shaft assembly with the 4 bolts, 4 nuts and 4 washers.

Torque: 88 N\*m (899 kgf\*cm, 65 ft.\*lbf)

- (c) Align the matchmarks on the yoke and transfer flange.
- (d) Install the propeller shaft assembly with the 4 nuts and 4 washers.

Torque: 88 N\*m (899 kgf\*cm, 65 ft.\*lbf)

