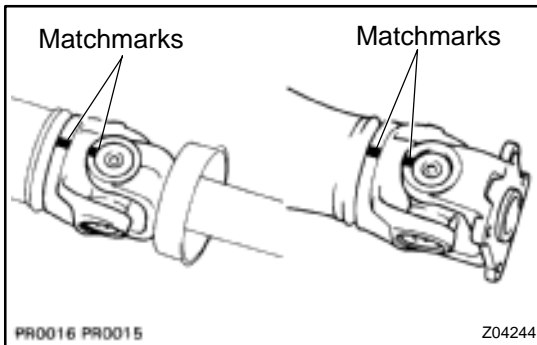


# SPIDER BEARING REPLACEMENT

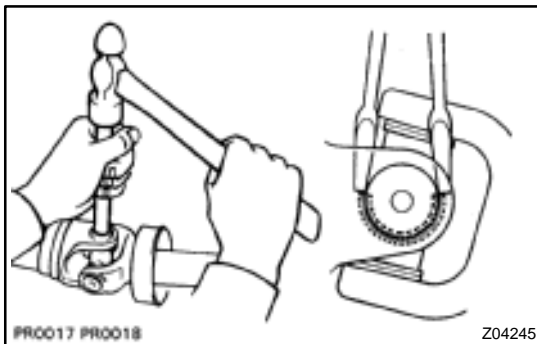
PR011-02

## NOTICE:

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

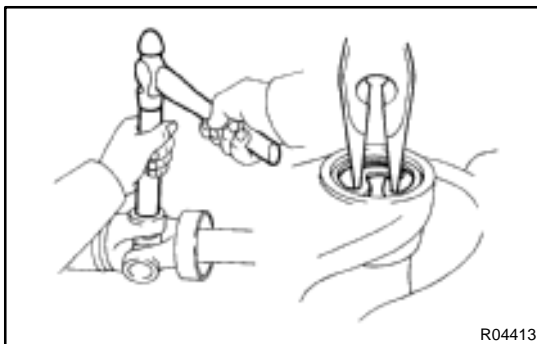


### 1. PLACE MATCHMARKS ON SHAFT AND YOKE



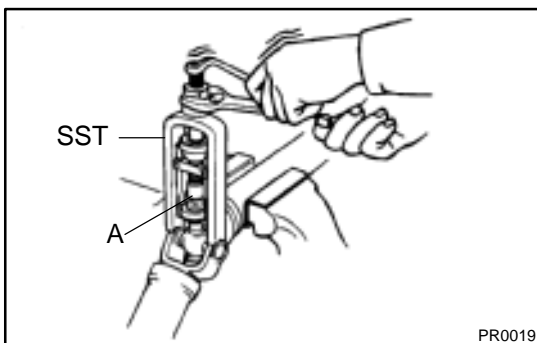
### 2. TMC made: REMOVE SNAP RING

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



### 3. DANA made: REMOVE SNAP RING

- Using a brass bar and hammer, slightly tap in the bearing outer races.
- Using needle nose pliers, remove the 4 snap rings from the grooves.



### 4. REMOVE SPIDER BEARING

- Using SST, push out the bearing from the propeller shaft.  
SST 09332-25010

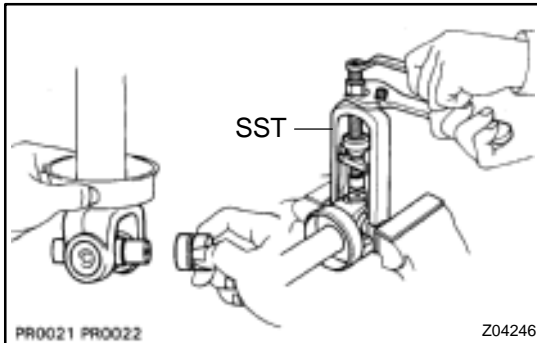
## HINT:

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

- Clamp the bearing outer race in a vise and tap off the propeller shaft with a hammer.

**HINT:**

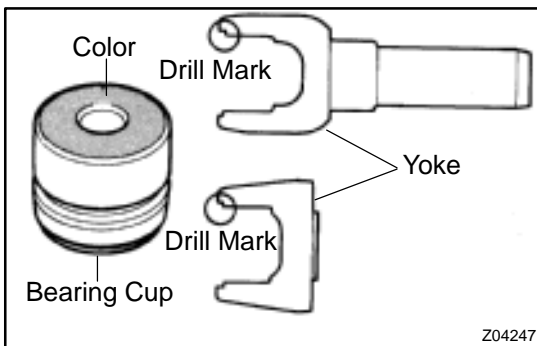
Remove the bearing on the opposite side in the same procedure.



- (c) Install the 2 removed bearing outer races to the spider.
- (d) Using SST, push out the bearing from the yoke.  
SST 09332-25010
- (e) Clamp the outer bearing race in a vise and tap off the yoke with a hammer.

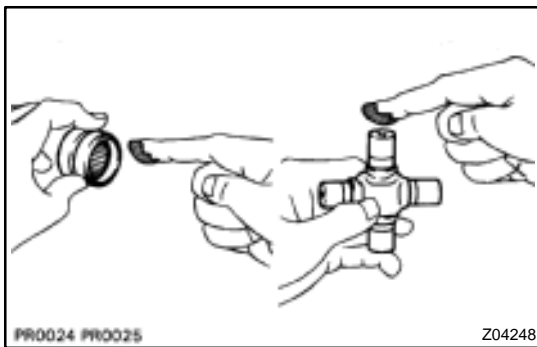
**HINT:**

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

**5. SELECT SPIDER BEARING**

Select the bearing according to whether or not there is a drill mark on the yoke section.

Yoke	Bearing
With drill mark	With color mark (Red)
No drill mark	No color mark

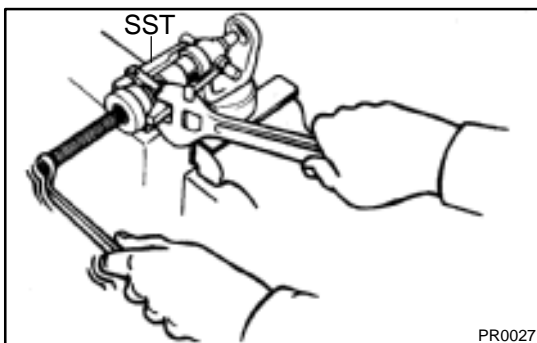
**6. INSTALL SPIDER BEARING**

- (a) Apply MP grease to a new spider and bearings.

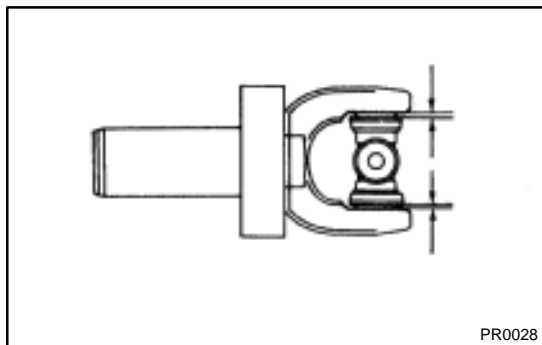
**NOTICE:**

**Be careful not to apply too much grease.**

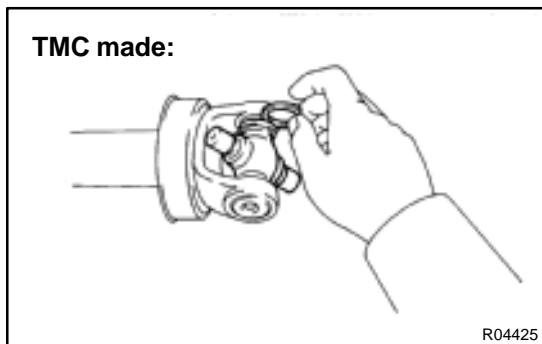
- (b) Align the matchmarks on the yoke and shaft.
- (c) Fit the spider into the yoke.



- (d) Using SST, install new bearings on the spider.  
SST 09332-25010



- (e) Using SST, adjust both bearings so that the snap ring grooves are at maximum and equal widths.



## 7. INSTALL SNAP RING

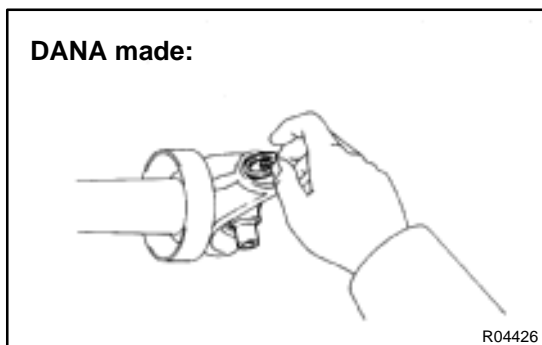
- (a) Install 2 new snap rings of equal thickness which will allow 0 – 0.05 mm (0 – 0.0020 in.) axial play.

HINT:

Do not reuse the snap rings.

**TMC made:**

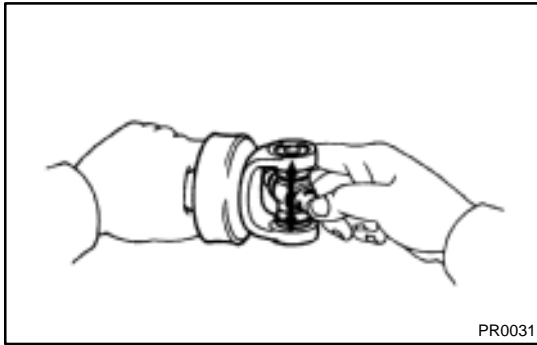
Color	Mark	Thickness mm (in.)
–	1	2.100 – 2.150 (0.0827 – 0.0846)
–	2	2.150 – 2.200 (0.0846 – 0.0866)
–	3	2.200 – 2.250 (0.0866 – 0.0886)
Brown	–	2.250 – 2.300 (0.0886 – 0.0906)
Blue	–	2.300 – 2.350 (0.0906 – 0.0925)
–	6	2.350 – 2.400 (0.0925 – 0.0945)
–	7	2.400 – 2.450 (0.0945 – 0.0965)
–	8	2.450 – 2.500 (0.0965 – 0.0984)



**DANA made:**

Color	Thickness mm (in.)
Green	1.384 (0.0545)
Red	1.435 (0.0565)
Black	1.486 (0.0585)
Copper	1.511 (0.0595)
Silver	1.537 (0.0605)
Yellow	1.588 (0.0625)
Blue	1.638 (0.0645)

- (b) Using a hammer, tap the yoke until there is no clearance between the bearing outer race and snap ring.

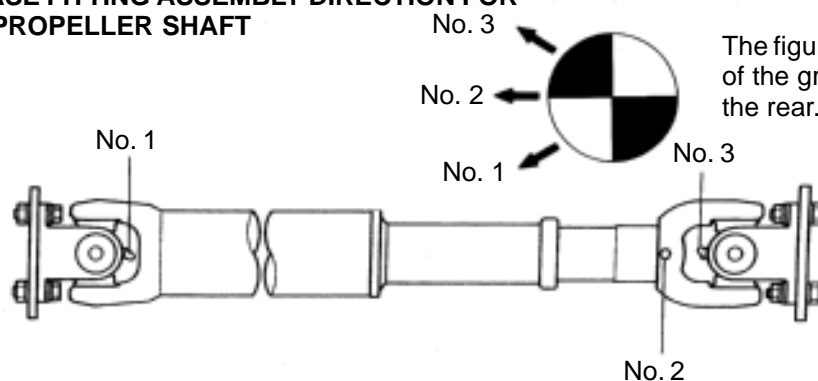
**8. CHECK SPIDER BEARING**

- (a) Check that the spider bearing moves smoothly.
- (b) Check the spider bearing axial play.

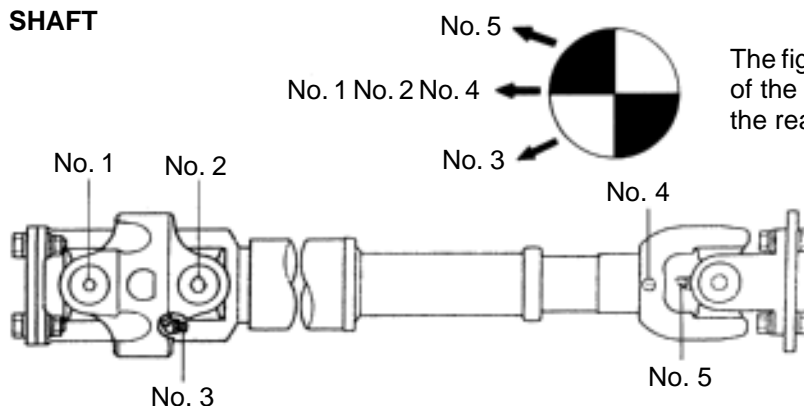
**Maximum bearing axial play: 0.05 mm (0.0020 in.)**

**HINT:**

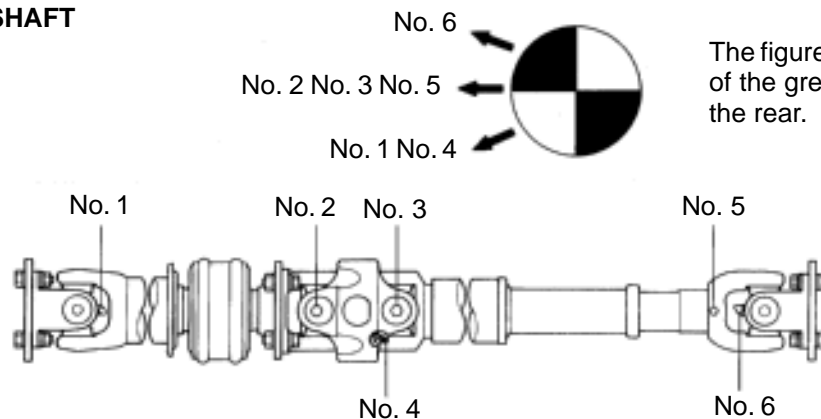
- Install new spider bearings on the shaft side in the procedure described above.
- When replacing the propeller shaft spider on pre runner and rear propeller shaft spider on 4WD vehicles, be sure that the grease fitting assembly hole is facing in the direction shown in the illustration on the next page.

**SPIDER GREASE FITTING ASSEMBLY DIRECTION FOR  
4WD FRONT PROPELLER SHAFT**


The figure at left shows the locations of the grease fittings as seen from the rear.

**SPIDER GREASE FITTING ASSEMBLY DIRECTION FOR  
PRE RUNNER PROPELLER SHAFT AND 4WD REAR  
PROPELLER SHAFT  
2-joint type:**


The figure at left shows the locations of the grease fittings as seen from the rear.

**SPIDER GREASE FITTING ASSEMBLY DIRECTION FOR  
PRE RUNNER PROPELLER SHAFT AND 4WD REAR  
PROPELLER SHAFT  
3-joint type:**


The figure at left shows the locations of the grease fittings as seen from the rear.

Z15305