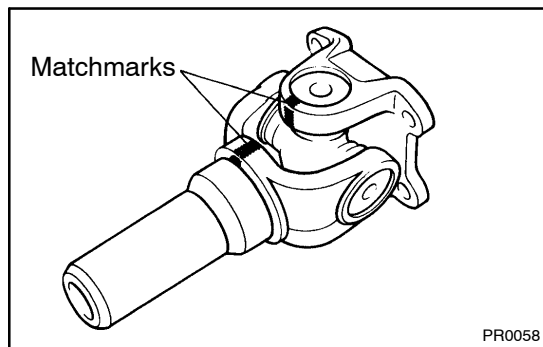




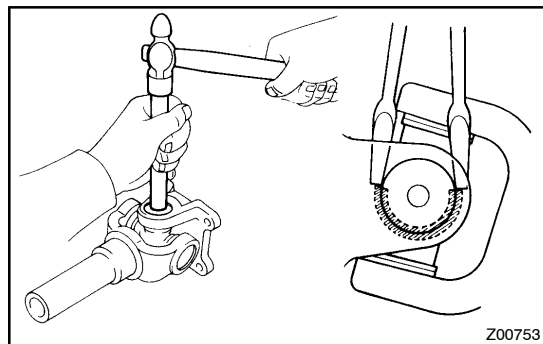
## SPIDER BEARING REPLACEMENT

PR03V-01

### NOTICE:

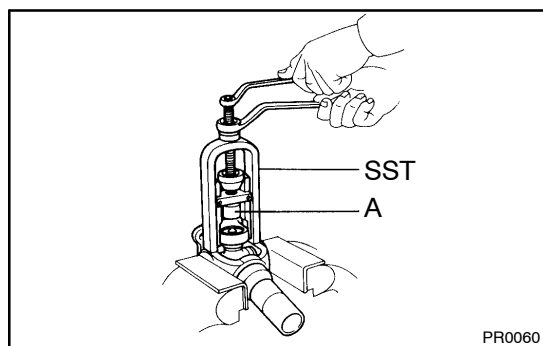
Be careful not to grip the propeller shaft rube too tightly in a vise as this will cause deformation.

1. REMOVE PROPELLER SHAFT  
(See page [PR-4](#))
2. PLACE MATCHMARKS ON SHAFT AND YOKE



### 3. REMOVE SNAP RINGS

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

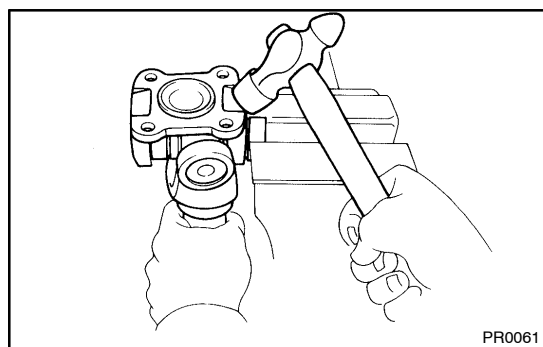


### 4. REMOVE SPIDER BEARINGS

- (a) Using SST, push out the bearing from the flange.  
SST 09332-25010

#### HINT:

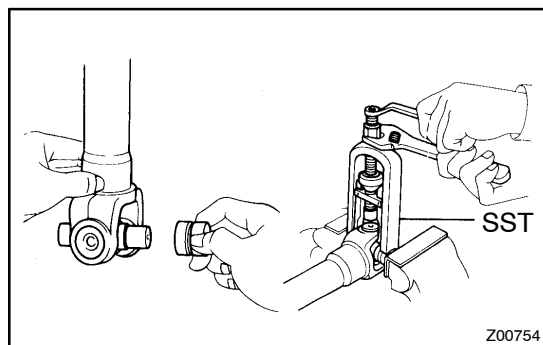
Sufficiently raise the part indicated by "A" so that it does not come into contact with the bearing.



- (b) Clamp the bearing outer race in a vise and tap off the flange with a hammer.

#### HINT:

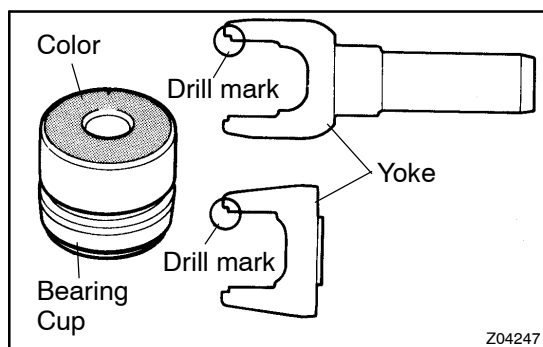
Remove the bearing on the opposite side in the same procedure.



- (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:

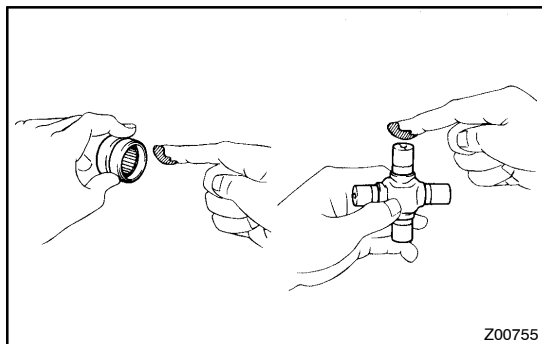
Remove the bearing on the opposite side in the same procedure.



### 5. SELECT SPIDER BEARING

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

| Yoke          | Bearing             |
|---------------|---------------------|
| w/ drill mark | w/ color mark (Red) |
| No drill mark | No color mark       |



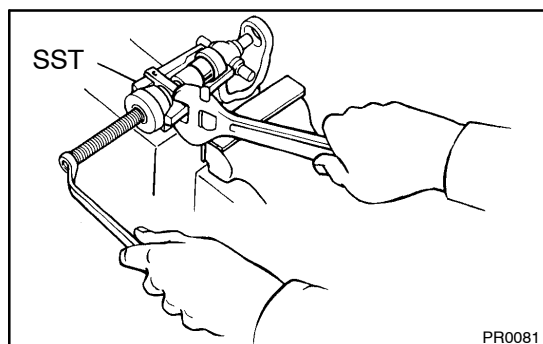
### 6. INSTALL SPIDER BEARING

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

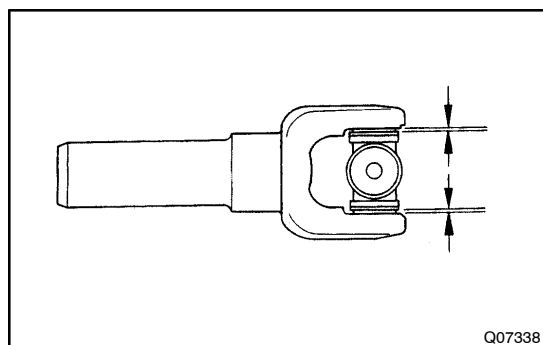
#### NOTICE:

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

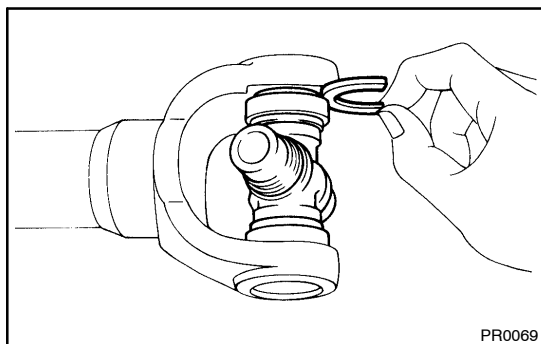
- (b) Align the matchmark on the yoke with the one on the flange.



- (c) Fit the spider into the yoke.
- (d) Using SST, install the bearings on the spider.  
SST 09332-25010



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



## 7. INSTALL SNAP RINGS

- (a) Install 2 new snap rings of equal thickness which will allow no axial play.

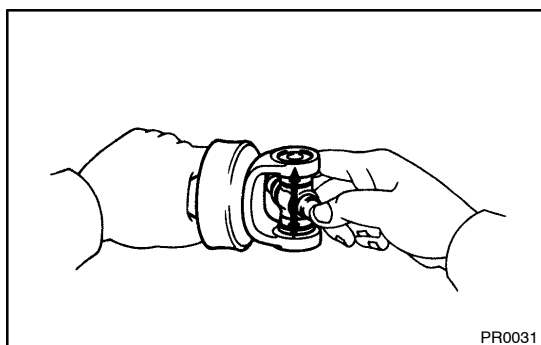
HINT:

Do not reuse the snap rings.

### Thickness of snap ring:

| Color | Mark | Thickness mm (in.)               |
|-------|------|----------------------------------|
| –     | 1    | 2.28 – 2.30<br>(0.0898 – 0.0906) |
| –     | 2    | 2.30 – 2.32<br>(0.0906 – 0.0913) |
| –     | –    | 2.32 – 2.34<br>(0.0913 – 0.0921) |
| Brown | –    | 2.34 – 2.36<br>(0.0921 – 0.0929) |
| Blue  | –    | 2.36 – 2.38<br>(0.0929 – 0.0937) |
| –     | 6    | 2.38 – 2.40<br>(0.0937 – 0.0945) |
| –     | 7    | 2.40 – 2.42<br>(0.0945 – 0.0953) |
| –     | 8    | 2.42 – 2.44<br>(0.0953 – 0.0961) |
| –     | 九    | 2.44 – 2.46<br>(0.0961 – 0.0969) |
| –     | 10   | 2.46 – 2.48<br>(0.0969 – 0.0976) |

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



## 8. CHECK SPIDER BEARING

(See page [PR-5](#))

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

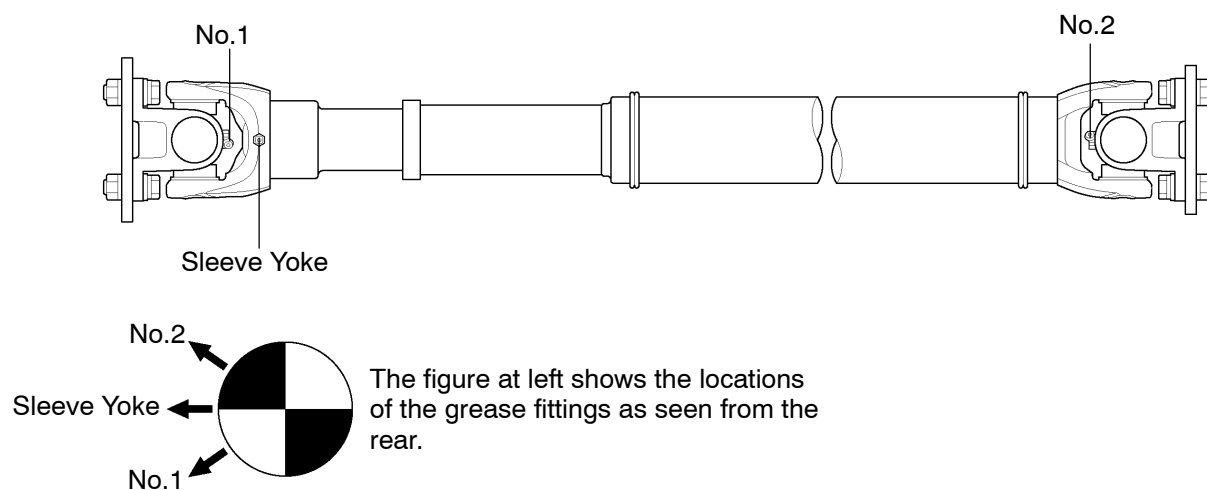
**Maximum bearing axial play: 0 mm (0 in.)**

HINT:

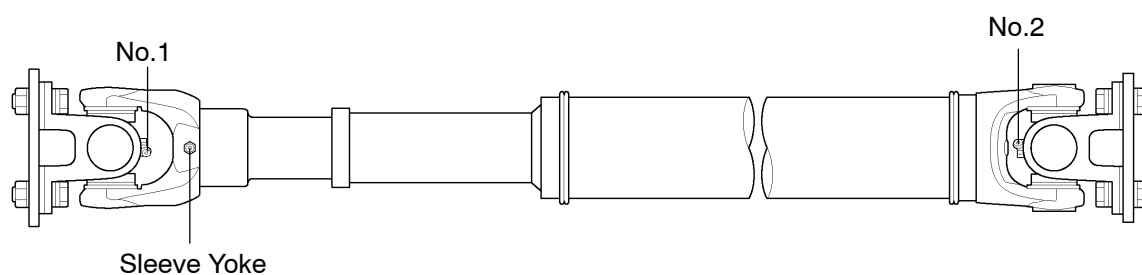
- Install a new spider bearing on the flange side in the procedure described above.

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

#### SPIDER GREASE FITTING ASSEMBLY DIRECTION Front Propeller Shaft



#### SPIDER GREASE FITTING ASSEMBLY DIRECTION Rear Propeller Shaft



D01633