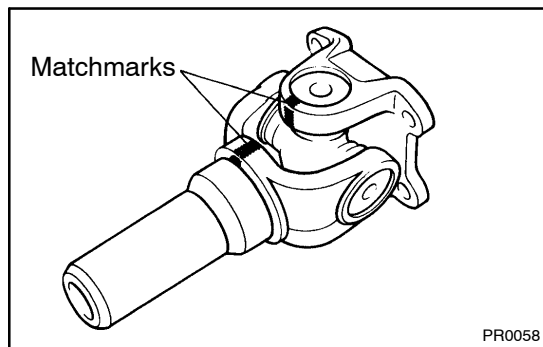




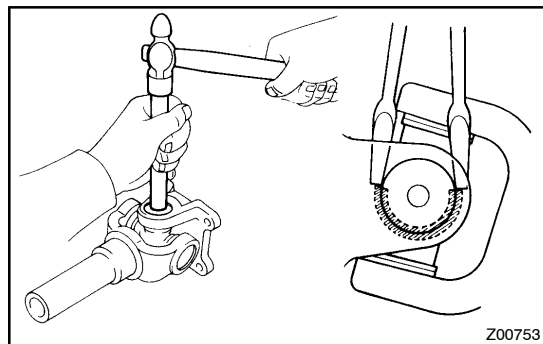
SPIDER BEARING REPLACEMENT

PR03N-01

NOTICE:

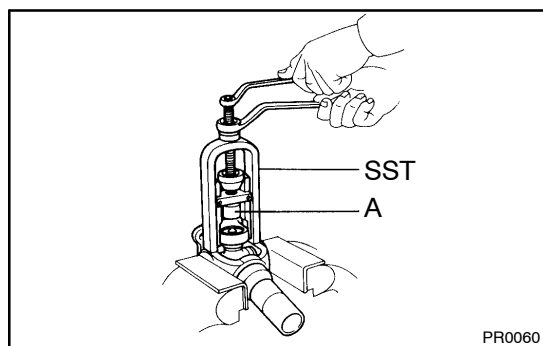
Be careful not to grip the propeller shaft tube too tightly in a vise as this will cause deformation.

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.

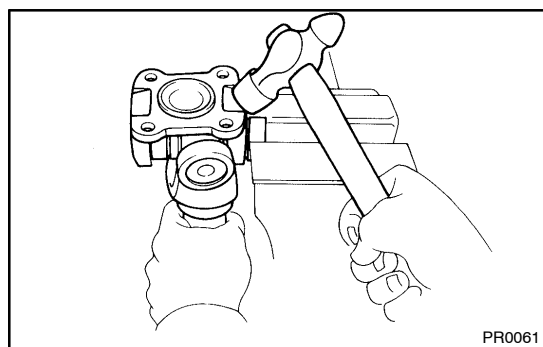


4. REMOVE SPIDER BEARINGS

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

HINT:

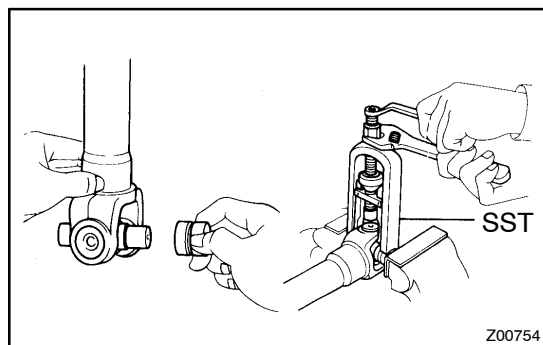
Sufficiently raise the part indicated by "A" so that it does not come into contact with the bearing.



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

HINT:

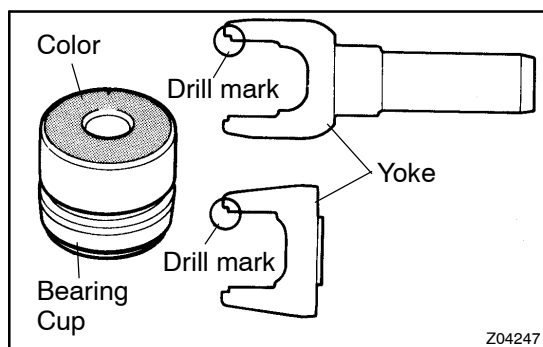
Remove the bearing on the opposite side in the same procedure.



- (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:

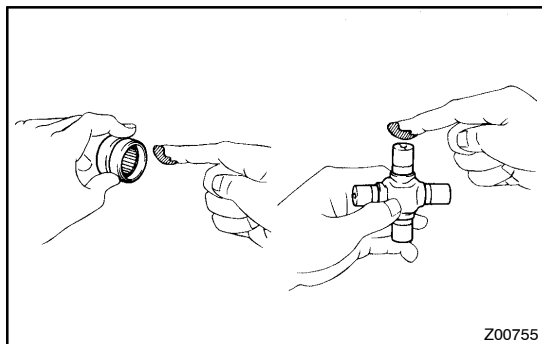
Remove the bearing on the opposite side in the same procedure.



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



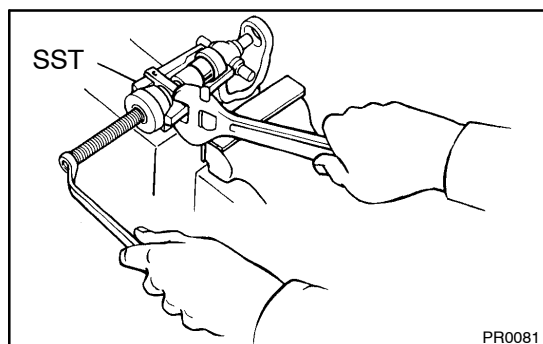
6. INSTALL SPIDER BEARING

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

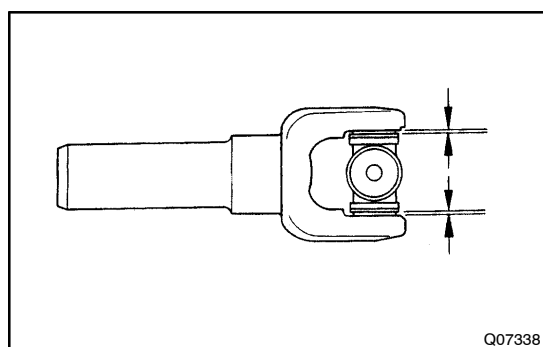
NOTICE:

Be careful not to apply too much grease.

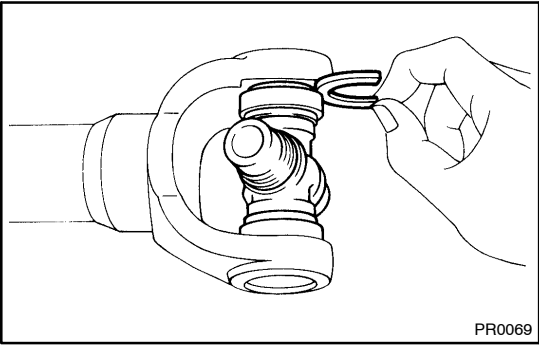
- (b) Align the matchmark on the yoke with the one on the flange.



- (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:

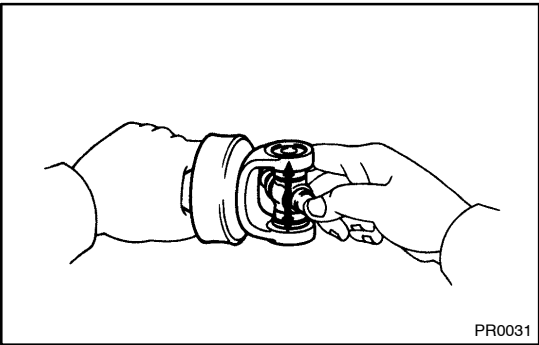
Do not reuse the snap rings.

Thickness of snap ring:

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

M00056

- (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.

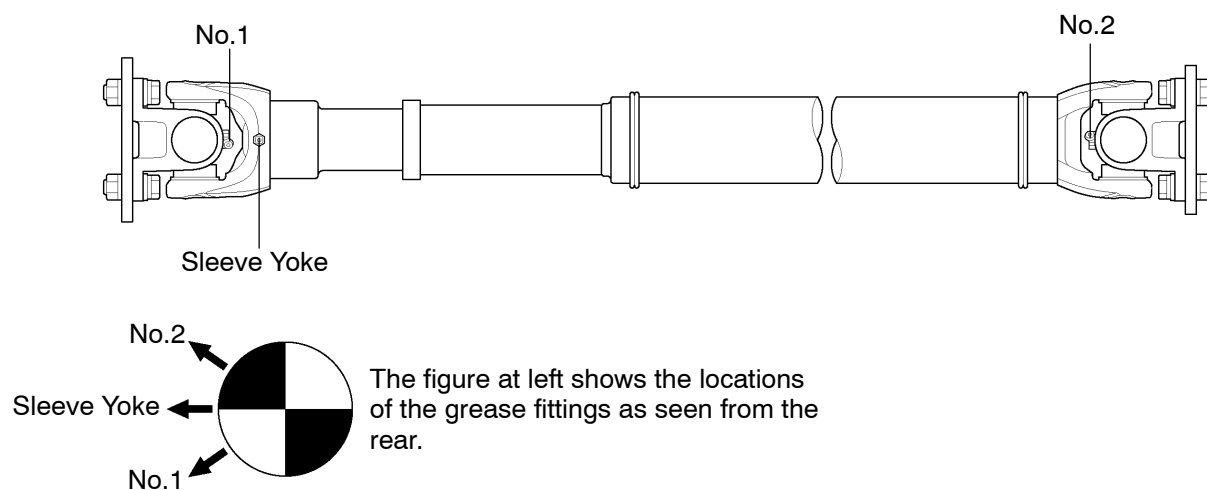
Maximum bearing axial play: 0 mm (0 in.)

HINT:

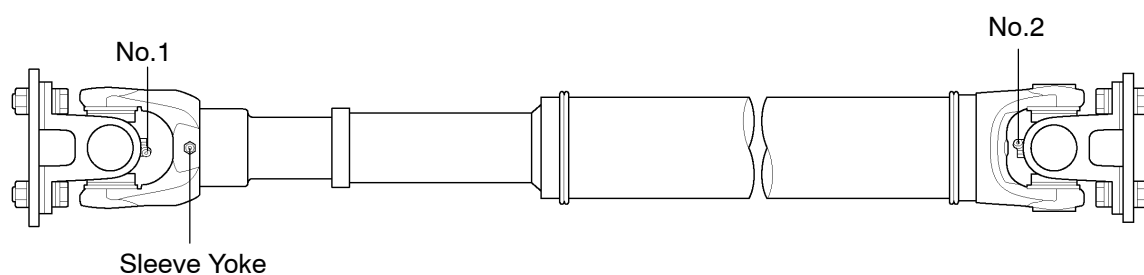
- Install a new spider bearing on the flange side in the procedure described above.

- 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