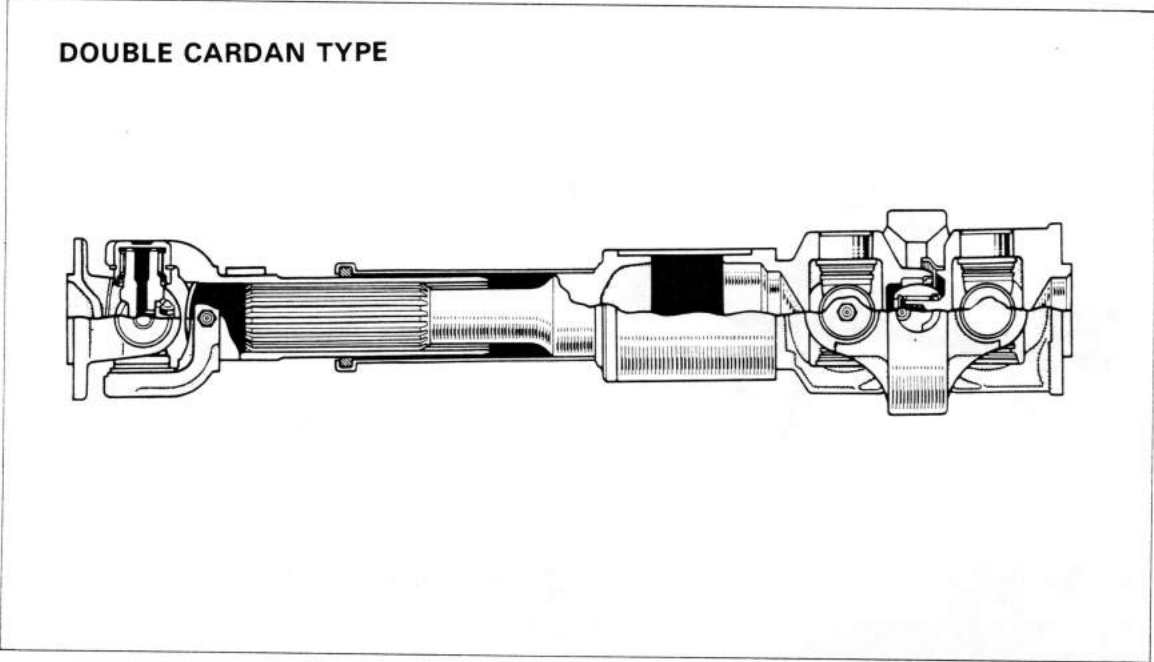


# PROPELLER SHAFT

PROPELLER SHAFT ..... Page **5-2**

# PROPELLER SHAFT COMPONENTS

Fig. 5-1



## REMOVAL

Remove the parts in the numerical order shown in the figure.

Fig. 5-2

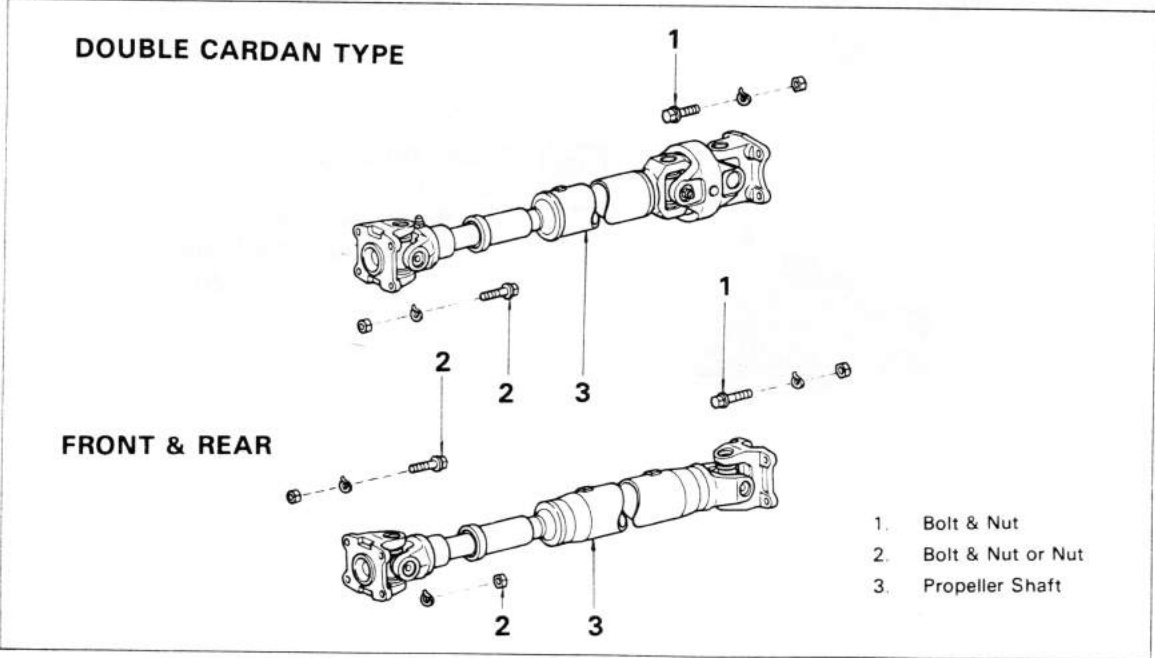


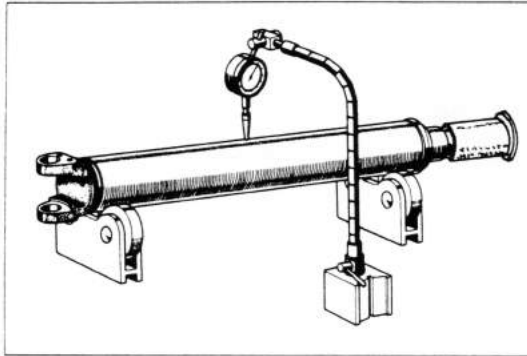
Fig. 5-3



**INSPECTION**  
**Propeller Shaft**

1. Place matchmarks on the sleeve yoke and propeller shaft, and remove the sleeve yoke.

Fig. 5-4

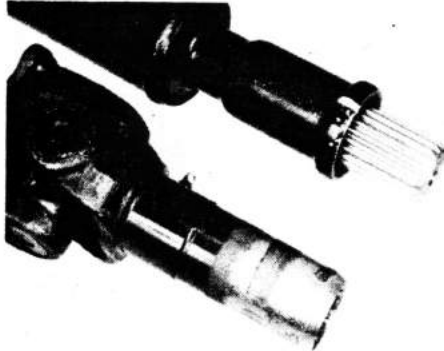


2. Inspect the propeller shaft for runout.

**Runout:**

**Limit 0.8 mm**  
**(0.031 in.)**

Fig. 5-5



**Propeller Shaft & Sliding Yoke**  
Inspect for wear or damage.

Fig. 5-6



**Spider Bearing**  
Inspect for wear or damage.

**Spider axial play:**  
**Less than 0.05 mm**  
**(0.0020 in.)**

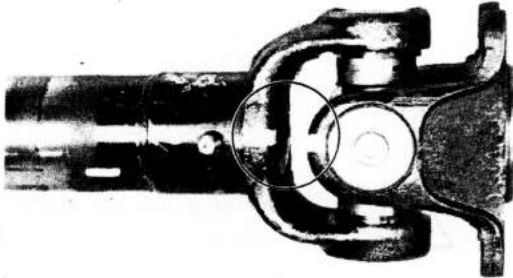
Fig. 5-7

**Double Cardan Type Propeller Shaft**

– Note –

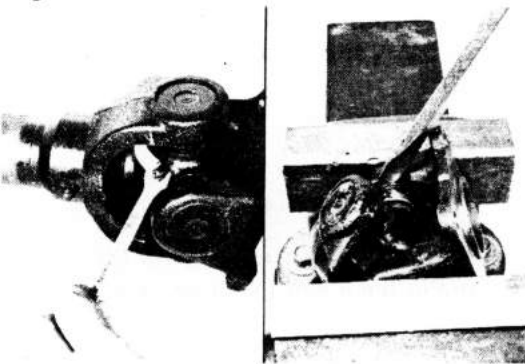
If any problem is found, replace the front propeller shaft assembly.  
Do not disassemble.

Fig. 5-8

**Replace The Spider Bearing**

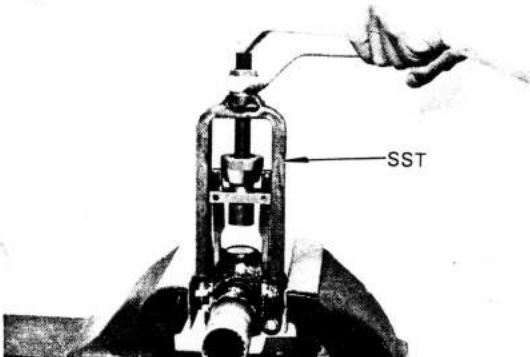
1. Place matchmarks on the flange yoke, spider and sleeve yoke (or propeller shaft).

Fig. 5-9



2. Remove the grease fitting and the snap rings.

Fig. 5-10



3. Screw out the bearing outer race about 5 mm (0.20 in.) with SST.  
SST [09332-25010]

Fig. 5-11

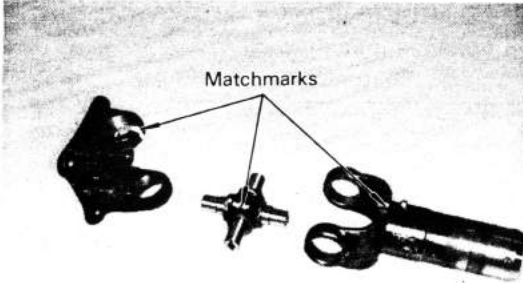


4. Clamp the bearing outer race in a vise and remove it by tapping the sleeve yoke.

— Note —

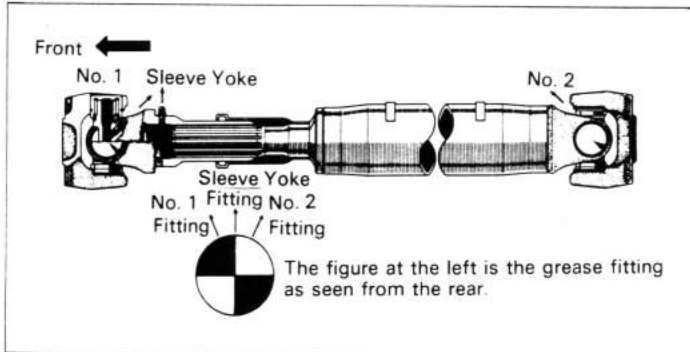
Remove the other bearing outer race of the sleeve yoke and the two bearing outer races of flange yoke by the same procedure.

Fig. 5-12



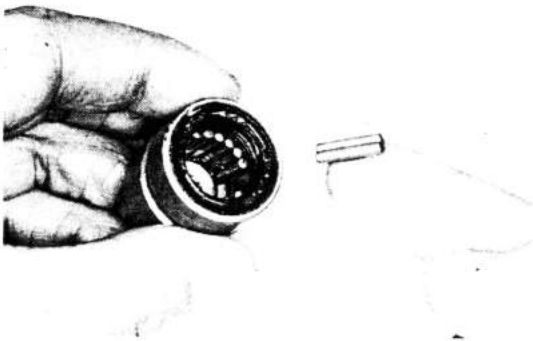
5. Aline matchmarks on flange yoke spider and sleeve yoke.

Fig. 5-13



6. When replacing the spider, be sure that the grease fitting assembly holes are facing in the direction shown in the figure.

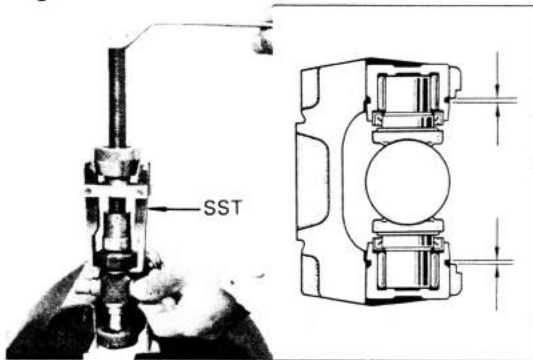
Fig. 5-14



7. Coat the bearing rollers with MP grease and fit them into the outer races.

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Fig. 5-15



8. Screw in the bearing outer races on both sides with SST until the snap ring grooves are at maximum and equal width.  
SST [09332-25010]

Fig. 5-16



9. Select and install a snap ring which will provide minimum play.  
Snap ring thickness



Part No.	Thickness mm (in.)
09520-29286	1.475 - 1.525 (0.0581 - 0.0600)
09520-29287	1.525 - 1.575 (0.0600 - 0.0620)
09520-29288	1.575 - 1.625 (0.0620 - 0.0640)

Fig. 5-17



— Note —



**Do not reuse snap rings.**  
**Use the snap rings of the same thickness on both sides.**

10. Lightly tap the yoke to firmly set the bearing outer race.

Fig. 5-18



11. Check to see that the spider moves smoothly.

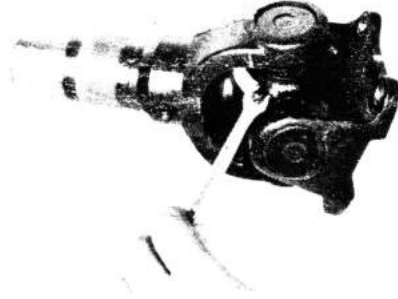
Check for axial play.

**Spider axial play:**

**Less than 0.05 mm**

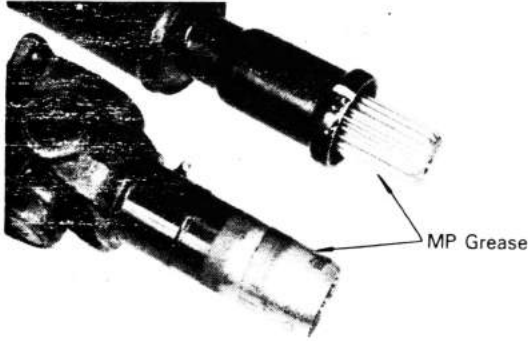
**(0.0020 in.)**

Fig. 5-19



12. Install the grease fitting.

Fig. 5-20



13. Apply MP grease to the splines of the propeller shaft and sleeve yoke.

Fig. 5-21



14. Align the matchmarks and install the sleeve yoke to the propeller shaft.



**INSTALLATION**

Install the parts in the numerical order shown in the figure.

Fig. 5-22

