
PROPELLER SHAFT

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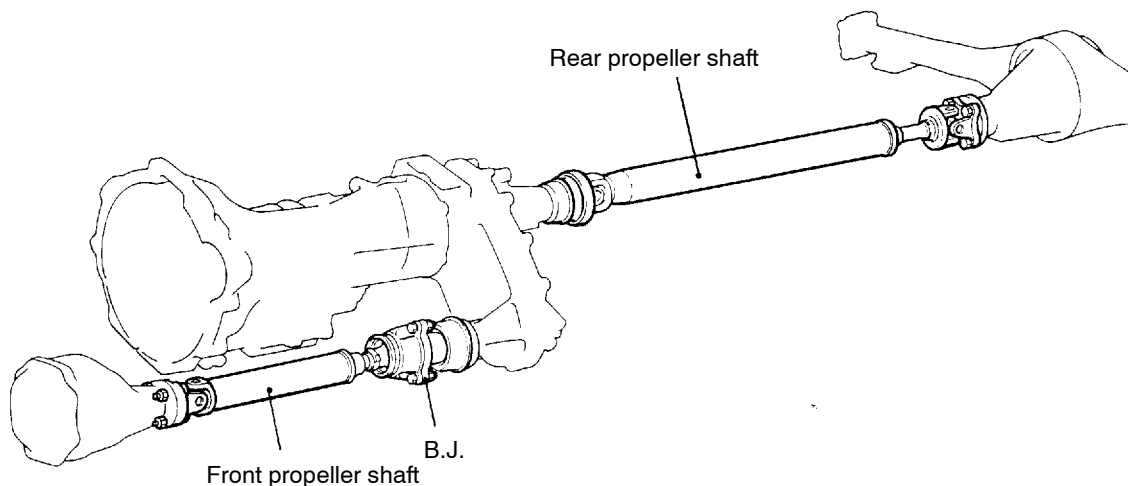
GENERAL INFORMATION

25100010084

A two-joint propeller shaft was used for both the front and rear. The front propeller shaft has a

B.J.-type joint on the transfer side.

CONSTRUCTION DIAGRAM



AV0596AA

SERVICE SPECIFICATIONS

25100030080

Items	Standard value	Limit
Front propeller shaft runout mm	–	0.6
Rear propeller shaft runout mm	–	0.6
Clearance between snap ring and groove wall of yoke mm	0.03 or less	–

LUBRICANT

25100040106

Item	Specified lubricant	Quantity
Sleeve yoke	Hypoid gear oil SAE 75W-90 or 75W-85W conforming to API GL-4	As required

SPECIAL TOOLS

25100060096

Tool	Number	Name	Use
	MB990840	Universal joint remover and installer	Disassembly and reassembly of the universal joint
	MB991410	Collar	

PROPELLER SHAFT

25100100163

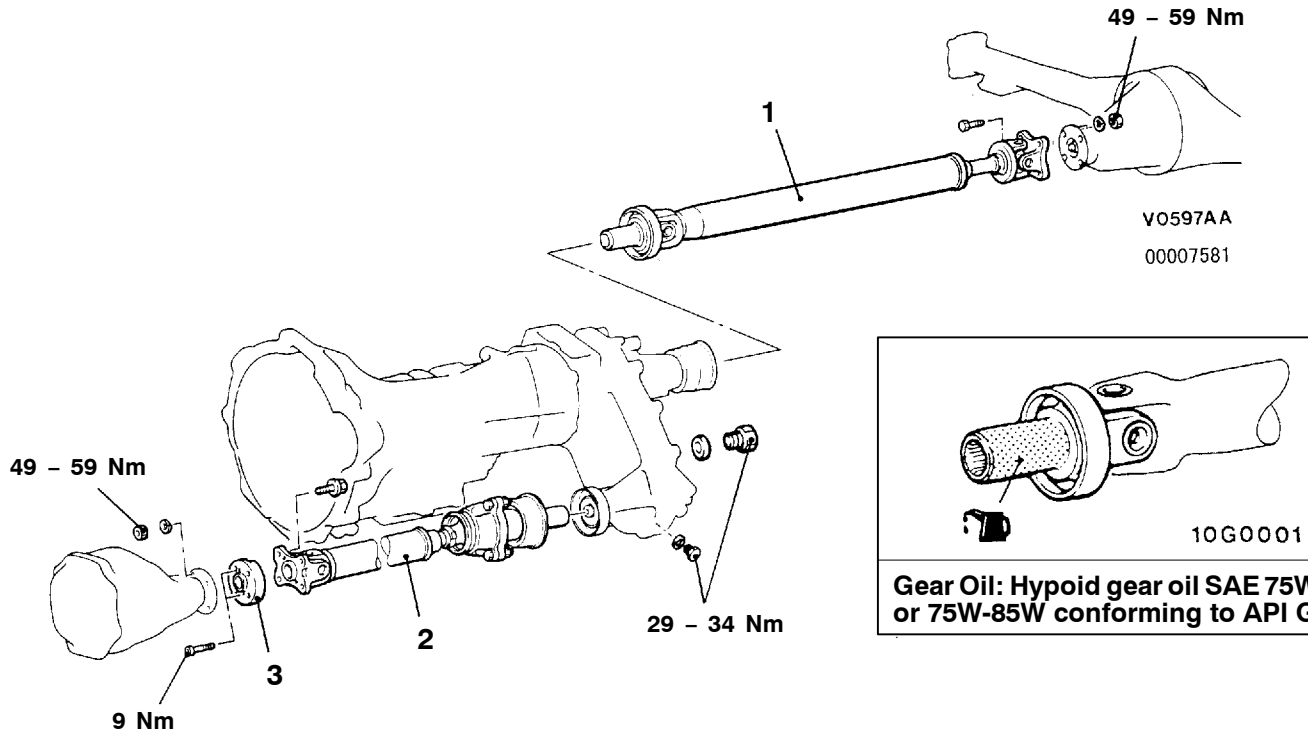
REMOVAL AND INSTALLATION

Pre-removal Operation

- Set the Transfer Shift Lever to “2H”
- Front Under Cover, Middle Under Cover and Transfer Protector Removal
- Transfer Gear Oil Draining
(Refer to GROUP 22 – On-vehicle Service.)

Post-installation Operation

- Transfer Gear Oil Supplying
(Refer to GROUP 22 – On-vehicle Service.)
- Front Under Cover, Middle Under Cover and Transfer Protector Installation

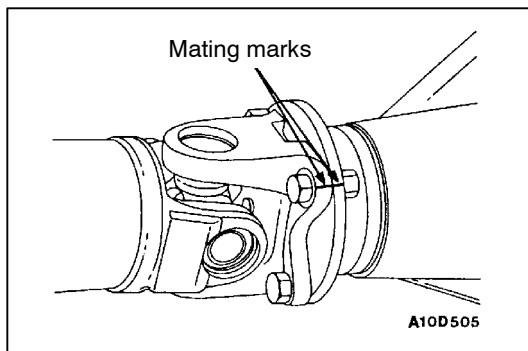


Removal steps



1. Rear propeller shaft assembly
2. Front propeller shaft assembly

3. Spacer <6G7>



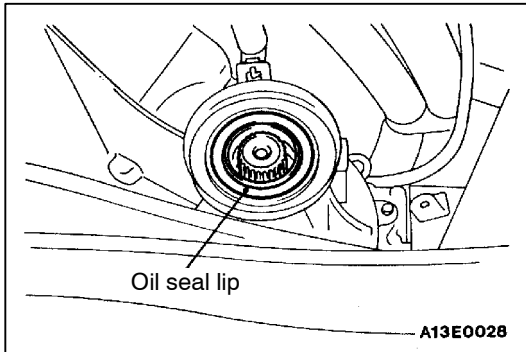
REMOVAL SERVICE POINT

REAR PROPELLER SHAFT ASSEMBLY/FRONT PROPELLER SHAFT ASSEMBLY REMOVAL

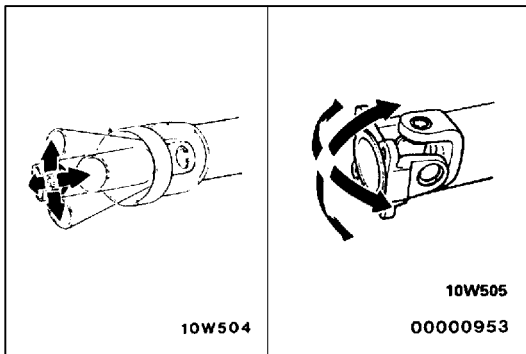
1. Make mating marks on the differential companion flange and flange yoke and remove the propeller shaft.
2. Use the plug as a cover so that no foreign material gets into the transmission or transfer.

INSTALLATION SERVICE POINT**►A◄ FRONT PROPELLER SHAFT ASSEMBLY/REAR PROPELLER SHAFT ASSEMBLY INSTALLATION**

Align the mating marks that were made during removal, and then install the propeller shaft assembly to the companion flange.

**Caution**

1. Tighten installation bolts after removing oil and grease from threads to prevent them from loosening due to lubrication.
2. Be careful not to damage the lip section of the transfer case oil seal when installing the propeller shaft.

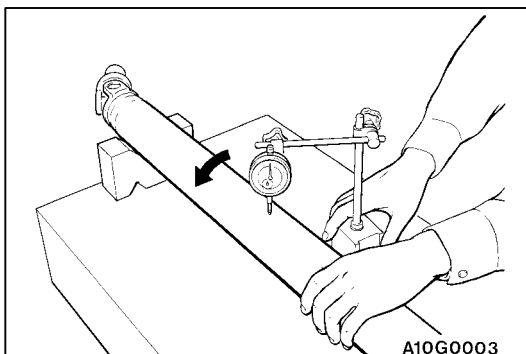
**INSPECTION**

25100110043

- Check the sleeve yoke, center yoke and flange yoke for wear, damage or cracks.
- Check the propeller shaft yokes for wear, damage or cracks.
- Check the propeller shaft for bends twisting or damage.
- Check the universal joints for smooth operation in all directions.
- Check the center bearing for smooth movement.
- Check the center bearing mounting rubber for damage or deterioration.

PROPELLER SHAFT RUNOUT

Limit: 0.6 mm

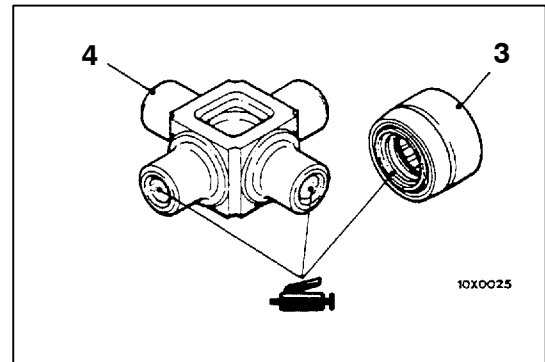
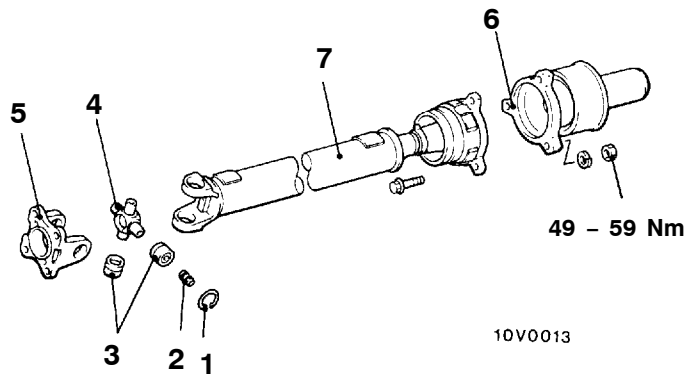


DISASSEMBLY AND REASSEMBLY

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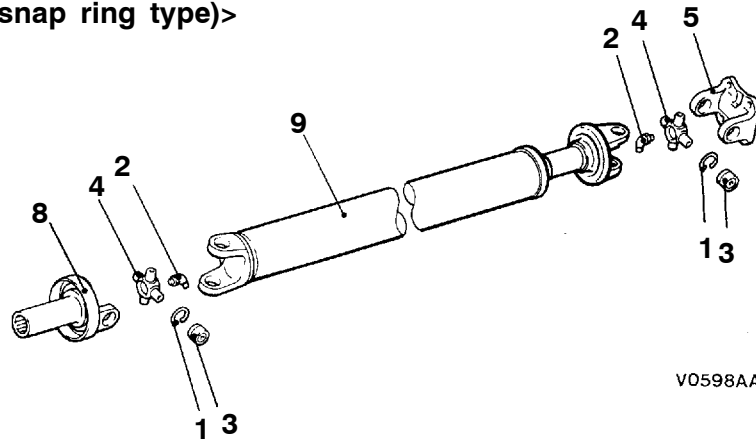
Front propeller shaft

<Type 1 (External snap ring type)>



Rear propeller shaft

<Type 2 (Internal snap ring type)>



Disassembly steps

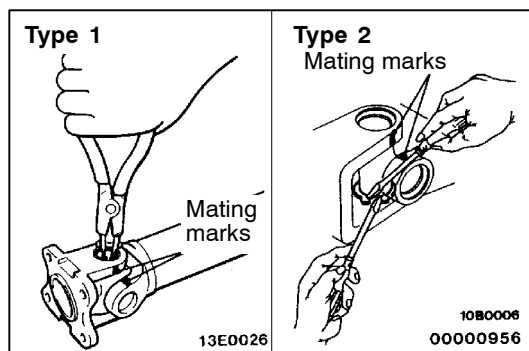
◀A▶ ▶B▶

1. Snap ring
2. Grease fitting
3. Journal bearing
4. Journal
5. Flange yoke

◀B▶ ▶A▶

◀C▶

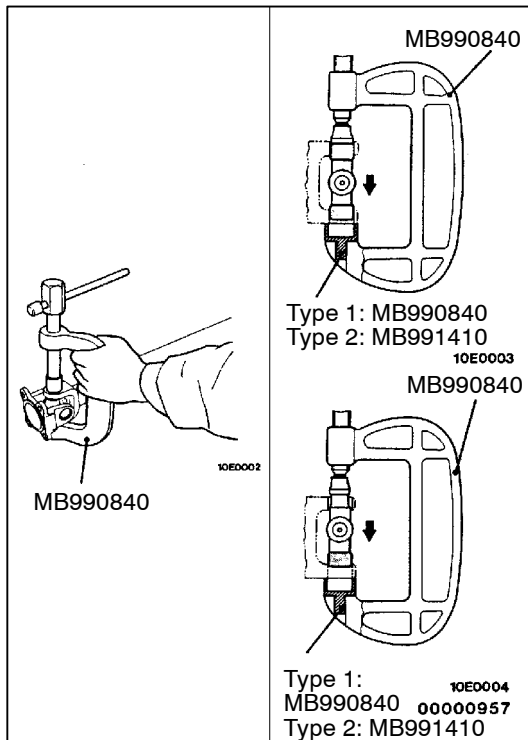
6. Sleeve flange
7. Front propeller shaft assembly
8. Sleeve yoke
9. Rear propeller shaft



DISASSEMBLY SERVICE POINTS

◀A▶ SNAP RING REMOVAL

Place a mating mark on the yokes of the universal joint that is to be disassembled.

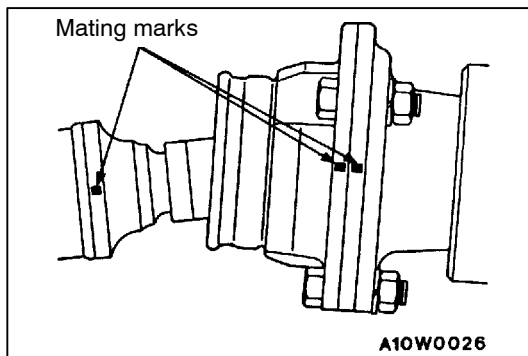


◀B▶ JOURNAL BEARING REMOVAL

1. Use special tool to press in the journal bearing on one side, and take out the journal bearing on the opposite side.
2. Insert special tool into the other side and press the journal to remove the first journal bearing that was pushed.

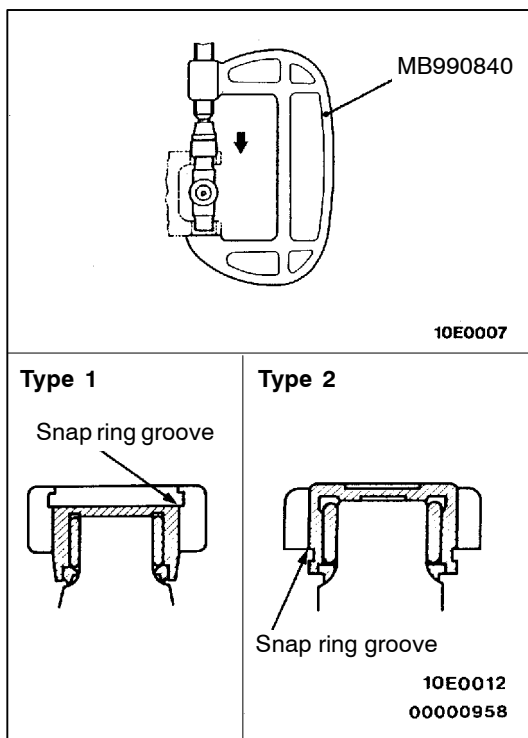
Caution

Do not tap the journal bearings to remove them, as this will upset the balance of the propeller shaft.



◀C▶ SLEEVE FLANGE REMOVAL

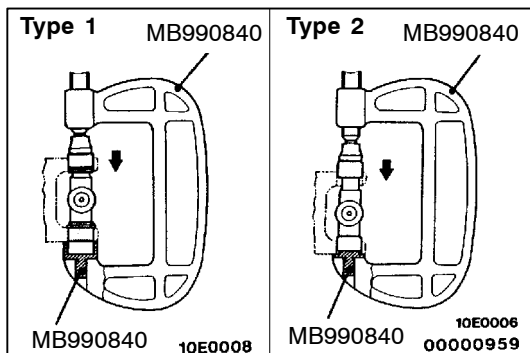
Place a mating mark on the sleeve flange and front propeller shaft assembly, and then remove the sleeve flange.



REASSEMBLY SERVICE POINTS

▶A◀ JOURNAL BEARING INSTALLATION

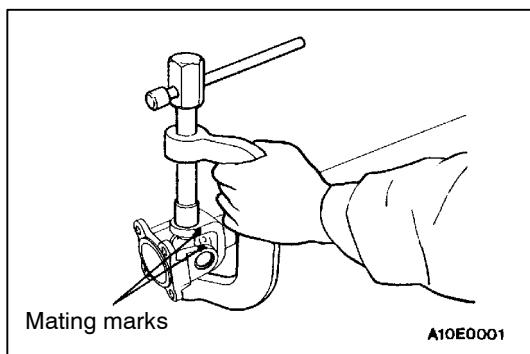
1. Use the special tool to press the journal bearing into the yoke until the snap ring groove is fully visible.



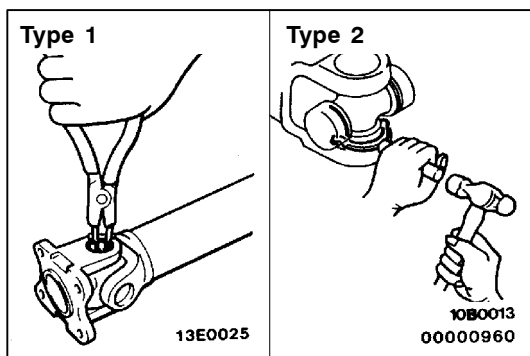
2. Use the special tool to press the opposite side journal bearing into the yoke.

Caution

Be careful when pressing the journal bearings, as if they are pressed at an angle, the inside of the journal bearings will be damaged by the journal.

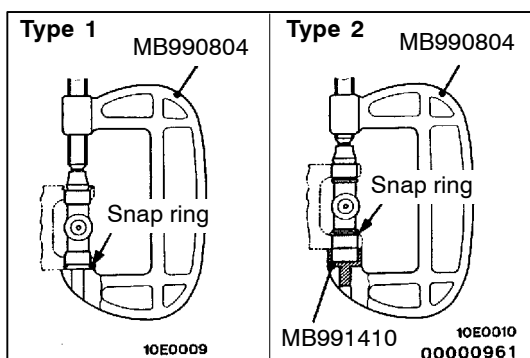


3. Align the mating marks on the yoke and propeller shaft, and install the propeller shaft journal bearings in the method described in (1) and (2) above.

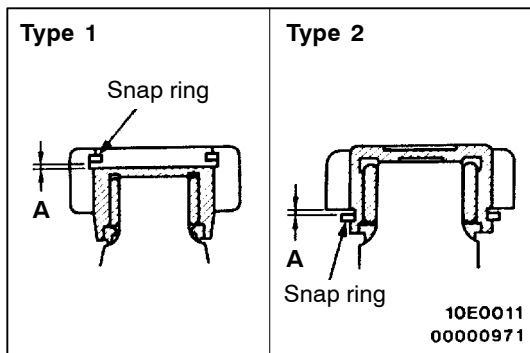


►B◄ SNAP RING INSTALLATION

1. Install a snap ring to one side of the journal.



2. Use the special tool at the opposite side of the installed snap ring to press in the journal bearing towards the snap ring.



3. Install the snap ring on the opposite side, and measure the clearance of the snap ring groove with a thickness gauge.

Standard value (A): 0.03 mm or less

Caution

Always use snap rings of equal thicknesses on both sides.

4. If the clearance exceeds the standard value, adjust by changing the thickness of the snap ring.

Thickness mm Type 1	Thickness mm Type 2	Identification colour
1.28	1.50	–
1.31	1.55	Yellow
1.34	1.60	Blue
1.37	1.65	Purple