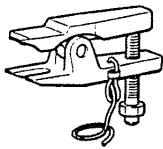
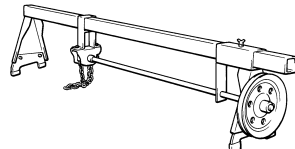

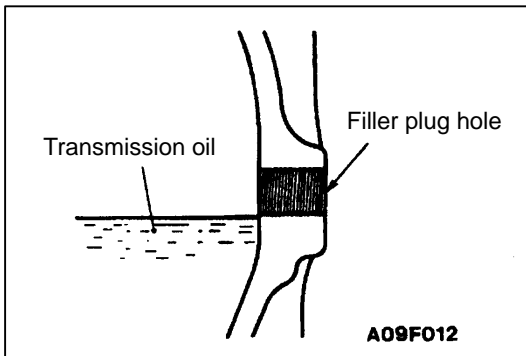


## LUBRICANT

Items	Specified lubricant	Quantity (litres)
Transmission oil	Hypoid gear oil SAE 75W-85W conforming to API classification GL-4	2.8

## SPECIAL TOOLS

Tool	Tool number and name	Supersession	Application
	MB991113 or MB990635 Steering linkage puller	13–006	<ul style="list-style-type: none"> <li>• Tie rod end ball joint and knuckle removal</li> <li>• Lateral lower arm ball joint and knuckle removal</li> <li>• Compression lower arm ball joint and knuckle removal</li> </ul>
	MZ203827 Engine lifter	E309A	Supporting the engine assembly during removal and installation of the transmission
	MB991460 Plug	–	Preventing foreign substances from entering transmission case

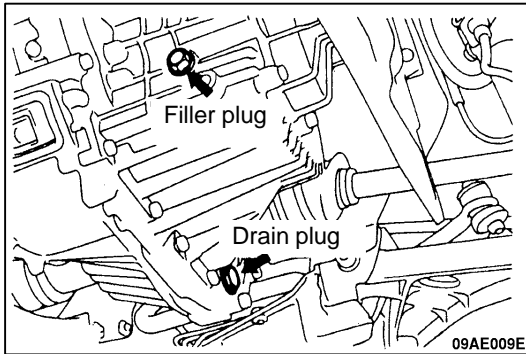


## ON-VEHICLE SERVICE

### TRANSMISSION OIL LEVEL CHECK

1. Remove the oil filler plug.
2. The oil level should be at the lower portion of the filler plug hole.
3. Check that the transmission oil is not noticeably dirty and that it has a suitable viscosity.
4. Tighten the filler plug to the specified torque.

**Specified torque: 32 Nm**



### TRANSMISSION OIL REPLACEMENT

1. Remove transmission drain plug.
2. Drain oil.
3. Tighten drain plug to specified torque.
4. Remove filler plug and fill with specified oil until the level reaches the lower portion of filler plug hole.

**Specified oil:**

**Hypoid gear oil SAE 75W–85W conforming to API classification GL-3**

**Quantity: 2.8 (litres)**

5. Tighten filler plug to specified torque.

**Specified torque: 32 Nm**

## TRANSMISSION CONTROL

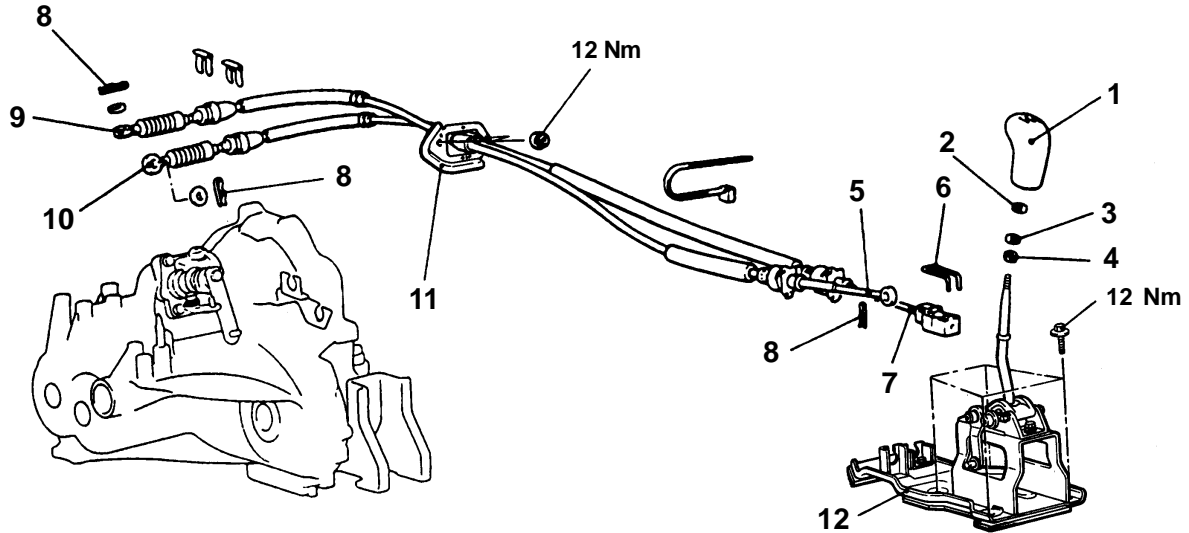
## REMOVAL AND INSTALLATION

**Pre-removal and Post-installation Operation**

- Air Cleaner – Removal and Installation (Refer [Group 15 On Vehicle Service.](#))

**Caution: SRS**

Be careful not to subject the SRS-ECU to any shocks during removal and installation of the transmission control cable and shift lever assembly.



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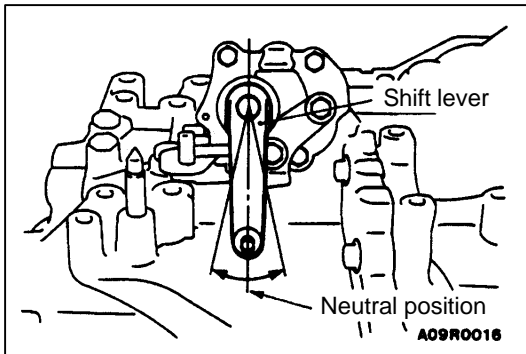
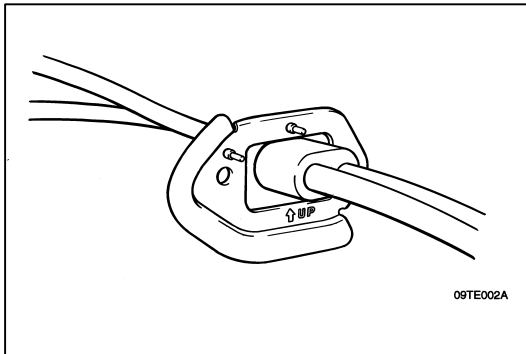
**Transmission control cable assembly removal steps**

- ▶B◀ 1. Shift knob
- ▶B◀ 2. Spacer
- ▶B◀ 3. Spring washer
- ▶B◀ 4. Nut
  - Front floor console (Refer [Group 52A.](#))
- ▶A◀ 5. Select cable connection (Shift lever side)
- ▶A◀ 6. Clip
- ▶A◀ 7. Shift cable connection (Shift lever side)
- ▶A◀ 8. R-clip
- ▶A◀ 9. Select cable connection (Transmission side)
- ▶A◀ 10. Shift cable connection (Transmission side)

- ▶A◀ 11. Shift cable and select cable assembly

**Shift lever assembly removal steps**

- ▶B◀ 1. Shift knob
- ▶B◀ 2. Spacer
- ▶B◀ 3. Spring washer
- ▶B◀ 4. Nut
  - Front floor console (Refer [Group 52A.](#))
- ▶A◀ 5. Select cable connection (Shift lever side)
- ▶A◀ 6. Clip
- ▶A◀ 7. Shift cable connection (Shift lever side)
- ▶A◀ 12. Shift lever assembly



## INSTALLATION SERVICE POINT

### ►A◄ SHIFT CABLE AND SELECT CABLE ASSEMBLY/SHIFT CABLE CONNECTION/SELECT CABLE CONNECTION

1. Ensure the shift cable and select lever assembly is mounted in the vehicle with the “UP” symbol and arrow on the mounting plate pointing upward as shown in the illustration.
2. Set the transmission side shift lever and the passenger compartment side shift lever to the neutral position.
3. For the transmission side, the white and the yellow paint marks on the shift and select cable ends should face the snap rings.
4. Move the shift lever to all positions and check that the operation is smooth.

### ►B◄ SPACER, SPRING WASHER, NUT AND SHIFT KNOB

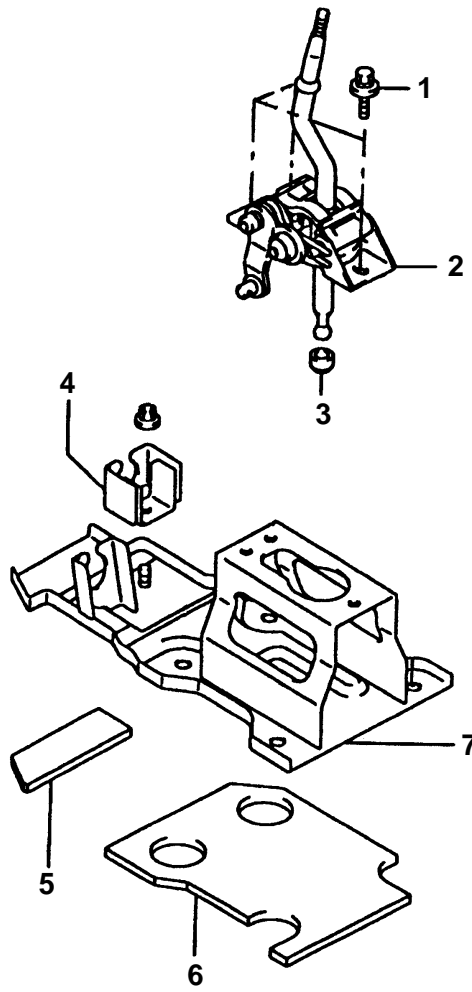
1. Tighten the shift knob to specified torque.

#### Specified torque:

Loosening torque: 2.5 Nm Min.

Tightening torque: 6.0 Nm

## SHIFT LEVER ASSEMBLY DISASSEMBLY AND REASSEMBLY



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### Disassembly steps

- |   |                                      |
|---|--------------------------------------|
| 1. Gearshift lever assembly retaining bolts | 4. Gearshift cable bracket           |
| 2. Gearshift lever assembly                 | 5. Gearshift lever bracket insulator |
| 3. Gearshift linkage bushing                | 6. Gearshift lever bracket insulator |
|   | 7. Gearshift lever bracket           |

## TRANSMISSION ASSEMBLY

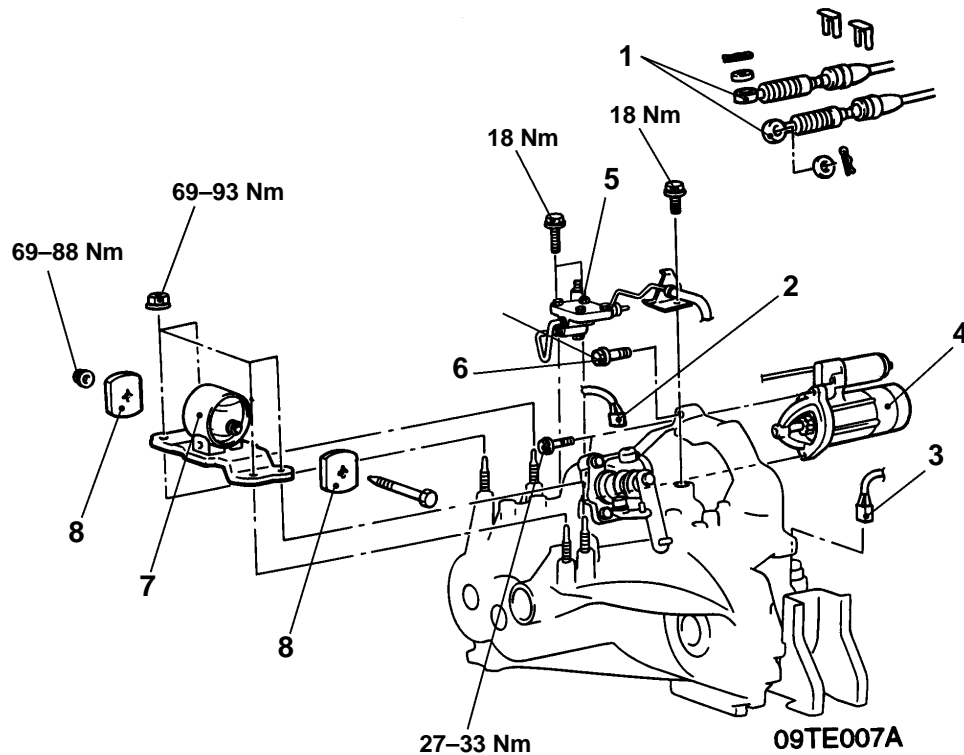
## REMOVAL AND INSTALLATION

**Pre-removal Operation**

- (1) Transmission Oil Draining (Refer [On Vehicle Service.](#))
- (2) Under Cover Removal
- (3) Battery and Battery Tray Removal
- (4) Air Cleaner Assembly Removal

**Post-installation Operation**

- (1) Air Cleaner Assembly Installation
- (2) Battery and Battery Tray Installation
- (3) Under Cover Installation
- (4) Supplying Transmission Oil (Refer [On Vehicle Service.](#))
- (5) Shift Lever Operation Check
- (6) Speedometer Operation Check

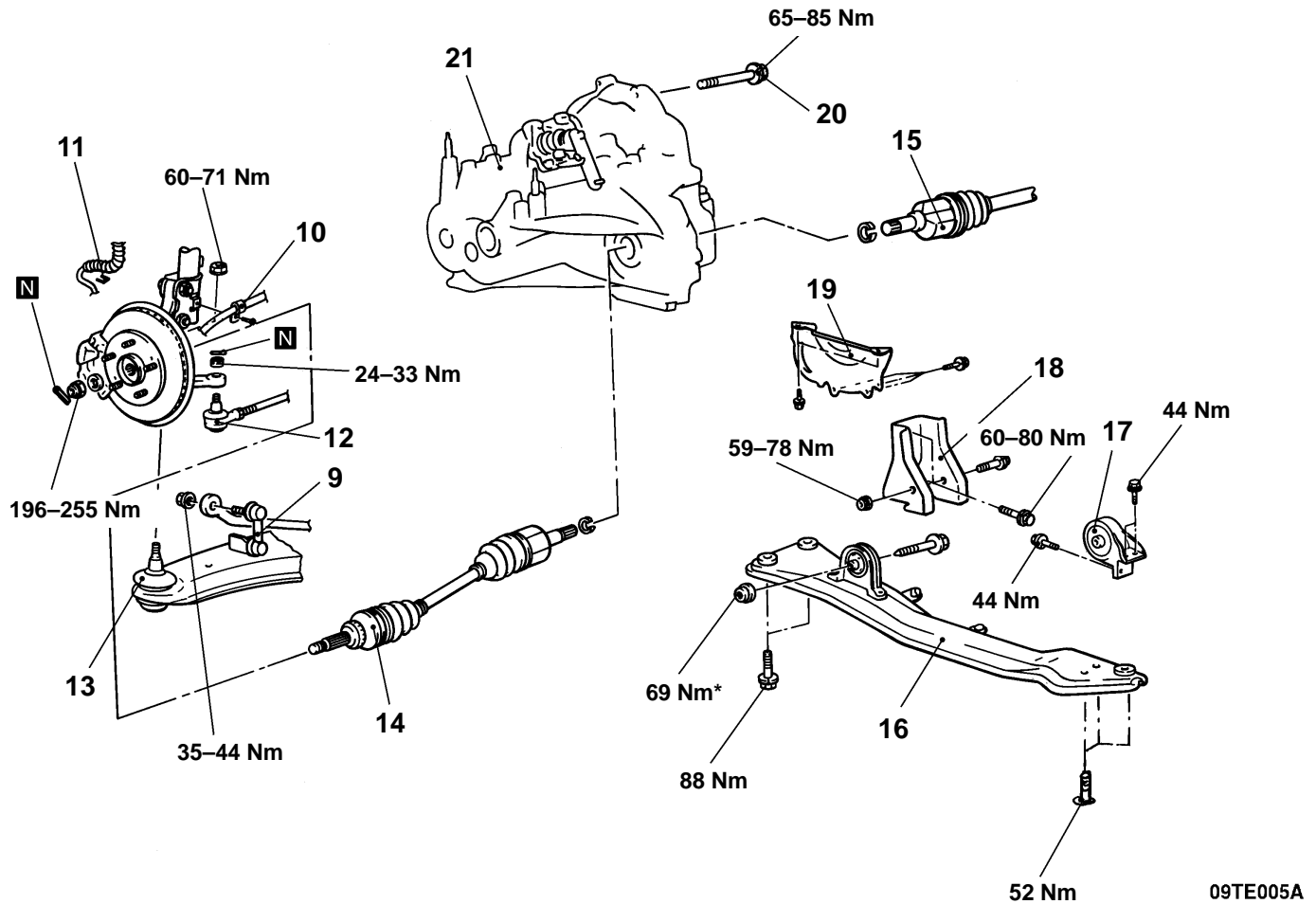
**Removal steps**

1. Shift cable and select cable connection (Refer [On Vehicle Service.](#))
2. Reverse lamp switch connector
3. Vehicle speed sensor connector
4. Starter motor
5. Clutch release cylinder connection



- Disengage clutch release bearing
- 6. Transmission assembly upper part coupling bolts
- 7. Transmission mount bracket
- 8. Transmission mount stopper
- Supporting engine assembly





- 9.. Stabiliser bar connection
10. Wheel speed sensor cable connection (Vehicles with ABS)
11. Brake hose clamp
12. Tie rod end connection
13. Lower arm ball joint connection
14. Drive shaft <LH> connection
15. Drive shaft <RH> connection
16. Centre member assembly
17. Rear roll stopper

18. Rear roll stopper bracket
19. Bell housing cover
20. Transmission assembly lower part coupling bolts
21. Transmission assembly

### Caution

\*: Indicates parts which should be temporarily tightened, and then fully tightened with the vehicle on the ground in the unladen condition.



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**REMOVAL SERVICE POINTS****◀A▶ STARTER MOTOR**

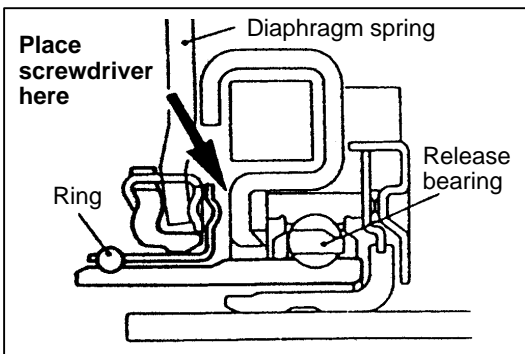
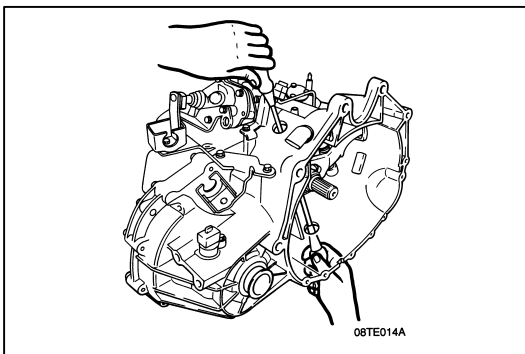
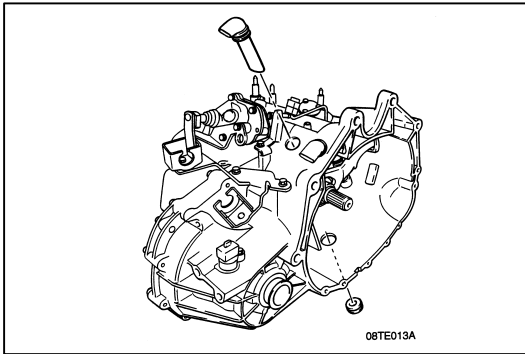
Remove the starter motor with the starter harness still connected and secure it to the inside of the engine compartment.

**◀B▶ CLUTCH RELEASE CYLINDER**

Remove the clutch release cylinder without disconnecting the oil line connection, and fix it to the vehicle chassis.

**◀C▶ RELEASE BEARING**

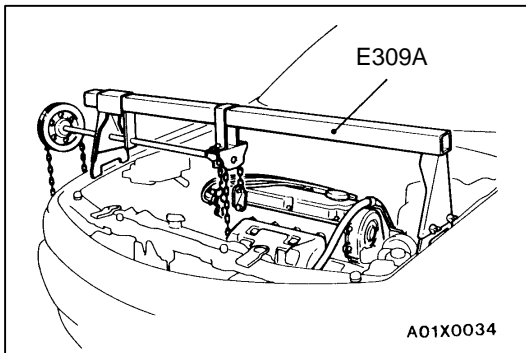
1. Remove the access hole covers from the top and bottom of the clutch housing.
2. Push the clutch cylinder end of the release fork so that the release bearing pushes against the diaphragm spring.
3. Insert a flat blade screwdriver in both top and bottom access holes in the clutch housing, between the release bearing and the diaphragm spring. Simultaneously turn both screwdrivers through 90° to disengage the release bearing.





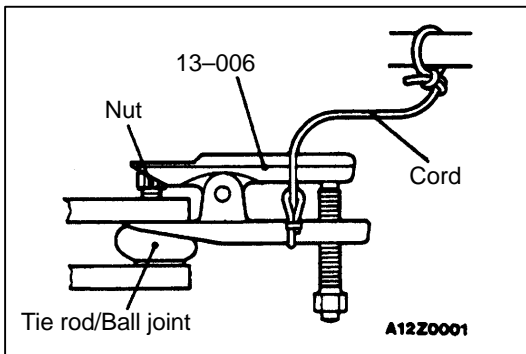
## ◀D▶ TRANSMISSION MOUNT BRACKET

Jack up the transmission assembly gently with a garage jack and then remove the transmission mount bracket.



## ◀E▶ ENGINE ASSEMBLY SUPPORTING

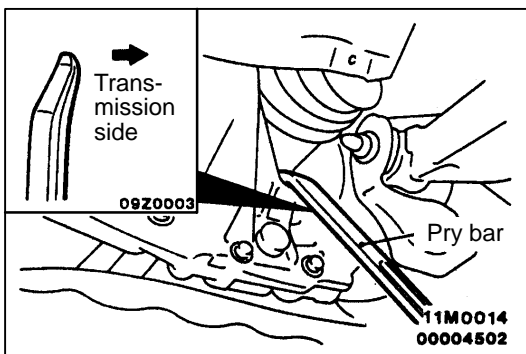
Set the special tool to the vehicle to support the engine assembly.



## ◀F▶ TIE ROD END/LOWER ARM BALL JOINT REMOVAL

### Caution

1. Loosen the nut without removing it from the ball joint and use the special tool 13-006 to disconnect the tie rod or ball joint.
2. Support the special tool with a cord in order to prevent it from falling off.

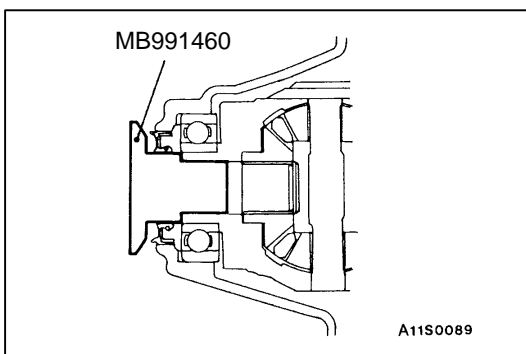


## ◀G▶ DRIVE SHAFT REMOVAL

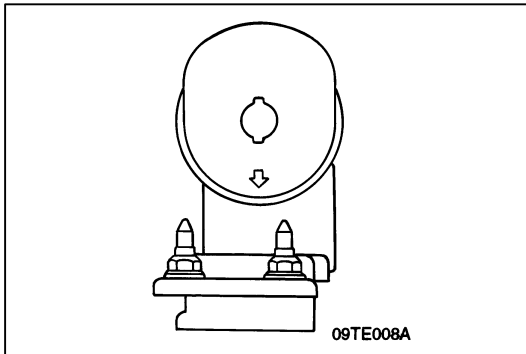
1. Insert a pry bar between the transmission case and the drive shaft to remove the drive shaft.

### CAUTION

Always use a pry bar or the drive shaft joints will be damaged.



2. To prevent foreign matter from entering the transmission case, insert a suitable plug into the drive shaft openings.
3. Suspend the RH drive shaft with wire so that there are no sharp bends in any of the joints.



### INSTALLATION SERVICE POINT

#### ►A◄ TRANSMISSION MOUNT STOPPER INSTALLATION

Install the transmission mount stopper so that the arrow points down as shown in the illustration.