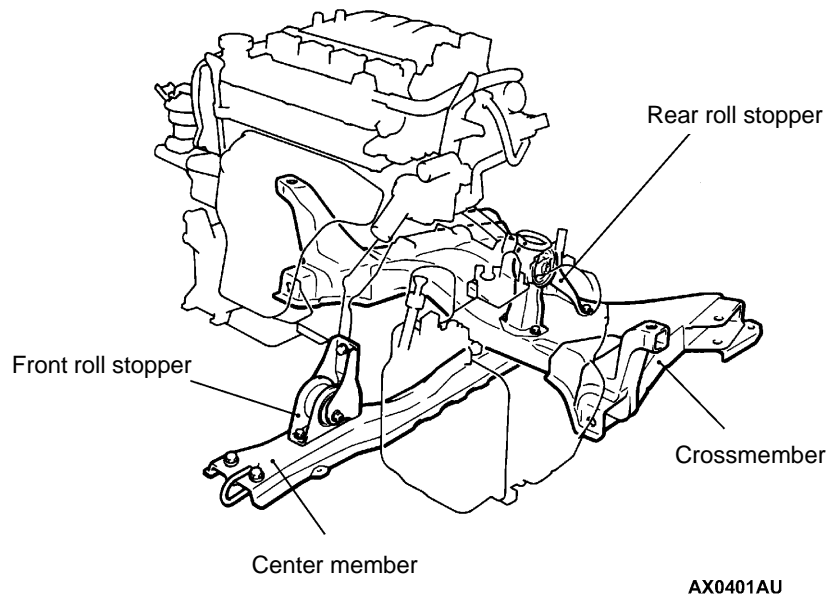
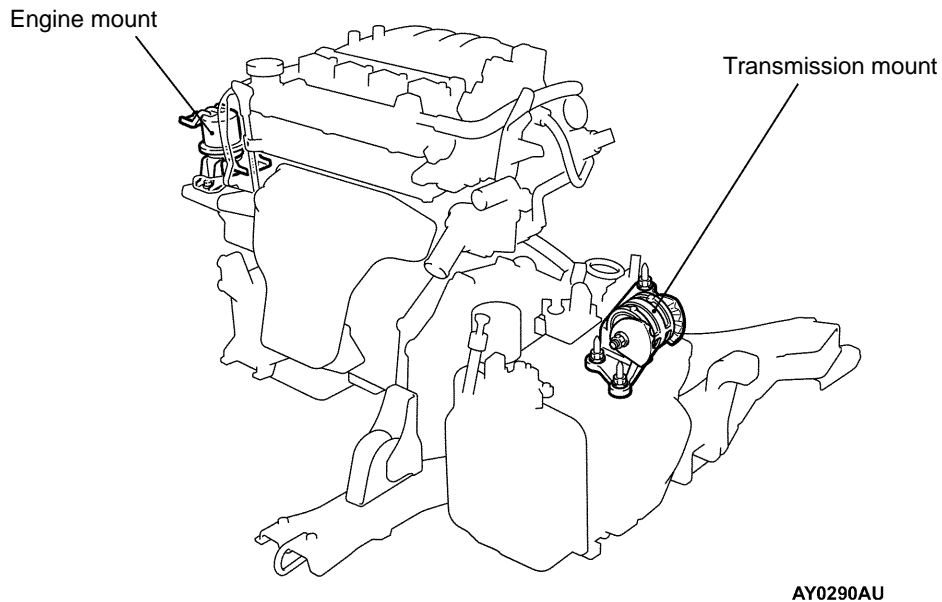


## GENERAL INFORMATION

Inertia principal axes system is incorporated into the engine mount system.

- Longitudinal installation type of cylindrical liquid-filled engine mount is used for reduction of idle vibration and improvement of ride feeling.
- For transmission mount, liquid-filled mount is used to improve ride feeling by optimizing insulator.
- Upper installation of roll mount reduces engine rolling, and increase of insulator bore also reduces idle vibration.

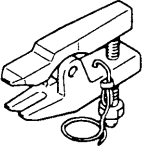
## CONSTRUCTION DIAGRAM



## SERVICE SPECIFICATION

Item	Standard value
Protruding length of stabilizer bar mounting bolt mm	20.5 – 23.5

## SPECIAL TOOL

Tool	Number	Name	Use
 B991113	MB990635, MB991113 or MB991406	Steering linkage puller	Tie rod end disconnection

## ENGINE MOUNTING

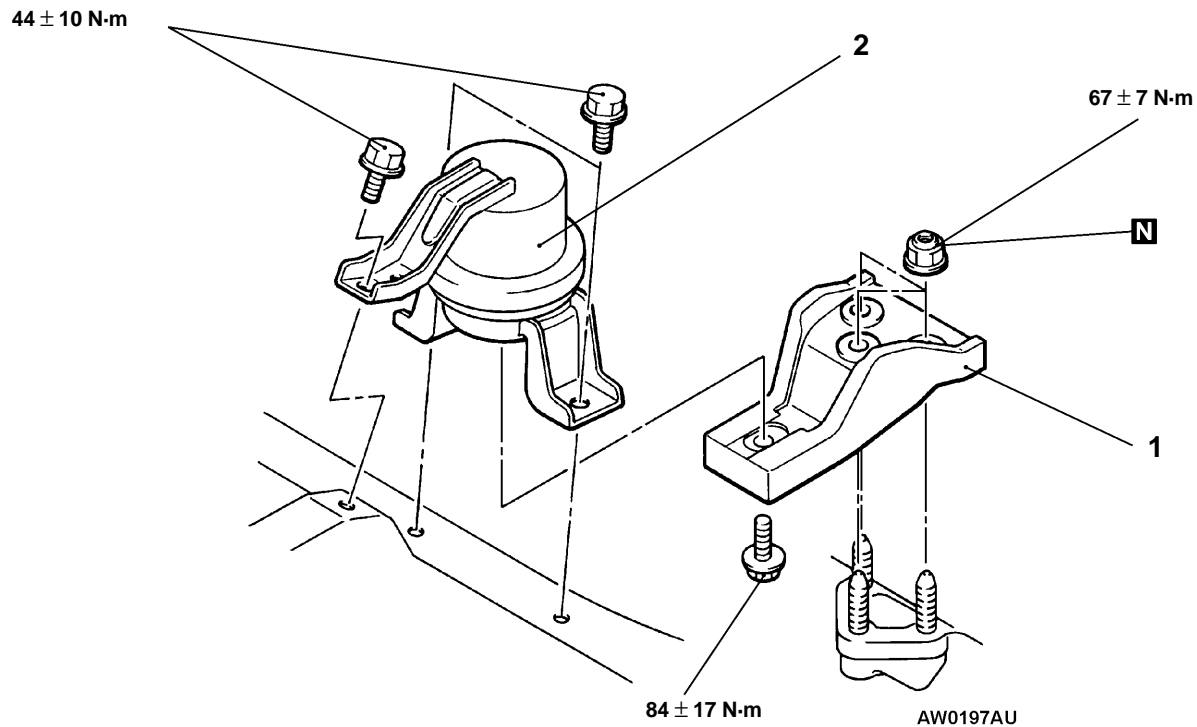
### REMOVAL AND INSTALLATION

#### Caution

∗: Indicates parts which should be initially tightened, and then fully tightened after placing the vehicle horizontally and loading the full weight of the engine on the vehicle body.

#### Pre-removal Operation

Raise the engine and transmission assembly until its weight is not applied to the insulator, and support it securely.



#### Removal steps

1. Engine mounting bracket
2. Engine mounting insulator

# TRANSMISSION MOUNTING

## REMOVAL AND INSTALLATION

### Caution

\*: Indicates parts which should be initially tightened, and then fully tightened after placing the vehicle horizontally and loading the full weight of the engine on the vehicle body.

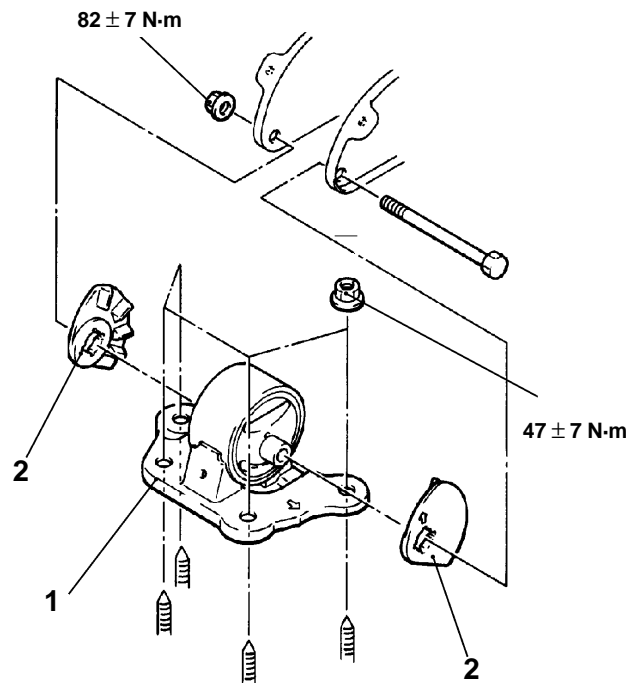
#### Pre-removal Operation

- Raise the engine and transmission assembly until its weight is not applied to the insulator, and support it securely.
- Battery and Battery Tray Removal
- [Air Cleaner Removal](#)
- [Rear Roll Stopper Removal](#)

#### Post-installation Operation

- [Rear Roll Stopper Installation](#)
- [Air Cleaner Installation](#)
- Battery and Battery Tray Installation

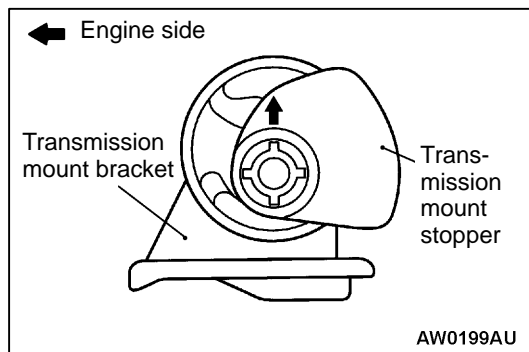
<M/T, A/T>



BW0198AU

### Removal steps

1. Transmission mounting
2. Transmission mounting stopper



AW0199AU

### INSTALLATION SERVICE POINT

#### ►A◄ TRANSMISSION MOUNT STOPPER INSTALLATION

Install the transmission mount stopper so that its arrow points upward.

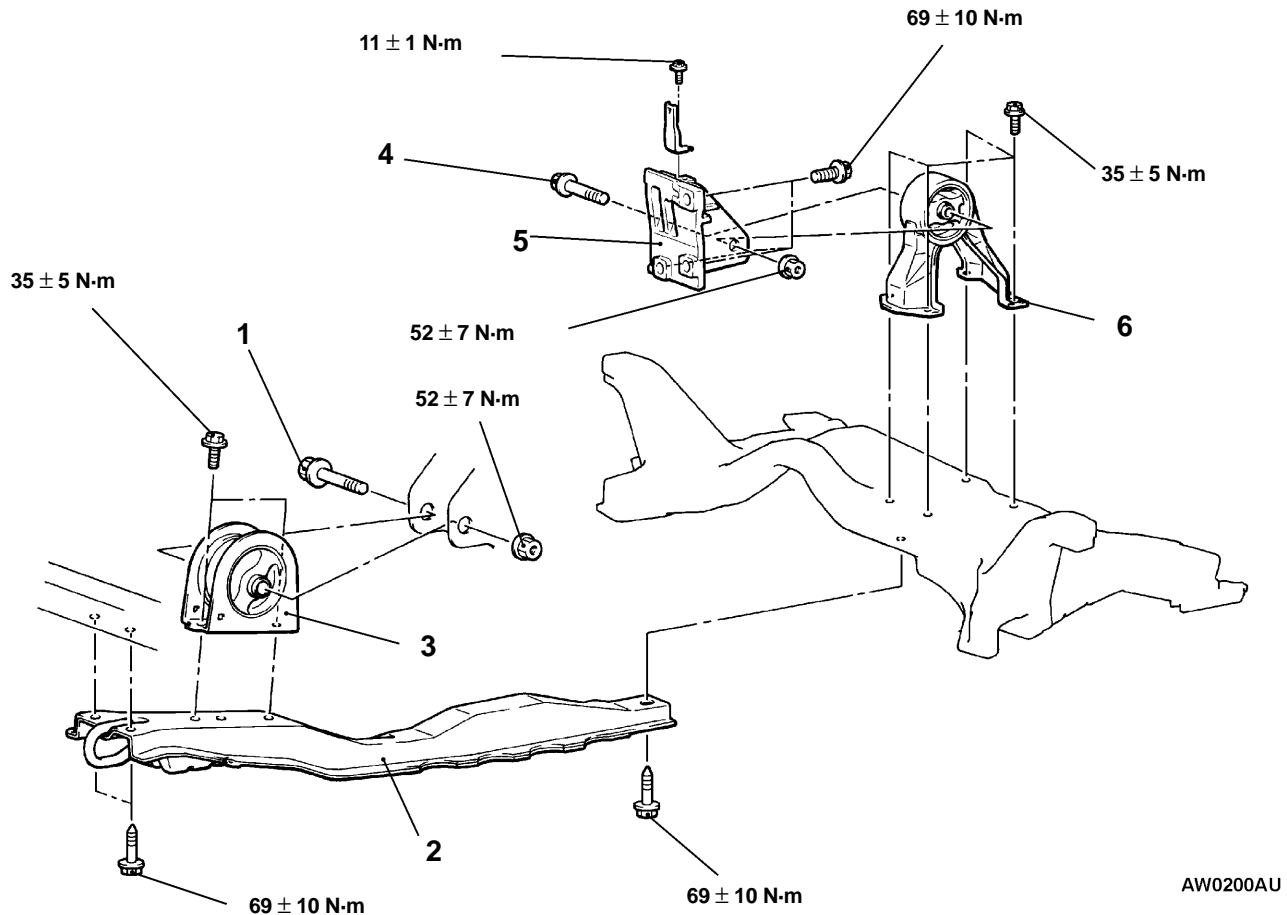
### INSPECTION

- Check the transmission mounting insulator for cracks, separation or deformation.

**ENGINE ROLL STOPPER, CENTERMEMBER****REMOVAL AND INSTALLATION****Caution**

\*: Indicates parts which should be initially tightened, and then fully tightened after placing the vehicle horizontally and loading the full weight of the engine on the vehicle body.

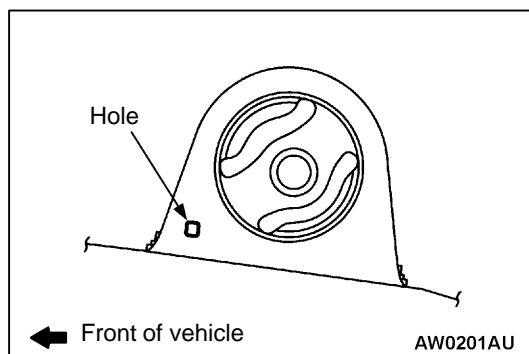
**Pre-removal and Post-installation Operation**  
Under Cover Removal and Installation

**Front roll stopper and centermember removal steps**

1. Front roll stopper connecting bolt
2. Centermember
3. Front roll stopper

**Rear roll stopper removal steps**

4. Rear roll stopper connecting bolt
5. Rear roll mount bracket
6. Rear roll stopper

**INSTALLATION SERVICE POINT****▶◀ FRONT ROLL STOPPER INSTALLATION**

Install the front roll stopper so that its hole points towards the front side of the vehicle.

## CROSSMEMBER

### REMOVAL AND INSTALLATION

#### Caution

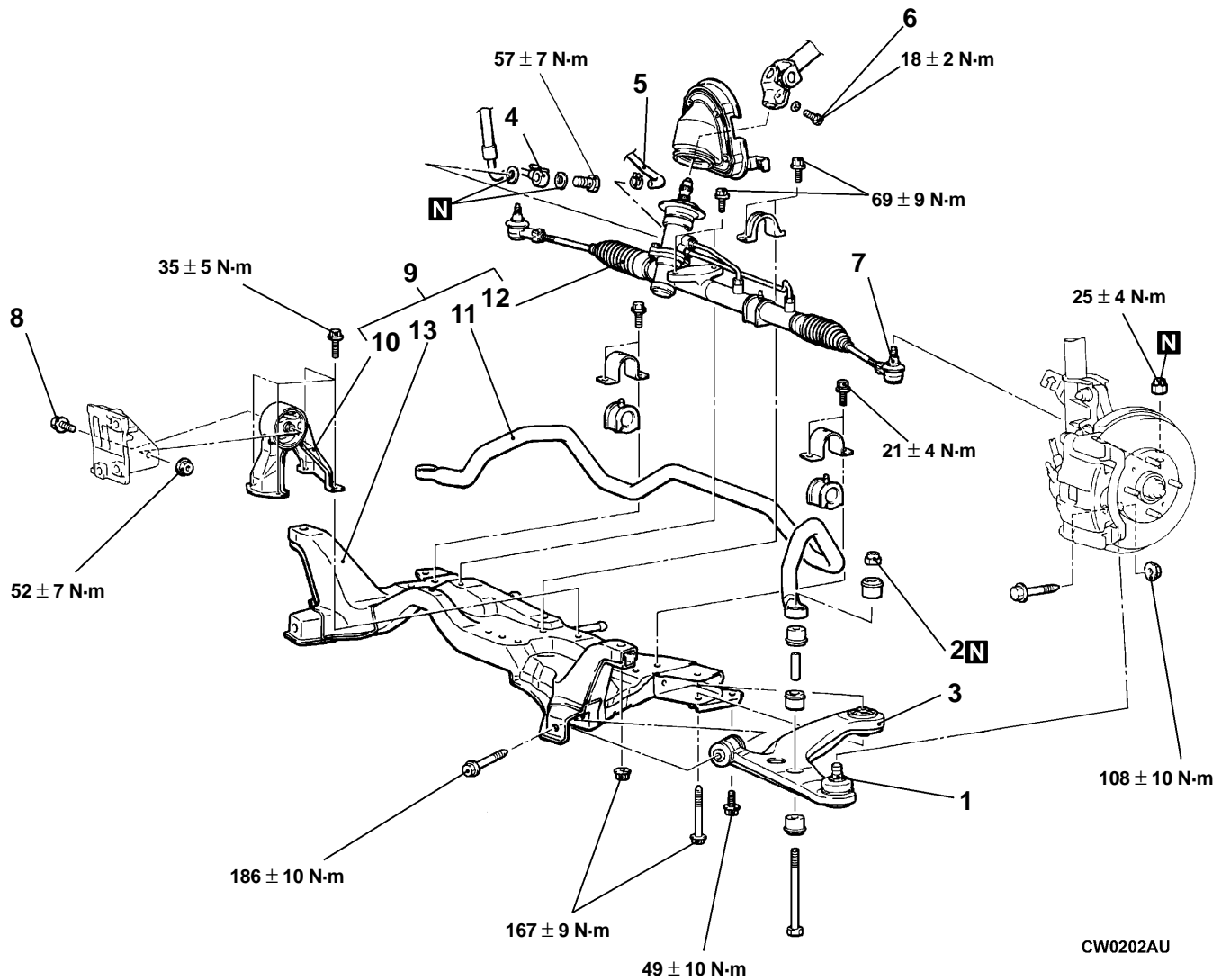
1. Before removing the steering wheel and airbag module assembly, always refer to [Service Precautions](#), [Airbag Module](#) and [Clock Spring](#). Also, set the front wheels so that they are facing straight forward, and remove the ignition key. If you fail to do this, the SRS clock spring will be damaged, causing the SRS airbag to be inoperative and serious injury.
2. \*1: Indicates parts which should be initially tightened, and then fully tightened after placing the vehicle horizontally and loading the full weight of the engine on the vehicle body.
3. \*2: Indicates parts which should be temporarily tightened, and then fully tightened with the vehicle on the ground in the unladen condition.

#### Pre-removal Operations

- [Centermember Removal](#)
- [Front Exhaust Pipe Removal](#)
- [Steering Wheel Air Bag Module Assembly Removal](#)
- [Power Steering Fluid Draining](#)

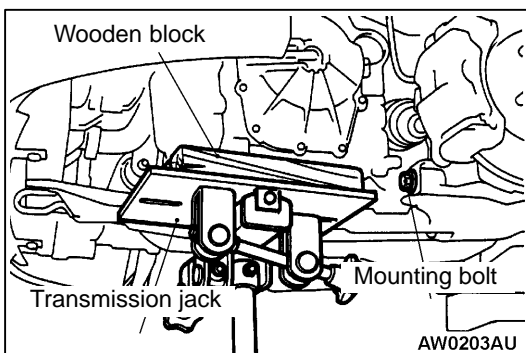
#### Post-installation Operations

- [Centermember Installation](#)
- [Front Exhaust Pipe Installation](#)
- [Steering Wheel Air Bag Module Assembly Installation](#)
- Power Steering Fluid Supplying  
(Refer to [On-vehicle Service](#).)
- Power Steering Fluid Line Bleeding  
(Refer to [On-vehicle Service](#).)
- Press the dust cover with a finger to check whether the dust cover is cracked or damaged.
- Checking Steering Wheel Position with Wheels Straight Ahead
- Front Wheel Alignment Check and Adjustment  
(Refer to [On-vehicle Service](#).)



## Removal steps

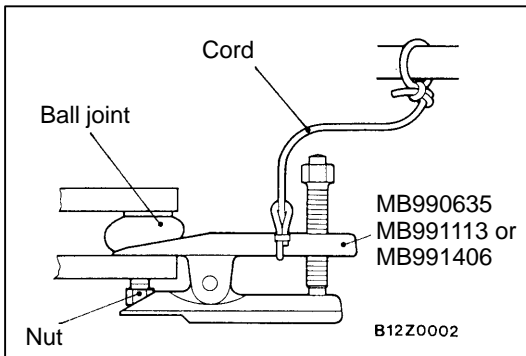
- |                           |   |                |  |
|---------------------------|---|----------------|--|
| <p>◀A▶ ▶B▶</p> <p>◀B▶</p> | <ol style="list-style-type: none"> <li>1. Lower arm and knuckle connection</li> <li>2. Self-locking nut</li> <li>3. Lower arm assembly</li> <li>4. Pressure hose connection</li> <li>5. Return hose connection</li> <li>6. Steering shaft assembly and gear box connecting bolt</li> <li>7. Tie rod end and knuckle connection</li> </ol> | <p>◀C▶ ▶A▶</p> | <ol style="list-style-type: none"> <li>8. Rear roll stopper connection bolt</li> <li>9. Crossmember assembly</li> <li>10. Rear roll stopper</li> <li>11. Stabilizer bar</li> <li>12. Steering gear and linkage</li> <li>13. Crossmember</li> </ol> |
|---------------------------|---|----------------|--|



## REMOVAL SERVICE POINTS

### ◀A▶ LOWER ARM ASSEMBLY REMOVAL

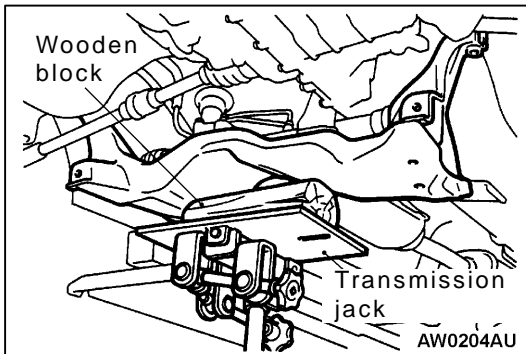
Lift the transmission with a transmission jack, and then withdraw the front mounting bolt on the left lower arm assembly.



## ◀B▶ TIE ROD END AND KNUCKLE DISCONNECTION

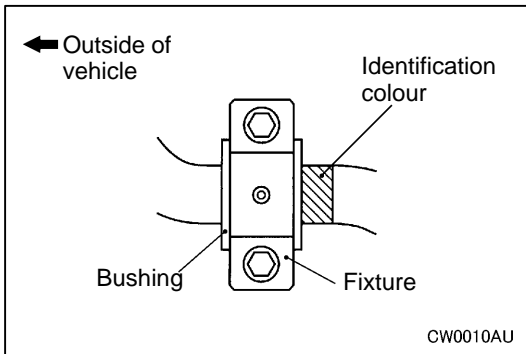
### Caution

1. The thread on the ball joint may be damaged. Do not remove the tie rod end mounting nut from the ball joint. Just loosen the nut. For this operation, use the special tool.
2. Suspend the special tool with a cord to prevent it from dropping.



## ◀C▶ CROSSMEMBER ASSEMBLY REMOVAL

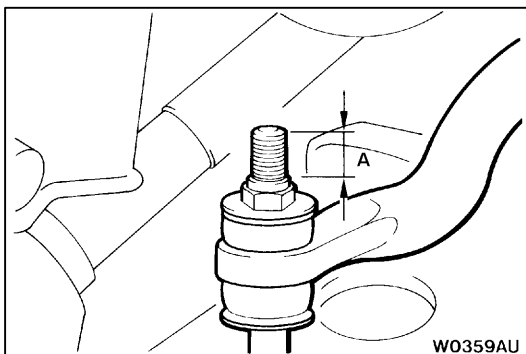
Retain the crossmember with a transmission jack, and then remove the crossmember mounting bolt.



## INSTALLATION SERVICE POINTS

### ▶A▶ STABILIZER BAR INSTALLATION

Align the identification colour on the left side of the stabilizer bar with the right end of the bushing.



### ▶B▶ SELF-LOCKING NUT INSTALLATION

Tighten the self-locking bolt until its protruding length meets the standard value.

**Standard value (A): 20.5 – 23.5 mm**

## INSPECTION

- Check the crossmember for cracks and damage.