
POWER PLANT MOUNT

CONTENTS

GENERAL INFORMATION	2	TRANSMISSION MOUNTING	5
SPECIAL TOOL	3	ENGINE ROLL STOPPER, CENTERMEMBER	6
ENGINE MOUNTING	4	CROSSMEMBER*	8

WARNING REGARDING SERVICING OF SUPPLEMENTAL RESTRAINT SYSTEM (SRS) EQUIPPED VEHICLES

WARNING!

- (1) Improper service or maintenance of any component of the SRS, or any SRS-related component, can lead to personal injury or death to service personnel (from inadvertent firing of the air bag) or to driver and passenger (from rendering the SRS inoperative).
- (2) Service or maintenance of any SRS component or SRS-related component must be performed only at an authorized MITSUBISHI dealer.
- (3) MITSUBISHI dealer personnel must thoroughly review this manual, and especially its GROUP 52B – Supplemental Restraint System (SRS) before beginning any service or maintenance of any component of the SRS or any SRS-related component.

NOTE

The SRS includes the following components: SRS-ECU, SRS warning lamp, air bag module, clock spring, and interconnecting wiring. Other SRS-related components (that may have to be removed/installed in connection with SRS service or maintenance) are indicated in the table of contents by an asterisk (*).

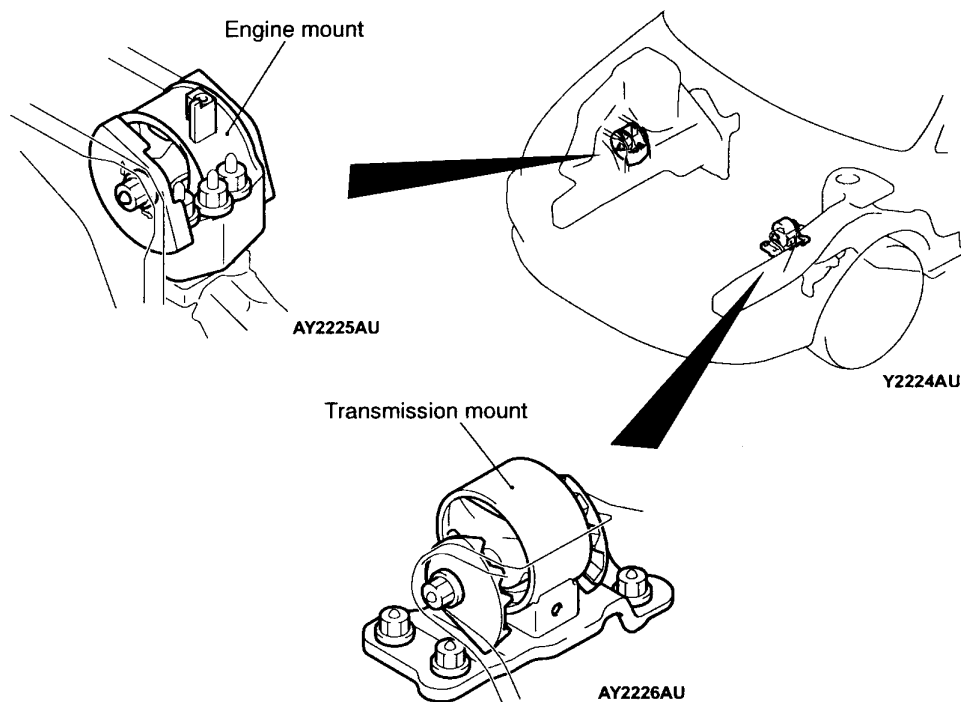
GENERAL INFORMATION

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

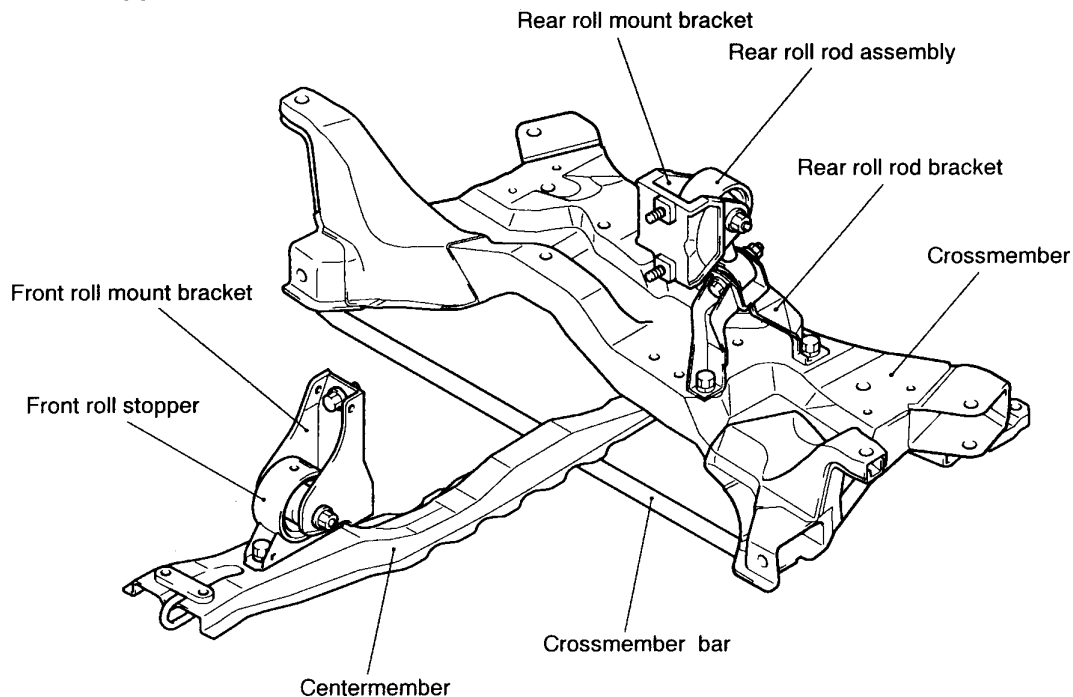
Upper installation of roll mount reduces engine rolling, and increase of insulator bore also reduces idle vibration.

CONSTRUCTION DIAGRAM

<Engine mount, Transmission mount>

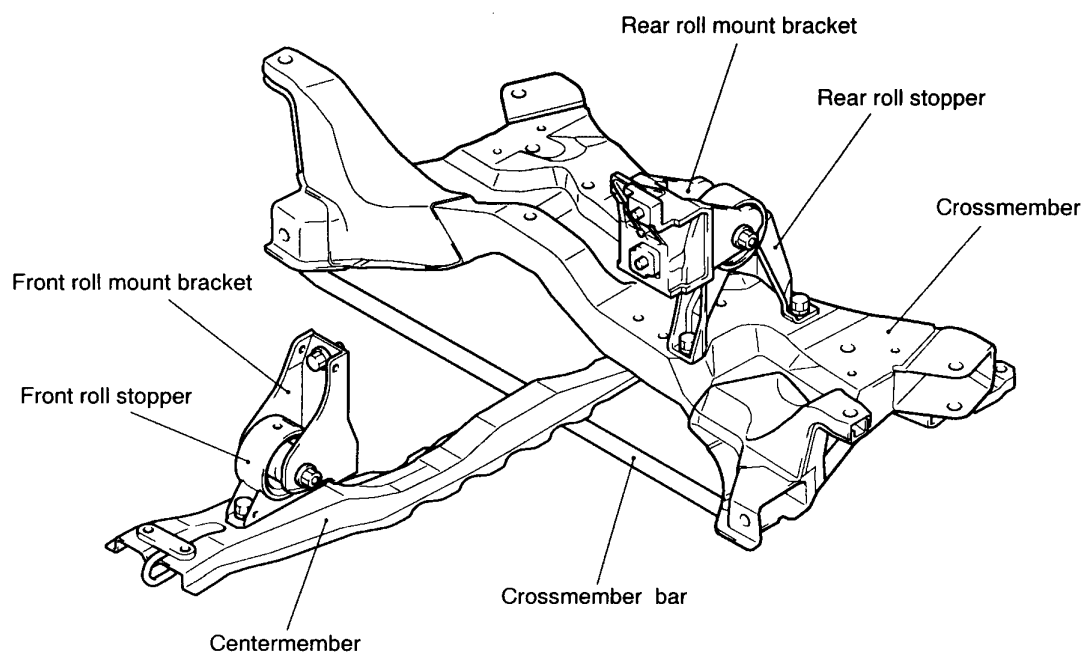


<Engine roll stopper, Centermember, Crossmember: L.H. drive vehicles>



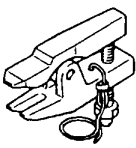
A10012AU

<Engine roll stopper, Centermember, Crossmember: R.H. drive vehicles>



A10011AU

SPECIAL TOOL

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

ENGINE MOUNTING

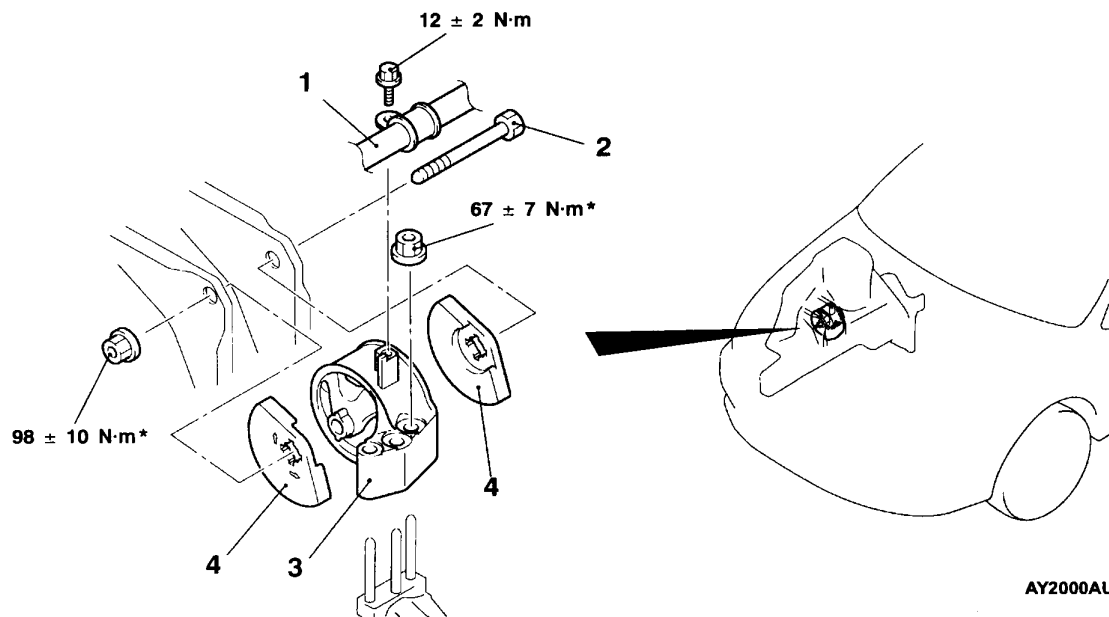
REMOVAL AND INSTALLATION

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 and Post-installation Operation

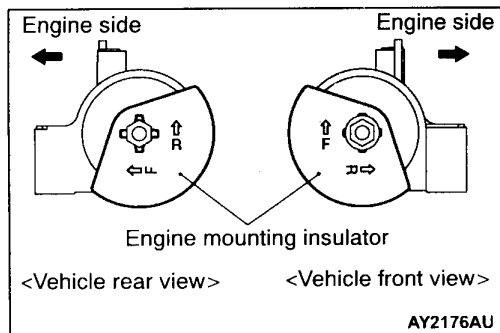
- Under Cover Removal and Installation (Refer to GROUP 51 – Front Bumper.)
- Raise the engine and transmission assembly until its weight is not applied to the insulator, and support it securely. <After installation only>



Removal steps

1. Power steering pressure hose assembly
2. Engine mounting connecting bolt

- ▶A◀ 3. Engine mounting bracket
4. Engine mounting insulator



INSTALLATION SERVICE POINT

▶A◀ENGINE MOUNTING INSULATOR INSTALLATION

Arrow marks on the engine mount insulator should face the shown direction.

NOTE

Disregard F and R stamped as a shared part.

TRANSMISSION MOUNTING

REMOVAL AND INSTALLATION

Caution

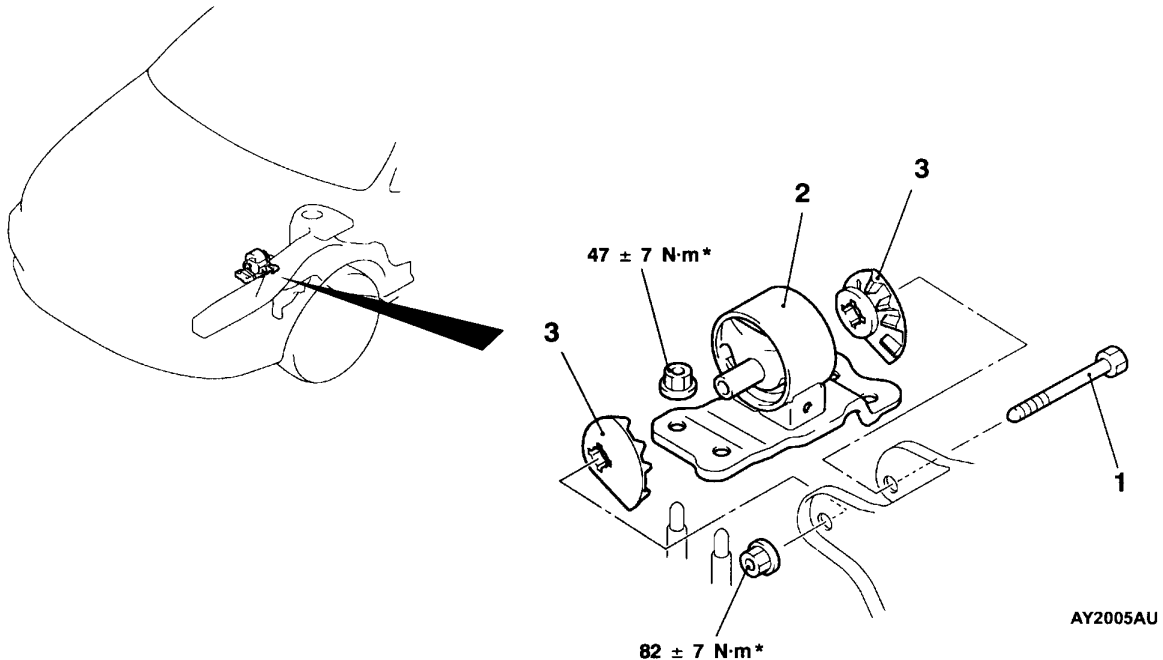
*: Indicates parts which should be initially tightened, and then fully tightened after placing the vehicle horizontally and loading the full weight of the engine on the vehicle body.

Pre-removal Operation

- Under Cover Removal (Refer to GROUP 51 – Front Bumper.)
- 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 (Refer to GROUP 15.)
- Radiator Removal (Refer to GROUP 14.)
- Air Pipe C, Air By-pass Hose, Air Hose D Removal (Refer to GROUP 15 – Inter Cooler.)
- Rear Roll Stopper Removal (Refer to P.32-6.)

Post-installation Operation

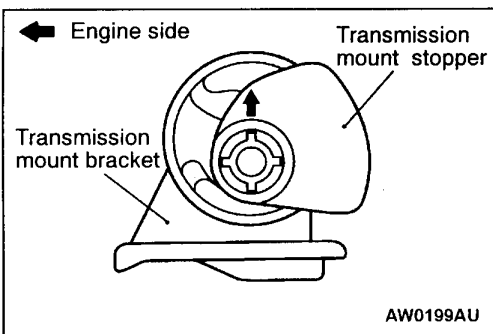
- Rear Roll Stopper Installation (Refer to P.32-6.)
- Air Pipe C, Air By-pass hose, Air Hose D Installation (Refer to GROUP 15.)
- Radiator Installation (Refer to GROUP 15.)
- Air Cleaner Installation (Refer to GROUP 15.)
- Battery and Battery Tray Installation
- Under Cover Installation (Refer to GROUP 51 – Front Bumper.)



Removal steps

1. Transmission mounting connecting bolt

2. Transmission mounting
3. Transmission mounting stopper



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

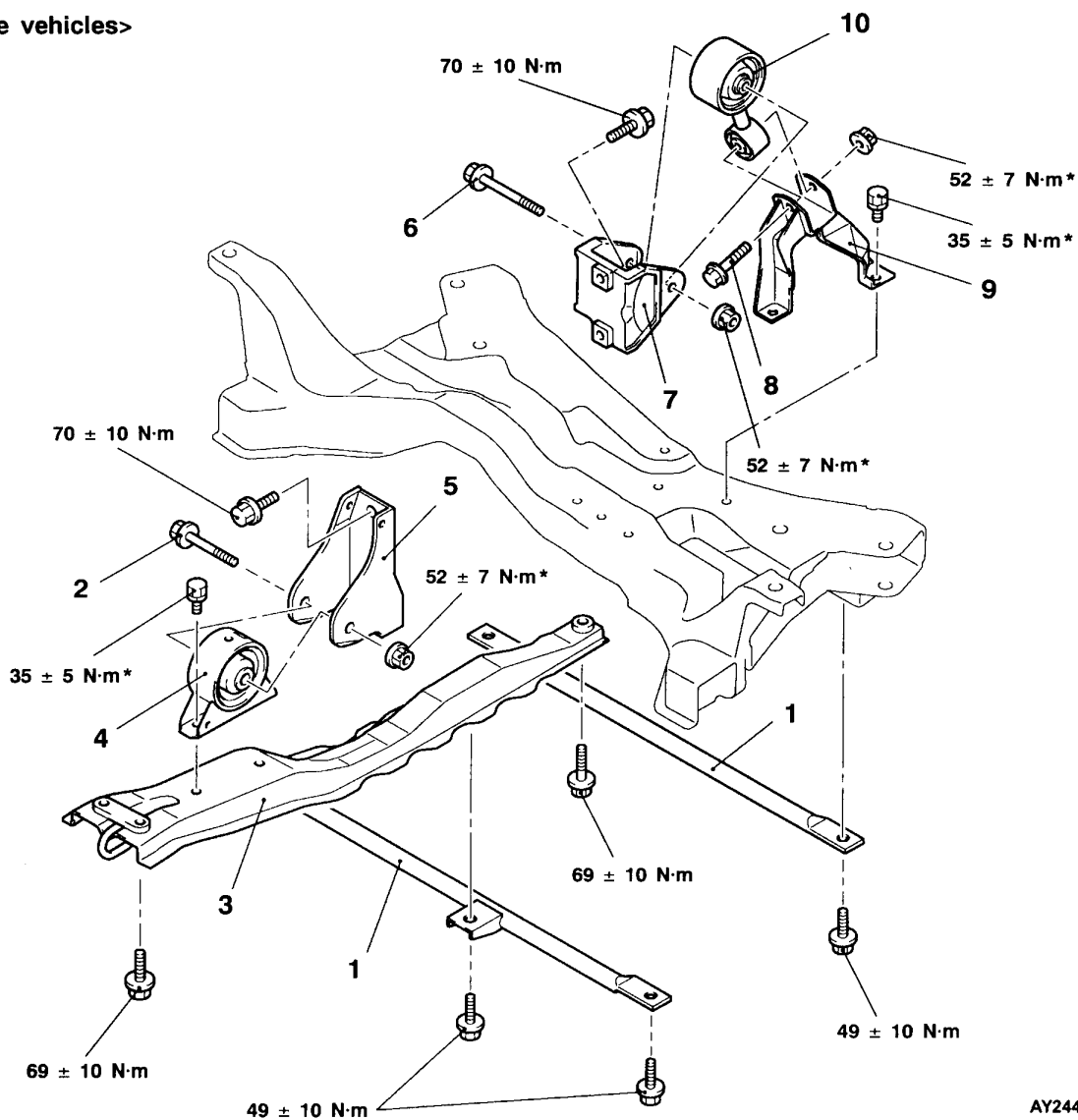
Caution

*: 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 (Refer to GROUP 51 – Front Bumper.)

<L.H. drive vehicles>



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Front roll stopper and centermember removal steps

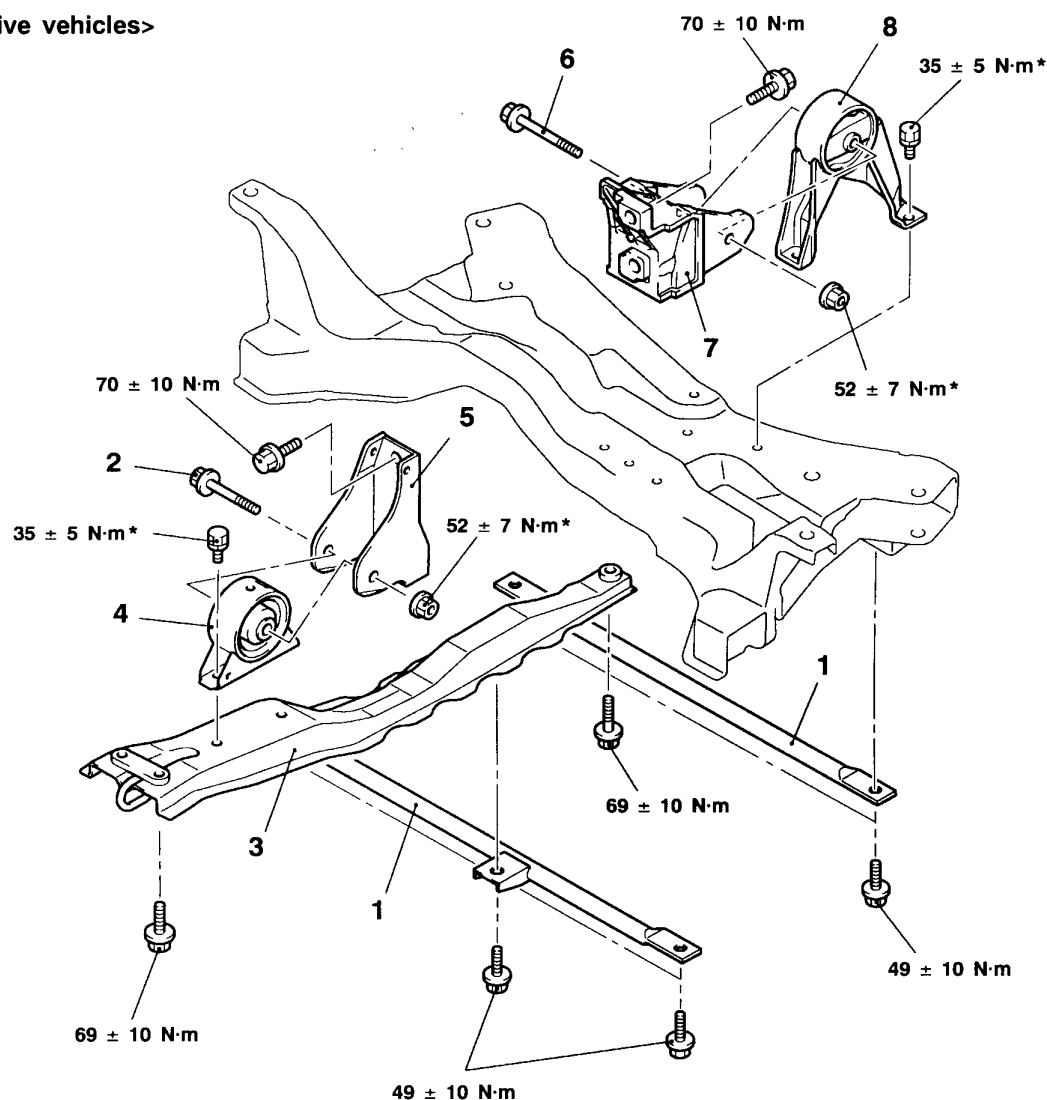
1. Crossmember bar
2. Front roll stopper connecting bolt
3. Centermember
4. Front roll stopper
5. Front roll mount bracket



Rear roll rod removal steps

6. Rear roll rod connecting bolt
7. Rear roll mount bracket
8. Rear roll rod connecting bolt
9. Rear roll rod bracket
10. Rear roll rod assembly

<R.H. drive vehicles>



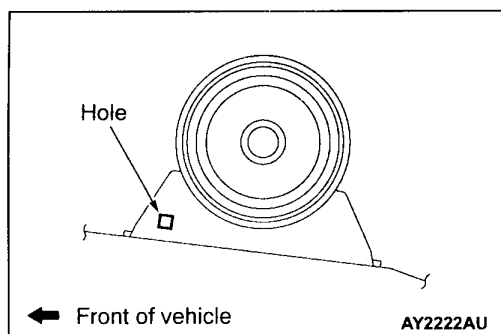
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Front roll stopper and centermember removal steps

1. Crossmember bar
2. Front roll stopper connecting bolt
3. Centermember
4. Front roll stopper
5. Front roll mount bracket

**Rear roll stopper removal steps**

6. Rear roll stopper connecting bolt
7. Rear roll mount bracket
8. 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 air bag module assembly, always refer to GROUP 52B – Service Precautions, Air bag 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 air bag 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.

Caution

If the vehicle is equipped the Brembo disc brake, during maintenance, take care not to contact the parts or tools to the caliper because the paint of caliper will be scratched.

Pre-removal Operations

- Under Cover Removal
(Refer to GROUP 51 – Front Bumper.)
- Centermember, Crossmember Bar Removal
(Refer to P.32-6.)
- Front Exhaust Pipe Removal
(Refer to GROUP 15.)
- Steering Wheel Air Bag Module Assembly Removal
(Refer to GROUP 37A.)
- Power Steering Fluid Draining
(Refer to GROUP 37A – On-vehicle Service.)

Post-installation Operations

- Centermember, Crossmember Bar Installation
(Refer to P.32-6.)
- Front Exhaust Pipe Installation
(Refer to GROUP 15.)
- Steering Wheel Air Bag Module Assembly Installation (Refer to GROUP 37A.)
- Power Steering Fluid Supplying
(Refer to GROUP 37A – On-vehicle Service.)
- Power Steering Fluid Line Bleeding
(Refer to GROUP 37A – 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 GROUP 37A – On-vehicle Service.)
- Under Cover Installation
(Refer to GROUP 51 – Front Bumper.)

This diagram illustrates the assembly of a rear axle, showing the relationship between various components and their required tightening torques. The components are numbered 1 through 13, and the torques are specified in N·m.

- Component 1:** Axle housing, torque $186 \pm 10 \text{ N·m}^2$
- Component 2:** Upper control arm, torque $39 \pm 5 \text{ N·m}$
- Component 3:** Lower control arm, torque $39 \pm 5 \text{ N·m}$
- Component 4:** Shock absorber top mount, torque $18 \pm 2 \text{ N·m}$
- Component 5:** Brake master cylinder, torque $52 \pm 7 \text{ N·m}^1$
- Component 6:** Brake caliper, torque $35 \pm 5 \text{ N·m}^1$
- Component 7:** Brake disc, torque $25 \pm 4 \text{ N·m}$
- Component 8:** Brake line, torque $70 \pm 10 \text{ N·m}$
- Component 9:** Brake disc, torque $108 \pm 10 \text{ N·m}$
- Component 10:** Axle housing, torque $167 \pm 9 \text{ N·m}$
- Component 11:** Axle housing, torque $167 \pm 9 \text{ N·m}$
- Component 12:** Axle housing, torque $167 \pm 9 \text{ N·m}$
- Component 13:** Axle housing, torque $167 \pm 9 \text{ N·m}$

The diagram also shows the following torque specifications for other components:

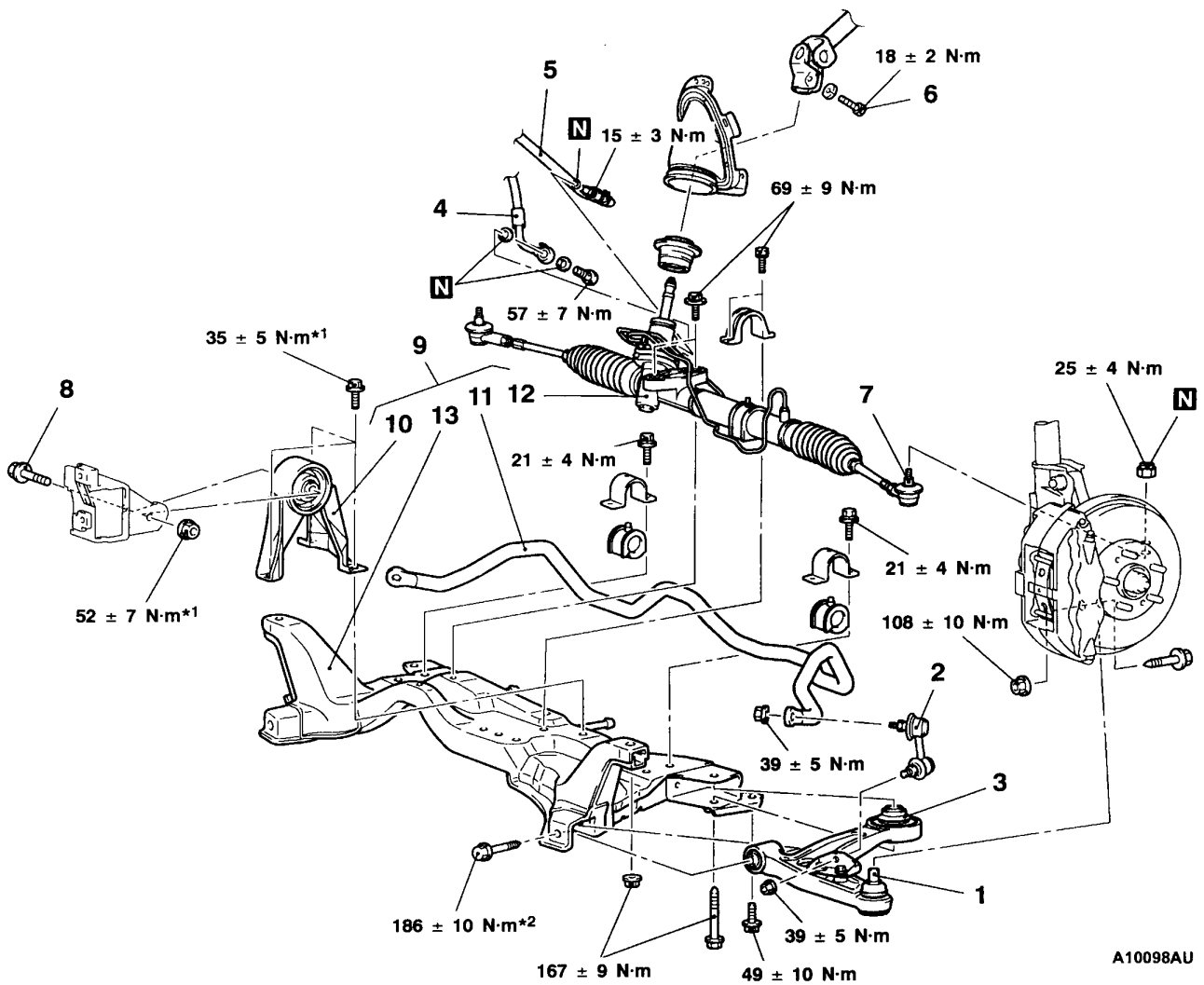
- $57 \pm 7 \text{ N·m}$
- $15 \pm 3 \text{ N·m}$
- $21 \pm 4 \text{ N·m}$
- $49 \pm 10 \text{ N·m}$

The diagram is labeled A10097AU.

1. Lower arm and knuckle connection
2. Stabilizer link
3. Lower arm assembly
4. Steering shaft assembly and gear box connecting bolt
5. Rear roll stopper connection bolt
6. Rear roll rod assembly and rear roll rod bracket

7. Return hose and return pipe
8. Pressure hose connection
9. Tie rod end and knuckle connection
10. Crossmember assembly
11. Stabilizer bar
12. Steering gear and linkage
13. Crossmember

<R.H. drive vehicles>

**Removal steps**

1. Lower arm and knuckle connection
2. Stabilizer link
3. Lower arm assembly
4. Pressure hose connection
5. Return hose connection
6. Steering shaft assembly and gear box connecting bolt
7. Tie rod end and knuckle connection

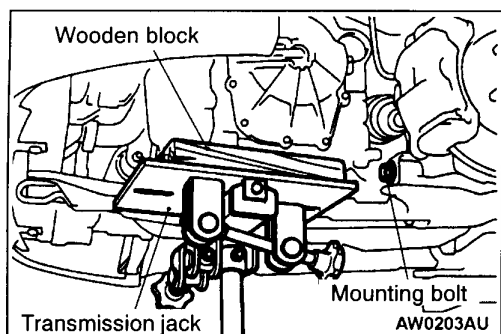
8. Rear roll stopper connection bolt
9. Crossmember assembly
10. Rear roll stopper
11. Stabilizer bar
12. Steering gear and linkage
13. Crossmember

◀A▶

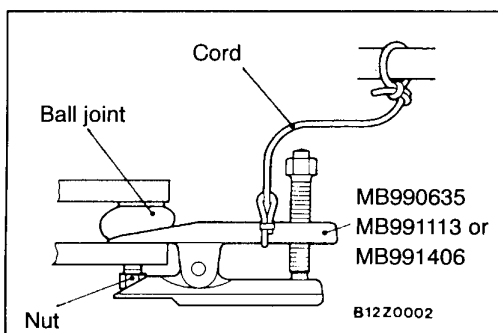
◀C▶

▶A◀

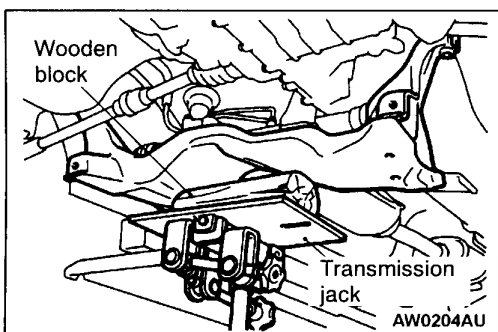
◀B▶

**REMOVAL SERVICE POINTS****◀A▶ LOWER ARM ASSEMBLY REMOVAL**

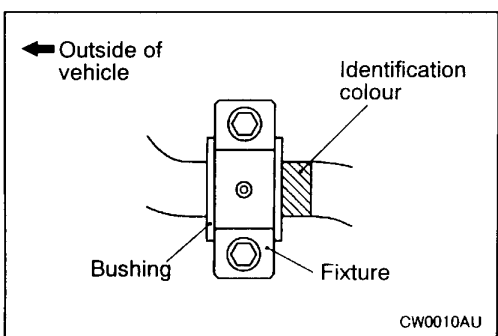
Lift the transmission with a transmission jack, and then withdraw the front mounting bolt on the left lower arm assembly.

**◀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 POINT****▶A◀ STABILIZER BAR INSTALLATION**

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

INSPECTION

- Check the crossmember for cracks and damage.