

GENERAL INFORMATION

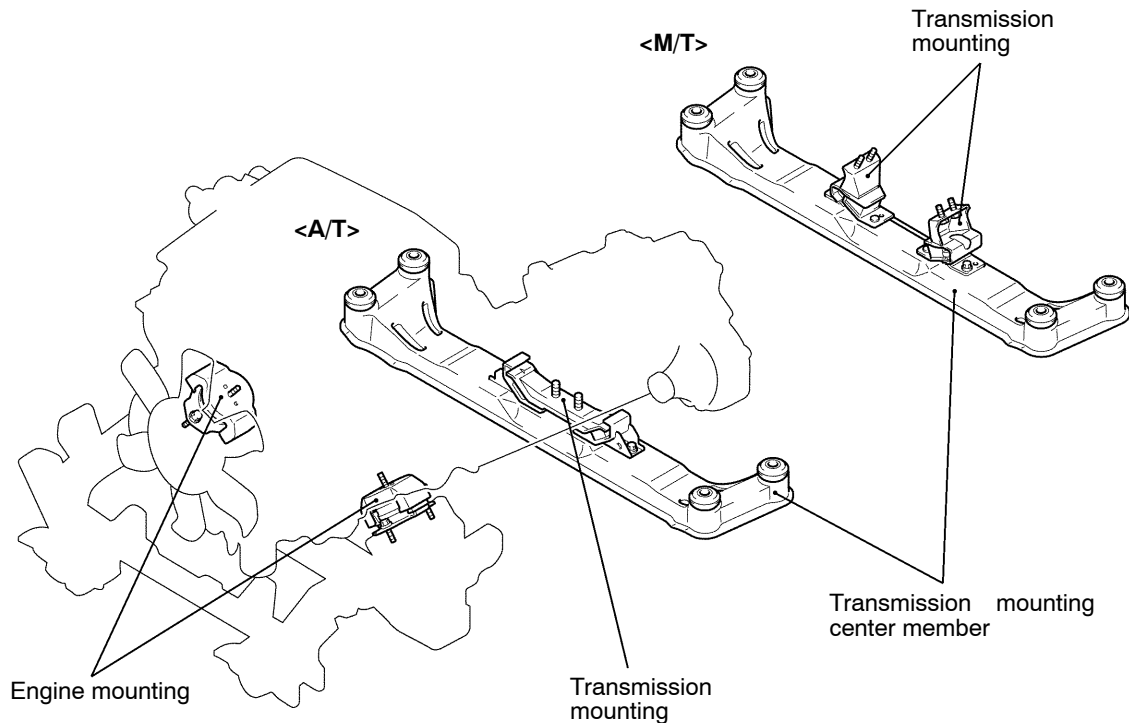
For vehicles with A/T, the engine and transmission assembly is supported at three points, where insulators are used. (Two points for the engine, one point for the transmission.)

For vehicles with M/T, the engine and transmission assembly is supported at four points, where insulators are used. (Two points for the engine, two points for the transmission.)

- For the engine mounting, a liquid-charged mount has been introduced in order to improve driving comfort and reduce vibration and noise during idling.

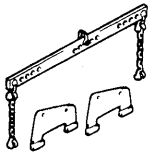
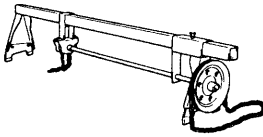
- The transmission mounting supports the transmission and the transmission mount center member elastically (dual anti-vibration method) in order to reduce vibration, which is transmitted to the vehicle body.
- For the transmission mounting insulator, a shear-type insulator has been introduced.

CONSTRUCTION DIAGRAM



AX1814CA

SPECIAL TOOLS

Tool	Number	Name	Use
 B991453	MB991453	Engine hanger	To support the engine assembly during removal and installation of the engine mounting
 Z203827	MZ203827	Engine lifter	

ENGINE MOUNTING

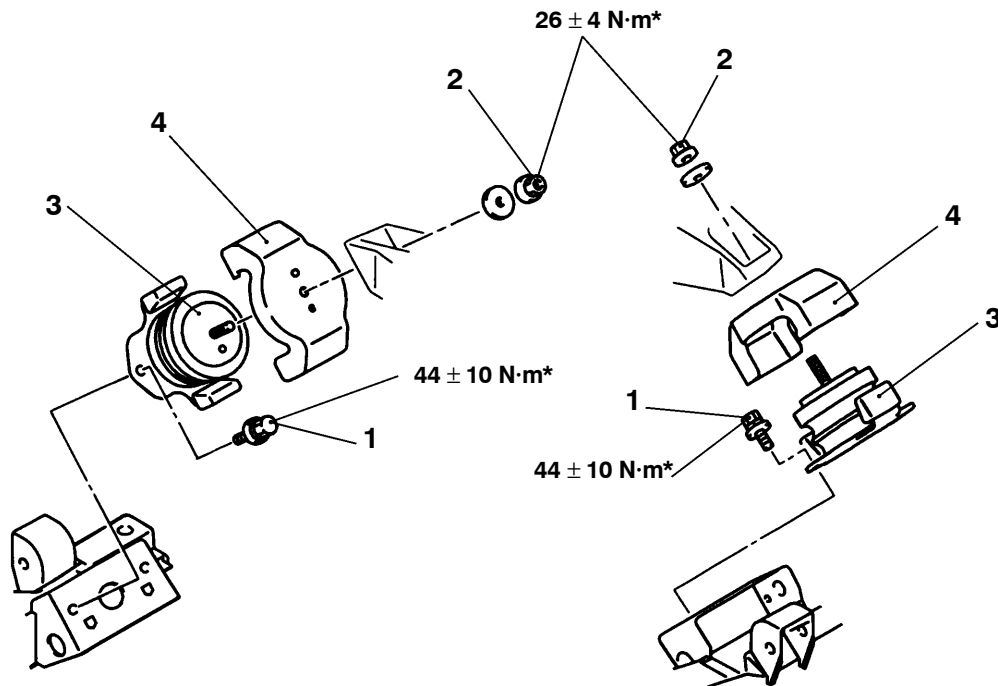
REMOVAL AND INSTALLATION

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 and Skid Plate Removal and Installation
- Battery Removal and Installation
- Air Cleaner Removal and Installation (Refer to GROUP 15.)
- Engine Cover Removal and Installation (Refer to GROUP 11A,11B,11C.)
- Radiator Removal and Installation (Refer to GROUP 14.)
- Glow Plug Relay and Solenoid Valve Assembly Removal and Installation <4M4>
- Intercooler Removal and Installation <4M4> (Refer to GROUP 15.)



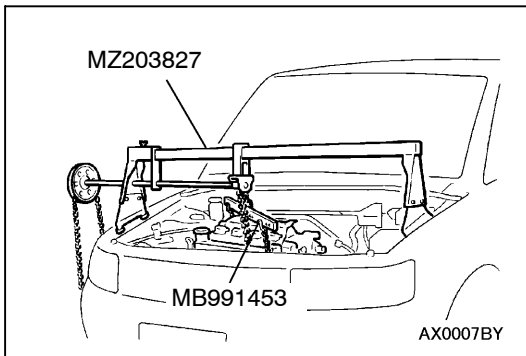
AX1247CA

Removal steps

- Brake hose clip (Refer to GROUP 33A – Upper Arm Assembly.)
- Connecting bolt between steering gear and joint (Refer to GROUP 37A – Power Steering Gear and Linkage.)
- Power steering pressure hose mounting bolt (Refer to GROUP 37A – Power Steering Gear and Linkage.)
- A/T oil cooler tube mounting bolt (Refer to GROUP 23 – Transmission Oil Cooler.)



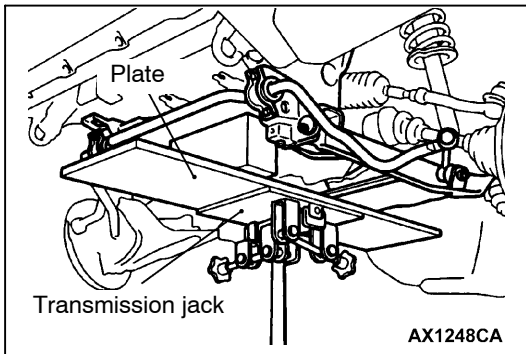
- Vacuum hose (Refer to GROUP 26 – Free Wheel Assembly, Differential Carrier.)
- 1. Engine mounting bolt
- 2. Engine mounting nut
- 3. Engine mounting bracket
- 4. Engine mounting stopper



REMOVAL SERVICE POINTS

◀A▶ ENGINE MOUNTING BOLT AND NUT REMOVAL

1. Use the special tool to support the engine.
2. Remove the engine mount mounting bolts and nuts.



◀B▶ ENGINE MOUNTING BRACKET REMOVAL

1. Support the No.1 crossmember using the transmission jack.
2. Unscrew the No.1 crossmember mounting nut and then put down the No.1 crossmember to remove the engine mounting.

INSPECTION

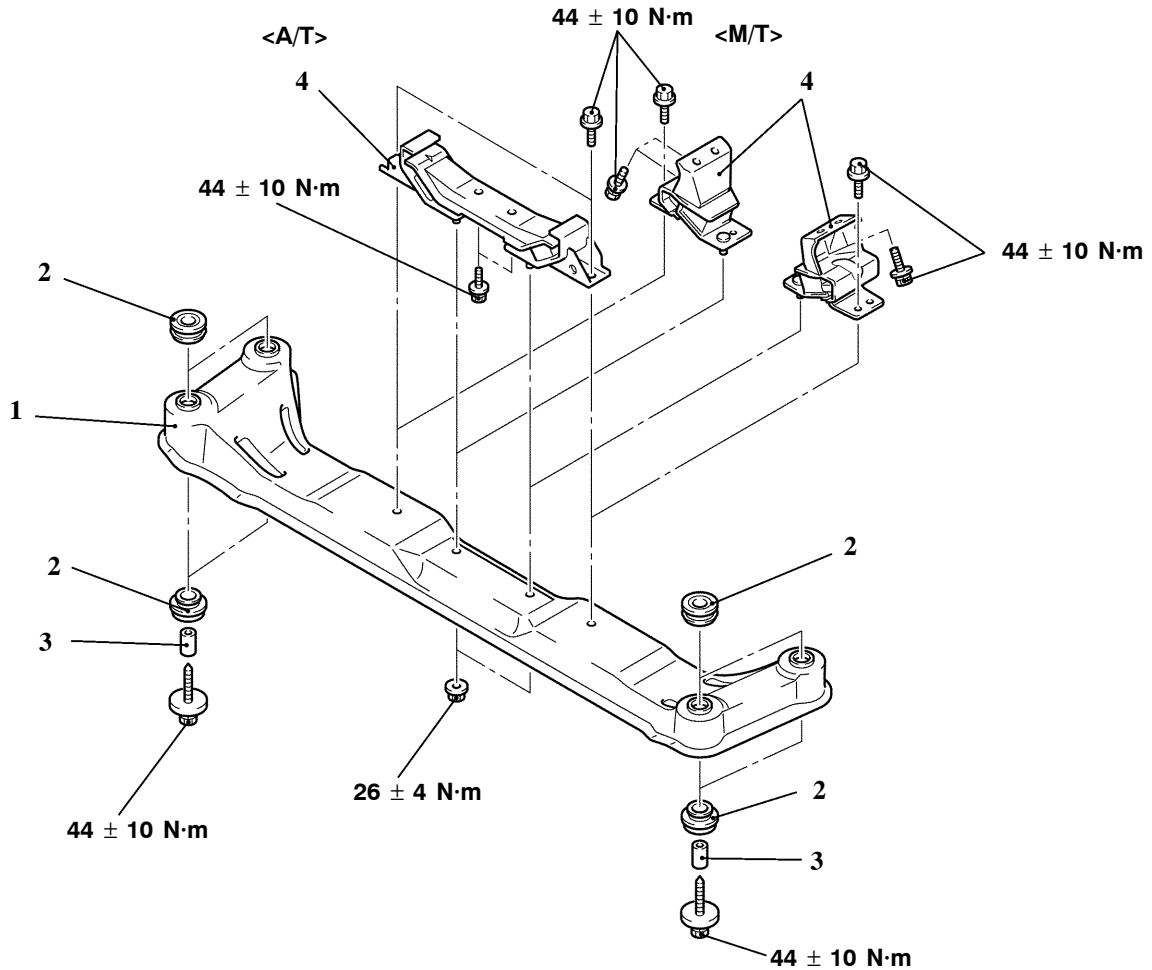
- Check the engine mounting bracket for cracks, separation or deformation.
- Check the engine mounting stoppers for deformation.

TRANSMISSION MOUNTING

REMOVAL AND INSTALLATION

Pre-removal and Post-installation Operation

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



AX1815CA

Removal steps

1. Transmission mounting center member assembly
2. Transmission mounting bush

3. Collar
4. Transmission mounting insulator assembly

INSPECTION

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

No.1 CROSSMEMBER

REMOVAL AND INSTALLATION

Caution

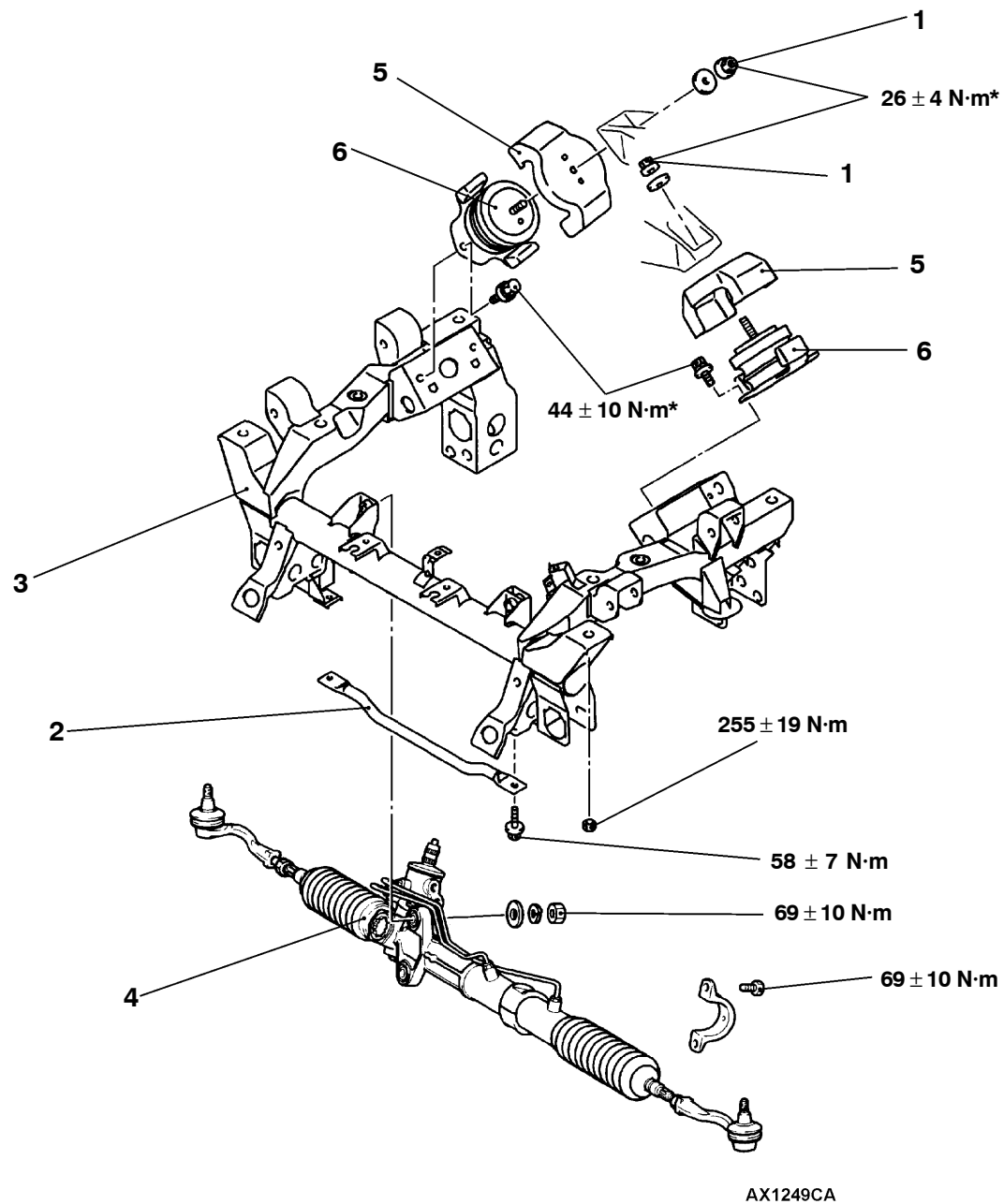
1. Before removing the steering wheel and airbag module assembly, always refer to GROUP 52B – Service Precautions, Airbag Module and Clock Spring. Also, set the front wheels so that they are facing straight forward, and remove the ignition key. If you fail to do this, the SRS clock spring will be damaged, causing the SRS airbag to be inoperative and serious injury.
2. *: 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
- Drive Shaft Removal
(Refer to GROUP 26.)
- Differential Carrier and No.2 Crossmember Assembly Removal (Refer to GROUP 26 – Freewheel Assembly and Differential Carrier.)
- Upper Arm Removal
(Refer to GROUP 33A.)
- Lower Arm Removal
(Refer to GROUP 33A.)
- Stabilizer Bar Removal
(Refer to GROUP 33A.)
- Engine Oil Cooler Removal<6G7-MPI>
(Refer to GROUP 12.)
- Air Cleaner Removal<4M4>
(Refer to GROUP 15.)
- Intercooler Removal<4M4>
(Refer to GROUP 15.)
- Engine Cover Removal
(Refer to GROUP 11A – Timing Belt.)
- Radiator Removal
(Refer to GROUP 14.)
- Power Steering Fluid Draining
(Refer to GROUP 37A – On-vehicle Service.)

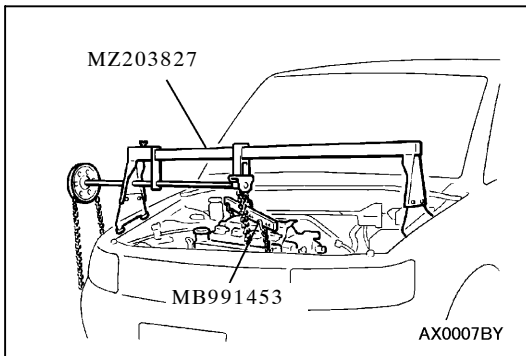
Post-installation Operations

- Differential Carrier and No.2 Crossmember Assembly Installation (Refer to GROUP 26 – Freewheel Assembly and Differential Carrier.)
- Drive Shaft Installation
(Refer to GROUP 26.)
- Lower Arm Installation
(Refer to GROUP 33A.)
- Upper Arm Installation
(Refer to GROUP 33A.)
- Stabilizer Bar Installation
(Refer to GROUP 33A.)
- Air Cleaner Installation<4M4>
(Refer to GROUP 15.)
- Intercooler Installation<4M4>
(Refer to GROUP 15.)
- Radiator Installation
(Refer to GROUP 14.)
- Engine Oil Cooler Installation<6G7-MPI>
(Refer to GROUP 12.)
- 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
- Engine Cover Installation
(Refer to GROUP 11A – Timing Belt.)

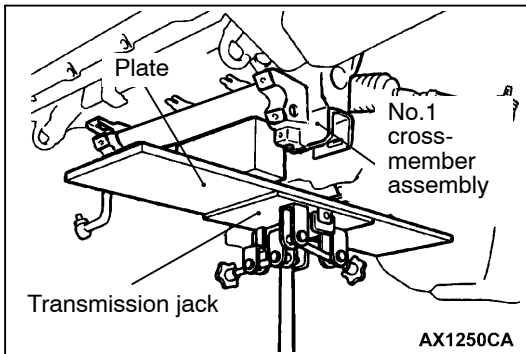
**Removal steps**

1. Engine mounting nuts
2. Front reinforcement bar
3. No.1 crossmember assembly

4. Power steering gear and linkage
5. Engine mounting stopper
6. Engine mounting

**REMOVAL SERVICE POINTS****◀A▶ ENGINE MOUNTING NUT REMOVAL**

1. Use the special tool to support the engine.
2. Remove the engine mounting nuts.

**◀B▶ No.1 CROSSMEMBER ASSEMBLY REMOVAL**

Use a transmission jack to support the No.1 crossmember and remove the No.1 crossmember.

INSPECTION

- Check the No.1 crossmember for cracks and damage.