

GROUP 32

POWER PLANT MOUNT

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WARNINGS 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 the driver (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: front impact sensors, 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

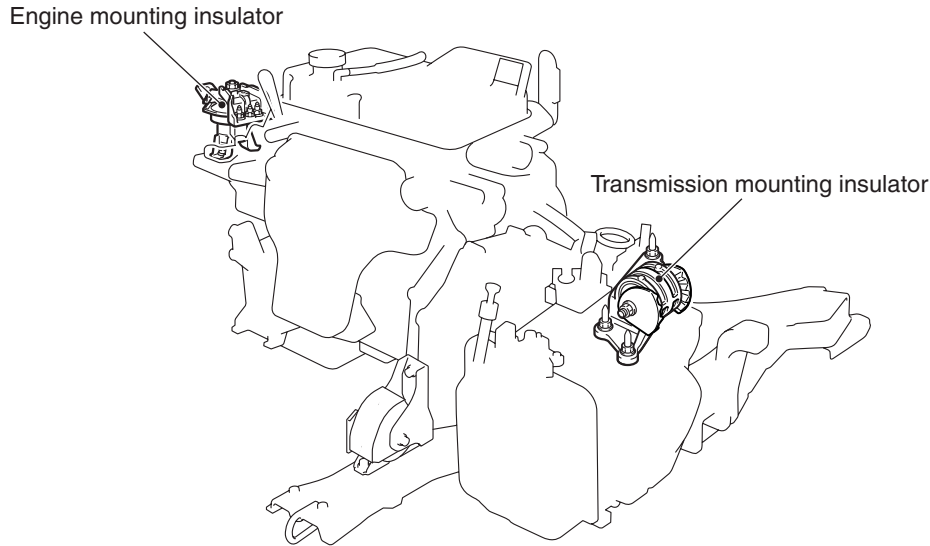
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The engine mounting system employs the inertial axis four-point suspension method, which is field proven.

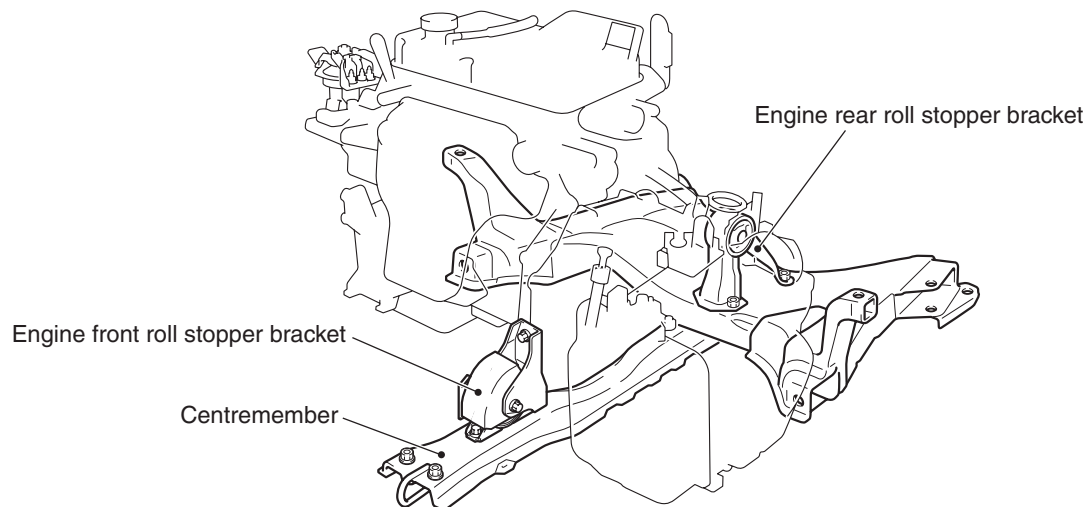
- Liquid-filled longitudinally installed cylindrical engine mounts are adopted to reduce idle vibration and improve ride feeling.

- The liquid-filled transmission mount improves ride feeling by its insulator.
- Installation of roll mount in the upper area limits engine rolling. Further more, large diameter insulator reduces idle vibration.

CONSTRUCTION DIAGRAM



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AC308230
AC308231AD

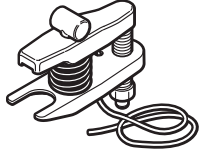
SERVICE SPECIFICATION

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Item	Standard value
Protruding length of stabilizer bar mounting bolt mm	22 ± 1.5

SPECIAL TOOL

M1321000600516

Tool	Number	Name	Use
 <p>AC106827</p>	MB991897	Ball joint remover	<p>Knuckle and tie rod end ball joint disconnection</p> <p><i>NOTE: Steering linkage puller (MB990635 or MB991113) is also available to disconnect knuckle and tie rod end ball joint.</i></p>

ENGINE MOUNTING

REMOVAL AND INSTALLATION

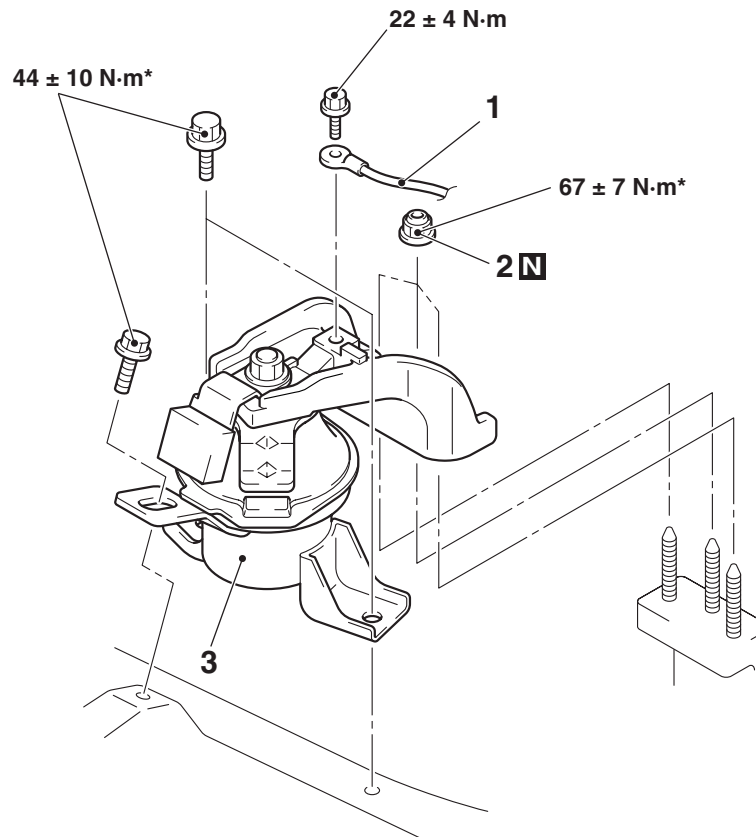
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CAUTION

*: 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.



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Removal steps

1. Earth cable connection

Removal steps (Continued)

2. Self-locking nuts
3. Engine mounting insulator

TRANSMISSION MOUNTING

REMOVAL AND INSTALLATION

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⚠ 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.

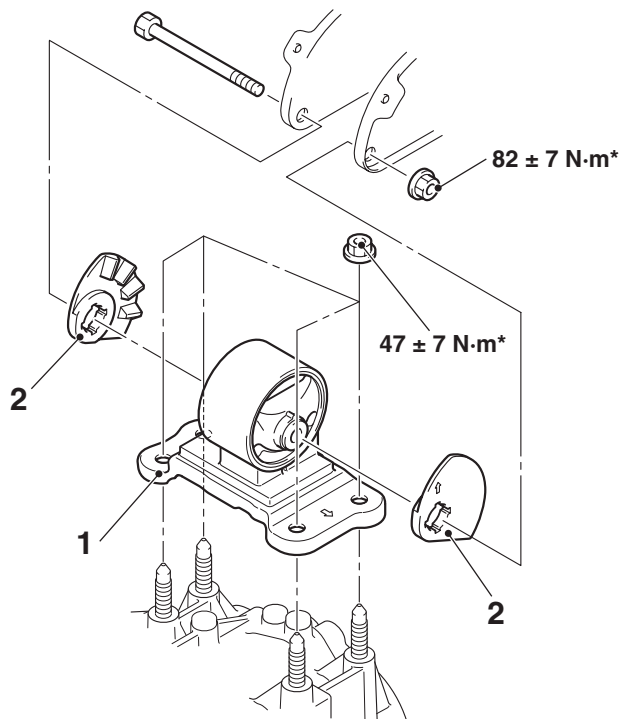
Pre-removal Operation

- 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 (Refer to GROUP 15 –Air Cleaner P.15-3).
- Engine Rear Roll Stopper Bracket Removal (Refer to P.32-7).

Post-installation Operation

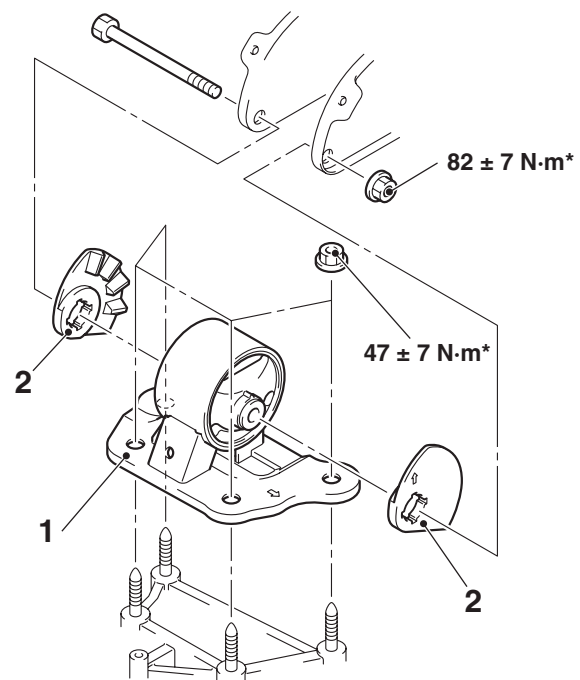
- Engine Rear Roll Stopper Bracket Installation (Refer to P.32-7).
- Air Cleaner Installation (Refer to GROUP 15 –Air Cleaner P.15-3).
- Battery and Battery Tray Installation

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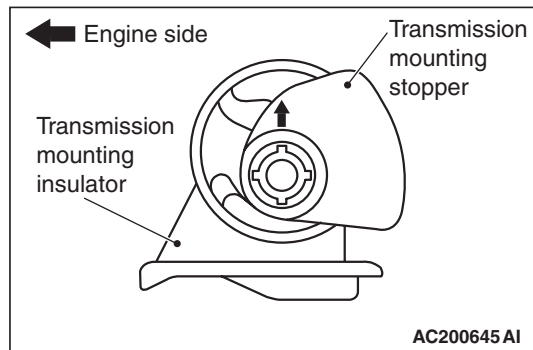
Removal steps

1. Transmission mounting insulator
2. Transmission mounting stopper

>>A<<

INSTALLATION SERVICE POINT

>>A<< TRANSMISSION MOUNTING STOPPER INSTALLATION



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

ENGINE ROLL STOPPER, CENTREMEMBER

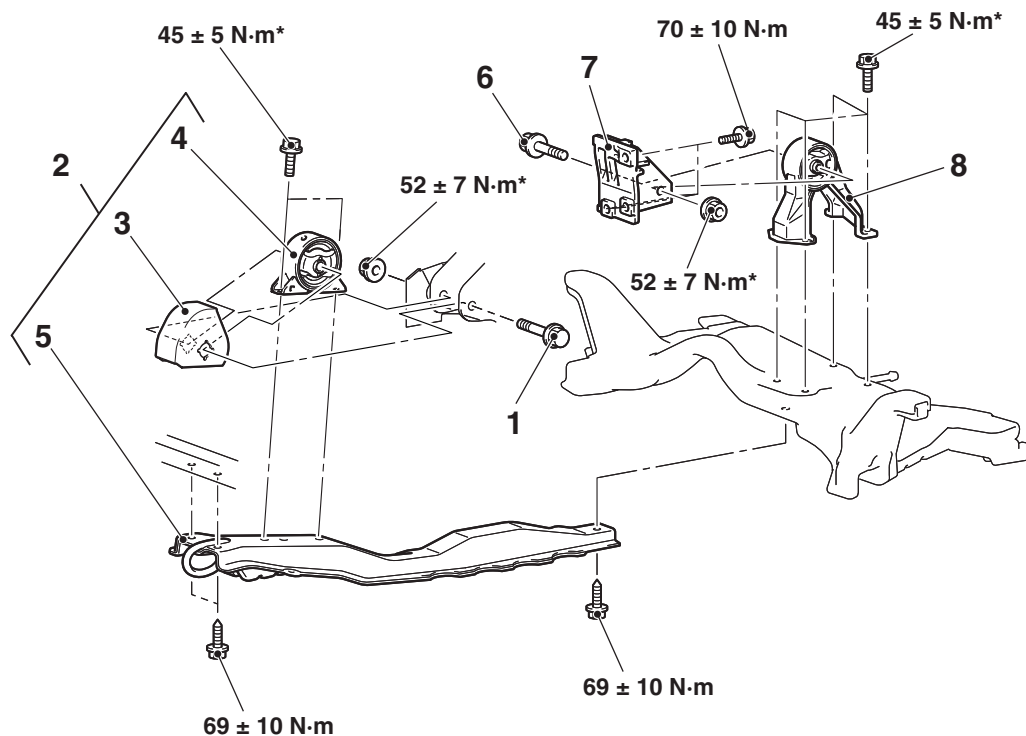
REMOVAL AND INSTALLATION

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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



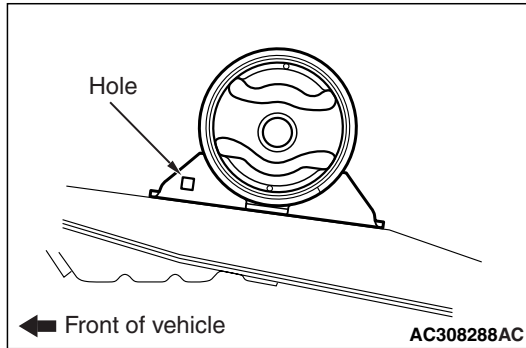
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Engine front roll stopper bracket and centremember removal steps

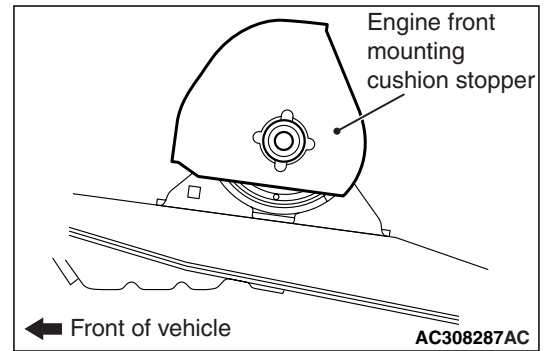
1. Engine front roll stopper bracket connecting bolt
2. Engine front roll stopper bracket, engine front mounting cushion stopper and centremember assembly
- >>B<< 3. Engine front mounting cushion stopper

Engine front roll stopper bracket and centremember removal steps (Continued)

- >>A<< 4. Engine front roll stopper bracket
5. Centremember
- Engine rear roll stopper bracket removal steps
6. Engine rear roll stopper bracket connecting bolt
7. Transmission case rear roll stopper bracket
8. Engine rear roll stopper bracket

INSTALLATION SERVICE POINTS**>>A<< ENGINE FRONT ROLL STOPPER
BRACKET INSTALLATION**

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

**>>B<< ENGINE FRONT MOUNTING
CUSHION STOPPER INSTALLATION**

Install the engine front mounting cushion stopper as shown.

CROSSMEMBER

REMOVAL AND INSTALLATION

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CAUTION

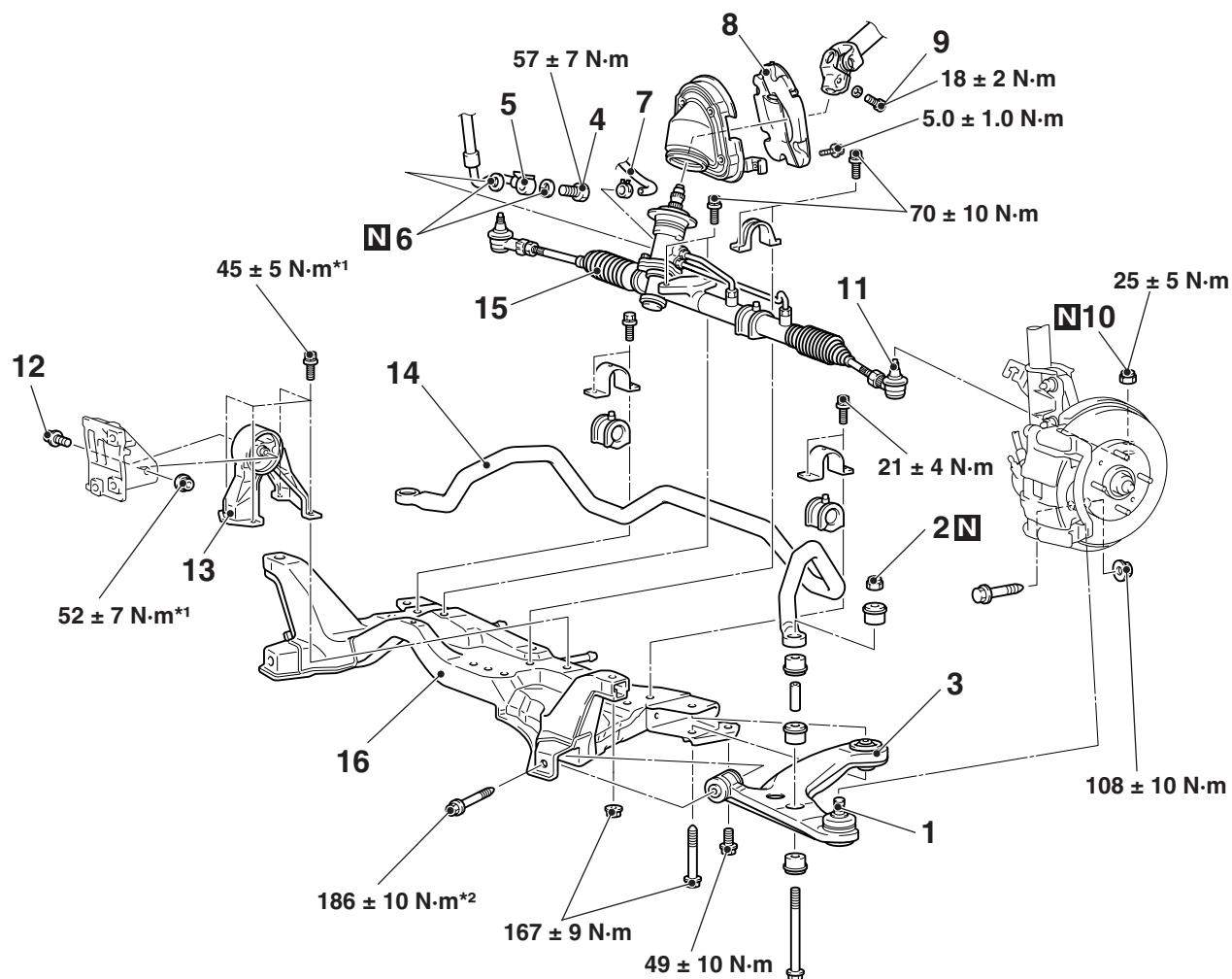
- Before removing the steering wheel and air bag module assembly, always refer to GROUP 52B - Service Precautions [P.52B-5](#), Air bag Module and Clock Spring [P.52B-157](#). Also, set the front wheels so that they are facing straight forward, and remove the ignition key. If you fail to do this, the SRS clock spring will be damaged, causing the SRS air bag to be inoperative and serious injury.
- *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.
- *²: Indicates parts which should be temporarily tightened, and then fully tightened with the vehicle on the earth in the unladen condition.

Pre-removal Operation

- Centremember Removal (Refer to [P.32-7](#)).
- Front Exhaust Pipe Removal (Refer to GROUP 15 – Exhaust Pipe and Main Muffler [P.15-8](#)).
- Steering Wheel and Air Bag Module Assembly Removal (Refer to GROUP 37 –Steering Wheel [P.37-15](#)).
- Power Steering Fluid Draining (Refer to GROUP 37 – On-vehicle Service [P.37-11](#)).

Post-installation Operation

- Front Exhaust Pipe Installation (Refer to GROUP 15 – Exhaust Pipe and Main Muffler [P.15-8](#)).
- Centremember Installation (Refer to [P.32-7](#)).
- Clock Spring Centring (Refer to GROUP 52B –Air Bag Modules and Clock Spring [P.52B-157](#)).
- Steering Wheel and Air Bag Module Assembly Installation (Refer to GROUP 37 –Steering Wheel [P.37-15](#)).
- Power Steering Fluid Supplying (Refer to GROUP 37 – On-vehicle Service [P.37-11](#)).
- Power Steering Fluid Line Bleeding (Refer to GROUP 37 – On-vehicle Service [P.37-11](#)).
- Press the dust cover with a finger to check whether the dust cover cracked or damaged.
- Checking Steering Wheel Position with Wheels Straight Ahead.
- Front Wheel Alignment Check and Adjustment (Refer to GROUP 33 –On-vehicle Service [P.33-5](#)).



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Removal steps

- >>B<<
1. Lower arm and knuckle connection
 2. Self-locking nut
 3. Lower arm assembly
 4. Eye bolt
 5. Pressure hose connection
 6. Gasket
 7. Return hose connection
 8. Shaft cover
 9. Steering shaft assembly and gear box connecting bolt

<<A>>

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>>A<<

Removal steps (Continued)

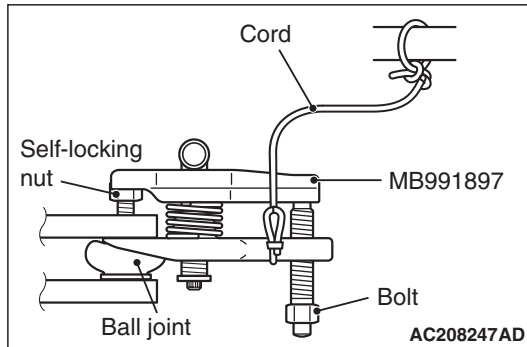
10. Self-locking nut
11. Tie rod end and knuckle connection
12. Engine rear roll stopper bracket connection bolt
- Crossmember assembly
13. Engine rear roll stopper bracket
14. Stabilizer bar
15. Steering gear and linkage
16. Crossmember

REMOVAL SERVICE POINTS

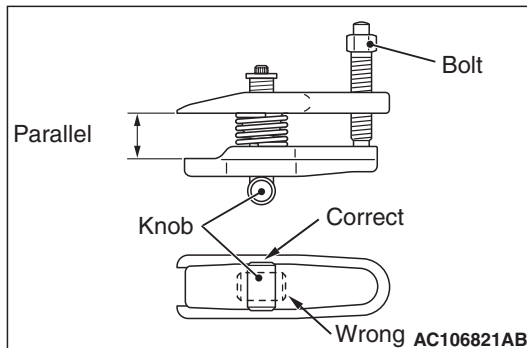
<<A>> TIE ROD END AND KNUCKLE DIS- CONNECTION

⚠ CAUTION

- Do not remove the nut from ball joint. Loosen it and use special tool to avoid possible damage to ball joint threads.
- Hang special tool with a cord to prevent it from falling.

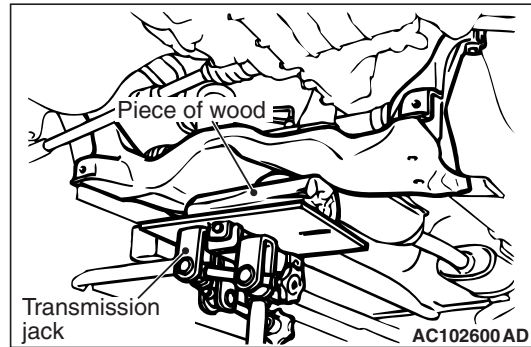


1. Install the special tool ball joint remover (MB991897) as shown in the figure.



2. Turn the bolt and knob as necessary to make the jaws of the special tool parallel, tighten the bolt by hand and confirm that the jaws are still parallel.
NOTE: When adjusting the jaws in parallel, make sure the knob is in the position shown in the figure.
3. Tighten the bolt with a wrench to disconnect the tie rod end.

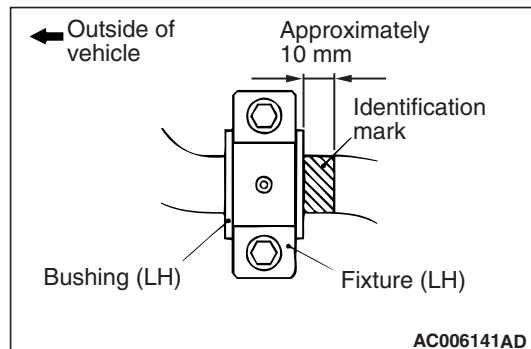
<> CROSSMEMBER ASSEMBLY REMOVAL



1. Use a transmission jack to hold the crossmember, and then remove the crossmember mounting nuts and bolts.
2. Lower the crossmember with the engine rear roll stopper bracket, the stabilizer bar, the return tube, and the steering gear.

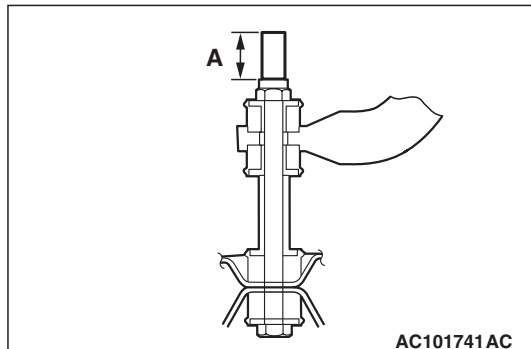
INSTALLATION SERVICE POINTS

>>A<< STABILIZER BAR INSTALLATION



Align the stabilizer bar identification mark with the right end of the bushing (LH).

>>B<< SELF-LOCKING NUT INSTALLATION



Tighten the self-locking nut until the stabilizer bar mounting bolt thread part protruding length meets the standard value.

Standard value (A): 22 ± 1.5 mm