
GROUP 32

POWER PLANT MOUNT

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GENERAL INFORMATION

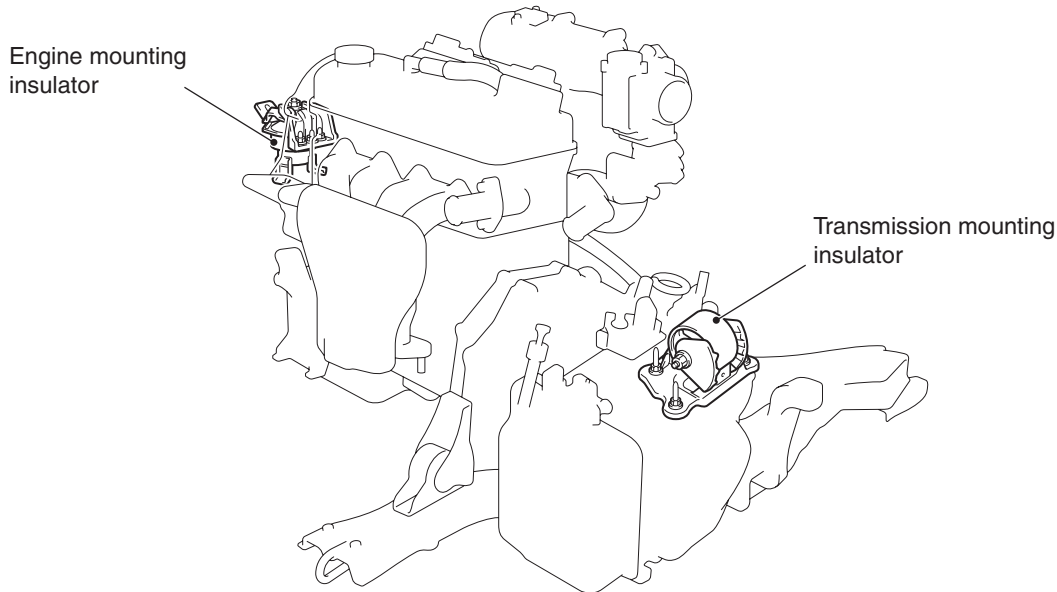
M1321000100759

The inertia axial system has been adopted for the engine mounting system.

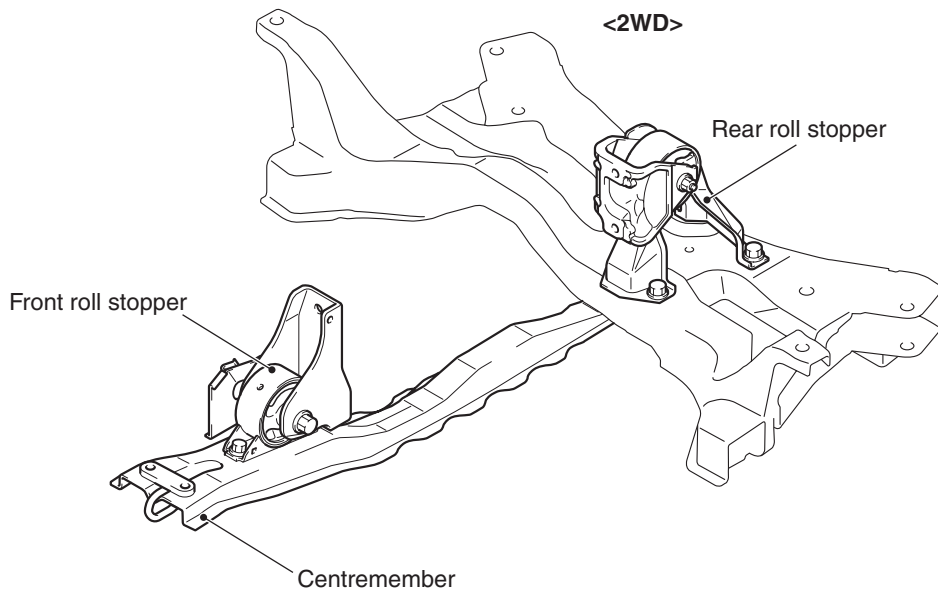
- Pressurized liquid-filled longitudinally installed cylindrical engine mounting insulator is adopted to reduce vibration during acceleration and cornering.

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

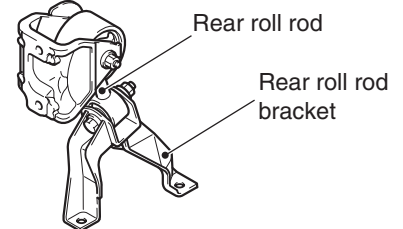
CONSTRUCTION DIAGRAM



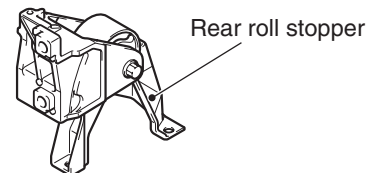
AC200012



<2WD>



<4WD-L.H. drive vehicles>



<4WD-R.H. drive vehicles>

AC504463
AC504548AB

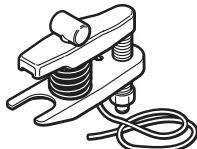
SERVICE SPECIFICATION

M1321000300496

Item	Standard value
Protruding length of stabilizer link thread part mm	9.4 ± 0.4

SPECIAL TOOL

M1321000600420

Tool	Number	Name	Use
 <p>AC106827</p>	MB991897 or MB992011	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

M1321001101045

CAUTION

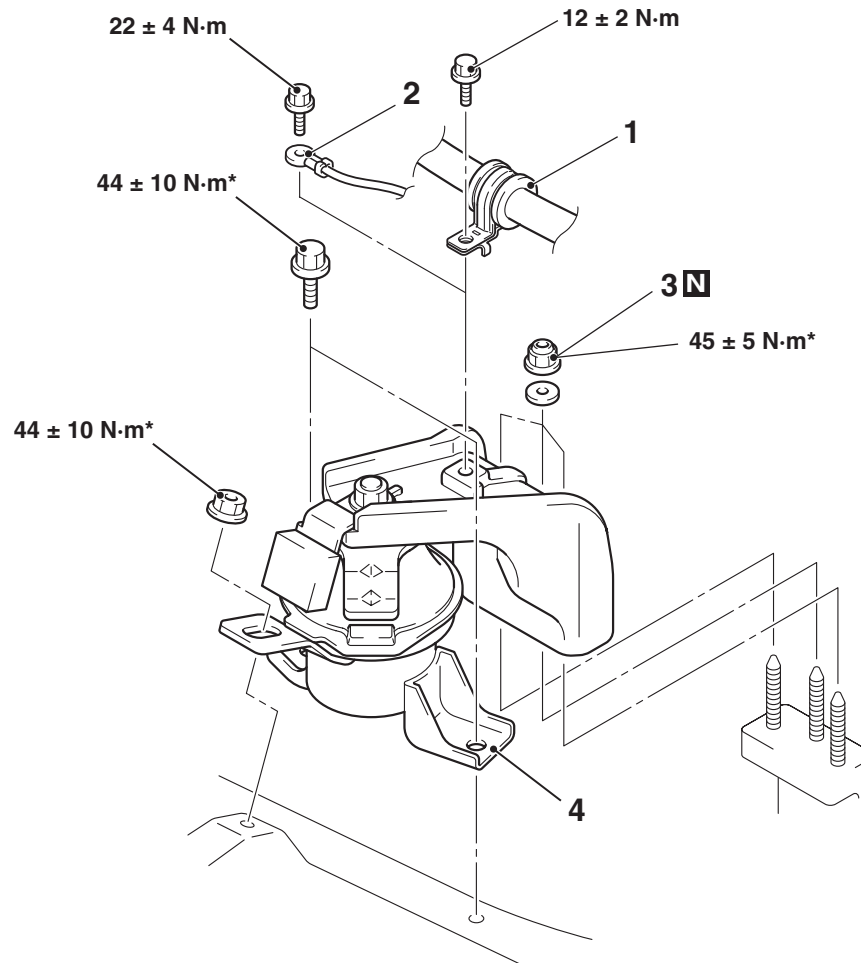
*: Indicates parts which should be initially tightened, and then fully tightened after placing the vehicle horizontally and loading the full weight of the engine on the vehicle body.

Pre-removal Operation

- Raise the engine and transmission assembly until its weight is not applied to the insulator, and support it securely.
- Accelerator Pedal Position Sensor Removal (Refer to GROUP 17, Accelerator Pedal Position Sensor [P.17-10](#)) <4G69-L.H. Drive Vehicles>.

Post-installation Operation

- Accelerator Pedal Position Sensor Installation (Refer to GROUP 17, Accelerator Pedal Position Sensor [P.17-10](#)) <4G69-L.H. Drive Vehicles>.
- Accelerator Cable Check and Adjustment (Refer to GROUP 17, On-vehicle Service [P.17-7](#)) <4G69-L.H. Drive Vehicles>.



AC400982AC

Removal steps

1. Pressure hose clamp <4G64>
2. Earth cable connection <4G69>

>>A<<

Removal steps (Continued)

3. Self-locking nuts
4. Engine mounting insulator

INSTALLATION SERVICE POINT

>>A<< SELF-LOCKING NUTS INSTALLATION

CAUTION

Do not tighten the self-locking nuts while the engine is hot.

Tighten the self-locking nuts to the specified torque while the engine is cold.

Tightening torque: $45 \pm 5 \text{ N}\cdot\text{m}$

INSPECTION

M1321001200209

- Check the engine mounting insulator for cracks or damage.

TRANSMISSION MOUNTING

REMOVAL AND INSTALLATION

M1321001400946

CAUTION

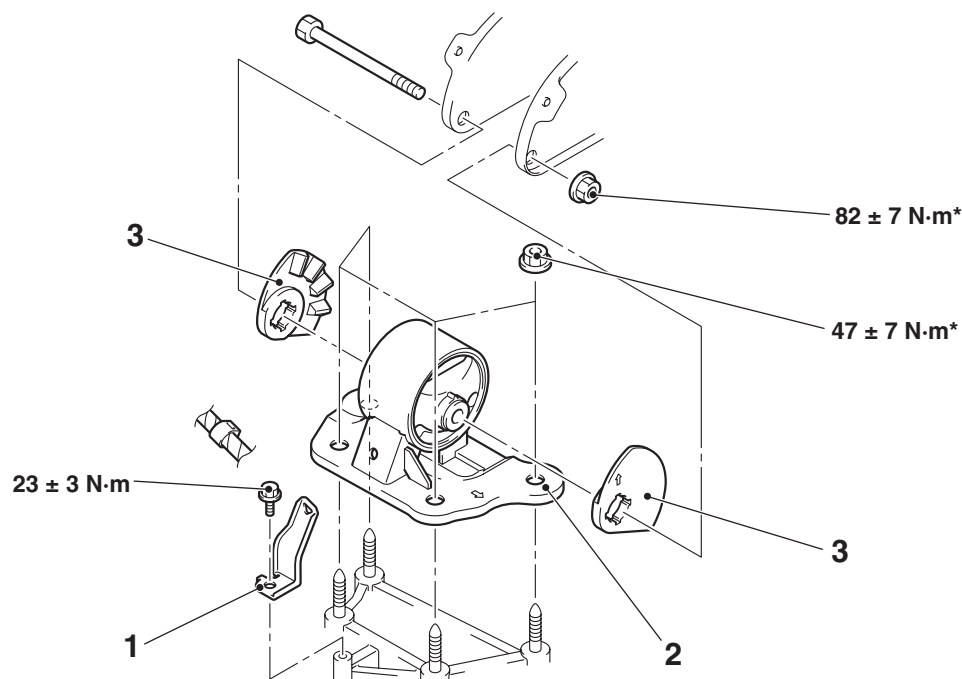
*: Indicates parts which should be initially tightened, and then fully tightened after placing the vehicle horizontally and loading the full weight of the engine on the vehicle body.

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<4G64>, P.15-4<4G69>].

Post-installation Operation

- Air Cleaner Installation [Refer to GROUP 15, Air Cleaner P.15-3<4G64>, P.15-4<4G69>].
- Battery and Battery Tray Installation



AC107606 AC

Removal steps

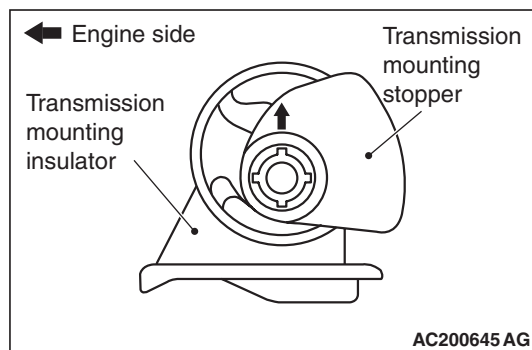
1. Control wiring harness bracket

Removal steps (Continued)

2. Transmission mounting insulator
3. Transmission mounting stopper

>>A<<

INSTALLATION SERVICE POINT

>>A<< TRANSMISSION MOUNTING
STOPPER INSTALLATION

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

INSPECTION

M1321001500125

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

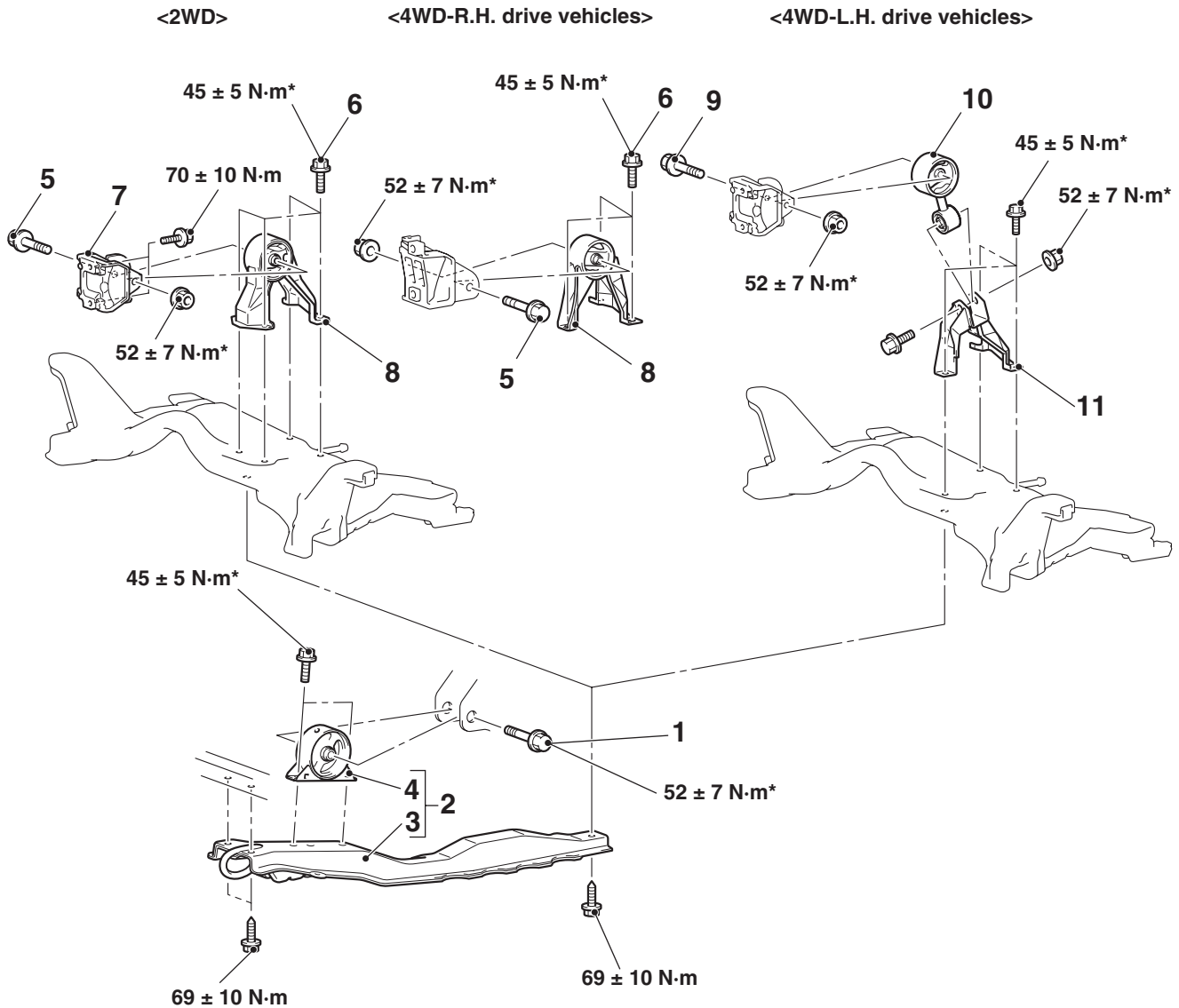
ENGINE ROLL STOPPER, CENTREMEMBER

REMOVAL AND INSTALLATION

M1321002300577

⚠ 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.



AC504468AB

Front roll stopper and centermember removal steps

- Under cover (Refer to GROUP 51, Under Cover P.51-29).
- 1. Front roll stopper connecting bolt
- 2. Centremember and front roll stopper assembly
- 3. Centremember
- 4. Front roll stopper

>>A<<

Rear roll stopper removal steps <2WD>

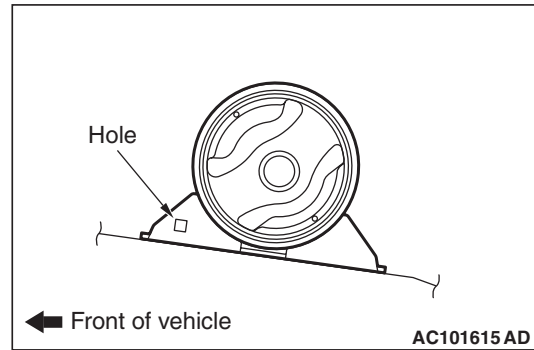
- 5. Rear roll stopper connecting bolt
- 6. Rear roll stopper connecting bolts
- 7. Rear roll mount bracket
- 8. Rear roll stopper

**Rear roll stopper removal steps
<4WD-R.H. drive vehicles>**

- Transfer assembly (Refer to GROUP 23A, Transfer Assembly [P.23A-143](#)).
- Crossmember assembly (Refer to [P.32-9](#)).
- 5. Rear roll stopper connecting bolt
- 6. Rear roll stopper connecting bolts
- 8. Rear roll stopper

**Rear roll rod bracket removal
steps <4WD-L.H. drive vehicles>**

- Front exhaust pipe (Refer to GROUP 15, Exhaust Pipe and Main Muffler [P.15-13](#)).
- 9. Rear roll rod connecting bolt
- 10. Rear roll rod
- Transfer assembly (Refer to GROUP 23A, Transfer Assembly [P.23A-143](#)).
- 11. Rear roll rod bracket

INSTALLATION SERVICE POINT**>>A<< FRONT ROLL STOPPER INSTALLATION**

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

INSPECTION

M1321002400035

- Check the roll stopper for cracks, separation or deformation.
- Check the centremember for cracks or damage.

CROSSMEMBER

REMOVAL AND INSTALLATION

M1321003200722

CAUTION

- 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.
- *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.15-13](#)).
- Steering Wheel 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](#)).

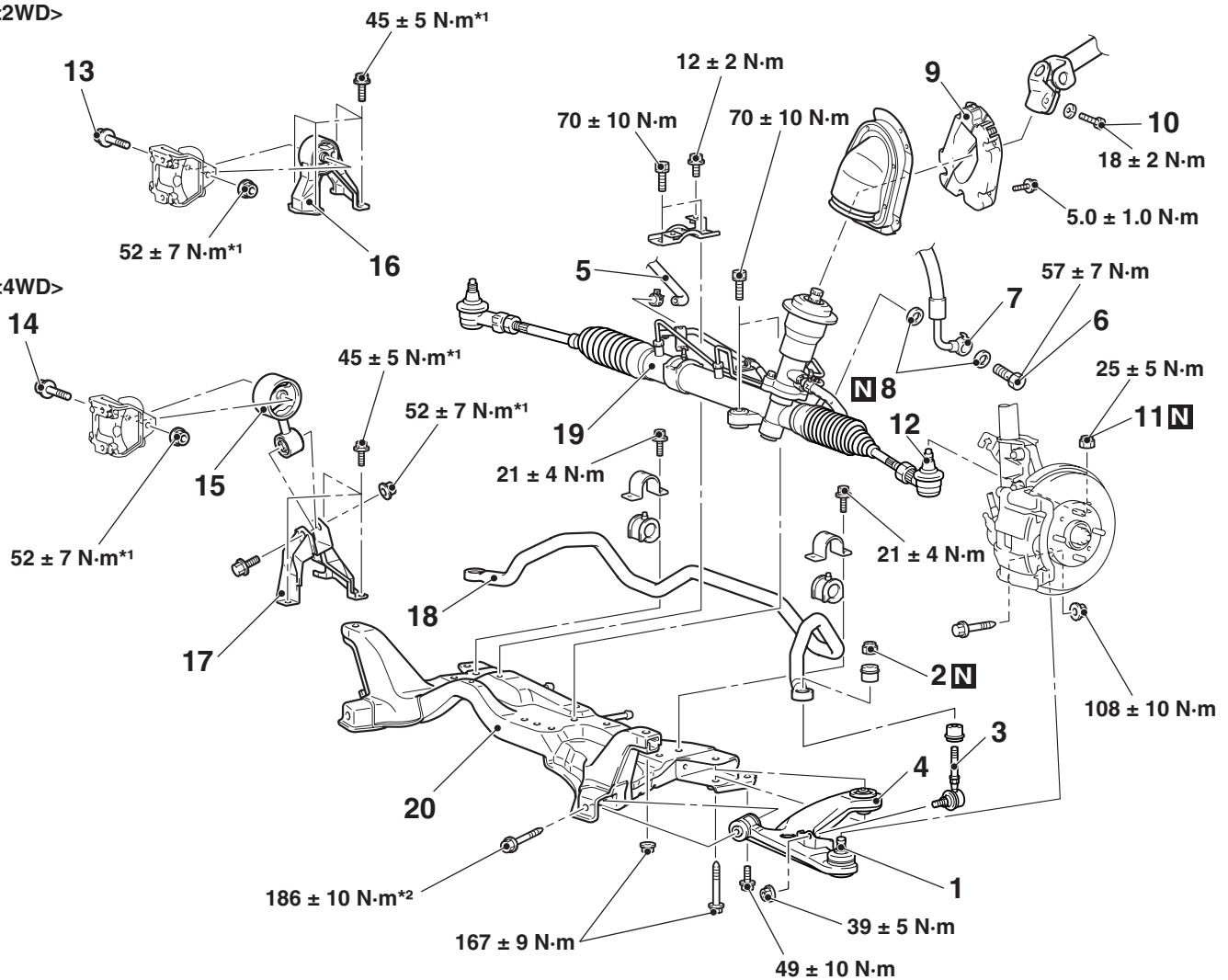
Post-installation Operation

- Centremember Installation (Refer to [P.32-7](#)).
- Front Exhaust Pipe Installation (Refer to GROUP 15, Exhaust Pipe and Main Muffler [P.15-13](#)).
- Steering Wheel 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.37-12](#)).
- 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 37, On-vehicle Service [P.37-9](#)).

<L.H. drive vehicles>

<2WD>

<4WD>



AC504469AB

Removal steps

>>B<<

1. Lower arm and knuckle connection
2. Self-locking nut
3. Stabilizer link assembly
4. Lower arm assembly
5. Return hose connection
6. Eye bolt
7. Pressure hose connection
8. Gaskets
9. Shaft cover
10. Steering shaft assembly and gear box connecting bolt
11. Self-locking nut
12. Tie rod end and knuckle connection
13. Rear roll stopper connecting bolt <2WD>

<<A>>

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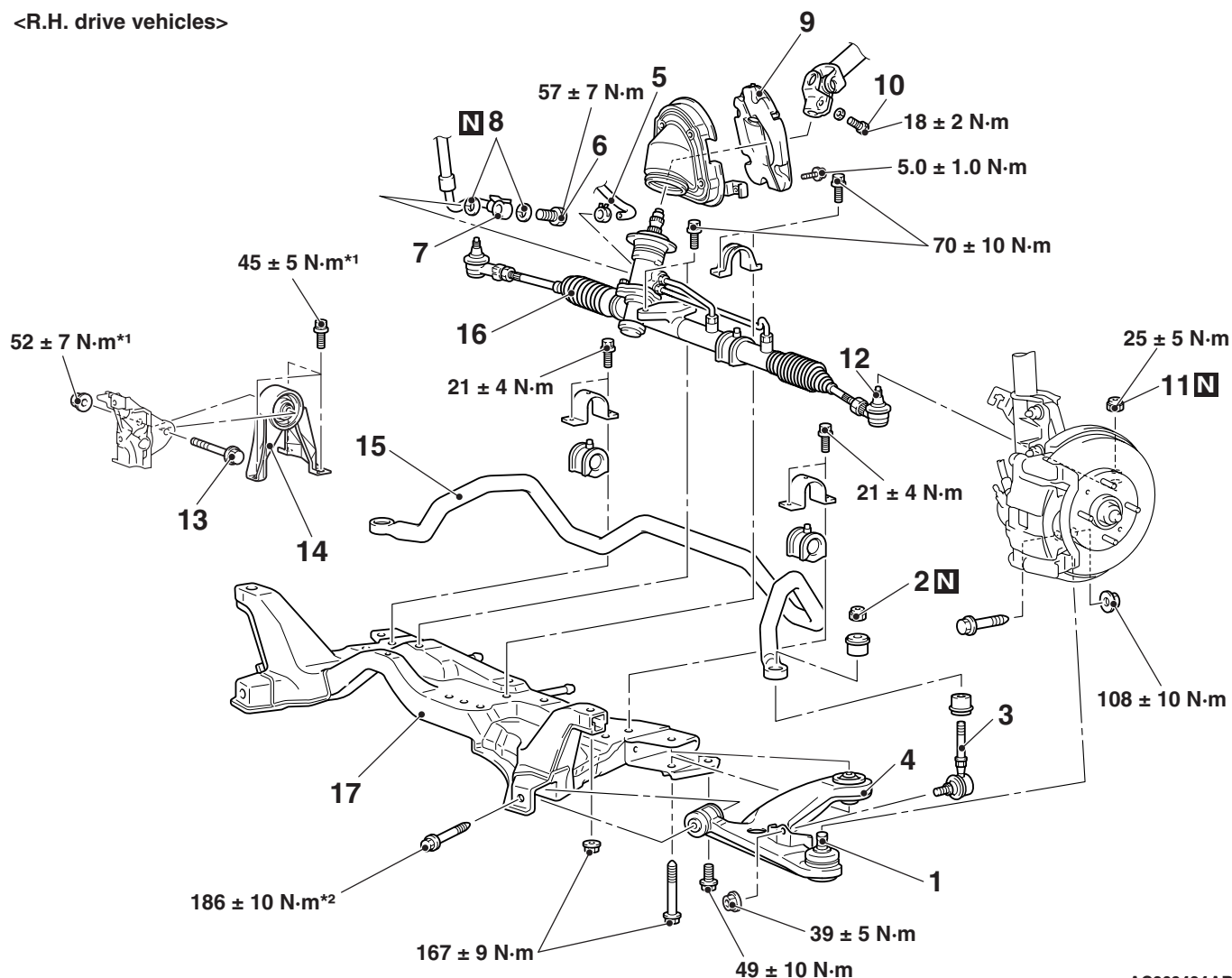
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>>A<<

Removal steps (Continued)

14. Rear roll rod connecting bolt <4WD>
15. Rear roll rod <4WD>
 - Crossmember, rear roll stopper, stabilizer bar, steering gear and linkage assembly <2WD>
 - Crossmember, rear roll rod bracket, stabilizer bar, steering gear and linkage assembly <4WD>
16. Rear rear roll stopper <2WD>
17. Rear roll rod bracket <4WD>
18. Stabilizer bar
19. Steering gear and linkage
20. Crossmember

<R.H. drive vehicles>



AC309434AB

Removal steps

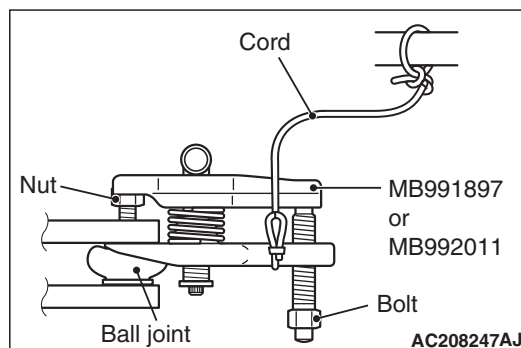
- >>B<<
1. Lower arm and knuckle connection
 2. Self-locking nut
 3. Stabilizer link assembly
 4. Lower arm assembly
 5. Return hose connection
 6. Eye bolt
 7. Pressure hose connection
 8. Gaskets
 9. Shaft cover
 10. Steering shaft assembly and gear box connecting bolt
 11. Self-locking nut
 12. Tie rod end and knuckle connection
 13. Rear roll stopper connecting bolt
 - <<A>>
 - <>
 - Crossmember, rear roll stopper, stabilizer, steering gear and linkage assembly
 14. Rear roll stopper
 - >>A<<
 15. Stabilizer bar
 16. Steering gear and linkage
 17. Crossmember

REMOVAL SERVICE POINTS

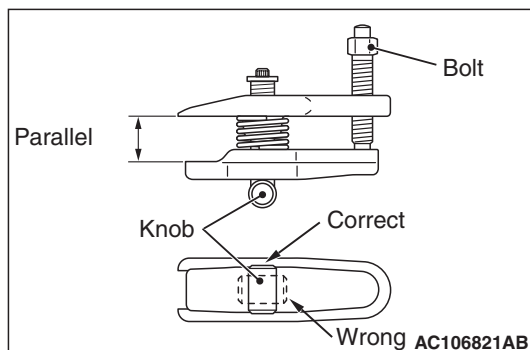
<<A>> TIE ROD END AND KNUCKLE DIS-CONNECTION

⚠ CAUTION

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



1. Install special tool ball joint remover (MB991897 or MB992011) as shown in the figure.

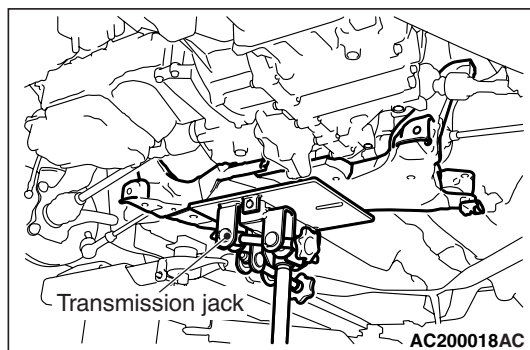


2. Turn the bolt and knob as necessary to make the jaws of the special tool parallel, tighten the bolt by hand and confirm that the jaws are still parallel.

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.

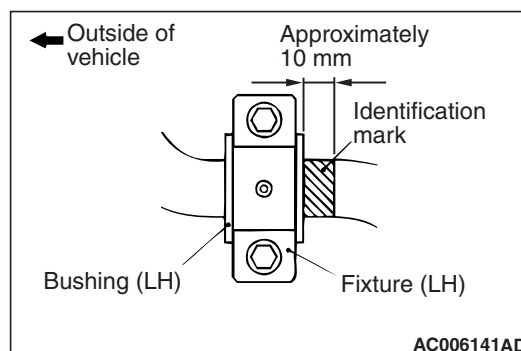
<> CROSSMEMBER, REAR ROLL STOPPER, STABILIZER BAR, STEERING GEAR AND LINKAGE ASSEMBLY <2WD>/CROSSMEMBER, REAR ROLL ROD BRACKET, STABILIZER BAR, STEERING GEAR AND LINKAGE ASSEMBLY <4WD> REMOVAL



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

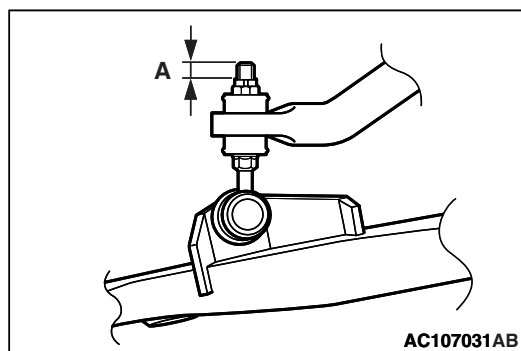
INSTALLATION SERVICE POINTS

>>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 link thread part protruding length meets the standard value.

Standard value (A): 9.4 ± 0.4 mm

INSPECTION

- Check the crossmember for cracks and damage.

M1321003300161