

GROUP 32

POWER PLANT MOUNT

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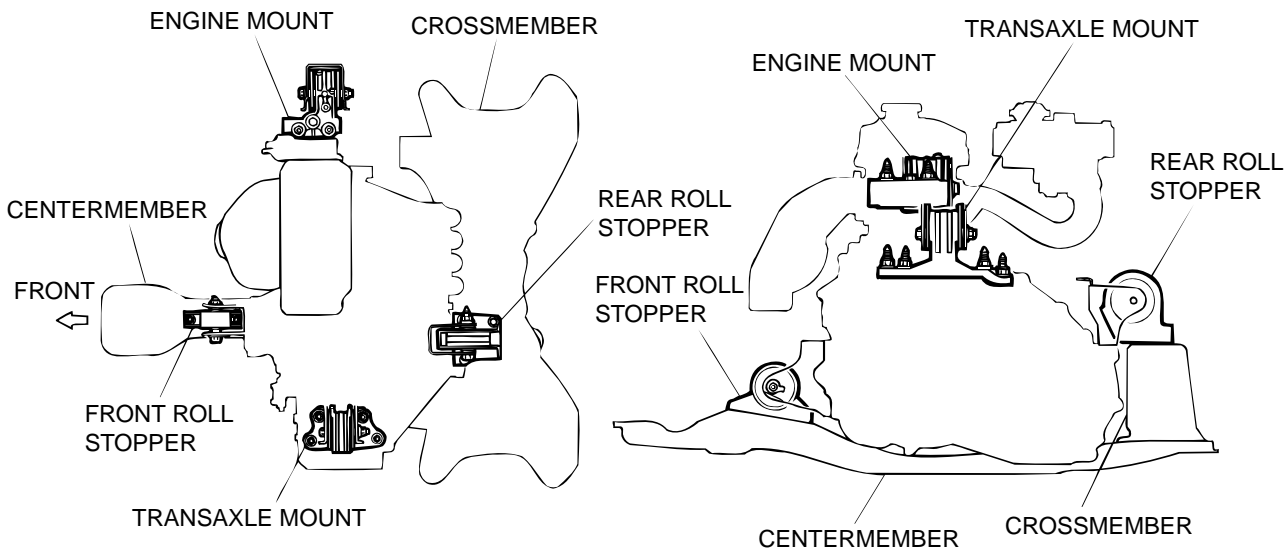
GENERAL DESCRIPTION

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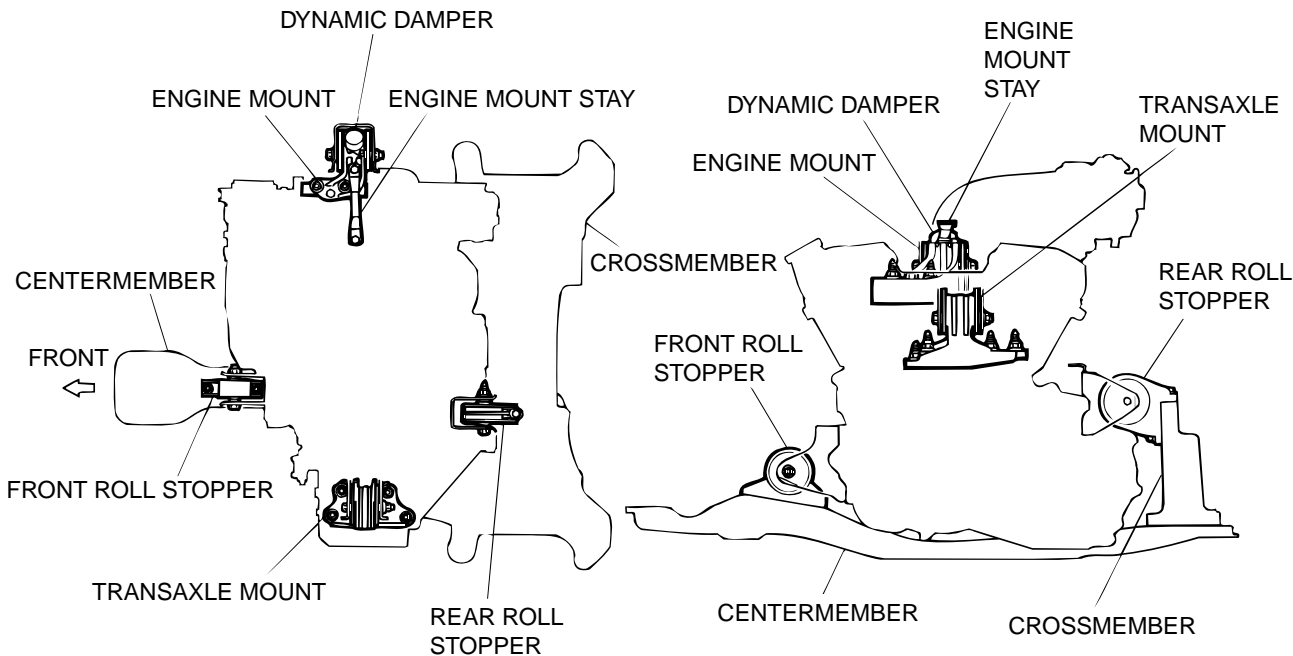
The engine-transaxle mount is of an inertial axis supporting type whose excellent features have already been proven in many Mitsubishi vehicles. The inertial axis supporting type mount supports the front upper part of the engine at the front and the rear upper part of the transaxle at the rear. This arrangement effectively suppresses the engine vibration.

ENGINE MOUNT CONSTRUCTION DIAGRAM

<2.4L ENGINE>



<3.0L ENGINE>

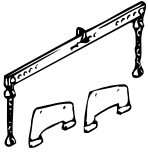
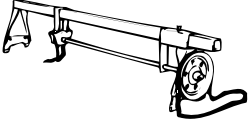
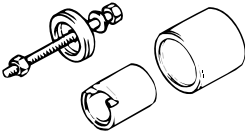
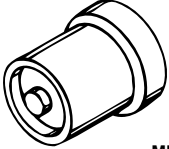


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SPECIAL TOOLS

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TOOL	TOOL NUMBER AND NAME	SUPERSESION	APPLICATION
 <p data-bbox="357 474 453 497">MB991453</p>	<p data-bbox="480 309 676 371">MB991453 Engine hanger</p>	<p data-bbox="780 309 1011 338">Tool not available</p>	<p data-bbox="1083 309 1506 405">To support the engine assembly during removal and installation of the transaxle mount</p>
 <p data-bbox="352 689 440 712">MZ203827</p>	<p data-bbox="480 533 639 595">MZ203827 Engine lifter</p>	<p data-bbox="780 533 1043 562">General service tool</p>	
 <p data-bbox="352 904 440 927">MB991045</p>	<p data-bbox="480 743 759 840">MB991045 Bushing remover and installer</p>	<p data-bbox="780 743 1011 772">Tool not available</p>	<p data-bbox="1083 743 1506 806">Driving out and press-fitting of crossmember bushings A and B</p>
 <p data-bbox="352 1120 440 1142">MB990828</p>	<p data-bbox="480 954 759 1050">MB990828 Bushing remover and installer</p>	<p data-bbox="780 954 1011 983">Tool not available</p>	<p data-bbox="1083 954 1482 1016">Driving out and press-fitting of crossmember bushing C</p>

ENGINE MOUNTING

REMOVAL AND INSTALLATION

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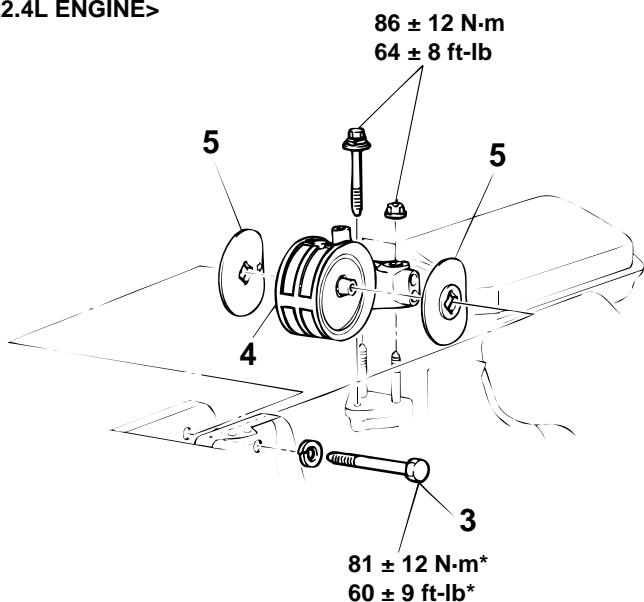
CAUTION

Mounting locations marked by * should be provisionally tightened, and then fully tightened after placing the vehicle horizontally and loading the full weight of the engine on the vehicle body.

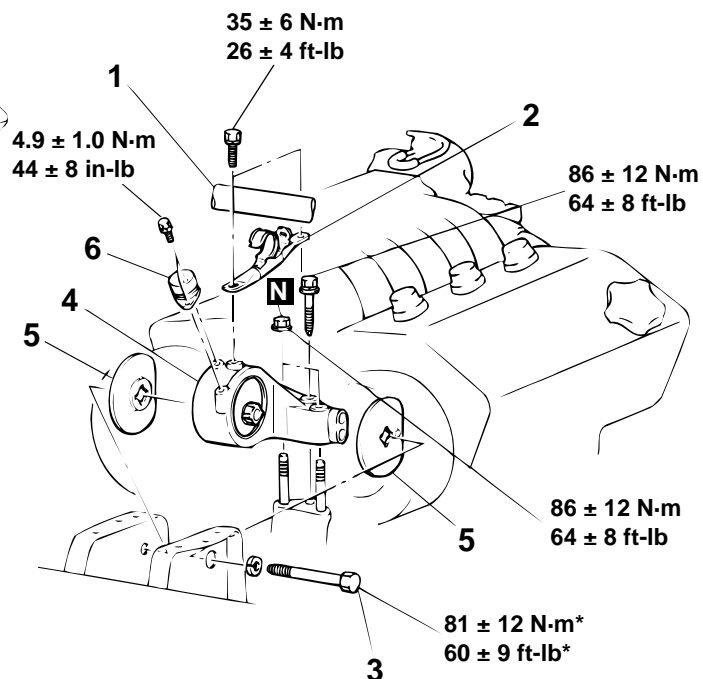
Pre-removal and Post-installation Operation

- Jack Up the Engine and Transmission Assembly Until There is no Weight on the Engine Mount Bracket Insulator.
- Reserve Tank Removal and Installation (Refer to GROUP 14, Radiator P.14-19.)

<2.4L ENGINE>



<3.0L ENGINE>



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REMOVAL STEPS

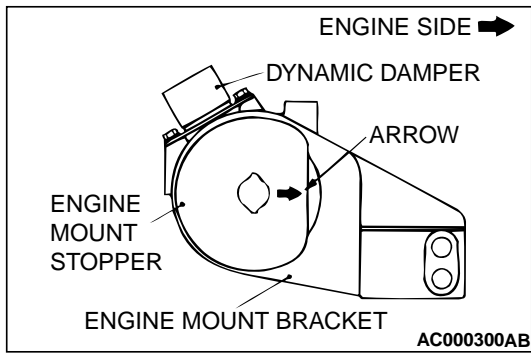
1. SUCTION HOSE <3.0L ENGINE>
2. ENGINE MOUNT STAY <3.0L ENGINE>
3. ENGINE MOUNT INSULATOR MOUNTING BOLT

REMOVAL STEPS (Continued)

- >>A<<
4. ENGINE MOUNT BRACKET
 5. ENGINE MOUNT STOPPER
 6. DYNAMIC DAMPER <3.0L ENGINE>

INSTALLATION SERVICE POINT**>>A<< ENGINE MOUNT STOPPER INSTALLATION**

Clamp the engine mount stopper so that the arrow points in the direction as shown in the diagram.

**INSPECTION**

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- Check the insulators for cracks, separation or deformation.
- Check the front insulator stoppers for deformation.

TRANSAXLE (TRANSMISSION) MOUNTING

REMOVAL AND INSTALLATION

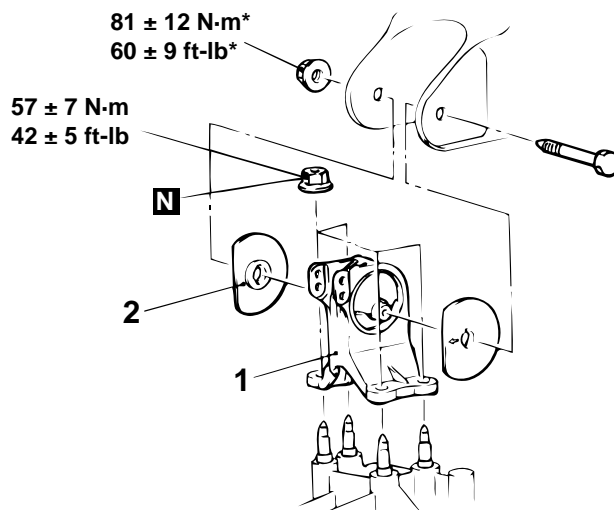
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CAUTION

Mounting locations marked by * should be provisionally 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

- Air Cleaner Assembly Removal and Installation (Refer to GROUP 15, Air Cleaner P.15-5.)
- Battery and Battery Tray Removal and Installation (Refer to GROUP 54A, Battery P.54A-8.)
- Centermember Removal and Installation (Refer to P.32-9.)
- Transaxle and Rear Roll Stopper Connecting Bolt Removal and Installation (Refer to P.32-9.)
- Rear Roll Stopper Bracket Removal and Installation <2.4L Engine-M/T> (Refer to GROUP 22B, Transaxle P.22B-8.), <2.4L Engine-A/T> (Refer to GROUP 23B, Transaxle P.23B-11.)



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REMOVAL STEPS

- <<A>> 1. TRANSAXLE MOUNT BRACKET
>>A<< 2. TRANSAXLE MOUNT STOPPER

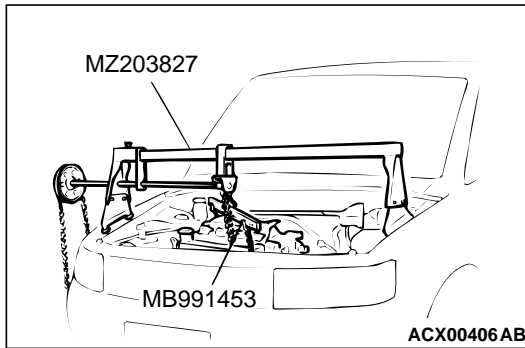
Required Special Tools:

- MB991453: Engine Hanger

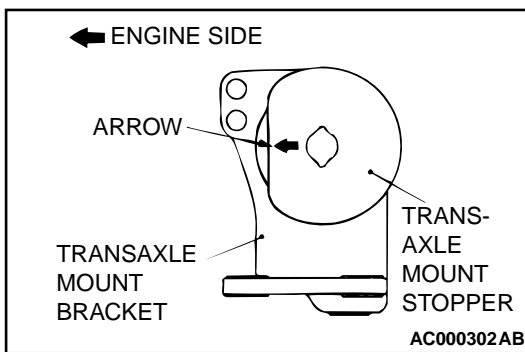
- MZ203827: Engine Lifter

REMOVAL SERVICE POINT**<<A>> TRANSAXLE MOUNT BRACKET REMOVAL**

1. Install special tools MB991453 and MZ203827 to the vehicle body to support the engine and transaxle assembly.
2. Remove the centermember and rear roll stopper bracket.
3. Remove the bolt and nut of the transaxle mount bracket.
4. After lowering the engine and transaxle assembly, remove the transaxle mount bracket.

**INSTALLATION SERVICE POINT****>>A<< TRANSAXLE MOUNT STOPPER INSTALLATION**

Clamp the transaxle mount stopper so that the arrow points in the direction as shown in the diagram.



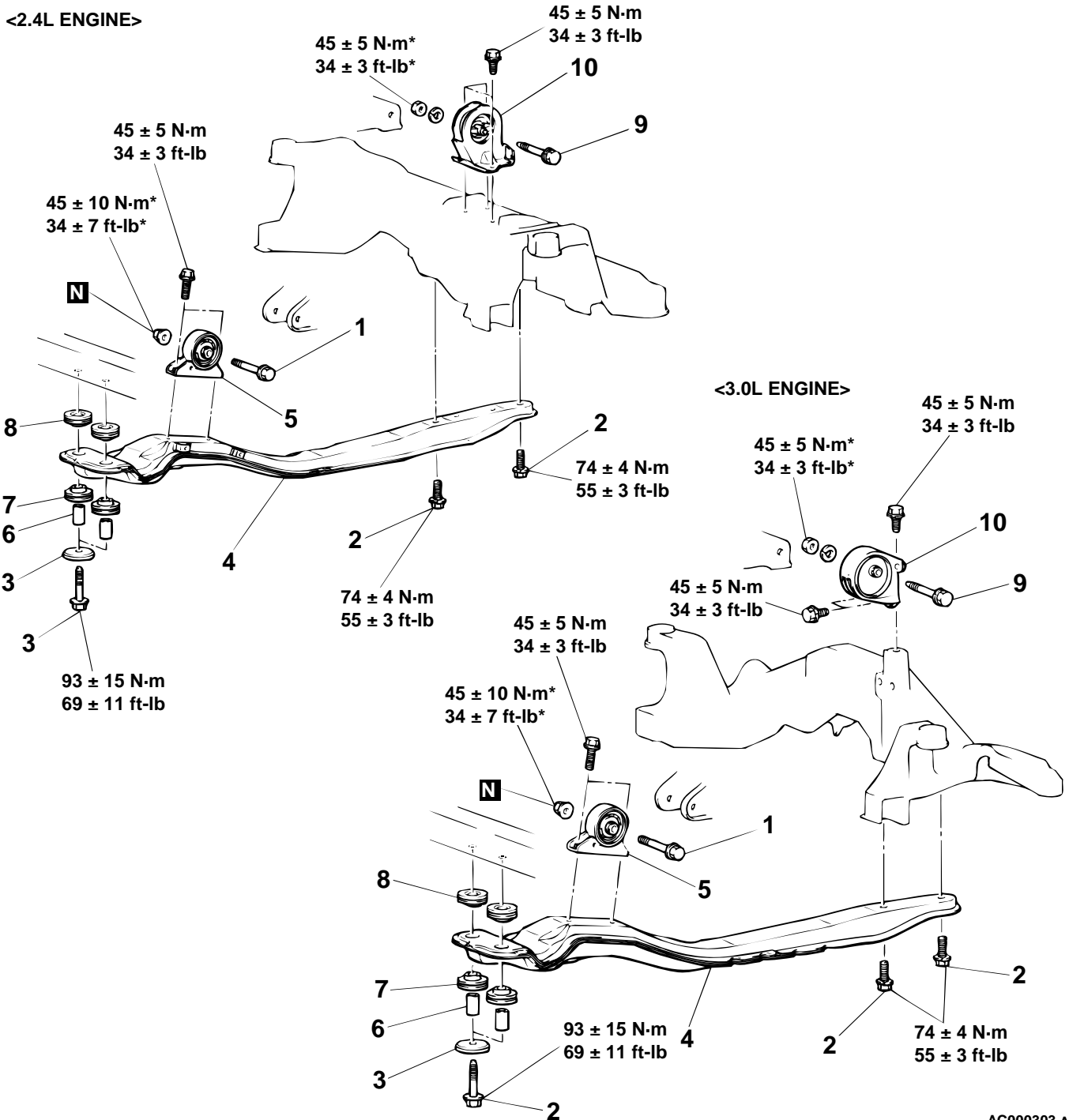
ENGINE ROLL STOPPER AND CENTERMEMBER

REMOVAL AND INSTALLATION

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CAUTION

Mounting locations marked by * should be provisionally tightened, and then fully tightened after placing the vehicle horizontally and loading the full weight of the engine on the vehicle body.



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**FRONT ROLL STOPPER,
CENTERMEMBER REMOVAL
STEPS**

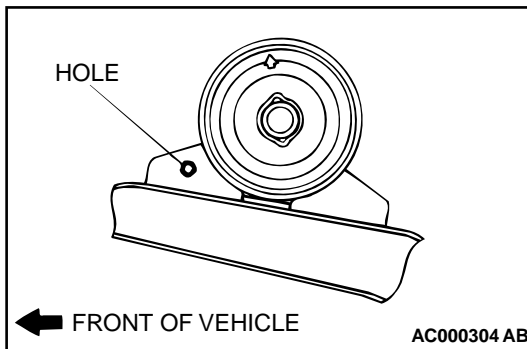
- >>A<<
1. TRANSAXLE AND FRONT ROLL STOPPER CONNECTING BOLT
 2. CENTERMEMBER MOUNTING BOLTS
 3. STOPPER
 4. CENTERMEMBER
 5. FRONT ROLL STOPPER
 6. COLLAR

**FRONT ROLL STOPPER,
CENTERMEMBER REMOVAL
STEPS (Continued)**

7. BUSHING (LOWER)
 8. BUSHING (UPPER)
- REAR ROLL STOPPER
REMOVAL STEPS**
9. TRANSAXLE AND REAR ROLL STOPPER CONNECTING BOLT
 10. REAR ROLL STOPPER

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

Install so that the hole in the front roll stopper is facing towards the front of the vehicle.



CROSSMEMBER

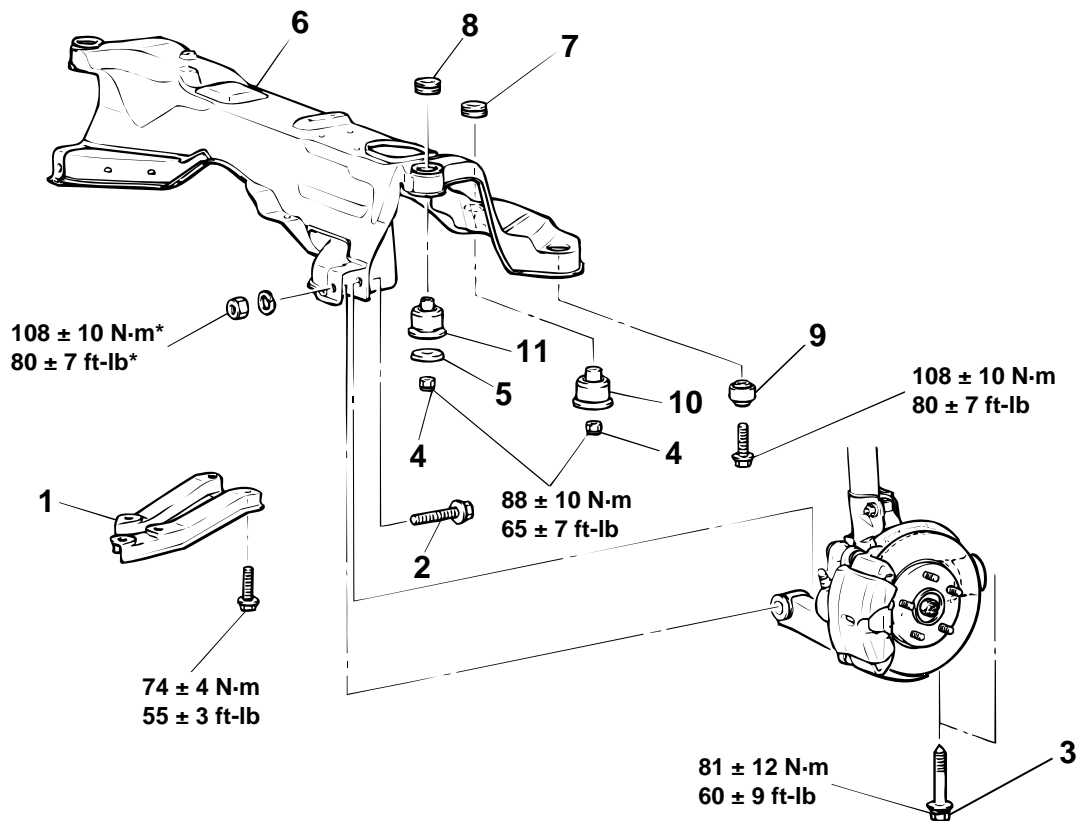
REMOVAL AND INSTALLATION

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CAUTION

- *: Indicates parts which should be temporarily tightened, and then fully tightened with the vehicle on the ground in the unladen condition.
- For vehicles with SRS, before removal of steering gear box, refer to GROUP 52B, center the front wheels and remove the ignition key. Failure to do so may damage the SRS clock spring and render the SRS system inoperative, risking serious injury.

Pre-removal Operation	Post-installation Operation
<ul style="list-style-type: none"> Power Steering Fluid Draining (Refer to GROUP 37A, On-vehicle Service – Fluid Replacement P.37A-16.) Centermember Removal (Refer to P.32-9.) Front Exhaust Pipe Removal (Refer to GROUP 15, Exhaust pipe and Main Muffler P.15-19 <2.4L Engine>, P.15-21 <3.0L Engine>.) Stabilizer Bar Removal (Refer to GROUP 33A, Stabilizer Bar P.33A-17.) Rear Roll Stopper Removal (Refer to P.32-9.) 	<ul style="list-style-type: none"> Rear Roll Stopper Installation (Refer to P.32-9.) Stabilizer Bar Installation (Refer to GROUP 33A, Stabilizer Bar P.33A-17.) Front Exhaust Pipe Installation (Refer to GROUP 15, Exhaust Pipe and Main Muffler P.15-19 <2.4L Engine>, P.15-21 <3.0L Engine>.) Centermember Installation (Refer to P.32-9.) Power Steering Fluid Supplying and Bleeding (Refer to GROUP 37A, On-vehicle Service – Fluid Replacement P.37A-16.) Steering Wheel Straight Ahead Position Checking.) Wheel Alignment Check and Adjustment (Refer to GROUP 33A, On-vehicle Service – Front Wheel Alignment Check and Adjustment P.33A-6.)



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- REMOVAL STEPS**
1. STAY <2.4L ENGINE>
 2. LOWER ARM AND CROSSMEMBER CONNECTION
 3. LOWER ARM MOUNT BOLT

- REMOVAL STEPS (Continued)**
- POWER STEERING GEAR BOX (REFER TO GROUP 37A, POWER STEERING GEAR BOX P.37A-23.)

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REMOVAL STEPS (Continued)

4. CROSSMEMBER MOUNTING NUT
5. LOWER PLATE
6. CROSSMEMBER
7. STOPPER A
8. STOPPER B
9. BUSHING C
10. BUSHING A
11. BUSHING B

Required Special Tools:

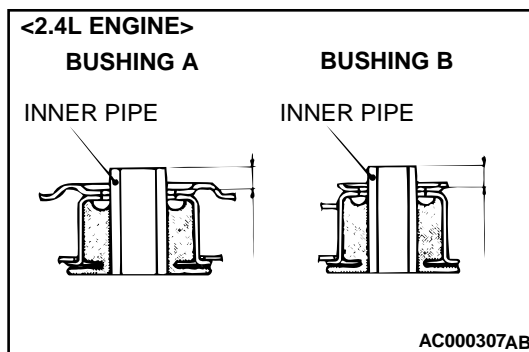
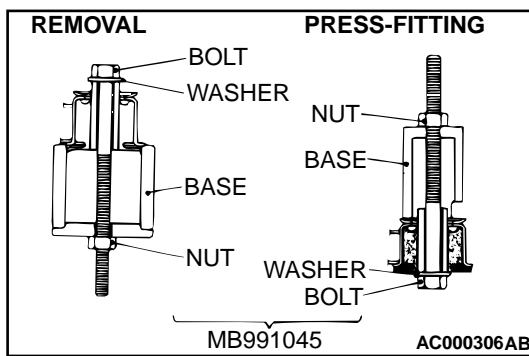
- MB990828: Bushing Remover and Installer
- MB991045: Bushing Remover and Installer

CROSSMEMBER BUSHING REPLACEMENT

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Crossmember Bushings A and B

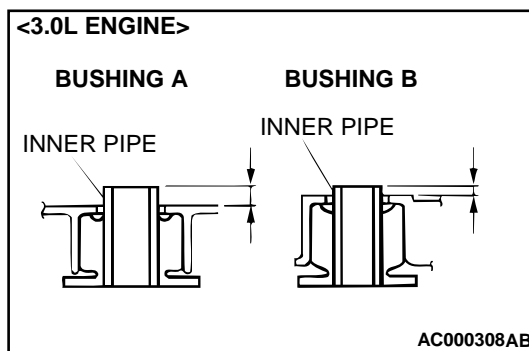
1. Apply soapy water to the contact surface of the bushing when press-fitted the bushing.



2. The bushing should be press-fitted so that the inner pipe projection is at the standard length.

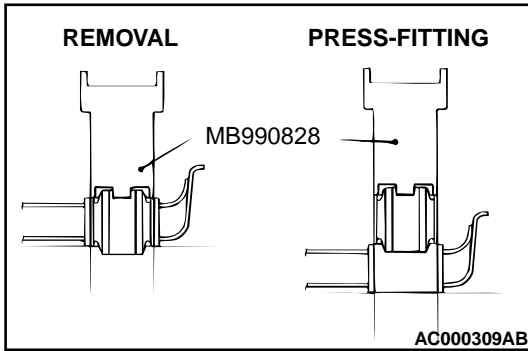
Standard values

- <2.4L ENGINE>
 - Bushing A: 9.0 ± 1.0 mm (0.35 ± 0.04 inch)
 - Bushing B: 4.0 ± 1.0 mm (0.16 ± 0.04 inch)
- <3.0L ENGINE>
 - Bushing A, B: 9.0 ± 1.0 mm (0.35 ± 0.04 inch)



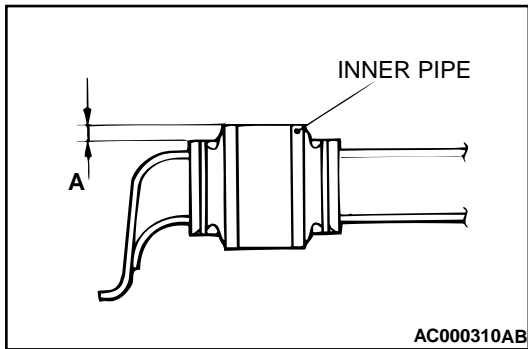
Crossmember Bushing C

1. Use special tool MB990828 to drive out and press-fit the crossmember bushing C.



2. The bushing should be press-fitted so that the inner pipe projection is at the standard length.

Standard value (A): 4.0 ± 0.5 mm (0.16 ± 0.02 inch)



SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATION

M1321004100085

ITEMS	SPECIFICATIONS
Centermember front mounting bolt	93 ± 15 N·m (69 ± 11 ft-lb)
Centermember rear mounting bolt	74 ± 4 N·m (55 ± 3 ft-lb)
Crossmember and stay connecting bolt <2.4L ENGINE>	74 ± 4 N·m (55 ± 3 ft-lb)
Crossmember mounting bolt	108 ± 10 N·m (80 ± 7 ft-lb)
Crossmember mounting nut	88 ± 10 N·m (65 ± 7 ft-lb)
Dynamic damper bolt	4.9 ± 1.0 N·m (44 ± 8 in-lb)
Engine mount bracket bolt	86 ± 12 N·m (64 ± 8 ft-lb)
Engine mount bracket nut	86 ± 12 N·m (64 ± 8 ft-lb)
Engine mount insulator mounting bolt	81 ± 12 N·m (60 ± 9 ft-lb)
Engine mount stay bolt <3.0L ENGINE>	35 ± 5 N·m (26 ± 4 ft-lb)
Lower arm and crossmember connecting nut	108 ± 10 N·m (80 ± 7 ft-lb)
Lower arm mount bolt	81 ± 12 N·m (60 ± 9 ft-lb)
Transaxle and front roll stopper connecting bolt	45 ± 5 N·m (34 ± 3 ft-lb)
Transaxle and front roll stopper connecting nut	45 ± 5 N·m (34 ± 3 ft-lb)
Transaxle and rear roll stopper connecting bolt	45 ± 5 N·m (34 ± 3 ft-lb)
Transaxle and rear roll stopper connecting nut	45 ± 5 N·m (34 ± 3 ft-lb)
Transaxle mount bracket nut	57 ± 7 N·m (42 ± 5 ft-lb)
Transaxle mount insulator mounting nut	81 ± 12 N·m (60 ± 9 ft-lb)

SERVICE SPECIFICATION

M1321000300043

ITEMS	STANDARD VALUE		
Inner pipe projection mm (in)	Bushings A		9.0 ± 1.0 (0.35 ± 0.04)
	Bushings B	2.4L ENGINE	4.0 ± 1.0 (0.16 ± 0.04)
		3.0L ENGINE	9.0 ± 1.0 (0.35 ± 0.04)
	Bushings C		4.0 ± 0.5 (0.16 ± 0.02)

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