GROUP 32

POWER PLANT MOUNT

CONTENTS

GENERAL DESCRIPTION	32-2	ENGINE ROLL STOPPER AND CENTERMEMBER	32-6
SPECIAL TOOL	32-3	REMOVAL AND INSTALLATION	32-6
ENGINE MOUNTING	32-4	CROSSMEMBER*	32-8
REMOVAL AND INSTALLATION	32-4	REMOVAL AND INSTALLATION	32-8
		INSPECTION	32-11
TRANSAXLE MOUNTING	32-5		
REMOVAL AND INSTALLATION	32-5	SPECIFICATIONS	32-12
INSPECTION	32-6	FASTENER TIGHTENING	
		SPECIFICATIONS	32-12
		SERVICE SPECIFICATION	32-12

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

- 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 and passenger (from rendering the SRS inoperative).

 Service or maintenance of any SRS component or SRS-related component must be performed only at an authorized MITSUBISHI dealer.
- 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 SRSrelated component.

The SRS includes the following components: SRS air bag control unit, SRS warning light, front impact sensors, 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 (*).

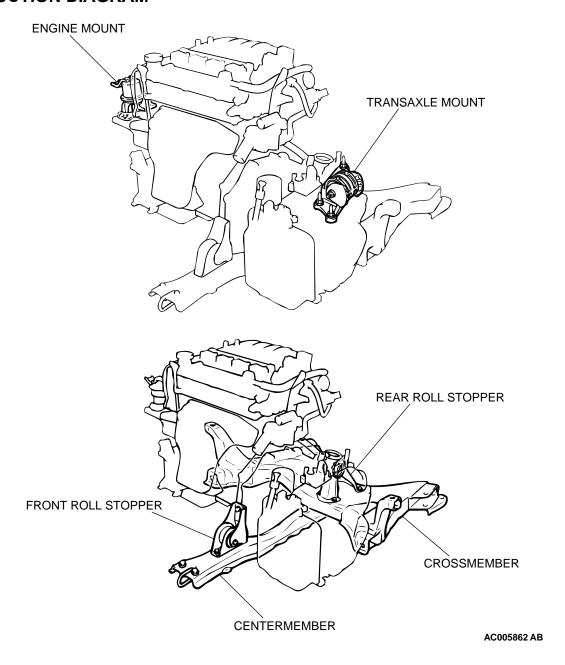
GENERAL DESCRIPTION

M1321000100243

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

- Longitudinal installation type of cylindrical liquidfilled engine mount is used for reduction of idle vibration and improvement of ride feeling.
- For transaxle mount, liquid-filled mount is used to improve ride feeling by optimizing insulator.
- Upper installation of roll mount reduces engine rolling, and increase of insulator bore also reduces idle vibration.

CONSTRUCTION DIAGRAM



SPECIAL TOOL

M1321000600215

TOOL	TOOL NUMBER AND NAME	SUPERSESSION	APPLICATION
AC106827	MB991897 Ball joint remover	MB991113-01, MB990635-01 or General service tool	Knuckle and tie rod end ball joint disconnection NOTE: Steering linkage puller (MB990635 or MB991113)is also used to disconnect knuckle and tie rod end ball joint.

ENGINE MOUNTING

REMOVAL AND INSTALLATION

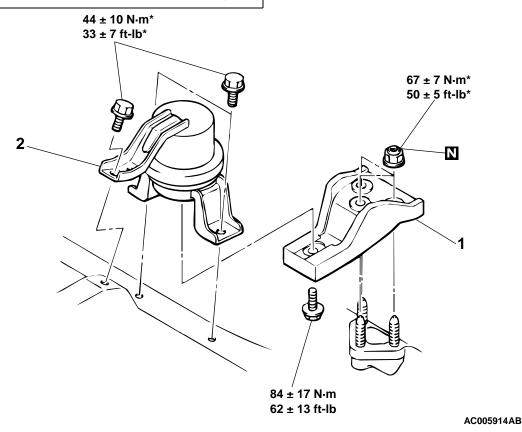
M1321001100291

⚠ 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 transaxle assembly until its weight is not applied to the insulator, and support it securely.



REMOVAL STEPS

- 1. ENGINE MOUNT BRACKET
- 2. ENGINE MOUNT INSULATOR

TRANSAXLE MOUNTING

REMOVAL AND INSTALLATION

M1321001400292

⚠ CAUTION

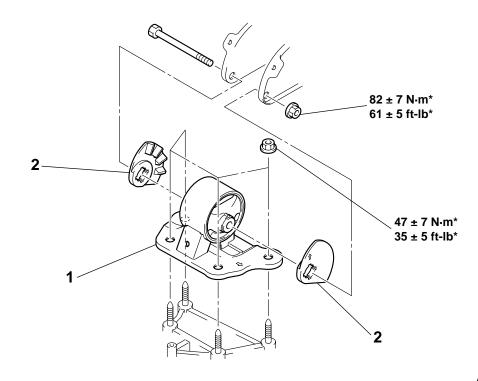
*: Indicates parts which should be initially tightened, and then fully tightened after placing the vehicle horizontally and loading the full weight of the engine on the vehicle body.

Pre-removal Operation

- Raise the engine and transaxle 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.15-4.)
- Rear Roll Stopper Removal (Refer to P.32-6.)

Post-installation Operation

- Rear Roll Stopper Installation (Refer to P.32-6.)
- Air Cleaner Installation (Refer to GROUP 15, Air Cleaner P.15-4.)
- Battery and Battery Tray Installation



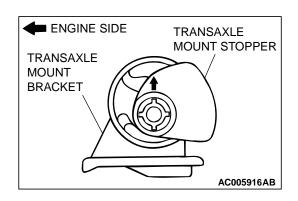
AC202855 AB

REMOVAL STEPS

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

INSTALLATION SERVICE POINT

>>A<< TRANSAXLE MOUNT STOPPER INSTALLATION Install the transaxle mount stopper so that its arrow points upward.



INSPECTION

M1321001500095

 Check the transaxle mount insulator for cracks, separation or deformation.

ENGINE ROLL STOPPER AND CENTERMEMBER

REMOVAL AND INSTALLATION

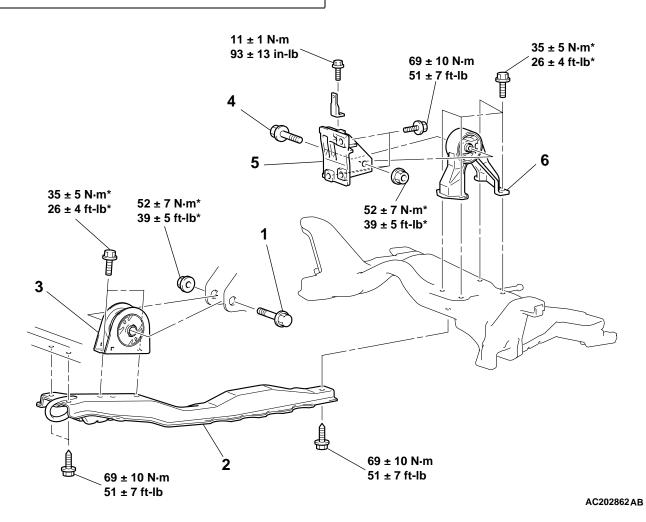
M1321002300191

⚠ 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



FRONT ROLL STOPPER AND CENTERMEMBER REMOVAL STEPS

- 1. FRONT ROLL STOPPER CONNECTING BOLT
- 2. CENTERMEMBER
- >>A<< 3. FRONT ROLL STOPPER

REAR ROLL STOPPER REMOVAL STEPS

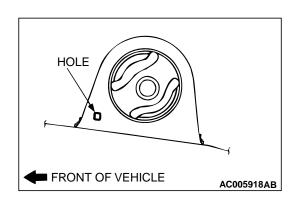
- 4. REAR ROLL STOPPER CONNECTING BOLT
- 5. REAR ROLL MOUNT BRACKET
- 6. REAR ROLL STOPPER

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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.



CROSSMEMBER

REMOVAL AND INSTALLATION

M1321003200261

⚠ CAUTION

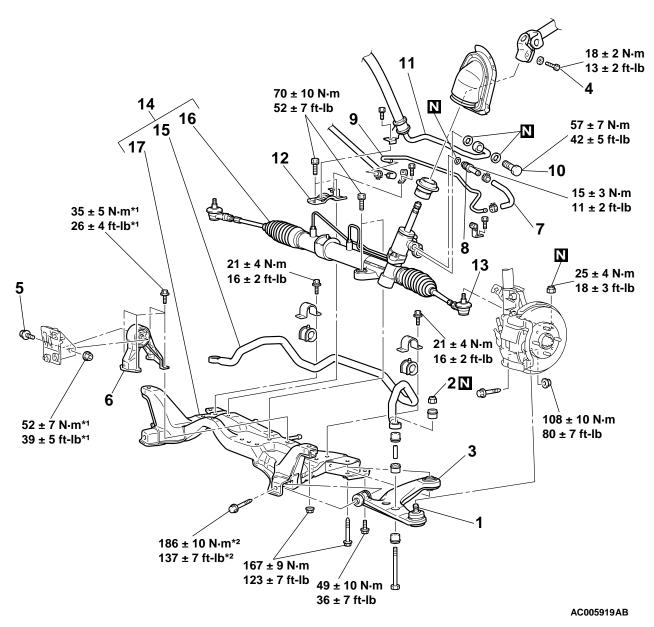
- Before removing the steering wheel and air bag module assembly, always refer to GROUP 52B Service Precautions, Air bag Module and Clock Spring. Also, set the front wheels so that they are
 facing straight forward, and remove the ignition key. If you fail to do this, the SRS clock spring will
 be damaged, 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 ground in the unladen condition.

Pre-removal and Post-installation Operation

- Center Member Removal (Refer to P.32-6.)
- Front Exhaust Pipe Remove (Refer to GROUP 15, Exhaust Pipe and Main Muffler P.15-9.)
- Steering Wheel Air Bag Module Assembly Removal (Refer to GROUP 37A, Steering Wheel and Shaft Assembly P.37A-20.)
- Power Steering Fluid Draining (Refer to GROUP 37A, Onvehicle Service P.37A-16.)

Pre-removal and Post-installation Operation

- Center Member Installation (Refer to P.32-6.)
- Front Exhaust Pipe Installation (Refer to GROUP 15, Exhaust Pipe and Main Muffler P.15-9.)
- Steering Wheel Air Bag Module Assembly Installation (Refer to 37A, Steering Wheel and Shaft Assembly P.37A-20.)
- Power Steering Fluid Supplying (Refer to GROUP 37A, On-vehicle Service P.37A-16.)
- Power Steering Fluid Line Bleeding (Refer to GROUP 37A, On-vehicle Service P.37A-17.)
- 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 37A, On-vehicle Service P.37A-14.)



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<<C>>>

>>A<<

REMOVAL STEPS

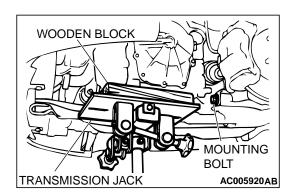
- LOWER ARM AND KNUCKLE CONNECTION
- >>B<<

<<A>>>

- 2. SELF-LOCKING NUT
- LOWER ARM ASSEMBLY
- 4. STEERING SHAFT ASSEMBLY AND GEAR BOX CONNECTING BOLT
- 5. REAR ROLL STOPPER CONNECTION BOLT
- 6. REAR ROLL STOPPER
- 7. RETURN HOSE
- 8. RETURN PIPE

REMOVAL STEPS (Continued)

- 9. RETURN PIPE
- 10. EYE BOLT
- 11. PRESSURE HOSE CONNECTION
- 12. CLAMP
- 13. TIE ROD END AND KNUCKLE CONNECTION
- 14. CROSSMEMBER ASSEMBLY
- 15. STABILIZER BAR
- 16. STEERING GEAR AND LINKAGE
- 17. CROSSMEMBER



REMOVAL SERVICE POINTS

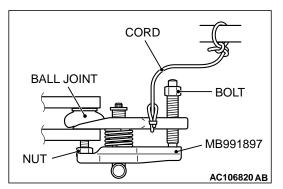
<<A>> LOWER ARM ASSEMBLY REMOVAL

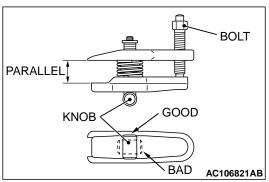
Lift the transaxle with a transmission jack, and then withdraw the front mounting bolt on the left lower arm assembly.

<> TIE ROD END AND KNUCKLE DISCONNECTION

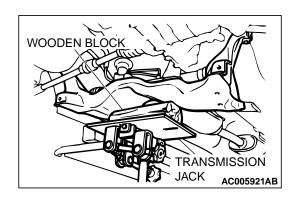
⚠ CAUTION

- Do not remove the nut from ball joint. Loosen it and use special tool MB991897 to avoid possible damage to ball joint threads.
- Hang special tool MB991897 with cord to prevent it from falling.
- 1. Install the special tool MB991897 as shown in the figure.



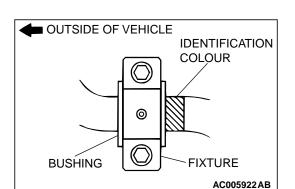


- 2. Turn the bolt and knob as necessary to make the jaws of special tool MB991897 parallel, tighten the bolt by hand and confirm that the jaws are still parallel.
 - NOTE: When adjusting the jaws in parallel, make sure the knob is in the position shown in the figure.
- 3. Tighten the bolt with a wrench to disconnect the tie rod end.



<<>>> CROSSMEMBER ASSEMBLY REMOVAL

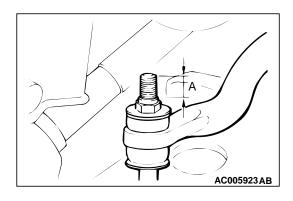
Retain the crossmember with a transmission jack, and then remove the crossmember mounting bolt.



INSTALLATION SERVICE POINTS

>>A<< STABILIZER BAR INSTALLATION

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



>>B<< SELF-LOCKING NUT INSTALLATION

Tighten the self-locking bolt until its protruding length meets the standard value.

Standard value (A): 22 \pm 1.5 mm (0.87 \pm 0.06 inch)

INSPECTION

M1321003300116

• Check the crossmembers for cracks or damage.

SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATIONS

M1321004100234

ITEM	SPECIFICATION
Center member to frame bolt	69 ± 10 N·m (51 ± 7 ft-lb)
Center member to crossmember bolt	69 ± 10 N·m (51 ± 7 ft-lb)
Crossmember mounting bolt	49 ± 10 N·m (36 ± 7 ft-lb)
Crossmember mounting nut	167 ± 9 N·m (123 ± 7 ft-lb)
Cylinder clamp assembly bolt, gear box connecting bolt	70 ± 10 N·m (52 ± 7 ft-lb)
Engine mount insulator to bracket bolt	84 ± 17 N·m (62 ± 13 ft-lb)
Engine mount bracket to engine nut	67 ± 7 N·m (50 ± 5 ft-lb)
Engine mount insulator to frame bolt	44 ± 10 N·m (33 ± 7 ft-lb)
Front roll stopper to center member bolt	35 ± 5 N·m (26 ± 4 ft-lb)
Front roll stopper to transaxle nut	52 ± 7 N·m (39 ± 5 ft-lb)
Lower arm and crossmember connecting bolt front	186 ± 10 N·m (137 ± 7 ft-lb)
Lower arm and crossmember connecting bolt rear	167 ± 9 N·m (123 ± 7 ft-lb)
Lower arm to knuckle connecting nut	108 ± 10 N·m (80 ± 7 ft-lb)
Oil pump eye bolt	57 ± 7 N·m (42 ± 5 ft-lb)
Pressure tube flare nut	15 ± 3 N·m (11 ± 2 ft-lb)
Rear roll bracket to harness clamp bolt	11 ± 1 N·m (93 ± 13 in-lb)
Rear roll stopper to crossmember bolt	35 ± 5 N·m (26 ± 4 ft-lb)
Rear roll stopper to rear roll mount bracket nut	52 ± 7 N·m (39 ± 5 ft-lb)
Rear roll mount bracket to transaxle bolt	69 ± 10 N·m (51 ± 7 ft-lb)
Stabilizer bracket bolt	21 ± 4 N·m (16 ± 2 ft-lb)
Steering shaft and gear box connecting bolt	18 ± 2 N·m (13 ± 2 ft-lb)
Transaxle mount to frame bolt	82 ± 7 N·m (61 ± 5 ft-lb)
Transaxle mount to transaxle nut	47 ± 7 N·m (35 ± 5 ft-lb)
Tie rod end to knuckle fixing nut	25 ± 4 N·m (18 ± 3 ft-lb)

SERVICE SPECIFICATION

M1321000300225

ITEM	SPECIFICATION
Protruding length of stabilizer bar mounting bolt mm (in)	$22 \pm 1.5 \ (0.87 \pm 0.06)$

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