

GROUP 33A

FRONT SUSPENSION

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

WARNING

- *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 SRS-related component.*

NOTE

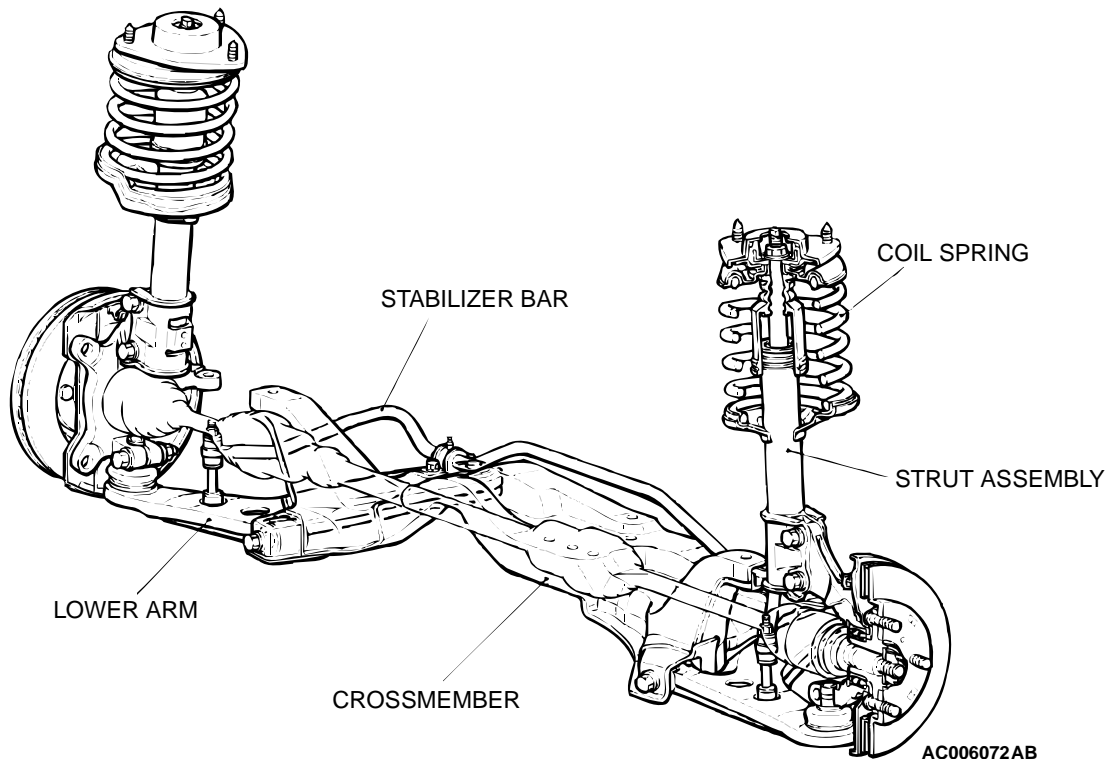
The SRS includes the following components: SRS air bag control unit, SRS warning light, front impact sensors, air bag module, clock spring, and interconnecting wiring. Other SRS-related components (that may have to be removed/installed in connection with SRS service or maintenance) are indicated in the table of contents by an asterisk (*).

GENERAL INFORMATION

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The front suspension is a McPherson strut with coil spring. The shock absorber is gas-filled hydraulic double-acting type.

CONSTRUCTION DIAGRAM



FRONT SUSPENSION DIAGNOSIS

INTRODUCTION TO FRONT SUSPENSION DIAGNOSIS

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If the front suspension is faulty, the vehicle will not run straightforward or noise will occur. Incorrect wheel alignment, malfunction of strut assembly, stabilizer bar, coil spring, or worn or out-of-balance tires can cause these problems.

FRONT SUSPENSION DIAGNOSIS TROUBLESHOOTING STRATEGY

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Use these steps to plan your diagnostic strategy. If you follow them carefully, you will be sure that you have exhausted most of the possible ways to find a front suspension fault.

1. Gather information from the customer.

2. Verify that the condition described by the customer exists.
3. Find and repair the malfunction by following the Symptom Chart and Symptom Procedures.
4. Verify malfunction is eliminated.

SYMPTOM CHART

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SYMPTOM	INSPECTION PROCEDURE	REFERENCE PAGE
Steering wheel is heavy, vibrates or pulls to one side	1	P.33A-3
Excessive body rolling	2	P.33A-3
Poor ride	3	P.33A-4
Unequal ride height	4	P.33A-4
Noise	5	P.33A-4

SYMPTOM PROCEDURES

INSPECTION PROCEDURE 1: Steering Wheel Is Heavy, Vibrates or Pulls to One Side

DIAGNOSIS

STEP 1. Check the tires.

Refer to GROUP 31, Diagnosis P.31-2.

Q: Are the tires in normal condition?

YES : Replace the tires as necessary, then go to Step 2.

NO : If out of balance, balance the tires as necessary. If excessively worn, replace the tires as necessary and go to Step 5.

STEP 2. Check the wheel alignment.

Q: Is the wheel alignment correct?

YES : Go to Step 3.

NO : Adjust it, then go to Step 5.

STEP 3. Check the ball joint.

Q: Is the ball joint in good condition?

YES : Go to Step 4.

NO : Replace it, then go to Step 5.

STEP 4. Check the coil spring.

Q: Is the coil spring in good condition?

YES : Go to Step 5.

NO : Replace it, then go to Step 5.

STEP 5. Check symptoms.

Q: Is the malfunction eliminated?

YES : The procedure is complete.

NO : Return to Step 1.

INSPECTION PROCEDURE 2: Excessive Body Rolling

DIAGNOSIS

STEP 1. Check for broken or deteriorated stabilizer bar.

Q: Is the stabilizer bar in good condition?

YES : Go to Step 2.

NO : Replace it, then go to Step 3.

STEP 2. Check the strut assembly for damage.

Q: Is the strut assembly in good condition?

YES : Go to Step 3.

NO : Replace it, then go to Step 3.

STEP 3. Check symptoms.

Q: Is the malfunction eliminated?

YES : The procedure is complete.

NO : Return to Step 1.

INSPECTION PROCEDURE 3: Poor Ride**DIAGNOSIS****STEP 1. Check for improper tire inflation pressure.**

Refer to GROUP 31, On-vehicle Service – Tire Inflation Pressure Check [P.31-7](#).

Q: Is the tire inflation correct?

YES : Go to Step 2.

NO : Adjust it, then go to Step 4.

STEP 2. Check for broken or deteriorated coil spring(s).

Q: Are the coil spring(s) broken or deteriorated?

YES : Replace the spring(s), then go to Step 4.

NO : Go to Step 3.

INSPECTION PROCEDURE 4: Unequal Ride Height**DIAGNOSIS****STEP 1. Check for broken or deteriorated coil spring(s).**

Q: Is the coil spring(s) broken or deteriorated?

YES : Replace it, then go to Step 2.

NO : Go to Step 2.

INSPECTION PROCEDURE 5: Noise**DIAGNOSIS****STEP 1. Check for lack of lubrication.**

Q: Is lubrication inadequate?

YES : Lubricate it, then go to Step 5.

NO : Go to Step 2.

STEP 2. Check the tightened parts for looseness as well as the bushings for wear.

Q: Are the tightened parts and bushings in good condition?

YES : Go to Step 3.

NO : Replace it, then go to Step 5.

STEP 3. Check for strut assembly damage.

Q: Is the strut assembly damaged?

YES : Replace it, then go to Step 4.

NO : Go to Step 4.

STEP 4. Check symptoms.

Q: Is the malfunction eliminated?

YES : The procedure is complete.

NO : Return to Step 1.

STEP 2. Check symptoms.

Q: Is the malfunction eliminated?

YES : The procedure is complete.

NO : Return to Step 1.

STEP 3. Check for broken coil spring.

Q: Is the coil spring broken?

YES : Replace it, then go to Step 5.

NO : Go to Step 4.

STEP 4. Check for strut assembly damage.

Q: Is the strut assembly damaged?

YES : Replace it, then go to Step 5.

NO : Go to Step 5.

STEP 5. Check symptoms.

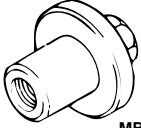
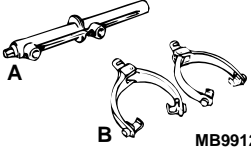
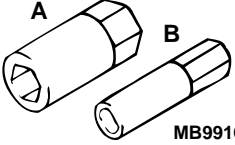
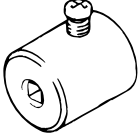

Q: Is the malfunction eliminated?

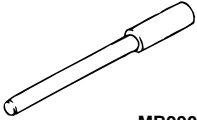
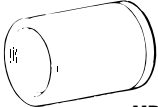
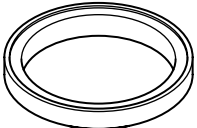

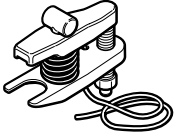
YES : The procedure is complete.

NO : Return to Step 1.

SPECIAL TOOLS

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TOOL	TOOL NUMBER AND NAME	SUPERSESION	APPLICATION
 <p>MB991004</p>	<p>MB991004 Wheel alignment gauge attachment</p>	<p>MB991004-01 or General service tool</p>	<p>Wheel alignment measurement</p>
 <p>MB991237</p>	<ul style="list-style-type: none"> • A: MB991237 Spring compressor body • B: MB991238 Arm set 	<p>MIT221369 or general service tool</p>	<p>Front coil spring compression</p>
 <p>MB991680</p>	<p>MB991680 Wrench set</p> <ul style="list-style-type: none"> • A: MB991681 Wrench • B: MB991682 Socket 	<p>—</p>	<p>Strut assembly disassembly and reassembly</p>
 <p>MB991006</p>	<p>MB991006 Preload socket</p>	<p>MB990228-01</p>	<p>Lower arm ball joint breakaway torque check</p>
 <p>MB990800</p>	<p>MB990800 Ball joint dust cover installer</p>	<p>MB990800-01 or General service tool</p>	<p>Lower arm ball joint dust cover installation</p>

TOOL	TOOL NUMBER AND NAME	SUPERSESION	APPLICATION
 <p>MB990883</p>	MB990883 Rear suspension bushing arbor	MB990883-01 or general service tool	Lower arm bushing removal and press-fitting
 <p>MB990971</p>	MB990971 Rear wheel bearing & installer joint	-	
	MB990887 Ring	-	
 <p>MB990890</p>	MB990890 Rear suspension bushing base	MB990890-01 or general service tool	
 <p>AC106827</p>	MB991897 Ball joint remover	MB991113-01 or general service tool	Tie rod end Knuckle disconnection <i>NOTE: Steering linkage puller (MB990635 or MB991113) is also used to disconnect knuckle and tie rod end ball joint.</i>

ON-VEHICLE SERVICE

FRONT WHEEL ALIGNMENT CHECK AND ADJUSTMENT

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Required Special Tool:

- MB991004: Wheel Alignment Gauge Attachment.

Measure wheel alignment with alignment equipment on a level surface. The front suspension, steering system, and wheels should be serviced to normal condition before measuring wheel alignment.

TOE-IN

Standard value: 1 ± 2 mm (0.04 ± 0.09 inch)

1. Adjust the toe-in by undoing the clip and jam nut, and turning the left and right tie rod turnbuckles by the same amount (in opposite directions).

NOTE: The toe will move out as the left turnbuckle is turned toward the front of the vehicle and the right turnbuckle is turned toward the rear of the vehicle.

2. Install the clip and tighten the jam nut to the specified torque.

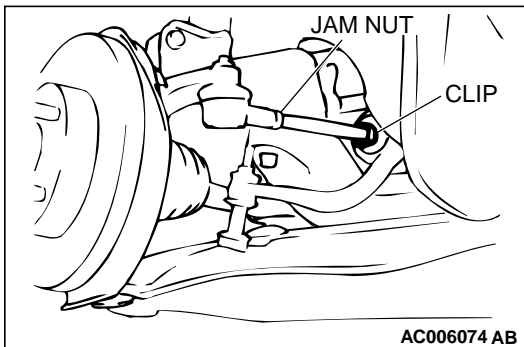
Standard value: 40 ± 5 N·m (30 ± 3 ft·lb)

3. Confirm that the toe-in is at the standard value.
4. Use a turning radius gauge to check that the steering angle is at the standard value.

STEERING ANGLE

Standard value:

ITEM	VEHICLES WITH 14-INCH WHEELS	VEHICLES WITH 15-INCH WHEELS	VEHICLES WITH 16-INCH WHEELS
Inner wheel	$40^{\circ}40' \pm 1^{\circ}30'$	$39^{\circ}30' \pm 1^{\circ}30'$	$39^{\circ}40' + 1^{\circ}30' / -2^{\circ}00'$
Outer wheel	$33^{\circ}20'$	$32^{\circ}30'$	$28^{\circ}46'$



CAMBER, CASTER AND KINGPIN INCLINATION

Standard value:

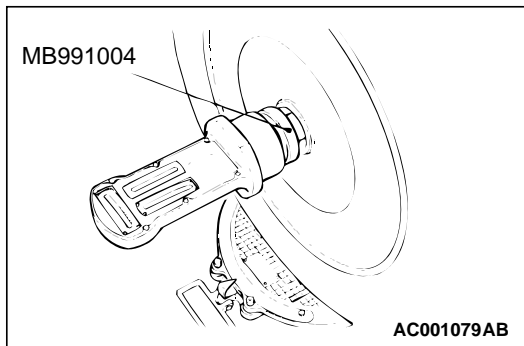
ITEM	VEHICLES WITH 14-INCH WHEELS	VEHICLES WITH 15-INCH WHEELS	VEHICLES WITH 16-INCH WHEELS
Camber (left/right deviation within 30')	0°00' ± 30'	0°05' ± 30'	-0°05' ± 30'
Caster (left/right deviation within 30')	2°55' ± 30'	2°45' ± 30'	2°55' ± 30'
Kingpin inclination	12°40' ± 1°30'	12°30' ± 1°30'	12°40' ± 1°30'

⚠ CAUTION

Never subject the wheel bearings to the vehicle load when the drive shaft nuts are loosened.

NOTE: Camber and caster are preset at the factory and cannot be adjusted.

For vehicles with aluminum type wheels, attach the camber/caster/kingpin gauge to the drive shaft by using special tool MB991004. Tighten special tool MB991004 to the same torque 245 ± 29 N·m (181 ± 21 ft·lb) as the drive shaft nut.

**LOWER ARM BALL JOINT END PLAY CHECK**

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1. Raise the vehicle.
2. Remove the stabilizer bar from the lower arm assembly.
3. Move the lower arm up and down with your hands to check for an excessive play in the axial direction of the ball joint. If there is an excessive play, replace the lower arm assembly.

BALL JOINT DUST COVER CHECK

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1. Press the dust cover with your finger to check that there are no cracks or damage in the dust cover.
2. If the dust cover is cracked or damaged, replace the lower arm assembly.

NOTE: If the dust cover is cracked or damaged, it is possible that there may also be damage to the ball joint.

STRUT ASSEMBLY

REMOVAL AND INSTALLATION

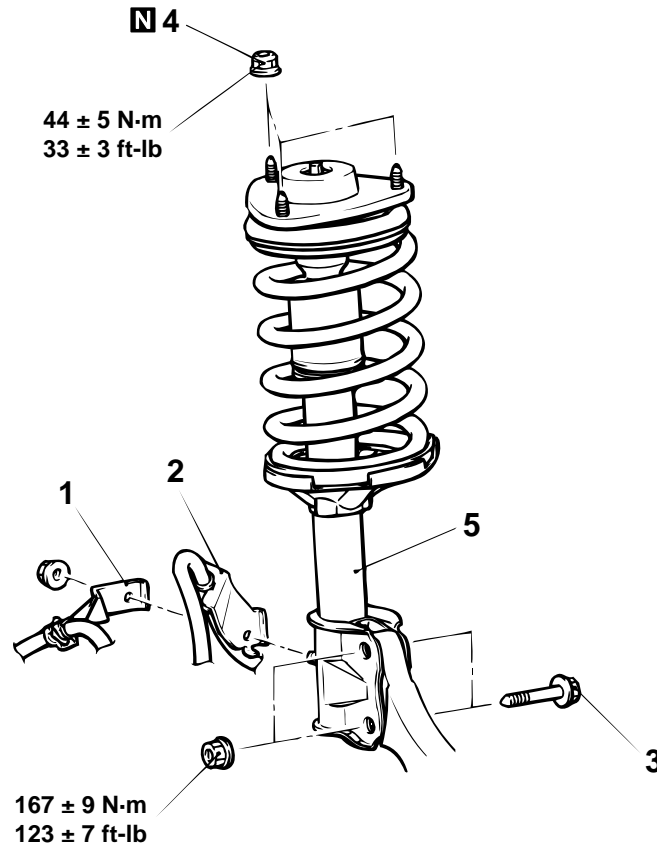
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⚠ CAUTION

For vehicles with ABS, be careful when handling the pole piece at the tip of the speed sensor so as not to damage it by striking against other parts.

Post-installation Operation

- Front Wheel Alignment Adjustment (Refer to P.33A-7.)



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REMOVAL STEPS

1. FRONT WHEEL SPEED SENSOR HARNESS BRACKET <VEHICLES WITH ABS>
2. BRAKE HOSE BRACKET

REMOVAL STEPS (Continued)

3. KNUCKLE CONNECTION
4. STRUT MOUNTING NUT
5. STRUT ASSEMBLY

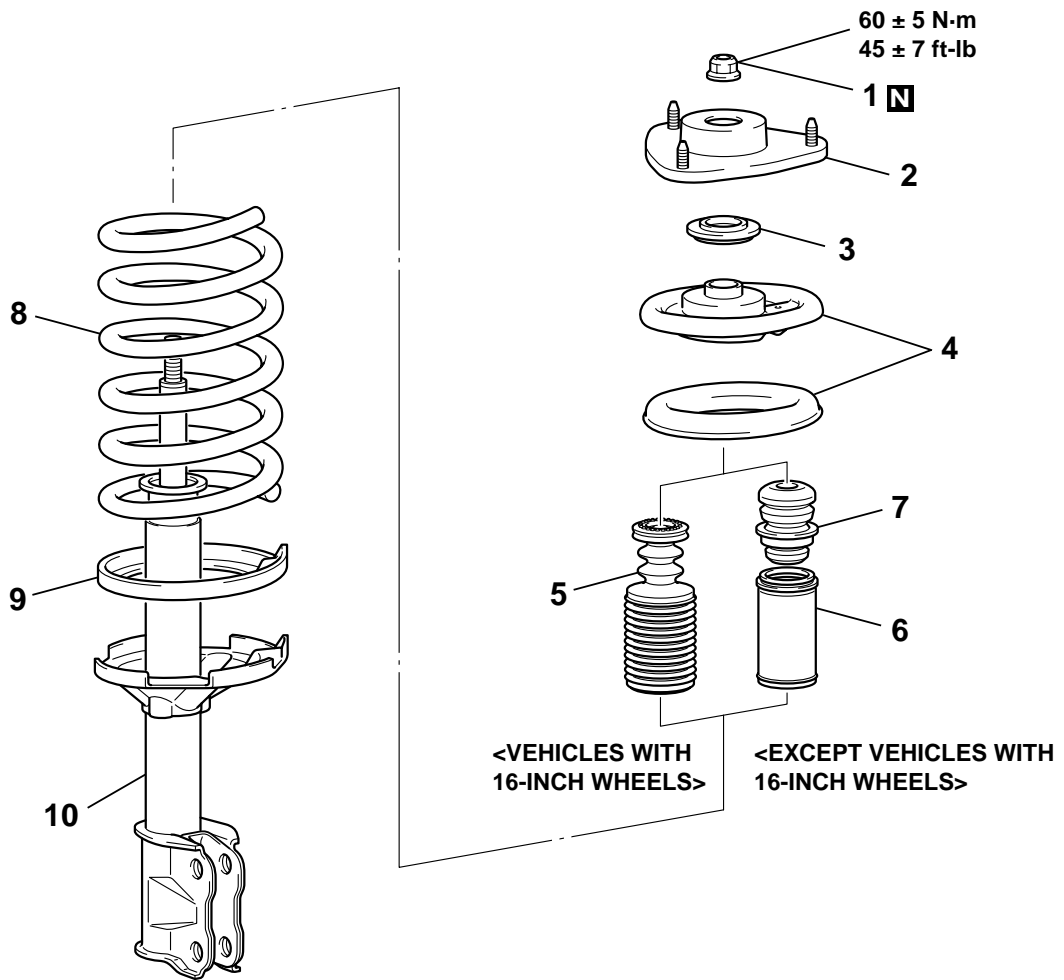
INSPECTION

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- Check for oil leaks from the strut assembly.
- Check the strut assembly for damage or deformation.

DISASSEMBLY AND ASSEMBLY

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- DISASSEMBLY STEPS**
- <<A>> >>B<< 1. SELF-LOCKING NUT
 2. STRUT INSULATOR ASSEMBLY
 3. BEARING
 >>A<< 4. UPPER SPRING SEAT
 5. BUMP RUBBER <VEHICLES WITH 16-INCH WHEELS>
 6. DUST COVER <EXCEPT VEHICLES WITH 16-INCH WHEELS>
 7. BUMP RUBBER <EXCEPT VEHICLES WITH 16-INCH WHEELS>
 8. COIL SPRING

- DISASSEMBLY STEPS (Continued)**
9. LOWER SPRING PAD
 10. STRUT ASSEMBLY

- Required Special Tools:**
- MB991237: Spring Compressor
 - MB991238: Arm Set
 - MB991680: Wrench set

DISASSEMBLY SERVICE POINTS

<<A>> SELF-LOCKING NUT REMOVAL

CAUTION

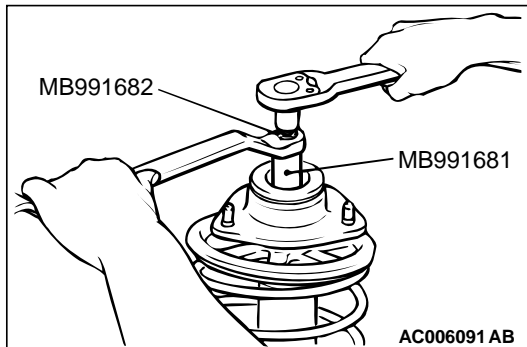
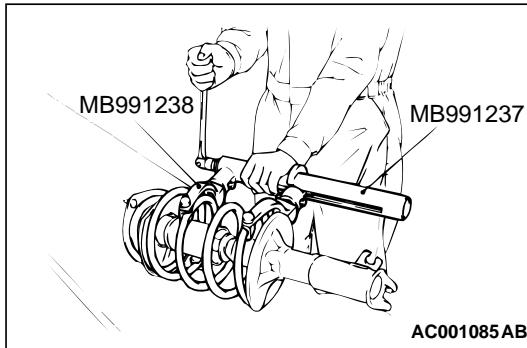
- Do not tighten the special tool bolt too tight. The special tool will be broken if the allowable tightening torque of 74 N·m (55 ft-lb) is exceeded.
- Install the special tools evenly, and so that the maximum length will be attained within the installation range.
- Do not use an impact wrench to tighten the bolt of special tool MB991237, otherwise the special tool will break.

1. Use special tools MB991237 and MB991238 to compress the coil spring.

WARNING

To prevent the piston rod self-locking nut inside the strut from loosening, do not use an impact wrench when the self-locking nut is loosened.

2. Use special tools MB991681 and MB991682 to secure the strut, and then remove the self-locking nut.

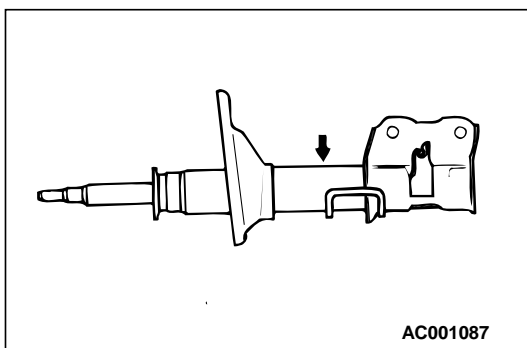


<> STRUT ASSEMBLY DISPOSAL

WARNING

Wear goggles when drilling to protect your eyes from flying metal debris.

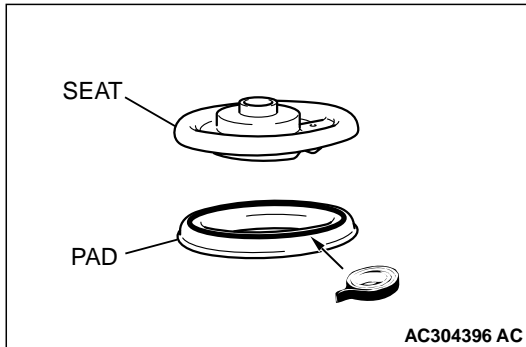
The gas must be discharged from the strut assembly before discarding it. Place the assembly horizontally with its piston rod extended. Then drill a hole of approximately 3 mm (0.1 inch) in diameter at the location shown in the illustration and discharge the gas.



ASSEMBLY SERVICE POINT

>>A<< UPPER SPRING SEAT INSTALLATION

If the upper spring seat peeled off the pad, adhere the seat and the pad with a double-sided tape.



>>B<< SELF-LOCKING NUT INSTALLATION

1. Ensure that the bearing is seated correctly.

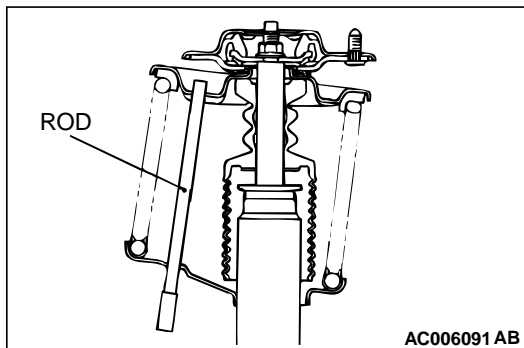
⚠ CAUTION

Do not use an impact wrench to tighten the bolt of special tool MB991237, otherwise the special tool will break.

2. Install special tool MB991237 to the strut assembly same as its removal.
3. While the coil spring is being compressed by the special tools, temporarily tighten the self-locking nut.
4. Align the hole in the strut assembly lower spring seat with the hole in the upper spring seat.

NOTE: Using a rod as shown facilitates the alignment.

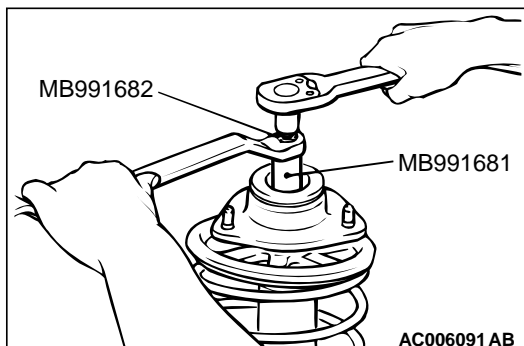
5. Align both ends of the coil spring with the grooves in the spring seat, and then loosen the special tools.



⚠ CAUTION

Do not use an impact wrench to tighten the self-locking nut, otherwise the self-locking nut will not be tightened securely.

6. Using special tools MB991681 and MB991682, tighten the self-locking nut to 60 ± 10 N·m (45 ± 7 ft·lb).



INSPECTION

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- Check the bearing for wear or rust.
- Check the rubber parts for damage or deterioration.
- Check the spring for deformation, deterioration or damage.
- Check the shock absorber for deformation.

LOWER ARM

REMOVAL AND INSTALLATION

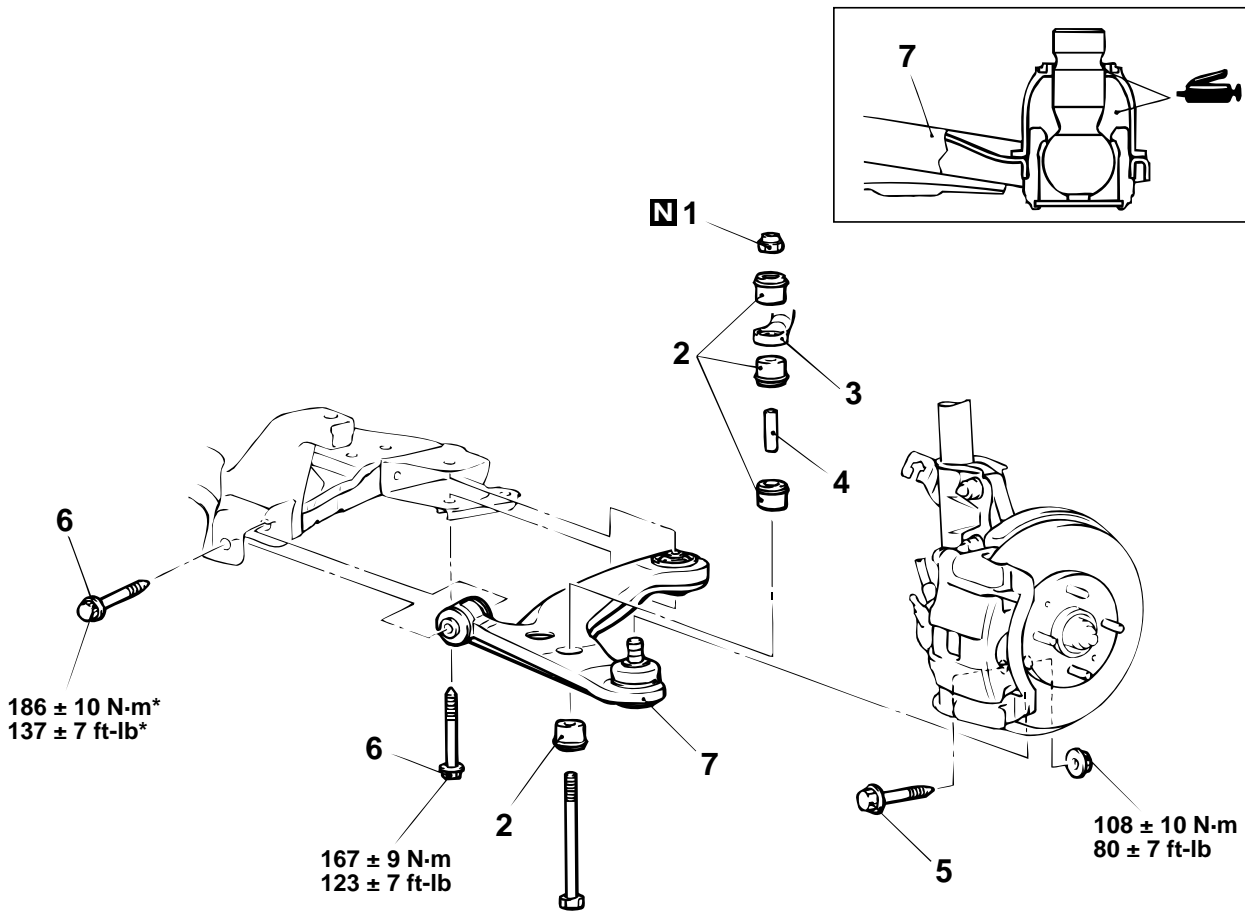
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CAUTION

*: Indicates parts which should be temporarily tightened, and then fully tightened with the vehicle on the ground in an unladen condition.

Post-installation Operation

- Check the Dust Cover for Cracks or Damage by Pushing it with Your Finger.
- Wheel Alignment Check and Adjustment (Refer to P.33A-7.)



AC006097AB

REMOVAL STEPS

- >>A<<
1. SELF-LOCKING NUT
 2. STABILIZER RUBBER
 3. STABILIZER BAR
 4. COLLAR
 5. LOWER ARM AND KNUCKLE CONNECTION
- <<A>>
6. LOWER ARM AND CROSSMEMBER CONNECTION
 7. LOWER ARM ASSEMBLY

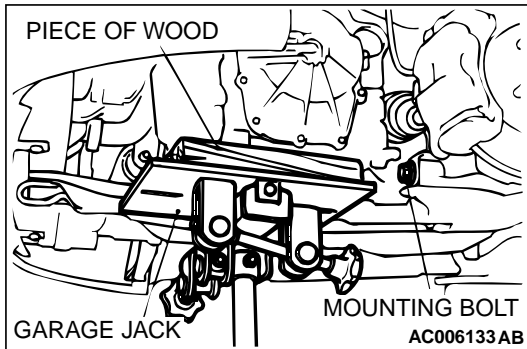
Required Special Tools:

- MB991006: Preload Socket
- MB990800: Ball Joint Remover and Installer
- MB990883: Rear suspension bushing arbor
- MB990971: Rear wheel bearing and Installer joint
- MB990887: Ring
- MB990890: Rear suspension bushing base

REMOVAL SERVICE POINT

<<A>> LOWER ARM AND CROSSMEMBER DISCONNECTION

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

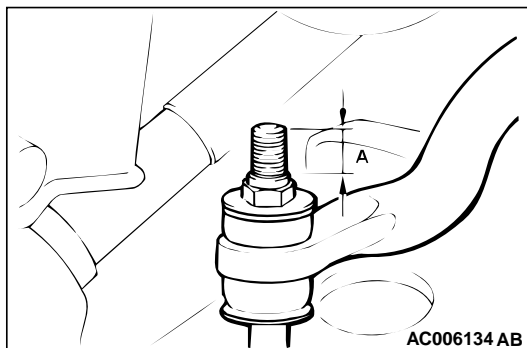


INSTALLATION SERVICE POINT

>>A<< SELF-LOCKING NUT INSTALLATION

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

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



INSPECTION

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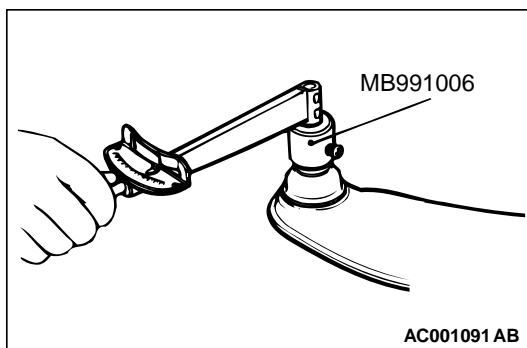
- Check the bushing for wear and deterioration.
- Check the lower arm for bend or breakage.
- Check all bolts for condition and straightness.

LOWER ARM BALL JOINT BREAKAWAY TORQUE CHECK

1. After shaking the ball joint stud several times, use special tool MB991006 to measure the breakaway torque of the ball joint.

Standard value: 0 – 3.9 N·m (0 – 35 in·lb)

2. If the measured value is not within the standard value, or if the ball joint is difficult to turn or does not turn smoothly, replace the lower arm assembly.



LOWER ARM BALL JOINT DUST COVER CHECK

1. Check the dust cover for cracks or damage by pushing it with your finger.
2. If the dust cover is cracked or damaged, replace the lower arm.

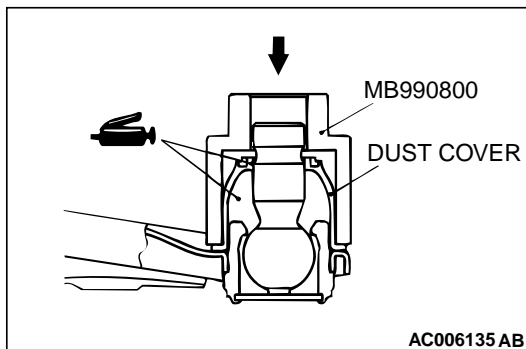
NOTE: Cracks or damage to the dust cover may cause damage to the ball joint. When it is damaged during service work, replace the dust cover.

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BALL JOINT DUST COVER REPLACEMENT

If the dust cover is damaged accidentally during service work, replace the dust cover as follows:

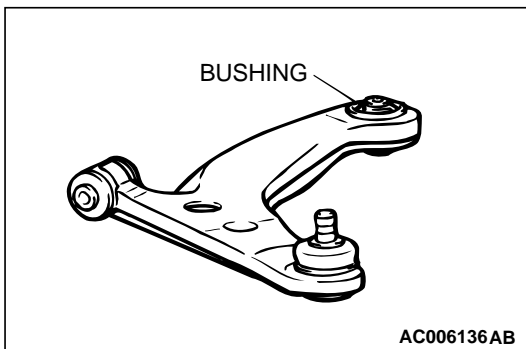
1. Remove the dust cover.
2. Apply multipurpose grease to the lip and inside of the dust cover.
3. Using special tool MB990800, drive in the dust cover until it is fully seated.
4. Check the dust cover for cracks or damage by pushing it with your finger.

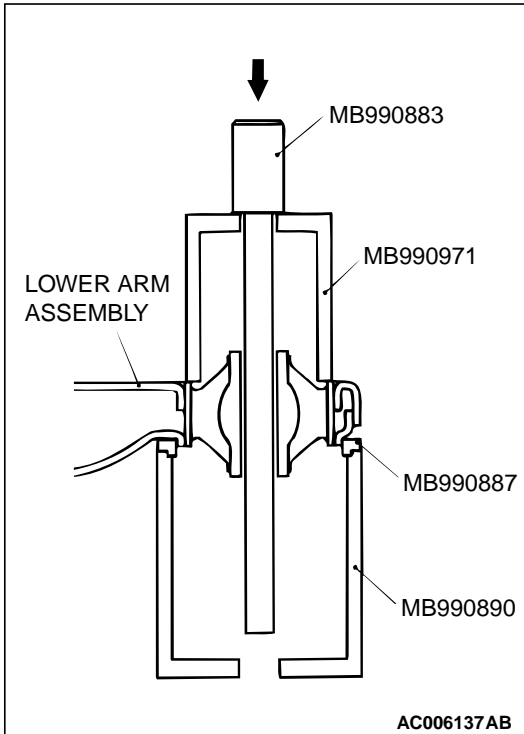


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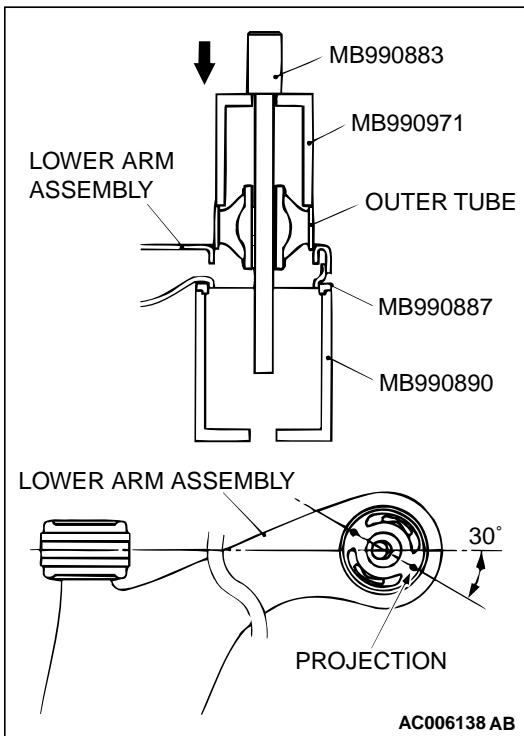
LOWER ARM REAR BUSHING REPLACEMENT

Replace the bushing as follows:





1. Use special tools MB990883, MB990971, MB990887, and MB990890 to drive out the bushing.



2. Position the bushing so that its projection is as shown, and then use special tools MB990883, MB990971, MB990887, and MB990890 to press in the bushing.
3. Press the bushing until its outer tube is flush with the lower arm assembly surface.

STABILIZER BAR**REMOVAL AND INSTALLATION**

M1332004000327

⚠ CAUTION

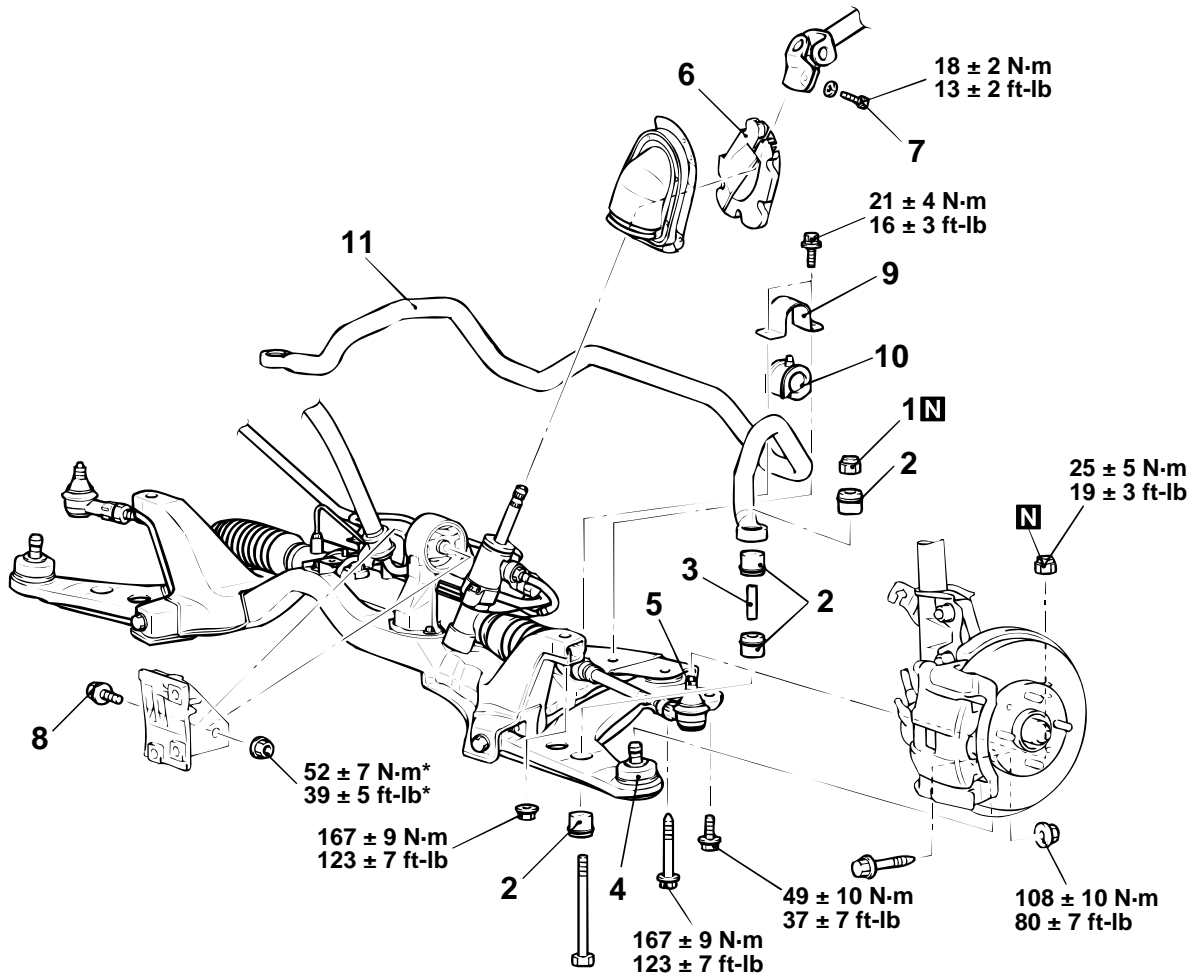
- Before removing the steering wheel and air bag module assembly, refer to **GROUP 52B - Service Precautions P.52B-16** and **Air Bag Module and Clock Spring P.52B-205**. Also, put the front wheels in straight-ahead position. Failure to do so may damage the SRS clock spring and render the SRS air bag inoperative, which results serious driver injury.
- *: Indicates parts which should be temporarily tightened, and then fully tightened with the vehicle on the ground in an unladen condition.

Pre-removal Operation

- Steering Wheel and Air Bag Module Assembly Removal (Refer to GROUP 37A, Steering Wheel and Shaft [P.37A-25](#).)
- Clock Spring Removal (Refer to GROUP 52B, Air Bag Modules and Clock Spring [P.52B-205](#).)
- Center Member Removal (Refer to GROUP 32, Engine Roll Stopper, Center Member [P.32-7](#).)
- Front Exhaust Pipe Removal (Refer to GROUP 15, Exhaust Pipe and Main Muffler [P.15-13](#).)

Post-installation Operation

- Front Exhaust Pipe Installation (Refer to GROUP 15, Exhaust Pipe and Main Muffler [P.15-13](#).)
- Center Member Installation (Refer to GROUP 32, Engine Roll Stopper, Center Member [P.32-7](#).)
- Clock Spring Installation (Refer to GROUP 52B, Air Bag Modules and Clock Spring [P.52B-205](#).)
- Steering Wheel and Air Bag Module Assembly Installation (Refer to GROUP 37A, Steering Wheel and Shaft [P.37A-25](#).)
- Check the Dust Cover for Cracks or Damage by Pushing it with Your Finger.
- Checking Steering Wheel Position with Wheels Straight Ahead
- Front Wheel Alignment Check and Adjustment (Refer to [P.33A-7](#).)



AC006139 AB

- >>B<<
1. SELF-LOCKING NUT
2. STABILIZER RUBBER
3. COLLAR
4. LOWER ARM AND KNUCKLE CONNECTION
- <<A>>
5. TIE ROD END AND KNUCKLE CONNECTION
6. STEERING SHAFT COVER
7. STEERING GEAR AND JOINT CONNECTING BOLT

8. REAR ROLL STOPPER CONNECTING BOLT
- <> >>A<<
9. FIXTURE
10. BUSHING
11. STABILIZER BAR

Required Special Tool:

- MB991897: Ball Joint Remover

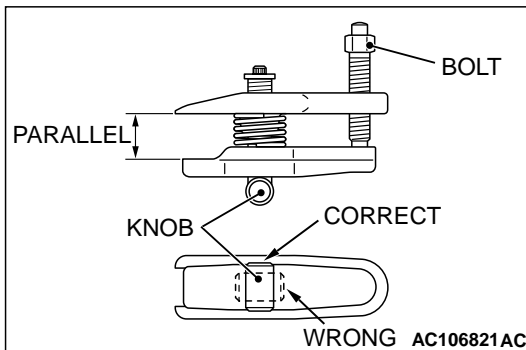
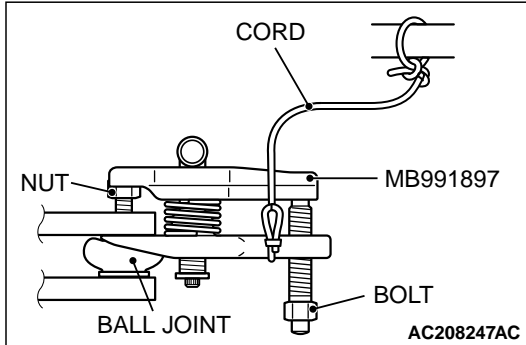
REMOVAL SERVICE POINTS

<<A>> TIE ROD END AND KNUCKLE DISCONNECTION

CAUTION

- Do not remove the nut from the ball joint. Loosen it and use special tool MB991897 to avoid possible damage to the ball joint threads.
- Hang special tool MB991897 with rope or wire to prevent them from falling.

1. Install the special tool MB991897 as shown in the figure.



2. After turning the bolt and knob to adjust the insert arms of the special tool MB991897 in parallel, tighten the bolt by hand and confirm that the insert arms are parallel.

NOTE: When adjusting the insert arms in parallel, turn the knob in the direction shown in the figure.

3. Tighten the bolt with a wrench to disconnect the tie rod end.

<> FIXTURE/BUSHING/STABILIZER BAR REMOVAL

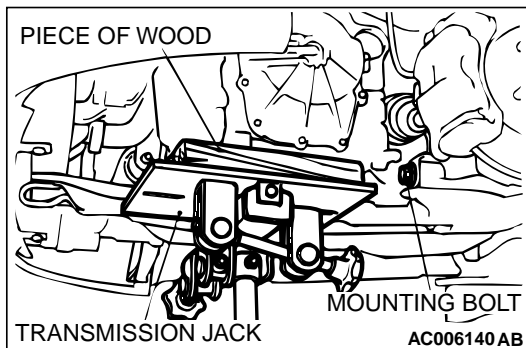
Carry out the following operations to ensure working space in order to remove the fixture, the bushing and the stabilizer bar.

1. Use a transmission jack to hold the crossmember, and then remove the crossmember mounting nuts and bolts.

CAUTION

Be careful not to lower the crossmember excessively, otherwise the power steering return hose bracket may deform.

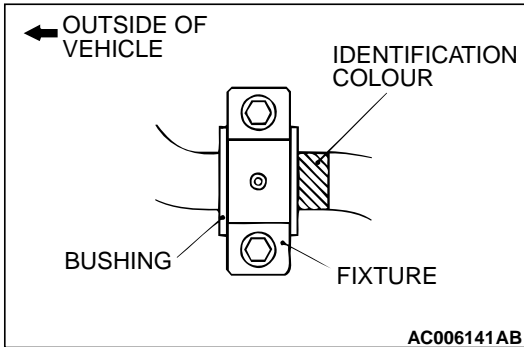
2. Lower the crossmember until the fixture, the bushing and the stabilizer bar can be removed.



INSTALLATION SERVICE POINTS

>>A<< STABILIZER BAR/BUSHING/FIXTURE INSTALLATION

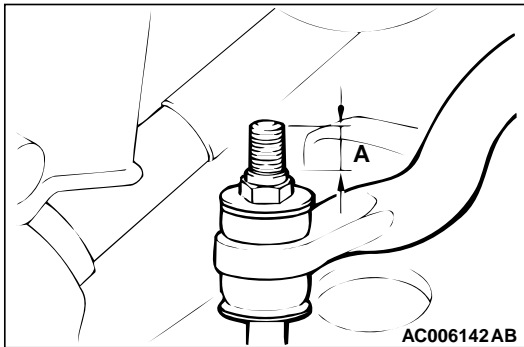
Align the stabilizer bar identification mark with the right end of the bushing.



>>B<< SELF-LOCKING NUT INSTALLATION

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

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



SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATIONS

M1332008500142

ITEM	SPECIFICATION
Lower arm assembly	
Lower arm to crossmember connection bolt (Rear)	167 ± 9 N·m (123 ± 7 ft-lb)
Lower arm to crossmember connection bolt (Front)	186 ± 10 N·m (137 ± 7 ft-lb)
Lower arm to knuckle connection nut	108 ± 10 N·m (80 ± 7 ft-lb)
Stabilizer bar	
Crossmember connection bolt	167 ± 9 N·m (123 ± 7 ft-lb)
Crossmember bolt	49 ± 10 N·m (37 ± 7 ft-lb)
Crossmember nut	167 ± 9 N·m (123 ± 7 ft-lb)
Rear roll stopper connection nut	52 ± 7 N·m (39 ± 5 ft-lb)
Stabilizer fixture bolt	21 ± 4 N·m (16 ± 3 ft-lb)
Steering gear and joint connecting bolt	18 ± 2 N·m (13 ± 2 ft-lb)
Lower arm to knuckle connection nut	108 ± 10 N·m (80 ± 7 ft-lb)
Tie rod end to knuckle connection nut	25 ± 5 N·m (19 ± 3 ft-lb)

ITEM	SPECIFICATION
Strut assembly	
Strut assembly self-locking nut	60 ± 10 N·m (45 ± 7 ft-lb)
Strut assembly to body connection nut	44 ± 5 N·m (33 ± 3 ft-lb)
Strut assembly to knuckle connection nut	167 ± 9 N·m (123 ± 7 ft-lb)

GENERAL SPECIFICATIONS

M1332000200244

COIL SPRING

ITEM	VEHICLES WITH 14-INCH WHEELS	VEHICLES WITH 15-INCH WHEELS	VEHICLES WITH 16-INCH WHEELS
Wire diameter mm (in.)	12 (0.5)	14 (0.6)	14 (0.6)
Average diameter mm (in.)	138 (5.4)	160 (6.3)	160 (6.3)
free length mm (in.)	353 (13.9)	363 (14.3)	306 (12.0)

SERVICE SPECIFICATIONS

M1332000300393

ITEM	SPECIFICATION		
Toe-in mm (in)	1 ± 2 (0.04 ± 0.07)		
Steering angle	Inner wheel	Vehicles with 14-inch wheels	40°40' ± 1°30'
		Vehicles with 15-inch wheels	39°30' ± 1°30'
		Vehicles with 16-inch wheels	33°40' +1°30'/- 2°00'
	Outer wheel (reference)	Vehicles with 14-inch wheels	33°20'
		Vehicles with 15-inch wheels	32°30'
		Vehicles with 16-inch wheels	28°46'
Camber	Vehicles with 14-inch wheels	0°00' ± 30' (Left/right deviation within 30')	
	Vehicles with 15-inch wheels	0°05' ± 30' (Left/right deviation within 30')	
	Vehicles with 16-inch wheels	-0°05' ± 30' (Left/right deviation within 30')	
Caster	Vehicles with 14-inch wheels	2°55' ± 30' (Left/right deviation within 30')	
	Vehicles with 15-inch wheels	2°45' ± 30' (Left/right deviation within 30')	
	Vehicles with 16-inch wheels	2°55' ± 30' (Left/right deviation within 30')	
Kingpin inclination	Vehicles with 14-inch wheels	12°40' ± 1°30'	
	Vehicles with 15-inch wheels	12°30' ± 1°30'	
	Vehicles with 16-inch wheels	12°40' ± 1°30'	
Protruding length of stabilizer bar mounting bolt mm (in)	22 ± 1.5 (0.87 ± 0.05)		
Lower arm ball joint breakaway torque N·m (in-lb)	0 – 3.9 (0 – 35)		