

## GROUP 34

# REAR SUSPENSION

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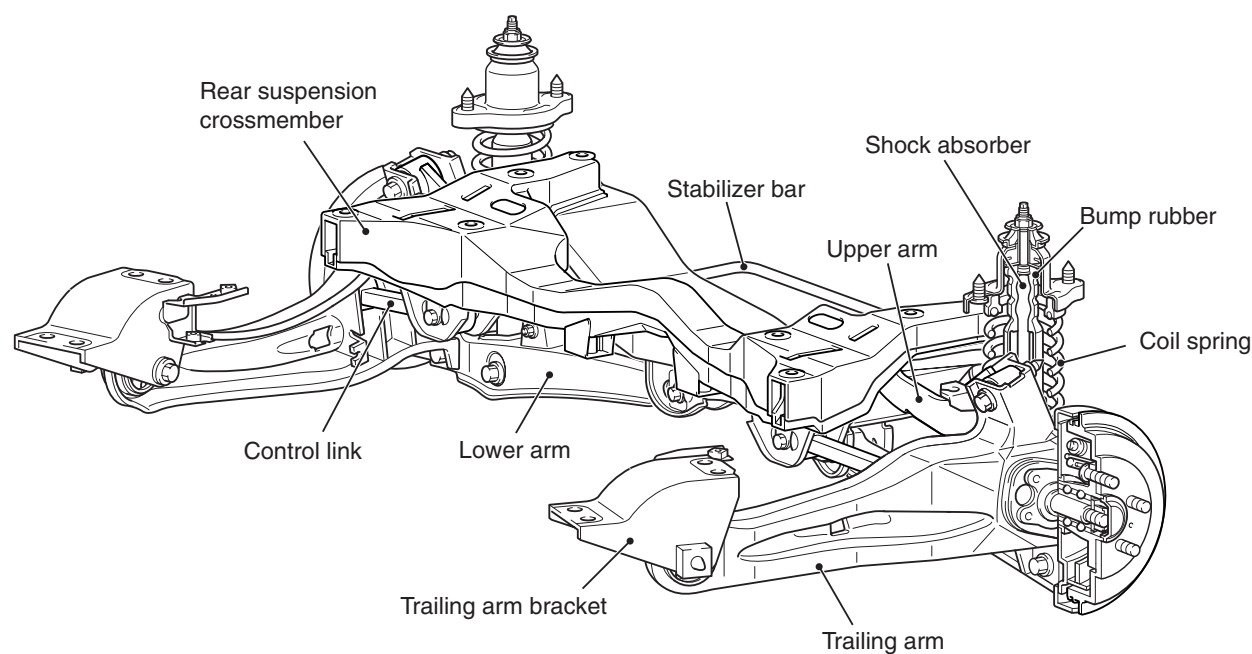
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GENERAL INFORMATION

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A trailing arm type multi-link suspension has been adopted as the rear suspension. The shock absorber is a hydraulic, cylindrical double-acting type.

CONSTRUCTION DIAGRAM



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SPECIFICATION  
COIL SPRING

Item	2WD	4WD	
		Vehicles for General Export, GCC, Brazil, Australia and New Zealand	Vehicles for South Africa and Argentina
Wire diameter mm	11	11	11
Average diameter mm	79 – 91	79 – 91	79 – 91
Free length mm	375	380	350

## SERVICE SPECIFICATIONS

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Item		Standard value
Toe-in	At the centre of tyre tread mm	$3 \pm 2$
	Toe-angle (per wheel)	$0^{\circ}08' \pm 0^{\circ}05'$
Camber		$-0^{\circ}40' \pm 0^{\circ}30'$ (Difference between right and left within 30')
Thrust angle		$0^{\circ}00' \pm 0^{\circ}09'$
Control link pillow ball bushing starting torque N·m		0.5 – 3.0
Upper arm pillow ball bushing starting torque N·m		0.5 – 3.0
Lower arm pillow ball bushing starting torque N·m		0.5 – 3.0
Stabilizer link ball joint turning torque N·m	2WD	0.5 – 1.5
	4WD	1.7 – 3.1

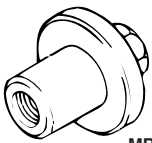
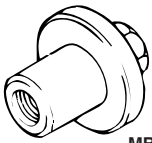
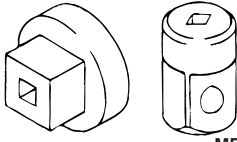
## LUBRICANT

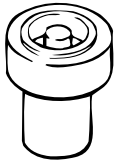
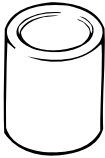
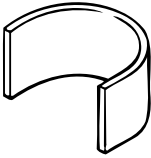
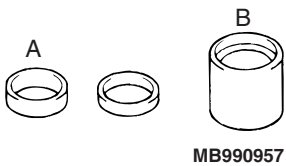
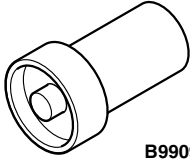
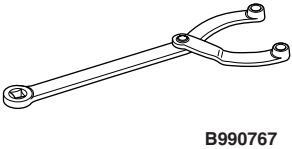
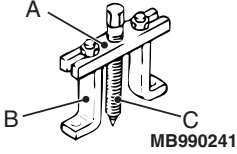

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Item	Specified lubricant	Quantity
Stabilizer link ball joint (inside of dust cover)	Multipurpose grease SAE J310, NLGI No.2 or equivalent	As required

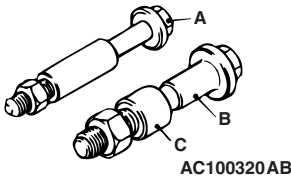
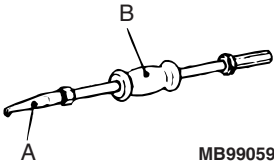
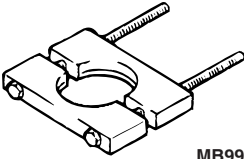
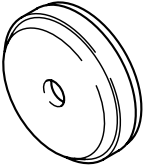
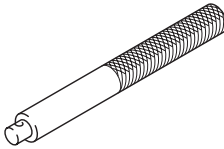
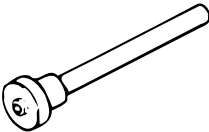
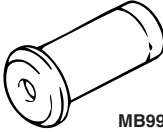

## SPECIAL TOOLS

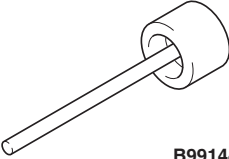
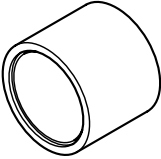
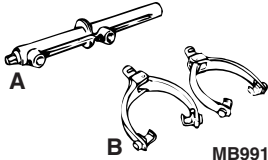
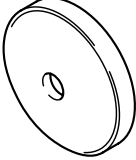
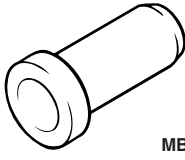

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Tool	Number	Name	Use
 MB991004	MB991014	Wheel alignment gauge attachment	Wheel alignment measurement <2WD-vehicles with aluminium wheels>
 MB991004	MB991004	Wheel alignment gauge attachment	Wheel alignment measurement <4WD-vehicles with aluminium wheels>
 MB990326	MB990326	Preload socket	<ul style="list-style-type: none"> <li>Pillow ball bushing starting torque check</li> <li>Stabilizer link ball joint turning torque check</li> </ul>

Tool	Number	Name	Use
	MB991447	Bushing remover and installer	Lower arm bushing removal and press-fitting
	MB991448	Bushing remover and installer base	
	MB991449	Bushing remover and installer supporter	
	MB990957 A: MB990969 B: MB990971	Lower arm bushing remover and installer A: Guide B: Base	Lower arm pillow ball bushing removal and press-fitting
	MB990996	Lower arm bushing arbor	
	MB990767	End yoke holder	Rear axle hub fixing
	MB990241 A: MB990243 B: MB990244 C: MB990242	Axle shaft puller A: Puller body B: Puller bar C: Puller shaft	Drive shaft removal <4WD>
	MB991354	Puller body	

- Removal of the drive shaft <4WD>
- Rear hub assembly removal <4WD>

Tool	Number	Name	Use
	A: MB991017 B: MB990998 C: MB991000	A, B: Front hub remover and installer C: Spacer	Provisional holding of the wheel bearing <4WD>
	MB990590 A: MB990212 B: MB990211	Rear axle shaft oil seal remover A: Adapter B: Sliding hammer	Rear hub assembly removal <4WD>
	MB990560	Bearing remover	Wheel bearing inner race removal <4WD>
	MB990934	Adapter	Wheel bearing removal <4WD>
	MB990938	Bar	
	MB991400	Rear wheel bearing and hub installer	<ul style="list-style-type: none"> <li>• Wheel bearing press-fitting &lt;4WD&gt;</li> <li>• Rear hub assembly press-fitting &lt;4WD&gt;</li> </ul>
	MB991401	Rear wheel bearing and hub installer base	Wheel bearing press-fitting <4WD>
	MB991411	Rear wheel bearing and hub installer joint	Rear hub assembly press-fitting <4WD>

Tool	Number	Name	Use
 B991444	MB991444	Bushing remover and installer arbor	Trailing arm bushing removal and press-fitting
	MB991445	Bushing remover and installer base	
 A B MB991237	A: MB991237 B: MB991239	A: Spring compressor body B: Arm set	Coil spring removal and installation
 MB991575	MB991575	Arbor	Differential support arm bushing removal and press-fitting
 MB990727	MB990727	Oil seal installer	
 MB991389	MB991389	Bush remover base	

## ON-VEHICLE SERVICE

### REAR WHEEL ALIGNMENT CHECK AND ADJUSTMENT

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Measure wheel alignment with an alignment equipment on level ground.

The rear suspension, wheels, and tyres should be serviced to the normal condition prior to wheel alignment measurement.

#### CAMBER

**Standard value:**

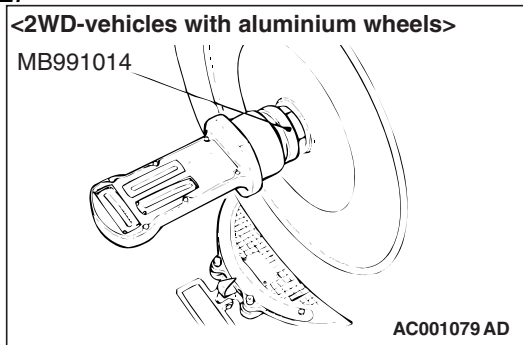
$-0^{\circ}40' \pm 0^{\circ}30'$  (Left/right deviation within 30')

**NOTE:** Camber is preset at the factory and cannot be adjusted.

#### CAUTION

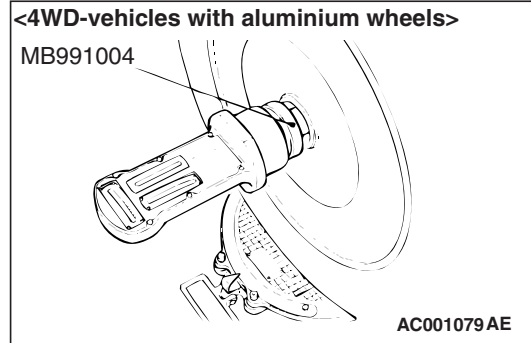
Never subject the wheel bearings to the vehicle load when the trailing arm spindle self-locking nuts (2WD), the drive shaft nuts (4WD), or the special tool wheel alignment gauge attachment (MB991004 or MB991014) are loosened.

**NOTE:**



For 2WD-vehicles with aluminium wheels, attach the camber/caster/kingpin gauge to the trailing arm spindle by using special tool wheel alignment gauge attachment (MB991014). Tighten the special tool to the same torque  $175 \pm 25$  N·m as the trailing arm spindle self-locking nut.

**NOTE:**



For 4WD-vehicles with aluminium wheels, attach the camber/caster/kingpin gauge to the drive shaft by using special tool wheel alignment gauge attachment (MB991004). Tighten the special tool to the same torque  $245 \pm 29$  N·m as the drive shaft nut.

#### TOE-IN

**Standard value:**

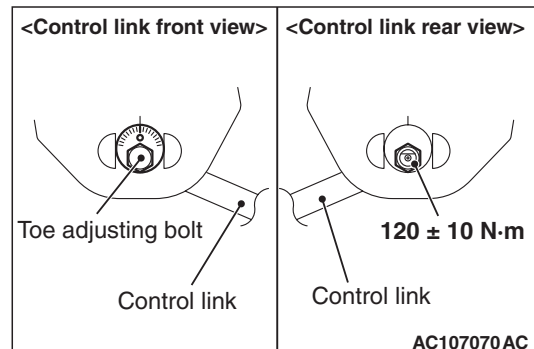
**At the centre of tyre tread:**  $3 \pm 2$  mm

**Toe angle (per wheel):**  $0^{\circ}08' \pm 0^{\circ}05'$

If toe-in is not within the standard value, adjust by following procedures.

#### CAUTION

To prevent bushings from breakage, the toe adjusting bolt should be temporarily tightened, and then fully tightened with the vehicle on the ground in the unladen condition.



Carry out adjustment by turning the toe adjusting bolt (control link mounting bolt which is located on the inner side of the body).

**NOTE:**

- LH: Clockwise viewed from the front → Toe-in
- RH: Clockwise viewed from the front → Toe-out
- Turning the toe adjusting bolt by one groove of the scale, toe can be changed approximately 2.6 mm (single side toe angle equivalent to 16').

## LOWER ARM PILLOW BALL BUSHING AXIAL PLAY CHECK

M1341016900132

1. Raise the vehicle.
2. Remove the stabilizer link and shock absorber 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 pillow ball bushing. If there is an excessive play, replace the lower arm pillow ball bushing (Refer to P.34-10).

4. After inspection, install the stabilizer link and shock absorber to the lower arm assembly (Refer to P.34-8).

## STABILIZER LINK BALL JOINT DUST COVER INSPECTION

M1341012800230

1. Check dust covers for cracks or damage by pushing it with your finger.
2. If a dust cover is cracked or damaged, replace the stabilizer link.

**NOTE:** Cracks or damage to the dust cover may cause damage to the ball joint.

# CONTROL LINK, UPPER ARM AND LOWER ARM REMOVAL AND INSTALLATION

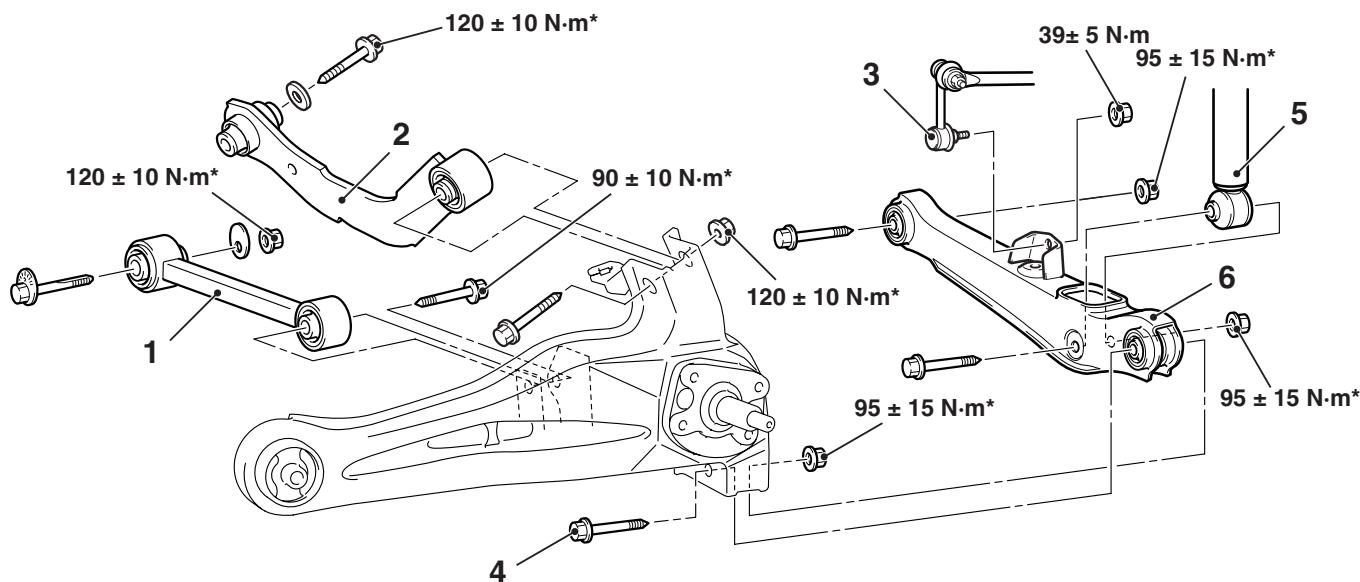
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### CAUTION

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

#### Post-installation Operation

- Rear Wheel Alignment Check and Adjustment (Refer to P.34-7).



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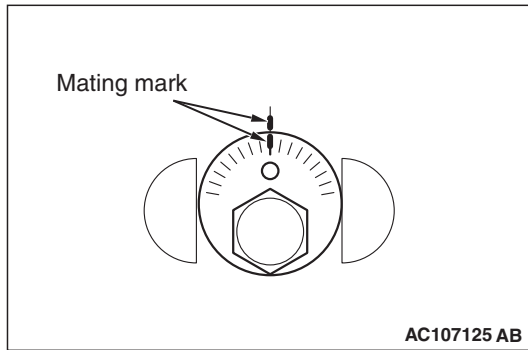
<<A>> >>A<< 1. Control link  
>>A<< 2. Upper arm

<<B>> 3. Stabilizer link connection  
4. Lower arm and trailing arm connection  
5. Shock absorber connection  
6. Lower arm



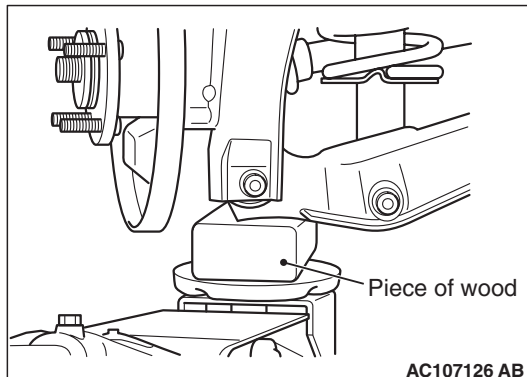
## REMOVAL SERVICE POINTS

### <<A>> CONTROL LINK REMOVAL



After making a mating mark on the toe-in/camber adjusting bolt, remove the control link/lower arm.

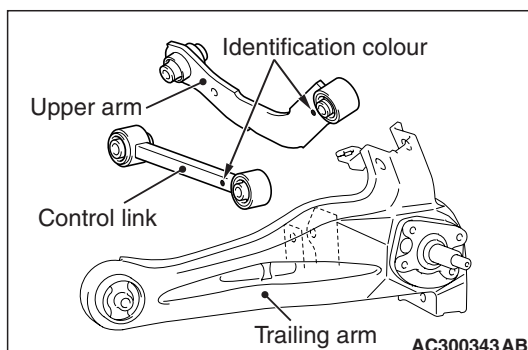
### <<B>> LOWER ARM AND TRAILING ARM DISCONNECTION



After supporting the lower arm with a jack, separate the lower arm and the trailing arm.

## INSTALLATION SERVICE POINTS

### >>A<< UPPER ARM/CONTROL LINK INSTALLATION



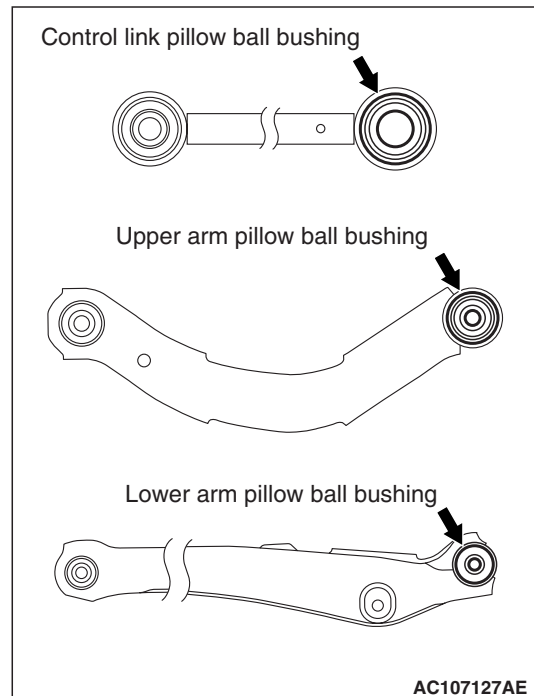
Install the upper arm/control link as shown so that its identification colour faces the trailing arm.

## INSPECTION

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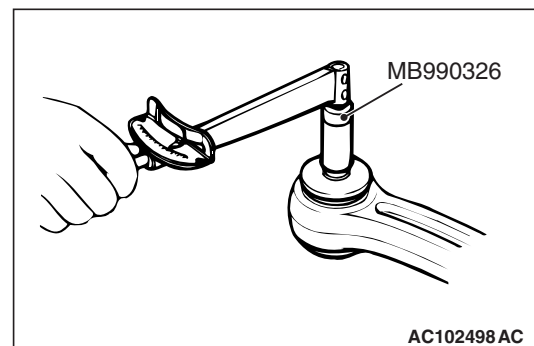
- Check the bushings for wear and deterioration.
- Check the control link, upper arm and lower arm for bending or breakage.
- Check all bolts for condition and straightness.

### CONTROL LINK/UPPER ARM/LOWER ARM PILLOW BALL BUSHING STARTING TORQUE CHECK



Check each pillow ball bushing as follows.

1. Insert the mounting bolt to the pillow ball bushing. In the opposite direction, insert a washer, then install the mounting nut.



2. After rotating the inner sleeve (contained washer) several times, measure the starting torque of the pillow ball bushing using special tool preload socket (MB990326).

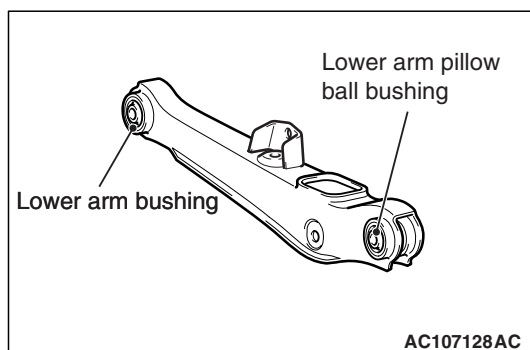
**Standard value: 0.5 – 3.0 N·m**

3. If the measured value exceeds the standard value, replace the control link, the upper arm, or the lower arm pillow ball bushing.

4. If the measured value is lower than the standard value, check that the pillow ball bushing turns smoothly without excessive play. If there is no excessive play and it turns smoothly, the pillow ball bushing can be reused.

### LOWER ARM BUSHING AND LOWER ARM PILLOW BALL BUSHING REPLACEMENT

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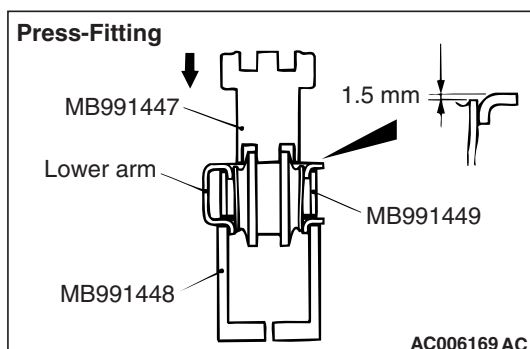
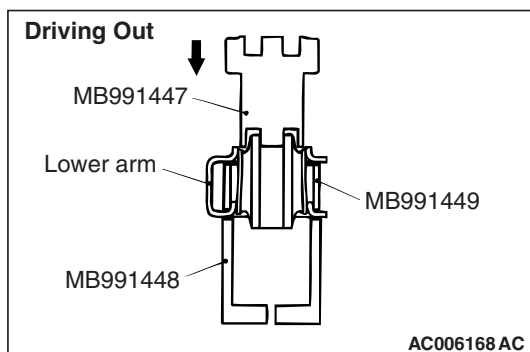


Replace the lower arm bushing and lower arm pillow ball bushing as follows.

### LOWER ARM BUSHING REPLACEMENT

#### ⚠ CAUTION

Because the outside of both edges of the bushing are different, be careful not to mistake the direction.

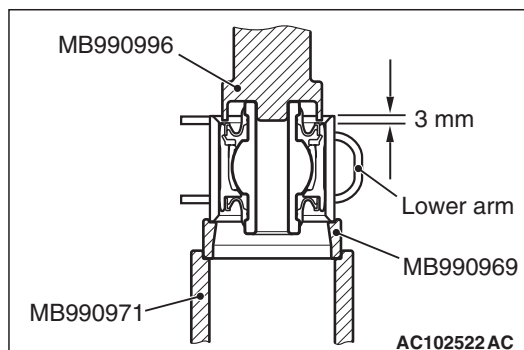


Use following special tools to drive out and press fit the bushing.

- Bushing remover and installer (MB991447)
- Bushing remover and installer base (MB991448)
- Bushing remover and installer supporter (MB991449)

After press fitting, the space between the edges of the bushing outer sleeve and of the lower arm should be 1.5 mm.

### LOWER ARM PILLOW BALL BUSHING REPLACEMENT



Use following special tools to drive out and press fit the bushing.

- Lower arm bushing remover and installer (MB990957)
  - Guide (MB990969)
  - Base (MB990971)
- Lower arm bushing arbor (MB990996)

After press fitting, the space between the edges of the bushing outer sleeve and of the lower arm should be 3 mm.

# TRAILING ARM ASSEMBLY

## REMOVAL AND INSTALLATION <2WD>

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### CAUTION

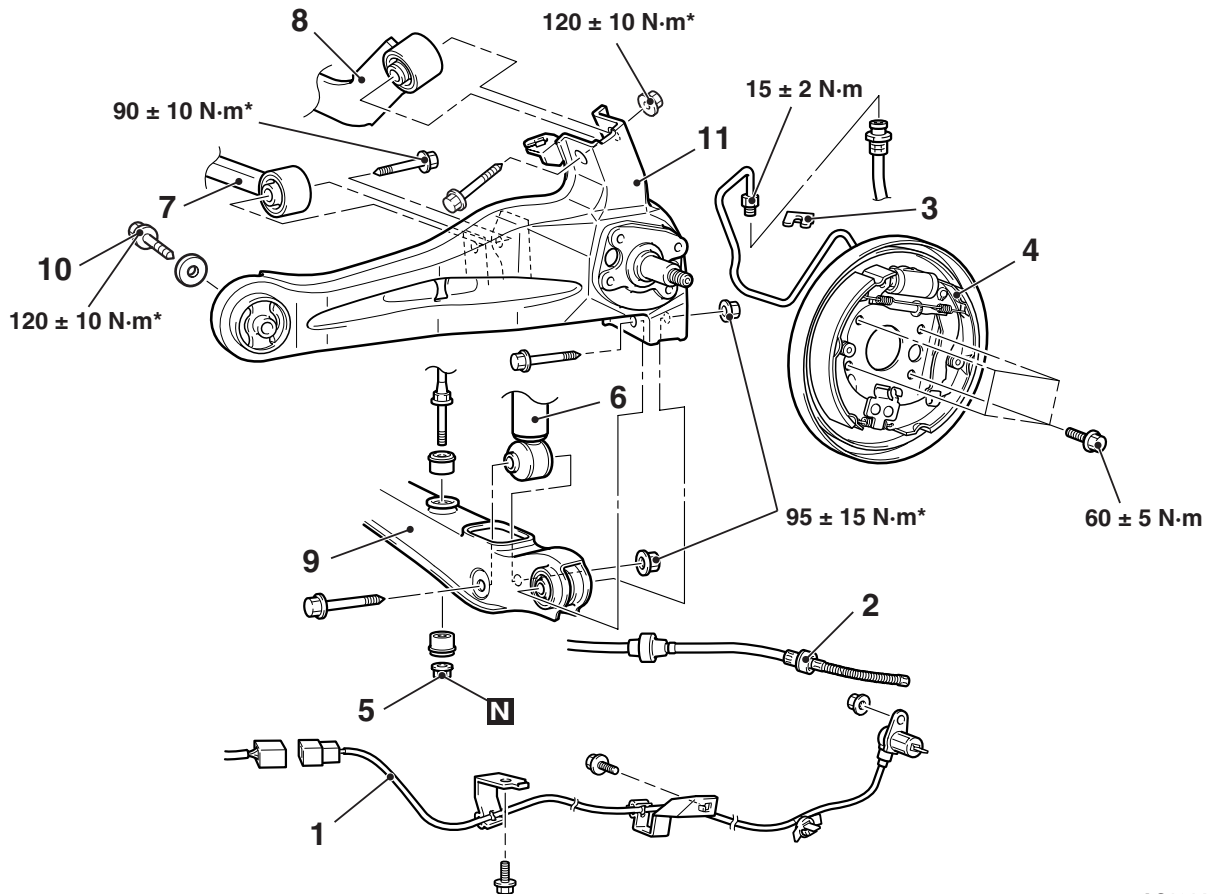
\*: Indicates parts which should be temporarily tightened, and then fully tightened with the vehicle on the ground in the unladen condition.

#### Pre-removal Operation

- Brake Fluid Draining
- Rear Hub Assembly Removal (Refer to GROUP 27A, Rear Axle Hub Assembly P.27A-5).

#### Post-installation Operation

- Rear Hub Assembly Installation (Refer to GROUP 27A, Rear Axle Hub Assembly P.27B-9).
- Brake Fluid Supplying and Bleeding (Refer to GROUP 35A, On-vehicle Service – Bleeding P.35A-9).
- Parking Brake Pedal Stroke Adjustment (Refer to GROUP 36, On-vehicle Service – Parking Brake Pedal Stroke Check and Adjustment P.36-5).
- Rear Wheel Alignment Check and Adjustment (Refer to P.34-7).



AC101449AE

#### Removal steps

1. Rear ABS Sensor (Refer to GROUP 35B, ABS Sensor P.35B-36).
2. Parking brake cable
3. Brake hose and trailing arm connection
4. Rear brake assembly
5. Lower arm and stabilizer link connection

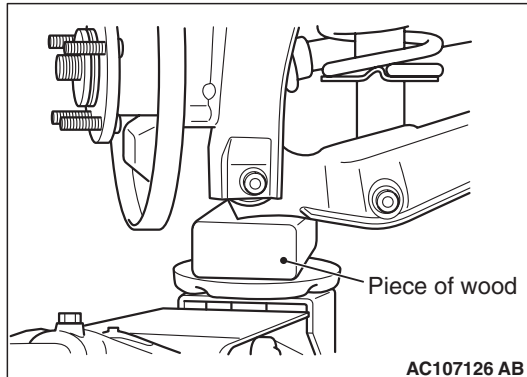
#### Removal steps (Continued)

6. Lower arm and shock absorber connection
7. Control link and trailing arm connection
8. Upper arm and trailing arm connection
9. Lower arm and trailing arm connection
10. Trailing arm and body connection
11. Trailing arm

<<A>>

>>A<<

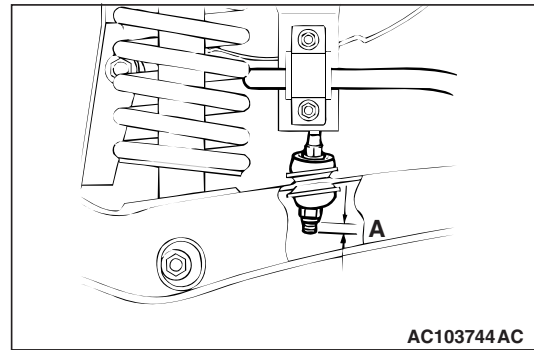
## REMOVAL SERVICE POINT

<<A>> LOWER ARM AND TRAILING ARM  
DISCONNECTION

After supporting the lower arm with a jack, separate the lower arm and trailing arm connection.

## INSTALLATION SERVICE POINT

## &gt;&gt;A&lt;&lt; STABILIZER LINK INSTALLATION



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

**Standard value (A): 6 – 8 mm**

## REMOVAL AND INSTALLATION <4WD>

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### CAUTION

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

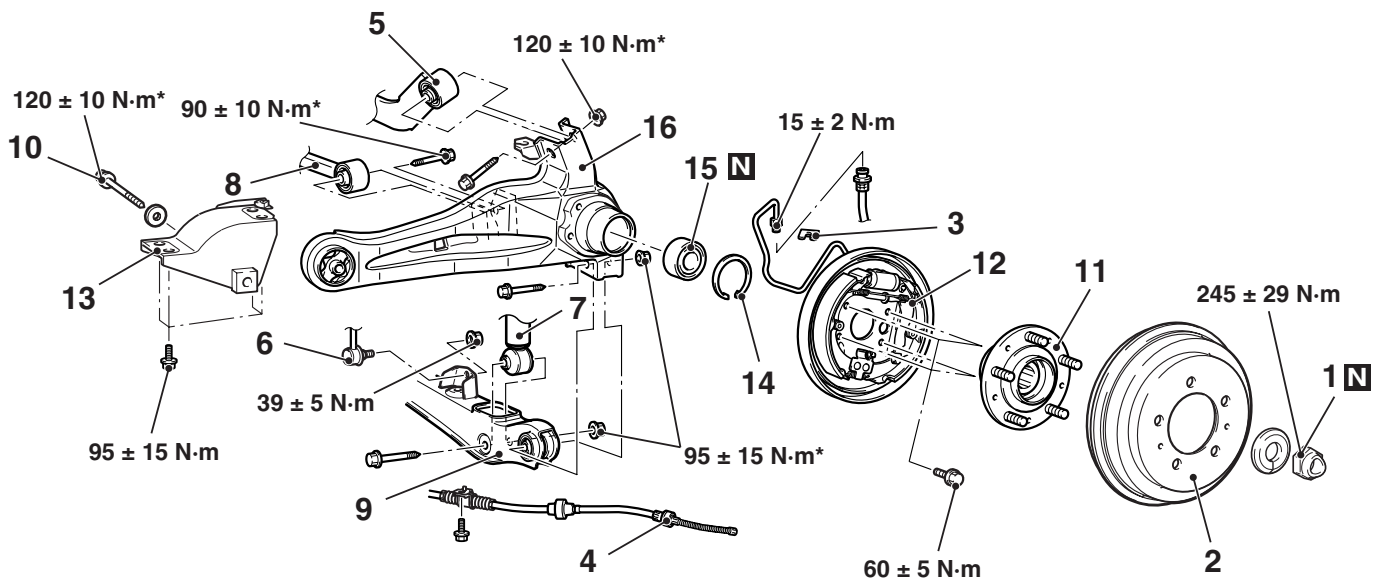
#### Pre-removal Operation

- Brake Fluid Draining
- Rear ABS Sensor Removal <Vehicles with ABS> (Refer to GROUP 35B, ABS Sensor P.35B-36).

#### Post-installation Operation

- Rear ABS Sensor Installation <Vehicles with ABS> (Refer to GROUP 35B, ABS Sensor P.35B-36).
- Brake Fluid Supplying and Bleeding (Refer to GROUP 35A, On-vehicle Service – Bleeding P.35A-9).
- Parking Brake Lever Stroke Adjustment <LH drive vehicles> (Refer to GROUP 36, On-vehicle Service – Parking Brake Lever Stroke Check and Adjustment P.36-4).
- Parking Brake Pedal Stroke Adjustment <RH drive vehicles> (Refer to GROUP 36, On-vehicle Service – Parking Brake Pedal Stroke Check and Adjustment P.36-5).
- Rear Wheel Alignment Check and Adjustment (Refer to P.34-7).

<Vehicles except for South Africa, Argentina, Australia and New Zealand>



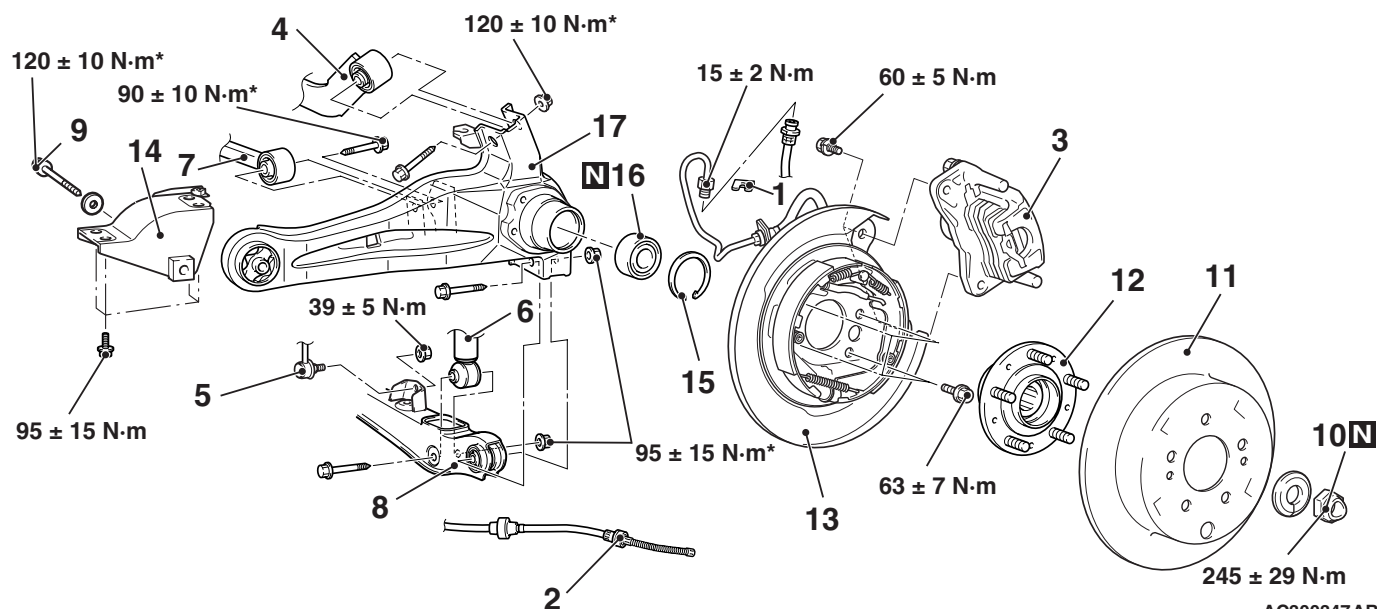
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- |       |       |                                             |
|-------|-------|---------------------------------------------|
| <<B>> | >>C<< | 1. Drive shaft nut                          |
| <<C>> |       | 2. Rear drum                                |
|       |       | • Drive shaft connection                    |
|       |       | 3. Brake hose and trailing arm connection   |
|       |       | 4. Parking brake cable                      |
|       |       | 5. Upper arm and trailing arm connection    |
|       |       | 6. Lower arm and stabilizer link connection |
|       |       | 7. Lower arm and shock absorber connection  |

#### Removal steps (Continued)

- |       |                                                           |
|-------|-----------------------------------------------------------|
| <<A>> | 8. Control link and trailing arm connection               |
|       | 9. Lower arm and trailing arm connection                  |
|       | 10. Trailing arm and trailing arm bracket connecting bolt |
| <<D>> | >>B<<                                                     |
|       | 11. Rear hub assembly                                     |
|       | 12. Rear brake assembly                                   |
|       | 13. Trailing arm bracket                                  |
|       | 14. Snap ring                                             |
| <<E>> | >>A<<                                                     |
|       | 15. Wheel bearing                                         |
|       | 16. Trailing arm                                          |

<Vehicles for South Africa, Argentina,  
Australia and New Zealand>



AC300347 AB

## Removal steps

1. Brake hose and trailing arm connection
2. Parking brake cable
3. Rear brake caliper assembly
4. Upper arm and trailing arm connection
5. Lower arm and stabilizer link connection
6. Lower arm and shock absorber connection
7. Control link and trailing arm connection

&lt;&lt;A&gt;&gt;

&lt;&lt;B&gt;&gt;

&lt;&lt;C&gt;&gt;

&lt;&lt;D&gt;&gt;

&lt;&lt;E&gt;&gt;

&gt;&gt;C&lt;&lt;

&gt;&gt;B&lt;&lt;

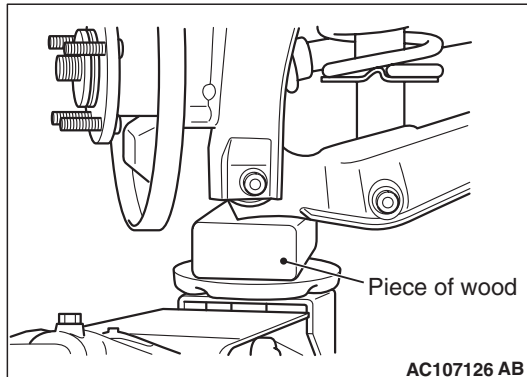
&gt;&gt;A&lt;&lt;

## Removal steps (Continued)

8. Lower arm and trailing arm connection
9. Trailing arm and body connection
10. Drive shaft nut
11. Brake disc
- Drive shaft connection
12. Rear hub assembly
13. Rear parking brake assembly
14. Trailing arm bracket
15. Snap ring
16. Wheel bearing
17. Trailing arm

## REMOVAL SERVICE POINTS

### <<A>> LOWER ARM AND TRAILING ARM DISCONNECTION

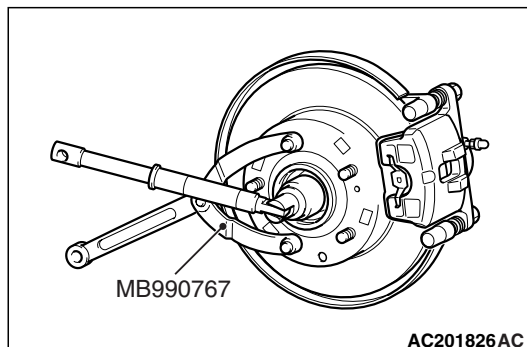
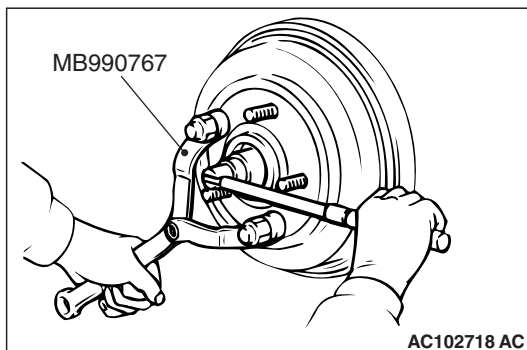


After supporting the lower arm with a jack, separate the lower arm and trailing arm connection.

### <<B>> DRIVE SHAFT NUT REMOVAL

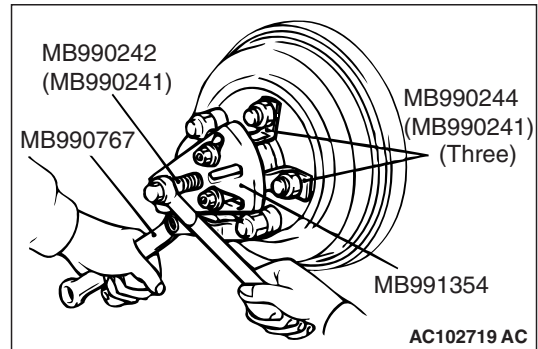
#### **CAUTION**

Do not apply pressure to the wheel bearing by the vehicle weight to avoid possible damage to the wheel bearing before tightening the drive shaft nut fully.

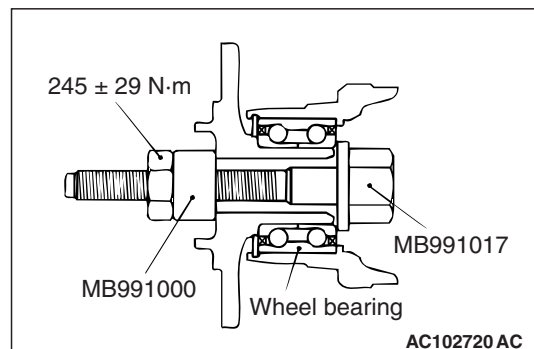


Use special tool end yoke holder (MB990767) to fix the rear axle hub, and then remove the drive shaft nut.

### <<C>> DRIVE SHAFT DISCONNECTION



1. Use following special tools to push out the drive shaft from the hub.
  - Axle shaft puller (MB990241)
    - Puller shaft (MB990242)
    - Puller bar (MB990244)
  - End yoke holder (MB990767)
  - Puller body (MB991354)
2. Hang the drive shaft on the vehicle body with a rope.



#### **CAUTION**

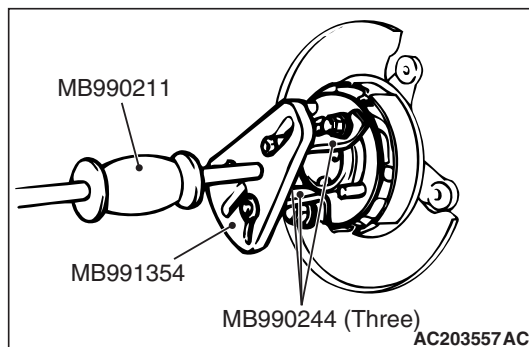
Do not apply pressure to the wheel bearing by the vehicle weight to avoid possible damage when the drive shaft is removed. If, however, vehicle weight must be applied to the bearing in moving the vehicle, temporarily secure the wheel bearing by using special tools front hub remover and installer, and spacer (MB991000 and MB991017).



## <<D>> REAR HUB ASSEMBLY REMOVAL

### ⚠ CAUTION

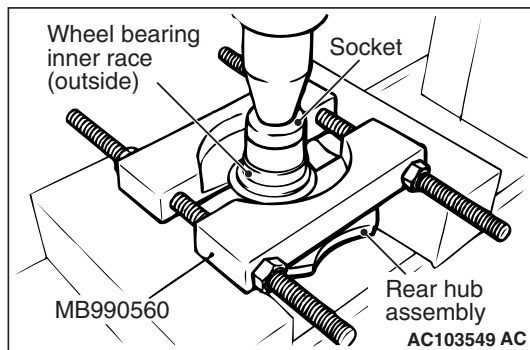
Replace the wheel bearing with a new part because wheel bearing frictional surface will be damaged when removing the hub.



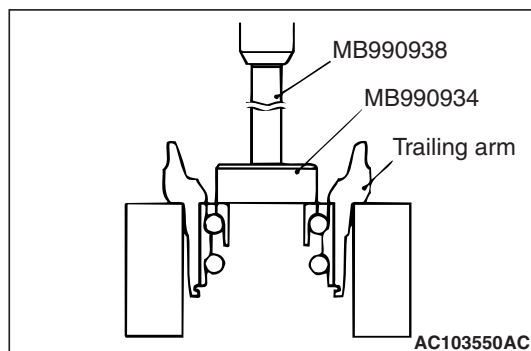
Use following special tools to pull out the rear hub assembly.

- Sliding hammer (MB990211)
- Axle shaft puller (MB990241)
  - Puller bar (MB990244)
- Puller body (MB991354)

## <<E>> WHEEL BEARING REMOVAL



1. Use special tool bearing remover (MB990560) to remove the wheel bearing inner race (outside) from the rear hub assembly.

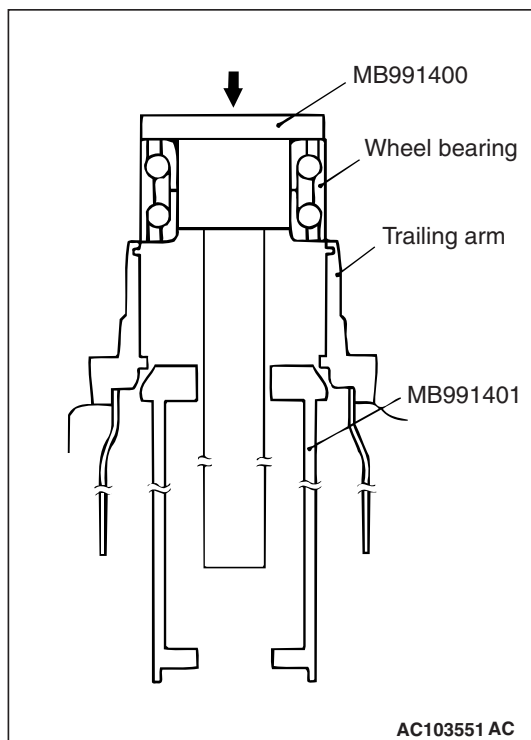


2. Use following special tools to remove the wheel bearing from the trailing arm.

- Adapter (MB990934)
- Bar (MB990938)

## INSTALLATION SERVICE POINTS

### >>A<< WHEEL BEARING INSTALLATION



Use following special tools to press-in the wheel bearing.

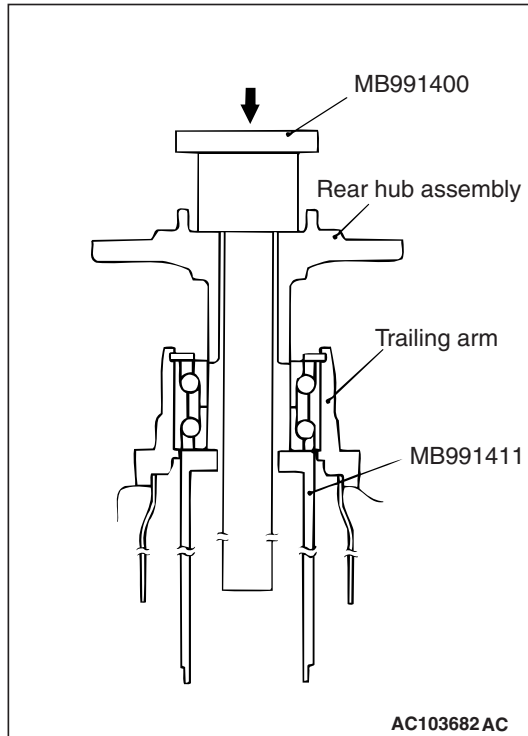
- Rear wheel bearing and hub installer (MB991400)
- Rear wheel bearing and hub installer base (MB991401)



## >>B<< REAR HUB ASSEMBLY INSTALLATION

### **CAUTION**

If the wheel bearing inner race has been pushed out, set the wheel bearing to the trailing arm again before installing the rear hub assembly.



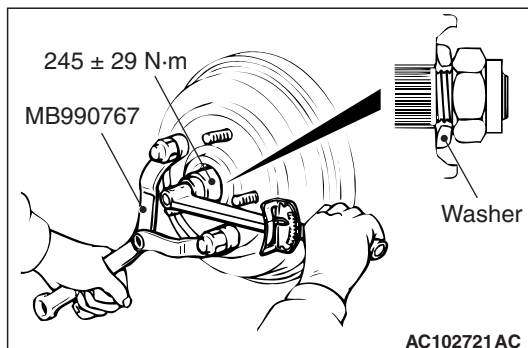
Use following special tools to press-in the rear hub assembly.

- Rear wheel bearing and hub installer (MB991400)
- Rear wheel bearing and hub installer joint (MB991411)

## >>C<< DRIVE SHAFT NUT INSTALLATION

### **CAUTION**

Do not apply pressure to the wheel bearing by the vehicle weight to avoid possible damage to the wheel bearing before tightening the drive shaft nut fully.



1. Assemble the drive shaft washer in the illustrated direction.
2. Use special tool end yoke holder (MB990767) to fix the rear axle hub, and the tighten the drive shaft nut fully.

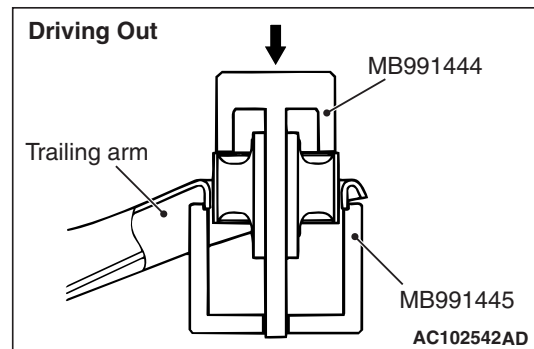
## INSPECTION

M1341002300160

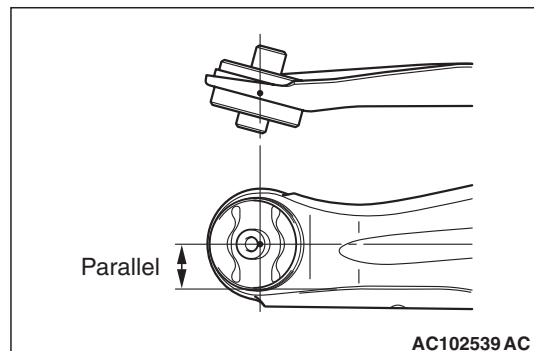
- Check the bushings for wear and deterioration.
- Check the trailing arm for bending or damage.

## TRAILING ARM BUSHING REPLACEMENT

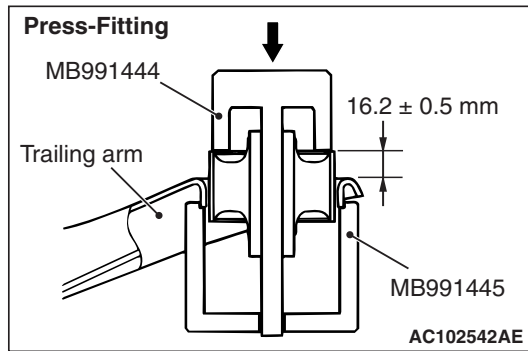
M1341011300191



1. Use following special tools to drive out the trailing arm bushing.
  - Bushing remover and installer arbor (MB991444)
  - Bushing remover and installer base (MB991445)



2. Set the installation direction and installation location of the trailing arm bushing.
  - (1) Place the long projection end of the trailing arm bushing inner pipe towards the inside of the vehicle.
  - (2) Make sure that the hollow of the trailing arm bushing is located as shown in the illustration.



3. Using the special tools, press the trailing arm bushing into the position shown.

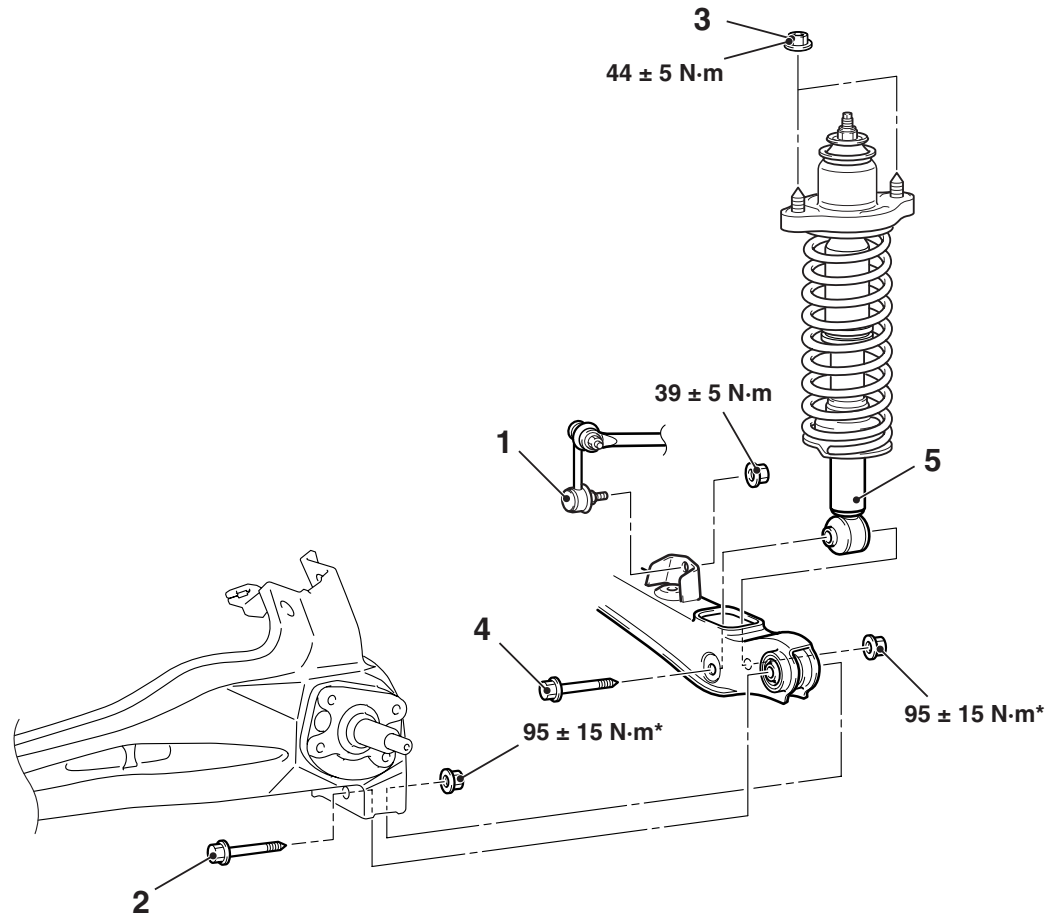
# SHOCK ABSORBER ASSEMBLY

## REMOVAL AND INSTALLATION

M1341002500506

### CAUTION

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



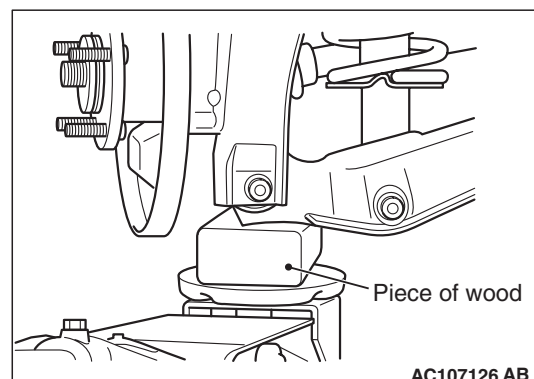
AC107092AE

### Removal steps

- <<A>>
1. Stabilizer link connection
  2. Lower arm and trailing arm connection
  3. Shock absorber mounting nut
  4. Shock absorber and lower arm connecting bolt
  - >>A<< 5. Shock absorber assembly

### REMOVAL SERVICE POINT

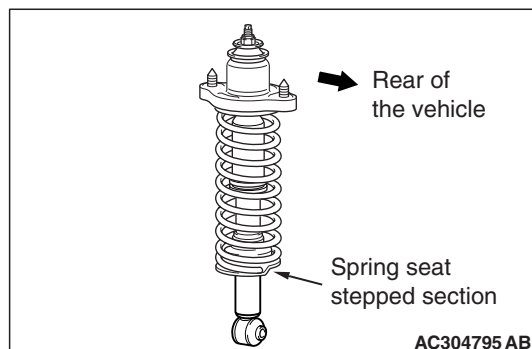
#### <<A>> LOWER ARM AND TRAILING ARM DISCONNECTION



After supporting the lower arm with a jack, separate the lower arm and trailing arm connection.

## INSTALLATION SERVICE POINTS

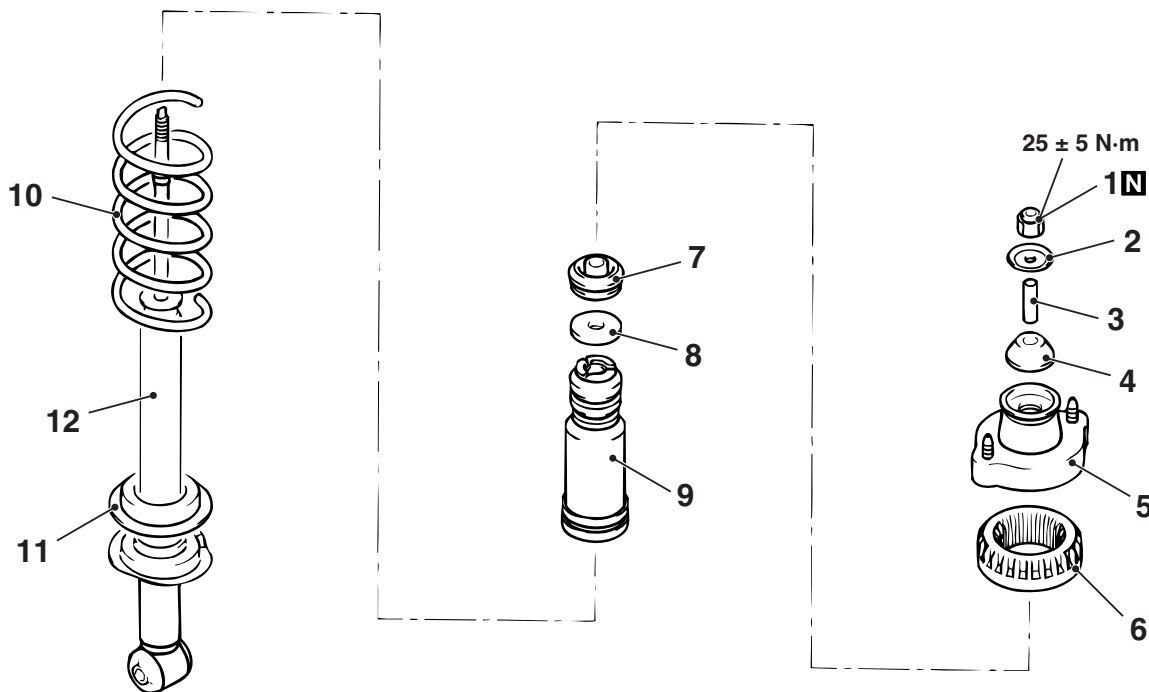
### >>A<< SHOCK ABSORBER ASSEMBLY INSTALLATION



Install the spring seat stepped section so that it points towards the rear side of the vehicle.

## DISASSEMBLY AND ASSEMBLY

M1341005300426



- Disassembly steps**
- <<A>> >>D<< 1. Self-locking nut  
2. Washer  
3. Collar  
4. Upper bushing B  
>>C<< 5. Bracket assembly  
>>A<< 6. Upper spring pad  
7. Upper bushing A

- Disassembly steps (Continued)**
8. Plate  
9. Bump rubber  
>>B<< 10. Coil spring  
>>A<< 11. Lower spring pad  
<<B>> 12. Shock absorber

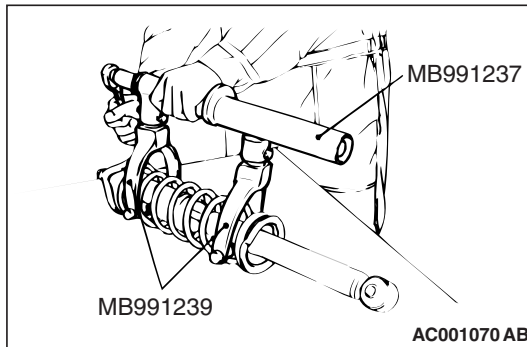
- INSPECTION**
- M1341002600138
- Check the rubber parts for cracks and wear.
  - Check the shock absorber for malfunctions, oil leakage, or abnormal noise.

## DISASSEMBLY SERVICE POINTS

### <<A>> SELF-LOCKING NUT REMOVAL

#### ⚠ CAUTION

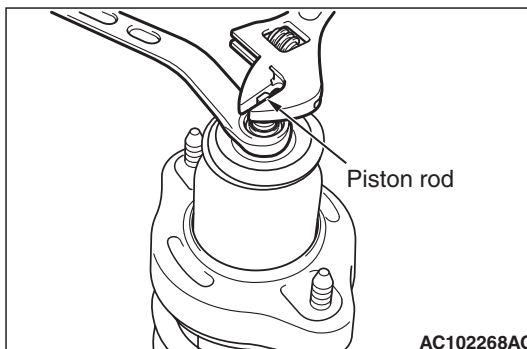
- To hold the coil spring securely, install special tool arm set (MB991239) evenly, and so that the space between both arms of the special tool will be maximum within the installation range.
- Do not use an impact wrench to tighten the bolt of special tool spring compressor body (MB991237). It will break the special tool.



1. Use following special tools to compress the coil spring.
  - Spring compressor body (MB991237)
  - Arm set (MB991239)

#### ⚠ WARNING

**Do not use an impact wrench to remove the self-locking nut. Vibration of the impact wrench will cause special tools (MB991237 and MB991239) to slip and cause personal injury.**

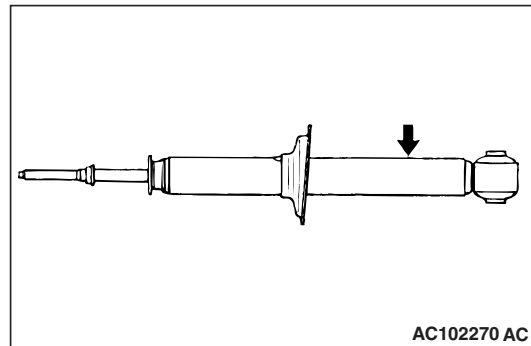


2. While holding the piston rod, remove the self-locking nut.

### <<B>> SHOCK ABSORBER DISPOSAL

#### ⚠ WARNING

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

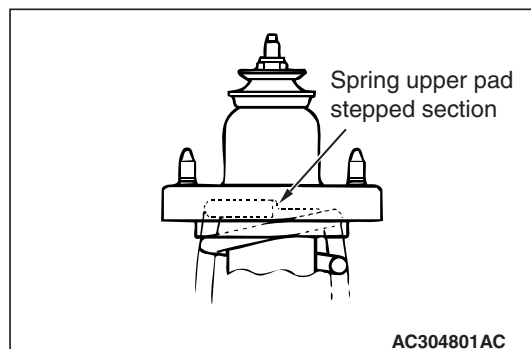


The gas must be discharged from the shock absorber before discarding it. Place the shock absorber horizontally with its piston rod extended. Then drill a hole of approximately 3 mm in diameter at the location shown in the illustration and discharge the gas.

## ASSEMBLY SERVICE POINTS

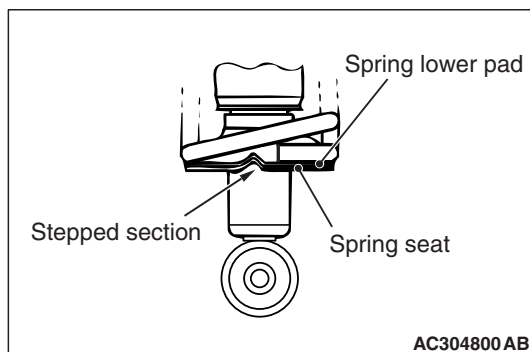
### >>A<< UPPER SPRING PAD/LOWER SPRING PAD INSTALLATION

#### <UPPER SPRING PAD>



Align the stepped section of the spring upper pad with the upper end of the coil spring, and install the spring upper pad.

## <LOWER SPRING PAD>

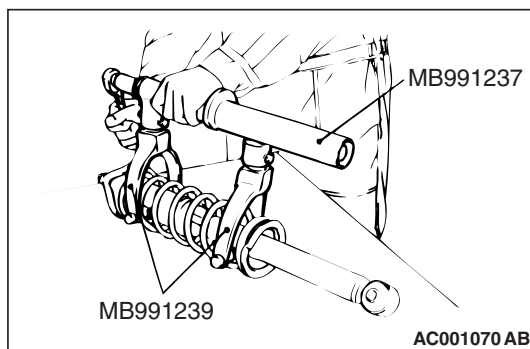


Align the stepped section of the spring lower pad with the stepped section of the spring seat of the shock absorber, and install the spring lower pad.

## >>B<< COIL SPRING INSTALLATION

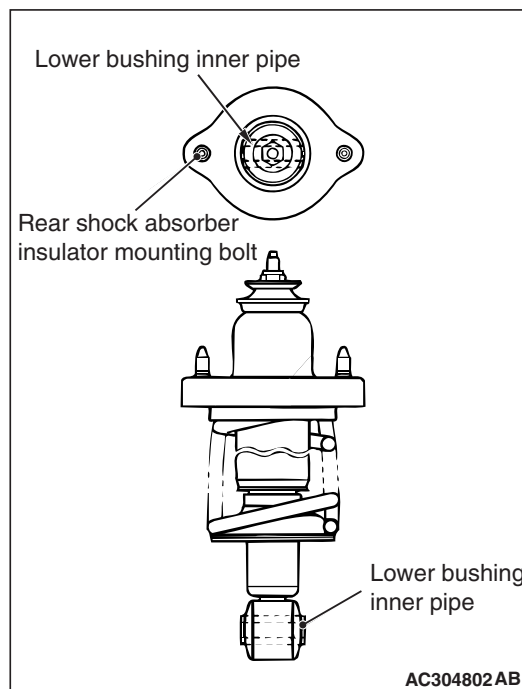
### **CAUTION**

Do not use an impact wrench to tighten the bolt of special tool spring compressor body (MB991237). It will break the special tool.



1. Use following special tools to compress the coil spring, and install it to the lower spring pad.
  - Spring compressor body (MB991237)
  - Arm set (MB991239)
2. Align the end of the coil spring with the stepped section of the lower spring pad.

## >>C<< BRACKET ASSEMBLY INSTALLATION



Install the bracket assembly so that the lower bushing inner pipe of the shock absorber and the line between the bracket mounting bolts are straight when looking from above.

## >>D<< SELF-LOCKING NUT INSTALLATION

1. Temporarily tighten the self-locking nut.

### **CAUTION**

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

2. Remove the special tools, and then tighten the self-locking nut to  $25 \pm 5$  N·m.

# STABILIZER BAR

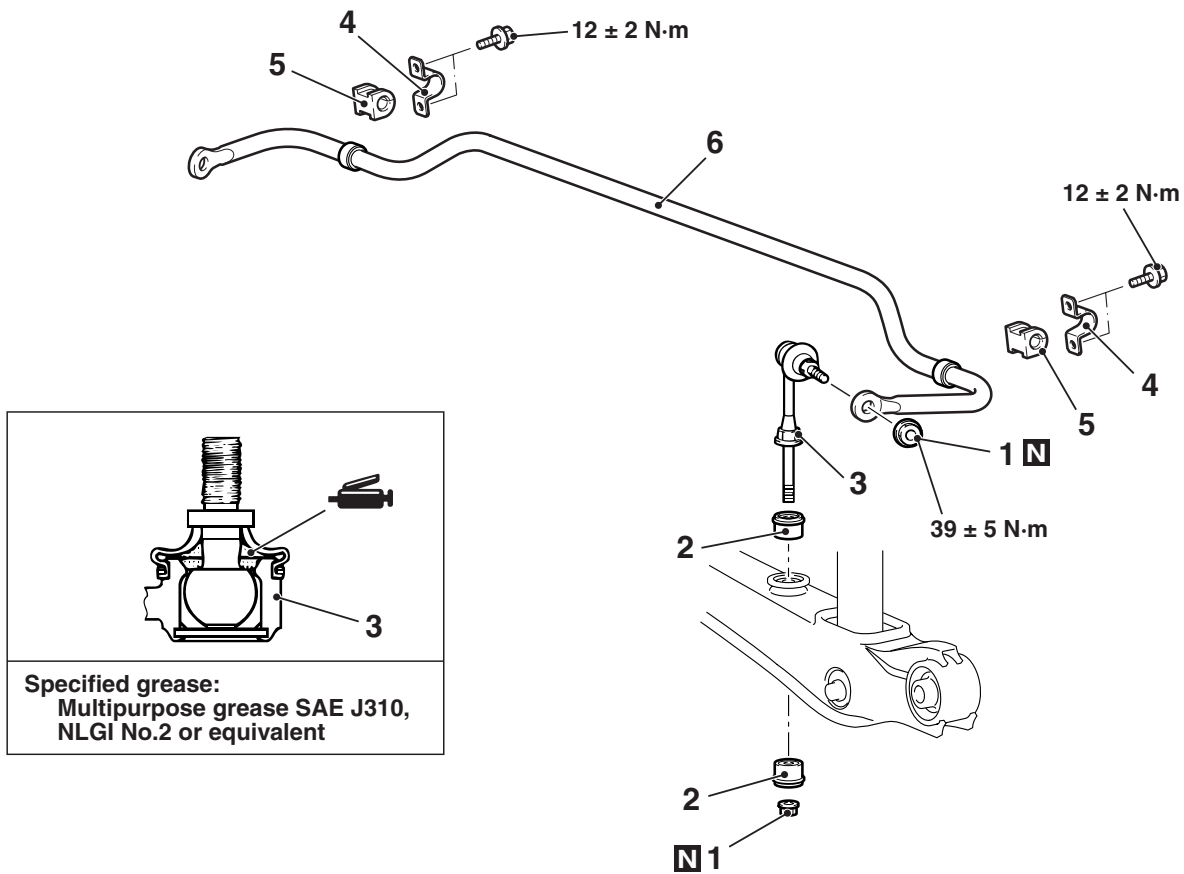
## REMOVAL AND INSTALLATION

M1341003000418

### Post-installation Operation

- Press the dust cover with your finger to check that there are no cracks or damage in the dust cover.

<2WD>



**Specified grease:**  
Multipurpose grease SAE J310,  
NLGI No.2 or equivalent

### Removal steps

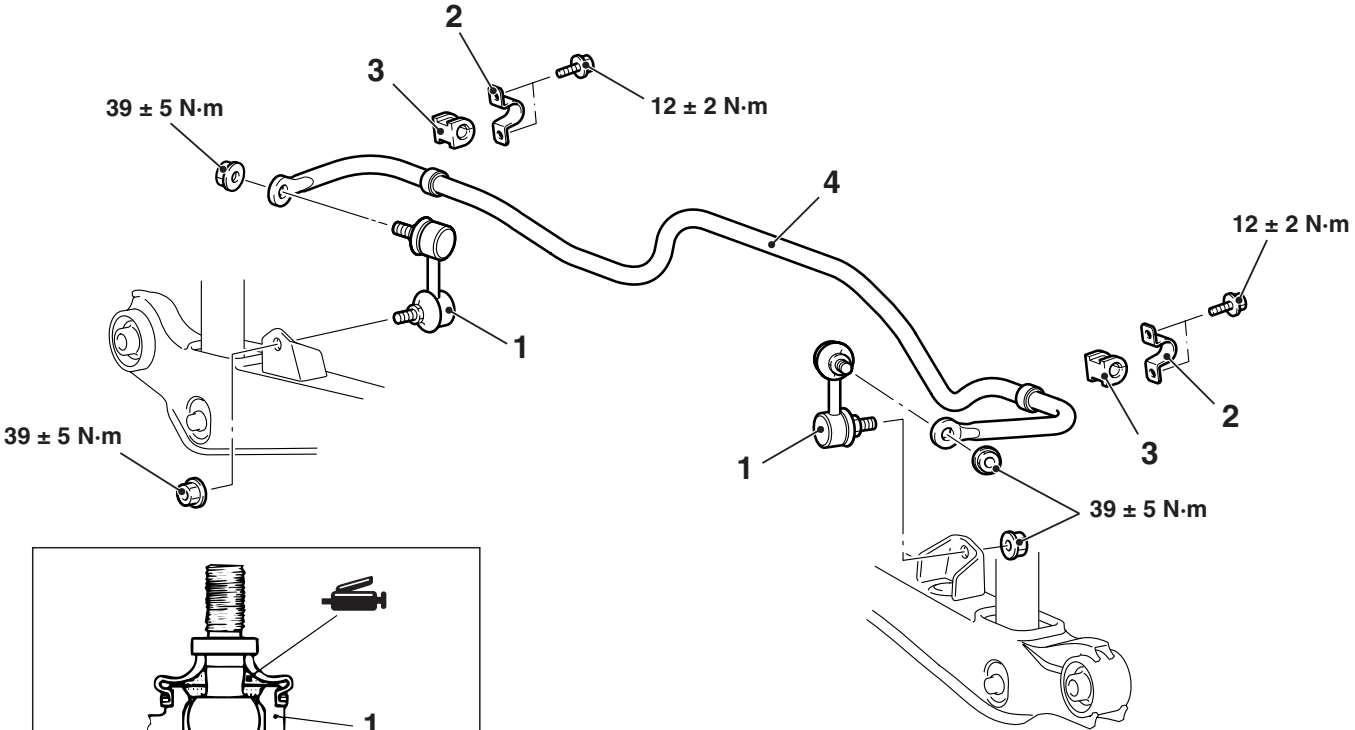
- >>B<<
1. Self-locking nut
  2. Stabilizer rubber
  3. Stabilizer link

### Removal steps (Continued)

- >>A<<
4. Fixture
  5. Bushing
  6. Stabilizer bar

AC504452AB

<4WD>



1

**Specified grease:**  
Multipurpose grease SAE J310,  
NLGI No.2 or equivalent

- Removal steps**

1. Stabilizer link

>>A<< 2. Fixture

- AC300495AB

**Removal steps (Continued)**

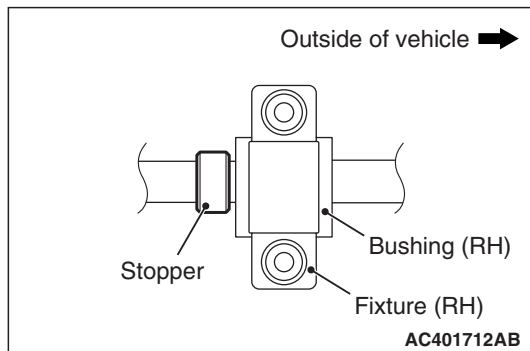
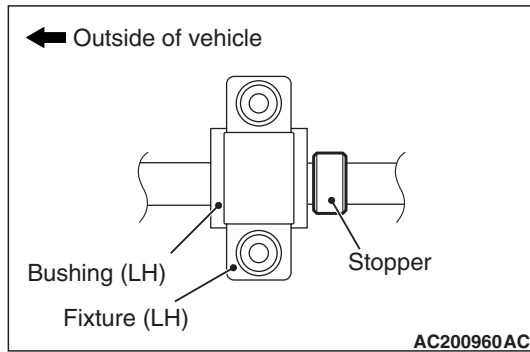
>>A<< 3. Bushing

>>A<< 4. Stabilizer bar



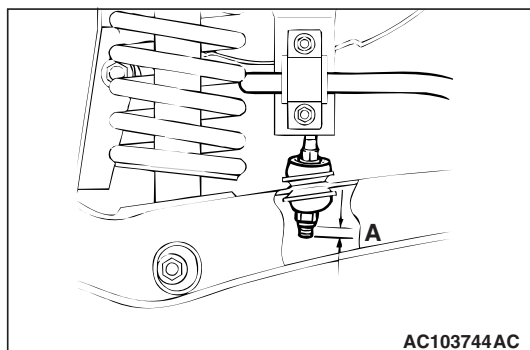
## INSTALLATION SERVICE POINTS

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



Install the stabilizer bar, the bushings and the fixtures so that the stoppers come inboard of the bushings.

### >>B<< SELF-LOCKING NUT INSTALLATION <2WD>



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

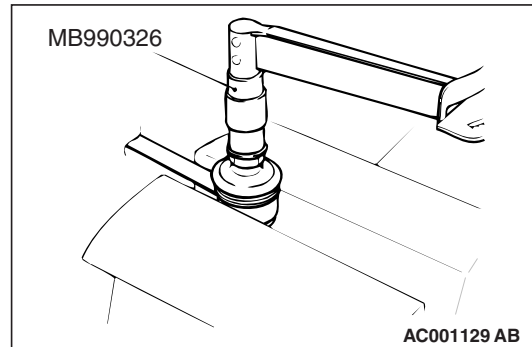
**Standard value (A): 6 – 8 mm**

## INSPECTION

M1341001400454

- Check the bushings for wear and deterioration.
- Check the stabilizer bar for deterioration or damage.
- Check all bolts for condition and straightness.

### STABILIZER LINK BALL JOINT TURNING TORQUE CHECK



1. After shaking the ball joint stud several times, install the nut to the stud and use special tool preload socket (MB990326) to measure the turning torque of the ball joint.

**Standard value:**

**2WD: 0.5 – 1.5 N·m**

**4WD: 1.7 – 3.1 N·m**

2. If the measured value exceeds the standard value, replace the stabilizer link.
3. If the measured value is lower than the standard value, check that the ball joint turns smoothly without excessive play. If so, it is possible to re-use that ball joint.

### STABILIZER LINK BALL JOINT DUST COVER CHECK

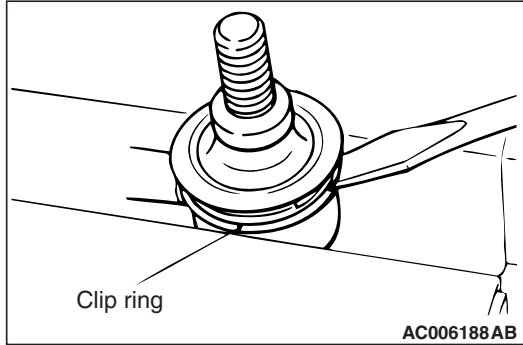
1. Check the dust cover for cracks or damage by pushing it with your finger.
2. If the dust cover is cracked or damaged, replace the stabilizer link.

*NOTE: Cracks or damage of the dust cover may cause damage to the ball joint. When it is damaged during service work, replace the dust cover (Refer to P.34-26).*

**STABILIZER LINK BALL JOINT DUST  
COVER REPLACEMENT**

M1341010900219

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



1. Remove the clip ring and the dust cover.

2. Apply specified grease to the inside of a new dust cover.

**Specified grease: Multipurpose grease SAE J310, NLGI No.2 or equivalent**

3. Wrap plastic tape around the stabilizer link stud, and then install the dust cover to the stabilizer link.
4. Secure the dust cover by the clip ring.
5. Check the dust cover for cracks or damage by pushing it with finger.

# REAR SUSPENSION CROSSMEMBER

## REMOVAL AND INSTALLATION

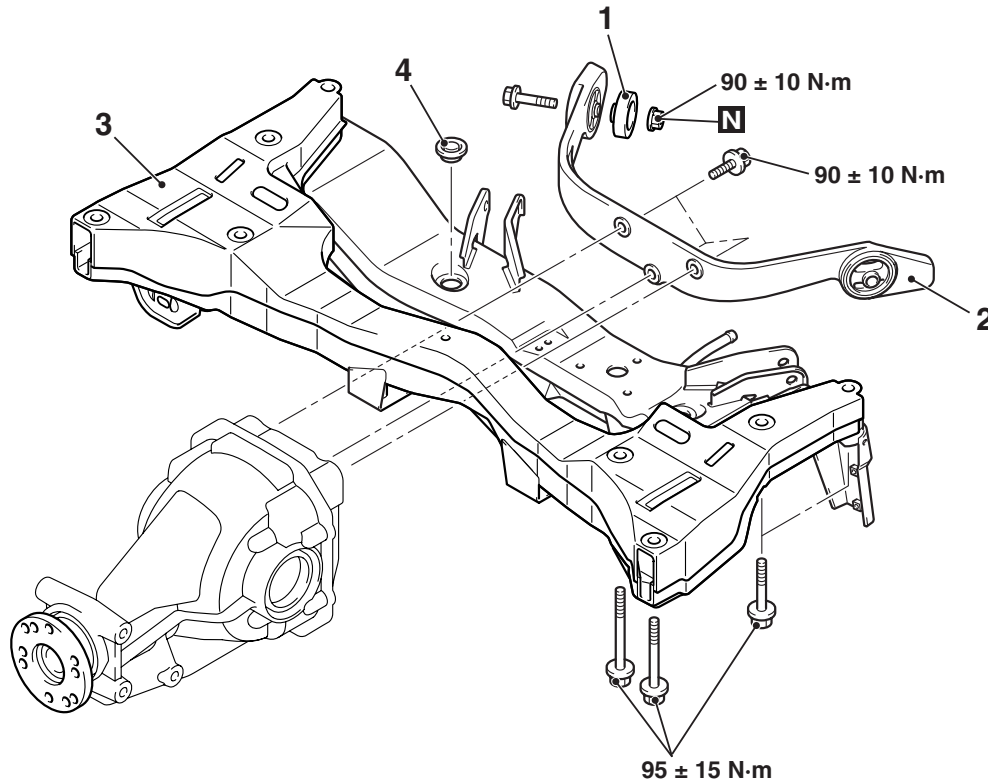
M1341006800349

### Pre-removal Operation

- Main Muffler, Centre Exhaust Pipe Removal (Refer to GROUP 15, Exhaust pipe and Main Muffler P.15-13).
- Control Link, Upper Arm, Lower Arm Removal (Refer to P.34-8).
- Stabilizer Bar Removal (Refer to P.34-23).
- Fuel Filler Neck Protector Removal (Except for Brazil and Chile, refer to GROUP 13D, Fuel Tank P.13C-8). (For Brazil and Chile, refer to GROUP 13D, Fuel Tank P.13C-12).
- Differential Carrier Assembly Removal (Refer to GROUP 27, Differential Carrier Assembly P.27B-17).

### Post-installation Operation

- Differential Carrier Assembly Installation (Refer to GROUP 27, Differential Carrier Assembly P.27B-17).
- Fuel Filler Neck Protector Installation (Except for Brazil and Chile, refer to GROUP 13D, Fuel Tank P.13C-8). (For Brazil and Chile, refer to GROUP 13D, Fuel Tank P.13C-12).
- Stabilizer Bar Installation (Refer to P.34-23).
- Control Link, Upper Arm, Lower Arm Installation (Refer to P.34-8).
- Main Muffler, Centre Exhaust Pipe Installation (Refer to GROUP 15, Exhaust pipe and Main Muffler P.15-13).
- Rear Wheel Alignment Check and Adjustment (Refer to P.34-7).



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### Removal steps

1. Rear differential support weight
2. Differential support arm connecting bolt
3. Rear suspension crossmember
4. Plug

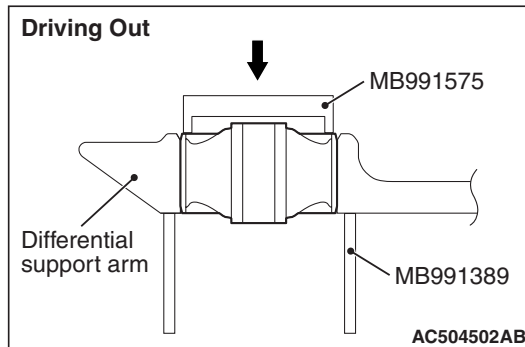
### INSPECTION

M1341006900056

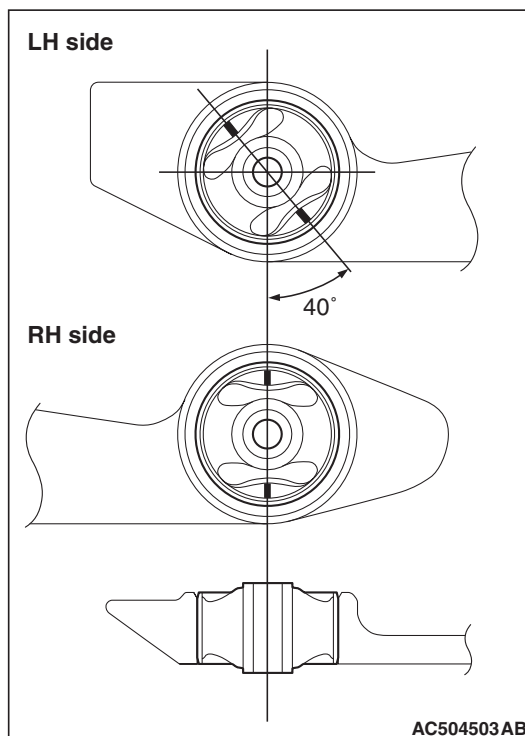
- Check the crossmember for cracks or deformation.
- Check all bolts for condition and straightness.

## DIFFERENTIAL SUPPORT ARM BUSHING REPLACEMENT

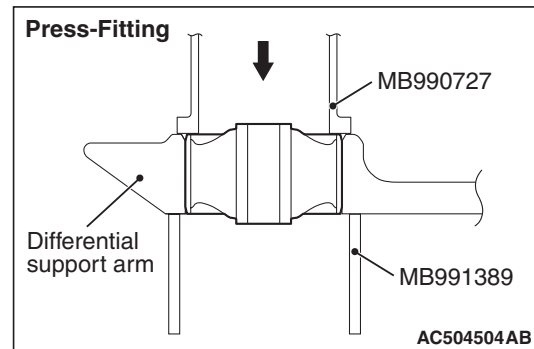
M1341019000019



1. Use following special tools to drive out the differential support arm bushing.
  - Arbor (MB991575)
  - Bush remover base (MB991389)



2. Set the installation direction and installation location of the trailing arm bushing. Make sure that the hollow of the trailing arm bushing is located as shown in the illustration.



3. Using the special tools, press the differential support arm bushing into the position shown.
  - Oil seal installer (MB990727)
  - Bush remover base (MB991389)