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# REAR SUSPENSION

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**GENERAL INFORMATION**

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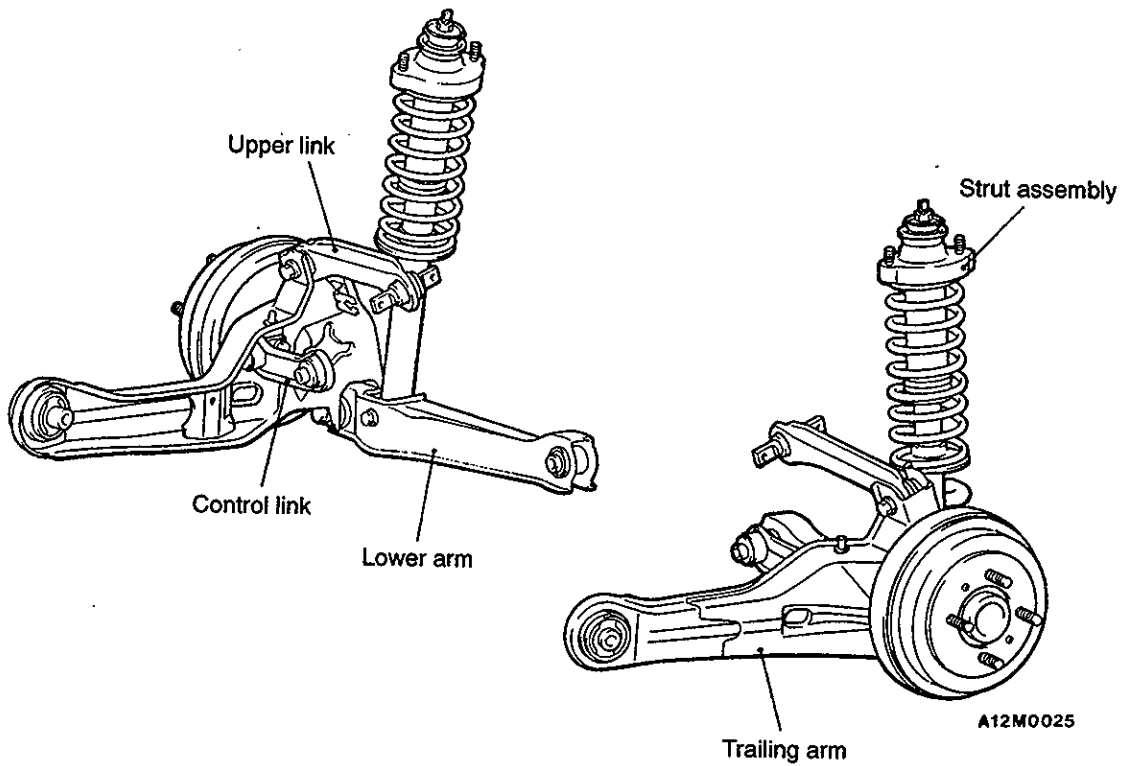
The rear suspension is a trailing arm type multi-link suspension. The shock absorber used on the strut

assembly is a hydraulic, cylindrical double-acting type.

**COIL SPRING**

Items	Hatchback	Sedan
Wire diameter × average diameter × free length mm	9 × 86 × 369	9 × 86 × 379

**CONSTRUCTION DIAGRAM**



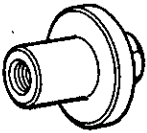
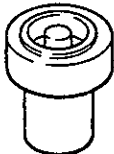

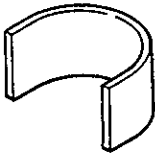
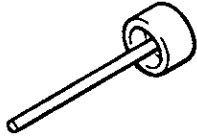
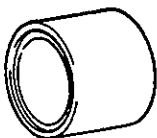
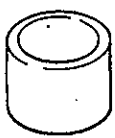
**SERVICE SPECIFICATIONS**

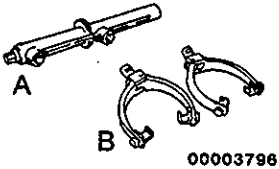
34100030105

Items		Specifications
Toe-in	At the centre of tyre tread mm	3 ±2
	Toe-angle (per wheel)	0°09'±06'
Camber		- 0°40'±30'
Clearance between rear speed sensor pole piece and rotor mm		0.1 – 2.0

**SPECIAL TOOLS**

34100060081

Tool	Number	Name	Use
	MB991004	Wheel alignment gauge attachment	Measurement of the wheel alignment (Vehicles with aluminium type wheels)
	MB991447	Bushing remover and installer	Driving out and press-fitting of lower arm bushing
	MB991448	Bushing remover and installer base	
	MB991449	Bushing remover and installer supporter	Driving out and press-fitting of trailing arm bushing
	MB991444	Bushing remover and installer arbor	
	MB991445	Bushing remover and installer base	
	MB991446	Bushing remover and installer spacer	

Tool	Number	Name	Use
 A B 00003796	A: MB991237 B: MB991239	A: Spring compressor body B: Arm set	Compression of the rear coil spring

## ON-VEHICLE SERVICE

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### REAR WHEEL ALIGNMENT CHECK AND ADJUSTMENT

Measure the wheel alignment with the vehicle parked on level ground.

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

#### TOE-IN

##### Standard value:

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

Toe angle (per wheel)  $0^{\circ}09' \pm 06'$

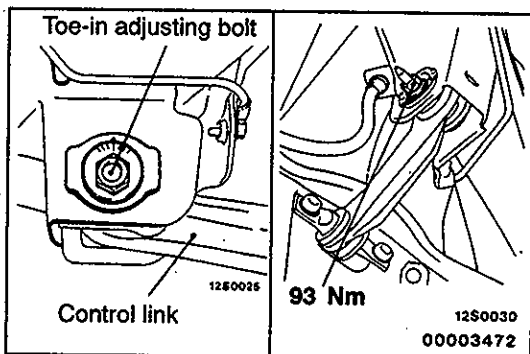
If outside the standard value, adjust by the following procedure.

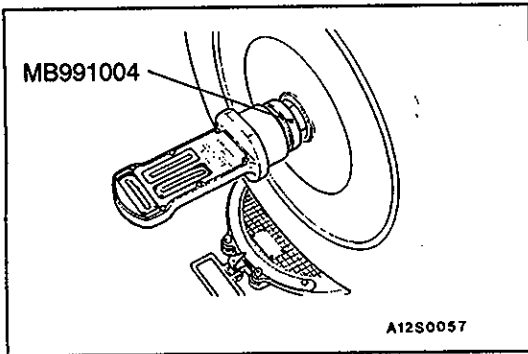
- (1) Be sure to adjust the camber before adjusting the toe-in.
- (2) Adjust by turning the toe adjusting bolt (mounting bolt on the inside of the control link).

LH: Turning clockwise → toe-in direction

RH: Turning clockwise → toe-out direction

The scale has gradations of approximately 2.6 mm (single side toe angle equivalent to 16')





**CAMBER**

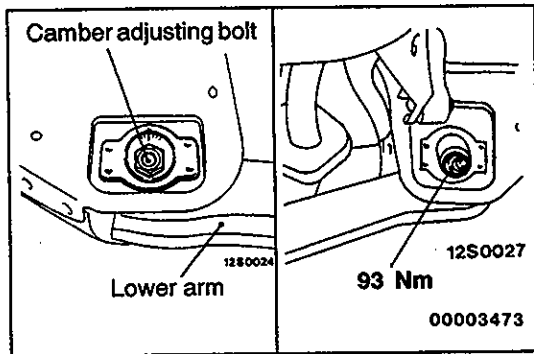
**Standard value:  $- 0^{\circ}40' \pm 30'$**   
**(The difference between the left and right wheels should be 30' or less.)**

**NOTE**

For vehicles equipped with aluminium wheels, measure the camber after tightening the special tool (MB991004) to the specified torque 172 Nm.

**Caution**

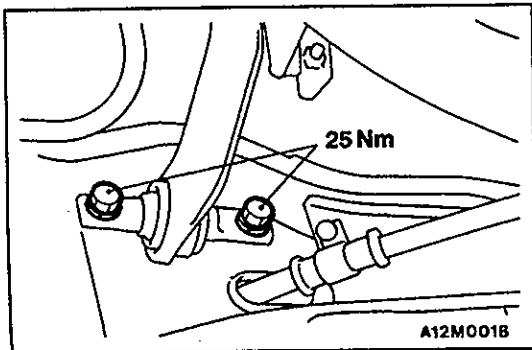
**Never subject the wheel bearings to the full vehicle load when the flange nuts are loosened.**



If outside the standard value, adjust by the following procedure.

- (1) Remove the connection between the control link and the trailing arm.
- (2) Adjust by turning the camber adjusting bolt (mounting bolt for the lower arm and rear crossmember).

Left wheel: clockwise + camber  
 Right wheel: clockwise – camber  
 The scale has gradations of approximately 14'



- (3) Tighten the control link to the trailing arm at the specified torque.
- (4) After adjusting the camber, be sure to adjust the toe-in.

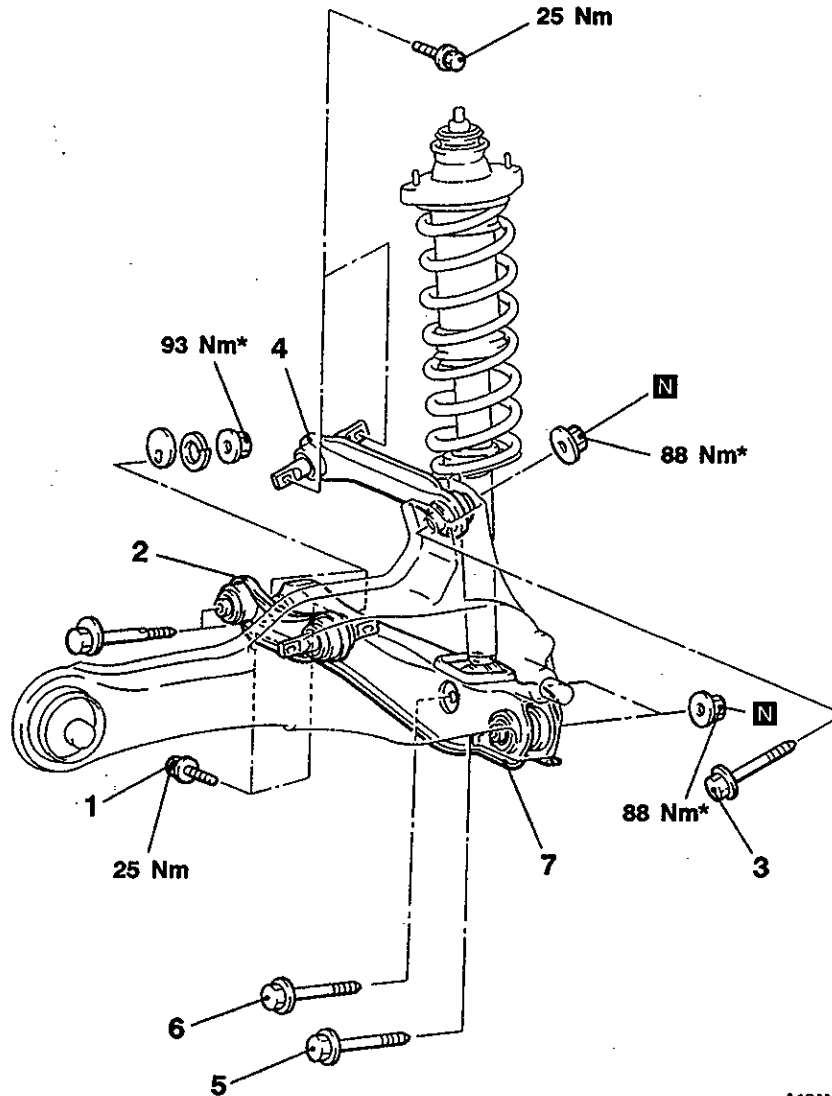
# CONTROL LINK, UPPER LINK AND LOWER ARM

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## REMOVAL AND INSTALLATION

**Post-Installation Operation**

- Wheel Alignment Check (Refer to P.34-4.)



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**Control link removal steps**

1. Control link and trailing arm connection
2. Control link

**Lower arm removal steps**

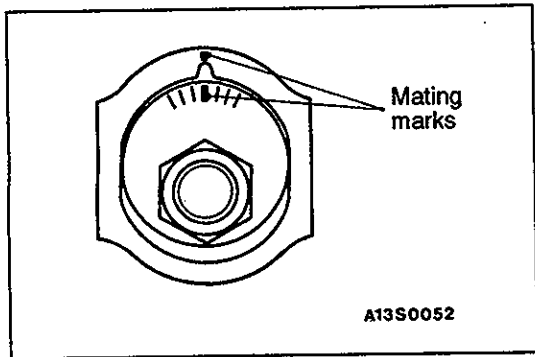
1. Control link and trailing arm connection
5. Lower arm and trailing arm connection
6. Shock absorber assembly and lower arm connection
7. Lower arm

**Upper link removal steps**

3. Upper link and trailing arm connection
4. Upper link

**Caution**

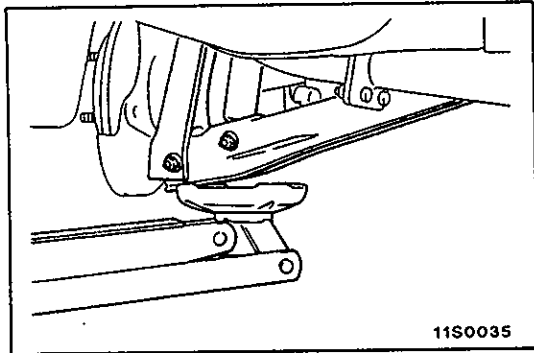
\* Indicates parts which should be temporarily tightened, and then fully tightened with the vehicles on the ground in the unladen condition.



**REMOVAL SERVICE POINTS**

**◀A▶ CONTROL LINK/LOWER ARM REMOVAL**

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



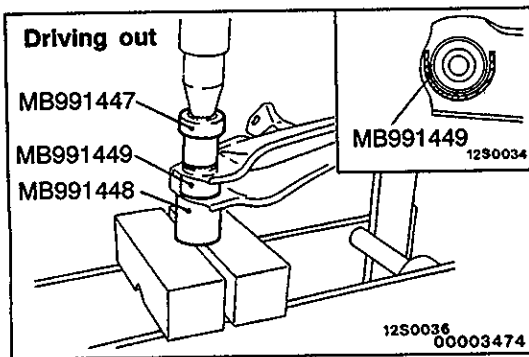
**◀B▶ UPPER LINK AND TRAILING ARM / LOWER ARM AND TRAILING ARM DISCONNECTION**

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

**INSPECTION**

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- Check the bushing for wear and deterioration.
- Check the control link upper link and lower arm for bends or breakage.
- Check all bolts for condition and straightness.



**LOWER ARM BUSHING REPLACEMENT**

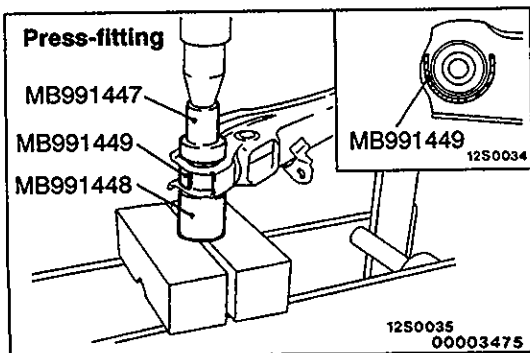
Use the special tools to drive out the press-fit the lower arm bushing.

**NOTE**

If the special tool (MB991449) is hard to install, tap it with a plastic hammer.

**Caution**

Because the outside diameter of both edges of the bushing are different, be careful not to mistake the direction when driving out and press-fitting.

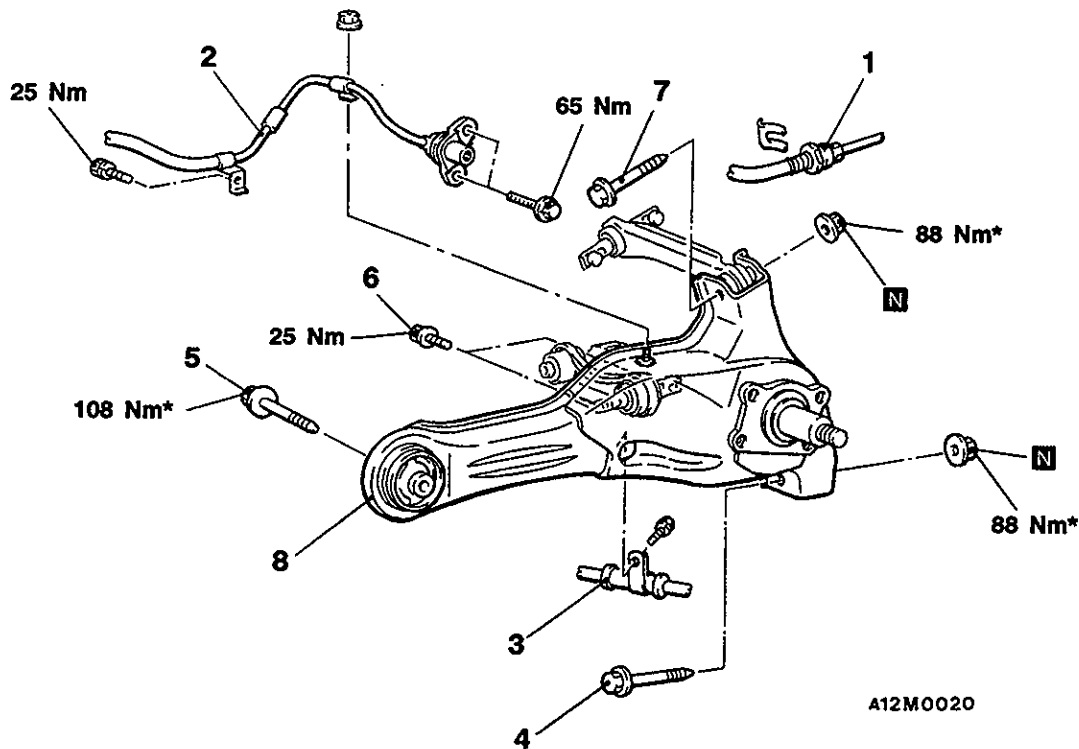


## TRAILING ARM

## REMOVAL AND INSTALLATION

**Pre-removal and Post-installation Operation**

- Rear Drum Brake Removal and Installation (Refer to GROUP 35A.)
- Rear Axle Hub Removal and Installation (Refer to GROUP 27.)



◀A▶

◀B▶ ▶A▶

◀C▶

**Removal steps**

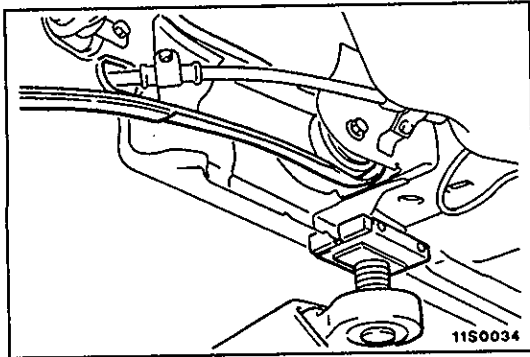
- Lifting point
- 1. Brake hose
- 2. Rear speed sensor  
<Vehicles with ABS>
- 3. Parking brake cable
- 4. Lower arm and trailing arm connection
- 5. Trailing arm and body connection
- 6. Control link and trailing arm connection

- 7. Upper link and trailing arm connection
- 8. Trailing arm

**Caution**

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





**REMOVAL SERVICE POINTS**

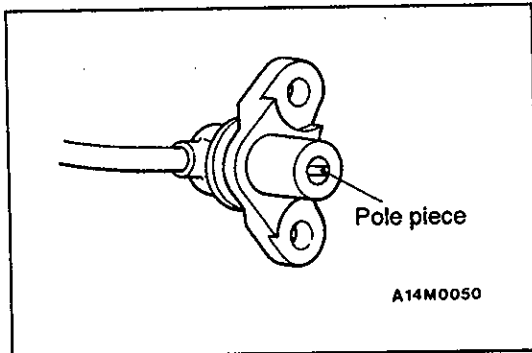
**◀A▶ LIFTING POINT**

When removing the trailing arm, move the lifting arm slightly towards the front of the vehicle so that it will not be in the way.

**◀B▶ REAR SPEED SENSOR REMOVAL**

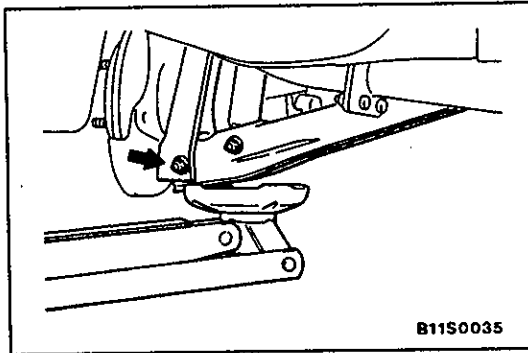
**Caution**

When removing the speed sensor, be careful that the pole piece at the end does not touch the surface of the rotor teeth or other parts.



**◀C▶ 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**

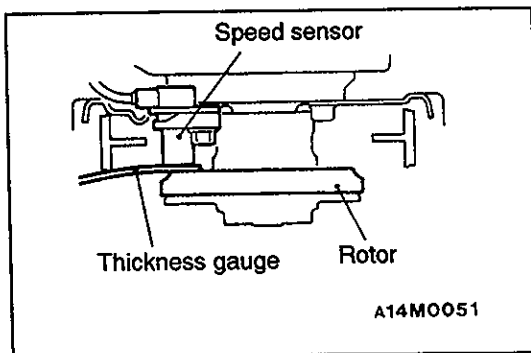
**▶A▶ REAR SPEED SENSOR INSTALLATION**

**Caution**

Be careful that the pole piece at the end of the speed sensor and the rotor teeth do not become damaged by striking them against the metal parts.

Insert a thickness gauge into the space between the speed sensor's pole piece and the rotor's toothed surface, and then tighten the speed sensor bracket at the position where the clearance is at the standard value all around.

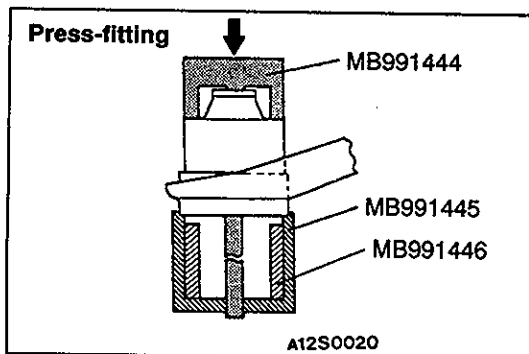
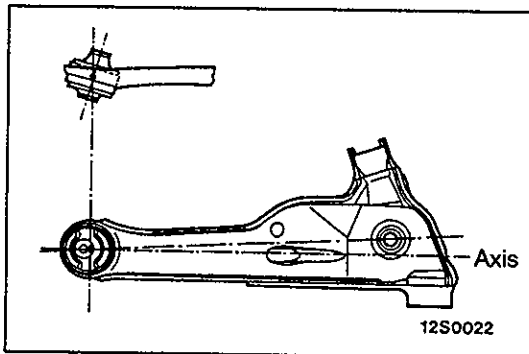
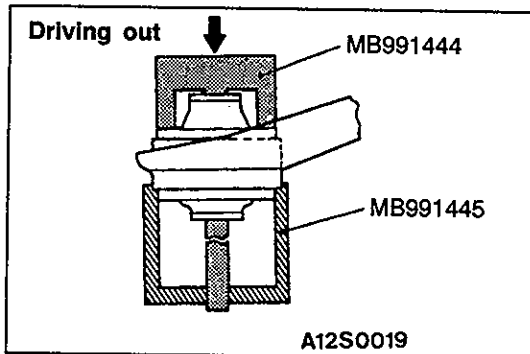
**Standard value: 0.1 – 2.0 mm**



**INSPECTION**

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- Check trailing arm for cracks and deformation.
- Check bushing for cracks, deterioration and wear.

**TRAILING ARM BUSHING REPLACEMENT**

(1) Use the special tools to drive out the trailing arm bushing.

(2) Set the installation direction and installation location of the trailing arm bushing.

1. Place the long projecting end of the trailing arm bushing inner pipe towards the inside of the vehicle.
2. Set so that the trailing arm bushing is symmetrical to the axis between the centre of the trailing arm bushing and the centre of the spindle.

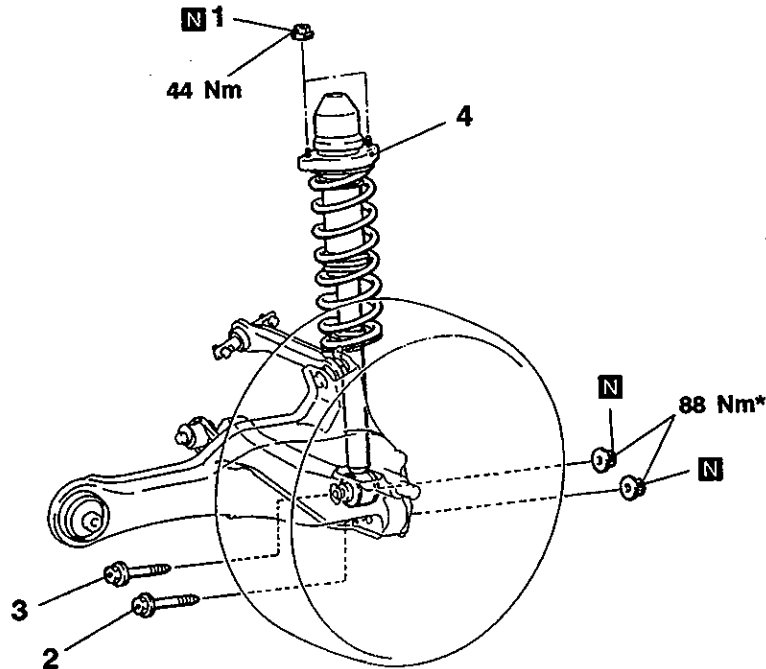
(3) Use the special tools to press-fit the trailing arm bushing.

# STRUT ASSEMBLY

## REMOVAL AND INSTALLATION

### Pre-removal and Post-Installation Operation

- Lower arm and trailing arm disconnection (Refer to P.34-8.)
- Quarter trim lid <Hatchback> (Refer to GROUP 52A – Trim.)



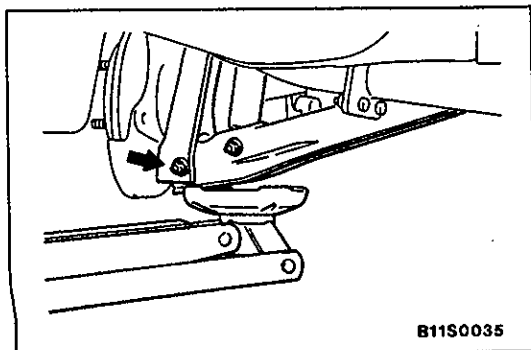
A12S0042

### Removal steps

1. Self-locking flange nut
2. Lower arm and trailing arm connection
3. Shock absorber assembly and lower arm connection
4. Strut assembly

### Caution

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



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### 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.

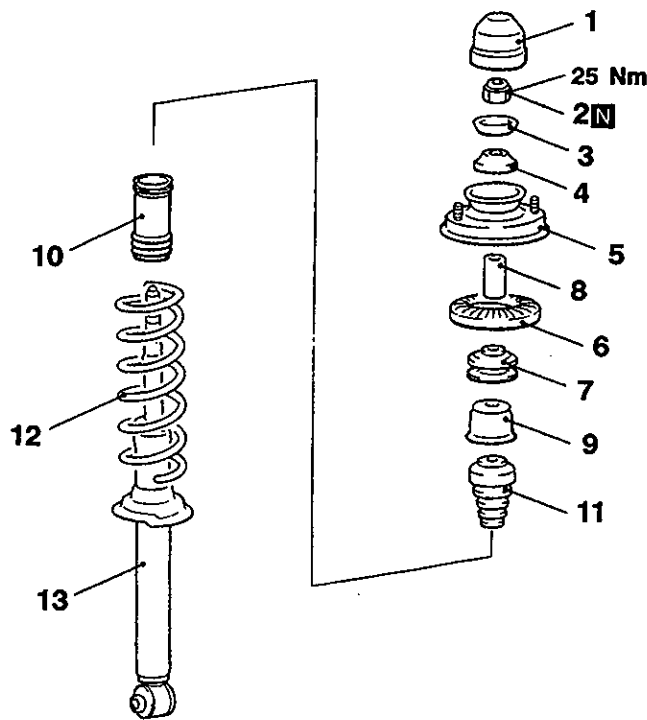
### INSPECTION

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

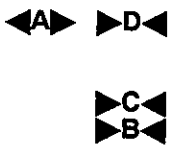
DISASSEMBLY AND REASSEMBLY

34100530070



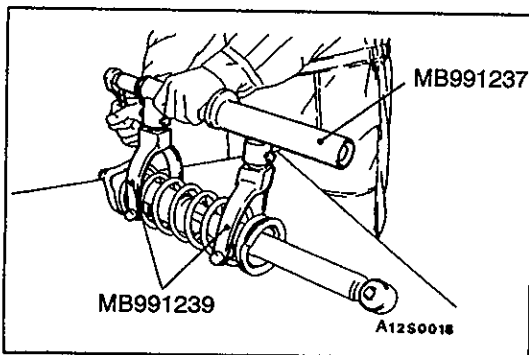
A12M0016

Disassembly steps



- 1. Cap
- 2. Self-locking nut
- 3. Washer
- 4. Upper bushing B
- 5. Bracket
- 6. Spring pad

- 7. Upper bushing A
- 8. Coller
- 9. Cup
- 10. Dust cover
- 11. Bump rubber
- 12. Coil spring
- 13. Shock absorber



DISASSEMBLY SERVICE POINT

◀A▶ SELF-LOCKING NUT REMOVAL

(1) Use the special tools to compress the coil spring.

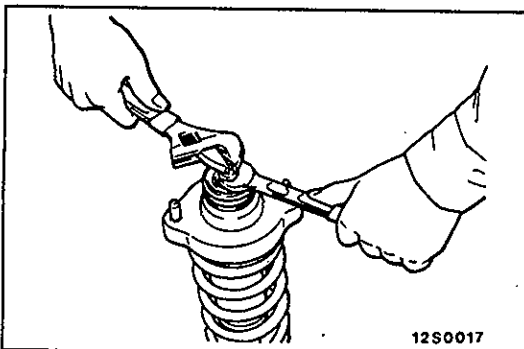
**Caution**

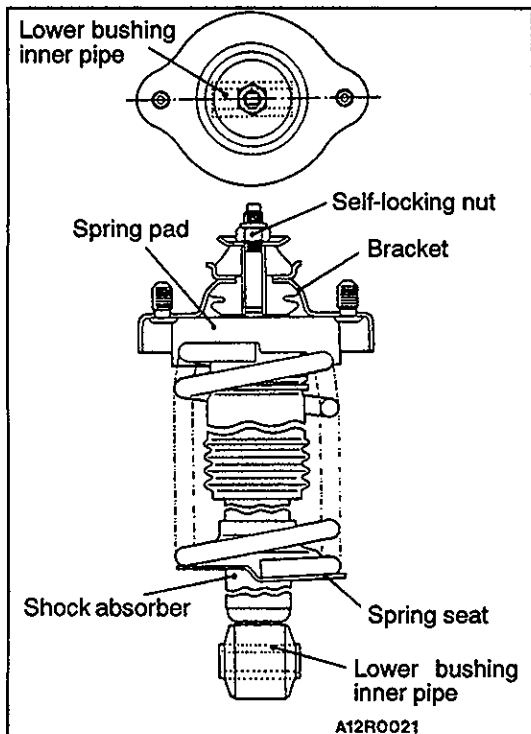
- 1. Install the special tools evenly, and so that the maximum length will be attained within the installation range.
- 2. Do not use an impact wrench to tighten the special tool bolt.

(2) Holding the piston rod, remove the self-locking nut.

**Caution**

Do not use an impact wrench.





**REASSEMBLY SERVICE POINTS**

**►A◄ COIL SPRING INSTALLATION**

- (1) Use the special tools (MB991237, MB991239) to compress the coil spring, and install it to the shock absorber.

**Caution**

**Do not use an impact wrench to tighten the bolt of the special tool.**

- (2) Align the end of the coil spring with the stepped section of the spring seat of the shock absorber.

**►B◄ SPRING PAD INSTALLATION**

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

**►C◄ BRACKET INSTALLATION**

Install the bracket 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) Provisionally tighten the self-locking nut.
- (2) Remove the special tools (MB991237, MB991239), tighten the self-locking nut at the specified torque.

**Caution**

**Do not use an impact wrench.**

**INSPECTION**

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- Check the rubber parts for damage.
- Check the coil springs for crack, damage or deterioration.

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**NOTES**