

DAIHATSU

L500, L501

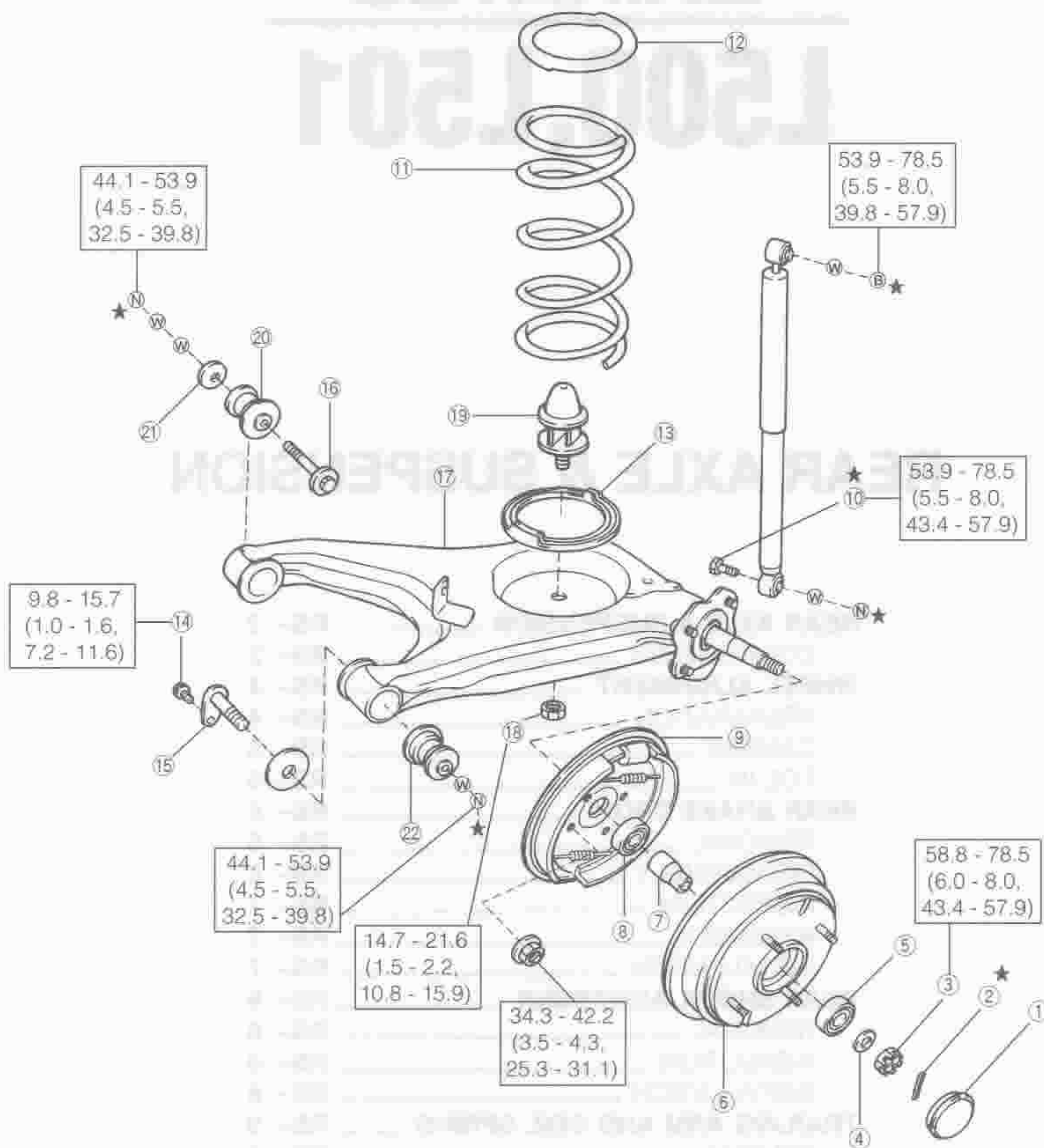
REAR AXLE & SUSPENSION

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LPS00001-00000

RS

REAR AXLE & SUSPENSION COMPONENTS



- | | |
|-----------------------|----------------------------|
| ① Grease retainer cap | ⑫ Rear spring upper seat |
| ★② Cotter pin | ⑬ Rear spring lower seat |
| ③ Castle nut | ⑭ Bolt |
| ④ Plate washer | ⑮ Trailing arm set bolt |
| ⑤ Bearing, outer | ⑯ Toe adjusting bolt |
| ⑥ Brake drum | ⑰ Trailing arm subassembly |
| ⑦ Bearing retainer | ⑱ Nut |
| ⑧ Bearing, inner | ⑲ Rear spring bumper |
| ⑨ Backing plate | ⑳ Rear suspension arm bush |
| ⑩ Bolt | ㉑ Toe adjusting plate |
| ⑪ Coil spring | ㉒ Trailing arm bush |

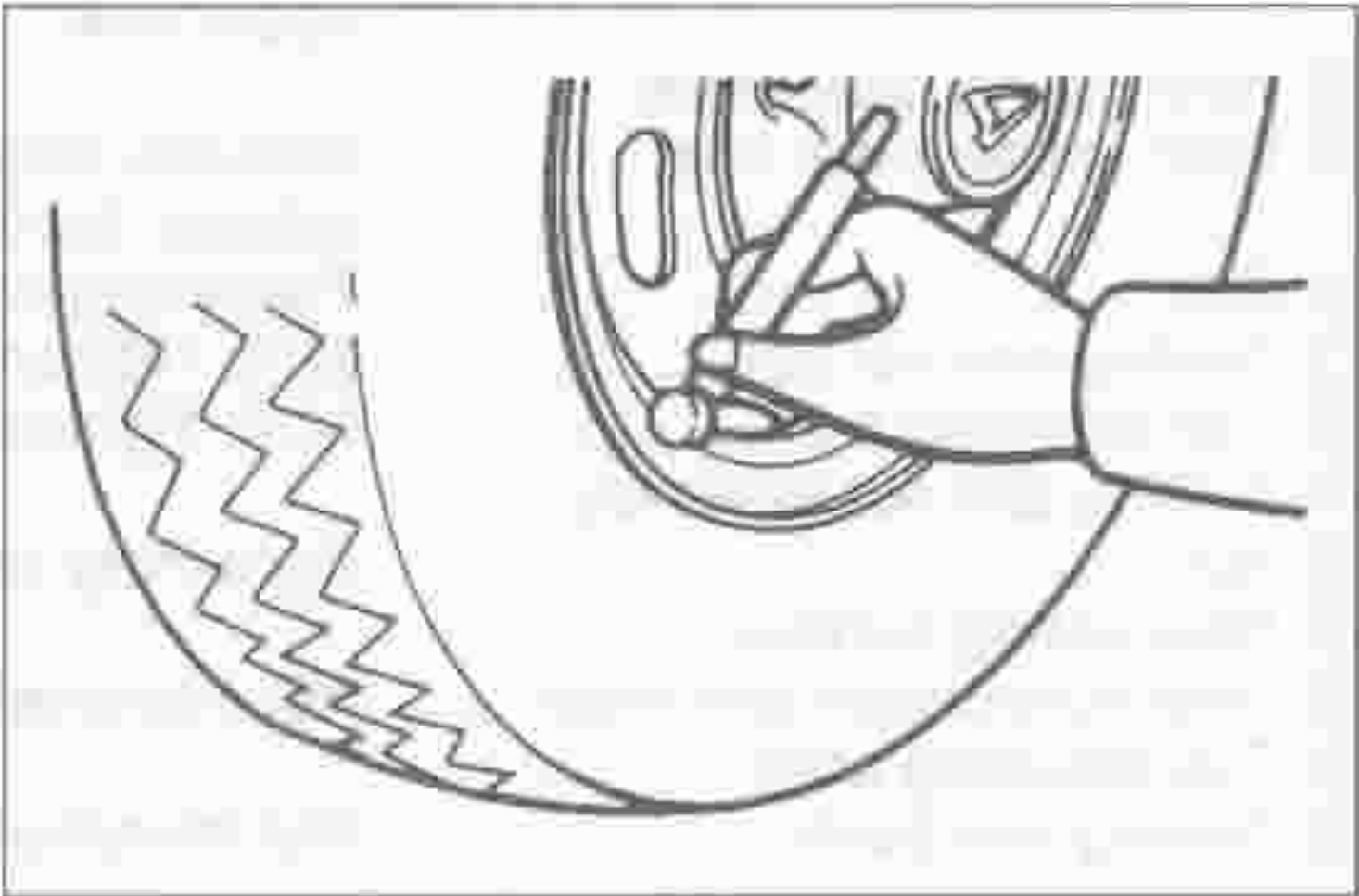
- | | |
|----------------------------------|---|
| ① Grease retainer cap | Reserve MP grease (15g). |
| ★② Cotter pin | |
| ③ Castle nut | Tightening torque: 6.0 - 8.0 kgf-m |
| ④ Plate washer | D = 24, t = 3.2 |
| ⑤ Bearing, outer | Apply MP grease (3g). |
| ⑥ Brake drum | Apply MP grease (10g). |
| ⑦ Bearing retainer | |
| ⑧ Bearing, inner | Assemble this bearing in such a way that the seal surface faces toward the trailing arm side of the brake drum. |
| ⑨ Backing plate | Apply Three Bond® 1104 to the mating surface between this backing plate and the trailing arm.
M8, Tightening torque: 3.5 - 4.3 kgf-m |
| ⑩ Bolt | M12, Tightening torque: 5.5 - 8.0 kgf-m |
| ⑪ Coil spring | Assemble the coil spring in such a way that the identification point mark comes at the upper side. |
| ⑫ Rear spring upper seat | |
| ⑬ Rear spring lower seat | Securely assemble the lower spring sheet, while aligning the lower spring sheet with the stopper section of the trailing arm subassembly. |
| ⑭ Bolt | Tightening torque: 1.0 - 1.6 kgf-m |
| ⑮ Trailing arm set bolt | M10, Tightening torque: 4.5 - 5.5 kgf-m |
| ⑯ Toe adjusting bolt | M10, Tightening torque: 4.5 - 5.5 kgf-m |
| ⑰ Trailing arm subassembly | |
| ⑱ Nut | Tightening torque: 1.5 - 2.2 kgf-m |
| ⑲ Rear spring bumper | |
| ⑳ Rear suspension arm bush | Not interchangeable with Item (22). d = 12 |
| ㉑ Toe adjusting plate | |
| ㉒ Trailing arm bush | Not interchangeable with Item (20). d = 10 |



NOTE:

- Perform the check on a level floor.
- Make sure that the wheels are mounted with the same maker's tires having the same size.
- Keep the vehicle in an unloaded state. The unloaded state represents a condition in which the fuel tank is filled to the full capacity, and the spare tire, standard tools and jack are installed at the correct locations.

Tire size	kPa (kgf/cm ² ,psi)	
	Front	Rear
145/70R12 69S	180 (1.8, 26)	180 (1.8, 26)

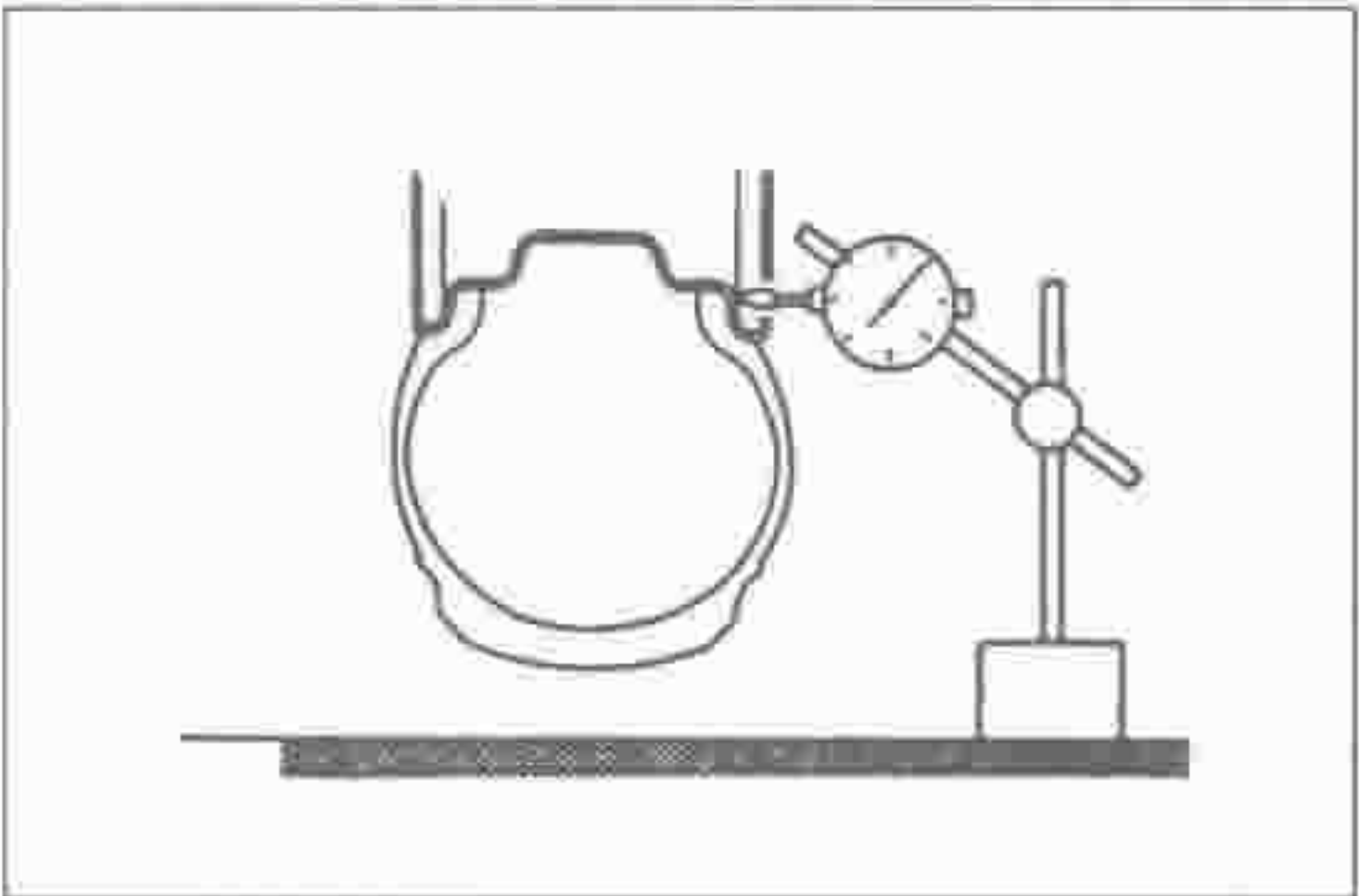


LRS00003-00002

3. Inspect the tires for runout.
Maximum Limit: 2 mm for Right-and-Left
1.4 mm for Up-and-down

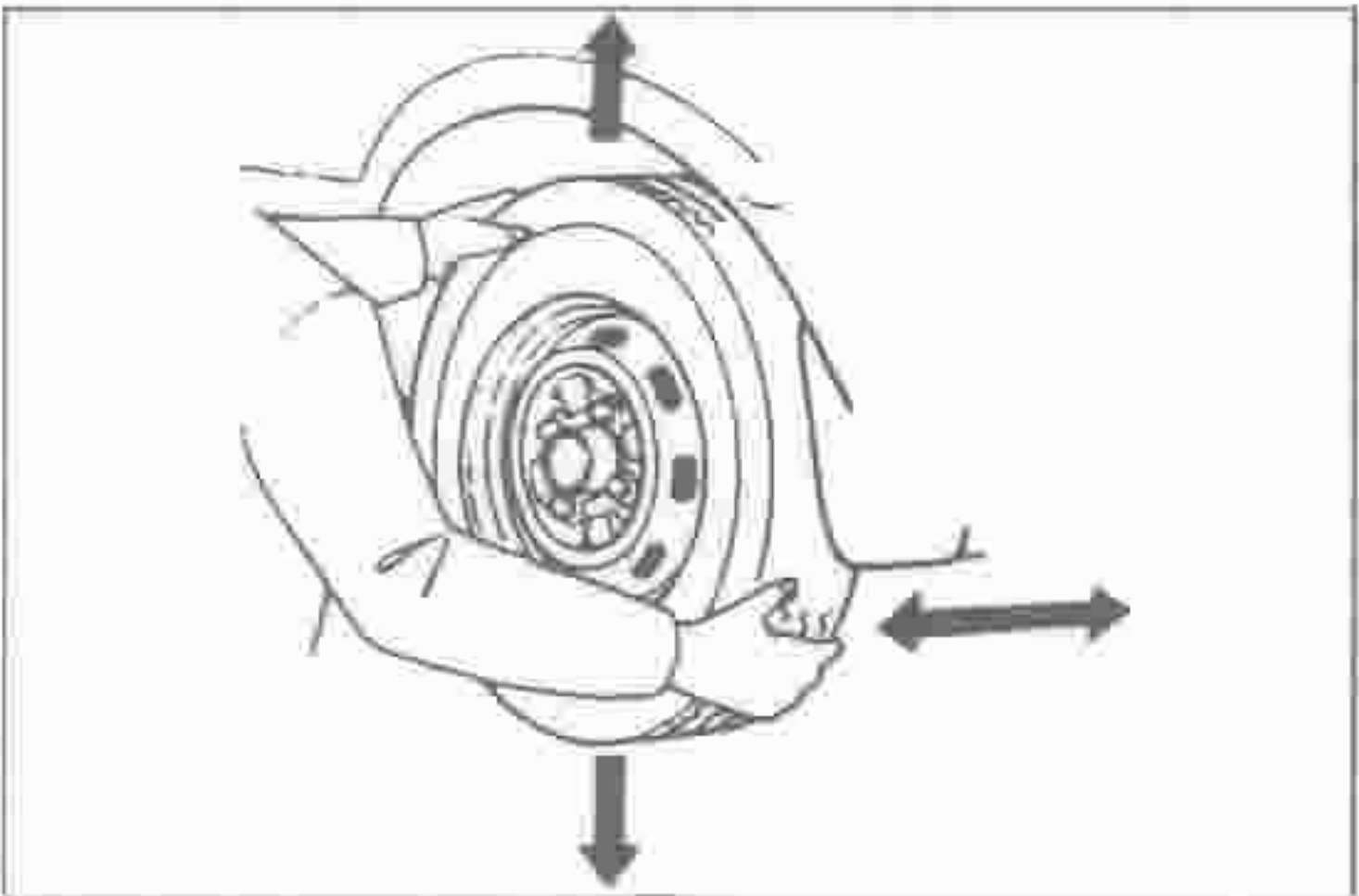
NOTE:

- Make sure to conduct the measurement above only after the tires have been warmed up.



LRS00004-00003

4. Check of bolts of related sections for tightened condition.
5. Check of related sections for excessive amount of play.
- (1) Jack up the vehicle. Alternately push and pull the upper and lower parts of each tire. Ensure that the tire exhibits no excessive play.
- (2) If the tire exhibits an excessive amount of play, perform the following check while the brake pedal is being depressed.



LRS00005-00004

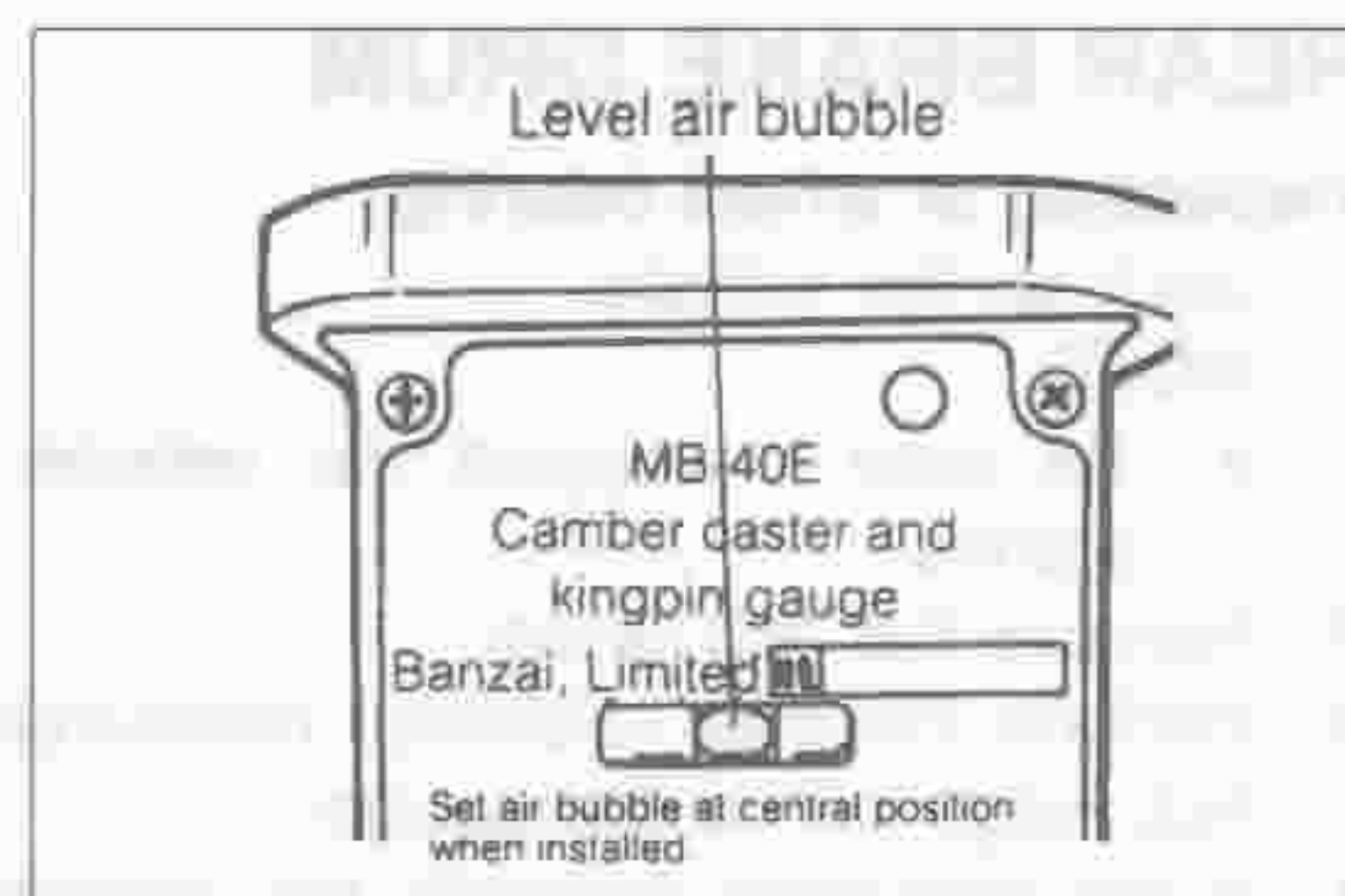
CAMBER

Inspection

1. Set the rear wheels to their straight-ahead conditions.
2. Align the level air bubble with the central position.
3. Take the camber reading of the gauge.

(Refer to FS section)

Specified Value: $0^{\circ}13' \pm 45'$



LRS00006-00005

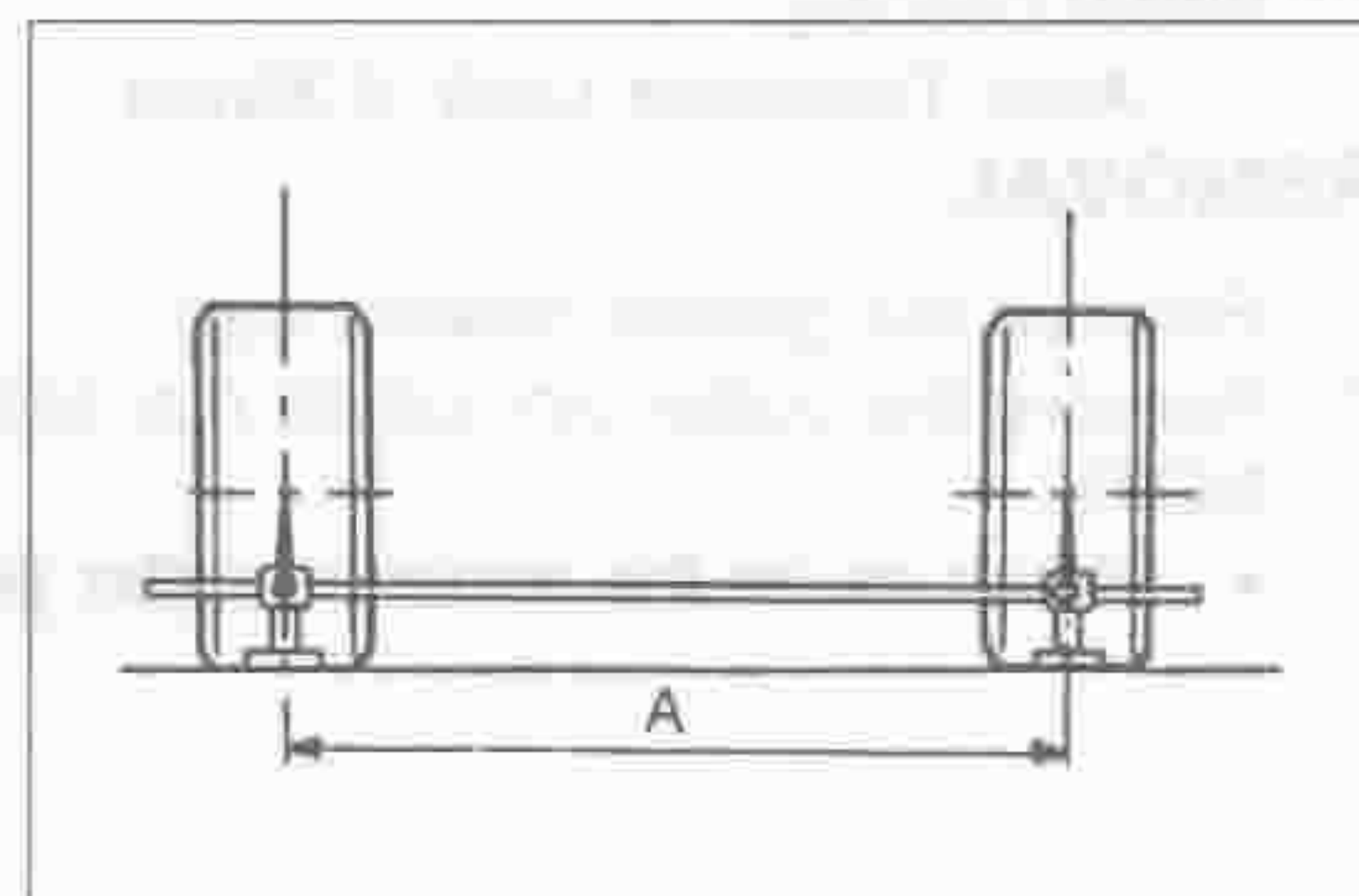
TOE-IN

Inspection

1. Rock the vehicle so that the vehicle height may stabilize.
2. Move the vehicle forward about five meter so that the rear wheels may become in their straight-ahead conditions.

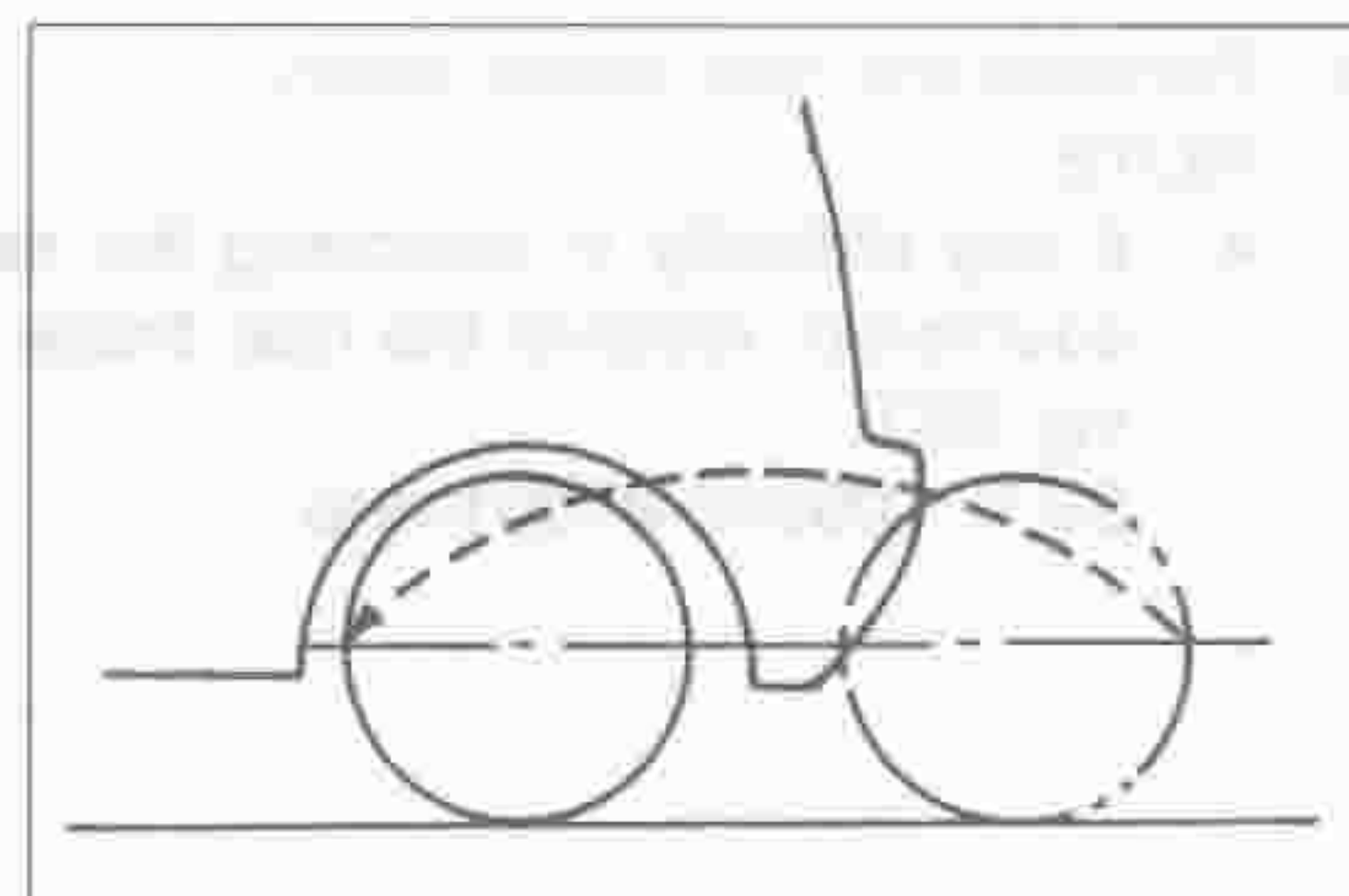
NOTE:

- Do not move the vehicle backward during the measurement.



LRS00007-00006

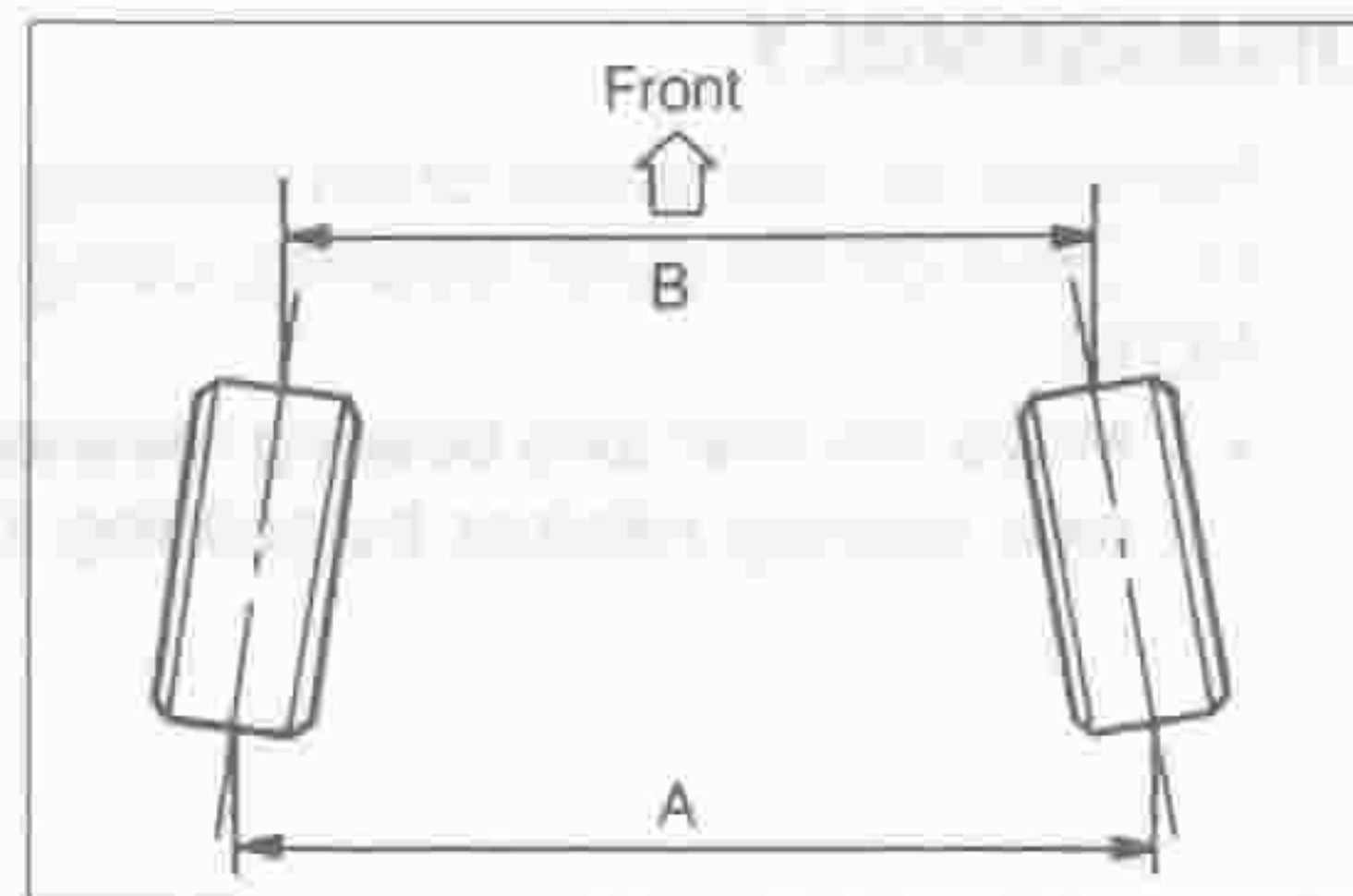
3. Align the height of the toe-in gauge pointers with the center height of the rear wheels.
4. Put a mark on the tread center of each rear wheel tire at the rear side. Measure the distance between the two marks (Dimension A) in the illustration.
5. Slowly move the vehicle forward by pushing the vehicle, until the wheels turn 180 degrees.



LRS00008-00007

6. Measure the distance (Dimension B) between the two marks which were put in the preceding step. This measurement is performed at the front side of the vehicle. Calculate the amount of toe-in, i.e. (Dimension A - Dimension B)

Specified Value: $\text{In } 2 \pm 2 \text{ mm}$



LRS00009-00008

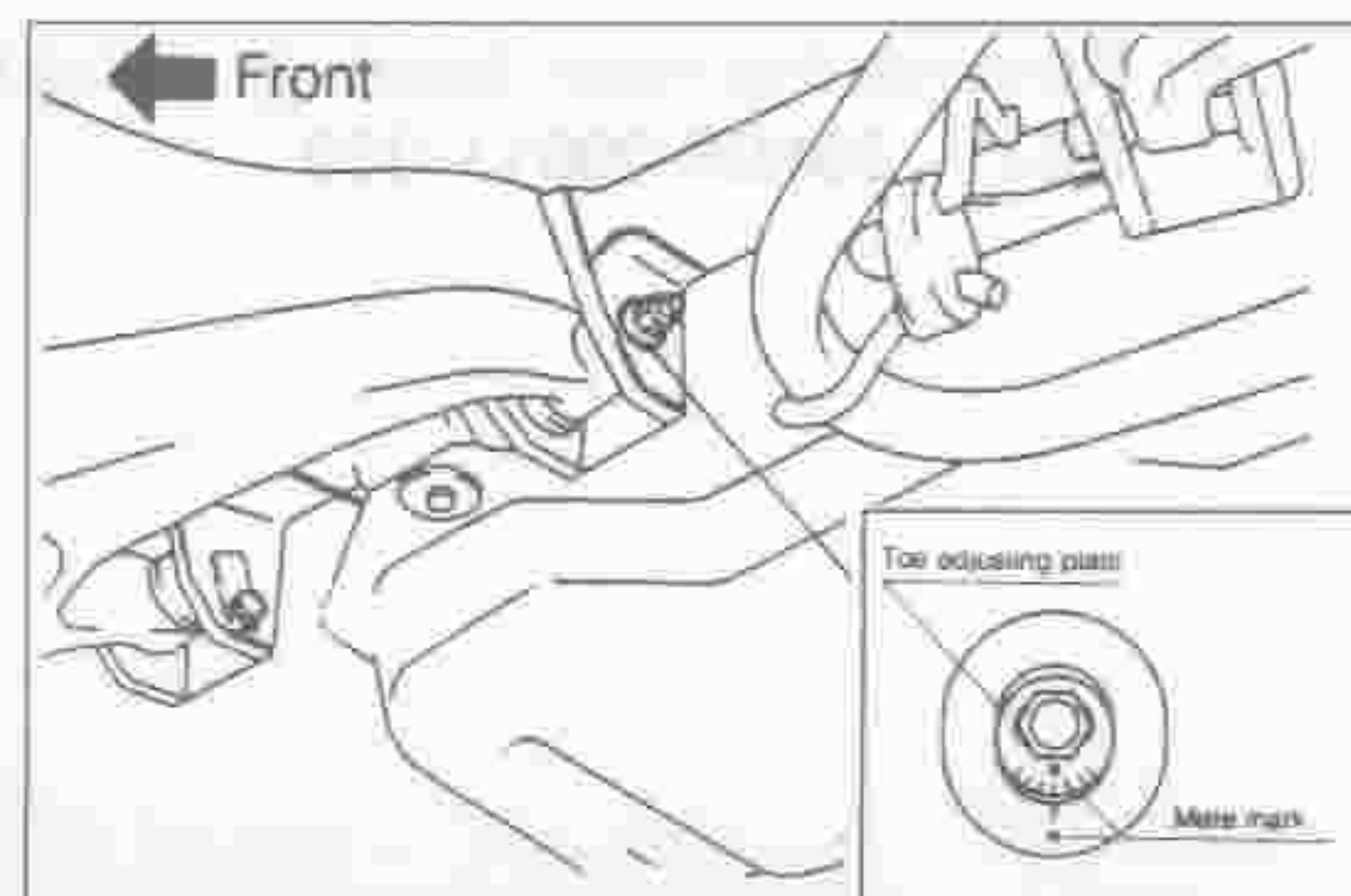
Adjustment

1. Slacken the set nut of the toe adjusting bolt.
2. Turn the toe adjusting bolt.

(inside: IN, Outside: OUT)

(Reference)

When each of the adjusting bolt provided at both sides is turned by one graduation, the toe-in will change approximately 1 mm (0.04 inch).



LRS00010-00009

REAR BRAKE DRUM

Inspection of wheel bearing

1. Jack up the vehicle.

NOTE:

- Be sure to support the vehicle securely with safety stands.

2. Remove the rear wheel.
3. Perform the axial tolerance measurement at a point of the hub edge with a dial gauge.
4. If the tolerance exceeds the allowable limit, replace the wheel bearing.

Axial Tolerance Limit: 0.35mm

REMOVAL

1. Remove the grease retainer cap.
2. Remove the cotter pin, castle nut, and plate washer.

NOTE:

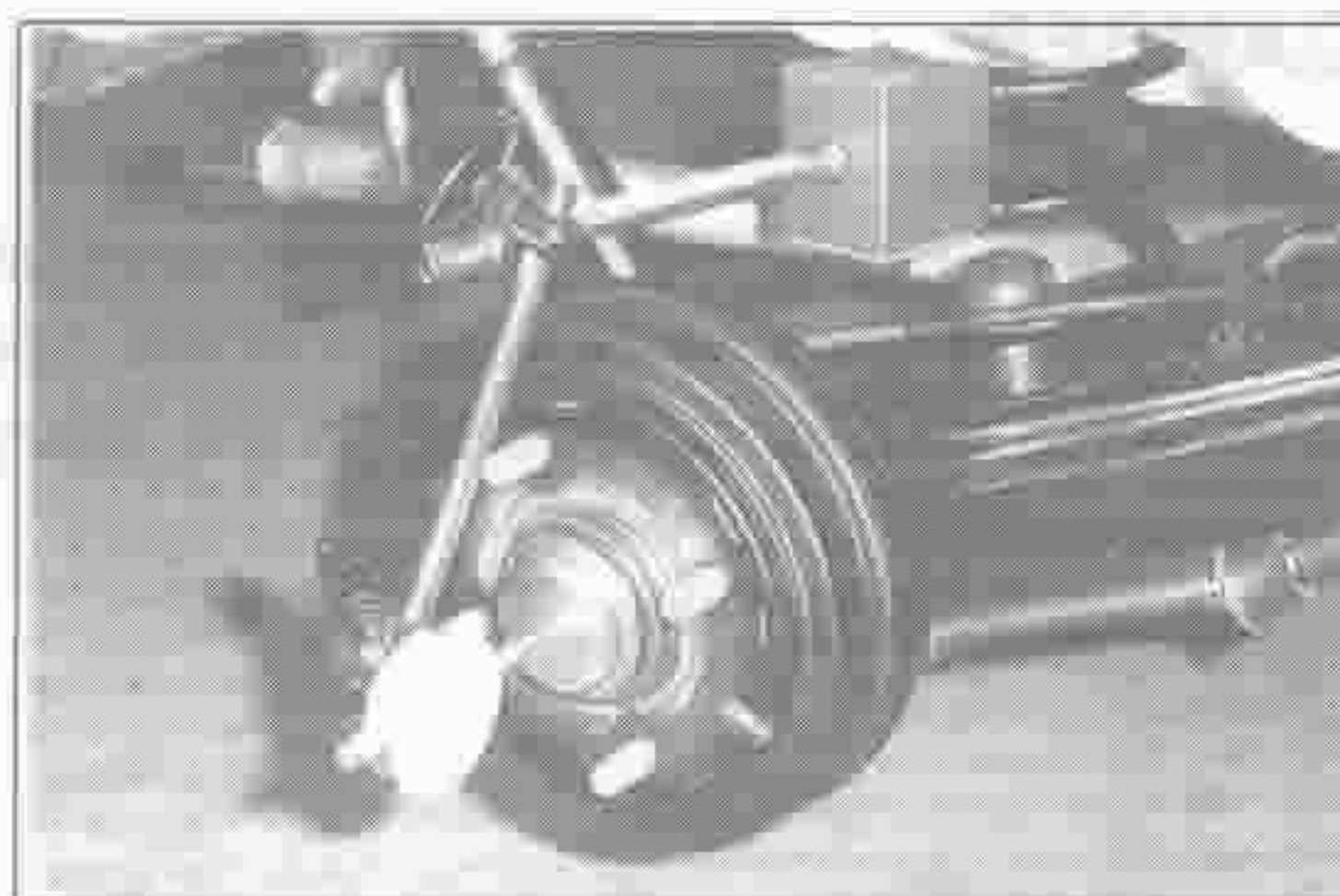
- Never reuse the removed cotter pin

3. Remove the rear brake drum.

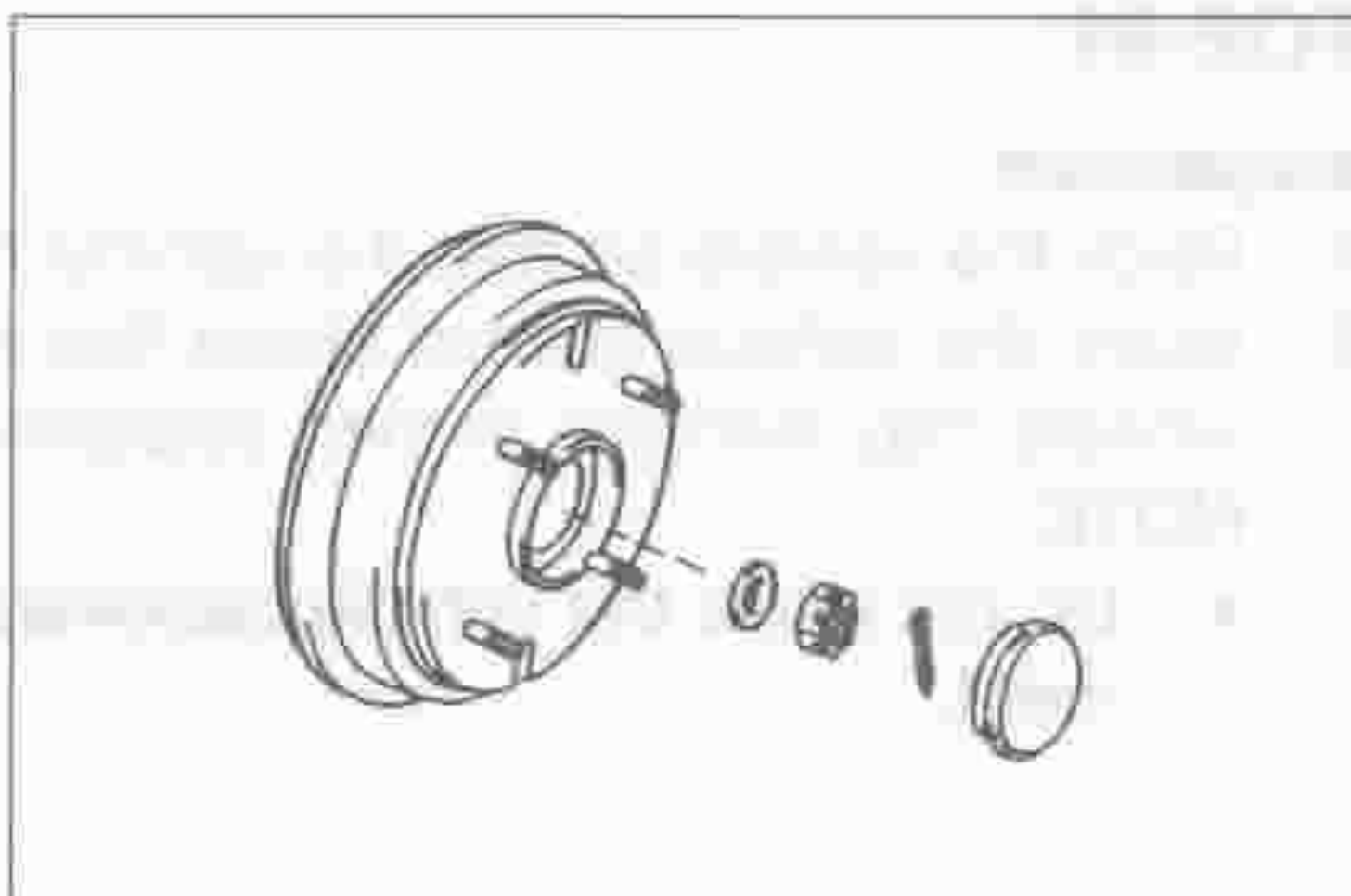
NOTE:

- If any difficulty in removing the rear brake drum is encountered, remove the rear brake drum with the following SST.

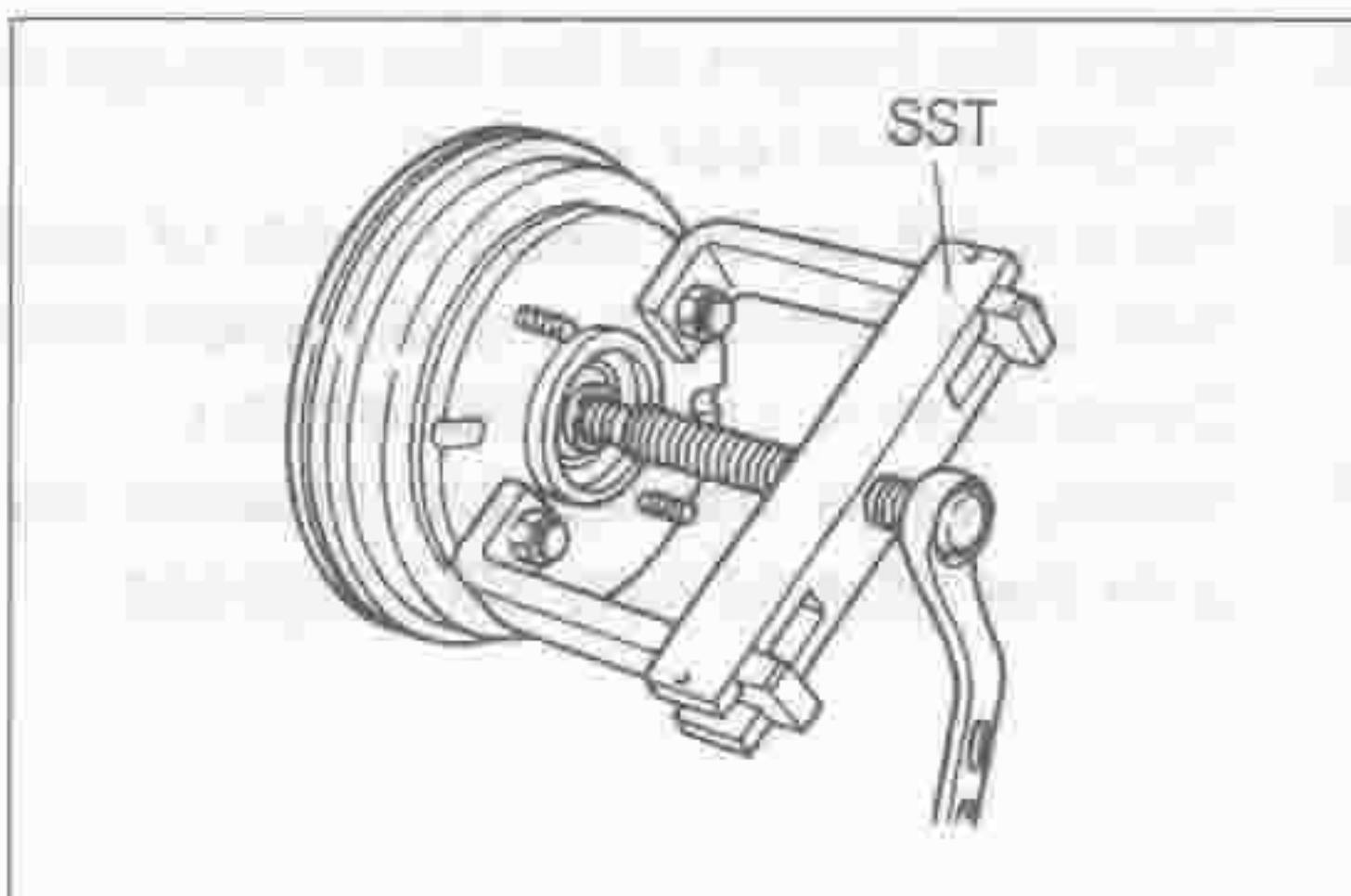
SST: 09510-87301-000



LRS00011-00010



LRS00012-00011



LRS00013-00012

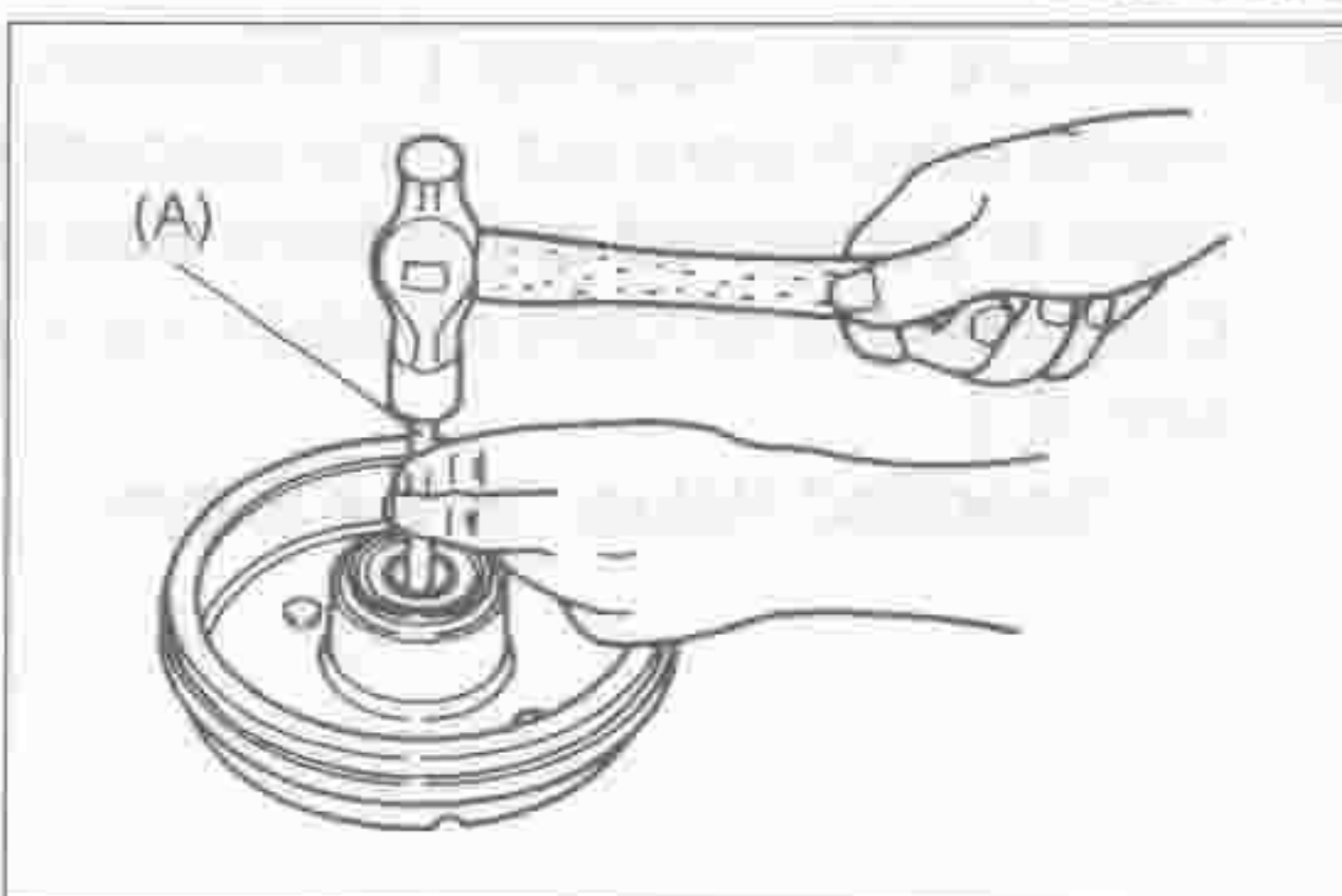
DISASSEMBLY

1. Removal of rear brake drum bearing

- (1) Drive off the outer bearing, using a brass bar (A).

NOTE:

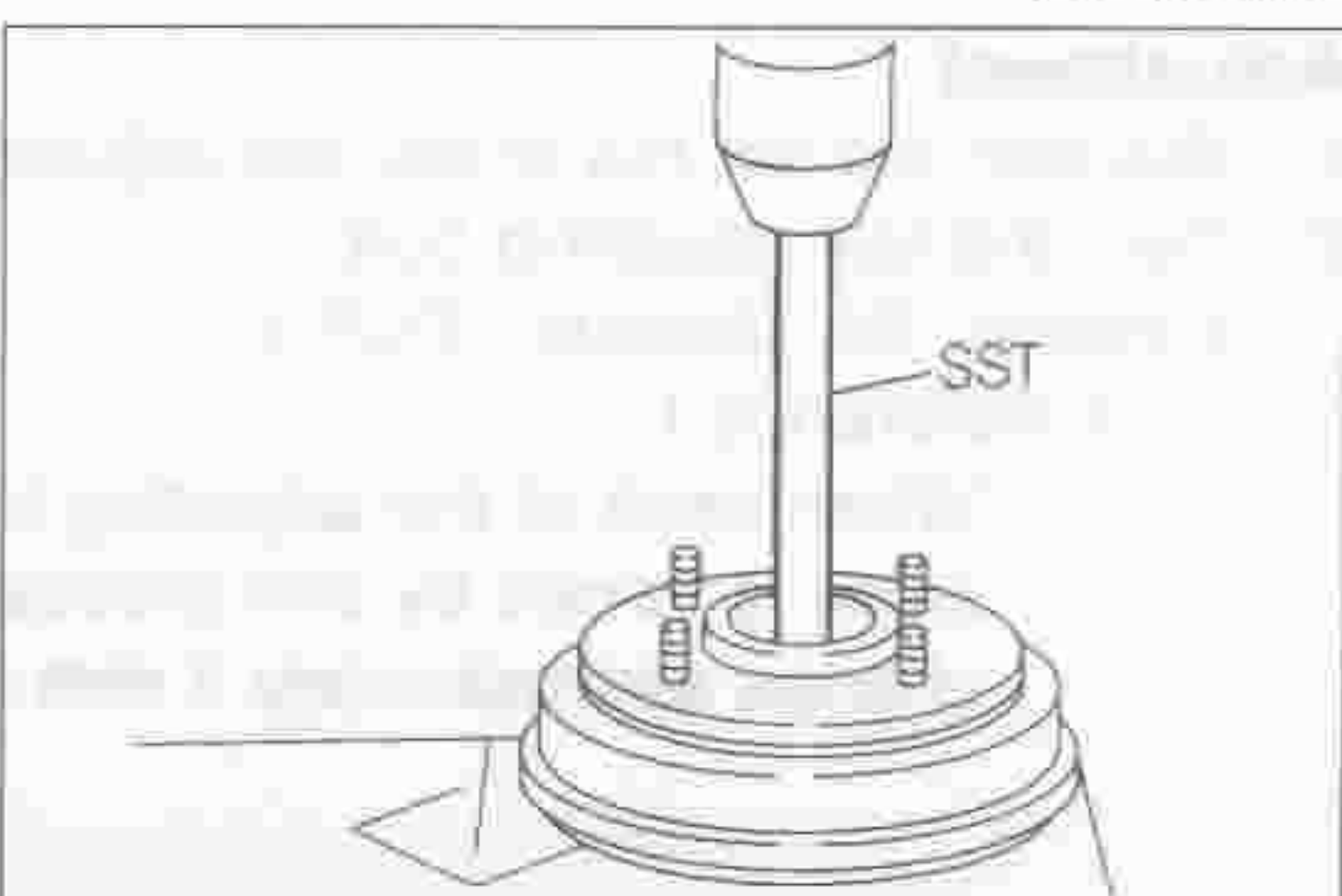
- Move the rear axle bearing retainer and remove the rear axle bearing retainer by pushing it.



LRS00014-00013

- (2) Remove the inner bearing, using the following SST.

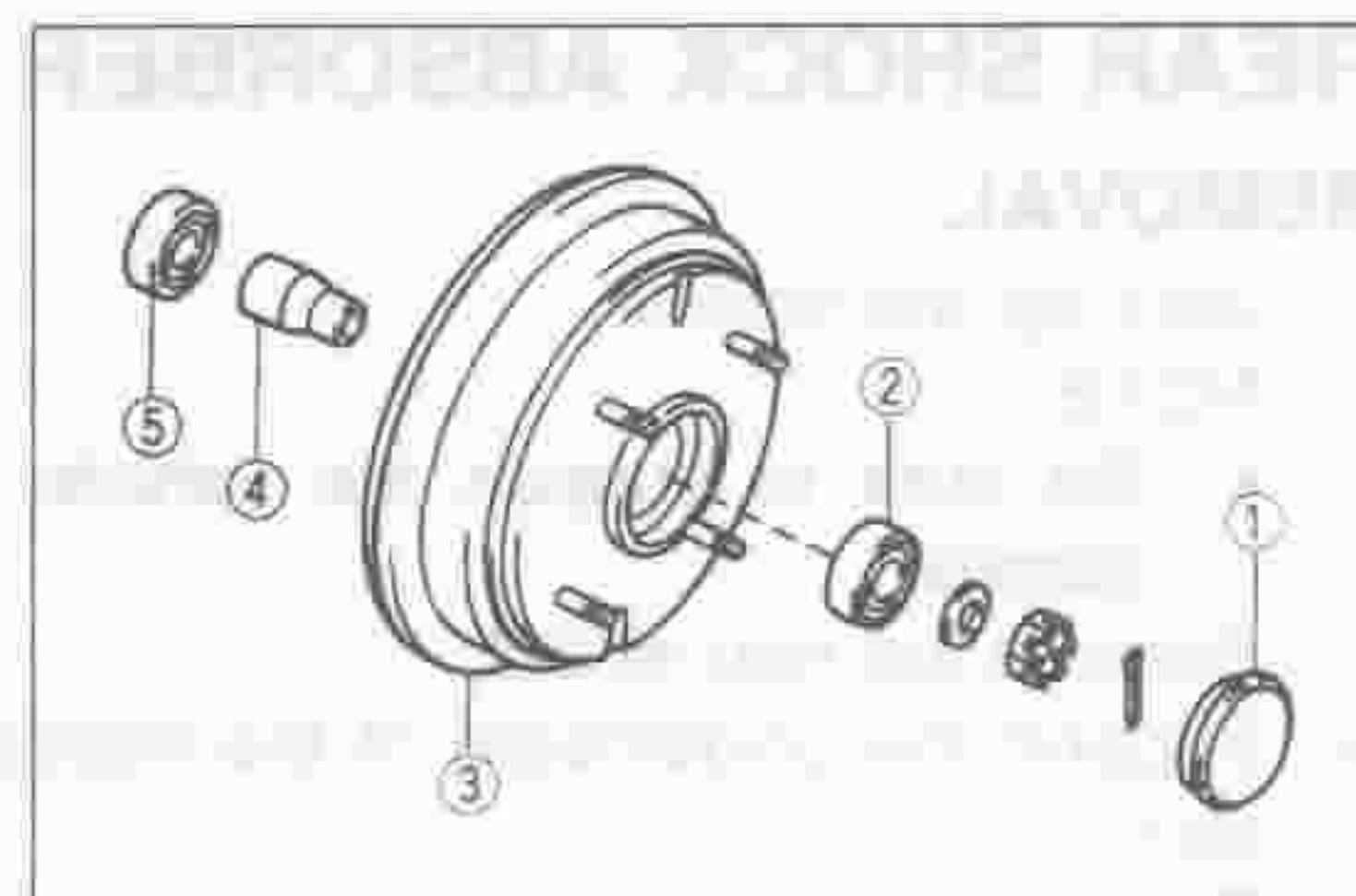
SST: 09608-20011-000



LRS00015-00014

INSPECTION

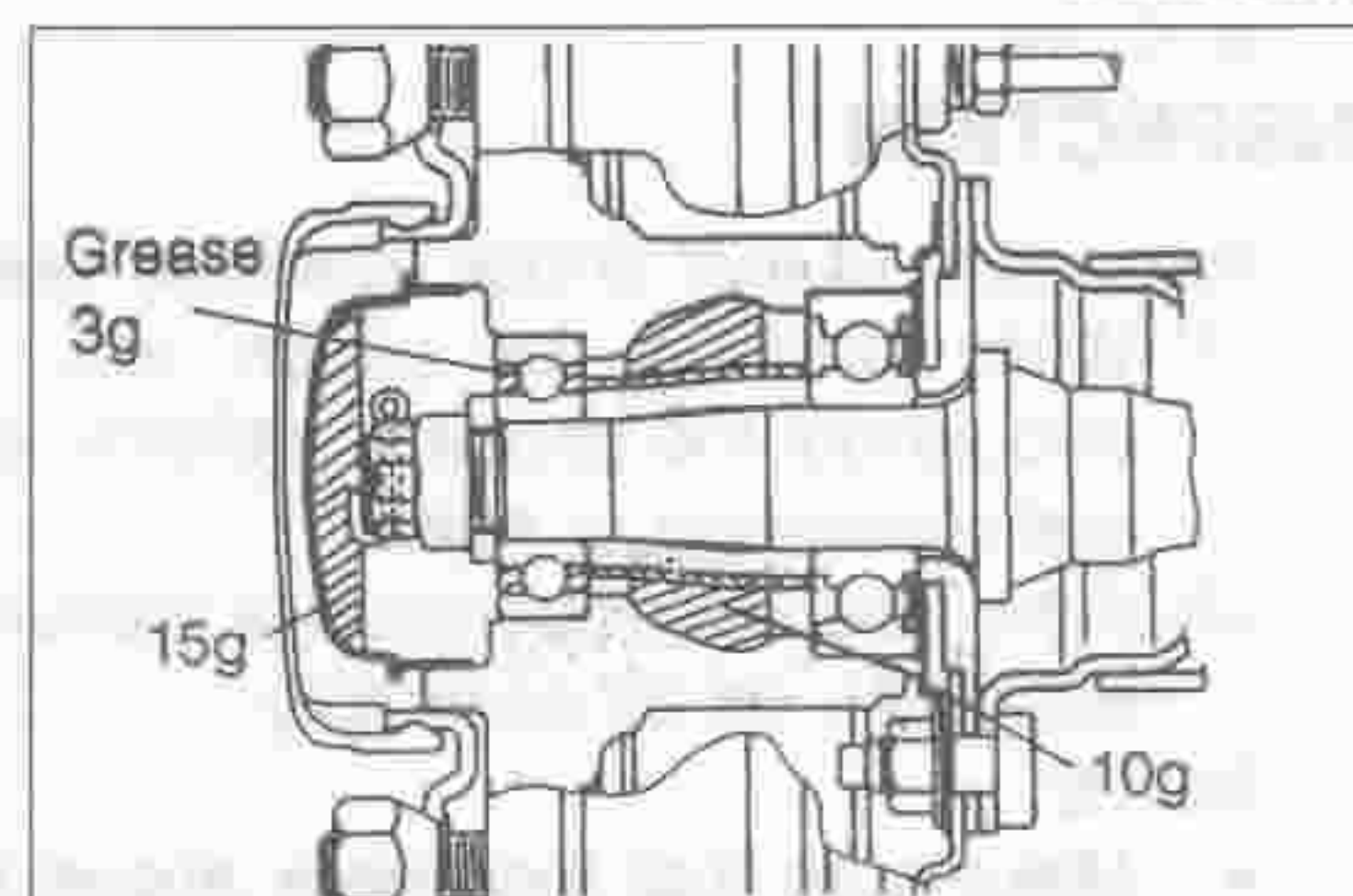
- | | | |
|-----------------------|-------|-------------------------------------|
| ① Grease retainer cap | | Damage |
| ② Bearing, outer | | Wear |
| ③ Brake drum | | Damage or wear |
| ④ Bearing retainer | | Both end section for wear or damage |
| ⑤ Bearing, inner | | Wear |



LRS00016-00015

ASSEMBLY

1. Prior to installation, apply Daihatsu genuine Ammix grease or the equivalent to them.

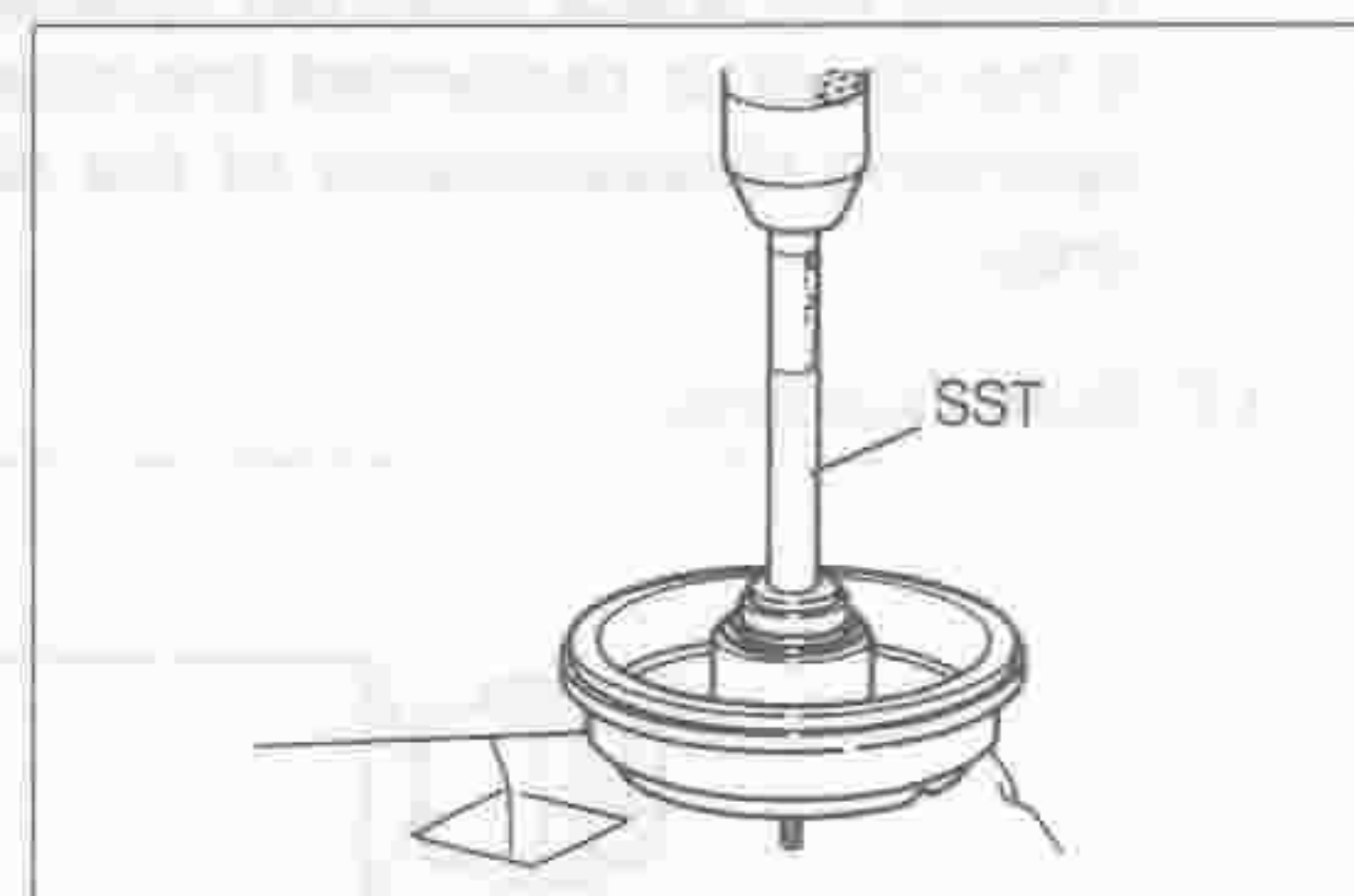


LRS00017-00016

2. Install the inner bearing, using the following SST.
SST: 09608-20011-000

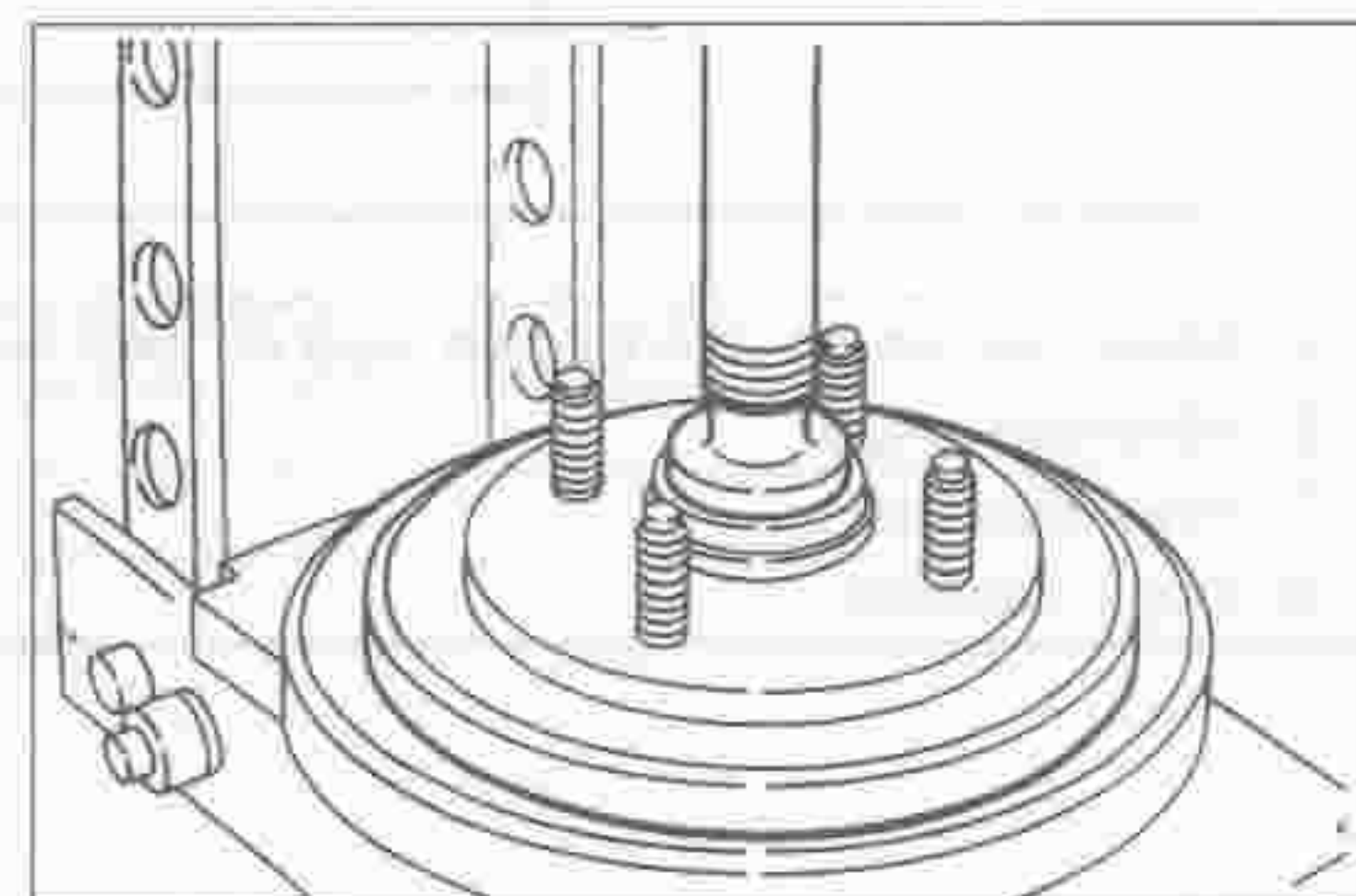
NOTE:

- Be sure to assemble the inner bearing in such a way that the seal surface faces toward the inside of the brake drum.



LRS00018-00017

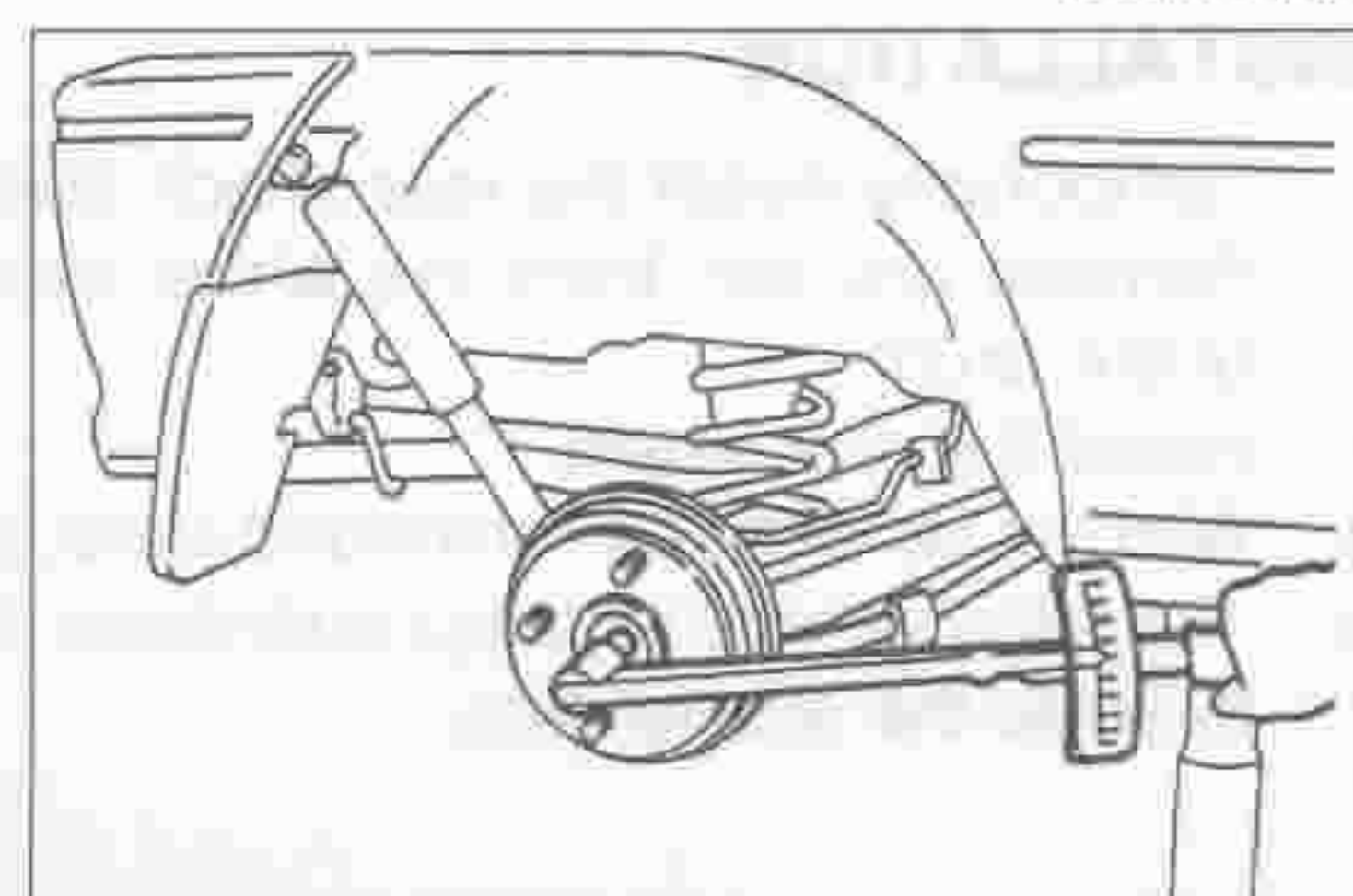
3. Insert the rear axle bearing retainer.
4. Install the outer bearing, using the following SST.
SST: 09608-20011-000



LRS00019-00018

INSTALLATION

1. Install the rear brake drum.
2. Install the plate washer and tighten the castle nut.
Tightening Torque: 58.8 - 78.5 N·m
(6.0 - 8.0 kgf-m, 43.4 - 57.9 ft-lb)
3. Install a new cotter pin.
4. Install the grease retainer cap.
5. Remove any dirt from the wheel mounting surface of the brake drum.
6. Install the rear wheel.

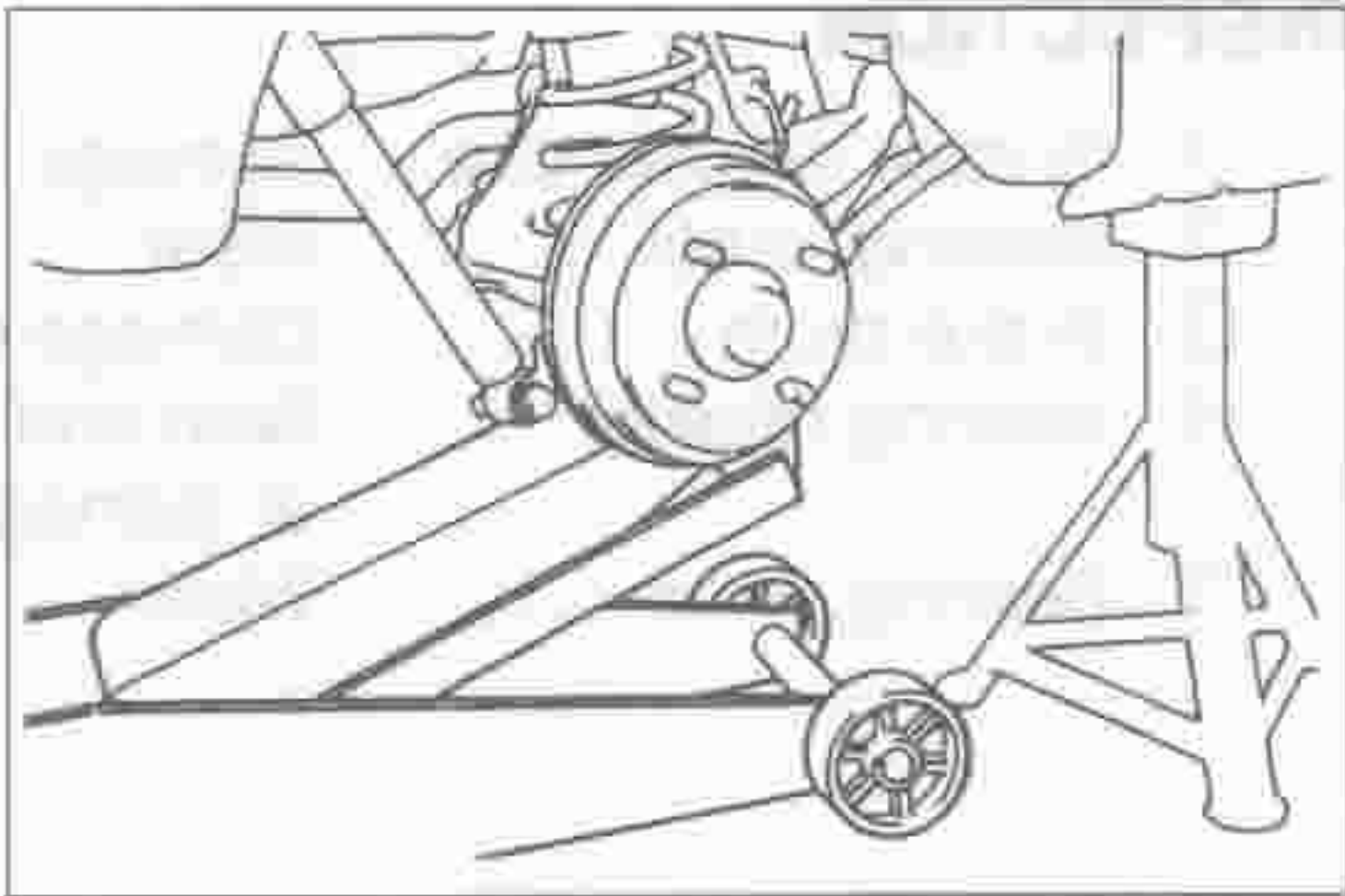


LRS00020-00019

REAR SHOCK ABSORBER

REMOVAL

- 1. Jack up the vehicle.
NOTE:
 - Be sure to support the vehicle securely with safety stands.
- 2. Remove the rear wheel.
- 3. Support the underneath of the trailing arm with a garage jack.
- 4. Remove the rear shock absorber by removing the two bolts and nut.



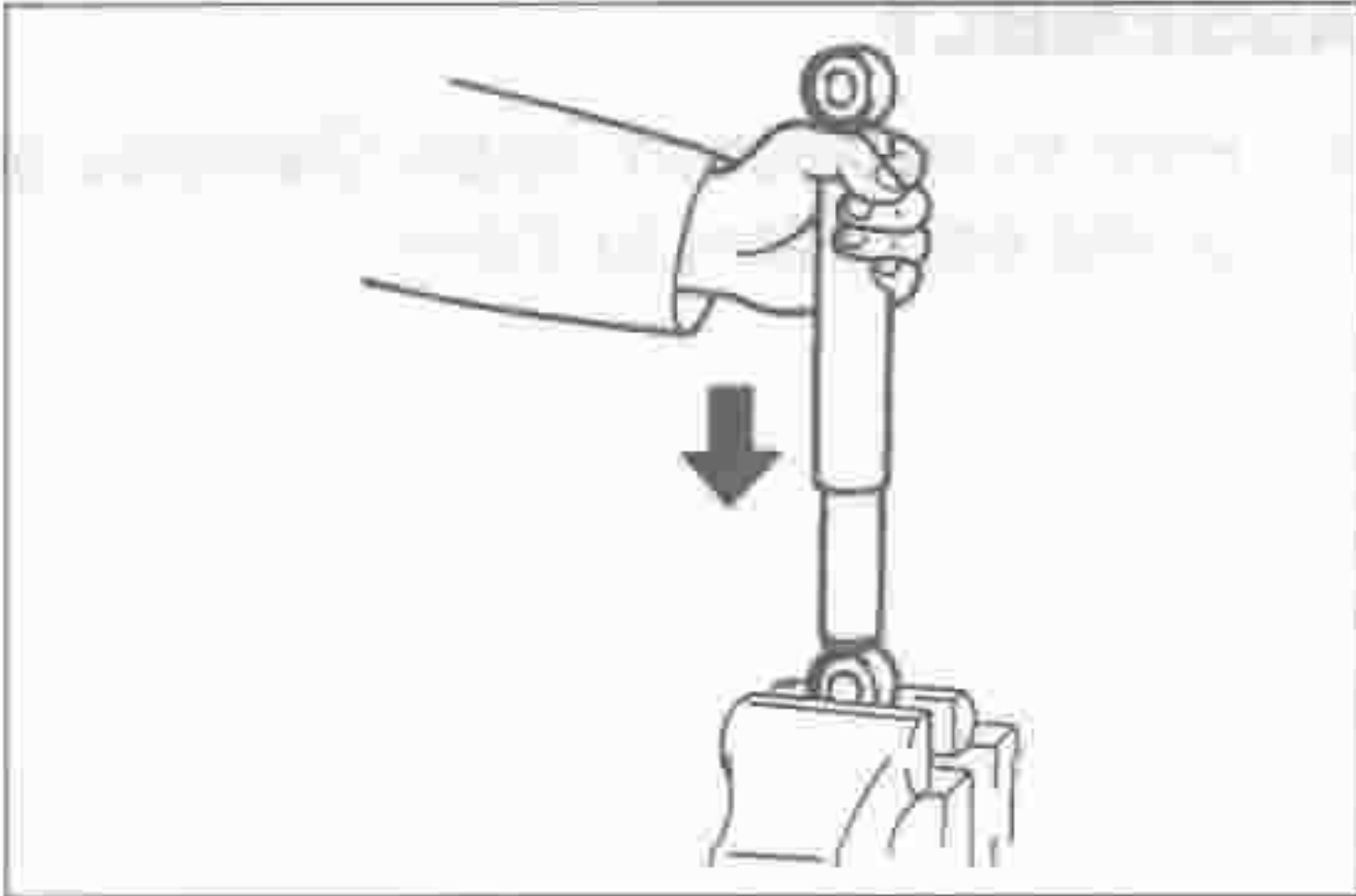
LRS00021-00020

INSPECTION

- 1. Inspection of rear shock absorber operation
 - (1) While pushing the piston rod, check that the pull throughout the stroke is uniform, and there is no abnormal resistance or noise.
 - (2) If the absorber operation is malfunctioning, replace the absorber, as an assembly.

NOTE:

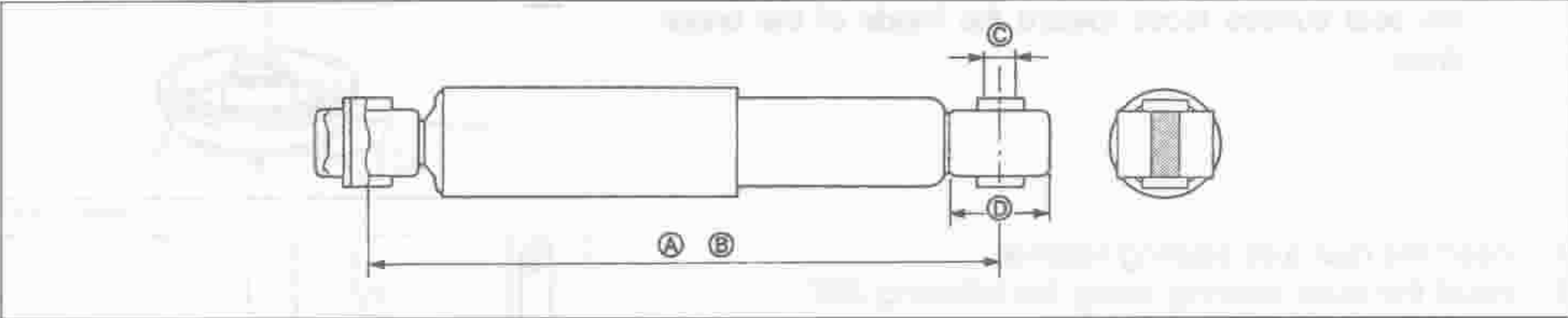
- Make sure that the check above is carried out without holding the shock absorber upside down.
If the check is performed improperly, you may feel the operating characteristics of the shock absorber differently.



LRS00022-00021

(3) Specifications

Unit: mm (inch)



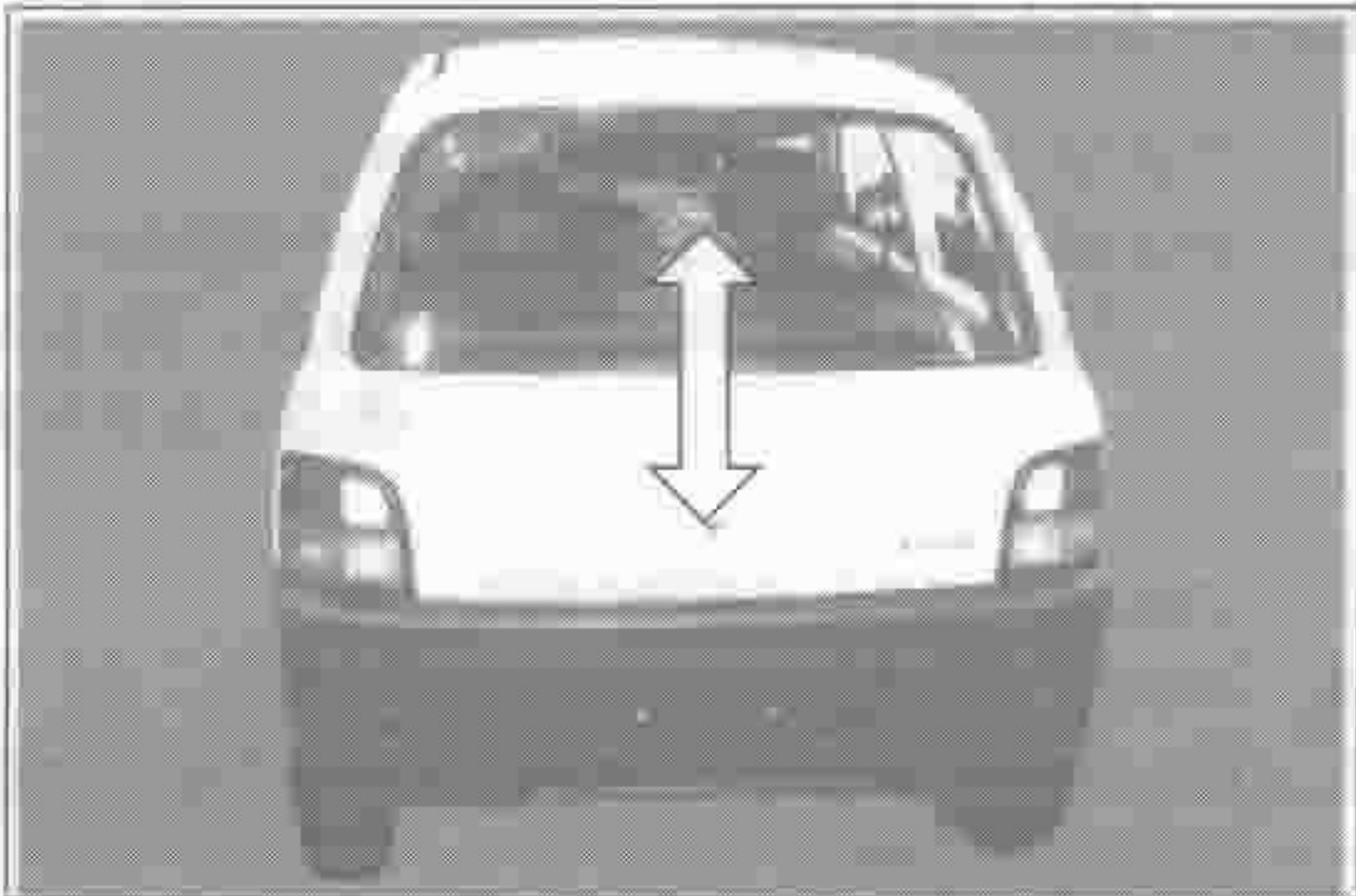
LRS00023-00022

Ⓐ Maximum length with tension load of 1960 N·m (200 kgf)	462 (18.19)
Ⓑ Minimum length	285 (11.22)
Ⓒ Inner diameter	12 (0.47)
Ⓓ Outer diameter	45 (1.77)

LRS00024-00000

INSTALLATION

- 1. Temporarily install the rear shock absorber.
- 2. Remove any dirt from the wheel mounting surface of the brake drum.
- 3. Install the rear wheel.
- 4. With the vehicle in an unloaded state, jack down the vehicle.
- 5. Rock the vehicle in an up-and-down direction several times to settle the suspension.



LRS00025-00023

5. Tighten the attaching bolts and nut.
Tightening Torque
 - Ⓐ Upper Side: 53.9 - 78.5 N·m
(5.5 - 8.0 kgf-m, 39.8 - 57.9 ft-lb)
 - Ⓑ Lower Side: 53.9 - 78.5 N·m
(5.5 - 8.0 kgf-m, 39.8 - 57.9 ft-lb)
6. Rear wheel alignment inspection. (Refer to RS - 3)



LRS00026-00024

TRAILING ARM AND COIL SPRING

REMOVAL

1. Jack up the vehicle.
NOTE:
 - Be sure to support the vehicle securely with safety stands.
2. Remove the rear wheel.
3. Remove the rear brake drum. (Refer to RS - 5)
4. Remove the backing plate.
 - (1) Disconnect the brake tube from the wheel cylinder, using the following SST.
SST: 09751-36011-000
 - (2) Remove the brake cable bracket from the trailing arm.
 - (3) Remove the backing plate with the brake shoe and parking brake cable installed.

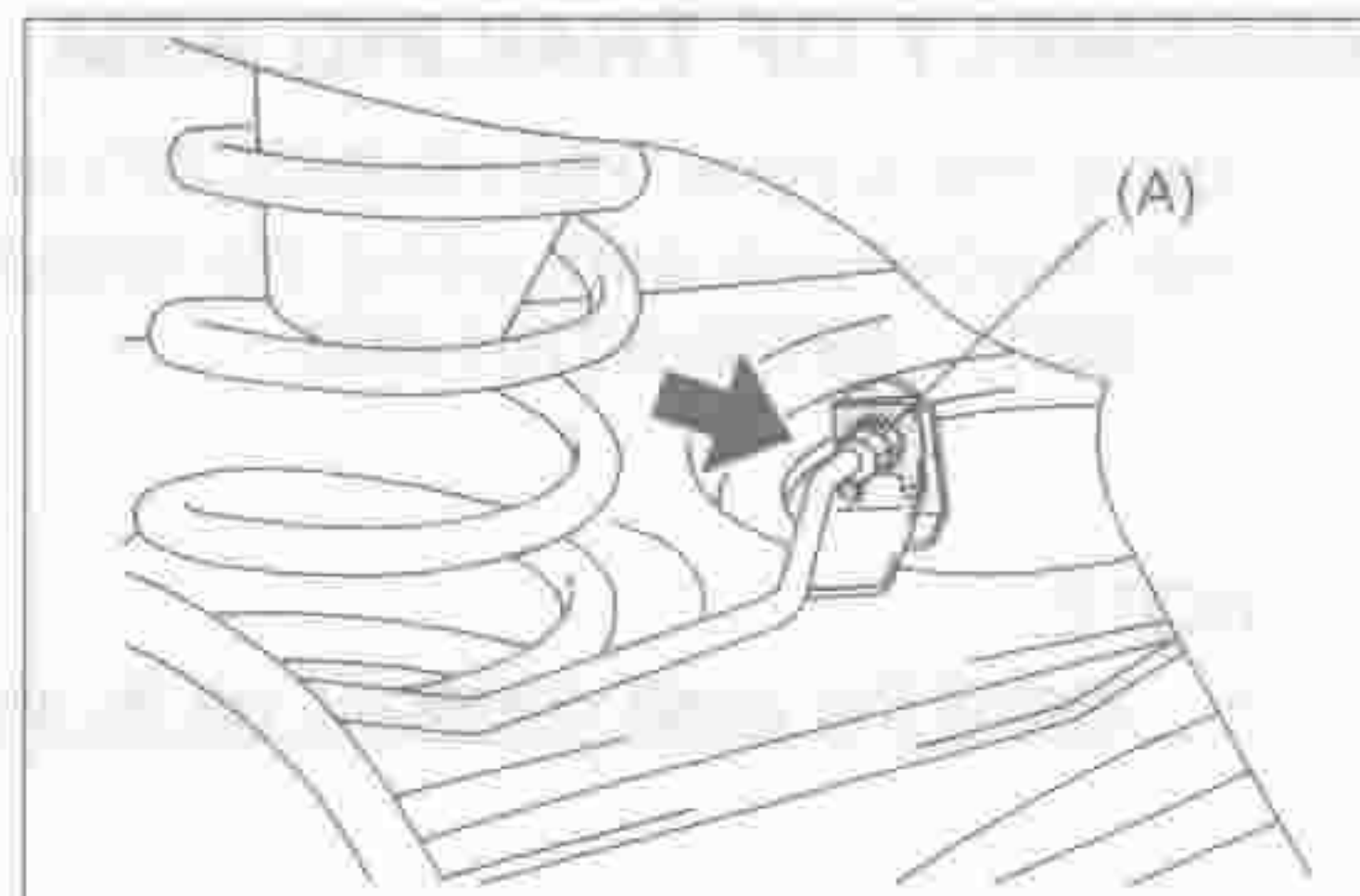


LRS00027-00025

5. Remove the rear shock absorber. (Refer to RS - 7)
6. Removal of trailing arm
 - (1) Disconnect the brake tube from the flexible hose.
 - (2) Remove the clip (A) from the trailing arm subassembly bracket.

NOTE:

- Never reuse the removed clip (A).

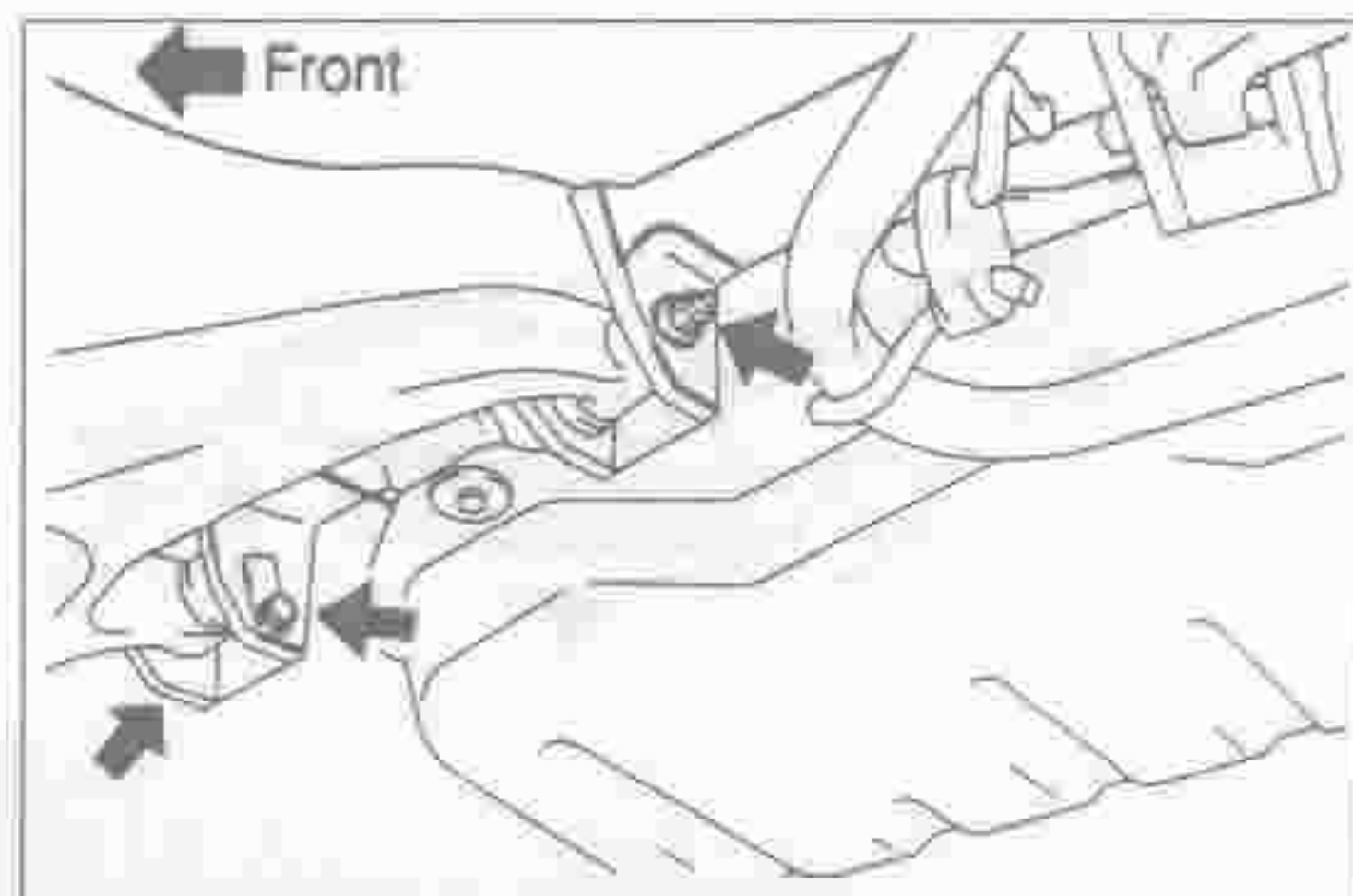


LRS00028-00026

- (3) Remove the trailing arm subassembly by removing the bolts and nuts.

NOTE:

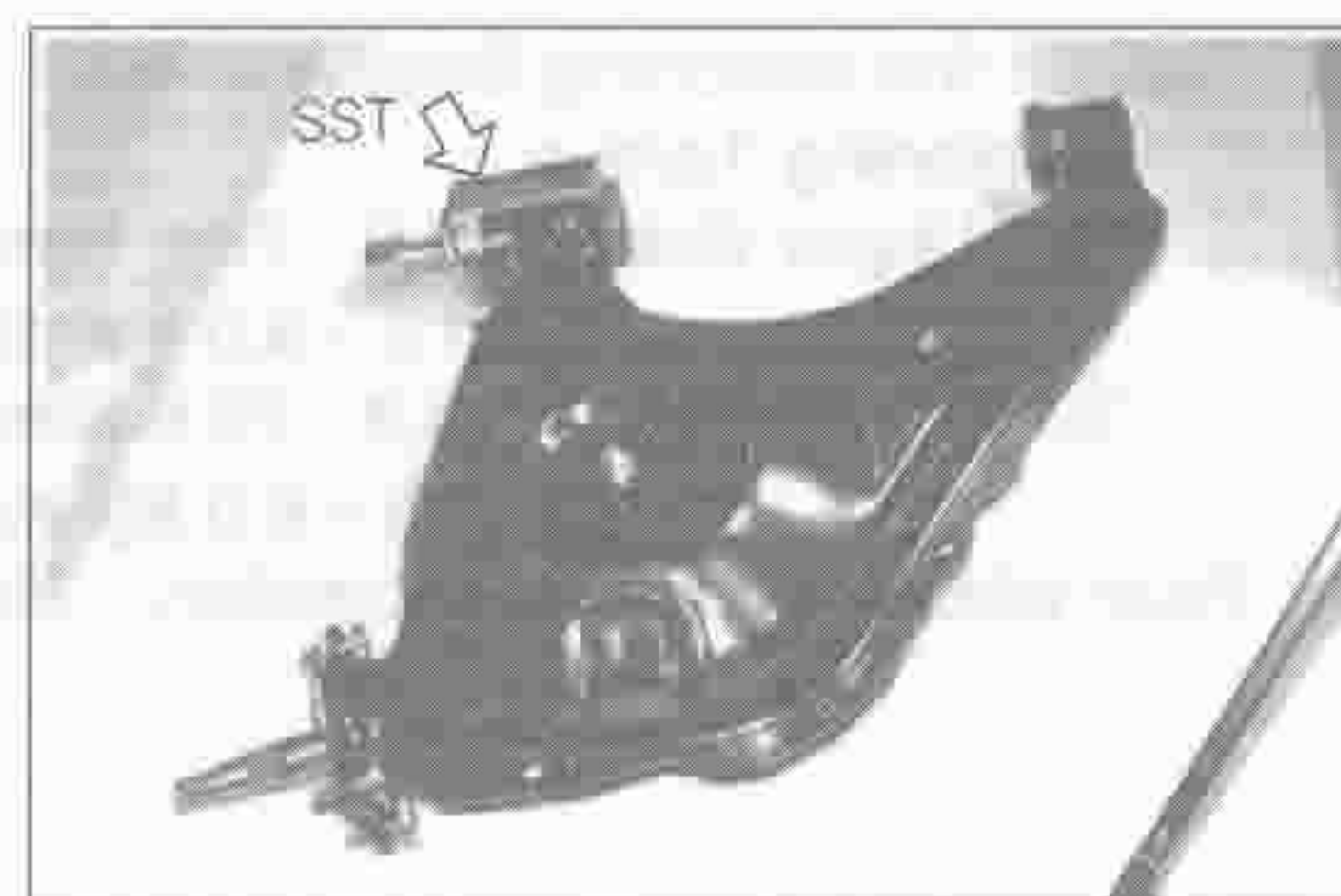
- Never reuse the removed nuts.
- (4) Remove the coil spring.
 - (5) Remove the rear spring bumper by removing the nut.



LRS00029-00027

DISASSEMBLY OF TRAILING ARM

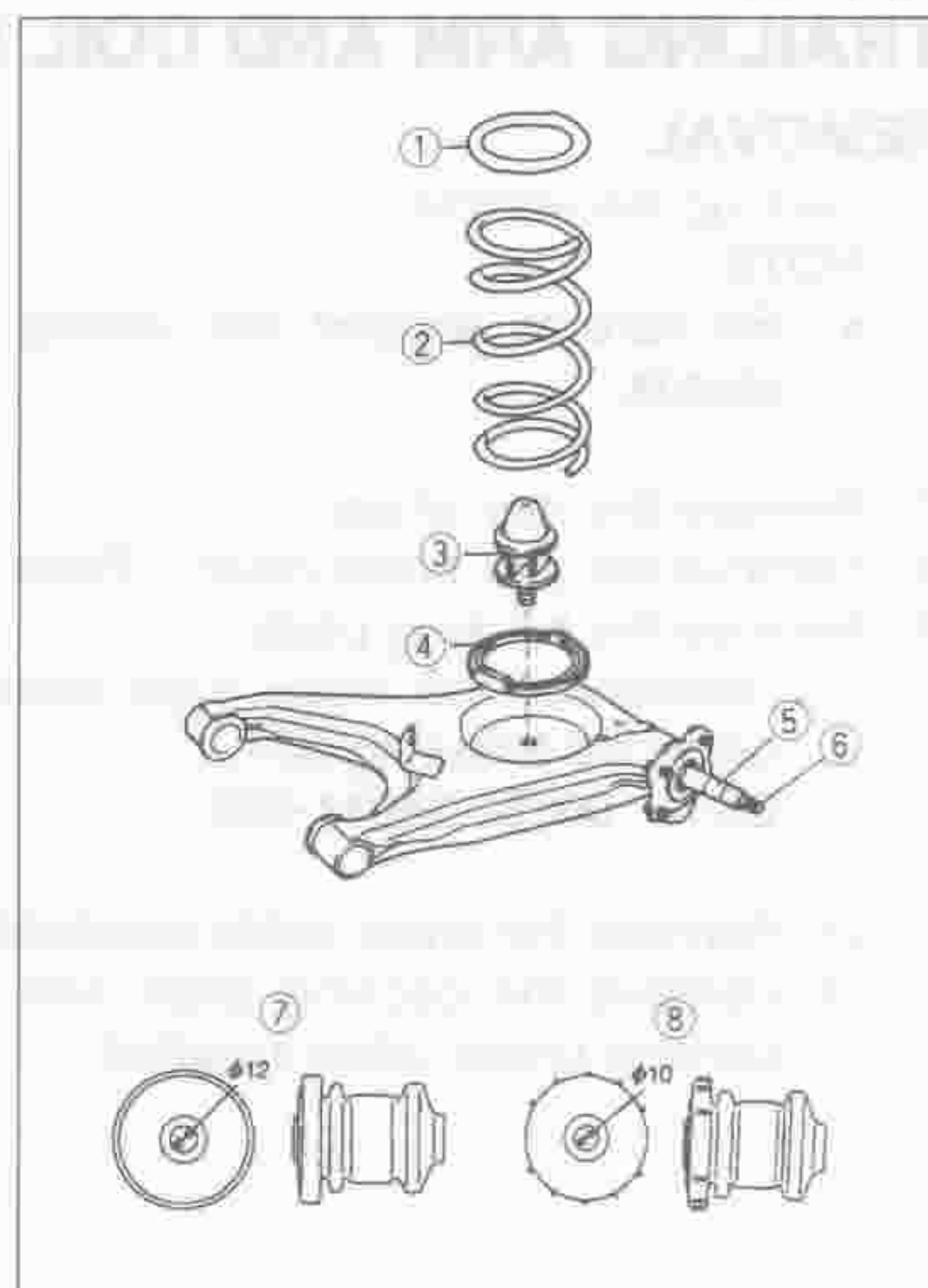
1. Remove the bushes for trailing arm and rear suspension arm, using the following SST.
SST: 09610-20011-000



LRS00030-00028

INSPECTION

- | | |
|----------------------------|-------------------------------|
| ① Rear spring upper sheet | Deterioration, wear or damage |
| ② Coil spring | Flattened condition |
| ③ Rear bumper spring | Deterioration, wear or damage |
| ④ Rear spring lower sheet | Deterioration, wear or damage |
| ⑤ Spindle | Damage |
| ⑥ Threaded portion | Damage |
| ⑦ Rear suspension arm bush | Deterioration, wear or damage |
| ⑧ Trailing arm bush | Deterioration, wear or damage |



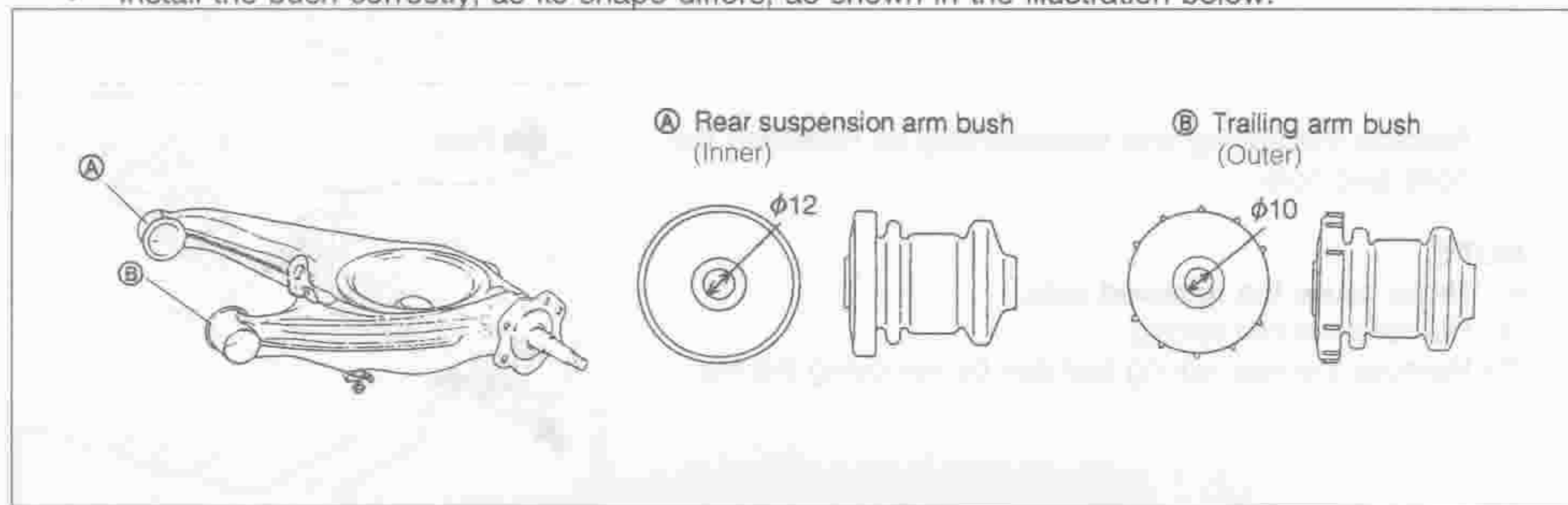
LRS00031-00029

ASSEMBLY OF TRAILING ARM

1. Apply the sunpar-150 (SUNOCO®) or equivalent around bush then, press the bush for trailing arm and rear suspension arm, using the following SST.
SST: 09738-87101-000

NOTE:

- Install the bush correctly, as its shape differs, as shown in the illustration below.



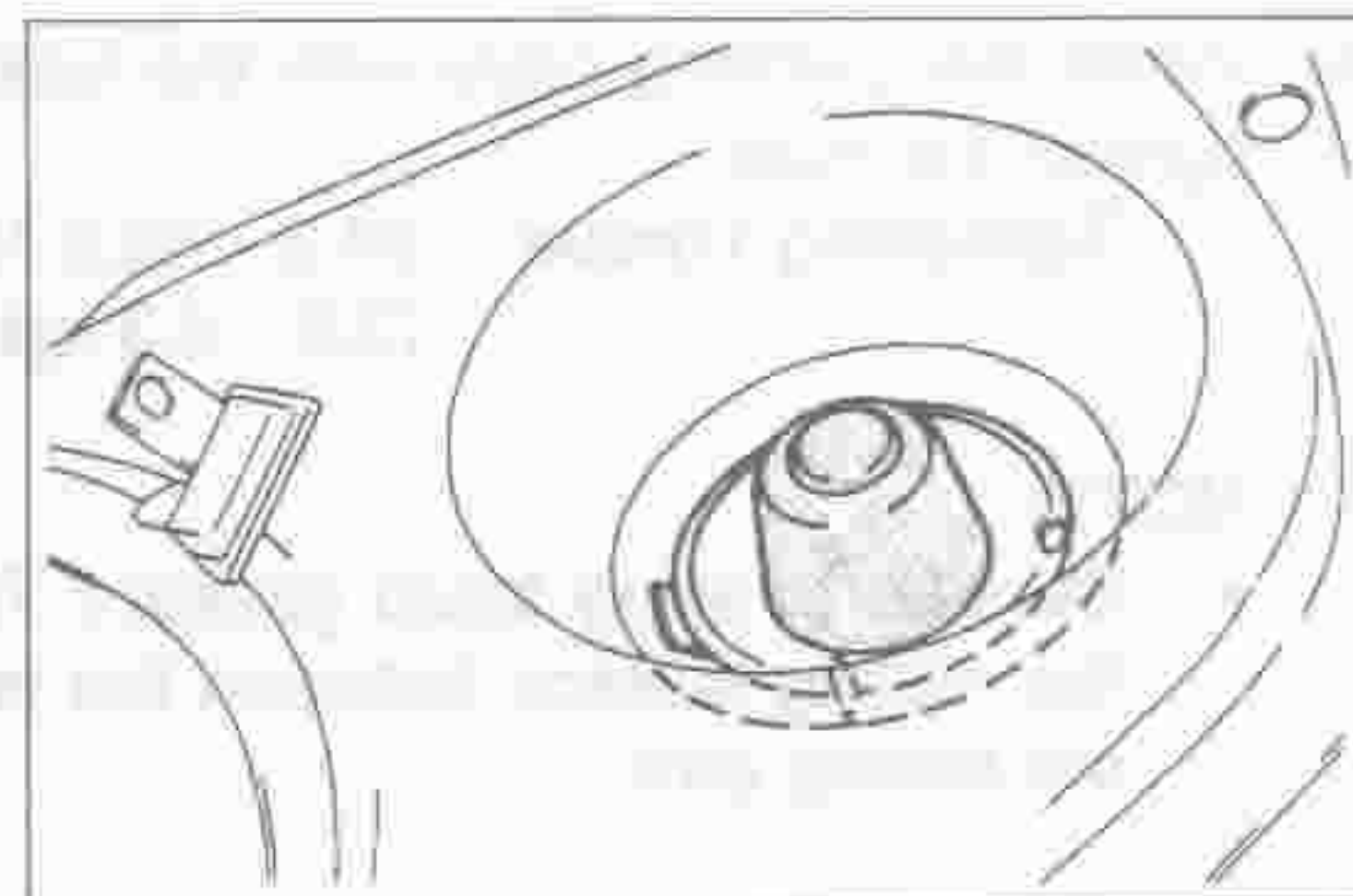
LRS00032-00030

INSTALLATION

1. Install the rear bumper spring with the nut.

Tightening Torque: 14.7 - 21.6 N.m

(1.5 - 2.2 kgf-m, 10.8 - 15.9 ft-lb)

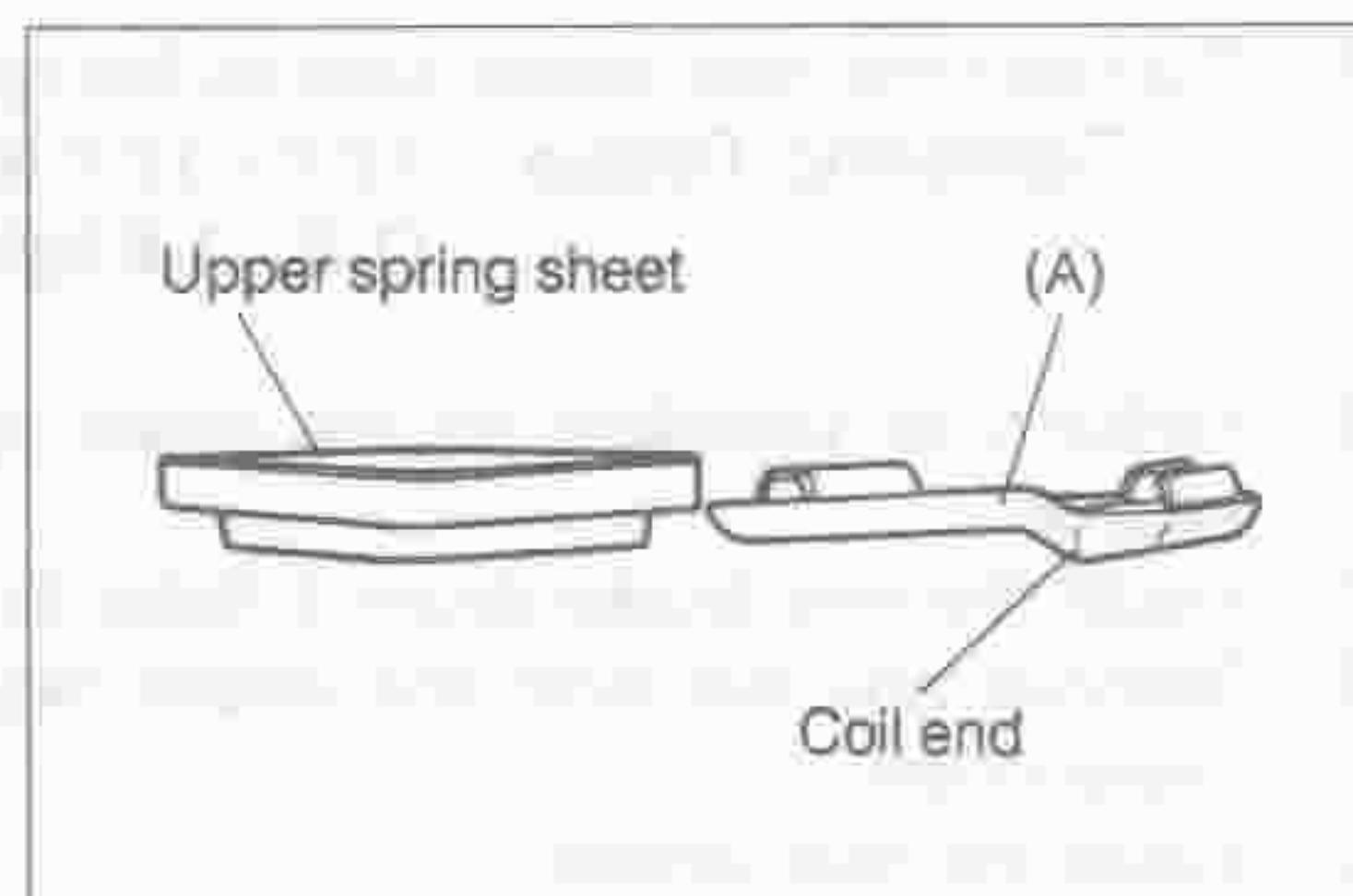


LRS00033-00031

2. Installation of rear spring and spring sheets
(1) Insert the lower spring sheet (A) into the position.

NOTE:

- Securely assemble the lower spring sheet, while aligning the lower spring sheet with the stopper section of the trailing arm subassembly.

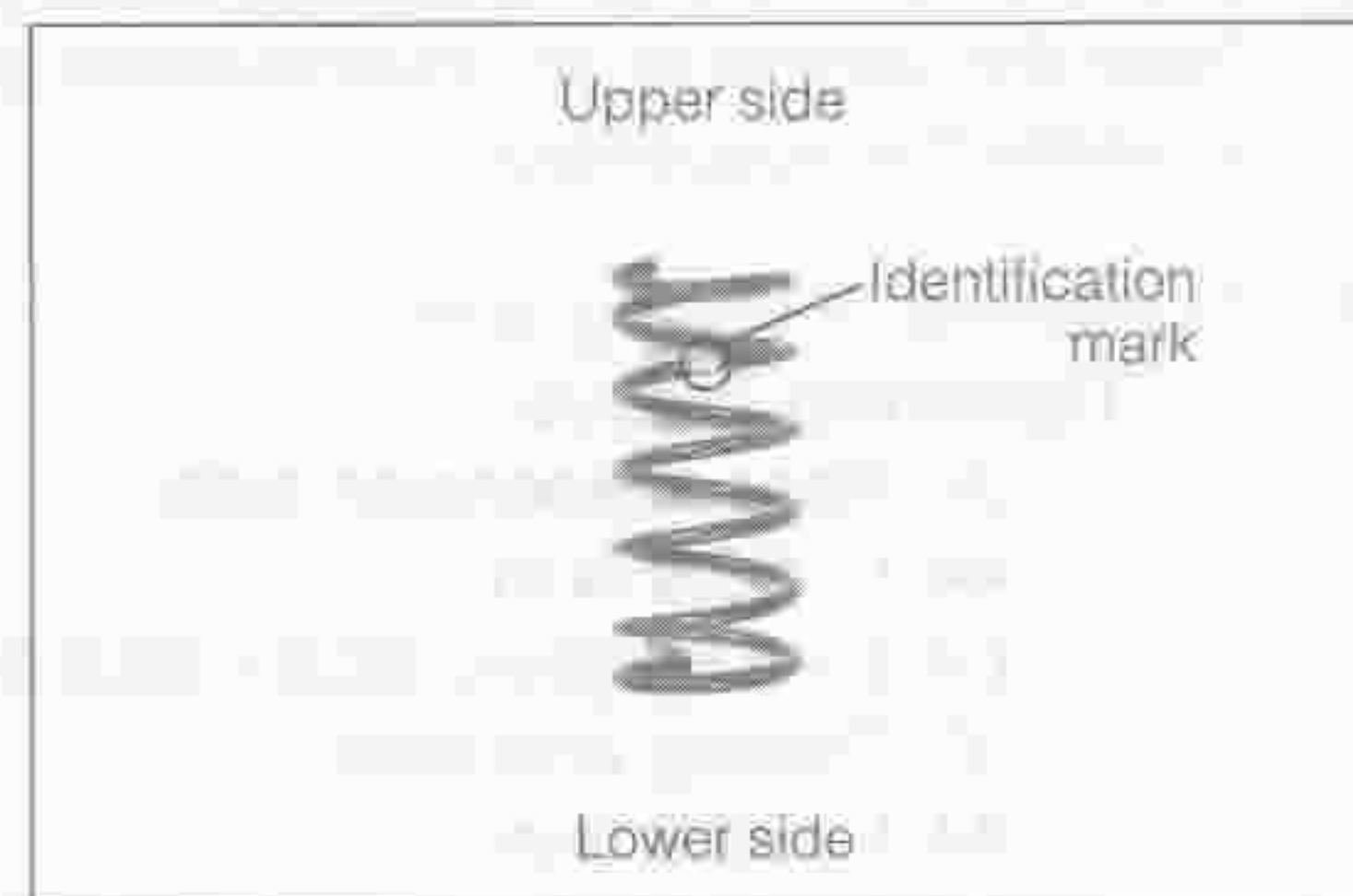


LRS00034-00032

- (2) Put on the rear coil spring with the upper sheet.

NOTE:

- Make sure to place the coil spring in such a direction that the identification mark comes at the upper side.



LRS00035-00033

3. Installation of trailing arm

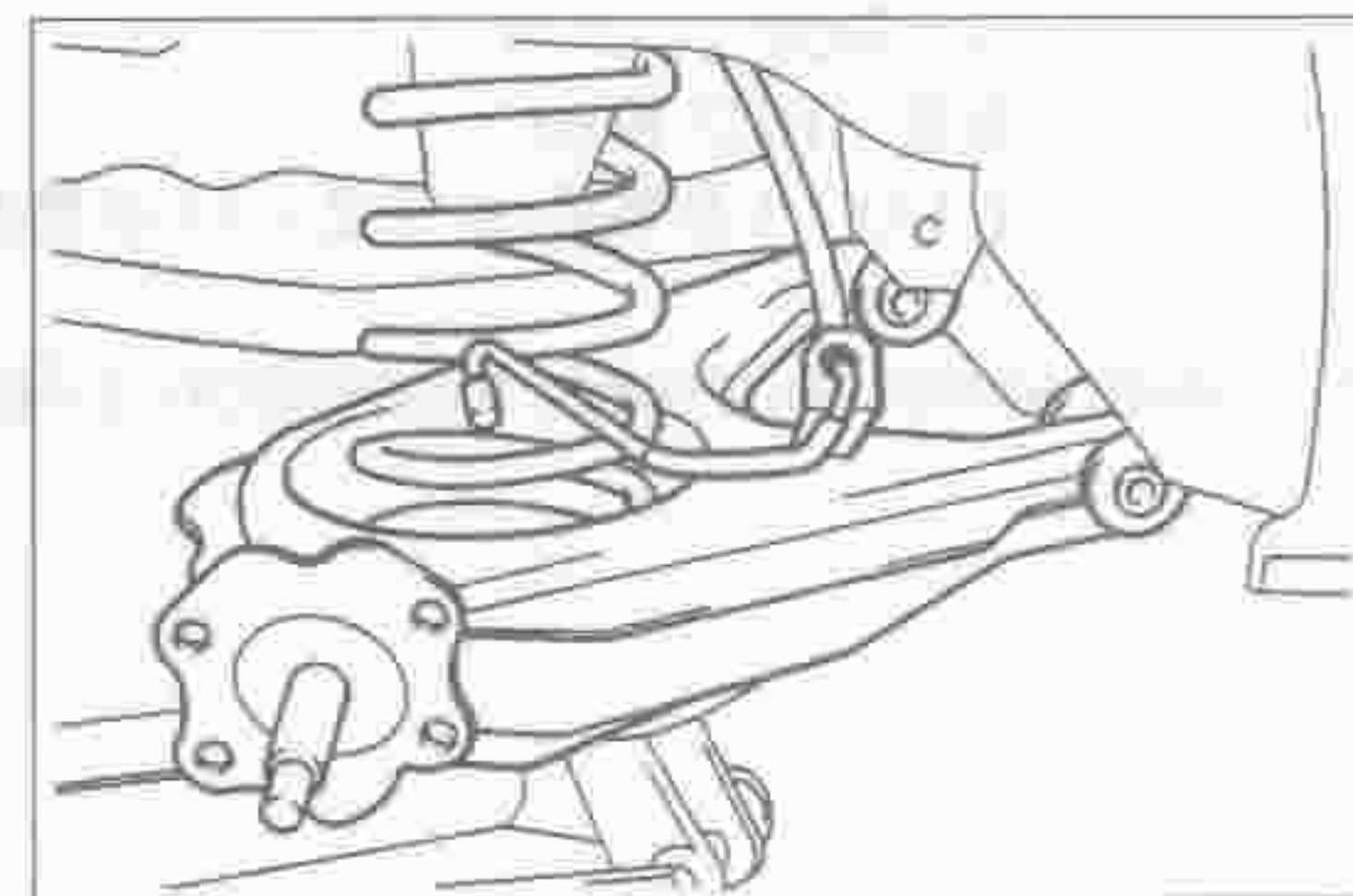
- (1) Jack up the trailing arm with the rear coil spring installed.

- (2) Connect the brake tube to the flexible hose.

NOTE:

- Make sure that no flexible hose is twisted during installation.

- (3) Install the clip.

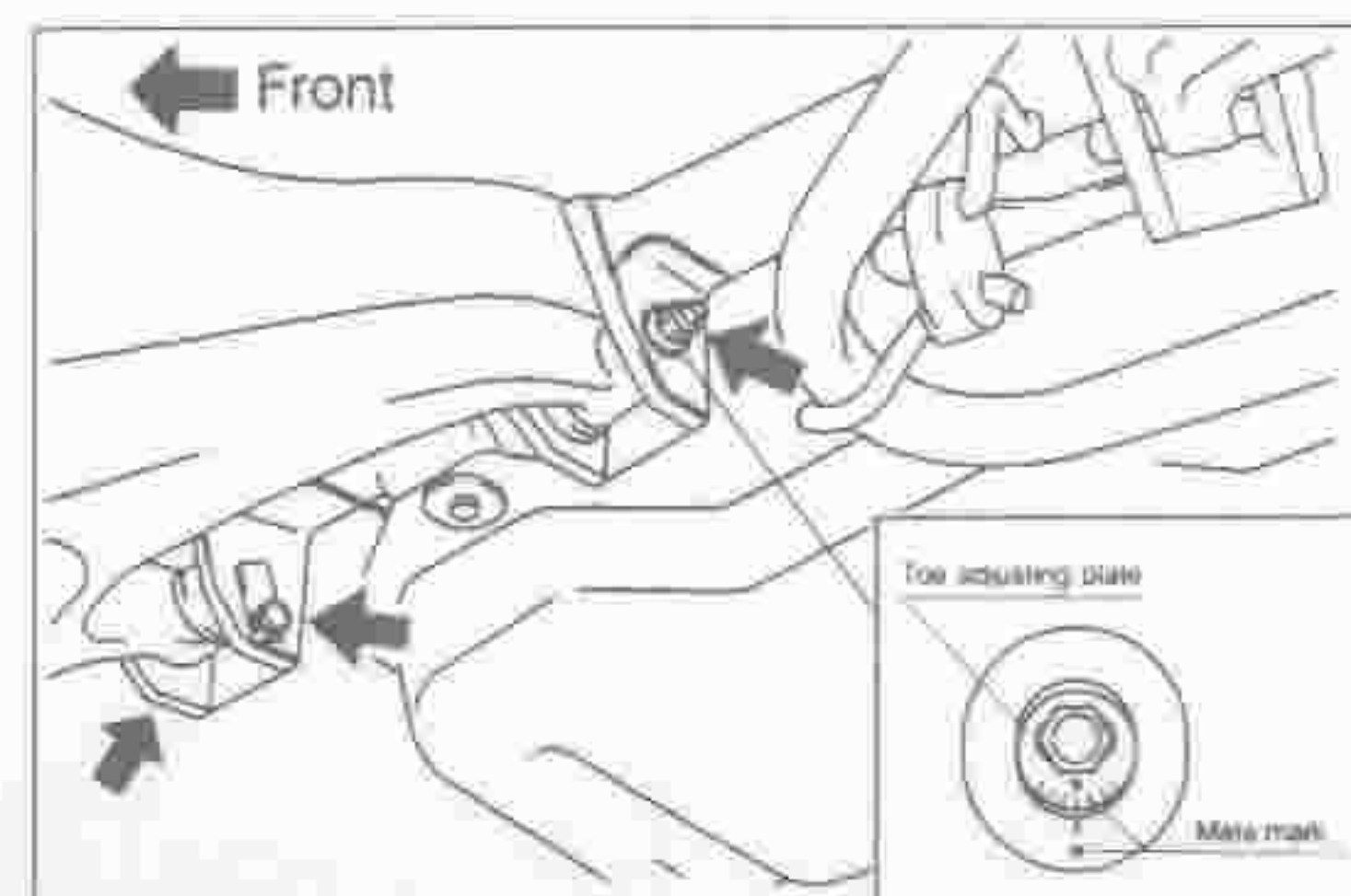


LRS00036-00034

- (4) Install the trailing arm with bolts and new nuts temporarily.

NOTE:

- Temporarily tighten the bolts, while aligning the scale for the toe adjustment of the bolt plate with the marked position.



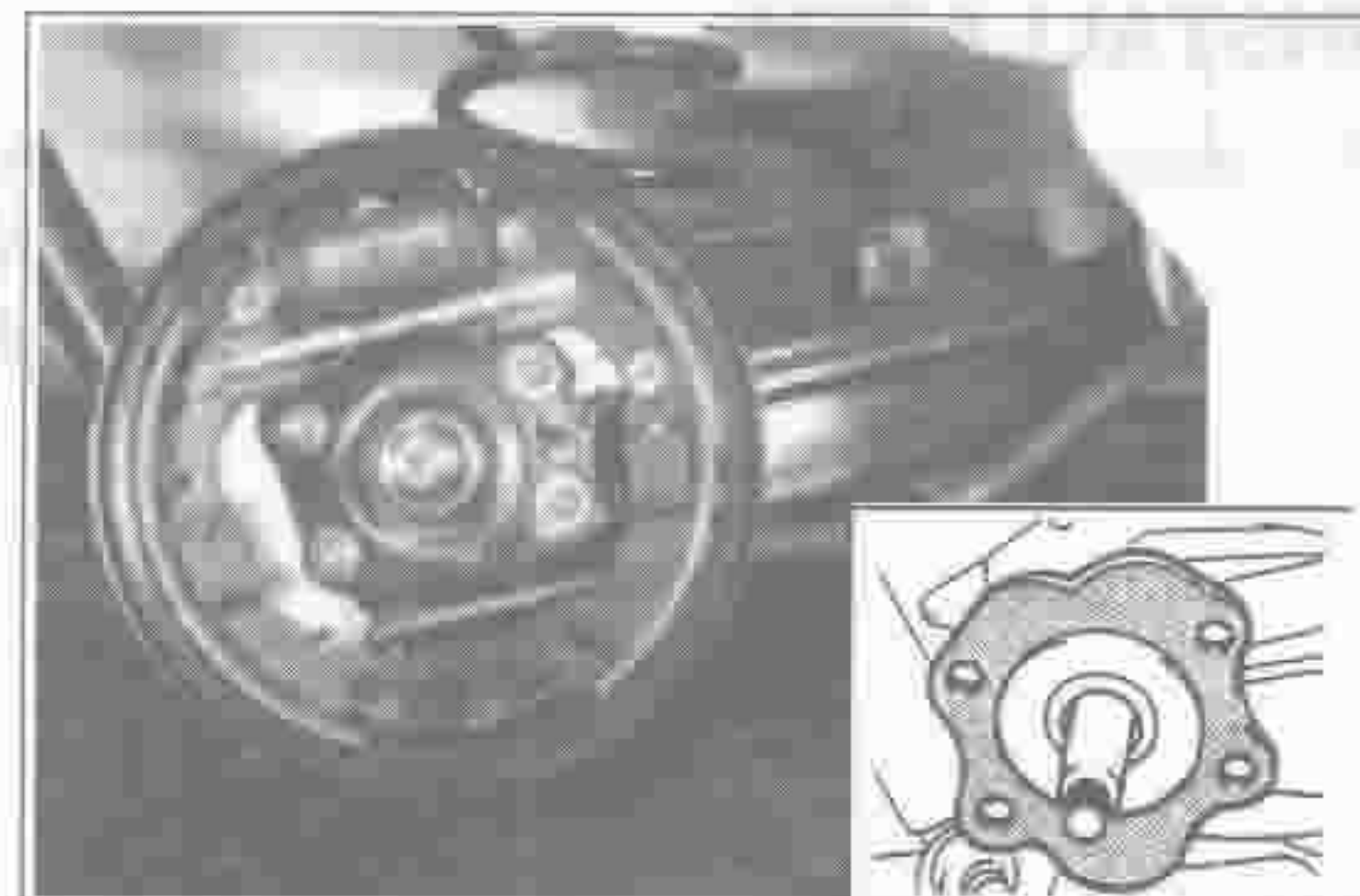
LRS00037-00035

4. Install the backing plate with the brake shoe installed and tighten the nuts.

Tightening Torque: 34.3 - 42.2 N·m
(3.5 - 4.3 kgf-m, 25.3 - 31.1 ft-lb)

NOTE:

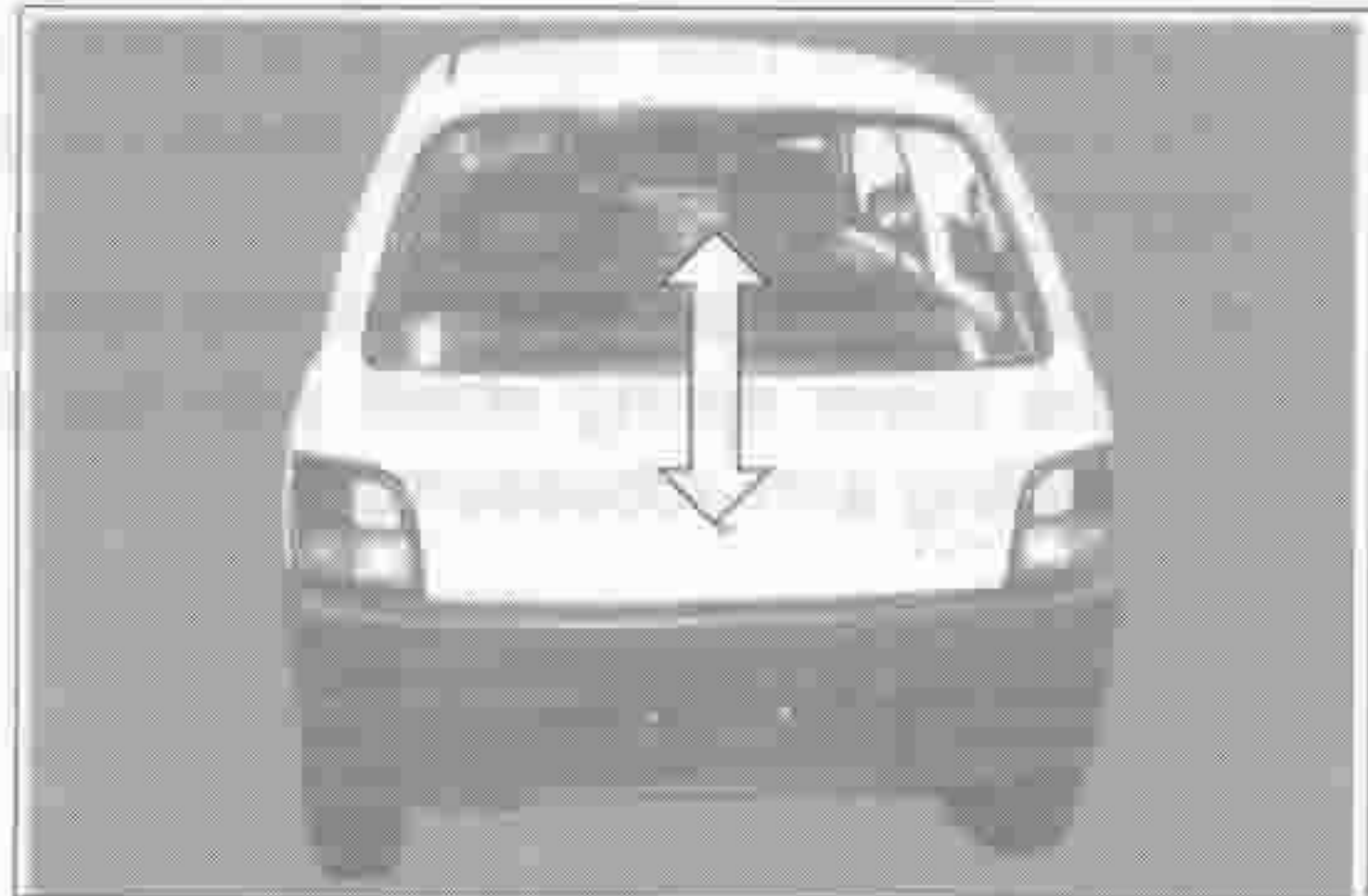
- Be sure to apply liquid gasket (Three Bond® 1104) to the mating surface between the rear backing plate and the trailing arm.



LRS00038-00035

5. Connect the rear brake tube to the rear wheel cylinder.

Tightening Torque: 12.7 - 17.7 N·m
(1.3 - 1.8 kgf-m, 9.4 - 13.0 ft-lb)



LRS00039-00023

6. Perform air bleeding for the brake system. (Refer to BR section)

7. Install the rear brake drum. (Refer to RS - 6)

8. Remove any dirt from the wheel mounting surface of the brake drum.

9. Install the rear wheel.

10. With the vehicle in an unloaded state, jack down the vehicle.

11. Rock the vehicle in an up-and-down direction several times to settle the suspension.

12. Tightening of trailing arm.

Tightening Torque:

Ⓐ: Rear suspension side:

44.1 - 53.9 N·m
(4.5 - 5.5 kgf-m, 32.5 - 39.8 ft-lb)

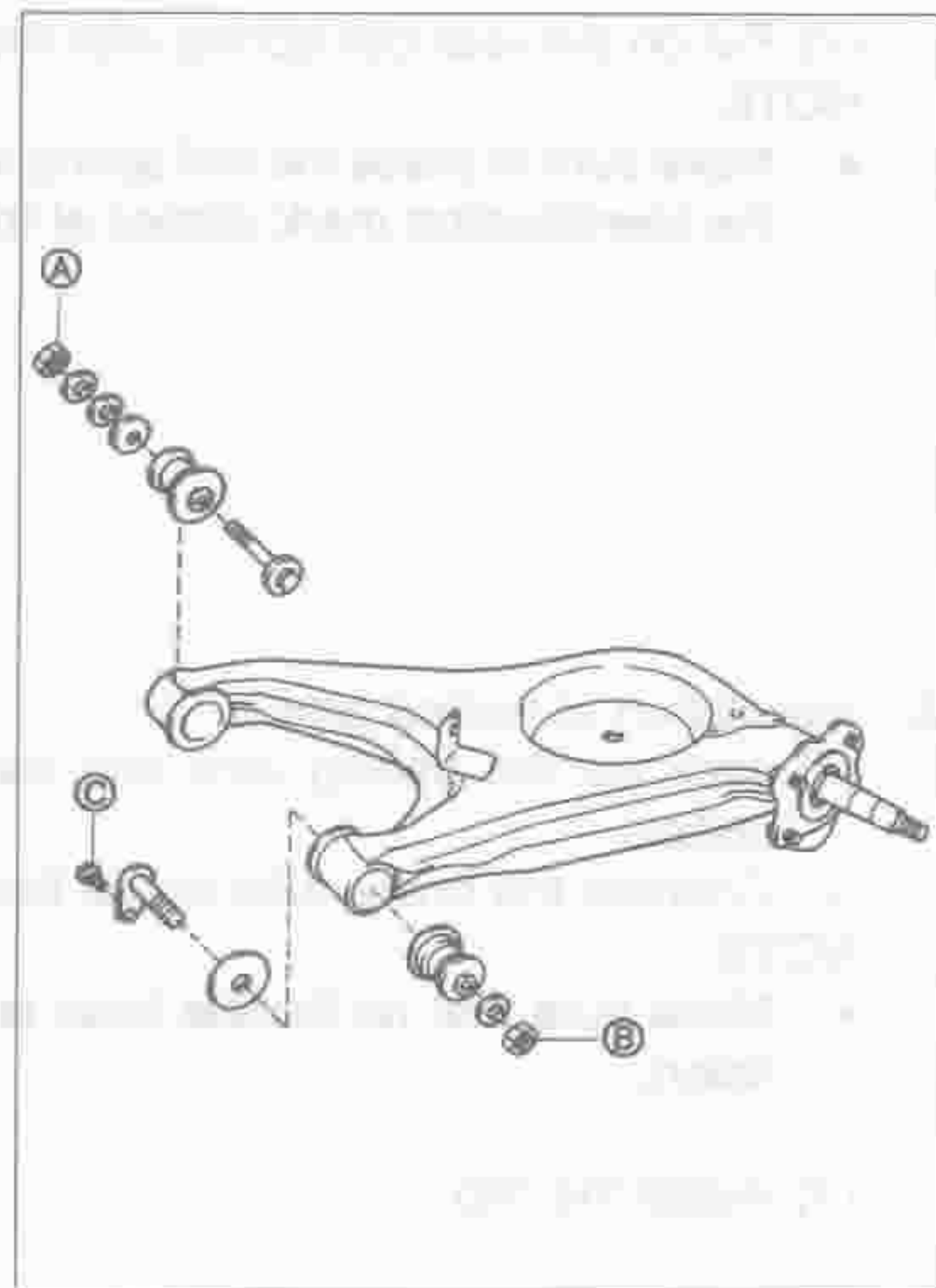
Ⓑ: Trailing arm side

44.1 - 53.9 N·m
(4.5 - 5.5 kgf-m, 32.5 - 39.8 ft-lb)

Ⓒ: Bolt

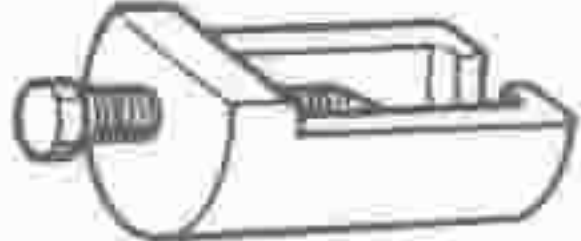
9.8 - 15.7 N·m
(1.0 - 1.6 kgf-m, 7.2 - 11.6 ft-lb)

13. Rear wheel alignment inspection. (Refer to RS - 3)



LRS00040-00037

SSTs

Shape	Parts number	Parts name
	09510-87301-000	Front hub & drum puller
	09608-20011-000	Front hub & drive pinion bearing tool set
	09738-87101-000	Pitman arm puller
	09751-36011-000	Brake tube union nut wrench
	09738-87101-000	Accumulator gas discharge tool

LR500041-00038

TIGHTENING TORQUE

Tightening component	Tightening torque		
	N·m	kgf·m	ft·lb
Brake drum × Castle nut	58.8 - 78.5	6.0 - 8.0	43.4 - 57.9
Rear brake assembly × Trailing arm set subassembly	34.3 - 42.2	3.5 - 4.3	25.3 - 31.1
Shock absorber (upper section) × Body	53.9 - 78.5	5.5 - 8.0	39.8 - 57.9
Shock absorber (lower section) × Trailing arm set subassembly	53.9 - 78.5	5.5 - 8.0	39.8 - 57.9
Bolt × Nut (rear suspension side)	44.1 - 53.9	4.5 - 5.5	32.5 - 39.8
Trailing arm set bolt × Nut	44.1 - 53.9	4.5 - 5.5	32.5 - 39.8
Bolt × Trailing arm set bolt	9.8 - 15.7	1.0 - 1.6	7.2 - 11.6
Rear bumper spring × Nut	14.7 - 21.6	1.5 - 2.2	10.8 - 15.9
Brake tube × Rear wheel cylinder	12.7 - 17.7	1.3 - 1.8	9.4 - 13.0

LR500042-00000





MEMO

MEMO





MEMO

MEMO

