

DAIHATSU

F73, F78

REAR AXLE & SUSPENSIONS

OUTLINE	RS- 2	REAR STABILIZER	RS-15
REAR AXLE HOUSING & REAR		COMPONENTS	RS-15
AXLE SHAFT	RS- 3	REMOVAL	RS-15
REAR DIFFERENTIAL	RS- 3	INSPECTION	RS-16
VEHICLE SUPPORTING POINTS		INSTALLATION	RS-16
(FRONT & REAR SIDES)	RS- 4	REAR AXLE SHAFT	RS-17
PRELIMINARY CHECK ITEMS	RS- 5	COMPONENTS	RS-17
COMPONENTS	RS- 6	REMOVAL	RS-17
REMOVAL	RS- 7	DISASSEMBLY	RS-19
INSPECTION	RS- 8	INSPECTION	RS-21
INSTALLATION	RS- 9	ASSEMBLY	RS-22
UPPER CONTROL ARM	RS-12	INSTALLATION	RS-25
COMPONENTS	RS-12	APPENDIX	RS-28
REMOVAL	RS-12	SST	RS-28
INSPECTION	RS-13	SERVICE SPECIFICATION	RS-29
INSTALLATION	RS-13	TIGHTENING TORQUE	RS-29

R7RS00001-00000

RS

RS-2

OUTLINE

The rear suspension is composed of the rear upper and lower control arms, coil springs, rear shock absorbers, lateral control rod and rear stabilizer. In order to achieve both good controllability and riding comfort, the five-link type rear suspension has been newly employed.

R7RS00002-00000

(A) REAR UPPER AND LOWER CONTROL ARMS

The rear upper and lower control arms sustain the rear wheels in relation to the load applying in a fore-&-aft direction of the vehicle.

(B) LATERAL CONTROL ROD

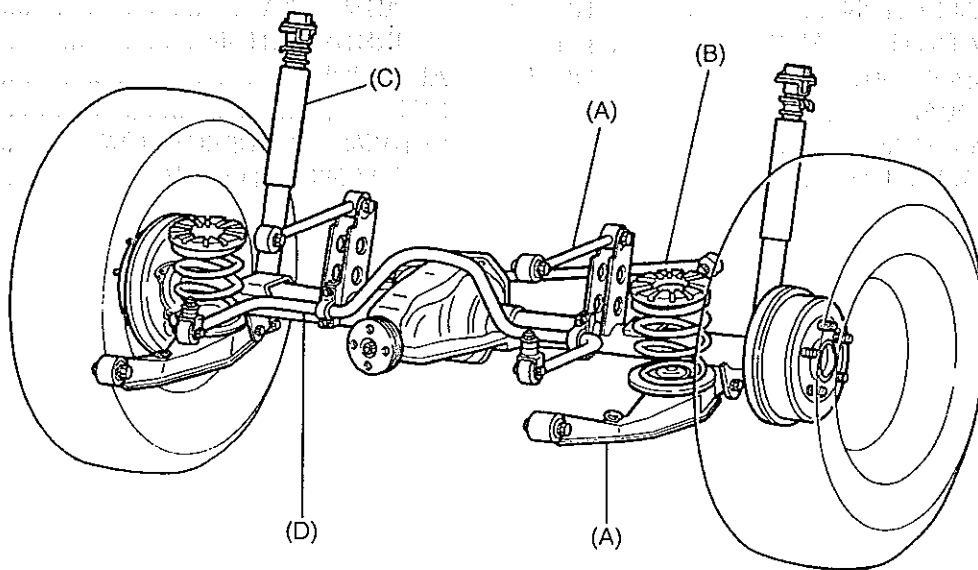
The lateral control rod sustains the rear wheels in relation to the load applying in a right-&-left direction of the rear suspension.

(C) REAR SHOCK ABSORBERS

The rear shock absorbers employ a nitrogen gas sealed double-cylindrical type shock absorber. As optional equipment, a three-stage damper is available in which the rear shock absorber damping force can be selected over three stages.

(D) REAR STABILIZER

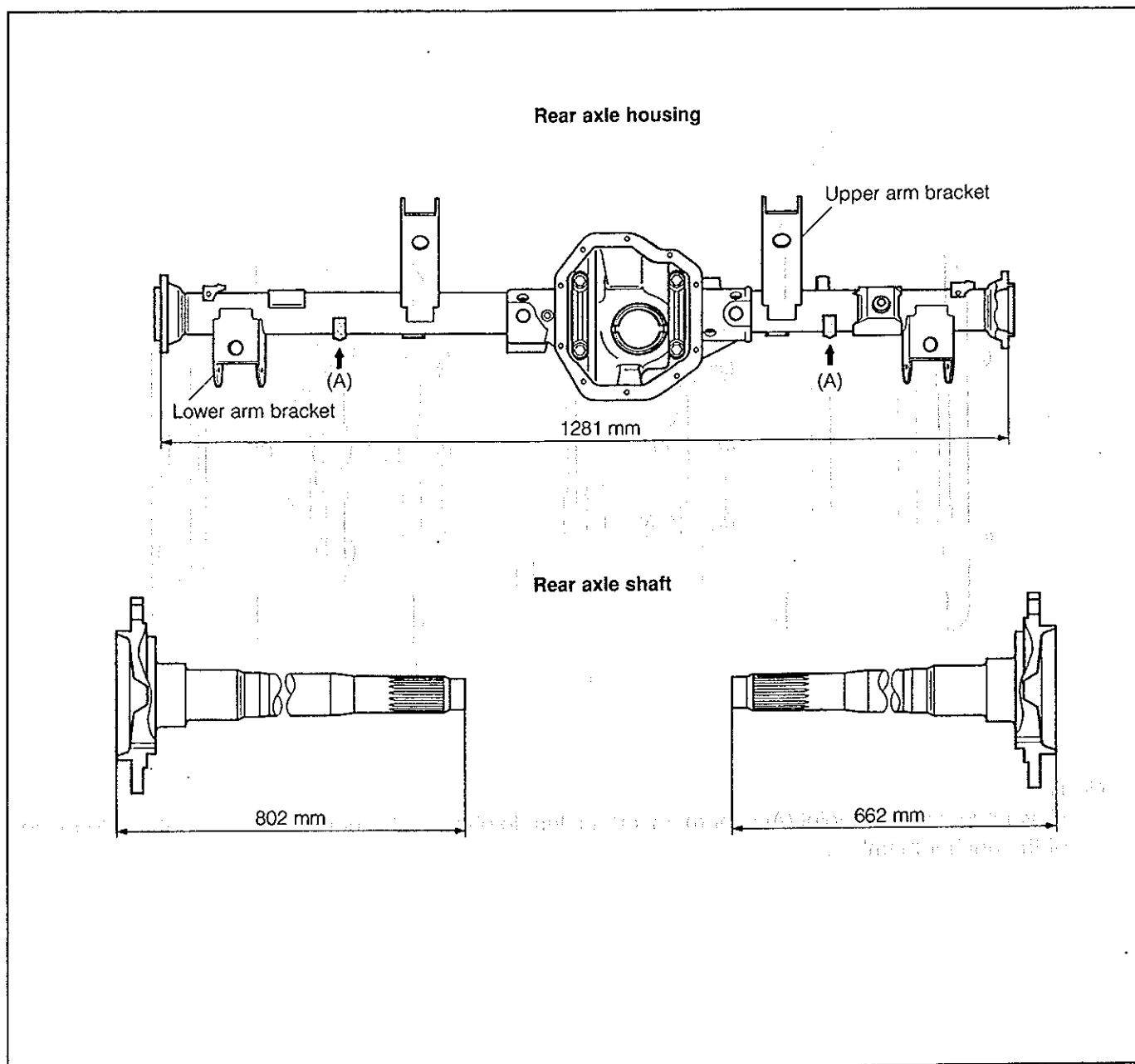
For improved running stability, the rear stabilizer having an outer diameter of 23 mm is provided between the frame, secured at the right and left sides, and the rear axle.



R7RS00003-99993

REAR AXLE HOUSING & REAR AXLE SHAFT

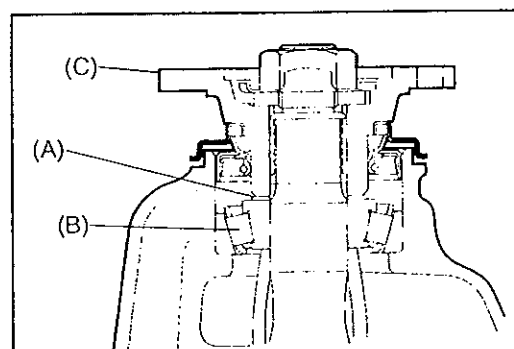
- As a result of the increased tread, the overall length has been increased.
- Since the five-link type suspension has been employed, lower arm brackets and lateral rod brackets have been newly provided at the axle housing.
- For improved serviceability, jacking points (A) have been newly provided.



R7RS00004-99999

REAR DIFFERENTIAL

Starting from vehicles manufactured in May 1993, a plate drive No. 2 (A) has been installed to between the differential front bearing (B) and the companion flange (C) so as to reduce the vehicle abnormal noise.



R7RS00005-99999

RS-4

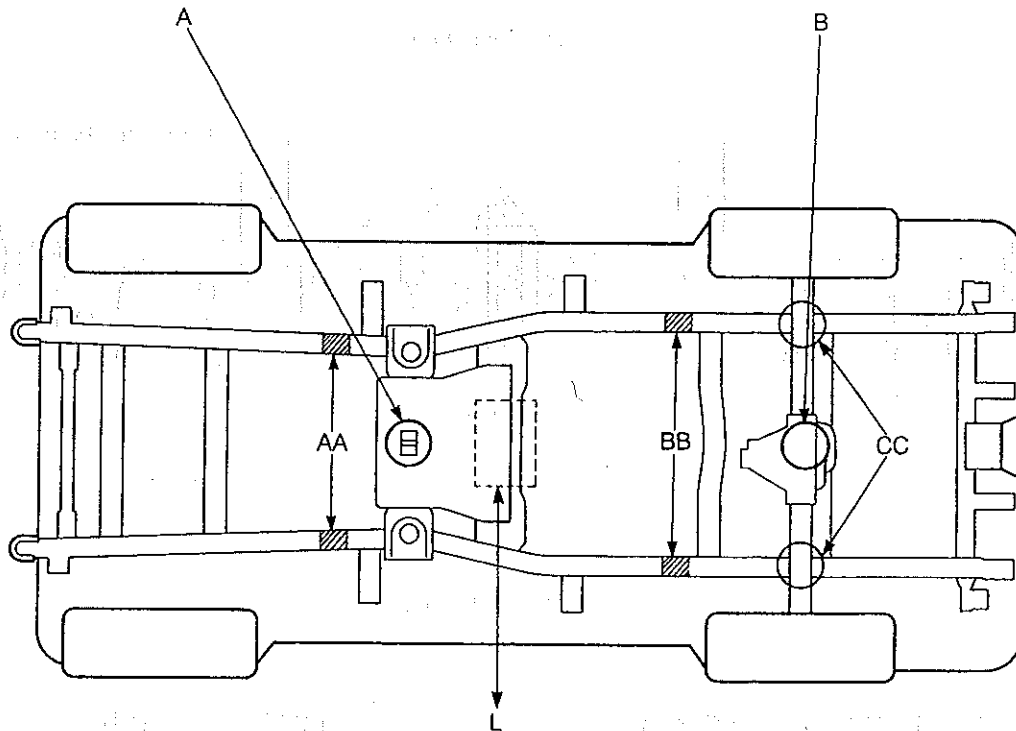
VEHICLE SUPPORTING POINTS (FRONT & REAR SIDES)

The figure below shows the jacking-up points, safety stand points and lifting-up points.

Jacking-up Point: A - B

Safety Stand Point: AA - CC

Lifting-up Point: AA - BB



R7RS00006-99999

NOTE:

- Never support the L-point (Anchor member). Failure to observe this notice may cause the deformation of the anchor member.

PRELIMINARY CHECK ITEMS

Ensure that the all tire have the same, designated size and that they are made by the same manufacture.

Designated Tire: 215R15 100Q, 255/70R15 108Q, 6.00-16-6 (LIBLUG), 6.00-16-4 (SAND), 215/80R15 100Q and H78-15

NOTE:

- The tire inflation pressure should be checked under the unloaded state and when the tires are cold.

R7RS00007-00000

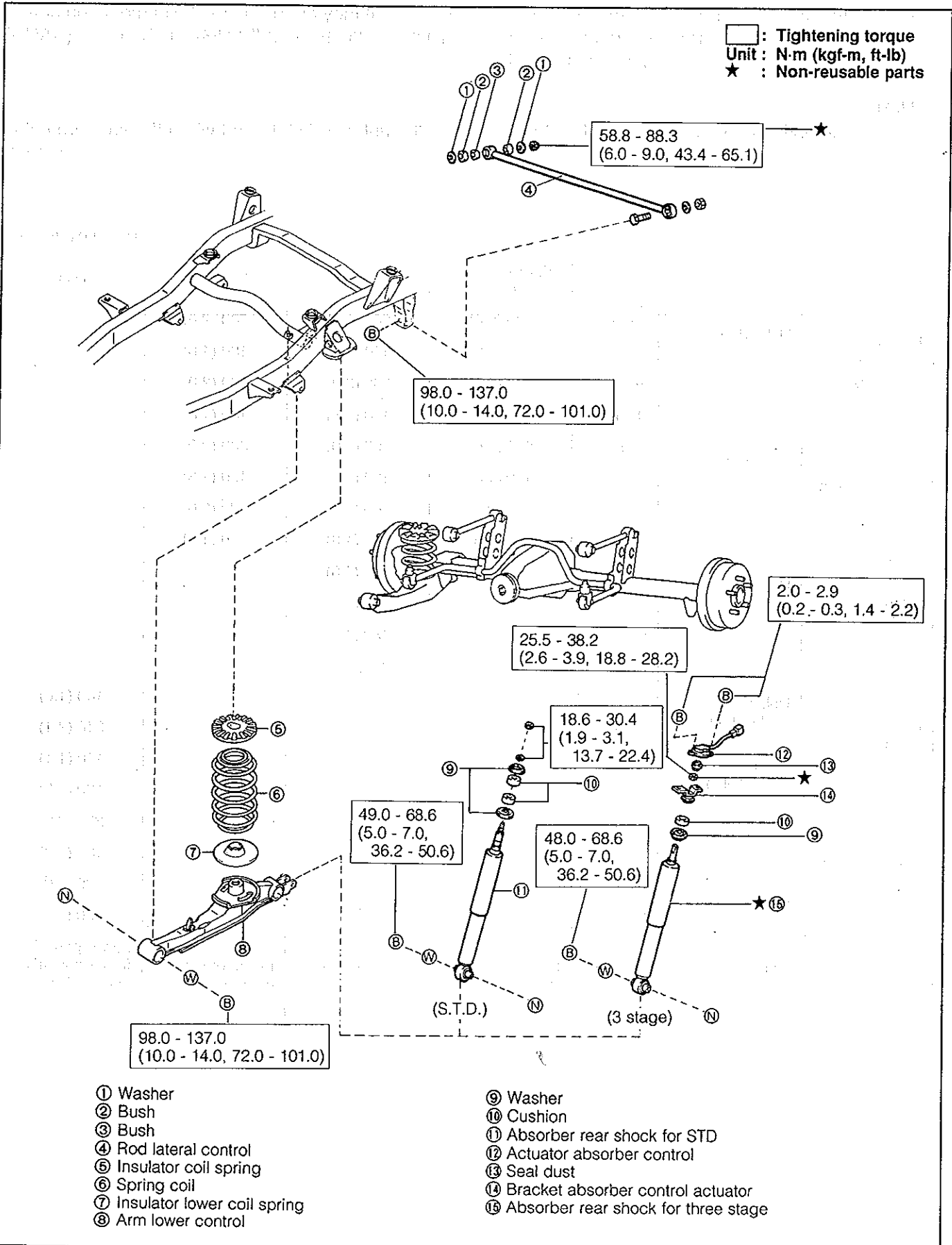
Unit: kPa (kgf/cm²)

			European and France	General	Australian	G.C.C
215R15 100Q (H78-15 100P for spare tyre)	Unloaded	Front	200 (2.0)	200 (2.0)	200 (2.0)	—
		Rear	180 (1.8)	180 (1.8)	180 (1.8)	—
	Loaded	Front	200 (2.0)	200 (2.0)	200 (2.0)	—
		Rear	180 (1.8)	180 (1.8)	180 (1.8)	—
255/70R15 108Q	Unloaded	Front	200 (2.0)	200 (2.0)	200 (2.0)	—
		Rear	180 (1.8)	180 (1.8)	180 (1.8)	—
	Loaded	Front	200 (2.0)	200 (2.0)	200 (2.0)	—
		Rear	180 (1.8)	180 (1.8)	180 (1.8)	—
6.00-16-6 (LIBLUG)	Unloaded	Front	—	180 (1.8)	—	—
		Rear	—	240 (2.4)	—	—
	Loaded	Front	—	180 (1.8)	—	—
		Rear	—	325 (3.25)	—	—
6.00-16-4 (SAND)	Unloaded (ON ROAD)	Front	—	—	—	160 (1.6)
		Rear	—	—	—	210 (2.1)
	Loaded (ON SAND)	Front	—	—	—	110 (1.1)
		Rear	—	—	—	130 (1.3)
215/80R15 100Q	Unloaded	Front	—	—	—	200 (2.0)
		Rear	—	—	—	180 (1.8)
	Loaded	Front	—	—	—	200 (2.0)
		Rear	—	—	—	180 (1.8)
Tire air inflation pressure caution label affixing position			Lower part of front door striker at driver's seat side		Inside of glove compartment	Lower part of front door striker at driver's seat side

R7RS00008-00000

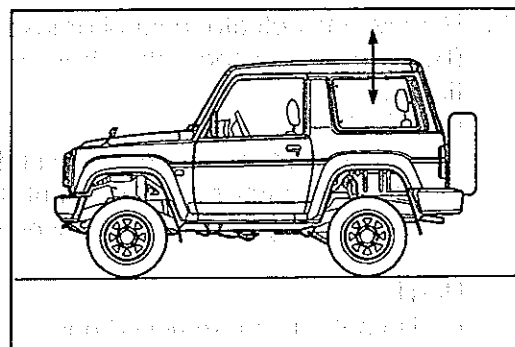
RS-6

COMPONENTS



REMOVAL

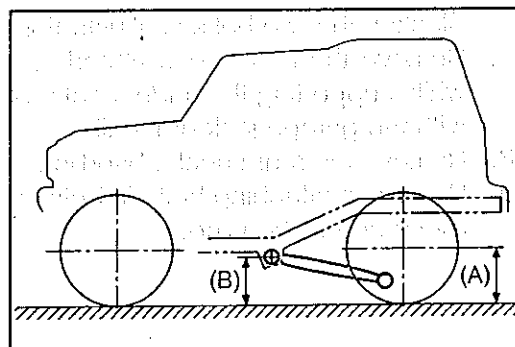
1. Place the vehicle on the flat surface.
2. Check the tire air pressure (see page RS-5).
3. With the vehicle in an unloaded state, Rock the vehicle in an up-and-down direction several times so as to stabilize the suspension.



R7RS00010-99999

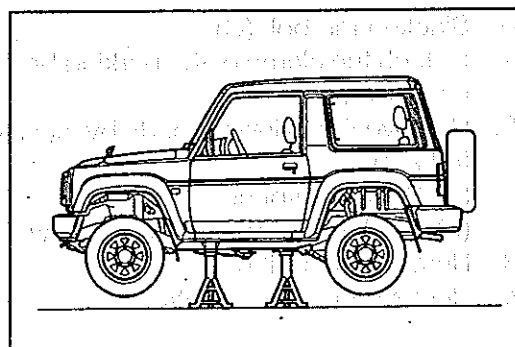
4. Measure and record the height distance of the following points.

- (A): Center of height of the rear axle housing from ground level.
- (B): Center of height of the installation bolt at the frame side of the lower control arm from ground level.



R7RS00011-99999

5. Detach the rear wheel ornament.
6. Slacken the hub nuts of the rear wheel.
7. Jack up the vehicle and support it with safety stands.
8. Remove the rear wheel by removing the five hub nuts.



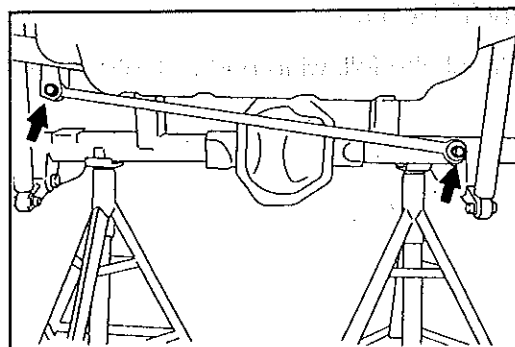
R7RS00012-99999

9. Remove the lateral control rod by removing a nut and bolt at the rear axle housing side.

NOTE:

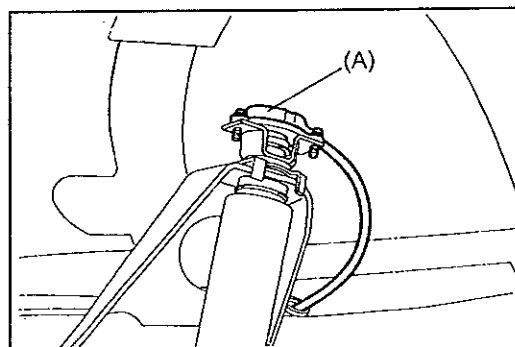
- Do not reuse the removed nut.

10. Pull out the plate washers, spacer and cushions at the nut section of the lateral control rod.



R7RS00013-99999

11. Remove the fuel inlet protector by removing the four bolts (only for RH side).
12. Disconnect the coupler of the three stage damper.
13. Remove the absorber control actuator (A) by removing the three bolts.
14. Remove the cushion from the shock absorber.



R7RS00014-99999

RS-8

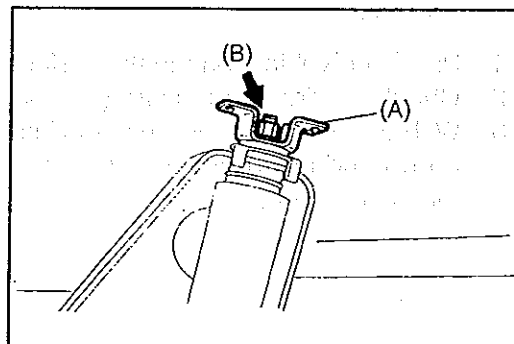
15. Remove the actuator control bracket (A) by removing a nut (B) of the rear shock absorber as illustration in the right figure.

CAUTION:

- Be careful to watch the body suddenly moving in an-up direction, after removing a nut. Failure to observe this caution may cause the injury of your face.

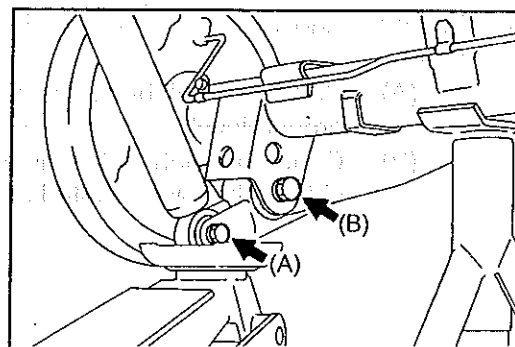
NOTE:

- Do not reuse a removed nut.



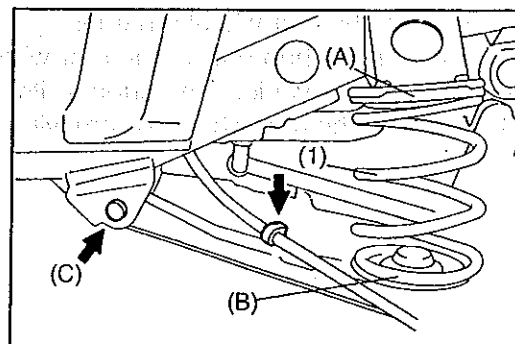
R7RS00015-99999

16. Slacken the two bolts as illustration in the right figure.
17. Remove the rear shock absorber by removing a bolt (A) while supporting the under section of the rear axle housing with the garage jack or the like.
18. Remove the rear shock absorber.
19. Remove a attaching bolt (A) between the lower control arm and rear axle housing.



R7RS00016-99999

20. Slacken the bolt (C).
21. Detach the clamp of the parking brake cable from the lower control arm.
22. Remove the following parts by jacking down the lower control arm.
 - (1) Rear coil spring.
 - (2) Insulator for upper (A) and lower (B).
23. Remove the bolt (C).
24. Remove the lower control arm.

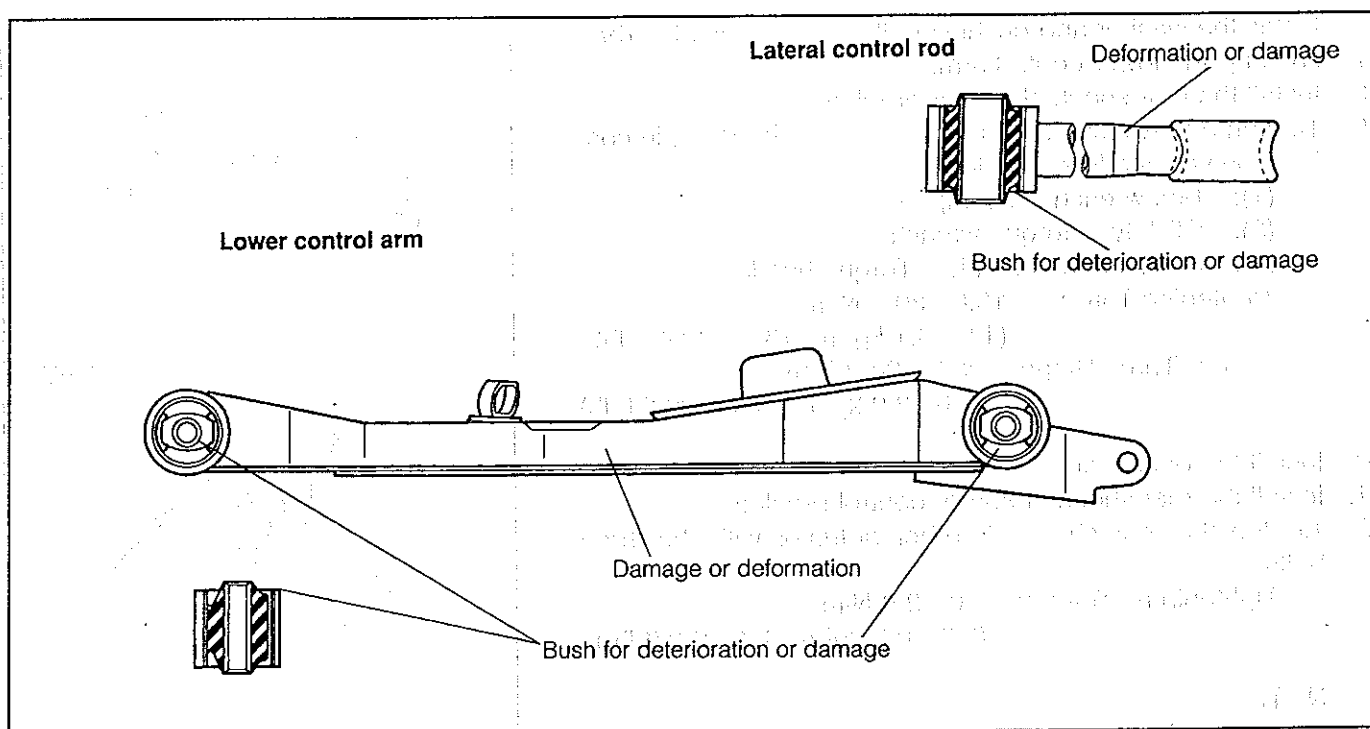


R7RS00017-99999

INSPECTION

Check the following parts. Replace any damaged parts.

R7RS00018-00000



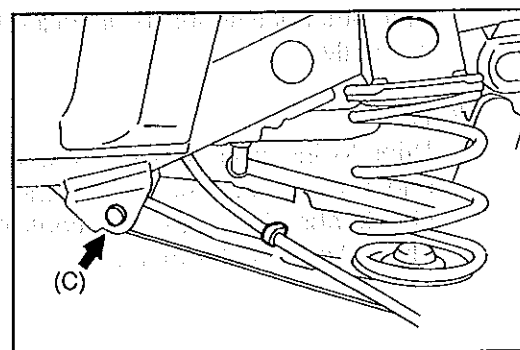
R7RS00019-99999

INSTALLATION

1. Temporarily install the lower control arm with a bolt (C) to the frame side.

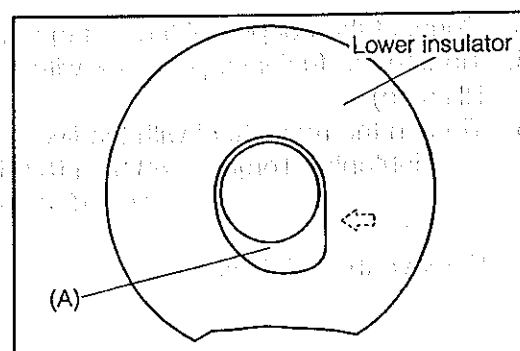
NOTE:

- Ensure that the identification mark is painted (WHITE) on the right side of the lower arm.



R7RS00020-99999

2. Install the following parts.
 - (1) Lower insulator
 - (2) Upper insulator
 - (3) Rear coil spring
3. Ensure that the end of rear coil spring (A) should be aligned with the allow headed embossed mark (it is indicated in the back side of the lower insulator) and also, ensure that the identification seal mark faces toward the upper insulator side. (Blue for short frame, Gray for long frame).

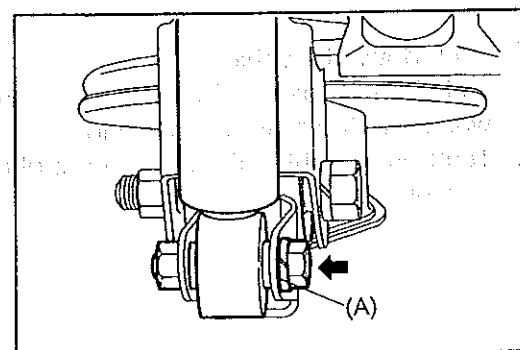


R7RS00021-99999

4. Temporary install/tighten the bolts while supporting the under section of the lower control arm with the garage jack or the like.

NOTE:

- Ensure that the threaded portion of the bolts faces toward the vehicle out side.
- Make sure that the spring washer (A) on the lower control arm should be installed as shown in the right figure illustration.



R7RS00022-99999

5. Clamp the parking cable to the lower control arm.

RS-10

6. Install the washer and cushion to the rear shock absorber.
7. Jack up the lower control arm.
8. Install the rear shock absorber bracket.
9. Tighten a new lock nut of the rear shock absorber, in conjunction with the following tools.

- (1): Box wrench (17 mm)
- (2): Click type torque wrench
- (3): Socket adapter (4): Torque header

Tightening Torque: 18.6 - 30.4 N·m
(1.9 - 3.1 kgf-m, 13.7 - 22.4 ft-lb)

For Three Stage: 25.5 - 38.2 N·m
(2.6 - 3.9 kgf-m, 18.8 - 28.2 ft-lb)

10. Install the dust seal.
11. Install the rear shock absorber control bracket.
12. Tighten the rear shock absorber actuator with the three bolts.

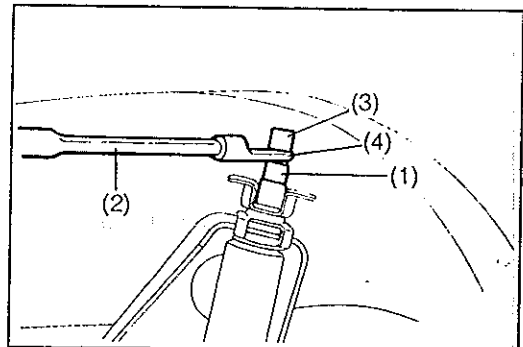
Tightening Torque: 2.0 - 2.9 N·m
(0.2 - 0.3 kgf-m, 1.4 - 2.2 ft-lb)

NOTE:

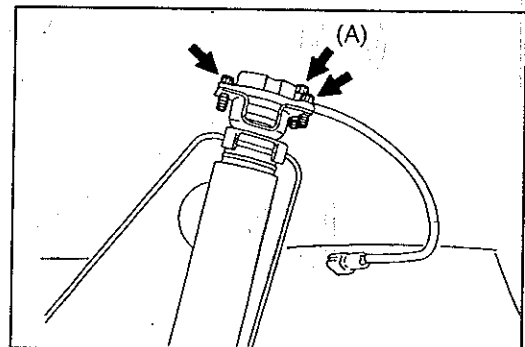
- Ensure that the L.H side of the designated bolt(A) longer than other bolt should be installed to the original position correctly.

NOTE:

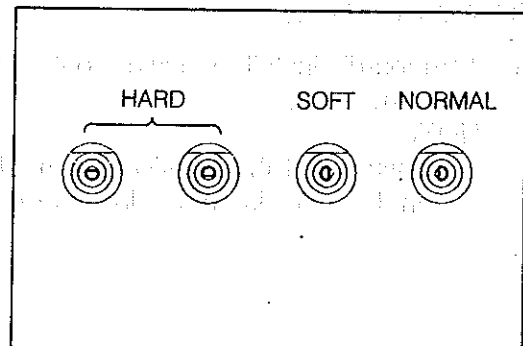
- Prior to install/tighten the rear control actuator to the shock absorber, ensure that the cutout section of the shock absorber and rear control actuator should be aligned with each others.



R7RS00023-99999



R7RS00024-99999



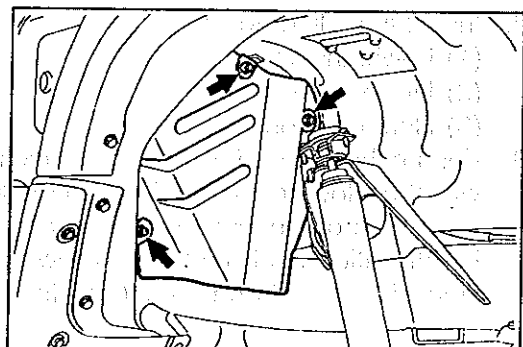
R7RS00025-99999

13. Connect the coupler of the 3 stage dampers.
14. Tighten the fuel inlet protector with the four bolts (only for RH side).

15. Tighten the rear wheel with the five hub nuts.

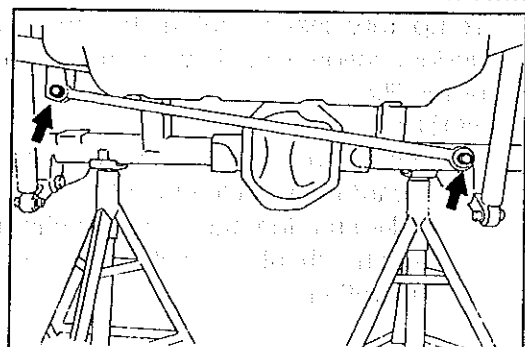
Tightening Torque: 88.3 - 118.0 N·m
(9.0 - 12.0 kgf-m, 65.1 - 87.0 ft-lb)

16. Remove the safety stands.



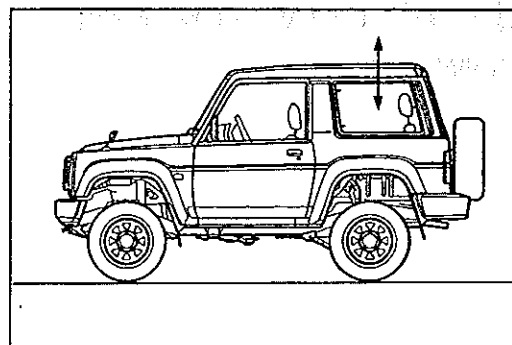
R7RS00026-99999

17. Jack down the vehicle.
18. Install the washer, bush lateral control rod, bush and washer to the rear axle housing.
19. Temporary tighten the lateral control rod with a bolt and a new nut.



R7RS00027-99999

20. Place the vehicle on the flat surface.
21. Check the tire air pressure (see page RS-5).
22. With the vehicle in an unloaded state, Rock/Move the vehicle in an up-and-down direction several times so as to stabilize the suspensions.

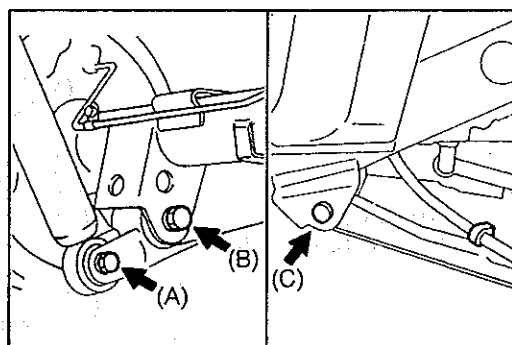


R7RS00028-99999

23. Tighten the bolts at the lower side of the shock absorber (A) and frame side (C), rear side (B) of the lower control arm.

Tightening Torque:

- (A): 49.0 - 68.6 N·m
(5.0 - 7.0 kgf-m, 36.2 - 50.6 ft-lb)
- (B) and (C): 98.0 - 137.0 N·m
(10.0 - 14.0 kgf-m, 72.0 - 101.0 ft-lb)

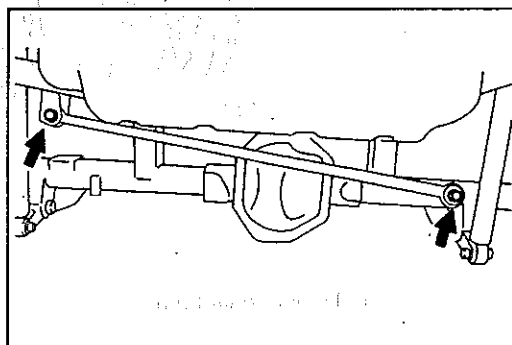


R7RS00029-99999

24. Tighten the lateral control rod with a bolt and a new nut.

Tightening Torque:

- Nut Side: 58.8 - 88.3 N·m
(6.0 - 9.0 kgf-m, 43.4 - 65.1 ft-lb)
- Bolt Side: 98.0 - 137.0 N·m
(10.0 - 14.0 kgf-m, 92.0 - 101.0 ft-lb)



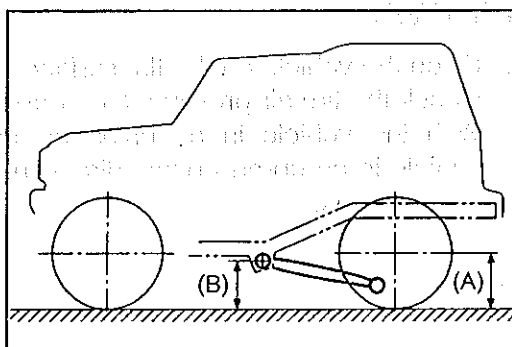
R7RS00030-99999

25. Measure the distance height between the following points.

- (A): Center of height of the rear axle housing
- (B): Center of height of the installation bolt at the frame side of lower control arm.

Specified Value: (A) - (B) = 40 mm

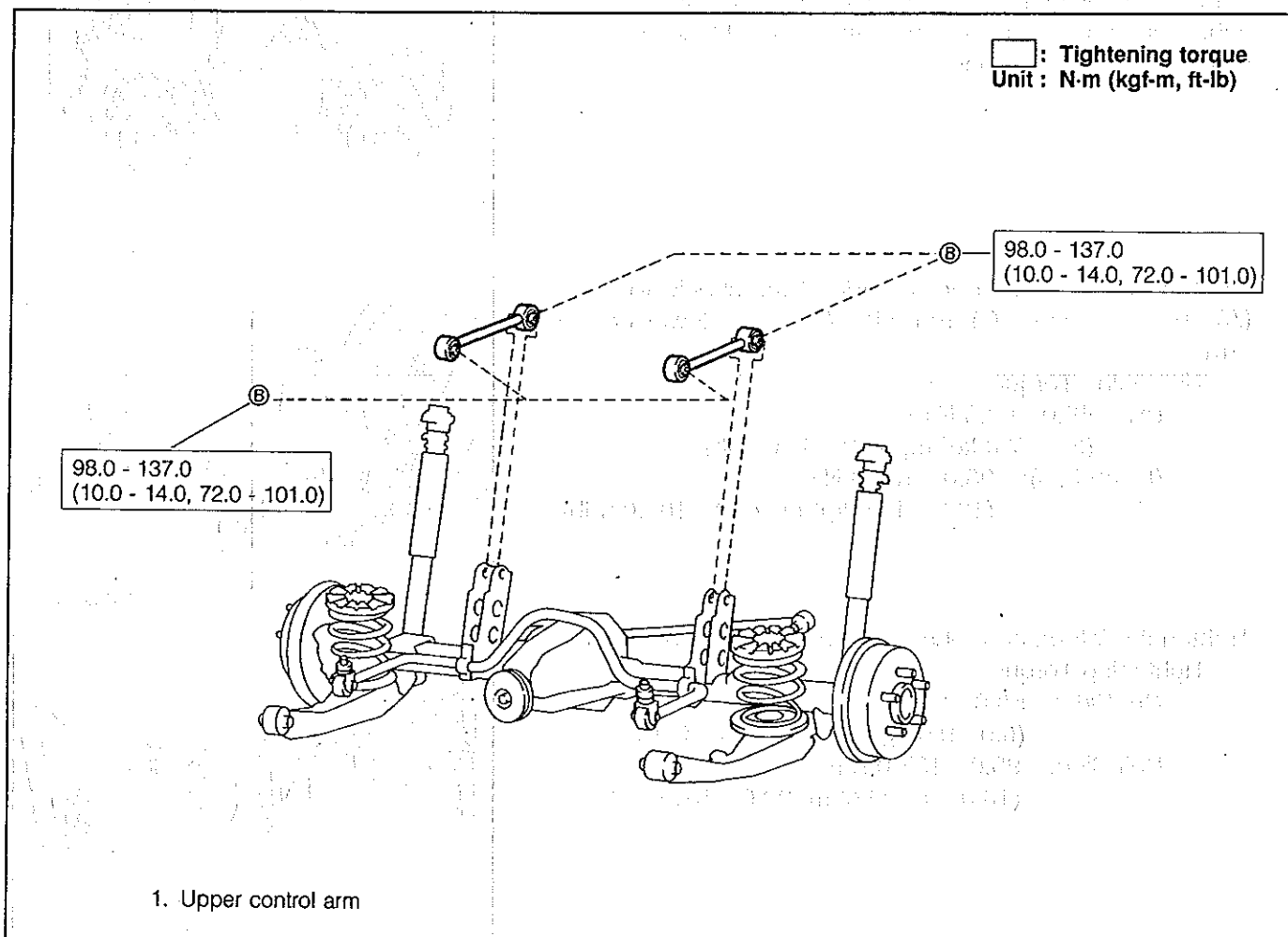
26. Attach the rear wheel ornament.



R7RS00031-99999

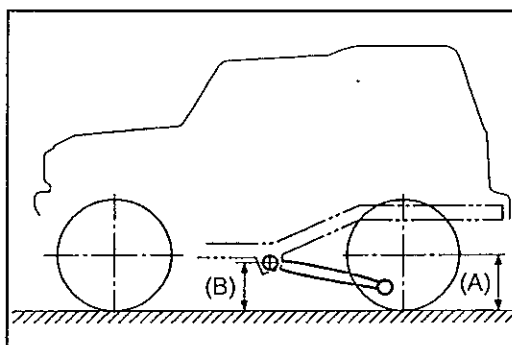
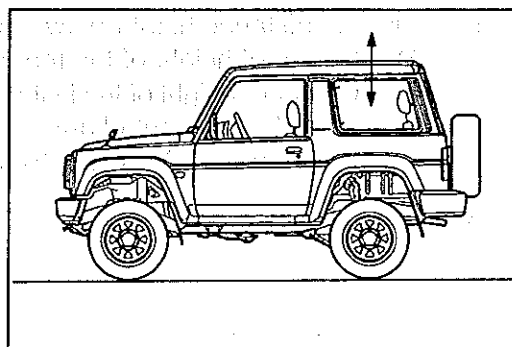
RS-12

UPPER CONTROL ARM COMPONENTS

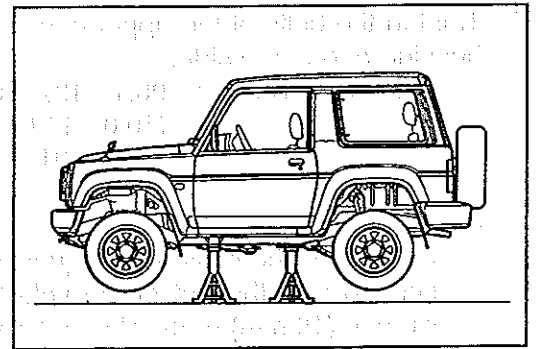


REMOVAL

1. Place the vehicle on the flat surface.
2. Check the tire air pressure (see page RS-5).
3. With the vehicle in an unloaded state, Rock/Move the vehicle in an up-and-down direction so as to stabilize the suspensions.
4. Measure/Record the actual value of distance height of the following points.
 - (A): Center of height of the rear axle housing from ground level.
 - (B): Center of height of the installation bolt at the lower control arm frame side from ground level.

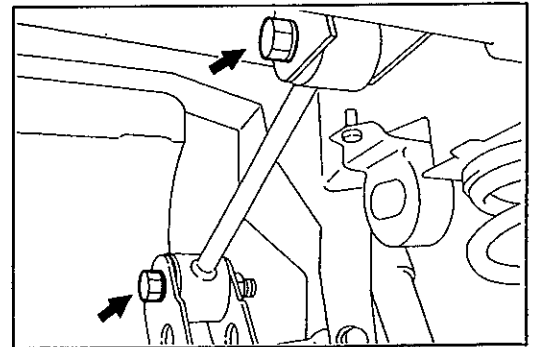


5. Detach the rear wheel ornament.
6. Slacken the hub nuts of the rear wheel.
7. Jack up the vehicle and support its with safety stands.
8. Remove the rear wheel by removing five hub nuts.



R7RS00035-99999

9. Remove the bolts of upper control arm.
10. Remove the upper control arm from the rear axle housing and frame side.

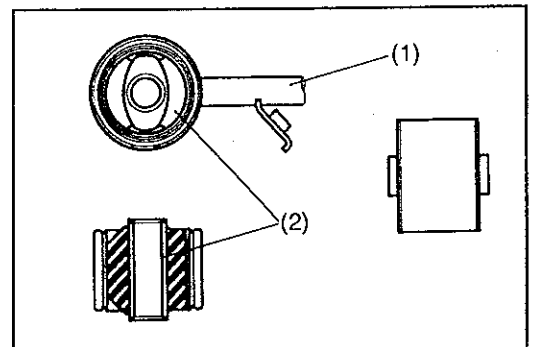


R7RS00036-99999

INSPECTION

Inspect the following parts. Replace any damaged parts.

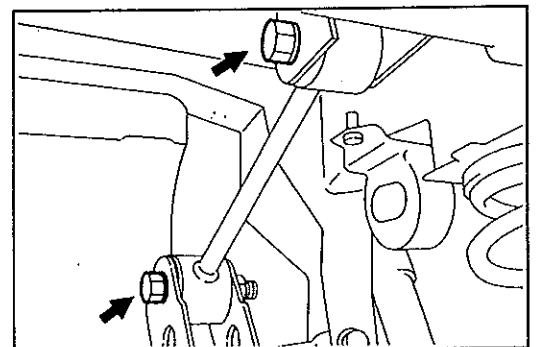
- (1): Arm rod for deformation and damage.
- (2): Bush for deterioration and damage.



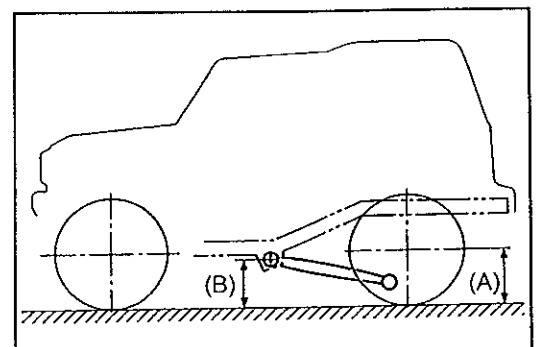
R7RS00037-99999

INSTALLATION

1. Temporary tighten the upper control arm with the bolts.
NOTE:
 - Ensure that the nut should be installed from the vehicle out side.
2. Tighten the rear wheel with the hub nuts.
Tightening Torque: 88.3 - 118.0 N·m
(9.0 - 12.0 kgf-m, 65.1 - 87.0 ft-lb)
3. Jack down the vehicle.
4. With the vehicle in an unloaded state, Rock/Move the vehicle in an up-and-down direction several times so as to stabilize the rear suspension.
5. Measure the actual value of the following points.
 - (A): Center of height of the rear axle housing from ground level.
 - (B): Center of height of the illustration bolt at the lower control arm frame side from ground level.
 Specified Value: (A) - (B) = 40 mm



R7RS00038-99999



R7RS00039-99999

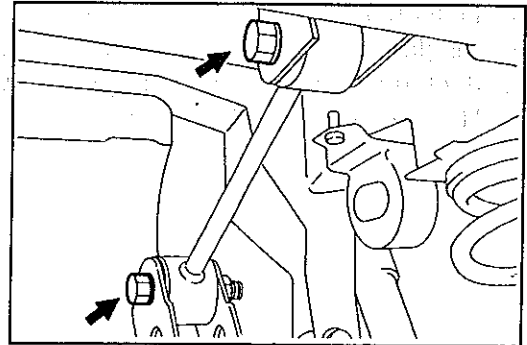
RS-14

6. Tighten the bolts of the upper control arm to the rear axle housing and frame side.

Tightening Torque: 98.1 - 137.3 N·m
(10.0 - 14.0 kgf-m,
72.0 - 101.0 ft-lb)

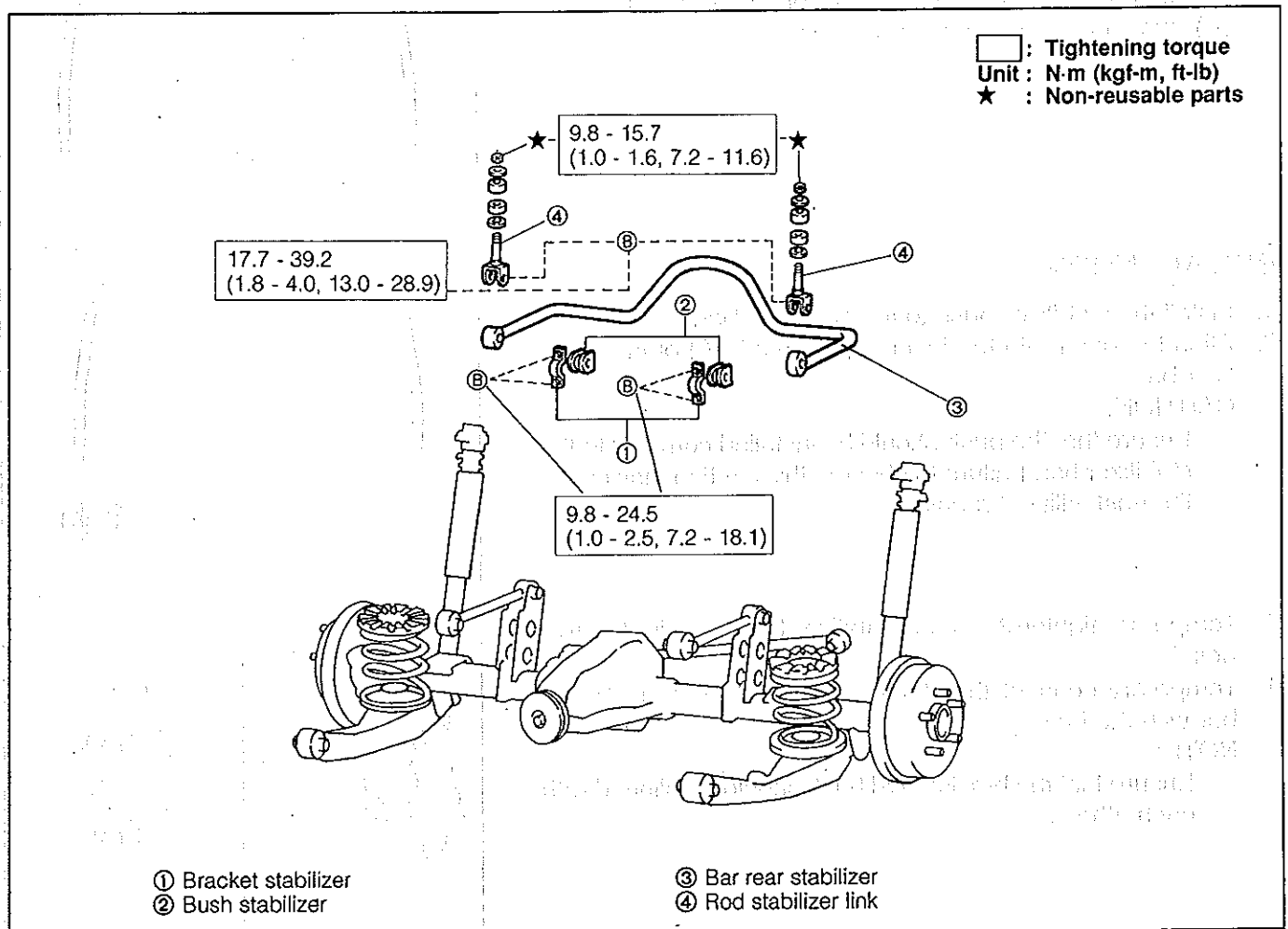
NOTE:

- As regards the tightening sequence of the bolts, first be sure to lock the nut at the vehicle out side with ring wrench (19 mm) or the like and Then, tighten the bolts.



R7RS00040-99999

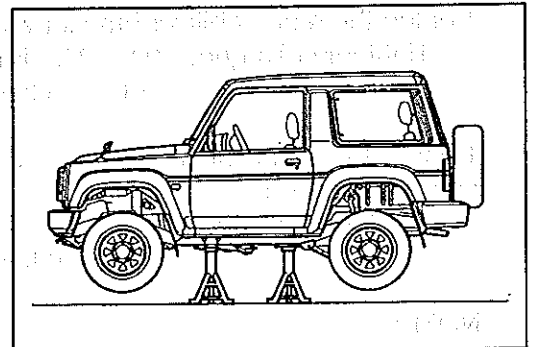
REAR STABILIZER COMPONENTS



R7RS00041-99999

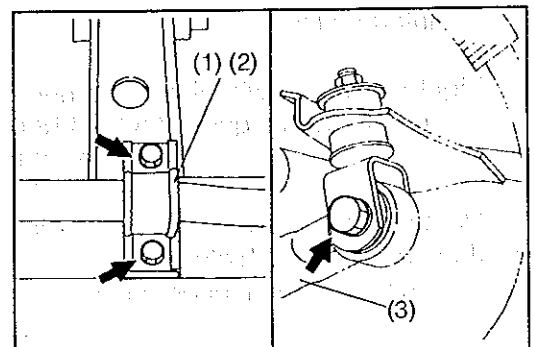
REMOVAL

1. Detach the rear wheel ornament.
2. Slacken the hub nuts of the rear wheel.
3. Jack up the vehicle and support it with safety stands.
4. Remove the rear wheel by removing the five hub nuts.



R7RS00042-99999

5. Remove the attaching bolt between the stabilizer link rod and stabilizer bar.
6. Remove the following parts by removing the two bolts.
 - (1) Stabilizer bracket
 - (2) Rear stabilizer bush
 - (3) Rear stabilizer bar



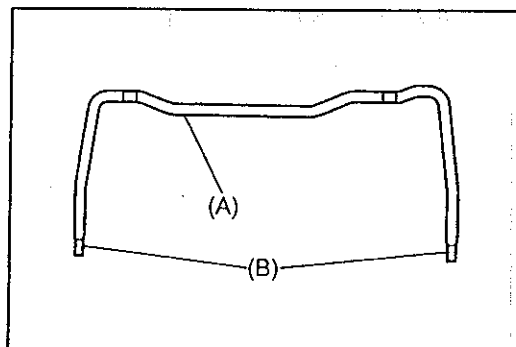
R7RS00043-99999

RS-16

INSPECTION

Check the following parts. Replace any damaged parts.

- (A) Rear stabilizer bar for deformation and damage.
- (B) Bush for deterioration and damage.



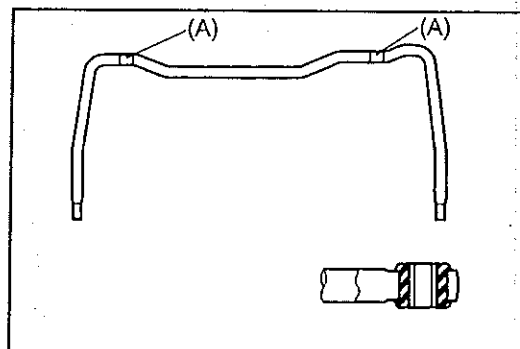
R7RS00044-99999

INSTALLATION

1. Install the stabilizer bush to the stabilizer bar.
2. Align the bush with the identification mark (A) of the stabilizer bar.

CAUTION:

- Ensure that the bush should be installed correctly to the stabilizer bar. Failure to observe this caution may cause the instability of running.

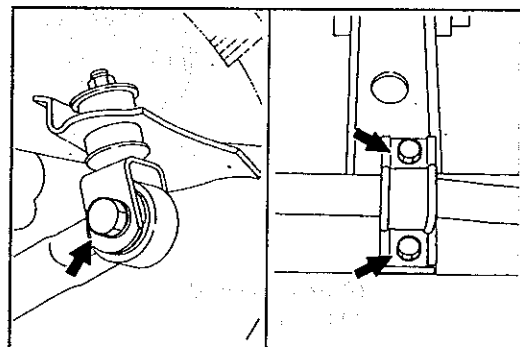


R7RS00045-99999

3. Temporary tighten the rear stabilizer bracket with the two bolts.
4. Temporary connect the stabilizer link rod to the stabilizer bar with the bolt.

NOTE:

- Ensure that the bracket and bush should be aligned with each others.



R7RS00046-99999

5. Tighten the rear stabilizer bracket with the two bolts.
Tightening Torque: 9.8 - 24.5 N·m
(1.0 - 2.5 kgf-m, 7.2 - 18.1 ft-lb)
6. Tighten the attaching bolt between the stabilizer link rod and stabilizer bar.
Tightening Torque: 17.7 - 39.2 N·m
(1.8 - 4.0 kgf-m, 13.0 - 28.9 ft-lb)

NOTE:

- Ensure that the bolt should be tightened from the vehicle interior side.

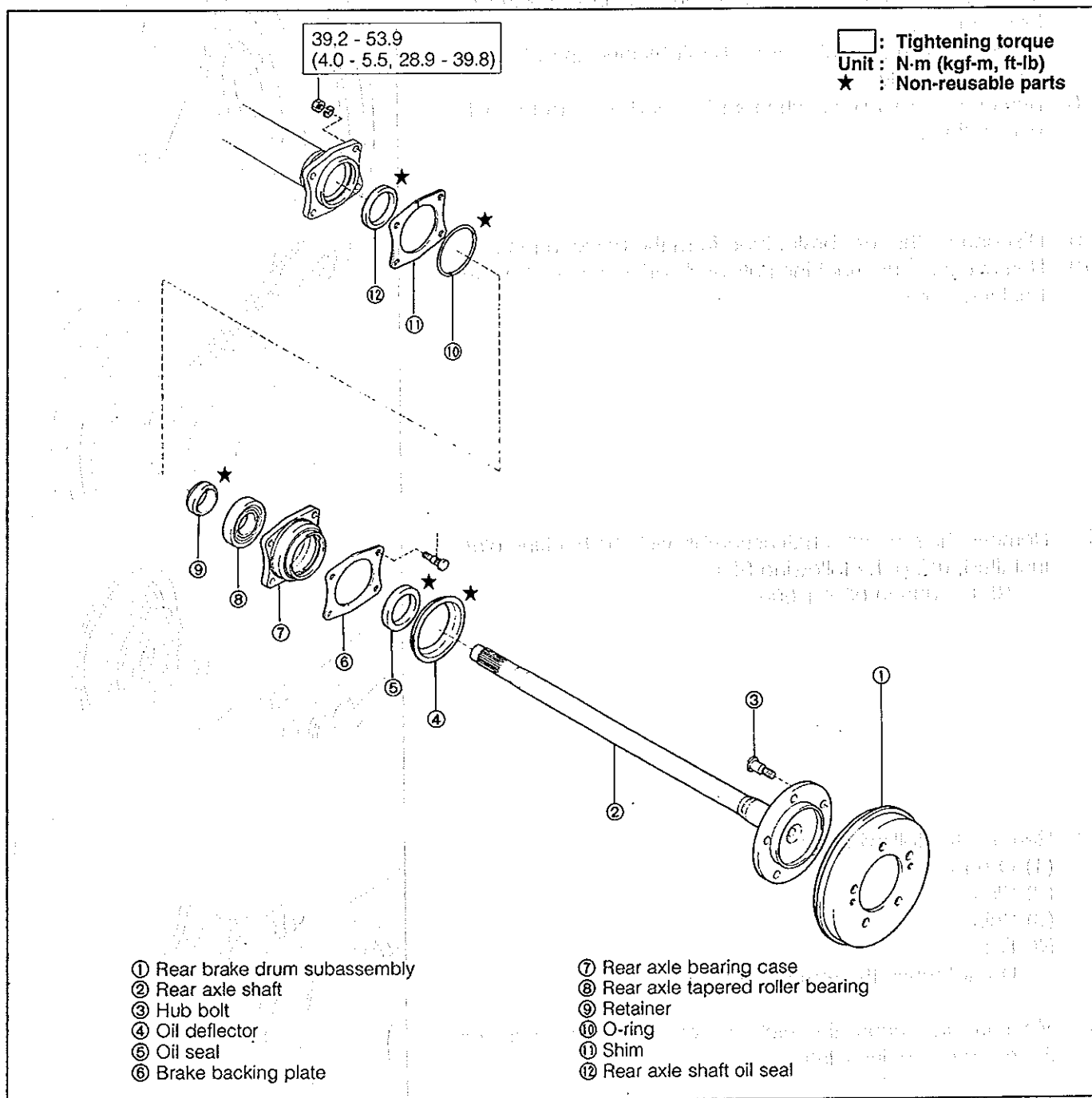
7. Tighten the rear wheel with the hub nuts.
Tightening Torque: 88.3 - 118.0 N·m
(9.0 - 12.0 kgf-m, 65.1 - 87.0 ft-lb)

R7RS00047-00000

8. Remove the safety stands by jacking up the vehicle.
9. Jack down the vehicle.
10. Attach the rear wheel ornament.

R7RS00048-00000

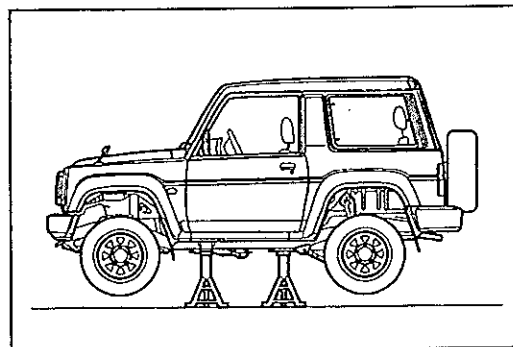
REAR AXLE SHAFT COMPONENTS



R7RS00049-99999

REMOVAL

1. Detach the rear wheel ornament.
2. Slacken the hub nuts of the rear wheel.
3. Jack up the vehicle and support its with safety stands.
4. Remove the rear wheel by removing the five hub nuts.
5. Release the parking brake lever.



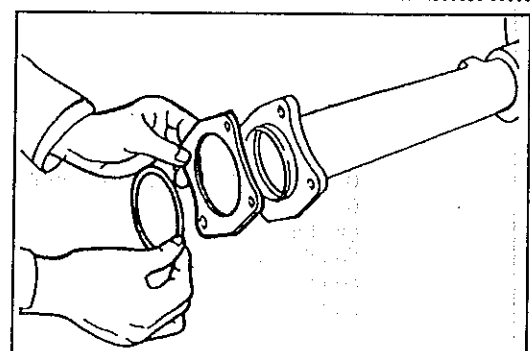
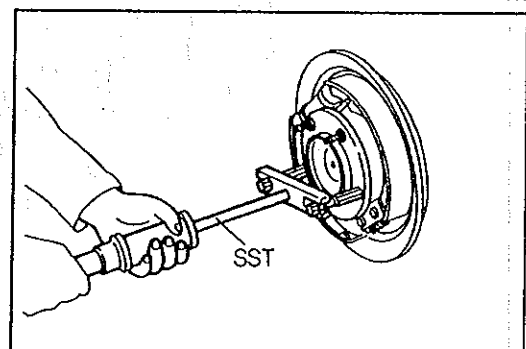
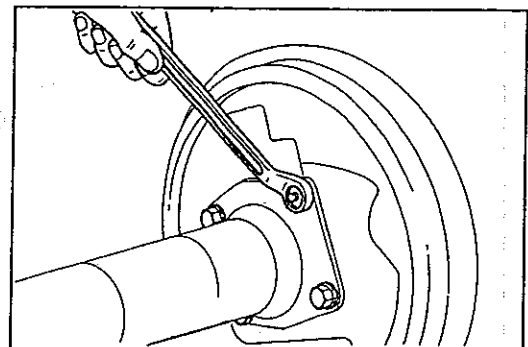
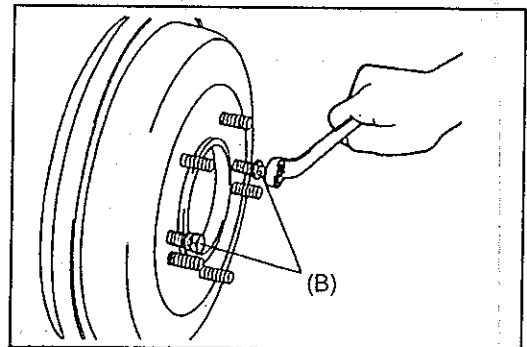
R7RS00050-99999

RS-18

6. Install the bolts (M10 × 1.25) to each bolt hole. The brake drum can be detached easily by screwing-in the bolts alternately (If any difficulty is encountered in removing the brake drum).
7. Remove the rear brake drum by tightening the aforesaid two bolts evenly.
8. Remove the rear brake shoe and related parts (refer to the BR section).
9. Disconnect the rear brake tube from the backing plate.
10. Remove the four attaching nuts and spring washer from the backing plate.
11. Remove the rear axle shaft assembly with the backing plate installed, using the following SST.
SST: 09520-00031-000
12. Remove the following parts.
 - (1) O-ring
 - (2) Plate
 - (3) Shim

NOTE:

 - Do not reuse the removed O-ring.
13. Measure and record the thickness of the removed shim for the reference of installation.



14. Remove the oil seal, using the following SST.
SST: 09308-00010-000

NOTE:

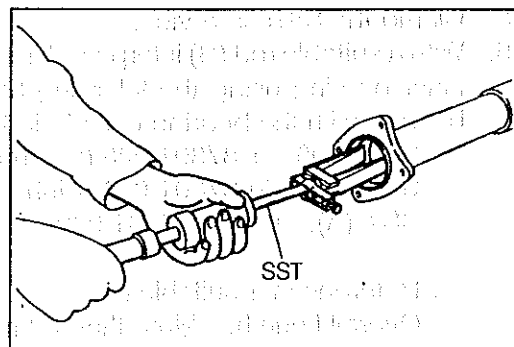
- Do not reuse the removed oil seal.

15. Remove the shim attaching to the end surface of the rear axle with the adhesive.

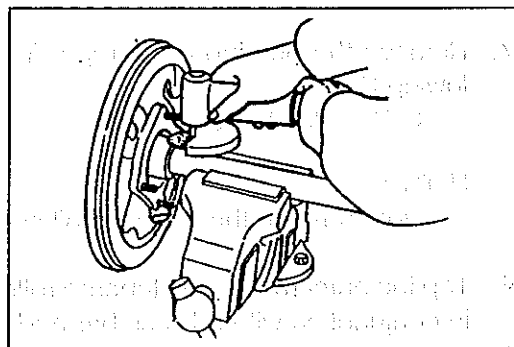
NOTE:

- Measure and record the thickness of the removed shim for the reference of installation.

16. Clean the end surface of the rear axle shaft with the cleaning solvent.



R7RS00055-99999



R7RS00056-99999

DISASSEMBLY

1. Clamp the rear axle shaft in a vice.
2. Grind off the retainer, using a hand grinder.

WARNING:

- Be sure to observe the operation instructions by the hand grinder manufacturer.
- Be sure to wear goggles during the grinding operation.

CAUTION:

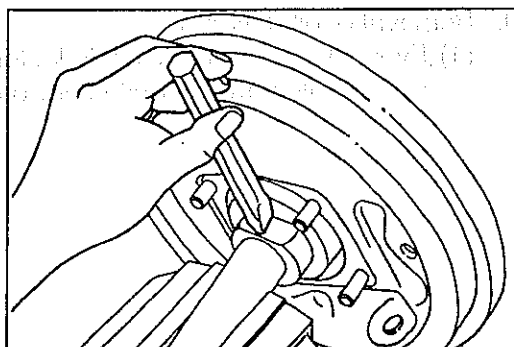
- When grinding the retainer with a grinder, if the bearing case should be ground inadvertently, most likely the bearing case may break off during the vehicle running, (because this bearing case is a critical part that sustains fully the vehicle weight.) Also a defective bearing case could result in poor sealing. Therefore, be certain to replace the bearing case with a new one.
- Likewise, when the bearing inner race should be ground inadvertently, also be sure to replace it with a new one.

3. Split the retainer with a chisel and hammer.

WARNING:

- Before splitting the inner retainer with a chisel, be sure to wear protective goggles and gloves for your both hands.

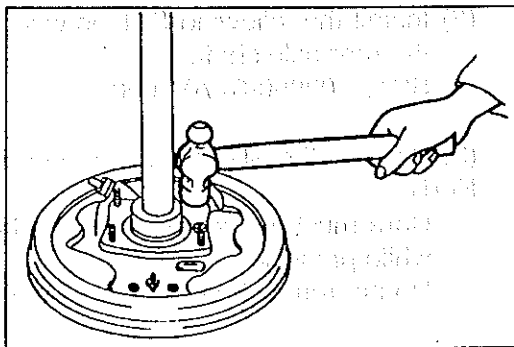
If you should try to split the inner retainer with a chisel without wearing protective goggles and gloves, metal powder from the retainer may get into your eyes. This may impair your eyesight at worst, depending upon powder size and amount.



R7RS00057-99999

4. Pull out the serration bolt.

Temporarily screw in a serration nut onto the end of the serration bolt in order to drive it off from the backing plate and bearing case.



R7RS00058-99999

RS-20

5. Clamp the SSTs in a vice.
6. With a suitable rod (B) interposed, remove the tapered roller inner bearing using the following SSTs. Pull out the inner bearing with the bearing case held by means of the SSTs.

SST: 09521-87301-000 (Left hand side)
SST: 09520-87601-000 (Right hand side)
SST (A): 09351-87601-000

Reference for suitable rod

Overall Length: More than 22 mm

Outer Diameter: Approx. 28 mm

7. Remove the bearing case Type "T" oil seal, using the following SST:

SST: 09308-00010-000

NOTE:

- Do not reuse the removed oil seal.

8. Tap the outer race of the tapered roller bearing into position, in conjunction with a brass bar and a hammer.

9. Drive out the hub bolts from the rear axle shaft, using a plastic hammer or the like.

NOTE:

- Do not reuse the removed hub bolts.

10. Removal of oil deflector

- (1) Evenly tap around the oil deflector by means of a chisel so as to float the oil deflector from the rear axle shaft.

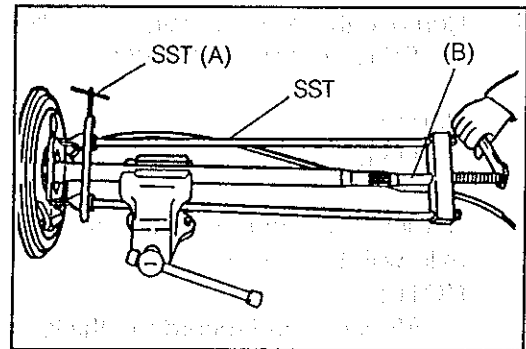
- (2) Install the following SST between the oil deflector and the rear axle shaft.

SST: 09950-87701-000

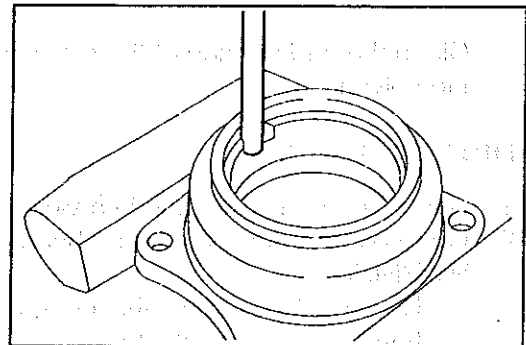
- (3) Remove the oil deflector by pressing the rear axle shaft.

NOTE:

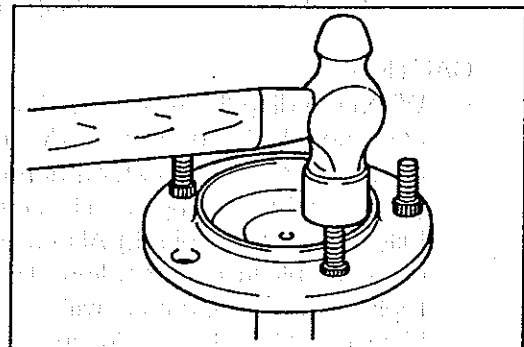
- Care must be exercised not to drop the rear axle shaft while pressing.
- Do not reuse the removed oil deflector.



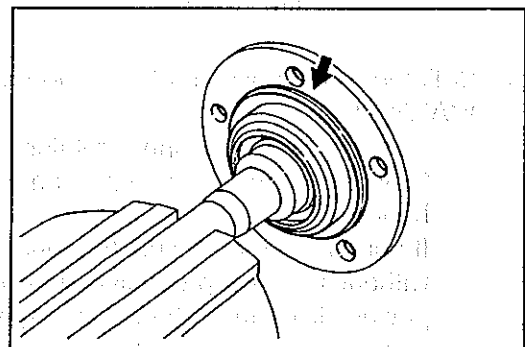
R7RS00059-99999



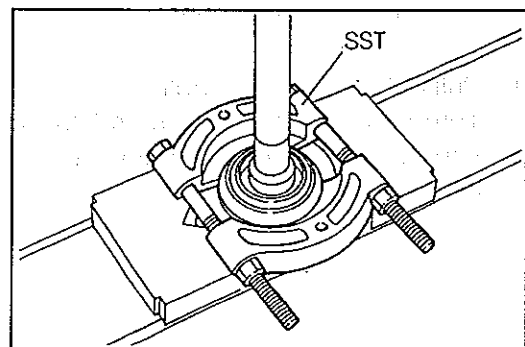
R7RS00060-99999



R7RS00061-99999



R7RS00062-99999



R7RS00063-99999

INSPECTION

1. Rear axle shaft

- (1) Place the rear axle shaft on a V-block.
- (2) Ensure that the runout at the flange end surface is within the allowable limit.

Maximum Allowable Limit: 0.2 mm

NOTE:

- This maximum allowable runout does not include the runout caused by roughness on the flange surface.
- If the flange surface exhibits roughness, finish the surface with an abrasive paper or the like.

- (3) Ensure that the runout at the center unmachined section is within the allowable limit.

Maximum Allowable Limit: 2.0 mm

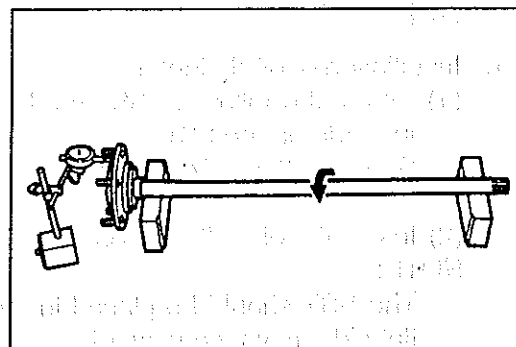
- (4) Ensure that the rear axle shaft spline section exhibits no damage, such as cracks and/or wear.
- (5) Ensure that the oil seal contact surface of rear axle shaft exhibits no damage, such as cracks scores and/or rust.
- (6) Ensure that the oil deflector exhibits no damage, such as deformation.

2. Bearing case

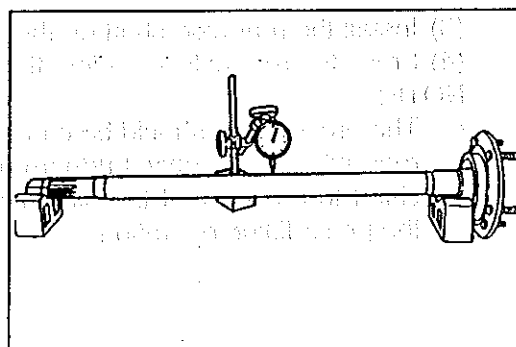
Ensure that the bearing case exhibits no damage, such as cracks, scores, rust and/or deformation.

3. Backing plate

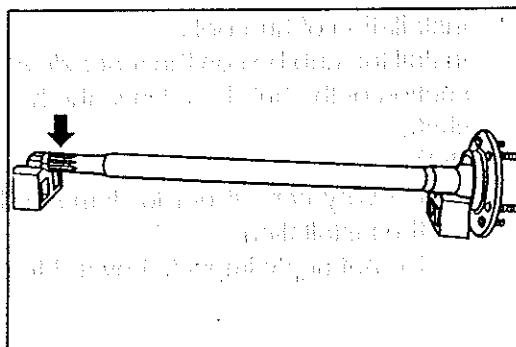
Ensure that the backing plate exhibits no damage, such as cracks, scores, rust and/or deformation.



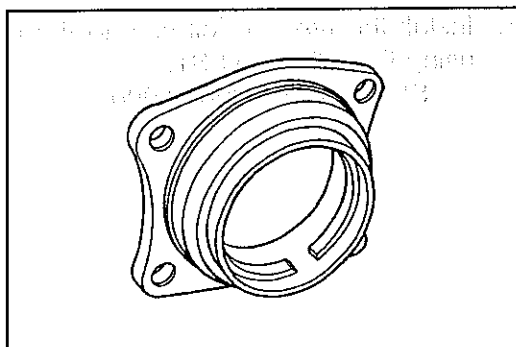
R7RS00064-99999



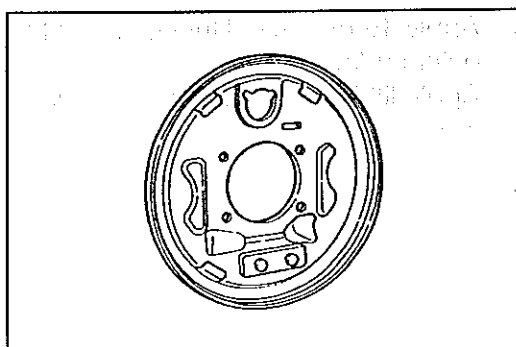
R7RS00065-99999



R7RS00066-99999



R7RS00067-99999



R7RS00068-99999

RS-22

ASSEMBLY

1. Installation of oil deflector

- (1) Adjust the following SST so that the oil deflector may just ride on the SST.

SST: 09950-87701-000

- (2) Install the oil deflector on the SST.

NOTE:

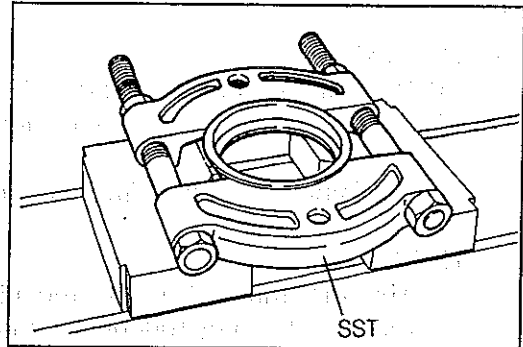
- The SST should be placed in such a direction that the flat side may face upward.

- (3) Install the rear axle shaft on the oil deflector.

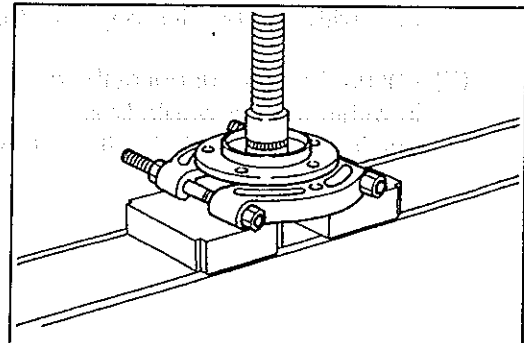
- (4) Press the rear axle shaft into the oil deflector.

NOTE:

- The press-fitting should be carried out while turning the rear axle shaft evenly. Furthermore, care must be exercised to ensure that the oil deflector will not tilt during the press-fitting operation.



R7RS00069-99999



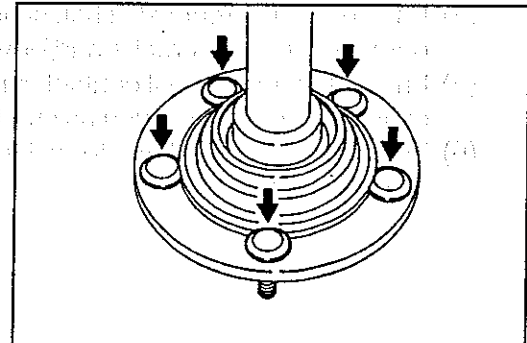
R7RS00070-99999

2. Installation of hub bolts

Install the hub bolt on the rear axle shaft, aligning the cutout section of the hub bolt. Drive the hub bolt into the rear axle shaft.

NOTE:

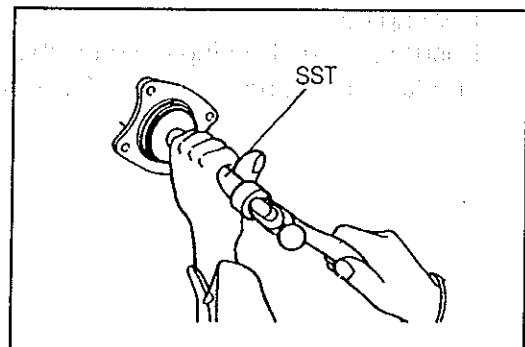
- Be very careful not to damage the oil deflector during the installation.
- Do not apply impacts beyond the required extent.



R7RS00071-99999

3. Install the type "T" oil seal to the rear axle housing end, using the following SST.

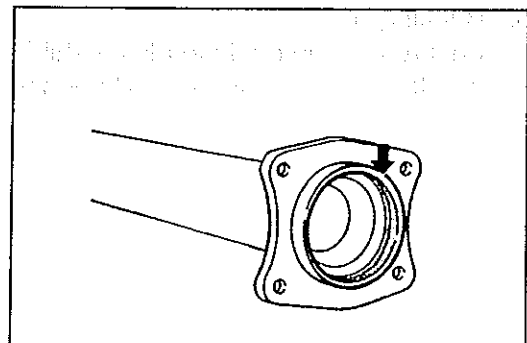
SST: 09608-30012-000



R7RS00072-99999

4. Apply 15 grams of lithium-based MP grease to the oil seal outer surface.

5. Apply lithium-based MP grease to the lip section of the oil seal.

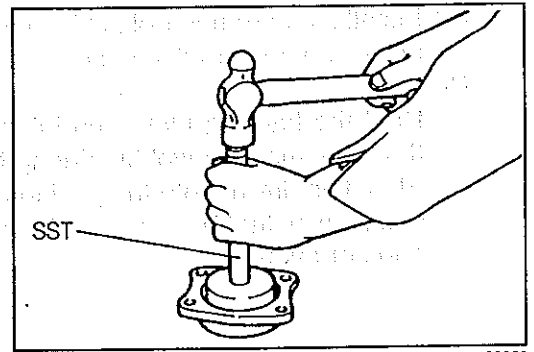


R7RS00073-99999

6. Install the bearing outer race into the bearing case, using the following SST.

SST: 09608-04110-000

(Use the set of 09608-30012-000)

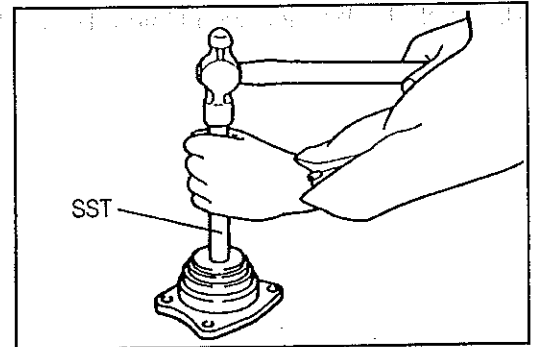


R7RS00074-99999

7. Install the new type "T" oil seal to the bearing case, using the following SST.

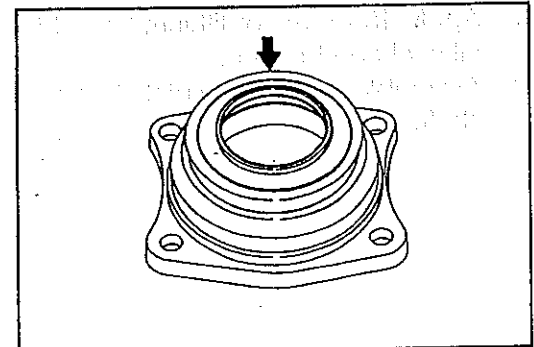
SST: 09608-04110-000

(Use the set of 09608-30012-000)



R7RS00075-99999

8. Apply lithium-based MP grease to the lip section of the oil seal.



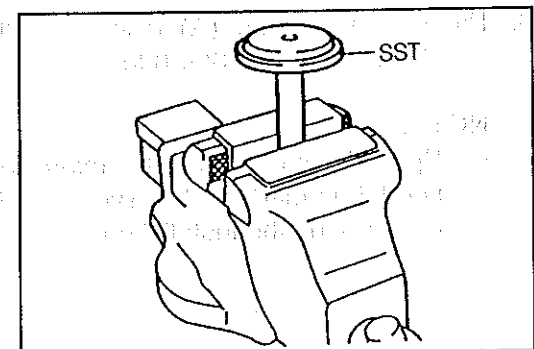
R7RS00076-99999

9. Assembly of backing plate and bearing case.

(1) Clamp the SST in a vice.

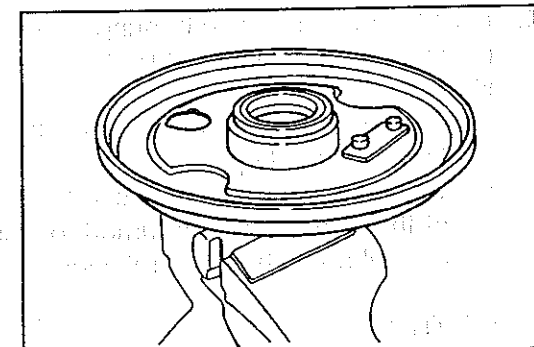
(2) Place the bearing case on the following SST.

SST: 09608-30012-000



R7RS00077-99999

(3) Place the backing plate on the bearing case.



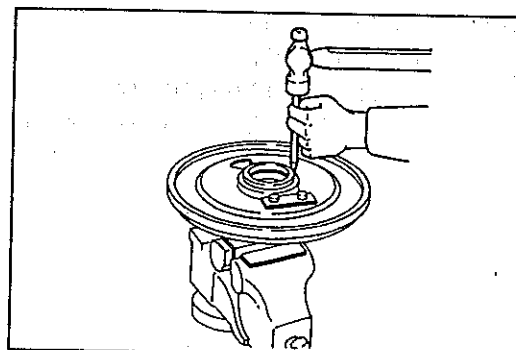
R7RS00078-99999

RS-24

- (4) Install the serration bolt. Drive the bolt into the position, using a hammer and an iron rod.

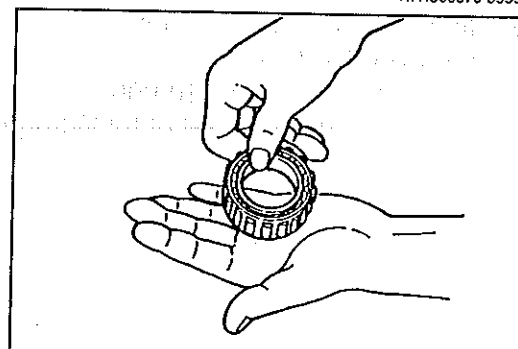
NOTE:

- Hold the backing plate and bearing case by hands so that they may not wobble during the installation.
- Also, this driving into the position must be performed in such a way that no gap exist between the backing plate and serration bolt.



R7RS00079-99999

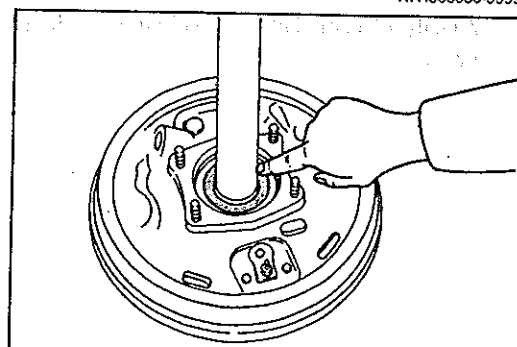
10. Pack the bearing with lithium-based MP grease.



R7RS00080-99999

11. Apply 15 grams of lithium-based MP grease between the oil seal and bearing.

12. Assemble the backing plate bearing case onto the rear axle shaft.

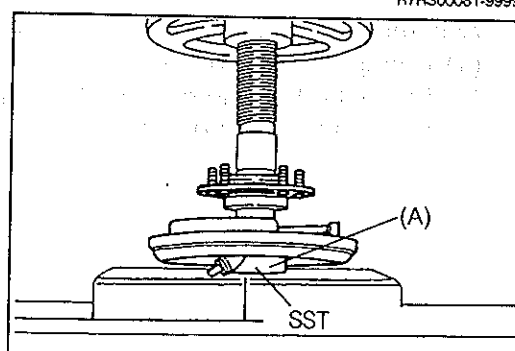


R7RS00081-99999

13. Press-fit the bearing (A), using the following SST.
SST: 09506-87304-000

NOTE:

- Special caution must be exercised to ensure that no scratch is made to the Type "T" oil seal of the bearing case during the installation.



R7RS00082-99999

14. Installation of rear axle bearing retainer

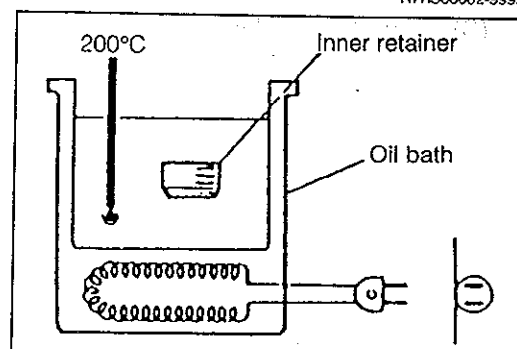
- (1) Heat the retainer to 180 - 220°C in an oil bath.

NOTE:

- Perform this operation promptly before the retainer temperature drops.
- When the temperature exceeds 180 - 220°C, the surface of the retainer will be turned to yellow. In this case, be careful not to heat the retainer any further.

CAUTION:

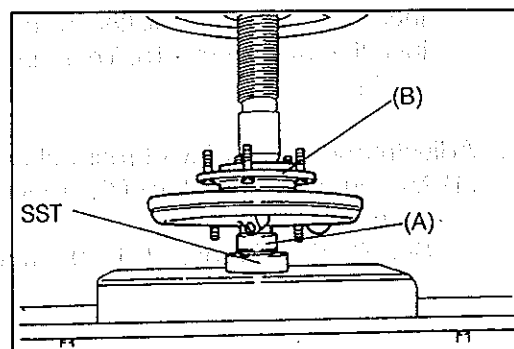
- Special attention must be paid not to burn yourself.



R7RS00083-99999

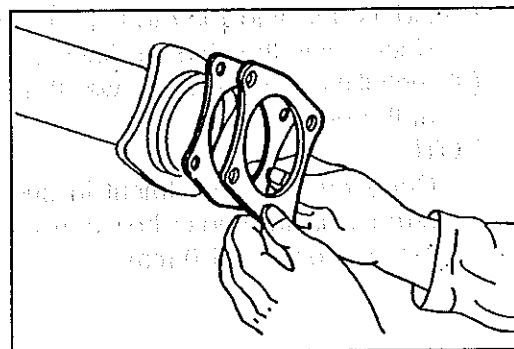
- (2) Install the new retainer (A) to the rear axle shaft (B), using a hydraulic press in combination with the following SST.

SST: 09506-87304-000



INSTALLATION

1. Insert the shim having the same thickness as the original shim.

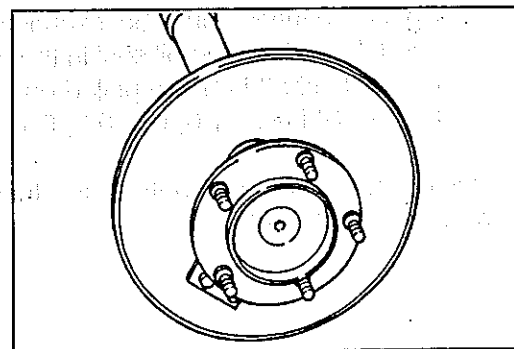


2. Insert the rear axle shaft into the rear axle housing.

NOTE:

- Be very careful not to damage the oil seal.

3. Install the backing plate to the rear axle in such a way that the attaching bolt of the backing plate is aligned with the attaching bolt of the rear axle housing and that the wheel cylinder installing hole of the backing plate comes at the upper side.



NOTE:

- Turn the rear axle shaft so that the spline at the differential side may engage with the spline at the axle shaft side.
- Do not apply impacts beyond the required extent to the bearing.

R7RS00087-00000

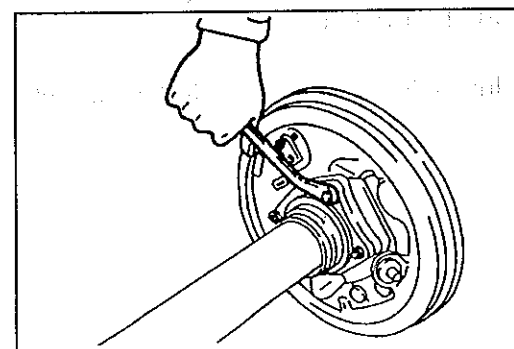
4. Attach the backing plate attaching nuts with the spring washers interposed. Tighten the them to the specified torque evenly over two or three stages.

Tightening Torque: 39.2 - 53.9 N·m

(4.0 - 5.5 kgf-m, 28.9 - 39.8 ft-lb)

NOTE:

- Be sure to measure the rear axle shaft end play during the tightening. If the end play becomes zero before the torque reaches the specified torque, remove the rear axle shaft.



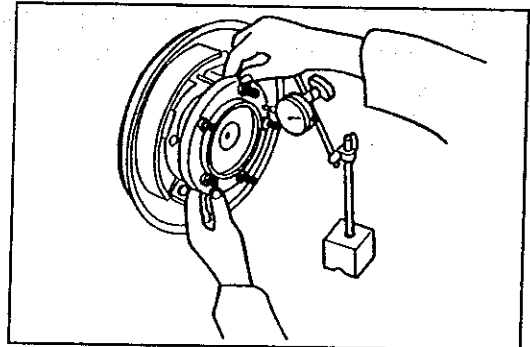
RS-26

- Increase the shim thickness, compared with the shim installed at the step 15. Then, install the rear axle shaft again.

5. Adjustment of end play of rear axle shaft

- (1) Measure the end play of the rear axle shaft, using a dial gauge.

Specified End Play: 0.1 - 0.2 mm



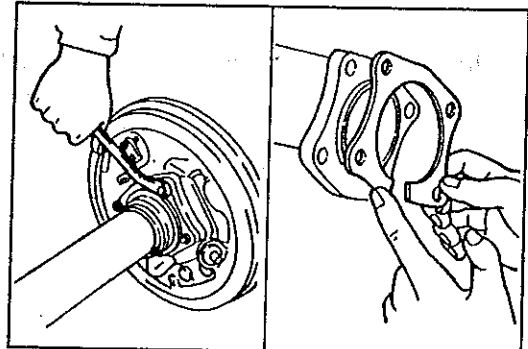
R7RS00089-99999

- (2) Adjust the end play to 0.1 - 0.2 mm by increasing or decreasing the shim thickness.

- (3) Install the shim in such a way that the cut end may come at the bottom.

NOTE:

- Carry out the adjustment in such a way that the difference in thickness between the right and left shims may not exceed 1.0 mm.

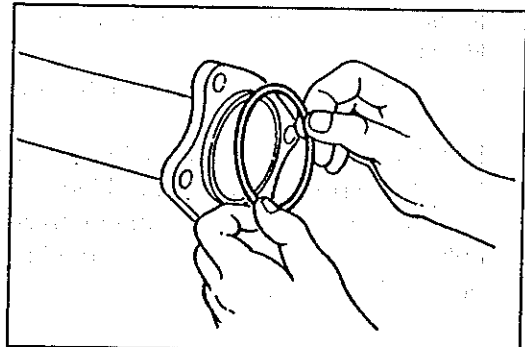


R7RS00090-99999

- Special caution must be exercised to ensure that no scratch made to the oil seal in the end housing while the rear axle shaft is being pulled out.

Kind of Shims: 1.0, 0.5, 0.2, 0.15 and 0.1 mm

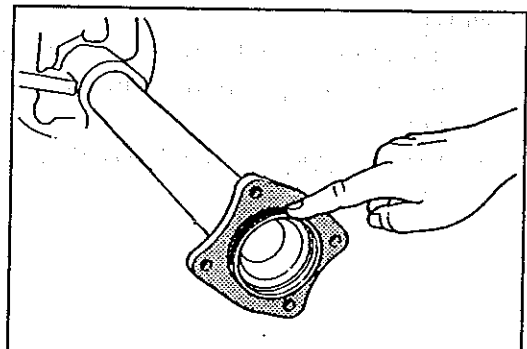
6. Pull out the rear axle shaft again. Install the O-ring in the rear axle shaft end.



R7RS00091-99999

NOTE:

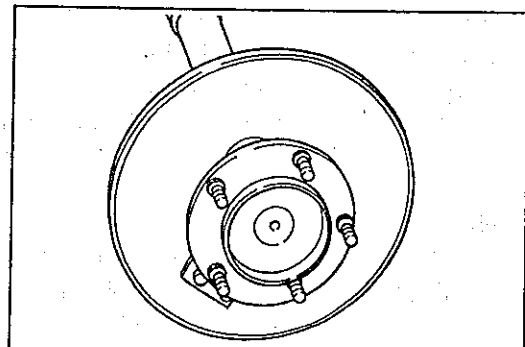
- Be very careful not to scratch the O-ring in the end housing.
- Utmost attention must be paid so that the shim may not ride on the O-ring or the O-ring may not be installed in a tilted way in the spigot fitting section.
- Special caution must be exercised to ensure that no scratch is made to the oil seal in the rear axle housing while the rear axle shaft is being pulled out.



R7RS00092-99999

7. Apply the Three Bond® (1270) sealer to the end surface of the rear axle shaft

8. Install the rear axle shaft. (see the step 16)

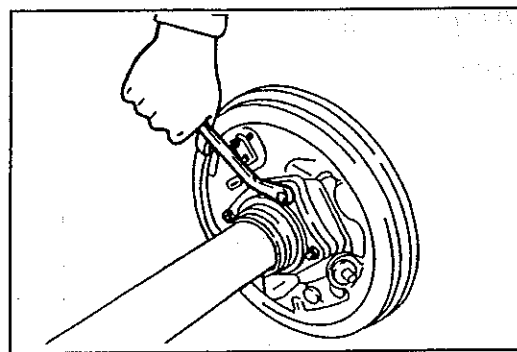


R7RS00093-99999

9. Secure the bearing case to the rear axle housing end by means of the four attaching bolts with new spring washers interposed.

Tightening Torque: 39.2 - 53.9 N·m
(4.0 - 5.0 kgf-m, 28.9 - 39.8 ft-lb)

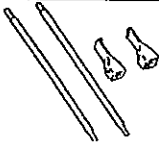
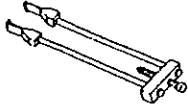
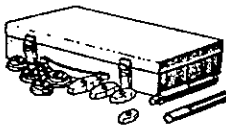
10. Install the rear brake.
(For the details refer to the BR section.)



R7RS00094-99999

RS-28

APPENDIX SST

Shape	Parts No.	Parts name
	09308-00010-000	Oil seal puller
	09351-87601-000	Rear wheel bearing puller
	09506-87304-000	Rear axle shaft bearing replacer
	09520-00031-000	Rear axle shaft puller
	09520-87601-000	Bolt with claw
	09521-87301-000	Rear wheel bearing puller
	09521-87501-000	Rear wheel bearing puller
	09608-30012-000	Front hub & drive pinion bearing tool set
	09950-87701-000	Bearing remover

R7RS00095-99999

SERVICE SPECIFICATION

	Specified value	Remarks
Rear axle shaft end play	0.1 - 0.2 mm	While tightening the attaching nuts of the backing plate.
Vehicle height	40 mm	

R7RS00096-00000

TIGHTENING TORQUE

Tightening component	N·m	kgf·m	ft·lb
Shock absorber × Lock nut	18.6 - 30.4	1.9 - 3.1	13.7 - 22.4
Shock absorber × Three stage actuator bracket	25.5 - 38.2	2.6 - 3.9	18.8 - 28.2
Three stage actuator × Three stage actuator bracket	2.0 - 2.9	0.2 - 0.3	1.4 - 2.2
Shock absorber × Lower control arm	49.0 - 68.6	5.0 - 7.0	36.2 - 50.6
Lower control arm × Frame	98.0 - 137.0	10.0 - 14.0	72.0 - 101.0
Lateral control rod × Rear axle housing (Bolt side)	88.3 - 128.0	9.0 - 13.0	65.1 - 94.0
Lateral control rod × Frame (Nut side)	58.8 - 88.3	6.0 - 9.0	43.4 - 65.1
Upper control arm × Rear axle housing	98.1 - 137.3	10.0 - 14.0	72.0 - 101.0
Upper control arm × Frame	98.1 - 137.3	10.0 - 14.0	72.0 - 101.0
Stabilizer bracket × Rear axle housing	9.8 - 24.5	1.0 - 2.5	7.2 - 18.1
Stabilizer link rod × Stabilizer bar	17.7 - 39.2	1.8 - 4.0	13.0 - 28.9
Rear axle housing × Rear brake backing plate	39.2 - 53.9	4.0 - 5.5	28.9 - 39.8
Fuel inlet protector × Body	4.8 - 9.8	0.8 - 1.0	5.8 - 7.2
Rear wheel × Hub nut	88.3 - 118.0	9.0 - 12.0	65.1 - 87.0

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