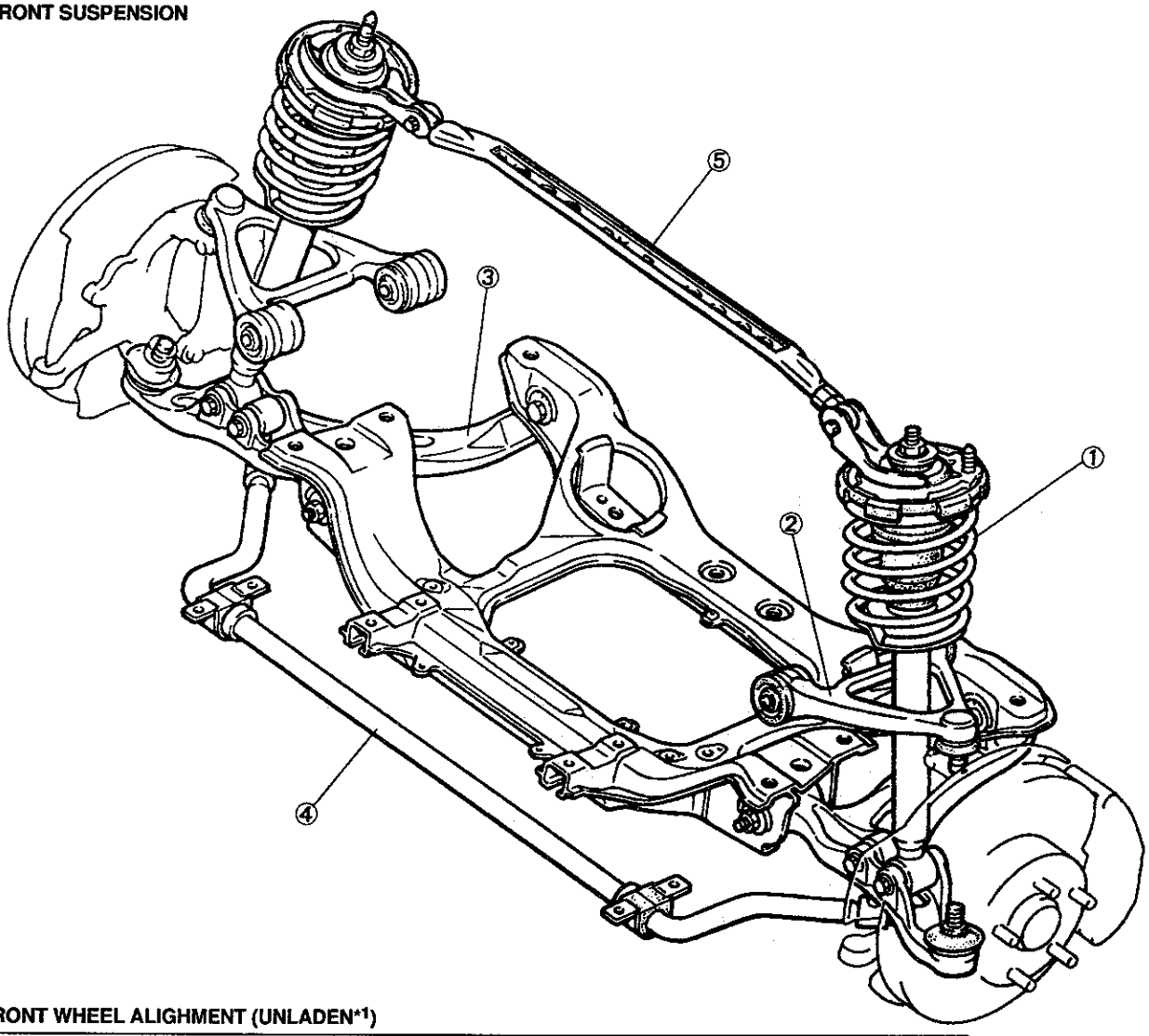
Many thanks to Lenny Terris for scanning this.

Before beginning any service procedure, refer to the 1994 RX-7 Body Electrical Troubleshooting Manual; see section S for air bag system service warnings and section J1 for audio antitheft system alarm conditions.

SUSPENSION

INDEX

FRONT SUSPENSION

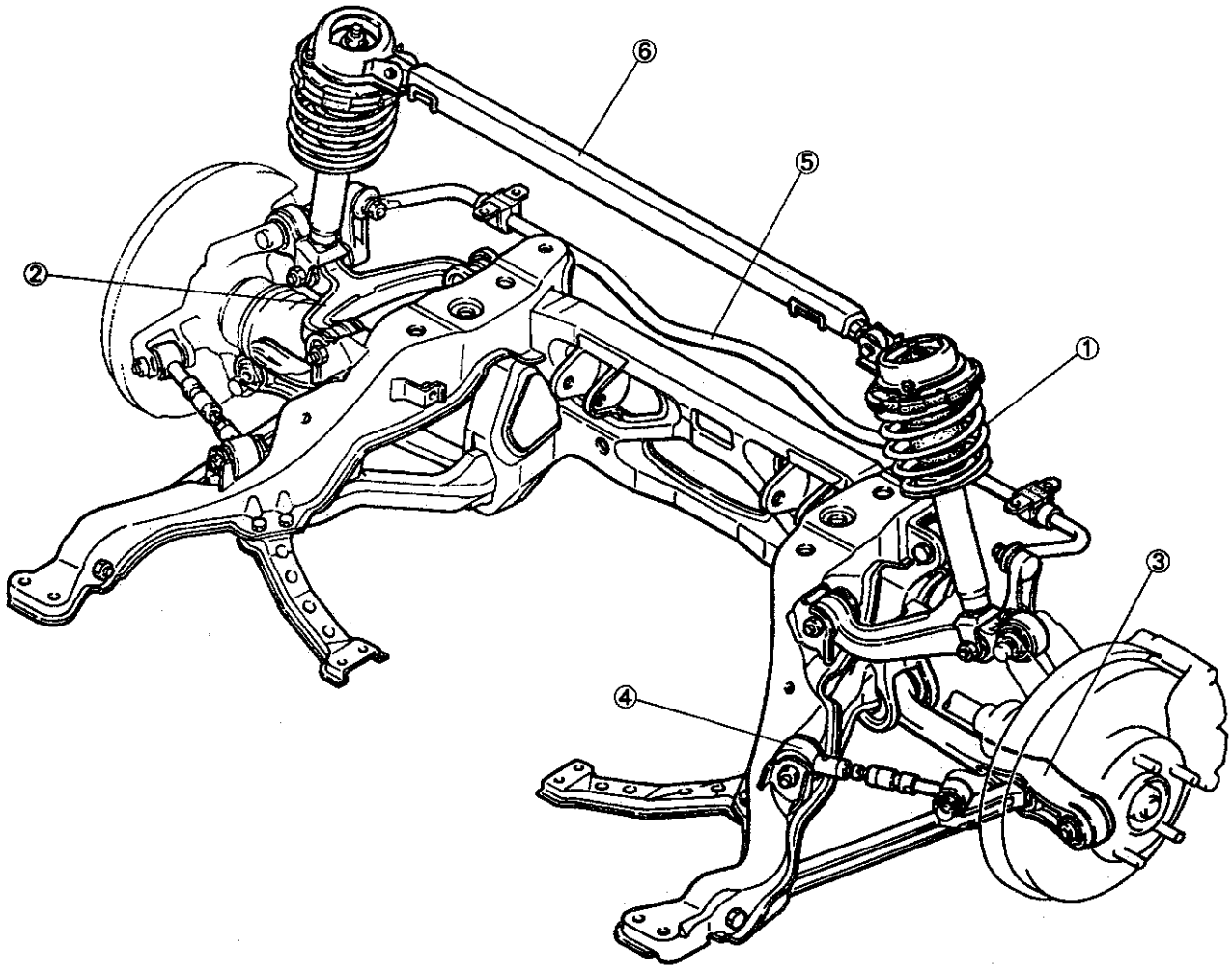


FRONT WHEEL ALIGHMENT (UNLADEN*1)

Item			Inspection standard	Adjustment standard
Total toe-in		mm {in}	2 ± 3 {0.08 ± 0.11}	2 ± 1 {0.08 ± 0.04}
Toe-in (per side)		Degree	0.1° ± 0.75°	0.1° ± 0.05°
Maximum steering angle		In	36° ± 2°	
		Out	32° ± 2°	
Kingpin angle		Degree	13°55'	
Camber angle		Degree	0.1° ± 0.75°	0.1° ± 0.5°
	Difference between left and right	Degree	1° Max.	1° Max.
Caster angle		Degree	6.08° ± 0.75°	6.08° ± 0.5°
	Difference between left and right	Degree	1° Max.	1° Max.

*1 Fuel tank full; radiator coolant and engine oil at specified levels; spare tire, jack, and tools in designated positions.

REAR SUSPENSION



REAR WHEEL ALIGHMENT (UNLADEN*1)

Item		Inspection standard	Adjustment standard
Total toe-in	mm {in}	2 ± 3 {0.08 ± 0.11}	2 ± 1 {0.08 ± 0.04}
Toe-in (per side)	Degree	0.1° ± 0.1°	0.1° ± 0.05°
Camber angle	Degree	−1.22° ± 0.75°	−1.22° ± 1.0°
Difference between left and right	Degree	1° Max.	1° Max.
Thrust angle	Degree	0° ± 0.1°	0° ± 0.1°

*1 Fuel tank full; radiator coolant and engine oil at specified levels; spare tire, jack, and tools in designated positions.

1. Rear shock absorber and spring
   - Removal / Installation . . . . . page R-27
   - Disassembly / Inspection / Assembly . . . . page R-29
2. Upper arm
   - Removal / Inspection
   - Installation . . . page R-32
   - Disassembly / Inspection / Assembly . . . . page R-33
3. Rear lower arm
   - Removal / Inspection
   - Installation . . . page R-36
   - Disassembly / Inspection / Assembly . . . . page R-37
4. Toe-control link
   - Removal / Inspection
   - Installation . . . page R-40
5. Rear stabilizer
   - Removal / Inspection / Assembly . . . . page R-41
6. Rear strut bar
   - Removal / Inspection / Assembly . . . . page R-42

OUTLINE

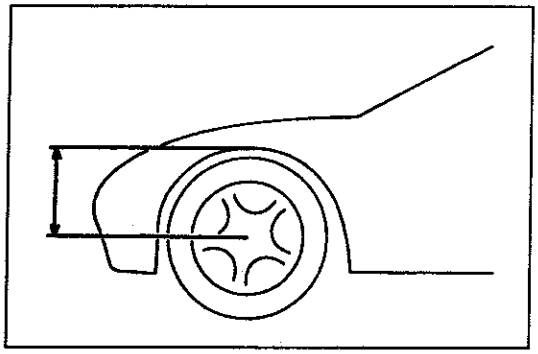
SPECIFICATIONS

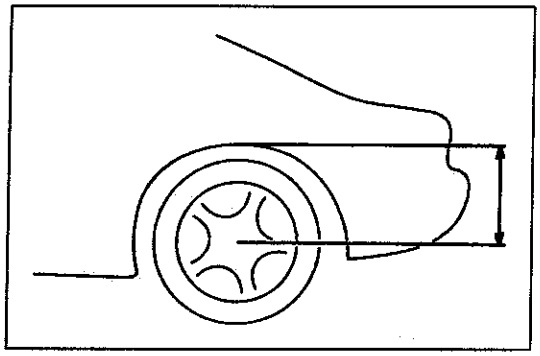
Item \ Transmission / Suspension			MT		AT
			Standard suspension	Hard suspension	Standard suspension
Front suspension					
Suspension type			Double-wishbone		
Coil spring	Identification mark color		Red		Brown
	Wire diameter	mm {in}	12.3 {0.48}		12.5 {0.49}
	Coil center diameter	mm {in}	104.8 {4.126}		105.0 {4.134}
	Free length	mm {in}	270.0 {10.63}		276.3 {10.88}
	Active coil number		4.14		4.39
Shock absorber	Type		Cylindrical, double-acting, low-pressure gas-charged		
	Damping force characteristics		Standard	Hard	Standard
Stablizer	Type		Torsion bar, hollow type		
	Diameter	mm {in}	28.6 {1.13}		
Front weel alignment (unladen*1)	Inspection standard				
	Total toe-in	mm {in}	2 ± 3 {0.08 ± 0.11}		
	Toe-in (per side)	Degree	0.1° ± 0.75°		
	Maximum steering angle	in	36° ± 2°		
		out	32° ± 2°		
	Camber angle	Degree	0.1° ± 0.75°		
	Difference between left and right	Degree	1° max		
	Caster angle	Degree	6.08° ± 0.75°		
	Difference between left and right	Degree	1° max		
	King pin angle	Degree	13°55'		
	Adjustment standard				
	Total toe-in	mm {in}	2 ± 1 {0.08 ± 0.04}		
	Toe-in (per side)	Degree	0.1° ± 0.05°		
	Maximum steering angle	in	36° ± 2°		
		out	32° ± 2°		
	Camber angle	Degree	0.1° ± 0.5°		
	Difference between left and right	Degree	1° max		
	Caster angle	Degree	6.08° ± 0.5°		
	Difference between left and right	Degree	1° max		
	King pin angle	Degree	13°55'		
Rear suspension					
Suspension type			Double-wishbone		
Coil spring	Identification mark color		Purple		
	Wire diameter	mm {in}	12.2 {0.48}		
	Coil center diameter	mm {in}	114.7 {4.516}		
	Free length	mm {in}	303.0 {11.93}		
	Active coil number		4.21		
Shock absorber	Type		Cylindrical, double-acting, low-pressure gas-charged		
	Damping force characteristics		Standard	Hard	Standard
Stabilizer	Type		Torsion bar, hollow type		
	Diameter	mm {in}	13.8 {0.54}		
Rear weel alignment (unladen*1)	Inspection standard				
	Total toe-in	mm {in}	2 ± 3 {0.08 ± 0.11}		
	Toe-in (per side)	Degree	0.1° ± 0.1°		
	Camber angle	Degree	−1.22° ± 0.75°		
	Difference between left and right	Degree	1° max		
	Thrust angle	Degree	0° ± 0.1°		
	Adjustment standard				
	Total toe-in	mm {in}	2 ± 1 {0.08 ± 0.04}		
	Toe-in (per side)	Degree	0.1° ± 0.05°		
	Camber angle	Degree	−1.22° ± 0.5°		
	Difference between left and right	Degree	1° max		
	Thrust angle	Degree	0° ± 0.1°		

*1 Fuel tank full; radiator coolant and engine oil at specified levels; spare tire, jack, and tools in designated positions.

TROUBLESHOOTING GUIDE

Problem	Possible cause	Action	Page
Body rolls	Weak stabilizer or stabilizer link	Replace	R-24, 41
	Damaged or worn stabilizer control link	Replace	R-24, 41
	Worn or deteriorated upper arm or lower arm bushings	Replace	R-17,21,33,37
	Damaged shock absorber	Replace	R-12, 27
Poor riding comfort	Weak coil spring	Replace	R-13, 29
	Damaged shock absorber	Replace	R-12, 27
Body leans	Weak coil spring	Replace	R-13, 29
	Damaged or worn stabilizer control link	Replace	R-24, 41
	Worn or deteriorated upper arm or lower arm bushings	Replace	R-17,21,33,37
Abnormal noise from suspension system	Poor lubrication of or worn upper arm or lower arm ball joint	Lubricate or replace	R-17, 21
	Looseness of peripheral connections	Tighten	—
	Damaged shock absorber	Replace	R-12, 27
	Damaged or worn stabilizer control link	Replace	R-24, 41
	Worn or deteriorated upper arm or lower arm bushings	Replace	R-17,21,33,37
General driving instability	Weak coil spring	Replace	R-13, 29
	Damaged shock absorber	Replace	R-12, 27
	Worn or deteriorated upper arm or lower arm bushings	Replace	R-17,21,33,37
	Damaged or worn stabilizer control link	Replace	R-24, 41
	Improperly adjusted wheel alignment	Adjust	R-6
	Damaged or worn upper arm or lower arm ball joint	Replace	R-17, 21
	Malfunction of steering system	—	Section N
	Damaged or unbalanced wheel	—	Section Q
Heavy steering	Poor lubrication of or worn upper arm or lower arm ball joint	Lubricate or replace	R-17, 21
	Improperly adjusted wheel alignment	Adjust	R-6
	Malfunction of steering system	—	Section N
	Damaged or unbalanced wheel	—	Section Q
Steering wheel pulls to one side	Weak coil spring	Replace	R-13, 29
	Damaged or worn stabilizer control link	Replace	R-24, 41
	Worn or deteriorated upper arm or lower arm bushings	Replace	R-17,21,33,37
	Damaged or worn upper arm or lower arm	Replace	R-17,21,33,37
	Improperly adjusted wheel alignment	Adjust	R-6
	Malfunction of steering system	—	Section N
	Malfunction of braking system	—	Section P
	Damaged or unbalanced wheel	—	Section Q
Shimmy occurs (steering wheel vibrates circumferential)	Damaged or worn upper arm or lower arm ball joint	Replace	R-17, 21
	Damaged shock absorber	Replace	R-12
	Loose shock absorber mounting	Tighten	R-12
	Worn or deteriorated upper arm or lower arm bushings	Replace	R-17, 21
	Damaged or worn stabilizer control link	Replace	R-24
	Improperly adjusted wheel alignment	Adjust	R-6
	Damaged or worn wheel bearing	—	Section M
	Malfunction of steering system	—	Section N
	Damaged or unbalanced wheel	—	Section Q
Steering wheel doesn't return properly	Stuck or damaged upper arm or lower arm ball joint	Replace	R-17, 21
	Improperly adjusted wheel alignment	Adjust	R-6
	Malfunction of steering system	—	Section N
	Damaged or unbalanced wheel	—	Section Q





WHEEL ALIGNMENT

PRE-INSPECTION

1. Check the tire inflations and set to the recommended pressure, if necessary.
2. Inspect the front wheel bearing play. Replace the bearing(s) as necessary.
3. Inspect the wheel and tire runout of all wheels.
4. Inspect the ball joints and steering linkage for excessive looseness.
5. Place the vehicle on level ground with no luggage or passenger load.
6. Rock the vehicle to settle the suspension.
7. Verify that the height difference between the left and right sides from the center of the wheel to the fender brim does not exceed specification.

   Specification: 10 mm {0.39 in}

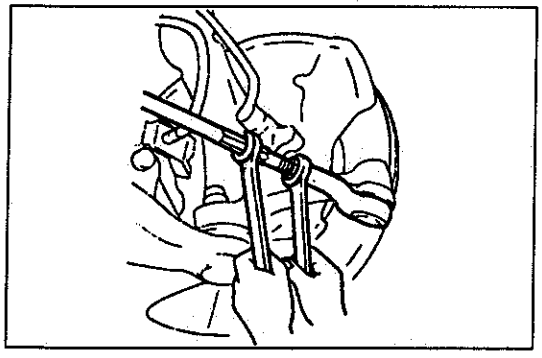
8. Verify that the height difference between the front and rear does not exceed specifications.

   Specification: 15 mm {0.59 in}

FRONT WHEEL ALIGNMENT
Specifications (Unladen*1)

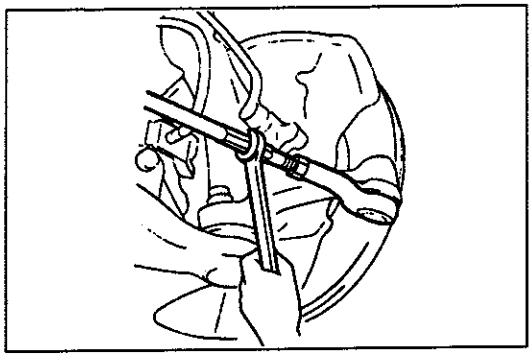
Item			Specifications	Specifications
Total toe-in		mm {in}	2 ± 3 {0.08 ± 0.11}	2 ± 1 {0.08 ± 0.11}
Toe-in (per side)		Degree	0.1° ± 0.75°	0.1° ± 0.05°
Maximum steering angle		In	36° ± 2°	
		Out	32° ± 2°	
King pin angle			13°55'	
Camber angle		Degree	0.1° ± 0.75°	0.1° ± 0.5°
	Difference between left and right	Degree	1° max.	1° max.
Caster angle		Degree	6.08° ± 0.75°	6.08° ± 0.5°
	Difference between left and right	Degree	1° max.	1° max.

*1 Fuel tank full; radiator coolant and engine oil at specified levels; spare tire, jack, and tools in designated positions.

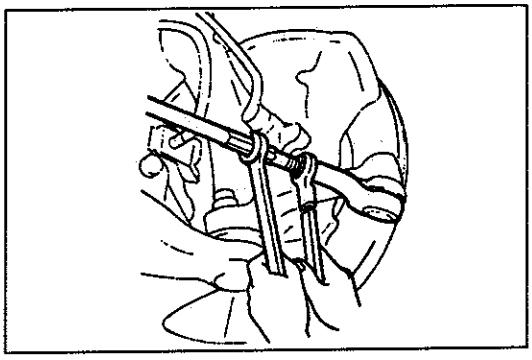


Adjustment
Toe-in

1. Remove the steering gear boot clamp.
2. Loosen the left and right tie rod locknuts and turn the tie rod equally. Both tie rods are right threaded, so turning the right tie rod toward the front of the vehicle and the left toward the rear increases toe-in.



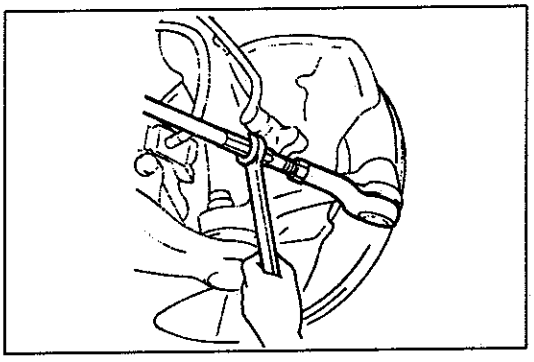
Note
- Turning one tie rod one complete turn changes toe-in by about 0.42 in {10.6mm}.



3. Tighten the tie rod locknuts to the specified torque.

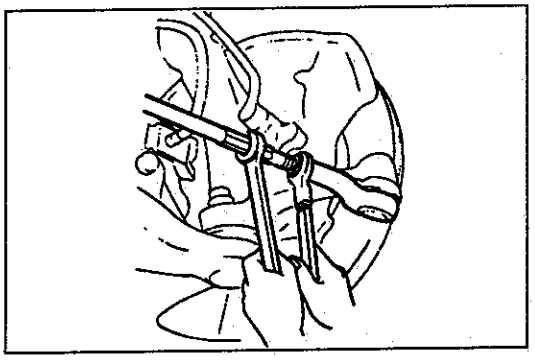
   Tightening torque:
   31–50 N·m {3.1–5.1 kgf·m, 23–36 ft·lbf}

4. Verify that the boot is not twisted. Install the boot clamp.



Maximum steering angle
1. Remove the steering gear boot clamp.
2. Loosen the tie rod locknut.
3. Turn the tie rod to provide the correct maximum steering angle.

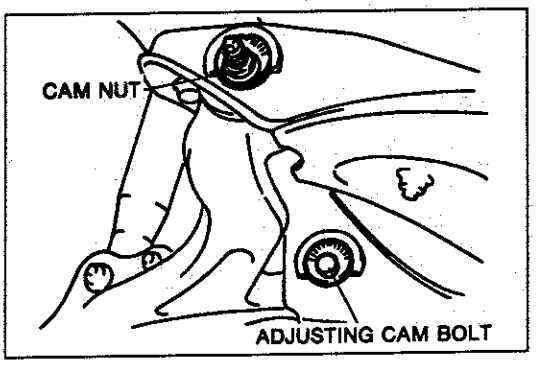
   Maximum left / right difference: 3 mm {0.12 in}



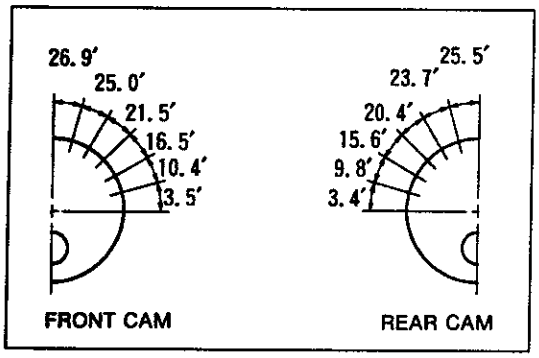
4. After adjustment, tighten the locknut to the specified torque.

   Tightening torque:
   31–50 N·m {3.1–5.1 kgf·m, 23–36 ft·lbf}

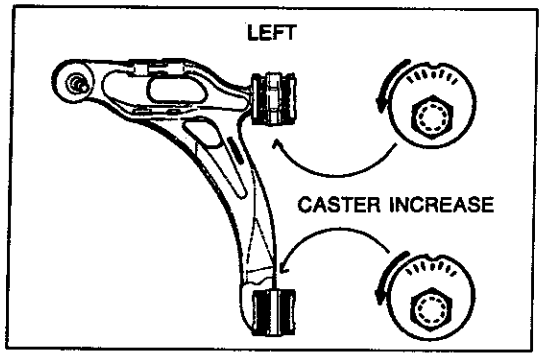
5. Adjust the toe-in. (Refer to page R–6.)
6. Verify that the boot is not twisted. Install the boot clamp.



Caster
1. Loosen the front or rear cam nut on the front lower arm.

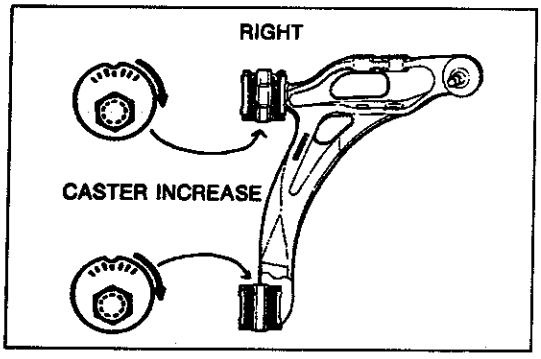


Note
- Turning the adjusting cam bolt one graduation changes the caster as shown in the illustration.

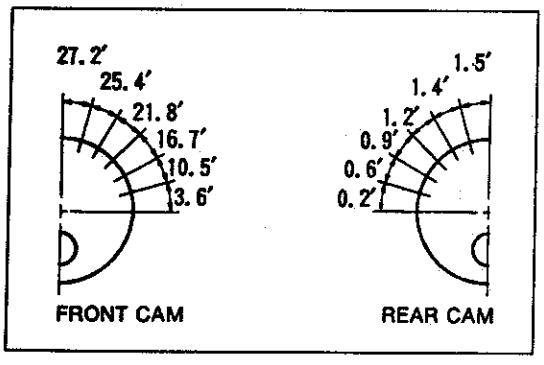


2. Turn the adjusting cam bolt as indicated to provide the correct caster angle.

Caster	Left wheel		Right wheel	
	Front cam	Rear cam	Front cam	Rear cam
Increase	Counter-clockwise	Counter-clockwise	Clockwise	Clockwise
Decrease	Clockwise	Clockwise	Counter-clockwise	Counter-clockwise

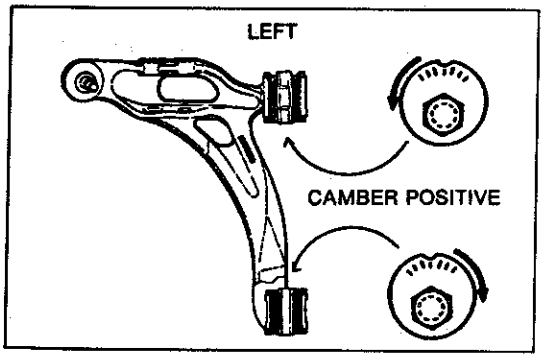


3. Adjust the camber and the toe-in.



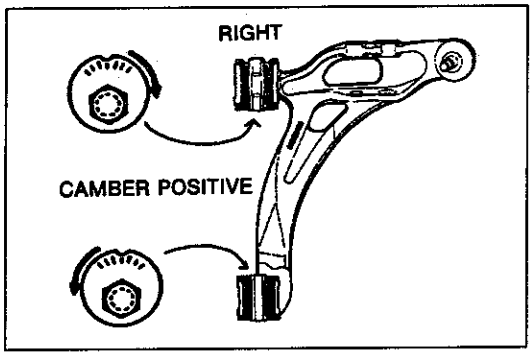
Camber
1. Adjust the caster before adjusting the camber.
2. Loosen the front or rear cam nut on the front lower arm.

Note
- Turning the adjusting cam bolt one graduation changes the caster as shown in the illustration.

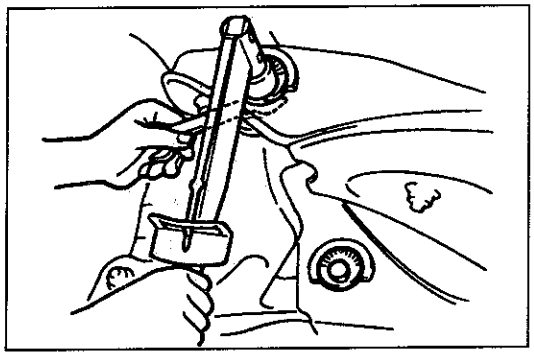


3. Turn the adjusting cam bolt as indicated to provide the correct camber angle.

Camber	Left wheel		Right wheel	
	Front cam	Rear cam	Front cam	Rear cam
Positive	Counter-clockwise	Clockwise	Clockwise	Counter-clockwise
Negative	Clockwise	Counter-clockwise	Counter-clockwise	Clockwise



4. If the cam cannot be turned enough to make the adjustment, readjust the caster using the other cam.



5. Hand-tighten the cam nut and lower the vehicle.
6. With the vehicle unloaded, tighten the cam nut to the specified torque.

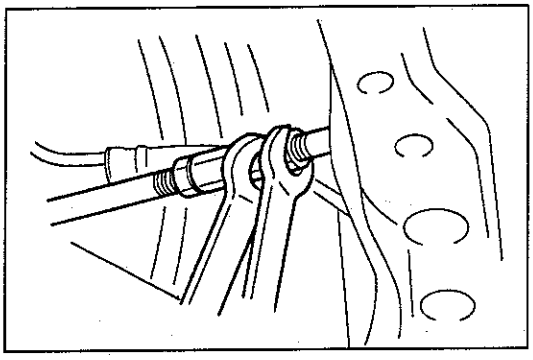
Tightening torque:
94–116 N·m {9.5–11.9 kgf·m, 69–86 ft·lbf}

7. Adjust the toe-in.

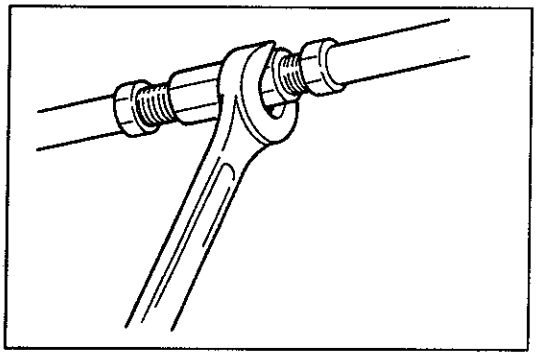
REAR WHEEL ALIGNMENT
Specifications (Unladen*1)

Item			Inspection standard	Adjustment standard
Total toe-in		mm {in}	2 ± 3 {0.08 ± 0.11}	2 ± 1 {0.08 ± 0.04}
Toe-in (per side)		Degree	0.1° ± 0.1°	0.1° ± 0.05°
Camber angle		Degree	−1.22° ± 0.75°	−1.22° ± 0.5°
	Difference between left and right	Degree	1° max.	1° max.
Thrust angle		Degree	0° ± 0.1°	0° ± 0.1°

*1 Fuel tank full; radiator coolant and engine oil at specified levels; spare tire, jack, and tools in designated positions.

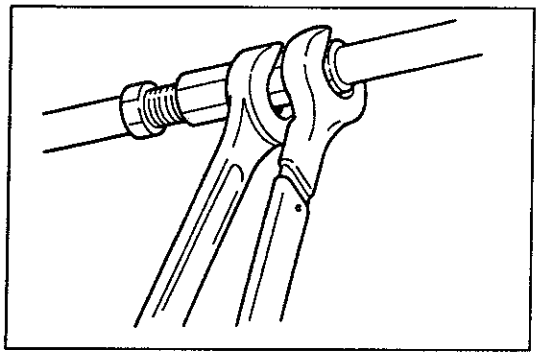


Adjustment
toe-in
The specified thrust angle **(0° ± 0.1°)** must be maintained while adjusting the rear toe-in.
If the thrust angle cannot be maintained at that specification, check the body dimensions. Refer to the 1992 RX-7 Body Shop Manual (Form No. 3256-10-92A).



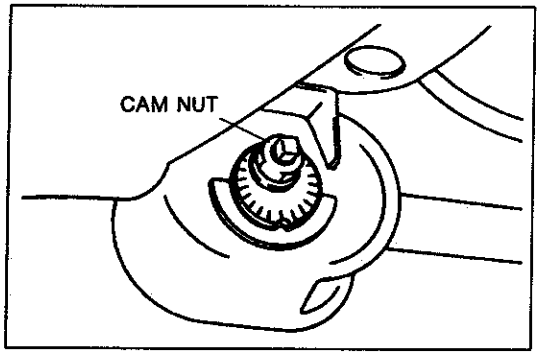
1. Loosen the left and right toe-control link locknuts and turn each link equally. Both are right threaded, so turning the right link toward the front of the vehicle and the left toward the rear increases toe-in.

Note
- Turning one link one complete turn changes toe-in by about 16.5 mm {0.65 in}.



2. Tighten the toe control link locknuts to the specified torque.

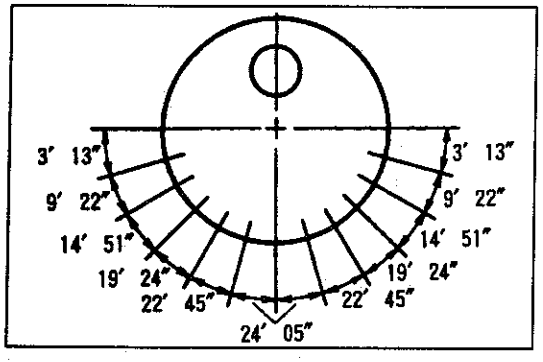
Tightening torque:
35–50 N·m {3.5–5.1 kgf·m, 26–33 ft·lbf}



Camber
1. Loosen the cam nut on the I-arm.

Note
- Turning the adjusting cam bolt one graduation changes the camber as shown in the illustration.

2. Turn the adjusting cam bolt as indicated to provide the correct camber angle.



Camber	Left wheel	Right wheel
Positive	Clockwise	Counterclockwise
Negative	Counterclockwise	Clockwise

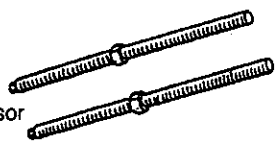
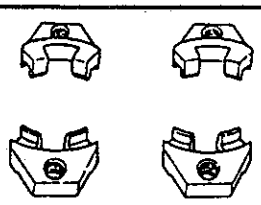
3. Tighten the cam nut to the specified torque.

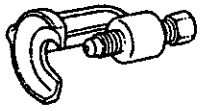
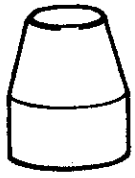
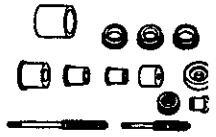
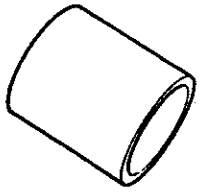
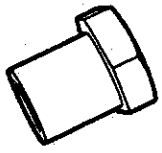
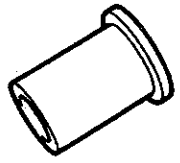
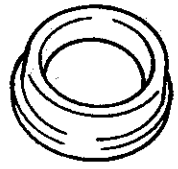
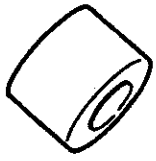
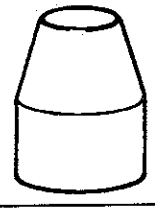
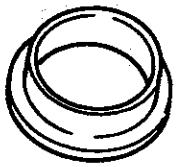
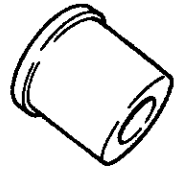
Tightening torque:
94–116 N·m {9.5–11.9 kgf·m, 69–86 ft·lbf}

4. Adjust the toe-in.

FRONT SUSPENSION (DOUBLE WISHBONE, COIL SPRING TYPE)

PREPARATION
SST

49 0370 641 Screw, coil spring compressor		For removal / installation of coil spring	49 0223 640B Arm, coil spring compressor	 For removal / installation of coil spring

49 0118 850C Puller, ball joint 	For removal of ball joint	49 0180 510B Attachment, preload measuring 	For inspection of ball joint
49 F034 211 Guide, clip 	For installation of dust boot clip	49 F034 2A0 Replacer set, rubber bushing 	For removal / installation of bushing
49 G028 203 Support (Part of 49 F034 2A0) 	For removal of bushing	49 G028 206 Shaft (Part of 49 F034 2A0) 	For removal / installation of bushing
49 G028 207 Nut (Part of 49 F034 2A0) 	For removal / installation of bushing	49 G028 208 Installer (Part of 49 F034 2A0) 	For removal of bushing
49 G034 205 Bearing (Part of 49 F034 2A0) 	For removal / installation of bushing	49 F034 204 Support (Part of 49 F034 2A0) 	For removal of bushing
49 F034 203 Support (Part of 49 F034 2A0) 	For installation of bushing	49 F034 206 Shaft (Part of 49 F034 2A0) 	For installation of bushing
49 F034 209 Installer (Part of 49 F034 2A0) 	For removal / installation of bushing	49 F034 210 Guide, clip 	For installation of dust boot clip
49 F034 205 Support (Part of 49 F034 2A0) 	For removal / installation of bushing	49 F034 208 Installer (Part of 49 F034 2A0) 	For installation of bushing

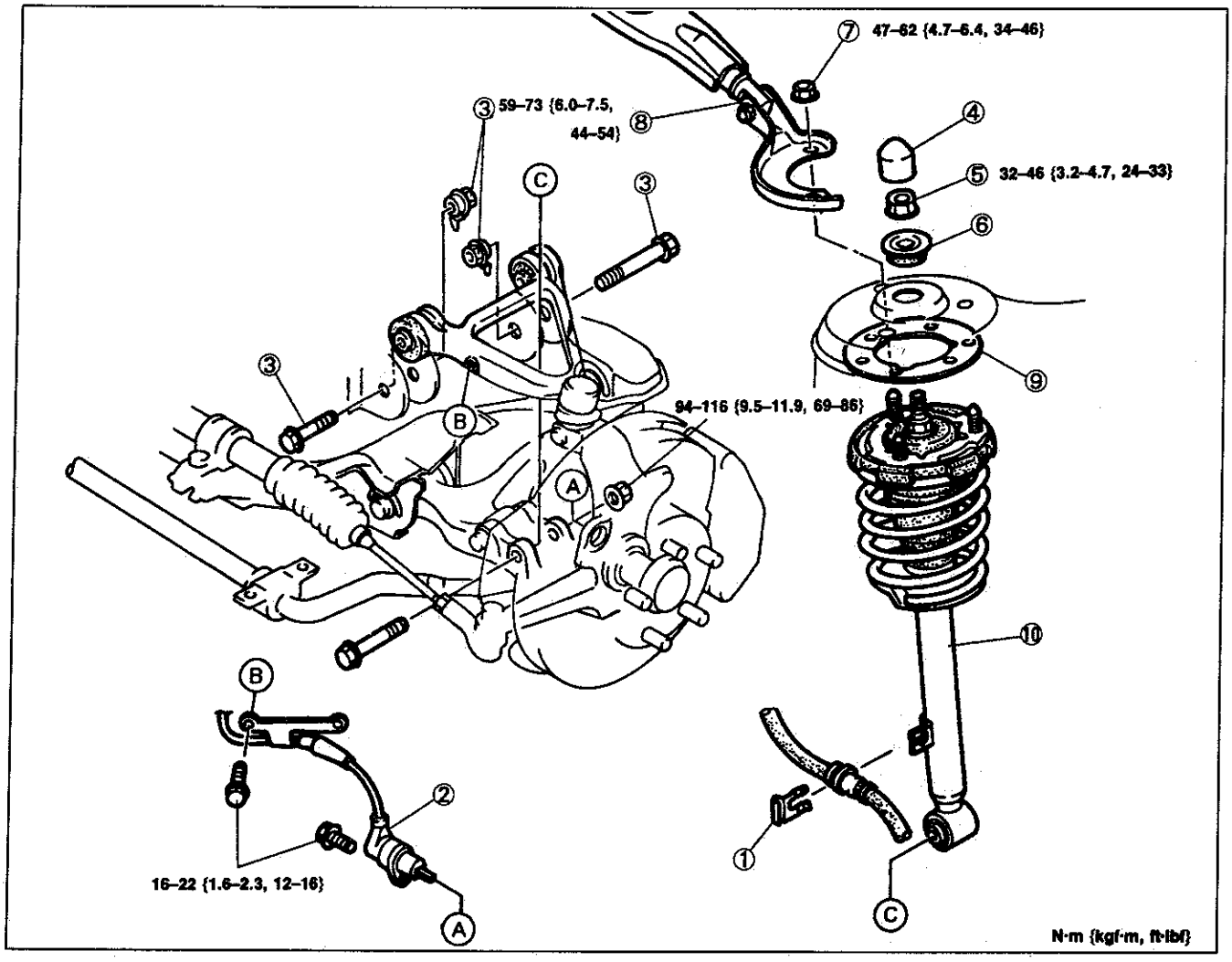
FRONT SHOCK ABSORBER AND SPRING

Removal / Installation

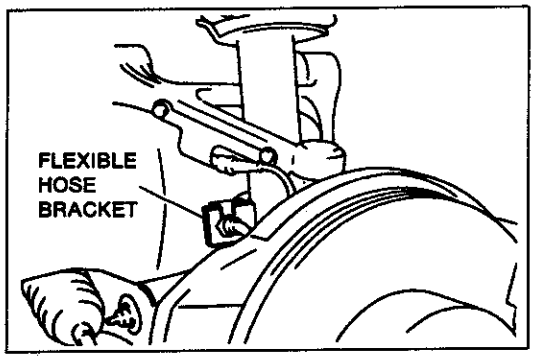
1. Jack up the front of the vehicle and support it on safety stands.
2. Remove the wheel and tire.
3. Remove in the order shown in the figure.
4. Install in the reverse order of removal, referring to **Installation Note**.
5. Install the wheel and tire.

Tightening torque: 89–117 N·m {9.0–12.0 kgf·m, 65–87 ft·lbf}

6. Adjust the front wheel alignment. (Refer to page R–6.)

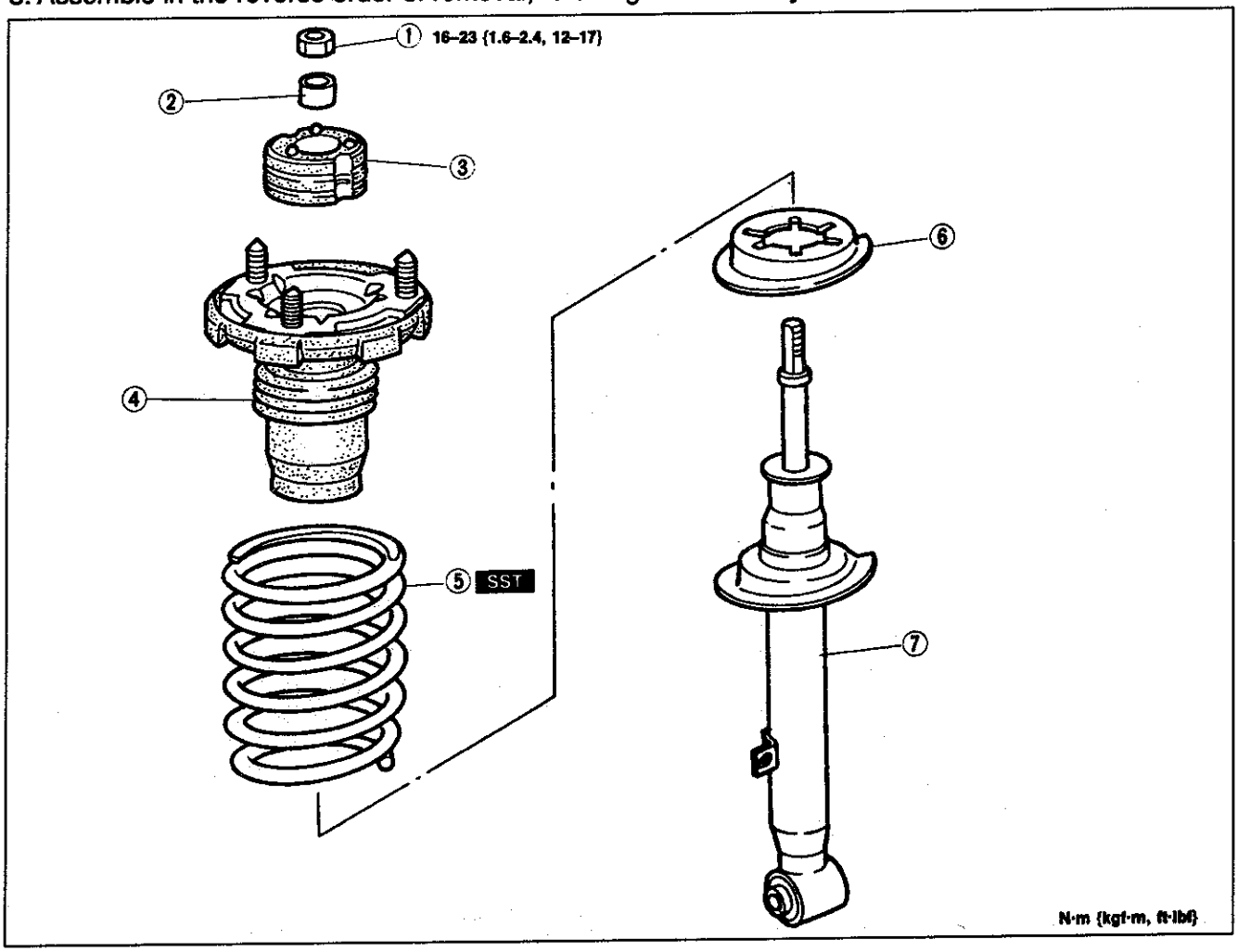


1. Clip (brake hose)
2. ABS wheel-speed sensor
3. Bolt, nut
4. Cap
5. Nut
6. Stopper rubber
7. Nut
8. Front strut bar
   Removal / Inspection / Installation ..... page R–25
9. Insulator
10. Front shock absorber and spring
    Installation Note ..... page R–13
    Disassembly / Inspection / Assembly .... page R–13

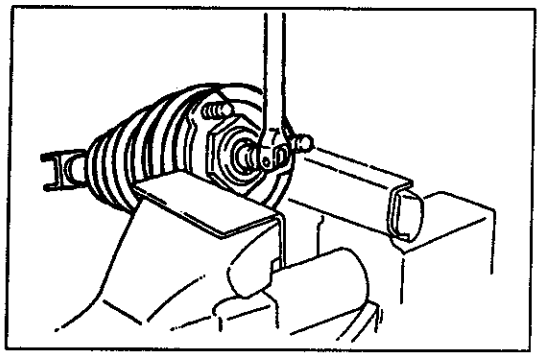


Installation note
Front shock absorber and spring
Install the shock absorber and spring so that the flexible hose bracket faces forward.

Disassembly / Inspection / Assembly
1. Disassemble in the order shown in the figure, referring to **Disassembly Note.**
2. Inspect all parts and repair or replace as necessary.
3. Assemble in the reverse order of removal, referring to **Assembly Note.**



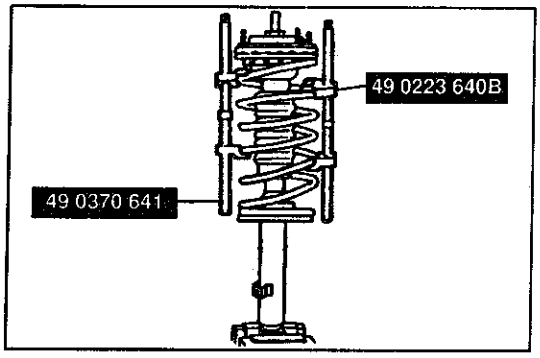
1. Nut
   Disassembly Note
   ..... page R–14
   Assembly Note
   ..... page R–15
2. Spacer
3. Mounting rubber
   Inspect for damage and deterioration
   Assembly Note
   ..... page R–15
4. Bound stopper assembly
   Inspect for damage and cracks
5. Coil spring
   Inspect for damage and weakness
   Assembly Note
   ..... page R–14
6. Lower spring seat
   Inspect for damage and cracks
7. Shock absorber
   Inspection .... page R–14

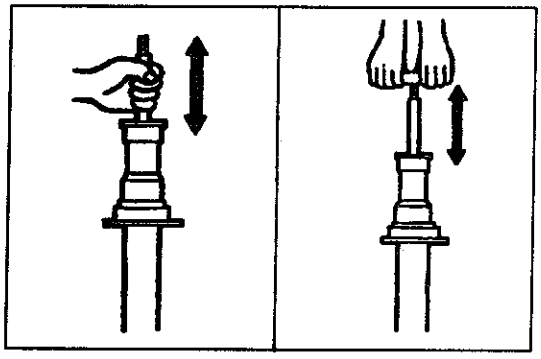


Disassembly note
Nut

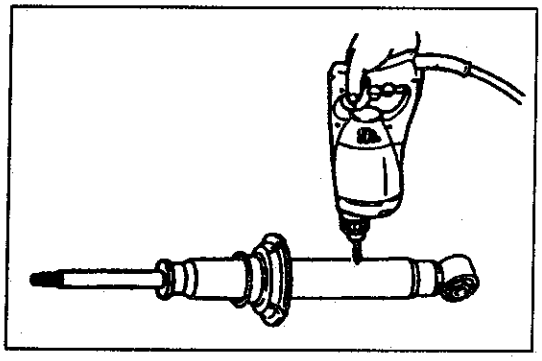
Warning
- **Removing the piston-rod nut is dangerous. The shock absorber and spring could fly off under tremendous pressure and cause serious injury or death. Secure the shock absorber in the SST before removing the piston-rod nut.**

1. Secure the mounting rubber bracket in a vise.
2. Loosen the mounting rubber nut several turns, but do not remove it.
3. Assemble the **SST**.
4. Compress the coil spring by using the **SST** and remove the mounting nut.





Inspection
Shock absorber
Check the following and replace the shock absorber if necessary.
1. Inspect for damage and oil leakage.
2. (1) Compress the shock absorber rod and release it.
   (2) Verify that the rod extends fully at a normal speed.
3. Compress and extend the rod at least three times. Verify that the operational force does not change and that there is no unusual noise.



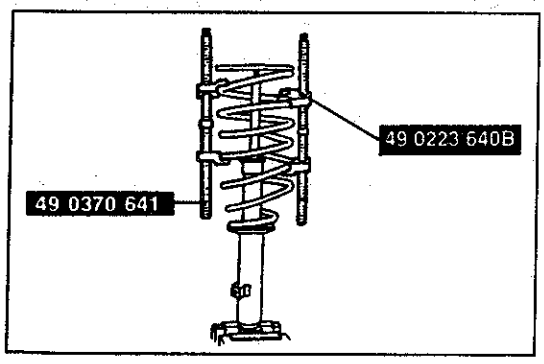
Disposal of shock absorber

Warning
- **The gas in the shock absorber is highly pressurized, and could spray metal chips into the eyes and face when drilling. Whenever drilling into a shock absorber, wear protective eye wear.**

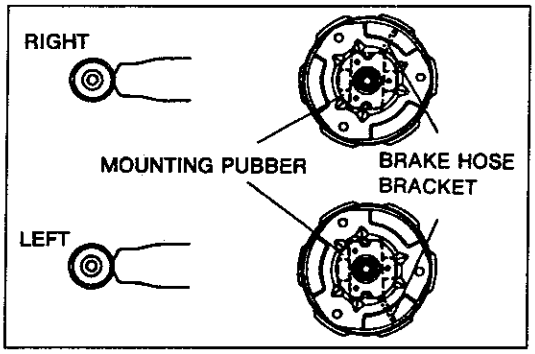
1. Lay the shock absorber flat.
2. Drill a hole in its body.

Drill size: 2–3 mm {0.08–0.12 in}

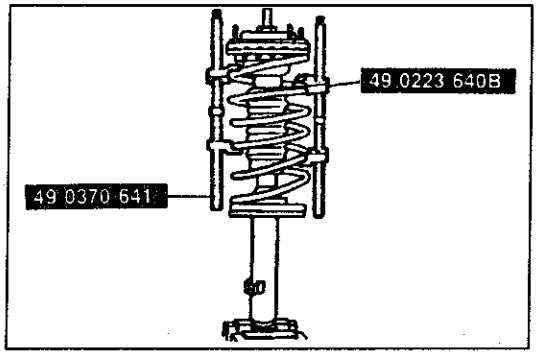
3. Allow the gas to escape from the shock absorber.
4. Discard the shock absorber.



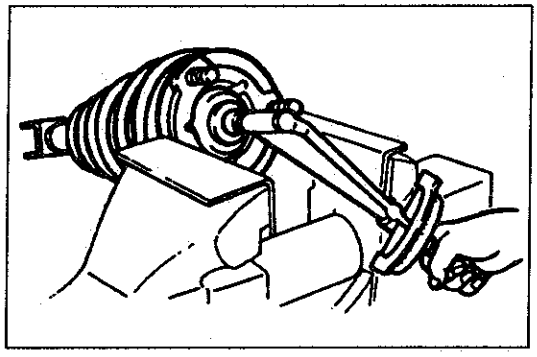
Assembly note
Coil spring
1. Compress the coil spring by using the **SST**.
2. Install the spring so that the lower coil is seated on the step of the lower seat.



Mounting rubber
Install the mounting rubber as shown.



Nut
1. Tighten the mounting nut several turns.
2. Remove the **SST**.
3. Verify that the lower coil of the spring is seated on the step of the lower seat.



4. Secure the mounting rubber bracket in a vise.
5. Tighten the nut.

Tightening torque:
16–23 N·m {1.6–2.4 kgf·m, 12–17 ft·lbf}

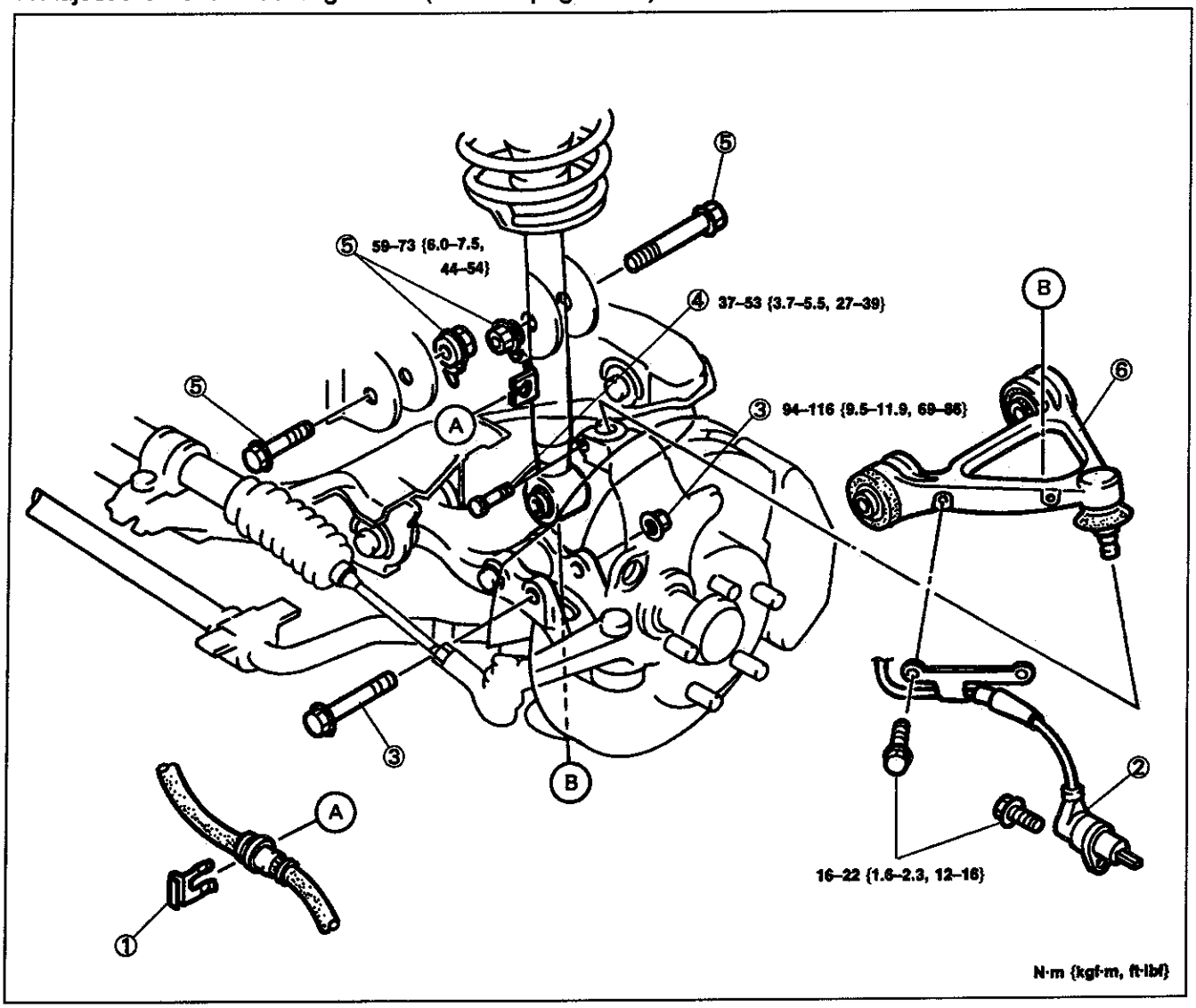
UPPER ARM

Removal / Inspection / Installation

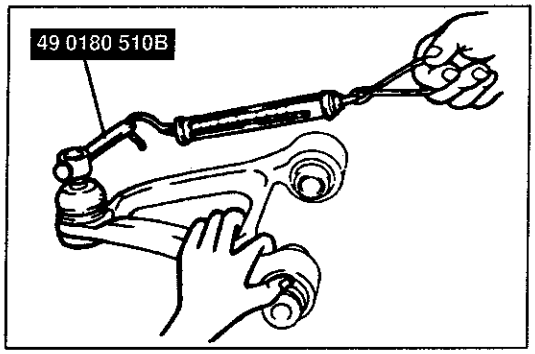
1. Jack up the front of the vehicle and support it on safety stands.
2. Remove the wheel and tire.
3. Remove in the order shown in the figure.
4. Inspect all parts and repair or replace as necessary.
5. Install in the reverse order of removal.
6. Install the wheel and tire.

Tightening torque: 89–117N·m{9.0–12.0kgf·m,65–87ft·lbf}

7. Adjust the front wheel alignment. (Refer to page R–6.)



1. Clip (brake hose)
2. ABS wheel-speed sensor
3. Bolt, nut
4. Bolt
5. Bolt, nut
6. Upper arm
   - Inspect for damage and cracks
   - Inspect bushing for damage and wear
   - Inspect boot for tearing and cracks
   - Inspection .... page R–17
   - Disassembly / Inspection / Assembly .... page R–17



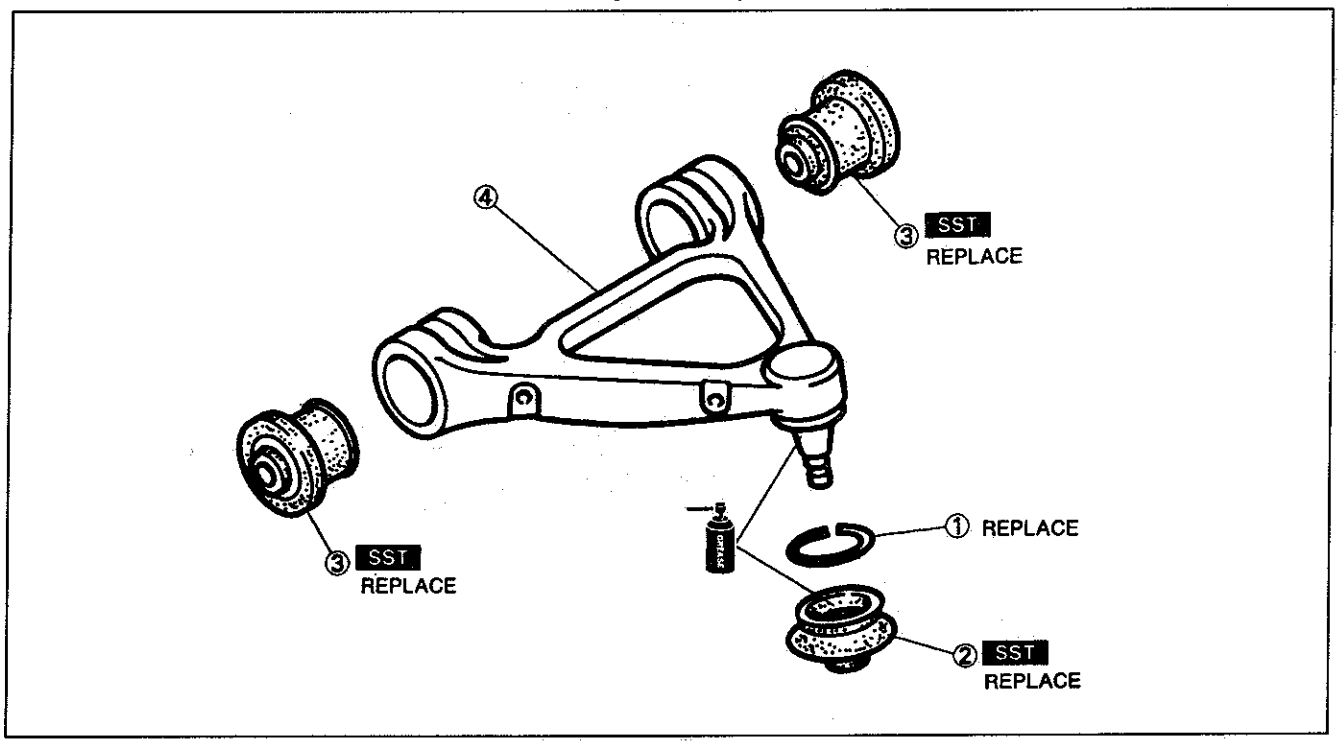
Inspection
Upper arm ball joint
Ball joint rotation torque
1. Shake and rotate the ball joint stud several times.
2. Connect the **SST** to the stud and measure the starting torque and the rotation torque by using a pull scale.

Starting torque:
2.0–5.8 N·m {20–60 kgf-cm, 18–52 in·lbf}
Pull scale reading:
20–58 N {2.0–6.0 kgf, 4.4–13.2 lbf}

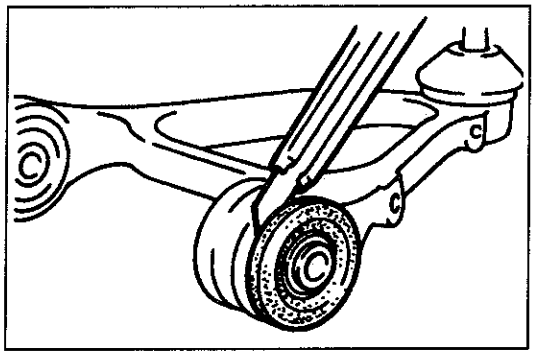
Rotation torque:
0.4–1.1N·m {4–12 kgf-cm, 3.5–10.4 in·lbf}
Pull scale reading:
4–11N {0.4–1.2 kgf, 0.9–2.6 lbf}

3. If not within specification, replace the upper arm.

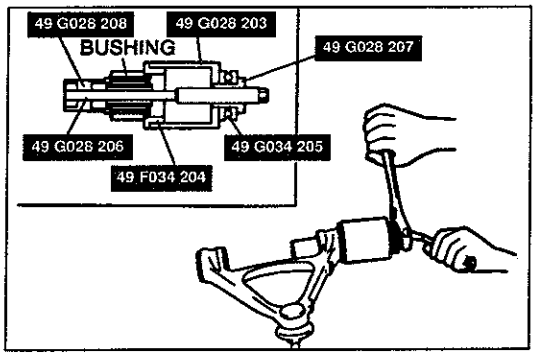
Disassembly / Inspection / Assembly
1. Disassemble in the order shown in the figure, referring to **Disassembly Note**.
2. Inspect all parts and repair or replace as necessary.
3. Assemble in the reverse order of disassembly, referring to **Assembly Note**.



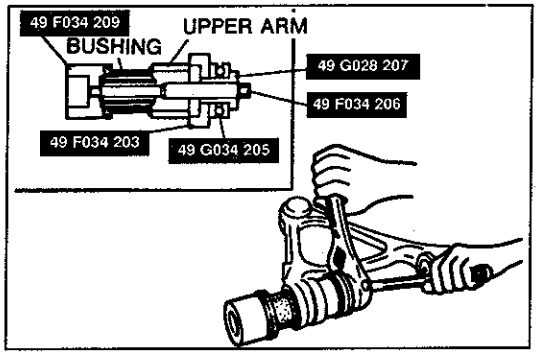
1. Clip
2. Dust boot
   Assembly Note ..... page R-18
3. Bushing
   Disassembly Note ..... page R-18
   Assembly Note ..... page R-18
4. Upper arm
   Inspect for damage and cracks



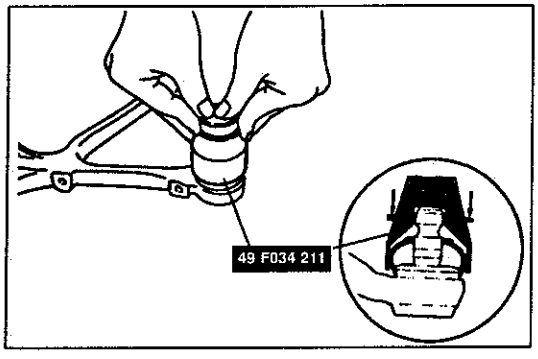
Disassembly note
Bushing
1. Cut away the projecting rubber of the bushing.



2. Remove the bushing by using the **SST**.



Assembly note
Bushing
1. Apply soapy water to the new bushing.
2. Install the bushing by using the **SST**.

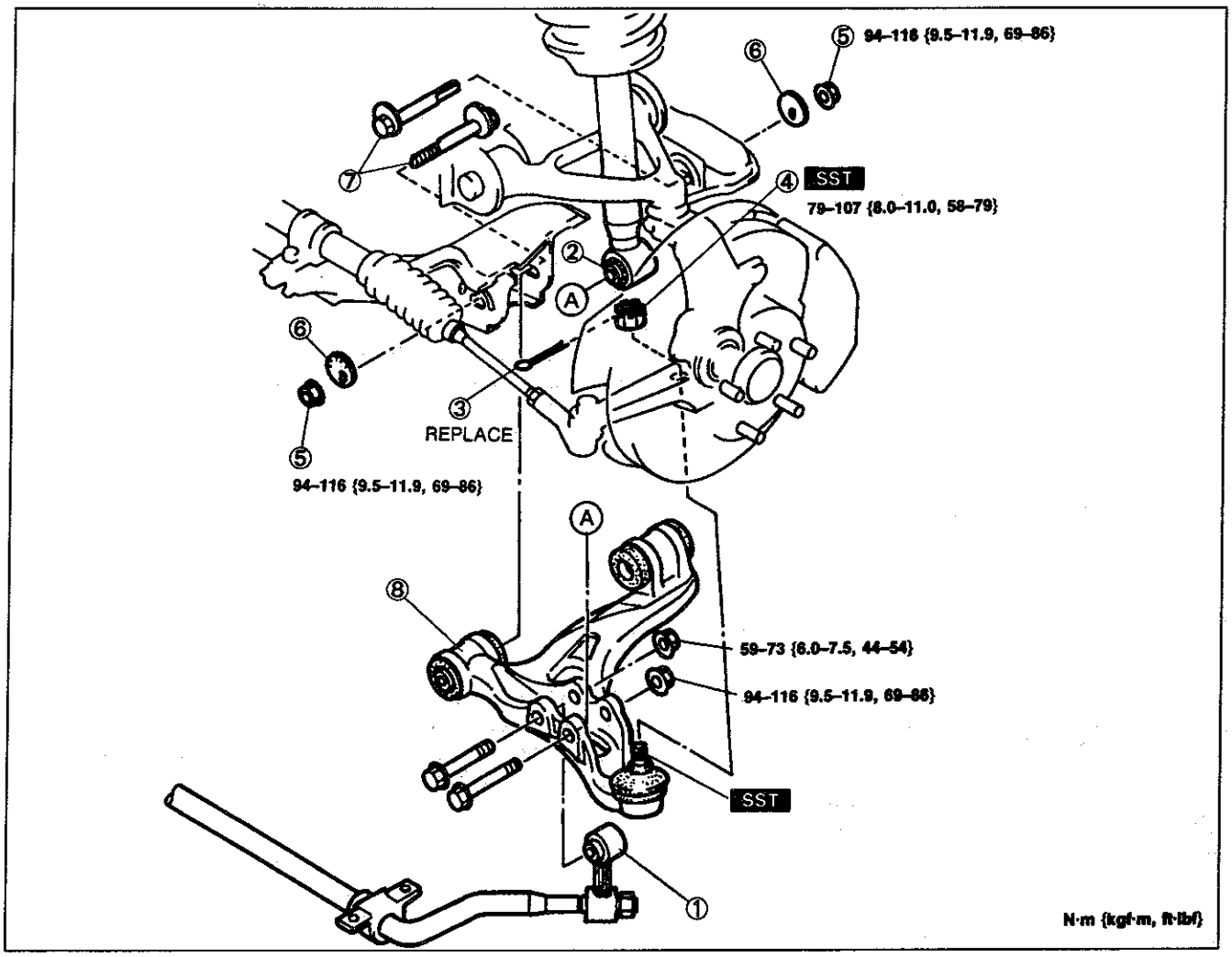


Dust boot
1. Wipe the grease off the ball stud.
2. Fill the inside of the new dust boot with grease.
3. Install the dust boot onto the ball joint.
4. Set the **SST** over the boot and install a new clip.
5. Wipe off the excess grease.

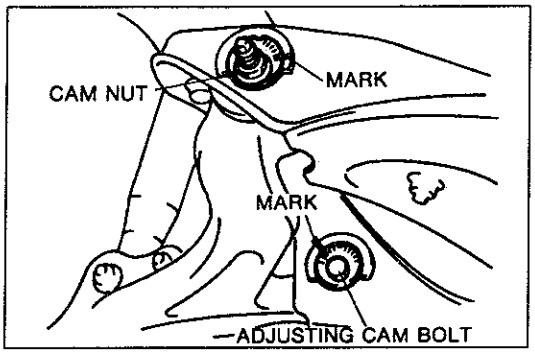
FRONT LOWER ARM

Removal / Inspection / Installation

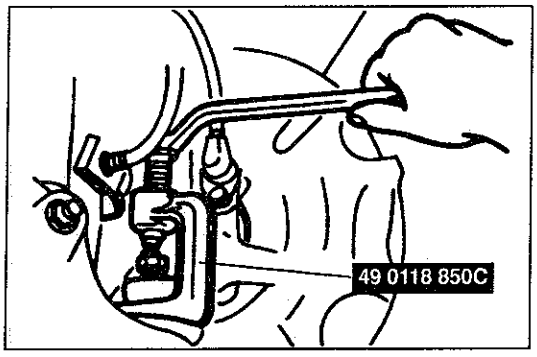
1. Jack up the front of the vehicle and support it on safety stands.
2. Remove the wheel and tire.
3. Remove in the order shown in the figure, referring to **Removal Note**.
4. Inspect all parts and repair or replace as necessary.
5. Install in the reverse order of removal, referring to **Installation Note**.
6. Loosely tighten the lower arm rear cam nut.
7. Install the wheel and tire.
   Tightening torque: 89–117 N·m {9.0–12.0 kgf·m, 65–87 ft·lbf}
8. Lower the vehicle.
9. With the vehicle unloaded, tighten the lower arm rear cam nut to the specified torque.
   Tightening torque: 94–116 N·m {9.5–11.9 kgf·m, 69–86 ft·lbf}
10. Adjust the front wheel alignment. (Refer to page R–6.)



1. Front stabilizer control link
2. Shock absorber and spring
3. Cotter pin
4. Nut
5. Nuts
   Removal Note ..... page R–20
   Installation Note ..... page R–20
6. Cam plates
   Removal Note ..... page R–20
   Installation Note ..... page R–20
7. Adjusting Cam bolt
   Installation Note ..... page R–20
8. Front lower arm
   Removal Note ..... page R–20
   Inspect for damage and cracks
   Inspect bushing for damage and wear
   Inspect boot for tearing and cracks
   Inspection .... page R–20
   Disassembly / Inspection / Assembly .... page R–21

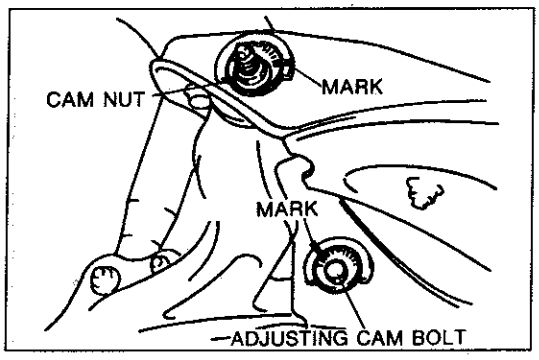


Removal note
Nut and cam plate
Before loosening the nut, make a mark on the cam plate and the crossmember for reference during installation.

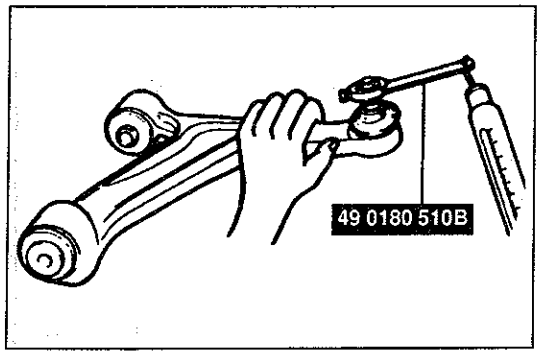


Front lower arm
1. Loosen the nut until it is flush with the end of the stud.
2. With the nut protecting the ball joint stud, separate the ball joint from the knuckle by using the **SST**.

Caution
- **The sharp edges of the SST can slice the dust boot. Install the SST so that the sharp edges are between the dust boot and the knuckle.**



Installation note
Nut, cam plate, and adjusting cam bolt
1. Install the cam plate so that the notch faces the same direction as the adjusting cam bolt.
2. Align the mark made before removing the adjusting cam bolt. Temporarily tighten the nut.



Inspection
Front lower arm ball joint
Ball joint rotation torque
1. Shake and rotate the ball joint stud at least five times.
2. Connect the **SST** to the stud and measure the starting torque and the rotation torque by using a pull scale.

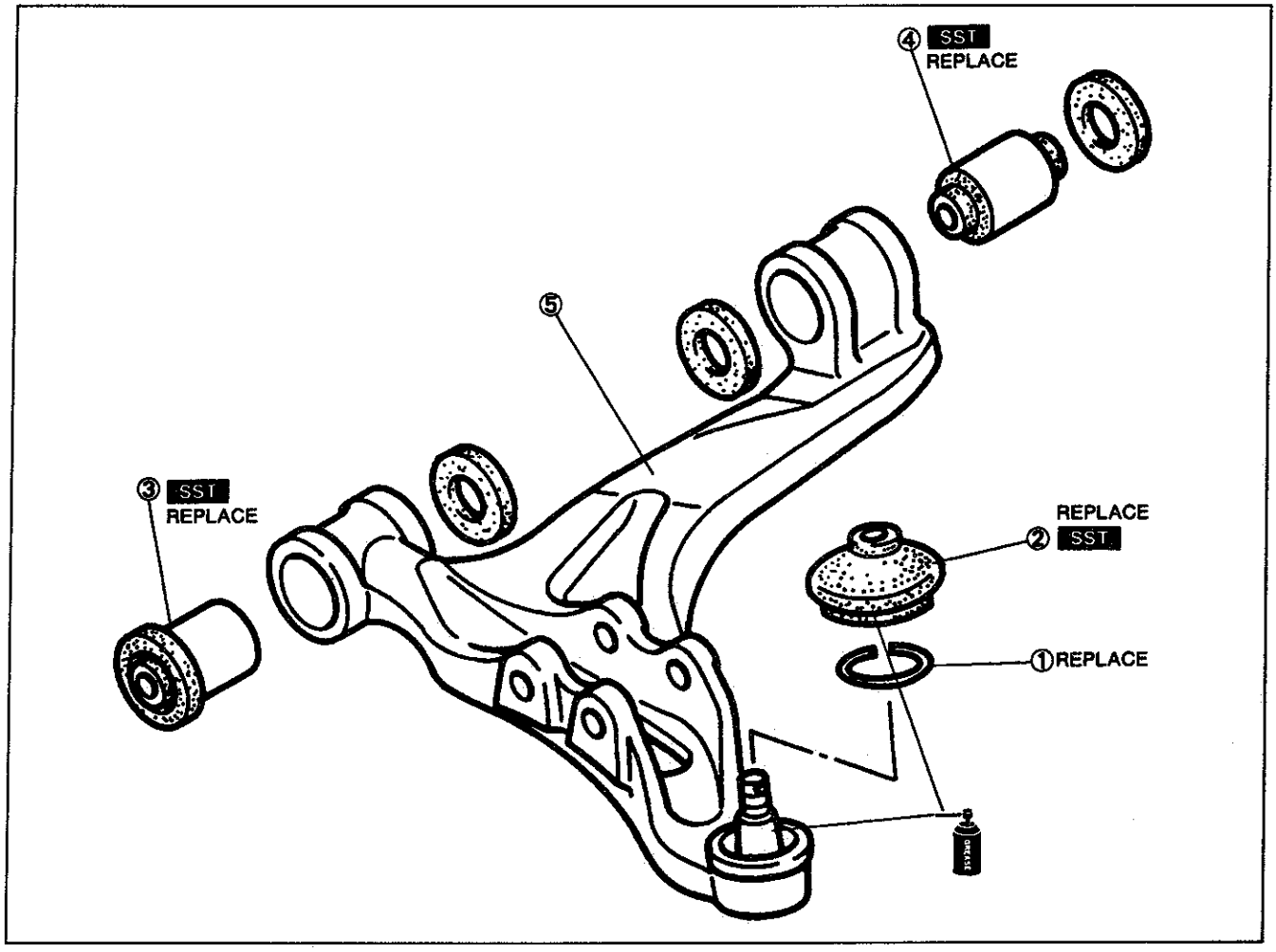
Starting torque:
2.5–7.3 N·m {25–75 kgf-cm, 22–65 in·lbf}
Pull scale reading:
25–73 N {2.5–7.5 kgf, 5.5–16.5 lbf}

Rotation torque:
0.5–1.4 N·m {5–15 kgf-cm, 4.4–13.0 in·lbf}
Pull scale reading:
5–14 N {0.5–1.5 kgf, 1.1–3.3 lbf}

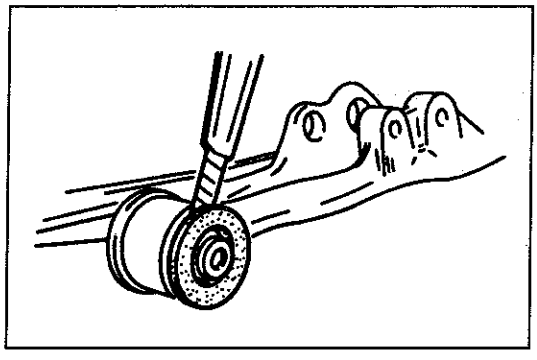
3. If not within specification, replace the front lower arm.

Disassembly / Inspection / Assembly

1. Disassemble in the order shown in the figure, referring to **Disassembly Note.**
2. Inspect all parts and repair or replace as necessary.
3. Assemble in the reverse order of disassembly, referring to **Assembly Note.**

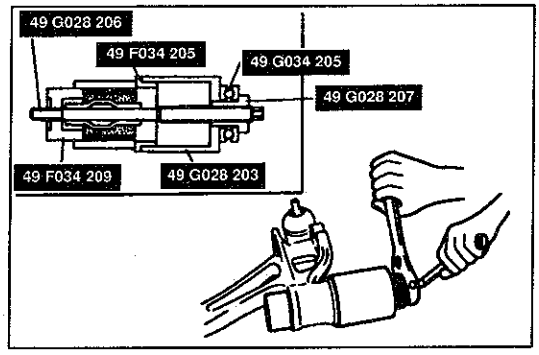


1. Clip
2. Dust boot
   Assembly Note
   ..... page R-23
3. Bushing (front)
   Disassembly Note
   ..... below
   Assembly Note
   ..... page R-22
4. Bushing (rear)
   Disassembly Note
   ..... page R-22
   Assembly Note
   ..... page R-22
5. Front lower arm
   Inspect for damage and cracks

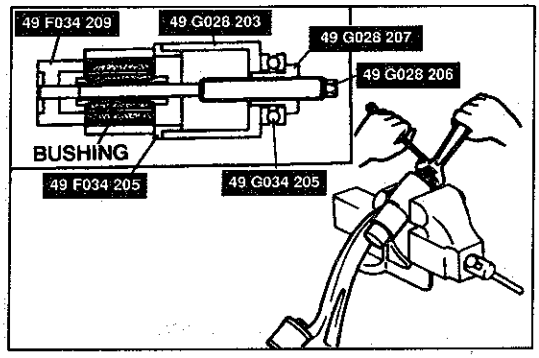


Disassembly note
Bushing (front)

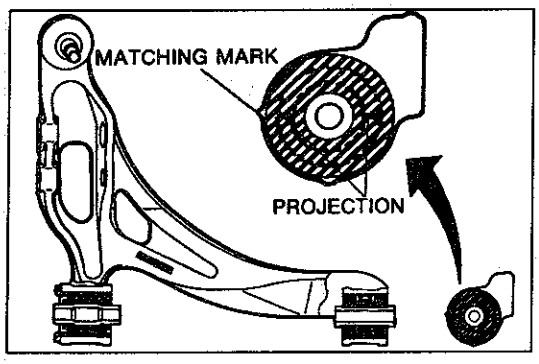
1. Cut away the projecting rubber of the bushing.



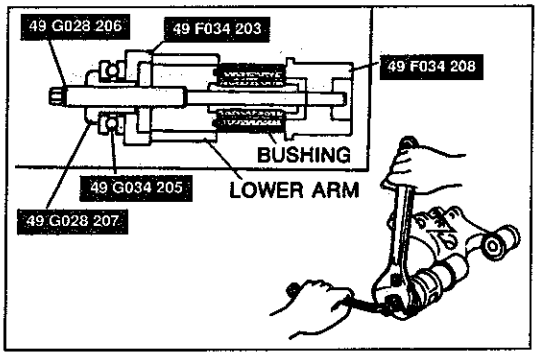
2. Remove the bushing by using the **SST**.



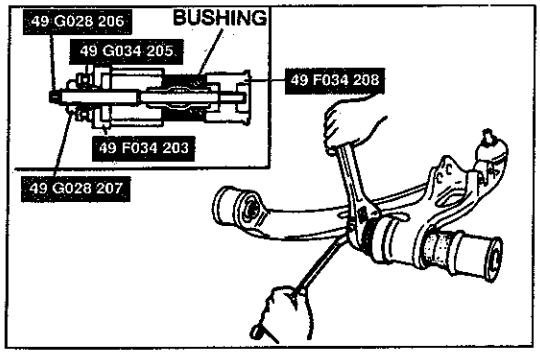
Bushing (rear)
Remove the bushing by using the **SST**.



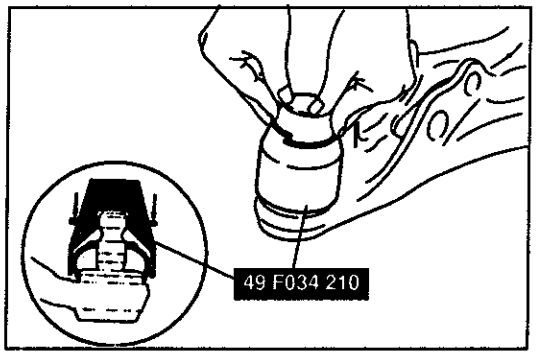
Assembly note
Bushing (rear)
1. Align the matching marks.



2. Apply soapy water to the new bushing.
3. Install the bushing by using the **SST**.



Bushing (front)
1. Apply soapy water to the new bushing.
2. Install the bushing by using the **SST**.



Dust boot

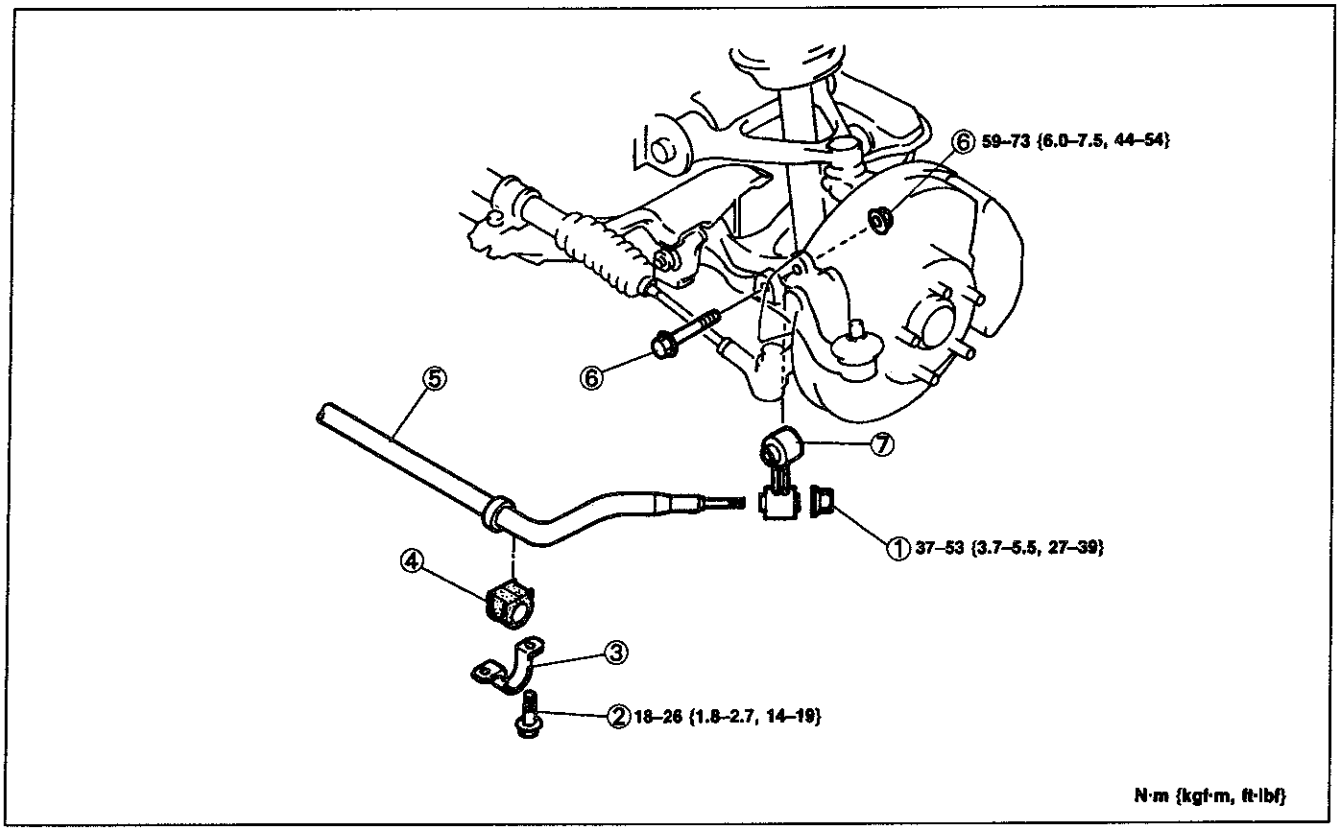
1. Wipe the grease off the ball stud.
2. Fill the inside of the new dust boot with grease.
3. Install the dust boot onto the ball joint.
4. Set the **SST** over the boot and install a new clip.
5. Wipe off the excess grease.

FRONT STABILIZER

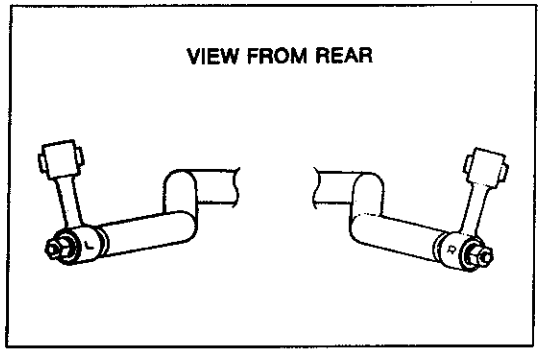
Removal / Inspection / Installation

1. Jack up the front of the vehicle and support it on safety stands.
2. Remove the wheels and tires and the undercover.
3. Remove in the order shown in the figure.
4. Inspect all parts and repair or replace as necessary.
5. Install in the reverse order of removal, referring to **Installation Note**.
6. Install the wheels and tires.

Tightening torque: 89–117 N·m {9.0–12.0 kgf·m, 65–87 ft·lbf}



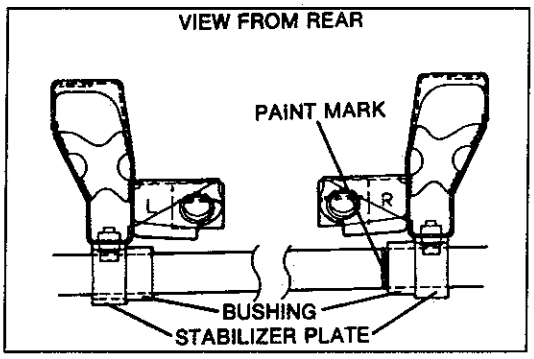
1. Nut
2. Bolt
3. Stabilizer plate
   Inspect for damage and cracks
4. Stabilizer bushing
   Inspect for wear and deterioration
5. Stabilizer bar
   Inspect for damage and bending
   Installation Note
   ..... page R-25
6. Bolt, nut
7. Stabilizer control link
   Inspect for damage and cracks
   Installation Note .... below



Installation note

Stabilizer control link

Install the stabilizer control links with the R (right) and L (left) marks as shown.



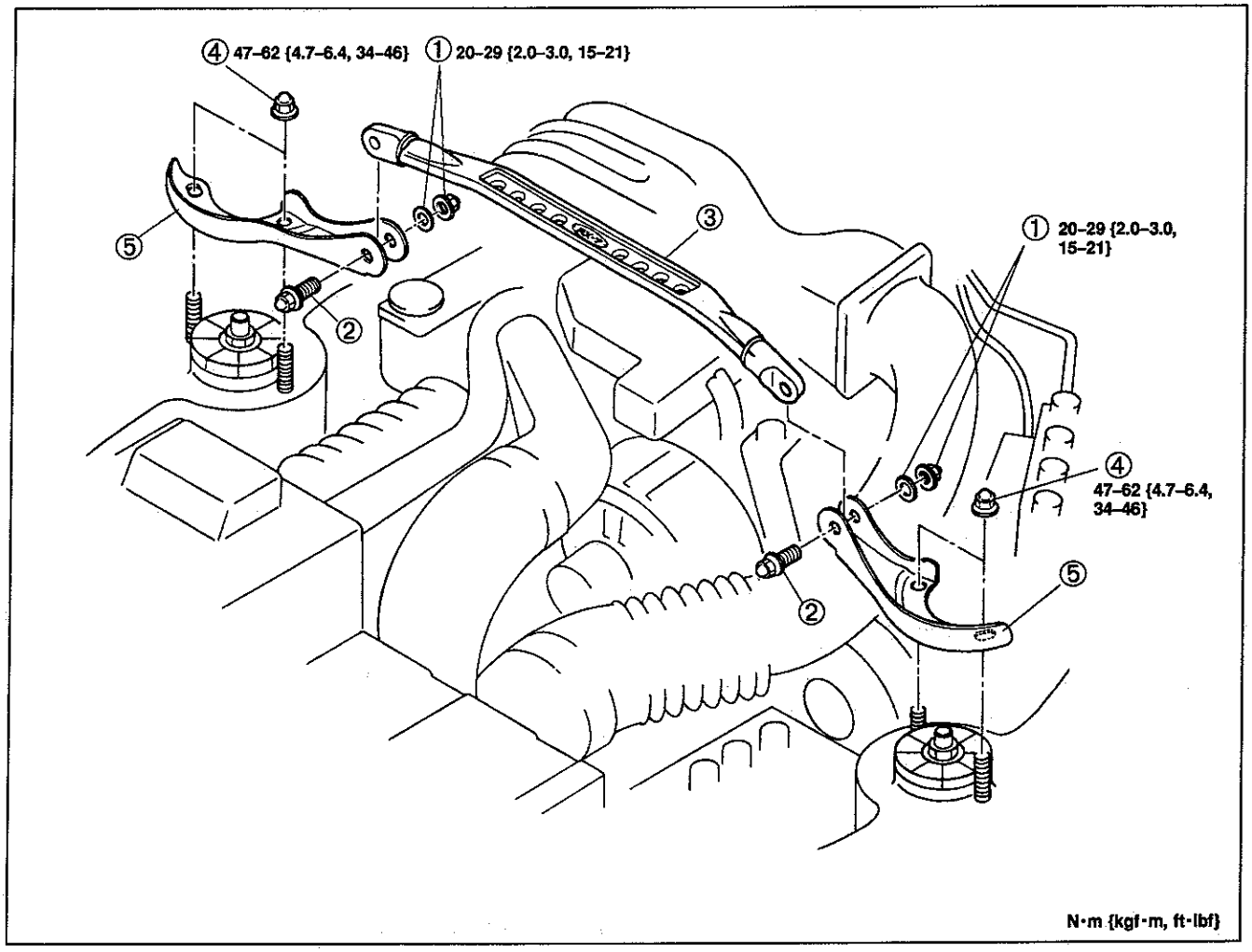
Stabilizer bar

Install the stabilizer bar with the white paint mark at the right side.

FRONT STRUT BAR

Removal / Inspection / Installation

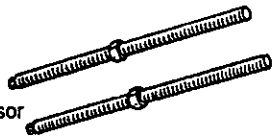
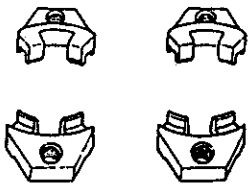
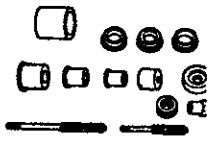
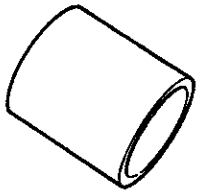
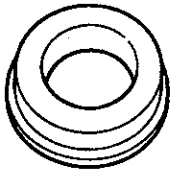
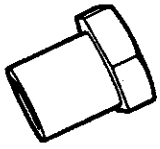
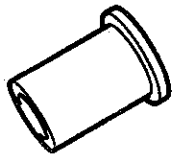
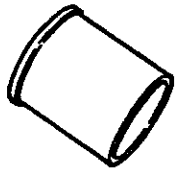
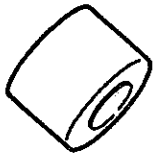
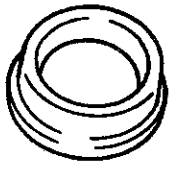
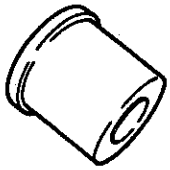
1. Remove in the order shown in the figure.
2. Inspect all parts and repair or replace as necessary.
3. Install in the reverse order of removal, referring to **Installation Note**.



1. Nut, washer
2. Bolt
3. Front strut bar
   Inspect for damage and bending
4. Nut
5. Strut plate

REAR SUSPENSION (DOUBLE WISHBONE, COIL SPRING TYPE)

PREPARATION
SST

49 0370 641 Screw, coil spring compressor 	For removal / installation of coil spring	490223 640B Arm, coil spring compressor 	For removal / installation of coil spring
49 F034 2A0 Replacer set, rubber bushing 	For removal / installation of bushing	49 G028 203 Support (Part of 49 F034 2A0) 	For removal / installation of bushing
49 G028 205 Support (Part of 49 F034 2A0) 	For removal / installation of pillow ball	49 G028 206 Shaft (Part of 49 F034 2A0) 	For removal / installation of bushing
49 G028 207 Nut (Part of 49 F034 2A0) 	For removal / installation of bushing	49 G028 208 Installer (Part of 49 F034 2A0) 	For removal / installation of pillow ball
49 G034 205 Bearing (Part of 49 F034 2A0) 	For removal / installation of bushing	49 F034 207 Installer (Part of 49 F034 2A0) 	For removal / installation of bushing
49 F034 203 Support (Part of 49 F034 2A0) 	For installation of bushing	49 F034 206 Shaft (Part of 49 F034 2A0) 	For installation of bushing
49 F034 209 Installer (Part of 49 F034 2A0) 	For installation of pillow ball	49 F034 204 Support (Part of 49 F034 2A0) 	For removal / installation of bushing
49 F034 208 Installer (Part of 49 F034 2A0) 	For removal / installation of bushing		

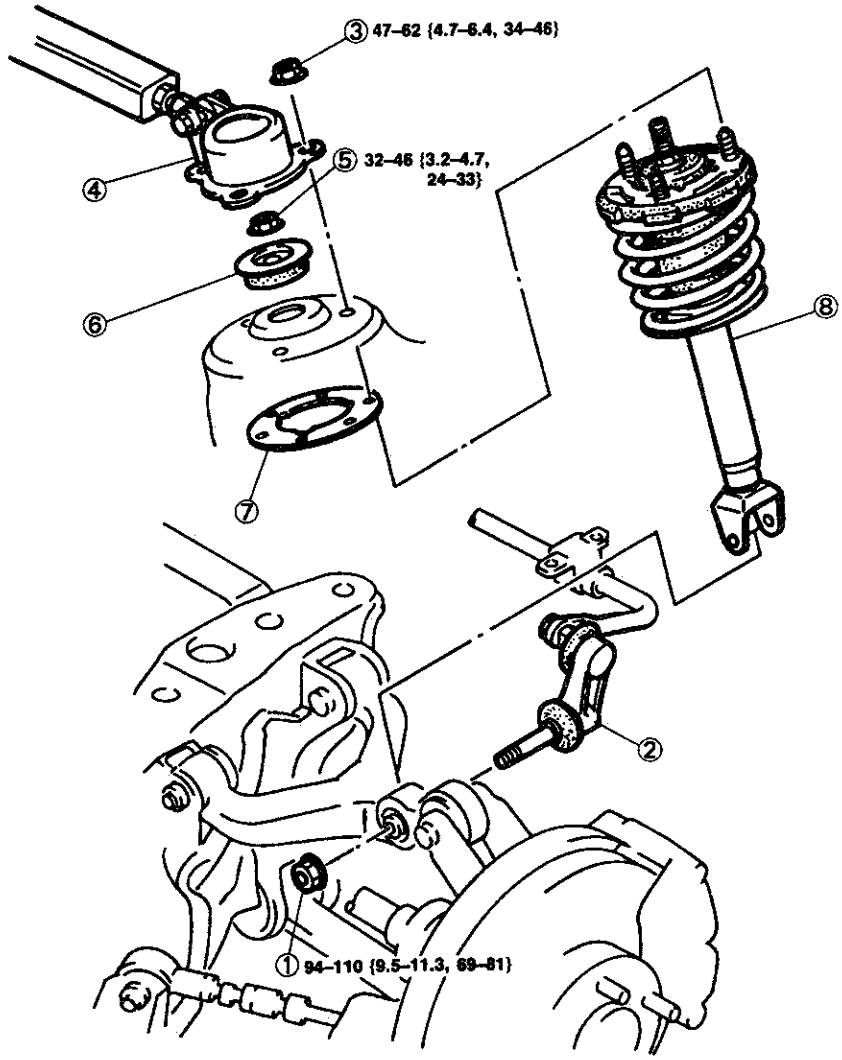
REAR SHOCK ABSORBER AND SPRING

Removal / Installation

1. Jack up the rear of the vehicle and support it on safety stands.
2. Remove the wheel and tire.
3. Remove in the order shown in the figure.
4. Install in the reverse order of removal, referring to **Installation Note**.
5. Install the wheel and tire.

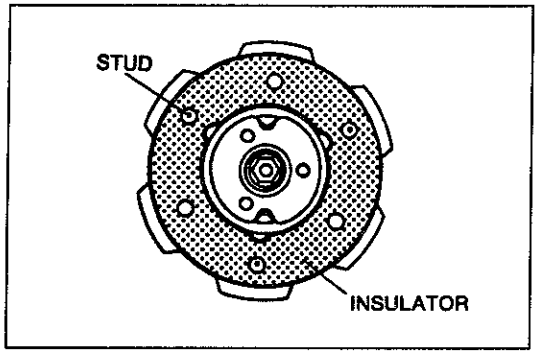
Tightening torque: 89–117 N·m {9.0–12.0 kgf·m, 65–87 ft·lbf}

6. Check the rear wheel alignment. (Refer to page R–9.)

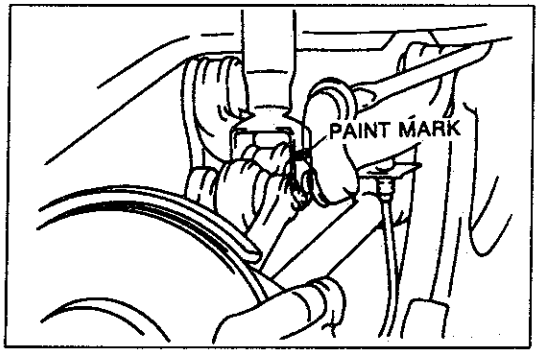


N·m {kgf·m, ft·lbf}

1. Nut
2. Rear stabilizer control link
3. Nut
4. Rear strut bar
   Removal / Inspection / Installation ... page R–43
5. Nut
6. Stopper rubber
7. Insulator
8. Shock absorber and spring
   Installation Note ..... page R–28
   Disassembly / Inspection / Assembly .... page R–29



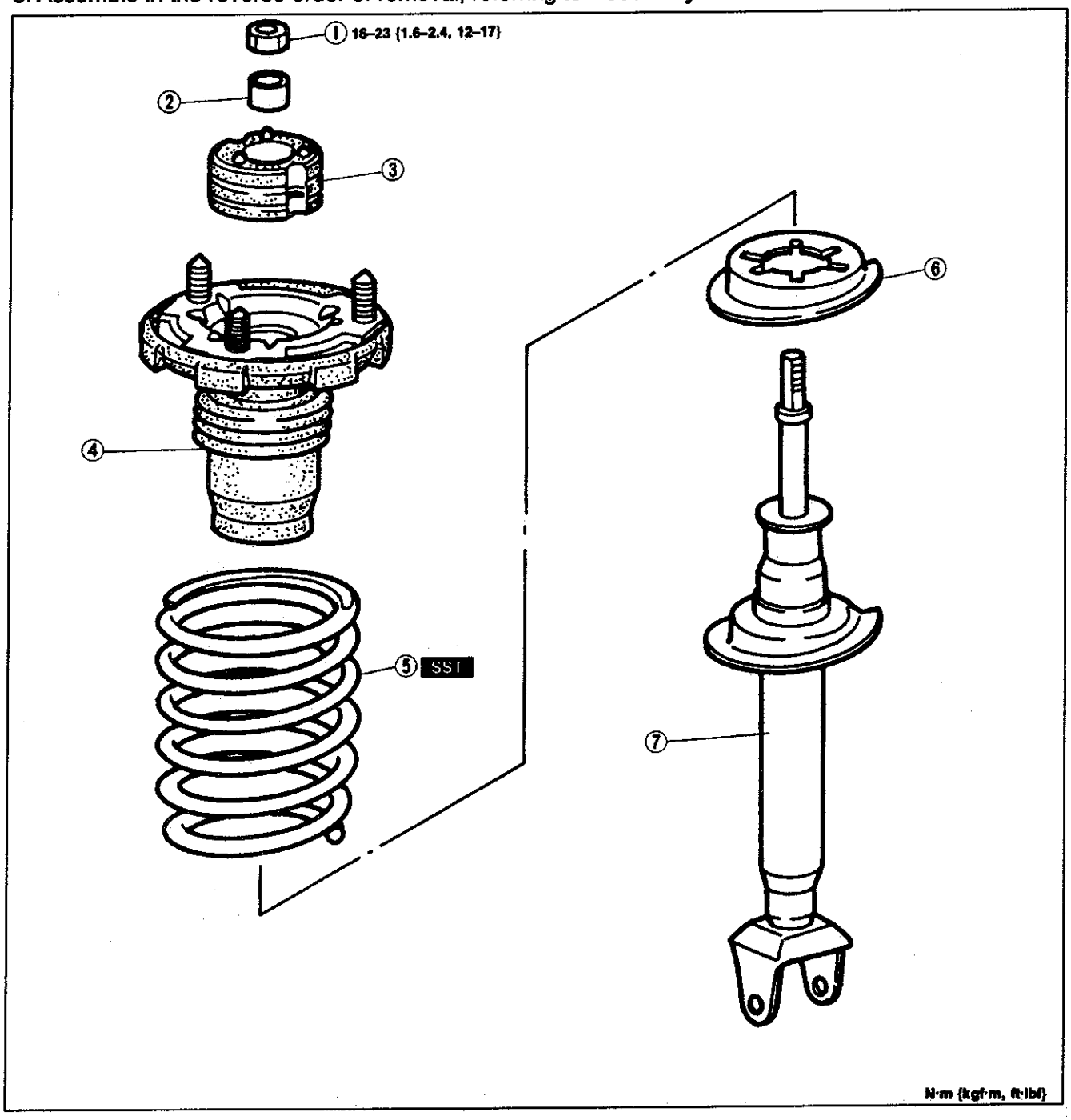
Installation note
Shock absorber and spring
1. Install the insulator so that the notches in it face the studs as shown.



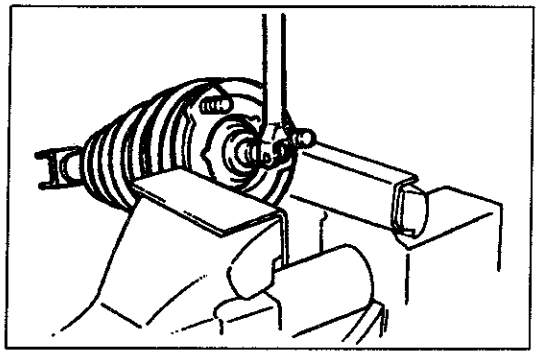
2. Install the shock absorber and spring so that the identification paint mark faces rearward.

Disassembly / Inspection / Assembly

1. Disassemble in the order shown in the figure, referring to **Disassembly Note**.
2. Inspect all parts and repair or replace as necessary.
3. Assemble in the reverse order of removal, referring to **Assembly Note**.



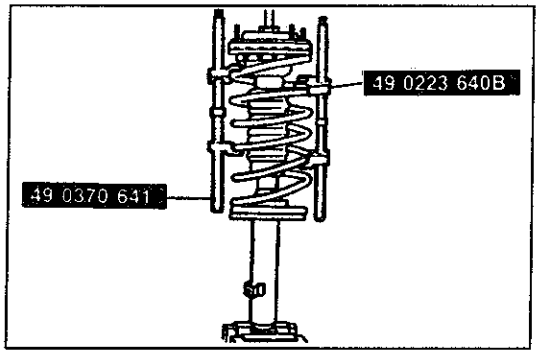
1. Nut
   Disassembly Note ..... page R–30
   Assembly Note ..... page R–31
2. Spacer
3. Mounting rubber
   Inspect for damage and deterioration
   Assembly Note ..... page R–31
4. Bound stopper assembly
   Inspect for damage and cracks
5. Coil spring
   Inspect for damage and weakness
   Assembly Note ..... page R–30
6. Lower spring seat
   Inspect for damage and cracks
7. Shock absorber
   Inspection ..... page R–30

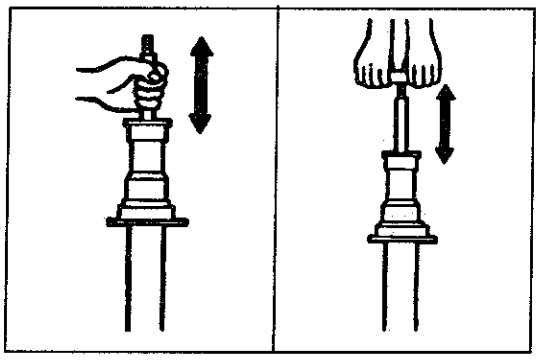


Disassembly note
Nut

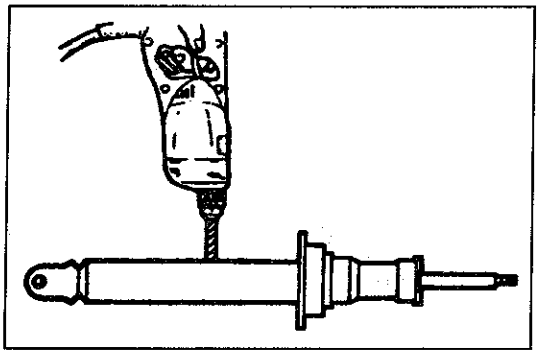
Warning
- **Removing the piston-rod nut is dangerous. The shock absorber and spring could fly off under tremendous pressure and cause serious injury or death. Secure the shock absorber in the SST before removing the piston-rod nut.**

1. Secure the mounting rubber bracket in a vise.
2. Loosen the mounting rubber nut several turns, but do not remove it.
3. Assemble the **SST**.
4. Compress the coil spring by using the **SST** and remove the mounting nut.





Inspection
Shock absorber
Check the following and replace the shock absorber if necessary.
1. Inspect for damage and oil leakage.
2. (1) Compress the shock absorber rod and release it.
   (2) Verify that the rod extends fully at a normal speed.
3. Compress and extend the rod at least three times. Verify that the operational force does not change and that there is no unusual noise.



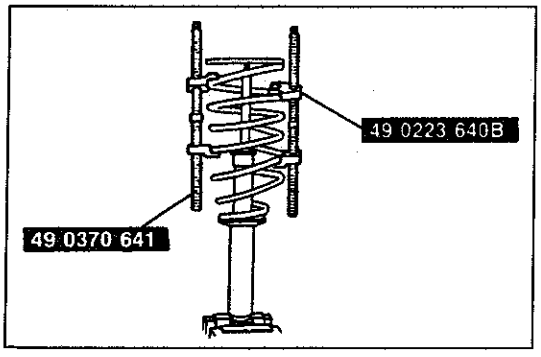
Disposal of shock absorber

Warning
- **The gas in the shock absorber is highly pressurized, and could spray metal chips into the eyes and face when drilling. Whenever drilling into a shock absorber, wear protective eye wear.**

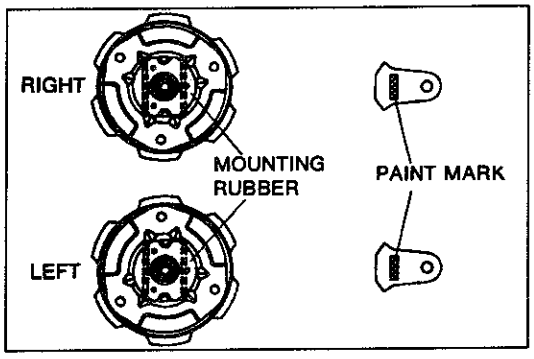
1. Lay the shock absorber flat.
2. Drill a hole in its body.

Drill size: 2–3 mm {0.08–0.12 in}

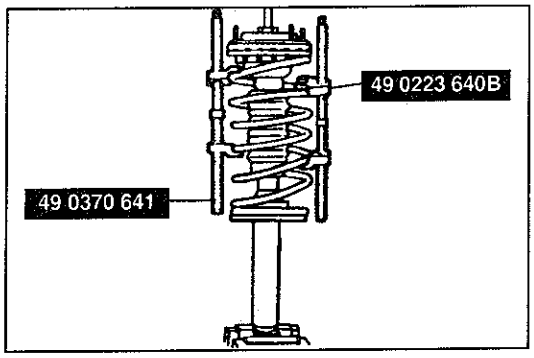
3. Allow the gas to escape.
4. Discard the shock absorber.



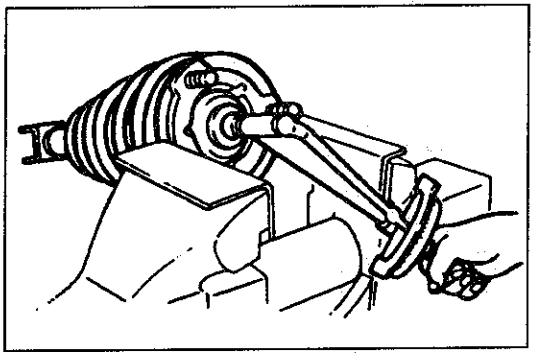
Assembly note
Coil spring
1. Compress the coil spring by using the **SST**.
2. Install the spring so that the lower coil is seated on the step of the lower seat.



Mounting rubber
Install the mounting rubber as shown.



Nut
1. Tighten the mounting nut several turns.
2. Remove the **SST**.
3. Verify that the lower coil of the spring is seated on the step of the lower seat.



3. Secure the mounting rubber bracket in a vise.
4. Tighten the nut.

Tightening torque:
16–23 N·m {1.6–2.4 kgf·m, 12–17 ft·lbf}

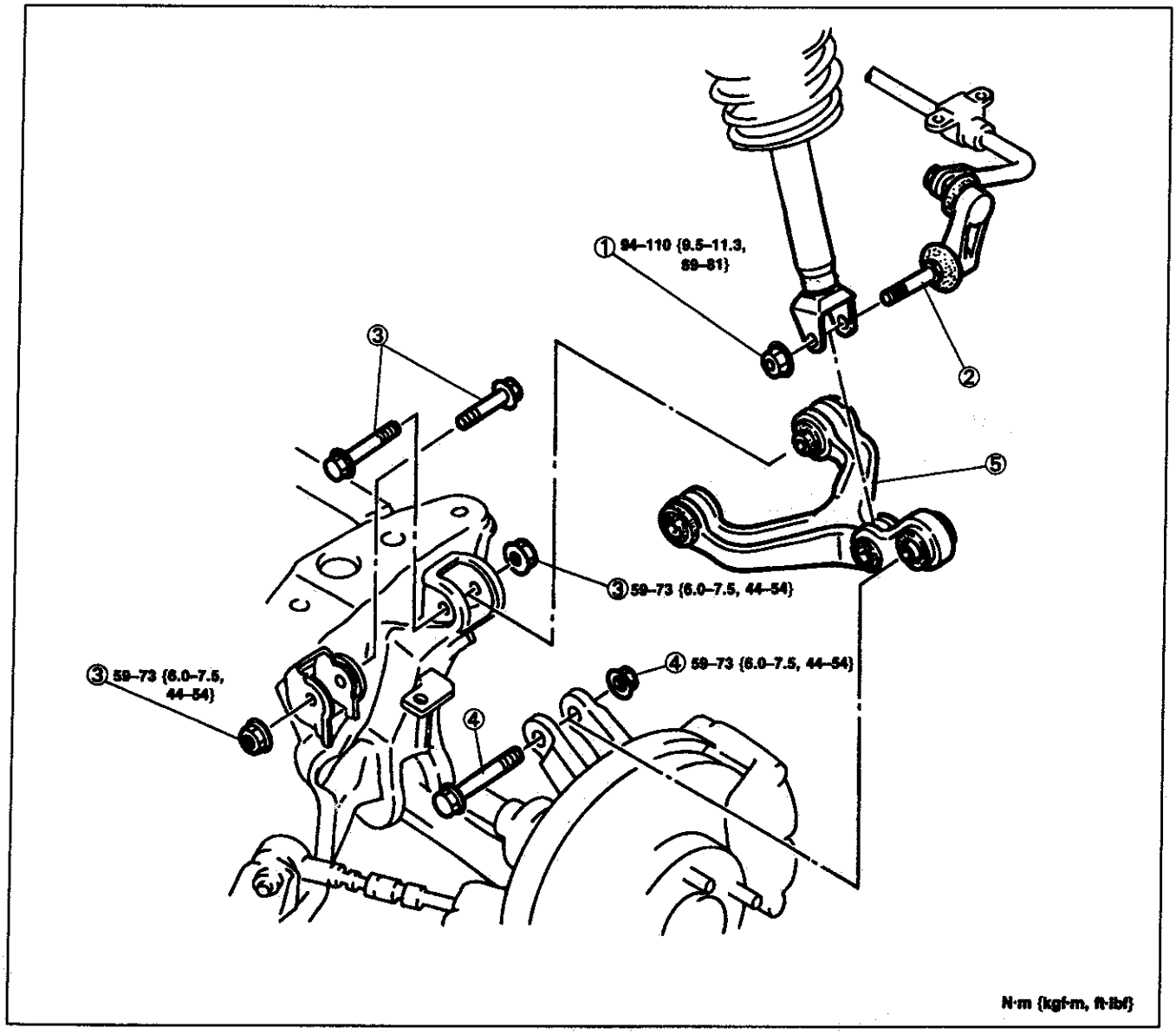
UPPER ARM

Removal / Inspection / Installation

1. Jack up the rear of the vehicle and support it on safety stands.
2. Remove the wheel and tire.
3. Remove in the order shown in the figure.
4. Inspect all parts and repair or replace as necessary.
5. Install in the reverse order of removal.
6. Install the wheel and tire.

Tightening torque: 89–117 N·m {9.0–12.0 kgf·m, 65–87 ft·lbf}

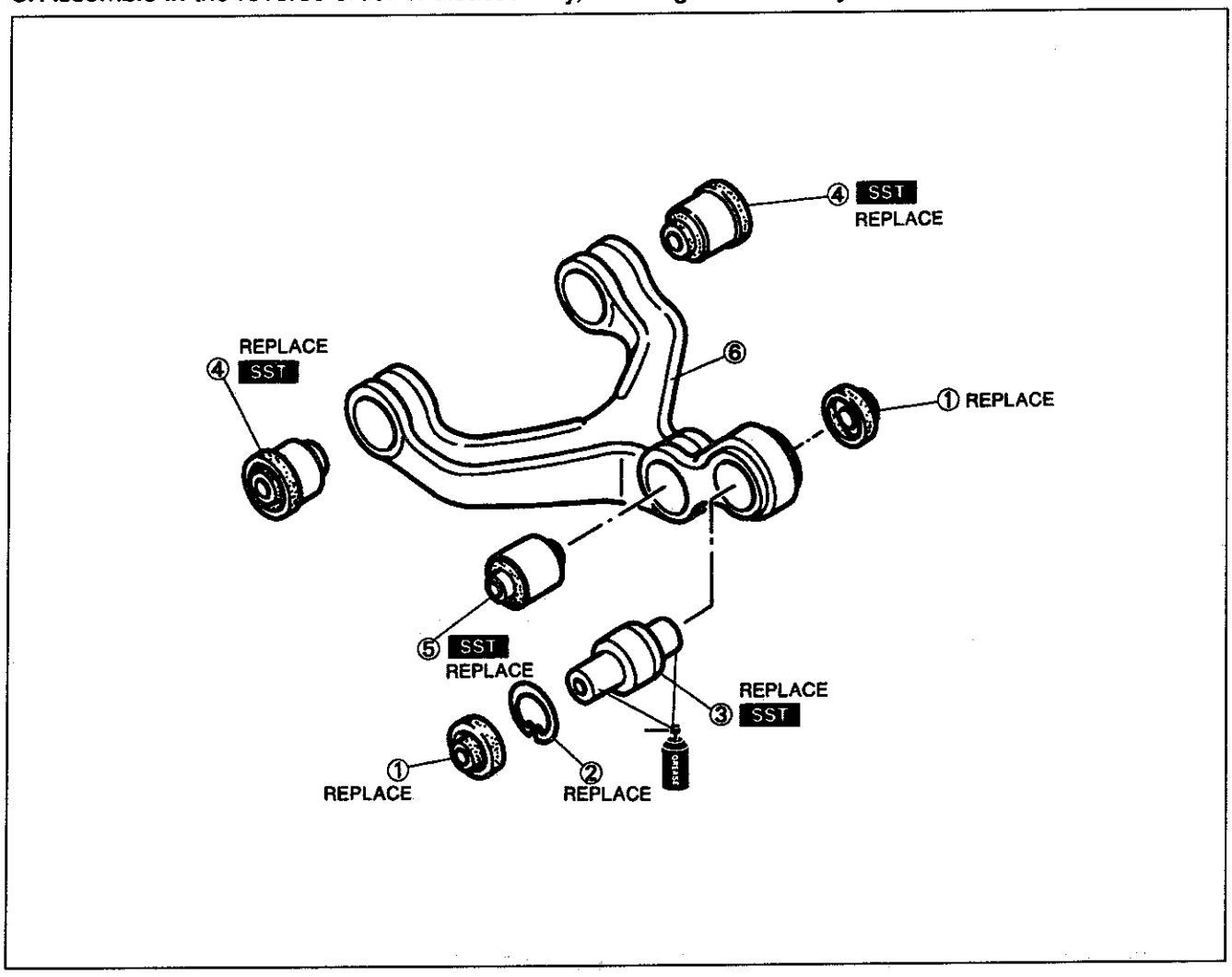
7. Check the rear wheel alignment. (Refer to page R–9.)



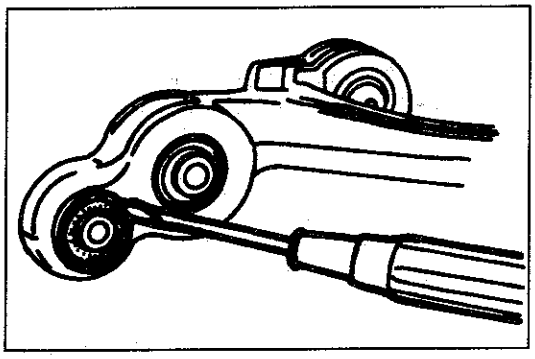
1. Nut
2. Stabilizer control link
3. Nut, bolt
4. Nut, bolt
5. Upper arm
   Inspect for damage and cracks
   Inspect bushing for wear and deterioration
   Disassembly / Inspection / Assembly .... page R–33

Disassembly / Inspection / Assembly

1. Disassemble in the order shown in the figure, referring to **Disassembly Note**.
2. Inspect all parts and repair or replace as necessary.
3. Assemble in the reverse order of disassembly, referring to **Assembly Note**.

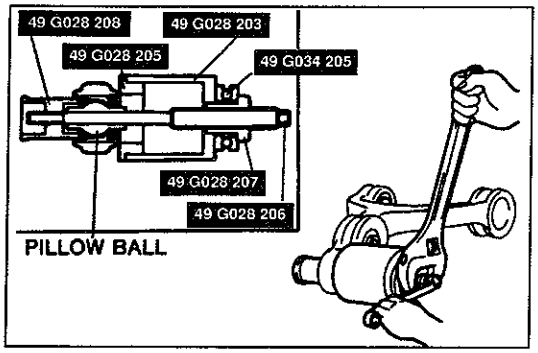


1. Rubber seal
2. Retaining ring
3. Pillow ball
   Disassembly Note . . below
   Assembly Note
   . . . . . page R-35
4. Upper arm bushing
   Disassembly Note
   . . . . . page R-34
   Assembly Note
   . . . . . page R-34
5. Damper bushing
   Disassembly Note
   . . . . . page R-34
   Assembly Note
   . . . . . page R-34
6. Upper arm
   Inspect for damage and cracks

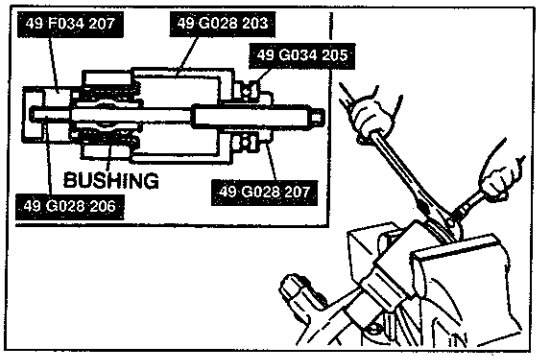


Disassembly note
Pillow ball

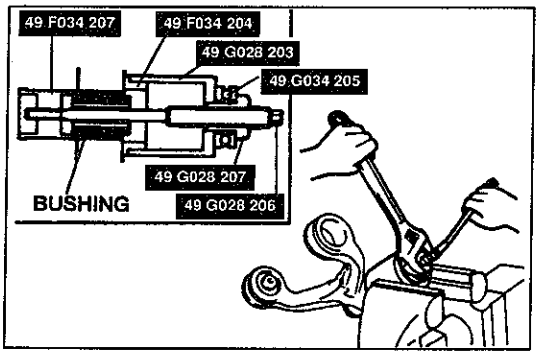
1. Remove the rubber seal by using a screw driver as shown.
2. Remove the retaining ring.



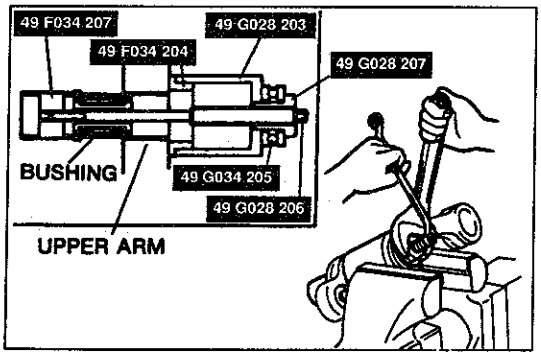
3. Remove the pillow ball by using the **SST**.



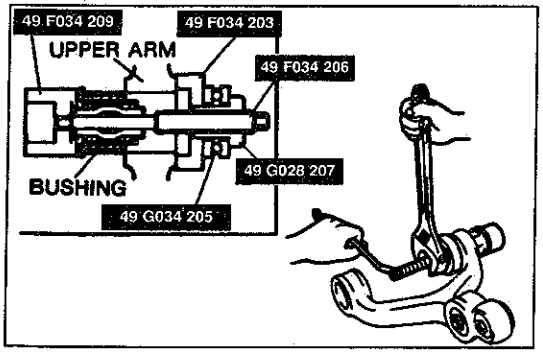
Upper arm bushing
Remove the upper arm bushing by using the **SST**.



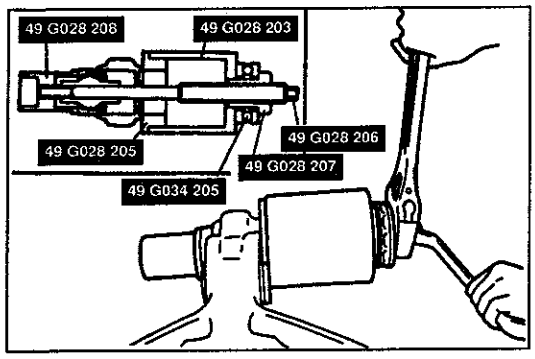
Damper bushing
Remove the damper bushing by using the **SST**.



Assembly note
Damper bushing
1. Apply soapy water to the new damper bushing.
2. Install the damper bushing by using the **SST**.

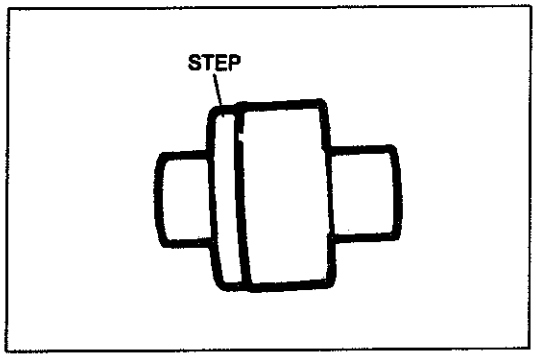


Upper arm bushing
1. Apply soapy water to the new bushing.
2. Install the upper arm bushing by using the **SST**.



Pillow ball

1. With the **SST**, install the pillow ball so that the step faces into the upper arm.

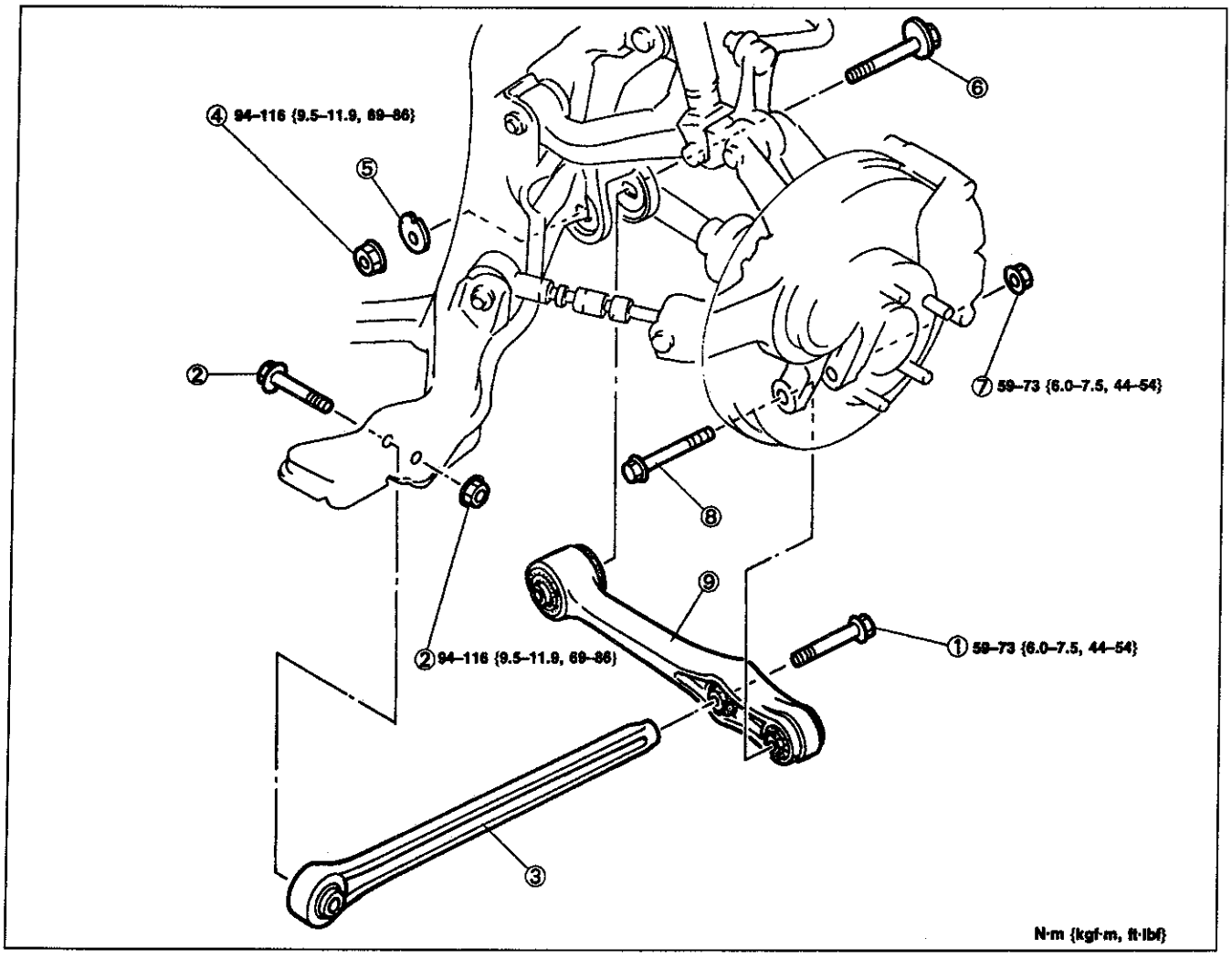


2. Install the retaining ring.
3. Fill the space between the pillow ball and rubber seal with grease.
4. Install the rubber seal.

REAR LOWER ARM

Removal / Inspection / Installation

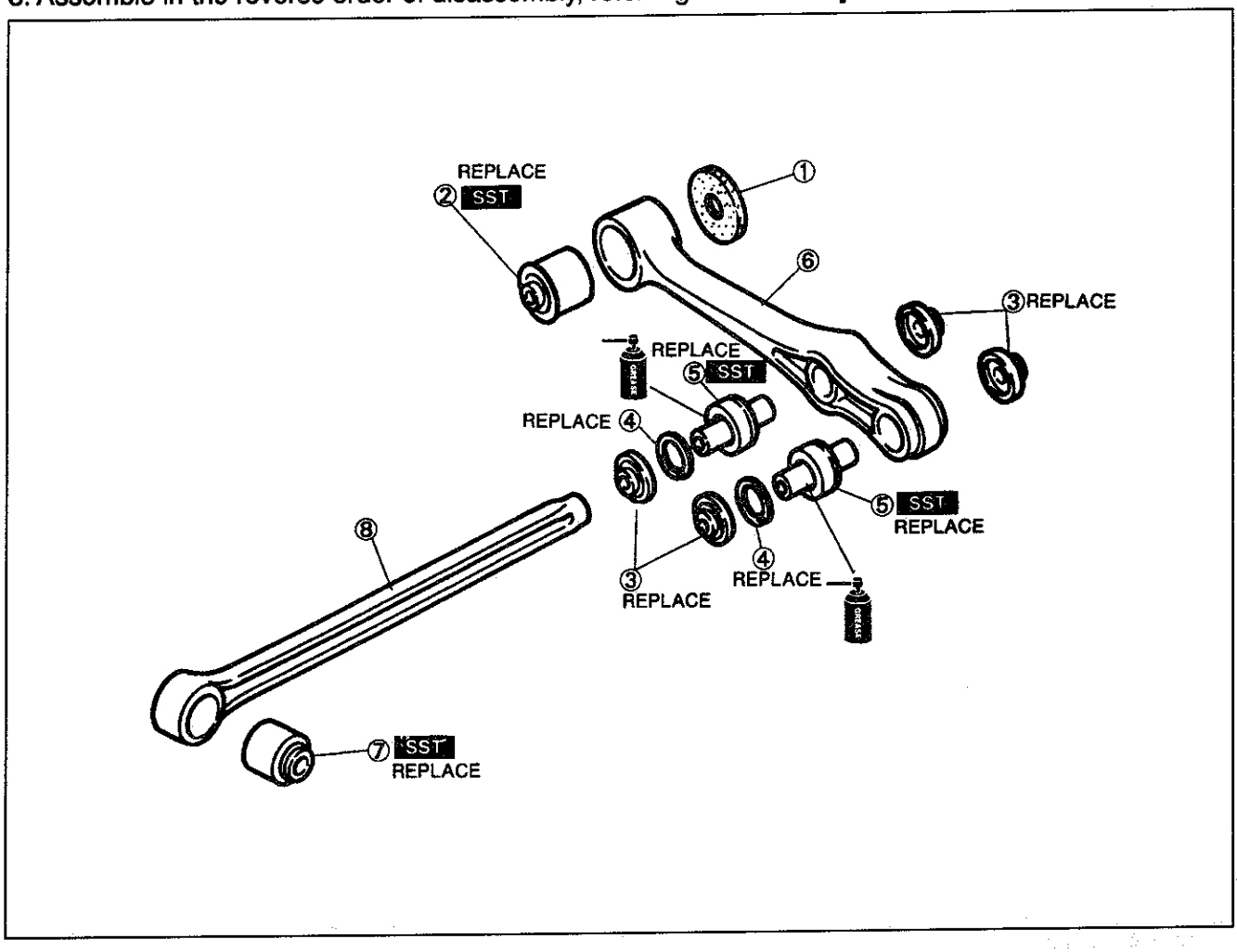
1. Jack up the rear of the vehicle and support it on safety stands.
2. Remove the wheel and tire.
3. Remove in the order shown in the figure, referring to **Removal Note**.
4. Inspect all parts and repair or replace as necessary.
5. Install in the reverse order of removal, referring to **Installation Note**.
6. Loosely tighten the trailing link front nut.
7. Install the wheel and tire.
   Tightening torque: 89–117 N·m {9.0–12.0 kgf·m, 65–87 ft·lbf}
8. Lower the vehicle.
9. With the vehicle unloaded, tighten the trailing link front nut to the specified torque.
   Tightening torque: 94–116 N·m {9.5–11.9 kgf·m, 69–86 ft·lbf}
10. Check the rear wheel alignment. (Refer to page R–9.)



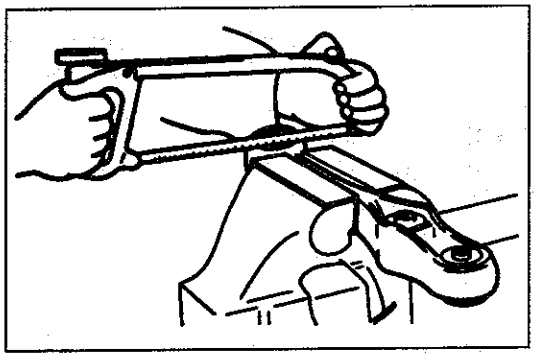
1. Bolt
2. Bolt, nut
3. Trailing link
   Inspect for damage and cracks
   Inspect bushing for wear and deterioration
   Disassembly / Inspection / Assembly .... page R–37
4. Nut
   Removal Note ..... page R–20
   Installation Note ..... page R–20
5. Cam plate
   Removal Note ..... page R–20
   Installation Note ..... page R–20
6. Adjusting cam bolt
   Installation Note ..... page R–20
7. Nut
8. Bolt
9. I-arm
   Inspect for damage and cracks
   Inspect bushing for wear and deterioration
   Disassembly / Inspection / Assembly .... page R–37

Disassembly / Inspection / Assembly

1. Disassemble in the order shown in the figure, referring to **Disassembly Note**.
2. Inspect all parts and repair or replace as necessary.
3. Assemble in the reverse order of disassembly, referring to **Assembly Note**.

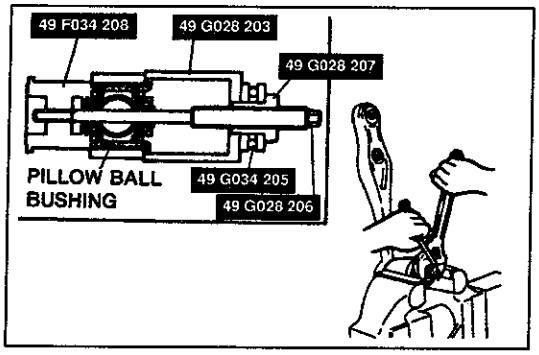


1. Stopper
2. Pillow ball bushing
   Disassembly Note ... below
   Assembly Note
   ..... page R-39
3. Rubber seal
4. Retaining ring
5. Pillow ball
   Disassembly Note
   ..... page R-38
   Assembly Note
   ..... page R-39
6. I-arm
   Inspect for damage and cracks
7. Bushing
   Disassembly Note
   ..... page R-38
   Assembly Note
   ..... page R-38
8. Trailing link
   Inspect for damage and cracks

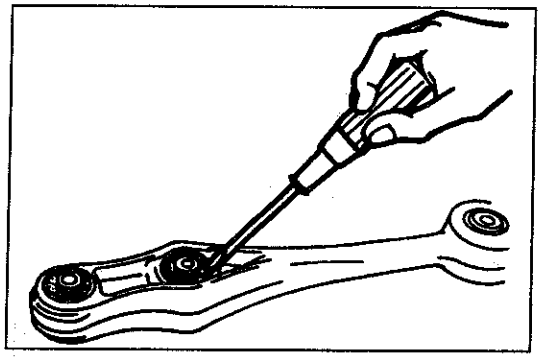


Disassembly note
Pillow ball bushing

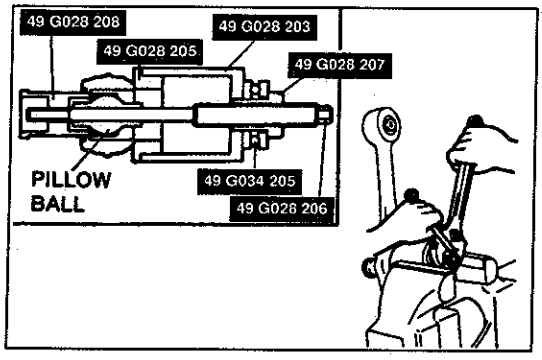
1. Cut away the flange of the bushing.



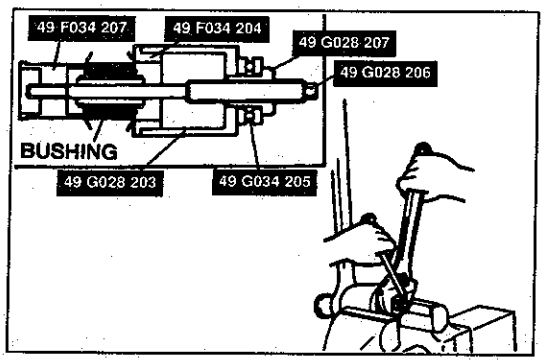
2. Remove the pillow ball bushing by using the **SST**.



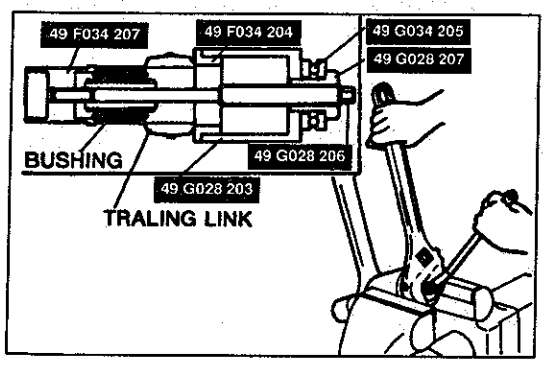
Pillow ball
1. Remove the rubber seal by using a screwdriver as shown.
2. Remove the retaining ring.



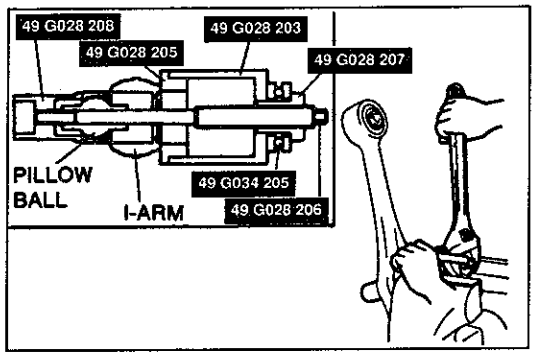
3. Remove the pillow ball by using the **SST**.



Bushing
Remove the bushing by using the **SST**.

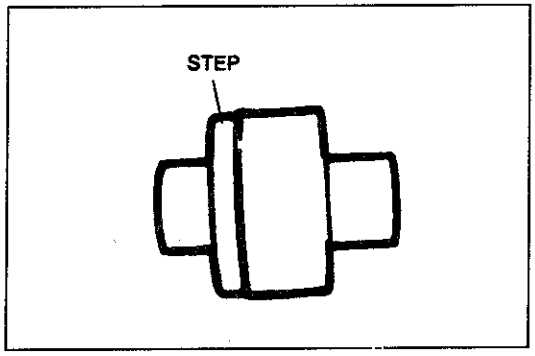


Assembly note
Bushing
1. Apply soapy water to the new bushing.
2. Install the bushing by using the **SST**.

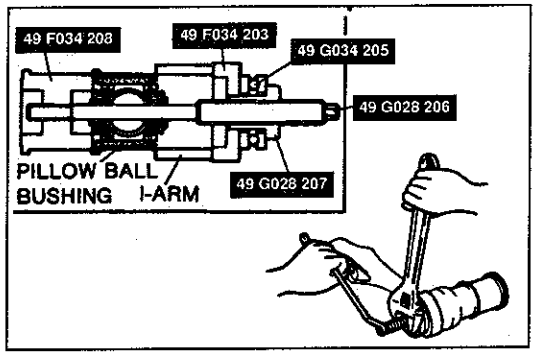


Pillow ball

1. With the **SST**, install the pillow ball so that the step faces into the I-arm.



2. Install the retaining ring.
3. Fill the space between the pillow ball and rubber seal with grease.
4. Install the rubber seal.



Pillow ball bushing

1. Apply soapy water to the new pillow ball bushing.
2. Install the pillow ball bushing by using the **SST**.

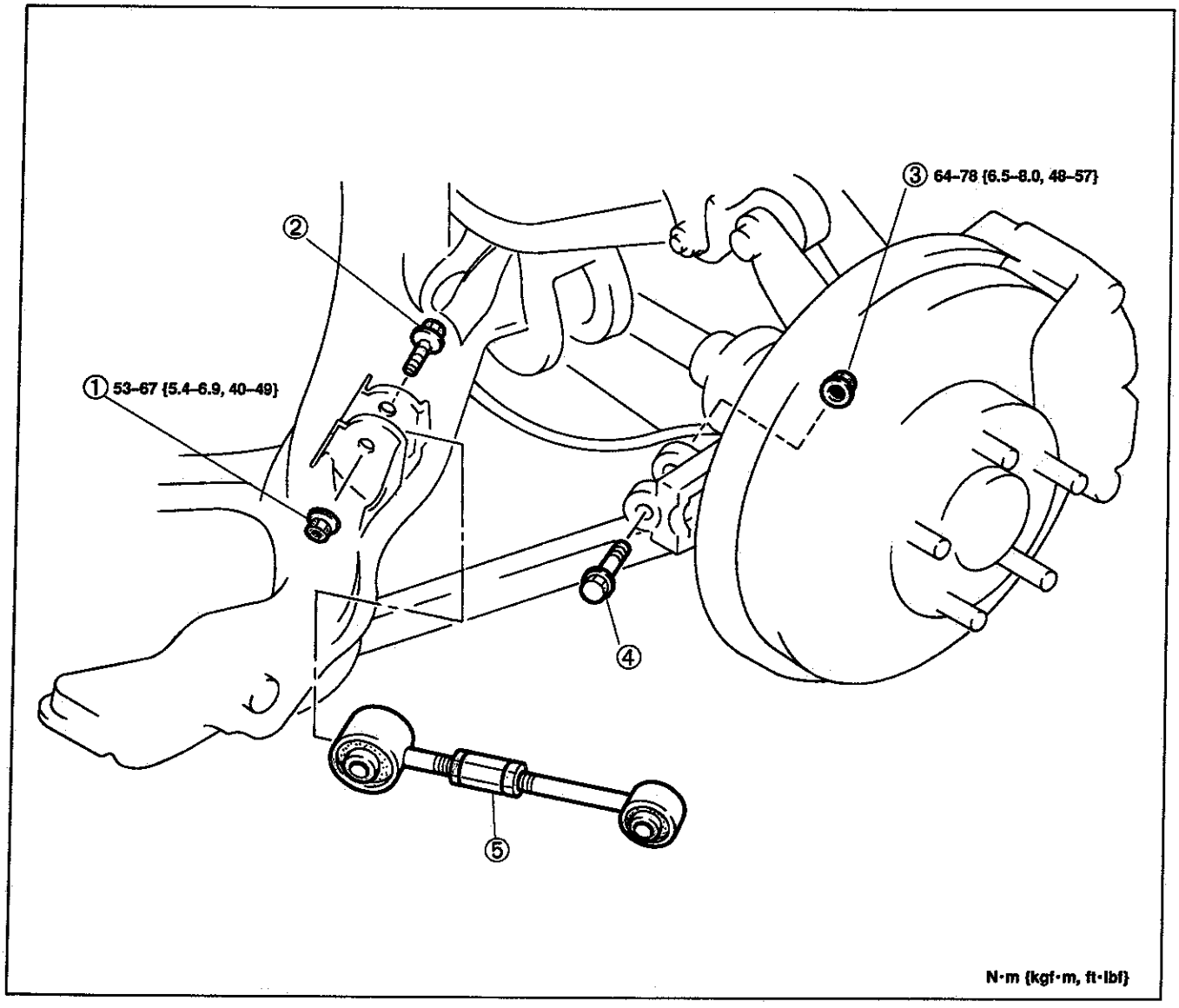
TOE-CONTROL LINK

Removal / Inspection / Installation

1. Jack up the rear of the vehicle and support it on safety stands.
2. Remov
   e the wheel and tire.
3. Remove in the order shown in the figure.
4. Inspect all parts and repair or replace as necessary.
5. Install in the reverse order of removal, referring to **Installation Note**.
6. Install the wheel and tire.

Tightening torque: 89–117 N·m {9.0–12.0 kgf·m, 65–87 ft·lbf}

7. Check the rear wheel alignment. (Refer to page R–9.)



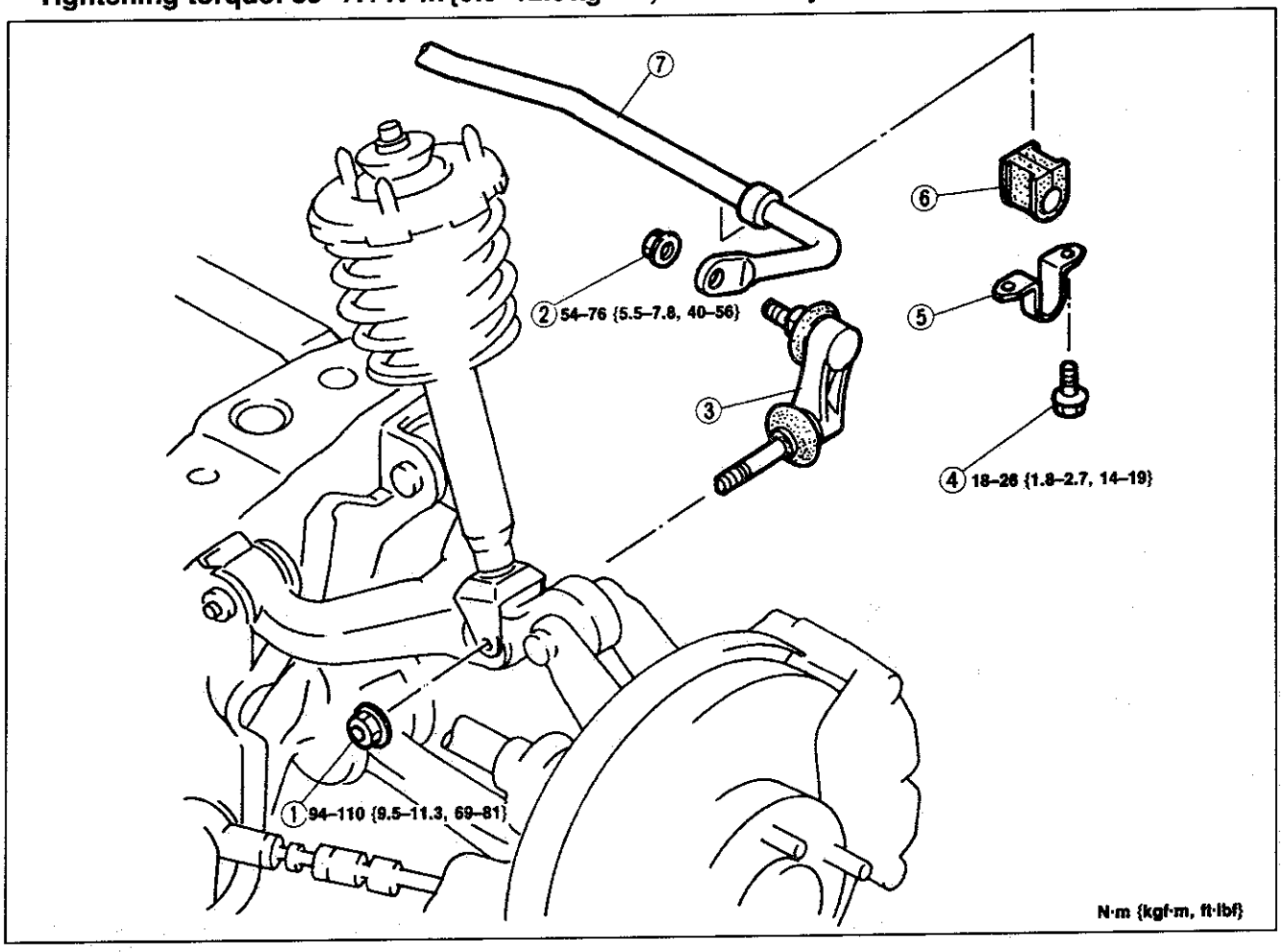
1. Nut
2. Bolt
3. Nut
4. Bolt
5. Toe-control link
   Inspect bushing for wear and deterioration

REAR STABILIZER

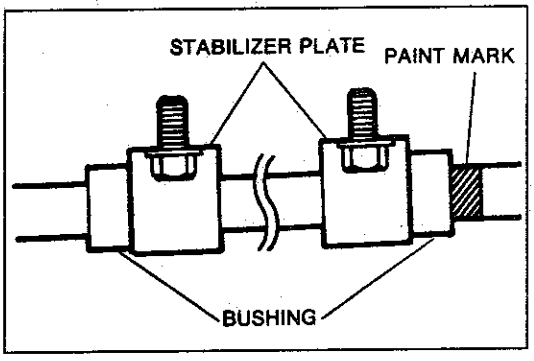
Removal / Inspection / Installation

1. Jack up the rear of the vehicle and support it on safety stands.
2. Remove the wheels and tires and the undercover.
3. Remove in the order shown in the figure.
4. Inspect all parts and repair or replace as necessary.
5. Install in the reverse order of removal, referring to **Installation Note**.
6. Install the wheels and tires.

Tightening torque: 89–117 N·m {9.0–12.0 kgf·m, 65–87 ft·lbf}



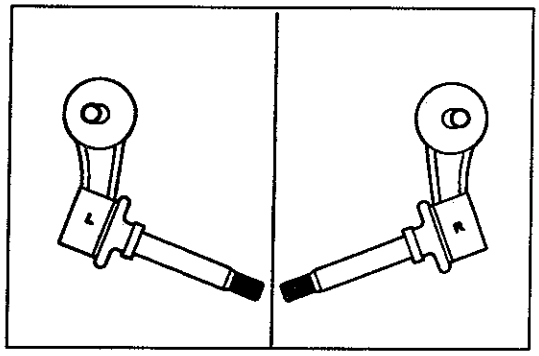
1. Nut
2. Nut
3. Stabilizer control link
   Inspect for damage and cracks
   Installation Note
   ..... page R–43
4. Bolt
5. Stabilizer plate
   Inspect for damage and cracks
6. Stabilizer bushing
   Inspect for wear and deterioration
7. Stabilizer bar
   Inspect for damage and bending
   Installation Note
   ..... below



Installation note

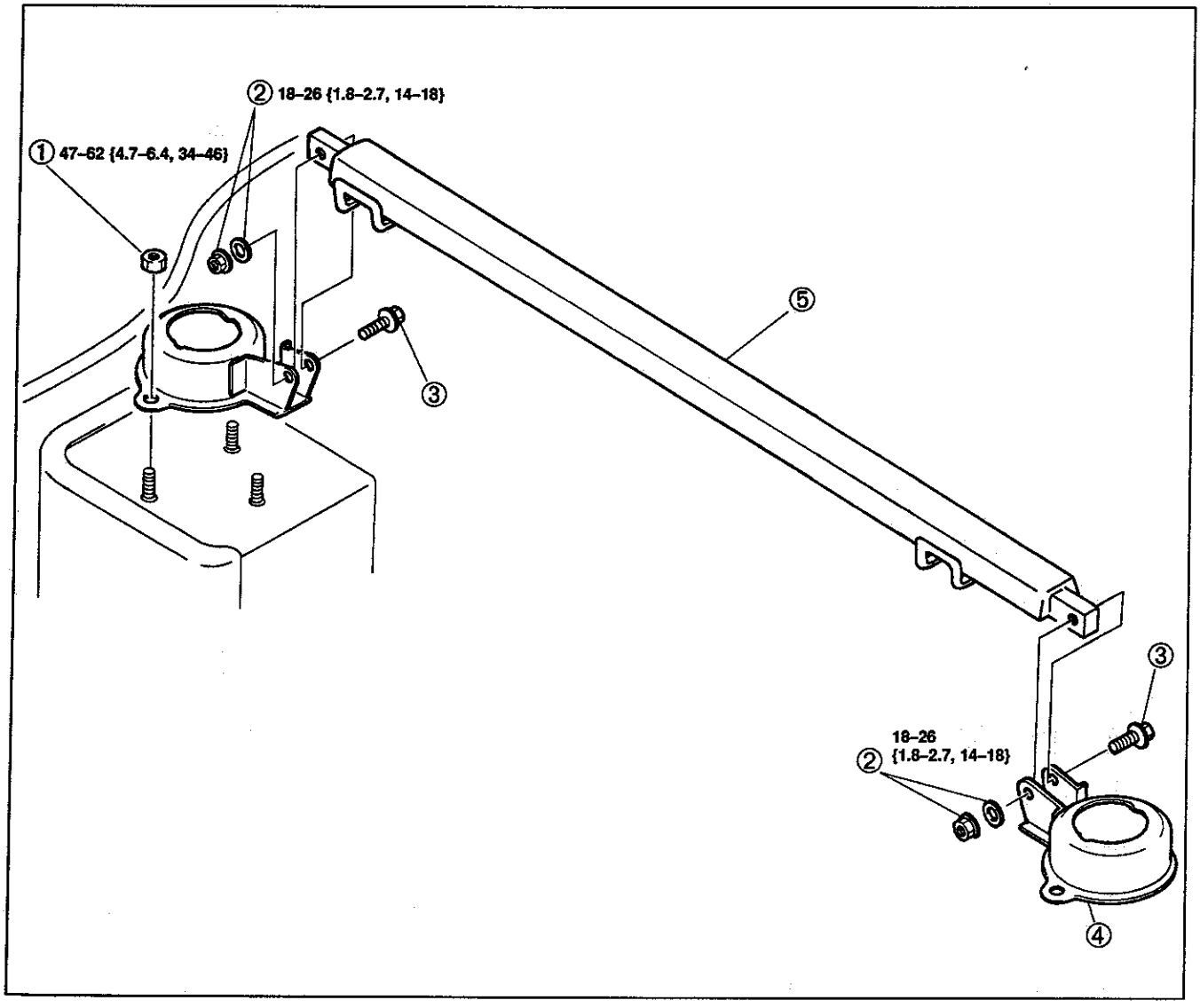
Stabilizer bar

Install the stabilizer bar with the white paint mark at the right side.



Stabilizer control link
Install the stabilizer control links with the R (right) and L (left) marks as shown.

REAR STRUT BAR
Removal / Inspection / Installation
1. Remove the suspension tower cover. (Refer to section S.)
2. Remove in the order shown in the figure.
3. Inspect all parts and repair or replace as necessary.
4. Install in the reverse order of removal.



1. Nut
2. Nut, washer
3. Bolt
4. Strut plate
5. Rear strut bar
   Inspect for damage and bending