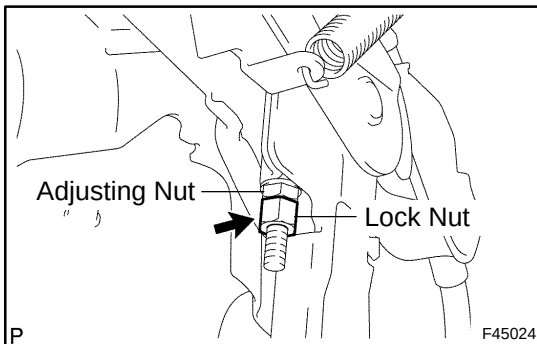


ADJUSTMENT

1. REMOVE REAR WHEEL
2. ADJUST PARKING BRAKE SHOE CLEARANCE (See page 33-17)
3. INSTALL REAR WHEEL
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
4. INSPECT PARKING BRAKE PEDAL TRAVEL
 - (a) Slowly depress the parking brake pedal all the way, and count the number of clicks.
Parking brake pedal travel: 3 - 5 clicks at 294 N (30 kgf, 66.0 lbf)
5. DISCONNECT BATTERY NEGATIVE TERMINAL(See page 60-1)
6. REMOVE FRONT DOOR SCUFF PLATE LH(See page 71-10)
7. REMOVE COWL SIDE TRIM BOARD LH(See page 71-10)
8. REMOVE INSTRUMENT PANEL FINISH PANEL SUB-ASSY LOWER LH (See page 71-10)

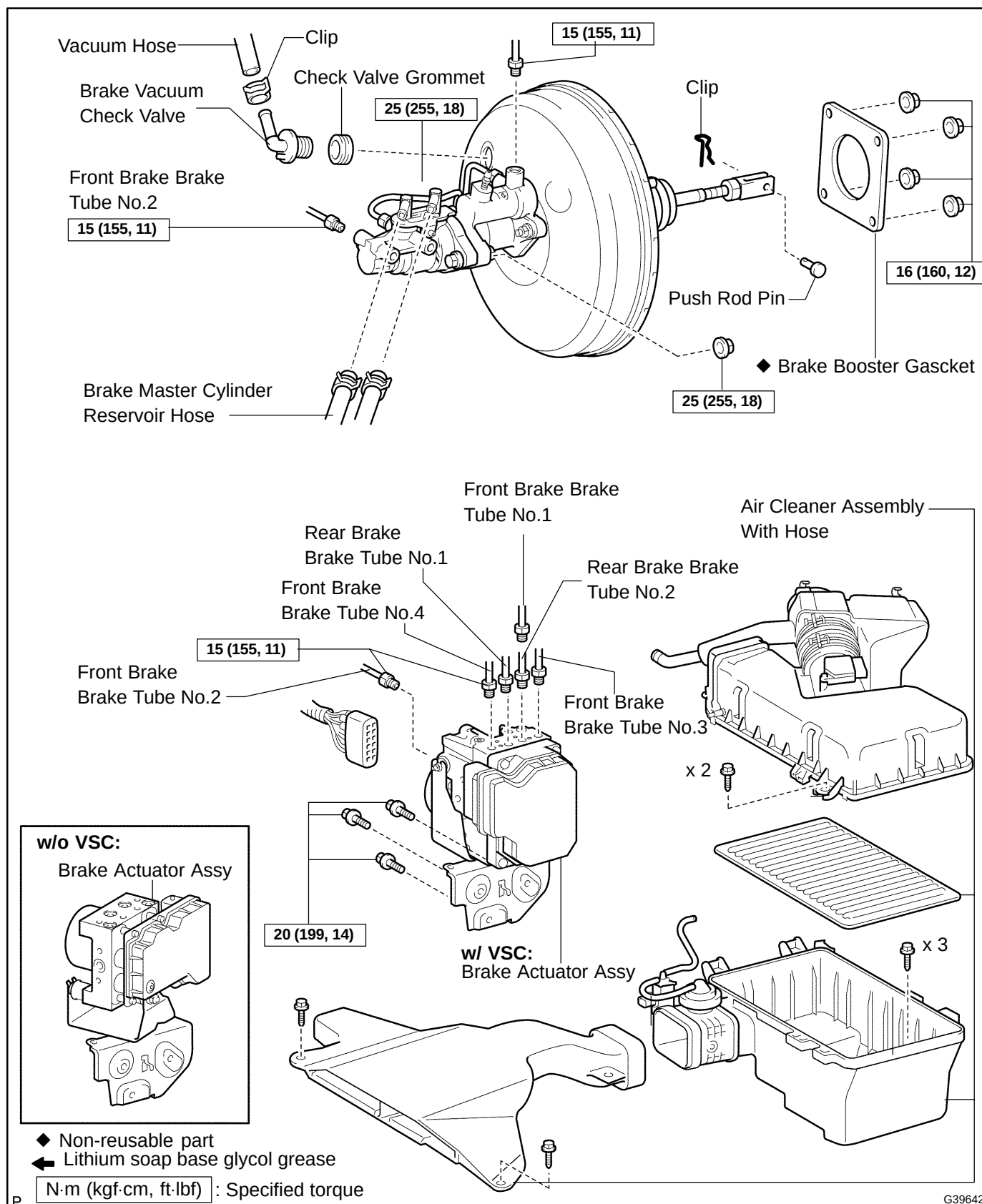


9. ADJUST PARKING BRAKE PEDAL TRAVEL
 - (a) Depress the parking brake pedal 3 notches to make a room for the procedure, and loosen the lock nut.
 - (b) Return the parking brake pedal to the original position.
 - (c) Turn the adjusting nut until the parking brake pedal travel corrects.
 - (d) Depress the parking brake pedal 3 notches to make a room for the procedure, and tighten the lock nut.
Torque: 5.4 N·m (55 kgf·cm, 48 in·lbf)
 - (e) Return the parking brake pedal to the original position.
 - (f) Check whether the parking brake drags or not.
 - (g) When operating the parking brake pedal, check that the parking brake pedal indicator light goes on.

320V1.01



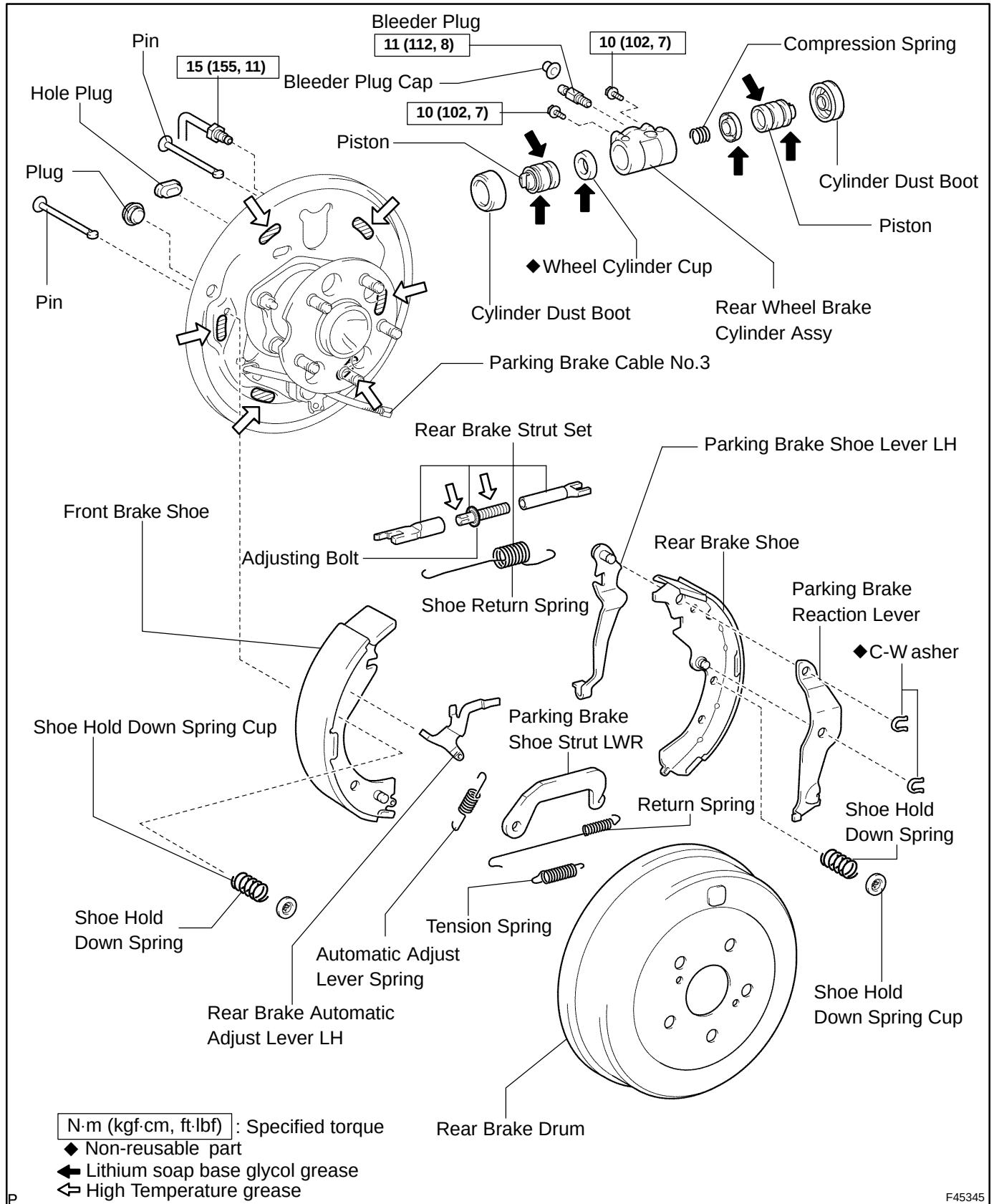
COMPONENTS



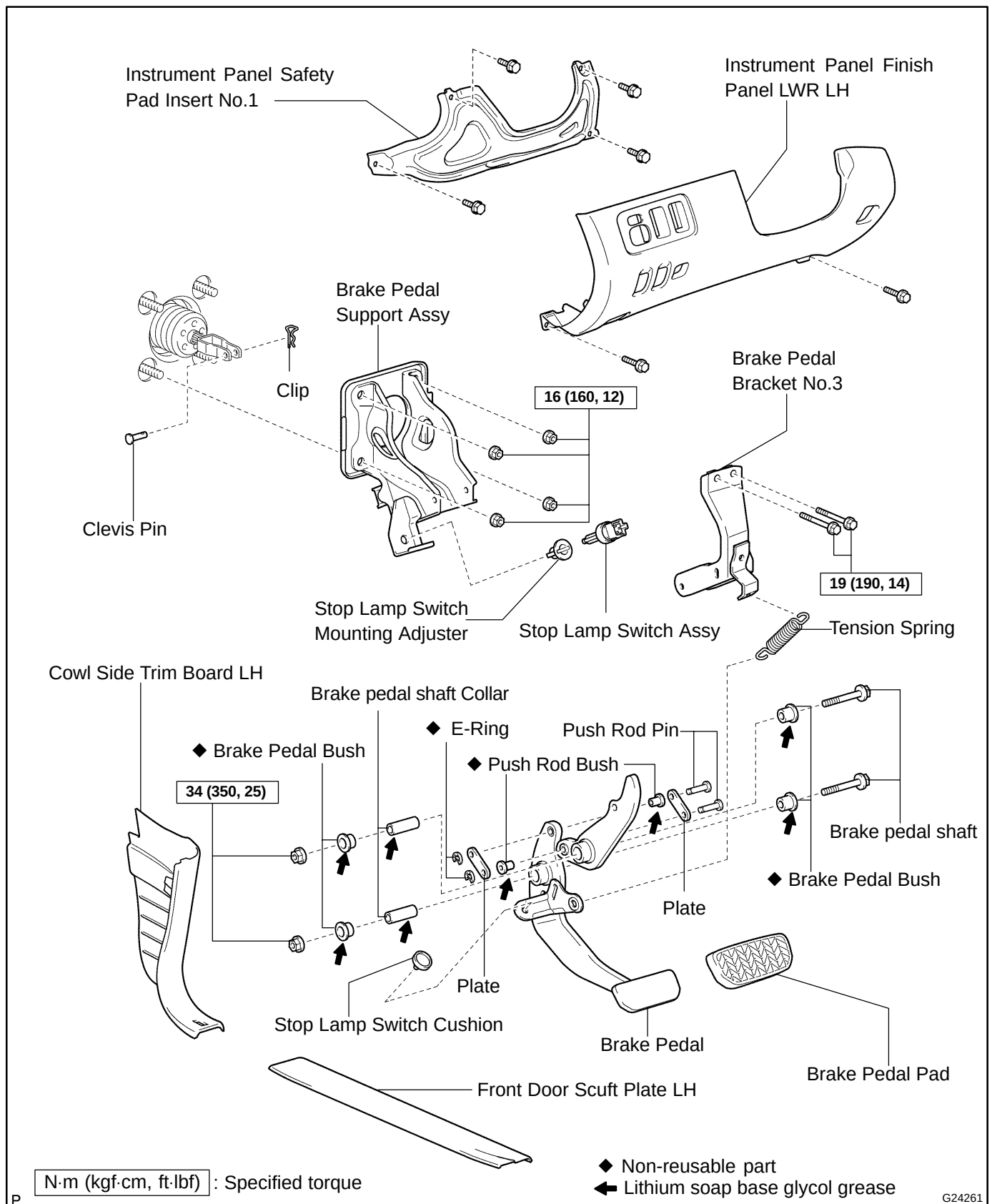
G39642

REAR DRUM BRAKE COMPONENTS

320V8-01

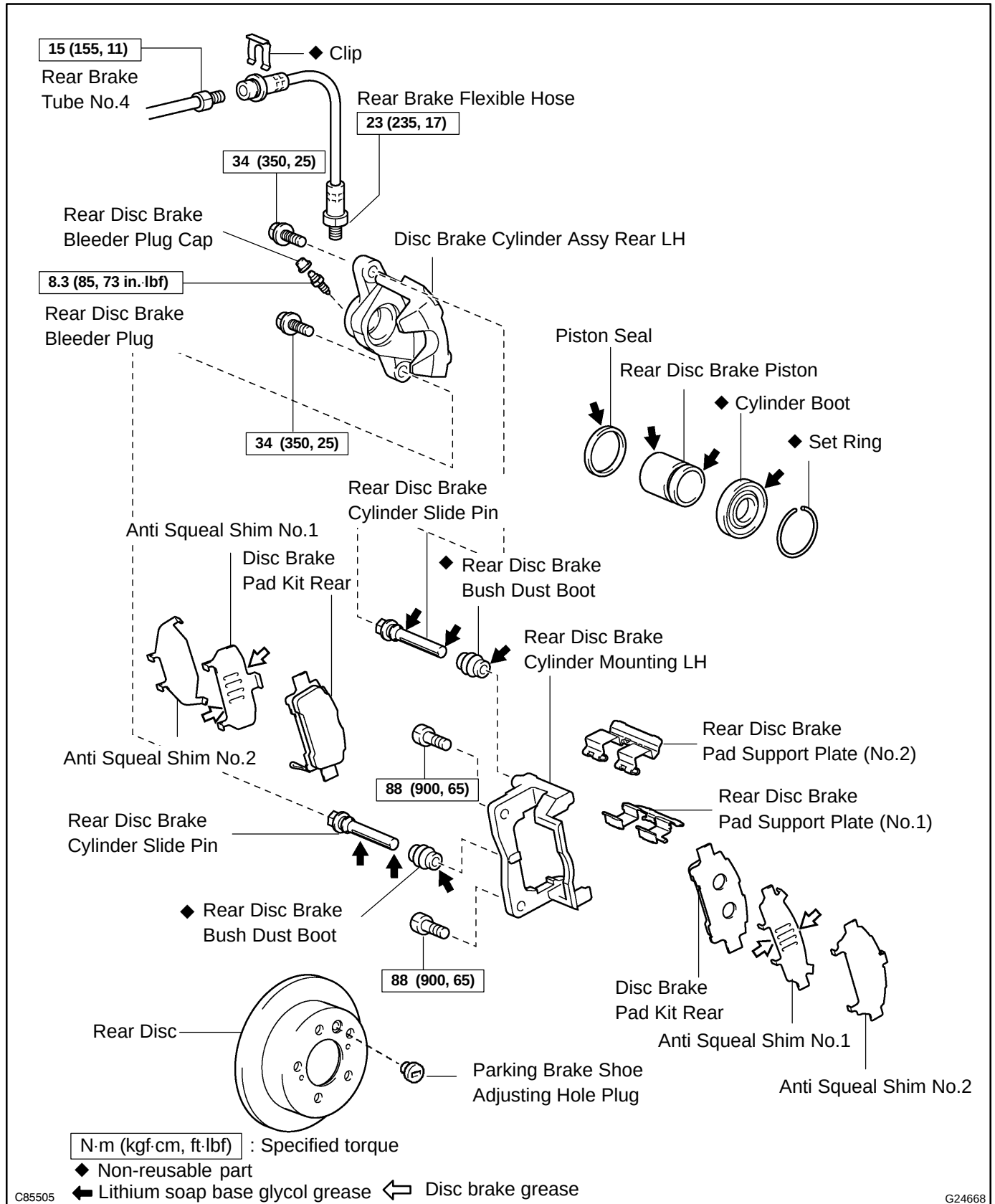


COMPONENTS



REAR DISC BRAKE COMPONENTS

320V6-01

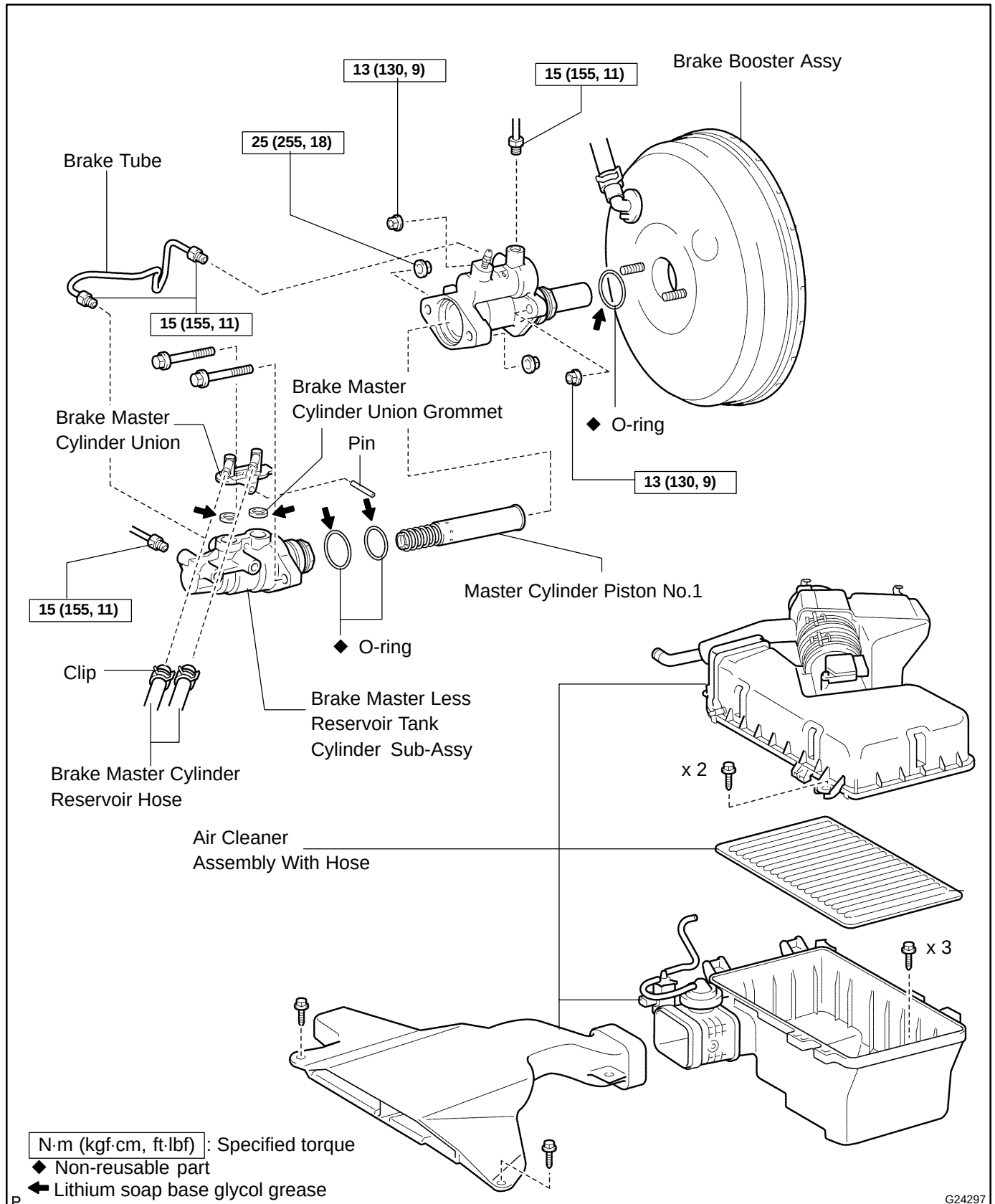


C85505

G24668

BRAKE MASTER LESS RESERVOIR TANK CYLINDER SUB-ASSY COMPONENTS

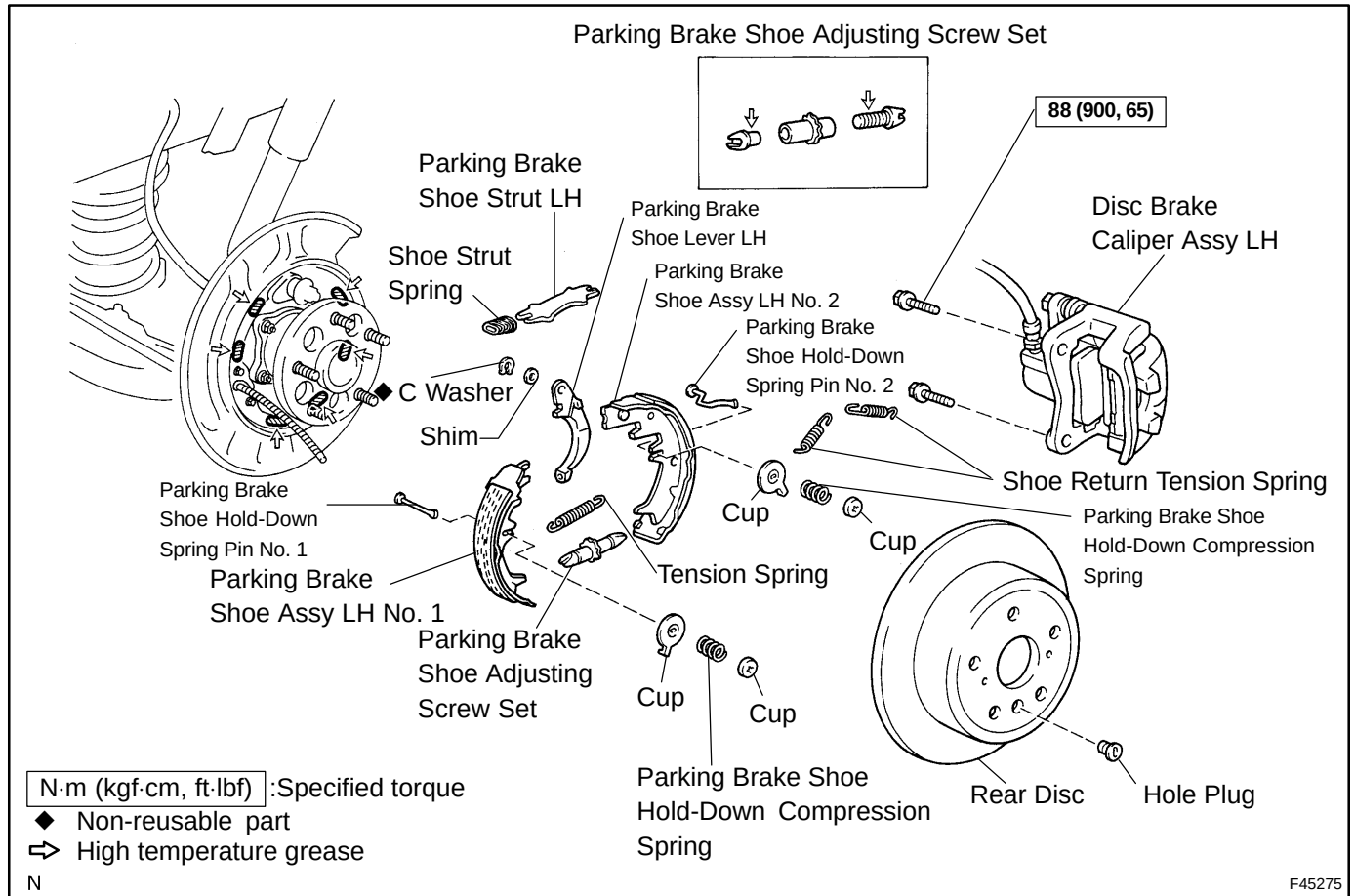
320UZ-01



G24297

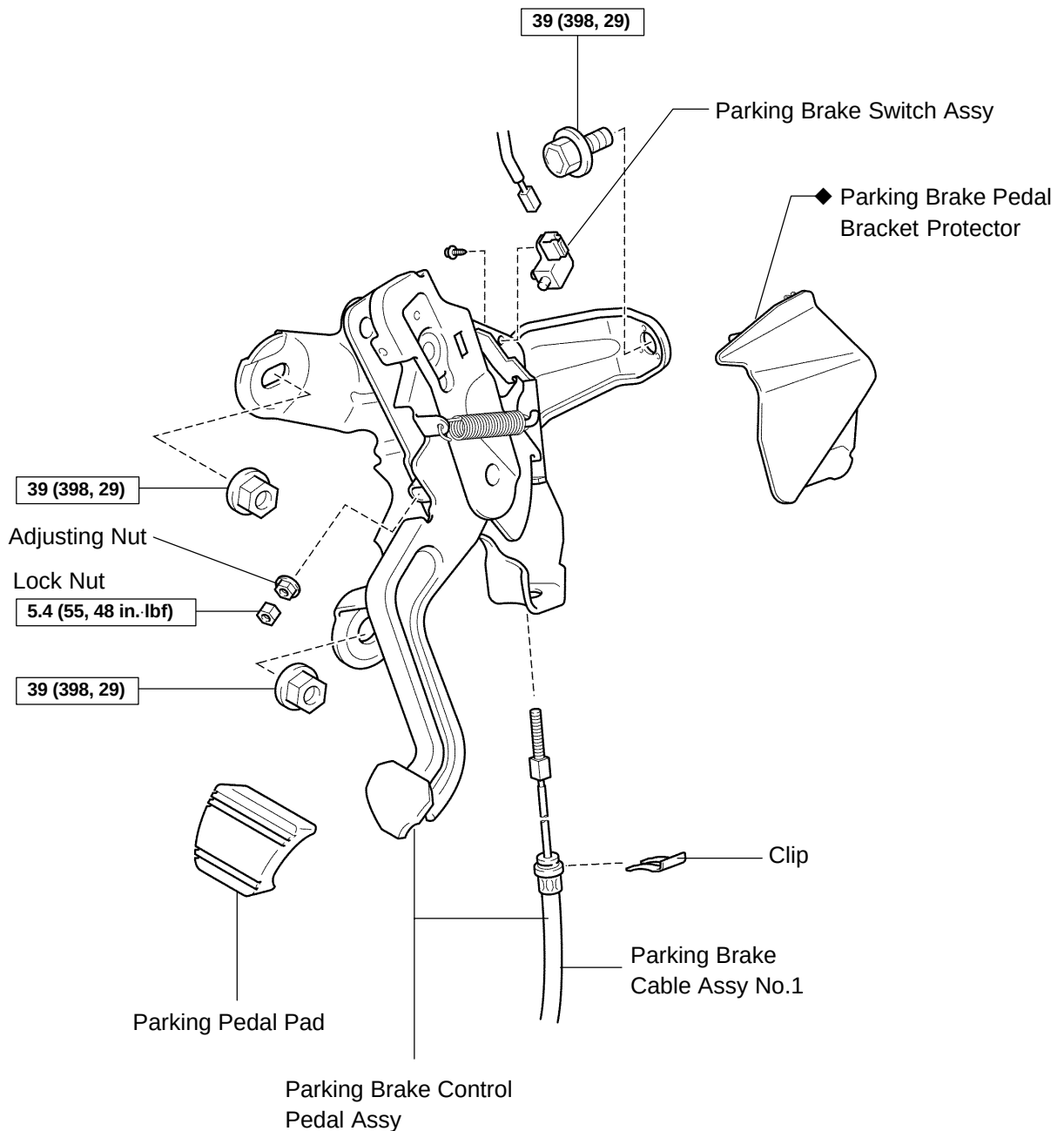
PARKING BRAKE ASSY COMPONENTS

330C2-01



PARKING BRAKE CONTROL PEDAL ASSY COMPONENTS

330BW-01



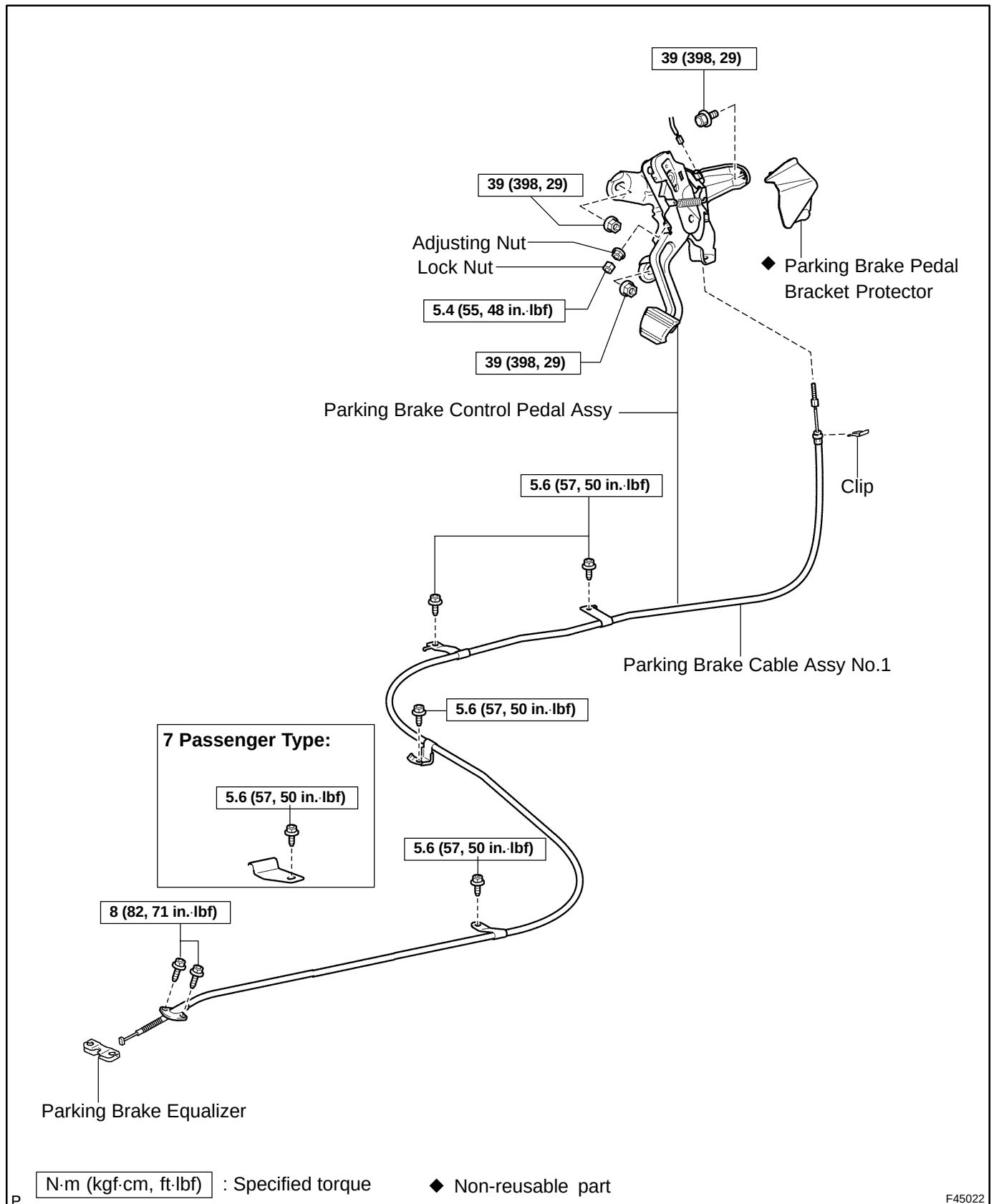
N·m (kgf·cm, ft·lbf) : Specified torque ◆ Non-reusable part

F45021

PARKING BRAKE CABLE ASSY NO.1

COMPONENTS

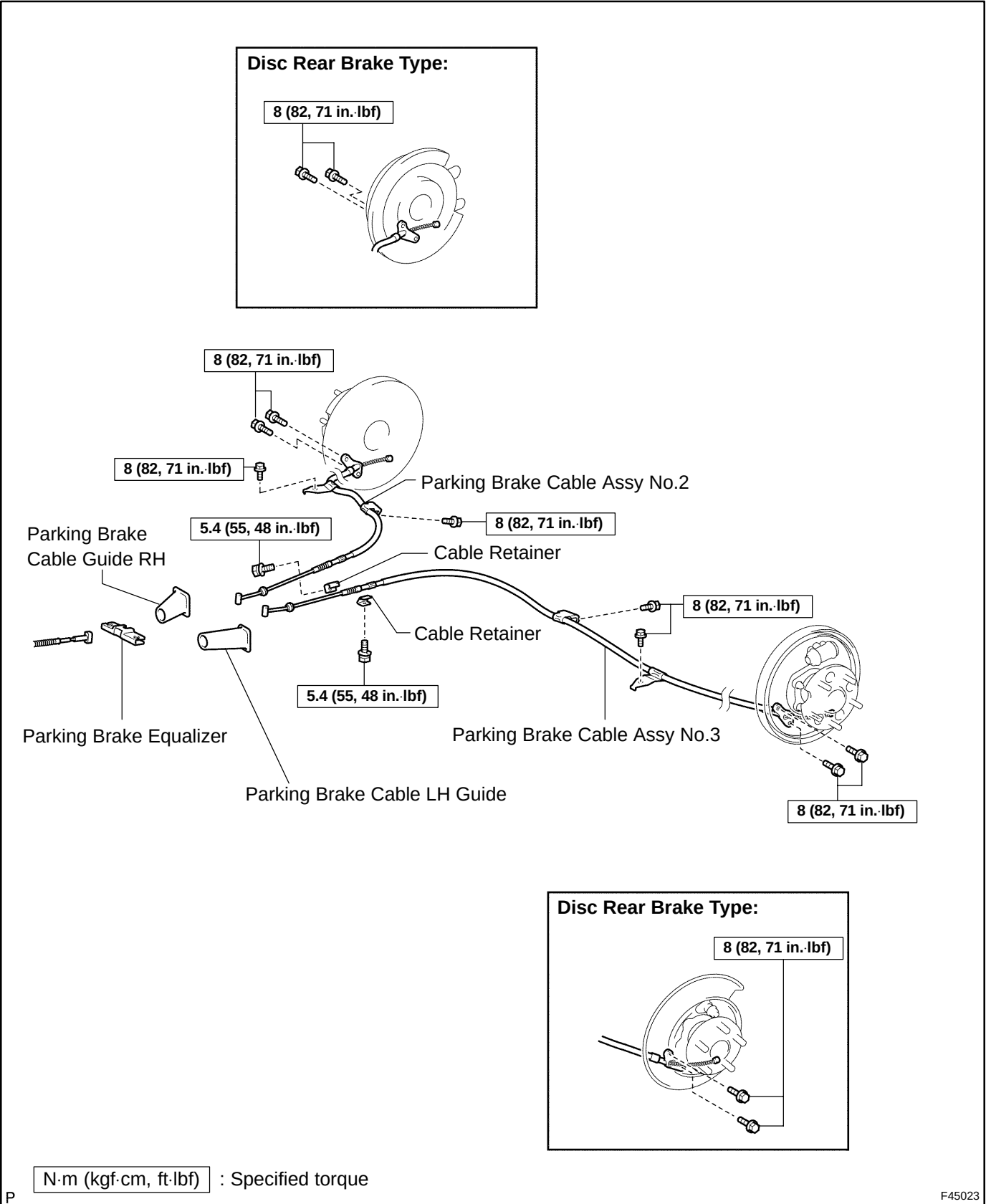
330BY-01



PARKING BRAKE CABLE ASSY NO.3

COMPONENTS

330C0-01



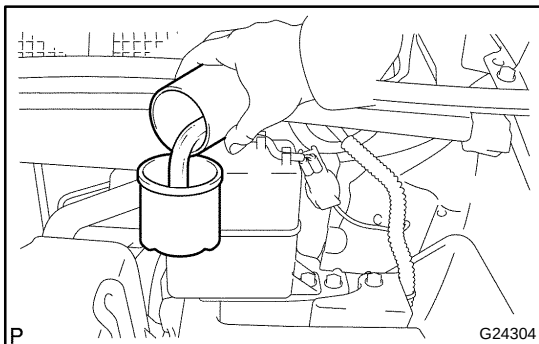
BRAKE FLUID BLEEDING

HINT:

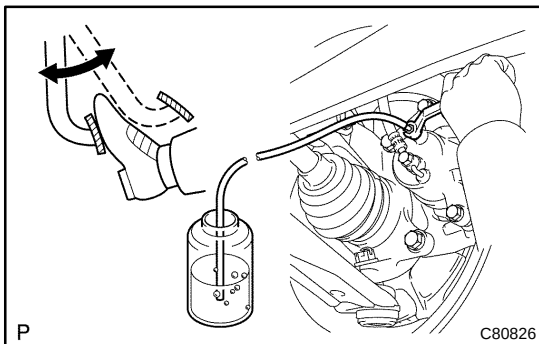
When working on the brake system or when air in the brake lines is suspected, bleed the air from the system.

NOTICE:

- Bleed air in order of the chassis, 3rd chamber, and chassis.
 - When the air is bled from the 3rd chamber, be sure to run the engine.
 - If the brake fluid attaches to any painted surfaces, wash it off immediately.
1. REMOVE COWL TOP PANEL SUB-ASSY OUTER FRONT (See page 55-33)

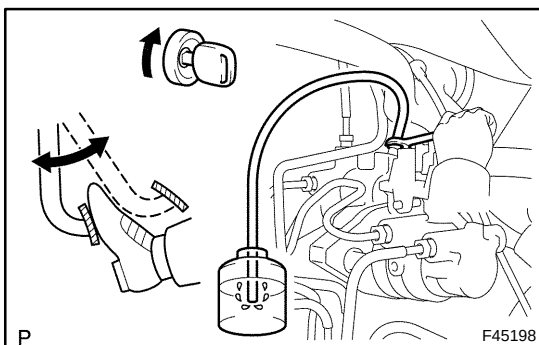


2. FILL RESERVOIR WITH BRAKE FLUID
Fluid: SAE J1703 or FMVSS No. 116 DOT3



3. BLEED BRAKE LINE
 - (a) Connect the vinyl tube to the brake caliper bleeder plug.
 - (b) Depress the brake pedal several times, then loosen the bleeder plug with the pedal held down.
 - (c) At the point when the fluid stops coming out, tighten the bleeder plug, then release the brake pedal.
 - (d) Repeat (b) and (c) until all the air in the fluid has been bled out.
 - (e) Repeat the above procedure to bleed the air out of the brake line for each wheel.

Torque: 8.3 N·m (85 kgf·cm, 73 in.-lbf)



4. BLEED MASTER CYLINDER

NOTICE:

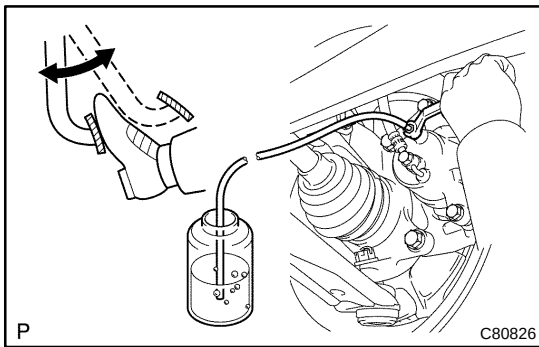
When the air is bled from the master cylinder (3rd chamber), be sure to run the engine.

HINT:

After disassembling the master cylinder or when if the reservoir becomes empty, bleed the air from the master cylinder.

- (a) Run the engine at idle.
- (b) Connect the vinyl tube to the brake caliper bleeder plug.

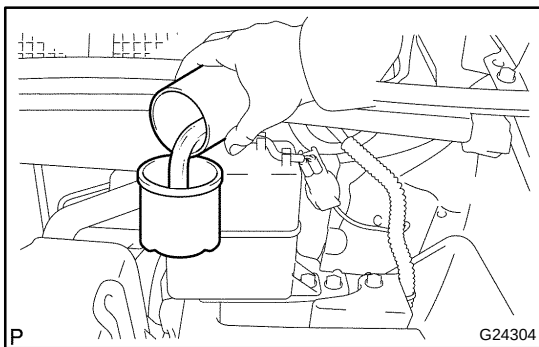
- (c) Open the brake caliper bleeder plug or wheel cylinder bleeder plug.
- (d) Depress the brake pedal several times, then loosen the master cylinder (3rd chamber) bleeder plug with the pedal held down.
- (e) At the point when the fluid stops coming out, tighten the master cylinder (3rd chamber) bleeder plug, then release the brake pedal.
- (f) Repeat (d) and (e) until all the air in the fluid has been bled out.
- (g) Tighten the master cylinder (3rd chamber) bleeder plug.
Torque: 11 N·m (112 kgf·cm, 8 ft·lbf)
- (h) Tighten the brake caliper bleeder plug or wheel cylinder bleeder plug.
Torque:
Disc: 8.3 N·m (85 kgf·cm, 73 in·lbf)
Drum: 11 N·m (112 kgf·cm, 8 ft·lbf)
- (i) Stop the engine.



5. BLEED BRAKE LINE

- (a) Connect the vinyl tube to the brake caliper.
- (b) Depress the brake pedal several times, then loosen the bleeder plug with the pedal held down.
- (c) At the point when the fluid stops coming out, tighten the bleeder plug, then release the brake pedal.
- (d) Repeat (b) and (c) until all the air in the fluid has been bled out.
- (e) Repeat the above procedure to bleed the air out of the brake line for each wheel.

Torque: 8.3 N·m (85 kgf·cm, 73 in·lbf)



6. CHECK FLUID LEVEL IN RESERVOIR

- (a) Check the fluid level and add fluid if necessary.

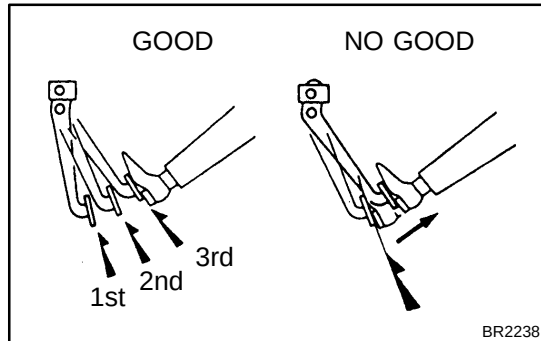
Fluid: SAE J1703 or FMVSS No. 116 DOT3

7. INSTALL COWL TOP PANEL SUB-ASSY OUTER FRONT (See page 55-33)

W/MASTER CYLINDER BRAKE BOOSTER ASSY

ON-VEHICLE INSPECTION

3203F-15



1. INSPECT BRAKE BOOSTER

(a) Air tightness check.

- (1) Start the engine and stop it after 1 or 2 minutes. Depress the brake pedal several times slowly.

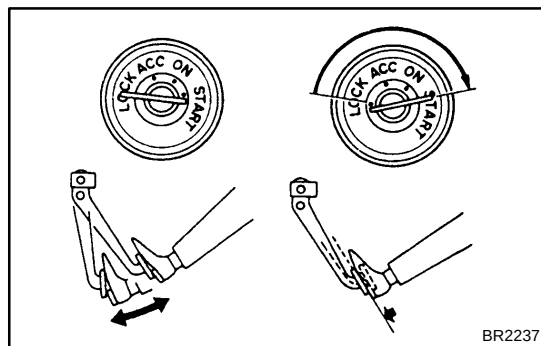
HINT:

If the pedal goes down farthest at the 1st time, and gradually rises at the 2nd or 3rd time, the booster is airtight.

- (2) Depress the brake pedal while the engine is running, and stop the engine with the pedal depressed.

HINT:

If there is no change in the pedal reserve distance after holding the pedal for 30 seconds, the booster is airtight.



(b) Operating check.

- (1) Depress the brake pedal several times with the ignition switch OFF and check that there is no change in the pedal reserve distance.
- (2) Depress the brake pedal and start the engine.

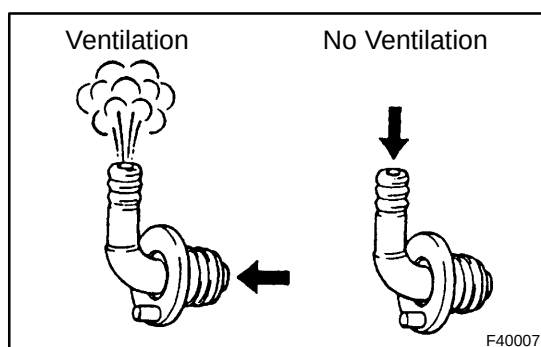
HINT:

If the pedal goes down slightly, the operation is normal.

2. INSPECT VACUUM CHECK VALVE

(a) Check the vacuum check valve.

- (1) Slide the clip and disconnect the vacuum hose.
- (2) Remove the vacuum check valve.



- (3) Check that there is ventilation from the booster to the engine, and no ventilation from the engine to the booster.
- (4) If any fault is found, replace the vacuum check valve.

BRAKE ACTUATOR ASSY (W/ VSC)

3203L-05

ON-VEHICLE INSPECTION

1. CONNECT HAND-HELD TESTER

- (a) Connect the hand-held tester to the DLC3.
- (b) Start the engine and run it at idle.
- (c) Select the ACTIVE TEST mode on the hand-held tester.

HINT:

Please refer to the hand-held tester operator's manual for further details.

2. INSPECT ACTUATOR MOTOR OPERATION

- (a) With the motor relay ON, check the actuator motor operation noise.
- (b) Turn the motor relay OFF.
- (c) Depress the brake pedal and hold it for about 15 seconds. Check that the brake pedal cannot be depressed.
- (d) With the motor relay ON, check that the pedal does not pulsate.

NOTICE:

Do not keep the motor relay ON for more than 5 seconds continuously. When operating it continuously, set the interval of more than 20 seconds.

- (e) Turn the motor relay OFF and release the brake pedal.

3. INSPECT RIGHT FRONT WHEEL OPERATION

NOTICE:

Never turn ON the solenoid which is not described below.

- (a) With the brake pedal depressed, perform the following operations.
- (b) Turn the SFRH and SFRR solenoid ON simultaneously, and check that the pedal cannot be depressed.

NOTICE:

Do not keep the solenoids ON for more than 5 seconds continuously. When operating them continuously, set the interval of more than 20 seconds.

- (c) Turn the SFRH and SFRR solenoid OFF simultaneously, and check that the pedal can be depressed.
- (d) Turn the motor relay ON, and check that the pedal returns.

NOTICE:

Do not keep the motor relay ON for more than 5 seconds continuously. When operating it continuously, set the interval of more than 20 seconds.

- (e) Turn the motor relay OFF and release the brake pedal.

4. INSPECT OTHER WHEEL OPERATION

- (a) Using the same procedure, check the solenoids of other wheels.

HINT:

Left front wheel: SFLH, SFLR

Right rear wheel: SRRH, SRRR

Left rear wheel: SRLH, SRLR

BRAKE ACTUATOR ASSY (W/O VSC)

ON-VEHICLE INSPECTION

1. CONNECT HAND-HELD TESTER

- (a) Connect the hand-held tester to the DLC3.
- (b) Start the engine and run it at idle.
- (c) Select the ACTIVE TEST mode on the hand-held tester.

HINT:

Please refer to the hand-held tester operator's manual for further details.

2. INSPECT ACTUATOR MOTOR OPERATION

- (a) With the motor relay ON, check the actuator motor operation noise.
- (b) Turn the motor relay OFF.
- (c) Depress the brake pedal and hold it for about 15 seconds. Check that the brake pedal cannot be depressed.
- (d) With the motor relay ON, check that the pedal does not pulsate.

NOTICE:

Do not keep the motor relay ON for more than 5 seconds continuously. When operating it continuously, set the interval of more than 20 seconds.

- (e) Turn the motor relay OFF and release the brake pedal.

3. INSPECT RIGHT FRONT WHEEL OPERATION

NOTICE:

Never turn ON the solenoid which is not described below.

- (a) With the brake pedal depressed, perform the following operations.
- (b) Turn the SFRH and SFRR solenoid ON simultaneously, and check that the pedal cannot be depressed.

NOTICE:

Do not keep the solenoids ON for more than 5 seconds continuously. When operating them continuously, set the interval of more than 20 seconds.

- (c) Turn the SFRH and SFRR solenoid OFF simultaneously, and check that the pedal can be depressed.
- (d) Turn the motor relay ON, and check that the pedal returns.

NOTICE:

Do not keep the motor relay ON for more than 5 seconds continuously. When operating it continuously, set the interval of more than 20 seconds.

- (e) Turn the motor relay OFF and release the brake pedal.

4. INSPECT OTHER WHEEL OPERATION

- (a) Using the same procedure, check the solenoids of other wheels.

HINT:

Left front wheel: SFLH, SFLR

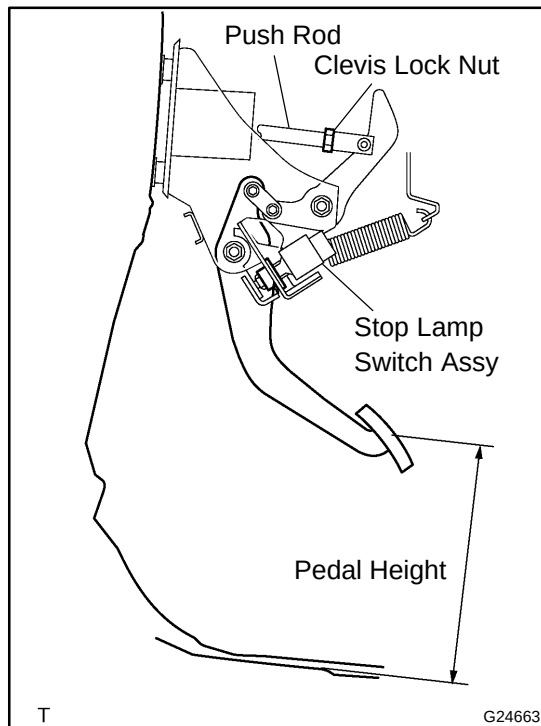
Right rear wheel: SRRH, SRRR

Left rear wheel: SRLH, SRLR

BRAKE PEDAL SUPPORT ASSY

ON-VEHICLE INSPECTION

320UW-02



1. INSPECT BRAKE PEDAL HEIGHT

- (a) Check the brake pedal height.

Pedal height from dash panel:

150.3 to 160.3 mm (5.917 to 6.311 in.)

NOTICE:

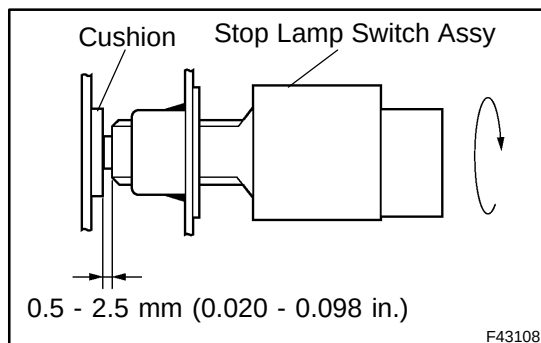
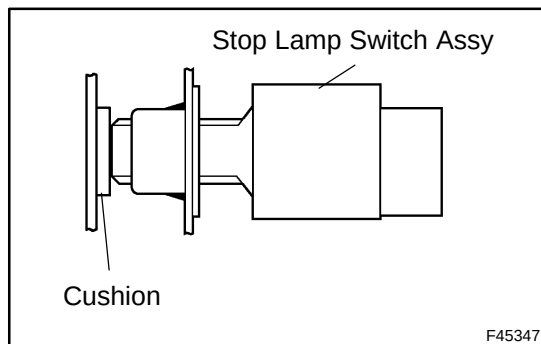
Do not adjust the pedal height. Doing so by changing the push rod length will structurally change the pedal ratio.

2. CHECK AND ADJUST STOP LAMP SWITCH

- (a) Disconnect the stop lamp switch assy connector from the stop lamp switch assy.
- (b) Turn the stop lamp switch assy counterclockwise and remove the stop lamp switch assy.
- (c) Insert the stop lamp switch assy until the body hits the cushion.

NOTICE:

When inserting the stop lamp switch assy, support the pedal from behind so that the pedal is not pushed in.



- (d) Make a quarter turn clockwise to install the stop lamp switch assy.

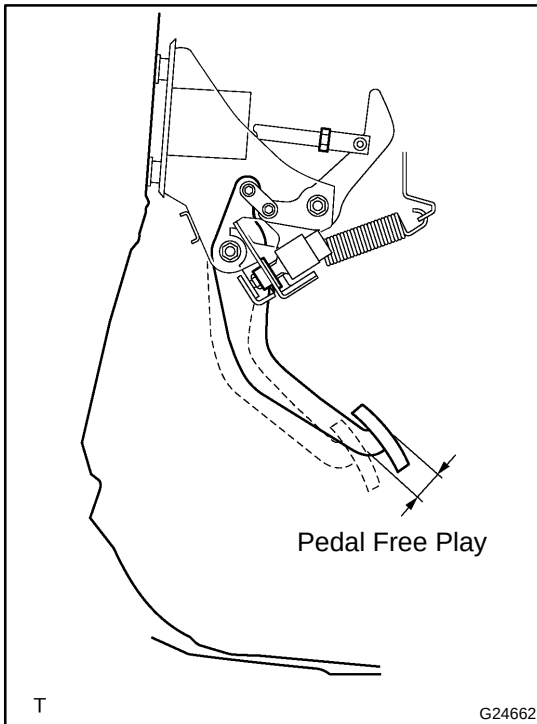
NOTICE:

- **When inserting the stop lamp switch assy, support the pedal from behind so that the pedal is not pushed in.**
- **The turning torque for installing the stop lamp switch assy.**

Torque: 1.5 N·m (15 kgf·cm, 13 in.-lbf) or less

- (e) Connect the stop lamp switch connector to the stop lamp switch assy.
- (f) Check the protrusion of the rod.

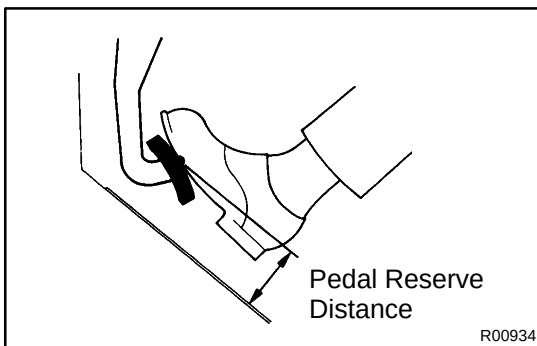
Protrusion of the rod: 0.5 to 2.5 mm (0.020 to 0.098 in.)



3. CHECK PEDAL FREE PLAY

- (a) Stop the engine and depress the brake pedal several times until there is no more vacuum left in the booster.
- (b) Push in the pedal until the beginning of the resistance is felt. Measure the distance, as shown.

Pedal free play: 1 to 6 mm (0.04 to 0.24 in.)



4. CHECK PEDAL RESERVE DISTANCE

- (a) Release the parking brake pedal.
With the engine running, depress the pedal and measure the pedal reserve distance, as shown.

Pedal reserve distance from asphalt sheet at 490 N (50 kgf, 110 lbf): More than 52 mm (2.0 in.)

If the distance is out of the specification, troubleshoot the brake system.

BRAKE SYSTEM

32038-06

PRECAUTION

- Care must be taken to replace each part properly as it could affect the performance of the brake system and result in a driving hazard. Replace the parts with parts having the same part number or equivalent.
- It is very important to keep parts and the area clean when repairing the brake system.
- If the vehicle is equipped with a mobile communication system, refer to the precaution in the INTRODUCTION.

PROBLEM SYMPTOMS TABLE

Use the table below to help you find the cause of the problem. The numbers indicate the priority of the likely cause of the problem. Check each part in order. If necessary, replace these parts.

Symptom	Suspect Area	See page
Low pedal or spongy pedal	3. Fluid leaks for brake system	-
	4. Air in brake system	32-4
	5. Piston seals (Worn or damaged)	32-22
	6. Brake Master cylinder (Faulty)	32-29
Brake drag	6. Brake Master cylinder (Faulty)	32-13
	1. Brake pedal freeplay (Minimal)	32-6
	2. Parking brake pedal travel (Out of adjustment)	33-2
	3. Parking brake wire (Sticking)	33-8
		33-12
	4. Parking brake shoe clearance (Out of adjustment)	33-17
	5. Pad (Cracked or distorted)	32-22
		32-37
	6. Shoe (Cracked or distorted)	32-29
	7. Piston (Stuck or Frozen)	32-22
Brake pull		32-29
		32-37
	1. Piston (Stuck or Frozen)	32-22
		32-29
		32-37
	2. Pad (Oily)	32-22
		32-37
	3. Disc (Scored)	32-22
		32-37
	4. Pad (Cracked or distorted)	32-22
Hard pedal but brake inefficient		32-37
	5. Drum (Scored)	32-29
	6. Shoe (Cracked or distorted)	32-29
	1. Fluid leaks for brake system	-
	2. Air in brake system	32-4
	3. Pad (Worn)	32-22
		32-37
	4. Pad (Cracked or distorted)	32-22
		32-37
	5. Pad (Oily)	32-22
		32-37
	6. Pad (Glazed or Scored)	32-22
		32-37
	7. Vacuum leaks for booster system	32-13

BRAKE - BRAKE SYSTEM

Noise from brakes	1. Pad (Cracked or distorted)	32-22
		32-37
	2. Installation bolt (Loose)	32-22
		32-37
	3. Disc (Scored)	32-22
		32-37
	4. Pad support plate (Loose)	32-22
		32-37
	5. Sliding pin (Worn)	32-22
		32-37
	6. Pad (dirty or Glazed)	32-22
		32-37
	7. Tension or return spring (Faulty)	32-29
	8. Anti-squeal shim (Damaged)	32-22
		32-37
	9. Shoe hold-down spring (Damaged)	32-29

PARKING BRAKE SYSTEM

330BU-01

PROBLEM SYMPTOMS TABLE

Use the table below to help you find the cause of the problem. The numbers indicate the likelihood of the cause in the descending order. Check each part in the order shown. Replace these parts as necessary.

Symptom	Suspect Area	See page
Brake drag	1. Parking brake pedal travel (Out of adjustment)	33-2
	2. Parking brake wire (Sticking)	33-8
		33-12
	3. Parking brake shoe clearance (Out of adjustment)	33-17
	4. Parking brake shoe lining (Cracked or distorted)	33-17
	5. Tension or return spring (Damaged)	33-17

OVERHAUL

HINT:

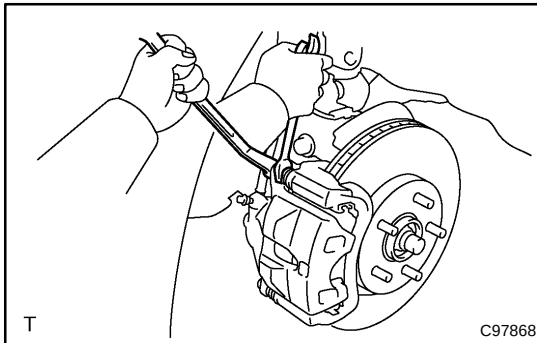
Overhaul the RH side by the same procedure as the LH side.

1. REMOVE FRONT WHEEL

2. DRAIN BRAKE FLUID

NOTICE:

Wash the brake fluid off immediately if it attaches to any painted surface.



3. REMOVE FRONT DISC BRAKE CYLINDER SUB-ASSY

- (a) Remove the union bolt and 2 gaskets from the front disc brake cylinder sub-assy, then disconnect the flexible hose.
- (b) Hold the front disc brake cylinder slide pin and remove the 2 bolts.

4. REMOVE DISC BRAKE PAD KIT FRONT (PAD ONLY)

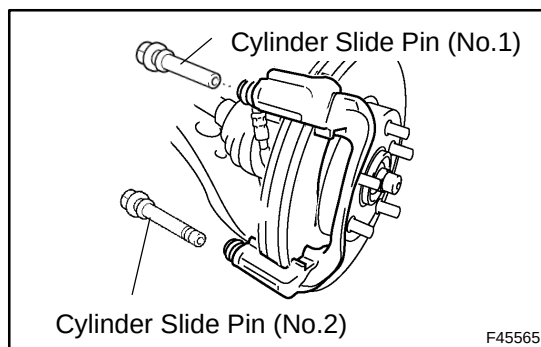
- (a) Remove the disc brake pad kit front from the front disc brake cylinder mounting LH.

5. REMOVE ANTI SQUEAL SHIM KIT FRONT

- (a) Remove the anti squeal shim and pad wear indicator plate from the each pad.

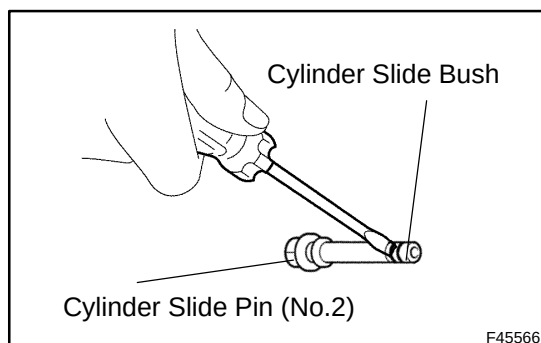
6. REMOVE FRONT DISC BRAKE PAD SUPPORT PLATE

- (a) Remove the front disc brake pad support plate (No.1) and front disc brake pad support plate (No.2) from the front disc brake cylinder mounting LH.



7. REMOVE FRONT DISC BRAKE CYLINDER SLIDE PIN

- (a) Remove the front disc brake cylinder slide pin (No.1) and front disc brake cylinder slide pin (No.2) from the front disc brake cylinder mounting LH.

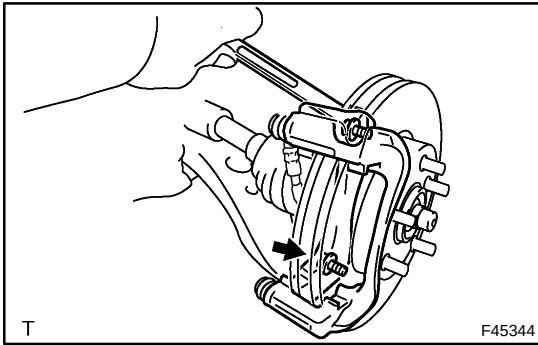


8. REMOVE FRONT DISC BRAKE CYLINDER SLIDE BUSH

- (a) Using a screwdriver, remove the front disc brake cylinder slide bush from the front disc brake cylinder slide pin (No.2).

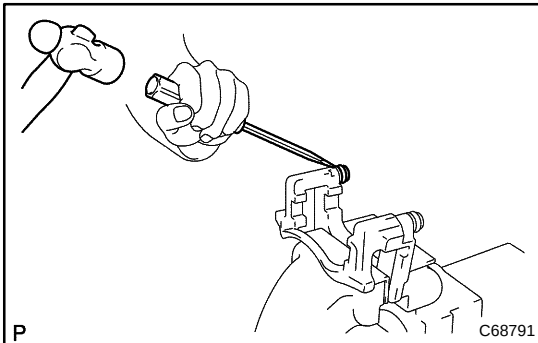
NOTICE:

Do not damage the front disc brake cylinder slide pin (No.2).



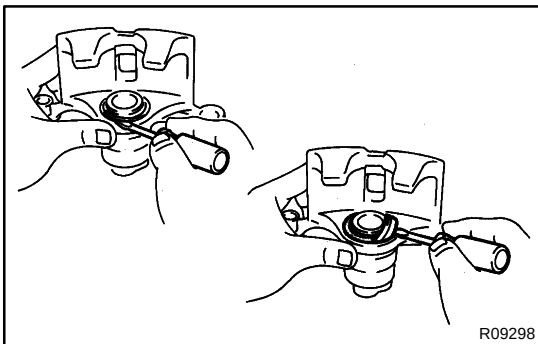
9. REMOVE FRONT DISC BRAKE CYLINDER MOUNTING LH

- (a) Remove the 2 bolts and front disc brake cylinder mounting LH.



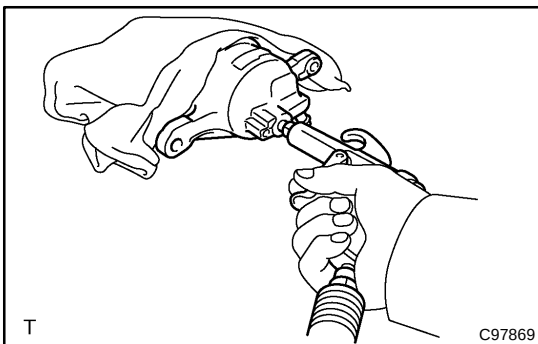
10. REMOVE FRONT DISC BRAKE BUSH DUST BOOT

- (a) Using soft jaws on the vise, hold the front disc brake cylinder mounting LH in the vise through aluminum plates.
- (b) Using a screwdriver and hammer, remove the 2 front disc brake bush dust boots from the front disc brake cylinder mounting LH.



11. REMOVE CYLINDER BOOT

- (a) Using a screwdriver, remove the set ring and cylinder boot.



12. REMOVE FRONT DISC BRAKE PISTON

- (a) Place a shop rug, between the front disc brake piston and the disc brake cylinder sub-assy.
- (b) Use compressed air to remove the front disc brake piston from the disc brake cylinder sub-assy.

CAUTION:

Do not place your fingers in front of the piston when using compressed air.

NOTICE:

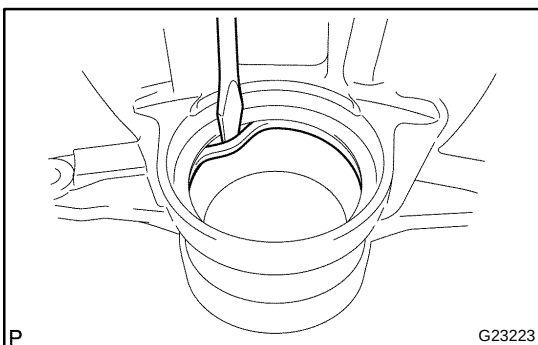
Do not spatter the brake fluid.

13. REMOVE PISTON SEAL

- (a) Using a screwdriver, remove the piston seal from the front disc brake cylinder sub-assy.

NOTICE:

Do not damage the inner cylinder and cylinder groove.

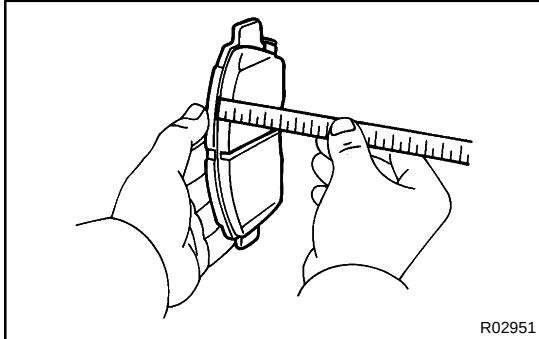


14. REMOVE FRONT DISC BRAKE BLEEDER PLUG

- (a) Remove the front disc brake bleeder plug from the front disc brake cylinder sub-assy.

15. REMOVE FRONT DISC BRAKE BLEEDER PLUG CAP**16. INSPECT BRAKE CYLINDER AND PISTON**

- (a) Check the brake cylinder bore and front disc brake piston for rust or scoring.

**17. INSPECT PAD LINING THICKNESS**

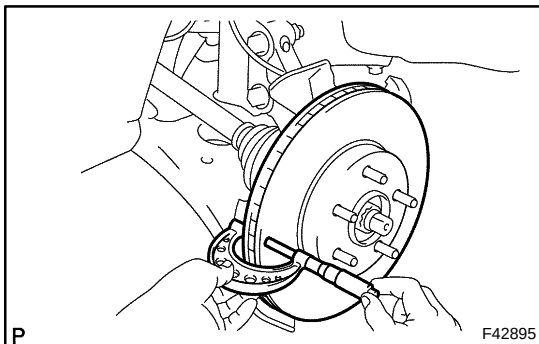
- (a) Using a ruler, measure the pad lining thickness.

Standard thickness: 12.0 mm (0.472 in.)

Minimum thickness: 1.0 mm (0.039 in.)

18. INSPECT FRONT DISC BRAKE PAD SUPPORT PLATE

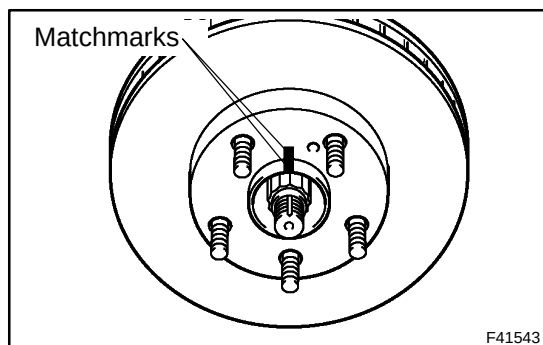
- (a) Inspect the front disc brake pad support plate (No.1) and front disc brake pad support plate (No.2). Make sure that they have sufficient rebound, no deformation, cracks or wear, and have had all rust and dirt cleaned off.

**19. INSPECT DISC THICKNESS**

- (a) Using a micrometer, measure the disc thickness.

Standard thickness: 28.0 mm (1.102 in.)

Minimum thickness: 26.0 mm (1.024 in.)

**20. REMOVE FRONT DISC**

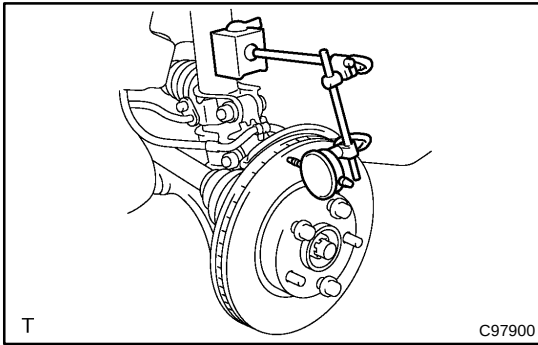
- (a) Place matchmarks on the front disc and the axle hub.
(b) Remove the front disc.

21. INSTALL FRONT DISC

- (a) Aligning the matchmarks, install the front disc.

HINT:

Select the installation position where the disc has the minimum runout.

**22. INSPECT DISC RUNOUT**

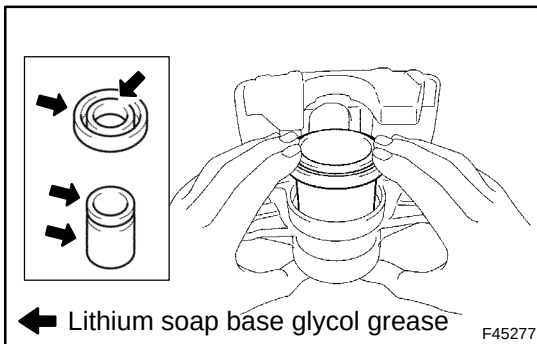
- (a) Temporarily fasten the disc with the hub nuts.
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
- (b) Using a dial indicator, measure the disc runout 10 mm (0.39 in.) away from the outer edge of the disc.
Maximum disc runout: 0.05 mm (0.0020 in.)
- (c) If the disc runout is the maximum value or greater, check the bearing play in the axial direction and check for the axle hub runout (See page 30-3). If the bearing play and axle hub runout are normal, adjust the disc runout or grind it on a "On-car" brake lathe.

23. TEMPORARILY TIGHTEN FRONT DISC BRAKE BLEEDER PLUG

- (a) Temporarily install the front disc brake bleeder plug to the front disc brake cylinder sub-assy.

24. INSTALL FRONT DISC BRAKE BLEEDER PLUG CAP**25. INSTALL PISTON SEAL**

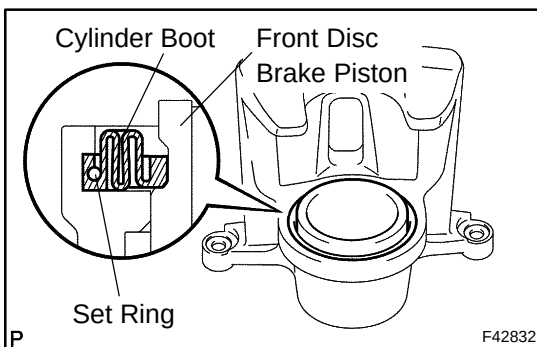
- (a) Apply lithium soap base glycol grease to a new piston seal.
- (b) Install the piston seal to the front disc brake cylinder sub-assy.

**26. INSTALL FRONT DISC BRAKE PISTON**

- (a) Apply lithium soap base glycol grease to the front disc brake piston and new cylinder boot.
- (b) Install the cylinder boot to the front disc brake piston.
- (c) Install the front disc brake piston to the front disc brake cylinder sub-assy.

NOTICE:

Do not install the piston forcibly in the front disc brake cylinder sub-assy.

**27. INSTALL CYLINDER BOOT**

- (a) Install a new cylinder boot to the front disc brake cylinder sub-assy .

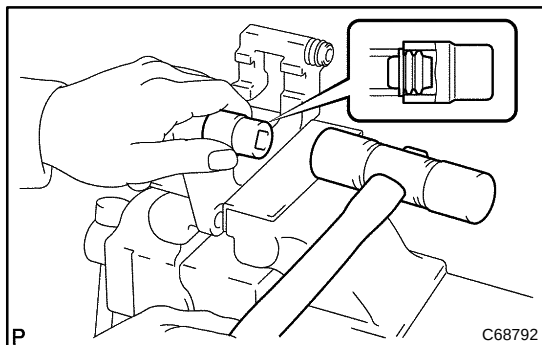
NOTICE:

Install the boot securely to the grooves of the cylinder and piston.

- (b) Using a screwdriver, install the set ring.

NOTICE:

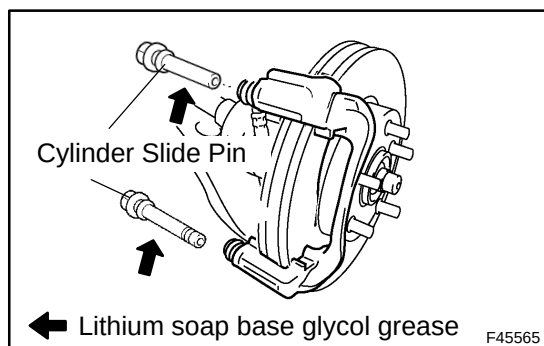
Do not damage the cylinder boot.

**28. INSTALL FRONT DISC BRAKE BUSH DUST BOOT**

- Using soft jaws on the vise, hold the front disc brake cylinder mounting LH in the vise through aluminum plates.
- Place front disc brake cylinder mounting LH in vise.
- Apply lithium soap base glycol grease to the sealing surface of 2 new front disc brake bush dust boots.
- Using a socket wrench (19 mm) and hammer, drive the 2 front disc brake bush dust boots to the front disc brake cylinder mounting LH.

29. INSTALL FRONT DISC BRAKE CYLINDER SLIDE BUSH

- Apply the lithium soap base glycol grease to a new front disc brake cylinder slide bush.
- Install the cylinder slide bush to the bottom side of the front disc brake cylinder slide pin (No.2).

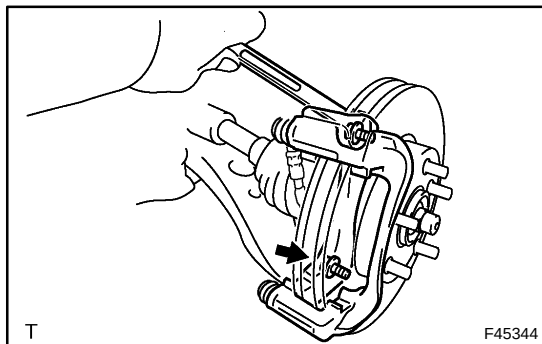
**30. INSTALL FRONT DISC BRAKE CYLINDER SLIDE PIN**

- Apply the lithium soap base glycol grease to the sliding part and the sealing surface of the front disc brake cylinder slide pin (No.1) and front disc brake cylinder slide pin (No.2).
- Install the front disc brake cylinder slide pin (No.1) and front disc brake cylinder slide pin (No.2) to the front disc brake cylinder mounting LH.
- Install the front disc brake cylinder slide pin (No.2) to the front disc brake cylinder mounting LH.

31. INSTALL FRONT DISC BRAKE CYLINDER MOUNTING LH

- Install the front disc brake cylinder mounting with the 2 bolts.

Torque: 107 N·m (1,090 kgf·cm, 79 ft·lbf)

**32. INSTALL FRONT DISC BRAKE PAD SUPPORT PLATE**

- Install the front disc brake pad support plate (No.1) and front disc brake pad support plate (No.2) to the front disc brake cylinder mounting LH.

33. INSTALL ANTI SQUEAL SHIM KIT FRONT**NOTICE:**

If necessary, replace the anti squeal shim kit when replacing the brake pad.

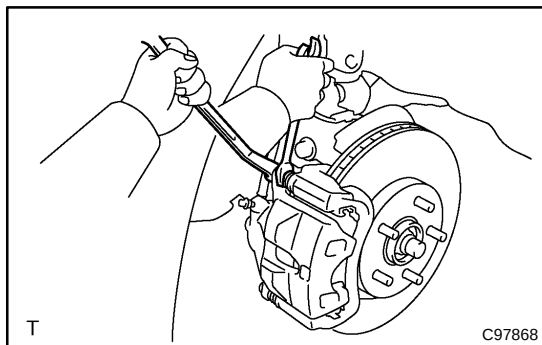
- Apply disc brake grease to each anti squeal shim.
- Install anti squeal shims on each pad.
- Install the pad wear indicator plate facing upward, and install each pad.

34. INSTALL DISC BRAKE PAD KIT FRONT (PAD ONLY)

- Install the disc brake pad kit front to the front disc brake cylinder mounting LH.

NOTICE:

There should be no oil or grease on the friction surfaces of the pads and the disc.

**35. INSTALL FRONT DISC BRAKE CYLINDER SUB-ASSY**

- (a) Install the front disc brake cylinder sub-assy with the 2 bolts.

Torque: 34 N·m (350 kgf·cm, 25 ft·lbf)

- (b) Install a 2 new gaskets and flexible hose with the union bolt.

Torque: 29 N·m (296 kgf·cm, 21 ft·lbf)

HINT:

Install the flexible hose lock securely in the lock hole in the disc brake cylinder.

36. FILL RESERVOIR WITH BRAKE FLUID (See page 32-4)**37. BLEED MASTER CYLINDER (See page 32-4)**

SST 09023-00101

38. BLEED BRAKE LINE (See page 32-4)**39. CHECK FLUID LEVEL IN RESERVOIR (See page 32-4)****40. CHECK BRAKE FLUID LEAKAGE****41. INSTALL FRONT WHEEL**

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

OVERHAUL

HINT:

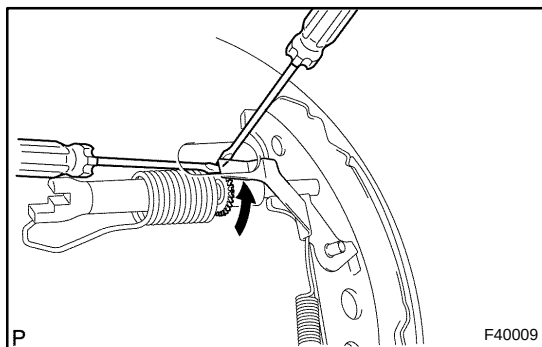
Overhaul the RH side by the same procedures as the LH side.

1. REMOVE REAR WHEEL

2. DRAIN BRAKE FLUID

NOTICE:

Wash the brake fluid off immediately if it attaches to any painted surface.



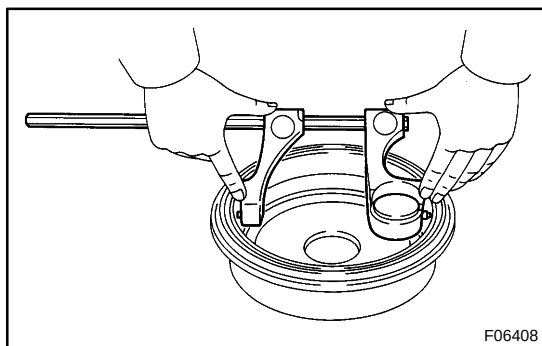
3. REMOVE REAR BRAKE DRUM SUB-ASSY

- (a) Release the parking brake lever, and remove the rear brake drum.

HINT:

If the rear brake drum cannot be removed easily, perform the following procedure.

- (b) Remove the hole plug and insert a screwdriver through the hole in the backing plate, and hold the automatic adjusting lever away from the adjuster.
- (c) Using another screwdriver, reduce the brake shoe adjuster by turning the adjusting wheel.

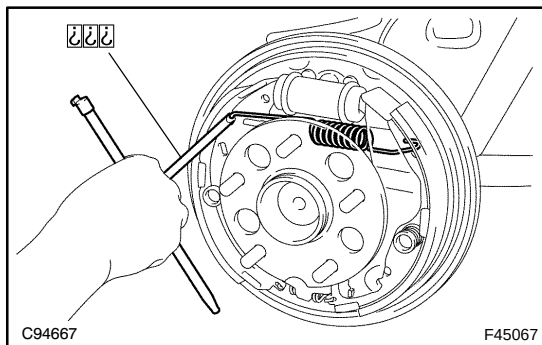


4. INSPECT BRAKE DRUM INSIDE DIAMETER

- (a) Using a brake drum gauge or equivalent, measure the inside diameter of the drum.

Standard inside diameter: 254.0 mm (10.00 in.)

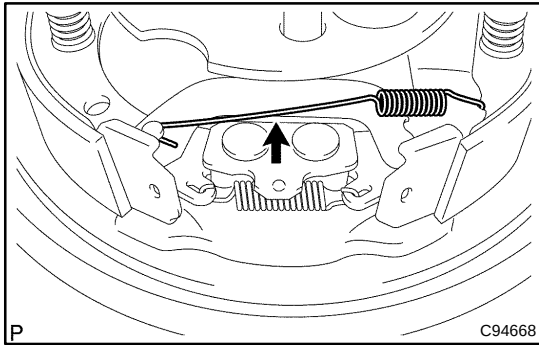
Maximum inside diameter: 256.0 mm (10.08 in.)



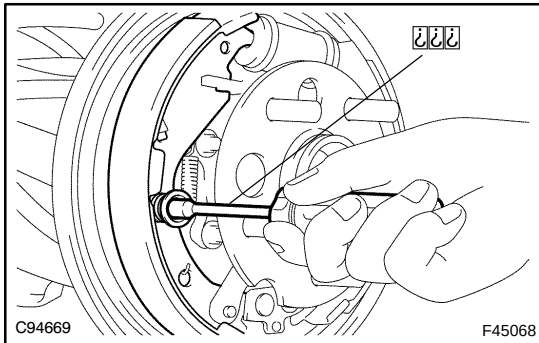
5. REMOVE FRONT BRAKE SHOE

- (a) Using SST, remove the shoe return spring from the front brake shoe.

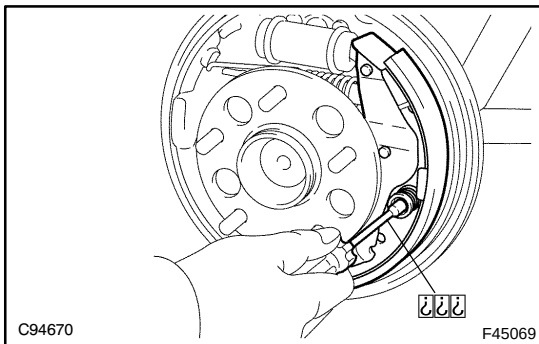
SST 09921-00010



- (b) Using a needle-nose pliers, remove the return spring.

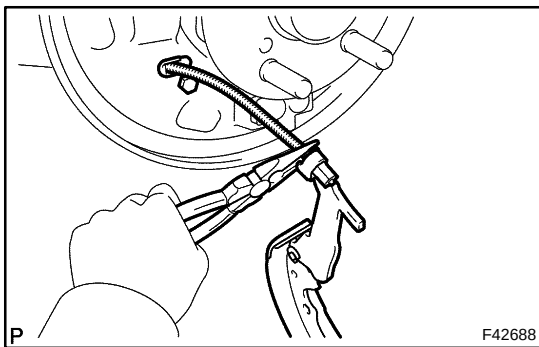


- (c) Using SST, remove the shoe hold down spring cup, shoe hold down spring and pin.
SST 09718-00010
(d) Remove the parking brake shoe strut LWR.
(e) Remove the tension spring and front brake shoe.
(f) Remove the automatic adjust lever spring and rear brake automatic adjust lever LH from the front brake shoe.

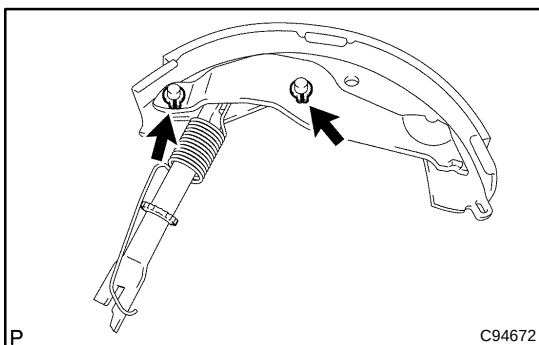


6. REMOVE REAR BRAKE SHOE

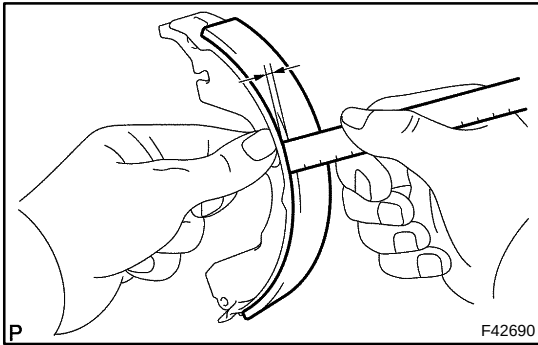
- (a) Using SST, remove the shoe hold down spring cup, shoe hold down spring and pin.
SST 09718-00010



- (b) Using a needle-nose pliers, disconnect the parking brake cable No.3 and remove the rear brake shoe.



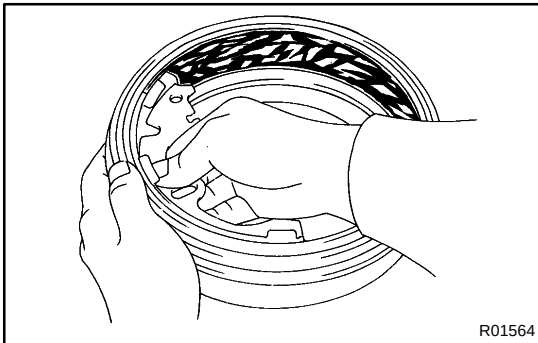
- (c) Using a screwdriver, remove the 2 C-washers, parking brake shoe lever, parking brake reaction lever LH and rear brake strut set.



7. INSPECT REAR DRUM BRAKE SHOE LINING THICKNESS

- (a) Using a ruler, measure the thickness of the shoe lining.
Standard thickness: 5.0 mm (0.197 in.)
Minimum thickness: 1.0 mm (0.039 in.)

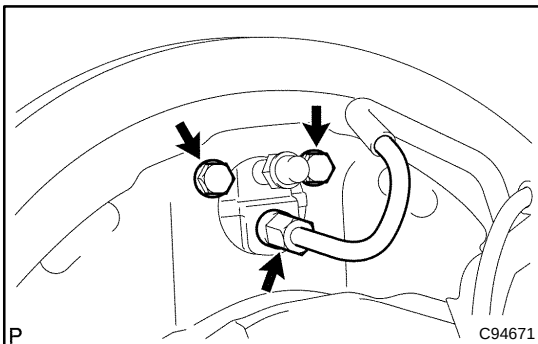
If the lining thickness is at the minimum thickness or less, or if there is severe, uneven wear, replace the brake shoe.



8. INSPECT BRAKE DRUM AND REAR DRUM BRAKE SHOE LINING FOR PROPER CONTACT

- (a) Apply chalk to the inside surface of the drum, then grind drum on the brake shoe lining to fit.

If the contact between the drum and the shoe lining is improper, repair it using a brake shoe grinder or replace the brake shoe assembly.



9. REMOVE LH, FRONT OR UPPER REAR WHEEL BRAKE CYLINDER ASSY

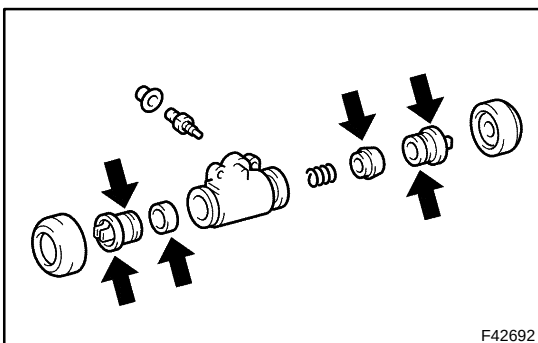
- (a) Using SST, disconnect the brake tube, use a container to catch the brake fluid.
 SST 09023-00101
 (b) Remove the 2 bolts and rear wheel brake cylinder assy.

10. REMOVE REAR WHEEL CYLINDER CUP KIT

- (a) Remove the 2 cylinder dust boots from the rear wheel brake cylinder assy.
 (b) Remove the 2 pistons and compression spring.
 (c) Remove the 2 wheel cylinder cups from each piston.
 (d) Remove the bleeder plug cap and bleeder plug from the rear wheel brake cylinder assy.

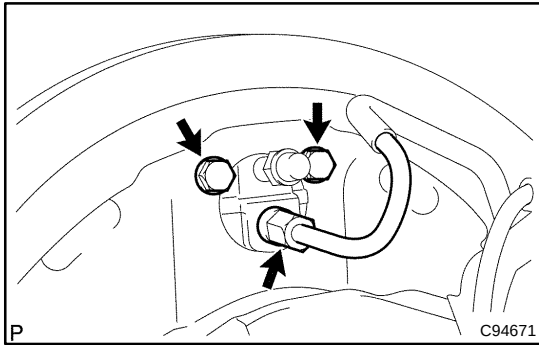
11. INSPECT BRAKE WHEEL CYLINDER

- (a) Check the cylinder bore and piston for rust or scoring.



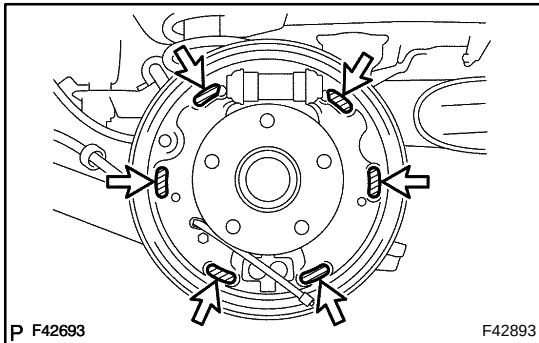
12. INSTALL REAR WHEEL CYLINDER CUP KIT

- (a) Temporarily tighten the bleeder plug to the wheel cylinder, and install the bleeder plug cap.
 (b) Apply lithium soap base glycol grease to the 2 new wheel cylinder cups and the 2 pistons.
 (c) Install the 2 wheel cylinder cups to each piston.
 (d) Install the compression spring and 2 pistons to the rear wheel brake cylinder.
 (e) Install the 2 new cylinder dust boots to the rear wheel brake cylinder.



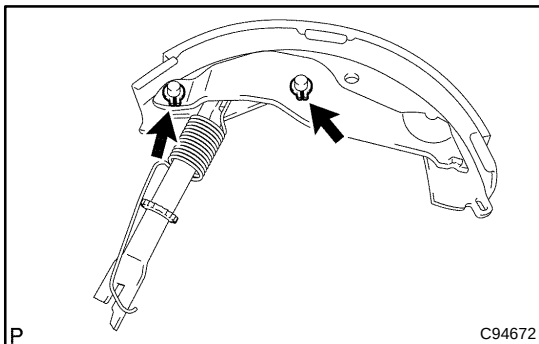
13. INSTALL LH, FRONT OR UPPER REAR WHEEL BRAKE CYLINDER ASSY

- (a) Install the rear wheel brake cylinder assy with the 2 bolts.
Torque: 10 N·m (102 kgf·cm, 7 ft·lbf)
- (b) Using SST, connect the brake tube.
SST 09023-00101
Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)



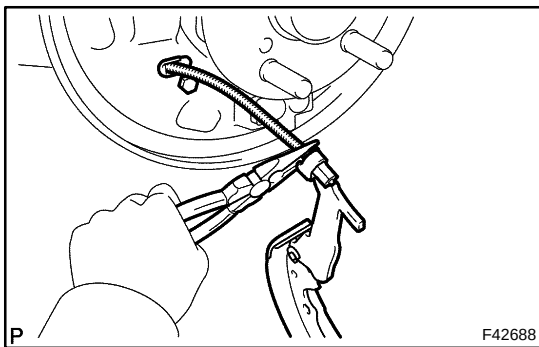
14. APPLICATION HIGH TEMPERATURE GREASE

- (a) Apply high temperature grease to the shoe attached surface of backing plate.

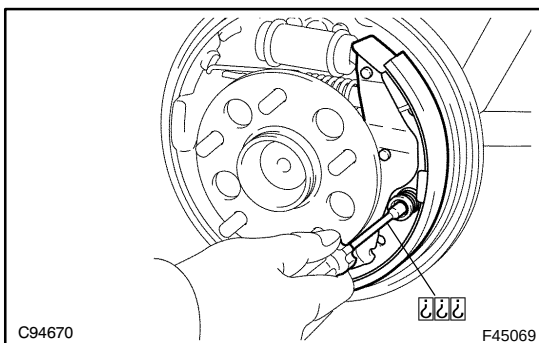


15. INSTALL REAR BRAKE SHOE

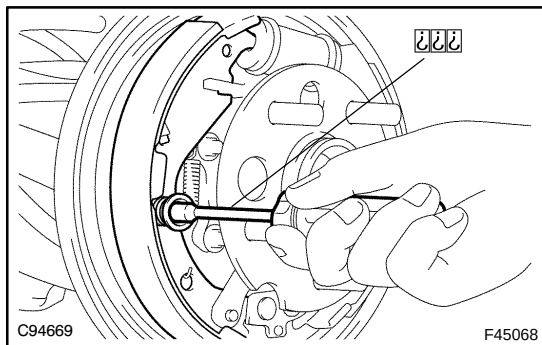
- (a) Apply high temperature grease to the adjusting bolt.
- (b) Install the rear brake strut set with the shoe return spring.
- (c) Using a pliers, install the rear brake strut set, parking brake reaction lever and parking brake shoe lever LH with the 2 new C-washers.



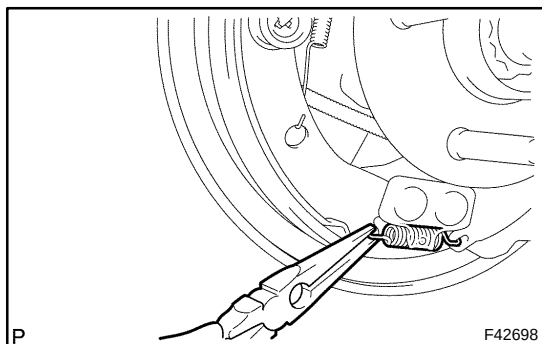
- (d) Using a needle-nose pliers, connect the parking brake cable No.3 to the parking brake shoe lever LH.



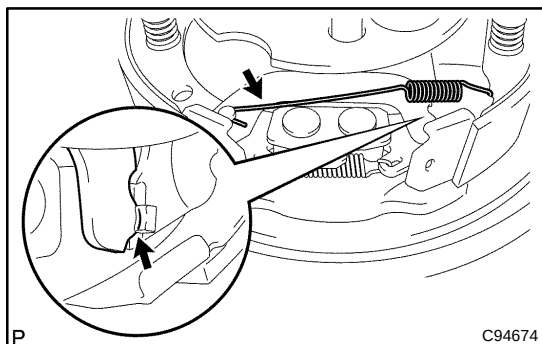
- (e) Using SST, install the rear brake shoe, pin, shoe hold down spring and shoe hold down spring cup.
SST 09718-00010

**16. INSTALL FRONT BRAKE SHOE**

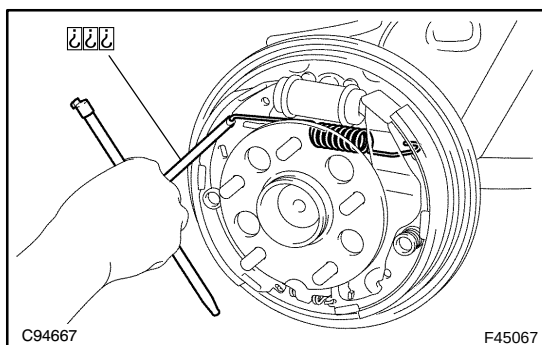
- (a) Install the rear brake automatic adjust lever LH, automatic adjust lever spring and parking brake shoe strut LWR to the front brake shoe.
- (b) Using SST, install the front brake shoe, pin, shoe hold down spring and shoe hold down spring cup.
SST 09718-00010



- (c) Install the tension spring to the front brake shoe and rear brake shoe.



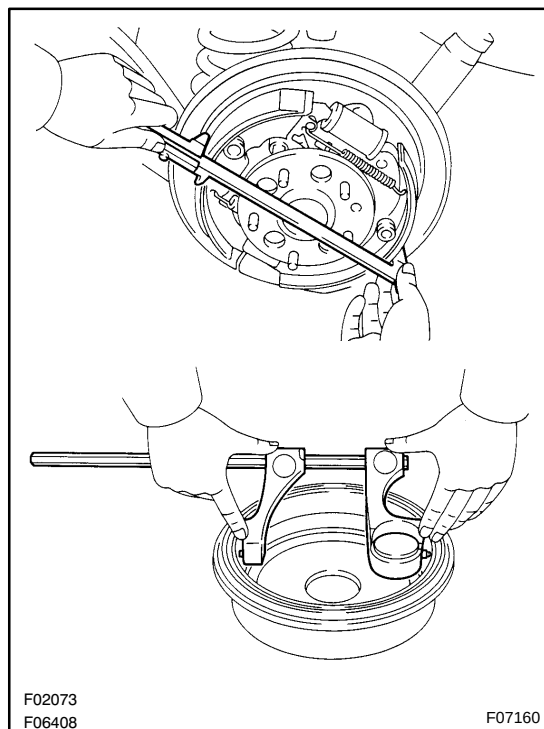
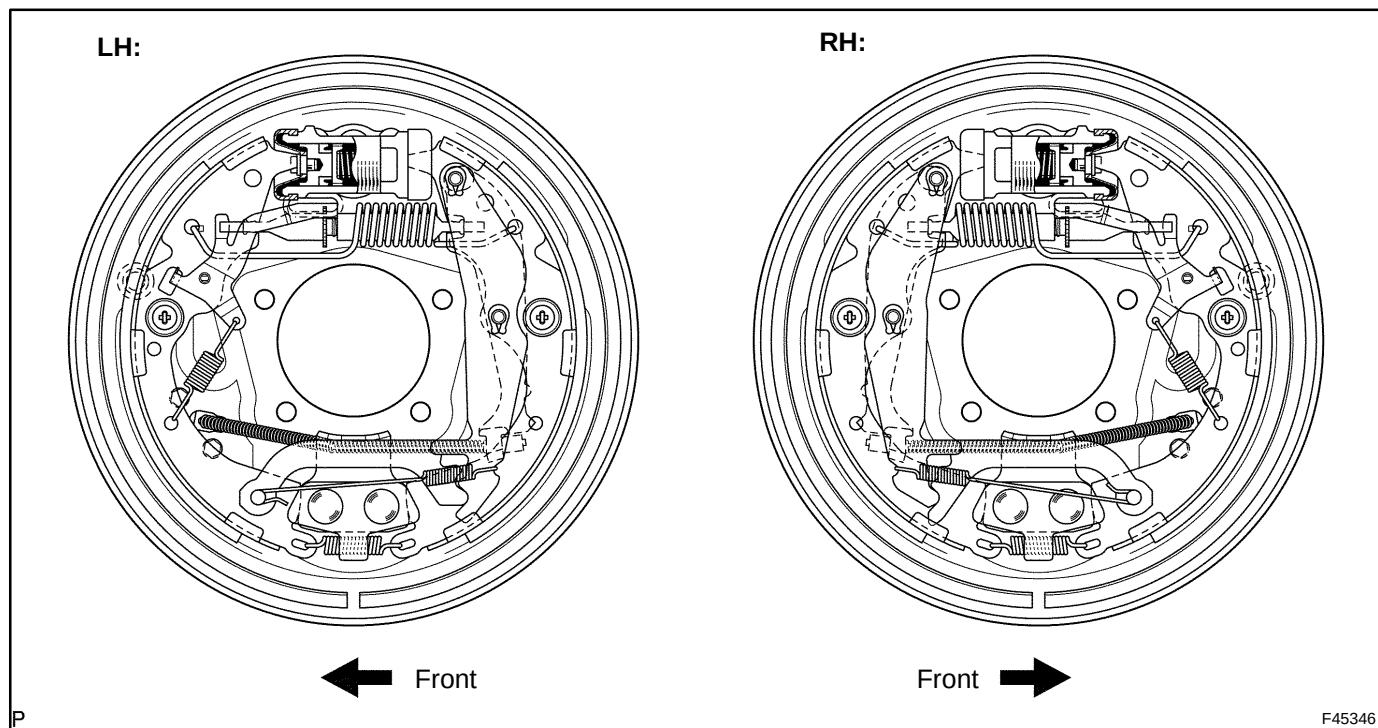
- (d) Using a needle-nose pliers, install the return spring.



- (e) Using SST, install the shoe return spring to the front brake shoe.
SST 09921-00010

17. CHECK REAR DRUM BRAKE INSTALLATION

- (a) Check that each part is installed properly.

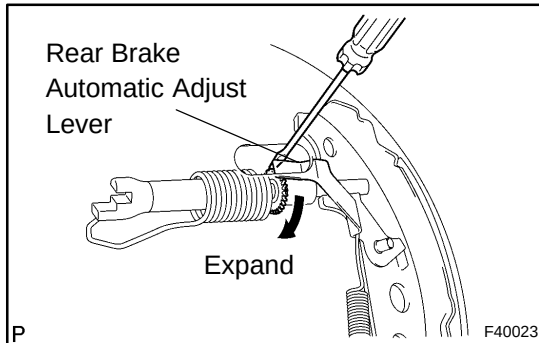


- (b) Measure the brake drum inside diameter and the diameter of the brake shoes. Check that difference between the diameter is the correct shoe clearance.

Shoe clearance: 0.5 mm (0.020 in.)

NOTICE:

There should be no oil or grease adhering to the friction surfaces of the shoe lining and the drum.

18. INSTALL REAR BRAKE DRUM SUB-ASSY**19. ADJUST REAR DRUM BRAKE SHOE CLEARANCE**

- (a) Temporarily install the hub nuts.
- (b) Remove the hole plug, and turn the adjuster and expand the shoe until the drum locks.
- (c) Using a screwdriver, back off the adjuster 15 notches.
- (d) Install the hole plug.

20. FILL RESERVOIR WITH BRAKE FLUID**21. BLEED MASTER CYLINDER (See page 32-4)**

SST 09023-00101

22. BLEED BRAKE LINE (See page 32-4)**23. CHECK FLUID LEVEL IN RESERVOIR (See page 32-4)****24. CHECK BRAKE FLUID LEAKAGE****25. INSTALL REAR WHEEL**

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

26. INSPECT PARKING BRAKE PEDAL TRAVEL (See page 33-2)**27. ADJUST PARKING BRAKE PEDAL TRAVEL (See page 33-2)**

OVERHAUL

HINT:

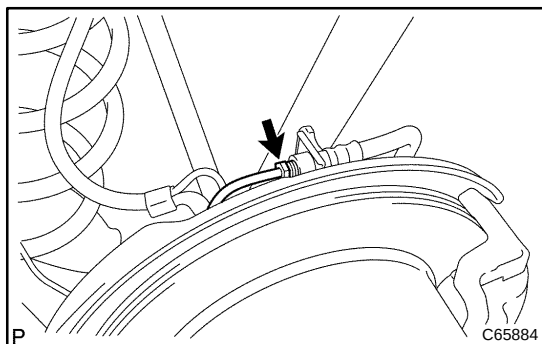
Overhaul the RH side by the same procedure as the LH side.

1. REMOVE REAR WHEEL

2. DRAIN BRAKE FLUID

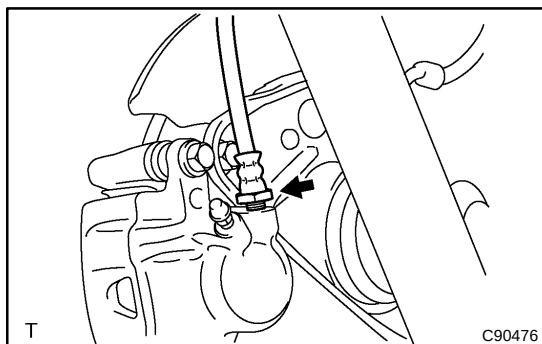
NOTICE:

Wash the brake fluid off immediately if it attaches to any painted surface.



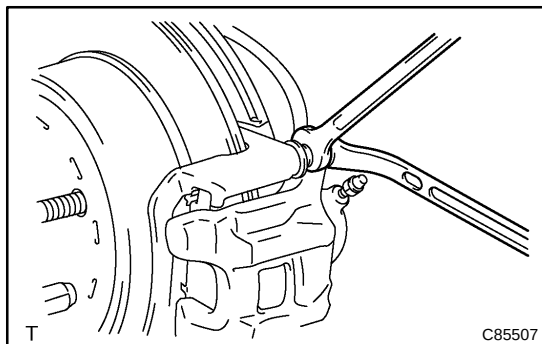
3. SEPARATE REAR BRAKE TUBE NO.4

- (a) Remove the clip and a disconnect, the rear brake flexible hose.
- (b) Using SST and spanner loosen the rear brake tube No.4.
SST 09023-00101



4. SEPARATE REAR LH FLEXIBLE HOSE

- (a) Using SST, remove the rear brake flexible hose.
SST 09023-12701



5. REMOVE DISC BRAKE CYLINDER ASSY REAR LH

- (a) Hold the rear disc brake cylinder slide pin and remove the 2 bolts.
- (b) Remove the disc brake cylinder assy rear LH from the rear disc brake cylinder mounting LH.

6. REMOVE REAR DISC BRAKE CYLINDER SLIDE PIN

- (a) Remove the 2 rear disc brake cylinder slide pins from the rear disc brake cylinder mounting LH.

7. REMOVE REAR DISC BRAKE BUSH DUST BOOT

- (a) Remove the 2 rear disc brake bush dust boots.

8. REMOVE DISC BRAKE PAD KIT REAR (PAD ONLY)

- (a) Remove the disc brake pad kit rear.

9. REMOVE REAR DISC BRAKE ANTI SQUEAL SHIM KIT

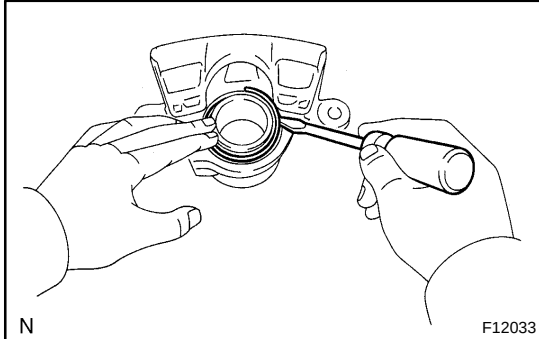
- (a) Remove the anti squeal shim No.1 and anti squeal shim No.2 from each pad.

10. REMOVE REAR DISC BRAKE PAD SUPPORT PLATE

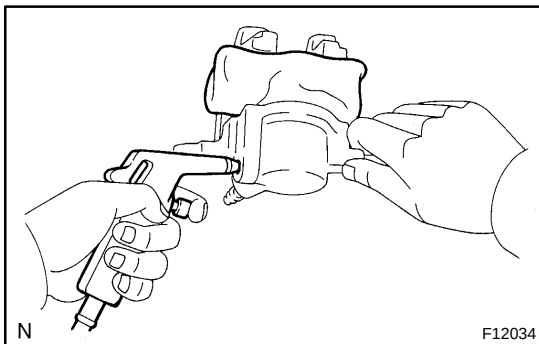
- (a) Remove the rear disc brake pad support plate (No.1) and rear disc brake pad support plate (No.2) from the rear disc brake cylinder mounting LH.

11. REMOVE REAR DISC BRAKE CYLINDER MOUNTING LH

- (a) Remove the bolts and rear disc brake cylinder mounting LH.

**12. REMOVE CYLINDER BOOT**

- (a) Using a screwdriver, remove the set ring and cylinder boot.

**13. REMOVE REAR DISC BRAKE DISC BRAKE PISTON**

- (a) Place a shop rug, between the rear disc brake piston and the disc brake cylinder.
 (b) Use compressed air to remove the rear disc brake piston from the disc brake cylinder.

CAUTION:

Do not place your fingers in front of the piston when using compressed air.

NOTICE:

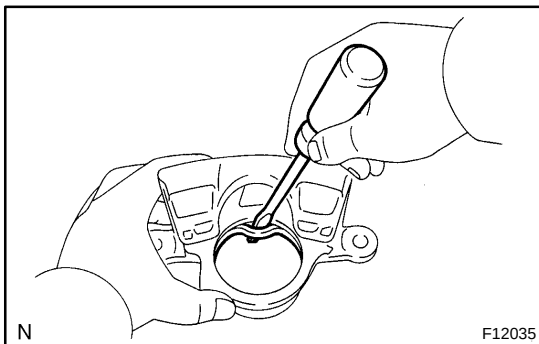
Do not spatter the brake fluid.

14. REMOVE PISTON SEAL

- (a) Using a screwdriver, remove the piston seal from the disc brake cylinder assy rear LH.

NOTICE:

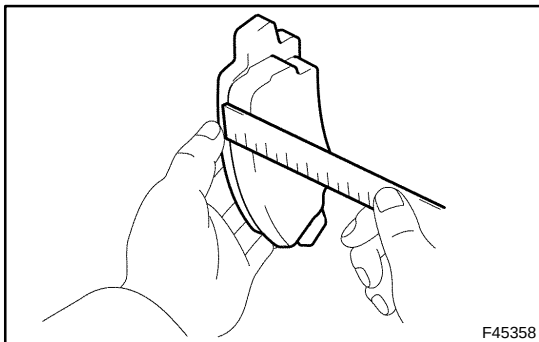
Do not damage the inner cylinder and cylinder groove.

**15. REMOVE REAR DISC BRAKE BLEEDER PLUG CAP****16. REMOVE REAR DISC BRAKE BLEEDER PLUG**

- (a) Remove the rear disc brake bleeder plug from the disc brake cylinder assy rear LH.

17. INSPECT BRAKE CYLINDER AND PISTON

- (a) Check the brake cylinder bore and rear disc brake piston for rust or scoring.

**18. INSPECT PAD LINING THICKNESS**

- (a) Using a ruler, measure the pad lining thickness.
Standard thickness: 11.0mm (0.433 in.)
Minimum thickness: 1.0 mm (0.039 in.)

19. INSPECT REAR DISC BRAKE PAD SUPPORT PLATE

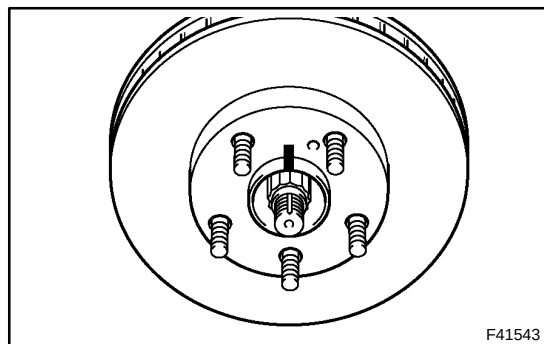
- (a) Inspect the rear brake disc pad support plate (No.1) and rear brake disc pad support plate (No.2). Make sure that they have sufficient rebound, no deformation, cracks or wear, and have had all rust and dirt cleaned off.

20. INSPECT DISC THICKNESS

- (a) Using a micrometer, measure the disc thickness.

Standard thickness: 12.0mm (0.472 in.)

Minimum thickness: 10.5 mm (0.413 in.)

**21. REMOVE REAR DISC**

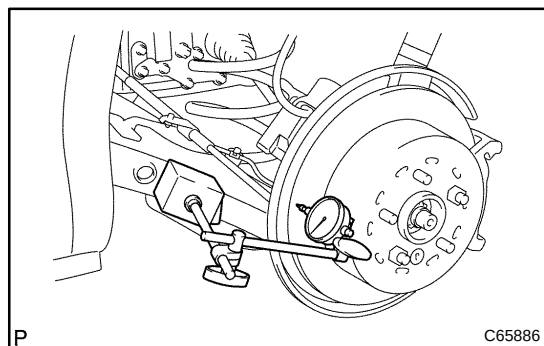
- (a) Make matchmarks on the rear disc and the axle hub,
(b) Remove the rear disc.

22. INSTALL REAR DISC

- (a) Aligning the matchmarks, install the rear disc.

HINT:

Select the installation position where the disc has the minimum runout.

23. REMOVE PARKING BRAKE SHOE ADJUSTING HOLE PLUG**24. INSTALL PARKING BRAKE SHOE ADJUSTING HOLE PLUG****25. INSPECT DISC RUNOUT**

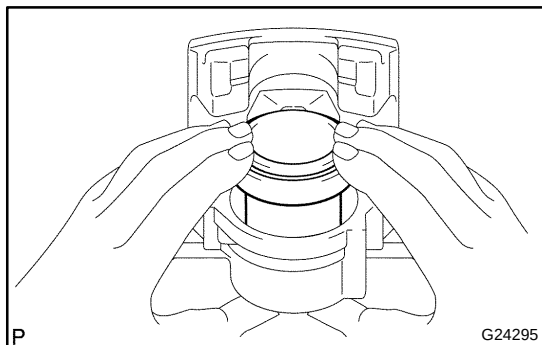
- (a) Temporarily fasten the disc with the hub nuts.
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
(b) Using a dial indicator, measure the disc runout 10 mm (0.39 in.) away from the outer edge of the disc.
Maximum disc runout: 0.10 mm (0.0039 in.)
(c) If the disc runout is the maximum value or greater, check the bearing play in the axial direction and check for the axle hub runout (See page 30-3). If the bearing play and axle hub runout are normal, adjust the disc runout or grind it on a "On-car" brake lathe.

26. ADJUST PARKING BRAKE SHOE CLEARANCE (See page 33-2)**27. TEMPORARILY TIGHTEN REAR DISC BRAKE BLEEDER PLUG**

- (a) Temporarily install the rear disc brake bleeder plug to the disc brake cylinder assy rear LH.

28. INSTALL REAR DISC BRAKE BLEEDER PLUG CAP**29. INSTALL PISTON SEAL**

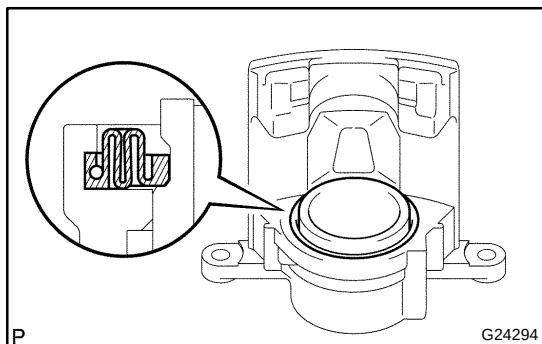
- (a) Apply lithium soap base glycol grease to a new piston seal.
(b) Install the piston seal to the disc brake cylinder assy rear LH.

**30. INSTALL REAR DISC BRAKE PISTON**

- (a) Apply lithium soap base glycol grease to the rear disc brake piston and new cylinder boot.
- (b) Install the cylinder boot to the rear disc brake piston .
- (c) Install the rear disc brake piston to the disc brake cylinder assy rear LH.

NOTICE:

Do not install the piston forcibly in the disc brake cylinder.

**31. INSTALL CYLINDER BOOT**

- (a) Install a new cylinder boot to the rear disc brake cylinder sub-assy .

NOTICE:

Install the boot securely to the grooves of the cylinder and piston.

- (b) Using a screwdriver, install the set ring.

NOTICE:

Do not damage the cylinder boot.

32. INSTALL REAR DISC BRAKE BUSH DUST BOOT

- (a) Install the 2 rear disc brake bush dust boot to the disc brake cylinder mounting LH.

33. INSTALL REAR DISC BRAKE CYLINDER SLIDE PIN

- (a) Apply the lithium soap base glycol grease to the sealing surface of the 2 rear disc brake cylinder slide pins.

34. INSTALL REAR DISC BRAKE CYLINDER MOUNTING LH

- (a) Install the rear disc brake cylinder mounting LH with the 2 bolts.

Torque: 88 N·m (900 kgf·cm, 65 ft·lbf)

35. INSTALL REAR DISC BRAKE PAD SUPPORT PLATE

- (a) Install the rear disc brake pad support plate (No.1) and rear disc brake pad support plate (No.2) to the rear disc brake cylinder mounting LH.

36. INSTALL REAR DISC BRAKE ANTI SQUEAL SHIM KIT**NOTICE:**

If necessary, replace the anti squeal shim kit when replacing the brake pad.

- (a) Apply disc brake grease to each anti squeal shim No.1.
- (b) Install anti squeal shims No.1 and anti squeal shim No.2 on each pad.

37. INSTALL DISC BRAKE PAD KIT REAR (PAD ONLY)

- (a) Install the brake pad kit rear to the rear disc brake cylinder mounting LH.

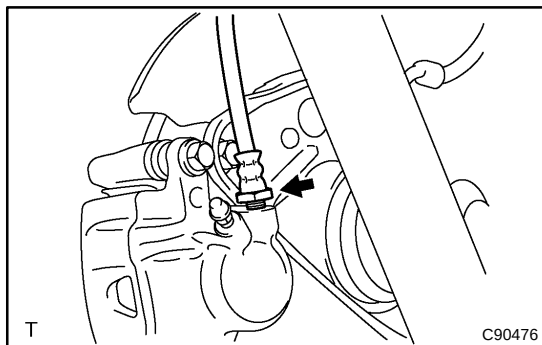
NOTICE:

There should be no oil or grease on the friction surfaces of the pads and the disc.

38. INSTALL DISC BRAKE CYLINDER ASSY REAR LH

- (a) Install the disc brake cylinder assy rear LH with the 2 bolts.

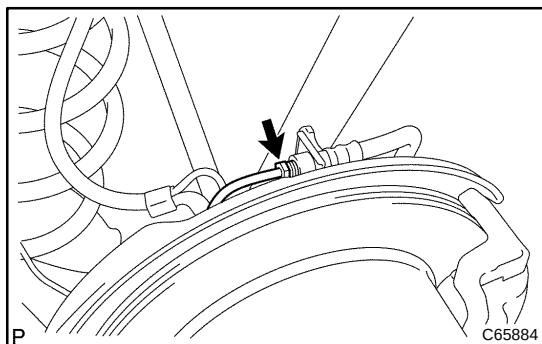
Torque: 34 N·m (350 kgf·cm, 25 ft·lbf)

**39. CONNECT REAR LH FLEXIBLE HOSE**

- (a) Using SST, Install the rear brake flexible hose.

SST 09023-12701

Torque: 23 N·m (235 kgf·cm, 17 ft·lbf)

**40. CONNECT REAR BRAKE TUBE NO.4**

- (a) Install the clip and connect the rear brake flexible hose.
 (b) Using SST and a spanner, connect the rear brake tube No.4.

SST 09023-00101

Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)

41. FILL RESERVOIR WITH BRAKE FLUID (See page 32-4)**42. BLEED MASTER CYLINDER (See page 32-4)**

SST 09023-00101

43. BLEED BRAKE LINE (See page 32-4)**44. CHECK FLUID LEVEL IN RESERVOIR (See page 32-4)****45. CHECK BRAKE FLUID LEAKAGE****46. INSTALL REAR WHEEL**

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

OVERHAUL

HINT:

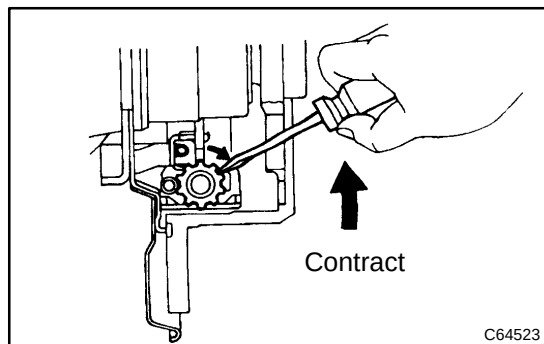
Overhaul the RH side by the same procedures as these of the LH side.

1. REMOVE REAR WHEEL

2. SEPARATE REAR DISC BRAKE CALIPER ASSY LH (See page 32-37)

HINT:

Do not disconnect the flexible hose from the brake caliper.

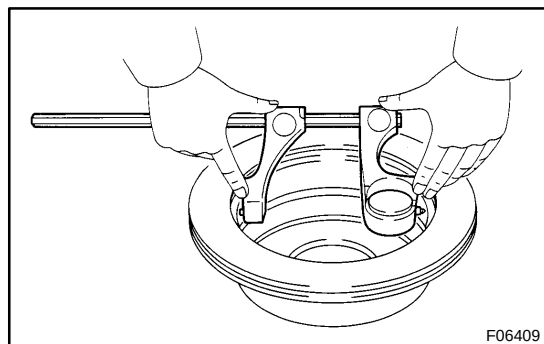


3. REMOVE REAR DISC

- (a) Release the parking brake, and remove the rear disc.

HINT:

- Align matchmarks on the disc and the axle hub.
- If the disc cannot be removed easily, turn the shoe adjuster until the wheel turns freely.

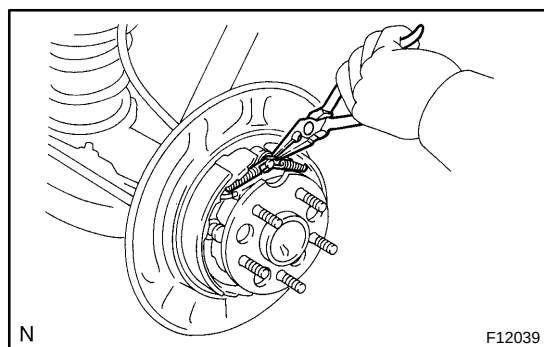


4. INSPECT BRAKE DISC INSIDE DIAMETER

- (a) Using a brake drum gauge or equivalent, measure the inside diameter of the disc.

Standard inside diameter: 190 mm (7.480 in.)

Maximum inside diameter: 191 mm (7.520 in.)

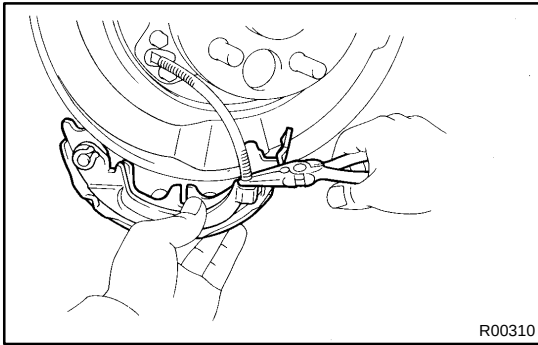


5. REMOVE PARKING BRAKE SHOE ASSY LH NO.1

- (a) Using needle-nose pliers, remove the 2 shoe return tension springs.
- (b) Disconnect the tension spring from the parking brake shoe assy LH No.1.
- (c) Slide out the parking brake shoe assy LH No.1 and remove the parking brake shoe assy LH No.1.
- (d) Remove the shoe hold-down compression spring, 2 cups and shoe hold-down compression spring pin No.1.

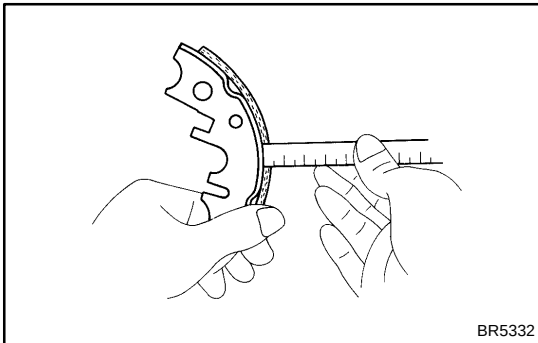
6. REMOVE PARKING BRAKE SHOE ADJUSTING SCREW SET

7. REMOVE PARKING BRAKE SHOE STRUT LH



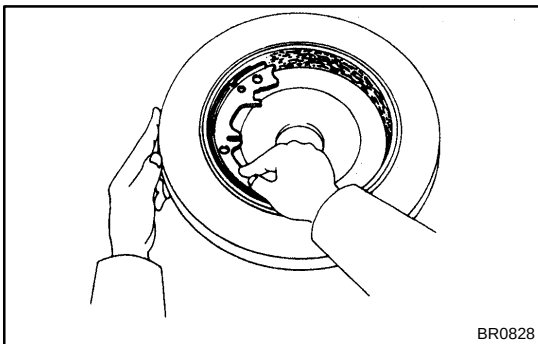
8. REMOVE PARKING BRAKE SHOE ASSY LH NO.2

- (a) Disconnect the return spring from the parking brake shoe assy LH No.2 and remove the tension spring.
- (b) Slide out the parking brake shoe assy LH No.2.
- (c) Remove the shoe hold-down compression spring, 2 cups and shoe hold-down compression spring pin No.2.
- (d) Using needle-nose pliers, disconnect the parking brake cable No.3 from the parking brake shoe lever and remove the parking brake shoe assy LH No.2.



9. INSPECT PARKING BRAKE SHOE LINING THICKNESS

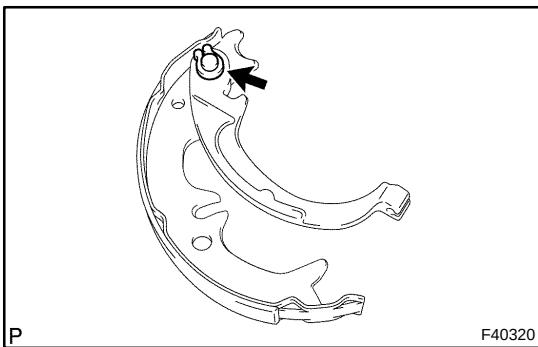
- (a) Using a ruler, measure the thickness of the shoe lining.
Standard thickness: 2.5 mm (0.098 in.)
Minimum thickness: 1.0 mm (0.039 in.)



10. INSPECT BRAKE DISC AND PARKING BRAKE SHOE LINING FOR PROPER CONTACT

- (a) Apply chalk to the inside surface of the disc, then grind down the brake shoe lining to fit.

If the contact between the brake disc and the shoe lining is improper, repair it using a brake shoe grinder or replace the brake shoe assembly.



11. REMOVE PARKING BRAKE SHOE LEVER LH

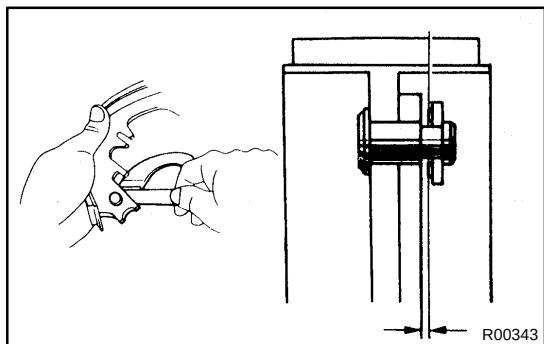
- (a) Using a screwdriver, remove the C-washer.
- (b) Remove the shim and shoe lever from the parking brake shoe.

12. APPLY HIGH TEMPERATURE GREASE

- (a) Apply the high temperature grease to the surface on which the shoe and backing plate attach.

13. INSTALL PARKING BRAKE SHOE LEVER LH

- (a) Install the shoe lever and shim to the rear shoe with a new C-washer.

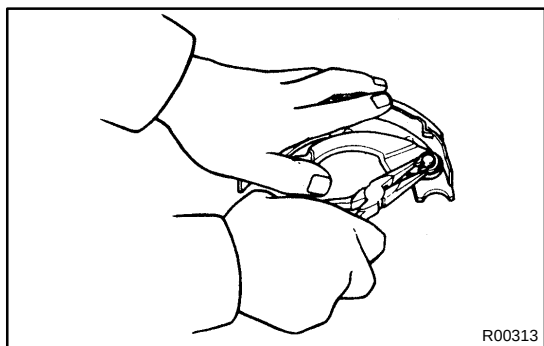


- (b) Using a feeler gauge, measure the clearance.

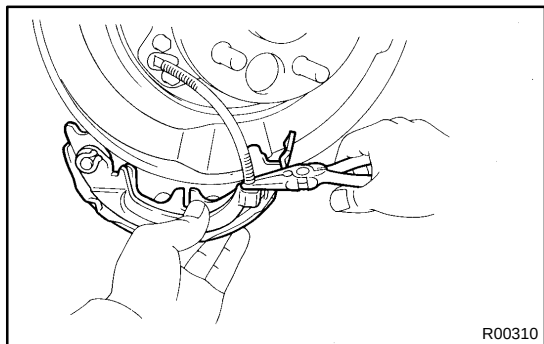
Standard clearance: Less than 0.35 mm (0.0138 in.)

If the clearance is not within the specification, replace the shim with one of the correct size.

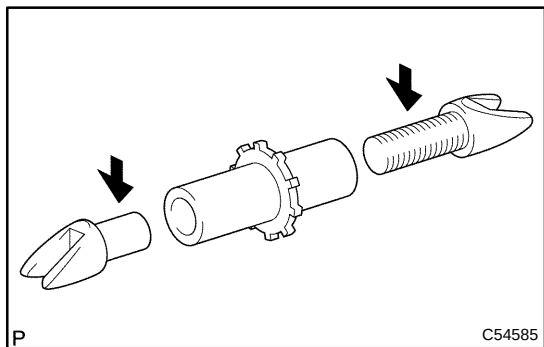
Shim Thickness	Shim Thickness
0.3 mm (0.012 in.)	0.9 mm (0.035 in.)
0.6 mm (0.024 in.)	-



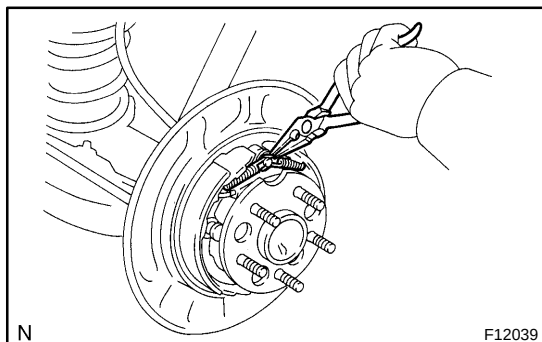
- (c) Install the correct side shim with a new C-washer.
(d) Remeasure the clearance.

**14. INSTALL PARKING BRAKE SHOE ASSY LH NO.2**

- (a) Using needle-nose pliers, connect the parking brake cable No.3 to the parking brake shoe lever.
(b) Install the parking brake shoe assy LH No.2 with the shoe hold-down compression spring pin No.2, shoe hold-down compression spring and 2 cups.

**15. INSTALL PARKING BRAKE SHOE ADJUSTING SCREW SET**

- (a) Apply the high temperature grease to the adjusting bolt.
(b) Install the parking brake shoe adjusting screw set LH.

16. INSTALL PARKING BRAKE SHOE STRUT LH**17. INSTALL PARKING BRAKE SHOE ASSY LH NO.1**

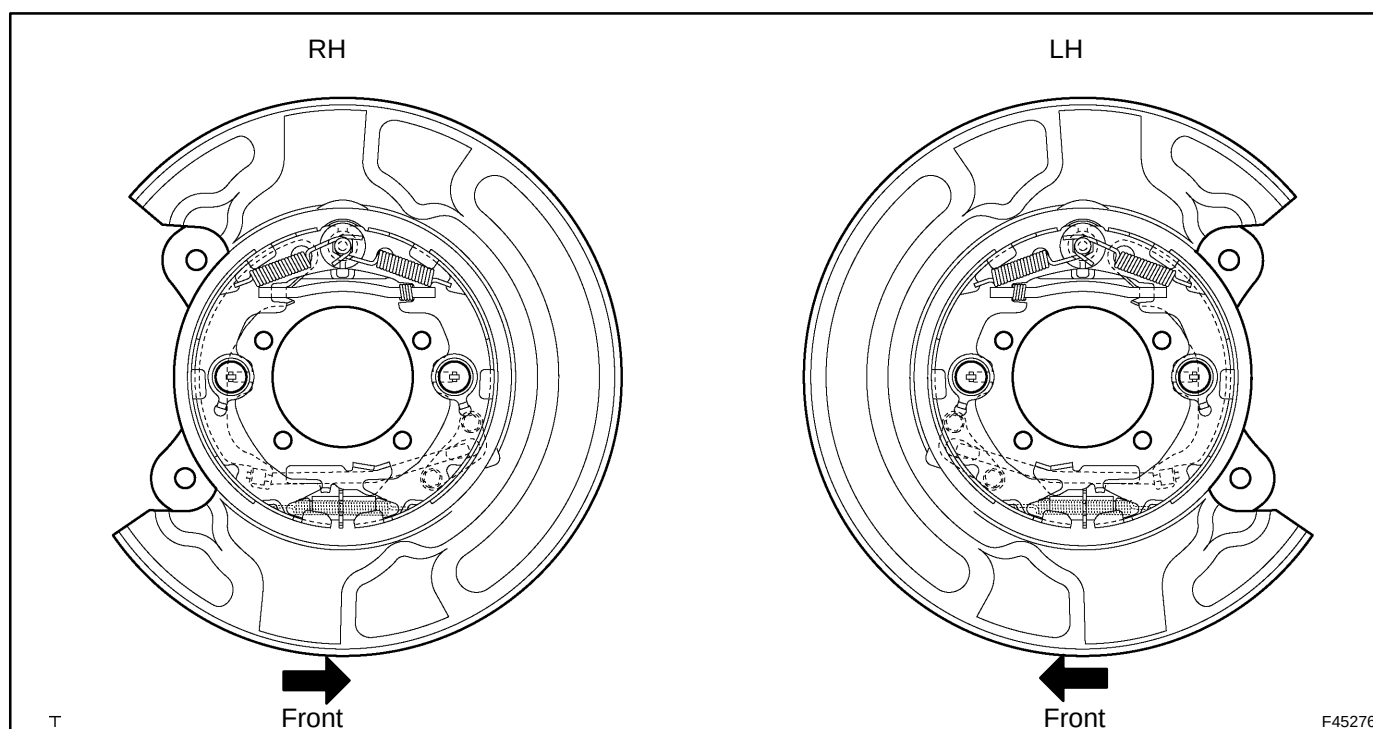
- (a) Install the parking brake shoe assy LH No.1 with the shoe hold-down compression spring pin No.1, shoe hold-down compression spring and 2 cups.
- (b) Install the tension spring and 2 shoe return tension springs.

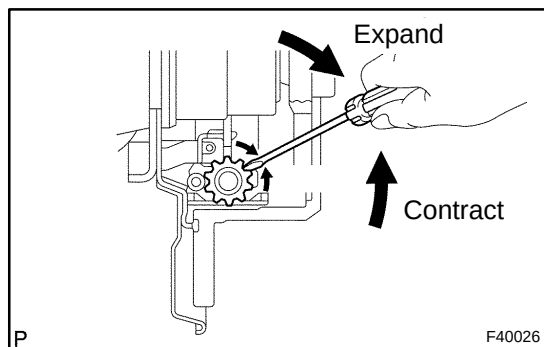
18. CHECK PARKING BRAKE INSTALLATION

- (a) Check that each part is installed properly.

NOTICE:

No oil or grease should be adhered to the friction surface of the shoe lining and disc.

**19. INSTALL REAR DISC**

**20. ADJUST PARKING BRAKE SHOE CLEARANCE**

- (a) Temporarily install the hub nuts.
- (b) Remove the hole plug, and turn the adjuster and expand the shoes until the disc locks.
- (c) Contract the shoe adjuster until the disc can rotate smoothly.

Standard : Return 8 notches

- (d) Check that the brake disc rotates smoothly.
- (e) Install the hole plug.

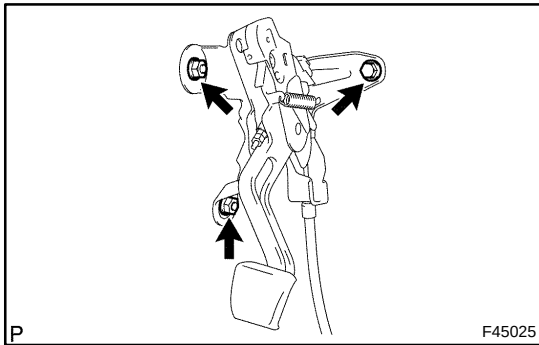
21. CONNECT REAR DISC BRAKE CALIPER ASSY LH**22. INSTALL REAR WHEEL**

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

23. INSPECT PARKING BRAKE PEDAL TRAVEL (See page 33-2)**24. ADJUST PARKING BRAKE PEDAL TRAVEL (See page 33-2)**

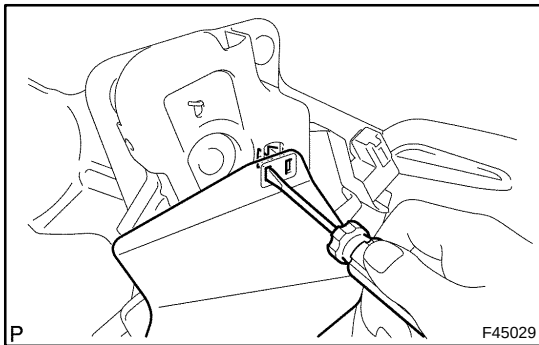
OVERHAUL

1. DISCONNECT BATTERY NEGATIVE TERMINAL (See page 60-1)
2. REMOVE FRONT DOOR SCUFF PLATE LH (See page 71-10)
3. REMOVE COWL SIDE TRIM BOARD LH (See page 71-10)
4. REMOVE INSTRUMENT PANEL FINISH PANEL SUB-ASSY LOWER LH (See page 71-10)
5. REMOVE REAR DOOR SCUFF PLATE RH
6. REMOVE REAR DOOR SCUFF PLATE LH
7. REMOVE FRONT SEAT ASSY LH
MANUAL SEAT TYPE (See page 72-22)
POWER SEAT TYPE (See page 72-12)
FOLD FLAT TYPE (See page 72-30)
8. REMOVE REAR NO. 1 SEAT ASSY
CAPTAIN SEAT TYPE LH (See page 72-37)
CAPTAIN SEAT TYPE CTR (See page 72-44)
9. REMOVE REAR FLOOR SEAT LOCK COVER
10. REMOVE REAR FLOOR SEAT LOCK COVER



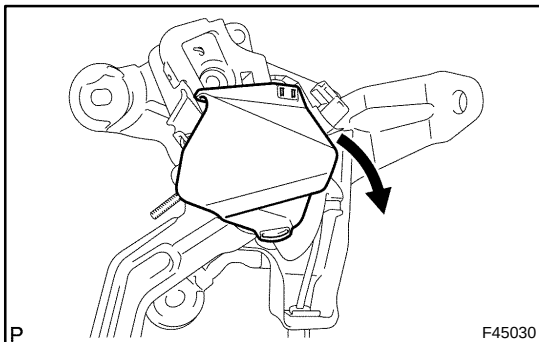
11. REMOVE PARKING BRAKE CONTROL PEDAL ASSY

- (a) Remove the 4 nuts and separate the instrument panel junction block assy w/wiring harness connector from the body.
- (b) Disconnect the parking brake switch connector.
- (c) Remove the bolt, 2 nuts and parking brake control pedal assy.



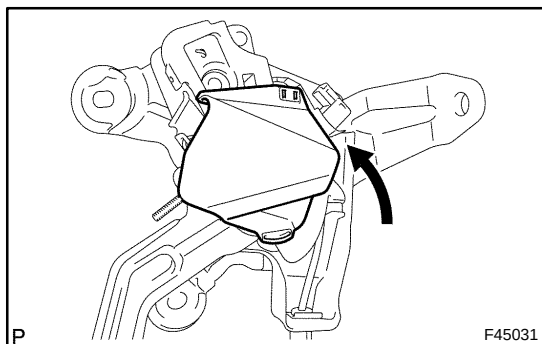
12. REMOVE PARKING BRAKE PEDAL BRACKET PROTECTOR

- (a) Using a flat-head screwdriver, disengage the 2 claws on the parking brake pedal bracket protector.



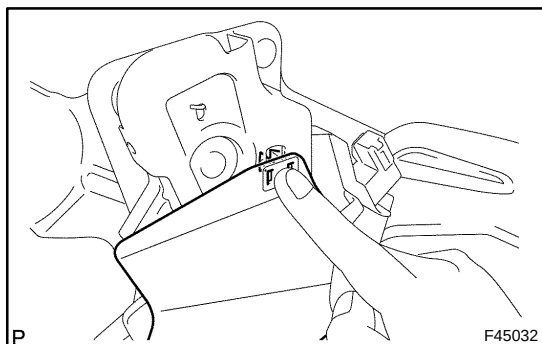
- (b) Turning the parking brake pedal bracket protector clockwise, remove the parking brake pedal bracket protector from the parking brake control pedal.

13. REMOVE PARKING BRAKE CABLE ASSY NO.1 (See page 33-8)
14. REMOVE PARKING BRAKE SWITCH ASSY
 - (a) Remove the screw and parking brake switch.
15. INSTALL PARKING BRAKE SWITCH ASSY
 - (a) Install the parking brake switch to the parking brake pedal with the screw.
16. INSTALL PARKING BRAKE CABLE ASSY NO.1 (See page 33-8)

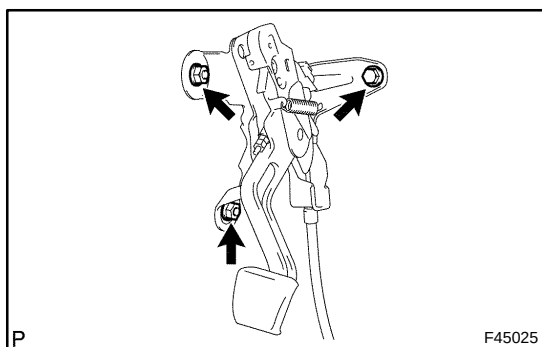


17. INSTALL PARKING BRAKE PEDAL BRACKET PROTECTOR

- (a) Fit the convex part on a new parking brake pedal bracket protector into the concave part on the parking brake control pedal and turn the parking brake pedal bracket protector counterclockwise.



- (b) Engaging the 2 claws, install the parking brake pedal bracket to the parking brake control pedal.



18. INSTALL PARKING BRAKE CONTROL PEDAL ASSY

- (a) Install the parking brake control pedal assy with a bolt and the 2 nuts.

Torque: 39 N·m (398 kgf·cm, 29 ft·lbf)

- (b) Connect the parking brake switch connector.
- (c) Connect the instrument panel junction block assy w/wiring harness connector with the 4 nuts.

Torque: 7.3 N·m (74 kgf·cm, 65 in·lbf)

19. INSTALL REAR FLOOR SEAT LOCK COVER
20. INSTALL REAR FLOOR SEAT LOCK COVER
21. INSTALL REAR NO. 1 SEAT ASSY
 - CAPTAIN SEAT TYPE LH (See page 72-37)
 - CAPTAIN SEAT TYPE CTR (See page 72-44)
22. INSTALL FRONT SEAT ASSY LH
 - MANUAL SEAT TYPE (See page 72-22)
 - POWER SEAT TYPE (See page 72-12)
 - FOLD FLAT TYPE (See page 72-30)
23. INSPECT PARKING BRAKE PEDAL TRAVEL(See page 33-2)

24. ADJUST PARKING BRAKE PEDAL TRAVEL(See page [33-2](#))

SKID CONTROL SENSOR (FF)

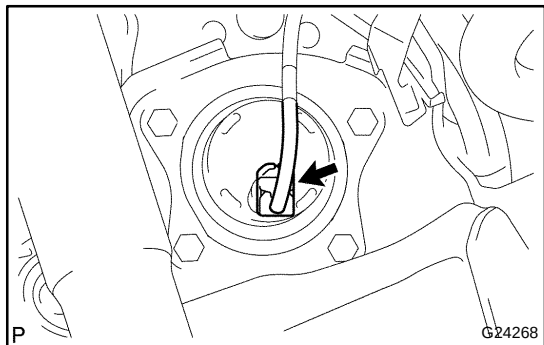
REPLACEMENT

320V3-01

HINT:

Replace the RH side by the same procedure as the LH side.

1. REMOVE REAR WHEEL



2. SEPARATE SKID CONTROL SENSOR WIRE

- (a) Disconnect the connector from the skid control sensor.

3. REMOVE REAR BRAKE DRUM SUB-ASSY (DRUM REAR BRAKE TYPE)

- (a) Place matchmarks on the rear brake drum sub-assy and the axle hub.
 (b) Remove the rear brake drum sub-assy.

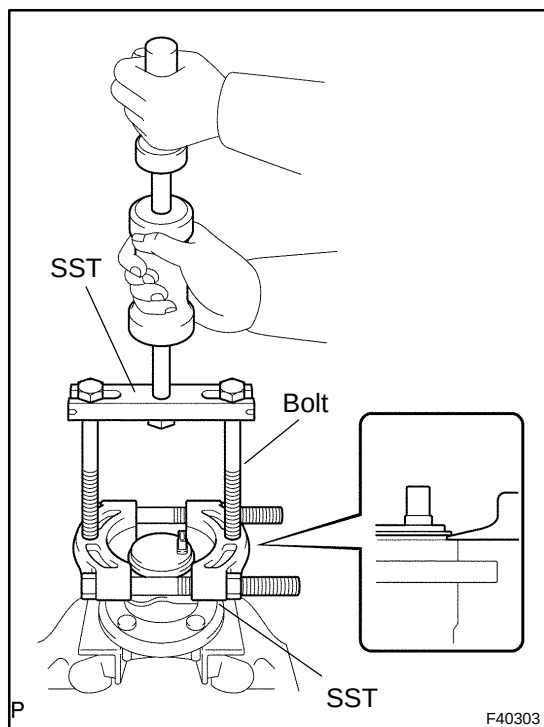
4. REMOVE REAR DISC BRAKE CALIPER ASSY LH (DISC REAR BRAKE TYPE)

- (a) Remove the 2 bolts and rear brake caliper assy LH.

5. REMOVE REAR DISC (DISC REAR BRAKE TYPE)

- (a) Place matchmarks on the rear disc and the axle hub.
 (b) Remove the rear disc.

6. REMOVE REAR AXLE HUB & BEARING ASSY LH (See page 30-46)



7. REMOVE SKID CONTROL SENSOR

- (a) Mount the rear axle hub in a soft jaw vise.

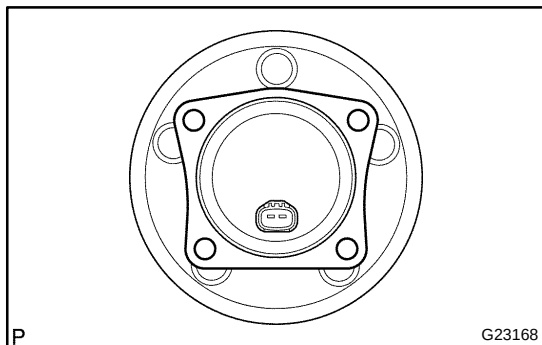
NOTICE:

Replace the axle hub assembly if it is dropped or a strong shock is given to it.

- (b) Using a pin punch and hammer, drive out the 2 pins and remove the 2 attachments from SST.
 (c) Using SST and 2 bolts (Diameter: 12 mm, pitch: 1.5 mm), remove the skid control sensor from the rear axle hub.
 SST 09520-00031 (09520-00040), 09521-00020, 09950-00020

NOTICE:

- If a damage is inflicted to the sensor rotor is damaged, replace the axle hub assembly.
- Do not scratch the contacting surface of the axle hub and speed sensor.



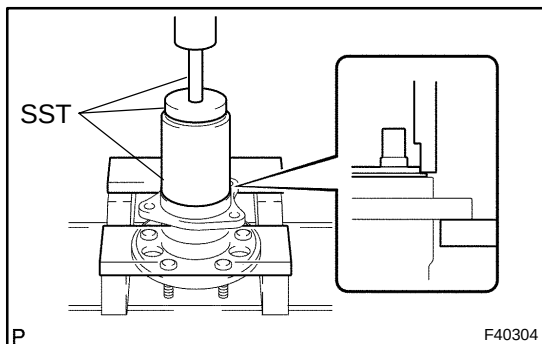
8. INSTALL SKID CONTROL SENSOR

- (a) Clean the contacting surface of the axle hub and a new skid control sensor.

NOTICE:

Keep the sensor rotor clean.

- (b) Place the speed sensor on the axle hub so that the connector is positioned as shown in the illustration.



- (c) Using SST and a press, install the skid control sensor to the axle hub.

SST 09214-7601 1

NOTICE:

- Do not tap the skid control sensor with a hammer directly.
- Check that there is no foreign matter on the skid control sensor detection portion.
- Press in the skid control sensor straight and slowly.

9. INSTALL REAR AXLE HUB & BEARING ASSY LH (See page 30-46)

10. INSTALL REAR BRAKE DRUM SUB-ASSY (DRUM REAR BRAKE TYPE)

- (a) Aligning the matchmarks, install the rear brake drum sub-assy.

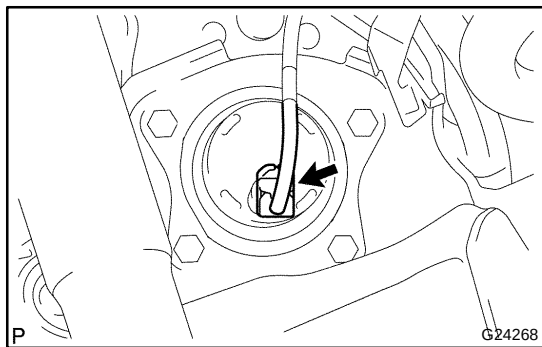
11. INSTALL REAR DISC (DISC REAR BRAKE TYPE)

- (a) Aligning the matchmarks, install the rear disc.

12. INSTALL REAR DISC BRAKE CALIPER ASSY LH (DISC REAR BRAKE TYPE)

- (a) Install the rear disc brake caliper assy LH with the 2 bolts.

Torque: 88 N·m (900 kgf·cm, 65 ft·lbf)



13. CONNECT SKID CONTROL SENSOR WIRE

- (a) Connect the connector to the skid control sensor connector.

14. INSTALL REAR WHEEL

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

15. INSPECT AND ADJUST REAR WHEEL ALIGNMENT (See page 27-4)

16. CHECK ABS SPEED SENSOR SIGNAL (See page 05-386)

REPLACEMENT

NOTICE:

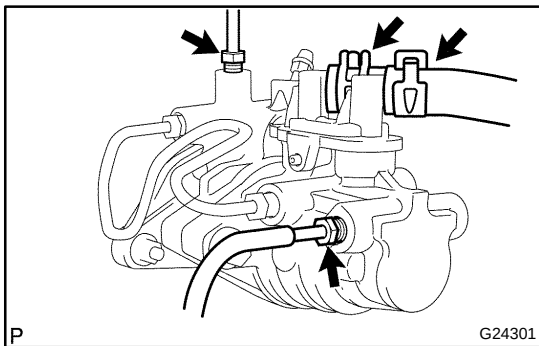
- Do not adjust the brake booster push rod.
- Do not change the combination of the diameter converting unit and brake.

1. DRAIN BRAKE FLUID

NOTICE:

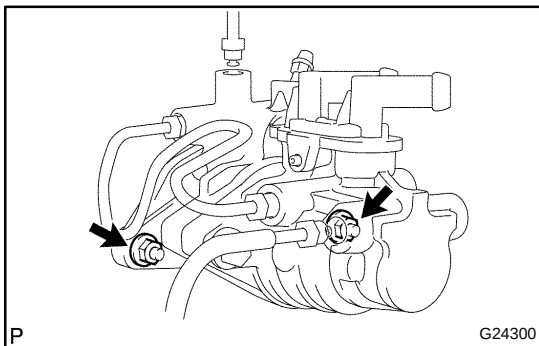
Wash the brake fluid off immediately if it attaches to any painted surfaces.

2. BATTERY NEGATIVE TERMINAL
3. REMOVE AIR CLEANER ASSEMBLY WITH HOSE
4. REMOVE COWL TOP PANEL SUB-ASSY OUTER FRONT (See page 55-33)

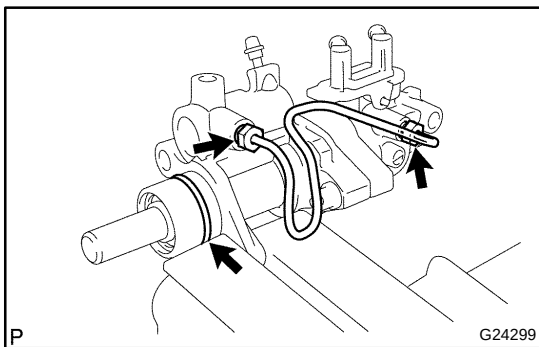


5. REMOVE BRAKE MASTER CYLINDER

- (a) Using SST, disconnect the 2 brake tubes from the brake master cylinder assy.
SST 09023-00101
- (b) Slide the clip and disconnect the brake master cylinder reservoir hose.

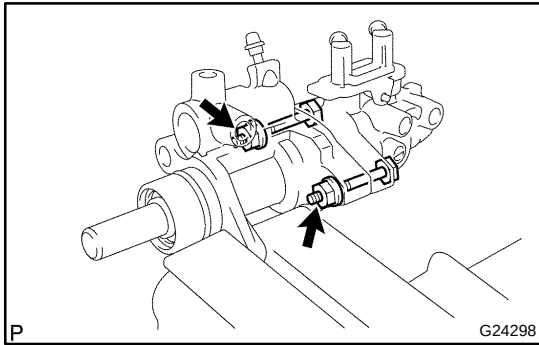


- (c) Remove the 2 nuts and brake master cylinder.



6. REMOVE BRAKE MASTER LESS RESERVOIR TANK CYLINDER SUB-ASSY

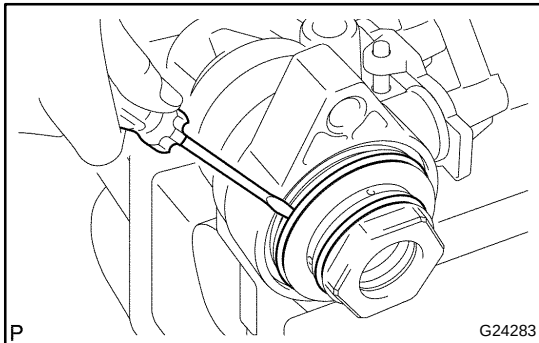
- (a) Using soft jaws on the vise, hold the brake master cylinder in a vise through aluminum plates.
- (b) Using a screwdriver, remove the O-ring.
- (c) Using SST, remove the brake tube from the brake master cylinder.
SST 09023-00101



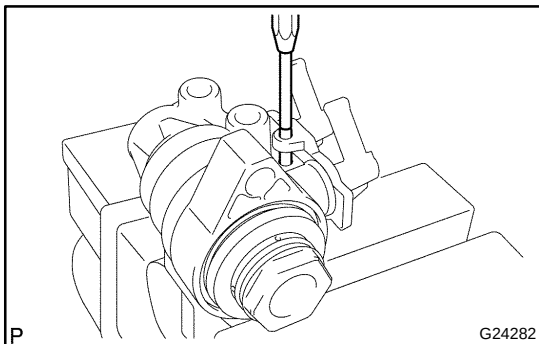
- (d) Remove the 2 nuts, 2 bolts and brake master less reservoir tank cylinder sub-assy.

NOTICE:

- Pay due attention so as not to drop the No.3 piston from the diameter converting unit.(if the No.3 piston drops, it cannot be reused.)
- Pay due attention so as not to drop the No.1 piston from the plunger master cylinder.(if the No.1 piston drops, it cannot be reused.)



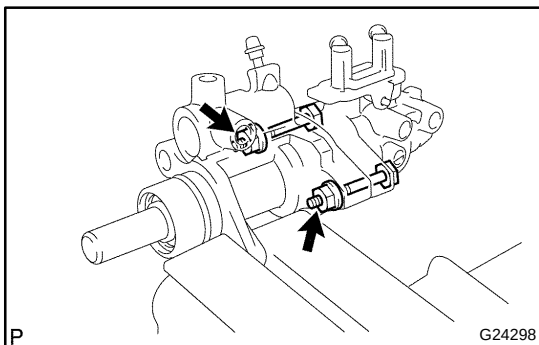
- (e) Using a screwdriver, remove the 2 O-rings.



- (f) Using a pin punch (ϕ 5 mm) and hammer, remove the pin.
 (g) Remove the brake master cylinder union and 2 brake master cylinder union grommets.

7. INSTALL BRAKE MASTER LESS RESERVOIR TANK CYLINDER SUB-ASSY

- (a) Apply lithium soap base glycol grease to the 2 brake master cylinder union grommets and install them to the brake master less reservoir tank cylinder sub-assy.
 (b) Using a pin punch (ϕ 5 mm) and hammer, install the master cylinder union with the pin.
 (c) Install the 2 new O-rings.

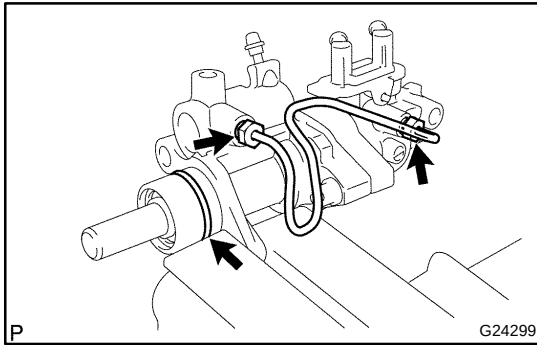


- (d) Install the brake master less reservoir tank cylinder sub-assy with the 2 nuts and, 2 bolts.

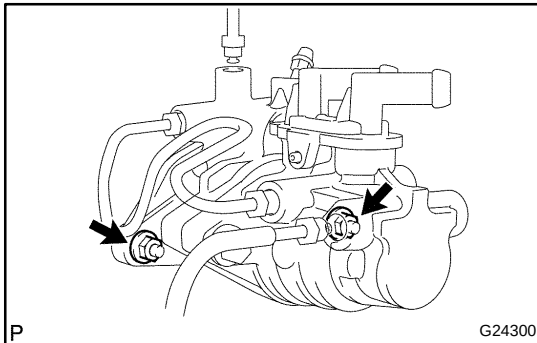
Torque: 25 N·m (255 kgf·cm, 18 ft·lbf)

NOTICE:

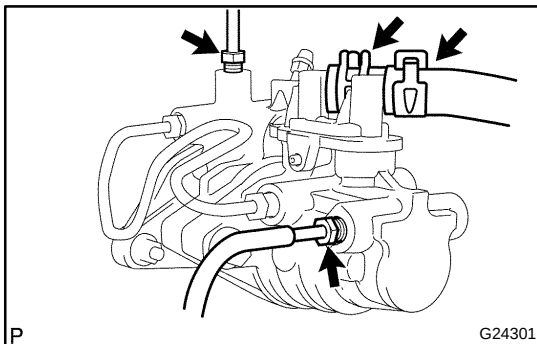
When the diameter converting unit and master cylinder are connected, install the No.3 piston with no looseness.



- (e) Using SST, install the brake tube to the brake master cylinder.
SST 09023-00101
Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)
- (f) Install the new O-ring.



- 8. INSTALL BRAKE MASTER CYLINDER**
- (a) Install the brake master cylinder with the 2 nuts.
Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)



- (b) Slide the clip and connect the brake master cylinder reservoir hose.
- (c) Using SST, connect the 2 brake tube to the brake master cylinder.
SST 09023-00101
Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)

- 9. INSTALL AIR CLEANER ASSEMBLY WITH HOSE**
- 10. FILL RESERVOIR WITH BRAKE FLUID (See page 32-4)**
- 11. BLEED MASTER CYLINDER (See page 32-4)**
SST 09023-00101
- 12. BLEED BRAKE LINE (See page 32-4)**
- 13. CHECK FLUID LEVEL IN RESERVOIR (See page 32-4)**
- 14. CHECK BRAKE FLUID LEAKAGE**
- 15. INSTALL COWL TOP PANEL SUB-ASSY OUTER FRONT (See page 55-33)**
- 16. INSPECT BRAKE PEDAL HEIGHT (See page 32-6)**
- 17. CHECK BRAKE ACTUATOR WITH TOYOTA HAND-HELD TESTER (See page 05-386 or 05-435)**

SPEED SENSOR REAR LH (4WD)

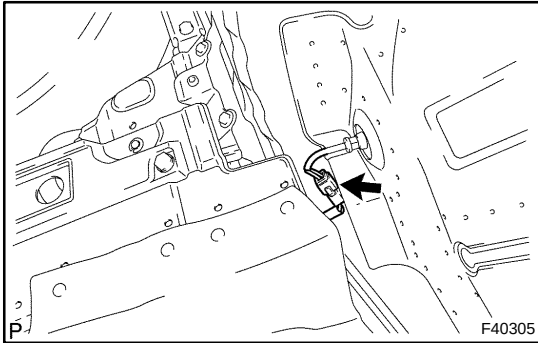
REPLACEMENT

3203P-05

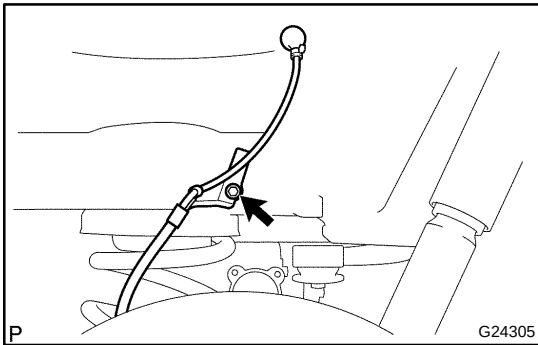
HINT:

Replace the RH side by the same procedure as the LH side.

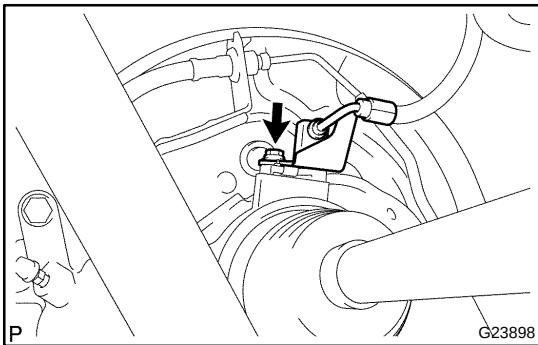
1. **REMOVE REAR WHEEL**
2. **REMOVE QUARTER TRIM PANEL ASSY FRONT LH (See page 76-27)**

**3. REMOVE SPEED SENSOR REAR LH**

- (a) Disconnect the speed sensor connector, and pull out the sensor wire harness with grommet.



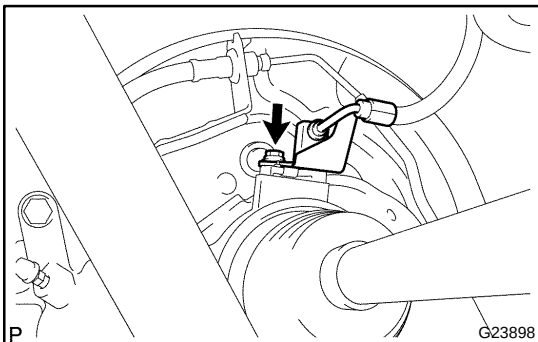
- (b) Remove the clamp bolt holding the sensor harness from the body.



- (c) Remove the bolt and speed sensor rear LH.

NOTICE:

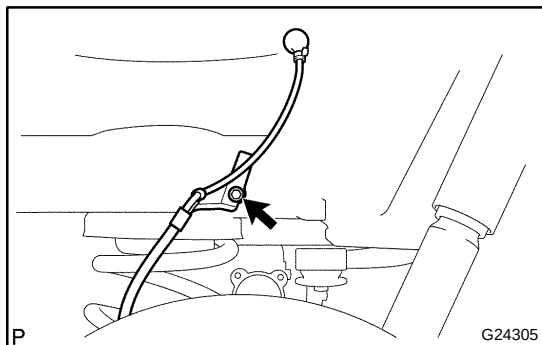
Keep the tip of the speed sensor rear LH clean.

**4. INSTALL SPEED SENSOR REAR LH**

- (a) Install the speed sensor rear LH with the bolt.
Torque: 8.0 N·m (82 kgf·cm, 71 in·lbf)

NOTICE:

Keep the tip of the speed sensor rear LH clean.



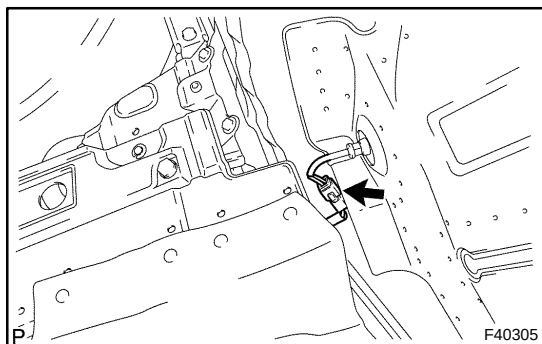
- (b) Install the sensor harness clamps with the bolts to the body.

Torque: 8.0 N·m (82 kgf·cm, 71 in·lbf)

- (c) Push in the sensor wire harness with grommet.

NOTICE:

When grommet is set to body, pull the grommet, and don't pull the sensor wire.



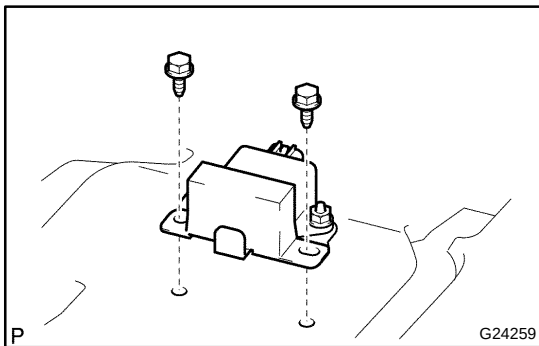
- (d) Connect the speed sensor connector.

5. **INSTALL QUARTER TRIM PANEL ASSY FRONT LH (See page [76-27](#))**
6. **INSTALL REAR WHEEL**
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
7. **CHECK ABS SPEED SENSOR SIGNAL (See page [05-435](#))**

YAWRATE SENSOR REPLACEMENT

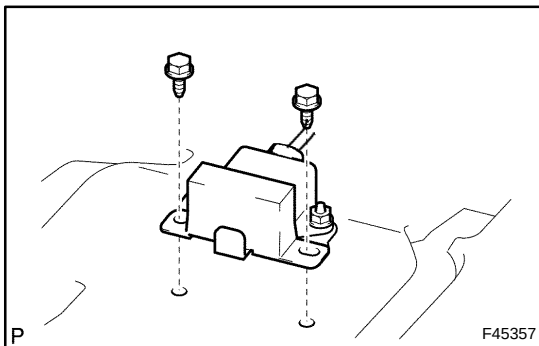
NOTICE:

- Don't use the dropped or damaged yawrate sensor.
 - Free from the foreign matters between yawrate sensor bracket and body.
 - Make sure the sensor direction.
1. REMOVE FRONT SEAT ASSEMBLY RH (See page [72-30](#))
 2. REMOVE FRONT DOOR SCUFF PLATE RH
 3. REMOVE COWL SIDE TRIM BOARD RH
 - (a) Remove the nut and cowl side trim board plate RH.



4. REMOVE YAWRATE SENSOR

- (a) Disconnect the yawrate sensor connector.
- (b) Remove the 2 bolts and yawrate sensor.



5. INSTALL YAWRATE SENSOR

- (a) Connect the yawrate sensor connector.
- (b) Install the yawrate sensor with the 2 bolts.
Torque: 13 N·m (136 kgf·cm, 10 ft·lbf)

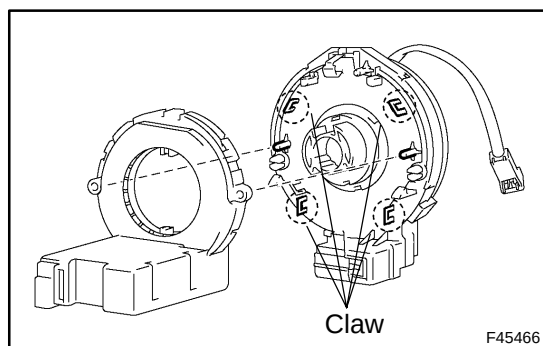
6. INSTALL COWL SIDE TRIM BOARD RH

- (a) Install the nut with the cowl side trim board plate RH.
7. INSTALL FRONT DOOR SCUFF PLATE RH
8. INSTALL FRONT SEAT ASSEMBLY RH (See page [72-30](#))
9. PERFORM YAWRATE SENSOR ZERO POINT CALIBRATION (See page [05-435](#))
10. CHECK VSC SENSOR SIGNAL (See page [05-435](#))

STEERING SENSOR REPLACEMENT

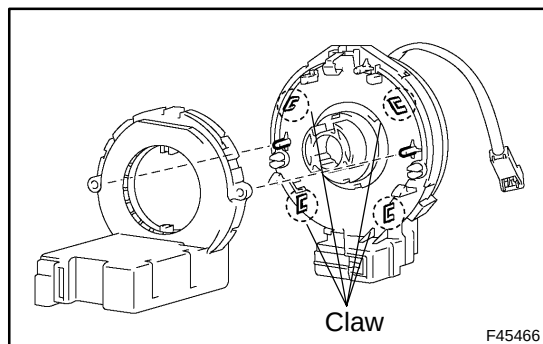
320VD-04

1. PRECAUTION (See page 60-1)
2. SEPARATE BATTERY NEGATIVE TERMINAL
3. PLACE FRONT WHEELS FACING STRAIGHT AHEAD
4. REMOVE HORN BUTTON ASSY (See page 60-19)
5. REMOVE STEERING WHEEL ASSY (See page 50-8)
6. REMOVE STEERING COLUMN LOWER COVER (See page 50-8)
7. REMOVE SPIRAL CABLE SUB-ASSY (See page 60-28)



8. REMOVE STEERING SENSOR

- (a) Release the claw fittings and remove the steering sensor from the spiral cable.



9. INSTALL STEERING SENSOR

- (a) Install the steering sensor onto the spiral cable.

10. PLACE FRONT WHEELS FACING STRAIGHT AHEAD
11. INSTALL SPIRAL CABLE SUB-ASSY (See page 60-28)
12. INSTALL STEERING COLUMN LOWER COVER (See page 50-8)
13. CENTER SPIRAL CABLE (See page 60-28)
14. INSTALL STEERING WHEEL ASSY (See page 50-8)
15. INSPECT STEERING WHEEL CENTER POINT
16. INSTALL HORN BUTTON ASSY (See page 60-19)
17. INSPECT SRS WARNING LIGHT (See page 05-770)

REPLACEMENT

NOTICE:

- Do not adjust the brake booster push rod.
- Do not change the combination of the diameter converting unit and brake.

1. REMOVE FRONT WHEEL

2. DRAIN BRAKE FLUID

NOTICE:

Wash the brake fluid off immediately if it attaches to any painted surfaces.

3. BATTERY NEGATIVE TERMINAL

4. REMOVE FRONT DOOR SCUFF PLATE LH

5. REMOVE COWL SIDE TRIM BOARD LH

- (a) Remove the nut and cowl trim board plate LH.

6. REMOVE INSTRUMENT PANEL FINISH PANEL SUB-ASSY LOWER LH

- (a) Remove the 2 bolts and instrument panel finish panel sub-assy lower LH.

7. REMOVE INSTRUMENT PANEL SAFETY PAD INSERT SUB-ASSY NO.1

- (a) Remove the 4 bolts and instrument panel safety pad insert sub-assy No.1.

8. REMOVE COWL TOP PANEL SUB-ASSY OUTER FRONT (See page 55-33)

9. REMOVE AIR CLEANER ASSEMBLY WITH HOSE

10. REMOVE BRAKE ACTUATOR ASSY (W/O VSC) (See page 32-43)

SST 09023-00101

11. REMOVE BRAKE ACTUATOR ASSY (W/ VSC) (See page 32-46)

SST 09023-00101

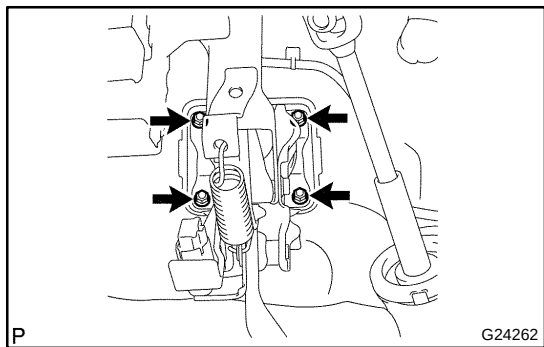
12. REMOVE BRAKE LINE

- (a) Remove the front brake tube No.1, front brake tube No.2, front brake tube No.3 and front brake tube No.4.

- (b) Remove the rear brake tube No.1 and rear brake tube No.2.

13. REMOVE PUSH ROD PIN

- (a) Remove the push rod pin from the brake booster push rod .



14. REMOVE BRAKE MASTER CYLINDER ASSY

- (a) Slide the clip and disconnect the brake master cylinder reservoir hose from the brake master cylinder union.
- (b) Slide the clip and disconnect the vacuum hose from the brake vacuum check valve assy.
- (c) Remove the 4 nuts and clevis.
- (d) Pull out the brake booster with master cylinder.

15. REMOVE BRAKE BOOSTER GASKET

- (a) Remove the brake booster gasket from the brake booster with master cylinder.

16. REMOVE BRAKE VACUUM CHECK VALVE ASSY

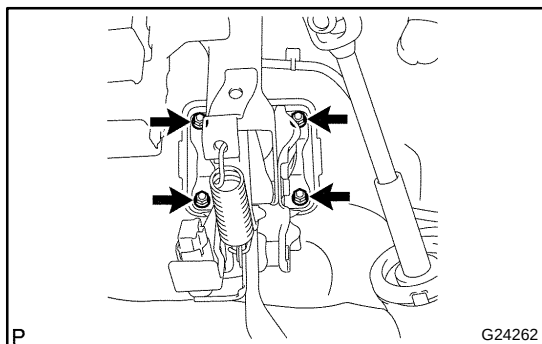
- (a) Remove the brake vacuum check valve assy and check valve grommet from the brake booster assy.

17. INSTALL BRAKE VACUUM CHECK VALVE ASSY

- (a) Install the brake vacuum check valve assy and check valve grommet to the brake booster assy.

18. INSTALL BRAKE BOOSTER GASKET

- (a) Install a new brake booster gasket to the brake booster with master cylinder.

**19. INSTALL BRAKE MASTER CYLINDER ASSY**

- (a) Install the brake booster assy with the 4 nuts.
Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)
- (b) Slide the clip and connect the brake master cylinder reservoir hose to the brake master cylinder union.
- (c) Slide the clip and connect the vacuum hose from the brake vacuum check valve assy.

20. INSTALL PUSH ROD PIN

- (a) Install the push rod pin to the brake booster push rod.

21. INSTALL BRAKE LINE

- (a) Install the front brake tube No.1, front brake tube No.2, front brake tube No.3 and front brake tube No.4.

Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)

- (b) Install the rear brake tube No.1 and rear brake tube No.2.

Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)

22. INSTALL BRAKE ACTUATOR ASSY (W/ VSC) (See page 32-46)

SST 09023-00101

23. INSTALL BRAKE ACTUATOR ASSY (W/O VSC) (See page 32-43)

SST 09023-00101

24. INSTALL AIR CLEANER ASSEMBLY WITH HOSE**25. FILL RESERVOIR WITH BRAKE FLUID (See page 32-4)****26. BLEED MASTER CYLINDER (See page 32-4)**

SST 09023-00101

27. BLEED BRAKE LINE (See page 32-4)**28. CHECK FLUID LEVEL IN RESERVOIR (See page 32-4)****29. CHECK BRAKE FLUID LEAKAGE****30. INSTALL INSTRUMENT PANEL SAFETY PAD INSERT SUB-ASSY NO.1**

- (a) Install the instrument panel safety pad insert sub-assy No.1 with the 4 bolts.

31. INSTALL INSTRUMENT PANEL FINISH PANEL SUB-ASSY LOWER LH

- (a) Install the instrument panel finish panel sub-assy lower LH with the 2 bolts.

32. INSTALL COWL SIDE TRIM BOARD LH

- (a) Install the cowl trim board plate LH with the nut.

33. INSTALL FRONT DOOR SCUFF PLATE LH**34. INSTALL COWL TOP PANEL SUB-ASSY OUTER FRONT (See page 55-33)****35. INSTALL FRONT WHEEL**

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

36. INSPECT BRAKE PEDAL HEIGHT (See page [32-6](#))
37. CHECK BRAKE ACTUATOR WITH TOYOTA HAND-HELD TESTER
(See page [05-386](#) or [05-435](#))

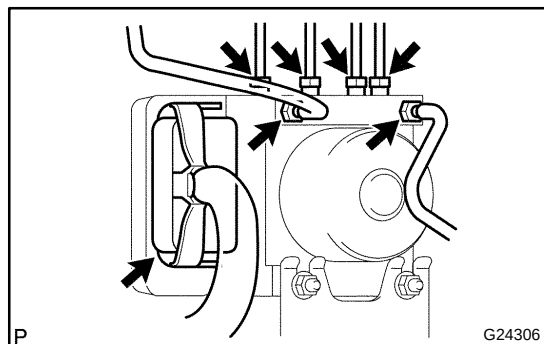
REPLACEMENT

1. DRAIN BRAKE FLUID

NOTICE:

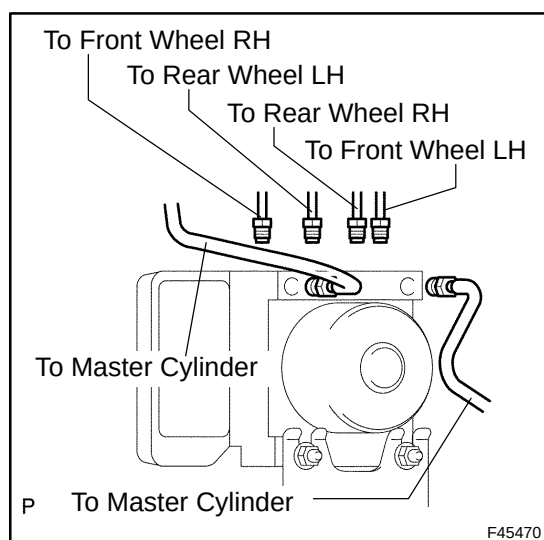
Wash the brake fluid off immediately if it attaches to any painted surface.

2. REMOVE AIR CLEANER ASSEMBLY WITH HOSE

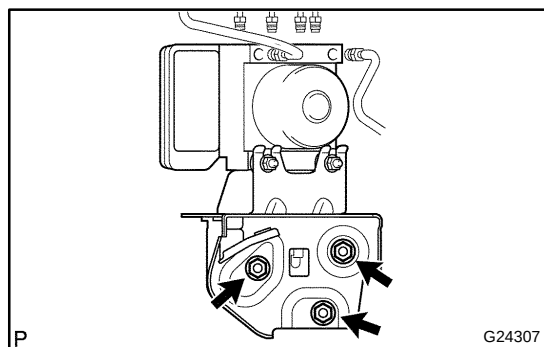


3. REMOVE BRAKE ACTUATOR WITH BRACKET

- (a) Release the latch of the brake actuator connector to disconnect the connector.
- (b) Using SST, disconnect the brake tubes from the brake actuator.
SST 09023-00101



- (c) Use tags or make a memo to identify the place to reconnect.



- (d) Remove the 3 bolts and brake actuator assy.

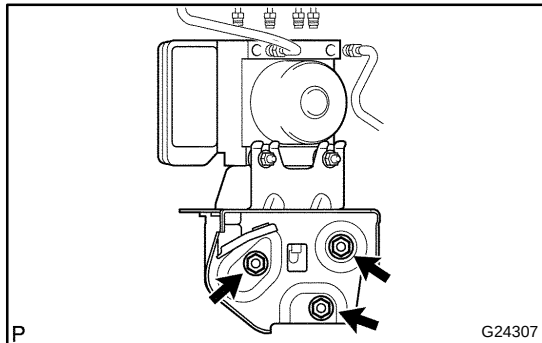
4. REMOVE BRAKE ACTUATOR ASSY

- (a) Remove the 2 nuts and brake actuator assy from the brake actuator bracket.

5. INSTALL BRAKE ACTUATOR ASSY

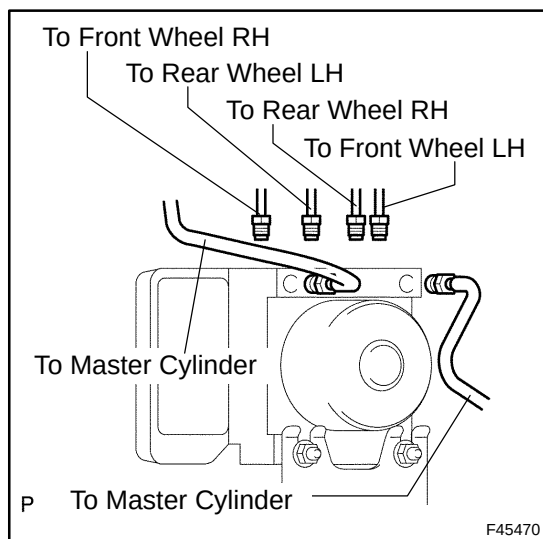
- (a) Install the brake actuator with the 2 nuts to the brake actuator bracket.

Torque: 5.4 N·m (55 kgf·cm, 48 in·lbf)

**6. INSTALL BRAKE ACTUATOR WITH BRACKET**

- (a) Install the 3 bolts with the brake actuator assy.

Torque: 20 N·m (199 kgf·cm, 14 ft·lbf)



- (b) Using SST, connect each brake tube to the correct position of brake actuator, as shown in the illustration.

SST 09023-00101

Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)

- (c) Connect the brake actuator connector.

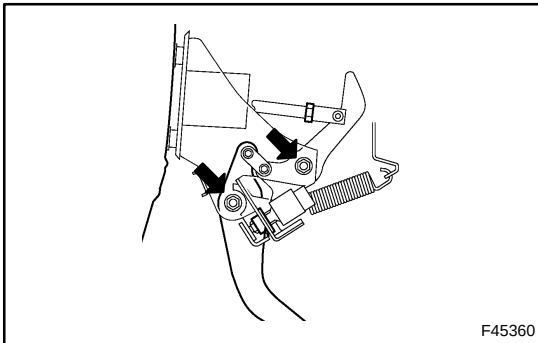
7. INSTALL AIR CLEANER ASSEMBLY WITH HOSE**8. FILL RESERVOIR WITH BRAKE FLUID (See page 32-4)****9. BLEED MASTER CYLINDER (See page 32-4)**

SST 09023-00101

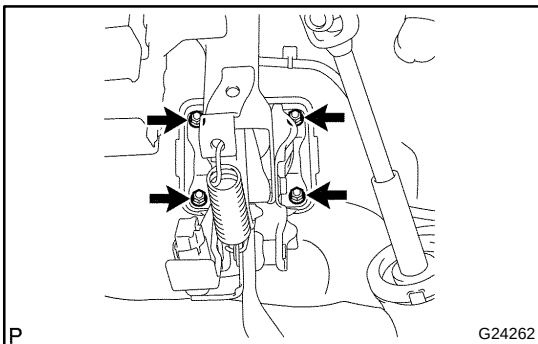
10. BLEED BRAKE LINE (See page 32-4)**11. CHECK FLUID LEVEL IN RESERVOIR (See page 32-4)****12. CHECK BRAKE FLUID LEAKAGE****13. CHECK BRAKE ACTUATOR WITH TOYOTA HAND-HELD TESTER (See page 05-386)**

REPLACEMENT

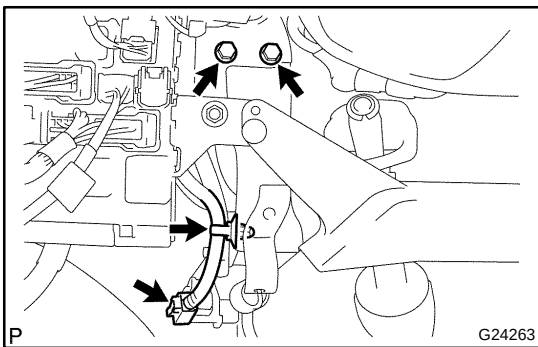
1. **SEPARATE BATTERY NEGATIVE TERMINAL**
2. **REMOVE FRONT DOOR SCUFF PLATE LH**
3. **REMOVE COWL SIDE TRIM BOARD LH**
4. **REMOVE INSTRUMENT PANEL FINISH PANEL SUB-ASSY LOWER LH**
 - (a) Remove the 2 bolts and instrument panel finish panel sub-assy lower LH.
5. **REMOVE INSTRUMENT PANEL SAFETY PAD INSERT SUB-ASSY NO.1**
 - (a) Remove the 4 bolts and instrument panel safety pad insert sub-assy No.1.



6. **LOOSEN BRAKE PEDAL SHAFT**
 - (a) Loosen the 2 brake pedal shafts.



7. **REMOVE BRAKE PEDAL SUPPORT ASSY**
 - (a) Remove the 4 nuts and brake pedal support sub-assy.
 - (b) Using needle-nose pliers, remove the tension spring.
 - (c) Remove the clip and clevis pin from the brake pedal lever.



- (d) Remove the 2 bolts from the brake pedal bracket No.3.
- (e) Remove the stop lamp switch harness clamp from the brake pedal support sub-assy.
- (f) Disconnect the stop lamp switch connector.

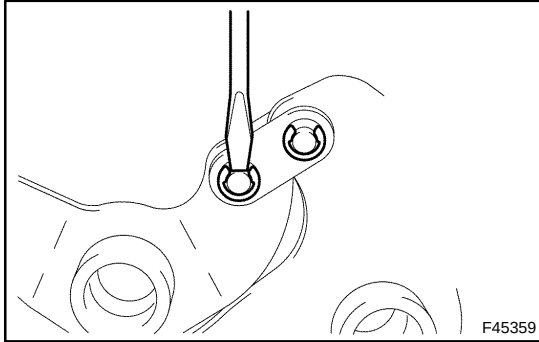
8. **REMOVE STOP LAMP SWITCH ASSY**
 - (a) Turn the stop lamp switch assy counterclockwise and remove the stop lamp switch assy.
 - (b) Remove the stop lamp switch mounting adjuster from the brake pedal support sub-assy.
9. **REMOVE STOP LAMP SWITCH CUSHION**
 - (a) Remove the stop lamp switch cushion from the brake pedal sub-assy.
10. **REMOVE BRAKE PEDAL**
 - (a) Remove the 2 brake pedal shafts, 2 nuts and brake pedal from the brake pedal support sub-assy.

11. REMOVE BRAKE PEDAL BUSH

- (a) Remove the 4 brake pedal bushes from the brake pedal.

12. REMOVE BRAKE PEDAL SHAFT COLLAR

- (a) Remove the 2 brake pedal shaft collars from the brake pedal.

**13. REMOVE PUSH ROD PIN**

- (a) Using a screwdriver, remove the 2 E-rings, 2 push rod pins and 2 plates from the brake pedal.
(b) Remove the 2 push rod bushes.

14. REMOVE BRAKE PEDAL PAD

- (a) Remove the brake pedal pad to the brake pedal sub-assy.

15. INSTALL BRAKE PEDAL PAD

- (a) Install the brake pedal pad to the brake pedal sub-assy.

16. INSTALL PUSH ROD PIN

- (a) Apply lithium soap base glycol grease to inside surface of 2 new push rod bushes.
(b) Install the 2 new push rod bushes.
(c) Install the 2 push rod pins with the 2 plate to the brake pedal.
(d) Using needle-nose pliers, install the 2 new E-rings to the 2 push rod pins.

NOTICE:

Install the E-ring securely to the grooves of the push rod pin.

17. INSTALL BRAKE PEDAL BUSH

- (a) Apply lithium soap base glycol grease to inside surface of 4 new brake pedal bushes.
(b) Install the 4 brake pedal bushes to the brake pedal.

18. INSTALL BRAKE PEDAL SHAFT COLLAR

- (a) Apply the lithium soap base glycol grease to inside surface of 2 brake pedal shaft collars.
(b) Install the 2 brake pedal shaft collars to the brake pedal.

19. INSTALL BRAKE PEDAL

- (a) Install the 2 brake pedal shafts, 2 nuts, brake pedal and brake pedal bracket No.3 to the brake pedal support sub-assy.

20. INSTALL STOP LAMP SWITCH CUSHION

- (a) Install the stop lamp switch cushion to the brake pedal sub-assy.

21. INSTALL STOP LAMP SWITCH ASSY

- (a) Install the stop lamp switch mounting adjuster to the brake pedal support sub-assy.
(b) Install the stop lamp switch assy until the body hits the cushion.
(c) Make a quarter turn clockwise to install the stop lamp switch assy.

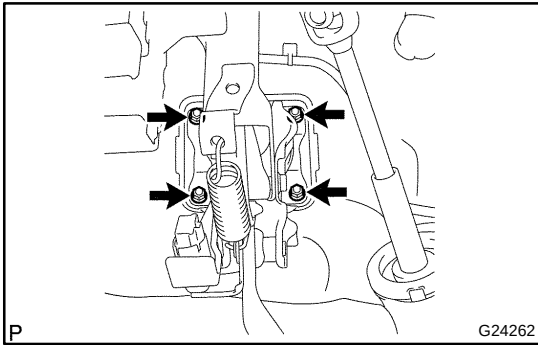
NOTICE:

The turning torque for installing the stop lamp switch assy.

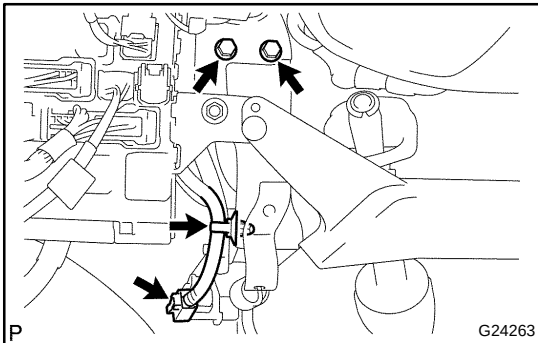
Torque: 1.5 N·m (15 kgf·cm, 13 in·lbf) or less

HINT:

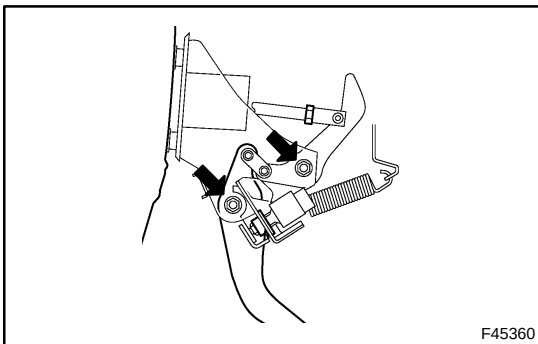
Due to the inverse screw structure, if the stop lamp switch assy is turned clockwise, the stop lamp switch assy moves in the direction to be pulled out.

**22. INSTALL BRAKE PEDAL SUPPORT ASSY**

- (a) Install the brake pedal support sub-assy with the 4 nuts.
Torque: 16 N·m (160 kgf·cm, 12 ft·lbf)
- (b) Install the clip and clevis pin to the brake pedal lever.
- (c) Using needle-nose pliers, install the tension spring.



- (d) Install the 2 bolts to the brake pedal bracket No.3.
Torque: 19 N·m (194 kgf·cm, 14 ft·lbf)
- (e) Install the stop lamp switch harness clamp to the brake pedal support sub-assy.
- (f) Connect the stop lamp switch connector.

**23. FULLY TIGHTEN BRAKE PEDAL SHAFT**

- (a) fully tighten the 2 brake pedal shafts.
Torque: 34 N·m (350 kgf·cm, 25 ft·lbf)

24. INSTALL INSTRUMENT PANEL SAFETY PAD INSERT SUB-ASSY NO.1

- (a) Install the instrument panel safety pad insert sub-assy No.1 with the 4 bolts.

25. INSTALL INSTRUMENT PANEL FINISH PANEL SUB-ASSY LOWER LH

- (a) Install the instrument panel finish panel sub-assy lower LH with the 2 bolts.

26. INSTALL COWL SIDE TRIM BOARD LH**27. INSTALL FRONT DOOR SCUFF PLATE LH****28. INSPECT BRAKE PEDAL HEIGHT (See page 32-6)****29. CHECK PEDAL FREE PLAY (See page 32-6)****30. CHECK PEDAL RESERVE DISTANCE (See page 32-6)**

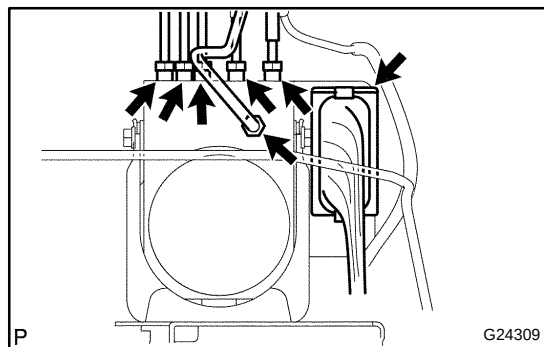
REPLACEMENT

1. DRAIN BRAKE FLUID

NOTICE:

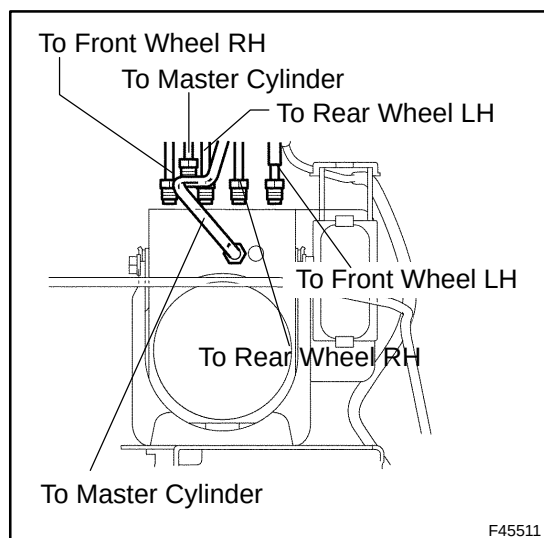
Wash the brake fluid off immediately if it attaches to any painted surface.

2. REMOVE AIR CLEANER ASSEMBLY WITH HOSE

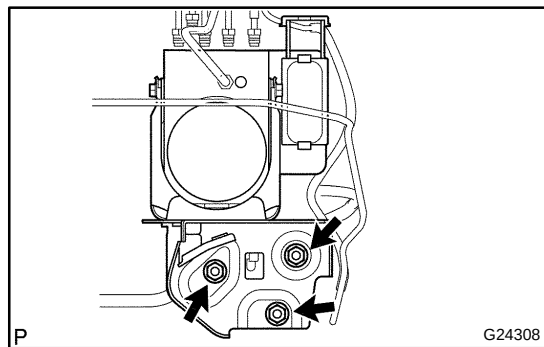


3. REMOVE BRAKE ACTUATOR WITH BRACKET

- (a) Release the latch of the brake actuator connector to disconnect the connector.
- (b) Using SST, disconnect the brake tubes from the brake actuator.
SST 09023-00101



- (c) Use tags or make a memo to identify the place to reconnect.



- (d) Remove the 3 bolts and brake actuator assy.

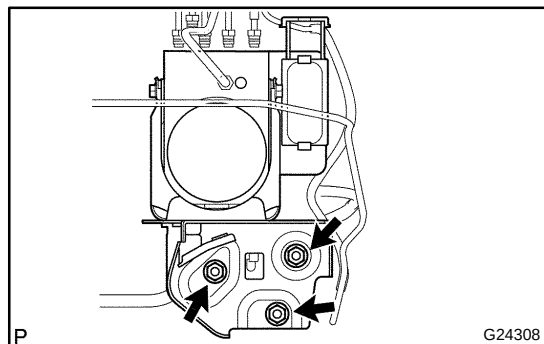
4. REMOVE BRAKE ACTUATOR ASSY

- (a) Remove the 2 nuts and brake actuator assy from the brake actuator bracket.

5. INSTALL BRAKE ACTUATOR ASSY

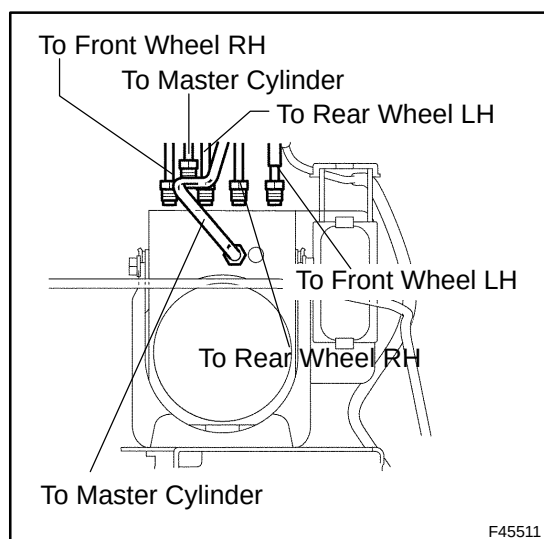
- (a) Install the brake actuator assy with the 2 nuts to the brake actuator bracket.

Torque: 5.4 N·m (55 kgf·cm, 48 in·lbf)

**6. INSTALL BRAKE ACTUATOR WITH BRACKET**

- (a) Install the 3 bolts with the brake actuator assy.

Torque: 20 N·m (199 kgf·cm, 14 ft·lbf)



- (b) Using SST, connect each brake line to the correct position of brake actuator, as shown in the illustration.

SST 09023-00101

Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)

- (c) Connect the brake actuator connector.

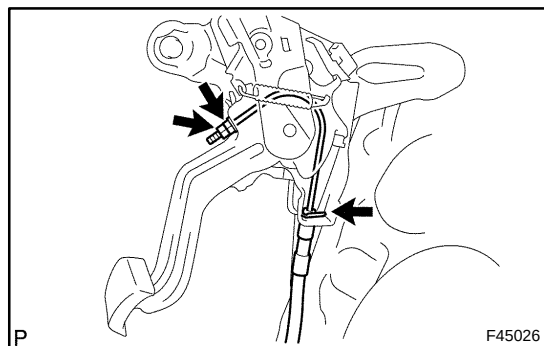
7. INSTALL AIR CLEANER ASSEMBLY WITH HOSE**8. FILL RESERVOIR WITH BRAKE FLUID (See page 32-4)****9. BLEED MASTER CYLINDER (See page 32-4)**

SST 09023-00101

10. BLEED BRAKE LINE (See page 32-4)**11. CHECK FLUID LEVEL IN RESERVOIR (See page 32-4)****12. CHECK BRAKE FLUID LEAKAGE****13. CHECK BRAKE ACTUATOR WITH TOYOTA HAND-HELD TESTER (See page 05-435)**

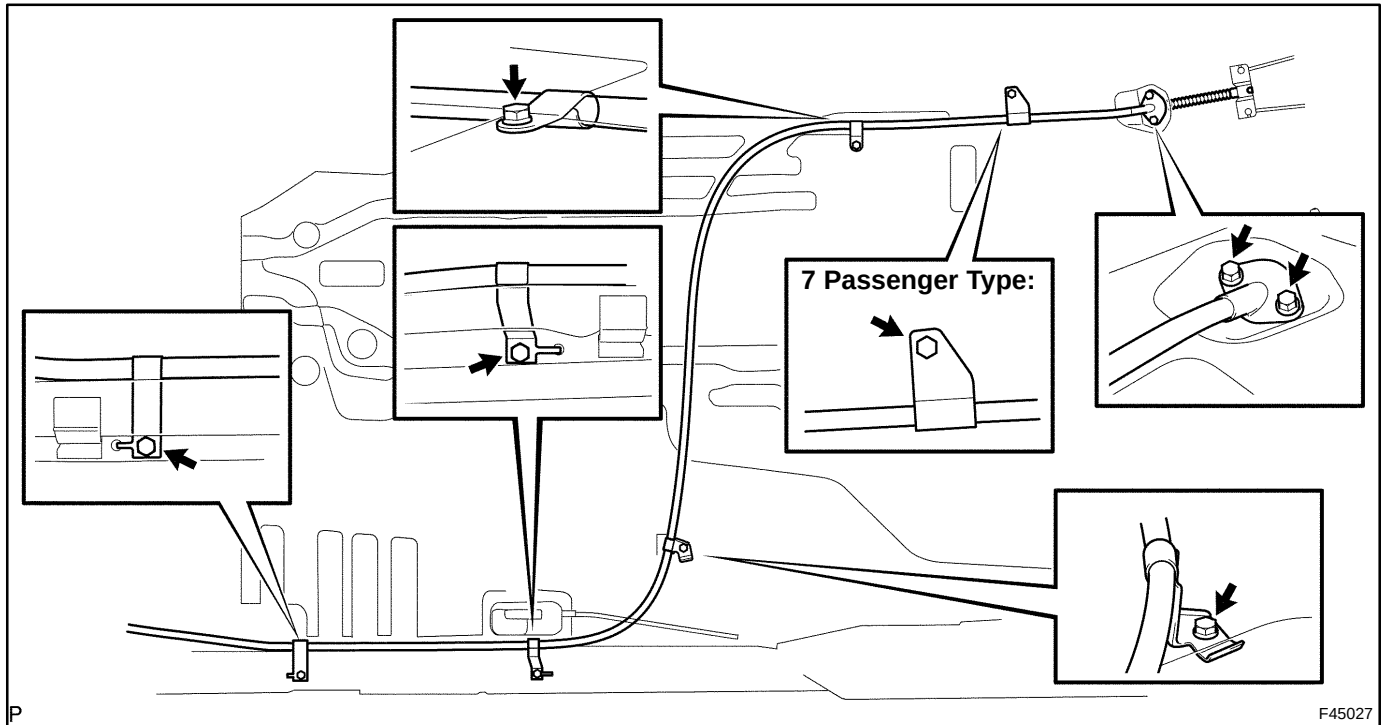
REPLACEMENT

1. DISCONNECT BATTERY NEGATIVE TERMINAL(See page 60-1)
2. REMOVE FRONT DOOR SCUFF PLATE LH (See page 71-10)
3. REMOVE COWL SIDE TRIM BOARD LH (See page 71-10)
4. REMOVE INSTRUMENT PANEL FINISH PANEL SUB-ASSY LOWER LH (See page 71-10)
5. REMOVE REAR DOOR SCUFF PLATE RH
6. REMOVE REAR DOOR SCUFF PLATE LH
7. REMOVE FRONT SEAT ASSY LH
MANUAL SEAT TYPE (See page 72-22)
POWER SEAT TYPE (See page 72-22)
FOLD FLAT TYPE (See page 72-30)
8. REMOVE REAR NO. 1 SEAT ASSY
CAPTAIN SEAT TYPE LH (See page 72-37)
CAPTAIN SEAT TYPE CTR (See page 72-44)
9. REMOVE REAR FLOOR SEAT LOCK COVER
10. REMOVE REAR FLOOR SEAT LOCK COVER
11. REMOVE PARKING BRAKE CONTROL PEDAL ASSY (See page 33-4)
12. REMOVE PARKING BRAKE PEDAL BRACKET PROTECTOR (See page 33-4)



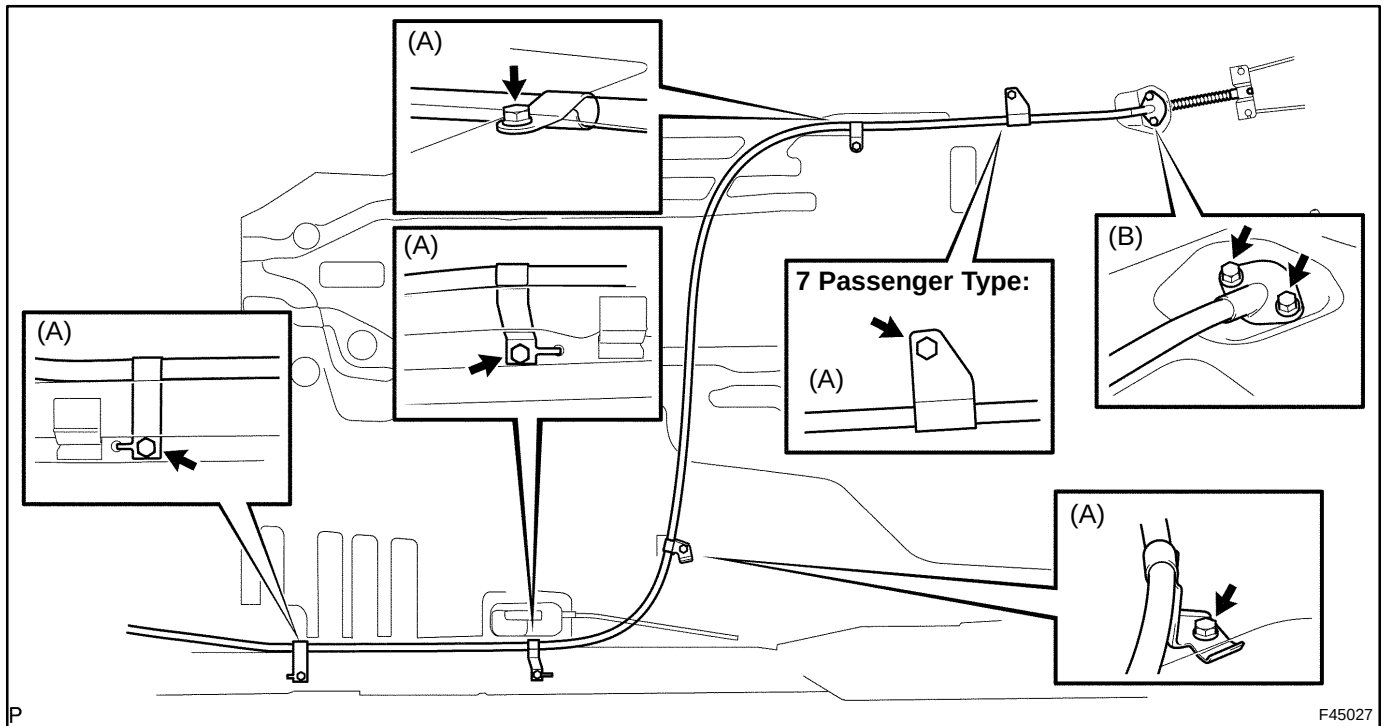
13. REMOVE PARKING BRAKE CABLE ASSY NO.1
 - (a) Remove the lock nut, adjusting nut, clip and disconnect the parking brake cable assy No.1 from the parking brake control pedal assy.
 - (b) Take up the floor carpet.
 - (c) Remove the 6 bolts and disconnect the parking brake cable assy No.1 from the floor.
(Except 7 Passenger Type)
 - (d) Remove the 7 bolts and disconnect the parking brake cable assy No.1 from the floor.
(7 Passenger Type)

- (e) Disconnect the parking brake cable No.1 from the parking brake equalizer, and remove the parking brake cable No.1.



14. INSTALL PARKING BRAKE CABLE ASSY NO.1

- (a) Connect the parking brake cable No.1 to the parking brake cable equalizer.
- (b) Install the parking brake cable No.1 with the 6 bolts.
(Except 7 Passenger Type)
- (c) Install the parking brake cable No.1 with the 7 bolts.
(7 Passenger Type)

Torque:**Bolt (A) : 5.6 N·m (57 kgf·cm, 50 in.·lbf)****Bolt (B) : 8 N·m (82 kgf·cm, 71 in.·lbf)**

- 15. INSTALL PARKING BRAKE PEDAL BRACKET PROTECTOR(See page 33-4)**
- 16. INSTALL PARKING BRAKE CONTROL PEDAL ASSY(See page 33-4)**
- 17. INSTALL REAR FLOOR SEAT LOCK COVER**
- 18. INSTALL REAR FLOOR SEAT LOCK COVER**
- 19. INSTALL REAR NO. 1 SEAT ASSY**
CAPTAIN SEAT TYPE LH (See page 72-37)
CAPTAIN SEAT TYPE CTR (See page 72-44)
- 20. INSTALL FRONT SEAT ASSY LH**
MANUAL SEAT TYPE (See page 72-22)
POWER SEAT TYPE (See page 72-12)
FOLD FLAT TYPE (See page 72-30)
- 21. INSPECT PARKING BRAKE PEDAL TRAVEL(See page 33-2)**
- 22. ADJUST PARKING BRAKE PEDAL TRAVEL(See page 33-2)**

SPEED SENSOR FRONT LH

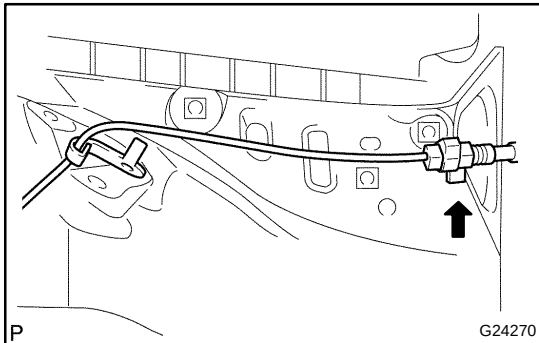
REPLACEMENT

3203N-05

HINT:

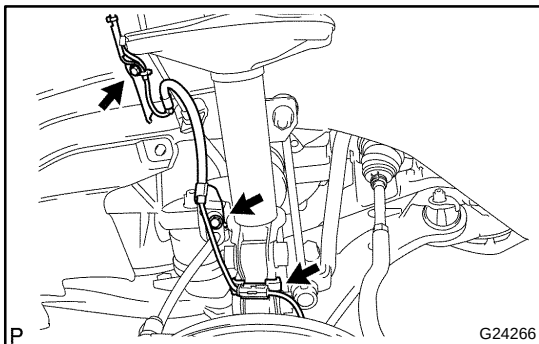
Replace the RH side by the same procedures with LH side.

1. **REMOVE FRONT WHEEL**
2. **REMOVE FRONT FENDER LINER LH**

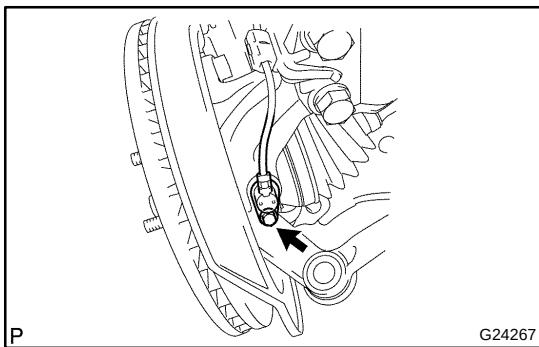


3. REMOVE SPEED SENSOR FRONT LH

- (a) Disconnect the speed sensor connector.
- (b) Remove the sensor harness and clamp from the body.



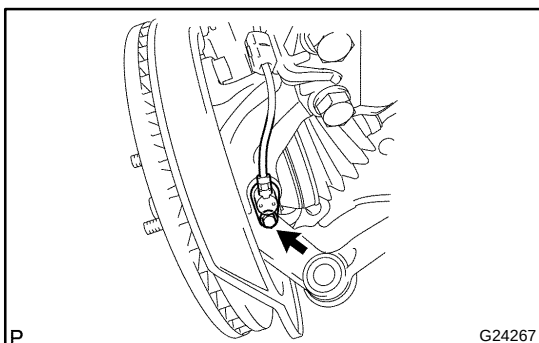
- (c) Remove the 2 clamp bolts holding the sensor harness and clamp from the body and shock absorber.



- (d) Remove the bolt and speed sensor front LH.

NOTICE:

Keep the tip of the speed sensor front LH.

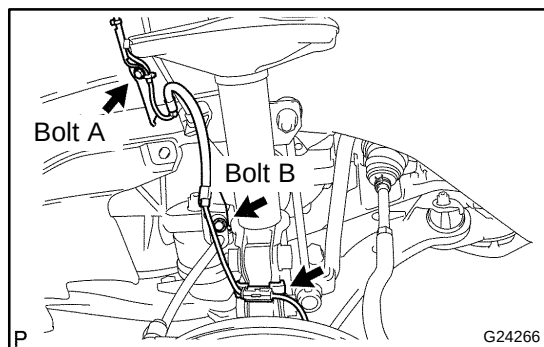


4. INSTALL SPEED SENSOR FRONT LH

- (a) Install the speed sensor front LH with the bolt.
Torque: 8.0 N·m (82 kgf·cm, 71 in·lbf)

NOTICE:

Keep the tip of the speed sensor front LH.



- (b) Install the sensor harness clamps with the 2 bolts A and B to the body and shock absorber.

Torque:

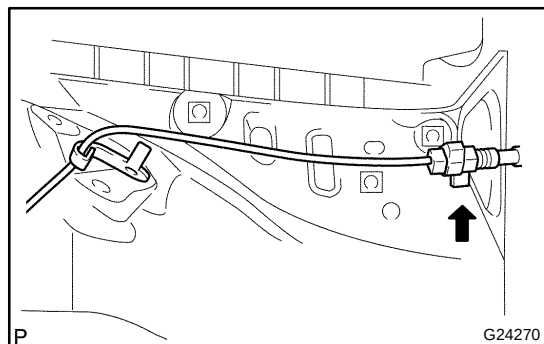
Bolt A: 8.0 N·m (82 kgf·cm, 71 in·lbf)

Bolt B: 19 N·m (192 kgf·cm, 14 ft·lbf)

NOTICE:

Do not twist the sensor wire when installing the sensor.

- (c) Connect the clamp to the knuckle.
(d) Install the sensor harness and clamp to the body.



- (e) Connect the speed sensor connector.

5. INSTALL FRONT FENDER LINER LH

6. INSTALL FRONT WHEEL

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

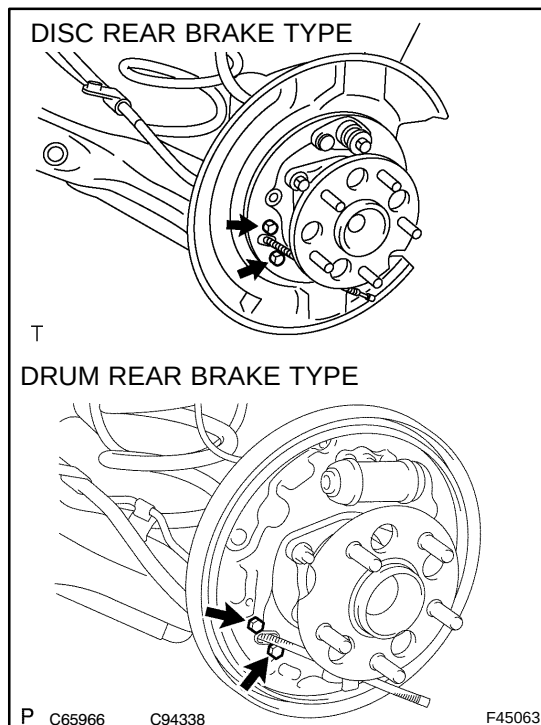
7. CHECK ABS SPEED SENSOR SIGNAL (See page [05-386](#))

REPLACEMENT

HINT:

For the parking brake cable assy No.2, perform the same procedure to the parking brake cable assy No.3.

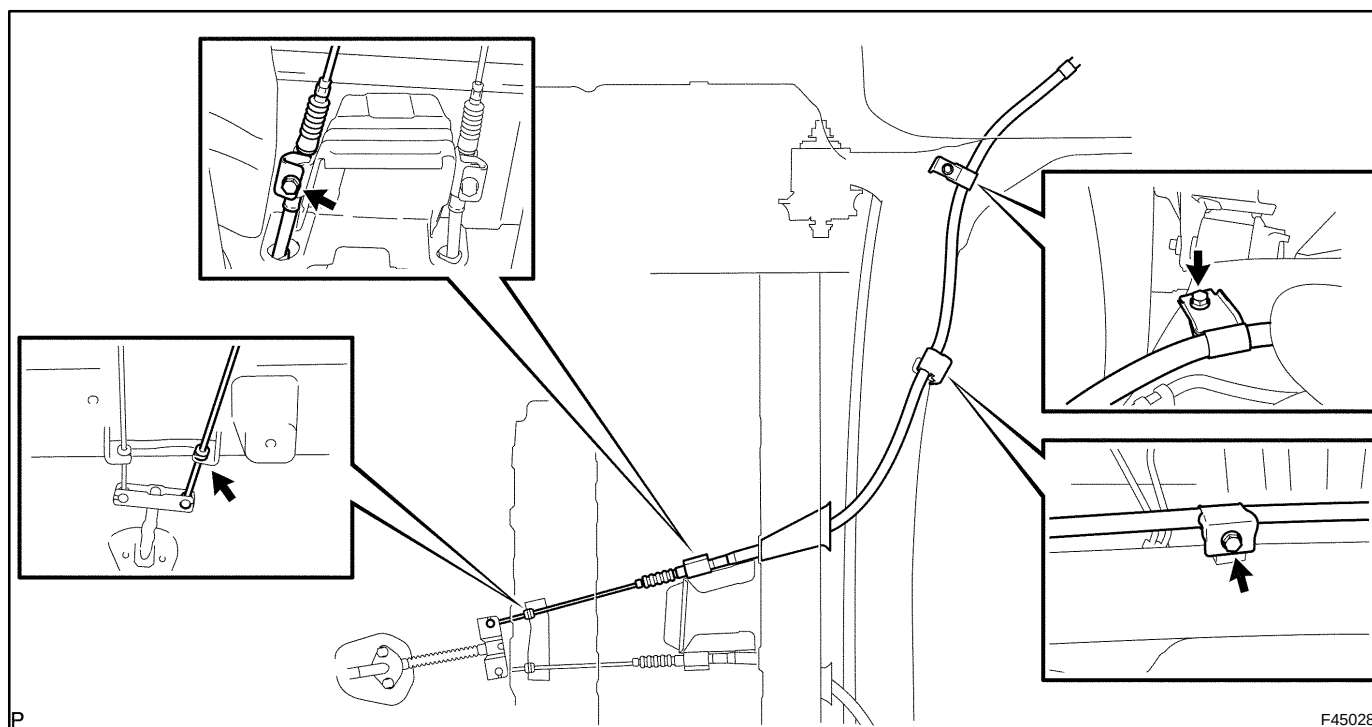
1. **REMOVE REAR WHEEL**
2. **REMOVE REAR BRAKE DRUM SUB-ASSY (DRUM REAR BRAKE TYPE) (See page 32-29)**
3. **REMOVE FRONT BRAKE SHOE (DRUM REAR BRAKE TYPE) (See page 32-29)**
SST 09703-30010, 09718-00010
4. **REMOVE REAR BRAKE SHOE (DRUM REAR BRAKE TYPE) (See page 32-29)**
SST 09718-00010
5. **SEPARATE REAR DISC BRAKE CALIPER ASSY LH (DISC REAR BRAKE TYPE) (See page 32-37)**
6. **REMOVE REAR DISC (DISC REAR BRAKE TYPE) (See page 33-17)**
7. **REMOVE PARKING BRAKE SHOE ASSY LH NO.1 (DISC REAR BRAKE TYPE) (See page 33-17)**
8. **REMOVE PARKING BRAKE SHOE ADJUSTING SCREW SET (DISC REAR BRAKE TYPE) (See page 33-17)**
9. **REMOVE PARKING BRAKE SHOE STRUT LH (DISC REAR BRAKE TYPE) (See page 33-17)**
10. **REMOVE PARKING BRAKE SHOE ASSY LH NO.2 (DISC REAR BRAKE TYPE) (See page 33-17)**



11. **SEPARATE PARKING BRAKE CABLE ASSY NO.3**
 - (a) Remove the 2 bolts, and disconnect the parking brake cable No.3 from the backing plate.

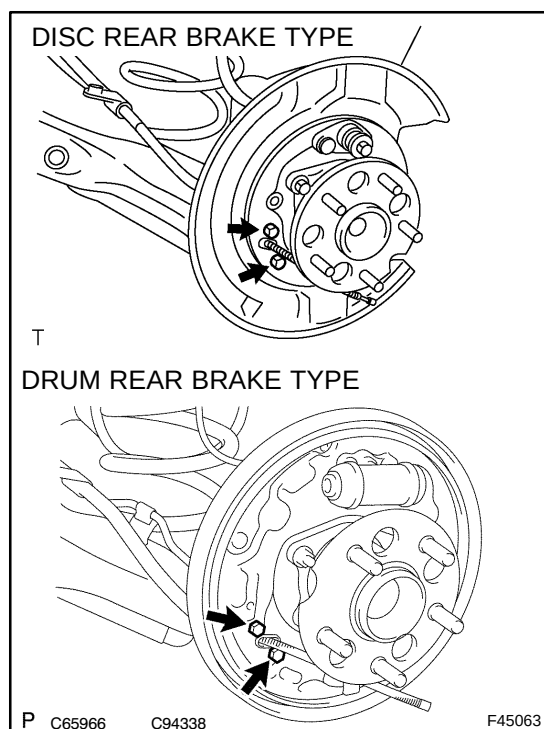
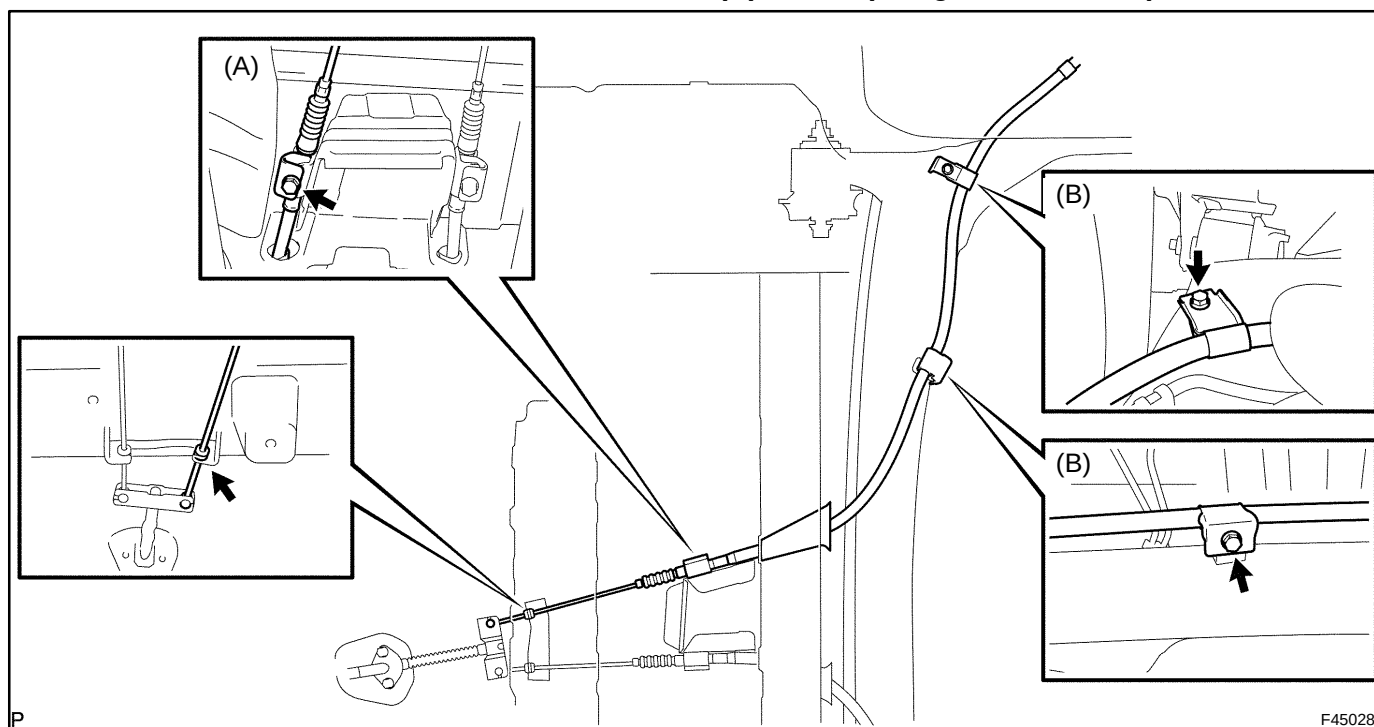
12. REMOVE PARKING BRAKE CABLE ASSY NO.3

- (a) Remove the 3 bolts and the button to disconnect the parking brake cable No.3 from the body.
- (b) Disconnect the parking brake cable No.3 from the parking brake equalizer, and remove the parking brake cable No.3.
- (c) Remove the parking brake cable LH guide from the parking brake cable assy No.3.



13. INSTALL PARKING BRAKE CABLE ASSY NO.3

- (a) Install the parking brake cable LH guide to the parking brake cable assy No.3.
- (b) Connect the parking brake cable No.3 to the parking brake cable equalizer.
- (c) Install the parking brake cable No.3 with the 3 bolts and button.

Torque:**Bolt (A): 5.4 N·m (55 kgf·cm, 48 in.·lbf)****Bolt (B): 8 N·m (82 kgf·cm, 71 in.·lbf)****14. CONNECT PARKING BRAKE CABLE ASSY NO.3**

- (a) Install the parking brake cable No.3 with the 2 bolts to the backing plate.

Torque: 8 N·m (82 kgf·cm, 71 in.·lbf)

15. APPLICATION HIGH TEMPERATURE GREASE (DRUM REAR BRAKE TYPE)
(See page 32-29)
16. INSTALL REAR BRAKE SHOE (DRUM REAR BRAKE TYPE) (See page 32-29)
SST 09718-00010
17. INSTALL FRONT BRAKE SHOE (DRUM REAR BRAKE TYPE) (See page 32-29)
SST 09703-30010, 09718-00010
18. CHECK REAR DRUM BRAKE INSTALLATION (DRUM REAR BRAKE TYPE)
(See page 32-29)
19. INSTALL REAR BRAKE DRUM SUB-ASSY (DRUM REAR BRAKE TYPE)
(See page 32-29)
20. ADJUST REAR DRUM BRAKE SHOE CLEARANCE (DRUM REAR BRAKE TYPE)
(See page 32-29)
21. INSPECT AND ADJUST PARKING BRAKE PEDAL TRAVEL (DRUM REAR BRAKE TYPE)
(See page 32-29)
22. APPLY HIGH TEMPERATURE GREASE (DISC REAR BRAKE TYPE) (See page 33-17)
23. INSTALL PARKING BRAKE SHOE ASSY LH NO.2 (DISC REAR BRAKE TYPE)
(See page 33-17)
24. INSTALL PARKING BRAKE SHOE ADJUSTING SCREW SET (DISC REAR BRAKE TYPE)
(See page 33-17)
25. INSTALL PARKING BRAKE SHOE STRUT LH (DISC REAR BRAKE TYPE)(See page 33-17)
26. INSTALL PARKING BRAKE SHOE ASSY LH NO.1 (DISC REAR BRAKE TYPE)
(See page 33-17)
27. CHECK PARKING BRAKE INSTALLATION (DISC REAR BRAKE TYPE) (See page 33-17)
28. INSTALL REAR DISC (DISC REAR BRAKE TYPE) (See page 33-17)
29. ADJUST PARKING BRAKE SHOE CLEARANCE (DISC REAR BRAKE TYPE) (See page 33-17)
30. CONNECT REAR DISC BRAKE CALIPER ASSY LH (DISC REAR BRAKE TYPE)
(See page 33-17)
31. INSTALL REAR WHEEL
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
32. INSPECT PARKING BRAKE PEDAL TRAVEL (See page 33-2)
33. ADJUST PARKING BRAKE PEDAL TRAVEL (See page 33-2)