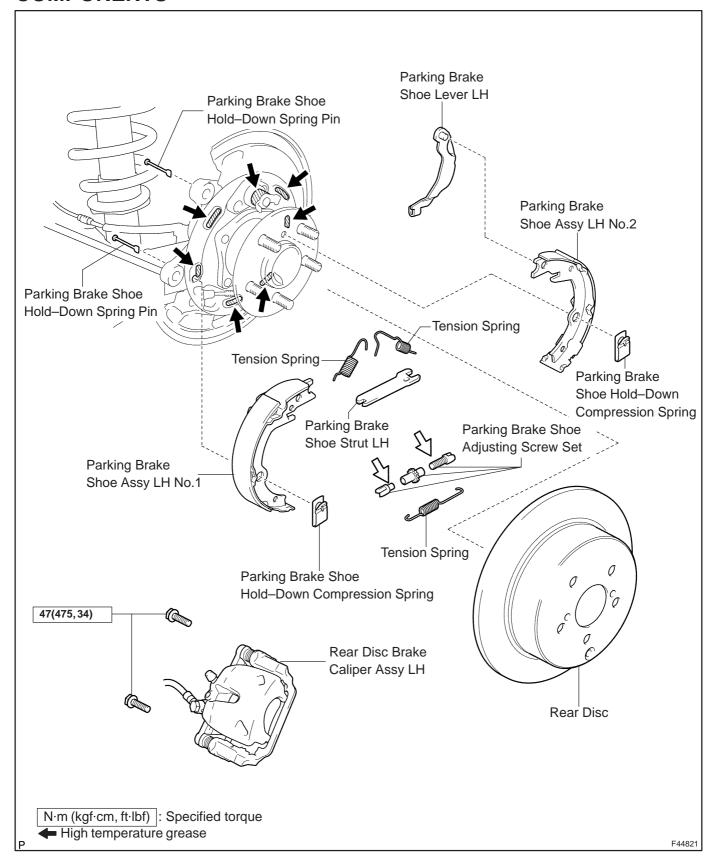
PARKING BRAKE ASSY COMPONENTS

3306E-05



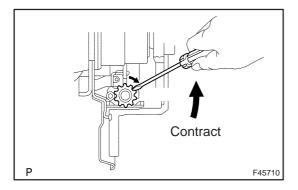
22000 01

OVERHAUL

HINT:

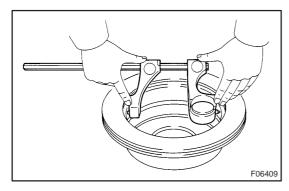
Overhaul the RH side by the same procedures as those of the LH side.

- 1. REMOVE REAR WHEEL
- 2. DISCONNECT REAR DISC BRAKE CALIPER ASSY LH (See page 30-31)



3. REMOVE REAR DISC

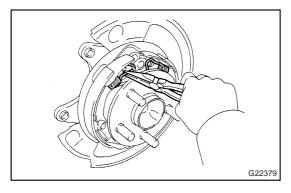
- (a) Release the parking brake, and remove the rear disc. HINT:
- Put matchmarks on the disc and the axle hub.
- If the disc cannot be removed easily, turn the shoe adjuster until the wheel turns freely.



4. INSPECT BRAKE DISC INSIDE DIAMETER

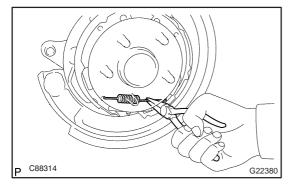
(a) Using a brake drum gauge or equivalent, measure the inside diameter of the disc.

Standard inside diameter: 173 mm (6.81 in.) Maximum inside diameter: 174 mm (6.85 in.)



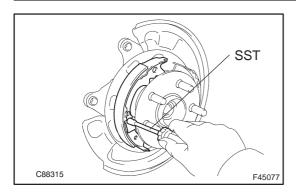
5. REMOVE PARKING BRAKE ADJUSTER KIT

- (a) Using needle–nose pliers, remove the shoe upper side 2 tension springs.
- (b) Remove the parking brake shoe strut LH.



6. REMOVE PARKING BRAKE SHOE ADJUSTING SCREW SET

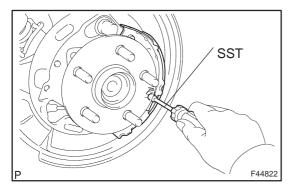
- (a) Using needle-nose pliers, remove the anchor side tension spring.
- (b) Remove the shoe adjusting screw set.



7. REMOVE PARKING BRAKE SHOE KIT

(a) Using SST, remove the parking brake shoe hold-down compression spring, parking brake shoe hold-down spring pin and parking brake shoe assy LH No.1.

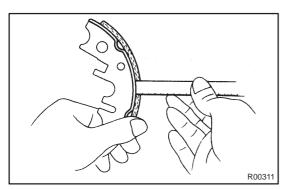
SST 09718-00010



(b) Using SST, remove the parking brake shoe hold-down compression spring and parking brake shoe hold-down spring pin.

SST 09718-00010

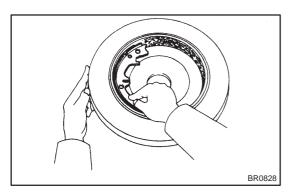
(c) Disconnect the parking brake shoe assy LH No.2 from the parking brake shoe lever LH, and remove the parking brake shoe LH No.2.



8. INSPECT PARKING BRAKE SHOE LINING THICKNESS

(a) Using a ruler, measure the thickness of the shoe lining.

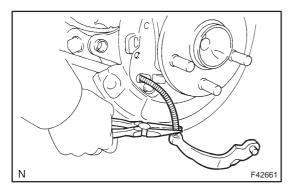
Standard thickness: 3.5 mm (0.138 in.) Minimum thickness: 1.0 mm (0.039 in.)



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

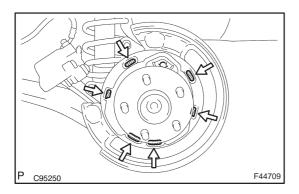
(a) Apply chalk to the inside surface of the disc, then grind down the brake shoe lining to fit.

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.



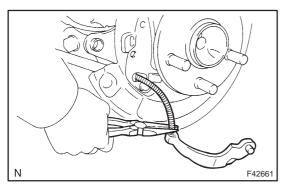
10. REMOVE PARKING BRAKE SHOE LEVER LH

(a) Using needle–nose pliers, disconnect the parking brake cable assy No.3 and remove the parking brake shoe lever LH.



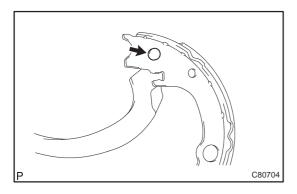
11. APPLY HIGH TEMPERATURE GREASE

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



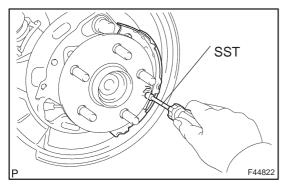
12. INSTALL PARKING BRAKE SHOE LEVER LH

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

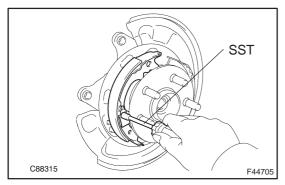


13. INSTALL PARKING BRAKE SHOE KIT

(a) Apply the high temperature grease to the contact part of the parking brake shoe and parking brake shoe lever.



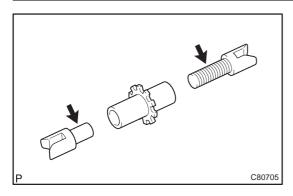
(b) Using SST, install the parking brake shoe LH No.2 with the parking brake shoe hold-down compression spring and parking brake shoe hold-down spring pin. SST 09718-00010



(c) Using SST, install the parking brake shoe LH No.1 with the parking brake shoe hold-down compression spring and parking brake shoe hold-down spring pin.

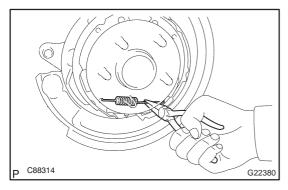
SST 09718-00010

AVENSIS REPAIR MANUAL (RM1018E)

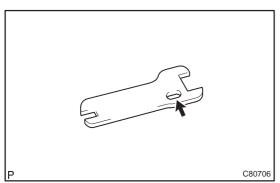


14. INSTALL PARKING BRAKE SHOE ADJUSTING SCREW SET

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

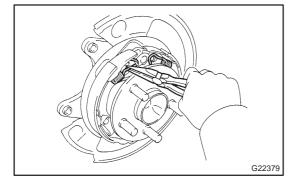


(c) Using needle–nose pliers, install the tension spring.



15. INSTALL PARKING BRAKE ADJUSTER KIT

- (a) Apply the high temperature grease to the contact part of the shoe strut and tension spring.
- (b) Install the parking brake shoe strut LH.



(c) Using needle–nose pliers, install the upper side 2 tension springs.

HINT:

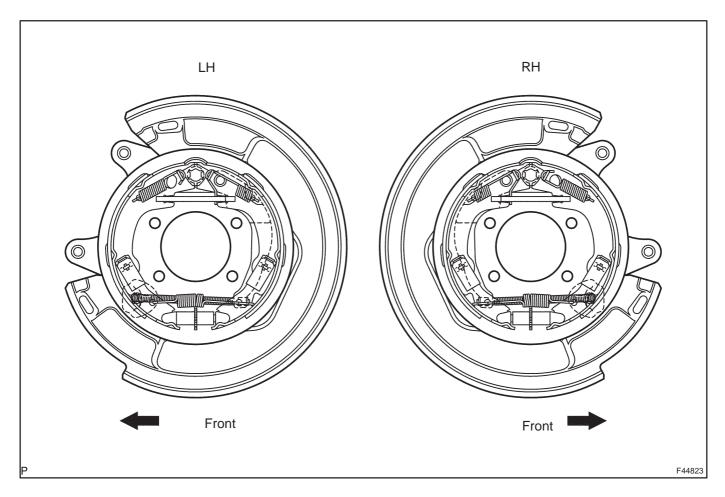
Install the 2 tension spring securely to the grooves of the shoe strut.

16. CHECK PARKING BRAKE INSTALLATION

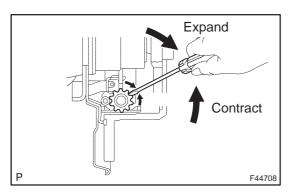
(a) Check that each part is installed properly.

NOTICE:

There should be no oil or grease on the friction surface of the shoe lining and disc.



17. INSTALL REAR DISC



18. 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 there is no brake drag.
- (e) Install the hole plug.

19. CONNECT REAR DISC BRAKE CALIPER ASSY LH

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

Torque: 47 N·m (475 kgf·cm, 34 ft·lbf)

20. INSTALL REAR WHEEL

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

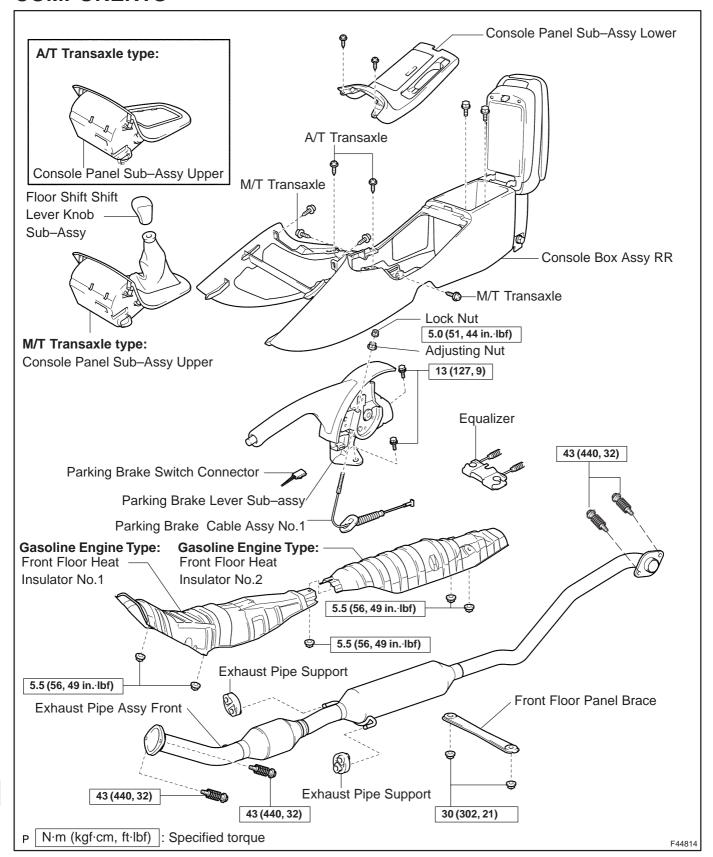
AVENSIS REPAIR MANUAL (RM1018E)

21. SETTLING PARKING BRAKE SHOES AND DISC

- (a) Drive the vehicle at about 50km/h (31 mph) on a safe, level and dry road.
- (b) With the parking brake release button pushed in, pull on the lever with 98 N (10kgf, 19.8 lbf) of force.
- (c) Drive the vehicle for about 400 meters (0.25 mile) in this condition.
- (d) Repeat this procedure 2 or 3 times.
- 22. INSPECT PARKING BRAKE LEVER TRAVEL (See page 33-2)
- 23. ADJUST PARKING BRAKE LEVER TRAVEL (See page 33-2)

PARKING BRAKE CABLE ASSY NO.1 COMPONENTS

3306A-03

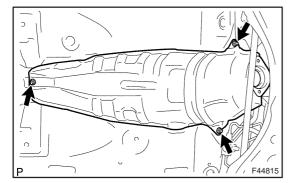


3306B-03

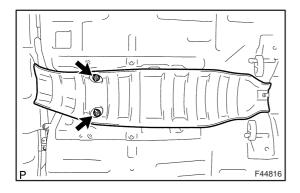
REPLACEMENT

- 1. REMOVE SHIFT LEVER KNOB SUB-ASSY (M/T TRANSAXLE) (See page 41–11)
- 2. REMOVE CONSOLE PANEL SUB-ASSY UPPER (See page 71-11)
- 3. REMOVE CONSOLE PANEL SUB-ASSY LOWER (See page 71-11)
- 4. REMOVE CONSOLE BOX ASSY RR (See page 71–11)
- 5. REMOVE PARKING BRAKE LEVER SUB-ASSY (See page 33-4)
- 6. REMOVE EXHAUST PIPE ASSY FRONT

1ZZ-FE/3ZZ-FE ENGINE TYPE: See page 15-2
1AZ-FE/1AZ-FSE ENGINE TYPE: See page 15-7

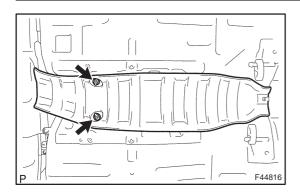


- 7. REMOVE FRONT FLOOR HEAT INSULATOR NO.1 (GASOLINE ENGINE TYPE)
- (a) Remove the 3 nuts and front floor insulator No.1.

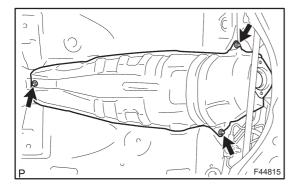


- 8. REMOVE FRONT FLOOR HEAT INSULATOR NO.2 (GASOLINE ENGINE TYPE)
- (a) Remove the 2 nuts and front floor insulator No.2.

- 9. REMOVE PARKING BRAKE CABLE ASSY NO.1
- (a) Disconnect the parking brake cable assy No.1 from the equalizer and remove the parking brake cable assy No.1.
- 10. INSTALL PARKING BRAKE CABLE ASSY NO.1
- (a) Connect the parking brake cable assy No.1 to the equalizer and install the parking brake cable assy No.1.



- 11. INSTALL FRONT FLOOR HEAT INSULATOR NO.2 (GASOLINE ENGINE TYPE)
- (a) Install the front floor insulator No.2 with the 2 nuts. **Torque:** 5.5 N·m (56 kgf·cm, 49 in.·lbf)



- 12. .INSTALL FRONT FLOOR HEAT INSULATOR NO.1 (GASOLINE ENGINE TYPE)
- (a) Install the front floor insulator No.1 with the 3 nuts. **Torque: 5.5 N·m (56 kgf·cm, 49 in.·lbf)**

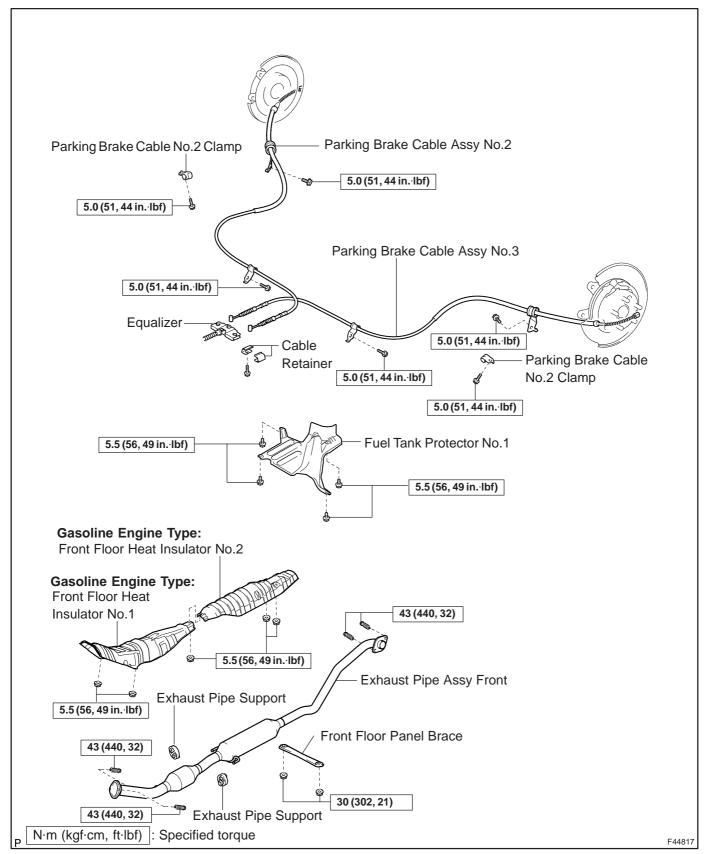
13. INSTALL EXHAUST PIPE ASSY FRONT

1ZZ-FE/3ZZ-FE ENGINE TYPE: See page 15-2 1AZ-FE/1AZ-FSE ENGINE TYPE: See page 15-7

- 14. INSTALL PARKING BRAKE LEVER SUB-ASSY (See page 33-4)
- 15. INSPECT PARKING BRAKE LEVER TRAVEL (See page 33-2)
- 16. ADJUST PARKING BRAKE LEVER TRAVEL (See page 33-2)

PARKING BRAKE CABLE ASSY NO.3 COMPONENTS

3306C-05



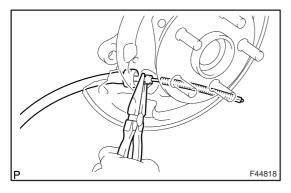
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REPLACEMENT

HINT:

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

- 1. REMOVE REAR WHEEL
- 2. DISCONNECT REAR DISC BRAKE CALIPER ASSY LH (See page 30-31)
- 3. REMOVE REAR DISC(See page 33-14)
- 4. REMOVE PARKING BRAKE ADJUSTER KIT (See page 33-14)
- 5. REMOVE PARKING BRAKE SHOE ADJUSTING SCREW SET(See page 33-14)
- 6. REMOVE PARKING BRAKE SHOE KIT (See page 33-14)
 SST 09718-00010



7. DISCONNECT PARKING BRAKE CABLE ASSY NO.3

(a) Using needle-nose pliers, and disconnect the parking brake cable assy No.3 from the backing plate.

8. REMOVE EXHAUST PIPE ASSY FRONT

1ZZ-FE/3ZZ-FE ENGINE TYPE: See page 15-2 1AZ-FE/1AZ-FSE ENGINE TYPE: See page 15-7

- 9. REMOVE FRONT FLOOR HEAT INSULATOR NO.1 (GASOLINE ENGINE TYPE) (See page 33-7)
- 10. REMOVE FRONT FLOOR HEAT INSULATOR NO.2 (GASOLINE ENGINE TYPE) (See page 33-7)

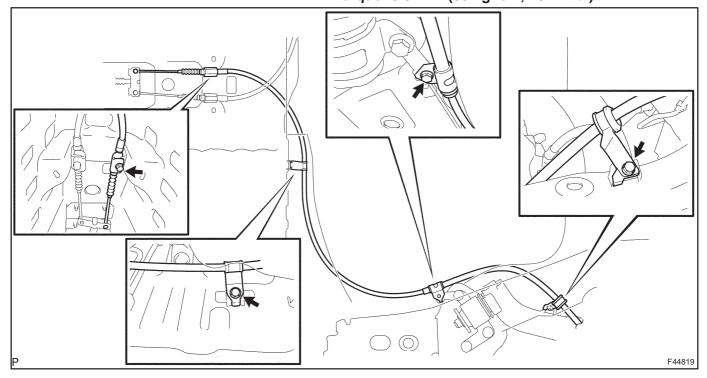
11. REMOVE PARKING BRAKE CABLE ASSY NO.3

- (a) Remove the 3 nuts and fuel tank protector No.1 (When replacing parking brake cable assy No.2).
- (b) Remove the 4 bolts and cable retainer from the body.
- (c) Disconnect the parking brake cable assy No.3 from the equalizer, and remove the parking brake cable assy No.3.

12. INSTALL PARKING BRAKE CABLE ASSY NO.3

- (a) Connect the parking brake cable assy No.3 to the equalizer.
- (b) Install the parking brake cable assy No.3 with the 4 bolts.

 Torque: 5.0 N·m (55 kgf·cm, 48 in.·lbf)

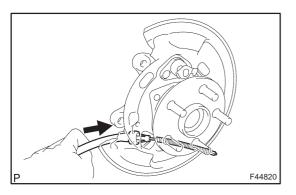


(c) Install the fuel tank protector No.1 and 3 nuts (When replacing parking brake cable assy No.2).

Torque: 5.5 N·m (56 kgf·cm, 49 in.·lbf)

- 13. INSTALL FRONT FLOOR HEAT INSULATOR NO.2 (GASOLINE ENGINE TYPE) (See page 33-7)
- 14. INSTALL FRONT FLOOR HEAT INSULATOR NO.1 (GASOLINE ENGINE TYPE) (See page 33-7)
- 15. INSTALL EXHAUST PIPE ASSY FRONT

1ZZ-FE/3ZZ-FE ENGINE TYPE: See page 15-2 1AZ-FE/1AZ-FSE ENGINE TYPE: See page 15-7



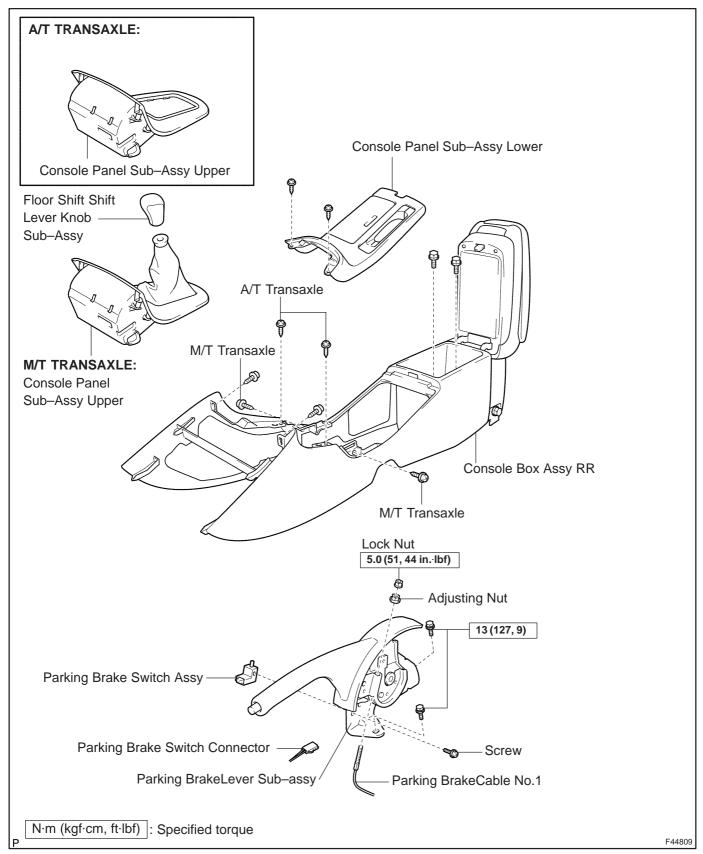
16. CONNECT PARKING BRAKE CABLE ASSY NO.3

(a) Connect the parking brake cable assy No.3 to the backing plate.

- 17. APPLY HIGH TEMPERATURE GREASE (See page 33-14)
- 18. INSTALL PARKING BRAKE SHOE LEVER LH (See page 33-14)
- 19. INSTALL PARKING BRAKE SHOE KIT (See page 33–14) SST 09718–00010
- 20. INSTALL PARKING BRAKE SHOE ADJUSTING SCREW SET (See page 33-14)
- 21. INSTALL PARKING BRAKE ADJUSTER KIT (See page 33-14)
- 22. INSTALL REAR DISC
- 23. CONNECT REAR DISC BRAKE CALIPER ASSY LH(See page 30-31)
- 24. ADJUST PARKING BRAKE SHOE CLEARANCE(See page 33-14)
- 25. INSTALL REAR WHEEL
 Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
- 26. SETTLING PARKING BRAKE SHOES AND DISC (See page 33-14)
- 27. INSPECT PARKING BRAKE LEVER TRAVEL (See page 33-2)
- 28. ADJUST PARKING BRAKE LEVER TRAVEL (See page 33-2)
- 29. CHECK EXHAUST LEAKAGE

PARKING BRAKE LEVER SUB-ASSY COMPONENTS

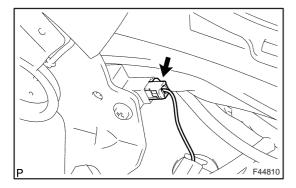
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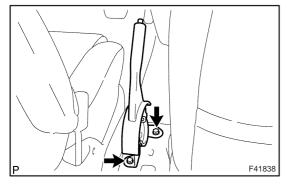
REPLACEMENT

- 1. REMOVE FLOOR SHIFT SHIFT LEVER KNOB SUB-ASSY (M/T TRANSAXLE) (See page 41-11)
- 2. REMOVE CONSOLE PANEL SUB-ASSY UPPER (See page 71-11)
- 3. REMOVE CONSOLE PANEL SUB-ASSY LOWER (See page 71-11)
- 4. REMOVE CONSOLE BOX ASSY RR (See page 71-11)

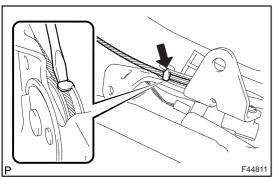


5. REMOVE PARKING BRAKE LEVER SUB-ASSY

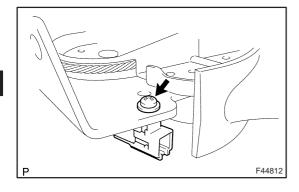
- (a) Disconnect the parking brake switch connector from the parking brake switch.
- (b) Remove the lock nut and adjusting nut from the parking brake cable assy No.1.



(c) Remove the 2 bolts.

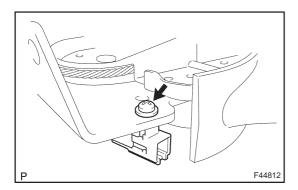


- (d) Using a screwdriver, raise the pick on the parking brake lever, and remove the parking brake cable assy No.1 from the parking brake lever.
- (e) Remove the parking brake lever from the body.



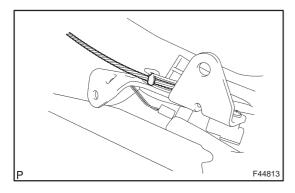
6. REMOVE PARKING BRAKE SWITCH ASSY

(a) Remove the screw and parking brake switch.



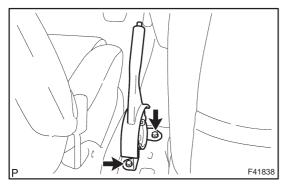
7. INSTALL PARKING BRAKE SWITCH ASSY

(a) Install the parking brake switch to the parking brake lever with the screw.



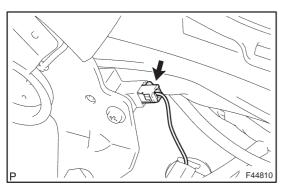
8. INSTALL PARKING BRAKE LEVER SUB-ASSY

- (a) Install the parking brake cable assy No.1 to the parking brake lever, temporally tighten the adjusting nut and lock nut.
- (b) Using a screwdriver, fix the parking brake cable No.1 to the pick.



(c) Install the parking brake lever with the 2 bolts.

Torque: 13 N·m (127 kgf·cm, 9 ft·lbf)



(d) Install the parking brake switch connector to the parking brake switch.

- 9. INSPECT PARKING BRAKE LEVER TRAVEL (See page 33-2)
- 10. ADJUST PARKING BRAKE LEVER TRAVEL (See page 33-2)

PARKING BRAKE SYSTEM PROBLEM SYMPTOMS TABLE

3300E-07

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 parts in the order shown. Replace these parts as necessary.

	Symptom	Suspect Area	See page
Brake drag		Parking brake lever travel (Out of adjustment)	33–2
		Parking brake wire (Sticking)	33–7
			33–10
		3. Parking brake shoe clearance (Out of adjustment)	33–14
		4. Parking brake shoe lining (Cracked or distorted)	33–14
		5. Tension or return spring (Damaged)	33–14

22225 27

ADJUSTMENT

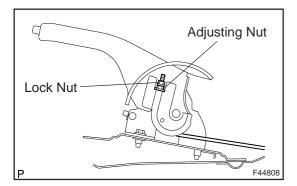
- 1. REMOVE REAR WHEEL
- 2. ADJUST PARKING BRAKE SHOE CLEARANCE (See page 33-14)
- 3. INSTALL REAR WHEEL

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

- 4. INSPECT PARKING BRAKE LEVER TRAVEL
- (a) Pull the parking brake lever all the way up, and count the number of clicks.

Parking brake lever travel: 6 – 9 clicks at 196 N (20 kgf, 44.1 lbf)

- 5. ADJUST PARKING BRAKE LEVER TRAVEL
- (a) Remove the console box assy RR. (See page 71–11)



- (b) Loosen the lock nut and turn the adjusting nut until the lever travel turns correct.
- (c) Tighten the lock nut.

Torque: 5.0 N·m (51 kgf·cm, 44 in.·lbf)

(d) Install the console box assy RR.

(See page 71–11)