

SECTION **PB**  
PARKING BRAKE SYSTEM

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# PREPARATION

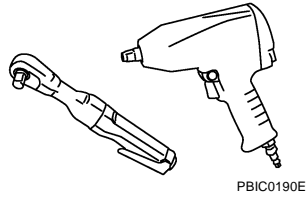
## PREPARATION

PFP:00002

### Commercial Service Tools

NFS000TF

Tool name	Description
Power tool	Loosening bolts and nuts



# PARKING BRAKE SYSTEM

## PARKING BRAKE SYSTEM

PFP:36010

### On-Vehicle Service LEVER STROKE

NFS0001F

- When parking brake lever is operated with a force of 196 N (20 kg, 44 lb), check that the stroke is within the specified number of notches. (Check it by listening and counting the ratchet clicks.)

**Lever stroke : 6 to 7 notches**

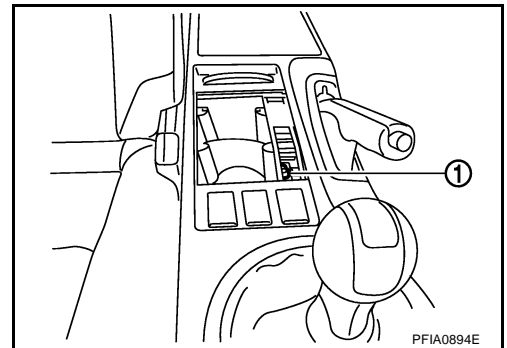
### INSPECT COMPONENTS

- Make sure the components are attached properly (check for looseness, backlash, etc.).
- Check parking lever assembly for bend, damage and cracks, and replace if necessary.
- Check that there is no wear or damage to the cable, and replace if there is.
- Inspecting parking brake warning lamp switch is inspected and exchange if there is a faulty.

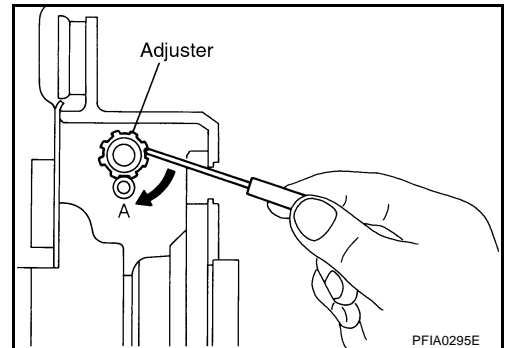
### ADJUSTMENT

- To perform adjustment operations, remove tire from the vehicle with power tool.

1. Remove the coin pocket. Insert a deep socket wrench to rotate adjusting nut (1) and loosen the cable sufficiently. Then, return the lever.
2. Using wheel nuts, fix the disc rotor to the hub and prevent it from tilting.



3. Remove adjusting hole plug installed on the disc. Using a flat-bladed screwdriver, turn the disc in direction "A" as shown in the figure until the disc is locked. After locking, turn the adjuster in the opposite direction by 5 or 6 notches.
4. Rotate the disc to make sure there is no drag. Install the adjusting hole plug.
5. Adjust cable as follows:
  - a. Operate lever 10 or more times with a force of 294 N (30 kg, 66 lb).
  - b. Rotate adjusting nut with deep socket to adjust lever stroke.



#### **CAUTION:**

**Do not reuse the adjusting nut after removing it.**

- c. When parking brake lever is operated with a force of 196 N (20 kg, 44 lb), check that the stroke is within the specified number of notches. (Check it by listening and counting the ratchet clicks.)

**Lever stroke : 6 to 7 notches**

- d. With the lever completely returned, make sure there is no drag on the rear brake.

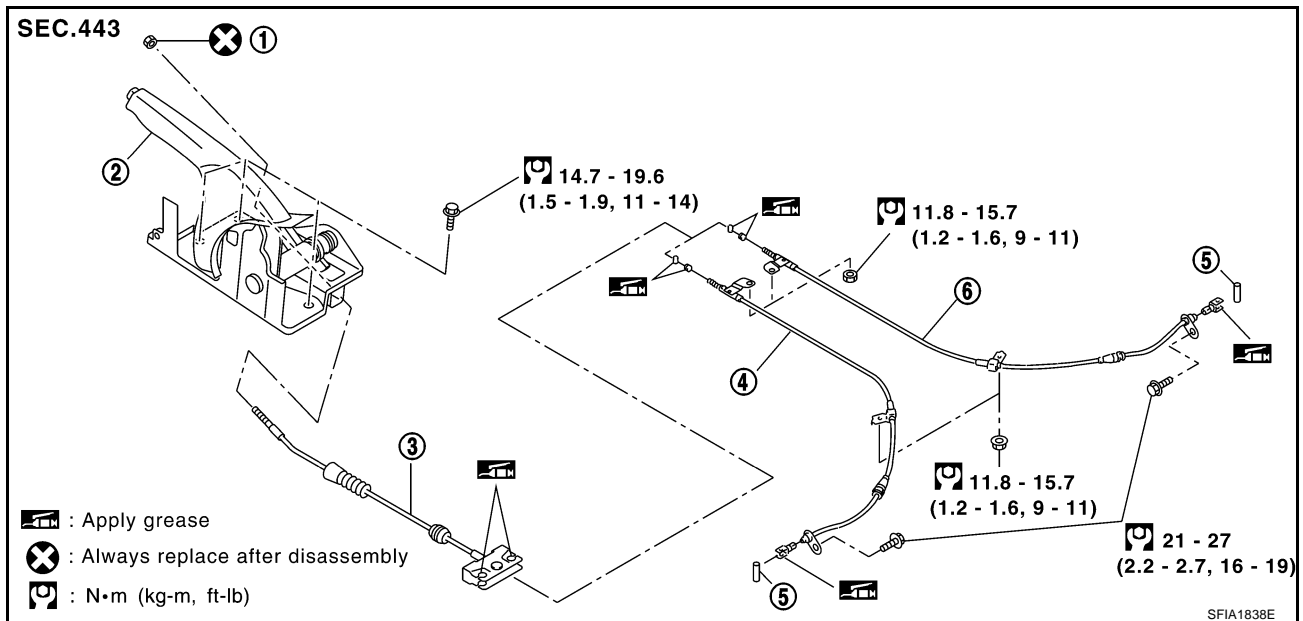
# PARKING BRAKE CONTROL

## PARKING BRAKE CONTROL

PFP:36010

### Components

NFS0001G



### Removal and Installation

#### REMOVAL

1. Remove center console. Refer to [IP-10, "INSTRUMENT PANEL ASSEMBLY"](#).
2. Remove adjusting nut from device assembly.
3. Remove exhaust center muffler. Refer to [EX-3, "EXHAUST SYSTEM"](#).
4. Remove propeller shaft. Refer to [PR-5, "REAR PROPELLER SHAFT"](#).

#### CAUTION:

**Do not impact or damage propeller shaft tube.**

5. Remove rear disc caliper and disc rotors. Refer to [BR-44, "Removal and Installation of Brake Caliper Assembly \(Other than Brembo Calipers\)"](#) or [BR-45, "Removal and Installation of Brake Caliper Assembly \(With Brembo Calipers\)"](#).
6. Remove parking brake shoe, and remove rear cable from toggle lever. Refer to [PB-5, "Components"](#).
7. Remove cable mounting nuts and bolts.
8. Remove right and left rear cables.
9. Remove front cable.
10. Remove device assembly mounting bolts and remove device assembly from vehicle.

#### INSTALLATION

1. Refer to "Component Parts Location" for tightening torque. Install in the reverse order of removal.

#### CAUTION:

**Since the adjusting nut is not a reusable part, do not reuse it.**

2. Adjust parking brake. Refer to [PB-3, "ADJUSTMENT"](#).

NFS0001H

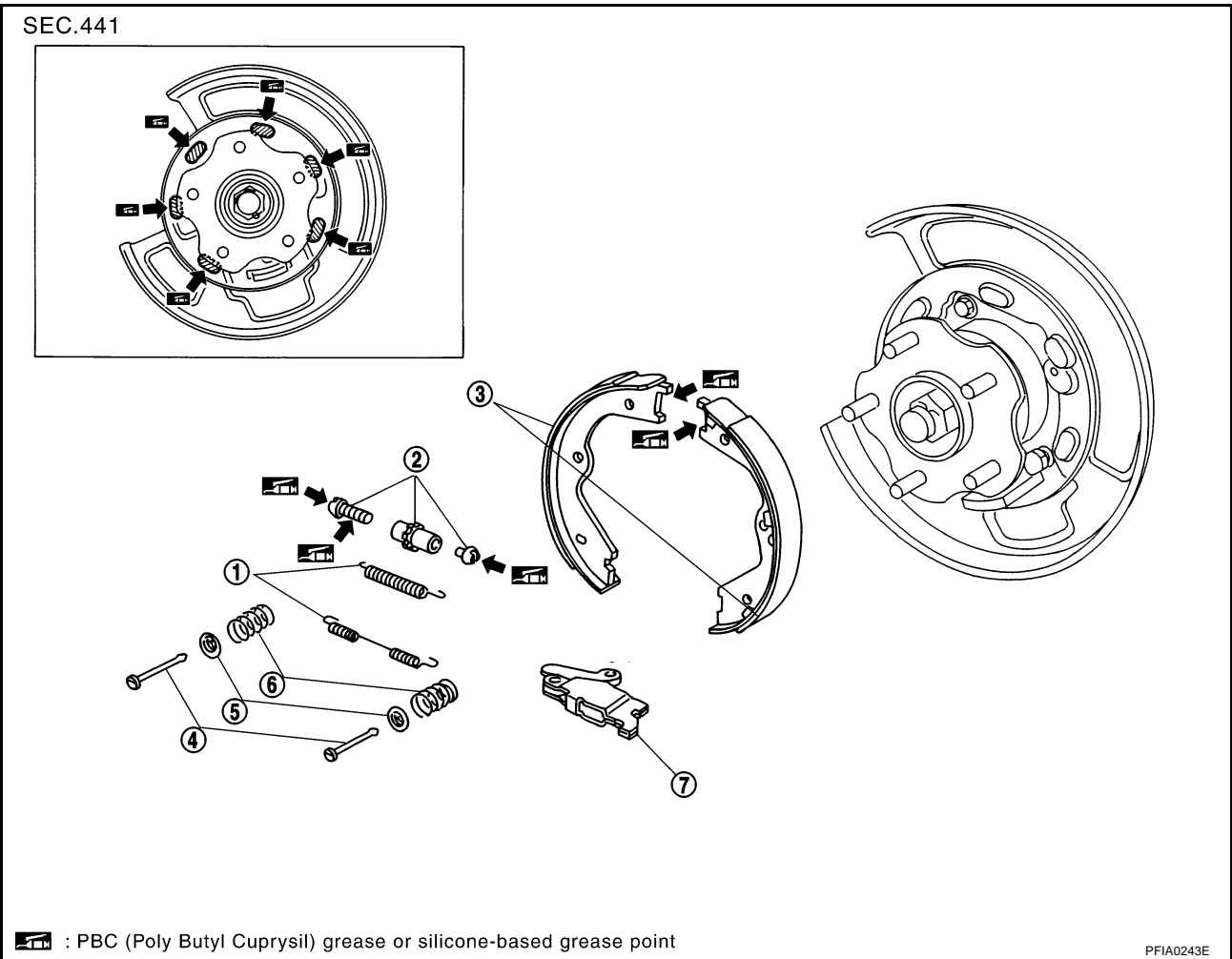
# PARKING BRAKE SHOE

## PARKING BRAKE SHOE

PFPA:44060

### Components

NFS0001J



- |                    |                      |                       |
|--------------------|----------------------|-----------------------|
| 1. Return spring   | 2. Adjuster assembly | 3. Shoe               |
| 4. Anti-rattle pin | 5. Retainer          | 6. Anti-rattle spring |
| 7. Toggle lever    |                      |                       |

### Removal and Installation

#### REMOVAL

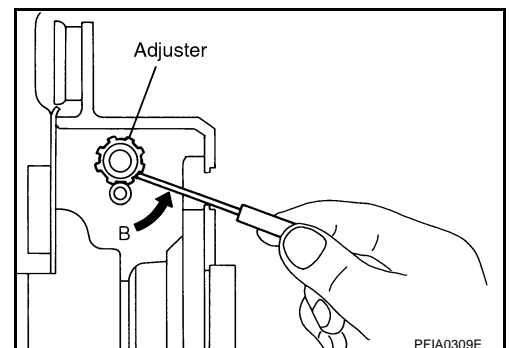
NFS0001J

#### **WARNING:**

Clean brakes with a vacuum dust collector to minimize the hazard of air borne particles or other materials.

Be careful of the following:

- Remove the disc rotor only with the parking brake lever completely in the returned position.
  - If disc rotor cannot be removed, remove as follows:
1. Fix the disc rotor in place with wheel nuts and remove disc rotor plug. Using a flat-bladed screwdriver, rotate star wheel on the adjuster assembly in direction "B" to retract and loosen brake shoes.



# PARKING BRAKE SHOE

## INSPECTION AFTER REMOVAL

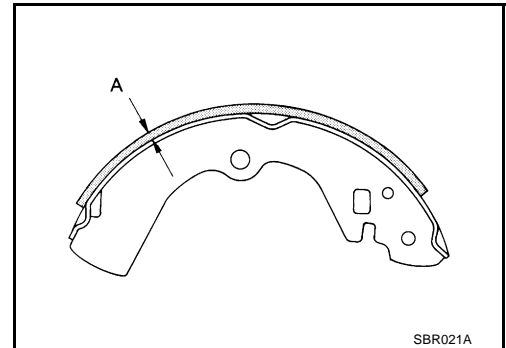
### Lining Thickness Inspection

- Check the thickness of the lining.

#### Standard

**Standard thickness "A"** : 3.2 mm (0.126 in)

**Wear limit thickness "A"** : 1.5 mm (0.059 in)



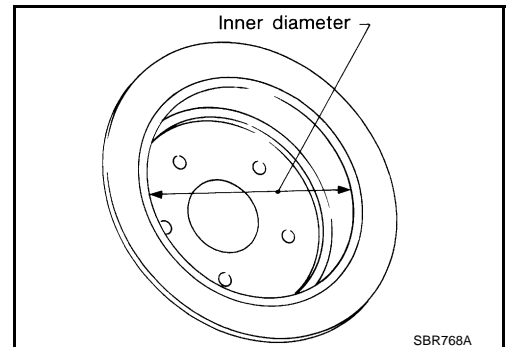
### Drum Inner Diameter Inspection

- Check the inner diameter of the drum.

#### Standard

**Standard inner diameter** : 172 mm (6.77 in) dia.

**Wear limit of inner diameter** : 173 mm (6.81 in) dia.



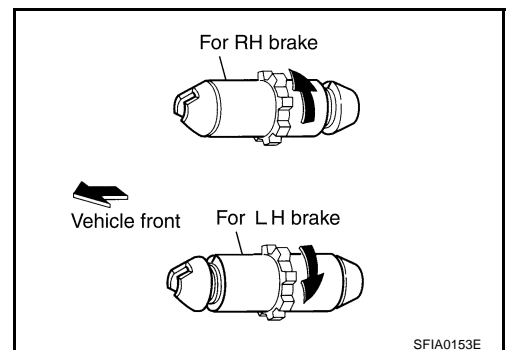
### Other Inspections

- Check shoe sliding surface for excessive wear and damage.
- Check anti-rattle pin for excessive wear and corrosion.
- Check return spring for sagging.
- Does the adjuster move smoothly?
- Check either visually or with a vernier caliper to see if there is any excessive wear, cracks, or damage inside the drum.

## INSTALLATION

Be careful of the following:

- Refer to "Component Parts Location" and apply brake grease to the specified points during assembly.
  - Orientation of the adjuster is different from left to right. Assemble the adjuster so that threaded part expands when rotating it in the direction shown by the arrow.
  - Collapse the adjuster to assemble
  - When disassembling the adjuster, apply PBC (Poly Butyl Cuprysil) grease or silicone-based grease to the threads.
  - After replacing brake shoes or disc rotors, or if brakes do not function well, perform break-in operation as follows.
1. Adjust the parking brake lever stroke to the specified stroke.
  2. Perform parking brake break-in (drag run) operation by driving the vehicle under the following conditions:



#### Drive forward

- **Perform the following.**
  - **Vehicle speed approx. 30 ± 5 km/h (19 ± 3 MPH) set (forward)**
  - **Parking brake operating force approx. 294 ± 49 N (30 ± 5 kg, 67 ± 11 lb) set**
  - **Time (other than breembo): Approx. 30 sec.**
  - **Time (made by breembo): Approx. 60 sec.**
3. After break-in operation, check lever stroke of the parking brake. Readjust if it is no longer at the specified stroke.
    - To prevent the lining from getting too hot, allow a cool off period of approximately 5 minutes after every break-in operation.
    - Do not perform excessive break-in operations, because it may cause uneven or early wear of the lining.

# SERVICE DATA AND SPECIFICATIONS (SDS)

## SERVICE DATA AND SPECIFICATIONS (SDS)

PFP:00030

### Parking Drum Brake

NFS0001K

Brake lining	Standard thickness (new)	3.2 mm (0.126 in)
	Wear limit thickness	1.5 mm (0.059 in)
Drum (disc)	Standard inner diameter (new)	172 mm (6.77 in) dia.
	Wear limit of inner diameter	173 mm (6.81 in) dia.

### Parking Brake Control

NFS0001L

Control type	Center lever
Number of notches [under force of 196 N (20 kg,44 lb)]	6 – 7 notches
Number of notches when warning lamp comes on	1 notch

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# SERVICE DATA AND SPECIFICATIONS (SDS)

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