

A
B
C

SECTION **PB**

PARKING BRAKE SYSTEM

CONTENTS

<p>PRECAUTIONS 2</p> <p> Precautions for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" 2</p> <p>PARKING BRAKE SYSTEM 3</p> <p> On-Vehicle Inspection 3</p> <p> PEDAL STROKE 3</p> <p> INSPECT COMPONENTS 3</p> <p> ADJUSTMENT 3</p> <p>PARKING BRAKE CONTROL 4</p>	<p> Components 4</p> <p> Removal and Installation 4</p> <p> REMOVAL 4</p> <p> INSTALLATION 5</p> <p>PARKING BRAKE SHOE 6</p> <p> Components 6</p> <p> Removal and Installation 6</p> <p> REMOVAL 6</p> <p> INSPECTION AFTER REMOVAL 7</p> <p> INSTALLATION 7</p> <p>SERVICE DATA AND SPECIFICATIONS (SDS) 9</p> <p> Parking Drum Brake 9</p> <p> Parking Brake Control 9</p>	<p>D E PB G H I J K L M</p>
--	---	--

PRECAUTIONS

PRECAUTIONS

PFP:00001

Precautions for Supplemental Restraint System (SRS) “AIR BAG” and “SEAT BELT PRE-TENSIONER”

NFS00009

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the SRS and SB section of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SRS section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PARKING BRAKE SYSTEM

PARKING BRAKE SYSTEM

PFP:36010

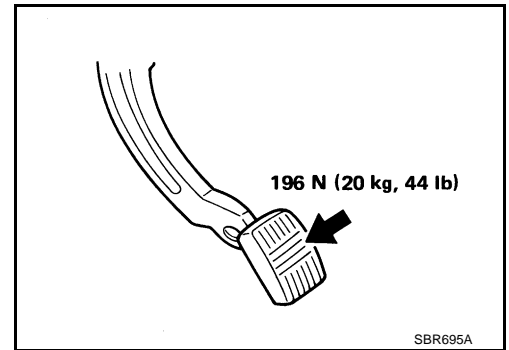
On-Vehicle Inspection PEDAL STROKE

NFS000C7

- While depressing parking brake pedal to the specified force, make sure that pedal stroke is within the range of specified stroke (number of notches).

Number of notches : 4 – 5 notches

- Make sure that brake warning lamp comes on when parking brake pedal is depressed in one notch.



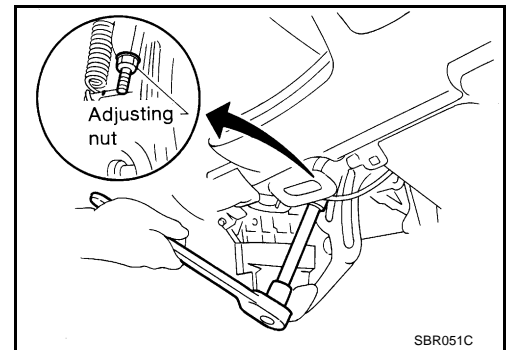
INSPECT COMPONENTS

Check the following:

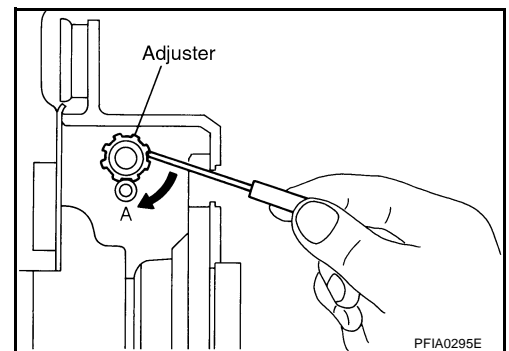
- Device assembly for bend, damage, and cracks. Replace there are.
- Cable and equalizer for wear and damage.
- Brake warning lamp switch. Refer to [BRC-56. "PARKING BRAKE SWITCH"](#).
- Each part for deformation, or damage by contact with other parts. Replace there are.

ADJUSTMENT

1. Insert a deep socket wrench to rotate adjusting nut to loosen cable sufficiently. Then, after returning pedal completely, adjust the clearance of rear shoes.
2. Remove tires.
3. Using a wheel nut, secure disc rotor to hub preventing it from tilting.



4. Remove adjuster hole plug installed on disc rotor. Using a flat-bladed screwdriver, turn adjuster to clockwise in the figure until disc rotor is locked. After locking, turn adjuster to opposite direction by 5 or 6 notches.
5. Rotate disc rotor to make sure that there is no drag. Then install adjuster hole plug.
6. After adjusting the clearance of rear shoes, with no drag on rear brake, adjust cable as follows:
 - a. Operate pedal 10 or more times with a force of 294 N (30 kg, 66 lb).
 - b. Depress pedal until a deep socket wrench can be inserted. Insert deep socket, and rotate adjusting nut to adjust pedal stroke. Refer to [PB-3. "PEDAL STROKE"](#).



CAUTION:

Do not reuse adjusting nut after removing it.

- c. After operating pedal 3 to 4 times with a force of 196 N (20 kg, 44 lb), make sure that pedal stroke is within specified value.
- d. With brake pedal completely returned, make sure that there is no drag on rear brake.

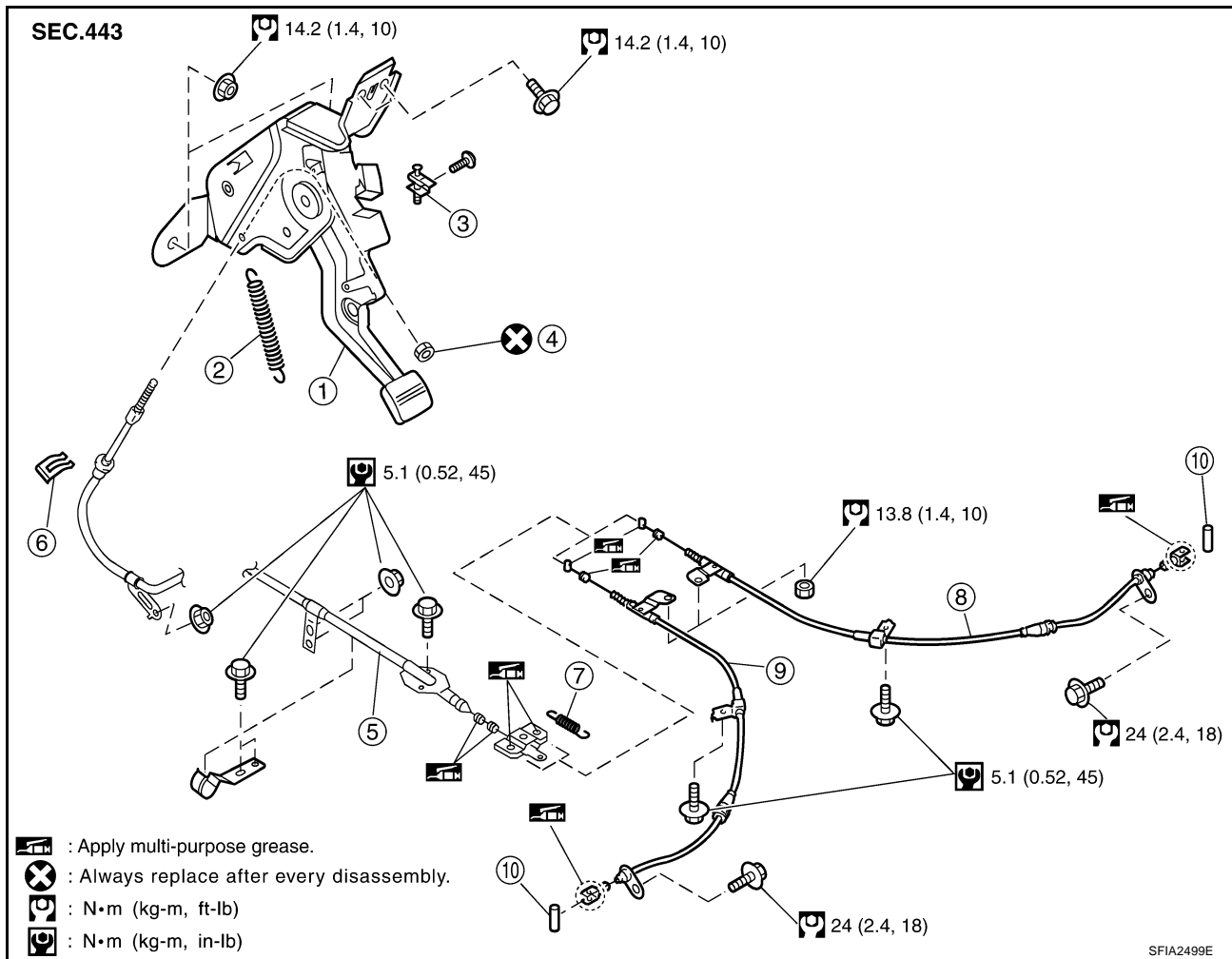
PARKING BRAKE CONTROL

PFP:36010

PARKING BRAKE CONTROL

Components

NFS000C8



- | | | |
|--------------------|------------------|------------------------------|
| 1. Device assembly | 2. Return spring | 3. Brake warning lamp switch |
| 4. Adjusting nut | 5. Front cable | 6. Lock plate |
| 7. Return spring | 8. RH rear cable | 9. LH rear cable |
| 10. Pin | | |

Removal and Installation

REMOVAL

NFS000C9

1. Remove center console. Refer to [IP-10, "INSTRUMENT PANEL ASSEMBLY"](#).
2. Remove adjusting nut from device assembly.
3. Remove lock plate.
4. Disconnect the brake warning lamp connector.
5. Remove center muffler. Refer to [EX-3, "Removal and Installation"](#).
6. Remove heat insulator of the three way catalyst and center muffler from vehicle.
7. Remove propeller shaft. Refer to [PR-5, "Removal and Installation"](#).
8. Remove rear disc caliper and disc rotor. Refer to [BR-31, "Disassembly and Assembly of Brake Caliper Assembly"](#).
9. Remove parking brake shoe, and remove rear cable from toggle lever. Refer to [PB-6, "Removal and Installation"](#).
10. Remove rear cable mounting bolts and nuts.
11. Remove right and left rear cable from vehicle.
12. Remove diagnosis sensor unit with sensor mount bracket. Refer to [SRS-50, "Removal and Installation"](#).

PARKING BRAKE CONTROL

13. Remove front cable mounting bolts and nuts, and remove front cable from vehicle.
14. Remove mounting nuts of device assembly, and remove device assembly from vehicle.

A

INSTALLATION

1. Install in the reverse order of the removal. Tighten the mounting bolts and nuts to the specified torque. Refer to [PB-4, "Components"](#) .

B

CAUTION:

Do not reuse adjusting nut of front cable.

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

C

D

E

PB

G

H

I

J

K

L

M

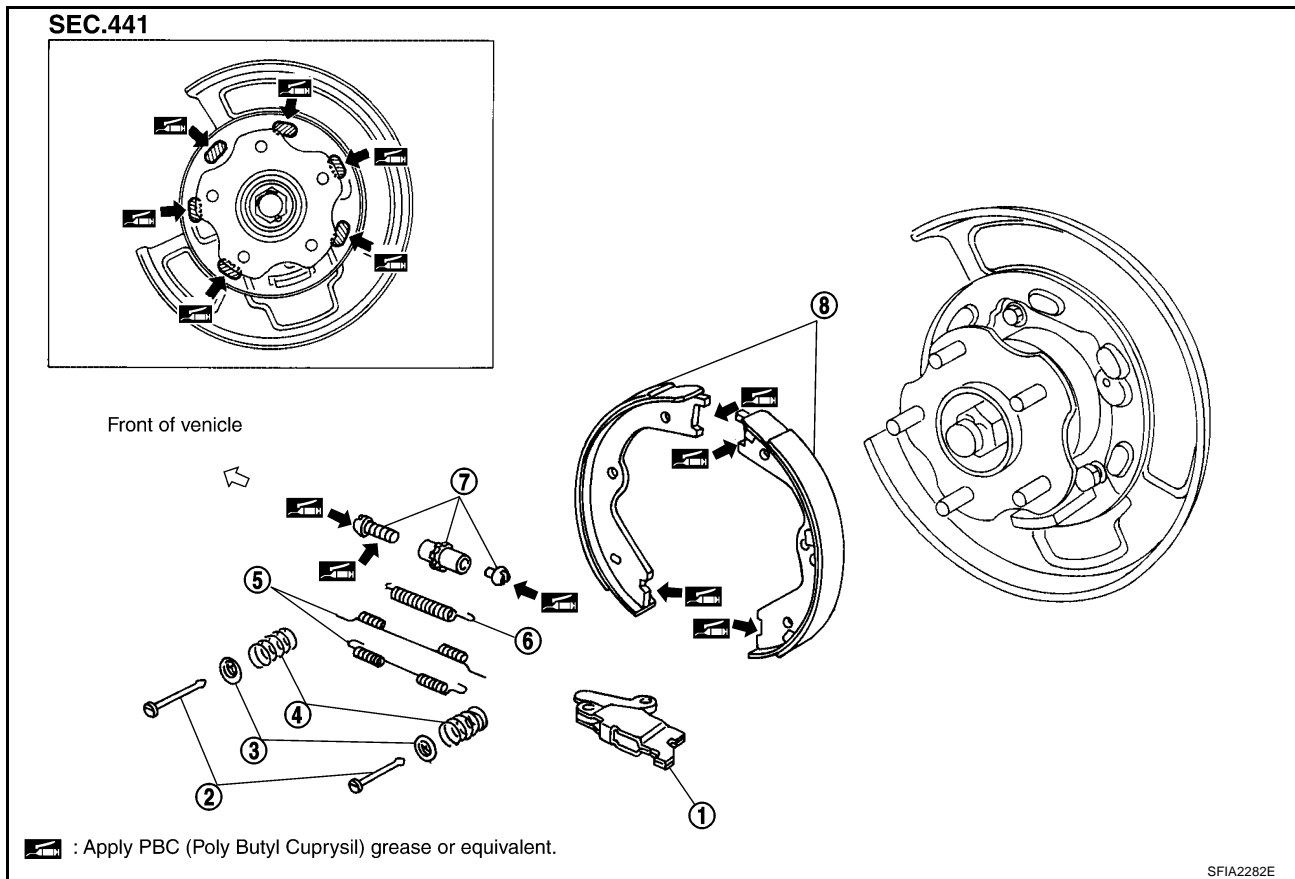
PARKING BRAKE SHOE

PFP:44060

PARKING BRAKE SHOE

Components

NFS000CA



- | | | |
|-----------------------|--------------------|--------------------|
| 1. Toggle lever | 2. Anti-rattle pin | 3. Retainer |
| 4. Anti-rattle spring | 5. Return spring | 6. Adjuster spring |
| 7. Adjuster assembly | 8. Shoe | |

Removal and Installation

REMOVAL

NFS000CB

WARNING:

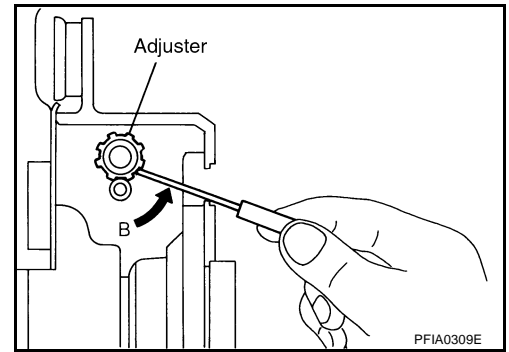
Clean brakes with a vacuum dust collector to minimize the hazard of air borne particles or other materials.

CAUTION:

- Remove wheel, and remove disc rotor with parking brake pedal completely released. Refer to [BR-31, "Disassembly and Assembly of Brake Caliper Assembly"](#).
 - When removing disc rotor, mark both disc rotor and wheel hub for alignment.
1. Remove rear tires from vehicle with a power tool.
 2. Remove disc rotor with the parking brake pedal in the completely released position.
 3. Remove disc rotor. If disc rotor cannot be removed, remove as follows:
 - a. Secure the disc rotor in place with wheel nuts and remove adjuster hole plug.

PARKING BRAKE SHOE

- b. Using flat-bladed screwdriver, rotate adjuster in direction "B" to retract and loosen brake shoe.
4. Remove anti-rattle pins, retainers, anti-rattle springs, then return springs.
5. Remove parking brake shoes, adjuster assembly, adjuster spring and toggle lever.

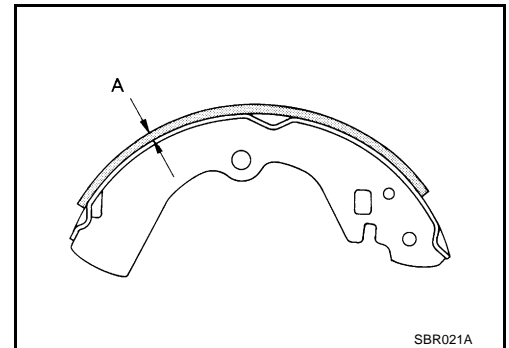


A
B
C
D

INSPECTION AFTER REMOVAL

Shoe Thickness Inspection

- Check thickness of lining.
 - Standard thickness (A) : 3.2 mm (0.126 in)**
 - Repair limit thickness (A) : 1.5 mm (0.059 in)**

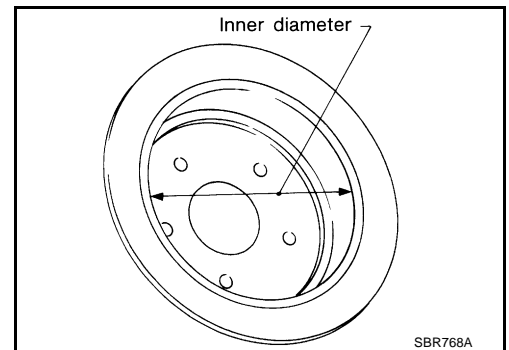


E

PB

Drum Inner Diameter Inspection

- Check drum inner diameter.
 - Standard inner diameter : 172.0 mm (6.77 in) dia.**
 - Maximum inner diameter : 173.0 mm (6.81 in) dia.**



H

I

J

K

L

Other Inspections

- Check the following:
 - Shoe for excessive wear, damage, and peeling.
 - Shoe sliding surface for excessive wear and damage.
 - Anti-rattle pin for excessive wear and corrosion.
 - Return spring for sagging.
- Make sure that adjuster moves smoothly.
- Visually check the inside of drum for excessive wear, cracks, and damage. Check the inside of drum using a pair of vernier calipers.
- Replace with new part if malfunction is detected on the above part.
- When disassembling adjuster, apply PBC (Poly Butyl Cuprysil) grease or equivalent to the threads. Refer to [MA-10, "Fluids and Lubricants"](#) .

M

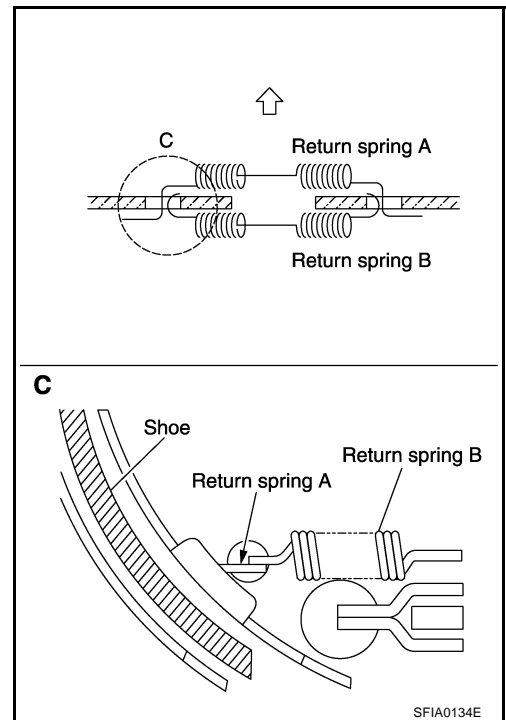
INSTALLATION

Be careful of the following:

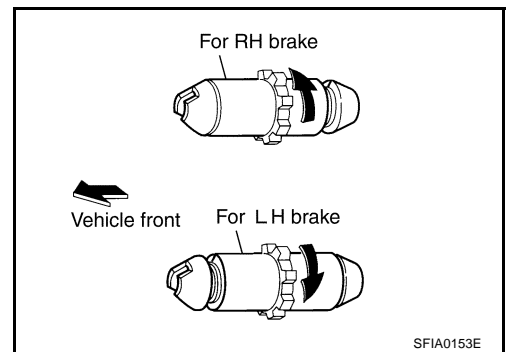
- Refer to [PB-6, "Components"](#) and apply PBC (Poly Butyl Cuprysil) grease or equivalent to the specified points during assembly.

PARKING BRAKE SHOE

- Assemble return spring A under return spring B as shown at C in figure.



- Assemble adjuster so that threaded part expands when rotating it in the direction shown by the arrow.
 - Shorten adjuster by rotating it.
 - After replacing brake shoes or disc rotors, or if brakes do not function well, perform break-in operation as follows.
1. Install in the reverse order of the removal.
 2. Adjust parking brake pedal stroke to the specified stroke. Refer to [PB-3, "ADJUSTMENT"](#).



3. Perform parking brake break-in (drag run) operation by driving the vehicle under the following conditions:
 - Drive forward**
 - **Vehicle speed approx. 35 km/h (22 MPH) set (forward)**
 - **Parking brake operating force approx. 148 N (15 kg, 68 lb) set**
 - **Distance approx. 100 m (328 ft)**
 - **Repeat steps three times.**
4. After break-in operation, check pedal stroke of parking brake. Readjust if it is no longer at the specified stroke. Refer to [PB-3, "ADJUSTMENT"](#).
 - To prevent 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 lining.

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

PFP:00030

Parking Drum Brake

NFS000CC

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

Parking Brake Control

NFS000CD

Control type	Foot pedal type
Number of notches [under force of 196 N (20 kg, 44 lb)]	4 – 5 notches
Number of notches when warning lamp switch comes on	1 notch

A
B
C
D
E
G
H
I
J
K
L
M

PB

SERVICE DATA AND SPECIFICATIONS (SDS)
