

SECTION **PB**
PARKING BRAKE SYSTEM

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

CONTENTS

PARKING BRAKE SYSTEM	2	PARKING BRAKE SHOE	5
On-Vehicle Service	2	Components	5
PEDAL STROKE	2	Removal and Installation	5
INSPECT COMPONENTS	2	REMOVAL	5
ADJUSTMENT	2	INSPECTION AFTER REMOVAL	6
PARKING BRAKE CONTROL	3	INSTALLATION	6
Components	3	SERVICE DATA AND SPECIFICATIONS (SDS)	7
Removal and Installation	3	Parking Drum Brake	7
REMOVAL	3	Parking Brake Control	7
INSTALLATION	4		

PARKING BRAKE SYSTEM

PARKING BRAKE SYSTEM

PFP:36010

On-Vehicle Service PEDAL STROKE

AFS001TJ

- When parking brake pedal is operated with a force of 200 N (20.4 kg, 44.9 lb), make sure the stroke is within the specified number of notches. (Check it by listening and counting the ratchet clicks.)

Pedal stroke : 4 – 5 notches

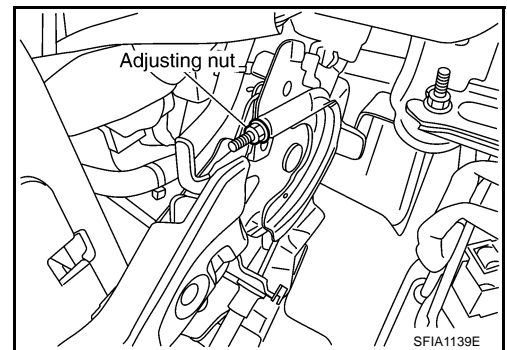
INSPECT COMPONENTS

- Make sure the components are attached properly (check for looseness, backlash, etc.).
- Check parking brake pedal assembly for bend, damage and cracks, and replace if necessary.
- Check cable for wear and damage, and replace if necessary.
- Check parking brake warning lamp switch for malfunction, and replace if necessary.

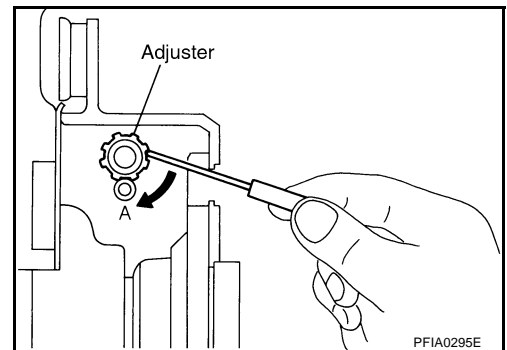
ADJUSTMENT

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

1. Insert a deep socket wrench to rotate adjusting nut and loosen cable sufficiently. Then, return pedal.
2. Using wheel nuts, fix disc to hub and prevent it from tilting.



3. Remove adjusting hole plug installed on disc. Using a flat-bladed screwdriver, turn adjuster in direction A as shown in the figure until disc rotor is locked. After locking, turn adjuster in the opposite direction by 5 or 6 notches.
4. Rotate disc rotor to make sure there is no drag. Install adjusting hole plug.
5. Adjust cable as follows:
 - a. Operate pedal 10 or more times with a force of 490 N (50 kg, 110 lb).
 - b. Rotate adjusting nut with deep socket to adjust pedal stroke.



CAUTION:

Do not reuse adjusting nut after removing it.

- c. When parking brake pedal is operated with a force of 200 N (20.4 kg, 44.9 lb), make sure the stroke is within the specified number of notches. (Check it by listening and counting the ratchet clicks.)

Pedal stroke : 4 – 5 notches

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

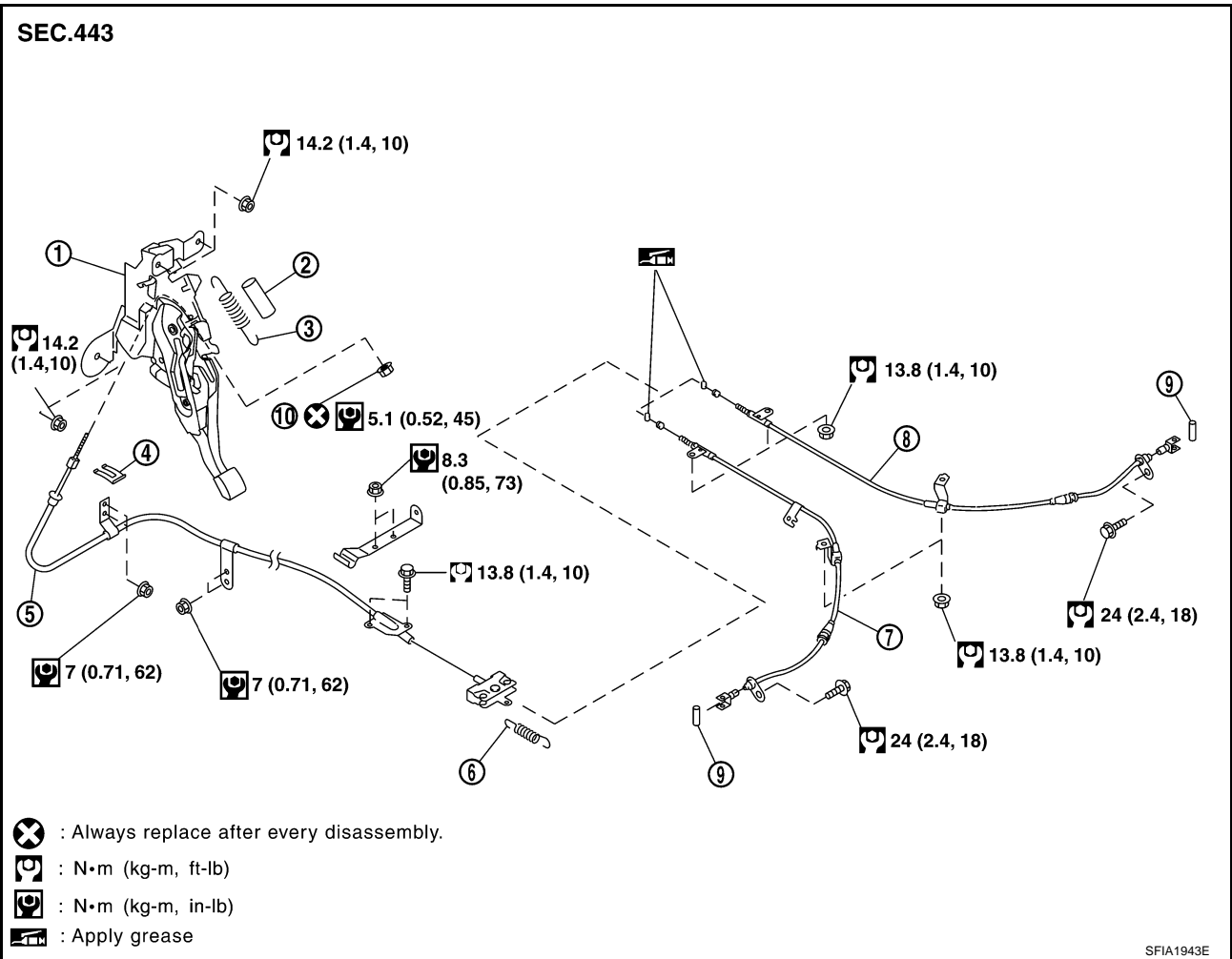
PARKING BRAKE CONTROL

PARKING BRAKE CONTROL

PF3:36010

Components

AFS001TK



- | | | |
|--------------------|---------------------|------------------|
| 1. Device assembly | 2. Spring insulator | 3. Return spring |
| 4. Lock plate | 5. Front cable | 6. Return spring |
| 7. Rear left cable | 8. Rear right cable | 9. Pin |
| 10. Adjusting nut | | |

Removal and Installation

REMOVAL

AFS001TL

1. Remove front kicking plate (driver side). Refer to [IP-12, "\(A\) Front Kicking Plate \(RH/LH\)"](#) .
2. Remove front body side welt (driver side). Refer to [EI-36, "BODY SIDE TRIM"](#) .
3. Remove dash side finisher (driver side). Refer to [IP-10, "INSTRUMENT PANEL ASSEMBLY"](#) .
4. Remove instrument lower panel (driver side). Refer to [IP-10, "INSTRUMENT PANEL ASSEMBLY"](#) .
5. Remove adjusting nut.
6. Remove front cable installation bolts, nuts, and lock plate, then remove front cable from the vehicle.
7. Remove heat insulator between center tube and rear propeller shaft.
8. Remove exhaust center muffler. Refer to [EX-3, "EXHAUST SYSTEM"](#) .
9. Remove propeller shaft. Refer to [PR-9, "Removal and Installation"](#) .
10. Remove rear disc caliper and disc rotors. Refer to [BR-27, "Removal and Installation of Brake Caliper Assembly"](#) .
11. Remove parking brake shoe, and remove rear cable from toggle lever. Refer to [PB-5, "PARKING BRAKE SHOE"](#) .

PARKING BRAKE CONTROL

12. Remove right and left rear cables installation nut, bolt, and remove right and left rear cable assembly from the vehicle.

INSTALLATION

1. Refer to "Components" for tightening torque. Install in the reverse order of removal.

CAUTION:

Do not reuse adjusting nut after removing it.

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

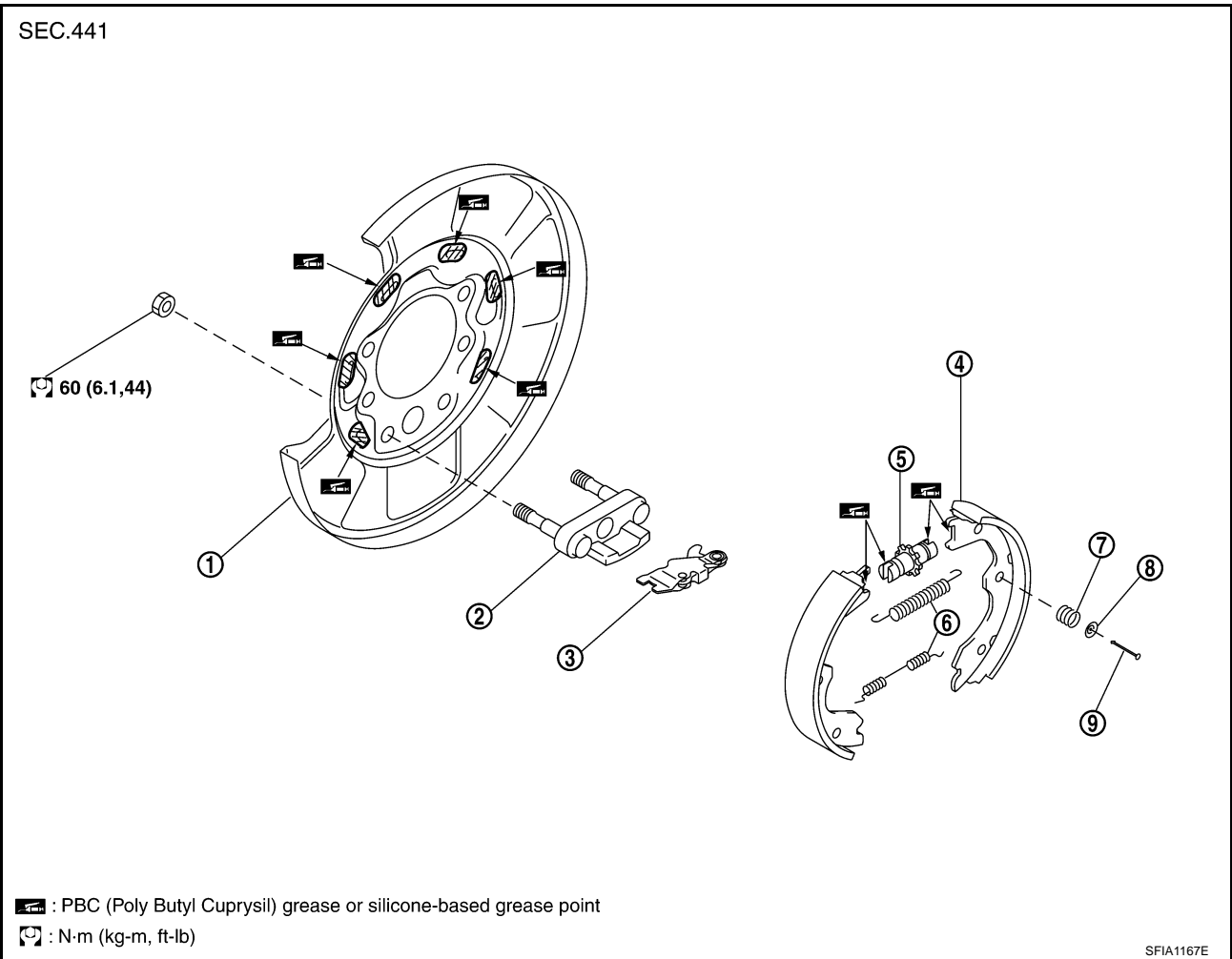
PARKING BRAKE SHOE

PARKING BRAKE SHOE

PFPA:44060

Components

AFS001TM



Removal and Installation

REMOVAL

AFS001TM

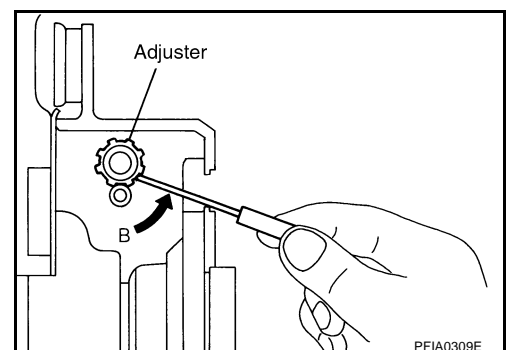
WARNING:

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

Be careful of the following:

- Remove disc rotor only with parking brake pedal completely in the returned position.
- If disc rotor can not be removed, remove as follows.

1. Fix disc rotor in place with wheel nuts and remove disc rotor plug. Using a flat-bladed screwdriver, rotate adjuster on adjuster assembly in direction B to retract and loosen brake shoes.

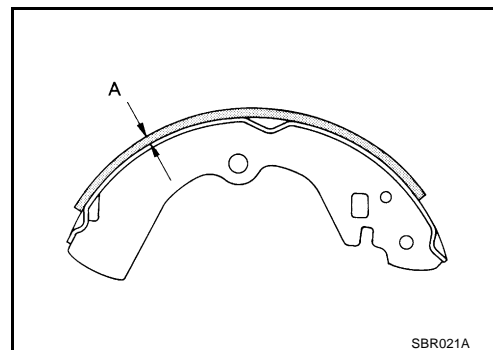


PARKING BRAKE SHOE

INSPECTION AFTER REMOVAL

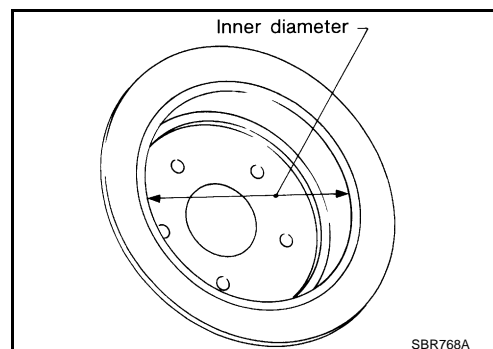
Lining Thickness Inspection

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



Drum Inner Diameter Inspection

- Check drum inner diameter.
 - Standard inner diameter : 190 mm (7.48 in)**
 - Maximum inner diameter : 191 mm (7.52 in)**



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.
- Check adjuster for rough operation.
- Check either visually or with a vernier caliper to see if there is any excessive wear, cracks, or damage inside drum.

INSTALLATION

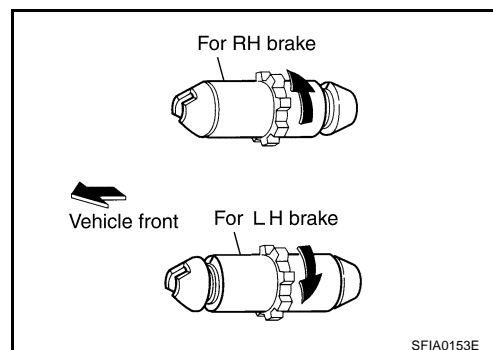
Be careful of the following:

- Refer to “Component Parts Location” and apply brake grease to the specified points during assembly.
- Assemble adjuster so that threaded part expands when rotating it in the direction shown by the arrow.
- Shorten adjuster by rotating it.
- When disassembling 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 parking brake pedal 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. 40 km/h (25 MPH) set (forward)**
 - **Parking brake operating force approx. 100 N (10 kg, 45lb) set**
 - **Distance approx. 100 m (328 ft)**
3. After break-in operation, check lever stroke of parking brake. Readjust if it is no longer at the specified stroke.
 - 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

AFS001TO

Type		DS19HC
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)	190 mm (7.48 in)
	Wear limit of inner diameter	191 mm (7.52 in)

Parking Brake Control

AFS001TP

Control type	Foot pedal
Number of notches [under a force of 200 N (20.4 kg, 44.9 lb)]	4 – 5 notches
Number of notches when warning lamp switch comes on	1 notches

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

PB

SERVICE DATA AND SPECIFICATIONS (SDS)
