SECTION PARKING BRAKE SYSTEM

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PRECAUTIONS

PRECAUTIONS

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

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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.

PREPARATION

PREPARATION PFP:0002 A Commercial Service Tools EFS0077 EFS0077 A Tool name Description B A A Power tool Removing fasteners B C C Description Removing fasteners C C C

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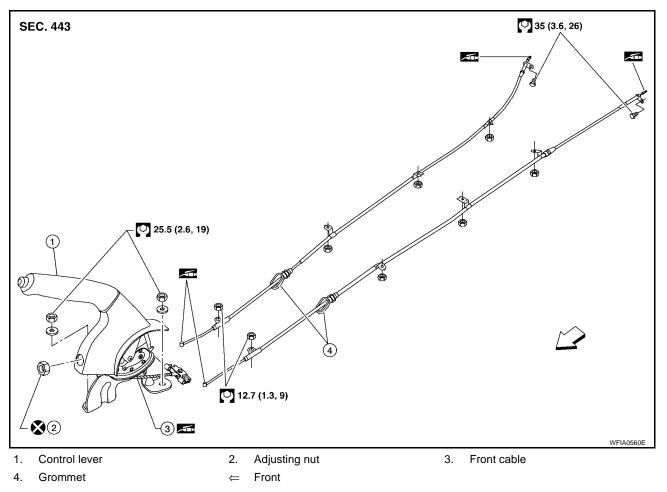
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PARKING BRAKE SYSTEM

PARKING BRAKE SYSTEM Removal and Installation

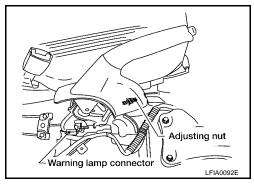
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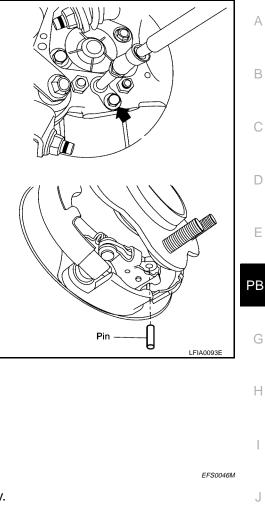
REMOVAL

- 1. Remove center console. Refer to IP-16, "DISASSEMBLY AND ASSEMBLY".
- 2. Remove console floor duct. Refer to <u>ATC-100, "Removal and Installation"</u> (Automatic A/C), <u>MTC-86,</u> <u>"Removal and Installation"</u> (Manual A/C).
- 3. Disconnect warning lamp connector.
- 4. Remove all parking brake cable mounting nuts and bolts, loosen and remove adjusting nut.



5. Remove the rear brake rotor. Refer to <u>BR-35, "Removal and Installation"</u>.

- 6. Remove the lock plate mounting bolt.
- 7. Remove the pin, then the parking brake cable.



INSTALLATION

Installation is in the reverse order of removal.

Adjust the parking brake cable. Refer to <u>PB-5, "Adjustment"</u>.
 CAUTION:

Do not reuse adjusting nut.

Inspection

- Check control lever for wear or other damage. Replace if necessary.
- Check wires for discontinuity or deterioration. Replace if necessary.
- Check warning lamp and switch. Replace if necessary.
- Check parts at each connecting portion and, if found deformed or damaged, replace.
- Check if the control lever stroke is within specification. Refer to PB-5, "Adjustment" .

Adjustment

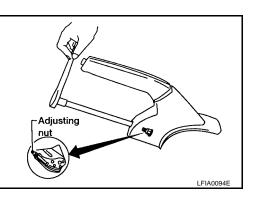
- 1. Fully engage the control lever.
- 2. Loosen the parking brake cable adjusting nut and fully release the control lever.
- 3. Adjust clearance of the rear parking brake shoes. Refer to <u>PB-</u> <u>8, "SHOE CLEARANCE ADJUSTMENT"</u>.
- 4. Depress the brake pedal fully more than five times.
- 5. Make sure that no drag exists while rotating the rear wheels.
- 6. Operate control lever 10 times or more with the specified full stroke pull distance.

Full stroke pull distance : 105 ± 10 mm (4.1 ± 0.4 in)

7. Pull control lever with specified amount of force. Check control lever stroke and ensure smooth operation.

Lever stroke (number of notches) : 5 - 7 Force : 196 N (20 kg-f, 44 lb-f)

8. Adjust control lever by turning adjusting nut.

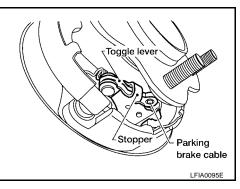


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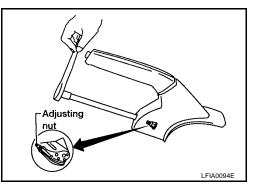
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- 9. After adjustment, check that there is no drag while the control lever is being released. If drag exists, perform the following:
 - Remove the rear disc rotor, refer to <u>BR-22</u>, "<u>Removal and</u> <u>Installation of Caliper Assembly and Disc Rotor</u>". Verify the toggle lever returns to stopper when the parking brake lever is released.



- If toggle lever does not return to stopper, loosen adjusting nut.
- Install rear disc rotor and adjust shoe clearance. Refer to <u>PB-8, "SHOE CLEARANCE ADJUSTMENT"</u>.



PARKING BRAKE SHOE

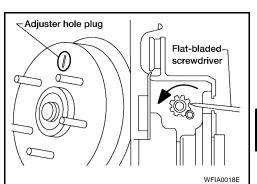
PARKING BRAKE SHOE

Removal and Installation REMOVAL

WARNING:

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

- 1. Remove wheel and tire.
- 2. Remove the brake rotor with the parking brake lever completely disengaged. If the brake rotor cannot be removed, remove as follows:
- a. Secure the brake rotor with the wheel nut and remove the adjuster hole plug.
- b. Insert a flat-bladed screwdriver or suitable tool through the plug opening and rotate the star wheel on the adjuster assembly in the direction as shown to retract the parking brake shoes.
- 3. Remove the parking brake shoe springs.
- 4. Remove the parking brake shoes and adjuster.



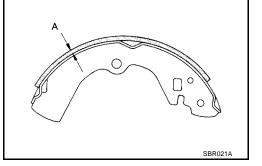
INSPECTION AFTER REMOVAL

- Visually inspect the lining for abnormal wear, damage and peeling.
- Using a micrometer, measure the thickness "A" of the lining.

Standard lining thickness: 3.2 mm (0.126 in)Lining wear limit "A": 1.5 mm (0.059 in)

• Visually inspect the inside of the drum for abnormal wear, damage and cracks. Using a pair of vernier calipers, measure the inside diameter of the drum.

Standard inner diameter: 172 mm (6.77 in)Maximum inner diameter: 173 mm (6.81 in)



CAUTION:

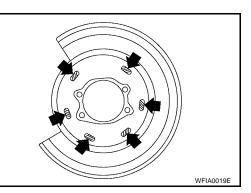
If necessary, remove the parking brake shoe and check as follows.

- Check the shoe sliding surface for abnormal wear and damage.
- Check the anchor pin for abnormal wear and corrosion.
- Check the return springs for sagging.
- Check the adjuster for rough operation.

INSTALLATION

Installation is in the reverse order of removal.

 Apply brake grease to the contact areas shown. Refer to <u>MA-12</u>, <u>"RECOMMENDED FLUIDS AND LUBRICANTS"</u>.



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Install the parking brake shoe springs as shown.

- The orientation of the adjuster is different from LH to RH brakes. Assemble the adjuster so that the threaded part is expanded when rotating it in the direction as shown. Completely retract the adjuster to assemble. When disassembling the adjuster, apply brake grease to the threads. Refer to MA-12, "RECOM-MENDED FLUIDS AND LUBRICANTS" .
- After installing parking brake shoes and rotor, adjust the parking • brake. Refer to PB-8, "SHOE CLEARANCE ADJUSTMENT" .

SHOE CLEARANCE ADJUSTMENT

- 1. Make sure the parking brake control lever is fully released and parking brake cable adjusting nut is loosened.
- Remove the adjuster hole plug on the rotor. Using a screwdriver 2. or suitable tool, turn the adjuster in the direction as shown until the rotor is locked. After locking, turn the adjuster in the opposite direction 5 or 6 notches.
- Rotate the rotor to make sure that there is no drag. Install the 3. adjuster hole plug.
- 4. After adjusting the clearance of the rear shoes, adjust the parking brake cable. Refer to PB-5, "Adjustment" .
 - After replacing the shoes or the brake rotor or if the parking brake does not function well, perform the break-in procedure. Refer to PB-8, "Drum and Lining Break-in".

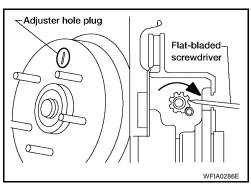
Drum and Lining Break-in

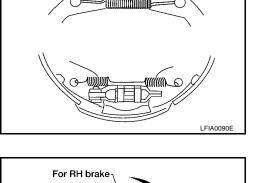
CAUTION:

Do not carry out the break-in procedure excessively. Doing so may cause uneven or premature wear of the brake shoe lining.

When new parking brake shoes or brake rotors are installed or when parking brake performance is poor, perform the following break-in procedure.

- Drive the unloaded vehicle on a safe, level and dry road. 1.
- Pull the parking brake control lever with a force of 147 N (15 kg-f, 33 lb-f). 2.
- While pulling the lever, continue to drive the vehicle forward 100 meters (328 ft) at approximately 35 km/h 3. (22 MPH).
- 4. Allow the parking brake to cool down for approximately five minutes.
- Release the parking brake control lever and drive the vehicle under normal conditions for two minutes to 5. cool down the parking brake.
- 6. Repeat steps 1 through 5 three times and repeat just step 5 once more.
- 7. After performing the break-in procedure, check the stroke of the parking brake control lever. If it is out of specification, adjust again. Refer to PB-5, "Adjustment" .

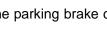




Vehicle front

Vehicle front

For LH brake



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SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS) PFP		
Parking Brake Cor	itrol	EF\$0046Q
Control type	Hand lever	
Number of notches [under for	5 - 7	
Number of notches when warning lamp switch comes on		1
Parking Drum Bral	(e	EFS0046R
Туре		DS17HF
	Standard thickness (new)	DS17HF 3.2 mm (0.126 in)
Type Brake lining	Standard thickness (new) Wear limit thickness	
		3.2 mm (0.126 in)

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