

GROUP 36

PARKING BRAKES

CONTENTS

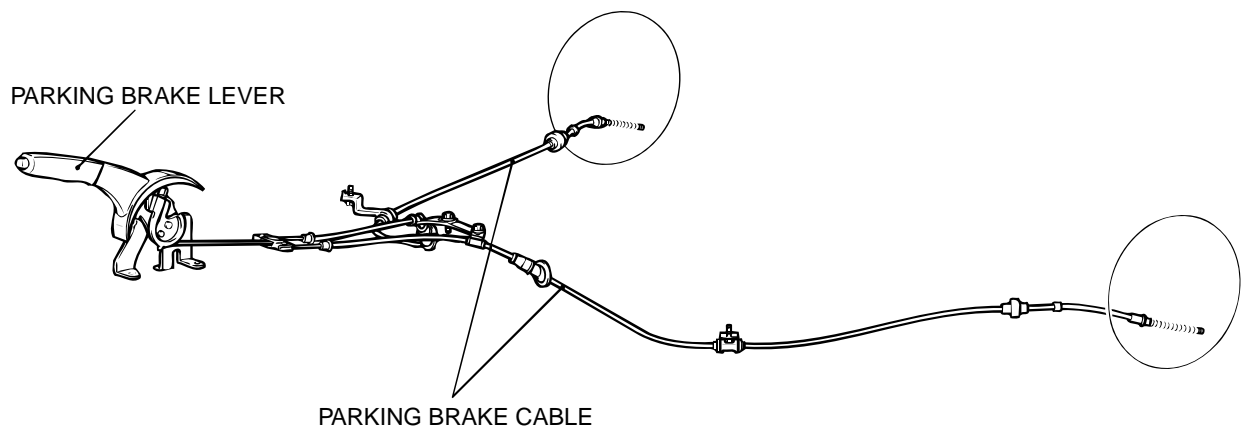
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GENERAL DESCRIPTION

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The parking brake is of a mechanical control type acting on the rear wheels. A lever is used to apply the parking brake.

CONSTRUCTION DIAGRAM



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PARKING BRAKE DIAGNOSIS

INTRODUCTION TO PARKING BRAKES DIAGNOSIS

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If the parking brake is faulty, parking brake effort will become insufficient.

The cause will malfunction of parking brake parts and parking brake lever out of adjustment.

PARKING BRAKES DIAGNOSTIC TROUBLESHOOTING STRATEGY

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Use these steps to plan your diagnostic strategy. If you follow them carefully, you will be sure that you have exhausted most of the possible ways to find a parking brakes fault.

1. Gather Information from the customer.

- 2. Verify that the condition described by the customer exists.
- 3. Find the malfunction by following the Symptom Chart.
- 4. Verify malfunction is eliminated.

SYMPTOM CHART

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SYMPTOM	INSPECTION PROCEDURE	REFERENCE PAGE
Brake drag	1	P.36-3
Insufficient parking brake function	2	P.36-3

SYMPTOM PROCEDURES

INSPECTION PROCEDURE 1: Brake Drag

DIAGNOSIS

STEP 1. Check the incomplete release of parking brake.

Q: Is there a fault?

YES : Correct it. Then go to Step 5.

NO : Go to step 2.

STEP 2. Check the incorrect parking brake adjustment. (Refer to [P.36-4](#).)

Q: Is there a fault?

YES : Adjust the parking brake. Then go to Step 5.

NO : Go to Step 3.

STEP 3. Check the parking break cable routing condition.

Q: Is there a fault?

YES : Correct it. Then go to Step 5.

NO : Go to Step 4.

STEP 4. Check the rear brake's shoe and lining.

Refer to GROUP 35A, On-vehicle Service-Brake Lining Thickness Check [P.35A-25](#) and Brake Drum Inside Diameter Check [P.35A-25](#).

Q: Is there a fault?

YES : Correct it. Then go to Step 5.

NO : Go to Step 5.

STEP 5. Retest the system.

Q: Is the malfunction eliminated?

YES : The procedure is complete.

NO : Recheck from Step 1.

INSPECTION PROCEDURE 2: Insufficient Parking Brake Function

DIAGNOSIS

STEP 1. Check the excessive parking brake lever stroke.

Q: Is the parking brake lever stroke adjusted properly?

YES : Adjust the parking brake lever stroke or check the parking brake cable routing. Then go to Step 7.

NO : Go to Step 2.

STEP 2. Check the parking brake cable for sticking.

Q: Is the parking brake cable stuck?

YES : Replace the cable. Then go to Step 7.

NO : Go to Step 3.

STEP 3. Check a worn brake lining.

Q: Is the brake lining worn?

YES : Replace the brake lining. Then go to Step 7.

NO : Go to Step 4.

STEP 4. Check the grease or oil on lining surface.

Q: Is the brake lining surface contaminated with grease or oil?

YES : Replace the brake lining. Then go to Step 7.

NO : Go to Step 5.

STEP 5. Check a stuck wheel cylinder.

Q: Is the wheel cylinder stuck?

YES : Replace the wheel cylinder. Then go to Step 7.

NO : Go to Step 6.

STEP 6. Check the automatic adjuster malfunction.

Q: Does the automatic adjuster function?

YES : Replace the automatic adjuster. Then go to Step 7.

NO : Go to Step 7.

STEP 7. Retest the system.**Q: Is the malfunction eliminated?****YES :** The procedure is complete.**NO :** Recheck from Step 1.

ON-VEHICLE SERVICE

PARKING BRAKE LEVER STROKE CHECK AND ADJUSTMENT

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1. Pull the parking brake lever with a force of approximately 200 N (45 pounds) and count the number of notches.

Standard value: 5 – 7 notches

2. If the parking brake lever stroke is not the standard value, adjust as described below.

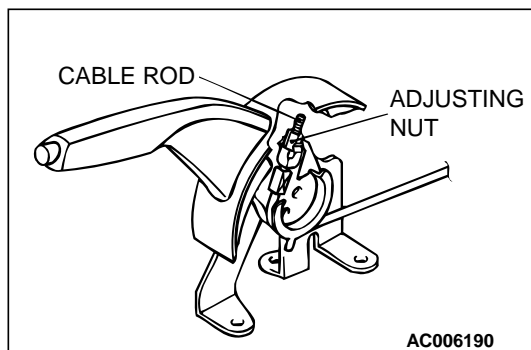
- (1) Remove the floor console assembly. (Refer to GROUP 52A, Rear Floor Console [P.52A-8.](#))

- (2) Loosen the adjusting nut to move it to the cable rod end so that the cable will be free.

- (3) Depress the brake pedal repeatedly until the lever has no change in its stroke.

NOTE: Depressing the brake pedal repeatedly adjusts shoe clearance correctly.

- (4) Turn the adjusting nut to adjust the parking brake lever stroke to the standard value. After adjusting, check that there is no space between the adjusting nut and the parking brake lever. Check that the adjusting nut is secured with the nut holder.

**⚠ CAUTION**

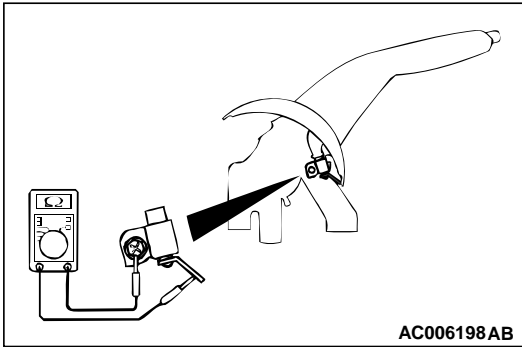
If the parking brake lever stroke is below the standard value and the braking is too firm, the rear brakes may drag.

- (5) After adjusting the parking brake lever stroke, jack up the rear end of the vehicle, and then release the parking brake and turn the rear wheels to check that the rear brakes are not dragging.

PARKING BRAKE SWITCH CHECK

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1. Remove the floor console assembly. (Refer to GROUP 52A, Rear Floor Console [P.52A-8.](#))
2. Remove the front seat assembly (RH). (Refer to GROUP 52A, Front Seat [P.52A-16.](#))



3. Check for continuity between the parking brake switch terminal and the switch mounting bolt.

When parking brake lever is pulled	Less than 2 ohms
When parking brake lever is released	Open circuit

PARKING BRAKE LEVER

REMOVAL AND INSTALLATION

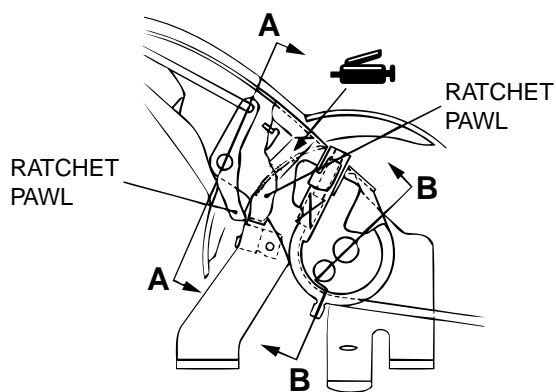
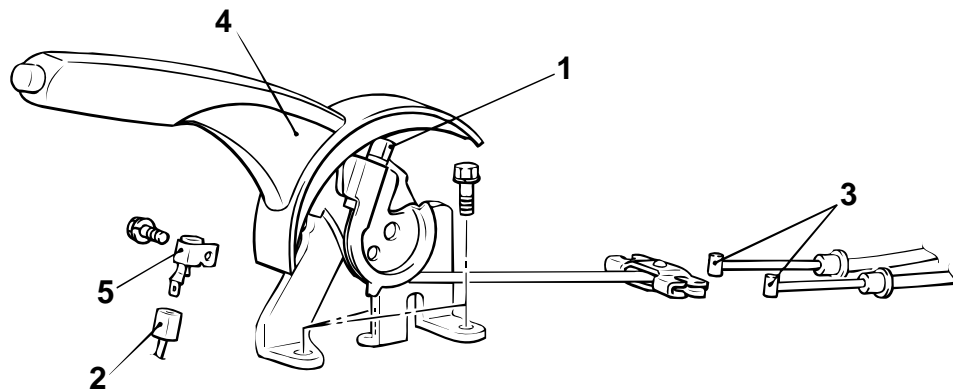
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Pre-removal Operation

Rear Floor Console Assembly and Rear Console Bracket Removal (Refer to GROUP 52A, Floor Console [P.52A-8.](#))

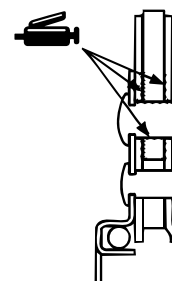
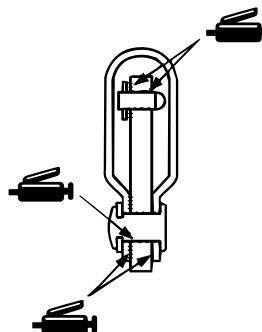
Post-installation Operation

- Parking Brake Lever Stroke Adjustment (Refer to [P.36-4.](#))
- Rear Console Bracket and Rear Floor Console Assembly Installation (Refer to GROUP 52A, Floor Console [P.52A-8.](#))



SECTION A - A

SECTION B - B



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REMOVAL STEPS

1. ADJUSTING NUT
2. PARKING BRAKE SWITCH CONNECTOR

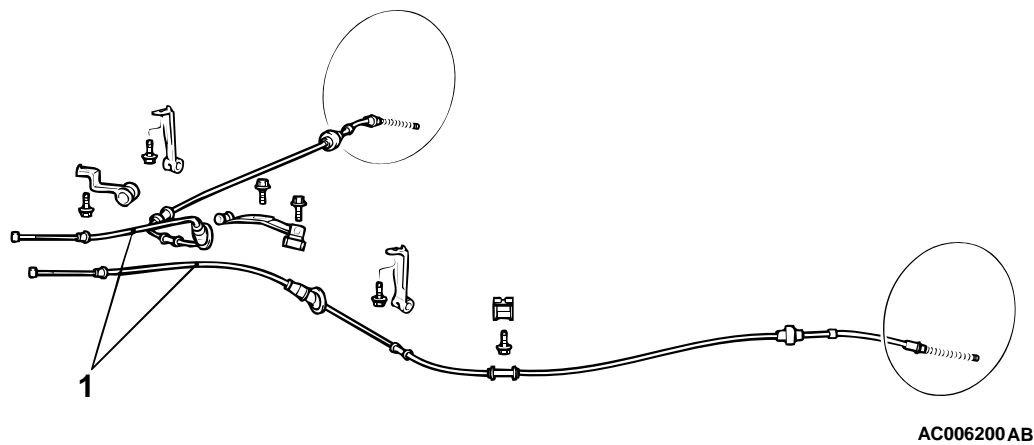
- REMOVAL STEPS (Continued)**
- 3. PARKING BRAKE CABLE CONNECTION
 - 4. PARKING BRAKE LEVER ASSEMBLY
 - 5. PARKING BRAKE SWITCH

PARKING BRAKE CABLE

REMOVAL AND INSTALLATION

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<p>Pre-removal Operation</p> <ul style="list-style-type: none">• Rear Floor Console Assembly and Rear Console Bracket Removal (Refer to GROUP 52A, Floor Console P.52A-8.)• Rear Seat Cushion Assembly Removal (Refer to GROUP 52A - Seat P.52A-16.)	<p>Post-installation Operation</p> <ul style="list-style-type: none">• Parking Brake Lever Stroke adjustment (Refer to P.36-4.)• Rear Seat Cushion Installation (Refer to GROUP 52A - Seat P.52A-16.)• Rear Console Bracket and Rear Floor Console Assembly Installation (Refer to GROUP 52A - Floor Console P.52A-8.)
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- REMOVAL STEPS**

 - SHOE AND LINING ASSEMBLY (REFER TO GROUP 35A, REAR DRUM BRAKE [P.35A-39.](#))
- REMOVAL STEPS (Continued)**

 - PARKING BRAKE CABLE CONNECTION (REFER TO [P.36-5.](#))
 - 1. PARKING BRAKE CABLE

SPECIFICATION

SERVICE SPECIFICATION

M1361000300252

ITEM	STANDARD VALUE
Parking brake lever stroke	5 – 7 notches