GROUP 36

PARKING BRAKES

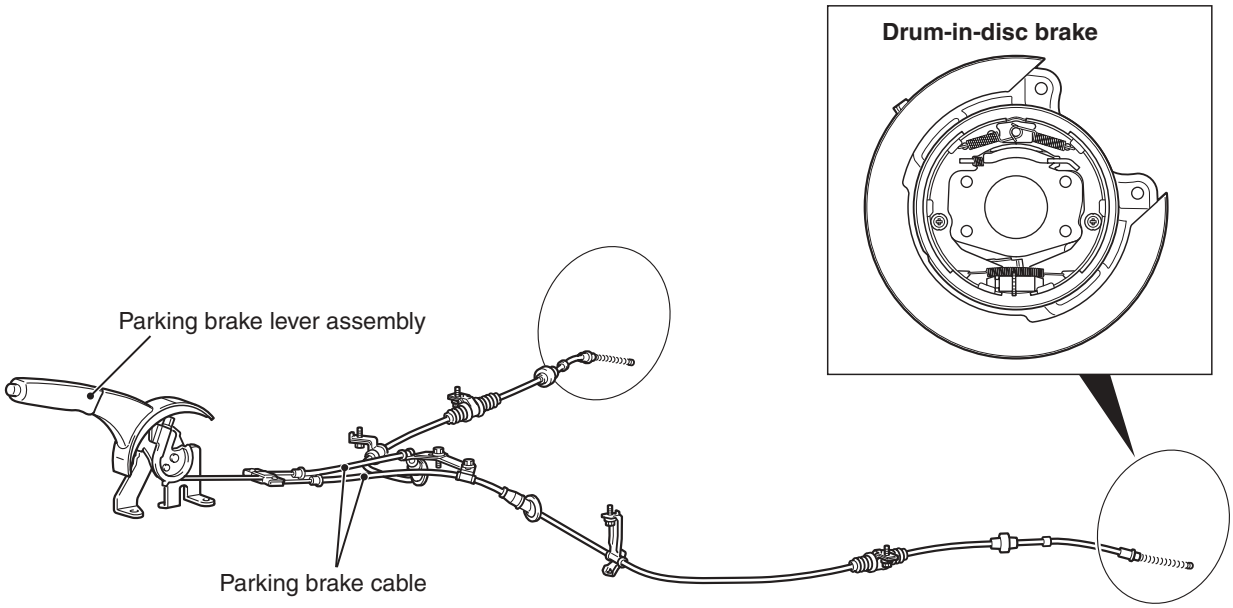
CONTENTS

GENERAL INFORMATION

M1361000100429

The parking brake is of a mechanical rear-wheel acting type, and its operation utilises a parking brake lever.

CONSTRUCTION DIAGRAM



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SPECIFICATION(S)

SERVICE SPECIFICATIONS

M1361000300508

Item	Standard value	Limit
Parking brake lever stroke	3 – 5 notches	–
Rear brake lining thickness mm	2.8	0.8
Rear drum inside diameter mm	190.0	191.0

ON-VEHICLE SERVICE

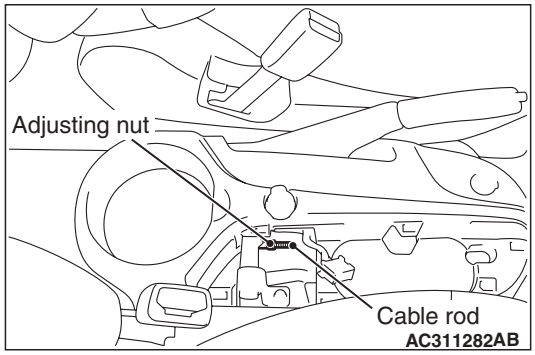
PARKING BRAKE LEVER STROKE CHECK AND ADJUSTMENT

M1361000900458

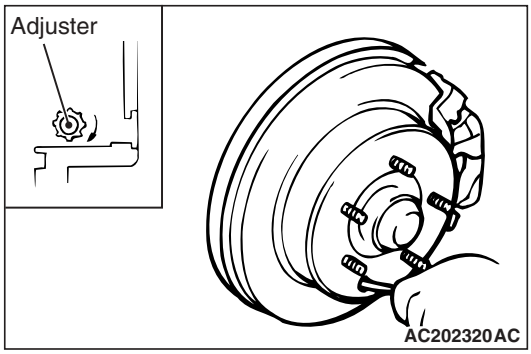
1. Pull the parking brake lever with a force of approximately 200 N and count the number of notches.

Standard value: 3 – 5 notches

2. If the parking brake lever stroke is not the standard value, adjust as described below.
   (1) Remove the floor console panel (Refer to GROUP 52A, Floor Console Assembly P.52A-9).



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



(3) Remove the rear brake adjusting hole plug. Then insert a flat-tipped screwdriver to turn the adjuster to the arrow direction (to expand the shoe) until the parking brake shoe makes contact and the disc can no longer be turned. Back off the adjuster to the opposite direction by five notches.

⚠ CAUTION

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

(4) Adjust the parking brake lever stroke to the standard value by turning the adjusting nut. After the adjustment, ensure that there is no free play between the adjusting nut and the parking brake lever.

(5) After the parking brake lever stroke is adjusted, raise the rear of the vehicle. Release the parking brake, turn the rear wheels to confirm that the rear brakes are not dragging.

PARKING BRAKE SWITCH CHECK

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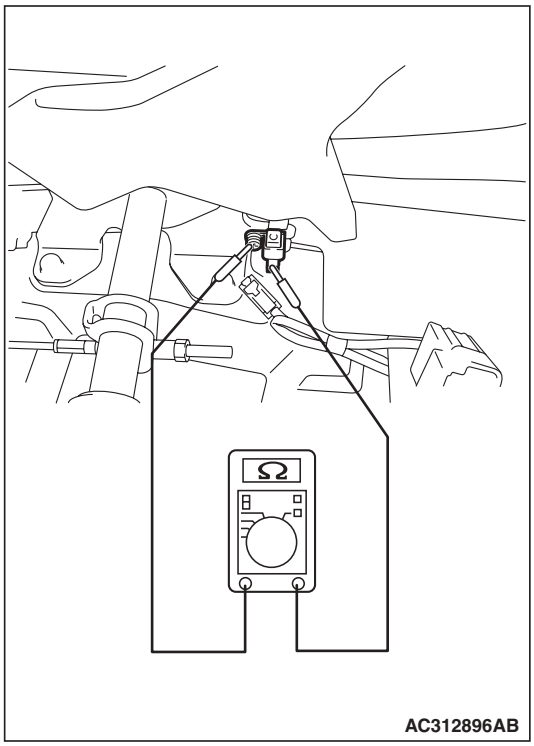


1. Remove the floor console panel. (Refer to GROUP 52A, Floor Console AssemblyP.52A-9).
2. Check for continuity between the parking brake switch terminal and the switch mounting bolt.

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

LINING RUNNING-IN

M1361001100347

⚠ CAUTION

Carry out running-in in a place with good visibility, and pay careful attention to safety.

Carry out running-in by the following procedure when replacing the rear brake disc rotors, or when brake performance is insufficient.

1. Adjust the parking brake lever stroke to the specified value.

   Specified value (Operation force: Approx. 200 N): 3 – 5 notches

2. Hook a spring balance onto the centre of the parking brake lever grip and pull it with a force of 100 – 150 N in a direction perpendicular to the handle.
3. Drive the vehicle at a constant speed of 35 – 50 km/h for 100 metres.

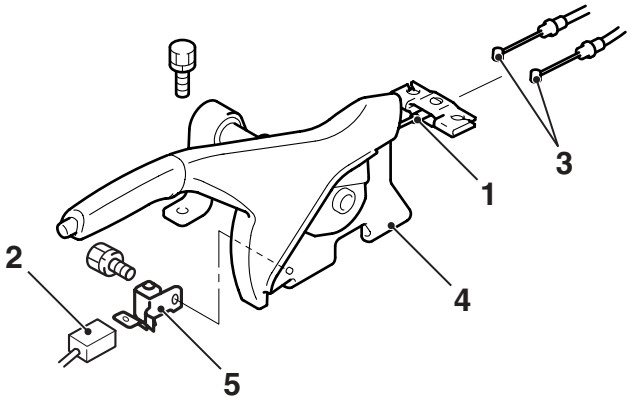
4. Release the parking brake and let the brakes cool for 5 – 10 minutes.
5. Repeat the procedure in steps 2 to 4 four or five times.

PARKING BRAKE LEVER

REMOVAL AND INSTALLATION

M1361001300437

Pre-removal Operation	Post-installation Operation
Rear Floor Console Assembly Removal (Refer to GROUP 52A, Floor Console P.52A-9.)	• Parking Brake Lever Stroke Adjustment (Refer to P.36-2.) • Rear Floor Console Assembly Installation (Refer to GROUP 52A, Floor Console Assembly P.52A-9.)



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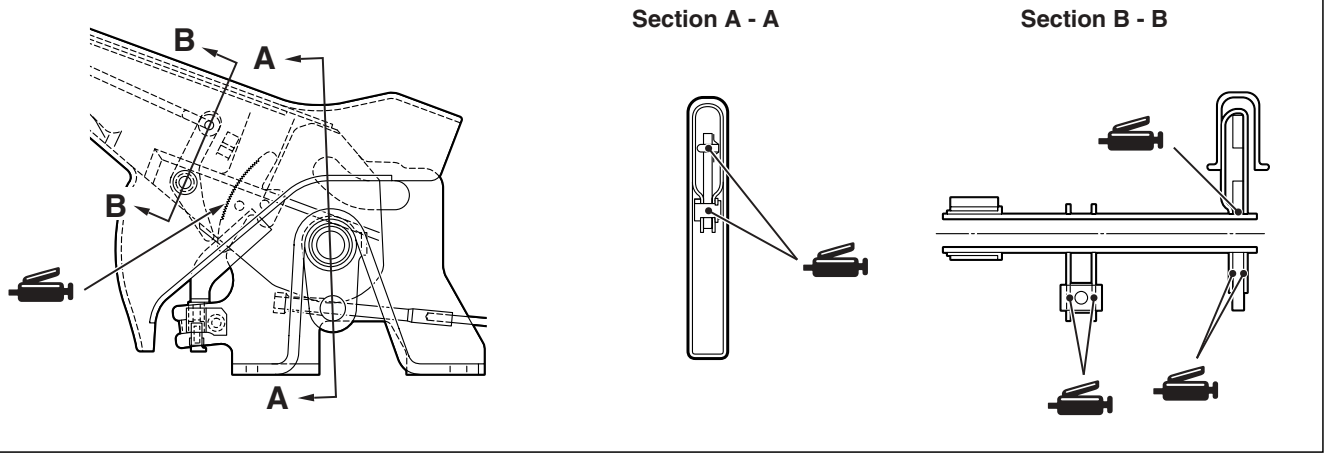


Removal steps

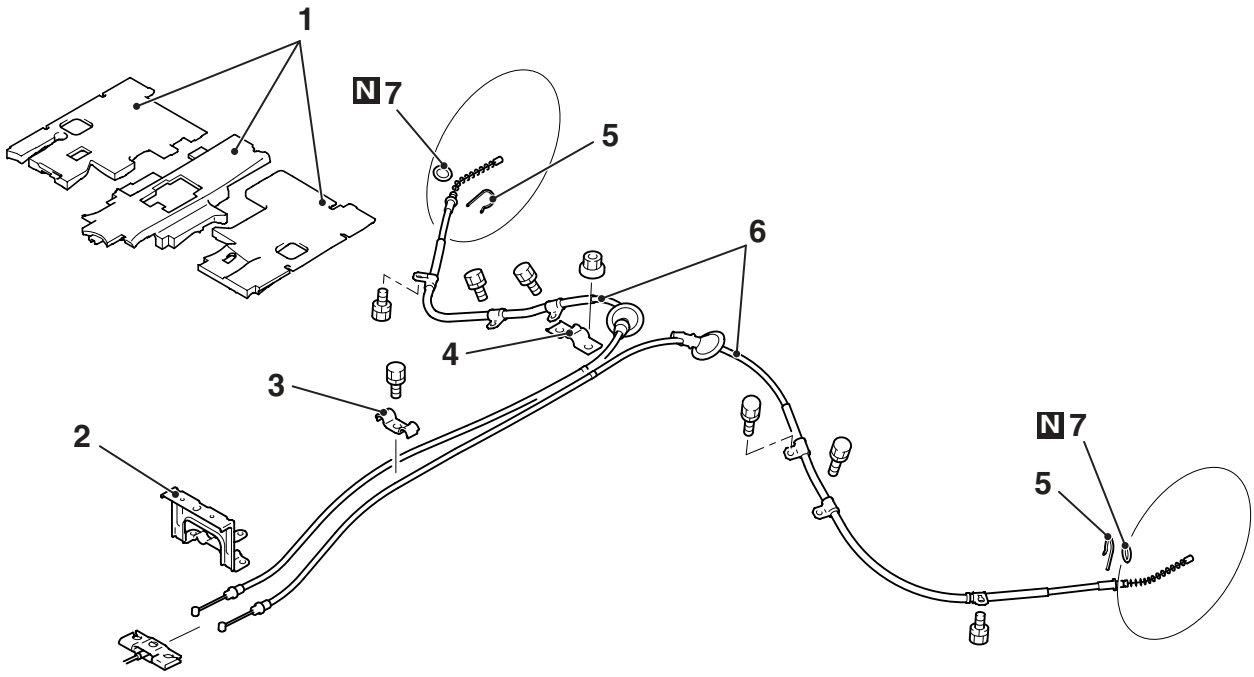
1. Adjusting nut
2. Parking brake switch connector
3. Parking brake cable connection
4. Parking brake lever assembly
5. Parking brake switch

PARKING BRAKE CABLE

REMOVAL AND INSTALLATION

M1361001900666

Pre-removal Operation	Post-installation Operation
• Front seat assembly removal (Refer to GROUP 52A, Front seat assembly P.52A-21.) • Front scuff plate and rear scuff plate removal (Refer to GROUP 52A, Interior trim P.52A-10.) • Seatbelt lower anchor bolt removal (Refer to GROUP 52A, Front seatbelt P.52A-35.) • Front door opening trim, rear door opening trim and centre pillar trim removal (Refer to GROUP 52A, Interior trim P.52A-10.) • Second seat assembly removal (Refer to GROUP 52A, Second seat assembly P.52A-26.) • Cowl side trim removal (Refer to GROUP 52A, Interior trim P.52A-12.) • Accelerator pedal arm stopper removal (Refer to GROUP 17, Accelerator pedal P.17-3.) • Footrest removal	• Footrest installation • Accelerator pedal arm stopper installation (Refer to GROUP 17, Accelerator pedal P.17-3.) • Cowl side trim installation (Refer to GROUP 52A, Interior trim P.52A-12.) • Second seat assembly installation (Refer to GROUP 52A, Second seat assembly P.52A-26.) • Front door opening trim, rear door opening trim and centre pillar trim installation (Refer to GROUP 52A, Interior trim P.52A-10.) • Seatbelt lower anchor bolt installation (Refer to GROUP 52A, Front seatbelt P.52A-35.) • Front scuff plate and rear scuff plate installation (Refer to GROUP 52A, Interior trim P.52A-10.) • Front seat assembly installation (Refer to GROUP 52A, Front seat assembly P.52A-21.) • Parking brake lever stroke check and adjustment (Refer to P.36-2.)



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Removal steps

1. Front floor backbone pad
   - Release the parking brake lever.
   - Parking brake front cable and parking brake rear cable connection
2. Parking brake cable support
3. Clamp

Removal steps (Continued)

4. Clip
   - Shoe and lining assembly (Refer to P.36-6).
5. Clip
6. Parking brake rear cable
7. O-ring

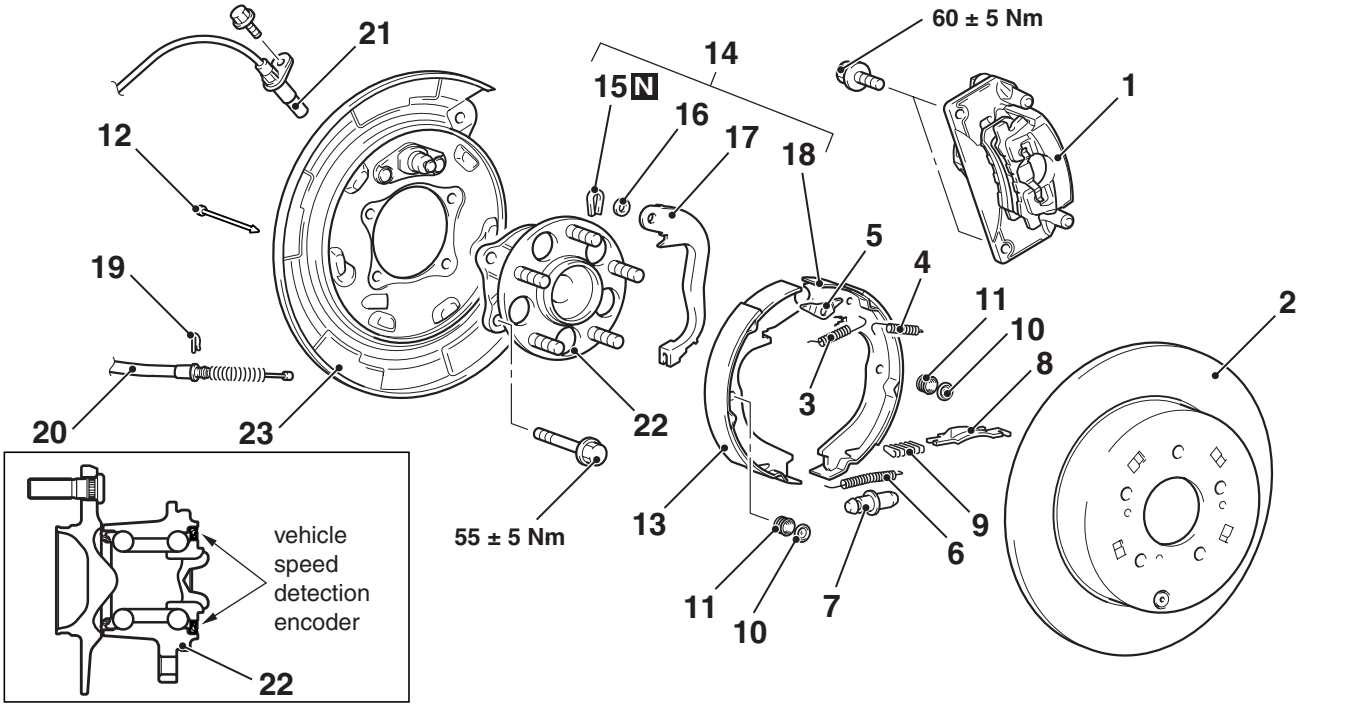
PARKING BRAKE LINING AND DRUM

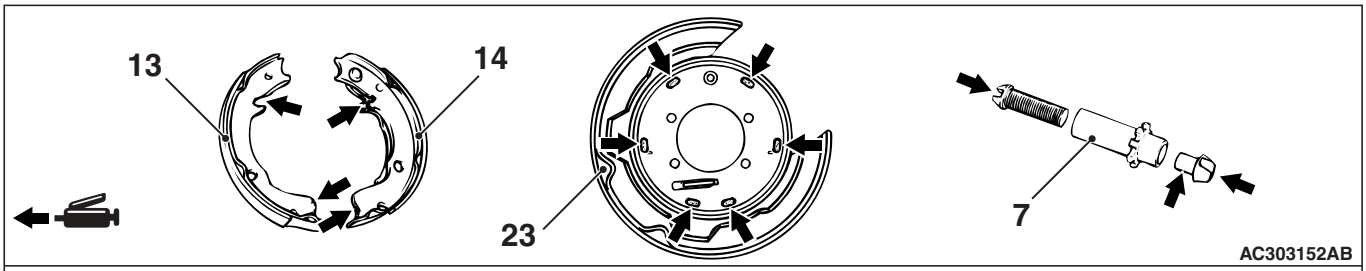
REMOVAL AND INSTALLATION

M1361002500434

⚠ CAUTION

- **The vehicle speed detection encoder collects any metallic particle easily, because it is magnetised. Make sure that the encoder should not collect any metallic particle. Check that there is not any trouble prior to reassembling it.**
- **When the rear wheel speed sensor is removed and installed, make sure that its pole piece does not contact with surrounding parts to avoid damage.**





Brake grease: Multipurpose grease

Removal steps

<<A>> 1. Rear brake caliper assembly
<<B>> 2. Rear brake disc
>>D<< 3. Shoe to anchor spring
>>D<< 4. Shoe to anchor spring
5. Shoe guide plate
6. Adjusting wheel spring
>>C<< 7. Adjuster assembly
8. Strut
9. Strut shoe-to-spring
10. Shoe hold down cup
11. Shoe hold down spring
12. Shoe hold down pin

Removal steps (Continued)

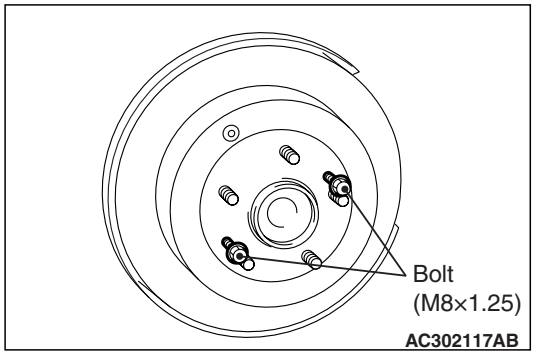
13. Shoe and lining assembly
14. Shoe and lever assembly
>>B<< 15. Retainer
>>A<< 16. Wave washer
17. Parking lever
18. Shoe and lining assembly
19. Pin
20. Parking brake rear cable
21. Rear wheel speed sensor
22. Rear hub assembly
23. Backing plate

REMOVAL SERVICE POINTS

<<A>> REAR BRAKE CALIPER ASSEMBLY REMOVAL

Remove the rear brake caliper assembly and hold it with a wire .

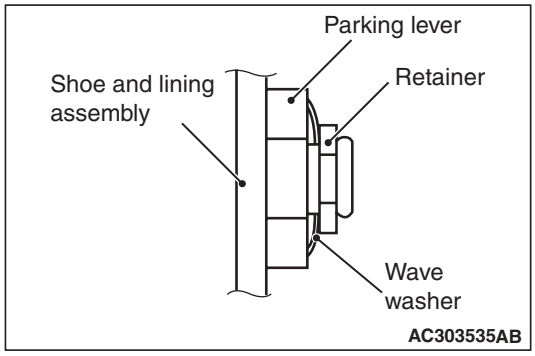
<<B>> BRAKE DISC REMOVAL



If the brake disc is seized, install a M8x1.25 mm bolts as shown, and remove the disc by tightening the bolts evenly and gradually.

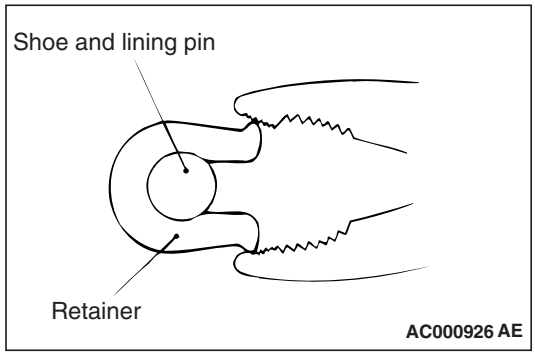
INSTALLATION SERVICE POINTS

>>A<< WAVE WASHER INSTALLATION



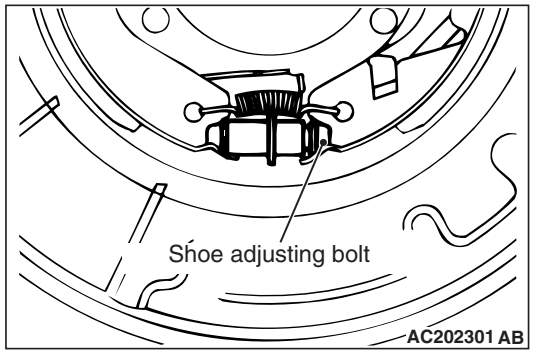
Install the wave washer in the direction shown in the illustration.

>>B<< RETAINER INSTALLATION



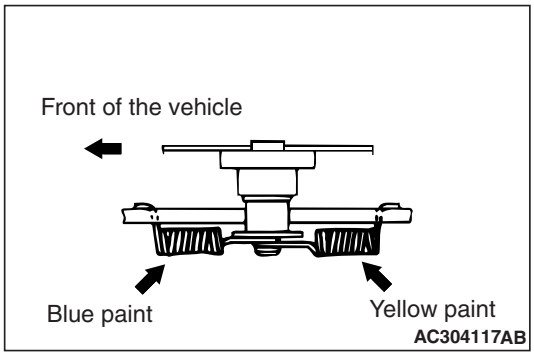
Crimp the retainer firmly to the pin with pliers.

>>C<< ADJUSTER ASSEMBLY INSTALLATION



Install the adjuster assemblies. For left wheel, the shoe adjusting bolt should be located at the front of the vehicle, and for right wheel, it should be located at the rear of the vehicle.

>>D<< SHOE-TO-ANCHOR SPRING INSTALLATION



The shoe-to-anchor springs are not interchangeable as their constants are different. The one with blue paint mark should be install at the front of the vehicle, and the other with yellow paint at the rear of the vehicle, respectively.

NOTE: The illustration shows the left rear wheel. The right rear wheel is symmetrical to that.

INSPECTION

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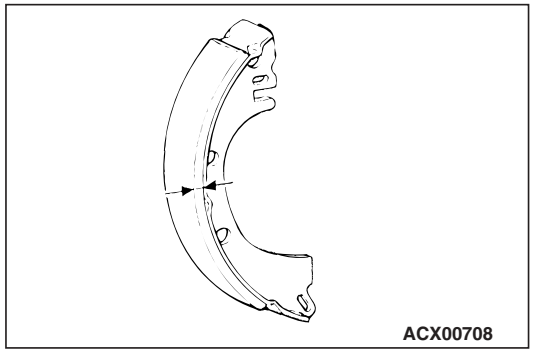
BRAKE LINING THICKNESS INSPECTION

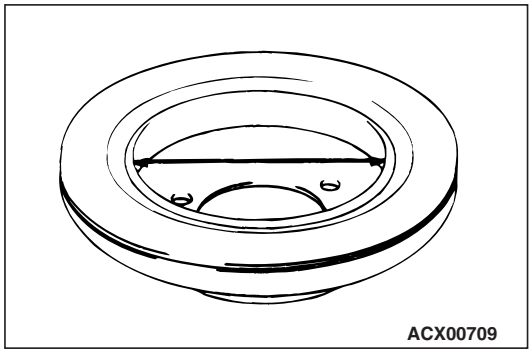


1. Measure the lining thickness at the most worn area.

   Standard value: 2.8 mm
   Limit: 0.8 mm

2. If the thickness is less than limit value, replace the right and left shoe and lining assemblies as a set.

BRAKE DRUM INSIDE DIAMETER INSPECTION



1. Measure the inside diameter of the brake drum at two positions or more.

   Standard value: 190.0 mm
   Limit: 191.0 mm

2. If the inside diameter is more than limit value or if there is excessive wear, replace the brake disc.