
GROUP 35A**SERVICE BRAKE****CONTENTS**

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GENERAL DESCRIPTION

M2350000100558

The brake system has been designed to give greater reliability and durability and to provide excellent braking performance.

FEATURES

Improved braking performance

1. An 8+9 inch tandem brake booster provides sufficient braking force in sudden braking range.
2. 16-inch front ventilated disc brakes provide stable braking force and improved braking feel.
3. 14-inch rear solid disc brakes are used. <2.4L engine>
4. 15-inch rear ventilated disc brakes provide stable braking force and improved braking feel. <3.8L engine>

Improved stability

1. A 4-wheel anti-lock braking system (4ABS) prevents slipping caused by the vehicle wheels locking up, in order to maintain a stable vehicle posture and steering performance.

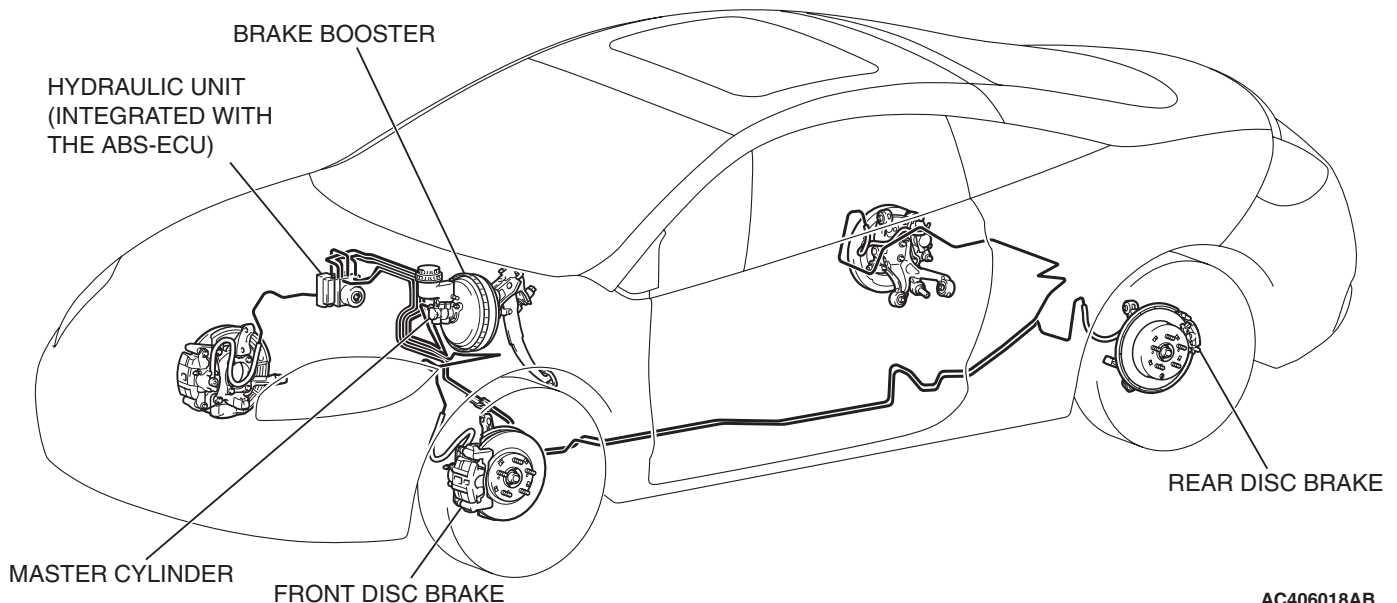
2. An electronic brake-force distribution (EBD) makes it possible to maintain the maximum amount of braking force even when the vehicle's load is unevenly distributed.
3. Front- and rear-wheel X-type brake line layout are used.
4. Ventilated discs on the front brakes improve anti-fading performance.
5. Ventilated discs on the rear brakes improve anti-fading performance. <3.8L engine>

Improved serviceability

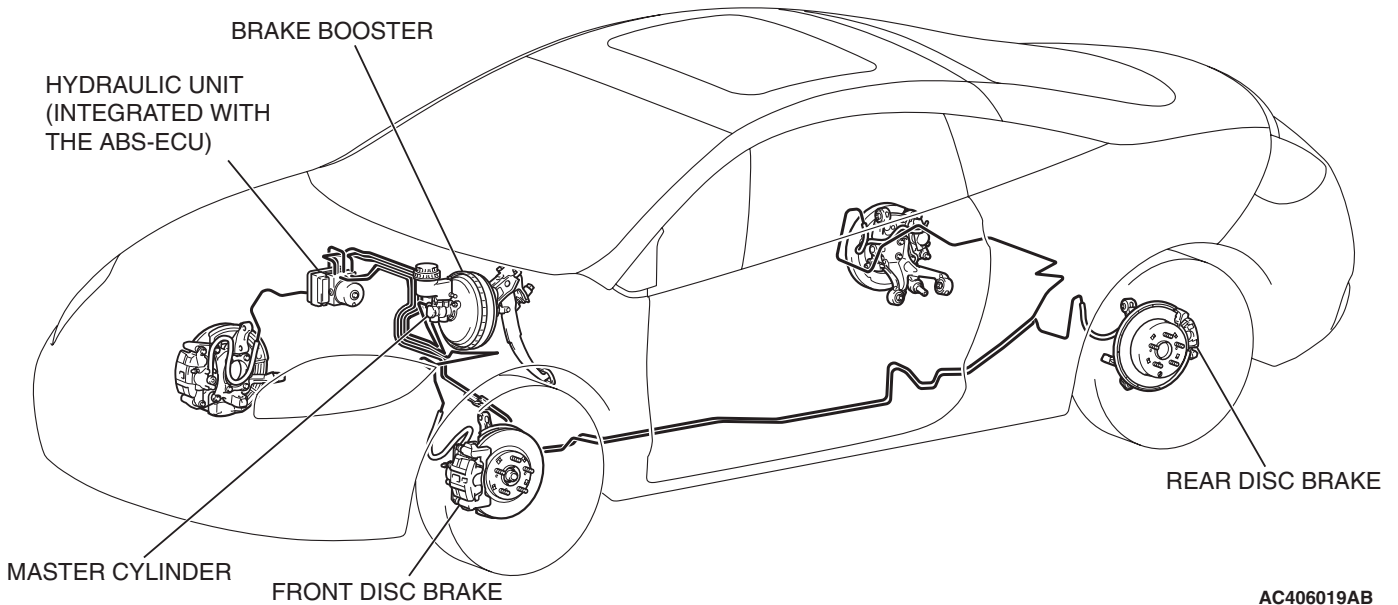
1. A diagnosis function for the ABS and ABS/TCL systems to make inspection easier.
2. An outer disc separated hub and rotor make removal and installation easier.
3. The master cylinder reservoir tank cap is colored white to make identification easier.
4. The ABS-ECU, ABS/TCL-ECU and hydraulic unit are integrated to make them more compact and light-weight.

CONSTRUCTION DIAGRAM

<2.4L ENGINE>



<3.8L ENGINE>



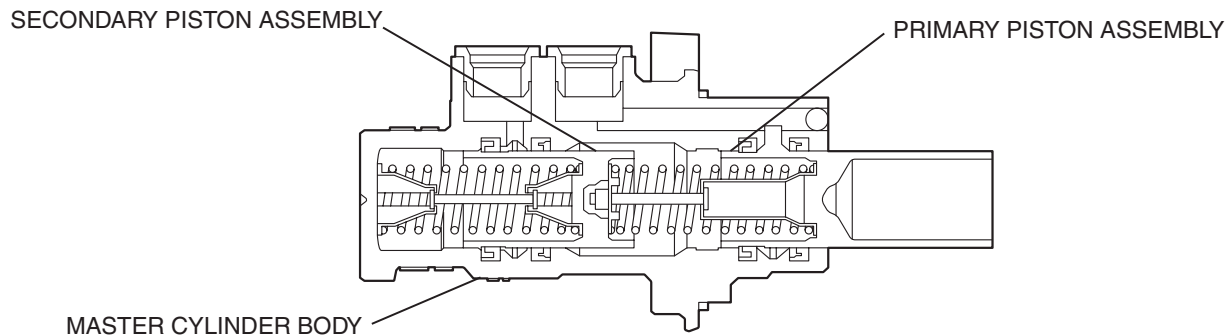
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SPECIFICATIONS

| ITEM | | 2.4L ENGINE | 3.8L ENGINE |
|-------------------------------------|--|---|---|
| Master cylinder | Type | Tandem type | Tandem type |
| | I.D. mm (in) | 25.4 (1.0) | 25.4 (1.0) |
| Brake booster | Type | Vacuum type, tandem | Vacuum type, tandem |
| | Effective dia. of power cylinder mm (in) | 205 + 230 (8 + 9) | 205 + 230 (8 + 9) |
| | Boosting ratio | 8.3 | 8.3 |
| Rear wheel hydraulic control method | | Electronic brake-force distribution (EBD) | Electronic brake-force distribution (EBD) |
| Front brakes | Type | Floating caliper, 1 piston, ventilated disc | Floating caliper, 1 piston, ventilated disc |
| | Disc effective dia × thickness mm (in) | 241 × 26 (9.5 × 1.0) | 241 × 26 (9.5 × 1.0) |
| | Wheel cylinder I.D. mm (in) | 60.33 (2.38) | 60.33 (2.38) |
| | Pad thickness mm (in) | 10.0 (0.39) | 10.0 (0.39) |
| | Clearance adjustment | Automatic | Automatic |
| Rear brakes | Type | Floating caliper, 1 piston, solid disc | Floating caliper, 1 piston, ventilated disc |
| | Disc effective dia × thickness mm (in) | 222 × 10 (8.7 × 0.39) | 237 × 20 (9.3 × 0.79) |
| | Wheel cylinder I.D. mm (in) | 34.93 (1.38) | 34.93 (1.38) |
| | Pad thickness mm (in) | 10.0 (0.39) | 10.0 (0.39) |
| | Clearance adjustment | Automatic | Automatic |
| Brake fluid | | DOT3 or DOT4 | DOT3 or DOT4 |

MASTER CYLINDER

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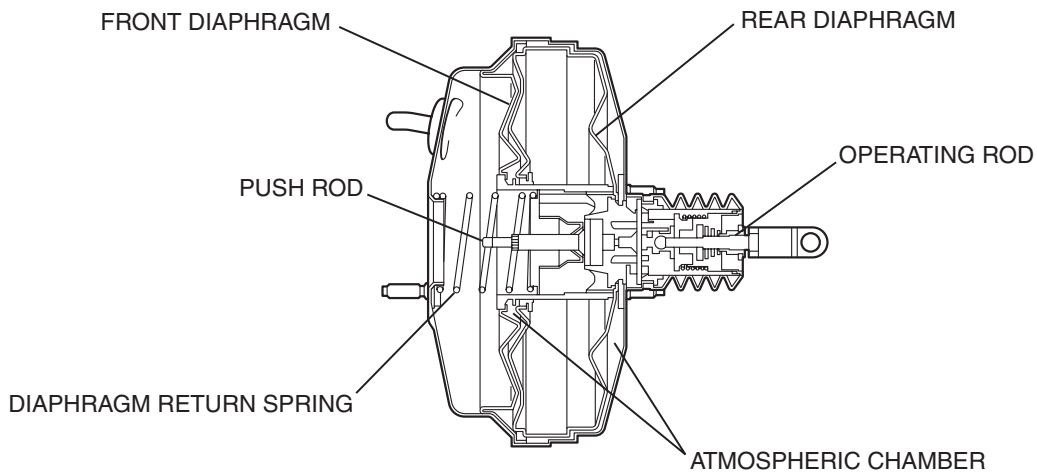


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The master cylinder is a tandem-type.

BRAKE BOOSTER

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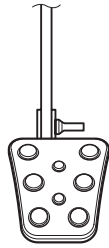
To improve the braking performance, an 8 + 9-inch tandem-type brake booster is used on all models. The tandem type brake booster uses two diaphragms to double the power effect resulting from the pressure difference between atmospheric pressure and negative pressure. It ensures an augmented brake boosting power.

BRAKE PEDAL

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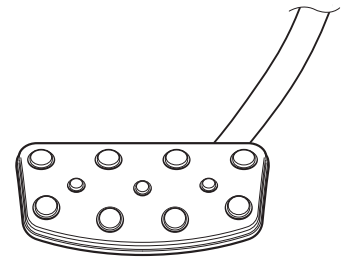
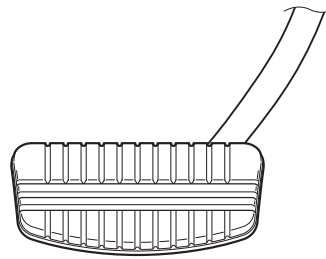
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STANDARD

OPTION: ALUMINUM PEDAL



STANDARD

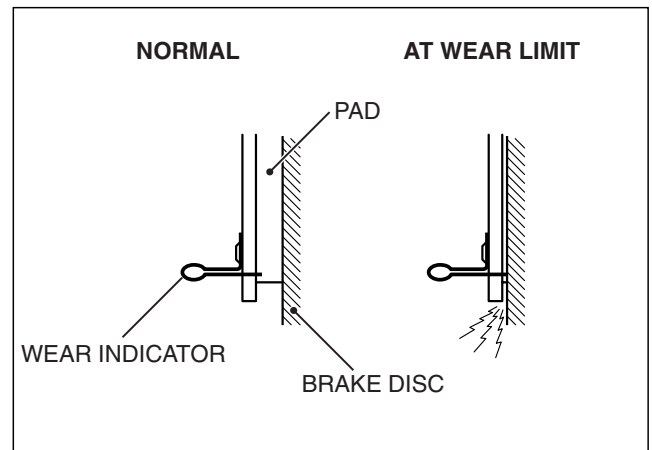
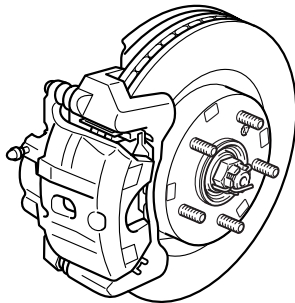
OPTION: ALUMINUM PEDAL

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Aluminum pedal pads have been adopted.<Option:
3.8L engine>

FRONT BRAKE

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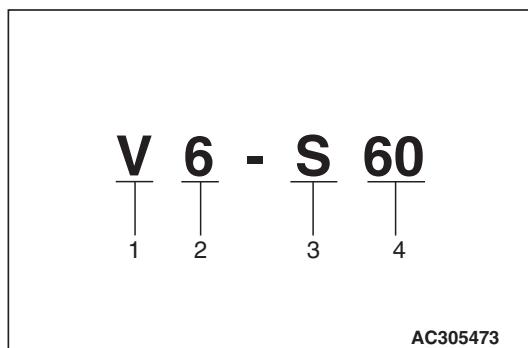
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Brakes with the following specifications have been adopted for the front brakes.

- V6-S60 1-piston ventilated discs
- An outer disc method in which the wheels and discs are tightened together improves the ease of brake disc removal and installation.

- The brake pads are equipped with mechanical-type audible wear indicators to notify the driver when the usage limit [2 mm (0.08 inch)] has been reached.

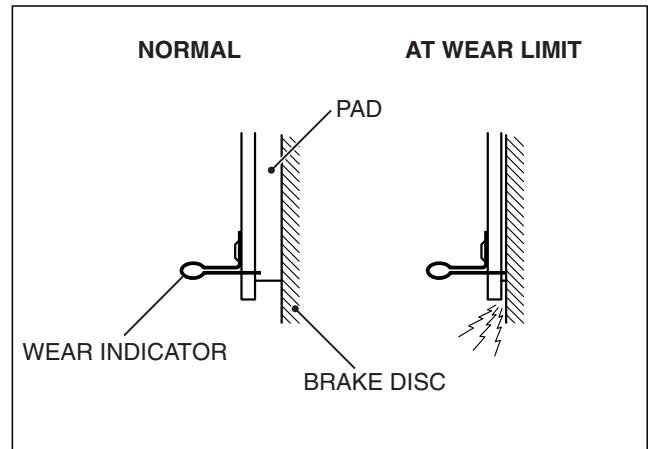
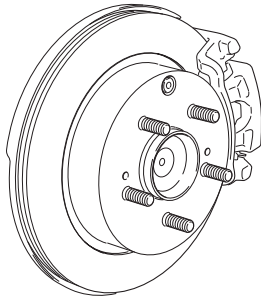
DISC BRAKE NOMENCLATURE



| NO. | ITEM | CONTENT |
|-----|--|-------------------------------|
| 1 | Brake disc type | V: Ventilated |
| 2 | Brake size | 6: 16-inch |
| 3 | No. of pistons | S: 1 pistons (floating type) |
| 4 | Piston size (rounded to nearest integer) | 60: $\phi 60.33$ mm (2.38 in) |

REAR BRAKE

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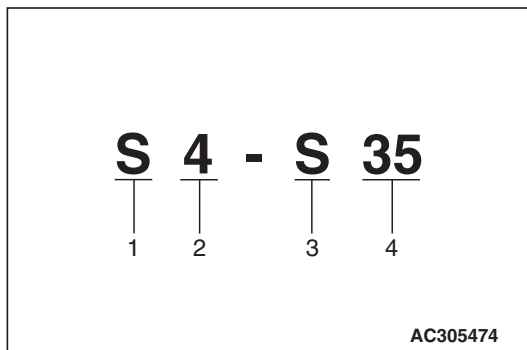
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Brakes with the following specifications have been adopted for the rear brakes.

- S4-S35 1-piston solid discs <2.4L engine>
- V5-S35 1-piston ventilated discs <3.8L engine>
- An outer disc method in which the wheels and discs are tightened together improves the ease of brake disc removal and installation.

- The brake pads are equipped with mechanical-type audible wear indicators to notify the driver when the usage limit [2 mm (0.08 inch)] has been reached.

DISC BRAKE NOMENCLATURE



| NO. | ITEM | CONTENT |
|-----|--|-------------------------------|
| 1 | Brake disc type | S: Solid V: Ventilated |
| 2 | Brake size | 4: 14-inch 5: 15-inch |
| 3 | No. of pistons | S: 1 piston (floating type) |
| 4 | Piston size (rounded to nearest integer) | 35: ϕ 34.93 mm (1.38 in) |