GROUP 35A

BASIC BRAKE SYSTEM

CONTENTS

GENERAL INFORMATION

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Brake systems with higher reliability and durability have achieved distinguished braking performance.

FEATURES

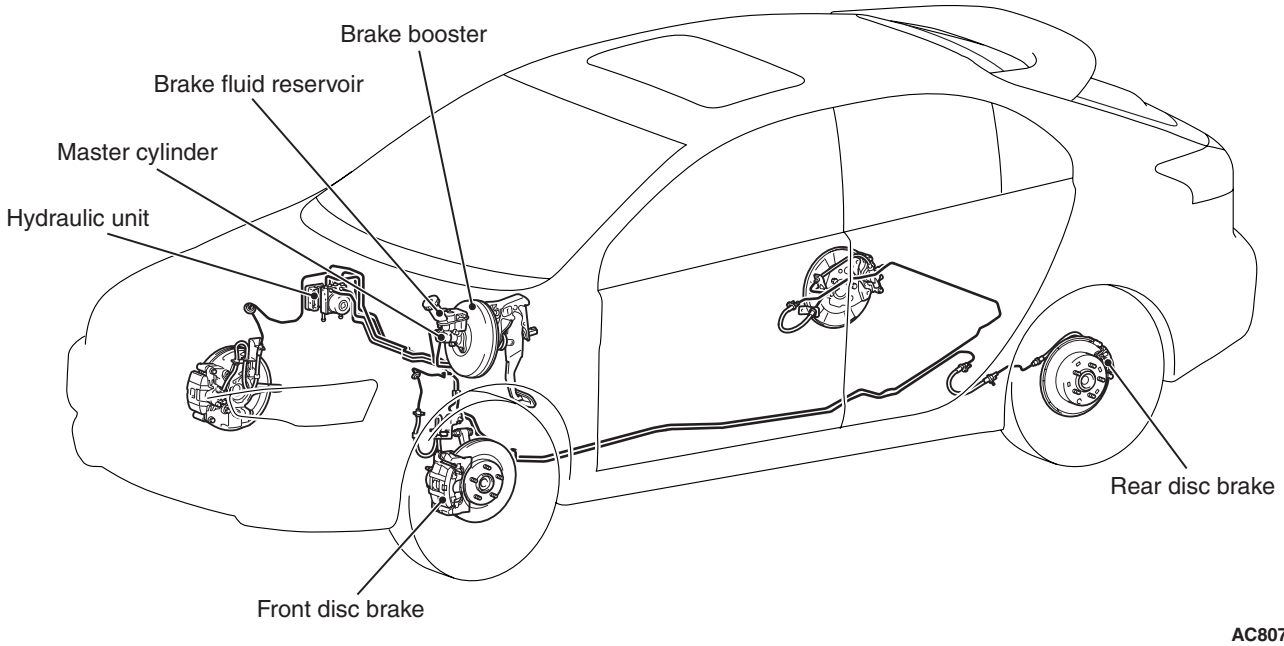
IMPROVEMENT OF BRAKING PERFORMANCE

- A 10-inch single brake booster with the variable boost ratio mechanism has been used to assure maximum braking force with less pedal pressure in case of emergency.
- In addition to the 10-inch single brake booster, a small and long stroke-type master cylinder has been adopted to achieve downsizing and secure assist force.
- 16-inch ventilated disk brakes have been adopted for the front.
- 16-inch solid disk brake has been adopted for the rear.
- The aluminum pedal pad has been adopted to the brake pedal. <2.0 L Engine>

IMPROVEMENT IN SAFETY

- X-type piping of brake lines has been adopted for the front and rear wheels.
- The brake pedal retreat suppression mechanism that suppresses the retraction of brake pedal surface upon a frontal collision is adopted.
- Audible wear indicators are used on the front and rear brake pads to warn the driver of wear limit.

CONSTRUCTION DIAGRAM



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SPECIFICATIONS

Item			Specification
Master cylinder	Type		Tandem type
	I.D. mm (in)	2.0 L Engine	22.2 (0.87)
		2.4 L Engine	20.6 (0.81)
Brake booster	Type		Vacuum type, single
	Effective dia. of power cylinder mm (in)		255 (10.0)
	Boost ratio		6.5 (Pedal depression force: 92 N) 8.5 (Pedal depression force: 156 N)

Item			Specification
Front disk brake	Type (Disk brake nomenclature)	2.0 L Engine	Floating caliper 2 piston ventilated disk (V6-W43)
		2.4 L Engine	Floating caliper 1 piston ventilated disk (V6-S57)
	Disk effective dia × thickness mm (in)	2.0 L Engine	247 × 24 (9.7 × 0.9)
		2.4 L Engine	241 × 26 (9.5 × 1.0)
	Cylinder I.D. mm (in) {Number of pistons}	2.0 L Engine	42.8 (1.69) {2}
		2.4 L Engine	57.1 (2.25) {1}
	Brake pad thickness mm (in)		10.0 (0.39)
	Clearance adjustment		Automatic adjustment
Rear disk brake	Type (Disk brake nomenclature)	2.0 L Engine	Floating caliper 1 piston solid disk (S6-S38)
		2.4 L Engine	Floating caliper 1 piston solid disk (S6-S35)
	Disk effective dia × thickness mm (in)		258 × 10 (10.2 × 0.4)
	Cylinder I.D. mm (in) {Number of pistons}	2.0 L Engine	38.1 (1.50) {1}
		2.4 L Engine	34.9 (1.37) {1}
	Brake pad thickness mm (in)		10.0 (0.39)
	Clearance adjustment		Automatic adjustment

BRAKE PEDAL

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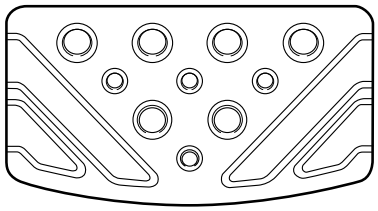
BRAKE PEDAL PAD



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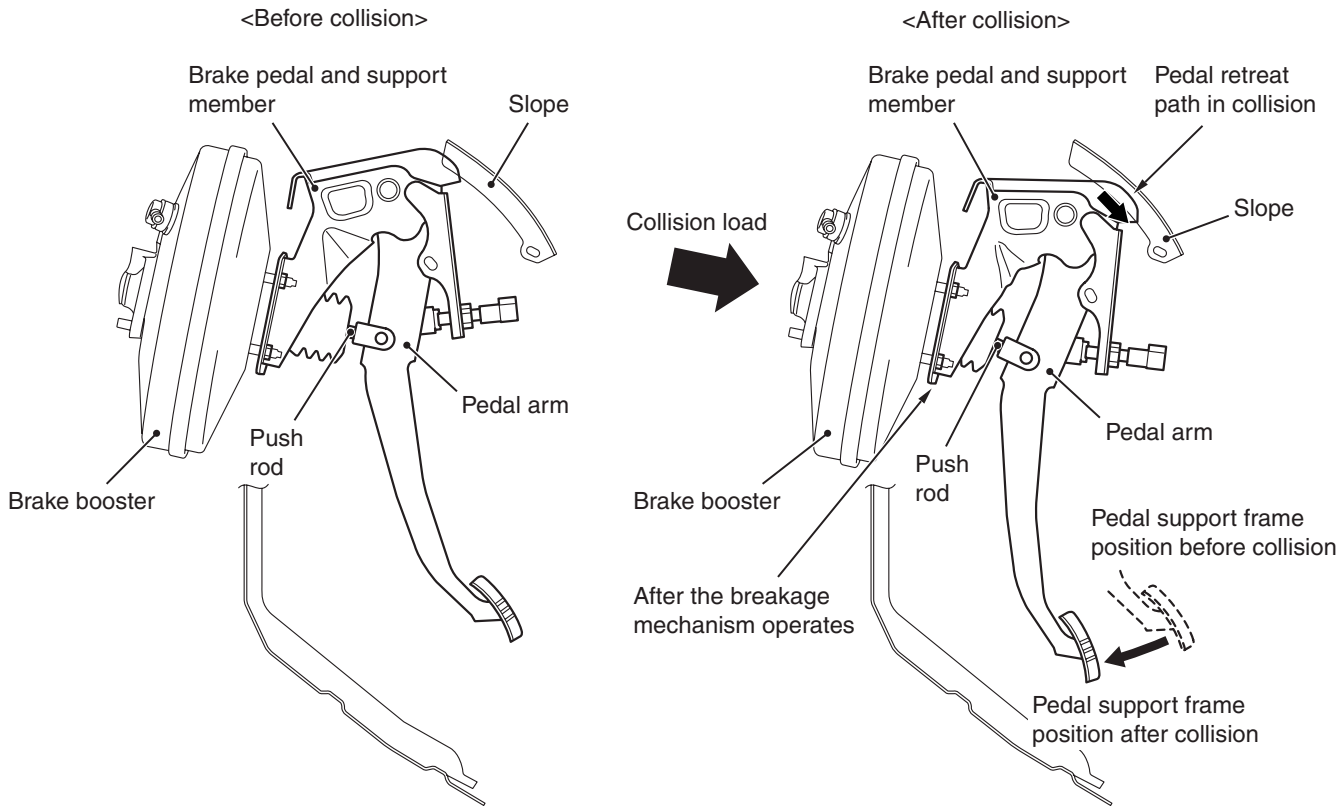
The aluminum pedal pad is adopted to the brake pedal in order to enhance the sporty image. <2.0 L Engine>

BRAKE PEDAL RETREAT SUPPRESSION MECHANISM



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The brake pedal retreat suppression mechanism that restraints the retraction of the brake pedal pad surface during a frontal collision has been adopted in order to reduce the shock to the driver's feet.

When the brake booster is crushed rearward by the engine retreat during a frontal collision, the installation surface of the brake pedal is retreated. In this case, the end of the pedal support is forcibly slid down and back by the interference with the slope mounted on the front deck crossmember assembly. At the same time, the linkage comprised of the pedal support, pedal arm, and push rod moves the brake pedal pad surface forward.

FRONT BRAKE

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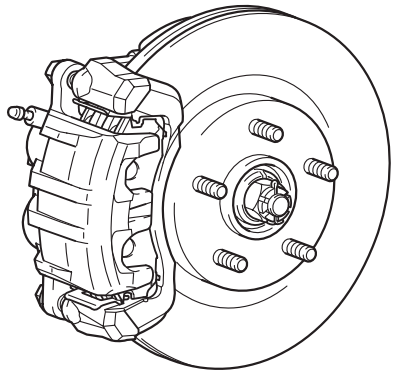
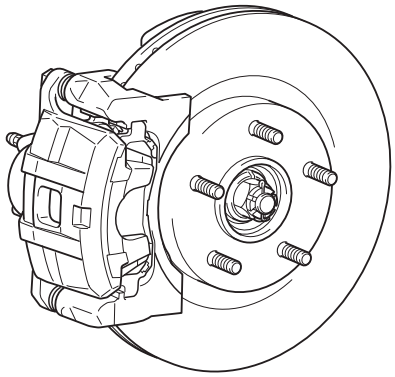
<2.0 L Engine>



<2.4 L Engine>



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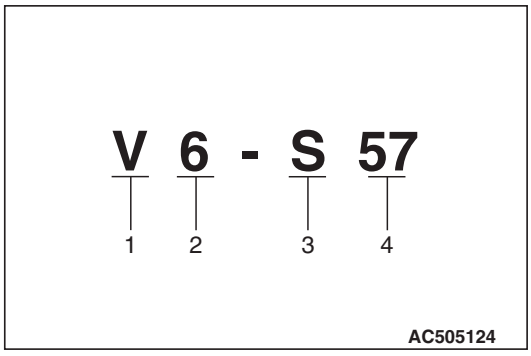
Brakes with the following specifications have been adopted for the front brakes.

- The 2-piston ventilate disk brake (V6-W43) has been adopted. <2.0 L Engine>
- The 1-piston ventilate disk brake (V6-S57) has been adopted. <2.4 L Engine>
- An audible wear indicator that informs the driver of application limit has been adopted onto the brake pads.

DISK BRAKE NOMENCLATURE



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No.	Item	Contents
1	Brake disk type	V: Ventilated S: Solid
2	Brake size (Minimum applicable disk wheel)	6: 16-inch
3	Number of pistons	S: 1 (Floating type) W: 2 (Floating type)
4	Piston size (Rounded integral value)	35: ϕ34.9 mm (1.37 in) 38: ϕ38.1 mm (1.50 in) 43: ϕ42.8 mm (1.69 in) 57: ϕ57.1 mm (2.25 in)

NOTE: This table includes the content of the rear brake.

REAR BRAKE

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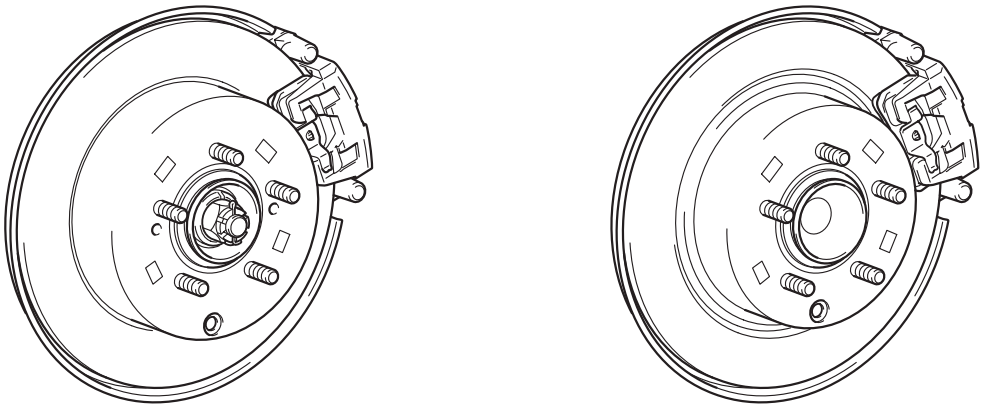
<2.0 L Engine>

<2.4 L Engine>



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

- The 1-piston solid disk brake (S6-S38 <2.0 L Engine> or S6-S35 <2.4 L Engine>) has been adopted.*
- An audible wear indicator that informs the driver of application limit has been adopted onto the brake pads.

*NOTE: *For disk brake nomenclature, refer to P.35A-5.*