

SUSPENSION

02

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SUSPENSION FEATURES

DPE02000000T01

Improved rigidity and handling stability	<ul style="list-style-type: none"> E-type multi-link rear suspension adopted
Improved handling and riding comfort	<ul style="list-style-type: none"> Four-point rubber mount system front crossmember adopted Oil-filled bushing for front lower arm Front shock absorber with large bore piston adopted Front spring layout optimized Separated input type front shock absorber mount adopted
Enlarged trunk compartment	<ul style="list-style-type: none"> Separated positioning of rear shock absorber and coil spring adopted
Improved marketability	<ul style="list-style-type: none"> Adhesive-type balance weights adopted (aluminum alloy wheels)
Environmental consideration	<ul style="list-style-type: none"> Steel balance weights adopted to reduce the use of lead

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SUSPENSION SPECIFICATIONS

DPE02000000T02

Suspension

Item			Specification		
Front suspension	Engine type		L8, LF	MZR-CD (RF Turbo)	
	Type		Strut type		
	Spring type		Coil spring		
	Shock absorber type		Low-pressure gas charged, cylindrical, double-acting		
	Stabilizer	Type		Torsion bar	
		Diameter	(mm {in})	23 {0.90}	
	Total toe-in	Tire [Tolerance ±4 {0.15}]	(mm {in})	2 {0.08}	
				Rim inner	1±3 {0.04±0.12}
		Degree		0°11'±22'	
		Maximum steering angle [Tolerance ±3°]	Inner		40°05'
	Outer			33°07'	
	Caster angle (Reference) [Tolerance ±1°]			3°14'	3°12'
	Camber angle (Reference) [Tolerance ±1°]			-0°42'	-0°44'
	Steering axis inclination (Reference)			13°59'	14°04'

OUTLINE

Item				Specification		
Rear suspension	Type			Multi-link		
	Spring type			Coil spring		
	Shock absorber type			High-pressure gas charged, cylindrical, double-acting		
	Stabilizer	Type			Torsion bar	
		Diameter		(mm {in})	20 {0.79}	
	Wheel alignment (Unloaded*)	Total toe-in	Tire [Tolerance ± 4 {0.15}]		2 {0.08}	
			Rim inner		1 \pm 3 {0.04 \pm 0.12}	
		Degree			0°11'±22'	
Camber angle [Tolerance $\pm 1^\circ$]			-1°29'			
Thrust angle [Tolerance $\pm 48'$]			0°			

* : Unloaded: Fuel tank is full. Engine coolant and engine oil are at specified level. Spare tire, jack and tools are in designated position.

Wheel and Tire

Standard tire

Item				Specification		
Tire	Size			195/65R15 91V	205/55R16 91V	205/50R17 93V
Wheel	Size			15 x 6J	16 x 6 1/2J	17 x 6 1/2J
	Material			Steel	Aluminum alloy	Aluminum alloy
	Offset	(mm {in})		52.5 {2.07}		
	Pitch circle diameter	(mm {in})		114.3 {4.50}		

Temporary spare tire

Item				Specification		
Tire	Size			T115/70D15	T125/70D16	
Wheel	Size			15 x 4T	16 x 4T	
	Material			Steel		
	Offset	(mm {in})		45 {1.8}		
	Pitch circle diameter	(mm {in})		114.3 {4.50}		

WHEEL AND TIRES

02-12 WHEEL AND TIRES

WHEELS AND TIRES OUTLINE. 02-12-1

WHEELS AND TIRES STRUCTURAL VIEW 02-12-1

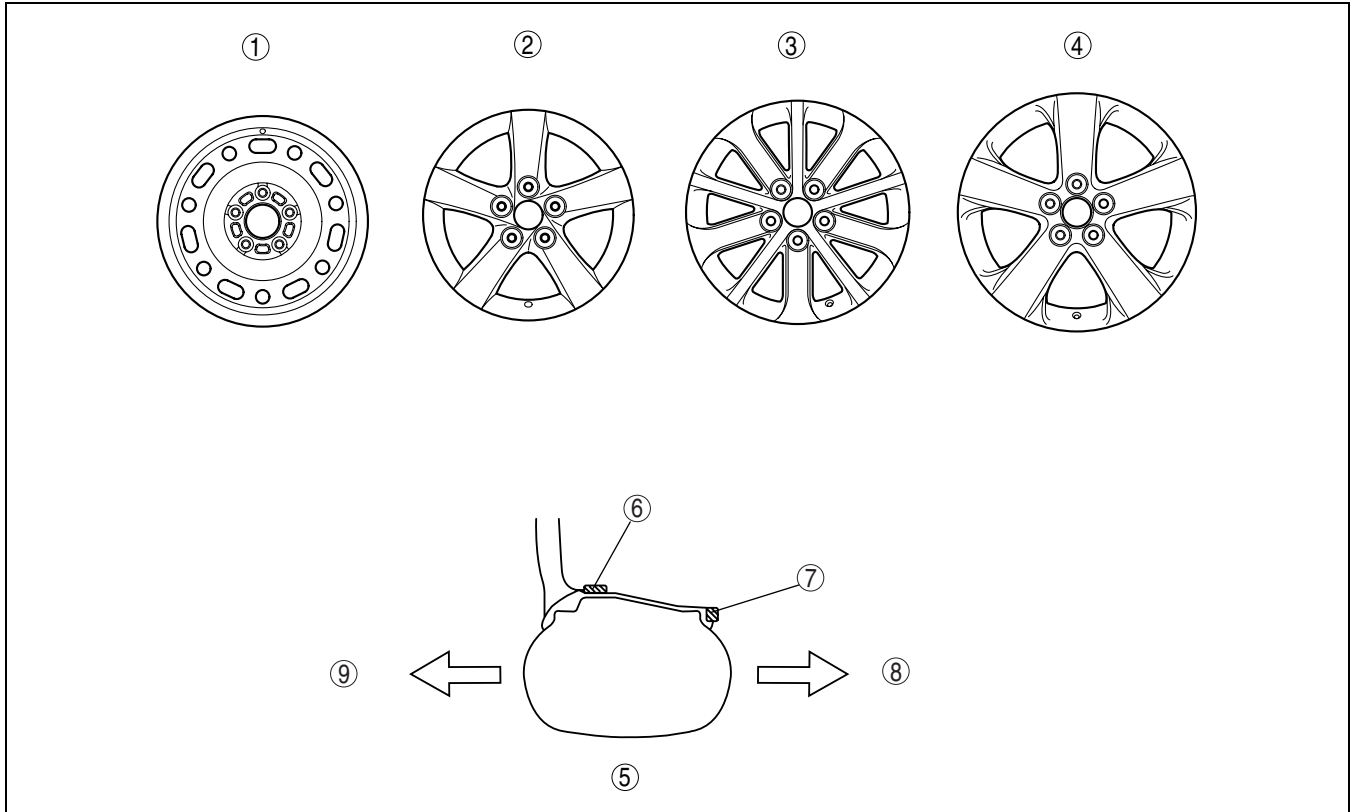
WHEELS AND TIRES OUTLINE

DPE02120000T01

- An adhesive-type balance weights has been adopted to the outer side of the aluminum alloy wheels. Due to this, a stylish wheel design is realized.
- In consideration of the environment, steel balance weights have been adopted to reduce the use of lead in the vehicle.

WHEELS AND TIRES STRUCTURAL VIEW

DPE02120000T02



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DPE212ZT1001

1	15-inch steel wheel
2	15-inch aluminum alloy wheel
3	16-inch aluminum alloy wheel
4	17-inch aluminum alloy wheel
5	Cross-sectional view (aluminum alloy wheels)

6	Adhesive-type balance weight
7	Knock-type balance weight
8	Inner
9	Outer

FRONT SUSPENSION

02-13 FRONT SUSPENSION

FRONT SUSPENSION OUTLINE 02-13-1
FRONT SUSPENSION
STRUCTURAL VIEW 02-13-1

FRONT SHOCK ABSORBER
CONSTRUCTION 02-13-2
FRONT LOWER ARM CONSTRUCTION. 02-13-2
FRONT CROSSMEMBER
CONSTRUCTION 02-13-2

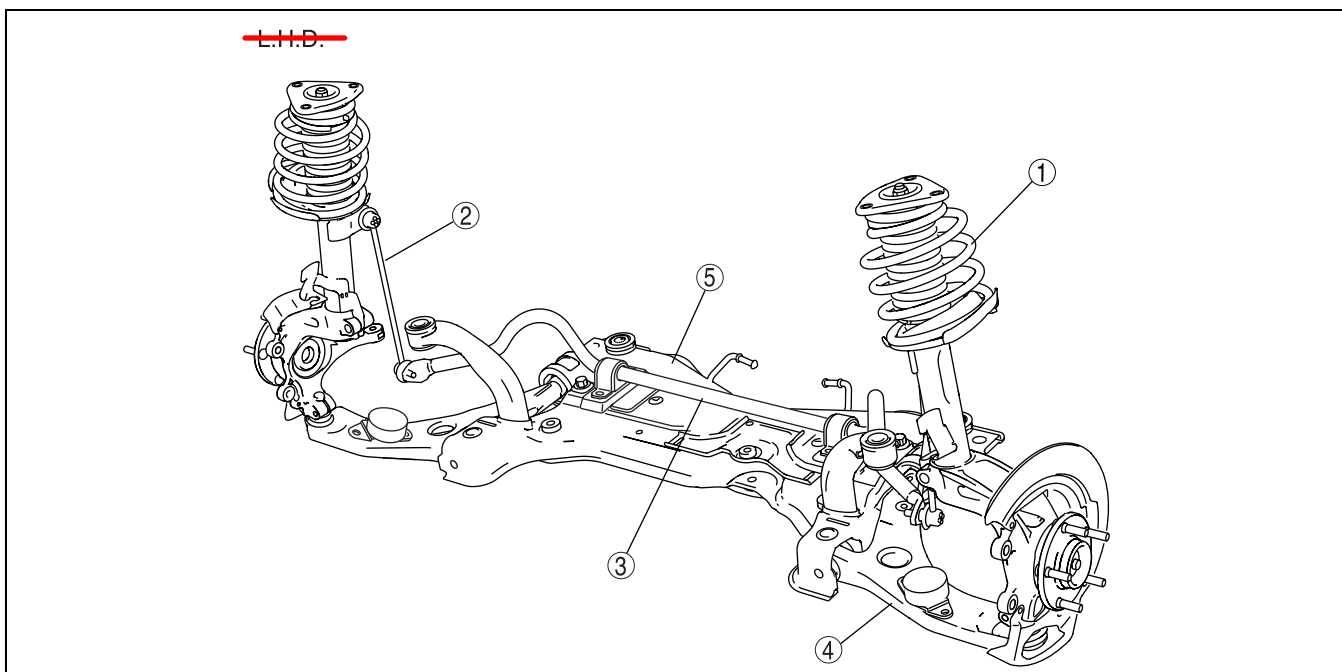
FRONT SUSPENSION OUTLINE

DPE02130000T01

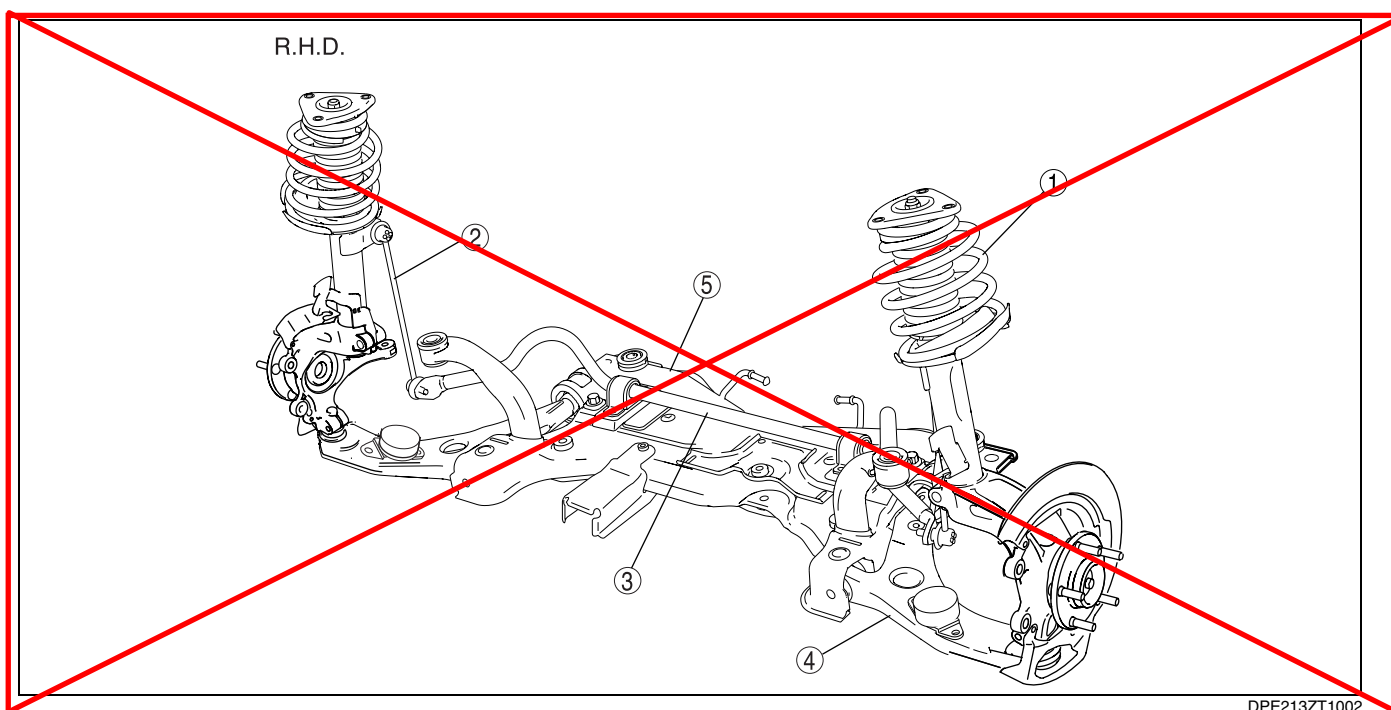
- A strut-type front suspension has been adopted.
- Due to the tight connection of the four-point rubber mounts to the body, high handling stability and improved riding comfort is provided together with low NVH (Noise, Vibration, Harshness) with no loss of mount rigidity.

FRONT SUSPENSION STRUCTURAL VIEW

DPE02130000T02



DPE213ZT1001



DPE213ZT1002

FRONT SUSPENSION

1	Front shock absorber and coil spring
2	Front stabilizer control link
3	Front stabilizer
4	Front lower arm
5	Front crossmember

FRONT SHOCK ABSORBER CONSTRUCTION

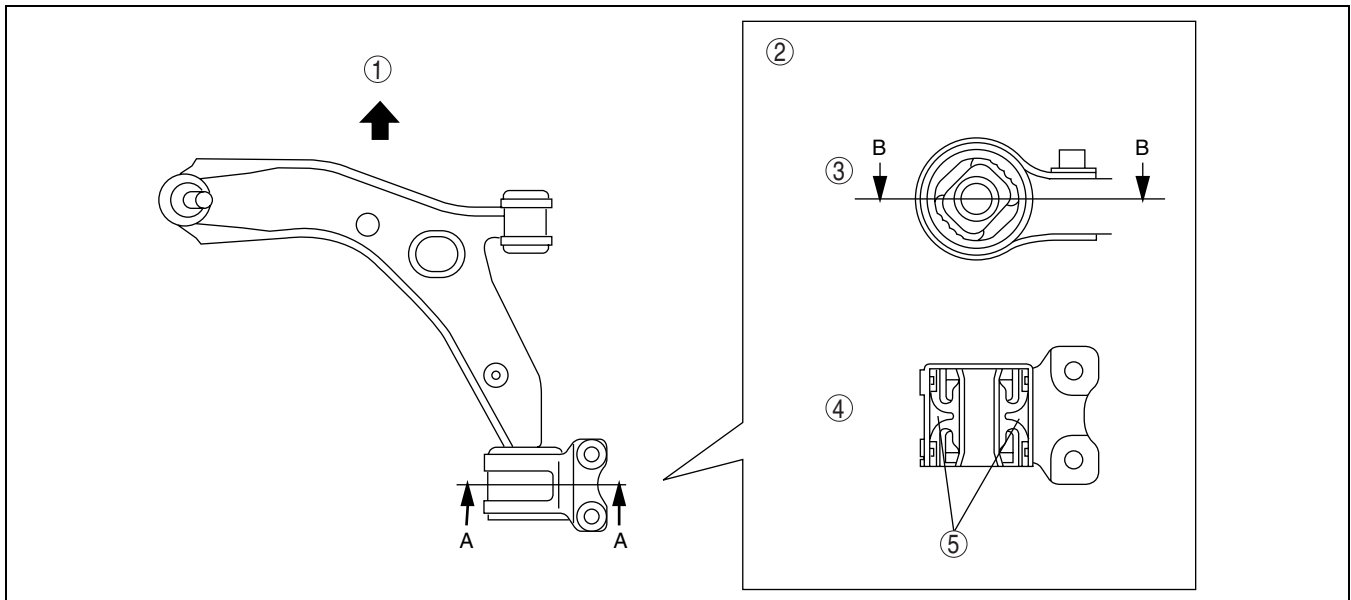
DPE021334700T01

- Excellent response shock absorbers with large-diameter pistons and built-in rebound springs which suppress inner wheel lifting during cornering have been adopted for improved riding comfort and handling stability.
- Separated input type front shock absorber mounts have been adopted. Due to this, the shock absorbers function efficiently, improving steering stability and riding comfort.
- In addition, to reduce shock absorber inner friction that occurs when lateral force acts on the shock absorbers, the coil springs have been optimally positioned.

FRONT LOWER ARM CONSTRUCTION

DPE021334300T01

- An oil-filled bushing has been adopted for the backside of the front lower arm. Due to this, superior handling stability and riding comfort, and low NVH (Noise, Vibration, Harshness) have been achieved.



B3E0213T008

1	Front of the vehicle
2	Front lower arm bushing
3	Cross-sectional view SEC. A-A

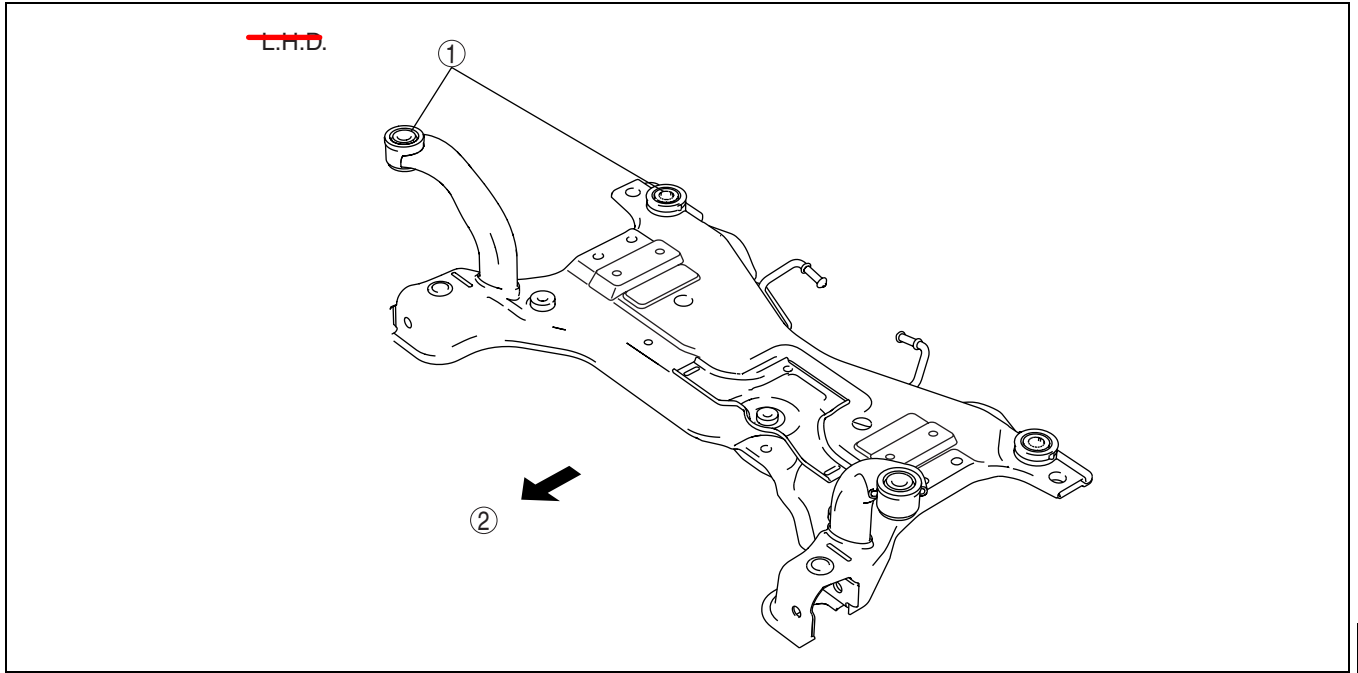
4	Cross-sectional view SEC. B-B
5	Oil

FRONT CROSSMEMBER CONSTRUCTION

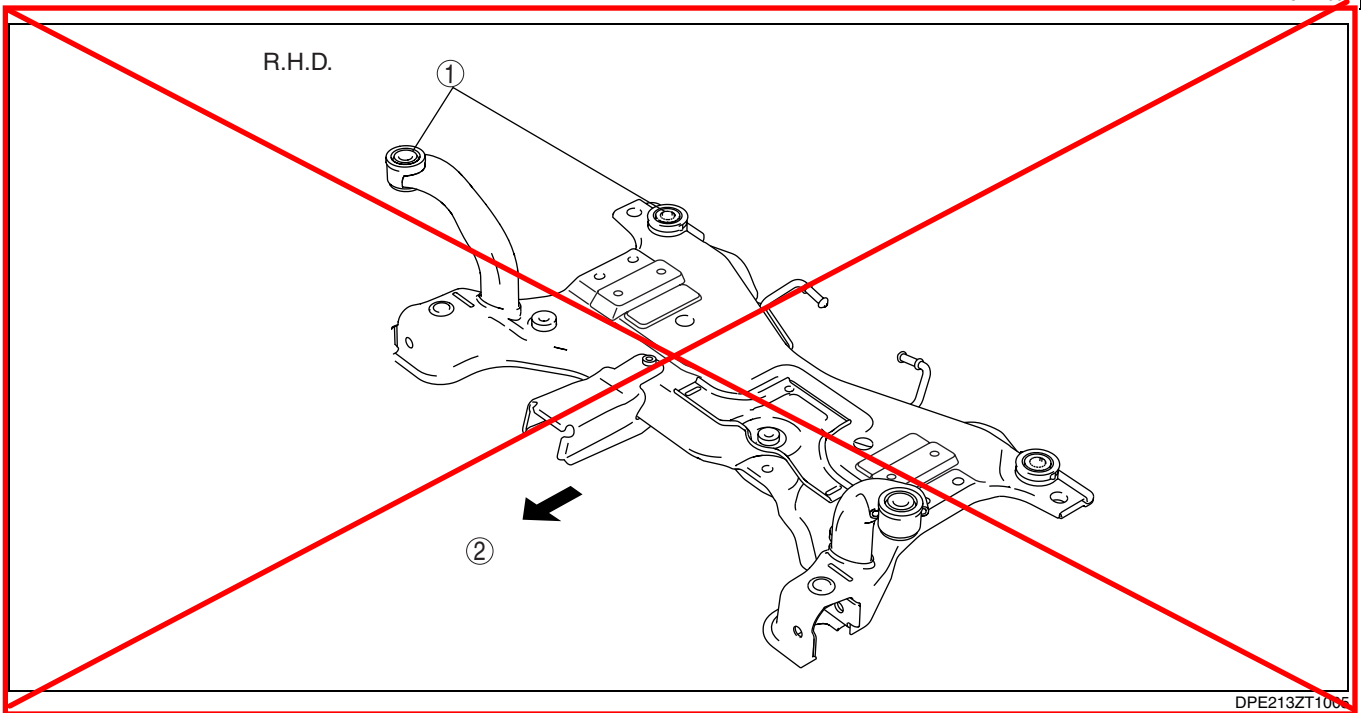
DPE021334800T01

- A four-point rubber mount system has been adopted for the front crossmember. Due to this, the application of preload in the vertical direction has improved rigidity providing enhanced handling stability, and the utilization of horizontal flexibility has improved riding comfort.

FRONT SUSPENSION



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1	Rubber mount
2	Front of the vehicle

REAR SUSPENSION

02-14 REAR SUSPENSION

REAR SUSPENSION OUTLINE 02-14-1
 REAR SUSPENSION
 STRUCTURAL VIEW 02-14-1
 MULTI-LINK REAR SUSPENSION
 CONSTRUCTION 02-14-2

REAR SHOCK ABSORBER C
 ONSTRUCTION 02-14-3
 REAR CROSSMEMBER
 CONSTRUCTION 02-14-4

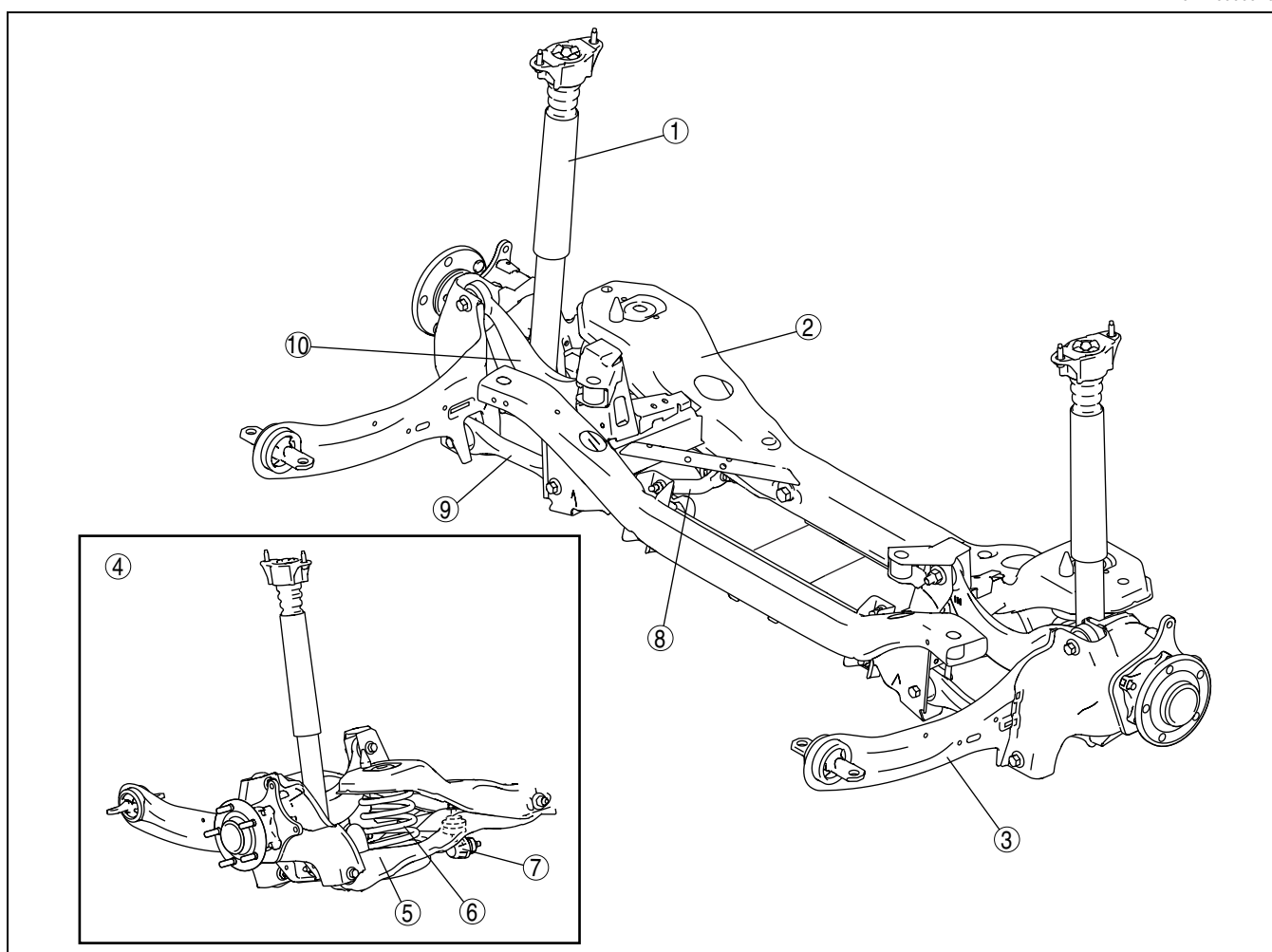
REAR SUSPENSION OUTLINE

DPE02140000T01

- An E-type multi-link rear suspension has been adopted.
- A wider luggage compartment is ensured due to the separated positioning of the shock absorber and coil spring.
- Also due to the separated positioning of the shock absorber and coil spring, side force on the shock absorber is reduced so that the suspension system operates smoothly and riding comfort is improved.

REAR SUSPENSION STRUCTURAL VIEW

DPE02140000T02



DPE214ZT1003

1	Rear shock absorber
2	Rear crossmember
3	Rear trailing link
4	View from the rear of the vehicle
5	Rear lower arm

6	Rear coil spring
7	Rear stabilizer control link
8	Rear stabilizer
9	Rear lateral link
10	Rear upper arm

REAR SUSPENSION

MULTI-LINK REAR SUSPENSION CONSTRUCTION

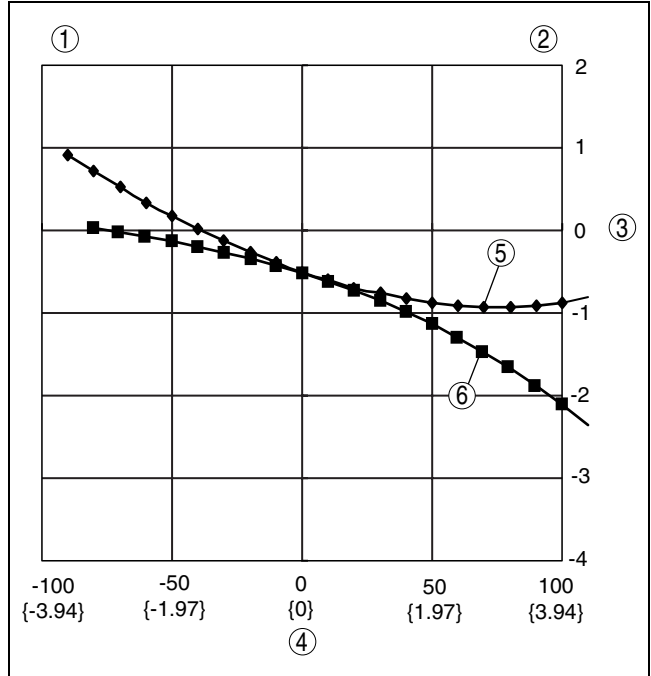
DPE02140000T03

Optimized Link and Shock Absorber Layout

Optimized camber angle

- Change of camber angle to ground during wheel stroke is minimized due to the optimization of the lower and upper arm lengths. Due to this high gripping power is assured under any driving condition and handling stability is improved.

Camber control characteristic comparison



B3E0214T004

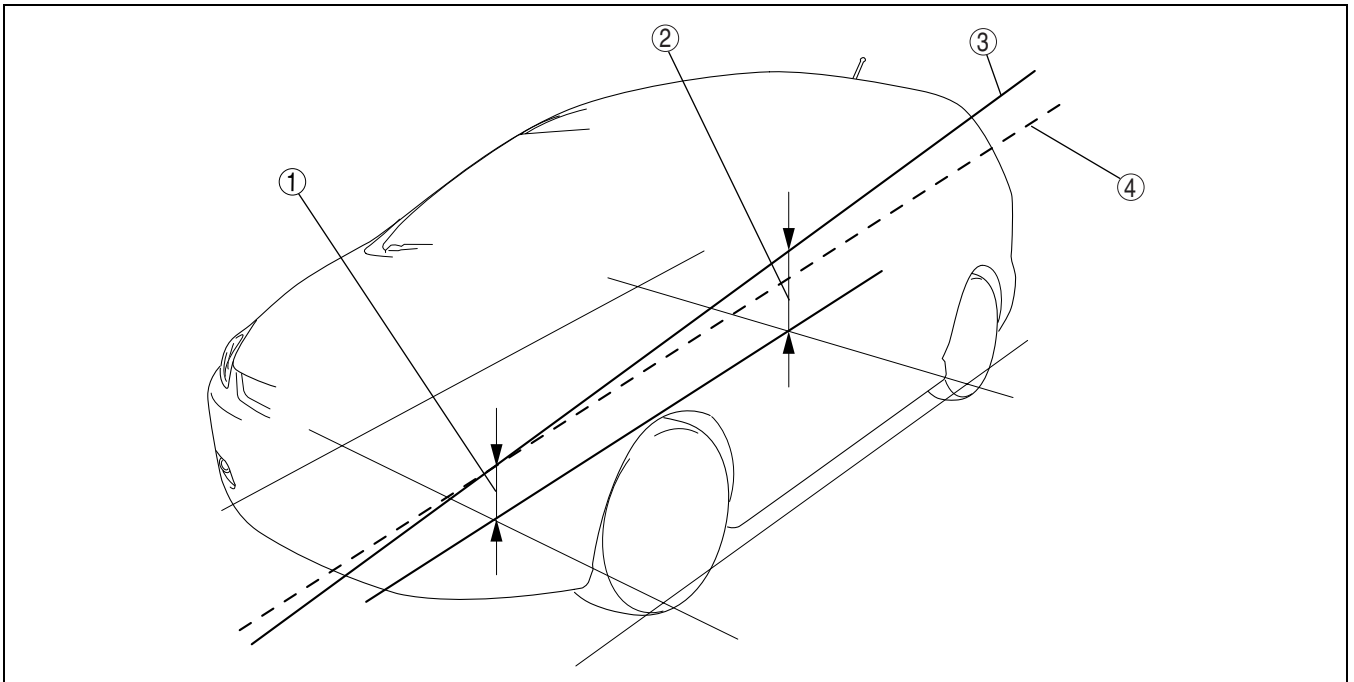
1	Rebound stroke area
2	Bump stroke area
3	Camber angle (°)
4	Wheel stroke (mm {in})
5	Strut rear suspension
6	Multi-link rear suspension

Optimized roll axis position

- Lateral force acting on the shock absorbers is reduced due to the separated positioning of the rear coil spring and shock absorber, enabling smooth operation of the suspension system and thereby improving riding comfort.
- Additionally, the height of the front roll center is set lower than the rear. Due to this, driveability is improved

REAR SUSPENSION

while cornering.



DPE214ZT1001

1	Front roll center height
2	Rear roll center height

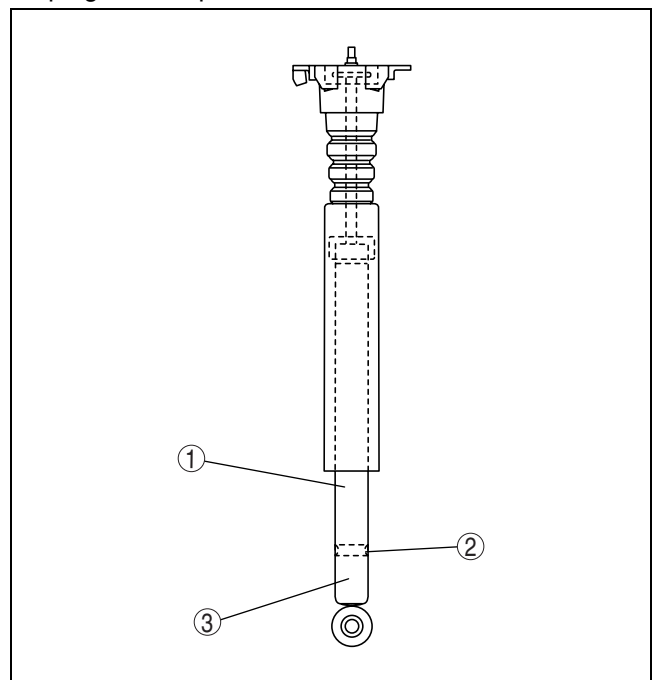
3	Roll axis
4	Phantom line parallel to road surface extending from front roll center height

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REAR SHOCK ABSORBER CONSTRUCTION

DPE021428700T01

- Monotube shock absorbers with superior damping characteristics such as response have been adopted, improving handling stability and riding comfort.
- Chambers that are gas-pressurized via a free piston have been equipped to provide excellent oil cooling capability and minimized cavitation. Due to this, stable damping force is provided.



DPE214ZT1002

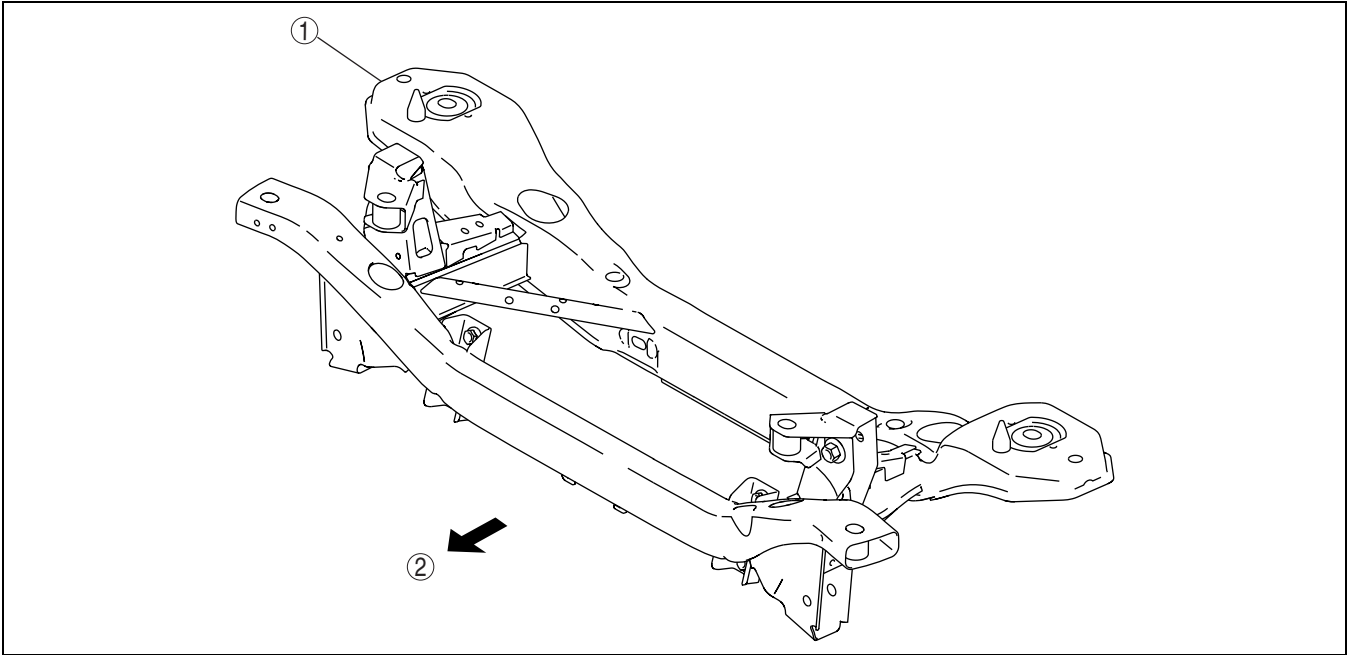
1	Oil
2	Free piston
3	High-pressure gas

REAR SUSPENSION

REAR CROSSMEMBER CONSTRUCTION

DPE021428400T01

- Due to the use of a hollow-steel construction rear crossmember, weight reduction is achieved while rigidity is improved.
- The rear crossmember is tightly connected to the vehicle body in six points, ensuring high rigidity.



DPE214ZT1004

1	Rear crossmember
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2	Front of the vehicle
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