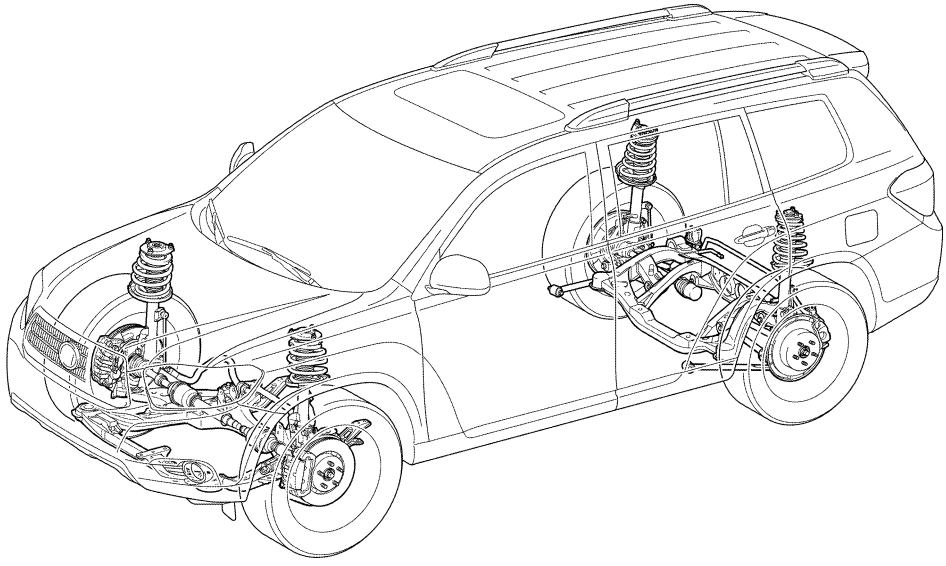
SUSPENSION AND AXLE

■ SUSPENSION

1. General

- A MacPherson strut type independent suspension is used for the front.
- A dual link MacPherson strut type independent suspension is used for the rear.



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2. Specifications

▶ Wheel Alignment ◀

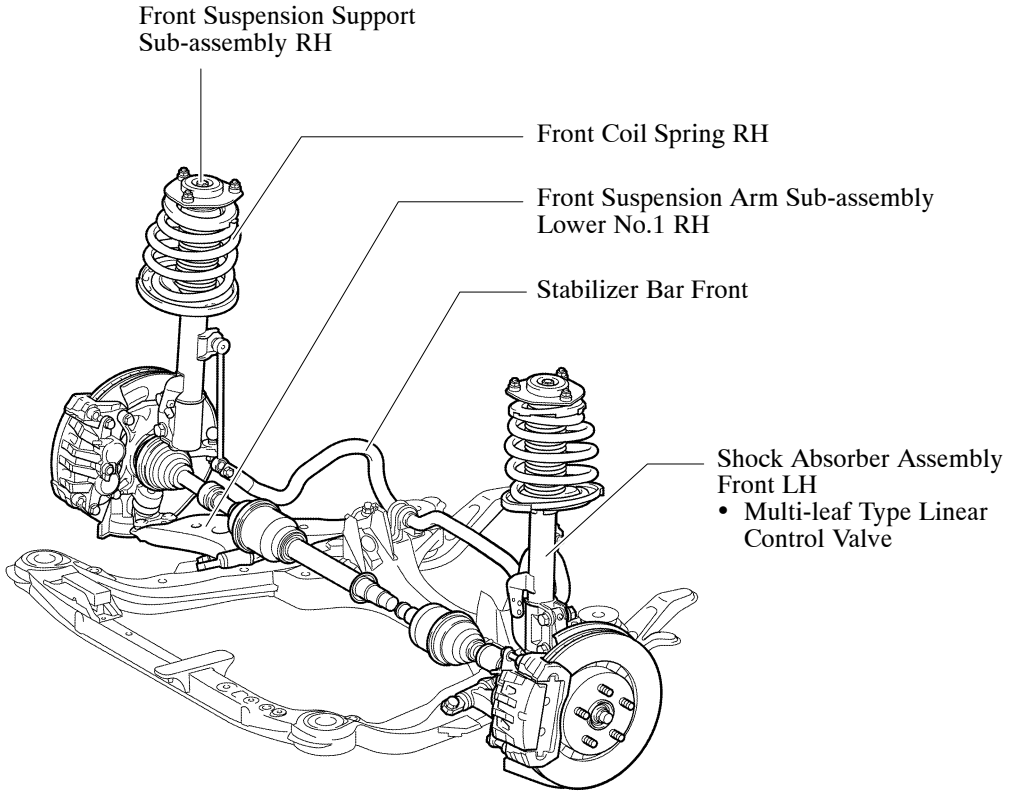
Front Wheel Alignment	Type		MacPherson Strut
	Tread*	mm (in.)	1625 (64.0)
	Caster*	degrees	2° 35’
	Camber*	degrees	-0° 38’
	Toe-in*	mm (in.)	1.0 (0.04)
	King Pin Inclination*	degrees	11° 00’
Rear Wheel Alignment	Type		Dual Link MacPherson Strut
	Tread*	mm (in.)	1625 (64.0)
	Camber*	degrees	-0° 33’
	Toe-in*	mm (in.)	3.5 (0.14)

*: Unloaded Vehicle

3. Front Suspension

General

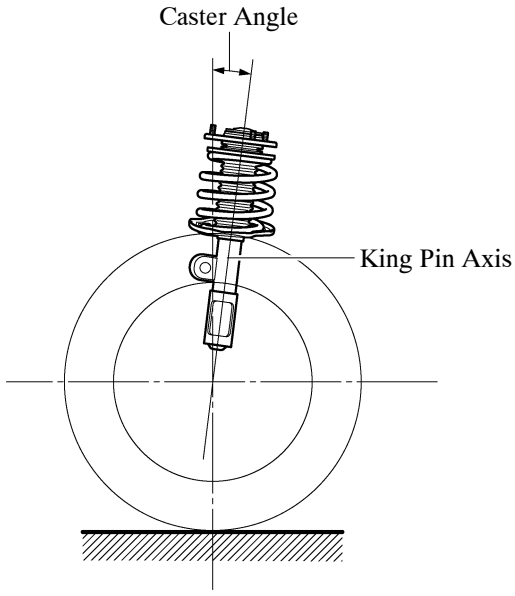
Through the optimal allocation of components, the front suspension ensures excellent riding comfort and controllability.



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Optimized Caster

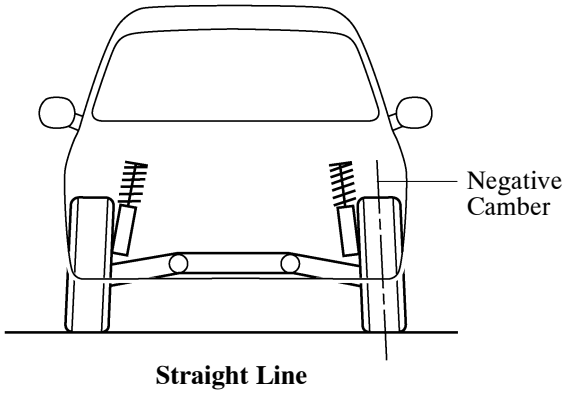
Optimum caster angle and trail values are featured to provide straight-line stability during low-speed and high-speed ranges and assist steering response at high-speeds.



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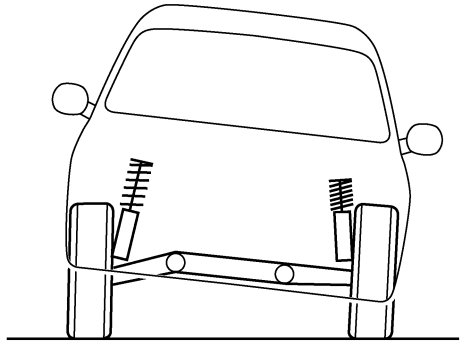
Negative Camber

The front suspension uses negative camber to reduce the ground contact camber angle of the outer wheel during turning (cornering), and provide excellent cornering performance.



Straight Line

181CH23

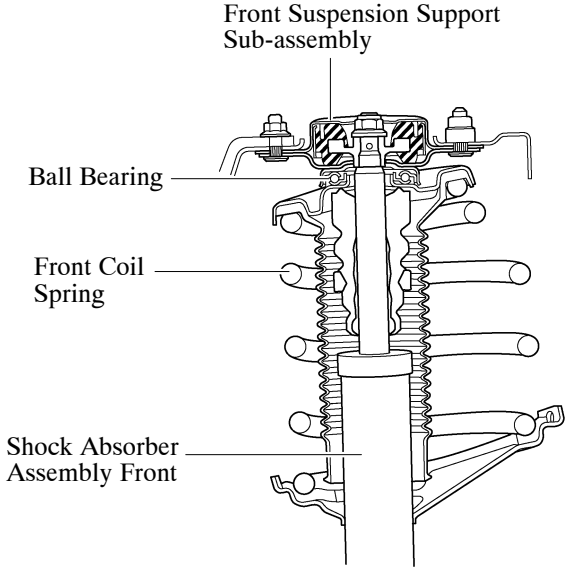


Cornering

181CH24

Front Coil Spring

The center axis of the coil spring is slanted toward the outside of the vehicle compared to the center axis of the shock absorber assembly front. As a result, friction and lateral force applied to the shock absorber are reduced.

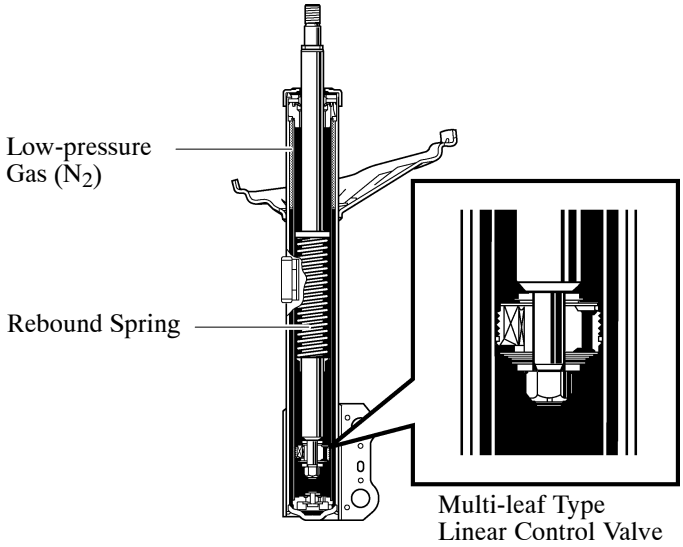


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Shock Absorber Assembly Front

1) General

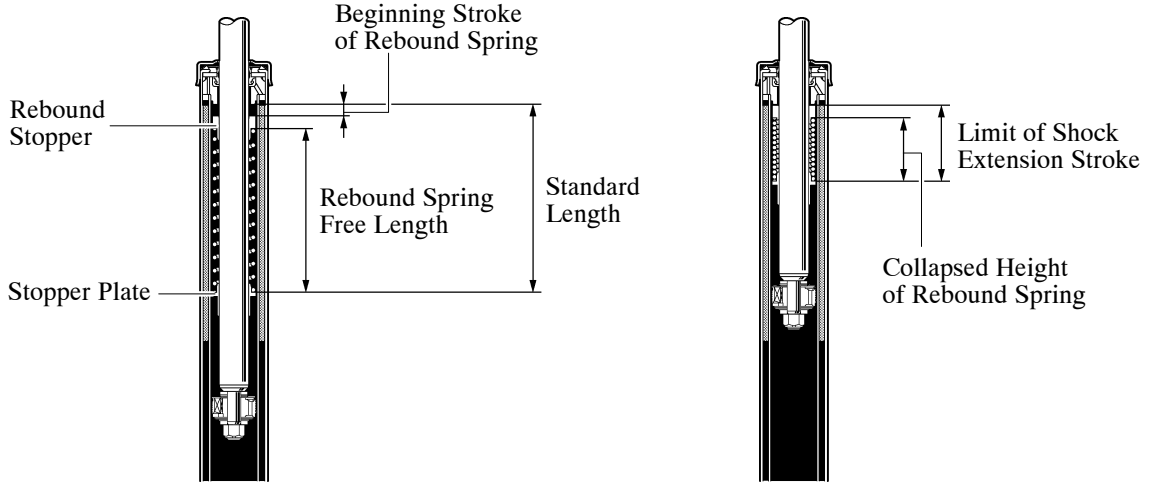
- Low-pressure (N_2) gas sealed front shock absorbers with linear control valves are used to realize both driving stability and riding comfort.
- A multi-leaf type linear control valve is used to attain linear damping force characteristics.
- A rebound spring is used to ensure vehicle stability during cornering.



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2) Rebound Spring

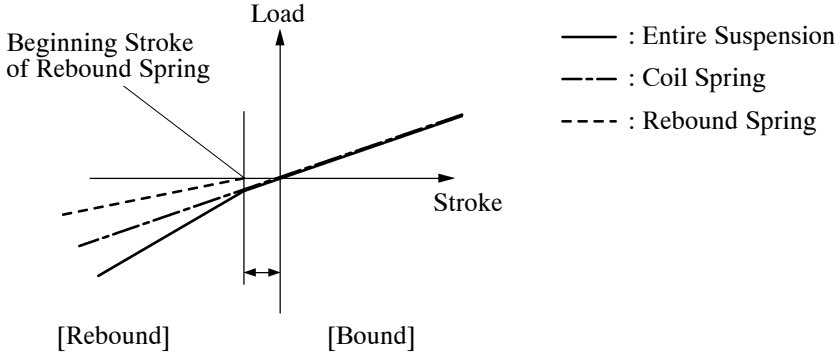
The built-in rebound spring is designed to function with the coil spring in order to restrain suspension extension during rebound. Also, in order to realize a soft and comfortable ride, only the coil springs are used when the suspension stroke is small during normal driving. However, when cornering, load is removed from the inner wheels, the functions of both the rebound spring and the coil spring interact and the extension of the suspension is restrained. As a result, the vehicle has excellent maneuverability and stability.



Typical Condition **Fully Extended**

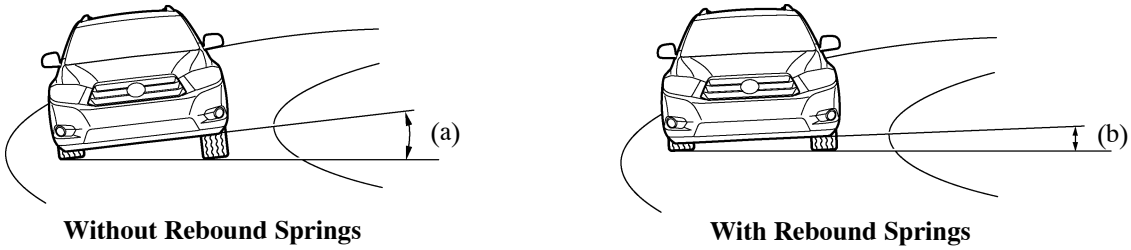
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▶ Characteristics of Shock Absorber with Built-in Rebound Spring ◀



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▶ During Cornering ◀



Without Rebound Springs **With Rebound Springs**

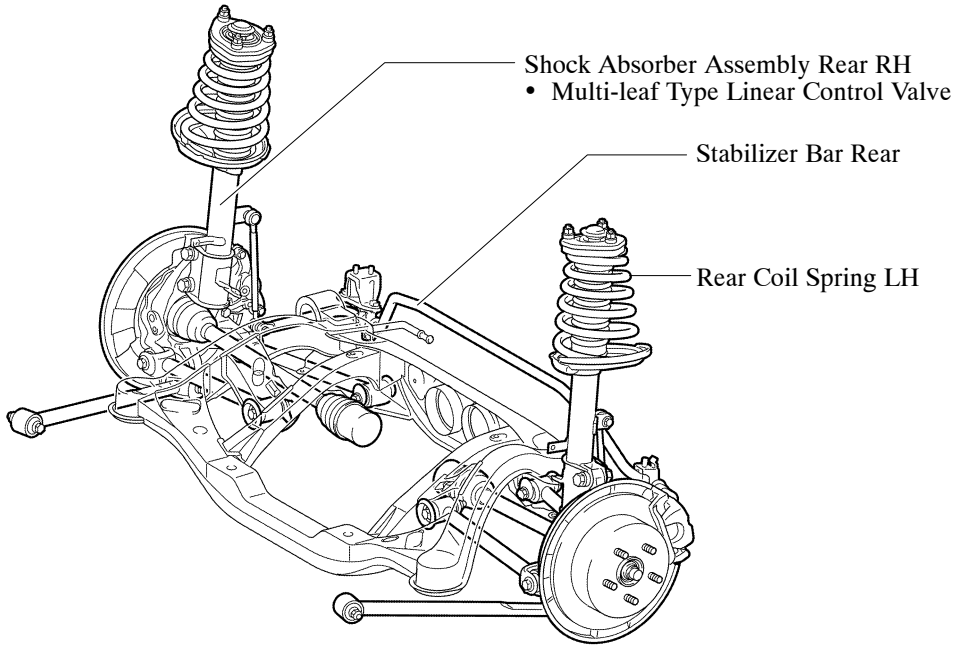
Roll Angle: (a) > (b)

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4. Rear Suspension

General

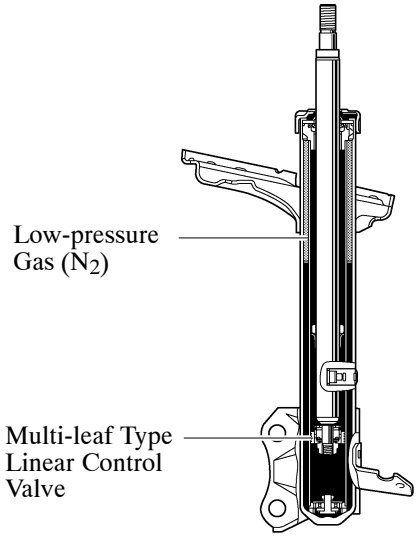
The rear suspension realizes excellent stability and controllability by optimizing the suspension geometry and the allocation of components.



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Shock Absorber Assembly Rear

- Low-pressure (N_2) gas sealed rear shock absorbers with linear control valves realize driving stability and riding comfort.
- As with the front shock absorbers, a multi-leaf type linear control valve is used in order to attain linear damping force characteristics.



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