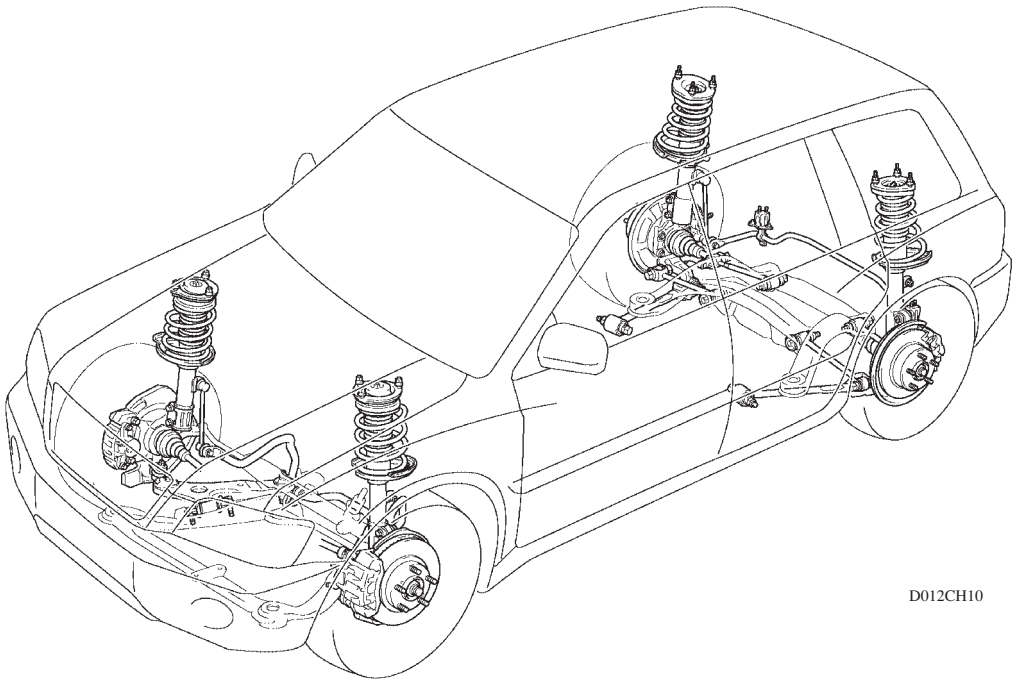
SUSPENSION AND AXLE

■SUSPENSION

1. General

- A MacPherson strut type independent suspension has been adopted for the front.
- A dual link MacPherson strut type independent suspension has been adopted for the rear.



▶ Specifications ◀

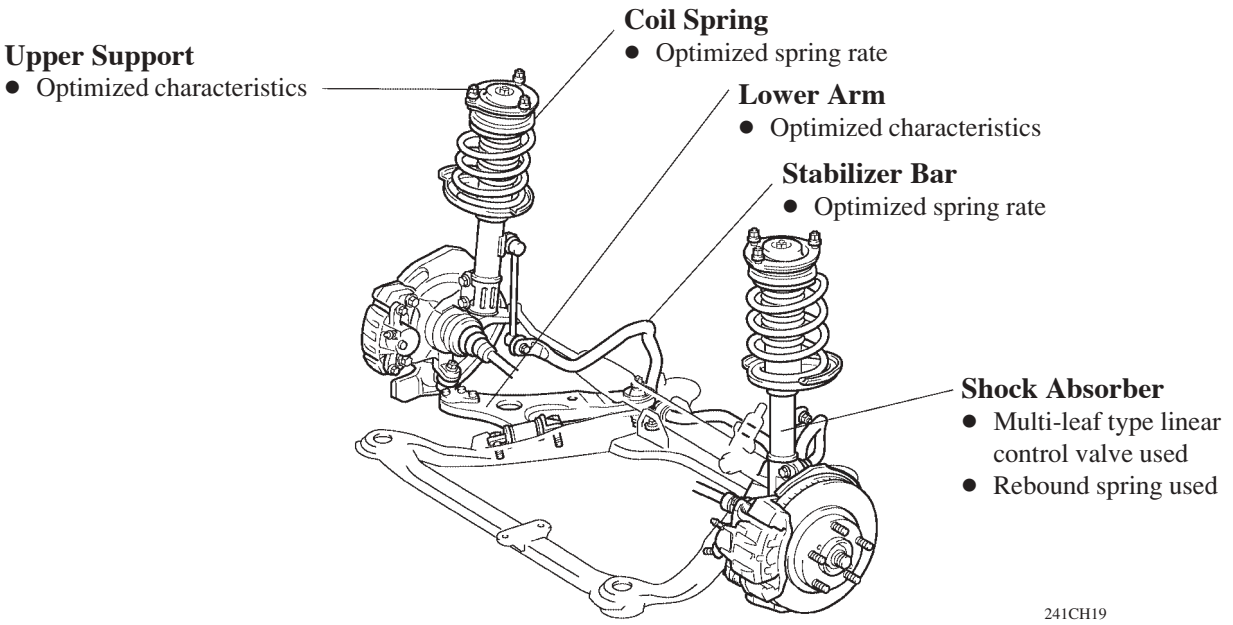
Front Suspension*1	Tread	mm (in.)	1576 (62.0)
	Caster	degrees	2° 45’
	Camber	degrees	–0° 35’
	Toe-in	mm (in.)	0
	King Pin Inclination	degrees	10° 35’
Rear Suspension*1	Tread	mm (in.)	1557 (61.3)
	Camber	degrees	–0° 45’
	Toe-in	mm (in.)	3.0 (0.12)

*1: Unload Vehicle Condition

2. Front Suspension

General

Through the optimal allocation of components, and the adoption of nachlauf geometry, the front suspension realizes excellent riding comfort and controllability.

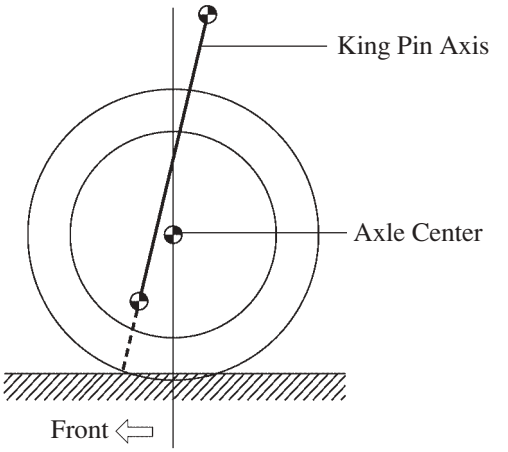


Service Tip

- To prevent hazardous conditions, make sure to empty the gas from the shock absorber before discarding a low-pressure (N_2) gas sealed shock absorber.

Nachlauf Geometry

The front suspension adopts the nachlauf geometry in which the king pin axis is located ahead of the axle center.
As a result, excellent straightline stability has been realized and the steering feel has been improved.



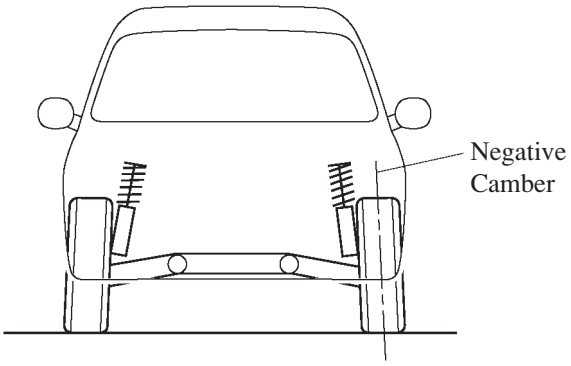
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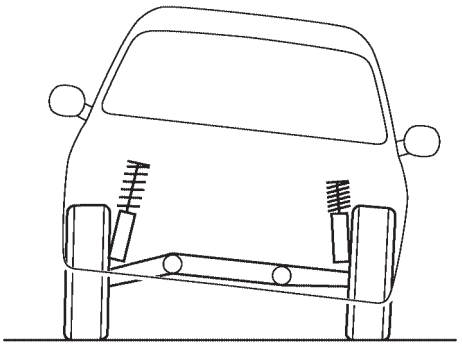
Negative Camber

The front suspension adopts negative camber to reduce the ground contact camber angle of the outer wheel at the time of turning (cornering), which is caused when the vehicle posture changes during cornering, thus realizing excellent cornering performance.

▶ During Cornering ◀



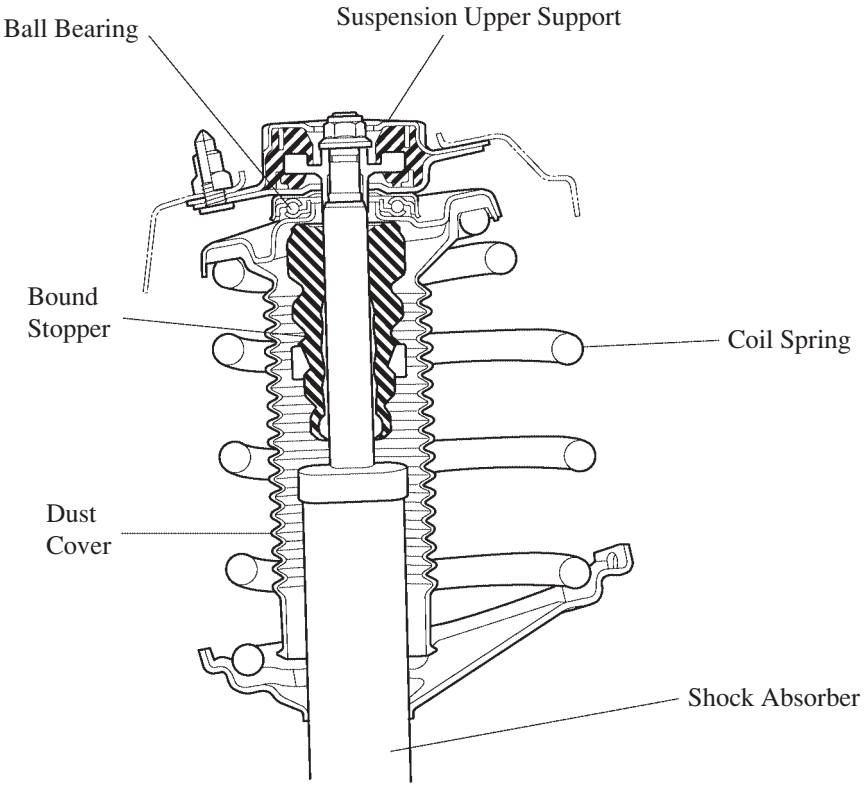
181CH23



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Suspension Upper Support and Coil Spring

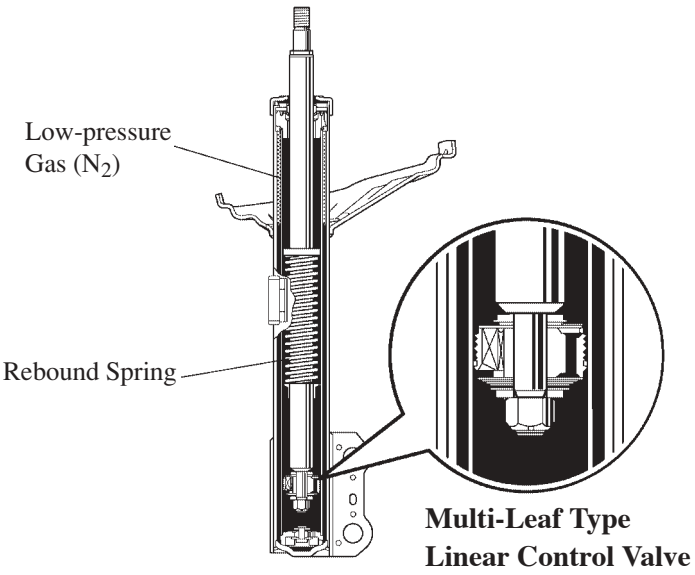
- The suspension upper support transmits the load that is applied via the spring through its metal structure, while the rubber portion receives only the load that is applied through the shock absorber.
- The center axis of the coil spring is slanted toward the outside of the vehicle compared to the center axis of the shock absorber. This reduces the lateral force bearing on the shock absorber piston rod and piston, and prevents increased sliding resistance while helping to maintain riding comfort.
- The dust cover is designed to completely cover the piston rod to reduce the intrusion of dust and improves the durability of the shock absorber.



Shock Absorber

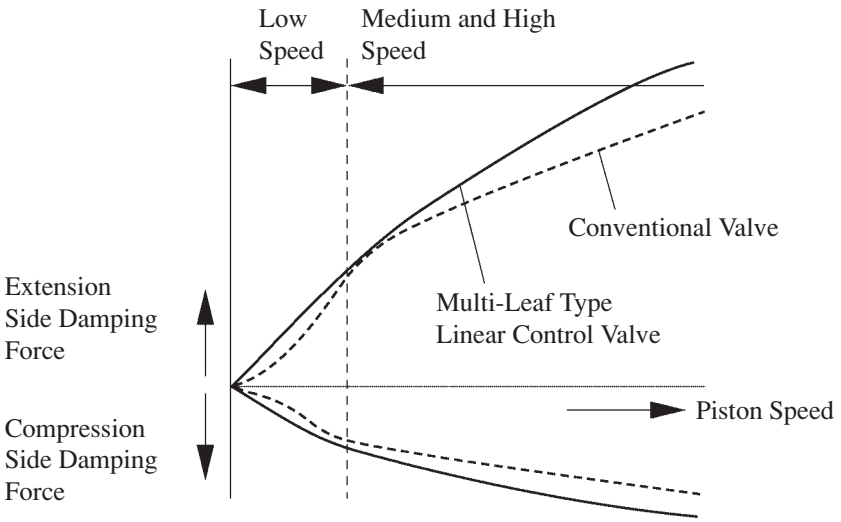
1) General

- Low-pressure (N_2) gas sealed front shock absorbers with a linear control valve have been adopted to realize both driving stability and riding comfort.
- A multi-leaf type linear control valve has been adopted to attain linear damping force characteristics.
- A rebound spring has been adopted to provide excellent vehicle stability during cornering.



241CH22

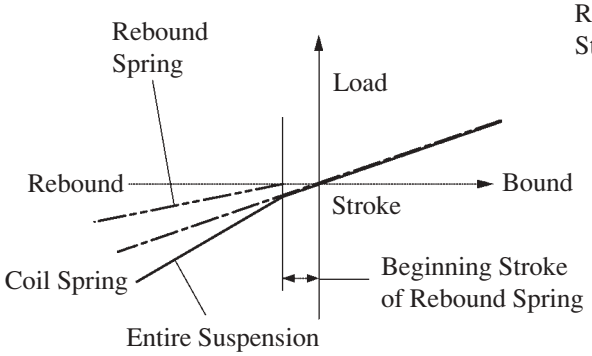
▶ Multi-Leaf Type Damping Force Characteristics ◀



199CH110

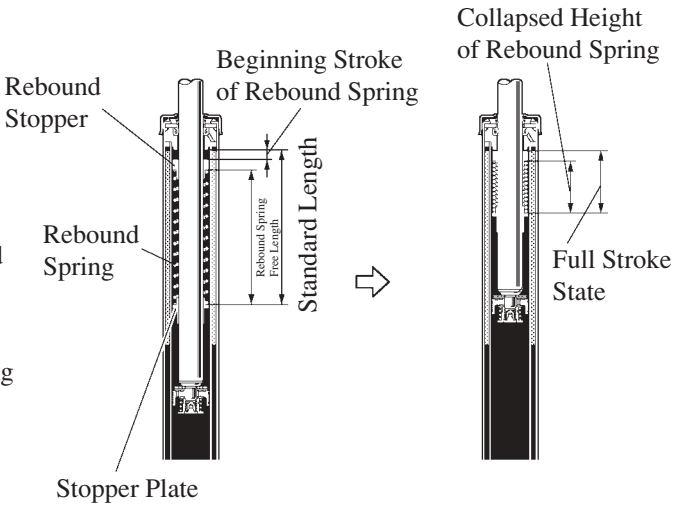
2) Rebound Spring

The function of the built-in rebound spring is to combine with the function of the coil spring in order to restrain the elongation of the entire suspension during rebounds. Consequently, only the function of the coil spring is applied when the suspension stroke is small during normal driving, in order to realize a soft and comfortable ride. However, when the inner wheel makes large rebounds, such as when the vehicle is cornering, the functions of both the rebound spring and the coil spring are combined in order to reduce the elongation of the entire suspension. As a result, the vehicle has excellent maneuverability and stability.



Characteristic of Shock Absorber With Built-in Rebound Spring

185CH16



221CH25

▶ During Cornering ◀



Without Rebound Spring **With Rebound Spring**

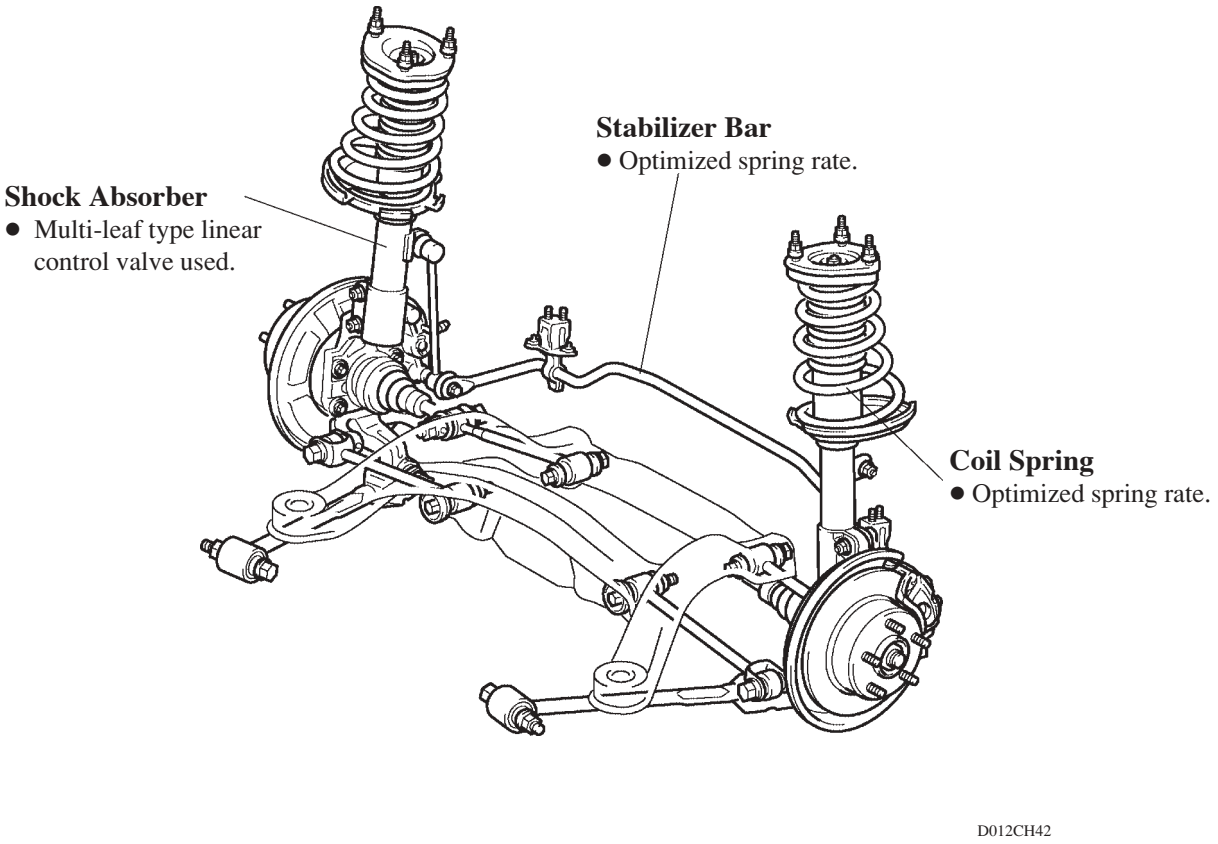
241CH90

Roll Angle = (a) > (b)

3. Rear Suspension

General

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

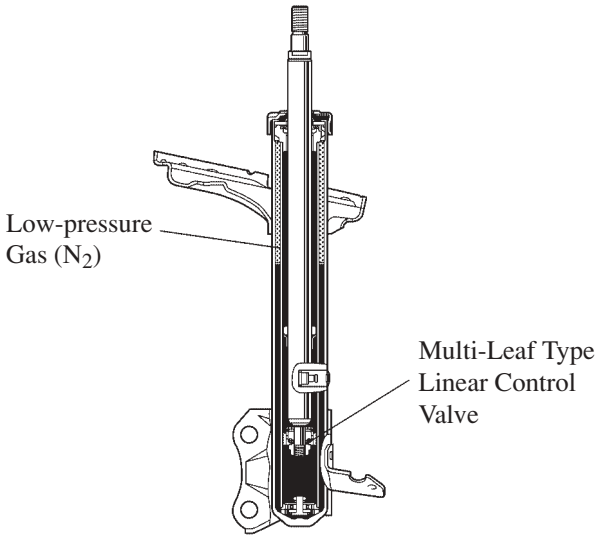


Service Tip

- To prevent hazardous conditions, make sure to empty the gas from the shock absorber before discarding a low-pressure (N_2) gas sealed shock absorber.

Shock Absorber

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



241CH25