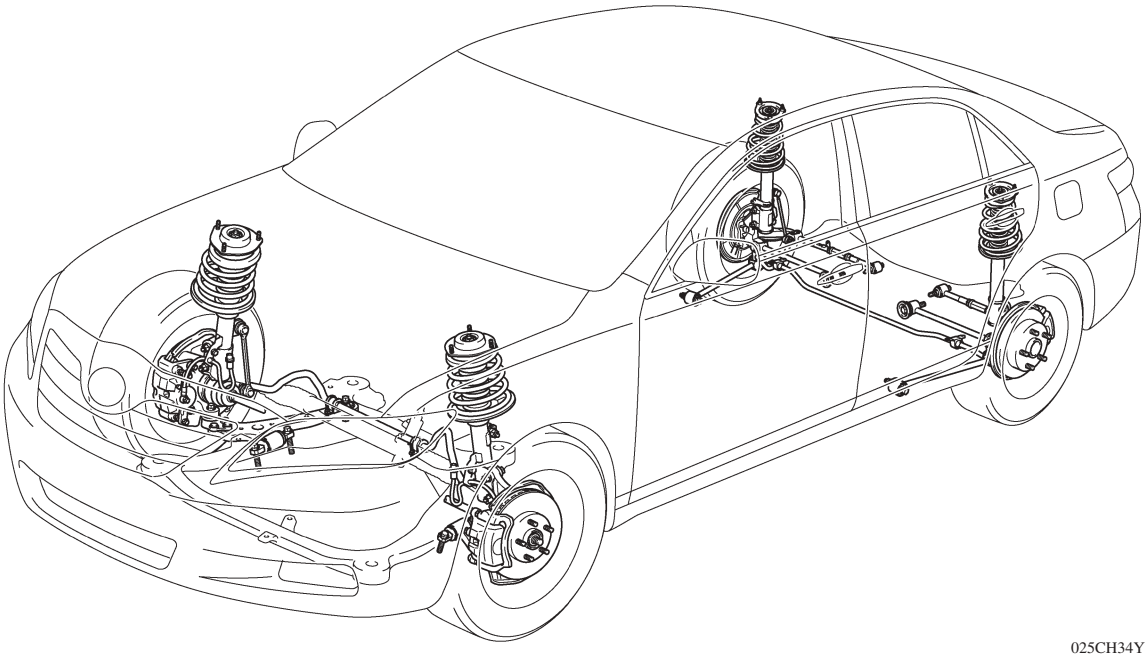
SUSPENSION AND AXLE

■SUSPENSION

1. General

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



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▶ Specifications ◀

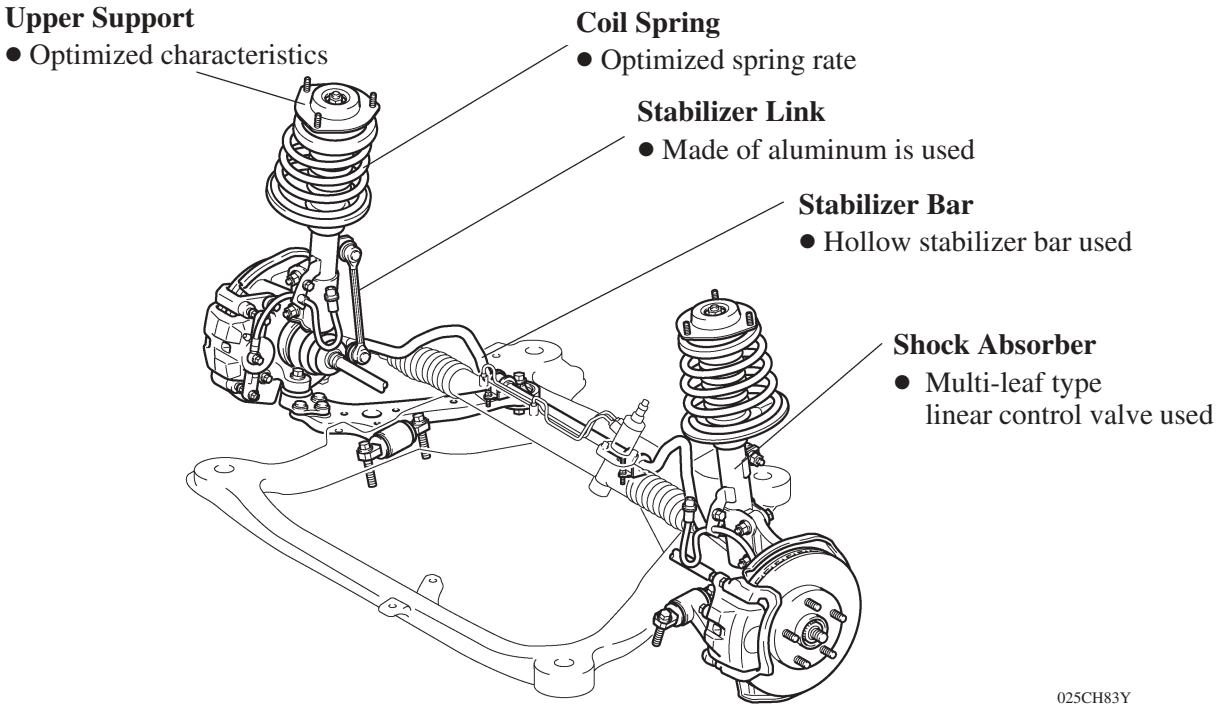
Item			Engine Type	
			2AZ-FE	2GR-FE
Front Wheel Alignment	Type		MacPherson Strut	←
	Tread*	mm (in.)	1,575 (62.0)	←
	Caster*	degrees	2° 40’	←
	Camber*	degrees	–0° 30’	←
	Toe-in*	mm (in.)	0	←
	King Pin Inclination*	degrees	12° 00’	←
Rear Wheel Alignment	Type		Dual link MacPherson Strut	←
	Tread*	mm (in.)	1,565 (61.6)	←
	Camber*	degrees	–1° 00’	–1° 05’
	Toe-in*	mm (in.)	4 (0.16)	←

*: Unload Vehicle Condition

2. Front Suspension

General

Through the optimal location of components, and the use of Nachlauf geometry, the front suspension provides excellent riding comfort and controllability.

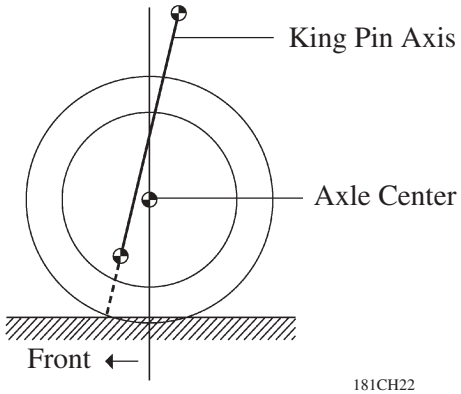


Service Tip

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. For details, see the Camry Repair Manual (Pub. No. RM0260E).

Nachlauf Geometry

The front suspension uses the Nachlauf geometry in which the king pin axis is located ahead of the axle center. As a result, excellent straight-line stability and steering feel has been improved.

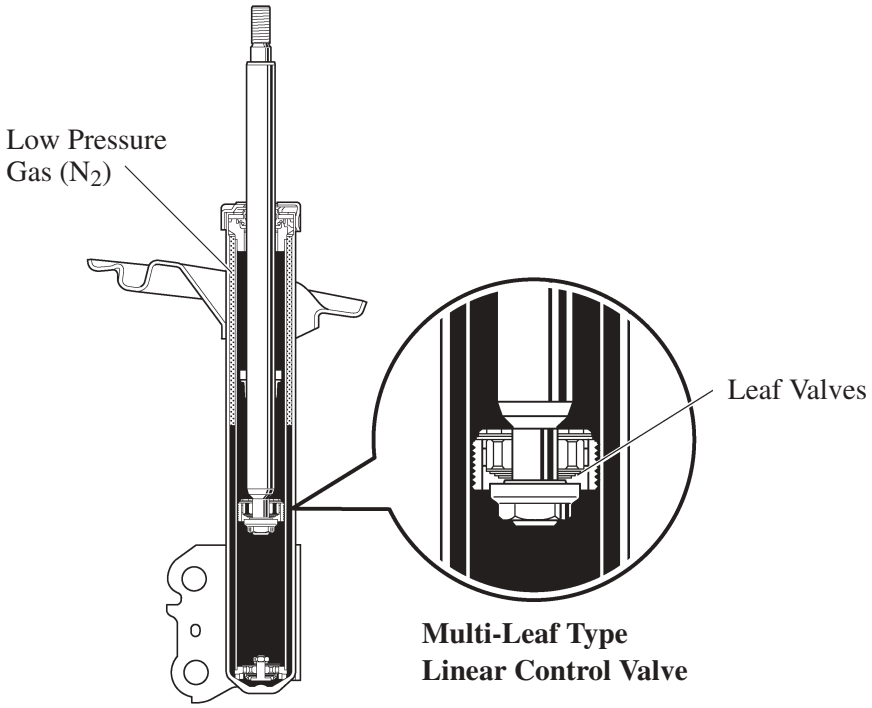


Shock Absorber

1) General

The two functions listed below are used for the shock absorber to realize both driving stability and riding comfort.

- A low-pressure (N_2) gas sealed type construction is used to suppress cavitation.
- A multi-leaf type linear control valve is used to attain linear damping force characteristics.

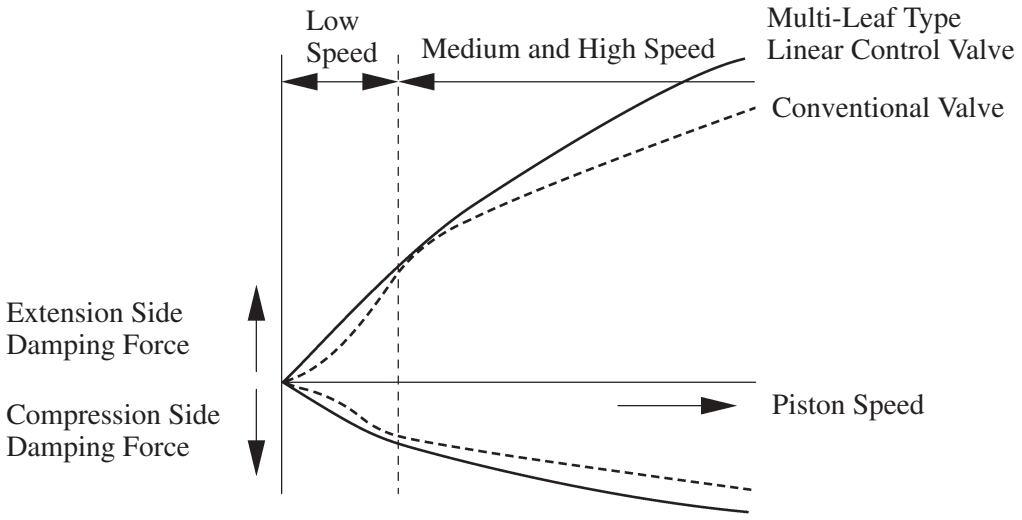


**Multi-Leaf Type
Linear Control Valve**

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2) Construction of Multi-Leaf type Linear Control Valve

The multi-leaf type linear control valve has a structure consisting of several layered leaf valves with different diameters. Through use of the multi-leaf type linear control valve, changes in the damping force are made constant at low piston speeds, thus realizing excellent riding comfort and controllability.



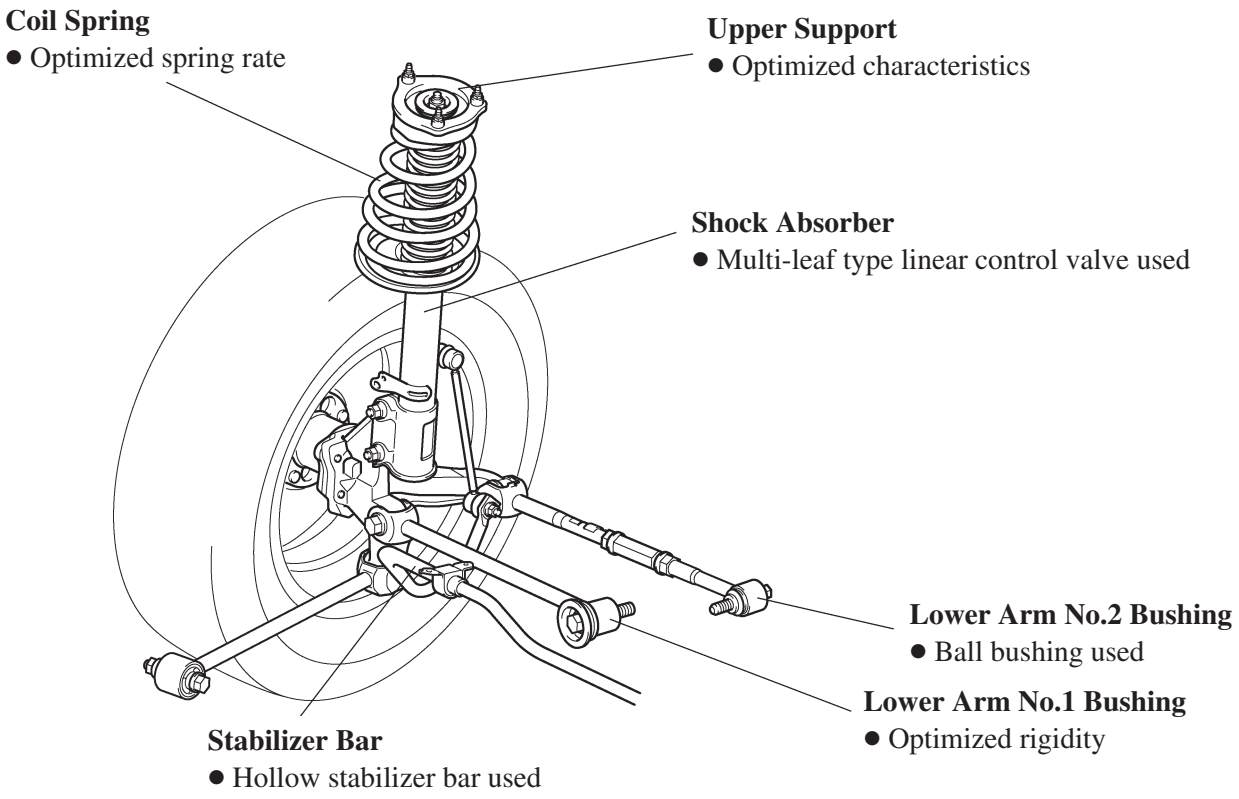
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Damping Force Characteristics

3. Rear Suspension

General

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



Service Tip

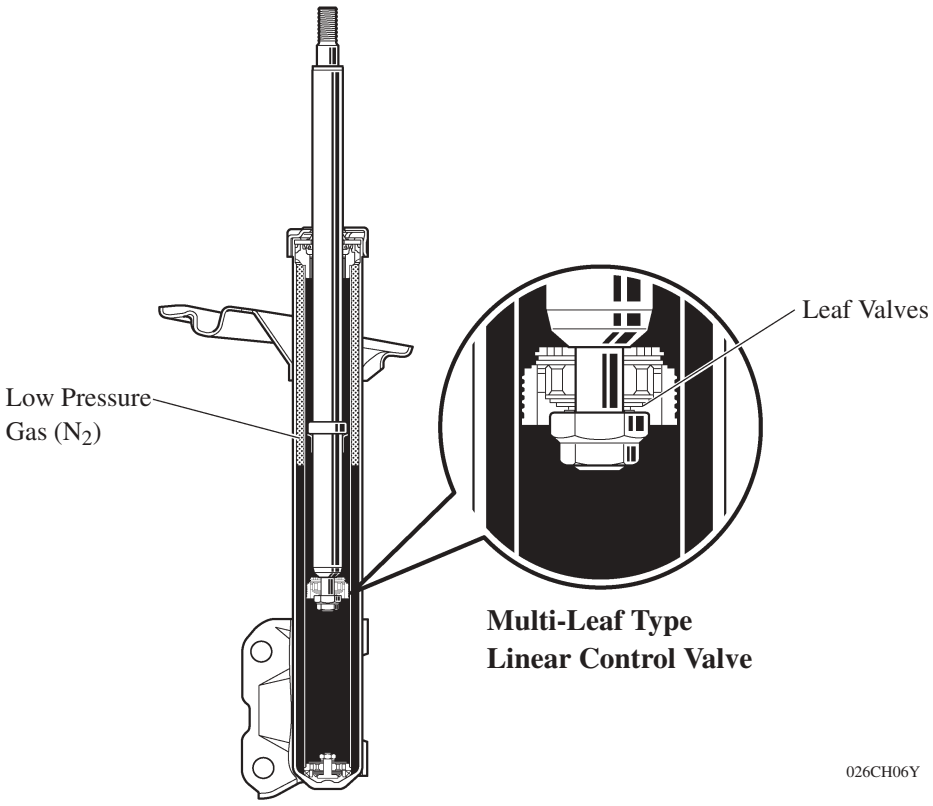
To prevent hazardous conditions, make sure to empty the gas from the shock absorber before discarding a low-pressure (N_2) gas sealed shock absorber. For details, see the Camry Repair Manual (Pub. No. RM0260E).

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Shock Absorber

The two functions listed below are used for the shock absorber to realize both driving stability and riding comfort.

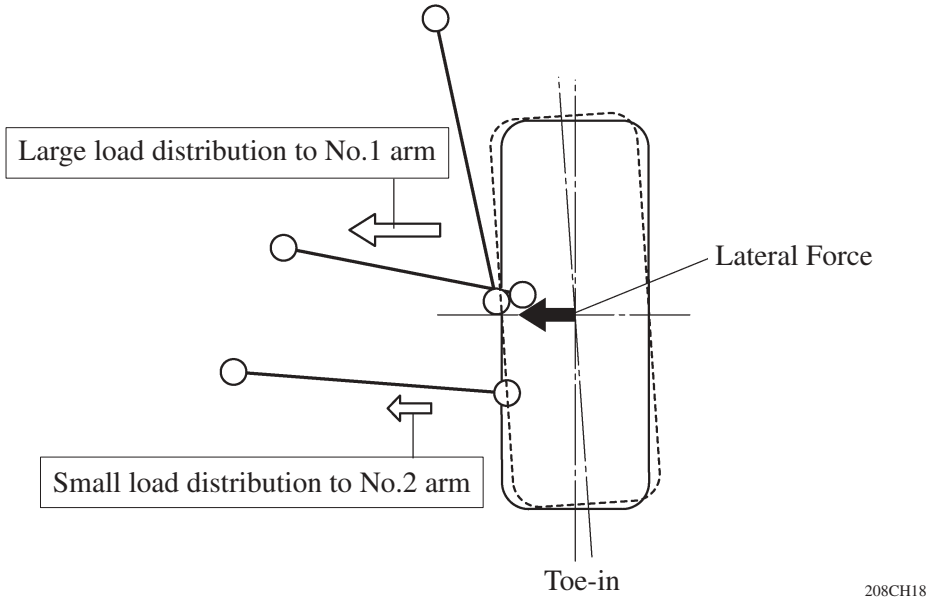
- A low-pressure (N_2) gas sealed type construction is used to suppress cavitation.
- A multi-leaf type linear control valve is used to attain linear damping force characteristics. For details, refer to Front Suspension section on page CH-80.



Multi-Leaf Type
Linear Control Valve

Cornering Geometry

When a lateral force is generated, the load becomes distributed to the No.1 and No.2 suspension arms. The illustration shown below indicates the lateral force distribution on suspension arms of the right side rear wheel during left cornering. This causes the wheels to toe-in, in order to ensure the proper stability of the rear suspension.



Braking Geometry

When the longitudinal force is generated, the displacement locus of the No.1 and No.2 suspension arms will toe-in as shown below, in order to ensure the stability of the vehicle.

