

## ■ SUSPENSION

### 1. General

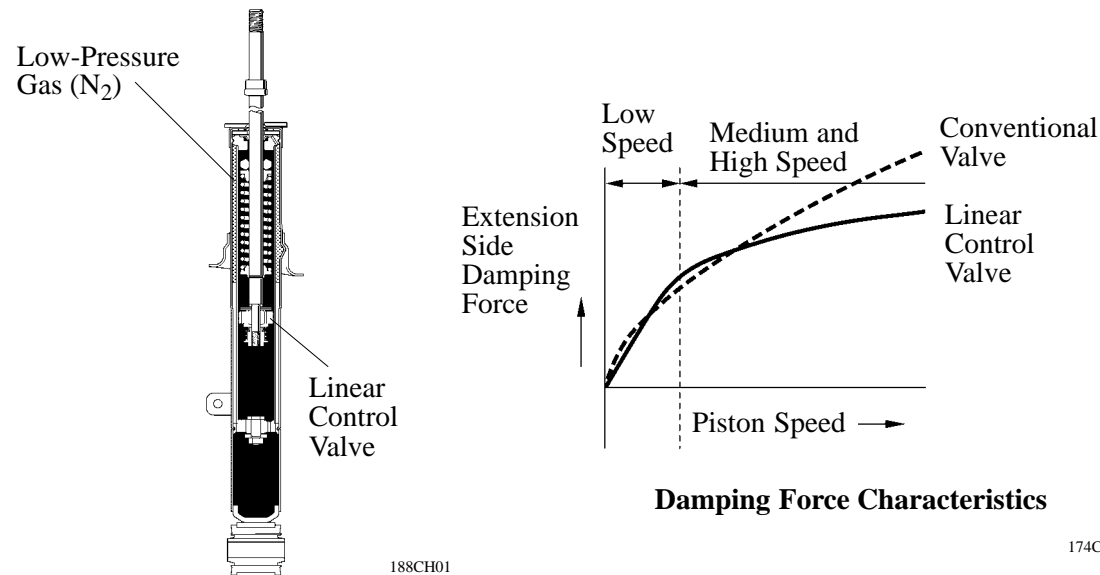
- Low-pressure ( $N_2$ ) gas-sealed front shock absorbers with a linear control valve have been adopted on the GS430/300.
- The shape of the front stabilizer bar has been changed and its sheet thickness has been increased. The rigidity of the bushings for both the front and rear stabilizers has been increased in order to improve driving stability and riding comfort.

### 2. Front Shock Absorber

#### General of Linear Control Valve

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.

Through the adoption of the linear control valve, the changes in the damping force are made constant at low piston speeds, thus making the vehicle behave more smoothly in relation to the steering operation. At medium and high piston speeds, the damping force is reduced to lessen the vehicle vibrations in relation to the roughness of the road surface.



#### Construction of Linear Control Valve

The linear control valve consists of a C-valve, a cutout valve and a leaf valve. These valves adopt a laminate construction and form orifices. At low piston speeds, the oil flows through the cutouts of the valves to achieve a linear damping force. At medium and high piston speeds, the valves flex to increase the amount of oil that flows through, thus reducing the damping force.

