



FUGA - Handling and Ride comfort -

Outstanding performance capabilities for enjoying exhilarating driving with peace of mind

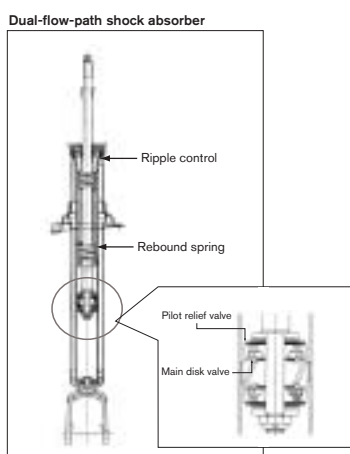
The Fuga was created to deliver enhanced driving performance, including responsive handling for enjoyable driving even on winding roads and superb ride comfort even on long-distance trips. Achieving superior driving performance requires an optimum balance of handling, stability, ride comfort and power, as well as the capabilities for attaining sufficiently high performance in each of these vital areas. To accomplish that, Nissan made the following improvements with the aim of securing the solid foundations essential to outstanding driving performance.



Handling and ride comfort

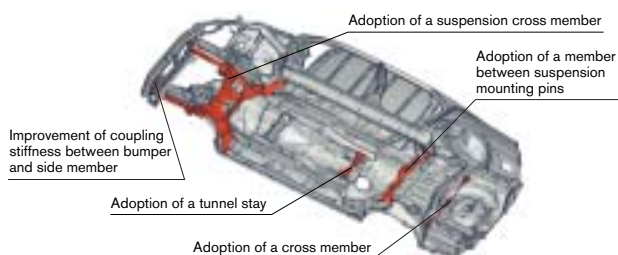
World's first shock absorbers to feature a novel dual-flow-path structure

The shock absorbers incorporate a newly developed dual-flow-path valve to achieve ideal damping characteristics. This unique valve increases the damping force relative to the piston speed during cornering for effective control of body roll. It lowers the damping force in relation to the piston speed so as to isolate tiny undulations in flat road surfaces and large force inputs induced by the seams in expressways. In this way, the dual-flow-path valve functions to achieve superior ride comfort.



Platform improvements

A stiffer platform was designed and further improvements were made wherever necessary. In addition to increasing the number of places where body joints are welded, laser welding is performed at critical locations. These improvements achieve higher levels of lateral bending stiffness, torsional stiffness and suspension mounting point stiffness, among other desirable characteristics.



19-inch tires

The use of large-diameter tires and wheels achieves both powerful gripping force and a comfortable ride. The Fuga is the first volume-produced model in Japan to feature 19-inch tires.

Rear Active Steering

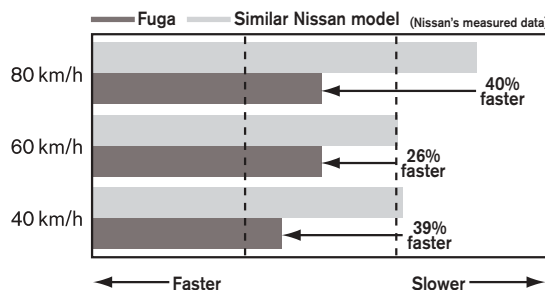
Depending on the vehicle speed and the steering angle, the rear wheels are steered in-phase or out of phase of the front wheels to provide quick, agile movement at low to medium speed and also stable vehicle behavior at high speed.

Acceleration

Newly developed synchronized engine speed control

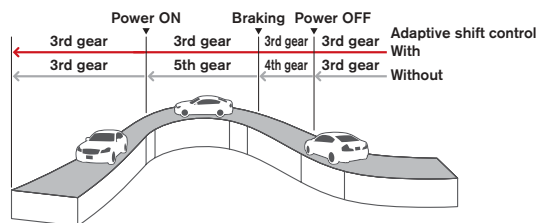
A throttle blipping function has been adopted to synchronize the engine speed for executing quick, smooth downshifts in the manual shift mode. Compared with a similar Nissan model, the downshift time is shortened by as much as 40%.

3-2 manual downshift time



Newly developed adaptive shift control

This control function automatically judges whether the car is going uphill, downhill or around a corner, as well as the driver's personal driving style, and selects the optimum gear to match the situation. That judgment is based on various vehicle sensor signals, including the engine speed, throttle valve opening, vehicle acceleration and other operating conditions. As a result, comfortable driving performance matching the driver's wishes is achieved in a wide variety of driving situations.



VQ35DE engine and VQ25DE engine

VQ35DE engine
Max. power: 206 kW (280 PS)/6200 rpm
Max. torque: 363 N-m (37.0 kg-m)/4800 rpm

VQ25DE engine
Max. power: 154 kW (210 PS)/6000 rpm
Max. torque: 265 N-m (27.0 kg-m)/4400 rpm

