

Body

More rigid body with even higher aluminium share

With the new 911, Porsche has further developed the mixed body construction throughout the vehicle and designed a completely new body structure. The steel share of 63 percent in the previous model has now been more than halved to 30 percent, for example. Apart from the front and rear aprons, the outer skin is now made fully of aluminium. The new door design, made from aluminium sheet, reduces the bodyshell weight without negatively impacting stability or quality.

In addition to high-strength steels, there is increased use of extruded aluminium profiles in the bodyshell, such as for the front and rear longitudinal members, inner and outer door sills and floor reinforcements. Their share has been increased from three to 25 percent. Porsche has also used more die-cast aluminium parts on the new 911. These components include the front spring strut mount, rear tunnel housing, rear carrier, and shock absorber mounts, for example.

New engine mounts reduce vibrations

The redesigned supporting structures also permitted modification of the engine mounts with very noticeable benefits for driving dynamics. Previously, the engine was connected to a crossbar via two mounts located relatively far back. This crossbar was in turn bolted to the longitudinal members. On the new 911, the crossbar is completely omitted and the engine mounts are integrated directly in the longitudinal members, around 20 cm further forward. The front connection to the transmission mounts is unchanged. As a result of the new position and tuning of the engine mounts, there is a significant reduction in the engine vibrations transmitted to the vehicle chassis. This improves comfort when driving on poor roads at slow speeds as well as at higher speeds, for example when driving over bumps.