

Seat technology aims to cut fatigue, improve long trips for drivers (w/ Video)

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Nissan is developing "fatigue-free seats" to cut driver and passenger fatigue and make long periods of driving a pleasant experience.

Research and analysis on the [human body](#) and cars led to the "neutral posture", which humans take on in a weightless environment.

The "Comfortable seat with spinal support" has been developed utilizing ergonomic technology.

The first challenge in development was how to maintain the neutral posture achieved in a [weightless environment](#) on the seat. Through a joint research program with Yamazaki Laboratory at Keio University, using a seat simulator and a musculo-skeletal model for seating analysis, Nissan reduced loads to the smallest amount on each muscular and spinal area from the seated position.

Nissan used control of the distribution of local deformation characteristics around the seat back in its initial shape to help realize optimal support. The "Neutral Posture Concept" provides continuous support from the pelvis to the chest, working to reduce muscular and spinal loads and improve blood flow, thereby reducing fatigue over long periods.

Provided by Nissan

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