

Volvo Cars design team offers concept in rearward baby seating

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A child-seat concept from Volvo Cars offers a design for child safety in cars of the future. Shown in the XC90 Excellence, it goes far beyond heated cup holders for baby bottles. Ben Coxworth in *Gizmag* summed

up the nuance: "Back in April, Volvo showed off its Lounge Console at the Shanghai International Auto Show. The concept replaced the usually-unoccupied front passenger seat of a chauffeur-driven vehicle with a multi-purpose luxury footrest for use by the rear-seat passenger. Building on that idea, the Swedish automaker has now unveiled the Excellence Child Seat Concept, which replaces the front seat with a baby seat."

Parents with newborns and young babies know the struggle when, unable to directly face the rear-facing baby in back, they need to twist around from the front or lean in from the side. On the emotional level, there is something positive to be said about a [child](#) in rear-facing position but being able to see the face of the passenger in the [rear seat](#), notably a parent or other familiar face. Vice-versa, the passenger in the rear seat also wants to look at the child. "Even if just the driver and the infant are in the car, it's still easier for the driver to see the little one's face while [driving](#)," said Coxworth.

The car maker said there is a clear safety advantage inherent in its Volvo's "Excellence Child Seat Concept." Volvo's safety position, said the release, is that "small children should travel rearward facing as long as possible (at least up to the age of 3 or 4). This is primarily due to the lack of muscular strength in the necks of small children and the disproportionate head size and weight in relation to the body."



Its rear-facing position was in fact spelled out by the car-maker in 2007. Young children are not merely adults only shorter. Oversized heads and not fully developed neck vertebrae, muscles and ligaments merit consideration. Their anatomy is different. The head of a newborn makes up half the total body weight. Volvo said children need special restraints, and facing the rear for as long as possible until at least three-four years of age. "When travelling facing the rear the crash forces are spread over the back and head, which reduces the load on the neck in frontal [impacts](#)."

Getting the child in and out of the seat was designed to be easy. The concept enables the parent to swivel the seat counter-clockwise when seating the child and then lock the seat in a rearward facing position.

Storage space for child accessories is another design attraction. Diapers, bottles, blankets and wipes all have a tidy place. Small items go beside the seat and storage space underneath can take diapers, blankets, or other large items. A tote bag can go at the front of the seat under the dashboard.

"We focused on three key benefits – making it easier to get the child into and out of the child seat from an ergonomic and comfort perspective, providing the child with a safe rearward facing seating position that enables it to keep eye-contact with either the driver or the rear passenger and of course including enough storage for those vital child accessories," said Tisha Johnson, chief designer interiors, Volvo Cars Concept and Monitoring Center.

According to Johnson the idea originated in a conversation with Volvo Cars' owner Li Shufu when he reviewed the XC90 Excellence Lounge Console Concept earlier this year, and thought about how else the space left by removing a front passenger seat could be used. The design team re-imagined the way in which [small children](#) can travel.

More information: www.media.volvocars.com/global...e-child-seat-concept

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