

October 14, 2004

Exhibition outline of the 38th Tokyo Motor Show for Commercial & Barrier - free Vehicles

October 14, 2004, Tokyo – Fuji Heavy Industries Ltd. (FHI), a global manufacturer of transportation and aerospace-related products and the maker of Subaru automobiles, today announced the major features of its exhibits at the 38th Tokyo Motor Show – Commercial & Barrier - free Vehicles, which will be held at Makuhari Messe from November 2 through 7, 2004. Under its theme for the show, “Open all roads: Vehicles for broadening opportunities and enriching life,” FHI will exhibit a wide range of Subaru’s barrier free vehicles for people with disabilities, plus a full lineup of commercial vehicles.

Featured at the Subaru booth will be a range of Subaru TransCare models, including the Subaru R1 prototype model: one fitted with a hand control and the other with a rotating seat. The R1 model has been developed as a high-quality, original mini-car as a prototype model . The R1 expresses the pursuit of the value of compactness and embodies its development concept: “Small is beautiful; the love and pride for owners in its smallness.”

Other Subaru TransCare models on display include some popular models that have been fitted with hand controls for driver with disabilities. Hand controls enable drivers to perform braking and acceleration exclusively by hand, without any lower body motion. In addition, some TransCare models come with rotating passenger seats, while others are equipped with electric wheelchair lifts for easy access to the vehicle.

In its commercial vehicle area at the show, FHI will exhibit the Subaru Sambar lineup. The Sambar has earned acclaim for excellence in its driving performance and reliability, as well as for outstanding convenience. The Sambar Transporter, a prototype model, is packed with new features and equipment that facilitate the tasks of delivery service providers.

FHI will also have two units of the Subaru Driving Simulator II that are both fitted with hand controls and rotating seats. People with limited or no use of their lower limbs will be able to enjoy the experience of virtual driving fun in a Subaru car.



Subaru R1 equipped with a hand control(Prototype)



Subaru R1 TransCare Wing Seat (Prototype)

Major features of Subaru exhibits

1. Prototype models

Subaru R1

Sophisticated exterior designs underline the value of compactness, a concept of Subaru designers and engineers for a unique, individual mini-car. With a length of 3,285 mm, a width of 1,475 mm, and a height of 1,510 mm, the R1 also features sporty and streamlined looks. The front end enhances sporty styling with its spread-wing grille design, which is reminiscent of aircraft wings.

The two front seats and cabin area are quite roomy, while the rear space can become either two seats or a spacious luggage area. The interior color combination of black and red also enhances sportiness.

The R1 has been engineered with many safety considerations. The “one-motion form,” a flowing eggshell line from front to rear, has been engineered to effectively absorb crash impact. Other shock-absorbing elements are incorporated to dampen the impact between the car and a pedestrian, reducing the risk of injury to the pedestrian in an accident.

Combining a smooth and powerful 4-cylinder DOHC engine (658 cc) with an active valve control system (AVCS) and the i-CVT (intelligent continuously variable transmission), the R1 ensures driving pleasure at the operator’s fingertips.

Subaru R1 2WD with i-CVT, equipped with a hand control

A hand control¹ enables a driver with disabilities to perform braking and acceleration exclusively by hand. The smallness of the R1 makes the driver feel comfortable, as everything in the interior space is reachable. Easy access to the driver’s seat is ensured by the seat’s clearance of 600 mm from the ground. The R1 is ideal for enabling the mobility of a driver with disabilities, while it can also be driven by family members and friends.

1) The FC-B hand control system is made by Fuji Auto Co., Ltd. (FC-B floor-type comes with a steering control ball grip, but no horn switch)

Subaru R1 TransCare Wing Seat AWD with i-CVT

Equipped with a rotating front passenger seat,² this R1 model also features a larger door opening for easy entry and exit. The rotating power seat can be operated by a handheld wireless remote control for superior convenience. The model addresses the need for enjoyable car trips for seniors and people with disabilities.

2) The height of the rotating seat, when extended out from the car’s interior, is as high as 560 mm from the ground.

Subaru Sambar Transporter Van 2WD + 3AT for delivery service providers

The Sambar Transporter model is a 2-seater van in a compact body, yet it provides the most spacious cabin area in the mini-commercial vehicle category³ in Japan. Its cabin and cargo space are separated by a wall panel with a small glass inset for rear visibility. The panel also has a window on the passenger side that opens to accommodate long delivery items that do not fit in the cargo space. The Sambar Transporter comes with a clothes-hanging rack in its cargo space, while its cabin is fitted with brackets that can eventually be used for installing such equipment as wireless data transmitters, portable terminals, and printers to facilitate data input and transmission and other communications required for efficient delivery services. The Transporter also comes with a Smart Key that automatically locks the doors when the driver walks away from the vehicle with the key and unlocks them as the driver approaches the vehicle.

3) The mini-commercial vehicle is a commercial van or truck with engine displacement of less than 660 cc.

2. TransCare Models

Subaru vehicles with hand controls

Subaru provides vehicles that can be fitted with hand controls and other adaptive equipment for people with disabilities to drive. Mobility equipment manufacturers that include Guidosimplex s.n.c., Nisshin Auto Co., Ltd., and Fuji Auto Co., Ltd., offer hand controls for TransCare models for drivers with disabilities. These makers also offer other adaptive equipment, such as right-foot accelerator pedals for people with limited or no use of their left feet and pedal extensions for shorter people.

Subaru Impreza Sedan WRX AWD SPORTSHIFT E-4AT with a hand control⁴

The Impreza WRX model is fitted with an electronic ring accelerator and brake installed on top of its steering wheel. Designed to operate effortlessly, the accelerator provides light and precise control. Thanks to its proximity to the steering wheel, the hand control system enables the driver to enjoy a sporty ride.

4) The steering control system with electronic ring accelerator and pull-type braking lever is made by Guidosimplex s.n.c.

Subaru R2i Plus 2WD i-CVT with a hand control⁵

The Subaru R2 is equipped with a compact hand control that incorporates braking and accelerating levers, as well as such functions as a blinker and a brake locking switch that can be activated to brake the car at a traffic light or during other extended braking times. All the operations except for steering can be efficiently handled by one hand, which greatly facilitates driving with hands.

5) The AP drive (AM type) is made by Nisshin Auto.

Subaru vehicles with rotating seats and wheelchair lifts

Subaru Legacy TransCare Wing Seat Touring Wagon 2.0R AWD SPORTSHIFT E-4AT

Using the standard seat for the Legacy model, this rotating front passenger seat features a sliding power-seat mechanism. It extends 80 mm out from the car by rotating, enabling the smooth entry and exit of a passenger. The rear luggage area comes with a restraint-belt system to horizontally secure a folded wheelchair, as well as a bumper cover to protect the rear bumper.

Subaru Forester TransCare Lift-and-Lower Wing Seat XT AWD E-4AT

This Forester model is fitted with a lift-and-lower power rotating seat, providing adjustable height for easy and convenient entry and exit. The seat also has a collapsible footrest and comfortable arm rests. The rear luggage area comes with a restraint-belt system to horizontally secure a folded wheelchair, as well as a bumper cover to protect the rear bumper.

Subaru Sambar TransCare Wheelchair Lift Dias Wagon 2WD 3AT

The Sambar is equipped with a wheelchair lift on the left sliding-door side. This is the only left-side lift available in the mini-commercial vehicle category in Japan. Because vehicles drive on the left side of the road in Japan, the left-side lift on the vehicle is convenient and safe for caregivers to assist those in wheelchairs when they enter from and exit to pedestrian sidewalks. Inside the van, a wheelchair user has ample headroom with the lowered floor. The Sambar also comes with a one-switch wheelchair restraint device, seat belts, and an extra grip bar for a safe and comfortable ride.

3. Others

The driving simulator is jointly developed by utilizing FHI Aerospace Company's technical know-how in building aircraft flight simulators, Subaru's Engineering Division involved in developing the vehicles and the Subaru Technical Research Center for development of future technologies. the Subaru Driving Simulator II has been improved upon since the original one was introduced at last year's Tokyo Motor Show. Both units of the Simulator II are equipped with Guidosimplex-made hand controls and rotating lift-and-lower seats for people with disabilities to experience the virtual driving of Subaru cars with adaptive equipment.

Subaru Pleo Van A 2WD 5MT

Subaru Sambar Truck TB 4WD 5MT plus extra low gear

Subaru Sambar Transporter Van 2WD 3AT

Subaru Sambar Porter Van 4WD EL + 5MT

Subaru R2 cutaway display model

Subaru Sambar TransCare Dias Wagon 2WD 3AT fitted with a wheelchair lift (displayed at the Test-ride Arena at the show)