



Mobility Support Robot HUG T1-02

FUJI Corporation

Supporting mobility by using an apparatus to assist standing



■ Outline of mobility support robot Hug

Fuji Corporation developed mobility support robot Hug in order to reduce the burden on caregivers with funding from the Project to Promote the Development and Standardization of Robotic Devices for Nursing Care conducted by the Ministry of Economy, Trade and Industry and AMED. It aids people who have difficulty standing by helping them to transfer (move) from a bed to a wheelchair or other locations such as the bathroom.

When moving, the care receiver leans forward against Hug, and the caregiver pushes the "stand" button to start the stand movement.

Hug T1-02 retains the original concept while renewing the design to make it an even more acceptable product for both care receivers and caregivers.

It not only reduces the burden on caregivers, but can also support the care receiver in continuing to live life with a high degree of independence.

■ Practicality in a caregiving environment

1. Uses and maintains the strength of the care receiver

Hug has the user lean forward and helps them to stand up by supporting the chest and raising the buttocks. A two-axis motor works in concert to help the part supporting the chest move in a natural standing motion. Standing up with Hug uses the same movement as a person standing up, shifting the center of gravity to the feet. The caregiver can talk to the care receiver while using the machine to enable the receiver to be aware of standing and participate in the movement.

2. Reduced burden and change in awareness

By leaving heavy lifting up to Hug, the caregiver no longer has to spend energy lifting and can focus on other aspects of care. From the perspective of the care receiver, they go from being lifted by a caregiver to using a device to stand, changing their image of the role of caregiver from "a person who lifts me up" to "a person who cares for me." This also helps eliminate the issue of care receivers feeling reluctant to move because of the physical burden it places on the caregiver.

3. Makes going to the bathroom easier

By enabling the care receiver to stay in a standing position, it is

easier to take care of bathroom needs such as removing trousers, wiping the buttocks, and changing diapers. The device is compact and lightweight, making it easy to maneuver even in an enclosed space. When sitting on the toilet, leaning on the Hug can help with bowel movements by applying pressure on the abdomen.

4. Simple operation

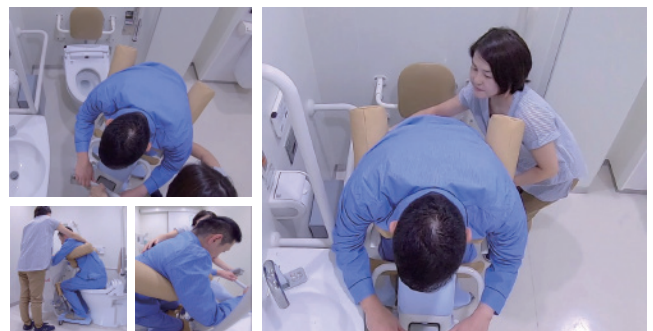
It is operated with just two buttons: "Stand" and "Sit" which makes it easy to use even without any specialized robot knowledge. It's easy to implement at care facilities, assisting work quickly and efficiently without getting in the way of other tasks. For families doing in-home care, the device can be used without having to spend time and energy figuring out how to use it.

5. Reduces falling risk

Hug supports a specific stable movement and operates no matter the ability or strength of the caregiver, reducing risk of falling. It lets the care receiver down gently, reducing risk of compression fractures.

■ Implementation and spread

Since sales began, approximately 200 Hug T1-02 units have been put into use, and over one thousand units for the series overall. Helping a person get up and move to another place, and helping them in the bathroom is extremely physically demanding work. Hopefully this device can be implemented and used in more and more situations in order to reduce the burden on caregivers and help care receivers live long, comfortable lives.



Bathroom usage example

Contact:

Fuji Corporation

Address: Chausuyama 19, Yamamachi, Chiryu City, Aichi
Robotic Solutions Division, Sales Department, Sales Section 2
Tel: 0566-55-8800 E-mail: hug@fuji.co.jp

