

VIP 2 Clinical Justification

Transportation

The VIP2 ensures vehicle transport safety through its ISO 7176-19 crash test certification to minimize injury risk. Its lightweight, foldable aluminum frame and detachable components simplify vehicle storage for caregivers, while the integrated tilt and recline functions transform the wheelchair into a mobile rest platform, preserving skin integrity and comfort during extended outings.

Accessible Vehicle Transport

Vehicle Safety — The keys to wheelchair vehicle safety are four-point tiedown system, seatbelt securement, and correct positioning. Always use vehicles equipped with wheelchair-specific tie-down systems and lock the wheelchair brakes. Occupants must wear a vehicle three-point seatbelt.

The VIP2 has crash test compliant with ISO 7176-19,

1. Lock brakes after positioning inside the vehicle.
2. Remove loose items (bags, oxygen bottles) and secure or adjust footplates.
3. Headrest: increases head stability during vehicle transport and reduces whiplash injury risk during emergency braking or accidents.

Standard Vehicle Storage Convenience

Weight and structure friendly for caregiver transport: Aluminum alloy frame is lightweight and sturdy, with components (e.g., footplates) that can be quickly detached, reducing maximum single-piece weight and easing caregiver burden. Trunk storage: The frame is foldable with a fold-back backrest design, reducing volume. Suitable for sedans and SUVs: Compact folded dimensions fit most family sedans or SUV cargo areas.

Recommendation: For frequent storage needs, consider the small-wheel model (typically lighter).

Extended Outing for Users with Paralysis or Elderly Frailty

Rest and Care Platform — Users with paralysis or elderly frailty who spend extended periods away face the challenge of difficulty resting and receiving care. The wheelchair's tilt-in-space and recline functions allow users to rest directly in the wheelchair, effectively distributing body pressure, alleviating prolonged sitting fatigue.

Elevating legrests promote lower extremity blood circulation, prevent edema and numbness, and provide space for leg care; removable armrest design facilitates posture adjustment and enables caregivers to more conveniently assist with position transfers, skin care, and other operations.

Accessory / Feature	Clinical Application for Amputation
<p>Tilt-in-Space & Recline</p>	<p>Tilt-in-space first, then recline. Tilting allows gravity to stabilize the pelvis in the seat before opening the recline angle. This eliminates shear force between the skin and the backrest during recline, ensuring skin integrity.</p> <p>Recline combined with tilt-in-space positioning enables caregivers to effectively perform cleaning and nursing care.</p> <p>Not only transfers partial hip pressure to the back, also distributes back pressure to maximize pressure relief.</p> <p>Effectively reduces symptoms caused by orthostatic hypotension, especially suitable for long-term bedridden users.</p> <p>Combined with articulating elevating legrests, the lower limbs can be positioned above heart level to promote lymph circulation and reduce lower extremity edema.</p>

<p>Tension Adjustable Backresth</p>	<p>The tension-adjustable backrest allows loosening of straps corresponding to thoracic kyphosis, increasing the contact surface area and thereby distributing pressure.</p> <p>Tightening the straps at the lumbar region creates a built-in lumbar support, helping maintain the physiological spinal curvature and delaying fatigue.</p> <p>The tension-adjustable backrest can be re-tightened at any time as the fabric stretches, ensuring the backrest consistently provides effective support rigidity and maintains correct seated posture.</p>
<p>Foldable Back</p>	<p>Along with foldable frame, the volume allow the wheelchair to be easily transported. This enables elderly users to participate in family gatherings, medical appointments, follow-up visits, or outdoor activities, improving mental health and rehabilitation motivation.</p> <p>After folding the back, the wheelchair can be placed flat or stood upright securely inside the vehicle, reducing the risk of collision damage during transport.</p> <p>Minimum Storage Dimensions: 775 x 355 x 680 mm</p> <p>Maximum Single-Unit Weight: 17.8 kg</p>
<p>Detachable Armrest</p>	<p>With the armrests removed, the wheelchair seat surface aligns seamlessly with the bed surface or transfer board. This provides a clear pathway for lateral transfer, significantly reducing collision and secondary injury during transfers.</p> <p>With the armrests fully removed, caregivers can get close to the user's trunk. This eliminates lumbar spine stress caused by lifting at a distance, improving caregiving efficiency and safety.</p> <p>In recline position, removable armrest enables lateral supine transfer.</p>

<p>Articulating Elevating Legrest</p>	<p>Articulating elevating leg rests, combined with tilt and recline functions, allow the user’s lower extremities to be elevated above heart level. This promotes lymphatic circulation and helps reduce edema.</p> <p>Angle adjustable to support the entire leg, reduce pain, postural deformity, or enable surgical wound healing.</p> <p>The legrests can swing outward, inward, or also be removed creating front clearance. This allows the user to stand with feet firmly on the ground, or enables caregivers to support the user at closer range, significantly reducing fall risk.</p> <p>When combined with the recline function, increasing the knee joint angle adjustment to reduce forward sliding in sitting position.</p>
<p>Compatible with Third-Party Seat Cushion</p>	<p>Seat height, armrest height, and backrest height adjustability allow VIP2 to fully accommodate cushions of varying thicknesses.</p>
<p>Compatible with Third-Party Back Support</p>	<p>Installing third-party rigid backrests providing extensive back support, reducing deformity risk and improving seated posture stability.</p> <p>Third-party backrests usually feature quick-release structures. This resolves the conflict between functionality and convenience, allowing caregivers to detach the back cushion instantly when storing the wheelchair in a vehicle, maintaining easy transport.</p>
<p>Anti-Tipper</p>	<p>Anti-tipper provide the protection during sudden center-of-gravity shifts, preventing the wheelchair from tipping over.</p>

**Crash Test Approved
(ISO 7176-19)**

Certified to ISO 7176-19, the frame is compatible with the four-point tie-downs and three-point seatbelts on a vehicle, absorbing energy upon impact while maintaining structural integrity to minimize injury risk.

Users can remain seated in the wheelchair when entering the vehicle. This minimizes the burden of transferring in and out of the vehicle during medical visits or travel, improving participation in daily and social activities.

Hook labels are clearly marked on the certified models, indicating correct tie-down positions, ensuring absolute stability during transit.



The clinical recommendations provided in this document are for professional therapists' reference only and should not replace individualized clinical assessment. The actual prescription should be determined by healthcare professionals based on the user's physical functions, home environment, and individual needs. Karma Medical reserves the right to change product specifications.

