

Invacare® Storm Series® Ranger X™ Power Wheelchair

REHABILITATION
POWER
CARE

Ranger X™



Yes, you can.®



Anything else is a compromise.™



The Invacare® Storm Series® Ranger X™ power wheelchair with 4-pole motors and MK Series™ power wheelchair electronics has the flexibility to maximize function through a series of “à la carte” options and accessories, such as TT® TrueTrack technology, to accommodate a wide range of clinical needs. Built on the rugged Storm Series H-frame design, the Ranger X power wheelchair offers a proven, durable construction and rubber element independent rear suspension for a softer ride.

Features

- MKIV™ A power wheelchair electronics standard
- TT® TrueTrack technology (optional) keeps the power wheelchair on a true forward path and reduces driver fatigue
- 4-pole motors provide true gear reduction and higher torque for many rehab needs
- Rubber element rear wheel suspension absorbs significant jolts and impacts
- Upgrade to Monroe® independent rear suspension and/or shock forks for additional vibration dampening
- Adjustable ASBA (adjustable seat back angle) rehab seat to allow for seat width and depth changes without changing the seat pan
- Ability to accommodate multiple powered seating options
- Transport tie down options available



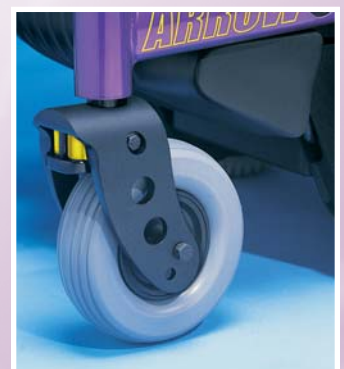
Rubber Element Standard Suspension

- Independent rear-wheel suspension is designed to absorb significant jolts and impacts
- For improved impact absorption and vibration control over uneven terrain, suspension package can be upgraded to the Monroe® Spring Shock system



Monroe® Spring Shock Upgraded Suspension (optional)

- Monroe Spring Shock system allows for up to 2 inches of movement to absorb impact and provide maximum dampening
- Independent rear-wheel suspension is designed to absorb significant jolts and impacts



Shock Fork Suspension (optional)

- Shock forks, designed for 8" casters, utilize elastomer dampeners that may be changed to provide dampening for all weight capabilities

TrueTrack Technology (optional)

The patented TT® TrueTrack technology features Gearless-Brushless GB™ motors and motor controller. This standard feature helps keep the power wheelchair on a true forward path—even on many slopes, thresholds and uneven terrains. TrueTrack minimizes the need for veer correction, diminishing fatigue for joystick and switch drivers.



Gearless-Brushless GB™ Motors (optional)

Invacare's Gearless-Brushless GB™ motors are not only a key component of the TT® TrueTrack technology, the design is 75% efficient resulting in 17% more battery range than Invacare's 4-pole motors. Battery range is an important feature for active users and users requiring powered seating systems.

Electronics

MK Series™ electronics have been the foundation for power wheelchair electronics for a number of years. Invacare designs and manufactures its own power wheelchair electronics specifically for the power wheelchair user's needs.



- MKIV™ A electronics come standard on the Ranger X™ power wheelchair
- MKIV electronics provide a wealth of programming options to help virtually any user drive safely and confidently
- MKIV electronics interface with an incredible range of driver inputs, including multiple-sized joysticks, Touchpad technology, Sip N' Puff controls and all ASL non-proportional driver controls
- TRCM or TAC powered seating control modules can interface with the MKIV system to allow full control of Invacare TARSYS® Tilt and Recline powered seating systems
- MKIV auxiliary output module (COM 12/COM 34) offers up to five-switch closures and four-ports for control of communication devices, computers and other auxiliary devices.
- Patented laptop Invacare Virtual Service™ (IVS) software allows the provider to perform diagnostics on the MKIV electronics

Invacare® Transport Tie Down Options

Invacare transport tie down options have been tested to ANSI/RESNA WC Vol. 1 Section 19 and go beyond the traditional "securement" brackets on other wheelchair designs. The transport tie down options include four tie-down locations that have been crash tested and are clearly marked for the caregiver to see. The options also include a battery securement system that prevents batteries from becoming dislodged in the case of an accident.

Invacare order forms will include two transport tie down selections, TRRO* and TRBKTS.** All Invacare wheelchairs with TRRO have been tested and passed the ANSI/RESNA WC Vol. 1 Section 19 standard using a specific seating system and configuration. See order forms and the owners manual for more information.

* TRRO includes four factory-installed transport brackets and a wheelchair anchored pelvic belt. TRRO has been crash-tested in accordance with ANSI/RESNA WC Vol 1 Section 19 Frontal Impact Test requirements for wheelchairs with a 168 lb. crash dummy, which corresponds to a person with a weight of 114 to 209 lb.

** TRBKTS includes four factory-installed wheelchair transport brackets. TRBKTS has not been crash-tested in accordance with WC 19. Use these transport brackets only to secure an unoccupied wheelchair during transport.

As of this date, the Department of Transportation has not approved any tie-down systems for transportation of a user while in a wheelchair, in a moving vehicle of any type. It is Invacare's position that users of wheelchairs should be transferred into appropriate seating in vehicles for transportation and use be made of the restraints made available by the auto industry. Invacare cannot and does not recommend any wheelchair transportation systems.





Yes, you can.®

Seating & Positioning Flexibility

Adjustable ASBA Rehab Seat design meets the widest range of changing consumer needs.

- Adjustable angle back offers a range of 85° to 105°
- Width is adjustable in 1" increments in the following ranges: 12"-16", 16"-20", 20"-24"
- Depth is adjustable in 1" increments in the following ranges: 12"-18", 16"-19", 19"-22"
- Manual recline option is available

TARSYS® Powered Seating Systems can be added easily as more rehab options are needed

- Offers Tilt, Recline, Tilt/Recline, Power Tilt Only, Elevating Seat or PTO/Elevating Seat
- Seat location system allows for the seat to slide along the base frame to optimize the center of gravity while maintaining traction and stability

Storm Series® drive wheels can be adjusted forward or rearward for maximum maneuverability and precise center-of-gravity adjustment

Specifications

Maximum speed	
4-pole motor (standard)	6 mph
GB with TrueTrack motor (standard)	7 mph
Dimensions	
Weight capacity	
4-pole motor w/MKIV A electronics	300 lb.
With tilt/recline	250 lb.
GB motor (optional)	400 lb.
With tilt/recline	350 lb.
Overall base width (with 14" x 3" wheels)	
4-pole motor (standard)	25"
GB with TrueTrack motor (optional)	24.75"
Seat-to-floor height (at 0° tilt)	
Low	17.5"
Medium	19.5"
Tall	21"
Overall base length*	
Short base	28.5"
Long base	31.5"
Seat adjustability	
Width (1" increments)	12" to 22"
Depth (1" increments)	12" to 22"
Back angle (5° increments)	85° to 105°
Seat tilt (continuous adjustment)	0° to 10°
Arm height	
Fixed	10"
Adjustable	9.5" to 13.5"

Drive wheels	
Pneumatic (standard)	14" x 3"
Foam-filled (optional)	14" x 3"
Pneumatic and foam-filled** (optional)	14" x 4"
Free-wheel hub with HD 4-pole motor (optional)	
Casters	
Semi-pneumatic (standard)	8" x 2.25"
Pneumatic (optional)	8" x 2.5"
Pneumatic and foam-filled (optional)	9" x 3"
Caster suspension (optional)	
Pneumatic and semi-pneumatic	8"
Electronics	
MKIV™ A with switch options	(standard)
Batteries***	
Group 24	(standard)
Weight (18" x 18" seat size with Group 24 batteries and without front riggings)	
	266 lb.

* Measured from head tube to standard anti-tip wheel.
 ** 14" x 4" adds 2" to overall width. Not available with TrueTrack.
 *** Sealed gel cell recommended.

Accessories

Alternative seating	
2G tilt, recline and combination	
Manual reclining back	
Power-elevating legrests	
Ventilator tray	

ANSI/RESNA W/C 19 sec 6.2 Presale Literature Notification – Storm Series® Ranger X™

- Minimum turning radius 31.9"
Minimum turn-around width 63.8"
- Ranger X wheelchairs have a maximum length of 41.5" inches or 1054 mm, meeting the ADA definition of a common wheelchair and the minimum length requirements of lifts on public vehicles.
- Total wheelchair mass = 296 lb. (134 kg) – including front riggings, wheel locks, TRO brackets, wheelchair-anchored pelvic belt, and seating.
- Average lateral dummy displacement = approximately .48" (121.3mm)
- Overall Score = 20 Overall Rating = A
- The Ranger X tested was sized to accommodate a 168 lb. test dummy (17"x17"x 18" high and 14" Rear-Wheel Drive tires).
 - The Ranger X was tied down using four tie-down brackets – 2 brackets located on the front of the base frame and 2 brackets located on the rear of the base frame.
 - The Ranger X was tested with a 168 lb. test dummy.
 - The Ranger X tested used a wheelchair-anchored pelvic belt and vehicle-anchored shoulder belt.
 - The Ranger X tested complies with the performance requirements of ANSI/RESNA W/C 19 sec. 5.3.
- For all types of vehicles, the Torque SP requires four SAE J2249-compliant tie-down strap assemblies for effective securement.
- The Ranger X provides a location for anchoring of an Invacare-provided pelvic belt. This belt has been tested in accordance with ANSI/RESNA W/C 19.
- The wheelchair-anchored pelvic belt is supplied by Invacare.



"Invacare says 'Yes, you can.®' and I couldn't have said it better myself."

Arnold Palmer

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Patent pending.

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