

Battery-Powered Commercial X-Frame EMS Ambulance Stretcher - 660 lb Capacity

Item: MS3C-POWERPROX



User Manual

Read this manual completely before operating or servicing the stretcher. Retain it for future reference.

MS3C
320 Mason Creek Dr. Suite 150
Katy, TX 77450
www.msec.co

WARNING: Observe all safety symbols, warnings, and precautions on the product and in this manual.

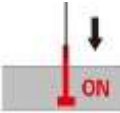
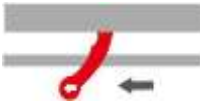
- Review the complete operating instructions before use.
- Use this User Manual together with all applicable product labels, service information, and facility procedures.

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Graphics, Symbols, and Safety Markings

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Graphics, Symbols, and Safety Markings

Graphics	Content
	Keep package upright during transport.
	Fragile contents. Handle with care.
	Keep dry. Protect package from moisture.
	Stacking limit: maximum 3 packages high.
	WARNING: Identifies a hazardous situation or condition requiring attention.
	Type B applied part (as marked on the device).
	CAUTION: Pinch/crush hazard. Keep hands clear.
	Maximum load / safe working load marking.
	Manual lift/release control - unlocked position.
	Stretcher deck/frame release - unlocked position.
	Do not rotate the IV pole.

1. Product Description and Intended Use

Product Description

- The MS3C-POWERPROX is a battery-powered, X-frame wheeled stretcher designed to support patient transport and ambulance loading/unloading operations.

Intended Use

- The stretcher is designed to be maneuvered by trained EMS personnel and incorporates powered height adjustment to assist with routine transport and ambulance loading. Operator staffing shall be determined by patient condition, load, terrain, local protocol, and applicable workplace safety requirements.

2. Scope of Application

For transport and transfer of patients in EMS, ambulance, hospital, clinic, and other healthcare environments by trained personnel.

3. Product Features

- 1) Powered hydraulic height adjustment.
- 2) Powered operation is designed to reduce manual lifting during routine ambulance loading and unloading; use additional personnel whenever required by patient condition, load, terrain, or local protocol.
- 3) Wide-profile casters support maneuverability across typical EMS transport surfaces.
- 4) Aluminum-alloy frame construction provides corrosion resistance and cleanable exposed surfaces.

4. Operating Conditions and Technical Specifications

Operating Conditions:

Electrical: AC charger input 220 VAC $\pm 10\%$, 50 Hz; vehicle charging input 12 VDC $\pm 10\%$; battery nominal voltage 20 VDC $\pm 10\%$. IMPORTANT FOR U.S. USE: Verify the charger nameplate before connection. Do not connect a 220 V-only charger directly to a standard 120 V U.S. receptacle.

Technical Specifications:

Dimensions are nominal; allowable dimensional tolerance: $\pm 20\%$.

Product Name	Battery-Powered Commercial X-Frame EMS Ambulance Stretcher
Model	MS3C-POWERPROX
High Position (L x W x H)	78 x 22 x 47 in. (198 x 56 x 119 cm), nominal
Low Position (L x W x H)	78 x 22 x 20 in. (198 x 56 x 51 cm), nominal
Backrest Adjustment	0° to 75° maximum
Knee/Leg Adjustment	0° to 20° maximum
Maximum Load Capacity	660 lb (300 kg), including patient, mattress, and accessories

Maximum load rating applies to the complete stretcher system, including patient, mattress, and installed accessories, with the stretcher in its highest position.

Do not exceed the rated load under any operating condition.

5. Operating Instructions

5.1 Backrest Angle Adjustment

Support the backrest, actuate the red release handle located beneath the head end, and move the backrest to the required angle. Release the handle and verify that the backrest is positively locked before placing a load on it.

5.2 Side-Rail Operation

Raise each side rail fully until the locking mechanism engages. Verify engagement by applying light downward pressure. To lower a side rail, support the rail, actuate the red release control, and lower the rail in a controlled manner.

CAUTION: Pinch hazard. Keep hands, fingers, clothing, tubing, and other items clear of the side-rail hinges and locking mechanism during operation.

5.3 Patient Restraints

Secure the patient with all supplied restraint straps before transport. Confirm that each buckle is latched, straps are correctly routed, and tension is appropriate for the patient.

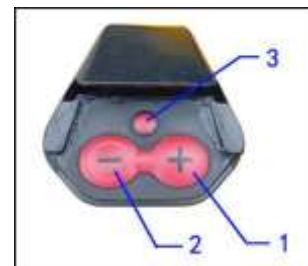
5.4 Powered Height Adjustment

Use the foot-end control shown in Figure 1. Press and hold "+" to raise the stretcher.

Press and hold "-" to lower the stretcher. Release the control when the required height is reached.

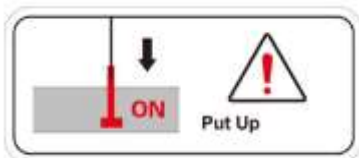
NOTE: If electrical power is unavailable, the manual pressure-release control at the foot end may be used for emergency height adjustment as shown in Figure 2. Manual operation requires two qualified operators.

Figure 1



1. "+" Button will raise up stretcher height
2. "-" Button will lower down stretcher height
3. On/Off Button that operates Warning Lights

Figure 2



- For Manual Lifting Up: Pull and hold the stretchers manual pressure relief knob (Figure 2). Two operators at both ends of the stretcher will need to manually lift the stretcher. Once desired height is achieved, release the knob. Once the knob is released and the stretcher is stable, the additional operators will no longer be needed and patient is ready for transport.
- For Manual Lowering Down: Two operators at both ends of the stretcher will need to manually lift the stretcher. While securely holding the stretcher handles, pull and hold the manual pressure release knob. The frame of the stretcher will slowly lower the height under the weight of the stretcher. Once desired height is achieved, release the knob. Once the knob is released and the stretcher is stable, the additional operators will no longer be needed and patient is ready for transport.

5.5 Battery Installation and Charging

- Battery installation: Align the battery with the receptacle below the display and slide it fully into position until the latch audibly engages. Verify that the battery is retained before operation.
- Battery removal: Support the battery, depress and hold the battery-release control, and slide the battery out of the receptacle.
- Battery charging: Charge only with the manufacturer-supplied charger specified for the installed 20 V battery. A flashing green indicator denotes charging; a steady green indicator denotes charge completion. A red indicator denotes a charging fault. Refer to the charger label and troubleshooting section before further use.

NOTE: Check battery state of charge before each shift and before extended transport. Recharge as required. Do not use third-party or unapproved chargers.

5.6 IV Pole Operation

- 1) Deploy the IV pole and seat it fully in mounting socket A.
- 2) To adjust height, rotate locking knob B counterclockwise, extend section C to the required height, then rotate knob B clockwise until secure.
- 3) If additional height is required, extend section D until locking feature E is fully engaged.
- 4) Hang the IV container from hook F as shown in Figures 5 and 6.
- 5) To stow the IV pole, remove all suspended loads and reverse the deployment sequence.

WARNING: Maximum IV-pole load is 11 lb (5 kg). Do not rotate the IV pole. Do not use the IV pole as a push/pull handle.

Figure 5

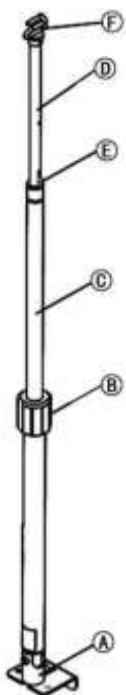
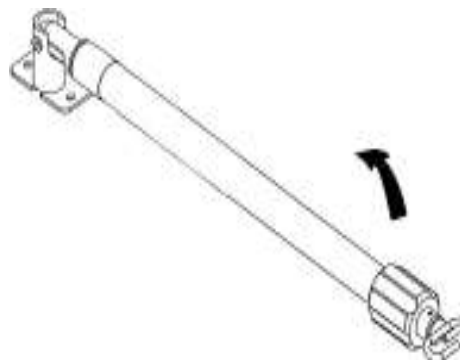


Figure 6



5.7 Stretcher Length Adjustment

- Upper-frame adjustment: Raise the backrest to its highest position. Lift the frame adjustment handle and retract the adjustable frame section to the required position.

NOTE: This function applies only to configurations equipped with an adjustable frame section.

- Lower-frame adjustment: Pull the red telescoping adjustment control and retract the lower frame as shown in Figure 7.
- Return to full length by reversing the adjustment sequence. Before patient use, verify that all telescoping sections are fully seated and positively locked.

NOTE: The shortened configuration is intended to improve maneuverability in elevators and other confined areas. Do not transport a patient unless all required frame locks are fully engaged.

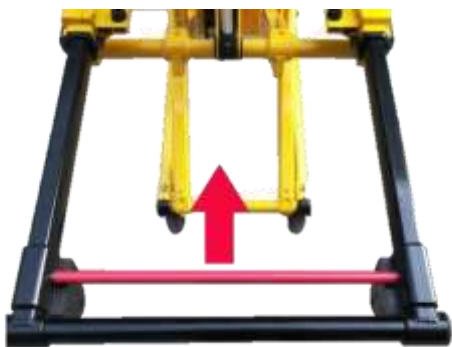


Figure 7



Figure 8

Figure 8 shows the stretcher in its fully retracted position

5.8 Warning-Light Operation

Press warning-light control (3) in Figure 1 to activate the flashing side warning lights. Press the control again to deactivate them. The lights are supplemental visibility aids and do not replace required ambulance or scene-warning equipment.

6. Warnings and Safety Precautions

- Only trained EMS or healthcare personnel who have demonstrated competency with this stretcher may operate it. Follow this manual, applicable facility procedures, ambulance loading procedures, and local EMS protocols. Improper operation may result in patient or operator injury or equipment damage.
- Before moving the stretcher, raise and lock both side rails as appropriate and secure the patient with all required restraints. Use a clean sheet or other facility-approved barrier when required by infection-control policy.
- Load or unload only when the ambulance is stationary on a firm, stable surface and the loading path is clear. Maintain positive control of the stretcher and keep it supported by the ambulance until the undercarriage is fully deployed and the wheels are in stable contact with the ground. Verify that the undercarriage is locked before moving away from the ambulance.
- Do not misuse, drop, impact, overload, or operate the stretcher outside the conditions specified in this manual. Never exceed the 660 lb (300 kg) maximum load rating.
- Inspect restraint straps, buckles, attachment points, fasteners, casters, locks, frame joints, and moving components at the prescribed intervals. Replace worn or damaged components and tighten loose fasteners in accordance with service specifications.
- Protect mattress and stretcher surfaces from needles, scalpels, and other sharp instruments. Use an appropriate puncture-resistant barrier when procedures involving sharps are performed on the stretcher.
- If any structural, restraint, mattress, electrical, hydraulic, caster, control, or battery component is damaged or does not operate correctly, immediately remove the stretcher from service. Use only manufacturer-approved replacement parts and dispose of batteries/electronic components in accordance with applicable federal, state, and local requirements.

7. Inspection, Cleaning, and Preventive Maintenance

- Maintain the stretcher in a clean, dry, serviceable condition. Remove the stretcher from service if damage or abnormal operation is identified.

7.1 Cleaning and Disinfection

Use a facility-approved cleaning/disinfection product that is compatible with aluminum, plastics, coated surfaces, mattress materials, and restraint webbing. Follow the chemical manufacturer's label for concentration, contact time, application, rinsing, and personal protective equipment. Do not use corrosive agents or products known to damage the stretcher materials.

Before use, inspect patient-contact surfaces and clean/disinfect them in accordance with facility infection-control procedures. Before first use and after extended storage, clean and inspect the complete stretcher before returning it to service.

After each patient use, clean and disinfect the mattress, side rails, handles, restraints, and other contaminated surfaces using compatible products and facility-approved procedures. Remove chemical residue as required by the product label and dry the stretcher before use or storage.

WARNING: Remove the battery before cleaning. Do not immerse the stretcher or allow liquids to enter the display, controls, battery receptacle, wiring, connectors, hydraulic components, or other electrical assemblies.

Cleaning Precautions

- Remove the battery before cleaning or disinfection. Do not clean the stretcher with the battery installed.
- Follow all cleaning/disinfectant manufacturer instructions, including dilution, contact time, and rinsing requirements.
- Inspect the complete stretcher before each use. If fasteners or structural components are loose, damaged, or missing, remove the stretcher from service until corrected by qualified service personnel.
- Inspect all restraint straps, stitching, buckles, and attachment points before each use. Replace any restraint showing cuts, fraying, deformation, contamination that cannot be removed, or impaired buckle operation.

Battery charging: During normal service, recharge when remaining capacity is approximately 10-20%. Avoid routine deep discharge because repeated full depletion can reduce battery performance and service life.

Long-term battery storage: If the stretcher will be out of service for an extended period, remove the battery and store it in a cool, dry location between 32°F and 68°F (0°C to 20°C). Recharge at least every 3 months to limit excessive self-discharge and permanent capacity loss.

NOTE: Elevated temperature and humidity increase battery self-discharge and may shorten service life. Do not store the battery in hot, humid, or wet conditions.

7.2 Preventive Maintenance Schedule

- Every 2,000 complete lift/lower cycles or every 6 months, whichever occurs first: inspect fasteners and structural joints; inspect restraints; inspect casters and locks; inspect moving components; and lubricate approved points as specified by service procedures.
- Every 5,000 complete lift/lower cycles or annually, whichever occurs first: perform the 2,000-cycle inspection and additionally inspect electrical wiring/connectors, battery contacts, control functions, powered lift operation, hydraulic components, leakage, abnormal noise, and overall structural condition.

NOTE: One cycle is recorded for each complete powered extension or complete powered retraction of the stretcher. Perform maintenance at the first limit reached: cycle count or elapsed time.

8. Storage

Store the stretcher in its shipping configuration or a protected service configuration. Observe package orientation, stacking, moisture, and environmental markings.

- A. Storage temperature: 29.2°F to 158°F (-1.6°C to 70°C)
- B. Storage relative humidity: ≤93%, non-condensing

9. Transportation

- A. The packaged stretcher may be transported by air, sea, or ground when secured and handled in accordance with carrier requirements and package markings.
- B. Manual carrying requires an adequate number of trained personnel and appropriate lifting technique. Secure all movable components before carrying.

10. Limited One-Year Warranty

This product is covered by a one-year limited warranty beginning on the later of the documented purchase date or delivery date. During the warranty period, defects attributable to materials or workmanship will be repaired in accordance with the manufacturer's warranty terms. Coverage excludes damage resulting from misuse, overload, improper operation, improper maintenance, accident, unauthorized modification or repair, incompatible parts/accessories, or failure to follow this manual.

The following conditions are excluded from warranty coverage:

- 1) Operation outside the specified environmental, electrical, load, or operating conditions.
- 2) Failure or damage associated with non-approved replacement parts, batteries, chargers, or accessories.
- 3) Failure or damage caused by improper operation, cleaning, storage, inspection, or maintenance.
- 4) Failure or damage resulting from service by unauthorized or unqualified personnel.
- 5) Damage caused by fire, earthquake, severe weather, flood, lightning, civil disturbance, war, or other events beyond the manufacturer's reasonable control.

10.1 Replacement Parts and Technical Support

Replacement parts are available from the manufacturer. Contact the After-Sales/Technical Support Department for approved replacement parts, circuit diagrams, component lists, and other service information.

If a malfunction occurs, remove the stretcher from service and have it inspected by qualified service personnel using manufacturer service information. Only qualified personnel may disassemble, adjust, or repair electrical, hydraulic, or structural assemblies.

NOTE: Unauthorized disassembly, repair, modification, or use of non-approved components may create a safety hazard and may void warranty coverage.

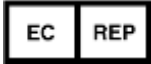
Common faults and troubleshooting methods:

Serial Number	Fault Code	Description	Possible Cause of Failure	Solution
1	ER5	Charge fault	Abnormal in position switch	Pull the stretcher away from the charging column, then push it back into the connecting charging column to resume charging.
2	ER10	Short circuit protection	Current up to 150A for immediate protection	Contact the manufacturer
3	ER11	Over current protection	Current of 70A lasts for 1s after protection	Contact the manufacturer
4	ER13	Under voltage protection	Battery voltage below 13.0V	Contact the manufacturer
5	ER16	Battery high temperature	Protection when the battery temperature is higher than 167 °F	Contact the manufacturer
6	ER17	Battery low temperature	Battery temperature below –13 °F protection	Contact the manufacturer
7	ER18	MOS thermal	MOS tube temperature exceeds 194 °F	Contact the manufacturer
8	ER23	Locked-rotor protection	The software detects that the motor is not performing proper phase switching and that the motor wire is damaged.	Contact the manufacturer

Spare Parts List

No.	Parts	QTY	Optional
1	Stretcher Frame	1	
2	20-Volt Battery	2 pcs	Battery capacity: ☐ 4Ah ☐ 6Ah ☐ 8Ah
3	Charger	1	
4	Safety Belt	1 set	
5	Mattress Pad	1	
6	User Manual	1	
7	Certificate of Quality	1	
8	Warranty Card	1	

Labels & Packing Symbols

Symbol	Content	Symbol	Content
	CE Symbol		Medical Device
	Manufacturer Name Address		Name and Address of European Union Representative
	Manufacture Date		Use until year & month (Expiration date)
	Batch Code		Consult instructions for use
	Warnings and Precautions		Non-Sterile
	Keep dry		Humidity limitation

Manufacturer Information: 



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