stryker®

Operations/ Maintenance Manual

Medical

Model 6500 RUGGED® Power-PRO Cot

Important Information

File in your maintenance records

For parts or technical assistance call
800 327 0770 (option 2)

Table of Contents

Table of Contents

INTRODUCTION

This manual is designed to assist you with the operation and maintenance of the RUGGED POWER PRO XT Ambulance Cot. Read it thoroughly before using the equipment or beginning any maintenance on it.

SPECIFICATIONS

Maximum Cot Load Capacity	700 pounds
Maximum Unassisted Lift Capacity	500 pounds
Backrest Articulation/Shock Position	2° to 73° / +15°
Overall Length/Minimum Length/Width	81” / 63” / 23”
Height[1]	Adjustable from 14” to 41 1/2”
Weight[2]	120 pounds
Caster Diameter/Width	6”/2”
Minimum Operators Required for Loading/Unloading an Occupied Cot	2
Minimum Operators Required for Loading/Unloading an Unoccupied Cot	1
Recommended Fastener Systems	Model 6370 or 6377 Floor Mount Type Model 6371 Wall Mount Type
Recommended Loading Height[3]	Adjustable up to 36”
Roll–In Style	Yes
Single Wheel Lock / Double Wheel Lock	Optional
Hydraulic Oil	Stryker Part Number 6500–001–293
Battery System	DEWALT® 24 Volt NiCd Battery
– Battery	Stryker Part Number 6500–060–000
– Charger	Stryker Part Number 6500–070–000 (120 Volt) Part Number 6500–072–000 (12/24 Volt)

1 Height measured from bottom of mattress at seat section to ground level.

2 Cot is weighed with 1 battery and without mattress and restraints.

3 Cot may be set to any ambulance deck height ranging from 26” to 36.”

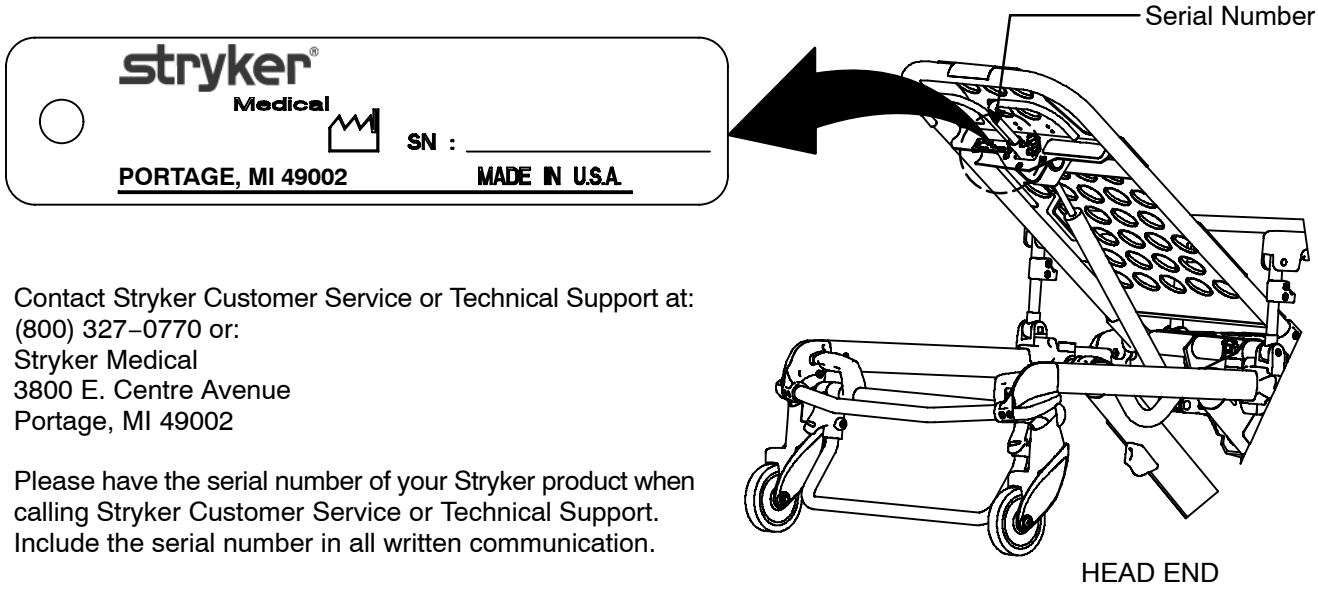
Stryker reserves the right to change specifications without notice.

The Power–PRO XT is designed to conform to the Federal Specification for the Star–of–Life Ambulance (KKK–A–1822E).

The Power–PRO XT is designed to be compatible with competitive cot fastener systems.

DEWALT® is a registered trademark of Black & Decker Inc.

Patents pending.



Contact Stryker Customer Service or Technical Support at:
(800) 327–0770 or:
Stryker Medical
3800 E. Centre Avenue
Portage, MI 49002

Please have the serial number of your Stryker product when calling Stryker Customer Service or Technical Support. Include the serial number in all written communication.

Figure 1 – Cot Serial Number & Location

WARNING / CAUTION / NOTE DEFINITION

The words WARNING, CAUTION and NOTE carry special meanings and should be carefully reviewed.

⚠WARNING

Alerts the reader about a situation, which if not avoided, could result in death or serious injury. It may also describe potential serious adverse reactions and safety hazards.

CAUTION

Alerts the reader of a potentially hazardous situation, which if not avoided, may result in minor or moderate injury to the user or patient or damage to the equipment or other property. This includes special care necessary for the safe and effective use of the device and the care necessary to avoid damage to a device that may occur as a result of use or misuse.

NOTE

This provides special information to make maintenance easier or important instructions clearer.

Symbols and Definitions

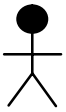
Warning, Refer to Service/Maintenance Manual

Dangerous Voltage Symbol

Pinch Point

Extend

Retract



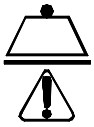
Type B Equipment: equipment providing a particular degree of protection against electric shock, particularly regarding allowable leakage current and reliability of the protective earth connection.

Internally Powered Equipment: Equipment able to operate from an internal (removeable) electrical power source.

Mode of Operation: 10% (1 Min. On / 5 Min. Off)

IPX6: Protection from from powerful jets

Medical Equipment Classified by Underwriters Laboratories Inc. with Respect to Electric Shock, Fire, and Mechanical Hazards Only in Accordance with UL 60601–1 and CAN/CSA C22.2 No. 601.1



Safe Working Load Symbol

The DEWALT® Battery System is a registered trademark of Black & Decker Inc.

In accordance with European Directive 2002/96/EC on Waste Electrical and Electronic Equipment, this symbol indicates that the product must not be disposed of as unsorted municipal waste, but should be collected separately. Refer to your local distributor for return and/or collection systems available in your country.

Warranty

Stryker EMS, a division of the Stryker Corporation, offers one warranty option in the United States:

Two (2) year parts and labor. Stryker EMS warrants to the original purchaser that its products should be free from manufacturing non−conformances that affect product performance and customer satisfaction for a period of two (2) years after date of delivery. Stryker's obligation under this warranty is expressly limited to supplying replacement parts and labor for, or replacing, at its option, any product that is, in the sole discretion of Stryker, found to be defective. Expendable components, i.e. mattresses, restraints, IV poles, storage nets, storage pouches, O2 straps, and other soft goods, have a one (1) year limited warranty.

Under this warranty, Stryker EMS warrants to the original purchaser that welds on its products will be free from structural non−conformances that affect product performance for the full service life of the product. Original purchasers will also obtain a three (3) year limited parts warranty for the X−frame components of the Power−PRO cot and a three (3) year limited power train warranty covering the motor pump assembly and hydraulic cylinder assembly. Stryker's obligation under this three (3) year limited warranty is expressly limited to supplying replacement parts and labor for, or replacing, at its option, any part that is, in the sole discretion of Stryker, found to be defective.

If Stryker requests, products or parts for which an original purchaser makes a warranty claim, the purchaser shall return the product or part prepaid freight to Stryker's factory.

Any improper use or alteration or repair by unauthorized service providers in such a manner as in Stryker's judgment affects the product materially and adversely, shall void this warranty. Any repair of Stryker products using parts not provided or authorized by Stryker shall void this warranty. No employee or representative of Stryker is authorized to change this warranty in any way.

This statement constitutes Stryker EMS's entire warranty with respect to the aforesaid equipment. STRYKER MAKES NO OTHER WARRANTY OR REPRESENTATION EITHER EXPRESSED OR IMPLIED, EXCEPT AS SET FORTH HERIN. THERE IS NO WARRANTY OF MERCHANTABILITY AND THERE ARE NO WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT SHALL STRYKER BE LIABLE HEREUNDER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OR IN ANY MANNER RELATED TO SALES OR USE OF ANY SUCH EQUIPMENT.

DEWALT® Product Warranty

Any DEWALT® product purchased from Stryker EMS is covered for a period of one (1) year after date of delivery. Stryker's obligation under this warranty is expressly limited to supplying replacement parts and labor for, or replacing, at its option, any product that is, in the sole discretion of Stryker, found to be defective.

Warranty

Stryker EMS Return Policy

Cots, Stair Chairs, Evacuation Chairs, Cot Fasteners and Aftermarket Accessories may be returned up to 180 days of receipt if they meet the following guidelines:

Prior to 30 Days

- 30 day money back guarantee in effect
- Stryker EMS is responsible for all charges
- Returns will not be approved on modified items

Prior to 90 Days

- Product must be **unused**, **undamaged** and in the original packaging
- Customer is responsible for a 10% restocking fee

Prior to 180 Days

- Product must be **unused**, **undamaged** and in the original packaging
- Customer is responsible for a 25% restocking fee

Return Authorization:

Merchandise cannot be returned without approval from the Stryker Customer Service Department. An authorization number will be provided which must be printed on the returned merchandise. Stryker reserves the right to charge shipping and restocking fees on returned items.
SPECIAL, MODIFIED, OR DISCONTINUED ITEMS NOT SUBJECT TO RETURN.

Damaged Merchandise:

ICC Regulations require that claims for damaged merchandise must be made with the carrier within fifteen (15) days of receipt of merchandise. DO NOT ACCEPT DAMAGED SHIPMENTS UNLESS SUCH DAMAGE IS NOTED ON THE DELIVERY RECEIPT AT THE TIME OF RECEIPT. Upon prompt notification, Stryker will file a freight claim with the appropriate carrier for damages incurred. Claim will be limited in amount to the actual replacement cost. In the event that this information is not received by Stryker within the fifteen (15) day period following the delivery of the merchandise, or the damage was not noted on the delivery receipt at the time of receipt, the customer will be responsible for payment of the original invoice in full.
Claims for any short shipment must be made within thirty (30) days of invoice.

International Warranty Clause:

This warranty reflects U.S. domestic policy. Warranty outside the U.S. may vary by country. Please contact your local Stryker Medical representative for additional information.

Patent Information

RUGGED products are manufactured under the following patents:

United States	5,575,026	6,276,010	6,648,343	6,908,133
	5,537,700	6,125,485	6,735,794	

Other Patents Pending

Summary of Safety Precautions

The following is a list of safety precautions that must be observed when operating or servicing this unit. The precautions are repeated throughout the manual, where applicable. Carefully read this list before using or servicing the unit.

⚠WARNINGS

- Do not modify the RUGGED ambulance cot or any components of the cot, including the hydraulic unit. Modifying the product can cause unpredictable operation resulting in injury to the patient or operator. Modifying the product will also void its warranty.
- The in−fastener shut−off module must be positioned properly before placing the ambulance cot into EMS service. Failure to install the in−fastener shut−off module may cause injury to the patient or operator and/or damage to the vehicle.
- It is the responsibility of the cot operator to ensure the ambulance cot being used in the Stryker cot fastener system meets the installation specifications listed on page 20. Injury may result if a non−compatible ambulance cot is used in the Stryker cot fastener system.
- Have the vehicle safety hook installed by a certified mechanic. Improper safety hook installation can result in injury to the patient or operator and/or damage to the cot.
- Failure to install the vehicle safety hook can result in injury to the patient or operator. Install and use the safety hook as described in this manual. To avoid injury, verify the safety bar has engaged the safety hook before removing the ambulance cot from the patient compartment.
- Install the vehicle safety hook at least 1/8” from the edge of the rear ambulance door. After installation, verify that the undercarriage locks in the load position without contacting the emergency vehicle bumper.
- The ambulance cot must have at least 5/8” of clearance between the emergency vehicle bumper and the ambulance cot to disengage the safety bar when unloading the product from the ambulance. Verify that the product is locked in a rolling position before disengaging the safety bar from the safety hook (if equipped).
- To avoid accidental release of the Pedi−Mate™, and possible injury to the infant, ensure that the restraint buckle is located away from obstructions on the ambulance cot or accessories.
- Never apply the optional wheel lock(s) while a patient is on the ambulance cot. Tipping could occur if the ambulance cot is moved while wheel locks are applied, resulting in injury to the patient or operator and/or damage to the product.
- Never install or use wheel locks on an ambulance cot with excessively worn wheels. Installing or using wheel locks on wheels with less than a 6” diameter could compromise the holding ability of the wheel lock, resulting in injury to the patient or operator and/or damage to the product or other equipment.
- To avoid risk of electric shock, never attempt to open the battery pack for any reason. If the battery pack case is cracked or damaged, do not insert it into the charger. Return damaged battery packs to a service center for recycling.
- Do not remove the battery when the ambulance cot is activated.
- Avoid contact with a wet battery or battery enclosure. Contact may cause injury to the patient or operator.
- When the optional head−end storage flat is being used, ensure it does not interfere with the operation of the retractable head section, safety bar and safety hook. Injury to the patient or operator could result.
- Improper usage of the RUGGED ambulance cot can cause injury to the patient or operator. Operate the ambulance cot only as described in this manual.
- Entanglement in powered ambulance cot mechanisms can cause serious injury. Operate the ambulance cot only when all persons are clear of the mechanisms.
- Practice changing height positions and loading and unloading the ambulance cot until operation of the product is fully understood. Improper use can cause injury.
- Do not allow untrained assistants to assist in the operation of the ambulance cot. Untrained technicians/assistants can cause injury to the patient or themselves.
- Do not ride on the base of the RUGGED ambulance cot. Damage to the product could occur, resulting in injury to the patient or operator.
- Grasping the RUGGED ambulance cot improperly can cause injury. Keep hands, fingers and feet away from moving parts.

Summary of Safety Precautions

⚠ WARNINGS

- Transporting the cot sideways can cause the cot to tip, resulting in possible damage to the product and/or injury to the patient or operator. Transporting the cot in a lowered position, head or foot end first, will minimize the potential of a cot tip.
- Any emergency vehicle to be used with this ambulance cot **must** have the in−fastener shut−off system installed.
- Always use all restraint straps to secure the patient to the ambulance cot. An unrestrained patient may fall from the ambulance cot and be injured.
- Do not attach restraints to the base or cross tubes, improper restraint attachment could result in damage to the cot further resulting in injury to the patient or operator.
- Never leave a patient unattended on the ambulance cot or injury could result. Hold the ambulance cot securely while a patient is on the cot.
- Siderails are not intended to serve as a patient restraint device. Refer to pages 24 and 25 for proper restraint strap usage. Failure to utilize the siderails properly could result in patient injury.
- High obstacles such as curbing, steps or rough terrain can cause the ambulance cot to tip, possibly causing injury to the patient or operator. Transporting the cot in lower positions can reduce the potential of a cot tip. If possible, obtain additional assistance (see page 53 for a reference chart) or take an alternate route.
- Whenever the weight of the ambulance cot and patient is off the wheels, the ambulance cot will **automatically** enter the high speed retract mode if the retract button is pressed.
- Once the weight is off the ground, the operator(s) must support the load of the patient, ambulance cot and any accessories. Failure to support the load properly may cause injury to the patient or operator.
- To avoid injury, verify the safety bar has engaged the safety hook before removing the ambulance cot from the patient compartment.
- Do not pull or lift on the safety bar when unloading the ambulance cot. Damage to the safety bar could result and injury to the patient or operator could occur.
- Do not press the extend (+) button until the safety bar engages the safety hook.
- To avoid injury, always verify that the head section is locked into place prior to operating the ambulance cot (see page 54). The head section must be extended and locked into position before loading/unloading the ambulance cot.
- When using a standard ambulance cot fastener, do not load the cot into the vehicle with the head section retracted. Loading the cot with the head section retracted may cause the product to tip or not engage properly in the cot fastener, possibly causing injury to the patient or operator and/or damage to the cot.
- The one person loading and unloading procedures are for use only with an empty ambulance cot. Do not use the procedures when loading/unloading a patient. Injury to the patient or operator could result.
- Do not attempt to operate the ambulance cot when loaded into a cot fastener. The in−fastener shut−off is **only** a means for disabling the electronic functionality. Damage to the product or injury to the patient or operator may occur.
- In−fastener shut−off must be installed in all ambulances in which the cot will be used.
- Use any appropriate personal safety equipment (goggles, respirator, etc.) to avoid the risk of inhaling contagion. Use of power washing equipment can aerate contamination collected during the use of the ambulance cot.
- Failure to properly clean or dispose of contaminated mattress or other ambulance cot components will increase the risk of bloodborne pathogens and may cause injury to the patient or operator.
- Hydraulically raising or lowering the cot may temporarily affect electronic patient monitoring equipment. For best results, patient monitoring should be conducted when the cot is idle.
- SOME CLEANING PRODUCTS ARE CORROSIVE IN NATURE AND MAY CAUSE DAMAGE TO THE PRODUCT IF USED IMPROPERLY. If the products described above are used to clean Stryker patient care equipment, measures must be taken to insure the cots are wiped with clean water and thoroughly dried following cleaning. Failure to properly rinse and dry the cots will leave a corrosive residue on the surface of the cots, possibly causing premature corrosion of critical components.

Summary of Safety Precautions

⚠WARNINGS

- Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source.

CAUTIONS

- Set the cot height limit to the proper stop height prior to operation.
- Installation of the safety hook should be done by a certified mechanic familiar with ambulance construction. Consult the vehicle manufacturer before installing the safety hook and be sure the installation of the safety hook does not damage or interfere with the brake lines, oxygen lines, fuel lines, fuel tank or electrical wiring of the vehicle.
- Ensure that restraints are not entangled in the base frame when raising and lowering the cot.
- Wheel locks are only intended to help prevent the ambulance cot from rolling while unattended. Wheel locks may not provide sufficient resistance on all surfaces or under loads.
- The ambulance cot fastener comes preconfigured for an X−Frame cot, if the fastener has been configured for an H−frame style cot, the cot retaining post must be adjusted to accommodate the fastener.
- Only use the battery and charger as specified.
- The Power PRO XT is not for use with an AC adaptor.
- Ensure that the battery is charged prior to placing into service. An uncharged or depleted battery may cause poor ambulance cot performance.
- A preventative maintenance program should be established for all Stryker EMS equipment. Preventative maintenance may need to be performed more frequently based on the usage level of the product. Close attention should be given to safety features including, but not limited to:

  Hydraulic power mechanism

  All electrical controls return to off or neutral position when released

  For additional maintenance information, refer to the preventative maintenance section
- Do not store items under the ambulance cot mattress. Storing items under the mattress can interfere with the operation of the ambulance cot.
- The weight of the equipment in the head end storage flat (if equipped) must not exceed 40 pounds (18 kilograms).
- The weight of the equipment in the pocketed backrest storage pouch (if equipped) must not exceed 20 pounds (9 kilograms).
- To avoid damage to the equipment hook, the weight of the accessories or equipment must not exceed 20 pounds (9 kilograms).
- The weight of the IV bags or equipment must not exceed 40 pounds (18 kilograms) for usage on the IV poles (if equipped).
- The weight of the oxygen bottle cylinder and/or other equipment must not exceed 40 pounds (18 kilograms) with the permanent foot−end oxygen bottle holder (if equipped).
- Before operating the cot, clear any obstacles that may interfere and cause injury to the operator or patient.
- The ambulance cot can be set at any height position. Establish the required load height for the ambulance cot prior to placing the unit into service.
- Loading, unloading or changing the position of a loaded ambulance cot requires a minimum of **two trained operators**. The operator(s) must be able to lift the total weight of the patient, cot and any other items on the cot (if additional assistance is needed, see page 53 for a reference chart).
- When unloading the ambulance cot from the patient compartment, ensure the caster wheels are safely set on the ground or damage to the product may occur.

Summary of Safety Precautions

CAUTIONS

- Do not “jog” the ambulance cot past the established load height of the product when the safety bar engages the vehicle safety hook or damage may occur to the product.
- Remove the battery if the cot is not going to be used for an extended period of time (over 24 hours).
- Remove the battery before washing the cot.
- Do not steam clean or ultrasonically clean this ambulance cot. Maximum water temperature should not exceed 180° F/82° C. Maximum air dry temperature (cart washers) is 240° F/115° C. Maximum water pressure should not exceed 1500 psi/130.5 bar. If a hand held wand is being used to wash the unit, the pressure nozzle must be kept a minimum of 24 inches/61 centimeters from the unit. Towel dry all casters and interface points. Failure to comply with these instructions may invalidate any/all warranties.
- Improper maintenance can cause injury or damage to the product. Maintain the ambulance cot as described in this manual. Use only Stryker−approved parts and maintenance procedures. Using unapproved parts and procedures could cause unpredictable operation and/or injury and will void the product warranty.
- Failure to use authorized parts, lubricants, etc. could cause damage to the ambulance cot and will void the warranty of the product.
- Hydraulic hose connections and lines can fail due to physical damage, kinks, age, and exposure. Check hoses and lines regularly to avoid damage to the cot. Check and tighten loose connections
- Hydraulic fluid connections can loosen due to physical damage and vibration. Check and tighten loose connections.
- When charging batteries in an ambulance vehicle, locate the charger either in the forward cab or an enclosed compartment (i.e. cabinet)

NOTES

- This manual should be considered a permanent part of the ambulance cot and should remain with the product even if the cot is subsequently sold.
- Adjustment of the rail clamp assembly may be required in order to compensate for any variation in the cot retaining post position depending on the ambulance cot manufacturer and model number.
- These are general instructions for installation of the Pedi−Mate™. Safe and proper use of the Pedi−Mate™ is solely at the discretion of the user. Stryker recommends all users be trained on the proper use of the Pedi−Mate™ before using it in an actual situation.
- If the arrow on the bottom bracket of the retaining post points toward the head end of the cot, the retaining post is set for an X−frame style cot. If the arrow points toward the foot end of the cot the post is set for an H−frame style cot.
- If the push button switch remains activated, the motor will remain halted until the operator releases the button. Once the push button is released, depress the appropriate button to “jog” the cot height in either direction.
- Add an additional 1/2 inch to your deck height measurement to allow for variations with patient weight and equipment added to the cot.
- The operators must lift the cot slightly off the ground to use the manual extend or retract while a patient is on the cot.
- Keep your spare battery on the charger at all times. Batteries slowly lose power when not on the charger.
- Failure to follow the cleaning directions when using the specified types of cleaners may void this product’s warranty.
- Activation of the manual release may cause the ambulance cot to drop slowly if less than 40 pounds are on the cot.
- When operating the manual release, avoid rapid lifting or lowering of the base or movement may appear sluggish; lift with a slow constant motion.

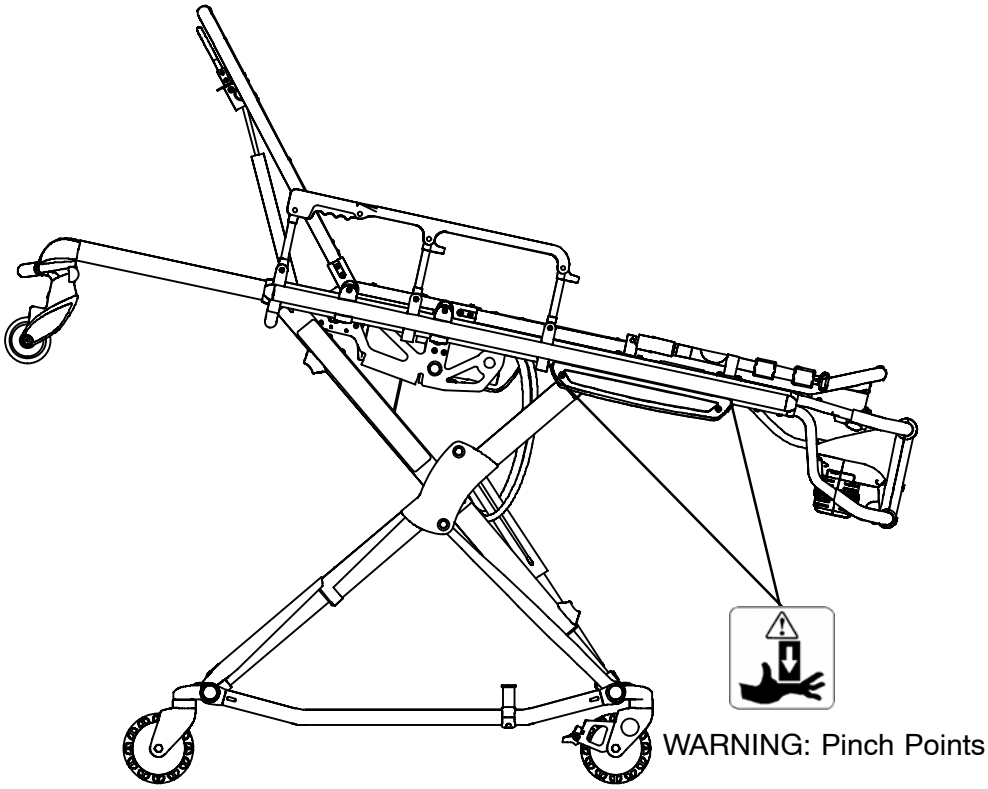


Figure 2 – Potential Pinch Points

Component Identification

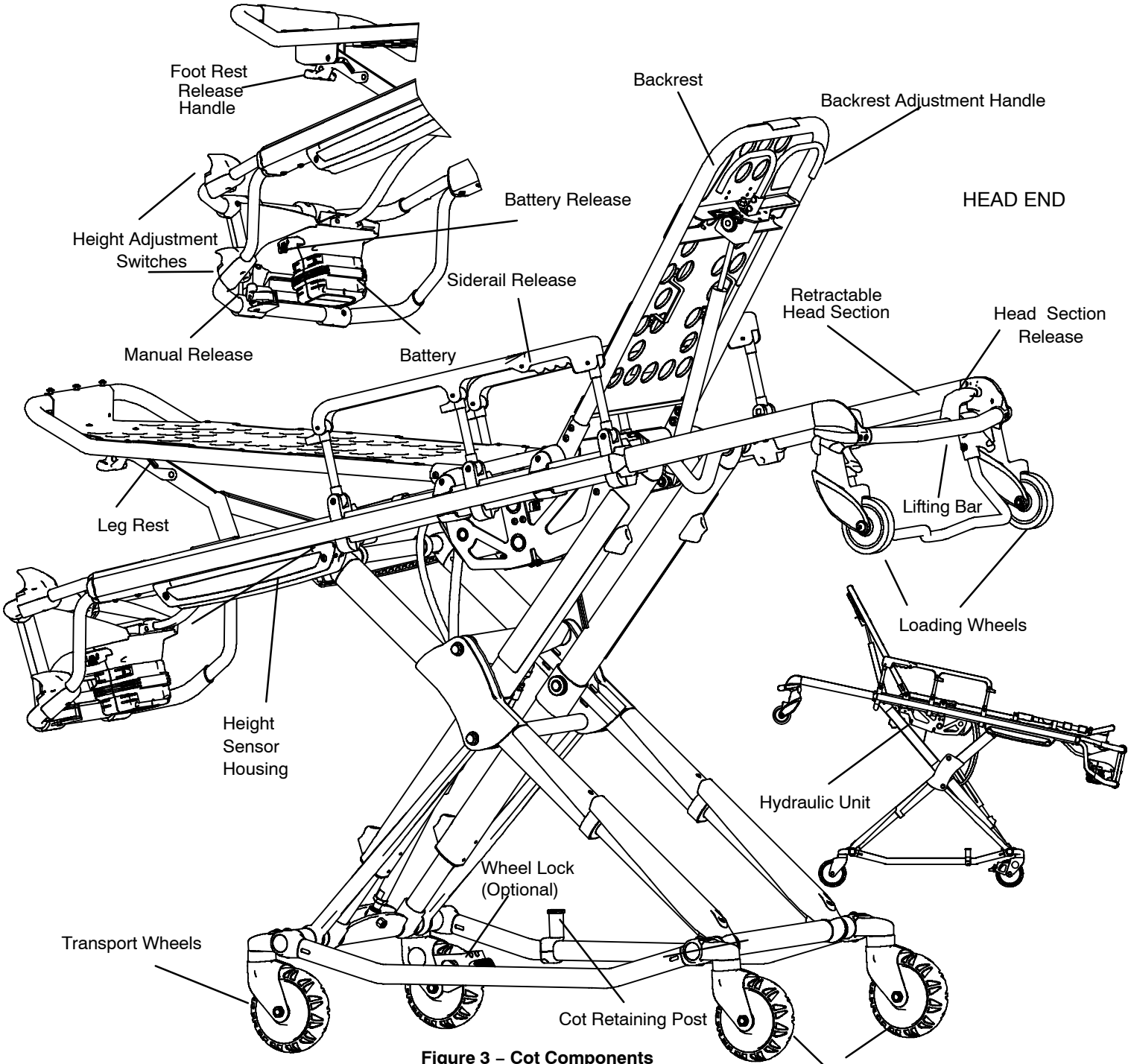


Figure 3 – Cot Components

Product Inspection

General Inspection

The condition of the ambulance cot is the responsibility of the owner. It is important that the ambulance cot is working properly before the product is put into service. Have a qualified service person use the following list and the operation instructions to check the ambulance cot before the product is put into service.

Unpack the cartons and check all items for proper operation.

Item	Routine	Page(s)
Battery	Unpack batteries and charger Charge battery according to DEWALT® instructions	P/N 6500−001−206

CAUTION

When charging batteries in an ambulance vehicle, locate the charger either in the forward cab or an enclosed compartment (i.e. cabinet).

Prior to checking the features and condition of the cot, the battery must be charged until the red LED lights continuously to ensure a full charge. Refer to the DeWALT® instructions for further charging information.

Once the battery is fully charged, inspect the ambulance cot for the following points:

Item	Routine	Page(s)
Battery	Charge spare battery (if necessary) according to DEWALT® instructions	P/N 6500−001−206
	Install battery into foot−end enclosure, battery indicator operates	35 & 55
	Ensure the battery remains firmly secured	55
	Release and remove battery from foot−end enclosure	55
	Reinstall battery into foot−end enclosure	55
Hydraulics	Inspect motor mount, all fasteners secure	95
	Check cylinder attachments at both ends, all fasteners secure	61
	Inspect main cable, all connections secure	76
	Inspect hoses and cylinder seal for leaks	93
Electronic Controls	Check battery indicator, charged	35
	Extend cot to raised position	53
	Verify ”jog” function operating smoothly	53
	Lower to retracted position, cot secures in a mid−height position (motor does not operate)	53
	Determine and set ambulance vehicle load height	18
	Check high speed retract	41
	Extend cot to full height, no drift	53
Manual Release	Verify the manual release lever functions properly, adjust accordingly	49
	With the cot empty, check the raise/lower function	50
	With the cot loaded with a minimum of 100 pounds, check the raise/lower function	50
	With the cot loaded with a minimum of 100 pounds, check the load/unload function	49

Product Inspection

Item	Routine	Page(s)
Litter	All fasteners secure (reference all assembly drawings)	
	All welds intact, not cracked or broken	
	No bent, broken, or damaged components	
	Inspect hand grips, no defects or tears	
	Verify siderails operate and latch properly	32
	Verify backrest cylinder operates properly through range of motion	32
	Verify the leg rest operates properly	31
	Install body restraints. Restraints intact and operating properly	24 & 25
	No rips or tears in mattress cover	
Head Section	All fasteners secure (reference all assembly drawings)	
	No bent or broken tubing or sheet metal	
	Verify the head section extends and retracts properly	54
	Inspect grip on lift bar, no defects or tears	
	Load wheels are secure and roll freely	
	Verify the safety bar operates properly	40
Base	All fasteners secure (reference all assembly drawings)	
	All welds intact, not cracked or broken	
	No bent, broken, or damaged components	
Wheels and Tires	No debris in wheels	
	All wheels secure, rolling and swiveling properly	
	Operate wheel locks (if equipped) – wheel secure when engaged, rolls freely when disengaged	29 & 30
Cot Fastener	Inspect the cot retaining post, fasteners secure	30
	Install in–fastener shut–off module Determine and set in–fastener shut–off position Verify the ambulance cot and cot fastener fit and function properly	21
	Install vehicle safety hook	22 & 23
	Verify the safety bar engages the vehicle safety hook properly	23
Accessories	Verify IV pole (if equipped) operates properly	40 & 41
	Verify foot–end oxygen bottle holder (if equipped) operates properly	
	Verify removable oxygen bottle holder (if equipped) operates properly	
	Verify Pedi–Mate™ restraint package (if equipped) operates properly	27 & 28
	Verify accessory hook (if equipped) is installed properly	39
	Verify head extension with pillow (if equipped) installed properly	
	Verify pocketed backrest storage pouch (if equipped) installed properly	38
	Head–end storage flat (if equipped) installed properly	37
	Verify pillow (if equipped) included	
	Verify 36” restraint extender (if equipped) is included	26
	Verify the Bariatric transfer flat (if equipped) is included	43

The patient compartment of the vehicle in which the ambulance cot will be used must have:

- A smooth rear edge for cot loading.
- A level floor large enough for the folded cot.
- Stryker 6370/6374/6377/6378/6379 or 6371/6375 crash stable cot fastener (not included).
- In–fastener shut–off module installed and positioned properly.
- Space to install the safety hook.

When necessary, modify the vehicle to fit the cot. Do not modify the cot.

⚠WARNING

Do not modify the RUGGED ambulance cot or any components of the cot, including the hydraulic unit. Modifying the product can cause unpredictable operation resulting in injury to the patient or operator. Modifying the product will also void its warranty.

Any emergency vehicle to be used with this ambulance cot **must** have the in–fastener shut–off system installed.

Refer to DEWALT® manual (Stryker part number 6500–001–206) for battery and charger operation.

NOTE

This manual should be considered a permanent part of the ambulance cot and should remain with the product even if the cot is subsequently sold.

Stryker continually seeks advancements in product design and quality. Therefore, while this manual contains the most current product information available at the time of printing, there may be minor discrepancies between your ambulance cot and this manual. If you have any questions, please contact Stryker Customer Service or Technical Support at (800) 327–0770.

Cot Load Height and "Jog" Function

Figure 4a – Sensor Housing

Figure 4b – Loosening the two screws

Figure 4c– Adjusting the height

Figure 4d – Securing the Cables

Figure 4 – Setting Cot Load Height

The control mechanism of the ambulance cot utilizes height sensors to set the load height stop for the cot. The sensors are used to match the load wheel height for a specific ambulance deck height.

The ambulance cot can be set at any height position. Establish the height for the cot prior to placing the unit into service. The load height of the ambulance cot can be modified at anytime, but must be determined and set before the cot is placed into service.

1. Locate the sensor housing on the patient right side of the ambulance cot (Figure 4a), using a T27 Torx wrench, remove the sensor housing cover by loosening the two (2) screws (one on each end) (Figure 4b).
2. Adjust only the left height sensor (Figure 4c). Move the sensor to the **left to increase** the load wheel height or to the **right to decrease** the load wheel height. After each movement of the cot height sensor, lower the cot to the full–down position then raise it until it automatically stops. Measure the distance below the load wheels and further adjust the cot sensor until the product reaches the desired height limit to match the ambulance floor height.

NOTE

Add an additional 1/2 inch to your deck height measurement to allow for variations with patient weight and other equipment added to the cot.

3. After the proper load wheel height is set, ensure all the height sensor cables are secured and lie flat in the housing (Figure 4d) between the sensors and replace the sensor housing cover using the screws removed in step 1.
4. Following completion of the sensor height adjustment, verify the cot properly engages the safety hook.

Cot Fastener Installation

The Stryker Cot Fastener systems are designed to be compatible only with cots which conform to the installation specifications listed on page 20.

WARNING

It is the responsibility of the cot operator to ensure that the cot being used in the Stryker Cot Fastener System meets the installation specifications listed on page 20. Injury may result if a non−compatible cot is used in the Stryker Fastener System.

NOTE

Adjustment of the rail clamp assembly may be required in order to compensate for any variation in the cot retaining post position depending on the ambulance cot manufacturer and model number.

For more detailed instruction and operation instructions for the Stryker Cot Fastener systems, refer to part number 6370−090−010 RUGGED Cot Fastener Installation/Operation Instructions.

Cot Fastener Installation

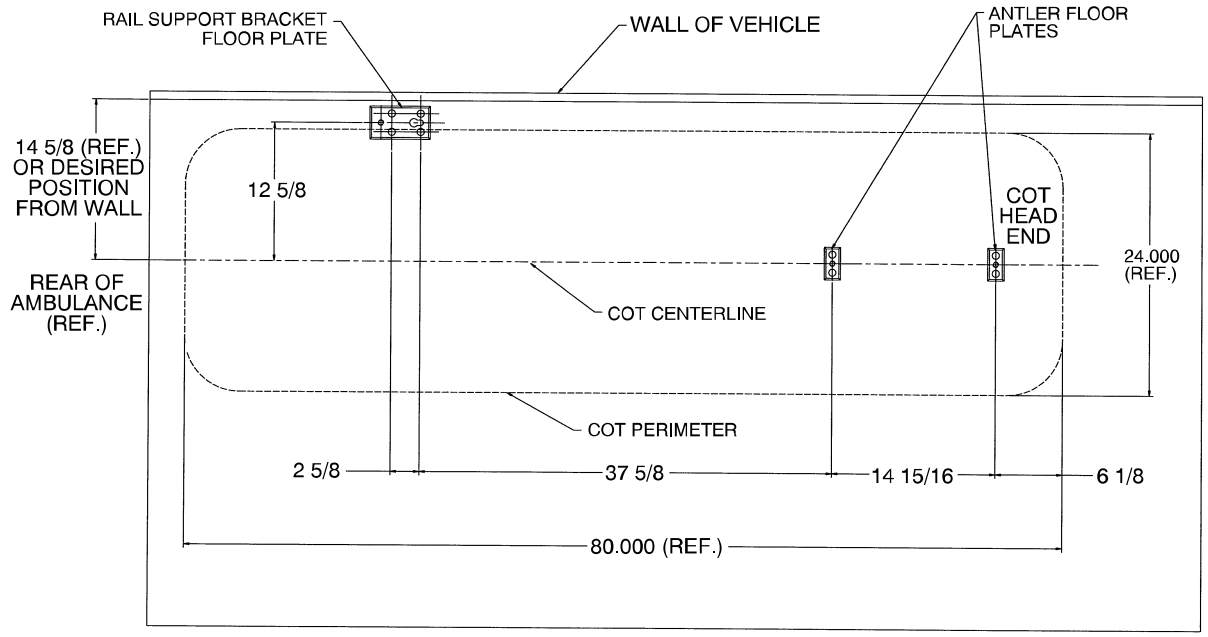


Figure 5 – Installation Specifications – Floor Mount Fastener

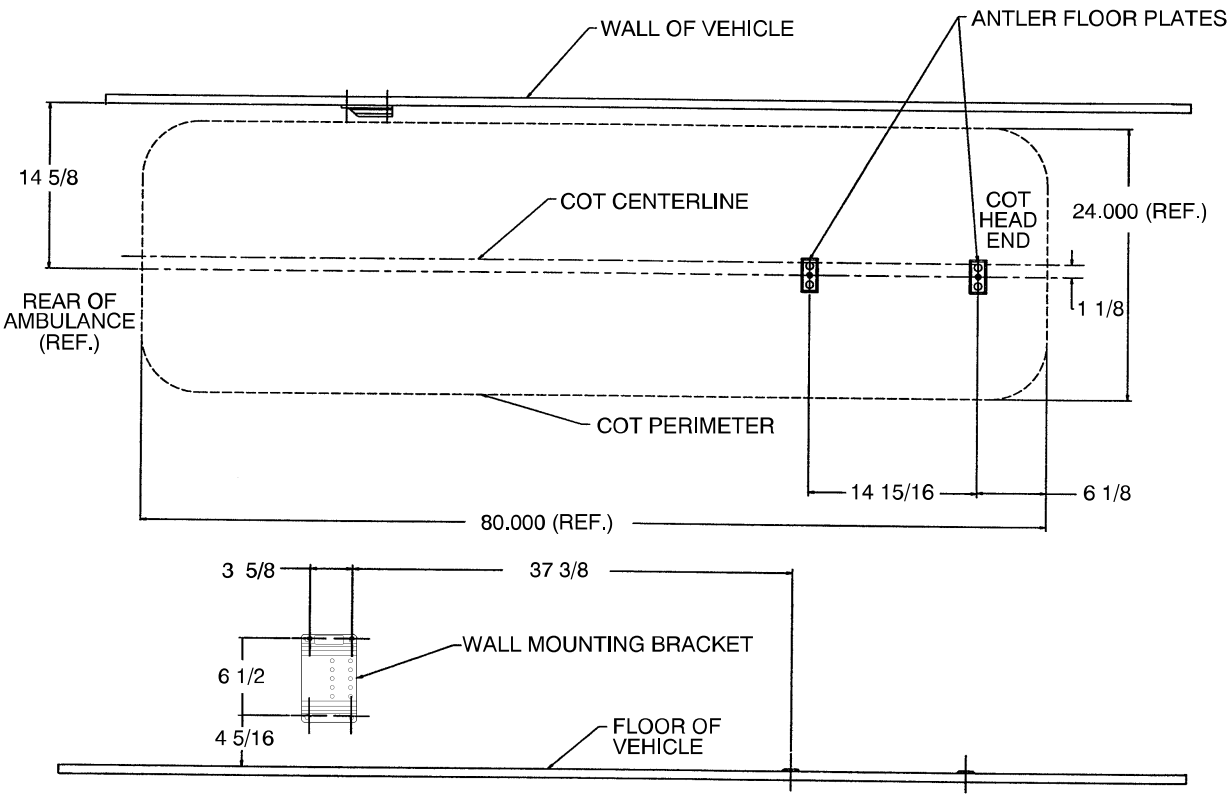


Figure 6 – Installation Specifications – Wall Mount Fastener

In−Fastener Shut−Off

⚠WARNING

The in−fastener shut−off must be positioned properly before placing the cot into service. Failure to install the in−fastener shut−off may cause injury to the patient or operator and/or damage to the vehicle.

The ambulance cot and fastener system have an integrated in−fastener shut−off function that disables the cot motor when the cot is secured in the ambulance cot fastener. Be sure the bolts on the fastener are tightened before installing the shut−off bracket. The shut−off magnet must be installed on the rail clamp assembly before putting the ambulance cot into service.

1. Place the ambulance cot into a loading position (any position where the load wheels of the head section meet the vehicle floor height). Roll the ambulance cot to the open door of the patient compartment. Lift the vehicle bumper to the raised position (if possible).
2. Push the ambulance cot forward until the load wheels are on the patient compartment floor and the safety bar passes the safety hook.
3. For maximum clearance to lift the base, pull the ambulance cot until the safety bar engages the safety hook.
4. Raise the base and push the ambulance cot into the patient compartment following loading instructions.
5. Engage the **extended** head section of the cot into the cot fastener antler and secure the cot post into the fastener rail clamp.
6. Adjust the magnet assembly along the rail clamp until the arrow on the sensor housing is lined up with the fastener as shown in Figure 7.
7. Using a T27 Torx wrench, securely fasten the bolts attaching the magnet assembly to the rail clamp assembly.
8. Press the retract (−) button to ensure the motor does not turn on while the cot is in the fastener. The battery indictor will still light. If the cot moves, readjust the the cot fastener.

⚠WARNING

Do not attempt to operate the ambulance cot when loaded into a cot fastener. The in−fastener shut−off is **only** a means for disabling the electronic functionality. Damage to the product or injury to the patient or operator may occur.

In−fastener shut−off must be installed in all ambulances in which the cot will be used.

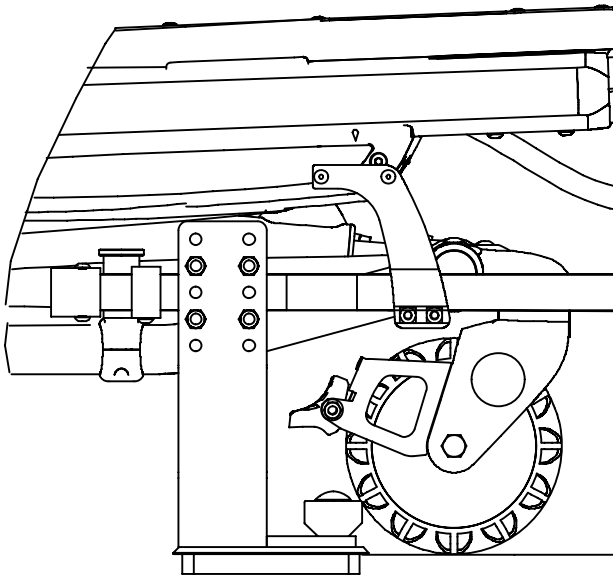


Figure 7 − Cot Engaging Cot Fastener

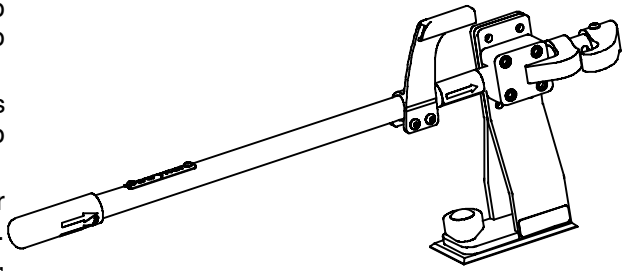


Figure 8 − In−Fastener Shut−Off Module

Vehicle Safety Hook Installation

The vehicle safety hook is a device shipped with the cot. The safety hook activates the safety bar and prevents the cot from being removed from the vehicle accidently. The vehicle safety hook was designed to ensure compatibility and proper operation of the cot during unloading when used in an ambulance vehicle compliant with Federal Regulation KKK–A–1822.

According to federal regulations (reference KKK–A–1822), the bumper height of the ambulance shall be installed equidistant ± 5 cm (2 inches) from the ambulance floor to the ground level, defined as the ambulance deck height (Figure 3a). The bumper step shall have a minimum depth of 13 cm (5 inches) and a maximum depth of 25 cm (10 inches). If the bumper depth is greater than 18 cm (7 inches), then the bumper must be able to fold. Installation of the safety hook into any ambulance vehicle compliant with this federal specification will provide adequate clearance for the cot base to lower to its fully extended position (Figure 10). The cot is compatible with all ambulance deck heights up to 36 inches as long as the ambulance meets the federal specifications outlined in KKK–A–1822.

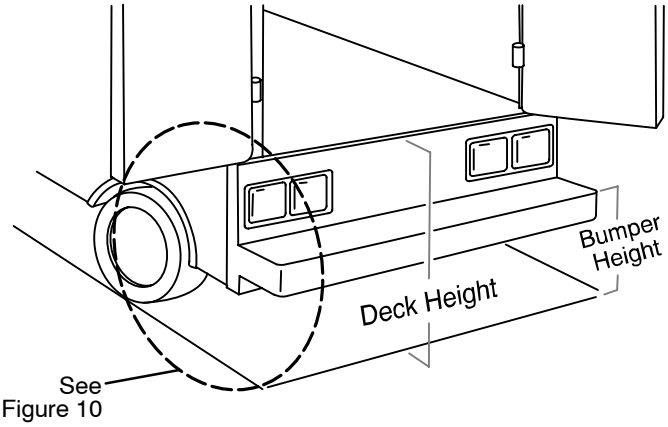


Figure 9 – Ambulance Configuration

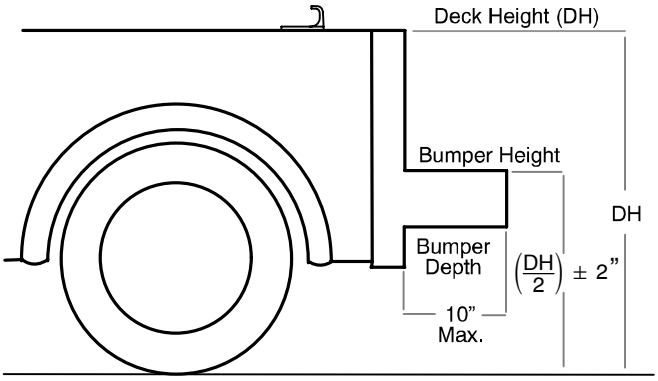


Figure 10 – Ambulance Configuration

CAUTION

Set cot height limit to the proper stop height (see page 18) prior to operation.

Installation of the safety hook should be done by a certified mechanic familiar with ambulance construction. Consult the vehicle manufacturer before installing the safety hook and be sure the installation of the safety hook does not damage or interfere with the brake lines, oxygen lines, fuel lines, fuel tank or electrical wiring of the vehicle.

⚠WARNING

Have the vehicle safety hook installed by a certified mechanic. Improper safety hook installation can cause injury to the patient and/or operator or damage to the cot.

Failure to install the safety hook can cause injury to the patient or operator. Install and use the safety hook as described in this manual.

To avoid injury, verify the safety bar has engaged the safety hook before removing the cot from the patient compartment.

Vehicle Safety Hook Installation

Required Hardware for Installation of the Safety Hook (Not Supplied)

(2) Grade 5, 1/4"–20 Socket Head Cap Screws*
(Stryker part number 6060–36–17 & 6060–36–18)

(2) Grade 5, 1/4"–20 Flat Socket Head Cap Screws*
(Stryker part number 6092–36–18)

(2) Flat Washers (2) Lock Washers

(2) 1/4"–20 Nuts

* The length of the socket head cap screws depends on the thickness of the vehicle floor. Use screws long enough to go completely through the patient compartment floor, washer and nut by at least two full threads.

⚠WARNING
Install the safety hook at least 1/8" from the edge of the rear ambulance door. After installation, verify the cot legs lock into the load position without contacting the ambulance bumper.

Positioning and Installing the Safety Hook

9. Place the cot in the cot fastener.
10. Remove the cot from the fastener and unload it from the vehicle. While the cot is being removed, note the position of the load wheels and the safety bar.
11. Center the safety hook (Figures 11 & 12) on the cot safety bar. Be sure the hook is facing the front of the vehicle.
12. Mark the position of the safety hook on the patient compartment floor. The safety hook should be installed as close as possible to the rear of the vehicle while allowing the vehicle doors to close (Figure 12). Be sure the bumper and bumper step don't interfere with the operation of the cot.
13. Drill the holes for the socket head cap screws.
14. Attach the safety hook to the patient compartment floor.
15. Verify the safety hook **always** engages the cot safety bar when the cot is unloaded from the vehicle (Figure 13). If the ambulance floor is wider than normal, an additional safety hook may be required.

⚠WARNING
The ambulance cot must have at least 5/8" of clearance between the ambulance bumper and the cot to disengage the safety bar when unloading the cot from the ambulance. Verify the cot locks into a rolling position before disengaging the safety bar from the safety hook.

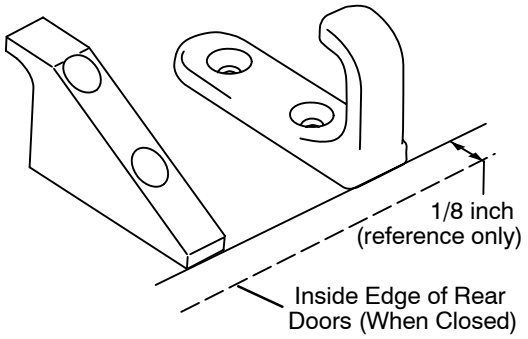


Figure 11 – Safety Hook Placement

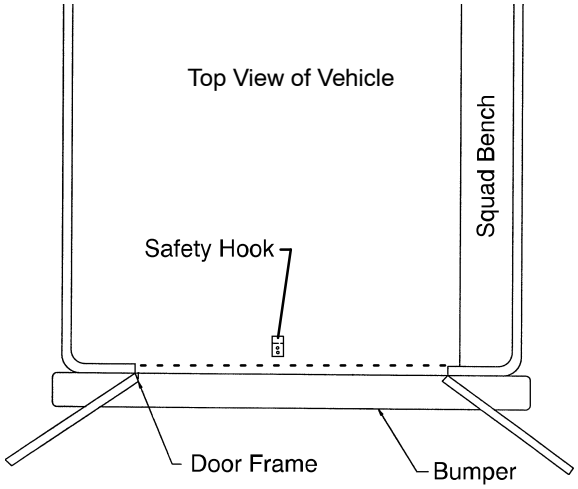


Figure 12 – Safety Hook Placement

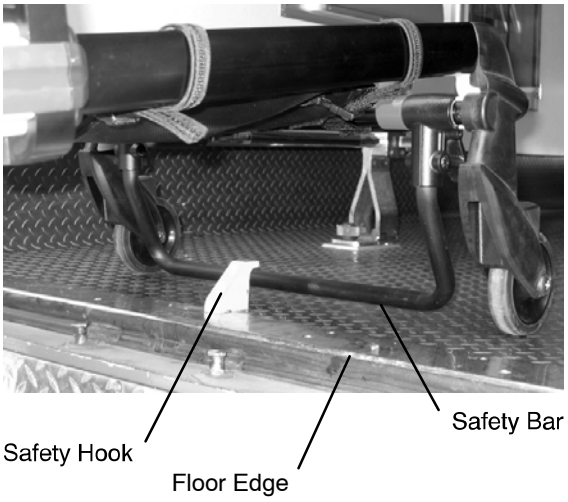


Figure 13 – Safety Bar Engaging Safety Hook

Using Restraint Straps

⚠WARNING
Always use all restraint straps to secure the patient on the cot. An unrestrained patient may fall from the cot and be injured.

Always secure the patient on the cot with all the restraint straps. Buckle the restraints across the patient's chest/shoulders, waist and legs (Figure 14). Keep the restraint straps buckled when the cot is not being used with a patient to avoid damage to the buckles and straps.

⚠WARNING
Do not attach restraints to the base or cross–tubes, improper restraint attachment could result in damage to the cot further resulting in injury to the patient or operator.

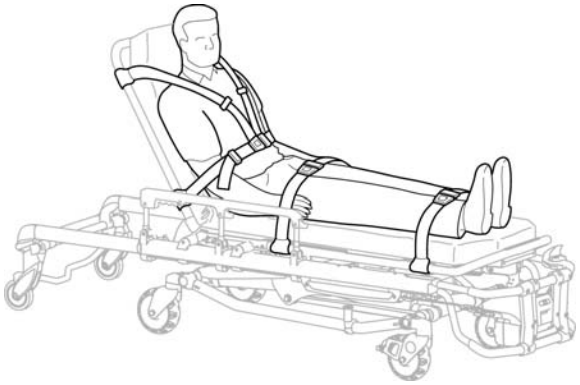


Figure 14 – Safety Restraints

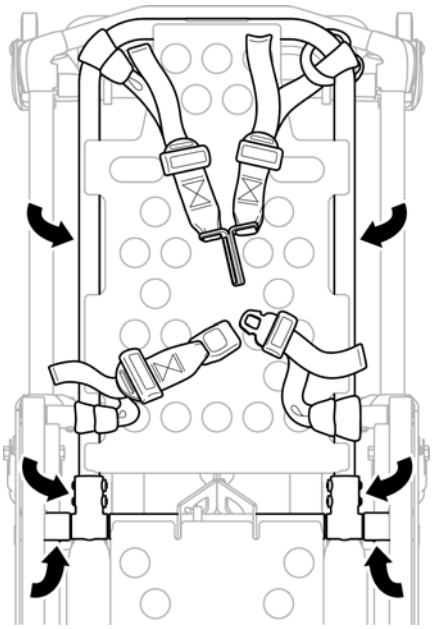


Figure 15– Head Section Restraints

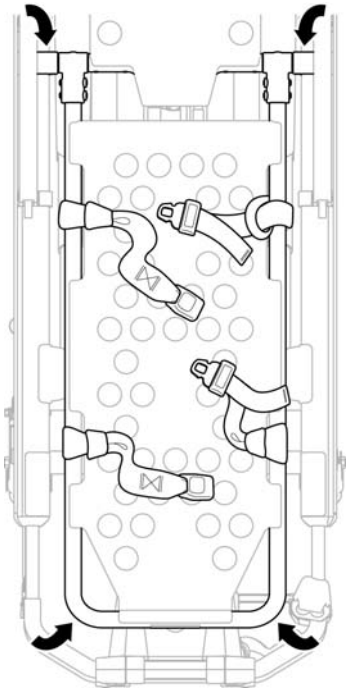


Figure 16 – Foot Section Restraints

Wrap the strap around the cot frame and back through the loop on the end of the strap as shown in Figures 15 and 136 The arrows indicate alternate attachment areas.

When attaching the restraint straps to the cot, remember the attachment points should provide both strong anchorage and proper restraint position while not interfering with equipment and accessories.

Using Restraint Straps (Continued)

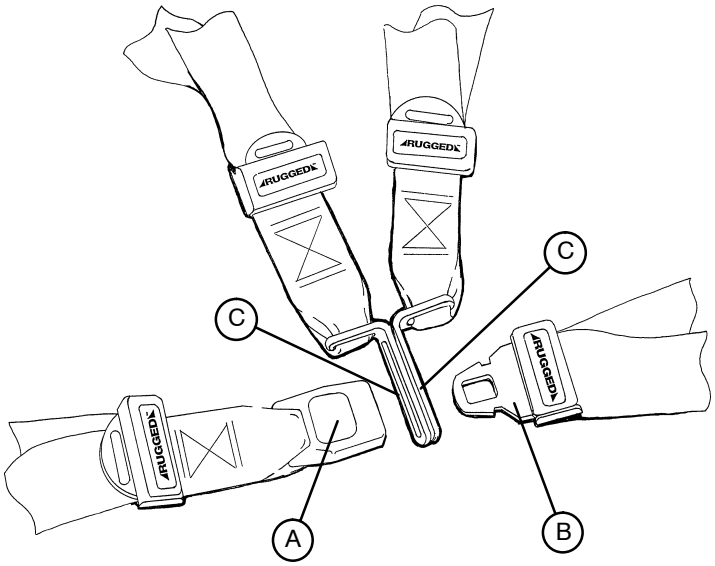


Figure 17 – Buckling the Safety Restraints

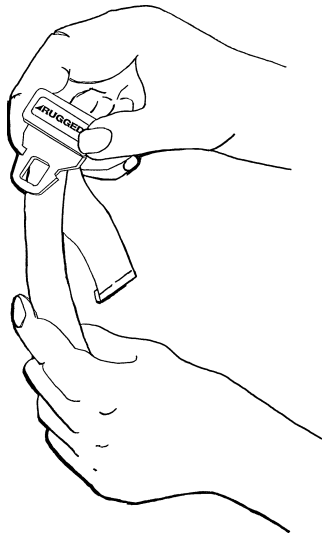


Figure 18 – Lengthening the Safety Restraint

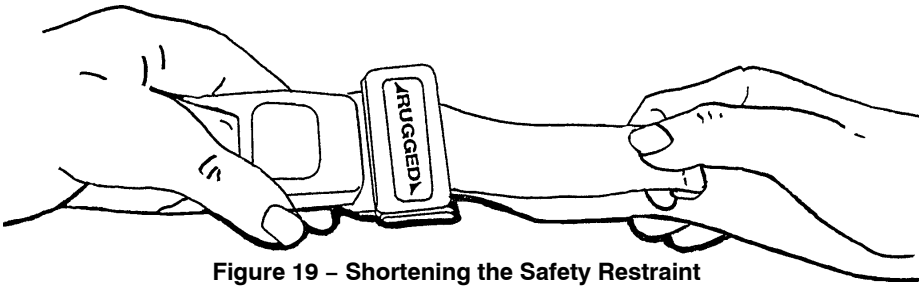


Figure 19 – Shortening the Safety Restraint

CAUTION

Ensure that restraints are not entangled in the base frame when raising and lowering the cot.

When the cot is put into service, open the restraints and place them at either side of the cot until the patient is positioned on the cot mattress. Lengthen the restraints, buckle them around the patient and shorten them until the required tightness is achieved.

- To open the restraint, press the red button (A) on the front of the buckle ”receiver”. This releases the buckle ”tang” (B) which can then be pulled out of the receiver (Figure 17).
- To close the restraint, push the tang into the receiver until a ”click” is heard. When fastening the chest restraint ensure the tang passes through both links (C) on the shoulder strap (Figure 17).
- To lengthen the restraint, grasp the buckle tang, turn it at an angle to the webbing, then pull it out (Figure 18). A hemmed tab at the end of the webbing prevents the tang from coming off the strap.
- To shorten the restraint, grasp the hemmed tab and pull the webbing back through the tang until the required tightness is achieved (Figure 19).

Whenever a restraint is buckled on a patient, verify the tang is fully engaged and any extra webbing is not tangled in the cot or hanging loose.

Inspection of the restraints should be done **at least** once a month (more frequently if used heavily). Inspection should include checking for a bent or broken receiver or tang, torn or frayed webbing, etc. Any restraint showing wear or not operating properly **must** be replaced immediately.

Using The Restraint Belt Extension (Optional)

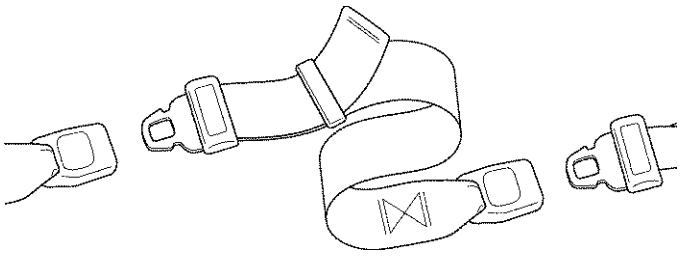


Figure 20 – Attaching the Restraint Belt Extension

Use the restraint belt extension for extra length when buckling the lap belt around large patients.

Pedi−Mate™ Infant Restraint System (Optional) Attachment Instructions

Refer to the Pedi−Mate™ users manual for the manufacturer's recommendations for the use, operation and care of the Pedi−Mate™ Infant Restraint System.

Securing the Pedi−Mate™ to the cot:

1. Remove any restraints already attached to the cot.
2. Raise the cot backrest to the full upright position.
3. Position the Pedi−Mate™ pad flat on the backrest with the black backrest straps out (see Figure 21).

Figure 21 − Positioning the Pedi−Mate™

4. Wrap the straps around the backrest and insert the ends of the straps through the brackets. Securely fasten the buckle (see Figure 22).

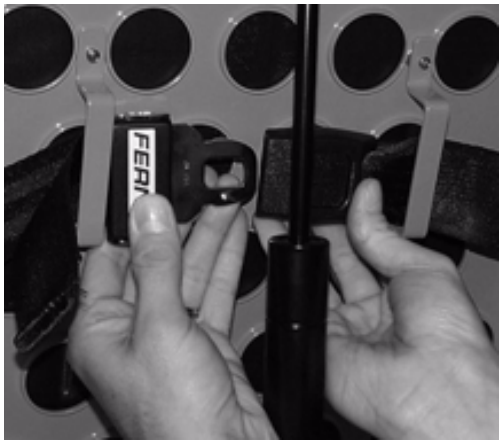


Figure 22 − Fastening the Pedi−Mate™ Buckle

WARNING

To avoid accidental release of the Pedi−Mate™, and possible injury to the infant, ensure the buckle is located away from obstructions on the cot or accessories.

Pedi−Mate™ Infant Restraint System Attachment Instructions (Continued)

5. Pull firmly on the end of the adjustable backrest strap and tighten it securely.
6. Insert the mainframe straps between the cot frame and the mattress. To ensure the release button is toward the foot end of the cot, insert the buckle behind the litter crossbrace and bring it up in front of the crossbrace. Secure the buckle around the crossbrace, leaving a little slack in the strap for final adjustment (see Figure 23).

Figure 23 – Securing the Safety Restraints on a RUGGED Cot

WARNING

To avoid accidental release of the Pedi−Mate™, and possible injury to the infant, ensure the buckle is located away from obstructions on the cot.

7. Verify all the straps are snug and fastened securely (see Figure 24).

Figure 24– Pedi−Mate™ Strapped to a RUGGED Cot

NOTE

These are general instructions for installation of the Pedi−Mate™. Safe and proper use of the Pedi−Mate™ is solely at the discretion of the user. Stryker recommends all users be trained on the proper use of the Pedi−Mate™ before using it in an actual situation.

Retain these instructions for future reference. Include them with the product in the event of transfer to new users.

Pedi−Mate™ is a trademark of Ferno−Washington Inc.

Operating The Optional Wheel Lock(s)

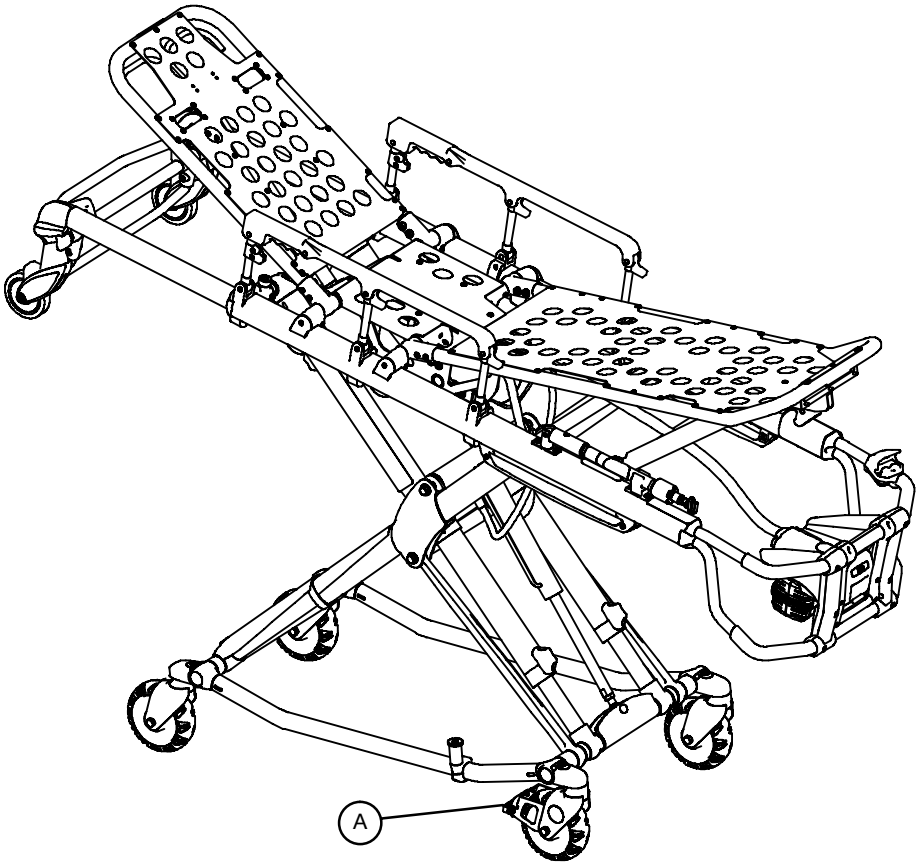


Figure 25 – RUGGED Wheel Lock

1. To activate the optional wheel lock(s), press fully down on the pedal (A) until it stops and is resting firmly against the surface of the wheel.
2. To release the optional wheel lock(s), depress the upper face of the pedal with your foot or lift up with your toe under the pedal. The upper portion of the pedal will rest against the caster frame when the wheel lock is released.

⚠WARNING

Never apply the optional wheel lock(s) while a patient is on the cot. Tipping could occur if the cot is moved while a wheel lock is applied, resulting in injury to the patient or operator and/or damage to the cot.

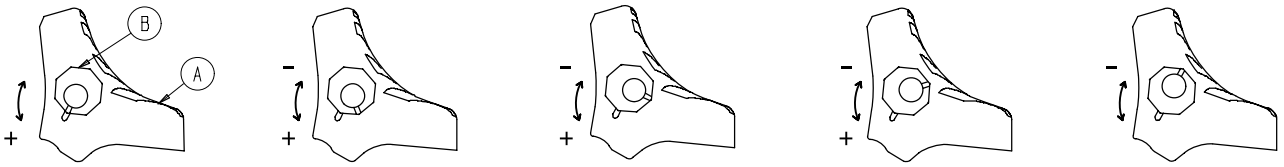
Never leave a patient unattended on the cot or injury could result. Hold the cot securely while a patient is on the cot.

Never install or use a wheel lock on a cot with excessively worn wheels. Installing or using a wheel lock on a wheel with less than a 6” diameter could compromise the holding ability of the wheel lock, possibly resulting in injury to the patient or operator and/or damage to the cot or other equipment.

CAUTION

Wheel lock(s) are only intended to help prevent the cot from rolling while unattended. A wheel lock may not provide sufficient resistance on all surfaces or under loads.

Adjusting The Wheel Locking Force



MINIMUM **Figure 26– Wheel Locking Force Adjustment** MAXIMUM

1. To adjust the wheel locking force, remove the socket screw from the center of the lock pedal. The wheel lock is initially assembled with the pedal set at the minimum locking force. The marker on the pedal (item A) is aligned with the marker on the octagonal sleeve (item B).
2. Remove the sleeve (B). Rotate the sleeve counterclockwise to increase the pedal locking force and clockwise to decrease the locking force. Insert the sleeve into the pedal. Reinstall the socket screw.
3. Test the pedal locking force and verify the pedal holds properly before returning the cot to service.

Adjusting the Cot Retaining Post

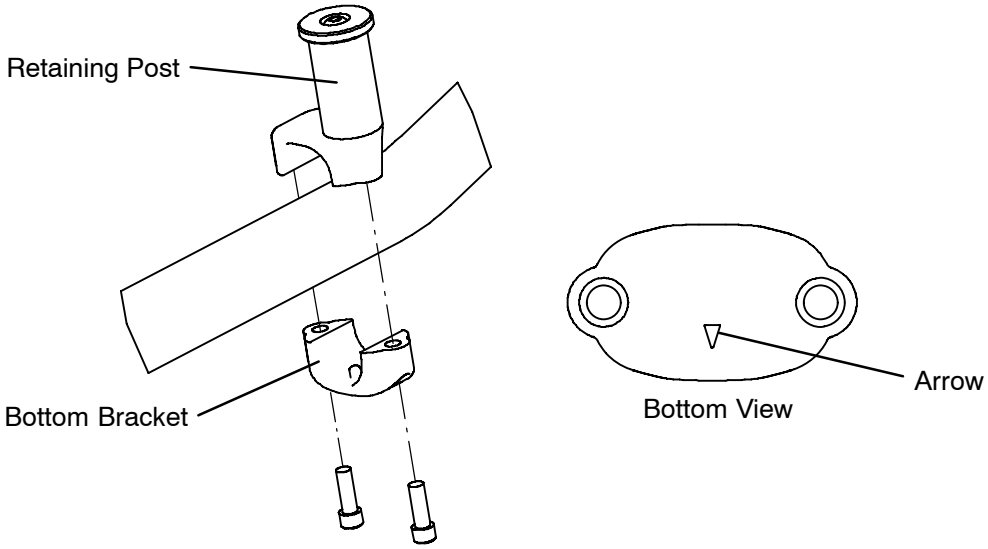


Figure 27 – Cot Retaining Post

CAUTION

The ambulance cot fastener comes preconfigured for an X–Frame cot, if the fastener has been configured for an H–frame style cot, the cot retaining post must be adjusted to accommodate the fastener.

1. Remove the two bolts holding the two retaining post brackets to the base frame.
2. Turn the bracket.
3. Reinstall the bolts.

NOTE

If the arrow on the bottom bracket of the retaining post points toward the head end of the cot, the retaining post is set for an X–frame style cot. If the arrow points toward the foot end of the cot the post is set for an H–frame style cot.

Adjusting the Footrest

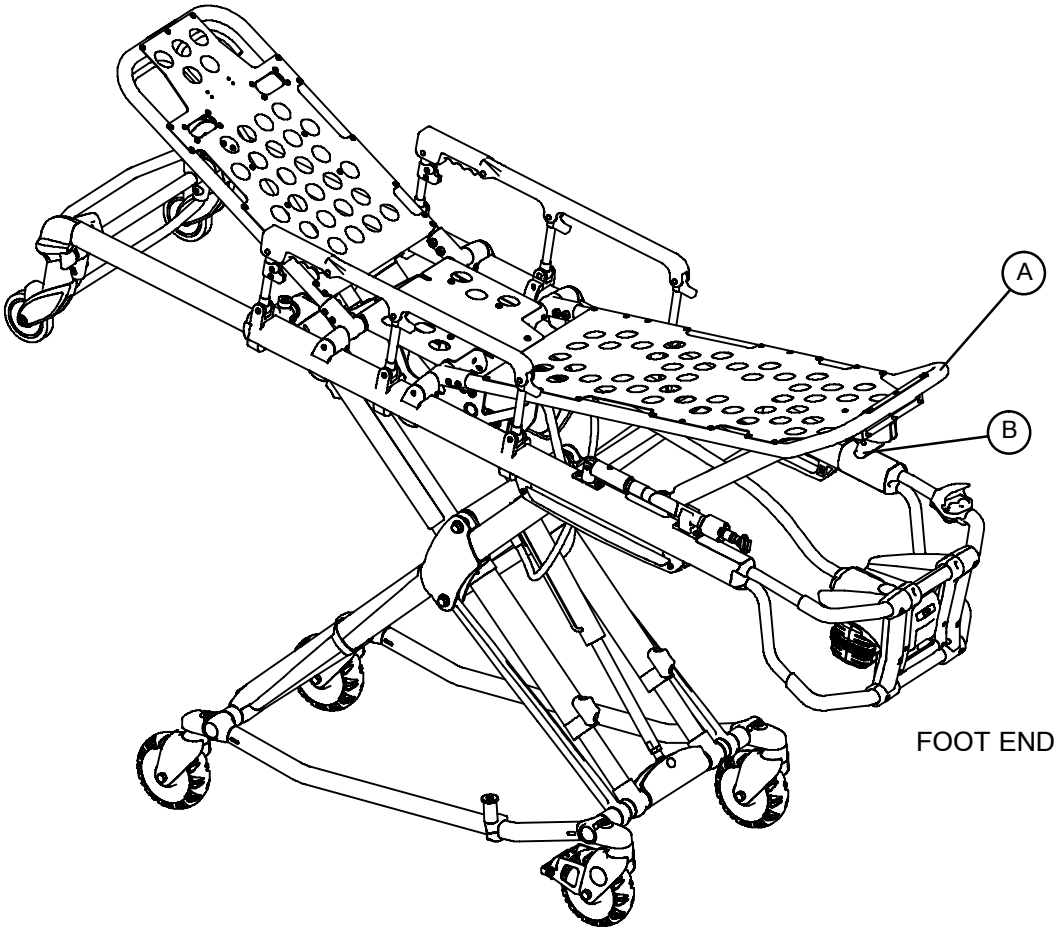


Figure 28 –Footrest Elevated

The footrest is adjustable to allow for elevation of the patient's legs.

To raise the footrest, lift the foot rest frame (A) as high as possible. The support bracket will engage automatically when released.

To lower the footrest, lift the foot rest frame (A) and, while holding the frame, lift up on the release handle (B) until the bracket disengages. Lower the footrest until flat.

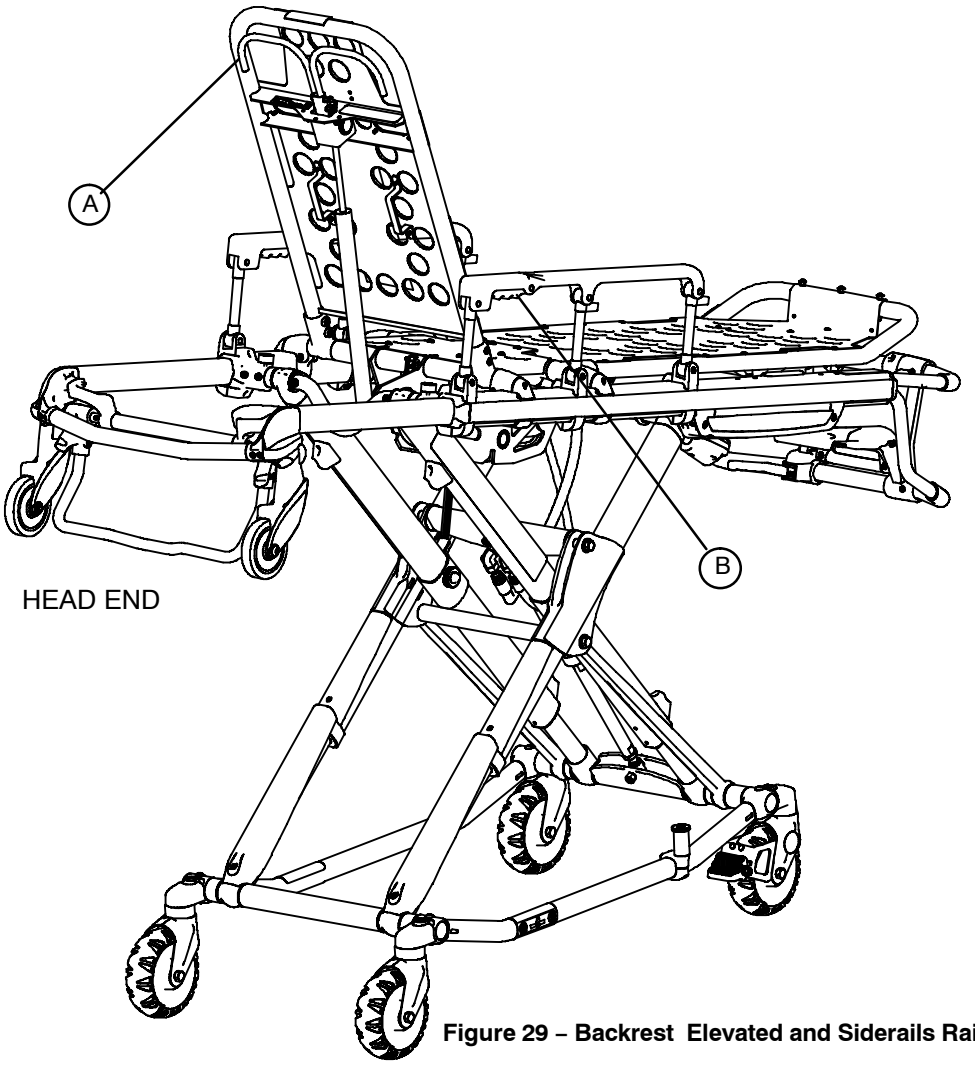


Figure 29 – Backrest Elevated and Siderails Raised

Operating the Backrest

To raise, squeeze handle (A) for pneumatic assist in lifting the backrest to the desired height.

To lower, squeeze handle (A) and push down on the backrest frame until the backrest has reached the desired height.

Operating the Siderails

To raise, lift up until the latch clicks and the siderail locks into place. When a patient is on the cot, always keep the siderails in the raised position unless the patient is being transferred.

To lower, squeeze handle (B) to release the siderail latch. Guide the siderail down toward the foot end until flat.

⚠WARNING

Siderails are not intended to serve as a patient restraint device. Refer to pages 24 and 25 for proper restraint strap usage. Failure to utilize the siderails properly could result in patient injury.

Proper Battery Management: DeWALT® Battery Management and Charger Care

The 24 Volt DEWALT® battery pack is designed for power cordless tools throughout the world. Care and maintenance procedures for the DEWALT® battery pack may differ slightly between the power tool industry and the emergency service provider industry. This document is intended to assist with proper battery pack and charger management in order to provide longer life to the rechargeable battery.

The following facts apply to the DEWALT® 24 Volt Battery system:

All batteries have a life span. This life span is dependent on proper care and maintenance. When a battery is placed in a charger or the charger is turned on-and-off with the battery in it, this is considered a charging cycle. A typical battery has between 800-900 recharging cycles. Keeping a battery in a 110V charger on a truck that does not have a continuous power supply to the charger will start a recharge cycle every time the power is switched off and on. For example, vehicles that are connected to a shoreline, unplugging and plugging the truck back in will count as a recharge cycle.

Having a fully charged battery in a charger, while unplugging and plugging in the charger may have damaging effects on the battery that will reduce the battery life. (This also includes inverter and/or generator powered patient compartments that can be switched on and off.)

Moisture and debris in the battery may reduce the battery life. A wet battery should not be recharged until completely dry.

Water on the charger may cause an electrical shock. Keep moisture away from all battery chargers.

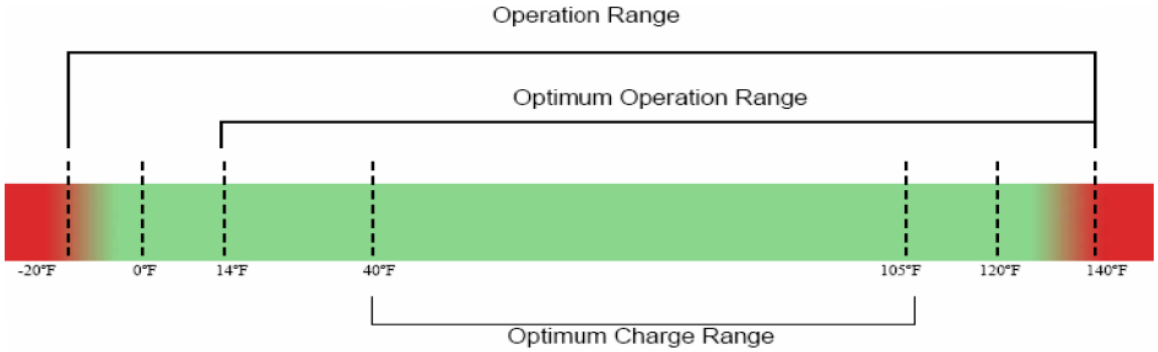
Stryker recommends the following procedures for charging the DEWALT® 24 Volt Battery:

When charging the battery in the vehicle, it is important to provide continuous-uninterrupted power to the battery charger and battery. Connect a 12V charger to a hot lead directly connected to the truck battery system (e.g. cigarette lighter adapter). Do not modify the 12V DEWALT® battery charger in any way. A full charge will take place in approximately one (1) hour, but when the battery is not in use, it is best to leave the battery in the charger for a minimum of (8) hours to take advantage of the “Tune-Up” mode which automatically conditions the battery. The 12V DEWALT® charger draws 2.8 Amps in full charge mode and is protected to not remove power from the truck battery system if the onboard charger fails.

When charging the battery at the station, connect a 110V charger into a station outlet and rotate batteries through the charger. A full charge will take place in approximately one (1) hour, but when the battery is not in use, it is best to leave batteries in the charger to take advantage of the “Tune-Up” mode which automatically conditions the batteries.

If a 110V charger is kept on a truck, do not leave the battery in the charger. Use this option as an “On-Scene” recharge system, not as a battery up-keep system.

Like any piece of rescue equipment, proper care and maintenance will provide the rescuer the best tools to perform the task at hand. Contact Stryker Technical Support with any additional questions at 1-800-784-4336.



Proper Battery Management: DEWALT® Battery Frequently Asked Questions

Is it better for DEWALT® batteries to be completely discharged before charging?

When using the DEWALT® battery to power the Power-PRO ambulance cot, it is beneficial to run the cot until the battery power indicator is flashing red. When the indicator is flashing red, the battery will power the cot through approximately (3) additional service calls. It is recommended that the battery be changed at this time.

What is Memory, and do DEWALT® batteries have it?

Memory is one of many conditions which causes a loss of runtime. Memory is created from repetitive light use in the exact same application (i.e. Cordless Phones, Video Cameras, Electric Shavers, etc.) The DEWALT® batteries rarely see light use or the exact same loads, due to variability from the user, the accessory size, as well as the product. The same variability which causes different runtimes prevents our cells from developing memory. The Power-PRO is considered a high-drain application. Memory typically develops in lower-drain rate applications, such as cordless phones, laptops, etc… because the rate at which the battery is draining is continuously the same. The Power-PRO will draw a higher current and have sporadic drain rates minimizing the opportunity for the battery to develop a memory.

Does it hurt DEWALT® batteries to leave them in the charger?

No. The DEWALT® chargers have a maintenance mode which allows batteries to remain in the charger, maintaining a fully charged battery until the user is ready to use it. If the batteries are stored outside of the charger they will discharge naturally, 15-20% in the first 24 hours, 7-10% the next day, and about 1% every day there after. NiCd batteries lose the bulk of the capacity when outside of the charger in the first 3 days. In fact, it is better for the battery to leave it in the charger to be sure it goes through equalization and maintenance modes which takes (8) hours minimum.

What can I do to improve the runtime of my battery?

If no permanent damage has been done to your battery, you may be able to improve its runtime. The correct procedure for charging your batteries is as follows:

1. Discharge the battery under normal use until the battery indicator light is flashing red or you feel a loss of power.
2. Remove the battery.
3. Let the battery sit out of the charger until the battery is at room temperature.
4. Place the battery in the charger for a minimum of 8 hours to allow for a full charge on each individual cell. If there is no difference in runtime, there is either permanent damage or the battery has reached the end of its usable life. In either case, the battery should be replaced.

Does the outside temperature affect batteries? How?

Yes. If the batteries are too hot or too cold, the batteries will not take a full charge. The optimum **charging** temperature range is between 40ºF and 105ºF. Charging batteries outside this range may result in a permanent loss of runtime. The maximum **operating** temperature range is between -20°F and 140°F with an optimum range between 14°F and 140°F. Operating batteries outside of this range may result in a permanent loss of runtime. When batteries are being charged and discharged, a chemical reaction is taking place, and if it is too hot or cold the chemical reaction is disturbed causing a loss of runtime.

Can the DEWALT® charger be used with a generator?

Yes. All DEWALT® chargers, excluding the DW9106, have been designed to handle the variations in voltage and current delivered by generators.

What should be done with batteries once they have gone bad?

RECYCLE THEM. DEWALT® is an active participant with RBRC (Recharge Battery Recycling Corporation), the organization which is the international leader in the collection, transportation, and recycling of NiCd cells. Old batteries should be disposed of at a DEWALT® Service Center. For more information call 1-800-8-BATTERY OR 1-800-8-228-8379.

Battery Power Indicator

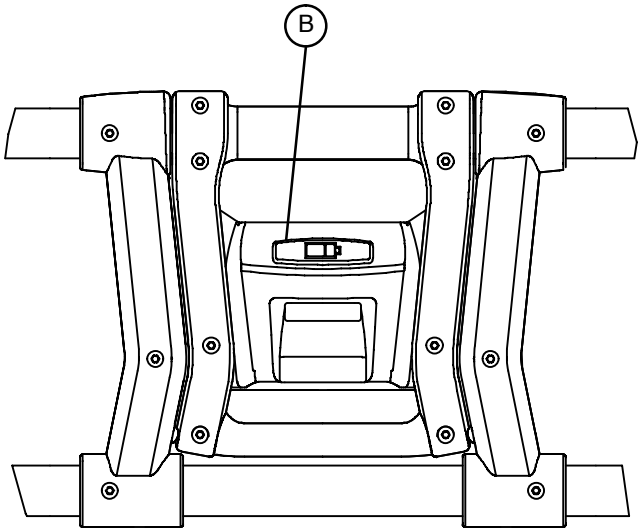


Figure 30a – Battery Power Indicator

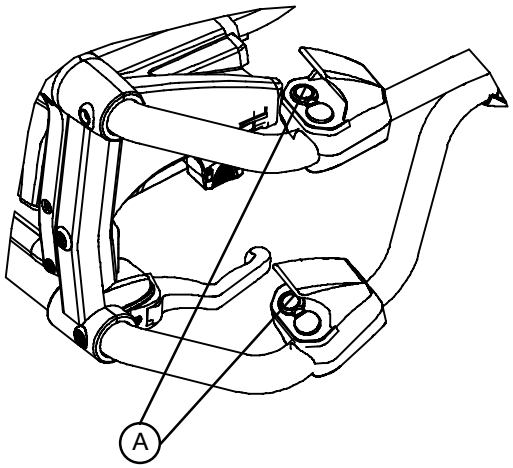


Figure 30b – Retract Switches

To check the battery power level, depress **lightly** on the retract (–) switch (A) to activate the battery power indicator light (B). The battery power indicator is located at the foot–end control enclosure, represented by a battery icon.

- The indicator lights GREEN when the battery is fully charged or has adequately charged battery power.
- The indicator flashes RED when the battery needs to be recharged or replaced.

⚠WARNING

To avoid risk of electric shock, never attempt to open the battery pack for any reason. If the battery pack case is cracked or damaged, do not insert it into the charger. Return damaged battery packs to a service center for recycling.

Do not remove the battery when the ambulance cot is activated.

Avoid contact with a wet battery or battery enclosure. Contact may cause injury to the patient or operator.

CAUTION

Only use the battery and charger as specified.

The Power PRO XT ambulance cot is not for use with an AC adapter.

When charging batteries in an ambulance vehicle, locate the charger either in the forward cab or an enclosed compartment (i.e. cabinet).

Ensure that the battery is fully charged prior to placing into service. An uncharged or depleted battery may cause poor ambulance cot performance.

Refer to the DEWALT® manual (Stryker part number 6500–001–206) for battery and charger information.

Hour Meter

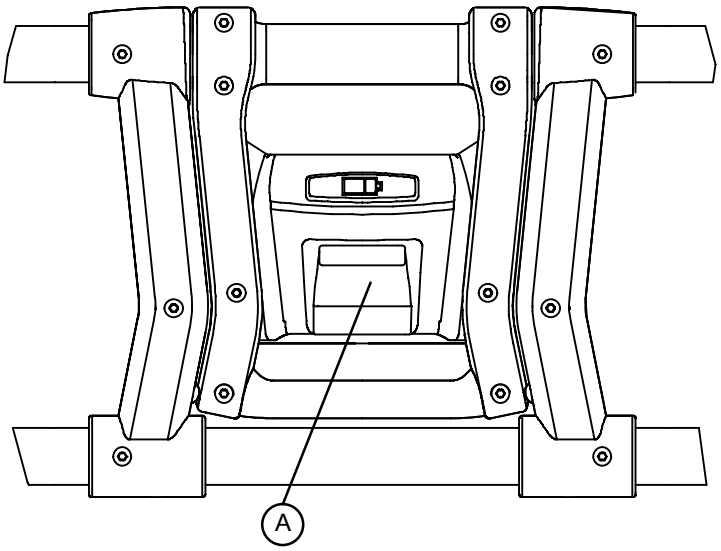


Figure 31 – Usage Meter

The cot has an hour meter on the foot–end control enclosure that indicates the amount of time (HHH.H hours) that the hydraulics have been activated. The hour meter can be used to help determine the frequency for preventative maintenance procedures found on pages 57–59.

CAUTION

A preventative maintenance program should be established for all Stryker EMS equipment. Preventative maintenance may need to be performed more frequently based on the usage level of the product. Close attention should be given to safety features including, but not limited to:

Hydraulic power mechanism

All electrical controls return to off or neutral position when released

For additional maintenance information, refer to the preventative maintenance section (pages 57–59).

Installing the Optional Head End Storage Flat

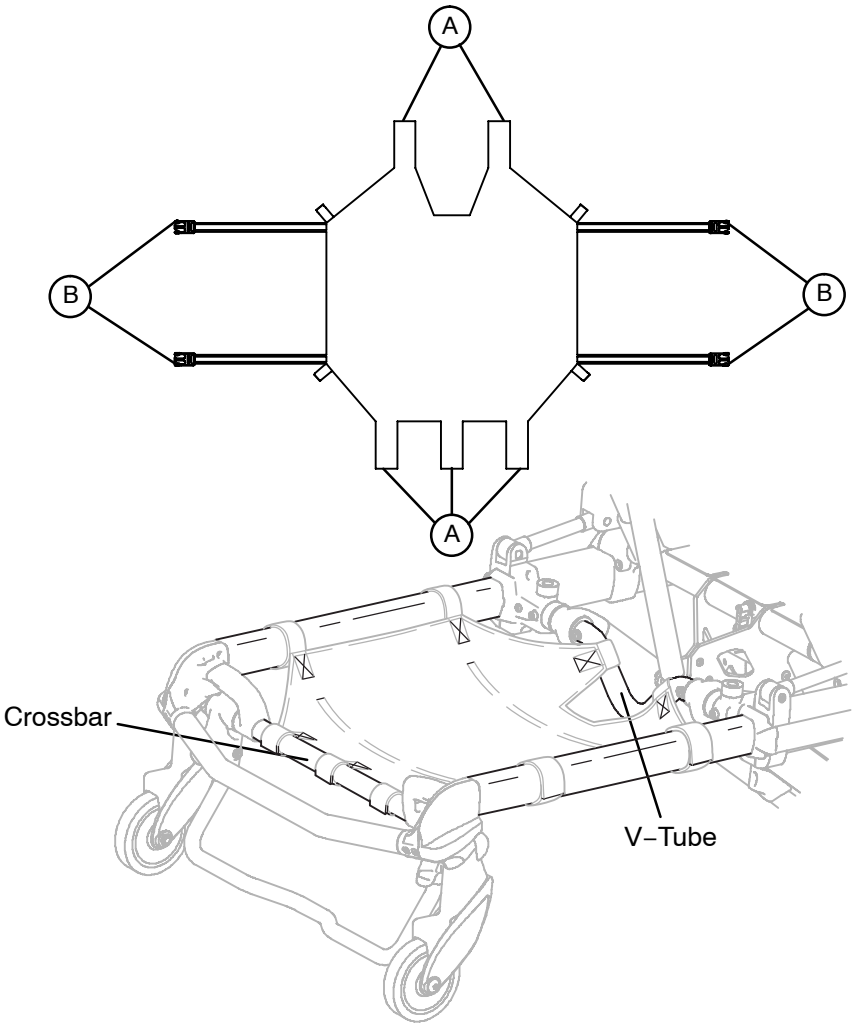


Figure 32 – Head End Storage Flat

1. Install the Velcro® straps (A) across the V−Tube near the pneumatic cylinder and around the crossbar of the retractable head section.
2. Buckle the restraint straps (B) around the outer rails of the retractable head section.

⚠WARNING

When the optional head−end storage flat is being used, ensure it does not interfere with the operation of the retractable head section, safety bar and safety hook. Injury to the patient or operator could result.

CAUTION

Do not store items under the ambulance cot mattress. Storing items under the mattress can interfere with the operation of the ambulance cot.

The weight of the equipment in the head end storage flat (if equipped) must not exceed 40 pounds (18 kilograms).

Installing the Optional Backrest Storage Pouch

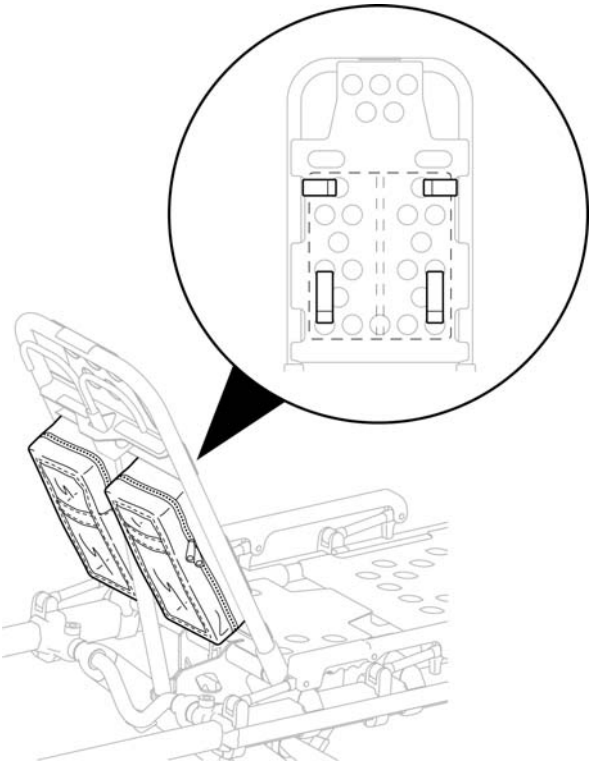


Figure 33 – Backrest Storage Pouch

Install the optional backrest storage pouch using the Velcro® straps. Insert each strap through a hole in the backrest skin and mount the pouch flat against the backrest.

CAUTION

Do not store items under the ambulance cot mattress. Storing items under the mattress can interfere with the operation of the ambulance cot.

The weight of the equipment in the pocketed backrest storage pouch (if equipped) must not exceed 20 pounds (9 kilograms).

Using the Optional Equipment Hook

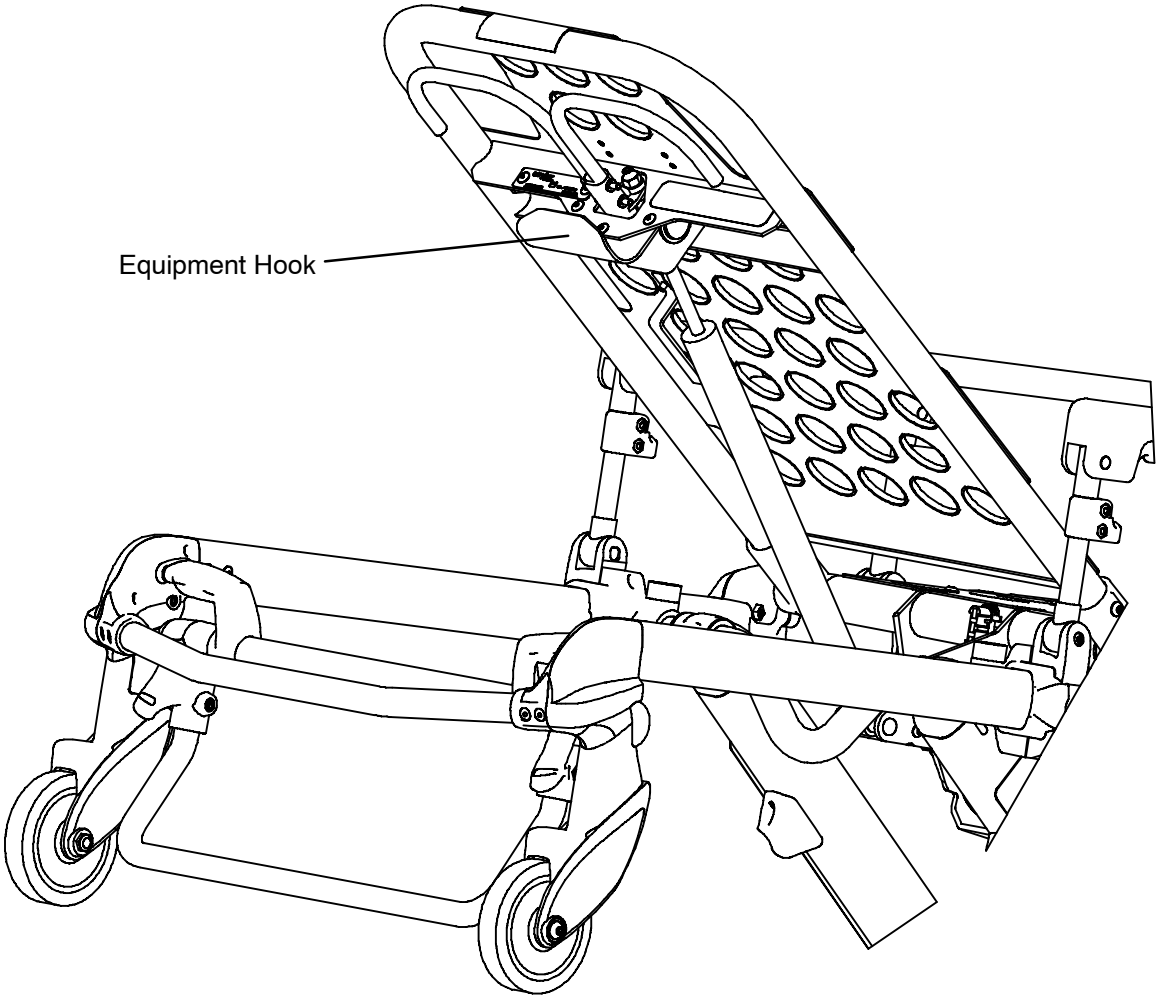


Figure 34 – Equipment Hook

The equipment hook is used to hang additional accessories or equipment such as defibrillators or monitors.

CAUTION

To avoid damage to the equipment hook, the weight of the accessories or equipment must not exceed 20 pounds (9 kilograms).

Operating the 2–Stage IV Pole (Optional Equipment)

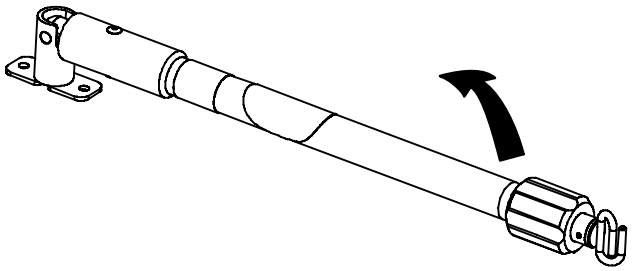


Figure 35 – 2–Stage IV Pole Storage Position

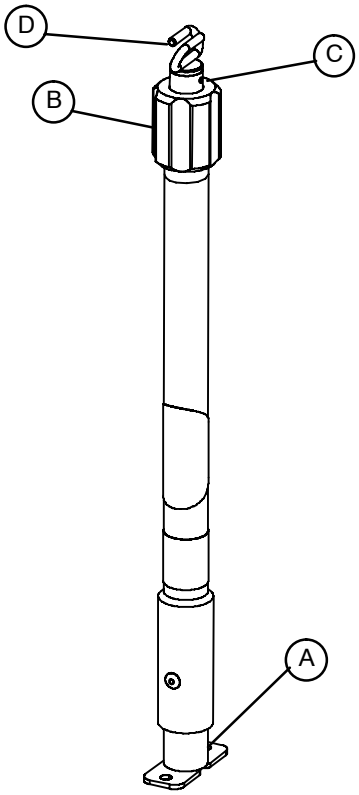


Figure 36 – 2–Stage IV Pole

1. Lift and pivot the pole from the storage position and push down until it is locked into receptacle (A).
2. To raise the height of the pole, turn the lock actuator (B) counterclockwise and pull up on the telescoping portion (C) of the pole to raise it to the desired height.
3. Turn the lock actuator (B) clockwise to lock the telescoping portion in place.
4. Hang the IV bags on the IV hook (D).

CAUTION

To avoid damage to the IV pole, the weight of the IV bags or equipment must not exceed 40 pounds (18 kilograms).

5. Turn the lock actuator (B) counterclockwise and slide section (C) into the bottom tube.
6. Lift up and pivot the pole down into the storage position.

Operating the 3–Stage IV Pole (Optional Equipment)

1. Lift and pivot the pole from the storage position and push down until it is locked into receptacle (A).
2. To raise the height of the pole, turn the lock actuator (B) counterclockwise and pull up on the bottom telescoping portion (C) of the pole to raise it to the desired height.
3. Turn the lock actuator (B) clockwise to lock the bottom telescoping portion in place.
4. For a higher IV pole, pull up on section (D) until the spring clip (E) engages.
5. Hang IV bags on the IV hook (F).

CAUTION

To avoid damage to the IV pole, the weight of the IV bags or equipment must not exceed 40 pounds (18 kilograms).

6. To lower the IV pole, push in on the spring clip (E) and slide section (D) down into section (C). Turn the lock actuator (B) counterclockwise and slide section (C) into the bottom tube.
7. Lift up and pivot the pole down into the storage position.

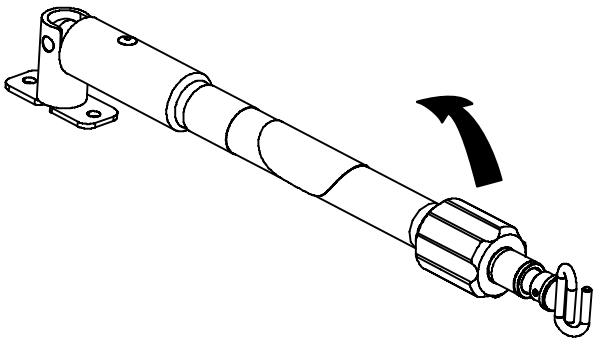


Figure 37 – 3–Stage IV Pole Storage Position

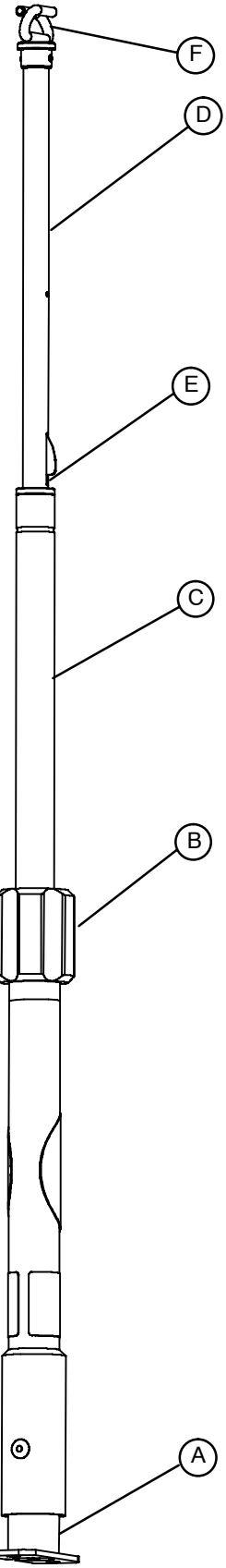


Figure 38 – 3–Stage IV Pole

Operating Guidelines

- Use the cot only as described in this manual.
- Read all labels and instructions on the cot before using the cot.
- Use a minimum of two (2) operators to manipulate the cot while a patient is on the cot. If additional assistance is needed, see the reference chart on page 53.
- Do not adjust, roll or load the cot into a vehicle without advising the patient. Stay with the patient and control the cot at all times.
- The ambulance cot can be transported in any position. Stryker recommends transporting the patient in as low a position as is comfortable for the operators to maneuver the cot.
- Only use the wheel lock(s) during patient transfer or without a patient on the ambulance cot.
- Always use the restraint straps.
- Use properly trained helpers when necessary to control the cot and patient.

⚠WARNING

Improper usage of the RUGGED ambulance cot can cause injury to the patient or operator. Operate the ambulance cot only as described in this manual.

Entanglement in powered ambulance cot mechanisms can cause serious injury. Operate the ambulance cot only when all persons are clear of the mechanisms.

Practice changing height positions and loading the ambulance cot until operation of the product is fully understood. Improper use can cause injury.

Do not allow untrained assistants to assist in the operation of the ambulance cot. Untrained technicians/assistants can cause injury to the patient or themselves.

Do not ride on the base of the RUGGED ambulance cot. Damage to the product could occur, resulting in injury to the patient or operator.

Transporting the cot sideways can cause the cot to tip, resulting in possible damage to the product and/or injury to the patient or operator. Transporting the cot in a lowered position, head or foot end first, will minimize the potential of a cot tip.

Grasping the RUGGED ambulance cot improperly can cause injury. Keep hands, fingers and feet away from moving parts. To avoid injury, use extreme caution when placing your hands and feet near the base tubes while raising and lowering the ambulance cot.

Any emergency vehicle to be used with this ambulance cot **must** have the in−fastener shut−off system installed.

CAUTION

Before operating the cot, clear any obstacles that may interfere and cause injury to the operator or patient.

Proper Lifting Techniques

When lifting the ambulance cot and patient, there are five basic guidelines to help you avoid injury:

Keep your hands close to your body.

Keep your back straight.

Coordinate your movements with your partner and lift with your legs.

Avoid twisting.

Always operate the ambulance cot as described in this manual.

Transferring the Patient to the Cot

Roll the cot to the patient.

Place the cot beside the patient and raise/lower the cot to the level of the patient.

Lower the siderails and open the restraint straps.

Transfer the patient to the cot using accepted EMS procedures.

Use all the restraint straps to secure the patient to the cot (see pages 24 and 25 for usage instructions).

Raise the siderails and adjust the backrest and leg rest as necessary.

⚠WARNING

Always use all restraint straps to secure the patient on the cot. An unrestrained patient may fall from the cot and be injured.

Never leave a patient unattended on the ambulance cot or injury could result. Hold the ambulance cot securely while a patient is on the product.

Never apply the optional wheel lock(s) while a patient is on the cot. Tipping could occur if the cot is moved while the wheel lock is applied, resulting in injury to the patient or operator and/or damage to the cot.

Siderails are not intended to serve as a patient restraint device. Refer to pages 24 and 25 for proper restraint strap usage. Failure to utilize the siderails properly could result in patient injury.

Hydraulically raising or lowering the cot may temporarily affect electronic patient monitoring equipment. For best results, patient monitoring be conducted when the cot is idle.

Using the Optional RUGGED Transfer Flat

When transferring large patients, use of the RUGGED Transfer Flat (Stryker part number 6083–001–200) is recommended.

Ambulance Cot Motion

Make sure all the restraint straps are securely buckled around the patient (see page 24 & 25 for restraint strap usage instructions).

The cot can be in any position for rolling.

When rolling the cot with a patient on it, position an operator at the foot end and one at the head end of the cot **at all times**.

During transport, approach door sills and/or other low obstacles squarely and lift each set of wheels over the obstacle separately.

⚠WARNING

High obstacles such as curbing, steps or rough terrain can cause the ambulance cot to tip, possibly causing injury to the patient or operator. Transporting the cot in lower positions can reduce the potential of a cot tip. If possible, obtain additional assistance (see page 53 for a reference chart) or take an alternate route.

CAUTION

The ambulance cot can be set at any height position. Establish the required load height for the ambulance cot prior to placing the unit into service (reference page 18 for instructions).

Loading the Cot into a Vehicle – Powered Method

Loading an occupied cot into the vehicle requires a minimum of **two (2) trained operators**.

When loading the cot into a vehicle, an operator should remember the following important issues:

- There must be a safety hook properly installed in the vehicle so that the bumper does not interfere with the front legs of the base frame. (See page 22 for safety hook installation instructions).

WARNING

Failure to install and use the vehicle safety hook can result in injury to the patient or operator. Install and use the hook as described in this manual.

- Cot operators must be able to lift the total weight of the patient, cot and any items on the cot. The higher an operator must lift the cot, the more difficult it becomes to hold the weight. An operator may need help loading the cot if he/she is small or if the patient is too large to lift safely.

CAUTION

Loading, unloading or changing the position of a loaded ambulance cot requires a minimum of **two trained operators**. The operator(s) must be able to lift the total weight of the patient, cot and any other items on the cot (if additional assistance is needed, see page 53 for a reference chart).

Place the cot in a loading position (any position where the loading wheels meet the vehicle floor height). Roll the cot to the open patient compartment. Lift the vehicle bumper to the raised position (if possible).

Push the cot forward until the load wheels are on the patient compartment floor and the safety bar passes the safety hook (Figure 39).

For maximum clearance to lift the base, pull the cot back until the safety bar engages the safety hook. Operator two should verify that the bar engages the safety hook.

Operator 1 – Grasp the cot frame at the foot end and push the retract (–) button until the undercarriage of the cot retracts fully (Figure 40).

Operator 2 – Securely grasp the cot outer rail to stabilize the cot during retraction.

Both Operators – Push the cot into the patient compartment (Figure 41), until the cot engages the cot fastener (not included).

⚠WARNING

When using a standard ambulance cot fastener, do not load the cot into the vehicle with the head section retracted. Loading the cot with the head section retracted may cause the product to tip or not engage properly in the cot fastener, possibly causing injury to the patient or operator and/or damage to the cot.

Figure 39 – Safety Bar Engaging Safety Hook

Figure 40 – 2 Operators – One Pushing the Retract Button

Figure 41 – 2 Operators Loading the Cot

Loading the Cot into a Vehicle – Powered Method (Continued)

High Speed Retract/Extend

- The ambulance cot is equipped with a high–speed retract mode to expedite loading/unloading the cot into and out of a vehicle.
- The undercarriage **rapidly** retracts towards its uppermost position once the weight of the ambulance cot and patient is off the wheels. Press the retract (–) button to actuate the control switch.
- The undercarriage **rapidly** extends towards its lowermost position once the weight of the ambulance cot and patient is off the wheels. Press the extend (+) button to actuate the control switch.

⚠WARNING

Whenever the weight of the ambulance cot and patient is off the wheels, the ambulance cot will **automatically** enter the high speed retract mode if the retract (–) button is pressed.

Once the weight is off the ground, the operator(s) must support the load of the patient, ambulance cot and any accessories. Failure to support the load properly may cause injury to the patient or operator.

Loading the Cot (occupied) into a Vehicle with Two Operators at the Foot End

Place the cot in a loading position (any position where the loading wheels meet the vehicle floor height). Roll the cot to the open patient compartment. Lift the vehicle bumper to the raised position (if possible).

Push the cot forward until the load wheels are on the patient compartment floor and the safety bar passes the safety hook.

For maximum clearance to lift the base, pull the cot back until the safety bar engages the safety hook. One operator should remain at the foot end while the second operator engages the safety hook as described above.

The second operator should return to the foot end and both operators should lift the cot while one operator pushes the retract (–) button until the undercarriage of the cot retracts fully.

Both operators should push the cot into the patient compartment, until the cot engages the cot fastener (not included).

Loading the Cot into a Vehicle – Powered Method

Loading an **unoccupied** cot into the emergency vehicle can be accomplished by a single operator.

⚠WARNING

The one person loading and unloading procedures are for use only with an empty ambulance cot. Do not use the procedures when loading/unloading a patient. Injury to the patient or operator could result.

Place the ambulance cot into a loading position (any position where the load wheels of the head section meet the vehicle floor height). Roll the ambulance cot to the open door of the patient compartment. Lift the vehicle bumper to the raised position (if possible).

Figure 42 – Load Wheels on the Vehicle Floor

⚠WARNING

When using a standard ambulance cot fastener, do not load the cot into the vehicle with the head section retracted. Loading the cot with the head section retracted may cause the product to tip or not engage properly in the cot fastener, possibly causing injury to the patient or operator and/or damage to the cot.

Push the ambulance cot forward until the load wheels are on the patient compartment floor and the safety bar passes the safety hook.

For maximum clearance to lift the base, pull the ambulance cot until the safety bar engages the safety hook (Figure 39). Operator two should verify that the bar engages the safety hook.

Grasp the ambulance cot frame at the foot–end and press the retract (–) button, until the undercarriage of the ambulance cot retracts into its uppermost position (Figure 43).

Figure 43 – Push the Retract Button

Push the ambulance cot into the patient compartment until the ambulance cot engages the cot fastener (not included).

Figure 44 – Push the Cot into the Vehicle

Unloading the Cot from a Vehicle – Powered Method:

Unloading the cot from the vehicle while a patient is on the cot requires a minimum of **two (2) operators**, positioned at each end of the ambulance cot. Each operator must grasp the ambulance cot frame securely.

Disengage the cot from the cot fastener (For more detailed instructions, reference the ambulance cot fastener installation/operation manual – Stryker part number 6370–090–010).

Lift the vehicle bumper to the raised position (if possible).

⚠WARNING

Do not press the extend (+) button until the safety bar engages the safety hook.

Operator 1 – Grasp the ambulance cot frame at the foot end. Pull the cot out of the patient compartment until the safety bar engages the safety hook. Operator two should verify that the bar engages the safety hook.

⚠WARNING

To avoid injury, verify the safety bar has engaged the safety hook before removing the ambulance cot from the patient compartment.

Operator 2 – Stabilize the cot during the unloading operation by securely grasping the outer rail.

Operator 1 – Depress the extend (+) button to lower the undercarriage to its fully extended position (Figure 46).

Operator 2 – Push the safety bar release lever forward to disengage the safety bar from the safety hook in the patient compartment (Figure 47).

⚠WARNING

Do not pull or lift on the safety bar when unloading the cot. Damage to the safety bar could result and injury to the patient or operator could occur.

Remove the load wheels from the patient compartment of the vehicle.

CAUTION

When unloading the cot from the patient compartment, ensure the caster wheels are safely set on the ground or damage to the product may occur.

Do not “jog” the cot past the load height while the safety bar is engaged.

Figure 45 – 2 Operators Unloading the Cot

Figure 46 – 2 Operators – One Pushing the Extend Button

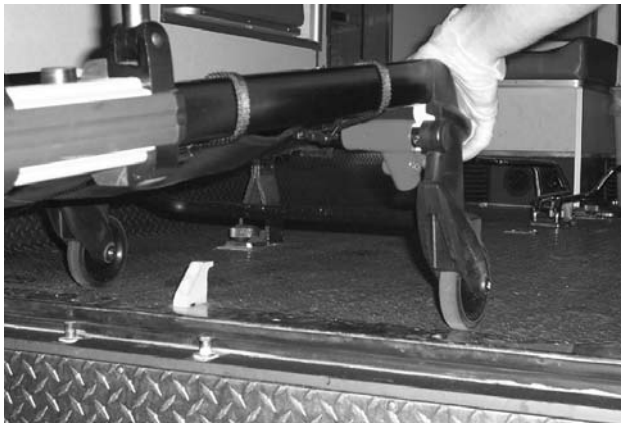


Figure 47 – Disengaging the Safety Bar

Unloading the Cot from a Vehicle – Powered Method

Unloading an **unoccupied** ambulance cot from a vehicle can be accomplished by a single operator.

⚠WARNING

The one person loading and unloading procedures are for use only with an empty ambulance cot. Do not use the procedures when unloading a patient. Injury to the patient or operator could result.

Disengage the cot from the cot fastener (For more detailed instructions, reference the ambulance cot fastener installation/operation manual – Stryker part number 6370–090–010).

Lift the vehicle bumper to the raised position (if possible).

Grasp the cot frame at the foot end. Pull the cot out of the patient compartment until the safety bar engages the safety hook. Operator two should verify that the bar engages the safety hook.

Figure 48 – Pull the Cot out of the Vehicle

⚠WARNING

Do not pull or lift on the safety bar when unloading the cot. Damage to the safety bar could result and injury to the patient or operator could occur.

Depress the extend (+) button to lower the undercarriage to its fully extended position (Figure 48).

Figure 49 – Push the Extend Button

Push the safety bar release lever forward to disengage the safety bar from the safety hook in the patient compartment.

Remove the load wheels from the patient compartment of the vehicle.

CAUTION

When unloading the ambulance cot from the patient compartment, ensure the caster wheels are safely set on the ground or damage to the product may occur.

Do not “jog” the cot past the load height while the safety bar is engaged.

Figure 50 – Remove Load Wheels from the Vehicle Floor

Manual Override Operation

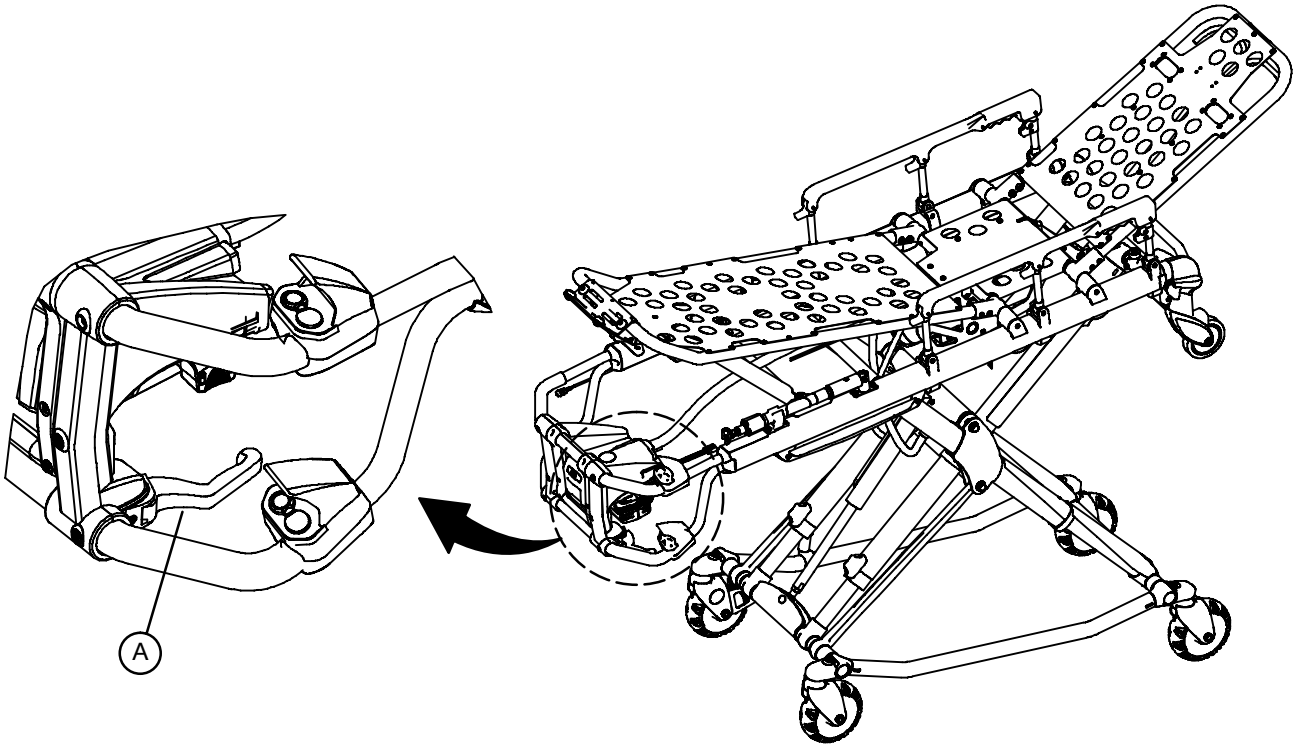


Figure 51 – Manual Release Handle

In the event of loss of electrical function, the ambulance cot is equipped with a manual override to allow manual operation of the product until electrical functionality is restored.

The **red** manual release lever (A) is located along the patient left side of the lower lift bar at the foot end of the cot.

To raise or lower the cot with the manual release:

Both Operators – lift the cot during the raise/lower operation to support the weight of the cot.

With the ambulance cot supported by an operator at each end, the operator at the foot–end must pull the release handle towards the lift bar. While the release handle is pulled, raise or lower the ambulance cot to the desired position and then release the handle to lock ambulance cot into position.

NOTE

The operators must lift the cot weight slightly off the wheels to use the manual extend or retract while a patient is on the cot.

Activation of the manual release may cause the ambulance cot to drop slowly if less than 40 pounds are on the cot, which may cause injury to the patient or operator.

Loading the Cot into a Vehicle – Manual Method

To load the cot with the manual release:

Place the cot in a loading position (any position where the loading wheels meet the vehicle floor height). Roll the cot to the open door of the patient compartment. Lift the vehicle bumper to the raised position (if possible).

Push the cot forward until the loading wheels are on the patient compartment floor and the safety bar passes the safety hook.

For maximum clearance to lift the base, pull the cot back until the safety bar engages the safety hook.

Operator 1 – Grasp the cot frame at the foot end. Lift the foot end of the cot until the weight is off the latching mechanism. Squeeze and hold the release handle.

Operator 2 – Stabilize the cot by placing your hand on the outer rail. Grasp the base frame. After the foot end operator has lifted the cot and squeezed the release handle, raise the undercarriage until it stops in the uppermost position and hold it there.

Both Operators – Push the cot into the patient compartment, engaging the cot fastener (not included).

NOTE

When operating the manual release, avoid rapid lifting or lowering of the base or movement may appear sluggish; lift with a slow constant motion.

Figure 52 – Manual Release Lever

Figure 53 – 2 Operators – One Lifting the Base

Figure 54 – Push the Cot into the Vehicle

Unloading the Cot from a Vehicle – Manual Method:

Unloading the cot from the vehicle while a patient is on the cot requires a minimum of **two (2) operators**, positioned at each end of the ambulance cot. Each operator must grasp the ambulance cot frame securely.

Disengage the cot from the cot fastener (For more detailed instructions, reference the ambulance cot fastener installation/operation manual – Stryker part number 6370–090–010).

Lift the vehicle bumper to the raised position (if equipped).

Operator 1 – Grasp the ambulance cot frame at the foot end. Pull the manual release lever to lower the undercarriage to its fully extended position (Figure 50). Pull the cot out of the patient compartment until the safety bar engages the safety hook. Operator two should verify that the bar engages the safety hook.

Figure 55 – 2 Operators Unloading the Cot

⚠WARNING

To avoid injury, verify the safety bar has engaged the safety hook before removing the ambulance cot from the patient compartment.

Operator 2 – Stabilize the cot during the unloading operation by securely grasping the outer rail.

Operator 2 – Push the safety bar release lever forward to disengage the safety bar from the safety hook in the patient compartment (Figure 57).

Figure 56 – 2 Operators – One Pushing the Extend Button

⚠WARNING

Do not pull or lift on the safety bar when unloading the cot. Damage to the safety bar could result and injury to the patient or operator could occur.

Remove the load wheels from the patient compartment of the vehicle.

CAUTION

When unloading the cot from the patient compartment, ensure the caster wheels are safely set on the ground or damage to the product may occur.

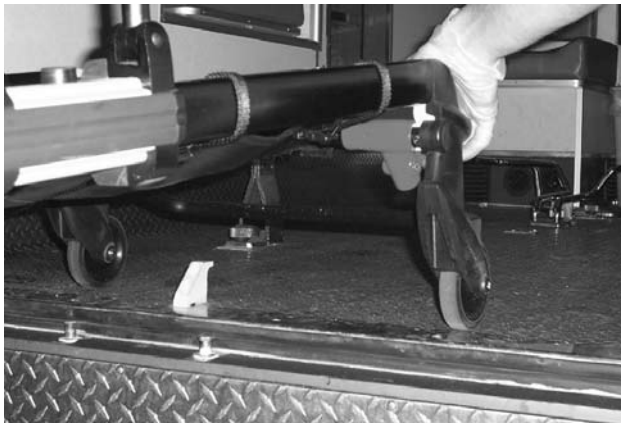


Figure 57 – Disengaging the Safety Bar

Unloading the Cot from a Vehicle – Manual Method (Continued)

Unloading an **unoccupied** ambulance cot from a vehicle can be accomplished by a single operator.

⚠WARNING

The one person loading and unloading procedures are for use only with an empty ambulance cot. Do not use the procedures when unloading a patient. Injury to the patient or operator could result.

Disengage the cot from the cot fastener (For more detailed instructions, reference the ambulance cot fastener installation/operation manual – Stryker part number 6370–090–010).

Lift the vehicle bumper to the raised position (if possible).

Grasp the cot frame at the foot end. Pull the manual release lever to lower the undercarriage to its fully extended position (Figure 59). Pull the cot out of the patient compartment until the safety bar engages the safety hook. Operator two should verify that the bar engages the safety hook.

Push the safety bar release lever forward to disengage the safety bar from the safety hook in the patient compartment.

⚠WARNING

Do not pull or lift on the safety bar when unloading the cot. Damage to the safety bar could result and injury to the patient or operator could occur.

Remove the load wheels from the patient compartment of the vehicle.

CAUTION

When unloading the ambulance cot from the patient compartment, ensure the caster wheels are safely set on the ground or damage to the product may occur.

Hydraulic fluid will become more viscous when the Power Pro is used for extended periods in cold temperatures. When using the manual release function to extend the base during unloading in cold weather conditions, hold the release lever engaged for approximately one second after the cot wheels touch the ground to minimize sagging of the litter as the cot is removed from the ambulance.

Figure 58 – Pull the Cot out of the Vehicle

Figure 59 – Pull the Manual Release Lever

Figure 60 – Remove Load Wheels from the Vehicle Floor

Cot Operation

Adjusting Cot Height

Changing the height of the cot while a patient is on the cot requires a minimum of **two (2) operators**, positioned at each end of the ambulance cot.

Operator 1 – Grasp the ambulance cot frame at the foot–end. Actuate the control switch, depress either the (+) or (–) button depending on desired travel direction, and allow the litter to raise/lower to the desired position.

Operator 2 – Maintain a firm grip on the outer rail until the ambulance cot is securely in position.

⚠WARNING

Grasping the RUGGED ambulance cot improperly can cause injury. Keep hands, fingers and feet away from moving parts. To avoid injury, use extreme caution when placing your hands and feet near the base tubes while raising and lowering the ambulance cot.

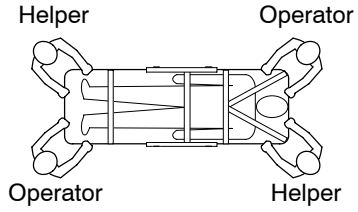
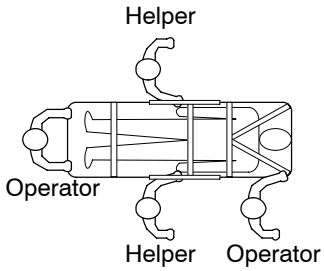
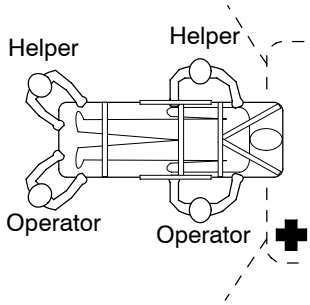
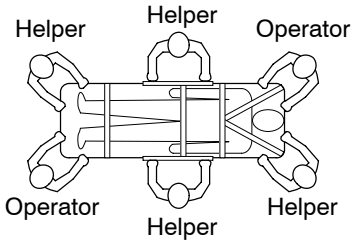
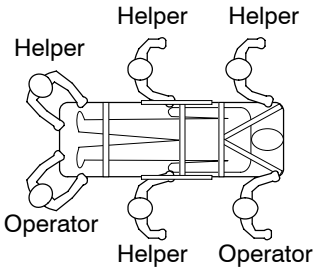
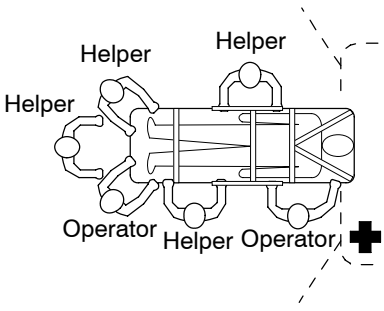
NOTE

If the push button switch remains activated, the motor will remain halted until the operator releases the button. Once the push button is released, actuate the extend (+) button again to "jog" the cot height up further.

CAUTION

Do not "jog" the ambulance cot past the established load height of the product when the safety bar engages the vehicle safety hook or damage may occur to the product.

Using Additional Assistance

	Changing Levels	Rolling	Loading/Unloading
Two Operators Two Helpers			
Two Operators Four Helpers			

Operating the Retractable Head Section

The head section telescopes from a first position suitable for loading the ambulance cot into an emergency vehicle to a second position retracted within the litter frame. When retracted, the ambulance cot can roll in any direction on the caster wheels even in the lowest position, allowing improved mobility and maneuverability.

To **extend** the head section:

- Grasp the outer rail with one hand for support and release the lever (A), rotate the lever towards the head end of the cot to release the head section from the locked position.
- While holding the handle (A) in the released position, pull the head section away from the litter frame, lengthening the head section until it engages in the fully extended position.

To **retract** the head section:

- Grasp the outer rail with one hand for support and release the lever (A), rotate the lever towards the head end of the cot to release the head section from the locked position.
- While holding the handle (A) in the released position, push the head section toward the litter frame, retracting the head section until it engages in the retracted position.

⚠WARNING

To avoid injury, always verify that the head section is locked into place prior to operating the ambulance cot.

When using a standard ambulance cot fastener, do not attempt to load the ambulance cot into the patient compartment with the head section retracted. Loading the ambulance cot with the head section retracted may cause the product to tip or not engage properly in the cot fastener, possibly causing injury to the patient or operator and/or damage to the product.

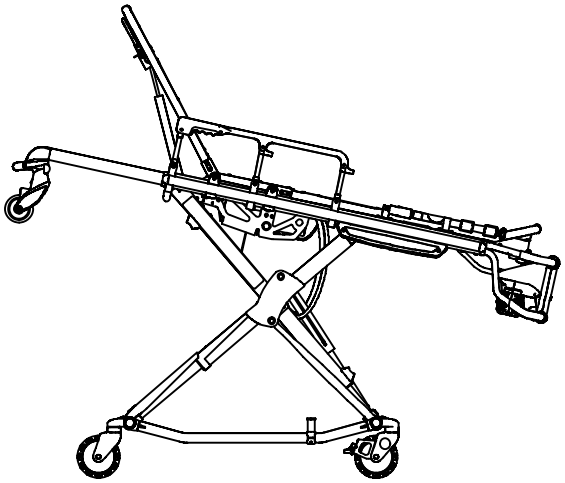


Figure 61 – Head Section Extended

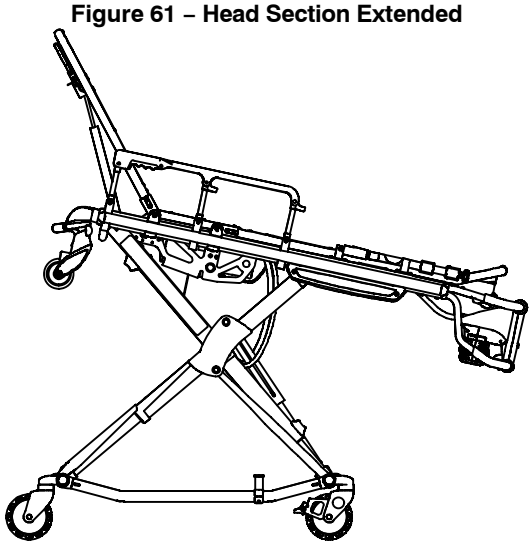


Figure 62 – Head Section Retracted

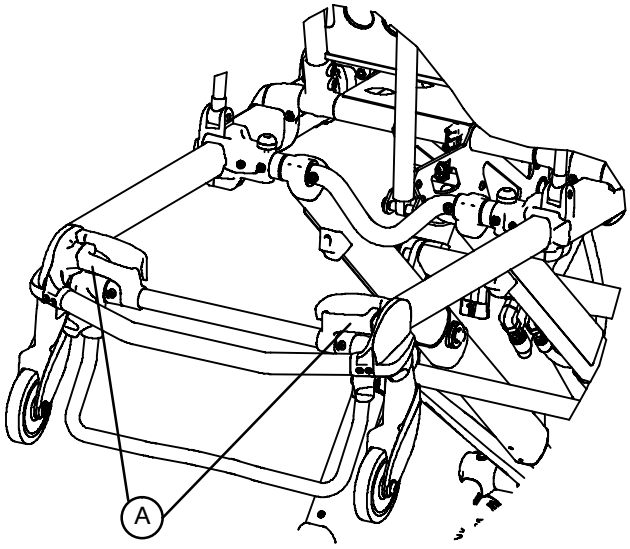


Figure 63 – Head Section Release Handles

Battery Operation

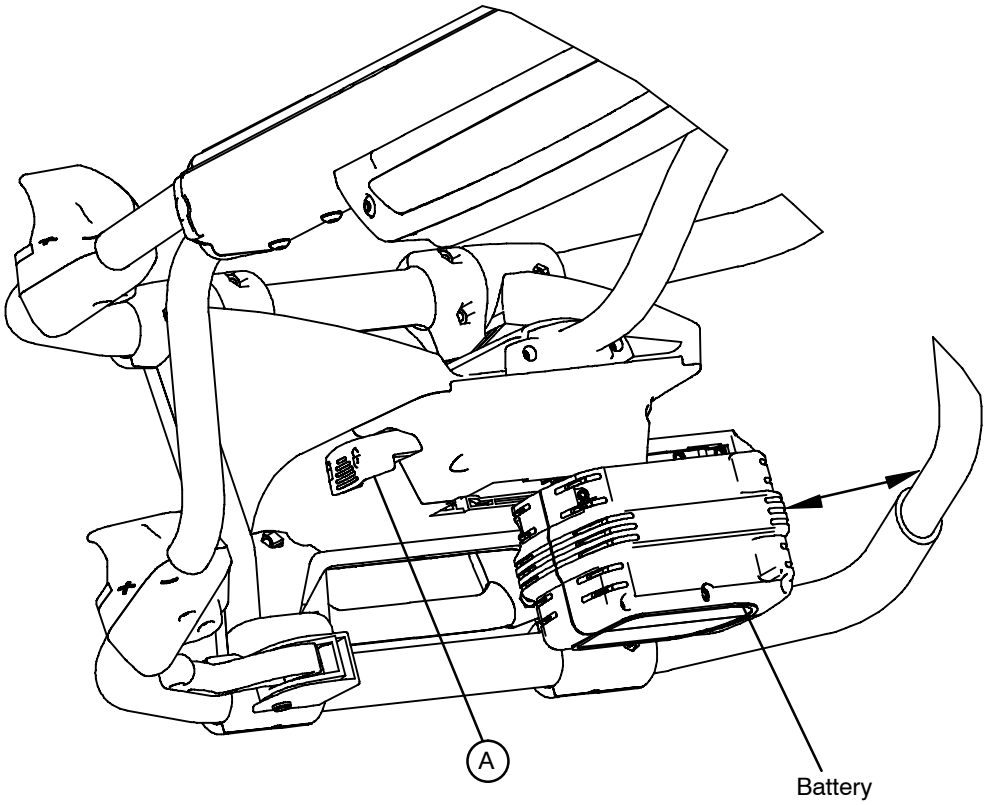


Figure 64 – Battery Removal & Replacement

The ambulance cot is supplied with two removable 24–volt DEWALT® batteries as the power source. To install the battery, align the tabs in the battery enclosure and push the battery into the enclousre until the latch clicks into place.

To remove the battery, locate the **red** battery release (A) along the patient left side of the foot end control enclosure. Push the battery release button to release the latch. Slide the released battery out of the enclosure to the left (not shown).

To reinstall the battery, align the tabs in the battery enclosure and push the battery into the enclosure until the latch clicks into place. The indicator will light GREEN, if the battery is fully charged or has adequate battery power. If the indicator flashes red, the battery needs to be recharged or replaced.

NOTE
Keep your spare battery on the charger at all times. Batteries slowly lose power when not on the charger.

⚠WARNING

To avoid risk of electric shock, never attempt to open the battery pack for any reason. If the battery pack case is cracked or damaged, do not insert it into the charger. Return damaged battery packs to a service center for recycling.

Do not remove the battery when the ambulance cot is activated.

Avoid contact with a wet battery or battery enclosure. Contact may cause injury to the patient or operator.

CAUTION

Remove the battery if the cot is not going to be used for an extended period of time (over 24 hours).

Cleaning

The RUGGED POWER PRO XT ambulance cot is designed to be power−washable. The unit may show some signs of oxidation or discoloration from continuous washing, however, no degradation of the cot's performance characteristics or functionality will occur due to power washing as long as the proper procedures are followed.

Thoroughly clean the cot once a month. Clean Velcro AFTER EACH USE. Saturate Velcro with disinfectant and allow disinfectant to evaporate. (Appropriate disinfectant for nylon Velcro should be determined by the service.)

Washing Procedure:

- **Remove the battery**! The battery and charger are **not** immersible or power−washable.
- Follow the cleaning solution manufacturer's dilution recommendations exactly.
- The preferred method Stryker Medical recommends for power washing the POWER PRO XT ambulance cot is with the standard hospital surgical cart washer or hand held wand unit.

Washing Limitations:

⚠WARNING

Use any appropriate personal safety equipment (goggles, respirator, etc.) to avoid the risk of inhaling contagion. Use of powerwashing equipment can aerate contamination collected during the use of the cot.

CAUTION

DO NOT STEAM CLEAN OR ULTRASONICALLY CLEAN THE UNIT.

Maximum water temperature should not exceed 180°F/82°C.

Maximum air dry temperature (cart washers) is 240°F/115°C.

Maximum water pressure should not exceed 1500 psi/130.5 bar. If a hand held wand is being used to wash the unit, the pressure nozzle must be kept a minimum of 24 inches/61 centimeters from the unit.

Towel dry all casters and interface points.

Failure to comply with these instructions may invalidate any/all warranties.

Remove the battery before washing the cot.

In general, when used in those concentrations recommended by the manufacturer, either phenolic type or quaternary type disinfectants can be used. Iodophor type disinfectants are not recommended for use because staining may result.

Suggested cleaners for the RUGGED POWER PRO XT cot surfaces:

Quaternary Cleaners (active ingredient – ammonium chloride)
Phenolic Cleaners (active ingredient – o–phenylphenol)
Chlorinated Bleach Solution (5.25% – less than 1 part bleach to 100 parts water)

Avoid over–saturation and ensure the product does not stay wet longer than the chemical manufacturer's guidelines for proper disinfecting.

⚠WARNING

SOME CLEANING PRODUCTS ARE CORROSIVE IN NATURE AND MAY CAUSE DAMAGE TO THE PRODUCT IF USED IMPROPERLY. If the products described above are used to clean Stryker patient care equipment, measures must be taken to insure the cots are wiped with clean water and thoroughly dried following cleaning. Failure to properly rinse and dry the cots will leave a corrosive residue on the surface of the cots, possibly causing premature corrosion of critical components.

NOTE

Failure to follow the above directions when using these types of cleaners may void this product's warranty.

REMOVAL OF IODINE COMPOUNDS

Use a solution of 1/2 tablespoons Sodium Thiosulfate in a pint of warm water to clean the stained area. Clean as soon as possible after staining occurs. If stains are not immediately removed, allow solution to soak or stand on the surface. Rinse surfaces which have been exposed to the solution in clear water before returning unit to service.

⚠WARNING

Failure to properly clean or dispose of contaminated mattress or cot components will increase the risk of exposure to bloodborne pathogens and may cause injury to the patient or the operator.

Preventative Maintenance

The RUGGED POWER PRO XT ambulance cot requires regular maintenance. Establish and follow a maintenance schedule and keep records of maintenance activity (see page 62 for a form).

⚠WARNING

Do not modify the RUGGED ambulance cot or any components of the cot, including the hydraulic unit. Modifying the product can cause unpredictable operation resulting in injury to the patient or operator. Modifying the product will also void its warranty.

Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source.

When using maintenance products, follow the directions of the manufacturer and reference all material safety data sheets.

CAUTION

Improper maintenance can cause injury or damage to the product. Maintain the ambulance cot as described in this manual. Use only Stryker–approved parts and maintenance procedures. Using unapproved parts and procedures could cause unpredictable operation and/or injury and will void the product warranty.

Failure to use authorized parts, lubricants, etc. could cause damage to the ambulance cot and will void the warranty of the product.

Hydraulic lines, hoses, and connections can fail or loosen due to physical damage, kinks, age, and exposure. Check hoses and lines regularly to avoid damage to the cot. Check and tighten loose connections.

Do not tip the ambulance cot onto its load wheels and actuate the product as this will allow air to enter the hydraulic system.

Regular Inspection and Adjustments

Maintenance Intervals

The following schedule is intended as a general guide to maintenance. Bear in mind that such factors as weather, terrain, geographical location, and individual usage will alter the required maintenance schedule. If you are unsure as to how to perform these checks please consult the electronic trouble shooting guide or contact your Stryker service technician. If you are in doubt as to what intervals to follow in maintaining your product, consult your Stryker service technician.

Item	Routine	Every (whichever comes first)			
		1 Month or 2 hours	3 Months or 6 hours	6 Months or 12 hours	12 Months or 24 hours
Settings	Verify the in–fastener shut–off is configured properly	X			
	Verify the ambulance cot and fastener fit and function properly				X
	Verify the safety bar engages the vehicle safety hook properly				X
Cylinder	All fasteners are secure (reference all assembly drawings)		X		
	Verify the cylinder is adjusted so the lock nut is tight and the cot stops moving when it hits the dead stops.				X
	Inspect for and verify that there are no hydraulic fluid (red) leaks; inspect the fittings and tighten as necessary		X		
Hydraulics	Inspect motor mount and verify that all fasteners are secure		X		
	Verify that there are no hydraulic fluid leaks		X		
	Inspect the reservoir and verify that there are no leaks		X		
	Inspect hoses and fittings for damage or wear; replace as necessary			X	
	Verify the hydraulic velocity fuse – Place a weight of approximately 50lbs on the cot, raise the cot, lift the cot with two operators, pull the manual release, rapidly set the cot down, verify that the cot does not drop.			X	
Electronic Controls	Extend cot to raised position, measure and check load height			X	
	Verify ”jog” function is operating			X	
	Verify high speed retract is working			X	
Switches	Verify there is no damage or wear to either switch			X	
	Verify both switches operate correctly – Replace if necessary			X	
Cables/Wires	Verify there is no damage or pinching of wiring harness, cables or lines		X		
	Check routing(s) and connection(s), verify there are no hanging wires	X			
	Verify there are no damaged connectors, replace if necessary		X		

Item	Routine	Every (whichever comes first)			
		1 Month or 2 hours	3 Months or 6 hours	6 Months or 12 hours	12 Months or 24 hours
Manual Release	Verify that the manual release functions properly	X			
	Verify the release handle returns to the stowed position				X
	Verify the base extends/retracts smoothly when the manual release is engaged		X		
	With 100 lbs or more on the cot, verify the cot does not lower when the manual release is pulled		X		
Litter	Inspect the ambulance cot frame/litter	X			
	Verify all welds intact, not cracked or broken				X
	Verify no bent, broken or damaged components			X	
	Verify all fasteners secure (reference all assembly drawings)		X		
	Verify warning labels present, legible (reference assembly drawings)				X
	Verify no damage or tears on cot grips			X	
	Verify the siderails operate and latch properly			X	
	Verify the backrest cylinder operates properly		X		
	Adjust pneumatic cylinder for full range of motion, if required		X		
	Verify the footrest operates properly			X	
Mattress	Verify no cracks or tears on cot mattress			X	
Restraints	Inspect patient restraints for proper function and no excessive wear	X			
Base	Inspect the ambulance cot frame/base	X			
	Verify all welds intact, not cracked or broken				X
	Verify no bent, broken, or damaged components			X	
	Verify all fasteners secure		X		
	Verify no excessive damage to X–frame guards, replace if necessary			X	
Wheels	Verify wheels are free of debris			X	
	Verify tires in good condition				X
	Verify all wheels secure, rolling and swiveling properly	X			
	Check and adjust optional wheel locks as necessary				X
X–Frame	Verify smooth operation of X–frame		X		

Item	Routine	Every (whichever comes first)			
		1 Month or 2 hours	3 Months or 6 hours	6 Months or 12 hours	12 Months or 24 hours
Head Section	Verify all fasteners secure		X		
	Verify no bent, broken, or damaged components			X	
	Verify the head section extends and locks properly		X		
	Verify the grip bar has no excessive damage or tears			X	
	Verify load wheels are secure and roll properly			X	
	Verify the safety bar operates properly	X			
Accessories	Verify the IV pole (optional) operates properly		X		
	Verify the head extension & pillow (optional) operates properly		X		
	Verify the restraint extender (optional) operates properly		X		

Maintenance Record

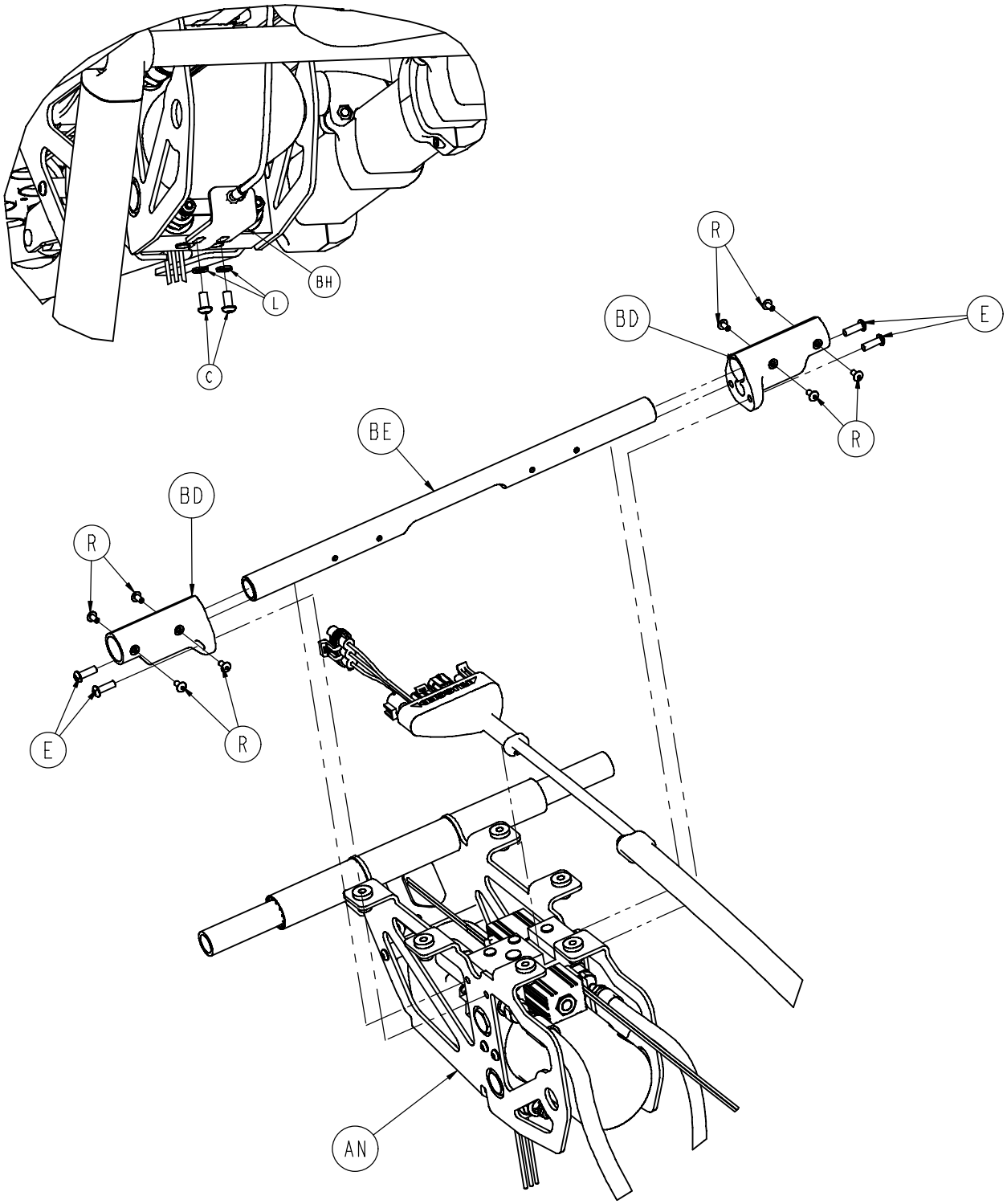
Date	Maintenance Operation Performed	By	Hours

Training Record

	Training Date		Training Method
Trainee Name	**Basic Training**	**Refresher Update**	**Owner's Manual, In−Service, Formal Class, Etc.**

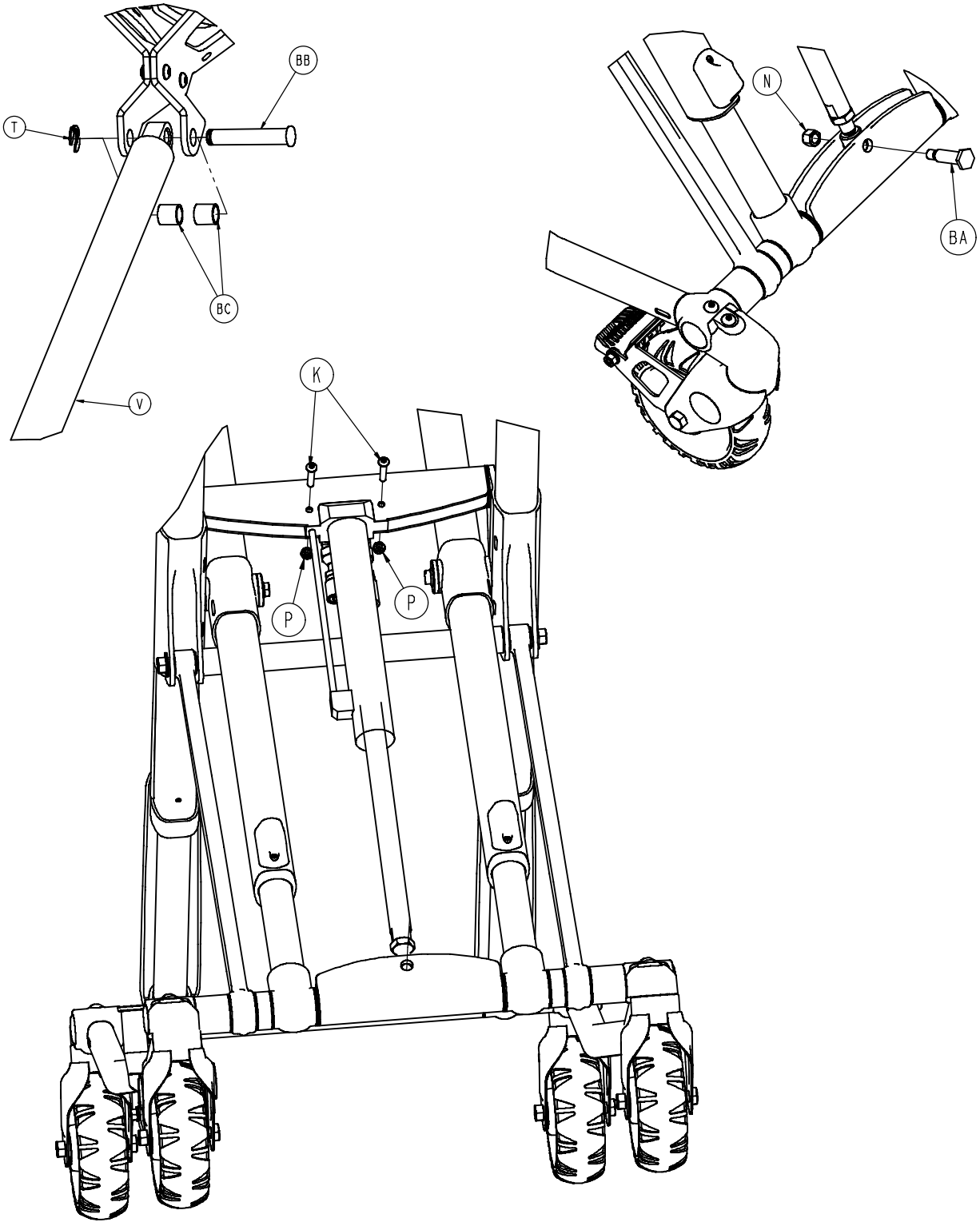
6500–001–010 Cot Assembly

For Reference Only: 6500–001–010



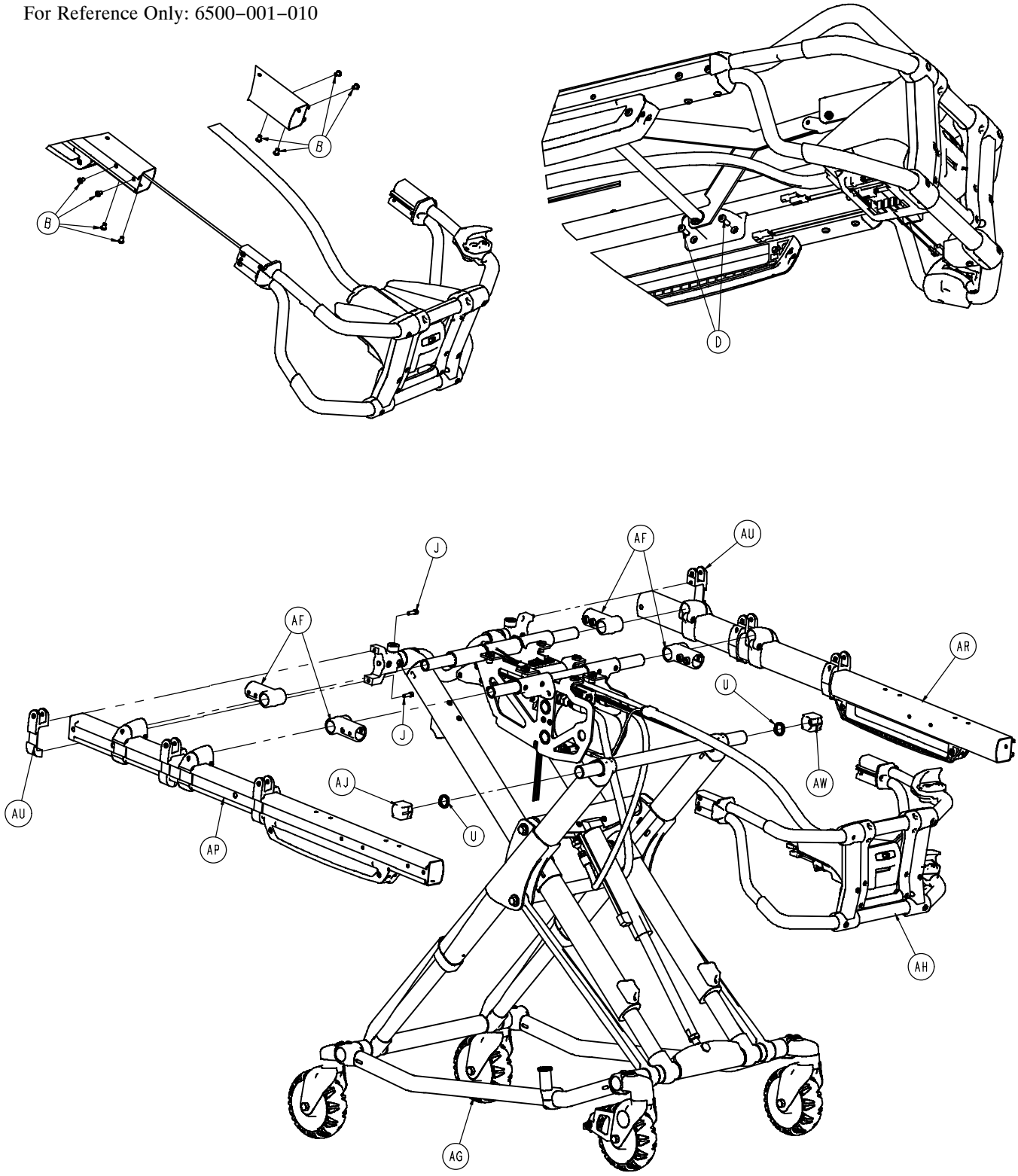
6500–001–010 Cot Assembly

For Reference Only: 6500–001–010



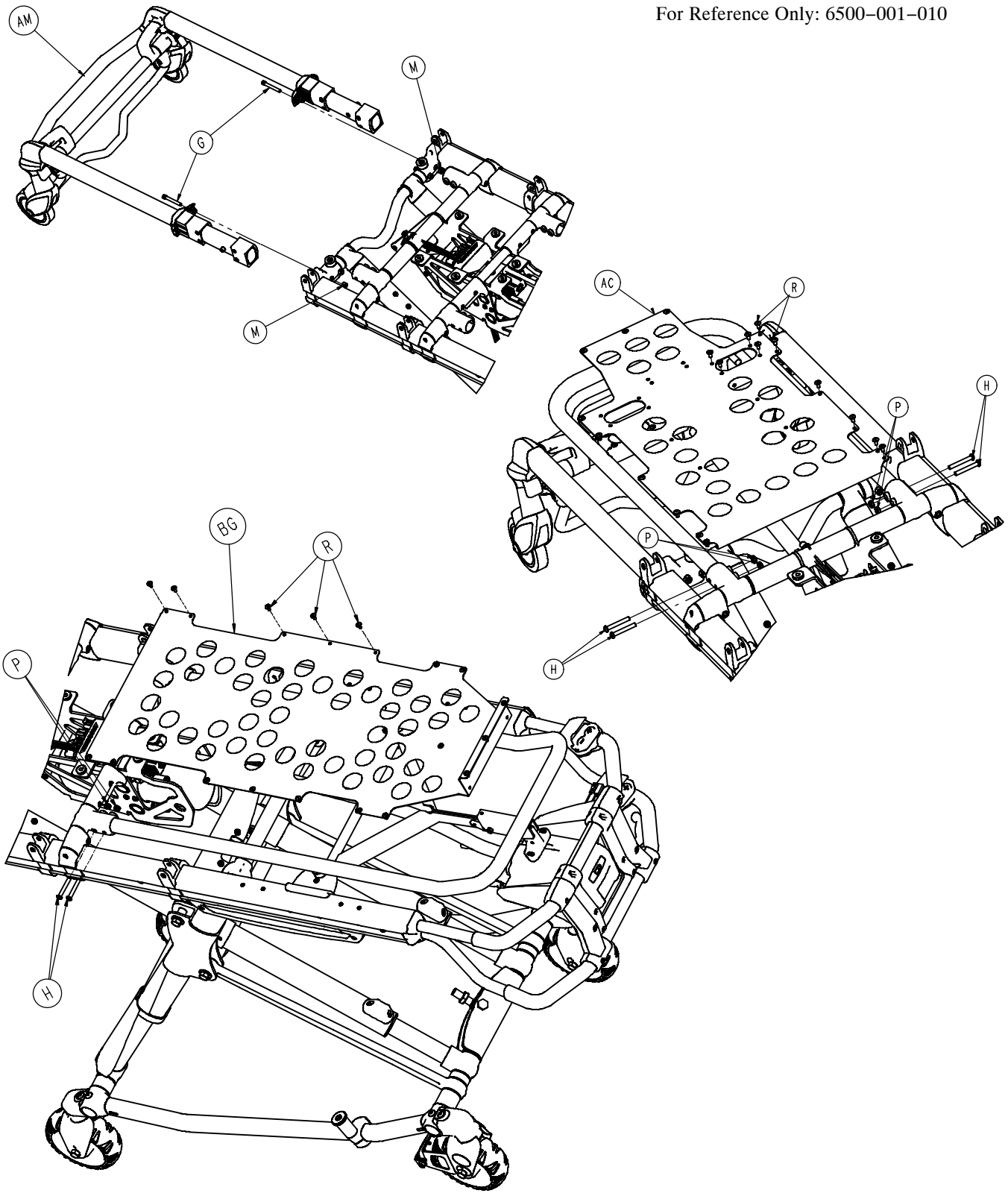
6500–001–010 Cot Assembly

For Reference Only: 6500–001–010



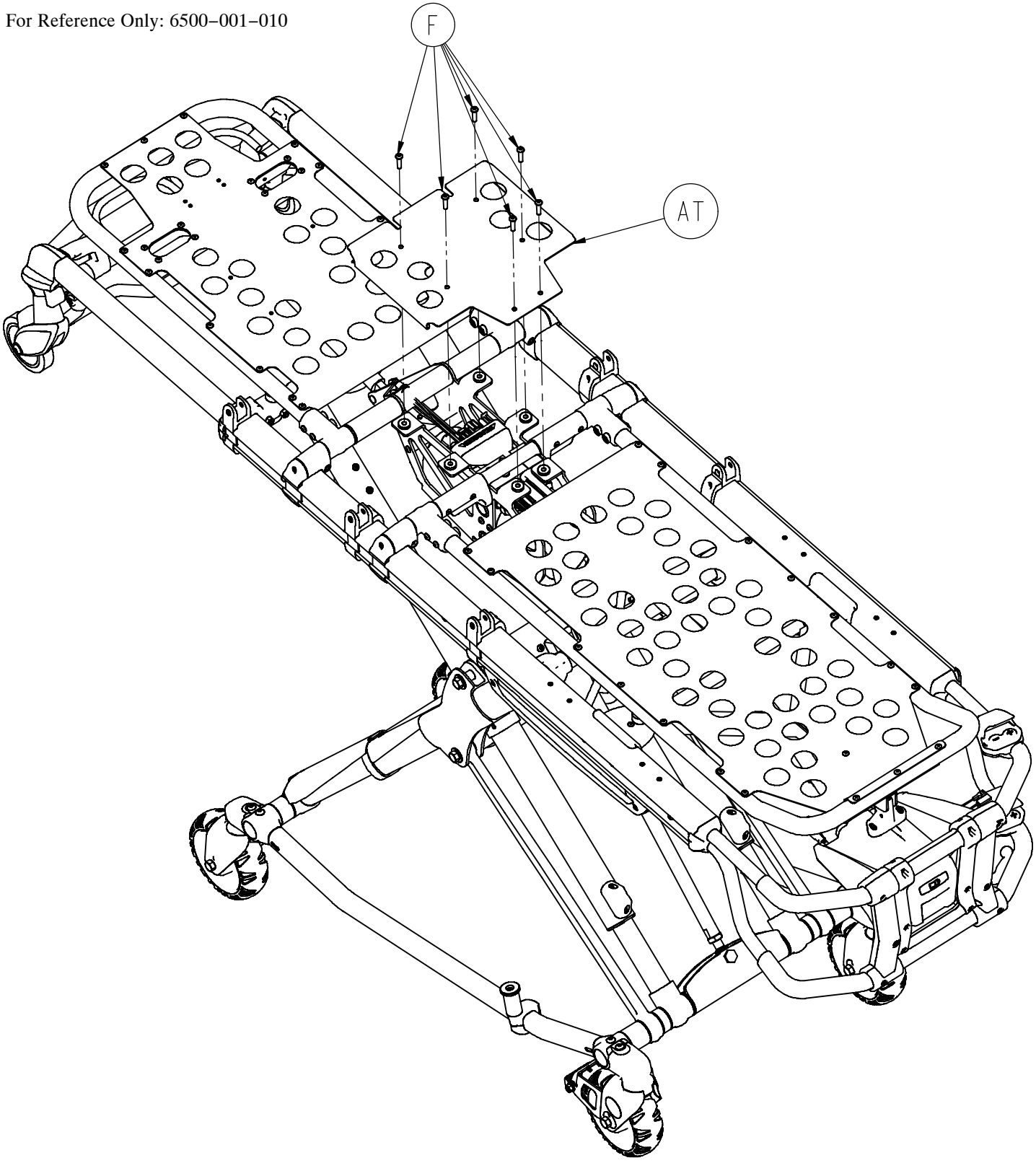
6500–001–010 Cot Assembly

For Reference Only: 6500–001–010



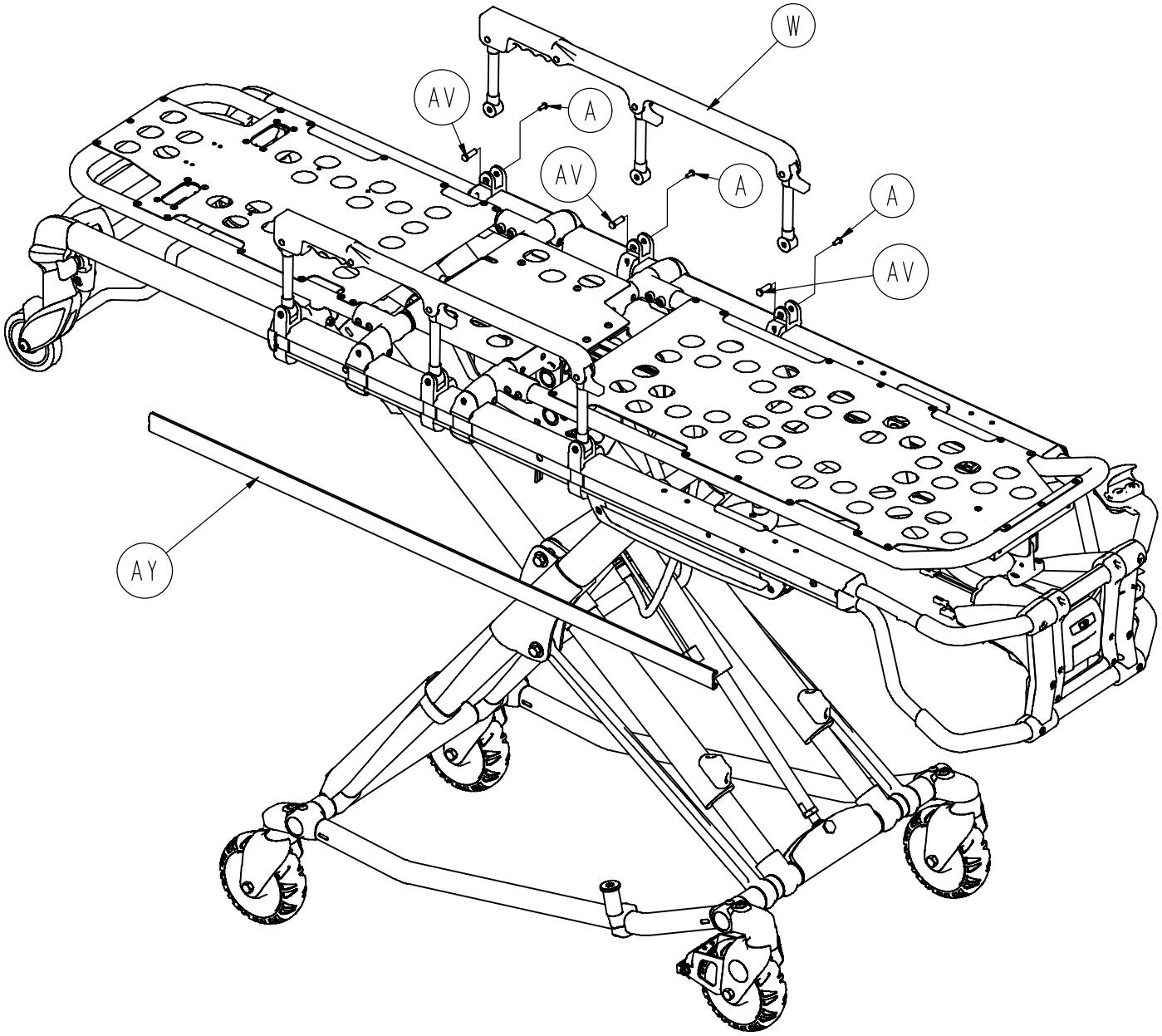
6500–001–010 Cot Assembly

For Reference Only: 6500–001–010



6500–001–010 Cot Assembly

For Reference Only: 6500–001–010



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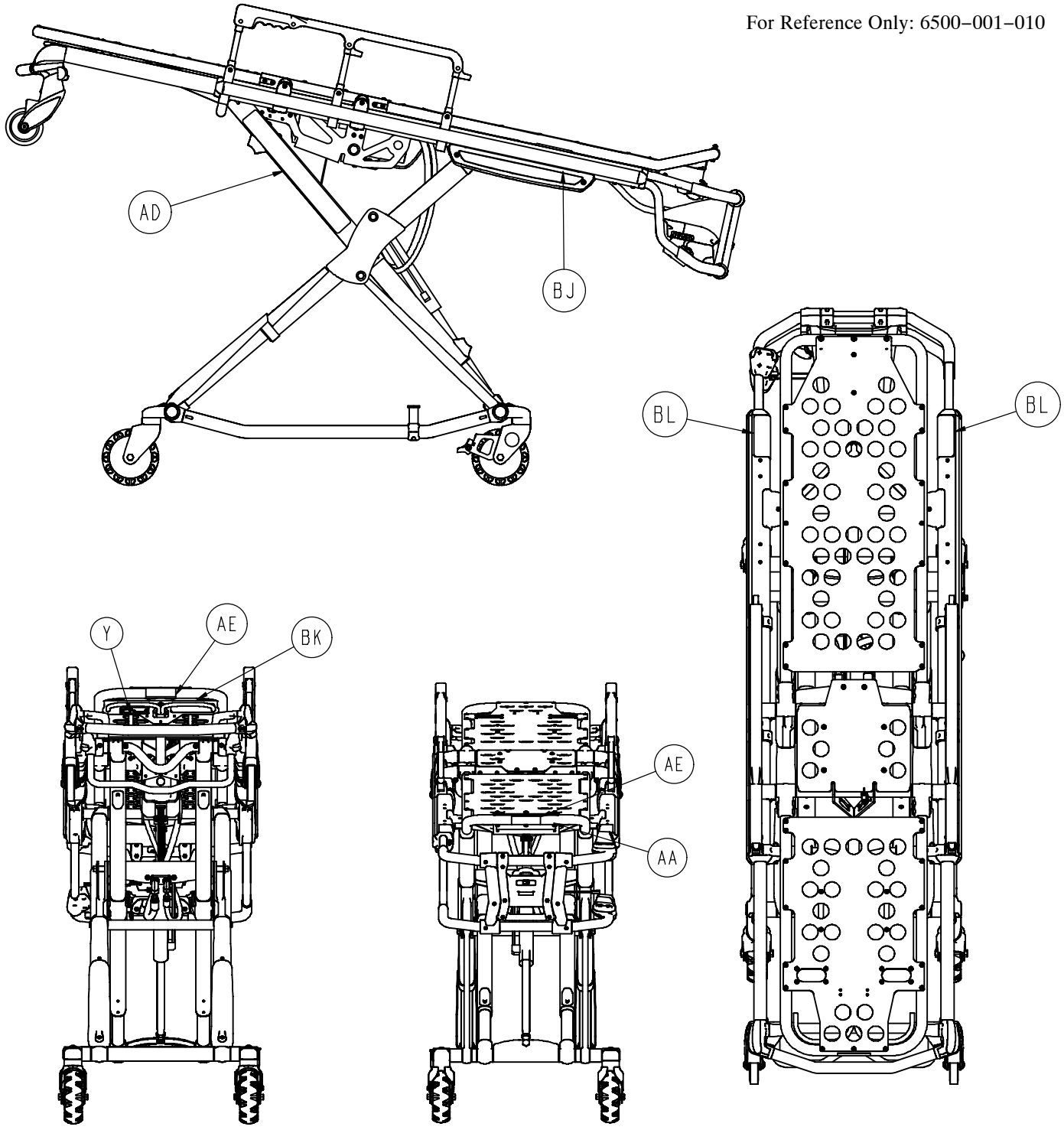
For Reference Only: 6500–001–010

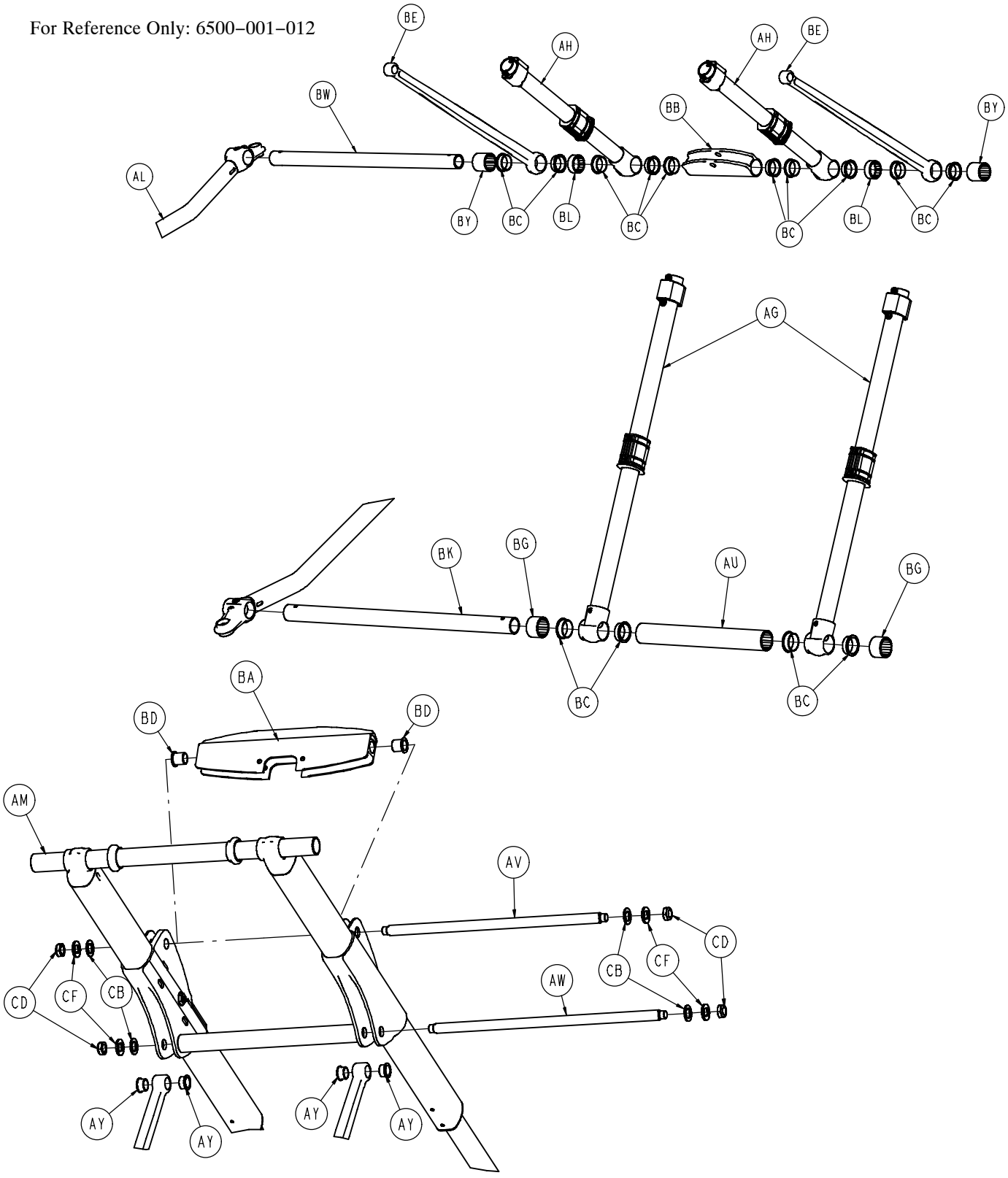


6500–001–010 Cot Assembly

Item	Part No.	Part Name	Qty.
A	0004–585–000	Button Head Cap Screw	6
B	0004–588–000	Button Head Cap Screw	8
C	0004–589–000	Button Head Cap Screw	6
D	0004–592–000	Button Head Cap Screw	12
E	0004–593–000	Button Head Cap Screw	4
F	0004–594–000	Button Head Cap Screw	6
G	0004–595–000	Socket Head Cap Screw	2
H	0004–596–000	Button Head Cap Screw	8
J	0004–611–000	Socket Head Cap Screw	4
K	0004–612–000	Button Head Cap Screw	2
L	0012–012–000	Locking Washer	2
M	0016–028–000	Nylock Hex Nut	2
N	0016–035–000	Nylock Hex Nut	2
P	0016–102–000	Nylock Hex Nut	10
R	0025–079–000	Rivet	54
T	0028–181–000	Truarc Ring	1
U	0038–574–000	Spring	2
V	1010–031–077	Gas Spring	1
W	6060–026–010	Siderail Assembly	2
Y	6060–090–002	Serial Number Tag	1
AA	6080–090–009	Warning Label	1
AB	6080–090–101	Brake Warning Label	1
AC	6082–032–045	Fowler Skin	1
AD	6082–090–003	RUGGED Label	2
AE	6083–001–165	STRYKER Label	2
AF	6100–003–125	Straight T Pivot	4
AG	6500–001–012	Base Assembly	1
AH	6500–001–015	Foot End Assembly	1
AJ	6500–001–017	Slider Magnet	1
AK	6500–001–018	Fowler Assembly	1
AL	6500–001–019	Trend Assembly	1
AM	6500–001–020	Head Section Assembly	1
AN	6500–001–031	Powerplant Assembly	1
AP	6500–001–032	Outer Rail, PR	1
AR	6500–001–033	Outer Rail PL	1
AT	6500–001–111	Mid–Section Skin	1
AU	6500–001–116	Siderail Bracket	2
AV	6500–001–118	Siderail Nut	6
AW	6500–001–123	Slider	1
AY	6500–001–127	Outer Rail Bumper	2
BA	6500–001–168	Pin, Rod Attachment	1
BB	6500–001–170	Pin, Fowler Cylinder	1
BC	6500–001–191	Spacer, Fowler Cylinder	2
BD	6500–001–195	Mount, Casting Motor	2
BE	6500–001–196	Cross Brace	1
BF	6500–001–197	Foot Section Tube	1
BG	6500–001–198	Foot Section Skin	1
BH	6500–001–215	Manual Release Bracket	1
BJ	6500–001–233	Sensor Housing Label	2
BK	6500–001–234	Power–Pro XT Label	1
BL	6500–001–259	Weight Capacity Label	2

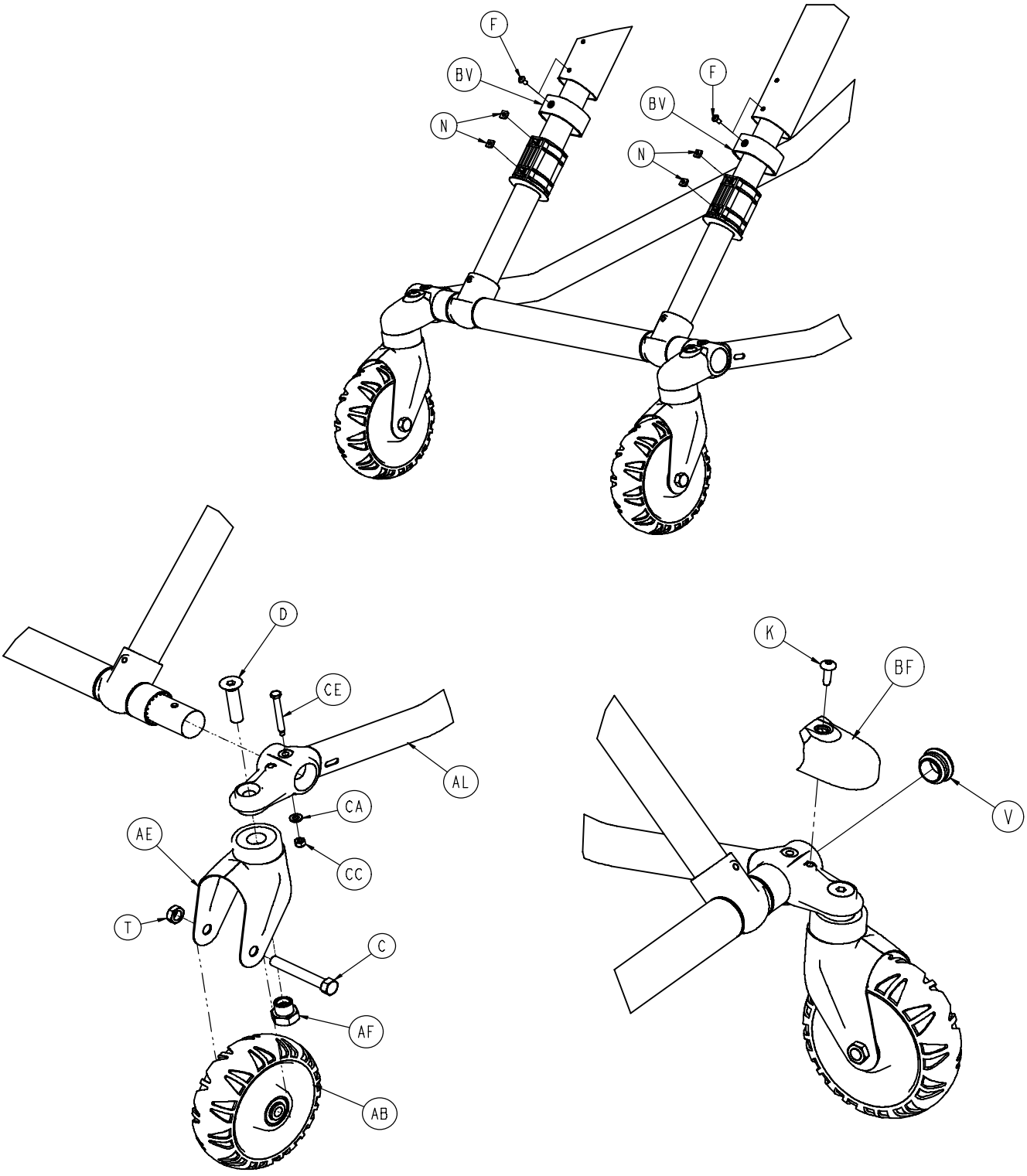
6500–001–012 Base Assembly

For Reference Only: 6500–001–012



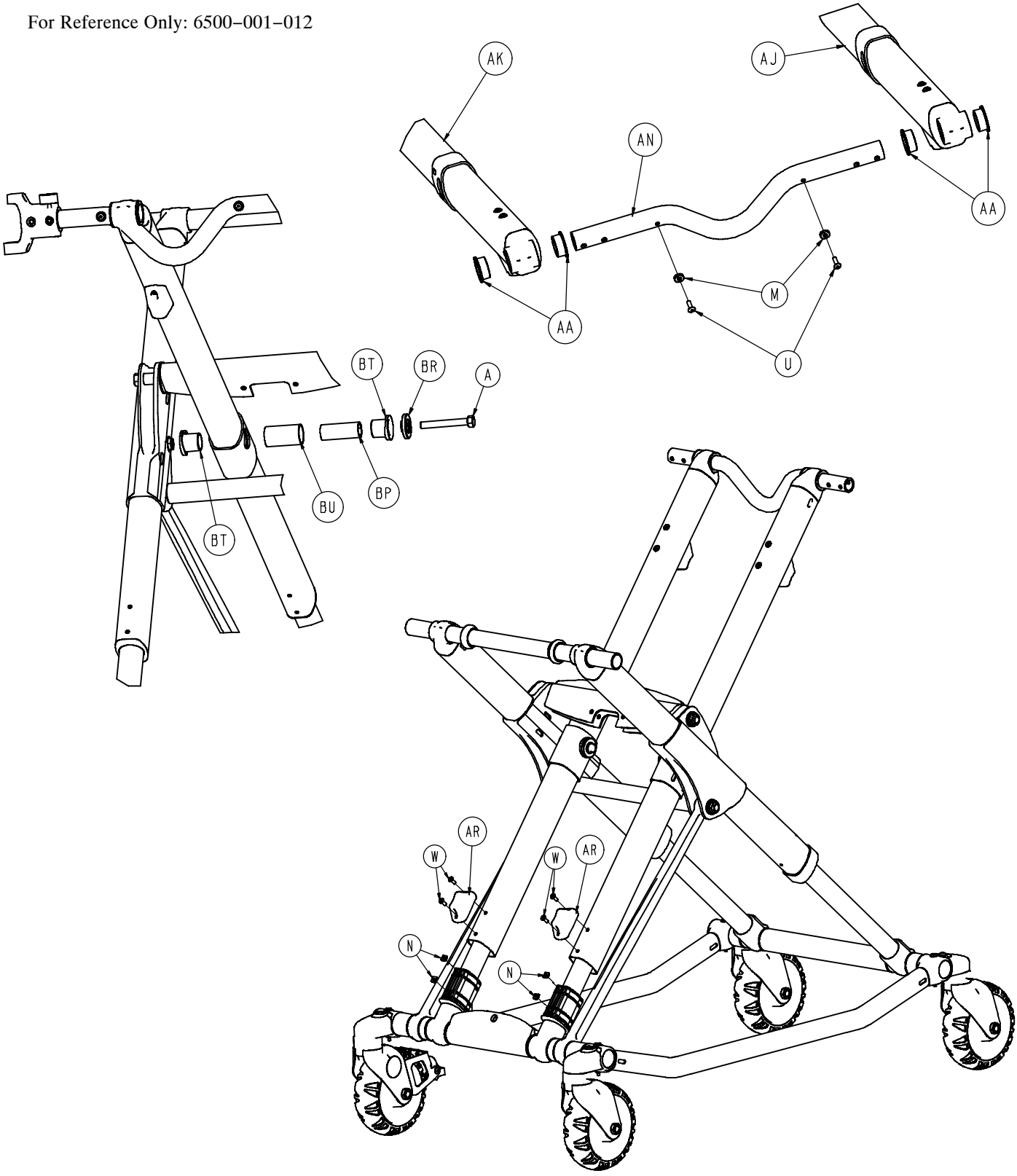
6500−001−012 Base Assembly

For Reference Only: 6500−001−012



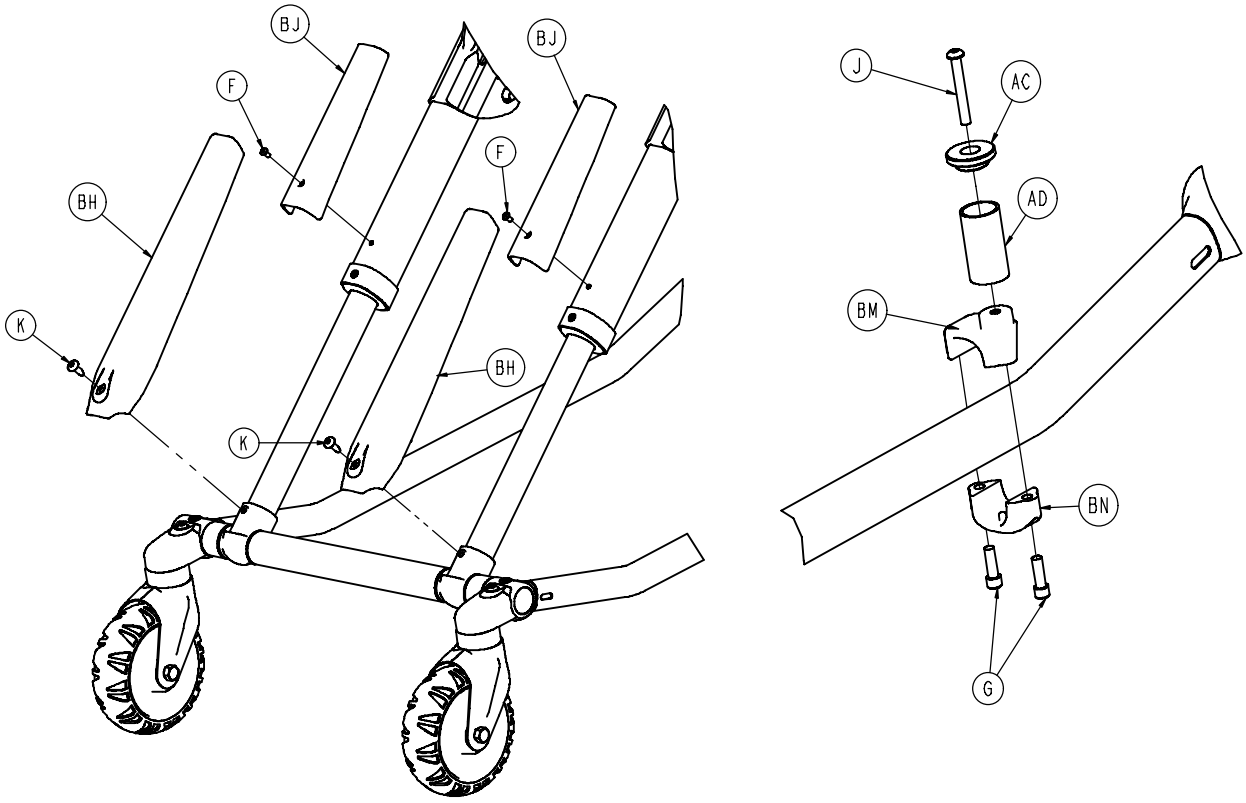
6500–001–012 Base Assembly

For Reference Only: 6500–001–012



6500−001−012 Base Assembly

For Reference Only: 6500−001−012



Item	Part No.	Part Name	Qty.
A	0003−107−000	Hex Head Cap Screw	2
C	0003−205−000	Hex Head Cap Screw	4
D	0004−319−000	Flat Head/ Hex Socket Bolt	4
F	0004−587−000	Button Head Cap Screw	4
G	0004−591−000	Socket Head Cap Screw	2
J	0004−631−000	Hex Head Cap Screw	1
K	0007−086−000	Truss Head Screw	6
M	0014−115−000	Washer	2
N	0015−051−000	Square Nut	8
T	0016−060−000	Toplock Hex Nut	4
U	0025−133−000	Rivet	10
V	0037−083−000	Tube Plug	4
W	0004−634−000	Button Head Cap Screw	4
AA	0081−244−000	Bearing−Flange	4
AB	6060−002−010	Molded Wheel Assembly	4
AC	6060−004−043	Retaining Post Cap	1
AD	6060−004−044	Post Tube	1
AE	6082−002−012	Caster Assembly	2
AF	6090−001−009	Caster Nut	4
AG	6500−001−021	Outer Lift tube Assembly	2
AH	6500−001−022	Inner Lift Tube Assembly	2

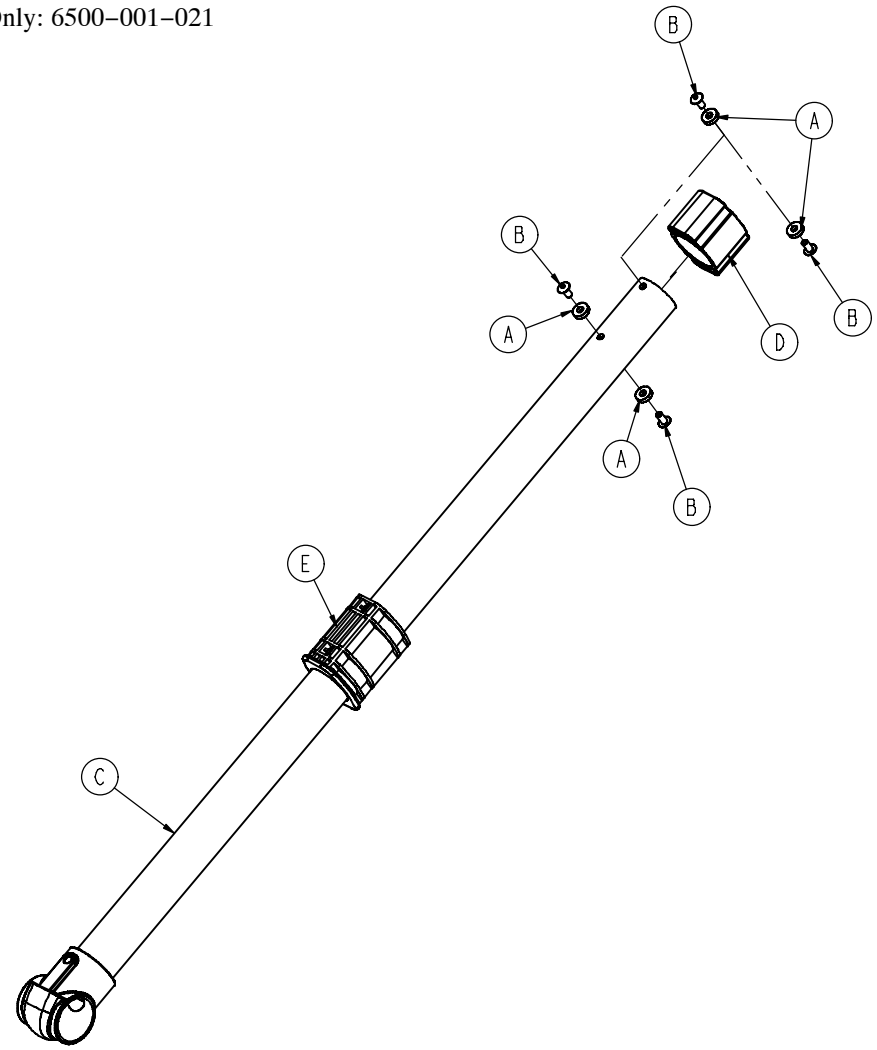
6500–001–012 Base Assembly

AJ	6500–001–034	Inner Lift Tube PR	1
AK	6500–001–035	Inner Lift Tube PL	1
AL	6500–001–054	Outer Base Tube Weldment	2
AM	6500–001–056	Frame, Base, Tube	1
AN	6500–001–090	Head End Cross tube	1
AR	6500–001–125	Dead Stop	2
AU	6500–001–129	Plastic Extrusion – Spacer	1
AV	6500–001–171	Cross tube Cylinder Mount	1
AW	6500–001–182	Cross Tube, Stiffener Bar	1
AY	6500–001–162	Flange Bearing	4
BA	6500–001–164	Pivot, Cylinder Mount, Top	1
BB	6500–001–165	Pivot, Cylinder Mount, Bottom	1
BC	6500–001–166	Bearing, Flange	14
BD	6500–001–157	Bearing, Flange	2
BE	6500–001–172	Support Link	2
BF	6500–001–177	Cover, Caster Mount	4
BG	6500–001–178	Plastic Extrusion – Spacer	2
BH	6500–001–179	X–Frame Lower Guard	2
BJ	6500–001–180	X–Frame Upper Guard	2
BL	6500–001–183	Plastic Extrusion – Spacer	2
BM	6500–001–189	Top Pin Bracket	1
BN	6500–001–190	Bottom Pin Bracket	1
BP	6500–001–217	Post, Pivot, Base Tube	2
BR	6500–001–218	Cap, Pivot, Base Tube	2
BT	6500–001–226	Bearing, Pivot, Base Tube	4
BU	6500–001–227	Post, Pivot, Base tube	2
BV	6500–001–228	Sleeve, Inner Lift Tube	2
BW	6500–001–229	Base Tube Foot	1
BY	6500–001–230	Plastic Extrusion – Spacer	2
CA	0014–002–000	Flat Washer	4
CB	0014–040–000	Flat Washer	4
CC	0016–002–000	Fiberlock Nut	4
CD	0016–049–000	Nylon Hex Nut	4
CE	6500–001–145	Spacer	4
CF	6500–001–225	“D” Washer	4

6500–001–021 Outer Lift Tube Assembly

Base Pivot

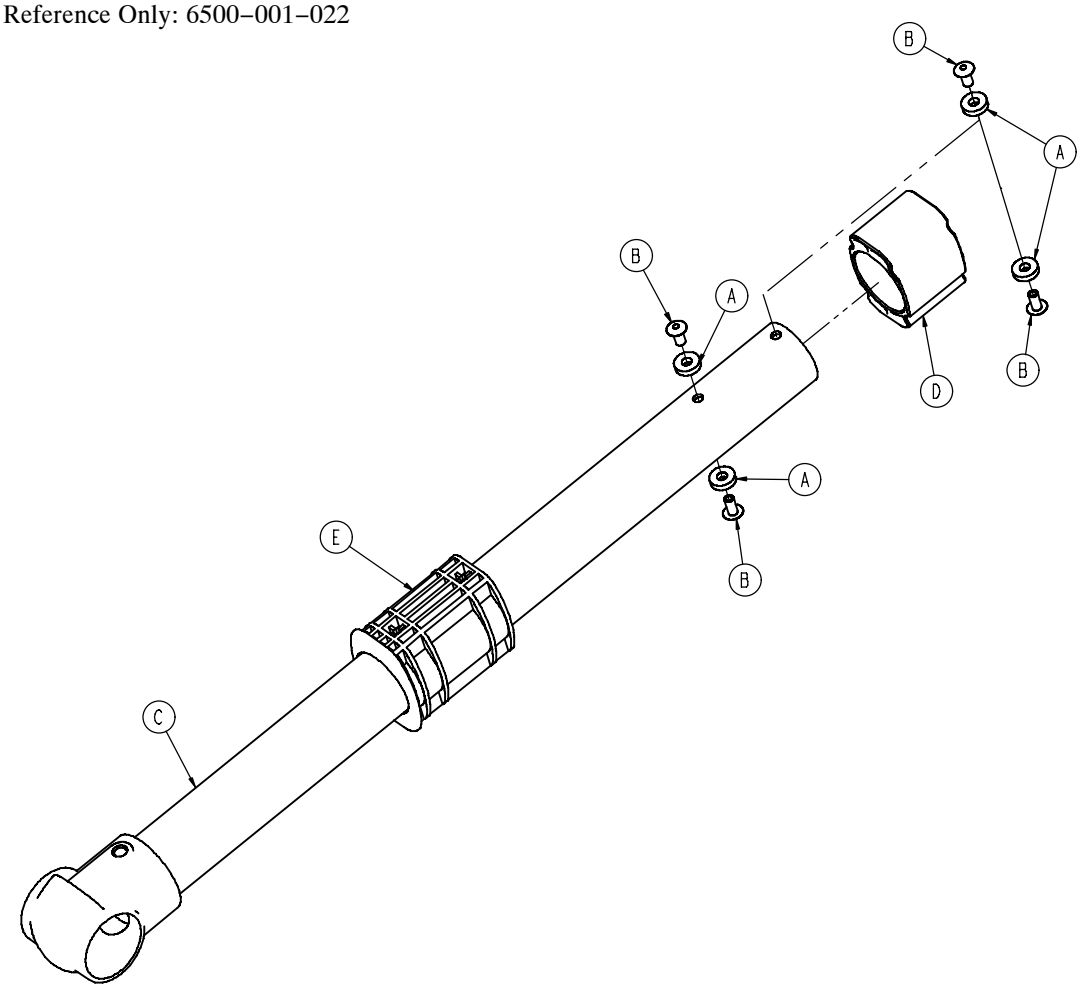
For Reference Only: 6500–001–021



Item	Part No.	Part Name	Qty.
A	014–115–000	Washer	4
B	0025–079–000	Rivet	4
C	6500–001–050	Outer Lift Tube Weldment	1
D	6500–001–186	Bearing	1
E	6500–001–187	Bearing	1

6500–001–022 Inner Lift Tube Assembly
Base Pivot

For Reference Only: 6500–001–022

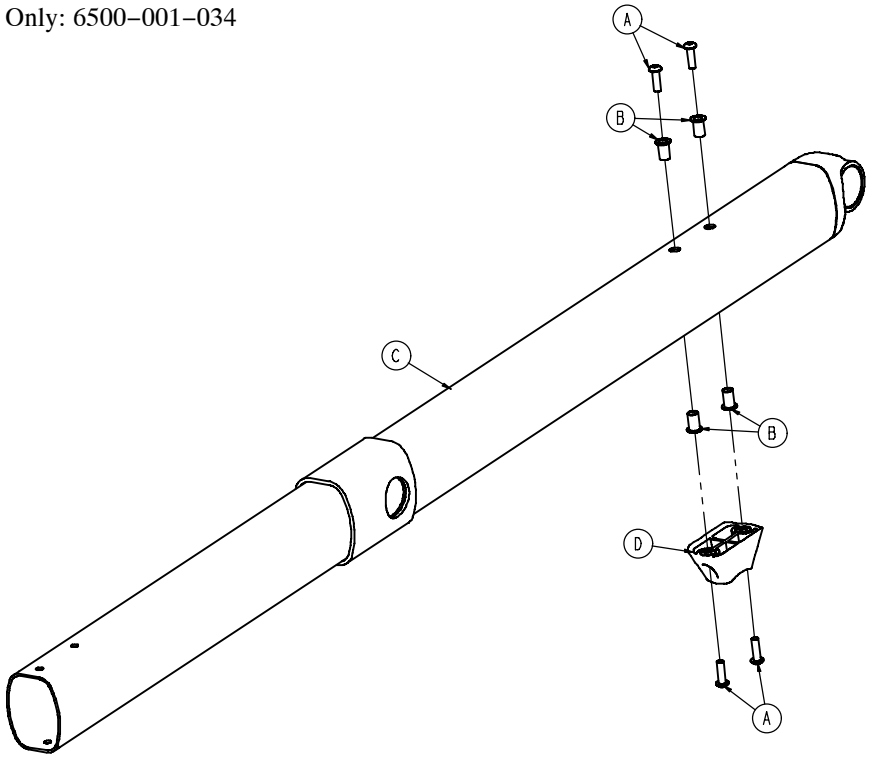


Item	Part No.	Part Name	Qty.
A	0014–115–000	Washer	4
B	0025–079–000	Rivet	4
C	6500–001–051	Inner Lift Tube Weldment	1
D	6500–001–186	Bearing	1
E	6500–001–187	Bearing	1

6500–001–034 Inner Lift Tube, Litter Pivot

Patient Right Assembly

For Reference Only: 6500–001–034

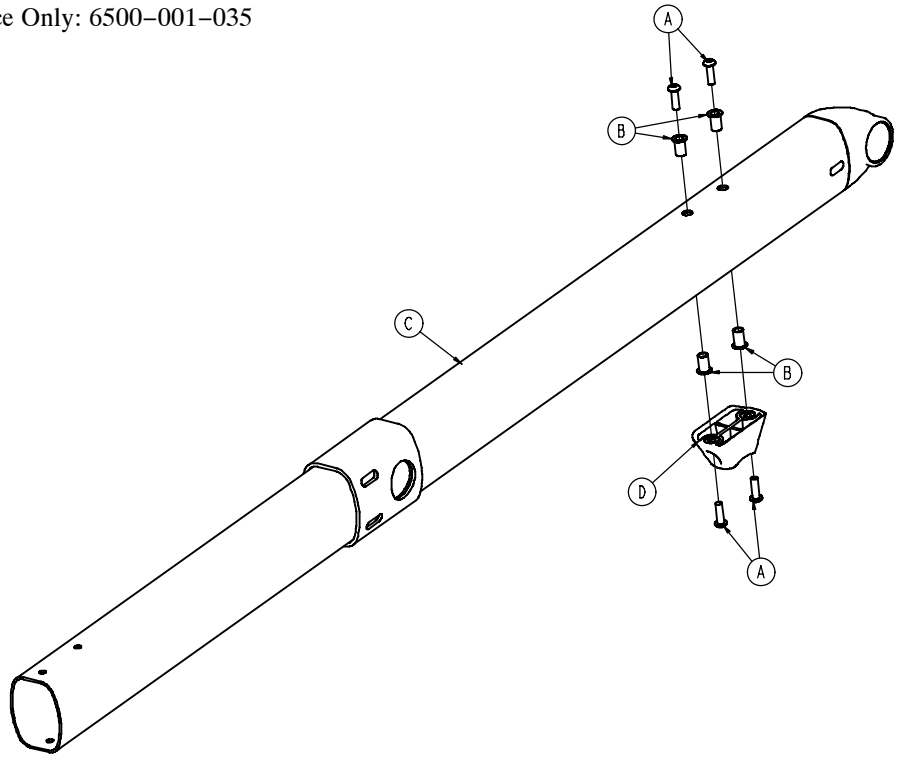


Item	Part No.	Part Name	Qty.
A	4–590–0	Button Head Cap Screw	4
B	55–100–75	Nut	4
C	6500–1–53	Inner Lift Tube Weldment	1
D	6500–1–125	Dead Stop	1

6500–001–035 Inner Lift Tube, Litter Pivot

Patient Left Assembly

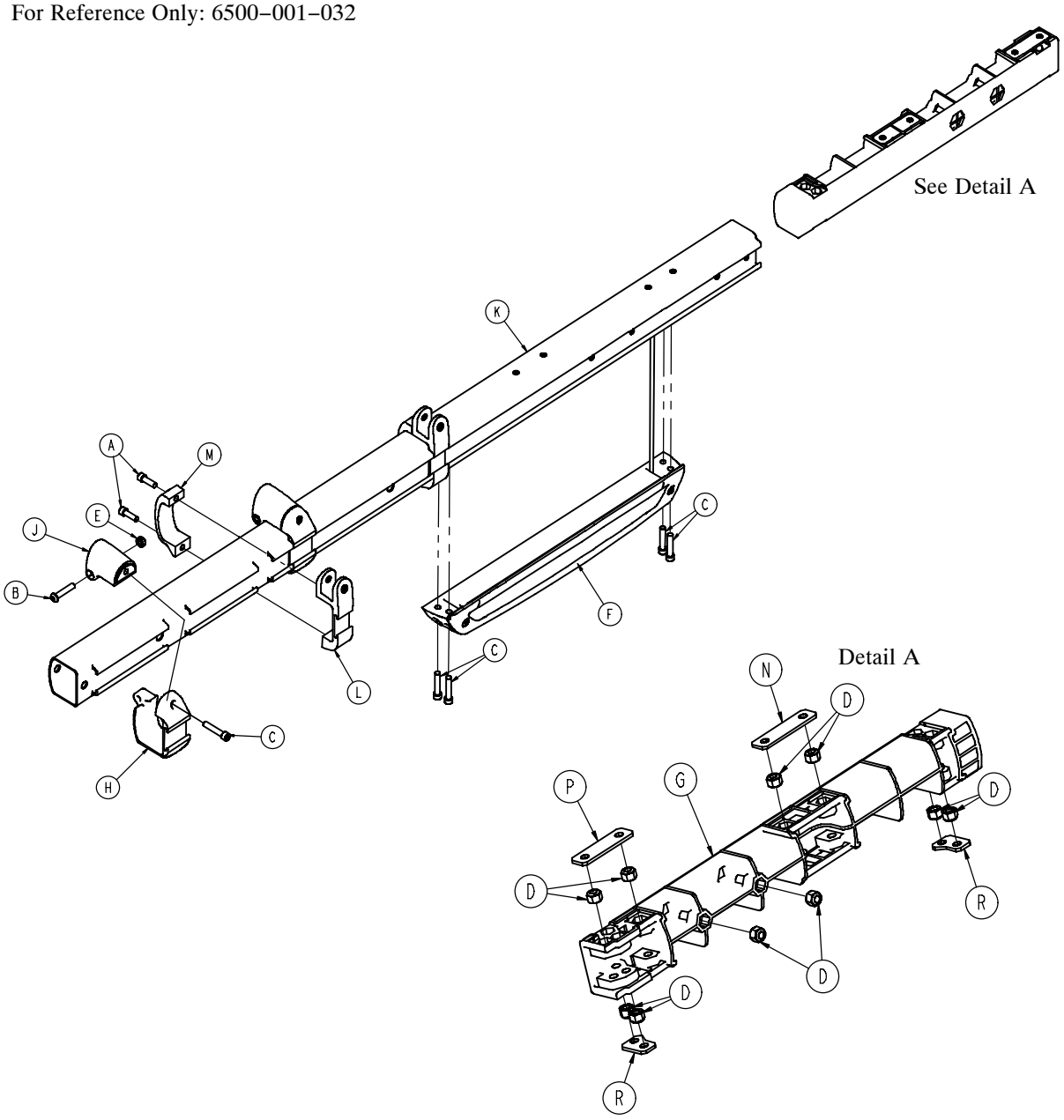
For Reference Only: 6500–001–035



Item	Part No.	Part Name	Qty.
A	0004–590–000	Button Head Cap Screw	4
B	0055–100–075	Nut	4
C	6500–001–053	Inner Lift Tube Weldment	1
D	6500–001–125	Dead Stop	1

6500–001–032 Outer Rail–Patient Right Assembly

For Reference Only: 6500–001–032

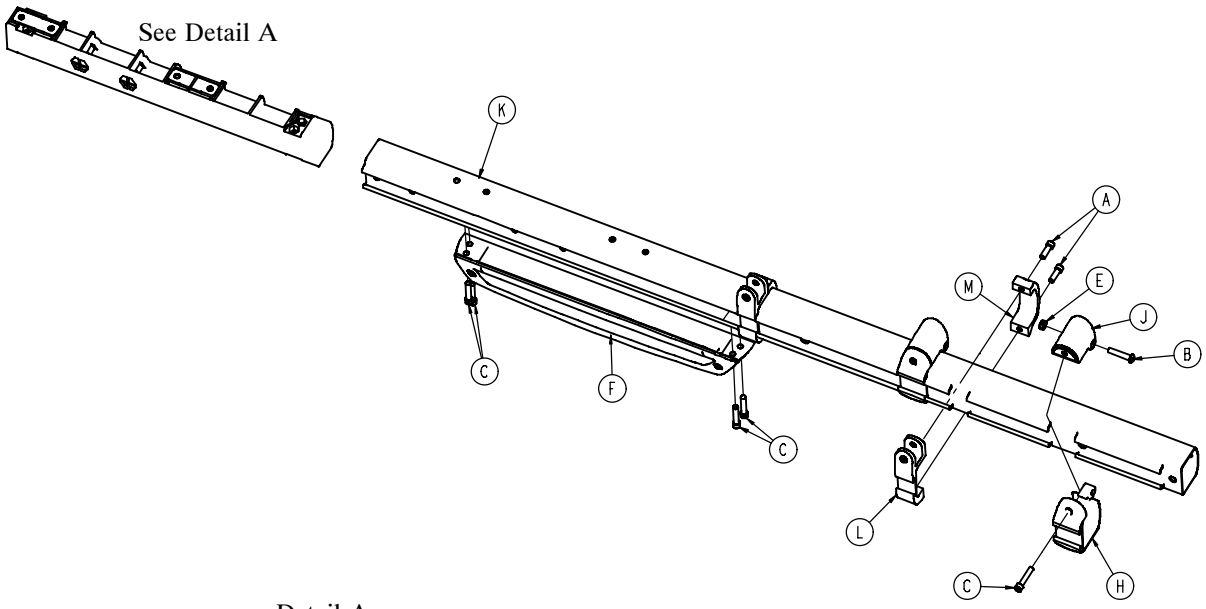


6500–001–032 Outer Rail–Patient Right Assembly

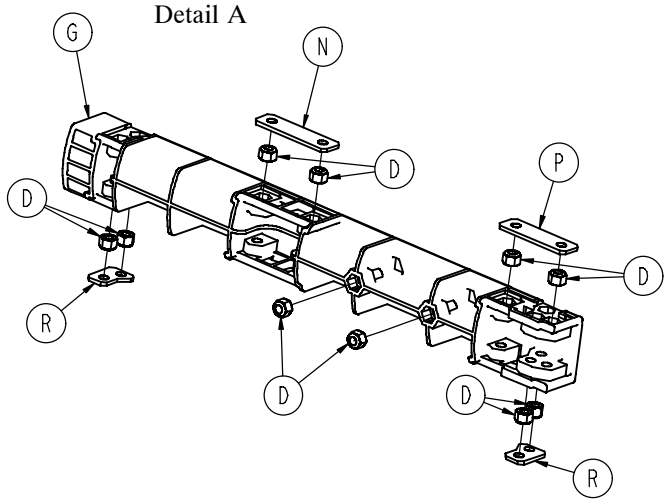
Item	Part No.	Part Name	Qty.
A	0004–591–000	Socket Head Cap Screw	4
B	0004–612–000	Button Head Cap Screw	2
C	0004–613–000	Socket Head Cap Screw	6
D	0016–028–000	Nut	10
E	0016–102–000	Nut	2
F	6500–001–028	Hall Sensor Assembly	1
G	6500–001–098	Dead Stop	1
H	6500–001–104	Support Bracket	2
J	6500–001–106	Support Bracket	2
K	6500–001–114	Outer Rail	1
L	6500–001–116	Siderail Bracket	2
M	6500–001–117	Siderail Clamp	2
N	6500–001–243	IV Pole Backer Plate	1
P	6500–001–244	IV Clip Backer Plate	1
R	6500–001–245	Sensor Housing Backer Plate	2

6500–001–033 Outer Rail–Patient Left Assembly

For Reference Only: 6500–001–033



Detail A

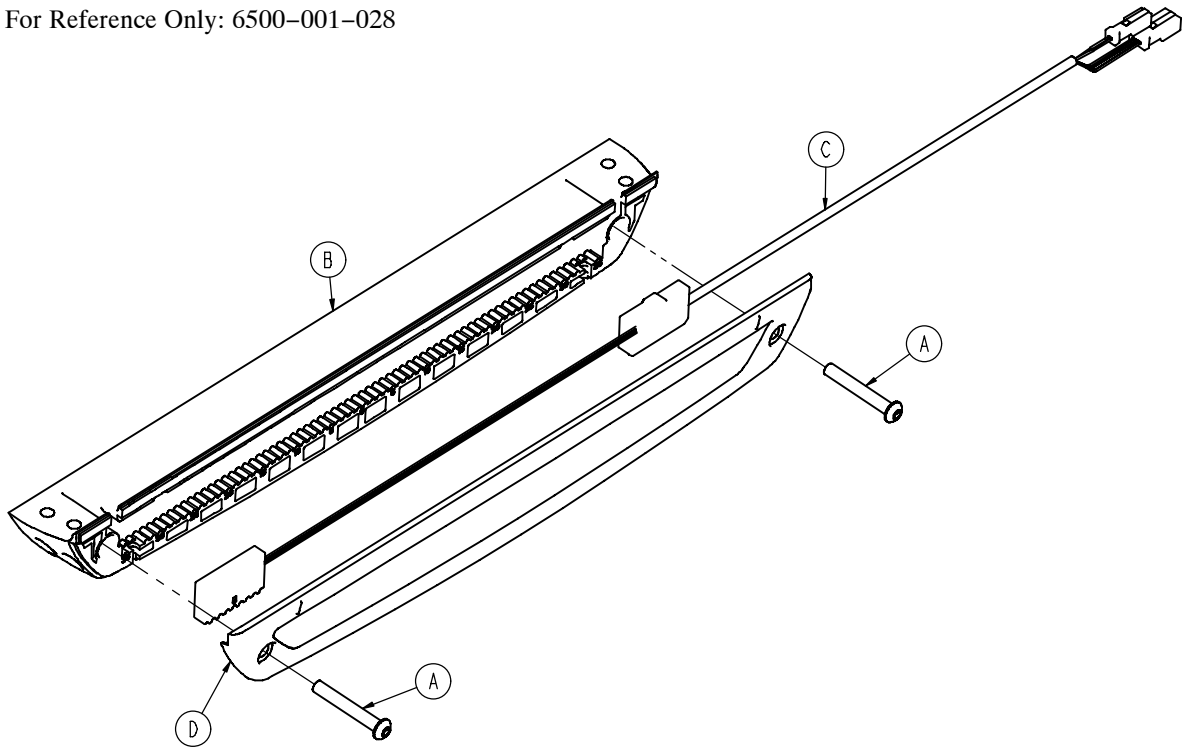


6500–001–033 Outer Rail–Patient Left Assembly

Item	Part No.	Part Name	Qty.
A	0004–591–000	Socket Head Cap Screw	4
B	0004–612–000	Button Head Cap Screw	2
C	0004–613–000	Socket Head Cap Screw	6
D	0016–028–000	Nut	10
E	0016–102–000	Nut	2
F	6500–001–029	Sensor Housing Assembly	1
G	6500–001–098	Dead Stop	1
H	6500–001–104	Support Bracket	2
J	6500–001–106	Support Bracket	2
K	6500–001–115	Outer Rail	1
L	6500–001–116	Siderail Bracket	2
M	6500–001–117	Siderail Clamp	2
N	6500–001–243	IV Pole Backer Plate	1
P	6500–001–244	IV Clip Backer Plate	1
R	6500–001–245	Sensor Housing Backer Plate	2

6500−001−028 Hall Sensor Assembly

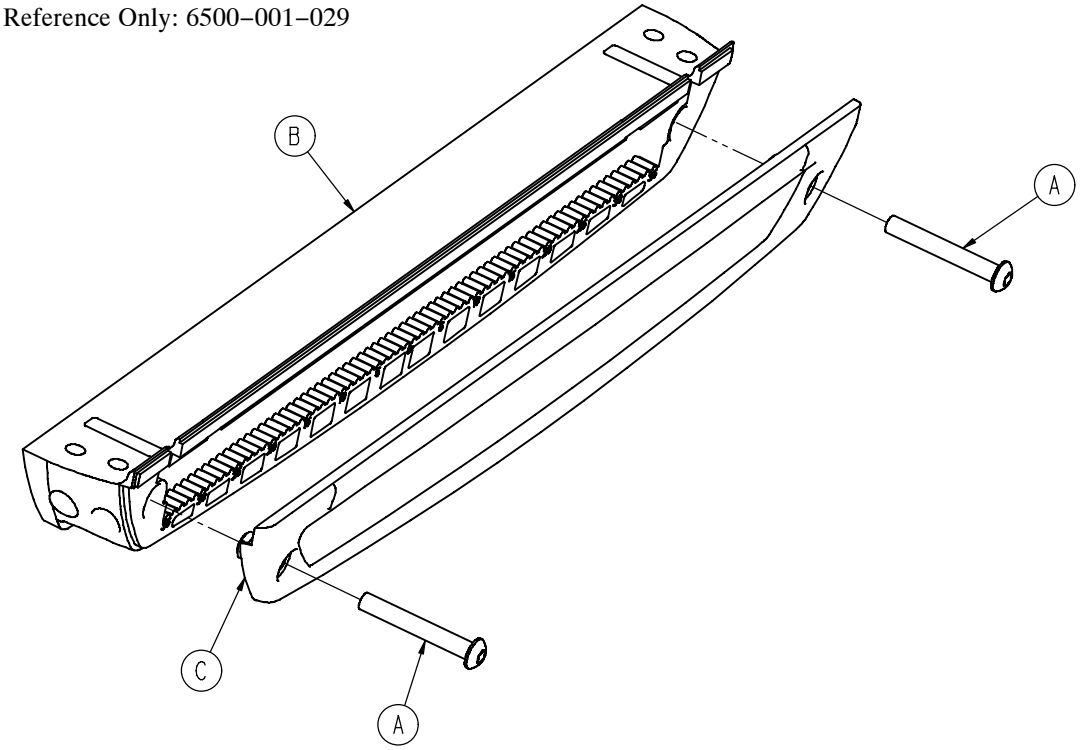
For Reference Only: 6500−001−028



Item	Part No.	Part Name	Qty.
A	0004−596−000	Button Head Cap Screw	2
B	6500−001−124	Sensor Housing	1
C	6500−001−160	Hall Effects Sensor	1
D	6500−001−199	Housing Cover	1

6500−001−029 Empty Housing Assembly

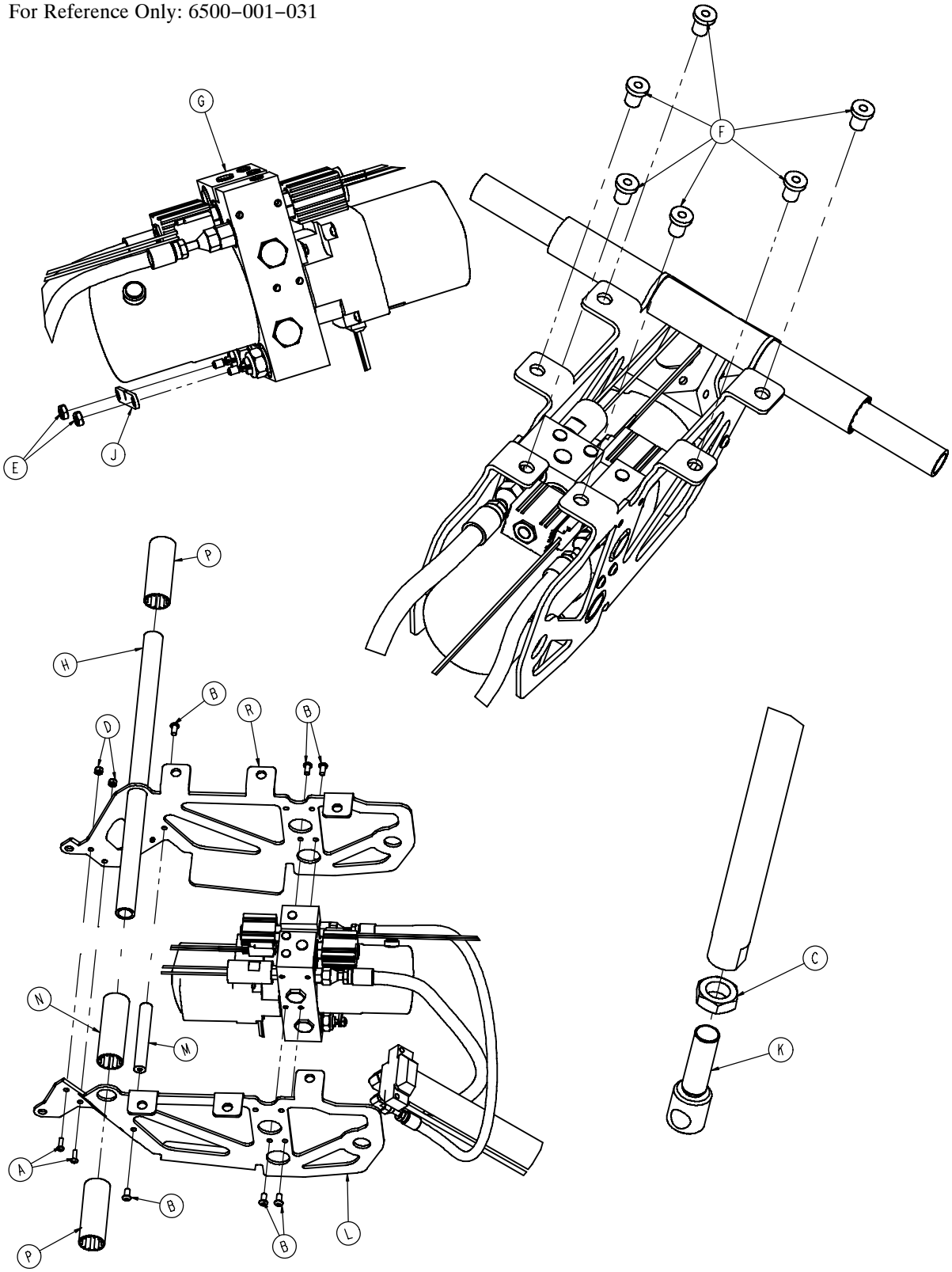
For Reference Only: 6500−001−029



Item	Part No.	Part Name	Qty.
A	0004−596−000	Button Head Cap Screw	2
B	6500−001−124	Sensor Housing	1
C	6500−001−199	Housing Cover	1

6500–001–031 Powerplant Assembly

For Reference Only: 6500–001–031

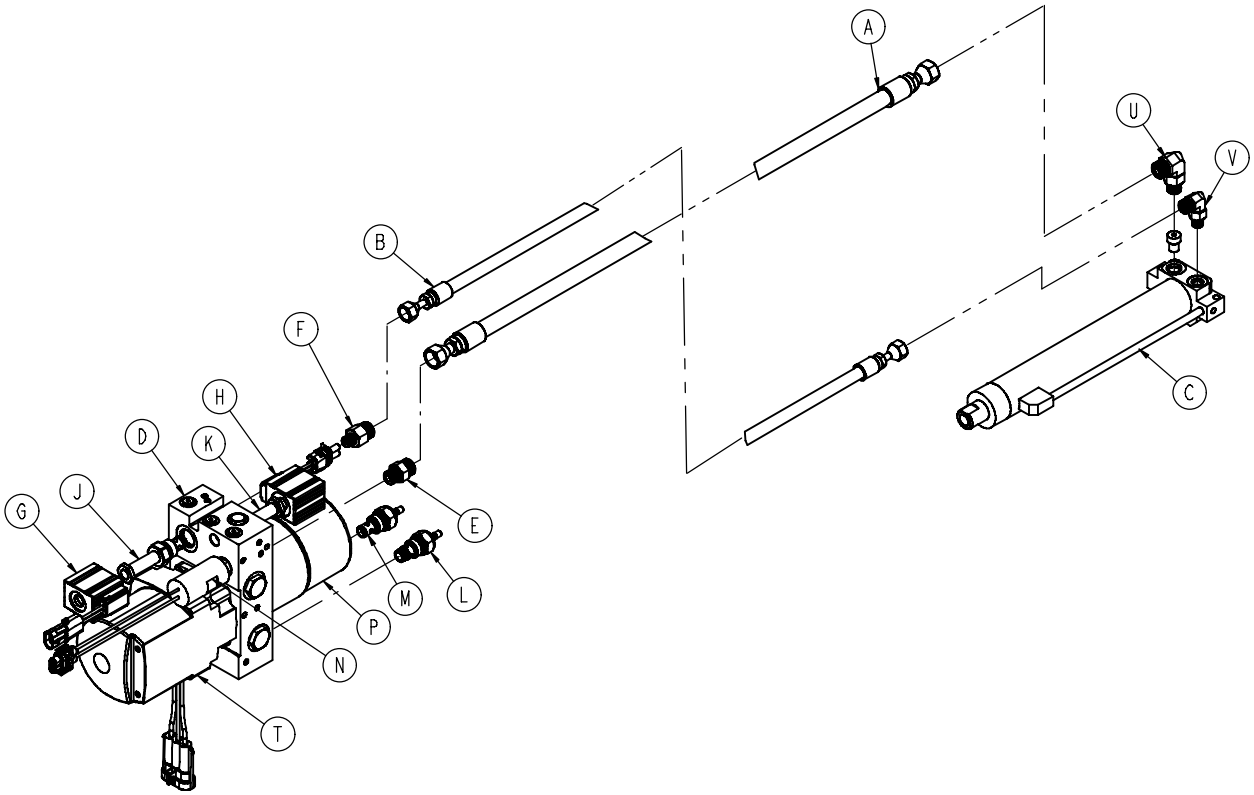


6500–001–031 Powerplant Assembly

Item	Part No.	Part Name	Qty.
A	0004–586–000	Button Head Cap Screw	2
B	0004–589–000	Button Head Cap Screw	6
C	0015–052–000	Nut	1
D	0016–002–000	Nut	2
E	0016–102–000	Nut	2
F	0055–100–074	Nut	6
G	6500–001–030	Hydraulics Assembly	1
H	6500–001–105	Cross Tube	1
J	6500–001–152	Bracket	1
K	6500–001–169	Cylinder Rod End	1
L	6500–001–194	Motor Mount	1
M	6500–001–212	Cross Bar	1
N	6500–001–249	Spacer	1
P	6500–001–250	Spacer	2
R	6500–001–294	Motor Mount	1

6500−001−030 Hydraulic Sub−Assembly

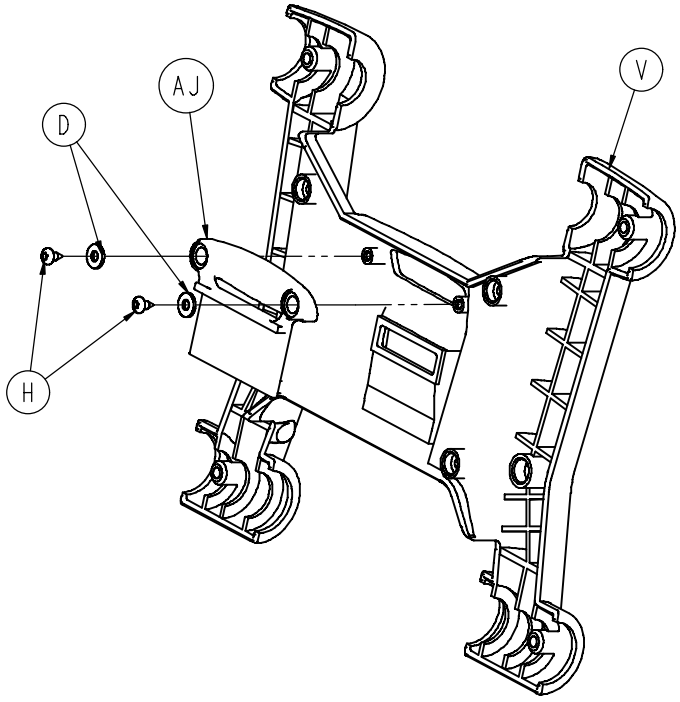
For Reference Only: 6500−001−030

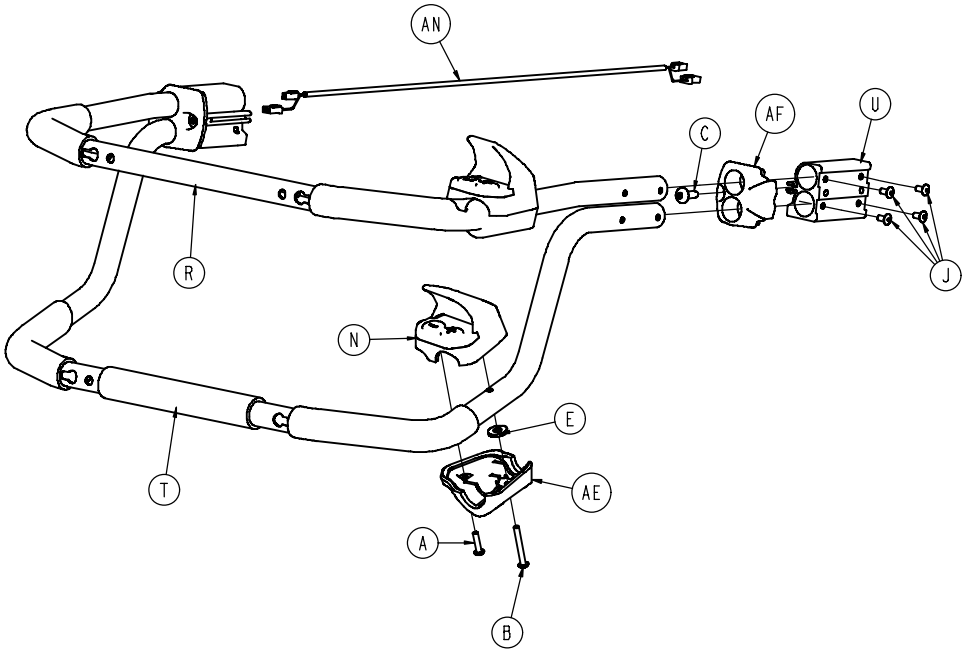


Item	Part No.	Part Name	Qty.
A	6500−001−210	Hose, Cap Side	1
B	6500−001−211	Hose, Rod Side	1
C	6500−001−213	Cylinder	1
D	6500−001−214	Manifold Assembly	1
E	6500−001−282	Hose Fitting, Cap Side, Manifold	1
F	6500−001−283	Hose Fitting, Rod Side, Manifold	1
G	6500−001−284	Solenoid, A Valve	1
H	6500−001−285	Solenoid, B Valve	1
J	6500−001−286	A Valve	1
K	6500−001−287	B Valve	1
L	6500−001−288	Manual Valve, Locking	1
M	6500−001−289	Manual Valve, Non−locking	1
N	6500−001−290	Pressure Switch	1
P	6500−001−291	Reservoir	1
R	6500−001−293	Hydraulic Fluid	1
T	6500−001−295	Motor	1
U	6500−001−296	Hose Fitting, Cap Side, Cylinder	1
V	6500−001−297	Hose Fitting, Rod Side, Cylinder	1

6500−001−015 Foot End Assembly

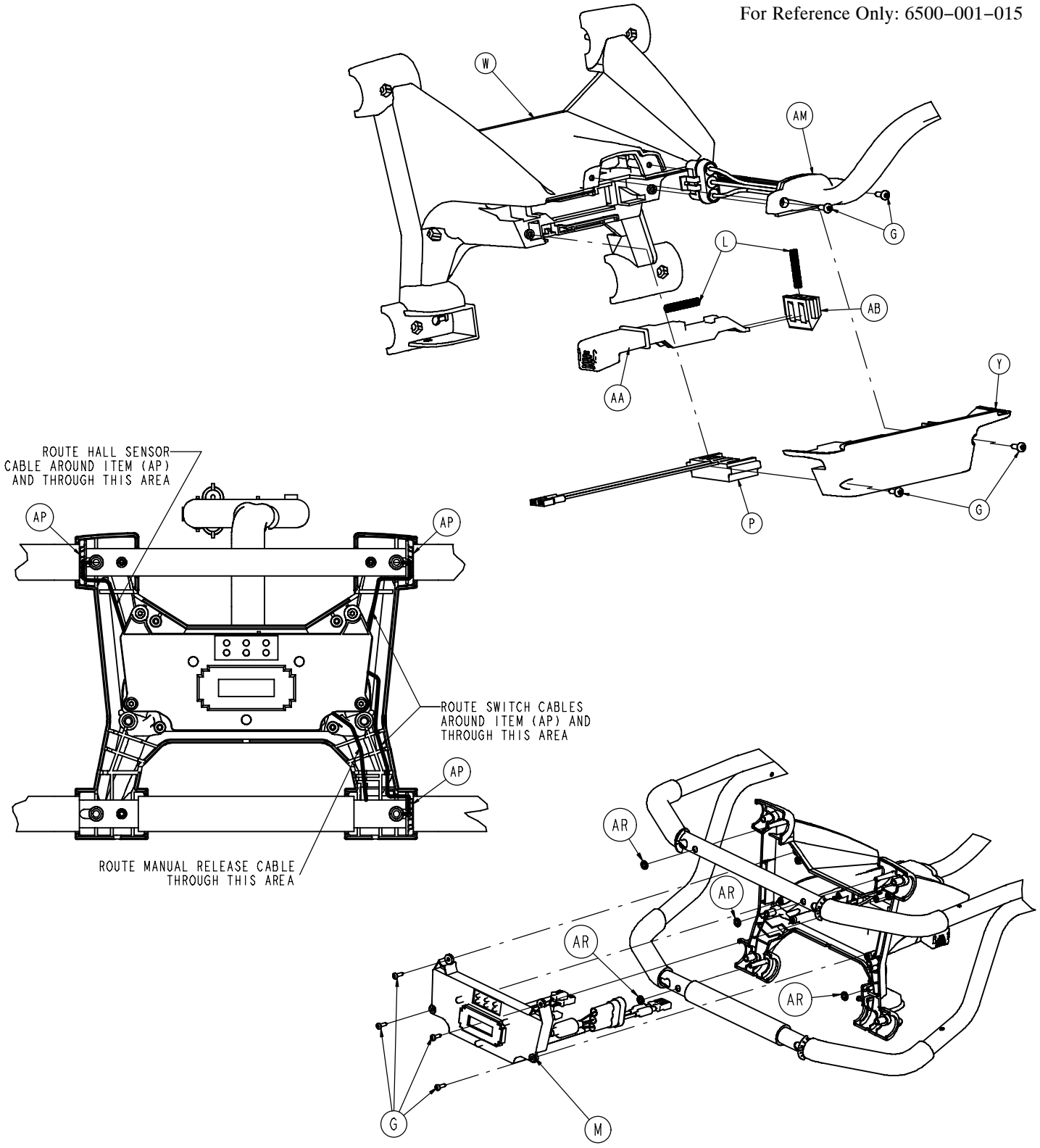
For Reference Only: 6500−001−015





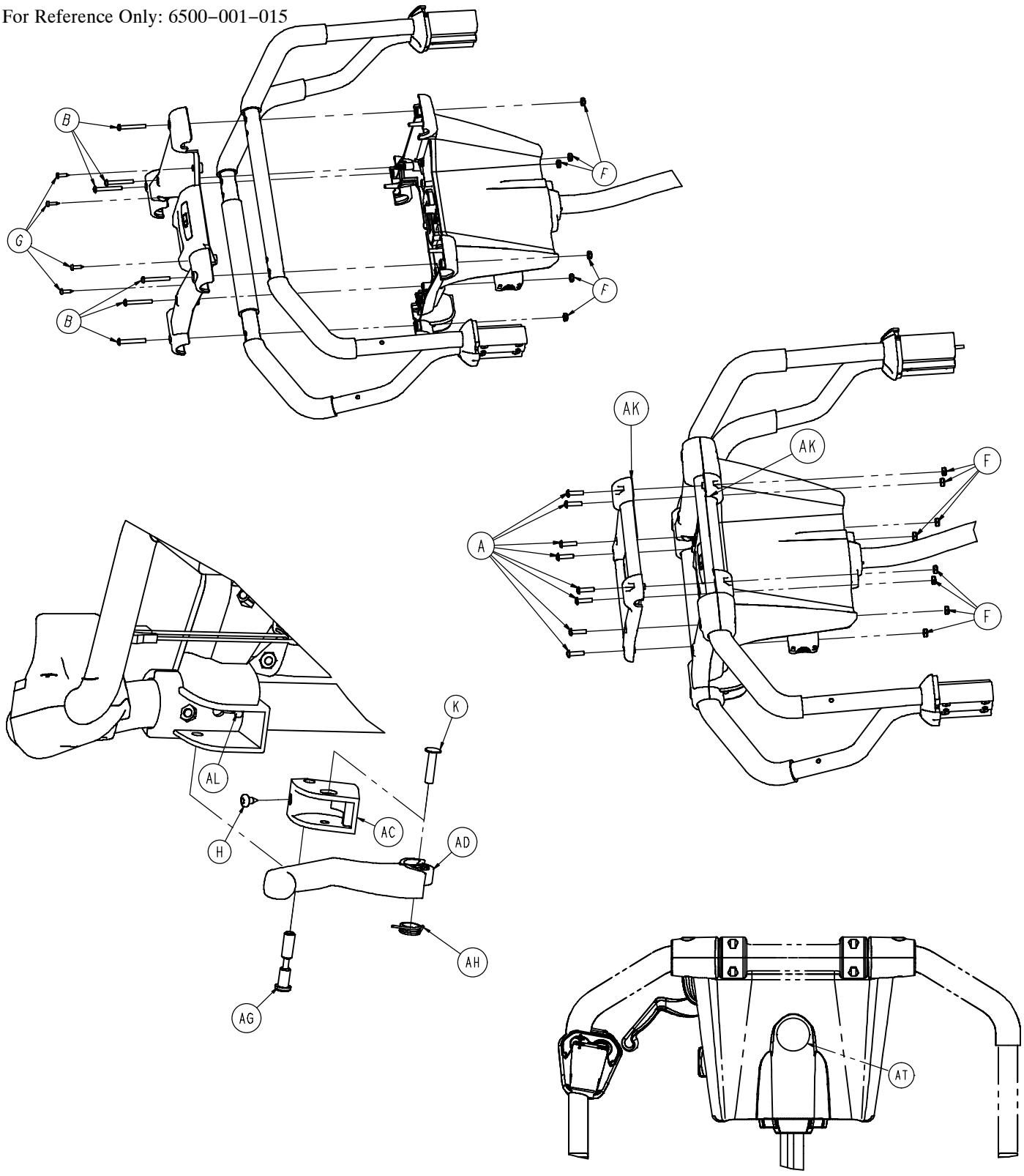
6500–001–015 Foot End Assembly

For Reference Only: 6500–001–015



6500–001–015 Foot End Assembly

For Reference Only: 6500–001–015

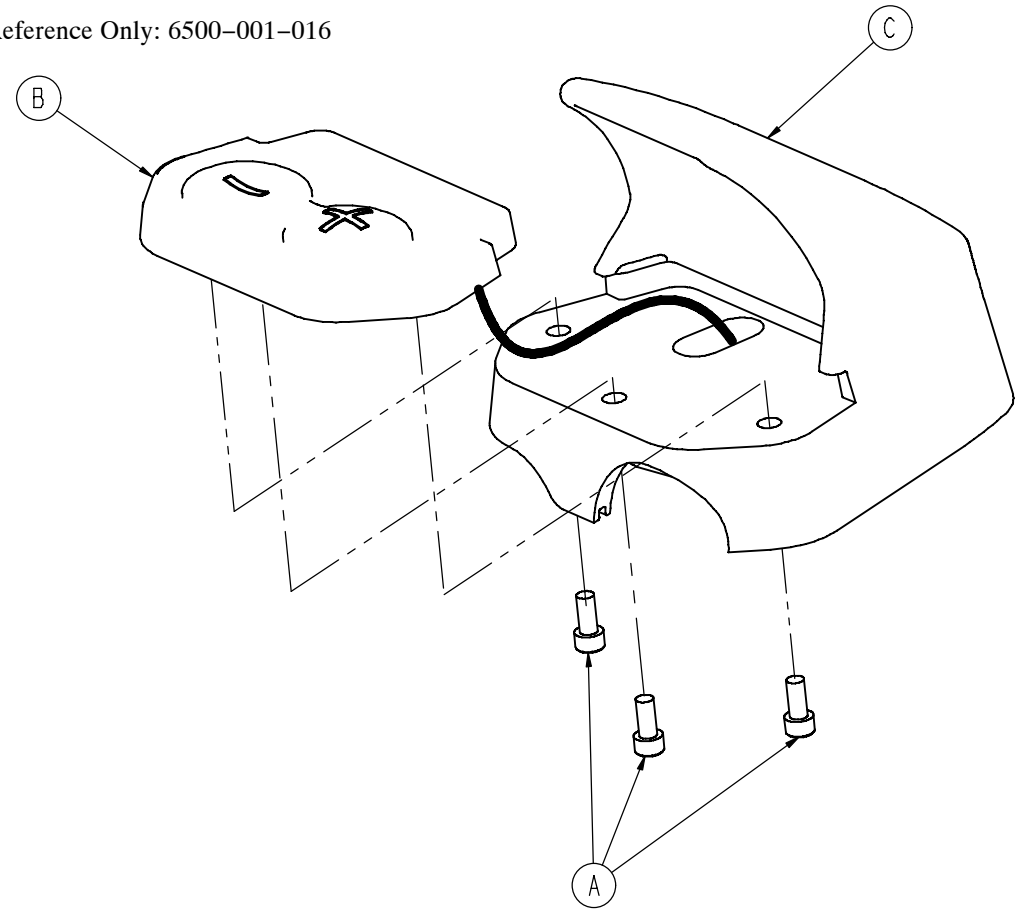


6500–001–015 Foot End Assembly

Item	Part No.	Part Name	Qty.
A	0004–614–000	Button Head Cap Screw	10
B	0004–615–000	Button Head Cap Screw	8
C	0007–065–000	Truss Head Screw	2
D	0011–062–000	Washer	2
E	0011–543–000	Washer	2
F	0016–131–000	Nut – Nylock Hex	2
G	0023–162–000	Pan Head Thread Forming Screw	12
H	0023–163–000	Pan Head Thread Forming Screw	3
J	0025–079–000	Rivet	8
K	0025–187–000	Semi–Tubular Rivet	1
L	0038–572–000	Compression Spring	2
M	6500–001–014	Electronics Assembly	1
N	6500–001–016	Switch Assembly	2
P	6500–001–101	Terminal Block	1
R	6500–001–131	Upper Lifting Bar	1
T	6500–001–132	Lower Lifting Bar	1
U	6500–001–133	Machined Extruded Bracket	2
V	6500–001–134	Battery Enclosure – Face Plate	1
W	6500–001–135	Top Plate, Foot End Enclousre	1
Y	6500–001–136	Bottom Plate, Foot End Enclosure	1
AA	6500–001–138	Button, Battery Release	1
AB	6500–001–139	Lock, Battery Release	1
AC	6500–001–140	Pivot, manual Release Actuator	1
AD	6500–001–141	Lever, manual Release Actuator	1
AE	6500–001–142	Housing, Lower, Button, Footend	2
AF	6500–001–144	Transition Cap, PR	2
AG	6500–001–146	Pivot Pin, Manual Release	1
AH	6500–001–147	Torsion Spring	1
AJ	6500–001–153	ORB, Light Panel	1
AK	6500–001–154	Pull Handle	2
AL	6500–001–156	Cable, Manual Release	1
AM	6500–001–159	Cable Assembly	1
AN	6500–001–161	Cable, Hall Effects	1
AP	6500–001–275	Wire Route Clip	3
AR	0028–116–000	Pushnut	4
AT	6080–090–101	Warning Label	1

6500–001–016 Switch Assembly

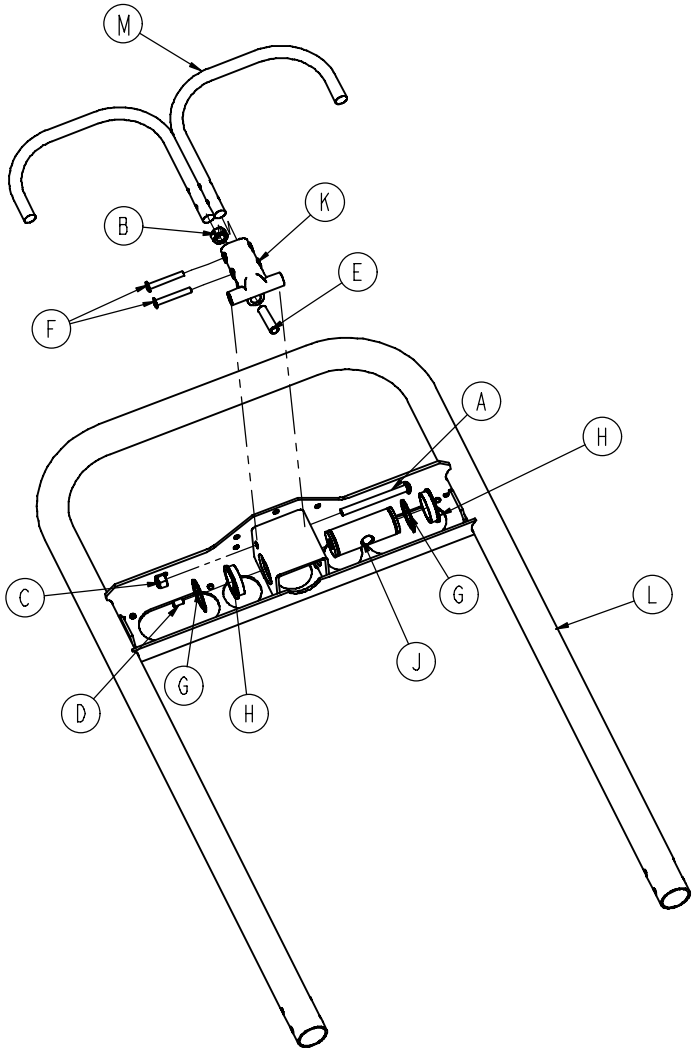
For Reference Only: 6500–001–016



Item	Part No.	Part Name	Qty.
A	0004–616–000	Socket Head Cap Screw	3
B	6500–001–130	Activation Switch	1
C	6500–001–143	Housing, Upper, Button, Footend	1

6500–001–018 Fowler Assembly

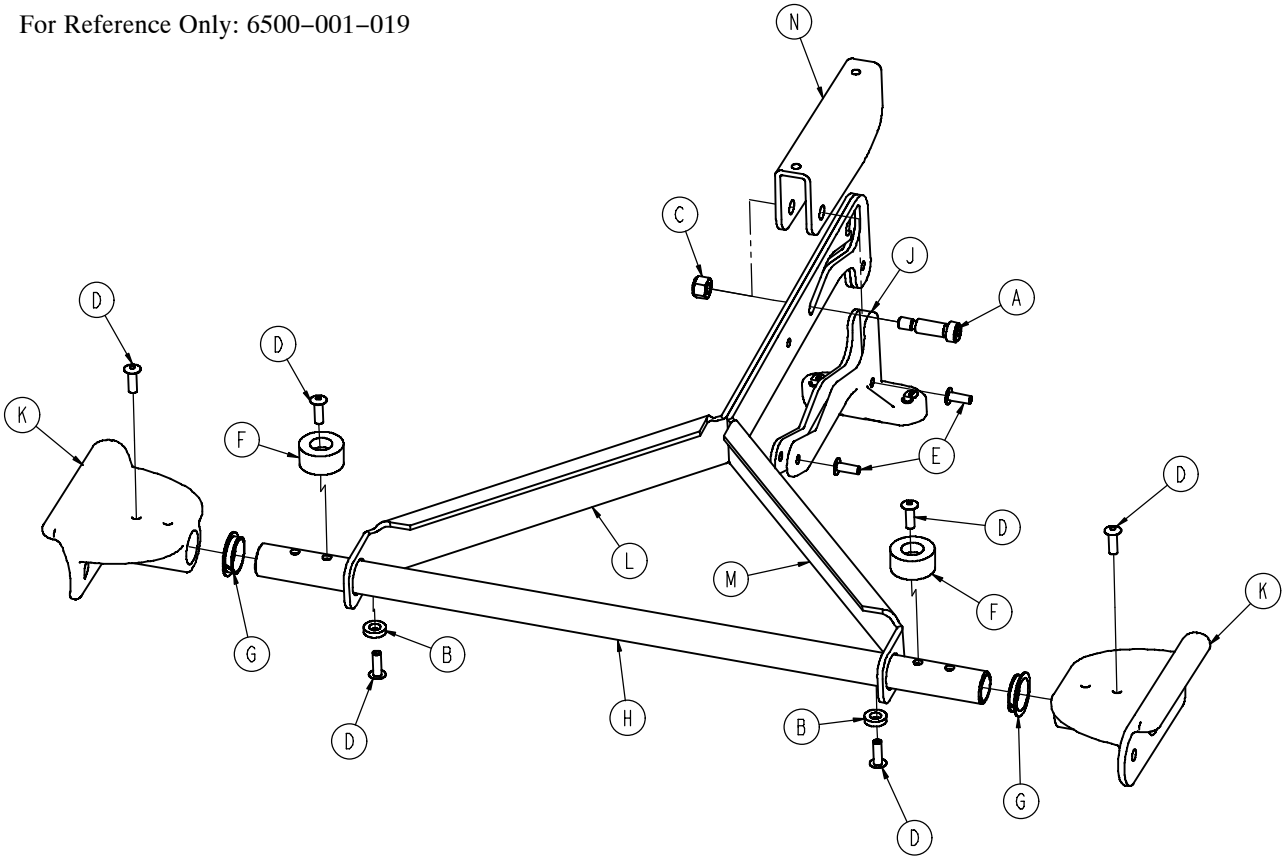
For Reference Only: 6500–001–018



Item	Part No.	Part Name	Qty.
A	0004–234–000	Button Head Cap Screw	1
B	0015–050–000	Nut	1
C	0016–028–000	Nut	1
D	0021–119–000	Set Screw	1
E	0021–138–000	Set Screw	1
F	0025–131–000	Rivet	2
G	0028–076–000	External Retaining Ring	2
H	0946–035–025	Liner	2
J	6060–032–038	Yoke	1
K	6060–032–040	Pivot	1
L	6082–032–050	Fowler Weldment	1
M	6082–032–052	Release Handle Weldment	1

6500–001–019 Trend Assembly

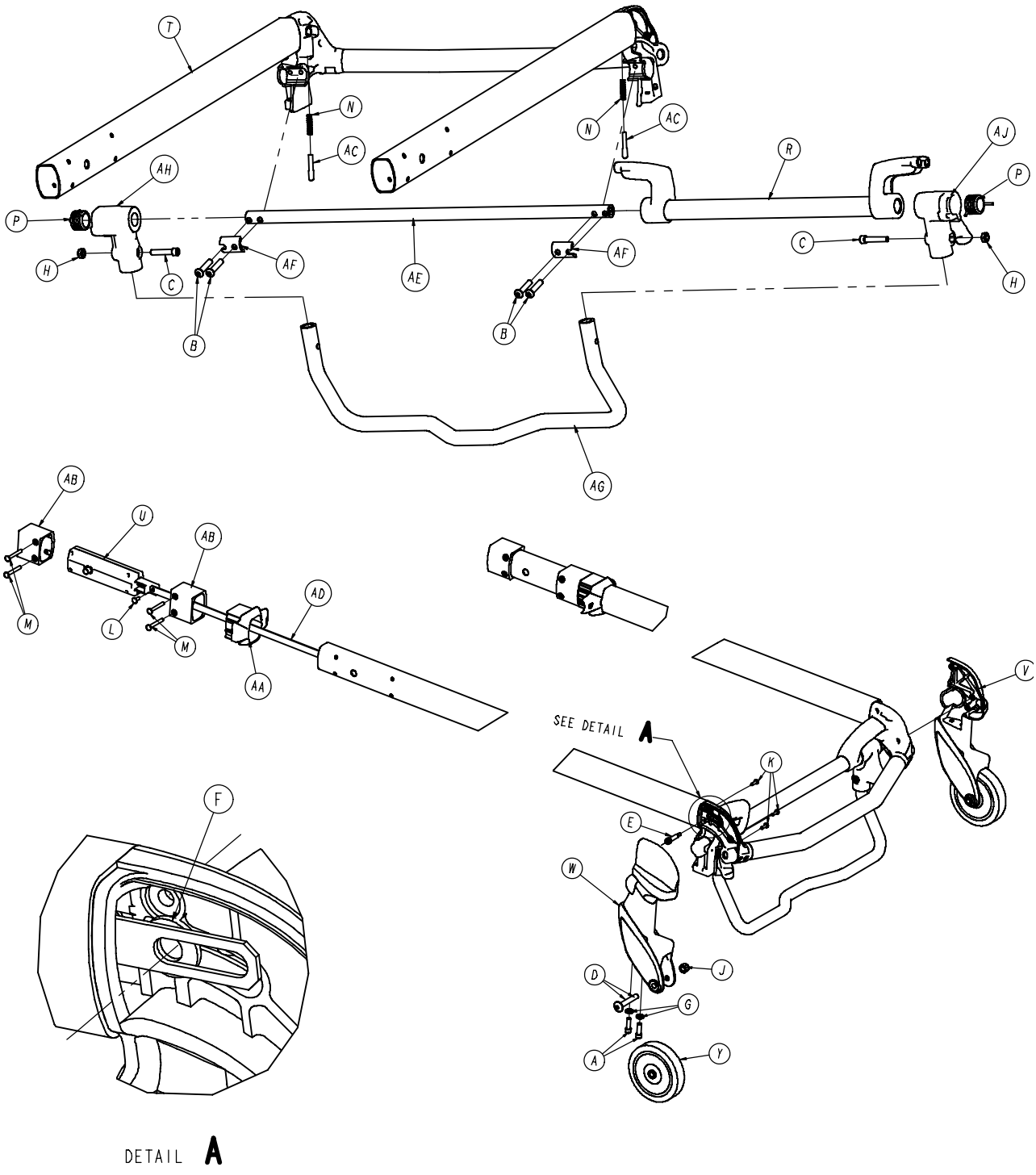
For Reference Only: 6500–001–019



Item	Part No.	Part Name	Qty.
A	0008–027–000	Socket Head Shoulder Screw	1
B	0014–067–000	Washer	2
C	0016–028–000	Nut	1
D	0025–133–000	Rivet	6
E	0025–186–000	Rivet	2
F	0056–016–000	Bumper	2
G	0081–255–000	Spilt Bearing	2
H	6500–001–107	Litter Cross Tube	1
J	6500–001–108	Trend Release	1
K	6500–001–109	Trend Bracket	2
L	6500–001–203	Calf Stand Support, LH, RH	1
M	6500–001–204	Calf Stand Support, LH	1
N	6500–001–205	Retainer, Calf Stand	1

6500–001–020 Head Section Assembly

For Reference Only: 6500–001–020

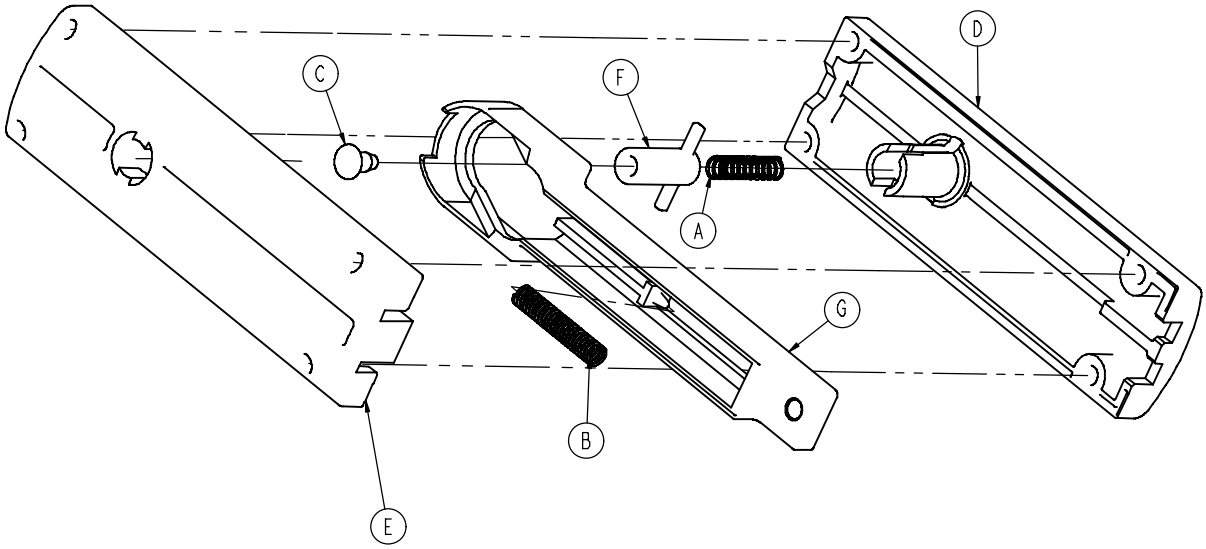


6500–001–020 Head Section Assembly

Item	Part No.	Part Name	Qty.
A	0004–090–000	Socket Head Cap Screw	4
B	0004–612–000	Button Head Cap Screw	4
C	0004–613–000	Socket Head Cap Screw	2
D	0007–036–000	Truss Head Machine Screw	2
E	0008–073–000	Socket Head Shoulder Screw	2
F	0011–002–000	Washer	2
G	0011–065–000	Washer	4
H	0016–102–000	Nut	2
J	0016–123–000	Nut	2
K	0023–162–000	Pan Head Thread Forming Screw	8
L	0025–126–000	Rivet	2
M	0025–185–000	Rivet	8
N	0038–057–000	Compression Spring	2
P	0038–575–000	Torsion Spring	2
R	6500–001–023	Head Trigger Assembly	1
T	6500–001–024	Tube Assembly	1
U	6500–001–026	Lock Assembly	2
V	6500–001–082	Load Wheel Horn	1
W	6500–001–083	Load Wheel Horn	1
Y	6500–001–086	Front Wheel	2
AA	6500–001–087	Bearing	2
AB	6500–001–088	Bearing	4
AC	6500–001–093	Pin	2
AD	6500–001–096	Link	2
AE	6500–001–220	Cross Tube	1
AF	6500–001–221	Clamp, Cross Tube	2
AG	6500–001–222	Hook Tube	1
AH	6500–001–223	Pivot	1
AJ	6500–001–224	Pivot	1

6500–001–026 Head Section Lock Assembly

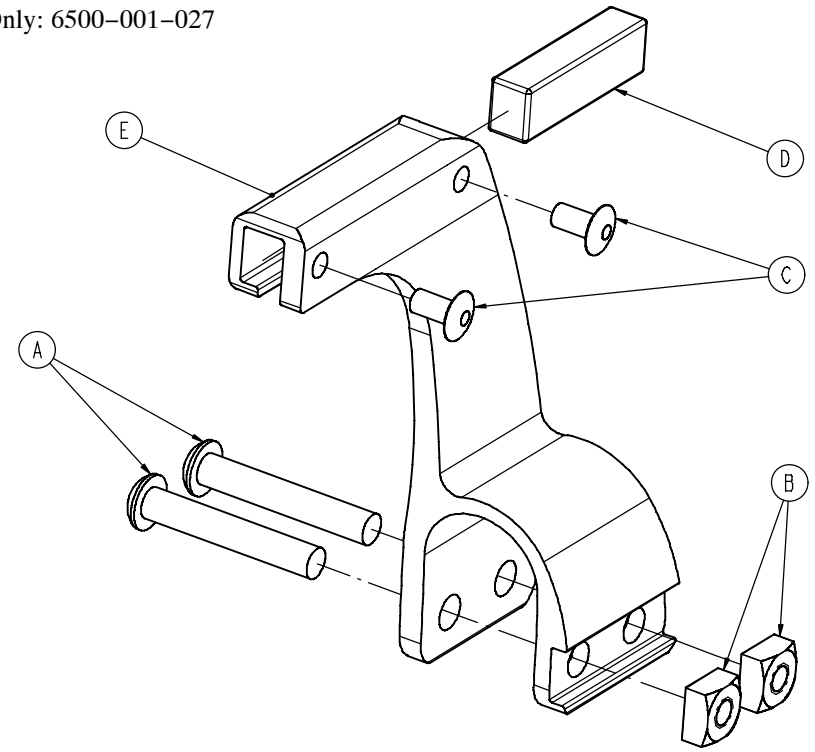
For Reference Only: 6500–001–026



Item	Part No.	Part Name	Qty.
A	038–570–000	Compression Spring	1
B	038–572–000	Compression Spring	1
C	6500–001–089	Bearing Tip	1
D	6500–001–091	Latch Housing	1
E	6500–001–092	Latch Housing	1
F	6500–001–094	Pin	1
G	6500–001–095	Actuation Slide	1

6500−001−027 In−Fastener Shut−Off Assembly

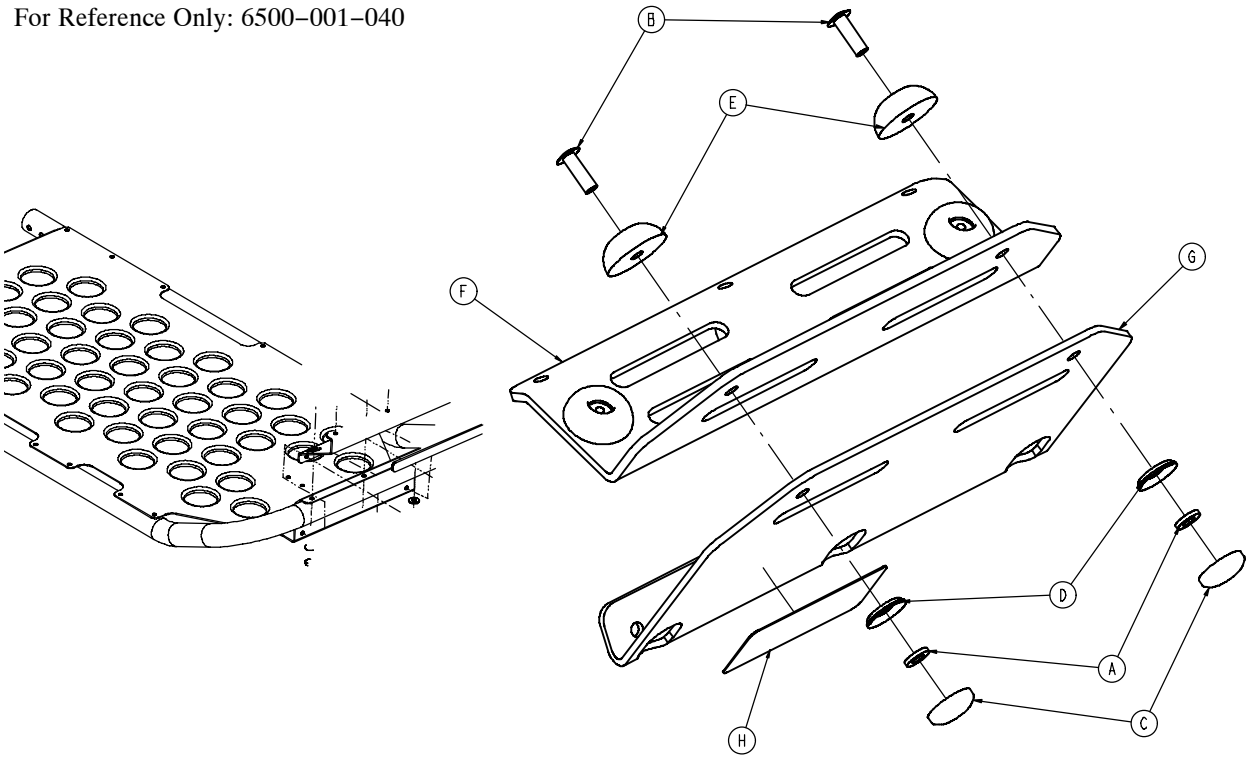
For Reference Only: 6500−001−027



Item	Part No.	Part Name	Qty.
A	0004−135−000	Button Head Cap Screw	2
B	0015−016−000	Square Nut	2
C	0025−079−000	Rivet	2
D	6500−001−271	Magnet	1
E	6500−001−272	Holder	1

6500–001–040 Oxygen Bottle Holder Assembly

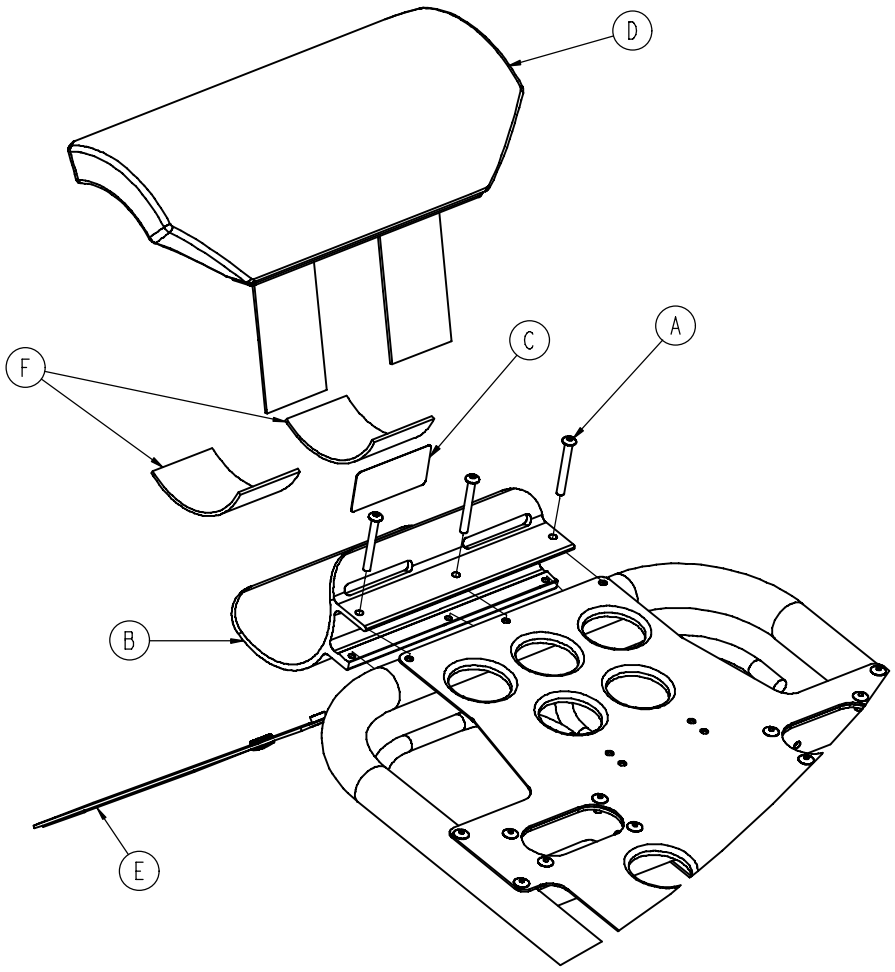
For Reference Only: 6500–001–040



Item	Part No.	Part Name	Qty.
A	0011–436–000	Washer	4
B	0025–133–000	Rivet	4
C	0037–055–000	Cap	4
D	0037–056–000	Washer	4
E	0946–001–155	Bumper	4
F	6500–001–239	Tray	1
G	6500–001–240	Bracket	1
H	6500–001–257	Label	1

NOTE: Max Load = 40 lbs.

6500–141–000 Optional Head End O_2 Bottle Holder



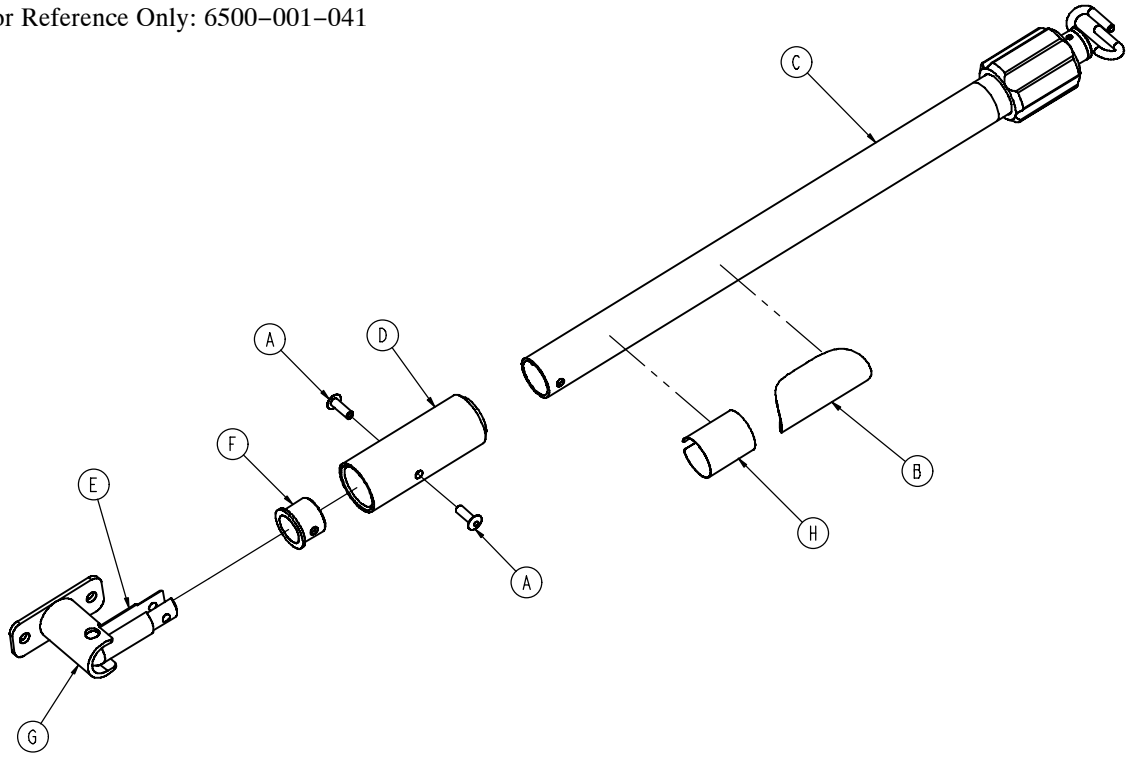
Item	Part No.	Part Name	Qty.
A	0004–636–000	Button Head Cap Screw	3
B	6500–001–119	Bracket	1
C	6500–001–231	Label	1
D	6500–001–260	Bottle Holder Cover	1
E	6500–001–261	Bottle Holder Strap	1
F	6500–001–262	Pad	1

NOTE: Max Load = 40 lbs.

6500−001−041 Two−Stage I.V. Pole Assembly

Patient Right

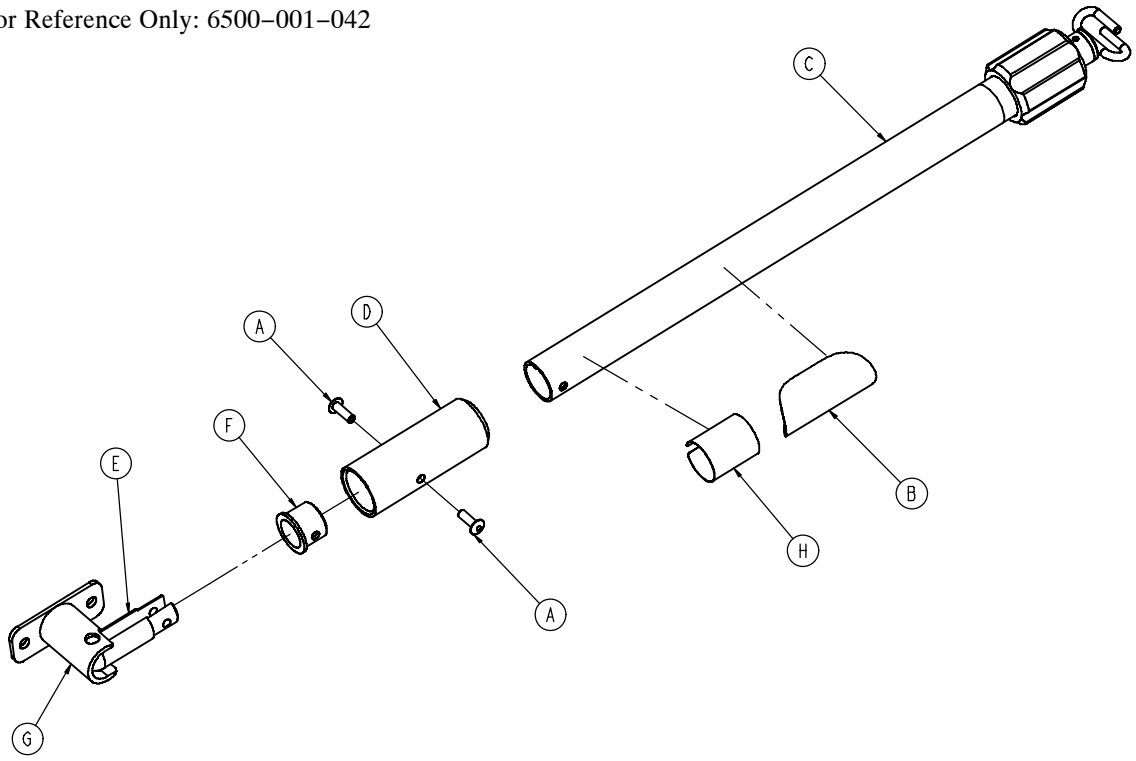
For Reference Only: 6500−001−041



Item	Part No.	Part Name	Qty.
A	0025−133−000	Rivet	2
B	6070−090−105	Caution Label	1
C	6070−210−040	Pole Assembly	1
D	6070−210−045	Sleeve	1
E	6070−210−046	Pivot	1
F	6070−210−049	Ring	1
G	6100−115−050	Socket Weldment	1
H	6500−001−253	Label	1

6500−001−042 Two−Stage I.V. Pole Assembly
Patient Left

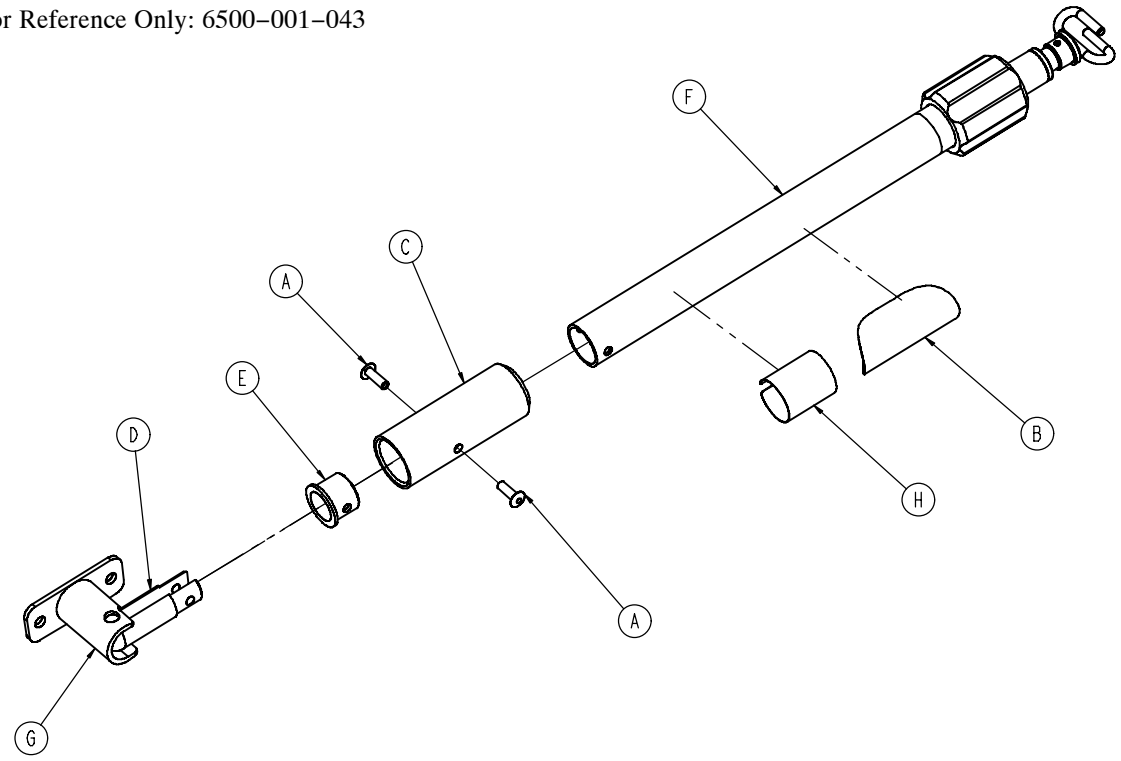
For Reference Only: 6500−001−042



Item	Part No.	Part Name	Qty.
A	0025−133−000	Rivet	2
B	6070−090−105	Caution Label	1
C	6070−210−040	Pole Assembly	1
D	6070−210−045	Sleeve	1
E	6070−210−046	Pivot	1
F	6070−210−049	Ring	1
G	6100−115−050	Socket Weldment	1
H	6500−001−254	Label	1

6500−001−043 Three−Stage I.V. Pole Assembly
Patient Right

For Reference Only: 6500−001−043

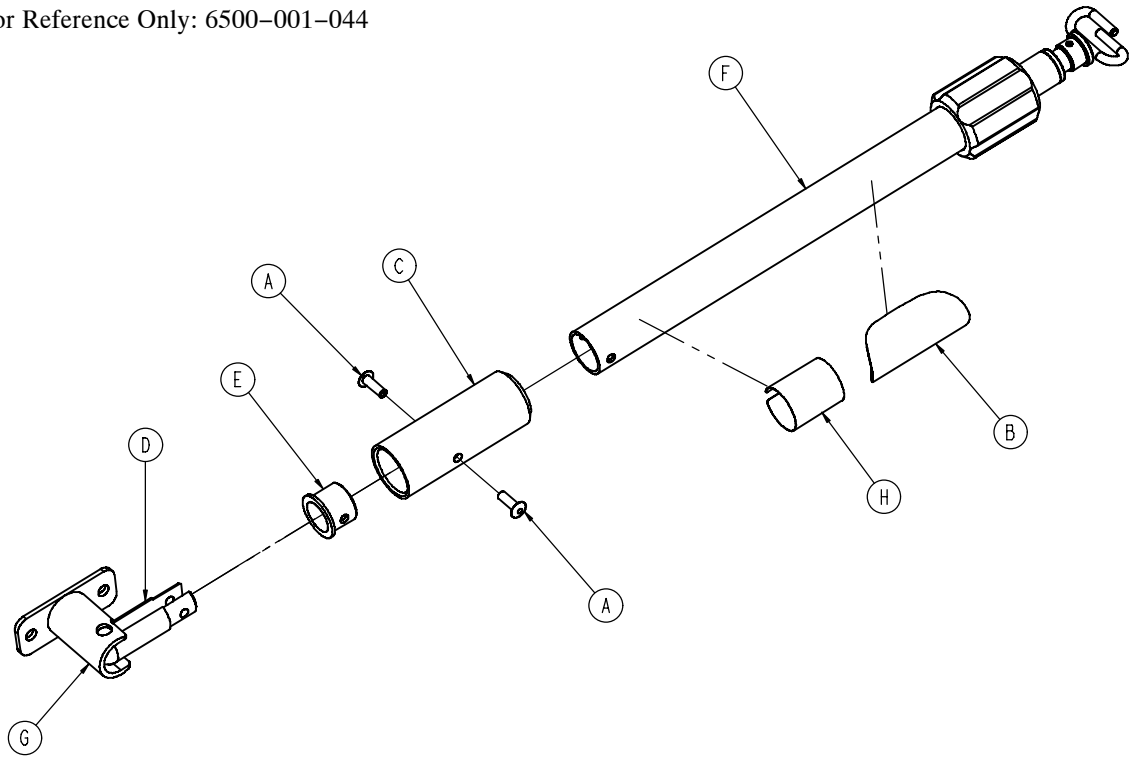


Item	Part No.	Part Name	Qty.
A	0025−133−000	Rivet	2
B	6070−090−105	Caution Label	1
C	6070−210−045	Sleeve	1
D	6070−210−046	Pivot	1
E	6070−210−049	Ring	1
F	6070−215−040	Pole Assembly	1
G	6100−115−050	Socket Weldment	1
H	6500−001−255	Label	1

6500−001−044 Three−Stage I.V. Pole Assembly

Patient Left

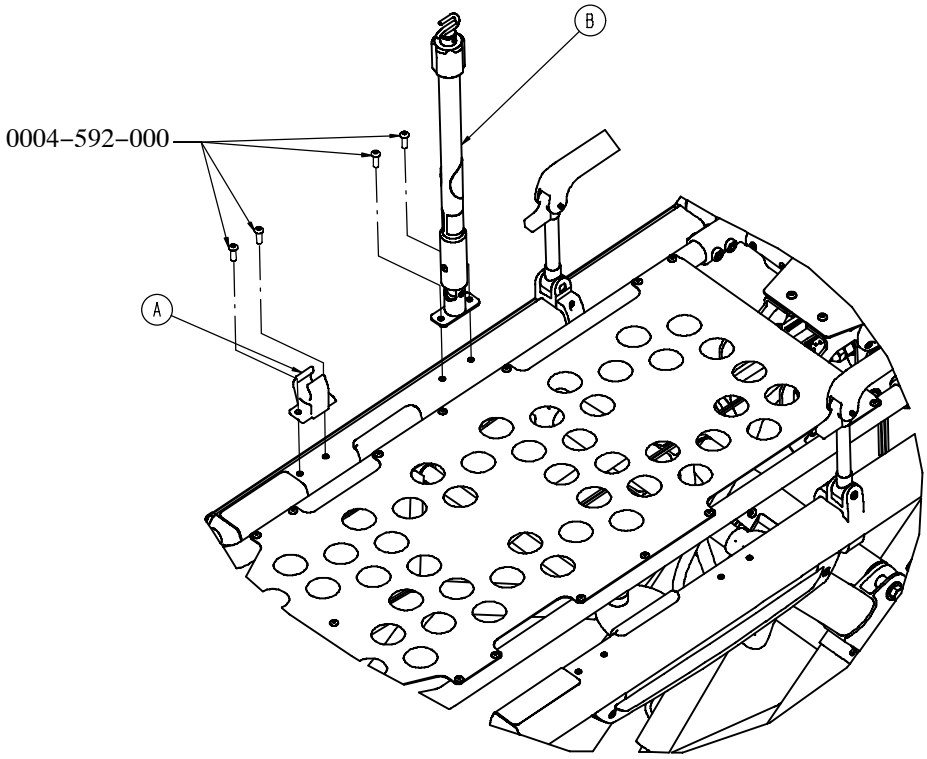
For Reference Only: 6500−001−044



Item	Part No.	Part Name	Qty.
A	0025−133−000	Rivet	2
B	6070−090−105	Caution Label	1
C	6070−210−045	Sleeve	1
D	6070−210−046	Pivot	1
E	6070−210−049	Ring	1
F	6070−215−040	Pole Assembly	1
G	6100−115−050	Socket Weldment	1
H	6500−001−256	Label	1

6500–001–041 Two–Stage I.V. Pole Assembly

Patient Right



6500–210–000

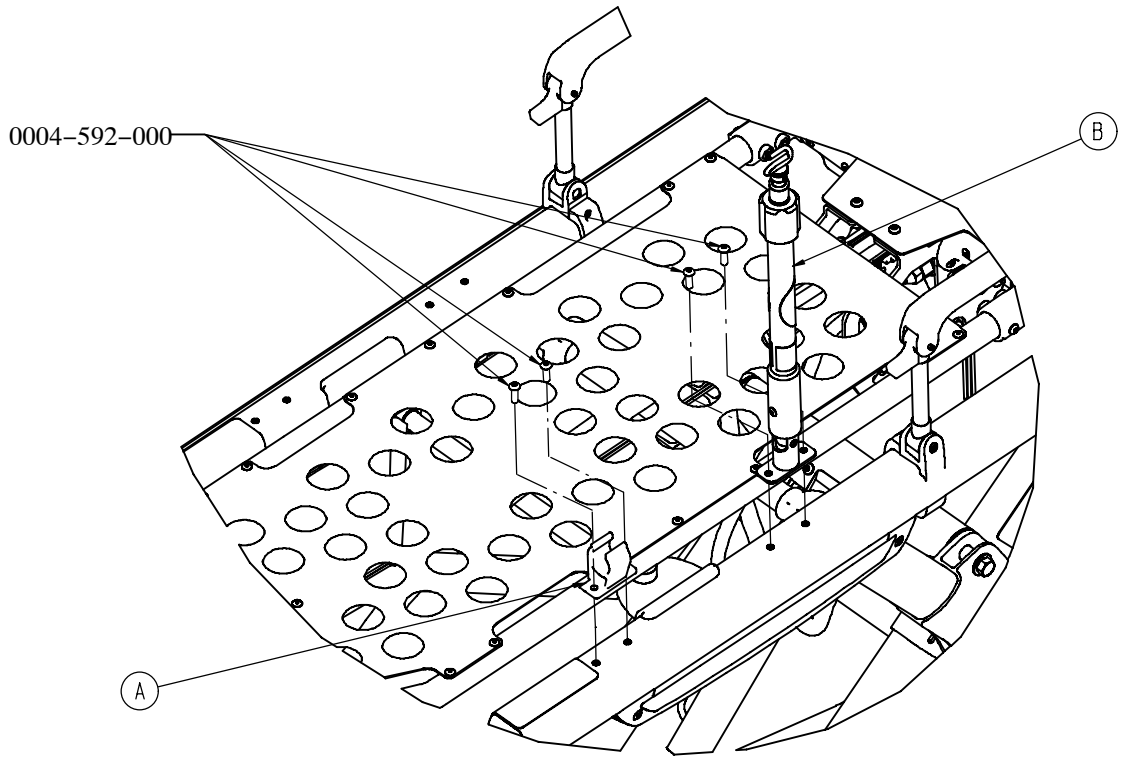
Item	Part No.	Part Name	Qty.
A	6100–115–060	Clip, I.V. Pole	1
B	6500–001–041	I.V. Pole Assembly, 2 stage, PR	1

6500–215–000

Item	Part No.	Part Name	Qty.
A	6100–115–060	Clip, I.V. Pole	1
B	6500–001–043	I.V. Pole Assembly, 3 stage, PR	1

6500–210–000 2–Stage I.V. Mounting Ass'y, Right

6500–215–000 3–Stage I.V. Mounting Ass'y, Right



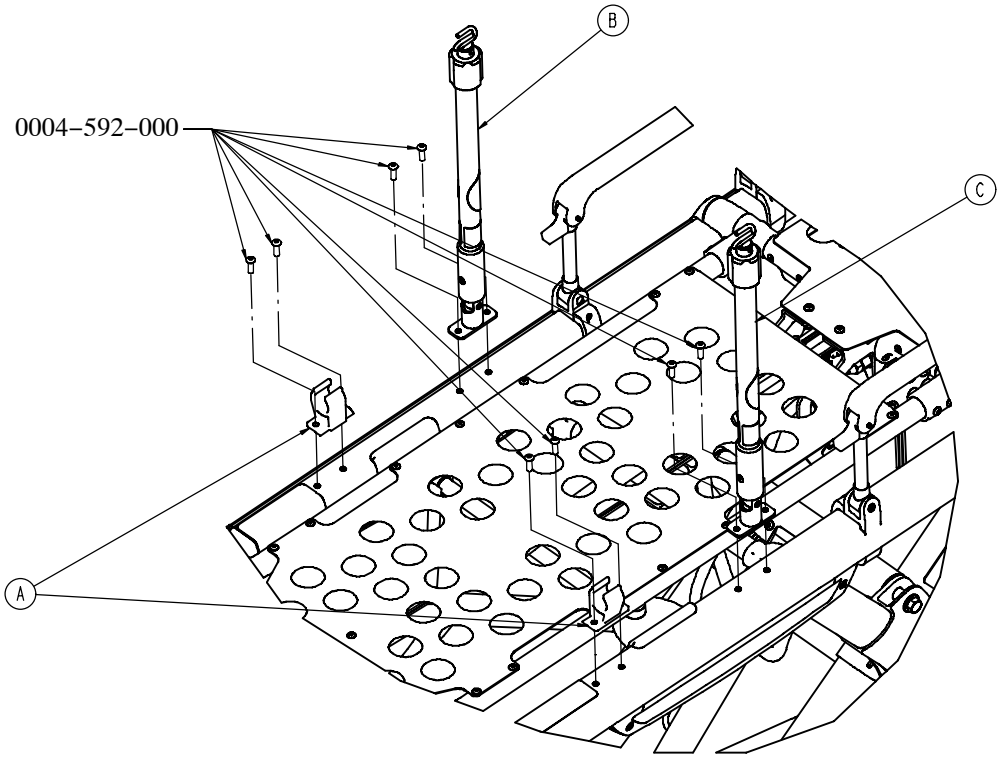
6500–211–000

Item	Part No.	Part Name	Qty.
A	6100–115–060	Clip, I.V. Pole	1
B	6500–001–042	I.V. Pole Assembly, 2 stage, PL	1

6500–216–000

Item	Part No.	Part Name	Qty.
A	6100–115–060	Clip, I.V. Pole	1
B	6500–001–044	I.V. Pole Assembly, 3 stage, PL	1

6500–212–000 2–Stage I.V. Mounting Ass'y, Dual
6500–217–000 3–Stage I.V. Mounting Ass'y, Dual



6500–212–000

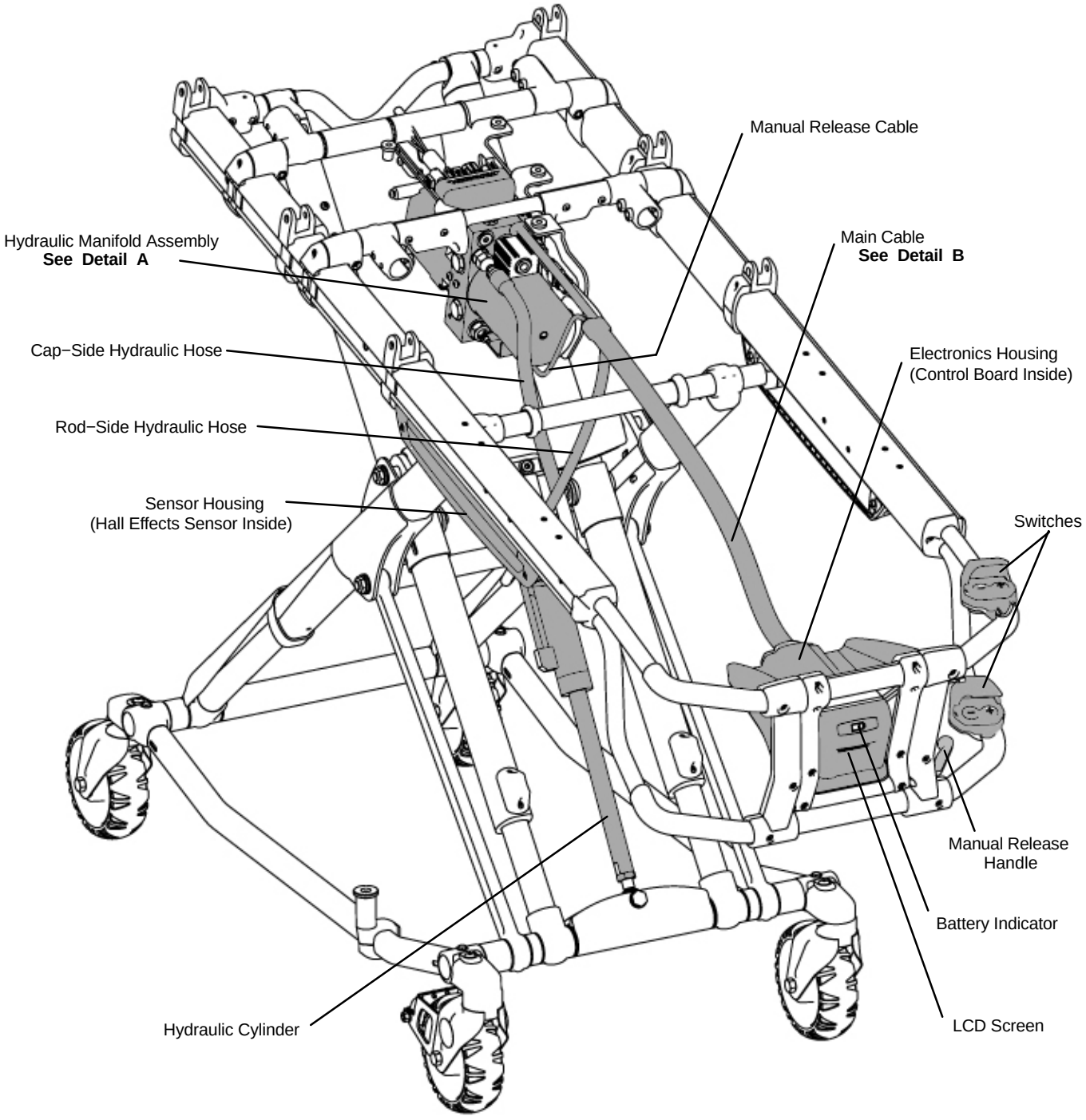
Item	Part No.	Part Name	Qty.
A	6100–115–060	Clip, I.V. Pole	1
B	6500–001–041	I.V. Pole Assembly, 2 stage, PR	1
C	6500–001–042	I.V. Pole Assembly, 2 stage, PL	1

6500–217–000

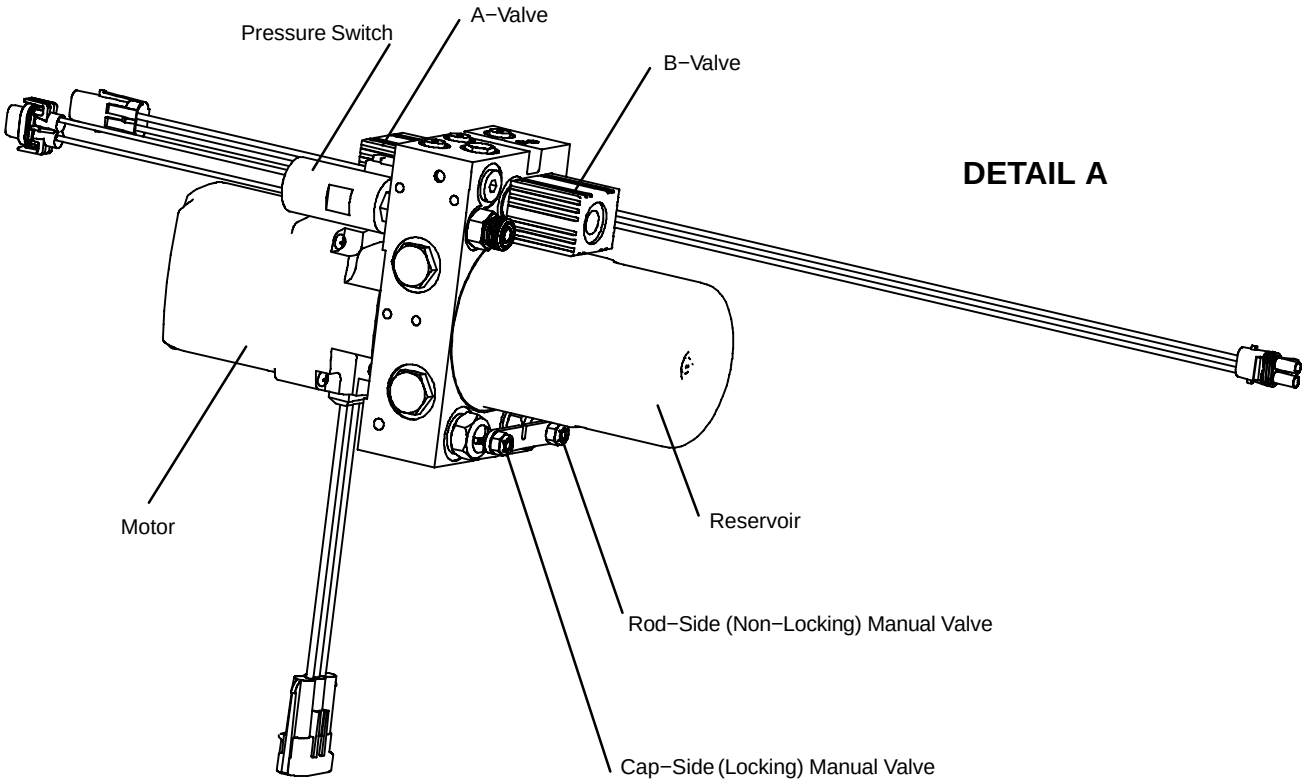
Item	Part No.	Part Name	Qty.
A	6100–115–060	Clip, I.V. Pole	1
B	6500–001–043	I.V. Pole Assembly, 3 stage, PR	1
C	6500–001–044	I.V. Pole Assembly, 3 stage, PL	1

Power−PRO Electronics and Hydraulics Locator

Note: Some Components removed for clarity



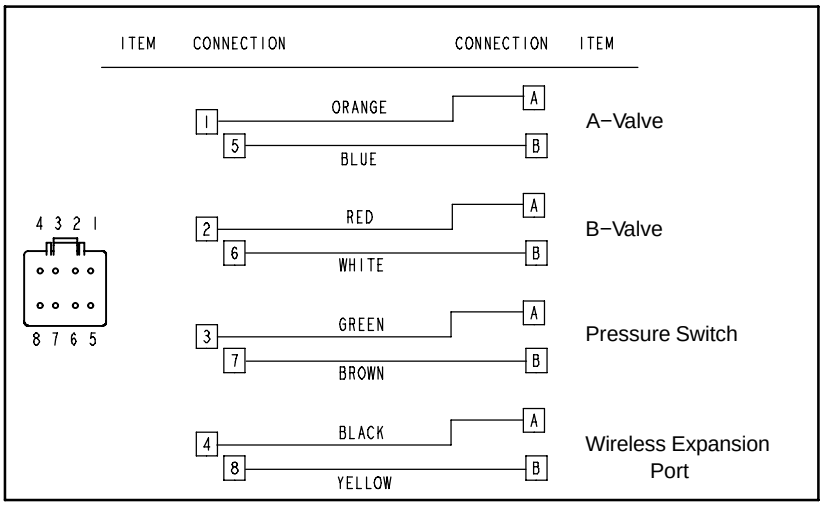
Power−PRO Hydraulic Manifold Components Locator



DETAIL B

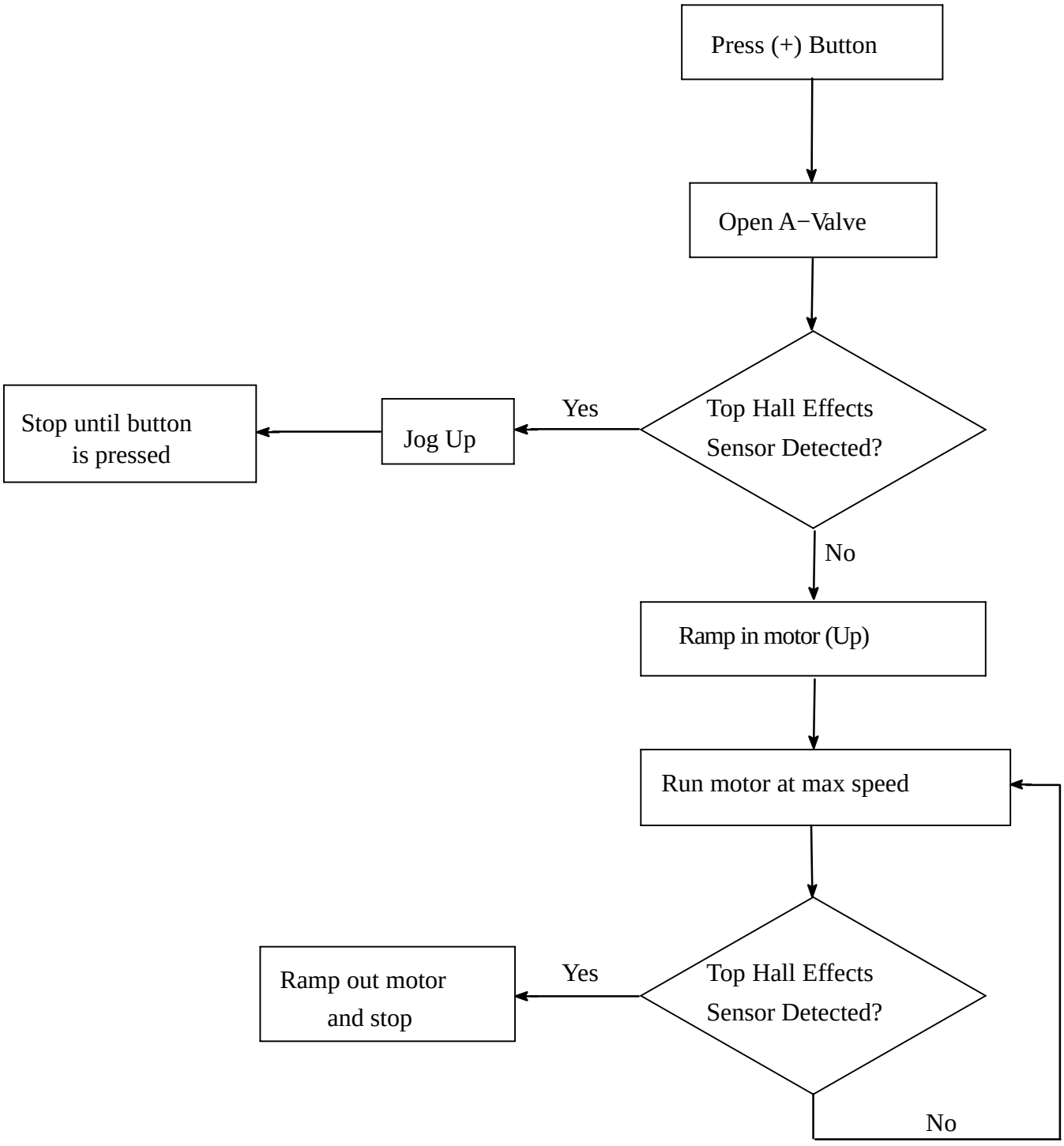
Wiring Schematics

Main Cable 8−Pin Connector



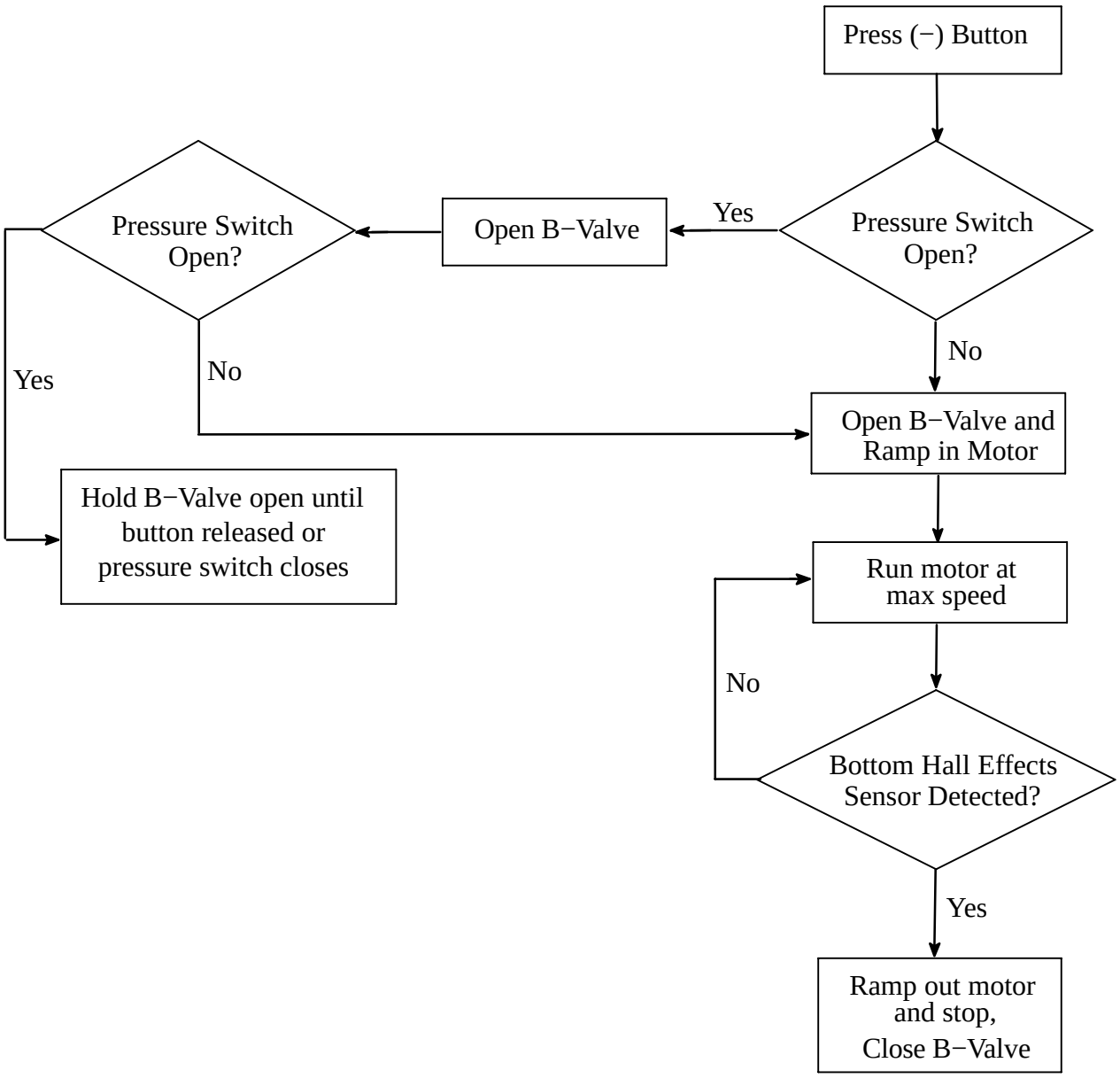
Power−PRO Electrical System Block Diagram

Lift and Extend (Unload) Functions



Power−PRO Electrical System Block Diagram

Lower and Retract (Load) Functions



Power−PRO Troubleshooting Guide Table of Contents

Check for proper operation after each step. When the problem is fixed, return the cot to service. If assistance is needed at any time during troubleshooting, please contact a service technician at 1−800−327−0770.

Power−PRO Troubleshooting Guide

1. Does the battery indicator light when the button is pressed?

a.	**NO**: Replace battery with fully charged battery. If the indicator still does not light, the problem is with the battery terminals, the control board or the Hall Sensor cable. Contact a service technician at 1−800−327−0770.
b.	**YES**, the indicator flashes red at a constant rate. Replace battery with fully charged battery.
c.	**YES**, the indicator flashes red with long and short flashes. This indicates an error in the electrical system. Check all electrical connections. If this doesn't eliminate the error code, there is a connection broken at some point in the electrical system. Please contact a service technician at 1−800−327−0770.
d.	**YES,** the indicator lights solid green. Continue to number 2.

2. Does the motor turn on when the (+) button is pressed and held?

a.	**NO**: Try the other set of switches. If this works, replace the first switch. If this doesn't work, the problem could be a faulty A−valve solenoid, A−valve, control board, or motor. Replace these components in that order, trying the function after each.
b.	**YES**, Does the cot drive up, and then drift down? i. **NO**: The problem is a faulty A−valve solenoid, A−valve, or motor. Replace these components in that order, trying the function after each. ii. **YES**: Continue to number 3.

3. The problem is most likely with the cap−side manual valve or the B−valve.

a.	Use the manual release lever to raise and lower the cot a couple of times.
b.	Push the cap−side manual valve in by tapping the stem with a punch and hammer.
c.	Loosen the manual release cable until it will no longer pull the valves. If this fixes the drift, re−adjust the manual release cable until proper function is achieved (See page 118 for how to adjust the cable).
d.	Replace the B−valve.
e.	Replace the cap−side manual valve.
f.	If none of the above fixes the drift, the manifold may need to be replaced. Please contact a service technician at 1−800−327−0770.

4. For leaking hydraulic fluid, wipe the area clean so the source of the leak can be found, then tighten or replace the leaking component.

5. There is most likely air in the hydraulics.

a.	Run the cot up and down several times.
b.	There may not be enough hydraulic fluid in the system. See page 118 for instructions on filling the reservoir.
c.	If the problem persists, go to section 11b.

6. Tighten the nut at the bottom of the cylinder to approximately 60 ft−lb, using a 3/4” wrench to hold the cylinder while tightening the nut.

a.	Follow the procedure on page 18 to verify that the hall effects sensor is set properly.
b.	Replace the hall effects sensor.
c.	Replace the control board.

7. Excessive motor noise is caused by a faulty motor, misaligned coupling, or pump. The latter two are internal to the hydraulics manifold. Please contact a service technician at 1−800−327−0770.

8. Try the other set of switches. If this works, replace the first switch. If this doesn’ work, the problem could be a faulty B−valve solenoid, B−valve, cylinder, or control board. Replace these components in that order, trying the function after each.

9. Make sure all the casters are on the ground and that the load wheels and foot end handles are not being supported. Does the motor turn on?

a.	**NO**: See page 115, number 4 and page 116, number 5.
b.	**YES**: The problem could be a short in the cable to the pressure switch, a bad pressure switch or a sticking hydraulic cylinder. Inspect and replace these components as necessary.

10. If unloading on an uneven surface, such as a curb or hill, the base may need to extend further than, or not as far as, the set load height. If this is not the case, see number 6.

11. The problem is most likely with the rod−side manual valve or the A−valve.

a.	Use the manual release lever to raise and lower the cot a couple of times.
b.	Push the rod−side manual valve in by tapping the stem with a punch and hammer.
c.	Loosen the manual release cable until it will no longer pull the valves. If this fixes the drift, re−adjust the manual release cable until proper function is achieved (See page 118 for how to adjust the cable.
d.	Replace the A−valve.
e.	Replace the rod−side manual valve.

12. Press the (+) button to extend the legs briefly, then try the retract operation again.

a.	Use the manual release lever to raise and lower the cot a couple of times.
b.	Push the rod−side manual valve in by tapping the stem with a punch and hammer.
c.	Loosen the manual release cable until it will no longer pull the valves. If this fixes the drift, re−adjust the manual release cable until proper function is achieved (See page 118 for how to adjust the cable.
d.	Replace the rod−side manual valve.
e.	Replace the cylinder.
f.	The problem may be with the manifold assembly. Please contact a service technician at 1−800−327−0770.

13. Run the cot up and down several times to remove any air in the system. If the problem persists, the problem could be the pressure switch, main cable, board, or cylinder. Replace these components in that order, trying the function after each.
14. Adjust the manual release cable until proper function is achieved (See page 118 for how to adjust the cable). If this does not fix the problem, replace the rod−side manual valve.
15. Adjust the manual release cable until proper function is achieved (See page 118 for how to adjust the cable). If this does not fix the problem, replace the cap−side manual valve.
16. Make sure the weight of the patient is being supported by the operators while actuating the manual release lever.

a.	Manually raise the cot litter slightly and try to lower again.
b.	Adjust the manual release cable until proper function is achieved (See page 118 for how to adjust the cable.
c.	Replace the cap−side manual valve.
d.	If the problem persists, replace the cylinder.

17. The operator may have to lift slightly on the foot end while lowering an empty cot. If this does not fix the problem, see number 16.

Adjusting the Manual Release Cable

Tools: 8mm wrench 10mm wrench

1. Support the litter so no weight is on the base.
2. Ensure the cable is intact.
3. Using a 10mm wrench, loosen the cable lock nut.
4. Using an 8mm hex wrench, adjust the tension on the manual release cable.
5. Tighten cable lock nut.

Filling the Reservoir − Use only Mobil Mercon Synthetic Blend Oil (6500−001−293).

Note: Any time you work with the hydraulics you may lose some oil.

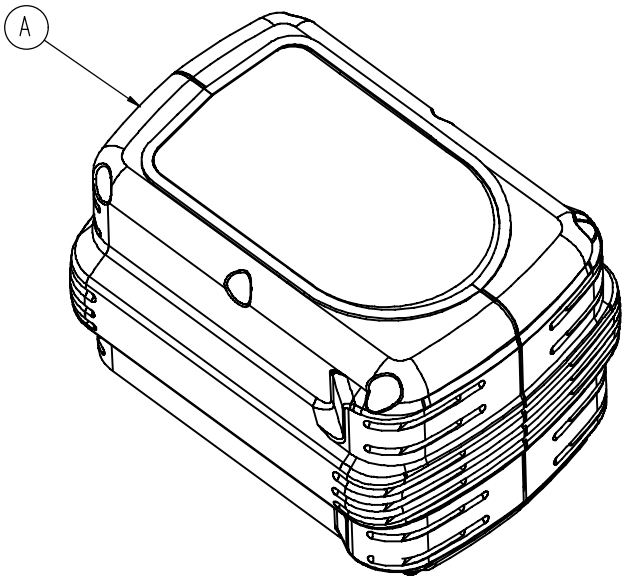
Tools: 3/16” Allen wrench

1. Ensure the fill port is horizontal and lined up with the hole in the motor mount.
2. Remove the port plug using a 3/16” allen wrench.
3. Fill the reservoir up to the bottom of the fill port.
4. Replace the plug and run the cot up and down a few times.

Recycling Passport

Product: 6500–060–000 (reference only)

View of battery



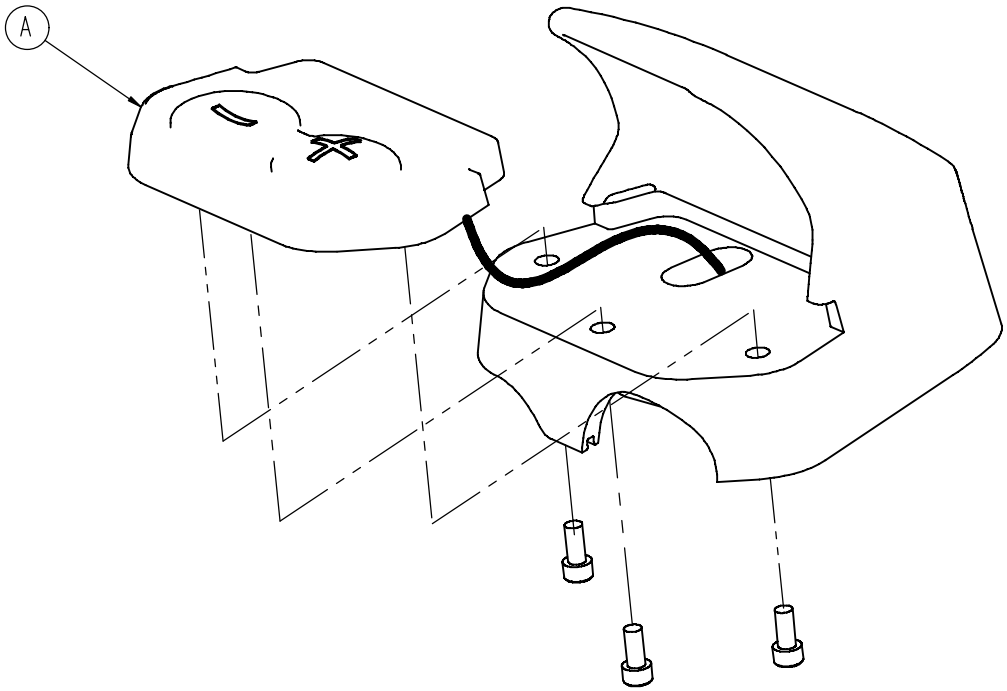
Item	Recycling/Material Code	Important Information	Qty
A	Battery Pack	NiCd	2

NOTE

Reference DeWALT Manual (Part Number 6500–001–206) for battery recycling information.

Product: 6500–001–016 (reference only)

Exploded view of switch assembly

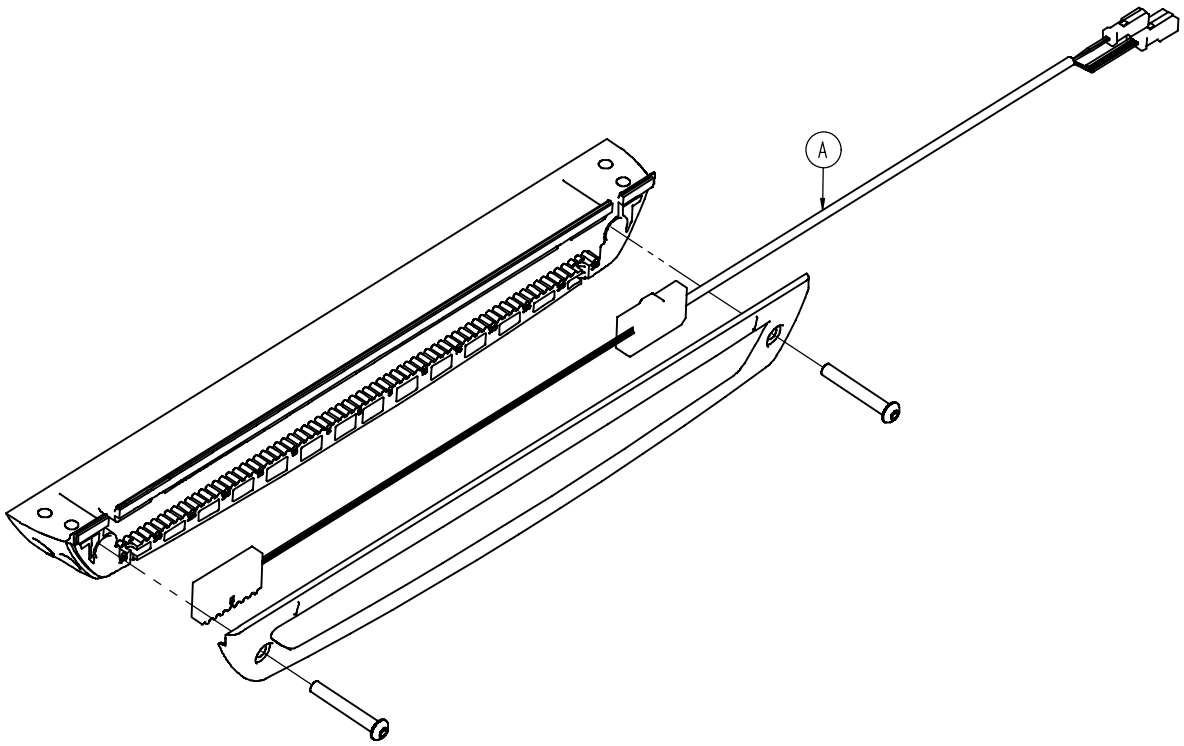


Item	Recycling/Material Code	Important Information	Qty
A	Printed Circuit Board		2

Recycling Passport

Product: 6500–001–028 (reference only)

Exploded view of hall sensor assembly

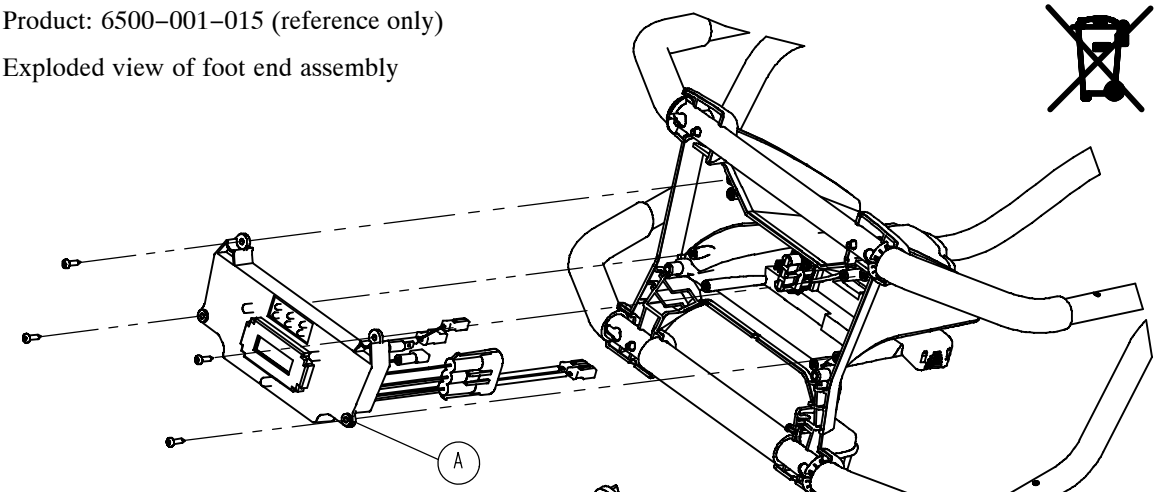


Item	Recycling/Material Code	Important Information	Qty
A	Printed Circuit Board		1

Recycling Passport

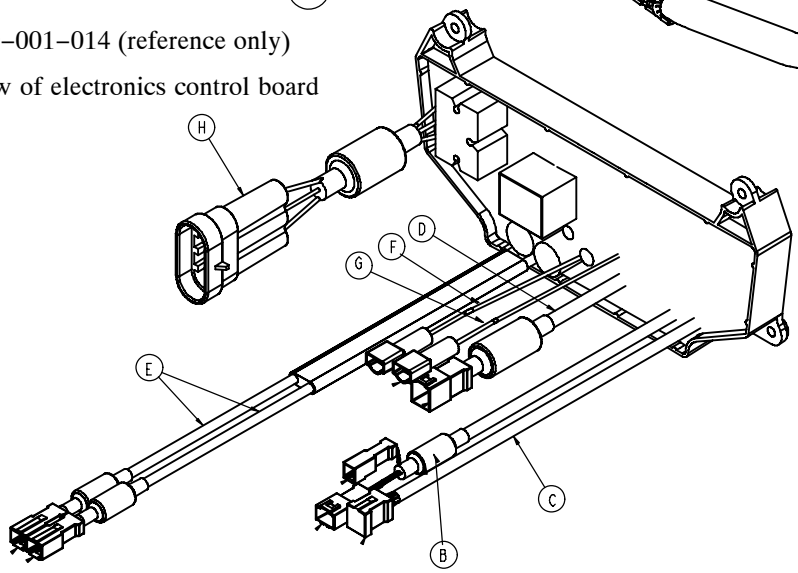
Product: 6500–001–015 (reference only)

Exploded view of foot end assembly



Product: 6500–001–014 (reference only)

Exploded view of electronics control board

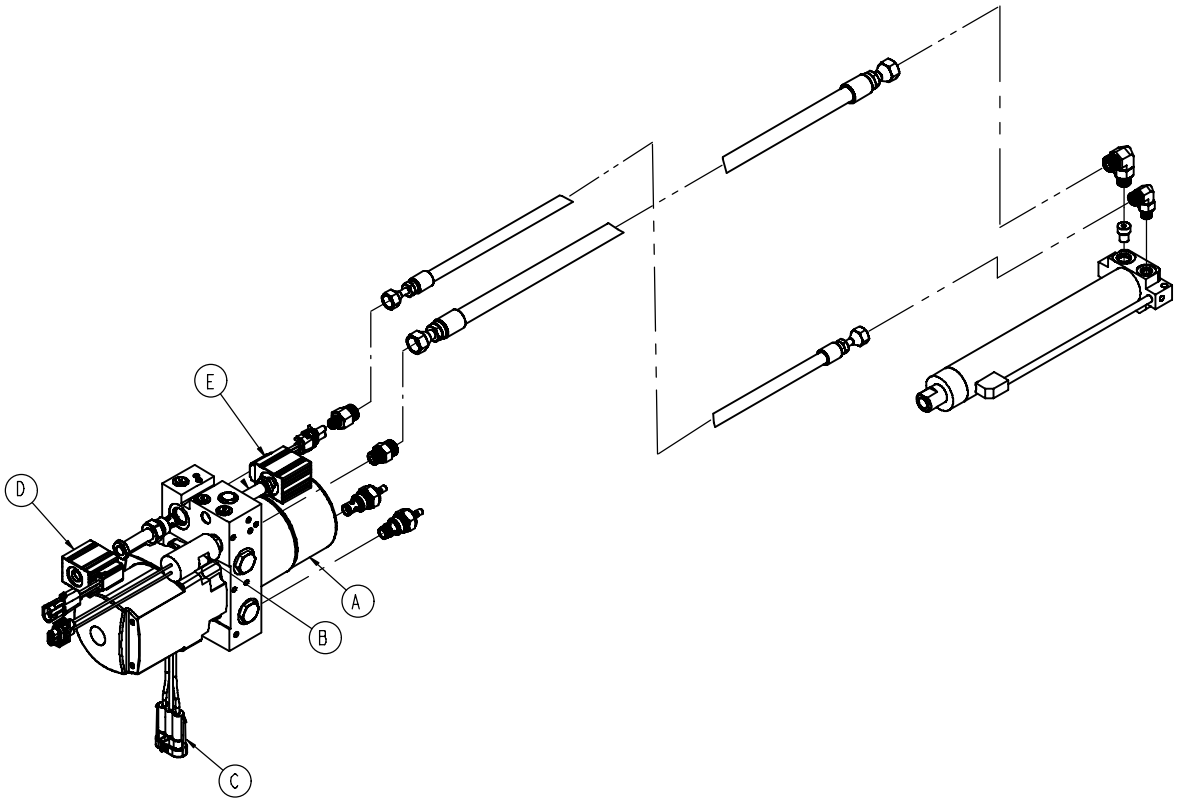


Item	Recycling/Material Code	Important Information	Qty
A	Printed Circuit Board	Contains Liquid Crystal Display	1
B	External Electrical Cable		1
C	External Electrical Cable		1
D	External Electrical Cable		1
E	External Electrical Cable		1
F	External Electrical Cable		1
G	External Electrical Cable		1
H	External Electrical Cable		1

Recycling Passport

Product: 6500–001–030 (reference only)

Exploded view of hydraulics assembly



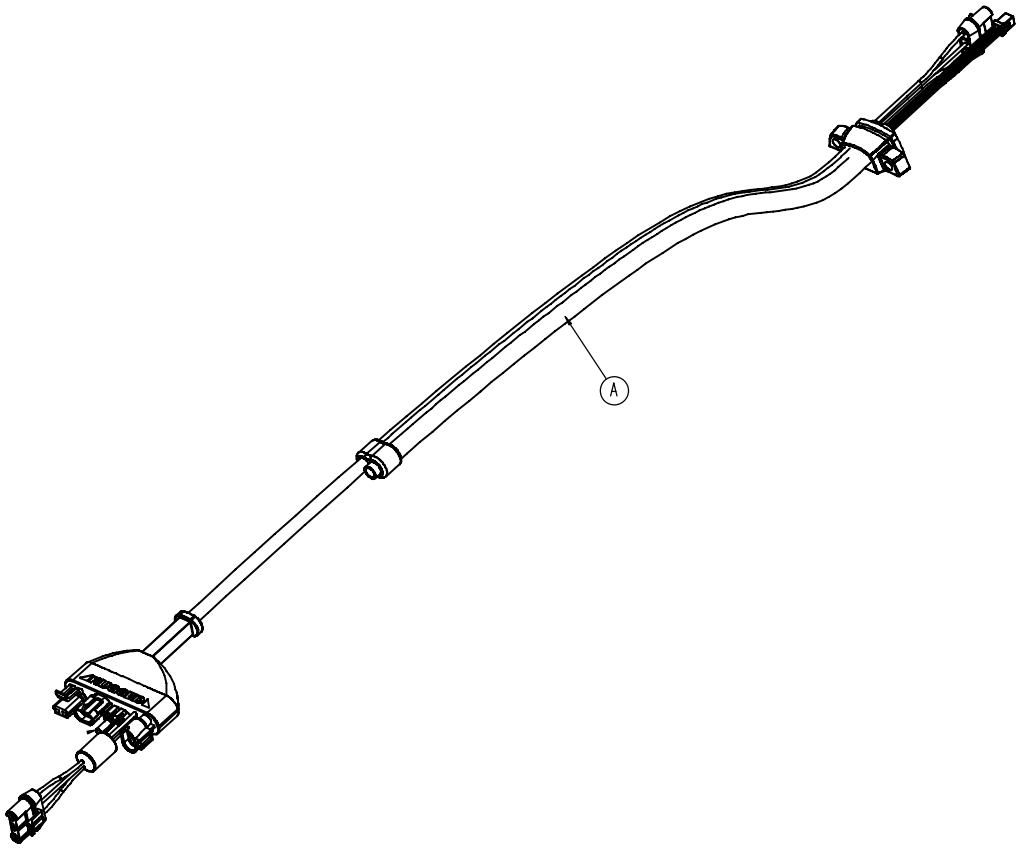
Item	Recycling/Material Code	Important Information	Qty
A	Motor	Contains Automatic Transmission Fluid*	1
B	External Electrical Cable		1
C	External Electrical Cable		1
D	External Electrical Cable		1
E	External Electrical Cable		1

* Mobil Mercon V Synthetic Blend or equivalent

Recycling Passport

Product: 6500–001–159 (reference only)

Main Cable Assembly



Item	Recycling/Material Code	Important Information	Qty
A	External Electrical Cable		1

Quick Reference Replacement Parts List

NOTE

The parts and accessories listed on this page are all currently available for purchase. Some of the parts identified on the assembly drawings pages in this manual may not be individually available for purchase. Please call Stryker Customer Service at 1−800−327−0770 for availability and pricing.

ITEM	PART NUMBER
Backrest Pouch Option	6500−130−000
Base Storage Flat	6500−160−000
DC Battery Charger, 110V, Domestic	6500−070−000
DC Battery Charger 12V/24V, In−ambulance	6500−072−000
Defibrillator Tray Option	6500−170−000
Equipment Hook Option	6500−147−000
Equipment Hook	6500−700−003
Gas Cylinder, Fowler	1010−031−077
Head Extension Kit	6100−700−012
Head Extension Pillow Only Option	6100−045−000
Hydraulic Oil	6500−001−293
I.V. Pole, 2−Stage, Right	6500−210−000
I.V. Pole, 2−Stage, Left	6500−211−000
I.V. Pole, 2−Stage, Dual	6500−212−000
I.V. Pole, 3−Stage, Right	6500−215−000
I.V. Pole, 3−Stage, Left	6500−216−000
I.V. Pole, 3−Stage, Dual	6500−217−000
Label, Base, ”Lift Here”	6080−090−008
Label, I.V. Pole Caution	6070−090−005
Label, Damage Warning	6080−090−009
Manual, Installation/Operation, Cot Fastener	6370−090−010
Mattress, Bolster	6090−041−010
Mattress, Flat	6090−042−010
NiCd Battery Pack	6500−060−000
Oxygen Bottle Holder Option, Footend	6500−140−000
Oxygen Bottle Holder Option, Headend	6500−141−000
Restraint Belt Extension	6082−160−050
Restraint, Chest	6060−260−046
Restraint, Lap Belt (2 Used per Unit)	6060−160−044
Restraint Package, Domestic	6082−260−010
Restraint, Shoulder Harness	6060−260−045
Restraint Strap Plastic Cap (short)	6082−160−051

Quick Reference Replacement Parts List

ITEM	PART NUMBER
Restraint Strap Plastic Cap (tall)	6082–160–055
Safety Hook, Long	6060–036–018
Safety Hook, Short	6060–036–017
Safety Hook, J Hook	6092–036–018
Storage Flat Option	6500–128–000
Touch–Up Paint (Yellow)	6060–199–010
Touch–Up Paint (Black)	6060–199–011
Velcro Adhesive Loop Pile, Litter	6060–032–046
Wheel Bearing	0081–226–000
Wheel Lock	6082–200–010

European Representative

RA/QA Manager
Stryker France
ZAC Satolas Green Pusignan
Av. De Satolas Green
69881 MEYZIEU Cedex
France

3800 E. Centre Ave., Portage, MI 49002
(800) 327–0770
www.stryker.com

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