




















# stryker®

## Maintenance Manual









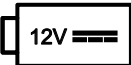
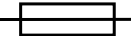
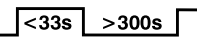







# Symbols



	Refer to instruction manual/booklet
	Operating instructions/Consult instructions for use
	CE mark
	EC REP
	General warning
	Caution
	Warning; crushing of hands
	Warning; non-ionizing radiation
	Catalogue number
	Lot (batch) code
	Serial number
	For US Patents see <a href="http://www.stryker.com/patents">www.stryker.com/patents</a>
	Manufacturer
	Date of manufacture
	Safe working load
	Dangerous voltage
	Medical Equipment Recognized by Underwriters Laboratories LLC With Respect to Electric Shock, Fire, and Mechanical Hazards only in accordance with ANSI/AAMI ES60601-1:2012 and CAN/CSA-C22.2 No. 60601-1:14.
	Direct current
	Class II electrical equipment: equipment in which protection against electric shock does not rely on basic insulation only, but in which additional safety precautions such as double insulation or reinforced insulation are provided, there being no provision for protective earthing or reliance upon installation conditions

# Symbols

	<p>In accordance with European Directive 2012/96/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 or collection systems available in your country.</p>
	<p>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 or collection systems available in your country.</p>
<p>IPX6</p>	<p>Protection from powerful water jets</p>
	<p>This device complies with Part 18 of the FCC Rules</p>
	<p>Two person lift</p>
	<p>This way up</p>
	<p>Fragile, handle with care</p>
	<p>Keep dry</p>
	<p>Do not stack more than 5 high</p>
	<p>12 VDC battery powered</p>
	<p>Fuse</p>
	<p>Battery duty cycle (loading): 10.0% (less than 33 seconds on, more than 300 seconds off)</p>
	<p>Battery duty cycle (charging): 100%</p>
<p>U.S.A.</p>	<p>English text below this symbol is intended for USA audiences only.</p>
<p>TRA Registered No: ER35122/14 Dealer No: DA35173/14</p>	<p>Registered in United Arab Emirates by the Telecommunications Regulatory Authority</p>
	<p>Product complies with applicable EMC standards in Australia/New Zealand</p>
	<p>Approved by independent communications authority of South Africa</p>

# Symbols

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	Box manufacturer's certificate - this packaging box has minimum edge crush test value of 82 lbs/in.
	Box manufacturer's certificate - this packaging box has minimum edge crush test value of 51 lbs/in.



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# 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 product 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:** Provides special information to make maintenance easier or important instructions clearer.

# Summary of safety precautions

---

Always read and strictly follow the warnings and cautions listed on this page. Service only by qualified personnel.

---

## **WARNING**

- Do not operate **Power-LOAD** with a voltage that is inconsistent with the rating on the product.
  - Do not operate **Power-LOAD** above its duty cycle to avoid the risk of equipment damage or smoke hazard.
  - Do not connect **Power-LOAD** to a 24 VDC vehicle circuit. Always connect **Power-LOAD** to a 12.8 VDC-15.6 VDC vehicle circuit that is on a 15A fuse/breaker prevent power hazards.
  - **Power-LOAD** operates at 13.56 MHz when you use **Power-LOAD** controls with a powered cot (**Power-PRO** XT or **Power-PRO** IT) that could interfere with other equipment that operate at this frequency band.
  - The use of accessories, transducers, and cables, other than those specified, with the exception of transducers and cables that are sold by Stryker as replacement parts for internal components, may result in increased emissions or decreased immunity of the **Power-LOAD** system.
  - Do not use the **Power-LOAD** system and the **Power-PRO** cot adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, observe the **Power-LOAD** system to confirm normal operation in the configuration where it will be used.
  - **Power-LOAD** operates primarily at these frequencies: 70 - 85 kHz for inductive charging and 13.56 MHz±7 kHz, Amplitude Modulated (OOK), ERP: -82.37 dBm. The inductive charging can operate between these frequencies: 70 - 125 kHz. Other equipment may interfere with the **Power-LOAD** system, even if that other equipment complies with CISPR emission requirements.
  - Always press the main power button to turn the unit off before service or cleaning.
  - Always use any appropriate personal protective equipment while power washing to avoid inhaling contagion. Power washing equipment may aerate contamination.
  - Always wipe the product with clean water and dry after cleaning. Some cleaning products are corrosive in nature and may cause damage to the product. Failure to properly rinse and dry the product leaves a corrosive residue on the surface of the product and may cause premature corrosion of critical components.
  - Two installers are required when lifting and positioning the trolley assembly.
  - While servicing or installing covers, do not pinch cables.
  - ESD precautions should be taken when handling the control board. For more information about ESD protection, contact Stryker Technical Support at (800) 327-0770.
- 

## **CAUTION**

- Improper usage of the product can cause injury to the patient or operator. Operate the product only as described in this manual.
  - Do not modify the product or any components of the product. Modifying the product can cause unpredictable operation resulting in injury to patient or operator. Modifying the product also voids its warranty.
  - This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their expense. In the event of interference, please relocate or reorient the **Power-LOAD** system or interfering product.
  - Always relocate or reorient the **Power-LOAD** system or interfering product in the event of interference. This device complies with Part 18 of the FCC Rules.
  - Do not use portable RF communications equipment (including peripherals such as antenna cables and external antennas) no closer than 30 cm (12 in.) to any part of the **Power-LOAD** system, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment may result.
-

# Summary of safety precautions

## ⚠ CAUTION (CONTINUED)

- The emissions characteristics of this equipment make it suitable for use in industrial areas and hospitals (CISPR 11 class A). This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area (for which CISPR 11 class B is normally required) is likely to cause harmful interference, in which case the user will be required to correct the interference at their expense. In the event of interference, please relocate or reorient the **Power-LOAD** system or interfering product.
- Do not spray directly underneath the trolley up in to the trolley mechanism. Water could gain ingress into the trolley housing and may accelerate corrosion or degrade operation.
- Do not clean, service, or perform maintenance while the product is in use.
- The manual overrides allow the **Power-LOAD** system to move freely.
- When replacing the battery, do not touch the negative and positive battery terminals together on any metal surface.

## Pinch points

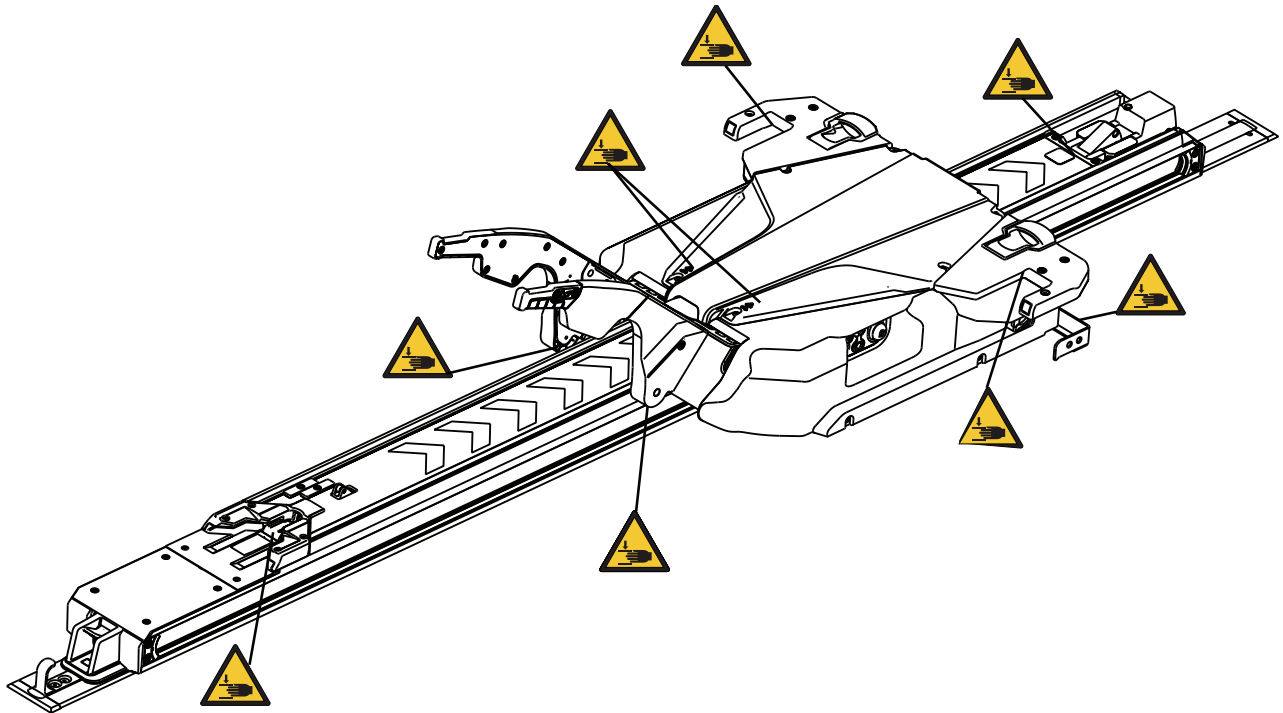


Figure 1: Pinch points

# Introduction

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This manual assists you with the operation or maintenance of your Stryker product. Read this manual before operating or maintaining this product. Set methods and procedures to educate and train your staff on the safe operation or maintenance of this product.

---

## CAUTION

- Improper usage of the product can cause injury to the patient or operator. Operate the product only as described in this manual.
  - Do not modify the product or any components of the product. Modifying the product can cause unpredictable operation resulting in injury to patient or operator. Modifying the product also voids its warranty.
- 

## Notes

- This manual is a permanent part of the product and should remain with the product even if the product is sold.
- Stryker continually seeks advancements in product design and quality. This manual contains the most current product information available at the time of printing. There may be minor discrepancies between your product and this manual. If you have any questions, contact Stryker Customer Service or Technical Support at 1-800-327-0770.

## Product description

The Stryker Model 6390 **Power-LOAD**® power-loading cot fastener system is designed to lift, lower, or steer compatible ambulance cots into and out of an emergency ground transport vehicle. When the cot is securely attached to the system, a battery powered hydraulic system assists the operators in loading and unloading a cot. The system also secures the compatible ambulance cot within the vehicle for patient transportation purposes. When the cot is secured in the transport position, **Power-LOAD** inductively charges compatible model 6506 **Power-PRO**™ XT and 6516 **Power-PRO**™ IT ambulance cots. In the event of power loss, the system remains functional for securing the cot within the vehicle.

## Indications for use

**Power-LOAD** is intended to assist with loading and unloading of a compatible wheeled stretcher (ambulance cot) to and from a transport vehicle and to secure the ambulance cot during transport. The device has a maximum safe working load of 870 lb (395 kg), which includes the weight of the ambulance cot, patient, and equipment attached to the cot (such as oxygen bottles, monitors, and pumps). The intended users of the device are trained professionals, including emergency medical service and medical care center personnel, as well as medical first responders, service technicians and installers.

## Expected service life


**Power-LOAD** has a seven year expected service life under normal use conditions and with appropriate periodic maintenance.

## Contraindications

None known.

# Introduction

## Specifications

	Safe working load <b>Note:</b> Safe working load represents the sum of the cot total weight and patient	870 lb	395 kg
Maximum lift capacity (patient and accessories)		700 lb	318 kg
Overall length		95 in.	241 cm
Minimum length		89.5 in.	228 cm
Width		24.5 in.	62 cm
Weight			
	Floor plate assembly	16.5 lb	7.5 kg
	Anchor assembly	23 lb	10.5 kg
	Transfer assembly	67 lb	30.5 kg
	Trolley assembly	105 lb	48 kg
Minimum operators required for loading/unloading an occupied cot		2	
Minimum operators required for loading/unloading an unoccupied cot		1	
Recommended loading height		22 in. to 36 in.	56 cm to 91 cm
Hydraulic oil		Mobil <b>Mercon</b> ® V Blend ATF Oil (6500-001-293) See the Mobil <b>Mercon</b> V Blend ATF oil material safety data sheet (MSDS) for safety information.	
Electrical requirements		12.8 VDC-15.6 VDC, 15A fuse/breaker, 2 conductor 10 AWG cable	
Battery duty cycle, charging		100%	
Battery duty cycle, loading		10% (33 sec on/5 min off)	
Battery		12 VDC, 5 Ah lead acid battery (6390-001-468)	
Fuse		LITTELFUSE 0496060.ZXD-UL	
Standards		ANSI/AAMI ES60601-1:2012, CAN/CSA-C22.2 No. 60601-1:14, KKK-A-1822F, IEC 60601-1-12:2014 For standards that require specific options, see <a href="#">Standards with required options on page 11</a> .	

Stryker reserves the right to change specifications without notice.

The yellow and black color scheme is a proprietary trademark of Stryker Corporation.

Hereby, Stryker declares that the radio equipment type short range device is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <http://techweb.med.strykercorp.com/EMS/EU%20Declaration%20of%20Conformity/index.html>.

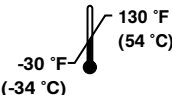
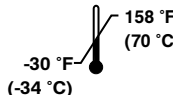
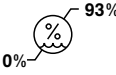
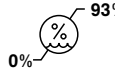
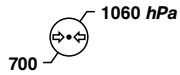
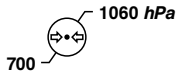
Labels may be unreadable from a viewing distance greater than 12 inches.

# Introduction

## Specifications (Continued)

### WARNING

- Do not operate **Power-LOAD** with a voltage that is inconsistent with the rating on the product.
- Do not operate **Power-LOAD** above its duty cycle to avoid the risk of equipment damage or smoke hazard.
- Do not connect **Power-LOAD** to a 24 VDC vehicle circuit. Always connect **Power-LOAD** to a 12.8 VDC-15.6 VDC vehicle circuit that is on a 15A fuse/breaker to prevent power hazards.
- **Power-LOAD** operates at 13.56 MHz when you use **Power-LOAD** controls with a powered cot (**Power-PRO XT** or **Power-PRO IT**) that could interfere with other equipment that operate at this frequency band.
- The use of accessories, transducers, and cables, other than those specified, with the exception of transducers and cables that are sold by Stryker as replacement parts for internal components, may result in increased emissions or decreased immunity of the **Power-LOAD** system.
- Do not use the **Power-LOAD** system and the **Power-PRO** cot adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, observe the **Power-LOAD** system to confirm normal operation in the configuration where it will be used.
- **Power-LOAD** operates primarily at these frequencies: 70 - 85 kHz for inductive charging and 13.56 MHz±7 kHz, Amplitude Modulated (OOK), ERP: -82.37 dBm. The inductive charging can operate between these frequencies: 70 - 125 kHz. Other equipment may interfere with the **Power-LOAD** system, even if that other equipment complies with CISPR emission requirements.

Environmental conditions	Operation	Storage and transportation
Temperature		
Relative humidity		
Atmospheric pressure		

### CAUTION

- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their expense. In the event of interference, please relocate or reorient the **Power-LOAD** system or interfering product.
- Always relocate or reorient the **Power-LOAD** system or interfering product in the event of interference. This device complies with Part 18 of the FCC Rules.
- Do not use portable RF communications equipment (including peripherals such as antenna cables and external antennas) no closer than 30 cm (12 in.) to any part of the **Power-LOAD** system, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment may result.



# Introduction

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## Specifications (Continued)

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### CAUTION (CONTINUED)

- The emissions characteristics of this equipment make it suitable for use in industrial areas and hospitals (CISPR 11 class A). This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area (for which CISPR 11 class B is normally required) is likely to cause harmful interference, in which case the user will be required to correct the interference at their expense. In the event of interference, please relocate or reorient the **Power-LOAD** system or interfering product.
- 

### Notes

- This device is compliant to European Directive 2011/65/EU Restriction of Hazardous Substances (RoHS) as it does not contain any of the restricted substances in excess of the acceptable threshold in electrical and electronic equipment.
- This device is considered an "article" as defined in Article 3(3) of the European Registration, Evaluation, Authorization, and restriction of Chemicals (REACH) Regulation (EC) 1907/2006, and it does not release substances under its normal use. Suppliers of articles are not required to register with the European Chemicals Agency (ECHA), but must provide recipients with information on Substances of Very High Concern (SVHC) if those are present above a concentration limit of 0.1 % weight on an article level. Based on a diligent review of information provided by our suppliers, this device does not contain above 0.1 % weight (w/w) threshold of any (SVHC) as listed by the ECHA as of the 30MAR2010 release. Stryker will continue to monitor REACH regulations for any SVHC that may be included in subsequent ECHA candidate lists and will communicate this information to customers.

## Standards with required options

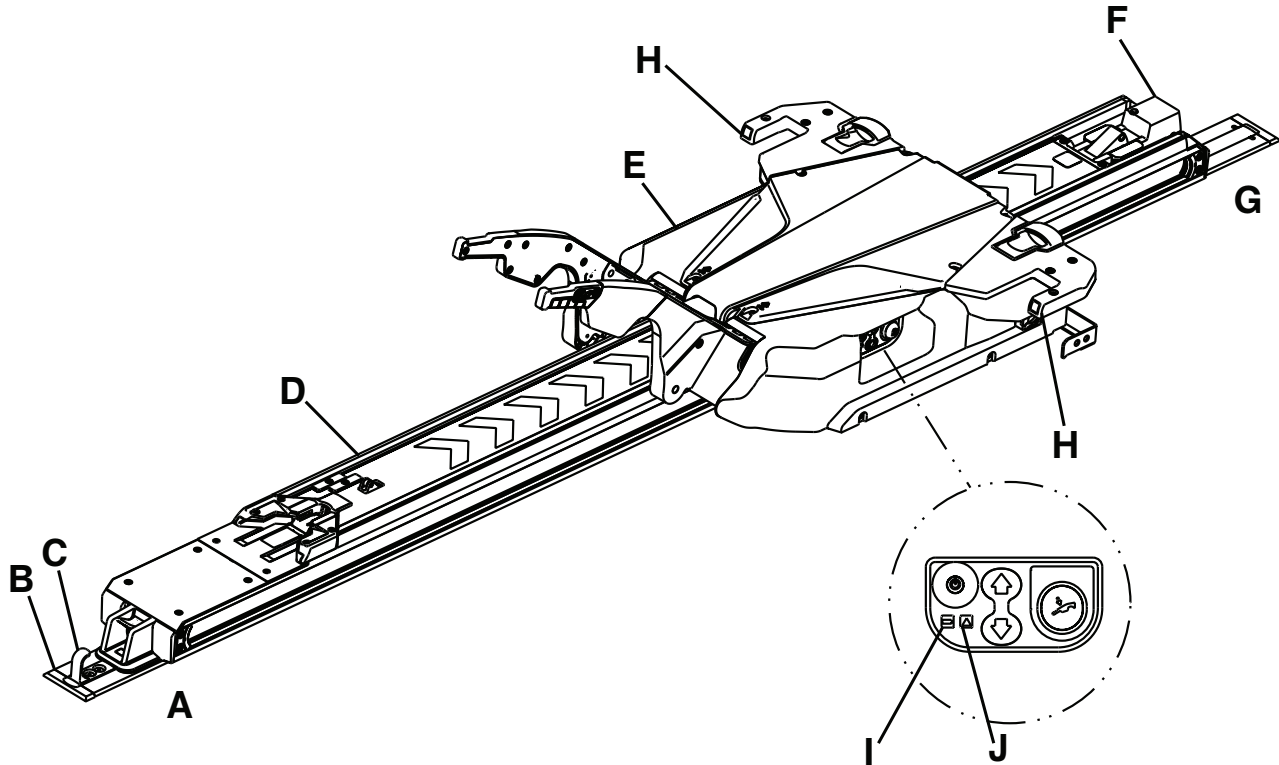
To be compliant with the standards, you must use **Power-LOAD** with the following compatible cots. See the Operations Manual for your cot model for more information.

**Note:** Compatible cot is loaded into **Power-LOAD** in powered mode for crash testing.

Standard	Power-LOAD compatible cot models
SAE J3027 and AS/NZS-4535:1999	6500, 6506
BS EN 1789:2007	6500, 6506, 6085, 6086

# Introduction

## Product illustration



A	Foot end
B	Floor plate
C	Safety hook
D	Transfer assembly
E	Trolley assembly

F	Anchor assembly
G	Head end
H	LED indicator, head end
I	Battery LED
J	Error LED

## Important contact information

For information about Federal Ambulance Specification KKK-A-1822F, contact:

Chief, Automotive & Commodity Management Branch (QMDAA)  
Office of Motor Vehicle Management  
General Services Administration  
R2200 Crystal Drive, Suite 1006  
Arlington, VA 22202 USA  
Telephone: 703-605-2277

For more information about AMD standards, contact:

Ambulance Manufacturers Division  
(National Truck Equipment Association)  
37400 Hills Tech Drive  
Farmington Hills, MI 48331-3414 USA

# Introduction

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## Contact information

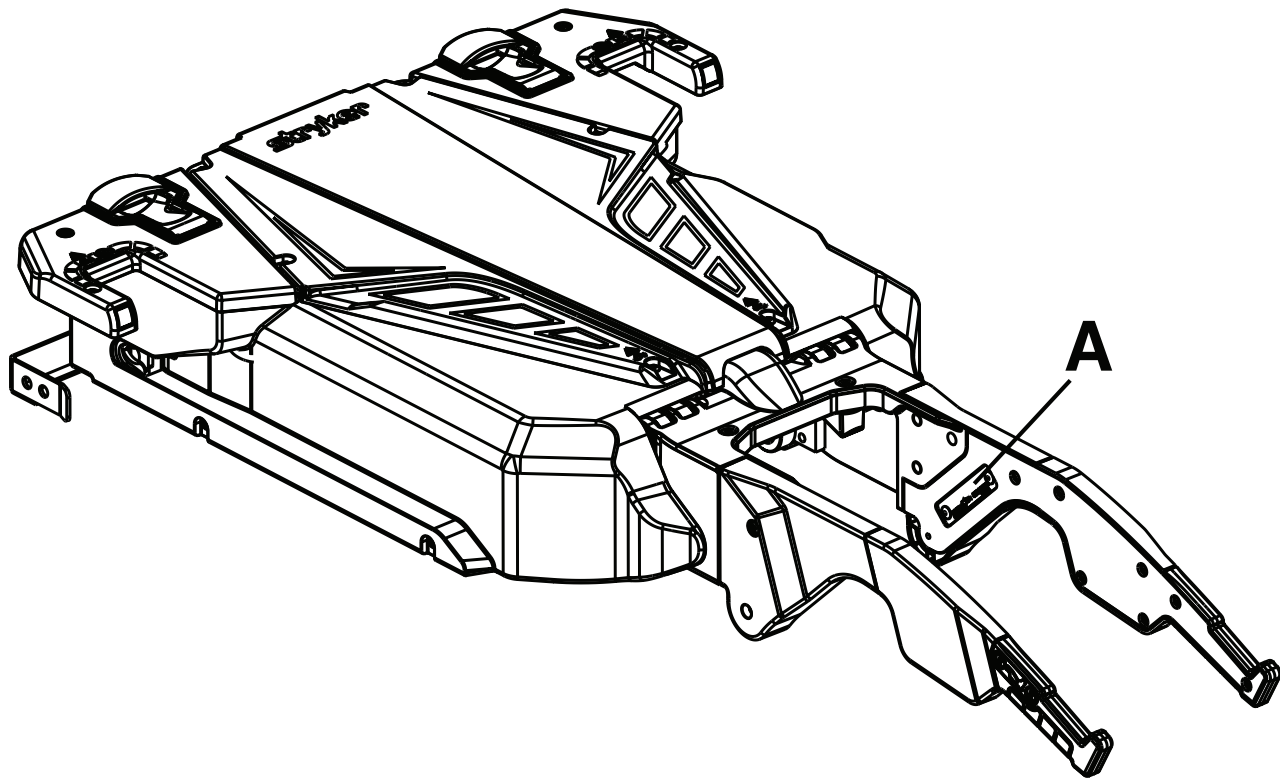
Contact Stryker Customer Service or Technical Support at: 1-800-327-0770.

Stryker Medical  
3800 E. Centre Avenue  
Portage, MI 49002  
USA

To view your operations or maintenance manual online, see <https://techweb.stryker.com/>.

Have the serial number (A) of your Stryker product available when calling Stryker Customer Service or Technical Support. Include the serial number in all written communication.

## Serial number location



## Date of manufacture

The year of manufacture is the first 2 digits of the serial number.

# Cleaning

---

## **WARNING**

- Always press the main power button to turn the unit off before service or cleaning.
  - Always use any appropriate personal protective equipment while power washing to avoid inhaling contagion. Power washing equipment may aerate contamination.
- 

## **CAUTION**

- Do not spray directly underneath the trolley up in to the trolley mechanism. Water could gain ingress into the trolley housing and may accelerate corrosion or degrade operation.
  - Do not clean, service, or perform maintenance while the product is in use.
- 

The product is power washable. The product may show some signs of oxidation or discoloration from continuous washing. No degradation of the product's performance will occur from power washing as long as you follow the proper procedures.

- Follow the cleaning solution manufacturer's dilution recommendations exactly.
- Power wash **Power-LOAD** with recommended cleaners. Hose down the product and towel dry the transfer rails and arm hinges.
- Power wash **Power-LOAD** with a hand held wand unit or wipe the product with a clean cloth and recommended cleaners.
- When you hose down or power wash the product, do not spray directly underneath the trolley up in to the trolley mechanism. Water could gain ingress into the trolley housing and may accelerate corrosion or degrade operation.
- Using a soft cloth and brush, clean the transfer roller channels to prevent debris accumulation.
- Remove the trolley top cover and patient left side cover assembly to towel dry the control board assembly.
- Disconnect the motor and battery connectors and towel dry the connectors.
- Towel dry the transfer rails and arm hinges.
- When cleaning, park the ambulance uphill and extend the transfer and trolley so the water drains out of the rear end of the vehicle patient compartment.

**Note:** Water that gets into the **Power-LOAD** system will drain through the drain tube to the underside of the vehicle.

## Suggested cleaners

In general, when used in concentrations recommended by the manufacturer, either phenolic type or quaternary (excluding **Virex**® TB) type disinfectants can be used. Iodophor type disinfectants are not recommended for use because staining may occur.

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## **WARNING**

Always wipe the product with clean water and dry after cleaning. Some cleaning products are corrosive in nature and may cause damage to the product. Failure to properly rinse and dry the product leaves a corrosive residue on the surface of the product and may cause premature corrosion of critical components.

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Suggested cleaners include:

- 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. Do not allow the product to stay wet longer than the chemical manufacturer's guidelines for proper disinfecting.

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

# Preventive maintenance

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## Regular inspection and adjustments

### Maintenance intervals

This schedule is a general guide to maintenance. The required maintenance schedule may vary based on:

- Call volume
- Weather
- Terrain
- Geographical location
- Individual usage

If you are not sure how or when to perform these checks, contact your Stryker Service Technician.

When you perform **Power-LOAD** preventive maintenance checks, you must perform a preventive maintenance check on its corresponding **Power-LOAD** compatible cot and the optional wheel guide assembly (if applicable) to confirm operability of the entire system.

### Power-LOAD compatible cot maintenance

Wear items that may require replacement on the **Power-LOAD** compatible cot include the cot arm spacer (6500-002-123), base dead stop (6085-001-094), and load wheel pin (6500-002-104).

### Optional wheel guide assembly maintenance (if applicable)

To preserve **Power-LOAD** fastener functionality, make sure that the wheel guide is functional and its structure has not been compromised. The wheel guide rail system assists the **Power-LOAD** system in loading the cot. If the wheel guide has been compromised, replace it immediately.

**Note:** The **Power-LOAD** maintenance schedule is based on 10 calls per day. Adjust the routine maintenance schedule to your actual service usage.

## Every month

Check	Routine
Lock location	Clean debris from the foot end lock location on the transfer

## Every three months

Check	Routine
Loose fasteners	Replace if loose
Battery terminal screws	Tighten loose screws (torque to 9 in-lb)
Transfer assembly and anchor assembly	Clean debris from the top of the transfer assembly and anchor assembly
Transfer roller channels	Clean transfer roller channels to prevent debris accumulation
Trolley stop ramp	Tighten loose screws

# Preventive maintenance

## Every twelve months

Check	Routine
Battery	Replace if lifting is sluggish
All parts	Check and replace any worn parts, including arm covers, arm wear pads, trolley top and side covers, cot release handle springs, anchor lever cover, transfer lock plate, transfer lock pin, or cot guides, if necessary
Dead stop bumpers	Replace if the corner is damaged
Motor	Replace when no motor motion exists
Cylinder rod end	Replace if <b>Power-LOAD</b> functions in manual mode and the error LED is illuminated
Full functionality	See <a href="#">Installation checklist on page 16</a>
Hydraulic	Check for hydraulic leaks
Transfer lock bearing	Replace once per year <b>Note:</b> During bearing replacement, make sure that the surrounding area is clean (anchor) and apply molybdenum disulfide grease to the transfer lock pin.
V-guide rollers	If the product is difficult to roll or wear is noticeable in the transfer roller channel beyond the inner rod, replace the V-guide rollers on the trolley and switch the patient right, outside, bottom transfer rod with the patient right, outside top transfer rod. Check all remaining rollers for damage or excessive wear. Replace, if necessary.
Lift arm springs	Replace the lift arm springs (0038-895-000) that are located under the trolley top cover

## Installation checklist

### CAUTION

The manual overrides allow the **Power-LOAD** system to move freely.

**Note:** Allow the battery to charge for a minimum of 20 minutes before you start the **Power-LOAD** functional check. The battery will only charge when the trolley is locked at the head end of the vehicle patient compartment. The battery power LED should flash green while charging.

Before you start the **Power-LOAD** functional check, make sure that the:

- Check is performed with a **Power-LOAD** compatible **Power-PRO** cot (Model 6500, 6506, 6510, 6516)
- **Power-LOAD** is locked at the foot end of the vehicle patient compartment with the lifting arms down
- Power is turned on
- LEDs on the trolley assembly wings flash amber

# Preventive maintenance

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## Installation checklist (Continued)

### Notes

- When you press the main power button, the battery power LED also illuminates to indicate that the **Power-LOAD** system is on. If the trolley battery is low, a flashing amber error LED may appear.
  - Check both the upper and lower cot control switches when you check the cot button functionality.
- \_\_\_\_\_ Lift the vehicle bumper to the raised position, if equipped.
- \_\_\_\_\_ Lock the **Power-LOAD** compatible cot into **Power-LOAD**.
- \_\_\_\_\_ Check that both cot load wheel pins are locked into **Power-LOAD** (latches).
- \_\_\_\_\_ Check that LEDs change from flashing amber to solid green.
- \_\_\_\_\_ Press and hold the retract (-) button on the cot control switch to fully retract the cot undercarriage.
- \_\_\_\_\_ Push the cot into the vehicle patient compartment until it locks at the head end of the vehicle patient compartment. Make sure that the lifting arms lower until the cot wheels are on the vehicle patient compartment floor and the cot foot end locks into the cot fastener.
- \_\_\_\_\_ Make sure that the cot is locked into **Power-LOAD** by firmly pulling side to side on the foot end of the cot.
- \_\_\_\_\_ Press and hold the extend (+) button on the cot control switch to make sure that the cot does not extend in the vehicle patient compartment. The cot legs should not attempt to lift in the transport position.
- Note:** Press the retract (-) button on the cot control switch to allow motion in some conditions.
- \_\_\_\_\_ Press and hold the release lever at the foot end of the **Power-LOAD** system and pull to remove the cot from the vehicle patient compartment. Make sure that the lifting arms raise the cot until the cot wheels are off the vehicle patient compartment floor.
- \_\_\_\_\_ Make sure that the head end LED indicators are solid green. Press and hold the extend (+) button on the cot control switch to extend the cot until the cot wheels rest on the ground and the cot is no longer supported by the **Power-LOAD** lifting arms.
- Note:** The lifting arms should remain in the full down position after the cot is released from **Power-LOAD**.
- \_\_\_\_\_ Press the up (↑) button on the **Power-LOAD** control panel to raise the lifting arms and the cot to the highest position.
- Note:** The cot legs do not retract.
- \_\_\_\_\_ Press the down (↓) button on the **Power-LOAD** control panel to lower the lifting arms and the cot.
- \_\_\_\_\_ Press the release button on the cot control switch to release the cot from **Power-LOAD**. The head end LED indicators will flash amber.
- \_\_\_\_\_ Lock the cot into **Power-LOAD** again.
- \_\_\_\_\_ Press the up (↑) button on the **Power-LOAD** control panel to lift the cot up to the highest position.
- Note:** The cot legs do not retract.
- \_\_\_\_\_ Press the manual release button on the **Power-LOAD** control panel to lower the cot. Continue to hold the button until the lifting arms are clear of the cot.
- \_\_\_\_\_ Lift one of the two manual cot release handles at the head end of the trolley to unlock the cot.
- \_\_\_\_\_ Roll the cot away from **Power-LOAD**.
- \_\_\_\_\_ Raise the lifting arms and push the trolley into the vehicle patient compartment to the transport position. With the trolley at the head end, allow the arms to lower.
- \_\_\_\_\_ Make sure that the battery power LED is flashing green when the trolley is in the transport position.
- \_\_\_\_\_ Load the **Power-LOAD** compatible cot without using the load functions to simulate manual loading of the cot into the vehicle patient compartment. Make sure that the cot locks into place.
- \_\_\_\_\_ Press and hold the release lever at the foot end of the **Power-LOAD** system and pull to remove the cot from the vehicle patient compartment. Make sure that the cot safety bar is connected with the vehicle.
- Note:** Only the cot will unlock. The trolley should remain at the head end of **Power-LOAD**.
- \_\_\_\_\_ To unlock the trolley, raise the lifting arms and press the trolley release button at the head end of the **Power-LOAD** system. Slide the trolley only a few inches toward the foot end.

# Preventive maintenance

## Installation checklist (Continued)

- \_\_\_\_\_ Slide the manual lock override closest to the foot end on the transfer and push the transfer out toward the foot end. Make sure that the transfer can be unlocked.
- \_\_\_\_\_ Fully extend **Power-LOAD** out of the vehicle patient compartment.
- \_\_\_\_\_ Slide the manual lock override closest to the head end on the transfer and push the transfer in toward the head end. Make sure that the transfer can be unlocked.
- \_\_\_\_\_ Visually inspect the head end transfer bumpers to make sure that they are installed flush to the outer edge of the transfer assembly with no signs of misalignment or improper installation.
- \_\_\_\_\_ Visually check that all bolts and screws are tight, with no signs of protruding or missing fasteners.
- \_\_\_\_\_ Push on the head end pawl and use the foot end release lever to activate the head end pin to make sure that they move freely and do not bind after you let go.
- \_\_\_\_\_ For Type II ambulances or if the cot center line is 17.5 in. (44.5 cm) or less from the vehicle wall, make sure that the optional wheel guide assembly (6390-027-000) is installed. Mark N/A if the wheel guide is not required.
- \_\_\_\_\_ Press the main power button to turn the product off. You may need to turn the product on and then off to make sure that **Power-LOAD** is off and not in sleep mode.

**Note:** If you will not use **Power-LOAD** for a week or more, press the main power button to turn the product off and avoid draining the battery. You may need to turn the product on and then off to make sure that **Power-LOAD** is off and not in sleep mode.

Product serial number:			
Installed by:		Date:	
Inspected by:		Date:	

**Note:** Maintain a copy of this record for at least seven years.

## Flat roller and V-guide part replacement schedule

You must replace the flat roller and V-guide parts every 14,110 calls. This is to make sure that the **Power-LOAD** remains functional. Follow this call volume time table to remain compliant with this requirement. The time table will also help plan appropriate service intervals.

Calls per day	Months
6	80
7-8	60
9-10	48
11-12	40
13	36
14-15	30

## Transfer lock bearing part replacement schedule

You must replace the transfer lock bearing parts every 3,653 calls. This is to make sure that **Power-LOAD** remains functional. Follow this call volume time table to remain compliant with this requirement.



# Preventive maintenance

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## Transfer lock bearing part replacement schedule (Continued)

Calls per day	Months
2	60
3	40
4-5	24
6	20
7-8	15
9-10	12
11-12	10
13-15	8





## Quick reference replacement parts

These parts are currently available for purchase. Call Stryker Customer Service: 1-800-327-0770 for availability and pricing.

Name	Number
Actuator assembly, trolley	6390-001-028
Battery	6390-001-468
Board, comm, trolley	6390-001-378
Board, inductive primary, anchor	6390-001-147
Board assembly, trolley control	6390-101-014
Bronze bearing (anchor lock bearing)	0081-439-000
Bumper block, mid position	6390-001-322
Coil assembly, middle, anchor	6390-001-030
Coil assembly, primary, anchor	6390-001-071
Coil assembly, trolley	6390-001-066
Cot release handle spring	0038-376-000
Cover, top	6390-101-420
Cover assembly, side, patient right	6390-001-041
Cover assembly, side, patient left	6390-001-042
Cover assembly, wing, patient right	6390-101-047
Cover assembly, wing, patient left	6390-101-048
Cover, arm, mid, patient right	6390-001-369
Cover, arm, mid, patient left	6390-001-370
Cover, arm, head end, patient right	6390-001-371
Cover, arm, head end, patient left	6390-001-372
Grip, arm, patient left	6390-001-341
Grip, arm, patient right	6390-001-368
Dead stop block, threaded	6390-001-246
Dead stop block, thru hole	6390-001-244
Dead stop bumper	6390-001-243
Hydraulics assembly	6390-001-039
Hydraulic fluid	6500-001-293
Hydraulic cylinder rod end	6390-001-040
Label, powered operations instructions	6390-101-498
Label, manual operations instructions	6390-001-499
Motor	6390-101-132
<b>Power-LOAD</b> mass casualty fastener, wall mounted fastener (Model 6391)	6391-000-000

## Quick reference replacement parts

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Name	Number
Power-LOAD mass casualty fastener, floor mounted fastener (Model 6391)	6391-000-000
Release lever housing	6390-001-105
Roller assembly, flat	6390-001-027
Roller assembly, V-guide	6390-001-025
Sensor, angle position (APS)	6390-001-397
Sensor, trolley position (TPS)	6390-001-361
Switch, master on/off	6390-001-450
Wheel guide rail bumper	6390-001-175
Wheel guide rail	6390-001-176

# Troubleshooting

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## Transfer/cot does not move out of the transport position

Transfer/cot does not move out of the transport position when you press the release lever at the foot end of the anchor.

If the lifting arms are over the base tube (powered mode)

1. Press the patient right transfer release lever and the trolley release button at the head end of the anchor at the same time with the help of another person.
2. If the cot is free, then inspect the head end anchor mechanism.
3. If the cot still will not move, then repeat step 1 while simultaneously pulling on the patient right transfer lock trigger at the foot end of the transfer.

**Note:** This should allow the cot to be pulled out while it is still locked into the trolley and transfer.

4. With the cot pulled out, look at the underside of the transfer. About 15 in. from the foot end, you will see the metal hook with a semi-circle cutout at its head end.
  - a. Push up on the semi-circle and the cot should be free to move.
  - b. With assistance from another person, pull the cot out.
5. With the cot free, check the foot end anchor mechanism.
  - a. Remove the transfer to inspect the foot end anchor pin.
  - b. Remove the anchor mechanism from the foot end anchor.

If the lifting arms are under the base tube

1. With the help of another person, press the transfer release lever and lift up on one of the cot release handles on the trolley at the same time.
2. If the cot is free, remove the cot and determine whether the black pin will extend up from the anchor head end cover.

**Note:** The trolley must be in the mid position and the release lever pressed to elevate the pin.

- a. If the pin extends out without signs of damage, check the casting in the trolley release handle mechanism (6390-001-328) or the plastic lever in the trolley middle mechanism.
- b. If the pin does not extend out, check the head end anchor mechanism for damage.

If the cot still will not move

1. Insert a screwdriver into each notch at the head end of the trolley side covers to release the cot head section latches.
2. After the latches are unlocked, use the release lever at the foot end to release the cot.
3. After the cot is removed, inspect the release handle mechanism in the trolley.

## Trolley does not roll smoothly

If rolling is difficult while the trolley is rolling on the transfer

1. Check the rods in the channels on the outside of the transfer extrusion for debris or foreign material and remove, if necessary.
2. If rolling is still difficult, check to see if the transfer extrusion is worn around the channels. If so, replace the V-guide rollers on the trolley.

If rolling is difficult while the transfer is rolling on the anchor

1. Check the metal dead stops (6390-001-246) at the head end of the transfer to make sure that they are fully seated and that they are not rubbing on the anchor extrusion.
2. Check the rods in the channels on the inside of the transfer extrusion. Remove any debris or foreign material.

# Troubleshooting

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## Trolley does not roll smoothly (Continued)

3. If rolling is still difficult, check to see if the transfer extrusion is worn around the channels. If so, replace the V-guide rollers on the anchor.

## Trolley rolls part of the way and stops

1. Check the transfer lock bearing in the anchor.
  - a. Clean the transfer lock pin.
  - b. Replace the bearing.
  - c. Apply molybdenum disulfide lubricant (6390-001-263) to the inside of the new bearing.
2. Check the transfer lock override slides (6390-001-261) for excessive wear.

## Trolley makes noise while rolling

If the noise occurs when the trolley is rolling on the transfer

When rolling the system out of the transport position, does the trolley get to the foot end of the transfer before the transfer moves?

1. If no, the transfer lock pin in the anchor, or its return spring, is most likely the problem. The pin should return to the full up position after it is pressed.
  - a. Check the transfer lock pin.
  - b. Clean or replace the spring or bearing as needed.
2. If yes:
  - a. Remove any debris or foreign objects from the transfer and vehicle floor.
  - b. Inspect the transfer extrusion for wear.
  - c. Remove the trolley from the transfer.
  - d. Make sure that the trolley rollers are free of debris.
3. If this does not solve the problem, or if the transfer extrusions worn around the rods, replace the V-guide rollers on the trolley.

If the noise occurs when the transfer is rolling on the anchor

1. The noise is likely caused by either the detent roller (usually a high-pitched squeak) or the transfer lock pin (usually more of a grinding sound).

## Trolley LEDs

Trolley LEDs stay off when the trolley reaches the loading position.

1. Confirm that the trolley is powered on and the battery is charged.
2. Make sure that the magnet activator (6390-001-106) is present and that it is fastened at the foot end of the anchor.
3. With the lifting arms down, push on the trolley. Make sure that the system does not roll away from the loading position and is locked in this position.
4. Remove the transfer. Make sure that the magnet mover trigger (6390-001-205) is intact and undamaged.
5. Remove the magnet mover trigger (6390-001-205).
6. Remove the foot end latch assembly from the transfer and pull out the link in the channel on the patient left side.
  - a. Check that the magnet nested into that link is present and intact.

# Troubleshooting

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## Trolley LEDs (Continued)

- b. Check that the return spring on the link is in good condition.
7. Remove the trolley covers. Check the connection of the trolley position sensor (TPS) cable (6390-001-361). If necessary, replace the trolley position sensor (TPS) (6390-001-361).
8. Check the connection of the trolley main cable (6390-001-391) to the control board assembly (6390-101-014). If necessary, replace the control board assembly (6390-101-014).
9. Check the connection of the trolley LED cables (6390-001-396). If necessary, replace each of the trolley LEDs (6390-001-396).
10. Replace the trolley main cable (6390-001-391).

## Cot release button does not unlock the cot from the trolley

1. Confirm that both the cot and the trolley have power, that there are no errors, and that both are operational independently.
2. Make sure that the cot release handles on the trolley are able to release the cot from Power-LOAD.
3. Confirm that communication exists between the cot and Power-LOAD by lifting the cot using the cot controls.
4. Press the release button on the second switch. If this works, the issue is with the first switch or there is a bad connection in the cot.
5. In a quiet area, press the release button and listen for a clicking sound at the head end patient left side of the trolley. You may need to push the button twice if the cot is asleep.
6. If there is a sound, the problem is likely a broken part in the actuator assembly or an improperly installed actuator assembly (6390-001-478).
7. If there is no sound, remove the trolley top and the patient left side covers.
  - a. Confirm that the connection of the actuator (6390-001-478) to the circuit board is good and the contacts appear to be in good condition.
  - b. Confirm that the connection of the trolley main cable (6390-001-391) to the control board assembly (6390-101-014) is good, the connector screws are tight, and the contacts appear to be in good condition.
  - c. Test Power-LOAD with a new actuator (6390-001-478).
  - d. Test Power-LOAD with a new control board assembly (6390-101-014).

## Trolley release handles

Trolley release handles do not release the cot from the trolley.

1. Confirm that the system is in the loading position with the cot wheels on the ground and the head section locked into the trolley.
2. Confirm that the lifting arms are in the full down position.
3. Are the release handles on the trolley free to rotate (they should rotate about 20 degrees)?
4. If yes:
  - a. Inspect the release handle mechanism. Pay particular attention to the activation cams (6390-001-329).
  - b. Inspect the trolley latches (6390-001-318 and 6390-001-319).
5. If no:
  - a. Remove the trolley covers.
  - b. In the mechanism in the center of the trolley at the head end, check the trolley arm (6390-001-334) or its return spring. Check to see if the spring is broken or jammed by debris.
  - c. Make sure that the trolley arm mechanism (6390-001-045) in the trolley is not jammed.
  - d. Make sure that the trolley latches (6390-001-318 and 6390-001-319) are not stuck or broken.



# Troubleshooting

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## Trolley does not lock in the loading position

If the trolley is unlocking from the transfer

1. Remove the cot.
2. Put the trolley in the middle of the transfer.
3. On the extended transfer (located just to the head end of the foot end fastener), the transfer trolley pawl (6390-001-073) should be sticking out of the transfer about 1/2". If the pawl is not sticking up or does not return when pressed, check its return spring. Make sure that there is no debris jamming the return spring.
4. Make sure that the pin of the roller in the pawl is not sticking out on either side.
5. Remove the transfer head end dead stops.
6. Remove the transfer from the anchor.
7. Clear any debris or foreign material from the top of the anchor and the channels in the transfer.

**Note:** Foreign objects that do not allow the trolley to reach the full out position could cause the mechanism to not operate properly.

8. Inspect the trolley stop ramp (6390-001-325) on the underside of the trolley middle mechanism to make sure that it is present and secure.

If the transfer is unlocking from the anchor

1. Remove the cot.
2. Move the trolley to the mid position.
3. Check for debris around the transfer lock trigger (6390-001-231).
4. Push the transfer all the way to the transport position.
5. Pull on the transfer to make sure it is locked.
6. If the transfer is not locked, the problem is likely that the transfer lock pin in the anchor is stuck or broken.
7. Check the return spring and look for burrs or debris.

## Trolley will not unlock from the transfer position

1. Remove the cot.
2. Using the head end transfer lock override slide (6390-001-261), move the transfer in and put the trolley in the mid position.

## Trolley pump runs for an extended time after cot jog up

1. Check the angle position sensor (APS) (6390-001-397) calibration set point. Call Stryker Service.
2. Remove the patient right side cover. Make sure that the hydraulic cylinder is not "over-stroking."

**Note:** Over-stroke condition is evidenced by a ~1/8 in. back settle in the rod of the hydraulic cylinder at full extension.

3. Check for damage of components in the chain of load bearing parts from the lifting arms to the patient right side plate (6390-001-344).

## Cot does not lock into the trolley and LEDs flash amber

1. Remove the cot from Power-LOAD.
2. Make sure that the cot is a Power-LOAD compatible cot and that the load wheel horns and pins (6500-002-104) are present, properly tightened, and in good condition.
3. Make sure that the handle release mechanism (6390-001-046) moves freely and the release handles return to the full down position. Make sure that there is no debris under the release handles.

# Troubleshooting

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## Cot does not lock into the trolley and LEDs flash amber (Continued)

4. Remove the trolley covers. Check the connection of the trolley latch switch cables (6390-001-318 and 6390-001-319).
5. Check the connection of the trolley main cable (6390-001-391) to the control board assembly (6390-101-014). If necessary, replace the trolley main cable (6390-001-391) and the control board assembly (6390-101-014).
6. Remove and inspect the actuator assembly (6390-001-028) from the trolley.
7. Check the return springs connecting the release cams (6390-001-329) to the trolley bottom pans.
8. Examine the trolley latches (6390-001-318 and 6390-001-319). Make sure that the electronic switch is being compressed when the latch is locked. Make sure that there are not cables obstructing the pin on the top of the latch and that there is not a broken spring internal to the latch.
9. Replace each latch, if necessary.

## Cot locks into the trolley at the loading position but LEDs are not on

1. Confirm that the trolley is on and the battery is charged.
2. Make sure that the magnet activator (6390-001-106) is present and that it is properly fastened at the foot end of the anchor.
3. With the lifting arms down, push on the trolley. Make sure that the system does not roll away from the loading position.
4. Remove the transfer. Make sure that the magnet mover trigger (6390-001-205) is not damaged.
5. Remove the magnet mover trigger (6390-001-205).
6. Remove the foot end latch assembly from the transfer.
7. Pull out the link in the channel on the patient right side.
8. Make sure that the magnet nested into that link is present and intact.
9. Make sure that the return spring on the link is in good condition.
10. Remove the trolley covers.
11. Check the connection of the trolley position sensor (TPS) cable (6390-001-361). If necessary, replace the trolley position sensor (TPS) (6390-001-361).
12. Check the connection of the trolley main cable to the control board assembly (6390-101-014). If necessary, replace the trolley main cable (6390-001-391) and the control board assembly (6390-101-014).
13. Check the connection of the trolley LED cables (6390-001-396). If necessary, replace one of the trolley LEDs (6390-001-396).

## Cot will not jog up when released from the transport position

Check the trolley control panel LEDs. They should be solid green without any solid amber error indication.

If there are no trolley control panel LEDs illuminated

1. Press the main power button to turn the product on. You may need to turn the product on and then off to make sure that Power-LOAD is not in sleep mode.

If the trolley control panel LEDs are illuminated

1. Flashing amber means that the battery is low. Return the trolley to the transport position.
2. Make sure that the product begins to charge as indicated by a flashing green battery LED.  
**Note:** The low battery indication (flashing amber) may continue as the battery recharges.
3. Solid green battery LED and solid amber LED means that there is a system error. Call Stryker Service for advanced troubleshooting. The following may be attempted:  
**Note:** If you hear the motor run as you pull the product from the transport toward the loading position, the problem is most likely with the hydraulic unit.
  - a. Replace the hydraulics assembly (6390-00-039).

# Troubleshooting

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## Cot will not jog up when released from the transport position (Continued)

- b. Replace the motor cable (6390-001-431).
- c. Replace the angle position sensor (APS) (6390-001-397).
- d. Replace the trolley position sensor (TPS) (6390-001-361).
- e. Replace the control board assembly (6390-101-014).

## Cot will not jog up high enough when released from the transport position

1. Check the angle position sensor (APS) (6390-001-397) calibration set point. Call Stryker Service.
2. Remove the patient right side cover and make sure that the hydraulic cylinder is not “over-stroking.”  
**Note:** Over-stroke condition is evidenced by a  $\sim 1/8$  in. back settle in the rod of the hydraulic cylinder at full extension.
3. Check for damage of components in the chain of load bearing parts from the lifting arms to the patient right side plate (6390-001-344).

## Cot takes a long time to jog up

1. Check that the battery voltage is 12.2 VDC.
2. Check the battery cable connections for damage.
3. Check the cable connections to the control board.
4. Replace the hydraulics assembly (6390-001-039).
5. Replace the control board assembly (6390-101-014).

## Lifting arms do not lower, but the cot legs extend when you press the extend (+) button

Make sure that the trolley is powered on.

Make sure that the head end LED indicators are green to confirm that Power-LOAD recognizes the loading position.

If the head end LED indicators are not on

1. Check the trolley control panel LEDs to make sure that the product is on.  
**Note:** The LEDs should appear as a solid green battery symbol with no illumination of error indication.
2. If the trolley control panel LED illuminates solid green only, then the trolley may not see what position it is in.
  - a. Make sure that the magnet activator (6390-001-106) is present.
  - b. Make sure that the magnet activator (6390-001-106) is fastened and secure at the foot end of the anchor.

If the head end LED indicators are on

Make sure that the trolley motor is running when you press the cot switch.

1. If the trolley motor is audible, then the problem is with the low pressure relief valve in the trolley hydraulics assembly.
  - a. Extend the cot legs.
  - b. Use the trolley manual release to drop the lifting arms until they are no longer supporting the cot.
  - c. Press the down button on the trolley side panel to finish lowering the arms.
  - d. If the arm moves, replace the hydraulics assembly (6390-001-039).
2. If the trolley motor is not audible:

# Troubleshooting

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## Lifting arms do not lower, but the cot legs extend when you press the extend (+) button (Continued)

- a. Check the motor and voltage to the motor. If voltage is present, replace the motor (6390-101-132).
  - b. Check the motor and voltage to the motor. If voltage is not present, replace the motor cable (6390-101-431) or the control board assembly (6390-101-014).
  - c. Run the lifting arms down using the trolley control panel. If the product lowers, the problem is likely with communication. Check both sides of the communication link. Replace the communication boards (6390-001-378 or 6500-002-100) as necessary.
3. If the trolley control panel LED error indication is illuminated, call Stryker Service for advanced troubleshooting.

## Lifting arms lower, but the cot legs do not extend when you press the extend (+) button

1. Make sure that the cot battery has sufficient power to drive the cot (no amber battery indicator).
2. Check to see if the cot pump motor is audible.
  - a. If yes, the problem is with the cot hydraulic unit.
  - b. If no, check for error codes on the cot LCD.
  - c. Check all cable connections at the control board and hydraulic unit.
  - d. Replace the cot control board (6390-101-014).
  - e. Replace the cot hydraulics assembly (6500-001-030).
  - f. Replace the cot main cable (6500-002-159).

## Lifting arms lower cot too quickly when you press the extend (+) button

1. Check for proper operation of the support sensor (6390-001-452). Make sure that both switches have continuity when weight < 100 lb is applied to the lifting arms.
  - a. If there is no continuity, replace the rod end assembly (6390-001-040).
2. Check for loose cable connections from the support sensors (6390-001-452) to the control board (6390-101-014).

## Lifting arms lower the cot too slowly when you press the extend (+) button

1. Check the trolley control panel LEDs for low battery indication.
2. Check for false closure of the velocity fuse.
3. Raise the cot using the trolley control panel. Determine if the cot lowers at the correct rate.
  - a. If the cot does not raise, check for loose or bad trolley pump motor connection.
4. Lower the cot using the trolley control panel.
  - a. If yes, replace the hydraulic velocity fuse (6390-001-381).
  - b. If no, replace the motor (6390-101-132).

## Trolley does not lower smoothly when you press the extend (+) button

1. Make sure that the trolley hydraulics have sufficient oil in the reservoir when lifting arms are all the way down. Look for any leaks and repair, if necessary.

**Note:** The oil level should be just below the fill port.

# Troubleshooting

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## **Trolley does not lower smoothly when you press the extend (+) button (Continued)**

2. Close the docked/locked latch and use the trolley control panel to cycle the lifting arms up and down a few times without a cot.
3. Check for proper operation of the support sensor (6390-001-452). Make sure that both switches have continuity when weight of < 100 lb is applied.
  - a. If no continuity, replace the rod end assembly (6390-001-040).
4. Check for loose cable connections from the support sensors (6390-001-452) to the control board (6390-101-014).

## **Trolley hydraulic motor is noisy when you press the extend (+) or retract (-) button**

1. Make sure that the trolley hydraulics have sufficient oil in the reservoir when the lifting arms are all the way down. Look for any leaks and repair, if necessary.

**Note:** The oil level should be just below the fill port.
2. Close the docked/locked latch and use the trolley control panel to cycle the lifting arms up and down a few times without a cot.
3. Cycle the product up and down three to five times, especially if this problem occurs happens right after a repair.
4. Replace the motor (6390-101-132) on the hydraulic unit.
5. Replace the hydraulics assembly (6390-001-039).

## **Lifting arms do not lower cot low enough when you press the extend (+) button**

Check the trolley control panel for errors.

If an error occurs when the lifting arms are loaded

1. The safety limit for loaded operation of the arms has been reached. This can happen at high load heights (>34 in.) with heavy loads (>400 lb).
  - a. Check the support sensor (6390-001-452) or angle position sensor (APS) (6390-001-397) for damage.

If an error occurs when the lifting arms are unloaded or become unloaded

1. Make sure that the arms are not being held up on or by the cot legs.
2. Check for a broken angle position sensor (APS) (6390-001-397) or angle position sensor (APS) attachment hardware.
3. Check for loose cable connections from the angle position sensor (APS) to the control board.
4. Replace the control board (6390-101-014).

## **Cot drifts down or goes into high speed retract when you press the retract (-) button**

1. Make sure that the trolley is on and functions without errors.
2. Make sure that the cot and trolley communication modules are connected, undamaged, and working properly.
  - a. Try the cot with a know good Power-LOAD.
  - b. Try the trolley with a known good cot.
3. Check all cable connections associated with communication leading back to the control board.
4. Replace the communication board (6390-001-378 or 6500-002-100).
5. Replace the control board assembly (6390-101-014 or 6500-002-014).

# Troubleshooting

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## **Cot legs are retracted, but the cot is not lifted by the lifting arms when you press the retract (-) button**

1. Make sure that the trolley is on and functions without errors.
2. Make sure that the cot and trolley communication modules are connected, undamaged, and working properly.
  - a. Try the cot with a known good Power-LOAD.
  - b. Try the trolley with a known good cot.
3. Check all cable connections associated with communication leading back to the control board.
4. Replace the communication board (6390-001-378 or 6500-002-100).
5. Replace the control board assembly (6390-001-014 or 6500-002-014).

## **Cot is lifted by the lifting arms but the cot legs do not retract when you press the retract (-) button**

1. Check the support sensor (6390-001-397) on the trolley.
2. Check the cable and connections to the control board.
3. Check for an error on the trolley control panel. If there is an error, call Stryker Service.
4. Check the cot by itself for proper functionality.
5. Make sure that the cot indicates a good battery and no errors are present on the cot LCD. If you have an error, replace the battery.
6. Press the retract (-) button on the cot.
  - a. If you hear the cot pump motor run, the issue is a stuck rod-side manual valve (patient left manual valve) on the cot.
7. Check for a faulty pressure switch by removing the pressure switch connection from the cot main cable at the end closest to the hydraulics.
  - a. Jumper the cable to simulate a closed switch and press the retract (-) button.
  - b. If you do not hear the motor, the issue is either with cable connections or a bad pump motor.
  - c. Fix the connection or replace the pump motor.
8. Check the cot control board (6390-101-014) and replace, if necessary.

## **Trolley lifts the cot too slowly when you press the retract (-) button**

1. Make sure that the trolley battery voltage is >12.2V DC.
  - a. If the battery is charged and the voltage is < 10.0V DC when you press the retract (-) button, replace the trolley battery.
2. Check for an error on the trolley control panel LEDs while moving the lifting arms with the trolley control panel.
  - a. If an error is active only when using the lifting arms, replace the support sensor (6390-001-452).
3. Replace the hydraulics assembly (6390-001-039).
4. Replace the control board assembly (6390-101-014).

## **Lifting arms lift the cot too quickly when you press the retract (-) button**

1. Check for a faulty or broken support sensor cable (6390-001-452).
2. Check for a faulty cabling connection to the control board.

# Troubleshooting

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## Trolley does not lift smoothly when you press the retract (-) button

1. Make sure that the trolley hydraulics have sufficient oil in the reservoir when the lifting arms are all the way down. Look for any leaks and repair, if necessary.  
**Note:** The oil level should be just below the fill port.
2. Close the docked/locked latch and use the trolley control panel to cycle the lifting arms up and down a few times without a cot.
3. Check for proper operation of the support sensor (6390-001-452). Make sure that both switches have continuity when weight < 100 lb is on the lifting arms.
  - a. If no continuity, replace the rod end assembly (6390-001-040).
4. Check for loose cable connections from support sensors to the control board.
5. Replace the hydraulics assembly (6390-001-039).

## Cot does not lift high enough

1. Check the angle position sensor (APS) (6390-001-397) calibration set point. Call Stryker Service.
2. Remove the patient right side cover and make sure that the hydraulic cylinder is not “over-stroking.”  
**Note:** Over-stroke condition is evidenced by a  $\sim 1/8$  in. back settle in the rod of the hydraulic cylinder at full extension.
3. Check for damage of components in the chain of load bearing parts from the lifting arms to the patient right side plate (6390-001-344).

## Cot does not jog down once in the transport position

Check the trolley control panel LEDs.

**Note:** The LEDs should be solid green without any solid amber error indication.

1. If no trolley control panel LEDs are illuminated, press the main power button to turn the product on.  
**Note:** You may need to turn the product on and then off to make sure that the Power-LOAD is not in sleep mode.
2. If trolley control panel LEDs are illuminated:
  - a. Flashing amber means the battery is low.
  - b. Return the trolley to the transport position.
  - c. Make sure that the product begins to charge as indicated by a flashing green battery LED.  
**Note:** Low battery indication (flashing amber) may continue while the battery recharges.
  - d. Solid green battery LED and solid amber LED means system error. Call Stryker Service for advanced troubleshooting.
3. Check the following items:
  - a. Hydraulics assembly (6390-001-039)
  - b. Motor cable (6390-101-431)
  - c. Angle position sensor (APS) (6390-001-037)
  - d. Control board assembly (6390-101-014)
4. Pull the trolley from the transport position. If you hear the motor running as you pull the product from the transport position toward the loading position, the problem is with the hydraulic unit.
5. Check the magnet in the anchor pawl at the head end that initiates jog down. Make sure that the pawl is securely connecting with the catch on the trolley when the trolley is in the transport position and that the trolley is not stuck.  
**Note:** This can be done by visual inspection, but a good indicator of a secure connection is that the release lever at the foot end of the anchor is fully up and not pushed part way in.

# Troubleshooting

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## Trolley manual release button does not lower the lifting arms

1. Remove the patient right side cover. Make sure that the linkages of the manual release that attaches to the side controls are connected and actuating the manual release valve on the hydraulic pump.
  - a. If the manual release valve is actuating, then the problem is a faulty velocity fuse. The velocity fuse (6390-001-381) is located in the cap end cylinder port under the elbow fitting. Remove and replace the velocity fuse.
  - b. If replacing the velocity fuse does not solve the problem, replace the pressure compensated flow control (6390-001-151).
  - c. Replace the hydraulics assembly (6390-001-039).

## Trolley manual release button lowers the lifting arms, but not smoothly

1. Remove and replace the velocity fuse (6390-001-381).

**Note:** The velocity fuse is located in the cap end cylinder port under the elbow fitting.
2. If this does not fix the issue, replace the pressure compensated flow control (6390-001-151).
3. Replace the hydraulics assembly (6390-001-039).

## Trolley error LED indicates an error (solid amber)

Call Stryker Service

## Trolley control panel does not move the lifting arms

1. Make sure that the power is on (solid green LED on the trolley control panel).
2. Make sure that the trolley is in the loading position and the latches are engaged.

**Note:** The trolley control panel will only work if the trolley is in the loading position and the latches are connected. When the lifting arms are supporting weight, they only lower to a certain angle. These are safety features.
3. Check the head end indicators (solid green LED) to make sure that the product is in the loading position and that both latches are engaged.
  - a. If there is no head end indicator LED activity, then the product is not in the loading position.
  - b. If the head end indicator LEDs are flashing amber, one or both of the latches are not closed. Check the status of the latches.
  - c. If the problem persists, check the switches and connectivity back to the control board.
4. Check connectivity from the trolley control panel back to the control board.
5. Replace the trolley control panel board (6390-001-450).

## Trolley stops part way while rolling to the transport position

1. Remove the transfer from the anchor.
  - a. Check for and remove any debris from the anchor and the channels on the inside of the transfer.
  - b. Examine the trolley to transfer lock release ramp (6390-001-144) to make sure that it is intact, tightly fastened, and not excessively worn.

**Note:** The transfer lock release ramp is located about 24 in. from the foot end of the anchor.
  - c. Examine the trolley to transfer lock pawl assembly (6390-001-144). Make sure that the pawl is allowed to rotate freely and, when pressed, it can rotate fully below the surface of the transfer.
  - d. Examine the V-guide rollers and the flat rollers on the trolley and anchor. Replace any rollers that do not roll smoothly or are excessively worn.



# Troubleshooting

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## Trolley makes noises while rolling

1. Check for and remove any debris or foreign objects found inside transfer channels.
2. Check the transfer for wear around the channels. Replace if needed.
3. Remove the trolley from the transfer and make sure that the trolley rollers are free of debris.
4. Replace the V-guide rollers on the trolley (6390-001-025).

## Trolley is in the transport position with a cot and the trolley LEDs are not illuminated green

1. Pull the trolley out of transport position.
2. Inspect the trolley head end pawl. It should return firmly when pressed down. If it does not, check the following:
  - a. Make sure that the pawl is free of debris or foreign objects that may stop it from returning.
  - b. Make sure that the head end anchor release button is free from debris inhibiting motion.
  - c. Check the return springs on the pawl (0038-885-000).
3. Check the trolley stop ramp (6390-001-325) on the underside of the trolley middle mechanism.
4. Remove the transfer from the anchor. Make sure that the channels where the trolley and anchor rollers travel are free from debris or foreign objects that could limit the range of motion.

## Trolley is in the transport position and the cot is not locked in at the foot end

Make sure that the cot foot end casters are on the vehicle floor.

1. If yes, pull the cot manual release and push down on the foot end of the cot.
  - a. If the cot still does not drop into the lock, pull the cot all the way out and push the cot retract (-) button to full retract the cot base.
  - b. Load the cot again without using the manual release lever.
  - c. If the cot is still held up by the foot end casters, then the problem is in the cot hydraulic system.
2. If no, did Power-LOAD run the motor to jog the cot down when the cot reached the transport position at the head end?
  - a. If no, see [Cot does not jog down once in the transport position on page 33](#).
  - b. If yes, make sure that the cot foot end guide (6500-002-111) is aligned with the transfer foot end guide (6390-001-220).
  - c. To ensure alignment, firmly move the cot foot end back and forth and the cot should drop in place.
  - d. Remove the cot and look for debris in the transfer guide that may be preventing the cot from locking.

## Transfer does not lock into the anchor

Push the transfer in by hand to make sure that the transfer goes all the way in against the bumper stops.

1. If yes, then the problem is likely the transfer lock bearing in the anchor.
  - a. Clean the transfer lock pin
  - b. Replace the bearing
  - c. Apply molybdenum disulfide lubricant (6390-001-263) to the inside of the new bearing.
  - d. Inspect the transfer lock override slides (6390-001-261) for excessive wear.
2. If no, remove the transfer head end dead stops.

# Troubleshooting

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## Transfer does not lock into the anchor (Continued)

- a. Remove the transfer from the anchor.
- b. Clear any debris from the top of the anchor and the channels in the transfer.

**Note:** Foreign objects that do not allow the trolley to reach the full out position could cause this mechanism to not operate properly.

## Transfer removal

### Tools Required

- T25 Torx driver
- 5/32" hex wrench

### Procedure

1. Remove the trolley. See [Trolley removal on page 37](#).
2. Put the transfer into the transport position all the way into the vehicle compartment.
3. Using a T25 Torx driver, remove the four screws (A) that secure the foot end transfer wear pad (B) to the transfer extrusion ([Figure 2 on page 37](#)).
4. Using a 5/32" hex wrench, remove the screw (C) that secures the trolley magnet activator (D) to the anchor extrusion to remove the trolley magnet activator ([Figure 2 on page 37](#)).
5. Slide both transfer lock triggers (E) to extend and pull the transfer off of the anchor completely ([Figure 2 on page 37](#)).

**Note:** The transfer assembly is heavy and may require assistance to remove.

6. Reverse steps to reinstall.
7. Verify proper operation of the product before returning it to service.

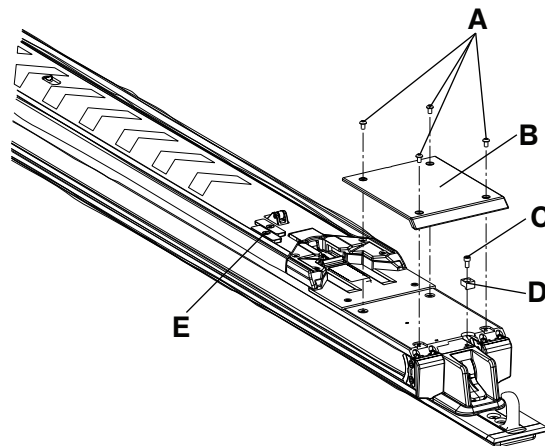


Figure 2: Foot end transfer components

## Trolley removal

### Tools Required

- T25 Torx driver
- 3/16" hex wrench

### Procedure

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**⚠ WARNING**

Two installers are required when lifting and positioning the trolley assembly.

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1. Raise the lifting arms (A) ([Figure 3 on page 38](#)).
2. Press the trolley release button at the head end of the anchor (B) ([Figure 3 on page 38](#)).
3. Pull the trolley toward the foot end to the middle of the transfer assembly.

## Trolley removal (Continued)

- Slide the patient right transfer lock trigger (C) to extend (Figure 3 on page 38).

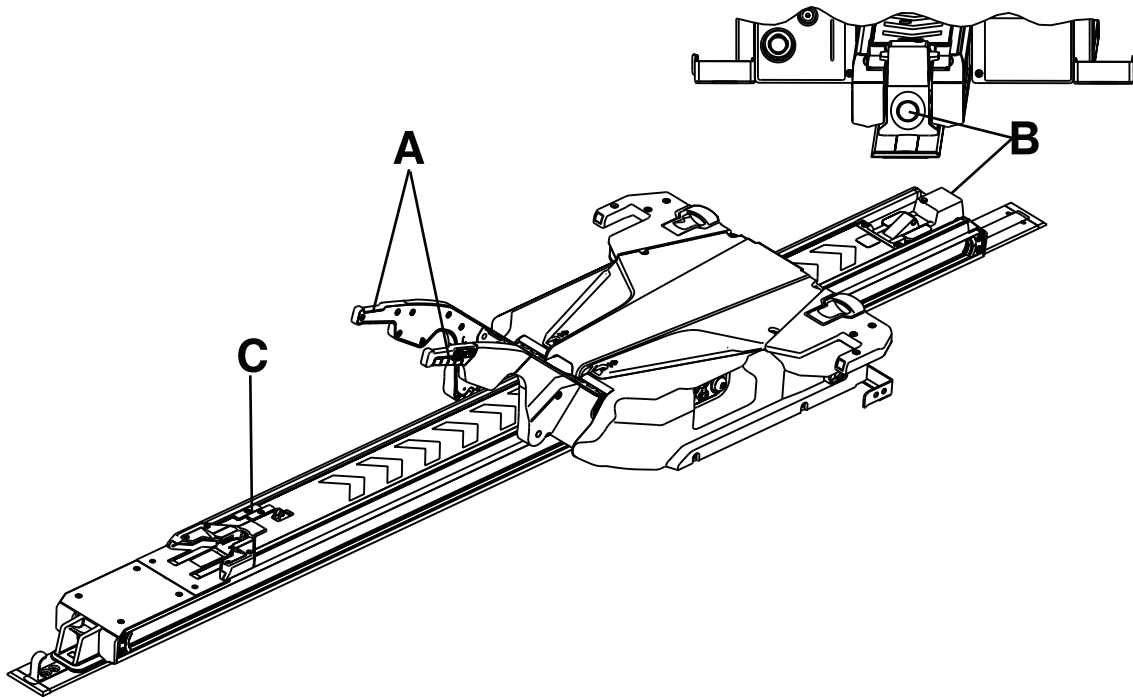


Figure 3: Trolley mid transfer position

- Pull the transfer toward the foot end until the transfer stops in the first lock position.
- Using a T25 Torx driver, remove the two screws that secure the transfer trim (E) (Figure 4 on page 39).

**Note:** The trolley will drop down slightly as you remove it from the transfer. Do not tip the trolley upside down, forward, or onto its side.

## Trolley removal (Continued)

- Using a 3/16" hex wrench, loosen (do not remove) the four socket head cap screws (two on each side) (D) that secure the dead stops to the transfer assembly (Figure 4 on page 39).

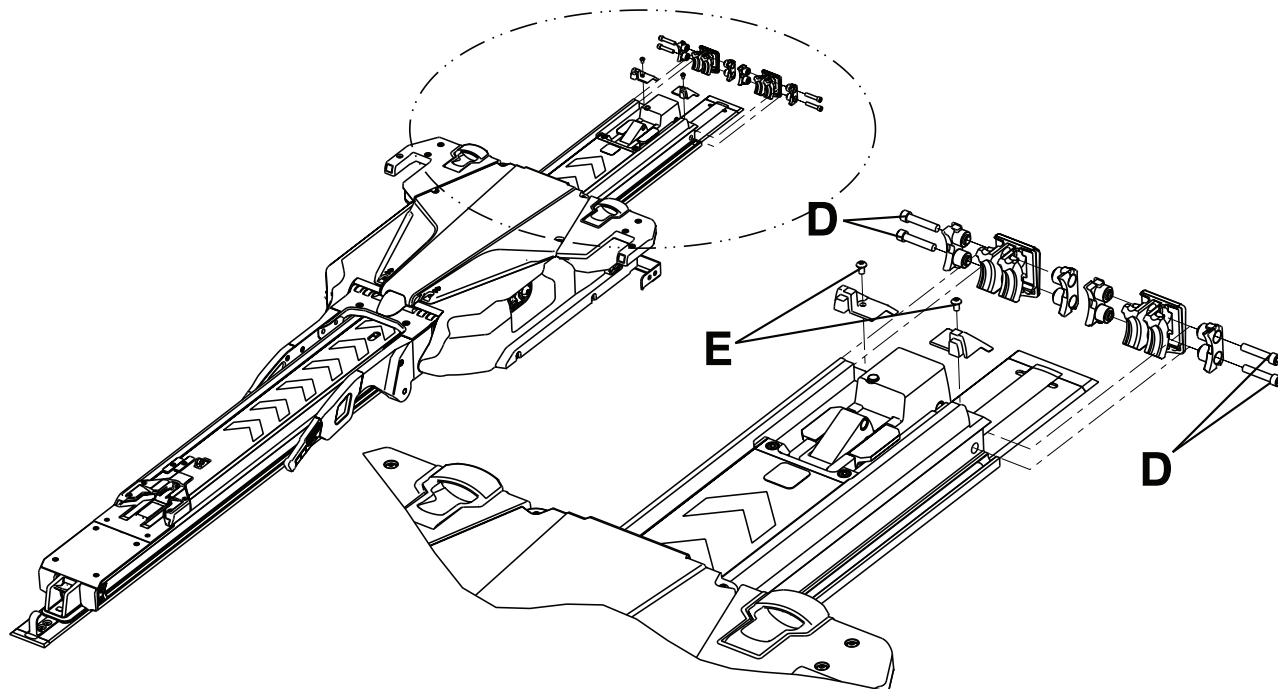


Figure 4: Trolley screws

- Push on the screws (loosened in step 7) to loosen the dead stops from the transfer.
- Remove the dead stop bumpers. Save the bumpers for reinstallation.
- Lift the trolley assembly by its arm and wing.
  - Do not lift the trolley by the manual cot release handles.
  - Lift only where indicated.
  - Installer 1, position hands at A1 and A2 (Figure 5 on page 40).
  - Installer 2, position hands at B1 and B2 (Figure 5 on page 40).
  - Move the trolley toward the head end until it is off of the transfer.
  - Remove the trolley from the anchor.
  - Place the trolley in a suitable work area.

## Trolley removal (Continued)

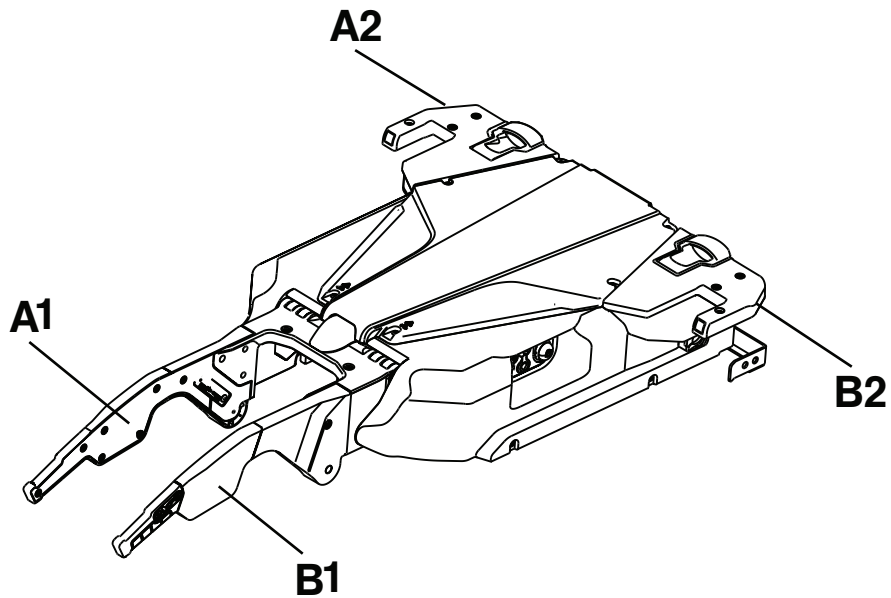


Figure 5: Trolley hand positions

11. Reverse steps to reinstall.
12. Verify proper operation of the product before returning it to service.

## Cover removal and replacement

### Tools Require

- T25 Torx driver
- 5/32" hex wrench

### Procedure

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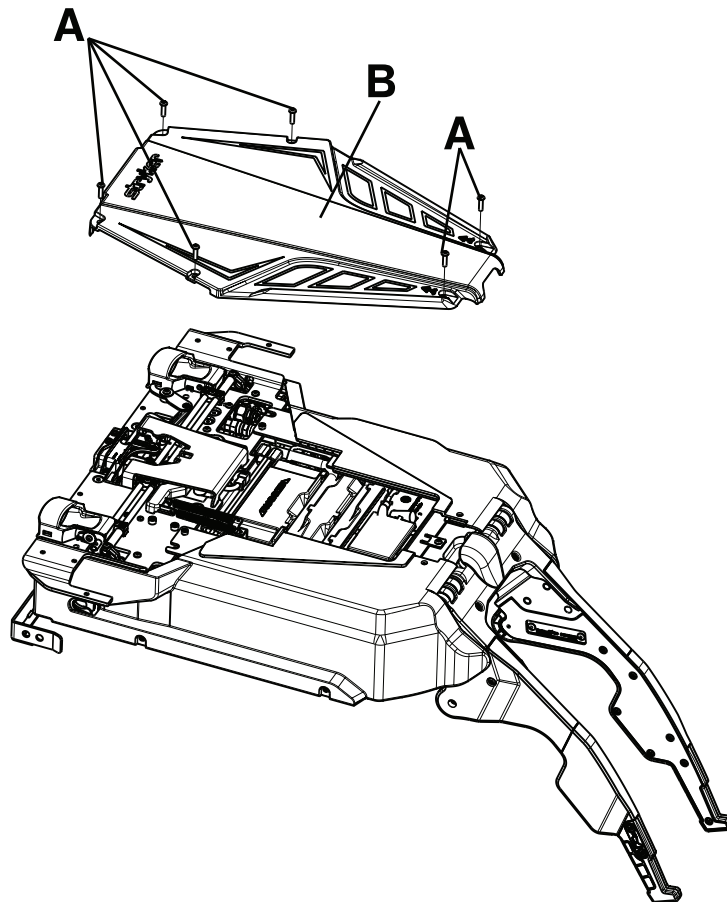
 **WARNING**

While servicing or installing covers, do not pinch cables.

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## Cover removal and replacement (Continued)

1. Using a T25 Torx driver, remove the six screws (A) that secure the trolley top cover (B) ([Figure 6 on page 41](#)).



**Figure 6: Trolley top cover**

2. Using a T25 Torx driver, remove the three screws (C) left side cover (D) ([Figure 7 on page 42](#)).
3. Using a 5/32" hex wrench, remove one hex head screw (E) from the top of the left side cover (D) ([Figure 7 on page 42](#)).
4. Remove the cover. Save the side cover, left and all screws for reinstallation.

## Cover removal and replacement (Continued)

- Repeat steps 2-4 to remove the side cover, right (F) ([Figure 7 on page 42](#)).

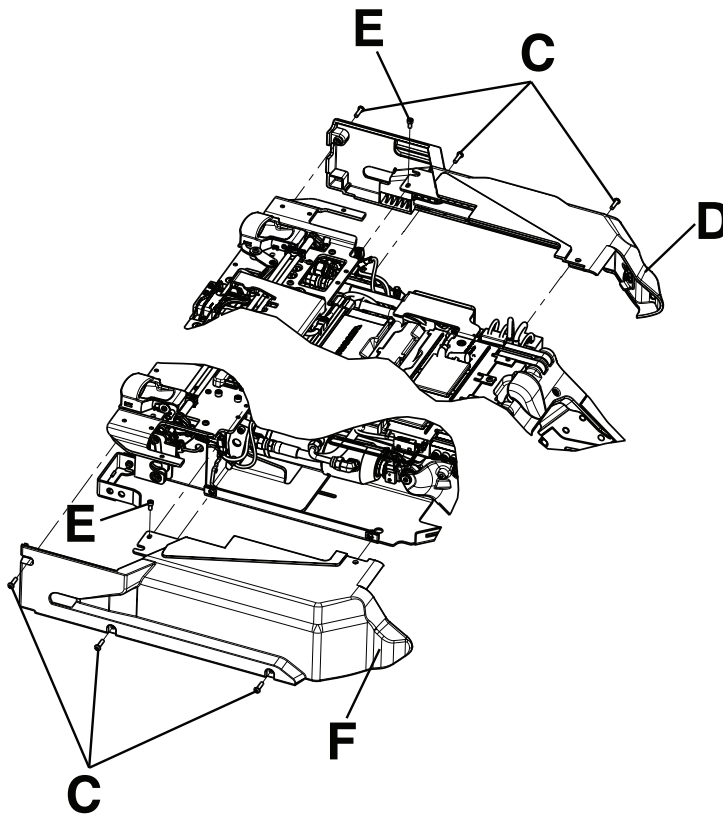


Figure 7: Trolley side covers

- Reverse steps to reinstall.
- Verify proper operation of the product before returning it to service.

## Manual release button assembly removal and replacement

### Tools required

- T25 Torx drive
- 5/32" hex wrench

### Procedure

- Pull the trolley assembly out of the patient compartment until it locks into the loading position.
- Remove the trolley covers. See [Cover removal and replacement on page 40](#).
- Press the main power button to turn the product off.
- Remove the slic pin (A) from the switch/bracket assembly ([Figure 8 on page 43](#)).
- Using a T25 Torx driver, remove the two button head cap screws (B) that secure the manual release button bracket to the trolley frame ([Figure 8 on page 43](#)).



## Manual release button assembly removal and replacement (Continued)

- Using a 5/32" hex wrench, loosen (do not remove) the socket head cap screw (C) that secures the manual release button bracket to the trolley frame (Figure 8 on page 43).

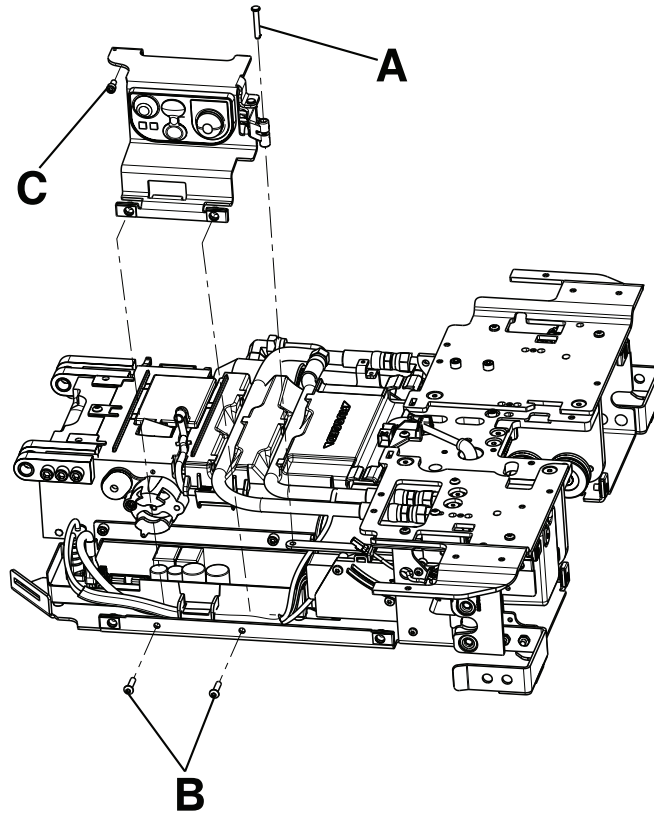


Figure 8: Manual release button assembly

## Manual release button assembly removal and replacement (Continued)

- Unplug the cables from the master On/Off switch (D) and remove the manual release button assembly ([Figure 9 on page 44](#)).

**Note:** Make note of the cable connection locations, so they do not get mixed up.

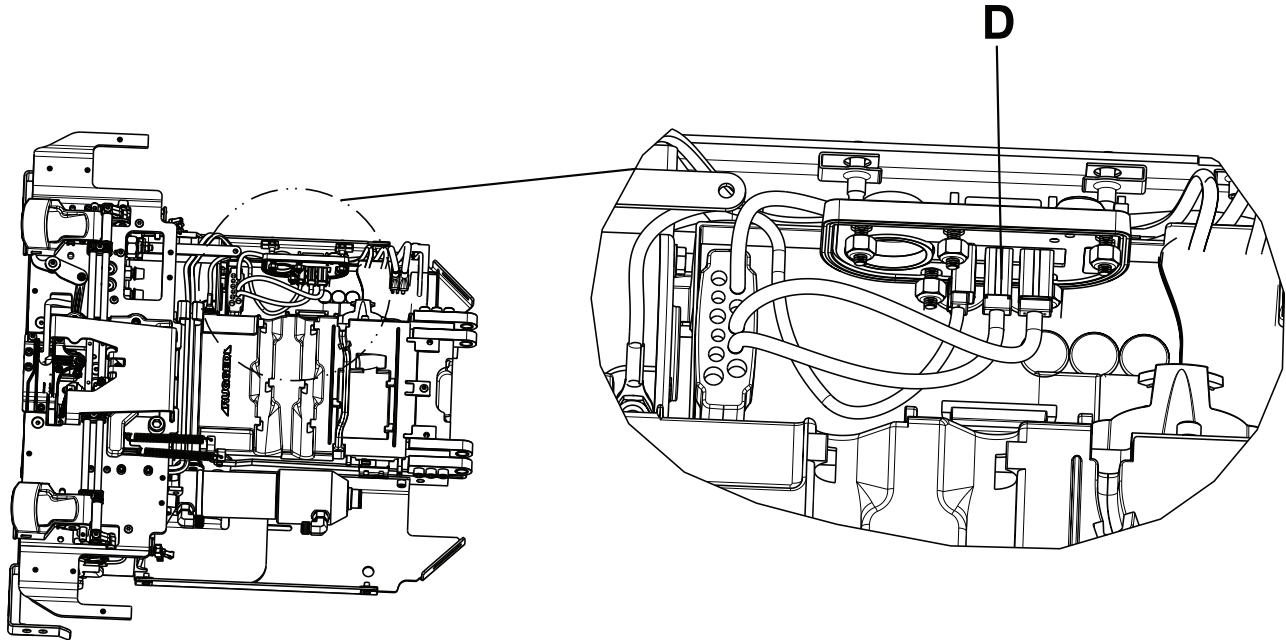


Figure 9: On/Off switch cable locations

- Reverse steps to reinstall.
- Verify proper operation of the product before returning it to service.

## Control board assembly removal and replacement

### Tools required

- 3/32" hex wrench
- ESD

### WARNING

ESD precautions should be taken when handling the control board. For more information about ESD protection, contact Stryker Technical Support at (800) 327-0770.

### Procedure

- Remove the manual release button assembly. See [Manual release button assembly removal and replacement on page 42](#).
- Using a 3/32" hex wrench, loosen (do not remove) the two screws (A) that secure the main cable assembly (B) to the control board assembly ([Figure 10 on page 45](#)).
- Unplug all of the other cables from the control board assembly (C) and then remove the control board assembly ([Figure 10 on page 45](#)). Discard the control board assembly.

**Note:** Do not dispose of as unsorted municipal waste. Refer to your local distributor for return or collection systems available in your country.

## Control board assembly removal and replacement (Continued)

4. Align the control board assembly tabs with the holes in bottom pan, left to install the new control board assembly. Make sure that all of the cables are routed correctly.
5. Reverse steps to reinstall.
6. Verify proper operation of the product before returning it to service.

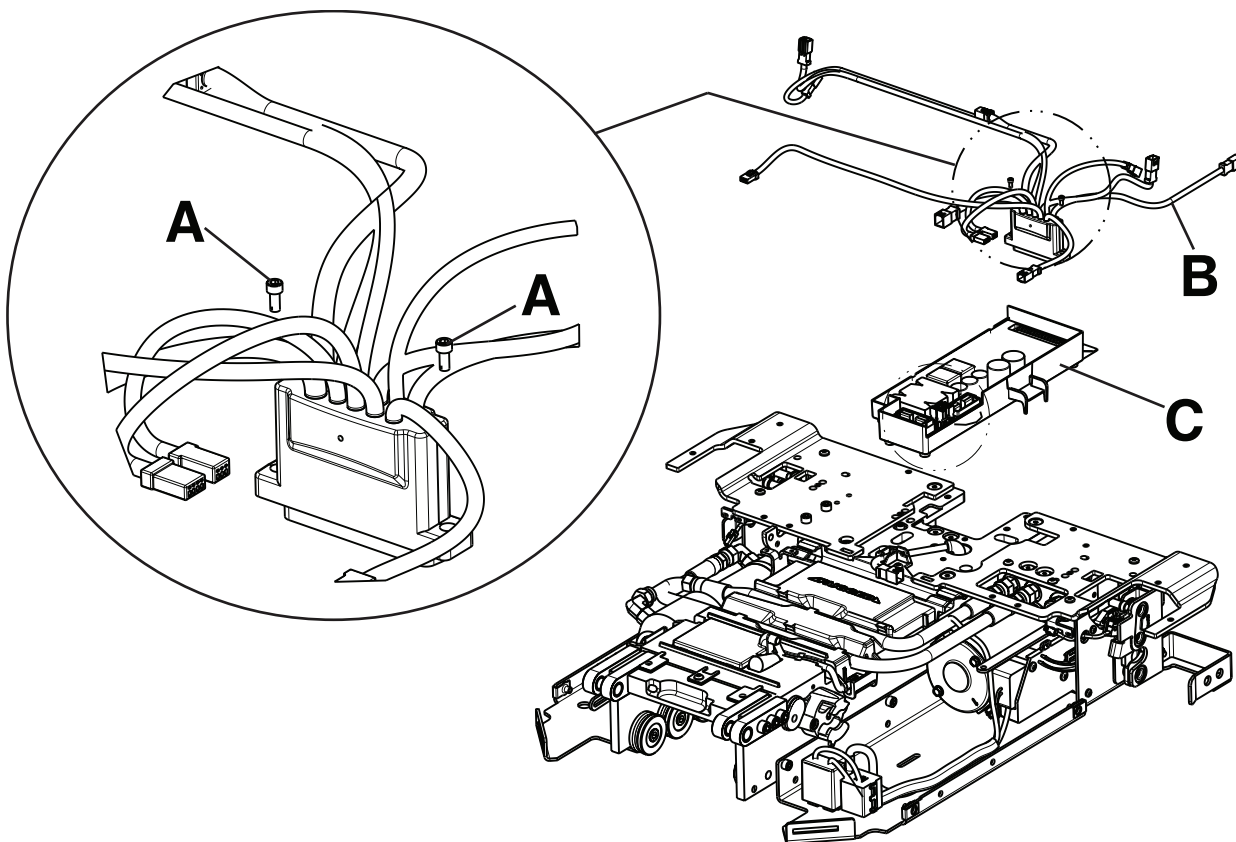


Figure 10: Control board assembly

## Master on/off switch replacement

### Tools required

- 1/32" Nut driver

### Procedure

1. Remove the manual release button assembly. See [Manual release button assembly removal and replacement on page 42](#).
2. Using an 11/32" nut driver, remove the five Fiberlock hex nuts (A) that secure the master On/Off switch (B) to the manual release button bracket (C). Discard the master On/Off switch ([Figure 11 on page 46](#))

**Note:** Do not dispose of as unsorted municipal waste. Refer to your local distributor for return or collection systems available in your country.

3. Reverse steps to reinstall.

**Note:** Do not overtighten the nuts.

4. Verify proper operation of the product before returning it to service.

## Master on/off switch replacement (Continued)

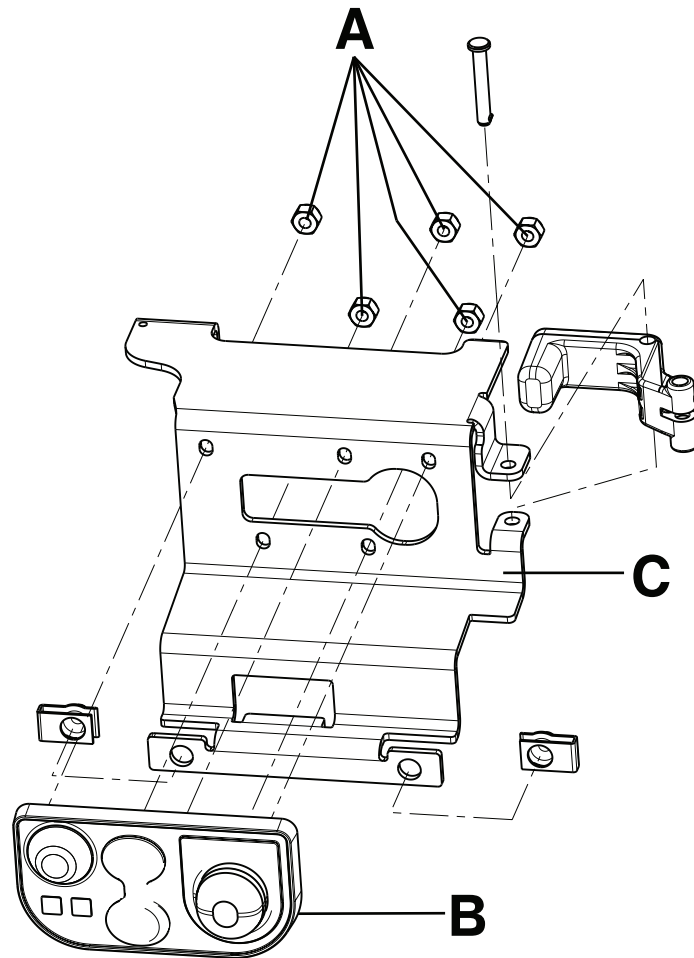


Figure 11: Master On/Off switch and manual release button bracket assembly

## Trolley actuator assembly replacement

### Tools required

- T20 Torx driver

### Procedure

1. Remove the manual release button assembly. See [Manual release button assembly removal and replacement on page 42.](#)

## Trolley actuator assembly replacement (Continued)

- Using a T20 Torx driver, remove the three delta screws (A) that secure the trolley actuator (B) to the trolley frame (Figure 12 on page 47).

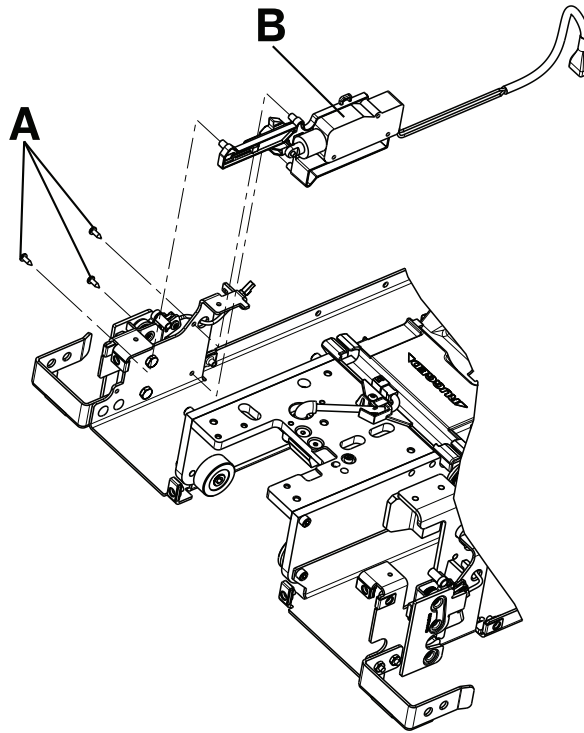


Figure 12: Trolley actuator assembly

- Unplug the cable (C) from the trolley actuator to the main cable assembly (Figure 13 on page 48).
- Pull the actuator out and up towards the trolley control board to remove.
- Reverse steps to reinstall.  
**Note:** Make sure that the cables are seated and routed correctly.
- Verify proper operation of the product before returning it to service.

## Trolley actuator assembly replacement (Continued)

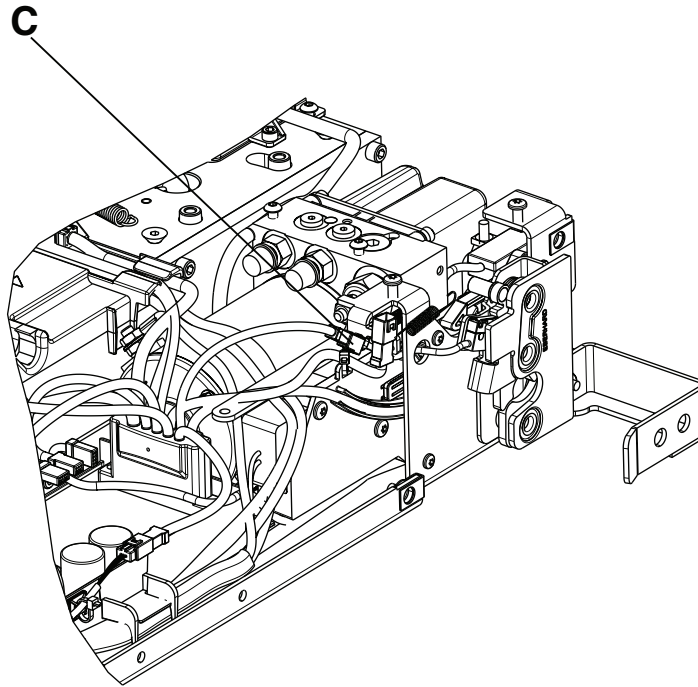


Figure 13: Main cable assembly

## Hydraulics assembly removal and replacement

### Tools Required

- T20 Torx driver
- T25 Torx drive
- 1/4" hex wrench
- 3/16" hex wrench
- 1/2" combination wrench
- Diagonal pliers

### Procedure

1. Remove the control board assembly. See [Control board assembly removal and replacement on page 44](#).
2. Remove the trolley actuator assembly. See [Trolley actuator assembly replacement on page 46](#).
3. Unclip the cables from the trolley routing tray and the hydraulic hoses.
4. Unplug the USB quick connect and the D+L-L lock switch cable from the main cable.
5. Position the main cable assembly toward the center of the trolley to allow clearance.

## Hydraulics assembly removal and replacement (Continued)

- Using a T25 Torx driver, remove the two screws (A) that secure the hydraulics assembly (B) to the wing plate, left (C) (Figure 14 on page 49).

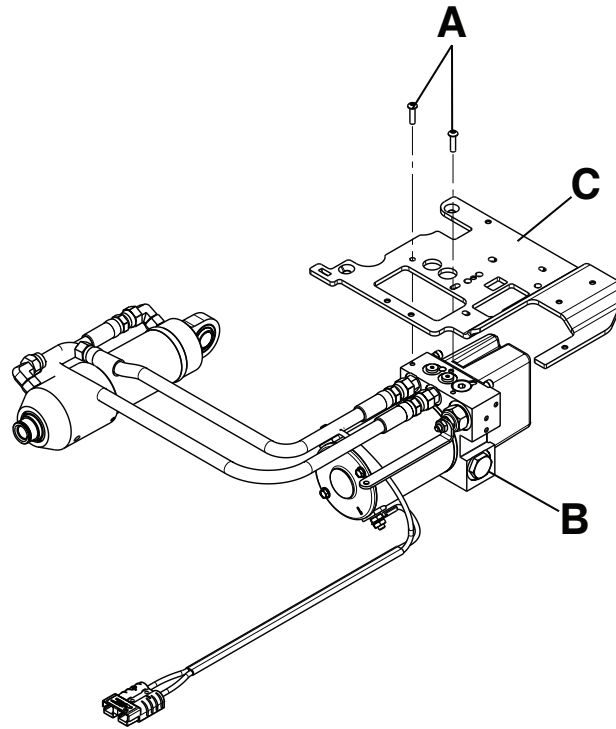


Figure 14: Hydraulics assembly

- Pull outward to remove the pump assembly and set the pump assembly on top of the wing plate, left.
- Using a 1/4" hex wrench and a 1/2" combination wrench, remove the end cap cylinder pin (D) and nut (E) (Figure 15 on page 49).

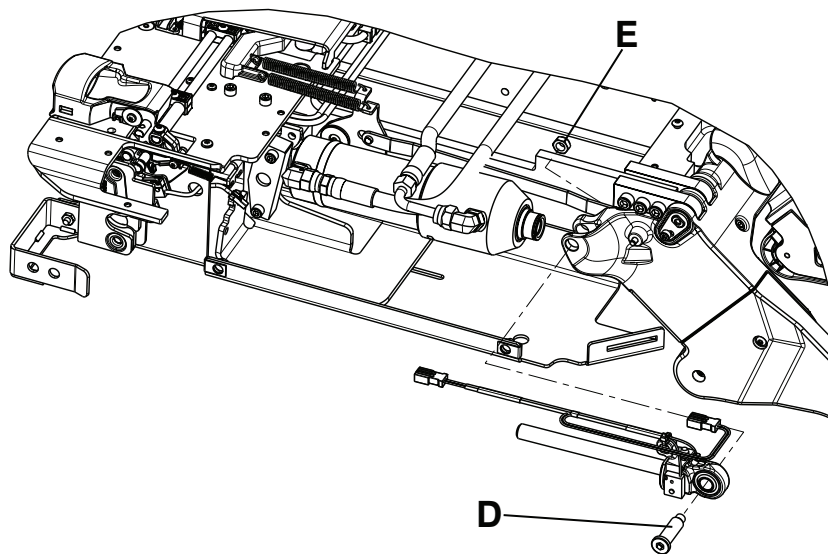


Figure 15: End cap cylinder pin and nut locations

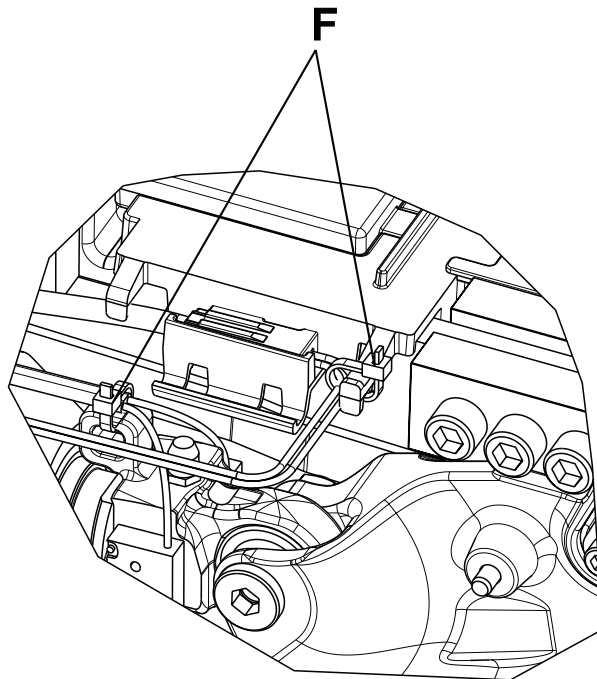
# Service

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## Hydraulics assembly removal and replacement (Continued)

- Using diagonal pliers, cut the cable ties (F) that secure the hydraulic cylinder rod end assembly cable to the plastic cover ([Figure 16 on page 50](#)).

**Note:** Pay attention to the location of all cable ties for reinstallation.



**Figure 16: Cable ties location**

- While lifting up on the cylinder, pull the hydraulic cylinder rod end assembly out. Save the hydraulic cylinder rod end assembly for reinstallation.
- Using a 3/16" hex wrench, remove the two screws (G) that secure the pin bracket (H) to the trolley ([Figure 17 on page 51](#)).



## Hydraulics assembly removal and replacement (Continued)

12. Remove the pin (I) and lift the hydraulic cylinder out (Figure 17 on page 51).

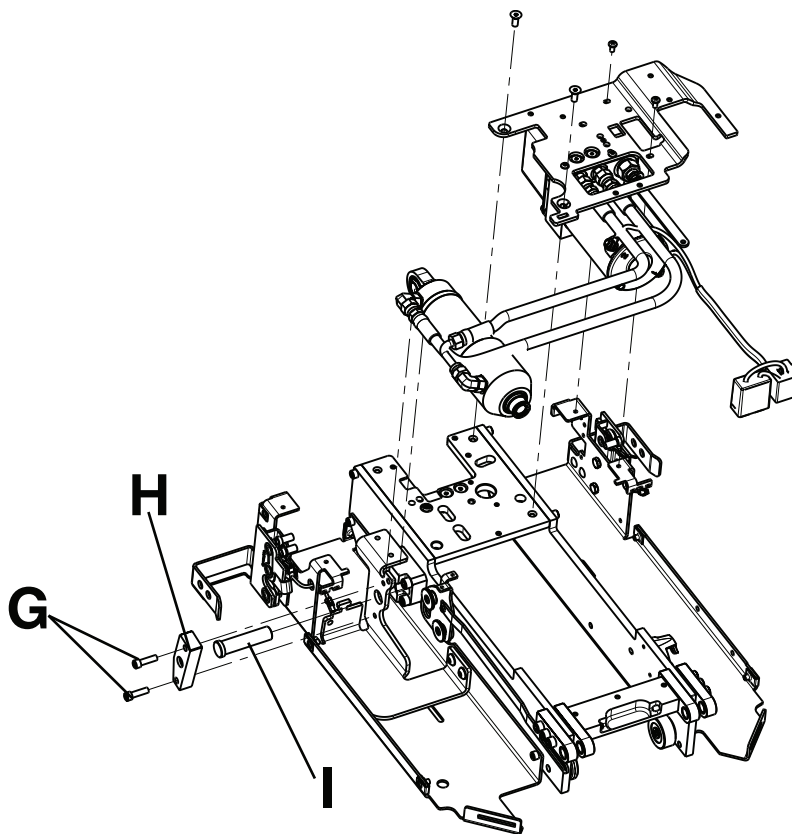


Figure 17: Pin and hydraulic cylinder removal

13. Remove the hydraulics assembly and properly discard.  
**Note:** Do not dispose of as unsorted municipal waste. Refer to your local distributor for return or collection systems available in your country.
14. Reverse steps to reinstall.
15. Verify proper operation of the product before returning it to service.

## Hydraulic cylinder rod end replacement

### Tools Required

- 1/4" hex wrench
- 1/2" combination wrench
- Diagonal pliers

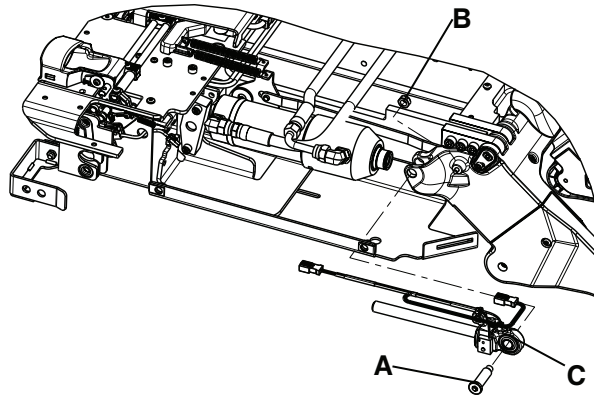
### Procedure

1. Pull the trolley assembly out of the patient compartment until it locks into the loading position.
2. Remove the trolley covers. See [Cover removal and replacement on page 40](#).
3. Press the main power button to turn the product off.

# Service

## Hydraulic cylinder rod end replacement (Continued)

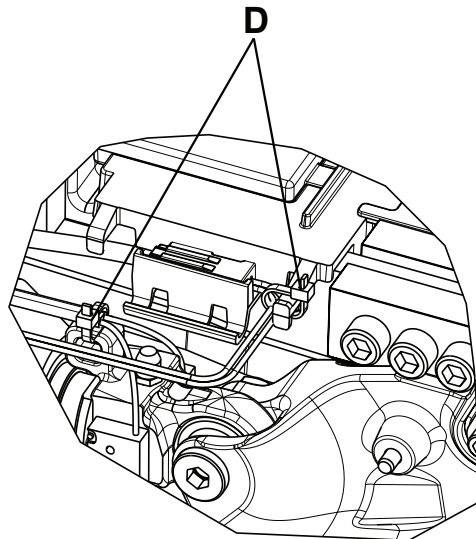
- Using a 1/4" hex wrench and a 1/2" combination wrench, remove the end cap cylinder pin (A) and nut (B) ([Figure 18 on page 52](#)).



**Figure 18: Hydraulic cylinder rod end assembly**

- Using diagonal pliers, cut the cable ties (D) that secure the hydraulic cylinder rod end assembly cable to the plastic cover ([Figure 19 on page 52](#)).

**Note:** Pay attention to the location of all cable ties for reinstallation.



**Figure 19: Cable ties location**

- While lifting up on the cylinder, pull the hydraulic cylinder rod end assembly (C) out and discard ([Figure 18 on page 52](#)).
- Reverse steps to reinstall.
- Verify proper operation of the product before returning it to service.

## Communication board replacement

### Tools Required

- Diagonal pliers

## Communication board replacement (Continued)

### Procedure

1. Pull the trolley assembly out of the patient compartment until it locks into the loading position.
2. Remove the trolley covers. See [Cover removal and replacement on page 40](#).
3. Using diagonal pliers, cut the cable tie that secures the hydraulic cylinder rod end assembly cable to the plastic cover.  
**Note:** Pay attention to the location of all cable ties for reinstallation.
4. Lift up on the trolley communication board (A) to remove ([Figure 20 on page 53](#)). Discard the communication board.  
**Note:** Do not dispose of as unsorted municipal waste. Refer to your local distributor for return and/or collection systems available in your country.
5. Reverse steps to reinstall.
6. Verify proper operation of the product before returning it to service.

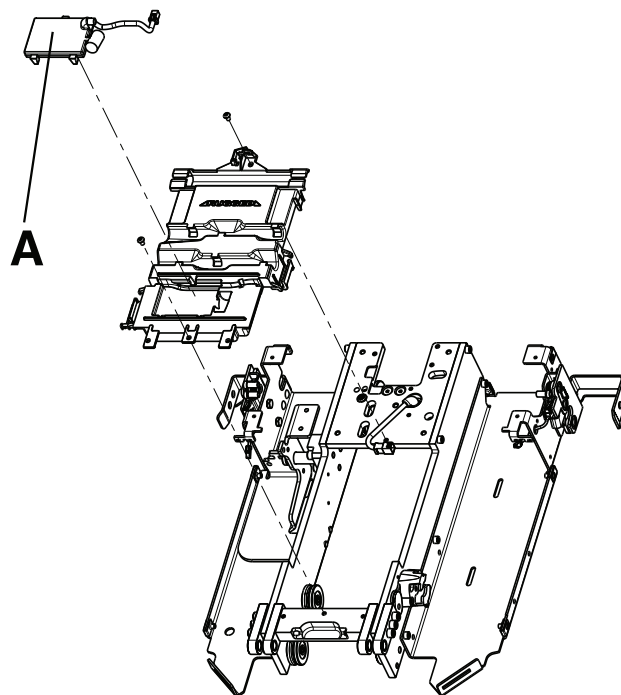


Figure 20: Communication board assembly

## Inductive coil replacement

### Tools required

- 5/32" hex wrench
- 3/16" hex wrench
- T25 Torx driver

### Procedure

1. Remove the manual release button assembly. See [Manual release button assembly removal and replacement on page 42](#).

## Inductive coil replacement (Continued)

2. Using a 5/32" hex wrench, remove the screw (A) that secures the inductive coil assembly to the frame (Figure 21 on page 54).
3. Using a 3/16" hex wrench, remove the screw (B) that secures the inductive coil assembly to the frame (Figure 21 on page 54).
4. Remove the cover (C) (Figure 21 on page 54). Save for reinstallation.

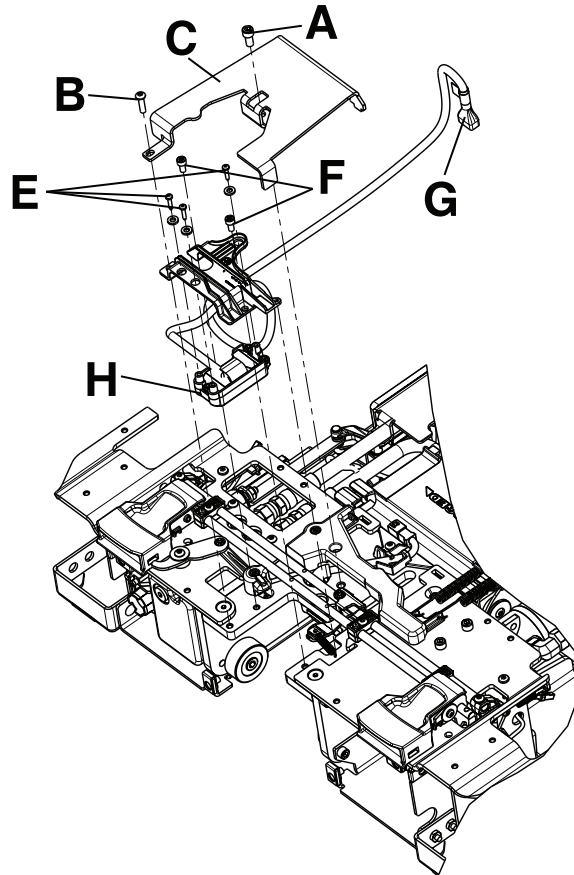
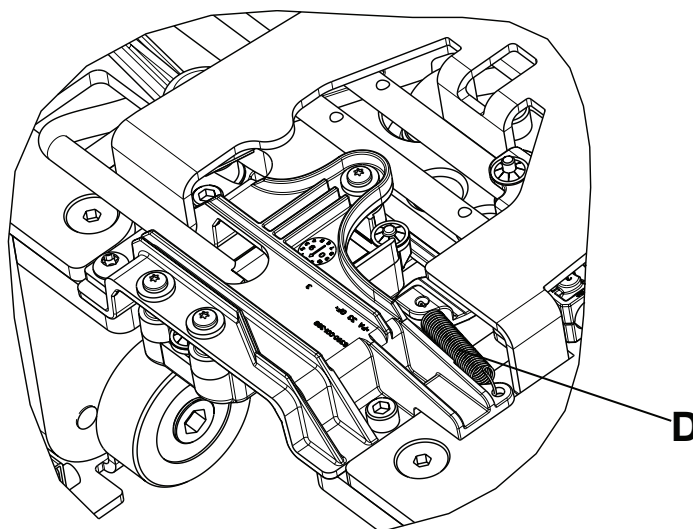


Figure 21: Inductive coil assembly

## Inductive coil replacement (Continued)

5. Remove the return spring (D) ([Figure 22 on page 55](#)). Save for reinstallation.



**Figure 22: Return spring location**

6. Using a T25 Torx driver, remove the screws (E) that secure the charge bracket ([Figure 21 on page 54](#)).
7. Using a 5/32" hex wrench, remove the screw (F) that secures the charge bracket ([Figure 21 on page 54](#)).
8. Using a T25 Torx driver, remove the two screws that secure the back left wing cover.
9. Unplug the cable (G) from the trolley control board, and remove the inductive coil (H) ([Figure 21 on page 54](#)). Discard the inductive coil.

### Notes

- Lift up on the trolley control board to pull the cable through.
- Pay attention to the cable routing for reinstallation.
- Do not dispose of as unsorted municipal waste. Refer to your local distributor for return or collection systems available in your country.

10. Reverse steps to reinstall.
11. Verify proper operation of the product before returning it to service.

## Trolley position sensor (TPS) replacement

### Tools required

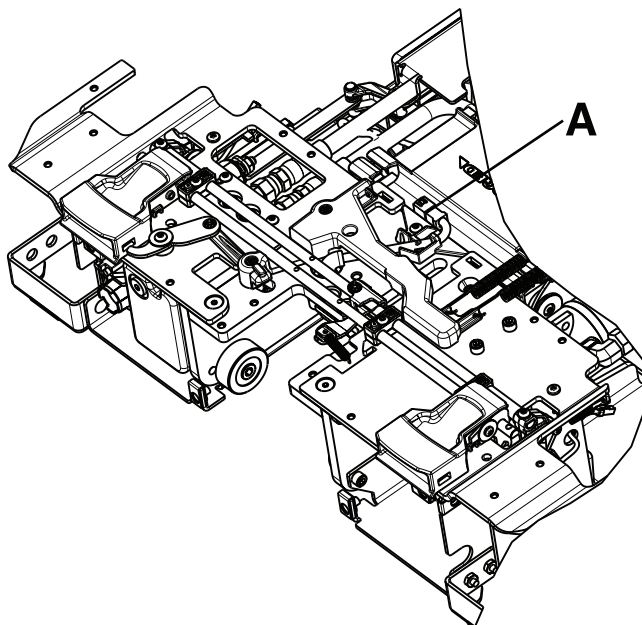
- T25 Torx driver
- 1/8" hex wrench
- 5/32" hex wrench
- 1/4" ratchet

### Procedure

1. Remove the trolley. See [Trolley removal on page 37](#).
2. Remove the trolley covers. See [Cover removal and replacement on page 40](#).

## Trolley position sensor (TPS) replacement (Continued)

3. Unplug the TPS cable (A) from the main cable assembly ([Figure 23 on page 56](#)).



**Figure 23: Main cable assembly**

4. Using a 5/32" hex wrench, loosen (do not remove) the socket head cap screw (B) that secures the trolley mechanism arm ([Figure 24 on page 57](#)).
5. Using 1/8" hex wrench, remove the flat head cap screw (C) that secures the link to the trolley mechanism arm and remove the trolley mechanism pivot pillar (D) ([Figure 24 on page 57](#)).

## Trolley position sensor (TPS) replacement (Continued)

- Using a 1/8" hex wrench, loosen (do not remove) the flat head cap screw (E) that secures the front link (F) to the trolley mechanism arm and swing it out of the way (Figure 24 on page 57).

**Note:** Rotate the link to remove the pivot pillar. During removal, pay attention to the orientation of the pivot pillar.

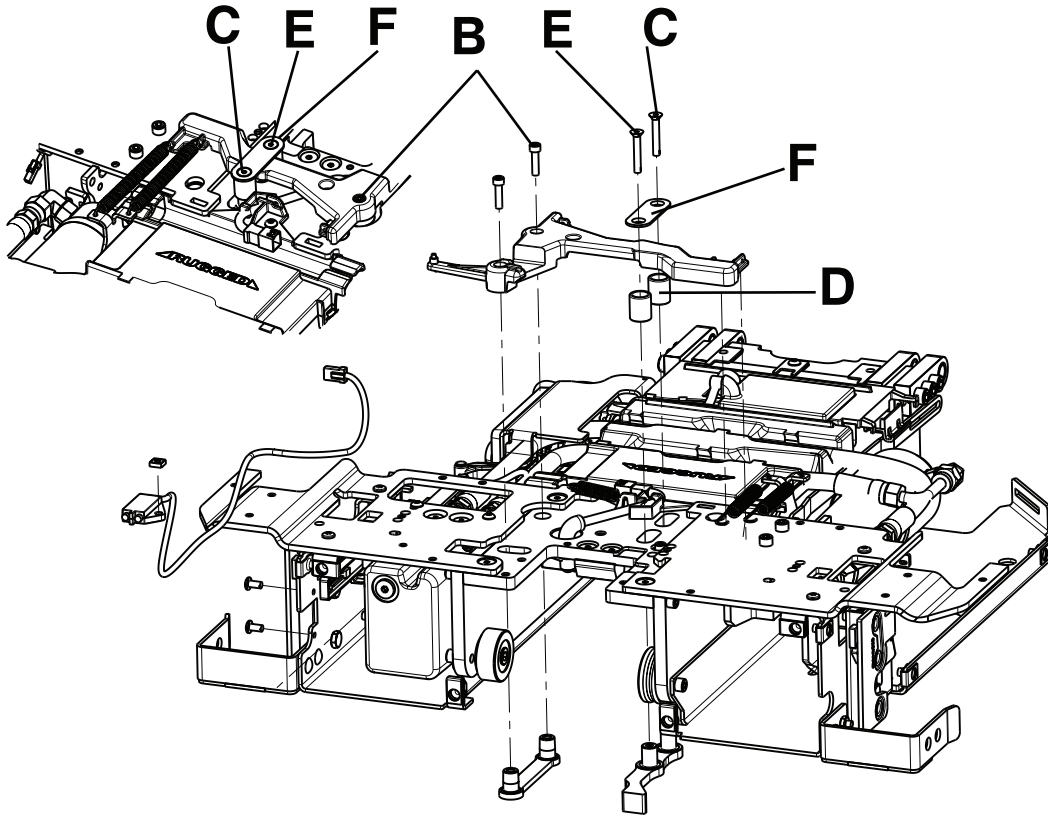


Figure 24: TPS assembly

## Trolley position sensor (TPS) replacement (Continued)

- Using a 1/4" ratchet and a T25 Torx driver, remove the two button head cap screws (G) that secure the TPS assembly (H) (Figure 25 on page 58).

### Notes

- Slightly lift up on the trolley mechanism arm to pull the cable through to remove the TPS. Discard the TPS.
- Do not dispose of as unsorted municipal waste. Refer to your local distributor for return and/or collection systems available in your country.

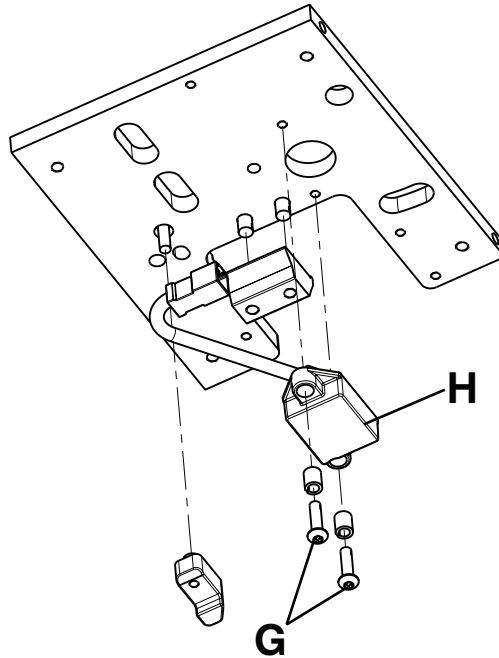


Figure 25: TPS assembly bottom view

- Reverse steps to reinstall.
- Verify proper operation of the product before returning it to service.

## Flat roller and V-guide roller replacement

### Tools required

- 3/8" drive ratchet
- 1/4" socket
- Torque wrench (in-lb) > 317 in-lb

### Procedure

- Remove the trolley. See [Trolley removal on page 37](#).
- Carefully set the trolley upright on its head end (Figure 26 on page 59).  
**Note:** Do not tip the trolley upside down, forward or onto its side.
- Using a 1/4" socket with a 3/8" drive ratchet, loosen (do not remove) the pivot bolt that secures the bad roller to the trolley.  
**Note:** The V-guide rollers are on the patient right side (five rollers) (A) and the flat rollers are on the patient left side (two rollers) (B) (Figure 26 on page 59).



## Flat roller and V-guide roller replacement (Continued)

4. Reverse steps to reinstall. When reinstalling, torque all bolts to 235-317 in-lb.
5. Verify proper operation of the product before returning it to service.

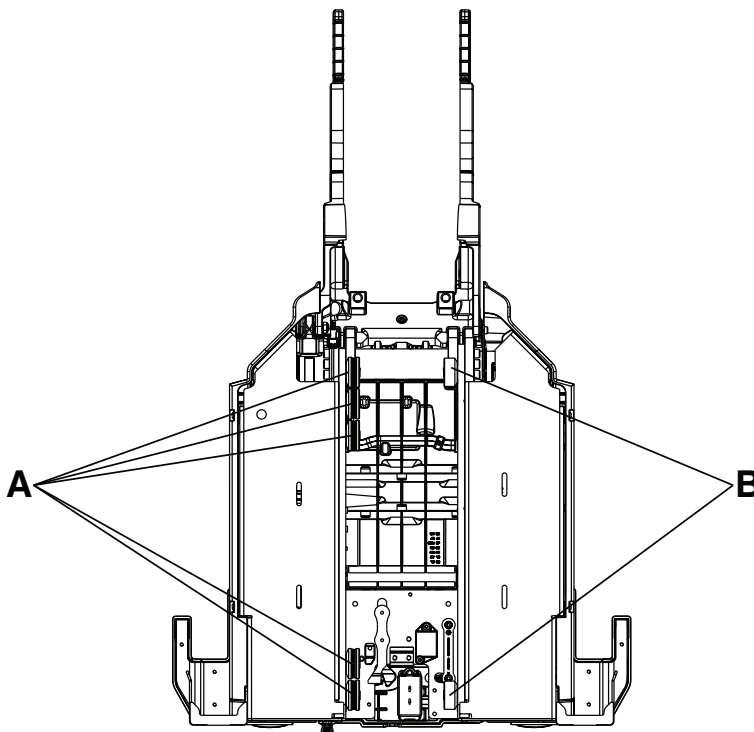


Figure 26: Trolley bottom view of the V-guide rollers

## Hydraulic cylinder removal and replacement

### Tools Required

- 1/4" hex wrench
- 1/8" hex wrench
- 1/2" combination wrench
- Diagonal pliers
- 5/8" combination wrench
- 3/16" hex wrench
- 11/16" hex wrench

### Procedure

1. Pull the trolley assembly out of the patient compartment until it locks into the loading position.  
**Note:** This makes working on the product easier, but is not required.
2. Press the manual release button on the Power-LOAD control panel until the lifting arms are in the lowest position.
3. Remove the trolley covers. See [Cover removal and replacement on page 40](#).

## Hydraulic cylinder removal and replacement (Continued)

- Using a 1/4" hex wrench and a 1/2" combination wrench, remove the end cap cylinder pin (A) and nut (B) (Figure 27 on page 60).

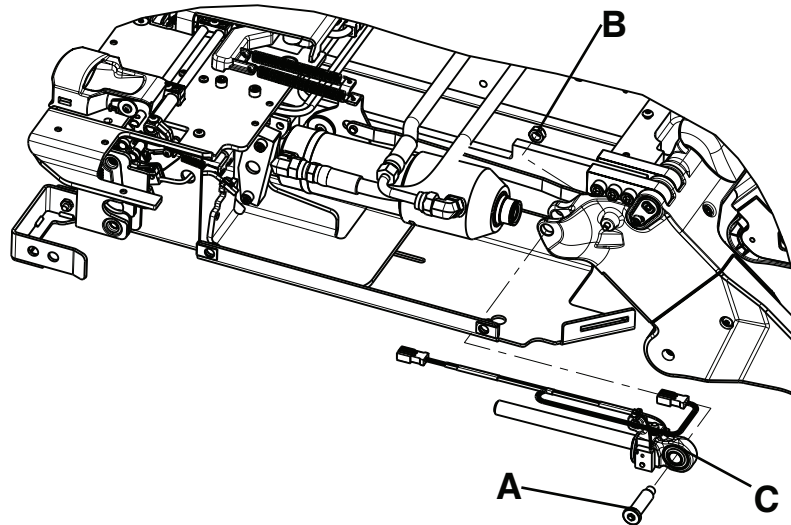


Figure 27: Hydraulic cylinder assembly

- Using diagonal pliers, cut the cable ties (D) (Figure 28 on page 60) that secure the hydraulic cylinder rod end assembly (C) cable to the plastic cover (Figure 27 on page 60).

**Note:** Pay attention to the location of all the cable ties for reinstallation.

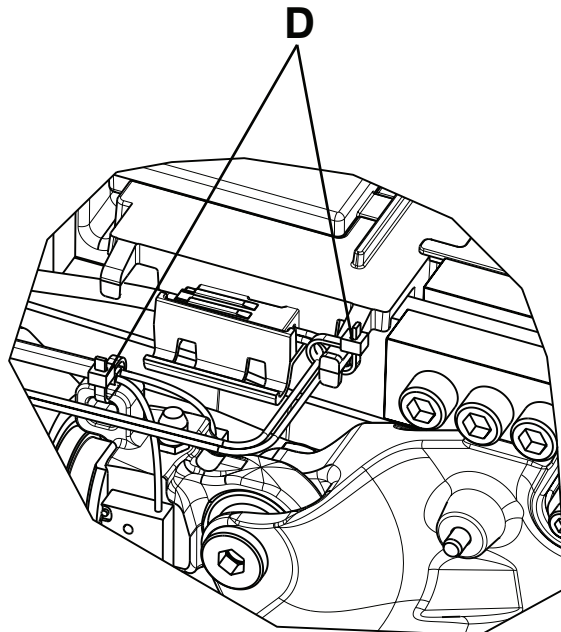


Figure 28: Cable ties locations

- While lifting up on the cylinder, remove the hydraulic cylinder rod end assembly (C) (Figure 27 on page 60). Save the hydraulic cylinder rod end assembly for reinstallation.

## Hydraulic cylinder removal and replacement (Continued)

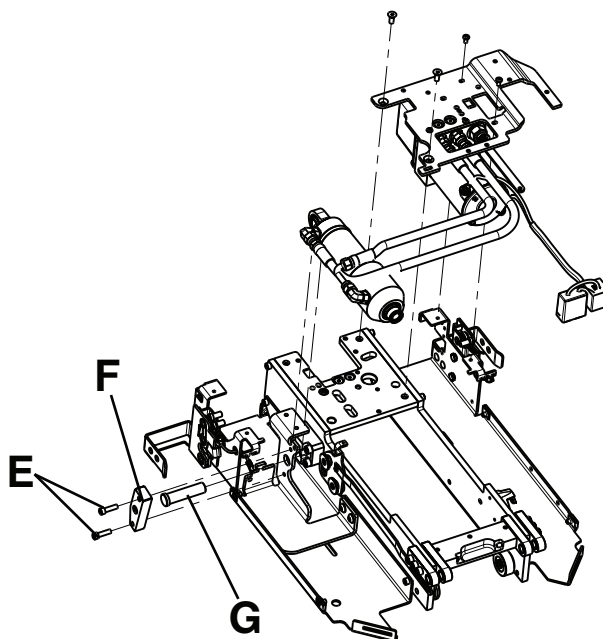
- Using an 11/16" combination wrench, disconnect both hoses from the cylinder. See [Velocity fuse removal and replacement on page 61](#).

**Note:** Hydraulic fluid will leak from the cylinder and hoses. Lay down towels to catch fluid.

- Using a 5/8" combination wrench, loosen (do not remove) the jam nuts on both of the cylinder hose fittings, and unthread the fitting from the hydraulic cylinder. Save all parts for reinstallation.

**Note:** Pay attention to the hose routing and location for reinstallation.

- Using a 1/8" hex wrench, remove the velocity fuse from the hydraulic cylinder. Save the fuse for reinstallation.
- Using a 3/16" hex wrench, remove the two screws (E) that secure the cylinder bracket (F) to the trolley and remove the end cap cylinder pin (G) ([Figure 29 on page 61](#)).



**Figure 29: Hydraulic cylinder pin location**

- Remove the hydraulics assembly and discard.
- Using a 1/8" hex wrench, install the velocity fuse into the cylinder.
- Reverse steps to reinstall.
- Check the fluid level before returning the product to service. See [Filling the reservoir on page 70](#).
- Verify proper operation of the product before returning it to service.

## Velocity fuse removal and replacement

### Tools Required

- 1/8" hex wrench
- 11/16" combination wrench
- 5/8" combination wrench
- Torque wrench (in-lb)

### Procedure

- Pull the trolley assembly out of the patient compartment until it locks into the loading position.

## Velocity fuse removal and replacement (Continued)

**Note:** This makes working on the product easier, but is not required.

2. Remove the trolley covers. See [Cover removal and replacement on page 40](#).
3. Using an 11/16" combination wrench, disconnect the hydraulic hose (A) closest to the mounting bracket at the head end of the trolley ([Figure 30 on page 62](#)).

**Note:** Hydraulic fluid will leak from the cylinder and hoses. Lay down towels to catch fluid.

4. Using a 5/8" combination wrench loosen (do not remove) the jam nut on the cylinder hose fitting (B) and unthread the fitting from the hydraulic cylinder (C) ([Figure 30 on page 62](#)). Save all parts for reinstallation.
5. Using a 1/8" hex wrench remove the velocity fuse (D) from the hydraulic cylinder (C) ([Figure 30 on page 62](#)). Discard the fuse.
6. Reverse steps to reinstall.

**Note:** When reinstalling the cylinder hose fitting (B) lubricate the O-ring with ATF and only thread the fitting in until you feel resistance. When aligning the fitting for proper position, do not back out more the 340 degrees from where resistance was felt. Using a torque wrench, torque the jam nut of the fitting to 190±10 in-lb.

7. Check the fluid level before returning the product to service. See [Filling the reservoir on page 70](#).
8. Verify proper operation of the product before returning it to service.

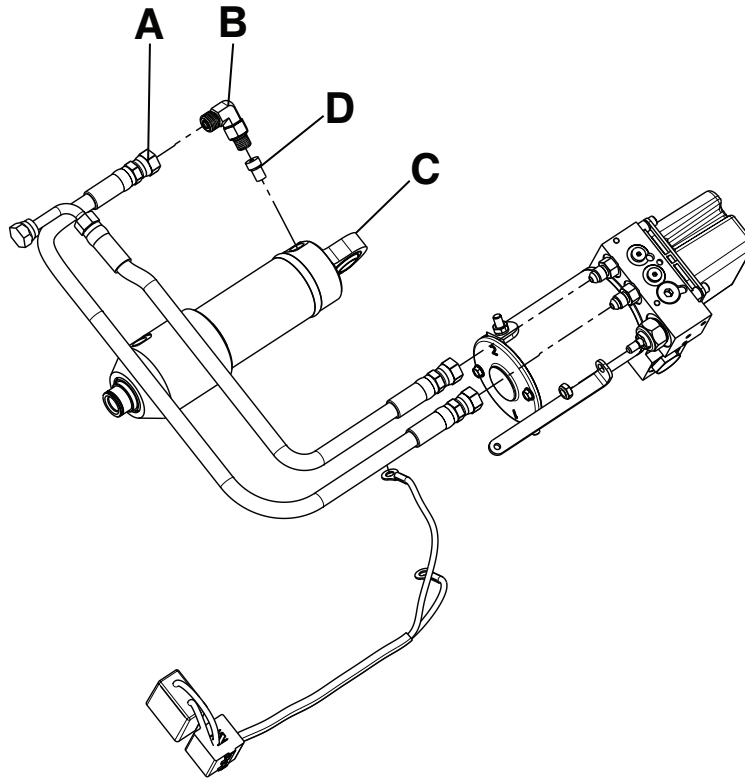


Figure 30: Velocity fuse components

## Non-locking manual valve removal and replacement

### Tools Required

- 7/16" deep well socket
- 7/8" deep well socket
- 3/8" drive ratchet

## Non-locking manual valve removal and replacement (Continued)

- 1/16" hex wrench

### Procedure

1. Pull the trolley assembly out of the patient compartment until it locks into the loading position.

**Note:** This makes working on the product easier, but is not required.

2. Lower the lifting arms down.
3. Remove the trolley covers. See [Cover removal and replacement on page 40](#).
4. Remove the manual release button assembly. See [Manual release button assembly removal and replacement on page 42](#).
5. Using a 7/16" deep well socket and 3/8" drive ratchet, remove the Nylock Hex nut (A) that secures the non-locking manual valve (B) to the manual release link (C) ([Figure 31 on page 63](#)).

**Note:** Place a 1/16" hex wrench through the slot on the non-locking manual valve (B) to keep it from turning ([Figure 31 on page 63](#)).

6. Using a 7/8" deep well socket and 3/8" drive ratchet, remove the non-locking manual valve (B) ([Figure 31 on page 63](#)). Discard the valve.

**Note:** Hydraulic fluid will leak from the cylinder and hoses. Lay down towels to catch fluid.

7. Reverse steps to reinstall.
8. Check the fluid level before returning the product to service. See [Filling the reservoir on page 70](#).
9. Verify proper operation of the product before returning it to service.

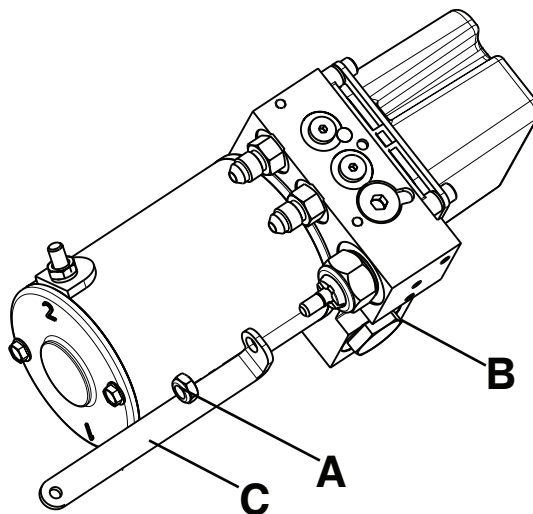


Figure 31: Non-locking manual valve

## Hose removal and replacement

### Tools Required

- 11/16" combination wrench
- (2) 9/16" combination wrench
- T25 Torx driver

### Procedure

## Hose removal and replacement (Continued)

1. Pull the trolley assembly out of the patient compartment until it locks into the loading position.

**Note:** This makes working on the product easier, but is not required.

2. Remove the trolley covers. See [Cover removal and replacement on page 40](#).
3. Using an 11/16" combination wrench, disconnect the hydraulic hose (A) closest to the mounting bracket at the head end of the trolley ([Figure 32 on page 64](#) and [Figure 33 on page 65](#)).

**Note:** Hydraulic fluid will leak from the cylinder and hoses. Lay down towels to catch fluid.

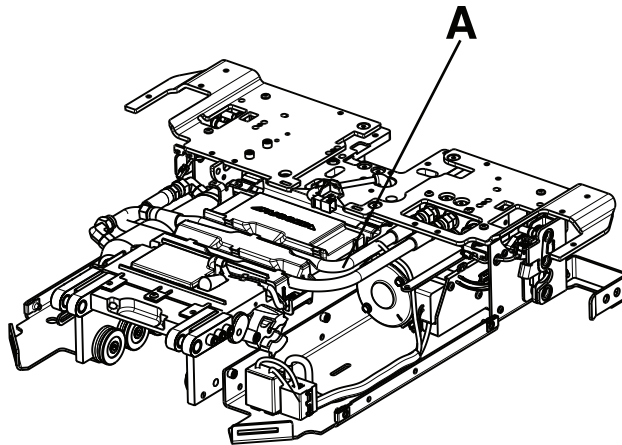
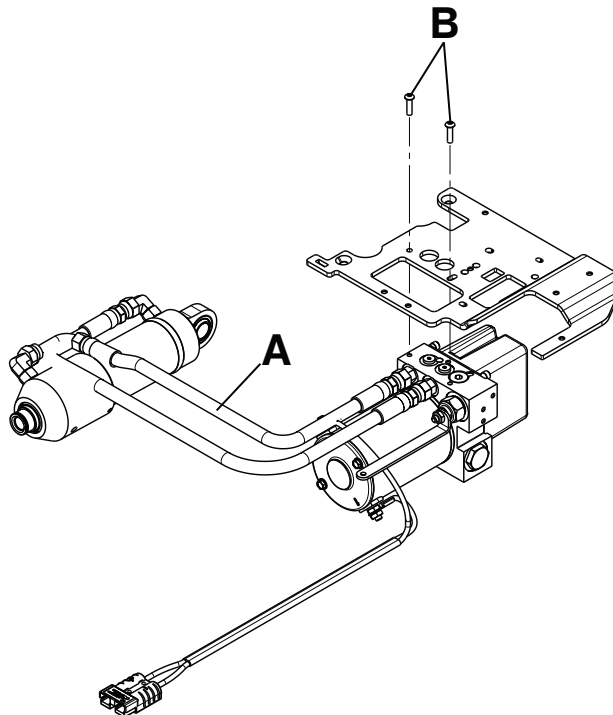


Figure 32: Hydraulic hose location

## Hose removal and replacement (Continued)

- Using a T25 Torx driver, loosen (do not remove) the two screws (B) that secure the manifold fitting to the left wing plate ([Figure 33 on page 65](#)).

**Note:** Do not remove the manifold fitting, just loosen the screws to gain better access to the nuts.



**Figure 33: Manifold fitting screws location**

- Using two 9/16" combination wrenches, disconnect the bad hose from the manifold fitting. Discard the hose.

**Note:** Hydraulic fluid will leak from the cylinder and hoses. Lay down towels to catch fluid.

- Reverse steps to reinstall.
- Check the fluid level before returning the product to service. See [Filling the reservoir on page 70](#).
- Verify proper operation of the product before returning it to service.

## Pump / motor assembly replacement

### Tools Required

- (2) 9/16" combination wrench

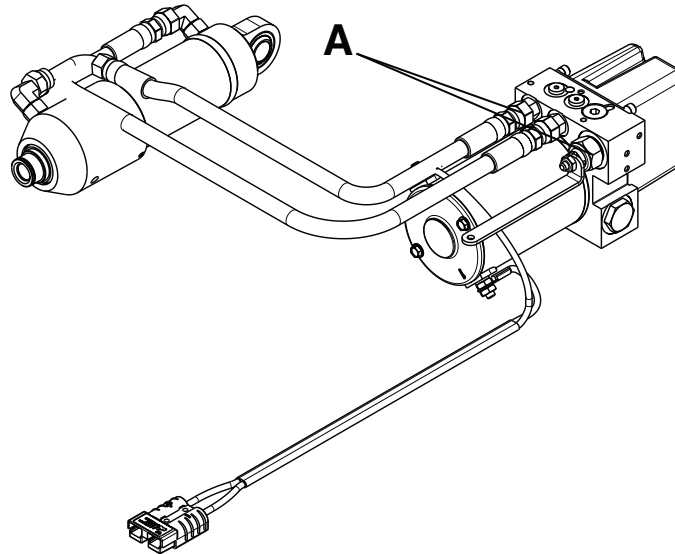
### Procedure

- Pull the trolley assembly out of the patient compartment until it locks into the loading position.  
**Note:** This makes working on the product easier, but is not required.
- Remove the hydraulics assembly. See [Hydraulics assembly removal and replacement on page 48](#).

## Pump / motor assembly replacement (Continued)

- Using two 9/16" combination wrenches, loosen (do not remove) the hose end connectors (A) from the manifold to remove both hoses ([Figure 34 on page 66](#)).

**Note:** Hydraulic fluid will leak from the cylinder and hoses. Lay down towels to catch fluid.



**Figure 34: Hydraulics assembly hose end connectors**

- Reverse steps to reinstall.
- Verify proper operation of the product before returning it to service.

## Motor cable removal and replacement

### Tools Required

- 7/16" combination wrench

### Procedure

- Pull the trolley assembly out of the patient compartment until it locks into the loading position.  
**Note:** This makes working on the product easier, but is not required.
- Remove the trolley covers. See [Cover removal and replacement on page 40](#).
- Remove the hydraulics assembly. See [Hydraulics assembly removal and replacement on page 48](#).



## Motor cable removal and replacement (Continued)

- Using a 7/16" combination wrench, remove the two nuts (A) and star washers (B) that secure the motor cable (C) to the motor assembly (Figure 35 on page 67).

**Note:** Pay attention to the cable routing and terminal orientation for reinstallation.

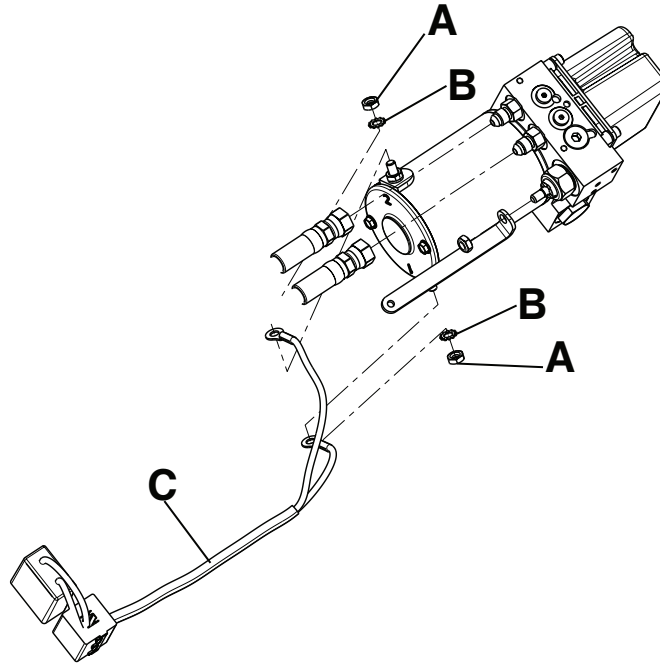


Figure 35: Motor assembly

- Reverse steps to reinstall.
- Verify proper operation of the product before returning it to service.

## Motor replacement

### Tools Required

- 7/16" combination wrench

### Procedure

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 **CAUTION**

When replacing the motor, damage may occur if motor armature or stator are bumped around.

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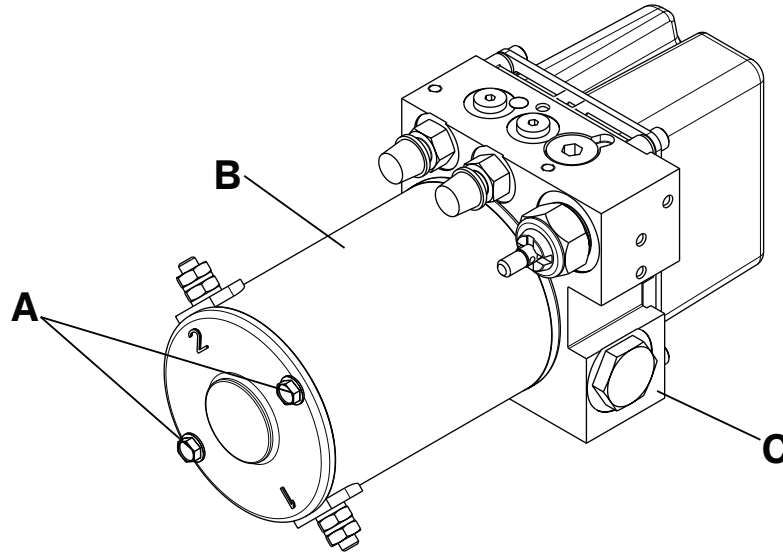
- Pull the trolley assembly out of the patient compartment until it locks into the loading position.  
**Note:** This makes working on the product easier, but is not required.
- Remove the trolley covers. See [Cover removal and replacement on page 40](#).
- Remove the motor cable. See [Motor cable removal and replacement on page 66](#).

# Service

## Motor replacement (Continued)

- Using a 7/16" combination wrench, remove the two bolts (A) that secure the motor (B) to the hydraulic manifold assembly (C) ([Figure 36 on page 68](#)).

**Note:** During reinstallation, do not overtighten the bolts.



**Figure 36: Motor replacement parts**

- Reverse steps to reinstall.
- Verify proper operation of the product before returning it to service.

## Pressure compensated flow control valve replacement

### Tools Required

- 1/4" hex wrench
- Needle nose pliers

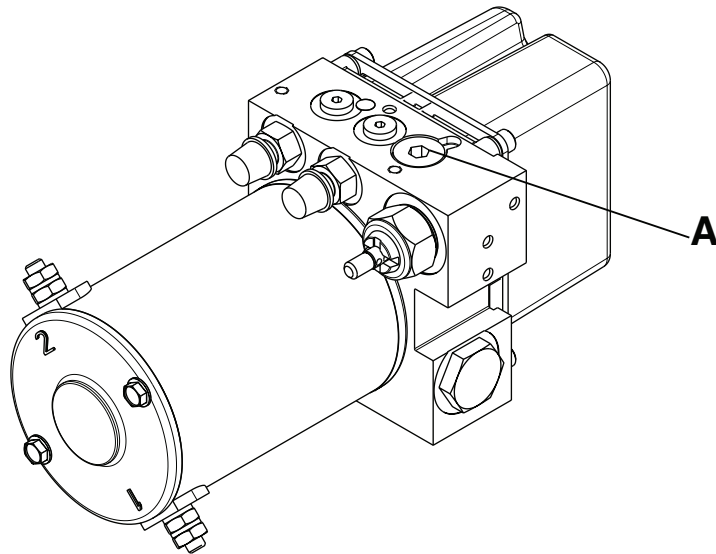
### Procedure

- Pull the trolley assembly out of the patient compartment until it locks into the loading position.  
**Note:** This makes working on the product easier, but is not required.
- Remove the trolley covers. See [Cover removal and replacement on page 40](#).
- Remove the hydraulics assembly. See [Hydraulics assembly removal and replacement on page 48](#).

## Pressure compensated flow control valve replacement (Continued)

- Using a 1/4" hex wrench, remove the hex plug (A) from the top of the hydraulic manifold assembly ([Figure 37 on page 69](#)).

**Note:** Pay attention to the orientation of the valve for reinstallation.



**Figure 37: Hex plug location**

- Install the replacement pressure compensated flow control valve.  
**Note:** Install the O-ring side of the valve down into the port.
- Reverse steps to reinstall.
- Check the fluid level before returning the product to service. See [Filling the reservoir on page 70](#).
- Verify proper operation of the product before returning it to service.

## Battery replacement

### Tools Required

- T25 Torx driver

### Procedure

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 **CAUTION**

When replacing the battery, do not touch the negative and positive battery terminals together on any metal surface.

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- Press the main power button to turn the product off.
- Using a T25 Torx driver, remove the two button head cap screws (A) that secure the rear trolley plate cover (B) to the trolley frame ([Figure 38 on page 70](#)). Remove the cover.

## Battery replacement (Continued)

3. Pull to remove the battery housing assembly (C) (Figure 38 on page 70).

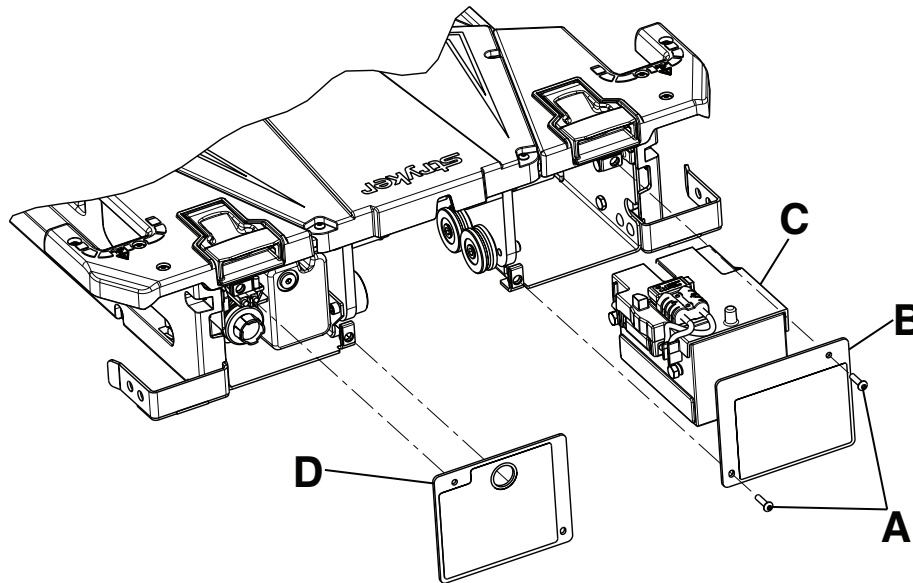


Figure 38: Battery housing components

4. Remove and discard the battery.  
**Note:** Do not dispose of as unsorted municipal waste. Refer to your local distributor for return and/or collection systems available in your country.
5. Install the replacement pressure compensated flow control valve.
6. Reverse steps to reinstall.
7. Verify proper operation of the product before returning it to service.

## Filling the reservoir

### Tools Required

- 3/16" hex wrench

### Procedure

#### **WARNING**

Use only Mobil Mercon® V Blend ATF Oil (6500-001-293) in the specified quantity. Do not overfill the reservoir with oil. See the Mobil Mercon® V Blend ATF Oil material safety data sheet (MSDS) issued by the manufacturer for safety information (Exxon Mobil Corporation, 1-(800) 947-9147, <http://www.exxon.com>, <http://www.mobil.com>, product code: 20103020B010, 525147-00, 97X826).

1. Pull the trolley assembly out of the patient compartment until it locks into the loading position.
2. Ensure that the lifting arms are in the down position before filling the reservoir.
3. Using a 3/16" hex wrench, remove the fill plug (D). (Figure 38 on page 70). See [Battery replacement on page 69](#).
4. Fill the reservoir up to the bottom of the fill port with Mobil Mercon® V Blend ATF Oil (6500-001-293).
5. Reinstall the plug.

## Primary coil replacement, foot end

### Tools required

- 5/32" hex wrench
- (2) 1/8" hex wrench
- 1/4" hex wrench
- 3/8" hex driver
- Torque wrench (ft-lb) > 60 ft-lb

### Procedure

1. Remove the trolley. See [Trolley removal on page 37](#).
2. Remove the transfer. See [Transfer removal on page 37](#).
3. Using a 3/8" hex driver, remove the four anchor mounting posts (A) that secure the anchor to the floor plate ([Figure 39 on page 71](#)).

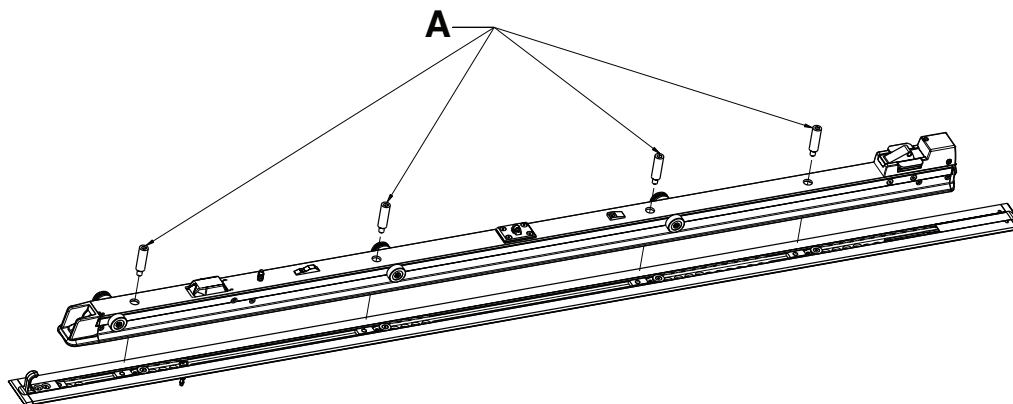


Figure 39: Remove the anchor mounting posts

4. Flip the anchor on its side and unplug the anchor plunger assembly cables from the patient compartment main power cable at the head end.
5. Using a 1/8" hex wrench, remove one of the two flat head cap screws (B) that secure the release lever housing (F) to the anchor ([Figure 40 on page 71](#)).

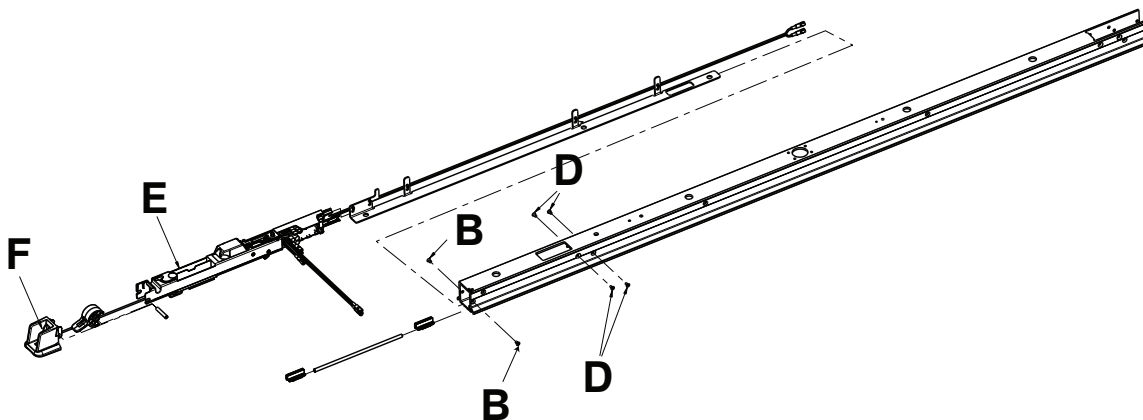


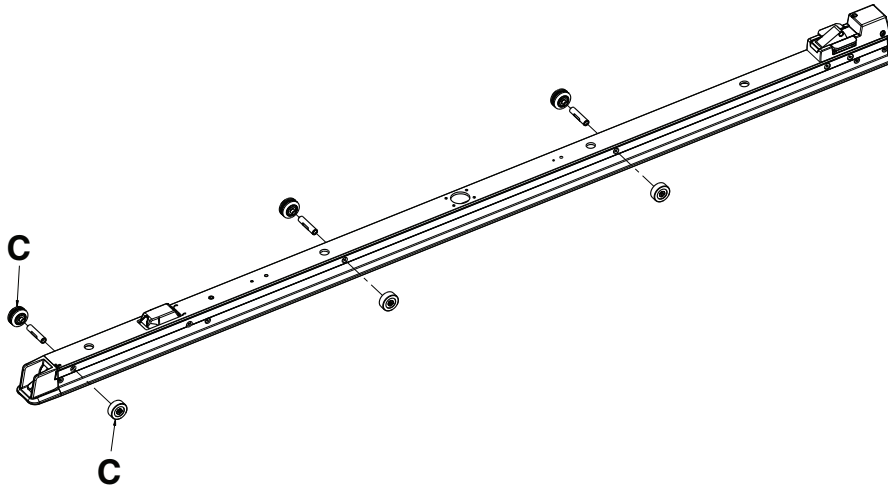
Figure 40: Remove the anchor plunger assembly

## Primary coil replacement, foot end (Continued)

- Using the second 1/8" hex wrench, insert the wrench into the anchor pivot pin to remove the other screw and remove the release lever housing.

**Note:** The LED cable will still be attached. Do not pull the parts to prevent damage.

- Using a 1/4" hex wrench, remove the two screws (C) that secure the flat roller assembly and the V-guide roller assembly on the foot end of the anchor assembly (Figure 41 on page 72). Save all parts.



**Figure 41: Remove the flat roller assembly and V-guide roller assembly**

- Using a 1/8" hex wrench, remove two of the four flat head cap screws (D) from one side of the anchor plunger assembly, mid (Figure 40 on page 71). Save the screws.
- Using the second 1/8" hex wrench, insert the wrench into the anchor pivot pin to remove the other two of the four flat head cap screws (D) (Figure 40 on page 71). Save the screws.
- Unplug the power cables from the extension cable from the underside of the anchor.
- Remove the anchor plunger assembly, mid (E) from the anchor (Figure 40 on page 71).
- Remove the anchor pivot pin (G) that holds the anchor coil assembly (H) to the anchor housing (J) (Figure 42 on page 73).
- Unplug the coil wires from the inductive primary board (I) (Figure 42 on page 73). Discard the anchor coil assembly.
- Reverse steps to reinstall. Torque the V-guide roller assembly and flat roller assembly to 235 to 317 in-lb. Torque the anchor mounting posts to 60 ± 10 ft-lb.
- Verify proper operation before returning the product to service.

## Primary coil replacement, foot end (Continued)

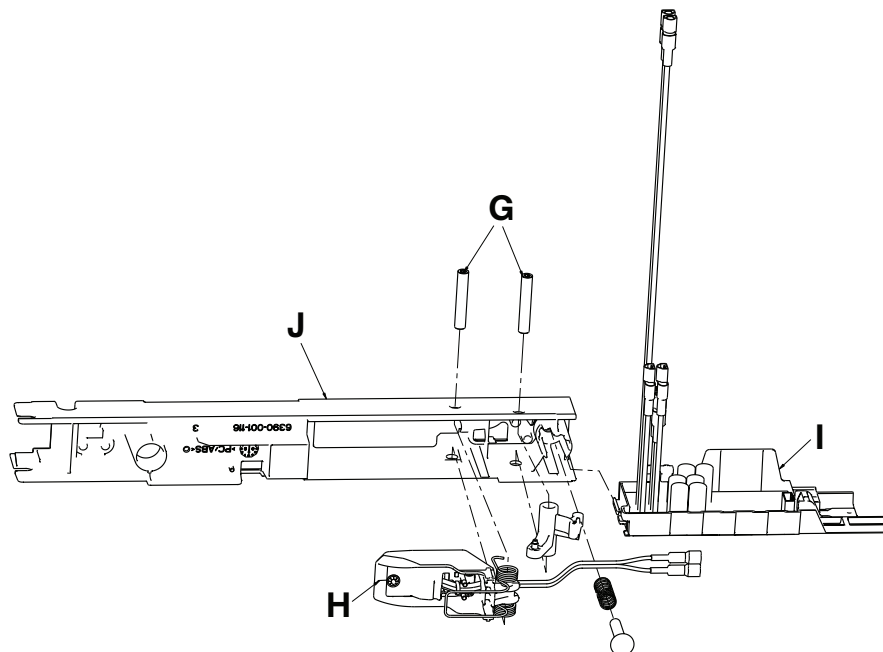


Figure 42: Unplug coil wires from the inductive primary board

## Primary coil replacement, head end

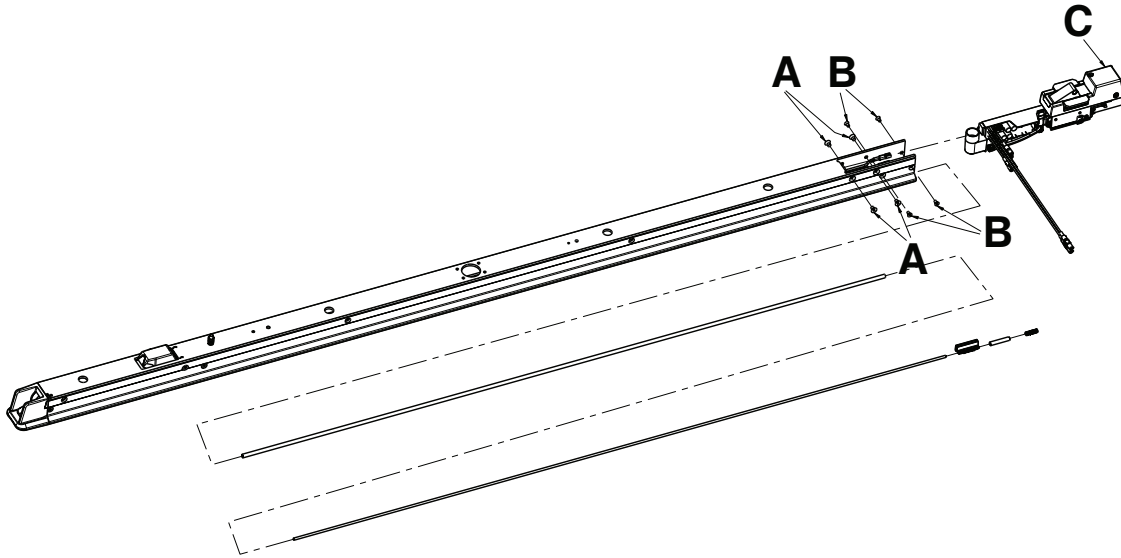
### Tools required

- 5/32" hex wrench
- (2) 1/8" hex wrench
- 3/8" hex driver
- T25 Torx driver
- Diagonal pliers
- Torque wrench (ft-lb) > 60 ft-lb

### Procedure

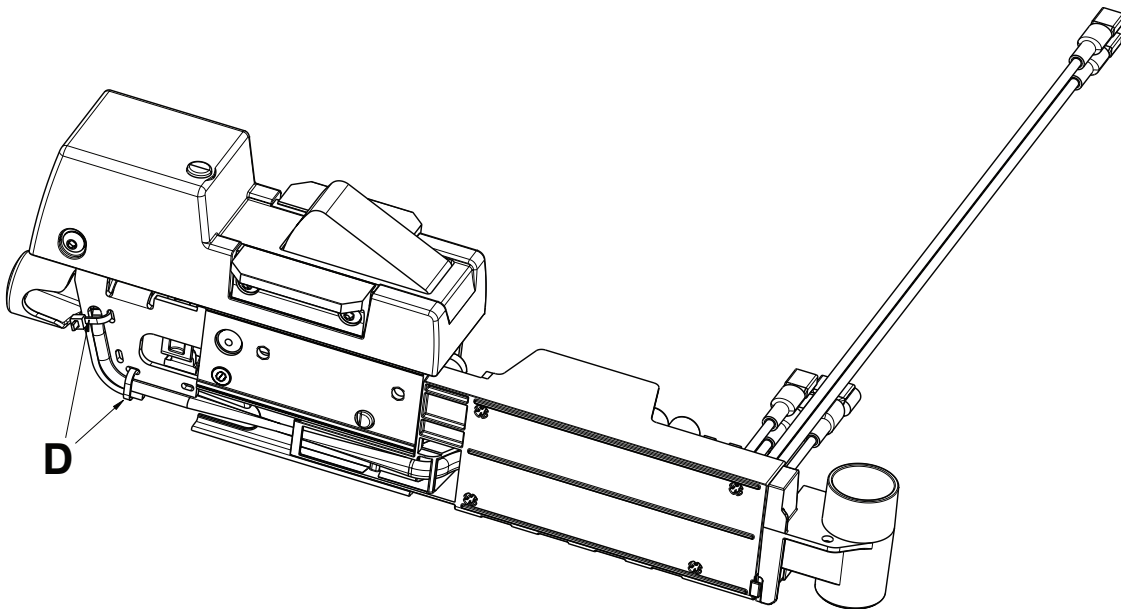
1. Remove the trolley. See [Trolley removal on page 37](#).
2. Remove the transfer. See [Transfer removal on page 37](#).
3. Using a 3/8" hex driver, remove the four anchor mounting bolts that secure the anchor to the floor plate.
4. Unplug the main power cable from the patient compartment to the anchor assembly at the head end.
5. Using a 5/32" hex wrench, remove the four screws (A) ([Figure 43 on page 74](#)).
6. Using two 1/8" hex wrenches, remove the four flat head cap screws (B) that secure the anchor pawl assembly to the anchor ([Figure 43 on page 74](#)).
7. Pull the anchor pawl assembly toward the head end of the anchor to remove the anchor pawl assembly.

## Primary coil replacement, head end (Continued)



**Figure 43: Remove the anchor pawl assembly from the anchor**

8. Unplug the power cables from the extension cable from the anchor.
9. Unplug the two coil wires from the inductive primary board.
10. Using diagonal pliers, cut the cable ties (D) that secure the coil wires to the wire management strap ([Figure 44 on page 74](#)).

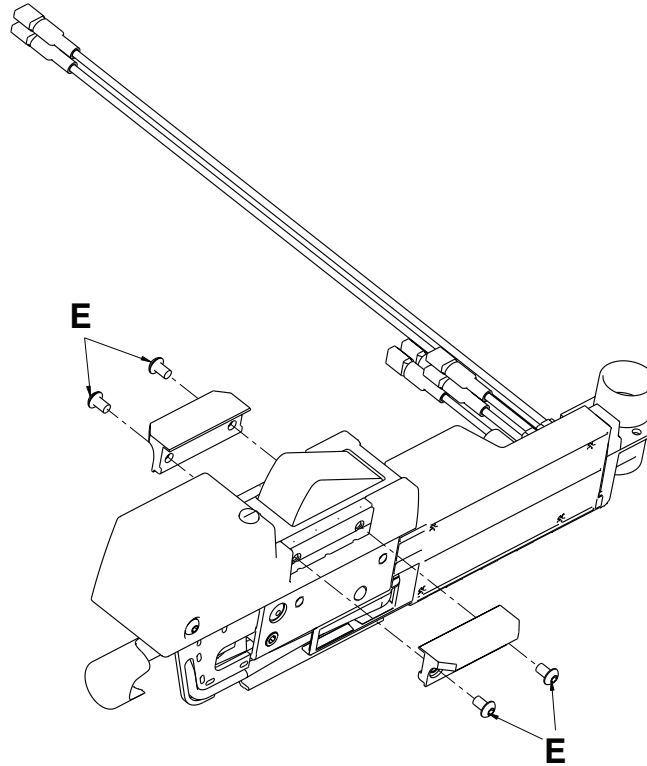


**Figure 44: Remove cable ties**



## Primary coil replacement, head end (Continued)

11. Using a T25 Torx driver, remove the four button head cap screws (E) that secure the two retainer wings and remove the retainer wings (Figure 45 on page 75). Save all parts.

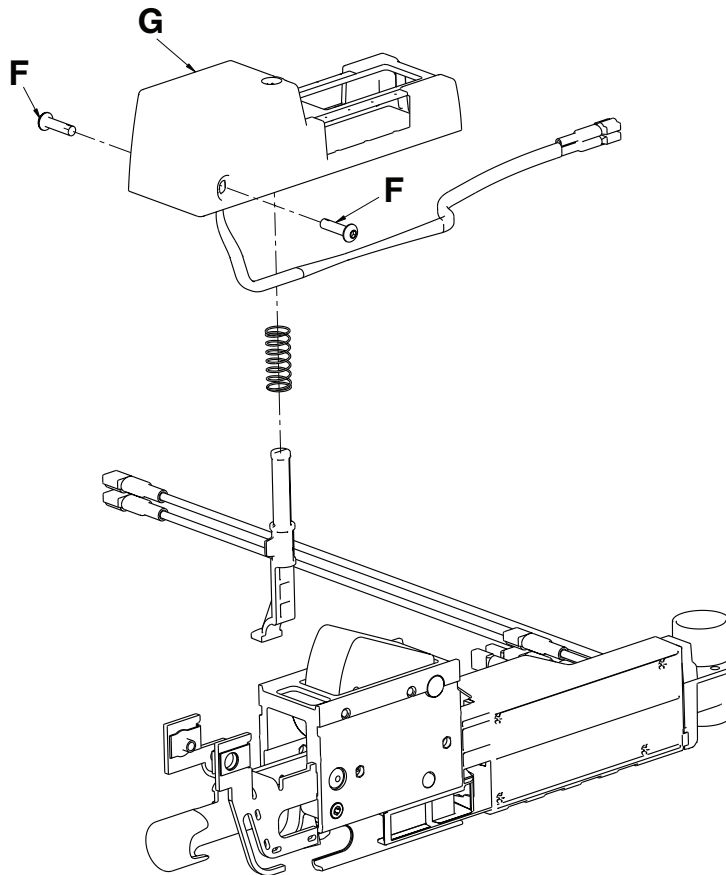


**Figure 45: Remove the retainer wings**

# Service

## Primary coil replacement, head end (Continued)

- Using a 1/8" hex wrench, remove the two button head cap screws (F) that secure the anchor housing assembly head end to the anchor pawl assembly. Remove the anchor housing assembly (G) ([Figure 46 on page 76](#)).



**Figure 46: Remove the anchor housing assembly**

- Remove and discard the anchor housing.  
**Note:** Do not dispose of as unsorted municipal waste. Refer to your local distributor for return, and or collection systems available in your country.
- Reverse steps to reinstall. When reinstalling, use a torque wrench to tighten each anchor mounting post to  $60 \pm 10$  ft-lb.
- Verify proper operation before returning the product to service.

## Transfer lock bearing removal and replacement

### Tools required

- 5/32" hex wrench

### Procedure

- Remove the trolley. See [Trolley removal on page 37](#).
- Remove the transfer. See [Transfer removal on page 37](#).

## Transfer lock bearing removal and replacement (Continued)

- Using a 5/32" hex wrench, remove the four flat head cap screws (A) that secure the transfer lock cap (B) to the anchor extrusion ([Figure 47 on page 77](#)).
- Remove the transfer lock cap (B) ([Figure 47 on page 77](#)).
- Remove the transfer lock pin assembly (C), compression spring (D), and bronze bearing (E) from the anchor extrusion ([Figure 47 on page 77](#)). Discard the bronze bearing.
- Clean the transfer lock pin assembly (C) and compression spring (D) thoroughly ([Figure 47 on page 77](#)).
- Install the supplied bronze bearing (D), compression spring (D), and transfer lock pin assembly (C) into the anchor extrusion ([Figure 47 on page 77](#)).

**Note:**

Prior to reinstallation, grease the transfer lock pin assembly with molybdenum disulfide lubricant (6390-001-263).

- Using a 5/32" hex wrench, reinstall the four flat head cap screws that secure that transfer lock cap (B) to the anchor extrusion. Start each screw first and then tighten all four screws.
- Reinstall the transfer. See [Transfer removal on page 37](#).
- Reinstall the trolley. See [Trolley removal on page 37](#).

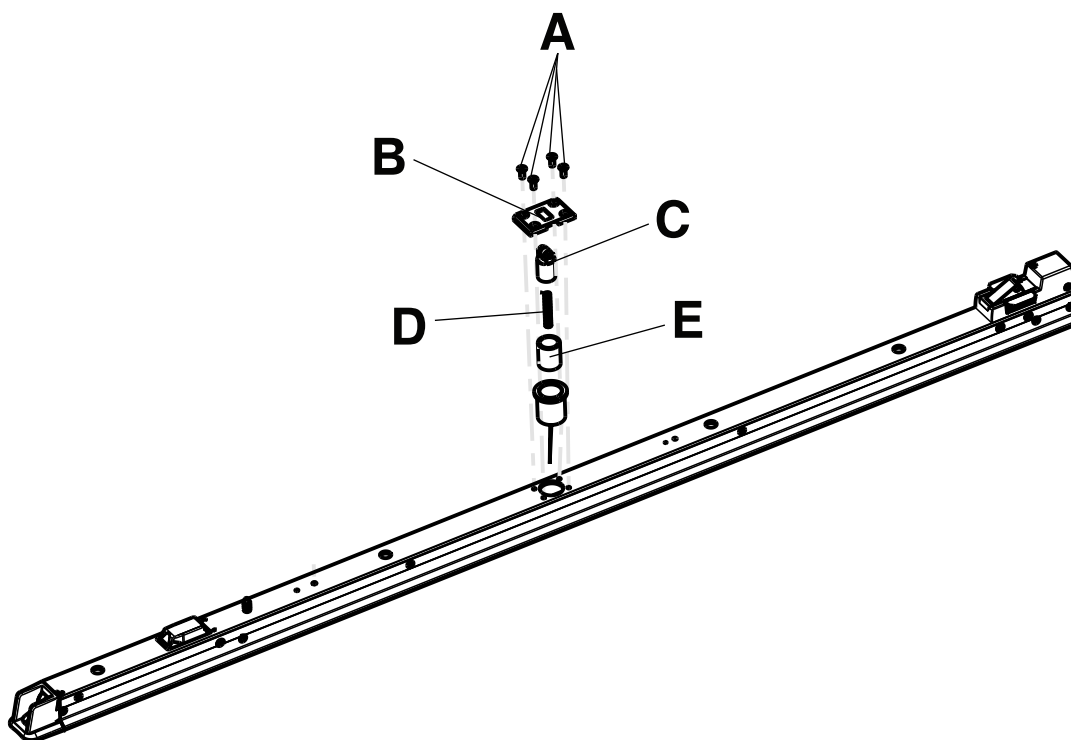
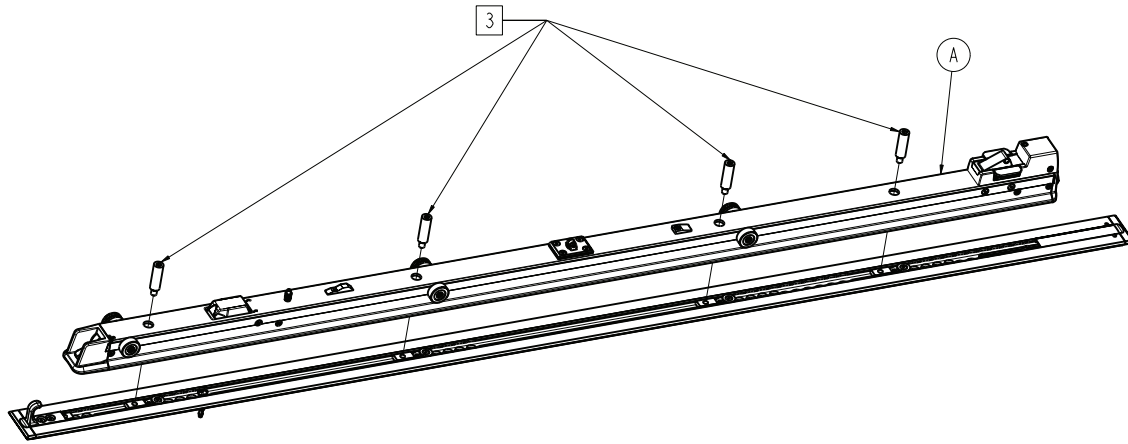


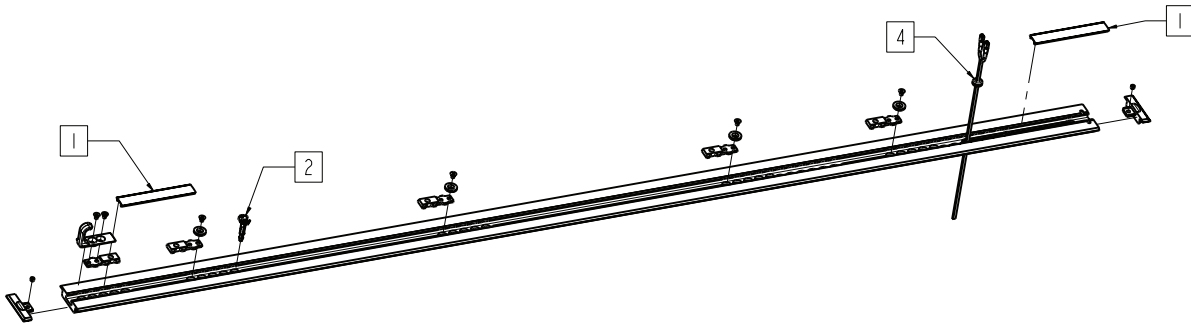
Figure 47: Transfer lock bearing removal and replacement

# Power-LOAD assembly

6390-001-010 Rev E (Reference only)



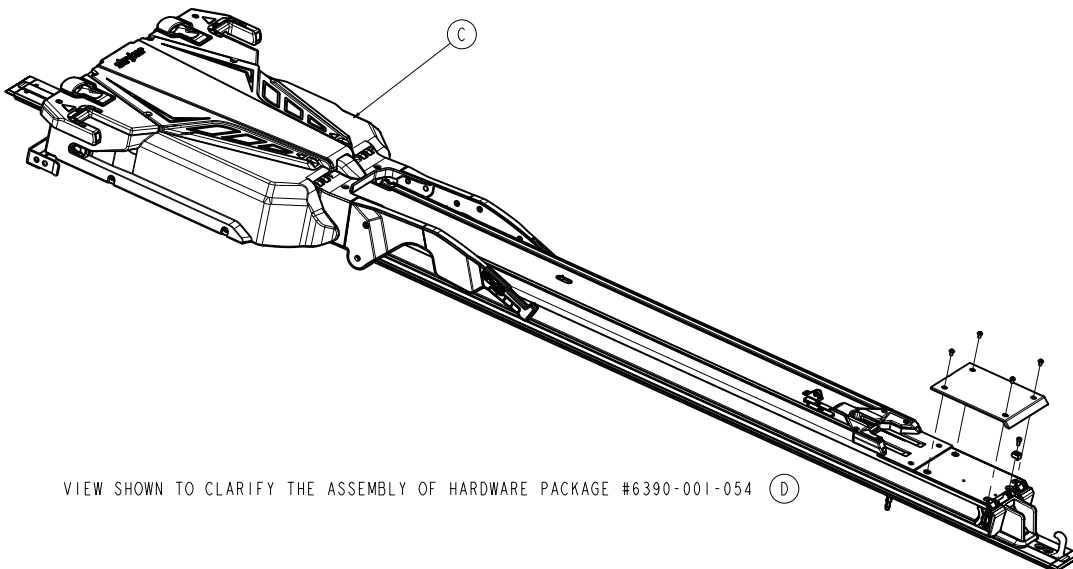
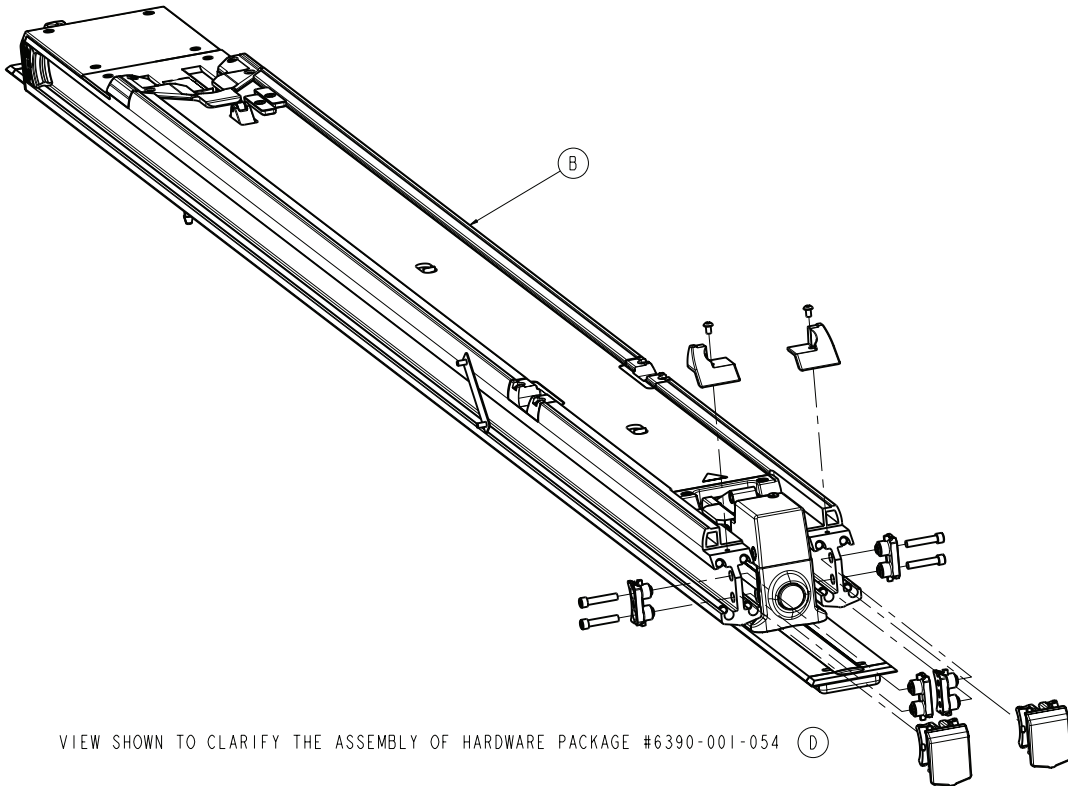
VIEW SHOWN TO CLARIFY THE ASSEMBLY OF MOUNTING POSTS WHICH ARE INCLUDED IN HARDWARE PACKAGE # 6390-001-054 (D)



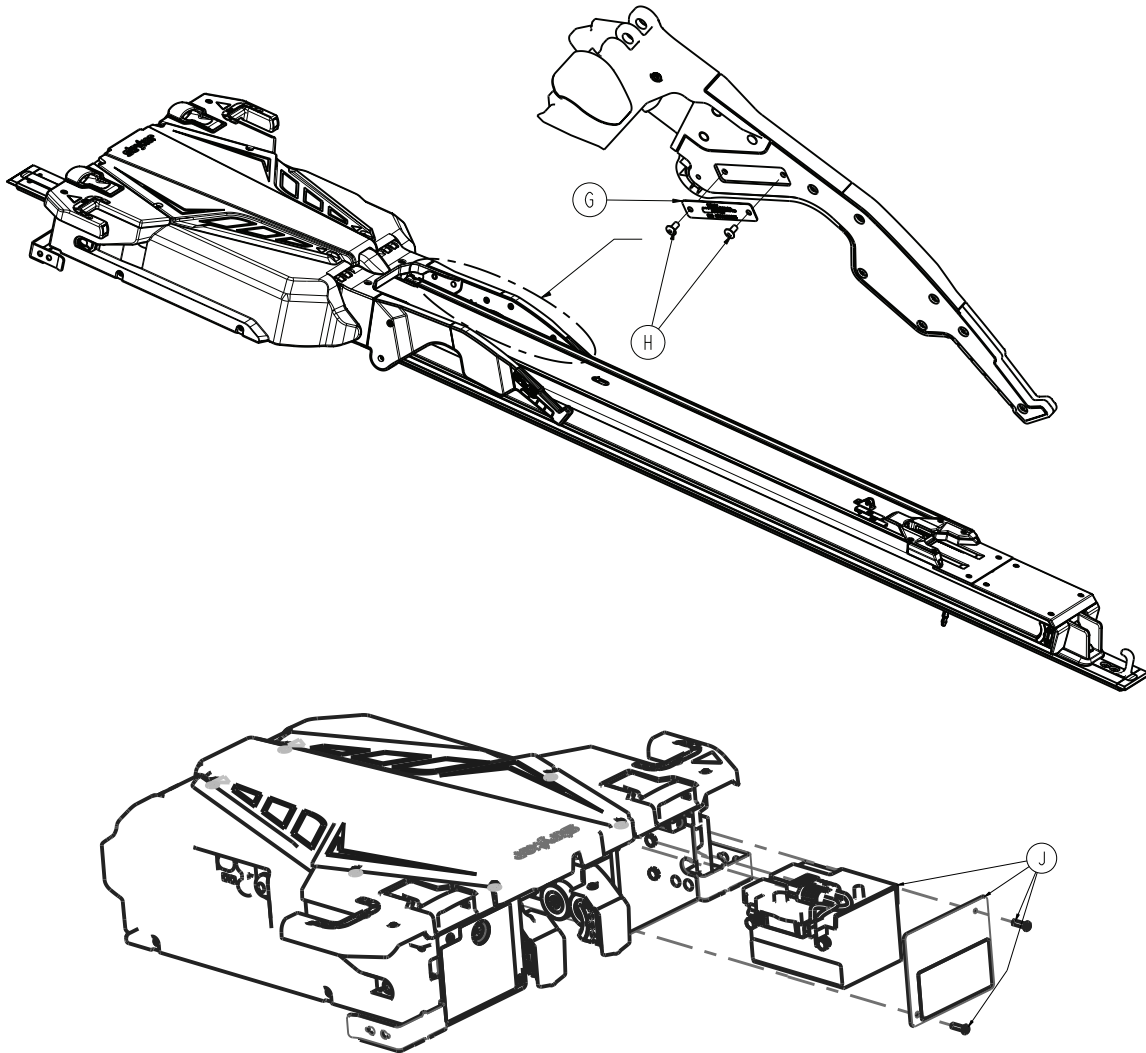
VIEW SHOWN TO CLARIFY THE ASSEMBLY OF HARDWARE PACKAGE # 6390-001-055 (E)

# Power-LOAD assembly

1. Cut pieces to desired length to cover void at either end, as needed.
2. Drill .400/.450 diameter hole through Item F for assembly. Hole to be drilled at pre-machined counter-sunk locations only.
3. Torque to  $60 \pm 10$  ft-lb
4. Drill .600/.656 diameter hole through item F for assembly hole to be drilled at one of the pre-machined pocket locations only.



# Power-LOAD assembly

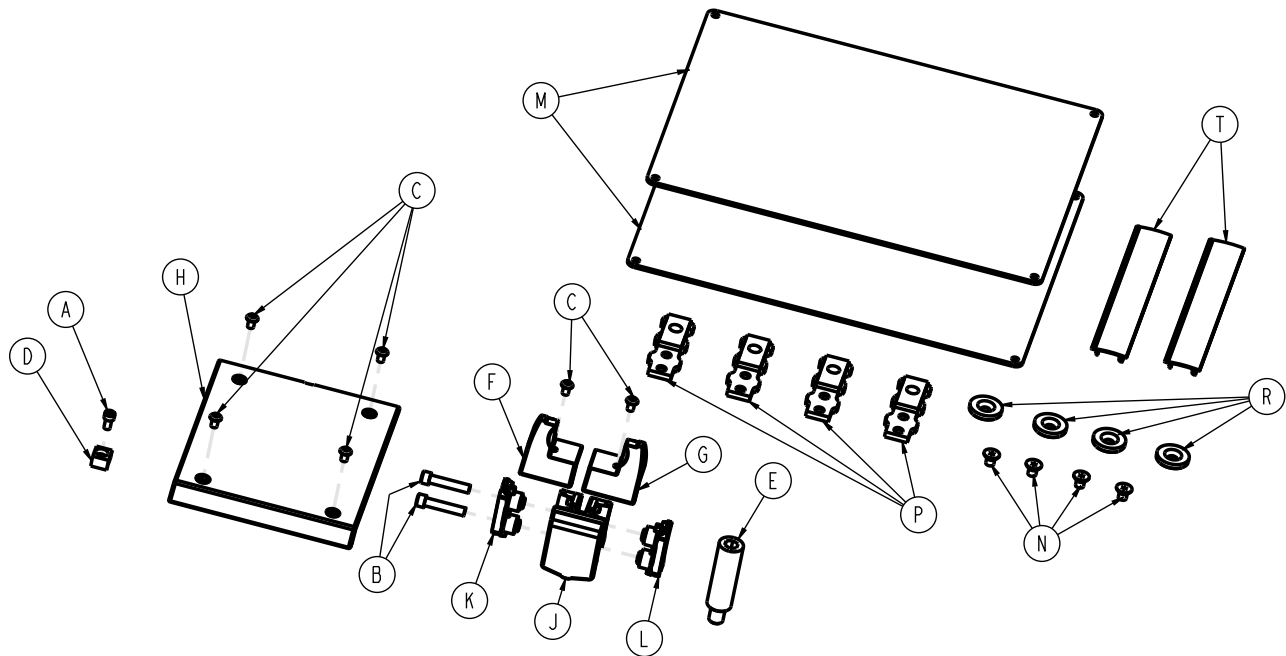


1. Cut pieces to desired length to cover void at either end, as needed.
2. Drill .400/.450 diameter hole through 6390-001-107, floor plate, for assembly. Hole to be drilled at pre-machined countersink locations only.
3. Torque to  $60 \pm 10$  ft-lb
4. Drill .600/.656 diameter hole through 6390-001-107, floor plate, for assembly hole to be drilled at one of the pre-machined pocket locations only.

Item	Number	Name	Quantity
A	6390-001-011	<a href="#">Anchor assembly on page 82</a>	1
B	6390-101-012	<a href="#">Transfer assembly on page 90</a>	1
C	6390-001-013	<a href="#">Trolley assembly on page 98</a>	1
D	6390-001-054	<a href="#">Assembly kit, Power-LOAD - 6390-001-054 on page 81</a>	1
G	6060-090-002	Tag, serial number	1
H	0025-079-000	Dome head rivet	2
J	639001010026	Battery installation assembly	1

# Assembly kit, Power-LOAD - 6390-001-054

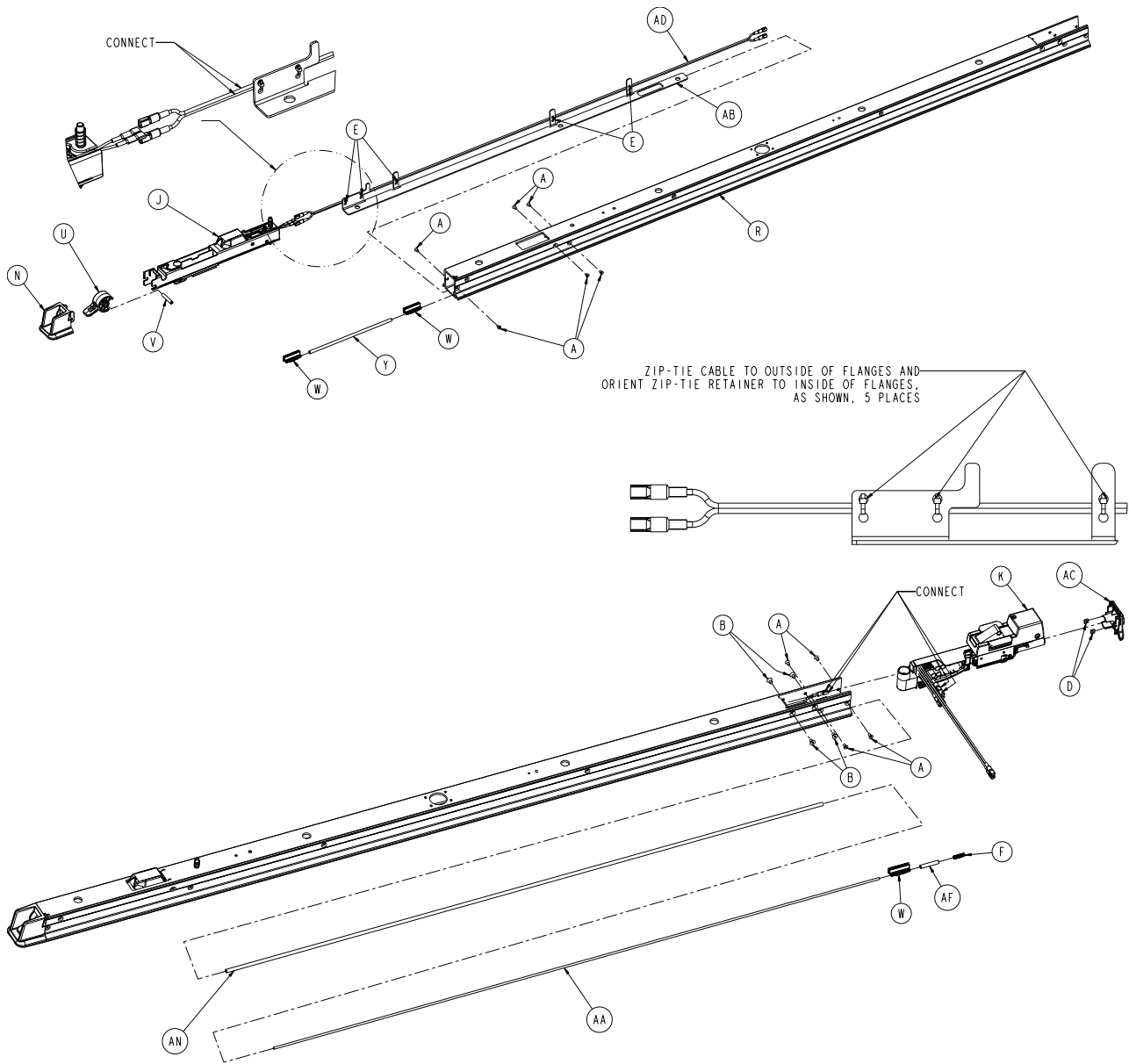
Rev C (Reference only)



Item	Number	Name	Quantity
A	0004-658-000	Socket head cap screw	1
B	0004-662-000	Socket head cap screw	4
C	0004-665-000	Button head cap screw	6
D	6390-001-106	Trolley magnet activator	1
E	6390-001-150	Anchor mounting post	4
F	6390-001-210	Transfer trim, head end, left	1
G	6390-001-211	Transfer trim, head end, right	1
H	6390-001-225	Transfer wear pad, foot end	1
J	6390-001-243	Dead stop bumper	2
K	6390-001-244	Dead stop block, thru hole	2
L	6390-001-246	Dead stop block, threaded	2
M	6390-001-467	Plate, IFU label	2
N	0001-194-000	Flat head cap screw, 1/4-20" x 3/8" hex wrench with patch	4
P	6390-101-108	Floor plate attachment bracket	4
R	6390-001-110	Retainer, attachment bracket, sub anchor	4
T	6390-001-166	Floor plate cover, short	2

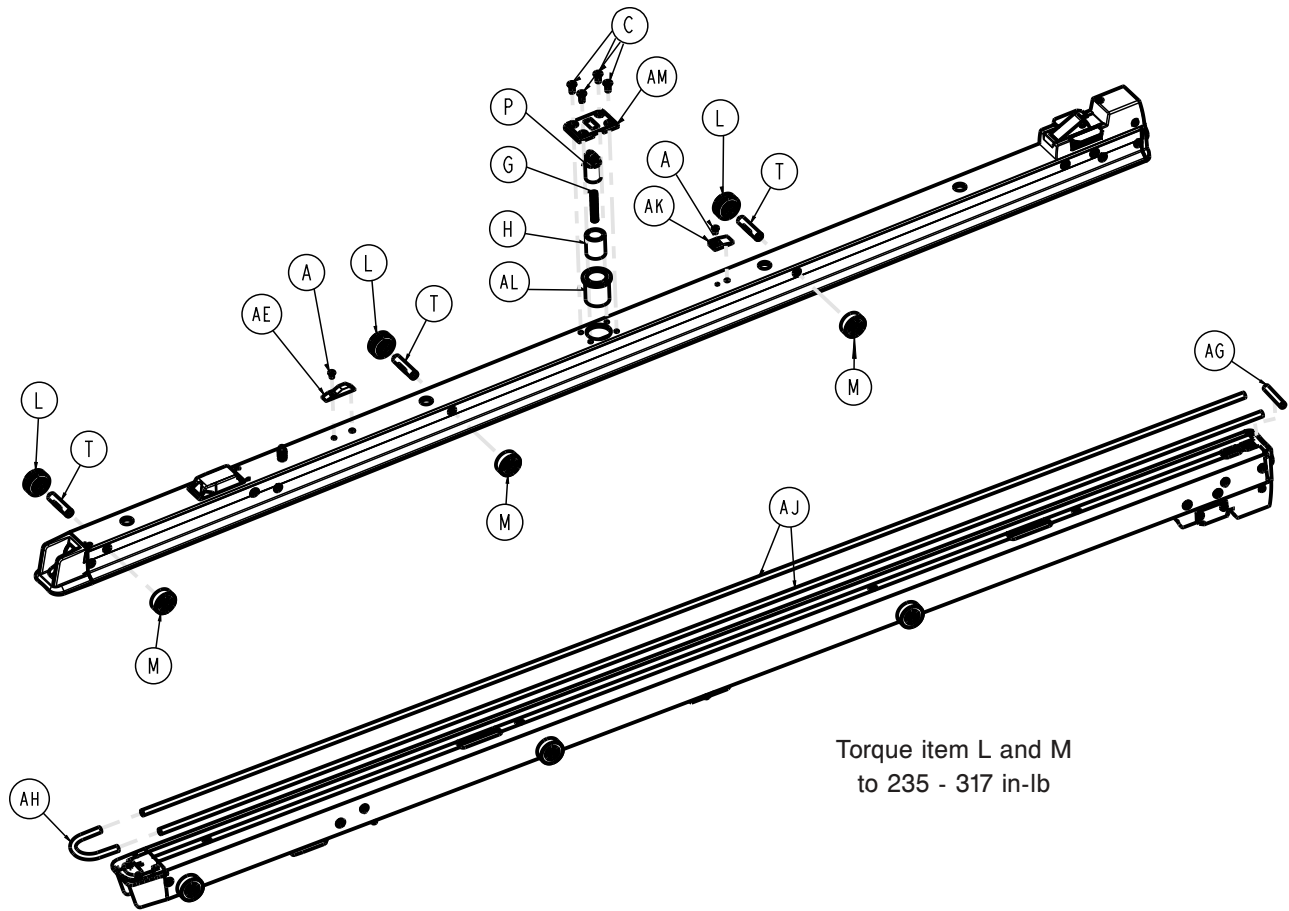
# Anchor assembly

6390-001-011 Rev F (Reference only)





# Anchor assembly



Torque item L and M  
to 235 - 317 in-lb

Item	Number	Name	Quantity
A	0001-193-000	Flat head cap screw	12
B	0001-194-000	Flat head cap screw	4
C	0001-195-000	Flat head cap screw	4
D	0015-087-000	Square nut	2
E	0038-111-000	Zip tie	5
F	0038-887-000	Compression wire	1
G	0038-606-000	Compression wire	1
H	0081-439-000	Bronze bearing	1
J	6390-101-023	<a href="#">Anchor plunger assembly, middle on page 89</a>	1
K	6390-001-024	<a href="#">Anchor pawl assembly, head end on page 85</a>	1
L	6390-001-025	V-guide roller assembly	3
M	6390-001-027	Flat roller assembly	3
N	6390-101-105	Anchor trigger housing, foot end	1
P	639001010074	Transfer lock pin assembly	1
R	6390-001-100	Machined anchor extrusion	1
T	6390-001-103	Anchor roller axle	3
U	6390-001-104	Anchor trigger	1
V	6390-001-112	Anchor pivot pin, threaded	1
W	6390-001-113	Anchor drive block	3

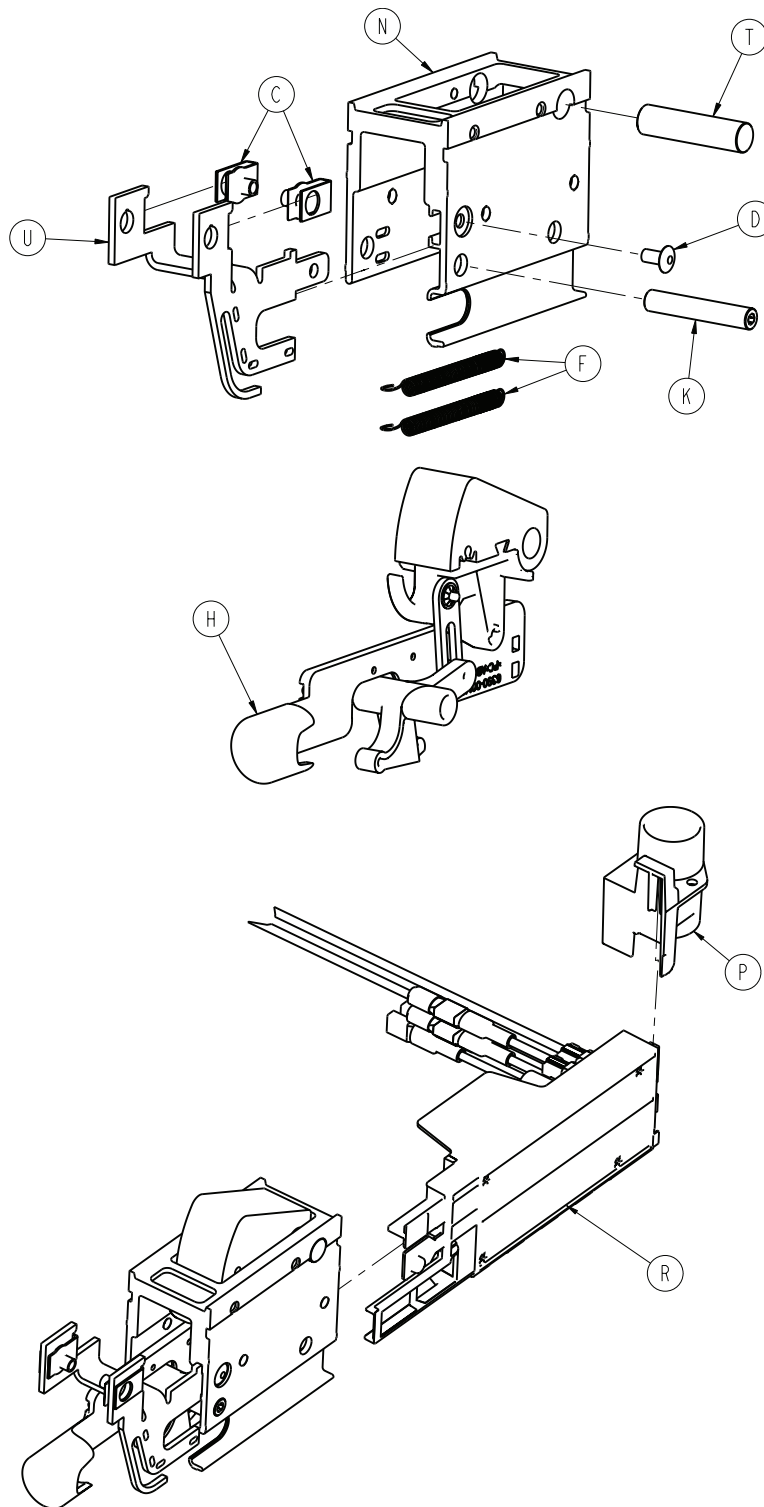
# Anchor assembly

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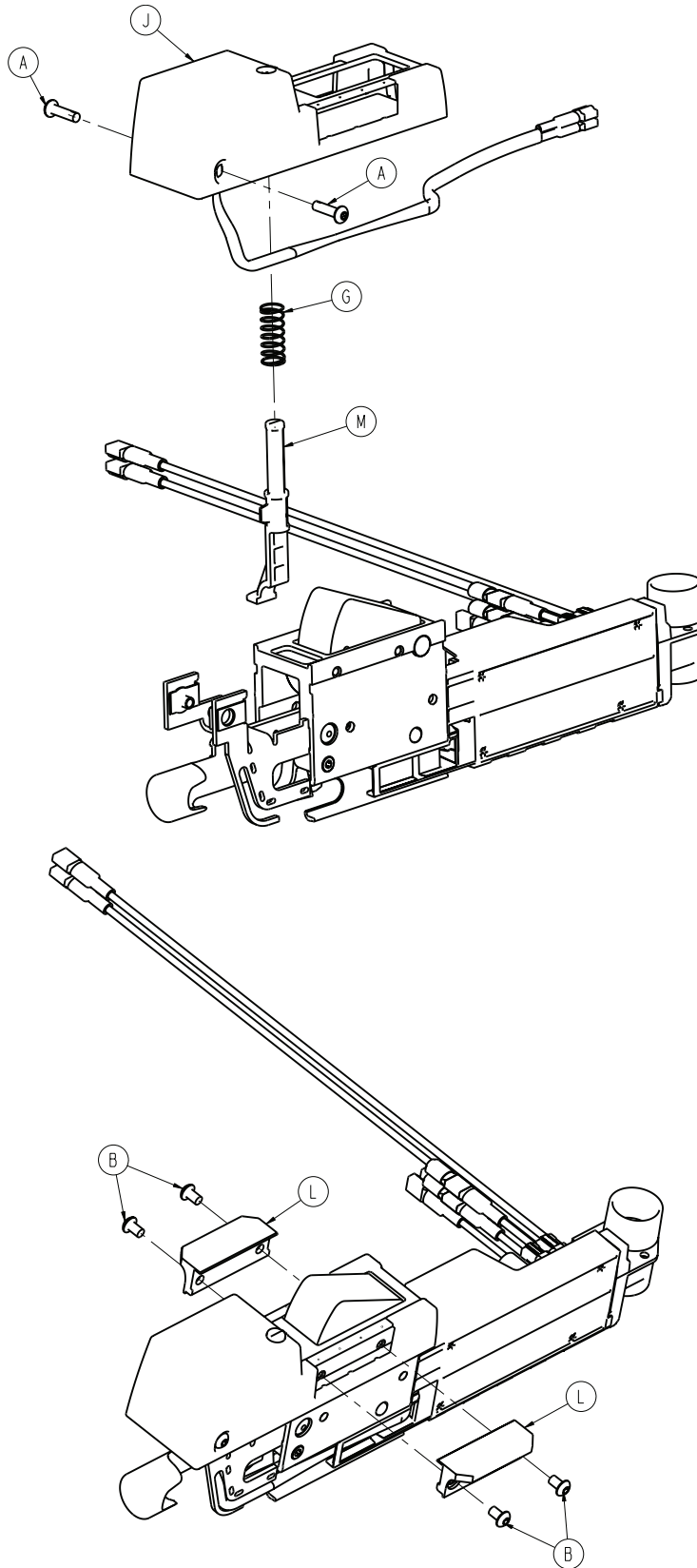
Item	Number	Name	Quantity
Y	6390-001-114	Anchor drive rod, medium	1
AA	6390-001-186	Anchor drive rod, long	1
AB	6390-001-120	Wire routing and washer bracket	1
AC	6390-001-136	Anchor end cap, rear	1
AD	6390-001-139	Cot charging cable	1
AE	6390-001-144	Trolley to transfer lock ramp	1
AF	6390-001-152	Anchor rod drive, rear	1
AG	6390-001-179	Anchor seal, head end	1
AH	6390-001-180	Anchor seal, foot end	1
AJ	6390-001-181	Anchor seal, side	2
AK	6390-001-193	Detent spring ramp	1
AL	6390-101-195	Transfer lock housing	1
AM	6390-101-196	Transfer lock cap	1
AN	6390-001-190	Anchor drive rod, bearing sleeve, long	1

# Anchor pawl assembly, head end

6390-001-024 Rev C (Reference only)

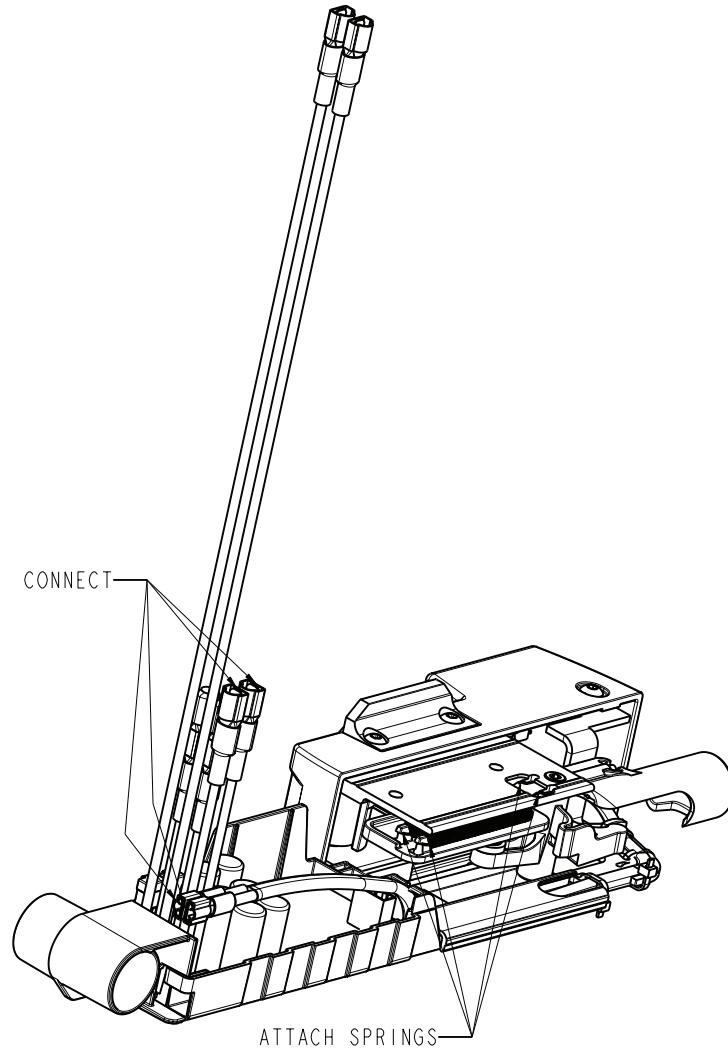


# Anchor pawl assembly, head end



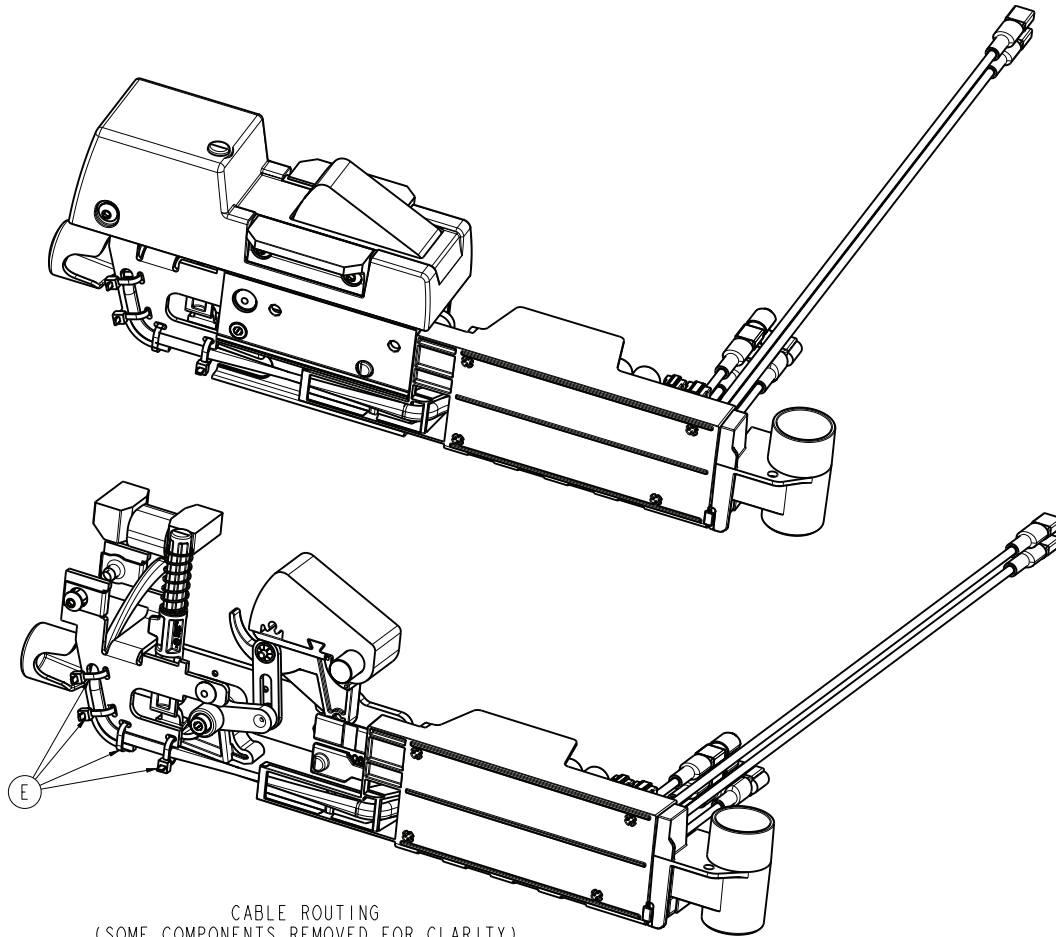
# Anchor pawl assembly, head end

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SPRING ATTACHMENT  
(SOME COMPONENTS REMOVED FOR CLARITY)

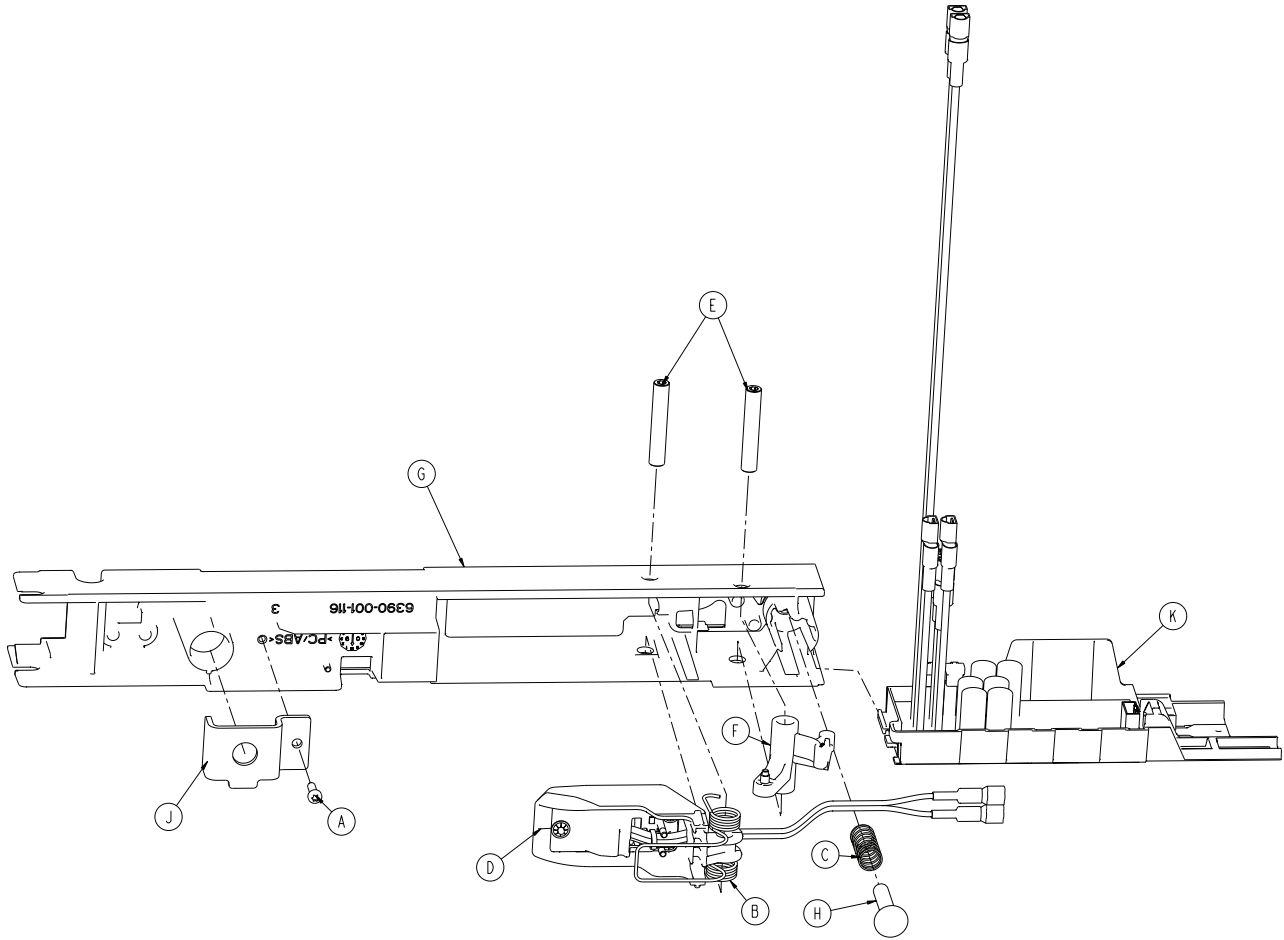
# Anchor pawl assembly, head end



Item	Number	Name	Quantity
A	0004-396-000	Button head cap screw	2
B	0004-665-000	Button head cap screw	4
C	0018-009-000	Extruded "U" nut	2
D	0025-079-000	Dome head rivet	1
E	0038-111-000	Zip tie	4
F	0038-885-000	Pawl return spring	2
G	0038-888-000	Compression, wire	1
H	6390-001-070	Manual release mechanism	1
J	6390-001-071	Anchor housing assembly, head end	1
K	6390-001-112	Anchor pivot pin, threaded	1
L	6390-001-123	Retainer wing	2
M	6390-001-124	Anchor actuator pin, head end	1
N	6390-001-125	Anchor housing, head end	1
P	6390-001-137	Wire protector	1
R	6390-001-147	Inductive primary board	1
T	6390-001-149	Pawl pivot pin	1
U	6390-001-164	Wire management strap, head end	1

# Anchor plunger assembly, middle

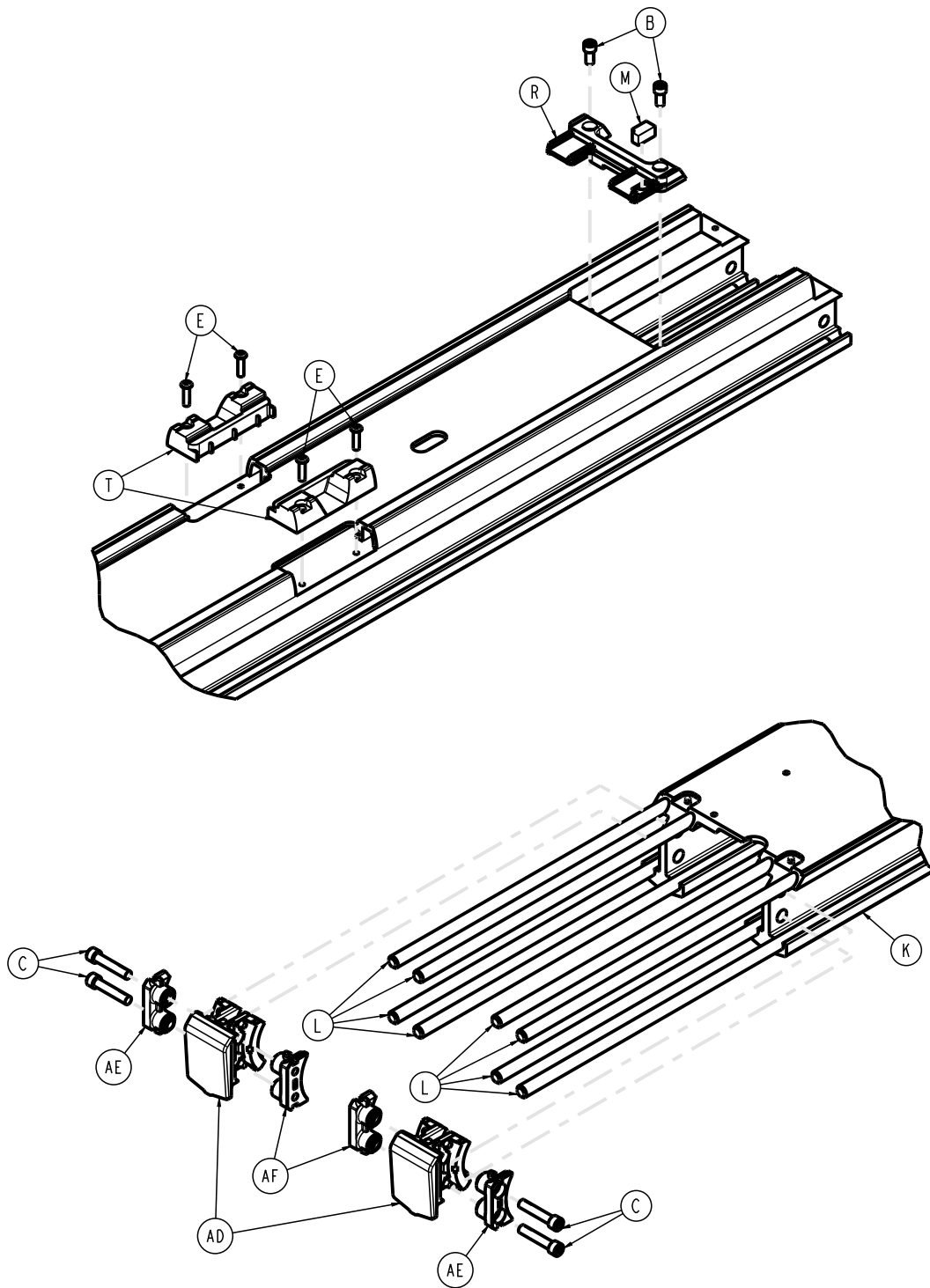
6390-101-023 Rev A (Reference only)



Item	Number	Name	Quantity
A	0023-163-000	Screw	1
B	0038-886-000	Torsion spring - anchor coil housing	1
C	0038-888-000	Compression, wire	1
D	6390-001-030	Anchor coil assembly, mid	1
E	6390-001-112	Anchor pivot pin, threaded	2
F	6390-001-115	Pivot actuator	1
G	6390-001-116	Anchor housing, middle	1
H	6390-001-117	Anchor actuator pin, middle	1
J	6390-001-127	Anchor bolster plate, foot end	1
K	6390-001-147	Inductive primary board	1

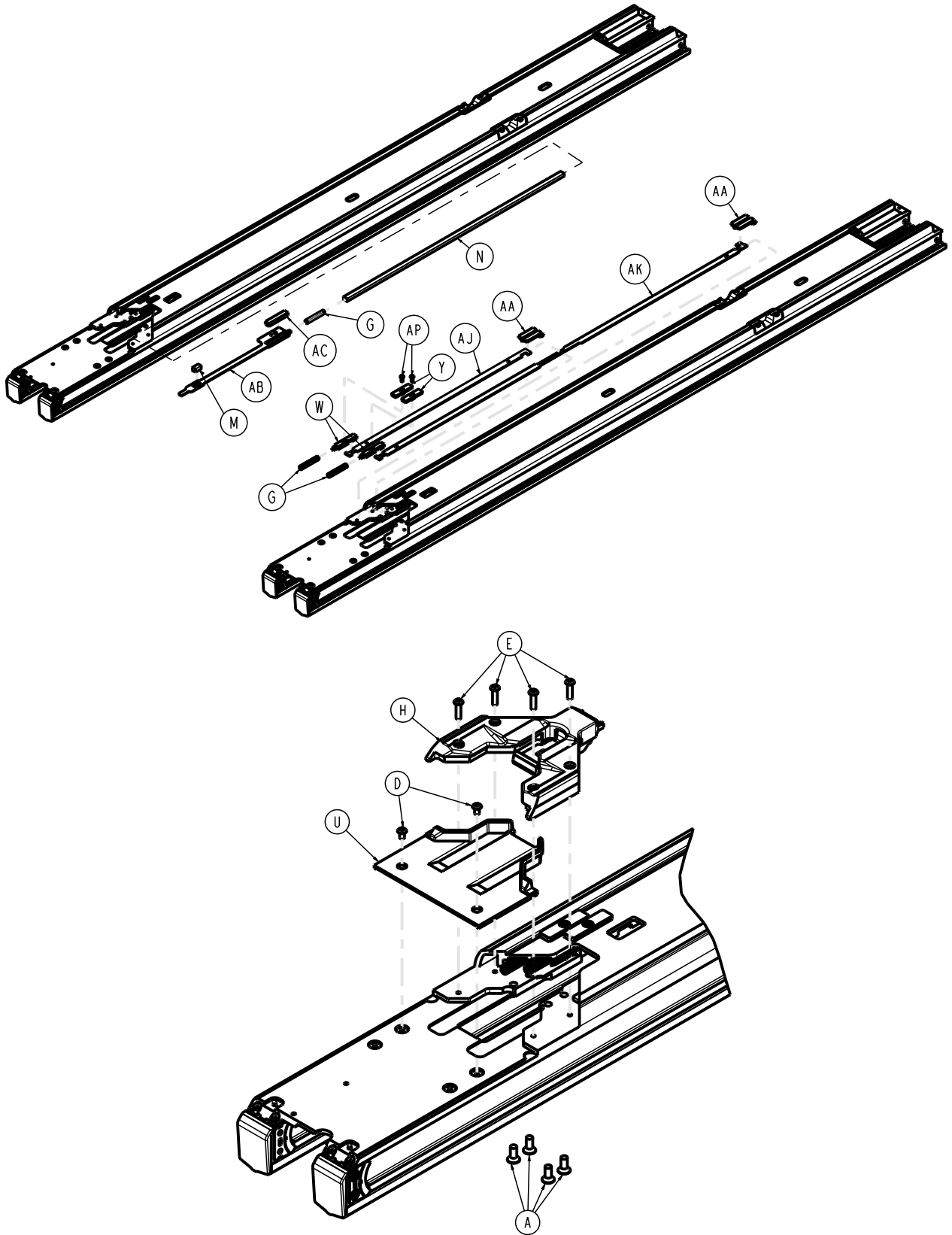
# Transfer assembly

6390-101-012 Rev C (Reference only)



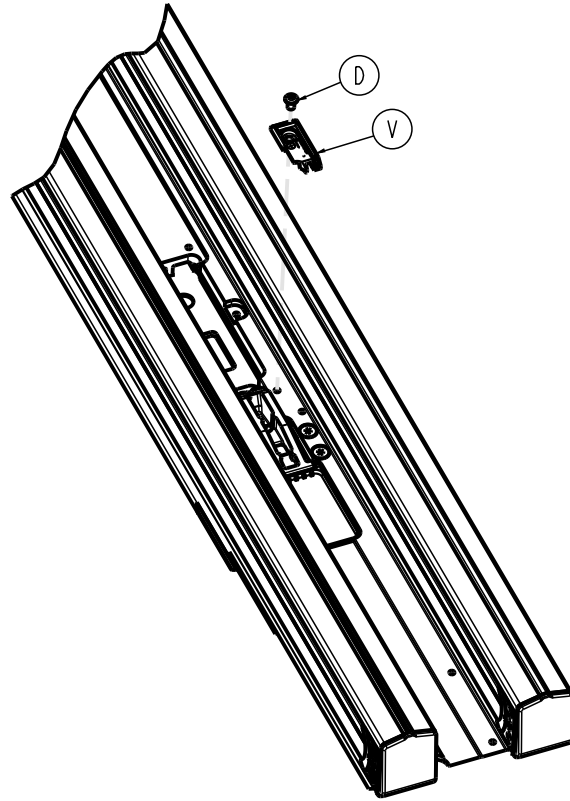


# Transfer assembly

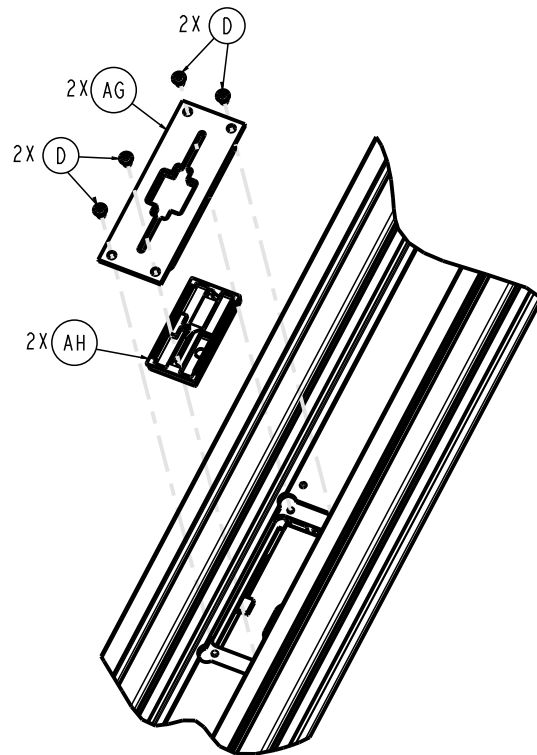
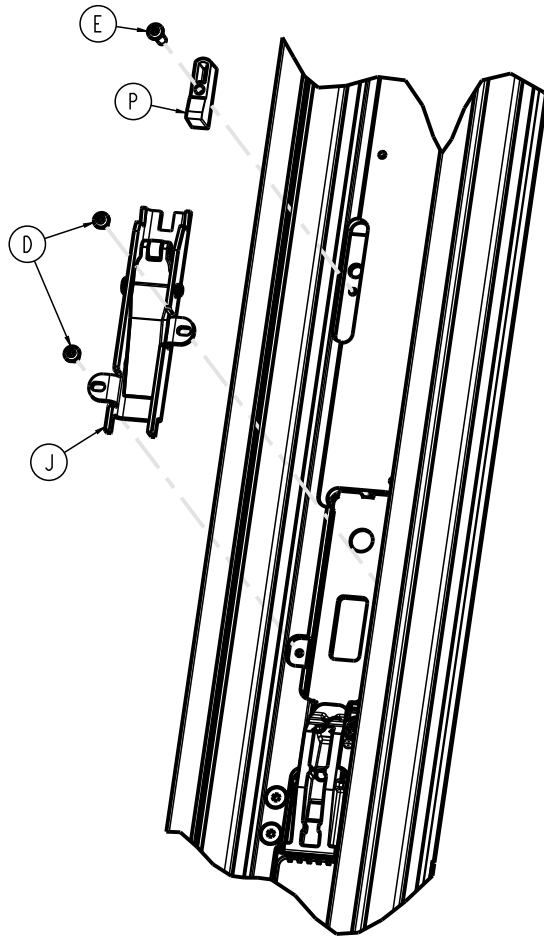


# Transfer assembly

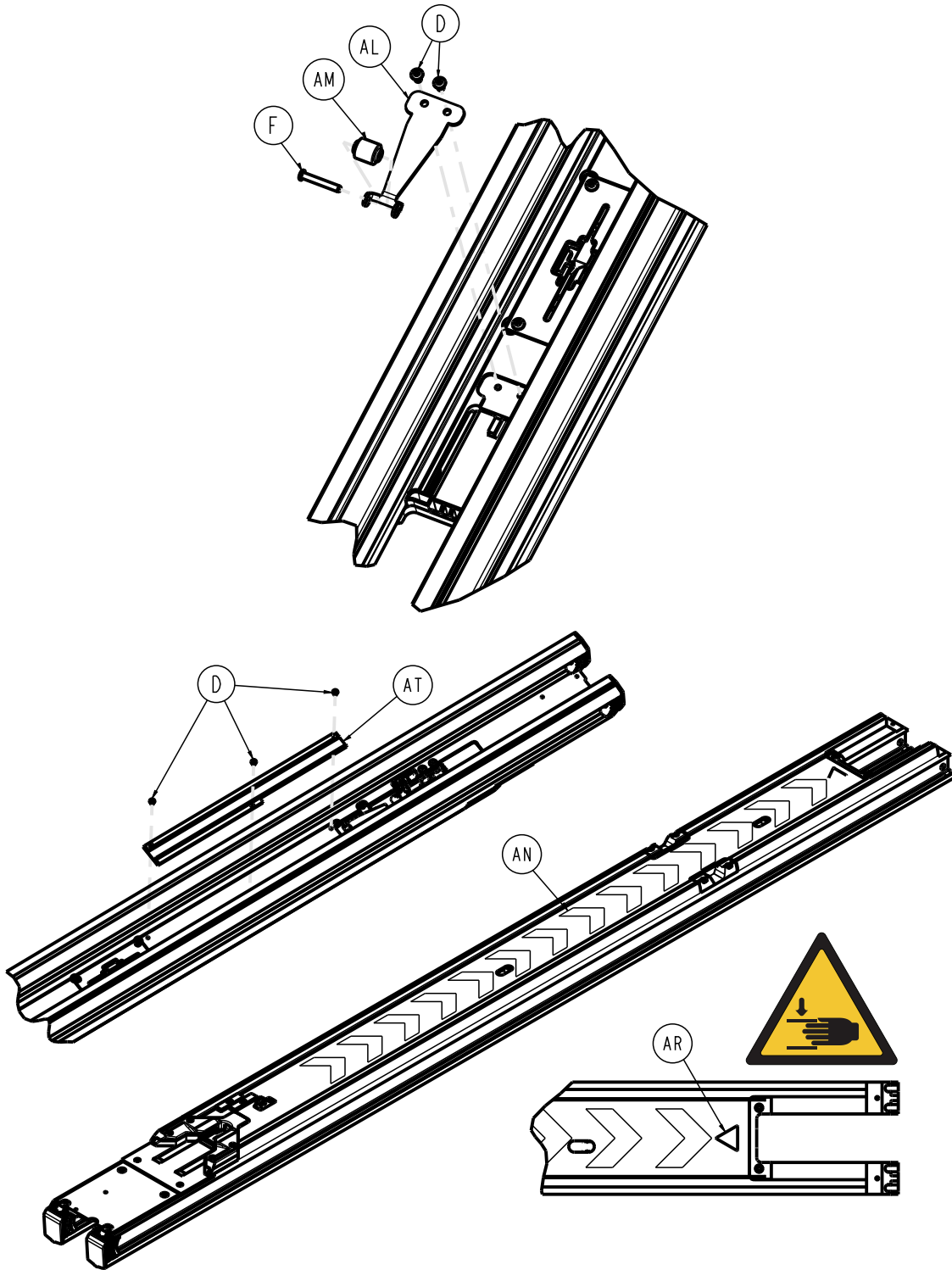
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# Transfer assembly



# Transfer assembly



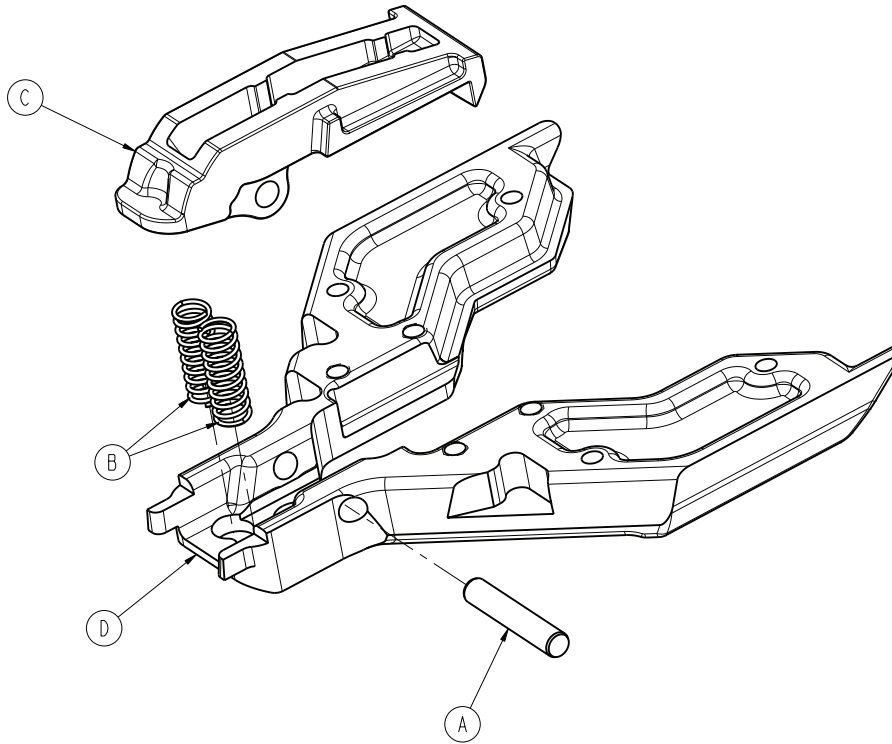
Item	Number	Name	Quantity
A	0001-195-000	Flat head cap screw	4
B	0004-660-000	Socket head cap screw	2
C	0004-662-000	Socket head cap screw	4
D	0004-665-000	Button head cap screw	18

# Transfer assembly

Item	Number	Name	Quantity
E	0004-666-000	Button head cap screw	9
F	0027-778-000	Slic pin	1
G	0038-606-000	Compression wire	3
H	6390-101-018	Foot end fastener assembly ( <a href="#">Foot end fastener assembly on page 96</a> )	1
J	6390-001-021	Transfer trolley lock assembly ( <a href="#">Transfer trolley lock assembly on page 97</a> )	1
K	6390-001-200	Transfer extrusion	1
L	6390-001-201	Roller rail rod	8
M	6390-001-203	Transfer magnet	2
N	6390-001-204	Transfer magnet spacer	1
P	6390-001-205	Magnet mover trigger	1
R	6390-001-207	Transfer back cover	1
T	6390-001-208	Mid position head end cutout cap	2
U	6390-001-213	Inductive charger cover plate	1
V	6390-001-217	Lock latch indicator slide block	1
W	6390-001-230	Transfer lock trigger base	2
Y	6390-001-231	Transfer lock trigger	2
AA	6390-001-233	Transfer lock slide	2
AB	6390-001-240	Magnet mover	1
AC	6390-001-242	Magnet mover glide	1
AD	6390-001-243	Dead stop bumper	2
AE	6390-001-244	Dead stop block, thru hole	2
AF	6390-001-246	Dead stop block, threaded	2
AG	6390-101-260	Transfer lock plate	2
AH	6390-001-261	Transfer lock override slide	2
AJ	6390-001-266	Transfer lock link, short	1
AK	6390-001-267	Transfer lock link, long	1
AL	6390-001-269	Detent spring	1
AM	6390-001-270	Detent roller	1
AN	6390-001-299	Label, chevron	1
AP	0004-585-000	Button head cap screw	2
AR	6506-001-114	Label, warning, crushing of hands	1
AT	6390-001-276	Transfer wear pad	1

# Foot end fastener assembly

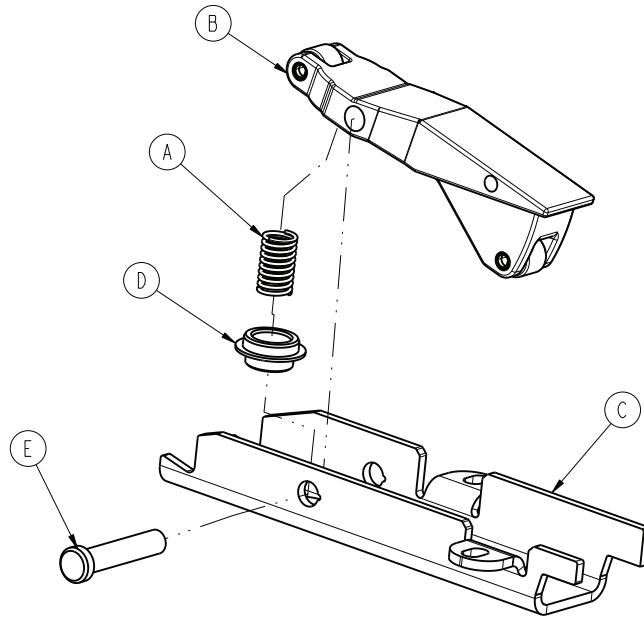
6390-101-018 Rev A (Reference only)



Item	Number	Name	Quantity
A	0026-556-000	Dowel pin	1
B	0038-890-000	Compression, wire	2
C	6390-101-224	Foot end fastener hook	1
D	6390-001-220	Foot end fastener guide	1

# Transfer trolley lock assembly

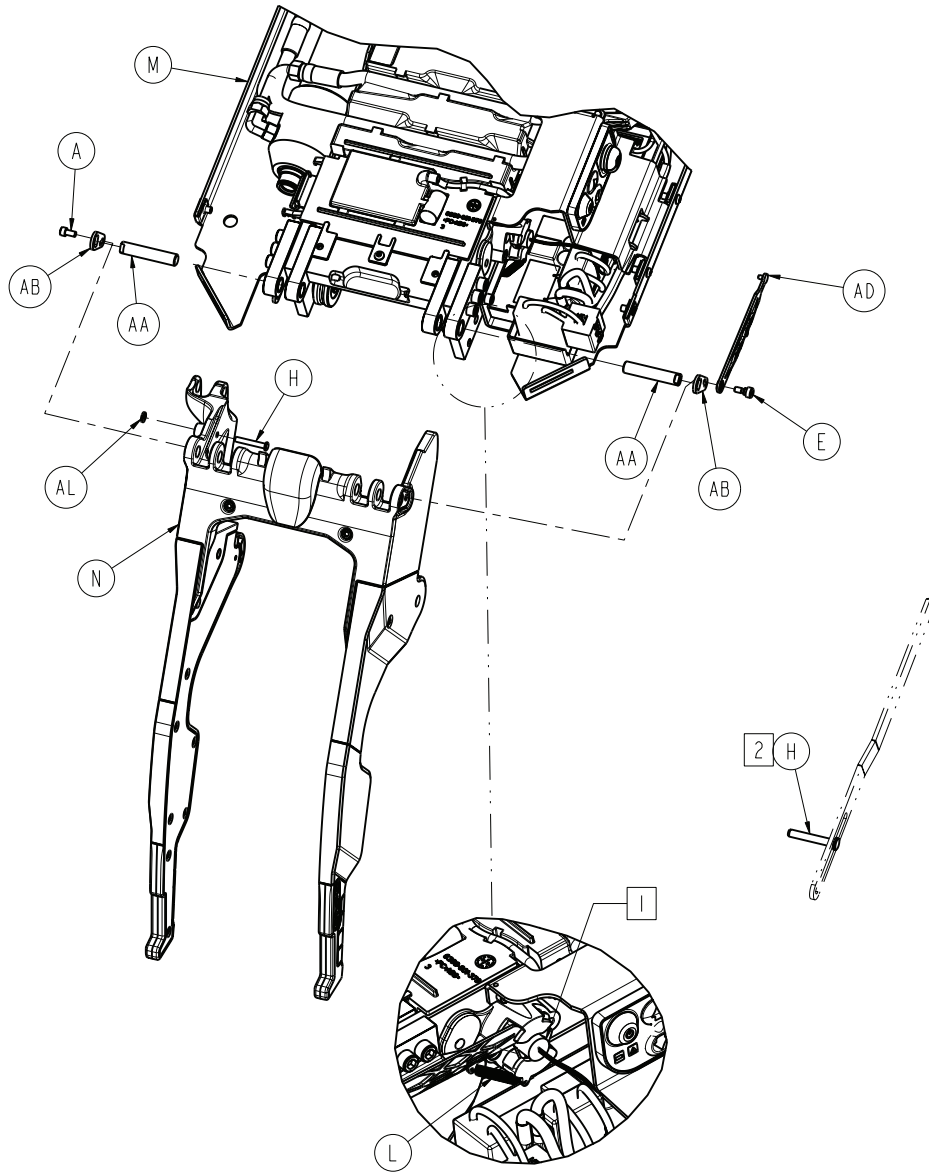
6390-001-021 Rev A (Reference only)



Item	Number	Name	Quantity
A	0038-890-000	Compression, wire	1
B	6390-001-073	Transfer trolley lock assembly	1
C	6390-001-250	Transfer trolley bracket	1
D	6390-001-252	Transfer trolley lock spring cap	1
E	6390-001-259	Trolley lock pivot pin	1

# Trolley assembly

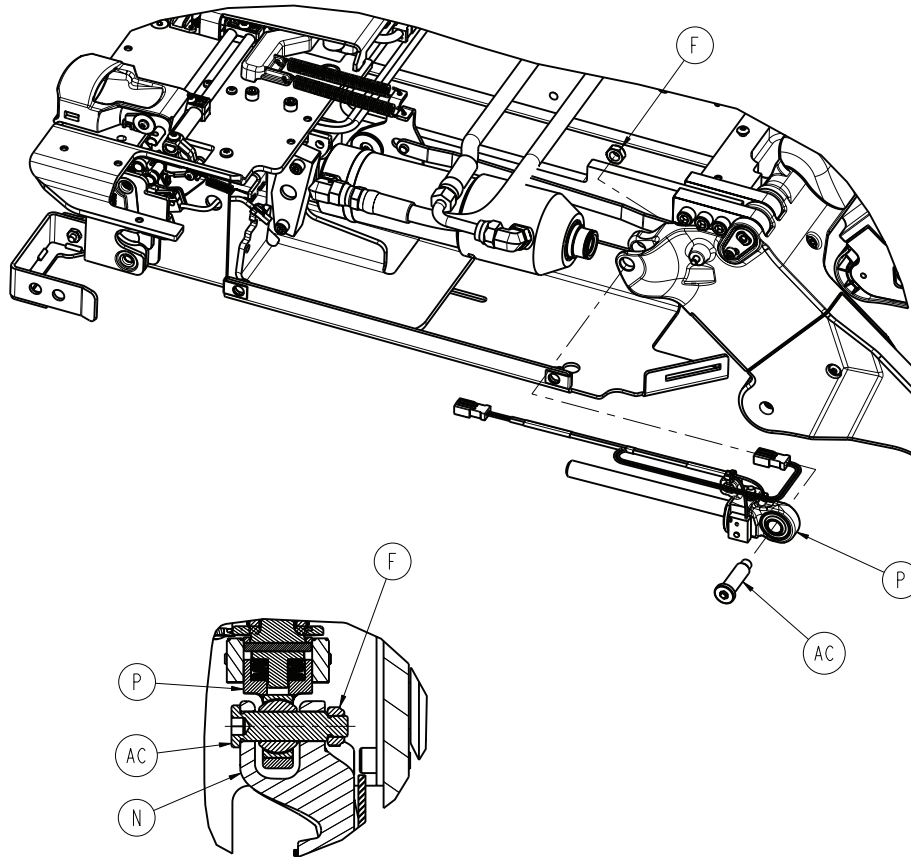
6390-001-013 Rev G (Reference only)



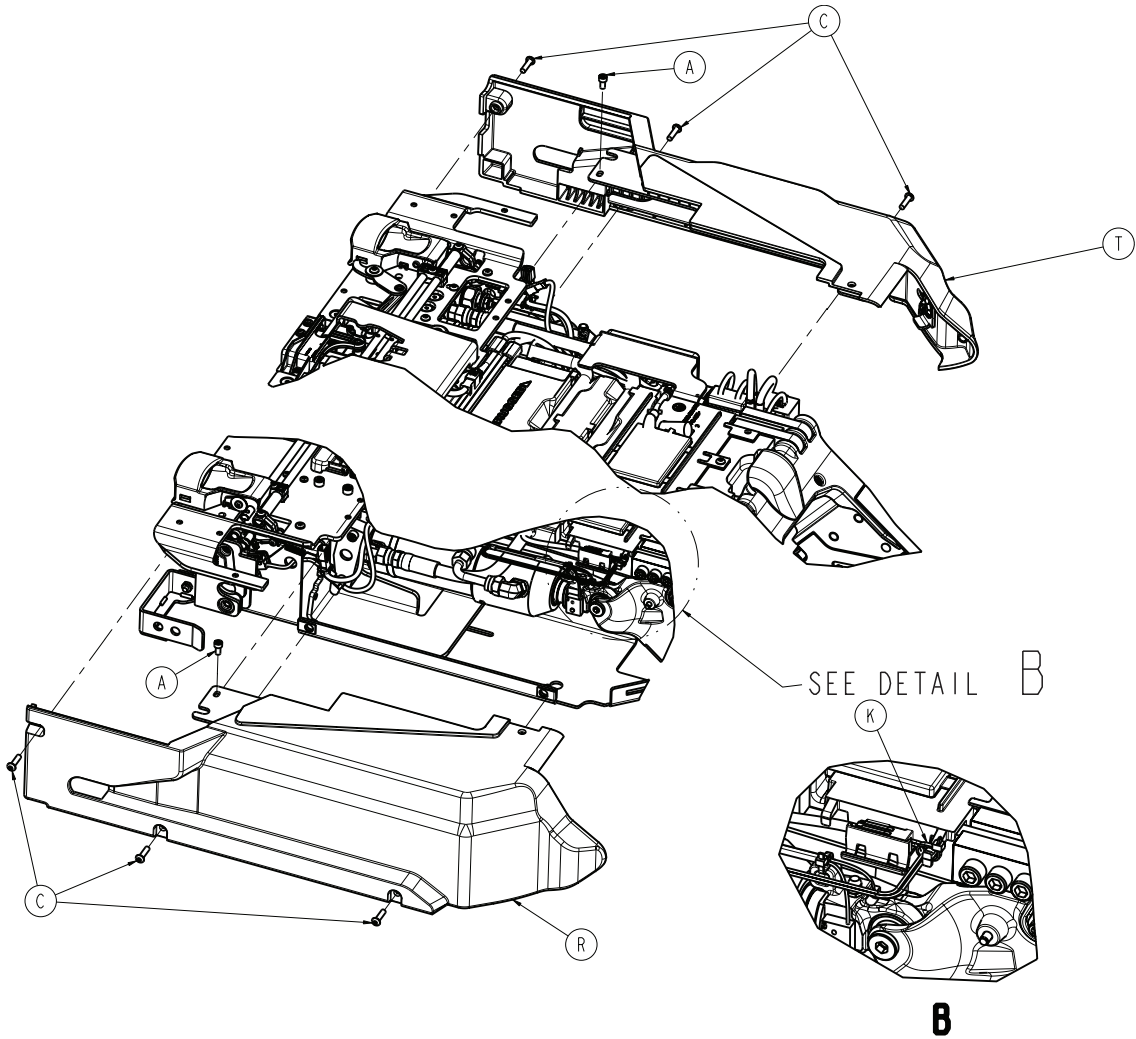


# Trolley assembly

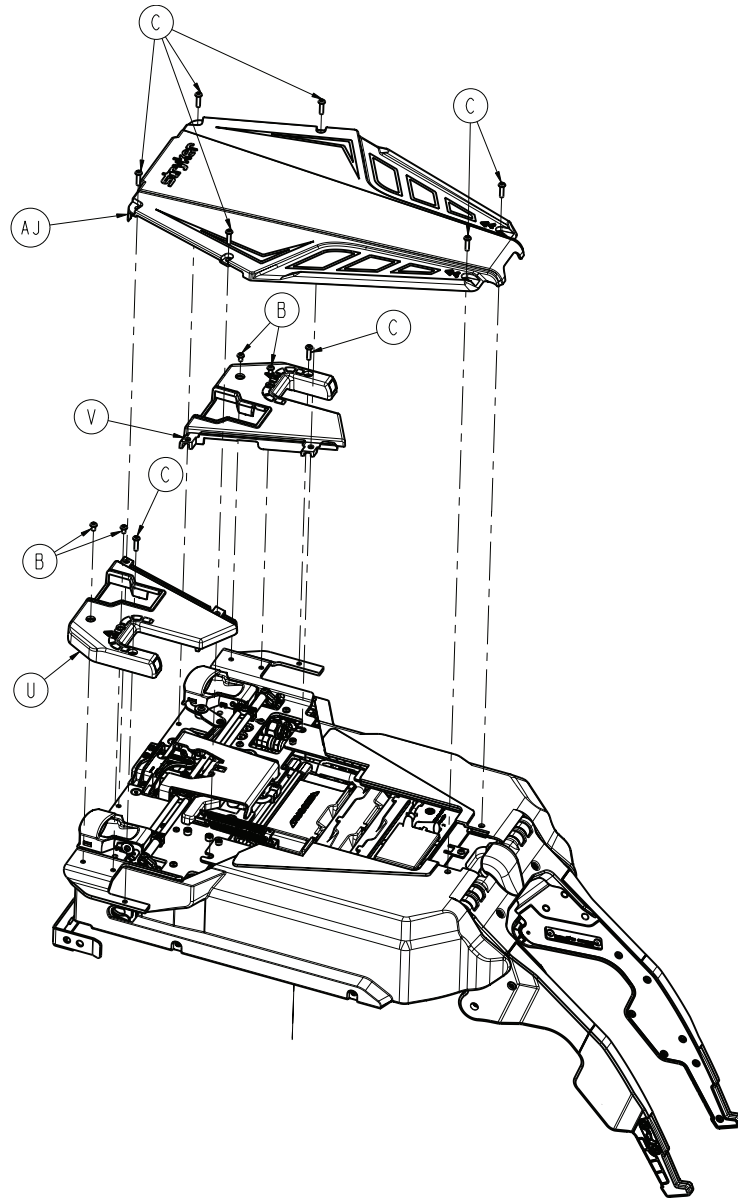
1. Angle sensor to be connected to Item AD with indicating dot oriented to top.
2. Item H orientation.



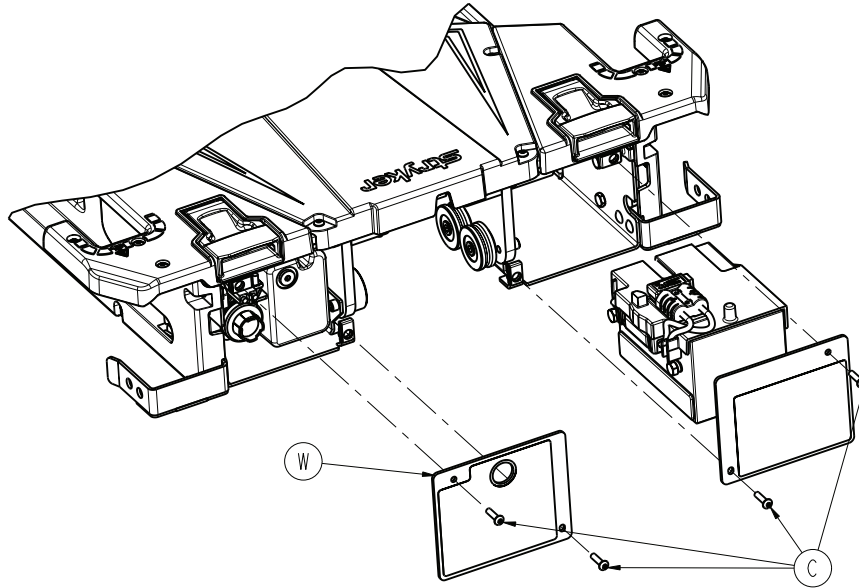
# Trolley assembly



# Trolley assembly



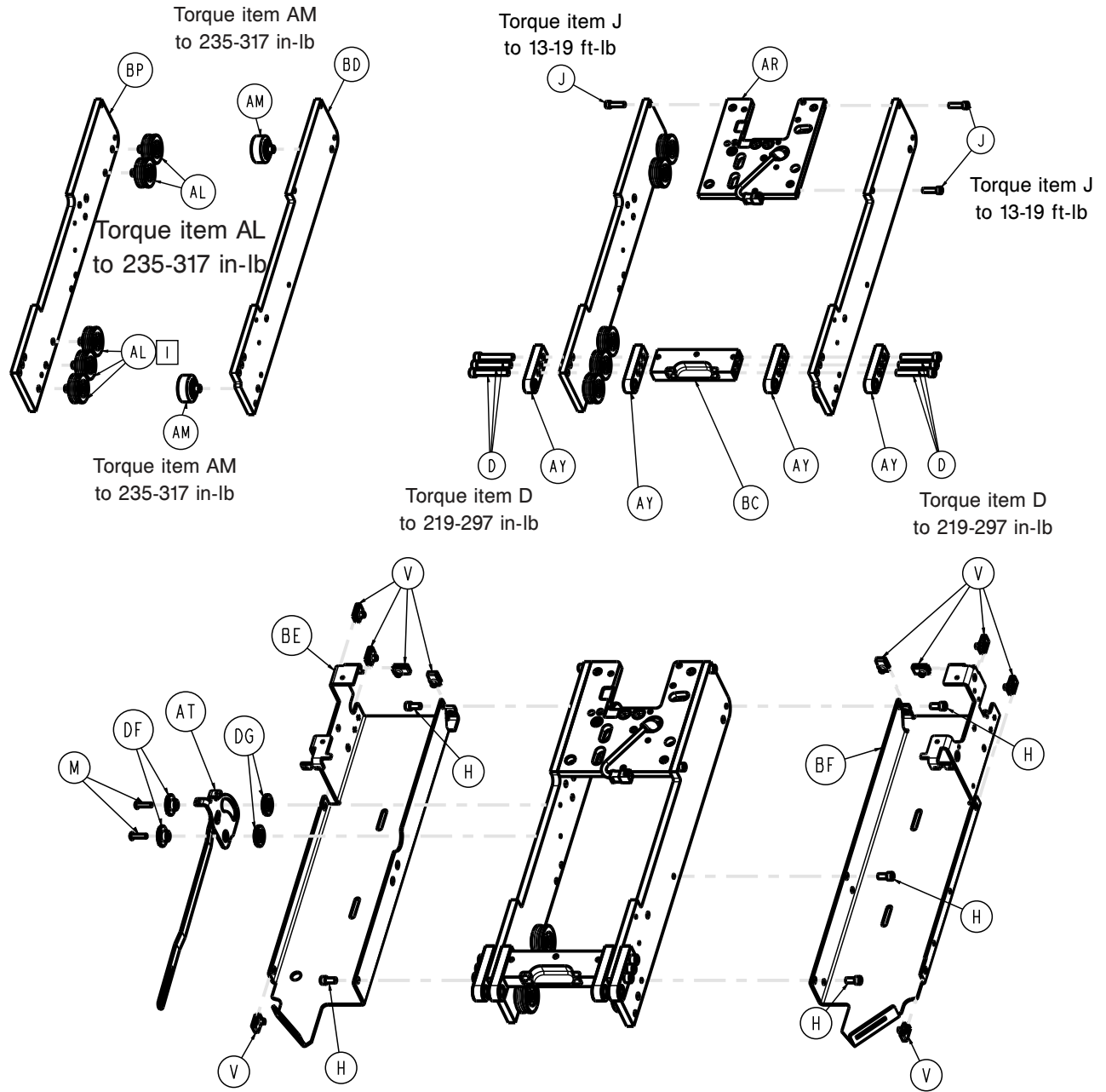
# Trolley assembly



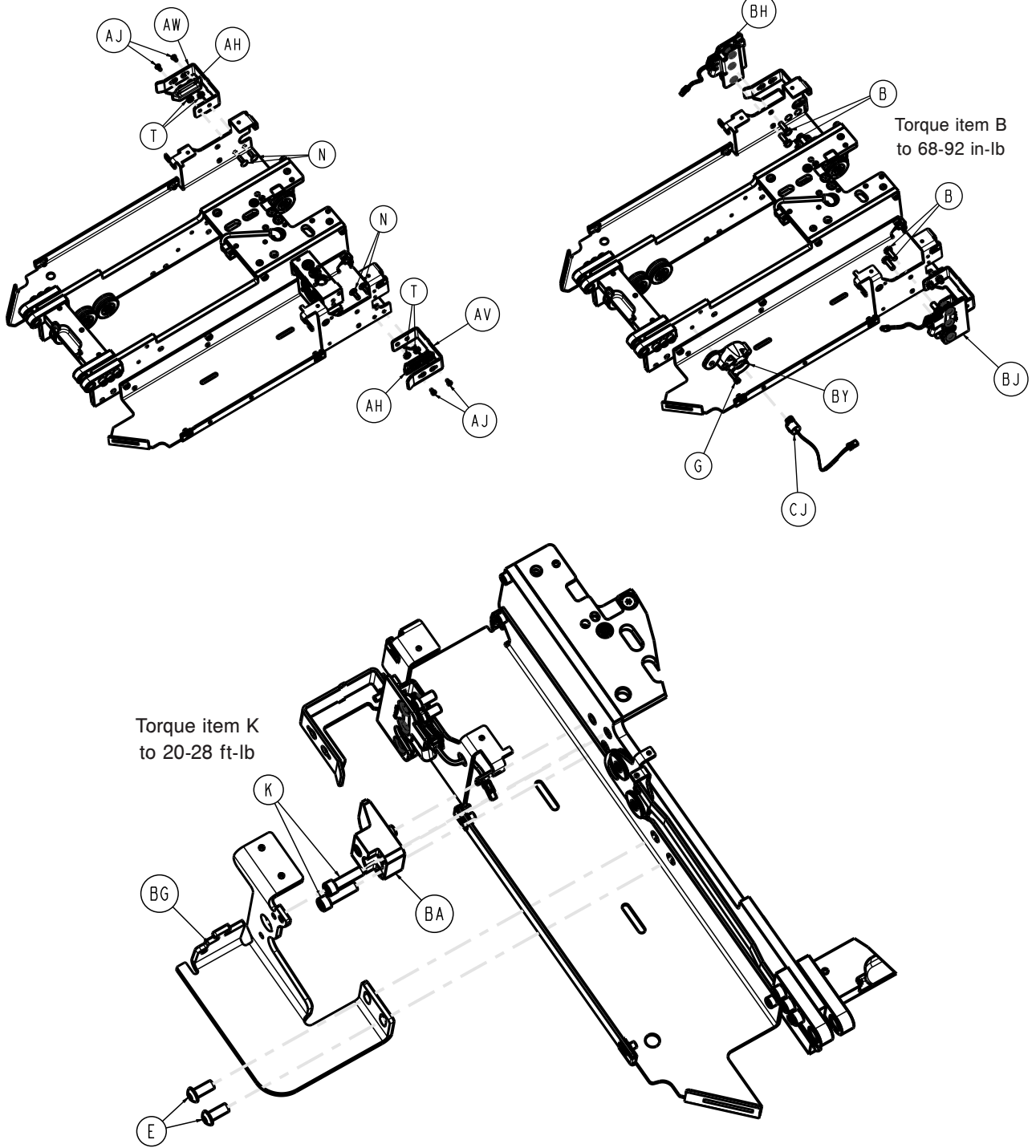
Item	Number	Name	Quantity
A	0004-658-000	Socket head cap screw	3
B	0004-665-000	Button head cap screw	4
C	0004-666-000	Button head cap screw	16
E	0008-082-000	Socket head set screw	1
F	0016-132-000	Nylock hex nut	1
H	0027-778-000	Slit pin	1
K	0038-111-000	Zip tie	1
L	0038-896-000	Extension spring	1
M	6390-001-015	<a href="#">Trolley main frame on page 103</a>	1
N	6390-001-016	<a href="#">Trolley arm assembly on page 124</a>	1
P	6390-001-040	Hydraulic cylinder rod end assembly	1
R	6390-001-041	Side cover, right	1
T	6390-001-042	Side cover, left	1
U	6390-101-047	Wing cover, right	1
V	6390-101-048	Wing cover, left	1
W	6390-101-062	Trolley rear cover plate, left	1
Y	6390-101-063	Trolley rear cover plate, right	1
AA	6390-001-309	Arm hinge pin	2
AB	6390-001-311	Hinge cover plate	2
AC	6390-001-313	Cylinder clevis pin	1
AD	6390-001-377	Angle sensor link	1
AJ	6390-101-420	Trolley top cover	1
AL	0011-454-000	Plain washer	1

# Trolley main frame

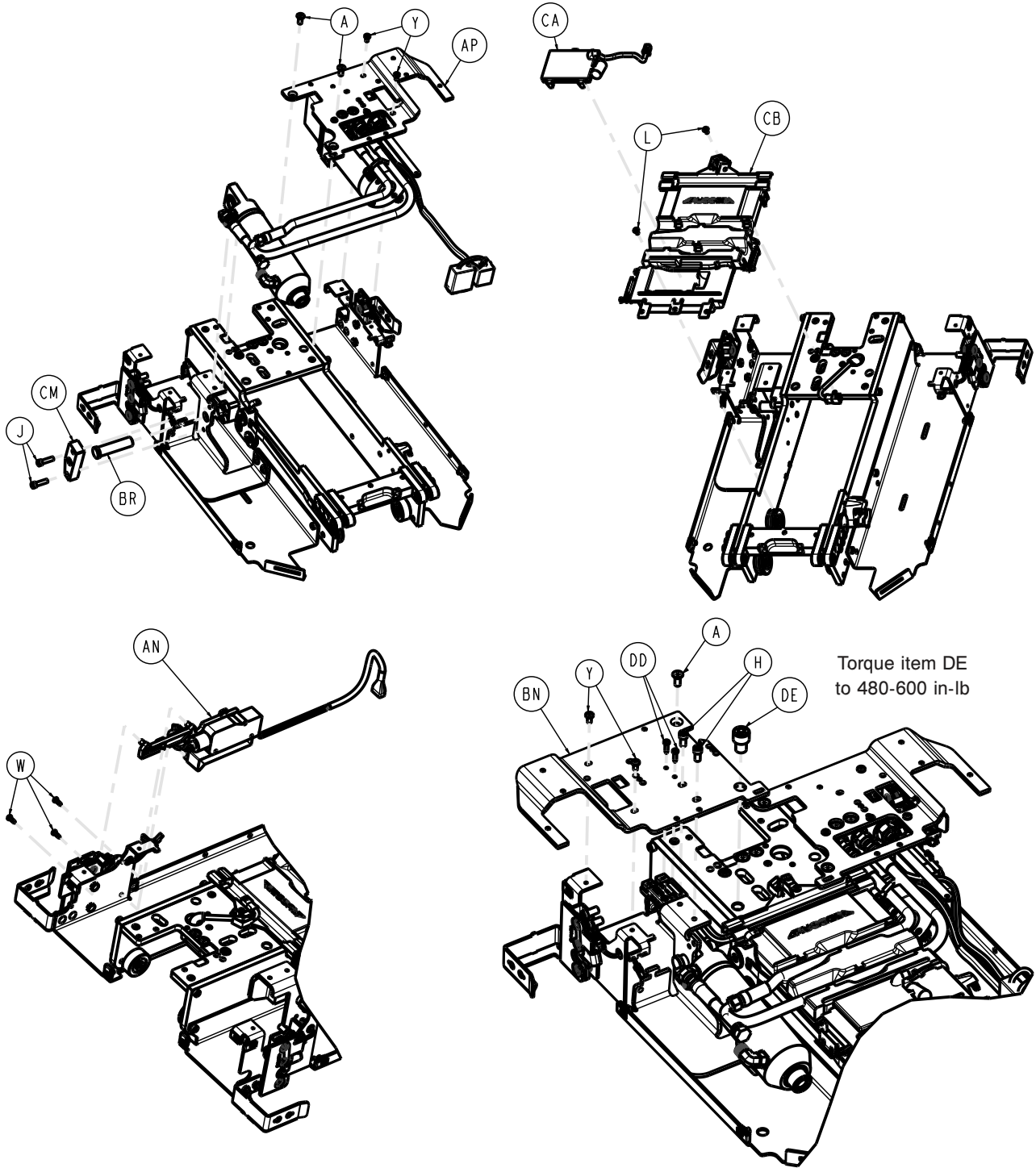
6390-001-015 Rev AA (Reference only)



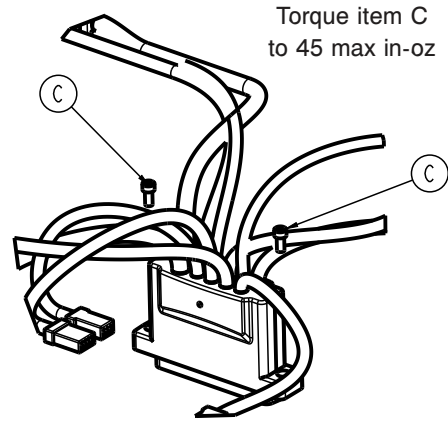
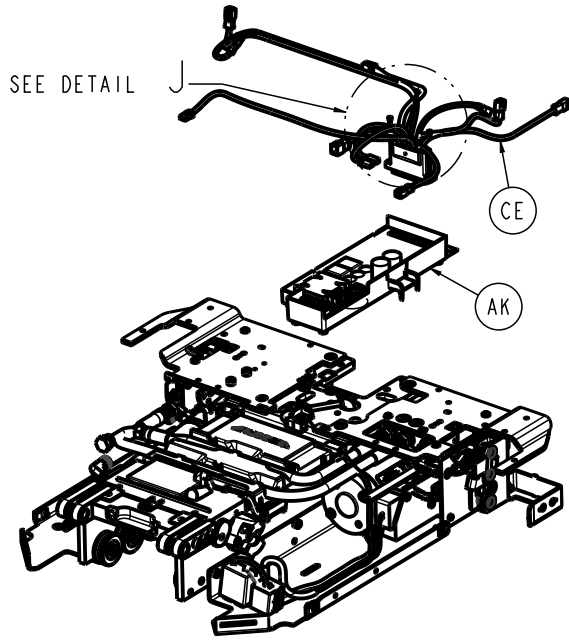
# Trolley main frame



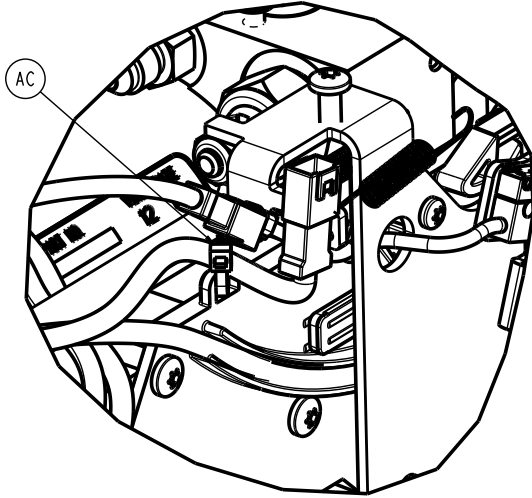
# Trolley main frame



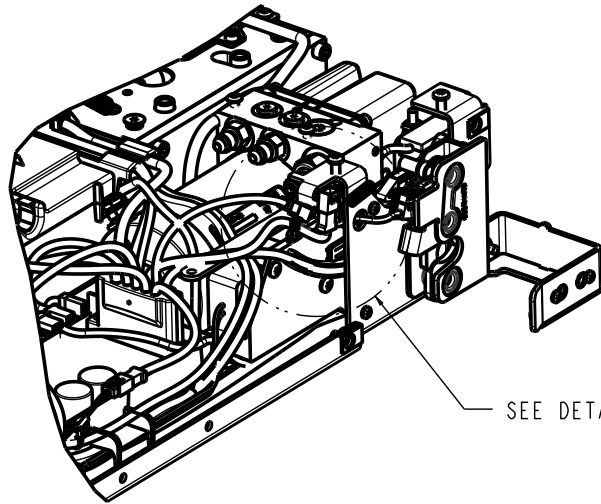
# Trolley main frame



DETAIL J



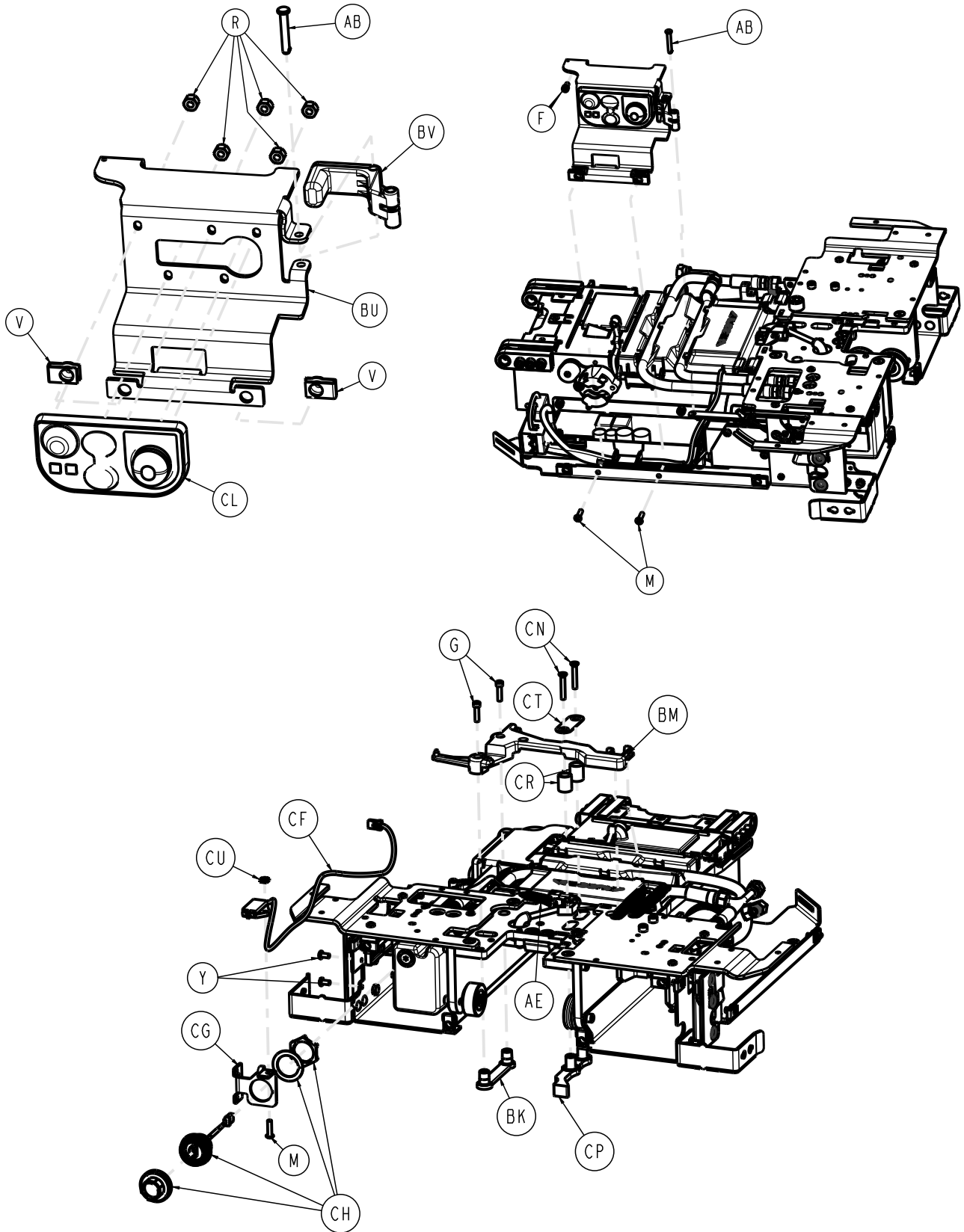
DETAIL A



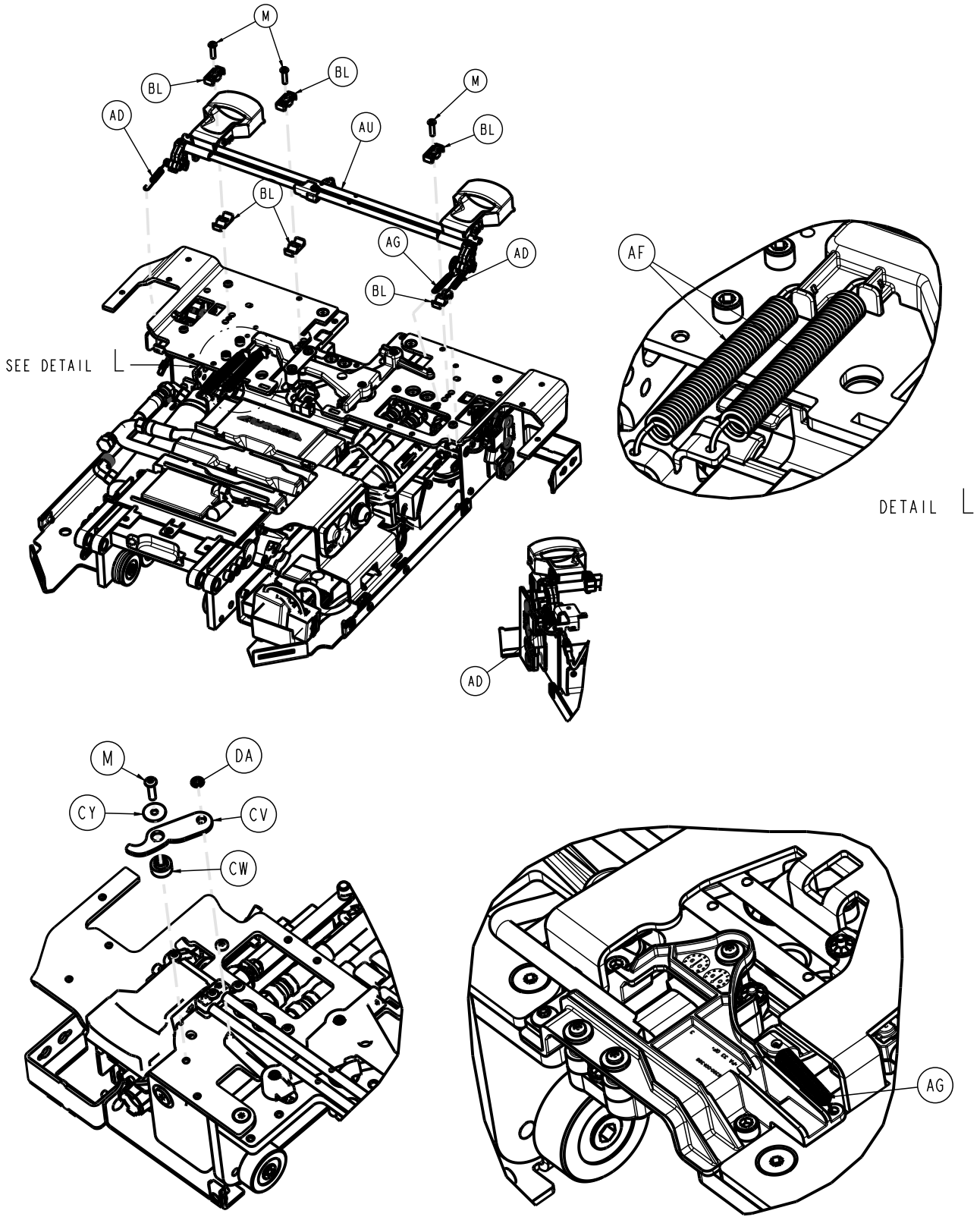
SEE DETAIL A



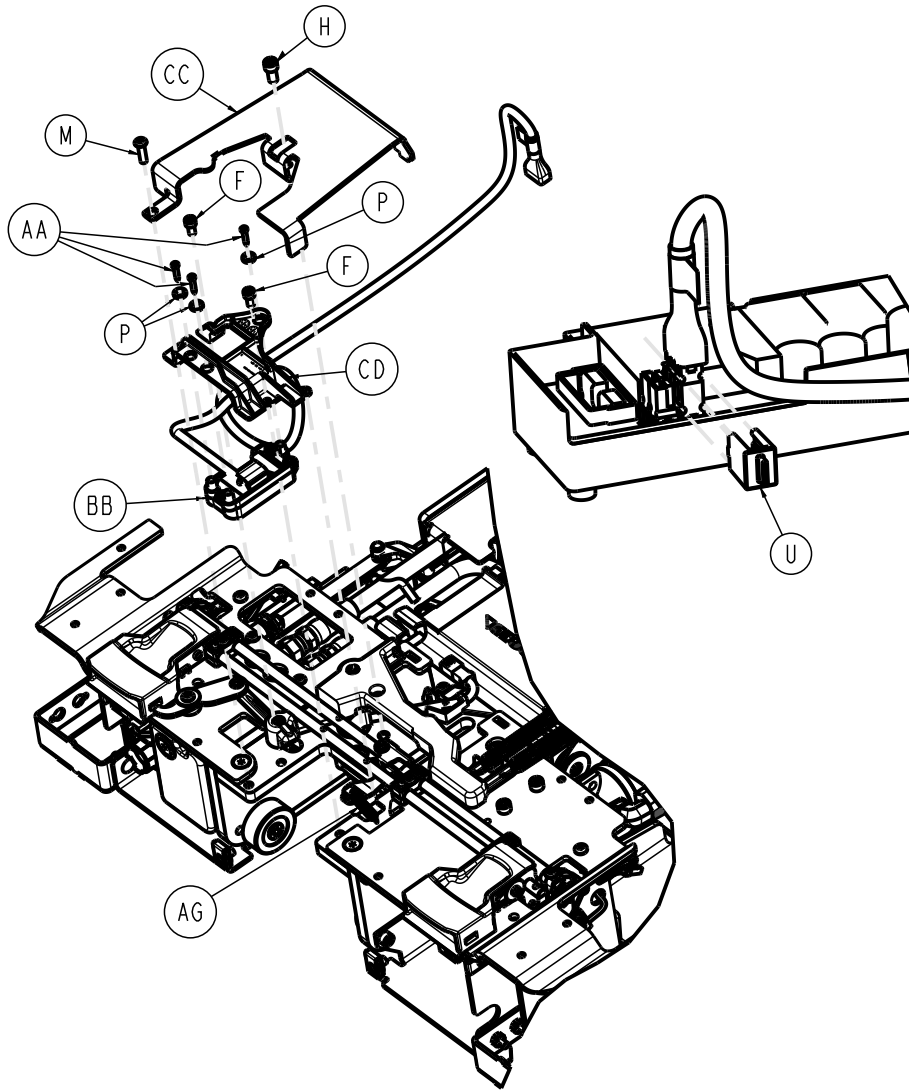
# Trolley main frame



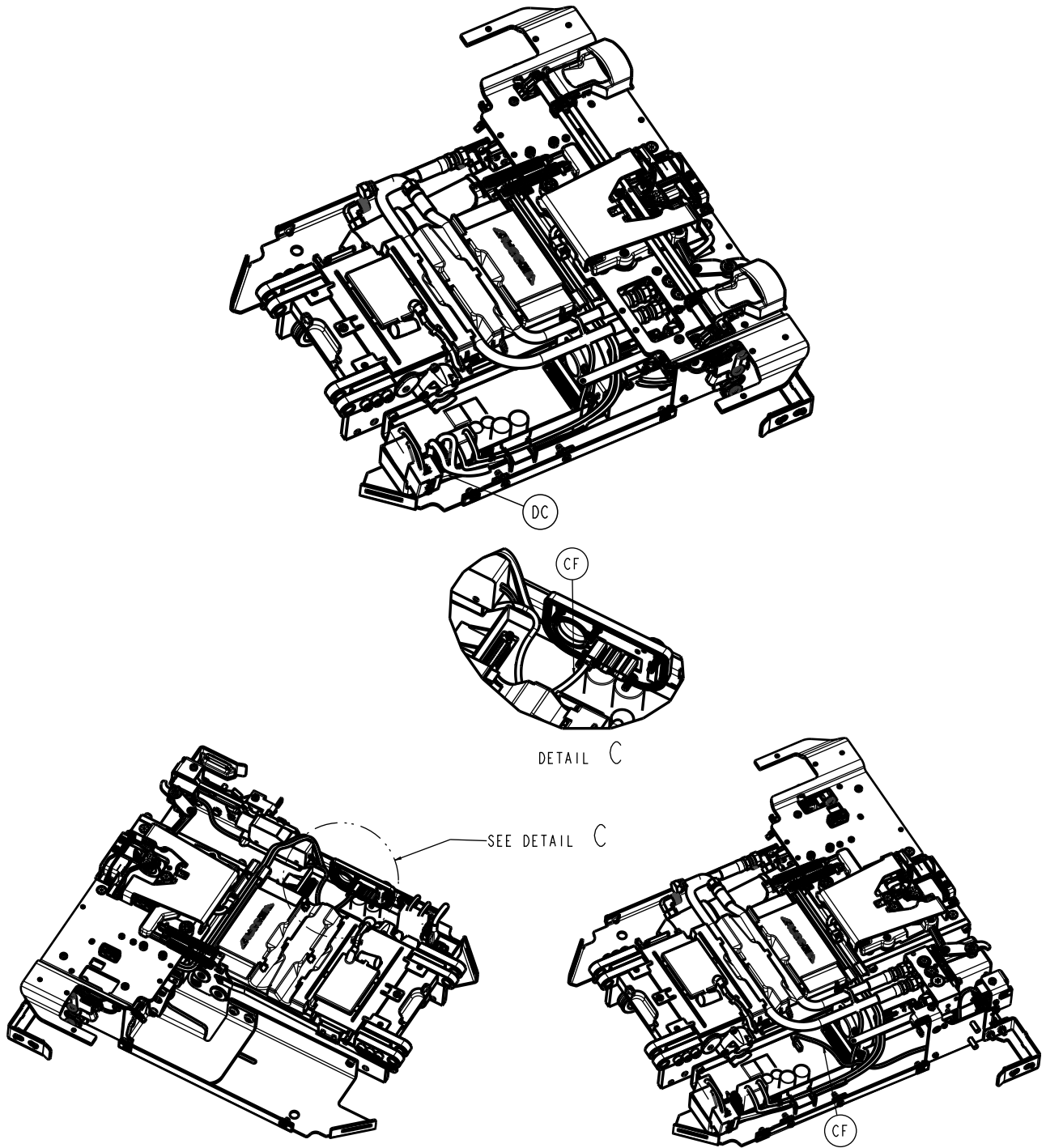
# Trolley main frame



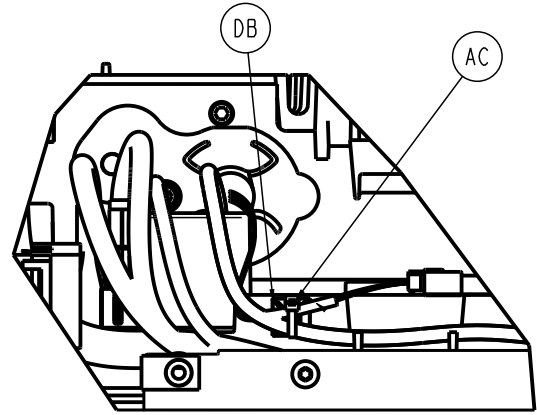
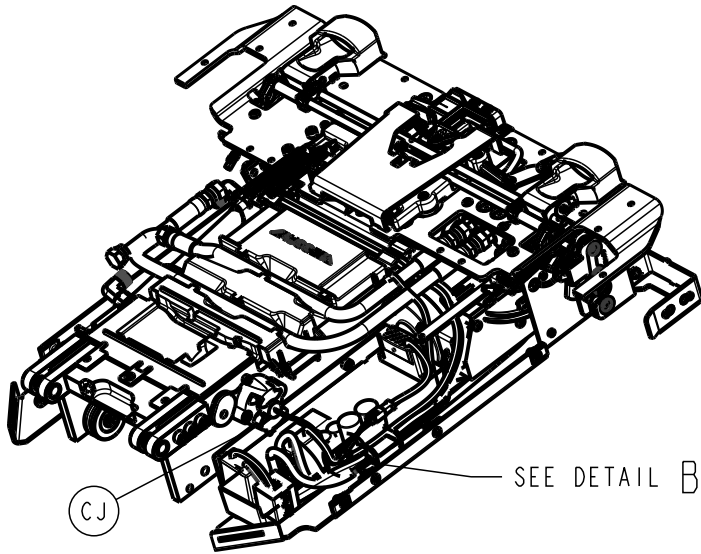
# Trolley main frame



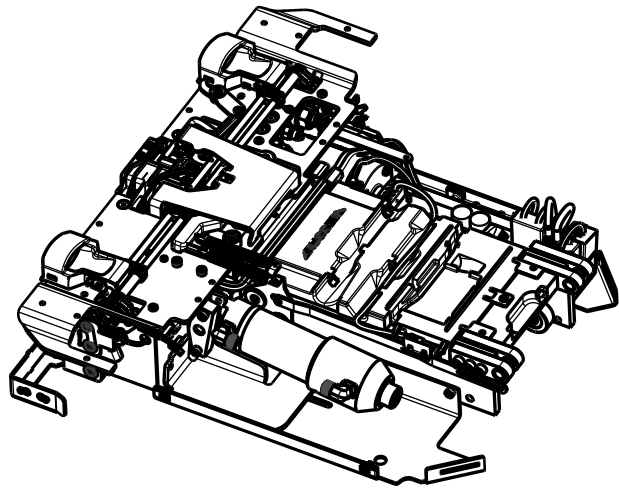
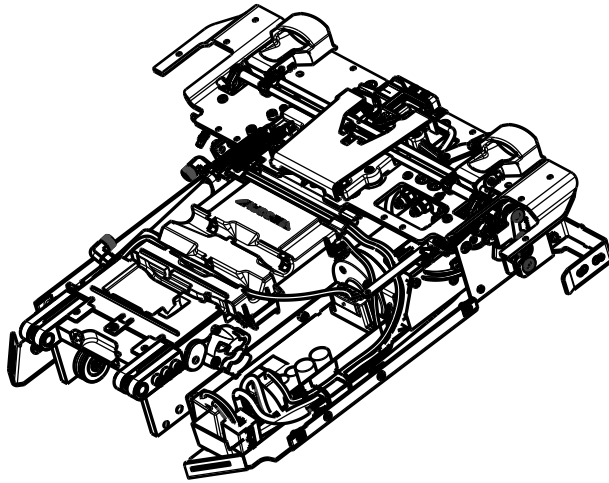
# Trolley main frame



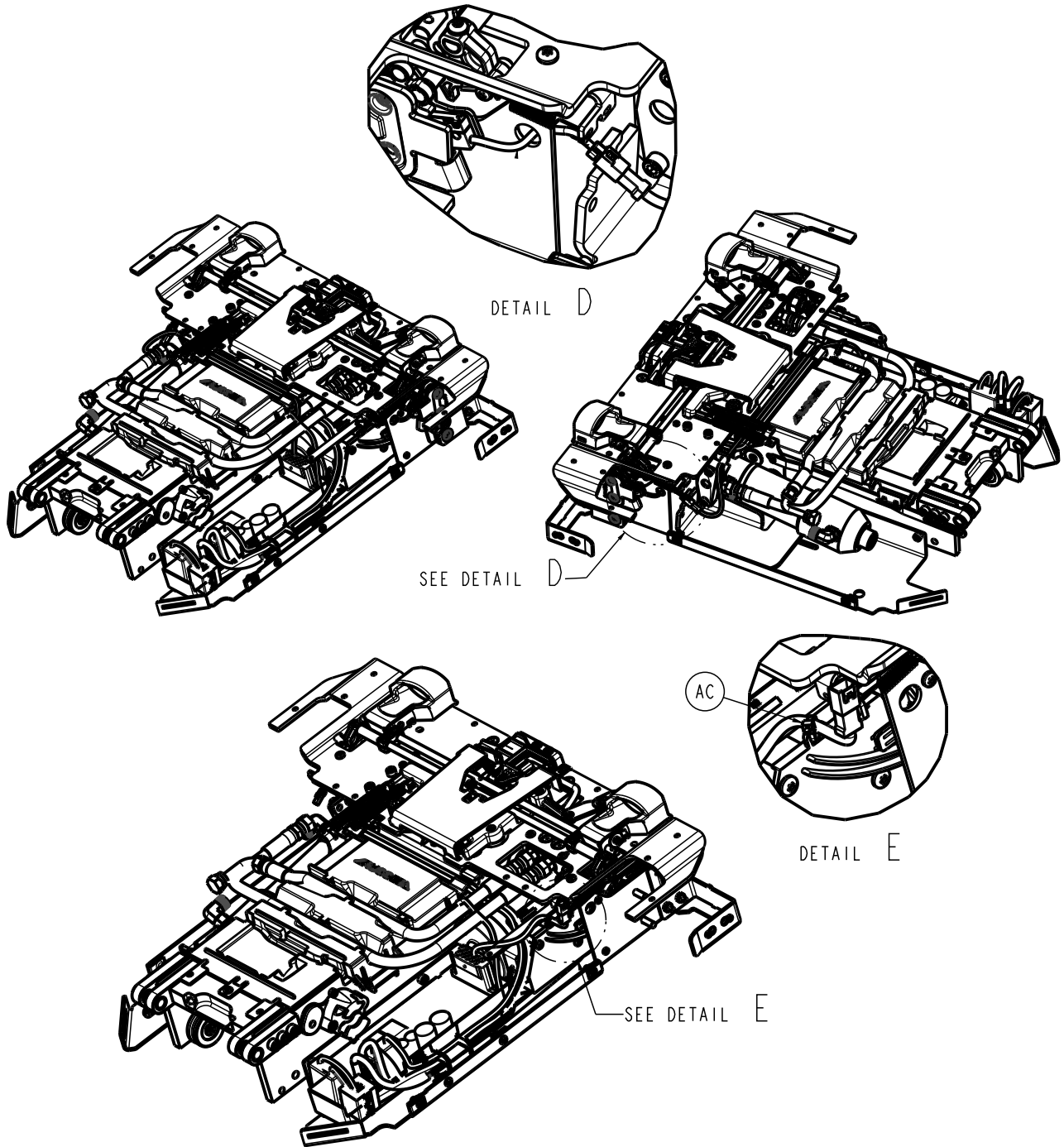
# Trolley main frame



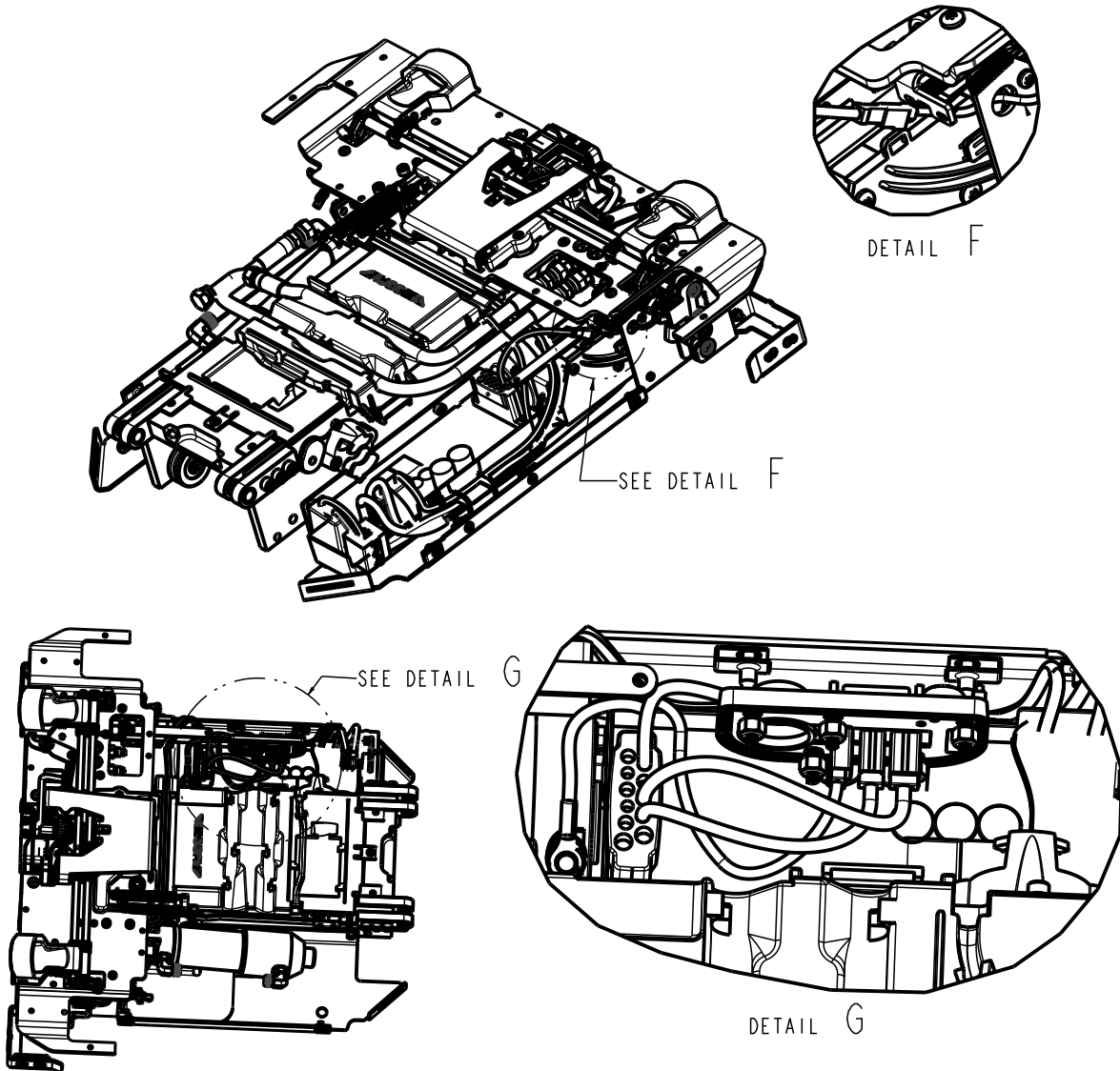
DETAIL B



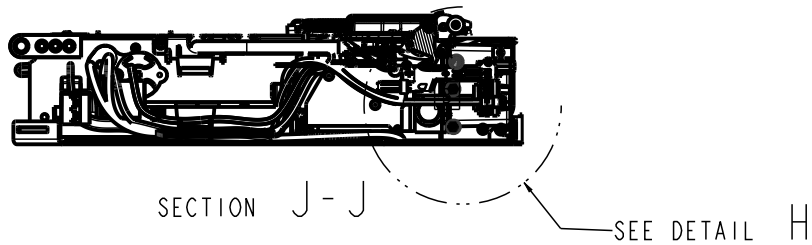
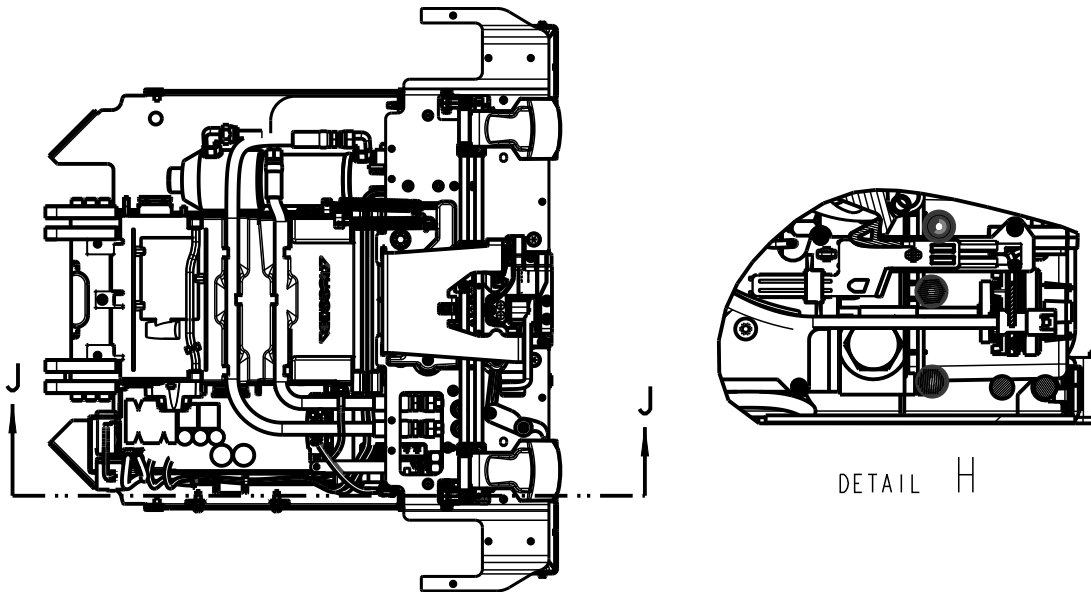
# Trolley main frame



# Trolley main frame



# Trolley main frame



Item	Number	Name	Quantity
A	0001-195-000	Flat head cap screw	3
B	0003-148-000	Hex head cap screw	4
C	0004-874-000	Socket head cap screw	2
D	0004-352-000	Socket head cap screw	6
E	0004-652-000	Button head cap screw	2
F	0004-658-000	Socket head cap screw	3
G	0004-659-000	Socket head cap screw	3
H	0004-660-000	Socket head cap screw	8
J	0004-661-000	Socket head cap screw	5
K	0004-397-000	Socket head cap screw	2
L	0004-665-000	Button head cap screw	2
M	0004-666-000	Button head cap screw	10
N	0005-047-000	Carriage bolt	4
P	0011-436-000	Washer	3
R	0016-014-000	Fiberlock hex nut	5
T	0015-003-000	Hex nut	4
U	6390-001-588	Secondary coil lock	1
V	0018-009-000	Extruded "U" nut	12
W	0023-167-000	Delta screw	3
Y	0023-296-000	Pan head machine screw	6
AA	0023-321-000	Delta screw	3



# Trolley main frame

Item	Number	Name	Quantity
AB	0027-778-000	Slic pin	2
AC	0038-111-000	Zip tie	2
AD	0038-376-000	Extension spring	2
AE	0038-894-000	Extension spring	1
AF	0038-895-000	Extension spring	2
AG	0038-896-000	Extension spring	2
AH	6390-001-294	Guide block, horn, load wheel	2
AJ	0023-163-000	Delta screw	4
AK	6390-101-014	Control board assembly	1
AL	6390-001-025	V-guide roller assembly	5
AM	6390-001-027	Flat roller assembly	2
AN	6390-001-028	<a href="#">Trolley actuator assembly - 6390-001-028 on page 127</a>	1
AP	6390-001-035	<a href="#">Wing assembly, left on page 118</a>	1
AR	6390-001-043	<a href="#">Trolley/transfer interface mechanism on page 117</a>	1
AT	6390-001-045	Trolley arm mechanism	1
AU	6390-001-046	<a href="#">Trolley manual release assembly on page 122</a>	1
AV	6390-001-052	Load wheel horn guide weldment, left	1
AW	6390-001-053	Load wheel horn guide weldment, right	1
AY	6390-001-064	Hinge plate assembly	4
BA	6390-001-065	Cylinder support block assembly	1
BB	6390-001-066	Coil housing assembly	1
BC	6390-001-301	Trolley main frame front block	1
BD	6390-001-304	Trolley main frame side block, left	1
BE	6390-001-314	Bottom pan, right	1
BF	6390-001-315	Bottom pan, left	1
BG	6390-001-316	Cylinder support bracket	1
BH	6390-001-318	Custom Eberhard latch, right	1
BJ	6390-001-319	Custom Eberhard latch, left	1
BK	6390-001-320	Bottom release arm	1
BL	6390-001-333	Release rod support block	6
BM	6390-001-334	Trolley mechanism arm	1
BN	6390-001-340	Wing plate, right	1
BP	6390-001-344	Trolley main frame side plate, right	1
BR	6390-001-360	End cap cylinder pin	1
BU	6390-001-365	Manual release button bracket	1
BV	6390-001-366	Manual release button - pump	1
BY	6390-001-375	Angle sensor housing	1
CA	6390-001-378	Trolley communication board	1
CB	6390-001-379	Trolley routing tray	1
CC	6390-001-385	Center metal cover	1
CD	6390-001-388	Trolley inductive charge bracket	1
CE	6390-001-391	Main cable assembly	1
CF	6390-001-392	Trolley rear LED assembly	1

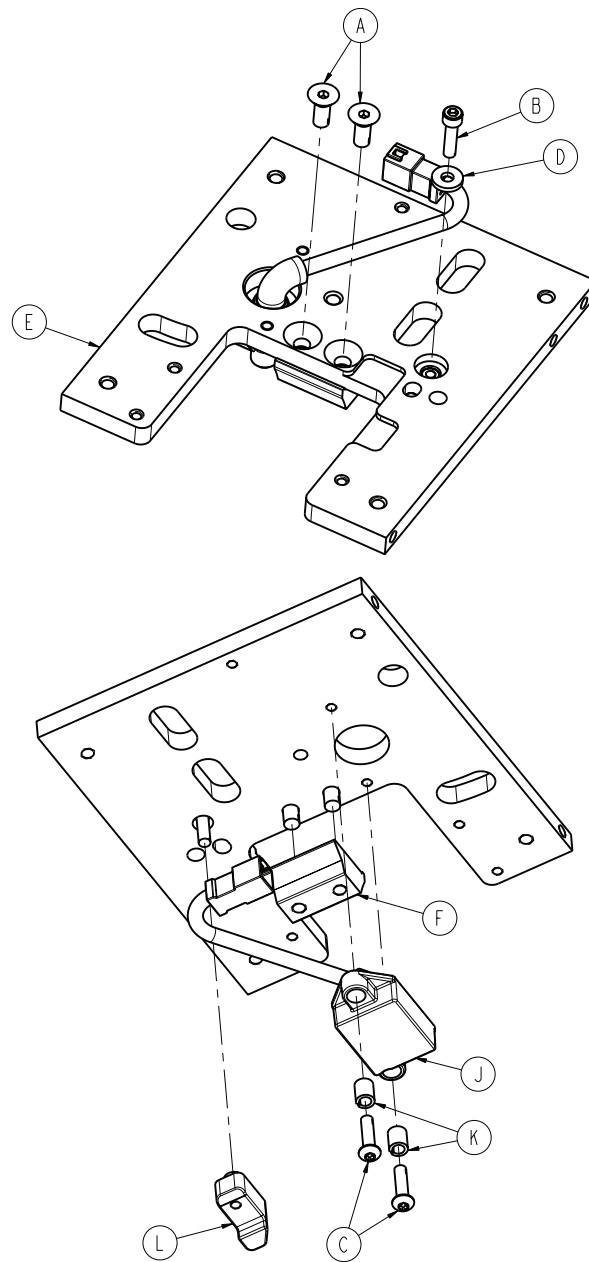
# Trolley main frame

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Item	Number	Name	Quantity
CG	6390-001-393	USB mounting bracket	1
CH	6390-001-395	USB connector	1
CJ	6390-001-397	Angle position sensor	1
CL	6390-001-450	Master on/off switch	1
CM	6390-001-352	Cylinder bracket	1
CN	0001-196-000	Flat head cap screw	2
CP	6390-001-351	Trolley release actuator	1
CR	6390-001-343	Trolley mechanism pivot pillar	2
CT	6390-001-336	Link	1
CU	0015-087-000	Square nut	1
CV	6390-001-412	Handle lock pawl	1
CW	6390-001-413	Handle lock pivot base	1
CY	0011-518-000	Washer	1
DA	0028-217-000	Push nut	1
DB	0058-143-000	Adhesive backed mounting tab	1
DC	6390-001-545	Battery fuse extension cable	1
DD	0023-162-000	Delta screw	2
DE	0004-404-000	Socket head cap screw	1
DF	6390-001-574	Trolley lock mechanism actuator bushing	2
DG	6390-001-573	Actuator thrust washer	2

# Trolley/transfer interface mechanism

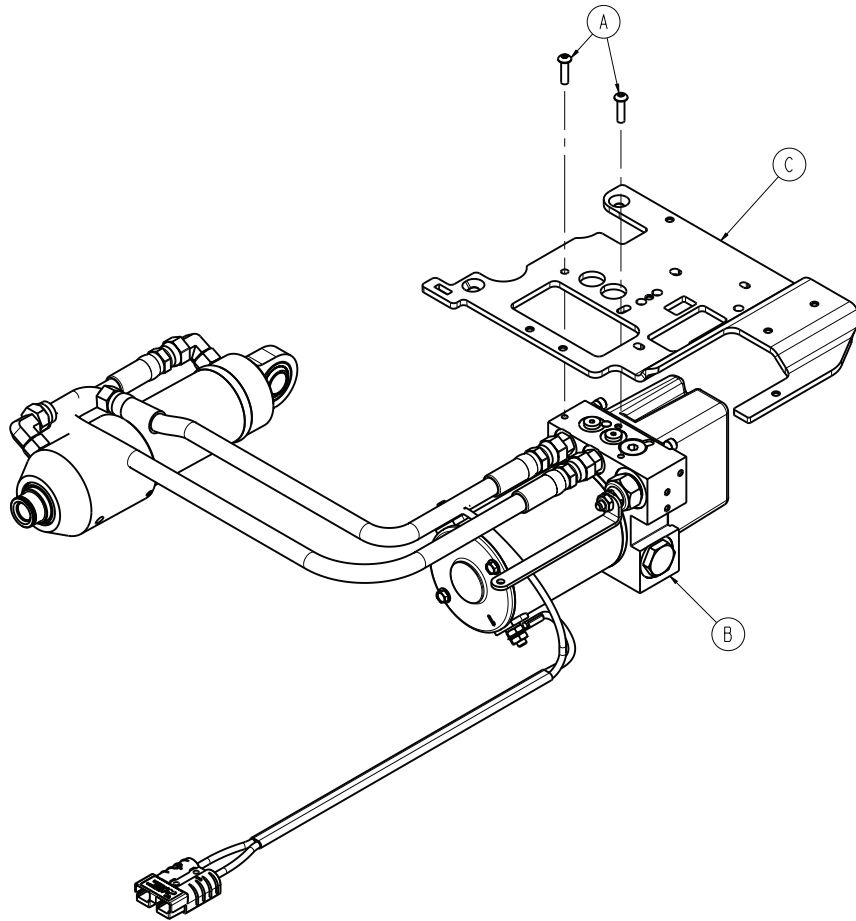
6390-001-043 Rev C (Reference only)



Item	Number	Name	Quantity
A	0001-195-000	Flat head cap screw	2
B	0004-659-000	Socket head cap screw	1
C	0004-666-000	Button head cap screw	2
D	0011-517-000	Washer	1
E	6390-001-303	Trolley main frame top plate	1
F	6390-001-325	Trolley stop ramp	1
J	6390-001-361	TPS sensor assembly	1
K	6390-001-362	TPS compression limiter	2
L	6390-001-404	Transfer to anchor release plug	1

# Wing assembly, left

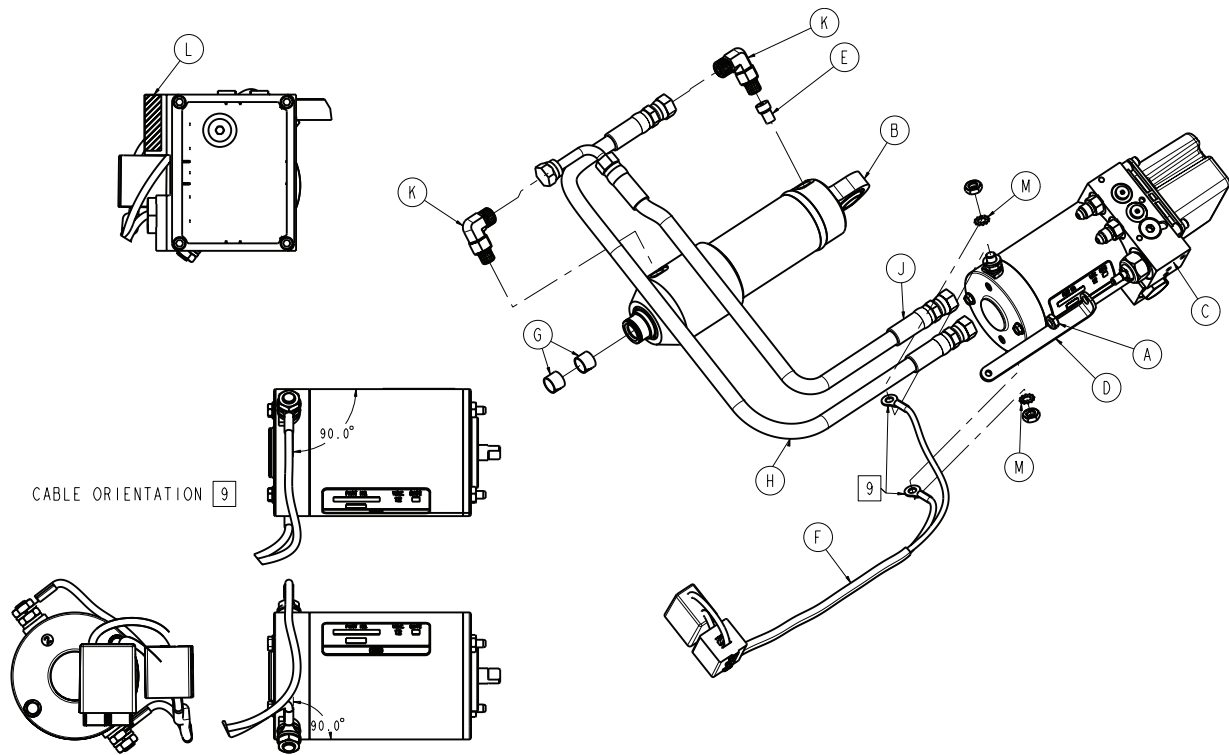
6390-001-035 Rev A (Reference only)



Item	Number	Name	Quantity
A	0004-666-000	Button head cap screw	2
B	6390-001-039	<a href="#">Hydraulics assembly on page 119</a>	1
C	6390-001-339	Wing plate, left	1

# Hydraulics assembly

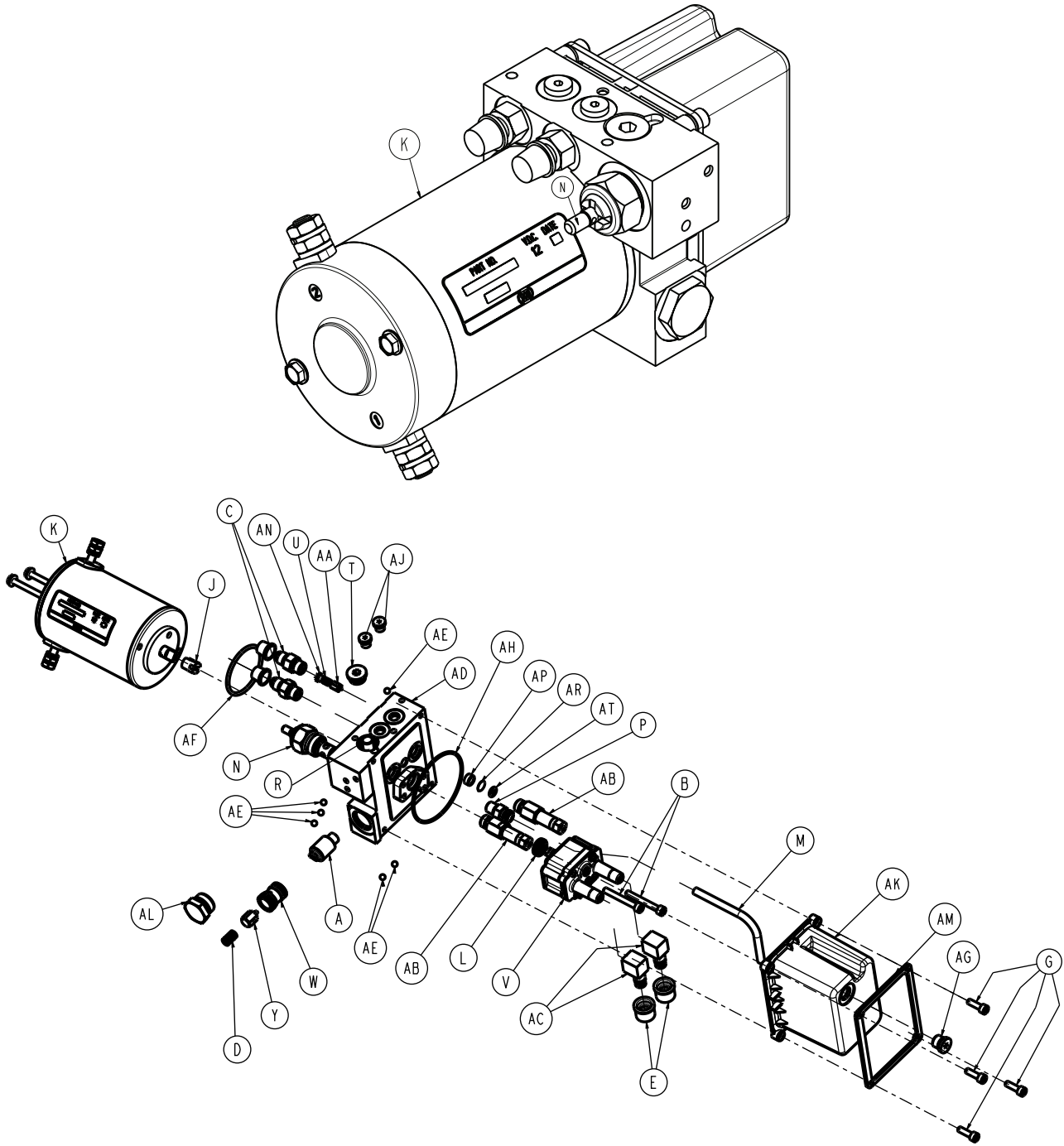
6390-001-039 Rev U (Reference only)



Item	Number	Name	Quantity
A	0016-102-000	Nylock hex nut	1
B	6390-001-029	Hydraulic cylinder	1
C	6390-101-038	<a href="#">Manifold assembly on page 120</a>	1
D	6390-001-167	Manual release link	1
E	6390-001-381	Velocity fuse	1
F	6390-101-431	Motor cable	1
G	6390-001-433	Inner rod bearing	2
H	6390-001-436	Hydraulic hose, cap end	1
J	6390-001-437	Hydraulic hose, rod end	1
K	6500-001-297	Cylinder rod side hose fitting	2
L	NA	Label	1
M	0013-038-000	External tooth lock washer	2

# Manifold assembly

6390-101-038 Rev B (Reference only)



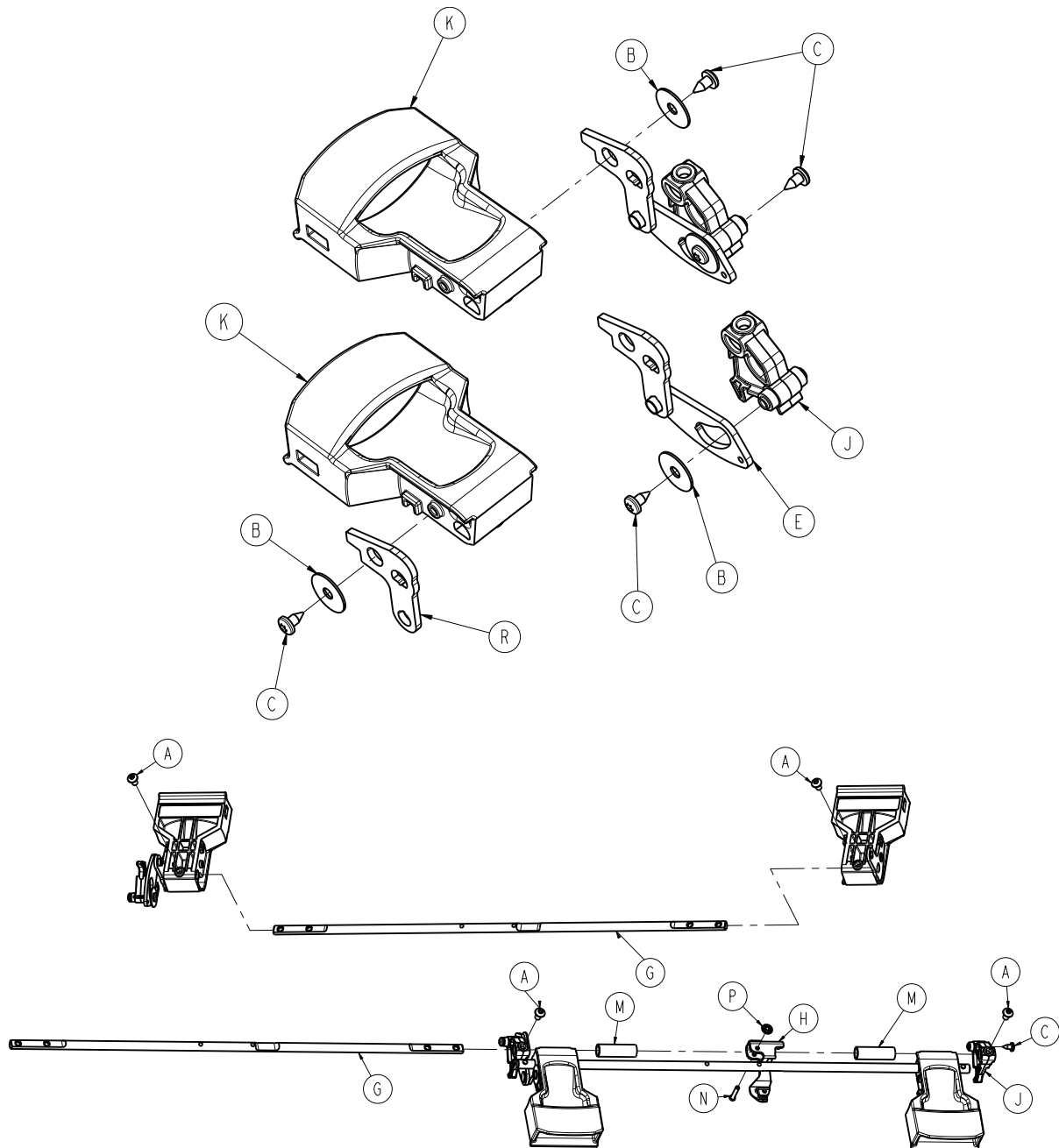
Item	Number	Name	Quantity
A	6390-001-438	Shuttle spool	1
B	406187	Socket head cap screw	2
C	6390-001-146	Fitting STR SAE4 J1C4	2
D	410462	Compression spring	1
E	410521	Filter	2
F			

# Manifold assembly

Item	Number	Name	Quantity
G	416242	Socket head cap screw	4
H			
J	413528	Coupling	1
K	6390-101-132	Motor 12DC 108/165AY	1
L	413675	Seal shaft	1
M	414885	Return tube	1
N	6500-001-289	Non-locking manual valve	1
P	414644	Fitting STR 1/8" NPTF 1/4" TB	1
R	6390-001-151	Valve PC flow control	1
T	415866	Plug SAE6 HOL hex	1
U	415867	Compression spring	1
V	646679	Pump	1
W	773763	Check seat assembly	1
Y	773776	Poppet assembly	1
AA	774585	Poppet assembly	1
AB	775905	Relief valve assembly	2
AC	775942	Filter assembly suction filter	2
AD	6390-101-129	Adapter block	1
AE	401072	Ball steel	6
AF	405673	O-ring	1
AG	409278	Plug SAE2 HOL hex	1
AH	410566	O-ring	1
AJ	413577	Plug SAE2 HOL hex	2
AK	6390-001-128	Reservoir loader	1
AL	776573	Hex plug retainer assembly	1
AM	6390-001-209	Flange RSVR loader	1
AN	414669	RV spring retainer	1
AP	364094	AL spacer	1
AR	411888	Filter screen	1
AT	401273	O-ring	1

# Trolley manual release assembly

6390-001-046 Rev C (Reference only)



Item	Number	Name	Quantity
A	0004-665-000	Button head cap screw	4
B	0011-518-000	Washer	3
C	0023-163-000	Delta screw	5
E	6390-001-060	Manual release linkage assembly, left	1
G	6390-001-326	Actuation rod	2
H	6390-001-328	Manual cot release slider block	1
J	6390-001-329	Actuation cam	2
K	6390-001-332	Trolley release handle	2



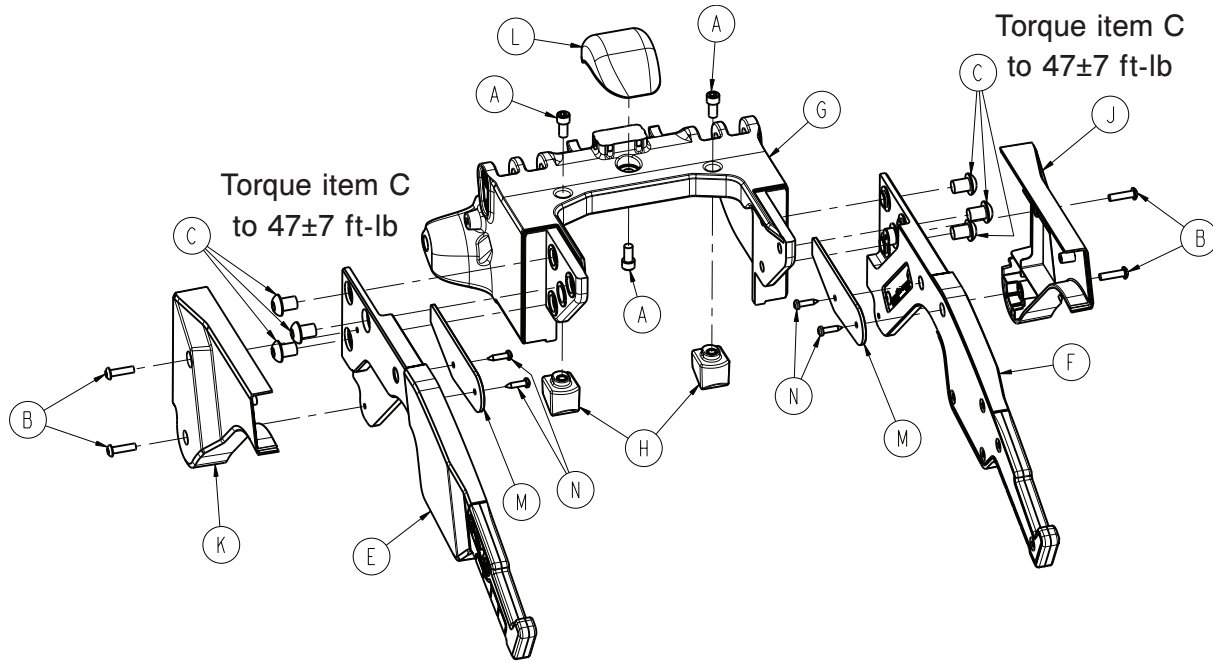
# Trolley manual release assembly

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Item	Number	Name	Quantity
M	6390-001-387	Release handle retainer	2
N	6390-001-323	Cot manual release pin	1
P	0028-217-000	Push nut	1
R	6390-001-382	Trolley release handle link arm	1

# Trolley arm assembly

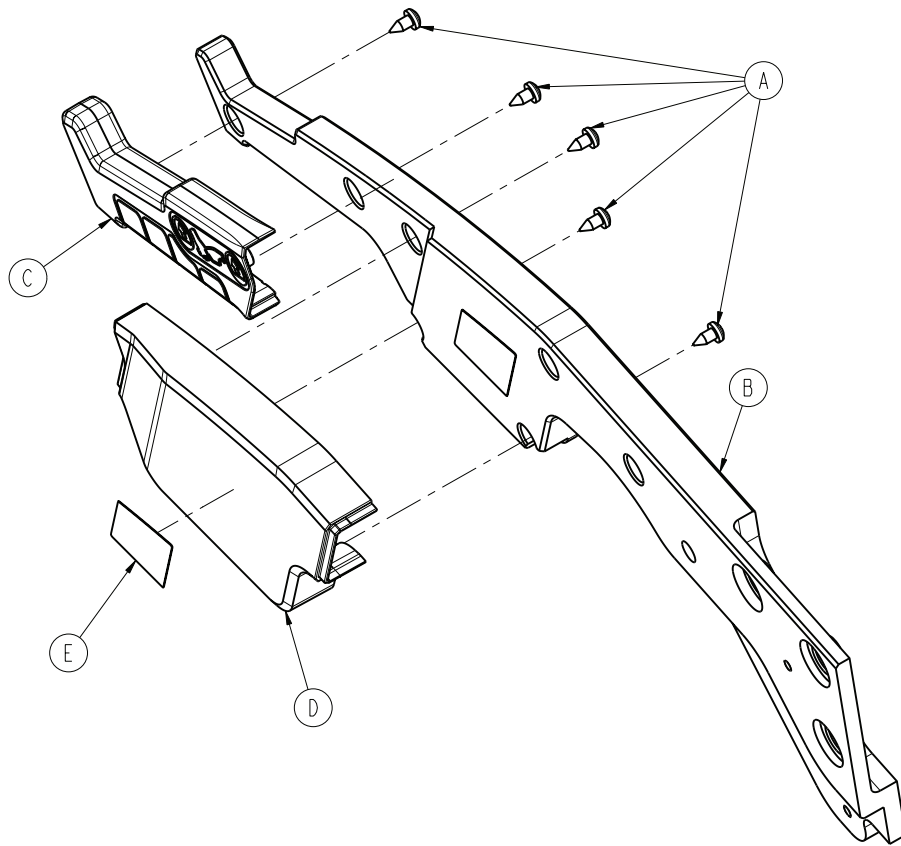
6390-001-016 Rev E (Reference only)



Item	Number	Name	Quantity
A	0004-660-000	Socket head cap screw	3
B	0004-666-000	Button head cap screw	4
C	0004-668-000	Button head cap screw	6
E	6390-001-036	<a href="#">Arm, right on page 126</a>	1
F	6390-001-037	<a href="#">Arm, left on page 125</a>	1
G	6390-001-305	Middle arm	1
H	6390-001-322	Mid position bumper lock block	2
J	6390-001-372	Arm cover, head end, left	1
K	6390-001-371	Arm cover, head end, right	1
L	6390-001-440	Trolley cot ramp	1
M	6390-001-486	Arm cover guard, head end	2
N	0023-162-000	Delta screw	4

# Arm, left

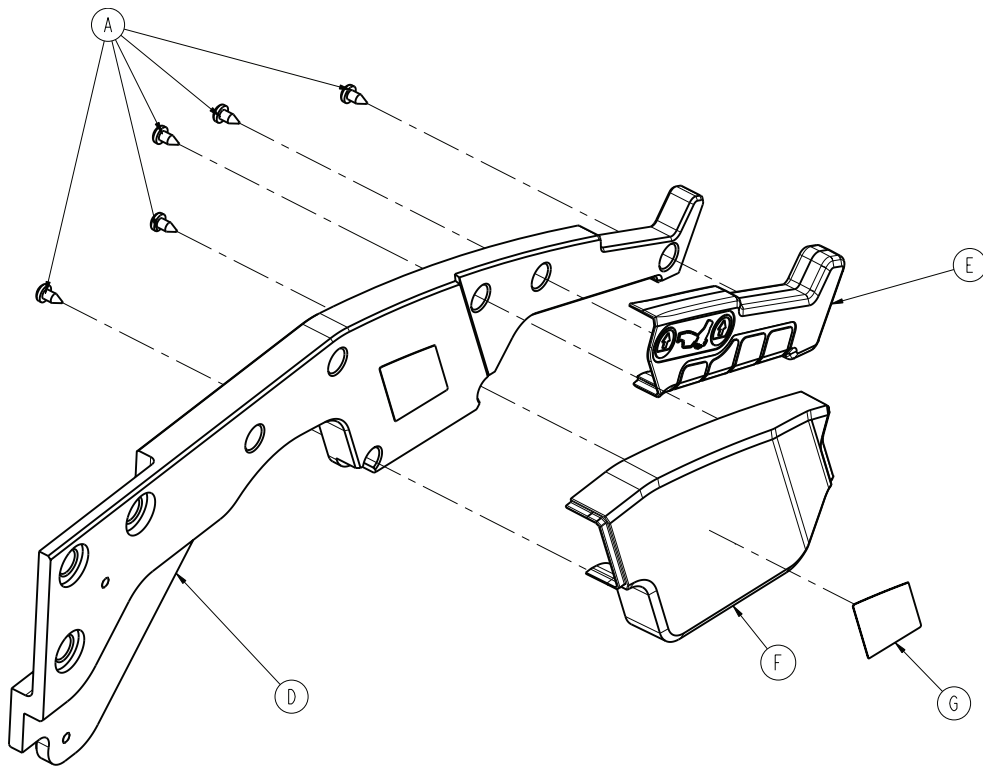
6390-001-037 Rev E (Reference only)



Item	Number	Name	Quantity
A	0023-163-000	Delta screw	5
B	6390-001-417	Arm, left	1
C	6390-001-341	Arm grip, left	1
D	6390-001-370	Arm cover, foot end, left	1
E	6390-001-410	Label, arm, left	1

# Arm, right

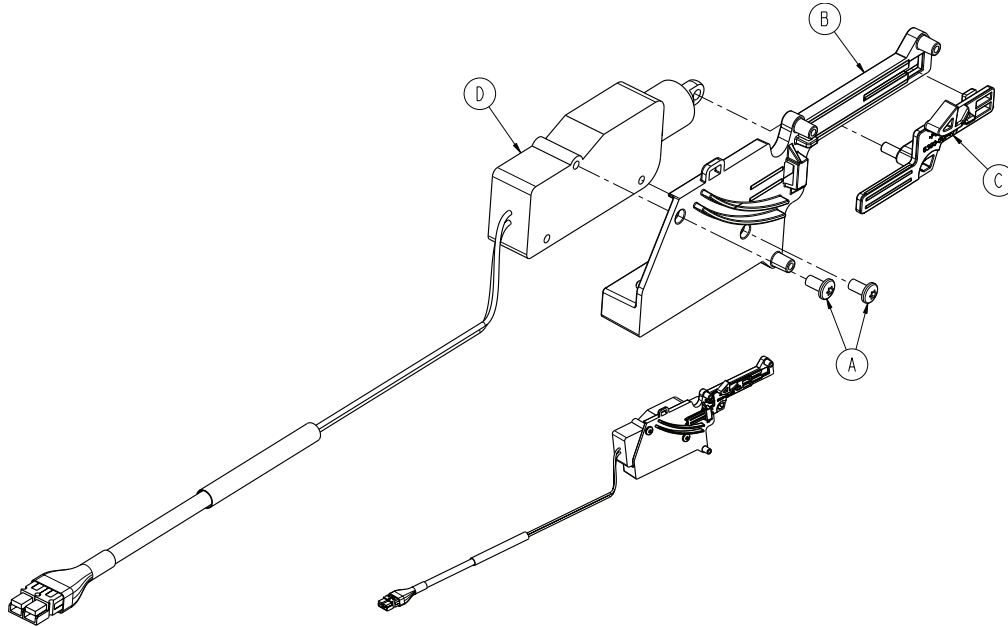
6390-001-036 Rev D (Reference only)



Item	Number	Name	Quantity
A	0023-163-000	Delta screw	5
D	6390-001-418	Arm, right	1
E	6390-001-368	Arm grip, right	1
F	6390-001-369	Arm cover, foot end, right	1
G	6390-001-411	Label, arm, right	1

# Trolley actuator assembly - 6390-001-028

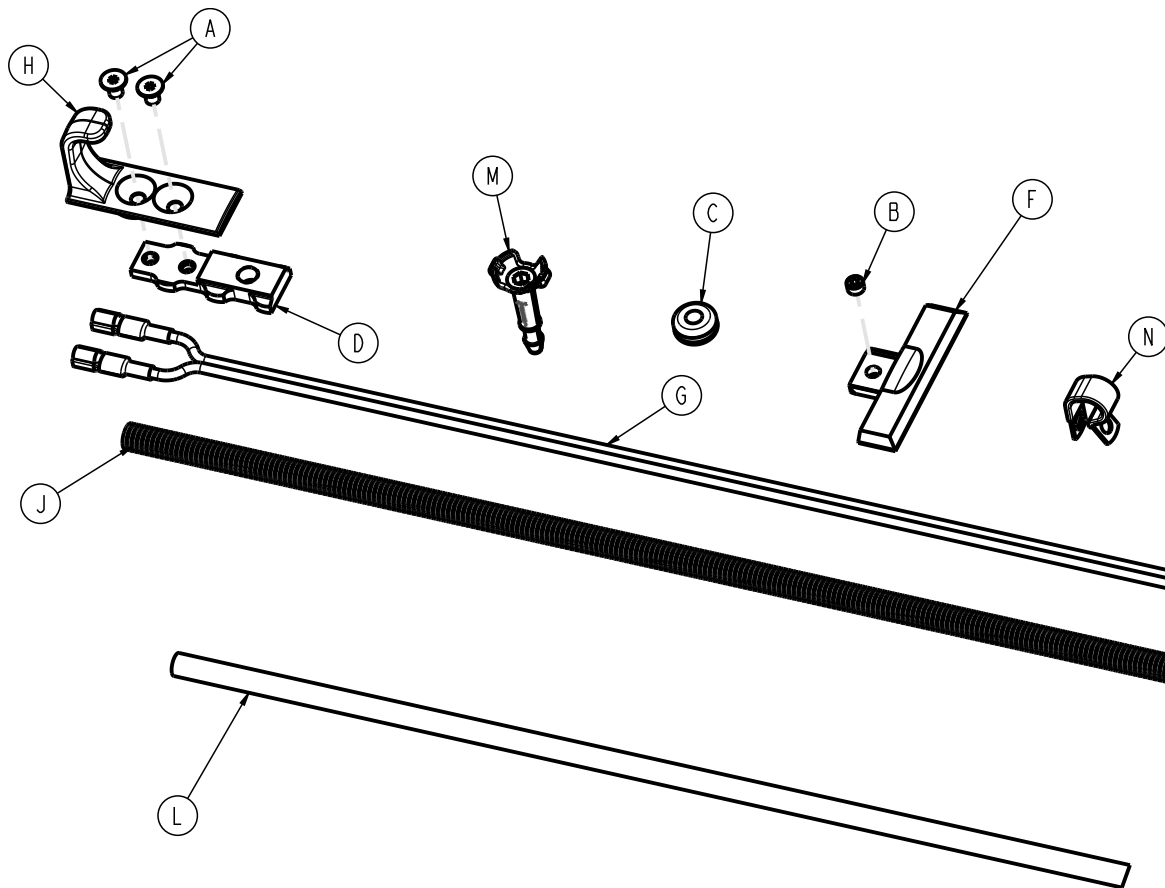
Rev A (Reference only)



Item	Number	Name	Quantity
A	0023-296-000	Pan head machine screw	2
B	6390-001-476	Lock release actuator housing	1
C	6390-001-477	Lock release actuator slide	1
D	6390-001-478	Actuator	1

# Floor plate, install components

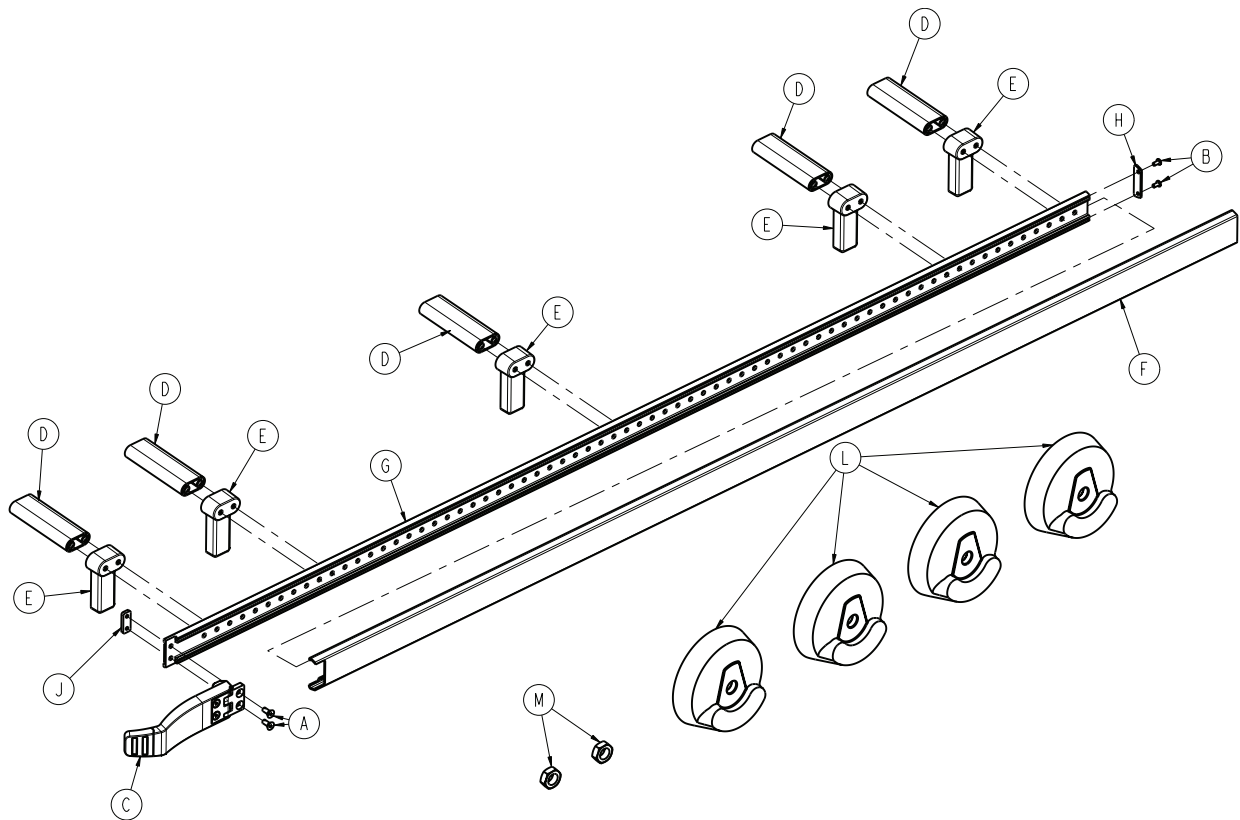
6390-001-055 Rev C (Reference only)



Item	Number	Name	Quantity
A	0001-194-000	Flat head cap screw	2
B	0021-197-000	Set screw	2
C	0037-247-000	Rubber grommet	1
D	6390-101-108	Floor plate attachment bracket	1
F	6390-001-111	End cap, floor plate	2
G	6390-001-135	Cable, anchor to vehicle	1
H	6390-001-148	Safety hook	1
J	6390-001-153	Loom, wire protection	1
L	6390-001-170	Drain tube	1
M	6390-001-183	Floor plate drain tube	1
N	6390-001-202	Rubber coated clamp	6

# Wheel guide, optional

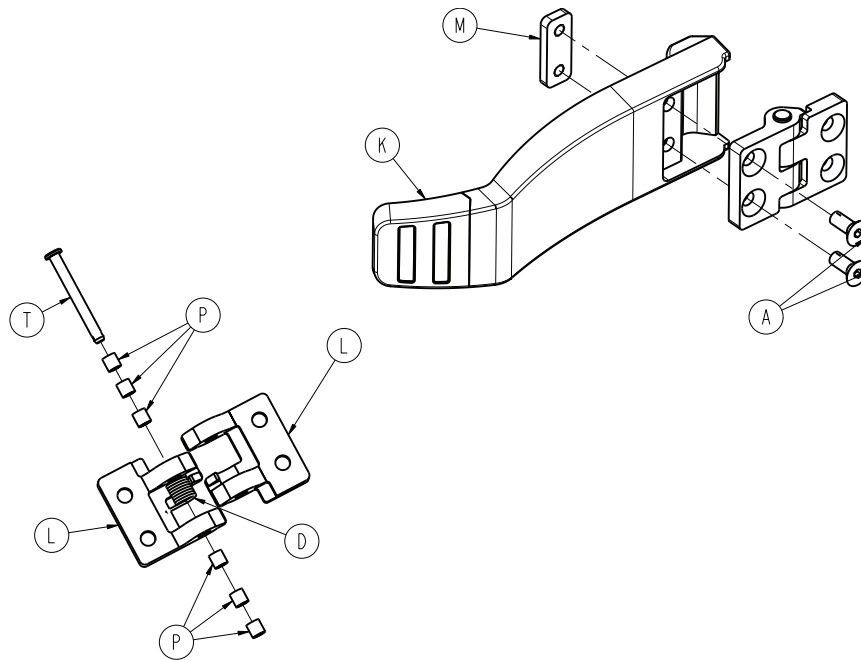
6390-027-000 Rev D (Reference only)



Item	Number	Name	Quantity
A	0001-195-000	Flat head cap screw	2
B	0023-296-000	Pan head machine screw	2
C	6390-001-017	<a href="#">Wheel guide assembly, optional - 6390-001-017 on page 130</a>	1
D	6390-001-173	Spacer	5
E	6390-001-174	Wheel guide support	5
F	6390-001-175	Wheel guide rail bumper	1
G	6390-001-176	Wheel guide rail	1
H	6390-001-178	Wheel guide cap	1
J	6390-001-191	Wheel guide nut	1
L	6390-001-206	Wheel cover	4
M	0016-060-000	Toplock locknut	2

# Wheel guide assembly, optional - 6390-001-017

Rev C (Reference only)

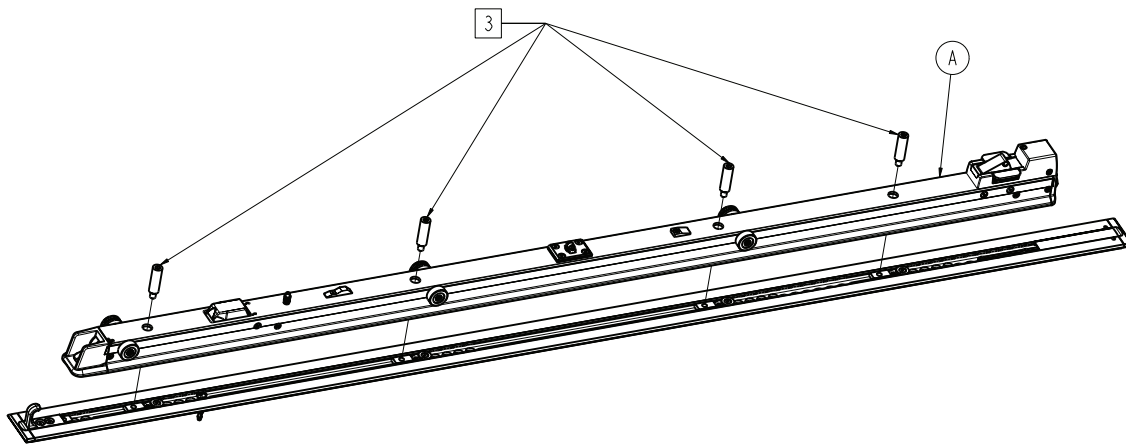


Item	Number	Name	Quantity
A	0001-195-000	Flat head cap screw	2
D	0038-377-000	Torsion spring	1
K	6390-001-185	Wheel guide	1
L	6390-001-188	Wheel guide hinge	2
M	6390-001-191	Wheel guide nut	1
P	0081-500-000	Bearing	6
T	0026-403-000	Clevis pin	1

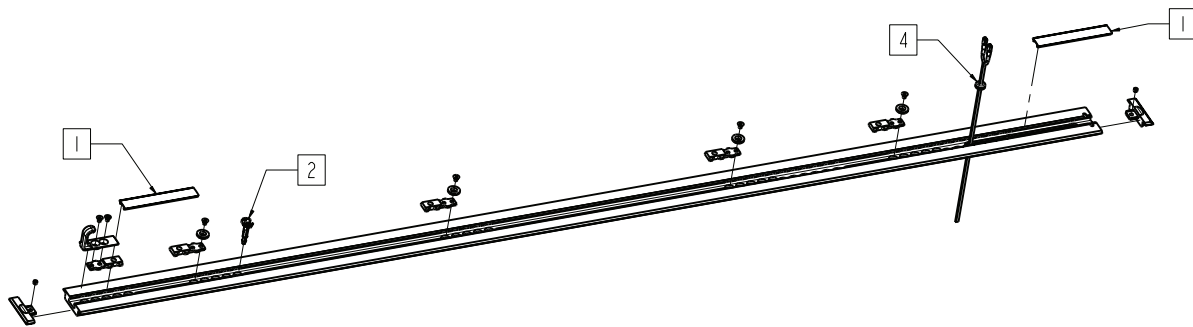


# Power-LOAD assembly, MTS - 639000550010

Rev AA (Reference only)



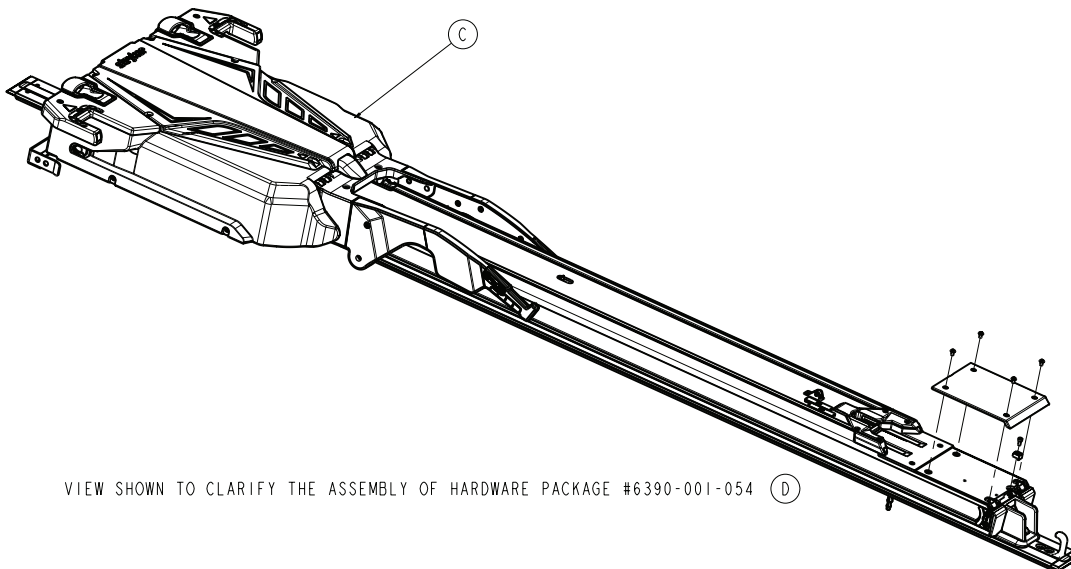
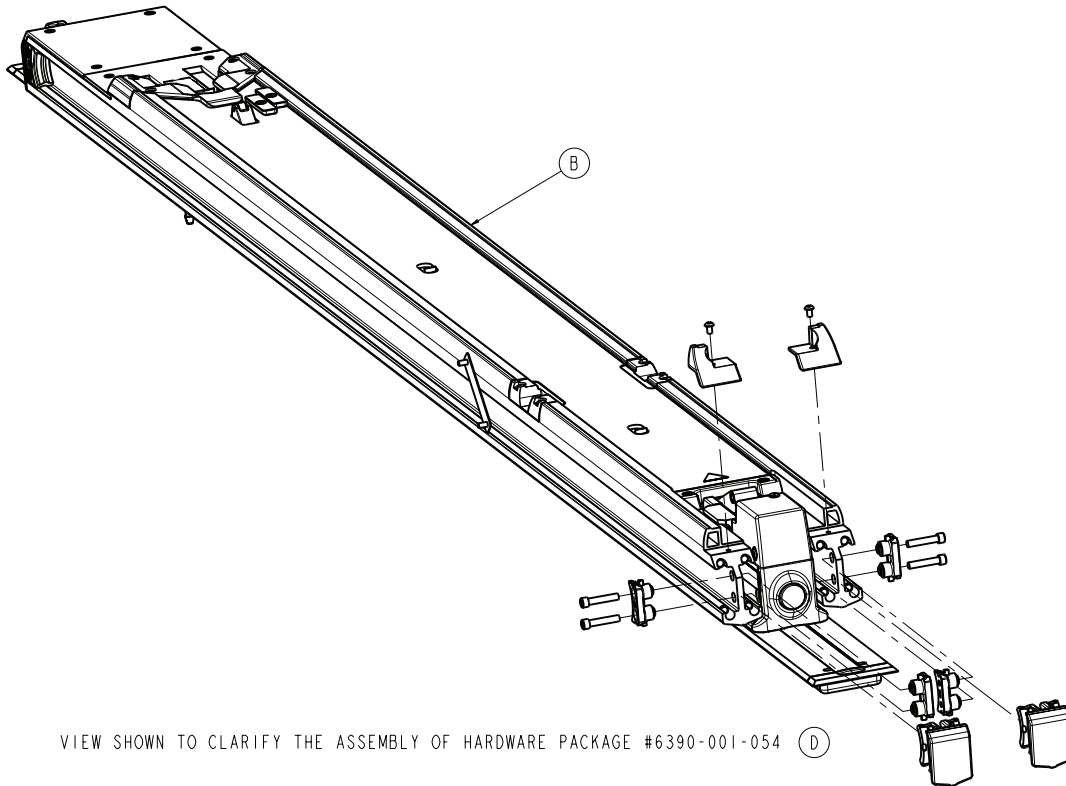
VIEW SHOWN TO CLARIFY THE ASSEMBLY OF MOUNTING POSTS WHICH ARE INCLUDED IN HARDWARE PACKAGE # 6390-001-054 (D)



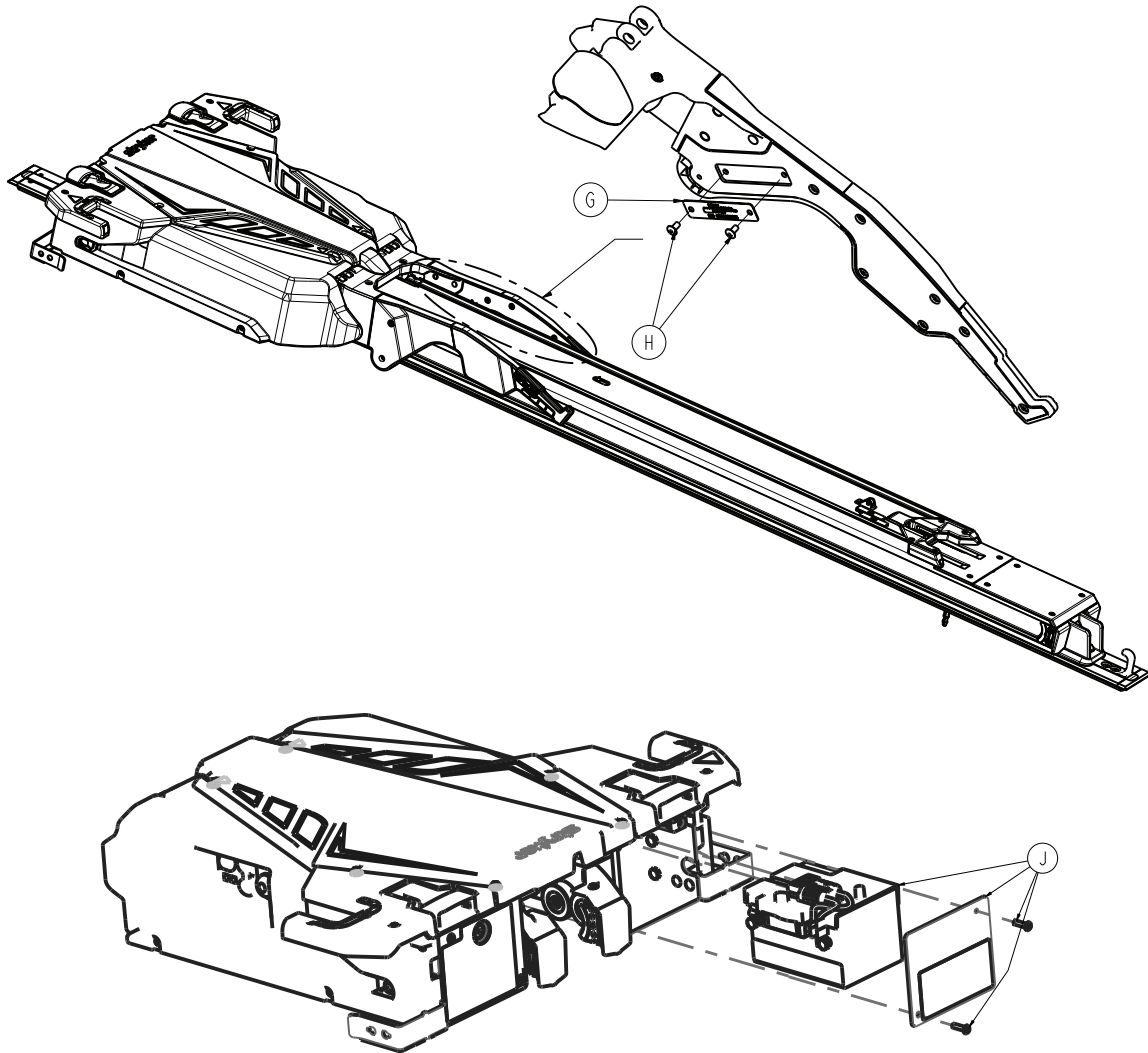
VIEW SHOWN TO CLARIFY THE ASSEMBLY OF HARDWARE PACKAGE # 6390-001-055 (E)

# Power-LOAD assembly, MTS - 639000550010

1. Cut pieces to desired length to cover void at either end, as needed.
2. Drill .400/.450 diameter hole through Item F for assembly. Hole to be drilled at pre-machined counter-sunk locations only.
3. Torque to  $60 \pm 10$  ft-lb
4. Drill .600/.656 diameter hole through item F for assembly hole to be drilled at one of the pre-machined pocket locations only.



# Power-LOAD assembly, MTS - 639000550010



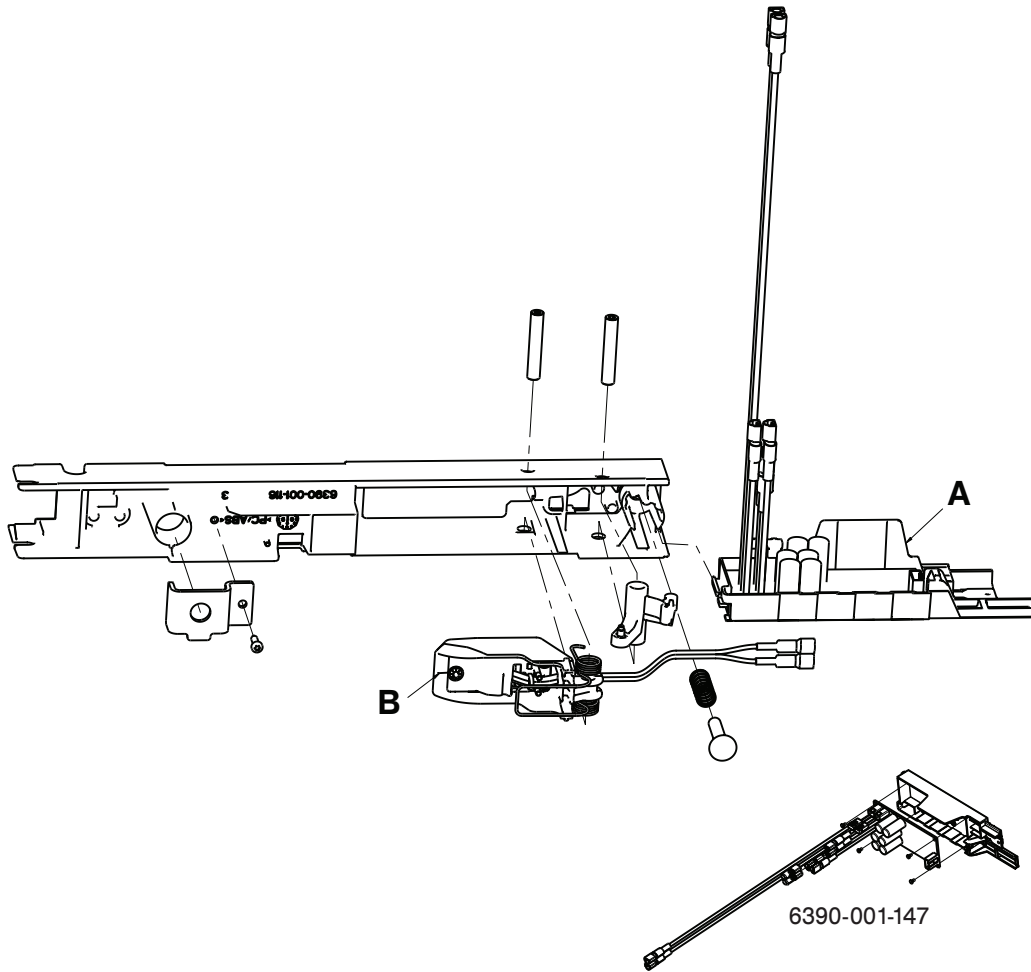
1. Cut pieces to desired length to cover void at either end, as needed.
2. Drill .400/.450 diameter hole through 6390-001-107, floor plate, for assembly. Hole to be drilled at pre-machined countersink locations only.
3. Torque to  $60 \pm 10$  ft-lb
4. Drill .600/.656 diameter hole through 6390-001-107, floor plate, for assembly hole to be drilled at one of the pre-machined pocket locations only.

Item	Number	Name	Quantity
A	6390-001-011	<a href="#">Anchor assembly on page 82</a>	1
B	6390-101-012	<a href="#">Transfer assembly on page 90</a>	1
C	6390-001-013	<a href="#">Trolley assembly on page 98</a>	1
D	6390-001-054	<a href="#">Assembly kit, Power-LOAD - 6390-001-054 on page 81</a>	1
G	639000010900	6390 MTS serial number tag	1
H	0025-079-000	Dome head rivet	2
J	639001010026	Battery installation assembly	1

# Recycling passport - 6390-101-023



(Reference only)

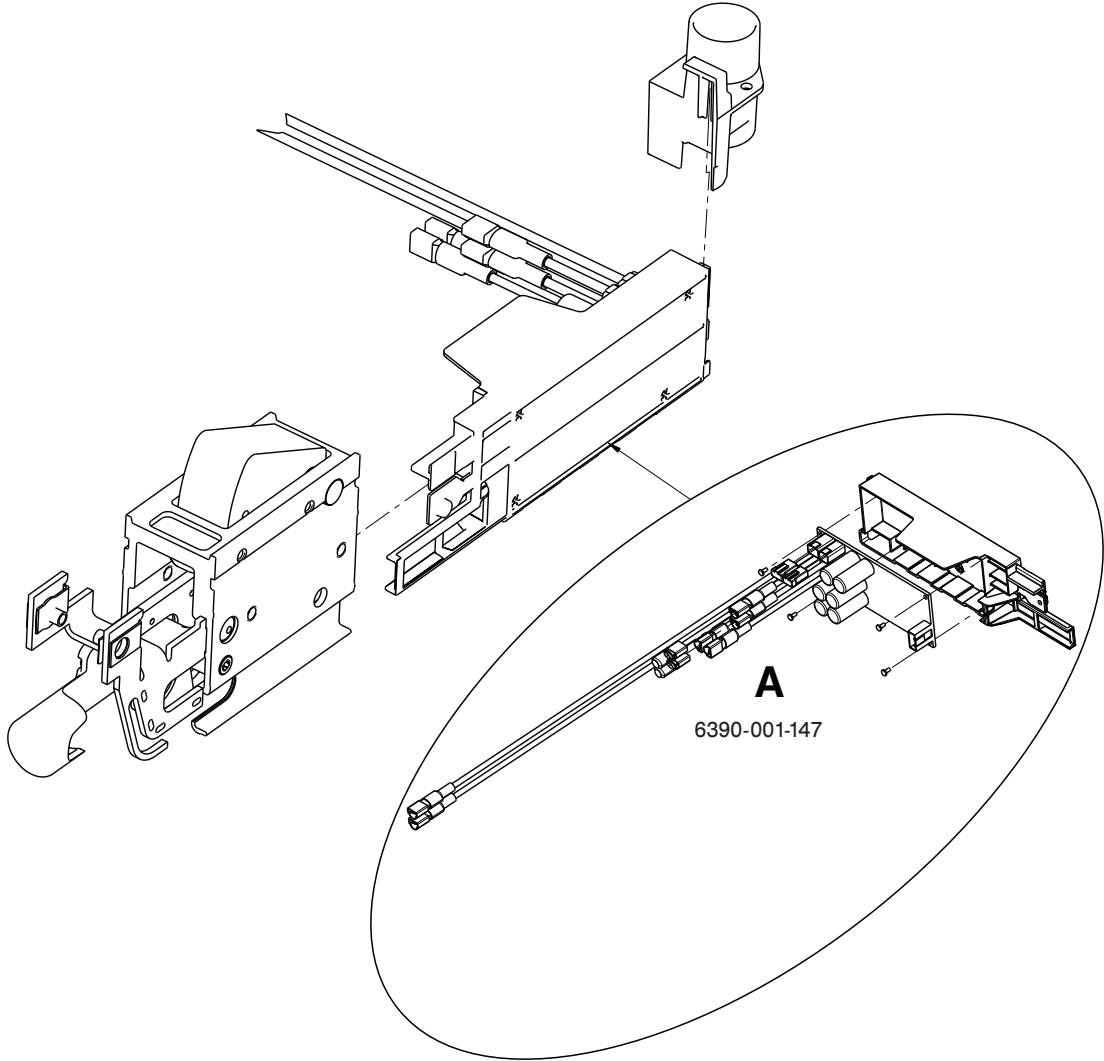


Item	Recycling/material code	Important information	Quantity
A	6390-001-147 (Inductive Primary Board)		1
B	6390-001-030 (Anchor Coil Assembly, Middle)		1

# Recycling passport - 6390-001-024



(Reference only)

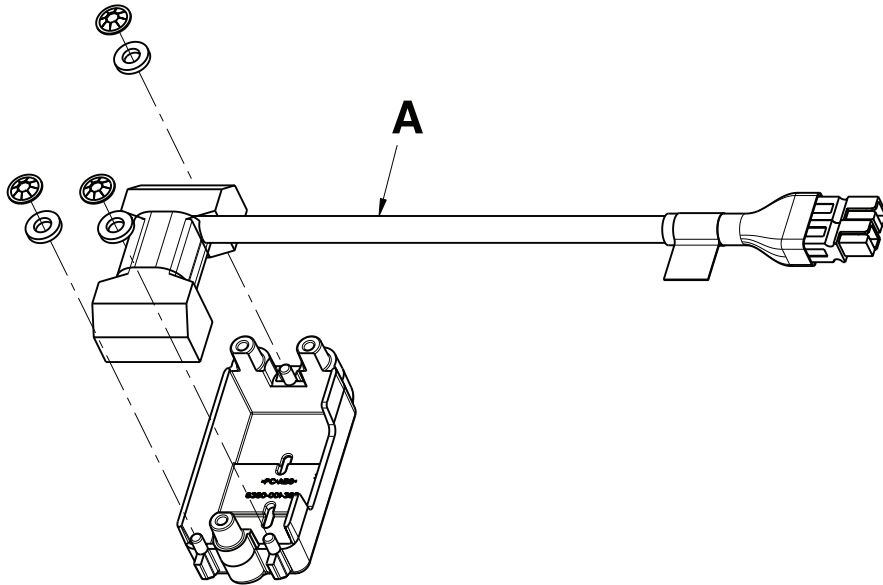


Item	Recycling/material code	Important information	Quantity
A	6390-001-147 (Inductive Primary Board)		1

# Recycling passport - 6390-001-066



(Reference only)

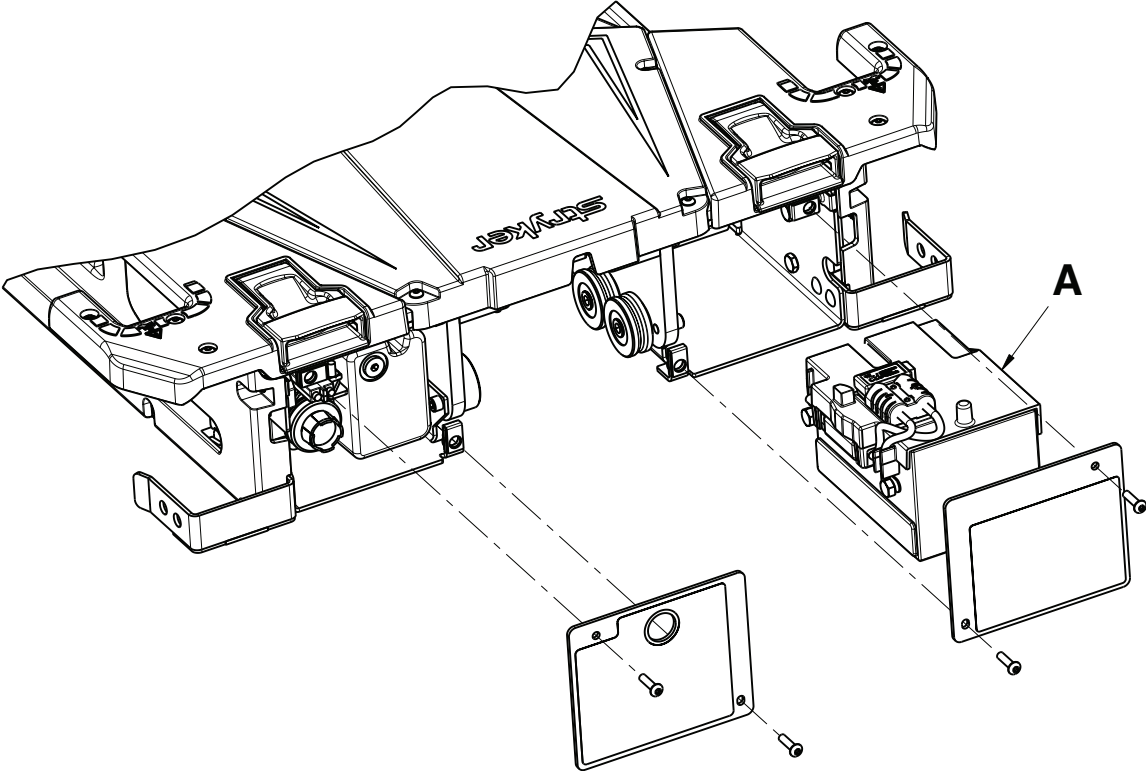


Item	Recycling/material code	Important information	Quantity
A	6390-001-337 (Trolley Secondary Coil)		1

# Recycling passport - 6390-001-013



(Reference only)

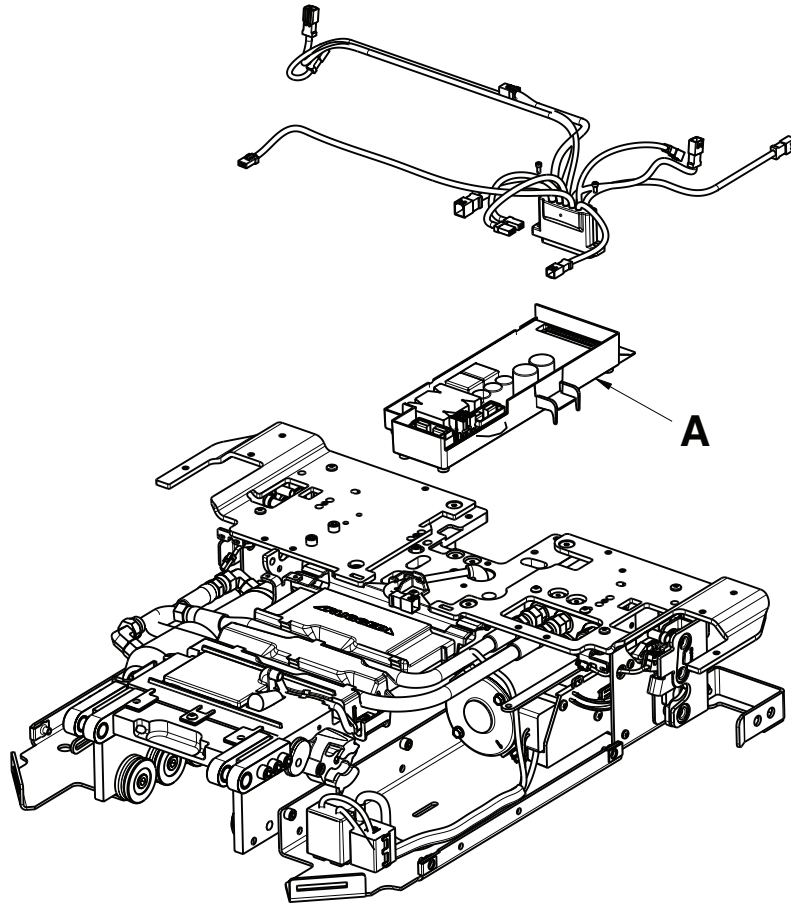


Item	Recycling/material code	Important information	Quantity
A	6390-001-026 (12V, 5 Ah Lead Acid Battery)		1

# Recycling passport - 6390-001-015



(Reference only)



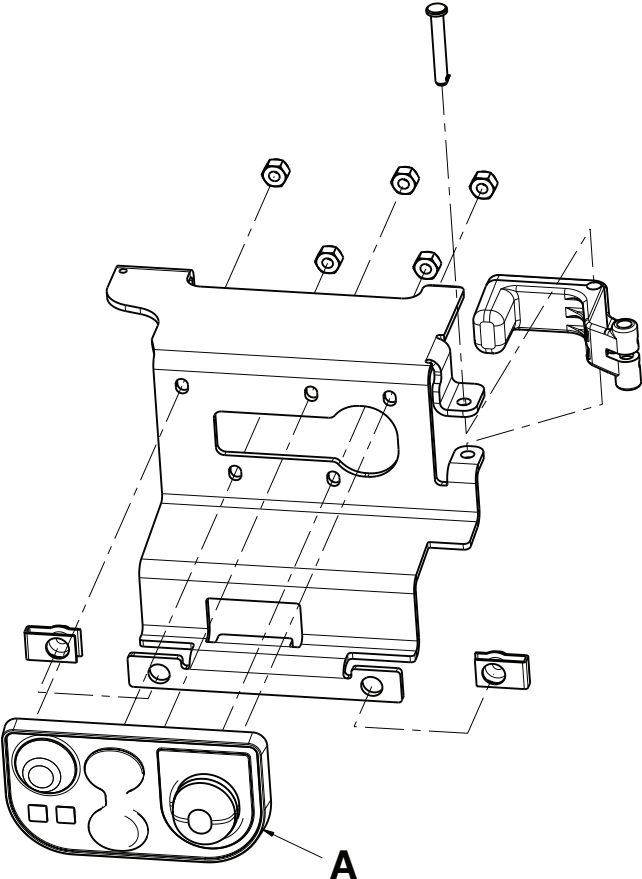
Item	Recycling/material code	Important information	Quantity
A	6390-101-014 (Control Board Assembly)		1



# Recycling passport - 6390-001-015



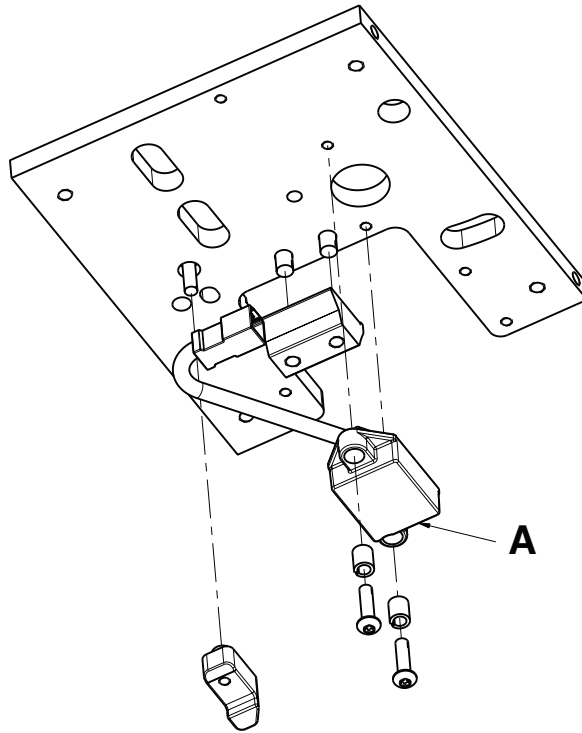
(Reference only)



Item	Recycling/material code	Important information	Quantity
A	6390-001-450 (Master On/Off Switch)		1



(Reference only)

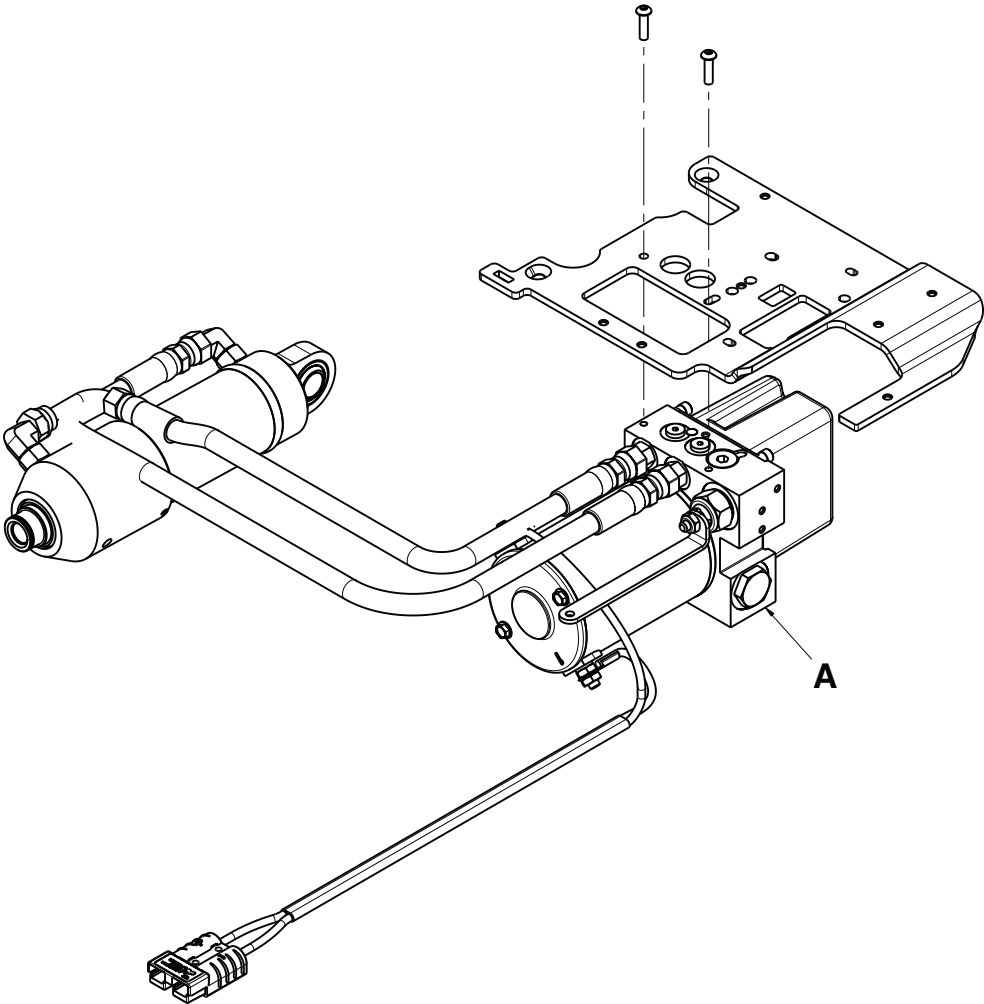


Item	Recycling/material code	Important information	Quantity
A	6390-001-361 (TPS Sensor Assembly)		1

# Recycling passport - 6390-001-035



(Reference only)

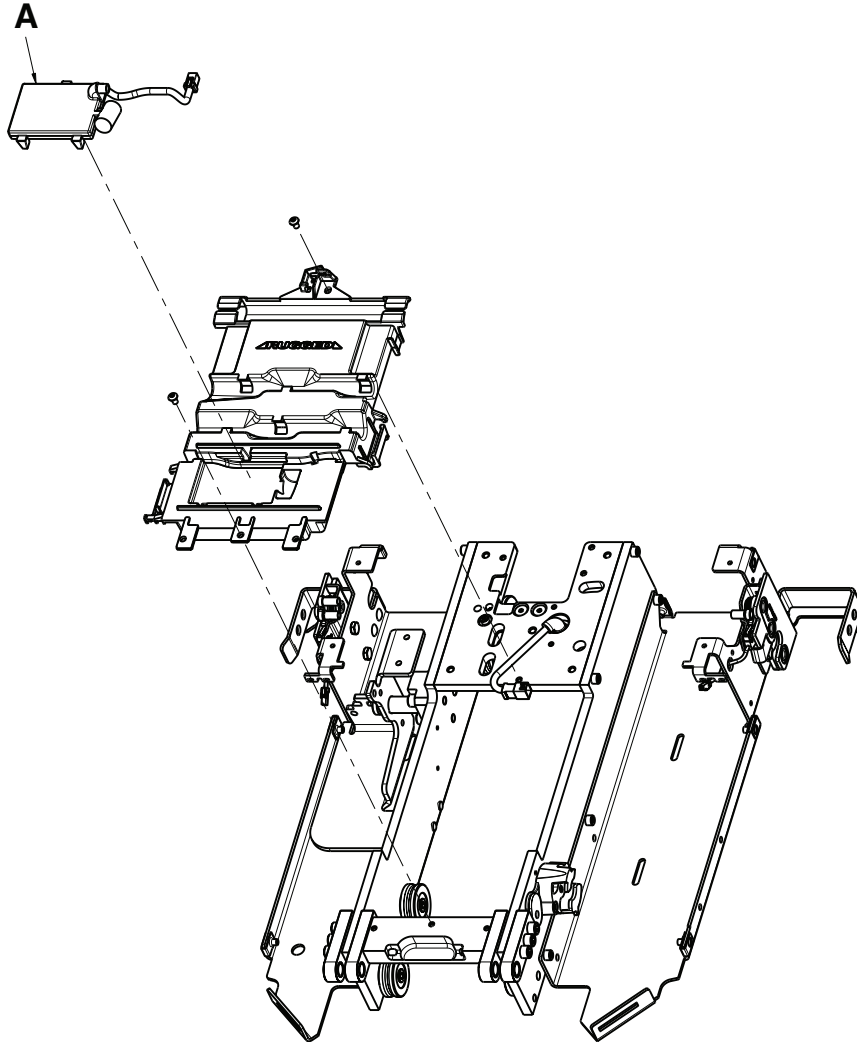


Item	Recycling/material code	Important information	Quantity
A	6390-001-039 (Hydraulics Assembly)		1

# Recycling passport - 6390-001-015



(Reference only)



Item	Recycling/material code	Important information	Quantity
A	6390-001-378 (Trolley Comm Board)		1

# EMC information

Guidance and manufacturer's declaration - electromagnetic emissions		
<p><b>Power-LOAD</b> is intended for use in the electromagnetic environment specified below. The customer or the user of <b>Power-LOAD</b> should assure that it is used in such an environment.</p>		
Emissions test	Compliance	Electromagnetic environment
RF Emissions CISPR 11	Group 1	The <b>Power-LOAD</b> system uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions CISPR 11	Group 2	The <b>Power-LOAD</b> system must emit electromagnetic energy in order to perform its intended function. Nearby electronic equipment may be affected.
RF Emissions CISPR 11	Class A	The <b>Power-LOAD</b> system is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.


Recommended separations distances between portable and mobile RF communications equipment and Power-LOAD			
<p><b>Power-LOAD</b> is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of <b>Power-LOAD</b> can help prevent electromagnetic interferences by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and <b>Power-LOAD</b> as recommended below, according to the maximum output power of the communications equipment.</p>			
Rated maximum output power of transmitter  W	Separation distance according to frequency of transmitter  m		
	150 kHz to 80 MHz  $d=(1.2) (\sqrt{P})$	80 MHz to 800 MHz  $d=(0.35) (\sqrt{P})$	800 MHz to 2.7 GHz  $d=(0.70) (\sqrt{P})$
0.01	0.12	0.04	0.07
0.1	0.38	0.11	0.22
1	1.20	0.35	0.70
10	3.79	1.11	2.21
100	12	3.5	7
<p>For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer. Note 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies. Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.</p>			

# EMC information

Guidance and manufacturer's declaration - electromagnetic immunity			
<b>Power-LOAD</b> is suitable for use in the electromagnetic environment specified below. The customer or the user of <b>Power-LOAD</b> should assure that it is used in such an environment.			
Immunity test	EN/IEC 60601 test level	Compliance level	Electromagnetic environment-guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±8 kV contact ±15 kV air	±8 kV contact ±15 kV air	Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Surge IEC 61000-4-5	±1 kV line(s) to line(s) ±2 kV line(s) to ground	±1 kV line(s) to line(s) ±2 kV line(s) to ground	Mains power quality should be that of a typical commercial or hospital environment.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Electrical transient conduction along supply ISO 7637-2	per ISO 7637-2	per ISO 7637-3	N/A
Conducted RF IEC 61000-4-6  Radiated RF IEC 61000-4-3	3 Vrms 6 Vrms in ISM and amateur radio bands 150 kHz to 80 MHz  10 V/m 80 MHz to 2.7 GHz	3 V 6 Vrms in ISM and amateur radio bands  10 V/m	Portable and mobile RF communications equipment should be used no closer to any part of <b>Power-LOAD</b> , including cables, than the recommended separation distance calculated from the equation appropriate for the frequency of the transmitter.  Recommended separation distance $D=(1.2) (\sqrt{P})$ $D=(.35) (\sqrt{P})$ 80 MHz to 800 MHz $D=(0.70) (\sqrt{P})$ 800 MHz to 2.7 GHz  where $P$ is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and $d$ is the recommended

# EMC information

(Continued)

Guidance and manufacturer's declaration - electromagnetic immunity			
			<p>separation distance in meters (m).</p> <p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site <sup>a</sup> should be less than the compliance level in each frequency range.<sup>b</sup></p> <p>Interference may occur in the vicinity of equipment marked with the following symbol:</p> 
<p><b>Note 1:</b> At 80 MHz and 800 MHz, the higher frequency range applies.</p> <p><b>Note 2:</b> These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.</p> <p><b>Note 3:</b> The ISM (industrial, scientific and medical) bands between 0.15 MHz and 80 MHz are 6.765 MHz to 6.795 MHz; 13.553 MHz to 13.567 MHz; 26.957 MHz to 27.283 MHz; and 40.66 MHz to 40.70 MHz. The amateur radio bands between 0.15 MHz and 80 MHz are 1.8 MHz to 2.0 MHz, 3.5 MHz to 4.0 MHz, 5.3 MHz to 5.4 MHz, 7 MHz to 7.3 MHz, 10.1 MHz to 10.15 MHz, 14 MHz to 14.2 MHz, 18.07 MHz to 18.17 MHz, 21.0 MHz to 21.4 MHz, 24.89 MHz to 24.99 MHz, 28.0 MHz to 29.7 MHz and 50.0 MHz to 54.0 MHz.</p> <p><b>Note 4:</b> Evaluated for immunity to proximity fields from RF wireless communication equipment per IEC 60601-1-2: 2014 Table 9.</p>			
<p><sup>a</sup> Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which <b>Power-LOAD</b> is used exceeds the applicable RF compliance level above, the <b>Power-LOAD</b> system should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating <b>Power-LOAD</b>.</p> <p><sup>b</sup> Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 20 V/m.</p>			

# Warranty

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

One (1) year parts, labor, and travel. 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 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. Expendable components, i.e. mattresses, restraints, IV poles, storage nets, storage pouches, oxygen straps, and other soft goods, have a one (1) year limited warranty.

The Stryker **Power-LOAD** is designed for a seven (7) year expected service life under normal use conditions, and with appropriate periodic maintenance as described in the maintenance manual. Stryker warrants to the original purchaser that the welds on the **Power-LOAD** will be free from structural defects for the expected seven (7) year life of the product as long as the original purchaser owns the product.

Upon Stryker's request, the purchaser shall return to Stryker's factory any product or part (freight prepaid by Stryker) for which an original purchaser makes a warranty claim.

Warranty exclusions and other conditions:

- 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.
- There are extenuating circumstances and events that may alter the performance of the products such as an ambulance accident. In Stryker's discretion, certain circumstances may allow for evaluation of the product post ambulance accident which could allow for continued use of the product. If products recommended to be removed from service are put back into service, Stryker will consider the product as being subject to unusual stress and improperly maintained. Products which are subject to unusual stress and improper maintenance are not subject to Stryker's warranty as noted above. In addition, Stryker will not indemnify any customer for any third-party claims related to injuries caused by products that have been involved in accidents.
- This warranty is void if the label bearing the serial number of the product has been removed or defaced.
- This warranty is void if the product is not purchased from an authorized Stryker dealer.

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 herein. There is no warranty on 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 matter related to sales or use of such equipment.

No employee or representative of Stryker is authorized to change this warranty in any way.

## Warranty exclusion and damage limitations

The express warranty set forth herein is the only warranty applicable to the product. **Any and all other warranties, whether express or implied, including any implied warranty of merchantability or fitness for a particular purpose are expressly excluded by Stryker.** In no event shall Stryker be liable for incidental or consequential damages.

## To obtain parts and service

Stryker products are supported by a nationwide network of dedicated Stryker Field Service Representatives. These representatives are factory trained, available locally, and carry a substantial spare parts inventory to minimize repair time. Simply call your local representative or call Stryker Customer Service at 1-800-327-0770.



# Warranty

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## Return authorization

Product cannot be returned without prior approval from the Stryker Customer Service Department. An authorization number will be provided which must be printed on the returned product. Stryker reserves the right to charge shipping and restocking fees on returned product. Special, modified, or discontinued products are not subject to return.

## Damaged product

ICC Regulations require that claims for damaged product must be made within fifteen (15) days of receipt of the product. 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. Claims 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 product, 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 within thirty (30) days of receipt. Claims for any incomplete shipments 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. Contact your local Stryker Medical representative for additional information.



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