

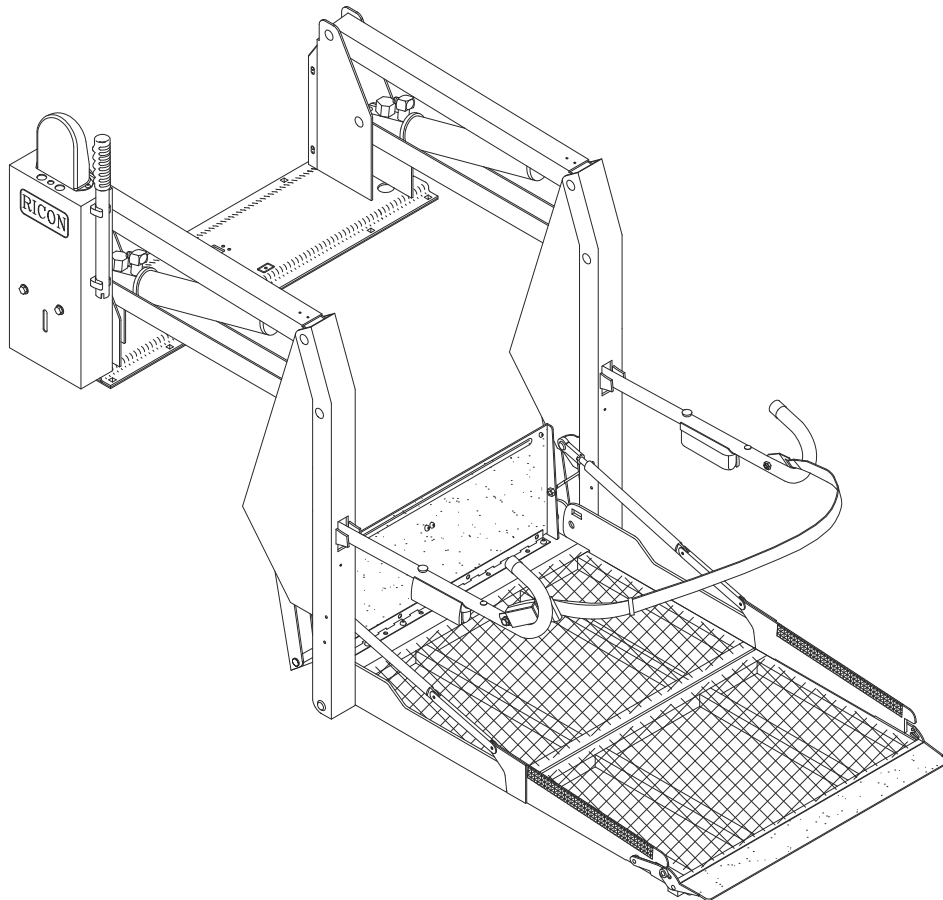


**Ricon**®

**A Wabtec company**

**KlearVue™**

**K-Series® Folding Platform  
DOT – Public Use Lift**



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**SERVICE MANUAL**

This Ricon service manual is for use by qualified service technicians, and is not intended for use by non-professionals (do-it-yourselfers). The manual provides essential instructions and reference information, which supports qualified technicians in the correct installation and maintenance of Ricon products.

Qualified service technicians have the training and knowledge to perform maintenance work properly and safely. For the location of a service technician in your area, call Ricon Product Support at 1-800-322-2884.

“DOT – Public Use Lift” verifies that this platform lift meets the public use lift requirements of FMVSS no. 403. This lift may be installed on all vehicles appropriate for the size and weight of the lift, but must be installed on buses, school buses, and multi-purpose passenger vehicles other than motor homes with a gross vehicle weight rating (GVWR) that exceeds 10,000 lbs (4,536 kgs).

Customer Name: \_\_\_\_\_  
Installing Dealer: \_\_\_\_\_  
Date Installed: \_\_\_\_\_  
Serial Number: \_\_\_\_\_

**REVISION RECORD**

REV	PAGES	DESCRIPTION OF CHANGE	ECO
32DSSK06. B.3	Cvr	Update to K-Series cover	6663
	4-14	Update to Figure 4-14	
	4-15	Update to Parts List 4-6	
	4-19	Update to Figure 4-7.1, 4-7.2	
	4-22	Update to Parts List 4-8	

Chapter

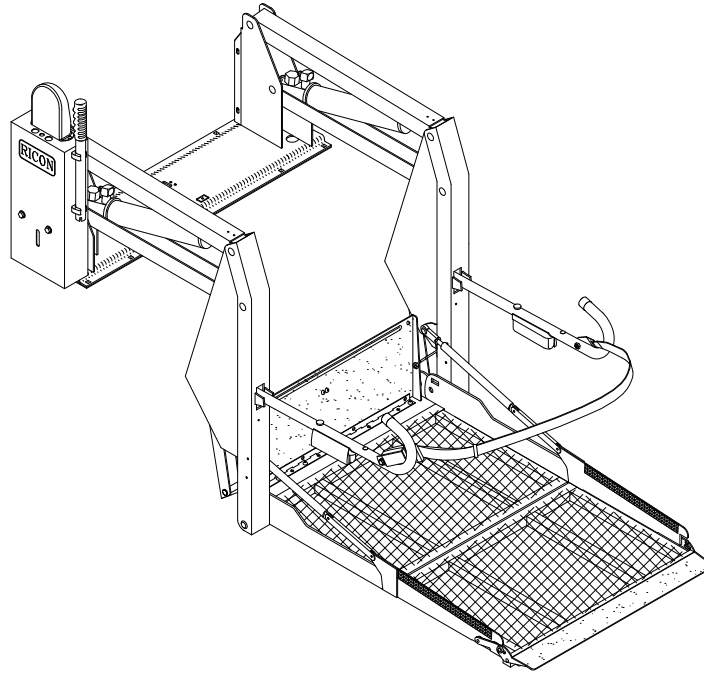
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### I. K-SERIES PUBLIC INTRODUCTION

The RICON K-Series® Public Use wheelchair lift provides wheelchair access to vans and buses. The patented movement provides smooth, safe entry and exit, and can lift up to 800 pounds (364 kilograms). The platform is raised with an electro-hydraulic pump. The pump has a built-in manual backup pump, allowing it to be raised or lowered manually.



By using the lift control switches, the platform is unfolded from the vehicle (deployed). The passenger boards the large non-skid platform and the operator uses the control switches to gently lower the platform to the ground. After the passenger departs, the platform is raised and folded into the vehicle (stowed). The lift platform splits and folds horizontally when stowed.

This manual contains operation and maintenance instructions and a troubleshooting guide for the lift. It is important to user safety that the lift operators be completely familiar with the Operating Instructions chapter of the operator manual (32DSSK05). Once the lift is installed, it is very important that the lift be properly maintained by following the Ricon recommended cleaning, lubrication, and inspection instructions.

If there are questions about this manual, or additional copies are needed, please contact Ricon Product Support at one of the following locations:

**Ricon Corporation**  
**7900 Nelson Road**  
**Panorama City, CA 91402 ..... (818) 267-3000**  
**Outside (818) Area Code..... (800) 322-2884**  
**World Wide Website ..... www.riconcorp.com**

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**Vapor Ricon Europe Ltd.**  
**Meadow Lane**  
**Loughborough, Leicestershire LE11 1HS**  
**United Kingdom.....(0044) 1509 635 920**  
**Fax .....(0044) 1509 261 939**

## RICON FIVE-YEAR LIMITED WARRANTY

**RICON K-SERIES® PUBLIC  
FIVE-YEAR LIMITED WARRANTY**

**Ricon Corporation (Ricon)** warrants to the original purchaser of this product that Ricon will repair or replace, at its option, any part that fails due to defective material or workmanship as follows:

- Repair or replace parts for a period of one year from the date of purchase.
- Labor costs for specified parts replaced under this warranty for a period of one year from the date of purchase. A Ricon rate schedule determines the parts covered and labor allowed.
- Repair or replace lift power train parts for a period of five years from the date of purchase. A list of parts covered can be obtained from Ricon Product Support.

**If you need to return a product:** Return this product to Ricon. Please give as much advance notice as possible, and allow a reasonable amount of time for repairs.

**This warranty does not cover:** Malfunction or damage to product parts caused by accident, misuse, lack of proper maintenance, neglect, improper adjustment, modification, alteration, the mechanical condition of the vehicle, road hazards, overloading, failure to follow operating instructions, or acts of nature (i.e., weather, lightning, flood).

**Note:** Ricon recommends that this product be inspected by a Ricon authorized service technician at least once every six months, or sooner if necessary. Required maintenance should be performed at that time.

 **WARNING**

THIS PRODUCT HAS BEEN DESIGNED AND MANUFACTURED TO EXACT SPECIFICATIONS.  
MODIFICATION OF THIS PRODUCT IN ANY RESPECT CAN BE DANGEROUS.

***This warranty is void if:***

- The product has been installed or maintained by someone other than a Ricon dealer or a qualified service technician.
- The product has been modified or altered in any respect from its original design without written authorization by Ricon.

***Ricon disclaims liability for any personal injury or property damage that results from operation of a Ricon product that has been modified from the original Ricon design. No person or company is authorized to change the design of this Ricon product without written authorization by Ricon.***

***Ricon's obligation under this warranty is exclusively limited to the repair or exchange of parts that fail within the applicable warranty period.***

***Ricon assumes no responsibility for expenses or damages, including incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply.***

***Important: The warranty registration card must be completed and returned to Ricon within 20 days after installation of this Ricon product for the warranty to be valid. The warranty is not transferable.***

***The warranty gives specific legal rights. There may be other rights that vary from state to state.***

## A. SHIPMENT INFORMATION

- ˘ Because of the specialized nature of this product, Ricon does not sell directly to the user. Instead, the product is distributed through a worldwide network of authorized Ricon dealers, who perform the actual installation.
- ˘ When the product is received, unpack the product and check for freight damage. Claims for any damage should be made to the carrier immediately.
- ˘ Verify that the installation kit contains all items listed on the enclosed packing list. Please report any missing items immediately to the Ricon Product Support department. The warranty and owner registration cards must be completed and returned to Ricon within 20 days to validate the warranty.

**NOTE:** Sales or Service Personnel must review the Warranty and the Operator Manual with the user to be certain that they understand how to safely operate the product. Instruct the user to follow the operating instructions without exception.

## B. GENERAL SAFETY PRECAUTIONS

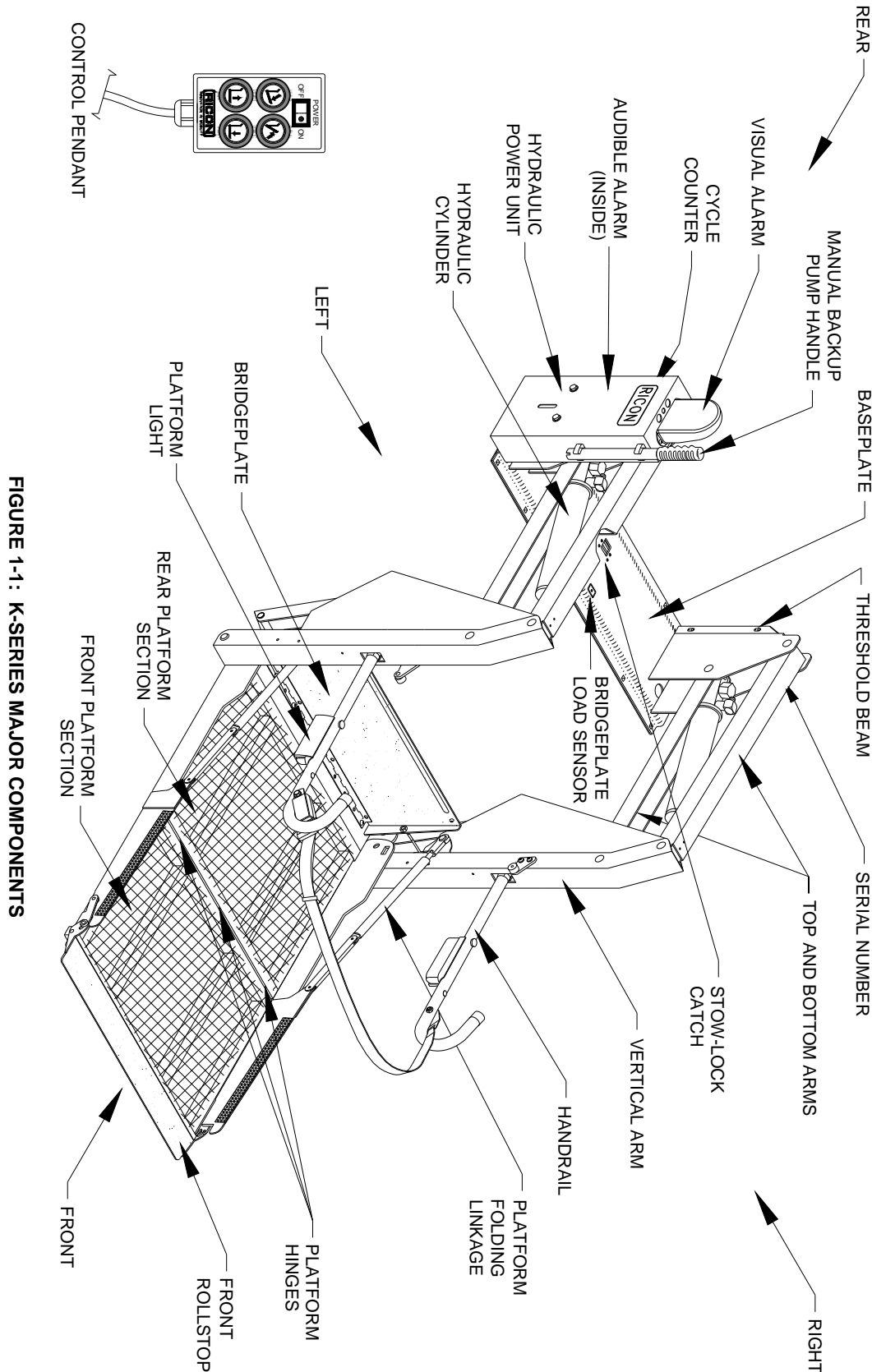
The following general safety precautions must be followed during installation, operation, service, and maintenance:

- Under no circumstances should installation, maintenance, repair, and adjustments be attempted without the immediate presence of a person capable of rendering aid.
- An injury, no matter how slight, must be attended to. Administer first aid or seek medical attention immediately.
- Protective eyeshields and appropriate clothing should be worn at all times.
- To avoid injury, exercise caution when operating lift and be certain that hands, feet, legs, and clothing are not in the path of platform movement.
- Batteries contain acid that can burn. If acid comes in contact with skin, immediately flush affected area with water and wash with soap.
- Always work in a properly ventilated area. Do not smoke or use an open flame near battery.
- Do not lay anything metallic on top of battery.
- Check under vehicle before drilling to avoid drilling into frame, subframe members, wiring, hydraulic lines, fuel lines, fuel tank, etc.
- Read and thoroughly understand the operating instructions before operating lift.
- Inspect the lift before each use. If an unsafe condition, unusual noises or movements exist, do not use lift until the problem is corrected.
- Never load or stand on the platform until the installation is complete. Upon completion of installation, test load the lift mounting integrity at 100% of its rated load capacity.
- Stand clear of doors and platform and keep others clear during operation.
- The product requires regular maintenance. A thorough inspection is recommended at least every six months. The lift must always be maintained at the highest level of performance.



**C. MAJOR LIFT COMPONENTS**

The terms used throughout this manual are illustrated in **Figure 1-1** and defined in **Table 1-1**. Refer to the parts diagrams and lists in **Chapter IV** for more details.



**FIGURE 1-1: K-SERIES MAJOR COMPONENTS**

TABLE 1-1: K-SERIES MAJOR COMPONENT TERM DEFINITIONS

TERM	DESCRIPTION
Left, right, front, rear	Position references when installed lift is viewed from outside of vehicle.
Baseplate	Bolts to vehicle floor; provides secure foundation for lift structure.
Bridgeplate (inboard rollstop)	Plate that bridges gap between platform and baseplate when platform is at floor level. Also acts as a rear rollstop when platform is in motion.
Bridgeplate load sensor	Senses if weight is present on the lowered bridgeplate.
Control pendant	Hand-held device used to control platform motions.
Cycle counter	Visible at top rear of housing. It records number of times platform has moved from floor level to ground and back to floor level.
Front platform section	Front portion of platform that unfolds during deploy and folds during stow. See "Platform folding linkage".
Front rollstop	Front barrier prevents wheelchair from inadvertently rolling off of platform during platform movement.
Handrail	(left and right) Provides handhold for standing passenger.
Hydraulic cylinder	(left and right) Telescoping single-acting cylinders convert hydraulic pressure into platform lifting and folding force.
Hydraulic power unit	Contains hydraulic pump driven by electric motor that produces pressure to raise and fold platform, and a pressure release valve to unfold and lower it.
Manual backup pump handle	Used to operate manual back up-pump (located on hydraulic power unit cover).
Platform folding linkage	(left and right) Links that cause front platform section to unfold as it deploys or fold as it stows.
Platform hinges	Three hinges provide a flexible connection between front and rear platform sections.
Platform light	(left and right) Provide illumination of platform surface when lift is in use.
Rear platform section	Rear portion of platform that is folded by linkage located within the vertical arms.
Serial number	This is the location of lift serial number decal.
Stow-lock catch	Engages latch located on bottom of bridgeplate when platform is fully stowed.
Threshold beam	(upper and lower) Light-beams detect presence of objects in threshold area.
Top and bottom arms	(left and right) Upper and lower links that connect vertical arms to baseplate.
Vertical arm	(left and right) Connects platform to top and bottom arms.
Visual and audible alarms	Announce when something has passed over threshold. Activated by threshold beams.
END OF TABLE	

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## II. INSTALLATION

This chapter contains instructions for installing the RICON K-Series® Public Use wheelchair lift into most vans and busses, although custom installations are also possible in other types of vehicles. Due to the wide range of lift applications, specific information for every possible application is not available. The following general procedures will apply to most installations. Contact the Ricon Product Support department for instruction on installations not covered. To install lift, refer to following sections and perform procedures carefully and in the order that they are presented. Be certain that installation instructions are followed exactly and do not eliminate any steps or modify product.

**NOTE:** Carefully review the installation instructions (32ii351e) that are supplied with this lift before beginning the following procedures. Where these procedures conflict, the installation instructions take precedence.

### A. GENERAL MECHANICAL INSTALLATION

#### 1. LIFT LOCATION

The installation surface must be flat and level. It is recommended that lift be installed on a 1/2", minimum, high-grade plywood sub-floor. However, this additional installation height may not be acceptable in cases where overhead clearance is limited.

**NOTE:** Check for proper travel clearance through doorway.

- a. With doors fully open, place/position lift in vehicle doorway as close as possible to door, with lift's baseplate assembly parallel to side of vehicle.
- b. Allow a distance of 3/4", if possible, between door and adjacent part of lift. Adjust the left and right side of lift to accommodate subframe members.
- c. Verify proper clearance of door frame, passenger seats, and outer edge of vehicle floor and possible interference with wires, fluid lines, subframe members, etc.

#### 2. LIFT INSTALLATION GUIDELINES

The lift mounting is a very important step. Improper mounting or fastening of baseplate can adversely affect lift performance. Although fastening details may vary from one vehicle to the next, these general principles apply:

- ◆ Be certain that all mounting bolts are properly installed and tightened. Bolts used to fasten baseplate assembly to vehicle floor must have a minimum strength rating of SAE Grade 5 and be torqued to 28 ft lbs, dry. Recognize that the most important bolts are those along the rear of lift, since these retain the majority of the load.
- ◆ Refer to **Figures 2-1** and **2-5**. Improper torquing sequence of baseplate bolts may result in a warped or bowed baseplate, which can cause platform to move erratically.

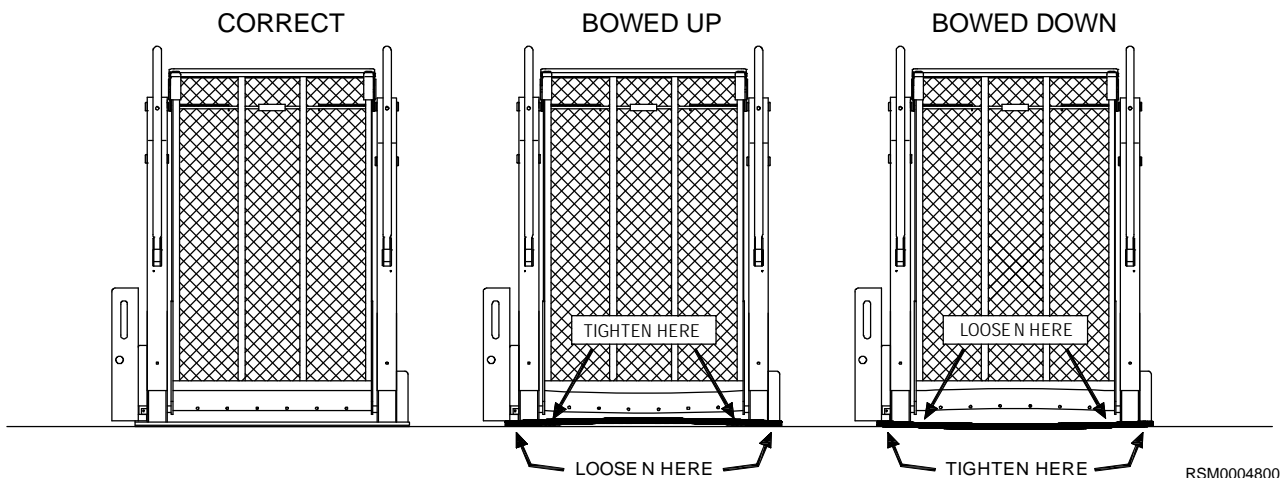
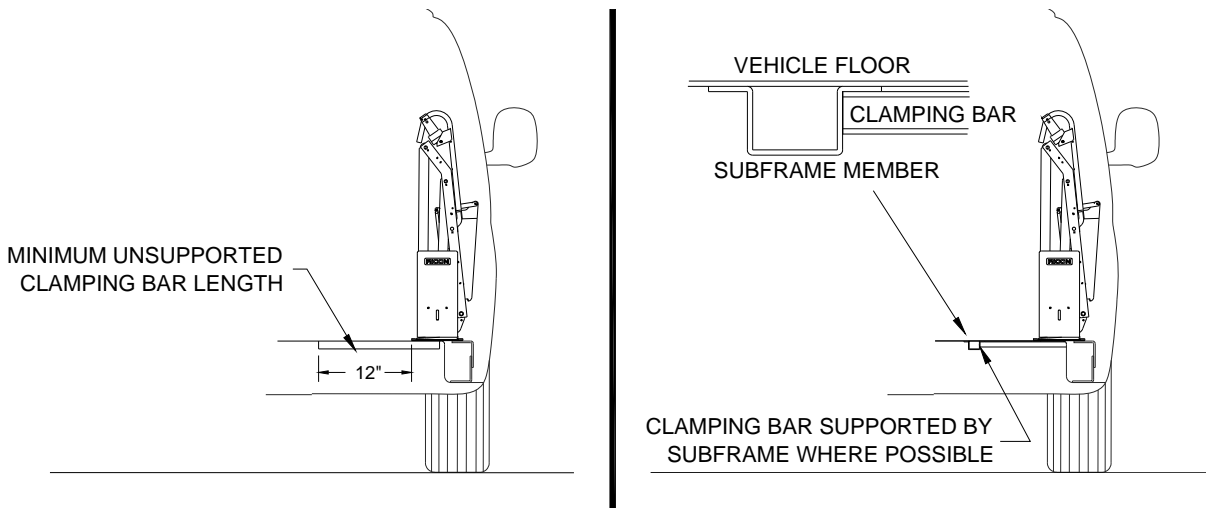


FIGURE 2-1: EXAMPLES OF BASEPLATE WARPAGE

- ◆ Refer to **Figure 2-2**. On Ford van installations, clamping bars are used to help evenly distribute floor loading and should only be cut if needed to clear a subframe member. A subframe member must be used to support clamping bar.



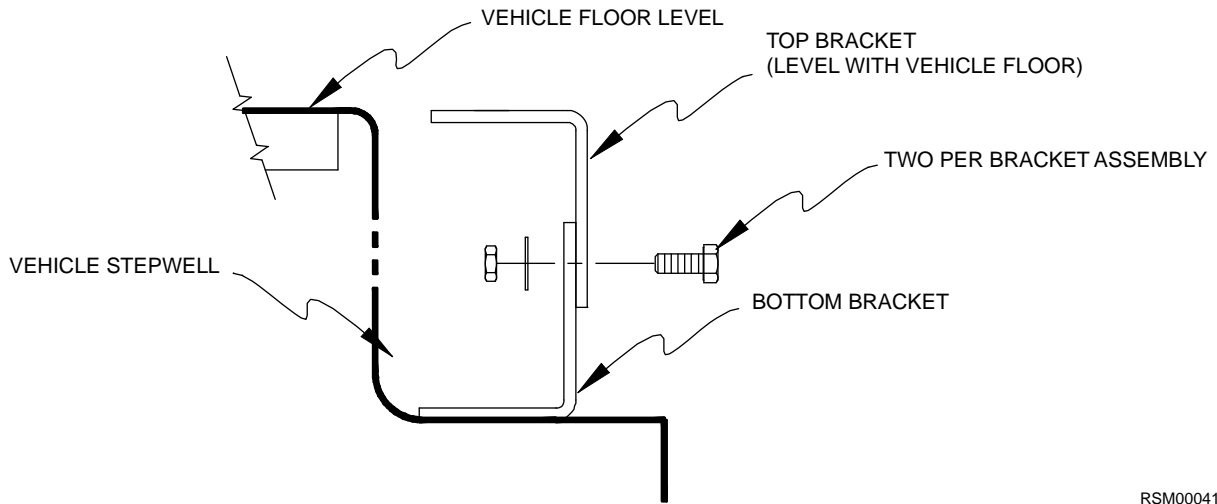
**FIGURE 2-2: FORD VAN CLAMPING BAR ARRANGEMENT**

**3. LIFT INSTALLATION INTO VANS**

This is a general procedure for installing Ricon lifts into Ford, Dodge, and Chevrolet full size vans.

- Refer to **Figure 2-3**. Use four 1" x 3/8" bolts, 3/8" washers, 3/8" lock washers, and 3/8" hex nuts to assemble two bracket assembly kits.

**NOTE:** The top bracket must overlap bottom bracket, and both slots must face outward.



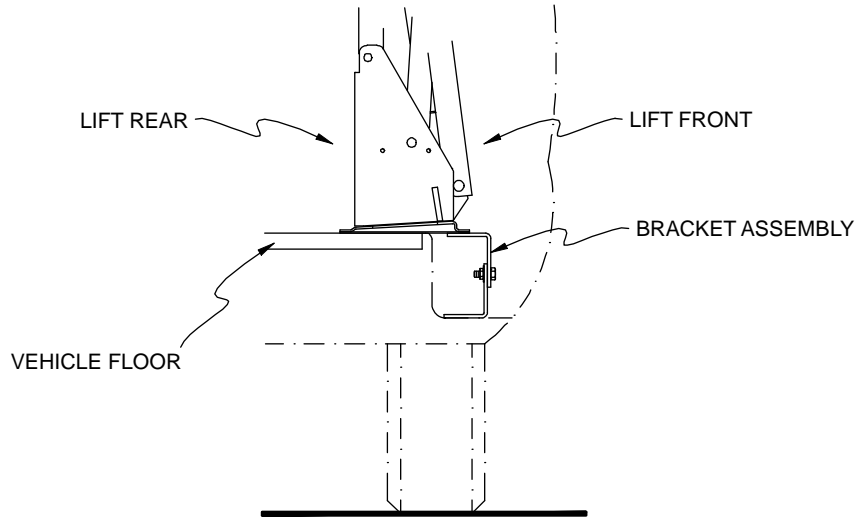
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**FIGURE 2-3: STEPWELL BRACKET**

- Position brackets on stepwell and adjust height of both bracket assemblies so that top bracket is level with vehicle floor. Tighten bracket assembly bolts.
- Verify that lift is fully folded (stowed) with handrails folded tight against vertical arms. If necessary, use manual pump.

<b>WARNING</b>
<p>LIFT WEIGHT IS APPROXIMATELY 340 - 370 LBS. USE EXTREME CARE WHEN POSITIONING BECAUSE STEPWELL BRACKETS MAY TIP. THIS PROCEDURE MUST NOT BE ATTEMPTED BY ONE PERSON.</p>

- d. Refer to **Figure 2-4**. With doors fully open, position lift in vehicle doorway so that back of lift is supported by vehicle floor, and front of lift is supported by both bracket assemblies.



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**FIGURE 2-4: BRACKET ASSEMBLY**

- e. Fasten Baseplate to Floor:

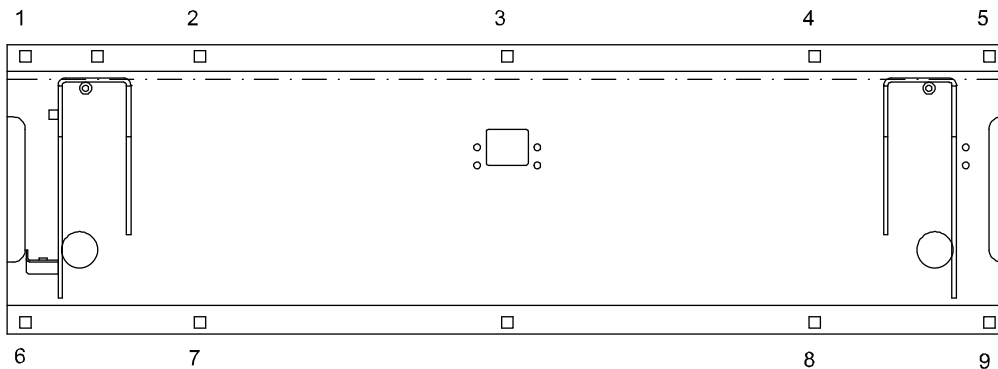
**NOTE:** If Ricon power door operators are used, install them first. They may influence location of lift.

- Be certain baseplate is flush against vehicle floor. The baseplate may be slightly offset in door opening to provide proper clearance for passenger seats.
- Before drilling, verify that lift position does not interfere with closing of vehicle doors or operation of passenger seats.
- If this lift is being installed in a Dodge van with sliding doors, omit the bolts in baseplate holes 7 and 8.

- f. Mark and Drill Holes:

	CAUTION
Before drilling holes, verify that underlying wires and tubing will not be damaged.	

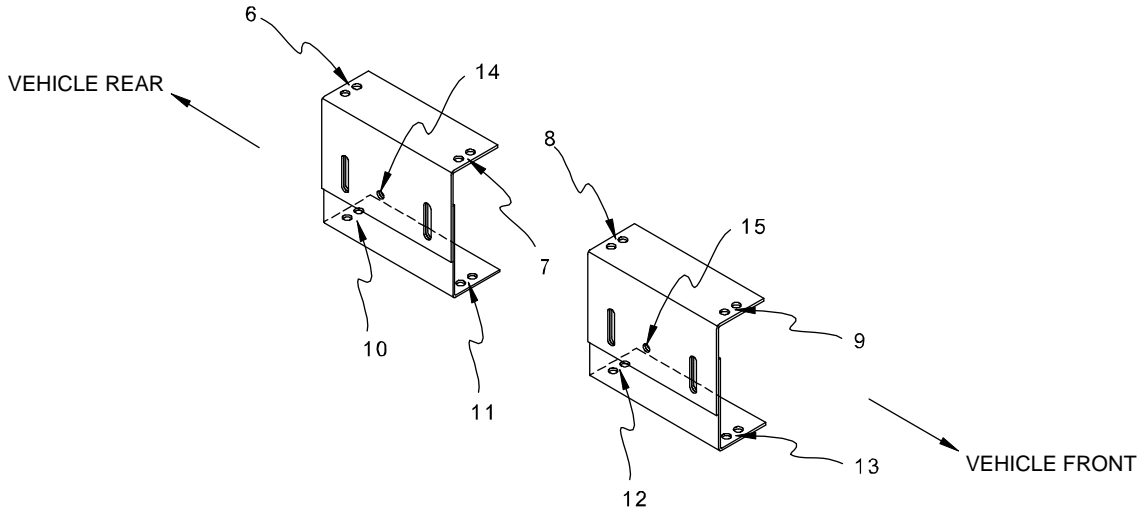
- 1) Refer to **Figure 2-5**. Mark and drill five 25/64" baseplate mounting holes (1, 2, 3, 4, and 5) through vehicle floor. (On Dodge and GM vans, you must drill through vehicle floor and subframe).



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**FIGURE 2-5: VAN BASEPLATE HOLES**

- 2) Place five 8" x 3/8" carriage bolts (use 4" x 3/8" bolts on Ford vans) into holes to secure position.
- 3) Refer to **Figure 2-6** on the following page. Match and align top holes of stepwell brackets 6, 7, 8, and 9, with baseplate holes 6, 7, 8, and 9. Mark lower stepwell bracket holes 10, 11, 12, and 13 onto vehicle step.
- 4) Remove five carriage bolts installed in step 2). Carefully push lift into vehicle interior.
- 5) Drill 1/4" dia holes through marked locations 10, 11, 12, and 13.



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**FIGURE 2-6: STEPWELL BRACKET HOLE LOCATIONS**

g. Fasten Bracket Assemblies and Lift:

- 1) Use 1-1/2" x 5/16" sheet metal screws with 5/16" lock washers to secure lower brackets to vehicle step holes 10 through 13.

**NOTE:** If the screw in position 13 interferes with proper door operation, do not install.

- 2) Reposition lift and verify that surface beneath lift is free of obstacles.
- 3) Insert five 8" x 3/8" carriage bolts through mounting holes at rear of baseplate assembly, and insert four 1-1/2" x 3/8" carriage bolts through baseplate and bracket assemblies. Place 3/8" washers, lock washers, and nuts under bracket assemblies, and finger tighten nuts.

**NOTE:** On Dodge and GM vans, place five 4" x 4" plates, 3/8" washers, lock washers and hex nuts on 8" x 3/8" carriage bolts under van and finger tighten. On Ford models, reinforce vehicle floor with clamping bars. They are installed in positions 1, 2, 3, 4, and 5 and run across width of baseplate towards center of van.

- 4) Before tightening carriage bolts, verify that lift is level with vehicle floor. Adjust bracket assembly bolts if necessary.
- 5) Tilting lift towards inside of van may hinder its initial unfolding. Install lift with its baseplate assembly as level as possible. Tightening carriage bolts requires special care to keep baseplate assembly from warping when secured to vehicle floor. If baseplate assembly warps, the vertical arms will not be parallel. Make corrections by shimming at appropriate locations. To help prevent warping, tighten the eight carriage bolts (six on Dodge van with sliding door) to 28 ft. lbs. in the appropriate sequence:

DODGE WITH SWING DOORS, ALL FORD AND GM VANS ..... **3, 1, 2, 4, 5, 6, 7, 8, 9**

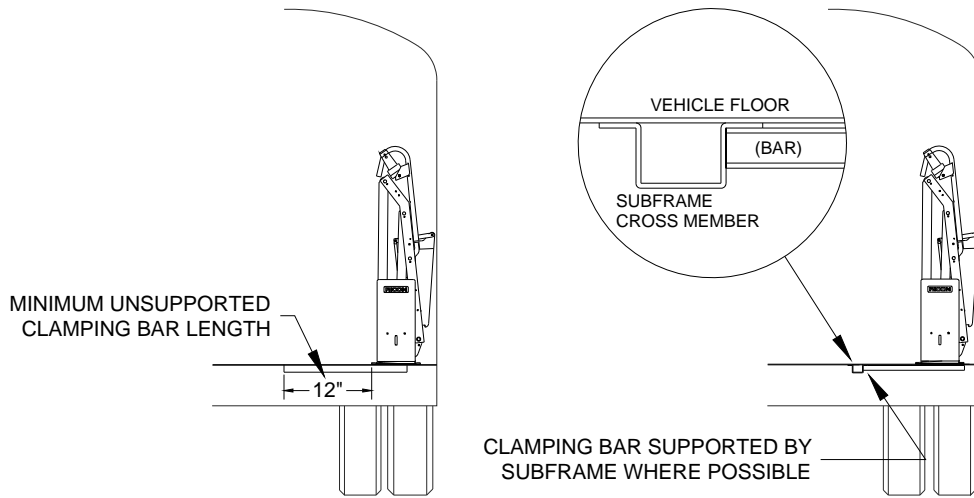
DODGE WITH SLIDING DOORS ..... **3, 1, 2, 4, 5, 6, 9**

**NOTE:** Vertical arms must be parallel for proper operation. Adjust bolts as required. Best results are obtained when lift is mounted on plywood. Shims, although best avoided, may be used if required.

- 6) Make certain that holes 14 and 15 on the front of each bracket assembly are drilled through, and 5/16" bolts are inserted to lock position of bracket assemblies.

**4. LIFT INSTALLATION INTO BUSES**

Refer to **Figure 2-7**. Clamping bars are used on most bus installations to help distribute floor loading and should be cut only if needed to clear a subframe member. Use the flange of a subframe member to support the clamping bar.



**FIGURE 2-7: BUS CLAMPING BAR ARRANGEMENT**

**WARNING**

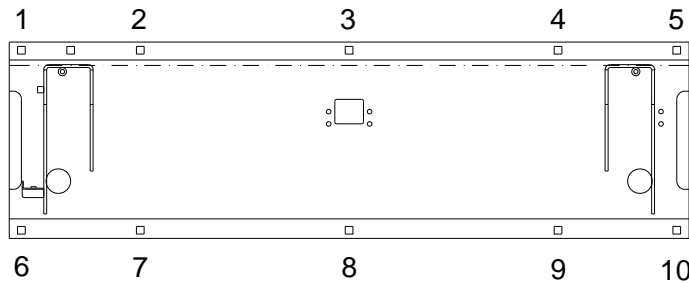
LIFT WEIGHT IS APPROXIMATELY 340-370 LBS. TAKE EXTREME CARE WHEN POSITIONING BECAUSE STEPWELL BRACKETS MAY TIP. THIS PROCEDURE MUST NOT BE ATTEMPTED BY ONE PERSON.

- a. Open doors fully and position lift so that it is centered in vehicle doorway. Close doors and move lift outward until it clears doors by a minimum of 1/2". The baseplate must be parallel to side of bus. Open manual pump release valve (CCW) and allow folded platform to fully settle against latch on baseplate. Verify that interference is not present between lift and doors. Reposition lift, if necessary. Close pump release valve; do not overtighten valve.

**CAUTION**

Before drilling holes, verify that underlying wires and tubing will not be damaged.

- b. Refer to **Figure 2-8**. Mark and drill ten 25/64" baseplate mounting holes (1 thru 10) through vehicle floor.



**FIGURE 2-8: BUS BASEPLATE HOLES**

- c. Fasten lift:
  - 7) Insert ten 4" x 3/8" carriage bolts through baseplate and vehicle floor.
  - 8) Install five support tubes on bolts underneath vehicle floor (across baseplate), i.e., from 1 to 5, 2 to 6, etc, and secure lift to vehicle floor with 3/8" washers, lock washers and hex-nuts.
  - 9) Use care when tightening carriage screws to prevent baseplate warpage. If baseplate assembly warps, vertical arms will not be parallel. Make corrections by shimming at appropriate locations. To help prevent warping, tighten the eight carriage screws to 28 ft-lbs in following sequence:

**2, 3, 6, 7, 1, 4, 5, 8**

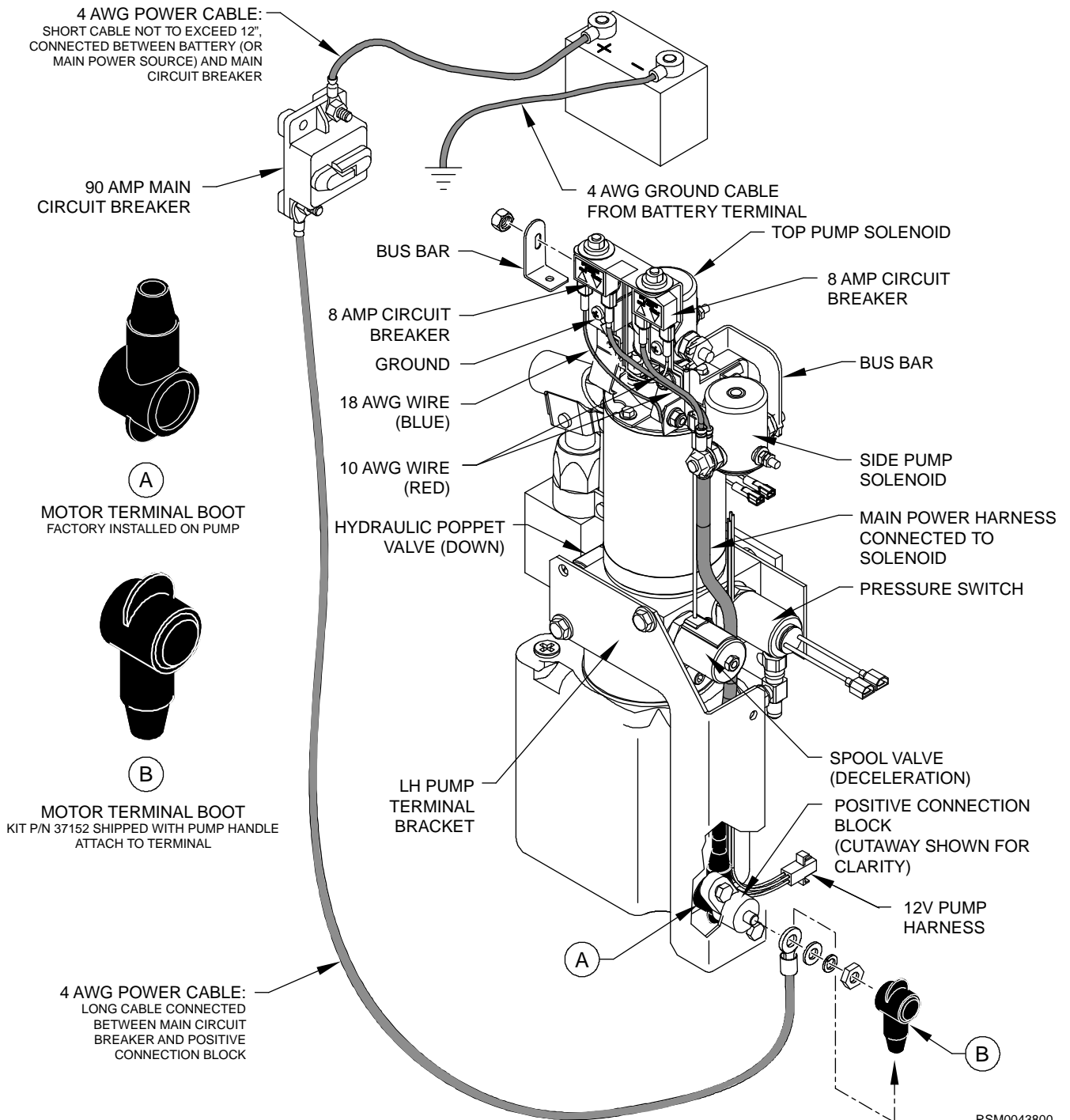
**NOTE:** Vertical Arms must be parallel for proper operation. Adjust screws as required. Best results are obtained when lift is mounted on plywood. Shims, although best avoided, may be used if required.



**B. ELECTRICAL INSTALLATION**

**CAUTION**

- Do not route any wire while it is connected to the battery.
- Route wires clear of moving parts, brake lines, and the exhaust system. Secure to the vehicle.
- When routing an electrical wire through vehicle floor or walls, use a grommet to protect wires from chafing.
- Check underside of vehicle before drilling to avoid damage to fuel lines, vent lines, brake lines, or wiring.



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**FIGURE 2-7: ELECTRICAL INSTALLATION DIAGRAM**

**1. INSTALL MAIN CIRCUIT BREAKER**

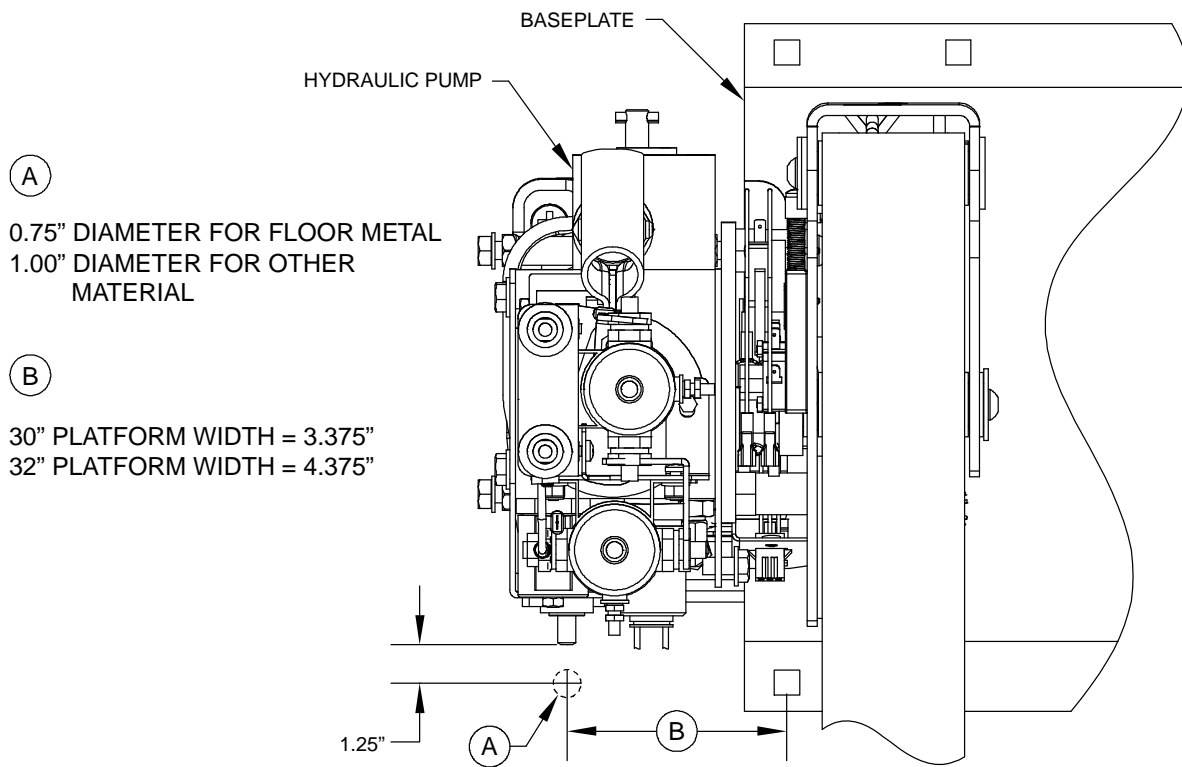
- a. Disconnect battery.
- b. Mount main circuit breaker inside engine compartment within 12 inches of battery (to minimize length of unprotected cable). Avoid installing near a heat source.

**2. ROUTE AND CONNECT MAIN POWER CABLE**

<b>CAUTION</b>
Check under-side of vehicle before drilling to avoid damage to fuel lines, vent lines, brake lines, or wiring.

**NOTE:** For applications where power cable is to pass through sheet metal, drill a 3/4" hole and use wire clamp provided. For applications where cable is to pass through plywood, drill a 1" hole and use black plastic grommet provided.

- a. Refer to **Figures 2-7 and 2-8**. Drill a hole through vehicle floor near or under pump solenoids so power cable can reach positive stud of side solenoid (the stud on side solenoid that is not connected to top solenoid with a bus bar). Drill hole where the installed pump cover will cover it.



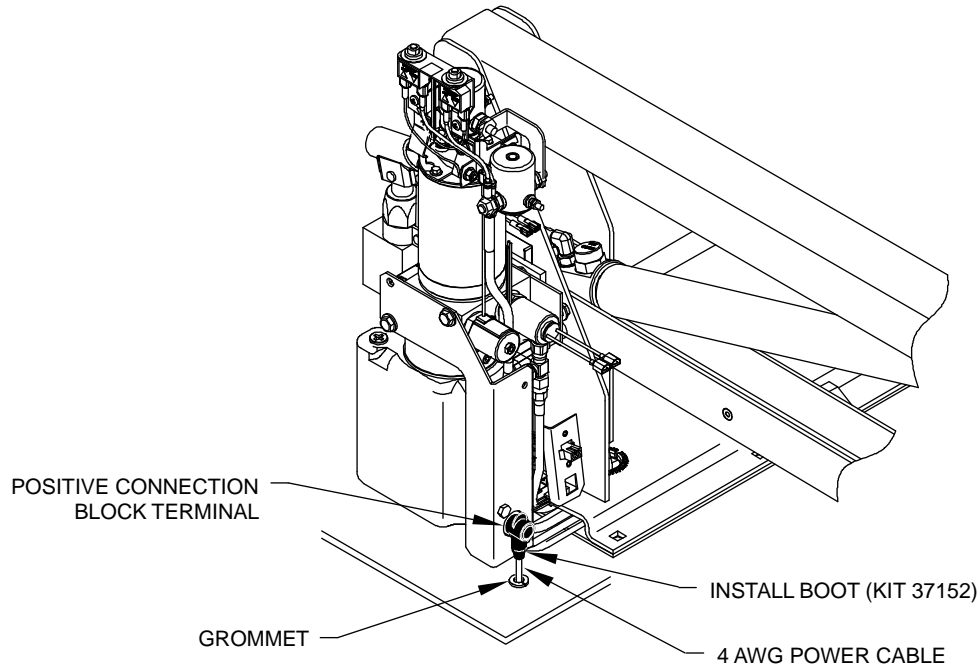
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**FIGURE 2-8: POWER CABLE ACCESS HOLE**

- b. Refer to **Figure 2-7**. Install supplied heavy ring terminals to each end of the short (12" long) 4 AWG power cable. Install one ring terminal, only, to one end of long power cable. Use an appropriate crimp tool (such as Ricon hammer tool, part of kit P/N 01243).
- c. Connect ring terminal end of long 4 AWG power cable to 90A main circuit breaker, then route power cable underneath vehicle floor and up through hole in floor.
- d. Refer to **Figure 2-7**. Detach Kit P/N 37152 (Shipped with pump handle) then install onto ring terminal connector before installing ring terminal onto positive connection block.
- e. Tie power cable to vehicle chassis, and to pump assembly harness using cable ties. Avoid pinch points, exhaust system, moving parts, and brake lines. Verify that power cable is secure.

<b>CAUTION</b>
Be sure that there is no interference with any parts that could damage power cable or other wires in any way.

- f. Refer to **Figure 2-9**. Cut excess wire from long cable, install heavy ring terminal, and then connect to side solenoid. Verify that red wire from main circuit breaker (if applicable) is connected to positive solenoid pole.



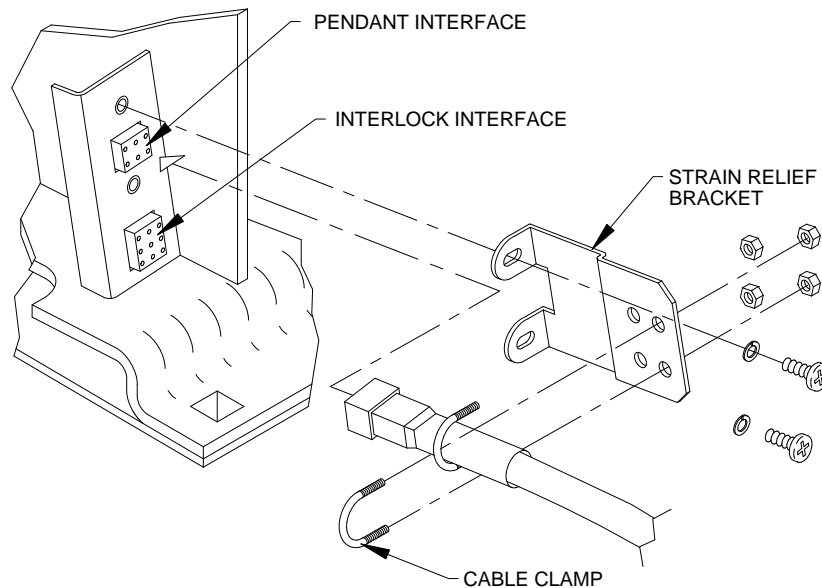
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**FIGURE 2-9: CABLE ROUTING**

- g. Connect 12" cable, with ring terminals, from positive battery terminal to main circuit breaker terminal.

**3. CONNECT CONTROL PENDANT**

- a. Refer to **Figure 2-10**. Connect hand-held control pendant to six-pin connector at left side of baseplate and secure cable with supplied bracket and cable clamps.



**FIGURE 2-10: STRAIN RELIEF KIT**

- b. Install wall portion of dovetail clip (pendant storage) in an appropriate and safe location near lift.

<b>CAUTION</b>
Be sure that harness does not interfere with any moving parts, or binds against any parts, or is pinched in any way.

4. GROUND (COMMON) CONNECTIONS

a. 12VDC Systems

12VDC powered lifts are chassis grounded and do not require a separate ground cable connection to battery. However, if the common side of the lift electrical system is connected to chassis with a cable, the cable must be attached in a manner that provides a reliable electrical connection. If ground cable is attached to an existing ground circuit, the circuit must be capable of conducting an additional 90 amps.

b. 24VDC Systems

- 1) Ricon recommends that a dedicated ground cable be used in 24VDC installations. A 4GA cable, or heavier, must be used.
- 2) Refer to **Figure 2-11**. The ground cable is connected from the negative stud (-) on pump motor to the negative battery terminal.

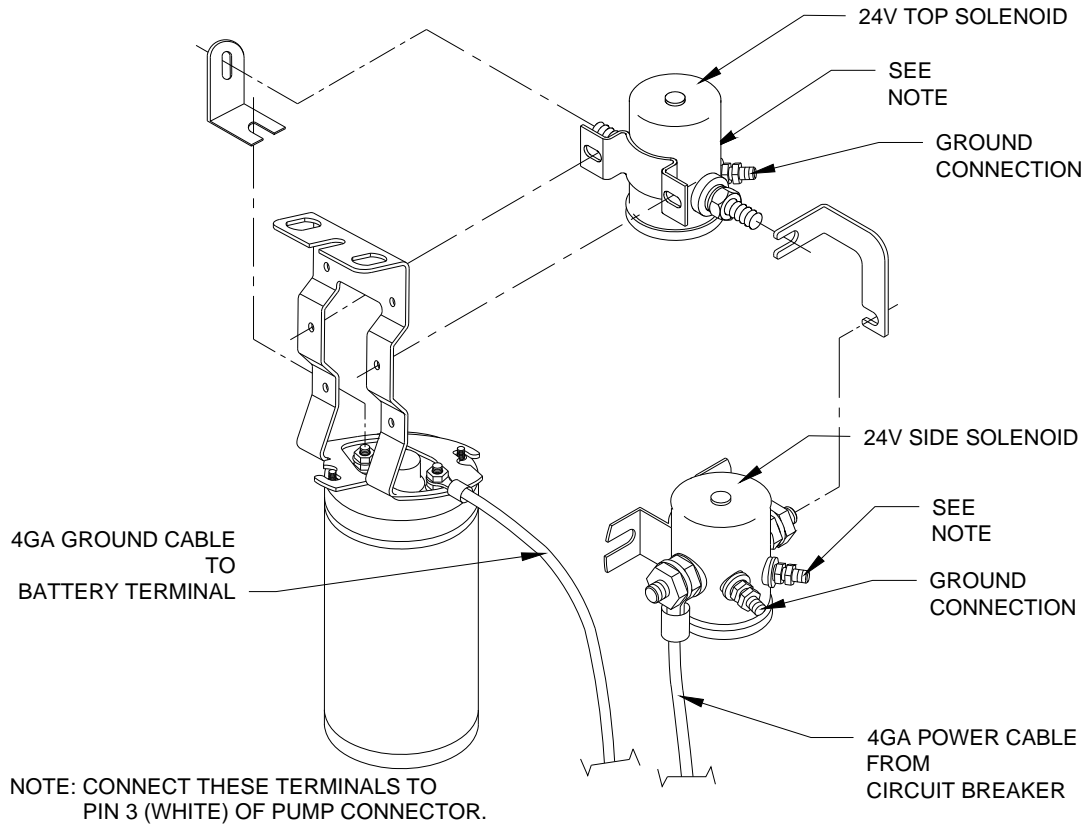


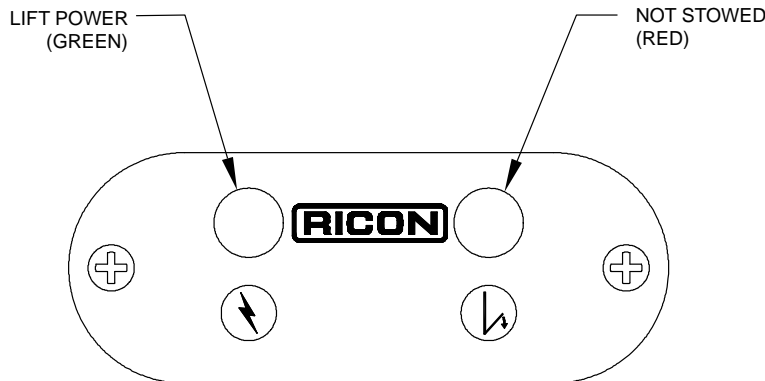
FIGURE 2-11: 24VDC DUAL SOLENOID WIRING

**5. INTERLOCK DEVICE INSTALLATION**

The supplied interlock device must be installed to prevent operation of the lift or vehicle when it is unsafe to do so. The K-series lift provides an electrical interlock signal to the vehicle that prevents movement of the vehicle unless the platform is fully stowed. The interlock control also supplies power to the lift only when the vehicle parking brake is set and the transmission is in PARK.

**NOTE:** An 8-amp circuit breaker is located within the lift as a circuit protection device. The circuit interface used by the installer must be capable of carrying an additional 8 amps of continuous current.

Refer to **Figure 2-12**. The interlock installation kit provides a display panel for mounting on the vehicle dashboard. The figure shows an LED display panel. The Lift Power LED lights green when the vehicle transmission is in PARK and the parking brake is set. While the LED is green the lift is lowered and the platform can be deployed. The Not Stowed LED lights red when the platform is not fully stowed into the vehicle. While the LED is red the transmission cannot be shifted out of PARK.



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**FIGURE 2-12: INTERLOCK DISPLAY PANEL**

The installer must verify that none of the original equipment circuit breakers, fuses, or solenoids are bypassed, removed, or altered. Be sure that no wires are left frayed or hanging loose after installation of the interlock device. If you have any questions concerning the proper installation of this interlock device, please contact our Product Support department.

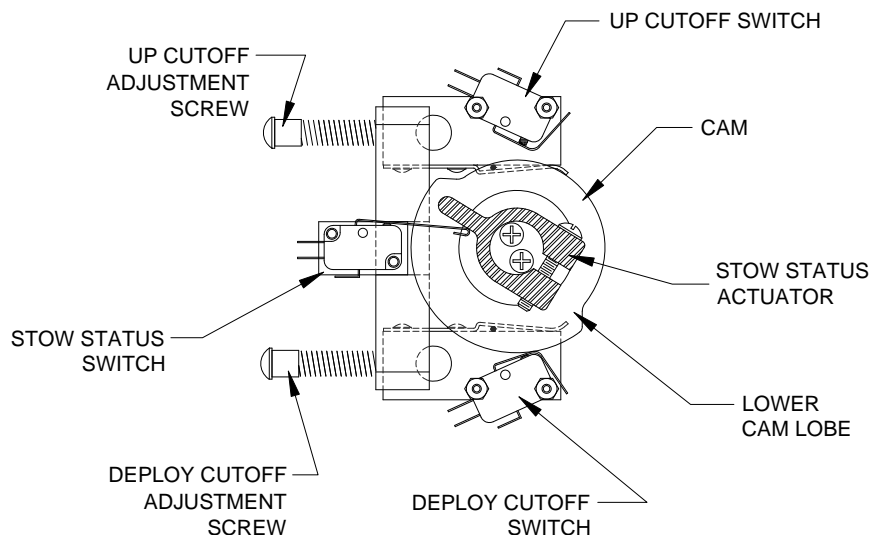
**C. FINAL ADJUSTMENTS**

**1. LIMIT SWITCH ADJUSTMENT**

Refer to **Figures 2-13, 2-14**, and the following procedure.

**NOTE:** To avoid operational “dead-spots”, adjust **DEPLOY CUTOFF SWITCH** before **UP CUTOFF SWITCH**.

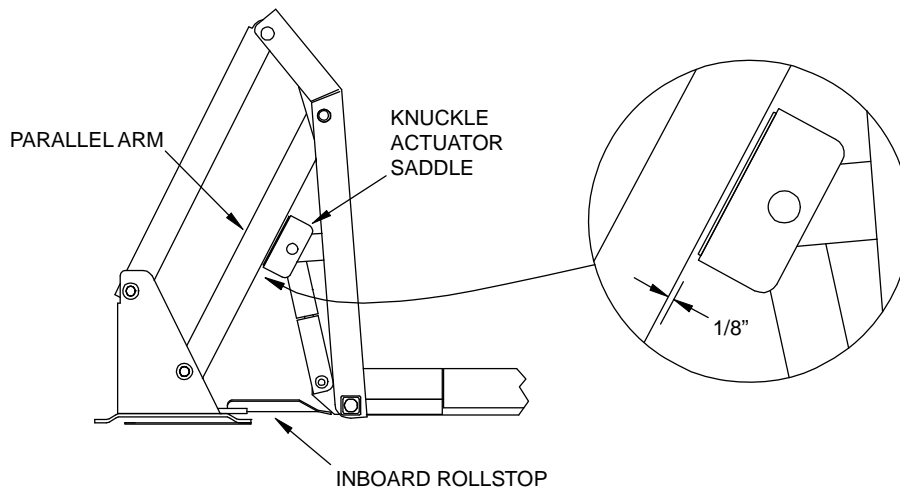
**NOTE:** When loosening adjustment screws, apply enough pressure to screw to move block instead of screw. (The block might stick if insufficient pressure is applied to screw.)



**FIGURE 2-15: LIMIT SWITCH ADJUSTMENT DIAGRAM**

- a. Fully DEPLOY platform.
- b. Adjust UP CUTOFF ADJUSTMENT SCREW and DEPLOY CUTOFF ADJUSTMENT SCREW 6-8 turns **counterclockwise** and then push screws FORWARD.
- c. Cycle platform to STOW then DEPLOY.
- d. When in DEPLOY position, platform should stop at an angle and NOT even with vehicle floor. If not, turn DEPLOY CUTOFF ADJUSTMENT SCREW an additional 2-3 turns **counterclockwise**, push screw forward, STOW then DEPLOY platform, then repeat this step.
- e. Cycle platform to UP position.
- f. When in UP position, platform should stop short of vehicle floor level. If not, turn UP CUTOFF ADJUSTMENT SCREW an additional 2-3 turns **counterclockwise**, push screw forward, cycle platform DOWN then UP, then repeat this step.
- g. Cycle platform to STOW then DEPLOY.
- h. Push and hold control pendant DEPLOY switch. Slowly turn DEPLOY CUTOFF ADJUSTMENT SCREW **clockwise** until platform "jogs" down to vehicle floor level. Make sure that clearance between knuckle actuator saddle and parallel arm is 1/8" minimum (distance may be 1/2" maximum and unequal from left or right arm), stop turning screw and release DEPLOY switch.
- i. Position platform DOWN to ground level then UP until it stops.
- j. Push and hold control pendant UP switch. Slowly turn UP CUTOFF ADJUSTMENT SCREW **clockwise** until platform "jogs" up to vehicle floor level. Make sure that clearance between knuckle actuator saddle and parallel arm is 1/8" minimum (distance may be 1/2" maximum and unequal from left or right arm), stop turning screw and release UP switch.

**NOTE:** If lift does not operate after 1-2 full turns of adjustment screw, cycle platform UP and DOWN (The UP CUTOFF SWITCH is less sensitive than DEPLOY CUTOFF SWITCH.)



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**FIGURE 2-14: LIMIT SWITCH ADJUSTMENT CLEARANCE**

- k. Cycle platform through all functions (DEPLOY, DOWN, UP, and STOW) to verify correct adjustment. Refer to **Table 2-1** if necessary.

<b>TABLE 2-1: LIMIT SWITCH ADJUSTMENT CHART</b>			
<b>COMPONENT</b>	<b>SYMPTOM</b>	<b>CORRECTIVE ACTION</b>	<b>ADJUSTMENT PROCEDURE</b>
Fold cutoff actuator	Lift does not fold tightly.	Rotate actuator counter-clockwise.	With lift fully folded (handrails should be folded tight against vertical arms), rotate actuator so that it barely trips fold cutoff switch.
	Pump runs continuously.	Rotate actuator clockwise.	Test lift. Pump should cutoff when lift is folded tight.

TABLE 2-1: LIMIT SWITCH ADJUSTMENT CHART			
COMPONENT	SYMPTOM	CORRECTIVE ACTION	ADJUSTMENT PROCEDURE
Up cutoff adjustment screw	Lift stops low.	Adjust screw clockwise.	Adjust up cutoff switch so that lift stops just before first knuckle actuator saddle or roller touches underside of lower parallel arm. (Saddle or roller should be about 1/8" from lower parallel arm.)
	Lift stops high.	Adjust screw counter-clockwise.	
Deploy cutoff adjustment screw	Lift stops low.	Adjust screw counter-clockwise.	Adjust deploy limit switch so that lift stops just below "Up" cutoff described in above step. This will give the necessary overlap to avoid "dead" spots.
	Lift stops high.	Adjust screw clockwise.	
END OF TABLE			

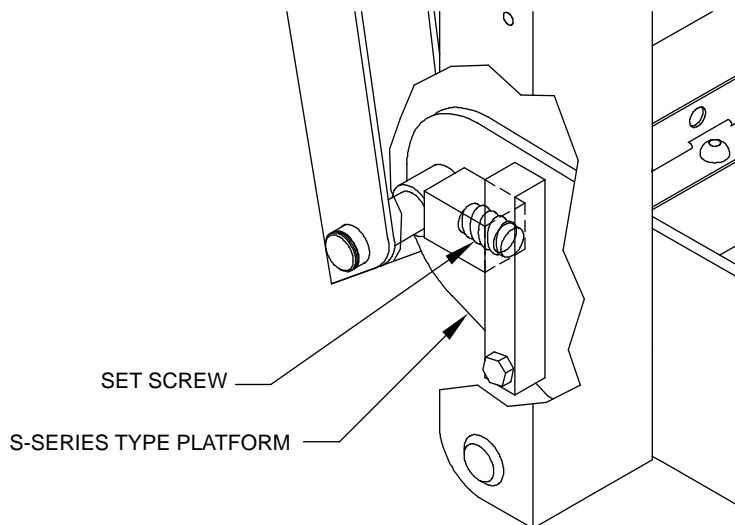
**1. PLATFORM TILT ADJUSTMENT**

Correct platform tilt adjustment is crucial for proper platform rollstop operation, but cannot be adjusted at factory. Factors such as vehicle floor height, lift tilt angle and stiffness of vehicle springs will vary installation geometry.

- a. Deploy and lower lift platform to a position halfway between vehicle floor level and ground level.
- b. Refer to **Figure 2-15**. Adjust left and right platform set screws until platform is level at zero (0) degrees. Turn setscrews clockwise to angle front-end of platform upward, or counter-clockwise to angle downward.

**NOTE:** At ground level, the distance between heel of platform and ground should be 3/4" to 1". This distance should be measured at initial point of rollstop full deployment.

**NOTE:** Adjust setscrews on both sides of platform simultaneously and evenly to ensure proper leveling of platform.



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**FIGURE 2-15: PLATFORM SET SCREWS**

- c. Repeat steps a and b as required to achieve proper rollstop operation.

 **CAUTION**

Do not lengthen tie rod stud to point where panel will lift off its tab support (at center of lift fork).

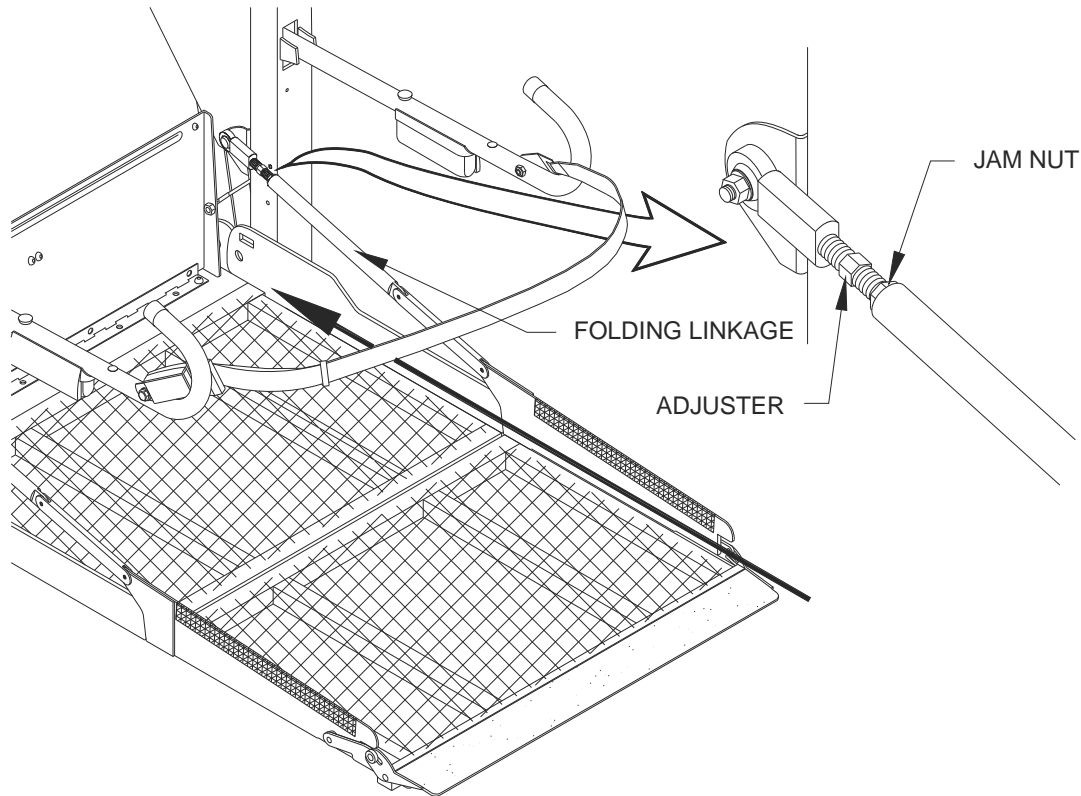
- d. Adjust left tie rod assembly. Adjust tie rod stud until nearly all of link free-play is out by lengthening rod.

## 2. PLATFORM FOLDING LINKAGE ADJUSTMENT

The front portion of the platform is connected to the rear portion with a hinge. The front portion is folded with linkages located at the right and left sides of the platform. The length of the linkage might require adjustment after installation of the lift or after disassembly of the platform.

**NOTE:** Perform the PLATFORM TILT ADJUSTMENT procedure (in previous section) before adjusting the linkage.

- a. Deploy and lower the platform to a position about halfway between floor level and ground level.
- b. Refer to **Figure 2-16**. Loosen the jam nuts (right and left sides) and use the adjusters to set the length of the linkages so that the front and rear portions are in the same plane; the two surfaces of the platform portions must be flat without any apparent folding along the hinge. Verify that the tension of both linkages is the same by sighting along outer edge of the platform (arrow in figure). Tighten jam nuts.



**FIGURE 2-16: ADJUSTMENT HARDWARE FOR PLATFORM FOLDING LINKAGE**

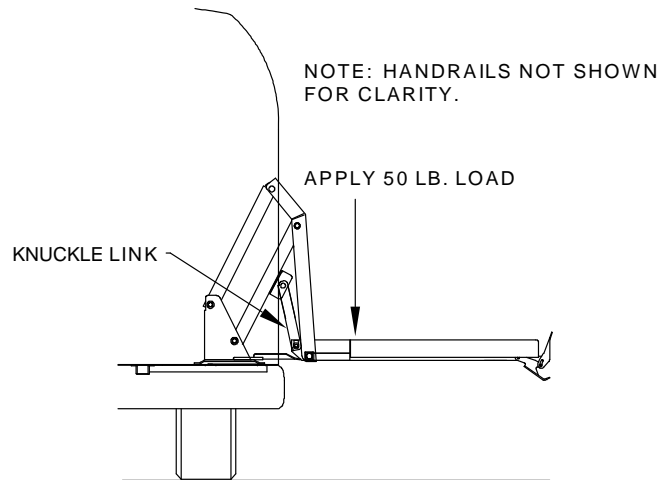
- c. Lower platform until it settles on the ground. Verify that a slight amount of slack is present in both linkages. If either linkage is under tension, repeat steps a and b.



**3. PLATFORM PRESSURE SWITCH CHECK AND ADJUSTMENT**

Correct adjustment of this pressure switch will prevent platform from folding into vehicle when there is a load of 50 lbs, or more, on the platform.

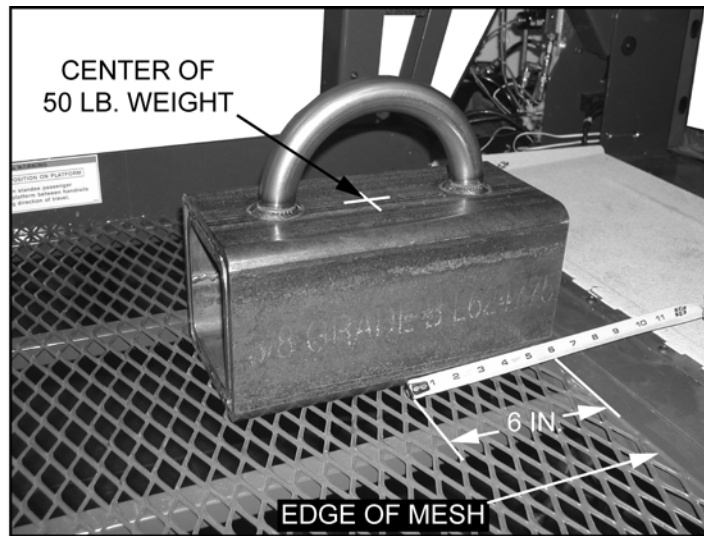
- a. Refer to **Figure 2-17**. Deploy and lower platform to ground. Place a 50 lb. load in center of platform and then raise platform to floor level. Press and hold STOW switch.



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**FIGURE 2-17: PRESSURE SWITCH TEST AT FLOOR LEVEL**

**NOTE:** Weight must be 50 lbs. and placed 6 inches from rear edge of platform mesh as shown in **Figure 2-18**.



**FIGURE 2-18: 50 LB. WEIGHT PLACEMENT ON PLATFORM**

- b. Place a 6" x 6" x 12", 50 lb. load on the rear, center portion of platform then raise platform to floor level by pressing and holding the STOW switch.
- c. Refer to **Figure 2-19**. If an alternate weight is to be used, the center of the weight must be 6 inches from the rear edge of the platform mesh.

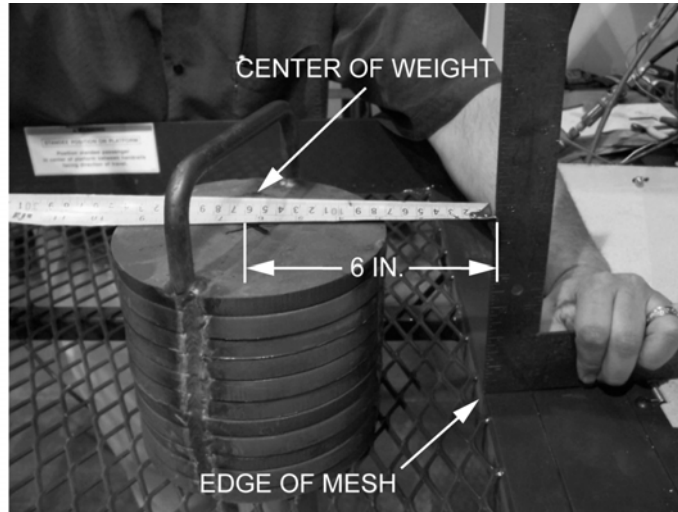
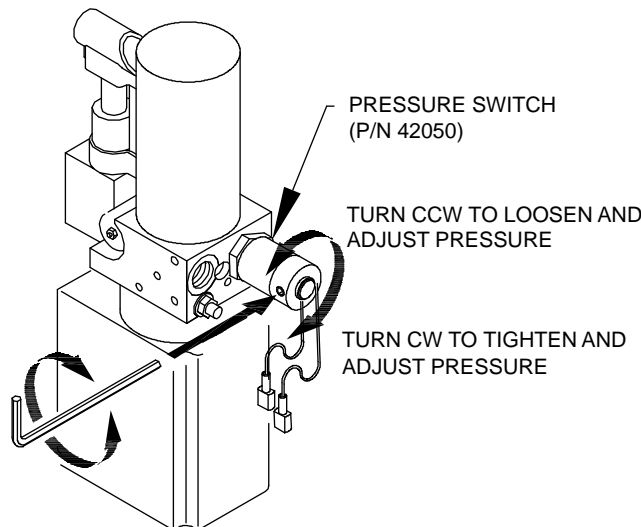


FIGURE 2-19: ALTERNATE 50 LB. WEIGHT

- d. The pressure switch is correctly set if pump motor shuts off when attempting to stow the lift, preventing inward movement of the platform.
- e. The pressure switch is not correctly set if pump motor does NOT shut off and there is inward movement of the platform. Adjustment of the pressure switch will be required.

**NOTE:** If adjustment is necessary then pressure switch must be adjusted as shown in **FIGURE 2-20**.

- f. Refer to **Figure 2-20**. Loosen the locking set screws from the hydraulic pressure switch, using a 5/64" hex wrench to allow adjustment of the hydraulic pressure switch.



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FIGURE 2-20: PRESSURE SWITCH ADJUSTMENT (P/N 42050)

- g. Turn the hydraulic pressure switch enclosure 1/8 of a turn **counterclockwise** (CCW), by hand to reduce the pressure.

**NOTE:** Turn the hydraulic pressure switch enclosure **clockwise** (CW) to increase pressure and **counterclockwise** (CCW) to decrease pressure, by hand.

- h. Stow platform and observe if the motor shuts off.
- i. If the motor does not shut off, turn the hydraulic pressure switch enclosure 1/8 of a turn **counterclockwise** (CCW), by hand to reduce the pressure.

**NOTE:** The lift should NOT stow or have inward movement with the weight on the platform.

- j. Repeat pressure switch adjustment as necessary to achieve correct setting.
- k. Tighten the locking set screw when the correct pressure setting is achieved.

**D. VERIFY INSTALLATION**

- ˆ Be certain that no vehicle components interfere with operation of lift.
- ˆ The lift is designed to carry the weight of a wheelchair and its passenger. The vehicle structure must be capable of supporting all loads produced during lift operation as well as those forces caused by motion of vehicle when it is driven.


**CAUTION**

- Do not operate lift when test weight is on platform. This load test is designed to test the lift **mounting method**, not the lift capacity. Remove test weight immediately after check.
- Vehicle suspension will compress and vehicle will lean when test weight is placed on platform. If weighted platform contacts ground, remove weight, raise platform, and retest.

- ˆ Ricon recommends that the lift be test loaded at its rated 800 pound load capacity to verify integrity of installation. Position lift platform 2" - 6" above the ground, place 800 pounds in center of platform, and inspect lift mounting brackets and hardware. REMOVE TEST WEIGHT.
- ˆ Run lift through several complete cycles while checking for proper operation.
- ˆ Refer to **Figure 2-21** on next page and verify that all decals are properly located and affixed as shown.

**NOTE:** The installing dealer affixes an Operating Instructions decal to vehicle in a location clearly visible to the lift operator.

**E. SAFETY CHECKLIST FOR VEHICLE MANUFACTURER**

This checklist is intended to verify safe operation of Ricon FMVSS 403 and 404 compliant wheelchair lifts. All requirements must be met for the wheelchair lift to be considered compliant.

COMPLIANT	NON-COMPLIANT	REQUIREMENT
		Wheelchair lift and vehicle properly interlocked (lift cannot be powered unless vehicle interlocks are activated, and interlocks cannot be disengaged unless lift is fully stowed).
		Threshold warning device functioning properly (audible warning and visual warning is activated if threshold area is entered when platform is at least one inch below vehicle floor level).
		Main power switch enables and disables the lift control system.
		Control pendant illuminated when the lift is powered and pendant power turned on.
		Inboard rollstop does not rise from floor level with 25 pounds, or more, at center of barrier.
		Platform unable to rise more than 3" above ground if safety belt is not engaged.
		Platform lighting functional when lift is powered.
		Platform does not stow if a weight of 50 pounds, or more, is present on platform.
		Manual back-up operation fully functional (see operator manual for directions).

**F. CUSTOMER ORIENTATION**

**IMPORTANT**  
**- Customer Orientation -**

Ricon Sales or Service personnel must review the warranty card and operator manual with the customer to be certain they understand how to safely operate the lift. The customer should be instructed to follow the operating instructions without exception.

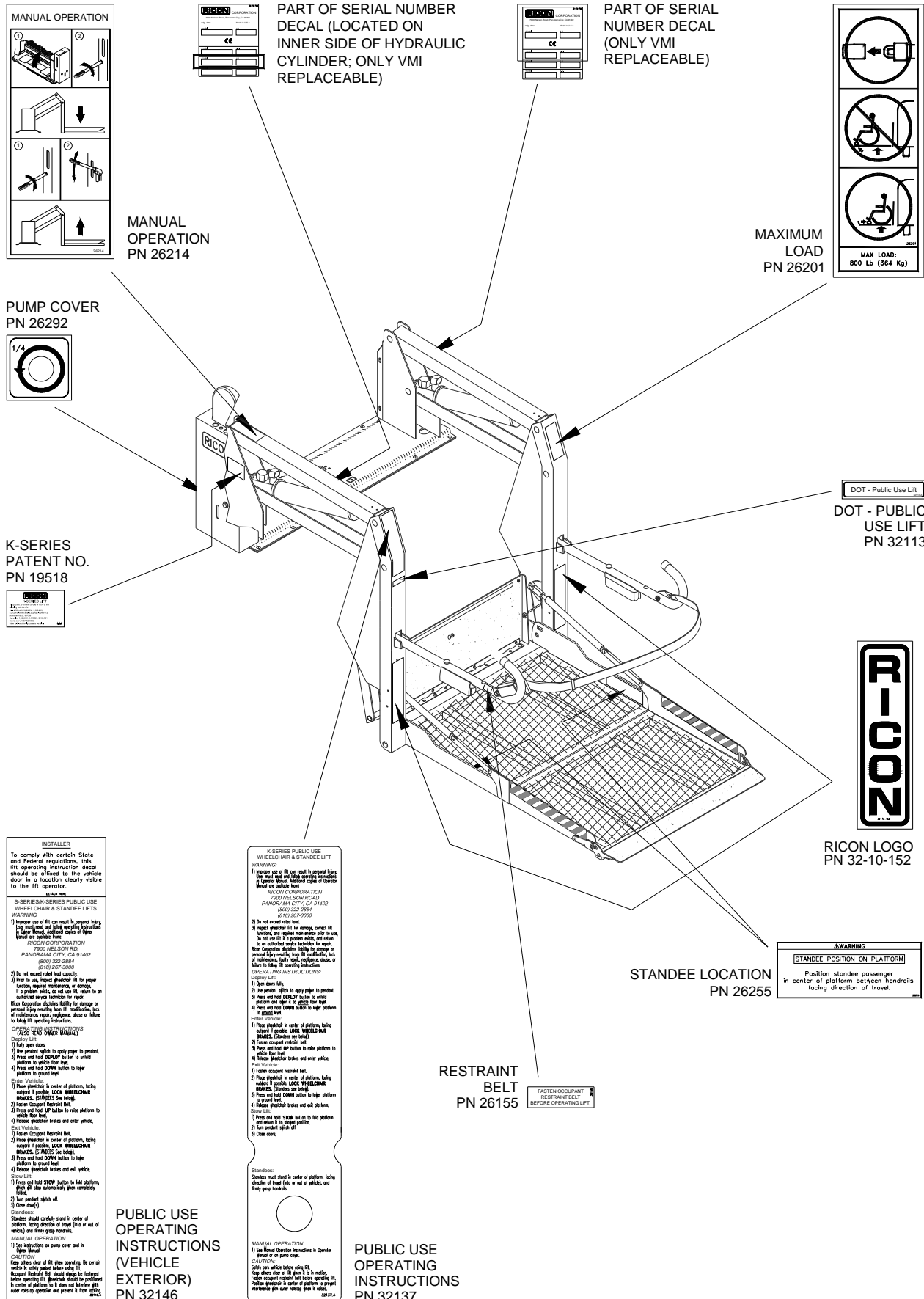


FIGURE 2-21: PUBLIC LIFT DECAL LOCATIONS AND PART NUMBERS

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### III. MAINTENANCE AND REPAIR

Regular maintenance of the Ricon K-Series® Public Use wheelchair lift will optimize its performance and reduce the need for repairs. This chapter contains lubrication and cleaning instructions, a maintenance schedule, troubleshooting section, and maintenance diagrams.

**⚠ CAUTION**

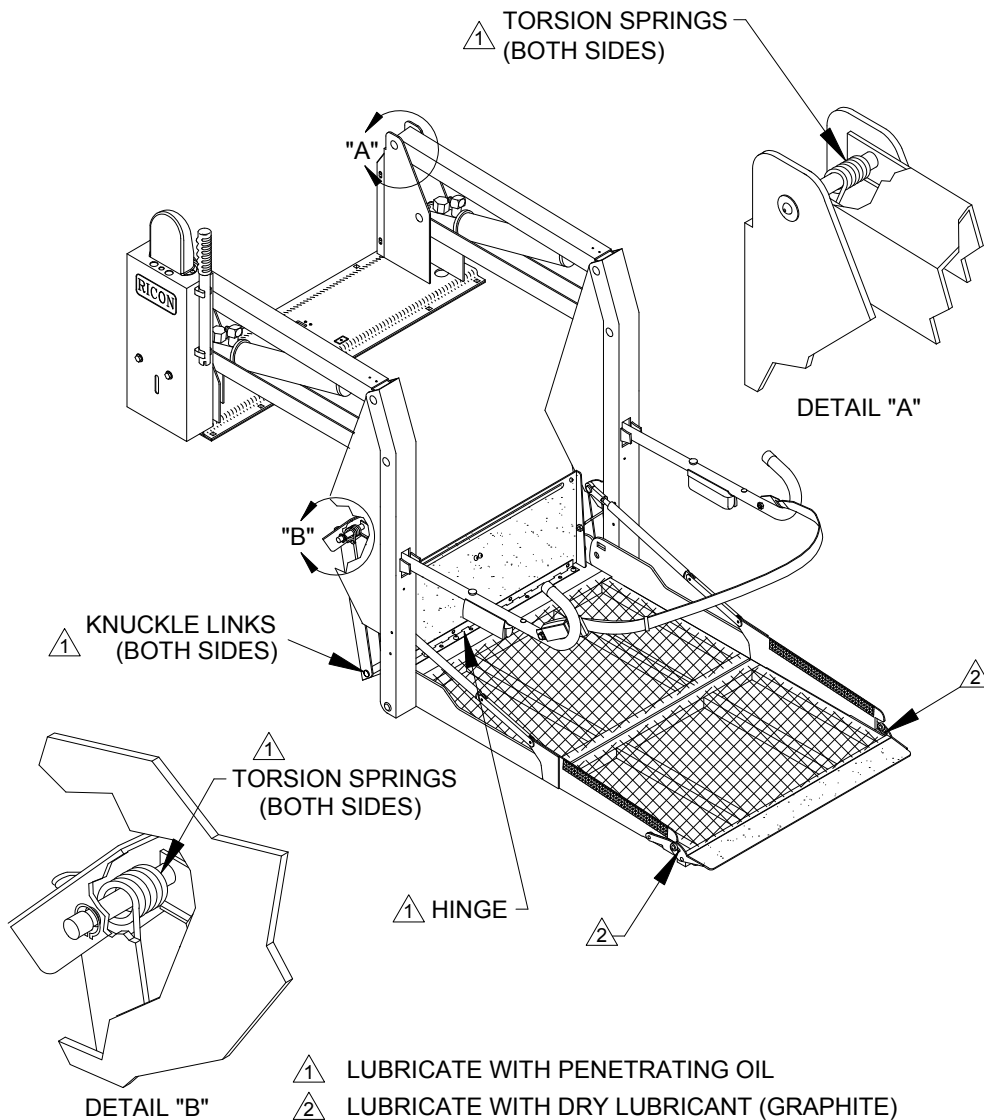
This Ricon product is highly specialized. Maintenance and repairs must be performed by an authorized Ricon service technician using Ricon replacement parts.

#### A. LUBRICATION

**⚠ CAUTION**

Do not lubricate motor or other electrical components. Lubrication of electrical components may collect dirt and debris, causing short circuits.

Lubrication should be performed at least every six months or sooner depending on usage. Refer to **Figure 3-1** and the following Maintenance Schedule. Lubricate lift at points indicated with lubricants specified.





**FIGURE 3-1: LIFT LUBRICATION POINTS**

**B. CLEANING**

Regular cleaning with mild soap (i.e. hand soap, car wash liquid) and drying thoroughly will protect lift painted surfaces. Cleaning is especially important in areas where roads are salted in winter. Make sure that lift pivot points remain clear and clean prior to lubrication.

**C. MAINTENANCE SCHEDULE**

Under normal operating conditions, maintenance inspections are required at least every six months (1750 cycles) and a thorough inspection should be performed at service intervals referenced in **Table 3-1**. Service should be increased under conditions of heavy use (more than 10 cycles per day.)

<b>TABLE 3-1: MAINTENANCE SCHEDULE</b>	
<b>SERVICE POINT</b>	<b>ACTION TO PERFORM</b>
<b>10 CYCLES</b>	
Overall condition	Listen for abnormal noises as lift operates (i.e. grinding or binding noises.)
Control pendant	Verify that control pendant is undamaged and cable connector is tight.
<b>150 CYCLES</b>	
Electrical wiring	Inspect electrical wiring for frayed wires, loose connectors, etc.
Vehicle interlock	Place vehicle in non-interlock mode and verify that lift does not operate.
Decals	Verify that lift decals are properly affixed, clearly visible, and legible. Replace, if necessary.
Handrails	Verify that handrail fasteners are properly tightened.
Lift mounting points	<ul style="list-style-type: none"> <li>▪ Verify that vehicle mounting and support points are undamaged.</li> <li>▪ Verify that mounting bolts are sufficiently tight and free of corrosion.</li> </ul>
Main lifting pivots	Verify that link pins on arms are properly installed, free from damage, and locked in position.
Platform pivot points	Verify that platform moves freely, without binding, and does not wobble.
Bridgeplate	<ul style="list-style-type: none"> <li>▪ Verify that bridgeplate operates without binding during lift functions.</li> <li>▪ Verify that bridgeplate deploys fully when platform stops at floor level.</li> <li>▪ Verify bridgeplate rests flat against baseplate.</li> </ul>
Front rollstop	<ul style="list-style-type: none"> <li>▪ Verify that rollstop is opened completely when platform is at ground level.</li> <li>▪ Verify that rollstop closes and locks when platform leaves ground.</li> </ul>
Hydraulic power unit	 <b>CAUTION</b>
	Check and add fluid when platform is at ground level. Fluid that is added when platform is raised will overflow when platform is lowered.
	<ul style="list-style-type: none"> <li>▪ Verify that pump hydraulic fluid level is at FULL mark when platform is at ground level. Add Texaco 01554 Aircraft Hydraulic Oil or equivalent U.S. mil spec H5606G fluid.</li> <li>▪ Verify there are no hydraulic fluid leaks.</li> <li>▪ Verify that manual backup pump operates properly.</li> </ul>
<b>1800 CYCLES</b>	
Cleaning and lubrication	<ol style="list-style-type: none"> <li>1. Clean lift with mild soap and water and wipe dry. Prevent rust by coating all surfaces with a light weight oil. Remove excess oil.</li> <li>2. Spray penetrating oil (Curtisol® Red Grease 88167 or WD-40®) where specified following directions on container. Remove excess grease from surrounding areas.</li> </ol>
 <b>CAUTION</b>	
A Ricon authorized dealer must perform the following safety check.	
<b>3600 CYCLES</b>	

**TABLE 3-1: MAINTENANCE SCHEDULE**

SERVICE POINT	ACTION TO PERFORM
Hydraulic cylinder, hoses and fittings	<ul style="list-style-type: none"> <li>▪ Check hydraulic cylinder for evidence of leaks.</li> <li>▪ Inspect hydraulic hoses for damage.</li> <li>▪ Verify that all fittings are tight.</li> </ul>
<b>END OF TABLE</b>	

## D. TROUBLESHOOTING

The troubleshooting guides are designed to provide logical starting points to locate general problems that could occur with lift. However, not all possible problems or combinations of problems are listed. For troubleshooting lift, refer to **Table 3-2**. The guide does not incorporate routine safety precautions or preliminary procedures, and assumes that vehicle battery is fully charged and battery terminals/connectors are clean and tight.

### **WARNING**

THE TROUBLESHOOTING GUIDES DO NOT INCORPORATE ROUTINE SAFETY PRECAUTIONS OR PRELIMINARY PROCEDURES. DURING THE RICON WARRANTY PERIOD ONLY A TRAINED, AUTHORIZED RICON SERVICE TECHNICIAN CAN PERFORM TROUBLESHOOTING. AFTER THE WARRANTY PERIOD, IT IS RECOMMENDED THAT TROUBLESHOOTING CONTINUE TO BE PERFORMED BY AN AUTHORIZED RICON SERVICE TECHNICIAN.

### 1. LIFT TROUBLESHOOTING

**TABLE 3-2: LIFT OPERATIONAL TROUBLESHOOTING GUIDE**

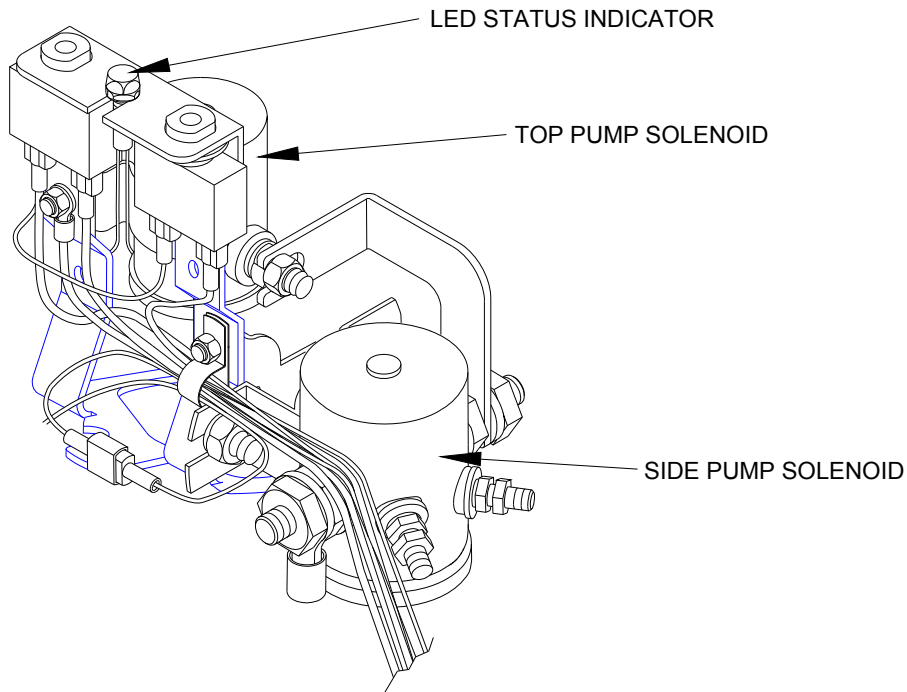
SYMPTOM		POSSIBLE CAUSE	REMEDY
Hydraulic fluid leaks		Loose hydraulic fitting.	Make sure fitting is PROPERLY tightened.
		Hydraulic component defective.	Do not use lift until repairs are made by an authorized Ricon service technician.
Rollstop does not open		Obstruction of rollstop release latch.	Raise lift and remove obstruction.
Lift functions	Abnormal operation.	Obstruction in lifting frame.	Remove obstruction and check for any damage
		Backup pump manual release valve OPEN.	Turn manual release valve CLOCKWISE until slightly snug.
		Hydraulic fluid may be low.	While platform is at GROUND LEVEL, be certain that pump hydraulic fluid level is maintained at required FULL level. Add only Texaco 01554 Aircraft Hydraulic Oil or equivalent U.S. mil spec H5606G fluid.
		Air may be trapped in hydraulic system.	Purge hydraulic system by operating lift through its maximum range of travel for at least four complete cycles. (For vehicles that do not use full travel of lift, the maximum range of travel is accomplished by raising vehicle on a service hoist or ramp.)
	No operation.	Control system circuit breaker tripped.	Reset circuit breaker.
		Backup pump manual release valve OPEN.	Turn manual release valve CLOCKWISE until slightly snug.
		Hydraulic hose or fitting leak.	Contact an authorized Ricon service technician for repair.



	Hydraulic fluid may be low.	While platform is at GROUND LEVEL, be certain that pump hydraulic fluid level is maintained at required FULL level. Add only Texaco 01554 Aircraft Hydraulic Oil or equivalent U.S. mil spec H5606G fluid.
	Air may be trapped in hydraulic system.	Purge hydraulic system by operating lift through its maximum range of travel for at least four complete cycles. (For some vehicles, the maximum range of travel is accomplished by raising vehicle on a service hoist or ramp.)
<b>END OF TABLE</b>		

**2. PUMP SOLENOID LED STATUS INDICATOR**

Refer to **Figure 3-2**. Two solenoids provide a margin of safety if one of the solenoids fails with its contacts closed. A status two-color indicator LED is located between the two 8A circuit breakers to monitor the condition of the two solenoids. The LED is normally off when the pump is not operating and becomes green when the pump operates. When the pump is not operating and the top solenoid has failed the LED will be red. The LED will be green when the side solenoid has failed.



**FIGURE 3-2: STATUS INDICATOR FOR PUMP SOLENOIDS**

**3. BRIDGEPLATE CABLE ASSEMBLY REPLACEMENT**

The following steps provide instructions for replacing the bridgeplate (also known as inner rollstop or IRS) cable assembly. Refer to **Figure 3-3** on following page. Please follow these instructions carefully. Contact Ricon Product Support if you need assistance.

- 1) Study the routing of the cable before removing it.
- 2) Deploy the lift platform to vehicle floor level. Be certain that bridgeplate is resting against baseplate assembly.
- 3) Remove pinch point shields from the left and right vertical arm assemblies.
- 4) Assemble and secure one end of an IRS cable to the IRS pulley mount block (#1; located inside the left vertical arm assembly) using a hex screw, bushing, and washer.

- 5) Route the cable around the IRS pulley mount block bushing (#2). Verify that cable is routed between the bushing tab and the point where the cable makes contact with the bushing. Install washer and hex nut over bushing and cable assembly.
- 6) Continue to route the cable around grooved bearings #3, #4, and #5.
- 7) Route the cable down the length of the vertical arm assembly and around grooved bearing #6.
- 8) Assemble and secure the end of the IRS cable to the left side of the bridgeplate (#7) using a hex screw, washer, bushing, and he nut. Be sure to install a hex nut on the inside of the inner rollstop.
- 9) Repeat for right side.
- 10) Reinstall pinch point shields removed in step 2.

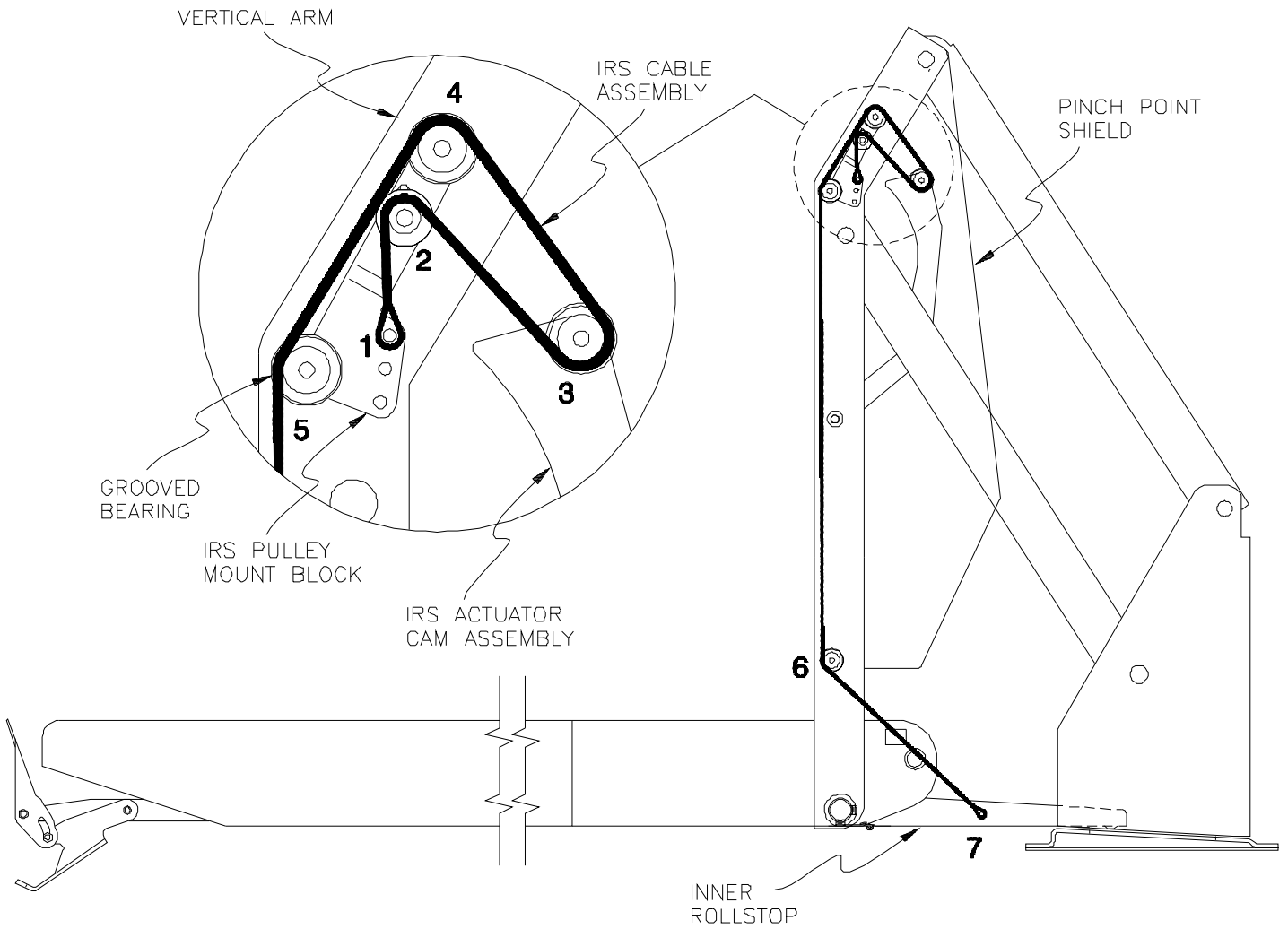
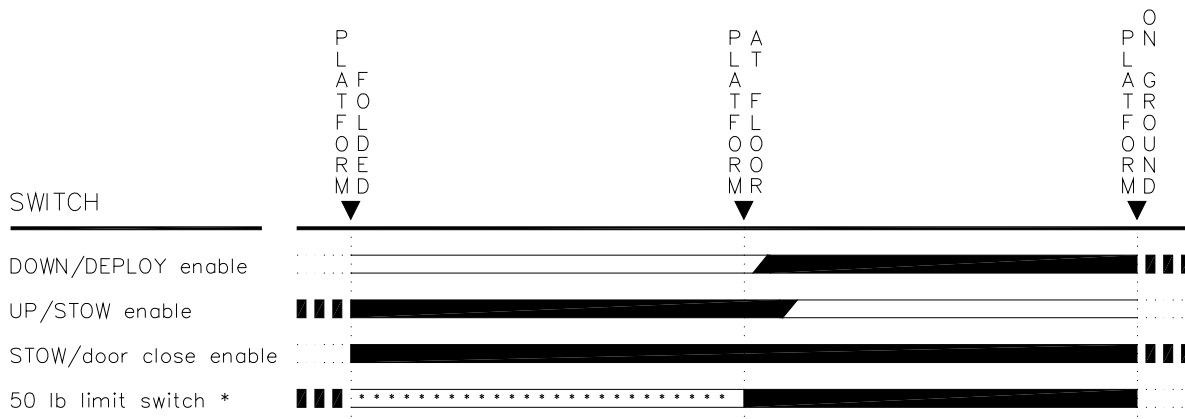


FIGURE 3-3: BRIDGEPLATE CABLE ROUTING

4. LIMIT SWITCH STATES

Refer to Figure 3-4. The limit switch actuation chart shows the state of all limit switches as the platform travels from stowed, to vehicle floor level, and then to ground level. The solid line segments (—) represent current flow through the normally CLOSED switch contacts, and the open line segments (≡) represent current flow through the normally OPEN switch contacts. The heavy dashed lines (■ ■ ■) show switch states when platform is beyond normal travel boundaries. This is useful in showing the operation of switches that change states at stowed or ground level positions. For proper operation of lift, the switch actuations must overlap as shown.



\* 50 lb limit switch actuates when weight on platform exceeds 50 lbs during IN platform motion.

FIGURE 3-4: LIMIT SWITCH ACTUATION CHART



E. HYDRAULIC CIRCUIT DIAGRAM

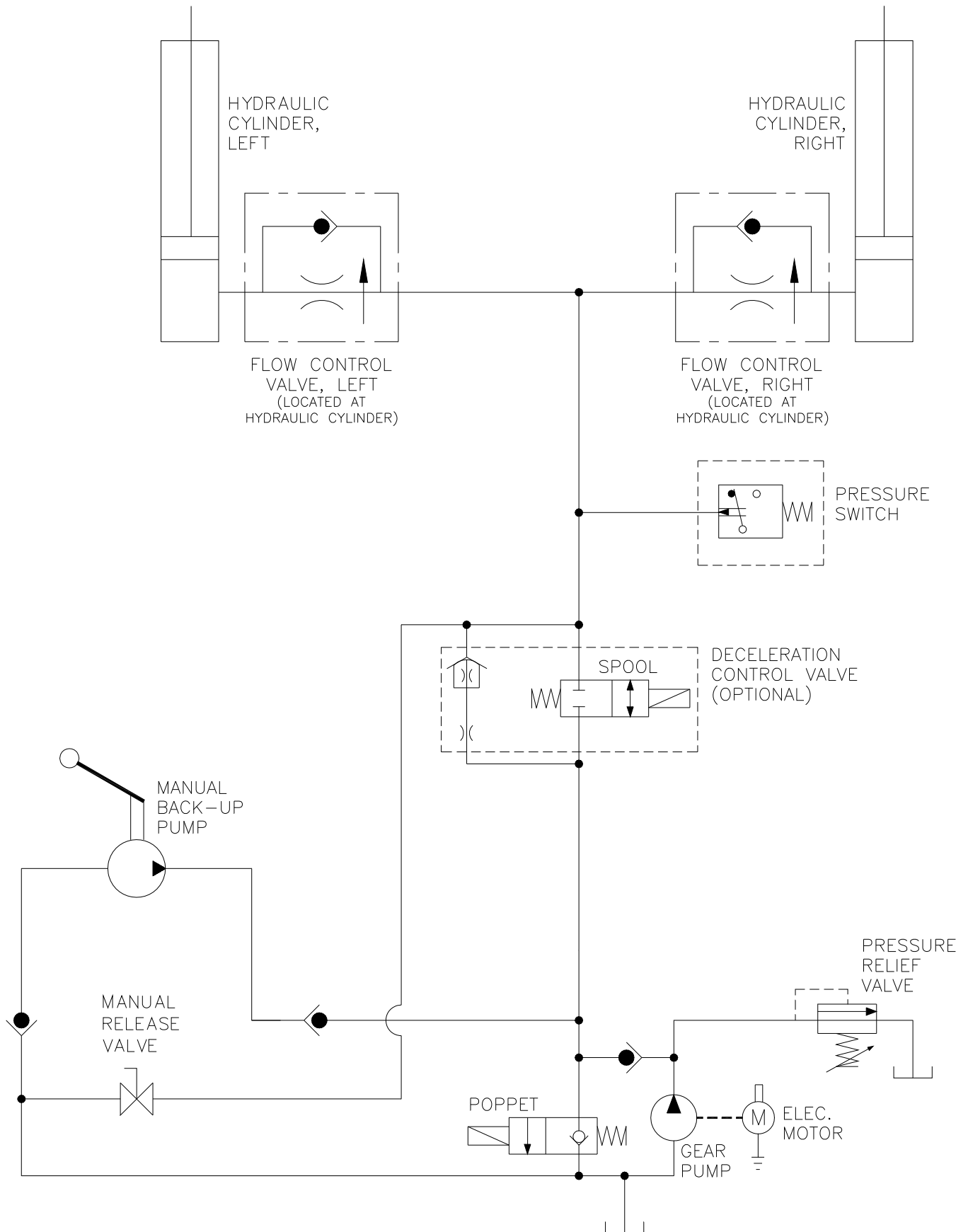


FIGURE 3-5: K-SERIES HYDRAULIC CIRCUIT DIAGRAM

**F. ELECTRICAL WIRING DIAGRAM**

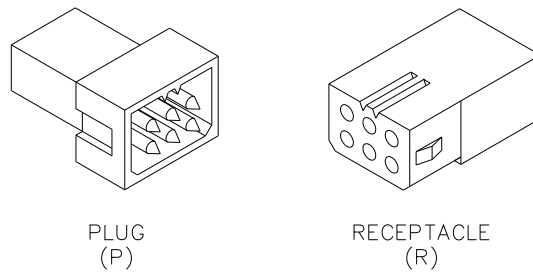
**1. DIAGRAM LEGENDS**

**a. Wire Color Codes**

TABLE 3-3: WIRE COLOR CODES			
LETTER	COLOR	LETTER	COLOR
BK	Black	R	Red
BL	Blue	VI	Violet
BR	Brown	GY	Gray
GN	Green	W	White
O	Orange	Y	Yellow
END OF TABLE			

**b. Electrical Connector Description**

Refer to **Figure 3-6**. The standard electrical connectors, used by Ricon are Molex .062" Series. These connectors have terminal numbers molded onto the back; use these numbers and wire colors to identify wires.



**FIGURE 3-6: MOLEX CONNECTORS**

**c. Diagram Labels**

12V	12 Volts – Circuit current rating is also given
DC	Door Close – Direct command
DO	Door Open – Direct command
DOE	Door open Enable – From Door Open cutoff switch
DWN	Pump Down – Used by OUT and DWN
DWNA	Down Attempt – Must be enabled
FAST	Signal to speedup valve for UP and DOWN
GND	GROUND
OUTA	Out Attempt – Out must be enabled
SDA	System Deploy Attempt – DO followed by OUT
SSA	System Stow Attempt – IN followed by DC
UP	Pump Up – Used by UP and IN
UPA	Up Attempt – Up must be enabled

**FIGURE 3-7: DIAGRAM LABELS**

d. Electrical Symbols

Figure 3-8 defines the symbols used on the electrical wiring diagram.

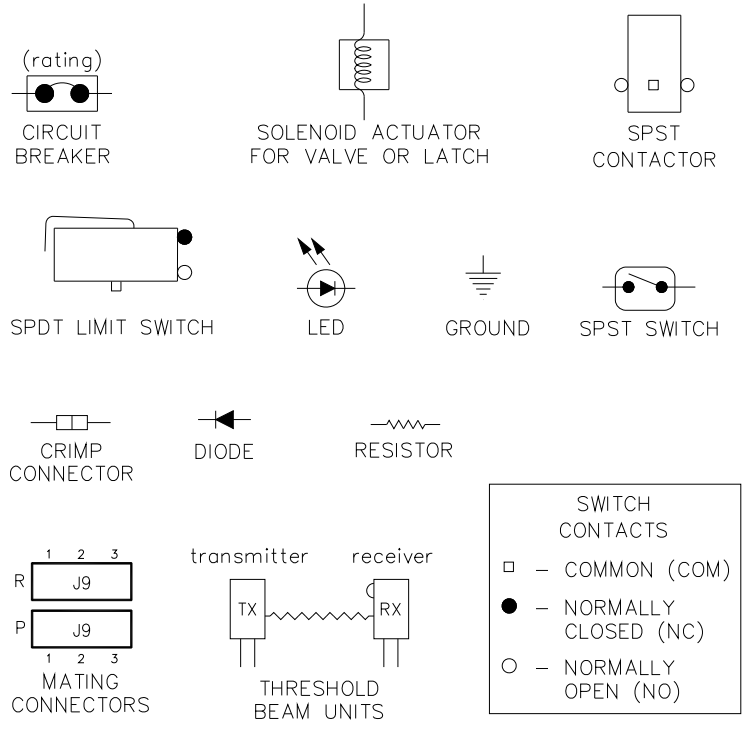


FIGURE 3-8: ELECTRICAL WIRING DIAGRAM SYMBOLS

**2. WIRING DIAGRAM**

Refer to **Figures 3-9** and **3-10** on the following two pages. The diagram is divided into two sheets.

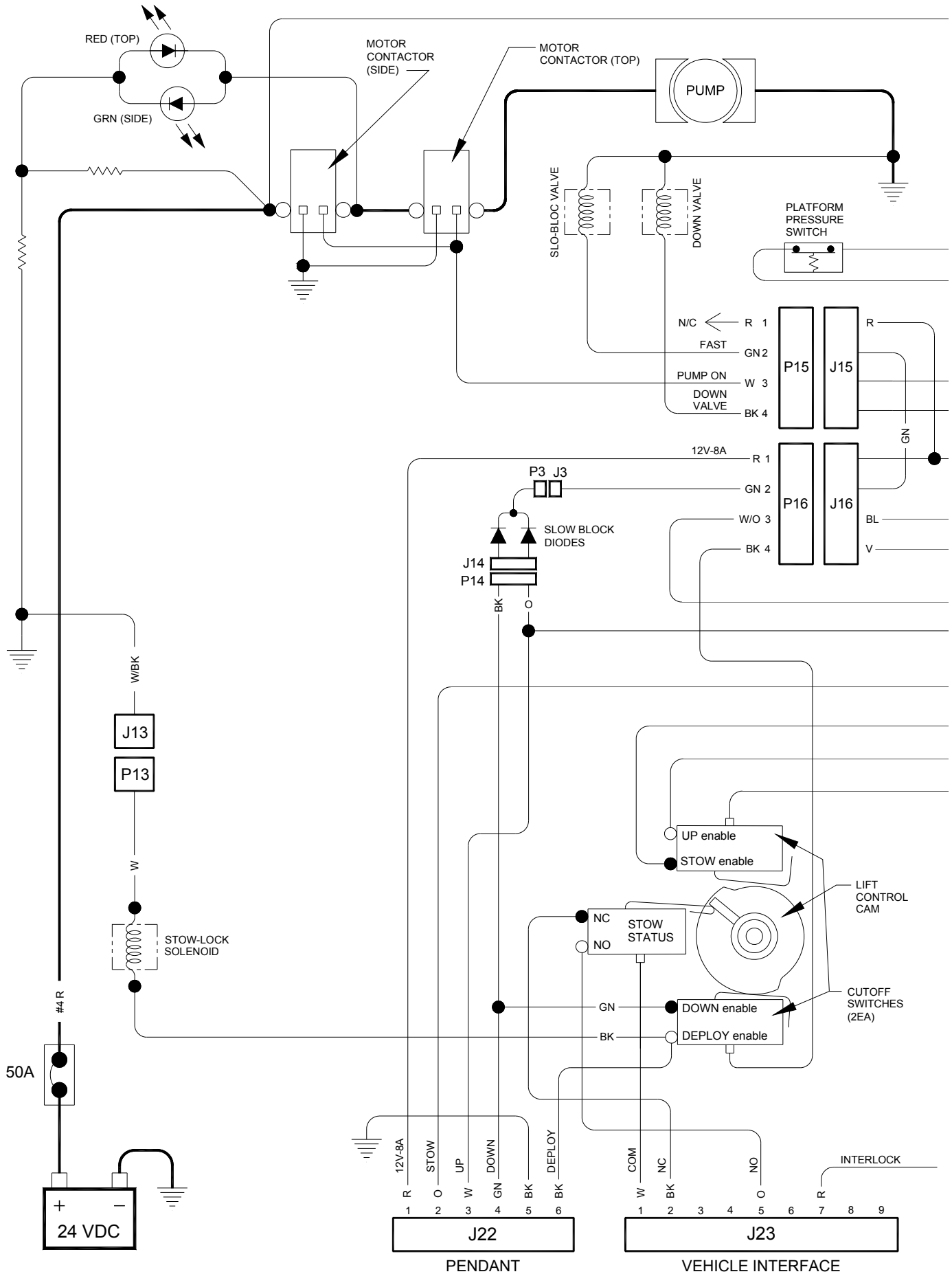
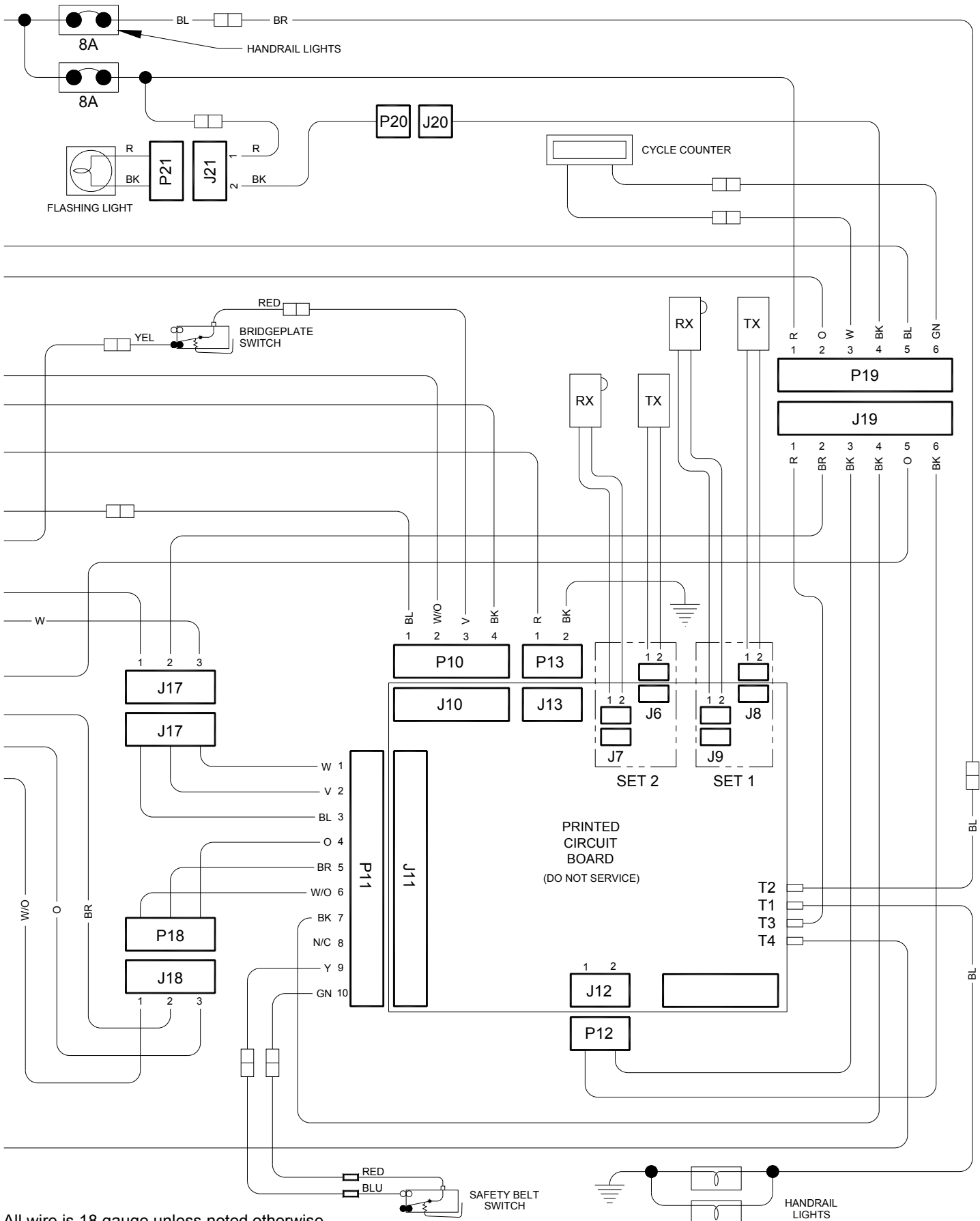


FIGURE 3-9: K-SERIES DOT PUBLIC USE LIFT SCHEMATIC – SHEET 1





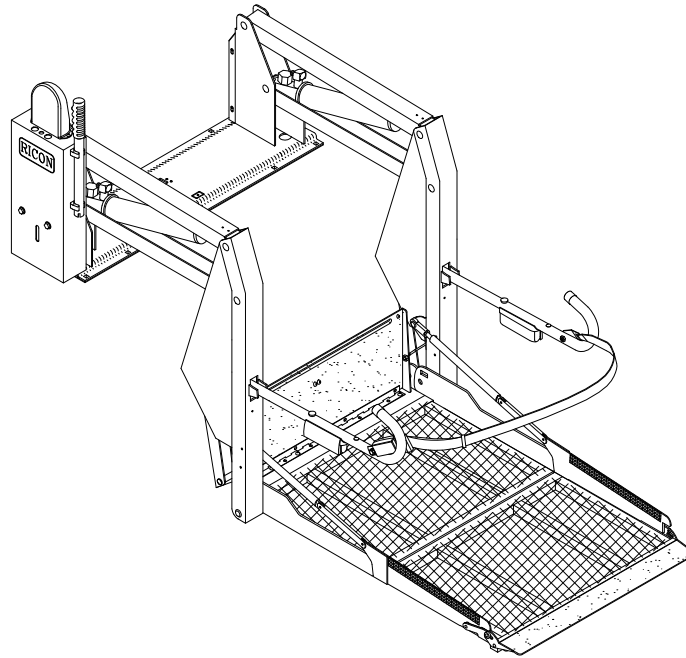
All wire is 18 gauge unless noted otherwise.

FIGURE 3-10: K-SERIES DOT PUBLIC USE LIFT SCHEMATIC – SHEET 2

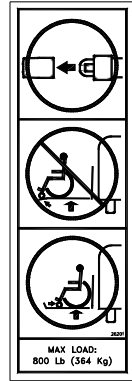
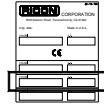
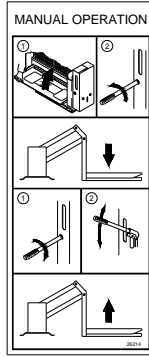
### IV. K-SERIES PUBLIC USE SPARE PARTS

This chapter contains parts diagrams and lists for the RICON K-Series® Public Use wheelchair lift. The exploded view of each major lift assembly shows individual components referenced by numbers. On each associated list are reference numbers, part descriptions, quantities used, and RICON part numbers.

**NOTE:** To order a part, locate the part or assembly on an exploded view, note its reference number, find this number on the associated parts list (following page), and order the part number in the far right column. Most kits contain a single part (plus hardware). Therefore, you may need to order more than one kit if the part is used more than once on a major assembly. Small hardware and fasteners are supplied in bags of ten. The quantity listed is the number of bags needed for the assembly in the figure. In most cases the bag will contain more pieces than needed.



PARTS DIAGRAM .....		PAGE
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PUMP COVER  
PN 26292



K-SERIES PATENT NO.  
PN 19518



DOT - Public Use Lift  
DOT - PUBLIC USE LIFT  
PN 32113



**INSTALLER**

To comply with certain State and Federal regulations, this lift operating instruction decal should be affixed to the vehicle door in a location clearly visible to the lift operator.

**WARNING:**

1) Improper use of lift can result in personal injury, the most severe being falling from the lift. Read and follow operating instructions in User Manual (attached copies of User Manual are available from: RICON CORPORATION, 7500 NELSLOW ROAD, PANDORAMA CITY, CA 91442, (800) 322-2084, (818) 267-3000.

2) Do not exceed rated load capacity.

3) Prior to use, inspect platform for proper function, required maintenance, or damage. If a problem exists, do not use lift, return to an authorized service technician to repair. Ricon Corporation declines liability for damage or personal injury resulting from lift modification, lack of maintenance, faulty repair, negligence, abuse, or failure to follow lift operating instructions.

**OPERATING INSTRUCTIONS (ALSO READ OWNER MANUAL)**

**STANDEE LIFT:**

- Fully open doors.
- Use pendant switch to apply power to platform.
- Press and hold **UP** button to raise platform to vehicle floor level.
- Press and hold **DOWN** button to lower platform to ground level.

**WHEELCHAIR:**

- Place wheelchair in center of platform, facing outward if possible. **LOCK WHEELCHAIR BRAKES.** (WHEELS see below).
- Fasten Occupant Restraint Belt.
- Press and hold **UP** button to raise platform to vehicle floor level.
- Release wheelchair brakes and enter vehicle.

**FASTEN OCCUPANT RESTRAINT BELT:**

- Fasten Occupant Restraint Belt.
- Place wheelchair in center of platform, facing outward if possible. **LOCK WHEELCHAIR BRAKES.** (WHEELS see below).
- Press and hold **DOWN** button to lower platform to ground level.
- Release wheelchair brakes and exit vehicle.

**STANDER:**

- Standee must stand in center of platform, facing direction of travel (into or out of vehicle), and keep arms braced.

**MANUAL OPERATION:**

- See instructions on pump cover and in User Manual.

**CAUTION:**

Never direct flow of lift when operating lift, vehicle is safety parked before using lift. Accidental flow of lift when it is in motion. Failure to maintain control may cause injury. Failure to maintain control may cause injury. Failure to maintain control may cause injury.

PUBLIC USE OPERATING INSTRUCTIONS (VEHICLE EXTERIOR)  
PN 32146

**K-SERIES PUBLIC USE WHEELCHAIR & STANDER LIFT**

**WARNING:**

- Improper use of lift can result in personal injury, the most severe being falling from the lift. Read and follow operating instructions in User Manual (attached copies of User Manual are available from: RICON CORPORATION, 7500 NELSLOW ROAD, PANDORAMA CITY, CA 91442, (800) 322-2084, (818) 267-3000.
- Do not exceed rated load capacity.
- Prior to use, inspect platform for proper function, required maintenance, or damage. If a problem exists, do not use lift, return to an authorized service technician to repair. Ricon Corporation declines liability for damage or personal injury resulting from lift modification, lack of maintenance, faulty repair, negligence, abuse, or failure to follow lift operating instructions.

**OPERATING INSTRUCTIONS (ALSO READ OWNER MANUAL)**

**STANDER LIFT:**

- Fully open doors.
- Use pendant switch to apply power to platform.
- Press and hold **UP** button to raise platform to vehicle floor level.
- Press and hold **DOWN** button to lower platform to ground level.

**WHEELCHAIR:**

- Place wheelchair in center of platform, facing outward if possible. **LOCK WHEELCHAIR BRAKES.** (WHEELS see below).
- Fasten Occupant Restraint Belt.
- Press and hold **UP** button to raise platform to vehicle floor level.
- Release wheelchair brakes and enter vehicle.

**FASTEN OCCUPANT RESTRAINT BELT:**

- Fasten occupant restraint belt.
- Place wheelchair in center of platform, facing outward if possible. **LOCK WHEELCHAIR BRAKES.** (WHEELS see below).
- Press and hold **DOWN** button to lower platform to ground level.
- Release wheelchair brakes and exit vehicle.

**STANDER:**

- Standee must stand in center of platform, facing direction of travel (into or out of vehicle), and keep arms braced.

**MANUAL OPERATION:**

- See instructions on pump cover and in User Manual.

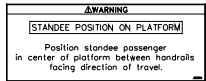
**CAUTION:**

Never direct flow of lift when operating lift, vehicle is safety parked before using lift. Accidental flow of lift when it is in motion. Failure to maintain control may cause injury. Failure to maintain control may cause injury. Failure to maintain control may cause injury.

RESTRAINT BELT  
PN 26155



STANDEE LOCATION  
PN 26255



PUBLIC USE OPERATING INSTRUCTIONS  
PN 32137

FIGURE 4-1: PUBLIC USE DECALS

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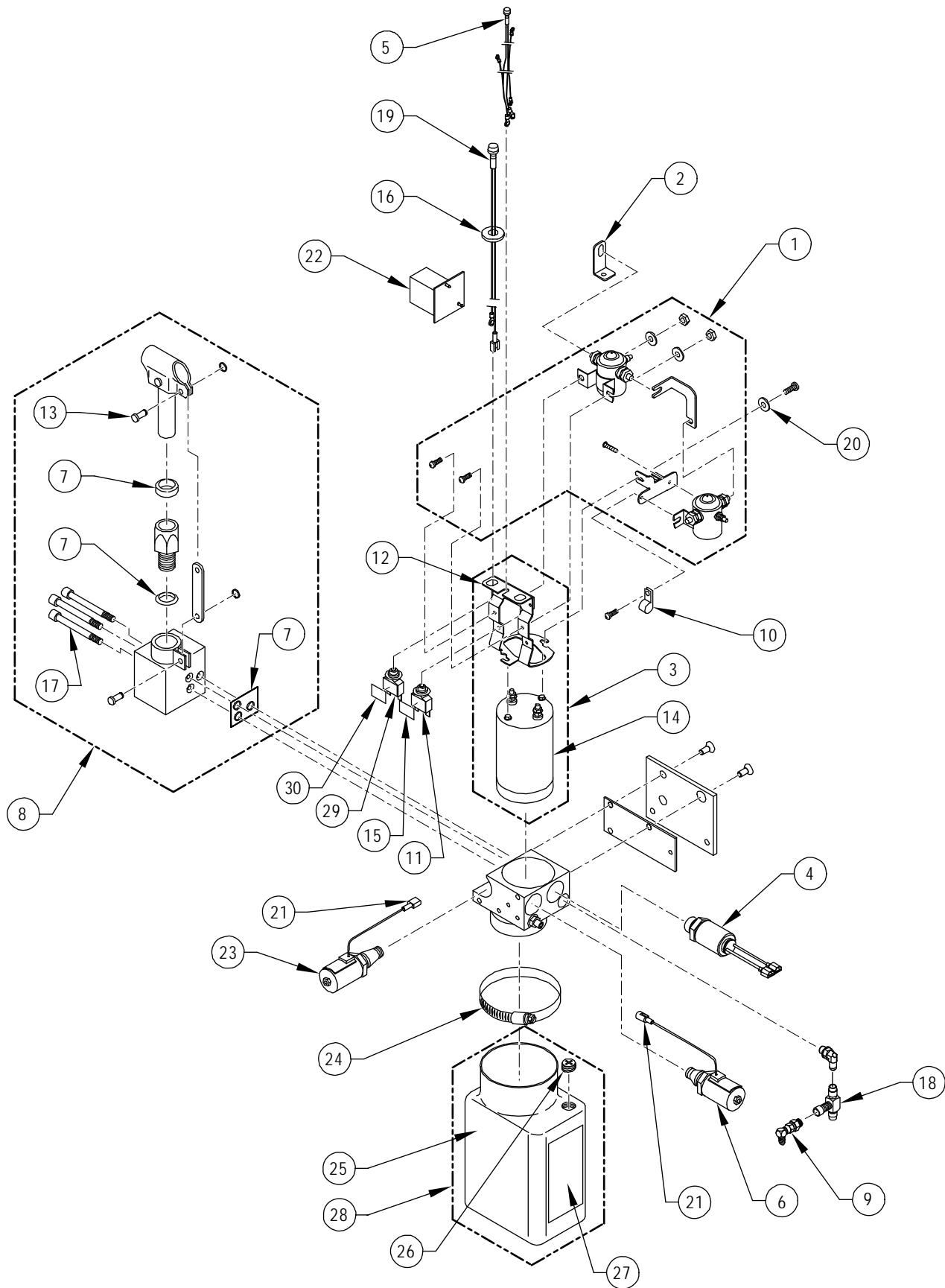


FIGURE 4-2: PUBLIC USE PUMP ASSY

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FIGURE 4-2: PUBLIC USE PUMP ASSY

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
1	KIT, SOLENOID, 12V, SPST	2		29297
2	BUS BAR, ISKRA MOTOR	1		10807
3	KIT, MOTOR ASSY, W/BACKET, 12V	1		14345
4	KIT, PRESSURE SWITCH, WITH INSTRUCTIONS	1		42050
5 *	LIGHT ASSY, INDICATOR, 12V (SUPERSEDED) SEE 5A	1		19067
5A	PCB, PUMP LED ASSY, 12V (P/N 35739)	1		45561
6	KIT, SPOOL VALVE, WITH DECELERATION, 12V	1		01176
6A *	KIT, SPOOL VALVE, WITH DECELERATION, 24V	1		01177
7	KIT, SEAL, PUMP, MANUAL BACK-UP	1		V2-SH-220
8	BACK-UP PUMP, MANUAL	1		V2-SH-210
9	FITTING ASSY, SNL, 1/4J X 1/4J, STEEL	1		VS-SH-06
10	CABLE CLAMP, 3/16", NYLON (BAG OF 10)	1		19798
11	CIRCUIT BREAKER KIT, 8 AMP, W/HDWR & DECAL	1		V2-SH-005
12	BRACKET, SOLENOID	1		10507
13	PIN & RETAINING RING	2		V2-SH-017
14	MOTOR ASSY, 12V, 3", ISKRA	1		14332
15	DECAL, 8 AMP CIRCUIT BREAKER	1		18797
16	ADAPTER, .625 D-HOLE TO .484 ROUND	1		V2-ES-059
17	SCREW, SHC, 1/4-20 X 2.25L (BAG OF 10)	3		32407
18	FITTING, SRT, 1/4J, STEEL	1		V2-SH-012
19	LIGHT, LIFT ARMED INDICATOR, 12V, GREEN	1		UL-ES-034
19A *	LIGHT, LIFT ARMED INDICATOR, 24V, GREEN	1		V2-ES-016
20	WASHER, FLAT, .406X.812X.065 (BAG OF 10)	1		17510
21	TERM, SPL, M22-18 FULLINS, (BAG OF 10)	1		29388
22	COUNTER ASSY	1		33048
23	HYDRAULIC POPPET VALVE ASSY (DOWN VALVE), 12V	1		V2-SH-105
23A *	HYDRAULIC POPPET VALVE ASSY (DOWN VALVE), 24V	1		V2-SH-136
24	HOSE CLAMP	1		V2-SH-109
25	RESERVOIR, PUMP, PLASTIC	1		V2-SH-108
26	PLUG, RESERVOIR, BREATHER	1		V2-SH-106
27	DECAL, OIL LEVEL WARNING	1		32-10-154
28	RESERVOIR, PUMP, PLASTIC W/DECAL & PLUG	1		30938
29	CIRCUIT BREAKER, 30AMP, WHITE	1		26510
30	DECAL, 30 AMP BREAKER, HYDRAULIC, PUMP ASSY	1		44270

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

**NOTE:** \* Item or configuration not shown.

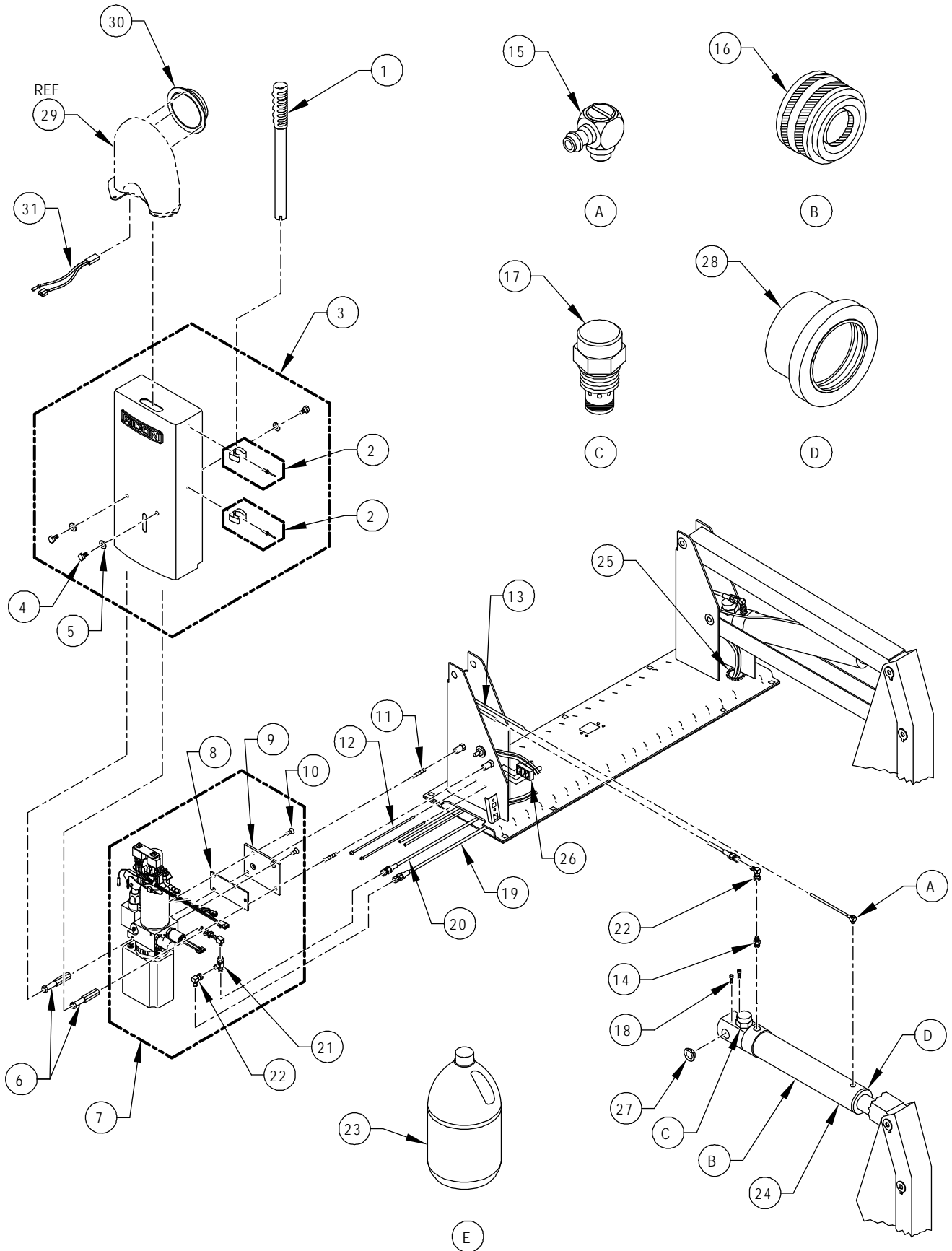


FIGURE 4-3: PUBLIC USE HYDRAULIC SYSTEM

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FIGURE 4-3: PUBLIC USE HYDRAULIC SYSTEM

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
1	HANDLE, MANUAL BACKUP PUMP	1		V2-SH-111
2	KIT, TOOL CLIP, W/HARDWARE	2		19557
3	COVER, ASSY, PUMP, LH	1		V2-CV-220
3A *	COVER, ASSY, PUMP, RH	1		V2-CV-221
4	SCREW, HEX, 5/16-18 X 5/8" GR 5 (BAG OF 10)	3		14495
5	WASHER, FLT, .344 X .688 X .065 (BAG OF 10)	3		13350
6	HEX ROD, PUMP STANDOFF	2		V2-CV-015
7 **	PUMP ASSY, W/O INTERLOCK, STD, DECEL VALVE, 12V, LH	1		PM212200108
7A **	PUMP ASSY, W/O INTERLOCK, STD, DECEL VALVE, 12V, RH	1		PM212200308
7B **	PUMP ASSY, W/O INTERLOCK, RAISED SCK, 12V, RH	1		PM212100408
7C **	PUMP ASSY, W/O INTERLOCK, RAISED, 12V, DECEL, LH	1		PM212100208
8	PLATE, PUMP COVER MOUNT	1		V2-AC-71
9	PLATE, PUMP MOUNT	1		V2-AC-70
10	SCREW, FLAT HEAD, 5/16-18 X 3/4" (BAG OF 10)	2		14499
11	STUD, THREADED, 5/16-18 X 1.75" (BAG OF 10)	2		14500
12	CABLE TIE, 5.5", BLACK (BAG OF 10)	2		25697
13	TUBE, POLYURETHANE, 6MM x 4MM, BLACK	9'		22-02-230
14	ADAPTOR, # 6 SAE MALE X # 4 JIC MALE	2		26591
15	FITTING, "L", MALE 10-32 X 1/4", BARB	2		V2-SH-16
16 *	KIT, CYL REPAIR (W/SEALS) (SUPERSEDED BY 21829)	2		V2-SH-56
16A	KIT, CYL REPAIR (PISTON/GLAND ASSY)	2		21829
17	KIT, FLOW CONTROL, FIXED RATE .50 GPM (KIT OF 2)	1		30968
18	SCREW, HEX RECESS HEAD, 1/4-20 X 1 (BAG OF 10)	4		14491
19	HOSE ASSY, HYDRAULIC, 61" X 1/4 JIC X 1/4 JIC	1		V2-SH-009
19A *	HOSE ASSY, HYDRAULIC, 64" X 1/4 JIC X 1/4 JIC	1		16601
20	HOSE ASSY, HYDRAULIC, 26" X 1/4 JIC X 1/4 JIC	1		V2-SH-008
21	FITTING, RUN TEE, 1/4 JIC M-M-F	1		V2-SH-012
22	FITTING, "L", 1/4 JIC M-F SWIVEL	3		VS-SH-06
23	OIL, HYDRAULIC, TEXACO #15, MEETS MIL-H-5606G	1	GAL	20-16-051
24	CYLINDER ASSY 37", (BLACK)	2	K2003	VT-SH-105K
	CYLINDER ASSY 37", (BLACK)	2	K2005	VT-SH-105K
	CYLINDER ASSY 37", (BLACK)	2	K2010	VT-SH-105K
24A *	CYLINDER ASSY 43", (BLACK)	2	K5505	30836K
*	CYLINDER ASSY 43", (BLACK)	2	K5510	30836K
*	CYLINDER ASSY 43", (BLACK)	2	K5511	30836K
25	GROMMET, CATERPILLAR, 3/16" X 12"	1		26647
26	SPACER, CABLE OR HOSE	2		25557
27	BUSHING, 3/4"ID X 3/8W	4		25386

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

**NOTE:** \* Item or configuration not shown.

**NOTE:** \*\* Refer to Pump Assembly figure for parts breakdown.



**FIGURE 4-3: PUBLIC USE HYDRAULIC SYSTEM CONT'D**

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
28 *	GLAND NUT, 1.50", WITH SEAL (SUPERSEDED BY 21829)	2		13009
28A	GLAND ASSY (FOR S/N ABOVE 236622) (SEE KIT 21829)	2		42305
29	COVER, LIGHT	REF		31783
30	LIGHT, BEACON	1		32440
31	LIGHT ASSY, EXTENSION	1		33049

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

**NOTE:** \* Item or configuration not shown.

**NOTE:** \*\* Refer to Pump Assembly figure for parts breakdown.

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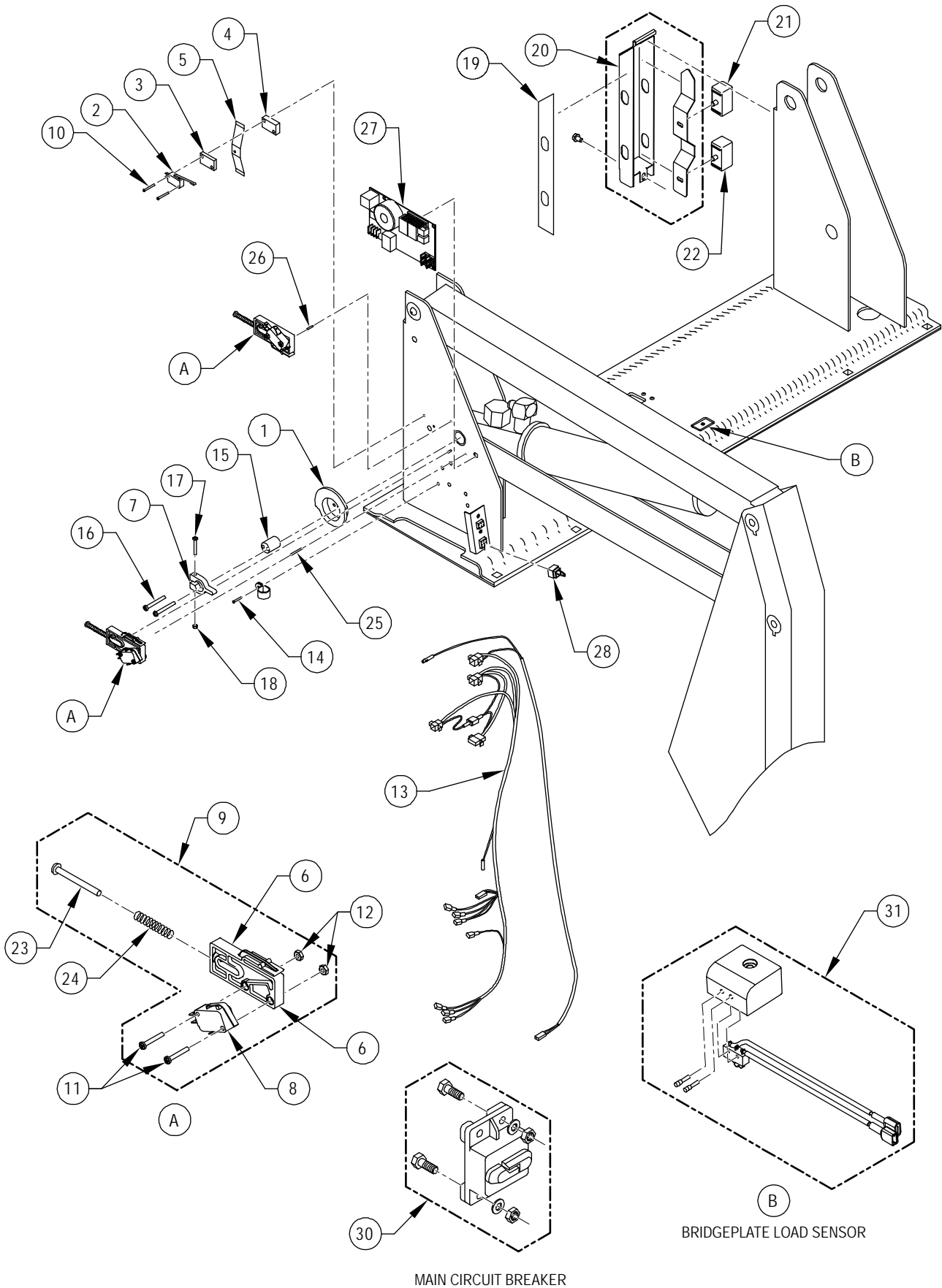


FIGURE 4-4: PUBLIC USE ELECTRICAL SYSTEM

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FIGURE 4-4: PUBLIC USE ELECTRICAL SYSTEM

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
1	CAM, LIFT CONTROL	1		V2-AC-107
2	SWITCH, LIMIT, FOLD CUTOFF	1		V2-ES-111
3	BLOCK, FOLD CUTOFF SWITCH OFFSET, 1/4" THICK	1		V2-ES-78
4	BLOCK, FOLD CUTOFF SWITCH OFFSET, 3/8" THICK	1		V2-ES-79
5	SPRING, RETAINING, UPPER/LOWER SWITCH BLOCK	1		V2-ES-95
6 *	SWITCH BLOCK ASSEMBLY (SUPERSEDED BY 34314)	2		V2-ES-82
6A	SWITCH BLOCK	2		34314
7	ACTUATOR, FOLD CUTOFF	1		V2-AC-089
8	SWITCH, LIMIT, FLOOR LEVEL POWER CUTOFF, UP & DOWN	2		V2-ES-110
9	KIT, LIMIT SWITCH BLOCK REPLACEMENT	2		V2-ES-61
10	SCREW, 4-40 X 1.25 PAN HEAD (BAG OF 10)	1		15908
11	SCREW, 4-40 X .75 PAN HEAD (BAG OF 10)	1		15909
12	NUT, HEX, 4-40 (BAG OF 10)	1		15903
13 **	ELECTRICAL HARNESS, MAIN, W/O INTERLOCK	1		33032
14	MS, 10-24 X 1/2 PHIL PAN (BAG OF 10)	1		13304
15	PIN, EXTENSION FOLD CUTOFF (BAG OF 10)	1		15914
16	MS 10-24 X 1 3/4 PHIL PAN (BAG OF 10)	1		29318
17	MS 8-32 X 1 1/4 PHIL PAN (BAG OF 10)	1		15906
18	NUT, HEX, 8-32 NYLON INSERT (BAG OF 10)	1		15907
19	TAPE, NON-REFLECTIVE	1		35706
20	OBS;ENCLOSURE,SENSOR,UNPAINTED	2		32295
21	SENSOR, PHOTOBEAM, RECEIVER	2		32499
22	SENSOR, PHOTOBEAM, TRANSMITTER	2		32498
23	SCREW, RD HEAD, 10-24 X 2" (BAG OF 10)	1		14497
24	SPRING, COMPRESSION, .30 X 2.06L	2		V2-ES-93
25	DIS;ROLLPIN,3/32x1(BAG OF 10)	1		14498
26	ROLLPIN, .94 X .50 (BAG OF 10)	1		14496
27	PCB ASSEMBLY, PUBLIC	1		33461
28	SHORTING PLUG	1		UL-ES-007
29 *	HARNESS, PCB TO CAM SWITCH	1		33030
*	HARNESS, PCB TO POWER INTERRUPT	1		33031
*	HARNESS, INTERLOCK	1		33044
*	HARNESS, PCB TO PLATFORM	1		33807
30	KIT, CIRCUIT BREAKER, MAIN (90A) – 12 VOLTS	1		01010K
30A *	KIT, CIRCUIT BREAKER, 50 AMP – 24 VOLTS	1		01291
31	BRIDGEPLATE LOAD SENSOR	1		31791

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

**NOTE:** \* Item or configuration not shown.

**NOTE:** \*\* Does not include all harnesses. Reference Item 29.

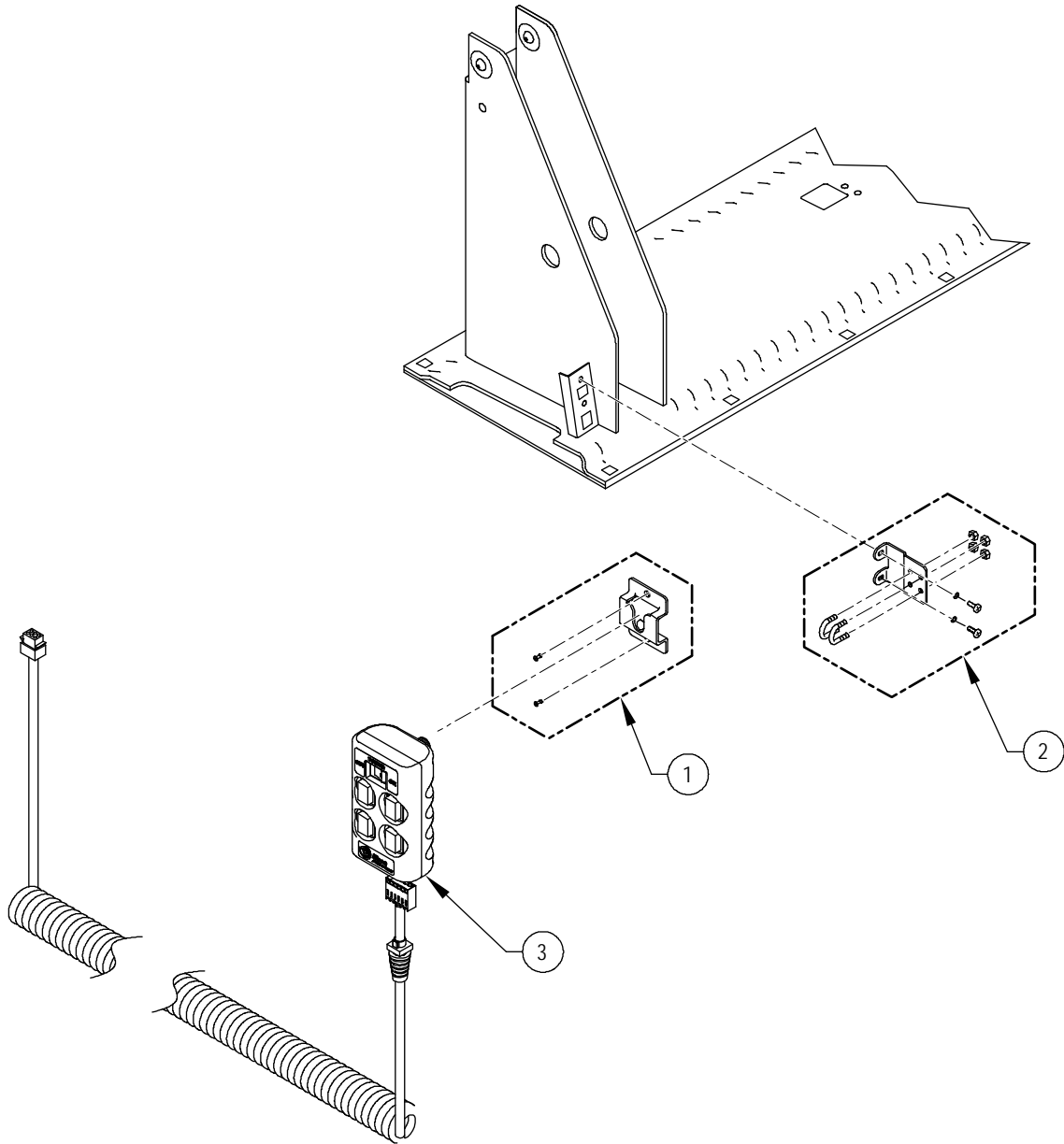


FIGURE 4-5: PUBLIC USE PENDANT

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FIGURE 4-5: PUBLIC USE PENDANT

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
1	KIT, PENDANT, MOUNT	1		33021
2	KIT, CTL HARNESS, STRAIN RELIEF, W/U-BOLT	1		01007
3	KIT, PENDANT, W/7FT CORD	1	K2003	33022
		1	K2005	33022
		1	K2010-F	33022
		1	K5503-F	33022
		1	K5505-F	33022
		1	K5510-F	33022
		1	K5511	33022
3A *	KIT, PENDANT, COIL CORD, 9 PIN, FMVSS, BLK	1	K2005-C	44870
		1	K2010-C	44870
		1	K5505-C	44870
		1	K5510-C	44870
3B *	KIT, PENDANT, COIL CORD, .29 DIA, PUSH BUTTON BLK	1	K2003	42968
		1	K2005-F	42968
		1	K2010-F	42968
		1	K5505-F	42968
		1	K5510-F	42968
3C *	KIT, PENDANT, STEEL CORD, 7 FT, FMVSS, BLK	1	K2005-F	44852
		1	K2010-F	44852
		1	K5505-F	44852
		1	K5510-F	44852
3D *	KIT, PENDANT, STRAIGHT CORD, 10 FT, FMVSS	1	K5510-F	44847

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

**NOTE:** \* Item or configuration not shown.

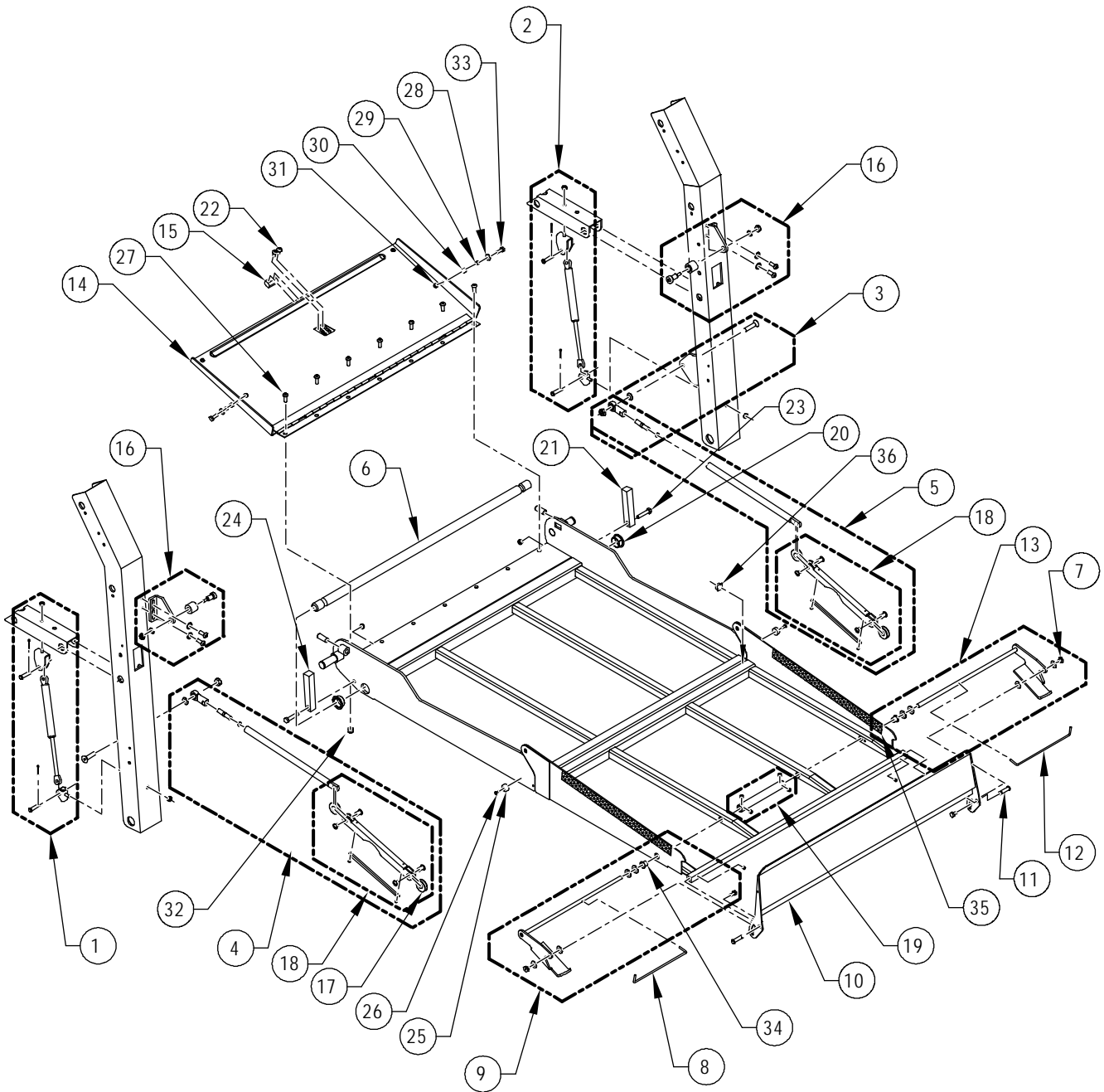


FIGURE 4-6: PUBLIC USE FOLDING PLATFORM ASSEMBLY

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FIGURE 4-6: PUBLIC USE FOLDING PLATFORM ASSEMBLY

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
1	KIT, PNEUMATIC SPRING ASSY, RETROFIT (LH & RH SIDE KIT)	2		19318
2	SPRING, PNEUMATIC ASSIST	2		R5-SP-502
3	ROD END ASSY, WITH HARDWARE	2		29224
4	KIT, LINK ASSY, RH, YELLOW, 51" LG PLATFORM	1	K2003	19522
	KIT, LINK ASSY, RH, YELLOW, 51" LG PLATFORM	1	K2005	19522
	KIT, LINK ASSY, RH, YELLOW, 51" LG PLATFORM	1	K5503	19522
	KIT, LINK ASSY, RH, YELLOW, 51" LG PLATFORM	1	K5505	19522
	KIT, LINK ASSY, RH, YELLOW, 51" LG PLATFORM	1	K5511	19522
4A	KIT, LINK ASSY, RH, YELLOW, 54" LG PLATFORM	1	K2010	42039
	KIT, LINK ASSY, RH, YELLOW, 54" LG PLATFORM	1	K5510	42039
5	KIT, LINK ASSY, LH, YELLOW, 51" LG PLATFORM	1	K2003	19522L
	KIT, LINK ASSY, LH, YELLOW, 51" LG PLATFORM	1	K2005	19522L
	KIT, LINK ASSY, LH, YELLOW, 51" LG PLATFORM	1	K5503	19522L
	KIT, LINK ASSY, LH, YELLOW, 51" LG PLATFORM	1	K5505	19522L
	KIT, LINK ASSY, LH, YELLOW, 51" LG PLATFORM	1	K5511	19522L
5A	KIT, LINK ASSY, LH, YELLOW, 54" LG PLATFORM	1	K2010	44264
	KIT, LINK ASSY, LH, YELLOW, 54" LG PLATFORM	1	K5510	44264
6	MAIN SHAFT, 1" DIA X 36.50" (VT-PI-43)	1	K2003	34890
	MAIN SHAFT, 1" DIA X 36.50" (VT-PI-43)	1	K5503	34890
6A	MAIN SHAFT, 1" DIA X 39.13" (VT-PI-49)	1	K2005	34893
	MAIN SHAFT, 1" DIA X 39.13" (VT-PI-49)	1	K5505	34893
6B	MAIN SHAFT, 1" DIA X 40.50"	1	K2010	16607
	MAIN SHAFT, 1" DIA X 40.50"	1	K5510	16607
	MAIN SHAFT, 1" DIA X 40.50"	1	K5511	16607
7	T-NUT, ¼-20, SST (BAG OF 10)	1		14485
8	TORSION SPRING, LH	1		V2-SP-021
9	KIT, ACTUATOR, ROLLSTOP, LH	1	K2003	22903
	KIT, ACTUATOR, ROLLSTOP, LH	1	K5503	22903
9A	KIT, ACTUATOR, 32"W PLATFORM, W/PLATE & HDWR	1	K2005	55672
	KIT, ACTUATOR, 32"W PLATFORM, W/PLATE & HDWR	1	K5505	55672
9B	KIT, ACTUATOR, 34"W PLATFORM, W/PLATE & HDWR	1	K2010	55671
	KIT, ACTUATOR, 34"W PLATFORM, W/PLATE & HDWR	1	K5510	55671
	KIT, ACTUATOR, 34"W PLATFORM, W/PLATE & HDWR	1	K5511	55671
10	ROLLSTOP ASSY, 6"H X 30"W (SUPERSEDED 32466)	1	K2003	39951
	ROLLSTOP ASSY, 6"H X 30"W (SUPERSEDED 32466)	1	K5503	39951
10A	ROLLSTOP ASSY, 6" X 32" (SUPERSEDED 32445)	1	K2005	39952
	ROLLSTOP ASSY, 6" X 32" (SUPERSEDED 32445)	1	K5505	39952
10B	ROLLSTOP ASSY, 6" X 34" (SUPERSEDED 32471)	1	K2010	39953
	ROLLSTOP ASSY, 6" X 34" (SUPERSEDED 32471)	1	K5510	39953

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

**NOTE:** \* Item or configuration not shown.



FIGURE 4-6: PUBLIC USE FOLDING PLATFORM ASSEMBLY (CONT'D)

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
10B	ROLLSTOP ASSY, 6" X 34" (SUPERSEDED 32471)	1	K5511	39953
11	PIN, CLEVIS, 5/16 X 1-1/4 (BAG OF 10)	1		19513
12	TORSION SPRING, RH	1		V2-SP-022
13	KIT, ACTUATOR, ROLLSTOP, RH	1	K2003	22902
	KIT, ACTUATOR, ROLLSTOP, RH	1	K5503	22902
13A	KIT, ACTUATOR, 32"W PLATFORM, W/PLATE & HDWR	1	K2005	55672
	KIT, ACTUATOR, 32"W PLATFORM, W/PLATE & HDWR	1	K5505	55672
13B	KIT, ACTUATOR, 34"W PLATFORM, W/PLATE & HDWR	1	K2010	55671
	KIT, ACTUATOR, 34"W PLATFORM, W/PLATE & HDWR	1	K5510	55671
	KIT, ACTUATOR, 34"W PLATFORM, W/PLATE & HDWR	1	K5511	55671
14	BRIDGEPLATE ASSY, INNER, 30" PLATFORM	1	K2003	32464
14A	BRIDGEPLATE ASSY, INNER, 32" PLATFORM	1	K2005	32444
14B	BRIDGEPLATE ASSY, INNER, 32" PLATFORM	1	K5505	33483
14C	BRIDGEPLATE ASSY, INNER, 34" PLATFORM	1	K2010	33082
	BRIDGEPLATE ASSY, INNER, 34" PLATFORM	1	K5510	33082
	BRIDGEPLATE ASSY, INNER, 34" PLATFORM	1	K5511	33082
15	CATCH, BASE LATCH	1		V2-AC-103
16	KIT, BRACKETS, W/ROLLER (LH & RH IN KIT) (SUPERSEDED 31252)	1	K2003	31247
	KIT, BRACKETS, W/ROLLER (LH & RH IN KIT) (SUPERSEDED 31252)	1	K2005	31247
	KIT, BRACKETS, W/ROLLER (LH & RH IN KIT) (SUPERSEDED 31252)	1	K2010	31247
16A	KIT, BRACKETS, HIGH MOUNT (LH & RH IN KIT)	1	K5503	31251
	KIT, BRACKETS, HIGH MOUNT (LH & RH IN KIT)	1	K5505	31251
	KIT, BRACKETS, HIGH MOUNT (LH & RH IN KIT)	1	K5510	31251
	KIT, BRACKETS, HIGH MOUNT (LH & RH IN KIT)	1	K5511	31251
17	WASHER, DELRIN, 1" OD X .38ID, 0.03 THK (BAG OF 10)	1		25628
18	KIT, LINK ASSY, FRONT PLATFORM (YEL) (INTERCHANGEABLE)	2		29223
19	KIT, COUPLER, ROLLSTOP ACTUATOR, W/HDWR	1	K2003	28775
	KIT, COUPLER, ROLLSTOP ACTUATOR, W/HDWR	1	K5503	28775
20	KIT, FLANGED BEARING, 1" ID (BAG OF 10)	1		19579
21	BLOCK, PLATFORM LEVEL ADJUST	2		VT-AH-142
22	SCREW, BUTTON HEAD, 5/16-18 X 1/2, SST, BLK OXIDE (BAG OF 10)	1		14484
23	SCREW, HEX HEAD, 5/16-18 X 1½, GR5 (BAG OF 10)	1		14403
24	SETSCREW, ½-20 X 1/4, w/NYLON INSERT (BAG OF 10)	1		19704
25	BUMPER, VHMW, .75D X .38T	2		V2-AC-027
26	SCREW, PAN HEAD, #8TEK X ½ (BAG OF 10)	1		15961
27	SCREW, BUTTON HEAD, 5/16-18 X ¾ SST, BLK OX (BAG OF 10)	1		15983
28	WASHER, FLAT, .28 X .63 X .06 (BAG OF 10)	1		17504
29	BUSHING STEEL, .25ID X .32OD X .19L	2		V2-BU-003
30	SPACER, .25 ID X .40 OD X .20	2	K2003	UV-PF-839

NOTE: (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

NOTE: \* Item or configuration not shown.

FIGURE 4-6: PUBLIC USE FOLDING PLATFORM ASSEMBLY (CONT'D)

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
30	SPACER, .25 ID X .40 OD X .20	2	K5503	UV-PF-839
30A	SPACER, .25 ID X .40 OD X .38	2	K5505	33805
	SPACER, .25 ID X .40 OD X .38	2	K2010	33805
	SPACER, .25 ID X .40 OD X .38	2	K5510	33805
	SPACER, .25 ID X .40 OD X .38	2	K5511	33805
31	NUT, w/NYLON INSERT, ¼-20 (BAG OF 10)	1		15919
32	NUT, w/NYLON INSERT, 5/16-18, SST (BAG OF 10)	1		14415
33	SCREW, HEX HEAD, ¼-20 X ¾ GR5 (BAG OF 10)	1		34518
34	BUSHING, BRONZE	2		V2-BU-195
35	DECAL, REFLECTIVE, 3" X 24", RED & WHITE	2	K2003	33010
35A	DECAL, REFLECTIVE, 3" X 18", RED & WHITE	2	K2005	33011
	DECAL, REFLECTIVE, 3" X 18", RED & WHITE	2	K5505	33011
	DECAL, REFLECTIVE, 3" X 18", RED & WHITE	2	K2010	33011
	DECAL, REFLECTIVE, 3" X 18", RED & WHITE	2	K5510	33011
	DECAL, REFLECTIVE, 3" X 18", RED & WHITE	2	K5511	33011
36	PLUG, MODIFIED, SQUARE	1		32918

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

**NOTE:** \* Item or configuration not shown.

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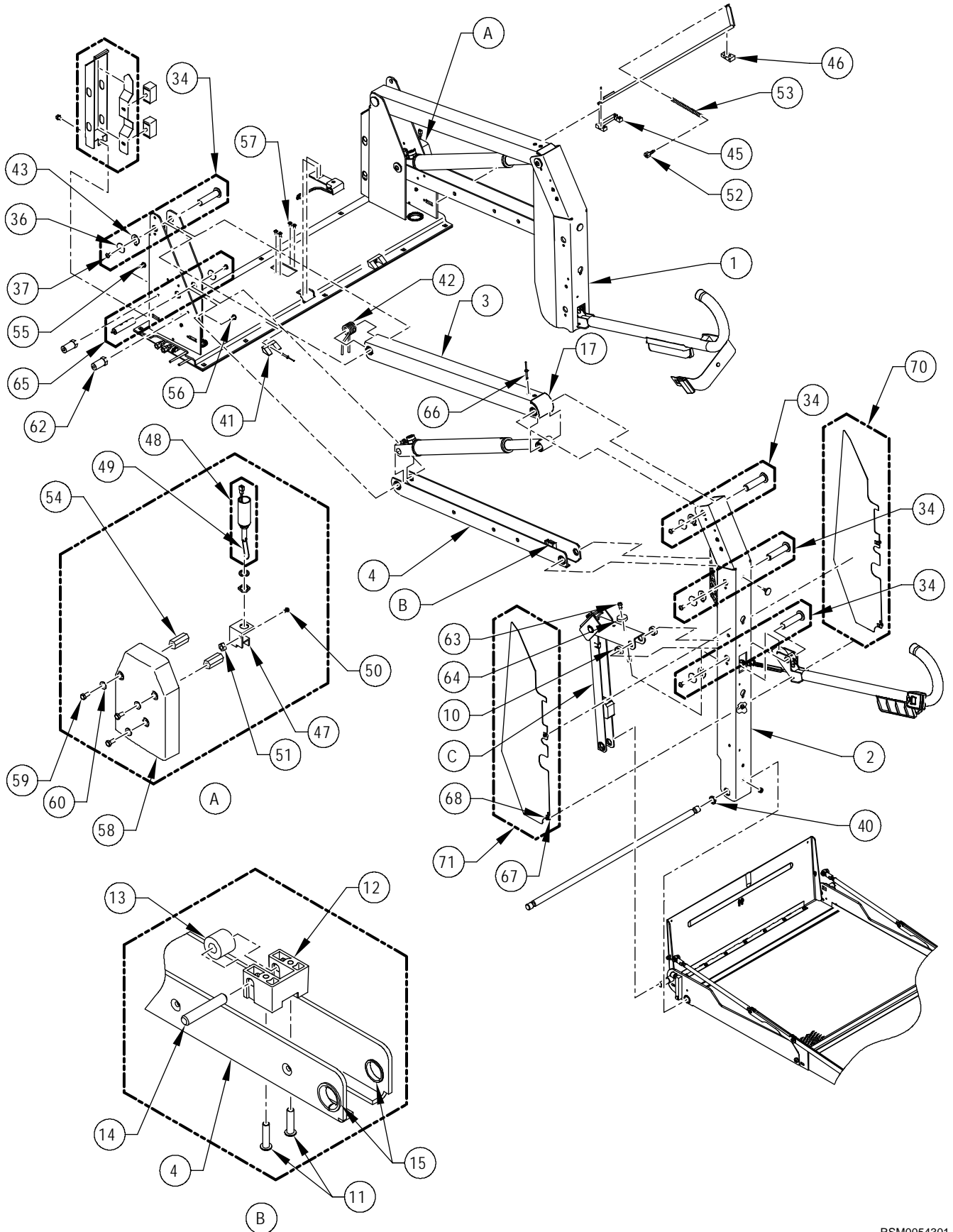
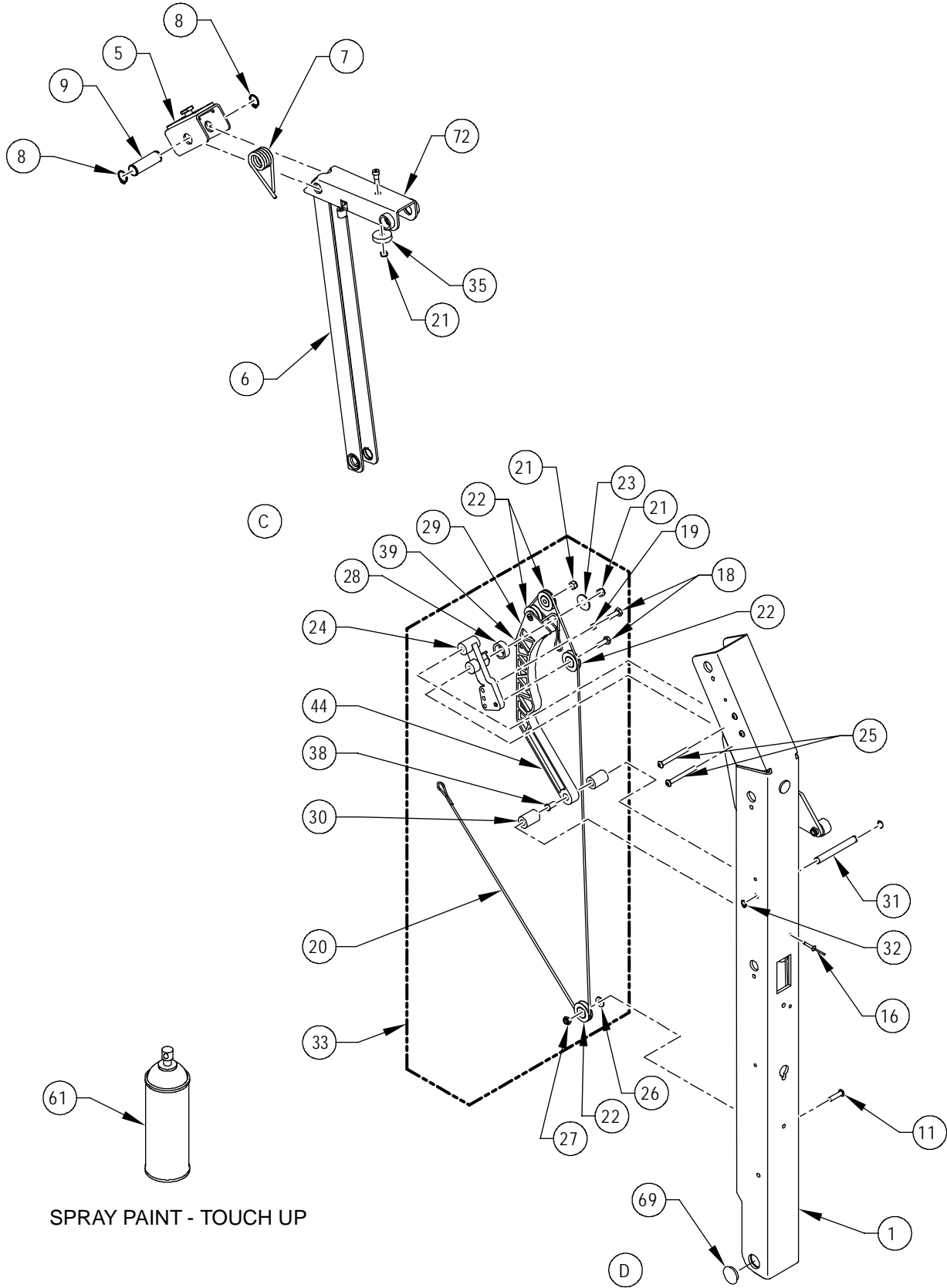


FIGURE 4-7.1: K-SERIES DOT PUBLIC USE TRAVELING FRAME (SHEET 1 OF 2)

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FIGURE 4-7.2: K-SERIES DOT PUBLIC USE TRAVELING FRAME (SHEET 2 OF 2)

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FIGURE 4-7: K-SERIES DOT PUBLIC USE TRAVELING FRAME ASSY

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
1	ARM ASSY, VERTICAL, RH (GRAY)	1	K2003	19328
	ARM ASSY, VERTICAL, RH (GRAY)	1	K2005	19328
	ARM ASSY, VERTICAL, RH (GRAY)	1	K2010	19328
1A	ARM ASSY, VERTICAL, RH (GRAY)	1	K5503	30854
	ARM ASSY, VERTICAL, RH (GRAY)	1	K5505	30854
	ARM ASSY, VERTICAL, RH (GRAY)	1	K5510	30854
	ARM ASSY, VERTICAL, RH (GRAY)	1	K5511	30854
2	ARM ASSY, VERTICAL, LH (GRAY)	1	K2003	19327
	ARM ASSY, VERTICAL, LH (GRAY)	1	K2005	19327
	ARM ASSY, VERTICAL, LH (GRAY)	1	K2010	19327
2A	ARM ASSY, VERTICAL, LH (GRAY)	1	K5505	30850
	ARM ASSY, VERTICAL, LH (GRAY)	1	K5510	30850
	ARM ASSY, VERTICAL, LH (GRAY)	1	K5511	30850
3	ARM ASSY, PARALLEL, UPPER (GREY)	2	K2003	VT-AC-250
	ARM ASSY, PARALLEL, UPPER (GREY)	2	K2005	VT-AC-250
	ARM ASSY, PARALLEL, UPPER (GREY)	2	K2010	VT-AC-250
3A	ARM ASSY, TOP	2	K5505	30858
	ARM ASSY, TOP	2	K5510	30858
	ARM ASSY, TOP	2	K5511	30858
4	ARM ASSY, PARALLEL, LOWER (GREY)	2	K2003	VT-AC-252
	ARM ASSY, PARALLEL, LOWER (GREY)	2	K2005	VT-AC-252
	ARM ASSY, PARALLEL, LOWER (GREY)	2	K2010	VT-AC-252
4A	ARM ASSY, PARALLEL, LOWER (GREY)	2	K5505	30835
	ARM ASSY, PARALLEL, LOWER (GREY)	2	K5510	30835
5	LINK, UPPER KNUCKLE LEVER ASSY	2		VT-AC-070
6	LINK, KNUCKLE, LONG, GREY (18.25")	2	K2003	VT-AC-069
	LINK, KNUCKLE, LONG, GREY (18.25")	2	K2005	VT-AC-069
	LINK, KNUCKLE, LONG, GREY (18.25")	2	K2010	VT-AC-069
6A	LINK, KNUCKLE ASSY, GREY	2	K5503	30863
	LINK, KNUCKLE ASSY, GREY	2	K5505	30863
	LINK, KNUCKLE ASSY, GREY	2	K5510	30863
	LINK, KNUCKLE ASSY, GREY	2	K5511	30863
7	SPRING, KNUCKLE ACTUATOR	2		VT-SP-42
8	RETAINING RING, .75" EXTERNAL (BAG OF 10)	1		11796
9	PIN, SNAP RING, .75 OD X 2.15L	2		VT-PI-41
10	SPACER, KNUCKLE LINK	4		VT-BU-42
11	SCREW, BUTTON HEAD, 1/4-20 X 1", SST (BAG OF 10)	3		19715

CONTINUED

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

**NOTE:** \* Item or configuration not shown.

FIGURE 4-7: K-SERIES DOT PUBLIC USE TRAVELING FRAME ASSY

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
12	RETAINER, CAM ROLLER	4		37729
13	ROLLER, INNER ROLLSTOP CAM	2		V2-AC-024
14	PIN, CAM ROLLER	2		V2-PI-094
15	FLANGED BUSHING, .75ID (BAG OF 10)	16		19576
16	RIVET, BLIND, 3/16 X 1/2", ALUM (BAG OF 10)	2		15918
17	CAP, UPPER PARALLEL ARM	2		V2-AC-89
18	SCREW, HEX HEAD, 1/4-20 x 3/4 (BAG OF 10)	4		13308
19	BUSHING, STEEL, .25ID x .32OD x .19L	1		V2-BU-003
20	KIT, REPLACEMENT, CABLE ASSY, IRS 52.75" (2 PER KIT)	1	K2003	16094
	KIT, REPLACEMENT, CABLE ASSY, IRS 52.75" (2 PER KIT)	1	K2005	16094
	KIT, REPLACEMENT, CABLE ASSY, IRS 52.75" (2 PER KIT)	1	K2010	16094
20A	KIT, REPLACEMENT, CABLE ASSY, IRS 59.13" (2 PER KIT)	1	K5505	34247
	KIT, REPLACEMENT, CABLE ASSY, IRS 59.13" (2 PER KIT)	1	K5510	34247
	KIT, REPLACEMENT, CABLE ASSY, IRS 59.13" (2 PER KIT)	1	K5511	34247
21	NUT, HEX 1/4-20, W/NYLON INSERT (BAG OF 10)	6		15919
22	BEARING, GROOVED	8		VS-AH-06
23	WASHER, FENDER, 1/4" X 1"OD (BAG OF 10)	2		25623
24	BLOCK, PULLEY MOUNT, INNER ROLLSTOP	2		V2-AC-112
25	SCREW, BUTTON HEAD, 1/4-20 x 2 1/4, SST (BAG OF 10)	4		19720
26	WASHER, FLT, .281 x .625 x .065 (BAG OF 10)	2		17504
27	NUT, ESN, 1/4-20 THIN, SST (BAG OF 10)	2		13339
28	BUMPER, IRS CAM, ANTI-RATTLE	2		V2-BU-090
29	CAM ASSY, INNER ROLLSTOP ACTUATOR	2		V2-AC-190
30	KIT, SPACER, RUBBER, INNER ROLLSTOP CAM (4 PER KIT)	1		01224
31	PIN, SNAP RING, .38OD X 3.09L	2		VS-PI-09
32	RETAINING RING, .38ID (BAG OF 10)	4		11795
33	KIT, CAM ASSY, IRS ACTUATOR, 52.75" CABLE	2	K20XX	46599
33A	KIT, CAM ASSY, IRS ACTUATOR, 59.13" CABLE	2	K55XX	46596
34	KIT, PIN, LINK-ARM, W/HARDWARE	3		34586
35	GROMMET, .25OD X .30ID X .31L (BAG OF 10)	6		23391
36	SPACER, 1.05OD X .80ID X .38L, PVC	12		VT-BU-42
37	SET SCREW, 3/8-16 X 3/8", CUP POINT (BAG OF 10)	1		11797
38	BEARING, NYLINER, 3/8ID X 11/16L	2		25562
39	BUMPER, BUTTON, IRS CAM (BAG OF 10)	1		19783
40	SPACER, MAIN SHAFT, 1.50OD X 1.06ID X .19W	2		V2-BU-091
41	GUIDE BLOCK, BRIDGEPLATE	2		34343
42	SPRING, UPPER PARALLEL ARM	2		V2-SP-97

CONTINUED

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

**NOTE:** \* Item or configuration not shown.



FIGURE 4-7: K-SERIES DOT PUBLIC USE TRAVELING FRAME ASSY

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
43	WASHER, KEYED	6		20258
44	KIT, LATCH RELEASE, 30", W/BLOCKS & HARDWARE	1	K2003	28768
	KIT, LATCH RELEASE, 30", W/BLOCKS & HARDWARE	1	K5503	28768
44A	KIT, LATCH RELEASE, 32", W/BLOCKS & HARDWARE	1	K2005	28769
	KIT, LATCH RELEASE, 32", W/BLOCKS & HARDWARE	1	K5505	28769
44B	KIT, LATCH RELEASE, 34", W/BLOCKS & HARDWARE	1	K2010	28771
	KIT, LATCH RELEASE, 34", W/BLOCKS & HARDWARE	1	K5510	28771
	KIT, LATCH RELEASE, 34", W/BLOCKS & HARDWARE	1	K5511	28771
45	BLOCK, CENTER MOUNTING, BASE LATCH	1		V2-AC-102
46	BLOCK, MOUNTING, BASE LATCH	1		V2-AC-001
47	BRACKET, STOW LOCK SOLENOID	1		V2-AC-108
48	SOLENOID ASSY, 12V, STOW LOCK	1		V2-ES-127
49	CLIP, SPRING, BASE LATCH	1		V2-AC-009
50	SCREW, FLAT HEAD, 10-24 x 1/2", SST (BAG OF 10)	1		14426
51	NUT, HEX, NYLON INSERT, 10-24 (BAG OF 10)	1		13382
52	PIN, SPRING MOUNTING	1		V2-PI-095
53	SPRING, STOW LOCK RELEASE, .38OD X 3.5"	1		V2-SP-093
54	STAND OFF, LATCH COVER	2		V2-BU-080
55	SCREW, HEX HEAD, 5/16-18 X 3/4" (BAG OF 10)	1		15901
56	SCREW, FLAT HEAD, 5/16-18 X 3/4" (BAG OF 10)	1		14499
57	SCREW, BUTTON HEAD, 1/4-20 X 1/2", SST (BAG OF 10)	4		15902
58	COVER, BASE LATCH	1		V2-CV-123
59	SCREW, HEX HEAD, 5/16-18 X .625 (BAG OF 10)	3		14495
60	WASHER, FLAT, .69OD x .34ID x .065 (BAG OF 10)	3		13350
61	SPRAY PAINT, TOUCH-UP, CHARCOAL	1		25340
62	BUSHING, E-COVER MOUNT	2		V2-BU-081
63	SCREW, HEX HEAD, 1/4-20 X 1 (BAG OF 10)	2		14493
64	GROMMET, .30ID x .88OD x .44 (BAG OF 10)	2		23391
65	SHAFT, CONTROL CAM	1		V2-PI-091
66	RIVET, BLIND, 3/16OD X 5/8L, STEEL (BAG OF 10)	2		34519
67	SPRING NUT, 10-24, U-TYPE (BAG OF 10)	8		11799
68	SCREW, PAN HEAD, 10-24 x 1/2" (BAG OF 10)	8		13304
69	PLUG, 1" LOW PROFILE, BLACK NYLON	2		25563
70	KIT, PINCH POINT SHIELD, LH INNER & RH OUTER, W/HARDWARE	2	K20XX	29178
70A	KIT, PINCH POINT SHIELD, LH INNER & RH OUTER, W/HARDWARE	2	K55XX	29179
71	KIT, PINCH POINT SHIELD, LH OUTER & RH INNER, W/HARDWARE	2	K20XX	29162
71A	KIT, PINCH POINT SHIELD, LH OUTER & RH INNER, W/HARDWARE	2	K55XX	29163
72	SADDLE ASSEMBLY	2		VT-AC-046

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

**NOTE:** \* Item or configuration not shown.

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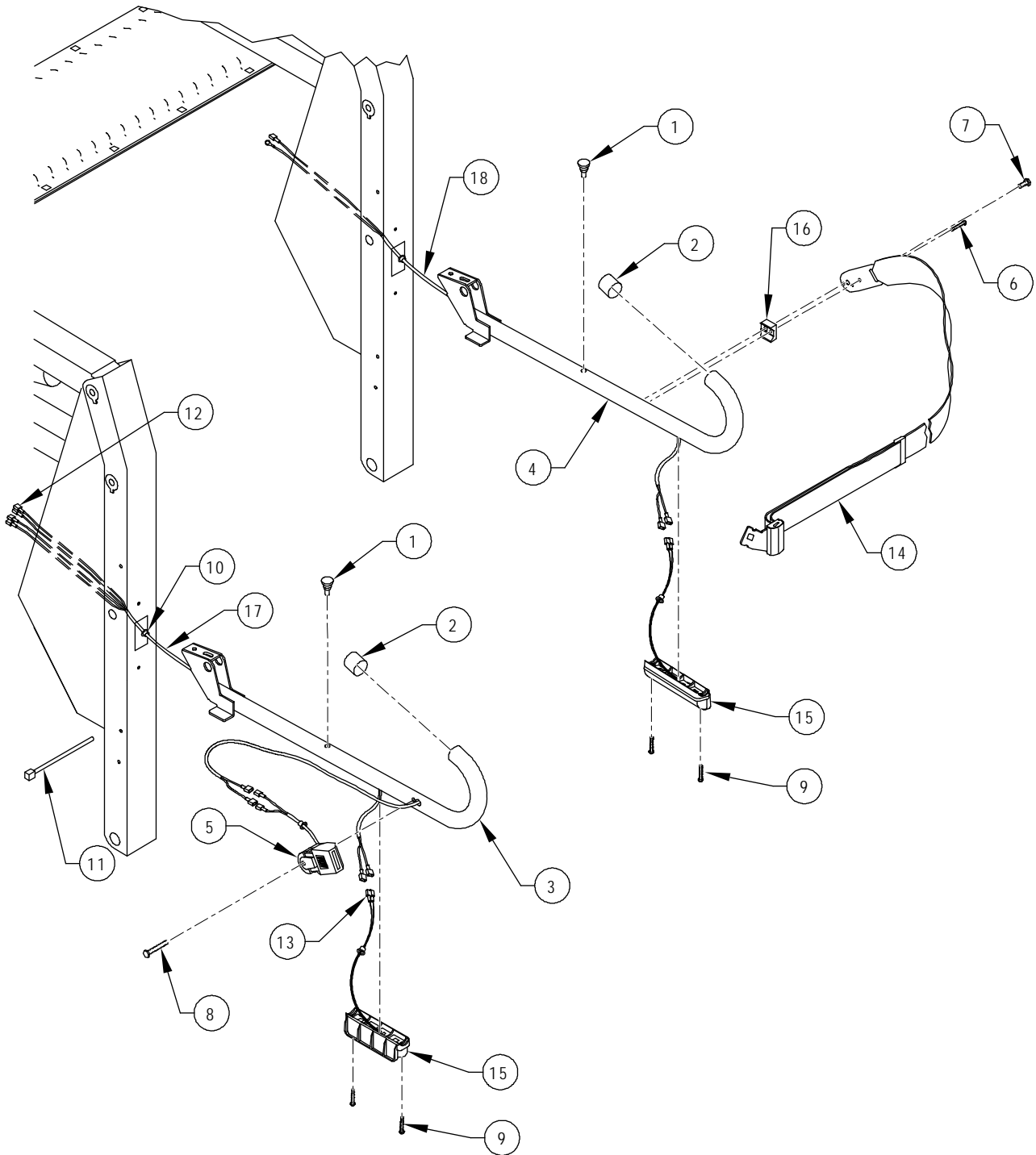


FIGURE 4-8: PUBLIC USE HANDRAILS

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FIGURE 4-8: PUBLIC USE HANDRAILS

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
1	BUMPER, RUBBER (BAG OF 10)	1		20653
2	CAP, ROUND, BLACK	2		25550
3	HANDRAIL ASSY, FMVSS, LH	1	K2003	32476
	HANDRAIL ASSY, FMVSS, LH	1	K2005	32476
	HANDRAIL ASSY, FMVSS, LH	1	K2010	32476
	HANDRAIL ASSY, FMVSS, LH	1	K5503	32476
	HANDRAIL ASSY, FMVSS, LH	1	K5505	32476
	HANDRAIL ASSY, FMVSS, LH	1	K5510	32476
	HANDRAIL ASSY, FMVSS, LH	1	K5511	32476
3A *	HANDRAIL ASSY, FMVSS, LH, W/BUCKLE ASSY	1	K2005	36569
	HANDRAIL ASSY, FMVSS, LH, W/BUCKLE ASSY	1	K2010	36569
	HANDRAIL ASSY, FMVSS, LH, W/BUCKLE ASSY	1	K5505	36569
	HANDRAIL ASSY, FMVSS, LH, W/BUCKLE ASSY	1	K5510	36569
4	HANDRAIL ASSY, FMVSS, RH	1	K2003	32477
	HANDRAIL ASSY, FMVSS, RH	1	K2005	32477
	HANDRAIL ASSY, FMVSS, RH	1	K2010	32477
	HANDRAIL ASSY, FMVSS, RH	1	K5503	32477
	HANDRAIL ASSY, FMVSS, RH	1	K5505	32477
	HANDRAIL ASSY, FMVSS, RH	1	K5510	32477
	HANDRAIL ASSY, FMVSS, RH	1	K5511	32477
4A *	HANDRAIL ASSY, FMVSS, RH, W/BUCKLE ASSY	1	K2005	36570
	HANDRAIL ASSY, FMVSS, RH, W/BUCKLE ASSY	1	K2010	36570
	HANDRAIL ASSY, FMVSS, RH, W/BUCKLE ASSY	1	K5505	36570
	HANDRAIL ASSY, FMVSS, RH, W/BUCKLE ASSY	1	K5510	36570
5	KIT, BUCKLE ASSY, w/ SWITCH	1		22017
6	SCREW, PAN HEAD, 10-24 X 3/4 (BAG OF 10)	1		15957
7	SCREW, HEX, 5/16-18 X 3/4 SST (BAG OF 10)	1		17508
8	SCREW, HEX HEAD, 5/16-18 X 1.0, SST (BAG OF 10)	1		19706
9	SCREW, PHP, 8TEK X 3/4 (BAG OF 10)	1		15911
10	BUSHING, SNAP-IN	1		28-26-077
11	CABLE TIE, STD X 1.5 DIA, BLACK (BAG OF 10)	1		25697
12	TERMINAL, SLIP, F, 14-16, FULLINSUL (BAG OF 10)	1		13318
13	TERMINAL, SLIP, M, 22-18, FULLINSUL	1		26359
14	RESTRAINT BELT, ANGLED, W/SLIDER, SEE ITEM 14A KIT	1		16630
14A *	KIT, RESTRAINT BELT, ASSY, 34"	1		16092
15	LIGHT ASSY, PLATFORM	2		32478
16	SPACER, HANDRAIL	1		V2-AC-063
17	HARNESS, RESTRAINT BELT, LH	1		32455
18	HARNESS, RESTRAINT BELT, RH	1		33808

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

**NOTE:** \* Item or configuration not shown.

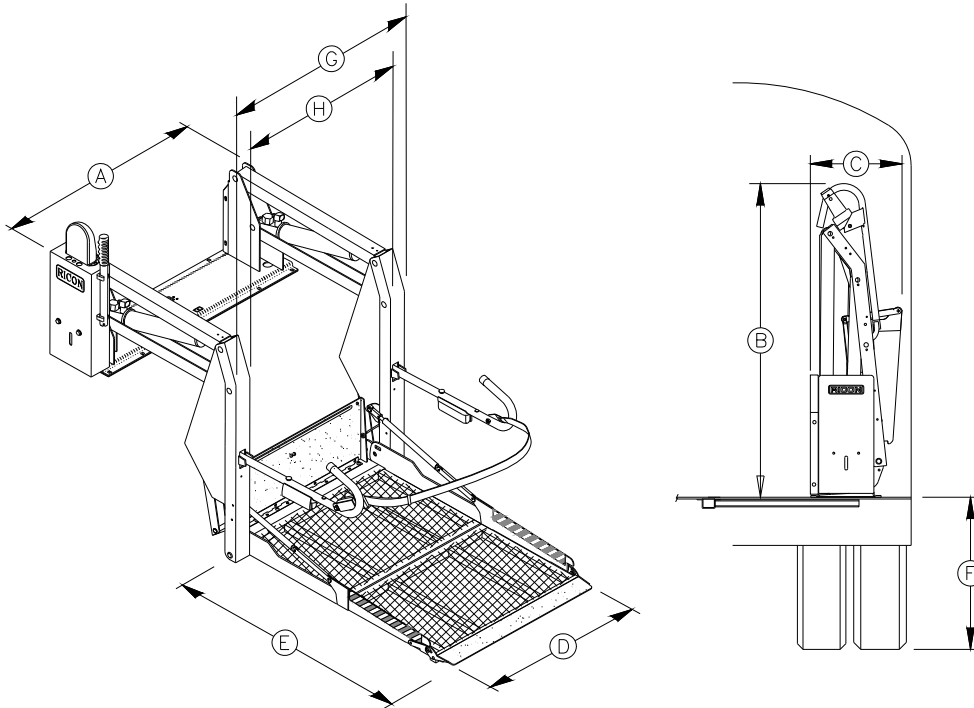
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**APPENDIX 1  
LIFT SPECIFICATIONS**

**K-SERIES PUBLIC USE PLATFORM LIFT**

Power .....electro-hydraulic  
 Motor rating @ 12 volts DC..... 65.0 amp. avg/cycle, 1250 psi  
 @ 24 volts DC ..... 32.5 amp. avg/cycle, 1250 psi  
 Hydraulic cylinders ..... 2 ea, 1.5", power-up/gravity-down

Rated load capacity.....800 lbs  
 Manual backup (up) ..... hand pump  
 Manual backup (down)..... pressure release valve  
 Lift weight ..... 340 - 370 lbs



**DIMENSIONS (inches)**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>
<b>MODEL</b>	Stationary frame width	Height (folded)	Installation depth (folded)	Usable platform width	Usable platform length	Floor-to-ground travel	Traveling frame width	Clear entry width
K2003	45	55	17	29	51	37	38	29.75
K2005	47	55	17	31	51	37	40	31.25
K2010	49	55	17	33	54	37	42	33.75
K5505	47	58	17	31	51	48	40	31.25
K5510	49	58	17	33	54	48	42	33.75
K5511	47	58	17	33	51	48	42	33.75

NOTES: