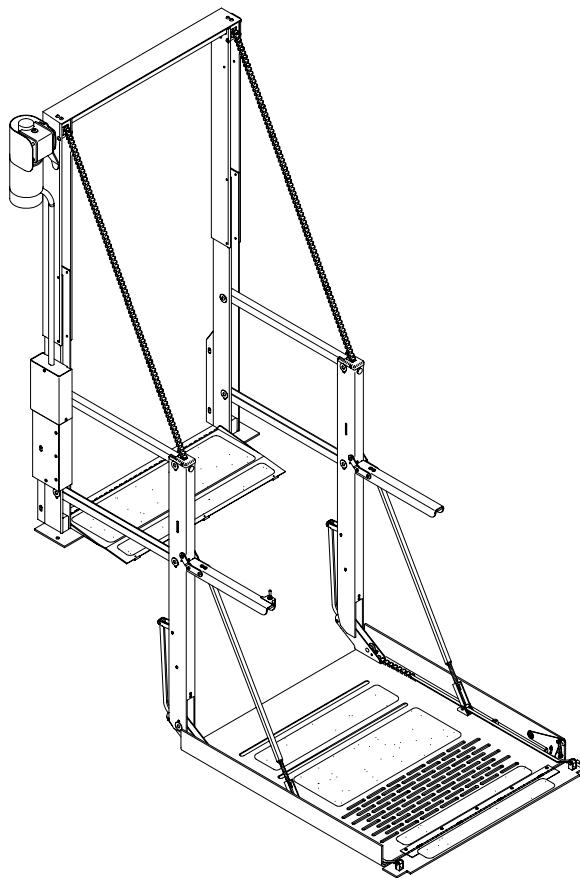




UNI-lite[®]
DOT Private Use
Wheelchair Lift



-PRINT-

Service Manual



This VMI 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 VMI products.

Qualified service technicians have the training and knowledge to perform maintenance work properly and safely. For the location of a VMI authorized service technician in your area, call VMI Technical Support at 1-800-348-8267.

“DOT – Private Use Lift” verifies that this platform lift meets only the private use lift requirements of FMVSS no. 403. This lift may be installed on all vehicles appropriate for the size and weight of the lift, except for 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	ECR / ECO
32DULP04. A	All	New Release	
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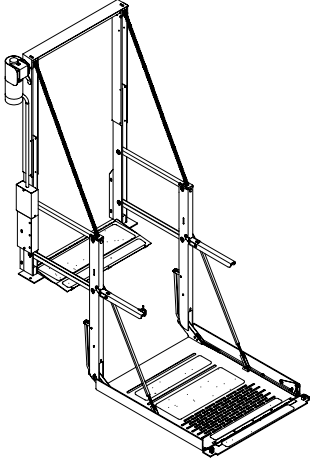
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I. INTRODUCTION

The VMI UNI-lite® DOT Private Use Wheelchair Lift provides wheelchair access to personal vans. With its aluminum alloy construction, UNI-lite lifts up to 600 pounds (273 kilograms), yet its lightweight has little, if any effect on vehicle handling. The lift is designed to be operated by a person in a wheelchair, or by an attendant. Unique, adjustable post design means that UNI-lite fits standard and raised doors of most full-size vans and some minivans. The large non-skid platform accommodates most wheelchairs, while the compact size maximizes vehicle interior space.



Standard features of the UNI-lite are convenient twin handrails with a control switch, a powerful electric motor and direct gear drive, and a powered roll stop with mechanical latch. The UNI-lite also contains a built-in manual backup system with a manual wrench, and a simple modular electrical system.

This manual contains installation, maintenance instructions, and spare parts for the UNI-lite. The installation instructions must be followed exactly, no steps should be eliminated nor should the product be modified. It is important to user safety that the installation is correct. It is equally important that lift operators be completely familiar with the operating instructions. For operating instructions please refer to the operator manual 32DULP03. Once the UNI-lite is installed, it is very important that the lift be properly maintained by following the VMI recommended cleaning, lubrication, and inspection instructions.

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

VMI

5202 S. 28th Place

Phoenix, AZ 85040 (602) 243-2700

Outside 818 Area Code (800) 348-8267

World Wide Website www.vantagemobility.com

A. VMI FIVE-YEAR LIMITED WARRANTY

VMI CORPORATION FIVE-YEAR LIMITED WARRANTY

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

- Repair or replace lift power train parts for a period of five years from the date of purchase. A complete list of parts covered can be obtained from your authorized VMI dealer.
- 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 VMI rate schedule determines the parts covered and labor allowed.

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

If you are traveling: All authorized VMI dealers will honor this warranty. Consult the telephone directory or call our Product Support department for the name of the nearest authorized VMI dealer.

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: VMI recommends that this product be inspected by an authorized VMI dealer or qualified service technician at least once every six months, or sooner if necessary. Any required maintenance or repair 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 HAZARDOUS.

This Warranty is void if:

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

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

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

VMI 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 VMI within 20 days after installation of this VMI product for the warranty to be valid. The warranty is not transferable.

The warranty gives specific legal rights, and there may be other rights that vary from state to state.

B. SHIPMENT INFORMATION

VMI does not sell directly to the user because of the specialized nature of the product. Instead, the product is distributed through the worldwide network of authorized VMI dealers, who perform the actual installation.

- When the product is received, unpack and check for freight damage. Claims for any damage should be made to the freight carrier immediately.
- Be sure the installation kit contains all items listed on the kit packing list. **Please report any missing items immediately to the VMI Product Support Department.** The warranty and owner's registration cards must be completed and returned to VMI within 20 days for the warranty to be valid.

C. 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, should always be attended. Always administer first aid or seek medical attention immediately.
- Protective eye shields and appropriate clothing should be worn at all times.
- To avoid injury, exercise caution when operating and be certain that hands, feet, legs, and clothing are not in the path of product movement.
- Batteries contain acid that can burn. If acid comes in contact with skin, flush affected area with water and wash with soap immediately.
- 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 damage to frame, subframe members, wiring, hydraulic lines, fuel lines, fuel tank, etc.
- Read and thoroughly understand the operating instructions before attempting to operate.
- Inspect the product before each use. If an unsafe condition, unusual noises or movements exist, do not use it until the problem is corrected.
- Do not load or stand on the platform until installation is complete. Upon completion of installation, test load the lift to 100% of its rated load capacity.
- Stand clear of doors and platform and keep others clear during operation.
- The product requires regular periodic maintenance. A thorough inspection is recommended at least once every six months. The product must always be maintained at the highest level of performance.

D. MAJOR LIFT COMPONENTS

The references used throughout this manual are illustrated in **Figure 1-1** and defined in **Table 1-1**. Refer to Chapter IV "Parts Diagrams and Lists" for more details.

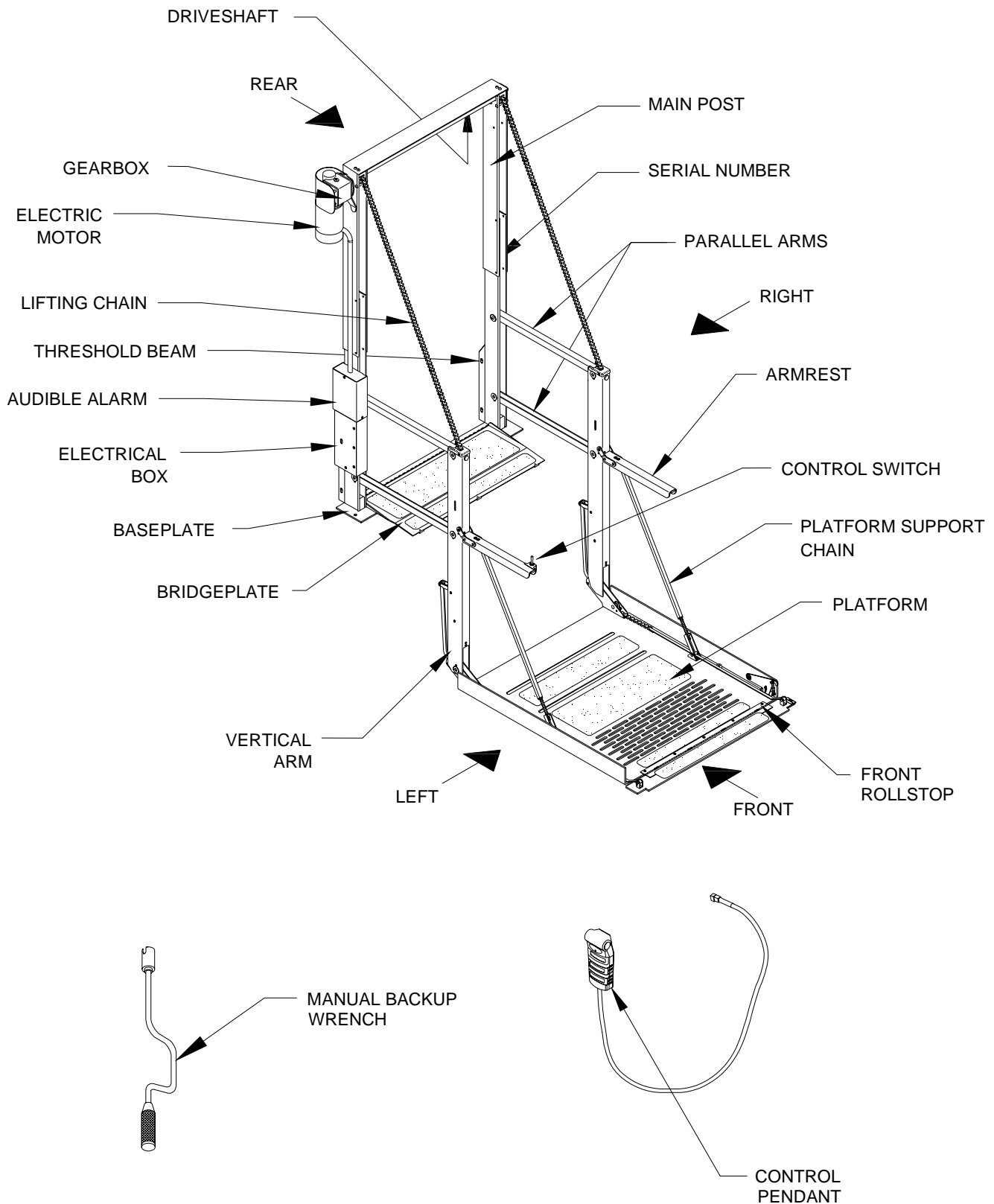


FIGURE 1-1: UNI-LITE PRIVATE USE WHEELCHAIR LIFT

32DULP04.A

TABLE 1-1: UNI-LITE PRIVATE USE LIFT TERMINOLOGY

REF	DESCRIPTION
Front, rear, left, right	Reference points from outside the vehicle looking inward.
Armrest	(left and right) Provides a handhold for platform occupant.
Audible alarm	(inside upper box containing threshold warning system components) Announces when something has passed over threshold. Activated by threshold beams.
Baseplate	Bolts to vehicle floor; provides secure foundation for lift structure.
Bridgeplate	Plate bridges gap between platform and baseplate when platform is at floor level. Acts as barrier to prevent wheelchair from rolling off of the platform during "Up" and "Down" platform motions.
Control pendant	Hand-held device controls platform motions.
Control switch	Allows passenger to control "Up" and "Down" platform motions.
Driveshaft	Driven by gearbox. Chain sprockets at each end engage lifting chains.
Electrical box	Contains controller and electrical circuit breakers.
Electric motor	12VDC motor provides lifting power for platform.
Front rollstop	Barrier prevents wheelchair from inadvertently rolling off the platform during lift operation.
Lifting chain	(left and right) Motor-driven chain lifts platform from ground level and folds it into vehicle. Also closes rollstop.
Gearbox	Motor-driven input with output connected to driveshaft.
Main post	(left and right) Vertical support posts are rigidly attached to vehicle at bottom and top.
Manual backup wrench	Wrench used to manually raise platform if electrical power is not available.
Parallel arms	(left and right) Arms connect the main posts to the vertical arms.
Platform	Component of lift where wheelchair and occupant are situated during "Up" and "Down" movements.
Platform support chain	(left and right) Provides additional support to platform and holds it horizontal while in motion. Also raises and lowers rollstop.
Serial number	Location of serial number decal.
Threshold beam	(upper and lower) Light-beams detect presence of objects in threshold area. Part of Threshold Warning System.
Vertical arm	(left and right) Arms connect platform to parallel arms and support armrests.
END OF TABLE	

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II. INSTALLATION

This chapter provides instructions for installing the VMI UNI-lite® DOT Private Use Wheelchair Lift into most vans; custom installations are also possible into other types of vehicles. Procedures for the specific vans listed in **Table 2-1** below are also included. If a question arises that is not covered in this chapter, contact VMI Product Support for assistance.

TABLE 2-1: UNI-LITE APPLICATIONS		
VAN TYPE	MAKE/MODEL	DOOR INSTALLATION
Minivan	Chevrolet - Astro	Side w/Sliding Door
	Ford - Aerostar	Side w/Sliding Door
	GMC - Safari	Side w/Sliding Door
Full Size	Dodge (see note below)	Side w/Sliding Door
		Side w/Swing Door
	Ford	Rear Door
		Side w/Sliding Door
		Side w/Swing Door
	GMC	Rear Door
		Side w/Sliding Door
		Side w/Swing Door
	NOTE: When installing the lift into rear of 1994 or newer full size Dodge van, the bumper and bumper brackets must be replaced with bumper and bumper brackets from a 1993 or earlier Dodge van.	
END OF TABLE		

A. REQUIRED TOOLS

- Allen Wrenches (5/32" & 3/16")
- C-Clamps or Locking Pliers
- Drill Bits #7 (.201", 1/4", 9/32", & 1/2")
- Electric Drill
- Hole saws (1" & 1-1/4" or 1-3/16")
- Large Wire Crimping Tool
- Open-end Wrenches (7/16" & 1/2")
- Screwdrivers (Phillips and flat)
- Side-Cutter Pliers
- Utility Knife

B. MECHANICAL INSTALLATION

To install the UNI-lite, refer to the following sections and perform the procedures carefully and in the order that they are presented. Be certain that the installation instructions are followed exactly and do not eliminate any steps or modify the product.

1. VEHICLE PREPARATION

To prepare the vehicle for installation of the UNI-lite, perform this procedure:

- a. Safely park vehicle on a flat, level surface and turn engine off.
- b. The lift will be mounted directly to the vehicle floor and wall. Remove door trim, carpet, plywood, molding, wall paneling or any other material that may interfere with the installation.
- c. At the engine compartment, disconnect the positive (+) cable from the battery terminal.

2. INSTALLATION KIT DESCRIPTION

For descriptions of the Installation Kit components, refer to **Figure 2-1** and **Table 2-2**.

a. Installation Kit Component Descriptions

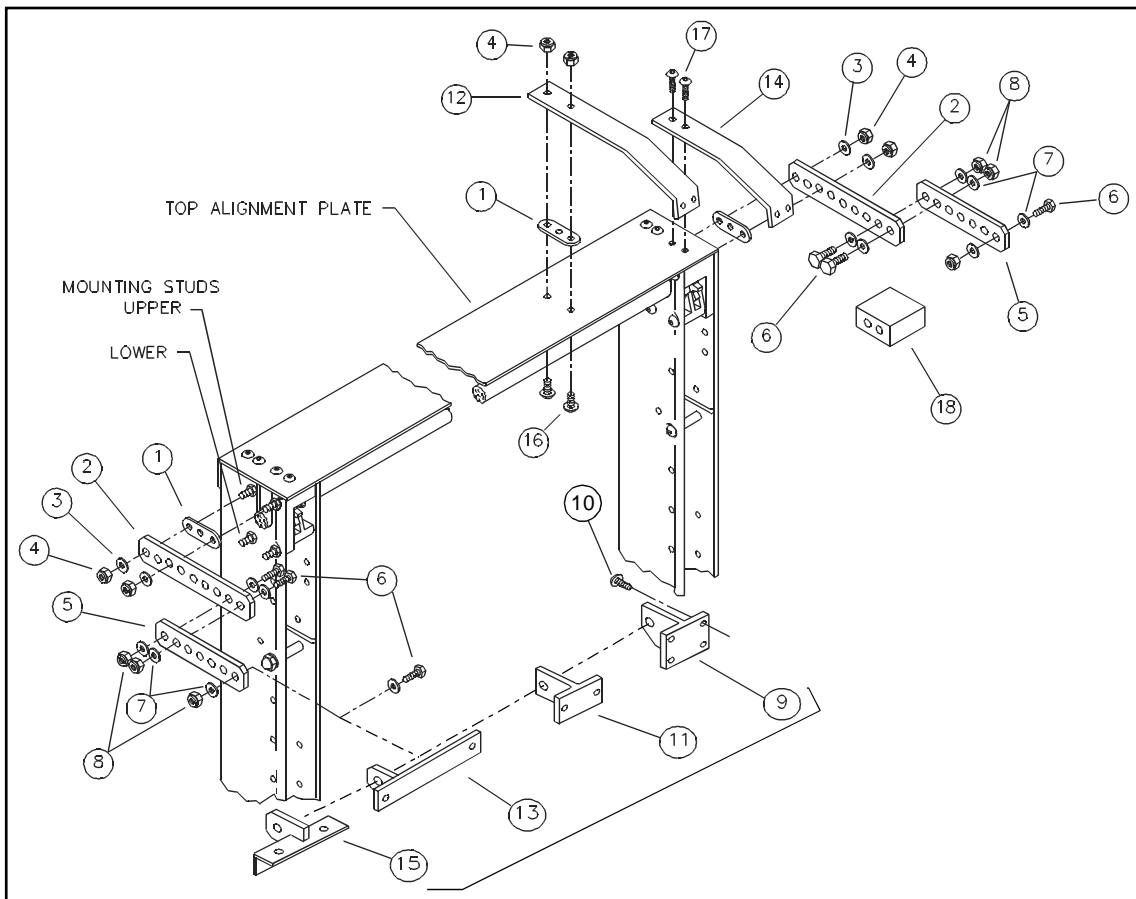


FIGURE 2-1: INSTALLATION KIT COMPONENTS

TABLE 2-2: INSTALLATION KIT COMPONENTS			
REF	DESCRIPTION	REF.	DESCRIPTION
1	Shim Plates (3)	10	#14 Sheet Metal Screws (4)
2	Extension Post Brackets (2) *	11	2-Hole "T" Mounting Brackets (2) *
3	1/4 Flat Washers (4)	12	Top Right Bracket **
4	1/4-20 Self-locking Nuts (6)	13	Top Left Brackets (2) **
5	Intermediate Brackets (2) *	14	Astro/Safari Top Right Bracket
6	5/16-18 Hex Bolts (6)	15	Astro/Safari Top Left Brackets (2)
7	5/16 Flat Washers (12)	16	1/4-20 x 1/2 Button Head Bolts (2)
8	5/16-18 Self-locking Nuts (6)	17	1/4-20 x 3/4 Button Head Bolts (2)
9	4-Hole "T" Mounting Brackets (2)*	18	Right-Side Bracket Offset Block (Chevrolet & GMC Full Size Vans)
NOTES: Brackets listed with (*) are components of the Main Post Bracket Set. Brackets listed with (**) are special order components.			
END OF TABLE			

b. Main Post Bracket Descriptions

For descriptions of the Main Post Bracket components, refer to the following paragraphs:

◆ Extension Post Brackets

The Extension Post Brackets (ref. #2) are designed with a wide range of adjustments to cover as many applications as possible. The brackets are designed to provide maximum upward and downward adjustment angles.

◆ Intermediate Brackets

The Intermediate Brackets (ref. #5) are provided for making the bracket set adjustable in length allowing different tilt angles. The brackets are attached to the Extension Post Bracket by two 5/16-18 hex bolts (ref. #6).

◆ Standard "T" Mounting Brackets

The Standard "T" Mounting Brackets (ref. #9 & #11) are the 2- and 4-hole mounting brackets that are attached to the Intermediate Brackets by one 5/16-18 hex bolt (ref. #6). The brackets are attached to the vehicle structure by sheet metal screws (ref. #10).

3. LIFT PREPARATION

To prepare the lift for installation, follow this procedure:

- a. Remove and collapse cardboard cover and lay cardboard flat on ground.
- b. Unbolt lift base from crate.
- c. Remove shipping straps.
- d. Lay lift platform first onto cardboard.
- e. Using speed wrench, rotate motor shaft to remove tension from drive chain.

4. MAIN POST EXTENSION ADJUSTMENTS

For the vans listed in **Table 2-3** and **Figure 2-2**, perform the appropriate main post extension adjustment procedure:

TABLE 2-3: VANS REQUIRING MAIN POST EXTENSION ADJUSTMENT		
MAKE/MODEL	DOOR INSTALLATION	ADJUSTMENT
Chevrolet - Astro	Side w/Sliding Door	None
Ford - Aerostar	Side w/Sliding Door	None
GMC - Safari	Side w/Sliding Door	None
Dodge	Side w/Sliding Door	SHORTEN, one (1) position
	Side w/Swing Door	SHORTEN, one (1) position
Ford	Rear Door	None
	Side w/Sliding Door	None
	Side w/Swing Door	None
GMC	Rear Door	None
	Side w/Sliding Door	None
	Side w/Swing Door	None
END OF TABLE		

⚠ CAUTION

EXCESS POWER WIRE MUST *NOT* BE COILED WITHIN THE MOTOR COVER. BUNDLE THE EXCESS WIRE WITHIN THE CONTROLLER ENCLOSURE.

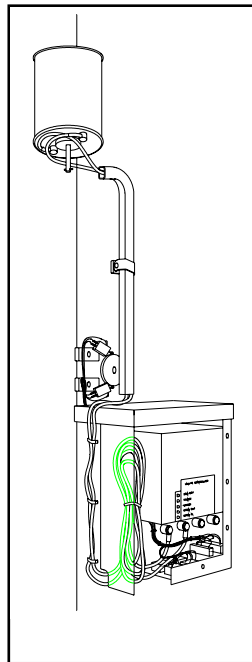


FIGURE 2-2: CONTROLLER WIRE ROUTING DIAGRAM

a. Lengthen Main Posts

To lengthen the Main Posts, refer to **Figures 2-3** through **2-5** and follow this procedure:

- 1) Note locations of left and right fold stops (ref. #3) and spacer bushings (ref. #5).
- 2) Using speed wrench, rotate motor shaft to LOOSEN drive chain.
- 3) Remove left and right extension post retaining bolts (ref. #1 & #2).
- 4) At controller enclosure, remove the front cover to expose wire harness and motor controller. Pull loops of excess motor wire out.



CAUTION

TO PREVENT DAMAGE TO THE DRIVE CHAIN AND MOTOR WIRE DURING THE POST LENGTHENING, LOOSEN CHAIN WITH SPEED WRENCH AND FEED MOTOR WIRE THROUGH ELECTRICAL TUBE AS NEEDED.

- 5) While assistant holds base plate, grasp top-alignment plate and PULL-OUT until desired holes are aligned.
- 6) Loosely install supplied fold stop retaining bolts (ref. #4) through fold stops
- 7) Loosely install spacer bushings and upper extension post retaining bolts.
- 8) Tighten all extension post retaining bolts.
- 9) Re-fold motor wires neatly and tuck into original position in controller enclosure.
- 10) Using supplied tie-wrap, bundle and position wire so that wire is NOT touching edge of enclosure. Reinstall enclosure cover.
- 11) Using speed wrench, rotate motor shaft to TIGHTEN drive chain.

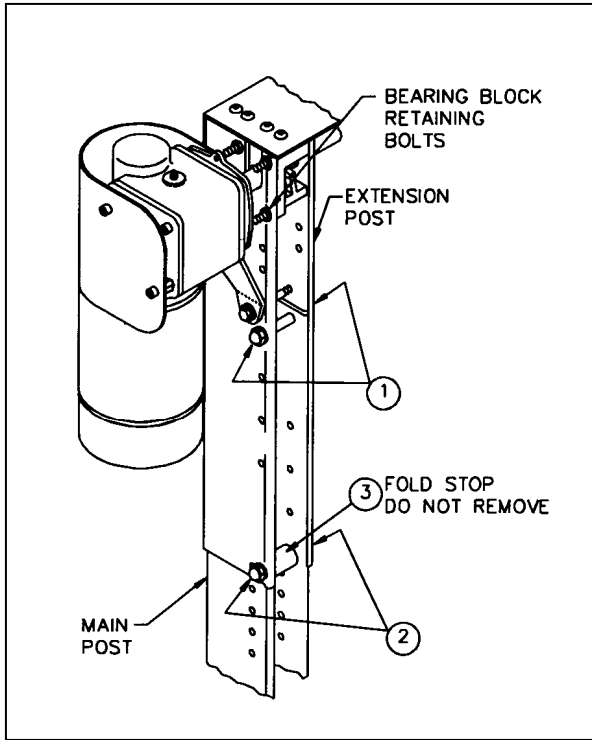


FIGURE 2-3: STANDARD CONFIGURATION - EXTEND

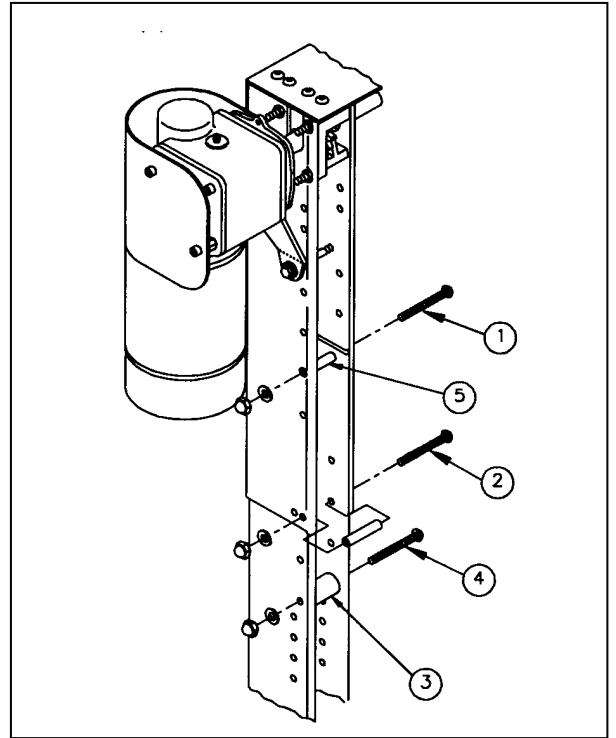


FIGURE 2-4: EXTENDED CONFIGURATION

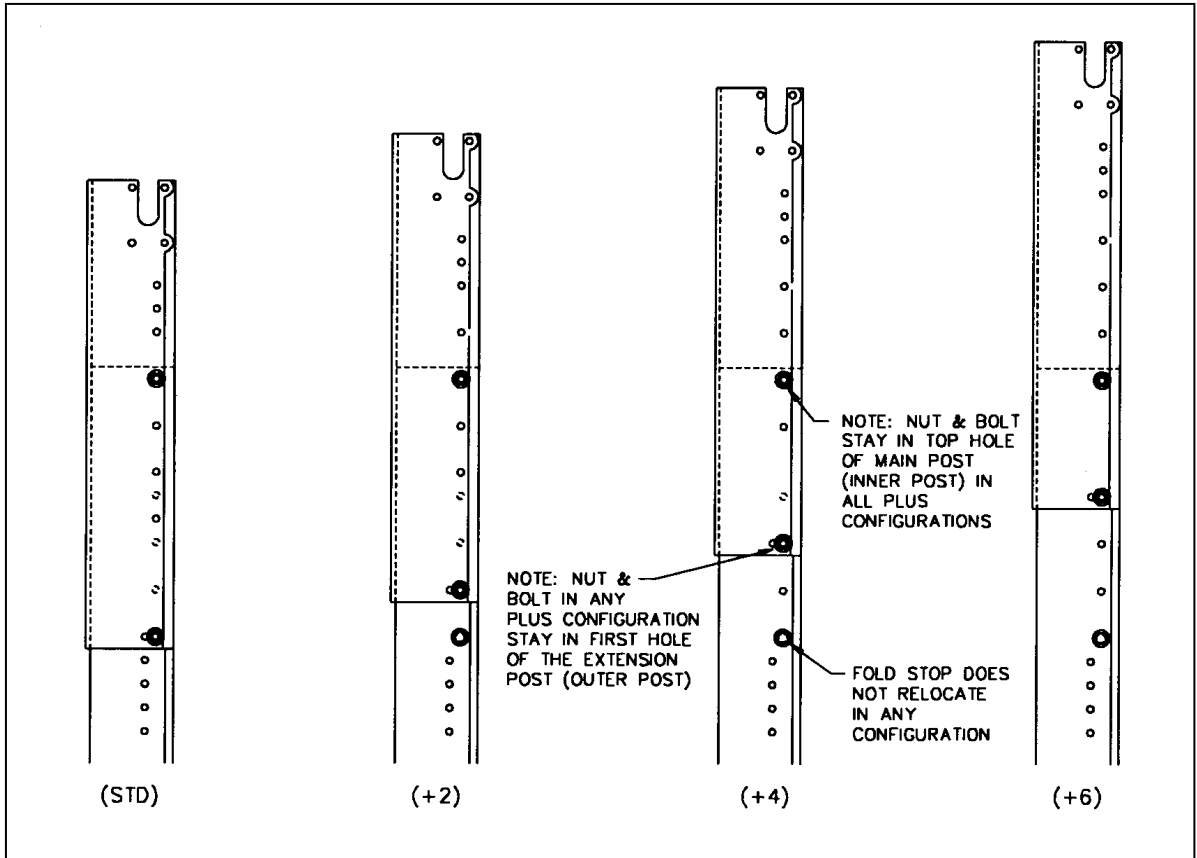


FIGURE 2-5: EXTENDED CONFIGURATION - SIDE VIEWS

b. Shorten Main Posts

To shorten the Main Posts, refer to **Figures 2-6** through **2-9**, and follow this procedure:

- 1) Note locations of left and right fold stops (ref. #3) and spacer bushings (ref. #5).
- 2) Remove torque arm bolt (ref. #4), and rotate gear motor assembly as shown.
- 3) Remove left and right extension post retaining bolts (ref. #1 & #2).
- 4) While assistant holds base plate, grasp top-alignment plate and PUSH-IN until desired holes are aligned.
- 5) Loosely install supplied fold stop retaining bolts (ref. #2) through fold stops.
- 6) Loosely install spacer bushings and upper extension post retaining bolts.
- 7) Loosely install torque arm bolt (ref. #4), rotate gear motor assembly to original position, and tighten torque arm bolt.
- 8) Tighten all extension post retaining bolts.
- 9) Re-fold motor wires neatly and tuck into original position in controller enclosure.
- 10) Using supplied tie-wrap, bundle and position wire so that wire is NOT touching edge of enclosure. Reinstall enclosure cover.
- 11) Bundle excess wire with supplied tie-wrap, position wire into bottom of motor, and reinstall motor cover.
- 12) Using speed wrench, rotate motor shaft to TIGHTEN drive chain.

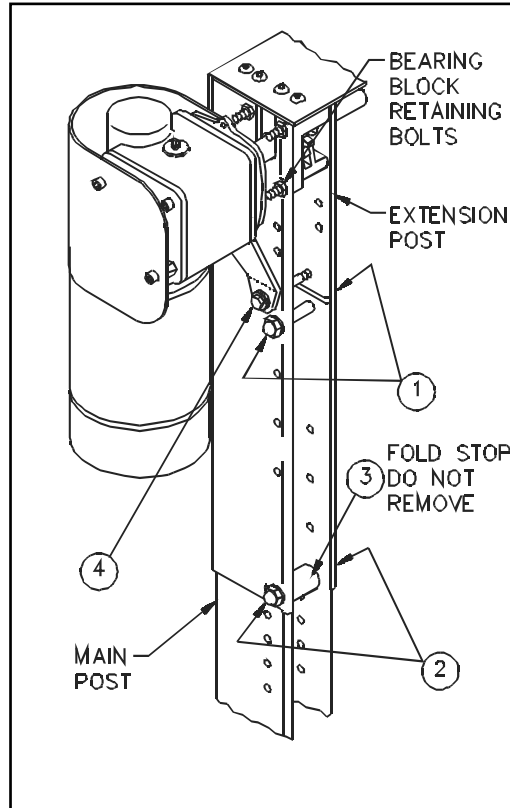


FIGURE 2-6: STANDARD CONFIGURATION - SHORTEN

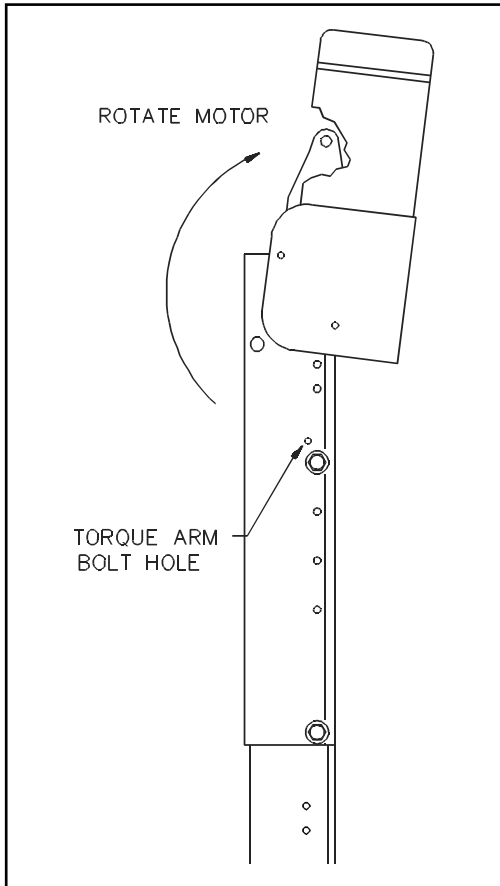


FIGURE 2-7: ROTATE GEAR MOTOR ASSEMBLY

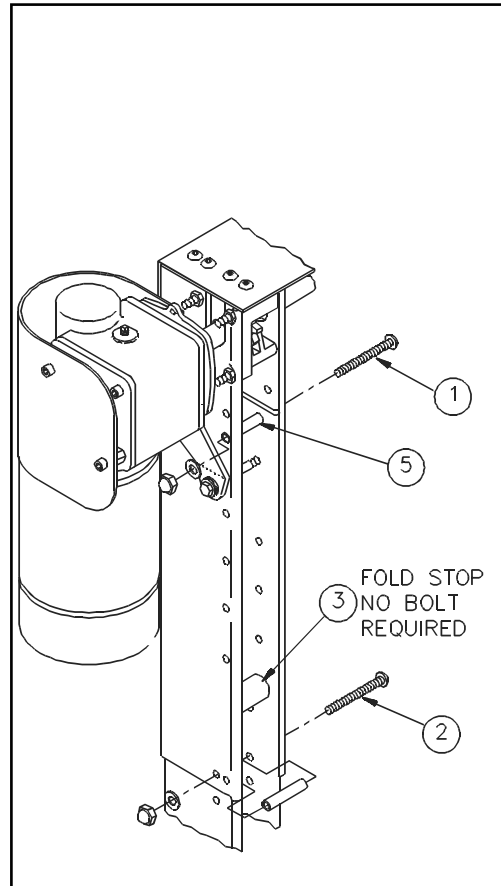


FIGURE 2-8: SHORTENED CONFIGURATION

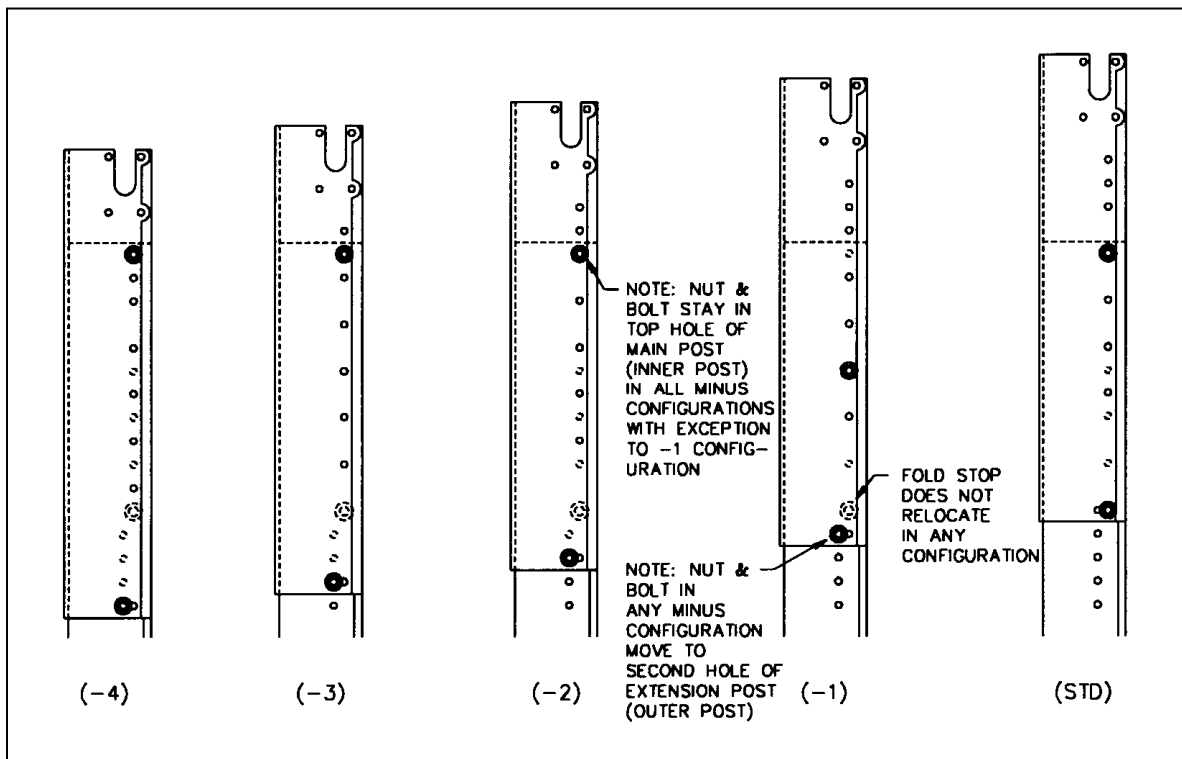


FIGURE 2-9: SHORTENED CONFIGURATION - SIDE VIEWS

5. BASE PLATE ADJUSTMENT

For the vans listed in **Table 2-4** below, perform the base plate adjustment procedure if needed:

TABLE 2-4: BASE PLATE ADJUSTMENT		
MAKE/MODEL	DOOR INSTALLATION	BASE PLATE MOUNT POSITION
Chevrolet - Astro	Side w/Sliding Door	Third / Top
Ford - Aerostar	Side w/Sliding Door	Second / Middle
GMC - Safari	Side w/Sliding Door	Third / Top
Dodge	Side w/Sliding Door	Standard (First / Bottom)
	Side w/Swing Door	Standard (First / Bottom)
Ford	Rear Door	Second / Middle
	Side w/Sliding Door	Third / Top
	Side w/Swing Door	Third / Top
GMC	Rear Door	Second / Middle
	Side w/Sliding Door	Third / Top
	Side w/Swing Door	Third / Top
END OF TABLE		

- a. Remove bolts that attach base plate to left and right Main Posts.

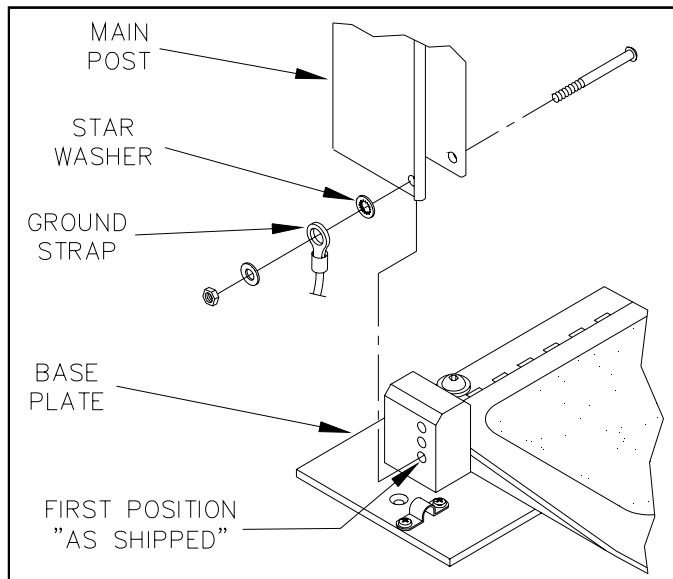


FIGURE 2-10: BASE PLATE MOUNTING

- b. Refer to **Figure 2-10**. Move base plate to appropriate position.
- c. Be sure to replace ground strap under washer, with star washer between ground strap and main post.
- d. Loosely install base plate bolts.

6. POSITION LIFT INTO VEHICLE

To position the lift into the vehicle, follow this procedure:

 WARNING
ALTHOUGH THE UNI-LITE IS CONSTRUCTED OF LIGHTWEIGHT MATERIALS, DO NOT ATTEMPT TO POSITION LIFT USING ONLY ONE PERSON.

- a. Position lift into van according to **Figures 2-11, 2-12, and Table 2-5:**

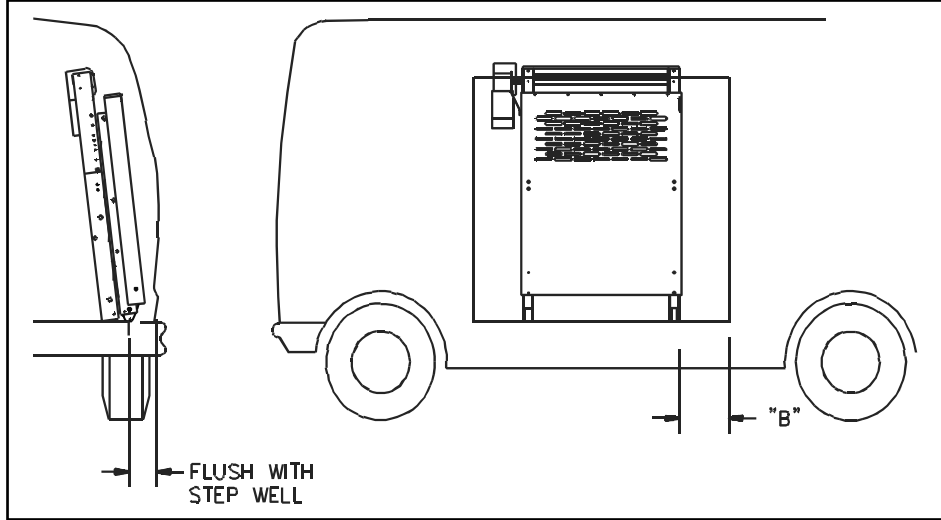


FIGURE 2-11: SIDE DOOR INSTALLATION CLEARANCES

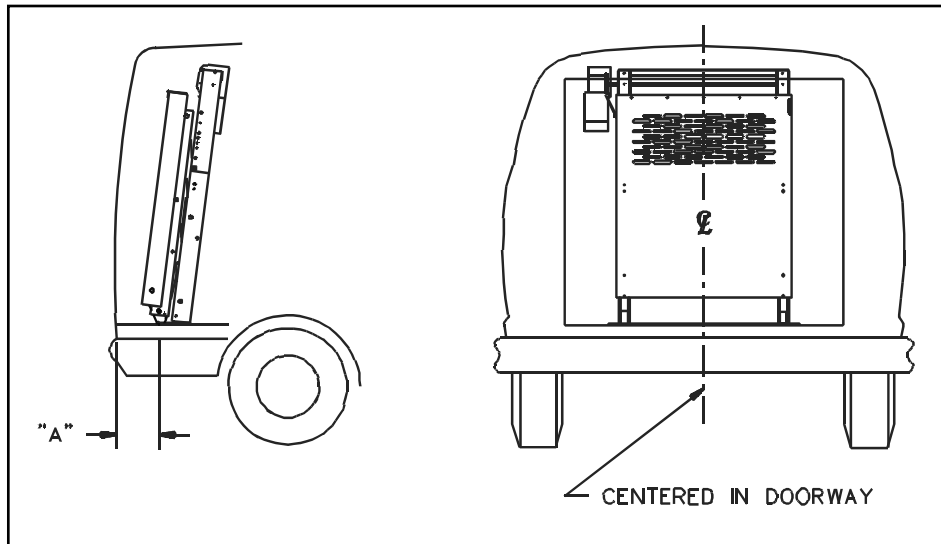


FIGURE 2-12: REAR DOOR INSTALLATION CLEARANCES

TABLE 2-5: VAN LIFT POSITION			
MAKE/MODEL	DOOR INSTALLATION	DISTANCE FROM STEPWELL	POSITION IN DOORWAY
Chevrolet - Astro	Side w/Sliding Door	Flush	Center
Ford - Aerostar	Side w/Sliding Door	Flush	Center
GMC - Safari	Side w/Sliding Door	Flush	Center
Dodge	Side w/Sliding Door	Flush	B = 9"
	Side w/Swing Door	Flush	Center
Ford	Rear Door	A = 10"	Center
	Side w/Sliding Door	Flush	B = 5"
	Side w/Swing Door	Flush	Center
GMC	Rear Door	A = 10"	Center
	Side w/Sliding Door	Flush	B = 5"
	Side w/Swing Door	Flush	Center
END OF TABLE			

- b. With sheet metal screws, temporarily attach base plate to floor.
- c. For Chevrolet Astro or GMC Safari side with sliding door installation, loosely install Top Right Bracket and Shim Plate to RIGHT-SIDE of top alignment plate using existing bolts. (Spacer washers may be needed to clear door track.)

For all other vans, refer to **Figure 2-13**. At top of lift, position extension brackets onto upper mounting studs and loosely install 1/4 flat washers and 1/4-20 self-locking nuts.

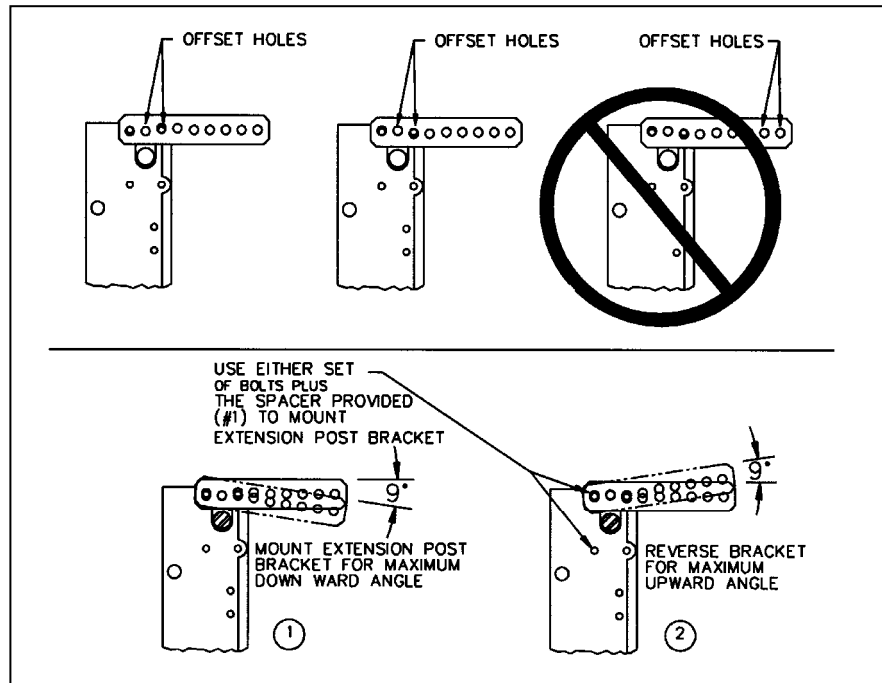


FIGURE 2-13: EXTENSION BRACKET MOUNTING

- d. For all vans EXCEPT RIGHT-SIDE of Chevrolet Astro or GMC Safari side with sliding door installation, refer to **Figure 2-14**. With 5/16-18 hex bolts, 5/16 flat washers, and 5/16-18 self-locking nuts, loosely install intermediate brackets to end of extension brackets.

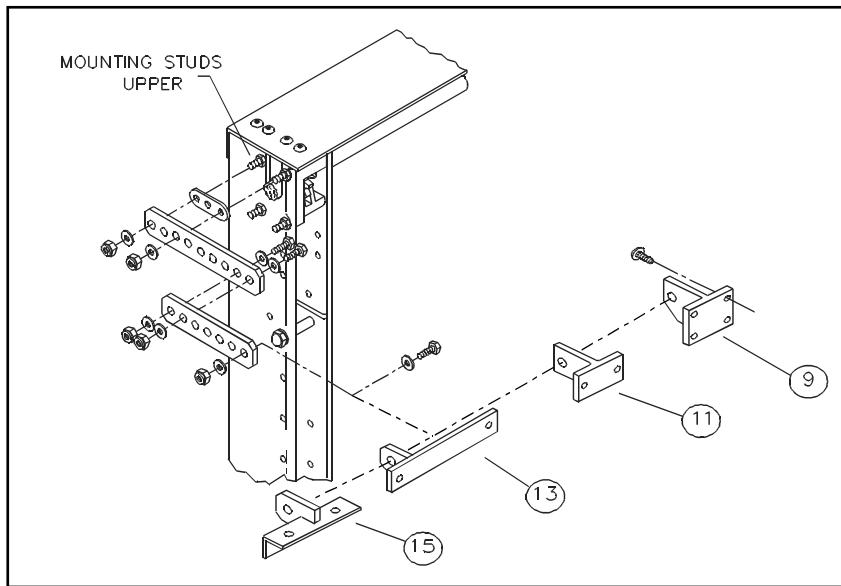


FIGURE 2-14: INTERMEDIATE AND MOUNTING BRACKET INSTALLATION


- e. Refer to **Table 2-6** for mounting bracket applications. With 5/16-18 hex bolts, 5/16 flat washers, and 5/16-18 self-locking nuts, loosely install mounting brackets to end of intermediate brackets.

TABLE 2-6: MOUNTING BRACKET APPLICATIONS			
MAKE/MODEL	DOOR INSTALLATION	LEFT-SIDE MOUNTING BRACKET	RIGHT-SIDE MOUNTING BRACKET
Chevrolet - Astro	Side w/Sliding Door	Astro Top Left	Astro Top Right
Ford - Aerostar	Side w/Sliding Door	2-Hole "T" (ref. #11)	4-Hole "T" (ref.# 9)
GMC - Safari	Side w/Sliding Door	Astro Top Left	Astro Top Right
Dodge	Side w/Sliding Door	4-Hole "T" (ref. #9)	4-Hole "T" (ref. #9)
	Side w/Swing Door	4-Hole "T" (ref. #9)	4-Hole "T" (ref. #9)
Ford	Rear Door	4-Hole "T" (ref. #9)	4-Hole "T" (ref. #9)
	Side w/Sliding Door	4-Hole "T" (ref. #9)	2-Hole "T" (ref. #11)
	Side w/Swing Door	4-Hole "T" (ref. #9)	4-Hole "T" (ref. #9)
GMC	Rear Door	4-Hole "T" (ref. #9)	4-Hole "T" (ref. #9)
	Side w/Sliding Door	4-Hole "T" (ref. #9)	4-Hole "T" (ref. #9) plus Right Side Offset Block
	Side w/Swing Door	4-Hole "T" (ref. #9)	4-Hole "T" (ref. #9) plus Right Side Offset Block
END OF TABLE			

- f. Tilt lift toward door opening to the amount specified in **Table 2-7**. (To achieve the amount of tilt specified, extension bracket and/or intermediate bracket may have to be repositioned or readjusted.)

TABLE 2-7: LIFT TILT SPECIFICATIONS		
MAKE/MODEL	DOOR INSTALLATION	AMOUNT OF TILT
Chevrolet - Astro	Side w/Sliding Door	Top of lift - 7" from door weather stripping
Ford - Aerostar	Side w/Sliding Door	Top of lift - 6" from door header
GMC - Safari	Side w/Sliding Door	Top of lift - 7" from door weather stripping
Dodge	Side w/Sliding Door	five degrees (5°)
	Side w/Swing Door	five degrees (5°)
Ford	Rear Door	seven degrees (7°)
	Side w/Sliding Door	ten degrees (10°)
	Side w/Swing Door	ten degrees (10°)
GMC	Rear Door	seven degrees (7°)
	Side w/Sliding Door	seven degrees (7°)
	Side w/Swing Door	seven degrees (7°)
NOTE: All tilt specifications are approximate.		
END OF TABLE		

- g. Using sheet metal screws or clamps, temporarily attach "T" mounting brackets to door header or post.

 WARNING
<ul style="list-style-type: none"> • WEAR PROTECTIVE CLOTHING AND EYE PROTECTION AT ALL TIMES. BATTERIES CONTAIN ACID THAT CAN BURN. IF ACID COMES INTO CONTACT WITH SKIN, IMMEDIATELY FLUSH AFFECTED AREA WITH WATER AND WASH WITH SOAP. • DO NOT SMOKE OR USE OPEN FLAME IN THE VICINITY OF BATTERY. ALWAYS WORK IN PROPERLY VENTILATED AREA. • DO NOT LAY ANYTHING ON TOP OF A BATTERY.

- h. Temporarily connect 12VDC power source to the lift, battery positive (+) terminal to power cable and battery negative (-) terminal to a suitable ground on the lift frame.

- i. Refer to **Figure 2-15**. Using Control Pendant, CAREFULLY DEPLOY lift while observing for any contact with vehicle doorsill, bumper, or external accessories. (If lift does not clear vehicle, reposition or readjust extension bracket, intermediate bracket and/or base plate

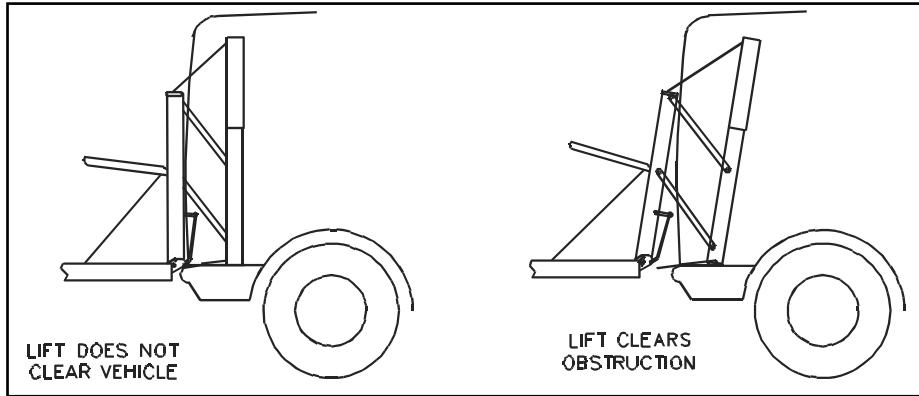


FIGURE 2-15: LIFT OPERATING CLEARANCE

position.)

7. BRIDGEPLATE ADJUSTMENT

To adjust the bridgeplate, follow this procedure:

- a. Make sure lift is in DEPLOY position.

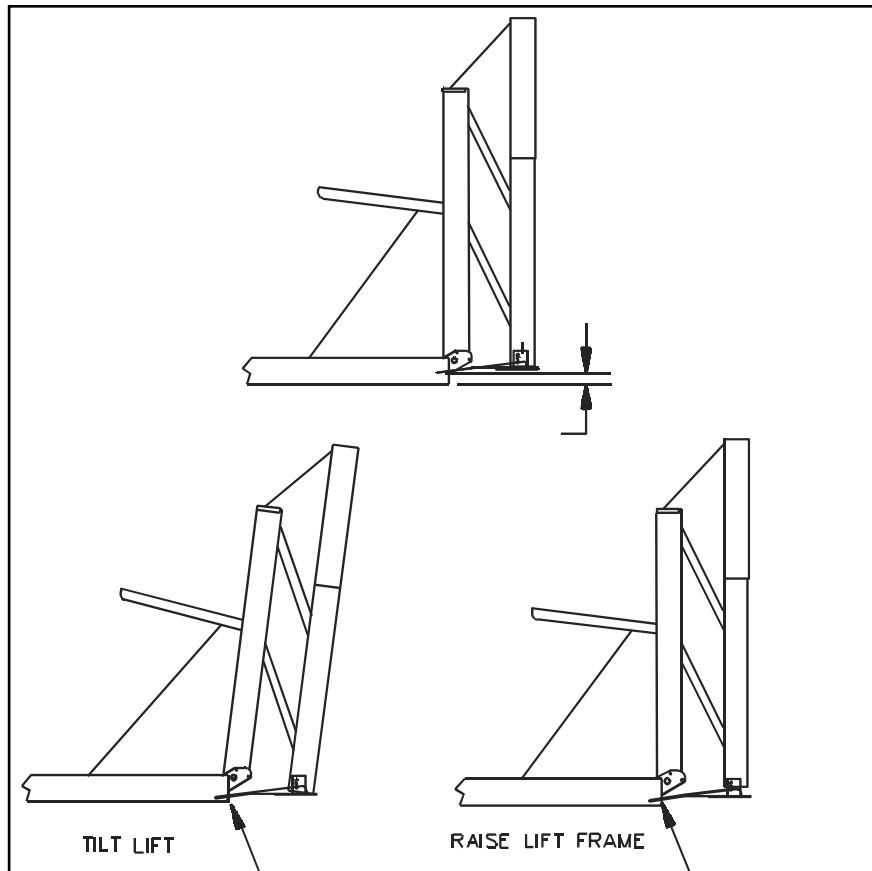


FIGURE 2-16: BRIDGEPLATE/PLATFORM GAP

- b. Refer to **Figure 2-16**. Observe point where Bridgeplate contacts platform top surface.

CAUTION
<p>IF LIFT REQUIRES ADDITIONAL TILT ADJUSTMENT, DO NOT EXCEED 10° OF TILT. TILT IN EXCESS CAN INTERFERE WITH PROPER DEPLOYMENT OF THE PLATFORM.</p>

- c. Reposition or readjust extension bracket, intermediate bracket and/or the base plate mounting position so there is NO GAP between bridgeplate and platform top surface.

8. PLATFORM TILT ADJUSTMENT

To adjust the platform tilt, follow this procedure:

- a. Make sure lift is in DEPLOY position.
- b. Refer to **Figure 2-17**. Using control pendant, position lift DOWN to slightly above ground

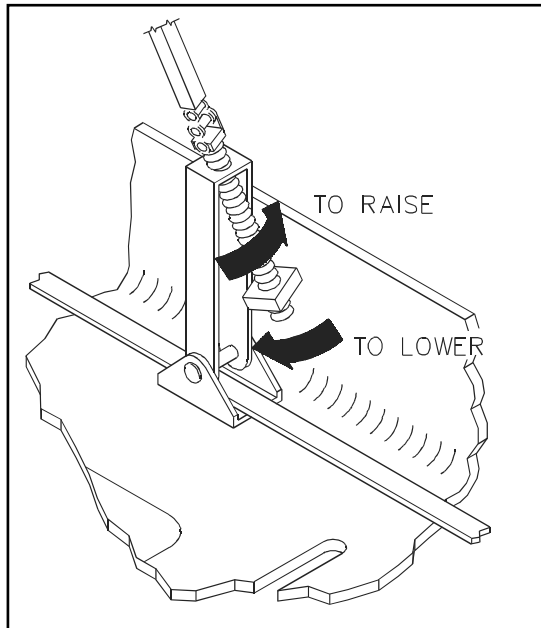


FIGURE 2-17: PLATFORM SUPPORT CHAIN ADJUSTMENT

level.

- c. Adjust platform support chains so platform is parallel with ground.

9. INSTALL LIFT IN VEHICLE

To install the lift into the vehicle, follow this procedure:

- a. Using Control Pendant, cycle test (DEPLOY, DOWN, UP, and STOW) lift to make sure clearances are adequate. Readjust tilt and/or position if necessary.
- b. At each base plate mounting holes, remove temporary sheet metal screws.
- c. Verify size of provided base plate mounting bolts and drill appropriate size holes through van floor at base plate mounting holes.
- d. Insert six mounting bolts through base plate mounting holes.
- e. From beneath van, install fenderwashers and locknuts onto each mounting bolt.
- f. Using sheet metal screws, permanently attach "T" mounting brackets to door header or post.
- g. For Chevrolet Astro or GMC Safari installation, install modified door guide arm, drill through Top Left Bracket holes through track, and install bolts and self-locking nuts.
- h. Securely tighten all upper brackets and their installation bolts and/or self-locking nuts.
- i. Securely tighten main post-to-baseplate bolts and self-locking nuts.

!CAUTION

- WEAR PROTECTIVE CLOTHING AND EYE PROTECTION AT ALL TIMES. BATTERIES CONTAIN ACID THAT CAN BURN. IF ACID COMES INTO CONTACT WITH SKIN, IMMEDIATELY FLUSH AFFECTED AREA WITH WATER AND WASH WITH SOAP.
- DO NOT SMOKE OR USE OPEN FLAME IN THE VICINITY OF BATTERY. ALWAYS WORK IN PROPERLY VENTILATED AREA.
- DO NOT LAY ANYTHING ON TOP OF A BATTERY.

- j. Disconnect temporary 12VDC power source from lift and vehicle battery.

C. ELECTRICAL INSTALLATION

NOTE: A good ground is imperative to the proper operation of the lift, especially with heavy loads. If a poor ground is suspected through the lift frame or the lift is not mounted to a grounded surface, a supplementary ground strap is recommended. Using 4 AWG or greater cable with ring terminals on both ends, mount one end of the ground strap under the frame bolt located under the controller and the other end to a steel chassis member. Remove all paint and corrosion from chassis member where the ring terminal will be in contact. It is recommended to do the same from the battery "negative" terminal to the vehicle chassis, because vehicle manufacturer's ground systems are often not designed for high current accessories such as wheelchair lifts.

To install electrical power to the lift, follow this procedure:

CAUTION

CHECK VEHICLE BEFORE DRILLING. DO NOT DRILL INTO FACTORY WIRING, HYDRAULIC LINES, FUEL LINES, FUEL TANK, ETC.

1. At vehicle engine compartment, mount supplied Main Circuit Breaker within 10" - 12" (25 - 30 cm) of battery.
2. Adjacent to lift electrical cover, drill one 3/4" (19.5-mm) hole through vehicle floor, deburr hole, and install grommet.
3. Insert lift power cable through drilled hole.

CAUTION

WHEN ROUTING POWER CABLE, **AVOID HAZARDS** SUCH AS VEHICLE DRIVE SHAFTS, MOVING SUSPENSION PARTS, EXHAUST SYSTEMS, ETC.

4. From beneath vehicle, run cable along vehicle frame to circuit breaker. Make sure cable does not interfere with moving or hot parts and secure with cable ties every 18" (45 cm).
5. At engine compartment, cut and retain 12" (30 cm) section from end of cable.
6. Cut and remove any excess wire from cable.
7. Using wire crimpers, crimp terminal to cable and connect to circuit breaker AUX terminal.
OPTIONAL:
Soldering terminal to end of cable is recommended. Use a soldering iron rated 100w or above. Use only **ROSIN CORE** solder (acid core will damage wire).
8. Crimp supplied terminals to both ends of previously cut 12" (30 cm) section of cable. (Soldering is recommended)
9. Connect end of 12" (30 cm) section of RED wire to circuit breaker BAT terminal.

WARNING

- WEAR PROTECTIVE CLOTHING AND EYE PROTECTION AT ALL TIMES. BATTERIES CONTAIN ACID THAT CAN BURN. IF ACID COMES INTO CONTACT WITH SKIN, IMMEDIATELY FLUSH AFFECTED AREA WITH WATER AND WASH WITH SOAP.
- DO NOT SMOKE OR USE OPEN FLAME IN THE VICINITY OF BATTERY. ALWAYS WORK IN PROPERLY VENTILATED AREA.
- DO NOT LAY ANYTHING ON TOP OF A BATTERY.

10. Connect other end of 12" (30 cm) section of RED wire to POSITIVE (+) terminal of vehicle battery.

D. ELECTRICAL LIMIT SWITCH ADJUSTMENTS

! CAUTION

- THE LIFT WILL OPERATE PROPERLY ONLY WHEN THE LIMIT SWITCHES ARE CORRECTLY ADJUSTED.
- TO AVOID OPERATIONAL DEAD-SPOTS, ALWAYS ADJUST THE OUT CUTOFF SWITCH *BEFORE* THE UP CUTOFF SWITCH.

The UNI-lite electrical limit switches are adjusted at the factory, but may require readjustment after installation. If the switches require adjustment(s), refer to **Figure 2-18** and **Table 2-8** and for the necessary adjustment(s). Contact the VMI Product Support Department for assistance, if needed.

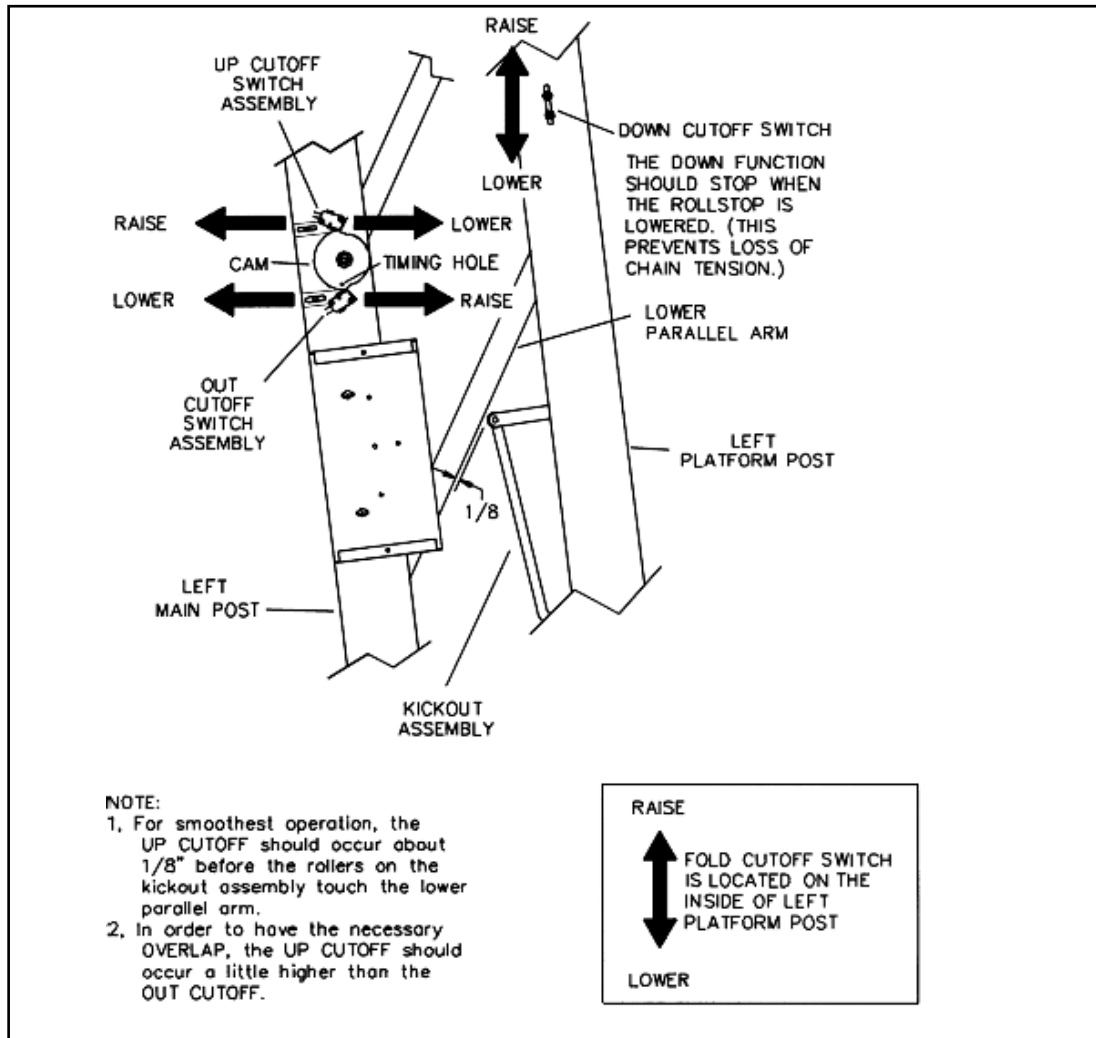
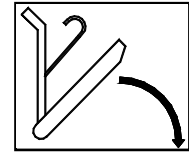


FIGURE 2-18: LIMIT SWITCH ADJUSTMENTS

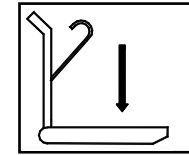
- Fully DEPLOY platform.
- At UP CUTOFF switch assembly and OUT CUTOFF switch assembly, loosen set screws and lightly tap assemblies approximately 1/4" **outward** (toward outside of vehicle).
- Cycle platform to STOW then DEPLOY.
- When in DEPLOY position, platform should stop at an angle and NOT even with vehicle floor. If not, lightly tap OUT CUTOFF switch assembly an additional 1/8" **outward**, STOW then DEPLOY platform, then repeat this step.
- Cycle platform to UP position.
- When in UP position, platform should stop short of vehicle floor level. If not, lightly tap UP CUTOFF switch assembly an additional 1/8" **outward**, cycle platform DOWN then UP, then repeat this step.
- Cycle platform to STOW then DEPLOY.

h. Push and hold control pendant DEPLOY/STOW switch in the (DEPLOY) position. Slowly tap OUT CUTOFF switch assembly **inward** 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/DOWN switch in the (UP) position. Slowly tap UP CUTOFF switch assembly **inward** 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 slight adjustments, cycle the platform UP and DOWN (The UP CUTOFF SWITCH is less sensitive than the OUT CUTOFF SWITCH.)

k. At UP CUTOFF switch assembly and OUT CUTOFF switch assembly, tighten set screws.

l. Cycle platform through all functions (DEPLOY, DOWN, UP, and STOW) to verify correct adjustment. Refer to **Table 2-8** if necessary.

TABLE 2-8: LIMIT SWITCH ADJUSTMENTS

ADJUSTMENT SYMPTOM	COMPONENT TO ADJUST	ADJUSTMENT
Difficult or impossible to adjust floor level cutoffs	CAM	Loosen the bolt in the center of the cam. With lift at vehicle floor level, rotate cam so the timing hole on the cam lines up with the timing hole drilled in the lift post (visible through the timing hole on the lift cam). Tighten center bolt to secure adjustment.
UP position needs adjustment	UP CUTOFF SWITCH	Adjust so the lift stops just before the rollers on the Kickout Assembly touch the underside of the lower Parallel Arm. Roller should be about 1/8" from the lower parallel arm. TO RAISE UP POSITION: adjust switch INWARD. TO LOWER UP POSITION: adjust switch OUTWARD.
DEPLOY position needs adjustment	OUT CUTOFF SWITCH	Perform UP position adjustment first. This will provide the necessary overlap. TO RAISE DEPLOY POSITION: adjust switch OUTWARD. TO LOWER DEPLOY POSITION: adjust switch INWARD.
DOWN position needs adjustment: Excessive chain runout (adjustment too low) OR Rollstop does not open all the way (adjustment too high)	DOWN CUTOFF SWITCH	TO RAISE: adjust switch UPWARD. TO LOWER (INCREASE ROLLSTOP OPENING): adjust switch DOWNWARD.
STOW position needs adjustment: Excessive looseness or lift rattle (adjustment too low) OR Motor stalls or power doors will not close (adjustment too high)	FOLD CUTOFF SWITCH	The Fold Cutoff Switch, not shown, is located inside the Left Platform Post. TO DECREASE FOLD LOOSENESS: raise switch. TO INCREASE FOLD LOOSENESS: lower switch.
END OF TABLE		

E. INSTALLATION VERIFICATION

- Clear the vehicle floor of all loose material, high-plush carpet strands, etc. which may interfere with operation.
- Be certain there is no interference with operation of the lift by interior components (e.g., passenger seat, seat belts, carpeting, tables, etc.) or exterior components (e.g., bumpers, running boards, etc.).

CAUTION

SIDE DOOR INSTALLATIONS MAY REQUIRE THAT THE BACKWARD POSITIONING OF THE FRONT PASSENGER'S SEAT BE RESTRICTED TO PREVENT INTERFERENCE WITH LIFT OPERATION. A BOLT INSTALLED IN THE SEAT TRACK OR INSTALLATION OF A GUARD MAY BE NECESSARY. IF SEAT BELT RELOCATION IS ALSO NECESSARY, CONSULT WITH THE VEHICLE MANUFACTURER FOR PROPER INSTRUCTION.

- Make sure that all fasteners are tightened properly.
- Run the UNI-lite through several cycles of all functions (DEPLOY, DOWN, UP, and STOW).
- Test the UNI-lite at 125% of its rated load capacity (600 pounds).

NOTE: ▪ Voltage at controller power terminals should be greater than 11.5 volts when lift is in operation. Be sure to check while lift is lifting.

NOTE: ▪ If the lift is unable to lift its rated load, it is almost always due to a poor connection in the power loop, or a weak vehicle electrical system. Solder all terminals using a soldering iron rated at 100w or greater and **ROSIN CORE** electrical solder (acid core plumber's solder will damage cable). Use star washers between all power terminals and metal surfaces. Use a fully charged vehicle battery. **DO THE TEST WITH THE ENGINE RUNNING.** If necessary, connect a 250 amp (or greater) booster/charger to battery and set to "boost" during test (refer to booster/charger operating manual for proper operation).

NOTE: ▪ VMI recommends the installation of a battery rated at 900 cranking amps or greater, or where the vehicle manufacturer has made provision, a dual battery system.

F. CUSTOMER ORIENTATION

* IMPORTANT *

The Sales/Service Personnel must review the Warranty, Operating Instructions of this manual, and all lift decals with the user to be certain that they understand the safe operation of the product. Instruct the user to follow the operating instructions without exception.

- Refer to **Figure 2-19** on following page and ensure that all decals are properly located and affixed to the UNI-lite.

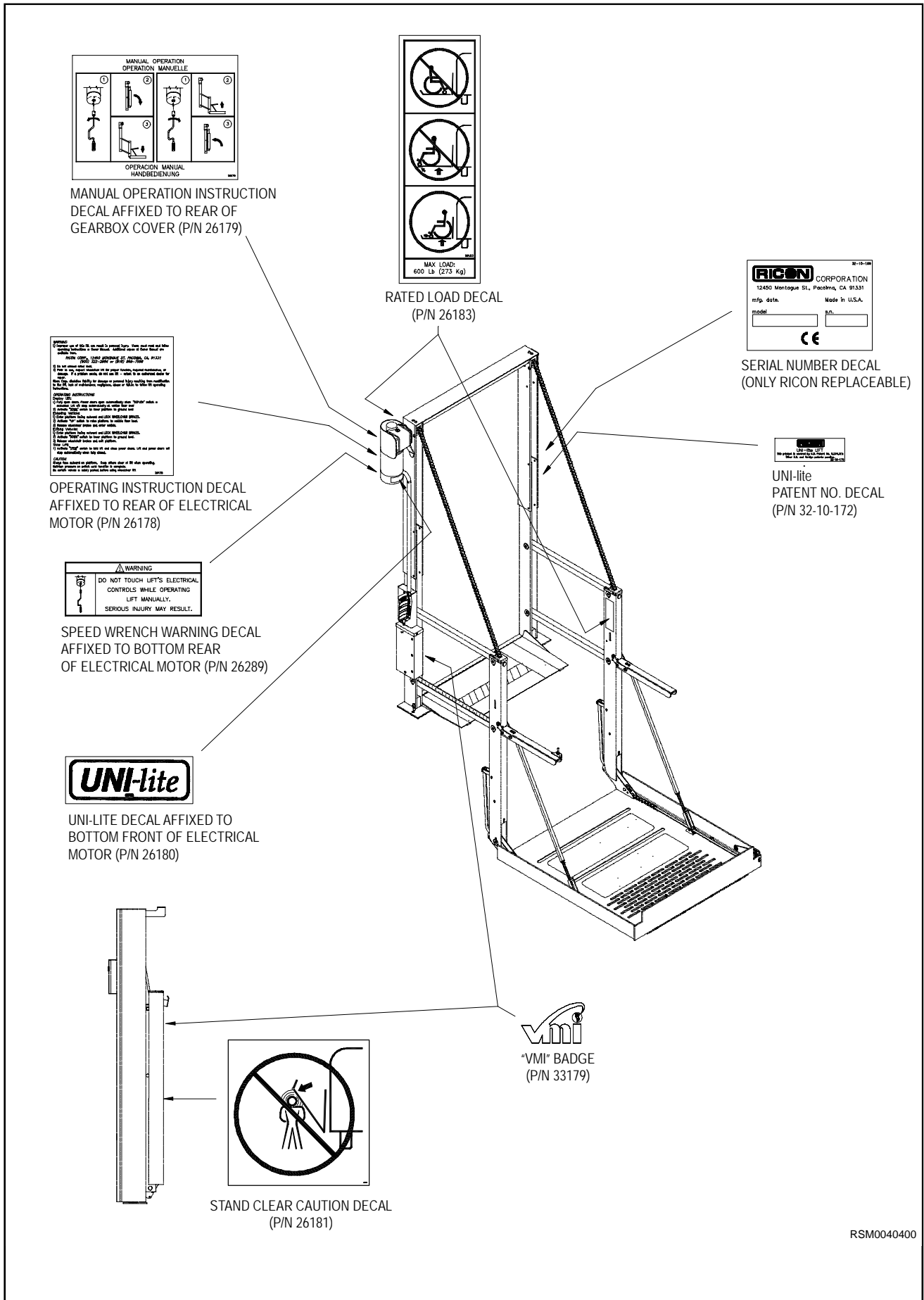


FIGURE 2-19: DECAL LOCATION

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III. MAINTENANCE

Routine maintenance of the VMI UNI-lite® DOT Private Use Wheelchair Lift will optimize its performance in addition to reducing the need for repairs. VMI products are highly specialized. Maintenance and repairs must be performed by an authorized VMI service technician using VMI replacement parts. During the VMI warranty period maintenance inspections are required every six months or sooner depending on usage.

A. CLEANING AND LUBRICATION

Cleaning the lift regularly is an important part of its maintenance. Regular cleaning and drying will protect its surfaces. All moving parts should be kept clean and lubricated.

 WARNING
SPRAYABLE SOLVENTS ARE EXTREMELY FLAMMABLE, AND CONTAIN HARMFUL VAPORS. TO PREVENT INJURY, FOLLOW THE SAFETY WARNING PRINTED ON THE CONTAINER.

- Chains should be kept clean but not lubricated. Chains should be cleaned with a sprayable penetrating solvent (such as WD-40®, etc.). Do not saturate chains or leave wet as this attracts dirt and dust. Chains should always be wiped dry after cleaning.
- The lift has been designed and manufactured for low maintenance. Cleaning and lubrication of all moving parts should be performed at least every six months, or sooner depending on usage.
- **DO NOT LUBRICATE MOTOR OR ELECTRICAL COMPONENTS.** The oil will attract dirt and possibly cause a short circuit.

B. ELECTRICAL SYSTEM


No general maintenance is required on the electrical system. This system should, however, be inspected at least every six months for short circuits, frayed wires, loose connectors, etc.

C. MAINTENANCE SCHEDULE

TABLE 3-1: ROUTINE INSPECTION	
INSPECTION	ACTION
Pivot bearings	Inspect for wear every six months
Inspect the platform barrier for damage or malfunction	Repair/replace as needed
Check all fasteners on lift for tightness	Tighten as required
Check hinge pins	Replace as needed
Check all mounting hardware	Tighten/replace as needed
Check electrical limit switch settings	Adjust as needed
Inspect chains and connection points	Repair/replace as needed
END OF TABLE	

D. TROUBLESHOOTING GUIDE

Qualified service personnel must perform electrical repairs. Locate the source of the problem by reference to the UNI-lite Electrical Wiring Diagram in this manual. Contact the VMI Product Service Department for assistance, if needed.

 WARNING
ELECTRICITY CAN BE HAZARDOUS. THE VOLTAGE IN THE VEHICLE IS HIGH ENOUGH TO CAUSE SPARKS, BURNS, AND ARCING OF METALLIC PARTS. SPARKS NEAR A BATTERY OR COMBUSTIBLE FLUID CAN CAUSE FIRE OR EXPLOSION.

- Always handle electricity with care. Call our Product Support Department with installation or troubleshooting questions.
- Avoid causing electrical components to spark, especially near combustible or explosive substances.

- Most multimeters or other test equipment have probes with exposed metallic leads. Shorting two connectors with one of these leads can activate a lift function and this movement, if unexpected, could cause an injury. Exercise care when inserting a test probe into the lift's electrical system. Know what connector and terminal you need to test, and never contact more than one terminal at a time.
- An improperly serviced electrical system can be a fire hazard. Electrical service should only be performed by qualified VMI service technician personnel. Replace wire and components with VMI replacement parts only.

E. TROUBLESHOOTING PROCEDURE

1. CHECK FOR MECHANICAL BINDING:

Sometimes, a perceived electrical problem turns out to be mechanical. Determine if the lift will move by disconnecting electrical power and using the manual operation speed wrench. The motor should turn freely. Do not force the speed wrench. If the motor does not turn freely, determine the reason for the bind.

2. INSPECT FOR DAMAGED WIRES OR CONNECTORS:

A visual inspection of all wires and connectors can sometimes reveal a bad connection and save you from having to perform a more involved electrical diagnosis of the problem.

3. CHECK THE BATTERY:

Before assuming there is an electrical problem with the lift, always check that there is sufficient battery power to the lift. There should be at least 12.5 volts measured between the terminal posts inside the controller marked " bat + " and " bat - ". When operating under load, the voltage between these points should never drop below 11.5 volts. If insufficient voltage is measured, check all battery cables and terminals. Thoroughly clean and/or tighten battery cables as required. Make sure that the battery is fully charged.

4. OBSERVE CONTROLLER INDICATORS:

The controller indicator lights are located on the solid-state controller behind the electrical box assembly cover. For the description of the indicators, refer to **Table 3-2** below:

TABLE 3-2: CONTROLLER INDICATORS		
INDICATOR	COLOR	DESCRIPTION
LOW BAT	RED	Indicates when the vehicle battery has low voltage. It will light continuously for a low battery condition (less than 9.5 volts) or flicker during controller operation when there is a low voltage problem.
POWER	GREEN	Lit continuously when the correct power/voltage is applied to the lift.
ERROR	RED	Lights when an overvoltage (greater than 15 volts) occurs.
STOW OUT	YELLOW	Lights when the DEPLOY or DOWN function is selected if the position of the lift is correct for that function. For example: If the lift is stowed, the down function will not do anything and will not light the indicator but the deploy function will. The operation of this light is independent of power being applied to the controller, making it useful for troubleshooting.
STOW IN	YELLOW	Acts the same as the stow out, except during the STOW and UP functions.
END OF TABLE		

F. CIRCUIT TRACE PROCEDURE

Perform the circuit trace procedure if a problem persists after completing the ELECTRICAL LIMIT SWITCH ADJUSTMENT procedure (outlined in section II.D.) :

1. Proper tracing technique will help solve a problem more quickly. The tracing procedure should be performed by a VMI service technician, trained in the use of electrical test equipment and diagram reading.
2. A circuit trace consists of choosing a STARTING POINT and checking every connection point along a predetermined TEST PATH. The path corresponds to the electrical path for the function (or functions) you are testing. The circuit diagram is essential in determining this path.
3. A terminal on the SWITCH CONNECTOR is usually a good place for a starting point, because all circuits go through this connector and it is very accessible.
4. If none of the lift functions work, check the 12V-5a terminal and work back to the battery.

5. If only one function does not work, check the terminal that performs the function and work your way toward the motor.
6. If more than one function does not work, you will have to test all circuits common to the non-operating functions.
7. In either case, test every connection point along the test path.
8. Our service personnel at VMI Corporation will be happy to assist you with any troubleshooting problems, including the circuit trace procedure.

G. ELECTRICAL WIRING DIAGRAM

1. DIAGRAM LEGEND

a. Wire Color Codes

TABLE 3-3: WIRE COLOR CODE DEFINITIONS			
LETTER	COLOR	LETTER	COLOR
BK	Black	R	Red
BL	Blue	VI	Violet
BR	Brown	VI/BK	Violet w/ Black
GN	Green	W	White
GN/BK	Green w/ Black	W/O	White w/ Orange
O	Orange	Y	Yellow
O/BK	Orange w/ Black	Y/BK	Yellow w/ Black
END OF TABLE			

b. Connectors

Refer to **Figure 3-1**. The standard electrical connectors used by VMI are Molex® .062" Series. These connectors have terminal numbers molded onto the rear; use these numbers and colors to identify wires.

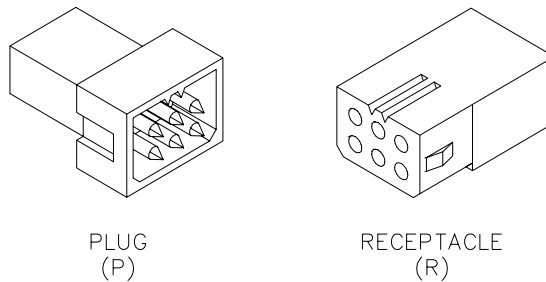


FIGURE 3-1: MOLEX CONNECTORS

c. Wiring Diagram Labels

12V	12 Volts – Circuit current rating is also given
DC	Door Close – Direct command
DDIODE	Down Diode – Full power when energized
DO	Door Open – Direct command
DOE	Door Open Enable – From Door Open cutoff switch
DWNA	Down Attempt – Must be enabled (2 cutoff switches)
GND	GROUND
INA	In Attempt – In must be enabled
MDWN	Motor Down – Used by OUT and DWN
MUP	Motor Up – Used by UP and IN
OUTA	Out Attempt – Out must be enabled
SDA	System Deploy Attempt – DO followed by OUT
SSA	System Stow Attempt – IN followed by DC
UPA	Up Attempt – Up must be enabled

d. Electrical Symbols

Refer to **Figure 3-2** for the symbols used on the electrical wiring diagram.

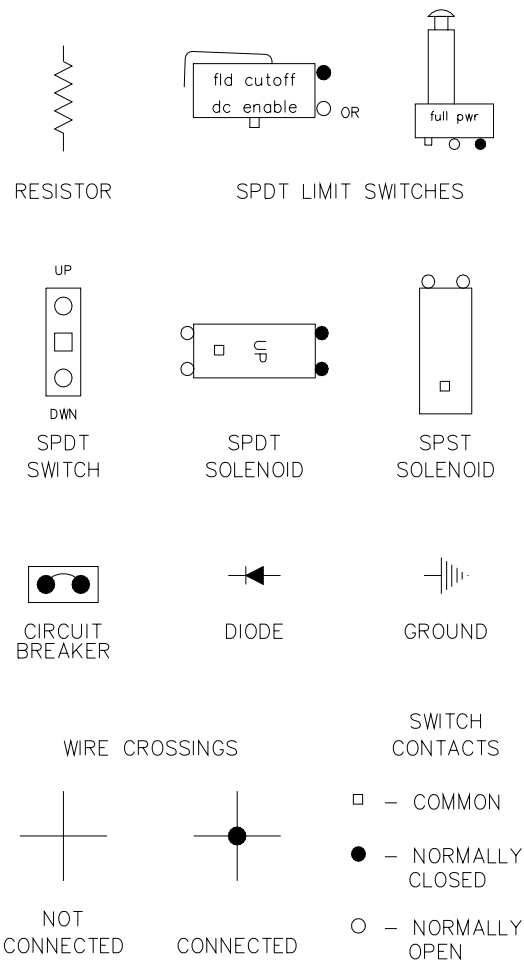


FIGURE 3-2: DIAGRAM SYMBOLS

2. UNI-LITE LIMIT SWITCH STATE DESCRIPTION

Refer to **Figure 3-3**. The limit switch actuation diagram shows the state of all limit switches as the platform travels from fully folded, to vehicle floor level, and to ground level. The solid line (—) indicates the normally closed portion of the switch is conducting, while the two thin lines (≡) indicate the normally open portion of the switch is conducting. The dotted lines (· · ·) show the switch states beyond the travel limits of the platform. This is useful in showing the operation of switches that change states at folded or ground level positions. For proper operation of the lift, the switch actuations must overlap as shown.

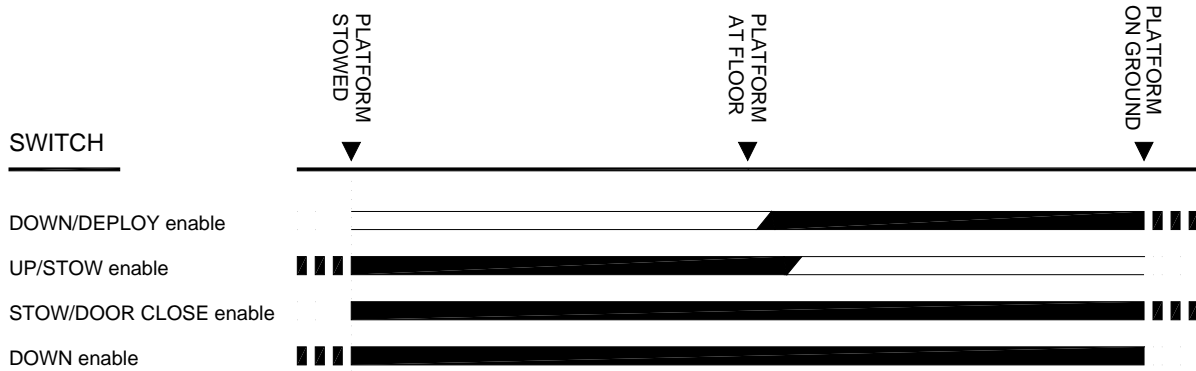


FIGURE 3-3: LIMIT SWITCH ACTUATION DIAGRAM

3. ELECTRICAL WIRING DIAGRAM

Refer to **Figures 3-4** and **3-5** on the following pages.

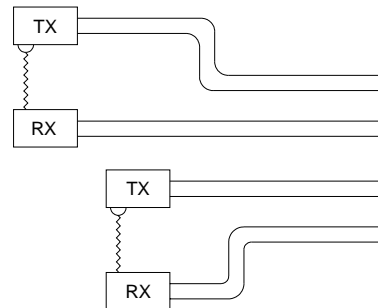
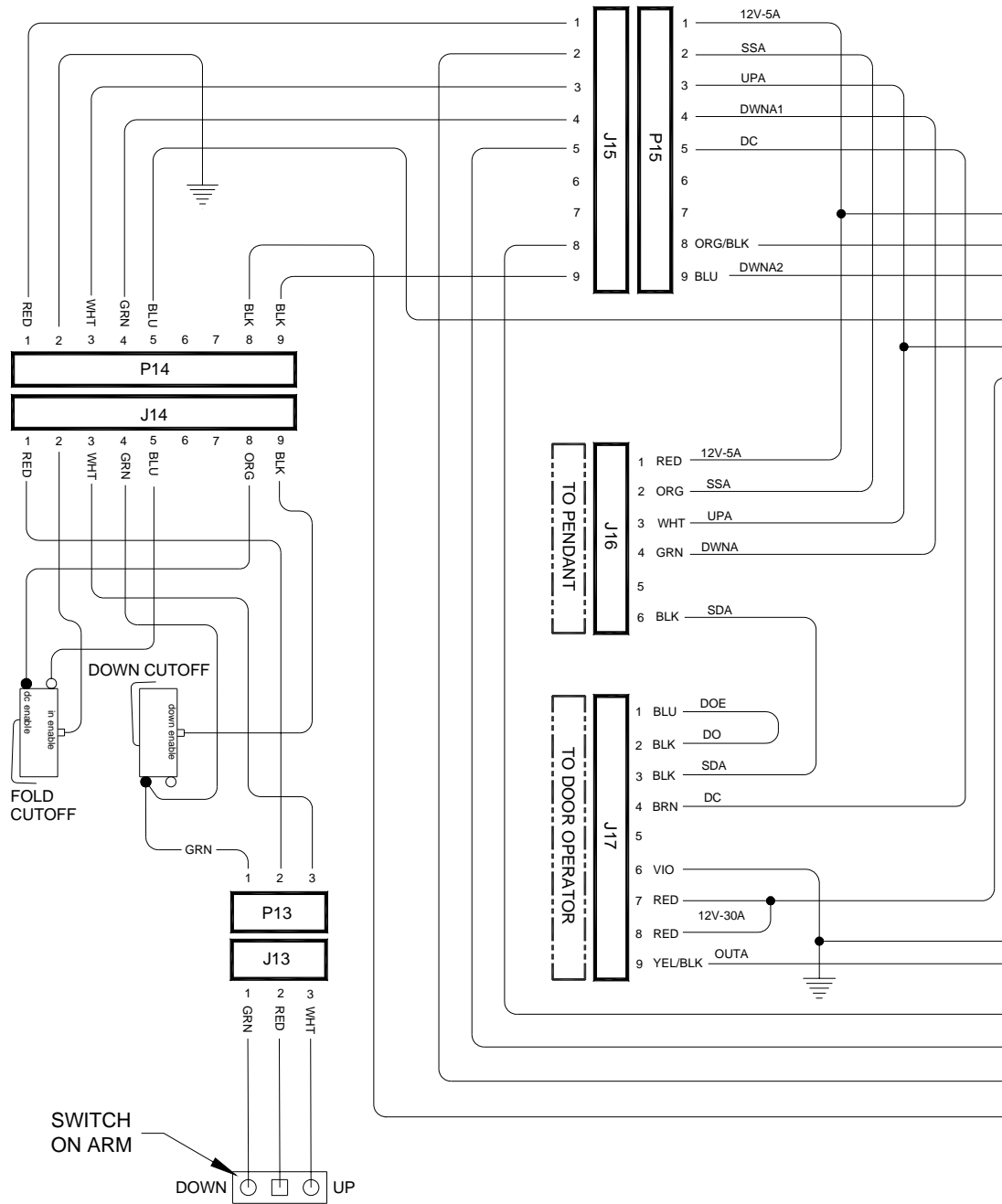


FIGURE 3-4: ELECTRICAL WIRING DIAGRAM – SHEET 1

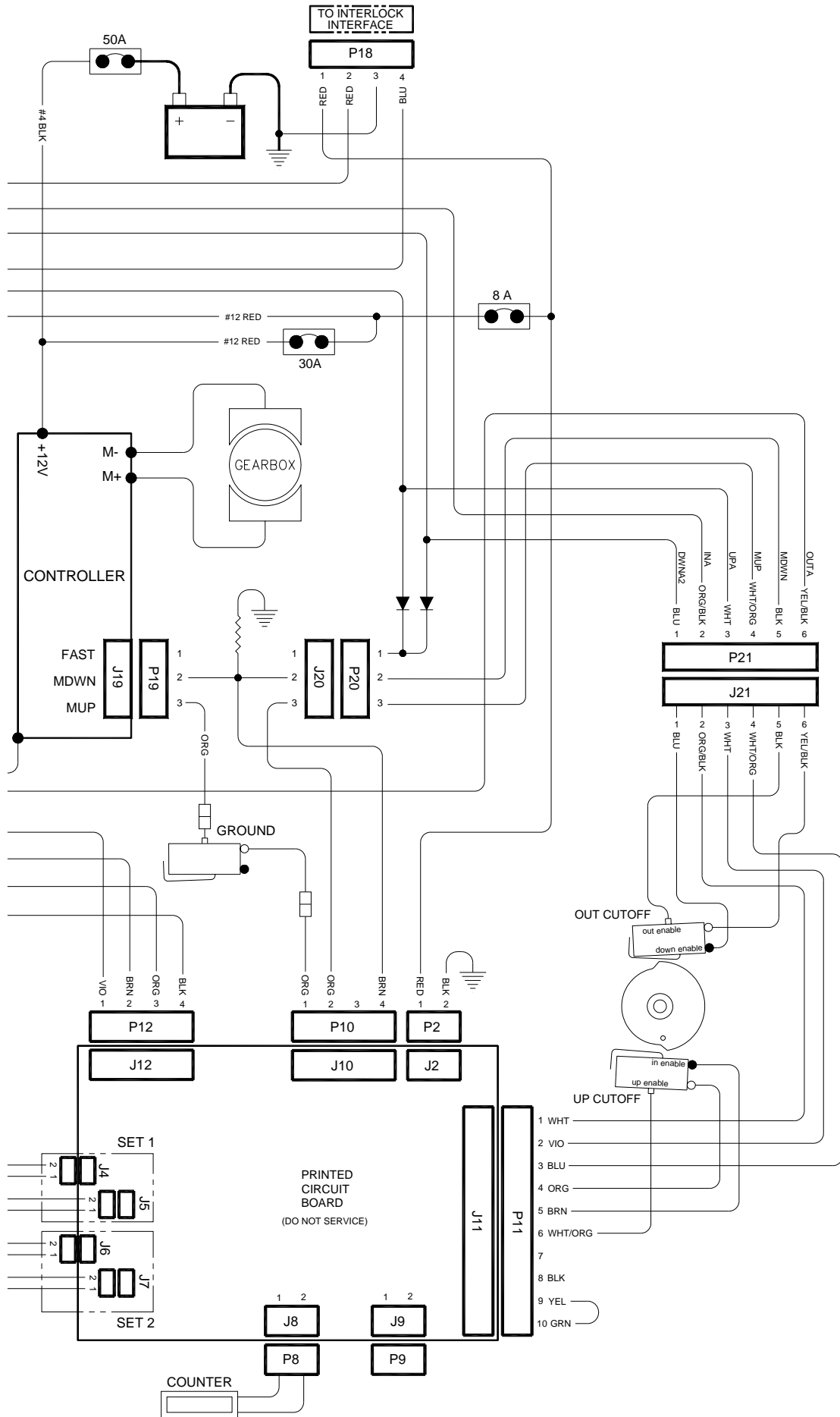


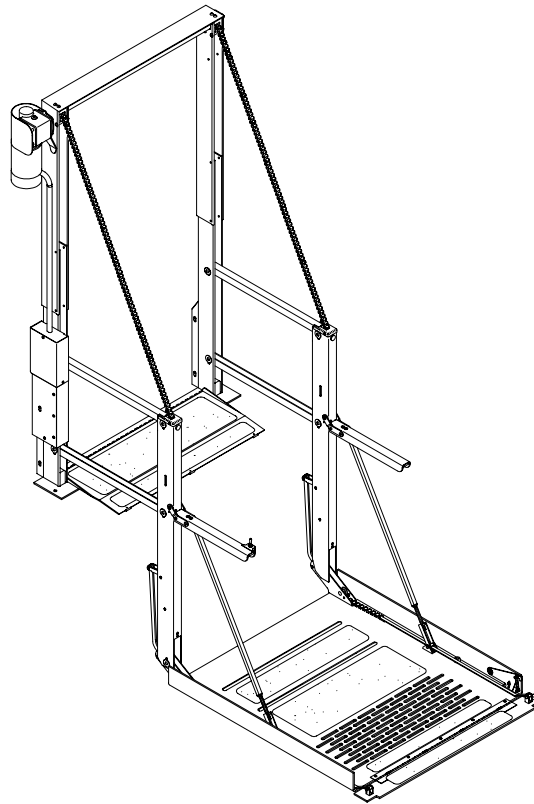
FIGURE 3-6: ELECTRICAL WIRING DIAGRAM – SHEET 2

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IV. PARTS DIAGRAMS AND LISTS

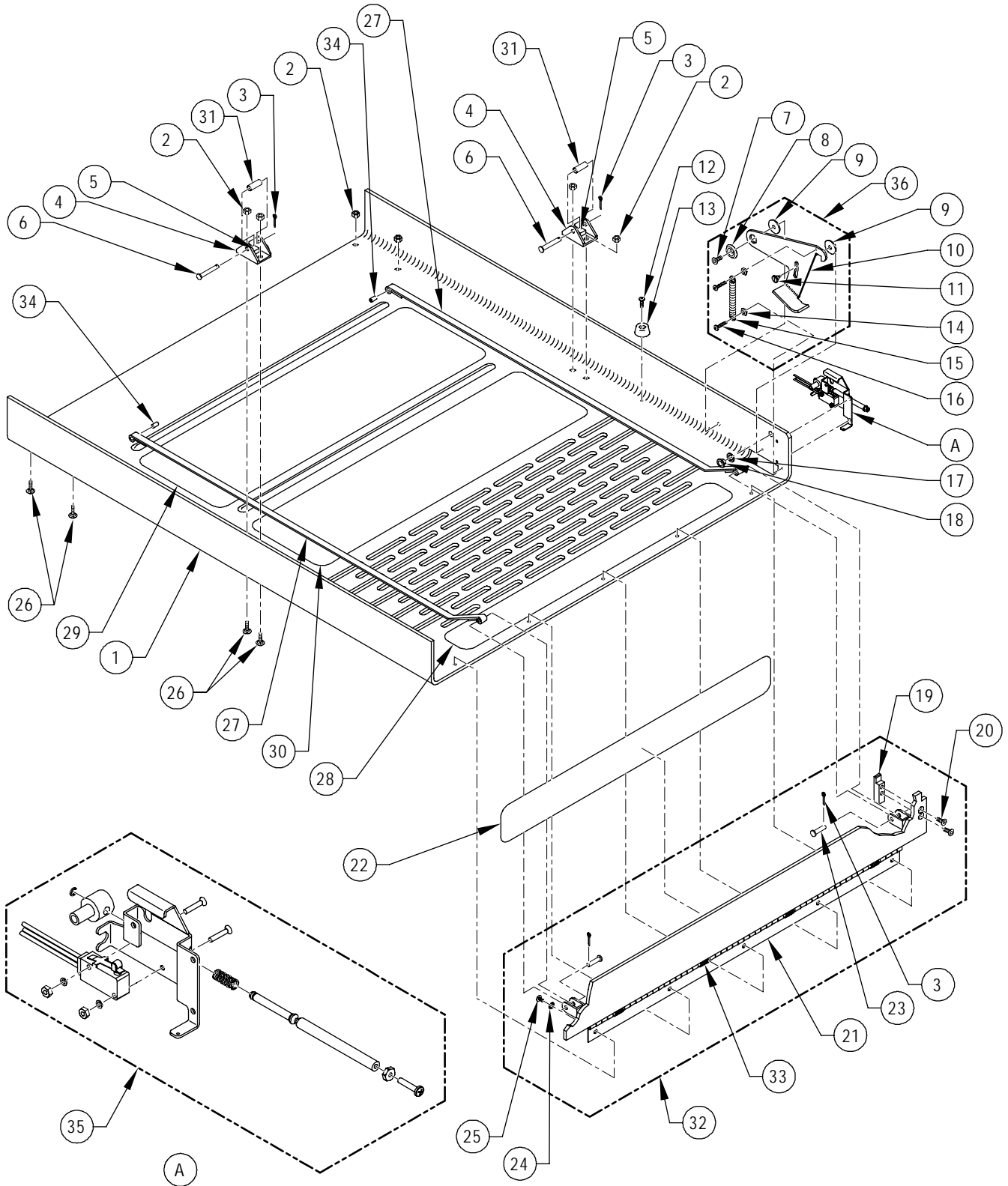
This chapter contains parts diagrams and lists for the VMI UNI-lite® DOT Private Use Wheelchair Lift. The exploded view of each major lift assembly shows individual components referenced by numbers. On each associated list is the reference number, a part description, the quantity used and the VMI part number. For part numbers of lift decals, refer to the “Decal Locations and Part Numbers” figure in Chapter II of this manual.



LIFT MODEL AND KIT NUMBERS	
PRODUCT NUMBER	UL2400-1G01000 (First listed model number)
DOCUMENTATION KIT NUMBER	33446
PRODUCTION DECAL SET NUMBER	33447

PARTS DIAGRAM PAGE

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FIGURE 4-1: UNI-LITE PLATFORM ASSEMBLY

FIGURE 4-1: UNI-LITE FMVSS PLATFORM ASSEMBLY

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
1	** PLATFORM ASSY, 26" X 36" FMVSS	REF	UL2400-1G01000	33437
1A	** PLATFORM ASSY, 29" X 40" FMVSS	REF	UL2806-2G01000	33439
	**	REF	UL2806-2G02000	33439
1B	** PLATFORM ASSY, 29" X 44" FMVSS	REF	UL2808-2G01000	33440
	**	REF	UL2808-3G01000	33440
1C	** PLATFORM ASSY, 32" X 44" FMVSS	REF	UL2810-2G01000	33441
	**	REF	UL2810-3G01000	33441
2	NUT, HEX, 1/4-20, SST (BAG OF 10)	1		15943
3	PIN, COTTER, 3/32 X 0.50 (BAG OF 10)	1		15930
4	CLEVIS-SUPPORT CHAIN, RR ENTRY MDL	2		UL-PF-030
5	PAD, PLATFORM, CLEVIS	2		UL-PF-022
6	PIN, CLEVIS, 1/4 X 1 23/64" ZINC	1		28636
7	SCREW, FHH, 1/4-20 X 5/8" SST (BAG OF 10)	1		19739
8	BUSHING, PIVOT, LATCH	1		UL-PF-010
9	WASHER, FLT, .315 ID X 1.156 OD X .062" NYL (BAG OF 10)	1		14443
10	SKI, SWITCH ACTUATOR	1		32931
11	SCREW, SHOULDER, FLAP LATCH	1		UL-PF-034
12	SCREW, PHP, 10-24 X 3/8" (BAG OF 10)	1		15944
13	BUMPER, 1.00 OD X .50 THK, RUB W/.180 HOLE	2		28408
14	NUT, HEX, 6-32" (BAG OF 10)	1		25625
15	SPRING, EXTENSION, UNI-LITE	1		25447
16	SCREW, PHP, 6-32 X 1/4" MS (BAG OF 10)	1		19736
17	WASHER, FLT, .318 X .751 X .031 NYL (BAG OF 10)	1		14467
18	GUIDE, DRIVE SHAFT PIVOT	1		UV-DS-014
19	CATCH, ROLLSTOP, LATCH	1		UL-PF-026
20	SOCKET, FLAT, 1/4-20 X 3/4" (BAG OF 10)	1		13310
21	* ROLLSTOP, WELD ASSY, 26"	1	UL2400-1G01000	UL-PF-014
21A	* ROLLSTOP, WELD ASSY, 29"	1	UL2806-2G01000	10803
	*	1	UL2806-2G02000	10803
	*	1	UL2808-2G01000	10803
	*	1	UL2810-3G01000	10803
21B	* ROLLSTOP, WELD ASSY, 32"	1	UL2810-2G01000	10804
	*	1	UL2810-3G01000	10804
22	SAFETY TREAD, 25.5 X 3", SAFETY YELLOW	1		25664
23	CLEVIS PIN, 1/4 X 55/64" (BAG OF 10)	2		15940
24	WASHER, 1/4 STAR, INTERNAL	5		28259
25	SCREW, CARRIAGE, SST, 1/4-20 X 5/8" (BAG OF 10)	2		19707
26	SCREW, BHS, 1/4-20 X 3/8" SST (BAG OF 10)	8		13309
27	* STRAP, ROLLSTOP ACTUATOR, 36" PLATFORM	2	UL2400-1G01000	UL-DS-022
27A	* STRAP, ROLLSTOP ACTUATOR, 40" & 44" PLATFORM	2	UL2806-2G01000	UL-DS-019
	*	2	UL2806-2G02000	UL-DS-019
	*	2	UL2808-2G01000	UL-DS-019
	*	2	UL2808-3G01000	UL-DS-019

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* Part number ONLY applies to corresponding configuration identified in CONFIG column. If no configuration is identified in CONFIG column then part number applies to ALL configurations.

** Reference Only – Not for Sale

FIGURE 4-1: UNI-LITE PLATFORM ASSEMBLY (CONT'D)

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
28	SAFETREAD, 25.5 X 2.25", OCEAN GRAY	1		25650
29	SAFETREAD, 25.5 X 8", OCEAN GRAY	1		25646
30	SAFETREAD, 25.5 X 4", OCEAN GRAY	1		25662
31	ROLLER, SUPPORT CHAIN, CLEVIS	1		UL-AC-009
32 *	ROLLSTOP ASSEMBLY, 26" FMVSS	1	UL2400-1G01000	33443
32A *	ROLLSTOP ASSEMBLY, 29" FMVSS	1	UL2806-2G01000	33442
*		1	UL2806-2G02000	33442
*		1	UL2808-2G01000	33442
*		1	UL2808-3G01000	33442
32B *	ROLLSTOP ASSEMBLY, 32" FMVSS	1	UL2810-2G01000	33444
*		1	UL2810-3G01000	33444
33	SPRING-BARRIER HINGE LARGE	4		25434
34	BUSHING, ROLLSTOP ACTUATOR, SST	2		UL-PF-032
35	SWITCH/BRACKET ASSY, W/PLUNGER	1		32929
36	PLATFORM PARTS, FMVSS	REF		33438

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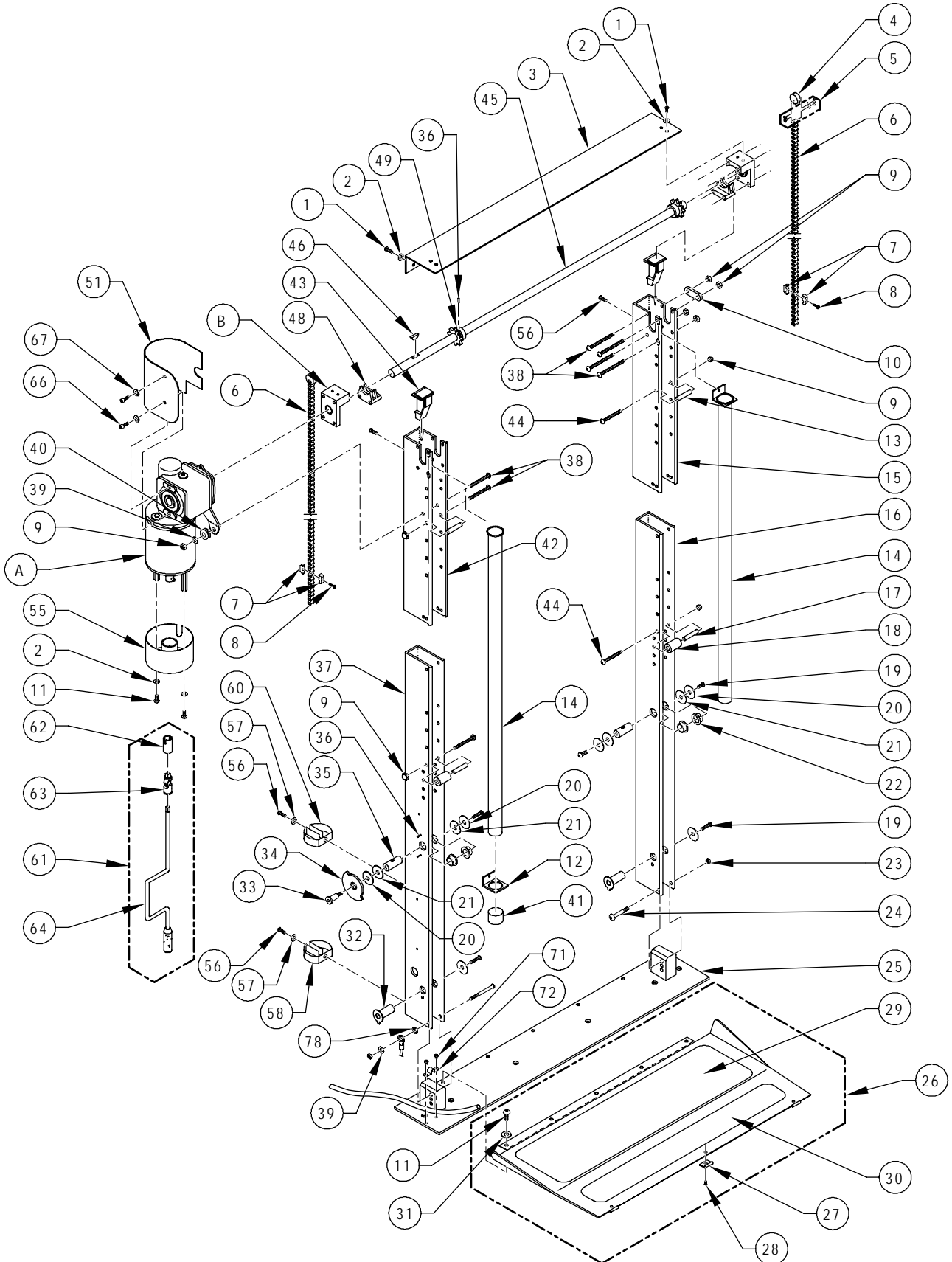


FIGURE 4-2: UNI-LITE BASE ASSEMBLY (SHEET 1 OF 2)

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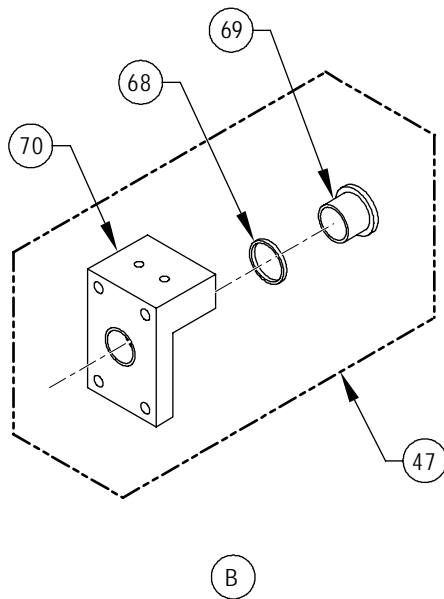
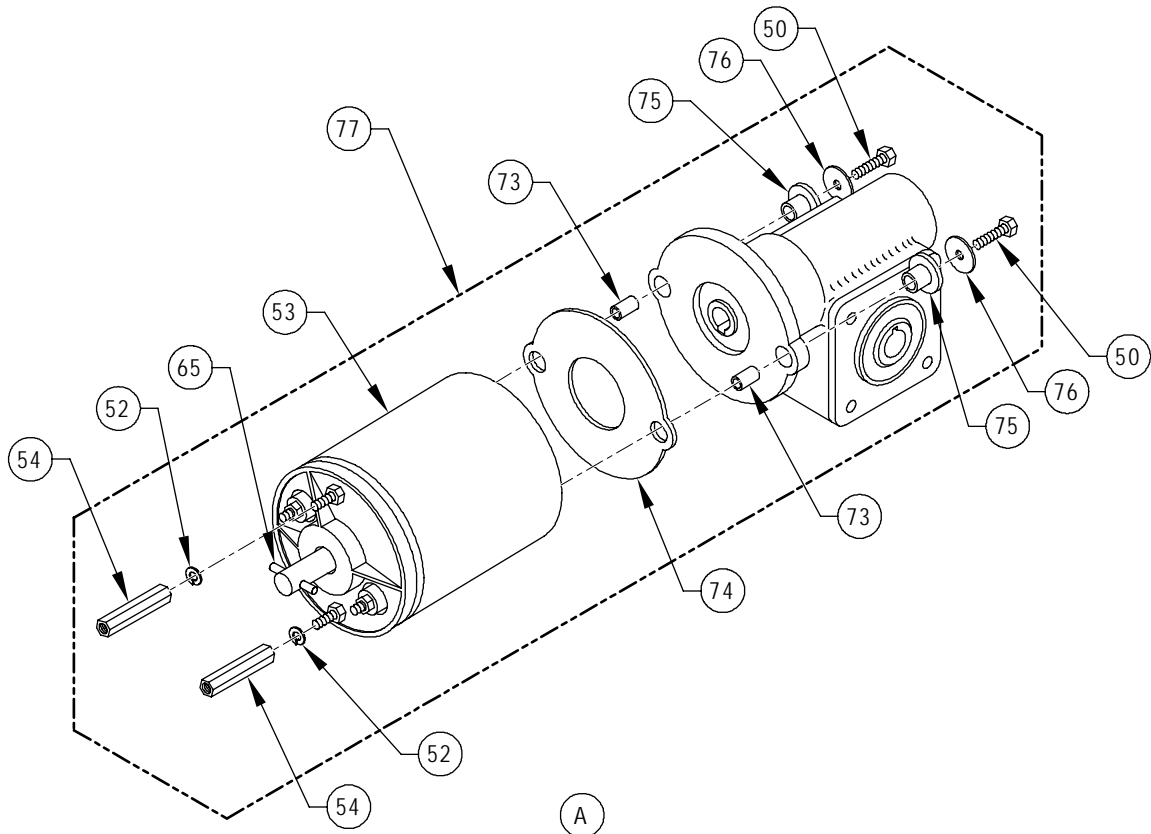


FIGURE 4-2: UNI-LITE BASE ASSEMBLY (SHEET 2 OF 2)

FIGURE 4-2: UNI-LITE BASE ASSEMBLY

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
1	SCREW, BHS, 1/4-20 X 1/2 BLK (BAG OF 10)	1		15985
2	WASHER, FLT, .281 X .625 X .065 (BAG OF 10)	1		17504
3 *	PLATE, ALIGNMENT, TOP, 26"	1	UL2400-1G01000	UL-BA-024
3A *	PLATE, ALIGNMENT, TOP, 29"	1	UL2806-2G01000	UL-BA-007
*		1	UL2806-2G02000	UL-BA-007
*		1	UL2808-2G01000	UL-BA-007
*		1	UL2808-3G01000	UL-BA-007
3B *	PLATE, ALIGNMENT, TOP, 32"	1	UL2810-2G01000	UL-BA-025
*			UL2810-3G01000	UL-BA-025
4	TAB, CHAIN	2		UL-DS-024
5	CHAIN, LINK, MASTER #40	4		25049
6	KIT, DRIVE CHAIN #40 REPLACEMENT, (STD)	2		01174
6A	KIT, DRIVE CHAIN REPLACEMENT, TALL, 225 PITCHES	2		01175
7	CHAIN, STOP, SAFETY	4		UL-DS-008
8	SMS #12 X 1 HEX WASHER HEAD "A"	2		28396
9	NUT-HEX, 1/4-20", NYLON INSERT (BAG OF 10)	14		15919
10	SPACER, MOUNTING BKT, TOP	2		UL-BA-026
11	SCREW, BHS, 1/4-20 X 3/8" SST (BAG OF 10)	9		13309
12	BRACKET, CHAIN TUBE	2		UL-BA-004
13	SPACER, MAIN POST (USE 4 FOR SHORT LIFTS)	2		UL-BA-006
14 *	TUBE-CHAIN, WITH RING	2	UL2400-1G01000	25524
*		2	UL2806-2G01000	25524
*		2	UL2806-2G02000	25524
*		2	UL2808-2G01000	25524
*		2	UL2808-3G01000	25524
*		2	UL2810-2G01000	25524
14A *	TUBE-CHAIN 36" LONG	2	UL2400-1G01000	UL-BA-040
*		2	UL2806-2G01000	UL-BA-040
*		2	UL2806-2G02000	UL-BA-040
*		2	UL2808-2G01000	UL-BA-040
*		2	UL2810-2G01000	UL-BA-040
15 *	POST, EXTENSION, MAIN, STD	1	UL2400-1G01000	UL-BA-011
*		1	UL2806-2G01000	UL-BA-011
*		1	UL2806-2G02000	UL-BA-011
*		1	UL2808-2G01000	UL-BA-011
*		1	UL2810-2G01000	UL-BA-011
15A *	POST, EXTENSION, MAIN, TALL, STD	1	UL2808-3G01000	UL-BA-034
*		1	UL2810-3G01000	UL-BA-034
16	POST, MAIN, STD	1		UL-BA-012
17	TUBE, FOLD STOP	2		UL-AC-044
18	FOLD STOP	2		UL-BA-010
19	SCREW, BHS, 5/16-18 X 3/4" SST, BLK OX (BAG OF 10)	5		15983

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FIGURE 4-2: UNI-LITE BASE ASSEMBLY (CONT'D)

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
20	WASHER, FDR, .31x1.25 SST BLK OXIDE (BAG OF 10)	6		15921
21	WASHER, NYLON	4		28563
22	BEARING-DU FLG, 3/4" ID X 1/4" L (KIT OF 10)	4		19576
23	NUT, ESN, 5/16-18 (BAG OF 10)	2		13349
24	SOCKET, BUTTON HEAD, 5/16-18 X 2-1/4, BLK. OXD. SST	2		282299
25 *	ASSY, WELD, BASEPLATE, WIDE 26"	1	UL2400-1G01000	UL-BA-023
25A *	ASSY, WELD, BASEPLATE, WIDE, 29"	1	UL2806-2G01000	UL-BA-014
*		1	UL2806-2G02000	UL-BA-014
*		1	UL2808-2G01000	UL-BA-014
*		1	UL2808-3G01000	UL-BA-014
25B *	ASSY, WELD, BASEPLATE, WIDE, 32"	1	UL2810-2G01000	UL-BA-022
*		1	UL2810-3G01000	UL-BA-022
26 *	ASSY, MECH, BRIDGEPLATE, 26"	1	UL2400-1G01000)	UL-BA-116
26A *	ASSY, MECH, BRIDGEPLATE, 29"	1	UL2806-2G01000	UL-BA-127
*		1	UL2806-2G02000	UL-BA-127
*		1	UL2808-3G01000	UL-BA-127
26B *	ASSY, MECH, BRIDGEPLATE, 32"	1	UL2810-2G01000	UL-BA-130
*		1	UL2810-3G01000	UL-BA-130
27	SKID, BRIDGEPLATE	3		UL-BA-021
28	SCREW, FHP, 10-24 X 1/4" UNDERCUT (BAG OF 10)	3		13302
29 *	SAFETY TREAD, 23 X 3, SAFETY YELLOW	1	UL2400-1G01000	25648
29A *	SAFETY TREAD, 23 X 7, SAFETY YELLOW	1	UL2400-1G01000	25649
30 *	SAFETY TREAD, 25 1/2 X 3, SAFETY YELLOW	1	UL2400-1G01000	25664
*		1	UL2806-2G01000	25664
*		1	UL2806-2G02000	25664
*		1	UL2808-2G01000	25664
*		1	UL2808-3G01000	25664
*		1	UL2810-2G01000	25664
*		1	UL2810-3G01000	25664
30A *	SAFETY TREAD, 25 1/2 X 7, SAFETY YELLOW	1	UL2806-2G01000	25665
*		1	UL2806-2G02000	25665
*		1	UL2808-2G01000	25665
*		1	UL2808-3G01000	25665
*		1	UL2810-2G01000	25665
*		1	UL2810-3G01000	25665
31	WASHER, 1/4", STAR INTERNAL	5		28259
32	ASSY, WELD, PIN, LINK ARM,	2		UL-AC-047
33	SCREW, SHOULDER, 3/8 X 1/2" (BAG OF 10)	1		25693
34	CAM, LIFT CONTROL w/SCREW	1		UL-ES-018
35	PIN, LINK ARM, CAM	2		UL-AC-008
36	PIN, ROLL, 3/32 X 1/2" (BAG OF 10)	2		14496
37	POST, MAIN, LH	1		UL-BA-013

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FIGURE 4-2: UNI-LITE BASE ASSEMBLY (CONT'D)

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
38	SCREW, BHS, 1/4-20 X 3" BLK SST	9		281499
39	WASHER, FDR, .281 X 1.00 X .065	2		28275
40	GROMMET	1		26656
41	RED CAP	2		25537
42 *	POST, EXTENSION, MAIN, LEFT	1	UL2400-1G01000	UL-BA-017
*		1	UL2806-2G01000	UL-BA-017
*		1	UL2806-2G02000	UL-BA-017
*		1	UL2808-2G01000	UL-BA-017
*		1	UL2810-2G01000	UL-BA-017
42A *	POST, EXTENSION, MAIN-TALL, LEFT	1	UL2808-3G01000	UL-BA-035
*		1	UL2810-3G01000	UL-BA-035
43	KIT, CHAIN GUIDE BLOCK	2		01070
44	SOCKET, BUTTON HD, 1/4-20 X 2 1/2"	4		281488
45 *	POWER SHAFT, WIDE, 26"	1	UL2400-1G01000	UL-DS-011
45A *	POWER SHAFT, STD, 29"	1	UL2806-2G01000	UL-DS-004
*		1	UL2806-2G02000	UL-DS-004
*		1	UL2808-2G01000	UL-DS-004
*		1	UL2808-3G01000	UL-DS-004
45B *	POWER SHAFT, WIDE, 32"	1	UL2810-2G01000	UL-DS-016
*		1	UL2810-3G01000	UL-DS-016
46	KEY, WOODRUFF	1		28430
47	ASSY, BLOCK, BEARING	2		UL-BA-038
48	STRIPPER, CHAIN	2		UL-BA-003
49	SPROCKET	2		UL-DS-003
50	BOLT HEX 1/4-20 X 1" (BAG OF 10)	2		14493
51	GEAR BOX, COVER	1		UL-AC-026
52	WASHER, SPL, 1/4" (BAG OF 10)	2		45815
53	MOTOR, 1HP 12V	1		10972
54	STANDOFF, MOTOR UNI-LITE	2		283682
55	COVER, BOTTOM MOTOR UNI-LITE	1		UL-AC-122
56	SCREW, PHP, 10-24 X 3/8" (BAG OF 10)	4		15944
57	WASHER, #10 SPLIT LOCK (BAG OF 10)	2		15941
58	KIT, TOOL CLIP, W/HARDWARE	1		19557
59	GEAR BOX, 70:1 INCLUDING TORQUE ARM	1		25489
60	CLIP-EMERGENCY TOOLS-SMALL	1		255435
61	KIT, EMERGENCY WRENCH	1		06001
62	SOCKET-EMERGENCY 3/8" DRIVE-11/16" DEEP	1		26724
63	UNIVERSAL JOINT, 3/8" DRIVE	1		26727
64	SPEED WRENCH-3/8" DRIVE	1		26725
65	ROLL PIN 3/16 X 1 SST	1		28360
66	SCREW, BHS, 1/4-20 X 3/8" SST (BAG OF 10)	5		13309
67	WASHER, FLT, .219 X .50 X .049 (BAG OF 10)	2		13379

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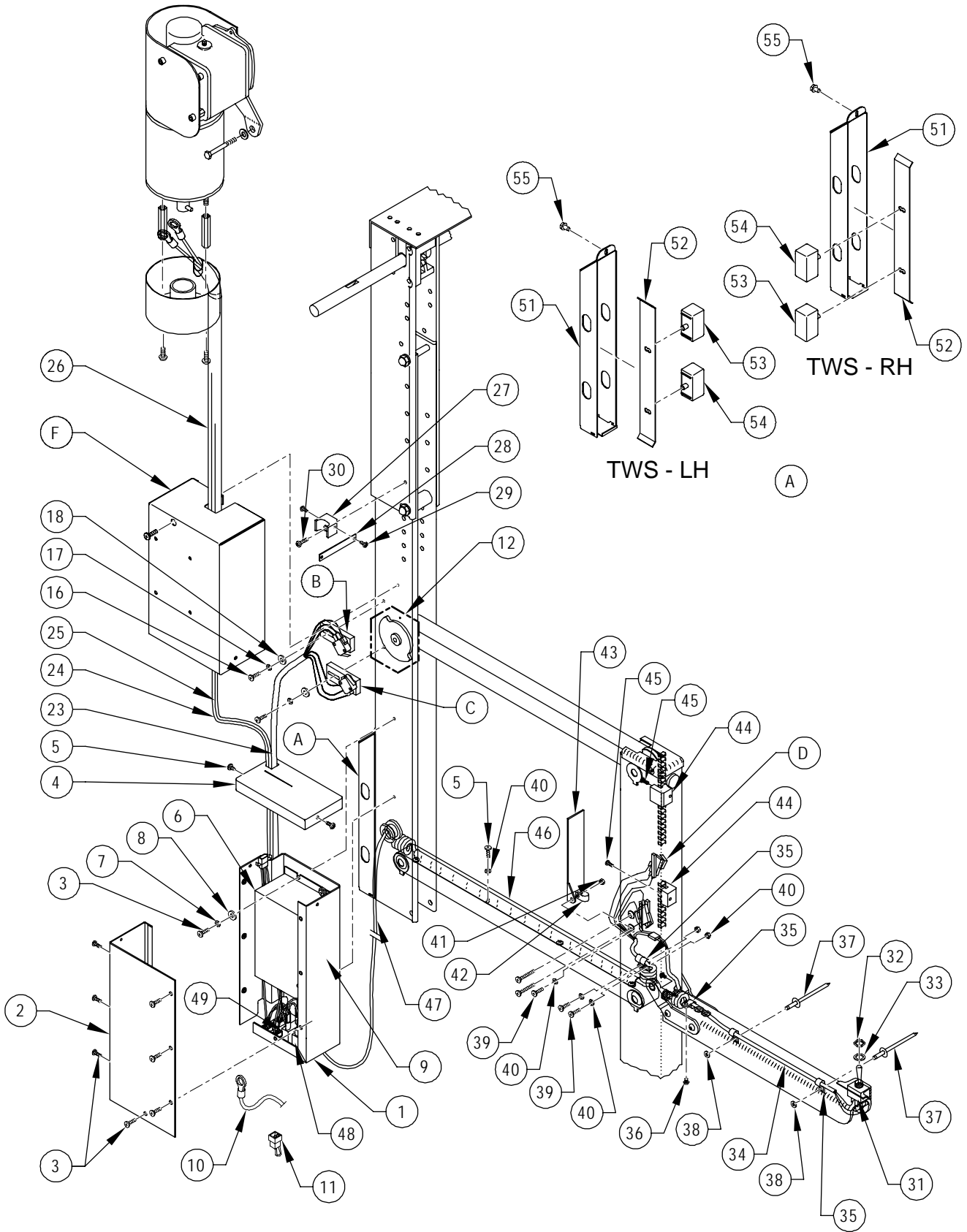
FIGURE 4-2: UNI-LITE BASE ASSEMBLY (CONT'D)

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
68	SPACER, B-BLOCK BUSHING	1		UL-BA-015
69	BUSHING-BRONZE SPURR	1		25307
70	BEARING BLOCK, ALUM.	1		UL-BA-002
71	MS, 10-24 X 1/4 PHIL PAN	2		28105
72	CLAMP, RETAINING	1		28407
73	SLEEVE-MOTOR/GEARBOX CONNECTION	2		UL-AC-081
74	GASKET-RUBBER MOTOR GEARBOX	2		UL-AC-082
75	BUSHING-STEM, SHOCK MOUNT	2		25370
76	WASHER-1/4" FENDER 1" OD (BAG OF 10)	2		25623
77	GEARMOTOR ASSY, 12V	1		UL-DS-100
78	WASHER-5/16 X 0.61 OD X 0.03 INTL. STAR BRONZE	1		28965

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

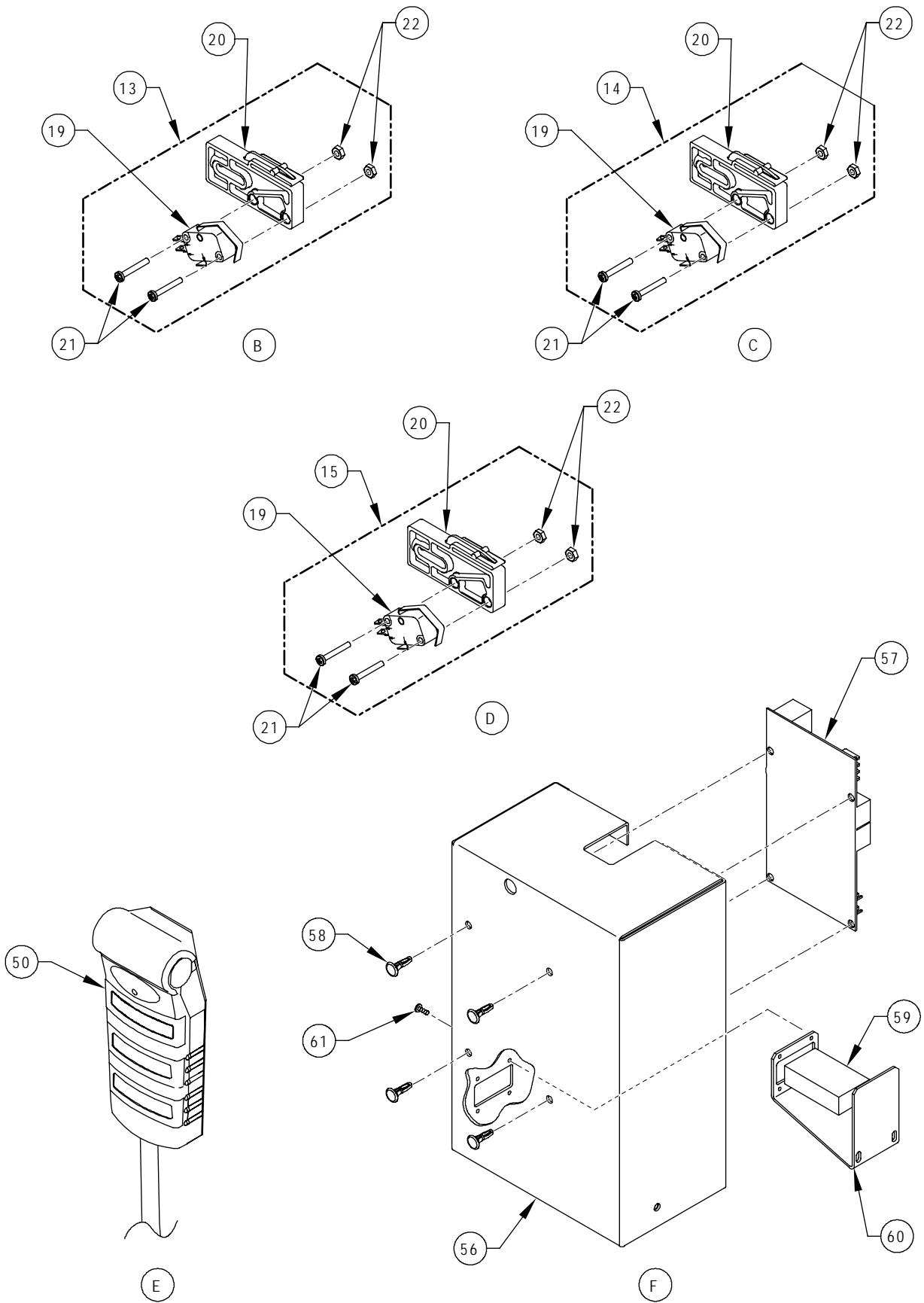
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FIGURE 4-3: UNI-LITE ELECTRICAL ASSEMBLY (SHEET 1 OF 2)



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FIGURE 4-3: UNI-LITE ELECTRICAL ASSEMBLY (SHEET 2 OF 2)

FIGURE 4-3: UNI-LITE ELECTRICAL ASSEMBLY

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
1	ELECTRICAL-BOX ASSEMBLY UNI-LITE (S.N's 7887-)	1		10244
2	COVER, UNI-LITE ELECTRICAL FRONT (S.N's. 7725-)	1		UL-ES-150
3	MS, 10-24 X 3/8" PHIL PAN (BAG OF 10)	6		15944
4	COVER TOP, ELECTRICAL BOX	1		UL-AC-121
5	SCREW, PHP, 10-24 X 1/2" TRS	2		28111T
6	CONTROLLER, ZERO POWER	1		12749
7	WASHER # 10 SPLIT LOCK (BAG OF 10)	4		15941
8	WASHER, #10, FLAT, SAE	4		28271
9	DECAL, VMI	1		33179
10	JUMPER-GROUND STRAP UNI-LITE	1		UL-ES-119
11	PLUG, SHORTING	1		UL-ES-007
12	KIT, CAM WLDT, W/SET SCREW	1		45889
13	SWITCH, ASSY., (UP/IN ENABLE) UNILITE	1		UL-ES-004
14	SWITCH, LIMIT, (UP/DOWN CUTOFF) UNILITE	4		UL-ES-110
15	SWITCH, ASSY., (DOWN/OUT ENABLE) UNILITE	1		UL-ES-024
16	SCREW, PHP, 10-24 X 3/4" (BAG OF 10)	3		15957
17	WASHER, SPL, #10 (BAG OF 10)	3		15941
18	WASHER, #10, FLAT, SAE (BAG OF 10)	3		13379
19	SWITCH, LIMIT, (UP/DOWN CUTOFF) UNILITE	1		UL-ES-110
20	SWITCH BLOCK	3		34314
21	SCREW,PHP,4-40 X 3/4" MS (BAG OF 10)	6		15909
22	NUT, HEX, 4-40, PLATED (BAG OF 10)	6		15903
23	HARNESS ASSY., CAM SWITCH, UNI-LITE	1		UL-ES-115
24	JUMPER, 6AWG, 60" MOTOR LEAD NEG	1		UL-ES-121
25	JUMPER-6AWG, 60" MOTOR LEAD POS	1		UL-ES-120
26	** ELBOW,CONDUIT,CRUSHED & PAINTED – 16.50"	REF	UL2400-1G01000	10913
26A	** ELBOW,CONDUIT,CRUSHED & PAINTED – 20.50"	REF	UL2806-2G01000	10914
	**	REF	UL2806-2G02000	10914
	**	REF	UL2808-2G01000	10914
	**	REF	UL2810-2G01000	10914
26B	** ELBOW,CONDUIT,CRUSHED & PAINTED – 28.50"	REF	UL2808-3G01000	10915
	**	REF	UL2810-3G01000	10915
27	SPACER, ELECTRICAL SYSTEM UNILITE	1		UL-ES-028
28	STRAP, ELECTRICAL TUBE	1		UL-ES-029
29	SCREW, PHP, 10-24 X 1/4"	2		28105
30	SCREW, PHP, 10-24 X 3/4"	1		28113
31	SWITCH, SPDT TOGGLE	1		26411
32	NUT, SWITCH, TOGGLE (BAG OF 10)	1		25639
33	WASHER, SWITCH, TOGGLE (BAG OF 10)	1		25638
34	HARNESS, ARM SWITCH, SHORT	1		UL-ES-021
35	CLAMP, 3/16", CABLE	4		25514
36	SCREW, PHP, 8-32 x 1/4"	2		28067

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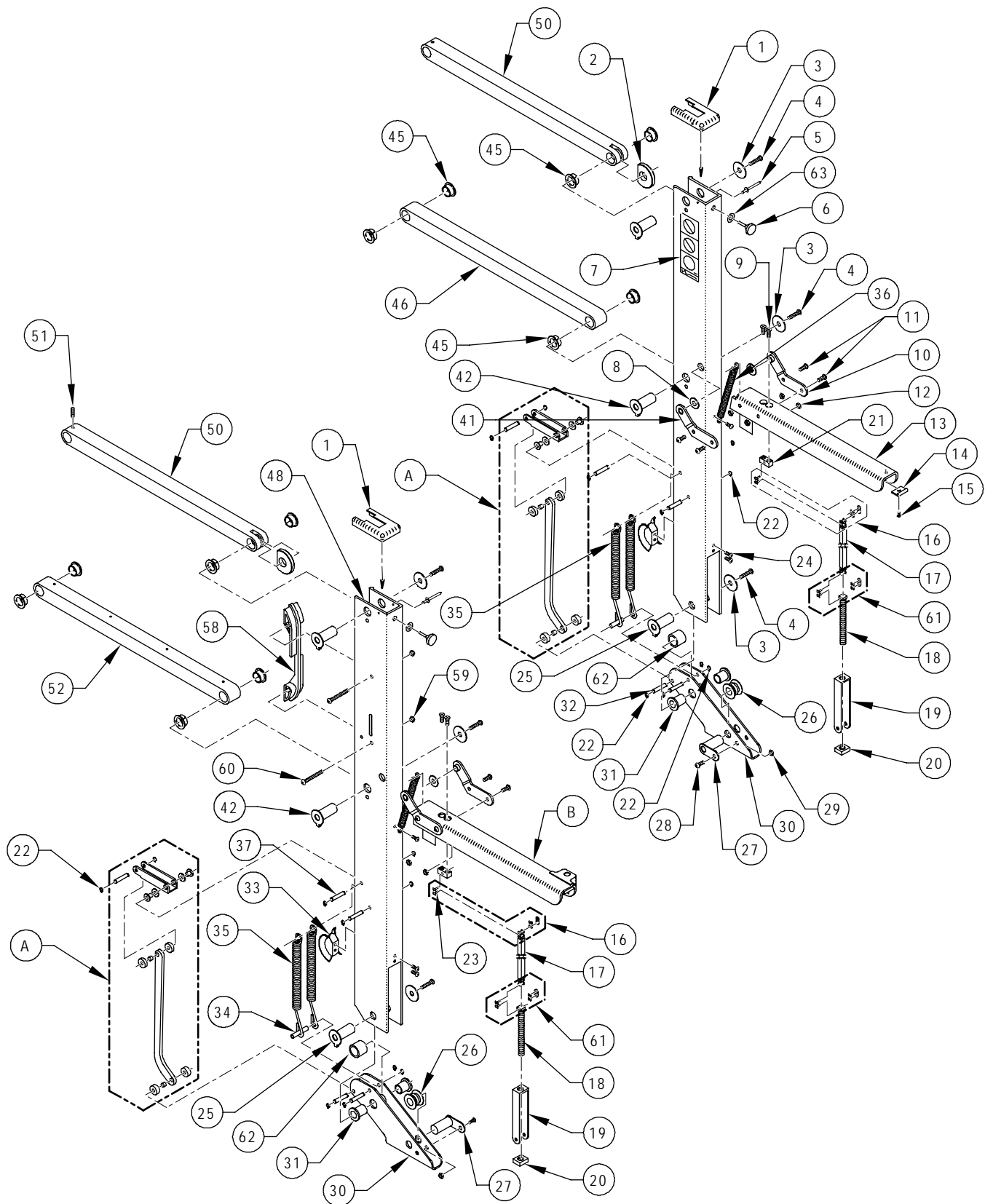
FIGURE 4-3: UNI-LITE ELECTRICAL ASSEMBLY (CONT'D)

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
37	RIVET, 1/8" X 1/2" (BAG OF 10)	2		25637
38	WASHER #4 FLAT	2		28265
39	SCREW, PHP, 10-24 X 1/2" (BAG OF 10)	3		13304
40	WASHER # 10 SPLIT LOCK	1		28272
41	NUT, JAM, 10-24	3		28304
42	CLAMP, CABLE, 3/8" (BAG OF 10)	3		32408
43	COVER, LIMIT SWITCH	1		UL-AC-023
44	BRACKET, CHAIN	2		UL-DS-007
45	SCREW, SSS, 3/8" X 1/2"	2		28376
46	HARNESS, PLATFORM POST	1		UL-ES-009
47	CLAMP, P-POST HARNESS, SHORT	1		UL-AC-061
48	BREAKER, CIRCUIT, 8 AMP	1		265108
49	BREAKER, CIRCUIT, 30 AMP	1		26510
50	KIT, PENDANT, 7 FT. UNI-LITE	1		14734
51	ENCLOSURE, SENSOR	2		33342
52	BRACKET, SENSOR ANCHOR	2		33343
53	SENSOR ASSY, RECEIVER	2		33845
54	SENSOR ASSY, TRANSMITTER	2		33846
55	SCREW, PHP, 10-24 X 3/8" TYPE F, ZINC PLATED	2		33208
56	COVER, PCB & COUNTER HOUSING	1		33209
57	PCB BOARD ASSY, PRIVATE	1		33057
58	PCB STANDOFFS	4		16421
59	COUNTER ASSY	1		19037
60	BRACKET, COUNTER ADAPTER	1		35705
61	SCREW, PHP, 10-24 X 3/4"	2		28113

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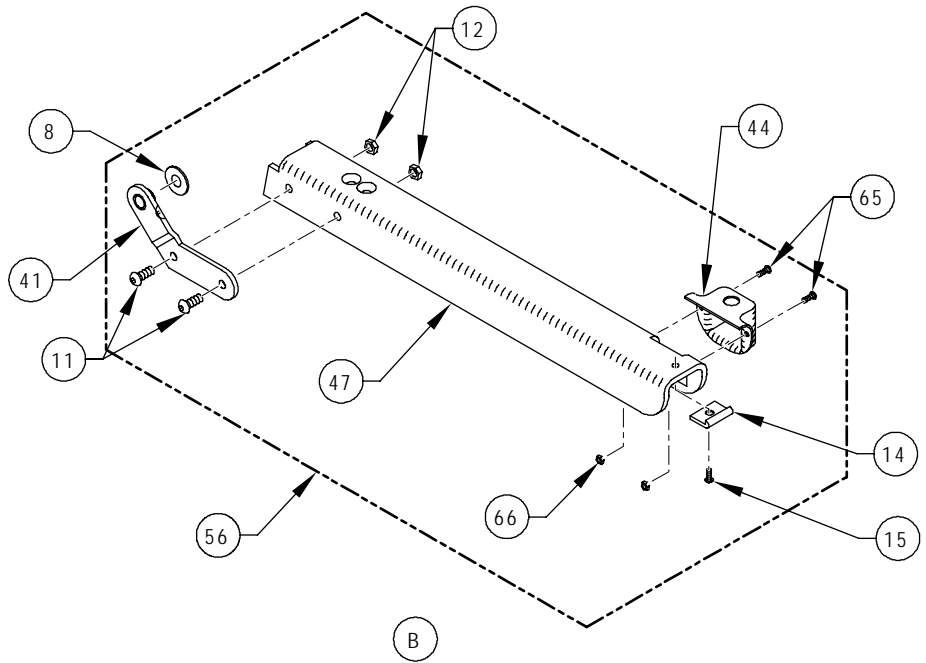
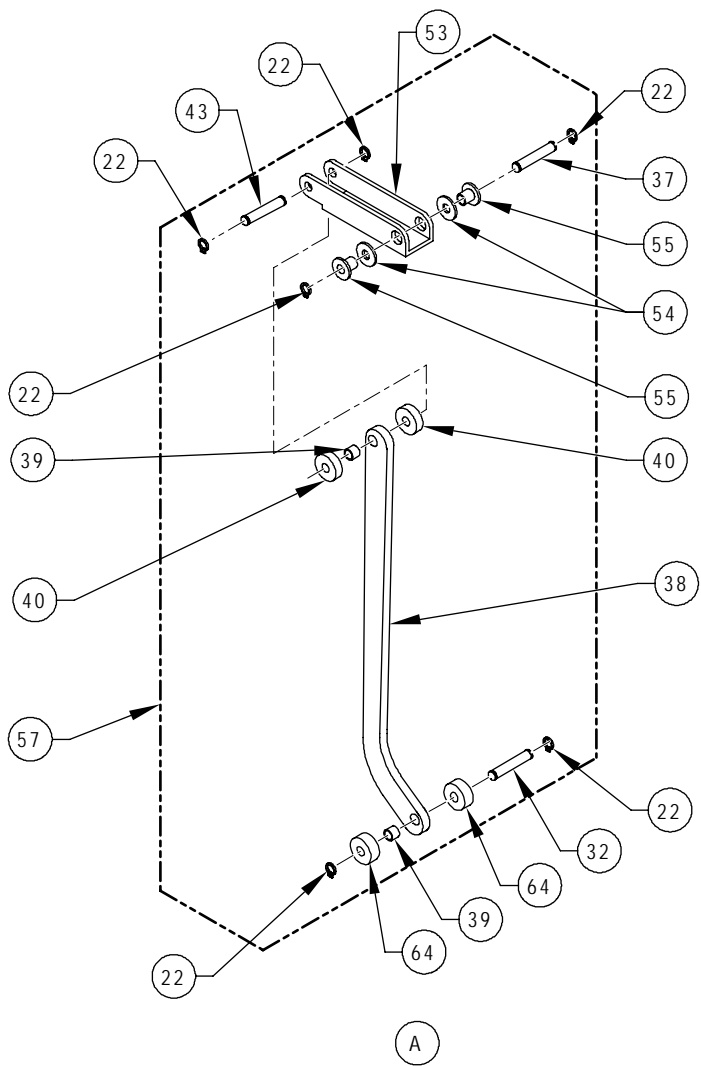
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RSM0028100

FIGURE 4-4: UNI-LITE PLATFORM POST ASSEMBLY (SHEET 1 OF 2)



RSM0040300

FIGURE 4-4: UNI-LITE PLATFORM POST ASSEMBLY (SHEET 2 OF 2)

FIGURE 4-4: UNI-LITE PLATFORM POST ASSEMBLY

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
1	CAP, PLATFORM POST	2		UL-AC-021
2	CHAIN GUIDE, LINK ARM	2		UL-AC-003
3	WASHER, FDR, .31 X 1.25" SST BLK OXIDE (BAG OF 10)	6		15921
4	SCREW, BHS, 5/16-18 X 3/4" SST BLK OXIDE (BAG OF 10)	6		15983
5	RIVET, 1/8 X 1/2, BLIND ALUM (BAG OF 10)	4		25637
6	BUMPER, RUBBER	2		V2-AC-86
7	DECAL, PROPER LOADING	2		26183
8	WASHER, FLT, .641 X .904 X .015 NYLON	4		28577
9	SOCKET, FLAT, 1/4-20 X 3/4" (BAG OF 10)	4		13310
10	BRACKET WLDT, HANDRAIL SUPPORT, RH	2		UL-AC-033
11	SBH, 1/4-20 X 5/8" BLK. OXD. SST (BAG OF 10)	8		15938
12	NUT, HEX, 1/4-20 (BAG OF 10)	8		25612
13 *	HANDRAIL, SUPPORT, SHORT	1	UL2400-1G01000	UL-AC-042
13A *	HANDRAIL, SUPPORT, STD	1	UL2806-2G01000	UL-AC-012
*		1	UL2806-2G02000	UL-AC-012
*		1	UL2810-2G01000	UL-AC-012
*		1	UL2810-3G01000	UL-AC-012
13B *	HANDRAIL, SUPPORT, LONG	1	UL2808-2G01000	UL-AC-412
*		1	UL2808-3G01000	UL-AC-412
14	SKID, BRIDGEPLATE	2		UL-BA-021
15	SCREW, FHP, 10-24 X 1/4" UNDERCUT (BAG OF 10)	2		13302
16	MASTER LINK, #40 CHAIN	2		25049
17A	PROTECTOR, CHAIN (2FT)	2		UL-AC-075
17B	CHAIN, #40, NICKEL PLATED, 51 PITCHES	2		UL-AC-002
18	ANCHOR, SUPPORT CHAIN	2		UL-AC-046
19	CLEVIS, SUPPORT CHAIN, ANCHOR	2		UL-AC-045
20	NUT, 7/16-14 SQUARE	2		28362
21	CHAIN, ANCHOR	2		UL-AC-010
22	SNAPRING, 1/4" (BAG OF 10)	20		11793
23	SCREW, BHS, 1/4-20 X 1/2" BLACK (BAG OF 10)	4		15985
24	SCREW, PHP, 10-24 X 1/2" (BAG OF 10)	4		13304
25	PIN WLDT, PIVOT BRACKET	2		UL-AC-049
26	ROLLER, CHAIN	2		UL-PF-015
27	PIN WLDT, CHAIN ROLLER	2		UL-AC-048
28	SCREW, PHP, 10-24 X 3/8" (BAG OF 10)	2		15944
29	NUT, JAM, 10-24 (BAG OF 10)	2		14489
30	PIVOT BRACKET	2		UL-PF-002
31	BEARING, BRONZE FLANGE, .63 X .75 X.63L	4		25379
32	PIN, 0.250 DIA, SNAPRING X 1.13	4		UL-AC-036
33	CHAIN GUIDE, POST	2		UL-AC-005
34	BUSHING, BRONZE, 0405-129 (MARTIN) .25 X .31 X .75	2		25319
35	SPRING, UNFOLD, KICKOUT	4		25436

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FIGURE 4-4: UNI-LITE PLATFORM POST ASSEMBLY (CONT'D)

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
36	SPRING, EXTENSION, .25 OD X 3.0 LG	2		254618
37	PIN, 0.250 DIA, SNAPRING X 1.78	4		UL-AC-038
38 *	LINK, KICKOUT, SHORT	2	UL2400-1G01000	UL-PF-029
38A *	LINK, KICKOUT	2	UL2806-2G01000	UL-PF-019
*		2	UL2806-2G02000	UL-PF-019
*		2	UL2808-2G01000	UL-PF-019
*		2	UL2808-3G01000	UL-PF-019
*		2	UL2810-2G01000	UL-PF-019
*		2	UL2810-3G01000	UL-PF-019
39	BUSHING, BRONZE, 0405-04, 5/16" X 1/4" X 1/4" LNG	4		25318
40	ROLLER, KICKOUT	4		UL-PF-017
41	BRACKET WLDT, HANDRAIL SUPPORT, LH	2		UL-AC-032
42	PIN WLDT, LINK ARM	4		UL-AC-047
43	PIN, 0.250 DIA	2		UL-AC-035
44	COVER W/GUARDS, SWITCH	1		11686
45	KIT FLANGE BEARING, 3/4" ID (KIT OF 10)	12		19576
46 *	ARM, PARALLEL, BOTTOM, LH	1	UL2400-1G01000	UL-AC-052
47 *	HANDRAIL, W/SWITCH, SHORT, LH	1	UL2400-1G01000	UL-AC-043
47A *	HANDRAIL, SWITCH, LH, STD	1	UL2806-2G01000	UL-AC-017
*		1	UL2810-2G01000	UL-AC-017
*		1	UL2810-3G01000	UL-AC-017
47B *	HANDRAIL, SWITCH, LH, LONG	1	UL2808-2G01000	UL-AC-417
*		1	UL2808-3G01000	UL-AC-417
48 *	POST, PLATFORM, STD, SHORT	1	UL2400-1G01000	UL-AC-054
48A *	POST, PLATFORM, STD	1	UL2806-2G01000	UL-AC-015
*		1	UL2806-2G02000	UL-AC-015
*		1	UL2808-2G01000	UL-AC-015
*		1	UL2808-3G01000	UL-AC-015
49 *	POST, PLATFORM, LH, SHORT	1	UL2400-1G01000	UL-AC-053
49A *	POST, PLATFORM, LH	1	UL2806-2G01000	UL-AC-019
*		1	UL2806-2G02000	UL-AC-019
*		1	UL2808-2G01000	UL-AC-019
*		1	UL2808-3G01000	UL-AC-019
*		1	UL2810-2G01000	UL-AC-019
*		1	UL2810-3G01000	UL-AC-019
50 *	ARM, PARALLEL, UPPER	2	UL2400-1G01000	UL-AC-050
50A *	ARM, PARALLEL, UPPER	2	UL2806-2G01000	UL-AC-006
*		2	UL2806-2G02000	UL-AC-006
*		2	UL2808-2G01000	UL-AC-006
*		2	UL2808-3G01000	UL-AC-006
*		2	UL2810-2G01000	UL-AC-006
*		2	UL2810-3G01000	UL-AC-006

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FIGURE 4-4: UNI-LITE PLATFORM POST ASSEMBLY

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
51	SCREW, HSS, 1/4-20 X 3/8"	2		28652
52 *	ARM, PARALLEL, BOTTOM, LH, SHORT	1	UL2400-1G01000	UL-AC-052
52A *	ARM, PARALLEL, BOTTOM, LH	1	UL2806-2G01000	UL-AC-041
*		1	UL2806-2G02000	UL-AC-041
*		1	UL2808-2G01000	UL-AC-041
*		1	UL2808-3G01000	UL-AC-041
*		1	UL2810-2G01000	UL-AC-041
*		1	UL2810-3G01000	UL-AC-041
53	KICKOUT, CHANNEL	2		UL-PF-018
54	WASHER, FLT, .406 X .812 X .065 (SAE) (BAG OF 10)	4		17510
55	BEARING, BRONZE FLANGE, .25 X .38 X .38L	4		25378
56 *	ASSY, HANDRAIL, SWITCH, SHORT	1	UL2400-1G01000	UL-AC-059
56A *	ASSY, HANDRAIL, SWITCH, STD	1	UL2806-2G01000	UL-AC-058
*		1	UL2810-2G01000	UL-AC-058
*		1	UL2810-3G01000	UL-AC-058
56B *	ASSY, HANDRAIL, SWITCH LONG	1	UL2808-2G01000	UL-AC-458
*		1	UL2808-3G01000	UL-AC-458
57 *	ASSY, KICKOUT SHORT	1	UL2400-1G01000	UL-PF-133
57A *	ASSY, KICKOUT STD	1	UL2806-2G01000	UL-PF-033
*		1	UL2806-2G02000	UL-PF-033
*		1	UL2808-2G01000	UL-PF-033
*		1	UL2808-3G01000	UL-PF-033
*		1	UL2810-2G01000	UL-PF-033
*		1	UL2810-3G01000	UL-PF-033
58	GUIDE, CHAIN	1		UL-AC-072
59	NUT, ESN, 1/4-20 THIN	2		14-08-304
60	SCREW, BHS, 1/4-20 X 2.00"	2		28161
61	TUBING, GREY VINYL, 5/8 ID X 2 FT.	2		UL-AC-075
62	SPACER, PVC, 0.81 ID X 0.87 L	2		UL-AC-062
63	WASHER ,FLT, .406 X .812 X .065 (SAE) (BAG OF 10)	2		17510
64	ROLLER, KICKOUT, .750 D X .307	4		UL-PF-016
65	SCREW, PHP, 6-32 X 3/8" (BAG OF 10)	2		13301
66	NUT, HEX, 6-32 (BAG OF 10)	2		25625

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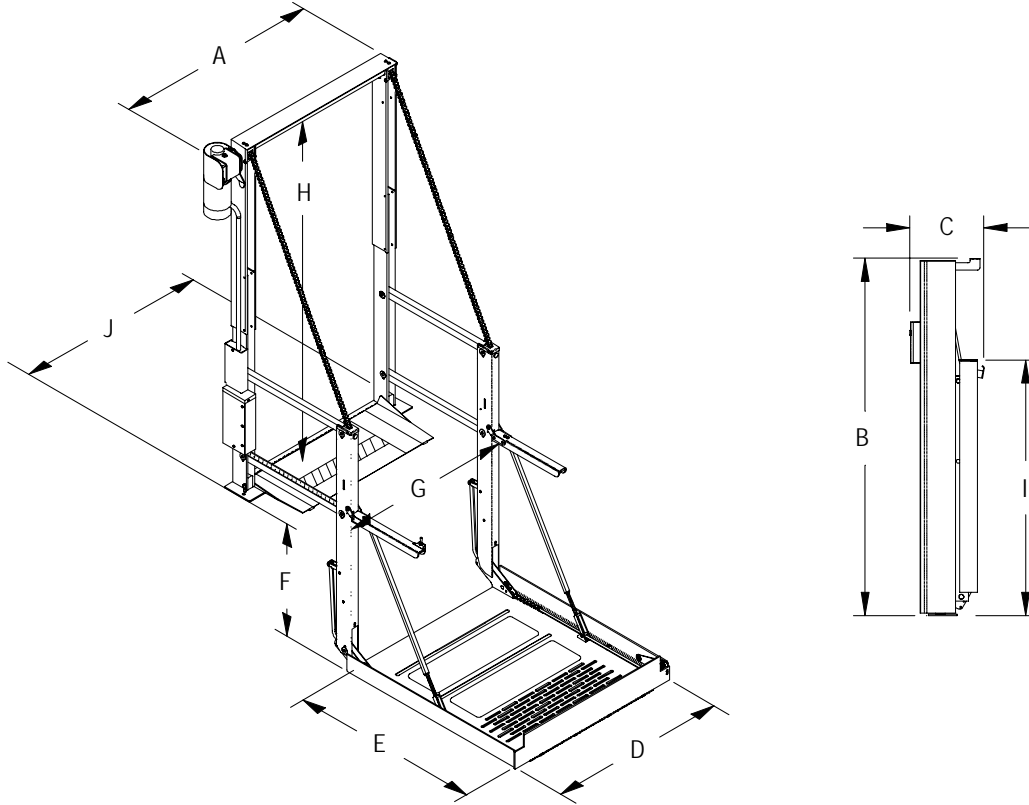
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APPENDIX 1 LIFT SPECIFICATIONS

UNI-lite WHEELCHAIR LIFT	
Power electro-mechanical Motor rating 12 Volt DC, 63 amp avg./cycle Lift weight 160 lbs.	Rated load capacity 600 lbs. Manual backup speed-wrench operated



RSM0040500

DIMENSIONS (inches)

MODEL	A	B	C	D	E	F	G	H	I	J
	Width, Stationary Frame	Height, Lift	Installation Depth (Folded)	Usable Platform Width	Usable Platform Length	Floor- to- Ground Travel	Width, Traveling Frame	Clear Entry Height	Floor to End of Platform, folded	Width, Base Plate
UL2400 Short	37	47-57	11.5	26	36	24	31	44-54	41	33.5
UL2806 Standard	40	50-57	11.5	29	40	28	34	47-54	45	36.5
UL2806 Standard	40	59-65	11.5	29	40	28	34	56-62	45	36.5
UL2808 Standard	40	50-57	11.5	29	44	28	34	47-54	50	36.5
UL2808 Tall	40	59-65	11.5	29	44	28	34	56-62	50	36.5
UL2810 Standard	43	50-57	11.5	32	40	28	37	47-54	45	39.5
UL2810 Tall	43	59-65	11.5	32	40	28	37	56-62	45	39.5

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