# RICON®

INNOVATION IN MOBILITY

# PSL-10 STEP ELEVATOR and WHEELCHAIR LIFT

PRINT

# **OPERATOR MANUAL**



07/02/01

32DSL101.B

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U.S. Patent no. 4,606,433 Other U.S and Foreign Patents Pending Printed in the United States of America

ONLY AUTHORIZED RICON SERVICE TECHNICIANS MAY SERVICE THIS RICON PRODUCT.

PRODUCT USERS MUST REFER TO THIS MANUAL FOR OPERATING AND GENERAL MAINTENANCE INSTRUCTIONS.

RETAIN THIS MANUAL IN THE VEHICLE FOR FUTURE REFERENCE.

	1
Customer Name:	- )
Installing Dealer:	.
Date Installed:	.
Serial Number:	.
	Γ

#### **REVISION RECORD**

REVISION	PAGES	DESCRIPTION OF CHANGE	ECR/ECO
32DSL101. B	All	Changed to curved arms on iso throughout manual.	3740/4773
D		Changed "dealer" to "service technician".	
07/02/01	1-3	Changed "dealer" to "shipment".	
	2-1 & 2-5	Added "UNLOCK" function to pendant.	
	2-2 & 2-3	Updated drawings, deleted item 3, added "stow lock manual release cable".	
	2-5, 3-3, 3-7 & 3-8	Rewrote "stow lock release" references to current configuration.	
	3-7 & 3-10	Added Figure "Close Release Valve"	
	4-1	Updated Daily Safety Check Table	
	4-2	Deleted decal 17736, changed decal 17631 to 19552	

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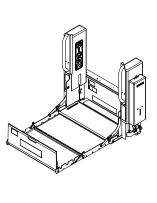
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#### INTRODUCTION

T his manual provides operating instructions for the Ricon PSL-10 Personal Step Elevator and Wheelchair Lift as installed in transit vehicles.



The step-lift is semi-automatic and is operated by a trained attendant. It does not block the vehicle doorway when stowed, thus allowing normal boarding and deboarding at this point. Step-lift capacity is 600lbs (272kg).

The vehicle interlock conditions must be met and the vehicle doors must be open prior to deploying the step-lift. The platform is then manually unfolded to accommodate a wheelchair passenger, or left folded in its step configuration to accommodate a standing passenger. The step-lift lifts the passenger from the ground to the vehicle floor, or lowers the passenger from floor to ground. Lifting power is provided by an electro-hydraulic pump. After use the platform is refolded and then returned to its stowed position. The step-lift has a manual backup pump that is used if normal power is lost.

It is important to user safety that these operating instructions be read and understood by the step-lift operator. It is also important that the Ricon recommendations for cleaning, inspecting and lubricating the step-lift be followed.

#### A. RICON PRODUCT SUPPORT

If there are questions about this manual, or you need copies, please contact the Ricon Product Support Department at the following location:

Ricon Corporation 7900 Nelson Road Panorama City, CA 91402 Telephone: (87

(818) 267-3000 (800) 322-2884

World Wide Website: www.riconcorp.com

#### RICON CORPORATION ONE-YEAR LIMITED WARRANTY

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

- Repair or replace parts for a period of one year starting from the date of purchase. A complete list of parts covered by this warranty can be obtained from Ricon Product Support.
- Labor costs for specified parts replaced under this warranty for a period of one year from the date put into service. A Ricon rate schedule determines parts covered and labor allowed.

*If You Need to Return a Product:* Return this product to Ricon Corporation, following the Ricon RMA procedure. Please give as much advance notice as possible, and allow a reasonable amount of time for repair.

#### This Warranty Does Not Cover:

- Labor or service charges, except as noted above.
- 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 an authorized Ricon service technician at least once every six months, or sooner if necessary. Any required maintenance should be performed at that time.

# 🔥 WARNING!

This product has been designed and manufactured to exact specifications.  $\sim$  Any modification of this product can be dangerous  $\sim$ 

#### This Warranty is Void If:

- The product has been installed or maintained by someone other than an authorized Ricon 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 in each state.

#### C. SHIPMENT INFORMATION

Check the received product for freight damage. Claims for damage should be made to the freight carrier immediately.

Be sure the installation kit contains all items listed on the included bill-of-material. Please report any missing items immediately to the Ricon Product Support Department. The war-ranty and owner's registration cards must be completed and returned to Ricon within 20 days for the warranty to be valid.

#### D. GENERAL SAFETY PRECAUTIONS

The following safety precautions must be adhered to during installation, operation, service and maintenance:

- Under no circumstances are installation, maintenance, repairs or adjustments to be attempted without the presence of a person capable of rendering aid.
- An injury, no matter how slight, should always be attended to. Always administer first aid or seek medical attention immediately.
- Protective eye shields and appropriate clothing should be worn at all times.
- To avoid injury, always exercise caution when operating step-lift and be certain that hands, feet, legs and clothing are not in the path of the step-platform as it moves.
- Be cautious when using metallic (conductive) tools near heavy-current power supplies.
- Check under vehicle before drilling or cutting to avoid damage to the frame, subframe members, wiring, hydraulic lines, etc.
- Read and thoroughly understand operating instructions before attempting to operate step-lift.
- Inspect product before each use. If an unsafe condition exists, or there are unusual noises or movements, do not use it until the problem is corrected.
- Keep others clear during step-lift operation.
- The product requires regular maintenance. A thorough inspection is recommended at least once every six months. The product should always be maintained at its highest level of performance.

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#### **II. DESCRIPTION**

# A. STEP-LIFT FUNCTIONS AND POSITIONS

Refer to **Table 2-1** for descriptions of steplift functions. Refer to **Figure 2-1**. These functions are controlled with two rocker switches on the control pendant. Refer to **Figure 2-2** for illustrations of the step-lift in its stowed, floor level, and ground level positions.

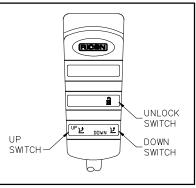


FIGURE 2-1: CONTROL PENDANT

	TABLE 2-1: STEP-LIFT FUNCTIONS	
FUNCTION	DESCRIPTION	
UP	Raises step/platform from either stow level or ground level. Releas- ing switch during upward motion halts movement.	
DOWN	Lowers step/platform from either stow level or floor level. Releas- ing switch during downward motion halts movement.	
	Releases the stow lock that secures the lift in the stow position. (The step-lift must be raised about four inches above the stow posi- tion to allow release of the stow lock.	

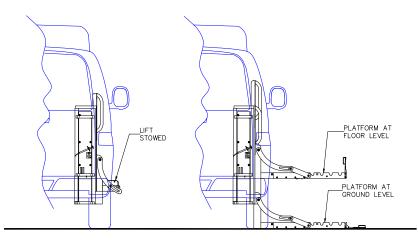
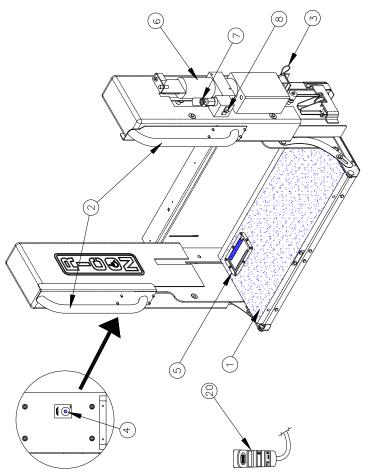
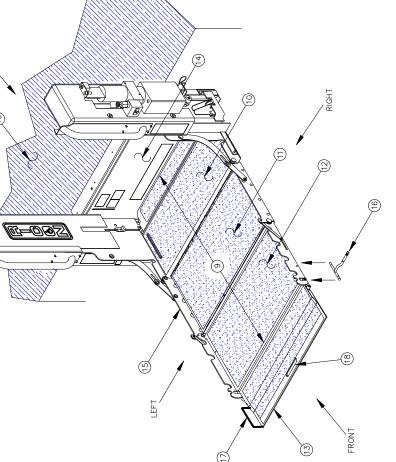


FIGURE 2-2: STEP/PLATFORM POSITIONS

#### B. MAJOR STEP-LIFT COMPONENTS

Major components referred to throughout this manual are illustrated in Figures 2-3 and 2-4, and defined in Table 2-2.





REAR

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	TABLE 2-2: STEP-LIFT COMPONENTS		
REF	NAME	DESCRIPTION	
1	Step	Small, non-skid surface that supports a standing passenger; un- folds into a platform.	
2	Handrails	Provide a brace for standing passengers.	
3	Stow-lock Manual Release Cable	Cable used to manually unlock platform from its stowed position.	
4	Emergency Over- ride Switch	Push-button switch used to enable pendant switch when platform interlock switch is inoperative; bypasses platform interlock switches.	
5	Recessed Handle	Provides a handgrip for unfolding and refolding platform sections.	
6	Hydraulic Pump Assembly	Electro-hydraulic power source that raises and lowers step-lift.	
7	Manual Pump Handle Socket	Socket on hydraulic pump assembly that manual pump handle is inserted into; used for manual lift operation.	
8	Manual Pump Release Valve	User accessible valve in hydraulic pump that is opened to lower step-lift; used for manual lift operation.	
9	Platform	Large, non-skid surface that supports a wheelchair; can be folded into a step.	
10	Rear Platform Section	Folding section of platform that is adjacent to inner rollstop.	
11	Middle Platform Section	Center section of folding platform.	
12	Front Platform Section	Folding section of platform that is adjacent to outer rollstop; outer rollstop is attached to its front edge.	
13	Outer Rollstop	Vertical barrier that helps to confine a wheelchair to platform; can be pivoted down for entry and exit.	
14	Inner Rollstop	Fixed vertical barrier that confines wheelchair to platform when platform is between floor level and ground.	
15	Side Barrier	Fixed barriers on left and right side of platform that help confine a wheelchair to platform.	
16	Platform Section Release Handle	T-handle locks front platform section to middle section; pulling it allows front section to be unfolded.	
17	Front Section Handle	Provides a handgrip for unfolding front platform section.	
18	Rollstop Handle	Provides a handgrip for outer rollstop. Used to lift rollstop out of its locking slots before moving it to open or stowed positions.	
19	Vehicle Floor	Interior floor area adjacent to fully raised step-lift.	
20	Control Pendant	Controls raising and lowering of step-lift.	

#### C. CONTROLS

1. CONTROL PENDANT

Refer to **Figure 2-5**. The step-lift is raised and lowered with two rocker switches mounted in a small box, or pendant. The pendant is hard-wired to the step-lift with a cable. The pendant is usually stowed near the step-lift on a clip mounted to a vehicle interior wall. A lift function is initiated by pushing the <u>end</u> of the appropriate switch. Push and hold the end labeled UP to raise the step platform; releasing the rocker switch will immediately halt movement. Push and hold the end labeled DOWN to lower the step platform; releasing the rocker switch will immediately halt movement. Push and hold the end of the switch with the unlock symbol to release the stow lock (lock secures lift in stow position).

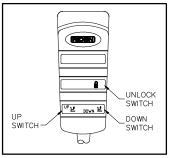


FIGURE 2-5: CONTROL PENDANT

**<u>NOTE:</u>** The step-lift must be raised about four inches above the stow position to allow release of the stow lock.

#### 2. EMERGENCY OVERRIDE SWITCH

Refer to **Figure 2-6**. There are three interlock switches, two sets of contacts, and a connector in the platform. All of these switches and contacts must be working properly to enable operation of the platform. If one of these components fails, the platform can be re-enabled with the override switch. This red switch is mounted on the left side of the left-hand column. Press and hold the override switch while using the pendant.

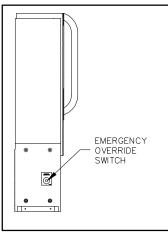


FIGURE 2-6: OVERRIDE SWITCH

#### 3. MANUAL STOW-LOCK RELEASE CABLE

Refer to **Figure 2-7**. The stow lock secures the step/platform in the stow position. The cable is used to manually releases the step/platform and allow it to be lowered when normal power is not available to the step-lift. The cable is connected to a latch mechanism near the base of the right hand column. The step must be raised about four inches above the stow position to allow release of the latch.

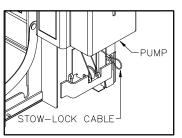
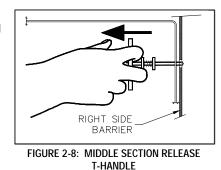


FIGURE 2-7: STOW-LOCK RELEASE

#### 4. MIDDLE PLATFORM SECTION RELEASE HANDLE

Refer to **Figure 2-8**. This T-handle is located at the right side of the platform, and secures the front platform section to the middle section. It is accessible after the middle section is unfolded from its step configuration. The T-handle is spring loaded to the lock position and is disengaged by pulling to the left. When the front section is refolded back onto the middle section, the spring will force the shaft of the T-handle into a hole in the platform right side barrier.



#### 5. FRONT PLATFORM SECTION HANDLE AND ROLLSTOP HANDLE

Refer to **Figures 2-9**. The front section handle is used to unfold the front platform section, or to grip the outer rollstop. When the platform is fully unfolded the handle is at the left end of the rollstop, as shown. When the rollstop is folded back against the front section the handle drops through a slot and protrudes out the back. This figure also shows the rollstop handle that is used to lift the rollstop out of its locking slots. The locking slots hold the rollstop in a vertical position.

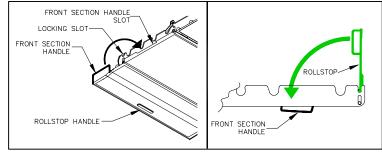


FIGURE 2-9: FRONT SECTION HANDLE AND ROLLSTOP HANDLE

#### 6. MANUAL BACK-UP PUMP

Refer to **Figure 2-10**. This pump is located on the right side of the right-hand column. When normal power is not available, the step-lift can be raised or lowered by using this manual back-up pump. The pump handle is stored near the pump. The handle is used to open and close the release valve or to pump the back-up pump.

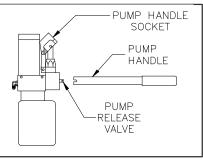


FIGURE 2-10: MANUAL BACK-UP PUMP

#### **III. OPERATING INSTRUCTIONS**

Safe and efficient use of the RICON PSL-10 Step Elevator and Wheelchair Lift requires a thorough understanding of its operation. Please read and understand all operating instructions before using step-lift.

#### A. SAFETY PRECAUTIONS

The following safety precautions must be observed at all times:

 Refer to Figure 3-1. It is dangerous to use the step-lift when the vehicle is on sloped ground or a steeply crowned road. Always attempt to park vehicle on a level, or near level, surface before using step-lift.



FIGURE 3-1: DO NOT USE STEP-LIFT WHEN VEHICLE IS ON SLOPED GROUND.

- Vehicle must have the parking brake applied, the transmission in neutral/park, and the doors open before using step-lift.
- Before deploying or stowing step-lift, check area around step-lift for objects that could interfere with step-lift operation.
- Do not change step-lift position unless operator can clearly see that it is safe to do so.
- Inspect step-lift before loading passengers. Do not use step-lift if unsafe to do so, or if unusual noises or movements are present.
- Keep others clear while operating step-lift.
- Persons using mobility equipment (e.g., wheelchairs, scooters, etc.) must enter or exit vehicle slowly and carefully, and must always face <u>OUTWARD</u>.
- Wheelchair and scooter brakes are less effective when the platform is wet or the mobility equipment wheels are wet. Be cautious in wet conditions.
- The step-lift is designed for one user at a time. Do not overload step-lift. Be certain mobility aid equipment fits safely on platform before entering or exiting vehicle.
- Never leave step-lift outside of vehicle; return step-lift to its stowed position after use.
- Do not allow children or others to play on step-lift, as this may be dangerous.
- Close supervision is necessary if step-lift is used near children.
- Do not allow arms or legs in or near any moving parts of step-lift.

#### B. DAILY SAFETY CHECK

Inspect the step-lift each day, preferably just prior to use, and be certain that the following conditions are met:

- All functions operate properly. DO NOT use if irregular noises or movements exist; contact an authorized Ricon service technician for repair.
- No objects are present that may interfere with step-lift operation.
- General appearance and lubrication are satisfactory.
- All fasteners are tight.

#### C. STEP-LIFT OPERATION

# A WARNING

IMPROPER USE OF THE STEP-LIFT CAN RESULT IN PERSONAL INJURY. OPERATORS MUST READ AND FOLLOW THE OPERATING INSTRUCTIONS IN THIS MANUAL. COPIES OF THIS MANUAL ARE AVAILABLE FROM:

#### RICON CORPORATION

#### 7900 NELSON ROAD

PANORAMA CITY, CA 91402

#### (800) 322-2884 OR (818) 267-3000

- □ PRIOR TO USE, INSPECT STEP-LIFT COMPONENTS FOR PROPER FUNCTION, RE-QUIRED MAINTENANCE OR DAMAGE. DO NOT USE IF A PROBLEM EXISTS, AND SEEK AN AUTHORIZED RICON SERVICE TECHNICIAN FOR REPAIR.
- DO NOT EXCEED STEP-LIFT LOAD CAPACITY OF 600 POUNDS (272 KILOGRAMS).
- □ THE STEP-LIFT IS DESIGNED FOR USE BY PEOPLE WHO CANNOT CLIMB STEPS, OR WHO MUST USE MOBILITY-AID EQUIPMENT (I.E., WHEELCHAIRS & WALKERS).

RICON CORPORATION DISCLAIMS LIABILITY FOR DAMAGE OR PERSONAL INJURY RE-SULTING FROM IMPROPER INSTALLATION, MODIFICATION TO THE STEP-LIFT OR OTHER COMPONENTS, LACK OF MAINTENANCE OR REPAIR, NEGLIGENCE, ABUSE OR FAILURE TO FOLLOW THE OPERATING INSTRUCTIONS.

- Be certain that vehicle is safely parked on near level ground and is away from traffic, before operating the step-lift. Provide space for step-lift operation, and the entering and exiting of passengers. Be certain that the touch down area for the step-lift is unobstructed.
- The step-lift will deploy **only** when the transmission is in neutral/park, and the door adjacent to the step-lift is open.
- Observe the Safety Precautions section at the beginning of this chapter.
- Use of the vehicles transmission will be restored when the step-lift is fully stowed and the door closed.
- Refer to Figures 2-3 and 2-4 in Chapter 2 for the locations of the handles, latches, etc, used to operate the step-lift.

#### 1. NORMAL STEP OPERATION

- a. Prepare Vehicle:
  - 1) Stop vehicle.
  - 2) Turn the step-lift main power switch ON, if present. Some vehicles may not be equipped with a separate power switch for the step-lift.
  - 3) Apply the vehicle parking brake, place transmission in neutral/park and open door at step-lift.
  - 4) Caution people in vicinity that step-lift is about to deploy. Vehicle beeper alert will sound at this time, if so equipped.
- b. RAISE Step-Lift to floor level.
  - 1) Press and hold UP button on control pendant; step-lift will stop at floor level.
- c. LOWER Step-Lift to ground level.
  - 1) Press and hold UP button until step is 4-5 inches above stow level.
  - 2) Press and hold the UNLOCK button on the control pendant.
  - 3) Press and hold DOWN button (while holding UNLOCK button); step will stop at ground level.
- d. ENTER vehicle from GROUND level:
  - 1) Passenger must stand on step facing INWARD and hold handrails.
  - 2) Press and hold UP button; step-lift will stop at floor level.

## **CAUTION**

Headroom will DECREASE as step-lift approaches interior floor level.

- 3) Passenger enters vehicle.
- e. EXIT vehicle from floor level:
  - 1) Passenger must stand on step facing OUTWARD and hold handrails.
  - 2) Press and hold UNLOCK button.
  - 3) Press and hold DOWN button (while holding UNLOCK button); step will stop at ground level.
  - 4) Passenger deboards.
- f. STOW step
  - 1) From FLOOR level:
  - 2) Press and hold DOWN button; step-lift will stop at STOW level.
  - 3) From GROUND level:
    - Press and hold UP button; step-lift will stop at floor level.
    - Press and hold DOWN button; step-lift will stop at STOW level.

#### 2. NORMAL WHEELCHAIR LIFT OPERATION

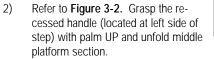
#### a. Prepare Vehicle:

- 1) Stop vehicle.
- 2) Turn the step-lift main power switch ON, if present. Some vehicles may not be equipped with a separate power switch for the step-lift.
- 3) Apply vehicle parking brake, place transmission in neutral/park and open door at step-lift.
- 4) Caution people in vicinity that step-lift is about to deploy. Vehicle alert beeper will sound at this time, if so equipped.

#### b. DEPLOY wheelchair lift from STOW position:

1) Press and hold **UP** button; step-lift will stop at floor level.





 Refer to Figure 3-3. Unlatch front platform section by pulling platform release T-handle (located at right side of platform) to the left.



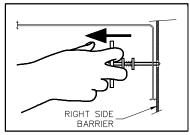


FIGURE 3-3: UNLATCH FRONT PLATFORM SECTION

4) Refer to Figure 3-4. Grasp front section handle (located at left side of front platform section) with left hand and begin to unfold. When this section is vertical, release left hand and grasp top edge with right hand. Finish unfolding.

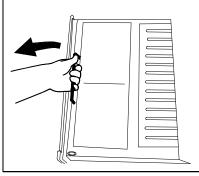


FIGURE 3-4: UNFOLD FRONT PLATFORM SECTION

5) Refer to Figure 3-5. Grasp rollstop handle and raise outer rollstop to vertical position. Drop it into locking slots, and then test rollstop to be certain it is locked in place.

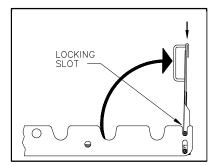


FIGURE 3-5: RAISE OUTER ROLLSTOP

- c. LOWER occupied platform from FLOOR level for deboarding:
  - 1) Test the outer rollstop to be certain it is locked in the RAISED position.
  - 2) Place passenger (on mobility-aid equipment) on platform facing OUTWARD.
  - Release stow-lock by press-3) ing and holding the UNLOCK button.
  - Press and hold DOWN button 4) (while holding UNLOCK button); platform will stop at ground level.
  - 5) Refer to Figure 3-6. Grasp rollstop handle and lift outer rollstop out of locking slots (about an inch). Lower to ground.

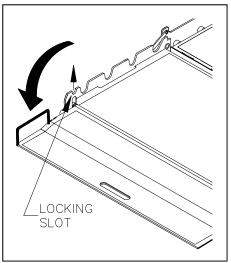


FIGURE 3-6: LOWER OUTER ROLLSTOP

Deboard passenger. 6)



#### 32DSL101.B

- d. RAISE <u>occupied</u> platform from GROUND level for boarding:
  - Refer to Figure 3-7. Grasp rollstop handle and lift outer rollstop out of locking slots (about an inch). Lower to ground.
  - Place passenger (on mobility-aid equipment) on platform facing OUTWARD.
  - Refer to Figure 3-8. Grasp rollstop handle and raise outer rollstop to vertical position, then drop it into locking slots. Test rollstop to be certain it is locked in place.
  - 4) Press and hold UP button; step-lift will stop at floor level.
  - 5) Board passenger into vehicle.
- e. STOW Platform:

From FLOOR level or GROUND level:

- Press and hold UP button until platform is at floor level, if it is not already there.
- Refer to Figure 3-9. Store outer rollstop by lifting and folding it rearward from either its vertical or open position.

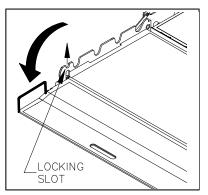


FIGURE 3-7: LOWER OUTER ROLLSTOP

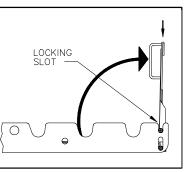


FIGURE 3-8: RAISE OUTER ROLLSTOP

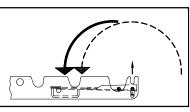


FIGURE 3-9: STORE OUTER ROLLSTOP

### **A** CAUTION

Keep fingertips away from folding platform sections.

- 3) Refer to Figures 3-3 and 3-4. Grasp front edge of outer platform section and lift to vertical position. Shift grasp to front section handle (protruding through left side of section) and finish folding section rearward. Observe that platform section release T-handle (located at right side of platform) has securely engaged hole in right side barrier.
- 4) Carefully fold remaining platform section.
- 5) Press and hold DOWN button; step-lift will stop at STOW position.

#### 3. MANUAL OPERATION

The step lift can be operated manually if normal lift power is not present. This procedure describes manual operation of the step-lift in its <u>platform</u> configuration. Omit steps that describe unfolding of platform sections when using step-lift in its <u>step</u> configuration.

**a**. Prepare Vehicle:

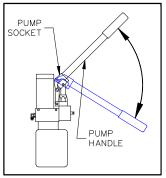
Be certain vehicle is on a level area and away from traffic. Provide adequate space for safe lift operation and passenger boarding. If vehicle has broken down and the parking situation is unsafe then operator must summon emergency assistance to move vehicle before operating lift.

- Check for obstacles that may be in path of step-lift as it deploys.
- Open door(s) completely.
- Caution people in vicinity that step-lift will deploy; vehicle beeper alert <u>may</u> sound at this time, if so equipped.

## 🔨 WARNING

FOLLOW SAFETY PRECAUTIONS AT BEGINNING OF THIS CHAPTER WHEN USING MANUAL BACK-UP SYSTEM TO ENTER OR EXIT VEHICLE.

- b. Deboard Passengers
  - Refer to Figure 3-10. Locate manual back-up pump on right side of right column. Insert pump handle into socket on manual pump and pump until step-lift is about four inches above stow level. If step-lift does not rise refer to Figure 3-11 and check that release valve is closed.



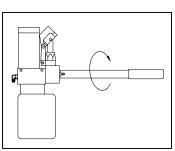


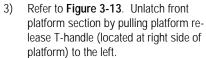
FIGURE 3-10: RAISE STEP-LIFT ABOUT 4"

FIGURE 3-11: CLOSE RELEASE VALVE

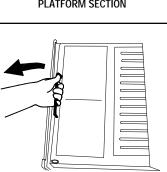
# **AUTION**

Recessed handle may pinch fingertips when step nears end of unfolding movement.

2) Refer to **Figure 3-12**. Grasp the recessed handle (located at left side of step) with palm UP and unfold middle platform section.



4) Refer to Figure 3-14. Grasp front section handle (located at left side of front platform section) with left hand and begin to unfold front section. When it is vertical, release left hand and grasp top edge with right hand. Finish unfolding.



- FIGURE 3-14: UNFOLD FRONT PLATFORM SECTION
- 5) Refer to **Figure 3-15**. Grasp rollstop handle and raise outer rollstop to vertical position, then drop it into locking slots. Test rollstop to be certain it is locked in place.
- 6) Resume pumping until platform is at floor level.
- Place passenger (on mobility-aid equipment) on platform facing <u>OUT-</u> <u>WARD</u>.

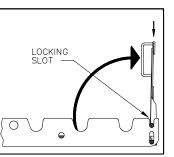


FIGURE 3-15: RAISE OUTER ROLLSTOP

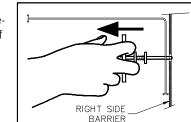


FIGURE 3-12: UNFOLD STEP WITH PALM UP

FIGURE 3-13: UNLATCH FRONT PLATFORM SECTION

8) Refer to **Figure 3-16**. Pull and hold the manual release cable (located below the pump on the side of right column).

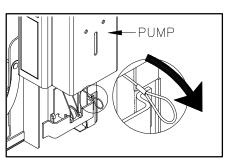


FIGURE 3-16: RELEASE STOW-LOCK

9) Refer to Figure 3-17. Engage pump release valve with notched end of pump handle. Turn valve 1/4 turn COUNTER-CLOCKWISE to begin lowering platform. Hold valve open until platform settles at ground level. Turn handle CLOCKWISE to close valve; DO NOT OVER-TIGHTEN VALVE.

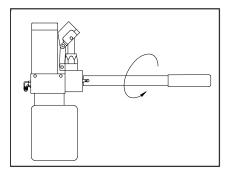


FIGURE 3-17: OPEN RELEASE VALVE

- 10) Refer to **Figure 3-18**. Grasp rollstop handle and lift outer rollstop out of locking slots (about an inch). Lower to ground.
- 11) Deboard passenger.
- 12) The platform can be refolded back into its step arrangement, and the manual pump used to return step lift to its stowed position. Refer to "STOW Platform" paragraph in previous "Normal Step-Lift Operation" section for details.

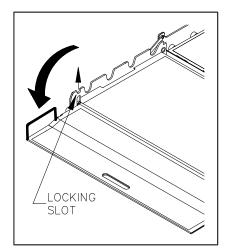


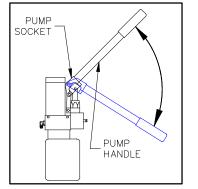
FIGURE 3-18: LOWER OUTER ROLLSTOP

c. Board Passengers

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FOLLOW "SAFETY PRECAUTIONS" AT BEGINNING OF THIS CHAPTER WHEN USING MANUAL BACK-UP SYSTEM TO ENTER OR EXIT VEHICLE.

 Refer to Figure 3-19. Locate manual back-up pump on right side of right column. Insert pump handle into socket on manual pump and pump until step lift is about four inches above stow level. If step-lift does not rise, refer to Figure 3-20 and be certain release valve is closed.



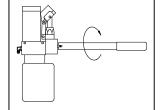


FIGURE 3-20: CLOSE RELEASE VALVE

FIGURE 3-19: RAISE STEP-LIFT ABOUT 4"

# **A** CAUTION

Recessed handle may pinch fingertips when step nears end of its unfolding movement.

2) Refer to **Figure 3-21**. Grasp the recessed handle (located at left side of step) with palm UP and unfold middle platform section.

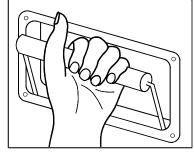


FIGURE 3-21: UNFOLD STEP WITH PALM UP

 Refer to Figure 3-22. Unlatch front platform section by pulling platform release T-handle (located at right side of platform) to the left.

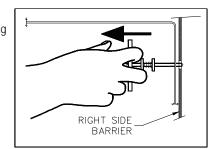


FIGURE 3-22: UNLATCH FRONT PLATFORM SECTION

4) Refer to Figure 3-23. Grasp hoop handle (located at left side of front platform section) with left hand and begin to unfold front section. When it is vertical, release left hand and grasp top edge with right hand. Finish unfolding.

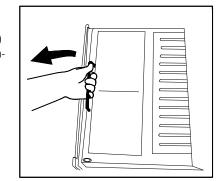


FIGURE 3-23: UNFOLD FRONT PLATFORM SECTION

5) Refer to **Figure 3-24.** Grasp rollstop handle and raise outer rollstop to vertical position, then drop it into locking slots. Test rollstop to be certain it is locked in place.

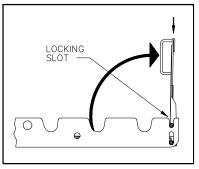


FIGURE 3-24: RAISE OUTER ROLLSTOP

6) Refer to **Figure 3-25**. Pull and hold manual release cable (located below the pump on side of right column).

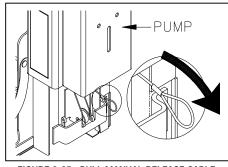


FIGURE 3-25: PULL MANUAL RELEASE CABLE

- 7) Refer to Figure 3-26. Engage pump release valve with notched end of pump handle. Turn valve 1/4 turn COUNTER-CLOCKWISE to begin lowering platform. Hold valve open until platform settles at ground level. Turn handle CLOCKWISE to close valve; DO NOT OVER-TIGHTEN VALVE.
- 8) Place passenger (on mobilityaid equipment) on platform facing <u>OUTWARD</u>.
- 9) Refer to **Figure 3-27**. Grasp rollstop handle and raise outer rollstop to vertical position, then drop it into locking slots. Test rollstop to be certain it is locked in place.
- 10) Pump platform up to floor level.
- 11) Board passenger into vehicle.
- 12) The platform can be refolded back into its step arrangement and the release valve used to return step lift to its stowed position. Refer to "STOW Platform" paragraph in previous "Normal Step-Lift Operation" section for detailed instructions.

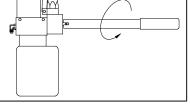
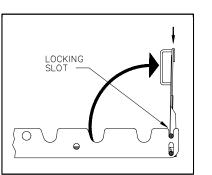


FIGURE 3-26: OPEN RELEASE VALVE





## **IV. MAINTENANCE**

Regular maintenance and safety inspections of the RICON PSL-10 Step Elevator and Wheelchair Lift can provide optimum performance and reduce the need for repairs. Refer to the PSL-10 Service Manual for complete maintenance and troubleshooting instructions.

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This Ricon product is highly specialized. Maintenance must be performed by a Ricon authorized service technician using Ricon replacement parts. Modification or improper maintenance of this product will void the warranty and may result in unsafe step-lift operating conditions.

#### A. DAILY SAFETY CHECK

Daily Safety inspections should be performed according to **Table 4-1**. Maintenance should be performed more frequently under conditions of heavy use (in excess of 20 cycles per day).

TABLE 4-1: DAILY SAFETY CHECK	
SERVICE POINT	CHECK
	STEP LIFT STOWED
Control Pendant	Control pendant for damage and cable connectors for tightness.
Hydraulic Power	1. Visible hydraulic fluid leakage.
Unit	2. Backup pump manual release valve is closed (lightly-seated).
Vehicle Interlock	<b>A</b> CAUTION
System	One person must be in driver seat to maintain vehicle control during following check.
	One operator sets parking brake, depresses vehicle brake pedal, turns on ignition and places transmission in gear. The second operator opens vehicle side door(s) and verifies that lift DOES NOT operate.
Handrails	Handrail mounting bolts are tight.
	PLATFORM DEPLOYED
Platform	Platform unfolds smoothly (no grinding noise or binding) and all joints are secure.
Decals	Decals are securely attached, clearly visible and legible.
Outer Rollstop	Rollstop can be locked in upright position.
	RAISE PLATFORM TO FLOOR LEVEL
Step-Lift Operation	Listen for abnormal noises as step-lift operates (i.e. grinding or bind- ing noises).
Step-Lift Travel	Step-lift rises fully to floor level
Platform Level	Lift stops at step level when Stow Lock is engaged.
LOWER PLATFORM TO GROUND LEVEL	
Step-Lift Operation	Listen for abnormal noises as lift operates (i.e. grinding or binding noises).
Step-Lift Travel	Lift travels completely to ground level.

(continued)		
Outer Rollstop	Rollstop opens fully and locks in upright position.	
Hydraulic Power Unit	Hydraulic fluid level in reservoir.	
STOW LIFT		
Outer Rollstop	Rollstop pivots down flush against platform.	
Platform	Platform folds completely into step configuration.	
Stow Lock	Stow Lock securely engages lift at stow level.	
END OF TABLE		

#### B. STEP-LIFT DECALS

Refer to **Figure 4-1**. Check the condition of all decals for chipping, peeling, fading and illegibility. Check at the intervals listed in **Table 4-1**, and replace decals as necessary. The decals should be located and orientated as shown. Part numbers for individual decals are given here, with the exception of the serial number decal, which can only be replaced by Ricon.

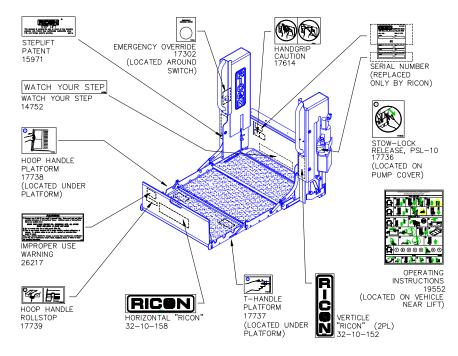


FIGURE 4-1: DECAL LOCATIONS