II. W-SERIES WHEELCHAIR LIFT OPERATING INSTRUCTIONS

This chapter contains safety precautions, daily safety check instructions, control and indicator descriptions and operating instructions for the RICON W-Series Wheelchair Lift. This chapter must be thoroughly understood before attempting to use the lift.

A. SAFETY PRECAUTIONS

Comply with the following safety precautions when operating the lift:

- Perform the Daily Inspection described in Table 2-1 (refer to Section B in this chapter).
- Refer to Figure 2-1. Deploying the lift when vehicle is on sloped ground is hazardous. Operate lift with vehicle parked on level ground.

![Figure 2-1: DO NOT DEPLOY LIFT WHEN VEHICLE IS ON SLOPED GROUND](image1)

- Vehicle must be safely parked with parking brake ON before using lift.
- The operator must inspect lift before use. If unusual noises, movements, or other unsafe conditions are noticed, do not use lift and contact an authorized Ricon service technician for repair.
- Read and comply with all warning labels and symbols affixed to wheelchair lift.
- Refer to Figure 2-2. Wheelchair occupant must FACE OUTWARD on platform while entering or exiting vehicle. This is necessary due to the possibility that the large rear wheels could roll over the front rollstop.

![Figure 2-2: FACE OUTWARD](image2)
- Verify that front rollstop is up before raising or lowering platform.
- Do not rely on an audible threshold warning device to confirm that it is safe to exit the vehicle while facing backwards. This device can be inoperative or unheard, and you might exit backwards when the platform is on the ground!
- When exiting vehicle, the attendant must verify that platform is at vehicle floor level and the front rollstop is up and locked.
- The raised front rollstop prevents slow and unintentional rolling off of the platform. It is NOT intended to stop a fast-moving wheelchair, which might tip forward if the small front wheels collide with the rollstop.
- Be certain wheelchair fits safely on the platform and does not extend over edges of platform or interfere with operation of rollstop.
- Do not operate with a platform load in excess of 800 lbs (364 kg).
- Do not allow arms, legs, or clothing near moving parts.
- The lift is designed to transport ONE wheelchair and its occupant, or a single standee. Do not overload lift.
- Do not stand in front of lift while deploying platform.
- Keep others clear while operating lift.
- Do not allow an untrained person to operate lift.
- Do not allow anyone to stand or walk on the bridgeplate when it is unsupported. A bent bridgeplate can cause interference with platform as it rises or lowers.
- LOCK WHEELCHAIR BRAKES before lift is operated. Powered wheelchairs should have their power turned off and brake set.
- Use extreme care in wet conditions. Wheelchair brakes are less effective if platform or wheels are wet.
- Never leave platform outside of vehicle. Always return platform to stowed position after use.
- Do not place large equipment or furniture inside vehicle that may prevent pivoting of your wheelchair. Being able to pivot assures that you can safely exit facing outward.
- Do not load a wheelchair into vehicle if it is too large to pivot freely when inside vehicle.

Be sure these safety precautions have been read and understood. Review them periodically, and ask other attendants or operators to read them as well. If there are any questions, contact Ricon Product Support.

B. DAILY SAFETY CHECK
Inspect the lift before each use and check that the following conditions are met before operating:
- All functions operate properly. DO NOT use if unusual noises or movements exist, and contact a Ricon authorized Service Technician for repair.
- No objects that can interfere with motion of platform are present.
- General appearance and lubrication are satisfactory and all fasteners are tight.
### C. PLATFORM MOTIONS

#### TABLE 2-1: PLATFORM MOTIONS

<table>
<thead>
<tr>
<th>MOTION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPLOY</td>
<td>Platform unfolds, or deploys, out of vehicle from stowed position.</td>
</tr>
<tr>
<td>DOWN</td>
<td>Platform is lowered from vehicle floor level to ground level. The rollstop automatically opens (or lowers) when platform contacts ground.</td>
</tr>
<tr>
<td>UP</td>
<td>Platform is raised from ground level to vehicle floor level. The rollstop automatically closes (or rises) when platform leaves ground level.</td>
</tr>
<tr>
<td>STOW</td>
<td>Platform folds into stowed position from vehicle floor level.</td>
</tr>
</tbody>
</table>

**END OF TABLE**

**NOTE:** The up and down functions do not operate if platform is in stowed position.

![Diagram of platform positions](image)

**FIGURE 2-3: PLATFORM POSITIONS**
D. LIFT CONTROLS

![WARNING]

THE LIFT IS ALLOWED TO OPERATE ONLY WHEN VEHICLE MANUFACTURER
INTERLOCK CIRCUITRY IS ACTIVATED. NEVER ATTEMPT TO OPERATE LIFT
WITH INTERLOCK BYPASSED. REFER TO VEHICLE OWNER/OPERATOR MAN-
UAL FOR INTERLOCK INSTRUCTIONS BEFORE OPERATING LIFT.

- CONTROL PENDANT

Refer to Figure 2-4. Platform motions are controlled with a hand held, hard-wired remote control pendant. It has two dual-position rocker switches. Pushing, and holding, one end of a rocker switch controls the platform motions. The ends of the rocker switches are referred to here as “buttons”. Pushing the DEPLOY button unfolds the platform from vehicle and pushing the STOW button folds platform into vehicle. Pushing the DOWN button lowers the platform towards the ground and pushing the UP button raises the platform towards floor. The pendant is typically stowed on a wall-clip located inside the vehicle.

![Figure 2-4: Control Pendant]
ELECTRICAL CONTROLS

- Control System Circuit Breaker
  Refer to Figure 2-5. The Control System Circuit Breaker is on the hydraulic pump assembly. In the event of a control system short circuit, the circuit breaker button will "pop-up". If pressing and releasing the button does not reset power, DO NOT press it and hold. Contact a Ricon authorized service technician for repair.

- Main Circuit Breaker
  Refer to Figure 2-6. The main circuit breaker is located in the vehicle engine compartment and interrupts electrical power to the lift electrical system when a short circuit occurs. In the event of a short circuit, the circuit breaker reset tab will "flip-down". Rotate as shown to reset. If rotating reset tab does not restore power, DO NOT rotate tab and hold it. Contact a Ricon authorized service technician for repair.
• **MANUAL BACKUP PUMP**

Refer to Figure 2-7. The manual backup pump is used to operate the lift if electrical power is not available. Controls for the pump are a pump handle used to raise the platform and a pressure release valve to lower it. Instructions for operating the manual pump are provided in the MANUAL OPERATION section.

![Diagram of manual backup pump](image)
### E. NORMAL LIFT OPERATION

**WARNING**

- IMPROPER USE OF LIFT CAN RESULT IN PERSONAL INJURY. USERS MUST READ AND FOLLOW OPERATING INSTRUCTIONS. ADDITIONAL COPIES OF OPERATOR MANUAL ARE AVAILABLE FROM:

  RICON CORPORATION  
  7900 NELSON ROAD  
  PANORAMA CITY, CA 91402  
  (800) 322-2884 or (818) 267-3000

- DO NOT EXCEED RATED LOAD CAPACITY OF 800 POUNDS (364 KG).

- PRIOR TO USE, INSPECT WHEELCHAIR LIFT FOR PROPER FUNCTION, REQUIRED MAINTENANCE, OR DAMAGE. IF A PROBLEM EXISTS, DO NOT USE LIFT AND CONTACT A RICON AUTHORIZED SERVICE TECHNICIAN FOR REPAIR.

- THIS LIFT IS FOR USE BY A WHEELCHAIR AND OCCUPANT OR A STANDEE. RICON CORPORATION DISCLAIMS LIABILITY FOR DAMAGE OR PERSONAL INJURY RESULTING FROM MODIFICATION TO LIFT, LACK OF MAINTENANCE OR REPAIR, NEGLIGENCE, ABUSE, OR FAILURE TO FOLLOW LIFT OPERATING INSTRUCTIONS.

- Before operating lift, be certain vehicle is safely parked on a level area away from traffic. Provide space for lift operation and passenger boarding.
- The lift operator must verify that the area in the vicinity of the lift is clear before deploying platform. Be certain there are no obstacles where platform will contact ground.
- Completely open vehicle doors adjacent to lift and verify that they are held open.

**WARNING**

ATTENDANT SHOULD ALWAYS REMAIN NEAR PASSENGER TO RENDER IMMEDIATE ASSISTANCE IF NECESSARY. KEEP OTHERS CLEAR WHEN OPERATING LIFT. BE CERTAIN WHEELCHAIR FITS PROPERLY ON PLATFORM AND DOES NOT CONTACT ROLLSTOP, WHICH WOULD PREVENT IT FROM LOCKING WHEN PLATFORM RISES.

1. **ENTERING VEHICLE**
   a. **DEPLOY PLATFORM** - Push and hold DEPLOY button until platform is completely unfolded at floor level.
   b. **LOWER PLATFORM** - Push and hold DOWN button until platform contacts ground and rollstop opens completely.
   c. Place wheelchair in center of platform, facing outward, and lock wheelchair brakes.

**NOTE:** Be certain wheelchair is safely within platform perimeter and does not interfere with operation of front rollstop.

   d. **RAISE PLATFORM** - Push and hold UP button while platform rises and then stops automatically at floor level.

   e. Verify that platform is at vehicle floor level and bridgeplate is resting squarely on rear edge of platform.

   f. Release wheelchair brakes and assist passenger into vehicle.
g. Refer to “Stowing Platform” section below and stow platform.

2. EXITING VEHICLE
   a. **DEPLOY PLATFORM** - Push and hold DEPLOY button until platform is completely unfolded at floor level.
   b. Verify that platform is at vehicle floor level, the bridgeplate is resting squarely on rear edge of platform, and platform rollstop is up and locked.
   c. Place wheelchair in center of platform, facing outward, and lock wheelchair brakes.

   ![WARNING]
   DO NOT STAND ON BRIDGEPLATE AS PLATFORM LOWERS.

   d. **LOWER PLATFORM** - Push and hold DOWN button until platform contacts ground and rollstop opens completely.
   e. Release wheelchair brakes and assist passenger off of platform.
   f. Refer to “Stowing Platform” section below to stow platform.

3. STOWING PLATFORM
   a. Push and hold STOW button until platform folds completely into vehicle.

   ![CAUTION]
   Do not release STOW button until platform has folded completely and hydraulic pump motor has stopped running. Be certain platform is completely folded before attempting to close doors.

   b. Close vehicle doors.
F. MANUAL LIFT OPERATION

**WARNING**

FOLLOW SAFETY PRECAUTIONS AT BEGINNING OF CHAPTER WHEN USING MANUAL BACKUP SYSTEM TO EXIT VEHICLE.

If lift electrical power is not functional, the lift can be operated manually. Open and secure vehicle doors before operating lift. Ricon recommends that manual lift operation be used only for unloading passengers.

1. DEPLOY PLATFORM
   a. Refer to Figure 2-8. Insert notched end of pump handle into hole in hydraulic pump cover marked “RELEASE VALVE” and engage pump release valve.

   **CAUTION**
   Do not open pump release valve more than 1/4-turn. Opening valve further may cause it to disengage from pump body, which will disable pump.

   ![Figure 2-8: Manual Operation](image)

   b. Turn valve 1/4 turn counterclockwise to begin unfolding platform. When platform unfolds to vehicle floor level turn valve clockwise to close it; do not lower platform below floor level. The front edge of bridgeplate must rest flat against the rear edge of the platform.

   **NOTE:** Do not over-tighten valve when closing it.

   c. Place wheelchair in center of platform, facing outward, and lock wheelchair brakes

2. LOWER PLATFORM
   a. Refer to Figure 2-8. Turn valve 1/4 turn counterclockwise to begin lowering platform.
   b. Hold valve open until platform settles at ground level. Turn valve clockwise to close it.

   **NOTE:** Do not over-tighten valve when closing it.
3. **STOW PLATFORM**
   
a. Refer to **Figure 2-9**. Check pump release valve to be certain it is closed. Insert pump handle into pump handle socket. Operate pump to begin raising platform.

![Figure 2-9: MANUAL BACK-UP PUMP - RAISE PLATFORM](image)

b. Operate pump until lift is COMPLETELY folded inside vehicle.

c. Stow pump handle. Close vehicle doors.