

# Operating Instructions

## WHEEL CHAIR LIFT

9700 Bus

**VOLVO**

# Foreword

This manual contains information concerning the operation and function of the Wheel Chair Lifter mounted on the 9700 US/CAN.

Illustrations in this manual are used for reference only and may differ slightly from the actual vehicle. However, key components addressed in this document are represented as accurately as possible.

The National Highway Traffic Safety Administration (NHTSA) and Prevost should be informed immediately if you believe that the vehicle has a defect that could cause a crash, injury or death.

Contact NHTSA by calling the Auto Safety Hotline at 1(888) 327-4236, by writing to NHTSA, U.S Department of Transportation, Washington, DC 20590, by TTY at 1 (800) 424-9153, or visit their web site at [www.nhtsa.dot.gov](http://www.nhtsa.dot.gov).

## **Volvo Bus Corporation**

Göteborg, Sweden

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# Safety Information

**IMPORTANT:** Before driving this vehicle, be certain that you have read and that you fully understand each and every step of the driving and handling information in this manual. Be certain that you fully understand and follow all safety warnings.

It is important that the following information be read, understood and always followed.

The following types of advisories are used throughout this manual:



## DANGER

Danger indicates an unsafe practice that could result in serious personal injury or death. A danger advisory banner is in **white** type on a **black** background with a **black** border.



## WARNING

Warning indicates an unsafe practice that could result in personal injury. A warning advisory banner is in **black** type on a **gray** background with a **black** border.



## CAUTION

Caution indicates an unsafe practice that could result in damage to the product. A caution advisory is in **black** type on a **white** background with a **black** border.

**Note:** Note indicates a procedure, practice, or condition that must be followed in order for the vehicle or component to function in the manner intended.

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## Introduction

The bus Volvo 9700 US/CAN could be equipped with a Wheel Chair Lifter, intended to provide wheelchair access to the vehicle.

The mechanical linkages provide smooth movement to the platform, which has a rated load capacity of 600 pounds (273 kilograms). Five hydraulic cylinders are employed to move the lift components. Two cylinders are mounted within the scissors assembly to extend and retract the platform assembly. A third cylinder raises and lowers the inner barrier.

The remaining two cylinders raise and lower the platform assembly. The movement of these cylinders is multiplied by a chain lift connected between the intermediate frame (rear portion of platform assembly) and the platform itself. As the cylinders lift the intermediate frame the chain lift doubles the movement of the platform assembly.

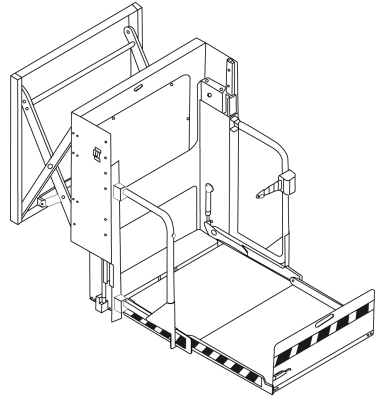
The lift contains an electro-hydraulic pump with a built-in manual backup pump. If the lift loses electrical power, it can be raised or lowered manually. The cylinders are controlled by solenoid valves that are operated manually if there is an electrical failure.

## 2 Introduction

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Platform movement is controlled with buttons on the hand held pendant. By using the buttons, the lift is extracted from the vehicle storage compartment and lowered to the ground level. The passenger boards the large non-skid platform and the operator uses the buttons to raise the platform to vehicle floor level. After the passengers departs, the platform is raised and retracted back into the vehicle. A similar procedure is used to exit.

This manual contains information about safety precautions, operating instructions, and maintenance. It is important to user safety that the lift operator be completely familiar with the operating instructions. Once the lift is installed, it is very important that the lift be properly maintained by following the Volvo recommended maintenance and inspection instructions.



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## **General Safety Precautions**

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

- To avoid injury, always exercise caution when operating lift and be certain that hands, feet, legs, and clothing are not in the path of product movement.
- Read and thoroughly understand the operating instructions.
- Inspect the product before each use for unsafe conditions, and unusual noises or movements. Do not use lift until any problems are corrected.
- Stand clear of doors and platform and keep others clear during operation.
- The product requires regular periodic maintenance. A thorough inspections is recommended at least once every six months. The product should be maintained at the highest level of performance.

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### Major Lift Components

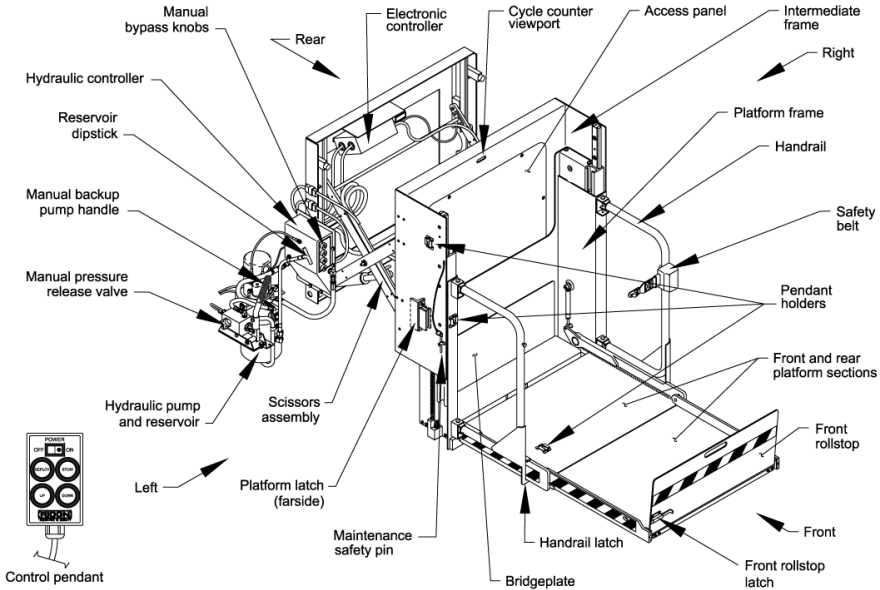
The terms used throughout are illustrated in the picture and defined in the table.

BAYLIFT TERM DEFINITIONS	
TERM	DESCRIPTION
Left, right, front, rear	Position references when installed lift is viewed from outside of vehicle.
Access panel	Provides easy access to components located behind intermediate.
Audible alarm	(not shown) Announces that something has passed through doorway threshold area and platform. Is 71” from vehicle floor level and is activated by threshold warning system (TWS). Refer to “Threshold Warning System” in chapter “Operating Instructions”.
Bridgeplate	Plate bridges gap between platform and vehicle floor when platform is at floor level. Acts as rear barrier during up and down platform motions to prevent wheelchair from rolling off of platform.
Control pendant	Hand-held device controls platform motions.
Cycle counter viewport	When platform is stowed the counter can be see here. It records number of times platform has moved from floor to ground and back to floor.
Electronic controller	Receives input signals from pendant and lift sensors and sends control signals to pump motor and hydraulic controller.
Front and rear platform sections	Lift components where wheelchair and occupant are situated during UP and DOWN platform motions. Folds and stows into platform frame.
Front rollstop	Front barrier prevents the wheelchair from inadvertently rolling off platform during platform movements.
Front rollstop latch	Manually operated latch locks front rollstop in stowed position. Rollstop is locked in upright position by dropping into slots.
Handrail	(left and right) Provides a handhold for standing passenger (standee).

Handrail latch	(left and right) Manually operated latch locks handrail in outward or inward position. Push handrail downward to release latch.
Hydraulic controller	Electro-hydraulic, solenoid valve system controls distribution of hydraulic fluid to cylinders. Receives input signals from electronic controller.
Hydraulic pump and reservoir	Hydraulic pump is driven by electric motor and procedures pressure to extend and raise platform and to raise bridgeplate.
Intermediate frame	Rigid structure suspended on outer ends of scissor assembly. Platform frame is attached to front face.
Maintenance safety pin	(left and right) Maintenance item that is employed to lock platform in position on intermediate frame. Must be removed for normal operation.
Manual backup pump handle	Use to operate manual backup pump when electrical power is not available.
Manual bypass knobs	Four knobs are employed during manual operation to control distribution of hydraulic fluid to preferred lift cylinders.
Manual pressure release valve	Opening valve bleeds pressure from hydraulic system, allowing platform or bridgeplate to lower.
Pendant holders	(up to three each, depending on application) Storage clips for pendant. One clip is attached to bottom of platform.
Platform frame	Structure that platform and handrails attach to. Moves up and down on sliders fastened to intermediate frame.
Platform latch	Magnetic catch that holds folded platform sections in upright position.
Reservoir dipstick	Use to determine fluid level in reservoir.
Safety belt	Safety restraint belt that spans between handrails to confine passenger.

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<p>Scissors assembly</p>	<p>(left and right) Telescoping components that support intermediate frame and platform, and allow horizontal movement.</p>
<p>Visual alarm</p>	<p>(not shown) Flashing red light makes it know that something has passed through doorway threshold area. Activated by threshold warning system (TWS). Refer to “Threshold Warning System”.</p>



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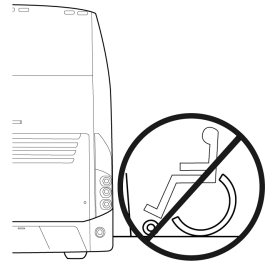
## Operating Instructions

The following safety precautions must be complied with when operating lift.

- Deploying the lift when vehicle is on sloped ground is hazardous. Operate lift with vehicle parked on level ground.
- Vehicle must be safely parked with parking brake set before using lift.
- Inspect lift before use. Do not use lift if an unsafe conditions exists, or unusual noises or movements are noticed, and contact a Volvo authorized service technician for repair.
- Read and comply with all warning labels affixed to wheel chair lift and vehicle.
- Wheelchair occupant should face outward on platform when entering or exiting vehicle to minimize the possibility of the large rear wheels rolling up and over the front rollstop.



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## 8 Operating Instructions

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- Do not load an oversize wheelchair into vehicle if it is too large to pivot freely inside vehicle.
- Do not place large equipment inside vehicle that can prevent pivoting of a wheelchair. Being able to pivot assures that a passenger can safely exit facing outward.
- Do not rely on a threshold-warning device (audible, or other) to confirm that is safe for a passenger to exit backwards. This device may be inoperative or unheard, and they might exit backwards when the platform is on the ground!
- When exiting vehicle, verify that platform is at same height as floor and front rollstop is upright and locked.



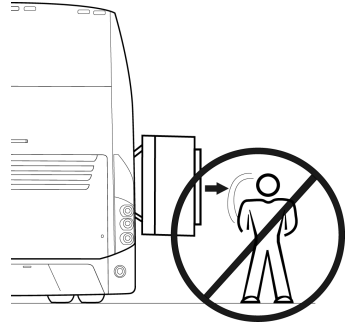
### WARNING

Do not operate with a load in excess of 600 lbs (273 kgs).

- The upright front rollstop inhibits slow and unintentional rolling off 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 platform; it must not extend beyond edges or interfere with rising and locking of front rollstop.
- Keep arms, legs, and clothing away from moving lift parts.
- The lift is intended for one wheelchair and occupant, or one 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.
- Careful supervision is necessary if used near children.
- Lock wheelchair brakes when on platform (power chair users must turn off power and set brake).
- Use great care in wet conditions, because the wheelchair brakes are less effective if wheels or platform are wet.
- Never leave platform outside of vehicle. Return platform to stowed position after use.

Read and understand safety precautions. Review them periodically and ask other operators to read them.



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## Daily Safety Check

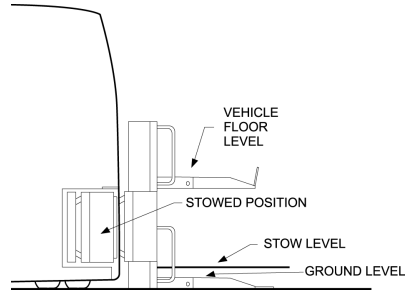
Inspect the lift before each use and check that the following conditions are met before operating:

- All functions operate properly and there are no unusual noises or movements. If problems are present, contact a Volvo authorized workshop for repair or, a Prevost service center/provider.
- Vehicle interlock is operating properly.
- No objects that may interfere with operation are present.
- General appearance and lubrication are satisfactory, and fasteners are tight.



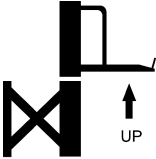



## Platform Motions

**Note:** The platform is an assembly comprised of the intermediate frame, platform frame, handrails, front and rear platform sections, bridgeplate, and front rollstop. Note that up and down motions operate only when platform is fully extended.



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PLATFORM MOTIONS	
MOTION	DESCRIPTION
 <p>DEPLOY</p> <p>T8053927</p>	Platform moves outward from lift compartment.
 <p>DOWN</p> <p>T8053928</p>	Platform lowers towards ground level. Bridgeplate automatically rises when platform drops below floor level.
 <p>UP</p> <p>T8053929</p>	Platform rises towards vehicle floor level. Bridgeplate automatically lowers when platform arrives at floor level.
 <p>STOW</p> <p>T8053930</p>	Platform moves downwards towards stow level and then retracts into lift compartment. If platform is below stow level, it must first be raised above stow level.

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### Controls and Indicators



#### **WARNING**

The lift is allowed to operate only when the lift and vehicle interlock circuitry requirements are met. Do not attempt to operate lift with interlock bypassed.



#### **CAUTION**

The pendant must be attached to the clip located on the bottom of the platform when the platform is stowed. The pendant can be severely damaged by the lift compartment doors if left stored on either of the other clips.

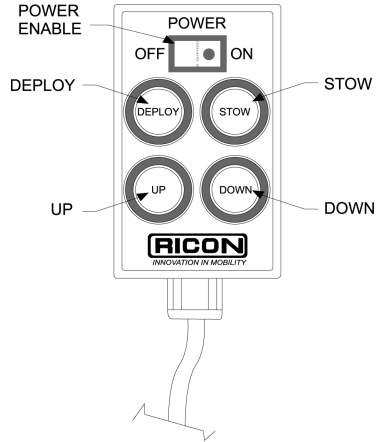
## Control Pendant

The lift is operated with a hand-held, hard-wired remote-control pendant. Turn on the POWER ENABLE switch and then press an appropriate button to control each lift motion.

The POWER ENABLE switch provides power to the pendant and thereby enables the lift. When turned on, the power switch and each button illuminate.

Pressing the DEPLOY button extends the platform from the storage compartment, and pressing the STOW button retracts the platform back into the storage compartment. Pressing the DOWN button lowers the platform towards the ground, and pressing the UP button raises the platform towards the vehicle floor. A button must be held depressed until the motion is completed. Movement of the platform can be halted at any time by releasing the button.

**Note:** In addition to the four powered operations described above, there are several manual operations required to deploy, lower, and stow the platform. Refer to Manual Lift Operation section.



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## Circuit Breakers

### Main Circuit Breaker

The main circuit breaker is located in vehicle battery compartment and is used to interrupt electrical power to lift electrical system when a major short circuit occurs. If problems are present, contact a Volvo authorized workshop or, a Prevost service center, provider.



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### Control System Circuit Breaker.

The control system circuit breaker is located on the PCB assembly, which is inside the electronic controller. The control system includes essentially all electrical components except the motor that drives the hydraulic pump

## Vehicle Interlock System

The purpose of the vehicle interlock system is to prevent lift operation if it is unsafe to do so. Requirements are that the vehicle transmission be in neutral, the parking brake applied, and the passenger door be opened before power is supplied to the lift. Before the vehicle can depart, the lift must be stowed, and both the lift compartment door and passenger door must be closed.

## **Bridgeplate Load Sensor**

A sensor switch is located in the hydraulic line connected to the bridgeplate hydraulic cylinder. When the sensor detects that an object is present on the bridgeplate it inhibits raising or lowering of the platform. This protects the passenger from possible injury when the cylinder raises the bridgeplate. It also protects the bridgeplate from damage, which could interfere later with proper operation of the lift.

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## Threshold Warning System

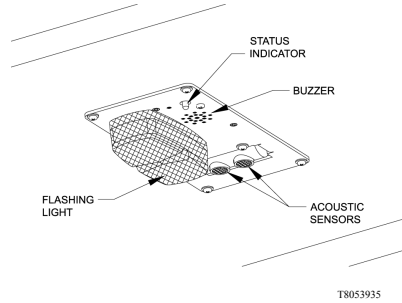
The threshold warning system is installed at the top of the doorway above the lift compartment. The module is powered on when the lift is powered, and the status indicator light then turns on. The acoustic sensors are enabled when the door is open and the lift-to-vehicle interlock system requirements are met.

**Note:** Installations provide a vehicle door closure signal to the module that will disable the sensors when the door is closed.

Acoustic sensors (transmitter and receiver) monitor the doorway threshold area for the presence of a passenger (or object, such as a wheelchair). If someone is detected in the threshold area when the platform is one inch, or more, below the floor an audible buzzer and flashing red light are actuated.

This system provides a margin of safety for lift passengers by warning them when the platform is below floor level. The platform must be at floor level when a passenger is boarding or exiting the platform.

**Note:** The buzzer and flashing light are disabled when the door is closed. In this case, the status indicator flashes when a passenger presence is detected.



## Lift Cycle Counter

The cycle counter (located near the electronic controller) is visible through a slot at the top center of the intermediate frame, just above the access panel. The platform must be fully stowed to view the counter. The counter advances each time the platform moves through a complete cycle, which consists of the platform moving from the vehicle floor to the ground and back to the floor. The number of cycles displayed is used to schedule maintenance operations.

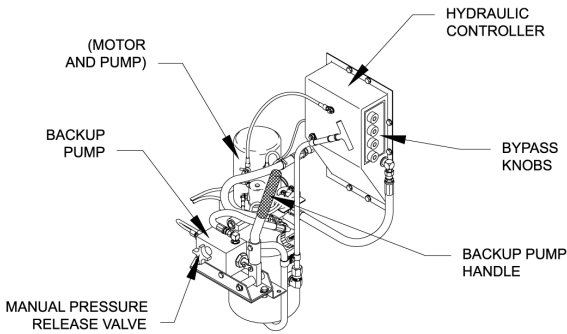
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## Manual Backup Pump

The manual backup pump system can operate the lift if electrical power is not functional. The controls for the system consist of a pump handle (not removable) and pressure release valve, which are used in conjunction with four bypass knobs to extend, raise, lower, and retract the platform.

The four bypass knobs shown on the front face of the hydraulic controller are connected to four solenoid valves located inside the enclosure. The open or closed position of each solenoid valve determines how fluid is distributed to the five hydraulic cylinders. The knobs provide the ability open and close the valves manually.





## Normal Lift Operation

- 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 take special care to ensure that area is clear before deploying platform. Be certain there are no obstacles beneath platform.
- When parked adjacent to a curb, the vehicle must be within 26 inches of curb. Rear section of platform must overlap curb a minimum of eight inches.
- Engage the parking brake and turn on the vehicle.
- Turn on lift power switch located on dashboard.
- Open lift compartment door (lower) completely and secure.
- Pull handle located rear to release door lock, insert key in door lock and turn front to open.
- Open the upper door 90°.



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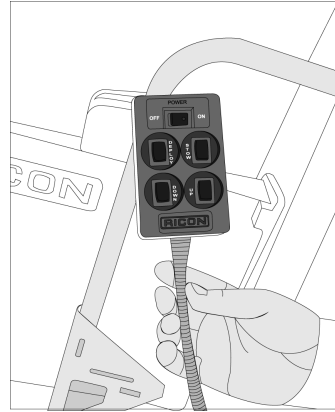
### CAUTION

Before attempting to raise or lower the platform, verify the two maintenance safety pins are not inserted into intermediate frame and platform. Severe damage can occur if pins are inserted. The pins are normally stored on the side, as shown, and are for maintenance use only.

- Enable lift control pendant by turning on Power switch located on pendant.

**Note:** Attendant must remain near passenger to render immediate assistance when necessary.

**Note:** A person that uses the wheelchair lift while standing (does not require mobility aid equipment) is referred to in this manual as a Standee

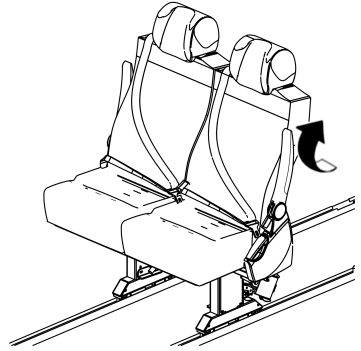


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## Procedure to move the sliding seats.

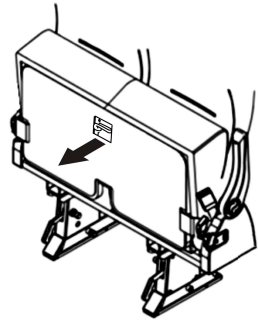
Follow the steps below in order to make room for WCL:

- Fold up the armrest.



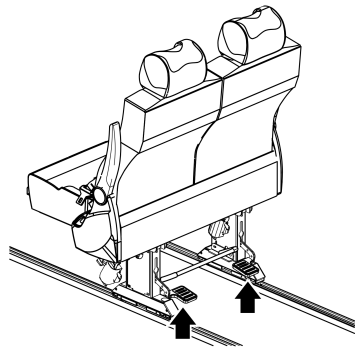
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- Pull the handle located under the cushion and lift it up.



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- Lift the pedals up.

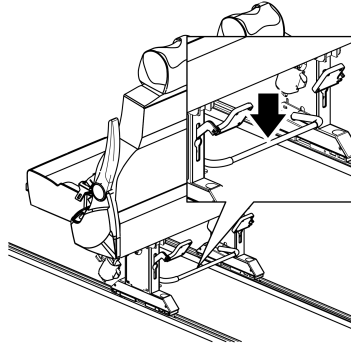


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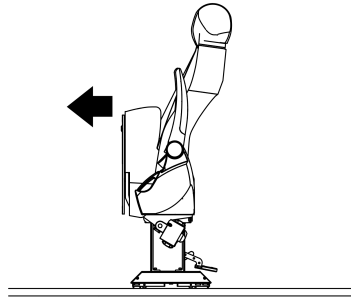
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- Press down the footbar until the seat is unlocked.



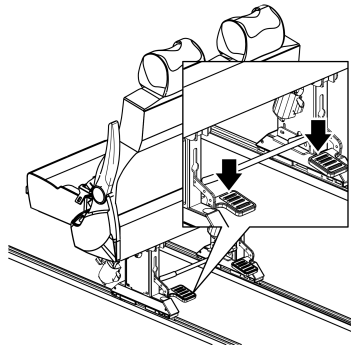
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- Push the seats. Place the hands on the backrest to move the seats forward. Slide until hear the lock sound.



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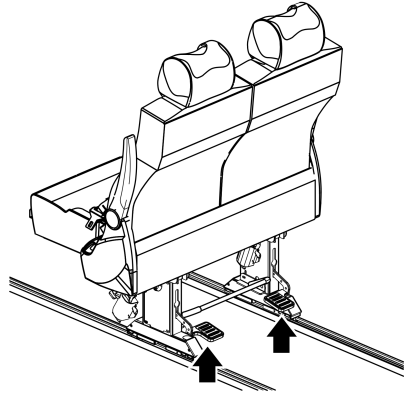
- Push the pedals down to lock the seats.



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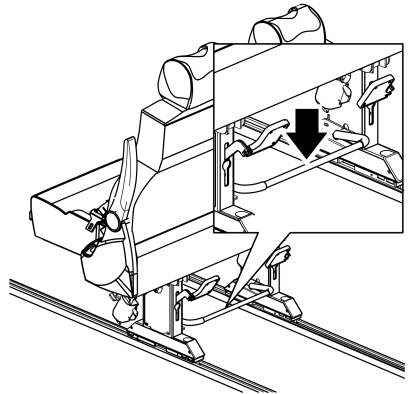
Follow the steps below in order to return to original position:

- Lift the pedals up.



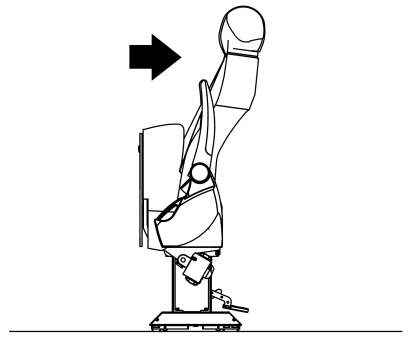
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- Push down the footbar .



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- Pull the seats. Place the hands on the backrest to move the seats backward. Slide until hear the lock sound.



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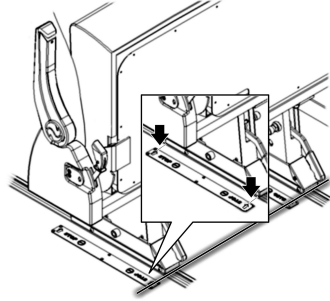
## 24 Operating Instructions

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### CAUTION

The edges of the pedestal need to be aligned with the lateral plate. Do not try to push the pedal down if the pedestal is not aligned with the arrows, if not followed this caution might cause a damage to the lever mechanism.



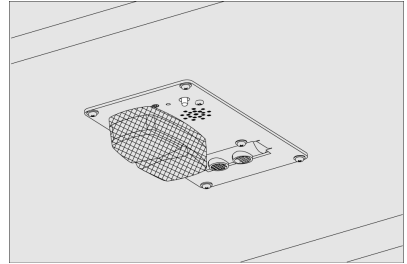
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**Note:** If any person is located under the sensor or near at door when the platform are in movement, an alarm and the red light will be activated.



## CAUTION

The platform does not automatically stop when being lowered onto a curb, therefore the operator must monitor the height of the platform. Do not allow platform to tilt as shown in left panel. Use the UP button to adjust the platform height, if necessary. Also, do not lower front portion of platform onto curb as shown in right panel.



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### • DEPLOY PLATFORM

Press and hold DEPLOY button until platform is completely extended from lift compartment.

**Note:** Platform cannot be moved up or down unless platform is fully extended.

- Unlatch each handrail by pushing downward and then swinging outward by hand.
- Pull out on top edge of platform to release magnetic latch and lower platform sections to horizontal position; weight of platform is spring assisted.
- Unfold front platform section by grasping handle provided.
- Raise front rollstop to upright position and lock in place by allowing it to drop into the slots at rollstop pivot points.

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- **LOWER PLATFORM**

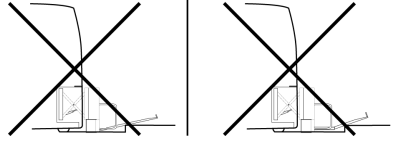
Press and hold DOWN button until platform contacts ground. Verify that bridgeplate is in upright position.

- Lift front rollstop out of slots and swing forward until it rests on ground.

- Carefully place wheelchair brakes. Pull safety belt from retractor on handrail and fasten to other handrail.

**Note:** A standee must stand near the center of the platform, facing in the direction of travel (into vehicle), and firmly grasp handrails. Do not stand on bridgeplate.

- Raise front rollstop to upright position and lock in place by allowing it to drop into the slots at rollstop pivot points.



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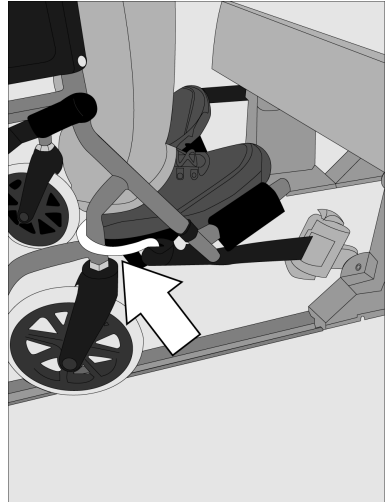
- **RAISE PLATFORM**

Press and hold UP button until platform rises and stops automatically at vehicle floor level. Verify that bridgeplate lowers to horizontal position and rests flat on vehicle floor.

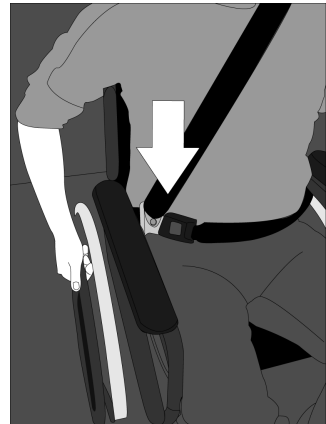
- Release wheelchair brakes, and carefully board passenger into vehicle.
- Place wheelchair in position, place brakes and secure with the hooks (located at lower zone from passenger's seats) placing at wheelchair frame.
- Always use the safety belt. Cross the belt from right side to left side and push it into the lock on the left side. After cross the upper belt and secure at lock from low belt.

Make sure an audible click is heard from the clasp in the lock and tug on the belt to verify it has locked.

**Note:** Lock could be stay at the aisle side.



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### Exit Vehicle

- To exit from vehicle, release:
  - 1 the safety belts
  - 2 the wheelchair from hooks
  - 3 brakes from wheelchair
- **DEPLOY PLATFORM**

Press and hold DEPLOY button until platform is completely extended from lift compartment.

**Note:** Platform cannot be moved up or down unless platform is fully extended.
- Unlatch each handrail by pushing downward and then swing outward by hand.
- Pull out on top edge of platform to release magnetic latch and lower platform sections to horizontal position; weight of platform is spring assisted.
- Unfold front platform section by grasping handle provided.
- Raise front rollstop to upright position and lock in place by allowing it to drop into the slots at rollstop pivot points.



#### CAUTION

Be certain wheelchair is safely within platform perimeter and does not interfere with operation of rollstop or bridgeplate.

- Carefully place wheelchair in center of platform, preferably facing outward (away from vehicle), and lock wheelchair brakes. Pull safety belt from retractor on handrail and fasten to other handrail.

**Note:** A standee must stand near the center of the platform, facing in the direction of travel (away from vehicle), and firmly grasp handrails. Do not stand on bridgeplate.

- **LOWER PLATFORM**

Press and hold DOWN button until platform settles at ground level. Verify that bridgeplates is in upright position before platform begins to lower.

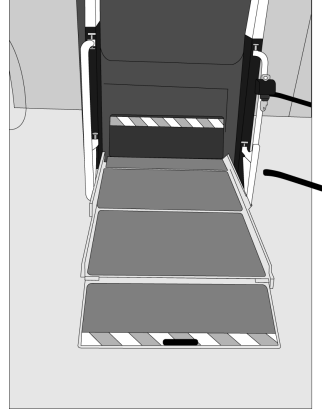
**Note:** The platform does not automatically stop when being lowered onto a curb, therefore the operator must monitor the height of the platform. Do not allow platform to tilt as shown in left panel. Use the UP button to adjust the platform height, if necessary

- Lift front rollstop out of slots and swing forward until it rests on ground.
- Unfasten safety belt, release wheelchair brakes, and carefully assist passenger off platform.

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## Stow Platform

- Lift front rollstop out of slots and swing to rear until it rests on platform. Latch in place.
- Grasp handle on lower side of front platform section and fold section back onto rear platform section.
- Raise platform sections by hand until they engage magnetic platform latch; weight of platform is spring assisted.
- Swing handrails inward and then push downward and latch handrails into square holes in bottom edge of platform frame.
- Stow platform:
  - If platform is at floor level (or anywhere above stow level) press and hold STOW button until platform lowers to stow level and fully retracts into lift compartment.
  - If platform is at ground level (or anywhere above stow level) press and hold UP button until platform lowers to stow level and fully retracts into lift compartment.



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### CAUTION

Be certain platform has retracted completely. To prevent damage to lift compartment doors, do not release button until lift pump motor has stopped automatically.

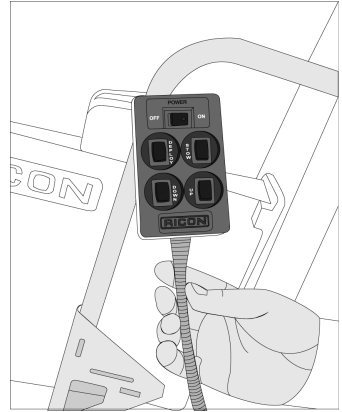
- Turn control pendant power switch off and stow pendant on clip located on bottom of platform.



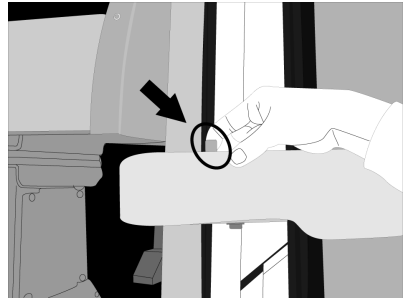
## CAUTION

The pendant must be attached to the clip located on the bottom of the platform when the platform is stowed. The pendant can be severely damaged by the lift compartment doors if left stored on either of the other clips.

- Close lift compartment doors releasing the locks.
- Turn off lift power switch located on dashboard.



T8054862



T8054864

## 32 Operating Instructions

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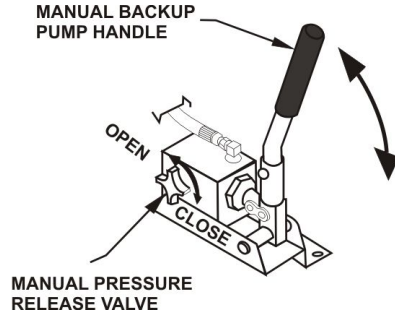
### Manual Lift Operation

The lift can be operated manually if lift electrical power is not functioning. Its recommend that manual operation be used only to exit from bus, not to enter bus.

Preparation:

- Be certain bus is on a level area and away from traffic. Allow space for platform movement plus space to exit from platform.
- The driver must summon assistance to move bus to a safe area if a break down situation exists where vehicle cannot be moved under its own power.
- Open storage compartment doors.
- The threshold warning system is not active during manual operation and cannot be used to indicate that the platform is at floor height.

The manual backup pump handle and manual pressure release valve are both referred to frequently in the following procedures. Moving its handle back and forth operates the backup pump. The release valve is closed by rotating it clockwise and opened by rotating it counterclockwise. The valve must be kept closed during normal operation.



T8055708



## CAUTION

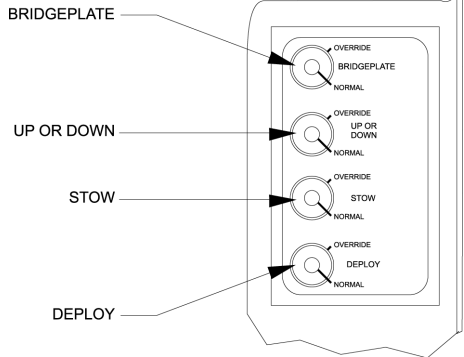
Open the pressure relief valve slowly and only far enough to result in a slow and steady movement of the platform. Avoid opening valve quickly because this will result in sudden and considerable platform movement.

The four bypass knobs shown are also referred to frequently in the following procedures. Push the destination knob inward and rotate to the setting directed in the procedure. Each knob must be in the normal position during normal operation.



## CAUTION

Follow the procedure carefully. Do not open more than one valve at time.



T8053937

# 34 Operating Instructions

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## 1 DEPLOY PLATFORM

- Verify that pressure release valve is closed.
- Rotate DEPLOY knob to override position.
- Operate hand pump until platform assembly is fully extended from lift compartment.
- Rotate DEPLOY knob to normal position.
- Swing both handrails outward by hand.
- Pull out on top edge of platform to release magnetic latch and lower platform sections to horizontal position; weight of platform is spring assisted.
- Unfold front platform section by grasping handle provided.
- Raise front rollstop to upright position and lock in place by allowing it to drop into the slots at rollstop pivot points.



## 2 RAISE PLATFORM

- Verify that pressure release valve is closed.
- Rotate the UP or DOWN knob to override position.
- Operate hand pump until platform rises to vehicle floor height.
- Rotate the UP or DOWN knob to normal position.
- Rotate BRIDGEPLATE knob to override position.
- Open pressure release valve and allow bridgeplate to lower to floor. Close valve.
- Rotate BRIDGEPLATE knob to normal position.
- Load passenger by carefully placing wheelchair in center of platform, preferably facing outward (away from vehicle), and lock wheelchair brakes. Pull safety belt from retractor on handrail and fasten to other handrail.

## 36 Operating Instructions

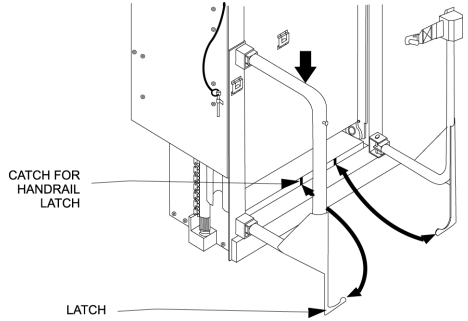
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### 3 LOWER PLATFORM

- Verify that pressure release valve is closed.
- Rotate BRIDGEPLATE knob to override position.
- Operate hand pump until bridgeplate is in upright position.
- Rotate BRIDGEPLATE knob to normal position.
- Rotate UP or DOWN knob to override position.
- Open pressure release valve and allow platform to lower to ground level. Close valve.
- Rotate UP or DOWN knob to normal position.
- Unlock front rollstop and swing forward until it rests on ground.
- Unfasten safety belt, release wheelchair brakes, and carefully assist passenger off platform.

## 4 STOW PLATFORM

- Verify that pressure release valve is closed.
- Rotate the UP or DOWN knob to override position.
- Operate hand pump until top edge of platform frame is at same height as top edge of intermediate frame (stow level).
- Rotate the UP or DOWN knob to normal position.
- Lift front rollstop and swing to rear until it rests on platform. Latch in place.
- Grasp handle on lower side of front platform section and fold section back onto rear platform section.
- Raise platform sections by hand until they engage magnetic platform latch; weight of platform is spring assisted.
- Swing handrails inward and then push downward and latch handrails into square holes in bottom edge of platform frame.
- Rotate STOW knob to override position.
- Operate hand pump until platform assembly is fully retracted into lift compartment.
- Rotate STOW knob to normal position.



T8055939

## 38 Maintenance


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### Cleaning

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

### Maintenance Schedule

Refer to cycle counter located on rear side of hydraulic power unit. Under normal operating conditions, maintenance inspections are required at the frequencies listed in table. Ten cycles is considered a typical number of cycles for one days use.

MAINTENANCE SCHEDULE	
SERVICE POINT	ACTION TO PERFORM
<b>10 CYCLES</b>	
Overall condition	Listen for abnormal noises as lift operates (i.e. grinding or binding noises.)
Control Pendant	<ul style="list-style-type: none"> <li>• Verify that control pendant is undamaged and cable connector is tight.</li> <li>• Verify that switch and buttons are illuminated.</li> </ul>
Threshold warning system (TWS)	Verify that system reliably detects objects in doorway threshold area, when enabled, and actuates the visual and audible alarms.
Bridgeplate load sensor	Verify that sensor inhibits upward and downward movement of platform when a weight is present on the lowered bridgeplate.
<b>150 CYCLES</b>	
Electrical wiring	Inspect electrical wiring for frayed wires, loose connectors, etc.
Vehicle interlock	Place vehicle in non-interlock mode and verify that lift does not operate.
Decals	Verify that lift decals are properly affixed, clearly visible, and legible. Replace, if necessary.
Handrails	Verify that handrail fasteners are properly tightened, and that handrails can be latched securely in position.
Lift mounting points	<ul style="list-style-type: none"> <li>• Verify that the vehicle mounting and support points are undamaged.</li> <li>• Verify that mounting bolts are sufficiently tight and free of corrosion.</li> </ul>
	<div style="border: 1px solid black; padding: 5px;">  <b>CAUTION</b>            Check and add fluid when platform is at ground level. Fluid that is added when platform is raised will overflow when platform is lowered.         </div>

## 40 Maintenance

Main lifting pivots	Verify that pins on scissor arms are properly installed, free from damage, and locked in position.
Platform pivot points	Verify that platform moves freely, without binding, and does not wobble.
Bridgeplate	<ul style="list-style-type: none"><li>• Verify that bridgeplate operates without binding during lift functions.</li><li>• Verify that bridgeplate deploys fully when platform stops at floor level.</li><li>• Verify bridgeplate rests flat against vehicle floor.</li></ul>
Front rollstop	Verify that rollstop pivots freely and can be latched securely in position.
Hydraulic power unit	<ul style="list-style-type: none"><li>• Verify that pump hydraulic fluid level is at FULL mark when platform is at ground level. Add Pentosin G002000 fluid.</li><li>• Verify there are no hydraulic fluid leaks.</li><li>• Verify that manual backup pump operates properly.</li></ul>
Cleaning and lubrication	<ol style="list-style-type: none"><li>1 Clean lift with mild soap and water wipe dry. Prevent rust by coating all surfaces with a light oil. Remove excess oil.</li><li>2 Spray penetrating oil (Curtisol Red Grease 88167 or WD-40) . Remove excess grease from surrounding areas.</li></ol>
<b>3600 CYCLES</b>	
Hydraulic cylinders, hoses, and fittings	<ul style="list-style-type: none"><li>• Check hydraulic cylinders for evidence of leaks.</li><li>• Inspect hydraulic hoses for damage.</li><li>• Verify that all fittings are tight.</li></ul>

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**VOLVO**

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