Owner Manual for:



Under-Vehicle Lift®



Congratulations

The Braun employee family thanks you for purchasing your new wheelchair lift. We design and build each Braun product for reliability, quality and safety. Our founder, Ralph Braun, instilled that ethic from day one and we live by that commitment today.

This manual includes operating instructions, safety precautions and maintenance procedures for your new wheelchair lift. As long as it's properly maintained and operated, your Braun lift will provide mobility freedom for years.

Thank you again for your business, and enjoy your independence!

Sincerely,

The Braun Employee Family

Warranty

Consult your local Braun dealer regarding warranty policy.

www.braunlift.com/international



Sample Serial No./Series No. Identification Tag

	ISTRATION	
	ISTRATION	
xx-xxxxxxxx		
OWNER		
		IATE INSTALLED
STATE	Z	IP
	STATE _	

Sample Warranty/Registration Card

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Document Cross Reference

Service Manual 37273

Installation and Service Safety Precautions

Safety Symbols

SAFETY FIRST! Know That

A The information contained in this manual and supplements (if included), is provided for your use and safety. Familiarity with proper installation, operation, maintenance and service procedures is necessary to ensure safe, trouble free lift operation. Safety precautions are provided to identify potentially hazardous situations and provide instruction on how to avoid them.



C

B

This symbol indicates important safety information regarding a potentially hazardous situation that could result in serious bodily injury and/or property damage.

This symbol indicates important information regarding how to avoid a hazardous situation that could result in minor personal injury or property damage.



Additional information provided to help clarify or detail a specific subject.



This symbol indicates that there are dangerous energy levels present inside the enclosure of this product. To reduce the risk of fire or electric shock, do not attempt to open the enclosure or gain access to areas where you are not instructed to do so. Refer servicing to qualified service personnel only.



This symbol indicates that a condition where damage to the equipment resulting in injury to the operator could occur if operational procedures are not followed. To reduce the risk of damage or injury, refer to accompanying documents, follow all steps or procedures as instructed.



This symbol indicates an area to avoid bodily contact to prevent injury.



This symbol indicates the presence of high pressure hydraulic hoses. Use appropriate personal protective equipment when working on hydraulic system.



This symbol indicates the presence of a fire hazard. Avoid open flames or sparks when working with flammable materials to prevent injury or damage.



This symbol indicates a device weighs in excess of 150 kg (330 lbs). Use of a fork lift or hoist is required.

These symbols will appear throughout this manual as well as on the labels posted on your lift. **Recognize the seriousness of this information.**

Installation and Service Safety Precautions

Installation/Service Safety Precautions

AWARNING

If installation, main-	
tenance or repair	
procedures cannot	
be completed ex-	
actly as provided in	
this manual or if the	
instructions are not	
fully understood,	
contact The Braun	
Corporation immedi-	
ately. Failure to do	
so may result in seri-	
ous bodily injury and/	
or property damage.	

A WARNING	Read this manual, supplement(s), and operating instructions decals before performing installation, operation, or service procedures.
	Minimum clear door opening dimensions specified in Lift Dimensions per lift model must be provided.
A WARNING	Use appropriate personal protective equipment when installing and servicing lift.
A WARNING	Remove any obstructions within the lift mounting/ operating area prior to beginning installation procedures.
A WARNING	Check for obstructions such as gas lines, wires, exhaust, etc. before drilling or cutting during installation procedures.
A WARNING	Route all cables clear of exhaust system, other hot areas, moving parts, wet areas, etc.

- **AWARNING** Risk of electrical shock or fire! Use extra care when making electrical connections. Connect and secure as outlined in Installation Instructions and Wiring Diagrams.
- **AWARNING** Adjust vehicle floor level positioning of bridge plate before operating lift with passenger.
- **AWARNING** Maintenance and repairs must be performed only by authorized service personnel.
- **AWARNING** Perform maintenance and lubrication procedures exactly as outlined in the Maintenance and Lubrication Schedule contained in this manual.
- **AWARNING** Disconnect the power cable at the battery prior to servicing.
- **AWARNING** Never modify (alter) a Braun Corporation lift.
- **AWARNING** Replacement parts must be Braun authorized replacements.
- **AWARNING** Never install screws or fasteners (other than factory equipped).
- **AWARNING** Whenever replacing a hydraulic cylinder or seals, lower platform fully.
- **AWARNING** Failure to follow these safety precautions may result in serious bodily injury and/or property damage.

Safety Symbols

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This symbol indicates important information regarding how to avoid a hazardous situation that could result in minor personal injury or property damage.



Additional information provided to help clarify or detail a specific subject.



This symbol indicates that there are dangerous energy levels present inside the enclosure of this product. To reduce the risk of fire or electric shock, do not attempt to open the enclosure or gain access to areas where you are not instructed to do so. Refer servicing to qualified service personnel only.



This symbol indicates that a condition where damage to the equipment resulting in injury to the operator could occur if operational procedures are not followed. To reduce the risk of damage or injury, refer to accompanying documents, follow all steps or procedures as instructed.



This symbol indicates an area to avoid bodily contact to prevent injury.



This symbol indicates the presence of high pressure hydraulic hoses. Use appropriate personal protective equipment when working on hydraulic system.



This symbol indicates the presence of a fire hazard. Avoid open flames or sparks when working with flammable materials to prevent injury or damage.



This symbol indicates a device weighs in excess of 150 kg (330 lbs). Use of a fork lift or hoist is required.

These symbols will appear throughout this manual as well as on the labels posted on your lift. **Recognize the seriousness of this information.**

Lift Operation Safety

Lift Operation Safety Precautions

If the lift operating instructions, manual operating instructions and/or lift operation safety precautions are not fully understood, contact The Braun Corporation immediately. Failure to do so may result in <u>serious</u> <u>bodily injury</u> and/or property damage.

A WARNING	Read manual and supplement(s) before operating lift. Read and become familiar with all safety precautions, operation notes and details, operating instructions and manual operating instructions before operating the lift.	
A WARNING	Load and unload on level surface only.	
A WARNING	Engage vehicle parking brake before operating lift.	
A WARNING	Provide adequate clearance outside the vehicle to accom- modate the lift before opening lift door(s) or operating lift.	
A WARNING	Inspect lift before operation. Do not operate lift if you suspect lift damage, wear, or any abnormal condition.	
	Do not use lift as a link bridge.	

AWARNING	Keep operator and bystanders clear of area in which the lift operates.
-----------------	--

- **AWARNING** Lift attendant must observe passenger at all times during lift operation.
- **AWARNING** Ensure adequate lighting exists in the lift operating area.
- **AWARNING** Whenever a wheelchair passenger (or standee) is on the platform, the:
 - Passenger must be positioned in the center of the platform, facing outward.
 Wheelchair brakes must be locked
 - Pridge plate and roll stop must be up
 - Bridge plate and roll stop must be up (vertical)
 Passenger should grip both handrails (if able).
- **AWARNING** Wheelchair lift attendants should be instructed on any special needs and/or
 - procedures required for safe transport of wheelchair passengers.
- **AWARNING** Load and unload clear of vehicular traffic.
- **AWARNING** Do not attempt to load or unload a passenger in a wheelchair or other apparatus that does not fit on the platform area.
- **AWARNING** The lift attendant shall not ride on the platform with the passenger. The lift is intended for use by a single passenger.
- **AWARNING** Do not overload or abuse. The load rating applies to both the raising and lowering functions continuous lifting capacity is 340 kg (750 lbs.).
- **AWARNING** Use caution when operating this equipment out of doors during electrical storms or similar electrical phenomena.
- **AWARNING** Use caution when operating this equipment in severe weather or environmental conditions (fog, rain, snow, ice, dust, etc.)
- **AWARNING** Discontinue lift use immediately if any lift or vehicle interlock does not operate properly.
- **AWARNING** Do not operate or board the lift if you or your lift operator are intoxicated.
- **AWARNING** Do not raise front wheelchair wheels (pull wheelie) when loading (boarding) the platform.

Lift Operation Safety

- **AWARNING** Open lift door(s) fully and secure before operating lift.
- **AWARNING** Position and secure (buckle, engage, fasten, etc.) the wheelchair-equipped occupant seat belt (torso restraint) before loading onto the wheelchair lift platform.
- **AWARNING** Fold handrails down to platform before stowing lift.
- **AWARNING** Lift attendants must ensure that lift occupants keep hands, arms and all other body parts within the lift occupant area and clear of moving parts.
- **AWARNING** Platform must be positioned at floor level (bridging position) when loading or unloading in and out of vehicle.
- **AWARNING** Do not use platform bridge plate or roll stops as a brake. Stop and brake wheelchair when loading onto the platform (manually stop and brake manual wheelchairs stop powered wheelchairs with the wheelchair controls).
- **AWARNING** Turn powered (electric) wheelchairs off when on lift platform.
- **AWARNING** Press the DOWN switch until the entire platform rests on ground level (lowered fully) and the roll stops are fully unfolded (ramp position) before loading or unloading a passenger at ground level.
- **AWARNING** Accidental activation of control switch(es) may cause unintended operation(s).
- **A**WARNING After manually releasing platform, stow platform and push manual release T-handle in fully and move platform in and out to engage platform lock before driving vehicle. Failure to lock platform may result in unintended platform deployment.
- **AWARNING** Insert manual release T-handle fully before manually lowering or raising platform and manually move platform in and out to engage platform lock.
- **AWARNING** Maintenance and lubrication procedures must be performed as specified in this manual by authorized (certified) service personnel.
- **AWARNING** Replace missing, worn or illegible decals.
- **AWARNING** Never modify (alter) a Braun Corporation lift.
- **AWARNING** Do not use accessory devices not authorized by The Braun Corporation.
- **AWARNING** Do not remove any guards or covers
- **AWARNING** Keep clear of any hydraulic leak.
- **AWARNING** Failure to follow these safety precautions may result in serious bodily injury and/or property damage.

Specifications



The lift must be installed, operated, and maintained as detailed in applicable manual. Any use of equipment other than instructed in this manual is prohibited.

The UVL855R and UVL855R24 have completed 15,600 cycles with a 340kg (750 lb.) load and a static load test with a 1020 kg (2250 lb) load.

Operating Temperature

This equipment will operate in its intended ambient at a minimum between +5°C and +40°C.

Relative Humidity

This equipment will operate correctly within an environment at 50% RH, at 40°C.

Altitude

This equipment will operate correctly up to 1000m above mean sea level.

Sound Pressure Level

The emission sound pressure level at the operator's position is expected not to exceed 70 db(A).

Transportation and Storage

This equipment will withstand, or has been protected against, transportation and storage temperatures of -25°C to +55°C, and for short periods of up to +70°C.

The lift has been packaged to prevent damage from the effects of normal humidity, vibration, and shock.

Power Requirements

12 VDC -- UVL855R 24 VDC -- UVL855R24

Lift Weight (Installed)

UVL855R -- 263 kg (580 lbs) UVL855R24 -- 263 kg (580 lbs)

Lifting Capacity

Maximum 340 kg (750 lbs.)



Vehicle Physical Requirements

OEM (Van) Chassis Floor Requirements

Lift must be secured with minimum of two all-thread mounting brackets per frame rail (minimum four mounting brackets securing lift).



Continuous Load Rating: 340 kg. (750 lbs.)

Driveline "Full Suspension Travel" Clearance:

Following installation, the installer must ensure vehicle drive shaft cannot contact lift. There must be a minimum 2.54 cm clearance between drive shaft (one piece or two) and lift. To ensure clearance, raise vehicle using a hoist capable of supporting chassis (allowing rear axle to relax to maximum extension before measuring clearance). The Braun Corporation does not recommend using axle limiting devices (may degrade vehicle safety). Split drive shafts may provide additional clearance in some applications. Following installation, installer must ensure acceptable clearance between lift and pavement. The Braun Corporation recommends minimum 12.7 cm clearance under normal driving conditions when loaded to maximum capacity. Aftermarket suspension kits can assist in maximizing ground clearance if properly utilized. In some cases, aftermarket exhaust accessories allow UVL to be mounted closer to vehicle frame, (increasing clearance). Increasing wheel and tire size may increase ground clearance, but may void vehicle warranty, negatively affect handling and render inaccurate odometer and speedometer reading.



Drive Shaft Clearance:

There must be a minimum 2.54 cm clearance between drive shaft (one piece or two) and lift with van supported by chassis and rear axle fully relaxed (suspended).

Lift Terminology





The lift must be installed, operated, and maintained as detailed in this manual. Any use of equipment other than instructed in this manual is prohibited.

Braun wheelchair lifts provide a method of boarding and exiting applicable motor vehicles. Braun wheelchair lifts accommodate wheelchair passengers, standees, and other mobility aid users.

Locate Lift Mounting Holes



Locate All-Thread Mounting Brackets

- 1. Locate center of door opening.
- Transfer center point to the vehicle frame. Using a frontto-rear framing member as a guide, transfer the center point across chassis to opposite side front-to-rear framing member (must be 90° to door opening).
- 3. Locate brackets as specifired in Figure C
- 4. Clamp the mounting brackets securely in place (all-thread studs must be vertical).

Engage Platform Manual Release System: The lift cable-activated platform manual release is disengaged during shipment to prevent potential drive chain stretch. Handle the lift with care. Engage manual release before attempting to install (raise, tilt or move) the lift.

AWARNING

Engage manual release before attempting to install (raise, tilt or move) lift. Failure to do so may result in <u>serious</u> <u>bodily injury</u> and/or property damage.



Secure Lift

WARNING

Check for obstructions such as gas lines, wires, exhaust, etc. before drilling or cutting. Failure to do so may result in serious bodily injury and/or property damage.



Attach Mounting Brackets to Vehicle Frame

Mounting bolts must be routed horizontally through framing members as shown in Figures D, E and F.

Carefully drill 25/64" (.390") diameter mounting holes at the center of the oval mounting slots.

Channel Frame Applications: Secure mounting bolts as specified in Figure D.

Box Frame Spacers: Position tubing spacers as shown at right to prevent collapsing the box frame. Cut spacer tubing to length (equal to thickness of box frame).

Insert spacer through 5/8" (.625) diameter hole. Secure mounting bolts as specified in Figures E and F.

Shipping Block Removal:

Wood blocks are placed in the lift housing to prevent lift damage during shipment. Remove shipping blocks from platform and carriage before running (activating) lift. Refer to Shipping Block Removal Instruction 28942.

"Box" Framing Member





Secure Lift



Position and secure lift.

Thread two 3/4" hex jam nuts fully onto each mounting bracket all-thread stud. Place one large diameter flat washer onto each all-thread stud (use tape to hold in place). See Figures G and H.

Carefully position lift under vehicle (aligned with mounting brackets). Position (slide) the four lift mounting clamps along the sides of the lift housing until aligned with mounting bracket allthread studs. See Figure G. Carefully raise lift into position as high as possible. Place one large diameter flat washer onto each mounting bracket all-thread stud. Thread two 3/4" hex jam nuts fully onto each all-thread stud (up against lift mounting clamp).

Shift lift and mounting brackets left-to-right as needed (lift must be centered in door opening). Tighten the 3/8" bolts securing mounting brackets to the frame. Torque Specifications: 160 Nm.

Height Adjustment

dimensions A, B, C and D must be equal (within 3 mm). See Figure J.

In-Out Positioning

Position the lift to achieve a 38 mm overlap between the deployed bridge plate and the vehicle floor. Tighten upper set of 3/4" hex jam nuts (with flat washer) down to the lift mounting clamps. Tighten jam nuts. **Torque Specifications:** 136 to 163 Nm.



Electrical and Hydraulic



Pump Module Mounting

Mount reinforcement "L" bracket to pump mounting bracket as shown in Figure K. Secure pump mounting bracket to floor using four 5/16" lag bolts.

Check under vehicle for obstructions before drilling, cutting holes or installing floor mounting hardware.

Note: Locate and drill pump module mounting holes, floor grommet hole and manual release hole before mounting pump (diameters specified).

Cable-activated Manual Release:

The T-handle must be mounted inside the vehicle. The cable must operate freely (no kinks or bends). The warning tag must remain attached to the handle. Remove handle for installation.

Electrical and Hydraulic



Hydraulics:

Remove the plug from 1/4" diameter clear vent tube. See Figure N.

Route hydraulic hose from pump through floor grommet to quick-disconnect fitting at lift. Connect hose.

Interlock Instructions EU

The lift shall be installed in such way that the lift can not be operational unless the vehicle is immobilized. Install a microswitch to the hand brake that provides signal when the hand brake is pulled (Installer provided). When installed, verify that the lift is not operational unless the hand brake is pulled.

Electrical and Hydraulic



Switch Adjustment





Lift Out

Switch LED Diagnostics

Lift Out Switch: The Lift Out Switch stops inward travel of the carriage/platform during Stow function (activated by the housing-mounted Lift Out Cam). Move cam in to increase inward travel. Move cam out to decrease inward travel. Diagnostic LED "LIFT OUT" will be illuminated when the switch is not contacting the cam.

Full Out Switch: The Full Out Switch stops outward travel of the carriage/platform during Deploy (Up/Down) functions (activated by the housing-mounted Full Out Cam). Move cam in to decrease outward travel. Move cam out to increase outward travel. Carriage rollers must be inside housing a minimum 13 mm (1/2"). The platform will not raise or lower until this switch is activated. Diagnostic LED "FULL OUT" will be illuminated when the switch is contacting the cam.

Floor Level Switch: Diagnostic LED "FL LVL" will be illuminated when the switch is contacting the cam. Adjustment details below.

Below Stow (Stow Start) Switch: The Below Stow Switch controls the height of the carriage/ platform before it moves inward during the Stow function (activated by the torque tube-mounted Stow Start Cam). Rotate the cam in to decrease platform height. Rotate the cam out to increase platform height. Adjust cam so bottom of platform is flush with the horizontal arms when switch is activated. Diagnostic LED "BELOW" will be illuminated when platform is at stow start height or below.

Switch Adjustment

Floor Level Switch Adjustment

The Floor Level switch stops upward travel of the platform during the Up function (activated by the torque tube-mounted Floor Level cam).

Position the bottom of the lift platform 38 mm (1 1/2") above floor level using the manual operation system. Loosen the clamp securing the torque tube-mounted Floor Level cam. Rotate the cam until the Floor Level switch is activated (cam depresses switch).

Note: Check the floor level position of the platform and the bridge plate after powering the pump. Hydraulic pressure may affect platform height slightly. Fine tuning adjustment (tweaking) of the Floor Level switch may be required.



Torque Tube

Cam Depressing Switch

Carriage Adjustments



Carriage Ride Height Adjustment

The carriage horizontal arms move (roll) in and out of the housing tracks on roller bearings. Following installation or extensive lift operation, clearance between horizontal arms and tracks may diminish. The eccentric shaft mounting plate allows height adjustment.

Remove eccentric plate mounting screw. Using screwdriver or small rod, rotate the shaft clockwise to increase carriage height. Rotate the shaft counterclockwise to decrease carriage height. Reinstall mounting screw in nearest retainer hole. Adjust left and right side eccentric shafts (screw positions may vary from side to side). Adjust height such that horizontal arms do not contact top or bottom of tracks (align center).

Drive Chain Adjustment

In event the drive chain sags 13 mm (1/2") or more, adjust tension as detailed. Tighten to eliminate visible sag but do not overtighten. See illustration at right.

- 1. Unlock and pull the manual release cable and lock in released position.
- 2. Manually extend platform carriage 2/3 full out.
- 3. Remove adjustment bolt (tensioner) access cover.
- Use deep well socket (long key sleeve) to loosen outside jam nut. Tighten inside jam nut to eliminate visible chain sag but do not overtighten.
- Lock jam nuts together. Unlock and push the manual cable in fully. Lock release cable. Move the platform in and out until platform chain release assembly engages chain.



Verification by the Installer

Compatibility between the lift and the vehicle

The installer shall confirm the compatibility between the lift and the vehicle.

Static Test

Deformation

The unladen platform is positioned mid-way between ground level and vehicle floor level and measurements are taken of the height of the platform and its angular attitude relative to the vehicle floor.

A load of 425k is applied to the platform and subsequently removed.

By repeating measurements of the height and attitude of the platform, verify that no permanent deformation has occurred in any part of the lift or its attachment to the vehicle which could affect the function of the lift.

Drift

A load of 425kg is applied to the platform, positioned at floor level. Measurements are taken of the height of the platform and its angular attitude relative to the vehicle floor. These measurements are repeated after a 15 minute test period.

Verify that the vertical drift of the platform between the two measurements has not exceeded 15mm.

Verify that the angular drift of the platform between the two measurements has not exceeded 2°.

If lift does drift:

- 1. Deploy lift to ground level.
- 2. Press circuit board manual override buttons L-UP and L-DN for 20 seconds.
- 3. Open manual down valve 1 turn and press "UP" on hand pendant for 20 seconds. Close valve.

Test to Verify that the Lift Cannot Lift Excessive Load

A load of 425kg is applied to the platform, positioned at ground level. Actuate the "UP" control and verify that the platform does not lift (tilt is permissible).

- 1. Lower platform to the ground.
- 2. Place 425kg at center of platform.
- 3. Press up switch and verify platform does not lift (tilt is permissible).
- 4. If platform does not lift, proceed to Dynamic Test. If platform does lift, proceed to step 5, pump relief valve adjustment is necessary.
- 5. Access relief valve through circuit board mounting plate access hole. Loosen 9/16" hex nut on the relief valve adjustment screw (do not remove hex nut).
- 6. Turn adjustment screw counterclockwise1/8 turn.
- 7. Press up switch and verify platform does not lift (tilt is permissible).
- 8. If platform does not lift, tighten 9/16" hex nut (do not turn relief valve adjustment screw while tightening hex nut). If platform does lift, repeat steps 6 through 8

Verification by the Installer

Dynamic Test

With 340kg applied to the platform, verify that the lift is able to operate throughout its full range of normal lifting and lowering.

- 1. Lower platform to the ground.
- 2. Place 340kg at center of platform.
- 3. Press up switch and verify that the lift is able to operate throughout its full range of normal lifting and lowering movements.
- 4. If platform is able to operate throughout its full range of normal lifting and lowering movements, no adjustment is necessary. If platform does not lift, proceed to step 5, pump relief valve adjustment is necessary.
- 5. Access relief valve through circuit board mounting plate access hole. Loosen 9/16" hex nut on the relief valve adjustment screw (do not remove hex nut).
- 6. Turn adjustment screw clockwise 1/8 turn.
- 7. Press up switch and verify lift is able to operate throughout its full range of normal lifting and lowering movement.
- 8. If lift does not operate throughout its full range, repeat steps 6 through 8. If lift does operate throughout its full range, tighten 9/16" hex nut (do not turn relief valve adjustment screw while tightening hex nut).

Test of Operations and Safety Functions

All functions of the lift and operations of all safety devices are verified after the static and dynamic tests have been completed. These tests do not apply to pipe break valves nor non-resettable safety devices such as electrical fuses (These items are the subject of a manufacturer's type test).



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This symbol indicates that a condition where damage to the equipment resulting in injury to the operator could occur if operational procedures are not followed. To reduce the risk of damage or injury, refer to accompanying documents, follow all steps or procedures as instructed.



This symbol indicates an area to avoid bodily contact to prevent injury.



This symbol indicates the presence of high pressure hydraulic hoses. Use appropriate personal protective equipment when working on hydraulic system.



This symbol indicates the presence of a fire hazard. Avoid open flames or sparks when working with flammable materials to prevent injury or damage.



This symbol indicates a device weighs in excess of 150 kg (330 lbs). Use of a fork lift or hoist is required.

These symbols will appear throughout this manual as well as on the labels posted on your lift. **Recognize the seriousness of this information.**

Lift Operation Safety

Lift Operation Safety Precautions

If the lift operating instructions, manual operating instructions and/or lift operation safety precautions are not fully understood, contact The Braun Corporation immediately. Failure to do so may result in <u>serious</u> <u>bodily injury</u> and/or property damage.

A WARNING	Read manual and supplement(s) before operating lift. Read and become familiar with all safety precautions, operation notes and details, operating instructions and manual operating instructions before operating the lift.
A WARNING	Load and unload on level surface only.
A WARNING	Engage vehicle parking brake before operating lift.
A WARNING	Provide adequate clearance outside the vehicle to accom- modate the lift before opening lift door(s) or operating lift.
A WARNING	Inspect lift before operation. Do not operate lift if you suspect lift damage, wear, or any abnormal condition.
	Do not use lift as a link bridge.

AWARNING	Keep operator and bystanders clear of area in which the lift operates.
-----------------	--

- **AWARNING** Lift attendant must observe passenger at all times during lift operation.
- **AWARNING** Ensure adequate lighting exists in the lift operating area.
- **AWARNING** Whenever a wheelchair passenger (or standee) is on the platform, the:
 - Passenger must be positioned in the center of the platform, facing outward.
 Wheelchair brakes must be locked
 - Prides plate and rell step revet he ve
 - Bridge plate and roll stop must be up (vertical)
 - Passenger should grip both handrails (if able).
- **AWARNING** Wheelchair lift attendants should be instructed on any special needs and/or procedures required for safe transport of wheelchair passengers.
- **AWARNING** Load and unload clear of vehicular traffic.
- **AWARNING** Do not attempt to load or unload a passenger in a wheelchair or other apparatus that does not fit on the platform area.
- **AWARNING** The lift attendant shall not ride on the platform with the passenger. The lift is intended for use by a single passenger.
- **AWARNING** Do not overload or abuse. The load rating applies to both the raising and lowering functions continuous lifting capacity is 340 kg (750 lbs.).
- **AWARNING** Use caution when operating this equipment out of doors during electrical storms or similar electrical phenomena.
- **AWARNING** Use caution when operating this equipment in severe weather or environmental conditions (fog, rain, snow, ice, dust, etc.)
- **AWARNING** Discontinue lift use immediately if any lift or vehicle interlock does not operate properly.
- **AWARNING** Do not operate or board the lift if you or your lift operator are intoxicated.
- **AWARNING** Do not raise front wheelchair wheels (pull wheelie) when loading (boarding) the platform.

Lift Operation Safety

- **AWARNING** Open lift door(s) fully and secure before operating lift.
- **AWARNING** Position and secure (buckle, engage, fasten, etc.) the wheelchair-equipped occupant seat belt (torso restraint) before loading onto the wheelchair lift platform.
- **AWARNING** Fold handrails down to platform before stowing lift.
- **AWARNING** Lift attendants must ensure that lift occupants keep hands, arms and all other body parts within the lift occupant area and clear of moving parts.
- **AWARNING** Platform must be positioned at floor level (bridging position) when loading or unloading in and out of vehicle.
- **AWARNING** Do not use platform bridge plate or roll stops as a brake. Stop and brake wheelchair when loading onto the platform (manually stop and brake manual wheelchairs stop powered wheelchairs with the wheelchair controls).
- **AWARNING** Turn powered (electric) wheelchairs off when on lift platform.
- **AWARNING** Press the DOWN switch until the entire platform rests on ground level (lowered fully) and the roll stops are fully unfolded (ramp position) before loading or unloading a passenger at ground level.
- **AWARNING** Accidental activation of control switch(es) may cause unintended operation(s).
- **A**WARNING After manually releasing platform, stow platform and push manual release T-handle in fully and move platform in and out to engage platform lock before driving vehicle. Failure to lock platform may result in unintended platform deployment.
- **AWARNING** Insert manual release T-handle fully before manually lowering or raising platform and manually move platform in and out to engage platform lock.
- **AWARNING** Maintenance and lubrication procedures must be performed as specified in this manual by authorized (certified) service personnel.
- **AWARNING** Replace missing, worn or illegible decals.
- **AWARNING** Never modify (alter) a Braun Corporation lift.
- **AWARNING** Do not use accessory devices not authorized by The Braun Corporation.
- **AWARNING** Do not remove any guards or covers
- **AWARNING** Keep clear of any hydraulic leak.
- **AWARNING** Failure to follow these safety precautions may result in serious bodily injury and/or property damage.

Lift Operating Instructions



Before lift operation, park the vehicle on a level surface, away from traffic. Place the vehicle transmission in "Park" and engage the parking brake. Vehicle engine must be running.

Lift Operating Instructions address operation of the lift only.

Vehicle Doors and Vehicle Interlocks: Transit vehicle lift doors and interlocks vary. Procedures to operate them vary also. Lift

Lift Power ON/OFF Switch: This switch must be in the ON position in order to activate the lift. The Power Indicator Light illuminates to signal power to the lift.

Control Switch Functions:

UP: From the stowed position, the UP function extends the platform fully (platform moves out). The platform then raises to floor level position and stops.

From ground level, the UP function will raise (rotate) the roll stop to the vertical position. The platform then raises to floor level position.

DOWN: The DOWN function lowers the platform to ground level and then unfolds (lowers) the roll stop to the ramp (horizontal) position. From the stowed position, the lift will extend and then lower when the DOWN switch is pressed.

STOW: The STOW function raises or lowers the platform to stow level and then moves the platform inward to the stow position (platform retracts).

DOOR CLOSE: If your vehicle is equipped with optional automatic door operators, the doors will open when the UP or DOWN switch is pressed. The automatic door operators will close when the DOOR CLOSE switch is pressed (only if the lift platform is in the fully stowed position).

Note: If any functions do not occur as described, discontinue lift use immediately.

operators (attendants) must become familiar with the vehicle lift access door system and vehicle interlock(s).

Manual Door(s): Open manual doors fully and secure in full open position before operating the lift.

Do not operate the lift if you suspect lift damage, wear, or any abnormal condition. Refer to the Manual Operating Instructions to manually operate lift.



Hand-held Pendant Control

Lift Operating Instructions

Lift Operating Instructions



Folding handrails are manually operated. The

not in use (stowed). The handrails are lifted to

the vertical position and locked in position when

handrails rest on the platform when the lift is

fully raised (latch engages platform bracket).



Lifting the round knob located on the vertical handrail tube disengages the latch. The handrails must be folded down to the platform (horizontal position) before stowing the lift. Note: Left handrail must be folded first as shown above.

OPEN DOOR(S) AND SECURE

Power Door Operator(s): Proceed to "TO DEPLOY PLATFORM."

Manual Door(s): Manually open door(s) fully and secure.

TO DEPLOY PLATFORM:

- 1. Stand clear and press the UP switch until the platform extends fully. Release switch.
- 2. Lift handrails up to vertical position. See Handrail Operating Instructions.
- 3. Press the UP switch until the platform stops (raises to floor level) and bridge plate unfolds to floor level. Release switch.

TO UNLOAD PASSENGER:

- 1. Load passenger onto platform and lock wheelchair brakes.
- 2. Press DOWN switch until the entire platform reaches ground level and the roll stop unfolds fully (ramp position). Release switch.
- 3. Unlock wheelchair brakes and unload passenger from platform.

TO LOAD PASSENGER:

- 1. Load passenger onto platform and lock wheelchair brakes.
- 2. Press UP switch to fold roll stop up fully (vertical), raise the platform to floor level and unfold bridge plate to floor level. Release switch.
- 3. Unlock wheelchair brakes and unload passenger from platform.

TO STOW PLATFORM:

- 1. Fold handrails down to platform (horizontal) position. See Handrail Operating Instructions.
- 2. Press STOW switch until platform stops (retracts fully). Release switch.

CLOSE DOOR(S)

- Power Door Operator(s): Press the DOOR switch until the door(s) are fully closed. Release switch.
- Manual Door(s): Manually close door(s) fully.

Manual Operating Instructions



The T-handle releases and engages the platform carriage assembly to allow the platform to be manually extended and retracted. The hand pump is used to manually lower and raise the platform.

Cable-Activated Platform Manual Release System

A cable-activated manual release system engages the platform carriage assembly drive chain. Disengaging the drive chain allows the platform to be manually extended (out) or retracted (in). A T-handle is provided for activation of the manual release.

After manually moving the platform in or out, the manual release must be positively re-engaged to lock the platform. Turn the T-handle and push the T-handle in fully. Grasp the roll stop and move the platform in and out until the platform locks. You will feel the release mechanism engage the drive chain.

Ensure the platform is locked before driving lift vehicle. Failure to lock the platform carriage assembly will allow the platform to roll in or out of housing unhindered during vehicle movement.

Notice: Push the lift platform fully into the lift housing before resuming powered operation.



manually move platform in and out to engage platform lock before driving vehicle. Failure to lock platform may result in unintended platform deployment. Unintended platform deployment may result in <u>serious bodily</u> injury and/or property damage.

Manual Operating Instructions

Note: Bridge plate automatically functions during manual operations.

OUT (TO EXTEND PLATFORM):

- 1. Pull T-Handle.
- 2. Turn T-Handle to lock platform in released position.
- 3. Pull platform out.
- 4. Turn T-Handle.
- 5. Push T-Handle in.
- 6. Grasp roll stop and attempt to move platform in and out until the platform locks (feel release mechanism engage).

DOWN (TO LOWER PLATFORM):

Using hand pump handle, open hand pump valve (turn counterclockwise). Open 1/2 turn only.

DOWN (TO UNFOLD ROLL STOP):

- 1. Remove hairpin cotter from detent pin.
- 2. Remove detent pin.
- 3. Unfold (rotate) barrier down.

UP (TO FOLD ROLL STOP):

- 1. Fold (rotate) roll stop up.
- 2. Insert detent pin.
- 3. Insert hairpin cotter in detent pin.

UP (TO RAISE PLATFORM):

Using hand pump handle:

- 1. Close hand pump valve (turn clockwise).
- 2. Insert handle in pump and stroke.

Note: Close valve before operating electric pump.

IN (TO STOW PLATFORM):

- 1. Raise or lower platform to stow level (follow UP or DOWN procedures).
- 2. Pull T-Handle.
- 3. Turn T-Handle to lock platform in released position.
- 4. Push platform in.
- 5. Turn T-Handle.
- 6. Push T-Handle in.
- 7. Grasp roll stop and attempt to move platform in and out until the platform locks (feel release mechanism engage).





Proper maintenance is necessary to ensure safe, trouble free lift operation. Inspecting the lift for any wear, damage or other abnormal conditions should be a part of the transit agency daily service program. Simple inspections can detect potential problems.

Park vehicle on a level surface clear of traffic and bystanders. Place vehicle transmission in "Park" and engage parking brake. Deploy lift to ground level. Provide adequate work space around fullydeployed lift. Perform specified maintenance and lubrication procedures (position lift as required).

Pump Module: When cleaning the exterior of the pump module, first disconnect the unit from its power source. Do not use liquid cleaners, aerosols, abrasive pads, scouring powders or solvents, such as benzine or alcohol. Use a soft cloth lightly moistened with a mild detergent solution. Ensure the surface cleaned is fully dry before reconnecting power.

Other Components: Clean components and the surrounding area before applying lubricants. Clean only with mild detergent and water. Do not clean with solvents. Allow the lift to dry thoroughly and apply lubricants as specified after every cleaning.

LPS2 General Purpose Penetrating Oil is recommended where Light Oil is called out. Use of improper lubricants can attract dirt or other contaminants which could result in wear or damage to components. Platform components exposed to contaminants when lowered to the ground may require extra attention.

Perform maintenance and lubrication procedures at the scheduled intervals according to the number of cycles. When servicing the

Maintenance and lubrication procedures must be performed as specified by an authorized service technician. Failure to do so may result in <u>serious bodily injury</u> and/or property damage.

lift at the recommended intervals, inspection and lubrication procedures specified in the previous sections should be repeated.

These intervals are a general guideline for scheduling maintenance procedures and will vary according to lift use and conditions. Lifts exposed to severe conditions (weather, environment, contamination, heavy usage, etc.) may require inspection and maintenance procedures to be performed more often than specified.

Records of maintenance and service procedures should be maintained.

Discontinue lift use if maintenance and lubrication procedures are not properly performed, or if there is any sign of wear, damage or improper operation. Contact your sales representative.

Maintenance and Lubrication Schedule

Lubrication Diagram



See the Maintenance/Lubrication Schedule for recommended applications per number of cycles.

Lubricant	Туре	Specified (recommended) Lubricant	Available Amount	Braun Part No.
LO - Light Oil	Light Penetrating Oil (30 weight or equivalent	LPS2, General Purpose Penetrating Oil	16 oz. Aerosol Can	15807
DE - Door-Ease	Stainless Stick Style (tube)	Door-Ease Stick (tube)	1.68 oz.	15806
SG - Synthetic Grease	Synthetic Grease (Multipurpose)	Mobiltemp SHC32	12.5 oz. Tube	28598

Maintenance and Lubrication Schedule

	Roll stop and lower closure pivot points (2)	Apply Light Oil - See Lubrication Diagram
	Inspect roll stop and lower closure for proper operation	Correct or replace damaged parts.
	Inspect lower closure gasket	Resecure, replace or correct as needed
	Roll stop detent pin	Apply Light Oil - See Lubrication Diagram
	Roll stop latch spring	Resecure, replace or correct as needed.
	Bridge plate hinge pivot points	Apply Light Oil - See Lubrication Diagram
	Bridge plate linkage pivot points	Apply Light Oil - See Lubrication Diagram
	Lifting arm pivot points and rollers (bearings)	Apply Light Oil - See Lubrication Diagram
	Inspect lift for wear, damage or any abnormal condition	Correct as needed.
750	Inspect lift for rattles	Correct as needed.
Cycles	Check drive chain tension.	Pull out and lock manual release cable. Adjust chain tension as needed. See Drive Chain Adjustment.
	Inspect bridge plate and linkage for: • Proper operation • Positive securement • Wear or damage • Proper adjustment	Resecure, replace or correct as needed. See Floor Level and Bridge Plate Adjustment Instructions.
	Check carriage ride height in housing	Adjust as needed. See Carriage Ride Height Adjustment.
	Check stow height/lifting arm alignment	Lifting arms should be horizontal, aligned with each other and aligned with carriage. Adjust as needed. See Below Stow Switch.
	Inspect wiring harnesses for securement, wear or other damage	Resecure, replace or correct as needed
	Check lower pan securement	Resecure, replace damaged parts or correct as needed.
	Torque tube pivot points (6 places)	Apply Light Oil - See Lubrication Diagram

	Carriage rollers (bearings)	Apply Light Oil - See Lubrication Diagram
	Eccentric shaft rollers (bearings)	Apply Light Oil - See Lubrication Diagram
	Rolling horizontal carriage tube slot area	Apply Door-Ease - See Lubrication Diagram. Apply to the surface area around both slots and wipe off excess.
	Hydraulic cylinder pivot points (4 per cylinder)	Apply Light Oil - See Lubrication Diagram
	Drive chain and chain rollers	Apply Light Oil - See Lubrication Diagram
	Drive chain release latch mechanism	Apply Synthetic Grease - See Lubrication Diagram
	Deploy lift, remove upper pan and blow out housing and clean housing tracks.	Use compressor and nozzle to remove all debris from housing. Use clean cloth and solvent to clean tracks.
	Check drive chain tensioner, jam nuts and connecting link for securement and/or misalignment.	Correct or replace damaged parts and/or relubricate. See Drive Chain Adjustment.
1500 Cycles	Inspect drive chain release latch mechanism for proper operation, positive securement, wear or other damage.	Correct or replace damaged parts and/ or relubricate.
	Inspect platform cable-activated manual release system (T-handle/cable assembly and carriage movement).	Ensure T-handle release and cable assembly operate properly. Ensure carriage can be manually extended and retracted freely.
	Inspect limit switches and cams for securement and proper adjustment	Resecure, replace or adjust as needed. See Switch Adjustment.
	Inspect carriage, lifting arm and eccentric shaft rollers (bearings) for wear or damage, positive securement and proper operation	Resecure, replace or correct as needed.
	 Inspect external snap rings & e-clips): Carriage roller bearings (4) Lower lifting arm pins (4) Bridge plate pivot pin (2) Eccentric shaft track roller bearing (4) Handrail pivot pins (8) Roll stop actuator (1) Hydraulic cylinder pins (4) 	Resecure, replace damaged parts, lubricate or correct as needed.
	Inspect lower lifting arm pins for wear or damage, positive securement and proper adjustment	Resecure, replace damaged parts, lubricate or correct as needed. See Carriage Ride Height Adjustment.

	Inspect eccentric shaft pins, bearing mounting screw, washers and securement hardware for wear or damage, positive securement and proper operation	Resecure, replace or correct as needed.
	Inspect torque tube cams for securement, wear or damage	Resecure, replace or correct as needed.
1 500 Cycles	Inspect housing cam brackets for securement, wear or damage	Tighten, repair or replace if needed.
	Inspect cylinder(s), hoses, fittings and hydraulic connections for wear, damage or leaks	Resecure, repair or replace if needed.
	Inspect power cable	Resecure, repair or replace if needed.
	Inspect handrails for securement	Resecure, repair or replace if needed.

4500 Cycles	Hydraulic Fluid (Pump) - Check level. Notice: Fluid should be changed if there is visible contamination. Inspect the hydraulic system (cylinder, hoses, fittings, seals, etc.) for leaks if fluid level is low.	Use 5606 aviation fluid only (part 87010R). Do not mix with Dextron III or other hydraulic fluids. Check fluid level with platform lowered fully. Fill to maximum fluid level indicated on reservior (specified on decal). Do not overfill. If fluid level decal is not present - measure 22 mm (7/8") from the bottom of the fill tube to locate fluid level.
	Inspect lifting arm bushings and pivot pins for visible wear or damage	Replace if needed.
	Inspect roll stop pivot pin mounting bolts (2)	Tighten or replace if needed
	Mounting	Check to see that the lift is securely anchored to the vehicle and there are no loose bolts, broken welds, or stress fractures.
	Decals and Antiskid	Replace decals if worn, missing or illegible. Replace antiskid if worn or missing.

Consecutive	Repeat all previously listed inspection,	
750 Cycle	lubrication and maintenance procedures	
Intervals	at 750 cycle intervals.	

Lift Disposal Procedure	2000-53-EC Disassembly and Disposal Guidelines
	No lift components contain unacceptable amounts of lead, cadmium, mercury, or hexavalent chromium.
	1. Lower platform to ground.
	2. Open pump module manual relief valve.
	3. Disconnect power from lift.
	4. Capture and recycle hydraulic fluid.
	5. Disassemble lift and recycle components.
	Refer to exploded views in appropriate service manual.



EC Declaration of Conformity With Council Directive 2006/42/EC

• •	
12 August 2013	
e: Machinery Directive on machinery safety, 2006/42/EC	
Hydraulic Lift System UVL601C Series 04 and Newer International Lifts UVL603C Series 04 and Newer International Lifts UVL603C24 Series 04 and Newer International Lifts UVL855R Series 09 and Newer International Lifts UVL855R24 Series 09 and Newer International Lifts	
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EN 13857:2008, EN ISO 13850:2008, EN ISO 14121-1:2007, EN 349:1993+A1:2008, EN 953:1997+A1:2009, EN 1037:1995+A1:2008, EN 982:1996+A1:2008, EN 614-1:2006+A1:2009, EN 60204-1:2006, EN 1756-2:2004+A1:2009	
Essential Health and Safety Requirements of Annex 1 of the Machinery Directive	
hinery described above conforms with the essential health and safety ive 2006/42/EC on the approximation of the laws of the Member machinery.	
SF10999A1.BC	

CE



Notes on Declared Standards referenced in the Declaration.

EN 13857:2008	Safety of machinery. Safety distances to prevent hazard zones being reached by upper and lower limbs.		
EN ISO 13850:2008	Safety of machinery - Emergency stop - Principles for design.		
EN ISO 14121-1:2007	Safety of machinery - Risk assessment - Part 1: Principles.		
EN 349:1993+A1:2008	Safety of machinery. Minimum gaps to avoid crushing of parts of the human body.		
EN 953:1997+A1:2009	Safety of machinery. Guards. General requirements for the design and construction of fixed and moveable parts.		
EN 1037:1995+A1:2008	Safety of machinery. Prevention of unexpected start-up.		
EN 982:1996+A1:2008	Safety of machinery. Safety requirements for fluid power systems and their components. Hydraulics.		
EN 614-1:2006+A1:2009	Safety of machinery - Ergonomic design principles - Part 1: Terminology and general principles.		
EN 60204-1:2006	Safety of machinery. Electrical equipment of machines. General requirements.		
EN 1756-2:2004+A1:2009	Tail Lifts-Platform lifts for mounting on wheeled vehicles-Safety Requirements-Part 2: Tail lifts for passengers.		



Declaration of Noise Emission

The Braun Corporation UVL International Series System Sound Pressure Levels per EN ISO 11202 as based on testing on similar models are as follows:

		Operating	Idle	
LpAm (Operator Position)	75 dB (A)	68 dB (A)		
LpAm (Bystander Position)	73 dB (A)	69 dB (A)		
Ambient Correction Factor K3A calcu Appendix A.		4 dB (A)		
Measurements were made at a height of 1.5 m and 1 m from the Operator Position and Bystander positions.				
The difference between the extraneous noise level and the sound intensity level at each measuring point is: $LpAm \Delta = 6$		∆ = 6 dB (A)		
The figures quoted are emission levels and are not necessarily safe working levels. While there is a correlation between the emission and exposure levels this cannot be used reliably to determine whether or not further precautions are required.				
Factors that influence the actual level of exposure of the workforce include characteristics of the work room, the other sources of noise, etc. such as the number of machines and other adjacent processes. Also, the permissible level of exposure can vary from country to country.				
This information, however, will enable the user of the machine to make a better evaluation of the hazard and risk.				
* * * * * * * * * * * * * * * * * * *	Braun Corporation 631 W. 11th Street Winamac, IN 46996 USA	(ε	



Declaration of Conformity With Directive 72/245/EEC - 2009/19/EC		
Date of Issue:	12 August 2013	
Directive:	Radio Interference of Vehicles 72/245/EEC - 2009/19/EC	
Conforming Machinery:	Hydraulic Lift System UVL601C Series 04 and Newer International Lifts UVL603C Series 04 and Newer International Lifts UVL603C24 Series 04 and Newer International Lifts UVL855R Series 09 and Newer International Lifts UVL855R24 Series 09 and Newer International Lifts	
Manufacturer:	Braun Corporation 631 West 11 th Street Winamac, IN 46996 USA	
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Harmonized Standards, Directives, and Regulations Referenced or Applied:	EN50498:2010	
We hereby certify that the machinery described above conforms with Directive 72/245/EEC - 2009/19/EC		
Technical File Reference Number	SF10999A1.BC	

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www.braunability.com/international ISO 9001:2008 631 West 11th Street, Winamac, IN 46996, USA Phone: +1 574 946 6153 Fax: +1 574 946 4670 **Owner Manual for:**





Under-Vehicle Lift®

Series 09



Consult your local Braun dealer regarding warranty policy.

www.braunlift.com/international

Patent #5,305,486

37272 Rev. A August 2013



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Original Instructions