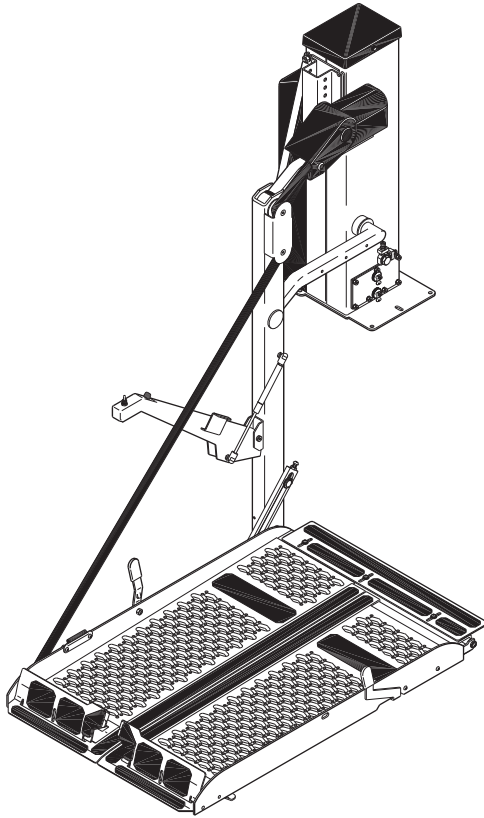




Owner / Operator Manual:


Mini Vangater™



 **THE BRAUN CORPORATION.**
"Providing Access to the World"
International Corporate Hdqrs: P.O. Box 310 Winamac, IN 46996 USA
1-800-THE LIFT (574) 946-6153 FAX: (574) 946-4670



WARNING



Read manual before operating lift. Failure to do so may result in serious bodily injury and/or property damage. Keep manual in lift vehicle.

90056-000

July 2002

Patent #4,140,230

Patent #5,401,135

See inside cover for warranty and registration information.

Congratulations

We at The Braun Corporation wish to express our fullest appreciation on your new purchase.

With you in mind, our skilled craftsmen have designed and assembled the finest lift available.

This manual includes safety precautions, operating instructions, override instructions, maintenance information and wiring diagrams, if needed.

The Braun Mini-Vangater™ is built for dependability and will provide years of pleasure and independence as long as the lift is installed and serviced as specified by a Braun certified technician, and the lift is operated by an instructed person.

Sincerely,

THE BRAUN CORPORATION



Ralph W. Braun

Chief Executive Officer

For your convenience, record the lift's Model Number, Series Number, and Serial Number in the space provided below. This information can be useful when calling in for warranty information.

Lift Model Number _____

Lift Series Number _____

Lift Serial Number _____

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INTRODUCTION

Your Braun lift has been designed for optimum safety and reliability, and includes high standards of material and equipment. This, plus a strict inspection before the lift leaves our manufacturing facility, aims to ensure your complete satisfaction with our product.

The purpose of these instructions is to enable the owner / user to operate the lift safely, and continue to maintain it's reliability. If followed conscientiously, the instructions will provide a long, trouble-free life for the equipment, and provide complete safety for the operating personnel.

Any of the independent Braun dealers, or our service department will be pleased to discuss a preventive maintenance schedule to suit your special requirements.

Because of continuous product development, the Braun Corporation reserves the right to alter the product and / or component specifications without notice.

FIELD MODIFICATIONS OF BRAUN PRODUCTS

Our exclusive ballscrew and ballnut drive is one of the safest, and most reliable lifting products you can purchase. However, modifications made to the original product may create serious results.

Consequently, all field modifications performed to the original products are at the installer's risk, and may void the warranty.

All equipment is dependant upon the operator's ability to prevent breakdown, and perform maintenance. Knowing the product's proper operation, capabilities and limitations will enable the operator to advise a maintenance technician of any changes or failure of the product's operation.

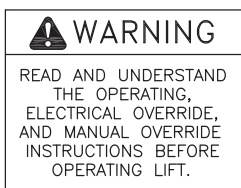
If you have any further questions concerning our products, please contact us at 1-800-THE LIFT, or any authorized Braun dealer. We welcome your comments or inquiries, so we can provide you with quality, and dependable equipment.

PART NUMBER	REV.
90056-000	Z

WARNINGS AND CAUTIONS

All the information in this manual is provided with your safety in mind. Familiarities with the lift operating instructions, electrical override instructions and manual override instructions are necessary to ensure safe and trouble free operation. Below and throughout this manual, there are safety precautions to help identify and avoid potentially hazardous situations.

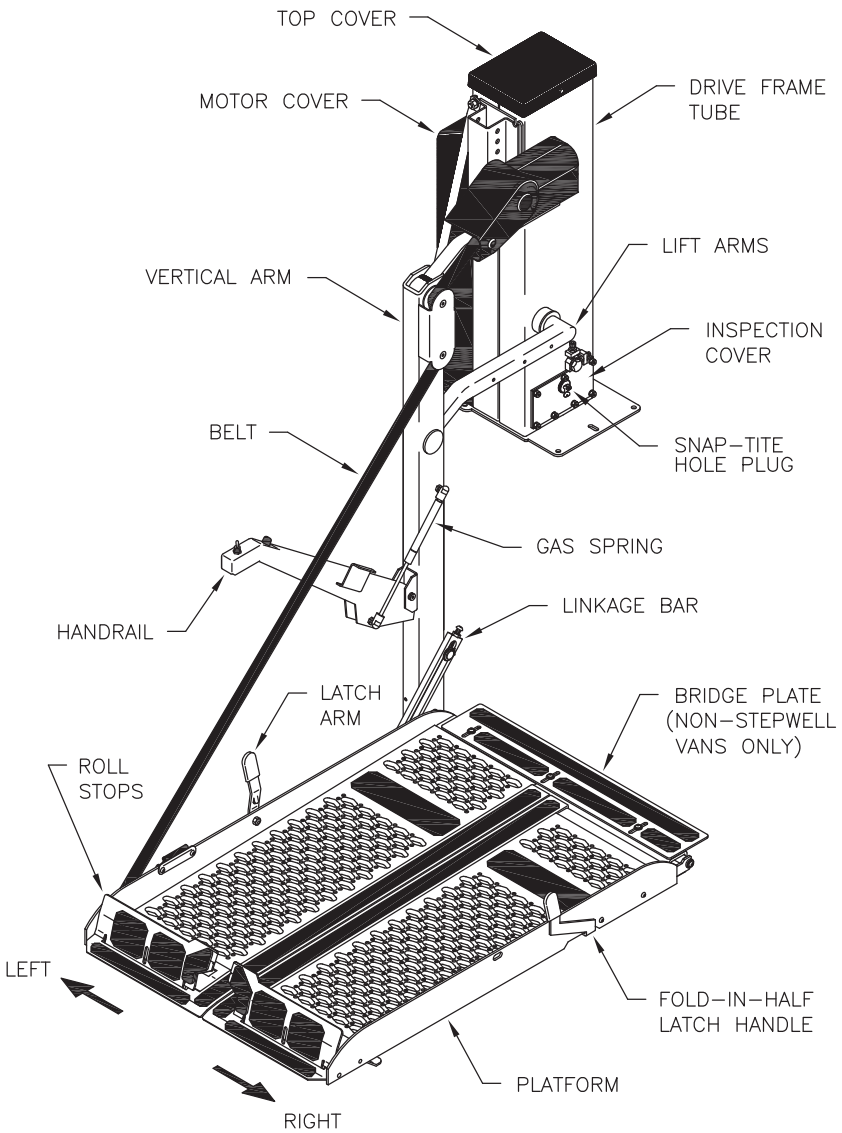
ALL WARNINGS MUST BE UNDERSTOOD BEFORE OPERATING THE LIFT. If there are any questions about a warning, please ask the installer, or call our service department.



The following are warnings that **MUST** be followed to prevent serious bodily injury or property damage.

- | |
|---|
| <ul style="list-style-type: none">* READ AND UNDERSTAND THE OPERATING AND OVERRIDE INSTRUCTIONS PRIOR TO OPERATING THE LIFT.* READ AND UNDERSTAND ALL SAFETY PRECAUTIONS PRIOR TO OPERATING THE LIFT.* DISCONTINUE USE OF THE LIFT IF THE ROLL STOPS DO NOT FUNCTION PROPERLY, AND NOTIFY A BRAUN DEALER IMMEDIATELY.* WHEELCHAIR'S BRAKE(S) AND SEATBELT MUST BE SECURED, AND PASSENGER FACING OUTWARD WHILE PLATFORM IS OCCUPIED.* VEHICLE PARKING BRAKES MUST BE ENGAGED BEFORE LIFT IS OPERATED.* VAN ENTRANCE DOOR MUST BE OPEN AND SECURED BEFORE LIFT IS OPERATED.* DO NOT LOAD / UNLOAD PASSENGERS IN THE PATHWAY OF VEHICLES.* OPERATOR AND BYSTANDERS MUST KEEP CLEAR OF ALL MOVING PARTS WHILE LIFT IS IN USE.* DO NOT USE THE LIFT'S ROLL STOPS AS BRAKES.* KEEP OWNER / OPERATOR MANUAL AND MANUAL OVERRIDE WRENCH ACCESSIBLE.* THE LIFT MUST BE SERVICED BY AN AUTHORIZED BRAUN DEALER.* REPLACE ALL MISSING AND WORN DECALS.* THE ELECTRICAL OVERRIDE IS NOT DESIGNED TO BE USED AS AN ALTERNATIVE WAY TO OPERATE THE LIFT. HAVE AN AUTHORIZED BRAUN DEALER ADDRESS THE PROBLEM AS SOON AS POSSIBLE.* OPERATOR MUST STOP LIFT AT ALL LOCATIONS WHILE USING ELECTRICAL OVERRIDE. |
|---|

LIFT TERMINOLOGY



STANDARD FEATURES

- A. Door cut-out switch: This safety feature prevents accidental operation of the lift while the slide door is closed.
- B. Unfold limit switch: This safety feature prevents the lift from being operated “Down”, unless the platform is in the horizontal position.



CAUTION

THE LIFT CAN STILL BE OPERATED UP, SO PLEASE INSURE PLATFORM IS IN THE HORIZONTAL POSITION BEFORE OPERATING, OR DAMAGE TO THE VAN MAY OCCUR.

- C. Exclusive fold-in-half platform: This feature allows access through the unblocked portion of the doorway when the platform is folded in half.
- D. Electro-mechanical drive: Our lifting device replaces conventional sliding friction screws with the rolling friction of ball bearings. It is highly efficient, allows precise positioning, permits uniform feed under various load conditions, and does not stick or slip regardless of temperature. This type of motion transfer device is used to drive the ailerons and flaps on commercial airplanes, insuring precise control.
- E. 100 Amp circuit breaker: Protects lift circuitry from overloading (refer to page 16).
- F. Electrical override: To be used only if the lift will not operate in the normal mode (refer to page 6).

For more specifications and options, please contact your local dealer.

FUNCTIONS:

- A. Your new Braun lift is an electro-mechanical device. It is powered by a 12 volt electric motor. The lifting and lowering function is controlled by Braun’s exclusive ballscrew drive mechanism.
- B. Your lift is operated by a single momentary toggle switch on the lift motor cover. There are also momentary toggle switches which may be located at several other locations; on the handrail, dash control, or outside rear controls.



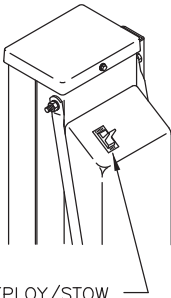
CAUTION

RAPID DIRECTION CHANGE IN THE UP-DOWN FUNCTION WILL CAUSE PREMATURE FAILURE OF THE SOLENOID. ALWAYS ALLOW THE LIFT MOTOR TO STOP FOR ONE-TWO SECONDS BEFORE CHANGING DIRECTIONS (UP OR DOWN).

OPERATIONS:

- A. Do not exceed the lifting capacity. Not operating the lift properly can cause premature wear of the clutch and drive mechanism.
- B. Always raise the platform into the vertical position without weight resting on it.

LIFT OPERATING INSTRUCTIONS



DEPLOY/STOW
SWITCH

TO OPEN DOOR:

Press DEPLOY switch until door is fully open.

TO DEPLOY PLATFORM:

1. Unlatch platform halves and open (rotate) to full width. Push latch handle down to lock platform.
2. Press DEPLOY switch until platform stops (reaches floor level).

TO UNLOAD PASSENGER:

1. Load passenger onto platform facing outward and lock wheelchair brakes.
2. Press DEPLOY switch until platform reaches ground level and roll stops unfold fully.
3. Unlock wheelchair brakes and unload passenger from platform.

TO LOAD PASSENGER:

1. Load passenger onto platform facing outward and lock wheelchair brakes.
2. Press STOW switch until platform stops (reaches floor level).
3. Unlock wheelchair brakes and unload passenger from platform.

TO STOW PLATFORM:

1. Press STOW switch until platform stops.
2. Unlatch platform halves and close (rotate) platform halves together until locked.

TO CLOSE DOOR:

Press STOW switch until door is fully closed.

WARNING

PLATFORM PANELS SHOULD BE OPENED MANUALLY, AND LOCKED IN PLACE WHILE IN THE VERTICAL POSITION, SO THE PLATFORM WILL DEPLOY PROPERLY.

CAUTION

THE DOWNSTOP ON THE VERTICAL ARM MUST MAKE CONTACT WITH THE GROUND SURFACE WHEN THE PLATFORM IS AT GROUND LEVEL. FAILURE TO DO SO MAY RESULT IN LIFT DAMAGE.

CAUTION

DO NOT PLACE THE WHEELCHAIR TIRES AGAINST THE ROLL STOPS WHILE THE PLATFORM CONTACTS THE GROUND SURFACE. THIS MAY CAUSE DAMAGE TO THE ROLL STOP ACTIVATORS.

WARNING

THE WHEELCHAIR MUST BE LOADED ONTO THE PLATFORM FACING OUT OF THE VAN.

WARNING

ALWAYS SECURE BRAKE(S) AND SEATBELT ON THE WHEELCHAIR BEFORE OPERATING LIFT.

WARNING

EXERCISE CAUTION WHEN PLACING THE WHEELCHAIR TIRES AGAINST THE ROLL STOPS ON THE PLATFORM. SOME POWER WHEELCHAIRS ARE DESIGNED TO OVERCOME OBSTACLES, AND MAY CLIMB OVER THE ROLL STOPS.

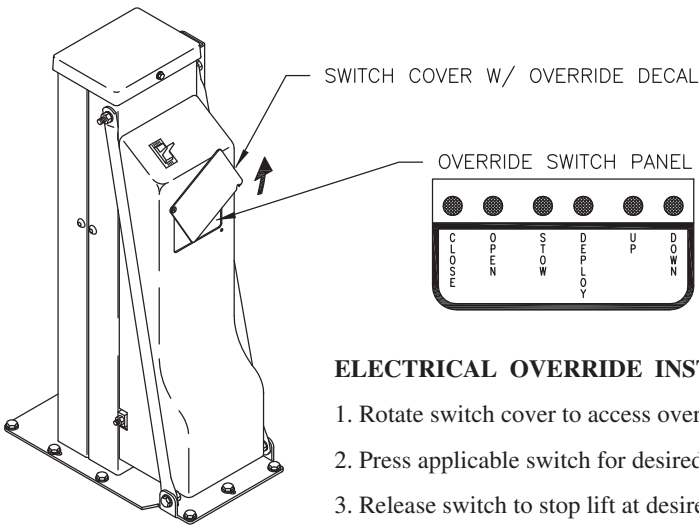
ELECTRICAL OVERRIDE OPERATION

NOTE: Before using the electrical override, refer to page 16 to see if the manual reset circuit breaker has to be reset. If the circuit breaker has been tripped, the lift should operate normally after resetting the breaker.

The electrical override will operate only when there is power to the lift, and should be used only if the lift will not operate in the normal mode. If the electrical override will not operate, refer to manual operating instructions on pages 7 and 8.

CAUTION

THE ELECTRICAL OVERRIDE BYPASSES ALL LIMIT SWITCHES EXCEPT THE DOWNSTOP LIMIT SWITCH. CARE MUST BE TAKEN TO AVOID RUNNING THE LIFT INTO THE VAN DOOR(S) OR RAISING/LOWERING THE LIFT WITH THE PLATFORM IN THE FOLDED POSITION. OPEN ENTRANCE DOOR(S) FULLY BEFORE OPERATING STOW/DEPLOY OR UP/DOWN FUNCTIONS.



ELECTRICAL OVERRIDE INSTRUCTIONS

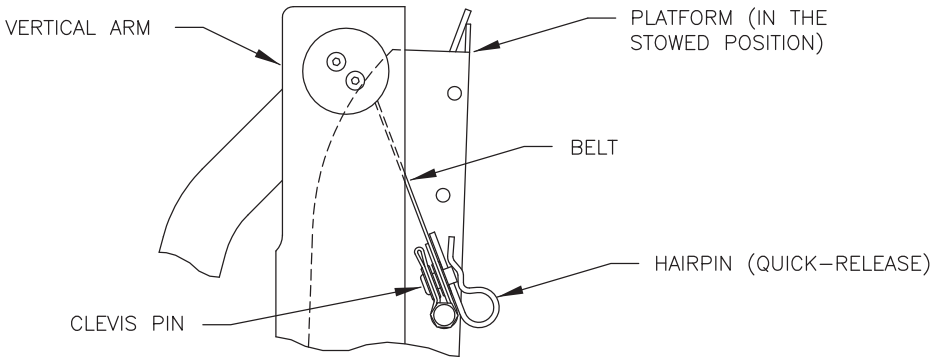
1. Rotate switch cover to access override switches.
2. Press applicable switch for desired function.
3. Release switch to stop lift at desired position.

WARNING

THE ELECTRICAL OVERRIDE IS NOT DESIGNED TO BE USED AS AN ALTERNATIVE WAY TO OPERATE THE LIFT (DAMAGE MAY OCCUR IF USED FREQUENTLY). HAVE A DEALER ADDRESS THE PROBLEM AS SOON AS POSSIBLE.

MANUAL OPERATION OF THE PLATFORM

In the event of an electrical malfunction, the platform can be manually lowered or raised (refer to illustration and warning below).



NOTE: Before manually operating the platform, refer to page 16 to see if the circuit breaker has to be reset.



WARNING

MANUAL OPERATION OF THE PLATFORM REQUIRES STRENGTH AND MOBILITY, AND SHOULD BE PERFORMED BY AN ATTENDANT (THE PLATFORM IS SPRING LOADED). IF THE PLATFORM WILL NOT DEPLOY, HOLD FIRMLY ONTO THE PLATFORM, AND PULL THE HAIRPIN (QUICK-RELEASE) OUT OF THE CLEVIS PIN. IF THE PLATFORM IS NOT BEING HELD BY THE OPERATOR OR SOME OTHER PERSON, IT WILL FREE FALL TO THE LOWERED POSITION.

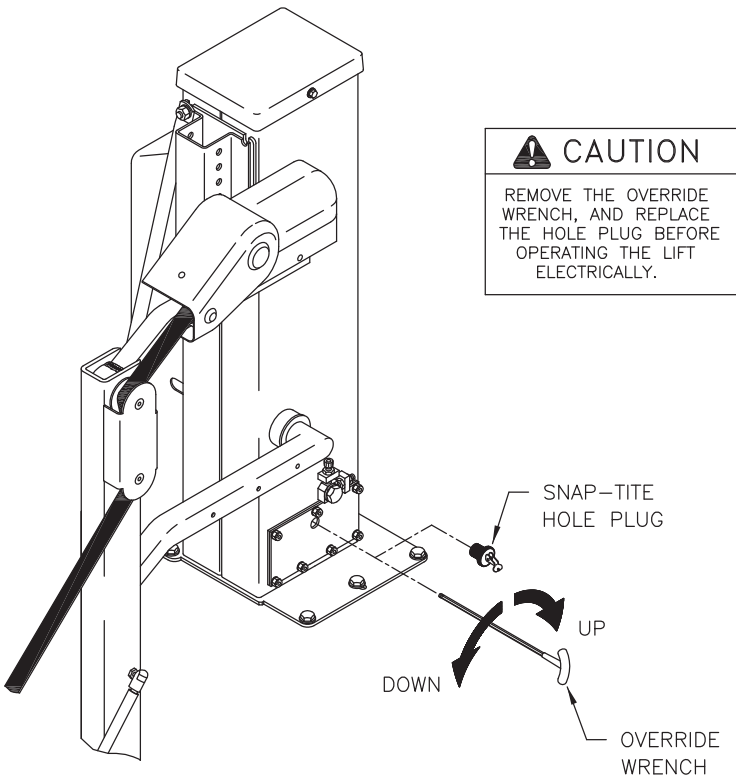
MANUAL OPERATION OF THE LIFT

A manual back-up system is a standard feature on your lift. The lift may be manually raised or lowered using the override wrench in the plastic pouch on the drive frame tube. Refer to illustration below for operation. For powered raising or lowering of the lift, a rechargeable drill may be used.

STEP 1: Release the lever lock, and remove the upper Snap-Tite hole plug.

STEP 2: Insert the override wrench into the socket head screw, inside of frame tube.

STEP 3: Turn the override wrench to raise or lower the lift.

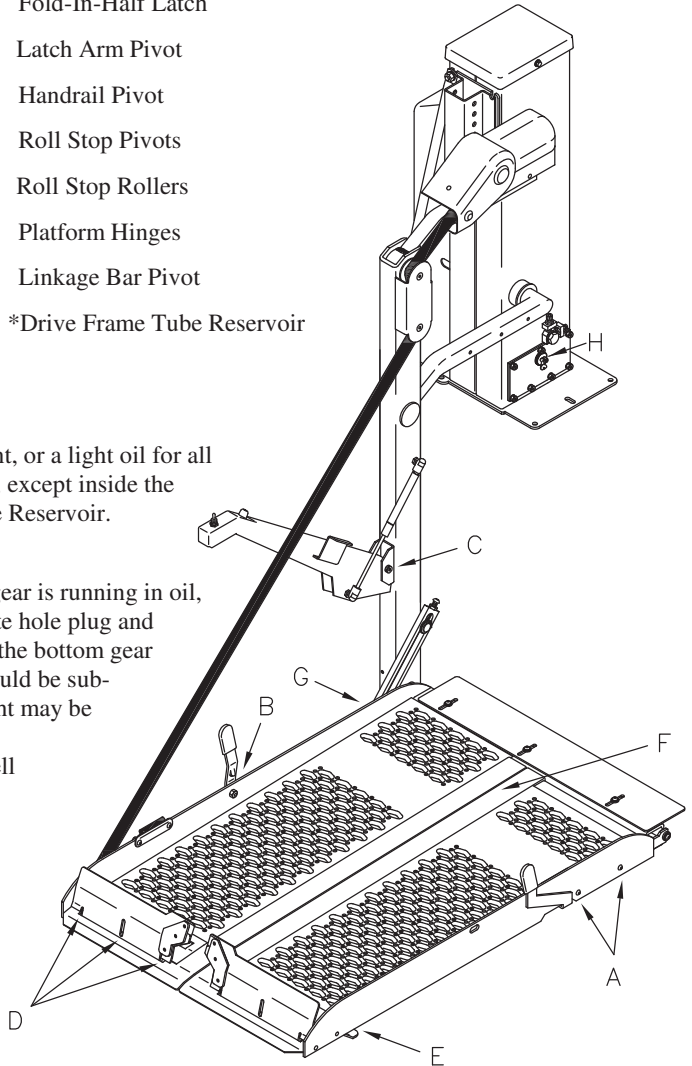


LUBRICATION POINTS

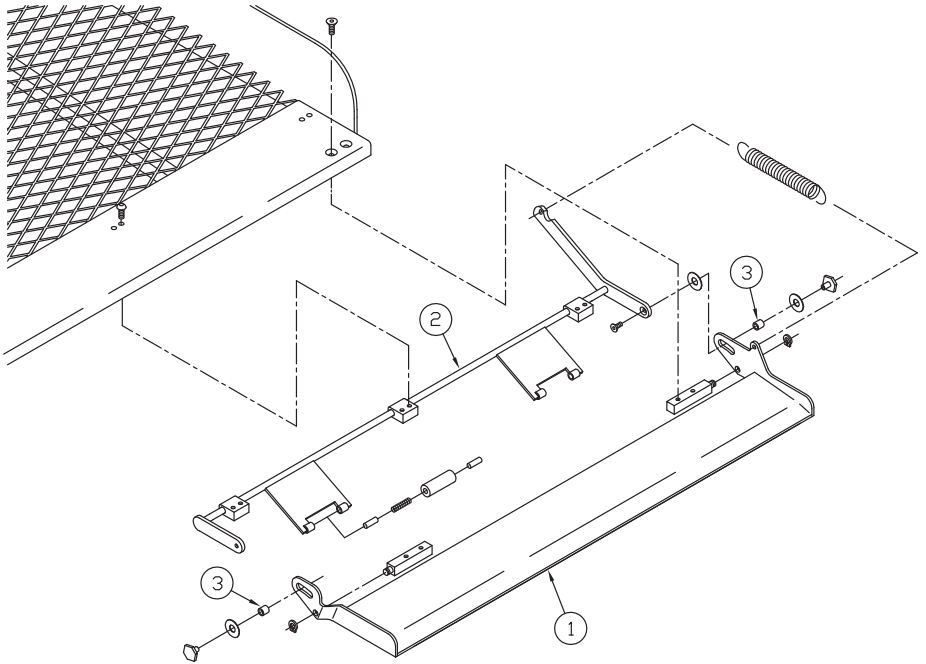
LETTER	INTERVAL (IN WEEKS)	LOCATION
A.	4	Fold-In-Half Latch
B.	2	Latch Arm Pivot
C.	4	Handrail Pivot
D.	2	Roll Stop Pivots
E.	2	Roll Stop Rollers
F.	4	Platform Hinges
G.	4	Linkage Bar Pivot
H.	Check every 12 months	*Drive Frame Tube Reservoir

NOTE: Use spray lubricant, or a light oil for all lubrication points, except inside the Drive Frame Tube Reservoir.

*Make sure that the oiler gear is running in oil, by removing the Snap-Tite hole plug and looking inside reservoir (the bottom gear teeth of the oiler gear should be submersed in oil). A flashlight may be necessary to view this. If oil level is low add Shell Spirax HD 80W-90.



LUBRICATION POINTS - SOLID PLATFORM ROLL STOP



Every two weeks, lubricate the pivot points on ref. no. 1, ref. no. 2 and ref. no. 3 using a spray lubricant, or a light oil.

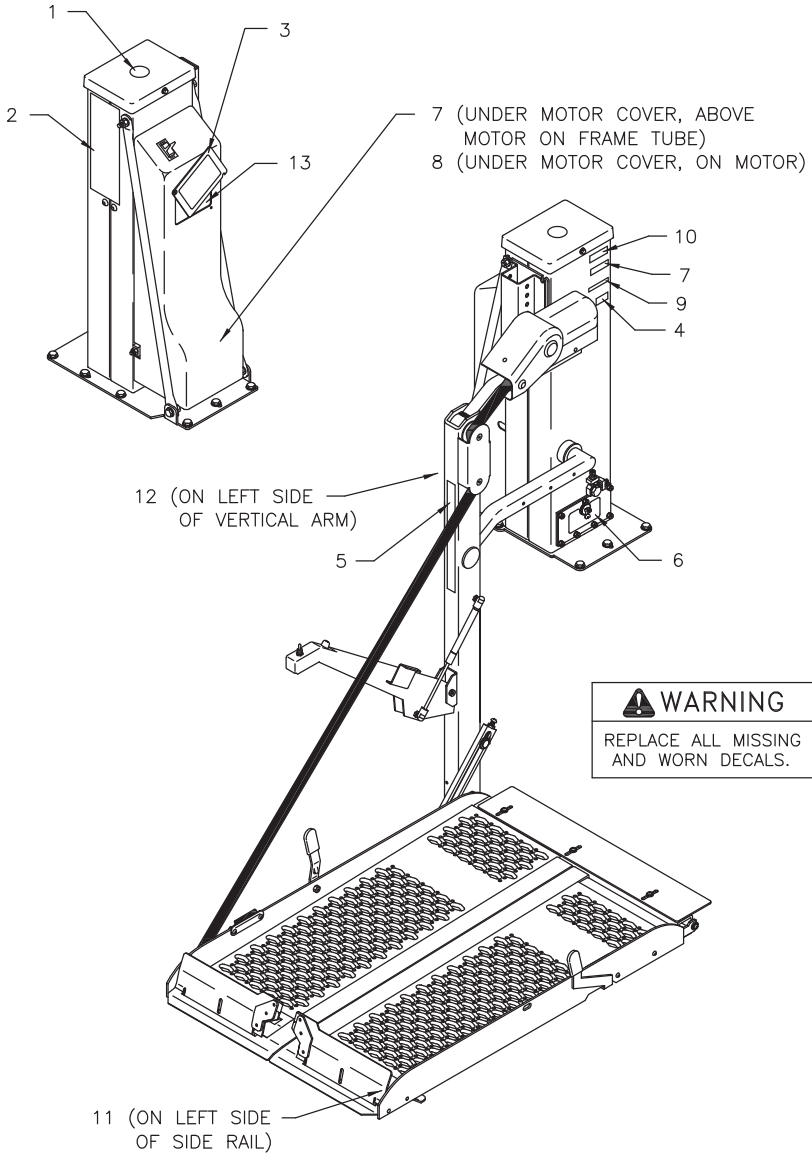
MAINTENANCE

1. Lubricate all pivot points as indicated on page 9 and 10. Have your dealer check the oil level in the drive frame tube once a year.
2. Inspect the roll stops periodically. Check for damage or malfunction.
3. Use a new or fully charged battery, for optimum lifting performance.
4. Check all fasteners periodically for looseness, and tighten if required.
5. Clutch adjustment should be checked by your dealer once a year, and any adjustments or repair must be made by an authorized Braun dealer.
6. Keep vehicle battery maintained, and battery terminals clean.

DEALER MAINTENANCE CHART

DRIVE FRAME TUBE OIL LEVEL		FASTENERS CHECKED	CLUTCH ADJUSTMENT
INITIALS	DATE	DATE	DATE

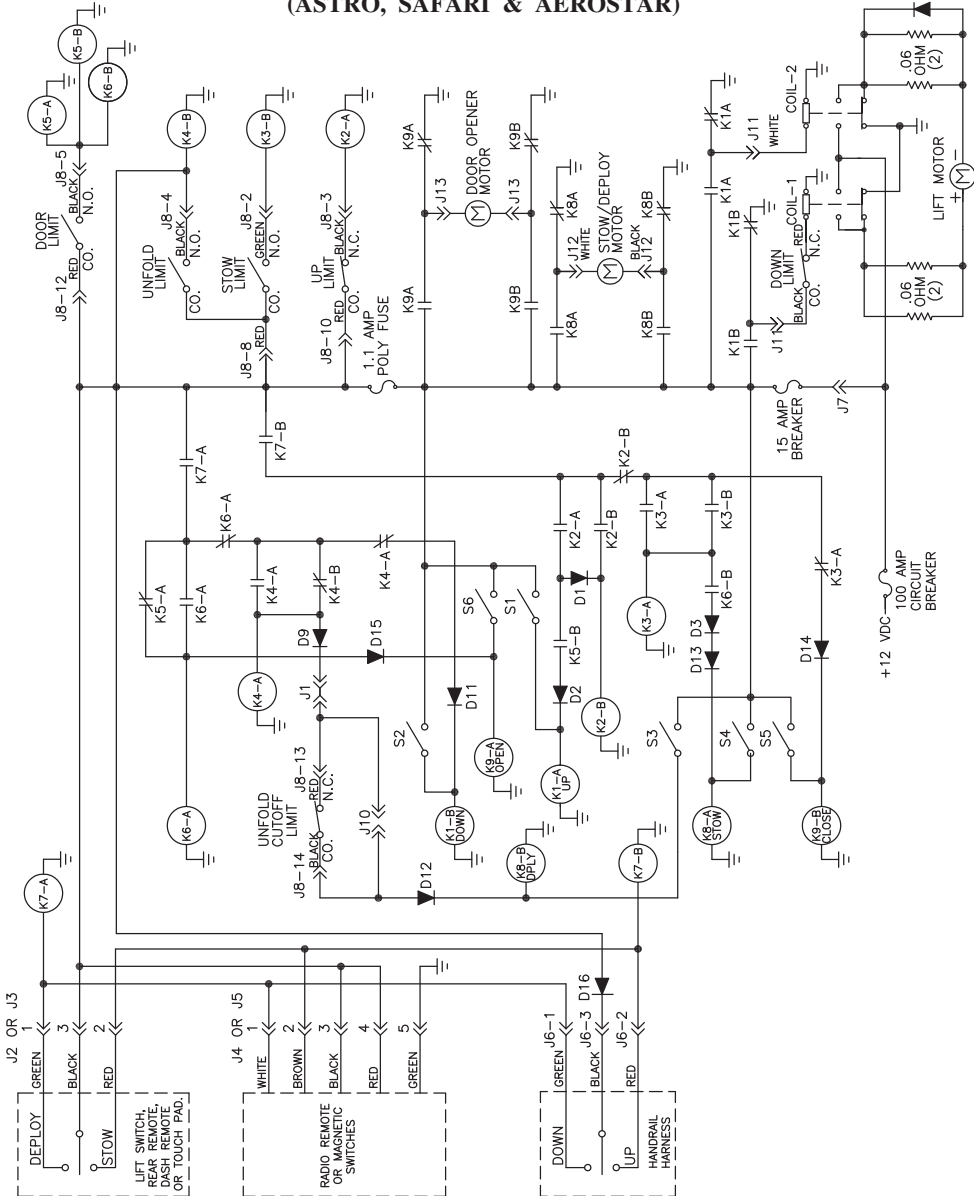
DECAL LOCATIONS & DESCRIPTIONS



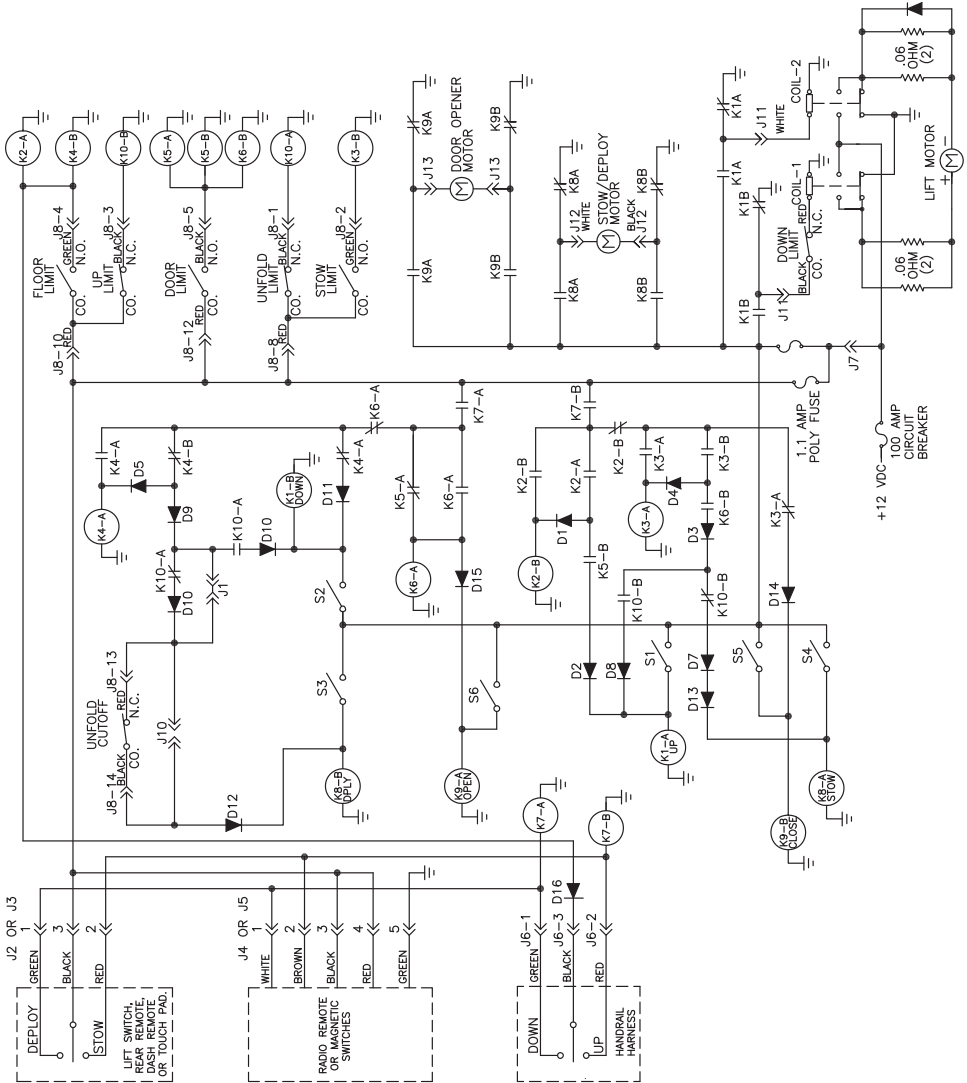
DECAL LOCATIONS & DESCRIPTIONS

REF. NO.	PART NO.	QTY.	DESCRIPTION
1	90251-000	1	Top Cover Decal
2	90613-000	1	Operating Instructions Decal
3	90612-000	1	Override Decal
4	90196-000	1	Made In USA Decal
5	90001-000	1	Braun Decal
6	90462-000	1	Inspection Cover Override Decal
7		2	Serial Number / Patent Number Decal
8	90021-000	1	"Do Not Tamper" Motor Decal
9		1	Lift Part Number Decal
10		1	Date Of Manufacture Decal
11	90276-000	1	Caution - Lift Capacity Decal
12	90273-000	1	Warning - Quick Release Decal
13	90623-000	1	Override Switches Decal

WIRING DIAGRAM - LADDER TYPE (ASTRO, SAFARI & AEROSTAR)

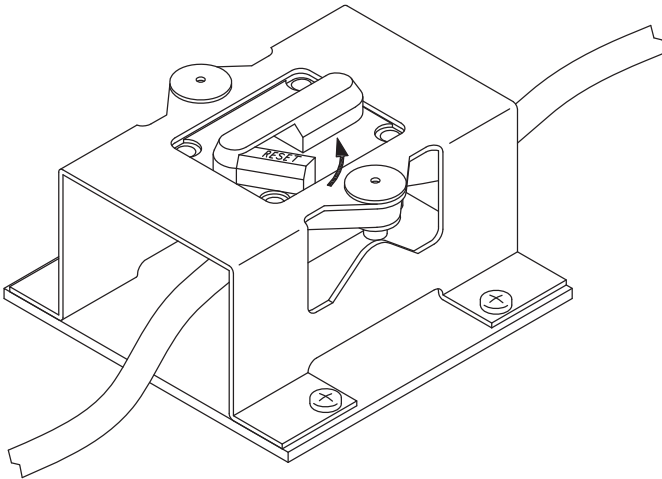


WIRING DIAGRAM - LADDER TYPE (CARAVAN, VOYAGER, WINDSTAR, VENTURE, SILHOUETTE, MONTANA & TRANSPORT)



MANUAL RESET CIRCUIT BREAKER (CIRCUIT SENTRY)

This lift is equipped with a manual reset circuit breaker. If the lift will not function, the circuit breaker may have to be reset (the circuit breaker should be located near the battery). If the reset arm is in the position shown on the illustration below, it should be moved in the direction of the arrow until you can hear the “click”.



"Providing Access to the World"



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and Distributors Worldwide**

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CORPORATION.**
"Providing Access to the World"



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1-800-THE LIFT® (574) 946-6153 FAX: (574) 946-4670



Braun "Worry-Free" Three-Year Limited Warranty

The Braun Corporation of Winamac, Indiana, warrants its wheelchair lift against defects in material and workmanship for three years, providing the lift is operated and maintained properly and in conformity with this manual. This warranty is limited to the original purchaser and does not cover defects in the motor vehicle on which it is installed, or defects in the lift caused by a defect in any part of the motor vehicle.

This warranty commences on the date the lift is put in service, providing the warranty registration card is completed and received by The Braun Corporation within 20 days of purchase.

This warranty also covers the cost of labor for the repair or replacement of most parts for one year when performed by an authorized Braun Representative. (A Braun labor schedule determines cost allowance for repairs.)

This warranty does not cover normal maintenance, service, or periodic adjustments necessitated by use or wear. The Braun Corporation will not, under any circumstances, pay for loss of use of lift or vehicle in which it is installed or loss of time.

This warranty will become null and void if the lift has been damaged through accident, misuse, or neglect, or if the lift has been altered in any respect.

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