

The Maxi-Lift[®] Manually Propelled Elevating Aerial Platform

CAUTION:

**READ CAREFULLY
BEFORE OPERATING
THIS UNIT**

**DO NOT REMOVE
MANUAL FROM UNIT**

**THE MAXI-LIFT[®] &
THE MAXI-LIFT[®] OUTRIGGERLESS**

**OPERATION, MAINTENANCE
AND TRAINING MANUAL**

Cotterman[®]

DIVISION OF MATERIAL CONTROL, INC.

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Reading and understanding the Manual of Responsibilities booklet included with this manual is **REQUIRED** by the Dealer, Owner, User, and Operator of this unit.

WARNING!

DEATH or SERIOUS INJURY can result from improper use.

Electrocution Hazard:

DEATH or SERIOUS INJURY will result from electrical contact or inadequate clearance.

Machine IS NOT insulated.

Assume all electrical parts and wires are energized unless known otherwise.

Maintain minimum safe approach distance (MSAD) from electrical power lines and apparatus, per OSHA 1910.333.

You MUST allow for platform sway, rock, or sag.

Work platform DOES NOT provide protection from contact with or proximity to electrically charged conductors.

Proper training requirements before using this equipment:

ONLY properly trained and authorized personnel are permitted to operate aerial platform.

Read and understand contents of Instruction Manual, including the Manual of Responsibilities.

View and understand training video supplied with this unit.

Complete and pass required proficiency examination.

Refer to instruction manual located inside equipment door.

Contact your supervisor for availability.

If instruction manual is missing or new video is needed call: 1-800-552-3337.

Operation configuration:

Outriggers MUST be extended fully and jacks placed in contact with surface before use.

DO NOT move unit with person on platform.

Use only on firm level surface.

DO NOT use near moving vehicles or where collision is possible.

Keep platform clean.

Check for wear or damage before each use.

Refer to ANSI A92.3, Sections 6, 7 and 8 for required frequent inspections.

For continued safe operation, replacement parts MUST be purchased from manufacturer only.

DO NOT substitute any part without written permission from manufacturer.

DO NOT substitute batteries: 2 x 6 volt deep cycle, 62 lbs each.

Intended for use by only one (1) person at a time.

Maximum wheel/outrigger load exerted: 1030 lbs.

Voltage: 12 VDC

The Maxi-Lift® model ML256BH:

7. **ALWAYS** read and understand all decals, labels, warnings, and instructions on THE MAXI-LIFT® prior to operation.

Safety Guidelines:

1. The following rules **MUST** be read, understood, and complied with. These rules are designed to promote operation safety, prevent equipment damage, and protect operating personnel.
2. If these guidelines conflict in any way with any State, Local, or Federal statutes or regulations, then those statutes **SHALL** supersede these guidelines.
3. The operator **MUST** comply with all applicable guidelines when operating THE MAXI-LIFT®.
4. **ALWAYS** survey job site area prior to using THE MAXI-LIFT®. THE MAXI-LIFT® is **NOT** for use near high-tension wires or on soft surfaces such as ditches, tampered earth, and/or debris. At **ALL** times a firm surface must support THE MAXI-LIFT®.
5. **DO NOT** use near electrically energized circuits. THE MAXI-LIFT® is **NOT** insulated.
6. THE MAXI-LIFT® **SHALL** be inspected prior to use; ensuring it has been properly serviced and is in good working order. **DO NOT** use THE MAXI-LIFT® if it is **NOT** working properly.
7. **NEVER** use THE MAXI-LIFT® for purposes or in a way for which it was not intended.
8. **DO NOT** elevate THE MAXI-LIFT® on incline. Operate **ONLY** on firm and level surface.
9. **ALWAYS** report any unsafe conditions in area, or with equipment.
10. **DO NOT** exceed platform load capacity.
11. **IT IS ESSENTIAL** that a careful, competent operator be physically and mentally fit, in addition to being thoroughly trained in THE MAXI-LIFT® safe operation.
12. **NEVER** lean out over or stand on platform railings for additional length of reach.
13. **DO NOT** alter equipment or any safety devices in any way
14. **DO NOT** use THE MAXI-LIFT® as a "dead man" or hoist. **(This produces excessive horizontal forces.)**
15. **DO NOT** use a ladder or any other devices on platform to gain additional height.
16. **DO NOT** let cords or other equipment dangle, or place where entanglement can occur.
17. **DO NOT** attempt to use THE MAXI-LIFT® while exposed to wind, rain, snow, or ice.

Training Video:

1. A Training Video has been provided with this unit.
2. It covers training regarding safe operation and maintenance of THE MAXI-LIFT®.
3. **ALL PERSONNEL** involved in either THE MAXI-LIFT® operation or maintenance **MUST** view and understand video along with this manual.
4. After viewing video, store together with spare lock keys and Material Safety Data Sheets, in a protected place for use in future training.
5. This Instruction Manual **MUST** be returned to its holder inside THE MAXI-LIFT® equipment compartment.

The Maxi-Lift® with Outriggers Setup:

1. Locate outriggers inside tubes at frame ends.
2. Pull outriggers out as far as they will go. **Note:** built in stops prevent complete removal.
3. Make sure THE MAXI-LIFT® is situated in proper position on a level, firm base.
4. Outrigger jacks must be screwed down into contact with floor surface.
NOTE: DO NOT LIFT WHEELS OFF OF FLOOR SURFACE!
5. **DO NOT use on incline.** A level indicator is provided below lower controls on The Maxi-Lift® frame. If unit is not level, re-position unit until level is indicated.
6. Hold each outrigger in extended position, and adjust outrigger jacks until green power indicator light turns on.
NOTE: THE MAXI-LIFT® will ONLY operate after OUTRIGGERS are in place.
7. A simple **slide bar gate** is located on either platform side for easy entrance without latches or knobs. Bars drop easily back into place, leaving operator's hands free.

The Maxi-Lift® Outriggerless Setup:

1. Locate floor locks under platform end of frame.
2. Push down on each floor lock pedal to engage.
Note: THE MAXI-LIFT OUTRIGGERLESS will ONLY operate after floor locks are in place.
3. To **release** floor locks, press **down** on release bar behind each lock pedal.
4. A simple **slide bar gate** is located on either platform side for easy entrance without latches or knobs. Bars drop easily back into place, leaving operators hands free.

Control Panel and Operation:

1. THE MAXI-LIFT® can **ONLY** be operated to an elevated position when lock switch, located on frame control panel, is in **ON** position. A lamp on control panel indicates operating controls are functional.
2. With lock switch in **ON** position, momentary push-button switches on platform will operate hydraulic system to raise or lower platform.
3. The **HOLD** push-button switch must be depressed and held in position for operation of **UP** or **DOWN** push-buttons.
4. Upon any switch release, platform will stop at platform elevated location at release time.
5. Platform can be jockeyed into position by proper **UP/DOWN** switch manipulation while depressing **HOLD** switch.
6. An **EMERGENCY STOP** button is located in platform center controls. Depressing this button removes all platform control power and stops platform.
7. To reactivate controls, turn red knob in arrow direction and it will pop out. This action confirms all controls again will be active.
8. In case operator is unable to manipulate switches, personnel at ground level can move platform by operating duplicate controls located on frame control panel.
9. Frame control panel also has **HOLD** push-button that must be depressed and held to activate **UP/DOWN** toggle switch.
10. Frame control panel has an **EMERGENCY STOP** button located adjacent to base control panel. This buttons function is used to remove platform control power and overrides all platform controls.

11. IMPORTANT: The base manual down valve will operate even if platform emergency stop button has been depressed. This knob is accessible from the back door panel.

WARNING

DO NOT remove any hydraulic components when platform is elevated.

DISCONNECT BATTERIES when working on any components.

Perform maintenance from The Maxi-Lift®'s back end when possible.

Any lifting device type presents hazard to personnel during maintenance.

Maintenance Safety:

1. The term "**CAUTION**" denotes that a failure to comply with the instructions could cause damage to the equipment.
2. The term "**WARNING**" denotes that failure to comply with the instructions would create a hazardous condition that could result in injury to personnel.

Daily Visual Inspection:

1. **ALWAYS** visually inspect THE MAXI-LIFT® completely before each use.
2. Factory authorized personnel only may repair or replace any damaged structural members of THE MAXI-LIFT®.
3. Tighten all loose bolts, nuts, screws, or pins.
4. **ALWAYS** check to ensure all guide blocks are in place and not damaged in any way.
5. Ensure outriggers operate properly and jacks operate easily.
6. Inspect chains for signs of wear, fractures, bends, broken links, corrosion, and/or heat damage, etc.
7. **ALWAYS** replace a chain that has been damaged in any way, or shows excessive signs of wear. Refer to **Appendix A, Figure 1** for each chain measurement. This checks chain stretch that occurs through usage and can determine if replacement is necessary.
8. The chain assemblies **MUST** be ordered from **Cotterman®** to ensure that the original safety and quality specifications are met.
9. **DO NOT** use THE MAXI-LIFT® if it has any chain assemblies in need of repair or replacement.
10. Inspect mast sections **DAILY** before operation. They should be free from dirt or foreign materials that will prevent free guide block movement.
11. **DAILY**, check hydraulic hose and fittings for leakage or damage. Tighten or replace when necessary in order to prevent any hydraulic oil loss.
12. Lubrication makes THE MAXI-LIFT® operation more efficient and extend its useful life.
13. Casters and swivel raceways need to be checked **DAILY** and greased weekly.
14. Guide block paths should be clean and lightly lubricated with petroleum jelly.
15. **NOTE:** Lubricate leaf chains **MONTHLY** with 2 or 3 oil drops every 6" of chain length using **Type EP 90 oil** or equivalent. Sheave shafts may be lubricated at this time.
16. Maintain consistent maintenance schedule for The Maxi-Lift®.

Following are our care and maintenance recommendations.

Suggested Component Checklist Schedule				
For Inspection and Lubrication				
COMPONENT	DAILY	WEEKLY	MONTHLY	6 MONTHS
BATTERIES				
Check wiring	X			
Fluid level	X			
Clean battery connection		X		
Coat terminals		X		
CONTROL SYSTEM				
Check terminals		X		
Check electrical cord		X		
HYDRAULIC SYSTEM				
Check for leaks	X			
Check fluid level		X		
Clean hoses	X			
Check fittings		X		
Check motor brushes				X
MAIN FRAME				
Grease casters		X		
Check structure	X			
MAST SYSTEM				
Check for damage	X			
Oil chains and sheaves			X	
Clean for broken pins & links (REPLACE IMMEDIATELY)	X			
SAFETY DECALS				
Check if missing	X			
Check if legible	X			
(REPLACE IMMEDIATELY)				

INSPECTION and LUBRICATION WORKSHEET

FOR CHECKING COMPONENTS

DAILY, WEEKLY and MONTHLY

MONTH: _____

YEAR: _____

DAILY SCHEDULE

COMPONENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
BATTERY	SINGLE BLOCKS ARE DONE ON A DAILY BASIS AND THE OTHERS SHOULD BE DONE WEEKLY. AS MARKED.																															
CHECK WIRING																																
CHECK FLUID LEVEL																																
CLEAN BATTERIES																																
COAT TERMINALS																																
CONTROL SYSTEM	SINGLE BLOCKS ARE DONE ON A DAILY BASIS AND THE OTHERS SHOULD BE DONE WEEKLY. AS MARKED.																															
CHECK TERMINALS																																
CHECK ELECTRICAL CORD																																
HYDRAULIC SYSTEM	SINGLE BLOCKS ARE DONE ON A DAILY BASIS AND THE OTHERS SHOULD BE DONE WEEKLY. AS MARKED.																															
CHECK FOR LEAKS																																
CHECK HOSES																																
CHECK MOTOR BRUSHES																																
CHECK FLUID LEVEL																																
MAIN FRAME	THESE ITEMS ONLY NEED TO BE CHECKED ON A WEEKLY BASIS																															
GREASE CASTERS																																
OIL WHEELS & CASTERS																																
MAST SECTION	SINGLE BLOCKS ARE DONE ON A DAILY BASIS AND THE OTHERS SHOULD BE DONE WEEKLY. AS MARKED.																															
CHECK FOR DAMAGED CHAINS																																
CHECK GUIDE BLOCKS (Wear?)																																
OIL SHEAVES																																
OIL SHAFTS																																
INSPECTORS INITIALS																																

Servicing Batteries:

WARNING

NEVER SMOKE or use other **COMBUSTIBLES** near batteries while servicing batteries or other components.

ALWAYS remember presence of hydrogen fumes could lead to **EXPLOSION**.

ALWAYS provide plenty of ventilation.

CAUTION

NEVER add acid to batteries.

USE DISTILLED WATER ONLY.

DO NOT over-fill.

Keep fluid filled to proper level.

Add water to batteries ONLY AFTER CHARGING, unless water level is below plate upper edges.

Fluid expands from charging as it gets warm, and may seep out of batteries.

When water is then added, solution is weakened and a loss of ampere-hour capacity results.

1. Battery care has a direct impact regarding efficient operation of THE MAXI-LIFT®.
2. Check battery water levels and wiring daily.
3. Charge the batteries fully after prolonged use of THE MAXI-LIFT®.
4. If batteries are allowed to remain discharged, lead plates will harden and become sulfated. In this condition, batteries fail to deliver rated capacity or be fully charged.
5. THE MAXI-LIFT® is equipped with an automatic, self-monitoring battery charger.
6. To charge batteries, plug extension cord into frame power inlet and other cord end plug into a **120 Volt AC outlet (240 on some models)**.
7. Check each battery water level and turn **ON/OFF** switch to **OFF** position. Charger will now operate.
8. When charging, two charger **LEDs** indicate current charging stage.
9. Most charging occurs during first stage. **RED (upper) LED** will be illuminated.
10. Both **LEDs** are on during second stage. Last charge amount is applied without overheating batteries.
11. When batteries are fully charged, only **GREEN LED** will be on.
12. Charger will continue to monitor batteries' charge, and top it off when needed without damaging battery or boiling off electrolyte solution.
13. Batteries can be charged indefinitely without overcharging.
14. Check fluid level and refill every **15 HOURS** of use and when recharging.
15. Wash any battery corrosion or dirt with solution of 5 teaspoons baking soda in 1 quart of water.
16. Coat terminals with petroleum jelly or equivalent coating.
17. Remove battery caps and check fluid level.
18. If needed, fill as follows: Before charging, fluid must be above plates. After charging, fill to split ring.

Adjustments to Leaf Chains:

1. Completely lower platform to bottom position.
2. Turn power off and disconnect power.
3. Remove back cover.
4. Leaf chains are adjusted from unit bottom with deep socket and ratchet wrench. Adjust each chain pair until column tops are even. Start with pair farthest from platform.
5. Bring all columns into contact with each associated stop angle by readjusting previous pairs as you work toward platform.
6. Avoid uneven loading by adjusting each pair evenly.
7. Platform deck top should be 18 inches +/- 2 inches from floor.
8. Replace back cover.

Servicing Hydraulic System:

CAUTION

Continuous, regular maintenance MUST be done to keep oil clean and prevent possible system damage.

1. Lower platform completely.
2. Turn Power Off/Disconnect Power.
3. Unscrew breather cap and fill, if needed, with **Mobil DTE 25** hydraulic oil or equivalent.
4. **DO NOT** over fill as oil, when warm, will expand and overflow reservoir.
5. If oil becomes contaminated, lower platform and drain oil into suitable container using mechanical siphon hose. Drain **ALL** reservoir oil and any remaining system oil. Reassemble components and check for tightness. Fill reservoirs with clean oil and replace breather cap. Operate lift to check for leaks.
6. After filling reservoir, operate THE MAXI-LIFT® for at least two cycles and recheck the reservoir between cycles.
7. Add oil as necessary.

Replacing Components:

Replace damaged or worn components prior to use.

Refer to following figures and component part listings when ordering replacement parts.

Contact company for pricing and availability.

Please have following information ready for parts and technical support:

1. THE MAXI-LIFT® Model Number and Serial Number.
2. Part Description and Part Number.

All replacement parts must be ordered direct from

Cotterman®

DIVISION OF MATERIAL CONTROL, INC.

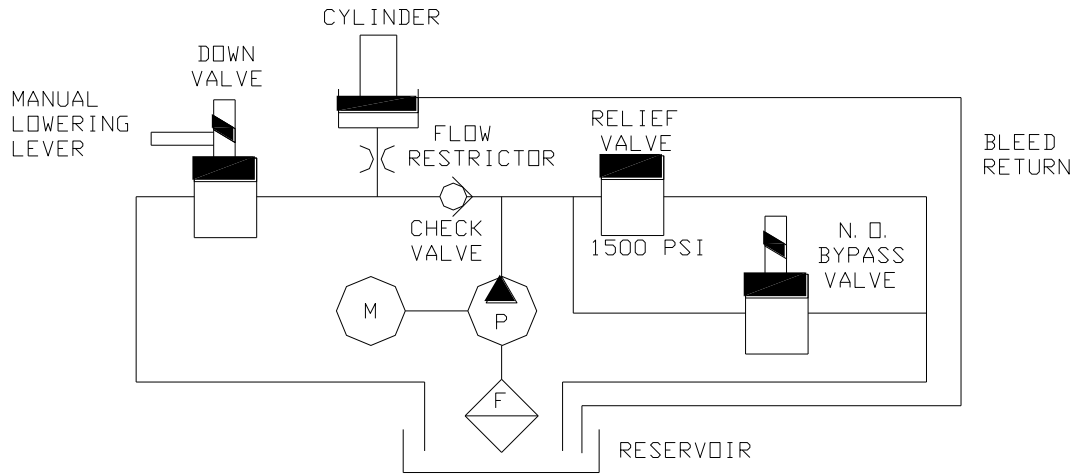
P.O. BOX 168

CROSWELL, MICHIGAN 48422

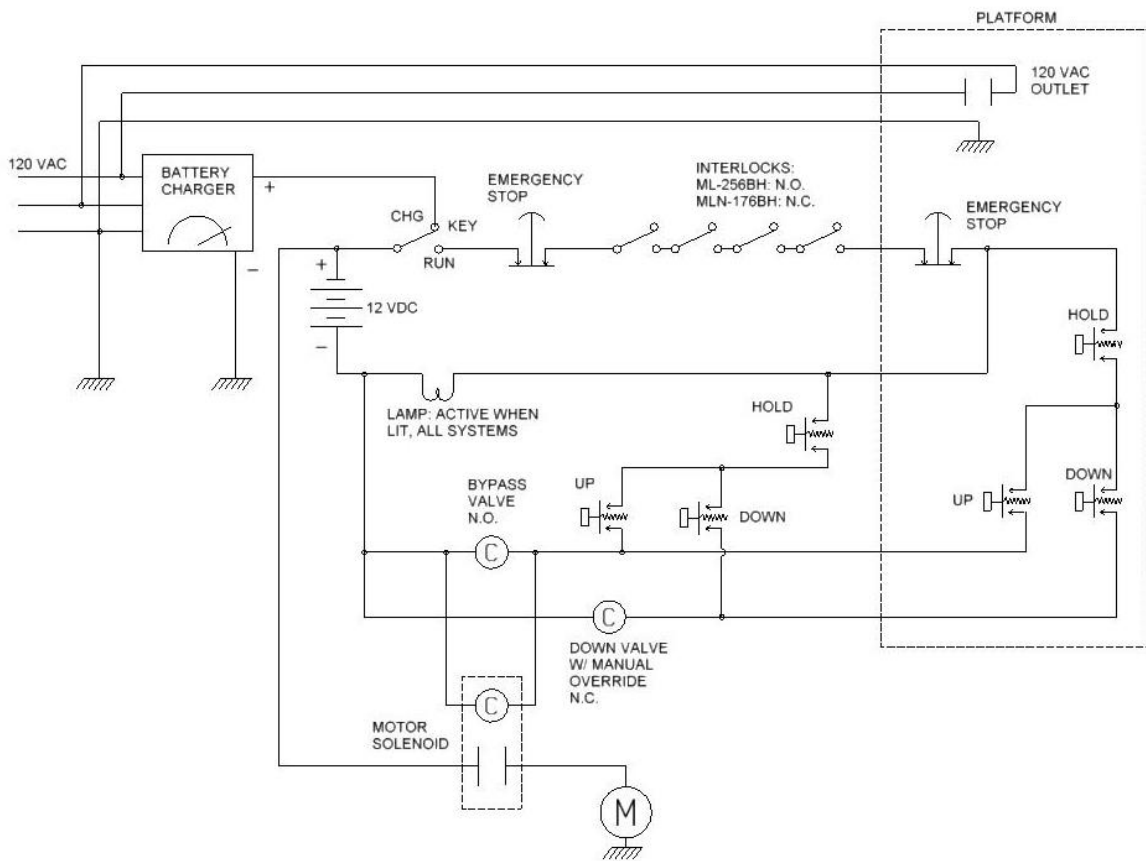
PHONE: (810) 679-4400 FAX: (810) 679-4510

E-MAIL: info@cotterman.com

HYDRAULIC SYSTEM DIAGRAM FOR THE MAXI-LIFT®



D.C. ELECTRICAL SCHEMATIC FOR THE MAXI-LIFT®



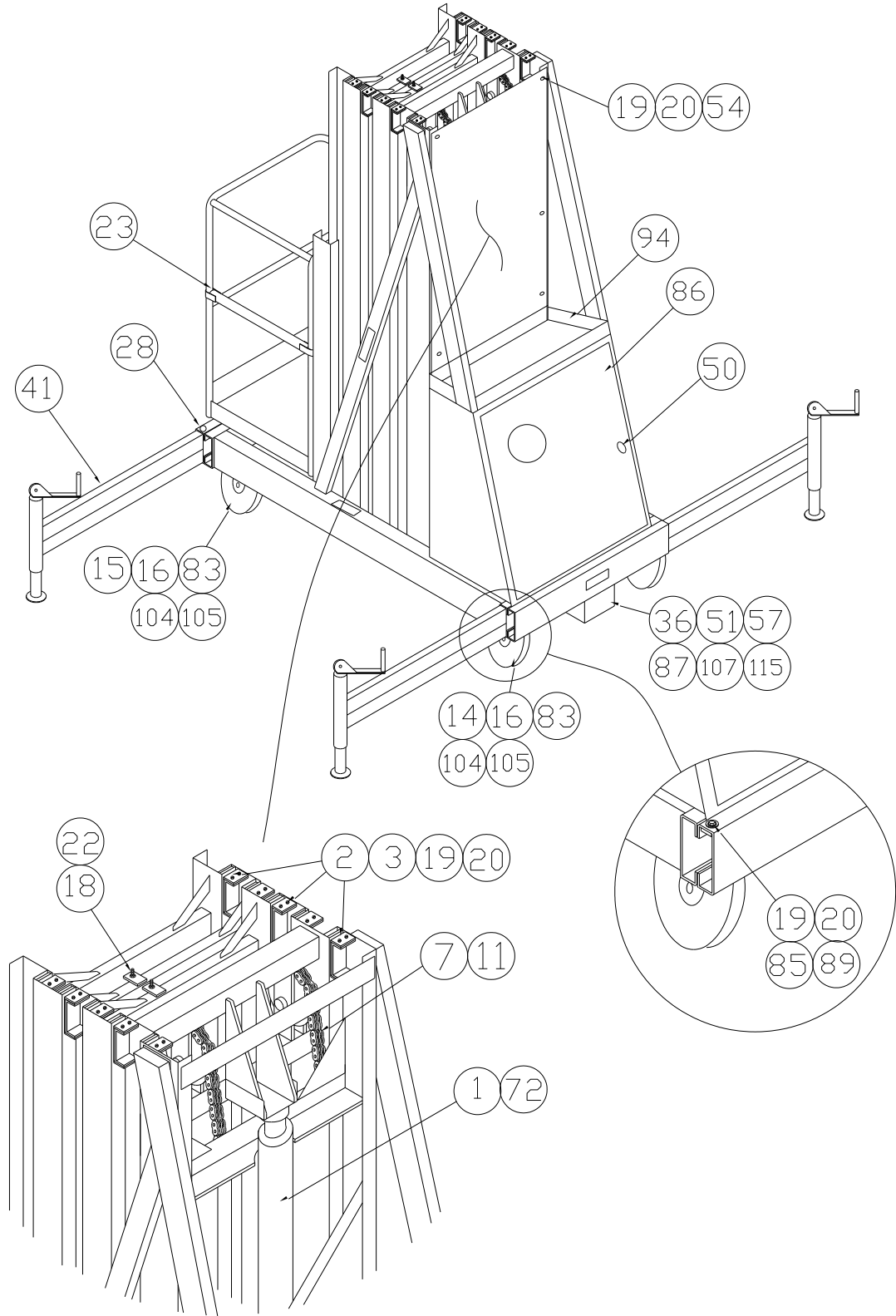
Replacement Part List: (Refer to assembly figures for item numbers)		
ITEM	DWG/PART#	DESCRIPTION
1	C-040-0001	HYDRAULIC CYLINDER
2	A-040-0028	GUIDE BLOCK FASTENER PLATE
3	A-040-0025	GUIDE BLOCK: 3 IN
4	A-086-0055	CHAIN ADJUST ANCHOR: 423
5	A-086-0072	CHAIN ADJUST ANCHOR: 446
6	A-086-0054	CHAIN ADJUST ANCHOR: 544
7	B-086-0020	CHAIN SHEAVE: 544 GRAPHITE
8	B-086-0094	CHAIN SHEAVE: 446 (OIL IMPREG 25' ONLY)
9	B-086-0051	CHAIN SHEAVE: 446 GRAPHITE
10	B-086-0032	CHAIN SHEAVE: 423 OIL IMPREG
11	A-086-0059	LIFTING LEAF CHAIN: BL-544
12	A-086-0074	LIFTING LEAF CHAIN: BL-446
13	A-086-0058	LIFTING LEAF CHAIN: BL-423
14	A-301-0203	SWIVEL CASTER: 8 IN DIAMETER
15	A-301-0302	RIGID CASTER: 8 IN DIAMETER
16	A-301-0452	3/8-16 x 1 HEX HEAD CAP SCREW
17	A-301-1012	INLET: 3 WIRE
18	A-301-1121	1/4-20 LOCKNUT W/NYLON INSERT
19	A-301-1087	1/4-20 x 3/4 HEX HEAD TEK SCREW
20	A-301-3425	1/4 SPLIT LOCKWASHER
21	A-301-0349	DUPLEX OUTLET: GND FAULT 125 VAC / 15 A
22	A-086-0065	SEQUENCING CABLE ASSEMBLY
23	A-301-0681	1 ¼' P/A CABLE PLUG
24	B-009-0076	RED BATTERY CABLE
25	B-009-0077	BLACK BATTERY CABLE
26	A-301-0043	BATTERY: 6 VOLT X 2
27	A-086-0192	BATTERY HOLDING BLOCK
28	A-086-0030	STRIPED SAFETY TAPE
29	A-301-3120	LEAF CHAIN LINK: BL-544
30	A-301-3121	LEAF CHAIN LINK: BL-446
31	A-301-0277	LEAF CHAIN LINK: BL-423
32	A-302-1035	ELECTRICAL CABLE: 16/3 CONDUCTOR

33	A-302-7600	ELECTRICAL CABLE: 18/4 CONDUCTOR
34	A-302-0160	PROTECTIVE EDGING: 22 GA
35	A-301-3123	ELECTRICAL CABLE SHEAVE: 3/8 BORE
36	A-301-0272	BUSHING: STRAIN RELIEF
37	A-301-1009	CABLE GRIP
38	A-301-1006	BATTERY CHARGER
39	A-301-1220	3/8-16 x 3 HEX HEAD CAP SCREW
40	A-301-0988	3/8-16 LOCKNUT WITH NYLON INSERT
41	A-086-0015	OUTRIGGER WELDMENT (ML-256BH)
42	A-301-4233	BULB: 12 VOLT
43	A-301-4224	SWITCH: MOMENTARY ACTUATOR
44	A-301-4219	CONTACT BLOCK FOR ITEM 43: N.O.
45	A-301-4227	SWITCH: PUSH-PULL ACTUATOR
46	A-301-4218	CONTACT BLOCK FOR ITEM 45: N.C.
47	A-301-0415	COTTER PIN: 3/32 x 1/2
48	A-301-0279	SEQUENCING CABLE SHEAVE: 1/1/2 DIA.
49	A-301-0326	CLEVIS PIN: 1/4 x 1 COTTERED
50	A-301-4225	PANEL LATCH/LOCK
51	A-301-4226	INTERLOCK SWITCH
52	A-301-4228	LAMP SOCKET
53	A-301-0535	COTTER PIN: 1/8 x 1-1/2
54	B-086-0053	FRAME BACK PANEL
55	B-086-0064	UPPER PLATFORM PANEL
56	B-086-0065	LOWER PLATFORM PANEL
57	A-086-0087	INTERLOCK COVER
59	A-301-0340	DC HYDRAULIC PUMP
60	A-301-1020	HYDRAULIC HOSE ASSEMBLY
61	A-301-0418	FLOW RESTRICTOR: 1-1/2 GAL (25' ONLY)
	A-301-0419	FLOW RESTRICTOR: 2-1/2 GAL (17' ONLY)
62	A-301-1047	90 DEG. ELBOW 1/4 x 1/4 NPT MALE
64	A-301-0246	DOWN VALVE KNOB
65	A-301-1136	1/8 x 1/4 NPT PLASTIC TUBE FITTING
66	A-301-0007	90 DEG. ADAPTER ELBOW #4 SEAL TO 6 SAE
69	A-086-0061	HYDRAULIC RETURN LINE

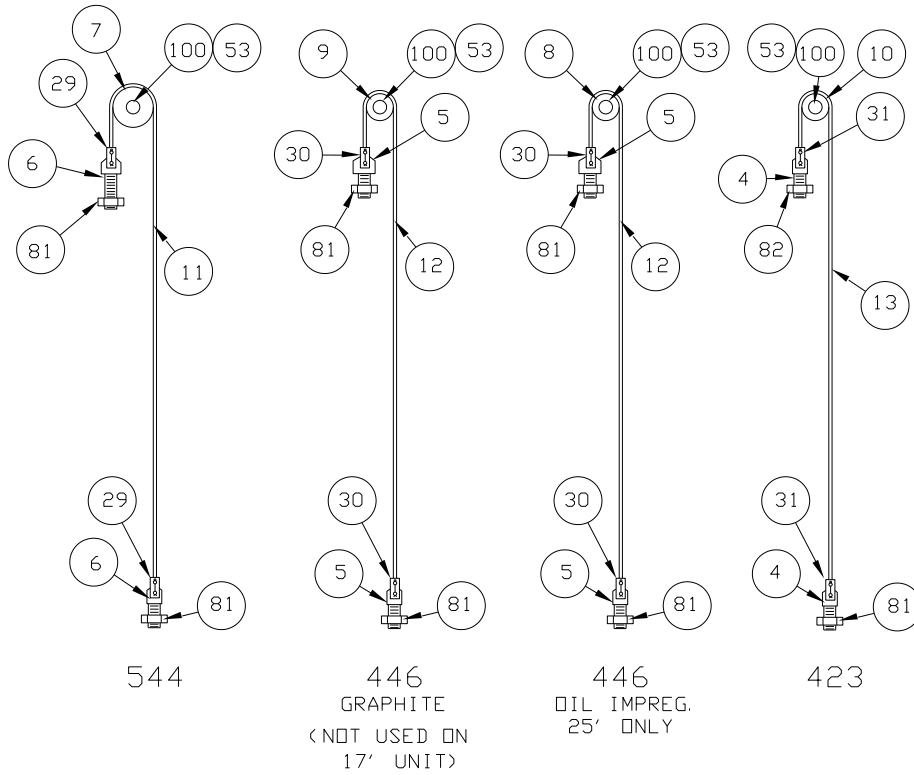
70	B-086-0054	CHAIN GUARD PANEL (25' & 17' ONLY)
71	A-301-1100	#6-32 x 1/2 PAN HEAD MACHINE SCREW
72	A-301-0292	COTTER PIN: 1/4 x 2-1/2
74	A-301-0253	#8 x 1/4 PAN HEAD SHEET METAL SCREW
76	A-301-1054	1/4-20 EYE BOLT
77	A-301-0143	10-24 HEX LOCKNUT NYLON INSERT
81	A-301-1151	3/4-10 LOCKNUT WITH NYLON INSERT
83	B-086-0079	CASTER MOUNT CHANNEL
85	A-086-0099	OUTRIGGER ASSEMBLY BLOCK
86	B-086-0041	EQUIPMENT BOX DOOR
87	A-302-0159	ELECTRICAL CABLE: 18/2 POLYVINYL
89	A-301-0214	1/4 FLATWASHER
90	A-301-1027	SWITCH: PUSHBUTTON
91	A-301-0355	SWITCH: LOCK ON-OFF
92	B-086-0085	CONTROL BOX BACK
93	A-301-0257	SWITCH: MOMENTARY TOGGLE, UP-DOWN
94	B-086-0077	TOOL TRAY COVER
95	B-086-0044	CONTROL BOX
96	A-301-4234	LENS: GREEN DOME
98	B-086-0068	ELECTRICAL BOX COVER
99	C-086-0018	ELECTRICAL BOX
100	A-086-0044	1/2 IN DIA CHAIN SHAFT
101	A-301-0268	STRAIN RELIEF GRIP 1/2 IN (17')
102	A-301-0475	3/8-16 X 3/4 HEX HEAD CAP SCREW
103	A-301-0215	3/8 IN FLAT WASHER
104	A-301-3501	3/8 IN SPLIT LOCKWASHER
105	A-301-4201	3/8-16 HEX NUT
106	A-301-1086	10-24 x 1 RND HEAD MACHINE SCREW
107	A-301-0620	#6-32 x 1 ROUND HEAD MACHINE SCREW
108	A-301-3406	#6 SPLIT LOCK WASHER
109	A-301-1101	#6-32 HEX NUT
110	C-086-0043	FLOOR LOCK 'A' (MLN-176BH)
111	C-086-0044	FLOOR LOCK 'B' (MLN-176BH)
113	A-301-0060	3/8-16 X 3 3/4 HEX HEAD CAP SCREW

114	SU1074	WASHER / NUT WELDMENT
115	A-301-0619	TINNERMAN CLIP
116	A-301-0110	1/4 - 20 X 1" HEX HEAD CAP SCREW - ZINC PLATED
117	SF9112	4 X 4 ½ CASTER PLATE
	D0080001	LABEL SET MLN176BH
	D0080002	LABEL SET ML256BH

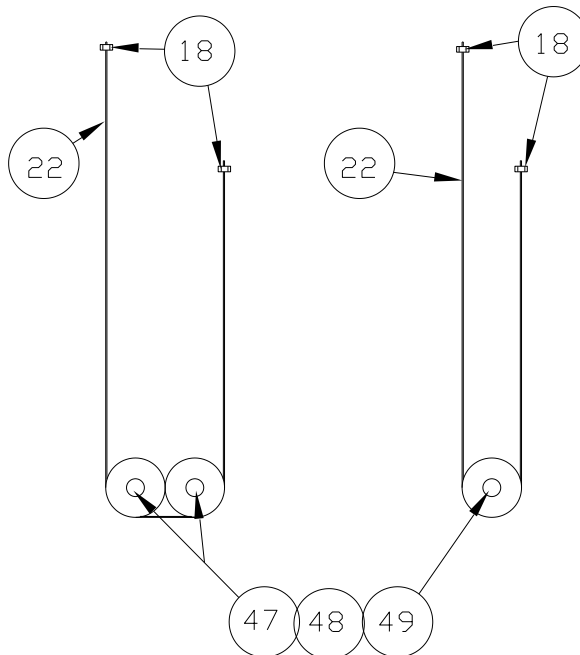
MAIN ASSEMBLY



CHAIN CONFIGURATIONS



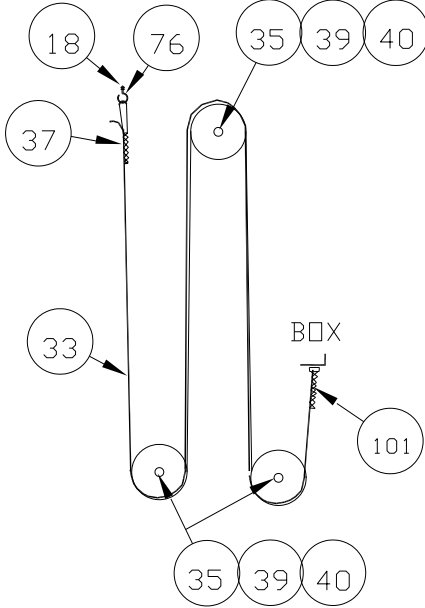
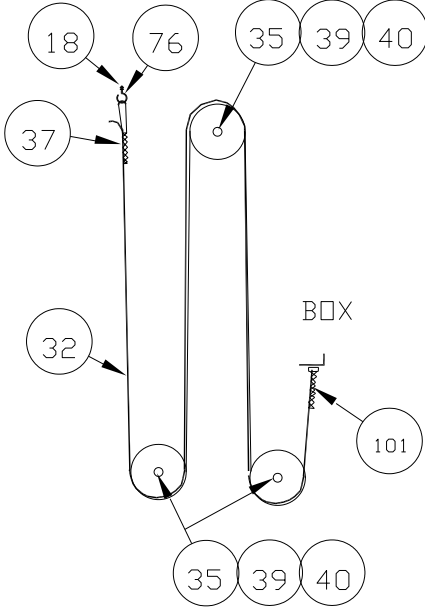
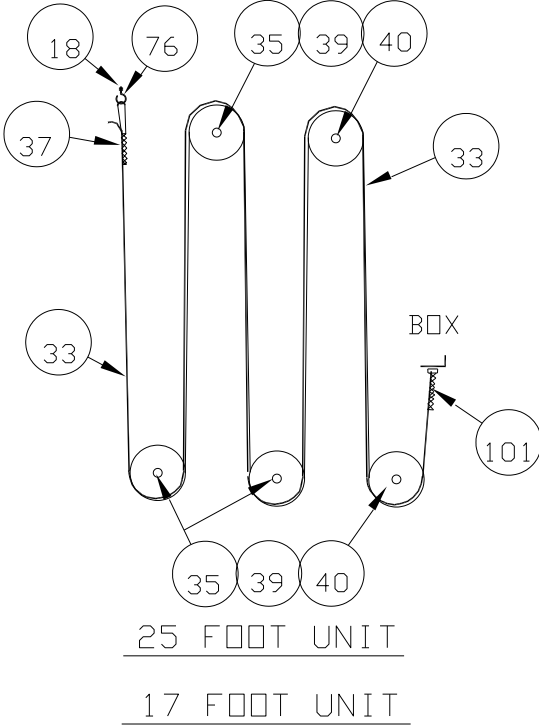
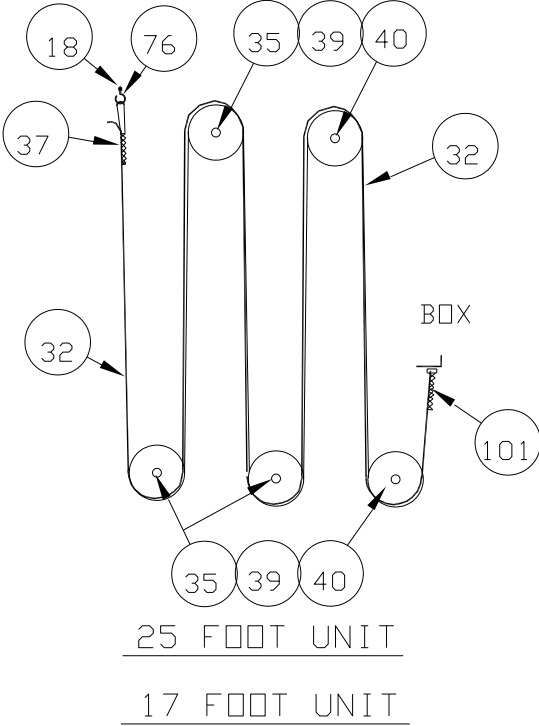
SEQUENCING CABLE CONFIGURATIONS



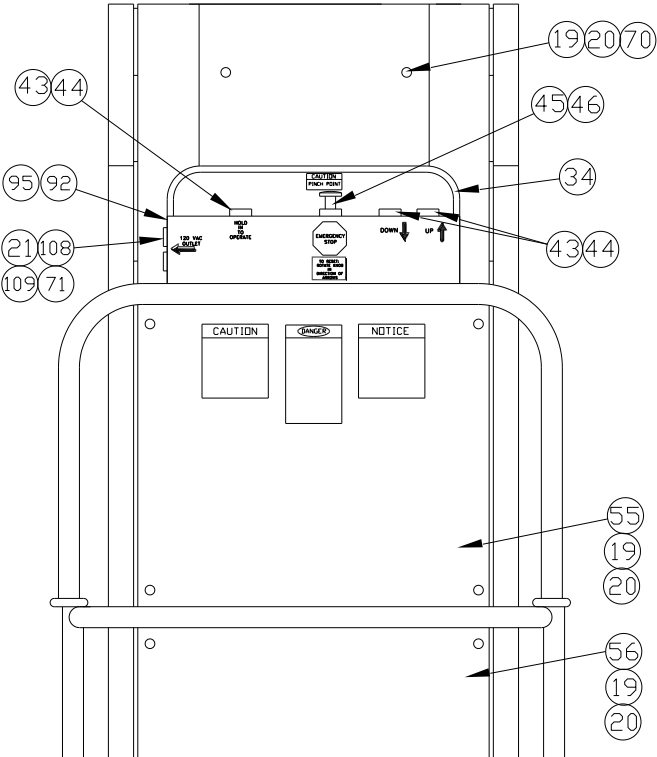
POWER CABLE and CONTROL CABLE CONFIGURATIONS

POWER CABLE CONFIGURATIONS

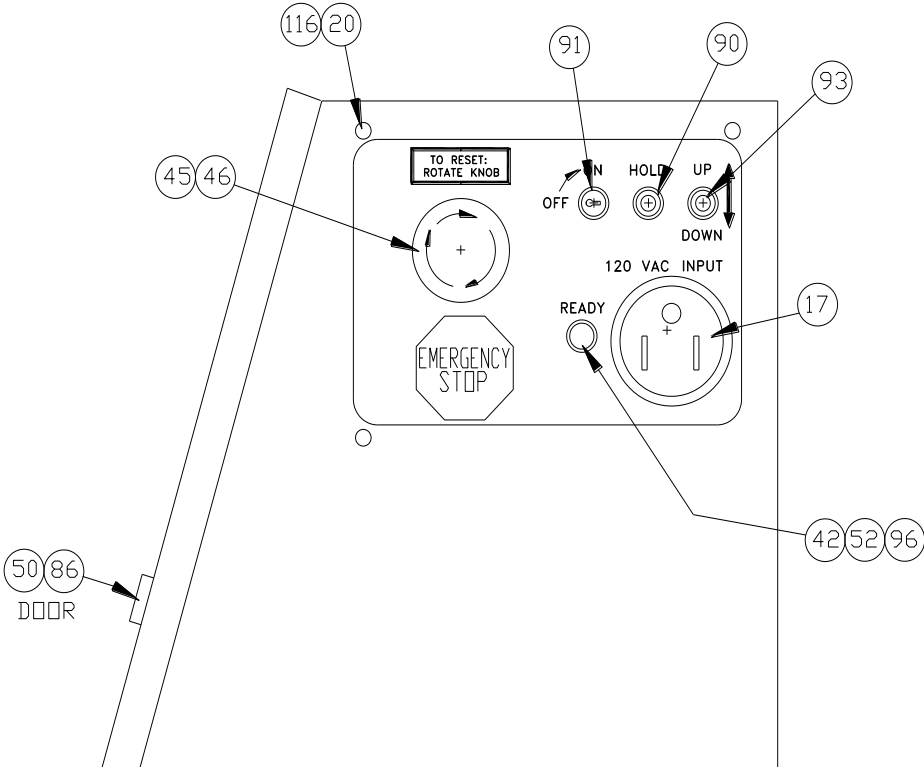
CONTROL CABLE CONFIGURATIONS



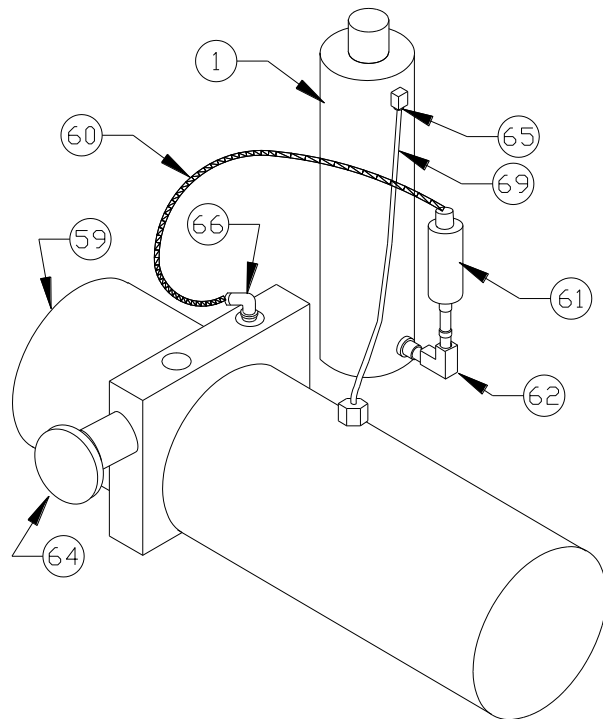
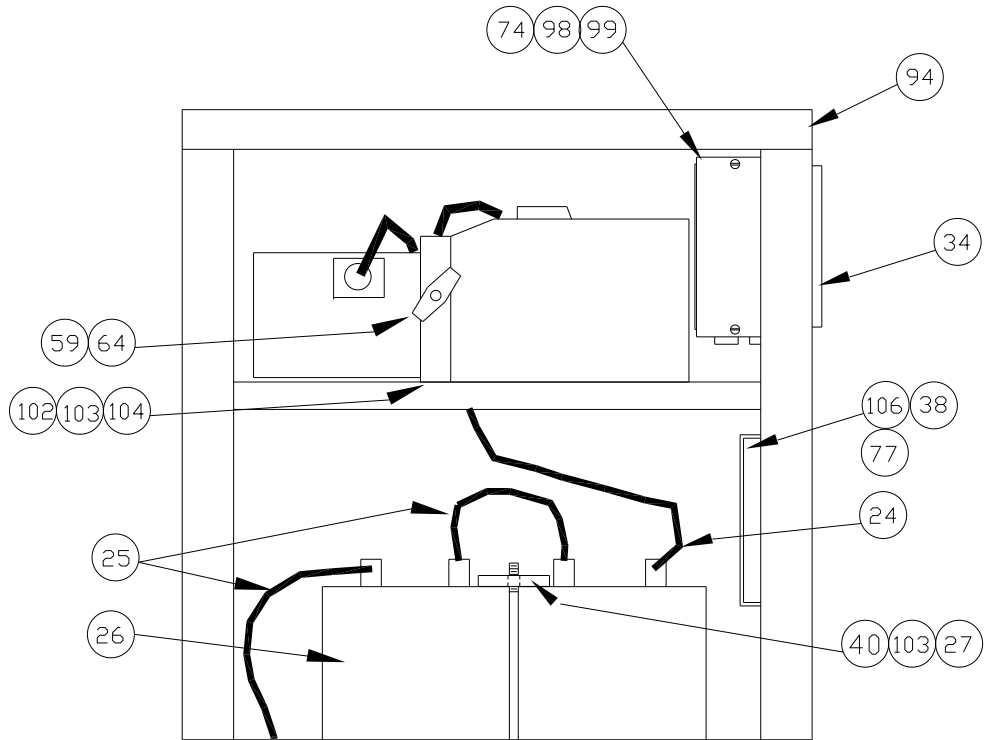
PLATFORM and CONTROL BOX COMPONENTS



FRAME PANEL COMPONENTS

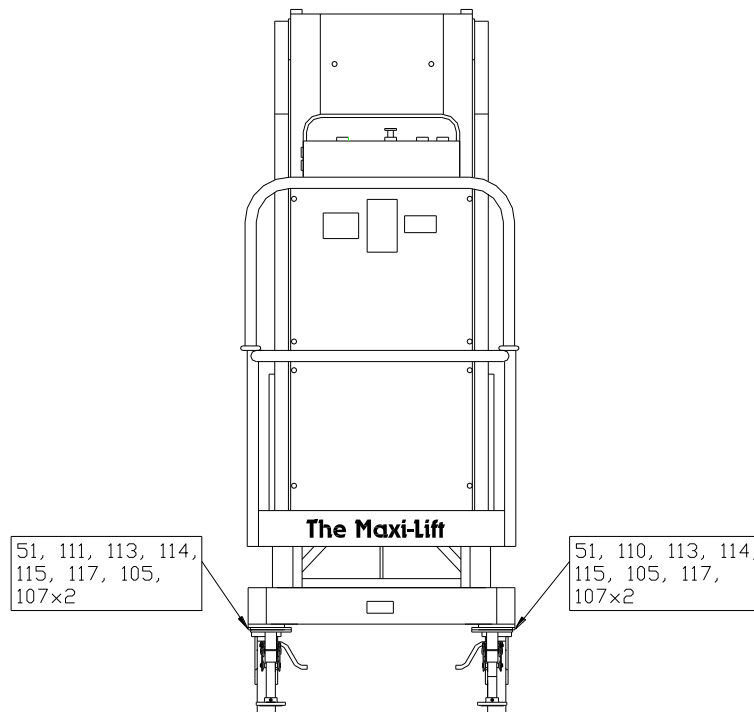
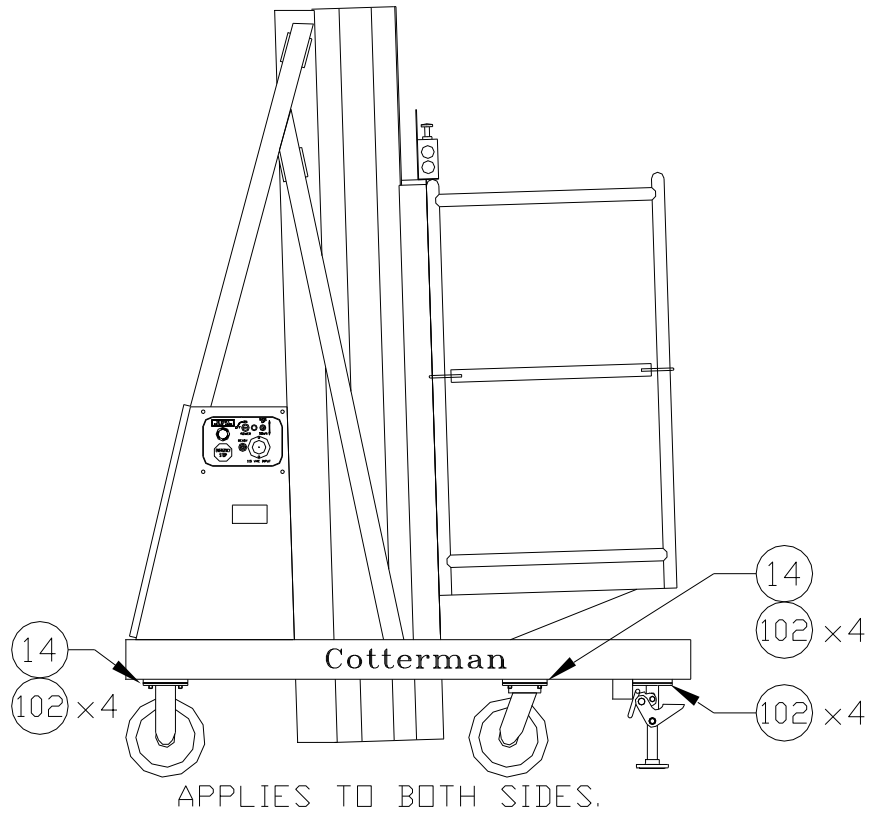


EQUIPMENT BOX COMPONENTS



HYDRAULIC SYSTEM COMPONENTS

THE MAXI-LIFT® OUTRIGGERLESS



PROBLEM	POSSIBLE CAUSES	REPAIR PROCEDURE
No Lift Motion (Pump is not operating)	Dead batteries	Charge as directed
	Damaged electrical circuit	Refer to electrical schematics
	Worn brushes	Replace
	Shorted armature	Replace pump
	Damaged motor control contactor	Replace contactor
	Damaged power switch	Replace switch
	Damaged UP switch	Replace
	Damaged hold switch	Replace
	Damaged outrigger interlock switch	Replace
	Emergency stop button depressed	Twist to reset
	Outrigger not in proper position	Move into place
	Battery cable disconnected	Reconnect cable
No Lift Motion (Pump is operating)	Hydraulic fluid low	Add Fluid
	Pump cavitation caused by improper fluid for temperature conditions	Drain & bleed system, use correct fluid
	Damaged relief valve	Replace pump
	Electrical circuitry defective	Refer to electrical schematics
	Damaged Normally Open valve	Replace pump
	Manual Down valve open	Close
	Damaged down valve on pump	Replace pump
Ascent speed slow or erratic	Weak battery	Charge battery
	Loose electrical connections	Visually inspect and secure
	Momentary short in wiring	Refer to electrical schematics
	Bent structural members	Damaged members replaced as needed by Factory authorized Personnel only
	Restriction in hydraulic hose	Replace hose
	Damaged or jammed seals in hydraulic cylinder	Replace hydraulic cylinder
	Pump or gear cavity worn or damaged	Replace pump
	Worn brushes	Replace brushes
	Loose intake hose	Tighten
	Damaged down valve on pump	Replace pump
	Manual Down valve open	Close

PROBLEM	POSSIBLE CAUSES	REPAIR PROCEDURE
Descent speed slow	Friction in structural members	Lubricate and check for damaged members and Cracked welds
		Damaged members replaced as needed by Factory authorized Personnel only
	Restriction in hydraulic hose	Replace defective hose
	Damaged down valve on pump	Replace pump
Platform will not descend	Down signal is not applied to down solenoid	Check battery charge
		Check wiring
	Damaged down valve on pump	Replace pump
	Faulty down solenoid	Replace pump
Platform creeps down	Damaged seal in cylinder	Replace seal
	Damaged down valve on pump	Replace pump
	Manual Down valve open	Close
	Damaged check valve	Replace pump

The Maxi-Lift® Appendix “A”

Operator Training Information Verification

This is to certify that I have received training in the proper Operation and Safe Use of THE MAXI-LIFT® as required by the ANSI STANDARD ANSI/SIA A92.3-2006.

I hereby declare that I have:

1. Viewed and understand the training video supplied with THE MAXI-LIFT®.
2. Read and understand the Manufacturer’s Operating Instructions and Safety Rules or been trained by a QUALIFIED PERSON on the Operating Instructions and Safety Rules contained in the Manufacturer’s Operating, Training, and Maintenance Manual.
3. Read and understand ALL Decals, Labels, Warnings, and Instructions on THE MAXI-LIFT®.

I have been given an opportunity to ask questions about THE MAXI-LIFT® Operation and Safety Procedures.

I have read and understand the above statements.

EMPLOYEE NAME: _____ DATE: _____

EMPLOYEE SIGNATURE: _____

WITNESS: _____

Maintenance Training Information Verification

This is to certify that I have received training in the proper Maintenance Procedures of THE MAXI-LIFT® as required by the ANSI STANDARD ANSI/SIA A92.3-2006.

I hereby declare that I have:

1. Viewed and understand the training video supplied with THE MAXI-LIFT®.
2. Read and understand the Manufacturer's Maintenance Instructions and Safety Rules or been trained by a QUALIFIED PERSON on the Maintenance Instructions and Safety Rules contained in the Maintenance Manual.
3. Read and understand ALL Decals, Labels, Warnings, and Instructions on THE MAXI-LIFT®.

I have been given the opportunity to ask questions about THE MAXI-LIFT® Maintenance and Safety Procedures.

I have read and understand the above statements.

EMPLOYEE NAME: _____ DATE: _____

EMPLOYEE SIGNATURE: _____

WITNESS: _____

LIFTING LEAF CHAIN REPLACEMENT MEASUREMENTS

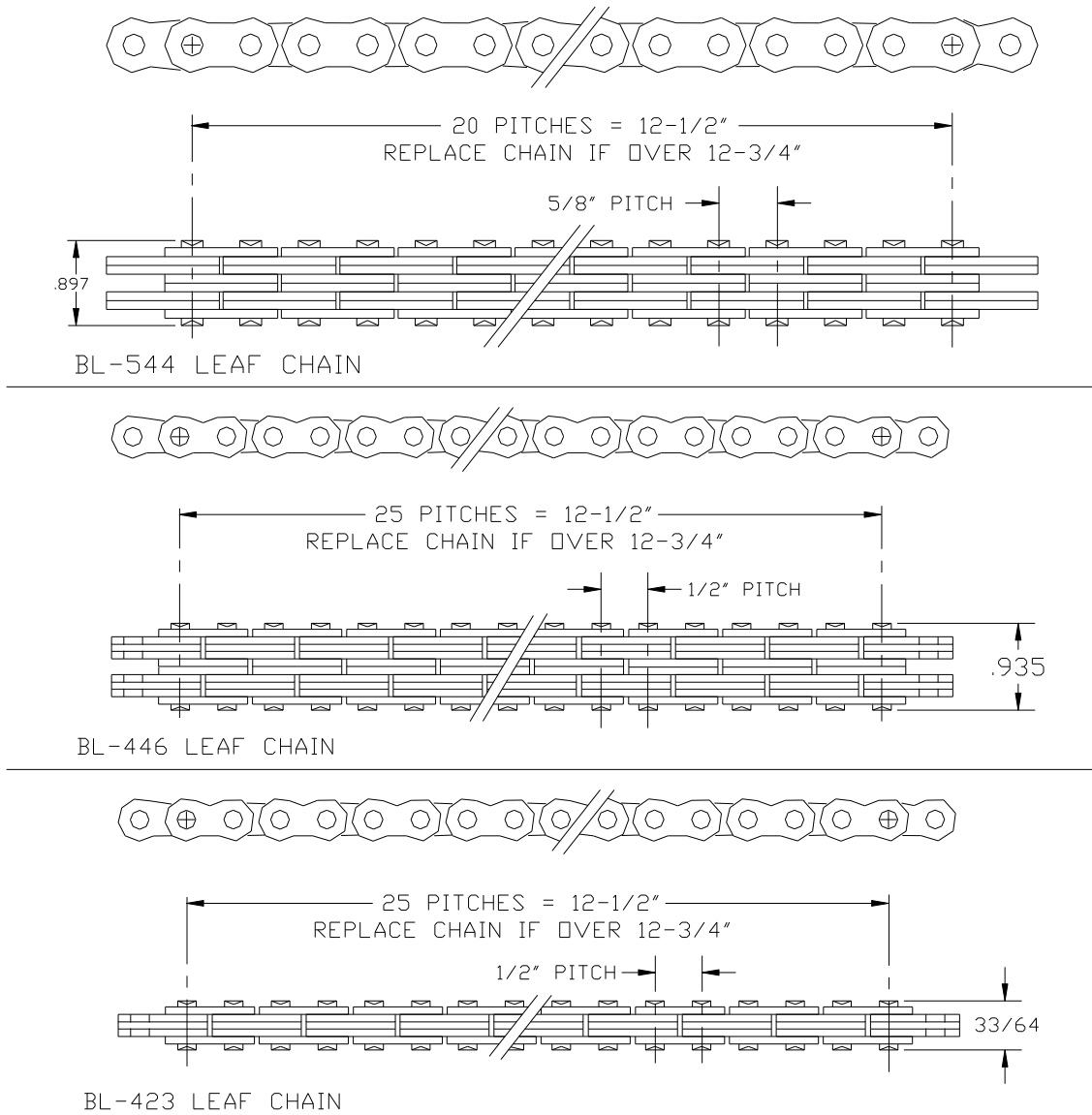


FIGURE 1

HYDRAULIC OIL RECOMMENDATIONS
FOR SPECIAL TEMPERATURE CONDITIONS

FOR TEMPERATURES FROM 0°F TO -40°F
USE TYPE A AUTOMATIC TRANSMISSION FLUID

FOR TEMPERATURES FROM 0°F TO 32°F
USE A GOOD GRADE SAE 5W HYDRAULIC OIL

DO NOT MIX DIFFERENT HYDRAULIC OILS

FIGURE 2

DANGER

THIS EQUIPMENT IS CAPABLE OF REACHING A HEIGHT FROM WHICH A FALL COULD RESULT IN SERIOUS INJURY OR DEATH.

FOR YOUR SAFETY, VIEW THE OPERATING VIDEO. THEN READ AND UNDERSTAND ALL WARNING LABELS AND THIS INSTRUCTION MANUAL BEFORE USING THIS EQUIPMENT.