



CooLift[®]

Owner's Manual

For CooLift models with manual hydraulic lift (CMH-- models)

IMPORTANT: Read entire manual before operating

Serial #: _____

Date of Purchase: _____

Warranty

Magliner products have a one (1) year warranty (unless otherwise specified) from the date of purchase against defects in workmanship or material. Any part or component, except items covered by warranties of other manufacturers, returned to the factory or service center freight prepaid by the owner, found upon examination by Magline, Inc. to be defective or the result of improper workmanship by the factory will be repaired or replaced without charge and returned to the owner freight prepaid by Magline, Inc.

Alterations of Magliner products void any warranty or liability on the part of Magline, Inc. Magline, Inc. does not guarantee product capacity if alterations are made.

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Thank you for purchasing the Magliner CooLift! If you have any questions regarding your new Magliner product please call our customer service department at 1-800-MAGLINE (624-5463) or (989) 512-1000. Please read this manual thoroughly to become familiar with the safe operation and maintenance of your new Magliner CooLift.

General Safety Instructions

- Carefully read this entire manual before using your Magliner CooLift.
- Keep hands and feet away from all moving parts.
- Always stand clear of lifting platform area when operating.
- Do not attempt to use the Magliner CooLift on a truck ramp.
- Engage the foot brake whenever in a stopped position.
- Keep the Magliner CooLift in an upright position at all times.
- Do not utilize Magliner CooLift as a lifting device for anything other than a CooLift pallet.
- Do not use the Magliner CooLift to transport people.
- A routine check of the CooLift should be performed daily that includes, but not limited to: checking for any leaks in the hydraulic or brake system; making sure the containment strap functions correctly; making sure the lift deck raises and lowers smoothly without excessive slowing or shuddering; checking the speed control brake system to ensure proper slowing and stopping functions; checking the foot brake system to ensure it prevents rear casters from rotation and swivel.
- Always use the containment strap when moving loads with the Magliner CooLift.
- When transporting a load, always use the handles provided at the user end of the CooLift in order to provide quick access to the braking system should immediate stopping be required.
- Operator should be positioned uphill from CooLift when descending on natural grades, sloping or uneven surfaces.
- Use hand brake to control speed.
- Avoid making sharp turns.
- Do not exceed the 1,000 lbs. capacity limit.
- Brake and hydraulic fluids are a slip hazard on any flooring surface; if a leak occurs it should be cleaned up immediately and completely.

Please follow the reminder labels found on your CooLift unit.

MAGLINER® Manual CooLift® Capacity: 1,000 lbs.
1-800-MAGLINE (624-5463) Serial No.
www.magliner.com M12345
Patent: www.magliner.com/patents



WARNING

Always stand clear of lifting platform area when operating



WARNING

Keep hands and feet clear of lifting platform

NO FORK

WARNING:

Raise deck before fastening containment strap

Safety Instructions

- Read and understand operating instructions before using
- Always inspect CooLift and pallets for damage before using. Do not use if there are signs of damage, improper maintenance or load shift
- Do not exceed capacity limit
- **NO RIDING** – Riding on the CooLift could cause serious injury
- **DO NOT USE ON TRUCK RAMPS**
- Use caution on natural grades; operator should be positioned uphill from cart when descending, use brake to control speed, no sharp turns
- Always apply holding brake and lower lift before unloading pallet or leaving CooLift unattended

General Specifications	CMH43
Corresponding pallet size	43 inch
Capacity	1,000 lbs
Weight	182 lbs
Overall height	65 inches
Overall width	19 inches
Overall depth	60 inches
Operating temperature*	-20 to 120°F

*NOTE: When the outside temperature is below 30°F the CooLift should not be left inside the truck overnight and should never be left inside a freezer or a cooler for extended periods of time. Extended exposure to subfreezing temperatures will adversely affect CooLift performance and increase cycle time.



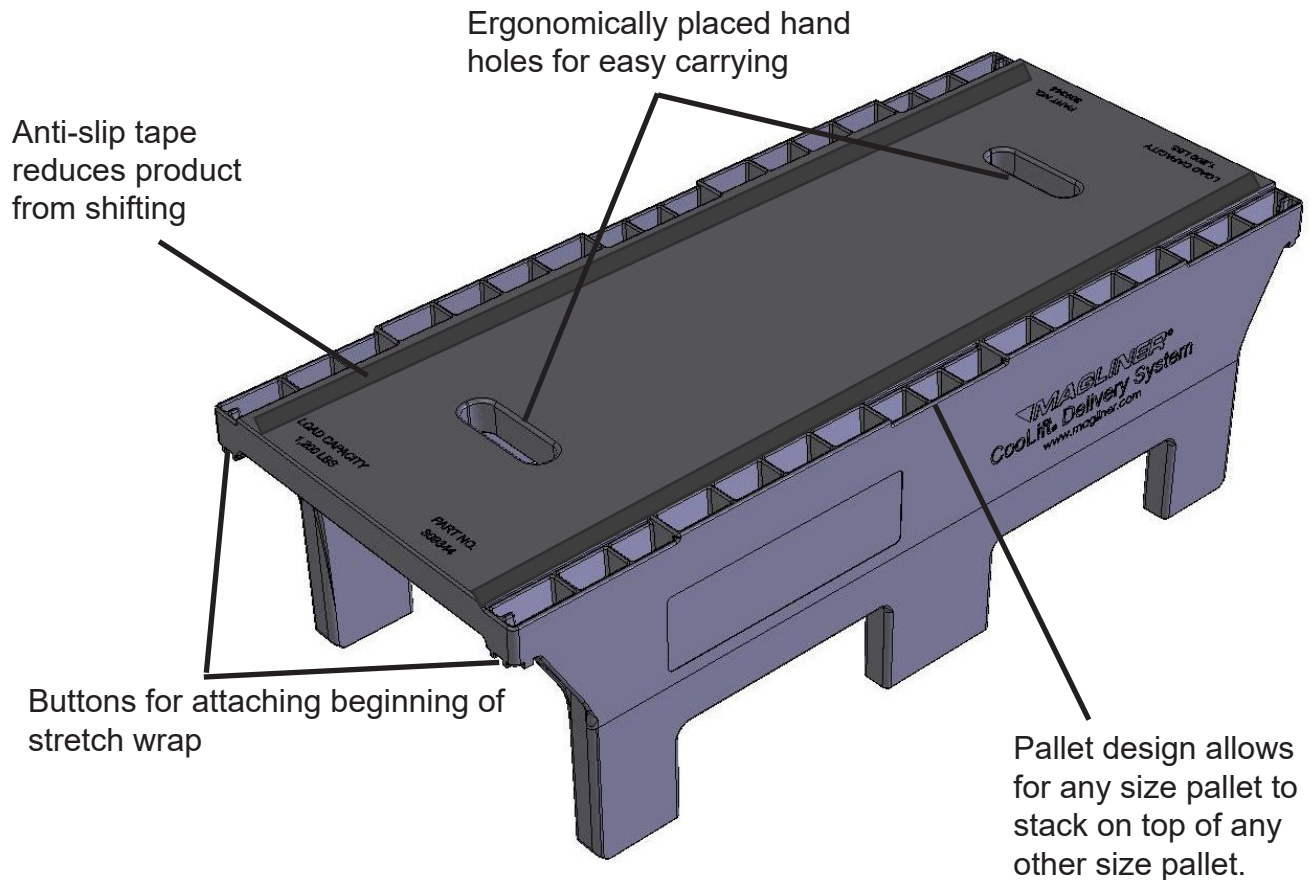
CMH43
CooLift with
bulk head

Pallets

General Pallet Information:

- Always load within capacity limit.
- Always load within pallet footprint; do not allow load to hang over pallet.
- **CAUTION: When using any multiple load handling system (such as a triple-double) to move the Coolift pallets, do not spread the forks while underneath pallet as it may result in pallet failure.**
- Store in upright position in cool, dry location.
- Do not drop.
- Do not stand upon.
- Wash with mild soap and water.
- Do not use if damaged.
- Make sure to interlock empty pallets when stacking.
- Only stack pallets when empty.
- Do not make modifications.
- Secure load before transporting.
- Use for intended purpose only.

Size	Capacity with Manual Coolift	Part Number
43" pallet	1,000	309344



User Controls

- A) Speed Control Brake Lever – used for slowing and stopping the momentum of the CooLift. This brake does not act as a parking brake.
- B) Foot Brake Lever - the foot brake is used as a parking brake for when the CooLift is in transit in the back of a vehicle, or if the CooLift is left unattended.
- C) Pump release valve – when valve is closed, the deck can be lifted. Open the valve to release the deck.
- D) Containment Strap – should be used to secure loads during transport.
- E) Operator Handles – foam cushioned, ergonomic handles for lift control.
- F) Manual Pump Handle – handle and retention strap for when not in use.
- G) Lift Assist Handle (optional) - handles pivot upward to give additional leverage when lifting back of CooLift

Deck Operation of the Magliner Manual CooLift

The CooLift deck is raised and lowered using the hand pump handle provided with the unit.

To raise the deck:

1. Rotate the valve handle toward the back of the CooLift (i.e. clockwise direction).
2. Carefully remove the retention strap from the pump handle.
3. Make sure the pump handle is securely inserted into the pump handle receiver located at the top of the pump.
4. Firmly grasp the handle and swing downward until it reaches the limit of travel - this increases pressure in the hydraulic line to apply lifting force to the deck. Return handle to upright position.
5. Repeat step 3 until the load is lifted to desired height.
6. Replace the retention strap on the pump handle in the upright position.

Note: The heavier the load, the more pumps it may take to raise the deck to the top position. With a 1,000 lbs. load, this could take approximately 18 pumps of the handle to lift the deck to the top position.

To lower the deck:

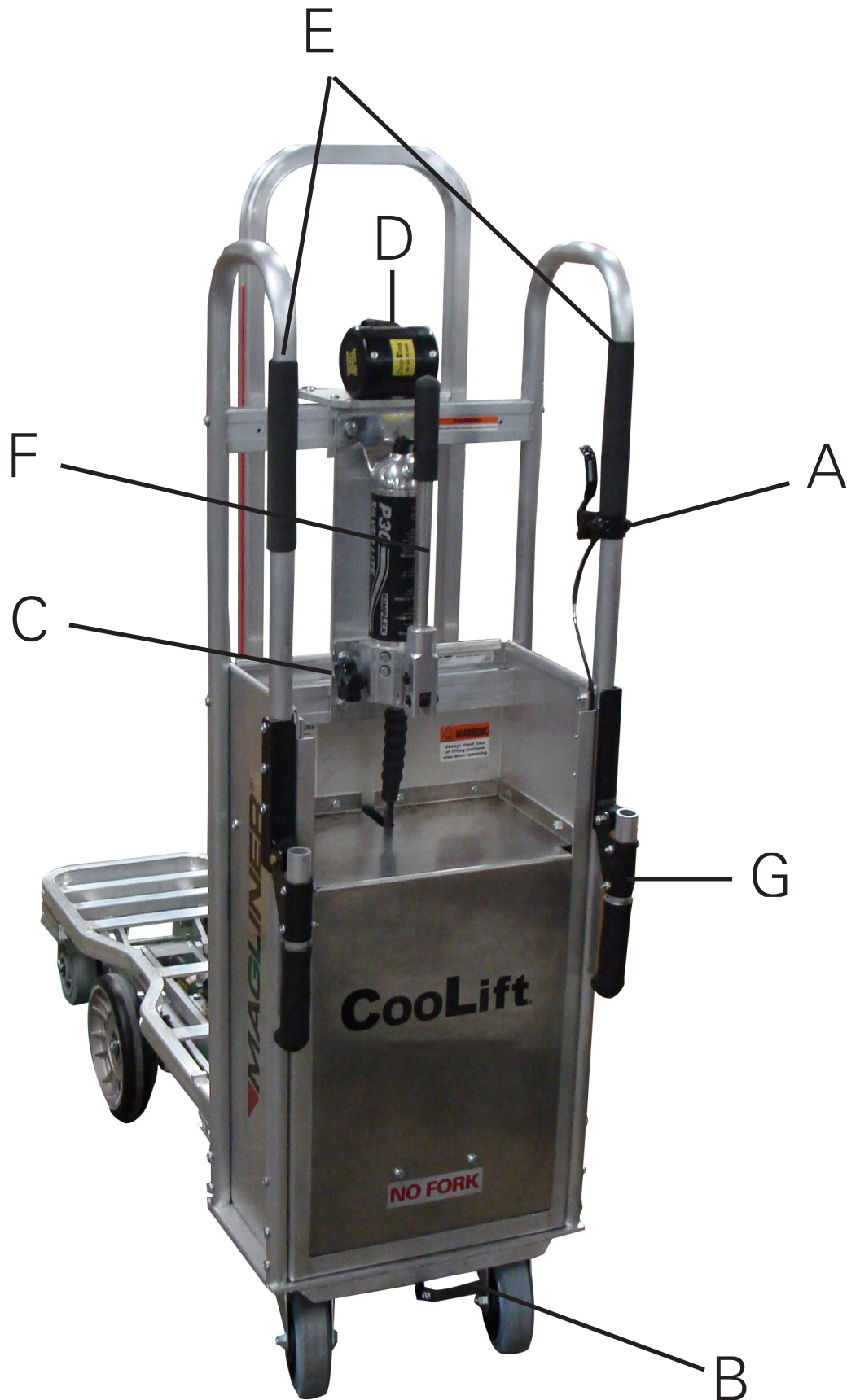
1. Rotate the valve handle toward the front of the CooLift (i.e. counter-clockwise direction).
2. The rate of descent can be controlled by how much the valve handle is rotated toward the front of the CooLift. The deck can be lowered part way and then held in place by rotating the handle toward the back of the unit until descent stops.
3. The deck will lower into the lowest position.

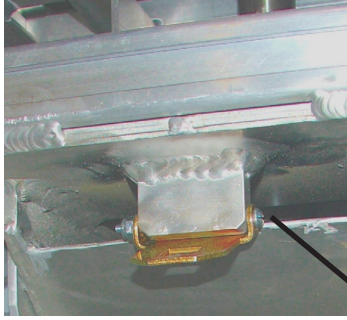
Operating the Foot Brake

The foot brake prevents the rear casters from rotating and from swiveling.

To engage, press down on the foot pedal until it locks in the down (locked) position. To disengage, pull up on the foot pedal until it is released and in the up (unlocked) position.







Front Underside View



CooLift with product strapped to deck

General Operation of the Magliner CooLift

A) Storage and Use of Foot Brake

- 1) Engage the foot brake whenever leaving the CooLift unattended.
- 2) Pallets on the Magliner CooLift should always be in the down position when not moving.
- 3) Keep hands, feet and all items clear of the moving parts of the CooLift.
- 4) Never place hands or feet under a loaded elevated pallet.
- 5) Store the CooLift on a hard level surface.

B) Loading a pallet on the Magliner CooLift

- 1) Make sure CooLift deck is in down position.
- 2) Push the CooLift under the pallet until fully inserted and the back of the pallet is touching the back of the cart or the bulk head if one is installed.
- 3) Rotate the valve handle in the clockwise direction. Pump the manual pump handle until the deck interlocks with the pallet. Once the deck is in the desired position, return the handle to the upright position and place the retention strap on the pump handle.
- 4) Engage the foot brake by pressing the brake down toward the ground or floor until it locks into the engaged position.

Note: Make sure the deck is in the up position prior to fastening the containment strap.

- 5) Fasten the containment strap to secure the load by: a) firmly grasping the end of the strap; b) pulling it out from the roll directly over the center of the load taking care not to twist the strap; c) extending strap far enough to snap into position; and d) hooking strap to the containment lock located at the lower front end of the cart (see Front Underside View).
- 6) The maximum stacking height is 50". However, never stack a load that is higher than your line of vision.



Figure 1: CooLift secured under a loaded pallet with the foot brake engaged



Figure 2: CooLift strapped into truck for transport

C) Transporting a pallet with the Magliner CooLift

- 1) When transporting a pallet with the CooLift the operator should always use caution on natural grades. Be positioned uphill from cart when descending, use brake to control speed and make no sharp turns.
- 2) Care should be taken to address any sidewalk ramps or door thresholds to help maintain stability in the load.
- 3) Use caution at all sloping or uneven surface areas and make any final positioning changes.
- 4) Release the manual pump valve by turning the valve handle counter-clockwise until the CooLift deck has lowered completely. Note: it is possible to have the pallet sitting on the floor and the deck still engaged to the bottom of the pallet if the deck has not been completely lowered.
- 5) Remove the CooLift from under the pallet.

D) Unloading a pallet from the Magliner CooLift

- 1) Position the cart in place on a level surface and engage the foot brake.
- 2) Lower the deck completely by turning the pump valve counter-clockwise.
- 3) Unlock the containment strap from the lock by lifting the tab and sliding the latch out.
- 4) Walk the strap back into position on the roll.
- 5) Disengage the foot brake by pulling the brake lever up until the brake releases.

E) Transporting the Magliner CooLift inside the truck

Note: It is important to keep the CooLift upright at all times.

- 1) If you are transporting the CooLift on a truck that has loaded pallets, insert the CooLift completely under a fully loaded pallet and lift the until deck makes contact with the bottom of the pallet but does not lift it. Engage the foot brake (Figure 1).
- 2) If there are no loaded pallets on the truck, the CooLift should be parked next to the wall and strapped in with the foot brake engaged (Figure 2).

Troubleshooting

The deck lifts to the top position but then gradually lowers.

- ✓ Is the manual release valve fully closed?
- ✓ Do you see any leaks in the hydraulic system?

The deck lifts slower than usual.

- ✓ Is the manual release valve closed all the way?
- ✓ Do you see any leaks in the hydraulic system?

The brakes are not working or braking unevenly side to side.

- ✓ Do you see any leaks in the brake system?
- ✓ If you pump the brake lever several times, does it start working?
- ✓ Are both of the calipers mounted tightly to the rail?

The deck is in the up position and will not go down.

- ✓ Is there any foreign matter in the linkage system?

Hydraulic or brake fluid has dripped underneath the CooLift deck.

- ✓ Wipe up any fluid that may have leaked using shop towels.

Replacement Part Description	Part Number
Axle - 14.3" long for center Coolift wheels	309020
Axle - 12.9" long for front wheels	309844
Axle mount bracket for center wheels	315009
Back access panel	315081
Brake disc	309050
Brake handle clamp	81207
Brake line assembly (includes brake lever, master cylinder, split brake line, junction box, calipers and brake pads) PLEASE NOTE: items within assembly not sold separately.	315090
Brake line insert bushing	315098
Brake line nut	315097
Brake pedal kit (includes brake pedal, two 80302 screws and two 80675 lock nuts)	86433
Bulk head for CMH43 and CMH48 models	309790
Bulk head mount	315087
Cable tie	61052
Caster - 6" x 2" swivel, gray TPR with top brake (rear caster)	13085
Caster brake weldment	315117
Caster brake pedal	315107
Caster wheel - 6" x 2" gray flat tread (front caster)	130014
Center wheel - 10" x 2" with deep groove ball bearings	309059
Clamp block for axle/brake caliper mount	309022
Containment strap	309152
Containment strap mounting spacer - all models	309150
Containment strap tongue	309133
Cotter pin - 1/8" x 1-1/2" long	81078
Cross brace assembly	315048
Cross brace warning label	98360
Deck weldment	315030
Deep groove ball bearing for center Coolift wheels	309060
Handle assembly with foam handle sleeve	315042
Handle cross brace with rivnuts	315047
Hex head cap screw - 5/16"-18 x 1" long	80011
Hex head cap screw - 5/16"-18 x 1-1/4" long	80012
Hex head cap screw - 5/16"-18 x 2" long	80018
Hex head cap screw - 3/8"-16 x 1" long	80025
Hex head cap screw - 3/8"-16 x 1-1/4" long	80132
Hex head cap screw - 3/8"-16 x 1-1/4" long	80026
Hex head cap screw - 3/8"-16 x 1-1/2" long	79988
Hex lock nut - 1/4"-20	80675
Hex lock nut - 5/16"-18	80676
Hex lock nut - 3/8"-16	80603
Hex lock nut flange - 3/8"-16	80624
Hex socket head cap screw - 5/16"-18 x 1" long	80038
Hydraulic cylinder assembly (includes items below with *)	315094

Replacement Part Description	Part Number
Hydraulic cylinder*	59010
Hydraulic cylinder mount, fixed*	315078
Hydraulic cylinder mount, moveable*	315079
Hydraulic fitting - 90-degree elbow, 3/8 NPSM female (swivel end) x 3/8 NPTF male end*	55425
Hex socket head cap screw - 3/4"-15 x 1-1/4" long*	80157
Hex socket head cap screw - 1/4"-20 x 3/4" long*	80041
Hydraulic cylinder mount, fixed pin	315058
Hydraulic cylinder mount bracket	315076
Hydraulic cylinder mount plate	315075
Hydraulic hose - 3/18" x 6' long	55424
Knob replacement kit (includes one 315069 knob, one 80326 set screw and one hex key wrench)	315069K
Lift assist handle assembly - LH	315110
Lift assist handle assembly - RH	315111
Lift assist handle backing plate	315033
Pallet stop for CMH43 and CMH48 models	309206
Pan head cross recess screw - #10-24 x 2-1/2" long	80004
Pan head machine screw - #10-32 x 3/4" long, thread forming	80323
Pan head machine screw - #10-32 UNF x 1" long	80123
Pan head machine screw - 1/4"-20 x 1/2" long	80139
Pan head machine screw - 1/4"-20 x 1" long	80102
Pan head machine screw - 1/4"-20 x 1-3/4" long	80106
Pan head machine screw - 1/4"-20 x 2" long, self tapping	80292
Pan head machine screw - 1/4"-20 x 2-1/4" long	80263
Pan head machine screw - 1/4"-20 x 2-3/4" long	80111
Pan head machine screw - 1/4"-20 x 3" long	80110
Pan head machine screw - 5/16"-18 x 1-3/4" long	80142
Pump mount plate	315071
Pump - manual hand pump assembly	315095
Saddle plate for CTA43 and CTA48	309341
Saddle plate for CTA53	309151
Shoulder screw - 6mm diameter x 8 mm long	80234
Spacer for master cylinder - vinyl	304273
Straight cotter pin	81142
Washer - flat, 6mm	80772
Washer - 1-1/4" x .796 x .0478 for front axle/casters	80723
Washer - SAE 5/16"	80761
Washer for center Coolift wheel	80718

Cart Serial No: _____ Inspection Date: _____
 Customer: _____ Inspector's Name: _____
 Estimated Usage: _____

Area	Description	Method of Inspection	Normal Condition	Findings Pass or Fail	Timing	Notes
General Inspection	Cart is straight and properly aligned	Visual inspection	<ul style="list-style-type: none"> • Frame is not twisted or bent • User enclosure is perpendicular to the frame • Deck is angled slightly toward enclosure when retracted • Handles are not bent or damaged 		Daily	
General Inspection	No damage or excessive wear	Visual inspection	<ul style="list-style-type: none"> • Straight sections • Smooth curves • Flat surfaces 		Daily	
General Inspection	Cart rolls smoothly	Push cart and let roll	Cart should travel in nearly a straight line for several feet		Daily	
General Inspection	Brakes are responsive when applied	Roll cart at walking speed and apply brakes	<ul style="list-style-type: none"> • Brakes should feel responsive and not "soft" • Brake lever should not contact handle 		Daily	
Hydraulics	Manual operation	Operate hydraulic pump up and down several times with pump handle	<ul style="list-style-type: none"> • Deck should lift completely within 5 strokes of pump handle (no load on deck) • Manual bypass valve should allow deck to descend and not leak once re-closed 		Daily	

Area	Description	Method of Inspection	Normal Condition	Findings Pass or Fail	Timing	Notes
General Inspection	Warning and branding labels are in good condition	Visual inspection	<ul style="list-style-type: none"> Labels are in place and not coming loose Labels are in good condition Red stripes are in place and in good condition 		Weekly	
Frame	Frame is in good condition <ul style="list-style-type: none"> No damage No excessive wear 	Visual inspection	<ul style="list-style-type: none"> Straight sections Smooth curves Flat surfaces Minor scratches and dings are expected 		Weekly	
Frame	Containment strap plate	Visual inspection	<ul style="list-style-type: none"> Plate should be flat and free of damage or excessive wear Plating should not be cracked or damaged Mounting screw should be tight 		Weekly	
Deck	Deck is in good condition <ul style="list-style-type: none"> No damage No excessive wear 	Visual inspection	<ul style="list-style-type: none"> Straight sections Smooth curves Flat surfaces Minor scratches and dings 		Weekly	
Deck	Yoke screws are not loose in deck	Manual inspection	Screws are tight		Weekly	
Brake System	No system leaks <ul style="list-style-type: none"> Fittings on master cylinder, connecting block & calipers Master cylinder body Caliper body Hoses 	Wipe around fittings and master cylinder with dry rag	No leaks (rag remains dry)		Weekly	
Brake System	Brake lever in good condition and operating properly	Visual inspection Operate brake	<ul style="list-style-type: none"> No visible damage Smooth operation 		Weekly	
Brake System	Parking brake pawl in good condition and operating properly <ul style="list-style-type: none"> Mounting screws tight Master cylinder mount to handle Master cylinder cap Connecting block to base of enclosure Caliper mounting 	Visual inspection Set brake	<ul style="list-style-type: none"> No visible damage Brake locks in place - casters should not rotate or swivel 		Weekly	
Brake System		Manual inspection	<ul style="list-style-type: none"> Parts are tight to mounting surfaces 		Weekly	

Area	Description	Method of Inspection	Normal Condition	Findings Pass or Fail	Timing	Notes
Hydraulics	Cylinder is not leaking	Visual inspection	Thin film of oil on piston rod		Weekly	
Hydraulics	Cylinder condition <ul style="list-style-type: none"> • No rod scoring • Return springs fully functional 	Visual inspection	Cylinder rod is smooth and retracts fully into cylinder body		Weekly	
Suspension	Wheels and tires are in good condition	Visual inspection	Wheels and tires are free of damage		Weekly	
Suspension	Components are straight and undamaged <ul style="list-style-type: none"> • Front wheel mounting yoke • Main axle • Rear swivel caster frames 	Manual inspection	<ul style="list-style-type: none"> • Components are not damaged and operate freely • Main axle plating is not cracked or damaged 		Weekly	
Operator Interface	External mounting screws are tight <ul style="list-style-type: none"> • Base plate mounting to frame • Enclosure mounting or base plate • Handle mounting screws • Switch plate mounting screws 	Manual inspection	Components are tight to mounting surfaces		Weekly	
Operator Interface	Handle, enclosure and door are free of damage and in good condition	Visual inspection	<ul style="list-style-type: none"> • Straight sections • Smooth curves • Flat surfaces • Minor scratches and dings are expected 		Weekly	
Operator Interface	Handle grips	Visual inspection	Grips are not worn or damaged		Weekly	
Operator Interface	Containment strap		<ul style="list-style-type: none"> • Belt should be free of tears and abrasions • Plating on buckle should not be cracked or damaged • Mounting screws should be tight • Mounting tab should not be bent or damaged • Belt should retract into housing such that only the buckle protrudes • Housing should not be cracked or damaged • Strap tongue should rotate freely 		Weekly	

Area	Description	Method of Inspection	Normal Condition	Findings Pass or Fail	Timing	Notes
Welds	No cracked welds	Visual inspection	Welds intact, no cracks		Monthly	
Brake System	Fluid level	Visual inspection	Fluid level up to notch in master cylinder reservoir		Monthly	
Brake System	Hose without damage, abrasion, wear	Visual inspection	No visible damage or wear		Monthly	
Brake System	Brake discs have minimal rub and warp	Spin wheel	Wheel should continue to rotate several times before stopping		Monthly	
Hydraulics	Fittings not leaking <ul style="list-style-type: none"> Hose fittings inside enclosure Tube fittings under enclosure and in frame Cylinder fittings 	Wipe around fittings with dry rag	No leaks (rag remains dry)		Monthly	
Hydraulics	No cracks or damage to hose or tubing	Visual inspection	No deep scratches or dents		Monthly	
Hydraulics	Manual operation	Operate hydraulic pump up and down several times using pump handle and bypass valve	<ul style="list-style-type: none"> Deck should lift completely within 3-5 strokes of pump handle when the deck is empty Manual bypass valve should allow deck to descend and not leak once re-closed 		Daily	
Hydraulics	Cylinder mount screws to frame and deck are tight	Manual inspection	Cylinder body is tight to frame; deck mounting screw is tight		Monthly	
Hydraulics	Fluid level	Visual inspection	Fluid should be about 1/2 inch below top of reservoir when deck is down		Monthly	
Suspension	Wheels and casters spin freely	Manual inspection	Wheel should continue to rotate several times before stopping		Monthly	

Area	Description	Method of Inspection	Normal Condition	Findings Pass or Fail	Timing	Notes
Suspension	<p>Mounting hardware is tight</p> <ul style="list-style-type: none"> • Front wheel yoke • Rear caster frame • Main axle mounts to frame and axle clamp • Cotter pins for main wheels <p>Hardware is properly installed and undamaged</p> <ul style="list-style-type: none"> • Spring pins • Washers • Springs 	Manual inspection	All hardware is tight		Monthly	
Linkage System	<p>Link pins</p> <ul style="list-style-type: none"> • Minimal play between pins and bushings • Bushings are not working out of links 	Visual inspection	<p>All hardware is in place and in good condition</p> <ul style="list-style-type: none"> • Pins are straight with no signs of wear • Pin plating is not cracked or damaged • Links are straight with no signs of damage or wear • Minimal play between pins and links • Bushings are flush with side of the links 		Monthly	
Linkage System	<p>Link pins are not loose in deck, frame or sync links</p> <p>Internal mounting hardware is tight</p> <ul style="list-style-type: none"> • Vertical slide cover screws • Vertical slide mounting screws • Guide block cotter pins in rod • Pump mounting plate • Pump mounting screws • Pump band clamp 	Manual inspection	Minimal play between pins and deck, frame and sync links		Monthly	
Operator Interface	<p>Brushes</p> <ul style="list-style-type: none"> • In front of enclosure • In door <p>Frame - general</p> <p>No cracked welds</p>	Visual inspection	<p>Components are tight to mounting surfaces</p> <ul style="list-style-type: none"> • Brushes are not worn or damaged • Brushes are properly positioned in holders <p>No cracks or damage</p>		Monthly	
Welds		Visual inspection	No cracks or damage		Monthly	
Welds		Visual inspection	No cracks or damage		Monthly	

Area	Description	Method of Inspection	Normal Condition	Findings Pass or Fail	Timing	Notes
Welds	Front caster plate	Visual inspection	No cracks or damage		Monthly	
Welds	Base plate	Visual inspection	No cracks or damage		Monthly	
Welds	Enclosure	Visual inspection	No cracks or damage		Monthly	
Welds	Handle cross bar	Visual inspection	No cracks or damage		Monthly	
Welds	Vertical slide rod	Visual inspection	<ul style="list-style-type: none"> Rod is straight with no signs of wear Rod plating is not cracked or damaged 		Quarterly	
Operator Interface	Guide blocks	<ul style="list-style-type: none"> Visual inspection Cycle deck up and down several times 	Blocks are not damaged or worn and move freely in the vertical slide		Quarterly	



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