

OPERATION & SAFETY MANUAL

SERIAL NO. _____

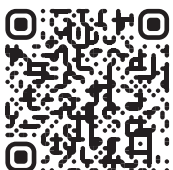
PA-1030



PUSH- AROUND SERIES

MOBILE
ELEVATING
WORK
PLATFORMS

ANSI A92.20
CSA B354.6:17
EN-280:2013+A1:2015
PA1.1-S | REV B



To view machine specific information on your mobile device, scan the code to the left.

Decals with this code can also be found on the manual box and base of the machine.

This manual refers to serial number(s):

PA-1030 PA10-10001 -

For older Serial Numbers refer to our website:
www.hybridlifts.com/Manuals.htm

CE DECLARATION OF CONFORMITY

We hereby declare that the above mentioned machine has been assessed, tested and approved in accordance with the requirements of the Machinery Directive 2006/42/EEC using the document EC Community Legislation on Machinery and taking guidance from EN280:2013 + A1:2015.

Model Number: PA-1030
 Machine Type: Mobile Elevating Work Platform
 Applicable Harmonised Standard: EN280:2013+A1:2015

Manufacturer:
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 Phone: 262-644-1300/Fax: 262-644-1320
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Service Information

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webparts@hybridlifts.com

Original instructions are written in English

The purpose of this Operations and Safety manual is to provide users with the instructions and operating procedures essential to properly and safely operate the Hy-Brid Lift for its intended purpose, and to position personnel and their necessary tools and materials.

- The user/operator should not accept operating responsibility until the manual has been read and understood as well as having operated the lift under supervision of an experienced and qualified operator.
- Because the manufacturer has no direct control over machine application and operation, proper safety practices are the responsibility of the user and all operating personnel.



DANGER
 THE OPERATION AND SAFETY MANUAL MUST BE READ AND UNDERSTOOD PRIOR TO OPERATING THE MACHINE.



WARNING
 ANY MODIFICATION ON THIS MACHINE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE MANUFACTURER IS PROHIBITED.

FALL PROTECTION NOTICE

The guardrail system around the perimeter of the platform is the fall protection system for manual-propelled Mobile Elevating Work Platforms (MEWP) per the A92.20/CSA-B354.6:17/EN-280:2013+A1:2015 Standards. It is prohibited to use an MEWP manufactured by Custom Equipment, LLC, with any portion—or all—of the guardrails removed. Lanyard anchorage points on this type of equipment are not required to conform to the applicable standard. However, if anchorage points for lanyard attachments are required by site authorities or other regulations, the anchorage points on all equipment manufactured by Custom Equipment, LLC are designed to be used for work positioning restraints of personnel only. Lanyard lengths are to be determined by operator/owner to restrict the operator to the confines within the guardrail system.

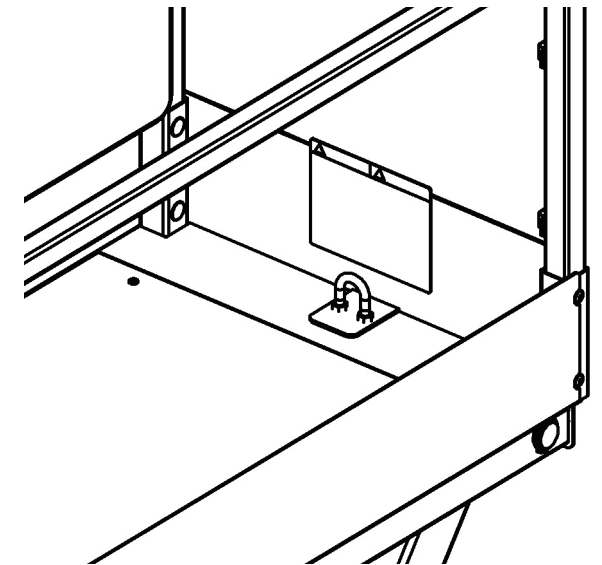


FIGURE 1: Lanyard Attachment




WARNING
 USE OF FALL ARREST SYSTEMS ATTACHED TO ANCHORAGE POINTS ON EQUIPMENT MAY CAUSE MACHINE TO TIP, RESULTING IN SERIOUS INJURY OR DEATH.

Register your Hy-Brid Lift at:
www.hybridlifts.com/RegisterOnline.htm

Register your Hy-Brid Lift to:

- Receive product updates and recalls
- Receive service bulletins, product and part recalls, and other important notifications
- Provide better records for service



WARNING

REGISTERING YOUR MEWP WITH THE MANUFACTURER IS AN ANSI A92.20 REQUIREMENT.

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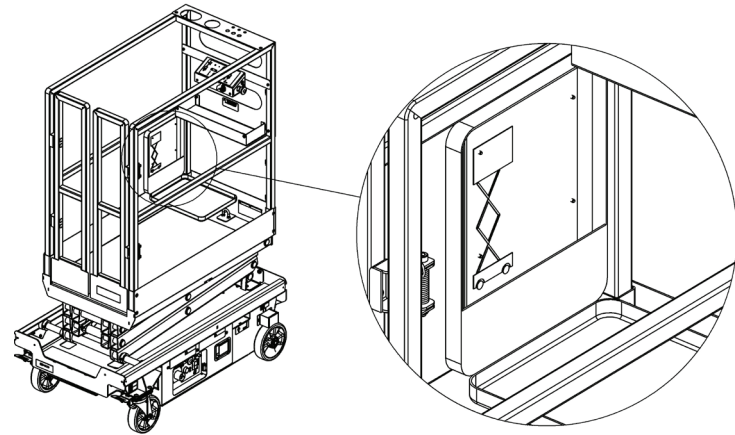


FIGURE 2: Manual Storage Location

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2.1 | SAFETY SYMBOLS

**DANGER**

FAILURE TO FOLLOW THIS WARNING WILL CAUSE DEATH OR PERSONAL INJURY.

"DANGER" indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.

**WARNING**

FAILURE TO FOLLOW THIS WARNING MAY CAUSE DEATH OR PERSONAL INJURY.

"WARNING" indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

**CAUTION**

FAILURE TO FOLLOW THIS WARNING MAY CAUSE INJURY OR DAMAGE TO EQUIPMENT.

"CAUTION" indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury or damage to equipment.

2.2 | GENERAL RULES AND PRECAUTIONS

An operator of any type of work platform is subject to certain hazards that cannot be protected by mechanical means. It is therefore essential that operators be competent, careful, physically and mentally fit, and thoroughly trained in safe operation of this machine.

Although Custom Equipment, LLC conforms to specified ANSI, OSHA, CSA, and CE standards, it is the responsibility of the owner to instruct operators with the safety requirements made not only by Custom Equipment, LLC, but by the various safety boards in your area, as well as additional requirements set forth by ANSI and OSHA, CSA, or CE. If you come across a situation that you think might be unsafe, stop the platform and request further information from qualified sources before proceeding.

**DANGER**

DO NOT OPERATE MACHINE NEAR POWER LINES. THE PLATFORM AND ENCLOSURES ARE NOT INSULATED. EQUIPMENT IS ONLY AS SAFE AS THE OPERATOR.

**WARNING**

NEVER REACH BETWEEN SCISSORS LINKS OR PROP UP PLATFORM.

2.3 | SAFETY FEATURES

Puncture-Proof Wheels**Guardrails**

43.4 in (110.2 cm) height with 6 in (15 cm) toe guards.

Non-Slip Deck**Entrance Gate****Automatic Brake when Elevated****Free Descent Protection**

A holding valve is installed in the manifold block to prevent the platform from descending in case of a ruptured hydraulic hose. The platform is hydraulically locked until hose has been replaced.

Decals

Danger, Caution, and Warning decals are displayed at various locations on this unit.

Key Switch Security

To prevent unauthorized use, a key switch is required for operation.

2.4 | SAFETY INDICATORS & INTERLOCKS

Tilt Alarm

If the chassis is tilted more than 1.5°, elevating function is prevented, and an alarm sounds. Lower the platform and move to a hard, level surface before elevating.

Descent Alarm & Lowering Interrupt

An audible alarm sounds when the machine is lowering.

When lowering the platform, the platform will stop when the ends of the scissors are approximately 2 inches apart for 3 seconds. The beacon light flashes to indicate the armguard delay (if both are equipped). Release. Look around all sides of the scissors to check for persons at risk. Then continue lowering the platform. If elevating platform less than 2 inches, the lift will not descend due to the armguard feature. Elevate the platform higher before lowering, or use the manual override in case of emergency.

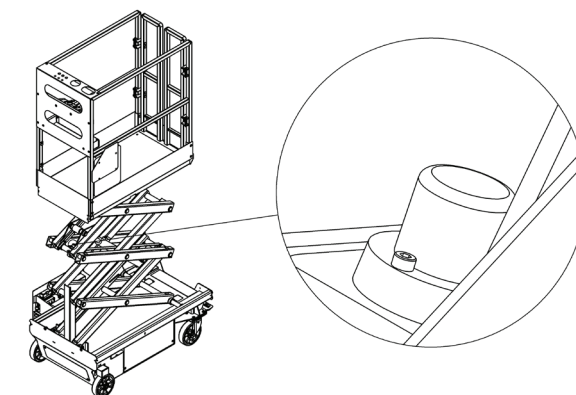


FIGURE 3: Descent Warning Light

Slope Alarm

An audible alarm sounds when the stowed machine is on a ramp.

Overload/Warning Alarm

An LED on the platform controls will activate when the load for the platform approaches maximum rating. An audible alarm will sound once the rated load has been exceeded. (See the "Operation" section of this manual for more detail).

Automatic Brakes

When elevated, a brake is automatically applied to the rigid wheels. The manual parking brake on the swivel casters should also be used. (See the "Operation" section of this manual).

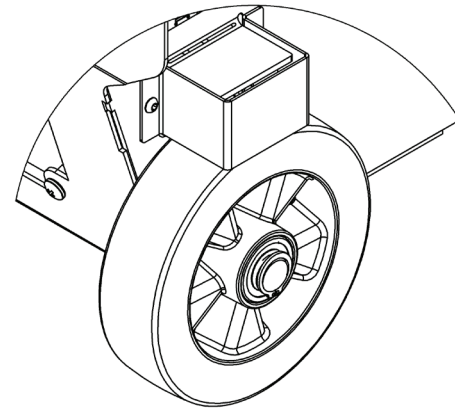


FIGURE 4: Automatic Brake

2.5 | SAFETY CONTROLS**Auxiliary Lowering: Descent - Manual Override**

For manually lowering the scissors in the case of power failure, a manual valve on the pump is provided. To lower the scissors, pull the cable located at the rear of the machine.

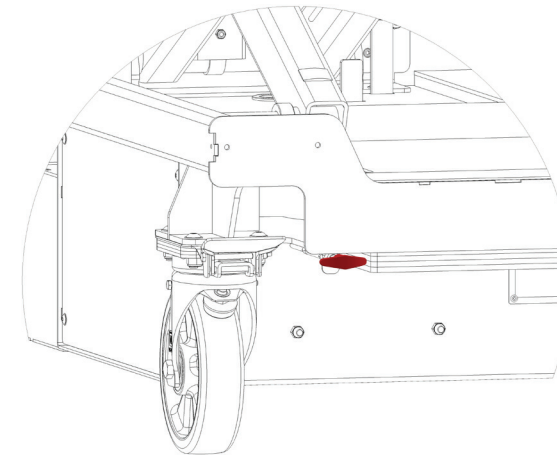


FIGURE 5: Auxiliary Lowering

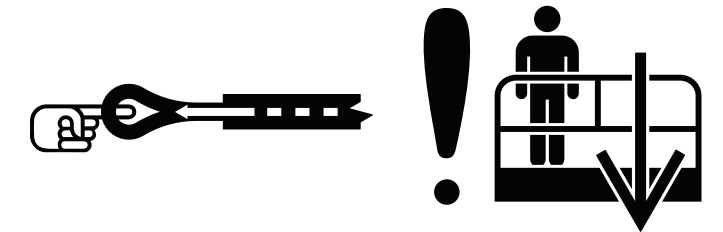


FIGURE 6: Lowering Instructions

! WARNING

IF PLATFORM SHOULD FAIL TO LOWER, DO NOT ATTEMPT TO CLIMB DOWN THE BEAM ASSEMBLY. SERIOUS INJURY MAY RESULT. HAVE AN EXPERIENCED OPERATOR USE THE EMERGENCY LOWERING PROCEDURE TO SAFELY LOWER THE PLATFORM.

Emergency Stop

This lift is equipped with two emergency stop switches, one at the platform control and one at the base control, that when activated, will render the unit inoperable until reset. To reset, pull the button out. (See the "Operating Controls & Indicators" section of this handbook for more detail.)

! WARNING

PUSHING THE EMERGENCY STOP MAY CAUSE UNEXPECTED PLATFORM MOVEMENT AS THE MACHINE COMES TO A SUDDEN STOP. BRACE YOURSELF AND SECURE OBJECTS ON THE PLATFORM DURING OPERATION OF THE MACHINE.

2.6 | MAINTENANCE LOCK

The maintenance lock must be placed into position whenever the machine is being serviced in a partially raised position. Serious injury and/or death could result if maintenance lock is not used properly.

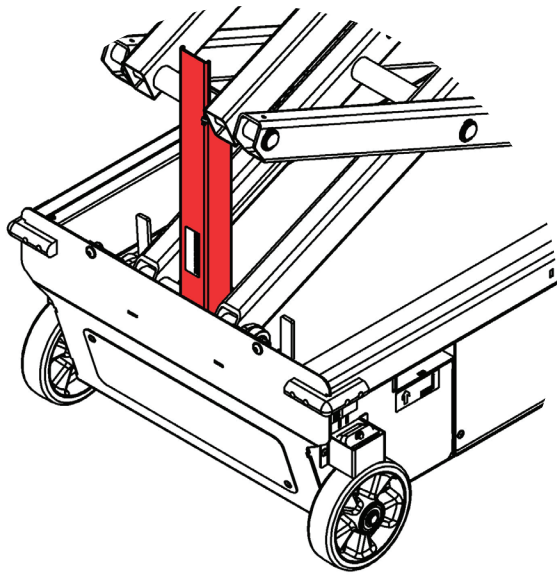


FIGURE 7: Maintenance Lock Use

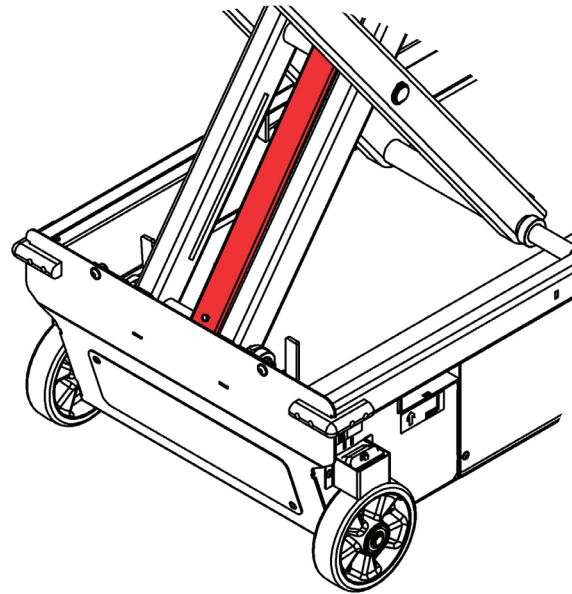


FIGURE 8: Maintenance Lock Storage

2.7 | PROPOSITION 65

WARNING

THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

2.8 | SAFETY GUIDELINES

Only qualified operators may operate this unit

- All operators must read and understand the Operation and Safety Manual. They must understand all decals and warning labels on unit.
- Do not work on platform if your physical condition is such that you feel dizzy or unsteady in any way.
- Do not neglect/misuse machine. Report any misuse of equipment to proper personnel.
- Prevent unauthorized use; when unit is not in use, remove key.
- It is recommended all personnel on unit wear approved personal protective equipment (PPE), i.e. head gear.

Use machine only for purposes for which it was intended

- Lift should never be used as a crane.
- Do not exceed the load capabilities of the platform.
- Distribute load evenly over platform floor area.
- Never use unit as electrical grounds for arc welding.
- Do not override any hydraulic, mechanical, or electrical safety devices.

Check job site for unsafe working conditions

- Watch out for others. Keep others clear of operating platform. Never allow others to pass under a raised platform or position the platform over someone.
- Avoid contact with fixed objects (walls, buildings, or other machinery, etc) or moving vehicles (automobiles, cranes, etc).
- Follow any applicable national traffic regulations.
- Never use outdoors. Lift is not designed for windy conditions or electrical storms.
- Unit must be on hard level surface before elevating. Do not operate on incline or uneven surface.
- You must maintain a clearance between any part of the machine, or its load, and any electrical line or apparatus. Follow local power line clearance regulations.

DANGER

DO NOT OPERATE MACHINE NEAR POWER LINES. THE PLATFORM AND ENCLOSURES ARE NOT INSULATED.

Equipment is only as safe as the operator

- Do not use ladders or scaffolding on the platform to obtain greater height.
- Do not enter or exit platform while machine is in motion.
- Never mount or dismount a raised platform.
- Make sure entry gate is secured before operating machine from the platform.
- Never belt or tie off to an adjacent structure.
- Secure tools and materials.
- Personnel must maintain a firm footing on the platform floor and work only within the platform area.
- Never move the unit with a person in the platform. Never move the unit in the elevated position.

Before operation, ensure that the machine is properly serviced

- Do not use machine if it is not working properly.
- Make sure platform rails and pins are secured.
- Operator shall use the maintenance lock when performing all types of maintenance procedures.
- Do not smoke while charging the battery.
- Perform inspections and preventative maintenance at the recommended intervals. (See the "Before you operate" section of this handbook)

3.1 | GENERAL

Custom Equipment’s Hy-Brid Lifts are mobile elevating work platforms designed to be safe and reliable. The purpose of the machine is to elevate personnel, along with their necessary tools and materials to overhead work locations.

Manufacturer approval is required for any use other than the intended use.

Before operation, the operator must read and understand the manufacturer’s operating instructions and user’s safety rules, or have them explained, understand all labels, warnings, and instructions displayed on the work platform or have them explained, ensure that all occupant of the work platform wear appropriate protective equipment for the conditions, including the environment in which the work platform will be operated.

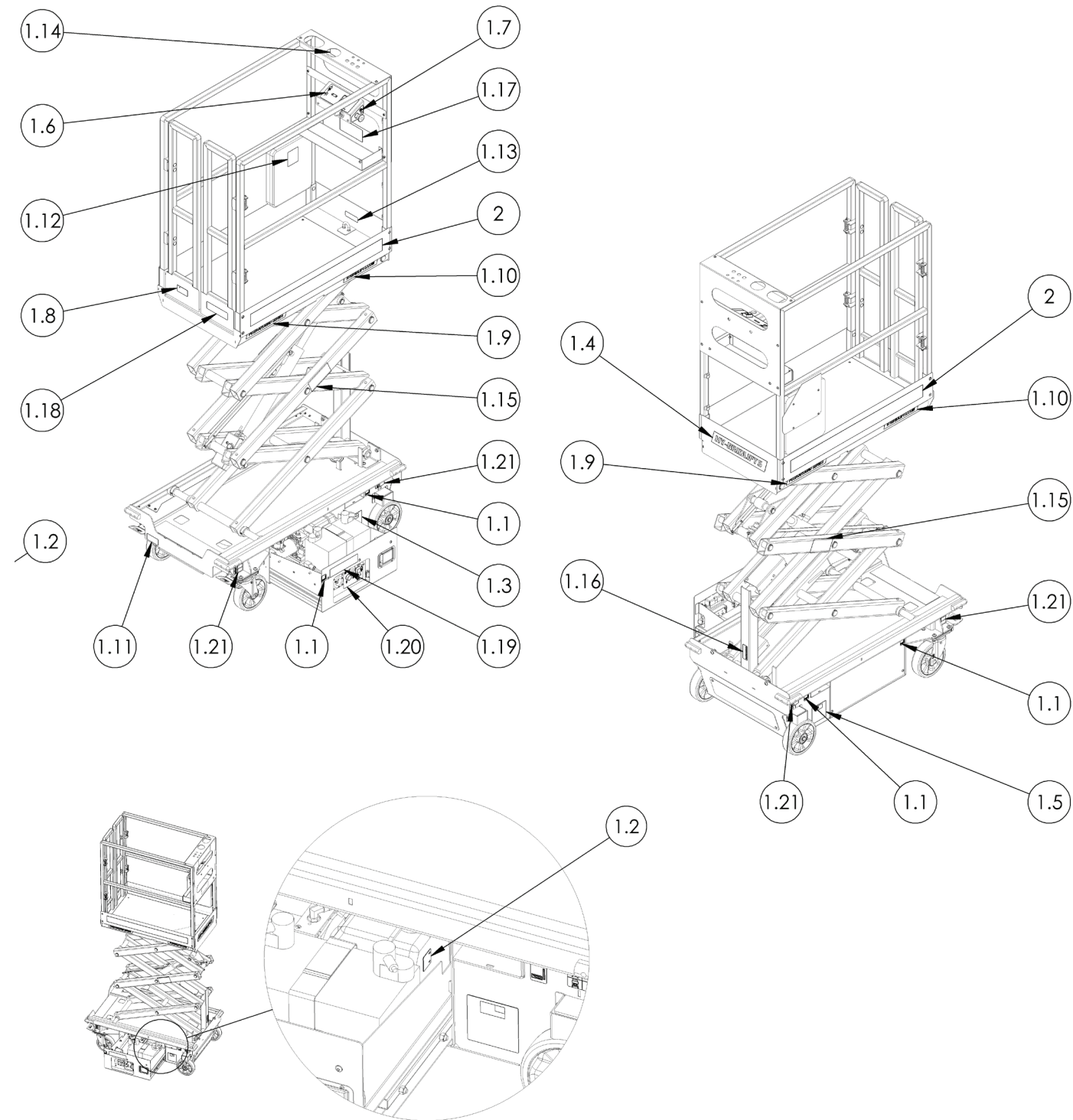
The operator must inspect the workplace for environmental hazards such as, but not limited to drop-offs, holes, slopes, debris, floor or overhead obstructions, surface, wind and weather conditions, or presence of unauthorized persons. Vibration does not create significant hazards on this machine.

SPECIFICATIONS	PA-1030	
Working Height	15.7 ft	4.78 m
Platform Height	9.7 ft	2.97 m
Stowed Height	68.7 in	174.5 cm
Platform Entrance	25.2 in	64.0 cm
Ground Clearance	2.6 in	6.6 cm
Overall Width	29.8 in	75.7 cm
Overall Length	51.3 in	130.3 cm
Platform (Inside)	20.5 in x 40.9 in	52.1 cm x 103.9 cm
Guard Rail Height	43.4 in	110.2 cm
Step Height	13.1 in	33.3 cm
Wheel Base	40.0 in	101.6 cm
Wheel Track	25.8 in	65.5 cm
Inside Turn Radius	Zero	Zero
Outside Turn Radius	48.8 in	124.0 cm
Tire Size (Solid, Non-Marking) - Front / Rear	7.9 in / 7.9 in	20.0 cm / 20.0 cm

RATED LOAD		
Lift Capacity (Evenly Distributed)	530 lbs	1 Person
	240 kg	
Horizontal/Manual Force	45 lbs	200 N

SPECIFICATIONS	PA-1030
FLOOR LOADING	
Machine Weight (Unloaded) (Approx.)	893.0 lbs 405.1 kg
Minimum Wheel Load - Contact Pressure	315.0 psi 2.1 MPa
Maximum Wheel Load - Contact Pressure	372.1 psi 2.6 MPa
Minimum Machine Loading - Floor Loading Pressure	82.4 psf 3.9 kPa
Maximum Machine Loading - Floor Loading Pressure	131.8 psf 6.3 kPa
ENVIRONMENTAL LIMITATIONS	
Wind	No Windy Conditions/Indoor Use Only
Rated Slope	Level Surface
Tilt Sensor Activated	1.5° Longitudinally / 1.5° Laterally
Grade-ability (Stowed Position)	N/A
Temperature	-4°F to 104°F -20° C to 40° C
Vibration	8.2 ft/s² max 2.5 m/s ² max
Sound - Normal Use, Alarms	86 dB Normal Use
POWER SYSTEMS - DRIVE SYSTEM (Proportional Electric)	
Drive Speed (Platform Elevated)	N/A
Drive Speed (Platform Lowered)	N/A
Lift Speed/Lower Speed	18/20 sec
Hydraulic Pressure (Max)	1800.0 psi 12410.6 MPa
Hydraulic Fluid Capacity	0.8 gal 2.8 L
Power System - Voltage	12V DC
Batteries - Deep Cycle Marine	(1) 12V Group 27 Wet Cell or AGM

4.1 | DECAL LOCATIONS AND DESCRIPTIONS



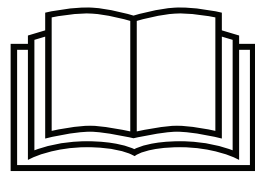
ITEM NO.	PART NO.	SUF	REV	DECAL MEANING OR DESIGNATION	QTY
1	177-21-080	-55-K	C	DECALS,PA-1030	1
1.1	DE1003	A		DECAL,FORK	4
1.2	DE1008	A		DECAL,HYDR FLUID	1
1.3	DE1031	A		DECAL,MADE IN USA MIRROR	1
1.4	DE1207	A		DECAL,HY-BRID LIFTS™	1
1.5	DE1221	A		DECAL,MADE IN USA	1
1.6	DE1315	A		DECAL,CTL UPR	1
1.7	DE1229	A		DECAL,CTL UPR E-STOP	1
1.8	DE1230	A		DECAL,PROP 65	1
1.9	DE1231	A		DECAL,SERIES PA	2
1.10	DE1232	A		DECAL,WEBSITE	2
1.11	DE1243	A		DECAL,E-DOWN CABLE	2
1.12	DE1246	A		DECAL,MANUAL BOX	1
1.13	DE1248	A		DECAL,LANYARD ATTACHMENT	1
1.14	DE1249	A		DECAL,ANNUAL INSPECTION	1
1.15	DE1250	A		DECAL,SCISSOR CRUSH HAZARD	2
1.16	DE1305	A		DECAL,MAINT LOCK	1
1.17	DE1309	A		DECAL,TOE BOARD, PA-1030	1
1.18	DE1310	A		DECAL,CAPACITY,530#,1P,I,WO/SO	1
1.19	DE1311	A		DECAL,LWR DANGERS	1
1.20	DE1312	A		DECAL,CTL LWR PA-1030	1
1.21	DE1313	A		DECAL,WHEEL LOAD PA-1030	4
2	DE1201	A		DECAL,MODEL PA-1030	2

FIGURE 9: Decal Locations

4.2 | DECAL SYMBOLS



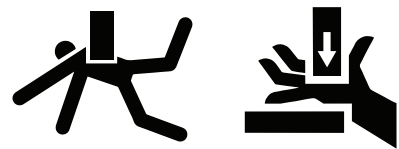
- No Unauthorized Use
- Do not operate this machine unless you have been trained in safe operation.
- Training includes complete knowledge of the safety and operating instructions contained in the manufacturer's manual, your employer's work rules, and applicable government regulations.
- An untrained operator subjects himself and others to death or serious injury.



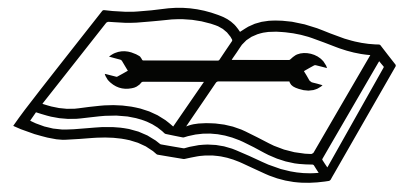
- Read and understand all dangers and warning in the Operations & Safety Manual before operating this machine.
- Improper use of this machine could cause death or serious injury.
- Inspect machine and make sure that it is operating properly, that all name plate and hazard signs are in place and legible, and that the machine is in accordance with the manufacturer's maintenance requirements contained in the operating and maintenance manual and the daily safety checklist.



- Lanyard anchorage point location. Capacity 1 person
- Lanyard anchorage points are for work positioning restraints only.
- Use of fall arrest systems attached to anchorage points on mobile equipment may cause machine to tip, resulting in serious injury or death.



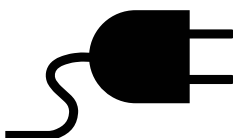
- Crushing Hazard
- Do not enter the space beneath the work platform or scissor structure unless the maintenance lock is in place.



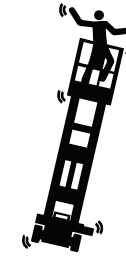
- Refer to Maintenance & Troubleshooting Manual
- Only qualified service personnel may service the machine. Failure to comply with listed safety precautions may result in machine damage, personnel injury, or death.
- Replace designated items with manufacturer's specified equipment only. Failure to use these items may cause instability and could void the Warranty.



- Batteries produce explosive gas. Charge batteries in a well-ventilated area.
- Do not expose sparks or flames.
- Do not smoke while charging battery.



- Battery Charger Power Inlet



- Tip Hazard



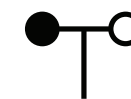
- Tip Hazard
- Do not elevate platform on steps



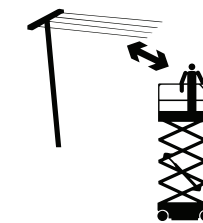
- Tip Hazard
- Do not elevate platform on a slope.



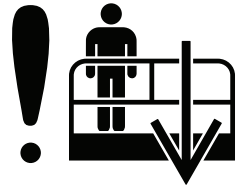
- Tip Hazard
- Do not elevate platform on uneven or soft surfaces.



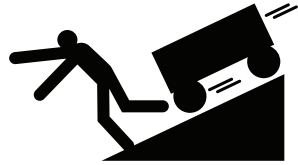
- Indoor Use Only: No Wind Load



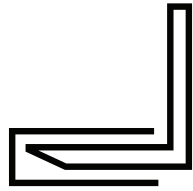
- Electrocution Hazard
- This machine is not insulated.
- Maintain safe clearance from electrical lines and apparatus. You must allow for machine sway, rock or sag and electrical lines swaying.
- This machine does not provide protection from contact with or proximity to an electrically charged conductor.
- You must maintain a clearance between any part of this machine or its load and any electrical apparatus. Follow local power line regulations.
- Death or serious injury will result from contact or inadequate clearance.



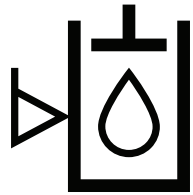
- Emergency Lowering



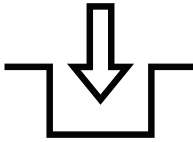
- For safety and controlled handling, it is not recommended to move the unit on a slope greater than 5°.



- Fork pocket



- Hydraulic oil level



- Engaging Mechanical Action: Enable Switch

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5.1 | PRELIMINARY UNPACKING INSTRUCTIONS AND DEALER INSPECTION

Maintenance locks must be engaged prior to inspecting or servicing the unit when the platform is elevated. Inspect machine for any possible damage during shipment; perform a pre-delivery inspection. See checklist in the Maintenance Manual. Reset emergency stop switches, if necessary.

5.2 | STORAGE

After periods of storage, exposure to extremes of ambient conditions-heat, cold, moisture, dust etc., inspect the machine. Refer to the Pre-Delivery/ Frequent Inspection Checklist in the Maintenance Manual.

5.3 | TRANSPORTATION

- Lower the work platform to the down position.
- Turn key switch to off position.
- Check entire machine for loose or unsecured items. Remove any loose items from machine.
- Apply manual brake lock on rear wheels.
- For safety and controlled handling, it is not recommended to move the unit on a slope greater than 5°.

5.4 | FORK LIFT POCKETS

Fork lift pockets are provided on the side of the unit for loading and unloading. When moving machine with a forklift, do not let machine slide along floor. Bring forklift to a stop and then gently lower the machine.

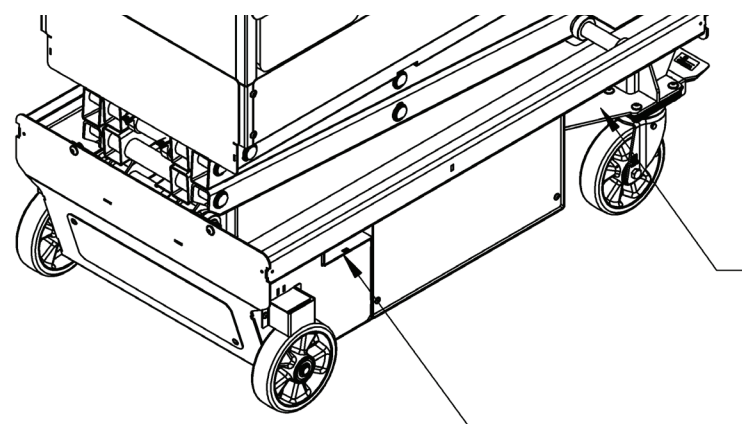


FIGURE 10: Fork Lift Pocket

5.5 | LIFTING AND TIE-DOWN POINTS

The fork lift pockets can also be used as tie-down points and are provided in the front and rear of the machine for securing the machine on a trailer or truck bed for transport between places of use. They may also be used as lift points.

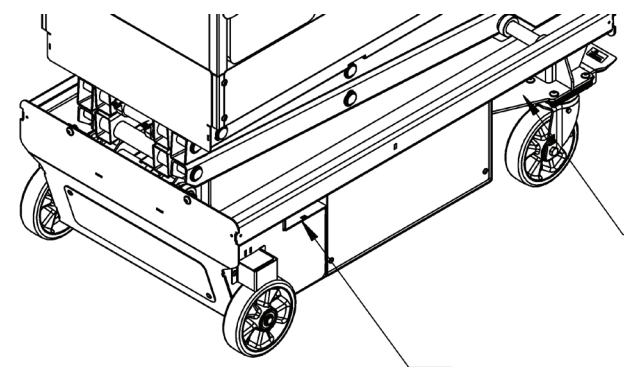


FIGURE 11: Tie-Down Points

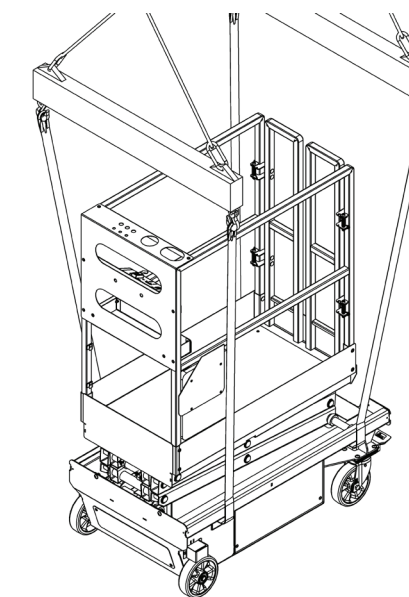
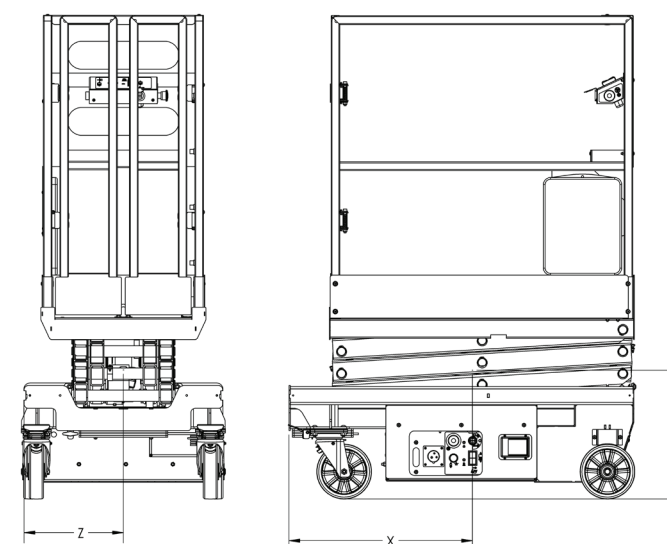


FIGURE 12: Example Sling/Lifting



Center of gravity:
 X: 26.4 in.
 Y: 18.5 in.
 Z: 14 in.

FIGURE 13: Center of Gravity

6.1 | BEFORE YOU OPERATE

Before use each day or at the beginning of each shift, the machine shall be given a visual inspection and functional test. Repairs (if any) must be made prior to operating the machine, as it is critical to ensure safe operation of the machine. A checklist for pre-start inspection can be found in the back of this manual.

6.2 | LOWER CONTROLS

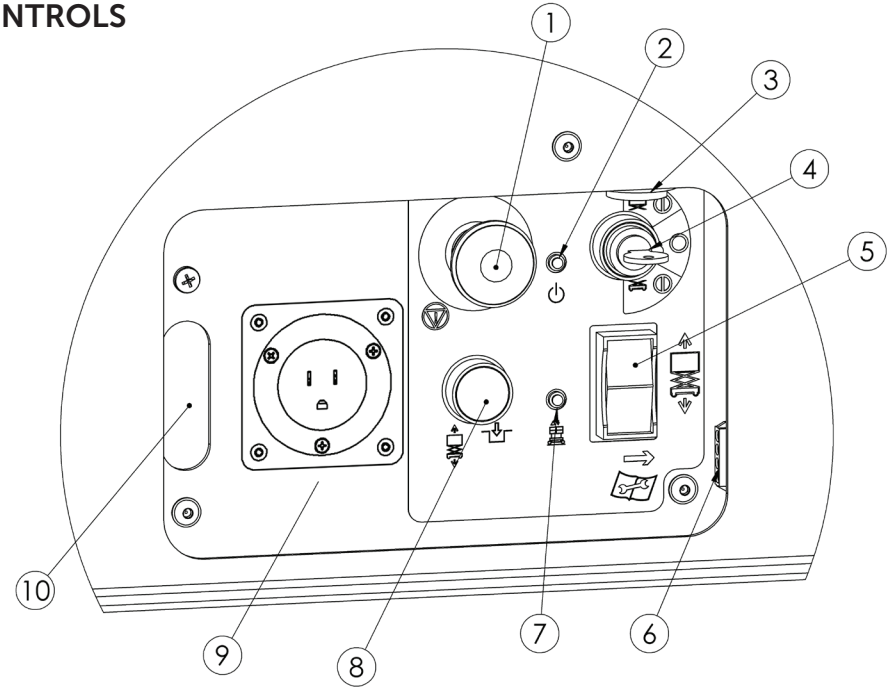


FIGURE 14: Base Controls

Item	Control Indicator
1	Emergency Stop Button (Operation described in section 2.5)
2	Power Indicator Light (Illuminates when power is on)
3	Alarm (Operation described in section 6.7) Alarm sounds for descent, descent delay, or warning that machine is on a slope.
4	Key Switch (Operation described in section 6.4)
5	Elevate/Lower Switch (Operation described in section 6.5)
6	Diagnostic Connection Port
7	Overload Indicator Light (Operation described in section 6.6)
8	Enable Button (Operation described in section 6.5)
9	Battery Charger Port (Operation described in section 6.8)
10	Charger Light Window (Operation described in section 6.8)

6.3 | UPPER CONTROLS AND INDICATORS

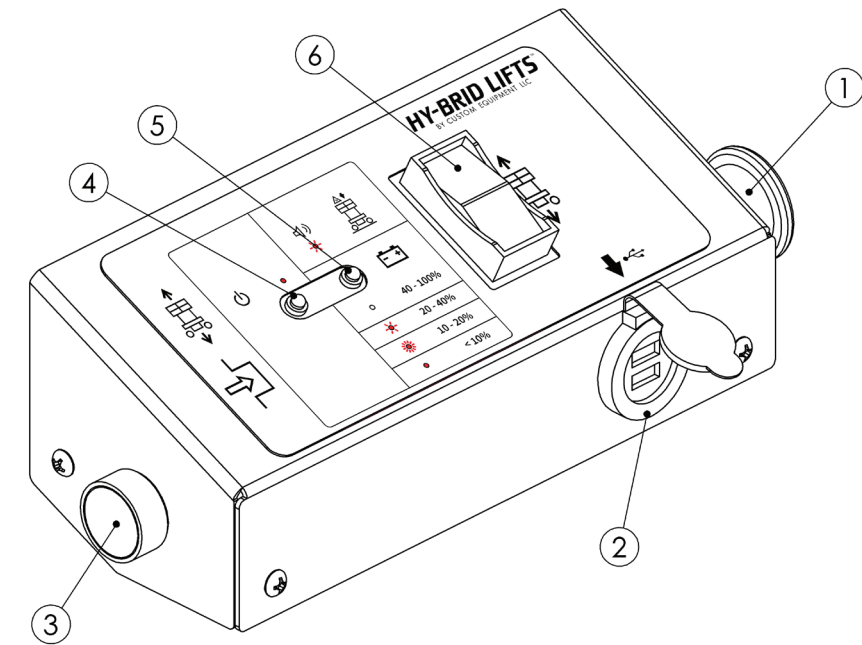


FIGURE 15: Platform Controls

Item	Control Indicator
1	Emergency Stop Button (Operation described in section 2.5)
2	USB Power Port
3	Enable Button (Operation described in section 6.5)
4	Power Indicator Light (Operation described in section 6.6)
5	Battery Indicator/Overload Indicator Light (Operation described in section 6.6)
6	Elevate/Lower Switch (Operation described in section 6.5)

6.4 | STARTUP/SHUTDOWN

! WARNING

CHECK THAT THE ROUTE OF TRAVEL TO BE TAKEN IS CLEAR OF PEOPLE, OBSTRUCTIONS, DEBRIS, HOLES, AND DROP-OFFS; AND IS CAPABLE OF SUPPORTING THE MACHINE.

- Check that the work area is safe.
- It is not recommended to maneuver the unit on a slope greater than 5°.
- Machine must be on a hard, level, surface before operation.
- Check that bubble level is centered.
- Engage the manual brakes on the rear casters before elevating the platform.
- Ensure that the key in the lower control panel is in the "ON" position for the chassis or platform control.
- Enter the work platform in the stowed position using the constant three point contact method.
- Follow all general rules and precautions stated in this handbook.

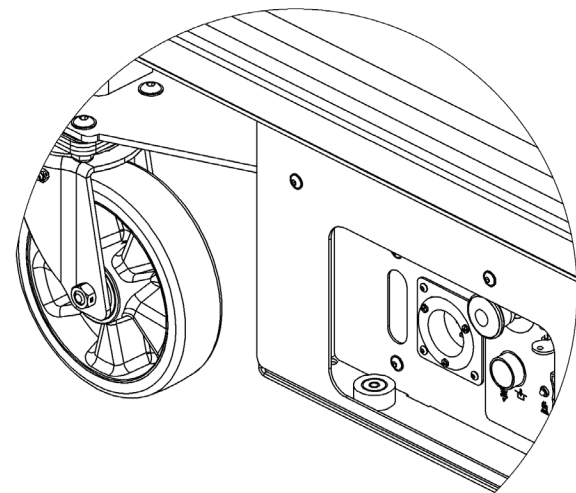


FIGURE 16: Bubble Level

! DANGER

THE OPERATOR MUST BE AWARE OF THE ENVIRONMENT. DO NOT RAISE THE PLATFORM IF THE MACHINE IS NOT ON A FIRM, LEVEL SURFACE.

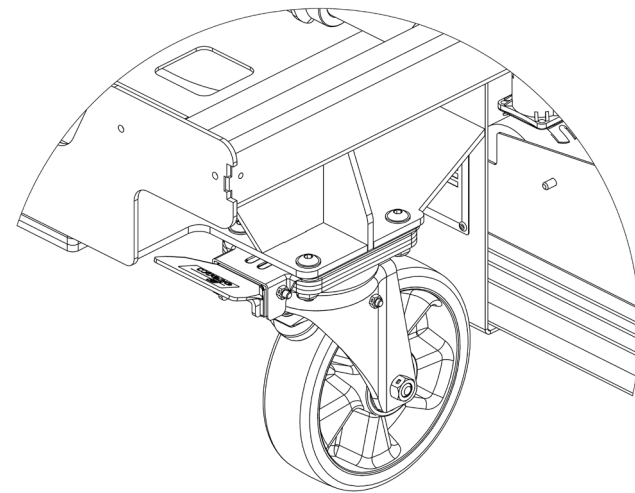


FIGURE 17: Rear Brake

- When finished with the machine, place the platform in the stowed position.
- Carefully exit the platform using the constant three point contact method.
- NEVER JUMP OFF PLATFORM.
- Park the machine on a level surface.
- Remove key from lower control panel to prevent unauthorized use

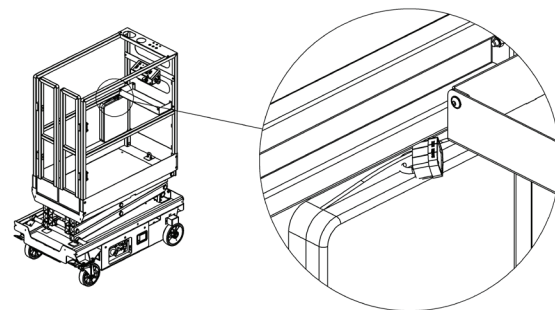


FIGURE 18: Padlock Example

6.5 | ELEVATING AND LOWERING

Using Upper Platform Controls

Ensure the key switch on the base controls is in the platform position.

To elevate/lower, push in and hold the enable button. While pushing the enable button push the top part of the rocker switch to elevate or the lower part of the rocker switch to lower

Using Base Controls

Ensure the key switch on the base controls is in the base position.

To elevate/lower, push in and hold the enable button. While pushing the enable button push the top part of the rocker switch to elevate or the lower part of the rocker switch to lower.

6.6 | INFORMATION INDICATORS

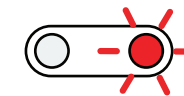
Power Indicator Light

Illuminates when controls have power.



Overload Indicator Light

Flashes when attempting to elevate machine more than 10% while overloaded.

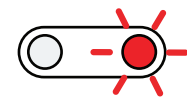


Battery Indicator Light

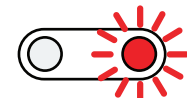
When the overload function has not been triggered right LED light gives an approximate indication of battery charge:



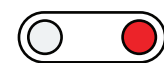
Not Illuminated: 100% to 40%



Slow Flash: 40% to 20%





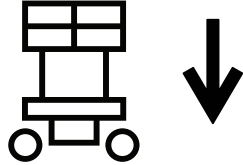

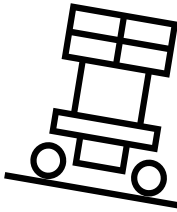

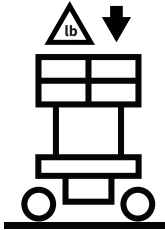
Fast Flash: 20% to 10%



Steady: Less than 10%

6.7 | ERROR ALARMS

The table below lists audible alarms that signal a potential hazard or that an interlock is functioning.

 Alarm	Alert Illustration	Meaning
 Slow Pulse		Machine is descending. Be aware of bystanders and possible obstructions.
 Medium Pulse		Machine is on a slope. Lower the platform and move to a level surface before elevating.
 Pulse in sync with Indicator Light		Machine is overloaded. Remove excess weight.

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! DANGER

FAILURE TO PERFORM INSPECTIONS AND PREVENTATIVE MAINTENANCE AT RECOMMENDED INTERVALS MAY RESULT IN THE UNIT BEING OPERATED WITH A DEFECT THAT MAY RESULT IN INJURY OR DEATH OF THE OPERATOR. REGULAR INSPECTION AND CONSCIENTIOUS MAINTENANCE IS IMPORTANT TO EFFICIENT ECONOMICAL OPERATION OF THIS MACHINE. IT WILL HELP TO ASSURE THAT EQUIPMENT WILL PERFORM SATISFACTORILY WITH A MINIMUM OF SERVICE AND REPAIR. MAKE CHECKS AT THE STATED INTERVALS OR MORE FREQUENTLY IF REQUIRED BY LOCAL OPERATING CONDITIONS. A PRE-START INSPECTION CHECKLIST IS INCLUDED IN THIS MANUAL.

Additional maintenance for use by trained personnel is included in a separate Maintenance Manual. Refer to the Maintenance Manual for Pre-Delivery/Frequent and Monthly Checklists and replacement part information.

! CAUTION

NEVER ADD ACID TO THE BATTERY

6.8 | CHARGING THE BATTERY

This unit is equipped with a deep cycle 12-volt battery. The care and maintenance of your battery has much to do with how well this unit functions. Battery wiring should be checked monthly.

NOTE: The surrounding temperature greatly affects the power reserve within a battery.

EXAMPLE: A battery that is 100% charged at 80° F (27°C) drops to 65% at 32°F (0°C). At 0°F (-18°C), this battery will drop to 40% efficiency.

Do not operate unit while charging. Shortened battery life will result.

To Charge:

- Park the machine on a level surface.
- Plug charger into AC outlet until charged.
- For best battery life, leave charger plugged in until machine will be used again. The charger will maintain the battery charge.
- The charger will not begin the charging cycle on severely discharged batteries.

! WARNING

LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES. KEEP SPARKS AND FLAME AWAY FROM BATTERIES. DO NOT SMOKE WHILE CHARGING.

! WARNING

DO NOT OPERATE UNITE WHILE CHARGING

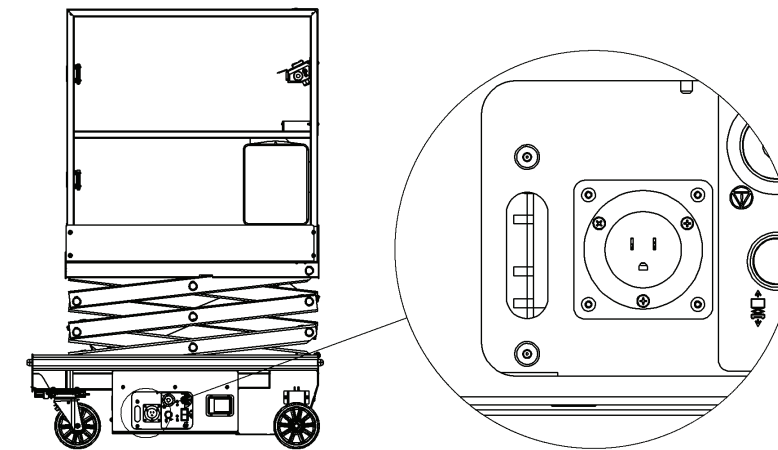


FIGURE 19: Battery Charger and Light Locations

Battery solution is at its proper strength when the battery is manufactured. Use distilled water and keep fluid up to proper level. When required, water should be added to battery after charging, unless water level is below the plates.

Reading the battery displays

POWER	BATTERY 1 STATUS CHARGING	READY	Description
Green LED (ON)	Red LED (OFF)	Green LED (OFF)	This display indicates that the power is on but there is no connection to a battery. The charger must see approximately five (5) volts on a battery to deliver D/C current.
Green LED (ON)	Red LED (ON)	Green LED (OFF)	This display indicates that power is on and that the output is delivering D/C current to the battery.
Green LED (ON)	Red LED (OFF)	Green LED (ON)	This display indicates that power is on and that the output is finished charging and is in a float maintenance model.

7.1 | PRE-START INSPECTION CHECKLIST

Pre-Start Inspection (Push-Around Series)

Model: _____

Serial No. _____

- Keep inspection records up-to-date.
- Record and report all discrepancies to your supervisor.
- A dirty machine cannot be properly inspected.



THIS CHECKLIST MUST BE USED AT THE BEGINNING OF EACH SHIFT OR AFTER EVERY SIX TO EIGHT HOURS OF USE. FAILURE TO DO SO COULD AFFECT THE SAFETY OF THE OPERATOR.

PRE-START INSPECTION CHECKLIST

(Print this page for additional inspections)

Y-Yes/Acceptable N-No/Unacceptable R-Repaired N/A-Not Equipped	Y	N	R	N/A
VISUAL INSPECTIONS				
There are no loose or missing parts.				
Check that warning and instructional labels are legible and secure. Ensure that load capacity is clearly marked.				
Check the platform rails and safety gate for damage.				
Platform and base controls are not missing, damaged, or disconnected.				
Electrical cables and wires are not torn, frayed, or disconnected.				
Hydraulic hoses are not torn or loose, and there are no leaks. Hoses and the cables have no worn areas or chafing.				
Check the tires for damage.				
Check that all snap rings are secure in grooves on pivot pins.				
FUNCTIONAL TESTS				
Gate closes automatically and latches. (alignment can be adjusted with screw-on toe board or railing)				
Platform Controls: Check all switches and push buttons for proper operation.				
Emergency Stop (Stops all movement)				
Up/Down Button (Elevates, Lowers, Enable button must be pressed)				
Base Controls: Check all switches and push buttons for proper operation.				
Emergency Stop (Stops all movement)				
Key Switch/Master Power Switch (Selects Platform Control, Ground Control, or Off)				
Up/Down Rocker Switch (Elevates, Lowers)				
Descent Alarm (Not damaged, sounds for descent)				
Tilt Alarm (Not damaged, sounds when tilted and machine elevated above designated height)				
Wheels: Front and rear wheels rotate freely.				
Brakes engage and hold when platform is elevated				
DATE: _____	INSPECTED BY: _____			

HY-BRID LIFTS™

BY CUSTOM EQUIPMENT LLC

Manual-Propelled
Mobile Elevated Work Platform
PA-1030

Operation & Safety
Manual

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