

# Owner and Operating Instructions Manual

## *Sprint* Personnel Lifter



**This Owner and Operating Instructions Manual, must remain on the *Sprint* Personnel Lifter in the container provided.**

**If you need a replacement for this manual, contact your authorized Lift-Rite Sales and Service Center whose name appears on the back cover.**

This publication, 1346965/001A, applies to the Lift-Rite *Sprint* Personnel Lifter, and to all subsequent releases of this product until otherwise indicated in new editions. Changes occur periodically to the information in this publication. This part number will supersede all prior versions of this manual.

To order additional copies of this manual, part number 1346965/001A, contact your local authorized Lift-Rite Sales and Service Center.

If you need assistance with your personnel lifter, contact your local authorized Lift-Rite Sales and Service Center.

For more information, please visit [www.lifrite.com](http://www.lifrite.com).

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Serial Number: \_\_\_\_\_

## INTRODUCTION

This manual is an important document.

The purpose of this manual is to illustrate the essential precautions and operational procedures for the safe and correct operation of the personnel lifter based upon the utilization anticipated.

These manuals reinforce your training to help prevent personal injury and property damage.

You must read this entire manual before operating the personnel lifter.

- a. If necessary, a replacement copy of this manual can be obtained from your Lift-Rite Sales and Service Center. Replacement copies of the Service Manual and Manual of Responsibilities can also be obtained from your Lift-Rite Sales and Service Center.

This manual and the Manual of Responsibilities shall be present on the machine in the weather-resistant container at all times.

The machine may not be rented, leased, or offered for use to any individual without permission from the owner. Renting, leasing, or offering for use requires that the user/receiver be familiarized and trained on the equipment.

## HAZARD AND TERMINOLOGY SYMBOLS

Hazard symbols are necessary to call attention to potential dangers that could cause injuries. To avoid possible serious injuries or fatal accidents, comply with all of the safety instructions that follow these symbols:



**WARNING:** Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.



**CAUTION:** Caution indicates a potentially hazardous situation, which, if not avoided, could result in minor or moderate injury or in damage to the personnel lifter or nearby objects. It can also be used to alert against unsafe practices.

**NOTICE**

Indicates information or a policy that relates directly or indirectly to the protection of property.

**For:**

- Training Materials
- Replacement Manuals
- Questions Regarding Product Safety
- Standard and Regulations Compliance Information
- Questions Regarding Special Product Applications
- Question Regarding Product Modifications

**Contact:**

Lift-Rite

22 South Canal Street

Greene, NY 13778

**Tel: 1-800-558-6012**

## **RESPONSIBILITY OF OWNER/USER**

Detailed responsibilities of owners, users, supervisors, operators, occupants, lessors, lessees, and brokers are set forth in the Manual of Responsibilities. Become familiar with and adhere to these responsibilities. The Manual of Responsibilities is an integral part of the truck and must remain in the weather resistant storage container.

## **SAFETY**

### **GENERAL INFORMATION**

This section illustrates the precautions necessary for the correct and safe use and maintenance of the personnel lifter. To make sure the personnel lifter is correctly used, it is important to establish a daily inspection procedure based on the directions in this manual.

The safe operation of personnel lifters requires, among other things, scheduled maintenance. Therefore, appropriate maintenance facilities should be provided.

Prior to using the personnel lifter, understand the task to be performed and determine whether the personnel lifter is appropriate for that task. Before operating the personnel lifter, read and understand this manual, the Manual of Responsibilities, all decals on the personnel lifter, and complete training in the operational procedures under the supervision of a qualified instructor.

Before operating the personnel lifter for the first time, make sure that you are properly trained and familiar with the following items. If you are not familiar with these items, ask for assistance from the owner of the personnel lifter prior to operating the personnel lifter. Upon request, the following items are addressed with a receiving entity.

### **FAMILIARIZATION**

- Become familiar with the location of the weather-resistant container for manual storage.
- Confirm that the Owner and Operating Instructions Manual, Manual of Responsibilities, and Operator's Daily Checklist are present on the personnel lifter in the weather-resistant container. These documents must be read through before operating the personnel lifter.
- Review the control functions (see "OPERATION OF THE PERSONNEL LIFTER"), and decals (see "DECALS") and warnings.
- Review the safety devices (including but not limited to: tilt sensor, emergency power off buttons, deadman pedals, hand presence sensors, emergency lowering, and horn, see "PLATFORM COMMAND CONSOLE OPERATIONS.")
- Review features, limitations and devices (see "OPERATION SAFETY," "SAFETY REQUIREMENTS," "RISK OF FALLING HAZARD," "ELECTROCUTION HAZARD," "STABILITY HAZARD," "CRUSHING AND IMPACT HAZARDS," and "CAPACITY TAG.")
- Review operating characteristics of the personnel lifter (see "PICKING PROCEDURE" and "TRAVEL PROCEDURES.")

For further information regarding training, inspection, maintenance, application and operation, contact Lift-Rite or an authorized Lift-Rite representative.



## **SAFETY STANDARDS COMPLIANCE**

The personnel lifter complies with the following standards and regulations in effect on the date the personnel lifter was built.

- CAN/CSA B354.6

This manual and the Manual of Responsibilities contain requirements for sales and service centers, owners, users, supervisors, operators, lessors, lessees, and brokers for mobile elevating work platforms, including this personnel lifter. Each entity has a responsibility to read, understand, and implement the requirements of safe use and training.

This personnel lifter has been overload tested, and functional tested in accordance with section 5.3 of CSA B354.6 prior to being placed on the market.

## **OPERATOR COMPREHENSION**

**Applicable standards require you to be trained and authorized to operate the personnel lifter.**

**This manual is not a substitute for training.**

- Do not operate the personnel lifter unless you are trained, authorized, and qualified to do so.
- Read and obey all warnings and instructions contained in this manual, Manual of Responsibilities, and on the personnel lifter prior to operating the personnel lifter.
- Use of the personnel lifter is allowed only by trained, authorized and qualified personnel, who have carefully read and fully understand the indications of CAUTION, WARNING, and NOTICE as well as the operating instructions of the personnel lifter found in the manual. If you do not understand the caution, warning, and notice information, or the operating instructions found in this manual, ask for assistance from a qualified person.
- All operators must read and obey the commands, controls, and emergency functions of the personnel lifter specified in the manual.
- Carefully read and obey all company rules, and local and governmental regulations in force relative to the operation of the personnel lifter.
- If you do not understand information regarding the rated capacity, intended use, maintenance, inspection, or operation of this personnel lifter, ask for assistance from the owner, sales and service centers, manufacturer, or a qualified person prior to operating the personnel lifter.
- Understand the task to be performed and make sure the personnel lifter is appropriate for the task, based on the capacities, capabilities, and limitations outlined in this manual.

## PERSONNEL LIFTER INSPECTION

- Use the personnel lifter only after having completed the daily inspection checklist. For further information, consult the Preparation and Inspection section in this manual.
- Make sure that all of the safety devices function correctly.
- Report any malfunction, damage, or unsafe condition immediately. Do not operate the personnel lifter until corrected.



**WARNING: Modifications or alterations of the personnel lifter may only be carried out with written authorization from the manufacturer and permission from the owner. Failure to use approved replacement parts may result in personnel lifter instability, malfunction, damage, injury, or death.**

Where it is not possible to obtain written permission from the manufacturer, modifications to the personnel lifter shall be made following the guidelines and instructions provided by an engineer familiar with mobile elevating work platforms. The modifications shall comply with all design and testing requirements defined in CAN/CSA B354.6.

- Do not operate the personnel lifter if any decals are illegible or missing.

## INSPECTION OF THE WORKPLACE

- Prior to operating the personnel lifter, and during operation, the operator shall immediately report any potentially hazardous conditions that becomes evident and stop operating the personnel lifter. Do not use the personnel lifter until the unit has been repaired or the hazardous condition has been fixed.
- Comply with instructions and warnings regarding potential hazards identified in the workplace.
- Personnel lifter is for indoor use only.
- Before operation, check for uneven floors, drop-offs, holes, bumps, debris, and other floor obstructions, including those concealed by water, ice, mud, etc.
- Do not operate on a slope.
- Check for the presence of unauthorized personnel.
- Before operation, inspect your work area for hazards such as electrical lines and other overhead obstructions. Make sure that adequate clearance is maintained from overhead obstructions and energized electrical conductors. When the personnel lifter is to operate within the area of travel of a bridge, crane, or similar equipment, steps shall be taken to prevent a collision with the personnel lifter.
- Do not operate or raise the operator compartment on trucks, semi trailer truck beds, railroad cars, boats on the water, scaffolds or similar structures or vehicles.
- Do not travel on unlevel or soft surfaces that could cause the personnel lifter to slide or tip.
- Verify the surface can support the weight of the personnel lifter, operator, and load, taking into consideration sub-surface voids such as cellars, basements, culverts and pipes. Do not operate on any slope greater than 1.5 degrees while in the elevated position. Do not operate on any slope greater than 4 degrees while in the lowered position. Only operate the personnel lifter on a strong, level surface that will support the weight of the personnel lifter, operator, and the load.
- The personnel lifter may be operated at temperatures between 0°F and 104°F (-18°C and 40°C). Lower the operator compartment when moving between cold environments (such as freezer) and warm environments.
- When moving equipment or vehicles are present, special precautions shall be taken to comply with local ordinances or safety standards established by the workplace. Warnings such as, but not limited to, flags, roped off areas, flashing lights, and barricades shall be used as appropriate. Avoid contact with objects/equipment.
- Operation of the personnel lifter in a hazardous location shall be prohibited if not approved and marked for operation in such locations (see ANSI/NFPA 505). It is the responsibility of the user to determine the hazard classification of the intended location of operation.

## OPERATION SAFETY

- All personnel should check with their employer regarding what personal safety equipment they should wear.
- Check all operating systems and safety devices. Report any malfunction, damage, or unsafe condition immediately. Do not operate the personnel lifter until corrected.
- Care shall be taken to prevent items such as rope, electrical cords, and hoses from becoming entangled in the personnel lifter.
- Observe applicable traffic regulations. Yield the right of way to pedestrians. Stop at intersections and/or whenever vision is obstructed.
- Stop and sound the horn when you approach intersections or crosswalks, when you exit an aisle, or when you cannot see clearly.
- Start, stop, change direction, travel, and brake smoothly. Slow down for turns and on slippery surfaces that could cause the personnel lifter to slide or tip.
- Avoid accumulations of debris on the floor of the operator compartment. Prevent mud, oil, grease, or other similar slippery substances from coming into contact with footwear or the operator compartment floor.
- Use extreme care when traveling with the operator compartment elevated. Excessive speed with abrupt turns or on uneven surfaces may cause the personnel lifter to tip over. Watch out for obstructions, especially overhead.
- When stopping, stay inside the operator compartment until the personnel lifter comes to a complete halt.
- Use the personnel lifter exclusively for lifting a single person and any tools and/or materials that are secured, evenly distributed, below the rated working load limit, and can be safely handled by the operator.
- Only properly secured tools and materials which are evenly distributed and can be safely handled by the operator may be moved on the load deck or load tray. Carrying materials larger than the load deck and load tray or outside of the load deck and load tray is prohibited. Materials shall be transferred to and from the personnel lifter no more than 25 lbs. (11.3 kg) at a time. The total weight of material on the load deck and load tray must not exceed the rated capacity for each at any given moment. See "PICKING PROCEDURE" and "CAPACITY TAG."
- Make sure that tools are put away properly and are not left hanging by their power cords on the load deck and load tray.
- Maintain adequate clearance from overhead obstructions and energized electrical conductors and parts.
- Maintain adequate clearance from fixed objects to avoid contact.
- Always look in the direction of movement when operating the personnel lifter. Maintain an adequate clearance distance from hazards. Keep a clear view.
- When leaving the personnel lifter unattended, fully lower the operator compartment, turn the key to the "O" position, turn the selector switch to the "Off" position, and remove the key.
- Do not carry passengers. Only one (1) occupant is allowed on the personnel lifter.
- Do not allow anyone to stand or pass under the operator compartment or load tray. Mark the floor with appropriate barriers, as needed.



- Do not place tools or material in the operator compartment.
- Keep all portions of the body inside the operator compartment when operating the personnel lifter.
- Keep clear of all obstructions.
- Do not alter the safety devices or alarms of the machine, such as the tilt sensor, in any way.
- If you are uncertain of the rated capacity, intended use, maintenance, condition, repair, inspection, or safety of operation of the personnel lifter, do not use the personnel lifter and contact the owner, sales and service center, or manufacturer to answer any questions.
- Stunt driving and horseplay are prohibited.
- Always properly attach the travel restraint device to the anchorage prior to operation if required by the work site authority.
- Travel with the operator compartment positioned at the lowest safe position for the conditions.
- Move at speeds that are appropriate for safe operation.
- Allow for the distance the personnel lifter may travel or move before coming to a complete stop after the controls are released.
- Never lean over or place objects on the control panel.
- Never rest objects on the personnel lifter guardrails or operator compartment entryway.

## **SAFETY REQUIREMENTS**



### **WARNING: Industrial equipment can be hazardous.**

Personnel lifter accidents may result from:

- Careless operators
- Untrained and unauthorized use
- Poor maintenance

Your personnel lifter is part of a system that has three parts:

- The operator
- The personnel lifter
- The workplace environment

Safe operation of your personnel lifter requires:

- Your knowledge, training, skill and attitude
- Active and attentive supervision to reinforce correct operational behavior
- Good personnel lifter maintenance
- A safe workplace with an appropriately configured personnel lifter

Always make sure that there is another qualified person on site, who is not working on the personnel lifter.

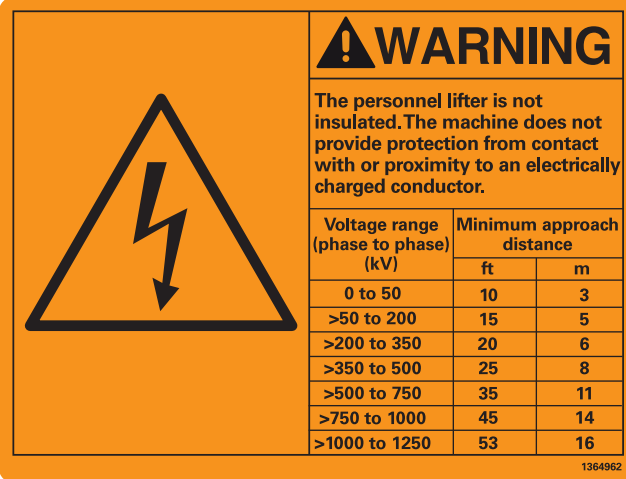
**RISK OF FALLING HAZARD**

**WARNING: Falling from the operator compartment could cause death or serious injury.**

- Do not operate the personnel lifter without placing gates in the closed position.
- Keep both feet firmly planted on the operator compartment floor at all times.
- Do not set ladders, boxes, steps, boards or other similar articles on the operator compartment floor in order to increase the overall working height.
- Do not step on the gates, guardrails, or the load tray.
- Pay very close attention when getting on or off the operator compartment. Make sure that the operator compartment is completely lowered.
- Always use three points of contact when getting onto or off of the personnel lifter. These three points of contact should be met using three of four limbs, which consist of two hands and two feet.
- Avoid sudden shifts in loads or operator positions.
- Guardrails are provided for fall protection. Do not lean any part of your body against the guardrails.
- Do not overload.
- Do not load unevenly.
- Do not push or pull on objects adjacent to the operator compartment.
- Keep the gates closed at all times while the unit is in operation.
- Always operate from the designated operating position. All parts of your body shall remain within the operator compartment, gates, guardrails, and load tray of the personnel lifter.
- Never climb the extending structure of the personnel lifter.

## ELECTROCUTION HAZARD

- The personnel lifter is not electrically insulated.
- Maintain minimum distance from electrically charged conductors and electrical power lines specified in the decal below.



Voltage range (phase to phase) (kV)	Minimum approach distance	
	ft	m
0 to 50	10	3
>50 to 200	15	5
>200 to 350	20	6
>350 to 500	25	8
>500 to 750	35	11
>750 to 1000	45	14
>1000 to 1250	53	16

- It is possible to reduce the minimum safe operational distance in the presence of insulating barriers for the prevention of contact, if those barriers have been adjusted to the voltage of the electrical lines they are set to protect.
- The barriers must not be a part of the personnel lifter nor may they be connected to it. The minimum operational safety distance may be reduced within the operational dimensions indicated by the insulating barriers. This distance is to be determined by a qualified person subject to the company, local, and governmental regulations regarding the undertaking of work operations in the proximity of high voltage equipment.
- The personnel lifter should never be used for electrical grounding to earth when welding structures alongside it.
- Local regulations for approach distance may be more stringent and must be adhered to.

**STABILITY HAZARD**

- Your personnel lifter is designed to be steady and stable. Stability is affected by:
  - Vehicle weight
  - Load weight, height, and distribution
  - Load position while picking and when placed on the personnel lifter
  - Operator weight and behavior
- The personnel lifter's capacity tag lists the maximum rated workload (including operator).
- The personnel lifter can tip or overturn. This can be caused by:
  - Careless load handling by the operator
  - Excessive load weight and height
  - Poor floor conditions
  - Pulling or pushing against the guardrail or any part of the operator compartment and load tray with a (lateral) force greater than 45 lbs. (200 N)
  - Operator weight greater than 286 lbs. (130 kg)
- Do not operate on any slope greater than 1.5 degrees while in the elevated position. Do not operate on any slope greater than 4 degrees while in the lowered position.
- Only operate the personnel lifter on a strong, level surface that will support the weight of the personnel lifter, operator, and the load.
- Before travel on floors, bridges, trucks, or other surfaces, verify that the surface can support the weight of the personnel lifter, operator, and the load.
- Do not overload the personnel lifter. Check the "CAPACITY TAG" for rated loads. Always keep loads evenly distributed. Do not handle unstable or loosely stacked loads.
- Never exceed the rated capacity when loads are transferred at any level.
- Avoid subjecting the personnel lifter to collisions with any objects.
- Do not push or pull against the guardrail or any part of the operator compartment and load tray with a (lateral) force that exceeds the maximum of 45 lbs. (200 N).
- Keep the chassis of the personnel lifter at a minimum distance of 2 ft. (0.6 m) from holes, rough areas, descents, obstacles, debris, and other potential hazards that may be found at ground level.
- Do not attempt to use the personnel lifter as a crane or jack. Do not tie or bind the personnel lifter to any other adjacent structure.
- Do not position any part of the personnel lifter against another object to steady the personnel lifter or attempt to improve stability.
- Do not increase the size of the operator compartment with extensions to the landing or other unauthorized additions.
- If the operator compartment becomes restricted when elevated and cannot be lowered by the service controls or emergency lowering lever, contact emergency services to transfer the operator to a safe location.
- Do not enter or exit the operator compartment when elevated except in emergency situations.
- Do not replace items critical to machine stability with items of different weight or specification. Contact your Lift-Rite Sales and Service Center for replacement parts. Failure to use approved replacement parts may result in personnel lifter instability, malfunction, damage, injury, and/or death.
- Do not mount attachments for holding materials or tools onto the operator compartment, load tray, or guardrail system without authorization from the manufacturer.
- Do not attempt to use the operator compartment or load tray to lift the wheels off the floor.
- Adjust the travel speed based upon the following conditions: floor surface conditions, slope of floor, traffic, visibility, load stability, location of other personnel, and any other factors that could constitute a hazard of collision, load or personnel lifter tip-over, or personnel injuries.
- Do not operate on ramps, docks, and other similar working surfaces.

## **CRUSHING AND IMPACT HAZARDS**

- When the personnel lifter is being used or the operator compartment is being raised or lowered, observe the clearances above, below, and on both sides of the operator compartment itself. Always look in the direction of movement when operating the personnel lifter. Maintain an adequate clearance distance from hazards. Keep a clear view.
- Do not allow anyone to stand or pass under the operator compartment or load tray. Mark the floor with appropriate barriers, as needed.
- Always verify that there is not equipment or personnel below the operator compartment or load tray before lowering the operator compartment.
- Do not lean any part of your body against the guardrails.
- While operating the personnel lifter, always operate from the designated operating position. All parts of your body shall remain within the operator compartment, gates, guardrails, and load tray of the personnel lifter. Your head, arms, hands, legs, and feet can be seriously injured if they strike objects outside the operator compartment while the personnel lifter is moving. It is acceptable to reach your arms over the guardrails to pick loads, which shall only be done while the personnel lifter is completely stationary. See "PICKING PROCEDURE."
- When traveling in areas of limited visibility, have an assigned person proceed ahead to indicate any hazard.
- When traveling, always keep pedestrians at a distance of at least 6 ft. (1.8 m) from the personnel lifter.
- Always travel at a speed that allows you to stop safely.
- Do not travel at a high speed in restricted, tight, or narrow areas.
- Notify operators of other overhead and floor level machines regarding the presence of the personnel lifter. Disconnect the electrical power to elevated cranes.



## PERSONNEL TRAINING

**Applicable standards require you to be trained and authorized to operate this personnel lifter.**

**This manual is not a substitute for training.**



**CAUTION: Operate this personnel lifter slowly in an open area until you understand the controls completely.**

The personnel lifter is a self-propelled device used to lift personnel to support maintenance applications, retrieve, and transport loads.

Therefore, it is to be used and maintained exclusively by trained and qualified personnel.

The operator must not operate the personnel lifter until trained, which includes fully reading and understanding this manual and completing operator training under the supervision of a qualified instructor.

This training shall include general instructions regarding the inspection, application and operation of the personnel lifter, including recognition and avoidance of hazards associated with their operation.

Never allow the personnel lifter to be used by another person without authorization and training.

### Operator Training

This manual is not a substitute for training. This Owner and Operating Instructions Manual is intended as a reminder of the operator's training. That training should include all of the safety requirements, warnings, and cautions in this manual regarding the use of this personnel lifter. In addition to the review of this manual, the Manual of Responsibilities contains training guidelines and content for the use, operation and inspection of mobile elevating work platforms, including this personnel lifter. It is the responsibility of the operator to review these training guidelines.



**WARNING: Do not use this lift truck unless you have been trained and authorized to do so. Read and obey all safety warnings and cautions.**

To attain the highest efficiency and safest operation, operators must be properly trained before operating this personnel lifter.

### Operator Training Program

The Lift-Rite training program provides a complete training program for your personnel lifter operators. It is available from your local Lift-Rite Sales and Service Center.

## PREPARATION INSPECTION AND MAINTENANCE

Lift-Rite provides information relative to the personnel lifter inspection, indicated in the following table.

All inspections, maintenance, and repairs must be performed in accordance with the manufacturer's recommendations, and should be based on the environment and type of service. See tables below for maintenance intervals. When performing maintenance, all precautions listed in the service manual must be adhered to. Replacement parts shall be identical or equivalent to the original components. Contact your authorized Lift-Rite Sales and Service Center if you have any questions. Failure to use approved replacement parts may result in personnel lifter instability, damage, malfunction, injury, and/or death. Maintenance personnel shall be trained in inspection and maintenance. Only qualified personnel shall inspect and maintain the personnel lifter. Repairs must be completed by a qualified technician. If, during any inspection, the personnel lifter is not found to be in proper operating condition, it shall be removed from service and repaired. All problems, damages, or malfunctions must be corrected before the unit is returned to service.

**Table 1: Personnel Lifter Inspection**

TYPE	FREQUENCY	MAIN RESPONSIBILITY	QUALIFICATION FOR INSPECTION	REFERENCE
<b>DAILY INSPECTION</b>	Before each shift, or operator change.	Operator	Operator	Refer to "SAMPLE DAILY INSPECTION CHECKLIST."
<b>WORKPLACE INSPECTION</b>	Prior and during use.	Operator	Operator	Refer to "INSPECTION OF THE WORKPLACE."
<b>FREQUENT (PERIODIC) INSPECTION</b>	Prior to placing into service. Required if the personnel lifter has been out of service for a period longer than 3 months, after 3 months of use, after 150 hours of use, or if environmental conditions require a shorter period (whichever occurs first).	Owner	Lift-Rite Qualified Mechanic	Refer to Service Manual
<b>ANNUAL INSPECTION</b>	Required no later than thirteen (13) months from the date of the prior annual inspection, or no later than after 700 hours of use from the date of the prior annual inspection (whichever occurs first).	Owner	Lift-Rite Qualified Mechanic	Refer to Service Manual

<p><b>STRUCTURAL INSPECTION</b></p>	<ul style="list-style-type: none"> <li>• 10 years after the date of manufacture and every 5 years thereafter.</li> <li>• After any actual, suspected, or potential damage is sustained during an incident that could potentially affect the structural integrity or stability of the personnel lifter.</li> <li>• After a change of ownership, unless a complete service history is provided, including maintenance and inspection records.</li> </ul>	<p>Owner or user</p>	<p>Professional Engineer</p>	<p>Professional Engineer</p>
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Always complete an inspection after any repair is made.

Prior to placing the unit into service when newly acquired or after any period of storage, perform an inspection as specified in Table 1 "Personnel Lifter Inspection."

After any exposure to adverse conditions, such as a discharging sprinkler system or a liquid spill, remove unit from service and perform an annual inspection.

The owner shall establish a preventative maintenance program including inspections as defined in this section and safety related bulletins, taking into account the severity of use.

The frequency of frequent (periodic) inspections and maintenance procedures must increase when the personnel lifter is used under adverse environmental conditions, as specified in the chart below, or with greater frequency. The frequency/extent of periodic examinations and tests can also depend upon national regulations.

<b>Type of Service</b>	<b>Working Environment</b>	<b>Service Frequency</b>
Normal	An eight hour day of basic use	90 days
Severe	Extended operating hours or constant use.	60 days

<b>Type of Service</b>	<b>Working Environment</b>	<b>Service Frequency</b>
Extreme	Dusty or sandy conditions, such as in cement plants, lumber or flour mills, coal dust, or stone-crushing areas High temperature areas, such as in steel mills, foundries, enclosed applications Corrosive chemical atmosphere, such as: fish, meat, or poultry processing plants, tanneries, or any other similar applications Chlorine or salt-sea air environments Adverse high humidity, wet, damp, or moist conditions	30 days

## DAILY INSPECTION



**WARNING: To avoid possible injuries, the electrical power supply of the personnel lifter shall be turned off during the visual inspection. (The selector switch and key switch shall be in the off position).**



**WARNING: If any damage or unauthorized changes to the personnel lifter are found, do not use the personnel lifter.**



**WARNING: If the personnel lifter does not function properly, turn it off immediately. Notify maintenance personnel of the problem. Do not use the personnel lifter until it has been declared suitable for safe operation.**



**CAUTION: Do not neglect the visual inspection and operational inspection for any portion of the personnel lifter.**



**CAUTION: Check and verify that there are no foreign objects or debris present that could cause serious damage to the personnel lifter.**

It is the responsibility of the operator to make a thorough daily inspection of the personnel lifter before each shift or operator change.

The purpose of the daily inspection is to check and verify that the personnel lifter is in working order, with no faults, damages, or malfunctions and to determine if routine maintenance is required.

See "SAMPLE DAILY INSPECTION CHECKLIST."

NOTE: Front cover removal is necessary to complete the daily inspection (see "FRONT COVER REMOVAL/INSTALLATION" for cover removal instructions).

### Daily Inspection Checklist Procedures

Applicable standards require daily checks of your personnel lifter before operating it. The Operator's Daily Checklist has two parts:

- Visual Inspection with the key switch in the OFF "O" position
- Operational Inspection with the key switch in the ON "I" position

Follow the procedures below for the visual inspection portion of the daily inspection.

1. Perform the visual inspection portion of the daily checklist. (See "SAMPLE DAILY INSPECTION CHECKLIST.")

Follow these procedures below for the operational inspection portion of the daily inspection.

1. Turn the key switch to the ON "I" position and set the selector switch to platform.
2. Without a load, make sure that all the personnel lifter functions are disabled when the emergency power off button on the platform command console is activated (pressed). (See "PLATFORM COMMAND CONSOLE OPERATIONS.")
3. From the service command console, without a load perform the following operations: (See "SERVICE COMMAND CONSOLE OPERATIONS.")
  - a. Make sure that all of the controls in both the service command console and operator compartment are disabled when the emergency power off button is activated (pressed).
  - b. Set the selector switch to service.
  - c. Check and verify that the lifting and the lowering of the operator compartment is operating properly. Verify both the lift and lower buttons by lifting and lowering the operator compartment 2 to 3 ft. (0.61 to 0.92 m) several times. Fully raise the operator compartment and verify that there are no cracks or damage on the extended structure.

- d. Check and verify the proper function of the emergency lowering lever by lifting the operator compartment and pulling the emergency lowering lever until the operator compartment is completely lowered.
- e. With the selector switch still set to service, check and verify that the platform command console controls do not function.
- f. Set the selector switch on the service command console to platform.
4. Platform gate opening test: Open gates and make sure the gates spring close. Gates shall be perpendicular to the side rails when closed.
5. From the platform command console, without a load, perform the following operations: (See "PLATFORM COMMAND CONSOLE OPERATIONS.")
  - a. Make sure that the key switch is set to the "I" position.
  - b. Actuate the lift operator compartment button. The operator compartment should not lift without the deadman pedals pressed, right hand on the throttle control handle, and the left hand on the steering control handle.
  - c. Engage the hand sensors and the right deadman pedal and, without activating the left deadman pedal, verify the personnel lifter does not travel and the operator compartment won't lift and lower.
  - d. Engage the hand sensors and the left deadman pedal and, without activating the right deadman pedal, verify the personnel lifter does not travel and the operator compartment does not lift and lower.
  - e. Engage both deadman pedals and the throttle handle sensor and, without actuating the steering hand sensor, verify the personnel lifter does not travel and the operator compartment does not lift and lower.
  - f. Engage both deadman pedals and the steering handle sensor and, without actuating the throttle hand sensor, verify the personnel lifter does not travel and the operator compartment does not lift and lower.
  - g. Actuate the deadman pedals, place hands on control handles, and actuate the lift operator compartment button. The operator compartment should lift.
  - h. If equipped with gate interlocks, leave the gates open and actuate the deadman pedals, place hands on control handles, and actuate the lift operator compartment button and verify the personnel lifter does not lift and lower. Actuate the drive and steer throttles and verify that the personnel lifter does not drive forwards or backwards or steer left or right. Verify that a 2-8 fault code is shown in the battery gauge when movement is requested.
  - i. If equipped with gate interlocks, raise the operator compartment 2 in. (5 cm) off the ground. Make sure that both entry gates are locked in a fixed position and cannot be opened while in the lifted position.
  - j. If equipped with LED work lights, verify that both LED lights turn on and off when the corresponding button is pressed.
  - k. Stand within the operator compartment with the gates closed and feet on the deadman pedals.
  - l. Lift and lower the operator compartment 2 to 3 ft. (0.61 to 0.92 m) several times.
  - m. Lift the operator compartment greater than 2 ft. (0.6 m) and travel in the forward and reverse direction. Completely lower the operator compartment and travel in the forward and reverse direction. Verify that the maximum travel speed when the operator compartment is elevated is reduced when compared to the maximum travel speed from when the operator compartment is completely lowered.
  - n. Turn left and right several times to verify that the steering is operating properly.
  - o. Lift and lower the load tray several times. Check and verify that the lifting and lowering of the load tray is operating properly.

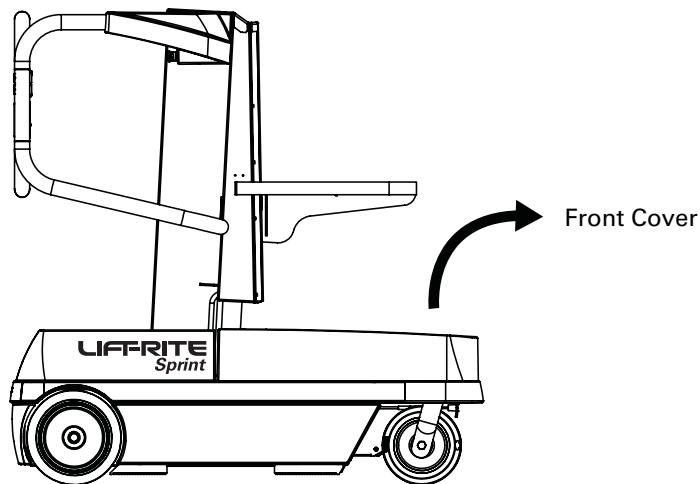
NOTE: The machine will not operate (travel or lift) unless the deadman pedals, steering handle sensor, and throttle handle sensor are actuated and held during drive and lift operation.

6. Tilt Sensor: With the operator compartment completely lowered, drive the personnel lifter onto a surface with a tilt of more than 1.5 degrees in any direction (**do not exceed the rated slope**). From the service command console, turn the selector switch to service and actuate the lift operator

compartment button. A tilt condition should be present and all functions should be locked; with the exception of lowering the operator compartment.

7. Parking Brakes - Check and verify the proper function of the brakes by having the operator compartment completely lowered and driving the personnel lifter onto a surface with a tilt of more than 1.5 degrees (**do not exceed the rated slope**) "CAPACITY TAG", and stop to make sure the brakes hold. If the tilt exceeds the rated slope, while the operator compartment is elevated, a 2-2 error code will appear in the CAN Display Module. To clear the error code, fully lower the operator compartment. This will enable the personnel lifter's travel functions so that the machine can be moved from the tilted surface.

## FRONT COVER REMOVAL/INSTALLATION



### Removal

Lift the front cover from the front to free it from the bumper on the base frame. Then slide the front cover forward while lifting it to completely detach the front cover from the personnel lifter. Use caution when maneuvering around the load tray.

### Installation

Position the front cover on the bumper on the upper part of the frame and slide it backwards, towards the operator compartment. Use caution when maneuvering around the load tray.





## **OPERATION OF THE PERSONNEL LIFTER**

**THE MANUFACTURER HAS NO DIRECT CONTROL OF THE APPLICATION OR THE OPERATION OF THE PERSONNEL LIFTER. THE USER AND OPERATOR ARE RESPONSIBLE FOR FOLLOWING THE CORRECT SAFETY PROCEDURES.**

This section provides information necessary for understanding the controls.

### **DESCRIPTION OF THE PERSONNEL LIFTER**

This lifting device is a self-propelled personnel lifter and it is equipped with a work platform or operator compartment mounted on a strut elevation mechanism, actuated by a single hydraulic cylinder with a synchronized effect.

Hydraulic cylinders are subject to thermal expansion and contraction. This may result in changes to the platform position while the machine is stationary. Factors affecting thermal movement can include the length of time the machine will remain stationary, hydraulic oil temperature, ambient air temperature and platform position.

The Sprint is equipped with an electrically actuated load tray mounted to the work platform and a load deck which are reserved only for objects and materials.

The purpose of the personnel lifter is to lift personnel to support maintenance applications, manually pick, and transport loads.

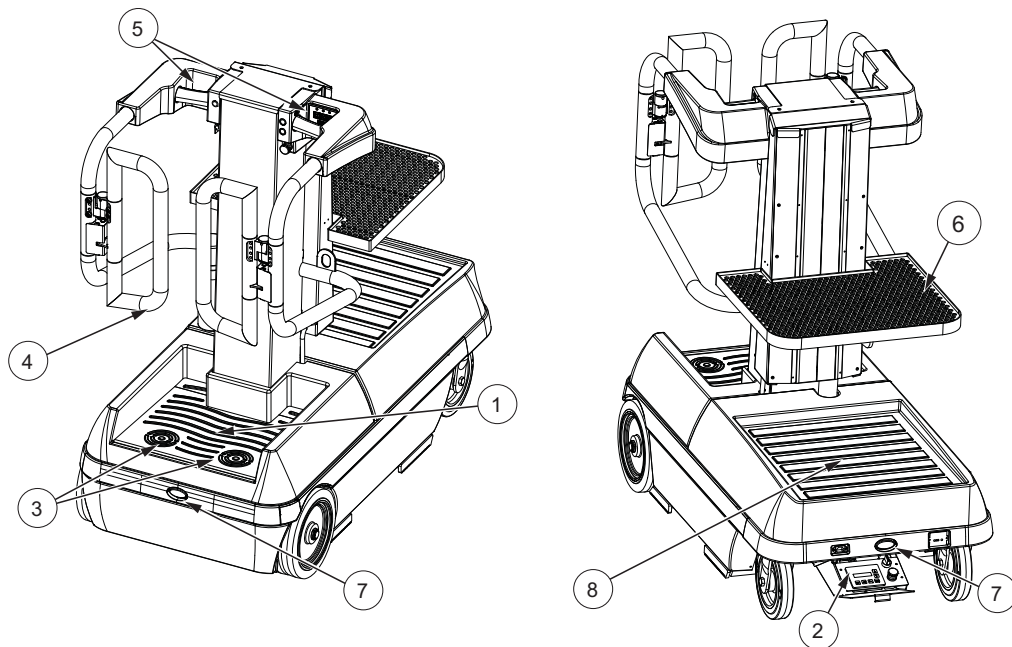
The Sprint has two drive wheels in the rear and two free caster wheels in the front. It is necessary to use the service command console (see "SERVICE COMMAND CONSOLE OPERATIONS") when the personnel lifter is being serviced, when functional verifications are performed, or in case of emergency if the operator is not capable of lowering the operator compartment.

## FUNCTION OF THE PERSONNEL LIFTER

### Operation Criteria

Before activating the personnel lifter using the commands on the service command console or those on the platform command console, it is necessary to satisfy the following conditions.

- No tilt condition present see "Tilt Sensor."
- Battery voltage must be sufficient for operation.
- The selector switch on the service command console must be set to either the service command mode or the platform command mode.
- Set the key switch to the "I" position.
- The emergency power off buttons on the command panel of the platform and on the service command console must be in the RESET position (extended outward).
- In platform command mode, the operator compartment raises and lowers only if the operator presses the deadman pedals, places their hands on the steering and throttle control handles (actuating the handle sensors), and actuates the lift or lower operator compartment button.
- In service command mode, the operator compartment raises and lowers only if the operator actuates the lift or lower operator compartment button on the service command console.
- The light/audible alarm activates during travel, lifting, and lowering of the operator compartment.
- Gates are in closed position.
- Loads are evenly distributed, not extending outside the load deck and load tray, and below the load ratings.



1. Operator Compartment
2. Service Command Console
3. Deadman Pedals
4. Platform Entry Gate
5. Platform Command Console
6. Load Tray
7. Warning Lights
8. Load Deck

**Battery Charging Procedure**

This personnel lifter is equipped with a battery charger with an AC electrical power input/DC electrical power output. The battery charger stops charging the batteries automatically when they have reached full charge.

NOTE: When the command panels on the platform and the ground station have indicated a low battery voltage, the battery must be charged.

NOTE: When the battery charger is connected to an AC electrical outlet, operator compartment lift/lower is disabled and travel functions are disabled.

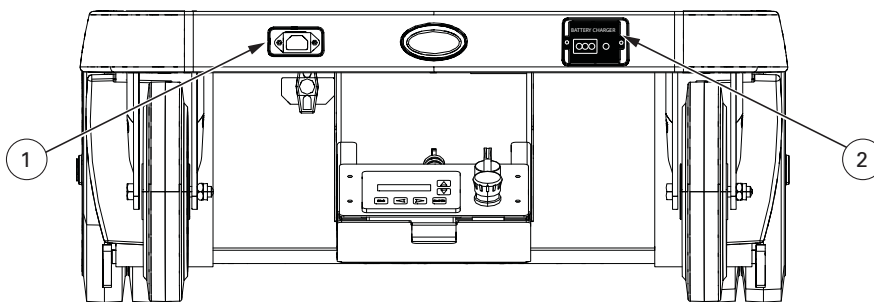


**WARNING: THE LEAD ACID BATTERIES MAY GENERATE EXPLOSIVE HYDROGEN GAS DURING NORMAL OPERATION. KEEP SPARKS, OPEN FLAMES, OR LIT TOBACCO AWAY FROM THE BATTERIES. DURING BATTERY CHARGING, PROVIDE FOR ADEQUATE VENTILATION IN THE AREA. DO NOT CHARGE A FROZEN BATTERY.**

1. Park the personnel lifter in a well ventilated area near an AC wall socket. The battery charger input voltage is 100-240V - 50/60 Hz 9.5A.



2. Always use a grounded AC socket. Connect the battery charger to a correctly installed AC socket with ground connection according to all of the local regulations in force. The grounded socket is necessary to reduce the risk of electrical shocks. Do not use grounded adapters and do not modify the plug. If an extension is used, avoid excessive drops in voltage by using the 3 wire 12 AWG type.



1 - A.C. POWER INPUT FOR THE BATTERY CHARGER

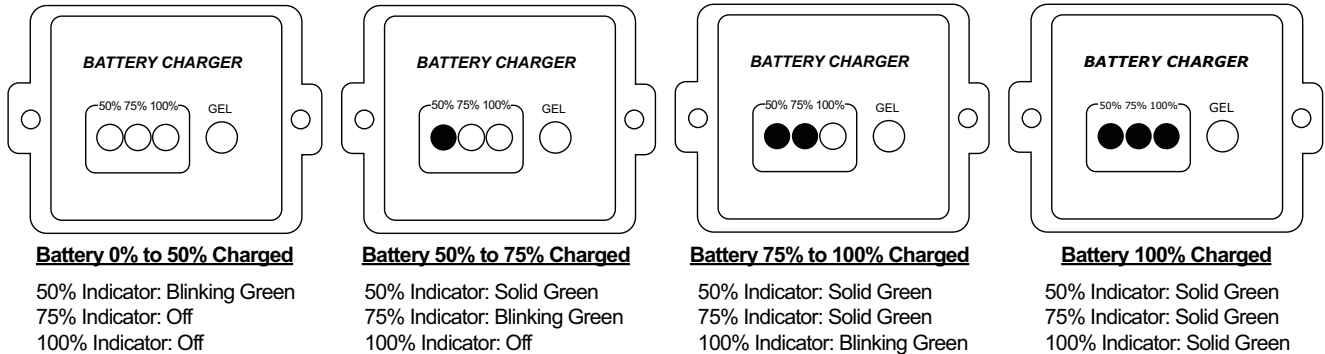
2 - CHARGE STATUS LIGHT

The charge status lights for the batteries are located near the AC power input on the battery charger on the chassis.

1. Upon the first connection, the battery charger LED will blink for a few seconds, then the charging begins.
2. When the GREEN LED illuminates at 100%, the batteries are charged. At this point, it is possible to disconnect the battery charger from the AC main power supply. (Grasp the plug and pull it out from the wall outlet. To avoid damage on the cord, do not pull on the cord.)



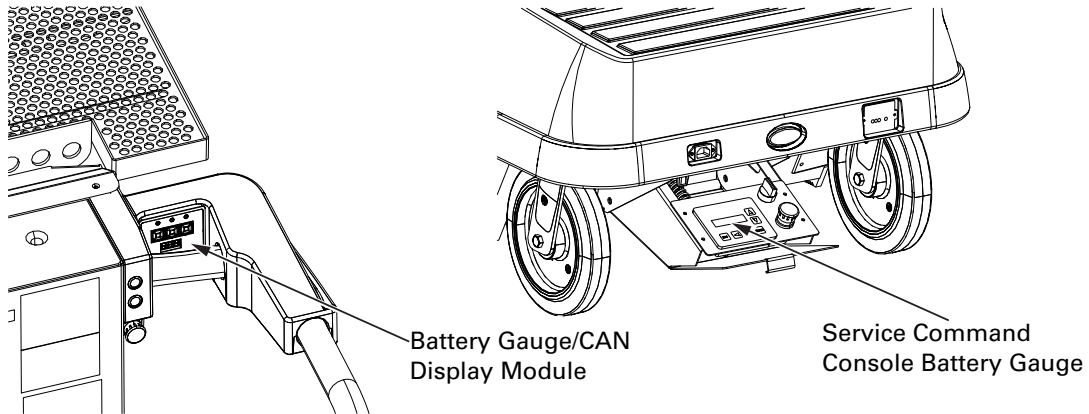
**NOTE:** When the green LED is at 100%, the battery charger switches OFF automatically.



## Battery Gauge

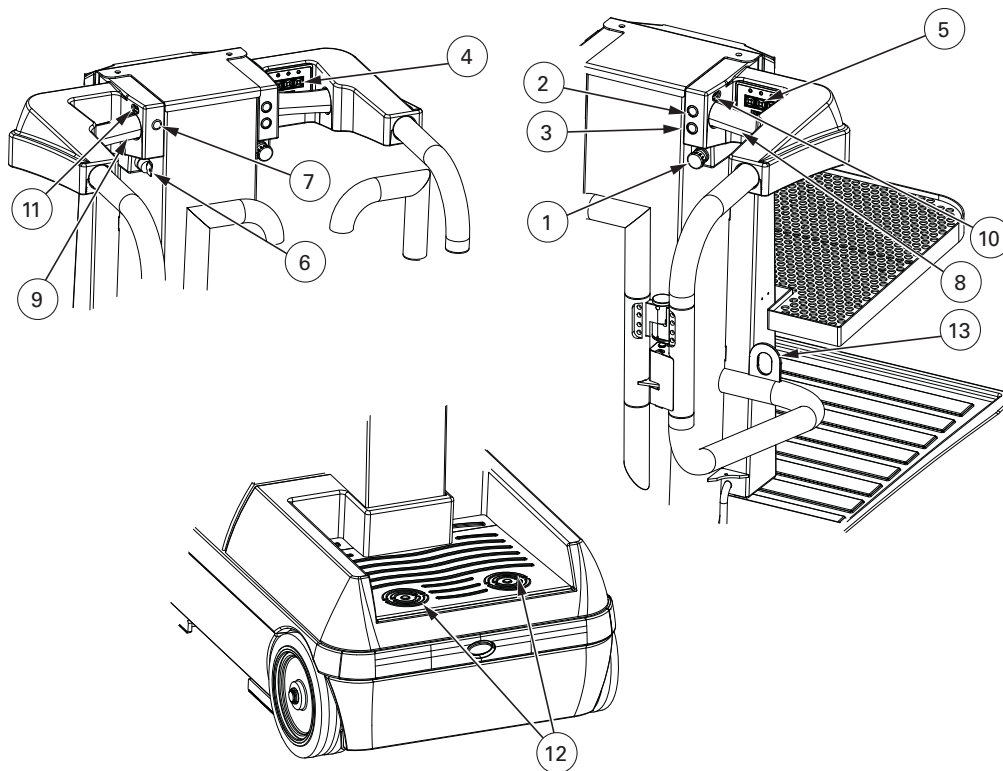
The battery gauge shows the battery charge status. When the battery gauge indicates a low battery voltage with a 4-4 error code, lifting of the operator compartment is prohibited and the battery must be charged.

Batteries shall only be charged in well-ventilated areas free of flames, sparks, or other hazards that may cause fire or explosion.



**NOTE: SWITCHING OFF THE PERSONNEL LIFTER WHEN NOT IN USE INCREASES THE BATTERY LIFE.**

## PLATFORM COMMAND CONSOLE OPERATIONS



1. Emergency Power Off Button
2. Lift Operator Compartment Button
3. Lower Operator Compartment Button
4. Lift Load Tray Button
5. Lower Load Tray Button
6. Key Switch
7. Horn Button
8. Throttle Control Handle
9. Steering Control Handle
10. Throttle Handle Sensor
11. Steering Handle Sensor
12. Deadman Pedals
13. Travel Restraint Anchor

### Platform Emergency Power Off Button

When pressed, the emergency power off button immediately stops all operations of the personnel lifter.

Reset of the emergency power off button **DOES NOT** actuate the personnel lifter, but enables the command devices.

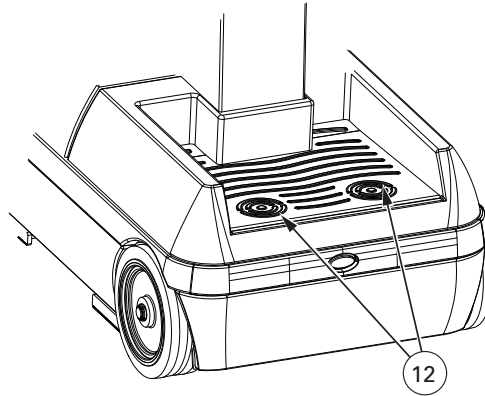
**NOTE:** In order to operate the personnel lifter, the emergency power off buttons on the service command console (refer to "SERVICE COMMAND CONSOLE OPERATIONS") and on the platform command console must both be set to the RESET position.

After operation and before disengagement of the emergency power off device(s), the personnel lifter shall be inspected to detect the reason for operation of the emergency power off.

## Deadman Pedals

There are two deadman pedals on the personnel lifter. The deadman pedals are engaged by the operator's heels. Removing one of the operator's heels from either deadman pedal will disable all of the functions of the machine.

NOTE: If heels are on the deadman pedals while the personnel lifter is being switched to ON, a 2-4 error code will show.

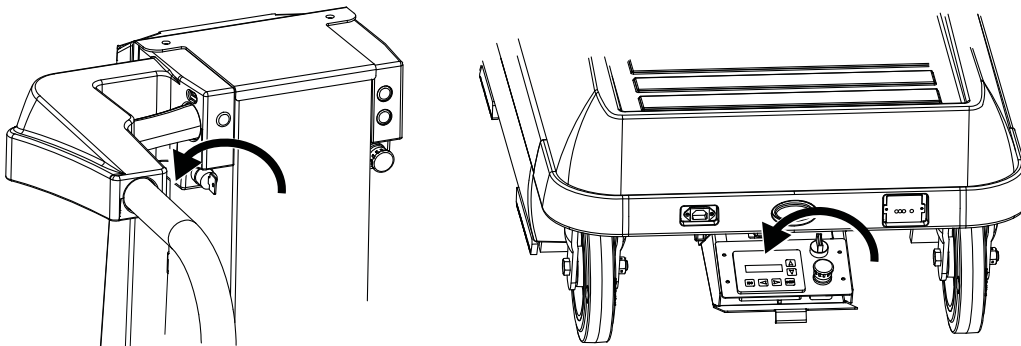


## Operator Compartment Lift and Lower Buttons

The operator must not for any reason climb up on top of the operator compartment guardrails, or use ladders or other items on the load tray, operator compartment, operator compartment floor, or guardrails to achieve greater work heights or to reach further. In addition, the operator must never lean against the guardrails of the operator compartment. Your head, arms, hands, legs, or feet can be seriously injured if they strike objects outside the operator compartment while the personnel lifter is moving. It is acceptable to reach your arms over the guardrails to pick loads, which shall only be done while the personnel lifter is completely stationary. See "PICKING PROCEDURE."

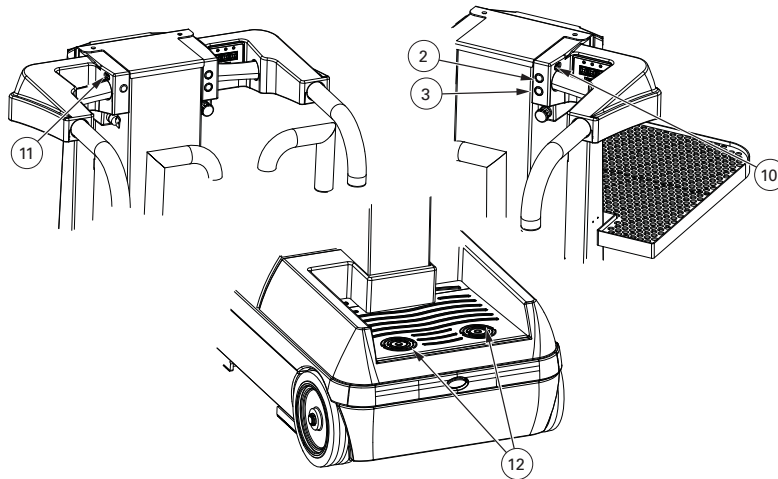
Before activating the personnel lifter, do a pre-operation check (daily inspection) and workplace inspection.

To enable the platform control, the key switch should be set to the "I" position and the selector switch should be set to platform.



Engage the deadman pedals (12), throttle handle sensor (10), steering handle sensor (11), and the lift operator compartment button (2) to lift the operator compartment. Release of the lift operator compartment button, handle sensors, or the deadman pedals automatically stops operator compartment movement.

Engage the deadman pedals (12), throttle handle sensor (10), steering handle sensor (11), and the lower operator compartment button (3) to lower the operator compartment. Release of the lower operator compartment button, handle sensors, or the deadman pedals automatically stops operator compartment movement.





## Throttle Control Handle

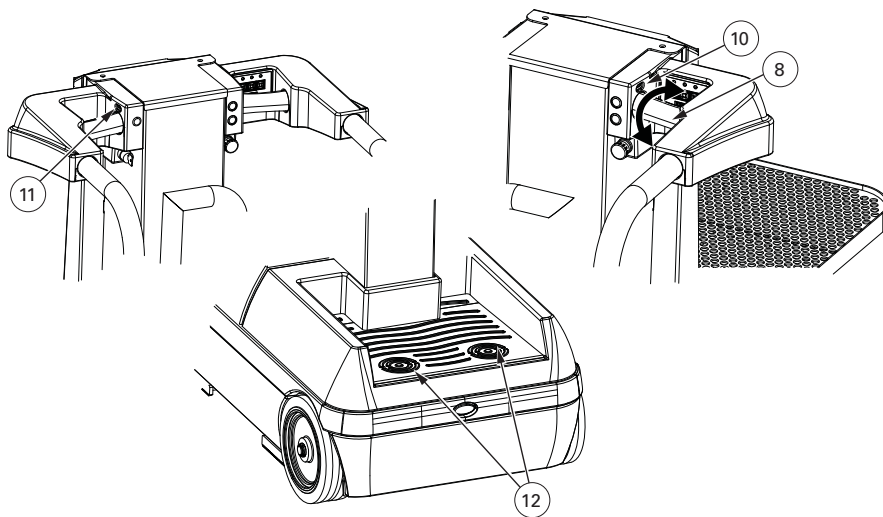
Engage the deadman pedals (12), throttle handle sensor (10), steering handle sensor (11), and rotate the throttle control handle (8) in the direction you want to travel (forward or reverse).

Release of the throttle control handle, handle sensors, or deadman pedals automatically stops the personnel lifter.

**NOTE:** The farther you rotate the control handle from the neutral position, the faster the personnel lifter will travel.

**NOTE:** The front of the personnel lifter may travel to one side or the other when you begin traveling, or change direction of travel. This is caused by the swing of the casters and may require steering correction.

**NOTE:** If objects interfere with your ability to see, lower the load tray or transfer the objects to the load deck before traveling. Do not carry objects that interfere with your visibility.

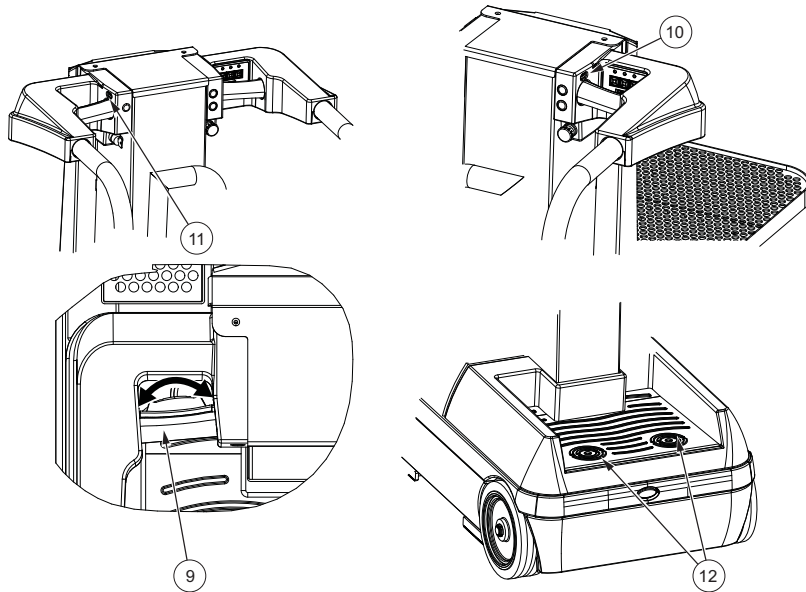


## Steering Control Handle

Engage the deadman pedals (12), throttle handle sensor (10), steering handle sensor (11), and grasp the steering control handle (9) in the direction you want the front of the personnel lifter to turn. Press or squeeze the right side of the rocker switch to turn the front of the personnel lifter to the right and press or squeeze the left side of the rocker switch to turn the front of the personnel lifter to the left.

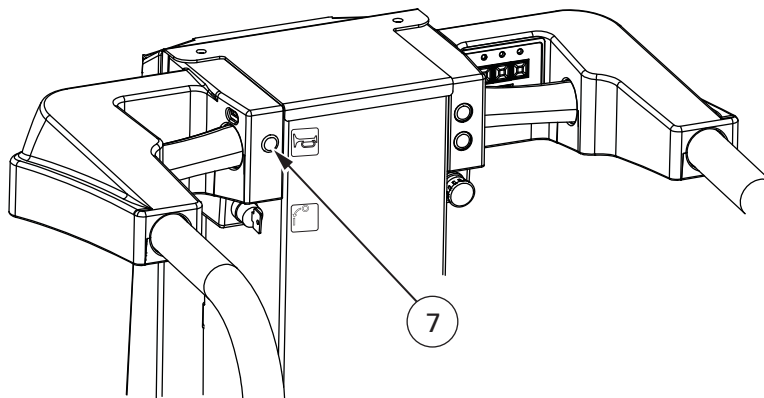
NOTE: Your turning speed will differ depending on how hard you squeeze the steering control handle. If your turning speed is too fast, the tilt sensor may indicate a tilt condition due to the dynamic effects on the tilt sensor.

NOTE: Use the steering control handle and throttle control handle to travel in the correct direction.



## Horn

Sounds when you press the button (7).



## Load Tray Lift and Lower Buttons

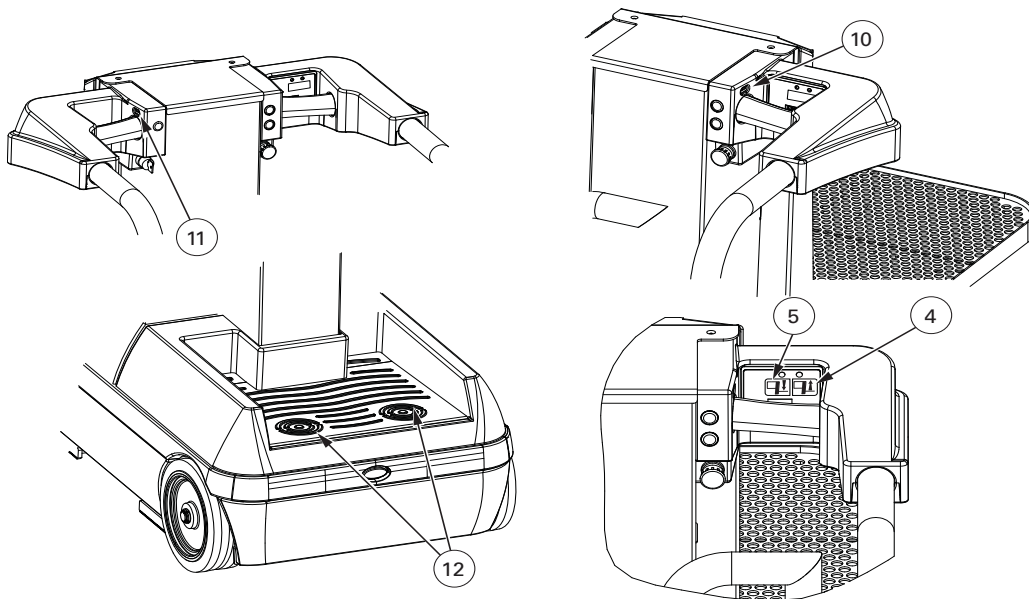
The load tray may be raised or lowered vertically on the front part of the operator compartment using the lift and lower load tray buttons.

Engage the deadman pedals (12), throttle hand sensor (10), steering hand sensor (11), and lift load tray button (4) to lift the load tray. Release of the button, hand sensors, or the deadman pedals automatically stops the load tray movement.

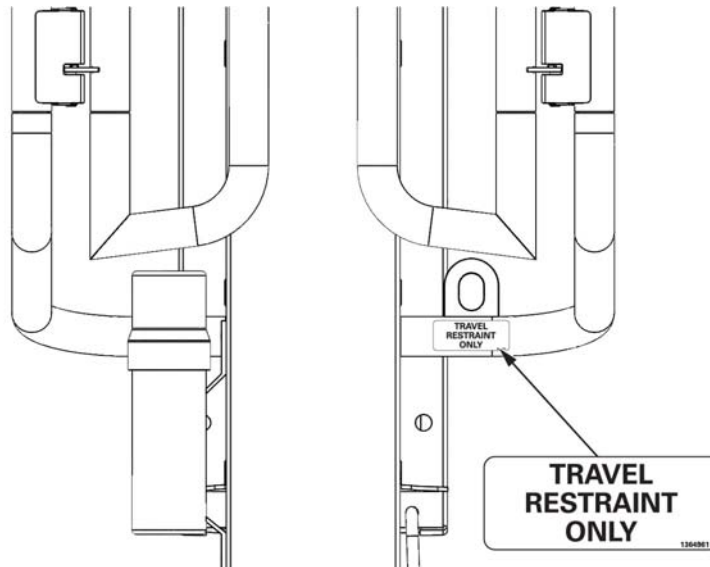
Engage the deadman pedals (12), throttle hand sensor (10), steering hand sensor (11), and lower load tray button (5) to lower the load tray. Release of the button, hand sensors, or the deadman pedals automatically stops the load tray movement.

While operating the personnel lifter, the operator may be required to adjust the height of the load tray, depending on the given scenario. The reasons for which the load tray might need to be adjusted include but are not limited to:

- improving forward travel visibility
- improving ergonomic picking height when loading/unloading objects



## Travel Restraint Anchorage



The personnel lifter is equipped with an anchorage for a travel restraint system. A travel restraint system is a fall protection system consisting of personal protective equipment that prevents and restrains a person from reaching a fall hazard.

**THIS IS NOT A FALL ARREST SYSTEM THAT IS DESIGNED TO ARREST THE FALL OF A WORKER.**

Personal protective equipment used as part of the travel restraint system shall meet the requirement of ANSI Z359 for travel restraint devices.

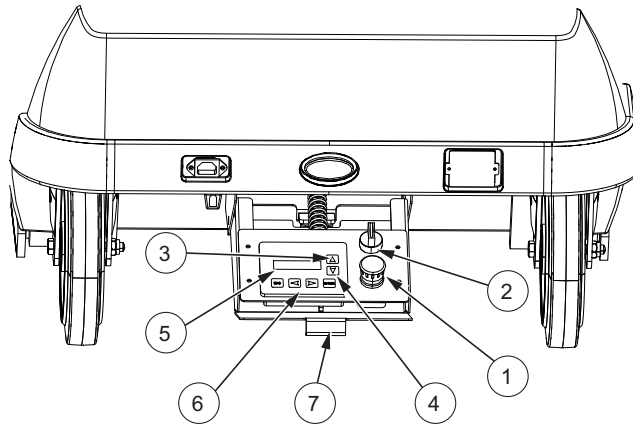
## Tilt Sensor

The Sprint includes a tilt sensor.

When the tilt sensor indicates that a tilt condition has been met, the battery gauge in the operator compartment (CAN Display Module) will show a 2-2 error code and the display on the service command console will show "FUNCTIONS LOCKED - TILTED." The tilt sensor only works when the operator compartment is elevated. If the tilt condition is met, the operator compartment will not lift more than 6 in. (0.15 m), and the operator will not be able to travel or steer. The tilt condition will be present until the operator compartment is fully lowered. Once it is lowered, the personnel lifter will regain steering and forward/reverse travel functions.

Do not use the personnel lifter when the tilt sensor indicates a tilt condition. If the operator compartment is elevated, lower the operator compartment to clear the tilt condition and proceed with caution while maneuvering the personnel lifter back onto a level surface.

## SERVICE COMMAND CONSOLE OPERATIONS



The Sprint service command console is contained in a pull-down cover in the front of the chassis underneath the front cover. Service command console functions include:

1. Emergency Power Off Button
2. Selector Switch
3. Lift Operator Compartment Button
4. Lower Operator Compartment Button
5. Display
6. Multi-function Button Group
7. Service Command Console Pull Down Handle

### Service Emergency Power Off Button

When pressed, the emergency power off button immediately stops all operations of the personnel lifter.

Reset of the emergency power off button **DOES NOT** actuate the personnel lifter, but enables the command devices.

**NOTE:** In order to operate the personnel lifter, the emergency power off buttons on the service command console and on the platform (see "PLATFORM COMMAND CONSOLE OPERATIONS" ) must both be set to the RESET position.

After operation and before disengagement of the emergency power off device(s), the personnel lifter shall be inspected to detect the reason for operation of the emergency power off.

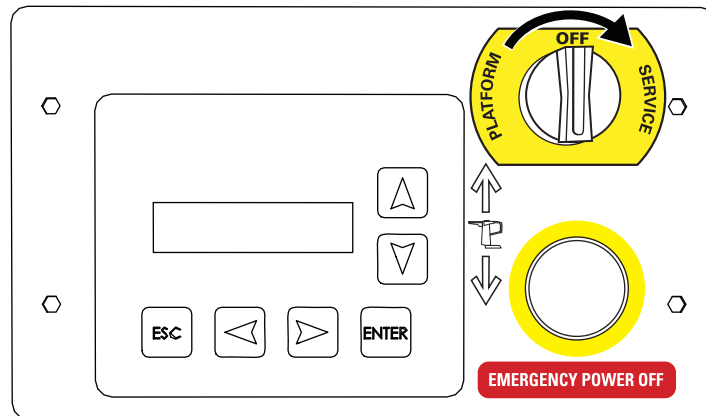
## Service Controls



**WARNING:** Before engaging of the controls on the service command console, make sure to always look in the direction of movement.



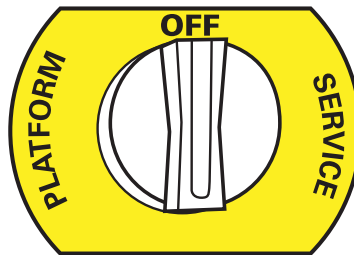
**WARNING:** Nobody should be in the operating compartment when using the service command console controls unless it is an emergency situation.



The platform key switch must be set to the "I" position and the selector switch (2) must be set to service to enable the service command console controls.

NOTE: When the selector switch is set to "SERVICE," the operator compartment battery gauge/CAN Display Module will display "Gnd."

## Selector Switch

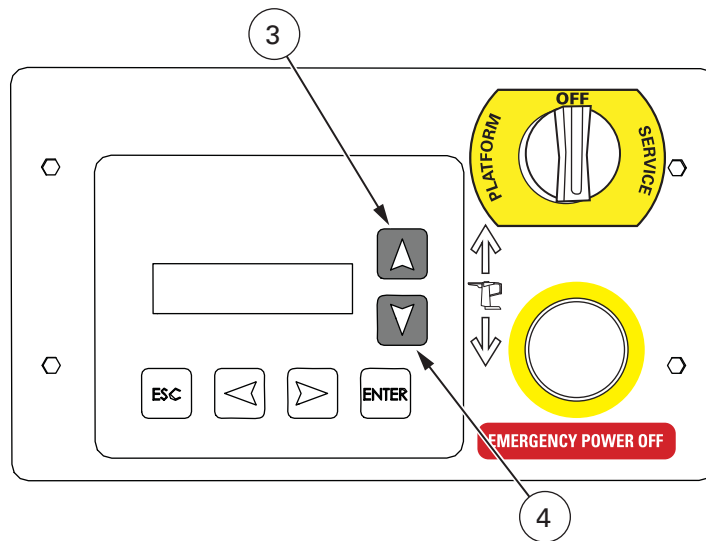


To turn the personnel lifter off, turn the selector switch to the "OFF" position as shown above.

To enable the platform command console, turn the selector switch counter-clockwise to the "PLATFORM" position.

To enable the service command console controls, turn the selector switch clockwise to the "SERVICE" position.

## Operator Compartment Lift and Lower Buttons



To lift the operator compartment, engage the **lift operator compartment button (3)**.

RELEASE THE BUTTON TO STOP THE LIFTING OF THE OPERATOR COMPARTMENT.

To lower the operator compartment, engage the **lower operator compartment button (4)**.

RELEASE THE BUTTON TO STOP THE LOWERING OF THE OPERATOR COMPARTMENT.



## EMERGENCY LOWERING LEVER

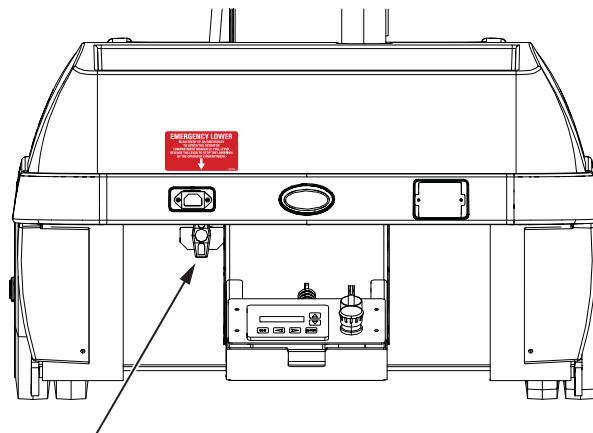


**WARNING: Crushing Hazard: During the following operations for emergency descent, the operator must not allow anyone to stand or pass under the operator compartment or load tray.**



The emergency lowering lever allows personnel on the ground to lower the operator compartment in the event that the operator is unable to do so after the operator compartment has been elevated. If the operator compartment becomes restricted when elevated and cannot be lowered by the service controls or emergency lowering lever, contact emergency services to transfer the operator to a safe location.

The emergency lowering lever is indicated by a decal.



Emergency Lowering Lever

## EMERGENCY LOWER PROCEDURE

To lower the operator compartment manually, pull the lever. The operator compartment will begin to lower.

RELEASE the lever to stop the lowering of the operator compartment.



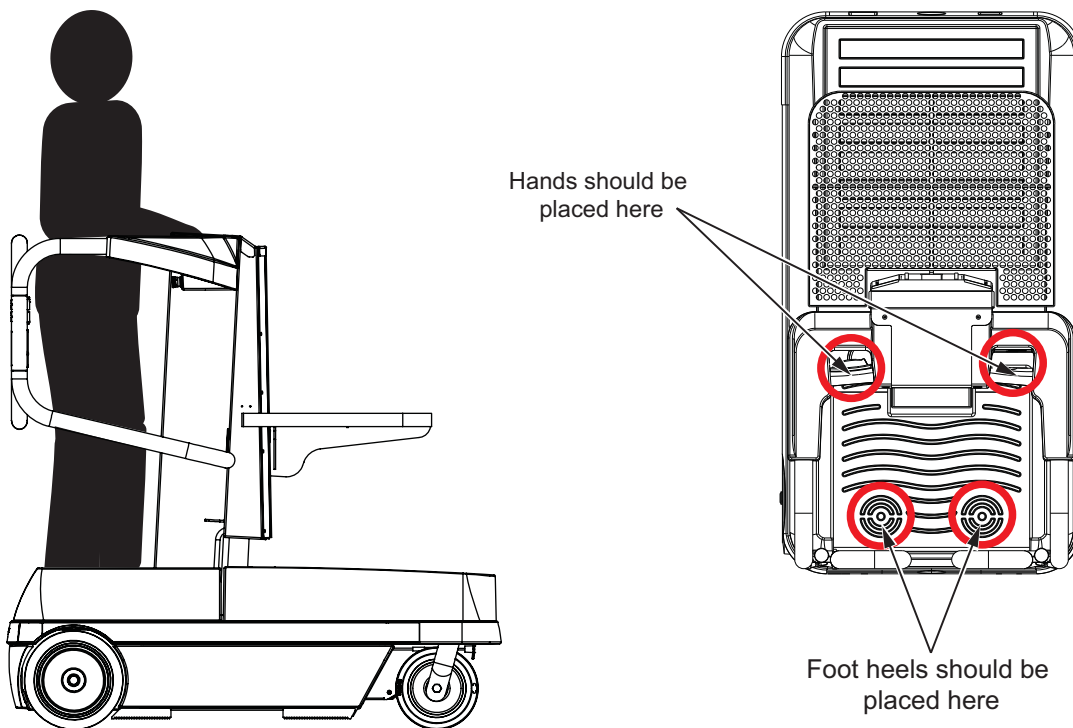
## OPERATING POSITION

When operating the personnel lifter, it is important to know what the appropriate operating positions are in order to avoid injury and to prevent any potential damage to the machine.

The operator should always keep their feet on the operator compartment floor, with their heels on the deadman pedals while facing the front of the lifter. At no point should any part of the operator's legs or feet be outside the confinements of the operator compartment, unless the operator is in the process of entering or exiting the personnel lifter, or had to step out to pick up/retrieve a load from the load deck or load tray while the unit is not in motion. If the operator removes their heel from either of the deadman pedals, all the personnel lifter functions will be disabled until both deadman pedals are once again activated simultaneously.

The operator must always keep both of their hands over the throttle and steering controls. Even if neither function is being used, both handle sensors must be actuated simultaneously, otherwise all personnel lifter functions will be disabled. The operator should always keep their arms and hands over the handle sensors unless they are entering or exiting the personnel lifter, or if they are picking up/dropping off a load from the load deck or load tray while the unit is not in motion.

In order for the personnel lifter to function properly, both deadman pedals and hand sensors should be actuated at the same time. Failure to comply to one of these conditions will result in all personnel lifter functions being disabled until they are all met.



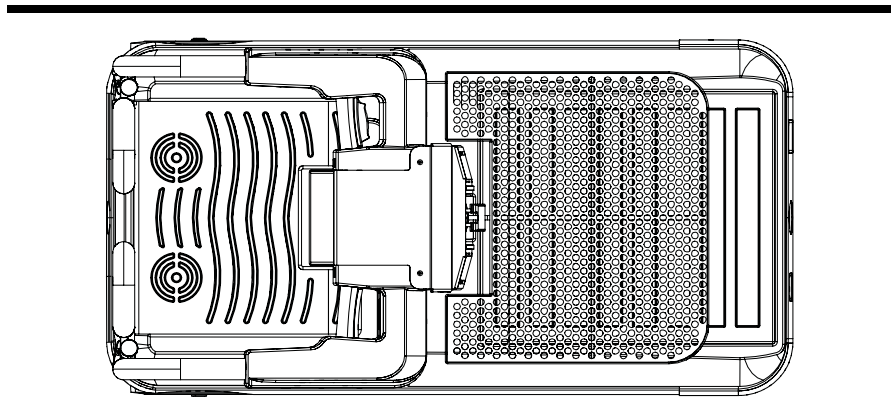
## PICKING PROCEDURE

Place the right or left side of the personnel lifter close to the racking (see figure below). Make sure to keep the personnel lifter parallel to the racking. Avoid sudden shifts in loads or operator positions. Do not push or pull on objects outside of the operator compartment.



**WARNING: DO NOT PICK OBJECTS UNTIL THE OPERATOR COMPARTMENT HAS COME TO A COMPLETE STOP.**

Racking



- Check the battery gauge/CAN Display Module on the platform for a tilt condition. If a tilt condition is present, lower the operator compartment fully. Proceed with caution while maneuvering the personnel lifter back onto a level surface.
- Adjust the height of the load tray if needed.
- Lift the operator compartment to the height required to pick the load.
- Do not lift more than 25 lbs. (11.3 kg) at a time while picking a load.
- It is acceptable to reach your arms only over the guardrails to pick loads, but never lean against the guardrails.
- When picking multiple loads, make sure their weight is distributed equally on the load tray, is secure and stable, and is not overhanging the load tray.

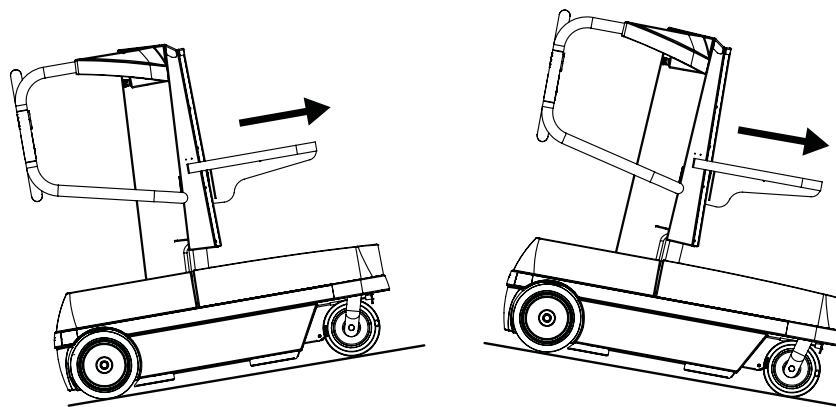
**Refer to “SAFETY” for inspections, operation safety, safety requirements, and hazards.**

## TRAVEL PROCEDURES

NOTE: If objects interfere with your ability to see, lower the load tray or transfer the objects to the load deck before traveling. Do not carry objects that interfere with your visibility.

- Before the personnel lifter is used and during use, the user shall check the area.
- Make sure personnel in the work site area that may be affected are aware of the impending movement.
- Communicate and maneuver the personnel lifter as required to protect against personal injury.
- Do not operate the personnel lifter without placing gates in the closed position.
- Do not travel on uneven or soft surfaces, over obstructions, bumps, holes, or debris.
- Slow down for turns and on slippery surfaces that could cause the personnel lifter to slide or tip.
- Make sure that your loads are secure and stable. Travel at a speed that prevents any loads from moving or tipping.
- Always look in the direction of movement when operating the personnel lifter. Maintain an adequate clearance distance from hazards. Keep a clear view.
- Stop and sound the horn when you approach intersections or crosswalks, when you exit an aisle, or when you cannot see clearly.
- To stop in normal operation, turn the throttle control handle to the neutral position slowly.
- To stop in an emergency, lift hand high enough to disengage the throttle control handle and the throttle handle sensor.
- The operator must stay in the operator compartment while the personnel lifter is in the process of stopping. Only after the lifter comes to a complete stop can the operator safely exit the compartment.
- Use special care when operating on ramps. When traveling up or down a ramp ALWAYS travel in the forward direction and have the operator compartment fully lowered. Do not angle or turn on a ramp. In normal operation, do not stop the personnel lifter on a ramp. The allowable personnel lifter slope or ramp grade is labeled on the operator compartment.

**Refer to "SAFETY" for inspections, operation safety, safety requirements, and hazards.**



## **PEDESTRIANS**



**WARNING: Never drive this personnel lifter close to anyone, especially someone standing next to a solid object like a wall or workbench.**

When operating this personnel lifter, it is important to always keep pedestrians safe. Other people in the surrounding area might not know how this machine works.

Always yield the right of way to pedestrians. Never rely on warning lights or alarms to notify pedestrians of your presence. When approaching intersections, crosswalks, doorways, or any area where your view is obstructed, always come to a complete stop and sound the horn.

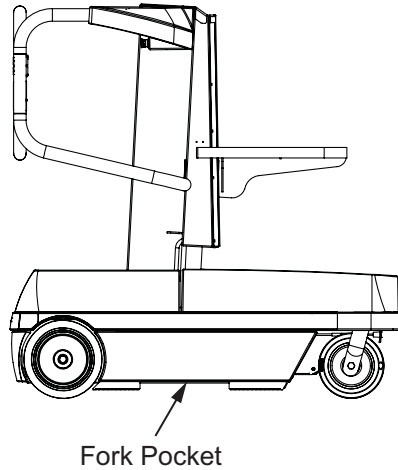
Always make sure to keep a clear view, make eye contact with pedestrians, and acknowledge the right of way before proceeding.

## TRANSPORT, LIFTING AND TIE-DOWN PROCEDURES

### General Information

The Sprint may be transported within the workplace with the following methods:

- Driving the machine around on its base wheels if travel surface area allows.
- Moved with a forklift truck using the fork pocket.



The Sprint may be transported between sites with the following method:

- in a semi-tractor trailer with the personnel lifter tied down

Before transport on floors, trucks, and other surfaces, verify that the surface can support the weight of the personnel lifter, operator, and load.

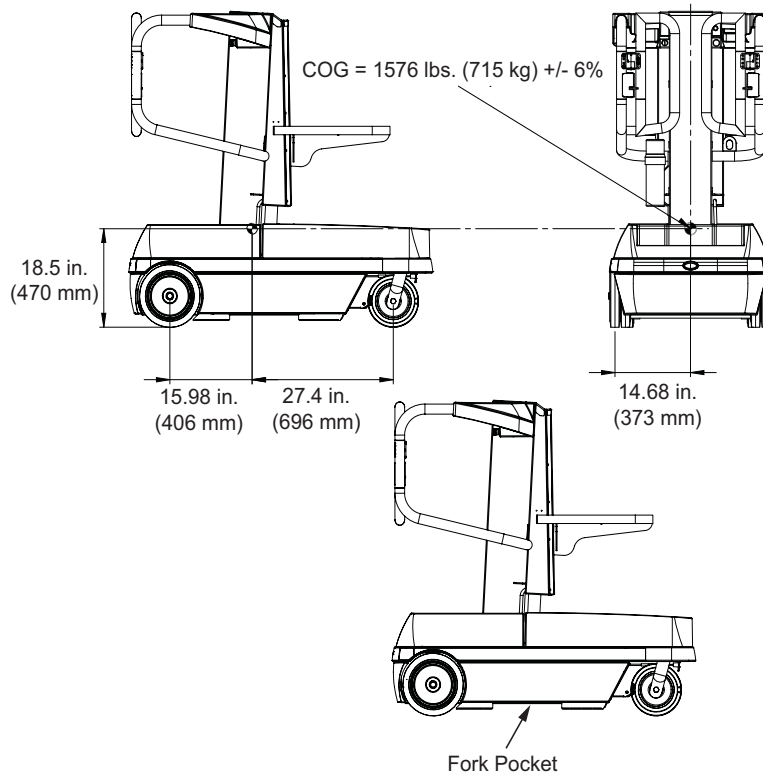
Before transport, make sure that the operator compartment has been completely lowered and all surfaces are empty (for example, no load is present).

## Transport with a Forklift Truck

A trained and authorized forklift truck operator and a forklift truck capable of carrying the weight of the personnel lifter shall be used for the below procedure.

Position the forks of a forklift truck with sufficient capacity in the Sprint's fork pocket. Make sure one fork is as far to the rear of the personnel lifter as possible and spread the forks as far apart as possible to fit the fork pocket. Secure the personnel lifter to the forklift truck prior to transport. Also make sure that the personnel lifter is turned to the off position at the key switch and the selector switch. Once the forks are positioned properly, the lifter should be lifted just enough off the ground to allow the safe transport, the forks should be tilted (if available), and the forklift truck should travel and turn slowly with caution.

### Center of Gravity (COG)



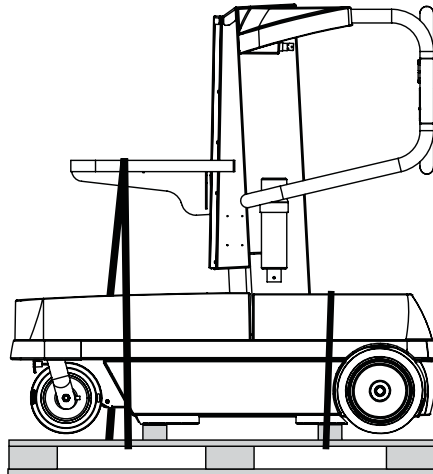
## Transport Vehicle Tie Down Strapping

NOTE: The personnel lifter should be turned off prior to transport.



**CAUTION: IF EXCESSIVE FORCE IS EXERTED WHEN SECURING THE PERSONNEL LIFTER (LOAD ON THE WHEELS) COMPONENTS INCLUDING BUT NOT LIMITED TO THE FRONT CASTER WHEEL ASSEMBLIES MAY BE DAMAGED.**

Use suitable strapping to secure the personnel lifter to the pallet by routing one strap over the platform covers and through the pallet and routing a second strap over the load tray through the pallet (make sure load tray is completely lowered). When blocking the personnel lifter for transport, make sure that the blocked objects are positioned beneath the skid plates as shown below. This will help prevent the lifter from potentially moving during transport.



## PARKING THE PERSONNEL LIFTER



**WARNING: Never park this personnel lifter on a ramp or slope.**

1. Drive the personnel lifter to a well sheltered and ventilated area. If possible, park the personnel lifter in a secure or supervised area inaccessible to unauthorized persons.
2. Make sure that the operator compartment is completely lowered, turn the key switch to the "O" position and turn the selector switch to the "Off" position.
3. Remove the key from the personnel lifter to prevent unauthorized persons from using the personnel lifter.

NOTE: If necessary, charge the batteries in preparation for the following working day (see Battery Charging).

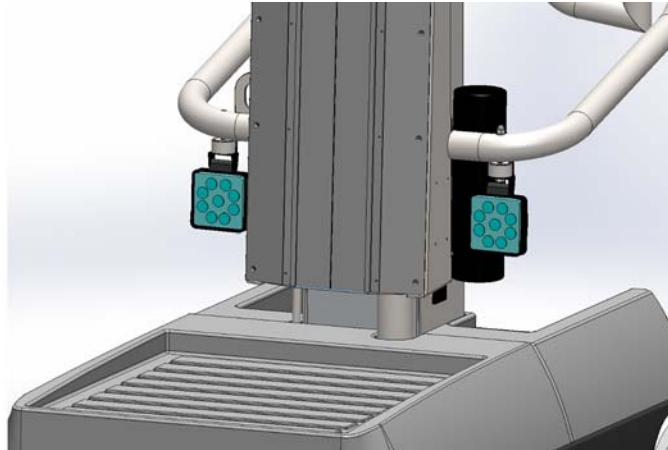
## STORAGE

Prior to placing the unit into service when newly acquired or after period of storage, perform the appropriate inspection as specified in Table 1, "Personnel Lifter Inspection."

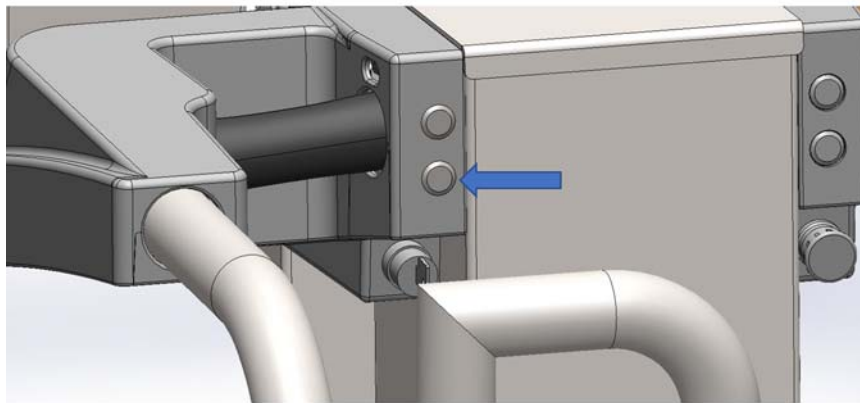
## OPTIONS

### LED Work Lights

This option is intended for machines that are operating in dimly lit environments where a work light is useful to complete daily tasks.



To turn the work lights ON, press the button pictured below. To turn the work lights OFF, press the same button again.



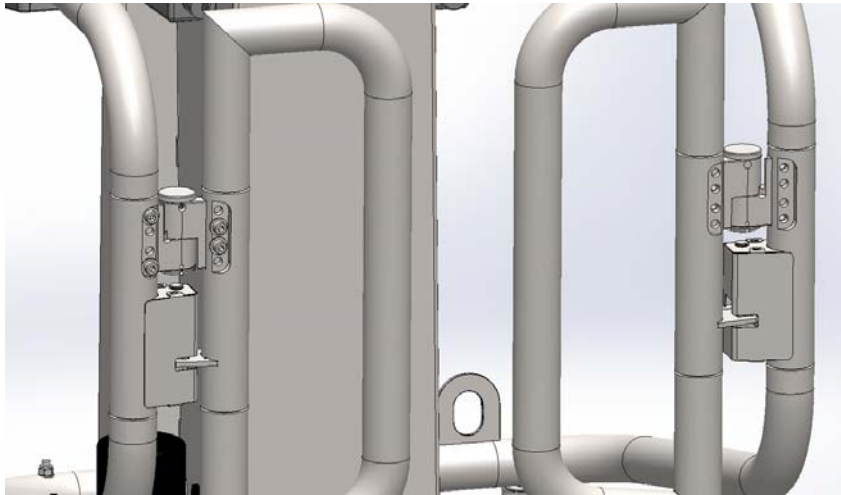


## Gate Interlock

This option enables the gate to be locked in the closed position using a lock solenoid.

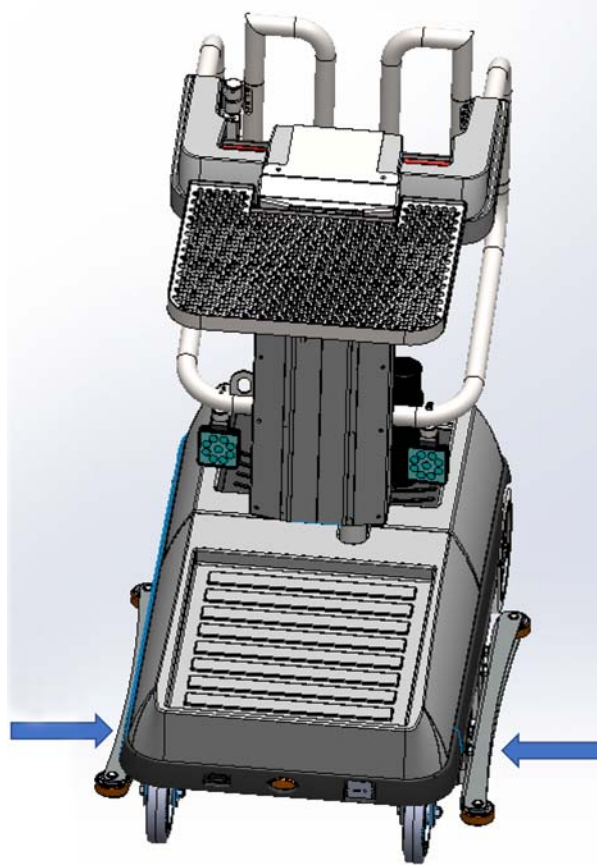
Function of the gate interlocks:

- a. Before the personnel lifter can perform any of its functions, the operator compartment must be fully lowered, with the operator within the compartment and the gates fully closed.
- b. If any gate remains open, the personnel lifter will not perform any functions until both gates are closed.
- c. The locking gate activates when the operator compartment is raised. This prevents the gates from opening until the operator compartment is completely lowered.
- d. In an emergency situation, pressing the Emergency Power Off button or setting the key switch to the "O" position will release the gate interlock, even if the operator compartment is elevated.



## Side Guide Rollers

This option is intended for machines to operate within aisles that are 37 in. (950 mm) or 41 in. (1050 mm) wide.



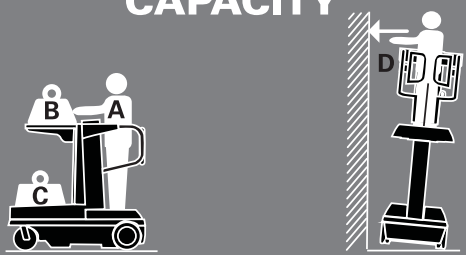
## Load Tray Attachment

This option is intended for machines that require additional support for the load tray. This tray attachment is designed to manage small or fragile items that need to be moved with caution.



**CAPACITY TAG**

**CAPACITY**



<b>MAX NUMBER OF OCCUPANTS</b>	1
<b>MAX OPERATOR LOAD (A)</b>	286 lbs. (130 kg)
<b>MAX TRAY LOAD (B)</b>	198 lbs. (90 kg)
<b>MAX DECK LOAD (C)</b>	249 lbs. (113kg)
<b>MAX LATERAL LOAD (D)</b>	45 lbs. (200 N)
<b>MAX SLOPE ELEVATED</b>	1.5°
<b>MAX SLOPE LOWERED</b>	4°

1364958

<b>MODEL</b>	Sprint
<b>NOM BATT VOLTAGE</b>	24V
<b>MIN TOTAL BATT WEIGHT</b>	247 lbs. (112 kg)
<b>BATT CHARGER INPUT</b>	100-240V ~ 50/60Hz 9.5 A
<b>MACHINE WEIGHT</b>	1576 lbs. (715 kg) +/- 6%
<b>MAX WHEEL LOAD</b>	765 lbs. (347 kg)
<b>POWER</b>	3000 W
<b>MAX PLATFORM HEIGHT</b>	10ft. 8in. (3.25 m)
<b>MAX WORKING HEIGHT</b>	17ft. 2in. (5.25 m)
<b>CLASSIFICATION</b>	TYPE 3, GROUP A

REFER TO THE MANUAL FOR INSPECTION INFORMATION.  
THIS UNIT HAS BEEN MANUFACTURED TO COMPLY WITH THE MANDATORY REQUIREMENTS OF CAN/CSA B354.6.

1364959/001

<b>MODEL</b>	Sprint 118
<b>NOM BATT VOLTAGE</b>	24V
<b>MIN TOTAL BATT WEIGHT</b>	247 lbs. (112 kg)
<b>BATT CHARGER INPUT</b>	100-240V ~ 50/60Hz 9.5 A
<b>MACHINE WEIGHT</b>	1576 lbs. (715 kg) +/- 6%
<b>MAX WHEEL LOAD</b>	765 lbs. (347 kg)
<b>POWER</b>	3000 W
<b>MAX PLATFORM HEIGHT</b>	9ft. 10in. (2.99 m)
<b>MAX WORKING HEIGHT</b>	16ft. 4in. (4.99 m)
<b>CLASSIFICATION</b>	TYPE 3, GROUP A

REFER TO THE MANUAL FOR INSPECTION INFORMATION.  
THIS UNIT HAS BEEN MANUFACTURED TO COMPLY WITH THE MANDATORY REQUIREMENTS OF CAN/CSA B354.6.

1364959/002

# DECALS

Read and obey all decals. If you have any questions about these decals, ask your supervisor. If a decal is damaged or missing, report it to your supervisor. Your local authorized Lift-Rite Sales and Service Center will replace it without charge. (See "LOCATION OF DECALS" for the location of the numbered decals).

**1**

**CAPACITY**

MAX NUMBER OF OCCUPANTS	1
MAX TRAY LOAD (A)	288 lbs. (130 kg)
MAX OPERATOR LOAD (B)	198 lbs. (90 kg)
MAX DECK LOAD (C)	249 lbs. (113kg)
MAX LATERAL LOAD (D)	45 lbs. (200 N)
MAX SLOPE ELEVATED	1.5°
MAX SLOPE LOWERED	4°

**4**

**WARNING**

BATTERIES PRODUCE EXPLOSIVE GAS  
CHARGE BATTERIES IN WELL-VENTILATED AREA  
DO NOT EXPOSE TO SPARKS OR FLAMES

ANY MODIFICATION ON THIS MACHINE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE MANUFACTURER AND PERMISSION FROM THE OWNER IS PROHIBITED.  
DO NOT REPLACE ITEMS CRITICAL TO MACHINE STABILITY WITH ITEMS OF DIFFERENT WEIGHT OR SPECIFICATION.  
MINIMUM TOTAL BATTERY WEIGHT: 247 lbs. (112 kg)

**11**

**WARNING**

**STAY CLEAR OF ALL MOVING PARTS**

**2a**

MODEL	Sprint
NOM BATT VOLTAGE	24V
MIN TOTAL BATT WEIGHT	247 lbs. (112 kg)
BATT CHARGER INPUT	100-240V ~ 50/60Hz; 3.5 A
MACHINE WEIGHT	1576 lbs. (715 kg) +/- 6%
MAX WHEEL LOAD	765 lbs. (347 kg)
POWER	3000 W
MAX PLATFORM HEIGHT	10ft. 8in. (3.25 m)
MAX WORKING HEIGHT	17ft. 2in. (5.25 m)
CLASSIFICATION	TYPE 3, GROUP A

REFER TO THE MANUAL FOR INSPECTION INFORMATION.  
THIS UNIT HAS BEEN MANUFACTURED TO COMPLY WITH THE MANDATORY REQUIREMENTS OF CAN/CSA B336.6.

**5**

**WARNING**

NO RIDING

**12**

**NOTICE**

- PRIOR TO OPERATION, COMPLETE A DAILY INSPECTION CHECKLIST.
- ARRANGE FOR FREQUENT PERIODIC INSPECTIONS PERFORMED BY A QUALIFIED TECHNICIAN PRIOR TO PLACING INTO SERVICE. A FREQUENT INSPECTION IS REQUIRED IF THE PERSONNEL LIFTER HAS BEEN OUT OF SERVICE FOR A PERIOD LONGER THAN 3 MONTHS, AFTER 3 MONTHS OF USE, AFTER 100 HOURS OF USE, OR IF ENVIRONMENTAL CONDITIONS REQUIRE A SHORTER PERIOD (WHICHEVER OCCURS FIRST).
- ARRANGE FOR ANNUAL INSPECTIONS, PERFORMED BY A QUALIFIED TECHNICIAN. ANNUAL INSPECTIONS SHALL BE PERFORMED NO LATER THAN THIRTEEN (13) MONTHS FROM THE DATE OF THE PRIOR ANNUAL INSPECTION OR NO LATER THAN AFTER 200 HOURS OF USE FROM THE DATE OF THE PRIOR ANNUAL INSPECTION (WHICHEVER OCCURS FIRST).
- ARRANGE FOR STRUCTURAL INSPECTIONS, PERFORMED BY A PROFESSIONAL ENGINEER. STRUCTURAL INSPECTIONS SHALL BE PERFORMED:
  - 10 YEARS AFTER THE DATE OF MANUFACTURE AND EVERY 5 YEARS THEREAFTER.
  - AFTER ANY ACTUAL, SUSPECTED, OR POTENTIAL DAMAGES SUSTAINED DURING AN INCIDENT THAT COULD POTENTIALLY AFFECT THE STRUCTURAL INTEGRITY OR STABILITY OF THE PERSONNEL LIFTER.
  - AFTER A CHANGE IN OWNERSHIP, UNLESS A COMPLETE SERVICE HISTORY IS PROVIDED, INCLUDING MAINTENANCE AND INSPECTION RECORDS.
- BEFORE THE PERSONNEL LIFTER IS USED AND DURING USE, THE USER SHALL CHECK THE AREA.
- INSPECTIONS SHALL BE IN ACCORDANCE WITH BOTH LIF-RITE'S AND THE MANUFACTURER'S RECOMMENDATIONS SET FORTH BY THE OWNER AND OPERATING INSTRUCTIONS MANUAL, THE MANUAL OF RESPONSIBILITIES, AND IN THE SERVICE MANUAL.

**2b**

MODEL	Sprint 118
NOM BATT VOLTAGE	24V
MIN TOTAL BATT WEIGHT	247 lbs. (112 kg)
BATT CHARGER INPUT	100-240V ~ 50/60Hz; 3.5 A
MACHINE WEIGHT	1576 lbs. (715 kg) +/- 6%
MAX WHEEL LOAD	765 lbs. (347 kg)
POWER	3000 W
MAX PLATFORM HEIGHT	9ft. 10in. (2.99 m)
MAX WORKING HEIGHT	16ft. 1in. (4.89 m)
CLASSIFICATION	TYPE 3, GROUP A

REFER TO THE MANUAL FOR INSPECTION INFORMATION.  
THIS UNIT HAS BEEN MANUFACTURED TO COMPLY WITH THE MANDATORY REQUIREMENTS OF CAN/CSA B336.6.

**6**

**NO RIDING**

**3**

**WARNING**

DO NOT OPERATE THIS PERSONNEL LIFTER UNLESS TRAINED AND AUTHORIZED TO DO SO. READ ALL WARNINGS AND INSTRUCTIONS CONTAINED IN THE OWNER AND OPERATING INSTRUCTIONS MANUAL, THE MANUAL OF RESPONSIBILITIES, AND ON THE PERSONNEL LIFTER.

**7**

**NO STEP**

**13**

**WARNING**

The personnel lifter is not insulated. The machine does not provide protection from contact with or proximity to an electrically charged conductor.

Voltage range (phase to phase)	Minimum approach distance (ft)	Minimum approach distance (in)
0 to 50	10	3
>50 to 200	15	5
>200 to 350	20	6
>350 to 500	25	8
>500 to 750	35	11
>750 to 1000	45	14
>1000 to 1250	53	16

1. Check all operating systems and safety devices as noted in the Owner and Operating Instructions Manual. Report any malfunctions, damage or unsafe condition immediately. Do not operate the personnel lifter until corrected.
  2. Always operate the personnel lifter from the designated operating position. Keep clear of all obstructions. Keep all portions of the body inside the operator compartment when operating the personnel lifter. Keep both feet firmly planted on the operator compartment floor at all times. All parts of your body shall remain within the operator compartment, gates, guardrails, and load tray of the personnel lifter. Do not lean any part of your body against the guardrails.
  3. The personnel lifter is not insulated. The machine does not provide protection from contact with or proximity to an electrically charged conductor.
  4. Personnel lifter is for indoor use only.
  5. Do not carry passengers. Do not place tools or material in the operator compartment.
  6. Do not allow anyone to stand or pass under the operator compartment or load tray.
  7. Do not operate the personnel lifter without placing gates in the closed position.
  8. Do not overload the personnel lifter. Check the capacity tag for rated loads. Always keep loads evenly distributed. Do not handle unstable or loosely stacked loads.
  9. When stopping, stay inside the operator compartment until the personnel lifter comes to a complete halt.
  10. Do not travel on uneven or soft surfaces, or over obstructions, bumps, holes, or debris.
  11. Start, stop, change direction, travel and brake smoothly. Slow down for turns and on slippery surfaces that could cause the personnel lifter to slide or tip. Do not operate on ramps, docks, and other similar working surfaces.
  12. Use extreme care when traveling with the operator compartment elevated. Excessive speed with abrupt turns or on uneven surfaces may cause the personnel lifter to tip over. Watch out for obstructions, especially overhead.
  13. Always look in the direction of movement when operating the personnel lifter. Maintain an adequate clearance distance from hazards. Keep a clear view.
  14. Do not operate on any slope greater than 1.5 degrees while in the elevated position. Do not operate on any slope greater than 4 degrees while in the lowered position. Only operate the personnel lifter on a strong, level surface that will support the weight of the personnel lifter, operator, and the load.
  15. Observe applicable traffic regulations. Yield the right of way to pedestrians. Stop at intersections and/or whenever vision is obstructed.
  16. When leaving the personnel lifter unattended, fully lower the operator compartment, turn the key to the "O" position, turn the selector switch to the "off" position, and remove the key.
  17. Do not perform maintenance or inspection with the operator compartment in the raised position unless the maintenance collar is installed.
- FAILURE TO FOLLOW INSTRUCTIONS COULD CAUSE DEATH OR PERSONAL INJURY.**

**8**

**EMERGENCY POWER OFF**

→

**14**

**TRAVEL RESTRAINT ONLY**

**9**

**EMERGENCY POWER OFF**

**15**

DATE OF LAST ANNUAL INSPECTION

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**10**

**EMERGENCY LOWER**

IN AN EVENT OF AN EMERGENCY TO LOWER THE OPERATOR COMPARTMENT MANUALLY, PULL LEVER, RELEASE THE LEVER TO STOP THE LOWERING OF THE OPERATOR COMPARTMENT.

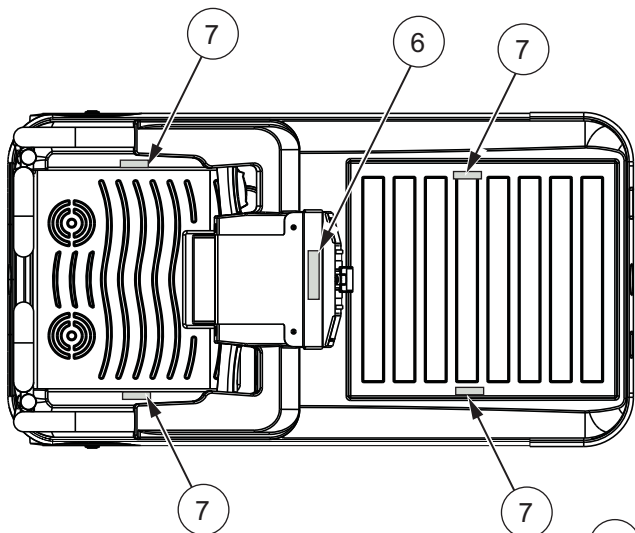
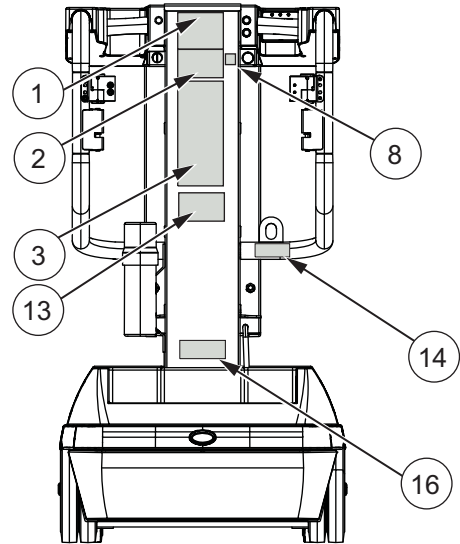
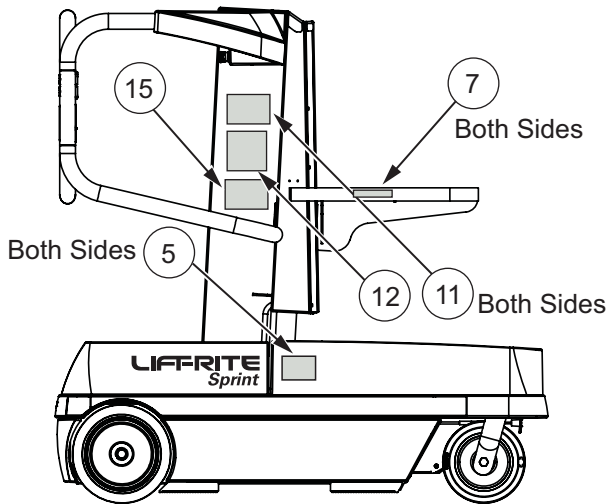
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**16**

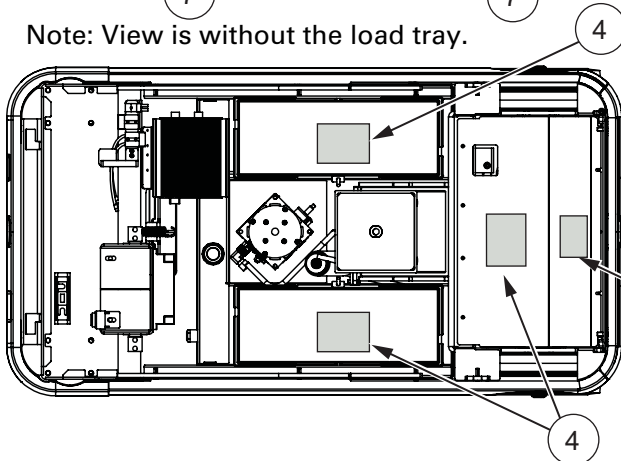
**WARNING**

DO NOT PLACE TOOLS OR MATERIAL ON THE OPERATOR COMPARTMENT FLOOR

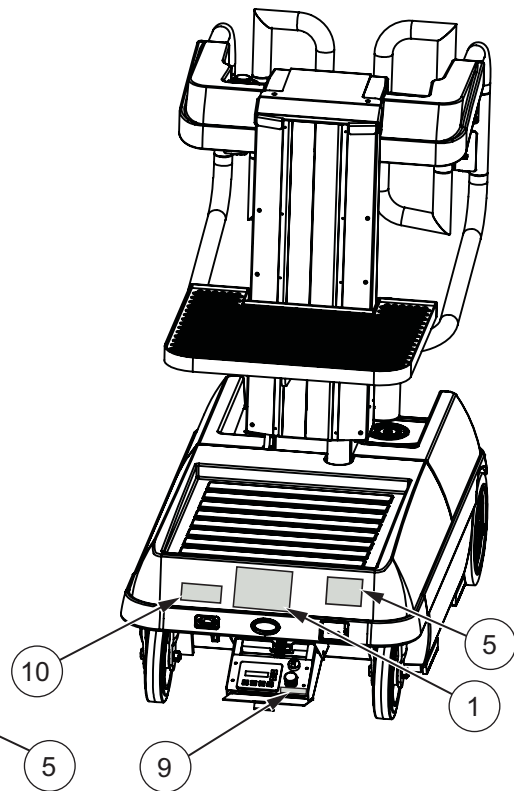
**LOCATION OF DECALS**



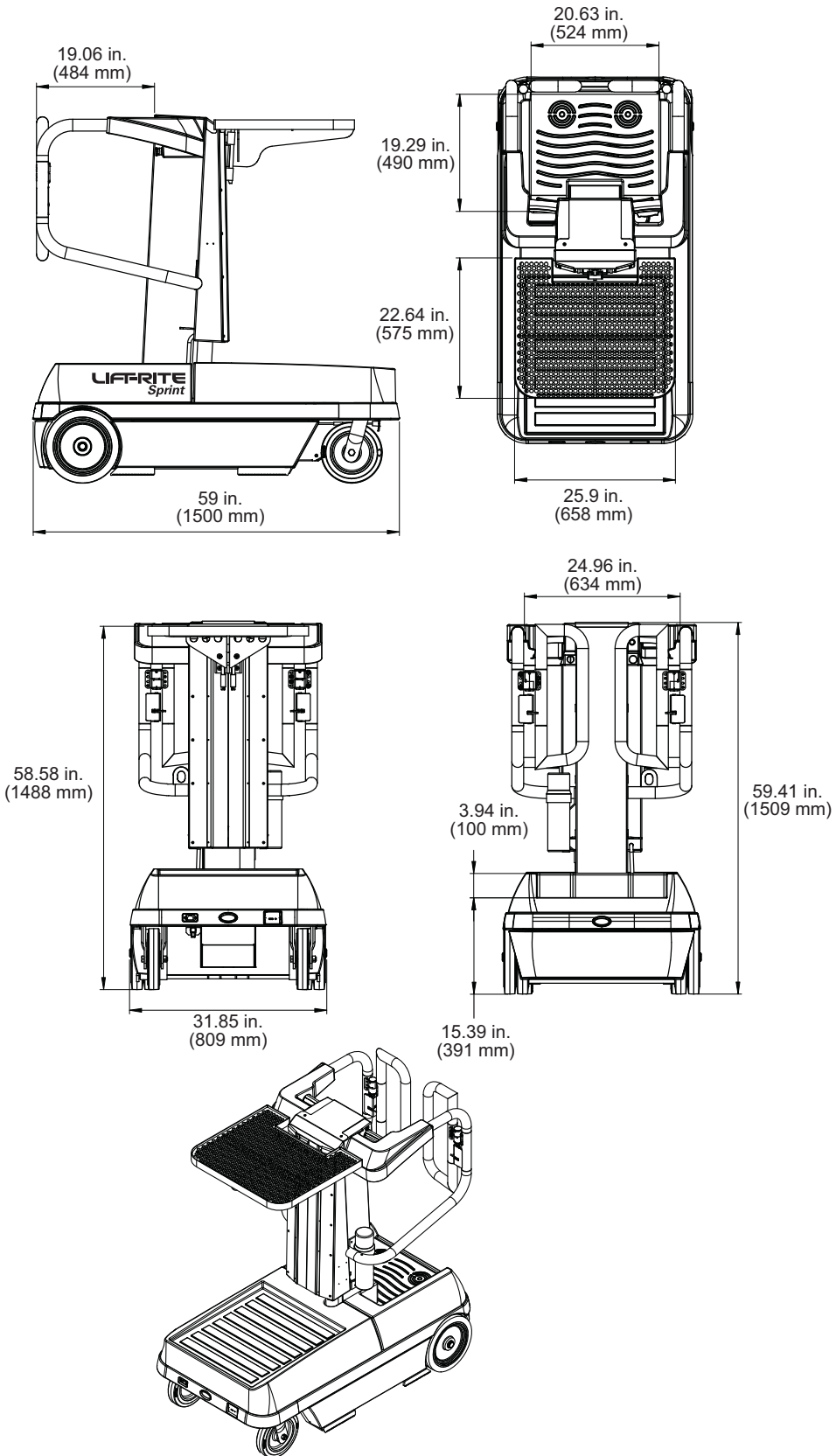
Note: View is without the load tray.



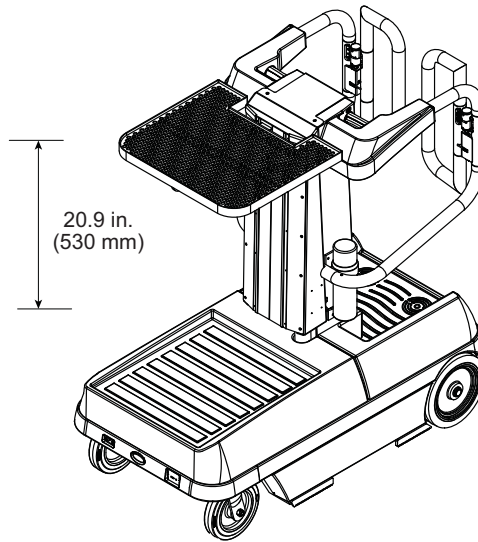
Note: View is without the operator compartment.



**PERSONNEL LIFTER DIMENSIONS**



**TECHNICAL DATA**



**TECHNICAL SPECIFICATIONS**

	<b>SPRINT</b>	<b>SPRINT 118</b>
Maximum Speed (Completely Lowered with Max Operator Weight)	3.1 mph/5.04 kph	3.1 mph/5.04 kph
Maximum Speed (Elevated with Max Operator Weight)	0.8 mph/1.26 kph	0.8 mph/1.26 kph
<i>Turning Radius (Internal)</i>	ZERO	ZERO
Platform Cycle Performance (Max Operator Weight)	Raising 22 seconds	Raising 20 seconds
	Lowering 13.5 seconds	Lowering 12.5 seconds
Tires	Anti-Skid Solid Rubber	Anti-Skid Solid Rubber
Tilt Condition Setting	1.5 Degrees	1.5 Degrees
Max Wheel Load	765 lb./347 kg	765 lb./347 kg
Necessary Bearing Strength of the Ground	569.8 lb./2534.5 N	569.8 lb./2534.5 N

**LOAD CAPACITIES**

Maximum Operator Weight	286 lb./130 kg	286 lb./130 kg
Deck Load Capacity	249 lb./113 kg	249 lb./113 kg
Load Tray Load Capacity	198 lb./90 kg	198 lb./90 kg
Maximum Lateral Load	45 lb./200 N	45 lb./200 N

**POWER SUPPLY**

Batteries	N 04, 6V 245 Ah@20 hr.	N 04, 6V 245 Ah@20 hr.
Batteries (GEL)	N 04, 6V 210 Ah@20 hr.	N 04, 6V 210 Ah@20 hr.
Power Supply	24 V	24 V
Standard Individual Battery Weight	70 lb./32kg	70 lb./32kg

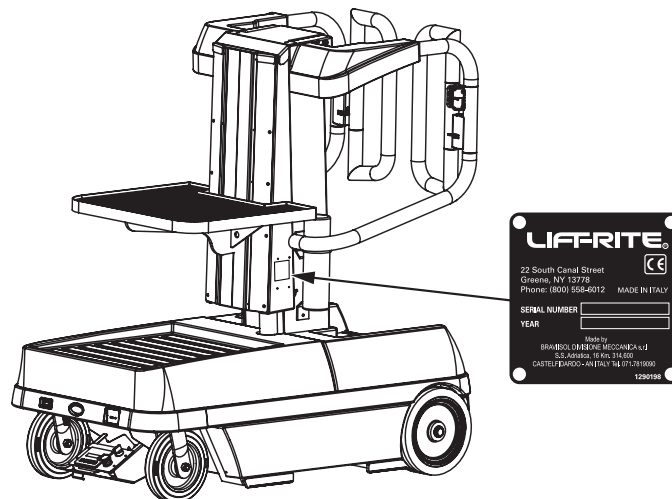
Individual Battery Weight (GEL)	68 lb./31 kg	68 lb./31 kg
Minimum Total Battery Weight	247 lb./112 kg	247 lb./112 kg
Maximum Hydraulic System Pressure	1451 psi/10,000 kPa	1451 psi/10,000 kPa
Charger Input Voltage	100-240V - 50/60 Hz 9.5A	100-240V - 50/60 Hz 9.5A
Noise Level	Less than 70 dB (A)	Less than 70 dB (A)
Platform Height (Operator Compartment Fully Elevated)	128 in./3245 mm	118 in./2986 mm
Personnel Lifter Height Total (Operator Compartment Fully Elevated)	172 in./4363 mm	162 in./4104 mm
Personnel Lifter Height Total (Operator Compartment Fully Lowered)	59.4 in./1509 mm	59.4 in./1509 mm
Personnel Lifter Length (Total)	59 in./1500 mm	59 in./1500 mm
Personnel Lifter Width (Total)	31.9 in./809 mm	31.9 in./809 mm
Occupants: (persons allowed on the platform)	1	1
Platform Entry Height	15.4 in./391 mm	15.4 in./391 mm
Personnel Lifter Gross Weight (Personnel Lifter Empty)	1576 lb./715 kg +/-6%	1576 lb./715 kg +/-6%

**INDOOR USE ONLY**

The vibration total value to which the hand-arm system is subject does not exceed 2.5 m/s<sup>2</sup>. The highest root mean square value of weighted acceleration to which the whole body is subjected does not exceed 0.5 m/s<sup>2</sup>.

**Location of the Serial Number**

For identification purposes, the serial number is engraved on the personnel lifter tag.





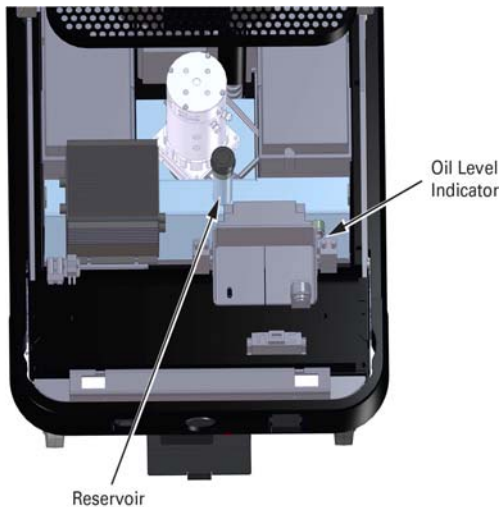
**MAINTENANCE TO BE PERFORMED BY THE OPERATOR**

**Hydraulic Oil**

The level of the hydraulic oil in the reservoir can differ according to the temperature of the oil. That is, in a cold personnel lifter, it is possible that the oil level will not reach the FULL mark. Lift and lower the operator compartment several times to obtain a more precise reading of the level. When the hydraulic oil is heated up, verify the reading, which should indicate a level equal to or slightly below the FULL mark.

- DO NOT FILL BEYOND THE FULL MARK.
- FILL the oil if its level is below the mark.

NOTE: Check the level of the hydraulic oil **with the operator compartment completely lowered.**



If necessary, fill as follows:

- Unscrew the hydraulic oil fill cap.
- Fill with a paraffinic oil with the specifications below.

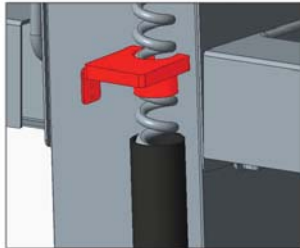
Viscosity Grade 1260911	ISO 22
Oil Type	Paraffinic
Density at 20°C (68°F)	858 Kg/m <sup>3</sup>
Viscosity at 40°C (104°F)	22 cSt
Viscosity at 100°C (212°F)	5.2 cSt
Viscosity Index	180
Pour Point	-31°C (-24°F)
Flash Point	205°C (401°F)

- Check and verify the oil level. If necessary, fill again.
- Tighten the filler cap well.

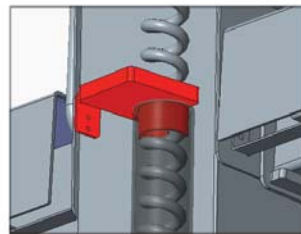
## Blocking Procedure for Personnel Lifter Maintenance



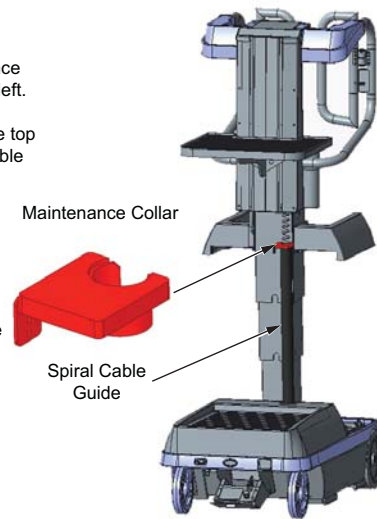
**WARNING: Crushing hazard: Do not perform maintenance or inspection with the operator compartment in the raised position unless the maintenance collar is installed. The integrity of the maintenance collar and spiral cable guide attachment points should be visually inspected to make sure there are no cracks or other compromising features.**



Position the maintenance collar as shown to the left. Lower it until the lower surface is flush with the top surface of the spiral cable guide.



Position the collar as shown to the left. Once completed, carefully lower the operator compartment until the bottom of the compartment is resting on the top of the maintenance collar.

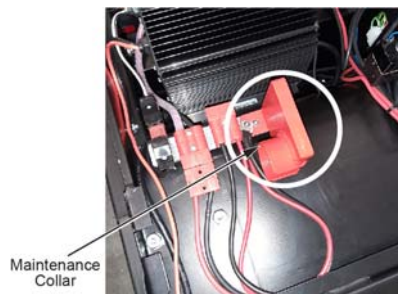


- Use the Service Controls to lift the operator compartment to a height that is past the spiral cable guide and enables the maintenance collar installation.
- Position the maintenance collar as shown above.



**WARNING: Crush hazard. Make sure all personnel and appendages are clear of the maintenance collar area before lowering the operator compartment.**

- Lower the operator compartment onto the maintenance collar. Make sure that the maintenance collar is secured and prevents any movement of the operator compartment.
- Take caution against dislodging the maintenance collar while performing inspection and maintenance on the personnel lifter.
- When not in use, the maintenance collar can be found under the front cover, in front of the battery charger as shown below.



## BATTERY INSPECTION AND MAINTENANCE PROCEDURE



**WARNING: Crushing Hazard: Do not perform maintenance or inspection with the operator compartment in the raised position unless the maintenance collar is installed. The integrity of the maintenance collar and spiral cable guide attachment points should be visually inspected to make sure there are no cracks or other compromising features.**

### BATTERY SAFETY



**WARNING: Explosive hydrogen gas forms when a battery is charging. An open flame or spark can cause this gas to explode. Serious personal injury or property damage could occur. This can happen even hours after charging. Ventilate the area to eliminate this hazard.**

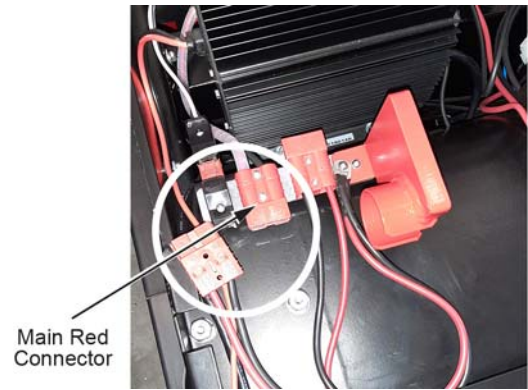


**WARNING: The battery contains sulfuric acid, which causes burns to skin and clothing. If battery acid contacts your clothing or skin, flush the area immediately with cold water. If battery acid gets in your face or eyes, flush the area with cold water immediately and get medical attention.**



1. Wear personal protective equipment for eyes, face, and skin. This equipment includes goggles or face shield, rubber gloves (with or without arm shields), and a rubber apron. Make sure a shower and eye wash station are nearby.
2. Do not smoke, use open flames, or use devices that produce sparks.
3. Ventilate the battery charging area.
4. Never place any objects on top of the batteries. A short circuit could cause the battery to explode.
5. Keep batteries, filler plugs, terminals, cables, and connectors clean and in good condition.
6. Keep filler plugs firmly in place except when checking the battery or adding demineralized water to the cells.
7. Make sure the vent holes in the filler plugs are open.
8. Do not let cleaning solution, dirt, or any foreign matter enter the cells.
9. Charge batteries at specified intervals.
10. Only use insulated tools when working on the batteries.
11. Always make sure that the plates are covered in water before charging (if equipped).
12. Small spills should always be neutralized with baking soda and water. For large spills, contact the appropriate first responders.
13. Never charge a flooded battery without first securing the vent caps on the cells (if equipped).
14. Never wear jewelry or other metal objects when working on or around the batteries.
15. Never make direct contact with the electrolyte (sulfuric acid). If this occurs, flush that area of the body with large amounts of water.
16. Do not add acid to any of the batteries.
17. Never charge a frozen battery.
18. A battery must never be charged when the temperature is above 122°F (50°C).
19. Never store batteries unless they are fully charged.
20. Never leave an acid spill unattended.

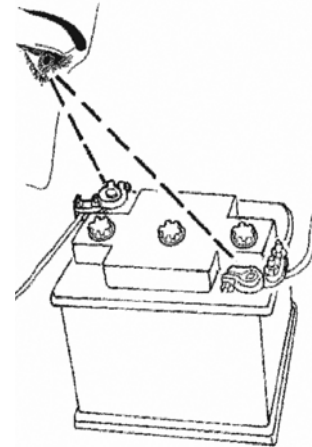
BEFORE PERFORMING ANY PROCEDURES ON THE BATTERIES, disconnect the main red connector under the front cover.



### Battery Terminals Inspection/Maintenance

If oxidation or grime build-up is found during the inspection of the battery terminal connectors on the personnel lifter, proceed as follows:

- Disconnect the terminal connectors and clean them with a rag, wet with water. If the oxidation layer is particularly thick, with the terminals still disconnected, use a wire brush to clean off the top layer and clean them with a rag wet with water.
- Dry the terminal connectors well.
- Put the connectors back in their place, paying close attention to the correct positive/negative pole connection, then tighten.
- Coat the terminal connectors with a protective lubricant for electrical contacts (such as a lubricant with a pharmaceutical grade petroleum jelly).



### Battery Water Inspection (if Applicable)

The inspection of the battery water level is to be performed every 4 working days or AFTER each and every battery recharge. Batteries should only be filled after the charging cycle.

It is possible to check the levels by lifting the cover.

The water level must always be at least 0.2 in. (5 mm) above the internal element plates. If necessary, fill with demineralized water.

Given that part of the water evaporates during recharging, it is necessary to check the level again after 30 minutes of work.

Perform the job for 30 minutes, and then repeat the battery check and fill until the proper level is achieved.

### Dead Battery Mitigation

If the battery is dead on the personnel lifter, and the operator compartment cannot be lifted to access the battery, notify maintenance personnel of the problem.

## PERSONNEL LIFTER CLEANING

Because the personnel lifter works in the presence of dust, it is necessary to clean it daily or sooner if needed.

Before each cleaning operation, turn the key switch and the selector switch to the off position.

Use a cloth slightly dampened with water to perform the cleaning on the external surfaces.

**SAMPLE DAILY INSPECTION CHECKLIST**



**WARNING:** To avoid possible injuries, the electrical power supply of the personnel lifter shall be turned off during the visual inspection. (The selector and key switch shall be in the off position).



**WARNING:** If the personnel lifter does not function properly, or fails any part of the daily checklist, turn it off immediately. Notify maintenance personnel of the problem. Do not use the personnel lifter until it has been declared suitable for safe operation.



**CAUTION:** Do not neglect the visual inspection and operational inspection for any portion of the personnel lifter.



**WARNING:** Check and verify that there are no foreign objects or debris present that could cause serious damage to the personnel lifter.

Daily Record (Perform these checks at the start of each shift)		
Model:	Serial Number:	Operator:
Shift Number:	Personnel Lifter Number:	Date:
<b>Mark Each Box OK or R/A (Repair/Adjust)</b>		

Visual Inspection: Key Switch in the OFF ( O ) Position		Mark
V-1	PERSONNEL LIFTER	
	• No cracks, damage, or corrosion in welds, frame, or load bearing members	
	• Examine personnel lifter for loose, damaged, worn or missing hardware or parts	
	• Verify warning light lenses are present and in good condition	
	• Personnel lifter is free of dirt and debris	
V-2	WHEELS AND TIRES	
	• No gouges, chunking, other damage, or flat spots	
	• No foreign objects or debris attached to or around the tires or wheels	
	• Wheel bolts and nuts are secure	

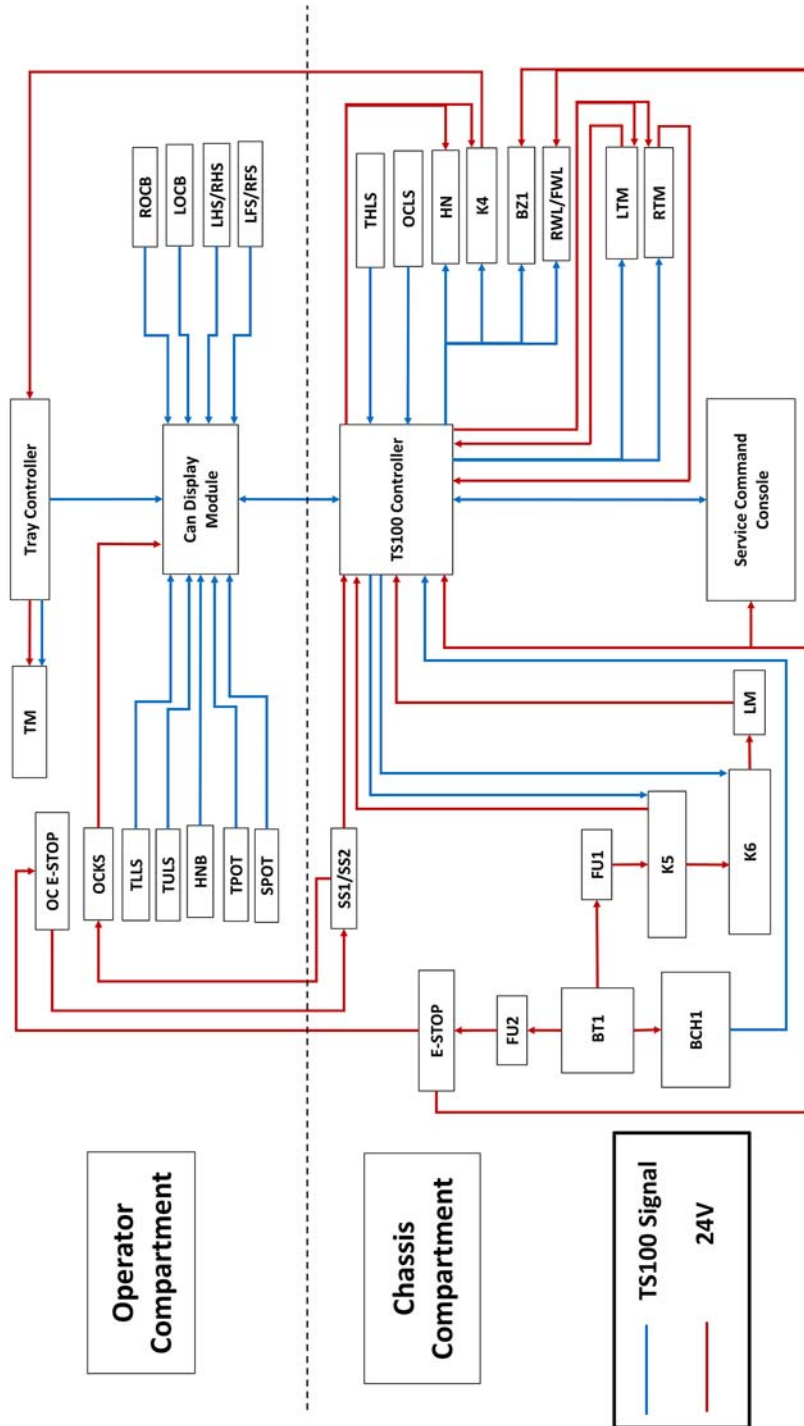
<b>Visual Inspection: Key Switch in the OFF ( O ) Position</b>		<b>Mark</b>
V-3	LIFT/LOWER SYSTEM	
	• No loose, damaged, or missing parts	
	• No chafing of electrical wires or hydraulic hoses	
	• No leaks; also check floor under personnel lifter for any dripping fluid	
	• Visually inspect hydraulic fluid level, electrical and mechanical components	
	• No wires or cables have come loose or hang from the underside of the personnel lifter	
	• Buttons move smoothly without binding and return to neutral when released	
V-4	DEADMAN PEDALS	
	• Move smoothly without binding	
	• Return to neutral when released	
V-5	THROTTLE AND STEERING CONTROL HANDLES	
	• Moves smoothly without binding	
	• Returns to neutral when released	
V-6	GUARDS, COVERS, DECALS	
	• All guards and covers installed correctly and securely	
	• Decals in place and readable	
	• Specification and Capacity tags in place and readable	
V-7	OTHER	
	• All batteries, plugs, terminals, cables, and receptacles in good condition and free of moisture and debris	
	• Check operator compartment, operator compartment guardrails, and travel restraint anchorage for damage or cracks	
	• Operator compartment gates shuts and return to closed when released	
	• Check that all manuals are in the weather resistant container	
	• Check all safety and personnel protection devices function properly	
	• Service Command Console is undamaged and folds properly into place	
V-8	SIDE GUIDE ROLLER (If Equipped)	
	• Check and make sure that the side guides are firmly secured to the personnel lifter	
	• Verify that the rollers can spin freely without restrictions	
	• Check that the side guides are not bent or deformed due to any previous impact	

<b>Visual Inspection: Key Switch in the OFF ( O ) Position</b>		<b>Mark</b>
V-9	LED WORK LIGHTS (If Equipped)	
	<ul style="list-style-type: none"> <li>• Check that the LED lights are firmly secured to the personnel lifter</li> </ul>	
<b>Operational Inspection: Key Switch in the ON ( I ) Position</b>		
O-1	BATTERY	
	<ul style="list-style-type: none"> <li>• Charged</li> </ul>	
O-2	EMERGENCY POWER OFF BUTTONS ON PLATFORM AND SERVICE COMMAND CONSOLE	
	<ul style="list-style-type: none"> <li>• Disables lift/lower/travel/steering functions when pressed</li> </ul>	
O-3	DEADMAN PEDALS	
	<ul style="list-style-type: none"> <li>• Disables lift/lower/travel/steering functions when either is released</li> </ul>	
O-4	SELECTOR SWITCH	
	<ul style="list-style-type: none"> <li>• Check and verify correct operation</li> </ul>	
O-5	PARKING BRAKES	
	<ul style="list-style-type: none"> <li>• Check and verify correct operation</li> </ul>	
O-6	LIFT/LOWER/TRAVEL/STEERING SYSTEM	
	<ul style="list-style-type: none"> <li>• All controls perform their functions correctly and smoothly. This includes the controls at the service and platform command consoles.</li> </ul>	
	<ul style="list-style-type: none"> <li>• Check and verify the correct operation of the key switch on the platform command console</li> </ul>	
	<ul style="list-style-type: none"> <li>• Check and verify there are no cracks or damage on the extended structure</li> </ul>	
	<ul style="list-style-type: none"> <li>• Verify load tray raises and lowers freely without binding</li> </ul>	
O-7	SAFETY	
	<ul style="list-style-type: none"> <li>• Emergency lower lever functions correctly</li> </ul>	
	<ul style="list-style-type: none"> <li>• All warning lights function correctly</li> </ul>	
	<ul style="list-style-type: none"> <li>• All limit switches operate correctly</li> </ul>	
	<ul style="list-style-type: none"> <li>• Tilt sensor operates correctly</li> </ul>	
	<ul style="list-style-type: none"> <li>• Gates operate correctly</li> </ul>	
	<ul style="list-style-type: none"> <li>• Horn operates correctly</li> </ul>	
	<ul style="list-style-type: none"> <li>• Audible alarm functions when personnel lifter operator compartment is in motion</li> </ul>	

<b>Operational Inspection: Key Switch in the ON ( I ) Position</b>		<b>Mark</b>
O-8	<p><b>OPTIONS</b></p> <ul style="list-style-type: none"> <li>• If equipped, verify gate interlocks operate correctly</li> <li>• If equipped with gate interlock, check that the operator compartment is fully lowered. Make sure that the personnel lifter will not move or operate when either of the gates are open. Verify that a 2-8 fault code is shown in the CAN display module when movement is requested.</li> <li>• If equipped with gate interlock, raise the operator compartment 2 in. (5 cm) off the ground. Make sure that both entry gates are locked in a fixed, closed position and cannot be opened while in the lifted position.</li> <li>• All working lights function correctly</li> </ul>	
O-9	<p><b>TRAVEL RESTRAINT</b></p> <ul style="list-style-type: none"> <li>• It is properly sized, properly connected, and free from damage</li> </ul>	
<p>COMMENTS:</p>		



**POWER DISTRIBUTION DIAGRAM**



<b>Mark</b>	<b>Description</b>
BCH1	BATTERY CHARGER
BT1	BATTERY
BZ1	BUZZER
E-STOP	EMERGENCY STOP
FU1	MAIN POWER FUSE
FU2	CONTROLLER POWER FUSE
HN	HORN
HNB	HORN BUTTON
K4	CHASSIS RELAY
K5	MAIN CONTACTOR
K6	PUMP CONTACTOR
LFS/RFS	LEFT/RIGHT FOOTSWITCH
LHS/RHS	LEFT/RIGHT HAND SENSOR
LM	LIFT MOTOR
LOCB	LOWER OPERATOR COMPARTMENT BUTTON
LTM	LEFT TRACTION MOTOR
OC E-STOP	OPERATOR COMPARTMENT EMERGENCY STOP
OCKS	OPERATOR COMPARTMENT KEY SWITCH
OCLS	OPERATOR COMPARTMENT LIMIT SWITCH
ROCB	RAISER OPERATOR COMPARTMENT BUTTON
RTM	RIGHT TRACTION MOTOR
RWL/FWL	REAR/FRONT WARNING LIGHTS
SPOT	STEER POTENTIOMETER
SS1/SS2	SELECTOR SERVICE SWITCH
THLS	TOW HITCH LIMIT SWITCH
TLLS	TRAY LOWER LIMIT SWITCH
TM	TRAY MOTOR
TPOT	TRAVEL POTENTIOMETER
TULS	TRAY UPPER LIMIT SWITCH

## TROUBLESHOOTING

If you have a problem with your personnel lifter, use the table below to decide what to do. Do not try to service this personnel lifter unless you are properly trained and authorized to do so. Contact your Service Department or local authorized Lift-Rite Sales and Service Center listed on the back of this manual.

PROBLEM	PROCEDURE
Nothing happens when the key switch is in the ON position and the selector switch is set to platform or service.	Check the battery and battery connections. Check that the emergency power off buttons are not pressed. Contact the Service Department.
Battery discharges quickly or does not indicate a full charge after charging.	Even though a battery has been fully recharged, it may not show 100% on the battery gauge. The maximum value shown depends upon the battery's type, age, and condition. Try another battery. If the same problem happens again, contact the Service Department.
Any system damage or malfunction (no travel, lift, or lower function).	Bring the personnel lifter to a stop immediately. Do not operate the personnel lifter until the problem is corrected. Contact the Service Department.

MOST COMMON ERRORS	ERROR CODE
LOW BATTERY	FLASH BCI WHEN AT LOW BATTERY
DEAD BATTERY	FLASH BAT ON CAN DISPLAY
BATTERY CHARGING	FLASH 2-3
BRAKES MANUALLY RELEASED	FLASH 8-2
HAND SENSOR FAULT	FLASH 2-4
FOOTSWITCH FAULT	FLASH 2-5
THROTTLE HANDLE FAULT	FLASH 2-6
STEER HANDLE FAULT	FLASH 2-7
TILT	FLASH 2-9 WHEN ELEVATED
ELEVATION SWITCH	FLASH 6.3

**LIFT-RITE® *Sprint* WARRANTY CERTIFICATE**

Your new *Sprint* is warranted against defects in materials and workmanship as follows:

Components found to be defective by the product manufacturer or an authorized *Sprint* LIFT-RITE Sales and Service Center during 1) the first year after delivery of the *Sprint* will be replaced or repaired and 2) the second year after delivery of the *Sprint* will be exchanged upon receipt of the defective component for a replacement part. Notwithstanding the foregoing, mast components (hydraulic cylinder and mast only) found to be defective by the product manufacturer or an authorized *Sprint* LIFT-RITE Sales and Service Center will be exchanged upon receipt of such defective component for a replacement part at any time during the lifetime of the *Sprint*.

Replacement components other than mast components installed during the warranty periods above will be warranted for the balance of the applicable warranty period, set forth above, or 90 days, whichever is longer. Replacement mast components installed during the warranty period will be warranted for 90 days. Transportation of the product to and from a *Sprint* LIFT-RITE Sales and Service Center, local taxes, and customs charges, if any, and labor to install replacement components more than one year after delivery are excluded.

This warranty does not apply to oil leaks, adjustments, or loose hardware.

**This warranty provided herein is void in the event of any damage caused by: lack of scheduled maintenance (as described in the Service Manual or LIFT-RITE service information); your negligent use of the product; misuse of the product, abuse, accident, impact, exposure to chemicals; or water immersion.**

LIFT-RITE reserves the right to make changes and improvements in design without making changes to previously manufactured products of the same description. Notwithstanding any other language contained herein, this warranty is expressly voided without any further notice if any modification is made to the LIFT-RITE product, or if additional components or devices are added to the LIFT-RITE product, without prior approval having been granted in writing by LIFT-RITE.

**THE REMEDIES DESCRIBED ABOVE ARE YOUR SOLE AND EXCLUSIVE REMEDIES AND OUR ENTIRE LIABILITY FOR ANY BREACH OF THIS WARRANTY. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED, IMPLIED, OR STATUTORY. THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, NOR ANY WARRANTY AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OF A THIRD PARTY. THE LIABILITY OF LIFT-RITE SHALL UNDER NO CIRCUMSTANCES EXCEED THE ACTUAL AMOUNT PAID BY YOU FOR THE PRODUCT, NOR SHALL LIFT-RITE UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, OR PUNITIVE DAMAGES OR LOSSES, WHETHER DIRECT OR INDIRECT.**



**LIFFRITE®**