

# Owner and Operating Instructions Manual

## *Sprint* Personnel Lifter



## *Sprint*

**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, 1267018A, 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.

To order additional copies of this manual, part number 1267018A, 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.liffrite.com](http://www.liffrite.com).

**©2018 Lift-Rite**

## TABLE OF CONTENTS

INTRODUCTION	1
HAZARD AND TERMINOLOGY SYMBOLS	1
RESPONSIBILITY OF OWNER	2
SAFETY	3
GENERAL INFORMATION	3
FAMILIARIZATION	3
SAFETY STANDARDS COMPLIANCE	3
OPERATOR COMPREHENSION	3
PERSONNEL LIFTER INSPECTION	4
INSPECTION OF THE WORKPLACE	4
OPERATION SAFETY	5
SAFETY REQUIREMENTS	6
RISK OF FALLING	7
ELECTROCUTION HAZARD	8
STABILITY	9
CRUSHING AND IMPACT HAZARDS	10
PERSONNEL TRAINING	11
Operator training requirements	11
Training supervision	11
PREPARATION INSPECTION AND MAINTENANCE	12
COMPLETE DAILY INSPECTION	14
Daily Inspection Checklist Procedures	14
COVER REMOVAL/INSTALLATION	16
OPERATION OF THE PERSONNEL LIFTER	17
DESCRIPTION OF THE PERSONNEL LIFTER	17
FUNCTION OF THE PERSONNEL LIFTER	17
Operation Criteria	17
Battery charging procedure	19
Battery Gauge	21
PLATFORM COMMAND CONSOLE OPERATIONS	22
Platform Emergency Power Off Button	22
Deadman Pedals	23

Operating Compartment Lift and Lower Buttons	23
Throttle Control Handle	25
Steering Control Handle	26
Horn	26
Load Tray Lift and Lower Buttons	27
Tilt Sensor	27
<b>SERVICE COMMAND CONSOLE OPERATIONS</b>	<b>28</b>
Service Emergency Power Off Button	28
Service Controls	29
Selector Switch	29
Operator Compartment Lift and Lower Buttons	30
<b>EMERGENCY LOWERING LEVER</b>	<b>31</b>
<b>PICKING PROCEDURE</b>	<b>32</b>
<b>TRAVEL PROCEDURES</b>	<b>33</b>
<b>TRANSPORT PROCEDURES</b>	<b>34</b>
General Information	34
Transport Vehicle Tie Down Strapping	34
<b>PARKING THE PERSONNEL LIFTER</b>	<b>34</b>
<b>CAPACITY TAG</b>	<b>35</b>
<b>DECALS</b>	<b>36</b>
<b>LOCATION OF DECALS</b>	<b>37</b>
<b>PERSONNEL LIFTER DIMENSIONS</b>	<b>38</b>
<b>TECHNICAL DATA</b>	<b>39</b>
Location of the serial numbers	40
<b>MAINTENANCE TO BE PERFORMED BY THE OPERATOR</b>	<b>41</b>
Hydraulic oil	41
Blocking Procedure for Personnel Lifter Maintenance	42
<b>BATTERY INSPECTION AND MAINTENANCE PROCEDURE</b>	<b>43</b>
<b>BATTERY SAFETY</b>	<b>43</b>
Battery Terminals Inspection/Maintenance	44
Battery Water Inspection	44
Dead Battery Mitigation	45
<b>PERSONNEL LIFTER CLEANING</b>	<b>45</b>
<b>DAILY INSPECTION CHECKLIST</b>	<b>46</b>

HYDRAULIC SCHEMATIC	49
WIRING DIAGRAM	50
TROUBLESHOOTING	51

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 should read this entire manual before operating the personnel lifter.

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

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**

Detailed responsibilities of owners are set forth in the Manual of Responsibilities. Become familiar with and adhere to these responsibilities.

It is the responsibility of the owner of this personnel lifter to maintain records for a minimum of at least four years regarding the following information:

- Name and address of purchaser, including serial number and date. This information should be provided to the manufacturer within 60 days.
- Written records of frequent and annual inspections and repairs performed. The record should include deficiencies found, corrective actions, and person performing the repair. It is the responsibility of the owner to make sure that frequent and annual inspections are completed. When frequent/annual inspections or repairs are performed by entities other than the owner, the owner shall make sure records of such inspections or repairs are received no later than 60 days after the inspection or repair.
- A complete and concise record of any information concerning regular inspections (daily inspection exempted), tests, maintenance, structural, electronic and machine repair that has a direct bearing on the safety of the personnel lifter shall be kept permanently by the owner.
- Personnel lifters shall be inspected, serviced, and adjusted to the manufacturer's requirements prior to each delivery by sale, lease, or rental.
- If rented or leased, the pre-delivery preparation shall be performed and documented prior to each delivery.
- Training information, including:
  - Name of persons trained
  - Name of person and entity providing the training
  - Clear identification that the training covered was on the personnel lifter
  - Date of training
  - Information regarding training and familiarization should be provided to users and trainees. Users are also responsible for maintaining the above listed training records.
- Name of persons receiving familiarization upon delivery (unless familiarization has been provided on the same or similar model within 90 days).
- Name of persons providing familiarization.

Upon rental/lease/sale, owner must:

- Make sure operating and service manuals are conveyed to new owner/user, and the operating manual is present in the weather-resistant container.
- Provide current Manual of Responsibilities for Self-Propelled Elevating Aerial Platforms to new owner in the weather-resistant container.
- Provide repair and parts manual to new owner/user.
- Offer training or advise the new owner/user of where to obtain training.
- Prior to delivery, service and adjust the personnel lifter in accordance with the inspection and service requirements indicated on page 12 of this manual and in the Service Manual.
- Perform annual inspections prior to delivery and provide a copy to the new owner/user.
- Familiarize the receiving entity with the personnel lifter (see page 3).

All safety related bulletins published by the manufacturer shall be adhered to.

## **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.

The owner, users, operators, firms offering leasing, and those subjects who leased the personnel lifter, must not operate the personnel lifter before reading: this manual, sections 6, 7, and 8 of ANSI/SAIA A92.6, Manual of Responsibilities, all decals on the personnel lifter, and completing training in the operational procedures under the supervision of a qualified instructor.

Upon delivery, the following items are addressed with a receiving entity. 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.

### **FAMILIARIZATION**

- Become familiar with the location of the weather-resistant container for manual storage
- Confirm that the operator's manual and Manual of Responsibilities are present on the personnel lifter in the weather-resistant container
- Review the control functions, decals, and warnings
- Review the safety devices

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:

- ANSI/SAIA A92.6, Section 4, with the exception of Section 4.19, American National Standards Institution/Scaffold & Access Industry Association
- IEC 60204-1, International Electrotechnical Commission

### **OPERATOR COMPREHENSION**

**Federal law and the 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, sections 6, 7, and 8 of ANSI/SAIA A92.6, Manual of Responsibilities, and on the personnel lifter prior to operating the personnel lifter.
- Use of the personnel lifter is permitted 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.
- 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.

## 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 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.**

- Do not operate the personnel lifter if the decals are illegible or missing.
- Avoid accumulations of debris on the floor of the operator's compartment. Prevent mud, oil, grease, or other similar slippery substances from coming into contact with footwear or the operator's compartment floor.

## 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.
- 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 overhead electrical lines and other 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. Do not operate on any incline. 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).
- 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.
- 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 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.
- Use extreme care when traveling with the operator's 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's 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 deck or load tray.
- Make sure that tools are put away properly and are not left hanging by their power cords in the platform work area.
- Maintain adequate clearance from overhead obstructions and energized electrical conductors and parts.
- Always look in the direction of travel. Keep a clear view.
- When leaving the personnel lifter unattended, fully lower the operator compartment, turn the key to "O", turn the selector switch to "Off", 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 and tray. Mark the floor with appropriate barriers, as needed.



- Do not place 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 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, dealer, or manufacturer to answer any questions.
- Stunt driving and horseplay are prohibited.

## **SAFETY REQUIREMENTS**



**WARNING: Industrial equipment can be hazardous when improperly used.**

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

**RISK OF FALLING**

**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 platform floor in order to increase the overall working height.
- Do not step on the gates, rails, or the tray.
- Pay very close attention when getting on or off the operator compartment. Make sure that the operator compartment is completely lowered. When getting on or off the operator compartment, do so facing the personnel lifter.
- Always keep three points of contact with the personnel lifter, doing so in such a manner that at least both hands and one foot or both feet and one hand are continuously in contact with the personnel lifter when getting on or off.
- Avoid sudden shifts in loads or operator positions.
- Guard rails are provided for fall protection. Do not lean any part of your body against the rails.
- 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 be well within the compartment, gate, rails, or tray of the personnel lifter.

## ELECTROCUTION HAZARD

- The personnel lifter is not electrically insulated.
- Maintain a distance of at least 10 ft. (3 m) between any part of the personnel lifter, its occupant, and tools or equipment, and an electrical power line or piece of equipment with an electrical charge rated at least 50,000 Volts.
- It is necessary to add 1 ft. (0.3 m) for each additional voltage increase equal to or less than 30,000 Volts.
- 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.



<b>VOLTAGE RANGE (FROM PHASE TO PHASE)</b>	<b>MINIMUM OPERATIONAL SAFETY DISTANCES ft. (m)</b>
From 0 to 50 kV	10 (3)
From over 50 kV to 200 kV	15 (5)
From over 200 kV to 350 kV	20 (6)
From over 350 kV to 500 kV	25 (8)
From over 500 kV to 750 kV	35 (11)
From over 750 kV to 1000 kV	45 (14)
NOTE: These minimum operational safety distances are to be applied except in cases in which company, local, or governmental regulations are more stringent.	

## STABILITY

- 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
- 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
  - Lateral load greater than 75 lbs. (333 N)
  - Operator weight greater than 286 lbs. (130 kg)
- Do not operate on a slope.
- 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" on page 35 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.
- Do not exceed the maximum lateral load of 75 lbs. (333 N) for the personnel lifter.
- 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. Do not tie or bind the personnel lifter to any other adjacent structure.
- Do not position the operator compartment against another object to steady the operator compartment 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, 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 authorized dealer for replacement parts.
- Do not mount attachments for holding materials or tools onto the platform or guardrail system without authorization from the manufacturer.
- Do not attempt to use the platform to lift the wheels off the ground.

## **CRUSHING AND IMPACT HAZARDS**

- When the personnel lifter is being used or the operator compartment is being raised or lowered, observe the distances above, below, and on both sides of the operator compartment itself. Always look in the direction of travel.
- Do not allow anyone to stand or pass under the operator compartment and tray. Mark the floor with appropriate barriers, as needed.
- Always verify that there is not equipment or personnel below the operator compartment and tray before lowering the compartment.
- Do not lean out from the operator compartment railings.
- While operating the personnel lifter, always operate from the designated operating position, all parts of your body shall be within the compartment, gate, rails, or tray of the personnel lifter.
- 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.
- Adjust the travel speed based upon the following conditions: ground or 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.
- 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**

**Federal law and the 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 requirements**

1. The purpose and use of manuals
2. That Owner's Manual and Operating Instructions Manual, and Manual of Responsibility are an integral part of the personnel lifter and must be stored properly in the weather-resistant container when not in use
3. A pre-start (daily) inspection
4. Responsibilities associated with problems or malfunctions affecting the operation of the personnel lifter, including recording and reporting of the malfunction/problem.
5. Factors affecting stability
6. The purpose of decals
7. Workplace inspection
8. Safety rules and regulations
9. Authorization to operate
10. Operator warnings and instructions
11. Actual operation of the personnel lifter under the direction of a qualified instructor. The trainee shall operate the personnel lifter for a sufficient period of time to demonstrate proficiency in the actual operation of the personnel lifter.
12. Familiarization with the personnel lifter (see page 3).
13. Responsibilities outlined in the Manual of Responsibilities.

### **Training supervision**

Training must be given under the supervision of a qualified instructor, in an open area, free of obstacles. It must continue until the trainee is capable of using the personnel lifter safely.

The operator shall be retrained, when so directed by the user, based on the user's observation and evaluation of the operator.

Documentation of proof of training shall be kept with the operator while operating the personnel lifter. The documentation should include the name of the trainee, the date of training, the name of the entity providing training, the name of the trainer, and identification that the training covered the personnel lifter.

## PREPARATION INSPECTION AND MAINTENANCE

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

All inspections, maintenance, and repairs shall be performed in accordance with the manufacturer's recommendations, and should be based on the environment and severity of use. 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 dealer if you have any questions. 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 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.	User or operator	User or operator	Refer to page 14 and page 46
<b>WORKPLACE INSPECTION</b>	Prior and during use.	User or operator	User or operator	Refer to page 4
<b>FREQUENT (PERIODIC) INSPECTION</b>	Every 3 months or 150 hours of use, whichever occurs first.	Owner or user	Lift-Rite Qualified Mechanic	Refer to Service Manual
<b>ANNUAL INSPECTION</b>	Annual, within 13 months from the last inspection, or 700 hours of use from the date of the prior annual inspection, whichever occurs first.	Owner or user	Lift-Rite Qualified Mechanic	Refer to Service Manual
<b>STRUCTURAL INSPECTION</b>	<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>	Owner or user	Professional Engineer	Professional Engineer

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.

<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
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

## COMPLETE 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).**



**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 or malfunctions and to determine if routine maintenance is required.

See “DAILY INSPECTION CHECKLIST” on page 46.

NOTE: Front cover removal is necessary to complete the daily inspection (see “COVER REMOVAL/ INSTALLATION” on page 16 for cover removal instructions).



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



### Daily Inspection Checklist Procedures



**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.**

1. Perform the visual inspection portion of the daily checklist. (See “DAILY INSPECTION CHECKLIST” on page 46.)

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

2. 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” on page 22.
3. From the service command console, without a load, perform the following operations: (See “SERVICE COMMAND CONSOLE OPERATIONS” on page 28.)
  - a. Make sure that all of the personnel lifter functions are disabled when the emergency power off button is activated (pressed).
  - b. Set the selector switch to service.

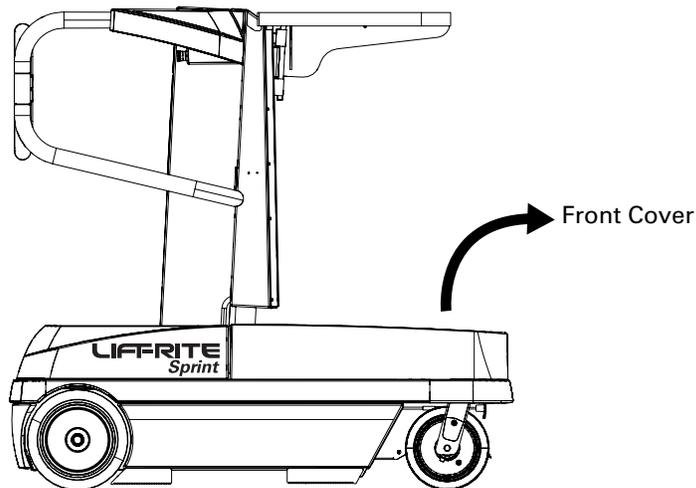
- c. Actuate the lift button. The operator compartment should lift. Verify both the lift and lower buttons by lifting and lowering the operator compartment 2 to 3 ft. (0.61 to 0.92 m) several times. Check and verify that the lifting and the lowering of the operator compartment is operating properly.
- 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. Check and verify the platform command console controls do not function.
4. Platform gate opening limit: 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" on page 22.
  - a. Set the selector switch on the service command console to platform.
  - 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 verify the personnel lifter won't travel and the operator compartment won't lift and lower.
  - d. Engage the hand sensors and the left deadman pedal and verify the personnel lifter won't travel and the operator compartment won't lift and lower.
  - e. Engage both deadman pedals and the throttle handle sensor and verify the personnel lifter won't travel and the operator compartment won't lift and lower.
  - f. Engage both deadman pedals and the steering handle sensor and verify the personnel lifter won't travel and the operator compartment won't 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. Stand within the operator compartment with the gates closed and feet on the deadman pedals.
  - i. Lift and lower the operator compartment 2 to 3 ft. (0.61 to 0.92 m) several times.
  - j. 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.
  - k. Turn left and right several times to verify that the steering is operating properly.
  - l. 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. 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**), and stop to make sure the brakes hold.
7. 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.

## COVER REMOVAL/INSTALLATION

### Removal



### Front Cover

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

### Front Cover

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 an aerial work platform or operator compartment, mounted on a strut elevation mechanism, actuated by a single hydraulic cylinder with a synchronized effect.

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

The *Sprint* is equipped with a electrically actuated load tray and a load deck which are reserved only for objects and materials.

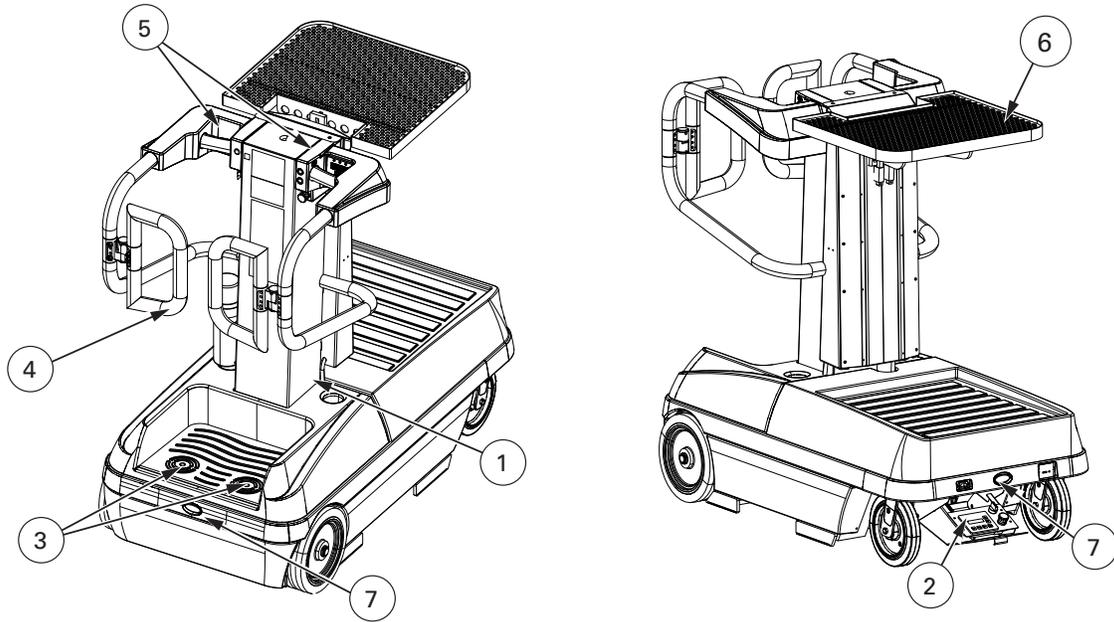
The *Sprint* has two drive wheels in the rear and two free caster wheels in the front. It is necessary to use the service command console (see page 28) when the personnel lifter is being serviced, when functional verifications are performed, or in case of emergency if the operator is not capable of lowering 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.
- 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.
- 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, and operator's hands are on the steering and throttle control handles (actuating the handle sensors), and actuates the lift or lower operator compartment button, see page 21.
- 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.



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

## 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.*

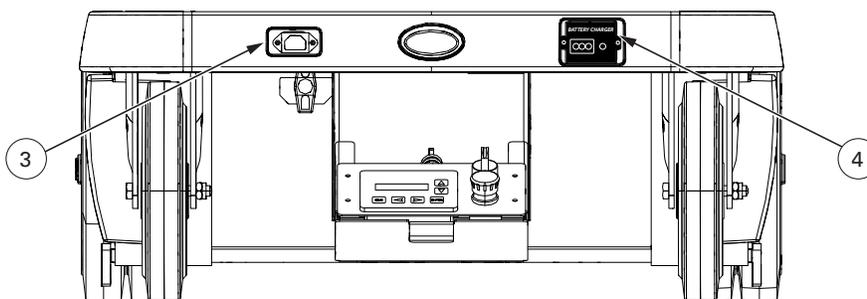


**THE LEAD ACID BATTERIES MAY GENERATE EXPLOSIVE HYDROGEN GAS DURING NORMAL OPERATION. KEEP SPARKS, OPEN FLAMES, OR LIT TOBACCO AWAY FROM THE BATTERIES. DURING BATTERY CHARGING, PROVIDE FOR ADEQUATE VENTILATION IN THE AREA. DO NOT CHARGE A FROZEN BATTERY. CAREFULLY STUDY THE PRECAUTIONS SPECIFIED BY THE BATTERY MANUFACTURER RELATIVE TO THE SPEED OF CHARGING RECOMMENDED AS WELL AS THE POSSIBILITY OF REMOVAL OF THE CELL CAPS DURING CHARGING.**

1. Park the personnel lifter in a well ventilated area near an AC wall socket.



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.



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

4 - 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.)

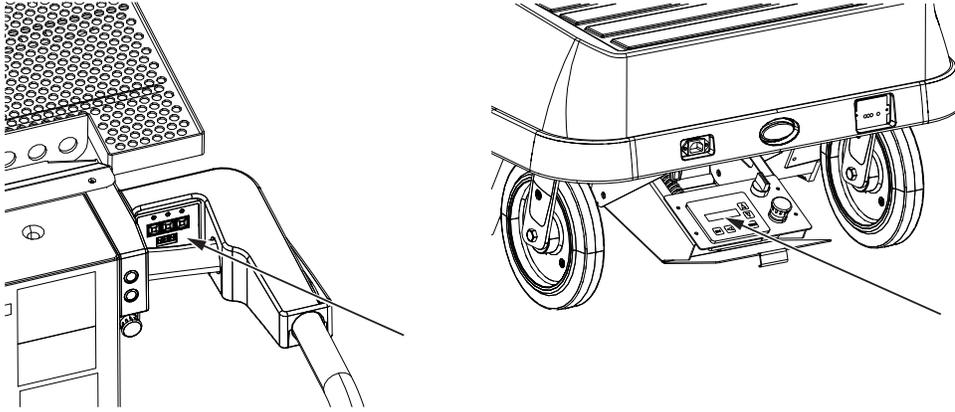


NOTE: When the green LED is at 100%, the battery charger switches OFF automatically.

## Battery Gauge

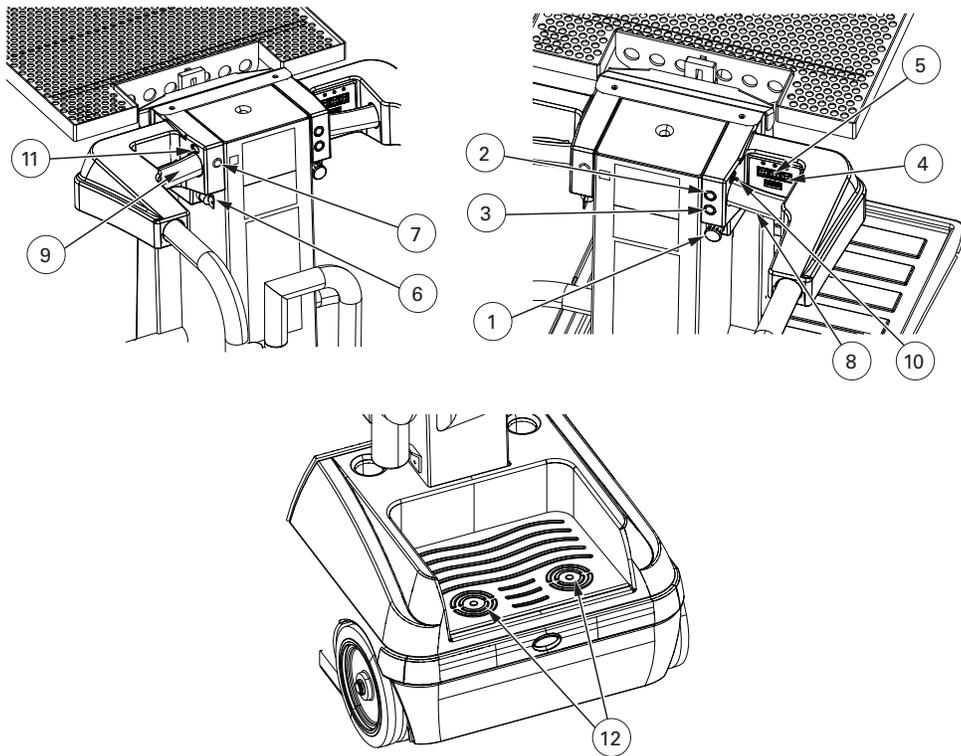
The battery gauge shows the battery charge status. When the battery gauge indicates a low battery voltage, lifting of the operator compartment is prohibited and the battery must be charged.

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

### Platform Emergency Power Off Button

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

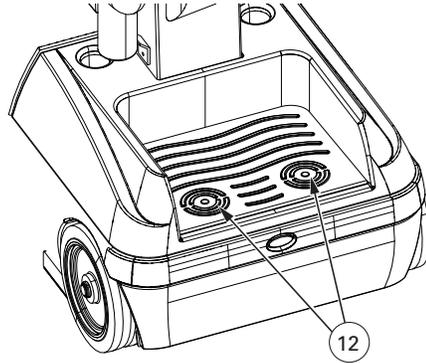
Reset of the emergency power off button **DOES NOT** actuate the personnel lifter, but enables the command devices.

**NOTE:** In order to operate the personnel lifter, the emergency power off buttons on the service command console (refer to page 28) and on the platform command console must both be set to the RESET position.

## 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 before turning the key switch to "I", an error will display.

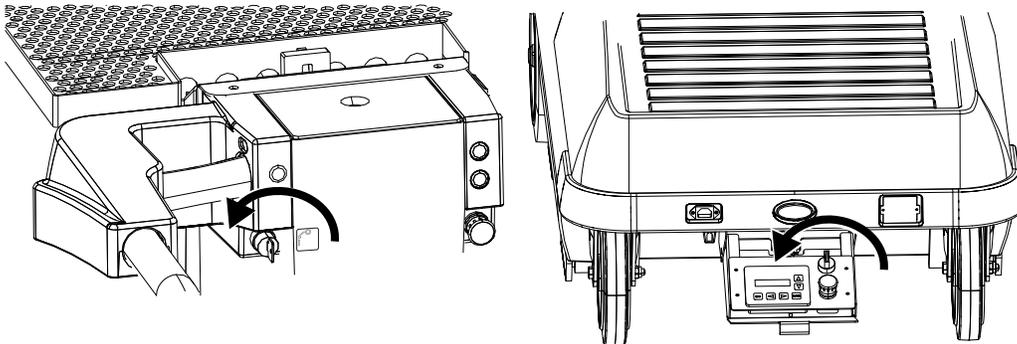


## Operating Compartment Lift and Lower Buttons

The operator must not for any reason climb up on top of the operator compartment railings, or use ladders or other items on the platform or railing to achieve greater work heights or to reach further. In addition, the operator must never lean outside of the railing of the operator compartment.

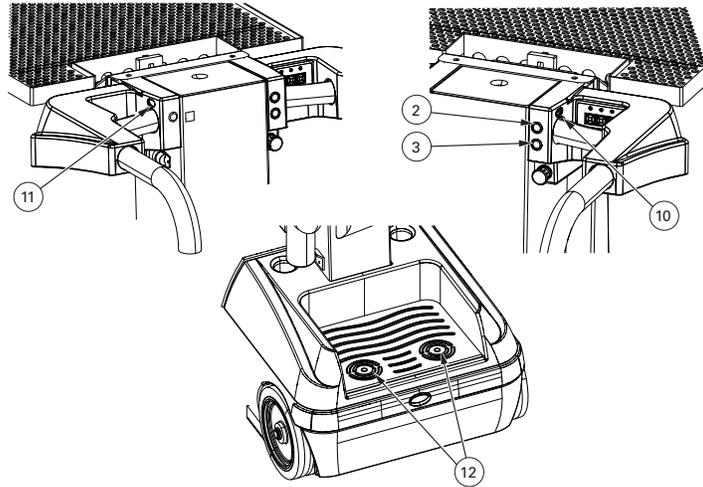
Before activating the personnel lifter, do a pre-operation check (daily inspection) and workplace inspection.

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



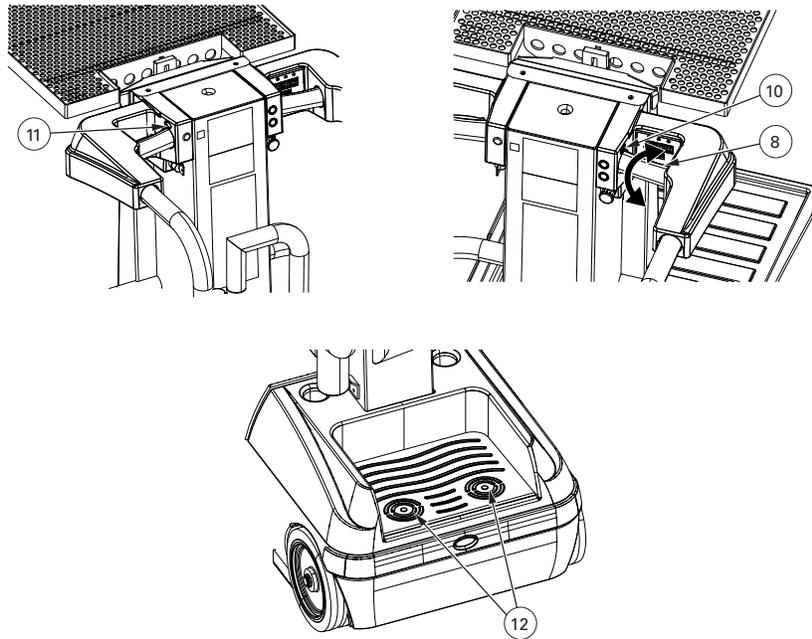
## Throttle Control Handle

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.

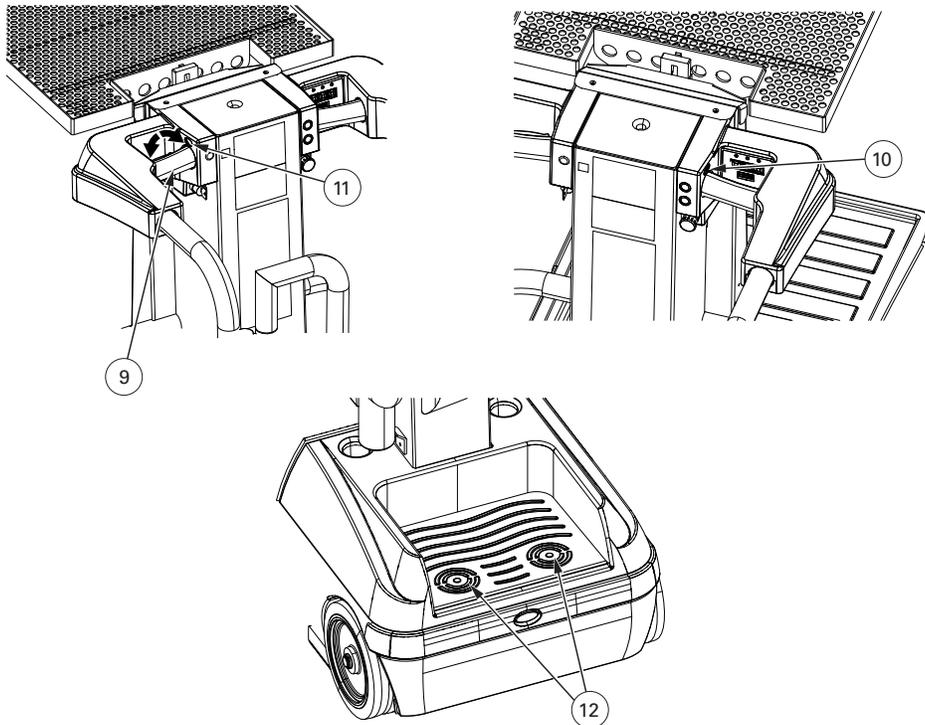


## Steering Control Handle

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. Grasp the control handle to the right to turn the front of the personnel lifter to the right and grasp the control handle to the left to turn the front of the personnel lifter to the left.

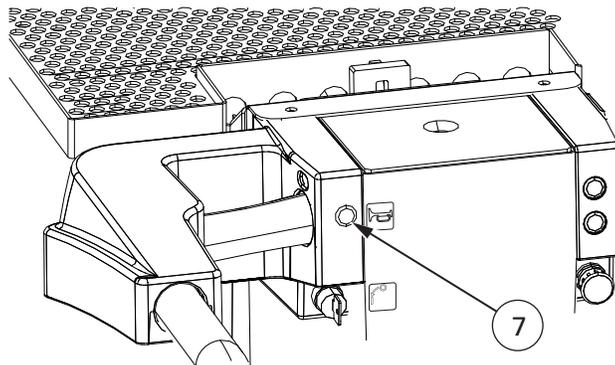
NOTE: Your turning speed will vary depending on how much you grasp the steering control handle. If your turning speed is too fast, the tilt sensor may indicate a tilt condition due to the dynamic effects on the tilt sensor.

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



## Horn

Sound the horn (7) as needed.

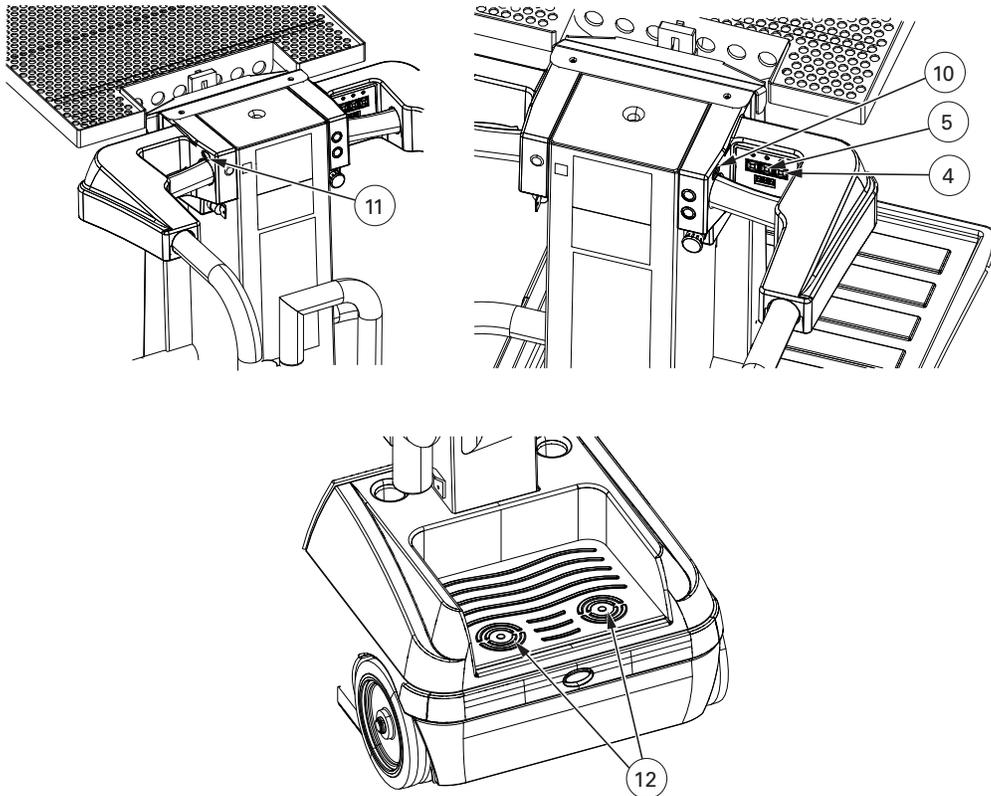


## Load Tray Lift and Lower Buttons

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.



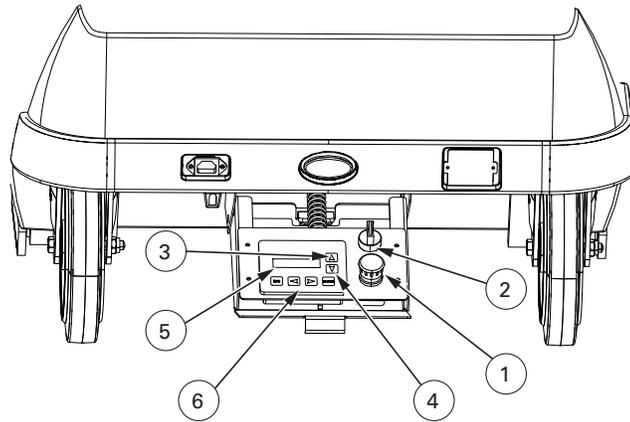
## Tilt Sensor

The *Sprint* includes a tilt sensor.

When the tilt sensor indicates a tilt condition, the battery gauge in the operator compartment will display 2-2 and the display on the service command console will display "FUNCTIONS LOCKED - TILTED". The operator compartment will not lift more than 6 in. (0.15 m), and the operator cannot travel or steer. The tilt condition remains until the operator compartment is completely lowered and the tilt condition has been eliminated.

Do not use the personnel lifter when the tilt sensor indicates a tilt condition. If raised, lower the operator compartment 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

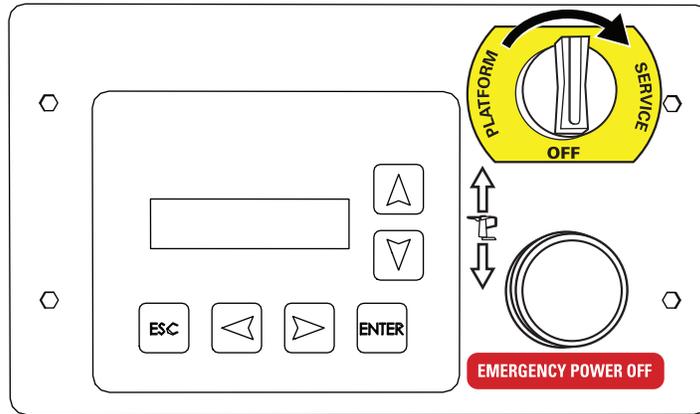
### Service Emergency Power Off Button

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.

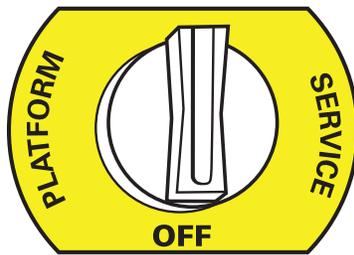
**NOTE:** In order to operate the personnel lifter, the emergency power off buttons on the service command console and on the platform (see "PLATFORM COMMAND CONSOLE OPERATIONS" on page 22) must both be set to the RESET position.

## Service Controls



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

## Selector Switch

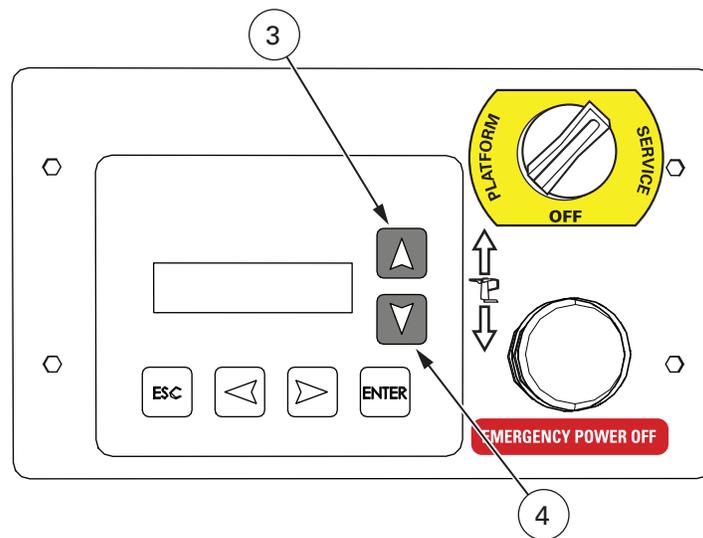


To turn the personnel lifter off, turn the selector switch to "OFF".

To enable platform command console, turn the selector switch to "PLATFORM".

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

## Operator Compartment Lift and Lower Buttons



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

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

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

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



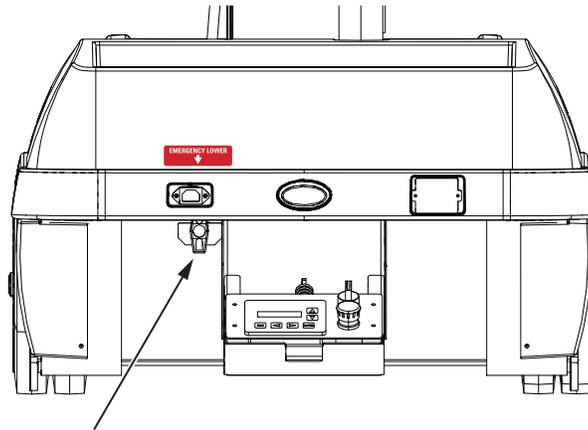
**EMERGENCY LOWERING LEVER**

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



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.

The emergency lowering lever is indicated by a decal.



Emergency Lowering Lever

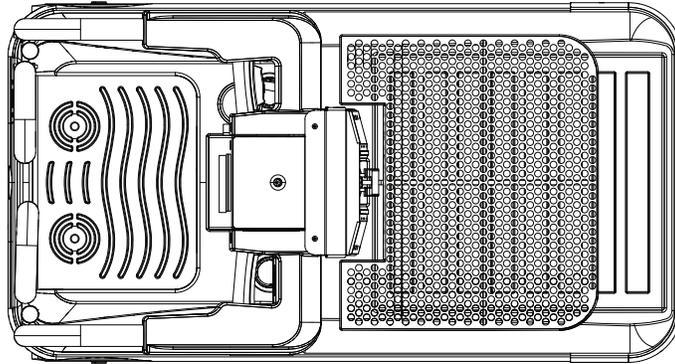
To lower the operator platform manually, pull the lever. The operator compartment will begin to lower very slowly.

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

## 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 adjacent to the operator compartment.

Racking



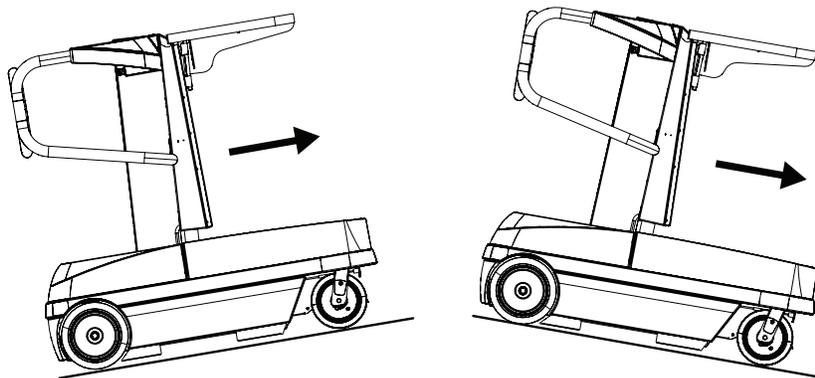
- Check the battery gauge on the platform for a tilt condition. If a tilt condition is present, do not attempt to lift. Proceed with caution while maneuvering the personnel lifter back onto a level surface.
- Adjust the height of the tray if needed.
- Lift the operator compartment to the height required 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 railing to pick loads, but never lean against the railing.
- When picking multiple loads, make sure their weight is distributed equally on the shelf and is secure and stable.

**Refer to "SAFETY" on page 3 for inspections, operation safety, safety requirements, and hazards.**

## TRAVEL PROCEDURES

- 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 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 travel. 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.
- 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 is labeled on the operator compartment.

**Refer to "SAFETY" on page 3 for inspections, operation safety, safety requirements, and hazards.**



## TRANSPORT PROCEDURES

### General Information

The *Sprint* may be transported within the workplace with the following method:

- Driving the machine around on its base wheels if travel surface area permits.

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.

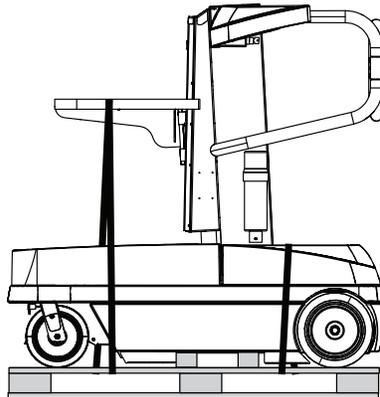
Before transport, make sure that the operator compartment has been completely lowered and all surfaces are empty (for example, no load is present).

### Transport Vehicle Tie Down Strapping

NOTE: The personnel lifter should be turned off at the key switch and the selector switch.

**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.**

Utilizing suitable strapping, 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).



## 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.
2. Make sure that the operator compartment is completely lowered, turn the key switch to "O" and turn the selector switch to "Off".
3. Remove the key from the platform 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).

**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. (113 kg)
<b>MAX LATERAL LOAD (D)</b>	75 lbs. (333 N)
<b>MAX SLOPE ELEVATED</b>	1.5°
<b>MAX SLOPE LOWERED</b>	4°

1284888

<b>MODEL</b>	<b>Sprint</b>
<b>NOM BATT VOLTAGE</b>	24V
<b>MIN TOTAL BATT WEIGHT</b>	264 lbs. (120 kg)
<b>BATT CHARGER VOLTAGE</b>	120 V
<b>MACHINE WEIGHT</b>	1488 lbs. (675 kg)
<b>MAX WHEEL LOAD</b>	720 lbs. (327 kg)
<b>POWER</b>	3000 W
<b>MAX PLATFORM HEIGHT</b>	131 in. (3350 mm)
<b>MAX WORKING HEIGHT</b>	210 in. (5350 mm)

REFER TO THE MANUAL FOR INSPECTION INFORMATION.  
 THIS UNIT HAS BEEN MANUFACTURED TO COMPLY WITH THE MANDATORY REQUIREMENTS OF ANSI/SAIA A92.6, SECTION 4\* AND IEC 60204-1.  
\*WITH THE EXCEPTION OF 4.19

1284918

# 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 representative will replace it without charge. (See page 37 for location of the numbered decals shown below).

1

CAPACITY	
MAX NUMBER OF OCCUPANTS	1
MAX OPERATOR LOAD (A)	286 lbs. (130 kg)
MAX TRAY LOAD (B)	198 lbs. (90 kg)
MAX DECK LOAD (C)	249 lbs. (113 kg)
MAX LATERAL LOAD (D)	75 lbs. (33 kg)
MAX SLOPE ELEVATED	1.5°
MAX SLOPE LOWERED	4°

2

MODEL	Sprint
NOM BATT VOLTAGE	24V
MIN TOTAL BATT WEIGHT	264 lbs. (120 kg)
BATT CHARGER VOLTAGE	120V
MACHINE WEIGHT	1452 lbs. (660 kg)
MAX WHEEL LOAD	720 lbs. (327 kg)
POWER	3000W
MAX PLATFORM HEIGHT	131 in. (3350 mm)
MAX WORKING HEIGHT	210 in. (5350 mm)

NOTE: THIS UNIT HAS BEEN MANUFACTURED TO COMPLY WITH THE MANDATORY REQUIREMENTS OF ANSI/SAA A92.6, SECTION 4 AND IEC 60334.

3

**WARNING**

DO NOT OPERATE THIS PERSONNEL LIFTER UNLESS TRAINED AND AUTHORIZED TO DO SO. READ ALL WARNINGS AND INSTRUCTIONS CONTAINED IN THE OPERATOR'S MANUAL, SECTIONS 6, 7, AND 8 OF ANSI/SAA A92.6, MANUAL OF RESPONSIBILITIES, AND ON THE PERSONNEL LIFTER.

1. Check all operating systems and safety devices as noted in the operator's manual. Report any unsafe conditions immediately. Do not operate personnel lifter until corrected.
2. Operate personnel lifter only from operating position. Keep clear of all obstructions. Keep all portions of the body inside the operator compartment. Keep both feet on the platform floor at all times. Never place any part of your body outside the personnel lifter.
3. The personnel lifter is not insulated. The machine does not provide protection from contact with or proximity to an electrically charged conductor. You must maintain a clearance of at least ten (10) feet between any part of this machine or its load and any electrical line or apparatus carrying up to 50,000 volts. One (1) foot of additional clearance is required for every additional 30,000 volts or less.
4. Personnel lifter is for indoor use only.
5. Do not carry passengers. Do not place material in operator compartment.
6. Do not allow anyone to stand or pass under the operator compartment or tray.
7. Do not operate without placing gates in the closed position.
8. Do not overload personnel lifter. Check capacity tag for load weight. Always keep loads evenly distributed. Do not handle unstable or loosely stacked loads.
9. When stopping, stay inside compartment until personnel lifter comes to a complete halt.
10. Do not travel on uneven or soft surfaces, or over obstructions, bumps, holes, and debris.
11. Start, stop, change direction, travel and brake smoothly. Slow down for turns and on slippery surfaces that could cause personnel lifter to slide or tip.
12. Use extreme care when traveling with operator's 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 direction of travel. Keep a clear view.
14. Do not operate on any incline. Only operate 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 right of way to pedestrians. Stop at intersections and/or whenever vision is obstructed.
16. When leaving personnel lifter unattended, fully lower operator compartment and remove key.

FAILURE TO FOLLOW INSTRUCTIONS COULD CAUSE DEATH OR PERSONAL INJURY.

4

**WARNING**

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

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

DO NOT REPLACE THESE BATTERIES OR MAKE ANY ADJUSTMENTS TO OR REMOVE ANY PARTS OF THE BATTERY WITHOUT THE EXPRESS WRITTEN CONSENT OF THE MANUFACTURER.

MINIMUM TOTAL BATTERY WEIGHT: 264 lbs. (120 kg)

5

**WARNING**

6

**NO RIDING**

7

**NO STEP**

8

**EMERGENCY POWER OFF**

9

**EMERGENCY POWER OFF**

10

**EMERGENCY LOWER**

11

**WARNING**

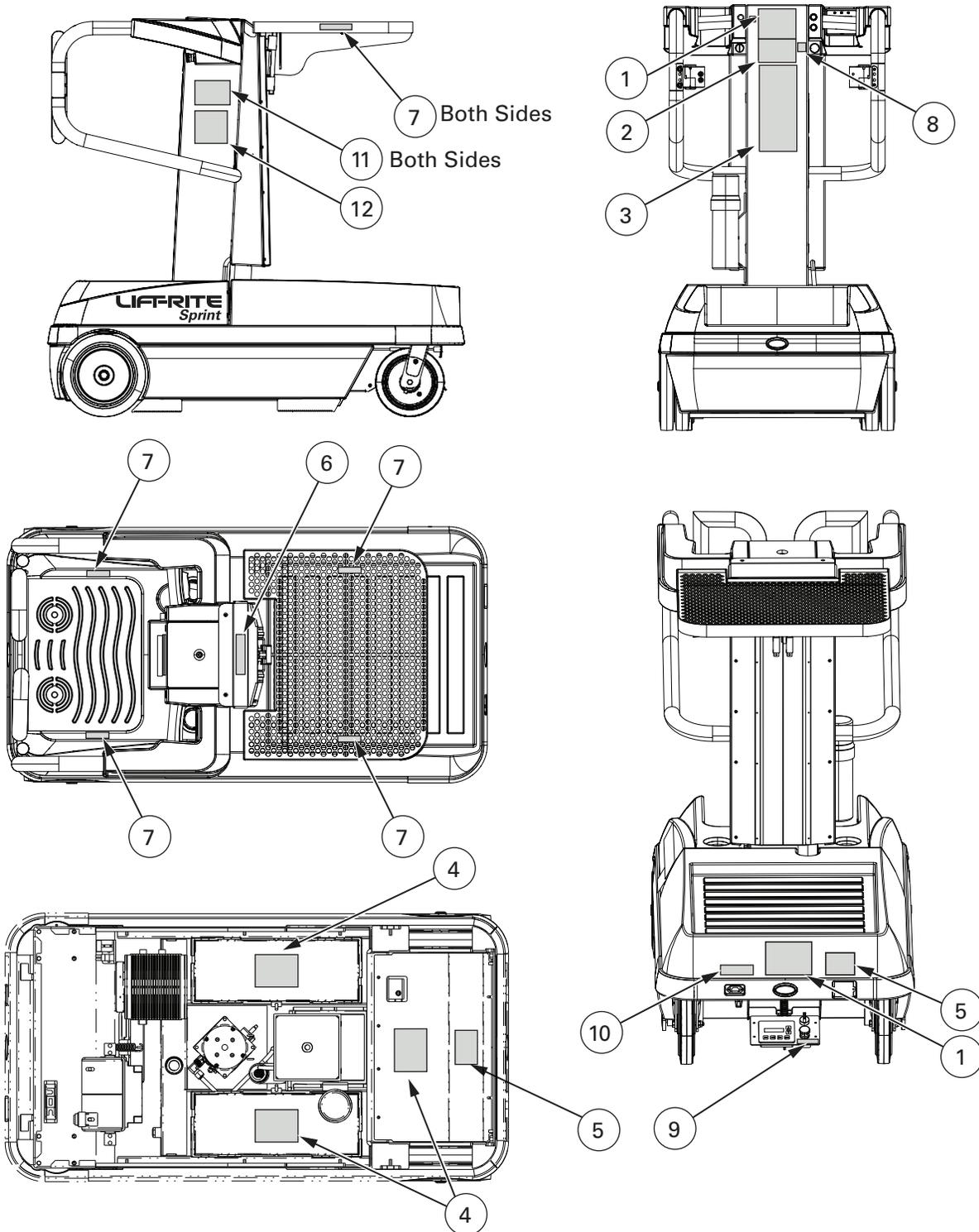
**STAY CLEAR OF ALL MOVING PARTS**

12

**NOTICE**

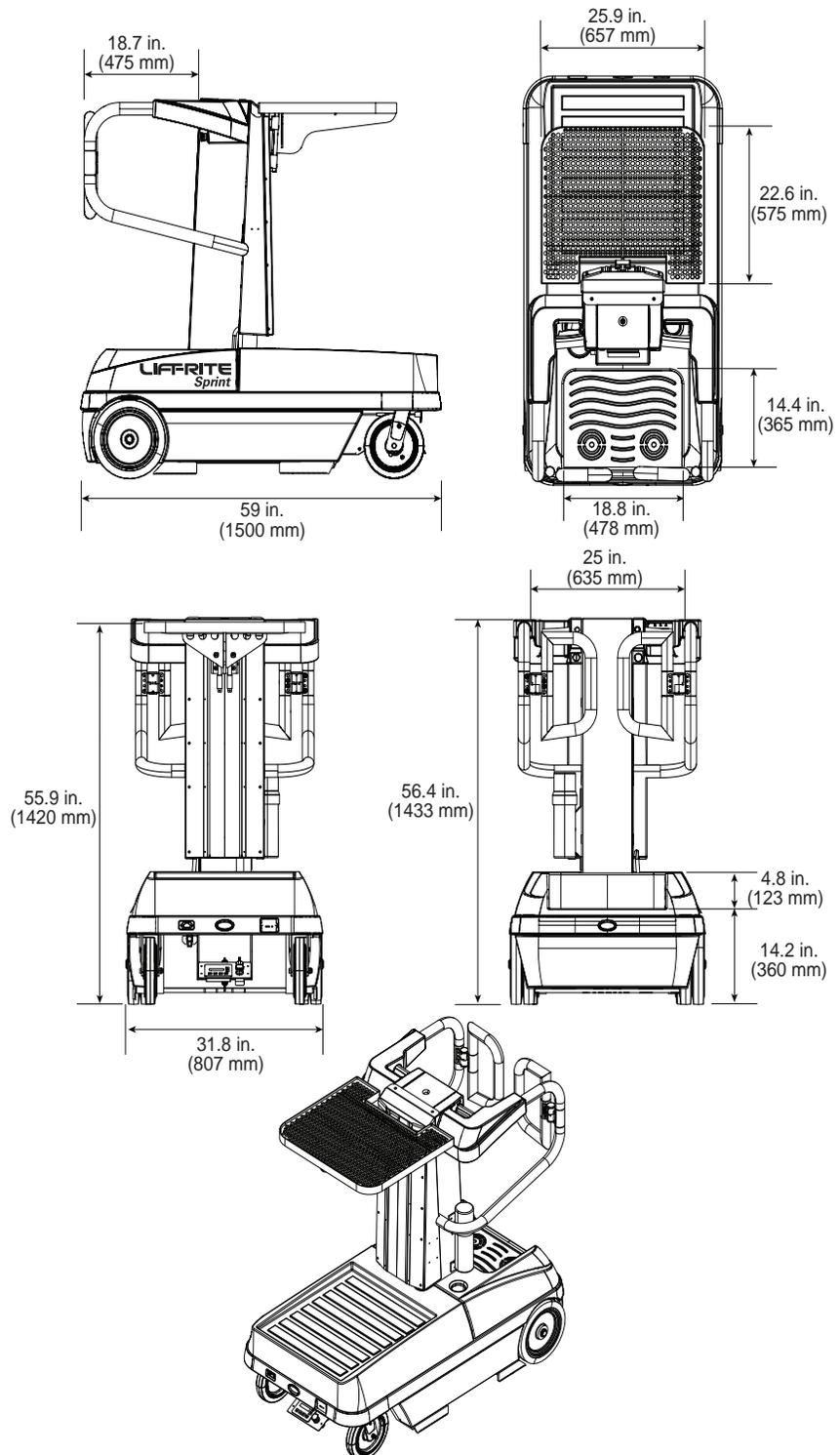
- PRIOR TO OPERATION COMPLETE A DAILY CHECKLIST.
- ARRANGE FOR INSPECTION MADE BY A QUALIFIED TECHNICIAN EVERY THREE (3) MONTHS OR 150 HOURS OF USE, WHICHEVER OCCURS FIRST.
- ARRANGE FOR ANNUAL INSPECTION MADE BY A QUALIFIED TECHNICIAN NO LATER THAN THIRTEEN (13) MONTHS OR 700 HOURS OF USE FROM THE DATE OF THE PRIOR ANNUAL INSPECTION, WHICHEVER OCCURS FIRST.
- A STRUCTURAL INSPECTION SHALL BE PERFORMED AT THE DIRECTION OF A PROFESSIONAL ENGINEER.
  - 10 YEARS AFTER THE DATE OF MANUFACTURE AND EVERY 5 YEARS THEREAFTER
  - 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
  - AFTER A CHANGE OF 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 LIFTRITE RECOMMENDATIONS SET FORTH IN THE OPERATOR'S MANUAL AND IN THE SERVICE MANUAL.

**LOCATION OF DECALS**



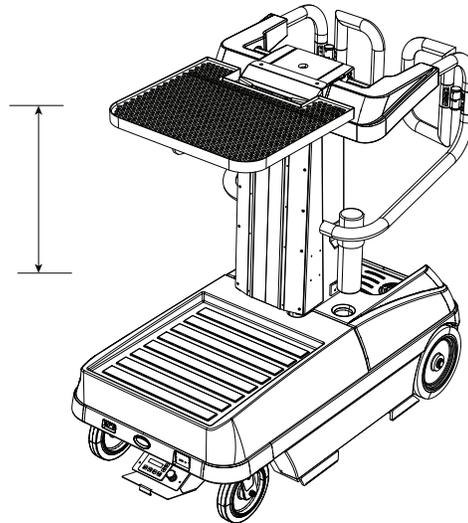
Note: View is without the operator compartment.

# PERSONNEL LIFTER DIMENSIONS



**TECHNICAL DATA**

19.7 in. (500 mm)



**TECHNICAL SPECIFICATIONS *Sprint***

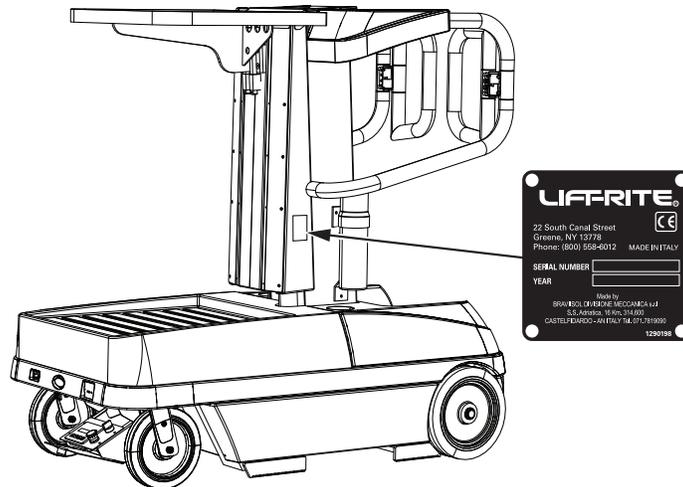
Maximum Speed (Completely Lowered with Max Operator Weight)	3.1 mph/4.99 kph
Maximum Speed (Elevated with Max Operator Weight)	0.8 mph/1.29 kph
Turning Radius	(Internal) ZERO
Platform Cycle Performance (Max Operator Weight)	Raising 22 seconds Lowering 13.5 seconds
Tires	Anti-Skid Solid Rubber
Tilt Condition Setting	1.5 Degrees
Max Wheel Load	720 lb./327 kg
<b>LOAD CAPACITIES</b>	
Operator Weight	286 lb./130 kg
Deck Load Capacity	249 lb./113 kg
Load Tray Load Capacity	198 lb./90 kg
Maximum Lateral Load	75 lb./333 N
<b>POWER SUPPLY</b>	
Batteries	N 04, 6V 245 Ah@20 hr.
Power Supply	24 V
Individual Battery Weight	66 lb./30 kg
Minimum Total Battery Weight	264 lb./120 kg
Maximum Hydraulic System Pressure	1451 psi/10,000 kPa

Charger Input Voltage	110 V AC 60Hz/220 V AC 50 Hz
Noise Level	Less than 70 dB (A)
<i>Platform Height</i> (Operator Compartment Fully Elevated)	131 in./3350 mm
Personnel Lifter Height Total (Operator Compartment Fully Elevated)	174 in./4423 mm
<i>Personnel Lifter Height Total</i> (Operator Compartment Fully Lowered)	56.4 in./1433 mm
Personnel Lifter Length (Total)	59 in./1500 mm
Personnel Lifter Width (Total)	31.8 in./807 mm
<i>Occupants:</i> (persons permitted on the platform)	1
Platform Entry Height	14.2 in./360 mm
Personnel Lifter Gross Weight (Personnel Lifter Empty)	1488 lb./675 kg

INDOOR USE ONLY

**Location of the serial numbers**

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 vary 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 near 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 inspect or initiate repair on the rear part of the unit unless the operator compartment is supported by a 4 x 4 in. (0.1 x 0.1 m) square section wood block that is between 30 and 40 in. (0.76 and 1.02 m) tall. The integrity of the wood block should be visually inspected to make sure there are no cracks, crookedness, bowing, or other compromising features.**



- Using the Service Controls, lift the operator compartment to a height that will enable wood block installation.
- Position the 4 x 4 (0.1 x 0.1 m) square section wood block between the lower frame and the operator compartment and adjacent to the mast assembly.
- Lower the operator compartment onto the wood block. Make sure that the block is secured and prevents any movement of the operator platform.
- Take caution against dislodging the wood block while performing inspection and maintenance on the personnel lifter.

## BATTERY INSPECTION AND MAINTENANCE PROCEDURE



**WARNING: Crushing Hazard: Do not inspect or initiate repair on the rear part of the unit unless the operator compartment is supported by a 4 x 4 in. (0.1 x 0.1 m) square section wood block that is between 30 and 40 in. (0.76 and 1.02 m) tall. The integrity of the wood block should be visually inspected to make sure there are no cracks, crookedness, bowing, 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.**

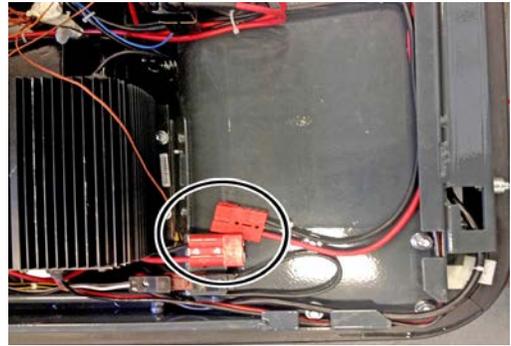


**WARNING: The battery contains sulfuric acid, which causes burns to skin and clothing. If battery acid contacts your clothing or skin, flush the area immediately with cold water. If battery acid gets in your face or eyes, flush the area with cold water immediately and get medical attention.**



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 lay tools or metal objects on top of the battery. 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.

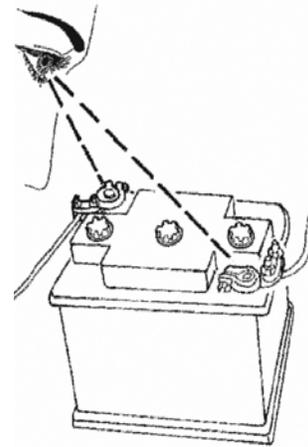
BEFORE PERFORMING ANY PROCEDURES ON THE BATTERIES, disconnect the main red connector under the front cover.



### 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, brush 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 Vaseline oil base).



### Battery Water Inspection

The inspection of the battery water level is to be performed every 4 working days or AFTER each and every battery recharge.

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 cannot lift the operator compartment, to access battery notify maintenance personnel of the problem.

**PERSONNEL LIFTER CLEANING**

As 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.

## 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.

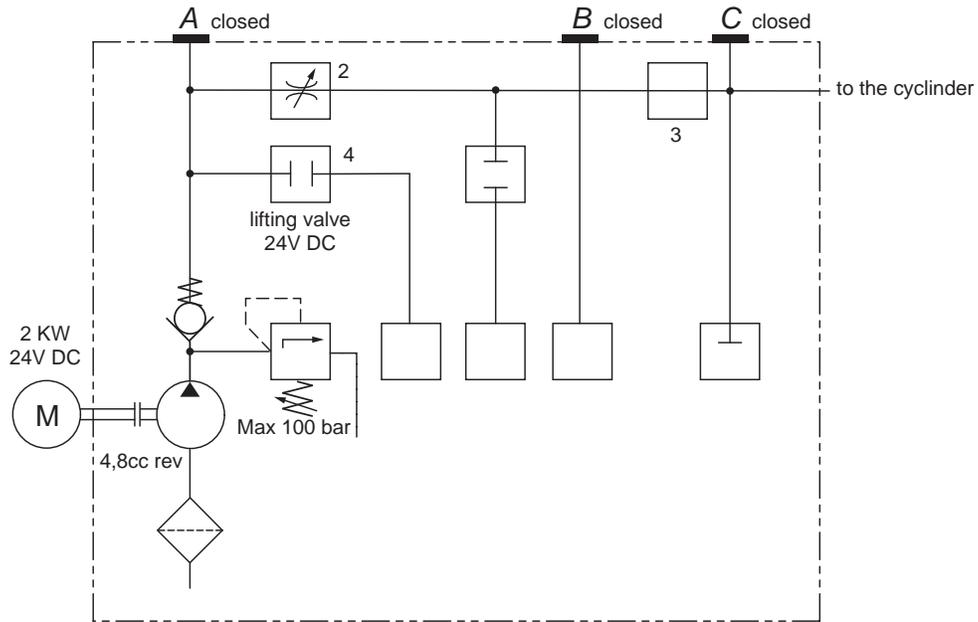
Daily Record (Perform these checks at the start of each shift)		
Model:	Serial Number:	Operator:
Shift Number:	Personnel Lifter Number:	Date:
<b>Mark Each Box OK or R/A (Repair/Adjust)</b>		

Visual Inspection: Key Switch Turned OFF ( O )		Mark
V-1	PERSONNEL LIFTER	
	• No cracks or damage in welds or frame	
	• Examine personnel lifter for loose or missing hardware	
	• Verify warning light caps are present and in good condition	
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	
V-3	LIFT/LOWER SYSTEM	
	• No loose parts	
	• 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	

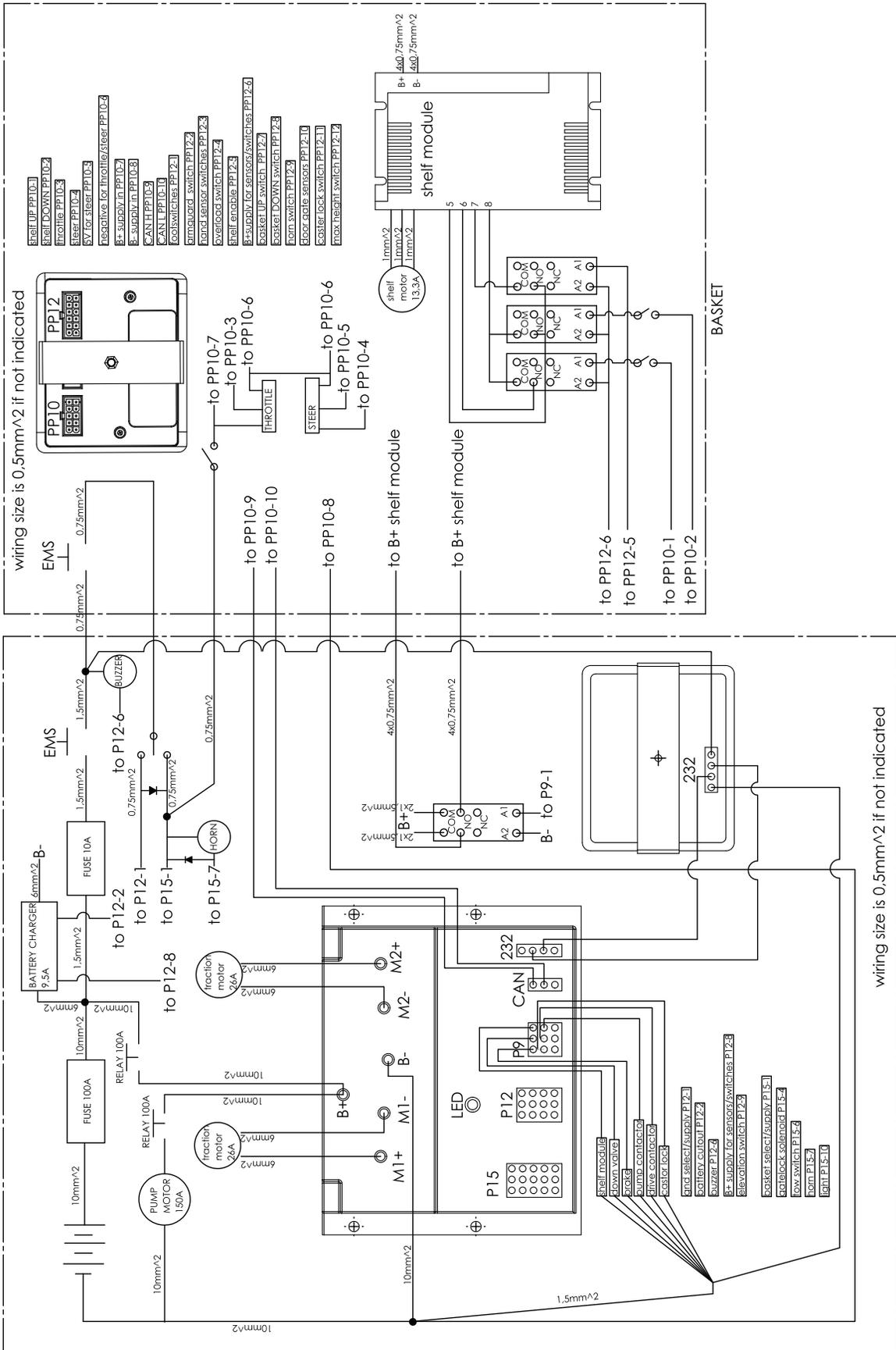
<b>Visual Inspection: Key Switch Turned OFF ( O )</b>		<b>Mark</b>
V-4	DEADMAN PEDALS	
	• Moves smoothly without binding	
	• Return to neutral when released	
V-5	THROTTLE AND STEERING CONTROL HANDLES	
	• Moves smoothly without binding	
	• Returns to neutral when released	
V-6	GUARDS, COVERS, DECALS	
	• 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 plugs, terminals, cables, and receptacles in good condition	
	• Check operator compartment and the operator compartment railings for damage or cracks	
	• Operator compartment gate shuts	
	• Check that all manuals are in the weather resistant container	
	• Check all safety and personnel protection devices function properly	
<b>Operational Inspection: Key Switch Turned ON ( I )</b>		<b>Mark</b>
O-1	BATTERY	
	• Charged	
O-2	EMERGENCY POWER OFF BUTTONS	
	• Disables Lift/Lower/travel/steering functions when pressed	
O-3	DEADMAN PEDALS	
	• Disables lift/lower/travel/steering functions when released	
O-4	SELECTOR SWITCH	
	• Check and verify correct operation	
O-5	BRAKES	
	• Check and verify correct operation	

<b>Operational Inspection: Key Switch Turned ON ( I )</b>		<b>Mark</b>
O-6	LIFT/LOWER/TRAVEL/STEERING SYSTEM	
	<ul style="list-style-type: none"> <li>• All controls perform their functions correctly and smoothly</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>	
O-7	SAFETY	
	<ul style="list-style-type: none"> <li>• Emergency lower lever operates properly</li> </ul>	
	<ul style="list-style-type: none"> <li>• All warning and working lights operate 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>	
COMMENTS:		

**HYDRAULIC SCHEMATIC**



# WIRING DIAGRAM



## 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 Dealer listed on the back of this manual.

<b>PROBLEM</b>	<b>PROCEDURE</b>
Nothing happens when the key switch is turned ON 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 display 100% on the battery gauge. The maximum value displayed depends upon the battery's type, age, and condition. Try another battery. If the same problem happens again, contact the Service Department.
Any system malfunction (no travel, lift, or lower function).	Contact the Service Department.

<b>MOST COMMON ERRORS</b>	<b>ERROR CODE</b>
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
TRIGGER FAULT	FLASH 2-4
FOOTSWITCH FAULT	FLASH 2-5
DRIVE JOYSTICK FAULT	FLASH 2-6
STEER JOYSTICK FAULT	FLASH 2-7
TILT	FLASH 2-9 WHEN ELEVATED
ELEVATION SWTICH	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 Dealer 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 Dealer 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 authorized dealer, 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®**