

snorkel

S3010E



CE

OPERATOR'S MANUAL

Serial Number S3010E-01-xxxx00445+

Part Number 514226-001-EN
October 2023

Appendix B – EC Declaration of Conformity




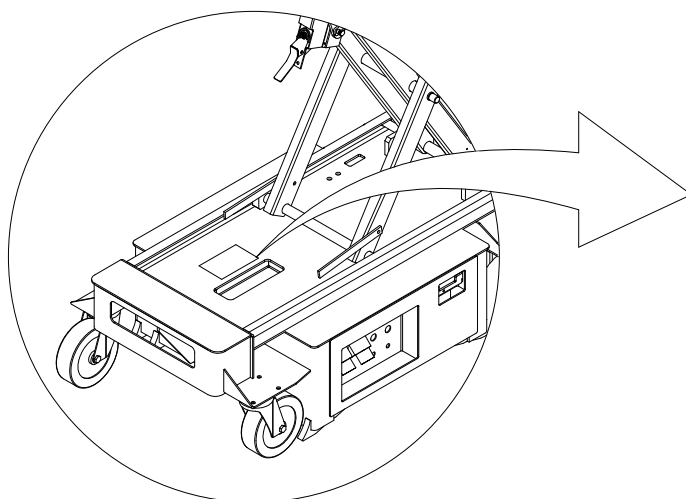
| DECLARATION OF CONFORMITY | |
|--|---|
| This declaration is issued under the sole responsibility of the manufacturer | |
| Manufacturer's Name and Full Address | Snorkel Europe Ltd Vigo Centre, Birtley Road, Washington, Tyne & Wear, NE38 9DA, UK |
| Description and Identification of the Machinery | |
| Product Description | Mobile elevating work platform |
| Model | S3010E |
| Serial Numbers | XXXXXX-__-____-____-____ (model)-(manufacturer)-(YYMM)-(5-digit sequential starting at 00001) |
| This machinery conforms to all the requirements of the Machinery Directive 2006/42/EC | |
| This machinery also conforms to the following Directives | EMC Directive 2014/30/EU |
| The following standards have been used | EN 12100: 2010, EN 280: 2013 + A1: 2015, EN 60204-1: 2018 |
| The machinery has been examined by |  Kuiper Certificering B.V. Van Slingelandtstraat 75, 7331 NM Apeldoorn, The Netherlands |
| Notified Body Number | XXXXXXXX |
| Certificate Number | XXXXXXXX |
| Name and address of the person authorised to compile the technical file (based in the European Community) | Snorkel Europe Ltd Vigo Centre, Birtley Road, Washington, Tyne & Wear, NE38 9DA, UK |
| Person authorised to make this declaration | Snorkel Europe Ltd Vigo Centre, Birtley Road, Washington, Tyne & Wear, NE38 9DA, UK |
| Name | XXXXXXXX |
| Function | Head of Engineering |
| Place of Declaration | Snorkel Europe Ltd Vigo Centre, Birtley Road, Washington, Tyne & Wear, NE38 9DA, UK |

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NOTE: When contacting SNORKEL for service or parts information, be sure to include the MODEL and SERIAL NUMBERS from the equipment nameplate. Please find the NAMEPLATE location below.



| | | | | | |
|---|-------------------------------|---|-----|--------------------------------|---------------------------------|
| snorkel | | Snorkel, Vista Centre, Birley Road, Washington, Tyne & Wear, NE31 3JA, UK | | CE | |
| MODEL NUMBER | S3010ECE | SERIAL NUMBER | | SLOPE SENSOR ALARM SETTING | |
| MONTH / YEAR OF MANUFACTURE | | | | FRONT TO JACK | 2 deg |
| NON-LOADED MACHINE WEIGHT | 495 kg | | | SIDE TO SIDE | 2 deg |
| ENGINE POWERED MODELS | N/A | | | MAXIMUM WHEEL LOAD | 250 kg |
| MAXIMUM OUTRIGGER LOAD | N/A | | | BATTERIES DRIVE POWERED MODELS | 24 V |
| MAXIMUM GRADEABILITY | 25 % | | | BATTERIES | 105 Ah |
| MAXIMUM ALLOWABLE MANUAL FORCE (SIDE PULL) | Indoors 200 lbs, Outdoors N/A | | | CHARGER INPUT | 110/240 V |
| MAXIMUM PLATFORM HEIGHT | Indoors 3 ft, Outdoors 3 m | | | MAXIMUM ALLOWABLE WIND SPEED | 0 mph / 0 m/s |
| RATED NUMBER OF OCCUPANTS | Indoors 1, Outdoors 0 | | | MAXIMUM PLATFORM REACH | N/A ft |
| | | | | MAXIMUM DRIVE HEIGHT | 3 m |
| | | | | MAXIMUM PLATFORM LOAD | 227kg = 1 Persons + 147kg Tools |
| CAUTION | | | | | |
| ONLY trained and authorized personnel may operate this machine. Consult the Operation Manual before using this machine. DO NOT make any changes to this machine, any changes made will invalidate the manufacturer's warranty and may contravene legislation. | | | | | |
| Axle weights with machine in the stowed position. | | | | | |
| STEER AXLE | | lbs | 235 | kg | |
| DRIVE AXLE | | lbs | 260 | kg | |

SAFETY RULES

⚠Warning

All personnel shall carefully read, understand and follow all safety rules and operating instructions before operating or performing maintenance on any SNORKEL aerial work platform.

Electrocution Hazard



THIS MACHINE IS NOT INSULATED!

Tip Over Hazard



NEVER elevate the platform or drive the machine while elevated unless the machine is on a firm, level surface.

Collision Hazard



NEVER position the platform without first checking for overhead obstructions or other hazards.

Fall Hazard



NEVER climb, stand, or sit on platform guardrails or midrail.

Trapping/Crushing Hazard



Beware of crushing hazard when holding handrails while the platform is moving in close proximity to other objects.

USE OF THE AERIAL WORK PLATFORM: This aerial work platform is intended to lift persons and his tools as well as the material used for the job. It is designed for repair and assembly jobs and assignments at overhead workplaces (ceilings, cranes, roof structures, buildings etc.). Uses or alterations to the aerial work platform must be approved by **SNORKEL**.

THIS AERIAL WORK PLATFORM IS NOT INSULATED! For this reason it is imperative to keep a safe distance from live parts of electrical equipment! Do not get closer than the minimum distance recommended by National Regulation.

Exceeding the specified permissible maximum load **is prohibited!** See "Platform Capacity" on page 18 for details.

The use and operation of the aerial work platform as a lifting tool or a crane **is prohibited!**

NEVER exceed the manual force allowed for this machine. See "Manual Force" on page 18 for details.

DISTRIBUTE all platform loads evenly on the platform.

NEVER operate the machine without first surveying the work area for surface hazards such as holes, drop-offs, bumps, curbs, or debris; and avoiding them.

OPERATE machine only on surfaces capable of supporting wheel loads.

NEVER operate the machine outdoors or indoors when wind speeds exceed 0 m/s (0 mph).

Do not operate the aerial platform in windy or gusty conditions. Do not add anything to or take anything into the aerial platform that will increase the wind loading such as billboards, banners, flags, etc.

IN CASE OF EMERGENCY push EMERGENCY STOP switch to deactivate all powered functions.

IF ALARM SOUNDS while platform is elevated, STOP, carefully lower platform. Move machine to a firm, level surface.

Climbing up the railing of the platform, standing on or stepping from the platform onto buildings, steel or prefab concrete structures, etc., **is prohibited!**

Dismantling the entry gate or other railing components **is prohibited!** Always make certain that the entry gate is closed!

It is prohibited to keep the entry gate in an open position when the platform is raised!

To extend the height or the range by placing of ladders, scaffolds or similar devices on the platform **is prohibited!**

NEVER perform service on machine while platform is elevated without blocking elevating assembly.

INSPECT the machine thoroughly for cracked welds, loose or missing hardware, hydraulic leaks, loose wire connections, and damaged cables or hoses before using.

VERIFY that all labels are in place and legible before using.

NEVER use a machine that is damaged, not functioning properly, or has damaged or missing labels.

To bypass any safety equipment **is prohibited** and presents a danger for the persons on the aerial work platform and in its working range.

NEVER charge batteries near sparks or open flame. Charging batteries emit explosive hydrogen gas.

Modifications to the aerial work platform **are prohibited** or permissible only at the approval by **SNORKEL**.

AFTER USE, secure the work platform from unauthorized use by turning the keyswitch off and removing key.

The driving of MEWP's on the public highway is subject to national traffic regulations.

Certain inherent risks remain in the operation of this machine despite utilizing proper design practices and safeguarding.

Care must be taken to ensure that the machines meets the requirements of stability during use, transportation, assembly, dismantling when out of service, testing, or foreseeable breakdowns.

In the event of an accident or breakdown see "Emergency Lowering" on page 12, do not operate the aerial platform if it is damaged or not functioning properly. Qualified maintenance personnel must correct the problem before putting the aerial platform back into service.

Harness attachment points are provided in the platform and the manufacturer recommends the usage of a fall restraint harness, especially where required by national safety regulations.

All harness attachment points on SNORKEL vehicles have been tested with a force of 3,650 lbs (16.3 KN) per person.

See below examples of harness attachment points used on SNORKEL vehicles with their corresponding rating;

Harness attachment point **Type 1** is rated for one lanyard attachment per loop as shown in the illustrations depending upon platform occupancy rating (see operators manual & decals).

Top View
2 lanyard attachments

Top View
1 lanyard attachment

Top View
1 lanyard attachment

Type 1. Type 1.

Harness attachment point **Type 2** is rated for two lanyard attachments per loop as shown in the illustrations depending upon platform occupancy rating (see operators manual & decals).

Top View
2 lanyard attachments

Top View
1 lanyard attachment

Type 2.

Harness attachment point **Type 3** is rated for one lanyard attachment per loop as shown in the illustrations depending upon platform occupancy rating (see operators manual & decals).

Front View
1 lanyard attachment

Type 3.

Harness attachment point **Type 4** is rated for one lanyard attachment per loop as shown in the illustrations depending upon platform occupancy rating (see operators manual & decals).

1 lanyard attachment

Type 4.

NOTE: There can be more harness attachment points per machine than the maximum number of occupants allowed in a platform. Refer to the platform decal & specifications table listed in the operators manual for the correct occupancy rating before use.

Introduction

Introduction

This manual covers the S3010E Aerial Work Platforms.

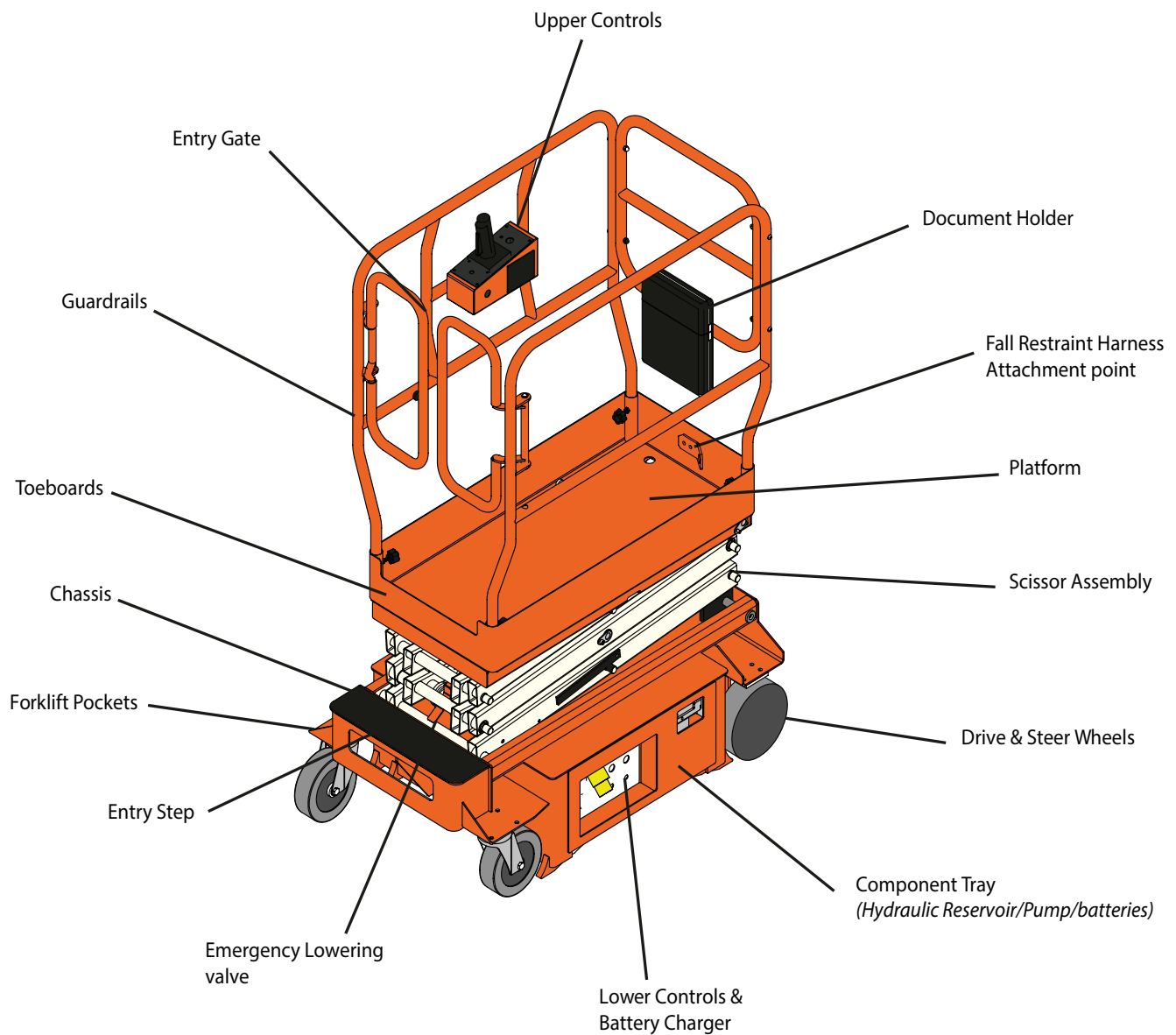
This manual must be stored on the machine at all times.

Read, understand and follow all safety rules and operating instructions before attempting to operate the machine.

When contacting SNORKEL for service or parts information,

be sure to include the MODEL and SERIAL NUMBERS from the equipment nameplate. Should the nameplate be missing, the SERIAL NUMBER is also stamped on the front of the chassis.

Component Identification



Special Limitations

Travel with the platform raised is limited to creep speed range. Elevating the platform is limited to firm, level surfaces only.

Danger

The elevating function shall **ONLY** be used when the work platform is level and on a firm surface.

The work platform is **NOT** intended to be driven over uneven, rough, or soft terrain.

Platform Capacity

One person and tools may occupy the platform when the machine is indoors only. The maximum platform capacity for the aerial platform is stated in the "Specifications" on page 18.

Danger

DO NOT exceed the maximum platform capacity or the platform occupancy limits for this machine.

Manual Force

Manual force is the force applied by the occupants to objects such as walls or other structures outside the work platform.

In zero wind conditions the maximum allowable manual force is limited to 200 N (45 lb).

Danger

DO NOT exceed the maximum amount of manual force for this machine.

Drive/Lift Level Sensor Interlock

The aerial platform drive and lift functions are interlocked through a level sensor system. The drive/lift level sensor interlock operates when the platform is elevated approximately 1.5 m (5').

If the chassis is tilted more than 2 degrees side-to-side or more than 2 degrees front-to-rear while the platform is elevated, the drive and lift functions will not operate and an alarm will sound.

Lower the platform and drive to a level surface when the drive/lift level sensor alarm sounds.

The drive/lift level sensor system is for added protection and does not justify operating on anything other than firm, flat, level surfaces.

Lowering Alarm

When the joystick is moved out of neutral to lower the platform, the alarm emits a loud beeping sound to warn personnel in the work area to stand clear.

Danger

Pinch points exist on the scissors structure. Death or serious injury will result if the scissors structure lowers onto personnel within the scissors arms or under the raised platform. Stand clear while raising and lowering the platform.

Be careful when lowering the platform. Keep hands and fingers away from the scissors structures components.

Lowering Interrupt

When the platform is lowered to about 1.5 m (5') lowering stops. The platform will not lower for three seconds regardless of the control position to allow personnel to clear the area of the scissors before the platform completely lowers.

Center the control in neutral to reset the lowering function, then continue to lower the platform.

Danger

The aerial platform can tip over if it becomes unstable. Death or serious injury will result from a tip-over accident. Do not exceed the capacity values indicated on the platform rating placard.

Controls and Indicators

The operator shall know the location of each control and indicator and have a thorough knowledge of the function and operation of each before attempting to operate the machine.

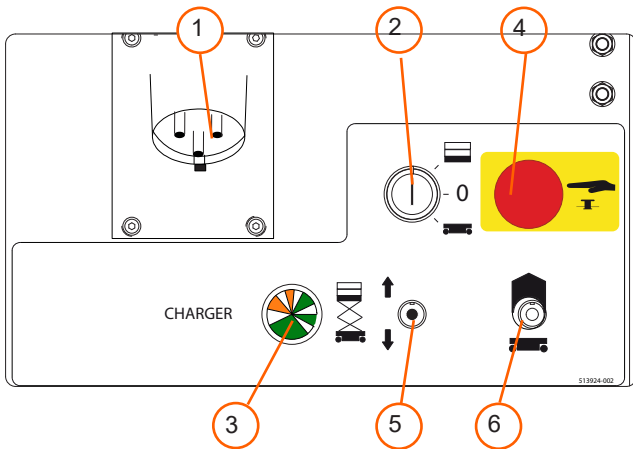


Figure 1 – Lower Controls and Indicators

1. Battery charging point
2. Control selector switch
3. Battery Charge indicator
4. Emergency stop button
5. Platform raise/lower switch
6. Ground Operation switch



Figure 2 – Upper Controls and Indicators

7. Drive/lift selector switch
8. Enable trigger (Front of Joystick)
9. Joystick
10. Low battery indicator
11. Horn button
12. Emergency stop button

⚠ Danger

Pinch points may exist between moving components. Death or serious injury will result from becoming trapped between components, buildings, structures, or other obstacles. Make sure all personnel stand clear while operating the aerial platform.

- Controls to position the platform are located on the lower control panel on the chassis and on the upper control panel in the platform.
- Controls to drive the aerial platform are located on the upper control panel only.

Lower Controls

The lower controls (refer to Figure 1) are located on the left side of the chassis. Only platform functions can be operated from the lower controls.

The following are located on the lower control panel:

- Emergency stop button
- Control selector switch
- Ground operation switch
- Platform raise/lower switch

Emergency Stop Button

The emergency stop is a two-position red push button.

- Push the button inward to disconnect power to all control circuits.
- Pull the button outward to restore power.

Control Selector Switch

Insert the key into the control selector switch.

- Turn the switch to the lower controls position to operate aerial platform functions from the lower controls. The upper controls will not operate while the control selector is in the lower position.
- Turn the switch to the upper controls position to operate the aerial platform functions from the upper controls.
- In the center position, aerial platform functions will not operate from the lower or upper controls.

Ground Operation Switch

The ground operation switch prevents platform movement if the platform raise/lower switch is accidentally moved. This switch is spring returned to the off position.

Hold the ground operation switch upward continually to operate the machine from the lower controls.

Platform Raise/Lower Switch

The platform raise/lower switch is used to raise or lower the platform. The switch is spring returned to the center off position.

- Hold the switch upward to raise the platform.
- Hold the switch downward to lower the platform.
- An alarm will sound as the platform lowers.

Upper Controls

The upper controls (refer to Figure 2) are located on the control panel at the platform. Platform and drive functions can be operated from the upper controls.

 Warning

The potential for an accident increases from improperly driving or steering the aerial platform. Death or serious injury could result from such accidents.

The following controls are located on the upper control panel:

- Emergency stop button
- Drive/lift selector switch
- Joystick to control platform lift, drive, and steer
- Horn button
- Enable Trigger

Emergency Stop Button

The emergency stop is a two-position, red push button on the front of the upper control panel.

- Push the button inward to disconnect power from all control circuits at the upper controls.
- Twist the button clockwise to restore power.

Push the button in when the upper controls are not in use to help protect against unintentional platform operation.

Drive/Lift Selector Switch

The drive/lift selector switch is used to select either machine drive or lift functions. Both functions can not be operated at the same time.

- Place the drive/lift selector switch in the drive position to drive the aerial platform using the joystick. The platform will not raise or lower while driving.
- Place the drive/lift selector switch in the lift position to raise and lower the platform using the joystick.

Joystick

Use the joystick to operate the following functions:

- Aerial platform steering
- Aerial platform drive and speed
- Platform raise/lower and speed

Movement of the joystick in a given direction produces a corresponding movement of the aerial platform. The steering and drive functions may be operated separately or simultaneously.

Horn Button

The horn button is on the top of the upper control panel.

Press the button to sound the horn.

Enable Trigger

The trigger prevents accidental operation of the machine from the upper controls and must be held in to operate the machine.

Pre-Operation Safety Inspection

Note

Carefully read, understand and follow all safety rules, operating instructions, labels and National Safety Instructions/Requirements. Perform the following steps each day before use.

1. Open the tray and inspect for damage, fluid leaks or missing parts.
2. Check the level of the hydraulic fluid with the platform fully lowered. The fluid level must be within the minimum and maximum level indicated on the dipstick which can be found on the bottom of the filling cap. Add recommended hydraulic fluid if necessary. See "Specifications" on page 18.
3. Check that the fluid level in the batteries is correct. See "Battery Maintenance" on page 15.

Note

Machines can also be supplied with maintenance free batteries, fluid check will not be necessary on this type of battery.

4. Verify that the batteries are charged.
5. Check that the AC extension cord has been disconnected from the outlet on the side of the chassis.
6. Check that all guardrails are in place and all fasteners are properly tightened.
7. Inspect the machine thoroughly for cracked welds and structural damage, loose or missing hardware, hydraulic leaks, damaged control cable and loose wire connections.

System Function Inspection

Refer to “Controls and Indicators” on page 6 for the locations of various controls and indicators.

Warning

STAND CLEAR of the work platform while performing the following checks.

Before operating the machine, survey the work area for surface hazards such as holes, drop-offs, bumps and debris.

Check in ALL directions, including above the work platform, for obstructions and electrical conductors.

1. Move the machine, if necessary, to an unobstructed area to allow for full elevation.
2. Pull the Lower Control Emergency Stop Switch to the ON position.
3. Turn the Upper Control Emergency Stop Switch clockwise to the ON position.
4. Visually inspect the scissors structure, lift cylinder, and hoses for cracked welds and structural damage, loose hardware, hydraulic leaks, loose wire connections, and erratic operation. Check for missing or loose parts.
5. Hold the ground operation switch upward. Test each machine function from the lower control station (refer to Figure 1).
6. Test the emergency lowering system for proper operation.
7. Push the Lower Control Emergency Stop Button to check for proper operation. All machine functions should be disabled. Pull the Lower Control Emergency Stop Button outward to resume.
8. Enter the platform and close the gate.
9. Check that the route is clear of obstacles (persons, obstructions, debris), is level, and is capable of supporting the wheel loads.
10. Test each machine function from the upper control station by engaging the interlock and operating the function controls (refer to Figure 2).
11. Push the Upper Control Emergency Stop Button to check for proper operation. All platform control functions should be disabled. Turn the Upper Control Emergency Stop Button clockwise to resume.

Operation

The aerial platform may be operated from either the lower or upper controls.

Danger

The aerial platform is not electrically insulated. Death or serious injury will result from contact with, or inadequate clearance from, an energized conductor. Do not go closer than the minimum safe approach distance as defined by national safety regulations.

Pinch points may exist between moving components. Death or serious injury will result from becoming trapped between components, buildings, structures, or other obstacles. Make sure there is sufficient clearance around the machine before moving the chassis or platform. Allow sufficient room and time to stop movement to avoid contact with structures or other hazards.

The aerial platform can tip over if it becomes unstable. Death or serious injury will result from a tip-over accident. Operate the aerial platform on a firm, flat, level surface. Avoid travel speeds and/or rough terrain that could cause sudden changes in platform position. Do not drive or position the aerial platform for elevated use near any drop-off, hole, slope, soft or uneven ground, or other tip-over hazard. Do not raise the platform in wind speeds above 0 m/s (0 mph).

The platform rated work load is the total weight of the personnel and equipment that may be lifted in the platform.

The work loads are stated on the platform rating placard at the entrance to the platform and page 18 of this manual.

Danger

The aerial platform can tip over if it becomes unstable. Death or serious injury will result from a tip-over accident. Do not exceed the capacity values indicated on the platform rating placard.

Capacity values indicate the rated lifting capacity and do not indicate aerial platform stability.

The operator bears ultimate responsibility for ensuring that the aerial platform is properly set up for the particular conditions encountered.

Preparing for Operation

Use the following procedure to prepare the aerial platform for operation:

1. Perform a pre-operation safety and system function inspection.
2. Close and latch the component tray.

Lower Controls

Only the platform raise and lower functions may be operated from the lower controls. The lower controls may be used for initial set up of the aerial platform, and for testing and inspection.

Use the following procedure to raise or lower the platform using the lower controls.

1. Pull the emergency stop button outward (refer to Figure 1).
2. Insert the key into the control selector switch and turn the switch to the lower controls position.
3. Hold the ground operation switch upward. Hold the platform raise/lower toggle switch up to raise the platform and down to lower it.
4. Release the toggle switch to stop movement.

Upper Controls

The upper controls may be used for driving and positioning the aerial platform while on the job.

Before operating the upper controls, properly set up the aerial platform as described under Preparing for Operation.

Warning

The potential for an accident increases from improperly driving or steering the aerial platform. Death or serious injury could result from such accidents. Make sure the upper control panel is facing the front of the platform, attached to the guardrail, and inside the platform rails.

Use the following procedure to operate the aerial platform from the upper controls:

1. From the lower controls, pull the emergency stop button outward (refer to Figure 1).
2. Insert the key into the control selector switch and turn the switch to the upper controls position.

Note

The upper controls will not operate while the control selector is in the lower position.

3. Enter the platform and secure the gate.
4. From the upper controls, turn the emergency stop button clockwise to the on position (refer to Figure 2).
5. The aerial platform may be driven and the platform may be raised and lowered from the upper controls.

Platform

Use care when entering and exiting the platform to avoid slipping and/or falling. Securely close the safety gate when the platform is occupied.

Raising and Lowering

The raise speed is proportional to the joystick position. The further the joystick is moved, the faster the platform raises. There is only one lowering speed.

1. Place the drive/lift selector switch (refer to Figure 2) in the lift position.
2. Squeeze the trigger on the joystick.
 - To raise the platform, slowly push the joystick forward until the desired height is reached.
 - To lower the platform, pull the joystick backward.

Lowering Interrupt

When the platform is lowered to about 1.5 m (5') lowering stops. The platform will not lower for three seconds regardless of the joystick position.

Center the joystick in neutral to reset the lowering function, then continue to lower the platform.

Danger

The aerial platform can tip over if it becomes unstable. Death or serious injury will result from a tip-over accident. Do not exceed the capacity values indicated on the platform rating placard.

Driving and Steering

Danger

The aerial platform can tip over if it becomes unstable. Death or serious injury will result from a tip-over accident. Do not drive an elevated aerial platform on soft, uneven, or sloping surfaces. Do not drive on grades that exceed 0 percent.

Warning

Death or serious injury could result from improperly driving or steering the aerial platform. Read and understand the information in this manual and on the placards and decals on the machine before operating the aerial platform on the job.

Use the following procedure to operate the drive and steer functions.

1. Place the drive/lift selector switch (refer to Figure 2) in the drive position.
2. Squeeze the trigger on the joystick.
3. Push the drive joystick forward to move the chassis forward. Pull the joystick backward to move the chassis backward. The drive speed is proportional to the joystick position.
4. To stop drive motion, return the joystick to neutral.

Note

To make an emergency stop push the emergency stop button inward to apply the parking brakes.

5. To steer to the right, hold the joystick to the right. To steer to the left, hold the joystick to the left.

Operation

Drive Speeds

The drive speed is proportional to the joystick position. The further the joystick is moved, the faster the travel speed.

Always slow down before traveling over rough terrain or surfaces.

Drive speed ranges are interlocked through limit switches that sense the platform position.

- When the platform is elevated below approximately 1.5 m (5') the aerial platform may be driven within the full range of drive speeds.
- When the platform is elevated above 1.5 m (5') only the slowest drive speed will work.

⚠Warning

The potential for an accident increases when safety devices do not function properly. Death or serious injury could result from such accidents. Do not alter, disable, or override any safety device.

Do not use the aerial platform if it drives faster than 0.6 km/h (0.4 mph), which is 5.3 m (7' 7") in 30 seconds, when elevated above 1.5 m (5').

Drive/Lift Level Sensor Interlock

When the platform is elevated above 1.5 m (5'), lift and drive functions are interlocked through a level sensor system. If the chassis is tilted more than 2 degrees side-to-side or front-to-rear, platform raise and drive functions are disabled and an alarm sounds when those controls are activated.

If the drive/lift level sensor interlock shuts off the platform raise and drive functions, lower the platform and drive to a level surface.

Component Tray

Batteries and hydraulic components are enclosed in the component tray on the left side of the chassis.

⚠Danger

The aerial platform can tip over if it becomes unstable. Death or serious injury can result from a tip-over accident. Do not open the tray when the platform is raised more than 2.4 m (8').

To open the tray, lift up on the latch and pull the tray open.

Emergency Lowering

Use the following procedure to operate the emergency lowering system.

⚠Warning

The potential for an accident increases when safety devices do not function properly. Death or serious injury can result from such accidents. Immediately push the emergency stop button inward to disable the control system before using the emergency lowering system in the event of an emergency.

1. Immediately push the emergency stop button inward to disable the control system in the event of an emergency.
2. Make sure there is nothing in the way to obstruct the platform when it lowers.
 - Push downward on the lever to lower the platform (refer to Figure 3).
3. Make certain the lever/handle is fully released and the emergency lowering valve is fully closed before operating the aerial platform.

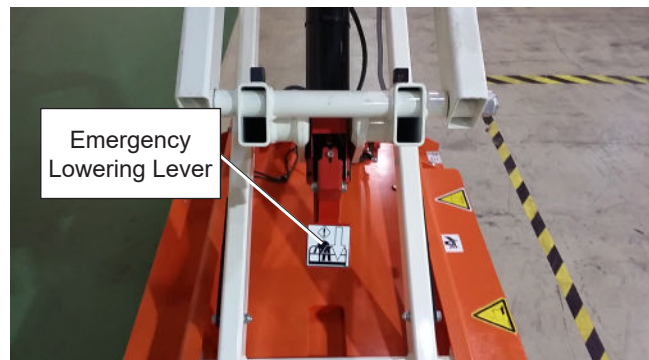


Figure 3 – Emergency Lowering Control

Transporting the Machine

Preparing for Transportation

Use the following procedure to prepare the aerial platform for transportation.

1. Remove any unnecessary tools, materials, or other loose objects from the platform.
2. Close and latch the component tray.

Transporting

The aerial platform may be moved on a transport vehicle. Depending on the particular situation, the aerial platform may be lifted with a forklift, driven, winched, or hoisted onto a vehicle such as a truck or trailer. Lifting with a forklift is the preferred method.

The equipment used to load, unload, and transport the aerial platform must have adequate capacity. The empty vehicle weight is listed in "Specifications" on page 18 and is stamped on the serial number placard.

The user assumes all responsibility for:

- Choosing the proper method of transportation.
- Choosing the proper selection and use of transportation and tie-down devices.
- Making sure the equipment used is capable of supporting the weight of the aerial platform.
- Making sure all manufacturer's instructions and warnings, regulations and safety rules of their employer, the DOT, and/or any other state or federal law are followed.

Lifting With a Forklift

Use the following procedure to lift the aerial platform with a forklift.

1. Properly stow the aerial platform.
2. Remove all personnel, tools, materials, or other loose objects from the platform.
3. Insert the forklift forks into the pockets on the side of the machine.

Caution

Lifting the aerial platform with the forklift forks positioned improperly can produce enough force to damage machine components. When lifting the machine with a forklift, only use the designated lift points.

4. Do not raise the aerial platform higher than necessary to transport it. Drive the forklift slowly and carefully when transporting the aerial platform.

Winching

Use a winch to load and unload the aerial platform on ramps that exceed the machine gradeability specification. A winch may also be used when poor traction, uneven surfaces, or stepped ramp transition make driving hazardous.

Use the following procedure to winch the aerial platform onto the transport vehicle.

1. Position the transport vehicle so the aerial platform will not roll forward after it is loaded.
 2. Remove any unnecessary tools, materials, or other loose objects from the platform.
 3. Drive the machine to the foot of the loading ramp with the front wheels nearest the ramp. Make sure the machine is centered with the ramps and that the wheels are straight.
 4. Properly stow the aerial platform.
 5. Chock the wheels to prevent uncontrolled motion of the aerial platform.
 6. Insert the winch line through the fork lift points on the front of the chassis.
- Note: this machine is not fitted with a brake release, to release the wheels while winching the machine needs to be fully operational with the joystick in the forward position.*
7. From the lower controls, pull the emergency stop button outward.
 8. Place the Control Selector Switch upward in the upper controls position.

Note

The upper controls will not operate while the control selector is in the lower position.

9. Enter the platform and close the gate.
10. From the upper controls, pull the emergency stop button outward.
11. Remove the wheel chocks and use the joystick and winch together to position the aerial platform on the transport vehicle.

Warning

Damage to the aerial platform and/or drive system may occur if the joystick is not held in the forward position while the winching process is being carried out .

Driving

Danger

The aerial platform can tip over if it becomes unstable. Death or serious injury will result from a tip-over accident. Do not drive on ramps that exceed 25 percent grade, or where conditions of the ramp could cause driving to be hazardous.

Drive the aerial platform onto the transport vehicle if a winch is not available and the ramp incline is within the grade capability of the aerial platform.

Use the following procedure to drive the aerial platform onto the transport vehicle.

1. Position the transport vehicle so the aerial platform will not roll forward after it is loaded.
2. Chock the vehicle wheels so it cannot roll away from the ramp while the aerial platform is loaded.
3. Remove any unnecessary tools, materials, or other loose objects from the platform.
4. Fully lower the platform.
5. Drive the aerial platform to the foot of the loading ramp with the front wheels nearest the ramp. Make sure the aerial platform is centered with the ramps and that the steering wheels are straight.
6. Drive the aerial platform on or off the transport vehicle in a straight line through the grade transitions with minimal turning.

Hoisting

Use suitable straps through the fork lift channels and a suitable fixture to keep the straps clear of the guardrails when hoisting the aerial platform. Machine damage can occur if the sling is attached anywhere else.

Warning

The potential for an accident increases when the aerial platform is lifted using improper equipment and/or lifting techniques. Death or serious injury could result from such accidents. Use proper equipment and lifting techniques when lifting the aerial platform.

Know the weight of the aerial platform and the capacity of the lifting devices before hoisting.

- Lifting devices include the hoist or crane, chains, straps, cables, hooks, sheaves, shackles, slings, and other hardware used to support the machine.
- The empty vehicle weight is stamped on the serial number placard and is listed in the machine specifications on page 18.

The user assumes all responsibility for:

- Making sure the equipment used is capable of supporting the weight of the aerial platform.
- Making sure all manufacturer's instructions and warnings, regulations and safety rules of their employer and/or any state or federal law are followed.

Maintenance

⚠Warning

Always block the elevating assembly whenever it is necessary to perform maintenance while the platform is elevated.

Hydraulic Fluid

The hydraulic fluid reservoir is located in the component tray. Refer to Figure 4.

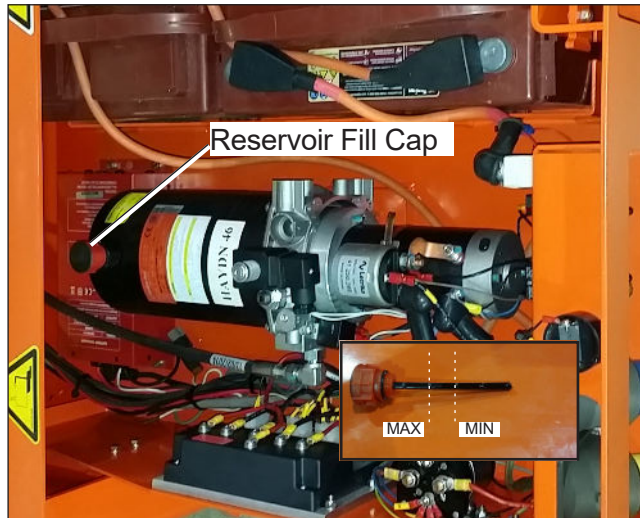


Figure 4 – Component Tray

Note

Never add fluid if the platform is elevated.

Check Hydraulic Fluid

1. Make sure that the platform is fully lowered.
2. Visually check that the fluid level is within the minimum and maximum levels indicated on the dipstick located on the bottom of the filler cap.
3. If necessary, add fluid of the proper type. Replace the cap making sure it is tightly in place. Refer to "Specifications" page 18.

Battery Maintenance

⚠Warning

Hazard of explosive gas mixture. Keep sparks, flame, and smoking material away from batteries.

Always wear safety glasses when working near batteries.

Battery fluid is highly corrosive. Thoroughly rinse away any spilled fluid with clean water.

Always replace batteries with manufacturer approved replacements.

- Check the battery fluid level daily, especially if the machine is being used in a warm, dry climate.

- If electrolyte level is lower than 6 mm ($\frac{1}{4}$ ") above the plates add distilled water only. DO NOT use tap water with high mineral content, as it will shorten battery life.
- Keep the terminals and tops of the batteries clean.
- Refer to the Service Manual to extend battery life and for complete service instructions.

Note

Battery type may vary on machines, some batteries supplied in machines may be "Maintenance Free" and will not require fluid level inspection.

⚠Warning

Always use manufacturer approved replacement parts.

Battery Charging

Charge the batteries at the end of each work shift or sooner if the batteries have been discharged.

⚠Warning

Charge the batteries in a well ventilated area.

Do not charge the batteries when the machine is near a source of sparks or flames.

Permanent damage to the batteries will result if the batteries are not immediately recharged after discharging.

Never disconnect the cables from the batteries when the charger is operating.

Keep the charger dry.

1. At the lower controls, turn the control selector switch to the off position.
2. Open the component tray to access the batteries. Remove the caps from each battery.
3. Visually check the battery fluid level making sure the level is within 6 mm ($\frac{1}{4}$ ") of the bottom of the filler neck inside each hole. If needed, add distilled water.

Note

Battery type may vary on machines, some batteries supplied in machines may be "Maintenance Free" and will not require fluid level inspection.

4. Tightly replace the caps on each battery and replace and latch the battery tray covers.
5. Plug the battery charger into a properly grounded outlet (100-240 volt AC, 50/60 Hz) using a 3 conductor, 1.5 mm (12 gauge) or larger extension cord. The extension cord must be as short as possible and in good electrical condition.

Inspection and Maintenance Schedule

Note

The aerial platform will not operate while the battery charger is plugged in.

6. Visually inspect the battery charge indicator for proper charging rate. The LED's are visible on the battery tray. Refer to Figure 5.

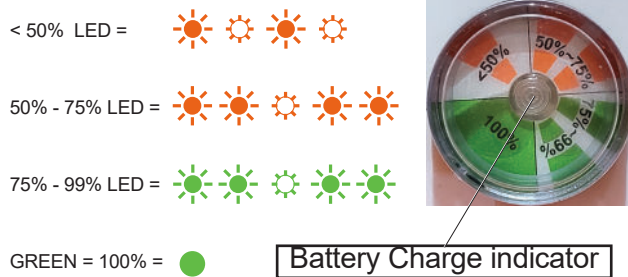


Figure 5 – Battery Charge Indicator

7. Once the Battery is charged, unplug the charger.

Note

If the charging cycle exceeds 16 hours without the batteries being fully recharged, unplug the charger and have the batteries checked.

8. After the battery is fully charged, it is necessary to unplug the charger. This will prevent the batteries from overcharging and optimise the service life of the battery.
9. Slide the component tray open to access the batteries. Remove the caps from each battery.
10. Visually check the battery fluid level making sure the level is within 6 mm (¼") of the bottom of the filler neck inside each hole. If needed, add distilled water.
11. Tightly replace the caps on each battery and close and latch the component tray.

Note

Battery type may vary on machines, some batteries supplied in machines may be "Maintenance Free" and will not require fluid level inspection.

Inspection and Maintenance Schedule

Caution

Frequency and extent of periodic examinations may depend on national regulations.

The Complete Inspection consists of periodic visual and operational checks, along with periodic minor adjustments that assure proper performance. Daily inspection will prevent abnormal wear and prolong the life of all systems. The inspection and maintenance schedule should be performed at the specified intervals and after prolonged periods of storage before returning the machine to service. Inspection and maintenance shall be performed by personnel who are trained and familiar with mechanical and electrical procedures.

Warning

Before performing preventative maintenance, familiarize yourself with the operation of the machine. Always block the scissors structure whenever it is necessary to perform maintenance while the platform is elevated.

The daily preventative maintenance checklist has been designed for machine service and maintenance. Please photocopy the Daily Preventative Maintenance Checklist and use the checklist when inspecting the machine.

Daily Preventative Maintenance Checklist

Preventative Maintenance Report

Date: _____

Serial No: _____

Owner: _____

Serviced By: _____

Model No: _____

| Item | Inspect For | Y | N | R |
|-------------------------------------|---|----------|----------|----------|
| Operator's Manual | In manual holder, all pages readable and intact | | | |
| Electrical System | | | | |
| Battery fluid level | Proper level | | | |
| Battery terminals | Clean, connectors tight | | | |
| Battery charger | Proper operation | | | |
| Cables and wiring harness | No wear or physical damage | | | |
| Hydraulic System | | | | |
| Fluid level | Between full and add marks with platform stowed | | | |
| Hoses, tubes and fittings | No leaks, all fittings tight | | | |
| Tires and Wheels | Good condition | | | |
| Lower Control Station | | | | |
| Operating controls | Proper operation | | | |
| Emergency stop | Shuts off lower controls/proper operation | | | |
| Lowering alarm and interrupt | Sounds when platform lowers/proper operation | | | |
| Emergency Lowering | Proper operation | | | |
| Safety Prop | No damage or deformation | | | |
| Flashing Light | Proper operation | | | |
| Structures | | | | |
| Weldments – Chassis, platform, etc. | Welds intact, no damage or deformation or corrosion. | | | |
| Slide blocks | In place, no damage or deformation | | | |
| Fasteners | In place, tight, and no damage | | | |
| Scissor and Cylinder Pins | Securely in place, no damage or corrosion. | | | |
| Upper Control Station | | | | |
| Guardrail system | Welds intact, no damage or deformation or corrosion. All fasteners in place, no loose or missing parts | | | |
| Brakes | Proper operation | | | |
| Operating controls | Proper operation | | | |
| Emergency stop | Shuts off upper controls | | | |
| Lowering alarm and interrupt | Sounds when platform lowers/proper operation | | | |
| Horn | Sounds when activated | | | |
| Placards and Decals | In place and readable | | | |

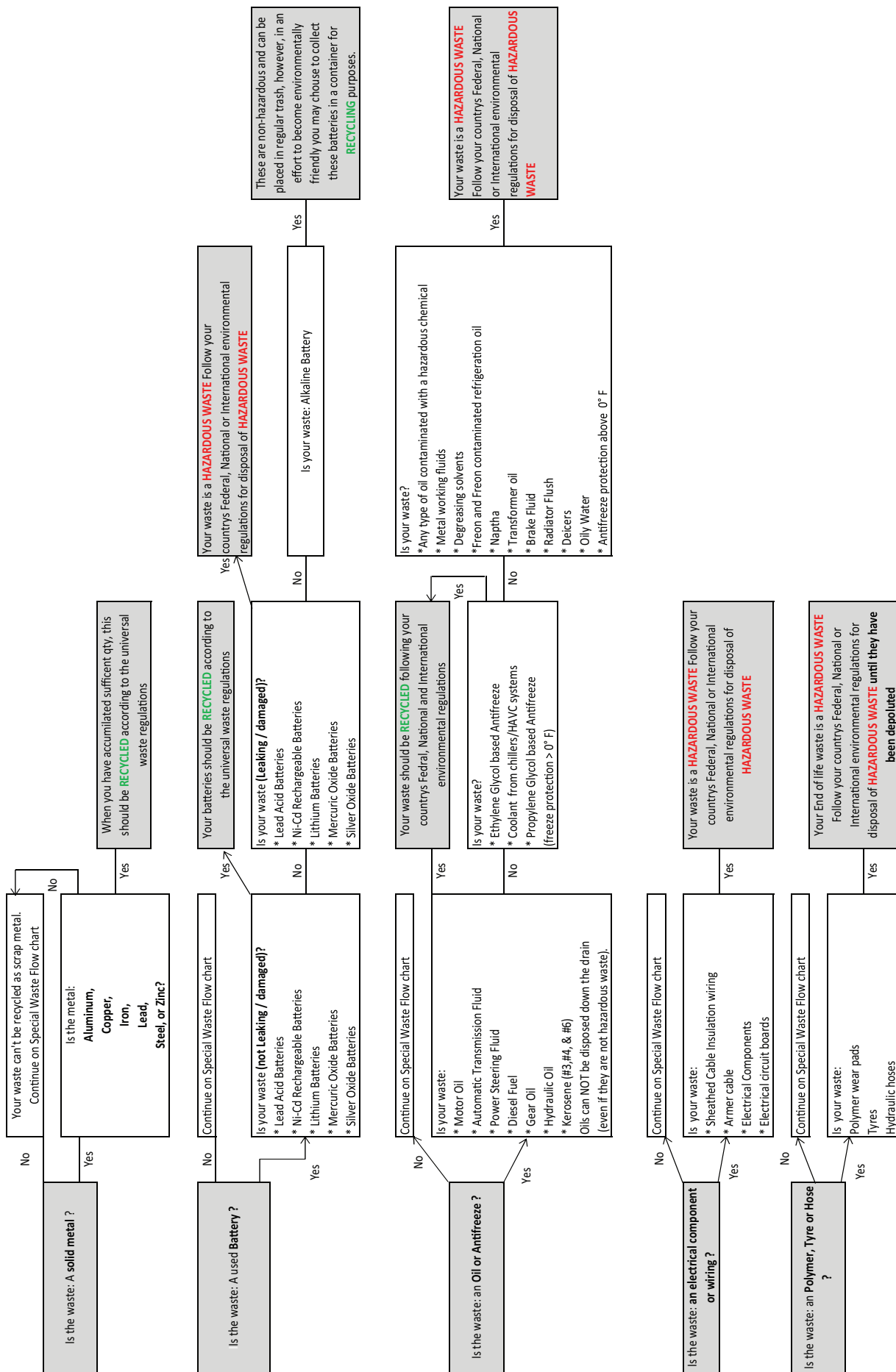
Maintenance Table Key: Y = Yes/Acceptable, N = No/Not Acceptable, R = Repaired/Acceptable

Specifications

| | |
|--|-----------------------------------|
| General Specifications – S3010E | |
| Aerial Platform | |
| Working height | 5 m (16.5') |
| Maximum platform height | 3.0 m (10') |
| Turning radius | |
| Inside | 0 cm (0") |
| Outside | 1.45 m (4' 9") |
| Wheelbase | 1 m (39") |
| Ground clearance | 6 cm (2.4") |
| Maximum wheel load | 250 kg (551 lbs) |
| Maximum ground pressure | 11.4 kg/cm ² (160 psi) |
| Weight EVW Approximate | 495 kg (1,091 lbs) |
| Stowed width | 77 cm (30") |
| Stowed length | 1.26 m (48.5") |
| Stowed height | 1.82 m (5' 11") |
| Platform | |
| Dimensions | |
| Main | 45 cm x 102 cm (17.7" x 40") |
| Guardrail height | 110 cm (43") |
| Toeboard height | 15.2 cm (6") |
| Rated work load | 227 kg (500 lb) |
| Maximum number of occupants | 1 indoors |
| Maximum manual force | 200N (45lb) |
| Function Speed | |
| Platform raise | 12 to 20 seconds |
| Platform lower | 20 to 26 seconds |
| High Drive | |
| Platform lower than 1.8 m (6 feet) | |
| | 0 to 3.2 km/h (0 to 2 mph) |
| Low Drive | |
| Platform higher than 1.8 m (6 feet) | |
| | 0 to 0.6 km/h (0 to 0.4 mph) |
| Drive System | |
| Standard | Two-wheel drive |
| Gradeability | 25% |
| Maximum drive height | 3.0 m (10') |

| | |
|--|-----------------------------------|
| Drive/Lift Level Sensor Interlock | |
| Side-to-side | 2 degrees |
| Front-to-rear | 2 degrees |
| Tires | |
| | Non-marking solid rubber |
| Electrical System | |
| Voltage | 24 V DC negative chassis ground |
| Source | Two - 12 V 105 amp hour batteries |
| Fluid recommended | Distilled water |
| Charger | 30 amp |
| Hydraulic System | |
| Maximum pressure | 19,305 kPa (2,800 psi) |
| Reservoir capacity | 3.78 l (1 US gal) |
| System capacity | 3.78 l (1 US gal) |
| Maximum operating temperature | 71°C (160°F) |
| Hydraulic fluid recommended | |
| Above -13°C (10°F) | ISO #46 |
| Below -13°C (10°F) | ISO #32 |
| Below -17°C (0°F) | ISO #15 |
| Ambient Air Temperature Operating Range | |
| Celsius | -20°C to 50°C |
| Maximum Wind Speed | |
| Gust or steady | 0 m/s (0 mph) |
| Vibration | |
| | Less than 0.5 m/sec ² |
| Sound Pressure Level | |
| At work station | < 68 dB(A) |

End of Life Waste Advice Chart :



**Local Distributor / Lokaler Vertiebs Händler / Distributeur local
El Distribuidor local / Il Distributore locale**

EUROPE, MIDDLE EAST

AFRICA & ASIA

PHONE: +44 (0) 845 1550 057

FAX: +44 (0) 845 1557 756

NORTH & SOUTH AMERICA

PHONE: +1 785 989 3000

TOLL FREE: +1 800 225 0317

FAX: +1 785 989 3070

AUSTRALIA

PHONE: +61 2 9725 4000

FAX: +61 2 9609 3057

NEW ZEALAND

PHONE: +64 6 3689 168

FAX: +64 6 3689 164

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