

snorkel

S3006P

S3008P

S3010P

S3210P



CE

OPERATORS MANUAL

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S3008P sn: 01-000800+ / 01-****00231+
S3010P sn: 01-000500+ / 01-****00559+
S3210P sn: 01-000000+ / 01-****00001+

Part Number 514690-000-EN

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Original Instructions

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Appendix B – EC Declaration of Conformity



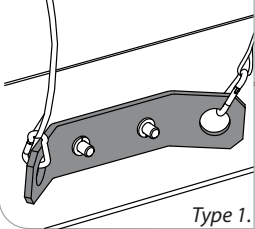
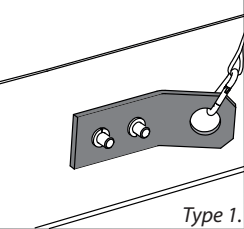
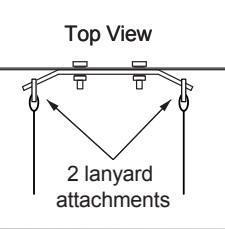
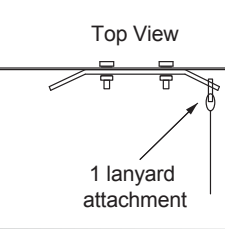
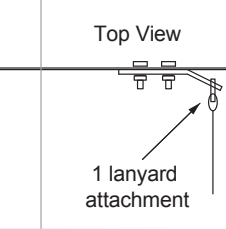
This declaration is issued under the sole responsibility of the manufacturer	
Manufacturer's name and full address	Snorkel Europe Ltd Vigo Centre, Birtley Road, Washington, Tyne & Wear, NE38 9DA, UK
Description and identification of the machinery	
Product description	Mobile elevating work platform
Models	S3010P, PRO 10iQ
Serial numbers	XXXXXX - _ _ - _ _ _ _ _ (model)-(manufacturer)-(YYMM)-(5-digit sequential starting at 00001)
EU DECLARATION OF CONFORMITY	
This machinery conforms to all the requirements of the Machinery Directive 2006/42/EC	
This machinery also conforms to	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, NL
Notified Body No	2842
Certificate Number	KCEC4486
Name and address of the person authorised to compile the technical file	Ahern Ireland Unit K2, Greenogue Business Park, Rathcoole, Dublin, D24 HN34, IE
UK DECLARATION OF CONFORMITY	
This machinery fulfils all the relevant provisions of the Supply of Machinery (Safety) Regulations 2008 (SI 2008/1597) as amended (SI 2011/1043, SI 2011/2157, SI 2019/696).	
This machinery fulfils all the relevant provisions of the Electromagnetic Compatibility Regulations 2016 (SI 2016/1091) as amended (SI 2017/1206, SI 2019/696).	
This machinery fulfils all the relevant provisions of the Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001 (SI 2001/1701) as amended (SI 2001/3958, SI 2005/3525, 2015/98).	
The following standards have been used	EN 12100: 2010, EN 280: 2013 + A1: 2015, EN 60204-1: 2018
The machinery has been examined by	Amtri Veritas Ltd Veritas House, Pierce St, Macclesfield, SK11 6ER, UK
Approved Body No	0463
Certificate Number	AVUK4486
Name and address of the person authorised to compile the technical file	Snorkel Europe Ltd Vigo Centre, Birtley Road, Washington, Tyne & Wear, NE38 9DA, UK
Person authorised to make this declaration	
Name, Function	Jason Moody, Head of Engineering
Signature	J. Moody
Place of Declaration	Snorkel Europe Ltd Vigo Centre, Birtley Road, Washington, Tyne & Wear, NE38 9DA, UK
Date of Declaration	

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.

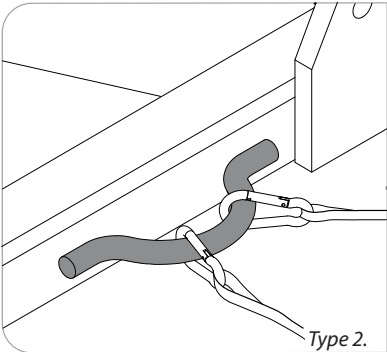
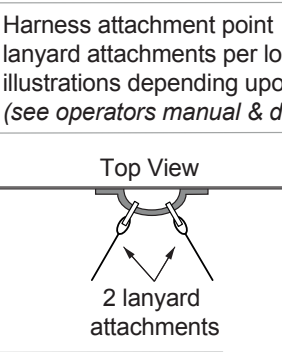
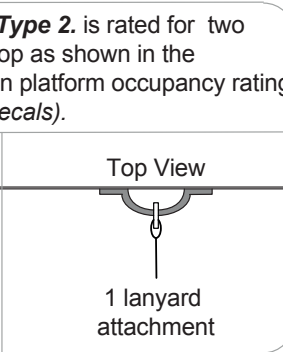
All harness attachment points on SNORKEL vehicles have been tested with a force of 3,650 lbs (16.3 KN) per person.

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

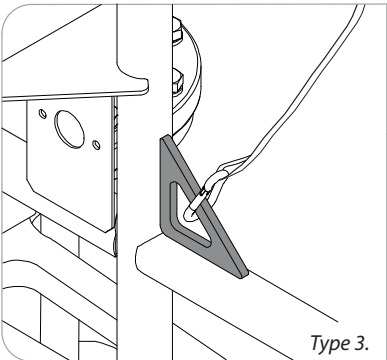
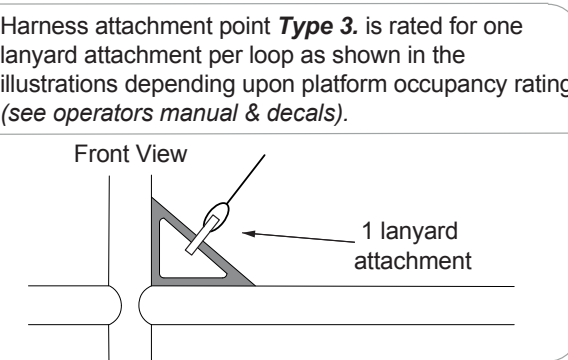
Harness attachment point **Type 1**. is rated for one lanyard attachment per loop as shown in the illustrations depending upon platform occupancy rating (see operators manual & decals).

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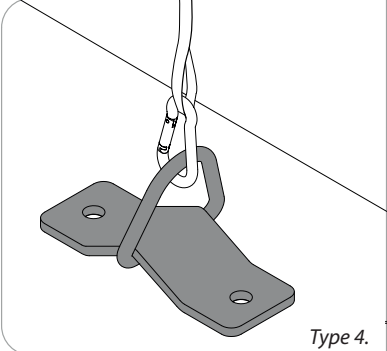
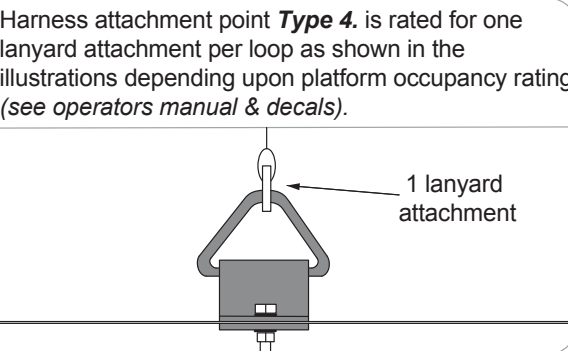
Harness attachment point **Type 2**. is rated for two lanyard attachments per loop as shown in the illustrations depending upon platform occupancy rating (see operators manual & decals).

		
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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).

	
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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).

	
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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.

OPERATION MANUAL

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.

Safety Rules

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.). All other uses of the aerial work platform are prohibited!

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 the "National Regulations".

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 when wind speeds exceed this machine's wind rating. See "Beaufort Scale" on page 18 for details.

NEVER attach notice boards etc. to the platform, as this will increase wind loading.

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!**

NEVER exit or enter the platform when it is elevated.

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

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.

Care must be taken to ensure that the machine 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.

Introduction

Introduction

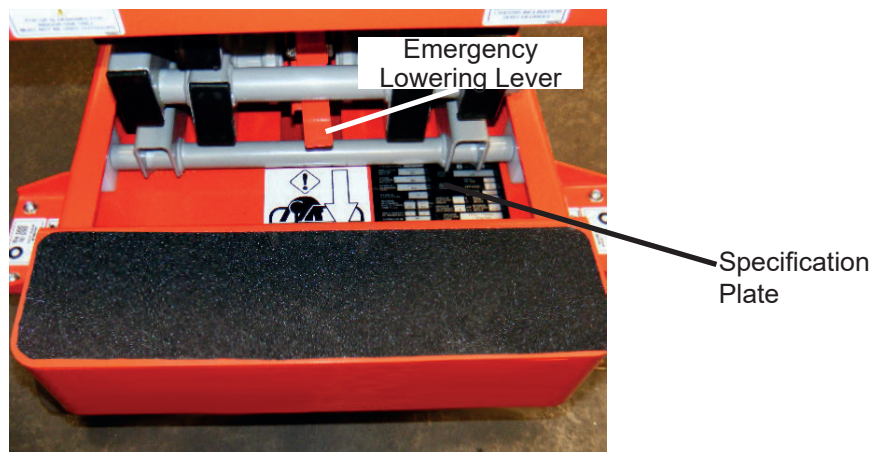
This manual covers the S3006P, S3008P, S3010P and S3210P Aerial Work Platforms.

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 Pop Up 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



Rear

Special Limitations

Elevating the platform is limited to firm, level surfaces only.



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 pushed over uneven, rough, or soft terrain.

Platform Capacity

One person and tools may occupy the platform when the machine is in use. The maximum platform capacity for the aerial platform is stated in the “Specifications” on pages 16 to 21.



DO NOT use machines designed for indoor use in winds exceeding 0 m/s, refer to the specification plate located on the machine to establish if the machine is designed for outdoor use.



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. The maximum allowable manual force is limited to 200 N.



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

Lift Level Sensor Interlock

The aerial platform lift function is interlocked through a level sensor system.

If the chassis is tilted more than 1.5 degrees side-to-side or 2 degrees front-to-rear, an alarm will sound when the power is turned on and the lift function will not operate. When the alarm sounds, only the platform lower function will operate.

Position the machine on a level surface when the lift level sensor alarm sounds. When the machine is properly positioned on a level surface, the alarm will not sound and all functions will be operational.

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

Lowering Alarm

When a platform control button is pressed to lower the platform, the alarm emits a loud beeping sound to warn personnel in the work area to stand clear.



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 (Arm Guard)

When the platform is lowered to about 1.5 m (5') lowering stops. This is the first decent limit 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.

To continue lowering release the controls, wait for three seconds then operate the controls to lower again. The alarm will sound, the beacon will flash and there will be a 1.5 second delay before lowering begins. Any releasing of the controls below the first decent limit will result in this 1.5 second delay being repeated the next time the controls are operated.

Used Material Disposal

For proper used material disposal, refer to applicable national and/or employer standards before disposal of any environmentally sensitive material including, but not limited to, hydraulic fluid, batteries, and battery fluid.

BEAUFORT RATING	WIND SPEED				GROUND CONDITIONS
	m/s	km/h	ft/s	mph	
3	3,4~5,4	12,25~19,4	11,5~17,75	7,5~12,0	Papers and thin branches move, flags wave.
4	5,4~8,0	19,4~28,8	17,75~26,25	12,0~18	Dust is raised, paper whirls up, and small branches sway.
5	8,0~10,8	28,8~38,9	26,25~35,5	18~24,25	Shrubs with leaves start swaying. Wave crests are apparent in ponds or swamps.
6	10,8~13,9	38,9~50,0	35,5~45,5	24,5~31	Tree branches move. Power lines whistle. It is difficult to open an umbrella.
7	13,9~17,2	50,0~61,9	45,5~56,5	31~38,5	Whole trees sway. It is difficult to walk against the wind.

Figure 1 – Beaufort Scale

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 2 – Lower Controls and Indicators

1. Tilt/lowering alarm
2. Battery charge indicator
3. 110V battery charger plug
4. Tray latch
5. Ground operation button
6. Platform raise button
7. Emergency stop button
8. Platform lower button
9. Control selector switch
10. Diagnostic Port

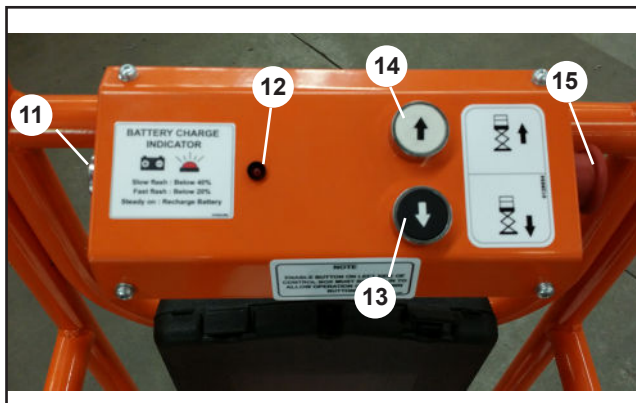


Figure 3 – Upper Controls and Indicators

11. Interlock button
12. Battery condition indicator LED
13. Platform lower button
14. Platform raise button
15. Emergency stop button

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.

Lower Controls

The lower controls (refer to Figure 2) are located on the right side of the chassis.

The following are located on the lower control panel:

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

Warning

The aerial platform is free to move when the brakes are released. Death or serious injury can result. Engage the brakes before operating the aerial platform.

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.

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

Ground Operation Button

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

Press and hold the ground operation switch inward continually to operate the machine from the lower controls.

Platform Raise/Lower Buttons

The platform raise/lower buttons are used to raise or lower the platform. The buttons are spring returned to the off position.

- Press and hold the platform raise button to raise the platform.
- Press and hold the platform lower button to lower the platform.
- An alarm will sound as the platform lowers.

Battery Charger

The battery charger is operated on a 110V electrical circuit.

Upper Controls

The upper controls (refer to Figure 3) are located on the control panel at the front of the platform.

The following controls are located on the upper control panel:

- Interlock button
- Battery condition indicator
- Platform raise/lower buttons
- Emergency stop button



Warning

The aerial platform is free to move when the brakes are released. Death or serious injury can result. Engage the brakes before operating the aerial platform.

Emergency Stop Button

The emergency stop is a two-position, red push button on the right side 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.

Interlock Button

The interlock button prevents platform movement if the platform raise or lower button is accidentally pressed. This switch is spring returned to the off position.

Press and hold the interlock button inward continually to operate the machine from the upper controls.

Platform Raise/Lower Buttons

The platform raise/lower buttons are used to raise or lower the platform. The buttons are spring returned to the off position.

- Press and hold the platform raise button to raise the platform.
- Press and hold the platform lower button to lower the platform.
- An alarm will sound as the platform lowers.

Battery Condition LED

The Battery Condition LED illuminates to give an approximate indication of the amount of charge remaining in the battery as follows:

Not illuminated	100% to 40%
Slow flash	40% to 20%
Fast flash	20% to 10%
Steady on less than	10%

Note: To maximise battery life always recharge the battery after use and never store the machine for extended periods without first fully recharging the battery.

Pre-Operation Safety Inspection

Note

Carefully read, understand and follow all safety rules, operating instructions, labels and National Safety Instructions/Requirements.

1. Open the tray and inspect for damage, fluid leaks or missing parts daily.
2. Check daily the level of the hydraulic fluid with the platform fully lowered. The fluid level must be within 6 mm ($\frac{1}{4}$ ") of the top of the fill hole. Add recommended hydraulic fluid if necessary. See "Specifications" on pages 16 to 18.
3. Check weekly that the fluid level in the batteries is correct. See "Battery Maintenance" on page 15.
4. Verify that the batteries are charged daily.
5. Check daily that the AC extension cord has been disconnected from the outlet on the side of the chassis.
6. Inspect the brakes daily on the rear castor wheels for proper operation. Step down on the brake levers and verify that the machine will not move.
7. Check daily that all guardrails are in place and all fasteners are properly tightened.
8. Inspect the machine thoroughly each day 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. Press and hold the ground operation button inward. Test each machine function from the lower control station (refer to Figure 2).
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 3).
11. Push the Upper Control Emergency Stop Button to check for proper operation. All upper control machine functions should be disabled. Turn the Upper Control Emergency Stop Button clockwise to resume.
12. Check to ensure that the Auto Brake system works correctly by raising the machine slightly from the lower controls. Check that the brake is engaged against the rear castor wheels. Check to make sure the machine will not move when elevated.

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. Engage both of the rear brakes before entering the platform. Do not position the aerial platform for elevated use near any drop-off, hole, slope, soft or uneven ground, or other tip-over hazard. Some machines have outdoor capability, Check the machine specifications on the specification plate (located on the machine chassis) before using the machine outdoors. Do not raise the platform in wind speeds above 0 m/s unless your machine has outdoor capability.

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.

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.
3. Position the machine in the work place and make certain the area is flat and horizontal.
4. Step down on each of the brake levers to lock the rear wheels in position. Verify that the brakes are engaged before entering the platform.

Lower Controls

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 2).
2. Insert the key into the control selector switch and turn the switch to the lower controls position.
3. Press and hold the ground operation button inward.
 - To raise the platform, press and hold the platform raise button.
 - To lower the platform, press and hold the platform lower button.
4. Release the button to stop movement.

Upper Controls

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

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 2).
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 3).
5. 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

Press and hold the interlock button on the left side of the upper control box.

- To raise the platform, press and hold the platform raise button until the desired height is reached.
- To lower the platform, press and hold the platform lower button until the desired height is reached.

Lowering Interrupt (Arm Guard)

When the platform is lowered to about 1.5 m (5') lowering stops. This is the first decent limit 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.

To continue lowering release the controls, wait for three seconds then operate the controls to lower again. The alarm will sound, the beacon will flash and there will be a 1.5 second delay before lowering begins. Any releasing of the controls below the first decent limit will result in this 1.5 second delay being repeated the next time the controls are operated.

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 elevated.

To open the tray, lift up on the tray 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.
3. Make certain the lever/handle is fully released and the emergency lowering valve is fully closed before operating the aerial platform.

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 equipment used to load, unload, and transport the aerial platform must have adequate capacity. The empty vehicle weight is listed in "Specifications" on pages 16 to 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. Engage the brakes on both of the rear wheels.
3. Remove all personnel, tools, materials, or other loose objects from the platform.
4. Insert the forklift forks into the pockets on either 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.

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

Lifting With a Tail Lift

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. Position the aerial platform on the tail lift.
4. Engage the brakes on both of the rear wheels.
5. Carefully raise the lift and position the aerial platform in the transport vehicle.
6. Secure the machine to the transport vehicle using straps through the fork lift pockets.

Maintenance

Warning

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

Use the following procedure to properly position the safety props:

1. Remove all tools and material from the platform.
2. Using the lower controls, raise the platform until the open distance on the chassis is wide enough to position the safety props. Refer to Figure 5.

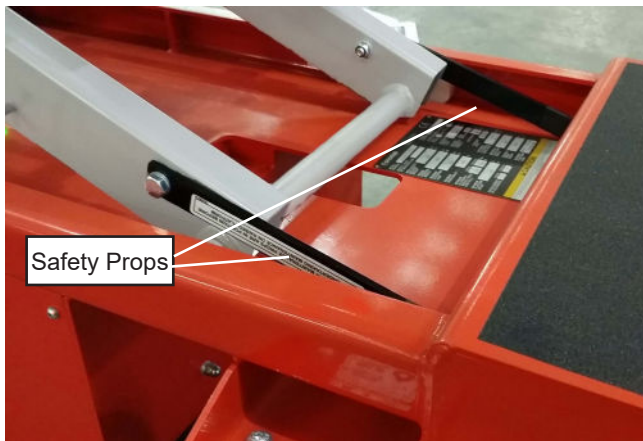


Figure 5 – Safety Props

3. Rotate the safety props downward from the storage position to the support position.
4. Remove hands and arms from the scissors area.
5. Lower the platform until the scissors are supported by the safety props.

Hydraulic Fluid

The hydraulic fluid reservoir is located in the component tray. Refer to Figure 6.

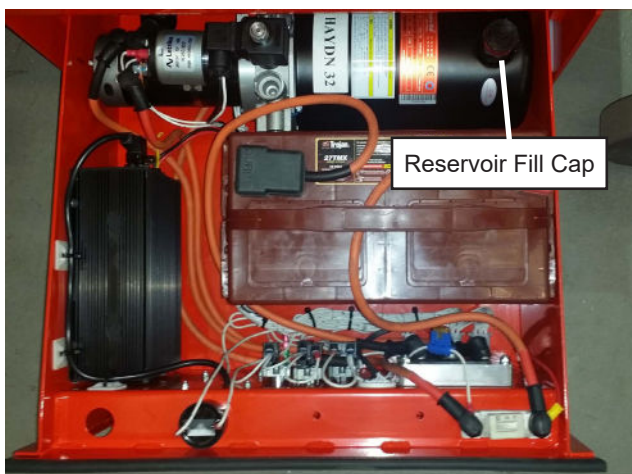


Figure 6 – Component Tray

Note

Never add fluid if the platform is elevated.

Check Hydraulic Fluid

1. Make sure that the platform is fully lowered.
2. Visually check to make sure the fluid is within 6 mm ($\frac{1}{4}$ ") of the top of the fill hole.
3. If necessary, remove the filler cap and add fluid of the proper type. Replace the cap making sure it is tightly in place. Refer to "Specifications" pages 16 to 18.

Battery Maintenance

Warning

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

Always wear safety glasses when working near the battery. Battery fluid is highly corrosive. Thoroughly rinse away any spilled fluid with clean water.

Always replace the battery with a manufacturer approved replacement.

- Check the battery fluid level weekly, 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 top of the battery clean.
- Refer to the Service Manual to extend battery life and for complete service instructions.

Warning

Always use manufacturer approved replacement parts.

Battery Charging

Charge the battery at the end of each work shift or sooner if the battery has been discharged.

Note: The PUSH series has a built in feature whereby power is cut to the lift function when the battery level reaches a manufacturer preset limit, this is to prevent excessive wear or damage to the battery. The machine should immediately be placed on charge if this occurs.

Warning

Charge the battery in a well ventilated area.

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

Permanent damage to the battery will result if the battery is not immediately recharged after discharging.

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

Inspection and Maintenance Schedule

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 battery. Remove the caps from the 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.
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 (110 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.
6. Visually inspect the battery charge indicator for proper charging rate. The LED is visible on the left side of the lower controls. Refer to Figure 7 for the function of the LED. The battery should be fully charged when the LED is solid green.
7. Leave the battery charger plugged in until it shuts itself off.

Figure 7 – Battery Charge Indicator



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

8. After the battery charger turns itself off, it is not necessary to immediately unplug the extension cord from the battery charger. The charger will monitor the charge state of the battery and recharge them if the voltage drops off.
9. Slide the component tray open to access the battery. Remove the caps from the battery.
10. 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.

11. Tightly replace the caps on the battery and close and latch the component tray.

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 terminals	Clean, connectors tight			
Battery charge indicator	Proper operation			
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			
Castors	Good condition, no damage/smooth movement			
Manual Brakes	Proper operation, no damage or deformation			
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			
Structures				
Weldments – Scissors, chassis, steps, platform, etc.	Welds intact, no damage or deformation			
Platform slide rollers	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			
	All fasteners in place, no loose or missing parts			
Platform floor	No damage or deformation			
	Clean to prevent slip and fall hazards			
Lanyard anchors	In place, no deformation or damage			
Entry gate	Proper operation, no damage or deformation			
Operating controls	Proper operation/raise and lower			
Lowering delay	Proper operation, limit switch delays lowering			
Emergency stop	Shuts off upper controls			
Operation and Safety Decals	In place and readable			

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

Specifications

General Specifications – S3006P

Aerial Platform

Working height	3.96 m
Maximum platform height	1.96 m
Wheelbase	1 m
Ground clearance	1.9 cm
Maximum wheel load	170 kg
Maximum ground pressure	71 kg/cm ²
Floor loading	933 kg/m ²
Weight, EVW	
Approximate	310 kg
Stowed width	76.2 cm
Stowed length	1.23 m
Stowed height	1.67 m

Platform

Dimensions	51.3 cm x 109 cm
Guardrail height	110.4 cm
Toeboard height	15.3 cm
Rated work load	240 kg
Maximum number of occupants	1 indoors

Function Speed

Platform raise	6 to 10 seconds
Platform lower	6 to 10 seconds

Lift Level Sensor Interlock

Side-to-side	1.5 degrees
Front-to-rear	2 degrees

Tires

Nonmarking solid rubber

Electrical System

Voltage	12 V DC negative chassis ground
Source	One - 12 V 105 amp hour battery
Fluid recommended	distilled water
Charger	15 amp

Hydraulic System

Maximum pressure	19,305 kPa
Pressure Relief Valve Setting	2,000 psi
Reservoir capacity	3.78 l
System capacity	3.78 l
Maximum operating temperature	71°C (160°F)
Hydraulic fluid recommended	
Above -13°C (10°F)	ISO VG32 (Mobil DTE-13M)
Below -13°C (10°F)	ISO VG15 (Mobil DTE-11M)

Ambient Air Temperature Operating Range

Celsius	-18°C to 43°C
Fahrenheit	0°F to 110°F

Maximum Wind Speed

Indoor machines	0 m/s
Outdoor machines	12.5 m/s

Vibration

Whole body vibration < 0.5 m/sec²
Hand / Arm vibration < 2.5 m/sec²

Sound Pressure Level

At work station	below 70 dB(A)
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General Specifications – S3008P

Aerial Platform

Working height	4.56 m
Maximum platform height	2.56 m
Wheelbase	1 m
Ground clearance	1.9 cm
Maximum wheel load	220 kg
Maximum ground pressure	92 kg/cm ²
Floor loading	1000 kg/m ²
Weight, EVW	
Approximate	350 kg
Stowed width	76.2 cm
Stowed length	1.23 m
Stowed height	1.82 m

Platform

Dimensions	51.3 cm x 109 cm
Guardrail height	110.4 cm
Toeboard height	15.3 cm
Rated work load	240 kg
Maximum number of occupants	1 indoors

Function Speed

Platform raise	6 to 12 seconds
Platform lower	8 to 12 seconds

Lift Level Sensor Interlock

Side-to-side	1.5 degrees
Front-to-rear	2 degrees

Tires

Nonmarking solid rubber

Electrical System

Voltage	12 V DC negative chassis ground
Source	One - 12 V 105 amp hour battery
Fluid recommended	distilled water
Charger	15 amp

Hydraulic System

Maximum pressure	19 305 kPa
Pressure Relief Valve Setting	2,000 psi
Reservoir capacity	3.78 l
System capacity	3.78 l
Maximum operating temperature	71°C (160°F)
Hydraulic fluid recommended	
Above -13°C (10°F)	ISO VG32 (Mobil DTE-13M)
Below -13°C (10°F)	ISO VG15 (Mobil DTE-11M)

Ambient Air Temperature Operating Range

Celsius	-18°C to 43°C
Fahrenheit	0°F to 110°F

Maximum Wind Speed

Indoor machines	0 m/s
Outdoor machines	12.5 m/s

Vibration

Whole body vibration < 0.5 m/sec²
Hand / Arm vibration < 2.5 m/sec²

Sound Pressure Level

At work station	below 70 dB(A)
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Specifications

General Specifications – S3010P

Aerial Platform

Working height	5 m
Maximum platform height	3.0 m
Wheelbase	1 m
Ground clearance	1.9 cm
Maximum wheel load	240 kg
Maximum ground pressure	100 kg/cm ²
Floor loading	1035 kg/m ²
Weight, EVW	
Approximate	370 kg
Stowed width	76.2 cm
Stowed length	1.23 m
Stowed height	1.78 m

Platform

Dimensions	51.3 cm x 109 cm
Guardrail height	110.4 cm
Toeboard height	15.3 cm
Rated work load	240 kg
Maximum number of occupants	1 indoors

Function Speed

Platform raise	10 to 14 seconds
Platform lower	10 to 14 seconds

Lift Level Sensor Interlock

Side-to-side	1.5 degrees
Front-to-rear	2 degrees

Tires	Nonmarking solid rubber
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Electrical System

Voltage	12 V DC negative chassis ground
Source	One - 12 V 105 amp hour battery
Fluid recommended	distilled water
Charger	15 amp

Hydraulic System

Maximum pressure	19,305 kPa
Pressure Relief Valve Setting	2,000 psi
Reservoir capacity	3.78 l
System capacity	3.78 l
Maximum operating temperature	71°C (160°F)
Hydraulic fluid recommended	
Above -13°C (10°F)	ISO VG32 (Mobil DTE-13M)
Below -13°C (10°F)	ISO VG15 (Mobil DTE-11M)

Ambient Air Temperature Operating Range

Celsius	-18°C to 43°C
Fahrenheit	0°F to 110°F

Maximum Wind Speed

Indoor machines	0 m/s
Outdoor machines	12.5 m/s

Vibration

Whole body vibration < 0.5 m/sec²
Hand / Arm vibration < 2.5 m/sec²

Sound Pressure Level

At work station	below 70 dB(A)
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General Specifications – S3210P

Aerial Platform

Working height	5 m
Maximum platform height	3.0 m
Wheelbase	1 m
Ground clearance	1.9 cm
Maximum wheel load	240 kg
Maximum ground pressure	100 kg/cm ²
Floor loading	1035 kg/m ²
Weight, EVW	
Approximate	470 kg
Stowed width	81.2 cm
Stowed length	1.23 m
Stowed height	1.78 m

Platform

Dimensions	51.3 cm x 109 cm
Guardrail height	110.4 cm
Toeboard height	15.3 cm
Rated work load	240 kg
Maximum number of occupants	1 indoors

Function Speed

Platform raise	10 to 14 seconds
Platform lower	10 to 14 seconds

Lift Level Sensor Interlock

Side-to-side	1.5 degrees
Front-to-rear	2 degrees

Tires	Nonmarking solid rubber
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Electrical System

Voltage	12 V DC negative chassis ground
Source	One - 12 V 105 amp hour battery
Fluid recommended	distilled water
Charger	15 amp

Hydraulic System

Maximum pressure	19,305 kPa
Pressure Relief Valve Setting	2,000 psi
Reservoir capacity	3.78 l
System capacity	3.78 l
Maximum operating temperature	71°C (160°F)
Hydraulic fluid recommended	
Above -13°C (10°F)	ISO VG32 (Mobil DTE-13M)
Below -13°C (10°F)	ISO VG15 (Mobil DTE-11M)

Ambient Air Temperature Operating Range

Celsius	-18°C to 43°C
Fahrenheit	0°F to 110°F

Maximum Wind Speed

Indoor machines	0 m/s
Outdoor machines	12.5 m/s

Vibration	Whole body vibration < 0.5 m/sec ²
Hand / Arm vibration	< 2.5 m/sec ²

Sound Pressure Level

At work station	below 70 dB(A)
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Manufacturer's Address

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