

# snorkel

## A62JRT



CE

# **OPERATORS** **MANUAL**

Part Number 104850-000  
March 2019

Serial number 000000 and after  
Replaces April 2015



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**A62JRT**

**Serial number**  
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Serienummer  
Numero de serie  
Matricola

**Notified body**  
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**Signed for Snorkel**

  
**Manufacturing Quality Manager**

**Date**

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**EC Declaration of Conformity of Machinery 2006/42/EC**  
**EC-Konformitätserklärung für Maschinen 2006/42/EC**  
**Declaration De Conformite CE pour les Machines 2006/42/EC**  
**Declaracion De Conformidad CE Para Maquinaria 2006/42/EC**  
**Dichiarazione Di Conformità CE Per Le Macchine 2006/42/EC**  
**CE Conformiteitsverklaring voor Machine 2006/42/EC**  
**EU Deklaration Avseende Överensstammelse För Maskinutrustning 2006/42/EC**

**EF-Samsvarserklæring For Maskiner 2006/42/EC**  
**EF-Overensstemmelseserklæring for Maskiner 2006/42/EC**  
**EU Vaatimustenmukaisuusvakuutus 2006/42/EC**

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**Description**

Bezeichnung  
Description  
Descrpcion  
Descrizione  
Beschrijving  
Beskrivning  
Beskrivelse  
Beskrivelse  
Kuvaus

**Aerial Work Platform**

Arbeitsbühne  
Plate-forme elevatrice de personnel  
Plataforma aerea de trabajo con motor  
Piattaforma di sollevamento motorizzata  
Mechanisch aangedreven werkplatform  
Höj-och sänkbar arbetsplattform  
Selvgående arbetsplattform  
Motordrevet loftepattform  
Konevoimalla toimiva nostolava  
Selvgående personarbetslift



# ! WARNING !

## SAFETY NOTICE PLEASE READ BEFORE USE

If this machine has been transported in a container the wheels will have been flipped to get it into the container. This will make the machine narrower than the design intent. The machine may be driven with the wheels flipped to load & unload but only ever when in the stowed position. The machine must not be used for a job of work until the wheels have been flipped back round to their correct position.

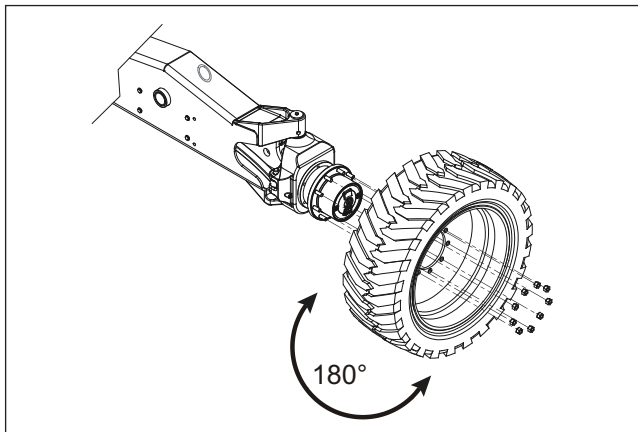


Figure 1 – Correct Wheel Orientation

To flip the wheel back to the correct orientation (refer to Figure 1), use the following instructions.

1. Safely jack the machine.
2. Loosen the 9 retaining lug nuts.
3. Safely remove the wheel from the hub.
4. Flip the wheel 180° so that decal 513132-000 is facing on the inside of the wheel. Refer to Figure 2.
5. Safely fit the wheel back onto the hub.
6. Hand tighten the 9 retaining lug nuts and lower the machine from the jack.
7. Dry torque the lug nuts to 150 ft lbs in a non-circular pattern.



Figure 2 – Wheel Position Decal

The distance between the outer edge of the right wheel to the outer edge of the left wheel should be 2390mm (94 in) when the wheels are correctly orientated. Refer to Figure 3.

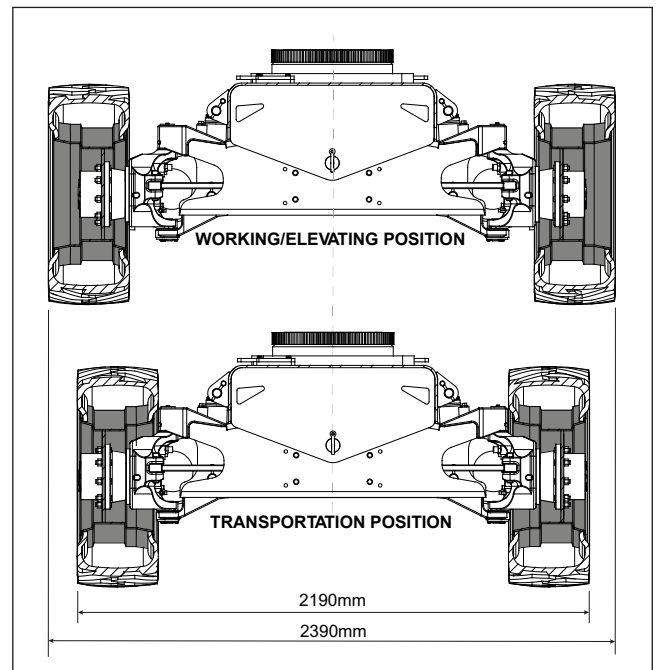


Figure 3 – Wheel Position Distance

# 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.

**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!** Refer to applicable national/governmental/local regulations for safe approach distances.

Exceeding the specified permissible maximum load **is prohibited!** See “Platform Capacity” on page 7 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 7 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 7 for details.

Do not operate the aerial platform in windy or gusty conditions. Do not add anything to 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.

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.

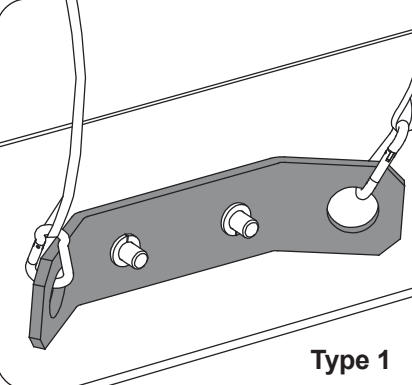
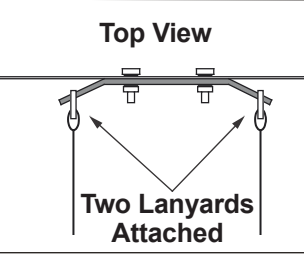
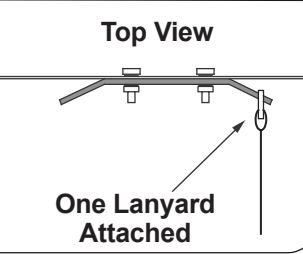
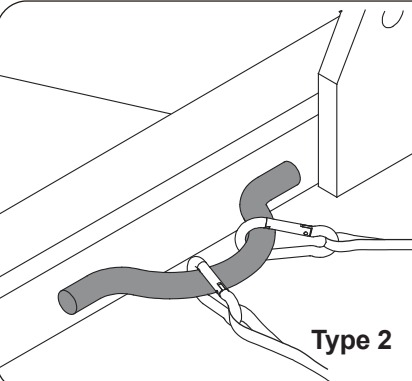
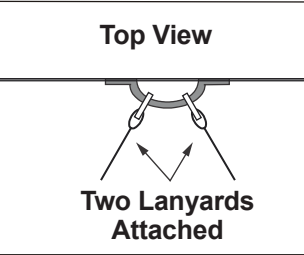
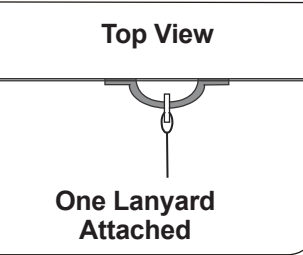
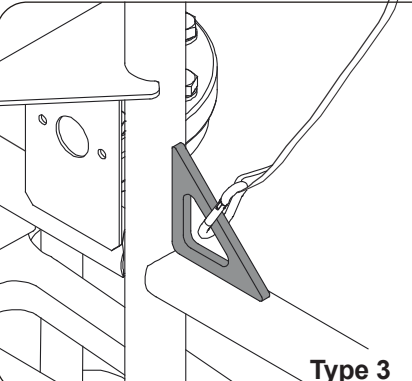
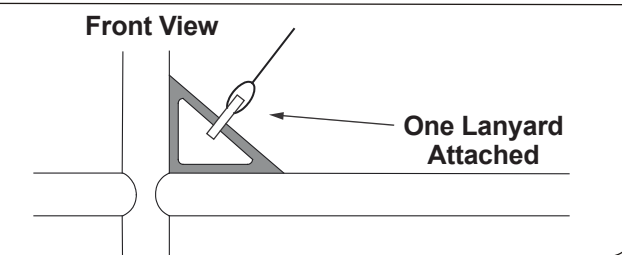
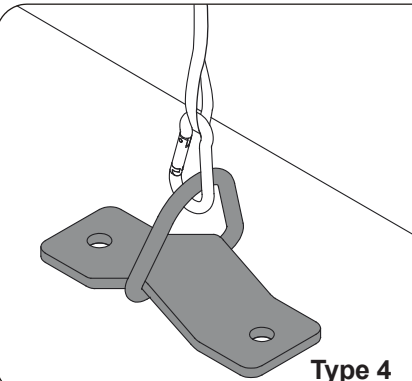
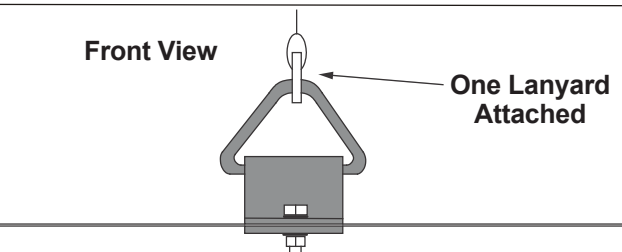
Care must be taken to ensure that the machines meets the requirements of stability during use, transportation, assembly, dismantling when out of service, testing, or foreseeable breakdowns.

In the event of an accident or breakdown see “Emergency Lowering” on page 18, 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.

## Fall Restraint Lanyard Anchor Points

All fall restraint lanyard anchor points on Snorkel aerial work platforms have been tested with a force of 3,650 lbs (61.3 kN) per person.

See below examples of anchor points used on Snorkel machines with their corresponding per person rating.

 <p style="text-align: right;"><b>Type 1</b></p>	<p>Anchor point Type 1 is rated for one lanyard attachment per loop. Refer to machine "Specifications" and platform decals for maximum number of platform occupants.</p>	
	<p style="text-align: center;"><b>Top View</b></p>  <p style="text-align: center;"><b>Two Lanyards Attached</b></p>	<p style="text-align: center;"><b>Top View</b></p>  <p style="text-align: center;"><b>One Lanyard Attached</b></p>
 <p style="text-align: right;"><b>Type 2</b></p>	<p>Anchor point Type 2 is rated for two lanyard attachments per loop. Refer to machine "Specifications" and platform decals for maximum number of platform occupants.</p>	
	<p style="text-align: center;"><b>Top View</b></p>  <p style="text-align: center;"><b>Two Lanyards Attached</b></p>	<p style="text-align: center;"><b>Top View</b></p>  <p style="text-align: center;"><b>One Lanyard Attached</b></p>
 <p style="text-align: right;"><b>Type 3</b></p>	<p>Anchor point Type 3 is rated for one lanyard attachment per loop. Refer to machine "Specifications" and platform decals for maximum number of platform occupants.</p>	
	<p style="text-align: center;"><b>Front View</b></p>  <p style="text-align: right;"><b>One Lanyard Attached</b></p>	
 <p style="text-align: right;"><b>Type 4</b></p>	<p>Anchor point Type 4 is rated for one lanyard attachment per loop. Refer to machine "Specifications" and platform decals for maximum number of platform occupants.</p>	
	<p style="text-align: center;"><b>Front View</b></p>  <p style="text-align: right;"><b>One Lanyard Attached</b></p>	

NOTE: There can be more anchor points in the platform than the maximum number of occupants allowed in the platform. Refer to the machine specifications for the correct occupancy rating before use.

## Introduction

### Introduction

This manual covers the A62JRT Aerial Work Platform.

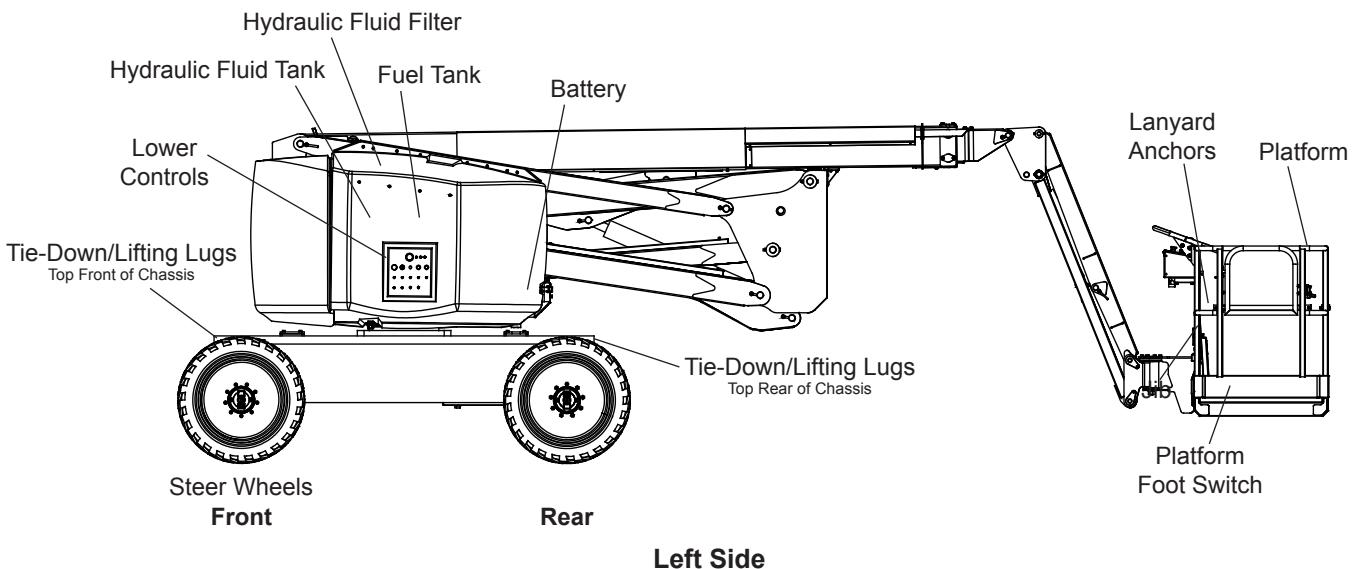
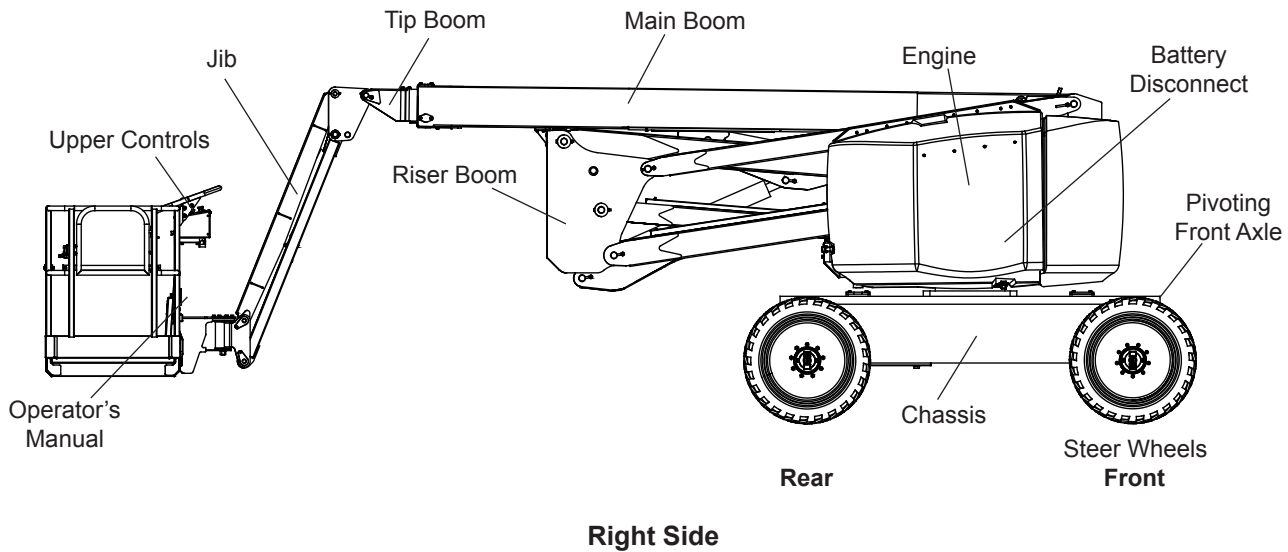
This manual must be stored on the machine at all times.

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 at the rear 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

Two people and tools may occupy the platform. The maximum platform capacity for the aerial platform is stated in the “Specifications” on page 24.

#### **⚠ 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.

The maximum allowable manual force is limited to 200 N (45 lbs) of force per occupant, with a maximum of 400 N (90 lbs) for two occupants.

#### **⚠ Danger**

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

#### Platform Overload Sensing System

All functions are stopped from the upper and lower controls, when the platform overload limit is exceeded. The horn will sound intermittently and the platform overload light will blink until the excess load is removed from the platform. At that time, the machine functions are again operational.

If the platform becomes significantly overloaded, or if an upward force on the platform exceeds approximately 2225 N (500 lb), the system will enter into error mode, stopping all functions from the upper and lower controls. The horn will then sound constantly and the overload light will stay illuminated at the upper and lower controls.

The system will remain in error mode until the excess load is removed from the platform and the emergency stop button or start switch is cycled off and back on, resetting the system. At that time, the machine functions are operational.

#### **⚠ Caution**

The emergency power system is for emergency lowering and stowing only. The length of time the pump can be operated depends on the capacity of the battery. **Do not use this system for normal operation.**

If the platform overload sensing system is tripped while operating the machine or if the system is in error mode and can not be reset, the emergency power system may still be used for emergency machine operation from either the lower or upper controls.

#### **⚠ 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.**

The overload sensing system is not active when the machine is being driven with the booms in the stowed position. This allows the machine to be driven without the system sensing an overload due to rough ground conditions.

To eliminate repeated tripping of the system during machine operation, there is a five second delay in machine functions following:

- starting the engine.
- removing excess load from the platform.

#### Beaufort Scale

Never operate the machine when wind speeds exceed 12.5 m/s (28mph) [Beaufort scale 6]. Refer to Figure 1.

#### Engine Protection Systems

A constant tone alarm will sound to warn against high engine temperature or low oil pressure.

The engine will shut-down:

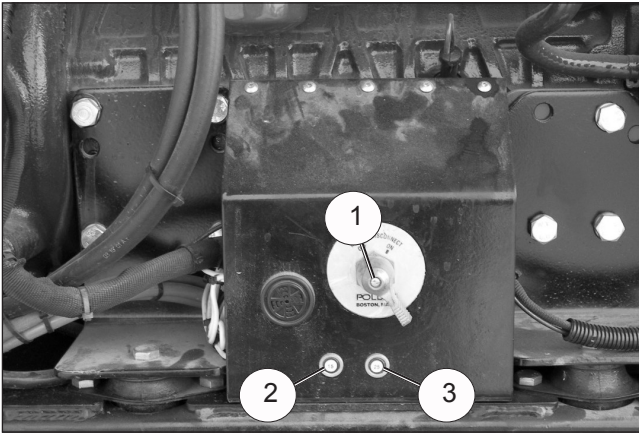
- if the operating temperature exceeds a preset level
- or, if the oil pressure is too low for safe operation.

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

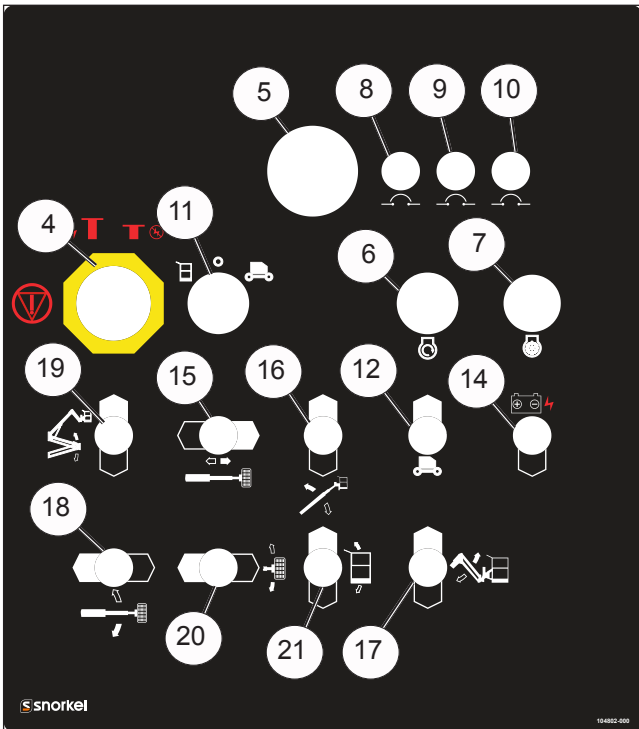
**Controls and Indicators**

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 – Battery Disconnect Switch**

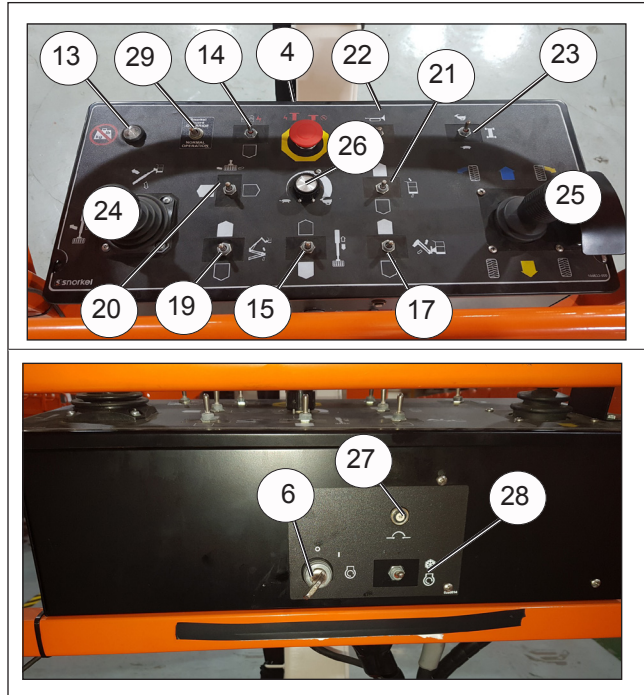
1. Battery disconnect switch
2. Glow plugs circuit breaker
3. Throttle circuit breaker



**Figure 3 – Lower Controls and Indicators**

4. Emergency stop button
5. Hour meter
6. Start switch
7. Preheat button
8. Main system circuit breaker
9. Relays/sensors circuit breaker
10. Boom functions circuit breaker

11. Controls selector switch
12. Ground operation switch
13. Platform overload light
14. Engine/emergency power switch
15. Boom extension switch
16. Boom elevation switch
17. Jib articulation switch
18. Rotation switch
19. Riser switch
20. Platform rotation switch
21. Platform level switch



**Figure 4 – Upper Controls and Indicators**

22. Horn switch
23. Drive range switch
24. Boom joystick
25. Drive joystick
26. Boom speed knob
27. Upper control circuit breaker
28. Preheat switch
29. Snorkel Guard override switch

**⚠ 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 turntable and on the upper control panel in the platform.
- Controls to drive the aerial platform are located on the upper control panel only.

## Battery Disconnect Switch

The battery disconnect is located at the right front of the turntable (refer to Figure 2).

The battery disconnect removes electrical power from all electrically controlled functions when in the off position.

- Place the switch in the on position to electrically connect the battery to the electrical system.

### Caution

**Only authorized personnel should operate the aerial platform. Unqualified personnel may cause injury to coworkers or property damage. Lock the battery disconnect switch in the off position before leaving the aerial platform unattended.**

- Lock the battery disconnect switch in the off position to prevent unauthorized use of the aerial platform.

## Lower Controls

The lower controls (refer to Figure 3) are located on the left side of the turntable. Boom and platform functions can be operated from the lower controls.

### Preheat Button

The preheat button (refer to Figure 3) is a two-position, black push button. This button operates the glow plugs to aid in starting the engine when the start switch is in the on position.

- When the engine is warmed up or the ambient temperature is above 10°C (50°F), it is not necessary to operate the glow plugs before starting the engine.
- When the ambient temperature range is 10°C (50°F) to -5°C (23°F), press and hold the preheat button for five seconds before starting the engine.
- When the ambient temperature is below 2-5°C (23°F), press and hold the preheat button for ten seconds before starting the engine.

### Start Switch

The start switch (refer to Figure 3) works like an automobile ignition switch.

- Hold the switch in the start position until the engine starts, then release it to on.
- If the engine dies, the switch must be turned to off before it can be turned back to start.

An alarm sounds, when the switch is turned on, to warn others that the machine engine is being started.

#### Note

*On some machines it may be necessary to pause about three seconds in the on position before going to start so the starter can engage.*

If the platform is to stay in a particular position for a long time, turn the start switch to off to shut off the engine and save fuel.

### Emergency Stop Button

The emergency stop (refer to Figure 3) 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.

### Controls Selector Switch

Use the controls switch (refer to Figure 3) to select between lower control and upper control operation.

- Place the switch in the upward position to operate the aerial platform from the upper controls.
- Place the switch in the downward position for lower control operation.

### Ground Operation Switch

Hold the ground operation switch (refer to Figure 3) upward continually to operate the machine from the lower controls. The engine speed increases when the switch is held upward. This switch is spring returned to the off position.

### Rotation Switch

The rotation switch (refer to Figure 3) is used to rotate the turntable in a clockwise or counterclockwise direction. The switch is spring returned to the center off position.

- Hold the switch to the right to rotate the turntable counterclockwise.
- Hold the switch to the left to rotate the turntable clockwise.

### Riser Switch

The riser switch (refer to Figure 3) is used to raise or lower the riser booms. The switch is spring returned to the center off position.

- Hold the switch upward to raise the riser booms.
- Hold the switch downward to lower the riser booms.

### Boom Elevation Switch

The boom elevation switch (refer to Figure 3) is used to raise or lower the main boom. The switch is spring returned to the center off position.

- Hold the switch upward to raise the main boom.
- Hold the switch downward to lower the main boom.

### Boom Extension Switch

The boom extension switch (refer to Figure 3) is used to extend or retract the booms. The switch is spring returned to the center off position.

## Controls and Indicators

- Hold the switch to the right to extend the booms.
- Hold the switch to the left to retract the booms.

### Jib Articulation Switch

The jib switch (refer to Figure 3) is used to raise or lower the jib. The switch is spring returned to the center off position.

- Hold the switch upward to raise the jib.
- Hold the switch downward to lower the jib.

### Platform Level Switch

The platform level switch (refer to Figure 3) is used to level the platform floor with respect to the ground. The switch is spring returned to the center off position.

- Hold the switch upward to tilt the platform floor upward or away from the ground.
- Hold the switch downward to tilt the platform floor downward or toward the ground.

### Platform Rotation Switch

The platform rotation switch (refer to Figure 3) is used to rotate the platform relative to the end of the tip boom. The switch is spring returned to the center off position.

- Hold the switch to the right to rotate the platform counterclockwise.
- Hold the switch to the left to rotate the platform clockwise.

### Engine/Emergency Power Switch

The engine/emergency power switch (refer to Figure 3) is used to operate turntable, boom, and platform functions using the emergency power system. The switch is spring returned to the engine position for aerial platform engine operation.

## Caution

**The emergency power system is for emergency lowering and stowing only. The length of time the pump can be operated depends on the capacity of the battery. Do not use this system for normal operation.**

- Hold the engine/emergency power switch downward in the direction of the white arrow to activate the emergency power system.
- Release the switch to disengage the emergency power system.

If the engine is running, it will stop when the switch is placed in the emergency power position.

### Hydraulic Oil Warm-Up Switch

The optional hydraulic fluid warm-up switch is used to warm the hydraulic fluid when the ambient temperature

is below 0°C (32°F) and boom movement is sluggish because of cold fluid.

## Caution

**Not all hydraulic fluid is suitable to use in the hydraulic system. Some have poor lubricating characteristics and may increase component wear. Only use hydraulic fluid as recommended.**

Use cold weather hydraulic oil as recommended in the machine General Specifications in temperatures of 0°C (10°F) or below.

The toggle switches for the warm-up system are on the lower control panel and on the front of the upper control panel.

### Note

*Machine functions are not operational while using the hydraulic warm-up system.*

To warm-up the hydraulic fluid from the lower controls:

1. Start the engine from the lower controls.
2. Place the hydraulic fluid warm-up switch in the on position.
  - The engine throttle speed will increase to warm the hydraulic fluid.
  - The engine throttle speed will decrease and return to idle once the hydraulic fluid reaches a preset temperature.
  - If the warm-up switch is left on the engine speed will continue to increase and decrease to keep the hydraulic fluid at a preset temperature.
3. When the engine throttle speed returns to idle, place the hydraulic fluid warm-up switch in the off position.

### Circuit Breaker Reset Buttons

The lower control panel electrical system has a 25 amp circuit breaker for the main control system circuit and a 10 amp circuit breaker for both the internal relays and sensors, and a 10 amp circuit breaker for the boom functions. There is a reset button for each circuit breaker at the top of the lower control panel (refer to Figure 3).

The upper control panel has a 10 amp circuit breaker for the upper control system circuit, with the reset button on the front of the upper control panel (refer to Figure 4).

The battery disconnect panel has a 15 amp circuit breaker for the engine throttle circuit and a 25 amp circuit breaker for the glow plug circuit. The reset buttons are on the bottom of the battery disconnect panel.

The circuit breakers protect the electrical wiring and components from electrical overload in case of a short circuit or other fault.

## **Caution**

**A tripped circuit breaker indicates a malfunction in the electrical system. Component damage can result if the cause of the malfunction is not corrected. Do not operate the aerial platform if the circuit breaker trips repeatedly.**

Push the button to reset the circuit breaker.

## **Upper Controls**

The upper controls (refer to Figure 4) are located on the control panel at the platform. Boom, platform, and drive functions can be operated from the upper controls. The following controls are located on the upper control panel.

### **Preheat Switch**

The preheat switch (refer to Figure 4) is a momentarily on toggle switch. This switch operates the glow plugs to aid in starting the engine when the start switch is in the on position.

- When the engine is warmed up or the ambient temperature is above 10°C (50°F), it is not necessary to operate the glow plugs before starting the engine.
- When the ambient temperature range is 10°C (50°F) to -5°C (23°F), press and hold the preheat button for five seconds before starting the engine.
- When the ambient temperature is below -5°C (23°F), press and hold the preheat button for ten seconds before starting the engine.

### **Start Switch**

The engine can be started from the platform using the start switch on the front of the upper control panel (refer to Figure 4).

This switch is similar to an automobile ignition switch.

- Turn the switch to start until the engine starts, then release it to on.
- If the engine dies, the switch must be turned to off before it can be turned back to start.

An alarm sounds, when the switch is turned on, to warn others that the machine engine is being started.

#### *Note*

*On some machines it may be necessary to pause about three seconds in the on position before going to start so the starter can engage.*

If the platform is to stay in a particular position for a long time, turn the start switch to off to shut off the engine and save fuel.

## **Emergency Stop Button**

The emergency stop is a two-position, red push button on the top of the upper control panel (refer to Figure 4).

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

#### *Note*

*The lower controls override the upper controls. If the upper control emergency stop button is engaged the lower controls can still be used to operate the aerial platform.*

- Push the emergency stop button inward when the upper controls are not in use to protect against unintentional operation.

## **Boom Joystick**

The boom joystick (refer to Figure 4) is used to raise and lower the main boom and to rotate the turntable. The boom and turntable functions may be operated simultaneously.

#### *Note*

*The distance the joystick is moved is proportional to the speed of the function.*

Hold the joystick forward to raise the main boom and backward to lower the boom.

Hold the joystick to the right to rotate the turntable counter-clockwise and to the left to rotate the turntable clockwise.

## **Drive Joystick**

The drive joystick (refer to Figure 4) is used to control forward and reverse motion of the aerial platform. It is also used to steer the machine. The steering and drive functions may be operated simultaneously.

#### *Note*

*The distance the joystick is moved is proportional to the speed of the function.*

Hold the joystick forward to move the aerial platform forward and backward to move in reverse as indicated by the directional arrows on the chassis.

Hold the joystick to the right to steer the aerial platform to the right and to the left to steer to the left as indicated by the directional arrows on the chassis.

#### *Note*

*The steering wheels are not self-centering. Set the steering wheels straight ahead after completing a turn.*

## **Drive Range Switch**

The drive range switch (refer to Figure 4) has two posi-

## Controls and Indicators

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tions to select drive wheel operation when the booms are in the stowed position; tip boom fully retracted and main boom fully lowered.

- High range (rabbit) – high speed drive 6.1 km/h (3.8 mph) with booms in the stowed position.
- Low range (turtle) – creep speed 1.2 km/h (0.75 mph) with high torque drive operation with booms in any position.

The drive range operates in low when the booms are out of the stowed position, regardless of the position of the drive range switch.

### Boom Speed Knob

Use the boom speed control knob (refer to Figure 4) to control the speed of the following boom functions:

- Main boom raise/lower
- Main boom extend/retract
- Turntable rotation clockwise/counterclockwise

Set the knob to slow (turtle) when beginning a boom movement. The speed may be increased by slowly rotating the knob toward fast (rabbit). For smooth operation, rotate the knob to slow when ending boom movement.

### Riser Switch

The riser switch (refer to Figure 4) is used to raise or lower the riser booms. The switch is spring returned to the center off position.

- Hold the switch upward to raise the riser booms.
- Hold the switch downward to lower the riser booms.

### Boom Extension Switch

The boom extension switch (refer to Figure 4) is used to extend or retract the booms. The switch is spring returned to the center off position.

- Hold the switch downward to extend the booms.
- Hold the switch upward to retract the booms.

### Jib Articulation Switch

The jib articulation switch (refer to Figure 4) is used to raise or lower the jib. The switch is spring returned to the center off position.

- Hold the switch upward to raise the jib.
- Hold the switch downward to lower the jib.

### Platform Level Switch

The platform level switch (refer to Figure 4) is used to level

the platform floor with respect to the ground. The switch is spring returned to the center off position.

- Hold the switch up to tilt the platform floor upward or away from the ground.
- Hold the switch downward to tilt the platform floor downward or toward the ground.

### Platform Rotation Switch

The platform rotation switch (refer to Figure 4) is used to rotate the platform relative to the end of the tip boom. The switch is spring returned to the center off position.

- Hold the switch to the right to rotate the platform counterclockwise.
- Hold the switch to the left to rotate the platform clockwise.

### Engine/Emergency Power Switch

The engine/emergency power switch (refer to Figure 4) is used to operate turntable, boom, and platform functions using the emergency power system. The switch is spring returned to the engine position for aerial platform engine operation.

## Caution

**The emergency power system is for emergency lowering and stowing only. The length of time the pump can be operated depends on the capacity of the battery. Do not use this system for normal operation.**

- Hold the engine/emergency power switch downward in the direction of the white arrow to activate the emergency power system.
- Release the switch to disengage the emergency power system.

If the engine is running, it will stop when the switch is placed in the emergency power position.

### Snorkel Guard Override Switch

When the Snorkel Guard system is activated, the Snorkel Guard override switch (refer to Figure 4) is used to override the system to operate main boom down, riser boom down, or jib down functions. The switch is spring returned to the normal operation position.

- Hold the switch upward to override the Snorkel Guard system.
- Release the switch to the downward position to re-sume normal machine operation.

### Horn Switch

The horn switch is to the right of the emergency stop button on the upper control panel (refer to Figure 4). Hold the switch upward to sound the horn.

### Platform Foot Switch

The upper controls are interlocked through the platform foot switch.

Step down on and hold the platform foot switch to activate the drive and boom functions from the upper controls.

### AC Generator Switch

The switch for the optional AC generator is located on the front of the upper control panel.

With the engine running, place the switch in the generator position to provide electrical power to the electrical outlet at the platform. Return the switch to the off position to turn off the generator and resume machine operation.

Machine functions will not operate while the switch is in the generator position.

### Hydraulic Oil Warm-Up Switch

The optional hydraulic fluid warm-up switch is used to warm the hydraulic fluid when the ambient temperature is below 0°C (32°F) and boom movement is sluggish because of cold fluid.

## Caution

**Not all hydraulic fluid is suitable to use in the hydraulic system. Some have poor lubricating characteristics and may increase component wear. Only use hydraulic fluid as recommended.**

Use cold weather hydraulic oil as recommended in the machine General Specifications in temperatures of -12°C (10°F) or below.

The toggle switches for the warm-up system are on the lower control panel and on the front of the upper control panel.

### Note

*Machine functions are not operational while using the hydraulic warm-up system.*

To warm-up the hydraulic fluid from the upper controls:

1. Start the engine from the upper controls.
2. Place the hydraulic fluid warm-up switch in the on position.
  - The engine throttle speed will increase to warm the hydraulic fluid.

- The engine throttle speed will decrease and return to idle once the hydraulic fluid reaches a preset temperature.

- If the warm-up switch is left on the engine speed will continue to increase and decrease to keep the hydraulic fluid at a preset temperature.

3. When the engine throttle speed returns to idle, place the hydraulic oil warm-up switch in the off position.

## 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 turntable covers 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 between the add and full marks on the sight glass. Add recommended hydraulic fluid if necessary. See “Specifications” on page 24.
3. Check the engine oil and coolant levels and make sure they are at the proper level.
4. Check that all guardrails are in place and all fasteners are properly tightened.
5. 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

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### System Function Inspection

Refer to “Controls and Indicators” on page 8 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. Pull the Upper Control Emergency Stop Switch to the ON position.
4. Visually inspect the elevating assembly, 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. Test each machine function (jib, platform level, platform rotate, elevation, rotation, extension) from the lower control station by holding the ground operation switch up while operating the control toggle switches (ref: Figure 3 on page 8).
6. Test the engine/emergency power switch 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 (drive, jib, platform level, platform rotate, elevation, rotation, extension from the upper control station by stepping on the platform foot switch and operating the function controls (ref: Figure 4 on page 8).
11. Push the Upper Control Emergency Stop Button to check for proper operation. All machine functions should be disabled. Pull the Upper Control Emergency Stop Button outward 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, booms, 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.**

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:

- rear of the platform
- lower controls
- upper controls

### 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.

### Cold Weather Start-Up

If the ambient temperature is 0°C (32°F) or below, the engine and hydraulic system oil may need to be warmed before operation. Do not operate the engine at more than a fast idle until the engine and hydraulic oil has had a chance to warm.

Cold, thick hydraulic oil does not flow well and may cause delay in response to control movement. Cold hydraulic oil may also cause cavitation and pump damage.

### Hydraulic System Cold Weather Warm-Up

Some machines may have a hydraulic fluid warm-up system that will automatically warm the fluid upon activating the warm-up switch. The hydraulic fluid may also be warmed manually if the machine is not equipped with the optional warm-up system.

### Caution

**Not all hydraulic fluid is suitable to use in the hydraulic system. Some have poor lubricating characteristics and may increase component wear. Only use hydraulic fluid as recommended.**

Use cold weather hydraulic oil as recommended in the machine General Specifications in temperatures of -12°C (10°F) or below.

### Hydraulic System Warm-Up Switch

This system may be used to warm the hydraulic fluid when the ambient temperature is below 0°C (32°F) and boom movement is sluggish because of cold fluid.

There may be a toggle switch for the warm-up system on the lower control panel and/or one on the front of the upper control panel.

The engine must be running and the switch used to turn the system on must be at the same location that the engine was started. For example, if the engine was started from the lower controls, the warm-up switch at the lower controls must be used for the system to operate.

To operate the warm-up system:

1. Start the engine.
2. From the same control station that the engine was started, place the warm-up switch in the on position. The engine throttle speed will increase while the warm-up system is on.
3. After the hydraulic fluid has been warmed to operating temperature and the throttle speed returns to idle, place the warm-up switch in the off position.

### Manually Warming The Hydraulic System

The hydraulic oil may be warmed by bottoming out the boom extension cylinder. Raise the main boom so it is horizontal and operate the boom retract function while the machine is stowed. With the cylinder bottomed out the oil flow will produce heat to warm the hydraulic oil.

### Caution

**Not all hydraulic fluid is suitable to use in the hydraulic system. Some have poor lubricating characteristics and may increase component wear. Only use hydraulic fluid as recommended.**

Use cold weather hydraulic oil as recommended in the machine General Specifications in temperatures of -12°C (10°F) or below.

## Operation

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### Preparing for Operation

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

1. Perform a prestart inspection as described in the “Daily Preventative Maintenance Checklist” on page 23.
2. Place the battery disconnect switch in the on position.
3. Close and latch the cowling doors.

### Lower Controls

The lower controls override the upper controls. This means that the lower controls can always be used to operate the platform regardless of the position of the upper control emergency stop button.

Boom, turntable, and platform 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 operate boom, turntable, or platform functions using the lower controls (ref: Figure 3 on page 8).

1. Place the emergency stop switch in the on position. Insert the key into the controls switch and turn the switch to the lower control position.
2. Operate the preheat button if required.
  - When the engine is warmed up or the ambient temperature is above 10°C (50°F), it is not necessary to operate the glow plugs before starting the engine.
  - When the ambient temperature range is 10°C (50°F) to -5°C (23°F), press and hold the preheat button for five seconds before starting the engine.
  - When the ambient temperature is below -5°C (23°F), press and hold the preheat button for ten seconds before starting the engine.
3. Press the start button until the engine starts, then release. The engine will not start if the control selector switch is left in the lower control position for 30 seconds or longer before starting the engine. The control selector switch must be turned back to off before the engine will start.
4. Let the engine warm to operating temperature.
5. Hold the ground operation switch in the on position while operating the boom and turntable control toggle switches.
6. Release the function toggle switch to stop movement.
7. Place the ground operation switch in the off position when no functions are being operated.

### Upper Controls

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

Use the following procedure to operate machine functions using the upper controls (ref: Figure 4 on page 8).

1. At the lower controls, place the emergency stop switch in the on position and place the controls switch in the upper controls position.
2. Enter the platform and securely close the gate.
3. Attach the fall restraint lanyard to one of the anchor points.
4. Pull the emergency stop outward.
5. Turn the start switch to the on position and pause a few seconds while the alarm sounds to alert others that the machine is about to start. Operate the preheat switch if required.
  - When the engine is warmed up or the ambient temperature is above 10°C (50°F), it is not necessary to operate the glow plugs before starting the engine.
  - When the ambient temperature range is 10°C (50°F) to -5°C (23°F), press and hold the preheat button for five seconds before starting the engine.
  - When the ambient temperature is below -5°C (23°F), press and hold the preheat button for ten seconds before starting the engine.
6. Turn the switch to start, then release it to on. The engine will not start if the switch is left in the on position for 30 seconds or longer before turning it to start. The switch must be turned back to off before the engine will start.
7. Let the engine warm to operating temperature.

### Boom Operation

Use the following procedure to operate the turntable, boom, or platform functions.

1. Step down on the platform foot switch. This switch must be held down to operate the upper controls.
2. Hold the appropriate control in the desired direction. Always look in the direction of movement.
3. To stop movement release the control to its neutral position or release the foot switch.

### Driving and Steering



**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 the machine on grades that exceed the percent grade-ability of that particular machine.**

For operation of A62JRTJ machines on grades up to 45 percent, it is recommended that the main boom be near horizontal to provide adequate ground clearance.

A 45 percent grade is a 1.4 m (54") vertical rise in 3.05 m (10') horizontal length.

Avoid driving with the platform over the front end of the chassis. In this position the machine is difficult to control because:

- Drive and steer control movements and their resulting machine movements are reversed.
- When driving fast, sudden turns or stops produce more severe reactions to platform occupants.
- More turning space is required to prevent the platform from colliding with obstacles several feet beyond the path of the tires.

### **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.**

The blue and yellow arrows on the chassis indicate the direction the chassis will move when the drive or steer control is moved toward the corresponding color.

When the machine is in the stowed position, with the booms centered between the rear wheels, the direction of drive and steer control movement corresponds with the direction of chassis movement.

When the turntable is rotated from the stowed position, with the booms to either side of or in front of the chassis, the direction of control movement does not correspond with the direction of chassis movement.

- To avoid confusion, always drive to the work area or move between work areas with the turntable and booms in the stowed position.
- After arriving at the work area, the booms may be positioned to the side or the front of the chassis for final positioning.
- Always look in the direction of movement as indicated by the directional arrows on the chassis.

Use the following procedure to operate the drive and

steer functions.

1. Determine the desired drive range for the specific driving conditions. Place the switch in the appropriate position to achieve the desired drive wheel operation.
  - Use high range (rabbit) when traveling across firm, flat, level surfaces. High range can only be activated when the booms are stowed. High range is for high speed, low torque operation.
  - Use low range (turtle) for driving on loading ramps or other steep grades and when safety considerations demand slow deliberate machine movement. Low range is for low speed, high torque operation.
2. Step down on the platform foot switch.
3. Push the drive joystick forward to move the chassis forward, the direction of the blue arrow. Pull the joystick backward to move the chassis backward, the direction of the yellow arrow. The drive speed is proportional to the joystick position.
4. To stop drive motion, return the joystick to neutral.
5. Push the drive joystick to the right to steer to the right, the direction of the yellow arrow. Push the joystick to the left to steer to the left, the direction of the blue arrow.

#### *Note*

*The steering wheels are not self-centering. Set the steering wheels straight ahead after completing a turn.*

6. After driving to the desired location, release the foot switch, or push the emergency stop button to apply the parking brakes.

#### **Drive Speeds**

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

Always slow down and shift the drive system to low range before traveling over rough terrain or any sloped surface.

Drive speed ranges are interlocked through limit switches that sense the main and tip boom position.

- When either boom is elevated or extended, only the slowest drive speed will work regardless of the drive range switch position.
- To avoid a sudden speed change from high to low elevated boom speed, always bring the machine to a stop before raising the booms from the stowed position.

### **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 in high or mid speed when the main boom is above horizontal or the tip boom is extended.

### Pivoting Front Axle

The front axle pivots to maximise tire contact with the ground. This helps to optimize both traction and machine stability.

The axle has the ability to pivot when either the ground operation switch is engaged at the lower controls, or when the foot switch at the upper control station is engaged.

While driving between work sites, the pivoting axle:

- Improves traction
- Reduces ground pressure

### Snorkel Guard Override Switch

When the Snorkel Guard system is activated, the Snorkel Guard override switch (refer to Figure 4 on page 7) is used to override the system to operate main boom down, riser boom down, or jib down functions. The switch is spring returned to the normal operation position.

### Warning

**The potential for an accident increases when safety devices do not function properly. Death or serious injury could result from such accidents. The Snorkel Guard override switch must only be used when all controls are released and in the neutral position. If a zero or neutral state cannot be achieved, depress the emergency stop and obtain assistance at the lower controls.**

1. When machine is stopped due to activation of the Snorkel Guard system, immediately depress the emergency stop, release the foot switch and all controls. Perform an assessment of the situation which caused the system to activate.
2. If it is determined that all controls are released and operation can proceed, return the emergency stop to the on position, and activate the Snorkel Guard override switch.
3. Activate the foot switch.
4. Activate the necessary functions to move the platform away from the obstacle that caused the Snorkel Guard activation.
5. Assess the machine for any damage. If damage occurred, return to the stowed position, exit the unit and perform a thorough inspection before returning to service.

### Tilt Alarm

If the aerial platform chassis is out of level more than 3.5 degrees when the main boom is raised or extended, or when the riser boom is raised, an alarm will sound. The tilt alarm is located under the upper control panel.

### 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 or position the aerial platform for elevated use near any drop-off, hole, slope, soft or uneven ground, or other tip-over hazard.**

Completely lower the booms and then drive to a level surface when the tilt alarm sounds.

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

### All Motion Alarm

The optional all motion alarm sounds loud intermittent beeps anytime the machine functions are being operated.

### Electrical Power Outlet

Power may be supplied to the outlet using an external power source or by operating the optional AC generator.

To use the outlet, plug a source of power into the power-input connector on the right side of the chassis. Unplug the source of power before moving the aerial platform.

### AC Generator

The optional generator supplies power to the electrical outlet only when the engine is running and the machine is stationary. The machine functions will not operate when the generator switch is in the generator position.

### Caution

**Cold hydraulic oil does not flow well and may produce improper generator output voltage. Improper outlet voltage can damage some electrical power tools and equipment. Warm the hydraulic oil before operating the generator.**

Do not operate the generator unless the hydraulic oil is at operating temperature. Refer to “Cold Weather Start-Up” on page 15 for a hydraulic oil warm-up procedure.

To supply power to the electrical power outlet, start the engine and place the generator switch in the generator position.

The engine will run at high idle while the generator is operating. The generator will continue to operate as long as the engine is running and the switch is in the generator position.

### Air Line

The optional air line may be used to conduct air for tool operation at the platform.

- The input connector is at the rear of the chassis and the output connector is at the platform on the rotator guard.
- The maximum working pressure of the line is 1,723 kPa (250 psi).

The air line may be used to conduct fluids such as water or antifreeze. Contact Snorkel for compatibility information before using the air line to conduct other fluids.

### **Caution**

**Fluid in the air line may damage some air tools or freeze and damage the line. Drain and blow out the air line after using it to conduct fluids.**

Use the following procedure to drain the air line.

1. Close the input connector on the chassis.
2. Open the output connector at the platform.
3. Raise the booms slightly above horizontal.
4. Open the input connector on the chassis.
5. Allow the fluid to drain from the line.
6. Lower the boom and close both connections.

## Emergency Lowering

### **Warning**

**If the platform should fail to lower, NEVER climb down the elevating assembly.**

**Stand clear of the elevating assembly while operating the Emergency Power System.**

The emergency power system can be used to operate the machine from the lower or upper controls.

### **Caution**

**The emergency power system is for emergency lowering and stowing only. The length of time the pump can be operated depends on the capacity of the battery. Do not use this system for normal operation.**

Only use the emergency power system if the main power system fails.

### **Lower Controls**

Use the following procedure to operate the machine using the emergency power system from the lower controls.

1. Place the battery disconnect switch in the on position.

2. Place the key in the control selector switch and turn it to the lower control position.
3. Pull the emergency stop button outward.
4. Hold the ground operation switch in the on position while holding the engine/emergency power switch in the emergency power position.
5. Hold the appropriate function toggle switch in the desired direction.

### **Upper Controls**

For the upper controls to be operational:

- The battery disconnect switch must be in the on position.
- The emergency stop button at the lower controls must be in the on position.
- The control selector switch at the lower controls must be in the upper control position.

Use the following procedure to operate the machine using the emergency power system from the upper controls.

1. Pull the emergency stop button outward.
2. Turn the start switch on.
3. Step down on the platform foot switch.
4. Hold the engine/emergency power switch in the emergency power position.
5. Hold the appropriate function toggle switch in the desired direction.

### **After Use Each Day**

1. Ensure that the platform is fully lowered.
2. Park the machine on a firm level surface, preferably under cover, secure against vandals, children and unauthorized operation.
3. Turn the Chassis Key Switch to OFF and remove the key to prevent unauthorized operation.

## Transporting the Machine

### 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 all cowling doors.

#### By Crane

Secure the straps to chassis lifting/lugs only.

Know the approximate location of the center of gravity before lifting the machine off the ground. Refer to Figure 5.

### **▲**Danger

Lifting by Crane is for transport purposes only.

See Specifications for weight of machine and be certain that the crane is of adequate capacity to lift the machine.

#### By Truck

1. Maneuver the machine into transport position and chock wheels.
2. Place a wood block under the tip end of the jib foot. Lower the platform so the foot rests on the wood block.

### **▲**Caution

Ratchets, winches, and come-alongs can produce enough force to damage machine components. Do not over tighten the straps or chains when securing the aerial platform to the transport vehicle.

3. Use a nylon strap to securely fasten the platform against the wood block. Thread the strap over the toeboard. Refer to Figure 6.



Figure 6 – Platform

4. Secure the machine to the transport vehicle with chains or straps of adequate load capacity attached to the chassis lifting/tie down points.

### Storage

No service is required when storing, or removing the machine from service, for less than one week.

If the machine functions are not cycled for longer than one week:

- Grease exposed cylinder rods with a light, white lithium grease.
- Periodically charge the batteries.

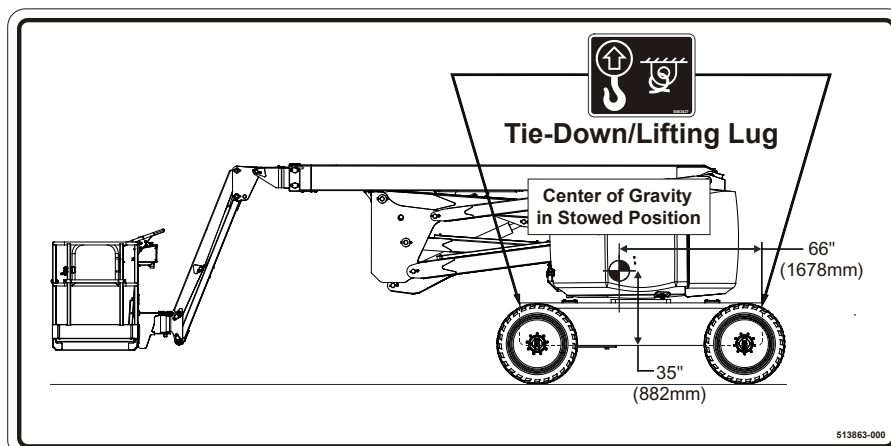


Figure 5 – Center of Gravity

## Maintenance

### **Warning**

Never perform service while the platform is elevated.

### Hydraulic Fluid

The hydraulic fluid reservoir is located behind the left side chassis door. Refer to Figure 7.

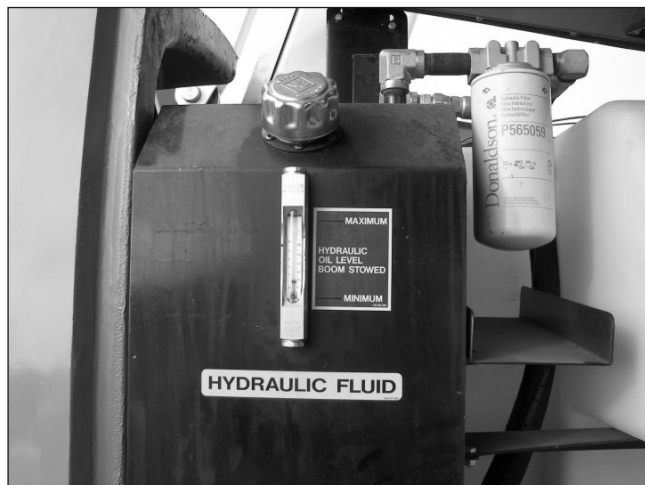


Figure 7 – Hydraulic Fluid Reservoir

#### Note

Never add fluid if the platform is elevated.

### Check Hydraulic Fluid

1. Make sure that the platform is fully lowered.
2. Open the left side cowling door.
3. Check the fluid level on the gauge on the end of the reservoir.
4. Add the appropriate fluid to bring the level to the FULL mark. See “Specifications” on page 24.

### Engine

Open the right side cowling door, remove the bolt and swing out the engine tray. Visually inspect the engine and its components with the engine off. Replace the bolt after closing the engine tray.

### Oil Level

Check the engine oil level before starting the engine so the oil has drained to the pan. The proper oil level is between the add and full marks on the dipstick.

The distance between the top and bottom dipstick marks corresponds to about 1 liter (1 quart US). Add oil, if necessary, before starting the engine.

### 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.

- 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 (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.

### **Warning**

Always use manufacturer approved replacement parts.

## Inspection and Maintenance Schedule

### **Caution**

**Frequency and extent of periodic inspections 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 elevating assembly 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	INSPECTION OR SERVICES	Y	N	R
<b>Operator's Manual</b>	In place, all pages readable and intact			
<b>Engine</b>				
Oil level	Between full and add marks			
Coolant	Proper fluid level			
Radiator	Cap tight, good condition and clean			
Fuel tank and line	Tank full, cap in place and tight/ no leaks			
<b>Electrical System</b>				
Battery	Condition and charged for proper operation			
Battery fluid level and terminals	Proper level/clean, connectors tight			
Cables and wiring harness	No wear or physical damage			
<b>Hydraulic System</b>				
Fluid level	Between full and add marks			
Hose, tubes and fittings	No leaks			
Cold weather warm-up kit	Proper operation			
<b>Tires</b>	Good condition			
<b>Wheels</b>	All wheel lug nuts present and properly torqued			
<b>Lower Control Station</b>				
Operating controls	Proper operation			
Emergency stop and emergency power	Shuts off lower controls/proper operation			
<b>Level Sensor</b>	Sounds tilt alarm			
<b>Flashing Light</b>	Proper operation			
<b>All Motion Alarm</b>	Sounds when machine is operated and/or driven			
<b>Structures</b>				
Weldments – Chassis, turntable, booms, platform, etc.	Welds intact, no damage or deformation			
Slide pads	In place, no damage or deformation			
Fasteners	In place and tight.			
<b>Upper Control Station</b>				
Guardrail system and lanyard anchors	Welds intact, no damage or deformation			
Operating controls – Boom functions, drive, brakes, etc.	Proper operation			
Emergency stop and emergency power	Shuts off upper controls/proper operation			
Horn	Sounds when activated			
Snorkel Guard	Proper operation			
<b>Placards and Decals</b>	In place and readable			

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

## Specifications

### Specifications

#### Aerial Platform

Working height	20.6 m (67' 8")
Maximum platform height	18.8 m (61' 8")
Up and over height	9.0 m (29' 6")
Maximum horizontal reach	11.1 m (36' 6.4")
Main boom	
Articulation	0° to +72.9°
Extension	3.1 m (10' 1")
Jib Articulation	-68.5° to +68.5°
Jib Extension	1.82 m (6')
Tail swing	0
Turntable rotation	360° non-continuous
Turning radius, outside	4.6 m (15' 1")
Turning radius, inside	1.4 m (4' 7")
Wheelbase	2.4 m (8')
Ground clearance	350 mm (13.75")
Maximum wheel load	4990 kg (11,000 lb)
Maximum ground pressure	448 kg/cm <sup>2</sup> (198 psi)
Weight, EVW approximate	11204 kg (24,700 lbs)
Level sensor setting	3.5 degrees
Width	2.4 m (8')
Stowed length	8.6 m (28' 2.5")
Stowed height	2.56 m (8' 5")

#### Platform

Dimensions	
Standard	1.0 m x 2.4 m (39" x 96")
Rated work load	227 kg (500 lb)
Rotation	180 degrees
Maximum number of occupants	2 people
Optional AC generator	110 V
Optional AC generator	220 V
Optional AC generator	220 V, 3-phase, 12 kw

#### Function Speed – Full Cycle

Turntable rotation	
Booms retracted	100 seconds minimum
Riser	
Up	43 seconds minimum
Down	43 seconds minimum
Main boom	
Up	38 seconds minimum
Down	38 seconds minimum
Extend	30 seconds minimum
Retract	33 seconds minimum
Jib	
Up	20 seconds minimum
Down	20 seconds minimum
Platform rotation	9 seconds minimum
Drive	
High, booms stowed	6.1 km/h (3.8 mph)
Low, booms raised/extended	1.2 km/h (0.75 mph)

#### Drive System

Standard	4WD hydrostatic
Gradeability – theoretical	45%
Axle	front oscillating
Vertical wheel travel	22.8 cm (9")

#### Tires

Foam Filled Bar lug	355/55 D625, 14 ply
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#### Electrical System

Voltage	12 V DC negative chassis ground
Source	One - 12 V 660 CCA batteries
Fluid recommended	distilled water

#### Hydraulic System

Pressure	
Drive circuit maximum	41368 kPa (6,000 psi)
Boom circuit maximum	18960 kPa (2,750 psi)
Reservoir capacity	170 l (45 US gal)
Maximum operating temperature	93°C (200°F)
Hydraulic fluid recommended	
Above 0°C (32°F)	Mobil Fluid 424
Consistently between -17°C (0°F) and 0°C (32°F)	Mobil DTE-13M (ISO VG32)
Below -17°C (0°F)	Mobil DTE-11M (ISO VG15)

#### Engine

Diesel	Kubota V2403MT
Output	59hp/44kw

#### Fuel Tank Capacity

Diesel	174.1 l (46 US gal)
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#### Ambient Air Temperature Operating Range

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

#### Maximum Wind Speed

Gust or steady	45 km/h (28 mph)
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#### Vibration

less than 2.5 m/sec<sup>2</sup>

#### Sound Power Level

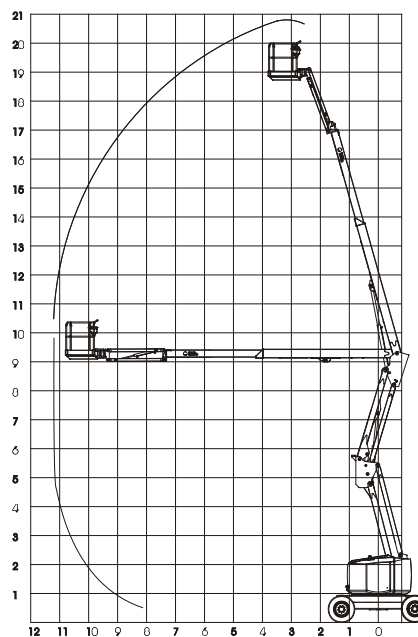
103 dB LWAd

Sound Pressure Level at workstation 72.3 dB LAeq

#### Group Classification

Heavy Duty – intended life 100,000 load cycles

#### Working Envelope





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