snorkel

A46JE



CE

OPERATOR'S MANUAL

ANSI/CSA/CE/AS/NZS
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Limited Warranty

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Boom Extension Switch
The boom extension switch (refer to Figure 7.5) 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 7.5) 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 7.5) 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 rotate switch (refer to Figure 7.5) 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.

Emergency Power Switch
The emergency power switch (refer to Figure 7.5) is used to operate turntable, boom, and platform functions using the emergency power system. The switch is spring returned to the off position.

⚠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 batteries. Do not use this system for normal operation.

- Hold the 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.

Horn Switch
The horn switch is to the right of the emergency stop button on the upper control panel (refer to Figure 7.5).

Hold the switch upward to sound the horn.

Platform Overload Warning Light
When the platform overload limit is exceeded, the horn will sound intermittently and the platform overload light (refer to Figure 7.5) will blink until the excess load is removed from the platform.

Override Switch
When the Snorkel Guard, platform overload system, bumpguard system, or boom/drive cut-out is activated, the override switch (refer to Figure 7.5) is used to override the system to operate riser up/down, main boom up/down/retract, jib boom up/down, or turntable rotation and drive functions. The switch is spring returned to the normal operation position.

- Hold the switch upward to override the Snorkel Guard or the platform overload system.
- Release the switch to the downward position to resume normal machine operation.

Tilt Alarm
If the aerial platform chassis is out of level more than the machine specified slope sensor alarm setting when the main boom is raised or extended, an alarm will sound and the tilt warning light on the lower and upper control panels will illuminate.

Platform Foot Switch
The upper controls are interlocked through the platform foot switch (refer to Figure 7.6)

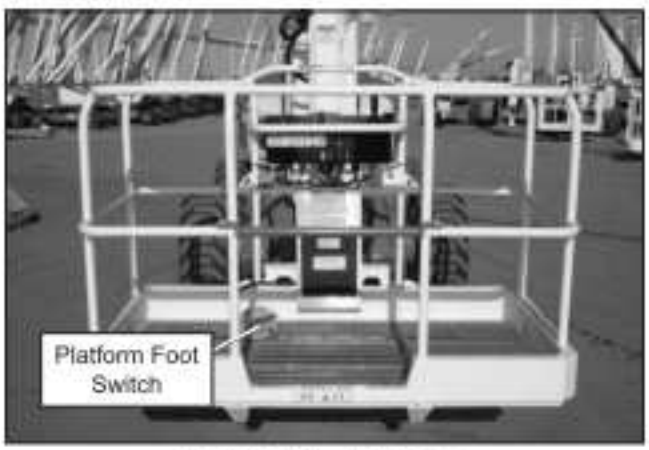


Figure 7.6 – Platform

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

Driving and Platform Work Lights

The control for the optional driving and tail lights is on the front of the upper control panel. Place the switch in the on position to operate the driving and work lights.

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The maximum total load carried by the glazier trays must not exceed 250 lb (113 kg). The weight of the load in the trays reduces the platform capacity by the amount of the load.

⚠Danger

The aerial platform can tip over if it becomes unstable. Death or serious injury will result from a tip-over accident. The glazier package may increase wind loads on the machine. Do not load the glazier trays anytime the wind speed is greater than 28 mph (12.5 m/s).

Do not operate the machine with a load on the glazier trays unless you have been fully trained and understand the hazards associated with lifting panels attached to the platform.

Pipe Rack

Some machines may be equipped with an optional pipe rack. The pipe rack consists of a pair of supports, mounted to the top and mid rails, one on each side of the rear of the platform (refer to Figure 9.10).

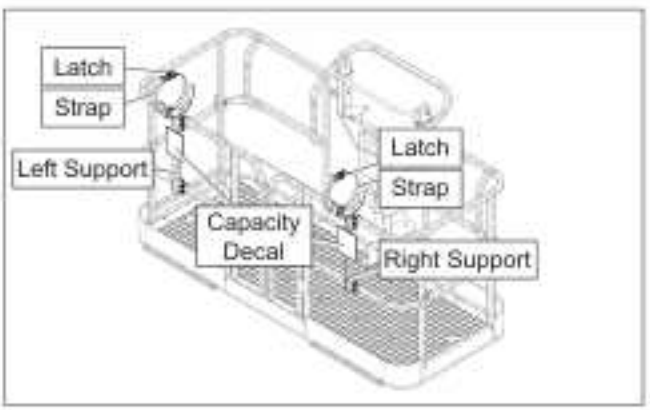


Figure 9.10 – Pipe Rack

⚠Danger

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

The rated load per pair of supports and the platform total capacity including the load on the pipe rack is stated on the pipe rack decal shown in Figure 9.11.



Figure 9.11 – Pipe Rack Rated Load and Platform Capacity

A pipe rack decal is located on the front of each support at the rear of the platform.

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

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

The load carried in the pipe rack reduces the platform capacity by the weight of the load being carried.

The platform capacity is reduced by the weight of the two supports and by the weight of the load being carried.

⚠Danger

The aerial platform can tip over if it becomes unstable. Death or serious injury will result from a tipover accident. Do not exceed the stated pipe length requirements or use with any other platform option.

The pipe rack is not to be used with any other platform option.

When loading the pipe rack:

- Pipe length cannot exceed 10 feet (305cm).
- The height of the pipes in the rack cannot exceed 6 inches (150mm).
- The load in the racks cannot exceed 150 lbs (68kg).
- Pipes must be centered and overhangs must be equal.

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

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Annual Maintenance – Every 500 Hours

Item	Procedure	Information	P/F/R
90 day or 150 hour maintenance	Perform maintenance per schedule	Retain copy of checklist	
Hydraulic oil reservoir	Clean and replace fluid	Above 10°F (-13°C) – ISO VG32 Below 10°F (-13°C) – ISO VG15	
Hydraulic return filter	Replace	After first 50 hours, then at recommended interval	
Hydraulic reservoir suction filter	Clean and reinstall		
Hydraulic pressures	Boom circuit system pressure	Maximum pressure: 2,850-3,000 psi	
	Function pressures: check at manifold, except level	Steer right/left: 2,700-2,800 psi	
		Riser boom down: 1,600-1,700 psi	
		Main boom down: 1,600-1,700 psi	
		Extend: 1,600-1,700 psi	
		Jib Down: 1,600-1,700 psi	
		Rotate: 1,600-1,700 psi	
		Platform rotate: 1,500-1,600 psi	
	Level Pressure: install gauge between valve and slave cylinder	Level: 2,000-2,050 psi	
Gear hubs	Replace fluid	Gear Lubricant – SAE Grade 80W-90	
Swing drive	Replace fluid	Gear lubricant SAE Grade 80W-90	

Maintenance Table Key: P = Pass, F = Fail, R = Repaired

Performed by: _____ Date: _____

Model Number: _____ Serial Number: _____

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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	Tip Over Hazard	Collision Hazard	Fall Hazard
			
THIS MACHINE IS NOT INSULATED!	**NEVER** elevate the platform or drive the machine while elevated unless the machine is on a firm, level surface	**NEVER** position the platform without first checking for overhead obstructions or other hazards.	**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! For this reason it is imperative to keep a safe distance from live parts of electrical equipment!

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 Operation." 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.

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Minimum Safe Approach Distance – AS/NZS

Minimum safe approach distances to energized power lines and their associated parts must be observed while operating the aerial platform.

⚠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.

AS/NZS 2550.10:2006 define minimum distances that must be observed when working near overhead power lines on poles and overhead power lines on towers. Refer to the clearance requirements decals on the machine to determine safe approach distances (refer to Figure 1).

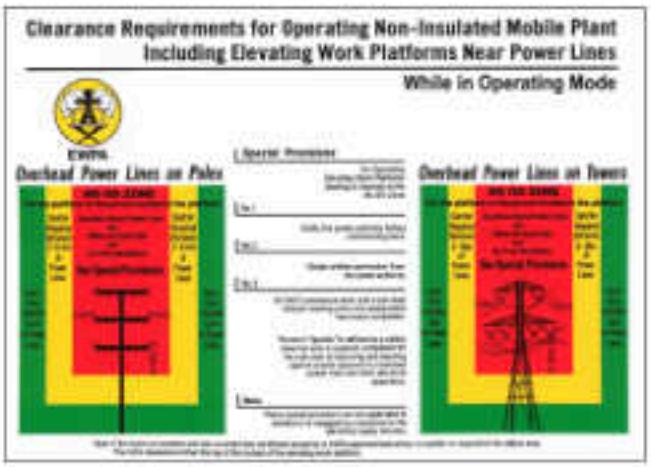


Figure 1 – Minimum Safe Approach Distance

Platform Capacity

Two people and their work materials may occupy 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 machine decals, placards, and in the machine specifications in this manual.

The maximum unrestricted rated load capacity and the maximum number of occupants for the aerial platform are stated on machine decals, placards, and in the machine specifications in this manual.

Manual Force

Manual force is the force applied by the occupants to objects such as walls or other structures outside the work 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 maximum allowable manual force indicated on the machine decals, placards, and in the machine specifications in this manual.

The maximum allowable manual force is limited to150 lb (667 N).

Wind Speeds

Do not add anything to the aerial platform that will increase the wind loading such as billboards, banners, flags, etc.

⚠Danger

The aerial platform can tip over if it becomes unstable. Death or serious injury will result from a tip-over accident. Do not operate the machine in wind speeds of 28 mph (12.5 m/s) or greater.

Do not operate the aerial platform in windy conditions with wind gusts or steady wind speeds of 28 mph (12.5 m/s) or greater. Refer to Figure 2.

Prestart Inspection

Perform a prestart inspection before each shift as described in Chapter 8. Do not use the aerial platform on the job unless you are trained and authorized to do so.

Work Place Inspection and Practices

Do not use the aerial platform as a ground connection when welding.

- The welding ground clamp must be attached to the same structure that is being welded.

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 2 – Beaufort Scale

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