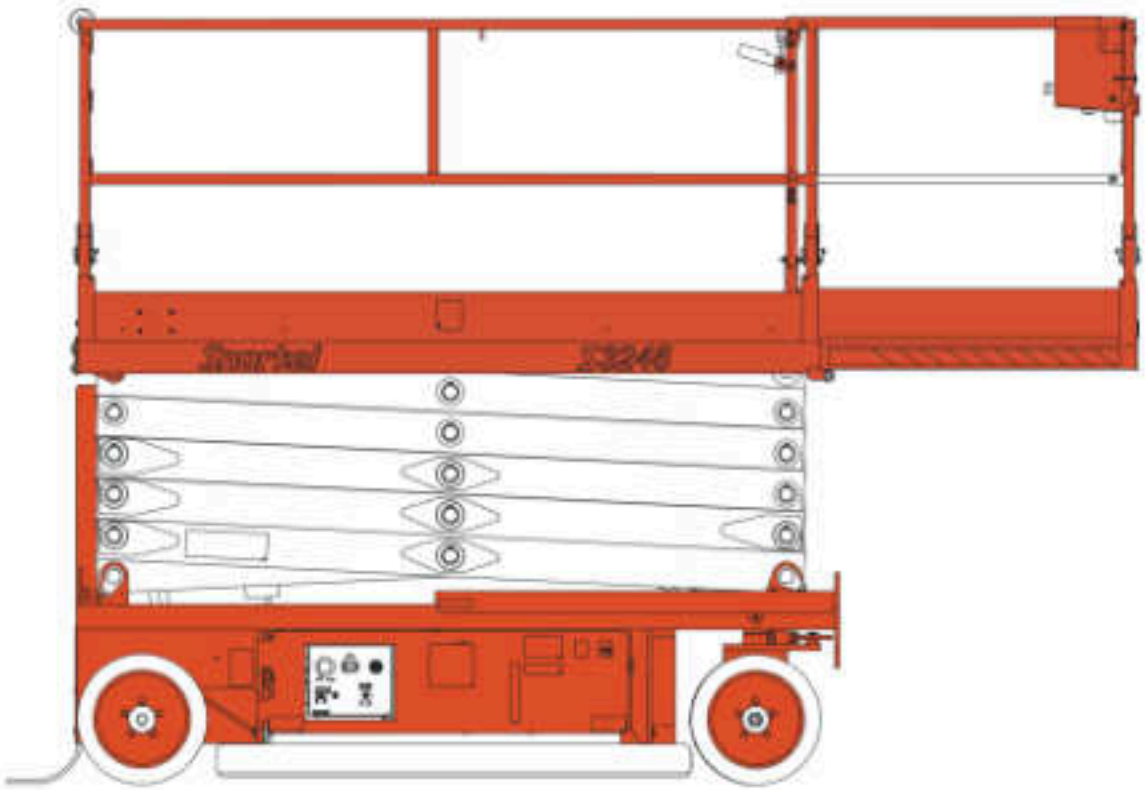
Operator's Manual



S2646
S3246

Part Number 0410063EE
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Snorkel
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Table of Contents

Chapter 1 – Introduction
Aerial Platform Features 1
Options 1
Operator's Manual 1
Safety Alerts 1
Operation 1
Maintenance 2
Owner and User Responsibilities 2
Additional Information 2

Chapter 2 – Specifications
Component Identification 3
General Specifications S2646 4
- Aerial Platform 4
- Platform 4
- Function Speed 4
- Drive System 4
- Drive/Lift Level Sensor Interlock 4
- Tires 4
- Electrical System 4
- Hydraulic System 4
- Ambient Air Temperature Operating Range 4
- Maximum Wind Speed 4
- Vibration 4
- Sound Threshold 4

General Specifications S3246 5
- Aerial Platform 5
- Platform 5
- Function Speed 5
- Drive System 5
- Drive/Lift Level Sensor Interlock 5
- Tires 5
- Electrical System 5
- Hydraulic System 5
- Ambient Air Temperature Operating Range 5
- Maximum Wind Speed 5
- Vibration 5
- Sound Threshold 5

Chapter 3 – Safety
Electrocution Hazards 7
Minimum Safe Approach Distance 7
Prestart Inspection 8
Work Place Inspection and Practices 8
Operation 8
Tip-Over and Falling Hazards 8
Electrical System 9
Hydraulic System 9
Placards and Decals 9

Chapter 4 – Safety Devices
Emergency Stop Controls 11
Drive Motion Alarm 11
Pothole Protector Skids 11
Drive/Lift Pothole Protector Interlock 12
Drive/Lift Level Sensor Interlock 12
Lowering Alarm 12
Lowering Interrupt 12
Emergency Lowering Handle 12
Safety Prop 12
Guardrails 13
Horn 13
Tilt Alarm 13
Overload Protection 13
Flashing Light 13

Chapter 5 – Gauges and Displays
Hour Meter 15
Ammeter 15
Battery Condition Indicator 15

Chapter 6 – Batteries
General Maintenance 17
Charging 17

Chapter 7 – Controls
Battery Disconnect Switch 19
Lower Controls 19
- Emergency Stop Button 19
- Control Selector Switch 19
- Platform Raise/Lower Switch 19

Upper Controls 19
- Emergency Stop Button 20
- Drive/Lift Selector Switch 20
- Joystick 20
- Interlock 20
- Steer Switch 20
- Drive Range Switch 20
- Horn Button 20
- Battery Condition Indicator 20

Chapter 8 – Prestart Inspection
Operator's Manual 21
Electrical System 21
- Battery Fluid Level 21
- Battery Terminals 21
- Battery Charger 21

Safety Prop 22
Cables and Wiring Harness 22
Hydraulic System 23
- Fluid Level 23
- Hoses and Fittings 23
- Free-Wheeling Valve 23

Tires and Wheels 24
Ground Strap 24
Lower Control Station 24
- Operating Controls 24
- Emergency Stop 24

MidWestTech | Snorkel S2646, S3246 Scissor Lift Operator's Manual | Publication 0410063... Order the manual at mid-west-tech.com >

Lowering Alarm and Interrupt 24
Pothole Protector Interlock 24
Emergency Lowering 25
Structures 25
Weldments 25
Slide Pads 26
Fasteners 26
Upper Control Station 26
Guardrail System 26
Platform Extension 26
Swing-Down Rails 27
Brakes 27
Operating Controls 27
Emergency Stop 27
Horn 27
Lowering Alarm and Interrupt 28
Drive Motion Alarm 28
Flashing Light 28
Battery Condition Indicator 28
Placards and Decals 28
Prestart Inspection Checklist 31

Chapter 9 – Operation
Preparing for Operation 33
Lower Controls 33
Upper Controls 33
Driving 34
Drive Range Switch 34
Drive Speeds 34
Drive/Lift Level Sensor Interlock 35
Steering 35
Platform 35
Raising and Lowering 35
Lowering Interrupt 35
Overload Protection 35
Extending 36
Swing-Down Rails 36
Swing-Out Trays 37
Wallboard Loading 37

Chapter 10 – Stowing and Transporting
Stowing 39
Transporting 39
Lifting With a Forklift 39
Winching 39
Driving 40
Hoisting 41
Securing for Transport 42

Chapter 11 – Emergency Operation
Emergency Lowering 43
Towing 43

Chapter 12 – Troubleshooting
Troubleshooting Chart 45

Appendix A – Glossary

Limited Warranty

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General Specifications S3246

Aerial Platform

Working height	11.58 m (38′)
Maximum platform height	9.75 m (32′)
Turning radius	
Inside	25.4 cm (10″)
Outside	2.5 m (101″)
Wheelbase	1.9 m (75″)
Ground clearance	
Pothole protector raised	10.1 cm (4″)
Pothole protector lowered	2.5 cm (1″)
Maximum wheel load	1328 kg (2,928 lbs)
Maximum ground pressure	13.8 kg/cm² (196 psi)
Weight, GVW	
Approximate	3003 kg (6,620 lbs)
Stowed width	116.8 cm (46″)
Stowed length	254 cm (100″)
Stowed height	
Guardrails raised	251.4 cm (99″)
Guardrails lowered	182.8 cm (72″)

Platform

Dimensions	
Main	45″ x 94″ (114.3 cm x 238.7 cm)
Extension	41″ x 36″ (104.1 cm x 91.4 cm)
Total length with extension	130″ (330.2 cm)
Rated work load	
Total	317.5 kg (700 lb)
Extension	113.3 kg (250 lb)
Maximum number of occupants	
Outside	1 person
Inside	2 people

Function Speed

Platform raise	40 to 50 seconds
Platform lower	50 to 60 seconds
High drive	
Platform lower than 2.1 to 2.4 m (7 to 8 feet)	3.2 km/h (0 to 2 mph)
Low drive	
Platform higher than 2.1 to 2.4 m (7 to 8 feet)	0.8 km/h (0 to 0.5 mph)

Drive System

Standard	Two wheel drive
Gradeability	25%
Maximum drive height	9.75 m (32′)

Drive/Lift Level Sensor Interlock

Side-to-side	2 degrees
Front-to-rear	4 degrees

Tires

Nonmarking solid rubber	40.6 cm x 12.7 cm (16″ x 5″)

Electrical System

Voltage	24 V DC negative chassis ground
Source	Four - 6 V 240 amp hour batteries
Fluid recommended	distilled water
Charger	40 amp

Hydraulic System

Maximum pressure	21,373.75 kPa (3,100 psi)
Reservoir capacity	34 l (9 US gal)
System capacity	35 l (9.25 US gal)
Maximum operating temperature	71°C (160°F)
Hydraulic fluid recommended	
Above -13°C (10°F)	Mobil DTE-13M (ISO VG32)
Below -13°C (10°F)	Mobil DTE-11M (ISO VG15)

Ambient Air Temperature Operating Range

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

Maximum Wind Speed

Gust or steady	12.5 m/s (28 mph)

Vibration

less than 2.5 m/sec²

Sound Threshold

below 70 dB(A)

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Chapter 6 – Batteries

The battery tray contains 4, 240 amp hour, 6 volt batteries. These batteries supply 24 volt DC electrical power to operate the aerial platform drive and platform control systems. Proper machine operation depends on well maintained and charged batteries.

General Maintenance

Always keep the batteries clean, free of dirt and corrosion. A film on top of the battery can accelerate discharge.

Cold reduces battery capacity and retards charging. Heat increases water usage and can result in overcharging. Very high temperatures can cause thermal run away which may lead to an explosion or fire. Consult a battery charger specialist if extreme temperature use is unavoidable.

⚠Warning

Battery acid can damage the skin and eyes. Serious infection or reaction can result if medical treatment is not given immediately. Wear face and eye protection when working near the batteries.

Use distilled water to refill the batteries. Avoid water containing metallic solids such as iron.

Charging

Fully recharge the batteries, immediately after use. One charging cycle per day is preferred. Fully charged batteries perform best. The deeper the discharge, the fewer number of cycles a battery will deliver. Deep discharges deteriorate the battery quicker than light shallow cycles.

An overly discharged battery may need to be cycled a few times before it can fully recover. If a battery begins to heat before becoming fully charged, it may be necessary to recharge and discharge the battery a few times.

The aerial platform is equipped with an automatic battery charger that will completely recharge the batteries and turn off after the charge cycle is completed.

⚠Warning

Batteries give off hydrogen and oxygen that can combine explosively. Death or serious injury can result from a chemical explosion. Charge the batteries only in a well ventilated area away from sparks or flame.

⚠Caution

The batteries can be overcharged and/or damaged if the charger fails to shut off automatically. Do not leave the battery charger on for more than two days.

It may take from 1 ½ to 16 hours to recharge the batteries depending on the amount of discharge. If the charging cycle exceeds 16 hours without the batteries being fully recharged, shut off the charger and have the batteries checked.

Use the following procedure to charge the batteries.

1. Turn the battery disconnect switch off (refer to Figure 6.1). The switch is next to the latch on the battery tray.

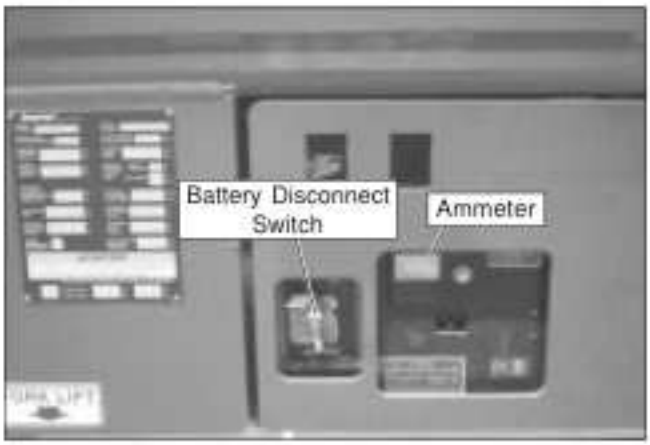


Figure 6.1 – Battery Tray

2. Check the battery water level. Add water to individual cells only if the plates are exposed. Replace the battery caps.

3. Plug the charger into a properly grounded AC outlet using a 3 conductor, 14 gauge or larger extension cord. The extension cord must be as short as possible and in good electrical condition. Make sure the AC voltage selector switch on the charger is set to the same voltage as the outlet voltage. The charger will turn on three to five seconds after a complete electrical connection is made. The ammeter (refer to Figure 6.1) will indicate near 40 amps initially then taper off to 5 to 10 amps as the batteries charge.

Note
If the batteries are fully charged when the charger is plugged in, the ammeter will initially read 35 to 40 amps then quickly read zero.

4. Leave the charger plugged in until it shuts itself off.

5. Unplug the extension cord after the battery charger turns itself off. Allow the batteries to cool off after charging.

6. Check the battery water level. Add water to individual cells only if the plates are exposed. Replace the battery caps.

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Tires and Wheels

Visually inspect the tires (refer to Figure 8.9). They should be smooth without any cuts, gouges, or missing rubber that might affect aerial platform stability.



Figure 8.9 – Tires and Wheels

Check the wheel lug nuts to see that none are missing, damaged, or loose.

Ground Strap

Make certain the ground strap (refer to Figure 8.10) is securely fastened to the chassis. It should be long enough to contact the ground surface to eliminate static electricity from the machine.



Figure 8.10 – Rear of Chassis

Lower Control Station

With no personnel in the platform, test the operation of each control from the lower control station (refer to Figure 8.11).

Operating Controls

Use the following procedure to operate the machine from the lower controls.

1. Turn the battery disconnect switch on.

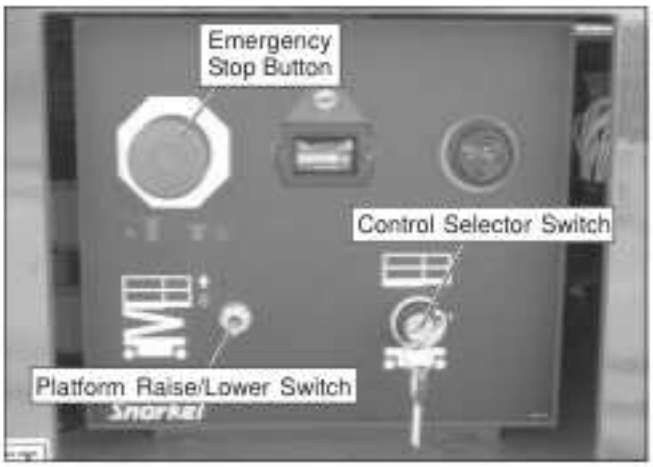


Figure 8.11 – Lower Controls

2. At the lower controls, pull the emergency stop switch outward to the on position.

3. Insert the key into the control selector switch and turn the switch to the lower controls position.

⚠ 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 of the aerial platform while performing the prestart inspection.

Test the operation of the platform raise/lower switch in both directions.

Place the battery disconnect switch in the off position. The platform should not raise or lower with the disconnect in this position.

Emergency Stop

Push the emergency stop button in to turn off the electrical power. The lower control functions should not operate with the emergency stop in this position.

Lowering Alarm and Interrupt

Raise the platform approximately 3 m (10'). Lower the platform and make sure the alarm sounds. The platform should stop lowering when it reaches about 1.5 m (5'). Release the raise/lower toggle switch to reset the lowering function. Wait for 5 seconds and then push the joystick forward to continue lowering.

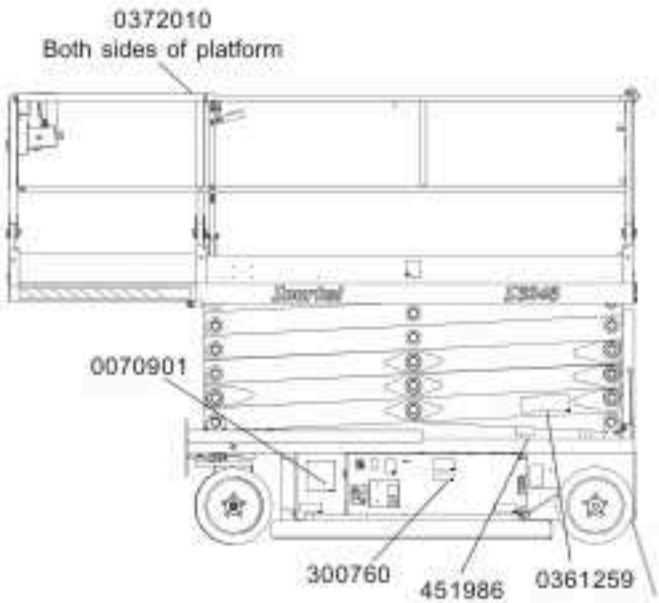
Pothole Protector Interlock

Perform this test using the lower controls.

1. Stow the aerial platform on a smooth, flat, level concrete slab.

2. Remove all persons and materials from the platform.

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Left Side



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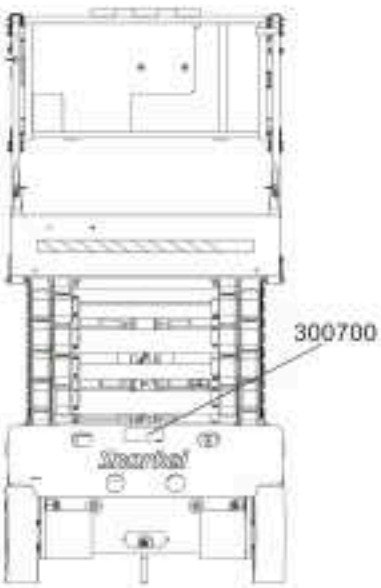
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