

DC ELECTRIC SCISSORS MODELS SJIII 3219 SJIII 3226 SJIII 4632

210274AFA November 2 2022



This manual is based on serial number(s):

SJIII 3219	80 100 000 - 80 149 999
SJIII 3226	80 150 000 - 80 179 999
SJIII 4632	80 180 000 - 80 199 999

Please refer to the website (www.skyjack.com) for older serial numbers.

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Alameda Júpiter, 710 Loteamento American Park Empresarial Indaiatuba, SP, Brasil 13347-653 Tel: +55 19 3936 0132 The Safety Alert Symbol identifies important safety messages on aerial platform, safety signs in manuals or elsewhere. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.



This Safety Alert Symbol means attention!

Become alert! Your safety is involved.



DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

IMPORTANT

IMPORTANT indicates a procedure essential for safe operation and which, if not followed, may result in a malfunction or damage to the aerial platform.



Table of Contents

Section 1 - Al	bout Your Aerial Platform	5
Read ar	nd Heed	5
Safety F	lules	6
Section 2 - Fa	miliarization	
2.1	Familiarization of SJIII Series	13
2.2	Component Identification	14
2.3	Visual & Daily Maintenance Inspections	
2.4	Function Tests	25
2.5	Winching and Towing Procedures	
2.6	Emergency Lowering Procedure	34
Section 3 - O	peration	
3.1	General	35
3.2	Major Components	
3.3	Major Assemblies	
3.4	Serial Number Nameplate	
3.5	Component Identification	
3.6	Component Identification (Optional Equipment/Attachments)	41
3.7	Operator's Responsibility	44
3.8	Start Operation	45
3.9	Guardrail Folding Procedure	50
3.10	Loading/Unloading	
3.11	Moving the Aerial Platform Through a Doorway	54
3.12	Maintenance Support Procedure	56
3.13a	Battery Maintenance	
3.13b	Battery Maintenance (If Equipped)	60
Section 4 - Ta	bles	
Table 4.	1 Standard and Optional Features - ANSI/CSA	63
Table 4.	2 Owner's Annual Inspection Record	64
Table 4.	3 Specifications and Features	65
Table 4.	4 Floor Loading Pressure	66
Table 4.	5 Maximum Platform Capacities (Evenly Distributed)	68
Table 4.	6 Maintenance and Inspection Schedule	69
Table 4.	7 Operator's Checklist	70
Section 5- La	bels	71
Section 6 - Sk	syjack Features	



SKYJACK is continuously improving and expanding product features on its equipment, therefore, specifications and dimensions are subject to change without notice.

Aerial Platform and Mobile Elevating Work Platform Definition

A mobile device that has a positionable platform supported from ground level by a structure.

Purpose of Equipment

The SKYJACK SJIII DC Electric series aerial platforms are designed to transport and raise personnel, tools and materials to overhead work areas.

Use of Equipment

The aerial platform is a highly maneuverable, mobile work station. Work platform elevation and elevated driving must only be done on a firm, level surface.

Manual

The operating manual is considered a fundamental part of the aerial platform. It is a very important way to communicate necessary safety information to users and operators. A complete and legible copy of this manual must be kept in the provided weather-resistant storage compartment on the aerial platform at all times.

Operator

The operator must read and completely understand both this operating manual and the safety panel label located on the platform and all other warnings in this manual and on the aerial platform. Compare the labels on the aerial platform with the labels found within this manual. If any labels are damaged or missing, replace them immediately.

Service Policy and Warranty

SKYJACK warrants each new SJIII Series work platform to be free of defective parts and workmanship for the first 24 months. Any defective part will be replaced or repaired by your local SKYJACK dealer at no charge for parts or labor. Contact the SKYJACK Service Department for warranty statement extensions or exclusions.

Optional Accessories

The SKYJACK aerial platform is designed to accept a variety of optional accessories. These are listed under "Standard and Optional Features" in Table 4.1. Operating instructions for these options (if equipped) are located in Section 3 of this manual.

For non-standard components or systems, contact the SKYJACK Service Department at

A	: 800 275-9522
	: 630 262-0006

Include the model and serial number for each applicable aerial platform.

Scope of this Manual

a. This manual applies to the ANSI/SIA, CSA version of the SJIII Series aerial platform models listed on Table 4.1.

- Equipment identified with "ANSI" meets the ANSI SIA-A92.6-2006 standard.
- Equipment identified with "CSA" meets the CSA B354.2-01 standard.

b. CSA (Canada)

Operators are required to conform to national, territorial/provincial and local health and safety regulations applicable to the operation of this aerial platform.

c. ANSI/SIA (United States)

Operators are required by the current ANSI/SIA A92.6 standards to read and understand their responsibilities in the manual of responsibilities before they use or operate this aerial platform.



Failure to comply with your required responsibilities in the use and operation of the aerial platform could result in death or serious injury!

Operator Safety Reminders

A study conducted by St. Paul Travelers showed that most accidents are caused by the failure of the operator to follow simple and fundamental safety rules and precautions.

You, as a careful operator, are the best insurance against an accident. Therefore, proper usage of this aerial platform is mandatory. The following pages of this manual should be read and understood completely before operating the aerial platform.

Common sense dictates the use of protective clothing when working on or near machinery. Use appropriate safety devices to protect your eyes, ears, hands, feet and body.

Any modifications from the original design are strictly forbidden without written permission from SKYJACK.



Electrocution Hazard

This aerial platform is not electrically insulated. Maintain a Minimum Safe Approach Distance (MSAD) from energized power lines and parts as listed below. The operator must allow for the platform to sway, rock or sag. This aerial platform does not provide protection from contact with or proximity to an electrically charged conductor.

Per ANSI A92.6-2006 8.10(7)

"The operator shall perform only that work for which he or she is qualified, in compliance with all applicable safety related work practices intended to prevent electric shock covered by the Code of Federal Regulations (CFR) 1910.333. The operator's level of competence shall be established only by persons qualified to do so. Operators shall maintain the appropriate minimum approach distance (MAD) from energized power lines and parts covered by CFR 1910.333 (c)."

Unqualified persons must maintain a minimum approach distance of 10 feet from any energized power line up to 50 kV. Energized power lines over 50 kV require a greater minimum approach distance to be maintained. Refer to CFR 1910.333.

As per CSA B354.2-01

"The operator shall maintain the minimum safe approach distance (MSAD) from energized conductors at all times in accordance with the authority having jurisdiction."

DO NOT USE THE AERIAL PLATFORM AS A GROUND FOR WELDING. DO NOT OPERATE THE AERIAL PLATFORM DURING LIGHTNING OR STORMS. DO NOT OPERATE THE AERIAL PLATFORM NEAR POWER LINES. MAINTAIN A MINIMUM SAFE APPROACH DISTANCE (MSAD) FROM ENERGIZED POWER LINES.





Minimum Safe Approach Distance

ANSI/SIA A92.6-2006 & CSA B354.2-01 Requirements

Voltage Range	Minimum Safe Approach Distance	
(Phase to Phase)	(Feet)	
0 to 300V	Avoid Contact	
Over 300V to 50KV	10	
Over 50KV to 200KV	15	
Over 200KV to 350KV	20	
Over 350KV to 500KV	25	
Over 500KV to 750KV	35	
Over 750KV to 1000KV	45	
FAILURE TO AVOID THIS HAZARD WIL	L RESULT IN DEATH OR SERIOUS INJURY!	

60023AD-ANSI



Safety Precautions

Know and understand the safety precautions before going on to next section.



Failure to heed the following safety precautions could result in tip over, falling, crushing, or other hazards leading to death or serious injury.

- KNOW all national, state or territorial/provincial and local rules which apply to your aerial platform and jobsite.
- TURN main power disconnect switch "O" off when leaving the aerial platform unattended. Remove the key to prevent unauthorized use of the aerial platform.
- WEAR all the protective clothing and personal safety devices issued to you or called for by job conditions.
- DO NOT wear loose clothing, dangling neckties, scarves, rings, wristwatches or other jewelry while operating this lift.



AVOID entanglement with ropes, cords or hoses.



- AVOID falling. Stay within the boundaries of the guardrails.
- DO NOT raise the aerial platform or operate elevated in windy or gusty conditions that exceed the limits specified in Section 4, Table 4.5.



- DO NOT increase the lateral surface area of the platform. Increasing the area exposed to the wind will decrease aerial platform stability. Avoid tenting.
- DO NOT drive elevated on a soft or uneven surface.

level surface.

- DO NOT elevate the aerial platform if it is not on a firm.
- DO NOT drive elevated near depressions or holes of any type, loading docks, debris, drop-offs or surfaces that may affect the stability of the aerial platform.
- IF OPFRATION IN ARFAS WITH HOLES OR DROP-OFFS IS **ABSOLUTELY**

NECESSARY, elevated driving shall not be allowed. Position the aerial platform horizontally only with the platform fullylowered. After ensuring that all 4 wheels or outriggers (if equipped) have contact with a firm, level surface, the aerial platform can be elevated. After elevation, the drive function must not be activated.



- DO NOT elevate or drive elevated on a slope. Elevated driving must be done on a firm, level surface.
- DO NOT ascend or descend a grade when elevated. When fully-lowered, ascend or descend grades up to maximum rated inclines listed in Table 4.





Safety Precautions (Continued)

Know and understand the safety precautions before going on to next section.

- DO NOT operate on surfaces not capable of holding the weight of the aerial platform including the rated load, e.g. covers, drains, and trenches.
- DO NOT operate an aerial platform that has ladders, scaffolding or other devices mounted on it to increase its size or work height. It is prohibited.



DO NOT exert side forces on aerial platform while elevated.



DO NOT use the aerial platform as a crane. It is prohibited.



DO NOT sit, stand or climb on the guardrails. It is prohibited.



DO NOT climb on scissor arm assembly. It is prohibited.



AVOID overhead obstructions. overhead Be aware of obstructions or other possible hazards around aerial platform when lifting or driving.



- AVOID crushing hazards. Be aware of crushing hazards when lifting or driving. Keep all body parts inside the aerial platform.
- DO NOT raise the aerial platform while the aerial platform is on a truck, fork lift or other device or vehicle.



DO NOT lower the platform unless the area below is clear of personnel and obstructions.



ENSURE that there are no personnel or obstructions in the path of travel, including blind spots.



- BE AWARE of blind spots when operating the aerial platform.
- DO NOT use with improperly inflated/damaged tires or wheels. Refer to Section 2: Wheel/Tire Assembly.



- ENSURE ALL tires are in good condition and bolts are properly tightened.
- DO NOT alter or disable limit switches or other safety devices.





Safety Precautions (Continued)

Know and understand the safety precautions before going on to next section.

DO NOT use the aerial platform • without guardrails, locking pins and the entry gate(s) in place.



alcohol or drugs.

- STUNT driving and horseplay are prohibited. •
- DO NOT exceed the rated • capacity of the aerial platform.



DO NOT distribute load unevenly.



- DO NOT operate if aerial ٠ platform is not working properly or if any parts are damaged or worn.
- DO NOT leave aerial platform • unattended with key in key switch.





- DO NOT position the aerial platform against another object to steady the platform.
- DO NOT place materials on the guardrails or materials that exceed the confines of the guardrails unless approved by Skyjack.

Safety Precautions (Continued)

Know and understand the safety precautions before going on to next section.

Fall Protection

As per the ANSI A92.6-2006 standard, "The guardrail system of the aerial platform provides fall protection. If occupant(s) of the platform are required to wear personal fall protection equipment (PFPE), occupants shall comply with instructions provided by the aerial platform manufacturer (remanufacturer) regarding anchorage(s)."

If additional fall protection is required, by an employer or the authority having jurisdiction, Skyjack recommends the use of a fall restraint system to keep an occupant within the confines of the platform, and thus not expose the occupant to any fall hazard requiring a fall arrest.

All personal fall protection equipment must comply with applicable governmental regulations and must be inspected and used in accordance with the manufacturer's recommendations.

All personal fall protection equipment must be attached only to approved anchorage points within the platform of the aerial platform.

Entering and exiting the aerial platform should only be done using the three points of contact.

- Use only equipped access openings.
- Enter and exit only when the aerial platform is in the fully retracted position.
- Do use three points of contact to enter and exit the platform. Enter and exit the platform from the ground only. Face the aerial platform when entering or exiting the platform.
- Three points of contact means that two hands and one foot or one hand and two feet are in contact with the aerial platform or the ground at all times during entering and exiting.

<u> warning</u>

An operator should not use any aerial platform that:

- does not appear to be working properly.
- has been damaged or appears to have worn or missing parts.
- has alterations or modifications not approved by the manufacturer.
- has safety devices which have been altered or disabled.
- has been tagged or locked out for non-use or repair.

Failure to avoid these hazards could result in death or serious injury.

Jobsite Inspection

- Do not use in hazardous locations (see NFPA 505).
- Perform a thorough jobsite inspection prior to operating the aerial platform, to identify potential hazards in your work area.
- Be aware of moving equipment in the area. Take appropriate actions to avoid collision.



Notes	

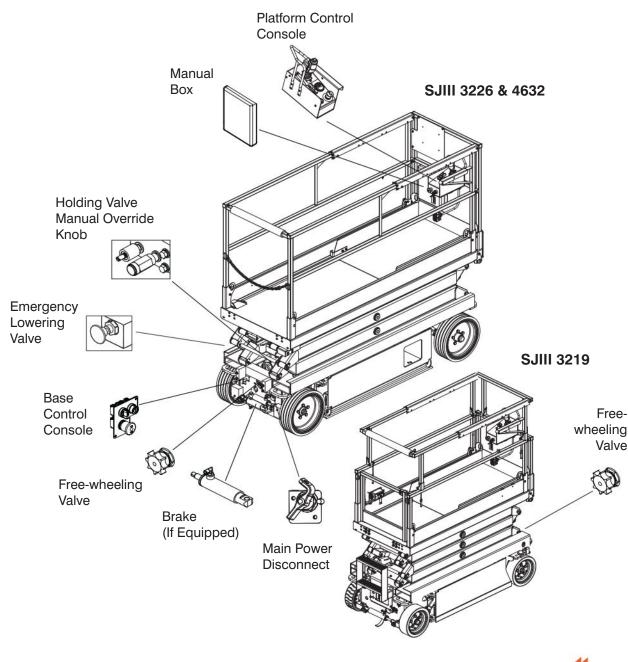
SKYJACK.

2.1 Familiarization of SJIII Series

Aerial Platform Familiarization should be given only to individuals who are QUALIFIED And TRAINED to operate an aerial platform.

Do not operate this aerial platform without proper authorization and training. Failure to avoid this hazard could result in death or serious injury.

It is the responsibility of the operator to read, completely understand and follow all instructions and warnings contained in this operating manual and on the aerial platform.





FAMILIARIZATION

2.2 Component Identification

The following descriptions are for identification, explanation and locating purposes only.

2.2-1 Main Power Disconnect Switch

This switch is located at the rear of the base.

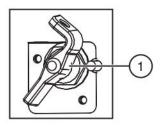


Figure 2-1. Main Power Disconnect Switch

1. Main Power Disconnect Switch - This switch, when in "O" off position, disconnects power to all circuits. Switch must be in "I" on position to operate any circuit. Turn switch "O" off when transporting aerial platform.

2.2-2 Tilt Alarm

The aerial platform is equipped with a device which senses when the aerial platform is out of level in any direction. When activated, it disables drive and lift functions of the aerial platform and an alarm produces an audible sound accompanied by the amber light (if equipped).

If the tilt alarm sounds and the platform does not, or only partially raises, immediately lower the platform completely and ensure that the aerial platform is on a firm level surface. 2.2-3 Base Control Console

This control console is located at the rear of the base. It contains the following controls:

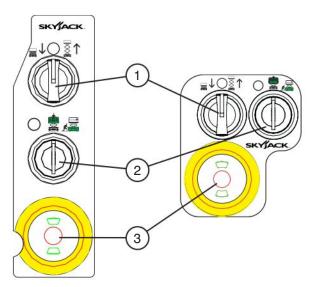


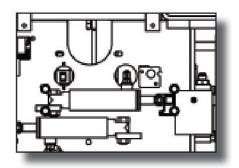
Figure 2-2. Base Control Console

- Lower/Neutral/Raise Switch This switch controls "臺↑" raising or "≡↓" lowering of platform.
- Off/Platform/Base Key Switch This three-way switch allows the operator to turn "O" off power to aerial platform or to activate either "a" platform or "at base controls.
- 3. Emergency Stop Button This button "O", when depressed, disconnects power to the control circuit.

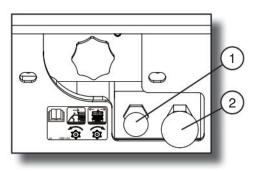


2.2-4 Brake System

The brake system is located at the rear of the base. The brakes must be manually disengaged before pushing, winching or towing. Refer to Section 2.5-2 for procedure on how to release brakes manually. The system contains the following controls:



Pin Brakes (If Equipped)

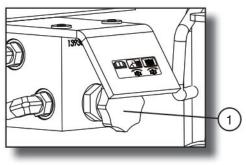


Disc Brakes (If Equipped)

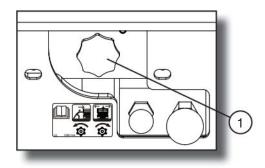
Figure 2-3. Brake System

- 1. Brake auto reset valve plunger
- 2. Brake hand pump

2.2-5 Free-wheeling Valve



Model 3219



Models 3226 and 4632

Figure 2-4. Free-wheeling Valve

1. Free-wheeling Valve - The free-wheeling valve is located at the front and/or rear of the aerial platform (depending on the model). Refer to Section 2.5-1 for procedure on how to release the free-wheeling valve.



2.2-6 Emergency Lowering System

This emergency lowering system allows platform lowering in the event of an emergency or an electrical system failure. Refer to Section 2.6 for the emergency lowering procedure. The system contains the following controls:

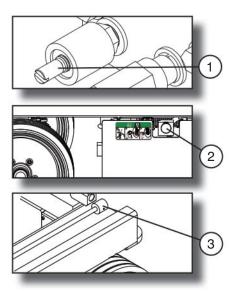


Figure 2-5. Emergency Lowering System

- 1. Holding Valve Manual Override Knob Located on the holding valve at the bottom of each lift cylinder.
- 2. Emergency Lowering Valve Located at the rear of the hydraulic/electric tray.
- **3.** Emergency Lowering Access Rod (3226 & 4632) - Located at the left side of the base.



2.2-7 Platform Control Console

This removable control console is mounted at the right front of the platform. It contains the following controls:

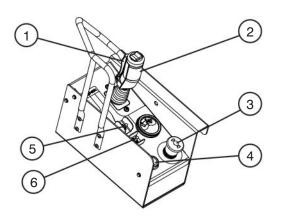


Figure 2-6. Platform Control Console

- Lift/Drive/Steer Enable Trigger Switch This momentary """ switch energizes the controller. It must be held depressed continuously while engaging either the lift/drive or steer functions.
- 2. Lift/Drive/Steer Controller This one-hand lever controls lift/drive and steer motions. Internal springs return it to neutral when controller is released.
- 3. Emergency Stop Button/Operation Light This button "O", when depressed, disconnects power to the control circuit. The operation light indicates upper control availability. It glows when both emergency stop buttons on the platform control console and the base control console are pulled out.

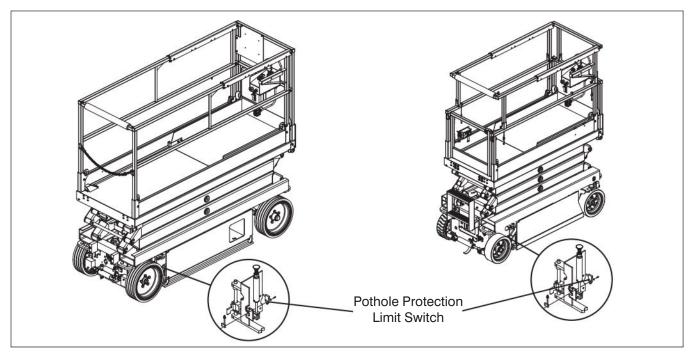
SJIII DC Electric

- 4. **Horn Push Button** This "both push button sounds an automotive-type horn.
- Inclined Drive/Level Drive Switch This switch selects "" inclined drive (low speed/high torque) or "," level drive (high speed/low torque).
- 6. Lift/Off/Drive Switch Selecting "O" off position disconnects power from both lift and drive circuits.
 Selecting "Q" lift position energizes the lift circuit.
 Selecting "Q" drive position energizes the drive circuit.

WARNING

Skyjack scissor lifts are to be operated from the operator's position on the platform with the control box secured on the mounting bracket at the front right portion of the platform. Operation of the unit from the ground is permissible only when maintaining the lift or, in limited circumstances, when an obstruction precludes the safe operation of the lift from the operator's position on the platform. Operation from the ground is to be performed as set forth in the Operating Manual.





2.3 Visual & Daily Maintenance Inspections Begin the visual and daily maintenance inspections by checking each item in sequence for the conditions listed in this section.



To avoid injury, do not operate an aerial platform until all malfunctions have been corrected.

To avoid possible injury, ensure aerial platform power is off during your visual and daily maintenance inspections.

Ensure aerial platform is on a firm, level surface.

NOTE

While performing visual and daily inspections in different areas, be aware to also inspect limit switches, electrical and hydraulic components.

2.3-1 Labels

Refer to Section 5 - Labels in this manual and determine that all labels are in place and are legible.

2.3-2 Electrical

Maintaining the electrical components is essential to good performance and service life of the aerial platform.

Inspect the following areas for chafed, corroded and loose wires:

- base to platform cables and wiring harness
- battery tray wiring harnesses
- hydraulic/electrical wiring harnesses

2.3-3 Limit Switches

Ensure limit switches are properly secured with no signs of visible damage and movement is not obstructed.

2.3-4 Hydraulic

Maintaining the hydraulic components is essential to good performance and service life of the aerial platform.

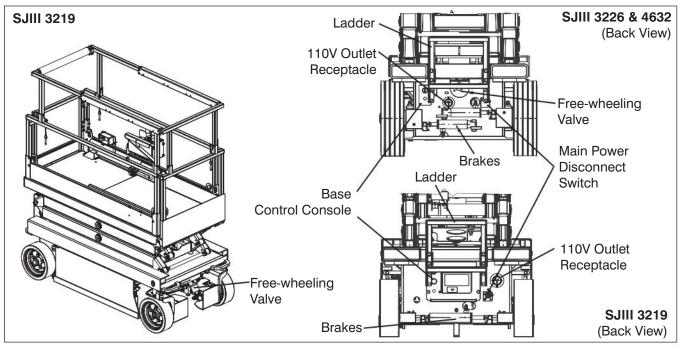
Perform a visual inspection around the following areas:

- hoses and fittings
- all hydraulic cylinders
- all hydraulic manifolds
- the underside of the base
- ground area under the aerial platform

SKYJACK Page 18

SJIII DC Electric

It is the responsibility of the operator to read, completely understand and follow all instructions and warnings contained in this operating manual and on the aerial platform.

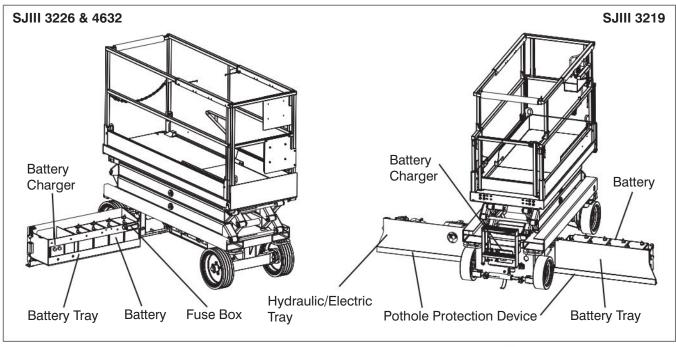


2.3-5 Entrance Side

- Main Power Disconnect Switch
 - Turn main power disconnect switch to " O" off position.
 - Ensure all cables are secure and switch is in proper working condition.
- Base Control Switches
 - Ensure there are no signs of visible damage and all switches are in their neutral positions.
- Free-wheeling Valve Knob (SJIII 3219 - Front Side)
 - Ensure there are no loose or missing parts and there is no visible damage.
- Brakes
 - Ensure there are no loose or missing parts and there is no visible damage.
 - Ensure tabs are not locked.

- 110V Outlet Receptacle
 - Ensure receptacle is free from dirt and obstructions.
- Ladder
 - Ensure there are no loose or missing parts and there is no visible damage.





2.3-6 Battery Tray Side

- Pothole Protection Device
 - Ensure mechanisms have no sign of visible damage and are free from dirt and obstructions.
- Battery Tray
 - Ensure tray latch is secure and in proper working order.
- Battery Charger
 (SJIII 3219 Entrance Side)
 - Ensure charger is secure and shows no visible damage.
- Battery

Proper battery condition is essential to good performance and operational safety. Improper fluid levels or damaged cables and connections can result in component damage and hazardous conditions.

Explosion hazard. Keep flames and sparks away. Do not smoke near batteries.



Battery acid is extremely corrosive -Wear proper eye and facial protection as well as appropriate protective clothing. If contact occurs, immediately flush with cold water and seek medical attention.

- 1. Check battery case for damage.
- 2. Clean battery terminals and cable ends thoroughly with a terminal cleaning tool or wire brush.
- 3. Ensure all battery connections are tight.
- If applicable, check battery fluid level. If plates are not covered by at least 1/2" (13 mm) of solution, add distilled or demineralized water.
- 5. Replace battery if damaged or incapable of holding a lasting charge.

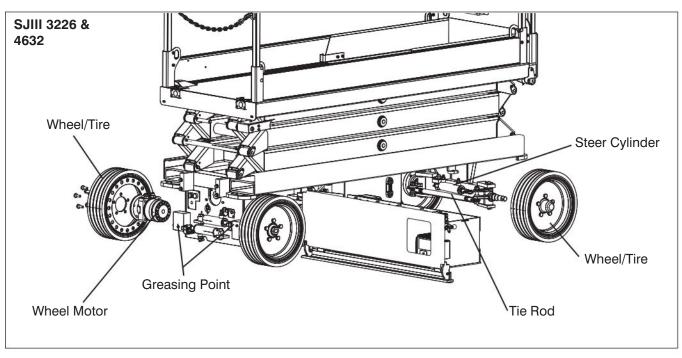


Use original or manufacturer-approved parts and components for the aerial platform.



SJIII DC Electric

It is the responsibility of the operator to read, completely understand and follow all instructions and warnings contained in this operating manual and on the aerial platform.



- Steer Cylinder Assembly
 - Ensure steer cylinder assembly is properly secured and there are no loose or missing parts.
- Wheel/Tire Assembly

The aerial platform is either equipped with solid rubber tires or foam-filled tires. Tire and/or wheel failure could result in an aerial platform tip-over. Component damage may also result if problems are not discovered and repaired in a timely fashion.

- Check all tire treads and sidewalls for cuts, cracks, punctures and unusual wear.
- Check each wheel for damage and cracked welds.
- Check each bolt for proper torque to ensure none are loose.
- Check wheel motor assembly for loose or missing parts and signs of visible damage.
- Ensure wheels are aligned and true vertically and horizontally.

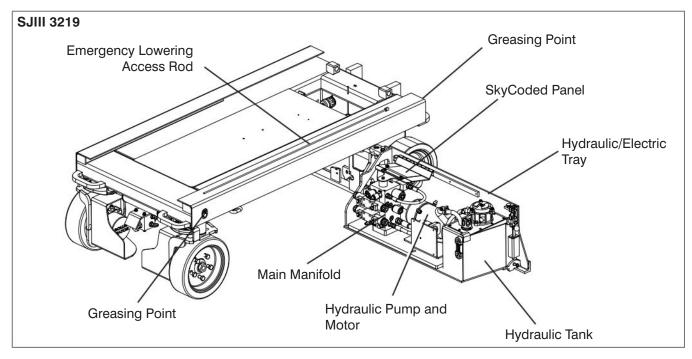


Intermixing tires of different types or using tires of types other than those originally supplied with this equipment can adversely affect stability. Therefore, replace tires only with the exact Skyjackapproved type. Failure to operate with matched approved tires in good condition may result in death or serious injury.

- Tie Rod (SJIII 3226 & 4632)
 - Ensure there are no loose or missing parts, tie rod end studs are locked and there is no visible damage.
- Greasing Points
 - Ensure greasing points have no sign of visible damage and are free from dirt and obstructions.



contained in this operating manual and on the aerial platform.



- Hydraulic/Electric Tray Side 2.3-7
 - Ensure tray latch is secure and in proper working order.
 - **Pothole Protection Device**
 - Ensure mechanisms have no sign of visible damage and are free from dirt and obstructions.
 - Hydraulic Tank
 - Ensure hydraulic filler cap is secure.
 - Ensure tank shows no visible damage and no evidence of hydraulic leakage.
 - Hydraulic Oil
 - Ensure platform is fully lowered, and then visually inspect the sight gauge located on the side of the hydraulic oil tank.
 - The hydraulic oil level should be at or slightly above the top mark of the sight glass.
 - Hydraulic Pump and Motor
 - Ensure there are no loose or missing parts and there is no visible damage.
 - SkyCoded Panel
 - Ensure panel is properly secured and there is no visible damage.
 - Ensure there are no loose wires or missing fasteners.

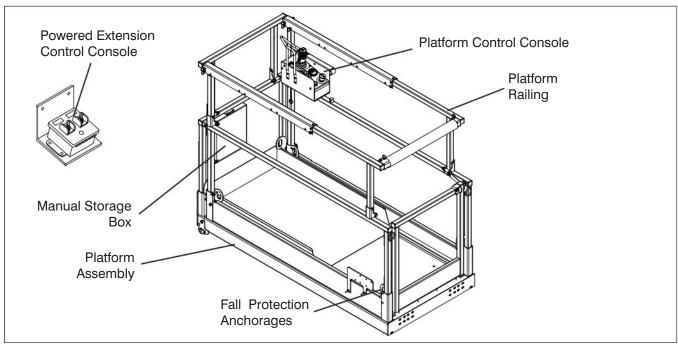
- Main Manifold
 - Ensure all fittings and hoses are properly tightened and there is no evidence of hydraulic leakage.
 - Ensure there are no loose wires or missing fasteners.
- Emergency Lowering Access Rod (If Equipped)
 - Ensure rod is properly secured and there is no visible damage.



SJIII DC Electric

Page 22

FAMILIARIZATION



2.3-8 Platform Assembly

WARNING Ensure that you maintain three points of contact to mount/dismount platform.

- 1. Use the ladder of aerial platform to access platform.
- 2. Close the gate.
 - Ensure there are no loose or missing parts and there is no visible damage.
 - Ensure all fasteners are securely in place.
 - Ensure all railings are properly positioned and secured.
 - Ensure gate is in good working order.
- Fall Protection Anchorage(s)
 - Ensure anchorage(s) are secure and there is no visible damage.
- AC Outlet on Platform
 - Ensure outlet has no visible damage and free from dirt or obstructions.
- Platform Control Console
 - Ensure all switches and controller are returned to neutral and are properly secured.

- Ensure there are no loose or missing parts and there is no visible damage.

Manuals

Ensure a copy of operating manual and ANSI/ CSA certificate are enclosed in manual storage box.

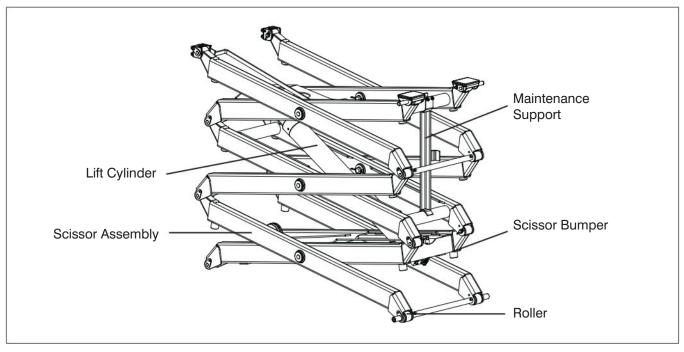
- Check to be sure manual storage box is present and in good condition.
- Ensure manuals are legible and in good condition.
- Always return manuals to the manual storage box after use.
- Powered Extension Control Console (If Equipped)
 - Ensure all switches are returned to neutral and are properly secured.
 - Ensure there are no loose or missing parts and there is no visible damage.



Ensure that you maintain three points of contact to mount/dismount platform.

3. Use the ladder to dismount from platform.





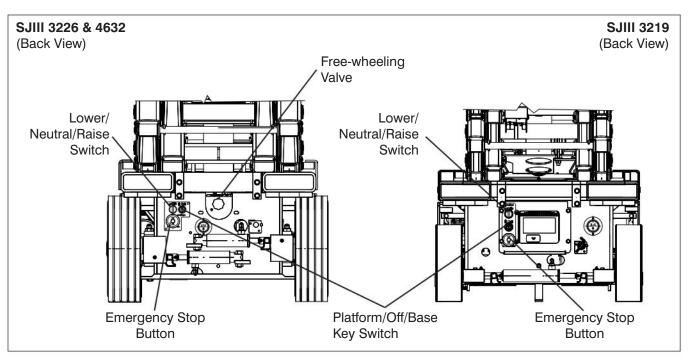
2.3-9 Lifting Mechanism

- 1. Raise the platform (refer to Section 3.8-2) until there is adequate clearance to swing down the maintenance support (refer to Section 3.12).
- Maintenance Support
 - Ensure maintenance support is properly secured and shows no visible damage.
- Scissor Assembly
 - Ensure scissor assembly shows no visible damage and no signs of deformation in weldments.
 - Make sure all the pins and fasteners are correctly installed, including the connections to the base and platform.
 - Ensure cables and wires are properly routed and shows no signs of wear and/ or physical damage.
- Scissor Bumpers
 - Ensure bumpers are secure and shows no sign of visible damage.
- Rollers
 - Ensure rollers are secure and there is no visible damage.
 - Ensure rollers' path of travel are free from dirt and obstructions.

Lift Cylinder(s)

- Ensure each lift cylinder is properly secured, there are no loose or missing parts and there is no evidence of damage.
- Ensure all fittings and hoses are properly tightened and there is no evidence of hydraulic leakage.
- 2. Raise the platform until there is adequate clearance to swing up the maintenance support.
- 3. Swing up maintenance support into storage bracket.
- 4. Fully lower the platform.





2.4 Function Tests

Function tests are designed to discover any malfunctions before aerial platform is put into service. The operator must understand and follow step-by-step instructions to test all aerial platform functions.

WARNING Never use a malfunctioning aerial platform. If malfunctions are discovered, aerial platform must be tagged and placed out of service. Repairs to aerial platform may only be made by a qualified service technician.

After repairs are completed, operator must perform a pre-operation inspection and a series of function tests again before putting aerial platform into service.

Prior to performing function tests, be sure to read and understand Section 3.8 - Start Operation.

2.4-1 Test Main Power Disconnect Switch

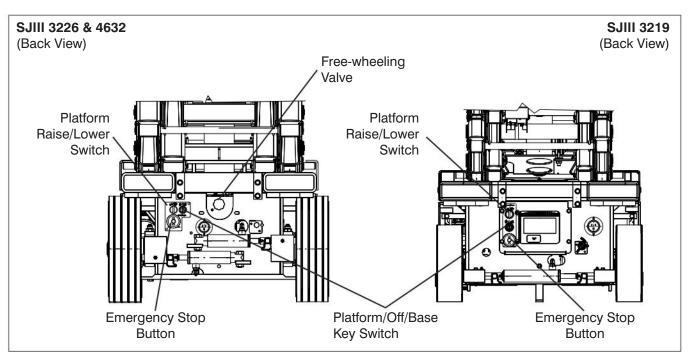
 At rear of the base, turn main power disconnect switch to "O" off position.
 Result: Aerial platform functions should not operate. 2.4-2 Base Control Console



Ensure that you maintain three points of contact when using the ladder to mount/ dismount platform.

- 1. Use the ladder of aerial platform to access platform.
- 2. Close the gate.
- 3. On platform control console, pull out "emergency stop button.
- 4. Use the ladder to dismount from platform.
- 5. Turn main power disconnect switch to " " on position.





- Test Base Emergency Stop
 - Push in "O" emergency stop button and attempt to raise or lower the platform.
 Result: Platform raising and lowering functions should not operate.
 - 2. Pull out base " emergency stop button.
- Test Off/Platform/Base Switch



Be aware of overhead obstructions or other possible hazards around the aerial platform when lifting.

 Select off/platform/base key switch "O" off position. Attempt to raise or lower the platform.

Result: Platform raising and lowering functions should not operate.

2. Select off/platform/base key switch to

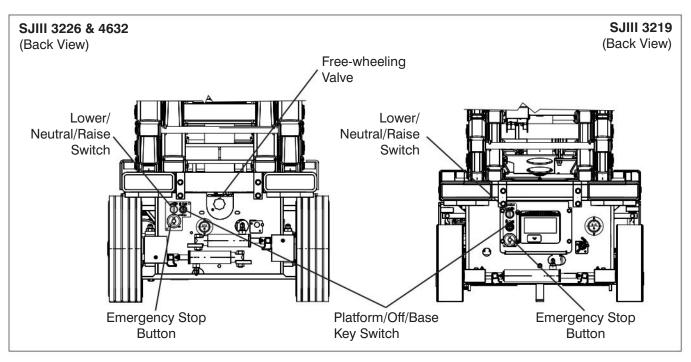
"a" platform position. Attempt to raise or lower the platform.

Result: Platform raising and lowering functions should not operate.

- Test Lower/Neutral/Raise Switch
- Select and hold off/platform/base key switch to " a base position and " ↑ raise the platform with lower/neutral/ raise switch. Result: Platform should rise.
- Select and hold off/platform/base key switch to " a base position and " J v" lower the platform with lower/ neutral/raise switch.
 Result: Platform should lower.



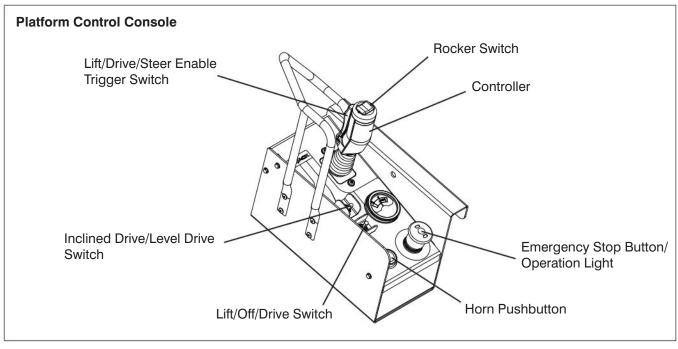
Page 26



- Test Emergency Lowering
 - 1. Raise the platform.
 - Turn main power disconnect switch to "O" off position.
 - Locate holding valve manual override knob at the base of each lift cylinder. Depress and turn counterclockwise. If necessary, use access rod that is located on the base of the aerial platform.
 - On hydraulic/electric tray, pull out and hold emergency lowering valve to fully lower the platform.
 Result: The platform should lower.
 - 5. To restore normal operation, depress and turn holding valve manual override knobs clockwise.

- Test Free-wheeling
 - 1. Ensure path of intended motion is clear.
 - 2. Release the brake manually (refer to Section 2.5-2).
 - Turn free-wheeling valve knob counterclockwise to a fully opened position and attempt to push/pull the aerial platform.
 Result: Platform should move.
 - 4. Turn free-wheeling valve knob clockwise to a fully closed position for normal operation.
 - 5. Reengage the brake (refer to Section 2.5-2).





- 2.4-3 Platform Control Console
 - 1. Ensure base "O" emergency stop button is pulled out.
 - Select off/platform/base key switch to "a" platform position.
 - 3. Ensure main power disconnect switch is in "I" on position.

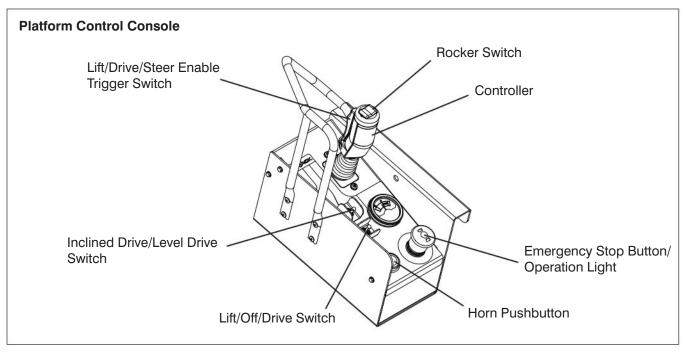
Ensure that you maintain three points of contact when using the ladder to mount/ dismount platform.

- 4. Use the ladder of aerial platform to access platform.
- 5. Close the gate.
- 6. On platform control console, pull out "emergency stop button.
- Test Platform Emergency Stop
 - 1. Push in "O" emergency stop button and attempt to activate any platform function.

Result: All selected platform functions should not operate.

- Test Enable Trigger Switch
- 1. Pull out ", emergency stop button.
- 2. Without activating "" enable trigger switch, attempt to activate any platform function. **Result:** All platform functions should not operate.
- Test Steering
- Select lift/off/drive switch to "
 ¹
 ¹
- 2. Activate and hold "" enable trigger switch.

SK



- Test Driving
- 1. Ensure path of intended motion is clear.
- 2. Activate and hold "A" enable trigger switch.
- Slowly move controller handle in ""," forward direction until aerial platform begins to move, and then return handle to center position.
 Result: Aerial platform should move in forward direction, and then come to a stop.
 - a
- Slowly move controller handle in ^{"↓}" reverse direction until aerial platform begins to move, and then return handle to center position.
 Result: Aerial platform should move in reverse direction, and then come to a stop.
- Test Brakes

Brakes will engage instantly when you release the controller handle, causing aerial platform to stop immediately.

- 1. Ensure path of intended motion is clear.
- 2. Activate and hold " $\overset{\circ}{\underbrace{\baselineskip}}$ " enable trigger switch.
- 3. Drive aerial platform ""," forward and then

"," backward. Test brake by releasing controller handle.

Result: Aerial platform should come to a stop. If aerial platform pulls to one side while stopping, do not operate aerial platform until brake adjustments have been checked.

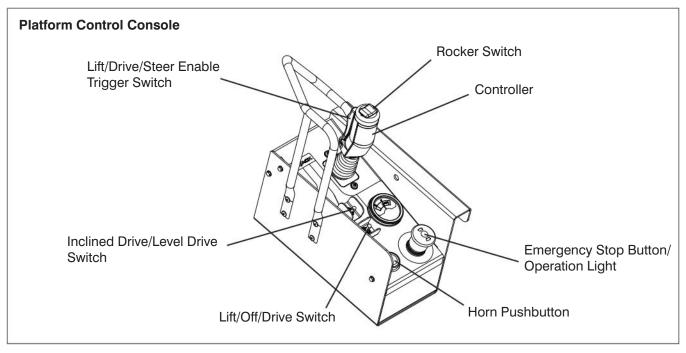
4. Drive aerial platform """ forward and then

"J" backward. Test brake again by releasing

"" enable trigger switch only.

Result: Aerial platform should come to an instant and abrupt stop. If aerial platform does not stop immediately, or if aerial platform pulls to one side while stopping, do not operate aerial platform until brake adjustments have been checked.





Test Platform Raising/Lowering



Be aware of overhead obstructions or other possible hazards around the aerial platform when lifting.

- Select lift/off/drive switch to "
 ^{*}
 ^{*}
- 2. Activate and hold "A" enable trigger switch.
- Push controller handle and raise the platform to an approximate height of 1 ft. (30.5 cm).
 Result: Platform should rise.
- Pull controller handle and lower the platform fully.
 Result: Platform should lower.

- Test Horn
 - 1. Push " rhorn push button. **Result:** Horn should sound.
- Test Pothole Sensor

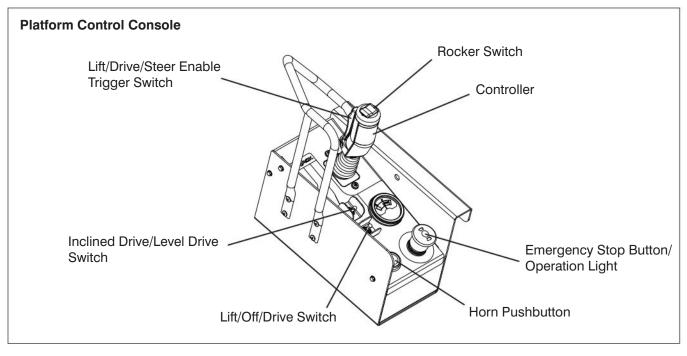


Ensure that you maintain three points of contact to mount/dismount platform.

- Use the ladder to dismount from platform and place a block, approximately 1.5" (3.75 cm), under the hydraulic/electric tray.
- 2. Use the ladder of aerial platform to access platform.
- 3. Close the gate.
- Raise the platform until approximately a height of 7 feet (2 meters) is reached and attempt to drive forward or reverse.
 Result: Aerial platform should not move forward or backward.



SJIII DC Electric



- Repeat the steps above with block placed under battery tray.
 Result: Aerial platform should not move forward or backward.
- Test Elevated Drive Speed

Be aware of overhead obstructions or other possible hazards around the aerial platform when lifting.

- 1. Ensure path of intended motion is clear.
- Raise the platform until approximately a height of 7 feet (2 meters) is reached and attempt to drive forward or reverse.
 Result: Aerial platform should move slower than when it was in stowed position.



2.5 Winching and Towing Procedures This section provides the operator with the Winching and Towing procedure, which includes instructions on how to manually release the brakes.

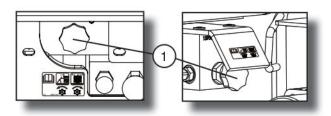
Ensure platform is fully lowered before winching or towing. Sudden motion could cause the aerial platform to become unstable. Death or serious injury could result.

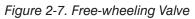
In emergency situations where aerial platform functions are not available and lowering is impeded by an obstacle, utmost care must be taken to move aerial platform far enough to clear the obstacle. In such cases, operation must be extremely smooth with no sudden movements and must not exceed a speed of 2"/sec (50 mm/sec).

When pushing, winching or towing, do not exceed 2 mph (3.2 km/h).

Do not push, winch or tow aerial platform onto a slope, or brake the towing vehicle rapidly. Do not pull aerial platform down an incline towards a winch.

- 2.5-1 To Release Free-wheeling Valve
- 1. Ensure aerial platform is on level ground. Chock or block the wheels to keep aerial platform from rolling.





2. Free-wheeling Valve - Turning valve knob counterclockwise (item 1) to a fully opened position allows fluid to flow through the wheel motors, thus providing "free-wheeling."

The free-wheeling valve must be closed tightly (clockwise) for normal operation.

2.5-2 To Release Brakes Manually

Releasing the brakes manually depends on the brake system that is provided on the aerial platform.

Do not manually disengage brakes if the aerial platform is on a slope.

2.5-2a Pin Brakes System

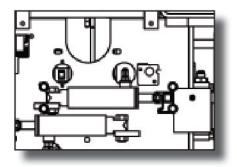


Figure 2-8. Brakes

WARNING

Brakes must be manually disengaged for pushing, winching or towing.



SJIII DC Electric

It is the responsibility of the operator to read, completely understand and follow all instructions and warnings contained in this operating manual and on the aerial platform.

- 1. Ensure aerial platform is on level ground. Chock or block wheels to keep aerial platform from rolling.
- 2. Turn main power disconnect switch to "O" off position.
- **3.** For Left-Side Brake: Using a 3/4" (19 mm) wrench, rotate the block on the brake pin 90° clockwise. The brake pin should be clear of the brake disc.
- 4. For Right-Side Brake: Using a 3/4" (19 mm) wrench, rotate the block on the brake pin 90° counterclockwise. The brake pin should be clear of the brake disc.
- 5. Remove wheel chocks or blocks, then push, winch or tow aerial platform to desired location.

Brakes must be reengaged immediately after reaching the desired location.

- 6. Position aerial platform on a firm and level surface.
- 7. Chock or block wheels to prevent aerial platform from rolling.
- 8. Reengage brakes by doing the following steps.
- **9.** For Left-Side Brake: Using a 3/4" (19 mm) wrench, rotate the block on the brake pin 90° counterclockwise.
- **10.** For Right-Side Brake: Using a 3/4" (19 mm) wrench, rotate the block on the brake pin 90° clockwise.
- 11. Close the free-wheeling valve.

2.5-2b Disc Brakes System

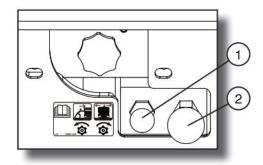


Figure 2-9. Brakes

Brakes must be manually disengaged for pushing, winching or towing.

- 1. Ensure aerial platform is on level ground. Chock or block wheels to keep aerial platform from rolling.
- 2. Turn main power disconnect switch to "O" off position.
- 3. Locate the brake manifold at the rear of the base.
- 4. Push in brake auto reset valve plunger (item 1).
- 5. Grasp brake hand pump (item 2) and rapidly depress until firm resistance is felt. The brakes are now released.
- 6. Remove wheel chocks or blocks, then push, winch or tow aerial platform to desired location.

Brakes must be reengaged immediately after reaching the desired location.

- 7. Position aerial platform on a firm and level surface.
- 8. Chock or block wheels to prevent aerial platform from rolling.
- 9. Reengage the brake by pulling out the brake auto reset valve plunger.
- 10. Close the free-wheeling valve.



2.6 Emergency Lowering Procedure This section guides the operator on how to use the

emergency lowering system. This system allows platform lowering in the event of an emergency or an electrical system failure.

Keep clear of scissors mechanism when using emergency lowering valve.

- 1. Remove any obstructions from a lowering platform.
- 2. Extension platform(s) may need to be retracted or aerial platform may need to be moved to clear obstruction. Refer to Section 2.5 for winching and towing procedures.

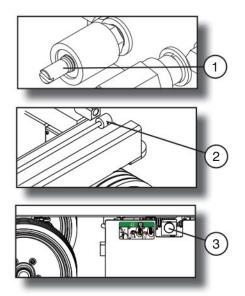


Figure 2-10. Emergency Lowering System

- 3. Turn main power disconnect switch to "O" off position.
- 4. Locate the holding valve manual override knob (item 1) at the base of each lift cylinder. Depress and turn counterclockwise. If necessary, use emergency lowering access rod (item 2) that is located on aerial platform base.
- 5. On hydraulic/electric tray, pull out and hold emergency lowering valve (item 3) to lower platform.
- 6. To restore normal operation, depress and turn holding valve manual override knobs clockwise.



FAMILIARIZATION

It is the responsibility of the operator to read, completely understand and follow all instructions and warnings contained in this operating manual and on the aerial platform.

3.0 Operation

This section provides the necessary information needed to operate the aerial platform. It is important that the user reads and understands this manual before operating the aerial platform.

3.1 General

In order for this aerial platform to be in good working condition, it is important that the operator meets the necessary qualifications and follow the maintenance and inspection schedule referred to in this manual.

3.1-1 Operator Qualifications

- Only trained and authorized personnel shall be permitted to operate an aerial platform.
- Safe use of this aerial platform requires the operator to understand the limitations and warnings, operating procedures and operator's responsibility for maintenance. Accordingly, the operator must understand and be familiar with this operating manual, its warnings and instructions, and all warnings and instructions on the aerial platform.
- The operator must be familiar with employer's work rules and related government regulations and be able to demonstrate the ability to understand and operate this make and model of aerial platform in the presence of a qualified person.
- 3.1-2 Operator's Responsibility for Maintenance

Maintenance must be performed by trained and competent personnel who are familiar with mechanical procedures.

Death or serious injury could result from the use of an aerial platform that is not properly maintained or kept in good working condition.

- The operator must be sure that the aerial platform has been properly maintained and inspected before using it.
- The operator must perform all the daily inspections and function tests found in Table 4.6, even if the operator is not directly responsible for the maintenance of this aerial platform.
- 3.1-3 Maintenance and Inspection Schedule
 - The inspection points covered in Table 4.6 indicate the areas of the aerial platform to be maintained or inspected and at what intervals the maintenance and inspections are to be performed.
 - The actual operating environment of the aerial platform may affect the maintenance schedule.

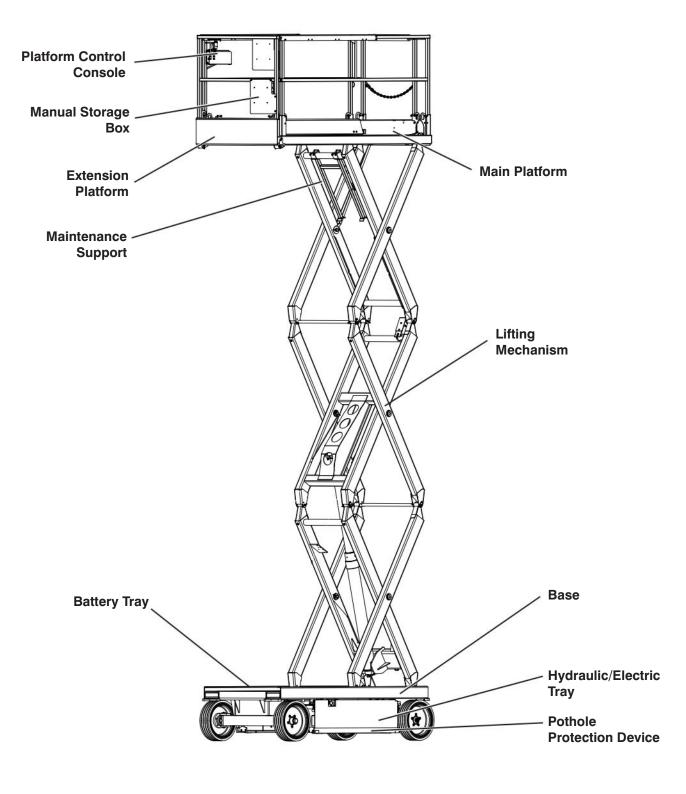
Use original or manufacturer-approved parts and components for the aerial platform.

3.1-4 Owner's Inspections

It is the responsibility of the owner to arrange daily, quarterly (or 150 hours) and annual inspections of the aerial platform. Refer to Table 4.6 for recommended maintenance and inspection areas and intervals. A record of annual inspection is kept on a label located on the scissor assembly. Refer to Table 4.2 in this manual.



3.2 Major Components



SKYJACK SJIII Series Aerial Platform



The aerial platform consists of three major assemblies: base, lifting mechanism and platform.

3.3-1 Base

The base is a rigid, one-piece weldment which supports two swing out trays.

SJIII 3219:

One tray contains the hydraulic and electrical components. The other tray contains four (4) 6 volt batteries. The charger is located at the rear of the aerial platform. The front axle has two hydraulic motor-driven wheels, steerable by a hydraulic cylinder. The rear axle is fixed and has non-driven, spring-applied, hydraulically released brake.

SJIII 3226 & 4632:

One tray contains the hydraulic and electrical components. The other tray contains battery charger and four (4) 6 volt batteries. The front axle has two non-driven wheels, steerable by a hydraulic cylinder. The rear axle has two hydraulic motor-driven wheels with spring-applied, hydraulically released brakes.

3.3-2 Lifting Mechanism

The lifting mechanism is constructed of formed steel or tube sections making up a scissor-type assembly. The scissor assembly is raised and lowered by single-acting hydraulic lift cylinders with holding valves. A pump, driven by an electric motor, provides hydraulic power to the lift cylinders.

3.3-3 Platform

The platform is constructed of a tubular support frame, a skid-resistant "diamond plate" deck surface and 39" hinged guardrails with 6" toe boards and mid-rails. The platform can be entered from the rear through a springreturned gate with latch. The platform is also equipped with a manual extension platform. An AC outlet is also located on the platform.

3.4 Serial Number Nameplate

The serial number nameplate, located at the rear of the aerial platform, lists the following:

- Model number
- Serial number
- Aerial platform weight
- Maximum drivable height
- Maximum capacities
- Maximum number of persons permissible on the platform
- Voltage
- System pressure
- Lift pressure
- Maximum platform height
- Maximum wheel load
- Date manufactured

3.5 Component Identification

The following descriptions are for identification, explanation and locating purposes only.

3.5-1 SkyCoded Display Panel

This panel is located in the hydraulic/electric tray. It contains the following controls:

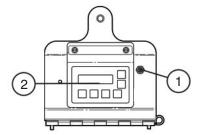


Figure 3-1. SkyCoded Display Panel

- Circuit Breaker Resets In the event of power 1. overload or positive circuit grounding, the circuit breaker pops out. Push the breaker back in to reset.
- 2. SkyCoded Display - This display screen shows operating information and parameters such as operating hours, tilt angle, and fault codes.

3.5-2 Battery Charger

The charger is located at the rear of the base or inside the battery tray. Refer to Section 3.13-2 for battery charging operation.

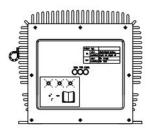


Figure 3-2a. Battery Charger

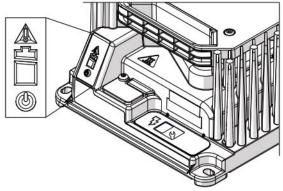


Figure 3-2b. Battery Charger

3.5-3 AC Outlet on Platform This outlet is a source of AC power on the platform.

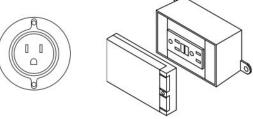


Figure 3-3. AC Outlet on Platform

3.5-4 Pothole Protection Device

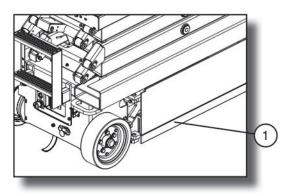


Figure 3-4. Pothole Protection Device

Pothole Protection Device - This device 1. consists of a set of mechanically actuated steel weldments located under the hydraulic/electric tray and battery tray. These weldments will automatically rotate for reduced ground clearance when elevating the aerial platform. If the pothole protection device has not fully lowered, the drive function will be disabled.



Page 38

Crushing Hazard - Personnel on ground must stay clear of pothole protection device.

Do not drive elevated in areas where electrical cords or debris are in the path of travel.

Maintenance of the Pothole Protection Device

As with all safety devices, periodic inspection and maintenance is required to ensure the proper operation of the pothole protection device. This mechanism is designed to reduce ground clearance and assist in the stability of an elevated aerial platform in the event the aerial platform encounters a "drop-off" or "pothole." The nature of this safety feature relies on maintaining a consistent ground clearance, therefore, if the aerial platform ever does come to rest on the pothole device, the platform should be immediately lowered and "locked out" to prevent further use until a complete inspection of the mechanism is performed by a qualified technician.

3.5-5 Maintenance Support

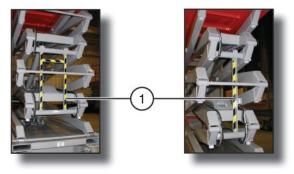


Figure 3-5. Maintenance Support

1. Maintenance Support - The maintenance support is a safety mechanism designed to support the scissor assembly. When properly positioned it can support the scissor assembly and empty platform. The maintenance support must be used when inspection and/or maintenance is to be performed within the lifting mechanism. Refer to Section 3.12 for procedure on how use and store the maintenance support.

The maintenance support must be used when inspection and/or maintenance or repairs are to be performed within the lifting mechanism. Failure to use this safety mechanism could result in death or serious injury.



Do not reach through the scissor assembly when the platform is raised without the maintenance support properly positioned. Failure to avoid this hazard could result in death or serious injury.



3.5-6 Manual Storage Box

This weather-resistant box is mounted on the platform

railings. It contains operating manual, ANSI manual of responsibility and ANSI/ CSA certificate. The operating manual for this make and model of aerial platform must remain with the aerial platform and should be stored in this box.

SKY	JACK

3.5-7 Folding Guardrail System

This system, when folded down, reduces the height of the retracted aerial platform for transporting and traveling through doorways only. Refer to Section 3.9 for guardrail folding procedure.

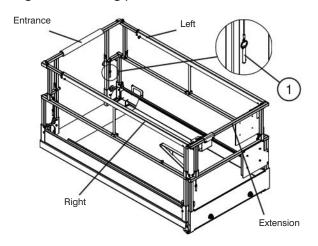


Figure 3-6. Folding Guardrail System

1. Guardrail Locking Pin with Lanyard - This pin is used to lock the guardrail in place.

The scissor assembly must be fully lowered before raising or lowering the guardrails.

3.5-8 Fall Protection Anchorage

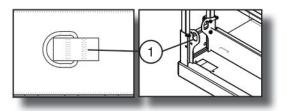


Figure 3-7. Fall Protection Anchorage

1. Fall Protection Anchorage - Use this as an attachment point for a fall restraint system. Do not attach anchorage connectors to any other point on the platform. Do not use this to lift, anchor, secure or support the platform or any other apparatus or material.



The fall protection anchorage is to be used for restraint, within the limits of the platform, only.



3.6 Component Identification

(Optional Equipment/Attachments) This section describes the components that are optional to aerial platforms.

3.6-1 Powered Extension Control Console (If Equipped)

This control console is mounted on one of the extension platform guardrails. It contains the following controls:

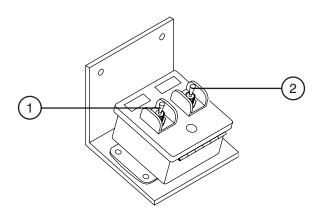


Figure 3-8. Powered Extension Control Console

- 1. Enable Switch This switch, when activated and held, allows the extension platform extend/retract switch functions to operate.
- 2. Extend/Retract Switch This switch, when activated, "
 activated, "

3.6-3 Motion Alarm (If Equipped)

The alarm produces an audible sound when any control function is selected. On aerial platforms with certain options, a flashing amber light will accompany this alarm. 3.6-4 Using Optional Control Box with Long Cable from Ground:



Skyjack scissor lifts are to be operated from the operator's position on the platform with the control box secured on the mounting bracket at the front right portion of the platform. Operation of the unit from the ground is permissible only when maintaining the lift or, in limited circumstances, when an obstruction precludes the safe operation of the lift from the operator's position on the platform. Operation from the ground is to be performed as set forth in the Operating Manual.

- 1. Before operating this aerial platform, perform the following steps:
 - Visual and daily maintenance inspections (see Section 2.3)
 - Function tests (see Section 2.4).
- 2. Ensure the platform is in the fully-stowed (lowered) position.



To protect against unintended movement of the aerial platform, push in the emergency stop button after you have arrived at your desired location.

3. Disconnect and remove platform control console from the mounting bracket at the front right portion of the platform.



Ensure that you maintain three points of contact when using the ladder to mount/ dismount platform.

Operation from the Ground:

4. The control box with long cable may be connected to the lower base control connector or to the platform control connector.

NOTE

For some models, the connection is located beneath an access panel which requires that the scissor assembly be raised to access it.

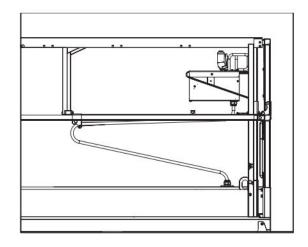


Figure 3-10. Control Box with Long Cable





- Ensure the operator and control box console are properly oriented in the direction the aerial platform is facing (see Figure 3-11).
- Do not drive the aerial platform toward yourself.
- Avoid crushing hazards; stand clear from the aerial platform and out of the direction of travel.
- During loading/unloading operations using a ramp, ensure all personnel (including operator) stand away from the direction of any potential fall-over of the aerial platform from the ramp or movement of the aerial platform down the ramp.
- Ensure that the control box with long cable does not become entangled with the aerial platform or any surrounding objects.
- 5. Perform a thorough jobsite inspection prior to operating the aerial platform to identify potential hazards in your work area.

- 6. Cordon-off the pathway in which you intend to travel.
- 7. Ensure there are no personnel in the intended path of travel.
- 8. Notify those around the pathway that you will be moving the aerial platform.
- 9. Use a spotter to guide movement where necessary. Ensure the spotter remains at a safe distance.
- 10. Once safely reached your destination, push in emergency stop button and turn main power disconnect switch to "O" off position.

Ensure that you maintain three points of contact when using the ladder to mount/ dismount platform.

11. Mount the platform control console to mounting bracket at the front right portion of the platform.

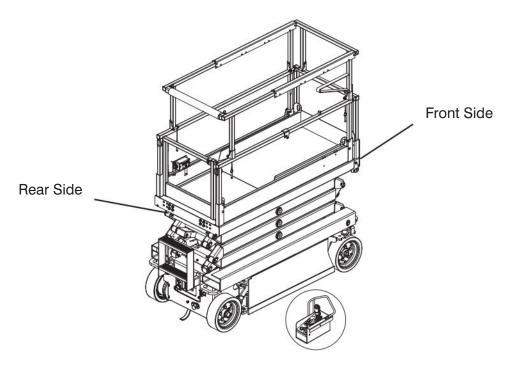


Figure 3-11. Control Box with Long Cable Outside Platform



3.7 Operator's Responsibility

It is the responsibility of the operator, prior to each work shift, to perform the following:

- 1. Visual and Daily Maintenance Inspections
 - are designed to discover any damage of components before the aerial platform is put into service.
 - are done before the operator performs the function tests.



Failure to locate and repair damage, and discover loose or missing parts may result in an unsafe operating condition.

- 2. Function Tests
 - are designed to discover any malfunctions before the aerial platform is put into service.

IMPORTANT

The operator must understand and follow the step-by-step instructions to test all aerial platform functions.

The operator should make a copy of the Operator's Checklist (see Table 4.7) and fill out the visual and daily maintenance inspections and the function tests sections while performing the items outlined in Section 2.3 and Section 2.4.

IMPORTANT

If aerial platform is damaged or any unauthorized variation from factorydelivered condition is discovered, aerial platform must be tagged and removed from service. Repairs to the aerial platform may only be made by a qualified service technician. After repairs are completed, the operator must perform visual and daily maintenance inspections & function tests again.

Scheduled maintenance inspections shall only be performed by qualified service technician (see Table 4.6).



3.8 Start Operation

Carefully read and completely understand the operating manual and all warnings and instruction labels (refer to Section 5 - Labels) on the aerial platform.

Do not operate this aerial platform without proper authorization and training. Failure to avoid this hazard could result in death or serious injury.

Before operating this aerial platform, perform the following steps:

- 1. Visual and daily maintenance inspections (see Section 2.3)
- 2. Function tests (see Section 2.4)
- 3. Job site inspection

It is the responsibility of the operator to perform a job site inspection and avoid the following hazardous situations:

- holes or drop-offs
- ditches or soft fills
- floor obstructions, bumps or debris
- overhead obstructions
- electrical cords, hoses and high voltage conductors
- hazardous locations (see NFPA 505)
- inadequate surface support to withstand all load forces imposed by the aerial platform
- wind and weather conditions
- the presence of unauthorized personnel
- other possible unsafe conditions

An operator should not use any aerial platform that:

- does not appear to be working properly.
- has been damaged or appears to have worn or missing parts.
- has alterations or modifications not approved by the manufacturer.
- has safety devices which have been altered or disabled.

Failure to avoid these hazards could result in death or serious injury.

3.8-1 To Activate Base Control Console

WARNING

Ensure that you maintain three points of contact when using the ladder to mount/ dismount platform.

- 1. Use the ladder of aerial platform to access platform.
- 2. Close the gate.
- 3. On platform control console, pull out " emergency stop button.
- 4. Use the ladder to dismount from platform.
- 5. Turn main power disconnect switch to "on position.
- 6. On base control console, pull out "●" emergency stop button.
- 3.8-2 To Raise or Lower Platform Using Base Control Console

Be aware of overhead obstructions or other possible hazards around the aerial platform when lifting.

Do not lower the platform unless the area is clear of personnel and obstructions.

- 1. Activate base control console (refer to Section 3.8-1).
- Select and hold off/platform/base key switch to
 "ase position.
- Select and hold lower/neutral/raise switch to either "
 [™]
 [™]



- 3.8-3 To Activate Platform Control Console
- 1. Turn main power disconnect switch to ""on position.
- 2. On base control console, pull out "O" emergency stop button.
- 3. Select off/platform/base key switch to "🚠" platform position.



Ensure that you maintain three points of contact when using the ladder to mount/ dismount platform.

- 4. Use the ladder of aerial platform to access platform.
- 5. Close the gate.
- On platform control console, pull out " emergency stop button.

3.8-4 To Raise or Lower Platform Using Platform Control Console

Be aware of overhead obstructions or other possible hazards around the aerial platform when lifting.

Do not lower the platform unless the area below is clear of personnel and obstructions.

- 1. Activate platform control console (refer to Section 3.8-3).
- 2. Select lift/off/drive switch to " $\overset{\circ}{\cong} \overset{\circ}{\downarrow}$ " lift position.
- 3. Activate and hold "⁽¹⁾ enable trigger switch.
- 4. Move controller handle forward or backward until desired height is reached.

NOTE

Raising and lowering is not proportional.

5. Return controller to neutral center position to stop. Release "{}" enable trigger switch.

To protect against unintended movement of the aerial platform, push in the emergency stop button after you have arrived at your desired location or elevation.

NOTE

If the tilt alarm sounds and the platform does not, or only partially raises, immediately lower the platform completely and ensure that the aerial platform is on a firm level surface.



3.8-5 To Drive Forward or Backward



Be aware of blind spots when operating the aerial platform.

Ensure that there are no personnel or obstructions in the path of travel, including blind spots.

- 1. Activate platform control console (refer to Section 3.8-3).
- Select lift/off/drive switch to "↓↓↓" drive position.
- 3. Activate and hold "" enable trigger switch.
- 4. Move controller handle " " forward/up or " " backward/down to desired speed and direction of aerial platform travel.
- 5. Return controller to neutral center position to stop. Release "", enable trigger switch.

To protect against unintended movement of the aerial platform, push in the emergency stop button after you have arrived at your desired location or elevation.

- 3.8-6 To Steer
- 1. Activate platform control console (refer to Section 3.8-3).
- 2. Select lift/off/drive switch to $(1)^{\uparrow}$ drive position.
- 3. Activate and hold "⁽¹⁾ enable trigger switch.
- 4. Press "* "rocker switch on top of controller handle in either direction to steer.

NOTE

Steering is not proportional. Driving and steering may be active at the same time.



3.8-7 To Select Level Drive or Inclined Drive Mode

1. Level Drive Mode

Select level drive mode when traveling on flat surface.

To activate level drive mode, select inclined drive/ level drive switch to " , " level drive (high speed/ low torque) position.

Aerial platform must be in fully retracted position when operated on any grade. Driving while elevated on any grade may result in death or serious injury.

2. Inclined Drive Mode

Select inclined drive mode when climbing grades or when loading or unloading the aerial platform.

To activate inclined drive mode, select inclined drive/level drive switch to """ inclined drive (low speed/high torque) position.



To protect against unintended movement of the aerial platform, push in emergency stop button after you have arrived at your desired location or elevation. 3.8-8 To Extend/Retract Manual Extension Platform

DANGER

Crushing Hazard - Extension platform must not be retracted manually from the ground.

- 1. To extend/retract manual extension platform, remove retaining locking pins and push/pull extension platform using the push bar or sliding handrails to one of four or five desired locking positions.
- 2. Upon extension or retraction, reinsert locking pins. Insert pin on one side of aerial platform in front of upright bar and the pin on the other side of aerial platform behind the upright bar to prevent accidental movement, in either direction, of manual extension platform during travel or transport. Refer to Figure 3-12 for a configuration example.

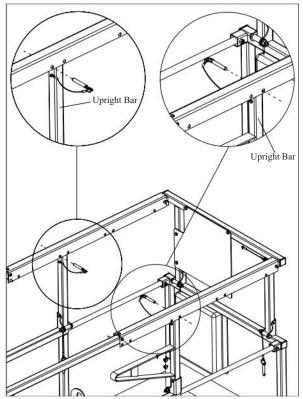


Figure 3-12. Variable Position Manual Extension Platform



- 3.8-9 To Extend/Retract Powered Extension Platform (If Equipped)
- 1. To extend/retract powered extension platform, ensure ", emergency stop button is pulled out.
- 2. Select lift/off/drive switch to " $\overset{\frown}{\underline{s}}_{\underline{s}}^{\uparrow}$ " lift position.
- On powered extension control console, press and hold "O" enable switch, then push extend/retract switch to "extend position. Release switch to stop.
- 4. To retract extension platform, press and hold "()" enable switch, then push extend/retract switch to

```
"" retract position. Release switch to stop.
```


To protect against unintended movement of the aerial platform, push in emergency stop button after you have arrived at your desired location or elevation.

- 3.8-10 Shutdown Procedure
- 1. Completely lower the platform.
- 2. On platform control console, push in "O emergency stop button.

WARNING

Ensure that you maintain three points of contact when using the ladder to mount/ dismount platform.

- 3. Use the ladder to dismount from platform.
- 4. On base control console, select off/platform/base key switch to "O" off position and remove the key.
- 5. Turn main power disconnect switch to "O" off position.

3.9 Guardrail Folding Procedure

When folded down, the folding guardrail system reduces the height of the retracted aerial platform for transporting only.



Any lowered guardrail will create a fall hazard. Remain away from the side of the platform while raising or lowering the guardrails to avoid falling.

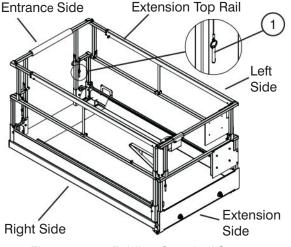


Figure 3-13a. Folding Guardrail System

1. Guardrail Locking Pin with Lanyard - This pin is used to lock the guardrail in place.

WARNING The scissor assembly must be fully lowered before raising or lowering the guardrails.

Before operating this aerial platform, check the guardrail system for loose or missing locking pins. The guardrail system must be upright and all pins must be locked in place. Death or serious injury could result if the guardrail system is not upright or properly locked. To fold the guardrail system down:

- 1. Ensure aerial platform is on level ground.
- 2. Ensure extension platform is fully retracted.
- 3. Ensure Emergency Stop button is depressed.
- 4. Turn main power disconnect switch to "○" off position.

Ensure that you maintain three points of contact when using the ladder to mount/ dismount platform.

- 5. Use the ladder of aerial platform to access platform.
- 6. Close the gate.
- 7. Remove the platform control console and lay it down on the platform.

Any lowered guardrail will create a fall hazard. Use caution when exiting or entering the platform when the guardrails are lowered.

8. Remove left and right side pins A and B (if equipped). (Refer to Figure 3-13b):

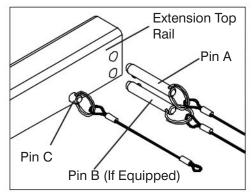


Figure 3-13b. Extension Top Rail Pins

WARNING Ensure pin C is in place and secured to the Extension Top Rail.



9. Remove remaining pins from all sides and carefully fold all guardrails in the following order:

SJIII 32xx

Entrance
 Use tie wrap t

Use tie wrap to secure entrance bar to left guardrail.

- Right Side
- Left Side
- Extension

Lock extension guardrail into place on the mounting post. Ensure that the detent ball of the pin is all the way through. (Refer to Figure 3-13c)

<u>SJIII 4632</u>

- Right Side
- Left Side
- Entrance
- Extension

Lock extension guardrail into place on the mounting post. Ensure that the detent ball of the pin is all the way through. (Refer to Figure 3-13c)

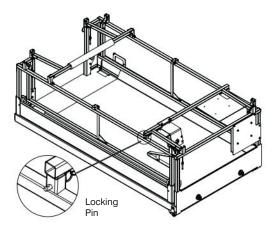


Figure 3-13c. All Guardrails Folded Down



Ensure that you maintain three points of contact when using the ladder to mount/ dismount platform.

To raise the guardrail system up:

- 1. Ensure aerial platform is on level ground.
- 2. Ensure extension platform is fully retracted.
- 3. Ensure Emergency Stop button is depressed.
- 4. Turn main power disconnect switch to "○" off position.

Any lowered guardrail will create a fall hazard. Use caution when exiting or entering the platform when the guardrails are lowered.

WARNING

The scissor assembly must be fully lowered before raising or lowering the guardrails.

WARNING

Ensure that you maintain three points of contact when using the ladder to mount/ dismount platform.

- 5. Use the ladder of aerial platform to access platform.
- 6. Remove locking pin from mounting post and carefully raise extension guardrail up and lock into place with locking pins ensuring that the detent ball of each pin is all the way through (Refer to Figure 3-13c).
- 7. Carefully raise each guardrail up and lock into place with locking pins ensuring that the detent ball of each pin is all the way through (Refer to Figure 3-13a).
- 8. Mount the platform control console at the front right of the platform. Lock it in place.



Before operating this aerial platform, check the guardrail system for loose or missing locking pins. The guardrail system must be upright and all pins must be locked in place. Death or serious injury could result if the guardrail system is not upright or properly locked.



3.10 Loading/Unloading

Know and heed all national, state or territorial/provincial and local rules which apply to your loading/unloading of aerial platforms.

Only qualified personnel shall operate the aerial platform during loading/unloading.

Be sure vehicle capacity and loading equipment hoists, chains, straps, etc., are sufficient to withstand maximum aerial platform weight.

The transport vehicle must be parked on a level surface and must be secured to prevent rolling while aerial platform is being loaded/unloaded.

3.10-1 Lifting

Only qualified rigger shall operate machinery during lifting.

When it is necessary to lift the Skyjack aerial platform the following conditions must be met:

- The platform must be fully lowered.
- The main power disconnect switch must be in "O" off position.
- The hydraulic/electric and battery trays must be closed and securely latched.
- The extension platform must be retracted and secured.
- The platform control console must be secured to the railings or removed.
- The platform must be cleared of all personnel, tools and materials.
- The lifting/rigging must be attached to all four lifting points as illustrated in Figure 3-14.

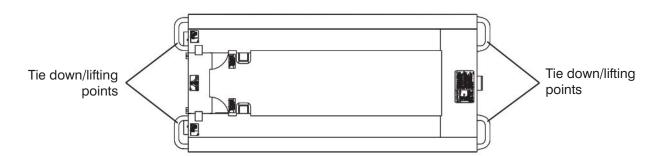


Figure 3-14. Tie Downs/Lifting Points

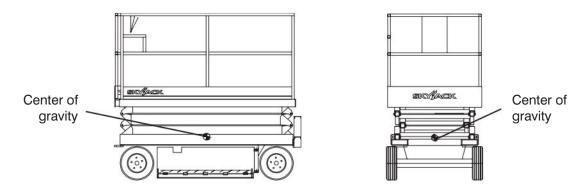


Figure 3-15. Center of Gravity



NOTE

The mass of the aerial platform is as per Table 4.3. The center of gravity is approximately located in the middle of the aerial platform, front to back and side to side, as illustrated in Figure 3-15. Vertically, the center of gravity is approximately just above the base chassis.

NOTE

The aerial platform can be lifted with a forklift from the sides but Skyjack does not recommend this use. Lift with forks in designated pockets as illustrated in Figure 3-16.

3.10-2 Driving

Before driving the aerial platform:

- Ramp or dock capacity should be sufficient to withstand maximum aerial platform weight.
- Ramp should be equipped with side guards to prevent inadvertent fall from the ramp.
- Incline should not exceed aerial platform gradeability (refer to Table 4.3.
- Aerial platform brakes should be checked for proper operation.
- Aerial platform speed should be on high torque setting.



When transporting, the aerial platform must be secured to the truck or trailer deck. Tie downs are available as illustrated in Figure 3-14.

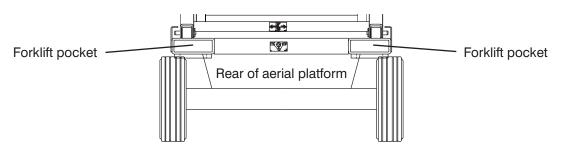


Figure 3-16. Forklift Pockets



3.11 Moving the Aerial Platform Through a Doorway

This procedure is suitable for level ground only.

1. Confirm that the height/width of the doorway is sufficient to allow the aerial platform to pass through.

NOTE

If it is necessary to fold the guardrails, refer to Section 3.9 for guardrail folding procedure.

- 2. Perform a thorough job site inspection prior to operating the aerial platform to identify potential hazards in your work area.
- 3. Cordon-off the pathway which you intend to travel.
- 4. Position the aerial platform to allow all future motion, including through the doorway, to be in a forward direction.
- 5. Turn main power disconnect switch to "O" off position.
- 6. Use the ladder of aerial platform to access platform.

Ensure that you maintain three points of contact when using the ladder to mount/ dismount platform.

- Close the gate. On platform control console, push in "O" emergency stop button.
- 8. Disconnect and remove platform control console from the platform.
- Fold the guardrails if necessary. Refer to Section 3.9 for guardrail folding procedure.
- 10. Use the ladder to dismount from platform.

11. Connect platform control console to the connection at the rear of the base.

NOTE

For some models, the connection is located beneath an access panel which requires that the scissor assembly be raised to access it.

- 12. Ensure there are no personnel in the intended path of travel.
- 13. Notify those around the pathway that you will be moving the aerial platform.
- 14. Use a spotter to guide movement. Ensure the spotter remains at a safe distance.
- 15. Ensure that platform control console is properly oriented in the direction the aerial platform is facing.
- 16. Turn main power disconnect switch to "a" on position.
- 17. On base control console, pull out "O" emergency stop button.
- Select base/off/platform key switch to "a" platform position.
- 19. On platform control console, pull out "O" emergency stop button.
- 20. Select lift/off/drive switch to $\overset{\uparrow}{\downarrow}$ drive position.

Select inclined drive/level drive switch to "Series" inclined drive (low speed/high torque) position for reduced speed.



Do not drive the aerial platform toward yourself.

21. Using as low a speed as practical and the operator positioned behind the aerial platform, drive forward through doorway.



- 22. Once safely through doorway, push in "O" emergency stop button and turn main power disconnect switch to "O" off position.
- 23. Disconnect platform control console and return it to the platform.



Ensure that you maintain three points of contact when using the ladder to mount/ dismount platform.

24. Return guardrails to upright position if folded. Refer to Section 3.9 for guardrail folding procedure.



Before operating this aerial platform check the guardrail system for loose or missing locking pins. The guardrail system must be upright and all pins must be locked in place.

Death or serious injury could result if the guardrail system is not upright or properly locked.

25. Once the platform control console is securely reconnected and guardrails up, normal operation may continue.



3.12 Maintenance Support Procedure

This section provides the operator with procedure regarding deployment and storage of maintenance support.

The maintenance support is a safety mechanism designed to support the scissor assembly. When properly positioned it can support the scissor assembly and empty platform. The maintenance support must be used when inspection and/or maintenance is to be performed within the lifting mechanism.

The maintenance support must be used when inspection and/or maintenance or repairs are to be performed within the lifting mechanism. Failure to use this safety mechanism could result in death or serious injury.

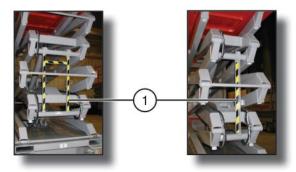


Figure 3-17. Maintenance Support

To Deploy the Maintenance Support

- 1. Remove all material from platform.
- 2. Raise platform until there is adequate clearance to swing down maintenance support (item 1).
- 3. Swing maintenance support down from storage bracket into a vertical position.
- 4. Remove hands and arms from scissors area.
- 5. Lower platform until bottom end of maintenance support contacts the labeled cross bar and scissors are supported by maintenance support.
- 6. Turn main power disconnect switch to "O" off position.



- 1. Turn main power disconnect switch to "a" on position.
- 2. Raise platform until there is adequate clearance to swing up the maintenance support.
- 3. Swing bar fully up into storage bracket.
- 4. Lower the platform.

WARNING

Do not reach through the scissor assembly when the platform is raised without the maintenance support properly positioned. Failure to avoid this hazard could result in death or serious injury.



3.13a Battery Maintenance

This section provides the operator with procedures on how to service and charge the battery. This also provides charger operation instructions.

3.13a-1 Battery Service Procedure

Explosion Hazard - Keep flames and sparks away. Do not smoke near batteries.



Battery acid is extremely corrosive - Wear proper eye and facial protection as well as appropriate protective clothing. If contact occurs, immediately flush with cold water and seek medical attention.

- 1. Turn main power disconnect switch to "O" off position.
- 2. Check battery case for damage.
- Check battery fluid level in each battery. If plates are not covered by at least 1/2" (13 mm) of solution, add distilled or demineralized water.
- 4. Clean battery terminals and cable ends thoroughly with a terminal cleaning tool or wire brush.
- 5. Make sure all battery connections are tight.
- 6. Replace any battery that is damaged or incapable of holding a lasting charge.
- 7. Do not use any batteries other than flooded leadacid batteries of the proper AH rating.



Use original or equivalent to the original parts and components for the aerial platform.

3.13a-2 Battery Charging Operation

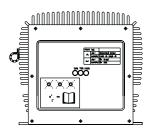


Figure 3-18. Battery Charger

Risk of electric shock - Do not immerse the charger in water. Though the charger is highly resistant to water, it is not designed for immersion and an electric shock can occur.

1. Provide adequate ventilation for the batteries and charger. The convection cooled design requires access to cooling air for proper operation. Do not allow blankets or other materials to cover the charger. Although the charger protects itself against overheating, the charger cooling fins should be cleaned if clogged with debris for best performance.



There could be a spark during charging. Be careful when using fuels, solvents or other flammables near the charger or batteries.

2. Connect the power supply cord to a properly grounded 100V/50 or 60Hz, 115V/50 or 60Hz, or 230V/50 or 60Hz socket. This charger automatically senses and adjusts to the AC input voltage range.

When changing the input voltage wait until all the LEDs are OFF or wait a minimum of 20 seconds before switching on the new voltage.



 The charging time is affected by numerous factors including battery Amp-Hour capacity, depth of discharge, battery temperature, and battery condition (new, old or defective). Batteries larger than 240 AH can be recharged but will take longer.

Do not disconnect the DC output wires near the batteries when the charger is ON. The resulting arcing could cause the batteries to explode. If the charger must be disconnected, first disconnect the AC power supply cord from its outlet, then disconnect the charger DC connections.

Risk of an electric shock - Do not touch un-insulated parts of the charger output wires, battery connector, or battery terminals.

Visually and manually inspect to verify the DC output wires and terminals are in good working condition before each use.

4. The charger will start automatically within four to six seconds. The charger will start even with severely discharged batteries (down to 1V terminal voltage). Once charging starts, the LEDs indicate the charging progress.

Charging State LED

State of charge	1 ^{s⊤} LED	2 ND LED	3 RD LED
0 to 50%	Blinking	Off	Off
50% to 75%	On	Blinking	Off
75% to 100%	On	On	Blinking
100%	On	On	On

The charger goes into an equalizing charge mode after the batteries are charged and all 3 LEDs are "ON". The charger will continue to charge at a low current then shut off automatically when complete. If all 3 LEDs blink together, there is a problem.

Take proper action according to the following instructions:

3 LEDs blink once simultaneously:

Output connection error. Check the battery and charger connection. The output may not be connected to the batteries or the connections to the batteries may have corroded or loosened. The output may be shorted due to improper connection to the batteries or pinched wires. The output may be connected in reverse polarity to the batteries. The charger is not damaged by any of these problems.

3 LEDs blink twice simultaneously:

The charger is indicating that the AC voltage is too low or too high. Check the AC input voltage.

3 LEDs blink three times simultaneously:

Charger is overheated. No action required. When the charger cools, charging will restart automatically. Check and correct for dirt or other debris on charger that may be reducing cooling.

3 LEDs blink four times simultaneously:

Input or output over current. No action required, charger will correct and restart automatically.

100% LED lamp blinks:

Charger 18-hour timer has timed out due to battery problem.



Batteries do not fully charge.

If the batteries are charged overnight, make sure the AC supply is not being switched off at night with other building items. Check battery condition and for dead cells or reduced capacity. Replace charger only if other problems are not found.

The AC line circuit breaker or fuse is blown.

A defective circuit breaker or fuse, an overloaded circuit, or a charger problem can cause this condition. Try connecting the charger to a different AC outlet (on a different circuit) in the building. If the AC supply checks good, the charger should be replaced.



3.13b Battery Maintenance (If Equipped) This section provides the operator with procedures on how to service and charge the battery. This also provides the charger operation instructions.

3.13b-1 Servicing the battery



Explosion hazard. Keep flames and sparks away. Do not smoke near batteries. Battery acid releases explosive gas while charging. Charge batteries in a well-ventilated area.

Battery acid is extremely corrosive – wear proper eye and facial protection as well as appropriate protective clothing. If contact occurs, immediately flush with cold water and seek medical attention.

- 1. Turn the main power disconnect switch to the off position.
- 2. Check the battery case for damage.
- 3. Check the battery fluid level in each battery. If the plates are not covered by at least 13 mm (1/2 in) of solution, add distilled or demineralized water.
- 4. Make sure all the battery connections are tight.

NOTE

Do not use any batteries other than the flooded lead-acid batteries of the proper Ah rating.

A WARNING

Use the original or equivalent to the original parts and components for the MEWP.

3.13b-2 Charging the battery

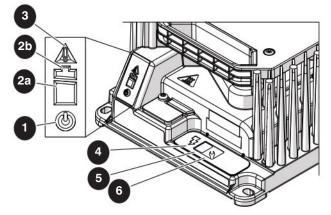


Figure 3-19. Battery Charger

No.	Indicator type	State	Description/action required
0	AC power	Blue	Battery charger is connected to the AC power.
23	Battery charging	Flashing green	Low charge— continue charging.
20	<80%	Solid green	High charge— continue charging.
	Battery charging	Flashing green	High charge— can discontinue charging.
20	>80%	Solid green	Charge complete— discontinue charging.
	Fault/error	Solid red	Charger fault—refer to the service manual.
3	Fault/enor	Flashing amber	Error encountered—refer to the service manual.
4	Charging output	Solid yellow	Charger output is active.
5	Charge profile/ error display	Current algorithm or fault/ error code	N/A.
6	Select charge profile	Current charging algorithm	N/A.



Risk of electric shock – do not immerse the charger in water. Though the charger is highly resistant to water, it is not designed for immersion, and an electric shock can occur.

Hot Surfaces - During charging, the surface of the charger may become hot to the touch, especially in higher ambient temperatures. This is normal. Avoid touching the surface of the charger.

1. Provide adequate ventilation for the batteries and charger.

NOTE

The convection cooled design requires access to cooling air for proper operation. Do not allow blankets or other materials to cover the charger. Although the charger protects itself against overheating, the charger cooling fins should be cleaned if clogged with debris for best performance.

There could be a spark during charging. Be careful when using fuels, solvents or other flammables near the charger or batteries.

- 2. Connect the power supply cord to a properly grounded socket between 100 to 240 VAC, 50/60 Hz. The charger automatically senses and adjusts to the AC input voltage range.
- 3. The charging time is affected by numerous factors including the battery Amp-Hour capacity, depth of discharge, battery temperature, and battery condition (new, old, or defective). Batteries larger than 240 AH can be recharged but will take longer.

Do not disconnect the DC output wires near the batteries when the charger is ON. The resulting arcing could cause the batteries to explode. If the charger must be disconnected, first disconnect the AC power supply cord from its outlet, then disconnect the charger DC connections.

Risk of an electric shock – do not touch uninsulated parts of the charger output wires, battery connector, or battery terminals.

Visually and manually inspect to verify the DC output wires and terminals are in good working condition before each use.

- The charger will start automatically within four to six seconds. The charger will start even with severely discharged batteries (down to 1 V terminal voltage). Once the charging starts, the LEDs indicate the charging progress.
 - Batteries do not fully charge: If the batteries are charged overnight, make sure the AC supply is not being switched off at night with other building items. Check the battery condition and for dead cells or reduced capacity. Replace the charger only if other problems are not found.
 - The AC line circuit breaker or fuse is blown: A defective circuit breaker or fuse, an overloaded circuit, or a charger problem can cause this condition. Try connecting the charger to a different AC outlet (on a different circuit) in the building. If the AC supply is sufficient, the charger should be replaced.



Notes

SKYJACK.

Tables

Table 4.1 Standard and Optional Features - ANSI/CSA

Models	3219	3226	4632
STANDA	RD EQUIPME	NT	
Platform controls	*	*	*
Base controls	*	*	*
Drivable at full height	*	*	*
Positive traction	*	*	*
Dual holding brakes	*	*	*
Battery charge indicator	*	*	*
Battery level indicator	*	*	*
Low voltage battery protection	*	*	*
Color coded and numbered wiring system	*	*	*
Swing out trays for easy access	*	*	*
Proportional control for drive/lift with joystick control	*	*	*
Tilt alarm with drive/lift cut out	*	*	*
GFI AC outlet on platform	*	*	*
Fall Protection Anchorages	*	*	*
Forklift pockets/tie downs/lifting lugs	*	*	*
Hydraulic oil level and temperature indicators	*	*	*
All motion audible alarm	*	*	*
Operator horn	*	*	*
Midrail chain entrance	*	*	*
Top railing with a midrail & 6" (15 cm) toeboard	*	*	*
Hourmeter	*	*	*
Hinged railing system		*	*
Variable front wheel hydraulic drive	*		
Variable rear wheel hydraulic drive		*	*
Freewheeling valve	*	*	*
Pothole protection	*	*	*
3' (0.9 m) Extension deck	*	*	
4' (1.2 m) Extension deck			*
OPTION	AL EQUIPME	NT	
Flashing Light	*	*	*
Shop air line to platform	*	*	*
Spring loaded half or full gate entry**	*	*	*
Hinged railing system	*		
5' (1.5 m) Powered extension platform			
6' (1.8 m) Powered extension platform			
EE rating package	*	*	*
Inverter	*	*	*
Bio-oil	*	*	*

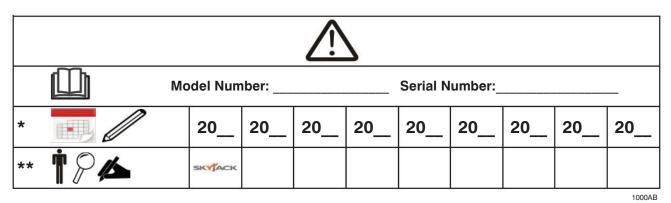
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** Full height gate not available with hinged railings on 3219 models



4

Table 4.2 Owner's Annual Inspection Record



This decal is located on the scissor assembly. It must be completed after an annual inspection has been completed. Do not use the aerial platform if an inspection has not been recorded in the last 13 months.

	Pictorial	Description			
*		Inspection Date			
**	† ? 1	Inspector Signature			



Table 4.3 Specifications and Features

MODEL	3219	3226	4632		
Weight *	2580 lb.	4135 lb.	5075 lb.		
Weight	1170 kg	1876 kg	2302 kg		
Overall width	32"	32"	46"		
	0.81 m	0.81m	1.17 m		
Overall length	70.0"	91"	91"		
	1.78 m	2.3 m	2.31 m		
Platform Size (inside)	26" x 64"	28" x 83"	42" x 84"		
	0.66 m x 1.63 m	0.71 m x 2.1 m	1.07 m x 2.13 m		
Height					
Working Height	25'	32'	38'		
	7.6 m	9.9 m	11.6 m		
Platform Elevated Height	19'	26'	32'		
	5.8 m	7.9 m	9.8 m		
Stowed Platform Height	39"	45"	48.5"		
	0.99 m	1.1 m	1.23 m		
Stowed Height (Railings Up)	78.5"	89"	88"		
	1.99 m	2.3 m	2.24 m		
Drive Height	FULL				
Standard Operating Time					
Lift Time (No Load)	19 s	46 s	52 s		
Lower Time (No Load)	36 s	55 s	62 s		
Lift Time (Rated Load)	23 s	50 s	59 s		
Lower Time (Rated Load)	30 s	42 s	55 s		
Chassis					
Normal Drive Speed	2.55 mph	2.2 mph	2.0 mph		
Normal Drive Speed	4.1 km/h	3.5 km/h	3.2 km/h		
Elevated Drive Speed	0.6 mph	0.6 mph	0.55 mph		
Lievaled Drive Speed	1.0 km/h	1.0 km/h	0.89 km/h		
High Torque Drive Speed	1.6 mph	1.3 mph	1.3 mph		
	2.6 km/h	2.0 km/h	2.0 km/h		
Gradeability (Ramp Angle)		25%			
Tires	12 x 4 x 8	16 x	5 x 12		
	Soft Rubber	Rubber			
Hydraulic Oil					
Туре		ATF Dexron III			
Taula Canadita	2.9 gal.	5.8 gal.	5.8 gal.		
Tank Capacity	10.9 gal	24 L	24 L		
1	<u> </u>	ļ	1208AA_ANSI		

* Weight with standard 3' (0.9 m) or 4' (1.2 m) extension platform.

Refer to nameplate for aerial platforms with 5' (1.5 m) or 6' (1.8 m) extension platform.



		Total	Aerial	Total Aerial Platform Load					
MOD	MODEL		Platform Weight		Wheel		LCP**		P**
		lb.	kg	lb.	kg	psi	KPa (kN/m ²)	psf	KPa (kN/m ²)
3219	min*	2580	1170	1032	468	100	689.5	170	8.0
5219	max*	3130	1420	1252	568	110	758.5	210	10.0
3226	min*	4100	1860	1644	746	120	827.5	210	10.0
5220	max*	4610	2091	1844	836	130	896.5	235	11.5
4632	min*	5075	2302	2030	921	208	1434.1	180	8.6
4032	max*	5775	2620	2310	1048	223	1537.5	205	9.8

Table 4.4 Floor Loading Pressure

1213AA_ANSI

* min - Total aerial platform weight with no options

max - Aerial platform weight + all options + full capacity

LCP - Locally Concentrated Pressure is a measure of how hard the aerial platform presses on the

** areas in direct contact with the floor. The floor covering (tile, carpet, etc.) must be able to withstand more that the indicated values above.

OUP - Overall Uniform Pressure is a measure of the average load the aerial platform imparts on the whole surface directly underneath it. The structure of the operating surface (beams, etc.) must be able to withstand more than the indicated values above.

NOTE:

The **LCP** or **OUP** that an individual surface can withstand varies from structure to structure and is generally determined by the engineer or architect for that particular structure.





Locally Concentrated Pressure (LCP):

Overall Uniform Pressure (OUP):

Base Area = Length x Width

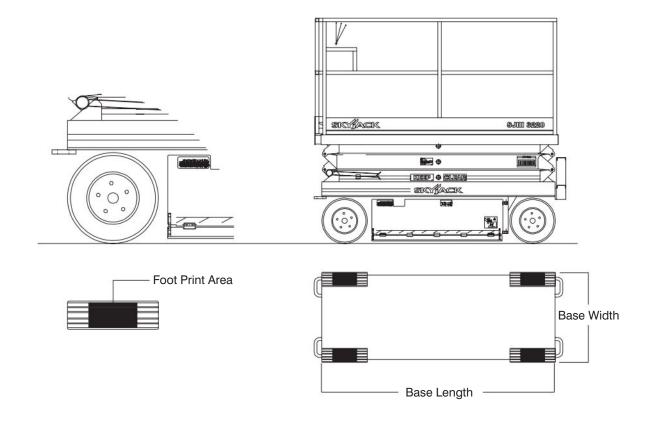
Foot Print Area identified by test.

LCP = _____Wheel Load

Foot Print Area

OUP = ______ Weight of Aerial Platform + Capacity

Base Area





Intermixing tires of different types or using tires of types other than those originally supplied with this equipment can adversely affect stability. Therefore, replace tires only with the exact Skyjack-approved type. Failure to operate with matched approved tires in good condition may result in death or serious injury.



Manual Extension Platform				Powered Ext	Maximum	Tilt Cutout			
MODEL	Total C	Capacity	Extension Capacity		Total Capacity Extension Capacity		Wind Speed	Setting (Degrees)	
3219	550 lb.	2 Persons	250 lb.	1 Person		N/A	28 mph	1.5 x 3.5	
5219	249 kg	2 1 6130113	113 kg	I Feison		N/A	12.5 m/s	1.5 × 5.5	
3226	500 lb.	2 Persons	250 lb. 1 Person		N/A	28 mph	1.5 x 3.5		
3220	227 kg	2 Persons	113 kg	Treison		N/A	12.5 m/s	1.5 X 3.5	
4620	700 lb.	2 Porcono	250 lb.	1 Porcon		N/A	28 mph	0 E x 4 E	
4632	318 kg	2 Persons	113 kg	1 Person	N/A		12.5 m/s	2.5 x 4.5	
			0					1214AA_ANS	

Table 4.5 Maximum Platform Capacities (Evenly Distributed)

SKYJACK '

General Maintenance

Before attempting any repair work, disconnect the battery by turning the main power disconnect switch to "O" off position. Preventive maintenance is the easiest and least expensive type of maintenance.

Frequency	Daily	3 months or 150 hours	Yearly	Frequency	Daily	3 months or 150 hours	Year	
Visual and Daily Maintenance Inspections				Fall Protection Anchorages	А			
Labels	A			AC Outlet on Platform	Α	A		
Electrical	A]		Platform Control Console	А			
Limit Switches	A]		Manuals	A			
Hydraulic	А]		Powered Extension Control Console (If Equipped)	А			
Entrance Side]		Lifting Mechanism		B*		
Main Power Disconnect Switch	A			Maintenance Support	А			
Base Control Switches	A			Scissor Assembly	Α			
Free-wheeling Value Knob	A	-		Scissor Bumpers	Α			
Brakes	A]		Rollers	А			
110V/220V Outlet Receptacle	А			Lift Cylinder(s)	Α			
Ladder	A]		Function Tests				
Battery Tray Side				Test Main Power Disconnect Switch	A			
Pothole Protection Device	A			Base Control Console				
Battery Tray	A]		Test Base Emergency Stop	Α			
Battery Charger	A	в*		Test Off/Platform/Base Switch	Α			
Battery	А] •		Test Lower/Neutral/Raise Switch	Α			
Steer Cylinder Assembly	A	-		Test Emergency Lowering	А			
Wheel/Tire Assembly	A			Test Free-wheeling	Α			
Tie Rod (Conventionals)	A	-		Platform Control Console				
Greasing Points	А			Test Platform Emergency Stop	Α			
lydraulic/Electric Tray Side				Test Enable Trigger Switch	A	B*		
Pothole Protection Device	А			Test Steering	Α			
Hydraulic Tank	A			Test Driving	А			
Hydraulic Oil	A			Test Brakes	Α			
Hydraulic Pump and Motor	А]		Test Platform Raising/Lowering	Α			
Electrical Panel	А			Test Lowering Warning (If Equipped)	Α			
Proportional and Main Manifolds	А]		Test Horn	А			
Load/Tilt Sensor	А			Test Load Sensing (If Equipped)	А			
Emergency Lowering Access Rod (If Equipped)	А			Test Pothole Sensor	А			
Platform Assembly				Test Elevated Drive Speed	A			

Table 4.6 Maintenance and Inspection Schedule

A - Perform Visual and Daily Maintenance Inspections & Functions Test. Refer to Section 2.3 and Section 2.4 of this manual.

B - Perform Scheduled Maintenance Inspection. Refer to Service & Maintenance manual.

* - Maintenance must be performed only by trained and competent personnel who are familiar with mechanical procedures.



Use original or equivalent to the original parts and components for the aerial platform.



Table 4.7 Operator's Checklist

SKYJACK
OPERATOR'S CHECKLIST

Serial Number:	
Model:	
Hourmeter Reading:	Operator's Name (Printed):
Date:	
Time:	Operator's Signature:

ā

FREQUENTLY

ANNUALLY

DAILY

Each item shall be inspected using the appropriate section of the Skyjack operating manual. As each item is inspected, check the appropriate box. INSPECTION FREQUENCY

- F FAIL
- **R** REPAIRED

	N/A	Ρ	F	R
Visual and Daily Maintenance Inspections				
Labels				
Electrical		1]		
Limit Switches				
Hydraulic				
Entrance Side				
Main Power Disconnect Switch				
Base Control Switches				
Free-wheeling Valve Knob				
Brakes				
110V Outlet Receptacle		Î		
Ladder				
Battery Tray Side				
Pothole Protection Device				
Battery Tray	2	Í.		
Battery Charger				
Battery		l l		
Steer Cylinder Assembly	5	Í.		
Wheel/Tire Assembly				
Tie Rod (Conventionals)		1		
Greasing Points				
Hydraulic/Electric Side				
Pothole Protection Device				
Hydraulic Tank				
Hydraulic Oil				
Hydraulic Pump and Motor				
Electrical Panel				
Proportional and Main Manifolds				
Tilt Sensor				
Emergency Lowering Access Rod (If Equipped)				
Platform Assembly				
Fall Protection Anchorages		ĵ,		
AC Outlet on Platform				
Platform Control Console				
Manuals		í í		
Powered Extension Control Console (If Equipped)				

	N/A	Р	F	R
Lifting Mechanism				
Maintenance Support				
Scissor Assembly				
Scissor Bumpers				
Rollers				
Lift Cylinder(s)				
Function Tests				
Test Main Power Disconnect Switch				
Base Control Console				
Test Base Emergency Stop				
Test Off/Platform/Base Switch			1	
Test Lower/Neutral/Raise Switch				
Test Emergency Lowering				
Test Free-wheeling				
Platform Control Console				
Test Platform Emergency Stop				
Test Enable Trigger Switch			S - 1	
Test Steering				
Test Driving				
Test Brakes				
Test Platform Raising/Lowering				
Test Horn				
Test Pothole Sensor				
Test Speed Limit				

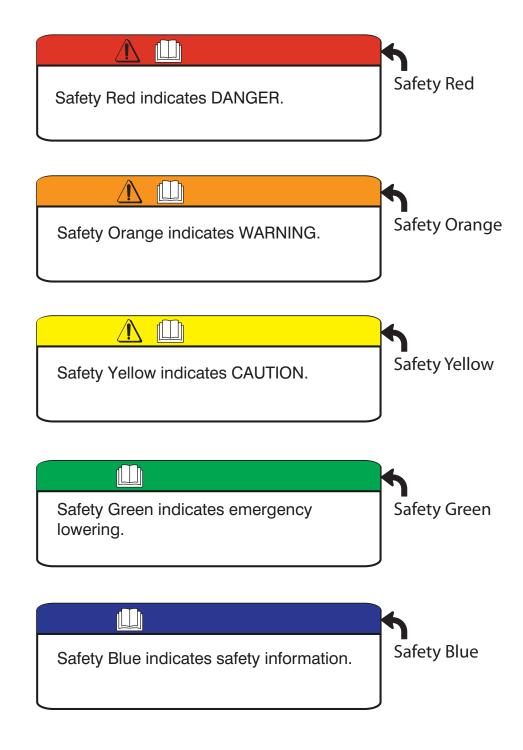
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Note:

Make a copy of this page or visit the Skyjack web site: www.skyjack.com for a printable copy.



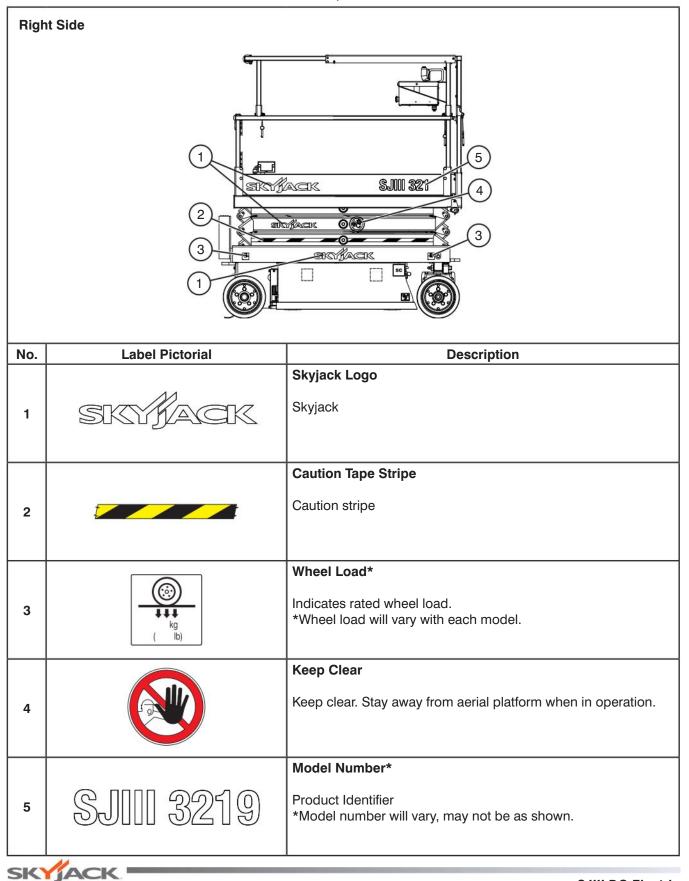
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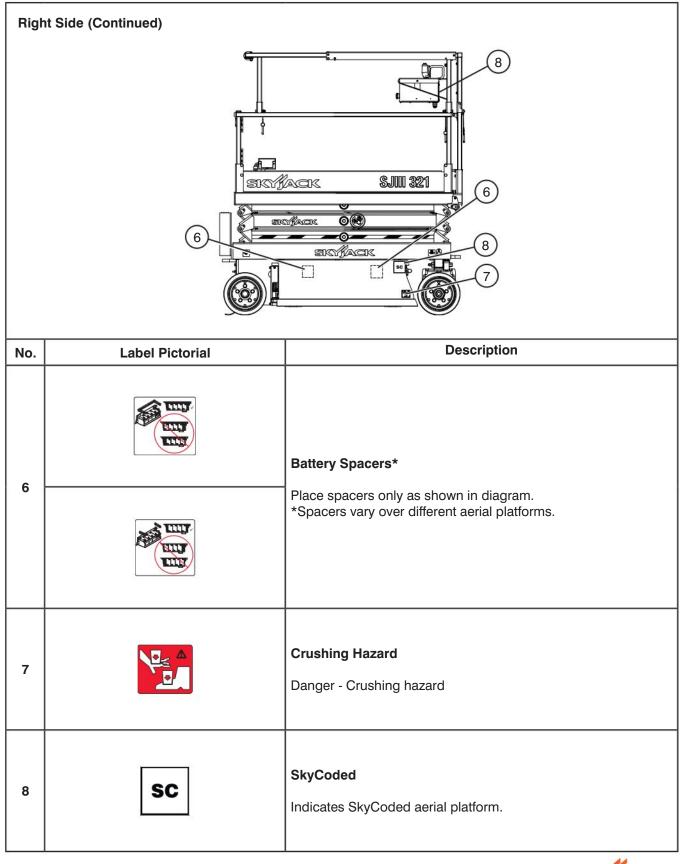


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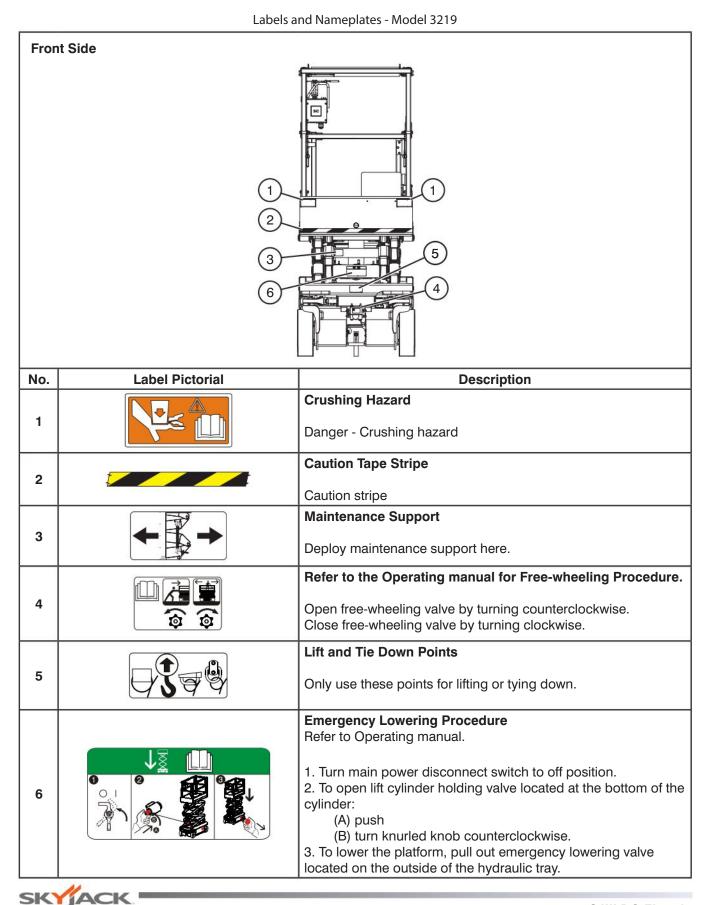




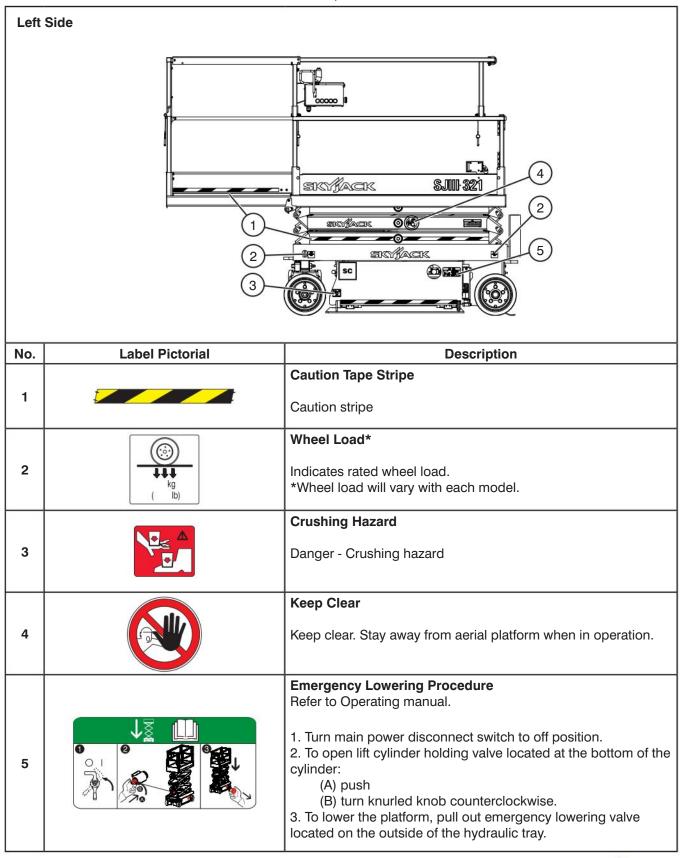






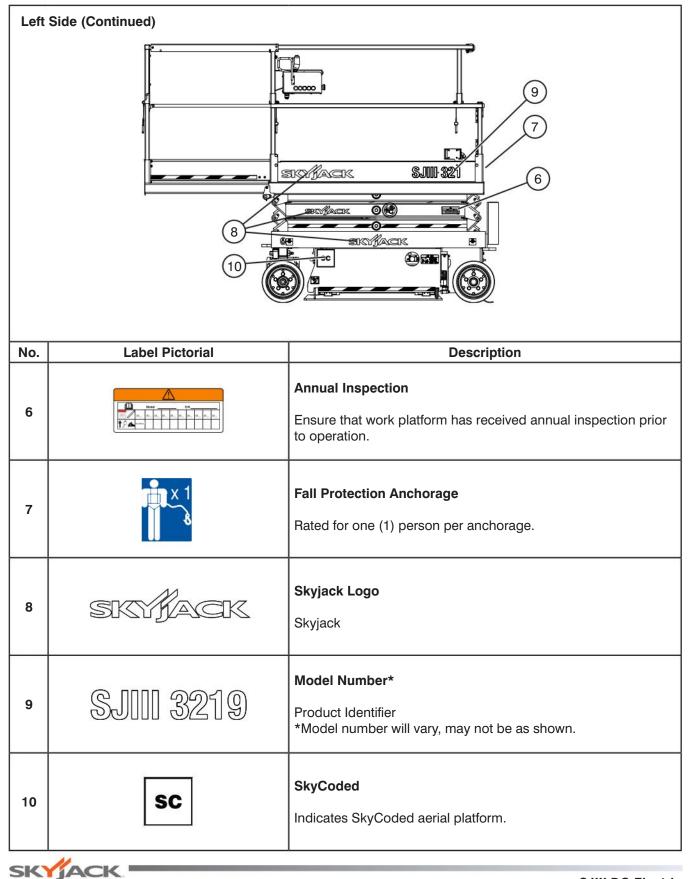




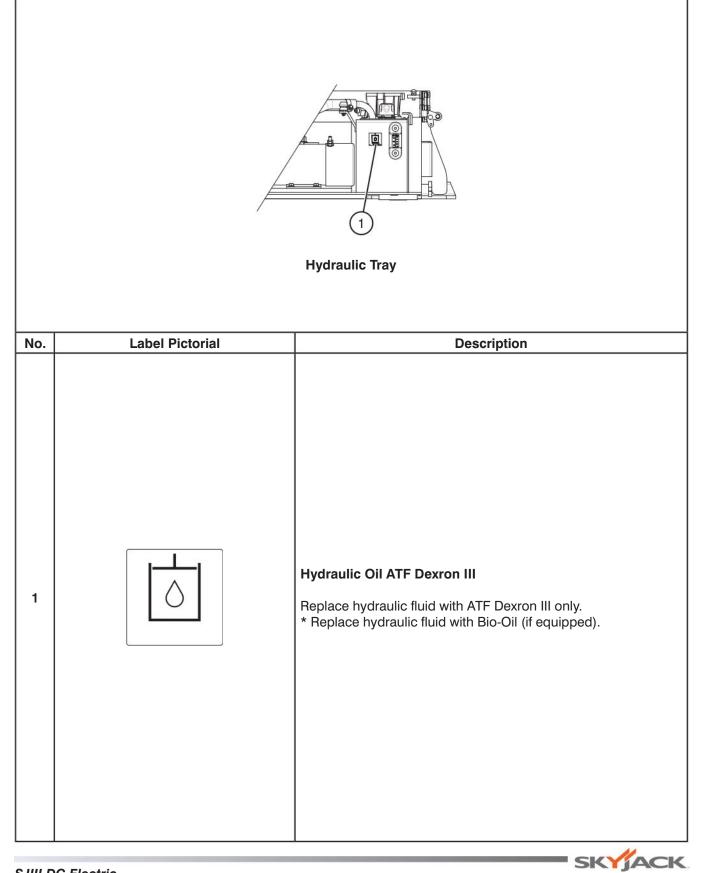




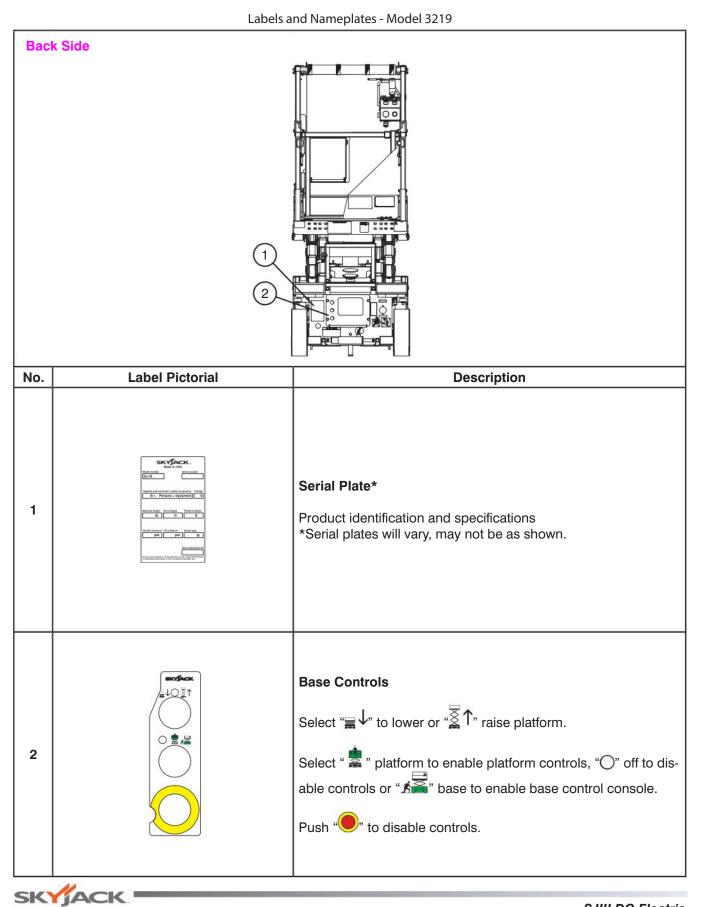




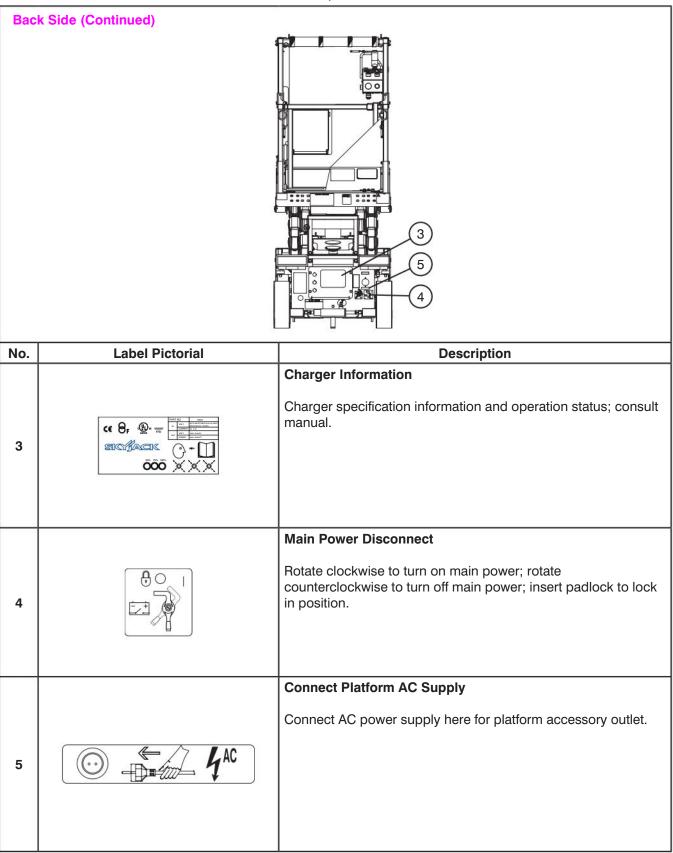
Labels and Nameplates - Model 3219



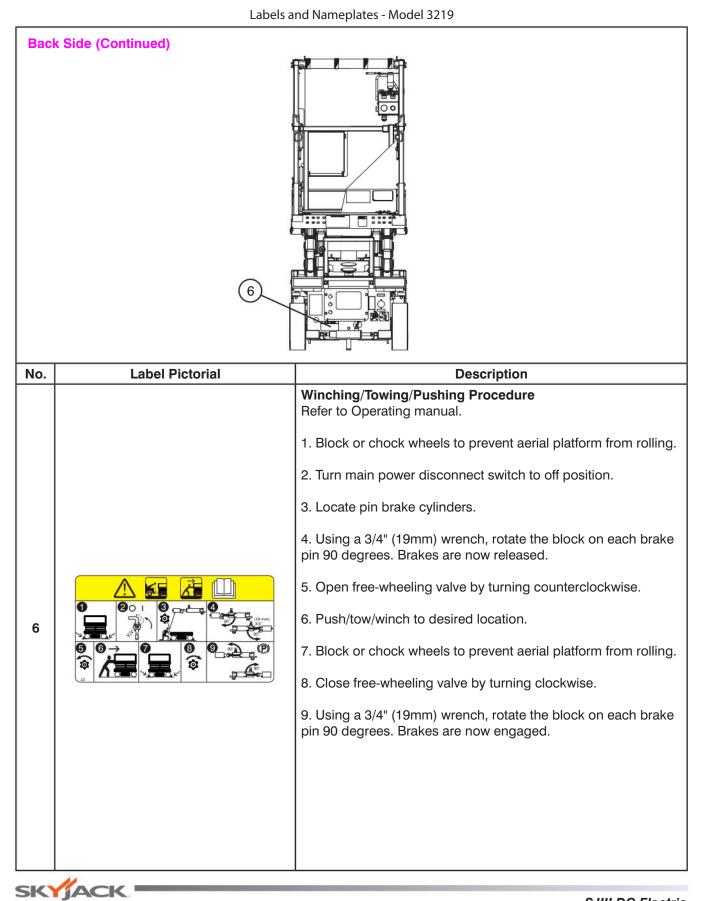


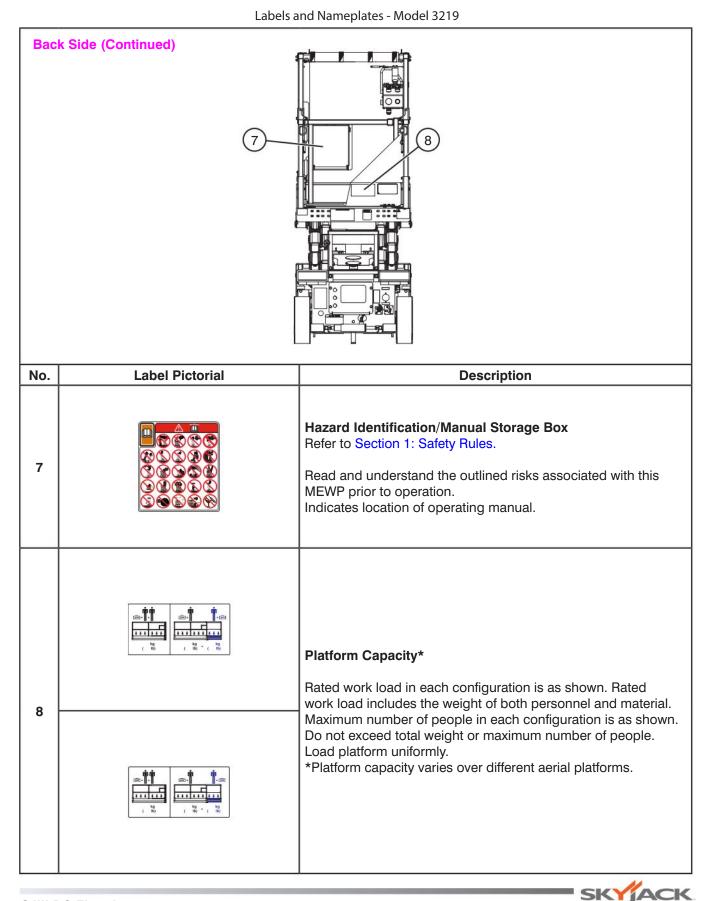




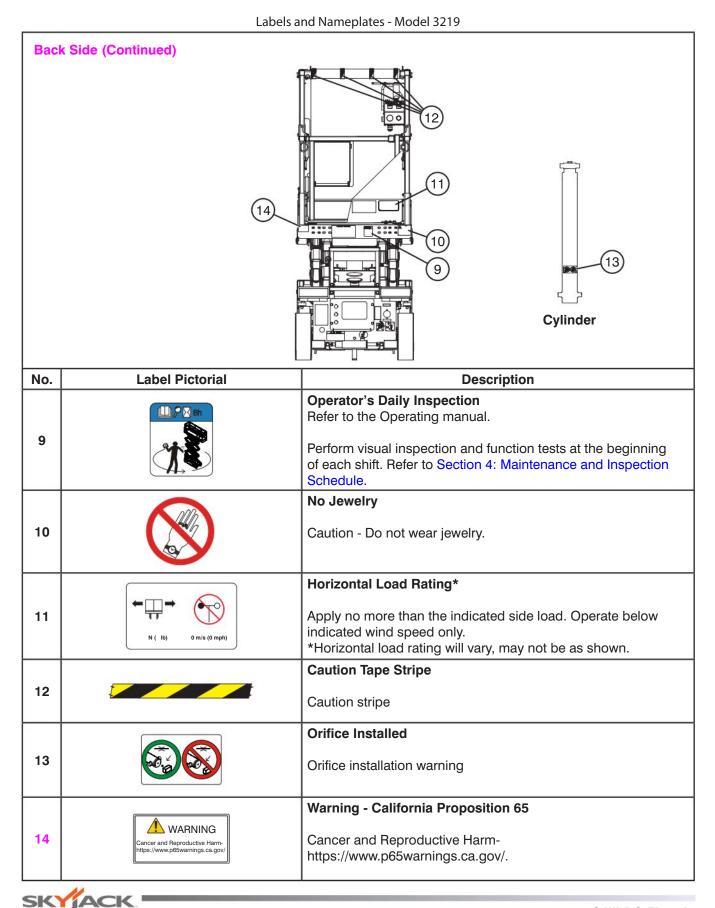




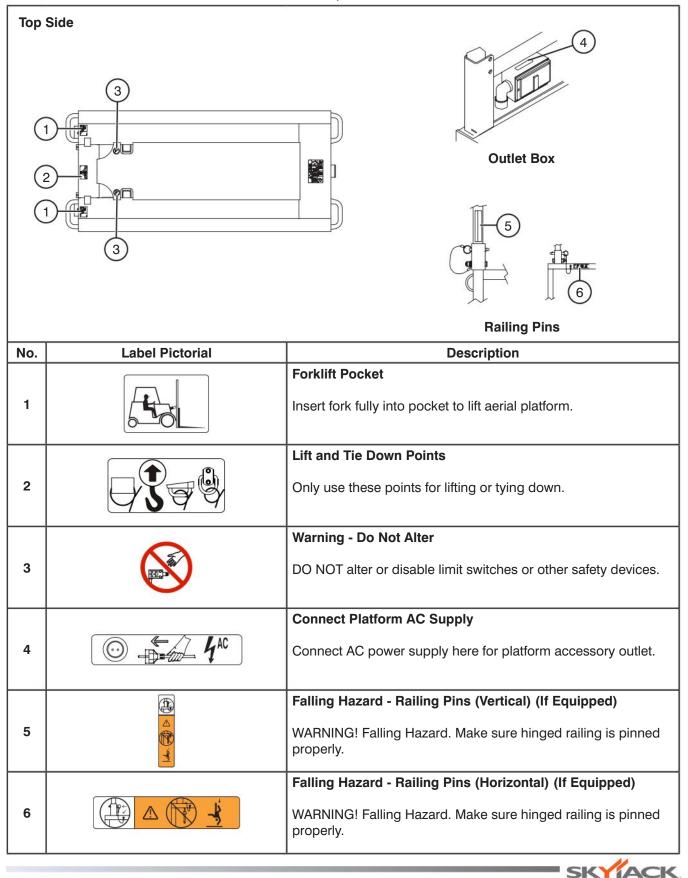




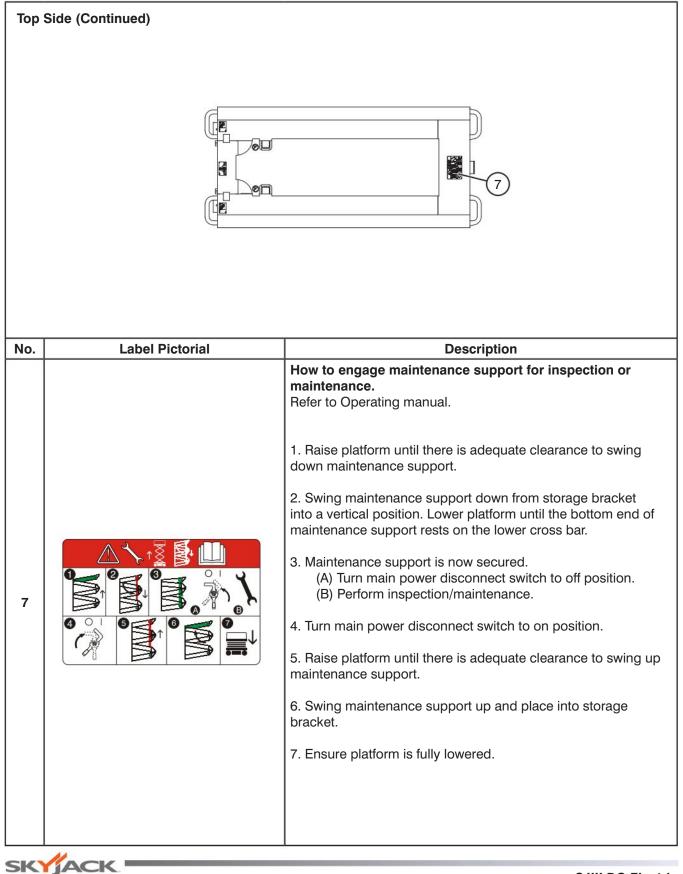


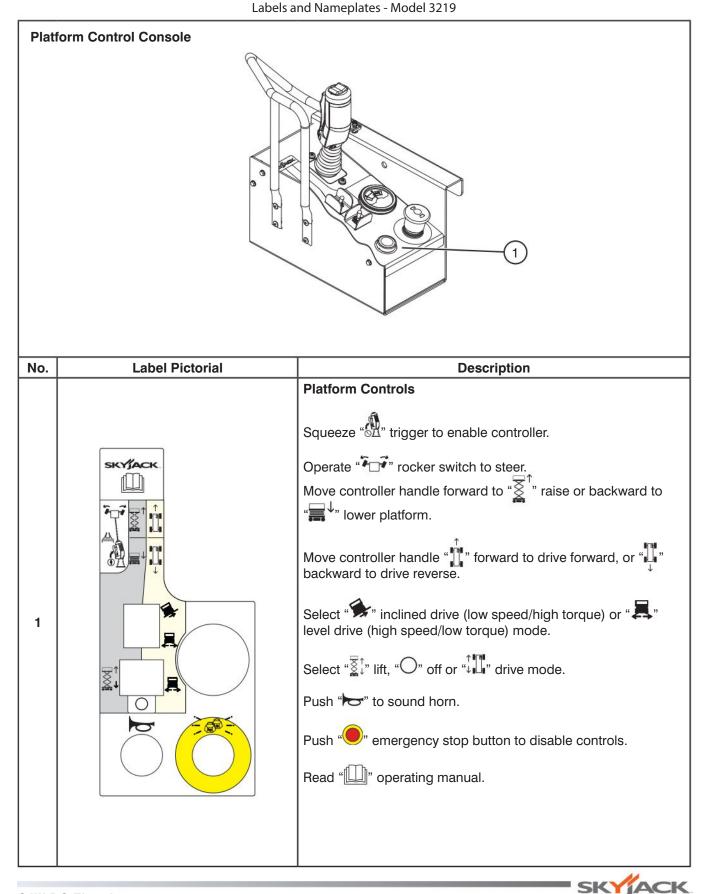


Labels and Nameplates - Model 3219



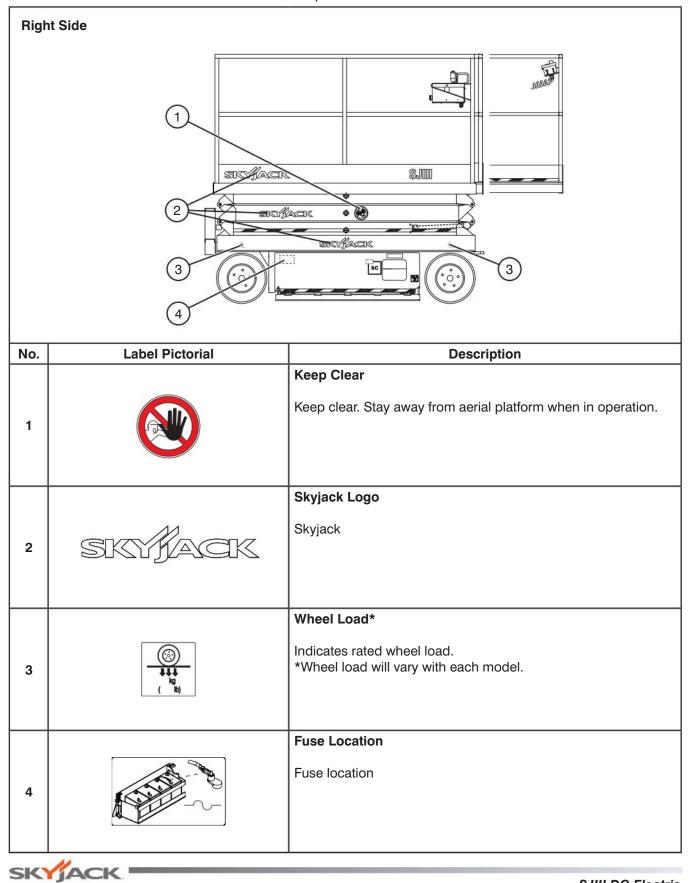
Labels and Nameplates - Model 3219

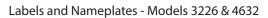


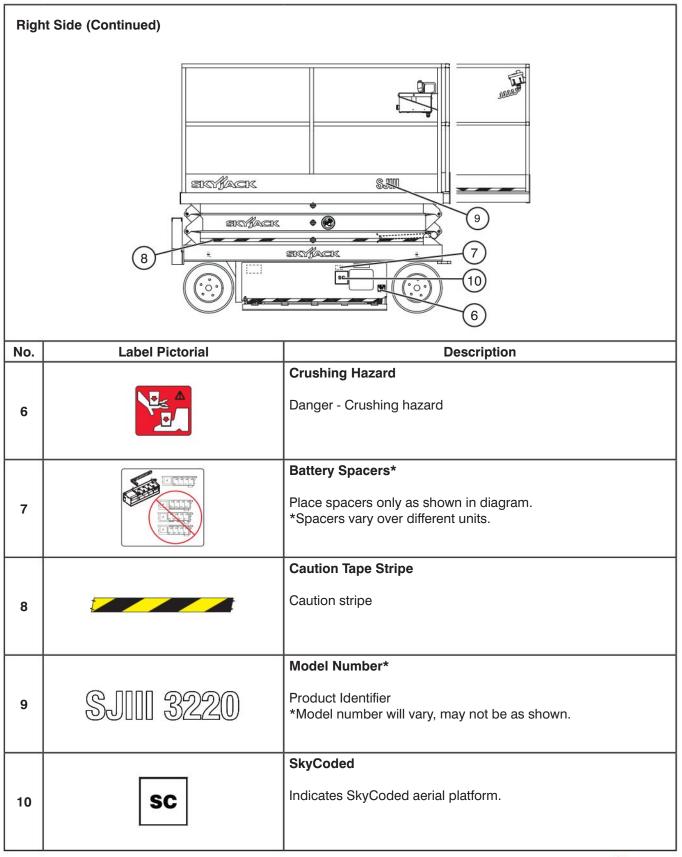




Labels and Nameplates - Models 3226 & 4632

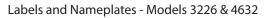






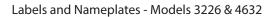


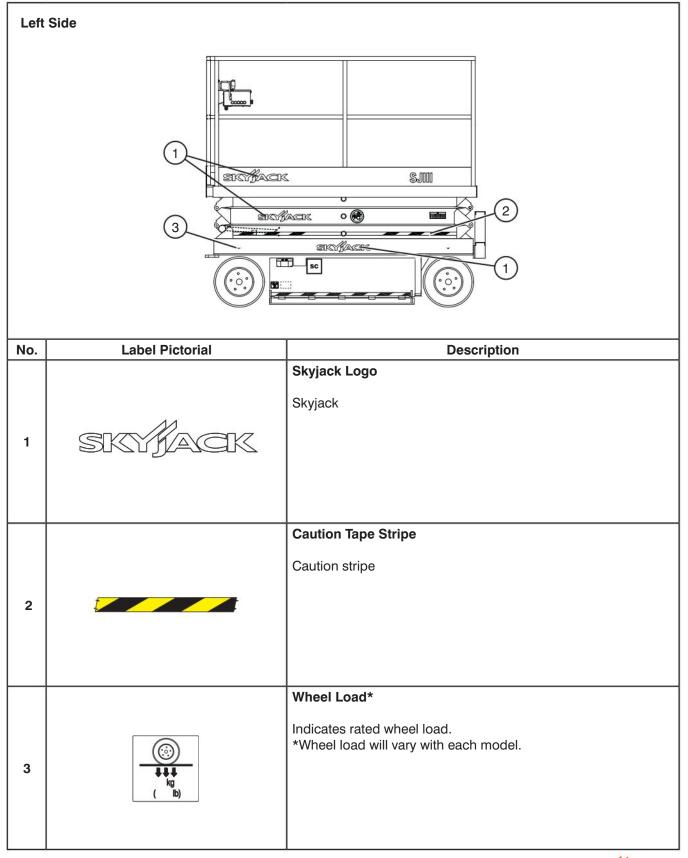
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Front Side				
5 1 1 4 SJIII 3226 2 5 3 5 5 5 5 5 5 5 5 5 5 5 5 5				
No.	Label Pictorial	Description		
1		Crushing Hazard Danger - Crushing hazard		
2		Maintenance Support Deploy maintenance support here.		
3		Lift and Tie Down Points Only use these points for lifting or tying down.		
4		Caution Tape Stripe Caution stripe		
5	X 1 8	Fall Protection Anchorage Rated for one (1) person per anchorage.		

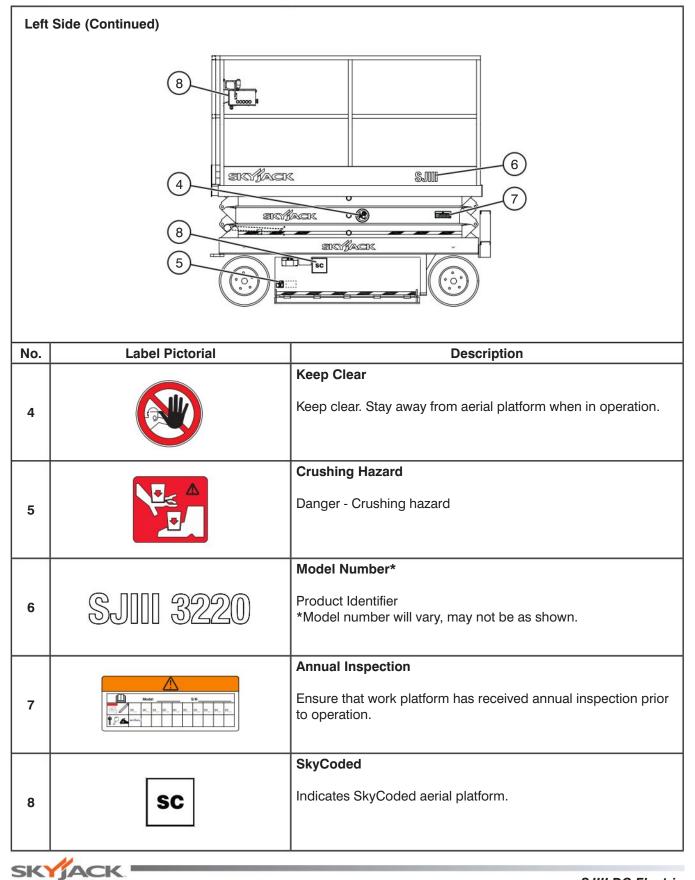


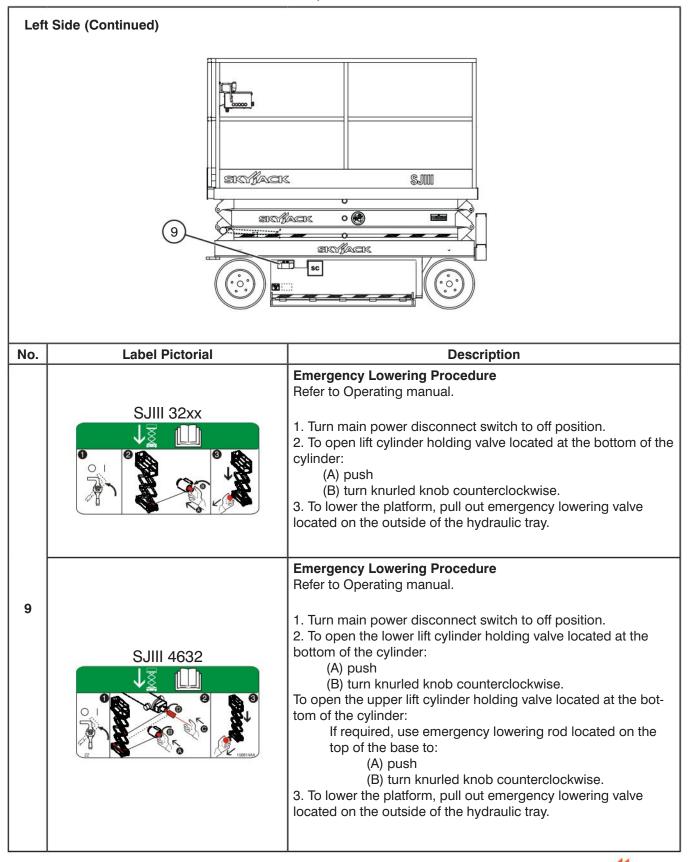




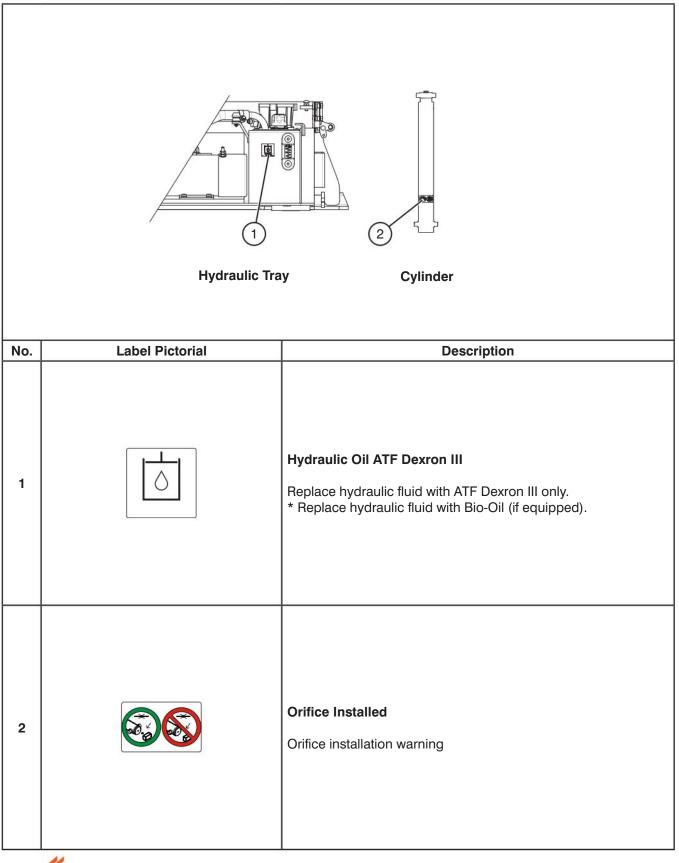


Labels and Nameplates - Models 3226 & 4632

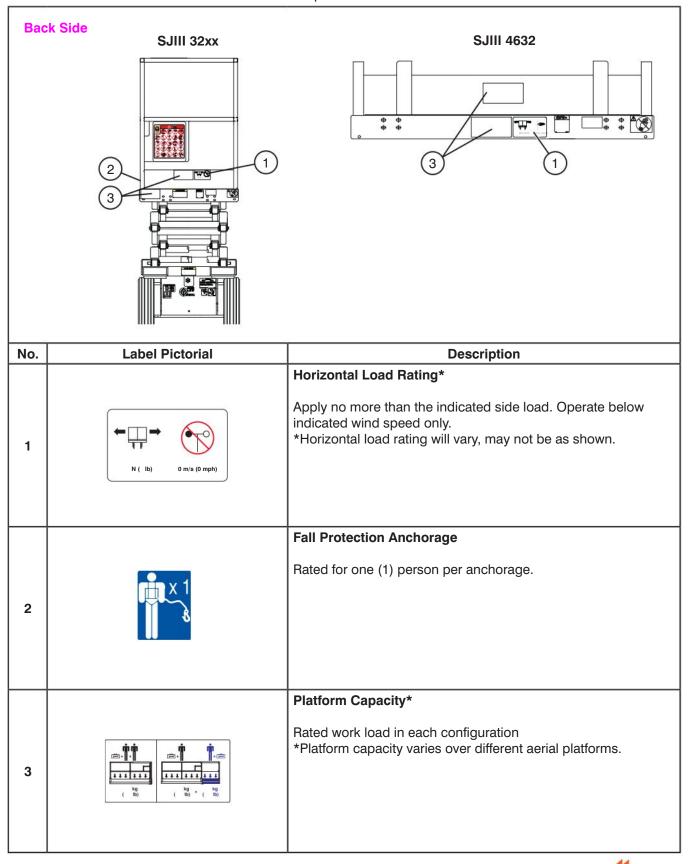




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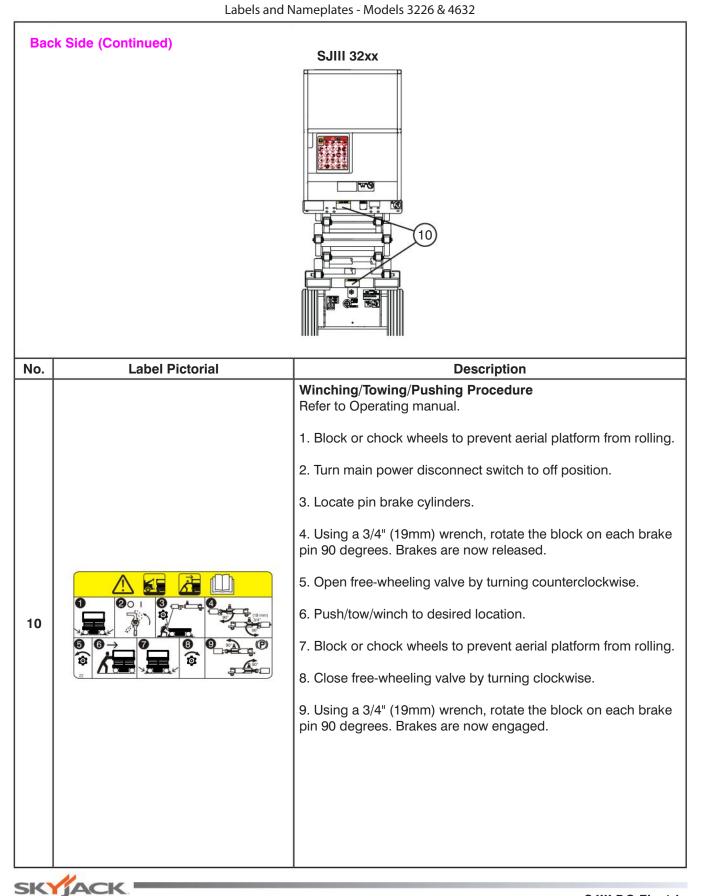
Back Side (Continued)		
No. Label Pictorial	Description	
SJIII 32xx	 Emergency Lowering Procedure Refer to Operating manual. 1. Turn main power disconnect switch to off position. 2. To open lift cylinder holding valve located at the bottom of the cylinder: (A) push (B) turn knurled knob counterclockwise. 3. To lower the platform, pull out emergency lowering valve located on the outside of the hydraulic tray. 	
4 SJIII 4632	 Emergency Lowering Procedure Refer to Operating manual. 1. Turn main power disconnect switch to off position. 2. To open the lower lift cylinder holding valve located at the bottom of the cylinder: (A) push (B) turn knurled knob counterclockwise. To open the upper lift cylinder holding valve located at the bottom of the cylinder: (A) push (B) turn knurled knob counterclockwise. To open the upper lift cylinder holding valve located at the bottom of the cylinder: (B) turn knurled knob counterclockwise. (A) push (B) turn knurled knob counterclockwise. To lower the platform, pull out emergency lowering valve located on the outside of the hydraulic tray. 	
SKYACK SJIII DC Electri		

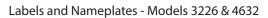
Page 94

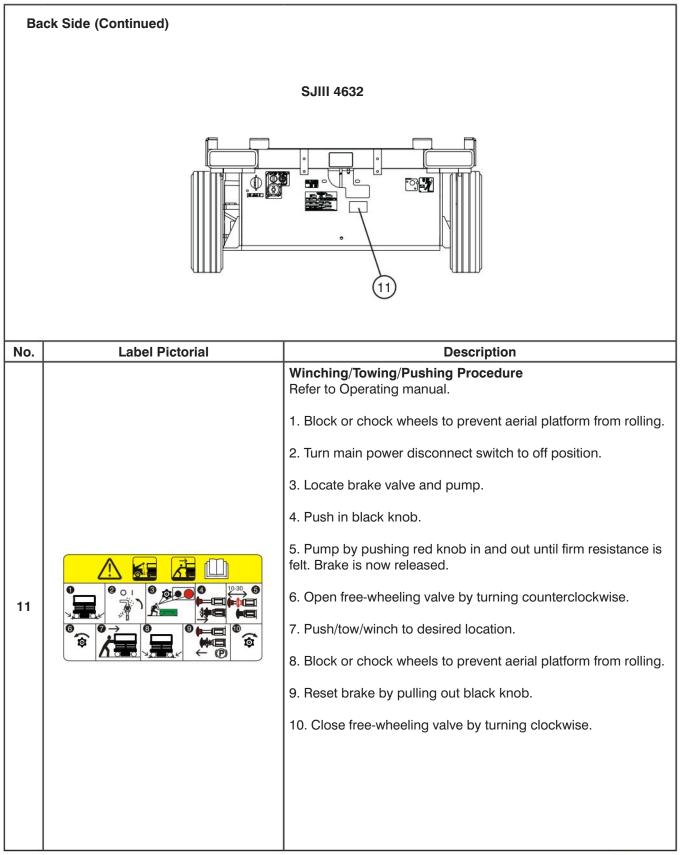


Back Side (Continued)			
	SJIII 32xx	SJIII 4632	
No.	Label Pictorial	Description	
6		Hazard Identification/Manual Storage Box Refer to Section 1: Safety Rules. Read and understand the outlined risks associated with this MEWP prior to operation. Indicates location of operating manual.	
7		No Jewelry Caution - Do not wear jewelry.	
8	Cancer and Reproductive Harm- https://www.p65warnings.ca.gov/	Warning - California Proposition 65 Cancer and Reproductive Harm- https://www.p65warnings.ca.gov/.	
9		Operator's Daily Inspection Refer to the Operating manual. Perform visual inspection and function tests at the beginning of each shift. Refer to Section 4: Maintenance and Inspection Schedule.	

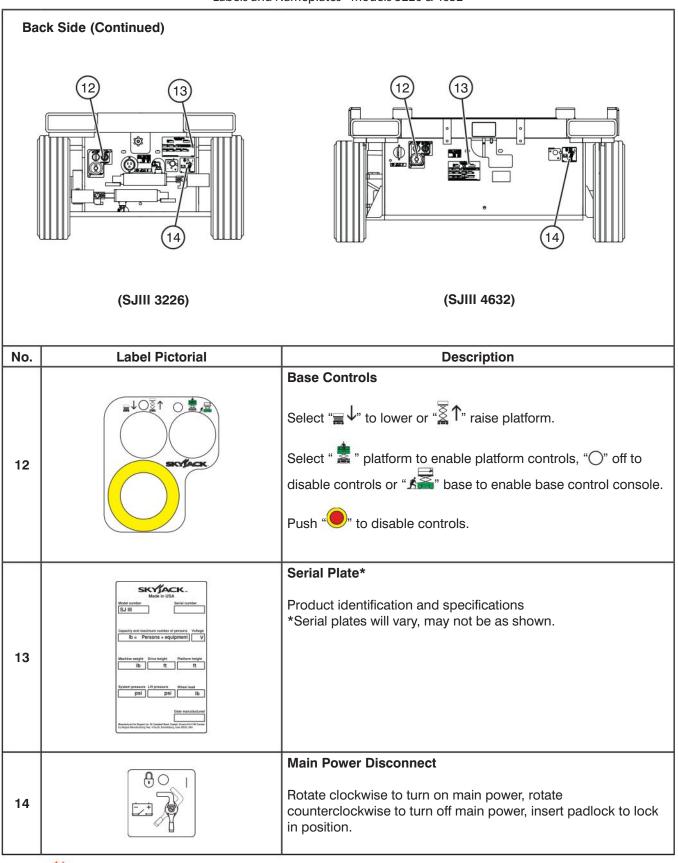




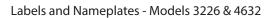


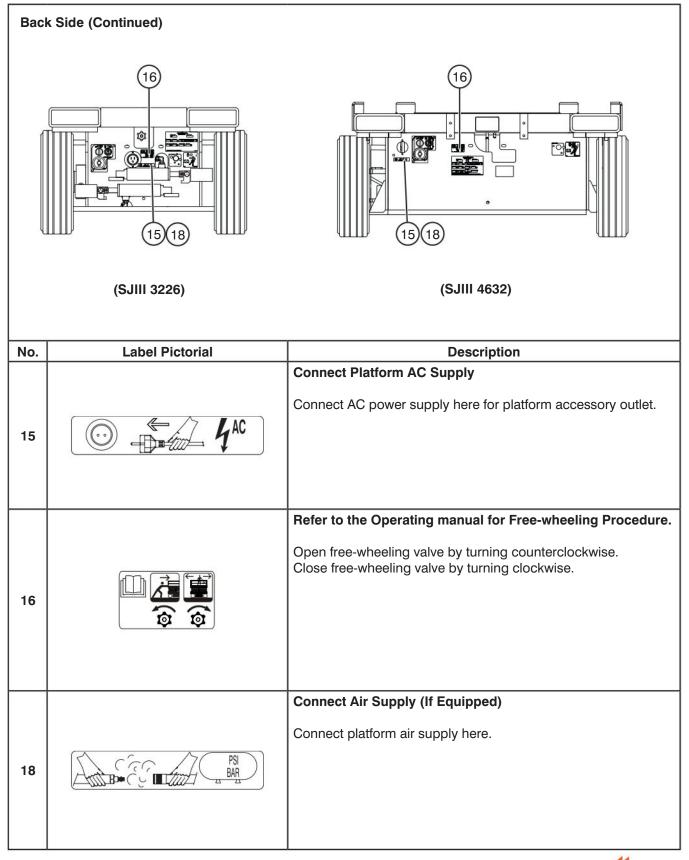




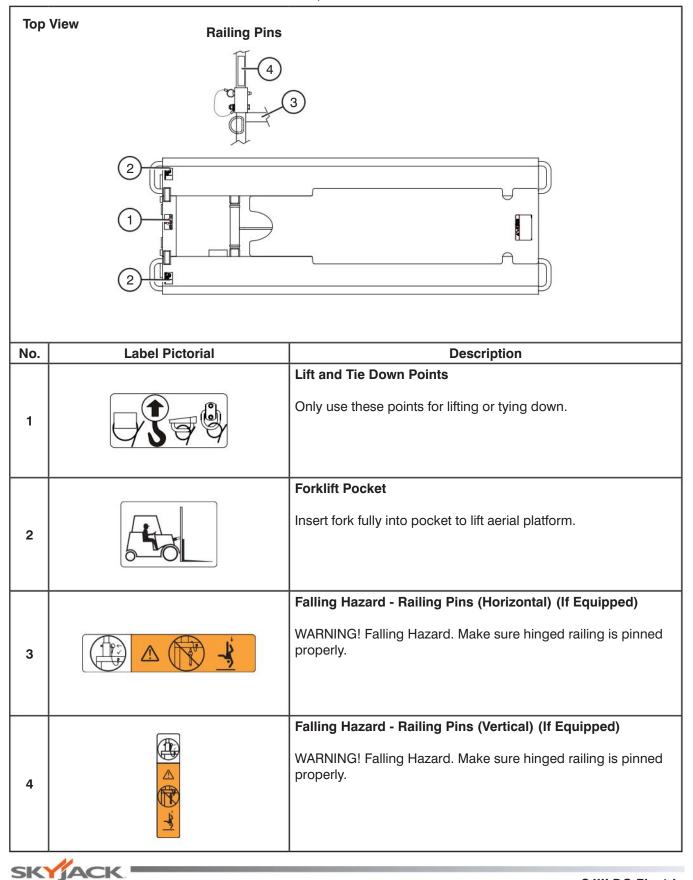


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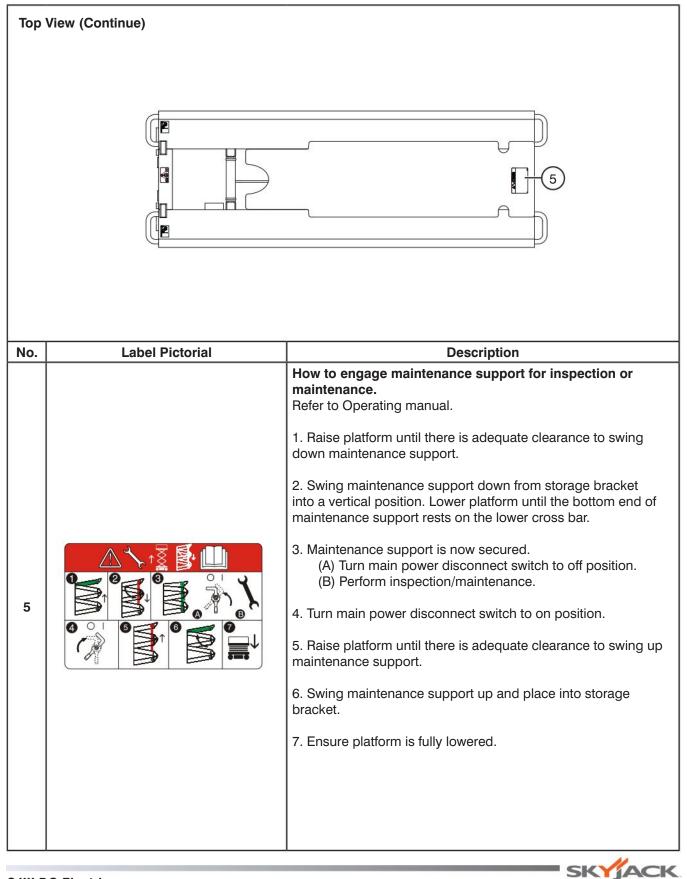






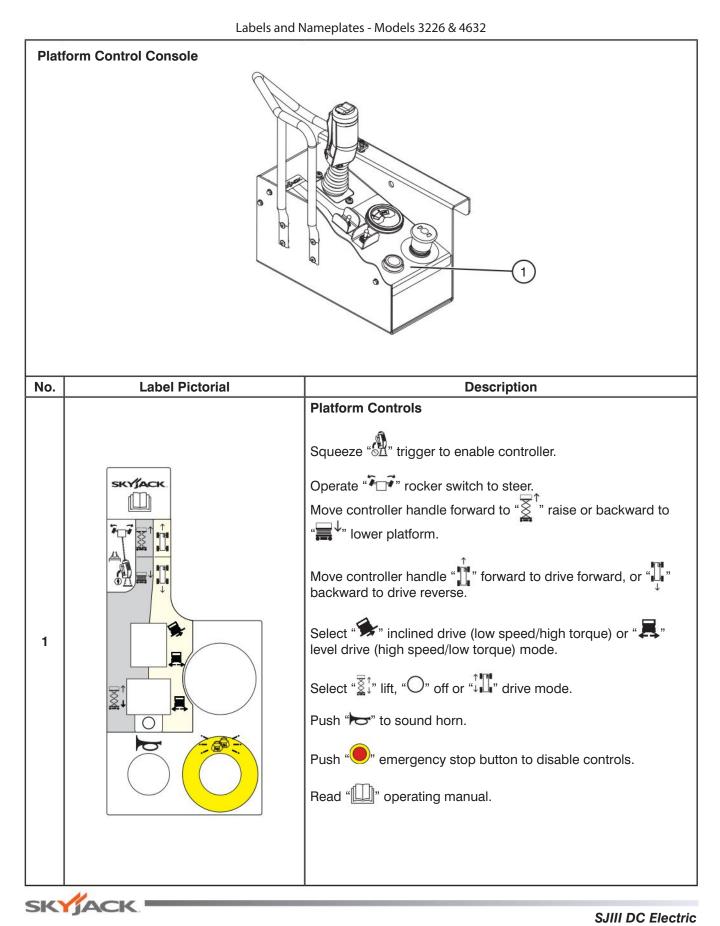




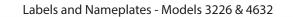


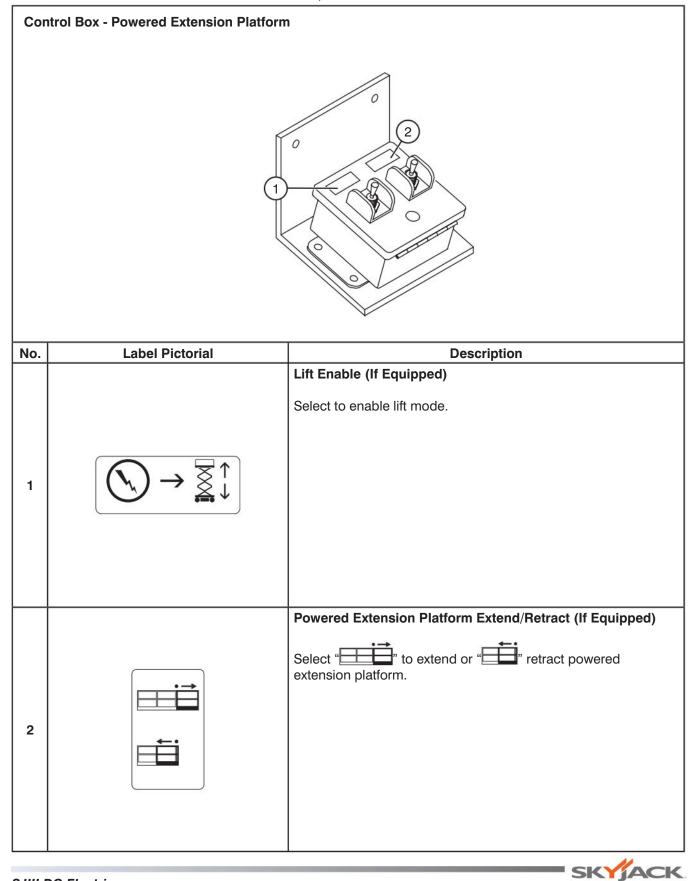






Page 102







6.0 Skyjack Features

Your Skyjack machine may be equipped with the following features:



At the heart of every Skyjack machine, proven and simplistic control systems using Skyjack's colour coded and numbered wiring system make our machines the easiest to trouble shoot and repair. – Black #14 is for the lift function on a 3219, and it is lift on a 63AJ. Using an analog based control system allows Skyjack AWPs to operate using a simplified system with fewer and less expensive components – less maintenance and lower costs.



Having equipment with features and functionality that allow you and your customers to do more is a vital part of the utilization equation. Skyjack offers a range of accessory products to further expand a given products adaptability and your power to offer a truly flexible rental choice.







www.skyjack.com