

## OPERATING MANUAL (AS) DC ELECTRIC SCISSORS MODELS SJIII 3215 SJIII 3219 SJIII 3220 SJIII 3226 SJIII 4626 SJIII 4632

194849AGA November 2 2022



#### This manual is based on serial number(s):

SJIII 3215	10 001 166 & Above
SJIII 3219	22 076 680 & Above
SJIII 3220	60 005 047 & Above
SJIII 3226	27 022 708 & Above
SJIII 46xx	70 022 593 & Above

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 MEWP, 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.

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

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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 MEWP.



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

#### Mobile Elevating Work Platform (MEWP) and Aerial 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 MEWP are designed to transport and raise personnel, tools and materials to overhead work areas.

#### **Use of Equipment**

The MEWP 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 MEWP. 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 MEWP 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 MEWP. Compare the labels on the MEWP 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 MEWP 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 options not listed under "Standard and Optional Features," contact the SKYJACK Service Department at

☎: 61 (0) 28786 3200
.: 61 (0) 28786 3222

Include the model and serial number for each applicable MEWP.

#### Scope of this Manual

- a. This MEWP meets requirements of the Guideline published by the National Regulators' Committee on High Risk Plant dated 27 May 2010.
- b. Operators are required to conform to national, state or territorial/provincial and local health and safety regulations applicable to the operation of this MEWP.



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# Failure to comply with your required responsibilities in the use and operation of the MEWP 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 MEWP is mandatory. The following pages of this manual should be read and understood completely before operating the MEWP.

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 MEWP 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 MEWP does not provide protection from contact with or proximity to an electrically charged conductor.

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





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#### 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.

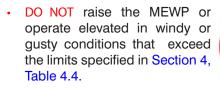
- KNOW all national, state or territorial/provincial and local rules which apply to your MEWP and jobsite.
- TURN main power disconnect switch "O" off when leaving the MEWP unattended. Remove the key to prevent unauthorized use of the MEWP.
- WEAR all the protective clothing and personal safety devices 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 increase the lateral surface area of the platform. Increasing the area exposed to the wind will decrease MEWP stability. Avoid tenting.
- DO NOT drive elevated on a soft or uneven surface.
- DO NOT elevate the MEWP if it is not on a firm, level surface.
- 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 MEWP.



OPERATION IF IN AREAS WITH HOLES OR DROP-OFFS ABSOLUTELY IS NECESSARY, elevated driving shall not be allowed. Position the MEWP horizontally only with the platform fully-lowered. After ensuring that all 4 wheels or outriggers (if equipped) have contact with a firm, level surface, the MEWP 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 not exceeding those listed in Table 4.3a and Table 4.3b.





#### 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 MEWP including the rated load, e.g. covers, drains, and trenches.
- DO NOT operate a MEWP that has ladders, scaffolding or other devices mounted on it to increase its size or work height. It is prohibited.



• DO NOT exert horizontal (manual) force on MEWP that exceeds the limits specified in Table 4.4.



• DO NOT use the MEWP 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. Be aware of overhead obstructions or other possible hazards around MEWP when lifting or driving.





- AVOID crushing hazards. Be aware of crushing hazards when lifting or driving. Keep all body parts inside the MEWP.
- DO NOT raise the MEWP while the MEWP 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 MEWP.
- 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 lug nuts 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 MEWP without • guardrails, locking pins and the entry gate(s) in place.

•



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

alcohol or drugs.



DO NOT distribute load unevenly.



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



DO NOT position the MEWP • 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

The guardrail system provides fall protection for the occupants. 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. When used, lanyards should only be attached to dedicated attachment points on the platform.

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.

### 

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

- Use only equipped access openings.
- Enter and exit only when the MEWP 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 MEWP 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 MEWP or the ground at all times during entering and exiting.

# 

An operator should not use any MEWP 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.
- Perform a thorough jobsite inspection prior to operating the MEWP, to identify potential hazards in your work area.
- Be aware of moving equipment in the area. Take appropriate actions to avoid collision.

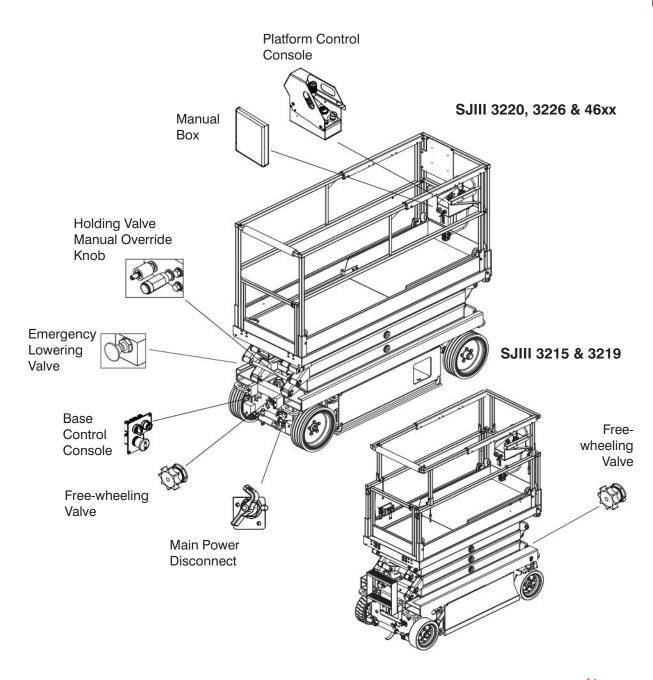


#### 2.1 Familiarization of SJIII Series

MEWP Familiarization should be given only to individuals who are COMPETENT And TRAINED to operate a MEWP.

Do not operate this MEWP 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 MEWP.





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.

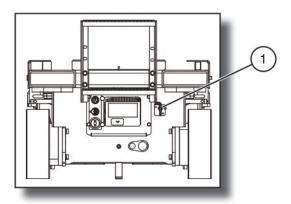


Figure 2-1. Main Power Disconnect Switch

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

#### 2.2-2 Tilt Alarm

The MEWP is equipped with a device which senses when the MEWP is on a slope in any direction. It is designed to prevent driving and activate audible and visual alarms when MEWP is on a slope greater than a predetermined limit.

# WARNING

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

#### 2.2-3 Lowering Alarm

The MEWP is equipped with an audible alarm which sounds while the MEWP is lowering.

#### NOTE

On MEWP with certain options, a flashing amber light will accompany this alarm.

#### 2.2-4 Load Sensing System

This system is a safety device that will prevent any normal movement of the MEWP from a stationary working position after the rated load is reached and exceeded. Refer to Table 4.4 for maximum platform capacities.

When 90% of the rated load is reached:

The red power indicator light on the platform control console flashes.

- When the rated load is reached: An audible alarm sounds for approximately 2 seconds. 5 times per minute.
- When the rated load is exceeded:

The flashing light and audible alarm continue and all electrically controlled MEWP movement functions stop. To resume normal operation, remove the overload from the platform.

If the MEWP comes in contact with an overhead obstruction:

The platform could become overloaded and all functions would stop. Release of the platform from this situation can only be effected by use of the emergency lowering system. Refer to Section 2.6.

#### NOTE

After reaching full extension and upon lowering, the MEWP could stop and take an overload reading. Return the controller to the neutral center position, and release the enable trigger switch. If the MEWP is overloaded, the flashing light and audible alarm continue and all electrically controlled MEWP movement functions stop. To resume normal operation, remove the overload from the platform.



**SJIII DC Electric** 

#### 2.2-5 Base Control Console

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

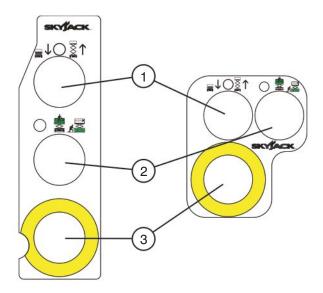


Figure 2-2. Base Control Console

- 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 MEWP or to activate either """ platform or """" base controls.

**3.** Emergency Stop Button - This button "●", when depressed, disconnects power to the control circuit.

#### 2.2-6 Disc 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:

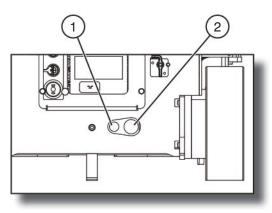
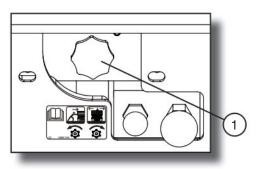


Figure 2-3. Disc Brake System

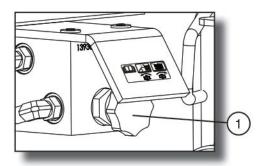
- 1. Brake auto reset valve plunger
- 2. Brake hand pump



#### 2.2-7 Free-wheeling Valve



Models 3220, 3226 and 46xx



Models 3215 and 3219

Figure 2-4. Free-wheeling Valve

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

#### 2.2-8 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:

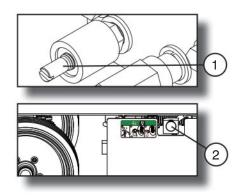


Figure 2-5. Emergency Lowering System

- 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.



SJIII DC Electric

#### 2.2-9 Platform Control Console

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

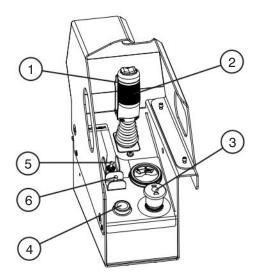


Figure 2-6. Platform Control Console with Toggle Switch

- 1. 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.
- 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 and overload status. When the light is continuously illuminated, upper controls are available. When the light is flashing, it signals an overload function. Refer to Section 2.2-3.
- 4. **Horn Pushbutton** This ">>>" pushbutton sounds an automotive-type horn.

SJIII DC Electric

5. Inclined Drive/Level Drive Switch (If Equipped)

- This switch selects "S" inclined drive (low speed/high torque) or "II" level drive (high speed/low torque).

#### NOTE

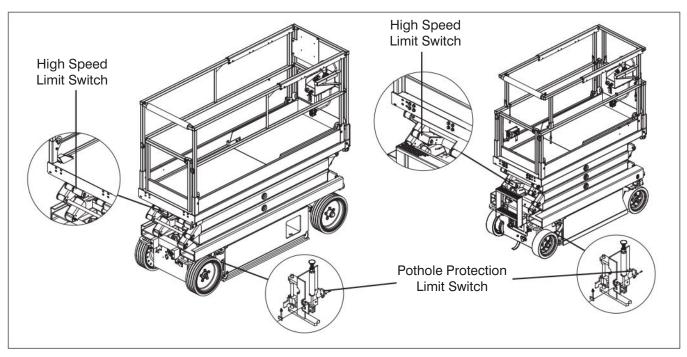
Inclined drive (low speed/high torque) is not available on models 3215 and 3219.

Lift/Off/Drive Switch - Selecting "○" off position disconnects power from both lift and drive circuits. Selecting "↓↓" lift position energizes the lift circuit. Selecting "↓↓" drive position energizes the drive circuit.

# 

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 a MEWP until all malfunctions have been corrected.

# WARNING

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

### CAUTION

Ensure MEWP 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 MEWP.

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 MEWP.

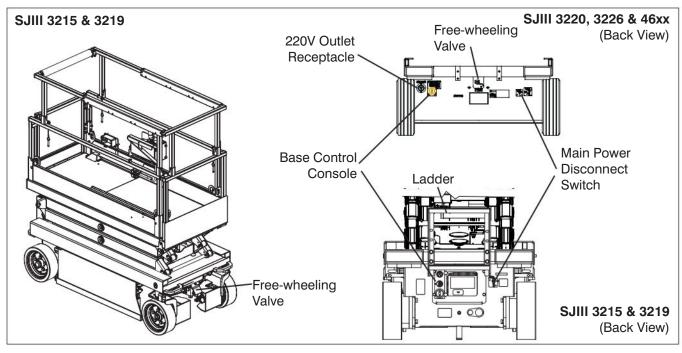
Perform a visual inspection around the following areas:

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



**SJIII DC Electric** 

It is the responsibility of the operator to read, completely understand and follow all instructions and warnings



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
   Support State
   Support State

(SJIII 3215 & 3219 - Front Side)

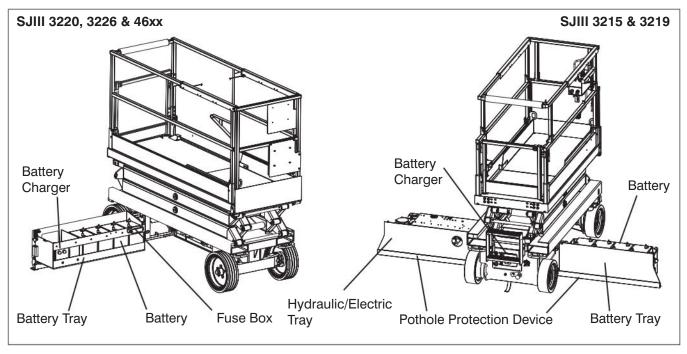
- Ensure there are no loose or missing parts and there is no visible damage.
- Brakes

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

- 220V 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
   Compared to a contract of the contrac
  - (SJIII 3215 & 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.

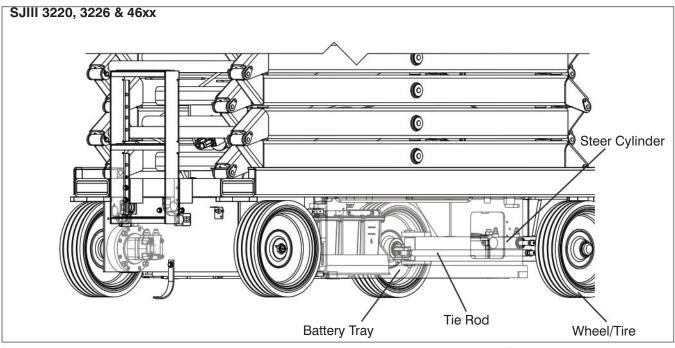
- 1. Check battery case for damage.
- 2. Clean battery terminals and cable ends thoroughly with a terminal cleaning tool or wire brush.
- 3. Ensure all battery connections are tight.
- 4. If applicable, check battery fluid level. If plates are not covered by at least 13 mm of solution, add distilled 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 MEWP.



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

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

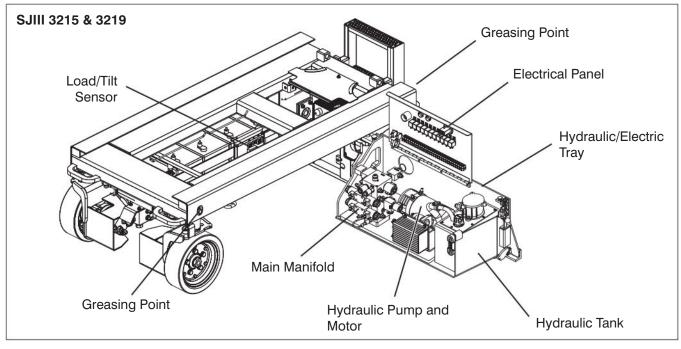
- Check all tire treads and sidewalls for cuts, cracks, punctures and unusual wear.
- Check each wheel for damage and cracked welds.
- Ensure the castle nut (if equipped) is in place with the cotter pin.
- Ensure the wheel nut is tight.
- Check wheel motor assembly for loose or missing parts and signs 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.

WARNING

- Tie Rod (SJIII 3220, 3226 **& 46xx**)
  - 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.





- 2.3-7 Hydraulic/Electric Tray Side
  - 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.
  - Electrical Panel
    - Ensure panel is properly secured and there is no visible damage.
    - Ensure there are no loose wires or missing fasteners.

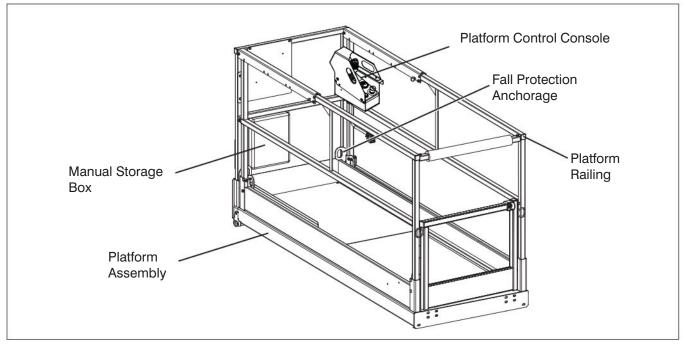
#### Main Manifold

- 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.
- Load/Tilt Sensor
  - Ensure load/tilt sensor is properly secure and there is no visible damage.
- Emergency Lowering Access Rod (If Equipped)
  - Ensure rod is properly secured and there is no visible damage.



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2.3-8 Platform Assembly

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

- 1. Use the ladder of MEWP 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 (if equipped) is in good working order and automatically closes and latches.
- 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.

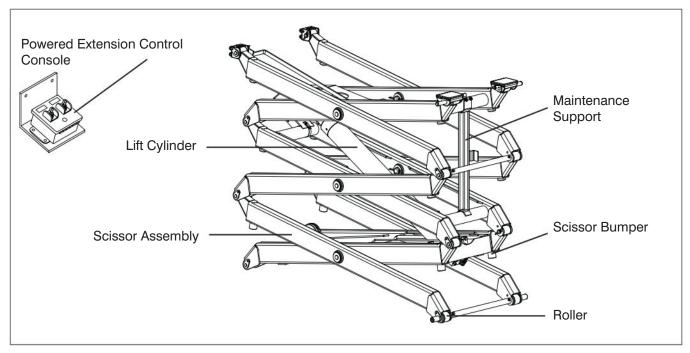
Platform Control Console

- 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 is 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 show no signs of wear and/ or physical damage.
- Scissor Bumpers
  - Ensure bumpers are secure and show 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.

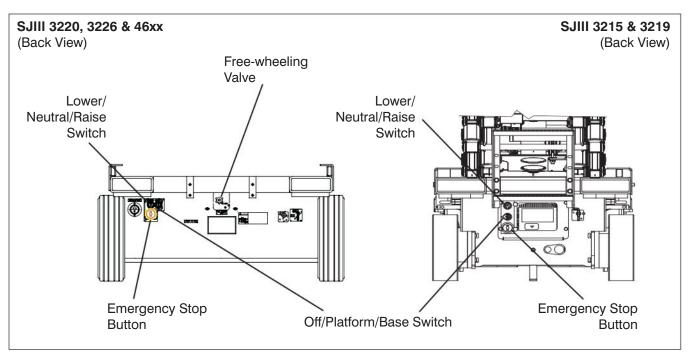


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FAMILIARIZATION

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.



#### 2.4 Function Tests

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

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

After repairs are completed, operator must perform a pre-operation inspection and a series of function tests again before putting MEWP 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: MEWP functions should not operate.

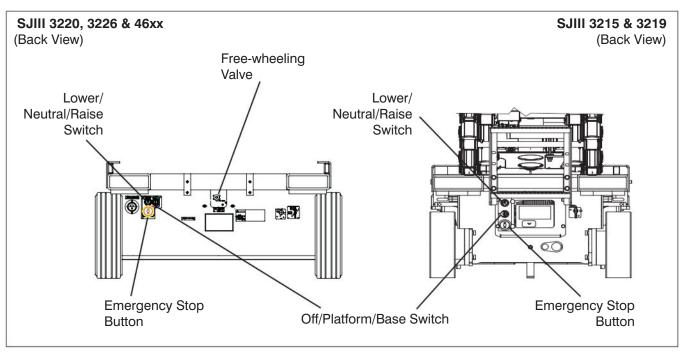
2.4-2 Base Control Console



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

- 1. Use the ladder of MEWP to access platform.
- 2. Close the gate.
- 3. On platform control console, push in "O" 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 base "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 "O" emergency stop button.
- Test Off/Platform/Base Switch



Be aware of overhead obstructions or other possible hazards around the MEWP 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.

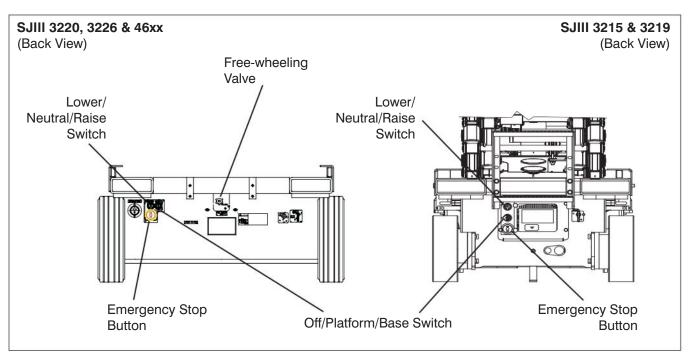
2. Select off/platform/base key switch to

"" platform position. Attempt to raise or lower the platform. **Result:** Platform raising and lowering functions should not operate.

- Select and hold off/platform/base key switch to " base position. Attempt to raise or lower the platform. Result: Platform raising and lowering functions should operate.
- Test Lower/Neutral/Raise Switch
  - Select and hold off/platform/base key switch to " a base position and " <sup>™</sup>/<sub>2</sub> ↑" raise the platform with lower/neutral/ raise switch. Result: Platform should rise.
  - Select and hold off/platform/base key switch to " base position and " lower the platform with lower/ neutral/raise switch.
     Result: Platform should lower.



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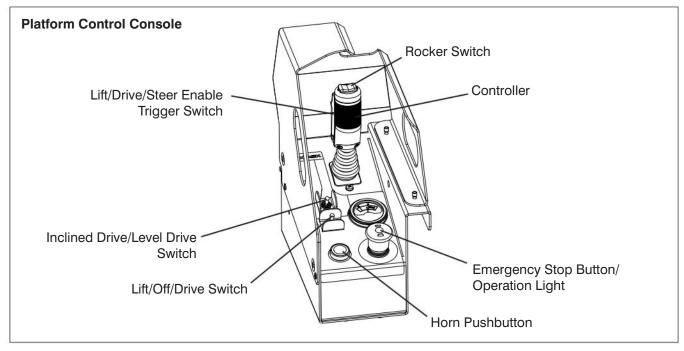
Test Emergency Lowering

•

- 1. Raise the platform.
- 2. Turn main power disconnect switch to off position.
- 3. 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 MEWP.
- 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 MEWP.
   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 "●" 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.

# 

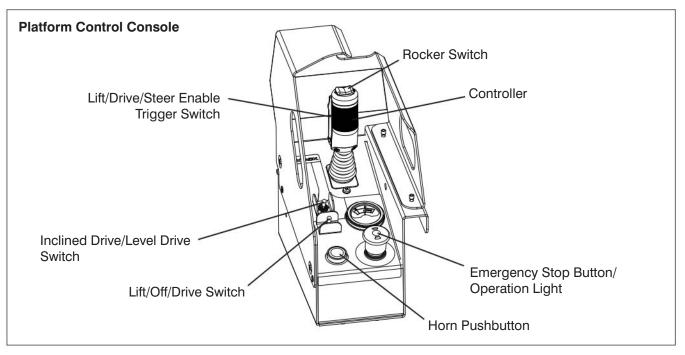
# Ensure that you maintain three points of contact when using the ladder to mount/ dismount platform.

- 4. Use the ladder of MEWP 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 "O" emergency stop button.
- 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 "
   <sup>^</sup>
   <sup>^</sup>
- 2. Activate and hold "" enable trigger switch.
- Press rocker switch on top of controller handle to " " eft and " right. Result: Steer wheels should turn left and right.





- 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 MEWP begins to move, and then return handle to center position.
   Result: MEWP should move in forward direction, and then come to a stop.
- Slowly move controller handle in <sup>"↓</sup>" reverse direction until MEWP begins to move, and then return handle to center position.
   Result: MEWP should move in reverse direction, and then come to a stop.
- Test Brakes

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### 

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

- 1. Ensure path of intended motion is clear.
- 2. Activate and hold "" enable trigger switch.
- 3. Drive MEWP "," " forward and then

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

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

4. Drive MEWP " " forward and then

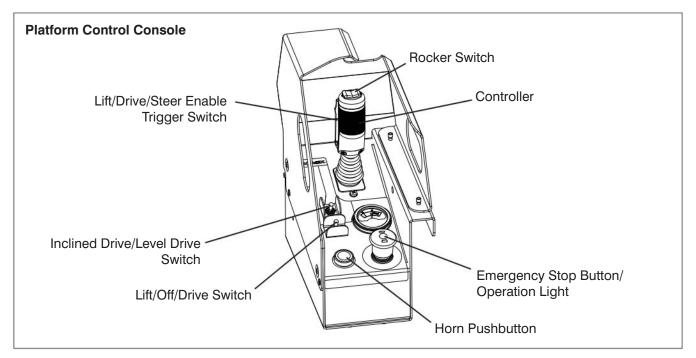
"J" backward. Test brake again by releasing

"🖑 enable trigger switch only.

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



.



Test Platform Raising/Lowering

## 

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

- Select lift/off/drive switch to "
   <sup>\*</sup>
   <sup>\*</sup>
- 2. Activate and hold "A" enable trigger switch.
- Push controller handle and raise the platform to an approximate height of 1/2 meter (2 feet).
   Result: Platform should rise.
- Pull controller handle and lower the platform fully.
   Result: Platform should lower.

Test Horn

- 1. Push "born pushbutton. **Result:** Horn should sound.
- Test Pothole Sensor



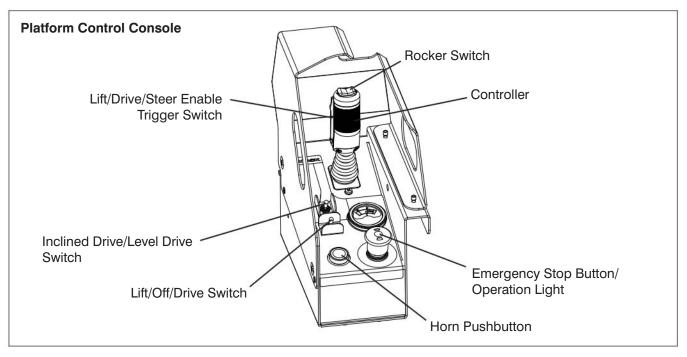
Ensure that you maintain three points of contact to mount/dismount platform.

- Use the ladder to dismount from platform and place a block, approximately 2 inches (4 cm), under the hydraulic/electric tray.
- 2. Use the ladder of MEWP to access platform.
- 3. Close the gate.
- Raise the platform until approximately a height of 2 meters is reached and attempt to drive forward or reverse.
   Result: MEWP should not move forward or backward.
- Repeat the steps above with block placed under battery tray.
   Result: MEWP should not move forward or backward.



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.



Test Elevated Drive Speed



#### Be aware of overhead obstructions or other possible hazards around the MEWP when lifting.

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

Test Lowering Alarm



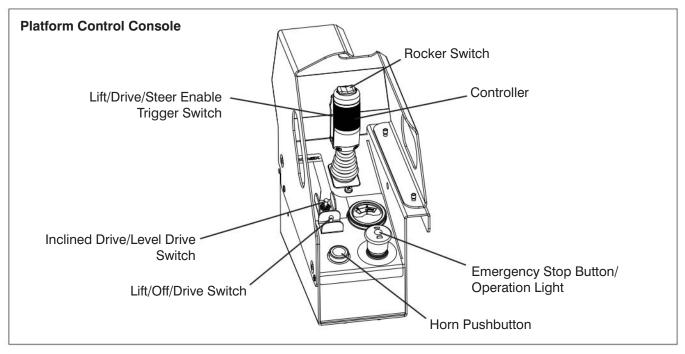
Be aware of overhead obstructions or other possible hazards around the MEWP when lifting.

- 1. Ensure path of intended motion is clear.
- 2. Lift and lower the platform. **Result:** Alarm should sound while platform is lowering.

#### NOTE

On MEWP with certain options, a flashing amber light will accompany this alarm.





• Verify Load Sensing Module Self-Check



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

1. Pull out platform "O"emergency stop button.

**Result:** Beeper should sound for approximately 1 second and light should turn on.

- Select lift/off/drive switch to "
   <sup>™</sup>
   <sup>™</sup>
- 3. Activate and hold "" enable trigger switch.
- 4. Push controller handle and raise the platform to an approximate height of 1 meter.
- 5. Attempt to lower the platform using the following steps:
  - a. Push in platform "O" emergency stop button.

- b. Activate and hold "" enable trigger switch.
- c. Pull controller handle and attempt to lower the platform.
- d. Pull out platform "
   "emergency stop button.
   Result: Platform should not lower and beeper should sound continuously.
- 6. Depress "O" emergency stop button, release controller handle, pull out "O" emergency stop button, activate and

hold """ enable trigger switch and pull controller handle to fully lower.

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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.

2.5 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 MEWP to become unstable. Death or serious injury could result.

# 

In emergency situations where MEWP functions are not available and lowering is impeded by an obstacle, utmost care must be taken to move MEWP 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 5 cm/sec.

## 

When pushing, winching or towing, do not exceed 3 km/h.

# 

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

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

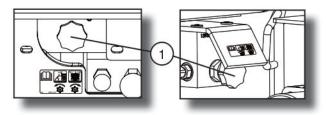


Figure 2-7. Free-wheeling Valve

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."



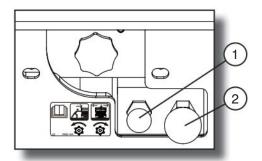
The free-wheeling valve must be closed tightly (clockwise) for normal operation.

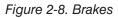


2.5-2 To Release Brakes Manually



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





### 

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

- 1. Ensure MEWP is on level ground. Chock or block wheels to keep MEWP from rolling.
- 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 MEWP to desired location.

## 

# Brakes must be reengaged immediately after reaching the desired location.

- 7. Position MEWP on a firm and level surface.
- 8. Chock or block wheels to prevent MEWP 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.
- Extension platform(s) may need to be retracted or MEWP may need to be moved to clear obstruction. Refer to Section 2.5 for winching and towing procedures.

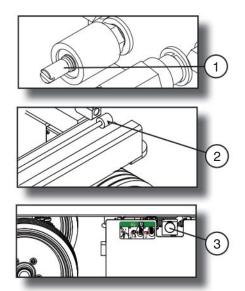


Figure 2-9. Emergency Lowering System

- 3. Turn main power disconnect switch to 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 MEWP 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.



Notes

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#### 3.0 Operation

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

#### 3.1 General

In order for this MEWP 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 section.

#### 3.1-1 Operator Qualifications

- Only trained and authorized personnel shall be permitted to operate an MEWP.
- Safe use of this MEWP 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 MEWP.
- 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 MEWP in the presence of a competent 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 MEWP that is not properly maintained or kept in good working condition.

- The operator must be sure that the MEWP 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 MEWP.

#### 3.1-3 Maintenance and Inspection Schedule

- The inspection points covered in Table 4.6 indicate the areas of the MEWP to be maintained or inspected and at what intervals the maintenance and inspections are to be performed.
- The actual operating environment of the MEWP may affect the maintenance schedule.

### 

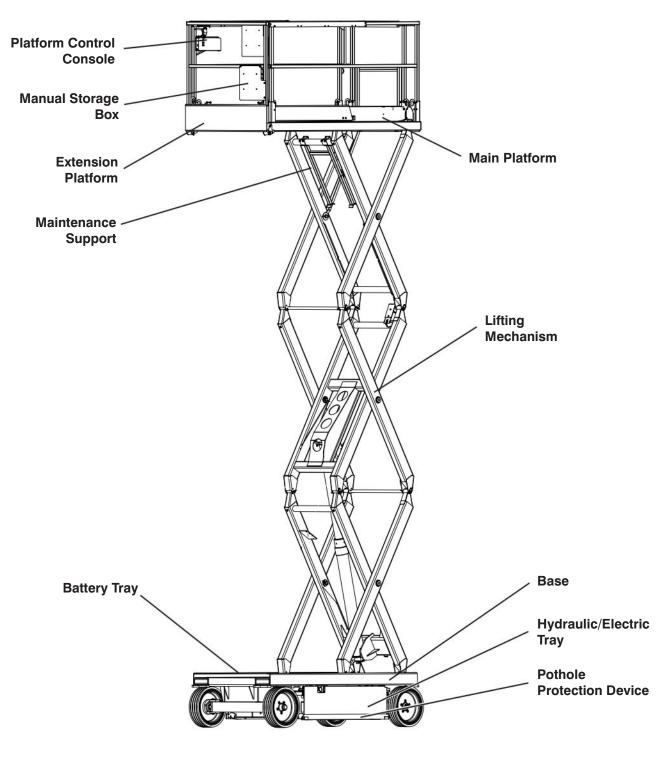
# Use original or manufacturer-approved parts and components for the MEWP.

#### 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 MEWP. 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 MEWP



### 3.3 Major Assemblies

The MEWP 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 3215 and 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 MEWP. The front axle has two hydraulic motordriven wheels, steerable by a hydraulic cylinder. The rear axle is fixed and has non-driven, springapplied, hydraulically released brake.

### SJIII 3220, 3226, 4626 & 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 1.1 m hinged guardrails with 0.15 m toe boards and mid-rails. The platform can be entered from the rear through a spring-returned 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 MEWP, lists the following:

- Model number
- Registration number
- Serial number
- MEWP 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
- Maximum wind speed
- Maximum chassis inclinations
- Maximum manual force
- Date manufactured

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### 3.5 Component Identification

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

### 3.5-1 Electrical Panel

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

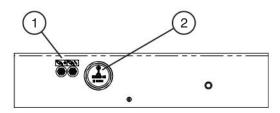


Figure 3-1. Electrical Panel

- 1. Circuit Breaker Resets In the event of power overload or positive circuit grounding, the circuit breaker pops out. Push the breaker back in to reset.
- 2. Hourmeter This gauge records accumulated operating time of the MEWP.
- 3.5-2 Battery Charger

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

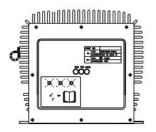


Figure 3-2a. Battery Charger

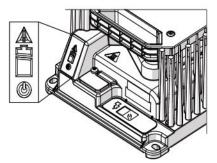


Figure 3-2b. Battery Charger

3.5-3 Pothole Protection Device

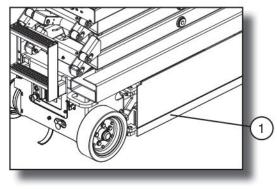


Figure 3-3. Pothole Protection Device

1. Pothole Protection Device - This device 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 MEWP. If the pothole protection device has not fully lowered, the drive function will be disabled.



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

WARNING

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 MEWP in the event the MEWP encounters a "drop-off" or "pothole." The nature of this safety feature relies on maintaining a consistent ground clearance, therefore, if the MEWP 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 technician.

### 3.5-4 Maintenance Support

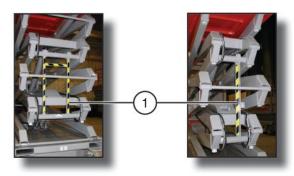


Figure 3-4. Maintenance Support

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.



This weather-resistant box is mounted on the platform

railings. It contains the operating manual, Certificate of Plant Design Registration and other important documents. The operating manual for this make and model of MEWP must be stored in this box.

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"	

### 3.5-6 Folding Guardrail System

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

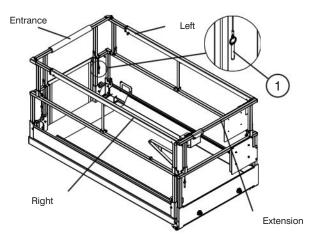


Figure 3-5. Folding Guardrail System

**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. 3.5-7 Fall Protection Anchorage

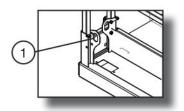


Figure 3-6. Fall Protection Anchorage

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.



Section 3 - Operation

Notes

### 3.6 Component Identification

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

3.6-1 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 MEWP, 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 MEWP, 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

On models 3215 and 3219, the connection is located beneath an access panel which requires that the scissor assembly be raised to access it.

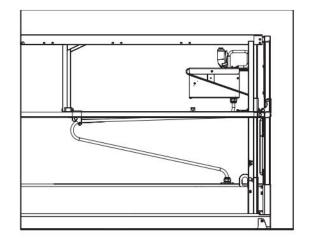


Figure 3-7. Control Box with Long Cable





- Ensure the operator and control box console are properly oriented in the direction the MEWP is facing (see Figure 3-8).
- Do not drive the MEWP toward yourself.
- Avoid crushing hazards; stand clear from the MEWP 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 MEWP from the ramp or movement of the MEWP down the ramp.
- Ensure that the control box with long cable does not become entangled with the MEWP or any surrounding objects.
- 5. Perform a thorough jobsite inspection prior to operating the MEWP 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 MEWP.
- 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.

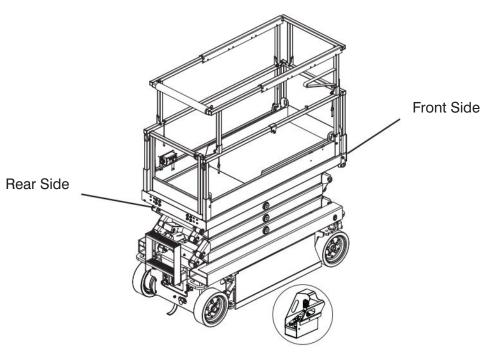


Figure 3-8. Control Box with Long Cable Outside Platform



### 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 MEWP 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 MEWP is put into service.

### **IMPORTANT**

The operator must understand and follow the step-by-step instructions to test all MEWP 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 MEWP is damaged or any unauthorized variation from factory-delivered condition is discovered, MEWP must be tagged and removed from service. Repairs to the MEWP may only be made by a competent 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 competent 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 MEWP.

## 

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

Before operating this MEWP, perform the following steps:

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

It is the responsibility of the operator to perform a jobsite 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
- inadequate surface support to withstand all load forces imposed by the MEWP
- wind and weather conditions
- the presence of unauthorized personnel
- the presence of other mobile equipment
- other possible unsafe conditions

## 

An operator should not use any MEWP 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

## 

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

- 1. Use the ladder of MEWP to access platform.
- 2. Close the gate.
- 3. On platform control console, push in " 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 "O" 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 MEWP 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 "∑↑" raise or "⊒↓" lower position. Release switch to stop.



- 3.8-3 To Activate Platform Control Console
- 1. Turn main power disconnect switch to "I" on position.
- 2. On base control console, pull out "O" emergency stop button.
- 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 MEWP 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 MEWP 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 " $\overset{\circ}{\underline{s}}_{\downarrow}^{\uparrow}$ " lift position.
- 3. Activate and hold "" enable trigger switch.
- 4. Move controller handle forward or backward until desired height is reached.

### NOTE

Lowering is not proportional.

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

## 

### To protect against unintended movement of the MEWP, 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 MEWP is on a firm level surface.



3.8-5 To Drive Forward or Backward



Be aware of blind spots when operating the MEWP.

## 

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).
- 2. Select lift/off/drive switch to "<sup>1</sup> drive position.
- 3. Activate and hold "" enable trigger switch.
- Move controller handle "<sup>1</sup>]" forward/up or "<sup>1</sup>]" backward/down to desired speed and direction of MEWP travel.
- 5. Return controller to neutral center position to stop. Release "?" enable trigger switch.

To protect against unintended movement of the MEWP, 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 "Ju" drive position.
- 3. Activate and hold "" enable trigger switch.
- 4. Press "There is a controller of the second secon

### 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.

## 

MEWP 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 MEWP.

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 MEWP, push in emergency stop button after you have arrived at your desired location or elevation. 3.8-8 To Extend/Retract Manual Extension Platform

## ANGER

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

- 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 MEWP in front of upright bar and the pin on the other side of MEWP behind the upright bar to prevent accidental movement, in either direction, of manual extension platform during travel or transport. Refer to Figure 3-11 for a configuration example.

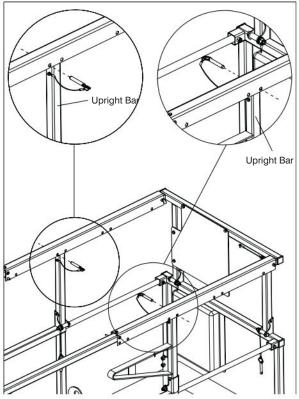


Figure 3-11. Variable Position Manual Extension Platform



- 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 " $\overset{\circ}{\underline{a}}_{\downarrow}^{\uparrow}$ " 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 "(\S)" enable switch, then push extend/retract switch to
  - "
    "
    retract position. Release switch to stop.



To protect against unintended movement of the MEWP, push in emergency stop button after you have arrived at 30 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 MEWP 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.

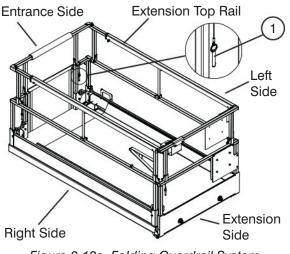


Figure 3-12a. Folding Guardrail System

**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.

## 

Before operating this MEWP, 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 MEWP is on level ground.
- 2. Ensure extension platform is fully retracted.
- 3. Ensure Emergency Stop button is depressed.
- 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 MEWP 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 3-12b):

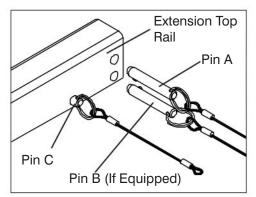


Figure 3-12b. Extension Top Rail Pins

### 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:



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### SJIII 32xx

### Entrance

Fold entrance bar to the left side and lock into place. Ensure that the detent ball of the pin is all the way through (Refer to Figure 3-12c).

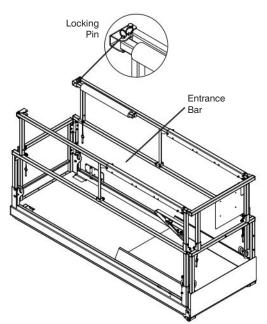


Figure 3-12c. Entrance Bar Folded In

- 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 3-12d).

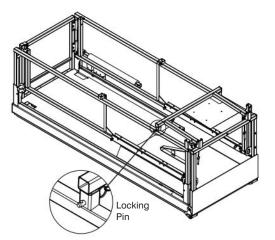


Figure 3-12d. All Guardrails Folded Down

## 

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

To raise the guardrail system up:

- 1. Ensure MEWP 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.

## 

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

- 5. Use the ladder of MEWP 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 3-12d).
- 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 3-12a).
- 8. Mount the platform control console at the front right of the platform. Lock it in place.



Before operating this MEWP, 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 MEWP.

Only competent personnel shall operate the MEWP during loading/unloading.

Be sure vehicle capacity and loading equipment hoists, chains, straps, etc., are sufficient to withstand maximum MEWP weight shown on the serial plate on the MEWP.

The transport vehicle must be parked on a level surface and must be secured to prevent rolling while MEWP is being loaded/unloaded. 3.10-1 Lifting

# Only competent rigger shall operate machinery during lifting.

When it is necessary to lift the MEWP 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 3-13.

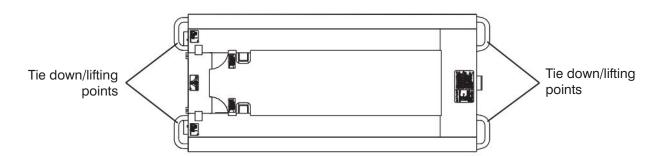


Figure 3-13. Tie Downs/Lifting Points

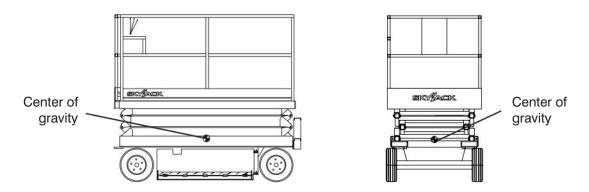


Figure 3-14. Center of Gravity



### NOTE

The mass of the MEWP is as per Table 4.3a and Table 4.3b. The center of gravity is approximately located in the middle of the MEWP, front to back and side to side, as illustrated in Figure 3-14. Vertically, the center of gravity is approximately just above the base chassis.

### NOTE

The MEWP 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 3-15.

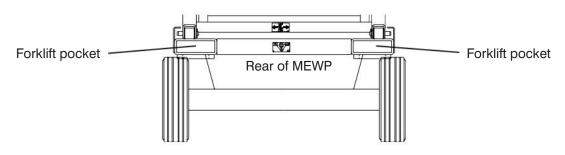
### 3.10-2 Driving

Before driving the MEWP:

- Ramp or dock capacity must be sufficient to withstand maximum MEWP weight.
- Ramp should be equipped with side guards to prevent inadvertent fall from the ramp.
- Incline should not exceed MEWP gradeability (refer to Table 4.3a and Table 4.3b).
- MEWP brake must be checked for proper operation.
- MEWP speed should be on high torque setting.



When transporting, the MEWP must be secured to the truck or trailer deck. Tie downs are available as illustrated in Figure 3-13.







3.11 Moving the MEWP 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 MEWP 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 jobsite inspection prior to operating the MEWP to identify potential hazards in your work area.
- 3. Cordon-off the pathway which you intend to travel.
- 4. Position the MEWP 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 MEWP 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.
- 9. 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

On models 3215 and 3219, 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 MEWP.
- 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 MEWP is facing.
- 16. Turn main power disconnect switch to "" on position.
- 17. On base control console, pull out "●" 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 "U" drive position. Select inclined drive/level drive to "S" inclined drive (low speed/high torque) position for reduced speed.

## 

Do not drive the MEWP toward yourself.

- 21. Using as low a speed as practical and the operator positioned behind the MEWP, 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 MEWP 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.

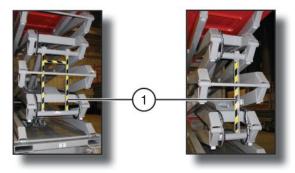


Figure 3-16. Maintenance Support

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.
- 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.

To Store the Maintenance Support

- 1. Turn main power disconnect switch to "" 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.



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.

3.13-1a Battery Service Procedures

## 

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.
- 3. Check battery fluid level in each battery. If plates are not covered by at least 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.



3.13a-2 Battery Charging Operation

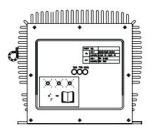


Figure 3-17. Battery Charger



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 <sup>ST</sup> LED	2 <sup>ND</sup> LED	3 <sup>RD</sup> LED
0 to 50%	0 to 50% Blinking Off		Off
50% to 75%	On	Blinking	Off
75% to 100%	On	On	Blinking
100%	On	On	On
	20	\$	60133AA

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.

## **WARNING**

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

3.13b-2 Charging the battery

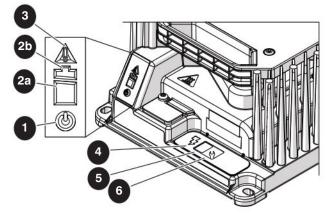


Figure 3-18. Battery Charger

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.
24	<80%	Solid green	High charge— continue charging.
25	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/error	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.

- 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.
- 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.

## A WARNING

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.

## A WARNING

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	

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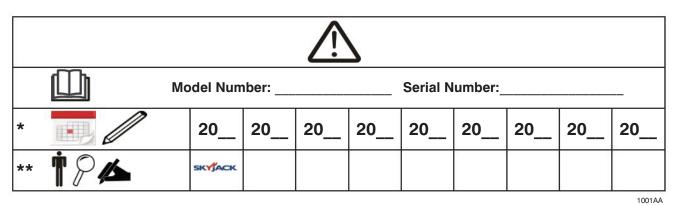
### Table 4.1 Standard and Optional Features

Models	3215	3219	3220	3226	4626	4632
S T A	ANDARD E	QUIPM	ENT			
Base control console	*	*	*	*	*	*
Color coded and numbered wiring system	*	*	*	*	*	*
DC power (VDC)	24	24	24	24	24	24
Dual holding brakes	*	*	*	*	*	*
Forklift pockets/tie downs/lifting lugs	*	*	*	*	*	*
Hinged railing system				*	*	*
Joystick proportional control for drive/lift	*	*	*	*	*	*
Fall protection anchorage(s)	*	*	*	*	*	*
Maximum drive height	Full Height	Full Height	Full Height	Full Height	Full Height	Full Height
Operator horn	*	*	*	*	*	*
Overload sensing system	*	*	*	*	*	*
Platform control console	*	*	*	*	*	*
Pothole protection	*	*	*	*	*	*
Roll out deck extension (m)	0.9	0.9	0.9	0.9	0.9	0.9
Spring loaded half height gate	*	*	*	*	*	*
Swing out trays for easy access	*	*	*	*	*	*
Tilt alarm with drive/lift cut out	*	*	*	*	*	*
Lowering alarm	*	*	*	*	*	*
Low voltage battery protection	*	*	*	*	*	*
Analog control system	*	*	*	*	*	*
Wiring for AC outlet on platform	*	*	*	*	*	*
250 Ah batteries	*	*	*	*	*	*
O P	TIONAL E	QUIPM	ENT			
Flashing light	*	*	*	*	*	*
Hinged railing system	*	*	*			
Shop air line to platform	*	*	*	*	*	*
Spring loaded full gate entry	*	*	*	*	*	*
Dual flashing light	*	*	*	*	*	*

177AH



### 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 6 months.

	Pictorial	Description
*		Inspection Date
**	<b>†</b> ? 1	Inspector Signature

SKYJACK

Table 4.3a	Specifications	and Features
Tuble 1.5u	specifications	anarcataics

MODEL	3215	3219	3220	3226		
Weight	1120 kg	1557 kg	1872 kg	1890 kg		
Overall width	0.8	1 m	0.83 m			
Overall length	1.8	0 m	2.34	4 m		
Platform Size (inside)	0.66 m	x 1.63 m	0.70 m >	x 2.10 m		
Height						
Working Height	6.6 m	7.8 m	8.0 m	9.9 m		
Platform Elevated Height	4.6 m	5.8 m	6.1 m	7.9 m		
Stowed Platform Height	0.88 m	0.99 m	0.97 m	1.14 m		
Stowed Height (Railings Up)	1.99 m	2.11 m	2.10 m	2.25 m		
Drive Height		Fl	JLL			
Standard Operating Times	- 0 					
Lift Time (No Load)	17 s	19 s	27 s	49 s		
Lower Time (No Load)	36 s	39 s	40 s	57 s		
Lift Time (Rated Load)	24 s	22 s	33 s	53 s		
Lower Time (Rated Load)	23 s	26 s	35 s	55 s		
Chassis						
Normal Drive Speed	3.3 km/h	2.9 km/h	2.7 km/h	2.7 km/h		
Elevated Drive Speed	0.8	km/h	0.9 km/h	0.9 km/h		
High Torque Drive Speed	N	/A	1.6 km/h	1.6 km/h		
Gradeability (Ramp Angle)	25	5%	25	5%		
Tires (Solid Rubber)	12 x	12 x 4 x 8 16 x 5 x 12				
Hydraulic Oil	•					
Туре		ATF D	exron III			
Tank Capacity (Liters)	1(	10.9 24				

Note :

Emission sound pressure level does not exceed 70 dB(A).



Table 4.3b S	pecifications and	Features
10010 1.303	peemeations and	reatures

MODEL	4626	4632
Weight	2760 kg	2720 kg
Overall width	1.2	2 m
Overall length	2.3	3 m
Platform Size (inside)	1.1 m	x 2.1 m
Height		
Working Height	9.9 m	11.8 m
Platform Elevated Height	7.9 m	9.7 m
Stowed Platform Height	1.1 m	1.2 m
Stowed Height (Railings Up)	2.15 m	2.24 m
Stowed Height (Railings Down)	1.8 m	1.9 m
Drive Height	F	ull
Standard Operating Times		
Lift Time (No Load)	44 s	44 s
Lower Time (No Load)	45 s	65 s
Lift Time (Rated Load)	51 s	50 s
Lower Time (Rated Load)	34 s	53 s
Chassis		
Normal Drive Speed	2.8	km/h
Elevated Drive Speed	1.0	km/h
High Torque Drive Speed	1.4	km/h
Gradeability (Ramp Angle)	25	5%
Tires (Solid Rubber)	16 x	5 x 12
Hydraulic Oil		
Туре	AW	T 46
Tank Capacity (Liters)	2	24

1068AG

### Note :

Emission sound pressure level does not exceed 70 dB(A).



Model	Extension [m]	Capacity [kg]	Persons	Extension Capacity [kg]	Persons on Extension	Maximum Wind [m/s]	Maximum Manual Force [N]	Tilt Cutout Setting [deg]
3215	0.91	227	2			400	1.5 x 3.5	
3215	0.91	221	1	113	1	12.5	200	1.5 X 3.5
3219	0.91	227	2	112	1	0	400	1.5 x 3.5
3219	0.91	221	1	113	I	12.5	200	1.5 X 3.5
3220	0.91	363	2	136	1	0	400	1.5 x 3.5
5220	0.91		1	130	I	12.5	200	1.5 X 3.5
3226	0.91	227	2	113	1	0	400	1.5 x 3.5
4626	0.91	454	3	100	4	0	400	1.5 x 3.5
4020	0.91	404	2	136 1		12.5	400	1.5 X 3.5
4632	0.91	0/0	2	113	1	0	400	1.5 x 3.5
4032		318	1	110	I	12.5	200	1.0 X 0.0

Table 4.4 Maximum Platform Capacities (Evenly Distributed)

1029AD



This MEWP is equipped with a load sensing system. Do not exceed the rated capacity of the MEWP. Failure to avoid this will prevent operation of all normal controls/functions of the MEWP. To resume normal operation remove the additional loads.



		Total Aerial Platform	Total Aerial Platform Load			
MODI	MODEL Weight kg		Wheel	LCP**	OUP** kPa (kN/m <sup>2</sup> )	
			kg	kPa (kN/m <sup>2</sup> )		
3215	min*	1120	280	690	7.5	
5215	max*	1347	570	759	9.5	
3219	min*	1557	394	748	10.6	
5219	max*	1806	621	924	12.0	
2020	min*	1872	472	627	9.9	
3220	3220 max*		835	889	11.8	
3226	min*	1890	473	627	9.9	
5220	max*	2117	699	799	11.1	
4626	min*	2760	701	799	10.2	
4626	max*	3259	1155	1082	11.8	
4632	min*		675	754	9.8	
4032	4632 max*		1051	1007	10.9	

### Table 4.5 Floor Loading Pressure

1030AE

\* min - Total aerial platform weight with no options

max - Aerial platform weight + all options + full capacity

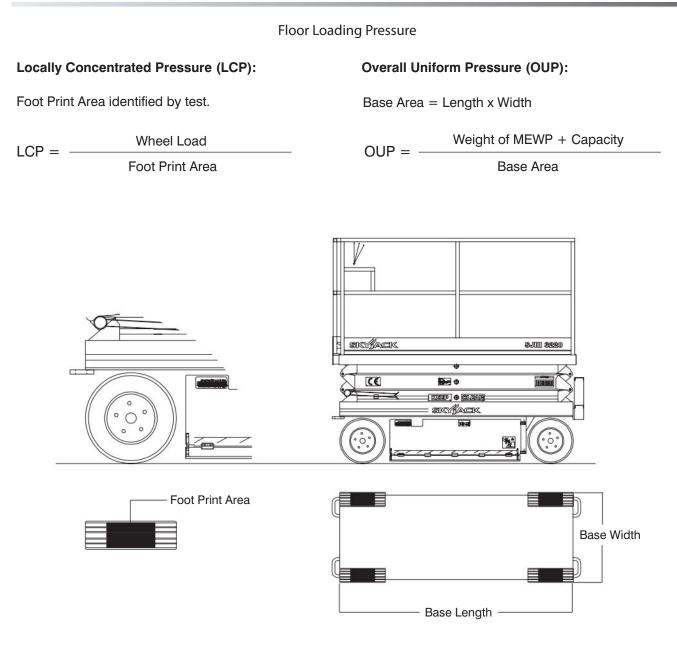
\*\* LCP - Locally Concentrated Pressure is a measure of how hard the aerial platform presses on the areas in direct contact with the floor. The floor covering (tile, carpet, etc.) must be able to withstand more that the indicated values above.

**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.







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.



### **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	Yearly	
Visual and Daily Maintenance Inspections			Platform Assembly				
Labels A			Fall Protection Anchorage(s)	Α			
Electrical	A		AC Outlet on Platform	Α			
Limit Switches	A	]	Platform Control Console	Α			
Hydraulic	A	]	Manuals	Α			
Entrance Side			Powered Extension Control Console (If Equipped)	Α	B*+		
Main Power Disconnect Switch	A	]	Lifting Mechanism		<b>」</b> ■**		
Base Control Switches	Α		Maintenance Support	Α			
Free-wheeling Value Knob	A	1	Scissor Assembly	A			
Brakes	A	]	Scissor Bumpers	Α			
220V Outlet Receptacle	Α		Rollers	Α			
Ladder	A	1	Lift Cylinder(s)				
Battery Tray Side		1	Function Tests				
Pothole Protection Device	Α		Test Main Power Disconnect Switch	А			
Battery Tray	A	]	Base Control Console		1		
Battery Charger	A	B*†	Test Base Emergency Stop	A	1		
Battery	A	Test Off/Platform/Base Switch		Α			
Steer Cylinder Assembly	A	1	Test Lower/Neutral/Raise Switch				
Wheel/Tire Assembly	A	Test Emergency Lowering		Α	1		
Tie Rod (Conventionals)	A		Test Free-wheeling	Α			
Greasing Points	A		Platform Control Console				
Hydraulic/Electric Tray Side			Test Platform Emergency Stop	A	В*+		
Pothole Protection Device	А	]	Test Enable Trigger Switch	A	] 0,		
Hydraulic Tank	A		Test Steering	A			
Hydraulic Pump and Motor	А		Test Driving	A	]		
Wheel/Tire Assembly	А	]	Test Brakes	А			
Electrical Panel	A		Test Platform Raising/Lowering	A			
Main Manifold	A	]	Test Horn	A			
Load/Tilt Sensor	А	]	Test Pothole Sensor	A			
Emergency Lowering Access Rod (If Equipped)	A		Test Elevated Drive Speed	A			
			Verify Load Sensing Module Self-Check	A			

### Table 4.6 Maintenance and Inspection Schedule

1010AF-AS

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.

+ - Refer to Skyjack's website @ www.skyjack.com for latest service bulletins prior to performing quarterly or yearly inspection.



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

### NOTE

The owner's annual inspection decal must be completed after an annual inspection has been completed.

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### Table 4.7 Operator's Checklist

SKYJACK
<b>OPERATOR'S CHECKLIST</b>

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

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

- P PASS
- F FAIL
- R REPAIRED
- NA NOT APPLICABLE

Labels		
Electrical		$\vdash$
Limit Switches		$\vdash$
Hydraulic		$\square$
Entrance Side		
Main Power Disconnect Switch		
Base Control Switches		
Free-wheeling Valve Knob		
Brakes		
220V Outlet Receptacle		
Ladder		
Battery Tray Side		
Pothole Protection Device		
Battery Tray		
Battery Charger		
Battery		
Steer Cylinder Assembly		
Wheel/Tire Assembly		
Tie Rod (Conventionals)	5	
Greasing Points		
Hydraulic/Electric Side		
Pothole Protection Device		
Hydraulic Tank		
Hydraulic Oil		
Hydraulic Pump and Motor		
Wheel/Tire Assembly		
Electrical Panel		
Main Manifold		
Load/Tilt Sensor		
Emergency Lowering Access Rod (If Equipped)		

### INSPECTION FREQUENCY

- FREQUENTLY
- DAILY
- ANNUALLY
- BI-ANNUALLY

Platform Assembly		
Fall Protection Anchorage(s)		
AC Outlet on Platform		
Platform Control Console		
Manuals		
Powered Extension Control Console (If Equipped)		
Lifting Mechanism		
Maintenance Support		
Scissor Assembly		
Scissor Bumpers		
Rollers		
Lift Cylinder(s)		
Function Tests		
Test Main Power Disconnect Switch		
Base Control Console		2
Test Base Emergency Stop		2
Test Off/Platform/Base Switch		
Test Lower/Neutral/Raise Switch		
Test Emergency Lowering		
Test Free-wheeling		
Platform Control Console		
Test Platform Emergency Stop		
Test Enable Trigger Switch		
Test Steering		
Test Driving		
Test Brakes		_
Test Platform Raising/Lowering		
Test Horn		
Test Pothole Sensor		
Test Elevated Drive Speed		
Verify Load Sensing Module Self-Check		

#### Note:

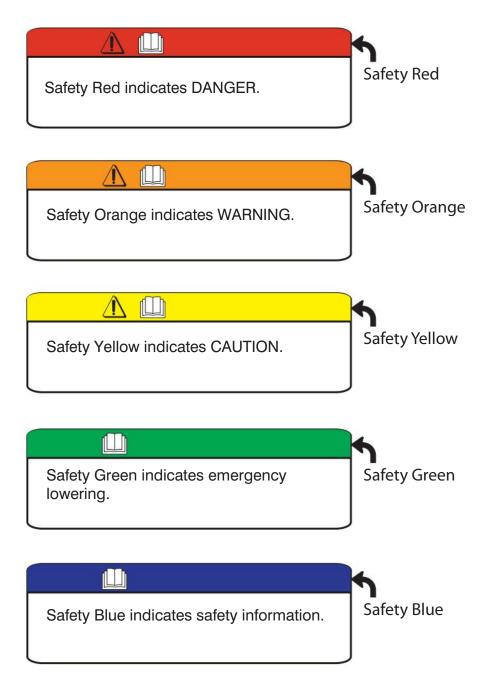
Make a copy of this page or visit the Skyjack web site: www.skyjack.com for a printable copy

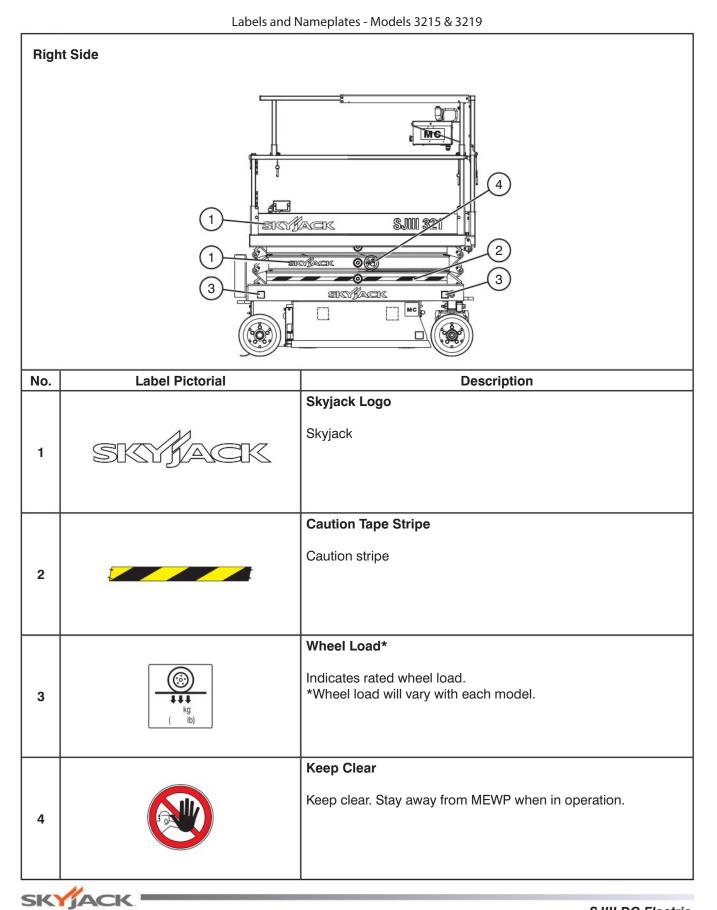


Notes

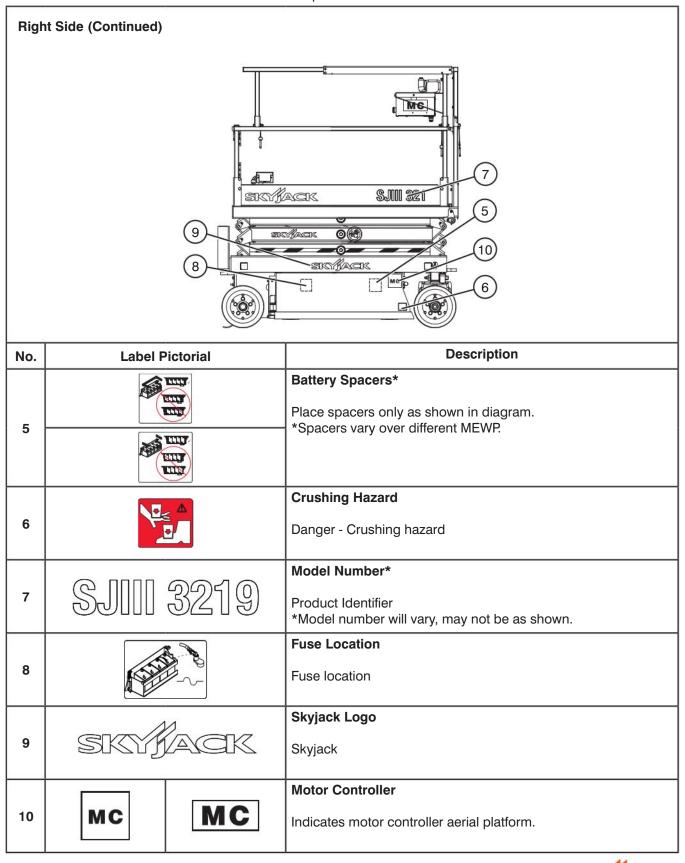
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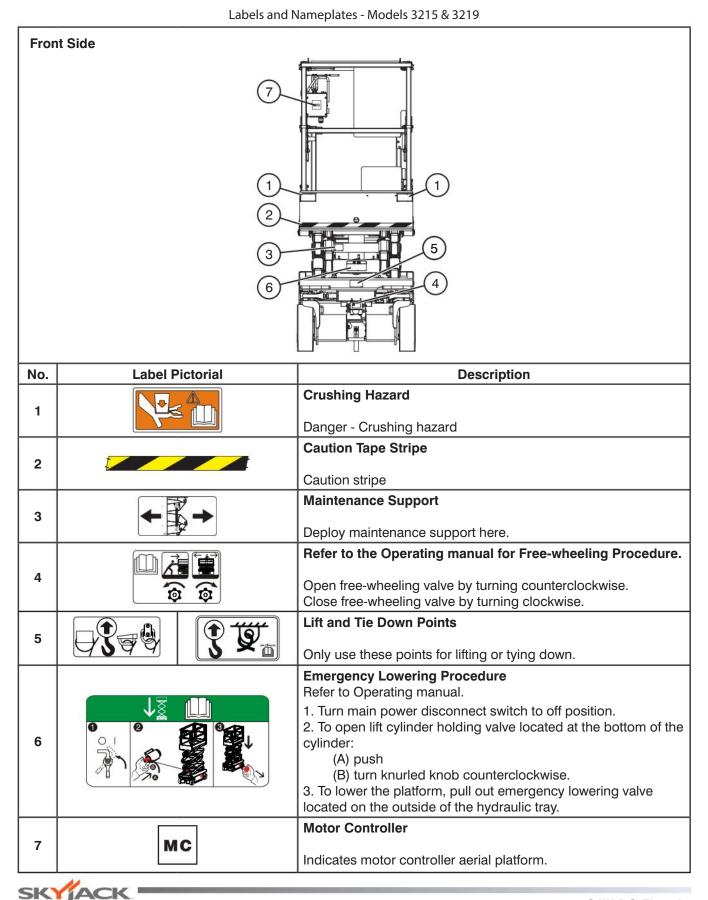


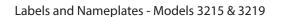


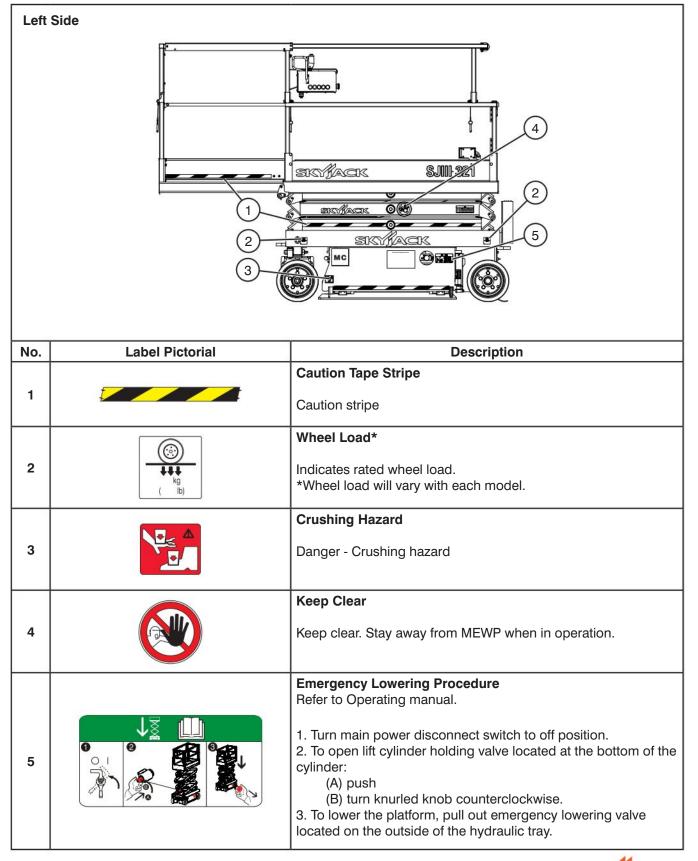
Labels and Nameplates - Models 3215 & 3219



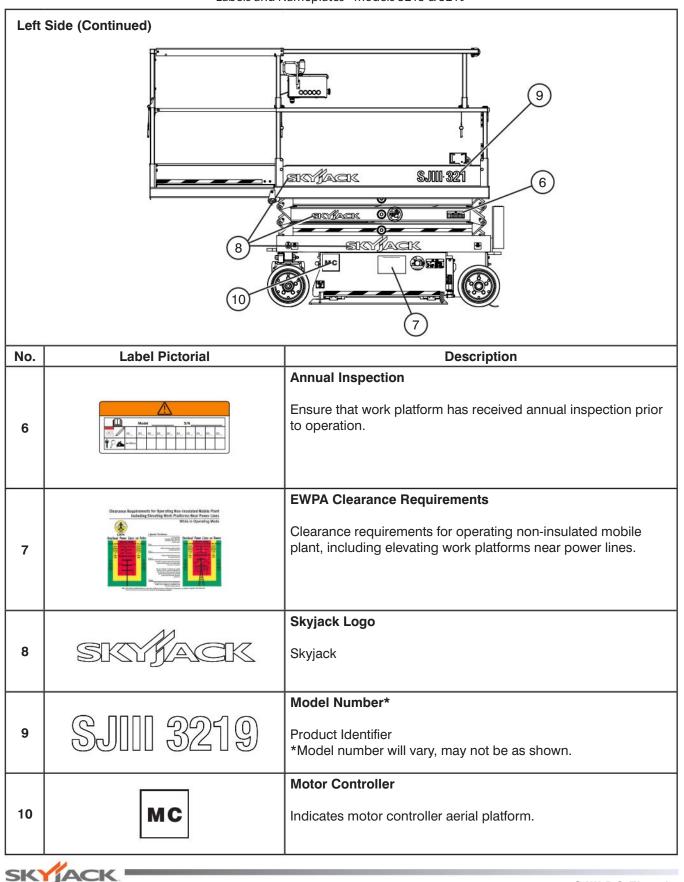


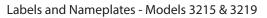


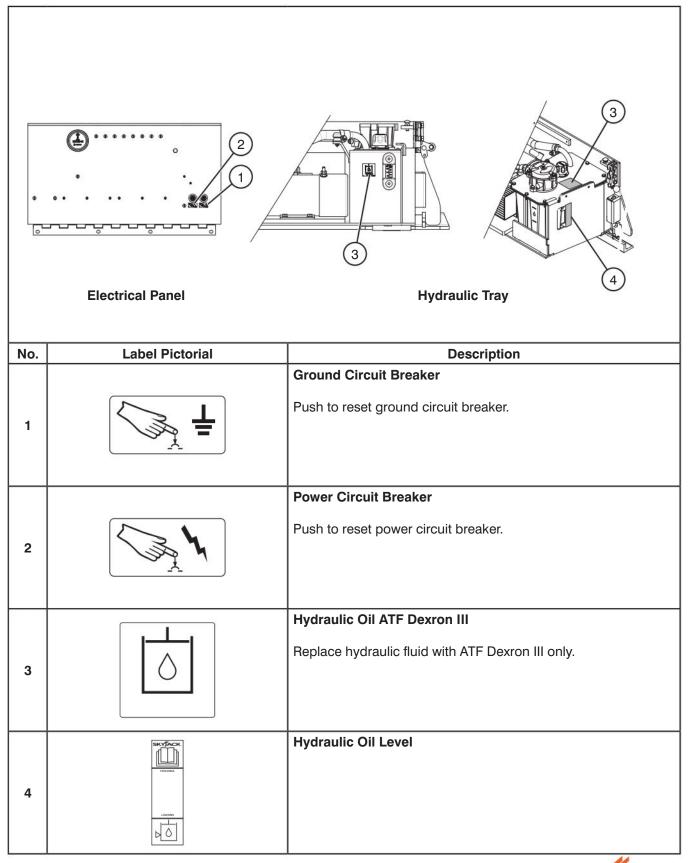




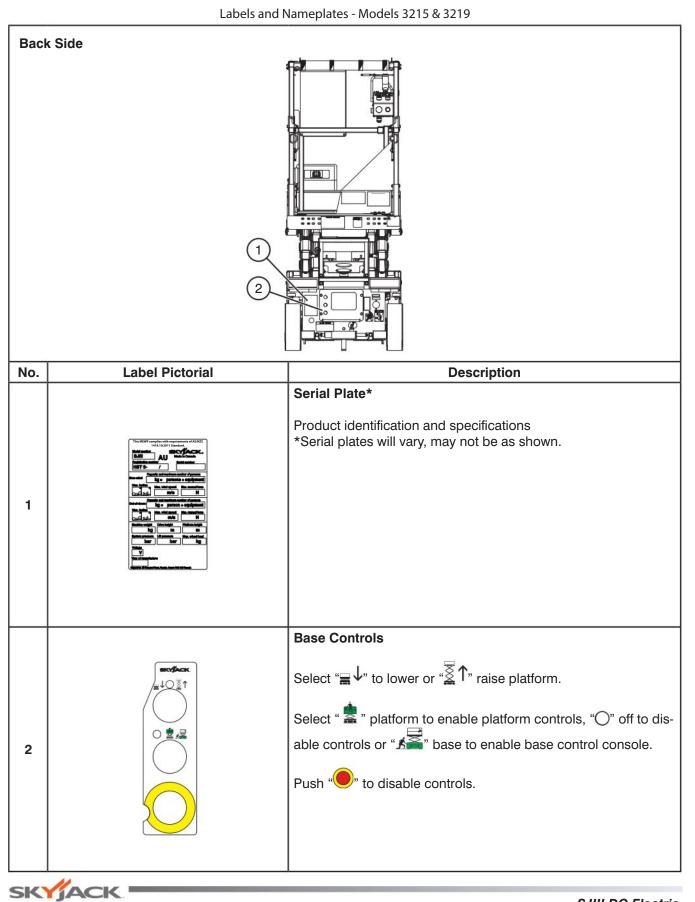


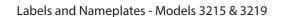


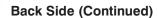


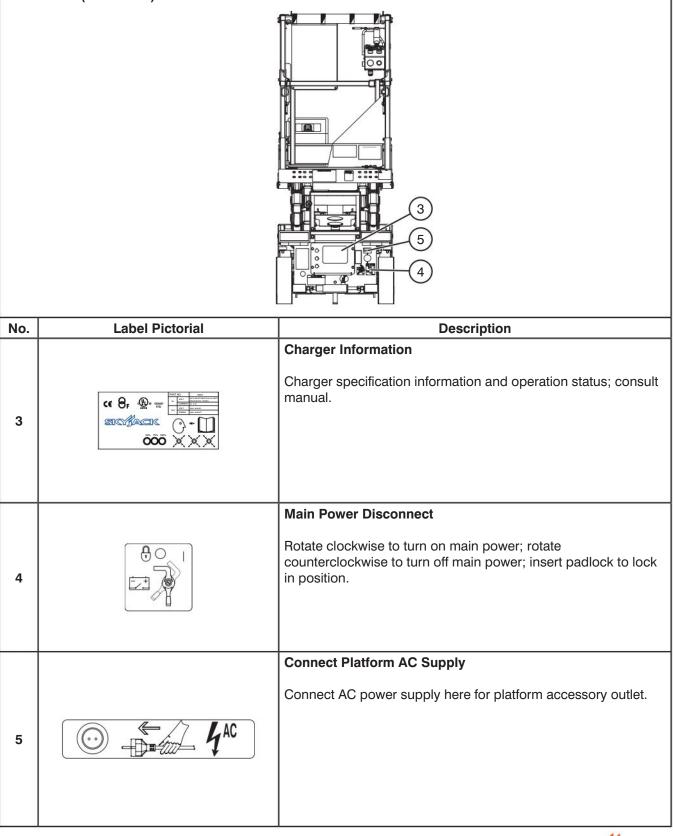




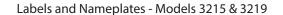


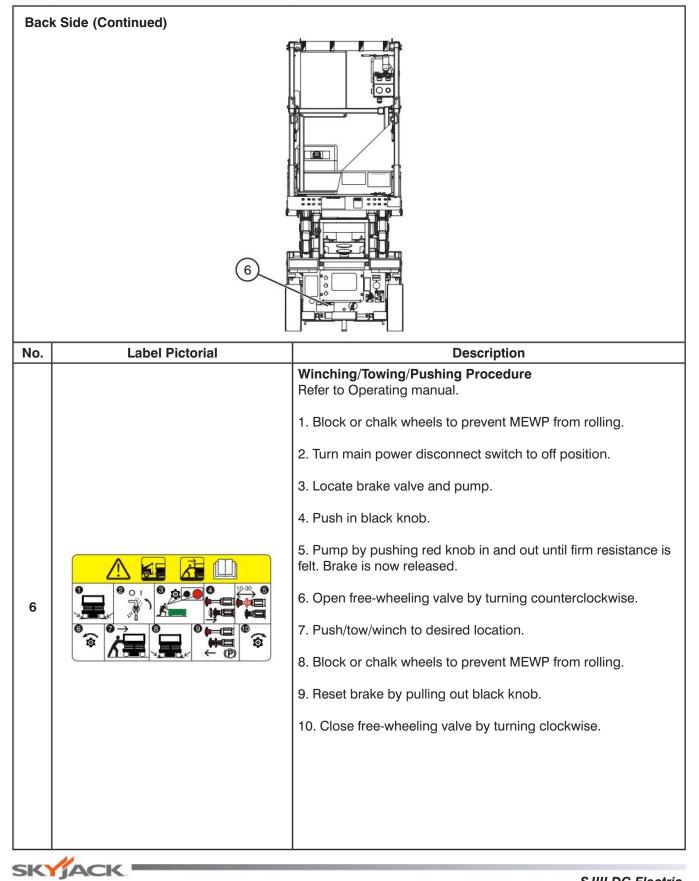








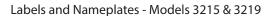


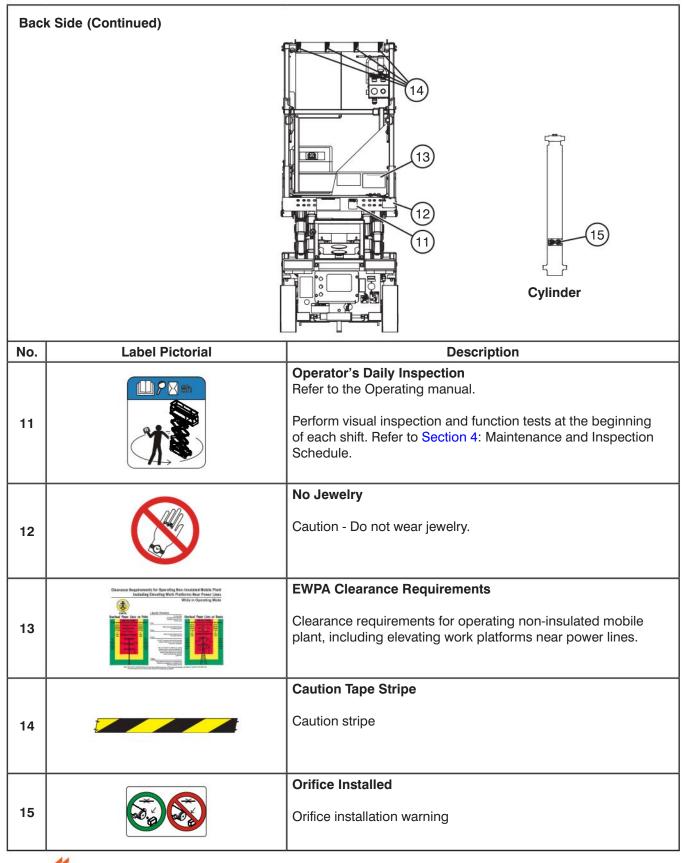


Bacl	Back Side (Continued)			
No.	Label Pictorial	Description		
7a		Hazard Identification/Manual Storage Box Refer to Section 1: Safety Rules. Read and understand the outlined risks associated with this MEWP prior to operation. Indicates location of operating manual.		
7b		Hazard Identification Refer to Section 1: Safety Rules. Read and understand the outlined risks associated with this work platform prior to operation.		
8		Manual Storage Box Indicates location of operating manual.		
9		Platform Capacity* Rated work load in each configuration is as shown. Rated work load includes the weight of both personnel and material. Maximum number of people in each configuration is as shown. Do not exceed total weight or maximum number of people. Load platform uniformly. *Platform capacity varies over different aerial platforms.		
10		Warning - Do Not Alter Do not alter or disable limit switches or other safety devices.		

## Labels and Nameplates - Models 3215 & 3219

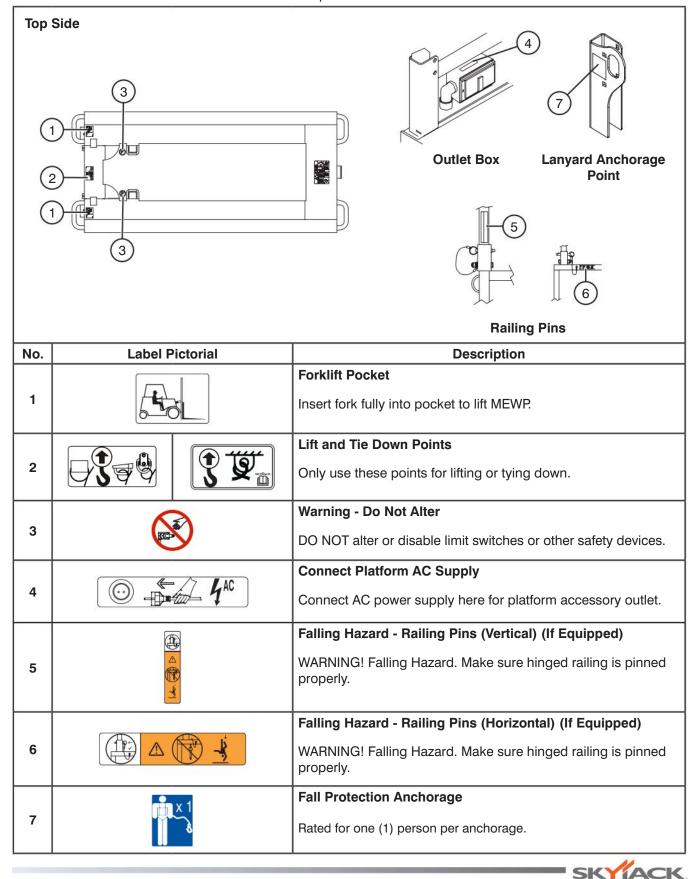
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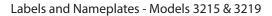


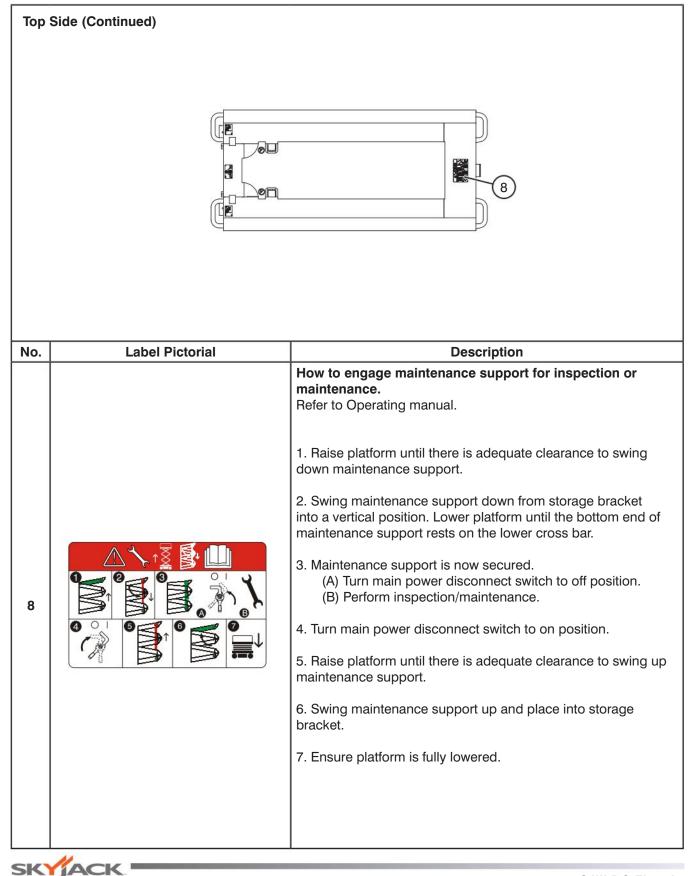


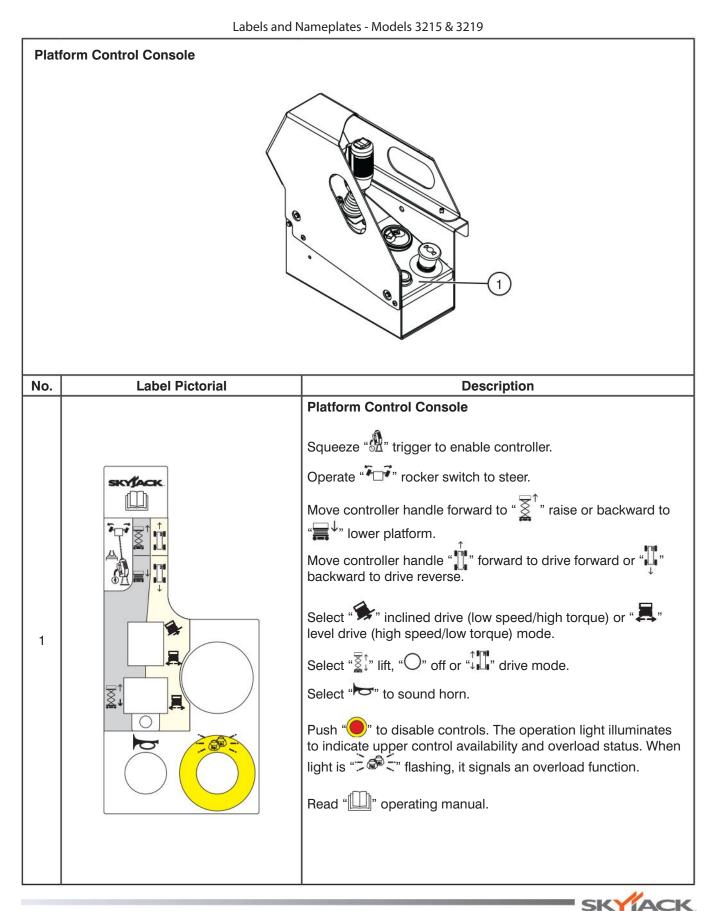
#### Labels and Nameplates - Models 3215 & 3219



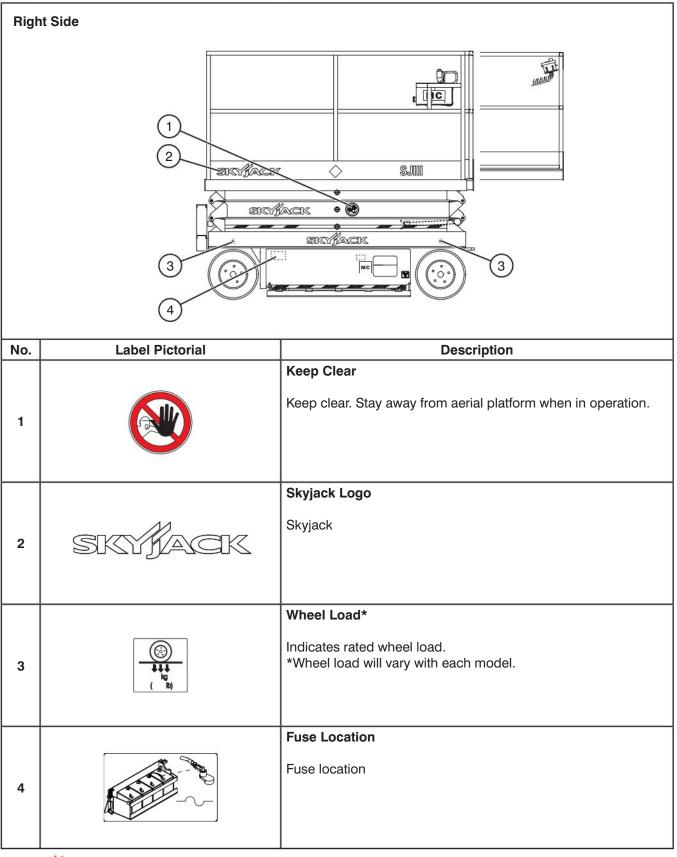






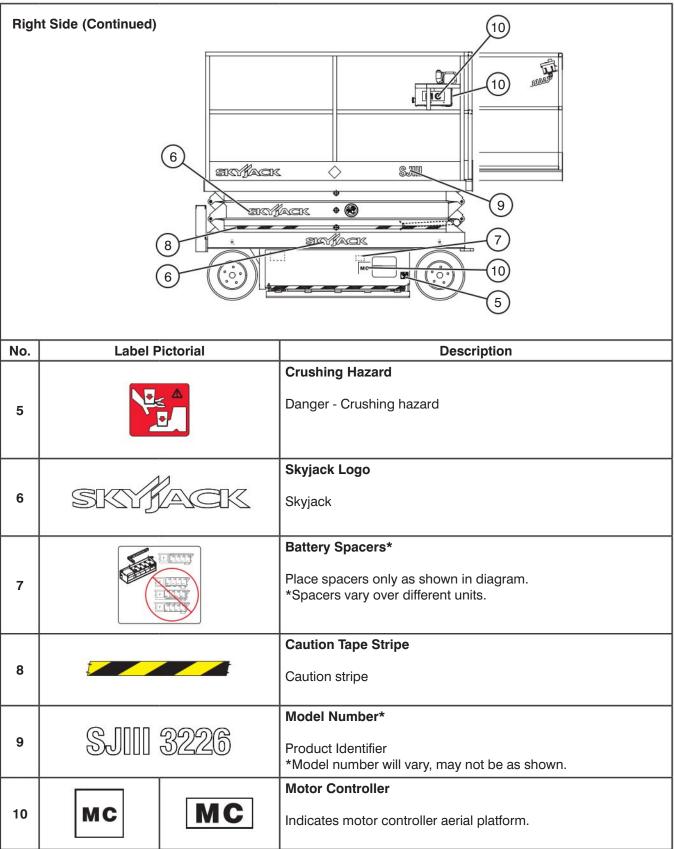




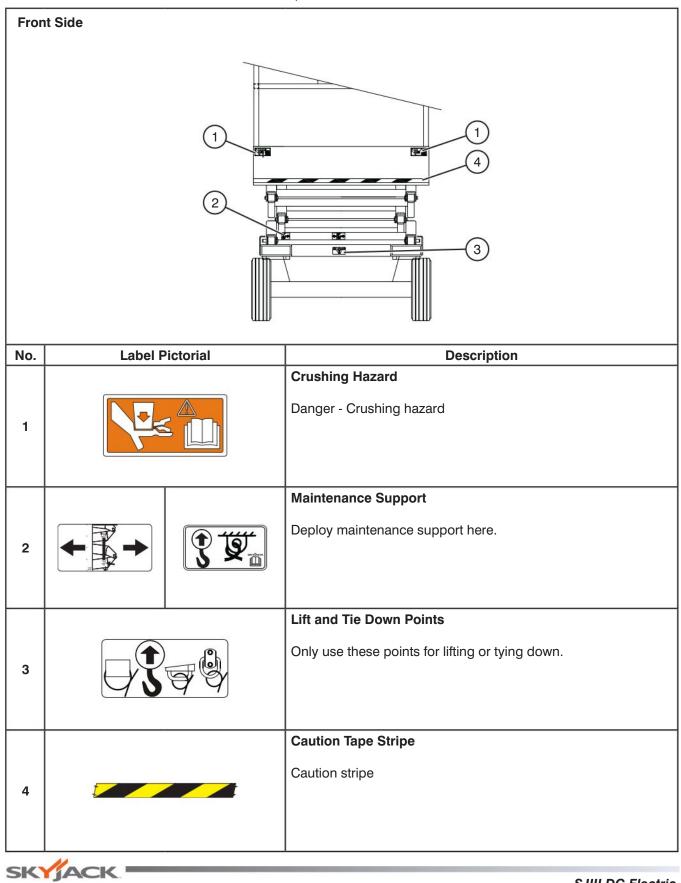






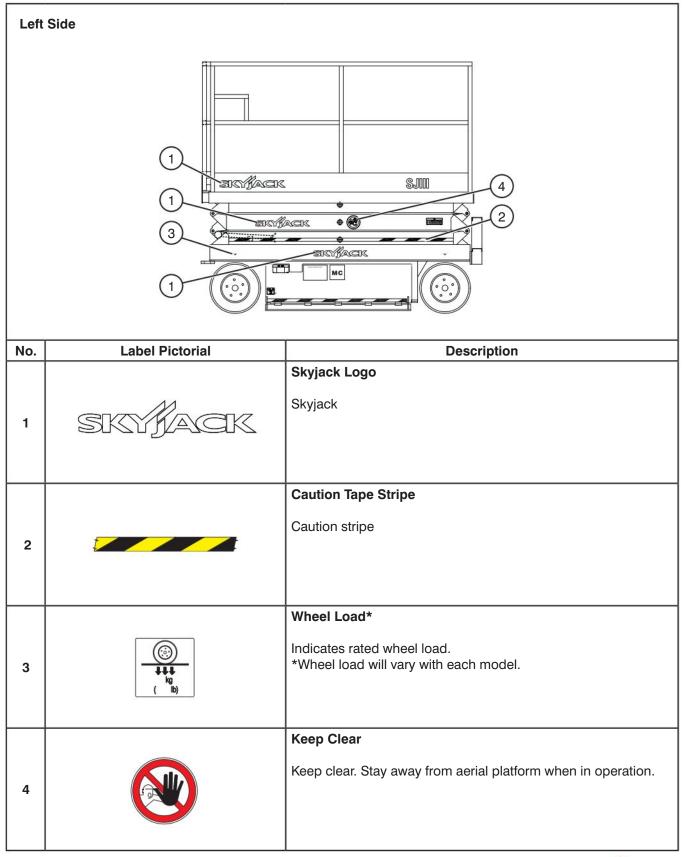






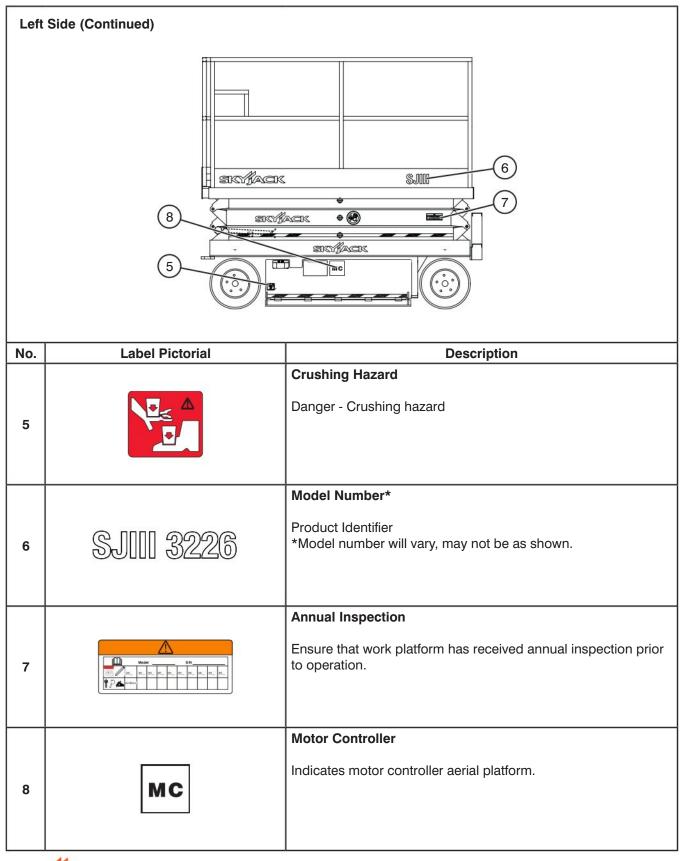
Labels and Nameplates - Models 3220, 3226 & 46xx





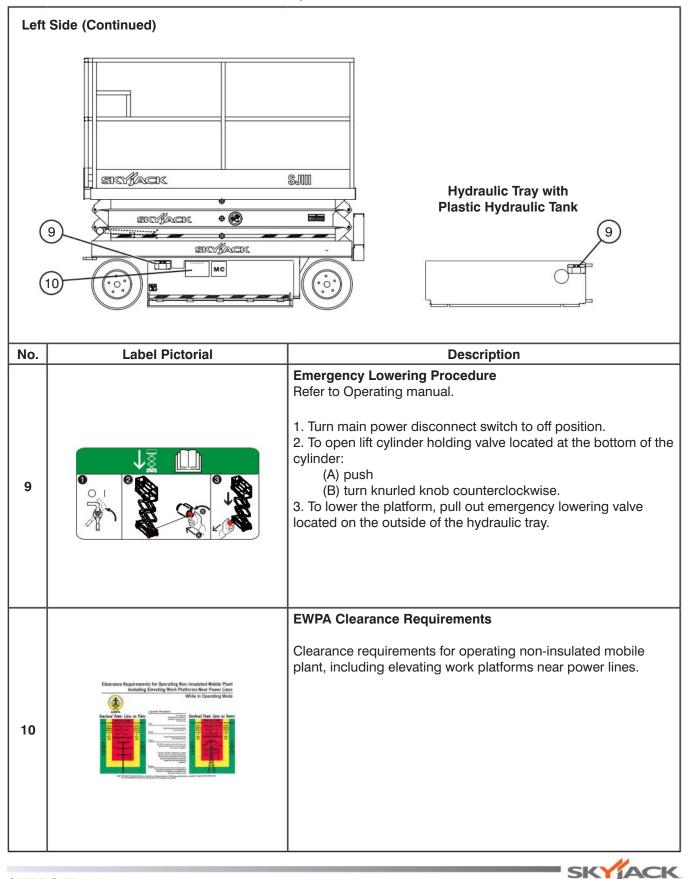




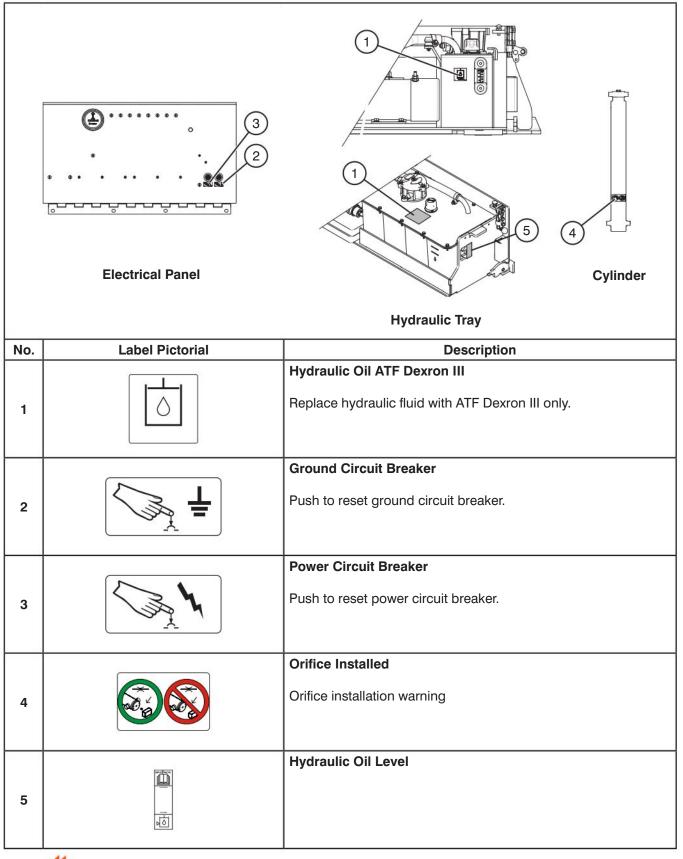




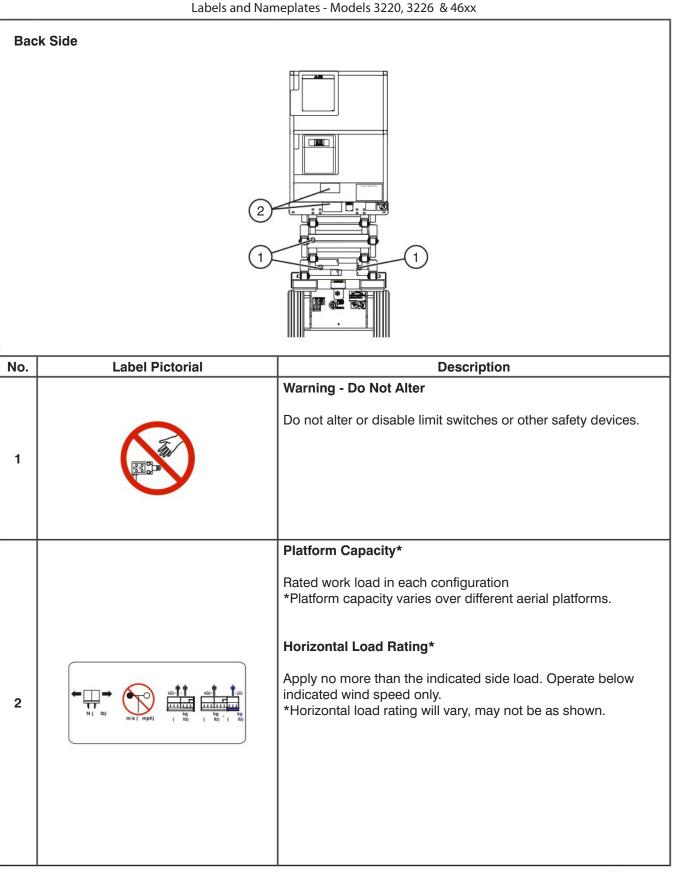






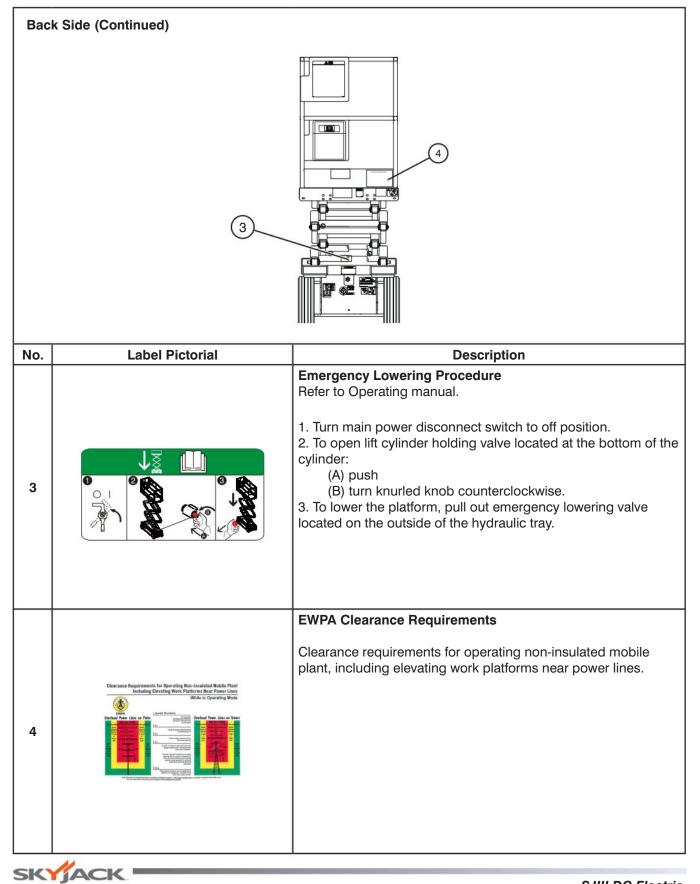




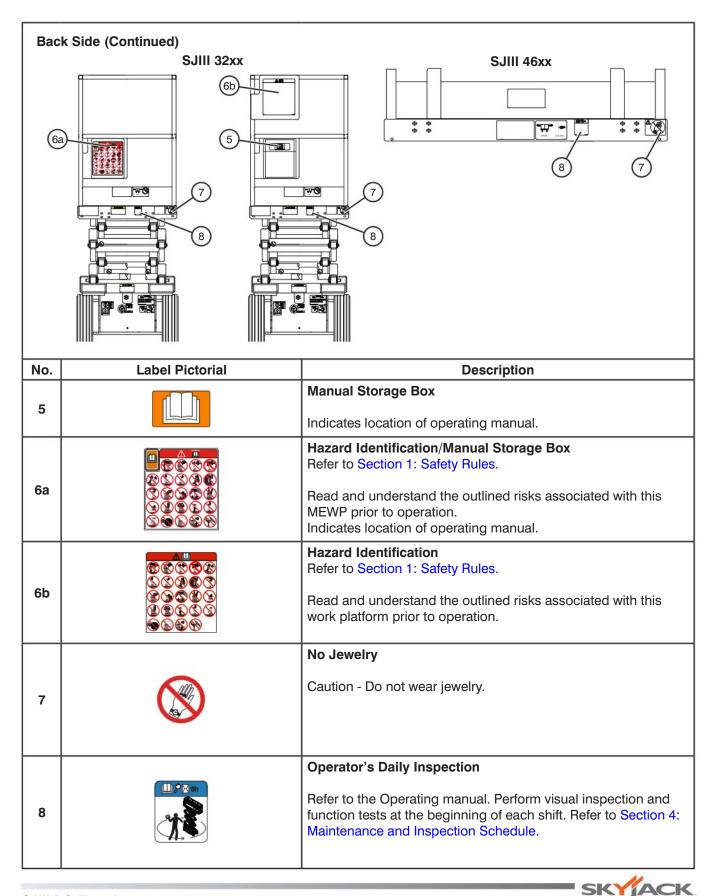




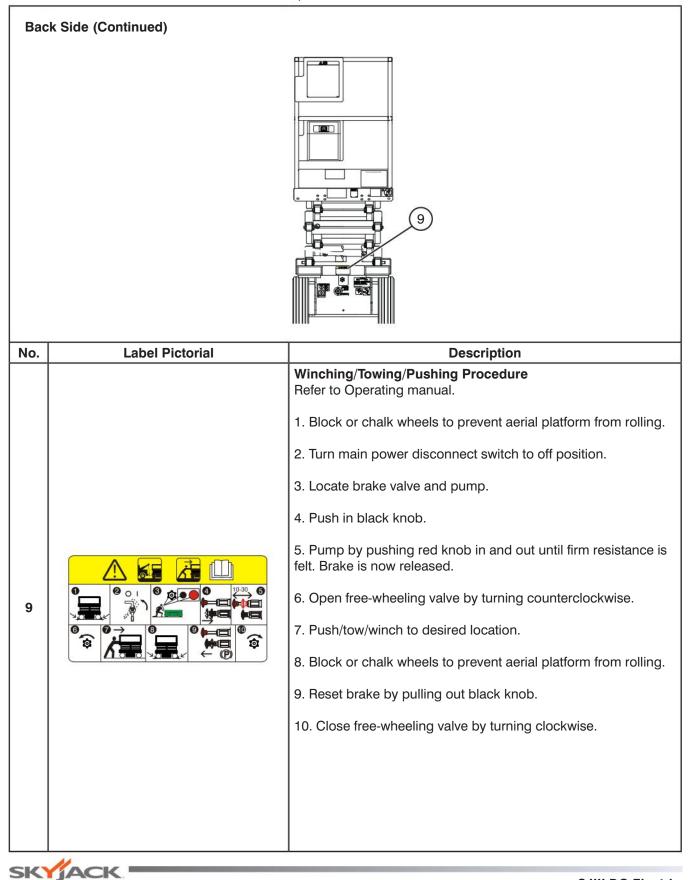


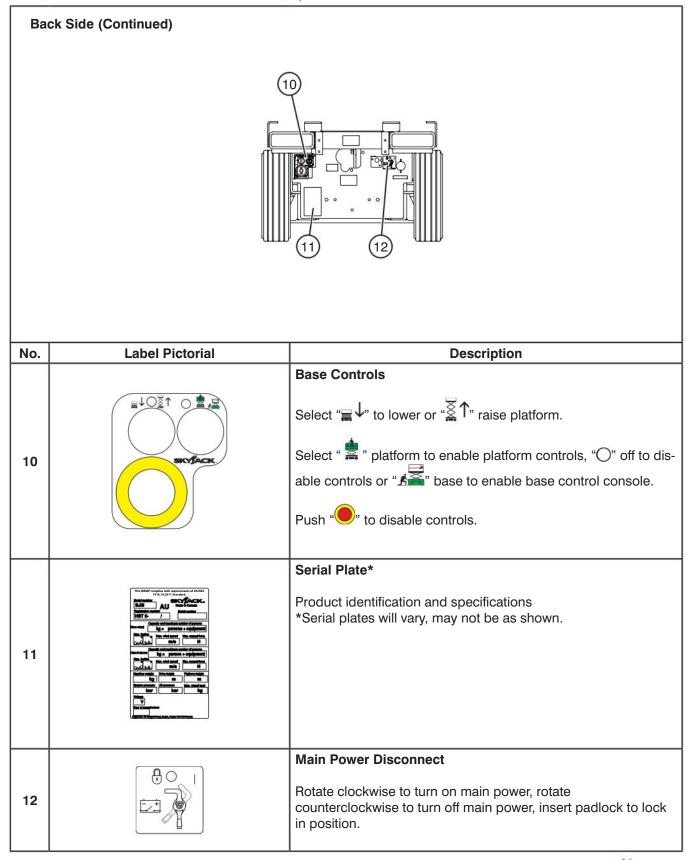


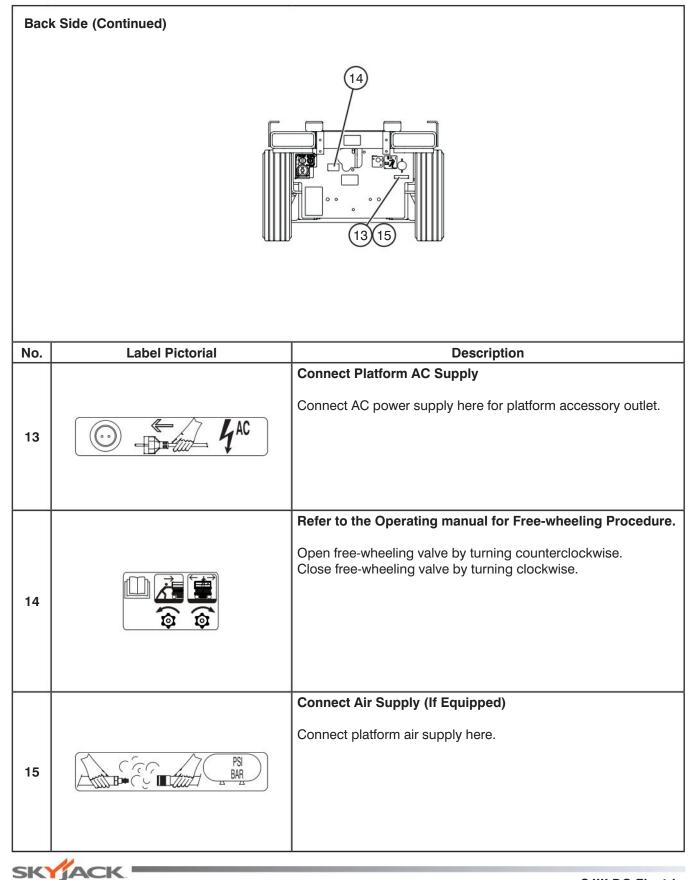








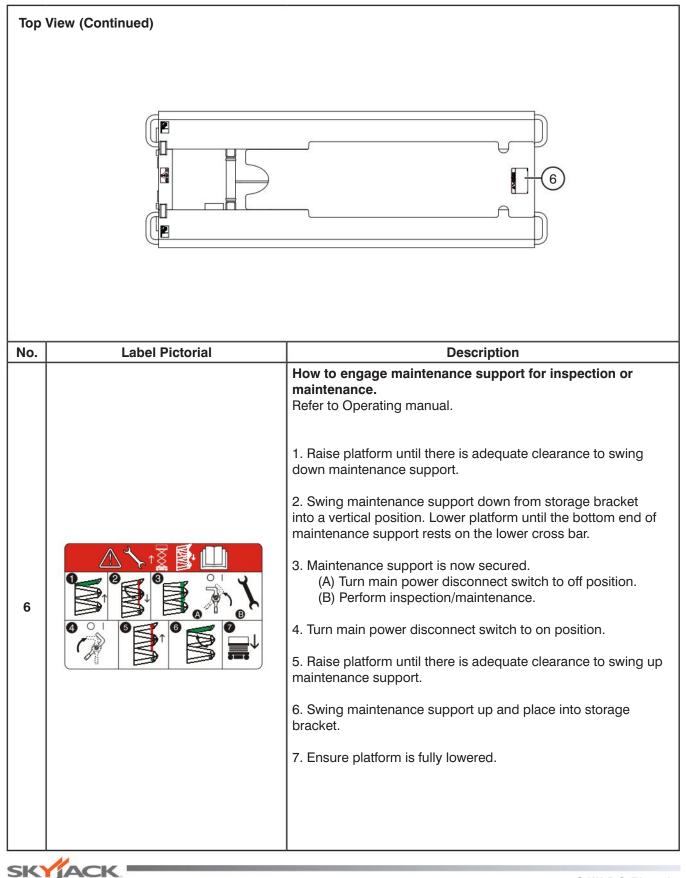




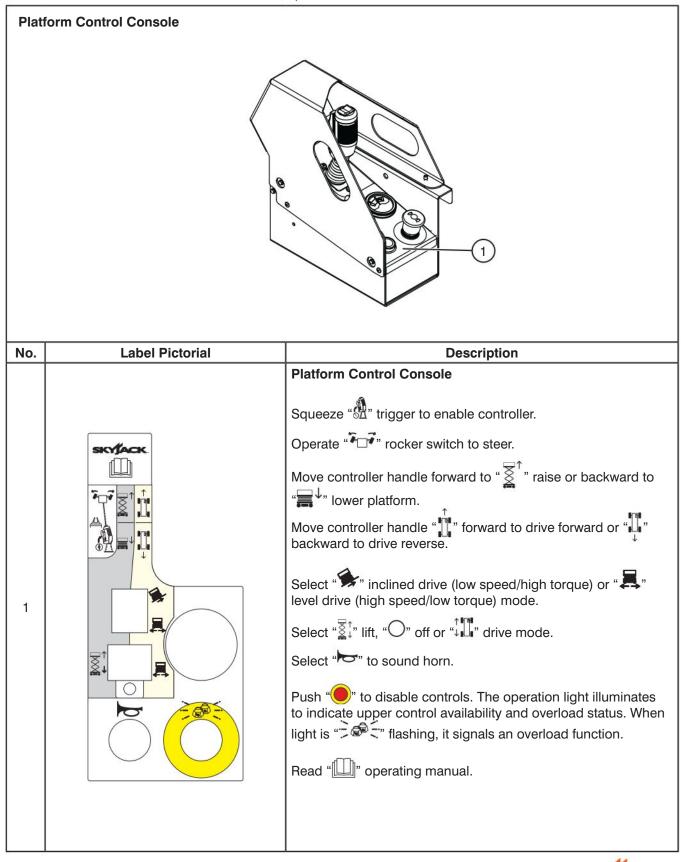


Тор	View Railing Pins	Lanyard Anchorage Point
		3 5
No.	Label Pictorial	Description
1	C C C C	Lift and Tie Down Points Only use these points for lifting or tying down.
2		Forklift Pocket Insert fork fully into pocket to lift aerial platform.
3		Falling Hazard - Railing Pins (Horizontal) (If Equipped)WARNING! Falling Hazard. Make sure hinged railing is pinned properly.
4		Falling Hazard - Railing Pins (Vertical) (If Equipped) WARNING! Falling Hazard. Make sure hinged railing is pinned properly.
5		Fall Protection Anchorage         Rated for one (1) person per anchorage.

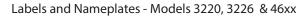


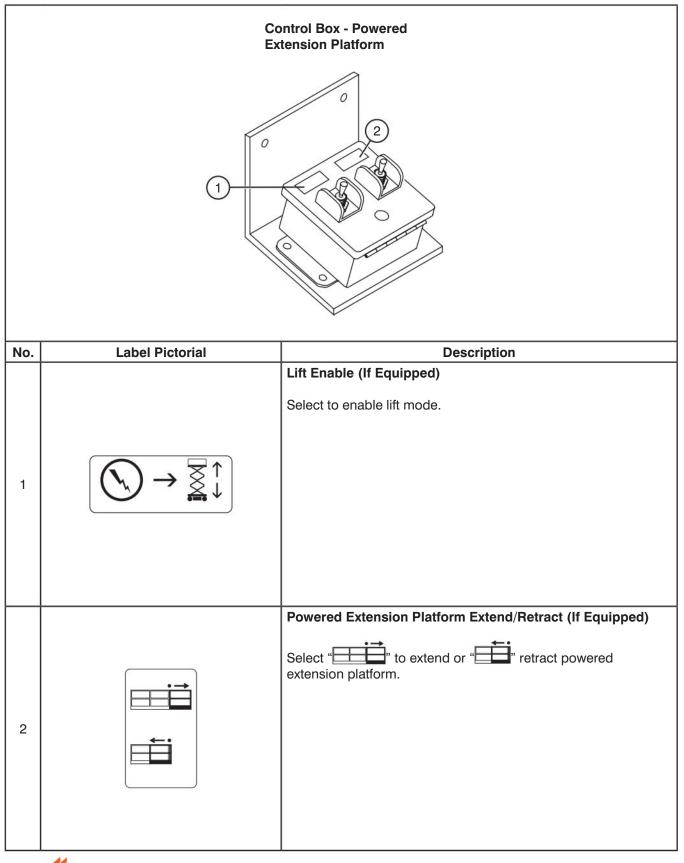














## 6.0 Skyjack Features

Your Skyjack machine may be equipped with the following features:



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.



Notes

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www.skyjack.com