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SKYJACK

OPERATION MANUAL

SJ3013 & SJ3014 micro

DC ELECTRIC SCISSORS

236613ACA December 2020 ANSI & CE

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SJ3013 & SJ3014 micro: 09281002 to 09289999

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Original instructions in English.

THIS SAFETY ALERT SYMBOL MEANS ATTENTION!



BE ALERT! YOUR SAFETY IS INVOLVED.

The Safety Alert Symbol identifies important safety messages on MEWPs, 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.

A DANGER

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

A WARNING

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.



SJ3013 & SJ3014 micro

Table of Contents

Sectio	on 1 –	About this Mobile Elevating Work Platform (MEWP)	9
1.1	Read a	and Heed	9
	1.1-1	Mobile Elevating Work Platform (MEWP) definition	9
	1.1-2	Purpose of equipment	9
	1.1-3	Use of equipment	9
	1.1-4	Operation manual	9
	1.1-5	Operator	9
	1.1-6	Service policy and warranty	9
	1.1-7	Ownership of Machine	9
	1.1-8	Optional Accessories	9
	1.1-9	Scope of this Manual	9
1.2	Prima	ry assemblies	10
1.3	Serial	number nameplate	11
1.4	Mainte	enance responsibility	12
	1.4-1	Operator	12
	1.4-2	Maintenance and inspection schedule.	12
	1.4-3	Owner	12
~	•		
Sectio	on 2 –	General Safety Precautions	13
2.1	Electro	ocution hazards	13
	2.1-1	Minimum distance from electrical conductors	13
2.2	Safety	instructions.	14
2.3	Fall-pr	otection	17
2.4	Works	ite inspection.	17
Sectio	on 3 –	Familiarization	19
3.1	Overv	iew of the MEWP	20
3.2	Manua	al storage box	21
3.3	Main p	oower connector.	21
3.4	Contro	ol functions	21
	3.4-1	Base control console	21
	3.4-2	Platform control console	22
3.5	Features and Devices		
	3.5-1	Tilt switch	22
	3.5-2	Lowering warning system - European (CE) models only	22
	3.5-3	Emergency-lowering system.	22
	3.5-4	Fall-protection anchorage.	23
	3.5-5	Overload warning system (OWS)	23

	3.5-6	Pothole protection.	24		
	3.5-7	Maintenance support	24		
3.6	General components.				
	3.6-1	Battery charger	25		
	3.6-2	Folding-guardrail system	25		
	3.6-3	Lowering alarm	25		
	3.6-4	Extension platform.	25		
	3.6-5	Flashing light	25		
Sect	ion 4 –	Inspections Before Operation	. 27		
4.1	Opera	tor's Responsibility	27		
4.2	Visual	Visual and daily maintenance inspections			
	4.2-1	Labels	28		
	4.2-2	Electrical	28		
	4.2-3	Hvdraulic	28		
	4.2-4	Base	29		
	4.2-5	System components tray	30		
	4.2-6	Platform assembly	31		
	4.2-7	Lift mechanism	32		
4.3	Functi	ion Tests	33		
	4.3-1	Do a test of the control module and load sensing module self-check	33		
	4.3-2	Do a test of the emergency-stop button on the base	33		
	4.3-3	Do a test of the platform/off/base key switch.	33		
	4.3-4	Do a test of the lower/neutral/raise switch	34		
	4.3-5	Do a test of the flashing lights.	34		
	4.3-6	Do a test of the lowering alarm	34		
	4.3-7	Do a test of the emergency-lowering function	34		
	4.3-8	Do a test of the brake-release switch	35		
	4.3-9	Do a test of the emergency-stop button on the platform	36		
	4.3-10	Do a test of the function-enable switch	36		
	4.3-11	Do a test of the steer function	36		
	4.3-12	Do a test of the drive function	37		
	4.3-13	Do a test of the low-speed button	37		
	4.3-14	Do a test of the brakes	38		
	4.3-15	Do a test of the platform raise and lower functions	38		
	4.3-16	Do a test of the horn	38		
	4.3-17	Do a test of the lowering warning system - European (CE) models only	39		
	4.3-18	Do a test of the pothole protection device	40		
	4.3-19	Do a test of the elevated travel speed	40		
	4.3-20	Do a test of the tilt system	40		
4.4	Opera	tor's Checklist	41		

Sectio	Section 5 – Operation				
5.1	Energize the base control console	43			
5.2	Raise or lower the platform with the base control console				
5.3	Energize the platform control console				
5.4	Raise or lower the platform with the platform control console				
5.5	Drive forward or rearward				
5.6	Steer				
5.7	Select the low-speed (high torque) drive mode45				
5.8	Extend/retract the extension platform46				
	5.8-1 Extend/retract the extension platform manually	46			
5.9	MEWP shutdown	46			
Sectio	on 6 – Procedures	47			
6.1	Use the emergency-lowering function	47			
6.2	Push, winch, and tow the MEWP	47			
6.3	Move the MEWP for transport.	48			
	6.3-1 Hoist or Lift the MEWP	49			
	6.3-2 Drive and tie-down the MEWP	50			
6.4	Charge the battery	51			
6.5	Use the maintenance support	52			
	6.5-1 Deploy the maintenance support	5 2			
	6.5-2 Store the maintenance support	52			
6.6	Guardrail lock-pin locations	53			
6.7	Fold the guardrails	54			
	6.7-1 Fold the guardrail system down	54			
	6.7-2 Unfold the guardrails.	55			
Sectio	on 7 – Specifications	57			
7.1	Standard and optional equipment	57			
7.2	Owner's Annual Inspection Record	58			
7.3	Specifications	59			
7.4	Environment.	60			
7.5	Maximum platform capacities (evenly distributed)	60			
7.6	Floor loading pressure	61			
Sectio	on 8 – Labels	63			
8.1	Rear	64			
8.2	Left side				
8.3	System components tray				
8.4	Platform				
8.5	Front				
8.6	Right side				
8.7	Top view				

Section 1 – About this Mobile Elevating Work Platform (MEWP)

1.1 Read and Heed

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

1.1-1 Mobile Elevating Work Platform (MEWP) definition

A mobile machine intended for moving persons, tools, and material to working positions, consisting of a work platform with controls, an extending structure, and a chassis.

1.1-2 Purpose of equipment

The Skyjack SJ DC Electric Scissor lifts are designed to move personnel, tools, and materials to working positions.

1.1-3 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.

1.1-4 Operation manual

The operation manual is an important part of the MEWP. It is important to always keep a copy of this manual in the weather-resistant manual storage box of the MEWP. The manual must be in good condition.

1.1-5 Operator

The operator must read and completely understand this operation manual, the safety panel label located on the platform, the limitations, operating procedures, operator's responsibility for maintenance and all other warnings and instructions in this manual and on the MEWP.

Before you operate the MEWP, make sure you read and completely understand this information:

- 1. The full contents of the operation manual, including the MEWP limitations and the responsibilities of the operator for the operation, applicable maintenance and safety instructions.
- **2.** The safety panel label on the platform, the labels on the MEWP and the attachments.

Compare the labels on the MEWP with the labels in this manual. Immediately replace any labels that are damaged or missing.

Only trained and authorized personnel shall be permitted to operate a MEWP.

The operator must be familiar with the employer's work rules and related government regulations.

1.1-6 Service policy and warranty

Skyjack warrants each new product to be free of defective parts and workmanship for the first 2 years or 3000 hours, whichever occurs first. Any defective part will be replaced or repaired by your local Skyjack dealer at no charge for parts or labor. In addition, all products have a 5-year structural warranty. Contact the Skyjack Service Department for warranty statement extensions or exclusions.

1.1-7 Ownership of Machine

Notify Skyjack of MEWP ownership. If you sell or transfer the ownership of a MEWP, promptly notify Skyjack of the new owner's contact information.

Skyjack needs this information to inform the owner of any updates or additional activities that are necessary to keep the machine in proper working condition.

1.1-8 Optional Accessories

This MEWP is designed to accept a variety of optional accessories. Refer to *Section 7.1* for a list of the optional accessories. Operating instructions for these options are located in Section 5 of this manual.

For components or systems that are not standard, speak to the Skyjack Service Department. Give the model and serial number for each applicable MEWP.

1.1-9 Scope of this Manual

- 1. This manual applies to the ANSI & CE versions of the SJ DC Electric Scissors series.
 - Equipment identified with *ANSI* meets the ANSI/SIA A92.6-2006 standard.
 - Equipment identified with CE meets the requirements of the Machinery Directive 2006/42/EC.



1.2 Primary assemblies

The MEWP has these primary assemblies:

- 1. Base
- 2. Lift mechanism
- 3. Platform.
- **1 Base:** The base is an assembly consisting of these components:
 - A tray, which contains:
 - hydraulic components
 - electrical components
 - two 12 V batteries and a charger.
 - The front wheels are steerable by a hydraulic cylinder.
 - The rear wheels are driven by electric motors. They have integrated brakes.

- 2 Lift mechanism: The lift mechanism is a scissortype assembly made of formed steel or tube sections. A hydraulic lift cylinder with a holding valve moves the scissor assembly and the platform up and down.
- **3 Platform:** The platform has these parts.
 - Tubular support frame.
 - Slip-resistant "diamond plate" deck surface.
 - Hinged tubular guardrails, with mid-rails, and toe boards.
 - You can enter and exit the platform from the rear through a spring-returned gate with a latch.
 - Front extension platform.





1.3 Serial number nameplate

The **serial number nameplate 1** is located at the rear side of the MEWP. It contains this information:

- Model
- Serial number
- Maximum load capacity
- Voltage/frequency rating
- Maximum platform height
- Maximum wind speed
- Date of production
- Weight
- Maximum gradeability
- Power.

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1.4 Maintenance responsibility

1.4-1 Operator

Before the beginning of each shift, do all the daily inspections and function tests. Refer to *Section 4*.

1.4-2 Maintenance and inspection schedule

Refer to the service manual for frequent, periodic, and annual inspections.

The actual operating environment of the MEWP may affect the maintenance schedule.

IMPORTANT

Only use original or manufacturer-approved parts and components for the MEWP.

NOTE

Refer to the Skyjack web site (www.skyjack.com) for machine registration and latest service bulletins before you do frequent/periodic or annual inspections.

1.4-3 Owner

The owner is responsible for the maintenance inspections and repairs. Refer to the service manual for the recommended maintenance and inspection areas and intervals. Keep a record of the annual inspection on the label on the scissor assembly. Refer to Section 7.2 in this manual.

Only trained and qualified/competent personnel, who understand the mechanical procedures, may do maintenance on the MEWP. The use of a MEWP that is not correctly maintained or in the correct working condition could result in death or serious injury.

Section 2 – General Safety Precautions

Failure to obey the instructions and precautions in this manual could result in MEWP damage, property damage, personal injury, or death.

It is mandatory that you use this MEWP correctly. Read this manual and make sure you fully understand it before you operate the MEWP.

Use personal protective equipment (PPE) when you do work on or near machinery to protect your eyes, ears, hands, feet, and body.

Any modifications to the MEWP must have written permission from Skyjack.

Do not operate the MEWP if:

- It does not operate correctly
- It is damaged, or shows worn or missing parts
- The safety devices are tampered with or disabled
- It is locked and tagged for servicing or repair
- It was modified without permission from Skyjack and the MEWP owner.

If you do not obey, there is a risk of death or serious injury.

2.1 Electrocution hazards

The MEWP is not electrically insulated and does not provide protection from contact with or proximity to energized electrical conductors. Follow *Section 2.1-1* for the minimum distance to keep between all parts of the MEWP, occupants, or tools, and the electrical conductors. Consider MEWP movement and electrical line sway in minimum distance calculation.

For North American (ANSI) models: If you need to work nearer than 3 m (10 ft), stop and apply control measures as determined by a qualified person with respect to electrical transmission and distribution.

Obey all the national, state/provincial/territorial and local safety rules.

2.1-1 Minimum distance from electrical conductors

For North American (ANSI) models:

Voltage Range	Minimum Distance from Electrical Conductors
\leq 50 KVA	3 m (10 ft)
> 50 KVA, or if not known	STOP and apply control measures as determined by a qualified person with respect to electrical transmission and distribution.

For European (CE) models:

CE Guidance Note

"Avoidance of danger from overhead lines." Adhere strictly to the governmental rulings and regulations applicable in your country.

DANGER

Electrocution hazard. Keep all parts of the MEWP, occupants, or tools a safe distance away from power lines, electrical power sources, or energized sources. If you do not obey, there is a risk of death or serious injury.



Keep a minimum safe distance from sources of high-voltage power.



DO NOT operate the MEWP during lightning or storms.

DO NOT use the MEWP as a ground for welding. If you do not obey, there is a risk of minor or moderate injury, or malfunction or damage to the MEWP.

2.2 Safety instructions

A WARNING

DO NOT operate this MEWP without the correct training and authorization. If you do not obey, there is a risk of death or serious injury.

DO NOT operate this MEWP in closed areas without sufficient airflow for exhaust gas and fumes. If you do not obey, there is a risk of death or serious injury.

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/provincial or territorial, and local rules which apply to your MEWP and worksite.

MAKE SURE all the safety and instructional labels are correctly attached on the MEWP in the correct location. Clean or replace labels that you cannot read.

Remove the platform/off/base key on the left side of the MEWP when leaving the MEWP unattended to prevent unauthorized use.



DO NOT wear jewelry or loose clothing that could become caught or entangled.



DO NOT allow the entanglement of ropes, cables or hoses with the MEWP, adjacent structures or objects.



Prevent falling from the platform. Always keep a firm footing on the platform floor when working thereon. Do not climb on the toe-board, mid-rail, or top-rail. Do not use planks, ladders, or any other devices on the platform for achieving additional height or reach.



DO NOT raise the platform or operate elevated in windy or gusty conditions that exceed the limits specified in Section 7.4.



DO NOT increase the surface area of the platform or carry large surface area items when exposed to wind. Increasing the area exposed to the wind will decrease the MEWP stability.

DO NOT elevate or drive elevated on a slope. Elevated driving must be done on a firm, level surface.



DO NOT drive elevated on a soft or uneven surface.

DO NOT raise the platform if it is not on a firm, level surface.

MAKE SURE the ground condition assessment considers the subsurface voids such as cellars, basements, culverts, and pipes.



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. **IF OPERATION IN AREAS** WITH HOLES OR DROP-OFFS IS ABSOLUTELY NECESSARY, elevated driving shall not be allowed. Position the MEWP horizontally only with the platform fully-lowered. After ensuring that all 4 wheels have contact with a firm, level surface, the platform can be raised. After elevation, the drive function must not be activated.

DO NOT ascend or descend grades greater than the maximum inclines listed in Section 7.3. Ascending or descending slopes must only be done when fully lowered.



DO NOT operate a MEWP that has ladders, scaffolding, or other devices on it to increase the platform size or work height.



DO NOT exceed the maximum side force on the platform capacity label when elevated (refer to Section 7.4).



DO NOT use the MEWP as a crane.



DO NOT sit, stand, or climb on the guardrails.



DO NOT climb on the scissor arm assembly.





DO NOT elevate the platform when the MEWP is on a truck, forklift, or other device or vehicle.



DO NOT use the MEWP when the wheels or tires are damaged (refer to *Section 4.2-4*).

Make sure the wheel nuts are in place.



DO NOT alter or disable limit switches or other safety devices.

DO NOT use the MEWP without guardrails, lock-pins, and the entry gate(s) in place.



DO NOT use the MEWP under the influence of alcohol or drugs, or if the operator's performance is impaired by a medical condition, the influence of prescription or over the counter drugs, or fatigue.



DO NOT exceed the rated capacity of the MEWP.



DO NOT distribute the load unevenly.



DO NOT use the MEWP if it does not function correctly or if any parts are damaged or worn.



DO NOT leave the MEWP unattended with the key in the key switch.

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DO NOT operate on slippery surfaces without sufficient traction to stop, drive, or steer the MEWP.

STUNT driving and horseplay are prohibited.

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.

Remove all personnel from the platform before you try to free a snagged platform with the base controls.

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2.3 Fall-protection

The guardrail system is the primary fall protection system of the MEWP platform.

If personal fall-protection equipment (PFPE) is required, by an employer or the authority having jurisdiction, Skyjack recommends the use of a full body harness with a lanyard. PFPE must be attached only to approved fall-protection anchorage points in the platform.

All PFPE must be compliant with applicable government rules and must be inspected as per the manufacturer's recommendation.

Fall hazard.

- Only enter and exit the MEWP using the three points of contact principle.
- Only use the equipped access openings.
- Only enter and exit the MEWP when the platform is fully lowered.
- Face the MEWP when entering or exiting the platform.

Failure to follow these instructions could result in death or serious injury.

Enter or exit the platform from the ground only. Use the three points of contact principle, which is when two hands and one foot, or one hand and two feet are in contact with the MEWP or the ground at all times. Face the MEWP when entering or exiting the platform.

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2.4 Worksite inspection

Make sure the operating environment, ambient temperature, Electromagnetic Compatibility (EMC), and Hazardous Location Rating (locations with potentially flammable gases, explosive gases or particles) are appropriate for the MEWP specifications (refer to Section 7.5).

Be sure to follow all national, state/provincial/territorial, and local rules that relate to operating the MEWP.

Perform a full worksite inspection before operating the MEWP. Identify potential hazards in the area.

Be aware of moving equipment in the area. Take the necessary precautions to prevent collisions.

It is the responsibility of the operator to perform a worksite inspection and avoid/address the following hazards:

- Holes or drop-offs
- Slopes
- Ditches or soft fills
- Floor obstructions, bumps, or debris
- Overhead obstructions
- Electrical conductors
- Hazardous locations
- Inadequate surface support to withstand all load forces imposed by the MEWP (refer to Section 7.6)
- Wind and weather conditions
- Presence of personnel
- Other mobile equipment
- Traffic hazards
- Equipment that could move and collide with the MEWP, such as overhead cranes
- Other possible unsafe conditions.

Section 3 – Familiarization

Do not operate this MEWP without correct training and authorization. If you do not obey, there is a risk of death or serious injury.

MEWP Familiarization must be given to a qualified operator. If you do not obey, there is a risk of death or serious injury. unt-f-quipment.con

It is the responsibility of the operator to fully understand, and follow all instructions and warnings contained in this operation manual and on the MEWP. If you do not obey, there is a risk of death or serious injury.

Read and fully understand the operation manual, all the warnings, and the instruction labels (refer to *Section 8*) on the MEWP.

Do these tasks before the operation:

- 1. Worksite inspection. Refer to Section 2.4.
- 2. Daily visual and maintenance inspections. Refer to *Section 4.2.*
- 3. Function tests. Refer to Section 4.3.

3.1 Overview of the MEWP



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3.2 Manual storage box

The manual storage box is weather-resistant. It contains the operation manual and other important documents. You must keep the operation manual for the make and model of this MEWP in this box. Refer to *Section 3.1* for the location of the manual storage box.



3.3 Main power connector

This connector, when disconnected, disconnects power to all circuits. The connector must be plugged in to the base to operate any circuit. The connector is located inside the system components tray. Refer to *Section 3.1.*



3.4 Control functions

3.4-1 Base control console

Refer to Section 3.1 for the location of the base control console.

Section 3 – Familiarization



- **Lower/neutral/raise:** This switch controls the function to lower or raise the platform.
- Platform/off/base key: With this three-way switch, you can:
 - Energize the platform controls.
 - Turn off the power to the MEWP controls.
 - Energize the base controls.
- Emergency-stop: This button disconnects power to the control circuit. Pull to connect the power again.
- Brake-release: This switch releases the brakes before you push, winch, or tow the MEWP.
- Hourmeter: The hourmeter records the total MEWP operation time.
- Power reset: This button resets the power if a power overload or positive circuit grounding occurs.

3.4-2 Platform control console

Refer to *Section 3.1* for the location of the platform control console.



- Lift/drive/steer function-enable: This switch energizes the controller handle. Squeeze and hold the switch continuously to engage the lift, drive, and steer functions.
- 2 Steering rocker: This switch controls the left and right steering. Release the switch to return it to the neutral position.
- 3 Lift/drive controller: This one-hand lever controls the lift and drive movements. To return it to the initial neutral position, release the controller.

Orive: This button energizes the drive circuit.

- 5 Low-speed: This button selects low speed (high torque).
- 6 Horn: This push-button makes a sound like a car horn.
- Overload warning system (OWS): A digital display shows OL when there is an overload (refer to Section 3.5-5).

Emergency-stop: This button disconnects the power to the control circuit.

9 Lift/lower: This button energizes the lift circuit.

3.5 Features and Devices

3.5-1 Tilt switch

This device senses when the MEWP has passed a predetermined angle in the longitudinal (front-to-back) or lateral (side-to-side) direction. Refer to Section 7.4. When the tilt switch is on, and the MEWP is in the elevated travel position, it disables the drive and lift functions. An alarm makes a sound, and an amber light flashes on either side of the MEWP. If the alarm makes a sound, fully lower the platform. Level the MEWP before you raise the platform.

3.5-2 Lowering warning system -European (CE) models only

The lowering warning system automatically stops the lowering function, and sounds an alarm, before the MEWP fully lowers. Make sure that no person is near the MEWP before you continue to lower the MEWP the remaining distance.

3.5-3 Emergency-lowering system

With the emergency-lowering system, you can lower the platform if there is a failure of the primary power. Refer to Section 6.1 for the emergency-lowering procedure. Refer to Section 3.1 for the location of the emergency-lowering handle.



Emergency-lowering handle

3.5-4 Fall-protection anchorage



Fall-protection anchorage: When required, use this as a point to attach personal fall protection equipment (PFPE). Do not attach the PFPE to any other points on the platform. Do not use this anchorage to lift, anchor, attach, or hold the platform, or other apparatuses or material.

Only use the fall-protection anchorage in the limits of the platform. Do not use the fall-protection anchorage for other than its intended function (refer to Section 2.3). If you use it incorrectly, death, serious injury, and/or MEWP damage can occur.

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3.5-5 Overload warning system (OWS)

The overload warning system prevents normal MEWP movement when the platform is overloaded and in a stationary position. Refer to *Section 7.4* for platform capacities.

Remove the overload from the platform to continue the usual operation.

Interautione

Fall hazard. Do not try to free a snagged platform with the base controls until you remove all personnel from the platform. If you do not obey, there is a risk of death or serious injury.

3.5-6 Pothole protection



Pothole protection: This device consists of a set of mechanically actuated steel weldments located under the base. These weldments will automatically deploy for reduced ground clearance when elevating the MEWP.

The drive and lift functions are disabled when the pothole protection device does not fully deploy while the MEWP is in the elevated travel position.

Crush hazard. Personnel on the ground must stay away from the pothole protection device. If you do not obey, there is a risk of death or serious injury.

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3.5-7 Maintenance support

Use the **maintenance support 1** when you do an inspection of the lift mechanism or do maintenance. Refer to *Section 6.5* for the procedure on how to use the maintenance support.



3.6 General components

3.6-1 Battery charger

The charger is located at the base. Refer to *Section 6.4* for the battery charger operation.



3.6-2 Folding-guardrail system

When you fold this system, it decreases the height of the fully lowered MEWP to transport the MEWP and/or to drive the MEWP through doorways. Refer to Section 6.7 for the procedure on how to fold the guardrails.



3.6-3 Lowering alarm

The alarm makes a sound when the lower function operates.

3.6-4 Extension platform

The extension platform increases the length and area of the platform. Refer to *Section 5.8* on how to extend and retract the extension platform.







Flashing lights: The flashing lights are attached to the base and flash when the base position or platform position is selected from the platform/ off/base key switch, as well as when a control function is enabled.

Section 4 – Inspections Before Operation

Operator's Responsibility 4.1

Do these tasks before each work shift in this sequence:

1. Visual and daily maintenance inspections (refer to Section 4.2).

WARNING

ount-faulpment.com Do an inspection on the MEWP for damage or loose or missing parts. If damage is found, lock and tag the MEWP and remove it from service. If you do not obey, there is a risk of death or serious injury.

2. Function tests (refer to Section 4.3).

Refer to Section 4.4 for a checklist of the inspection items.

WARNING

If the MEWP is damaged or has been modified from the initial factory-delivered condition, without permission from Skyjack, lock and tag the MEWP. Remove the MEWP for servicing. If you do not obey, there is a risk of death or serious injury.

Repairs to the MEWP are tasks only for a qualified service technician. Do the visual and daily maintenance inspections and function tests again after the repairs.

Scheduled maintenance inspections are a task only for a qualified service technician.



4.2 Visual and daily maintenance inspections

Do an inspection of the MEWP in this sequence:

Do not operate a MEWP that does not function correctly. Lock and tag the MEWP, and remove it for servicing. Only a qualified service technician must repair the MEWP. If you do not obey, there is a risk of death or serious injury.

Turn the platform/off/base key switch to the off position before you do the visual and daily maintenance inspections. If you do not obey, there is a risk of death or serious injury.

Make sure that the MEWP is on a firm, level surface before you do the visual and daily maintenance inspections. If you do not obey, there is a risk of machine damage.

4.2-1 Labels

Refer to *Section 8* in this manual for the labels. Make sure all the labels are in the correct location, are in good condition, and you can read them.

4.2-2 Electrical

Do a check on these areas for chafed, corroded, and loose wires:

- Base to platform cables and wiring harness
- Battery tray wiring harnesses
- Hydraulic and electrical wiring harnesses.

4.2-3 Hydraulic

Do a check on these areas and make sure there are no signs of leakage:

- Hydraulic tank, filter, fittings, hoses.
- All hydraulic cylinders
- All hydraulic manifolds
- The ground area below the MEWP





4.2-4 Base

Do the inspection that follows:

Wheel/tire assembly

- Do a check on all the tire treads and sidewalls for cuts, cracks, and unusual wear.
- Do a check on each wheel for damage, and cracked welds.
- Make sure the wheels are correctly aligned vertically and horizontally.
- Make sure there is no visible damage.

Do not use tires other than the tires that Skyjack specifies for this MEWP. Do not mix different types of tires or use tires that are not in good condition. Only replace the tires with the same types that are approved by Skyjack. The use of other tires can make the MEWP less stable. If you do not obey, there is a risk of death or serious injury.

2 Wheel nuts

Make sure the wheel nuts are tight.

3 Ladder

- Make sure the ladder is correctly attached.
- Make sure there are no loose or missing parts.
- Make sure there is no visible damage.

Pothole protection device

- Make sure there are no loose or missing parts.
- Make sure there is no visible damage.
- Make sure there is no dirt and blockages.

Greasing points

- Make sure there is no visible damage.
- Make sure there is no dirt or blockages.



4.2-5 System components tray

Do the inspection that follows:

Base controls

Make sure there is no visible damage, and all the switches are in their off/neutral positions.

2 Batteries

 Make sure that the battery tray latches correctly and is in good condition.

🋕 WARNING

Explosion hazard. Keep flames and sparks away. Do not smoke near the batteries. Batteries release explosive gas while you charge them. Charge the batteries in a well-ventilated area. If you do not obey, there is a risk of death or serious injury.

Corrosion hazard. Do not touch battery acid. Wear the correct PPE. If the battery acid touches you, immediately flush the area with cold water and get medical aid.

- 1. Do an inspection of the battery case for damage.
- 2. Make sure all the battery connections are tight.
- If applicable, do a check on the battery fluid levels. If the plates do not have a minimum 13 mm (1/2 inch) of solution above them, add distilled or demineralized water.

Only use original or manufacturer-approved parts and components for the MEWP. If you do not obey, there is a risk of death, serious injury, or machine damage.

Battery charger

- Make sure that the battery charger is correctly installed, and in good condition.
- Make sure there is no visible damage.

Hydraulic pump and motor

- Make sure there are no loose or missing fasteners.
- Make sure there is no visible damage.

5 Valve

- Make sure all fittings and hoses are correctly tightened.
- Make sure there is no indication of hydraulic leakage.
- Make sure there are no loose wires or missing fasteners.

Main Power Connector

- Make sure the connector is in good condition.
- Make sure all cable connections are tight.
- Make sure there is no visible damage.

236613ACA



4.2-6 Platform assembly

Do the inspection that follows in sequence:

🋦 WARNING

Fall hazard. Use the three points of contact principle when you use the MEWP ladder to enter or exit the platform. If you do not obey, there is a risk of death or serious injury.

- 1. Use the MEWP ladder to enter the platform.
- 2. Close the gate.
- Platform railings
 - Make sure there are no loose or missing parts, and there is no visible damage.
 - Make sure that the lock-pins and fasteners are correctly locked.
 - Make sure that the platform railings 1 are in the correct position and locked with lock-pins. Refer to Section 6.6.
 - Make sure that the gate is in good condition and operates correctly.

Pall-protection anchorages

- Make sure that the fall-protection anchorages are correctly installed.
- Make sure there is no visible damage.

3 Platform control console

 Make sure that the control console is locked with lock-pins.

4 Manual storage box

- Make sure that the operation manual and other important documents are in the manual storage box.
- Make sure that the documents are in good condition, and you can read them.
- Always put the manuals and other documents back in the storage box after use.
- 3. Use the MEWP ladder to exit the platform.



4.2-7 Lift mechanism

Do the inspection that follows in sequence:

Sliders

- Make sure that the sliders on the left and right side of the MEWP are correctly attached.
- Make sure there is no visible damage.
- Make sure there is no dirt or blockages in the slider paths.
- 1. Raise the platform (refer to Section 5.2) and deploy the maintenance support (refer to Section 6.5-1).
- 2 Maintenance support
 - Make sure that the maintenance support is correctly attached and shows no visible damage.

Scissor assembly

- Make sure that the scissor assembly shows no signs of visible damage, deformation, or cracks in the weldments.
- Make sure all the pins and fasteners are correctly installed.
- Make sure that the cables and wires have the correct routing, and show no signs of wear and/or physical damage.

O Scissor bumpers

 Make sure that the bumpers are correctly attached and have no visible damage.

5 Lift cylinder and pressure transducer

- Make sure that the lift cylinder is correctly installed.
- Make sure the pressure transducer is correctly installed.
- Make sure there is no visible damage.
- Make sure there are no loose or missing fasteners.
- Make sure there is no indication of leaks or damage.
- Make sure there are no loose or missing wires.

6 Angle transducer

- Make sure that the angle transducer is correctly attached.
- 2. Retract the maintenance support into the storage bracket. Refer to Section 6.5-2.
- 3. Fully lower the platform.





4.3 Function Tests

Do the function tests in sequence.

Do not operate a MEWP that does not function correctly. Lock and tag the MEWP, and remove it for servicing. Only a qualified service technician must repair the MEWP. If you do not obey, there is a risk of death or serious injury.

Be sure to read *Section 5* before you do the function tests.

4.3-1 Do a test of the control module and load sensing module self-check

- 1. Push the **emergency-stop** button 1 on the base control console.
- 2. Pull the **emergency-stop** button on the base control console.
 - Result: The beeper makes a sound for approximately 1 second. This shows that the system is in operation, and there are no faults.

4.3-2 Do a test of the emergency-stop button on the base

- 1. Push the emergency-stop button.
- 2. Turn the **platform/off/base** switch 2 to the base position.
- **3.** Turn and hold the **lower/neutral/raise** switch **3** to the raise position.
 - **Result:** The platform does not rise.

4.3-3 Do a test of the platform/off/base key switch

1. Pull the emergency-stop button.

Look for overhead obstructions or other possible hazards around the MEWP when you raise the platform. Do not lower the platform unless the area below is clear of personnel and obstructions. If you do not obey, there is a risk of death or serious injury.

- 2. Turn the **platform/off/base key** switch to the platform position.
- **3.** Turn and hold the **lower/neutral/raise** switch to the raise position.
 - Result: The platform does not rise.
- 4. Turn the **platform/off/base key** switch to the base position.
- 5. Turn and hold the **lower/neutral/raise** switch to the raise position.
 - Result: The platform rises.





- 1. Turn the **platform/off/base** switch to the base position.
- 2. Turn and hold the **lower/neutral/raise** switch to the raise position.
 - Result: The platform rises.
- 3. Turn and hold the lower/neutral/raise switch to the lower position.
 - **Result**: The platform lowers.

4.3-5 Do a test of the flashing lights

- 1. Turn the **platform/off/base key** switch to the platform or base position.
 - Result: The lights 5 continuously flash.
- 2. Select the off position on the platform/off/base key switch.
 - Result: The lights do not flash.

4.3-6 Do a test of the lowering alarm

- 1. Turn the **platform/off/base key** switch to the base position.
- 2. Turn and hold the **lower/neutral/raise** switch to the raise position to raise the platform.
 - **Result:** The alarm does not make a sound as the platform rises.
- **3.** Turn and hold the **lower/neutral/raise** switch to the lower position to fully lower the platform.
 - **Result:** The alarm makes a sound as the platform lowers.

4.3-7 Do a test of the emergencylowering function

WARNING

5

Look for overhead obstructions or other possible hazards around the MEWP when you raise the platform. Do not lower the platform unless the area below is clear of personnel and obstructions. If you do not obey, there is a risk of death or serious injury.

- 1. Raise the platform.
- 2. Push the emergency-stop button.
- **3.** Pull the **emergency-lowering** handle **6** to lower the platform.
 - Result: The platform lowers.



4.3-8 Do a test of the brake-release switch

IMPORTANT

This test requires two people - one to operate the brake-release switch and the other to push the MEWP.

WARNING

Crush hazard. Make sure the switch operator is away from the wheels at all times. If you do not obey, there is a risk of serious injury.

- 1. Make sure the MEWP is on a level surface.
- 2. Make sure the path of intended motion is clear.
- 3. Pull the emergency-stop button on the base control console.
- 4. Pull the emergency-stop button on the platform control console.
- 5. Turn the platform/off/base switch to the base position.
- 6. Push down and hold the brake-release switch 4.
- 7. Push the MEWP forward.
 - Result: The MEWP moves forward.
- 8. Release the break-release switch.
- 9. Push the MEWP forward.
 - Result: The MEWP does not move.



4.3-9 Do a test of the emergency-stop button on the platform

- 1. Pull the **emergency-stop** button on the base control console.
- 2. Turn the platform/off/base key switch to the platform position.

Fall hazard. Use the three points of contact principle when you use the MEWP ladder to enter or exit the platform. If you do not obey, there is a risk of death or serious injury.

- 3. Use the MEWP ladder to enter the platform.
- 4. Close the gate.
- 5. Pull the **emergency-stop** 1 button on the platform control console.
- 6. Push the drive button 2.
- 7. Push the emergency-stop button.
- 8. Squeeze and hold the function-enable switch3.
- 9. Push the controller handle 4 to drive forward.
 - **Result:** The drive function does not operate.

4.3-10 Do a test of the function-enable switch

- 1. Make sure the path of intended motion is clear.
- 2. Pull the emergency-stop button.
- 3. Push the drive button 2.
- 4. Do not use the **function-enable** switch, and try to drive the MEWP by moving the controller handle forward.
 - **Result:** The drive function does not operate.

4.3-11 Do a test of the steer function

- 1. Push the drive button 2.
- 2. Squeeze and hold the function-enable switch.
- 3. Press the **steering rocker** switch **5** on top of the controller handle to steer left and right.
 - **Result:** The steer wheels turn left and right.

236613ACA



4.3-12 Do a test of the drive function

- 1. Make sure the path of intended motion is clear.
- 2. Push the drive button 2.
- 3. Squeeze and hold the function-enable switch.
- 4. Slowly push the **controller handle** until the MEWP starts to move. Then, release the handle, so that it goes back to the center position.
 - **Result:** The MEWP moves in the forward direction and then stops.
- 5. Slowly pull the **controller handle** until the MEWP starts to move. Then, release the handle, so that it goes back to the center position.
 - **Result:** The MEWP moves in the opposite direction and then stops.

4.3-13 Do a test of the low-speed button

- **1.** Make sure the path of intended motion is clear.
- 2. Push the drive button 2.
- 3. Push the low-speed button
 - **Result:** The light on the button comes on.
- 4. Squeeze and hold the function-enable switch.
- 5. Slowly push the **controller handle** forward to the full drive position, then release the handle, so that it goes back to the centre position.
 - **Result:** The MEWP moves slowly in the forward direction, then stops.



4.3-14 Do a test of the brakes

IMPORTANT

The brakes engage instantly when you release the function-enable switch. This causes the MEWP to stop immediately.

- 1. Make sure the path of intended motion is clear.
- 2. Push the drive button 2.
- 3. Squeeze and hold the function-enable switch.
- 4. Drive the MEWP forward and then rearward. Release the **controller handle**.
 - Result: The MEWP stops. Do not operate the MEWP if the MEWP pulls to one side while it stops. A service technician must do a check on the brake adjustments.
- 5. Drive the MEWP forward and then rearward. Release the **function-enable** switch only.
 - Result: The MEWP stops. Do not operate the MEWP if it pulls to one side while it stops. A service technician must do a check on the brake adjustments.

4.3-15 Do a test of the platform raise and lower functions

WARNING

Look for overhead obstructions or other possible hazards around the MEWP when you raise the platform. Do not lower the platform unless the area below is clear of personnel and obstructions. If you do not obey, there is a risk of death or serious injury.

- 1. Push the lift/lower button 6.
- 2. Squeeze and hold the function-enable switch.
- **3.** Pull the **controller handle** to raise the platform by approximately 0.5 m (20 in).
 - Result: The platform rises.
- 4. Squeeze and hold the function-enable switch.
- 5. Push the **controller handle** to fully lower the platform.
 - Result: The platform fully lowers.

4.3-16 Do a test of the horn

- 1. Push the horn button 7.
 - **Result:** The horn makes a sound.



- 5. Make sure that the area around the MEWP is clear.
- 6. Squeeze and hold the function-enable switch.
- 7. Pull the **controller handle** to continue to lower the MEWP.
 - Result: The platform fully lowers.
4.3-18 Do a test of the pothole protection device

🛦 WARNING

Crush hazard. Make sure all personnel on ground stay away from the pothole protection device. If you do not obey, there is a risk of death or serious injury.

A WARNING

Fall hazard. Use the three points of contact principle when you use the MEWP ladder to enter or exit the platform. If you do not obey, there is a risk of death or serious injury.

- 1. Push the emergency-stop button.
- 2. Use the MEWP ladder to exit the platform.
- **3.** Put a block (approximately 3.75 cm (1.5 in) below the system components tray of the MEWP.
- 4. Use the MEWP ladder to enter the platform.
- 5. Close the gate.
- 6. Pull the emergency-stop button.
- 7. Raise the platform approximately 1.5 m (5 ft).
- 8. Drive the MEWP forward or rearward, or continue to raise the platform higher than 1.5 m (5 ft).
 - Result: The drive function does not operate. The lift function does not operate above 1.5 m (5 ft). An error/fault code shows on the display of the platform control console.
- 9. Fully lower the platform.
- **10.** Do steps 1 to 9 again, with the block put below the opposite side of the MEWP.
 - Result: The drive function does not operate. The lift function does not operate above 1.5 m (5 ft). An error/fault code shows on the display of the platform control console.
- 11. Push the emergency-stop button.
- **12.** Use the MEWP ladder to exit the platform.
- 13. Remove the block.

4.3-19 Do a test of the elevated travel speed

Look for overhead obstructions or other possible hazards around the MEWP when you raise the platform. Do not lower the platform unless the area below is clear of personnel and obstructions. If you do not obey, there is a risk of death or serious injury.

- 1. Pull the emergency-stop button.
- 2. Make sure the path of intended motion is clear.
- Raise the platform until it is at a height of approximately 0.3 m (1 ft).
- 4. Drive the MEWP forward and then rearward.
 - **Result:** The MEWP drives slower than when it was in the lowered travel position.

4.3-20 Do a test of the tilt system

IMPORTANT

Use the platform control console to do this test from the ground. Do not stand in the platform. Lower the platform fully before you do the test.

- 1. Make sure the path of intended motion is clear.
- 2. Put a 2x4 or similar piece of wood in front of each wheel on the right side of the MEWP.
- 3. Push the drive button 2.
- 4. Squeeze and hold the function-enable switch.
- 5. Slowly push the **controller handle** and drive the MEWP onto the pieces of wood.
- 6. Push the lift/lower button.
- 7. Squeeze and hold the function-enable switch.
- 8. Slowly pull the **controller handle** rearward and raise the platform.
 - **Result:** When the platform rises 1.5 m (5 ft) from the stowed position, an alarm sounds and the platform lift stops. The drive functions do not operate. The tilt indicator light on the platform control console flashes.
- **9.** Push the **controller handle** forward and fully lower the platform.
- **10.** Drive the MEWP off of the pieces of wood.
- **11.** Remove the wood.

4.4 Operator's Checklist (page 1 of 2)

SKYJACK	SJ3013 & SJ3014 micro				
	Daily Operator's Checklist				

Serial Number: Model: Hourmeter Reading:	Operator's Name (Printed):
Date:	Operator's Signature:
Each item shall be inspected using the appropriate section of the Skyjack operating manual. As each item is inspected, check or complete the appropriate box.	 P PASS N/A NOT APPLICABLE Add a comment if the item does not pass inspection.

	P	N/A	Comment (if item does not pass inspection)
Visual and Daily Maintenance Inspections			
Labels - Do an inspection for damaged, or missing labels			
Pothole protection limit switches - Do an inspection for loose, damaged, or missing components			
Electrical - Do an inspection for loose, damaged, or missing components			
Hydraulic - Do an inspection for loose, damaged, or missing components			
Wheel/tire assembly - Do an inspection for loose, damaged, or missing components	X		
Wheel/tire assembly			
Wheel nuts			
Entrance side - Do an inspection for loose, damaged, or missing components			
Ladder			
Battery charge indicator			
Brakes			
Wheel/motor assembly			
System components tray side - Do an inspection for leaks and loose, damaged, or missing components			
Base controls			
Pothole protection device			
Battery charger			
Batteries			
Hydraulic oil level			
Hydraulic pump and motor			
Hydraulic components			
Emergency lowering knob and cable			
Extension side - Do an inspection for leaks and loose, damaged, or missing components			
Steer cylinder assembly			
Steer linkages			
Greasing points			
Tie rod			
Platform assembly - Do an inspection for loose, damaged, or missing components			
Platform railings			
Fall-protection anchorages			

Page 1 of 2

2088AC

NOTE: Make a copy of this page or go to www.skyjack.com for a copy that you can print.

SJ3013 & SJ3014	micro
SKYJACK	

Operator's Checklist (page 2 of 2)

	Р	N/A	Comment (if item does not pass inspection)
Visual and Daily Maintenance Inspections			
Platform assembly - Do an inspection for loose, damaged, or missing components continued			
Platform control console			
Manual storage box			
Lift mechanism - Do an inspection for loose, damaged, or missing components			
Sliders			
Maintenance support			
Scissor assembly			
Scissor bumpers			
Rollers			
Lift cylinder and pressure transducer			~0`
Angle transducer			
Function Tests			
Do a test of the control module and load sensing module self-check			
Do a test of the emergency-stop button on the base			
Do a test of the platform/off/base key switch			
Do a test of the lower/neutral/raise switch			
Do a test of the flashing lights			
Do a test of the lowering alarm			
Do a test of the emergency-lowering function			X
Do a test of the brake release function			
Do a test of the emergency-stop button on the platform			
Do a test of the function-enable switch			
Do a test of the steer function			
Do a test of the drive function			
Do a test of the low-speed button			
Do a test of the brakes			
Do a test of the platform raise and lower functions			
Do a test of the horn			
Do a test of the lowering warning system - European (CE) models only			
Do a test of the nothole protection device			
Do a test of the elevated travel speed			
Do a test of the tilt system			
Page 2 of 2			2088AC

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Section 5 – Operation

Do not operate this MEWP without authorization and training. If you do not obey, there is a risk of death or serious injury.

Do these tasks in sequence before MEWP operation:

- 1. Visual and daily maintenance inspections. Refer to *Section 4.2*.
- 2. Function tests. Refer to Section 4.3.
- 3. Worksite inspection. Refer to Section 2.4.
- 4. If a risk assessment finds that a rescue plan is necessary, make sure you have a system of communication. The communication must be between the personnel on the platform and the selected support personnel. The selected support personnel must know how to use the base controls to lower the platform.

Do not operate the MEWP if:

- It does not operate correctly
- It is damaged, or shows worn or missing parts
- The safety devices are tampered with or disabled
- It is locked and tagged for servicing or repair
- It was modified without permission from Skyjack and the MEWP owner.

If you do not obey, there is a risk of death or serious injury.

5.1 Energize the base control console

- **1.** Plug in the main power connector.
- 2. Pull the **emergency-stop** button on the base control console.

\Lambda WARNING

If you do not hear a beep, and the light does not come on, lock and tag the MEWP. Remove the MEWP for servicing. If you do not obey, there is a risk of death or serious injury.

3. Turn the **platform/off/base key** switch to the base position.

5.2 Raise or lower the platform with the base control console

- 1. Energize the base control console (refer to *Section 5.1*).
- 2. Turn the **platform/off/base key** switch to the base position.

A WARNING

Look for overhead obstructions or other possible hazards around the MEWP when you raise the platform. Do not lower the platform unless the area below is clear of personnel and obstructions. If you do not obey, there is a risk of death or serious injury.

3. Push and hold the **lower/neutral/raise** switch to the raise or lower position and hold it to raise or lower the platform. Release the switch to stop.

5.3 Energize the platform control console

A WARNING

If you do not hear a beep, and the light does not come on, lock and tag the MEWP. Remove the MEWP for servicing. If you do not obey, there is a risk of death or serious injury.

- 1. Pull the **emergency-stop** button on the base control console.
- 2. Turn the **platform/off/base key** switch to the platform position.

Fall hazard. Use the three points of contact principle when you use the MEWP ladder to enter or exit the platform. If you do not obey, there is a risk of death or serious injury.

- 3. Use the MEWP ladder to enter the platform.
- 4. Close the gate.
- 5. Pull the **emergency-stop** button on the platform control console.

5.4 Raise or lower the platform with the platform control console

1. Energize the platform control console (refer to *Section 5.3*).

Look for overhead obstructions or other possible hazards around the MEWP when you raise the platform. Do not lower the platform unless the area below is clear of personnel and obstructions. If you do not obey, there is a risk of death or serious injury.

- 2. Push the lift/lower button.
- 3. Squeeze and hold the function-enable switch.
- 4. Move the **controller handle** rearward or forward to go to the necessary height.

NOTE

The lower function is not proportional.

5. Move the **controller handle** to the neutral central position to stop. Release the **function-enable** switch.

Push the emergency-stop button when you are at the necessary location or elevation. This prevents unintended MEWP movement. If you do not obey, there is a risk of death or serious injury.

If the tilt alarm makes a sound, and the platform does not rise or does not fully rise:

- 1. Fully lower the platform immediately.
- 2. Make sure the MEWP is on a firm, level surface.

If you do not obey, there is a risk of death or serious injury.



5.5 Drive forward or rearward

Make sure there are no personnel or obstructions in the path of travel. Acquaint yourself with the blind spots of the MEWP. If you do not obey, there is a risk of death or serious injury.

Crush hazard. Personnel on the ground must stay away from the pothole protection device. If you do not obey, there is a risk of death or serious injury.

Do not drive the MEWP elevated in areas where electrical cables or debris are in the path of travel. If you do not obey, there is a risk of death or serious injury.

- 1. Energize the platform control console (refer to *Section 5.3*).
- 2. Push the drive button.
- 3. Squeeze and hold the function-enable switch.
- 4. Move the **controller handle** forward or rearward to drive at and in the necessary speed and direction.
- 5. Move the **controller handle** to the neutral central position to stop. Release the **function-enable** switch.

Push the emergency-stop button when you are at the necessary location or elevation. This prevents unintended MEWP movement. If you do not obey, there is a risk of death or serious injury.

The pothole protection relies on consistent ground clearance. If the total MEWP weight is ever on the pothole protection, immediately lower the platform, and lock and tag the MEWP. A qualified service technician must do a complete inspection. If you do not obey, there is a risk of MEWP damage.

5.6 Steer

- 1. Energize the platform control console (refer to *Section 5.3*).
- 2. Push the drive button.
- 3. Squeeze and hold the function-enable switch.
- Push the steering rocker switch on top of the controller handle in one of the two directions to steer.

NOTE

The steer function is not proportional. Drive and steer functions can be active at the same time.

5.7 Select the low-speed (high torque) drive mode

Do not drive the MEWP in the elevated position on a slope. Fully retract the MEWP before you operate it on a slope. If you do not obey, there is a risk of death or serious injury.

- Select the low-speed (high torque) drive mode in these situations:
 - When you drive up or down slopes.
 - When you drive on rough ground.
 - When you drive the MEWP on to or remove it from a transport vehicle.
 - **1.** To use the low-speed (high torque) drive mode, push the low speed button.

A WARNING

Push the emergency-stop button when you are at the necessary location or elevation. This prevents unintended MEWP movement. If you do not obey, there is a risk of death or serious injury.

5.8 Extend/retract the extension platform

Crush hazard. Do not retract the extension platform from the ground. If you do not obey, there is a risk of death or serious injury.

Push the emergency-stop button when you are at the necessary location or elevation. This prevents unintended MEWP movement. If you do not obey, there is a risk of death or serious injury.

5.8-1 Extend/retract the extension platform manually

- 1. Press the foot pedal 1 to unlock the extension platform.
- 2. Push or pull the extension handrails to extend or retract the extension platform to the next position stop.
- **3.** Do steps 1 and 2 again to extend or retract the extension platform to the necessary position.

NOTE

Do not stand on the platform extension while you try to extend it.

Make sure each position is locked into place. If you do not obey, there is a risk of machine damage.



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5.9 MEWP shutdown

Look for overhead obstructions or other possible hazards around the MEWP when you raise the platform. Do not lower the platform unless the area below is clear of personnel and obstructions. If you do not obey, there is a risk of death or serious injury.

- 1. Select a reasonably well-protected location to park the MEWP. This location must have a firm, level surface, clear of obstructions and traffic.
- 2. Fully lower the platform
- 3. Push the emergency-stop button.

Fall hazard. Use the three points of contact principle when you use the MEWP ladder to enter or exit the platform. If you do not obey, there is a risk of death or serious injury.

- 4. Use the MEWP ladder to exit the platform.
- Turn the platform/off/base key switch to the off position on the base control console and remove the key.
- 6. Push the emergency-stop button.
- 7. Open the system components tray.
- 8. Pull the main power connector to disconnect it.
- 9. Close the system components tray.



Section 6 – Procedures

6.1 Use the emergencylowering function

With the emergency-lowering system, you can lower the platform if there is a failure of the primary power.

Crush hazard. Keep clear of the lift mechanism when you use the emergency-lowering function. If you do not obey, there is a risk of death or serious injury.

- 1. Remove obstructions before you lower the platform.
- **2.** If necessary, retract the extension platform or move the MEWP to clear an obstruction.

Look for overhead obstructions or other possible hazards around the MEWP when you raise the platform. Do not lower the platform unless the area below is clear of personnel and obstructions. If you do not obey, there is a risk of death or serious injury.

3. Pull the **emergency-lowering** handle **1** to fully lower the platform.



6.2 Push, winch, and tow the MEWP

Tip-over hazard. Make sure the platform is fully lowered before you push, winch, or tow, unless movement is necessary to clear an obstacle. Sudden movement can cause the MEWP to become unstable.

In emergency situations where the MEWP functions are not available, and an obstruction prevents the platform lower function, carefully move the MEWP sufficiently far away to clear the obstruction. Do not move at a speed faster than 50 mm/sec (2 in/sec).

If you do not obey, there is a risk of death, serious injury, and/or MEWP damage.

Runaway hazard. After you release the brakes, the MEWP rolls freely on slopes. Do not manually disengage the brakes unless the MEWP is on a level surface or the MEWP is fully restrained.

Keep the travel path clear at all times.

If you do not obey, there is a risk of death, serious injury, and/or MEWP damage.

When you push, winch, or tow, do not move the MEWP at a speed faster than 3.2 km/h (2.0 mph). If you do not obey, there is a risk of death or serious injury.

SJ3013 & SJ3014 micro

Tip-over hazard. Disengage the brakes manually before you push, winch, or tow the MEWP. If you do not obey, there is a risk of death or serious injury.

- 1. Release the brakes manually.
- **2.** Push, winch, or tow the MEWP to the necessary location.
- 3. Put the MEWP on a firm, level surface.
- 4. Engage the brakes.

Engage the brakes immediately after the MEWP is at the necessary location. If you do not obey, there is a risk of death or serious injury.

to order go to Disc

6.3 Move the MEWP for transport

When you drive a MEWP onto or remove it from a transport vehicle, on a public road, give protection to the person(s) involved. Protection can include:

- Warning cones
- Road signs and signaling devices
- Applicable personal protective equipment, such as reflective clothing
- Flag personnel to warn other vehicles of the MEWP and other related vehicles
- Other applicable control measures.

Obey all the national, state/provincial/territorial, and local safety rules when you move the MEWP for transport. Only qualified personnel with authorization must drive the MEWP onto or remove it from a transport vehicle.

Be sure the vehicle capacity and load equipment, hoists, chains, straps, and other related items are sufficient to withstand the maximum MEWP weight.

Park the transport vehicle on a level surface. Use wheel chocks or blocks to prevent unintended vehicle movement during this operation.

6.3-1 Hoist or Lift the MEWP

\Lambda WARNING

Only qualified riggers must operate the machinery during a lift.

When you hoist or lift the MEWP, you must:

- Turn the platform/off/base key switch to the off position and remove the key.
- Close and tightly latch the system components tray.
- Retract the extension platform and lock it into place.
- Remove the platform control console.
- Remove all personnel, tools, and materials from the platform.
- Fold the platform guardrails (for hoist only). Refer to Section 6.7.
- Attach the rigging to all four lift points ① to hoist. Lift with the forks in the designated forklift pockets ②. Refer to *Figure 01* and *Figure 02*.



Figure 01 Lift and tie-down points and forklift pockets



Figure 02 Appropriate method to hoist

NOTE

For the weight of the MEWP, refer to Section 7.3. Horizontally, the **center of gravity** is approximately in the middle of the MEWP, front to back and side to side. Refer to Figure 03. Vertically, the center of gravity is approximately a small distance above the chassis.

49



Figure 03 Center of gravity

to order go to Dist

6.3-2 Drive and tie-down the MEWP

Before you drive the MEWP:

- The ramp or dock capacity must be able to hold the maximum MEWP weight.
- Use side guards (if available) to prevent a fall from the ramp.
- The incline of the ramp must not exceed the MEWP gradeability. Refer to Section 7.3.
- Do a test of the MEWP brakes to make sure they operate correctly.
- Push the low-speed button to select low speed (high torque).

🛦 WARNING

When you transport the MEWP, it must be attached to a truck or trailer deck. Use the available tie-down points 1 to attach the MEWP. Refer to *Figure 01*. If you do not obey, there is a risk of death or serious injury.

 Tie-down the MEWP to the transport vehicle using the four tie-down points ①. Refer to Figure 01 and Figure 04.



Figure 04 MEWP Tie-down

6.4 Charge the battery

- **1.** Supply sufficient airflow for the batteries and the charger.
- 2. Do a visual and manual inspection of the DC output wires and terminals. Make sure they are in good condition before each use.
- **3.** Make sure the batteries are connected before you charge them.
- 4. Remove the battery vent caps and look at the battery acid level. If it is necessary, add sufficient distilled water to only cover the plates. Do not put too much water in before the charge cycle.
- 5. Install the battery vent caps.
- 6. Connect the power supply cable at the back of the chassis to a correctly grounded socket between 100 to 240 VAC, 50/60 Hz.
- **7.** The charger shows when the battery is fully charged.
- 8. Look at the battery acid level when the charge cycle is complete. Add distilled water to the level of the bottom of the fill tube. Do not put too much water in.

Electrocution hazard. Do not put the charger in water. If you do not obey, there is a risk of death or serious injury.

Burn hazard. Do not touch the surface of the charger when it is in operation, especially in higher temperature environments. Let the charger cool before you touch it. If you do not obey, there is a risk of injury.

Explosion hazard. Be careful when you use fuels, solvents, or other flammable materials near the charger or batteries. A spark from the charger or batteries can cause a fire or explosion. If you do not obey, there is a risk of death or serious injury.

NOTE

Many conditions have an effect on the battery charge time. These include: the battery amp-hour capacity, the remaining charge, the temperature, and the condition (new, used, and defective).

A WARNING

Explosion hazard. Do not disconnect the DC output wires near the batteries when the charger is ON. This can cause an arc, which can then cause the batteries to explode. You must disconnect the AC power supply cable from its socket, and then the charger DC connections. If you do not obey, there is a risk of death or serious injury.

Electrocution hazard. Do not touch parts of the charger output wires that are not insulated, the battery connector, or the battery terminals. If you do not obey, there is a risk of death or serious injury.

Do not charge the batteries in hazardous areas.

6.5 Use the maintenance support

The **maintenance support 1** is a mechanism on the scissor assembly. When it is in the correct position, it can hold the scissor assembly and an empty platform.



WARNING

Use the maintenance support when you do an inspection and/or maintenance or repairs in the confines of the lift mechanism. If you do not use the support, there is a risk of death or serious injury.

🛦 WARNING

Crush hazard. Do not put parts of your body through the scissor assembly unless the maintenance support is correctly deployed. If you do not obey, there is a risk of death or serious injury.

6.5-1 Deploy the maintenance support

1. Remove all personnel and material from the platform.

🛦 WARNING

Look for overhead obstructions or other possible hazards around the MEWP when you raise the platform. Do not lower the platform unless the area below is clear of personnel and obstructions. If you do not obey, there is a risk of death or serious injury.

- 2. Raise the platform until there is adequate clearance to deploy the maintenance support
 1.
- 3. Deploy the maintenance support.
- Lower the platform until the maintenance support touches the cross member with the label, and the platform stops.
- 5. Open the system components tray.
- 6. Pull the main power connector to disconnect it.
- 7. Close the system components tray.

6.5-2 Store the maintenance support

- 1. Open the system components tray.
- 2. Plug in the main power connector.
- 3. Close the system components tray.
- 4. Turn the **platform/off/base key** switch to the base position.

Look for overhead obstructions or other possible hazards around the MEWP when you raise the platform. Do not lower the platform unless the area below is clear of personnel and obstructions. If you do not obey, there is a risk of death or serious injury.

- 5. Raise the platform until there is adequate clearance to retract the **maintenance support**.
- 6. Retract the **maintenance support** into the storage bracket.
- 7. Fully lower the platform.



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6.6 Guardrail lock-pin locations



6.7 Fold the guardrails

When folded down, the guardrail system decreases the total height of the retracted MEWP for transport.

A WARNING

Fall hazard. To prevent a fall, keep away from the sides of the platform when you fold or unfold the guardrails. If you do not obey, there is a risk of death or serious injury.



 Guardrail lock-pin with lanyard: Use this pin to lock the guardrails. Refer to Section 6.6.

Fall hazard. Fully lower the platform before you fold or unfold the guardrails. If you do not obey, there is a risk of death or serious injury.

Before you operate this MEWP, make sure that the guardrail system does not have loose or missing lock-pins. The guardrail system must be in the vertical position. Lock all pins correctly. An incorrectly locked guardrail can cause a fall, which can result in death or serious injury.

6.7-1 Fold the guardrail system down

- 1. Make sure the MEWP is on firm, level ground.
- 2. Make sure you fully lower the platform.
- **3.** Push the **emergency-stop** button on the base control console.
- Turn the platform/off/base key switch to the off position.

Fall hazard. Use the three points of contact principle when you use the MEWP ladder to enter or exit the platform. If you do not obey, there is a risk of death or serious injury.

Fall hazard. Use a stable elevated surface that gives you a solid footing to fold or unfold the guardrails. You must be at eye-level height (at a minimum) to the mid-rail. You must have your hands free to fold or unfold the guardrails from the external side of the MEWP. If you do not obey, there is a risk of death or serious injury.

5. Fully retract the extension platform.

Refer to *Figure 05* for the guardrail folding sequence listed below.

- 6. Remove the **lock-pins** from the control console mounting bracket.
- 7. Put the **platform control console** down on the platform floor.
- 8. Give support to the two inner side guardrails.
- **9.** Remove the lock-pins from both sides of the front guardrail.
- **10.** Fold the front guardrail.
- 11. Fold the inner right guardrail.
- **12.** Fold the inner left guardrail.
- **13.** Remove the lock-pin from the rear guardrail.
- **14.** Swing the rear guardrail toward the opposite outer guardrail.
- **15.** Lock the rear guardrail to the outer guardrail with the same lock-pin.
- **16.** Remove the lock-pin from the outer right side guardrail.
- 17. Fold the outer right side guardrail.
- **18.** Remove the lock-pin from the outer left side guardrail.
- **19.** Fold the outer left side guardrail.

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Figure 05 Guardrail folding sequence

6.7-2 Unfold the guardrails

- 1. Make sure the MEWP is on firm, level ground.
- 2. Make sure you fully lower the platform.
- 3. Push the **emergency-stop** button on the base control console.
- 4. Turn the **platform/off/base key** switch to the off position.

Fall hazard. Use a stable elevated surface that gives you a solid footing to fold or unfold the guardrails. You must be at eye-level height (at a minimum) to the mid-rail. You must have your hands free to fold or unfold the guardrails from the external side of the MEWP. If you do not obey, there is a risk of death or serious injury. Reverse the sequence shown in *Figure 05* to unfold the guadrails, as listed below. Refer to *Section 6.6* for the lock-pin locations.

- **5.** Unfold the outer left side guardrail. Install the lock-pin.
- **6.** Unfold the outer right side guardrail. Install the lock-pin.
- **7.** Put the rear guardrail in place. Install the lockpins in both sides.
- 8. Unfold the inner left guardrail.
- 9. Unfold the inner right guardrail.
- **10.** Give support to the two inner side guardrails.
- 11. Unfold the front extension deck guardrail.
- **12.** Install the lock-pins into both sides of the front guardrail.

🛦 WARNING

Fall hazard. Use the three points of contact principle when you use the MEWP ladder to enter or exit the platform. If you do not obey, there is a risk of death or serious injury. **13.** Install the **platform control console** onto the mounting bracket. Install the lock-pin in the mounting bracket.

Before you operate this MEWP, make sure that the guardrail system does not have loose or missing lock-pins. The guardrail system must be in the vertical position. Lock all pins correctly. An to order go to Discountrefutionment.com incorrectly locked guardrail can cause a fall, which can result in death or serious injury.

Section 7 – Specifications

7.1 Standard and optional equipment

Models	SJ3013 & SJ3014 micro
Standard Equipment	
24V DC power source	*
AGM batteries	*
Lowering alarm	*
Base controls	*
Battery charger indicator	*
Battery level indicator	*
Dual holding brakes	*
Fall protection anchorages	*
Flashing lights	*
Forklift pockets/tie downs/lifting lugs	*
Hinged rail system	*
Hydraulic oil level indicator	*
Locking battery tray	*
Low voltage battery protection	*
Manual extension platform	*
Operator horn	*
Overload warning system	*
Platform controls	*
Pothole protection system	*
Spring-loaded half gate entry	*
Pull-out tray for easy access	*
Rear wheel electric drive with integrated	*
Tilt alarm with drive/lift cut out	*
	2076A

Owner's Annual Inspection Record 7.2



WARNING

Do not use the MEWP if there is no inspection recorded in the last 13 months. If you do not obey, there is a risk of death or serious injury.

IMPORTANT

The Owner's Annual Inspection Record on the scissor assembly must be filled out after an annual inspection is completed. to order go to

> SJ3013 & SJ3014 micro SKYJACK

7.3 Specifications

Weight *						
Worgin	820 kg (1808 lb)					
Overall width	0.76 m (29.92	0.76 m (29.92 in)				
Overall length (Platform Retracted)	1.49 m (58.66	in)				
Overall length (Platform Extended)	1.8 m (70.87 i	n)				
Platform Size - Inside (Platform Retracted)	1.28 m x 0.76 (50.39 in x 29.93	m 2 in)				
Platform Size - Inside (Platform Extended)	1.8 m x 0.76 i (70.87 in x 29.92	m 2 in) +				
Hei	ght 🧷					
	ANSI	CE				
Working Height	6.23 m (20 ft 5.23 in)	6.4 m				
Platform Elevated Height	4.4 m (14 ft 5.23 in)	4.4 m				
Stowed Height (Railings Down)	1.59 m (62.60 in)	1.59 m				
Stowed Height (Railings Up)	2.02 m (79.53 in)	2.05 m				
Drive Height	Full					
Standard Ope	erating Times					
Lift Time (No Load)	23 s					
Lower Time (No Load)	19 s	19 s				
Lift Time (Rated Load)	Load) 25 s					
Lower Time (Rated Load)	18 s					
Cha	ssis					
Normal Drive Speed	3.0 km/h (1.9 mph)					
Elevated Drive Speed	0.8 km/h (0.5 m	iph)				
Gradeability (Ramp Angle)	25%					
Tires (Solid Rubber)	230M					
Sound Pressure Level at Platform Level						
Does not exceed:	70 dB(A)					

2087AB

7.4 Environment

Model	SJ3013 & SJ3014 micro			
Electromagnetic Compatibility (EMC)	Do not use near intense electromagnetic fields (radar, high voltage or high currents).			
Hazardous Location Rating	The MEWP is not rated for hazardous locations with potentially flammable gases, explosive gases or particles.			
	Operating Temperatures			
-20°C (-4°F) – +40°C (+104°F)				

2078AB

7.5 Maximum platform capacities (evenly distributed)

Model	Wind rating	Total platform capacity		Extension platform capacity	Manual side force	Tilt cutout setting (side-to-side x front-to-back)	
SJ3013 & SJ3014 micro	0 m/s [0 mph]	240 kg (529 lb)	2 Persons	100 kg (220 lb) 1 Person	400 N 90 lbf	2.5° × 3.5°	

2079AB

NOTE

Occupants and materials are not to exceed the rated load. Refer to the capacity label at the entrance of the platform and the front kick plate for more information and models equipped with options.

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7.6 Floor loading pressure

		Weights				Pressures				
Model		MEWP weight		Max weight per wheel		LCP**		OFL**		
		kg	lb	kg	lb	N/mm ²	psi	N/mm ²	psf	
SJ3013 &	Min*	820	1808	265						
SJ3014 micro	Max*	1060	2337		584	0.57	82	0.013	271	

2080AB

Min: Minimum MEWP weight (Unloaded platform, no options/attachments)
 Max: Maximum MEWP weight (Platform loaded to capacity with options/attachments)

Wheel is the weight that can be experienced on one wheel. Note: This is more than 25% of the machine weight due to possible weight distribution over the machine and platform.

** LCP: Local Concentrated Pressure is a measure of how hard the MEWP presses on the area in direct contact with the floor/tire. OFL: Overall Floor Load (Pressure) is a measure of the average load the MEWP imparts on the whole surface directly underneath the chassis. This has been calculated by dividing the MEWP weight by the overall floor area occupied by the MEWP (on wheels).

Note: The floor covering (e.g., tile, carpet, etc.) or the structure (e.g., beams) of the operating surface must be able to withstand more than the values indicated above.

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

Section 8 – Labels





Description

Hazard identification

Read and understand the specified hazards with this MEWP before operation. Refer to Section 2.

Manual storage box

Shows the location of the operation manual. *Note: This label is inside the platform.*

Platform capacity*

Shows the rated work load in each configuration.

*Each model has different platform capacities.

Horizontal load rating**

Do not apply more than the specified side load. Operate the MEWP when the wind speed, which includes wind gusts, is less than the specified speed for this model.

**The rating changes between different units.

Operator daily inspection

Refer to the operation manual. Do the visual inspections and function tests when you start each work shift. Refer to *Section 4.2*.





Rear, continued



SJ3013 & SJ3014 micro

Rear, continued



Description

8 Maintenance support procedure

Refer to the operation manual.

- 1. Remove all personnel and material from the platform.
- 2. Raise the platform until there is adequate clearance to deploy

the maintenance support.

3. Deploy the maintenance support. Lower the platform until the maintenance support touches the cross bar with the label, and the platform stops.

4. The maintenance support is now secured.

- (A) Pull the main power connector to disconnect it.
- (B) Do the necessary inspection or maintenance.
- 5. Plug in in the main power connector.

6. Raise the platform until there is adequate clearance to retract the maintenance support.

- 7. Store the maintenance support in the storage bracket.
- 8. Fully lower the platform.



Connect the AC supply here.







Rear, continued



Manual storage box Shows the location of the operation manual.



67



SJ3014 micro



Left side, continued



Left side, continued



Stay away from the MEWP when it is in operation.



8.3 System components tray



Platform 8.4 1 3 1 Description Label Pictorial **1** Fall-protection anchorages - * For North American (ANSI) models only When required, attach the body-harness lanyards of each occupant to the fall-protection anchorage points. Rated for one (1) person for each anchorage point.



When required, attach the body-harness lanyards of each occupant to the fall-protection anchorage points.

Rated for one (1) person for each anchorage point.

Do not use for fall arrest.

Warning - fall hazard

Make sure the hinged railing is locked with **lock-pins**.







Platform continued



6 AC power plug Connect the AC supply here.









Right side, continued



Stay away from the MEWP when it is in operation.




1 Emergency-lowering procedure

Refer to the operation manual.

- **1.** Push the emergency stop button.
- 2. Pull the emergency-lowering handle to fully lower the platform.



2 Warning - deploy maintenance support

Do not do maintenance or inspections in the scissor assembly unless the maintenance support is deployed. Refer to Section 6.5.





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