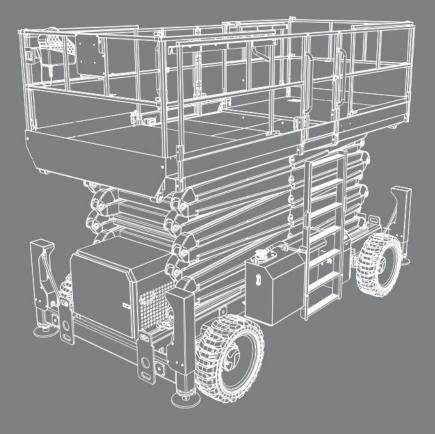


OPERATION MANUAL

SJ9233 RT, SJ9243 RT, SJ9253 RT, SJ9664 RT

ROUGH TERRAIN SCISSORS



222852AFAA

January 2021 AS

This manual is for MEWPs with serial numbers:

SJ9233 RT, SJ9243 RT, SJ9253 RT: A202 000 001 & Above SJ9664 RT: A203 000 001 & Above

Please refer to the website (www.skyjack.com) for contact information, other Serial Numbers, most recent Technical Manuals, and USB software.

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.

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.

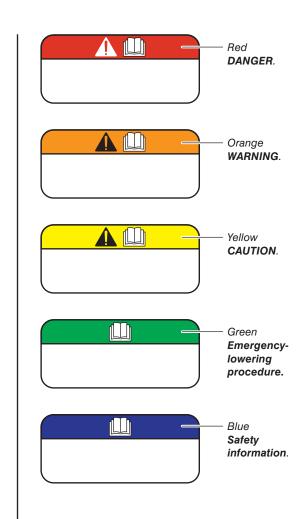


Table of Contents

Sect	ion 1 –	About this Mobile Elevating Work Platform (MEWP)	9
1.1		and heed.	
	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 MEWP	9
	1.1-8	Optional equipment	9
	1.1-9	Scope of this manual	10
1.2	Prima	ry assemblies	11
1.3	Serial	number nameplate	12
1.4	Mainte	enance responsibility	13
	1.4-1	Operator	13
	1.4-2	Maintenance and inspection schedule	13
	1.4-3	Owner	13
Sect	ion 2 –	General Safety Precautions	15
2.1		ocution hazards	
	2.1-1	Minimum distance from electrical conductors	
2.2		/ instructions	
2.3		rotection	
2.4		site inspection	
		Familiarization	
3.1		iew of the MEWP	
3.2		al storage box	
3.3	Contro	ol functions	
	3.3-1	Main power disconnect switch	
		Base control console	
	3.3-3	Platform control console	
	3.3-4	Engine control console	
3.4	Featu	res and devices	
	3.4-1	Lowered travel position and elevated travel position	
	3.4-2	Drive speed	27
	3.4-3	Tilt switch	27
	3.4-4	Brake release system	27

	3.4-5	Freewheeling valve	. 27
	3.4-6	Emergency-lowering system	. 27
	3.4-7	Fall-protection anchorage	. 28
	3.4-8	Platform load-sensing system	. 28
	3.4-9	Maintenance support(s)	. 29
	3.4-10	Auto-level system	. 29
3.5	Genera	al components	.29
	3.5-1	AC power socket on the platform	. 29
	3.5-2	Folding-guardrail system	. 29
	3.5-3	Extension platforms	. 30
	3.5-4	ECOStart	. 30
3.6	Option	al equipment	.31
	3.6-1	Motion alarm	. 31
	3.6-2	Secondary Guarding Lift Enable (SGLE) push-button	. 31
	3.6-3	Elevate™ telematics - access control unit	. 31
	3.6-4	Cold Weather Start Kit Operation	. 33
Saati	on 1	Inspections Before Operation	25
4.1		tor's responsibility	
4.2		and daily maintenance inspections	
	4.2-1		
	4.2-2	Electrical	
	4.2-3	Hydraulic	
	4.2-4	Wheel/tire assembly	
	4.2-5	Base	
	4.2-6	Hydraulic and base control side	
	4.2-7	Rear side	
	4.2-8	Fuel tank side	
	4.2-9		
		Platform assembly	
		Lift mechanism	
4.3		on tests	-
	4.3-1	Do a test of the main power disconnect switch	
	4.3-2	Do a test of the control module and load sensing module self-check.	
	4.3-3	Do a test of the emergency-stop button on the base	
	4.3-4	Do a test of the off/base/platform key switch.	
	4.3-5	Do a test of the base lift enable switch	
	4.3-6	Do a test of the emergency-lowering function	
	4.3-7	Do a test of the emergency-stop button on the platform	
	4.3-8	Do a test of the function-enable switch	
	4.3-9	Do a test of the steer function	
	4.3-10	Do a test of the drive function	
	4.3-11	Do a test of the anti-tiedown function	
	4.3-12	Do a test of the brakes	. 52

	4.3-13	Do a test of the platform raise and lower functions
	4.3-14	Do a test of the horn
	4.3-15	Do a test of the elevated travel speed
	4.3-16	Do a test of the outrigger interlocks
	4.3-17	Do a test of the generator (optional equipment)
	4.3-18	Do a test of the SGLE switch (optional equipment)
	4.3-19	Do a test of the positive air shutoff (optional equipment)
4.4	Opera	tor's checklist
Secti	on 5 –	Operation
5.1		ze the base control console
5.2		or lower the platform with the base control console
5.3		ize the platform control console
5.4	Raise	or lower the platform with the platform control console
5.5		forward or rearward
5.6	Steer.	
5.7	Select	the level-drive or inclined-drive mode
5.8	Extend	d/retract the extension platforms64
5.9		e auto-level
5.10	Start a	nd stop the generator (optional equipment)65
5.11	Raise	and lower with the SGLE platform control console (optional equipment)
5.12	Engag	e or disengage the differential lock
5.13	EcoSta	art
5.14	MEWP	9 shutdown
Secti	on 6 –	Additional Procedures
6.1	Use th	e emergency-lowering function
6.2		Winch and Tow the MEWP
6.3		e platform control console from the ground
	6.3-1	Disconnect and remove the platform control console
	6.3-2	Operate the MEWP from the ground
6.4	Refuel	
	6.4-1	Refuel the MEWP with diesel
6.5	Move	the MEWP for transport
	6.5-1	Hoist the MEWP
	6.5-2	Drive and tie-down the MEWP
6.6	Use th	e maintenance support(s)74
	6.6-1	Deploy the maintenance support(s)
	6.6-2	Store the maintenance support(s)
6.7	Fold th	ne guardrail
	6.7-1	Fold the guardrail system down
	6.7-2	Unfold the guardrail system
6.8	Move	the MEWP through a doorway

Sectio	on 7 –	Specifications	1
7.1	Standa	ard and optional equipment	1
7.2	Owner	's annual inspection record8	2
7.3	Specif	ications	3
7.4	Enviro	nment	4
7.5	Maxim	um platform capacities (evenly distributed)8	4
7.6	Floor I	oading pressure	5
Sectio	on 8 –	Labels	7
8.1	Base o	ontrol labels	8
8.2	Platfor	m control labels	0
8.3	SJ923	3 RT, SJ9243 RT, SJ9253 RT & SJ9664 RT labels9	1
	8.2-1	Left side	1
	8.3-1	Rear side	9
	8.3-2	Right side	3
	8.3-3	Front side	9
	8.3-4	Engine compartment	2
	8.3-5	Outriggers	3
	8.3-6	Fall-protection anchorages	4
	8.3-7	Cold/Arctic Package	5
Sectio	on 9 –	Unique Skyjack Features11	7

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 Rough Terrain 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 MEWP

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.

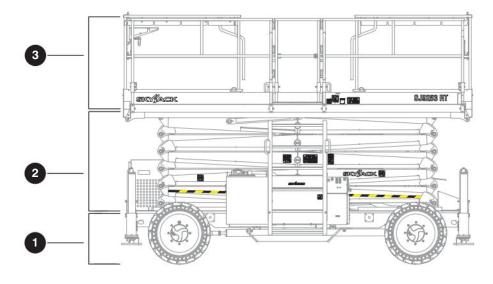
1.1-8 Optional equipment

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

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

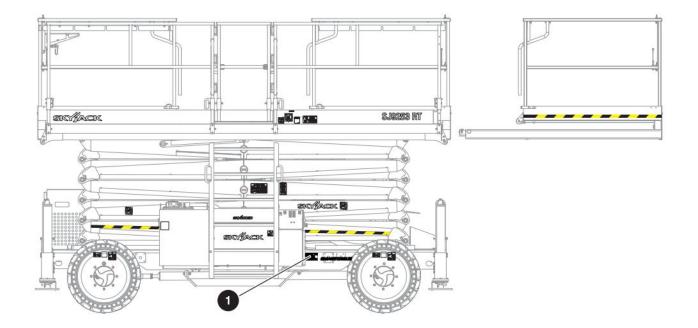


1.2 Primary assemblies

The MEWP has these primary assemblies:

- 1. Base
- 2. Lift mechanism
- 3. Platform.
- Base: The base is an assembly consisting of these components:
 - A tray on two brackets attached to the right side of the base. The tray contains these parts:
 - A fuel tank with a fuel gauge on the side of the tank
 - A ladder
 - A tray on two brackets attached to the left side of the base. The tray contains these parts.
 - Hydraulic tank and sight gauge
 - Ladder
 - Base control console
 - 12V starter battery.
 - Two front and two rear outriggers.
 - Emergency-lowering system at the base control console.
 - Engine compartment at the front of the base.
 - Hydraulic compartment at the rear of the base.
- The front axle is steerable by a hydraulic cylinder.
- The rear axle is hydraulic motor-driven. A drive shaft connects the rear axle to the front axle. The rear axle has spring-applied, hydraulicallyreleased brakes.

- A two-section hydraulic pump that gives power to the hydraulic system is connected to the engine.
- An engine control console in the engine compartment at the front of the base.
- 2 Lift mechanism: The lift mechanism is a scissortype assembly made of formed steel or tube sections. Single-acting hydraulic-lift cylinders with holding valves move 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 two sides through a spring-returned gate with a latch.
 - Front extension platform.
 - Rear extension platform.
 - AC power outlet.



1.3 Serial number nameplate

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

- Model number
- Туре
- Group
- Serial number
- Registration number
- Indoor or outdoor use
- Capacity and maximum number of persons
- Voltage
- System pressure
- Maximum platform height
- Maximum drive height
- Maximum manual force
- Model year
- Year of manufacture
- MEWP weight
- Maximum wind speed
- Maximum incline

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 the latest service bulletins before you do frequent/periodic or annual inspections.

1.4-3 Owner

The owner is responsible for 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 properly 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. Obey all the national, state/provincial/territorial and local safety rules.

2.1-1 Minimum distance from electrical conductors

Voltage Range (Phase to phase)	Minimum Distance from Electrical Conductors (Meters)			
	Without Spotter	With Spotter		
Up to and including 133KV	6.4	3		
Greater than 133KV	10	8		

A 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

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

A WARNING

DO NOT operate this mewp in enclosed areas without adequate ventilation for exhaust gas and fumes. Failure to follow this warning could cause death or serious injury.

A WARNING

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.

DISCONNECT and lock out main power disconnect 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 7.5.



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.

Safety instructions



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 or outriggers 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 7.5).



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

Make sure the wheel nuts are tight.



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



DO NOT use the MEWP without guardrails, locking 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.

222852AFAA

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.

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.

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 7.4*).

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.

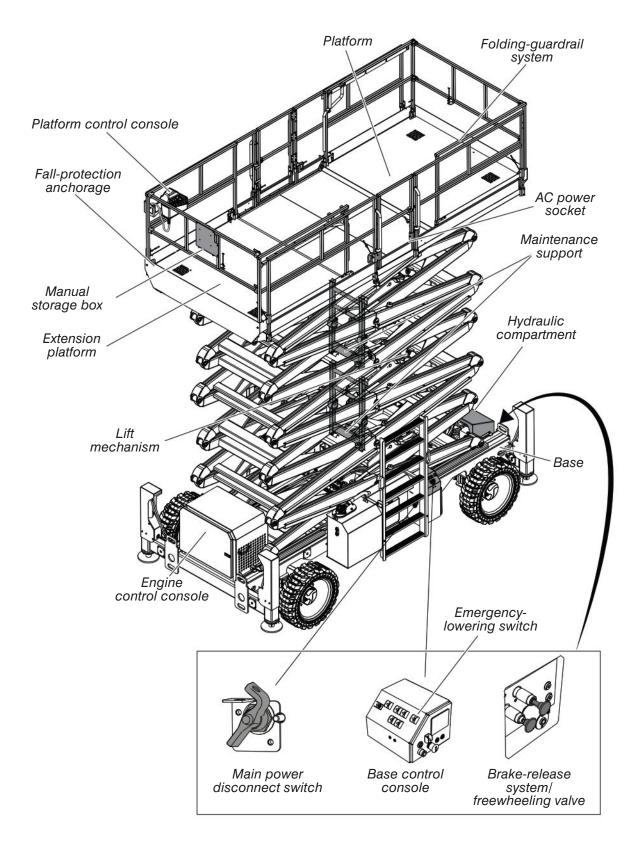
It is the responsibility of the operator to fully understand, and follow all instructions and warnings contained in this operation manual and on the MEWP. If you do not obey, there is a risk of death or serious injury.

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:

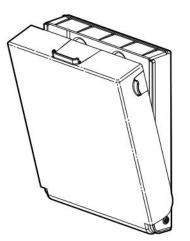
- 1. Worksite inspection. Refer to Section 2.4.
- 2. Daily visual and maintenance inspections. Refer to *Section 4.2*.
- 3. Function tests. Refer to Section 4.3.

3.1 Overview of the MEWP



3.2 Manual storage box

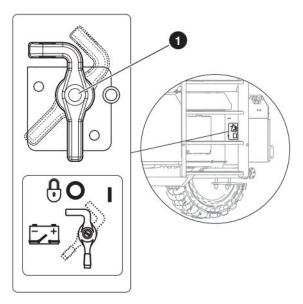
The manual storage box is weather-resistant. It contains the operation manual and other important documents. You must keep the operation manual for the make and model of this MEWP in this box. Refer to *Section 3.1* for the location of the manual storage box.



3.3 Control functions

3.3-1 Main power disconnect switch

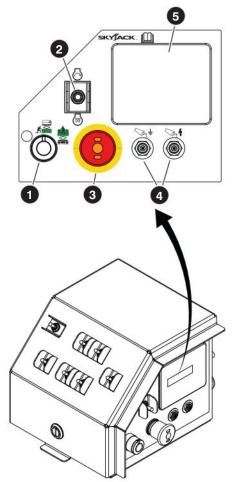
Refer to *Section 3.1* for the location of the main power disconnect switch.



Main power disconnect: This switch disconnects power to all control circuits when it is in the off position. The switch must be in the on position to operate the MEWP. The switch must be in the off position when you transport the MEWP or put it in storage.

3.3-2 Base control console

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

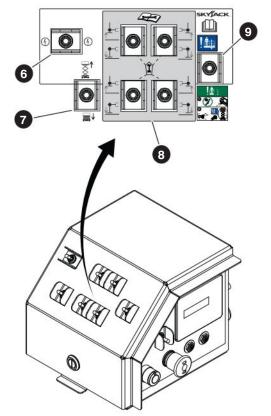


Off/base/platform key: With this three-way switch, you can:

- Turn off the power to the MEWP controls.
- Energize the base controls.
- Energize the platform controls.
- Engine start/glow plug: In the start position, this switch starts the engine. In the glow plug position, it energizes the glow plugs. This helps to start a cold diesel engine. The glow plugs only operate when the switch is held.

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

- Circuit breaker: If a power overload or positive circuit grounding occurs, the circuit breaker comes out. Push the circuit breaker back into the initial position to reset the power.
- Skycoded[™] display panel: This display panel shows operation and parameter information. Examples are the hours of operation, tilt angle, and error codes.

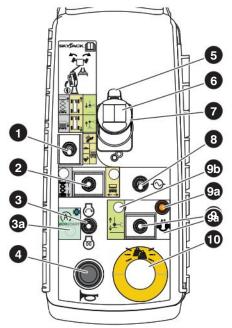


- 6 **Enable:** This switch energizes the circuit that lets the lift, lower, emergency-lowering, and outrigger functions operate.
- Lower/neutral/raise: This switch controls the function to lower or raise the platform.
- Outriggers: This switch controls the function to manually extend or retract individual outriggers for service and maintenance purposes only. This function is to be used by a qualified service technician only.
- Emergency-lowering: This switch controls the function to lower the platform if there is a failure of the primary power.

3.3-3 Platform control console

Use this control console to operate the MEWP from the platform or the ground. To operate the MEWP from a position on the ground, refer to *Section 6.3*.

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



Inclined drive/level drive: This switch selects the following speeds:

- Level drive high speed (low torque) when driving on flat surfaces.
- Level drive low speed (high torque) when driving on rough terrains.
- Inclined drive provides maximum torque when climbing grades.

2 Lift/off/drive: A light next to this switch illuminates to indicate the selected mode.

- The off position on this switch disconnects the power to both the lift and drive circuits.
- The lift position energizes the lift circuit.
- The drive position energizes the drive circuit.

Engine start/glow plug: In the start position, this switch starts the engine. In the glow plug position, it energizes the glow plugs. This helps to start a cold diesel engine. The glow plugs only operate when the switch is held.

ECOStart/Engine glow plug light: A blue light comes on when the engine stops because of the ECOStart function. An amber light comes on while the glow plugs are energized. The light goes off when the glow plugs are prepared to start the engine.

- Horn: This push-button makes a sound like a car horn.
- Lift/drive/steer/auto-level function-enable: This switch energizes the controller handle. Squeeze and hold the switch continuously to engage the lift, drive, steer, and auto-level functions.
- 6 Steering rocker: This switch controls the left and right steering. Release the switch to return it to the neutral position.
- Lift/drive/auto-level controller: This one-hand lever controls the lift, drive, and auto-level movements. To return it to the initial neutral position, release the controller.
- Generator (optional equipment): This switch starts the generator.
- Auto-level/differential lock: In the auto-level position (available only in lift mode), this switch enables the controller operation of the outrigger auto-level function. In the differential lock position (available only in drive mode), this switch makes the light a go on, and the differential lock engages. The differential lock is only available in the drive mode.

Auto-level light

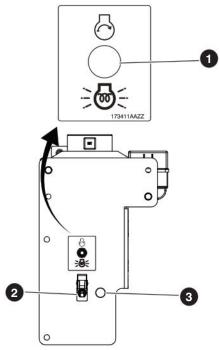
Auto-level light	Outrigger condition
Off	The outriggers are fully retracted. The outriggers are not active.
Flashing slowly	Indicates the outrigger extension or retraction.
Flashing quickly	The outriggers are extended and the MEWP is not level, or there is an outrigger or auto- level function error.
On	The outriggers are extended and the MEWP is level. The light is on while the auto-level function is active only.

Emergency-stop/operation light: This button, disconnects the power to the control circuit.

- When the light is on continuously, the platform controls are available.
- When the light flashes, there is an overload (refer to *Section 3.4-8*).

3.3-4 Engine control console

This control console is on a bracket on the radiator in the engine compartment.



Engine start/glow plug: In the start position, this switch starts the engine. In the glow plug position, it energizes the glow plugs. This helps to start a cold diesel engine. The glow plugs only operate when the switch is held.

Positive air shut-off (optional equipment): This switch stops the air supply to the engine. This is useful if the engine does not immediately stop when the power is off.

Positive air shut-off light (optional equipment): This light continuously illuminates when the positive air shut-off valve disengages.

3.4 Features and devices

3.4-1 Lowered travel position and elevated travel position

The available MEWP functions depend on these factors:

- MEWP configuration (lowered travel position/ elevated travel position)
- Chassis angle
- Platform load.

The MEWP is in the lowered travel position when the platform is below height "A" (refer to *Figure 01*).

The MEWP is in the elevated travel position when the platform is at or above height "A" (refer to *Figure 01*).

When the platform is above the maximum drive height, the drive function does not work (refer to *Figure 01*).

Model	A - Height	Maximum drive height
SJ9233 RT	< 2.28 m	Full height
SJ9243 RT	< 2.72 m	Full height
SJ9253 RT	< 3.73 m	10.06 m
SJ9664 RT	< 4.50 m	9.14 m

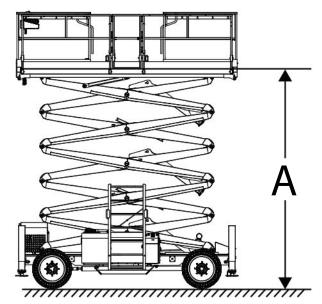


Figure 01 Lowered and elevated travel position

3.4-2 Drive speed

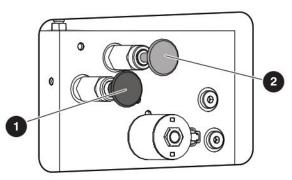
The drive speed depends on the MEWP configuration (lowered travel position/elevated travel position). When the MEWP is in the elevated travel position, the speed is slower than the speed in the lowered travel position. Refer to *Section 7.3*.

3.4-3 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 7.5.* 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 on the lower cross member flashes. If the alarm makes a sound, fully lower the platform. Level the MEWP before you raise the platform.

3.4-4 Brake release system

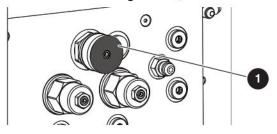
This system disengages the brakes manually before you push, winch, or tow the MEWP. Refer to *Section 6.2* for the procedure. Refer to *Section 3.1* for the location of the brake-release system.



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

3.4-5 Freewheeling valve

Refer to *Section 6.2* for the procedure on how to release the freewheeling valve **1**.



3.4-6 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 *Figure 02* for the location of the emergency-lowering switch.

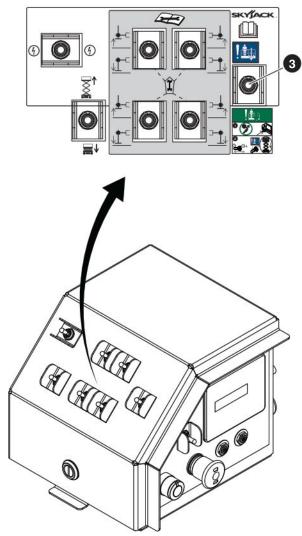
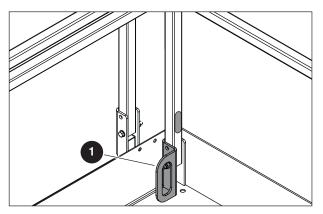


Figure 02 Emergency-lowering switch

Emergency-lowering switch

3.4-7 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.

A WARNING

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.

3.4-8 Platform load-sensing system

The platform load-sensing system prevents normal MEWP movement when the platform is overloaded and in a stationary position. Refer to *Section 7.5* for platform capacities.

Load status	Result
The platform is near the rated load. All functions are available.	The light on the emergency-stop button flashes on the platform and base control consoles.
The platform is at the rated load. All functions are available.	The alarm sounds. The light on the emergency- stop button flashes on the platform and base control consoles.
The load on the platform is more than the rated load. All normal MEWP	The light on the emergency- stop button continues to flash on the platform and base control consoles. The alarm continues to
movement functions are unavailable.	sound at an increased frequency.

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

A WARNING

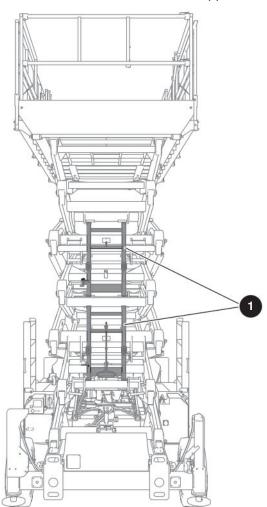
Fall hazard. Do not try to free a snagged platform with the base controls until you remove all personnel from the platform. If you do not obey, there is a risk of death or serious injury.

3.4-9 Maintenance support(s)

Use the **maintenance support(s) 1** when you do an inspection of the lift mechanism or do maintenance. Refer to *Section 6.6* for the procedure on how to use the maintenance support(s).

NOTE

Models SJ9233 RT, SJ9243 RT, and SJ9664 RT only have one maintenance support, found at the bottom. Model SJ9253 RT has two maintenance supports.



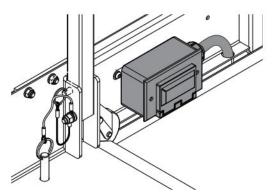
3.4-10 Auto-level system

The auto-level system deploys and retracts all four outriggers at the same time. Use this system to level the MEWP from the platform.

3.5 General components

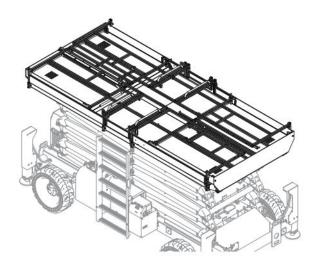
3.5-1 AC power socket on the platform

The AC power socket is a source of AC power on the platform when the plug at the base is connected to a generator or an external power supply.



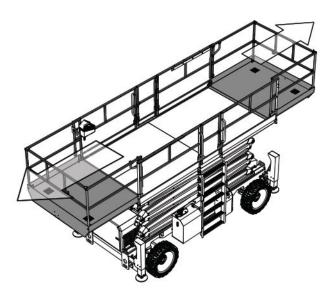
3.5-2 Folding-guardrail system

When you fold down 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.



3.5-3 Extension platforms

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



3.5-4 ECOStart

The ECOStart function stops the engine after it is idle for three minutes. The use of a function or control will reset the ECOStart timer to three minutes.

NOTE

The ECOStart will not start until the engine is at a correct temperature to operate, and it is at idle for three-minutes.

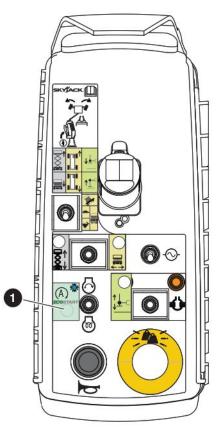


Figure 03 ECOStart light on the platform control console

ECOStart light

NOTE

Make sure the ECOStart-enabled MEWP has an Ecostart-enabled control box, as shown by the light in Figure 03. See the ECOStart instructions.

SJ9233 RT, SJ9243 RT, SJ9253 RT, SJ9664 RT

SKYJACK

222852AFAA

3.6 Optional equipment

Skyjack approved modifications and attachments can change the MEWP specifications. Refer to the applicable instructions and labels.

IMPORTANT

Refer to the labels of the optional equipment for the actual weight. Include this weight to calculate the total load on the platform. Include personnel and other materials in the total load.

The weight of the attached parts, panels, occupants, and tools put together must not be more than the rated platform capacity.

3.6-1 Motion alarm

The alarm makes a sound when a control function operates. On some MEWPs, an amber flashing light goes with this alarm.

3.6-2 Secondary Guarding Lift Enable (SGLE) push-button

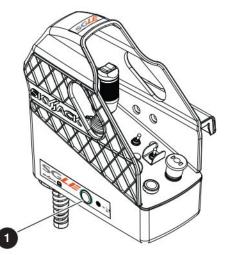
3.6-3 Elevate[™] telematics - access control unit

Access control is an added function of the Elevate[™] Trackunit. The access control function does not have an effect on: emergency-lowering, load sensing, the horn, and when you lower the platform. These functions are always available. The access control unit does not allow the engine to operate without an approved code or card.

IMPORTANT

The owner is responsible to supply PIN codes or Smart ID cards for MEWPs that have the access control function. Skyjack does not supply or reset PIN codes or Smart ID cards. Speak to the MEWP owner to help you with PIN codes or Smart ID cards that do not function, or you cannot find.

With the access control function, the user can control access to the MEWP operation. You can get unique PIN codes or Smart ID cards to unlock and start the MEWP. For this function, an Elevate[™] telematics device and an access control keypad are necessary. With the Trackunit Manager, the MEWP owner can customize the access control to the MEWP (https://www.trackunit.com/services/manager/). Speak to the MEWP owner to help you with PIN codes or Smart ID cards that do not function, or you cannot find.



SGLE: This push-button energizes the lift function. Hold the button down together with the function-enable switch to enable the raising of the platform with the lift function.

NOTE

The SGLE does not have an effect on these functions: lower, drive, steer, auto-level, or emergency-lowering.



Figure 04 Keypad of the access control unit

Orange indicator: This light shows that the access control unit is ON. The keypad always has power regardless of the emergency-stop, off/base/platform key switch, or main power disconnect position.

Green/red indicator: A green light shows that the access control unit is in operation. A red light that flashes shows that the keypad received a cancel input.

Operation

To operate the MEWP, the light and all of these power connections must be ON before the set time expires. This set time is the time that the MEWP owner sets for the access control operation.

- The green light on the keypad of the access control unit.
- The main power disconnect switch.
- The emergency-stop button on the base control console.
- The off/base/platform key switch.

You can also set these power connections to ON before you start the access control unit.

To operate the access control unit, use the PIN code or Smart ID card.

With the Keypad:

NOTE

This touch-sensitive keypad beeps to identify a correct input.

1. Enter the PIN code.

- 2. Press the green checkmark to confirm.
 - **Result:** The green light identifies an approved ID. Start the operation.

NOTE

If you push an incorrect button when you enter the PIN code, push the Cancel button to start again.

With the Smart ID Card:

- 1. Put the card in front of the reader.
- 2. A beep identifies that the reader read the card.
 - Result: The green light identifies an approved ID. Start the operation.

IMPORTANT

If the set time of the access control unit expires, enter the PIN code or tap the Smart ID card again. If there is a failure of the access control activation, speak to the MEWP owner.

IMPORTANT

The access control unit will not operate if these power connections are not ON in the set time, or if the operator disconnects them:

- The main power disconnect switch
- The emergency-stop button on the base control console
- The off/base/platform key switch.

IMPORTANT

To start the access control unit, enter the PIN code or tap the Smart ID card. These power connections must be in the ON position in the set time:

- The main power disconnect switch
- The emergency-stop button on the base control console
- The off/base/platform key switch.

Function Tests

Do the function tests as specified in Section 4.3.

When you do the function tests, make sure that the green light on the keypad is ON. This light confirms that the access control unit is in operation. Do the function tests for these power connections in the set time:

- The main power disconnect switch
- The emergency-stop button on the base control console
- The off/base/platform key switch.

SKYACK

222852AFAA

3.6-4 Cold Weather Start Kit Operation

Plug heaters in a minimum of 4 hours before operation.

Do not leave heaters on for more than 12 hours consecutively.

Do no use heaters if temperature is above freezing.

Make sure hydraulic oil level is visible in the sight gauge.

Make sure the electrical circuit can handle the combined current draw from the hydraulic tank heater, battery blanket, and block heater.

Section 4 – Inspections Before Operation

4.1 Operator's responsibility

Do these tasks before each work shift and in this sequence:

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

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.

A 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 from service. 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.

🛦 WARNING

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 main power disconnect 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.



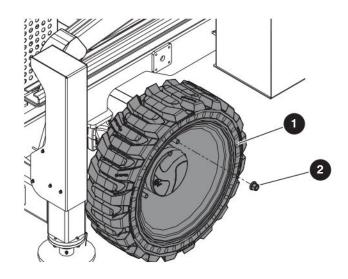
4.2-1 Labels

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
- Engine compartment electrical panel
- Engine 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, gauge, filter, fittings, hoses
- Engine compartment fittings, hoses, primary pump, and filter
- All hydraulic cylinders
- All hydraulic manifolds
- The ground area below the MEWP
- Outriggers

4.2-4 Wheel/tire assembly

Do the inspection that follows:

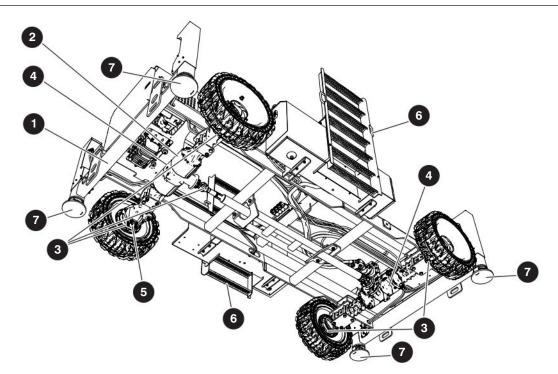
Wheel/tire assembly

- 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 are no loose or missing parts.
- 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 installed and are tight.



4.2-5 Base

Do the inspection that follows, and make sure:

Base weldment

- There are no cracks in the welds or structure.
- There are no signs of deformation.

Steer cylinder assembly

- The steer cylinder assembly is correctly installed.
- There are no loose or missing fasteners.
- There is no visible damage.

Greasing points

- There is no visible damage.
- There is no dirt or obstructions.

Orive axles

- There are no loose or missing parts.
- All the fittings and hose connections are tight.
- There is no sign of hydraulic leakage.

5 Tie rod

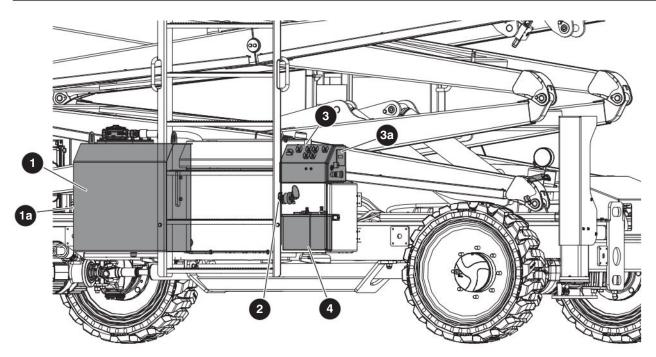
- There are no loose or missing parts.
- The tie rod end studs are attached and tight.
- There is no visible damage.

6 Ladder

- There are no loose or missing parts.
- There is no visible damage on the left and right MEWP ladders.

Outriggers

- There are no loose or missing parts.
- There is no visible damage.



4.2-6 Hydraulic and base control side

Do the inspection that follows:

Hydraulic tank

- Make sure the hydraulic filler cap closes tightly.
- Make sure there is no visible damage or hydraulic leaks.
- Hydraulic oil level:
 - 1. Make sure the platform is fully lowered and the outriggers are retracted.
 - 2. Do a check on the **gauge 1** on the left side of the hydraulic oil tank. The hydraulic oil level must be at or a small distance above the top mark of the gauge.

2 Main power disconnect switch

- Turn the main power disconnect switch to the off position.
- Make sure the switch rotates and stays in the on and off position.
- Make sure the cables are not loose.

Base control

- Make sure there is no visible damage, and all the switches are in their off/neutral positions.
- Make sure the Skycoded[™] display panel is correctly attached, and there is no visible damage.



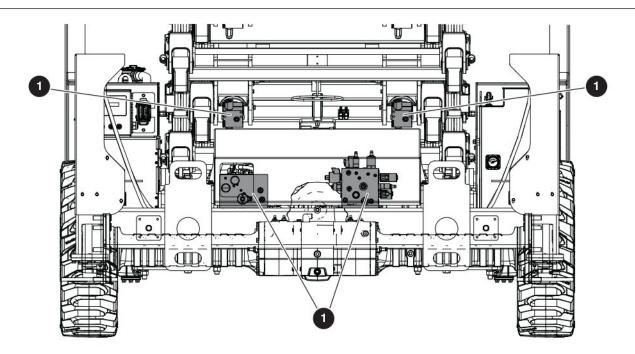
Explosion hazard. Keep flames and sparks away. Do not smoke near the batteries. Batteries release explosive gas while you charge them. Charge the batteries in a well-ventilated area. If you do not obey, there is a risk of death or serious injury.

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, check the battery fluid levels. If the plates do not have a minimum 13 mm of solution above them, add distilled or demineralized water.

🛦 WARNING

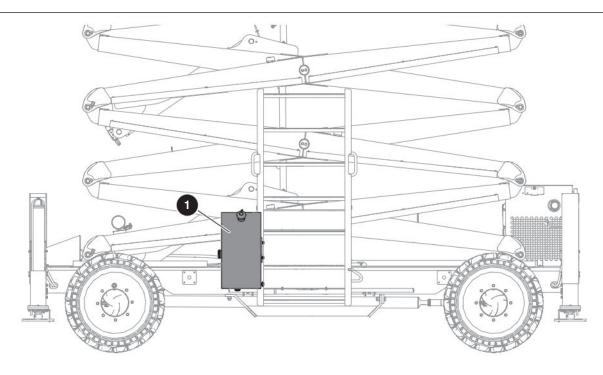
Only use original or manufacturer-approved parts and components for the MEWP. If you do not obey, there is a risk of death, serious injury, or machine damage.



4.2-7 Rear side

Manifolds

- 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.



4.2-8 Fuel tank side

Do the inspection that follows:

🛦 WARNING

Explosion or fire hazard. Do not smoke near the fuel system. If you do not obey, there is a risk of death or serious injury.

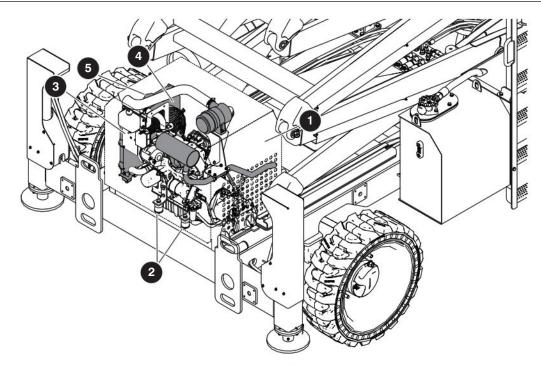
IMPORTANT

Before you use the MEWP, make sure there is sufficient fuel for the estimated task.

Fuel tank

- Make sure that the fuel filler cap closes tightly.
- Make sure there is no visible damage to the tank, gauge, hoses, or fittings.
- Make sure there is no indication of fuel leakage from the tank, gauge, hoses, fittings, pump, and filter.

Environmental hazard. Immediately remove diesel fuel, engine oil, and hydraulic fluid spills and leaks with rags. Discard these rags in accordance with national, state/provincial/territorial, and local regulations. Spilled fluids can damage the environment. When spilled fluids go into the water (for example, a sewage system, streams, rivers, or other surface water), they can kill aquatic life.



4.2-9 Engine side

Do the inspection that follows:

Engine compartment cover

- Make sure that the engine access door is latched tightly and in good condition.
- Make sure that the hinges and lockable latch on the engine access door are latched tightly and in good condition.
- Make sure that the hinges have sufficient lubrication.

🛦 WARNING

Burn hazard. Do not touch hot engine components without the correct PPE. Let the engine cool before you do an inspection or servicing. If you do not obey, there is a risk of death or serious injury.

2 Engine and engine mounting plate

- Make sure there are no loose or missing parts.
- Make sure there is no visible damage to the engine and engine mounting plate.
- Make sure that the engine is correctly attached to the mounting plate.

Engine control console

- Make sure that the engine control console is correctly attached. Make sure there is no visible damage to the housing or the mounting hardware.
- Make sure that all the toggle switches are in the neutral position and correctly attached. Make sure there is no visible damage on the switches.

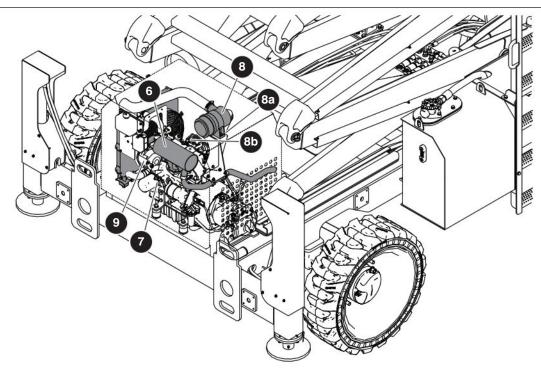
4 Radiator

- Make sure that the radiator is correctly installed.
- Make sure there are no loose or missing parts
- Make sure there is no visible damage.

Engine coolant

Burn hazard. There is pressurized fluid in the radiator. Do not open the radiator cap when it is hot. Wear the correct PPE. Let the engine cool before servicing. If you do not obey, there is a risk of death or serious injury.

- Do a check of the coolant level. Add coolant if it is necessary.
- Make sure there are no coolant leaks.



6 Muffler and exhaust

 Make sure that the muffler and exhaust systems are correctly attached with no visible damage.

Engine oil level

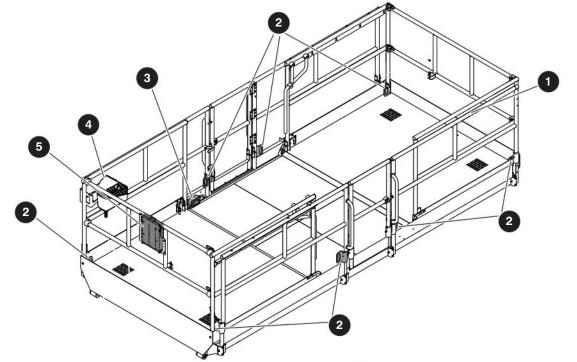
- Use the dipstick to check the oil level.
- The oil level must be between the marks L (low) and H (high). Add oil if it is necessary.

Engine intake air filter

- Make sure there are no loose or missing parts.
- Make sure there is no visible damage.
- Squeeze the lips of the vacuator valve
 ^(a) to remove the dirt and dust.
- Do an inspection of the service indicator on the air cleaner ^(ab). Replace the filter element if necessary.

Belts

 Make sure that the belts do not have cracks, are not frayed, and do not have chunks of material missing.



4.2-10 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.
- Make sure that the gate is in good condition and operates correctly.

2 Fall-protection anchorages

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

AC power socket

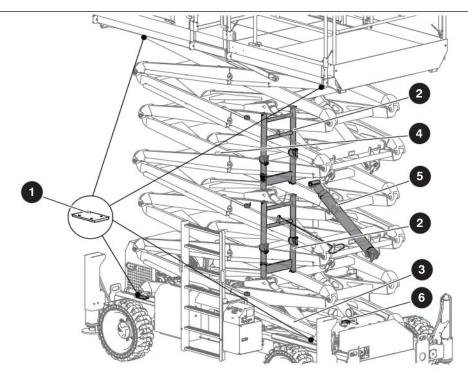
Make sure that the socket is free of dirt or blockages.

Platform control console

- Make sure that the control console is locked with lock-pins.
- Make sure that the platform control cable is correctly locked, and there is no visible damage.

6 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.



4.2-11 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 5.4*) and deploy the maintenance support(s) (refer to *Section 6.6*).

2 Maintenance support(s)

 Make sure that the maintenance support(s) are correctly attached and show 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.

Scissor bumpers

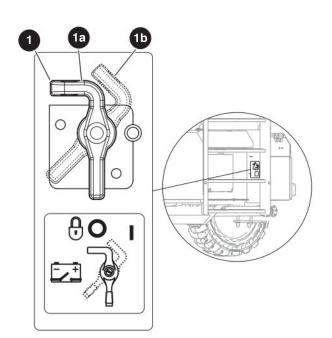
• Make sure that the bumpers are correctly attached and have no visible damage.

5 Lift cylinders

- Make sure that the lift cylinders are correctly installed.
- Make sure there are no loose or missing fasteners.
- Make sure there is no indication of leaks or damage.
- 2. Retract the maintenance support(s) into their storage brackets. Refer to *Section 6.6.*
- 3. Fully lower the platform.

6 Angle transducer

• Make sure that the angle transducer is correctly attached.





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 main power disconnect switch

- 1. Turn the main power disconnect switch 1 to the on position 1.
- 2. Pull the emergency-stop button 2 on the base control console.
- 3. Turn the off/base/platform key switch 5 to the base position 3.

4. Start the engine at the base. Refer to *Figure 05*.

0

0

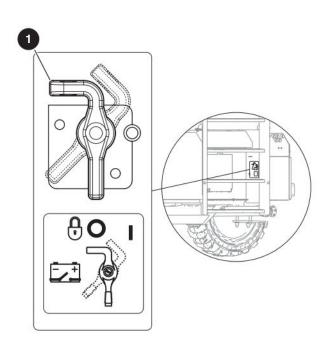
3a

3 3h

Engine type	Cold engine	Warm engine
Diesel	 a. Move the engine start/glow plug switch 3 to the glow plug position 4, and hold it for 15 to 20 seconds or until the light turns off. b. Move the engine start/glow plug switch 3 to the engine start position 3. 	a. Move the engine start/ glow plug switch 3 to the engine start position 3.

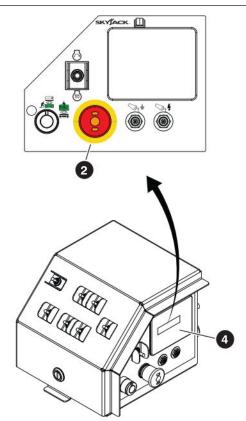
Figure 05 Start the diesel engine from the engine, base, or platform control consoles

- 5. Turn the main power disconnect switch 1 to the off position 1.
 - **Result:** The engine stops.

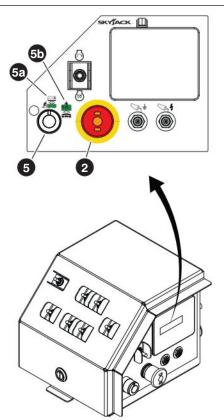


4.3-2 Do a test of the control module and load sensing module self-check

- 1. Push the **emergency-stop** button **2** on the base control console.
- 1. Turn the **main power disconnect** switch **1** to the on position.
- 2. Pull the emergency-stop button 2 on the base control console.
 - Result: The beeper makes a sound for approximately 1 second. The light on the emergency-stop button comes on. This shows that the system is in operation, and there are no faults.
- Make sure there are no error codes on the Skycoded[™] display panel ④.
 - Result: If you see an error code, lock and tag the MEWP. Remove the MEWP for servicing. Speak to a qualified service technician for repairs.



- 4.3-3 Do a test of the emergency-stop button on the base
 - 1. Turn the **main power disconnect** switch **1** to the on position.
 - 2. Pull the emergency-stop button 2.
 - 3. Start the engine at the base. Refer to Figure 05.
 - 4. Push the emergency-stop button 2.
 - **Result:** The engine stops.

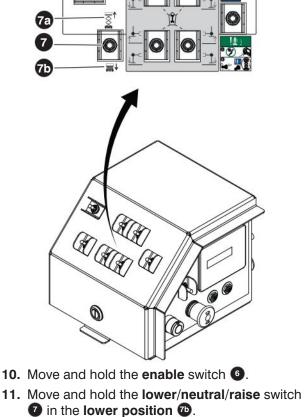


4.3-4 Do a test of the off/base/platform key switch

1. Pull the emergency-stop button 2.

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 off/base/platform key switch 5 to the platform position 5.
- 3. Start the engine. Refer to Figure 05.
- 4. Move and hold the enable switch 6.
- 5. Move and hold the lower/neutral/raise switch
 in the raise position <a>a.
 - **Result:** You cannot raise the platform.
- 6. Turn the off/base/platform key switch 5 to the base position 3.
- 7. Start the engine. Refer to Figure 05.
- 8. Move and hold the enable switch 6.
- 9. Move and hold the lower/neutral/raise switch
 7 in the raise position 7.
 - Result: The platform raises.



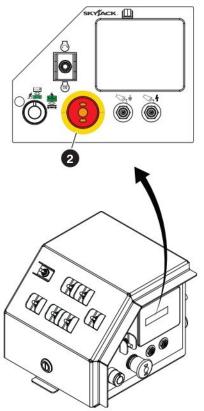
6

O

Result: The platform lowers.

4.3-5 Do a test of the base lift enable switch

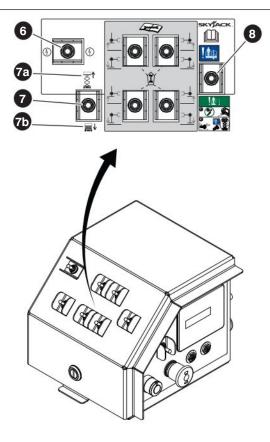
- 1. Start the engine. Refer to Figure 05.
- Move and hold the lower/neutral/raise switch
 in the raise position (a). Do not select the enable switch (b).
 - Result: The platform does not raise.

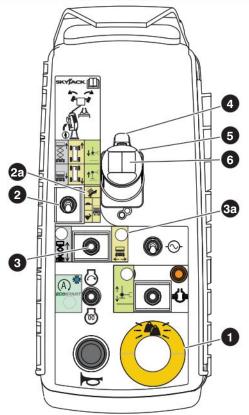


4.3-6 Do a test of the emergencylowering function

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 2.
- **3.** Move and hold the **enable** switch **6** to the left, and the **emergency-lowering** switch **8** down to lower the platform.
 - **Result:** The platform fully lowers.
- 4. Raise the platform.
- 5. Move and hold the enable switch ⁽⁶⁾ to the right, and the emergency-lowering switch ⁽³⁾ down to fully lower the platform.
 - **Result:** The platform fully lowers.
- 6. Pull the **emergency-stop** button **2** on the base control console.





4.3-7 Do a test of the emergency-stop button on the platform

1. Turn the off/base/platform key switch to the platform position.

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.

- 2. Use the MEWP ladder to enter the platform.
- 3. Close the gate.
- 4. Pull the **emergency-stop** button **1** on the platform control console.
- 5. Start the engine. Refer to Figure 05.
- 6. Move the inclined-drive/level-drive switch 2 to the inclined-drive position 2.
- 7. Push the emergency-stop button 1.
- 8. Squeeze and hold the function-enable switch4.
- 9. Push the controller handle 5 to drive forward.
 - Result: The engine stops. The drive function does not operate.

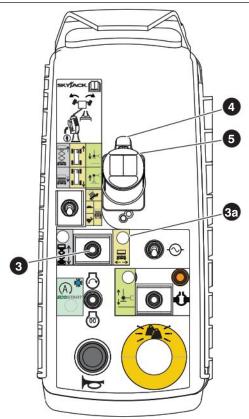
4.3-8 Do a test of the function-enable switch

- 1. Fully retract the outriggers. Refer to Section 5.9.
- 2. Make sure the path you plan to travel is clear.
- 3. Pull the emergency-stop button 1.
- 4. Start the engine. Refer to Figure 05.
- 5. Move the lift/off/drive switch 3 to the drive position 3.
- Do not use the function-enable switch ④, and try to drive the MEWP by moving the controller handle forward.
 - **Result:** The drive function does not operate.

4.3-9 Do a test of the steer function

- 1. Move the lift/off/drive switch 3 to the drive position 3.
- Squeeze and hold the function-enable switch
 4.
- Press the steering rocker switch

 on top of the controller handle to steer left and right.
 - **Result:** The steer wheels turn left and right.

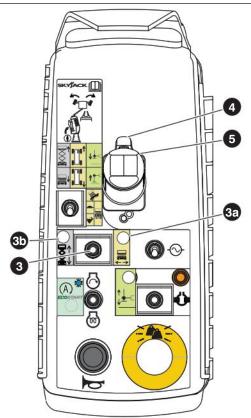


4.3-10 Do a test of the drive function

- 1. Make sure the path of intended motion is clear.
- 1. Move the lift/off/drive switch 3 to the drive position 3.
- Squeeze and hold the function-enable switch
 4.
- 3. Slowly push the **controller handle 5** 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.
- 4. Slowly pull the **controller handle s** 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.

4.3-11 Do a test of the anti-tiedown function

- 1. Make sure the path of intended motion is clear.
- 2. Move the lift/off/drive switch 3 to the drive position 3.
- Squeeze and hold the function-enable switch
 for 7 seconds.
- 4. Slowly push the **controller handle 5** to move the MEWP in the forward direction.
 - **Result:** The MEWP does not move in the forward direction.



4.3-12 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.

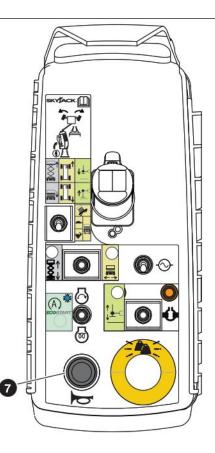
- 1. Make sure the path of intended motion is clear.
- 2. Move the lift/off/drive switch 3 to the drive position 3.
- Squeeze and hold the function-enable switch
 4.
- 4. Drive the MEWP forward. Release the **controller** handle **5**.
 - Result: The MEWP stops. Do not operate the MEWP if the MEWP pulls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

4.3-13 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. Move the lift/off/drive switch to the lift position ³b.
- Squeeze and hold the function-enable switch
 .
- **3.** Push the **controller handle 5** to raise the platform by approximately 0.5 m.
 - Result: The platform raises.
- 4. Squeeze and hold the function-enable switch
 4.
- 5. Pull the controller handle 5 to fully lower the platform.
 - Result: The platform fully lowers.



4.3-14 Do a test of the horn

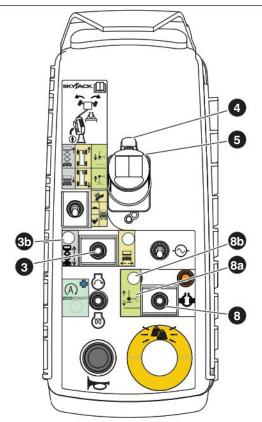
- 1. Push the horn button 7.
 - **Result:** The horn makes a sound.

4.3-15 Do a test of the elevated travel speed

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.

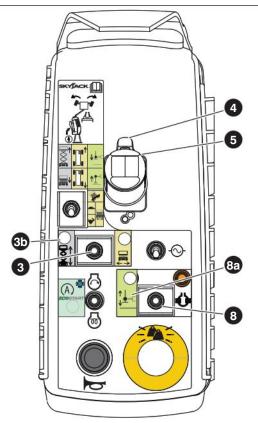
- 1. Make sure the path of intended motion is clear.
- 2. Raise the platform until it is at a height of approximately 4.3 m.
- 3. Drive the MEWP forward and then rearward.
 - **Result:** The MEWP drives slower than when it was in the lowered travel position.



4.3-16 Do a test of the outrigger interlocks

- 1. Use the MEWP ladder to enter the platform.
- 2. Start the engine. Refer to Figure 05.
- 3. Move the auto-level/differential lock switch to the auto-level position a.
- Squeeze the function-enable switch 4 and push the controller handle 5 to extend all four outriggers 10 cm.
- 5. Move the lift/off/drive switch 3 to the lift position 3.
- 6. Squeeze the function-enable switch ④ and push the controller handle ⑤ to raise the platform
 - Result: The platform does not raise.
- 7. Move the auto-level/differential lock switch ⁽³⁾ to the auto-level position ⁽³⁾.

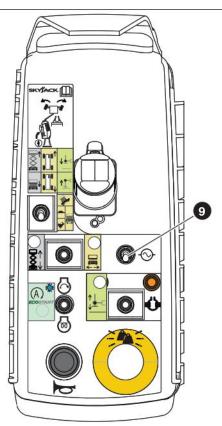
- Squeeze the function-enable switch ④ and pull the controller handle ⑤ to fully retract all four outriggers.
 - Result: All four outriggers fully retract.
- Squeeze the function-enable switch 4 and push the controller handle 5 to deploy all four outriggers. When the first outrigger hits the ground (observed as the initial movement), stop lowering the outriggers, and observe all four outriggers.
 - **Result:** All four legs have moved more than 5 cm and all the pads are near the ground.
- **10.** Resume the deployment of the outriggers until the platform has leveled itself.
 - Result: All four outriggers extend until they hold the MEWP weight and put the MEWP in a level position. The outriggers stop automatically when the platform is level. The outrigger light goes solid ^(B).



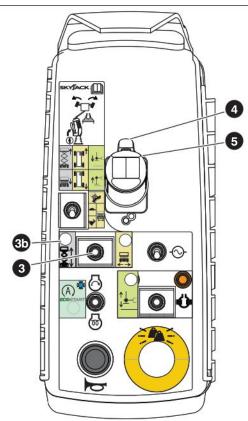
11. Move the lift/off/drive switch 3 to the lift position 3.

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.

- 12. Raise the platform by approximately 0.3 m.
 - Result: The platform raises.
- **13.** Fully lower the platform.
 - Result: The platform fully lowers.
- **14.** Move the **auto-level/differential lock** switch **auto-level position a**.
- 15. Squeeze the function-enable switch ④ and pull the controller handle ⑤ to fully retract all four outriggers.
 - **Result:** All four outriggers fully retract.



- 4.3-17 Do a test of the generator (optional equipment)
 - 1. Use the MEWP ladder to enter the platform.
 - 2. Start the engine. Refer to Figure 05.
 - 3. Move the generator switch (9) to the on position.
 - **Result:** The engine speed automatically changes to high throttle. The generator starts. The light goes on.
 - 4. Move the generator switch 9 to the off position.
 - **Result:** The generator stops. The light goes off. The throttle goes back to idle.

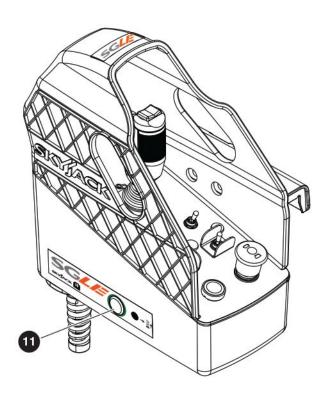


4.3-18 Do a test of the SGLE switch (optional equipment)

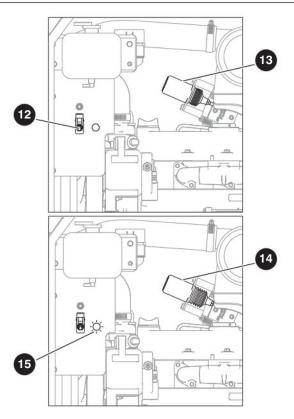
🛦 WARNING

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. Start the engine. Refer to Figure 05.
- 2. Move the lift/off/drive switch 3 to the lift position 3.
- Do not squeeze the function-enable switch 4 or push the SGLE button 1. Push and pull the controller handle 5 to raise and lower the platform.
 - **Result:** The platform does not raise or lower.
- Push and hold the SGLE button ① only. Do not squeeze the function-enable switch ④. Push and pull the controller handle ⑤ to raise or lower the platform.
 - Result: The platform does not raise or lower.



- 5. Push and hold the SGLE button 1. Squeeze the function-enable switch 4. Push and pull the controller handle 5 to raise or lower the platform.
 - **Result:** The platform raises and lowers.
- 6. Squeeze the function-enable switch ④ only. Do not push the SGLE button ①. Push and pull the controller handle ⑤ to raise or lower the platform.
 - **Result:** The platform lowers, but does not raise.



4.3-19 Do a test of the positive air shutoff (optional equipment)

Do not do this function test while the engine is on.

Burn hazard. Do not touch hot engine components without the correct PPE. Let the engine cool before you do an inspection or servicing. If you do not obey, there is a risk of death or serious injury.

- 1. Make sure these power connections are ON:
 - The main power disconnect switch
 - The emergency-stop button on the base control console
 - The off/base/platform key switch is in the base position.
- 2. Make sure the engine is off.
- 3. Open the engine compartment cover.
- **4.** Lift the switch guard for the positive air shutoff on the engine control console.
- 5. Move the **positive air shut-off** switch **1**² to the on position to engage the shutoff valve **1**³.

- 6. Move the positive air shut-off switch ¹² to the off position to disengage the shutoff valve ¹⁴. The light ¹⁵ continuously illuminates.
 - **Result**: The shutoff valve disengages after 20 seconds.
- 7. Make sure the **positive air shut-off** switch **2** is put back to the off position, and that the switch guard is down. Push the engine compartment cover until the latch locks into position.

Sorial Number

4.4 Operator's checklist (page 1 of 2)

SKYJACK SJ9233 RT, SJ9243 RT, SJ9253 RT, SJ9664 RT Daily Operator's Checklist

Model: Hourmeter Reading:	Operator's Name (Printed):
Time:	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)

	Р	N/A	Comment (if item does not pass inspection)
Visual and Daily Maintenance Inspections			
Labels - Do an inspection for damaged, or missing labels			
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			
Wheel/tire assembly			
Wheel nuts			
Base - Do an inspection for loose, damaged, or missing components			
Base weldment			
Steer cylinder assembly			
Greasing points			
Drive axles			
Tie rod			
Ladder			
Outriggers			
Hydraulic/base control side - Do an inspection for leaks and loose, dam- aged, or missing components			
Hydraulic tank			
Hydraulic oil level			
Main power disconnect switch			
Base control			
Batteries			
Rear side - Do an inspection for leaks and loose, damaged, or missing components			
Manifolds			
Fuel tank side - Do an inspection for leaks and loose, damaged, or missing components			
Fuel tank			
Engine side - Do an inspection for loose, damaged, or missing compo- nents			
Engine compartment cover			
Engine and engine mounting plate			
Engine control console			
Radiator			
Engine coolant			
Muffler and exhaust			
Engine oil level			
Engine intake air filter			

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

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					
Platform railings					
Fall protection anchorages					
AC power socket					
Platform control console					
Manual storage box					
Lift mechanism - Do an inspection for loose, damaged, or missing com- ponents					
Sliders					
Maintenance support(s)					
Scissor assembly					
Scissor bumpers					
Lift cylinders					
Angle transducer					
Optional equipment and attachments - Do an inspection for leaks and loose, damaged, or missing components					
Function Tests					
Do a test of the main power disconnect switch					
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 off/base/platform key switch					
Do a test of the base lift enable switch					
Do a test of the lower/neutral/raise switch					
Do a test of the emergency-lowering 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 anti-tiedown function					
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 elevated travel speed					
Do a test of the outrigger interlocks					
Do a test of the generator (optional equipment)					
Do a test of the ECOStart (optional equipment)					
Do a test of the SGLE switch (optional equipment)					
Do a test of the positive air shutoff (optional equipment)					

1810AD

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

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. Worksite inspection. Refer to Section 2.4.
- 2. Visual and daily maintenance inspections. Refer to Section 4.2.
- 3. Function tests. Refer to Section 4.3.
- 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. Turn the **main power disconnect** switch to the on position.
- 2. Pull the **emergency-stop** button on the base control console.

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. Move the off/base/platform key switch to the base position.
- **4.** Start the engine. Do the steps that follow for your engine fuel type and temperature.

Engine type	Cold engine	Warm engine
Diesel	 a. Move the engine start/glow plug switch to the glow plug position, and hold it for 15 to 20 seconds or until the light turns off. b. Move the engine start/glow plug switch to the engine start position. 	a. Move the engine start/ glow plug switch to the engine start position.

Figure 06 Start the diesel engine from the engine, base, or platform control consoles

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 off/base/platform key switch to the base position.
- 3. Select and hold the enable switch.

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.

4. Move 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

1. Turn the **main power disconnect** switch to the on position.

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.

- 2. Pull the **emergency-stop** button on the base control console.
- 3. Turn the off/base/platform 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.

- 4. Use the MEWP ladder to enter the platform.
- 5. Close the gate.
- 6. Pull the **emergency-stop** button on the platform control console.
- 7. Start the engine. Refer to *Figure 06*.

5.4 Raise or lower the platform with the platform control console

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. Move the lift/off/drive switch to the lift position.
- 2. Squeeze and hold the function-enable switch.
- **3.** Move the **controller handle** forward or rearward to go to the necessary height.

NOTE

The lower function is not proportional.

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

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.

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

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

NOTE

Some models have a restriction of 10 m lift height. To raise the platform higher than 10 m, deploy the outriggers before you raise the platform from the fully lowered position. Refer to Section 5.9.

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 severe injury.

- 1. Energize the platform control console (refer to *Section 5.3*).
- 2. Move the lift/off/drive switch to the drive position.
- 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.

5.6 Steer

- 1. Energize the platform control console (refer to *Section 5.3*).
- 2. Move the lift/off/drive switch to the drive position.
- 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 level-drive or inclined-drive mode

- Select the level-drive mode when you drive on a level surface.
 - 1. To use the level drive mode, move the inclined-drive/level-drive switch to the leveldrive (high speed/low torque) position.

A WARNING

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 severe injury.

- Select the inclined-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 inclined-drive, move the **inclined**drive/level-drive switch to the inclined-drive (low speed/high torque) position.

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 platforms

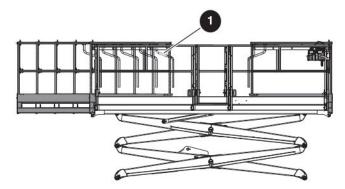
M WARNING

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

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.

- 1. Remove the **lock-pin** on the floor of the extension platforms.
- 2. Deploy the extension handle.
- 3. Push or pull the **extension handle 1** to extend or retract the extension platforms.
- 4. Retract the **extension handle** to lock the extension platforms in position.
- 5. Insert the **lock-pin** on the floor of the extension platform.



5.9 Use the auto-level

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.

Tip-over hazard. Make sure the surface below the tires and outrigger pads is firm and can hold the MEWP and the rated load. Do not put the outrigger pads on street drains, manhole covers, or other unsupported surfaces. If you do not obey, there is a risk of death or serious injury.

Level the MEWP

- 1. Fully lower the platform. Refer to Section 5.3 and Section 5.4.
- 2. Move the **auto-level/differential lock** switch to the auto-level position.
- **3.** Squeeze the **function-enable** switch and push the **controller handle** to deploy all four outriggers. The light of the level indicator shows the auto-level outrigger condition. Refer to *Figure 07.*

Auto-level light	Outrigger condition				
Off	The outriggers are fully retracted. The outriggers are not active.				
Flashing slowly	Indicates the outrigger extension or retraction.				
Flashing quickly	The outriggers are extended and the MEWP is not level, or there is an outrigger or auto- level function error.				
On	The outriggers are extended and the MEWP is level. The light is on while the auto-level function is active only.				

Figure 07 Auto-level outrigger condition

4. Make sure each outrigger pad is in firm contact over its entire surface area, with a suitable supporting surface.

NOTE

The drive functions are disabled if the outriggers are not fully retracted.

If the outrigger alarm makes a sound during operation, immediately lower the platform and put the MEWP on a firm surface. The MEWP must be on a firm surface for you to operate it.

Retract the outriggers

- 1. Fully lower the platform.
- 2. Move the **auto-level/differential lock** switch to the auto-level position.
- **3.** Squeeze the **function-enable** switch and pull the **controller handle** to retract all four outriggers. The light of the level indicator shows the auto-level outrigger condition. Refer to *Figure 07*.

IMPORTANT

Limit switches prevent outrigger damage. If the drive functions are not available, do a visual inspection of the outriggers to make sure they are all fully retracted.

5.10 Start and stop the generator (optional equipment)

- 1. Start the engine. Refer to Figure 06.
- 2. Move the lift/off/drive switch to the lift position.
- **3.** Move the **generator** switch to the on position to start the generator.
- **4.** Move the **generator** switch to the off position to stop the generator.

NOTE

The generator stops in these situations:

- You start the drive, lift, or auto-level functions
- You push the emergency-stop button
- You change the off/base/platform key switch position
- The engine stalls.

The generator stays on while you lower the platform.

5.11 Raise and lower with the SGLE platform control console (optional equipment)

- 1. Energize the platform control console.
- 2. Move the lift/off/drive switch to the lift position.

🛕 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 **SGLE** push-button and squeeze the **function-enable** switch.
- 4. Push the **controller handle** until you are at the necessary height.
- 5. Squeeze the function-enable switch.
- 6. Pull the controller handle to lower the platform.

NOTE

The SGLE does not have an effect on these functions: lower, drive, steer, auto-level, or emergency-lowering.

7. Release the **controller handle** until it goes back to the center position to stop. Release the **function-enable** switch.

5.12 Engage or disengage the differential lock

- 1. Move the **auto-level/differential lock** switch to the differential lock position.
- 2. Drive the MEWP.

5.13 EcoStart

- 1. The EcoStart functionality ONLY shuts down the engine under all of these specific conditions:
 - The engine coolant temperature is more than 70 degrees Celsius
 - The generator switch is turned off.
 - No engine powered function from the platform has been used for more than 3 minutes.
- 2. If the EcoStart functionality shuts down the engine, the light illuminates. If engine power is required, select the start position from the engine start/ glow plug switch until the engine starts.

5.14 MEWP shutdown

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.

- 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.

🏠 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.

- 4. Use the MEWP ladder to exit the platform.
- 5. Turn the off/base/platform key switch to the off position on the base control console and remove the key.
- 6. Push the emergency-stop button.
- 7. Turn the main power disconnect switch to the off position.

Section 6 – Additional Procedures

6.1 Use the emergencylowering function

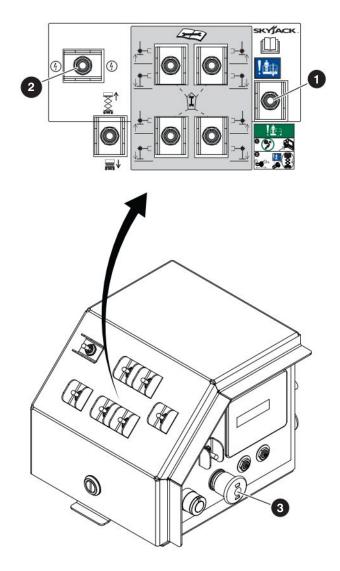
With the emergency-lowering system, you can lower the platform if there is a failure of the primary power.

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 platforms or move the MEWP to clear an obstruction.
- **3.** Make sure the **main power disconnect** switch is in the on 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.

- 4. Push the **emergency-stop** button ③ on the base control console.
- 5. Hold the enable switch 2 to the left or right and hold down the emergency-lowering switch 1 on the base control console to fully lower the platform.



6.2 Push, Winch and Tow the MEWP

WARNING

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.

A WARNING

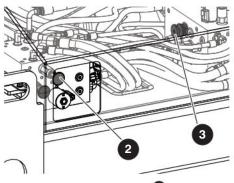
Runaway hazard. After you release the brakes, the MEWP rolls freely on slopes. Do not manually disengage the brakes unless the MEWP is on a level surface or the MEWP is fully restrained.

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.

- 1. Apply wheel chocks if necessary.
- 2. Turn the main power disconnect switch to the off position.
- 3. Push the **plunger** 1 of the brake auto-reset valve on the drive manifold at the rear side of the base.



- Push and release the knob 2 of the hand pump 10-30 times. The brake is now released to permit wheel rolling.
- Turn the freewheeling valve knob 3
 counterclockwise to a fully open position.
- **6.** Push, winch, or tow the MEWP to the necessary location.
- 7. Re-apply the wheel chocks if necessary.
- 8. Pull out the **plunger** of the brake auto-reset valve to re-engage the brakes.

A WARNING

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.

9. Turn the **freewheeling valve knob** clockwise to a fully close position.

6.3 Use the platform control console from the ground

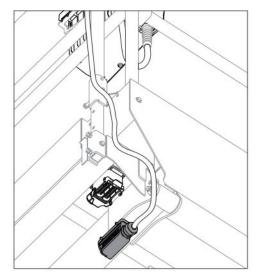
The correct operator location is from the platform. Only operate the MEWP from the ground in these conditions;

- When you can't operate the machine safely from the platform,
- When you need to operate the machine for maintenance.

Operating the MEWP from the ground presents additional risks to the operator and other parties. Appropriate risk assessment must be carried out before operating from this position. If you do not obey, there is a risk of death or serious injury.

6.3-1 Disconnect and remove the platform control console

1. Disconnect the platform control console cable from the electrical plug under the platform.

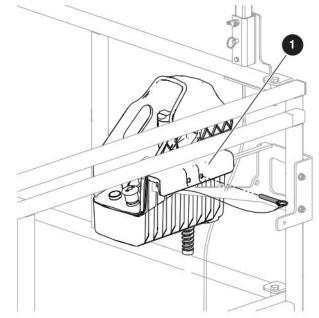


A WARNING

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.

2. Use the MEWP ladder to enter the platform.

- 3. Remove the control console mounting bracket lock-pin 1 from the mounting bracket. Remove the platform control console from the mounting bracket.
- 4. Remove the **control cable lock-pin** from the railing clamp. Remove the **control cable** from the clamp.



5. Use the MEWP ladder to exit the platform.

6.3-2 Operate the MEWP from the ground

🛦 WARNING

Make sure the operator and the control console point in the same direction as the front of the MEWP.

Do not drive the MEWP toward yourself.

Keep away from crush hazards. Stay clear of the MEWP and out of the direction of travel.

When you use a ramp to drive the MEWP on to or remove it from a transport vehicle, make sure all personnel, which includes the operator:

- Stay away from the direction of a possible tipover of the MEWP.
- Stay out of the path of movement of the MEWP down the ramp.

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

Make sure the control console cable does not become entangled with the MEWP or objects that surround the MEWP. If you do not obey, there is a risk of MEWP damage.

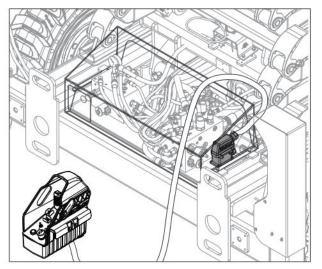
- 1. Before you operate the MEWP, do a full worksite inspection to identify possible hazards in your work area. Refer to *Section 2.4*.
- 2. Cordon-off the pathway you plan to travel.

🛦 WARNING

Crush hazard. Make sure that there are no personnel in the path you will travel. Tell personnel around the path before you move the MEWP. Use a second person to monitor the movement of the MEWP. Make sure that person stays at a safe distance. If you do not obey, there is a risk of death or serious injury.

3. Stay behind or to the side of the MEWP.

 Connect the platform control console cable to the electrical connector at the rear side of the MEWP.



- 5. Move the **inclined-drive/level-drive** switch to the inclined-drive position.
- 6. Use as low a speed as practical to drive the MEWP forward to the necessary location.
- 7. Push the **emergency-stop** button when the MEWP is at the necessary location.
- 8. Turn the **main power disconnect** switch to the off position.

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.

9. Use the MEWP ladder to enter the platform.

Make sure each lock-pin is correctly installed with the detent ball of each lock-pin fully through the hole.

- **10.** Install the **platform control console** onto the mounting bracket. Install the **lock-pin** in the mounting bracket.
- **11.** Install the **control cable** into the railing clamp and install the **lock-pin**.

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.

- **12.** Use the MEWP ladder to exit the platform.
- **13.** Connect the **platform control console cable** to the **electrical connector** below the platform.

6.4 Refuel

Do not start the MEWP if you smell gas. Lock and tag the MEWP, and remove it for servicing. If you do not obey, there is a risk of death or serious injury.

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.

Explosion hazard. Only refuel the MEWP in a wellventilated area, away from open flame and other sources of ignition, approved by your employer and/or supervisor. Always have an approved fire extinguisher that you can easily access. If you do not obey, there is a risk of death or serious injury.

Explosion hazard. Do not smoke in an area where MEWPs are kept or refueled. If you do not obey, there is a risk of death or serious injury.

IMPORTANT

Before you use the MEWP, make sure that there is sufficient fuel for the estimated task.

6.4-1 Refuel the MEWP with diesel

IMPORTANT

For diesel engines, use ultra-low sulfur diesel. Refer to the information on the fuel tank.

- **1.** Put all the power connections in the off position. This includes the engine.
- 2. Push all the **emergency-stop** buttons, and turn the **main power disconnect** switch to the off position.

Environmental hazard. Immediately remove diesel fuel, engine oil, and hydraulic fluid spills and leaks with rags. Discard these rags in accordance with national, state/provincial/territorial, and local regulations. Spilled fluids can damage the environment. When spilled fluids go into the water (for example, a sewage system, streams, rivers, or other surface water), they can kill aquatic life.

- 3. Remove the fuel cap.
- 4. Carefully fill the fuel tank. Make sure that there are no spills. At the same time, look at the fuel gauge on the side of the tank. The fuel gauge indicator must not go above the F (full) mark.
- 5. Put the fuel cap back on and make sure it closes tightly.
- **6.** Do an inspection of the fuel system for leaks. Clean away the spilled fuel.
- **7.** Discard the wipes or rags in an approved container.

6.5 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 on to 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.

6.5-1 Hoist the MEWP

WARNING

Only qualified riggers must operate the machinery during a lift.

When you hoist the MEWP, you must:

- Turn the main power disconnect switch to the off position.
- Close and tightly latch the engine compartment door.
- Retract the extension platforms. Correctly insert the lock-pin(s).
- Attach the platform control console to the mounting bracket, or remove the platform control console
- Remove all personnel, tools, and materials from the platform.
- Attach the rigging to all four lift points ①. Refer to Figure 08 and Figure 09.

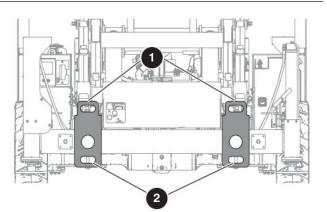


Figure 08 Lift and tie-down points

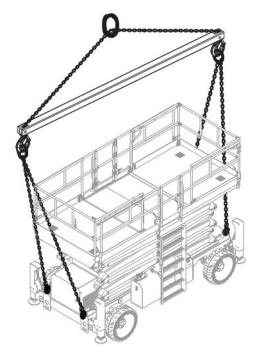
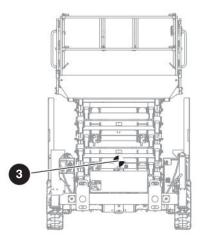


Figure 09 Appropriate method to hoist

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 10. Vertically, the center of gravity is approximately a small distance above the chassis.



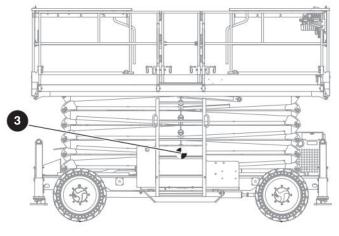


Figure 10 Approximate center of gravity

6.5-2 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.
- Move the **inclined-drive**/level-drive switch to the inclined-drive (low speed/high torque) position.

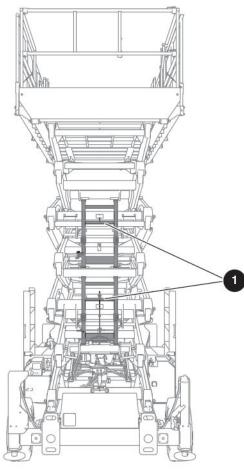
A WARNING

When you transport the MEWP, it must be attached to a truck or trailer deck. Use the available tie-down points 2 to attach the MEWP. Refer to *Figure 08* 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 2. Refer to *Figure 08*.

6.6 Use the maintenance support(s)

Maintenance support(s) ① are a mechanism on the scissor assembly. When they are in the correct position, they can hold the scissor assembly and an empty platform.



A WARNING

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

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

6.6-1 Deploy the maintenance support(s)

1. Remove all personnel and material from the platform.

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.

- Raise the platform until there is adequate clearance to deploy the maintenance support(s) 1.
- 3. Deploy the lower maintenance support:
 - a. Remove the maintenance support rod from the keyhole at the rear side of the MEWP.
 - b. For models SJ9233 RT, SJ9243 RT & SJ9253 RT:
 - Push the rod handle so that the maintenance support is in a vertical position. Align the lower maintenance support with the pipes on the cross member.

For SJ9664 RT:

- Pull the rod handle so that the maintenance support is in a vertical position. Align the lower maintenance support with the scissor pins.
- **c.** Put the **rod** back into the keyhole at the rear side of the MEWP.
- 4. For models SJ9233 RT and SJ9243 RT:

Lower the platform until the pipes on the cross members fully touch the maintenance support, and the platform stops. Go to step 6. For model SJ9253 RT:

Lower the platform until the top of the support is just below or at the blue mark found on the top cylinder mount. Continue to step 5.

For model SJ9664 RT:

Lower the platform until the scissor pins fully touch the maintenance support, and the platform stops. Go to step 6.

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

- 5. Deploy the top maintenance support (only for model SJ9253 RT):
 - **a.** Go up the MEWP ladder. Maintain three points of contact on the ladder at all times. Refer to *Figure 11*.

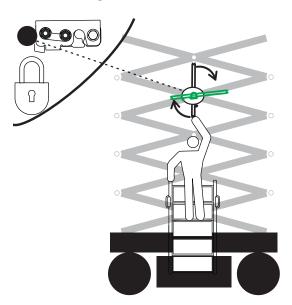


Figure 11 Position to release or retract the top maintenance support (only for model SJ9253 RT)

- **b.** Turn the latch on the scissor assembly to deploy the top maintenance support. Make sure that it is in a vertical position. Align the top maintenance support with the pipes on the cross member.
- c. Go down the MEWP ladder.
- **d.** Lower the platform until the pipes on the cross members fully touch the maintenance supports, and the platform stops.
- 6. Turn the **main power disconnect** switch to the off position.

6.6-2 Store the maintenance support(s)

1. Turn the **main power disconnect** switch to the on 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.

2. For model SJ9253 RT:

Raise the platform until the top of the lower maintenance support is just below or at the blue mark on the top cylinder mount.

For models SJ9233 RT and SJ9243 RT: Raise the platform until there is adequate clearance to retract the lower maintenance support.

For model SJ9664 RT

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

A WARNING

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

- **3.** Retract the top maintenance support (only for model SJ9253 RT):
 - **a.** Go up the MEWP ladder. Maintain three points of contact on the ladder at all times. Refer to *Figure 11.*
 - **b.** Swing the top maintenance support up until it locks back into the latch on the scissor assembly.
 - c. Go down the MEWP ladder.
- **4.** For all models, retract the lower maintenance support:
 - **a.** Remove the rod from the keyhole at the rear side of the MEWP.
 - b. For models SJ9233 RT, SJ9243 RT & SJ9253 RT:
 - Pull the **rod** handle to retract the lower maintenance support.

For SJ9664 RT:

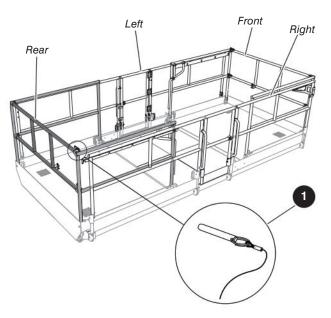
- Push the rod handle to retract the lower maintenance support.
- **c.** Put the **rod** back into the keyhole at the rear side of the MEWP.
- 5. Fully lower the platform.

6.7 Fold the guardrail

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

🛦 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.

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

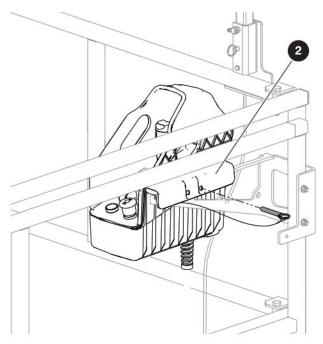
- **1.** Make sure the MEWP is on firm, level ground.
- 2. Make sure you fully lower the platform.
- **3.** Push the **emergency-stop** button on the base control console.
- 4. Turn the **main power disconnect** switch to the off position.

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.

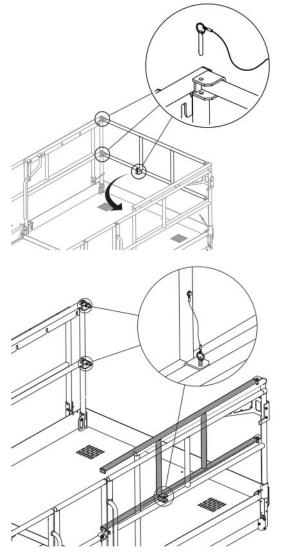
- 5. Use the MEWP ladder to enter the platform.
- 6. Close the gate.
- 7. Make sure you fully retract the extension platforms.

Install each lock-pin correctly with the detent ball of each lock-pin fully through the bracket or railing clamp. If you do not obey, there is a risk of machine damage

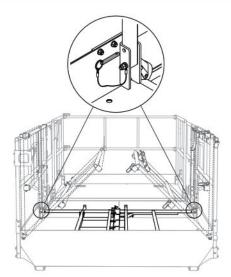
8. Remove the lock-pins from the control console mounting bracket 2. Put the control console down on the platform floor.



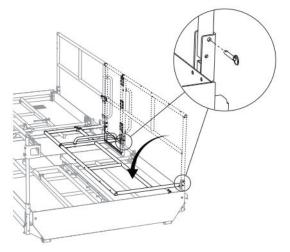
9. Remove all the **lock-pins** on the front guardrail and swing it to the right extension guardrail. Install the mid-rail lock-pin to lock the front guardrail to the right extension guardrail.



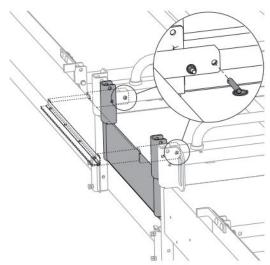
- **10.** Remove all the **lock-pins** from the rear guardrail and swing it to the left extension guardrail. Install the mid-rail lock-pin to lock the rear guardrail to the left extension guardrail.
- **11.** Remove all the **lock-pins** on the front-left extension guardrail and fold it down.
- **12.** Remove all the **lock-pins** on the rear-left extension guardrail and fold it down.
- **13.** Remove all the **lock-pins** on the front-right extension guardrail and fold it down.
- **14.** Remove all the **lock-pins** on the rear-right extension guardrail and fold it down.



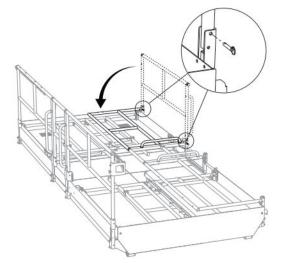
15. Remove all the **lock-pins** on the front-left guardrail and the left gate.



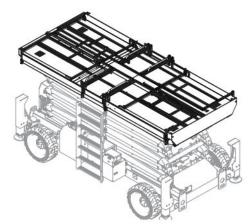
16. Pull the gate latch, and fold down the front-left guardrail along with the left gate.



- **17.** Remove the **lock-pins** from the rear-left guardrail and fold it down.
- **18.** Install the **lock-pins** to lock the rear-left guardrail.



- **19.** Remove all the **lock-pins** on the rear-right guardrail and the right gate.
- **20.** Pull the gate latch, and fold down the rear-right guardrail along with the right gate.
- **21.** Remove the **lock-pins** from the front-right guardrail and fold it down.
- **22.** Install the **lock-pins** to lock the front-right guardrail.



23. Use the MEWP ladder to exit the platform.

6.7-2 Unfold the guardrail system

- **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 **main power disconnect** switch to the off position.

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.

5. Use the MEWP ladder to enter the platform.

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.

Fall hazard. Install each lock-pin correctly with the detent ball of each lock-pin fully through the guardrail. The guardrail system must be in the vertical position. An incorrectly locked guardrail can cause a fall, which can cause death or serious injury.

- 6. Unfold the front-right guardrail, and install all the lock-pins.
- 7. Unfold the rear-right guardrail and the right gate, and install all the **lock-pins**. Push the right gate back into the gate latch.
- 8. Unfold the rear-left guardrail, and install all the **lock-pins**.
- **9.** Unfold the front-left guardrail and the left gate, and install all the **lock-pins**. Push the left gate back into the gate latch.
- **10.** Unfold the rear-right extension guardrail and install all the **lock-pins**.
- **11.** Unfold the front-right extension guardrail and install all the **lock-pins**.

- **12.** Unfold the front-left extension guardrail and install all the **lock-pins**.
- **13.** Unfold the rear-left extension guardrail and install all the **lock-pins**.
- **14.** Remove the lock-pin from the rear-left midrail. Swing the rear guardrail towards the right extension guardrail. Install all the **lock-pins**.
- **15.** Remove the lock-pin from the front-right midrail. Swing the front guardrail towards the left extension guardrail. Install all the **lock-pins**.
- **16.** Mount the platform control console at the front right of the platform and install all the **lock-pins**.

A WARNING

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.

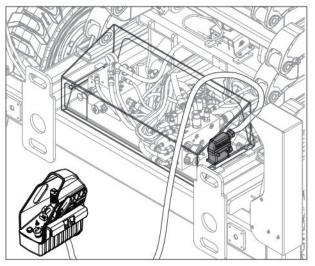
6.8 Move the MEWP through a doorway

Only do this procedure on level ground. If you do not obey, there is a risk of death or serious injury.

- 1. Make sure the height/width of the doorway is sufficient to let the MEWP drive through.
- 2. Before you operate the MEWP, do a full inspection of the site (refer to *Section 2.4*). Identify hazards in your work area.
- **3.** Make sure the platform is fully lowered.
- **4.** Follow *Section 6.3-1* to disconnect and remove the platform control console.
- **5.** Fold the guardrails if it is necessary. Refer to *Section 6.7* for the procedure on how to fold the guardrails.

Crush hazard. Make sure that there are no personnel in the path you will travel. Tell personnel around the path before you move the MEWP. Use a second person to monitor the movement of the MEWP. Make sure that person stays at a safe distance. If you do not obey, there is a risk of death or serious injury.

6. Connect the platform control console cable to the electrical plug at the rear side of the MEWP.



- **7.** Stay behind the MEWP.
- 8. Make sure the **platform control console** points in the same direction as the front of the MEWP.
- 9. Turn the **main power disconnect** switch to the on position.
- **10.** Pull the **emergency-stop** button on the base control console.
- **11.** Turn the **off/base/platform key** switch to the platform position.
- **12.** Pull the **emergency-stop** button on the platform control console.
- 13. Start the engine. Refer to Figure 06.
- 14. Move the **inclined drive/level drive** switch to the inclined drive (low speed/high torque) position for reduced speed.
- **15.** Move the **lift/off/drive** switch to the drive position.
- **16.** Use as low a speed as practical to drive the MEWP forward drive forward through the doorway.
- **17.** Push the **emergency-stop** button when the MEWP is safely through the doorway.

- **18.** Turn the **main power disconnect** switch to the off position.
- **19.** Disconnect the **platform control console** from the rear side of the base.

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.

20. Use the MEWP ladder to enter the platform.

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.

21. Return the guardrails to the vertical position if folded. Refer to *Section 6.7* for the procedure on how to fold the guardrails.

Fall hazard. Make sure each lock-pin is correctly installed with the detent ball of each lock-pin fully through the hole. Failure to avoid this hazard could result in death or serious injury.

- 22. Put the **platform control console** back onto the mounting bracket. Install the **lock-pin** in the mounting bracket.
- 23. Put the **control cable** into the railing clamp and install the **lock-pin**.

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.

- 24. Use the MEWP ladder to exit the platform.
- **25.** Connect the **platform control console cable** to the **electrical connector** below the platform.

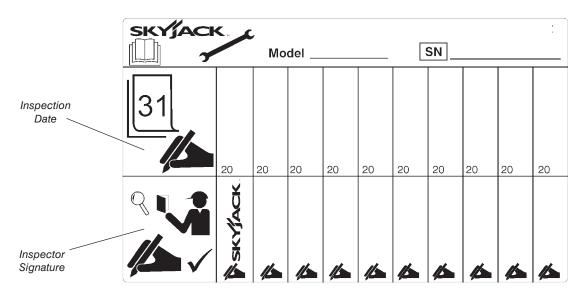
Section 7 – Specifications

7.1 Standard and optional equipment

Model	SJ9233 RT	SJ9243 RT	SJ9253 RT	SJ9664 RT
Standard E	quipment			I
Base controls	*	*	*	*
Platform controls	*	*	*	*
Dual range (torque/speed) selector	*	*	*	*
Operator horn	*	*	*	*
Diamond pattern, all steel platform deck construction	*	*	*	*
Hinged guardrail system	*	*	*	*
Fall protection anchorages	*	*	*	*
Front manual extension platform	*	*	*	*
Rear manual extension platform	*	*	*	*
Access ladders and gates at both sides of platform	*	*	*	*
AC socket on platform	*	*	*	*
Self-centering scissors design	*	*	*	*
Hour meter	*	*	*	*
Tilt alarm with drive/lift cut out	*	*	*	*
Color-coded, numbered wiring system	*	*	*	*
Mounted engine tray	*	*	*	*
Diesel engine	*	*	*	*
Tie-down points	*	*	*	*
Solid tires	*	*	*	*
4-wheel drive	*	*	*	*
Spring-applied hydraullically released disc brake system	*	*	*	*
Outriggers	*	*	*	*
ECOStart	*	*	*	*
Motion alarm	*	*	*	*
Chassis impact bumper				*
Optional Equipme	ent			
Non-marking tires	*	*	*	*
Positive air shutoff	*	*	*	*
Cold weather start kit	*	*	*	*
Arctic weather package	*	*	*	*
Scissor guards assembly	*	*	*	*
Generator	*	*	*	*
Heavy duty pipe rack	*	*	*	*
Tool caddy	*	*	*	*
Storage box	*	*	*	*
Elevate telematics	*	*	*	*
Secondary guard lift enable	*	*	*	*
Brake pressure gauge	*	*	*	*
Diesel scrubber	*	*	*	*
Chassis impact bumper	*	*	*	

1811AB

7.2 Owner's annual inspection record



Do not use the MEWP if there is no inspection recorded in the last 12 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.

7.3 Specifications

Model	SJ9233 RT	SJ9243 RT	SJ9253 RT	SJ9664 RT	
Weight *	6 446 kg	7 081 kg	8 215 kg	9 997 kg	
Overall Width		2.30 m		2.42 m	
Overall Length (Platform Retracted)		4.50 m		4.58 m	
Overall Length (Platform Extended)		7.21 m		7.21 m	
Platform Size, Inside (Platform Retracted)	1.92 m x 4.36 m	1.82 m x 4.36 m	1.92 m x 4.36 m	1.92 m x 4.46 m	
Platform Size Inside (Platform Extended)	1.92 m x 7.12 m	1.82 m x 7.12 m	1.92 m x 7.12 m	1.92 m x 7.11 m	
	Height				
Working Height	12.06 m	15.11 m	18.15 m	21.51 m	
Platform Elevated Height	10.06 m	13.11 m	16.15 m	19.51 m	
Stowed Height (Railings Down)	1.96 m	2.16 m	2.39 m	2.78 m	
Stowed Height (Railings Up)	2.77 m	2.96 m	3.20 m	3.60 m	
Drive Height (Maximum)	10.06 m	13.11 m	10.06 m	9.14 m	
	Standard Operatin	g Times			
Raise Time (No Load)	52 s	55 s	80 s	87 s	
_ower Time (No Load)	34 s	29 s	39 s	72 s	
Raise Time (Rated Load)	52 s	56 s	82 s	87 s	
Lower Time (Rated Load)	30 s	29 s	39 s	72 s	
	Chassis				
Travel Speed (Lowered Travel Position)		5.6 km/h		4,8 km/h	
Travel Speed (Elevated Travel Position)	≤ 0.8 km/h				
Maximum Gradeability	40%	36%	32%	30%	
Tires (Solid Rubber)		33 x 1	2 x 20		
	Hydraulic O	il			
Tuno	ATF				
Туре	Bio Oil				
Tank Capacity		117 L			

* Weights are approximate; refer to MEWP nameplate for specific weight.

7.4 Environment

Model	SJ9233 RT	SJ9243 RT	SJ9253 RT	SJ9664 RT
Electromagnetic Compatibility (EMC)	Meets requ	irements of EN ISO 13766-1	:2018 and IEC CISPR12:200	07+A1:2009
Hazardous Location Rating	MEWP not rated for ha	zardous locations with poter	itially flammable gases, expl	osive gases or particles
Sound Pressure Level (ISO 3744)		72	dB	
Guaranteed Maximum Sound Power Level (ISO 4871)		100) dB	
Whole-body Vibration on Platform		≤ 0.5	5 m/s²	
	Operating Tempe	eratures		
Standard		-20°C to	o +40°C	
				1814A

*In cold conditions, -10°C and below, machines should be equipped with the optional cold weather kit.

** In extreme cold conditions, -18°C and below, machines should be equipped with the optional arctic weather kit.

7.5 Maximum platform capacities (evenly distributed)

Model	Wind Rating		latform acity		n Platform acity	Manual Side Force	Tilt Cutout Setting (side-to- side x front-to- back)	Outrigger Tilt Cutout Setting
SJ9233 RT	12.5 m/s	1247 kg	7 people					
SJ9243 RT	12.5 m/s	907 kg	6 people					1° x 1°
SJ9253 RT	12.5 m/s	681 kg	5 people	227 kg	2 people	400 N	2.5° x 4.5°	
SJ9664 RT	0 m/s	512 kg	5 people					0.6° x 0.6°
339004 KI	12.5 m/s	512 kg	3 people					0.0 X 0.6

1813AB

NOTE

Occupants and materials are not to exceed the rated load. Refer to the capacity label at the sides of the platform for additional information and models equipped with options.

7.6 Floor loading pressure

		We	ights	Pressures		
Model		MEWP Weight	Max Weight per Wheel/Outrigger**	LCP***	OFL***	
		kg	kg	kPa	kPa	
SJ9233 RT on	Min*	6114	1860	857	5.9	
Wheels	Max*	7523	2630	930	7.1	
SJ9233 RT on	Min*	6276	1860	498	5.9	
Outrigger Pads	Max*	7523	2630	705	7.1	
SJ9243 RT on	Min*	6749	1950	853	6.6	
Wheels	Max*	7818	2585	920	7.4	
SJ9243 RT on	Min*	6911	1950	522	6.6	
Outrigger Pads	Max*	7818	2585	693	7.4	
SJ9253 RT on	Min*	8045	2268	867	7.6	
Wheels	Max*	8725	2790	971	8.3	
SJ9253 RT on	Min*	8045	2268	609	7.6	
Outrigger Pads	Max*	8725	2790	747	8.3	
SJ9664 RT on	Min*	9980	2525	906	9.1	
Wheels	Max*	10492	3000	1040	9.5	
SJ9664 RT on	Min*	9980	2525	676	9.1	
Outrigger Pads	Max*	10492	3000	800	9.5	

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

** Wheel/Outrigger Load is the weight that can be experienced on one wheel/outrigger. 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/outrigger.

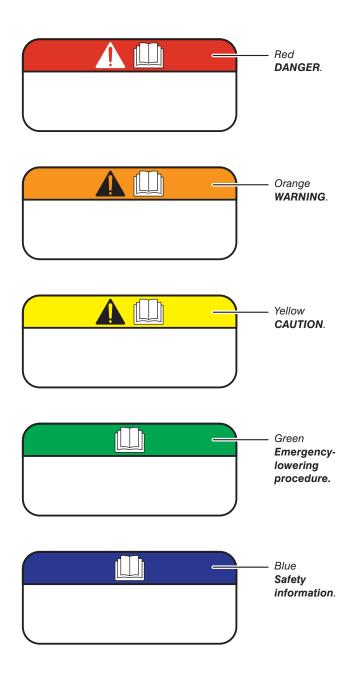
OFL: Overall Floor Load (Pressure) is a measure of the average load the MEWP imparts on the whole surface directly underneath the chassis. This has been calculated by dividing the MEWP weight by the overall floor area occupied by the MEWP (on wheels/outriggers).

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.

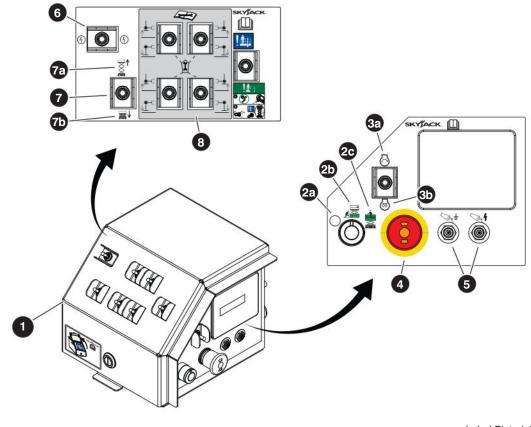
Note: The LCP or OFL that an individual surface can withstand varies from structure to structure and is generally determined by the engineer or architect for that particular structure.

1809AD

Section 8 – Labels





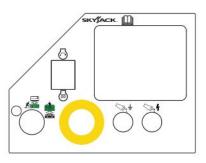


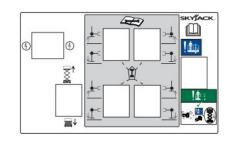
Description

Label Pictorial

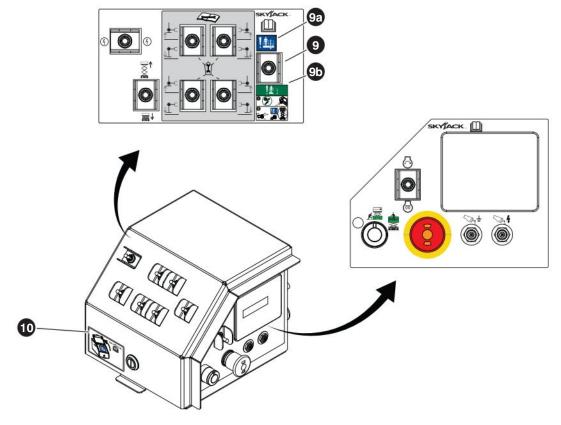
Base controls

- Select the off position ⁽²⁾ to turn off power to the MEWP, the base position ⁽²⁾ to energize the base controls, or the platform position ⁽²⁾ to energize the platform controls. Select the engine start position ⁽³⁾ to start the engine, or select the glow plug position ⁽³⁾ to energize the glow plugs to start a cold diesel engine.
- Push the emergency-stop button 4 to disconnect power to the control circuit. Pull the emergency-stop button to connect the power again.
- Push the circuit breakers 5 to reset the power if a power overload or positive circuit grounding occurs.
- Select the enable switch 6 to energize the raise, lower, emergency lowering, and outrigger functions.
- Select the lower/neutral/raise switch 7 to raise 7 or lower 7 the platform.
- Select the outrigger switches (a) to manually extend or retract the outriggers.





Base control labels (continued)



Description

Label Pictorial

Emergency-lowering identification

Emergency-lowering procedure

Refer to the operation manual.

The main power disconnect switch must be in the on position.

- 1. Push the **emergency-stop** button on the base control console.
- Hold the enable switch to the left or right and hold down the emergency-lowering switch

 on the base control console to fully lower the platform.

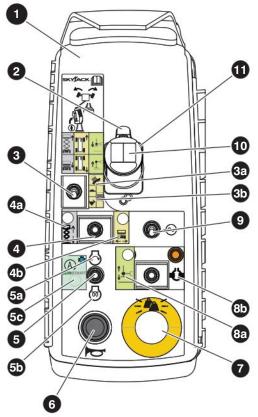
Emergency-lowering identification

Found below the base control console cover.





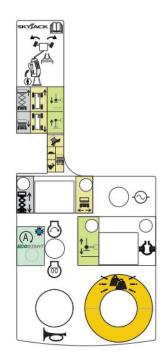
8.2 Platform control labels



Description

Platform controls

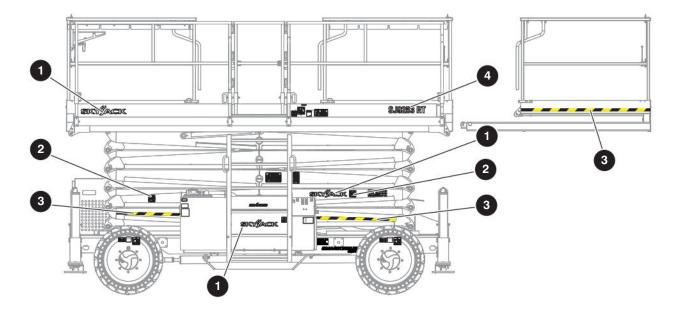
- Squeeze and hold the function-enable switch 2 to energize the lift, drive, steer, and auto-level functions.
- Select the inclined drive (a) (low speed/high torque) or level drive (b) (high speed/low torque) mode.
- Select the lift 49, off 4, or drive 40 mode.
- Select the engine start position is to start the engine, or select the glow plug position is to energize the glow plugs to start a cold diesel engine.
- The ECOStart/Engine glow plug light ⁶⁹ will illuminate blue when the ECOStart has stopped the engine, and amber when the glow plug is on.
- Push the horn button 6 to make a sound like a car horn.
- Push the emergency-stop button ⑦ to disconnect power to the control circuit. Pull the emergency-stop button to connect the power again.
- Select the auto-level position ^(a) to extend and retract the outriggers and make the MEWP level, or the differential lock position ^(a) to engage the differential lock.
- Select the generator switch 9 to start the generator.
- Operate the steering rocker switch 10 to steer.
- Move the controller handle 1 to control the lift, drive, and outrigger/auto-level movements.



Label Pictorial

8.3 SJ9233 RT, SJ9243 RT, SJ9253 RT & SJ9664 RT labels

8.2-1 Left side



Description

Label Pictorial

Skyjack logo

2 Stay away

Stay away from the MEWP when it is in operation.

Caution tape stripe

Model number*

Product identifier.

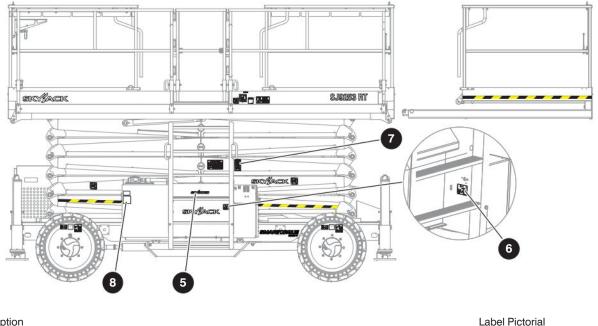
*The model number can be different from the one you see.









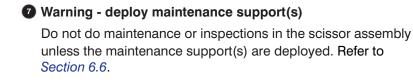


Description

Skycoded[™] logo

Main power disconnect switch

Turn the switch clockwise to turn the power on. Turn the switch counterclockwise to turn the power off. Use a padlock to lock the switch in position.





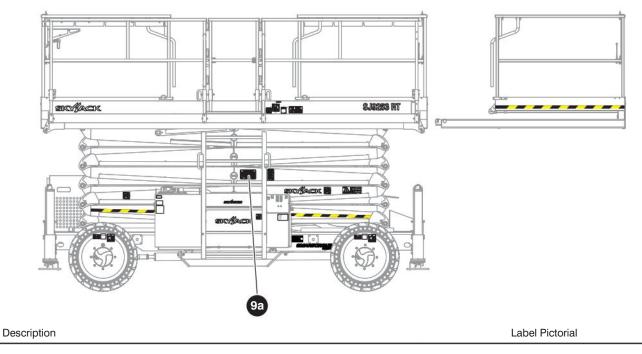
Shows the guaranteed maximum sound power level.









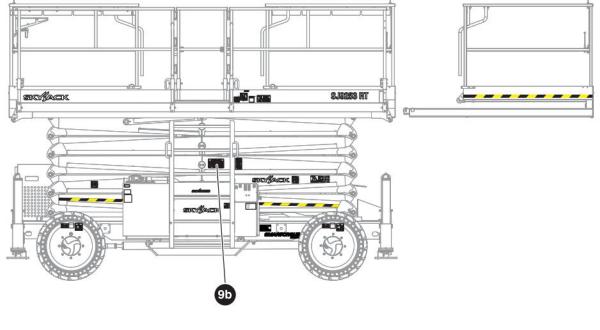


Maintenance support procedure (SJ9233 RT, SJ9243 RT)

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:
 - **a.** Remove the **maintenance support rod** from the keyhole at the rear side of the MEWP.
 - **b.** Push the **rod** handle so that the maintenance support is in a vertical position. Align the maintenance support with the pipes on the cross member.
 - c. Put the rod back into the keyhole.
- **4.** Lower the platform until the pipes on the cross members fully touch the maintenance support, and the platform stops.
- **5.** Turn the **main power disconnect** switch to the off position. Do maintenance on the MEWP. Refer to the service manual.
- 6. Turn the main power disconnect switch to the on position.
- **7.** Raise the platform until there is adequate clearance to retract the maintenance support.
- 8. Retract the maintenance support:
 - **a.** Remove the **rod** from the keyhole at the rear side of the MEWP.
 - **b.** Pull the **rod** handle to retract the maintenance support.
 - c. Put the rod back into the keyhole.
- 9. Fully lower the platform.





Description

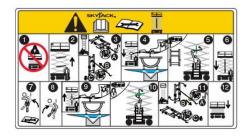
Label Pictorial

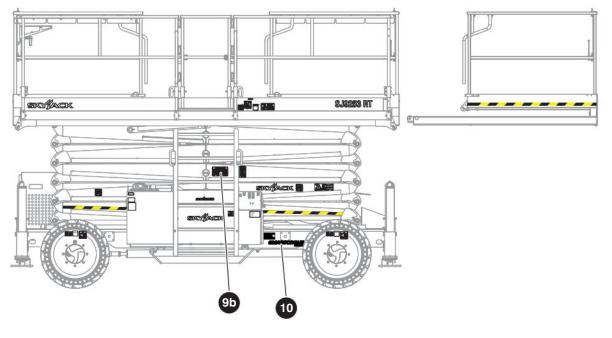
Maintenance supports procedure (SJ9253 RT)

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 supports.
- 3. Deploy the lower maintenance support:
 - **a.** Remove the **maintenance support rod** from the keyhole at the rear side of the MEWP.
 - **b.** Push the **rod** handle so that the maintenance support is in a vertical position. Align the lower maintenance support with the pipes on the cross member.
 - c. Put the rod back into the keyhole.
- **4.** Lower the platform until the top of the support is just below or at the blue mark found on the top cylinder mount.
- 5. Deploy the top maintenance support:
 - Go up the MEWP ladder.
 - Turn the latch on the scissor assembly to deploy the top maintenance support. Make sure that it is in a vertical position. Align the top maintenance support with the pipes on the cross member.
 - Go down the MEWP ladder.

Continue to next page.





Description

Label Pictorial

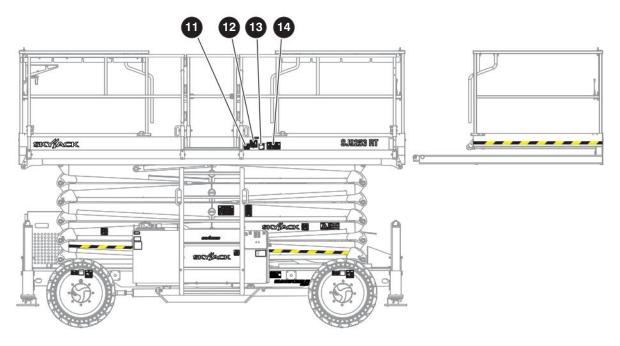
Maintenance supports procedure continued (SJ9253 RT)

- **6.** Lower the platform until the pipes on the top and bottom cross members fully touch the maintenance supports, and the platform stops.
- 7. Turn the **main power disconnect** switch to the off position. Do maintenance on the MEWP. Refer to the service manual.
- 8. Turn the main power disconnect switch to the on position.
- **9.** Raise the platform until the top of the lower support is just below or at the blue mark on the top cylinder mount.
- 10. Retract the top maintenance support:
 - Go up the MEWP ladder.
 - Swing the top maintenance support up until it locks back into the latch on the scissor assembly.
 - Go down the MEWP ladder.
- 11. Retract the lower maintenance support:
 - **a.** Remove the **rod** from the keyhole at the rear side of the MEWP.
 - **b.** Pull the **rod** handle to retract the lower maintenance support.
 - c. Put the rod back into the keyhole.
- 12. Fully lower the platform.









Description

No jewelry

Caution. Do not wear jewelry or loose clothing that could become caught or entangled.

12 No insulation

This 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.

Operator daily inspection

Refer to the operation manual. Do the visual inspections and function tests before you start each work shift. Refer to *Section 4.4*.

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.

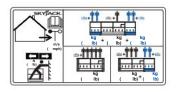
**The rating changes between different units.

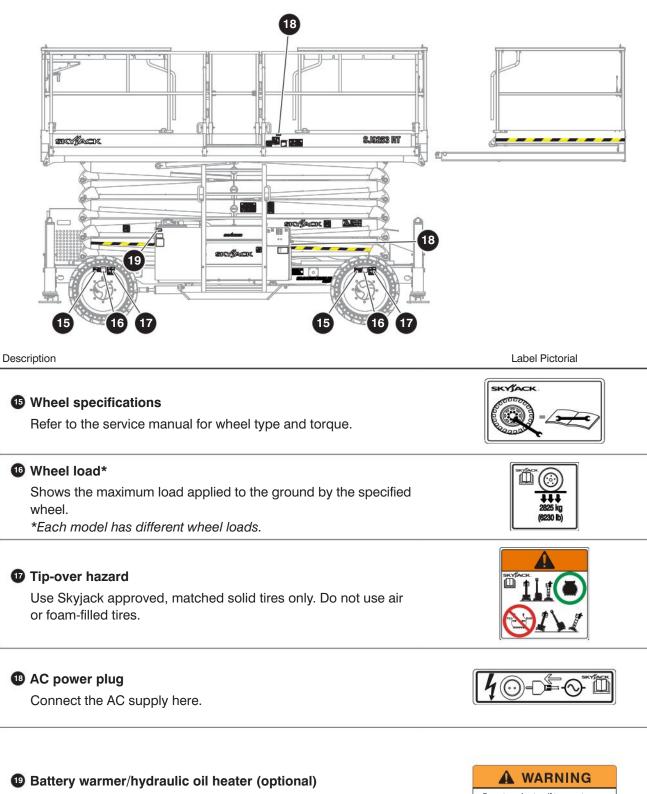


Label Pictorial



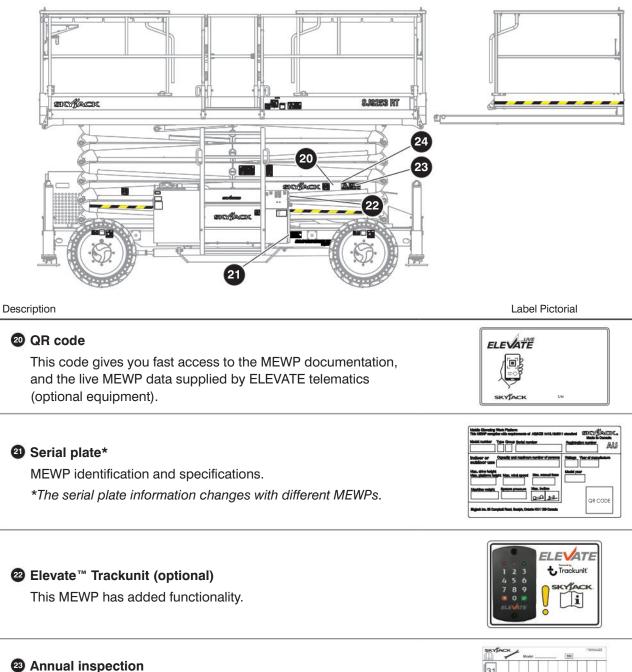






Do not use heaters if the temperature is above 0°C (32°F).





Make sure the MEWP has received an annual inspection before operation.

Warning - annual inspection

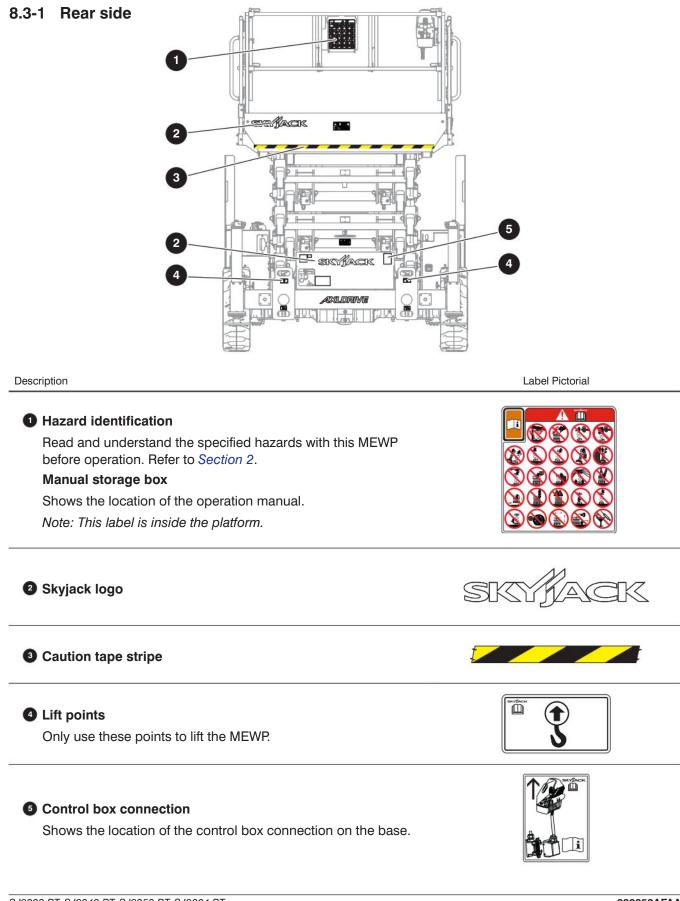
Refer to the operation manual. Make sure the annual and daily inspections are done.

SJ9233 RT, SJ9243 RT, SJ9253 RT, SJ9664 RT SKYJACK

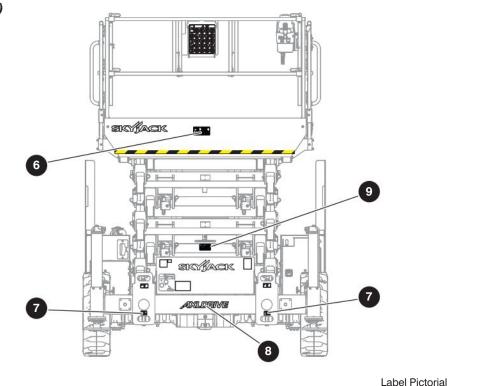


-





Rear side (continued)



Description

O 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.

Note: This label is inside the platform.

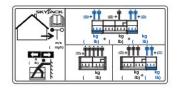
7 Tie-down points

Only use these points to tie-down the MEWP.

B AxIdrive[™] logo

9 Procedure for the maintenance support rod

- 1. Remove the **maintenance support rod** from the keyhole at the rear side of the MEWP.
- 2. Push the **rod** handle so that the maintenance support is in a vertical position. Align the lower maintenance support with the pipes on the cross member.
- 3. Put the rod back into the keyhole.

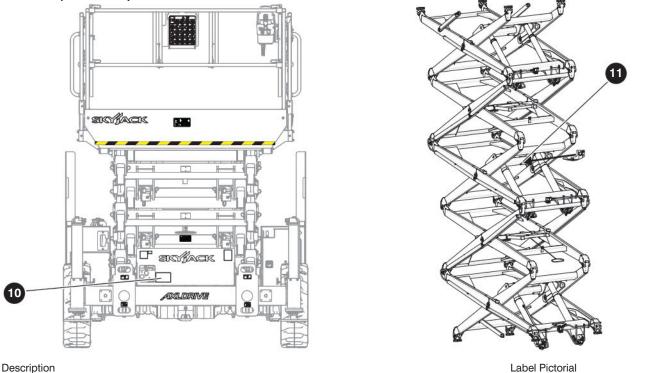








Rear side (continued)



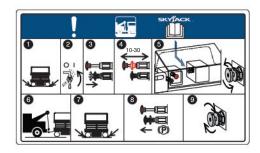
Push, winch and tow procedure

Refer to the operation manual.

- 1. Apply wheel chocks if necessary.
- 2. Turn the main power disconnect switch to the off position.
- **3.** Push the **plunger** of the brake auto-reset valve on the drive manifold at the rear side of the base..
- **4.** Push and release the knob of the hand pump 10-30 times. The brake is now released to permit wheel rolling.
- **5.** Turn the freewheeling valve counterclockwise to a fully open position.
- 6. Push, winch, or tow the MEWP to the necessary location.
- 7. Re-apply the wheel chocks if necessary.
- 8. Pull out the **plunger** of the brake auto-reset valve to reengage the brakes.
- **9.** Turn the **freewheeling valve** knob clockwise to a fully close position.

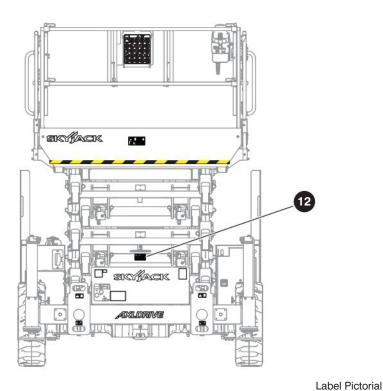
Distance mark for the lower maintenance support (SJ9253 RT)

Make sure the top of the lower maintenance support is below the blue mark found on the cylinder mount.





Rear side (continued)



Description

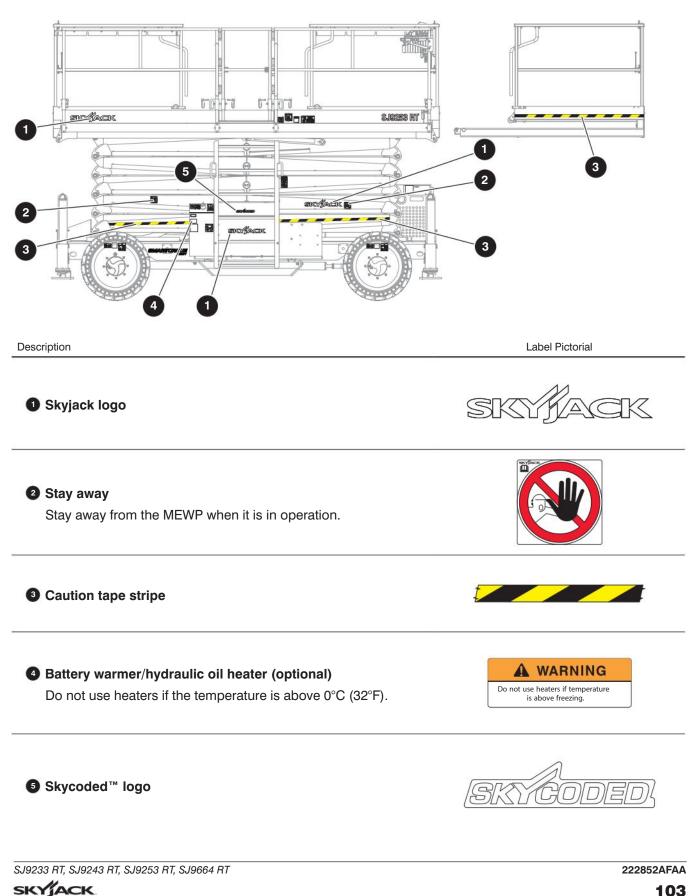
Maintenance supports procedure (SJ9664 RT)

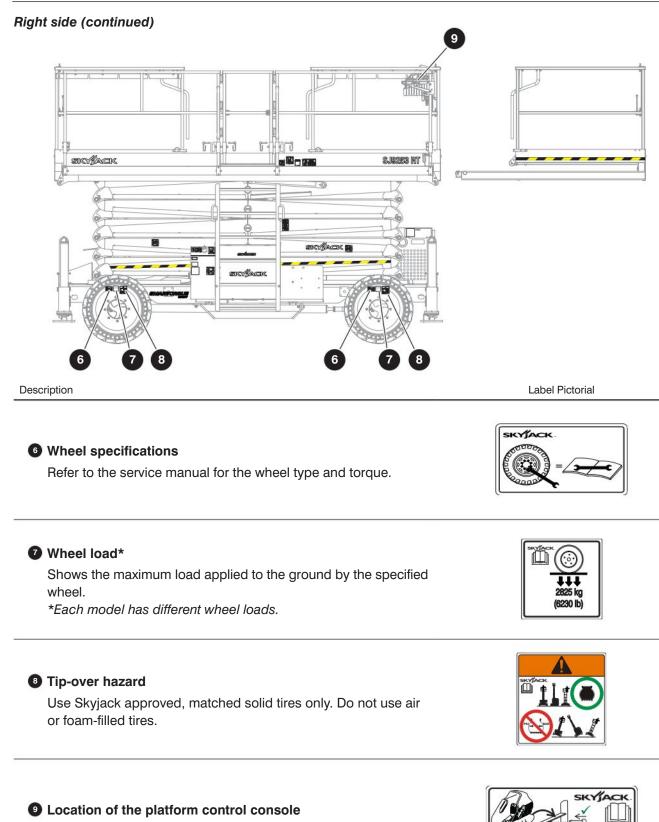
Refer to the operation manual.

- 1. Remove all personnel and material from the platform.
- 2. Raise the platform until there is adequate clearance to deploy the maintenance supports.
- 3. Deploy the lower maintenance support:
 - **a.** Remove the **maintenance support rod** from the keyhole at the rear side of the MEWP.
 - **b.** Pull the rod handle so that the maintenance support is in a vertical position. Align the lower maintenance support with the scissor pins.
 - **c.** Put the rod back into the keyhole at the rear side of the MEWP.
- **4.** Lower the platform until the scissor pins fully touch the maintenance support, and the platform stops.
- 5. Turn the **main power disconnect** switch to the off position. Do maintenance on the MEWP. Refer to the service manual.
- 6. Turn the main power disconnect switch to the on position.
- **7.** Raise the platform until there is adequate clearance to retract the lower maintenance support
- 8. Retract the maintenance support:
 - **a.** Remove the **rod** from the keyhole at the rear side of the MEWP.
 - b. Push the rod handle to retract the maintenance support.
 - c. Put the rod back into the keyhole.
- **9.** Fully lower the platform.

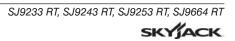


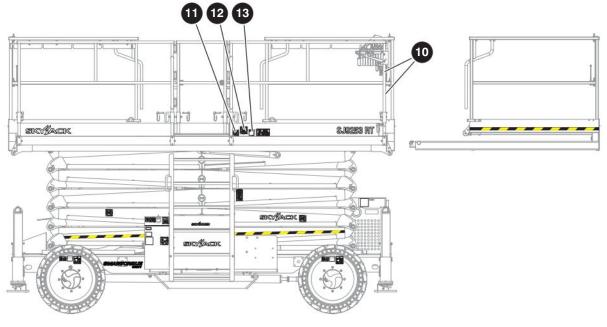
8.3-2 Right side

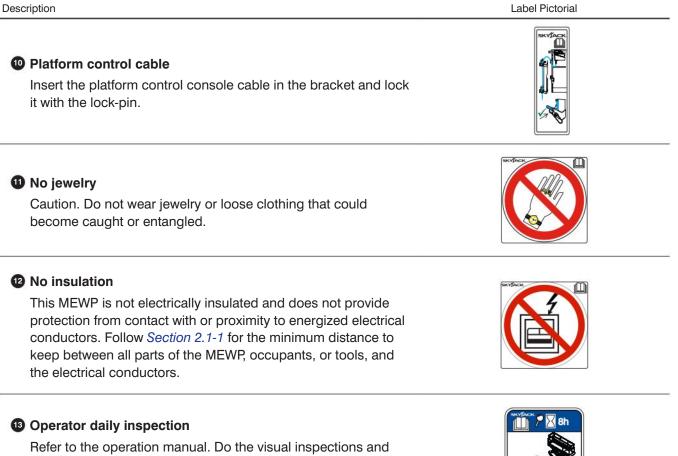




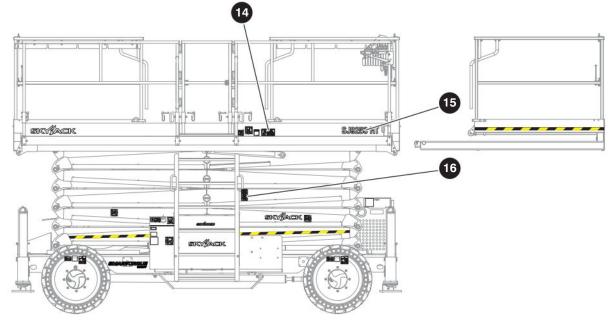
Shows the location of the platform control console.







Refer to the operation manual. Do the visual inspections and function tests before you start each work shift. Refer to *Section 4.4*.



Description

Platform capacity*

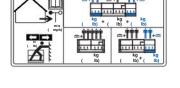
Shows the rated work load in each configuration.

*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.



Label Pictorial

Model number*

Product identifier.

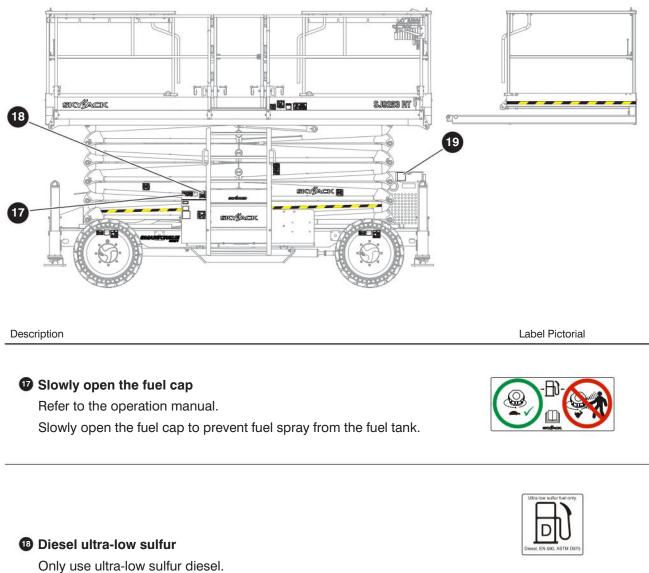
*The model number can be different from the one you see.

Warning - deploy maintenance support(s)

Do not do maintenance or inspections in the scissor assembly unless the maintenance support(s) are deployed. Refer to *Section 6.6*.





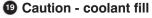


Only use ultra-low sultur die OR

Diesel

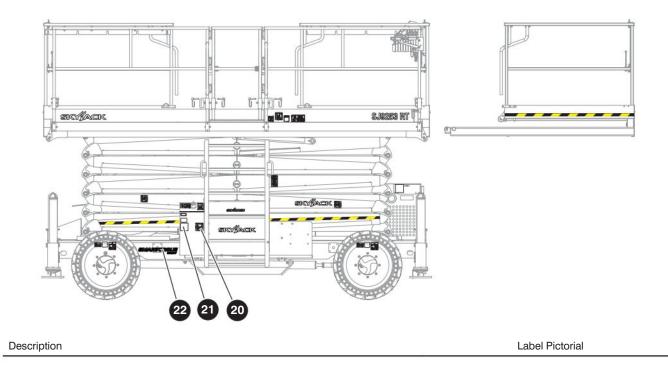
Only use low or ultra-low sulfur diesel.





There is pressurized fluid in the radiator. Do not open the radiator cap when it is hot. Wear the correct PPE. Let the engine cool before you service it.





Do not smoke Do not smoke near this location.



(I)

Lwa

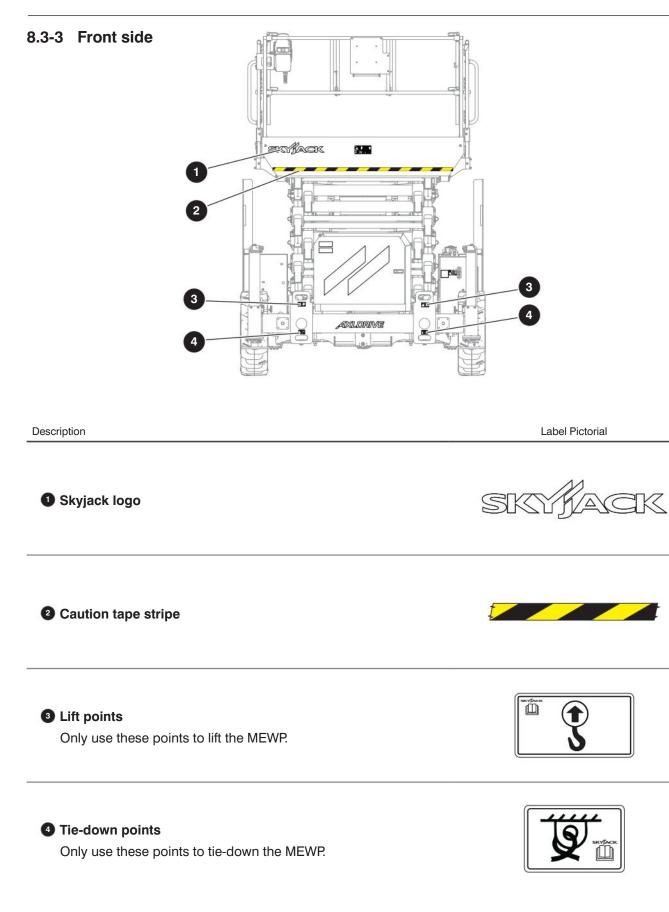
dB

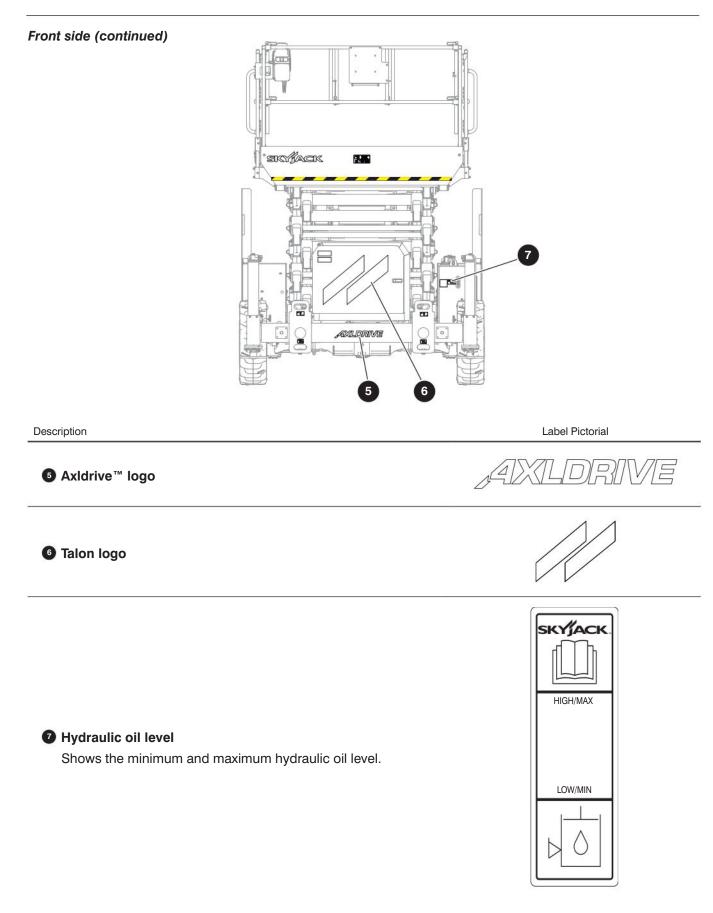
Sound power level

Shows the guaranteed maximum sound power level.

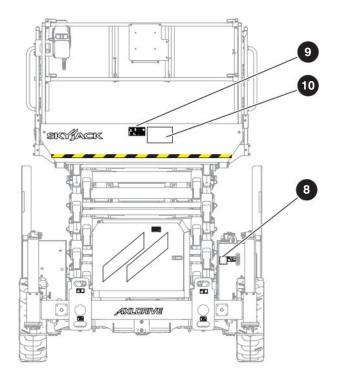








Front side (continued)



Description

*.*____

B Hydraulic oil ATF Dexron III

Only replace the hydraulic fluid with ATF Dexron III.

Platform capacity*

Shows the rated work load in each configuration.

*Each model has different platform capacities.

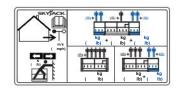
Horizontal load rating**

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.

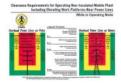
**The rating changes between different units. Note: This label is on the toe-board inside the platform.

Elevating Work Platform Association (EWPA) clearance requirements

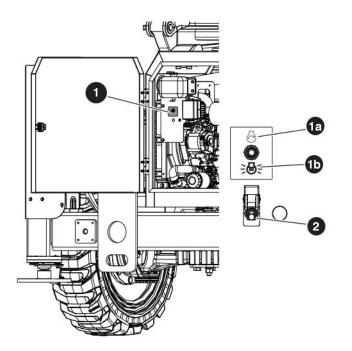
Shows the clearance requirements for operation in a mobile plant that is not electrically insulated, which includes elevating work platforms near power lines.



Label Pictorial



8.3-4 Engine compartment

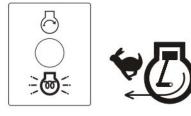


Description

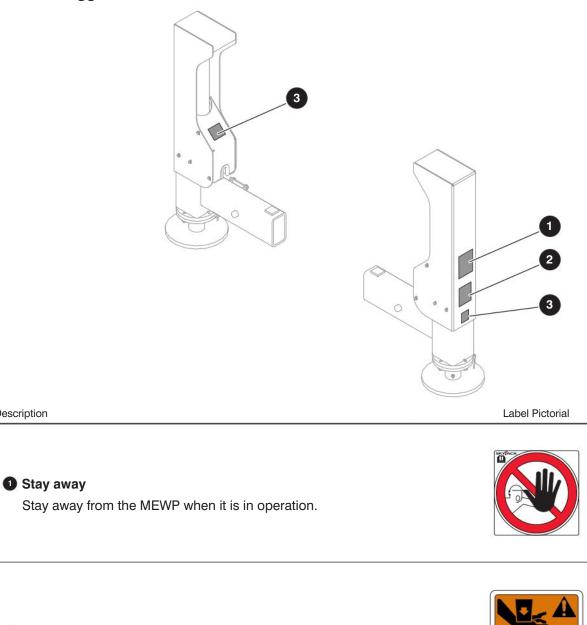
Label Pictorial

Engine controls - diesel

- Select the engine start position (a) to start the engine, or select the glow plug position (b) to energize the glow plugs to start a cold diesel engine.
- Select the **positive air shut-off** switch (2) (optional) to stop the air supply to the engine.



8.3-5 Outriggers



2 Warning - crush hazard

Description

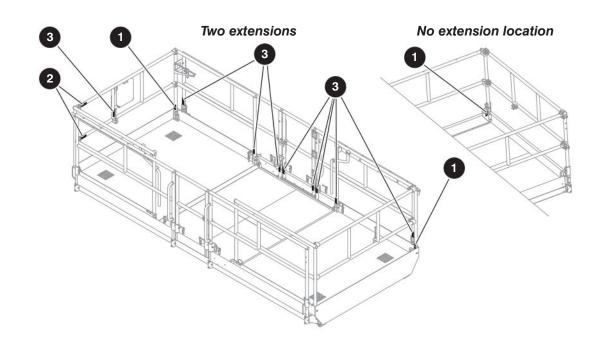
3 Warning - do not alter

Do not tamper with or disable the limit switches or other safety devices.





8.3-6 Fall-protection anchorages



Description

Label Pictorial

1 Fall-protection anchorages

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. Used for fall-restraint or fall-arrest.

2 Warning - fall hazard (horizontal)

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



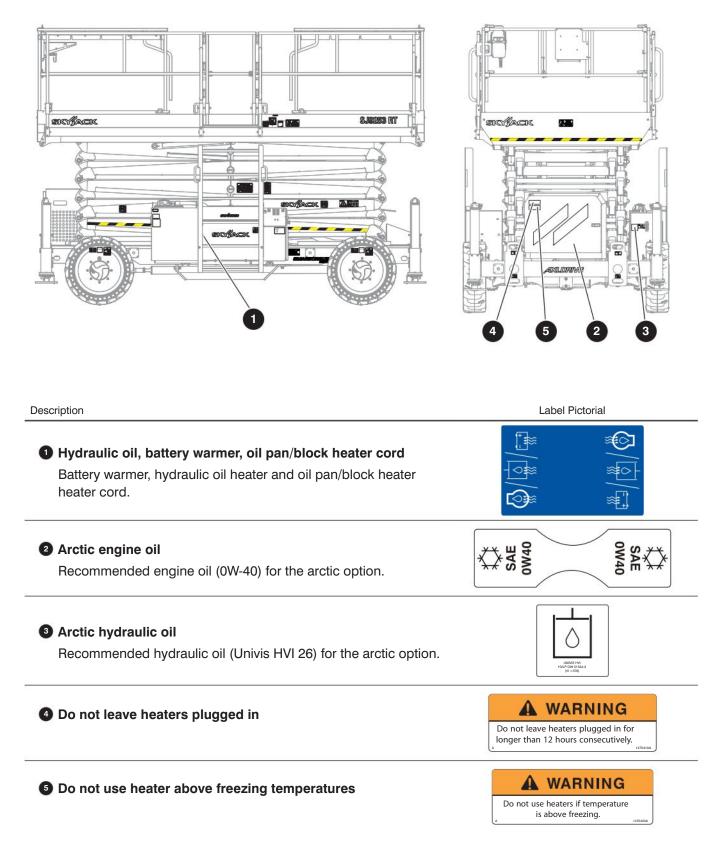
Warning - fall hazard (vertical)

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





8.3-7 Cold/Arctic Package



Section 9 – Unique Skyjack Features

Your Skyjack MEWP may be equipped with the following unique features:



At the heart of every Skyjack machine is our proven and simplistic control system. Skyjack's color-coded and numbered wiring system make our machines the easiest to troubleshoot and repair, translating into less maintenance and lower costs for our customers. The control system on Skyjack's Full-Size Rough Terrain Scissor Lifts pairs the simplistic reliability of the colorcoded and numbered wires with a single control module that manages machine functions, while a visual display module at the base control box provides an easy to navigate interface – outputting plain text and easily understood codes.



Skyjack's mechanical "axle based" drive system gives positive traction and excellent rough ground "terrain-ability'. This is achieved using an automatic or manual (model dependent) locking differential on the rear axle and limited slip differential on the front axle. This means MEWPs can climb grades of up to 30% in the case of Rough Terrain Scissor Lifts, and 50% in the case of Boom Lifts. This industry-leading terrain capability means one can use the Skyjack Rough Terrain Scissor Lifts and Boom Lifts in the most challenging of conditions.



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 product's adaptability and your power to offer a truly flexible rental choice.

SMARTFORQUE

Skyjack's new Full-Size Rough Terrain Scissor Lifts feature an optimized balance of engine horsepower, torque, and hydraulic performance. By adjusting axle gear ratios and maximizing hydraulic output, the new models are able to provide excellent performance with less engine horsepower. An optimized lower horsepower engine not only benefits performance but keeps the cost down - both upfront acquisition and maintenance. Less emission controlling components avoids the cost associated with their complexity, as well as the time and inconvenience required in maintaining them. SMARTORQUE[™] means no diesel particulate filter (DPF), no diesel exhaust fluid (DEF)/ AdBlue, and no other active exhaust after treatment.

 Notes						

