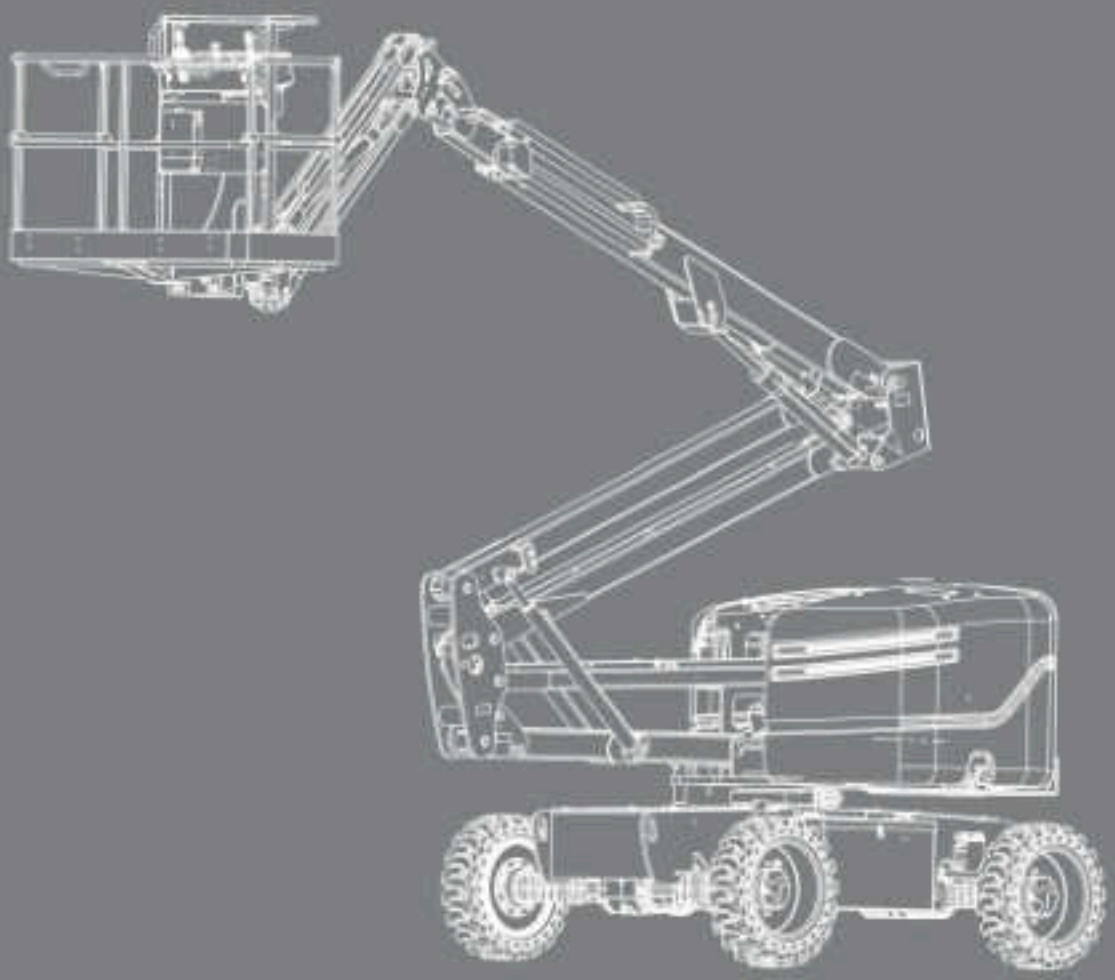
SKYJACK

OPERATION MANUAL

SJ45 AJE+, SJ60 AJE+

ARTICULATING BOOMS



251711ABA
December 2025
ANSI/CSA

MidWestTech | Skyjack SJ45 AJE+, SJ60 AJE+ Articulating Boom Lift Operation Manual |...

Order the manual at mid-west-tech.com >

Table of Contents

Section 1 – About this Mobile Elevating Work Platform (MEWP) 9

1.1 Read and heed 9

1.1-1 Mobile Elevating Work Platform (MEWP) definition 9

1.1-2 Purpose of equipment 9

1.1-3 Use of equipment 9

1.1-4 Operation manual 9

1.1-5 Operator 9

1.1-6 Service policy and warranty 9

1.1-7 Ownership of MEWP 9

1.1-8 Optional equipment 9

1.1-9 Scope of this manual 10

1.2 Primary assemblies 11

1.3 Serial number nameplate 12

1.4 Maintenance responsibility 13

1.4-1 Operator 13

1.4-2 Maintenance and inspection schedule 13

1.4-3 Owner 13

Section 2 – General Safety Precautions 15

2.1 Electrocution hazards 15

2.1-1 Minimum distance from electrical conductor 15

2.2 Safety instructions 16

2.3 Fall-protection 19

2.4 Worksite inspection 19

Section 3 – Familiarization 21

3.1 Overview of the MEWP 22

3.2 Manual storage box 23

3.3 Control functions 23

3.3-1 Main power disconnect switch 23

3.3-2 Footswitch 23

3.3-3 Battery compartment 23

3.3-4 Base control console 24

3.3-5 Platform control console 26

3.4 Features and devices 28

3.4-1 Lowered travel position and elevated travel position 28

3.4-2 Drive speed 29

3.4-3 Drive direction 29

MidWestTech | Skyjack SJ45 AJE+, SJ60 AJE+ Articulating Boom Lift Operation Manual |... Order the manual at mid-west-tech.com >

3.4-4 Angle transducer . . . 29
3.4-5 Platform load sensing system . . . 29
3.4-6 Function restrictions when the MEWP is tilted . . . 30
3.4-7 Overload status - SJ45 AJE+ . . . 30
3.4-8 Overload status - SJ60 AJE+ . . . 31
3.4-9 Brake-release system . . . 32
3.4-10 Secondary guarding electrical (SGE) . . . 32
3.4-11 AC power socket on the platform . . . 32
3.4-12 Motion alarm . . . 32
3.4-13 Differential lock switch . . . 32
3.4-14 White Noise Alarm . . . 32
3.4-15 Turret transportation lock . . . 33
3.5 Optional equipment . . . 33
3.5-1 Flashing amber light . . . 33
3.5-2 Tool Tray . . . 33
3.5-3 LanyardGo . . . 34
3.5-4 Glazier . . . 34
3.5-5 Pipe Rack . . . 34
3.5-6 Elevate™ telematics access control unit . . . 35

Section 4 – Inspections Before Operation . . . 37
4.1 Operator's responsibility . . . 37
4.2 Visual and daily maintenance inspections . . . 38
4.2-1 Labels . . . 38
4.2-2 Electrical . . . 38
4.2-3 Limit switches . . . 38
4.2-4 Hydraulic . . . 38
4.2-5 Pump motor compartment . . . 39
4.2-6 Control compartment . . . 40
4.2-7 Base . . . 41
4.2-8 Platform assembly . . . 43
4.2-9 Boom assembly . . . 44
4.2-10 Optional equipment . . . 45
4.3 Function Tests . . . 46
4.4 Operator's checklist . . . 53

Section 5 – Operation . . . 55
5.1 Energize the base control console . . . 55
5.2 Rotate the platform with the base control console . . . 56
5.3 Rotate the turret with the base control console . . . 56
5.4 Move the jib up and down with the base control console . . . 56
5.5 Raise or lower the riser with the base control console . . . 56
5.6 Raise or lower the main boom with the base control console . . . 56
5.7 Extend or retract the boom with the base control console . . . 57

MidWestTech | Skyjack SJ45 AJE+, SJ60 AJE+ Articulating Boom Lift Operation Manual |... Order the manual at mid-west-tech.com >

5.8 Make the platform level with the base control console . . . 57
5.9 Operate with the emergency power switch at the base control console . . . 57
5.10 Energize the platform control console . . . 57
5.11 Drive forward or rearward . . . 58
5.12 Steer . . . 58
5.13 Move the jib up and down with the platform control console . . . 58
5.14 Move the riser up and down with the platform control console . . . 58
5.15 Extend or retract the boom with the platform control console . . . 58
5.16 Make the platform level with the platform control console . . . 58
5.17 Rotate the platform with the platform control console . . . 58
5.18 Raise or lower the main boom with the platform control console . . . 59
5.19 Operate the horn . . . 59
5.20 Rotate the turret with the platform control console . . . 59
5.21 Operate with the emergency power switch at the platform control console . . . 59
5.22 Engage or disengage the differential lock switch . . . 59
5.23 MEWP shutdown . . . 59
5.24 Glazier Tray (optional equipment) . . . 60
5.25 Pipe Rack (optional equipment) . . . 60
5.26 LanyardGo (optional equipment) . . . 60

Section 6 – Additional Procedures . . . 61

6.1 Use the emergency-lowering function . . . 61
6.1-1 At the base control console: . . . 61
6.1-2 At the base control console: . . . 61
6.1-3 At the platform control console: . . . 61
6.2 Chassis tilt recovery . . . 62
6.2-1 Platform uphill . . . 62
6.2-2 Platform downhill . . . 62
6.3 Release the brakes manually . . . 63
6.4 Winch and tow the MEWP . . . 63
6.5 Move the MEWP for transport . . . 64
6.5-1 Lock the turret . . . 64
6.5-2 Hoist the MEWP . . . 65
6.5-3 Tie down the MEWP . . . 66
6.6 Battery Maintenance . . . 67
6.6-1 Battery service procedure . . . 67
6.6-2 Charge the Battery . . . 67

Section 7 – Technical Diagrams and Specifications . . . 69

7.1 Technical diagrams . . . 70
7.1-1 Reach diagram - SJ45 AJE+ . . . 70
7.1-2 Dimensions - SJ45 AJE+ . . . 71
7.1-3 Reach diagram - SJ60 AJE+ . . . 73

MidWestTech | Skyjack SJ45 AJE+, SJ60 AJE+ Articulating Boom Lift Operation Manual |... Order the manual at mid-west-tech.com >

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 cowling of the control compartment. Refer to *Section 7.3* in this manual.

⚠ WARNING

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.

MidWestTech | Skyjack SJ45 AJE+, SJ60 AJE+ Articulating Boom Lift Operation Manual |...
Order the manual at mid-west-tech.com >

7.8 Maximum platform capacities (evenly distributed)

SJ45 AJE+		Regular Platform Capacity		Derated Platform Capacity*	
	Capacity	300 kg	660 lb	272 kg	600 lb
	Maximum number of people	2	2	1	1
	Manual side force	400 N	90 lbf	200 N	45 lbf
Wind rating	-	12.5 m/s (28 mph)		12.5 m/s (28 mph)	
Tilt cutout setting	side-to-side x front-to-back	5 degrees x 5 degrees		5 degrees x 5 degrees	
SJ60 AJE+		**Regular Platform Capacity**		**Derated Platform Capacity***	
High-capacity zone	Capacity	454 kg	1000 lb	454 kg	1000 lb
	Maximum number of people	3	3	1	1
	Manual side force	400 N	90 lbf	200 N	45 lbf
Low-capacity zone	Capacity	300 kg	660 lb	272 kg	600 lb
	Maximum number of people	2	2	1	1
	Manual side force	400 N	90 lbf	200 N	45 lbf
Wind rating	-	12.5 m/s (28 mph)		12.5 m/s (28 mph)	
Tilt cutout setting	side-to-side x front-to-back	5 degrees x 5 degrees		5 degrees x 5 degrees	

**Refer to Section 3 for the capacity derate switch operation.*

2286AA

7.9 Floor loading pressure

Model		Weights		Pressures	
		Gross MEWP Weight	Weight per Wheel**	LCP***	OFL***
SJ45 AJE+	*min**	5407 kg	1450 kg	766 kPa	8.1 kPa
	*max**	5706 kg	2725 kg	1026 kPa	8.5 kPa
SJ60 AJE+	*min**	8880 kg	2177 kg	788 kPa	11.6 kPa
	*max**	9330 kg	4082 kg	1087 kPa	12.2 kPa

2287AA

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

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

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

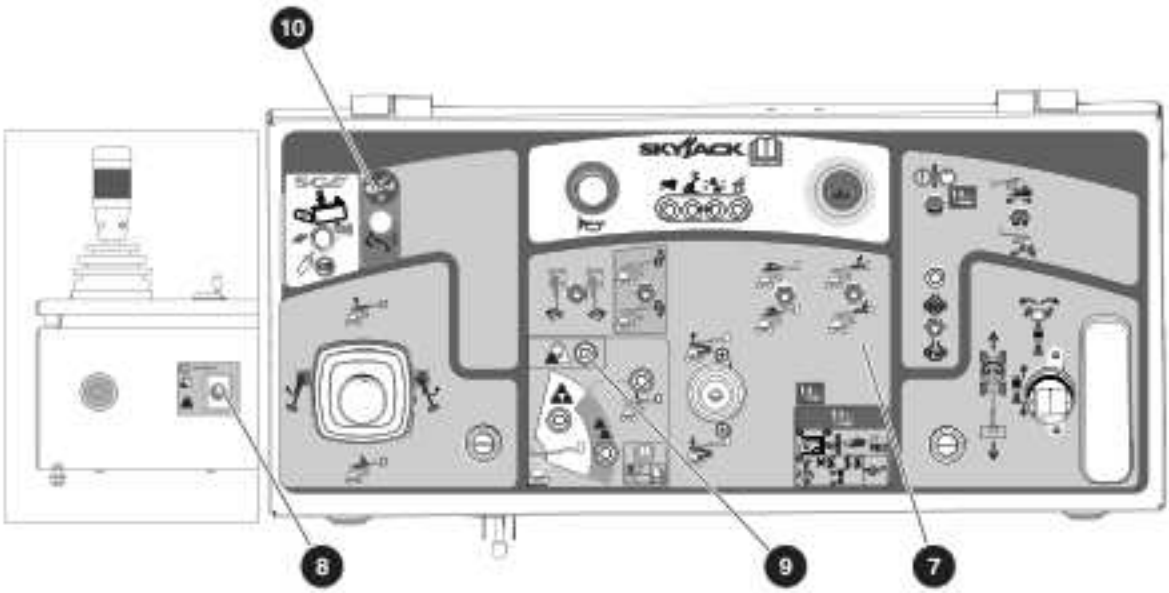
***Note:** The floor covering (e.g., tile, carpet, etc.) or the structure (e.g., beams) of the operating surface must be able to withstand more than the values indicated above.*

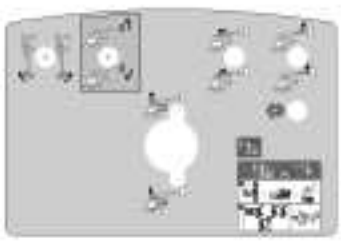
NOTE

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

MidWestTech | Skyjack SJ45 AJE+, SJ60 AJE+ Articulating Boom Lift Operation Manual |... Order the manual at mid-west-tech.com >

Platform control console continued



Description	Label Pictorial
7 Boom/jib/platform controls Select the platform rotation switch to rotate the platform to the left or right. Select the platform-leveling override switch to tilt the platform up or down. Select the boom extend/retract switch to extend or retract the boom. Select the jib up/down switch to move the jib up or down. Select the riser raise/lower controller to raise or lower the riser.	
8 Capacity derate switch This switch controls the platform capacity. This switch derates the platform capacity to adapt to specified attachments. Select up for derated platform capacity and select down for full platform capacity.	
9 Capacity derate light This light illuminates when the capacity derate switch is selected. It indicates the reduction in platform capacity	
10 LanyardGo (if equipped) The light turns green if the body-harness lanyard is attached to the LanyardGo anchorage point. It turns red, if it is not attached.	

MidWestTech | Skyjack SJ45 AJE+, SJ60 AJE+ Articulating Boom Lift Operation Manual |... Order the manual at mid-west-tech.com >



DO NOT drive elevated near depressions or holes of any type, loading docks, debris, drop-offs or surfaces that may affect the stability of the MEWP.

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



DO NOT drive elevated on a soft or uneven surface.

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



DO NOT ascend or descend grades greater than the maximum inclines listed in *Section 7.4*. 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 7.8*).



DO NOT use the MEWP as a crane.



DO NOT step on the boom arm assembly.



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









DO NOT collide or crush. Be aware of obstructions, personnel, or other possible hazards around the MEWP when elevating, lowering, or driving. Keep all body parts inside the platform when elevating or driving. Be aware of blind spots when operating the MEWP.

MidWestTech | Skyjack SJ45 AJE+, SJ60 AJE+ Articulating Boom Lift Operation Manual |...
Order the manual at mid-west-tech.com >

Section 8 – Labels

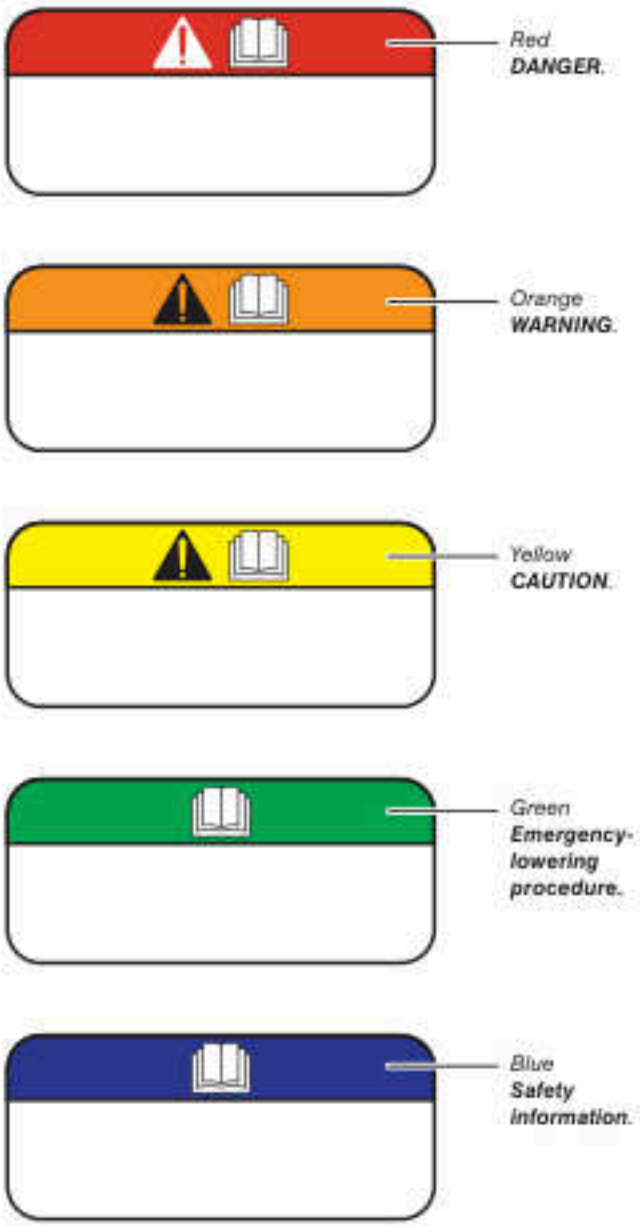


Figure 09 *Label legend*

MidWestTech | Skyjack SJ45 AJE+, SJ60 AJE+ Articulating Boom Lift Operation Manual |... Order the manual at mid-west-tech.com >