SKYJACK

OPERATING MANUAL
ANSI/CSA

This manual must be kept and stored with the aerial platform at all times.



Rough Terrain Series

Engine Powered

Operating Manual - ANSI/CSA

Models:
Mid Size: 7127, 7135, 8243 & 8850
Full Size: 8831, 8841 & 9250

For Service please call ***800 275-9522***
Skyjack Service Center, 3451 Swenson Ave., St. Charles, IL. 60174, USA .... *FAX 630 262-0006*
For Parts in North America and Asia please call ***800 965-4626***
Skyjack Parts Center, 3451 Swenson Ave., St. Charles, IL. 60174, USA..... *FAX 888 782-4825*
For Parts & Service in Europe please call ***44-1691-676-235***
Skyjack Europe, Glovers Meadow, Maesbury Rd., Oswestry, Shropshire, U.K .....*FAX 44-1691-676-239*

143861AB-A Printed in Canada February 2008

MidWestTech | Skyjack SJ7127, SJ7135, SJ8243, SJ8850, SJ8831, SJ8841, SJ9250 Rough... Order the manual at mid-west-tech.com >

Table of Contents

Section 1 - About Your Aerial Platform

Read and Heed

Aerial Platform Definition....7
Purpose of Equipment....7
Use of Equipment....7
Manual....7
Operator....7
Service Policy and Warranty....7
Optional Accessories....7
Scope of this Manual....7

Safety Rules

Operator Safety Reminders....8
Electrocution Hazard....9
Safety Precautions....10

Section 2 - Operation

2.1 General....13
2.1-1 Operator Qualifications....13
2.1-2 Operator's Responsibility for Maintenance....13
2.1-3 Maintenance and Inspection Schedule....13
2.1-4 Owner's Inspections....13
2.2 Major Components....14
2.3 Major Assemblies....15
2.3-1 Base....15
2.3-2 Lifting Mechanism....15
2.3-3 Platform....15
2.4 Serial Number Nameplate....15
2.5 Component Identification....16
2.5-1 Emergency Main Power Disconnect Switch....16
2.5-2 Motion Alarm....16
2.5-3 Tilt Alarm....16
2.5-4 Base Control Console....16
2.5-5 Engine Control Console....17
2.5-6 Brake System....18
2.5-7 Emergency Lowering System....18
2.5-8 Propane Cylinder (If Equipped)....19
2.5-9 Maintenance Support....19
2.5-10 Manual Storage Box....19
2.5-11 Folding Guardrail System....20
2.5-12 Lanyard Attachment Anchorage....20
2.5-13 AC Outlet on Platform....20
2.5-14 Platform Control Console....21
2.6 Component Identification (Special Options)....22
2.6-1 Generator/Outrigger Control Console (If Equipped)....22
2.6-2 Powered Extension Control Console (If Equipped)....22
2.6-3 1500W AC Inverter (If Equipped)....23





MidWestTech | Skyjack SJ7127, SJ7135, SJ8243, SJ8850, SJ8831, SJ8841, SJ9250 Rough... Order the manual at mid-west-tech.com >

Table of Contents

Section 2 - Operation (Continued)

2.7 Operator's Responsibility 24
2.8 Visual and Daily Maintenance Inspections 25
2.9 Function Tests 35
2.10 Start Operation 40
2.10-1 To Activate Base Control Console 40
2.10-2 To Raise or Lower Platform Using Base Console 41
2.10-3 To Activate Platform Control Console 41
2.10-4 To Raise or Lower Platform Using Platform Control Console 42
2.10-5 To Drive Forward or Backward 42
2.10-6 To Steer 43
2.10-7 To Select Drive Torque 43
2.10-8 To Extend or Retract Powered Extension Platform (If Equipped) 43
2.10-9 To Extend or Retract Manual Extension Platform 44
2.10-10 Hydraulic Outriggers (If Equipped) 45
2.10-11 Generator (If Equipped) 46
2.10-12 Electrical Inverter (If Equipped) 46
2.10-13 Shutdown Procedure 46
2.11 Refueling Procedure 48
2.11-1 Regular Fuel 48
2.11-2 Propane 49
2.12 Loading/Unloading 50
2.12-1 Lifting 50
2.12-2 Driving 51
2.13 Winching and Towing Procedure 52
2.13-1 To Release the Brakes Manually 52
2.14 Guardrail Folding Procedure 54
2.15 Emergency Lowering Procedures 56
2.16 Maintenance Support Procedure 57
2.17 Tables 59
2.18 Labels 69

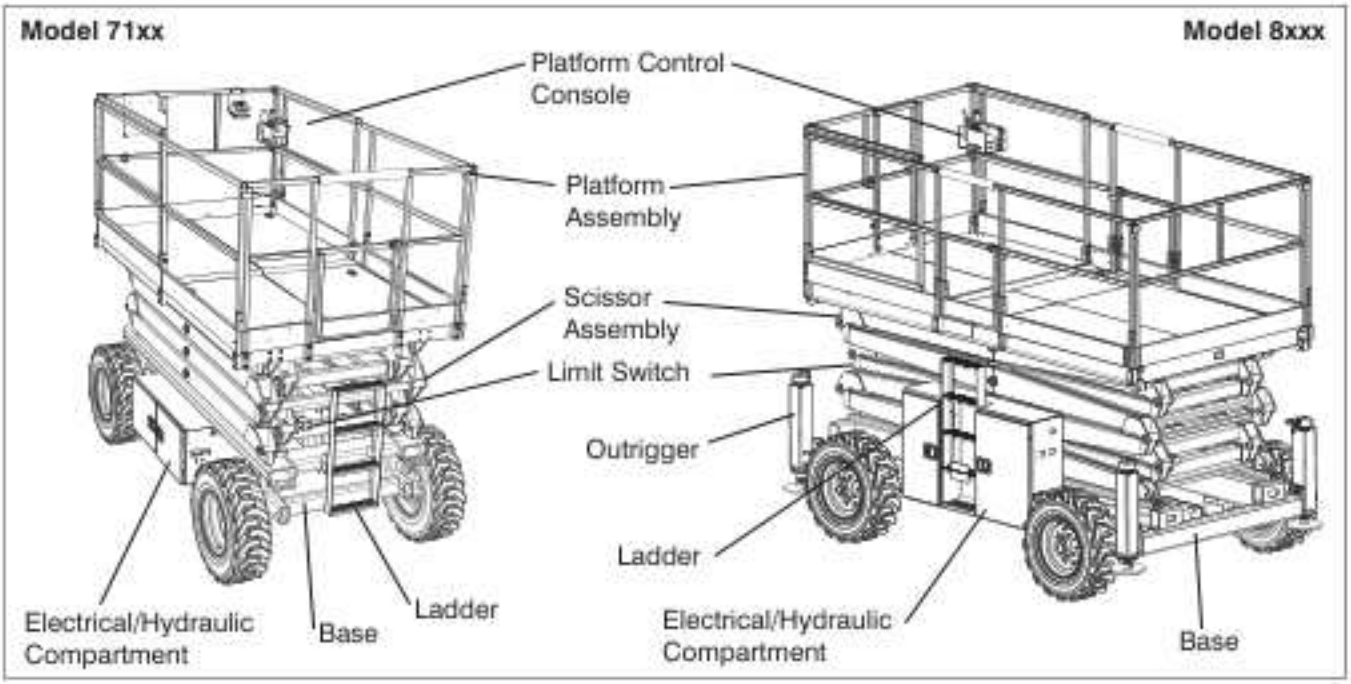
List of Tables

Table 2.1 Standard and Optional Features 59
Table 2.2 Owner's Annual Inspection Record 60
Table 2.3 Specifications and Features 61
Table 2.4 Maximum Platform Capacities (Evenly Distributed) 62
Table 2.5 Maximum Platform Capacities (Evenly Distributed with Optional #7 Tires) 63
Table 2.6 Floor Loading Pressure 64
Table 2.7 Tire Specifications 66
Table 2.8 Maintenance and Inspection Schedule 67
Table 2.9 Operator's Checklist 68





MidWestTech | Skyjack SJ7127, SJ7135, SJ8243, SJ8850, SJ8831, SJ8841, SJ9250 Rough... Order the manual at mid-west-tech.com >



2.8 Visual & Daily Maintenance Inspections

Begin the visual and daily maintenance inspections by checking each item in sequence for the conditions listed in this section.

WARNING

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

WARNING

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

NOTE

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

2.8-1 Labels

Refer to the labels section in this manual and determine that all labels are in place and are legible.

2.8-2 Electrical

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

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

- base to platform cables and wiring harness
- engine compartment electrical panel
- engine wiring harness
- hydraulic/electrical wiring harnesses

2.8-3 Limit Switches

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

2.8-4 Hydraulic

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

Perform a visual inspection around the following areas:

- hydraulic tank filter, fittings, hoses, emergency power unit (if equipped) and base surfaces
- engine compartment fittings, hoses, main pump, and filter
- all hydraulic cylinders
- all hydraulic manifolds
- the underside of the base
- ground area under the aerial platform
- outriggers

MidWestTech | Skyjack SJ7127, SJ7135, SJ8243, SJ8850, SJ8831, SJ8841, SJ9250 Rough... Order the manual at mid-west-tech.com >

2.10-11 Generator (If Equipped)

To start hydraulic generator:

1. On platform control console, select off/lift/drive key switch to "↑ ↓" lift position.
2. Depress and hold engine " " start pushbutton until engine starts, then release. Do not overcrank starter.
3. On auxiliary control console, select hydraulic generator switch to energized position. Engine will automatically switch to high throttle and generator will start.

To restore normal operation:

1. Flip the switch to the off position. The generator will turn off.

NOTE

Activating any lift or outrigger functions, changing the key switch setting, activating the emergency stop or an engine stall will turn off the generator. The platform may be lowered during generator operation.

2.10-12 Electrical Inverter (If Equipped)

The inverter is operational with alternating current available at all times when, and only when, the engine is running at high throttle. Deselecting the high idle throttle setting or stopping the engine will turn the inverter off.

To check status of inverter:

1. During routine operation, the on/off switch should remain in the on position. To prevent automatic inverter operation when high throttle is activated, slide the on/off switch on the inverter to the off position.
2. Inverter state is indicated by the LEDs on the face of the inverter. A glowing green LED indicates normal operation. If a fault occurs, the status LEDs will indicate the area responsible. After the fault condition is corrected, the inverter will automatically reset itself.

2.10-13 Shutdown Procedure

1. Completely lower the platform.
2. On platform control console, push in " " emergency stop button.
3. Select off/lift/drive select key switch to " " off position and remove key.

WARNING

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

4. Use the ladder to dismount from platform.
5. On the engine tray post:
   - For diesel engine, push in off/on switch to " " off position.
   - For dual fuel engine, select off/on/start switch to " " off position.
6. Turn emergency main power disconnect switch to off position.

MidWestTech | Skyjack SJ7127, SJ7135, SJ8243, SJ8850, SJ8831, SJ8841, SJ9250 Rough... Order the manual at mid-west-tech.com >

Table 2.4 Maximum Platform Capacities (Evenly Distributed)

MODEL		Total		First Extension		Second Extension	
		Capacity	Number of Occupants	Capacity	Number of Occupants	Capacity	Number of Occupants
7127	One Extension Platform	1500 lb. 680 kg	5	500 lb. 227 kg	2	Not Available	
7135	One Extension Platform	1000 lb. 454 kg	4	350 lb. 159 kg	1	Not Available	
8243	One Extension Platform	1000 lb. 454 kg	3	350 lb. 159 kg	1	Not Available	
8850	One Extension Platform	800 lb. 363 kg	3	300 lb. 136 kg	1	Not Available	
8831	No Extension Platform	2500 lb. 1134 kg	6	Not Available			
	One Extension Platform	2000 lb. 907 kg	6	500 lb. 227 kg	2	Not Available	
	Two Extension Platforms	1700 lb. 771 kg	6	500 lb. 227 kg	2	500 lb. 227 kg	2
8841	No Extension Platform	1700 lb. 771 kg	5	Not Available			
	One Extension Platform	1500 lb. 680 kg	5	500 lb. 227 kg	2	Not Available	
	Two Extension Platforms	1500 lb. 680 kg	5	500 lb. 227 kg	2	500 lb. 227 kg	2
9250	No Extension Platform	2000 lb. 907 kg	5	Not Available			
	One Extension Platform	1500 lb. 680 kg	5	500 lb. 227 kg	2	Not Available	
	Two Extension Platforms	1500 lb. 680 kg	5	500 lb. 227 kg	2	500 lb. 227 kg	2

EGSTRAD-ANSI

NOTE:

Occupants and materials are not to exceed rated load.
Capacities listed are for standard machines equipped with #6 tires.
Refer to capacity label at sides of platform for additional information and for models equipped with options.

MidWestTech | Skyjack SJ7127, SJ7135, SJ8243, SJ8850, SJ8831, SJ8841, SJ9250 Rough... Order the manual at mid-west-tech.com >

Table 2.7 Tire Specifications

WARNING

Air pressure can affect stability. Temperature changes can affect air pressure. It is important to visually inspect all tires for proper tire inflation prior to use. Tires should be checked by end user on a daily basis. Tire inflation pressures must be checked weekly with a calibrated gauge. If the measured pressure is less than the specification, reinflate to the pressure specified below. Tires must not be inflated above the recommended specification. Do not intermix tires of different types on one aerial platform. Use only tires of type originally supplied.

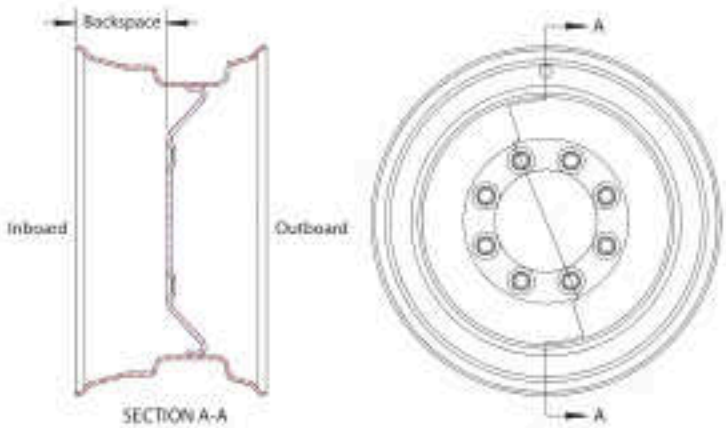
Tire Size		Fill Specification			Usage†						
					MID SIZE				FULL SIZE		
		Fill Type	Ply Rating	Pressure (Factory) (kPa)	7127	7135	8243	8850	8831	8841	9250
#6A	10-16.5 CARLISLE US LOADER	Air	10	75* (517.1)*	S	S	S	N/A	S	S	S
#6A	10-16.5 OTR OUTRIGGER (Non-Marking)		10	75* (517.1)*	O	O	O	N/A	O	O	O
#7A	31-15.5-15 GOODYEAR TERRA XTRAC		8	45* (310.3)*	O	O	O	N/A	O	O	O
#6F	10-16.5 CARLISLE US LOADER	Foam	10	N/A	O	O	O	S	O	O	O
#6F	10-16.5 OTR OUTRIGGER (Non-Marking)		10	N/A	O	O	O	O	O	O	O
#7F	31-15.5-15 GOODYEAR TERRA XTRAC		8	N/A	O	O	O	O	O	O	O

603TIAC-ANSI

* Factory preset @ 21°C, **Check pressures regularly as tires can lose pressure over time and over different ambient temperatures even under normal conditions.**

† Usage: (S)tandard Or (O)ptional
(N/A) Not Available

Rim Backspace Diagram



Rim Size	Backspace						
	7127	7135	8831	8841	8243	8850	9250
Serial Number	Contact Skyjack Service Department						
#6 & #6F	3-3/4"	3-3/4"	4-3/4"	4-3/4"	3-3/4"	3-3/4"	3-3/4"
	95 mm	95 mm	121mm	121mm	95 mm	95 mm	95 mm
#7 & #7F	All models are 4-3/8"						

603BIAC-ANSI

MidWestTech | Skyjack SJ7127, SJ7135, SJ8243, SJ8850, SJ8831, SJ8841, SJ9250 Rough... Order the manual at mid-west-tech.com >

Table 2.1 Standard and Optional Features

MODEL	Mid-Size RT's				Full-Size RT's		
	7127	7135	8243	8850	8831	8841	9250
STANDARD EQUIPMENT							
Base control	•	•	•	•	•	•	•
Joystick control	•	•	•	•	•	•	•
Dual range (torque/speed) selector	•	•	•	•	•	•	•
Operator horn	•	•	•	•	•	•	•
Diamond pattern, all steel platform deck construction	•	•	•	•	•	•	•
Hinged guardrail system	•	•	•	•	•	•	•
Lanyard attachment rings	•	•	•	•	•	•	
Front-mounted manual extension platform	•	•	•	•			
Front-mounted powered extension platform	•	•	•	•			
Access ladders and gates at both sides of platform					•	•	•
AC outlet on platform	•	•	•	•	•	•	•
Self-centering scissors design					•	•	•
Flashing amber beacon	•	•	•	•	•	•	•
Motion alarm	•	•	•	•	•	•	•
Cabinets with lockable swing-out door	•	•	•	•	•	•	•
Hourmeter	•	•	•	•	•	•	•
Tilt alarm with lift/drive cut-out	•	•	•	•	•	•	•
Color-coded, numbered wiring system	•	•	•	•	•	•	•
Engine mounted on roll-out tray	•	•	•	•	•	•	•
65 hp GM 1.6L dual fuel - gasoline/propane engine			•	•	•	•	•
23.1 kW (31 hp) Kubota DF972 dual fuel - gasoline/propane engine	•	•					
Tie-down points	•	•	•	•	•	•	•
Grip lug air-filled tires	•	•	•		•	•	•
Grip lug foam-filled tires				•			
4-wheel drive	•	•	•	•	•	•	•
Independently operated hydraulic outriggers			•	•			•
Spring-applied hydraulically released disc brake system	•	•	•	•	•	•	
Dual spring-applied hydraulically released parking brakes							•
OPTIONAL EQUIPMENT							
Front-mounted manual extension platform					•	•	
Rear-mounted manual extension platform					•	•	
Front-mounted powered extension platform					•	•	•
Rear-mounted powered extension platform					•	•	•
19.4 kW (26 hp) Kubota D1105 diesel water-cooled engine	•	•	•	•	•	•	•
Grip lug foam-filled tires	•	•	•		•	•	•
2-wheel drive	•	•	•		•	•	•
Independently operated hydraulic outriggers	•	•			•	•	
1500 watt AC Inverter	•	•	•	•	•	•	•
3500 watt hydraulic AC generator	•	•	•	•	•	•	•

8831SAC-ANSI

MidWestTech | Skyjack SJ7127, SJ7135, SJ8243, SJ8850, SJ8831, SJ8841, SJ9250 Rough... Order the manual at mid-west-tech.com >