

OPERATING MANUAL (ANSI/CSA)

TELESCOPIC BOOMS

MODELS SJ40T SJ45T SJ61T SJ66T

169269AF-A August 2016

SKYJACK

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3.8-8 To Operate Using Emergency Power Switch at Base Control Console

This is a momentary-type switch. This switch allows all functions except the drive function to operate in the event of engine malfunction. Refer to Section 2.6 for the emergency lowering procedure.

NOTE
The emergency power unit has two-minute duty cycle.

CAUTION
Do not use emergency power unit continuously for two minutes.

3.8-9 To Activate Platform Control Console

1. In engine compartment, turn main power disconnect switch to "I" on position.
2. On base control console, turn off/base/platform (base/off/platform) key switch to " " platform position.
3. On base control console, pull out " " emergency stop button.

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

WARNING
DO NOT operate any control on operator's control console without proper fall protection secured to the designated location in the platform. Failure to avoid this hazard could result in death or serious injury.

4. Enter platform and close gate.
5. Attach body harness lanyards of each occupant to platform lanyard rings.
6. On platform control console, pull out " " emergency stop button.
7. Select " " start position from engine start/on/off switch until engine starts.

WARNING
DO NOT over crank the starter. If engine fails to start after multiple attempts, consult "Troubleshooting Information," in the Service and Maintenance Manual.

NOTE
Engine will not start if you are pressing down on the footswitch.

8. Select desired engine RPM using throttle switch: " " high or " " low.

WARNING
- **DO NOT** drive or steer the aerial platform when the platform position does not allow you a clear view of the base.
- Your area of operation should be cordoned from other personnel or equipment.

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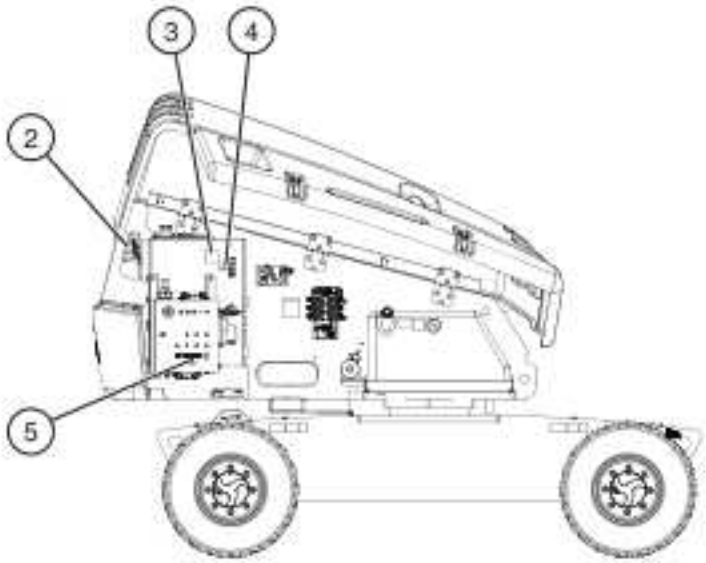
Table 4.2b Specifications and Features

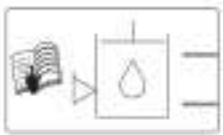
MODEL				SJ 40T	SJ 45T	SJ 61T	SJ 66T
Engine - Deutz	Engine Type			Deutz D2.9		Deutz TD2.9	
	Fuel Type			Diesel			
	Fuel Tank Capacity			45 gal (170.3 L)			
	Standard Oil Factory Fill	Ambient Temperature Limits	0°F to 115°F (-18°C to +45°C)	SAE 15W-40 API CF/CG/CH-4			
	Cold Lube Oil Option		-20°F to 90°F (-29°C to +32°C)	SAE 5W-30 API CF/CG/CH-4			
	Arctic Lube Oil Option		-40°F to 115°F (-40°C to +45°C)	SAE 0W-40 API CF/CG/CH-4			
	Approved Alternates			See Engine Manual			
	Lube Oil Sump Capacity			2.11 gal (8 L)		2.38 gal (9 L)	
	Radiator Capacity			2.38 gal (9 L)		3.43 gal (13L)	
	Radiator Fluid Type			DELO ELC 50/50			
Engine - Deutz	Engine Type			Deutz D2011L03i		Deutz D2011L04i	
	Fuel Type			Diesel			
	Fuel Tank Capacity			45 gal (170.3 L)			
	Standard Oil Factory Fill	Ambient Temperature Limits	0°F to 115°F (-18°C to +45°C)	SAE 15W-40 API CF/CG/CH-4			
	Cold Lube Oil Option		-20°F to 90°F (-29°C to +32°C)	SAE 5W-30 API CF/CG/CH-4			
	Arctic Lube Oil Option		-40°F to 115°F (-40°C to +45°C)	SAE 0W-40 API CF/CG/CH-4			
	Approved Alternates			See Engine Manual			
	Lube Oil Sump Capacity			1.45 gal (5.5 L)		2.64 gal (10.0 L)	
Engine - GM	Engine Type			3.0L GM Dual Fuel			
	Fuel Type - Dual			Gasoline/Propane			
	Fuel Tank Capacity			45 gal (170.3 L)			
	Standard Oil Factory Fill	Ambient Temperature Limits	-40°F to 115°F (-40°C to +45°C)	SAE 5W-30 API SL			
	Approved Alternates			See Engine Manual			
	Lube Oil Capacity			1.19 gal (4.5 L)			
	Standard Coolant	Ambient Temperature Limits	-20°F to 115°F (-29°C to +45°C)	GM 50/50 Extended Life Coolant			
	Arctic Coolant Option		-40°F to 115°F (-40°C to +45°C)	GM 60/40 Extended Life Coolant			
	Coolant Capacity			3.0 gal (11.4 L)			
Engine - Kubota	Engine Type			2.5L Kubota Dual Fuel			
	Fuel Type - Dual			Gasoline/Propane			
	Fuel Tank Capacity			45 gal (170.3 L)			
	Standard Oil Factory Fill	Ambient Temperature Limits	-40°F to 115°F (-40°C to +45°C)	SAE 5W-30 API SL			
	Approved Alternates			See Engine Manual			
	Lube Oil Capacity			2.5 gal (9 L)			
	Standard Coolant	Ambient Temperature Limits	-20°F to 115°F (-29°C to +45°C)	Recochem 50/50 Extended Life Coolant			
	Arctic Coolant Option		-40°F to 115°F (-40°C to +45°C)	Recochem 60/40 Extended Life Coolant			
	Coolant Capacity			3.17 gal (12 L)			
Hydraulic Oil	Hyd Cooler Option	Ambient Temperature Limits	100°F to 115°F (+38°C to +45°C)	Oil cooler option recommended			
	Standard Factory Fill		-15°F to 100°F (-26°C to +38°C)	Shell Tellus T46			
	Arctic Oil Option		-40°F to 100°F (-40°C to +38°C)	Esso/Mobil UNIVIS HVI 26 Petro-Canada HYDREX EXTREME			
	Approved Alternates		-15°F to 100°F (-26°C to +38°C)	Mobilfluid 424, Esso UNIVIS N46, Chevron Rycon MV			
			-40°F to 80°F (-40°C to +27°C)	Mobil DTE 13M, Esso UNIVIS N22 Petro-Canada HYDREX MV Arctic 15			
	Hydraulic Tank Capacity			59 gal (223.3 L)			

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Control Compartment (Continued)



No.	Label Pictorial	Description
2		**Grease Points Maintenance** Refer to service and maintenance manual "" for lubricating aerial platform.
3		**Hydraulic Oil** Replace hydraulic fluid with Shell Tellus T46 or approved alternate (see Table 4.2b). (Note: Cold weather starting temperatures can be improved with Skyjack options. Please consult your nearest Skyjack service center.)
4		**Hydraulic Oil Level** Indicates minimum/maximum oil level.
5		**Positive Air Shutoff (If Equipped)** Use this switch to trigger the positive air shutoff valve.

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Table 4.6 Floor Loading Pressure

MODEL (with Air Filled Tires)	Gross Aerial Platform Weight		Total Aerial Platform Load					
			Wheel		LCP		OUP	
	lb.	kg	lb.	kg	psi	kPa	psf	kPa
SJ 40T	14,750	6,695	7,600	3,450	130	900	193	9.3
SJ 45T	15,315	6,950	8,000	3,630	135	930	200	9.5
SJ 61T	24,000	10,890	12,360	5,600	145	1000	330	15.8
SJ 66T	27,200	12,340	13,900	6,300	165	1140	372	17.8

MODEL (with Foam Filled Tires)	Gross Aerial Platform Weight		Total Aerial Platform Load					
			Wheel		LCP		OUP	
	lb.	kg	lb.	kg	psi	kPa	psf	kPa
SJ 40T	15,550	7,055	7,600	3,450	130	900	193	9.3
SJ 45T	16,115	7,310	8,000	3,630	135	930	200	9.5
SJ 61T	25,500	11,567	12,360	5,600	145	1000	330	15.8
SJ 66T	28,700	13,018	13,900	6,300	165	1140	372	17.8

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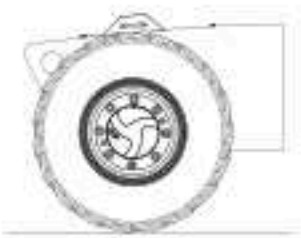
- Gross Aerial Platform Weight = Weight + platform capacity
- LCP – Locally Concentrated Pressure – is a measure of how hard the aerial platform tire tread presses on the area in direct contact with the floor. The floor covering (tile, carpet, etc.) must be able to withstand more than the indicated values above.
- OUP – Overall Uniform Pressure – is a measure of the average load the aerial platform imparts on the whole surface projected directly underneath it. The structure of the operating surface (beams, etc.) must be able to withstand more than the indicated values above.
- Welder option will add approximately 350 lb. (158.8 kg) to total aerial platform weight and 175 lb. (79.4 kg) to max. wheel load.

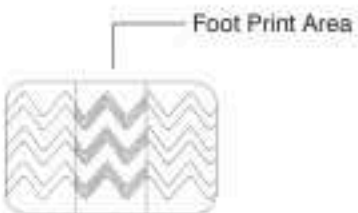
NOTE:
The LCP or OUP that an individual surface can withstand varies from structure to structure and is generally determined by the engineer or architect for that particular structure.

Locally Concentrated Pressure (LCP):

Foot Print Area identified by test.

$$LCP = \frac{\text{Wheel Load}}{\text{Foot Print Area}}$$



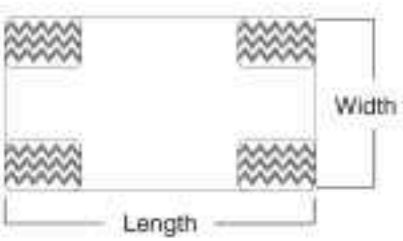


Overall Uniform Pressure (OUP):

Base Area = Length x Width

$$OUP = \frac{\text{Aerial Platform Weight + Capacity}}{\text{Base Area}}$$





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Safety Precautions

Know and understand the safety precautions before going on to next section.

⚠ 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 or territorial/provincial and local rules which apply to your aerial platform and jobsite.
- **TURN** main power disconnect switch "◯" off when leaving the aerial platform unattended. Remove the key to prevent unauthorized use of the aerial platform.
- **WEAR** all the protective clothing and personal safety devices issued to you or called for by job conditions.
- **DO NOT** wear loose clothing, dangling neckties, scarves, rings, wristwatches or other jewelry while operating this aerial platform .



- **AVOID** entanglement with ropes, cords or hoses.



- **AVOID** falling. Stay within the boundaries of the guardrails.



- **DO NOT** raise the platform in windy or gusty conditions.



- **DO NOT** increase the lateral surface area of the platform. Increasing the area exposed to the wind will decrease aerial platform stability. Avoid tenting.



- **DO NOT** elevate the aerial platform if it is not on a firm, level surface.
- **DO NOT** drive elevated near depressions or holes of any type, loading docks, debris, drop-offs and surfaces that may affect the stability of the aerial platform.



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



- **If operation in areas with holes or drop-offs is absolutely necessary,** elevated driving shall not be allowed. Position the aerial platform horizontally only with the platform fully lowered. After ensuring that all 4 wheels or outriggers (if equipped) have contact with a firm, level surface, the aerial platform can be elevated. After elevation, the drive function must not be activated.



- **DO NOT** drive elevated on a soft or uneven surface.



- **DO NOT** ascend or descend a grade steeper than 50% (2WD & 4WD). Boom elevated driving must only be done on firm level surfaces.



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