

SERVICE MANUAL

ARTICULATING BOOMS

MODELS SJ46AJ SJ51AJ

143921AK June 2024

SKYJACK

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Table 2.9 Specifications and Features (Continued)

MODEL				SJ 46AJ (ANSI/CSA)	SJ 46AJ (CE & AS)	SJ 51AJ (CE & AS)
Engine - Deutz	Engine Type			Deutz D2011L03		
	RPM Settings			1300 Low / 1850 / 2000 High		
	Gross Intermittent HP			35.8 kW / 48 Hp		
	Horsepower @ 2000 rpm (intermittent)			28.9 kW / 38.8 Hp		
	Fuel Type			Diesel		
	Fuel Tank Capacity			17 gal (63 L)		
	Standard Oil Factory Fill	Ambient Temperature Limits	0°F to 115°F (-18°C to +46°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 +46°C)	SAE 0W-40 API CF/CG/CH-4		
	Approved Alternates			See Engine Manual		
	Lube Oil Sump Capacity			1.45 gal (5.5 L)		
Engine - GM	Engine Type			3.0L GM Dual Fuel	N/A	
	RPM Settings			900 Low / 1650 / 2000 High		
	Gross Intermittent HP			52.2 kW / 70 Hp		
	Horsepower @ 2000 rpm (intermittent)			40.8 kW / 54.8 Hp		
	Fuel Type - Dual			Gasoline/Propane		
	Fuel Tank Capacity			17 gal (63 L)		
	Standard Oil Factory Fill	Ambient Temperature Limits	-40°F to 115°F (-40°C to +46°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 +46°C)	GM 50/50 Extended Life Coolant		
	Arctic Coolant Option		-40°F to 115°F (-40°C to +46°C)	GM 60/40 Extended Life Coolant		
	Coolant Capacity			3.0 gal (11.4 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			24 gal (91 L)		

1006-ALL Standards

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3.4 Hydraulic Schematic Parts List (Continued)

Index No.	Skyjack Part No.	Qty.	Description
			Parts list continued from previous page.
RV6	154663	1	VALVE, Relief (Main control - clipping)
RV7	154678	1	VALVE, Relief (Main control - rotate)
RV8	154663	1	VALVE, Relief (Main control - riser down)
RV9	154663	1	VALVE, Relief (Main control - platform leveling)
SV1	141439	1	VALVE, Shuttle (Brake valve)
SV2	141441	1	VALVE, Shuttle (Brake valve - M1 / M2)
SV3	N/A	1	VALVE, Shuttle (Swing drive)
SV4	154677	1	VALVE, Shuttle (Load sensing)
SV5	154677	1	VALVE, Shuttle (Load sensing)
SV6	154677	1	VALVE, Shuttle (Load sensing)
SV7	154677	1	VALVE, Shuttle (Load sensing)
SV8	154677	1	VALVE, Shuttle (Load sensing)
SV9	154677	1	VALVE, Shuttle (Swing drive load sensing)
SV10	154677	1	VALVE, Shuttle (Riser load sensing)
SV11	154677	1	VALVE, Shuttle (Leveling load sensing)
SV12	154677	1	VALVE, Shuttle (Leveling load sensing)
SV13	154677	1	VALVE, Shuttle (Main boom load sensing)

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Introduction

The following pages contain a table of Troubleshooting Information for locating and correcting most service trouble which can develop. Careful and accurate analysis of the systems listed in the table of Troubleshooting Information will localize the trouble more quickly than any other method. This manual cannot cover all possible troubles and deficiencies that may occur. If a specific trouble is not listed, isolate the major component in which the trouble occurs, isolate whether the problem is electrical or hydraulic, and then isolate and correct the specific problem.

The content of this section is separated into "probable cause" and "remedy." The information preceded by a number represents the "probable cause." The following line, noted by a dash represents the "remedy" to the "probable cause" directly above it. See example below for clarification.

1. Probable Cause
   - Remedy

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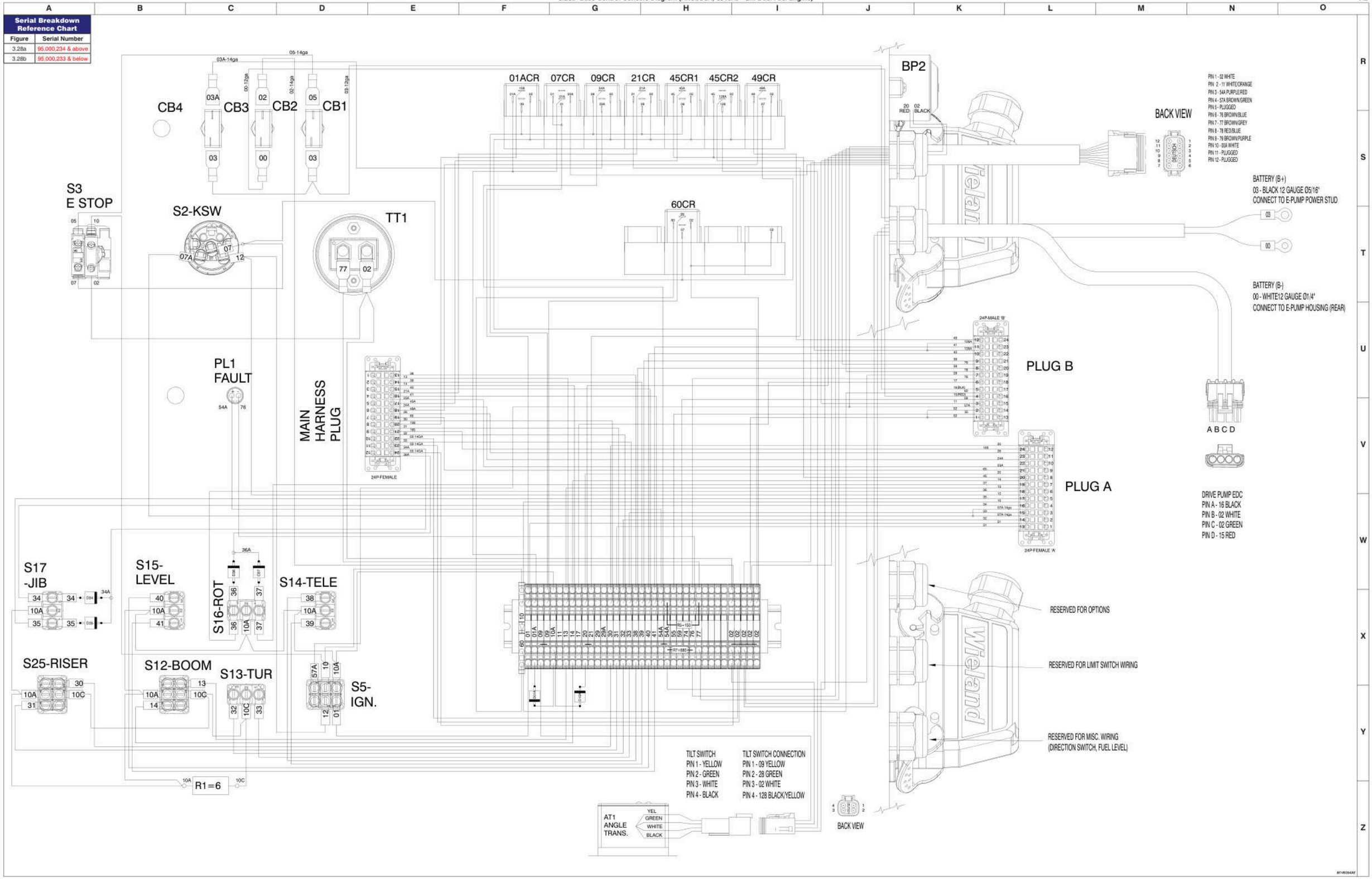
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Serial Breakdown Reference Chart	
Figure	Serial Number
3.28a	95,000,234 & above
3.28b	95,000,233 & below



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