

SERVICE MANUAL

TELESCOPIC BOOMS

MODELS SJ40T SJ45T

143872AL September 2025

SKYJACK

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Section 1
SCHEDULED MAINTENANCE

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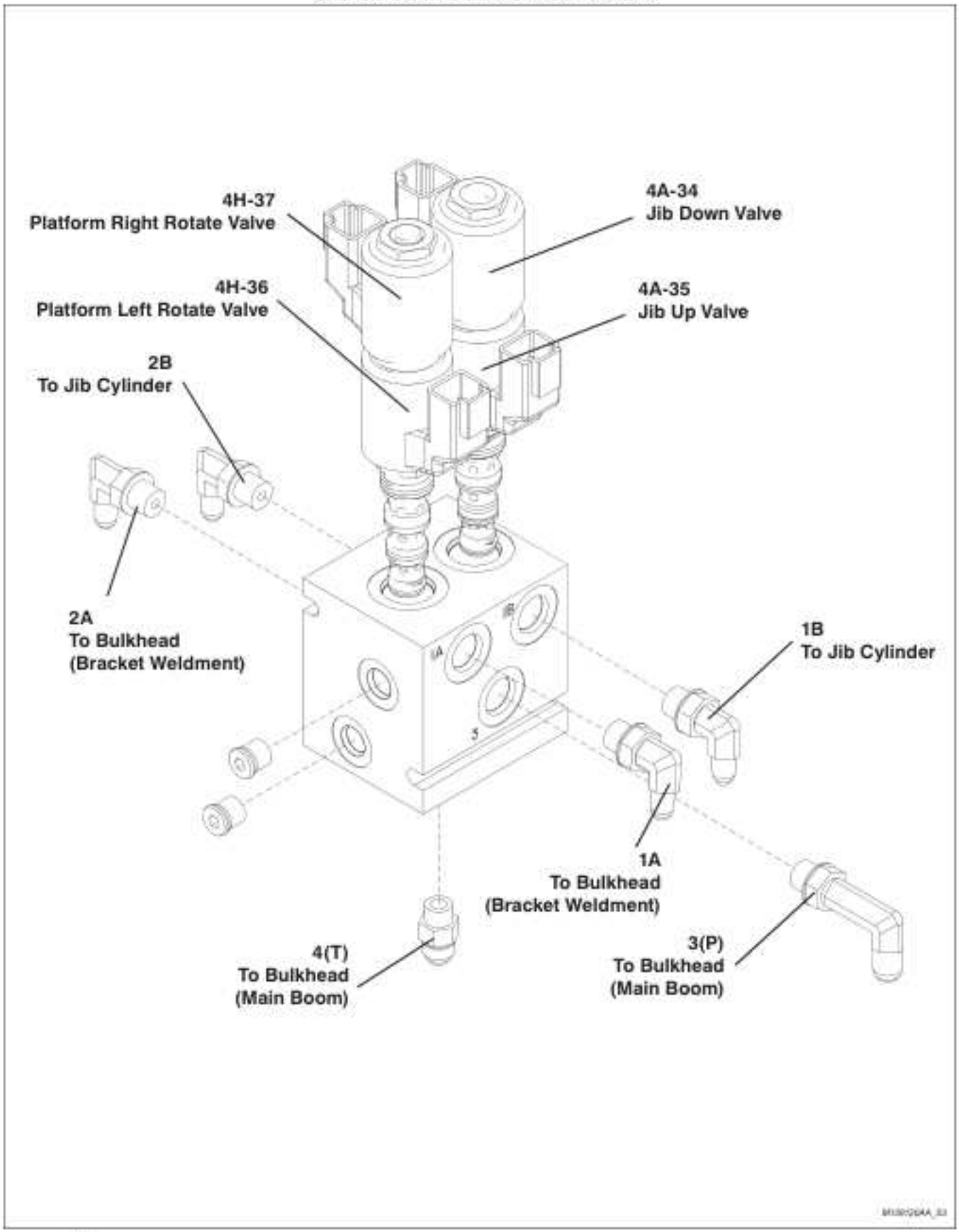
Table 2.8 Specifications and Features (Continued)

MODEL				SJ 40T (ANSI/CSA)	SJ 45T (ALL STANDARDS)
Engine - Deutz	Engine Type			Deutz D2011L03i	
	RPM Settings			1600 Low / 2100 / 2675 High	
	Gross Intermittent HP			36 kW / 48 Hp	
	Horsepower @ 2600 rpm (intermittent)			34 kW / 45 Hp	
	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	
	Apporved Alternates			See Engine Manual	
	Lube Oil Sump Capacity			1.45 gal (5.5 L)	
Engine - GM	Engine Type			3.0L GM Dual Fuel	
	RPM Settings			900 Low / 1620 / 2675 High	
	Gross Intermittent HP			46 kW / 62 Hp	
	Horsepower @ 2600 rpm (intermittent)			45 kW / 60 Hp	
	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	
	Apporved 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)	
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	
	Apporved 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)	

1082AA-ALL Standards

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3.11 Jib Valve and Port Identifications



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4.3 Load Sensing System - CE

4.3-1 Green Power LED is not Flashing

1. Loose or broken wires #60 and #02 at platform terminal block.
   - Check for connections. Check for voltage (12V).
2. Load cell has lost its calibration.
   - Refer to calibration procedure for recalibration of load cell.

4.3-2 Load Cell red Alarm LED is ON (with platform empty)

1. Load cell has lost its calibration.
   - Refer to calibration procedure for recalibration of load cell.

4.3-3 Red Error LED is ON

1. Open safety contact circuit.
   - Check for connections with wires #161 and #162A at platform terminal block and base terminal block. Check resistor R6 for 680 ohms.

4.3-4 Load Cell red Alarm LED is OFF (with platform overloaded)

1. Load cell has lost its calibration.
   - Refer to calibration procedure for recalibration of load cell.

4.3-5 Platform Indicator Light does not turn ON

1. Defective lamp.
   - Check lamp. Replace if defective.
2. Defective relay 82CR.
   - Check relay. Replace if defective.
3. Load cell circuit not operating.
   - Check for connections with wire #02A at pilot light strip and relay 82CR, and wire #82 at platform terminal block and relay 82CR.
4. Defective load cell.
   - Defective if 0V is measured between wire #82 and #02 from platform terminal block.

4.3-6 Audible Alarm does not turn ON

1. Defective alarm BP3.
   - Check alarm. Replace if defective.
2. Open or defective diode D118.
   - Check diode. Replace if defective.
3. Load cell circuit not operating.
   - Check for connections with wires #02A and #118 at platform terminal block.
4. Defective load cell.
   - Defective if 0V is measured between wire #118 and #02 from platform terminal block.

4.3-7 Boom and Drive Functions are Enabled (with boom extended)

1. "Fly IN" limit switch LS3 is not operating properly.
   - Check for voltage (0V) between wires #59 and #02 from platform terminal block. If 12V is measured, check for proper actuation of limit switch. Readjust limit switch if necessary.
2. Defective load cell. Safety contact remains closed.
   - Check for voltage (0V) between wires #162A and #02 from base terminal block. Defective if 12V is measured.

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Section 4
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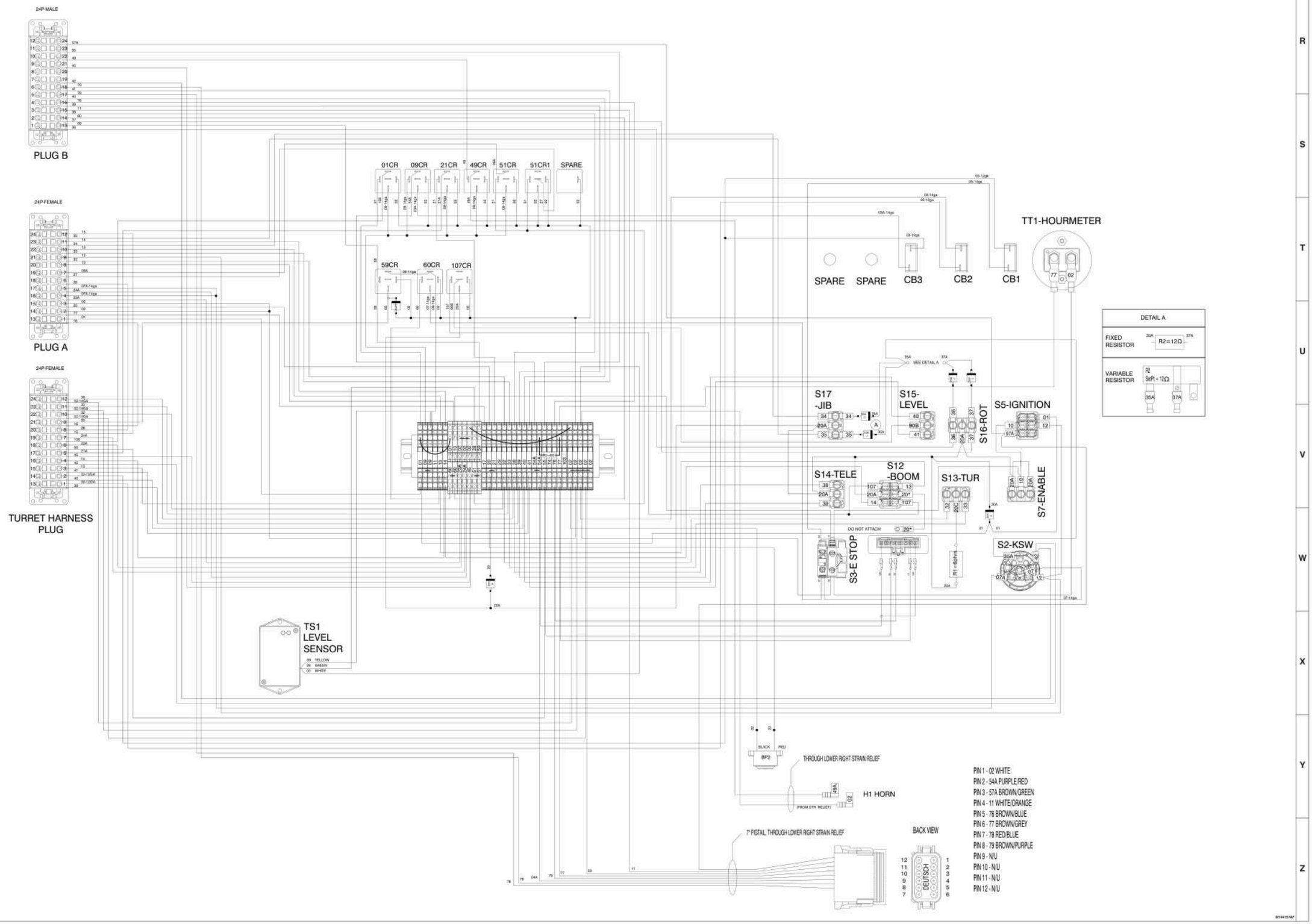
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Serial Breakdown Reference Chart		
Models	Serial Number	Reference
45T	98,000,714 to 98,001,141	Figure 3.36a
	98,000,713 & Below	Figure 3.36b



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