

Genie®

Service Manual

Part No. 62401
Rev A6
January 2013

S™-100 *from serial number 101 to 136*

S™-105 *from serial number 101 to 136*

S™-120 *from serial number 101 to 403*

S™-125 *from serial number 101 to 403*

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SPECIFICATIONS

Turning radius, outside, axles extended	20 ft 8 in 6.3 m	20 ft 8 in 6.3 m
Turning radius, inside, axles extended	10 ft 1 in 3.1 m	10 ft 1 in 3.1 m
Turntable rotation (degrees)		360° continuous
Platform rotation		160°
Maximum allowable side force (ANSI and CSA)		150 lbs 667 N
Maximum allowable side force (CE)		90 lbs 400 N
Controls		12V DC proportional
Platform dimensions		
Length		96 in 244 cm
Width		36 in 91 cm
Tires and wheels		
Tire size		15 x 22.5, 18 pr FF
Tire ply rating		18
Overall tire diameter		43.1 in 109.5 cm
Wheel diameter		22.5 in 57 cm
Wheel width		11.75 in 30 cm
Wheel lugs		10 @ 3/4 -16
Lug nut torque, dry		420 ft-lbs 569.5 Nm
Lug nut torque, lubricated		320 ft-lbs 433.9 Nm

Fluid capacities	
Hydraulic tank capacity	55 gallons 208 liters
Hydraulic system capacity (including tank)	80 gallons 303 liters
Fuel tank capacity	40 gallons 151 liters
Airborne noise emissions Maximum sound level at normal operating workstations (A-weighted)	80 dB

Continuous improvement of our products is a Genie policy. Product specifications are subject to change without notice.

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FAULT CODE CHART

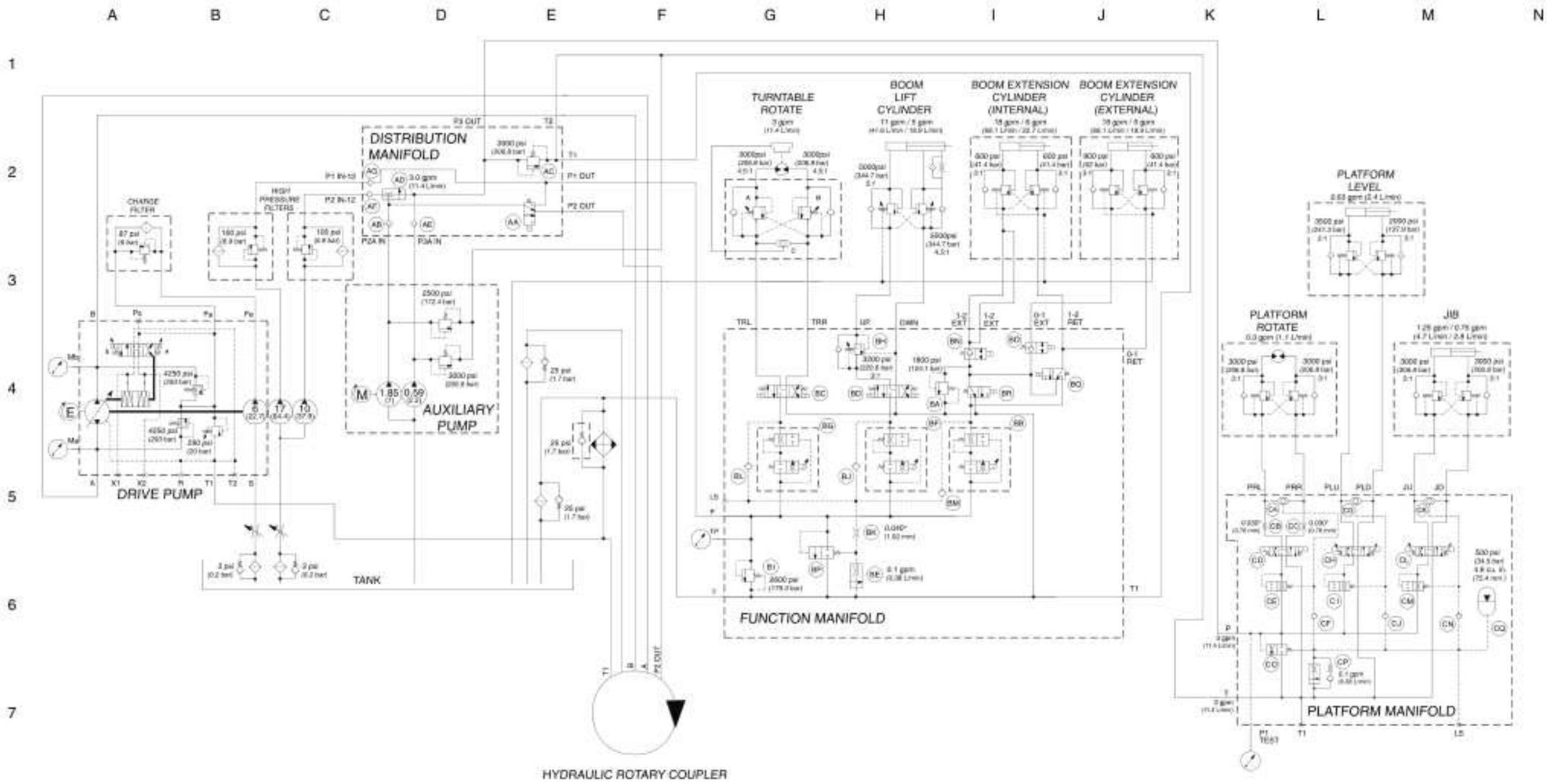
Diagnostic code displayed	Condition	Possible Causes	Solution
EXTEND/RETRACT JOYSTICK VALUE TOO LOW	Extend/retract functions inoperative from platform.	Damaged circuit between platform control card and extend/retract joystick or Joystick may need to be replaced.	Refer to charts 16 and 17 to troubleshoot.
EXTEND/RETRACT BUTTONS FAULT	Extend/retract functions inoperative from turntable.	Shorted boom extend/retract membrane on turntable membrane panel.	Consult Genie Industries Service Department. The turntable membrane panel may need to be replaced.
BOOM EXT/RET SPEED NOT CALIBRATED	Extend/retract function speeds to fast or to slow.	Extend/retract speed calibration set from display or Reset Boom ext/ret flow valve defaults set from display. Refer to Display module section.	Calibrate Boom extend/retract speed refer to repair section.
BOOM EXT/RET FLOW VALVE NOT CALIBRATED	No movement on extend/retract functions until joystick is moved past half stroke.	Reset Boom extend/retract flow valve defaults set from display. Refer to Display module section.	Calibrate Boom extend/retract Thresholds refer to repair section.
BOOM EXT/RET FLOW VALVE FAULT	Extend/retract functions inoperative.	Boom extend/retract flow valve coil circuit open or shorted to ground or the coil itself is bad.	Refer to charts 16 and 17 to troubleshoot.
BOOM EXT VALVE FAULT	Extend function inoperative.	Boom extend valve coil circuit open or shorted to ground or the coil itself is bad.	Refer to chart 16 to troubleshoot.
BOOM RET VALVE FAULT	Retract function inoperative.	Boom retract valve coil circuit open or shorted to ground or the coil itself is bad.	Refer to chart 17 to troubleshoot.
LOCK OUT VALVE P1 FAULT	Retract function inoperative when boom length is <100'.	Boom retract lockout valve coil circuit open or shorted to ground or the coil itself is bad.	Refer to chart 16 to troubleshoot.
LOCK OUT VALVE P2 FAULT	Extend function inoperative when boom length = or >100'	Boom extend lockout valve coil circuit open or shorted to ground or the coil itself is bad.	Refer to chart 17 to troubleshoot.
BOOM LENGTH SWITCHES FAULT	Extend, up, and down functions inoperative.	Boom length operational switches out of sequence.	Refer to chart 15 to troubleshoot.
TURNTABLE ROTATE JOYSTICK NOT CALIBRATED	Turntable rotate functions inoperative from platform.	Turntable rotate joystick not calibrated.	Calibrate turntable rotate joystick refer to repair section.
TURNTABLE ROTATE JOYSTICK SHORTED TO 0V	Turntable rotate functions inoperative from platform.	Open circuit between platform control card and turntable rotate joystick.	Refer to charts 22 and 23 to troubleshoot.
TURNTABLE ROTATE JOYSTICK SHORTED TO 5V	Turntable rotate functions inoperative from platform.	Shorted circuit between platform control card and turntable rotate joystick.	Refer to charts 22 and 23 to troubleshoot.
TURNTABLE ROTATE JOYSTICK VALUE TOO HIGH	Turntable rotate functions inoperative from platform.	Damaged circuit between platform control card and turntable rotate joystick or Joystick may need to be replaced.	Refer to charts 22 and 23 to troubleshoot.
TURNTABLE ROTATE JOYSTICK VALUE TOO LOW	Turntable rotate functions inoperative from platform.	Damaged circuit between platform control card and turntable rotate joystick or Joystick may need to be replaced.	Refer to charts 22 and 23 to troubleshoot.
TURNTABLE ROTATE BUTTONS FAULT	Turntable rotate functions inoperative from turntable.	Shorted turntable rotate membrane on turntable membrane panel.	Consult Genie Industries Service Department. The turntable membrane panel may need to be replaced.



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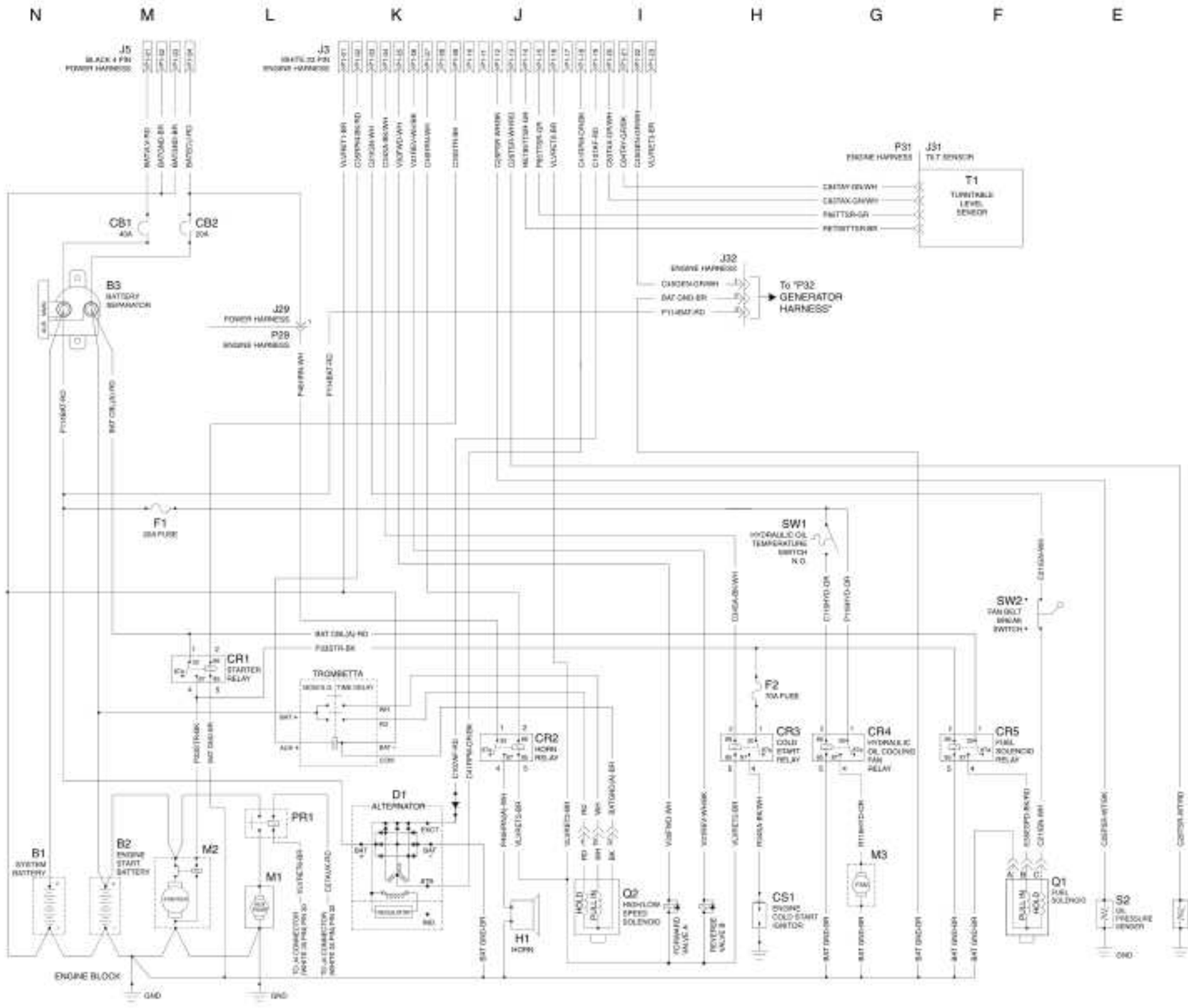
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Hydraulic Schematic, S-125 Models



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Electrical Schematic - Deutz Models



B	BATTERY	1
	B1 = BATTERY	
	B2 = ENGINE BATTERY	
	B3 = BATTERY SEPARATOR	
CB	CIRCUIT BREAKER WITH AMP RATING AND FUNCTION	
	CB1 = 40 AMP, POWER SUPPLY TO ECM	
	CB2 = 20 AMP, POWER TO ENGINE	
CR	CONTROL RELAY WITH NUMBER AND FUNCTION	2
	CR1 = POWER SUPPLY TO ENGINE STARTER SOLENOID	
	CR2 = HORN RELAY	
	CR3 = COLD START RELAY	
	CR4 = HYDRAULIC COOLING FAN RELAY	
	CR5 = FUEL SOLENOID RELAY	
CS	COLD START	
	CS1 = ENGINE COLD START IGNITOR	3
D	POWER SUPPLY	
	D1 = ALTERNATOR	
F	FUSE WITH AMP RATING AND FUNCTION	
	F1 = 20 AMP, POWER SUPPLY TO HYDRAULIC OIL COOLER	
	F2 = 70 AMP, POWER SUPPLY TO ENGINE COLD START	
GND	CHASSIS GROUND	
H	HORN	4
J	AMP PLUG WITH CIRCUIT, COLOR, PIN COUNT AND FUNCTION	
	J3 = WHITE 23 PIN ENGINE HARNESS CONNECTOR	
	J5 = BLACK 4 PIN POWER HARNESS CONNECTOR	
	J29 = POWER HARNESS CONNECTOR TO HORN RELAY	
	J31 = 4 PIN HARNESS CONNECTOR TO TILT SENSOR	
	J32 = 3 PIN POWER HARNESS CONNECTOR TO GENERATOR	
M	MOTOR	5
	M1 = AUXILIARY PUMP	
	M2 = STARTER MOTOR	
	M3 = ENGINE OIL COOLING FAN (OPTION)	
PR	POWER RELAY	
	PR1 = POWER SUPPLY TO M1	
Q	SOLENOID	
	Q1 = FUEL SOLENOID	6
	Q2 = HIGH/LOW SPEED SOLENOID	
S	SENSOR	
	S1 = COOLANT TEMPERATURE	
	S2 = OIL PRESSURE	
	S3 = OIL TEMPERATURE	
	S4 = EMISSION CONTROLS	
SW	SWITCH	7
	SW1 = HYDRAULIC OIL TEMPERATURE SWITCH	
	SW2 = FAN BELT BREAK SWITCH	
T	LEVEL SENSOR	
	T1 = TURNTABLE LEVEL SENSOR	

PLUG	JACK	CONNECTOR DESCRIPTION AND/OR LOCATION
P28	J29	2 Way Deutsch Connector - Power Harness/Engine Harness
P31	J31	4 Way Connector - Engine Harness to Tilt Sensor
P32	J32	4 Way Connector - Engine Harness-AC Generator

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