

Genie®

Service Manual

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Z™-34/22

Bi-Energy Power

(before serial number 4800)

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SPECIFICATIONS REV A

Hydraulic Hose and Fitting Torque Specifications

Your machine is equipped with Parker Seal-Lok® fittings and hose ends. Genie specifications require that fittings and hose ends be torqued to specification when they are removed and installed or when new hoses or fittings are installed.

SAE O-ring Boss Port
(tube fitting - installed into Aluminum)

SAE Dash size	Torque
-4	11 ft-lbs / 15 Nm
-6	23 ft-lbs / 31 Nm
-8	40 ft-lbs / 54 Nm
-10	69 ft-lbs / 94 Nm
-12	93 ft-lbs / 126 Nm
-16	139 ft-lbs / 188 Nm
-20	172 ft-lbs / 233 Nm
-24	208 ft-lbs / 282 Nm

Seal-Lok® fittings

1 Replace the O-ring. The O-ring must be replaced anytime the seal has been broken. The O-ring cannot be re-used if the fitting or hose end has been tightened beyond finger tight.

Note: The O-rings used in the Parker Seal Lok® fittings and hose ends are custom-size O-rings. They are not standard SAE size O-rings. They are available in the O-ring field service kit (Genie part number 49612).

2 Lubricate the O-ring before installation.

3 Be sure that the face seal O-ring is seated and retained properly.

4 Position the tube and nut squarely on the face seal end of the fitting and tighten the nut finger tight.

5 Tighten the nut or fitting to the appropriate torque per given size as shown in the table.

6 Operate all machine functions and inspect the hoses and fittings and related components to confirm that there are no leaks.

SAE O-ring Boss Port
(tube fitting - installed into Steel)

SAE Dash size	Torque
-4	16 ft-lbs / 22 Nm
-6	35 ft-lbs / 47 Nm
-8	60 ft-lbs / 81 Nm
-10	105 ft-lbs / 142 Nm
-12	140 ft-lbs / 190 Nm
-16	210 ft-lbs / 285 Nm
-20	260 ft-lbs / 353 Nm
-24	315 ft-lbs / 427 Nm

Seal-Lok® Fittings
(hose end)

SAE Dash size	Torque
-4	18 ft-lbs / 25 Nm
-6	30 ft-lbs / 40 Nm
-8	40 ft-lbs / 55 Nm
-10	60 ft-lbs / 81 Nm
-12	85 ft-lbs / 115 Nm
-16	110 ft-lbs / 150 Nm
-20	140 ft-lbs / 190 Nm
-24	180 ft-lbs / 244 Nm

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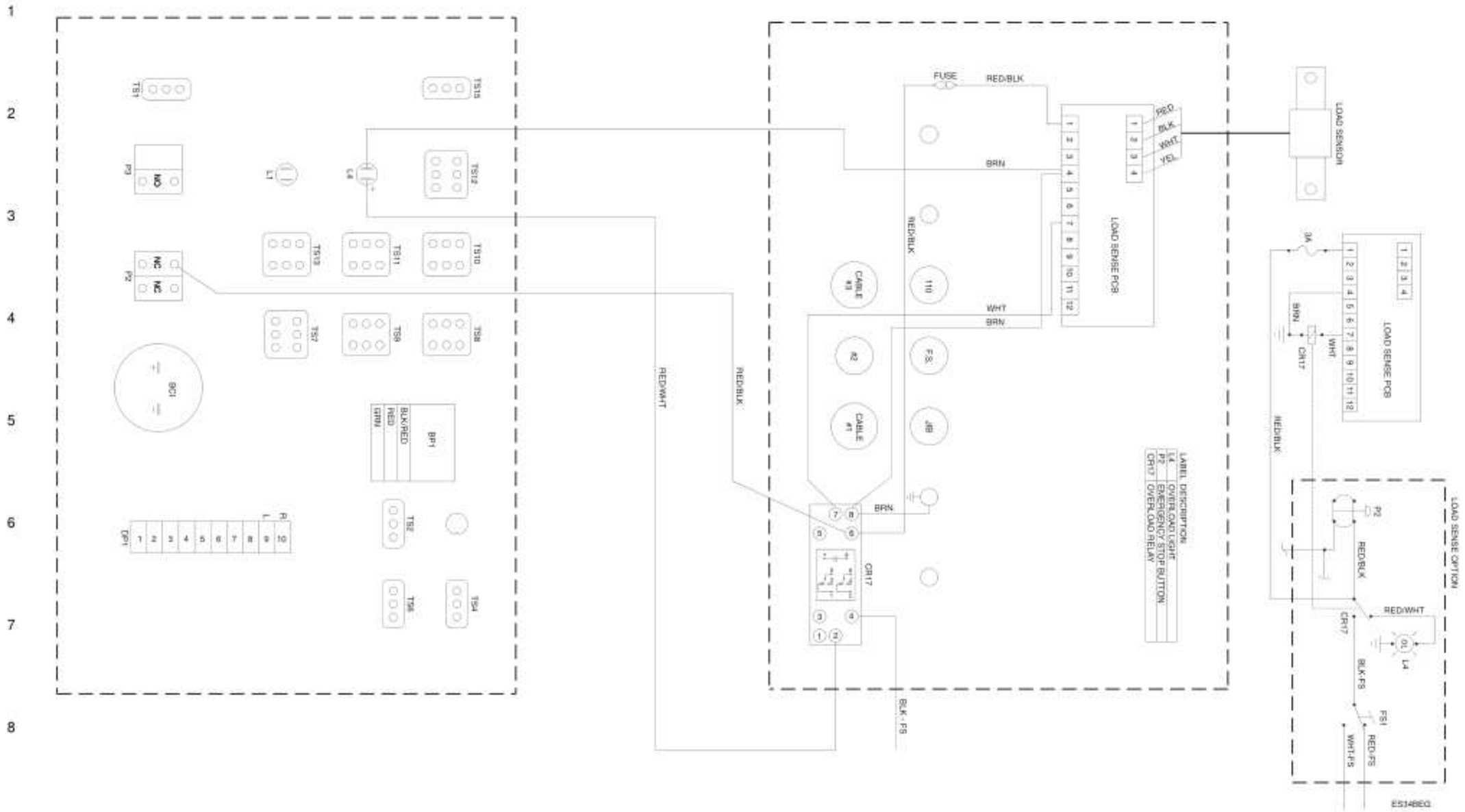
FAULT CODE CHART REV A

Fault Code	Code Scanner Display	Condition	Possible Causes	Solution
21	THROTTLE FAULT 1	Machine will not drive. Controller fault indicator light on at the platform controls.	Open in wht/red wire #32 at pin 14 or red/wht wire #29 at pin 16 on the motor controller going from drive joystick to pins 14 and 16 at the motor controller OR pin 14 is internally shorted to power or ground OR the potentiometer on the drive joystick defective.	See Chart 29A
	THROTTLE FAULT 2	Machine will not drive. Controller fault indicator light on at the platform controls.	Pin 14 (wht/red #32) is shorted to power or ground OR the potentiometer on the drive joystick is defective.	See Chart 29A
31	CONT DRVR OC	Machine will not drive. Controller fault indicator light on at the platform controls.	Main contactor (PR1) coil defective OR brake release relay CR5 defective.	Replace main contactor PR1 or brake release relay CR5 OR replace the motor controller.
32	MAIN CONT WELDED	Machine will not drive. Controller fault indicator light on at the platform controls.	Main contactor (PR1) contacts stuck closed OR grn wire at pin 17 on motor controller shorted to ground OR open in motor armature wiring OR motor controller has a internal short to ground.	See Chart 29B
33	PRECHARGE FAULT	Machine will not drive. Controller fault indicator light on at the platform controls.	External short between B+ terminal on motor controller and ground OR motor controller is defective.	Repair short between B+ terminal on motor controller and ground OR replace motor controller. Note: Short can be on any part of circuit connected to the B+ terminal on the motor controller.

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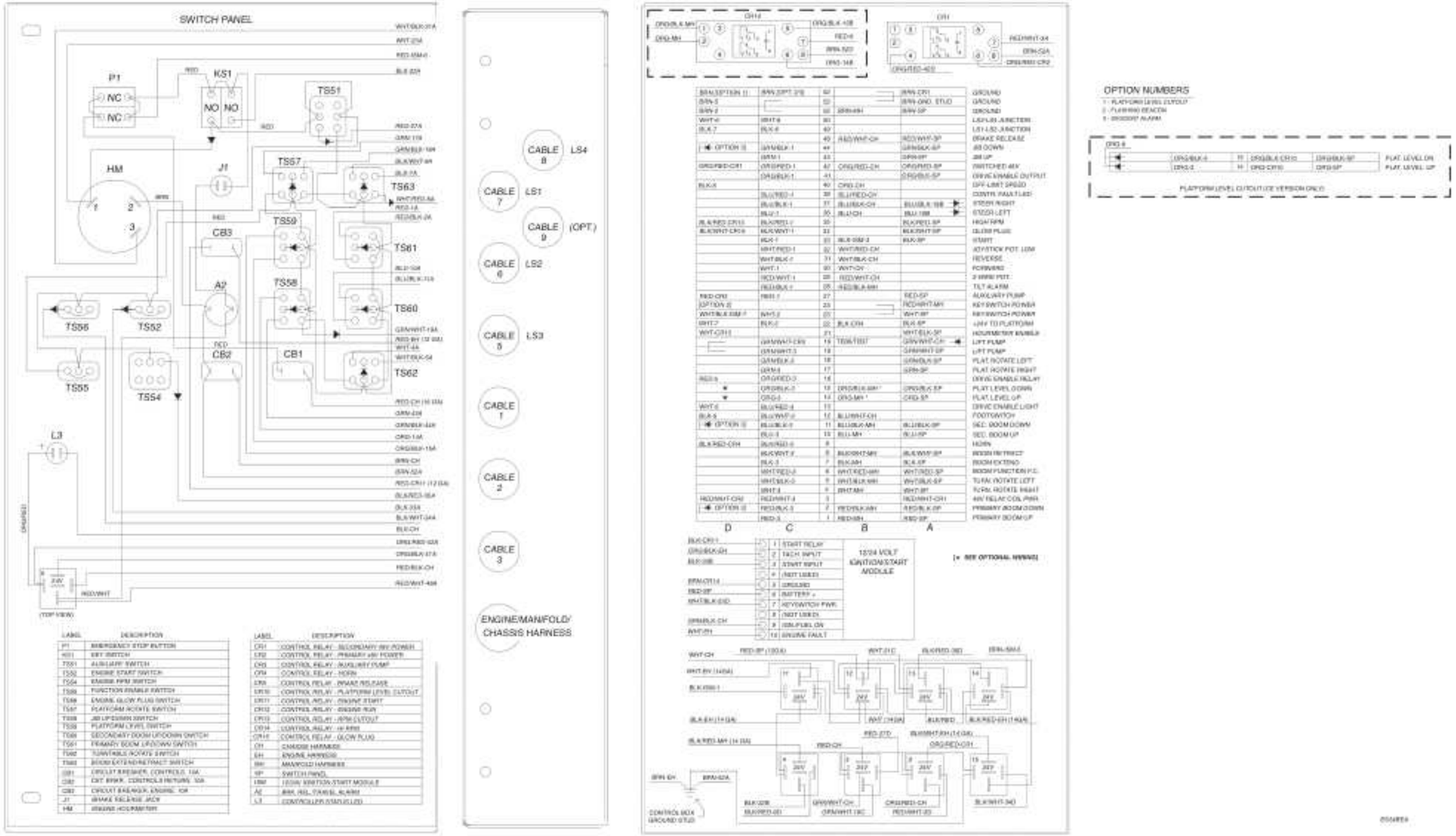
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Load Sense Option Wiring Diagram (before serial number 2098)



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Ground Control Box Wiring Diagram (before serial number 1468)



LABEL	DESCRIPTION
P1	EMERGENCY STOP BUTTON
KS1	KEY SWITCH
TS51	ALARM/HORN SWITCH
TS52	ENGINE START SWITCH
TS54	ENGINE RPM SWITCH
TS56	FUNCTION ENABLE SWITCH
TS58	ENGINE GLOW PLUG SWITCH
TS57	PLATFORM ROTATE SWITCH
TS59	JIB UP/DOWN SWITCH
TS55	PLATFORM LEVEL SWITCH
TS61	SECONDARY BOOM UP/DOWN SWITCH
TS62	PRIMARY BOOM UP/DOWN SWITCH
TS60	TURNTABLE ROTATE SWITCH
TS63	BOOM EXTEND/RETRACT SWITCH
CB1	CIRCUIT BREAKER, CONTROLS, 15A
CB2	CKT. BRKR., CONTROLS RETURN, 10A
CB3	CIRCUIT BREAKER, ENGINE, 10A
J1	BRAKE RELEASE JACK
HM	ENGINE HOURMETER

LABEL	DESCRIPTION
CR1	CONTROL RELAY - SECONDARY (BY) POWER
CR2	CONTROL RELAY - PRIMARY (+B) POWER
CR3	CONTROL RELAY - AUXILIARY PUMP
CR4	CONTROL RELAY - HORN
CR5	CONTROL RELAY - INHIBIT/ISOLATE
CR10	CONTROL RELAY - PLATFORM LEVEL CUTOUT
CR11	CONTROL RELAY - ENGINE START
CR12	CONTROL RELAY - ENGINE RUN
CR13	CONTROL RELAY - RPM CUTOUT
CR14	CONTROL RELAY - (4) RPM
CR15	CONTROL RELAY - GLOW PLUG
CH	CHASSIS HARNESS
EH	ENGINE HARNESS
MH	MANIFOLD HARNESS
SP	SWITCH PANEL
IGM	12/24V IGNITION START MODULE
AE	ARM, ASS., TX/RX, ELAPSED
LT	CONTROLLER (TX/RX) (LCD)

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