A TEREX COMPANY

Service Manual

	Serial Number Range
Z-30/20N	from Z30N08-11500 to Z30N14-15221
Z-30/20N RJ	from Z34N07-6291 to Z34N14- 10983
Z-34/22N	from Z3407-5427 to Z3414- 9685
Z-34/22DC	

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Specifications

Hydraulic Component Specifications

Function pump	
Type: Fixed displacement gear pump	
Displacement	0.183 cu in 3 cc
Flow rate @2800 psi / 172 bar	2.1 gpm 7.9 L/min
Hydraulic tank return filter	10 micron with 25 psi / 1.7 bar bypass
Function manifold	
System relief valve pressure, Z-30/20N and Z-30/20N RJ	2800 psi 193 bar
System relief valve pressure, Z-34/22 and Z-34/22N	3200 psi 221 bar
Primary boom down relief pressure	1600 psi 110 bar
Secondary boom down relief pressure	1600 psi 110 bar
Primary boom extend relief pressure Models with rotating jib	1800 psi 124 bar
Turntable rotate relief pressure	1100 psi 76 bar
Auxiliary pump	
Type: Fixed displacement gear pump	
Displacement	0.3 gpm 1.14 L/min

Manifold Component Specifications

Plug torque	
SAE No. 2	36 in-lbs / 4 Nm
SAE No. 4	10 ft-lbs / 13 Nm
SAE No. 6	14 ft-lbs / 19 Nm
SAE No. 8	38 ft-lbs / 51 Nm
SAE No. 10	41 ft-lbs / 55 Nm
SAE No. 12	56 ft-lbs / 76 Nm

Valve Coil Resistance

Note: The following coil resistance specifications are at an ambient temperature of 68°F / 20°C. As valve coil resistance is sensitive to changes in air temperature, the coil resistance will typically increase or decrease by 4% for each 18°F / 10°C that your air temperature increases or decreases from 68°F / 20°C.

Valve Coil Resistance Specification

Description	Specification
Solenoid valve, 3 position 4 way, 20V DC (schematic items A, J, K, U, V, Y, AA, AB and CC)	22 Ω
Proportional solenoid valve, 24V DC (schematic item H)	19.5 Ω
Solenoid valve, N.C. poppet, 20V DC (schematic item M)	23.5 Ω
Solenoid valve, N.O. poppet, 20V DC (schematic item P)	23.5 Ω

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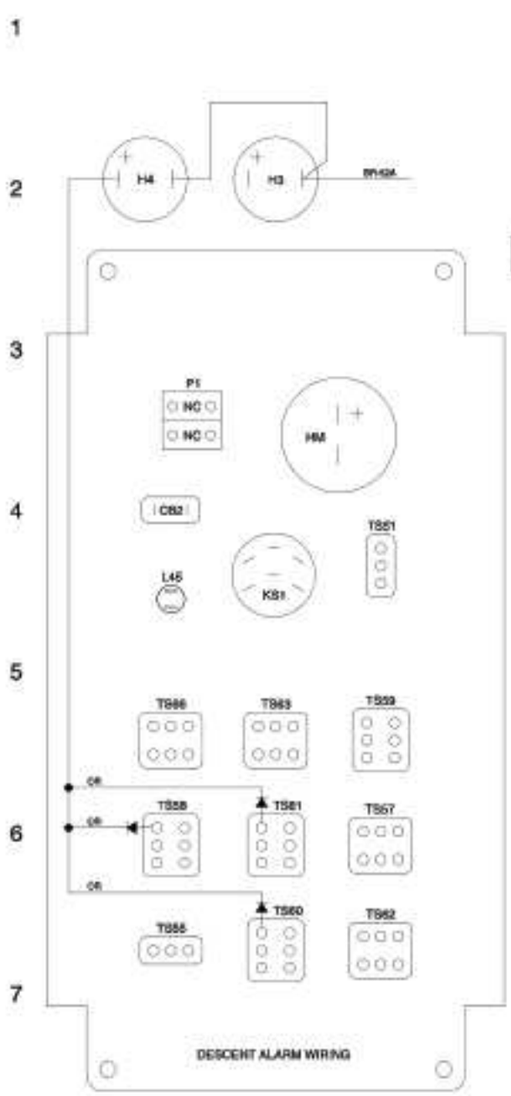
Fault Code Chart

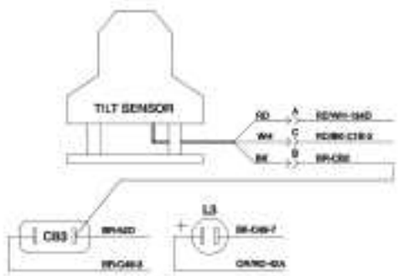
Fault Code	Programmer Diagnostic Display	Condition	Possible Causes	Solution
21	THROTTLE FAULT 1	Machine will not drive.	Open in wht/red wire #32 at pin 14 or red/wht wire #29 at pin 16 on the motor controller going from drive joystick to pins 14 and 16 at the motor controller OR pin 14 is internally shorted to power or ground OR the potentiometer on the drive joystick is defective.	Consult Genie Product Support.
	THROTTLE FAULT 2	Machine will not drive.	Pin 14 (wht/red #32) is shorted to power or ground OR the potentiometer on the drive joystick is defective.	Consult Genie Product Support.
31	CONT DRVR OC	Machine will not drive.	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.	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 an internal short to ground.	Consult Genie Product Support.
33	PRECHARGE FAULT	Machine will not drive.	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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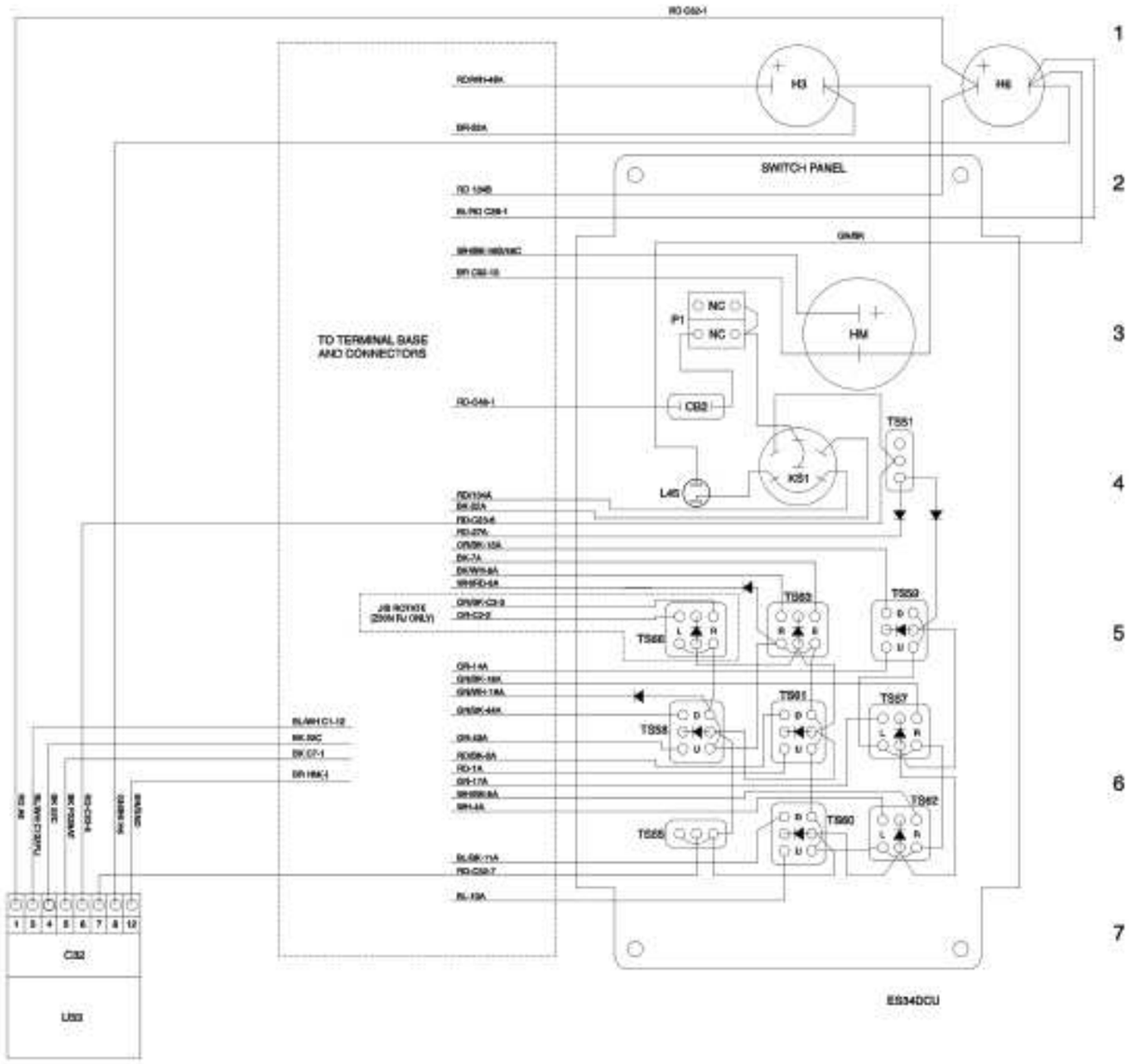
Ground Control Box Switch Panel Wiring Diagram, (AS / CE)

(from serial numbers Z30N10-12119, Z34N10-8857 and Z3410-7774 to Z30N13-14695, Z34N13-10622 and Z3413-9441)





LABEL	DESCRIPTION
P1	EMERGENCY STOP BUTTON
KS1	KEY SWITCH
TS51	AUXILIARY TOGGLE SWITCH
TS56	FUNCTION ENABLE TOGGLE SWITCH
TS57	PLATFORM ROTATE TOGGLE SWITCH
TS58	JIB BOOM UP/DOWN TOGGLE SWITCH
TS59	PLATFORM LEVEL TOGGLE SWITCH
TS60	SECONDARY BOOM UP/DOWN TOGGLE SWITCH
TS61	PRIMARY BOOM UP/DOWN TOGGLE SWITCH
TS62	TURNTABLE ROTATE TOGGLE SWITCH
TS63	PRIMARY BOOM EXTEND/RETRACT TOGGLE SWITCH
TS66	JIB ROTATE TOGGLE SWITCH (230N RJ ONLY)
CB2	CIRCUIT BREAKER, CONTROLS, 10A
CB3	CIRCUIT BREAKER, CONTROLS RETURN, 15A
HM	HOURMETER
CH	CHASSIS HARNESS
MH	MANIFOLD HARNESS
SP	SWITCH PANEL
CR	CONTROL RELAY
H3	TRAVEL ALARM
H4	DESCENT ALARM
H6	PLATFORM OVERLOAD ALARM
L3	CONTROLLER STATUS LED
L45	PLATFORM OVERLOAD LED

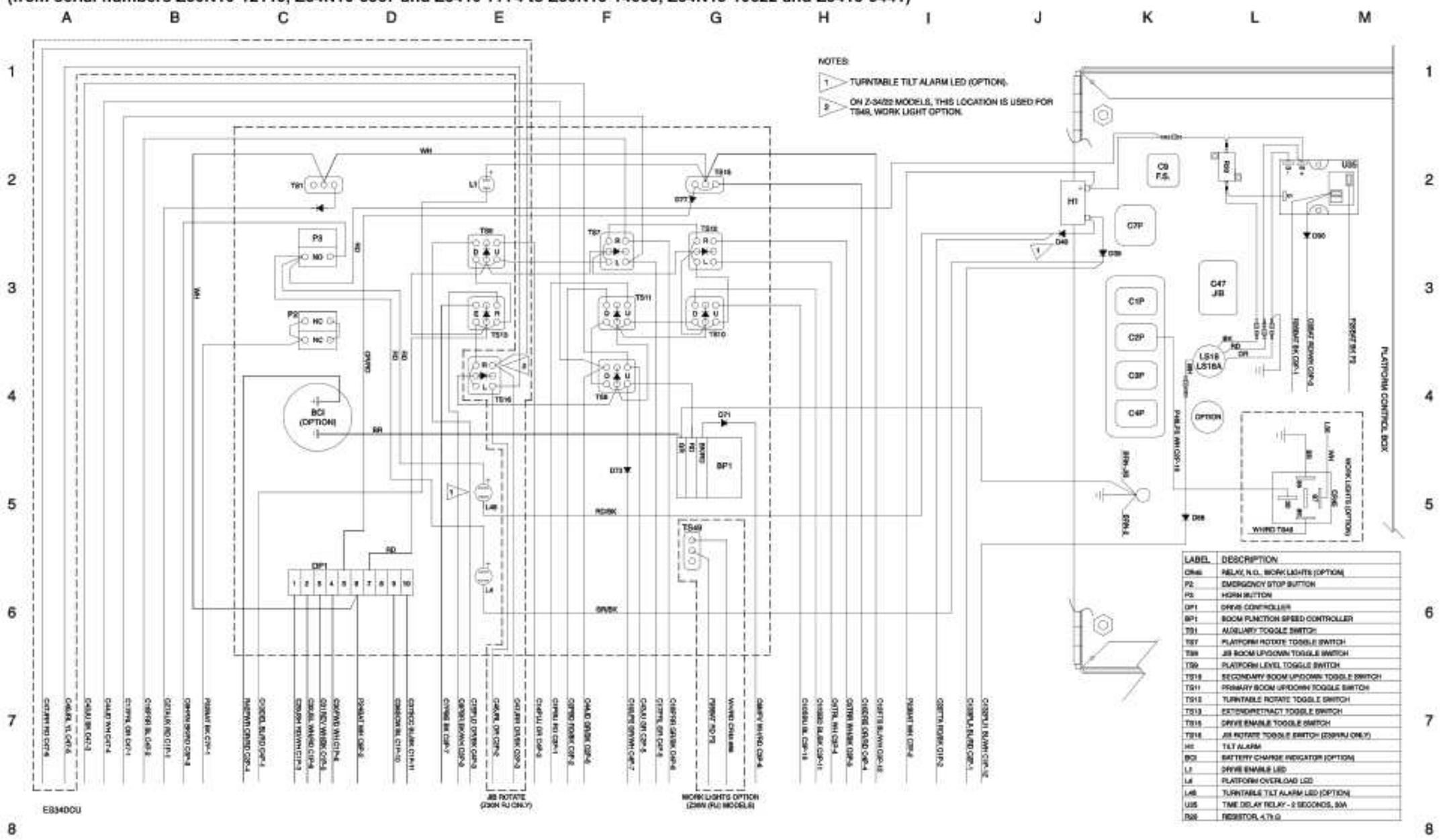


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Platform Control Box Wiring Diagram, (AS / CE)

(from serial numbers Z30N10-12119, Z34N10-8857 and Z3410-7774 to Z30N13-14695, Z34N13-10622 and Z3413-9441)



LABEL	DESCRIPTION
CR48	RELAY, N.O., WORK LIGHTS (OPTION)
P2	EMERGENCY STOP BUTTON
P3	HORN BUTTON
DP1	DRIVE CONTROLLER
BP1	BOOM FUNCTION SPEED CONTROLLER
TS1	AUXILIARY TOGGLE SWITCH
TS7	PLATFORM ROTATE TOGGLE SWITCH
TS9	JIB BOOM UP/DOWN TOGGLE SWITCH
TS9	PLATFORM LEVEL TOGGLE SWITCH
TS10	SECONDARY BOOM UP/DOWN TOGGLE SWITCH
TS11	PRIMARY BOOM UP/DOWN TOGGLE SWITCH
TS12	TURNTABLE ROTATE TOGGLE SWITCH
TS13	EXTEND/RETRACT TOGGLE SWITCH
TS15	DRIVE ENABLE TOGGLE SWITCH
TS16	JIB ROTATE TOGGLE SWITCH (Z30N/RJ ONLY)
H2	TILT ALARM
BCI	BATTERY CHARGE INDICATOR (OPTION)
L1	DRIVE ENABLE LED
L4	PLATFORM OVERLOAD LED
L48	TURNTABLE TILT ALARM LED (OPTION)
U35	TIME DELAY RELAY - 2 SECONDS, 30A
R26	RESISTOR, 4.7k Ω

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