A TEREX COMPANY

Service and Repair Manual

Z®-45/25 DC

Z®-45/25J DC

Serial Number Range

from Z452513A-48153
to Z452516N-57199

from Z452513B-3078
to Z452516M-6699

from Z452513D-101
to Z452516D-939

from Z4525D-940
from Z4525M-6700
from Z4525N-57200

This manual includes:
Repair procedures
Fault Codes
Electrical and
Hydraulic Schematics

For detailed maintenance procedures, refer to the appropriate Maintenance Manual for your machine.

Part No. 1268530GT
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Specifications

Hydraulic Component Specifications

Function pump	
Type	Fixed displacement gear pump
Displacement per revolution	0.183 cu in 3 cc
Flow rate	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, maximum	3200 psi 220.6 bar
Secondary boom down relief valve pressure	2100 psi 145 bar
Platform level flow regulator	0.6 gpm 2.27 L/min
Jib boom / platform rotate flow regulator	0.4 gpm 1.5 L/min

Auxiliary pump	
Type: fixed displacement gear pump	
Displacement per revolution	0.5 gpm 1.9 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 Specification	
Description	**Specification**
Solenoid valve, 3 position 4 way, 20V DC (schematic items B, C, D, E, F and H)	25 to 29 Ω
Solenoid valve, 2 position 3 way, 20V DC (schematic items A, K, S and AA)	25 to 29 Ω
Proportional solenoid valve, 24V DC (schematic item I)	17 to 21 Ω

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Fault Code Chart

Fault Code	Programmer Diagnostic Display	Condition	Possible Causes	Solution
Fault code LED is off or is on, but not blinking	COMMUNICATION ERROR	Machine will not drive.	The key switch or Emergency Stop button(s) was cycled on and off faster than 5 seconds OR controller sensed an internal error during start up.	Push in the ground control red Emergency Stop button to the off position and wait for 5 seconds. Pull out the ground control red Emergency Stop button to the on position. If problem persists, replace the motor controller.
1		Normal operation.		
12	HW FAILSAFE 1-2-3	Machine will not drive.	The motor controller failed self test.	Replace the motor controller.
13	M- SHORTED	Machine will not drive.	The motor controller has a internal short between M- and B- terminals.	Test the motor controller. See Repair Section.
	FIELD OPEN	Machine will not drive.	Motor wiring is loose OR motor is defective OR motor controller has an internal short.	Check for loose or open connections at the drive motors and motor controller OR replace the defective drive motor OR test the motor controller. See Repair Section.
	ARM SENSOR	Machine will not drive.	Defective motor controller.	Replace the motor controller.
	FLD SENSOR	Machine will not drive.	Defective motor controller.	Replace the motor controller.

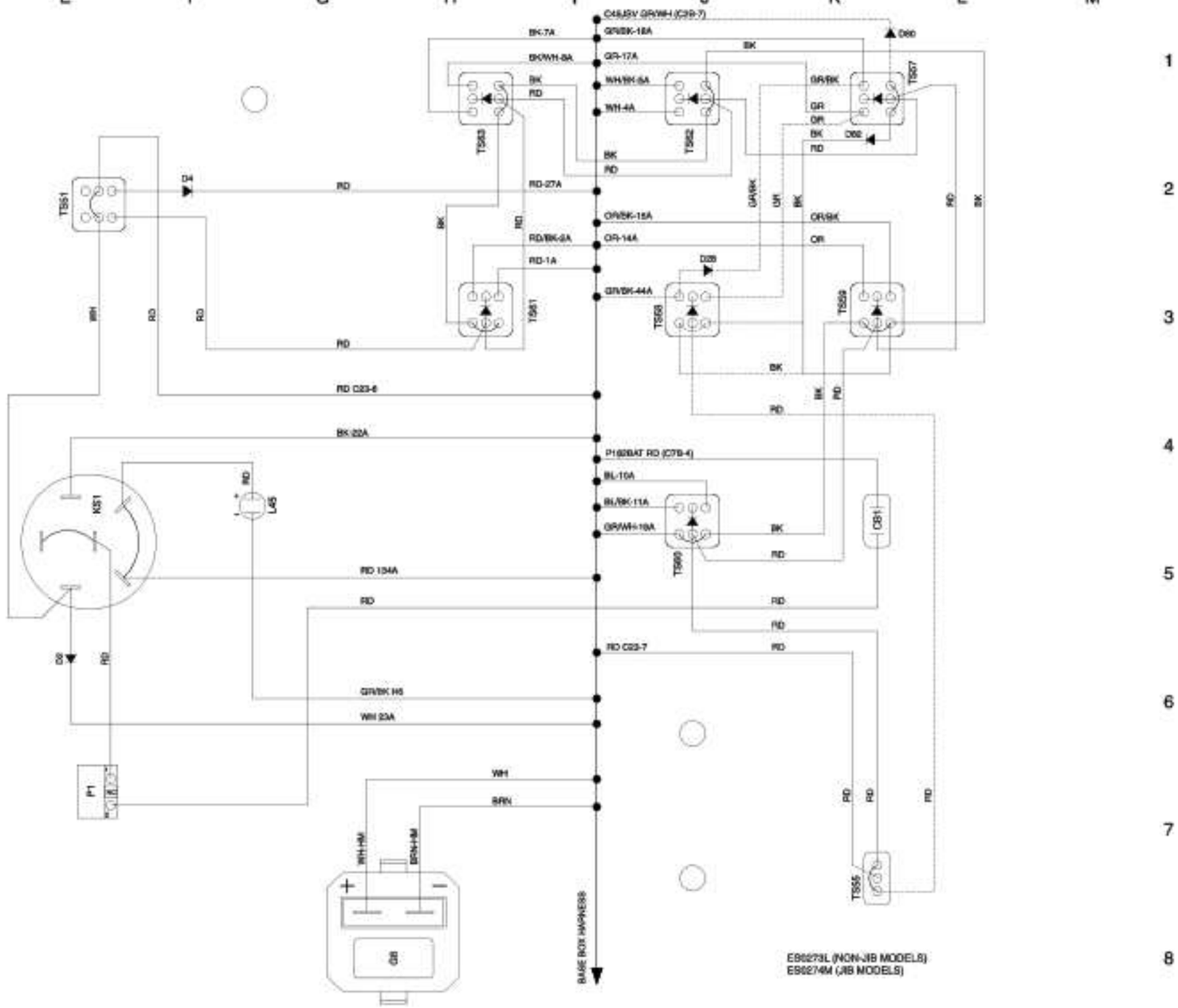
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Ground Control Box Switch Panel Wiring Diagram, (CE)

COMPONENT INDEX

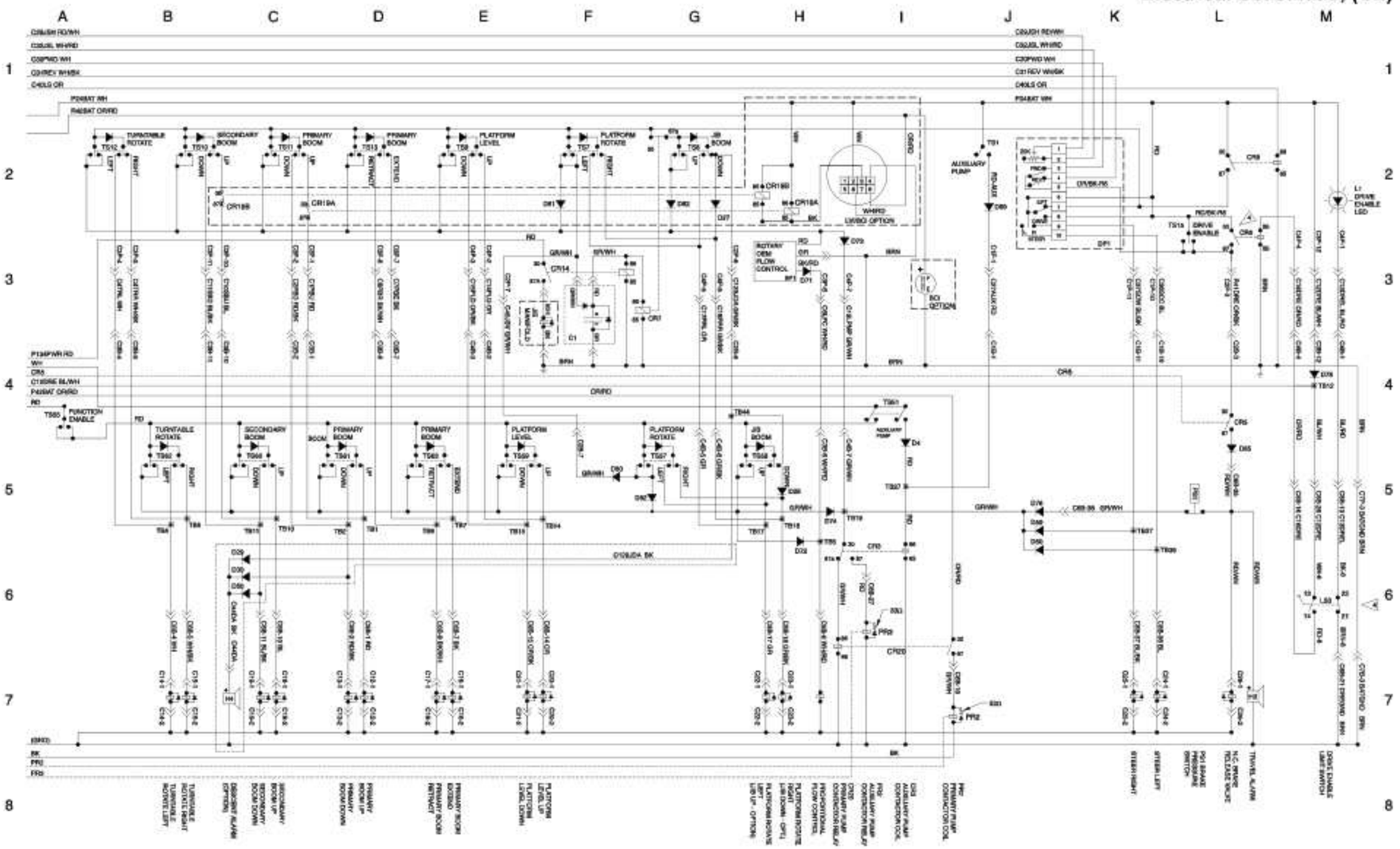
CB1	10A CIRCUIT BREAKER
CR1	POWER RELAY, 48V
CR2	POWER RELAY, 48V
CR3	AUXILIARY PUMP RELAY
CR4	HORN RELAY
CR5	BRAKE RELEASE RELAY
CR20	PRIMARY LIFT PUMP RELAY
G6	HOUR METER
H6	PLATFORM OVERLOAD ALARM
KS1	KEY SWITCH
L37	LED - DRIVE CONTROLLER FAULT STATUS
L45	LED - PLATFORM OVERLOAD
P1	EMERGENCY STOP BUTTON
TS51	AUXILIARY PUMP TOGGLE SWITCH
TS55	FUNCTION ENABLE TOGGLE SWITCH
TS57	PLATFORM ROTATE TOGGLE SWITCH
TS58	JIB UP / DOWN TOGGLE SWITCH (OPTION)
TS59	PLATFORM LEVEL UP / DOWN 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
U33	LOAD SENSE MODULE

NOTE: DASHED LINES INDICATE OPTIONS.



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Electrical Schematic, (CE)



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