A TEREX COMPANY

Service and Repair Manual

Z®-45/25

Z®-45/25J

Bi-Energy Power

Serial Number Range

from Z452513A
to Z452516N-57199

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.

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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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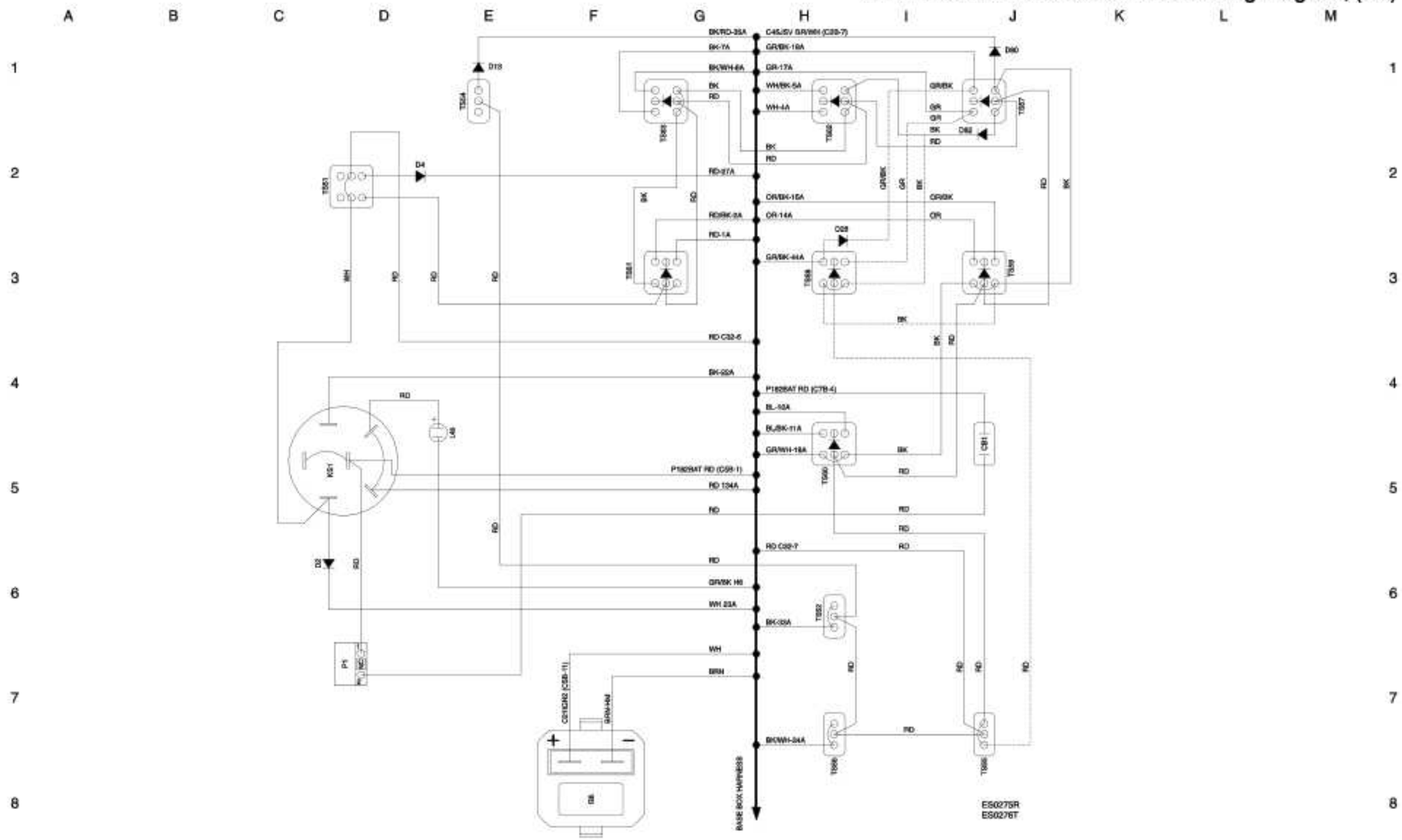
Fault Codes

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.

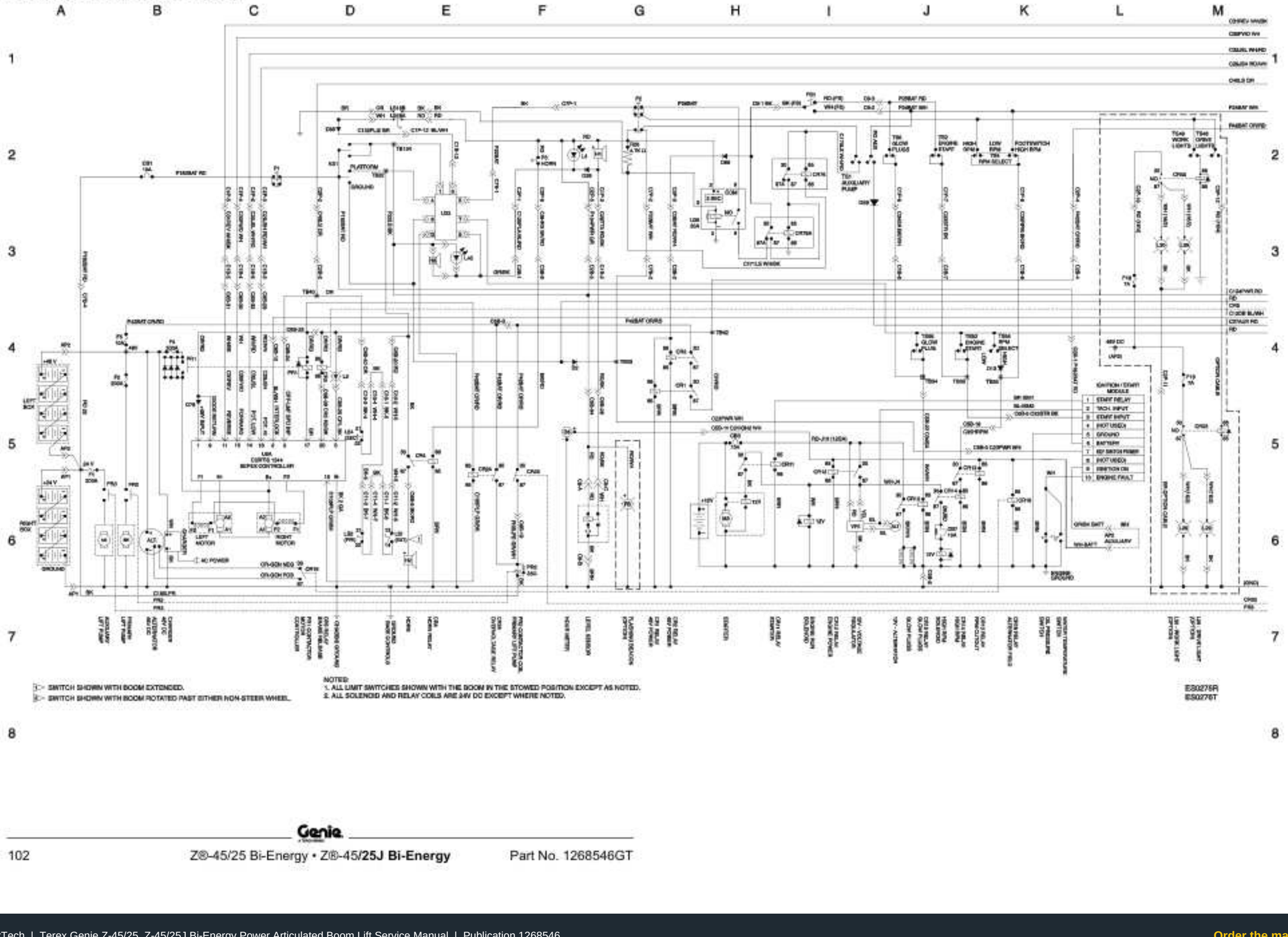
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Ground Control Box Switch Panel Wiring Diagram, (AS)



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Electrical Schematic, (AS)



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