CEBM019106

Shop Manual

D51EX-22
D51PX-22

CRAWLER TRACTOR

SERIAL NUMBERS D51EX-22 B10001 and up
D51PX-22 B10001 and up

ENGINE 6D107E-1

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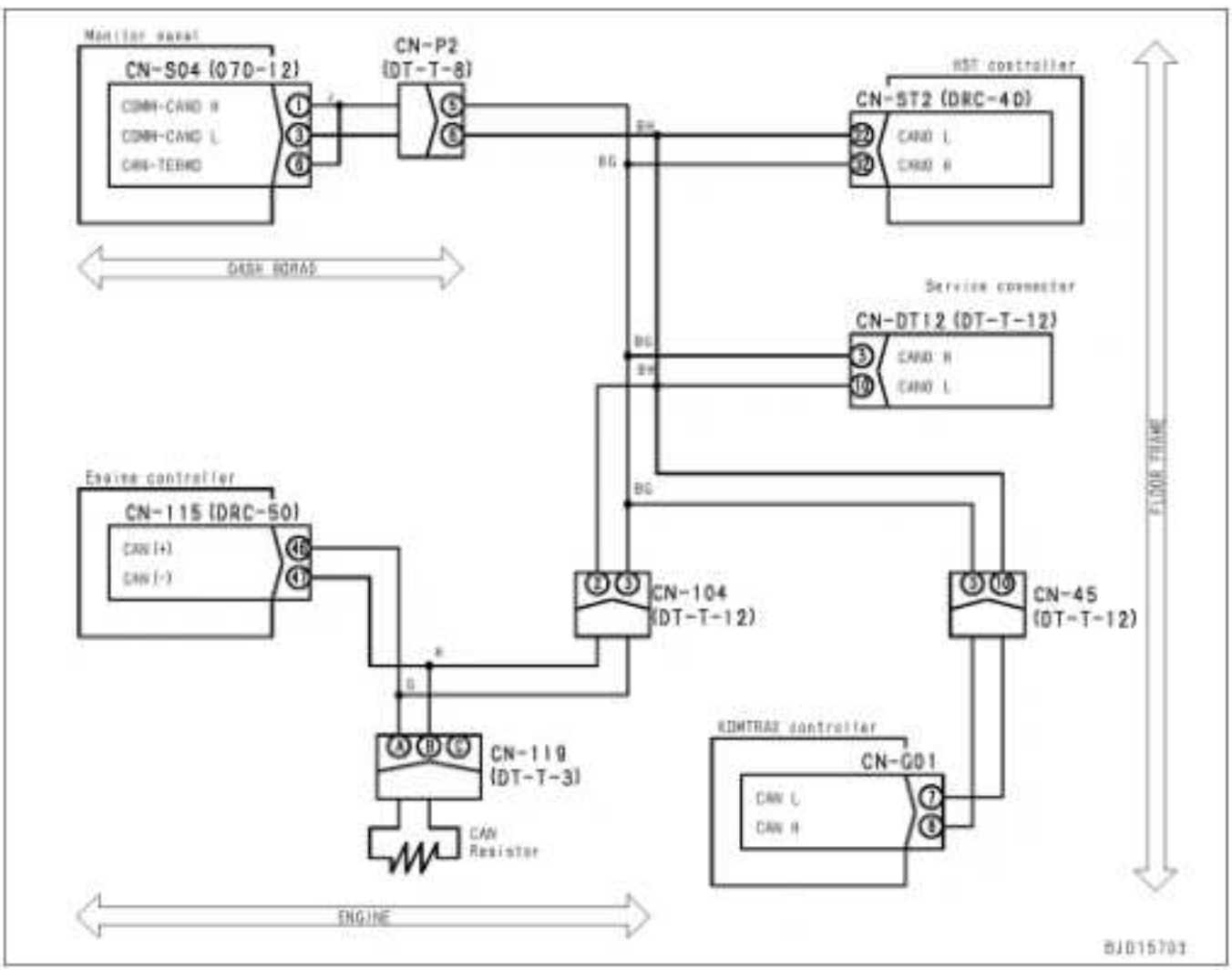
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	Cause		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	4	Short circuit with power supply line circuit in wiring harness (Contact with 24V circuit)	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.		
			Wiring harness between CN-S04 (female)(1), (6) – CN-115 (female) (46), – CN-ST2 (female) (32), – CN-G01 (female) (8), – CN-119 (female) (A), CN-DT12 (male) (3) and chassis ground	Voltage	Max. 1 V
			Wiring harness between CN-S04 (female) (3) – CN-115 (female) (47), – CN-ST2 (female) (22), – CN-G01 (female) (7), – CN-119 (female) (B), CN-DT12 (male) (10) and chassis ground	Voltage	Max. 1 V
	5	Defective CAN end point resistance	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch.		
			CN-119 (female)	Resistance	
			Between (A) and (B)	100 – 140 Ω	
	6	Defective CAN end point resistance (Internal of monitor)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch.		
			CN-S04 (male)	Resistance	
			Between (3) and (6)	100 – 140 Ω	
	7	Defective monitor panel or HST controller	If causes 1 – 6 are not detected, monitor panel or HST controller may be defective. (Since trouble is in system, troubleshooting cannot be carried out.)		

Circuit diagram related to CAN communication



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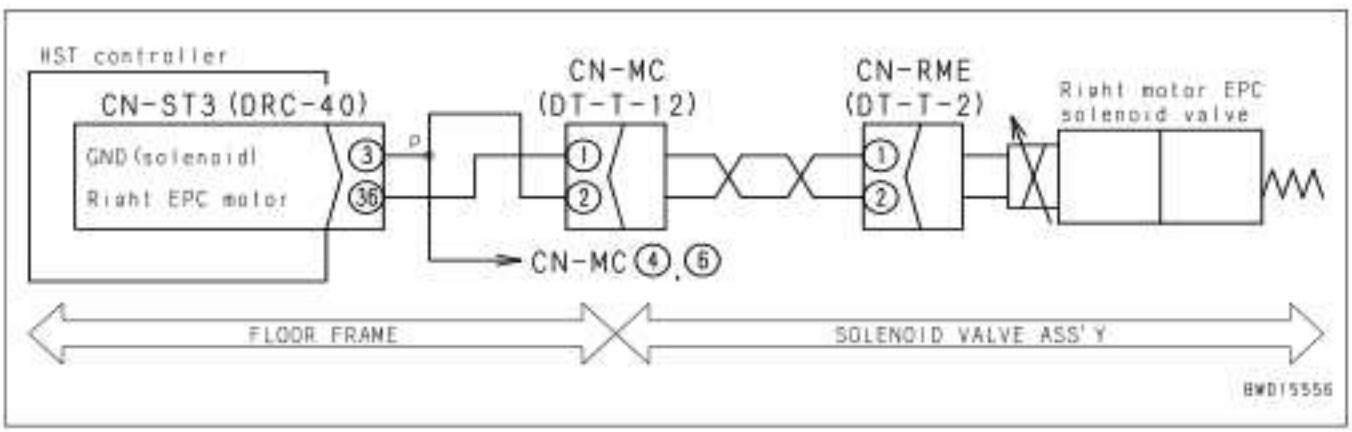
ERROR CODE [DXK2KA]

RIGHT HST MOTOR EPC SOLENOID VALVE DISCONNECTION

Action code	Error code	Trouble	Right HST motor EPC solenoid valve: Disconnection (HST controller system)
E02	DXK2KA		
Contents of trouble	• When the signal is output to the Right HST motor EPC solenoid valve, no current flows.		
Action of controller	• Flashes the warning lamp and sounds the warning buzzer. • Stops outputting to the Right HST motor EPC solenoid valve circuit. • Stops outputting to the Left HST motor EPC solenoid valve circuit, too. • Even if the cause of the error disappears, the system does not reset itself until the starting switch is turned OFF.		
Problem that appears on machine	• If the machine has been traveling at high-speed, it decelerates. • The machine cannot travel at high-speed.		
Related information	• The output state (command current, sensed current) to the Right HST motor EPC solenoid valve can be checked in the monitoring mode. (Controller: HST, Code: 52301 – R MOTOR, Code: 52303 – R PUMP FB) • Method of reproducing error code: Start engine and travel the machine at high-speed.		

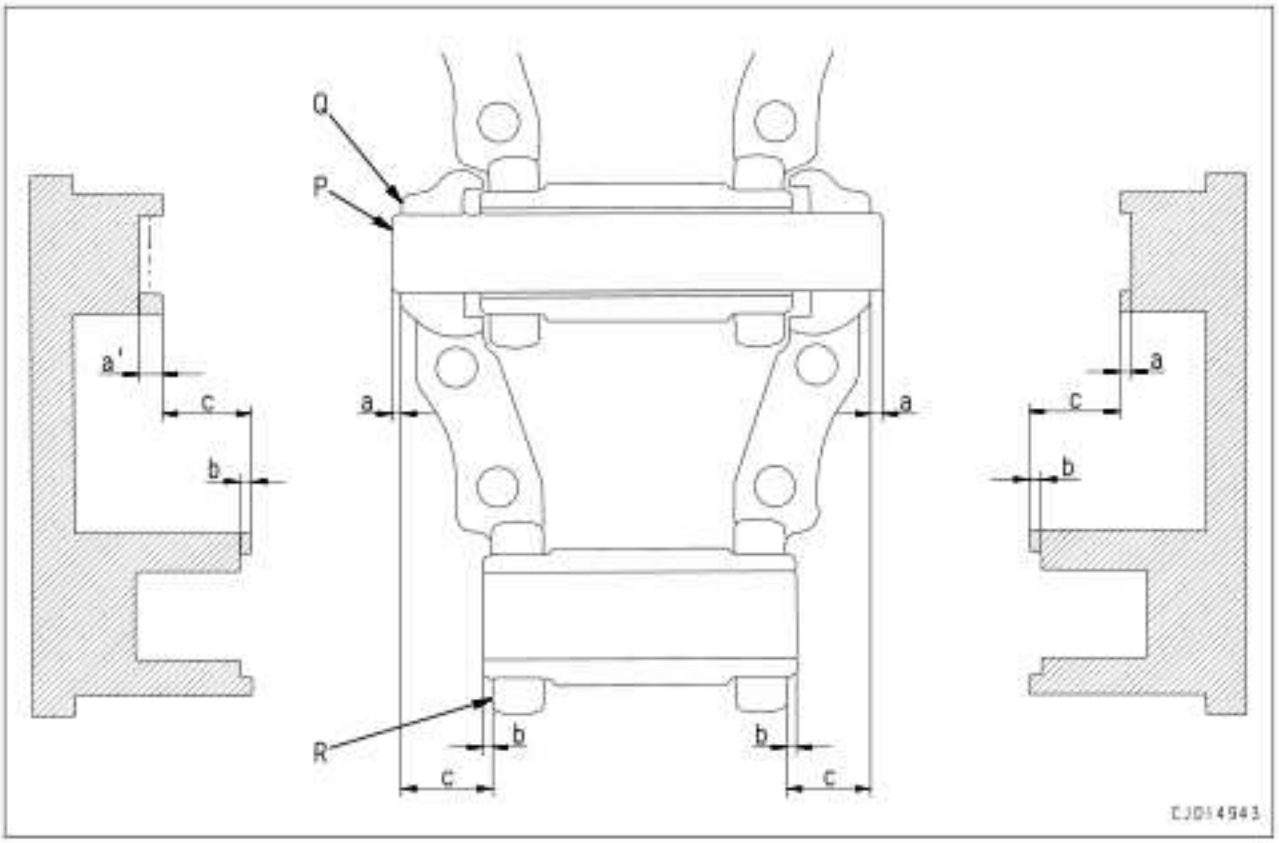
	Cause		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	1	Short circuit with power supply line in wiring harness (Contact with 24V circuit)	If error code [**DXK2KY**] is displayed, carry out troubleshooting for it first.		
	5	Defective Right HST motor EPC solenoid valve (Internal disconnection)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch.		
			CN-RME (male)	Resistance	
			Between (1) and (2)	5 – 15 Ω	
	3	Disconnection in wiring harness (Disconnection or defective contact in connector)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch.		
			Wiring harness between CN-ST3 (female) (36) and CN-RME (female) (1)	Resistance	Max. 1 Ω
			Wiring harness between CN-ST3 (female) (3) and CN-RME (female) (2)	Resistance	Max. 1 Ω
	4	Defective HST controller	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch.		
			CN-ST3 (female)	Resistance	
			Between (36) and (3)	5 – 15 Ω	

Circuit diagram related to Right HST motor EPC solenoid valve



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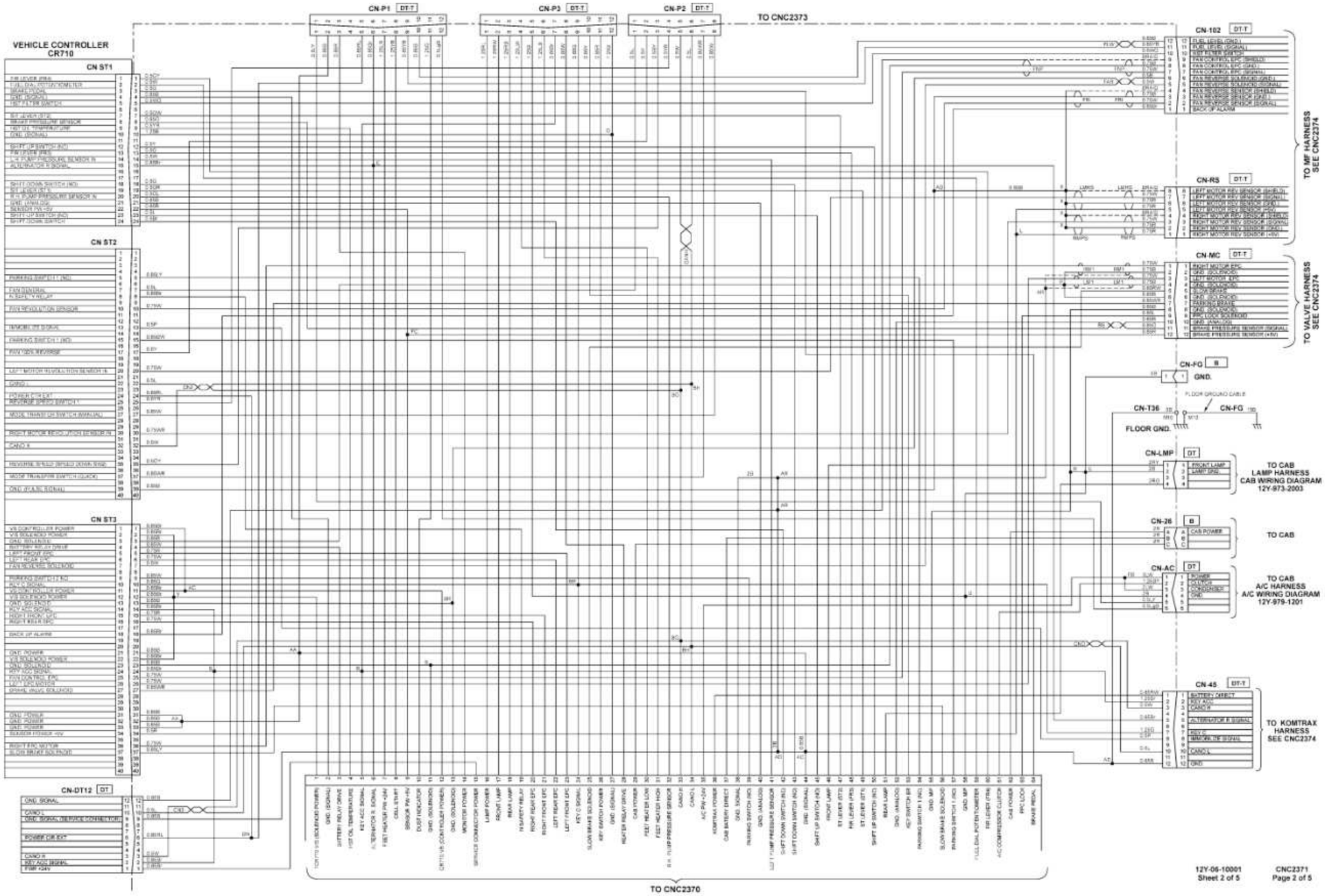
LINK PRESS-FITTING JIG DIMENSIONS TABLE 1



Jig dimensions (mm)	
a	3.0 ± 2
b	2 ± 0.3
c	43.8

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CAB HARNESS AND CONTROLLER CONNECTIONS (VIEW 2 OF 5)



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