CEBM022903

Shop Manual

KOMATSU®

WA500-6

WHEEL LOADER

SERIAL NUMBERS **WA500-6** **A93001** and UP

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Testing and Adjusting Item	Symbol		Part No.	Part Name	Qty	Remarks
Measuring directional lever (steering wheel specification)	K		79A-264-0021	Push-pull scale	1	0 – 294 N (0 – 66.09 lbf)
Testing and adjusting power train oil pressure	L	1	799-101-5002	Hydraulic tester	1	Pressure gauge: 2.5, 6, 40, 60 MPa (362.59, 870.23, 5,801.51, 8,702.26 psi)
			790-261-1204	Digital hydraulic tester	1	Pressure gauge: 60 MPa (8,702.26 psi)
		2	799-101-5220	Nipple	1	10 x 1.25 mm
			07002-11023	O-ring	1	Pressure gauge: 1 MPa (145.04 psi)
Method of moving machine when transmission is broken	M		794-423-1190	Plug	1	20 x 1.5 mm
Testing and adjusting steering wheel	N		79A-264-0021	Push-pull scale	1	0 – 294 N (0 – 66.09 lbf)
Testing steering oil pressure	Q	1	799-101-5002	Hydraulic tester	1	Pressure gauge: 2.5, 6, 40, 60 MPa (362.59, 870.23, 5,801.51, 8,702.26 psi)
			790-261-1204	Digital hydraulic tester	1	Pressure gauge: 60 MPa (8,702.26 psi)
		2	799-101-5220	Nipple	1	Size: 10 x 1.25 mm
			07002-11023	O-ring	1	–
		3	799-401-3200	Adapter	1	Size 03
		4	799-401-2701	Differential pressure gauge	1	–
Testing hydraulic drive fan	R	1	799-205-1100	Tachometer kit	1	Digital display: 6 – 99999.9 rpm
		2	799-101-5002	Hydraulic tester	1	Pressure gauge: 2.5, 6, 40, 60 MPa (362.59, 870.23, 5,801.51, 8,702.26 psi)
			790-261-1204	Digital hydraulic tester	1	Pressure gauge: 60 MPa (8,702.26 psi)
		3	799-101-5220	Nipple	1	Size: 10 x 1.25 mm
			07002-11023	O-ring	1	–
		4	799-401-3500	Adapter	1	Size 06
Bleeding air from hydraulic drive fan circuit	S	1	799-101-5002	Hydraulic tester	1	Pressure gauge: 2.5, 6, 40, 60 MPa (362.60, 870.23, 5,801.51, 8,702.26 psi)
			790-261-1204	Digital hydraulic tester	1	Pressure gauge: 60 MPa (8,702.26 psi)
		2	799-101-5220	Nipple	1	Size: 10 x 1.25 mm
			07002-11023	O-ring	1	–

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CA263

Fuel Temperature Sensor High Error

Action Code	Failure Code	Trouble	Fuel temperature sensor high error (Engine controller system)
E01	CA263		
Contents of trouble	• Fuel temperature sensor circuit is abnormally high.		
Action of controller	• Sets fuel temperature to fixed value (95°C [203°F]), and continues operation.		
Problem that appears on machine	—		
Related information	• The input state (temperature) from the fuel temperature sensor can be checked with the monitoring function (Code: 04204 FUEL TEMP). • The input state (voltage) from the fuel temperature sensor can be checked with the monitoring function (Code: 14201 FUEL TEMP). • Method of reproducing failure code: Turn starting switch ON.		

	Cause		Standard value in normal state/Remarks on troubleshooting			
Possible causes and standard value in normal state	1	Defective fuel temperature sensor (Internal defect)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			TFUEL (male)	Fuel temperature	Resistance	
			Between (A) and (B)	10 – 100°C (50 – 212°F)	0.6 – 20 kΩ	
	2	Disconnection in wiring harness (Disconnection in wiring or defective contact in connector)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between ENG (female) (30) – TFUEL (female) (A)		Resistance	Max. 1 Ω
			Wiring harness between ENG (female) (47) – TFUEL (female) (B)		Resistance	Max. 1 Ω
	3	Ground fault in wiring harness (Short circuit with GND circuit)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between ENG (female) (30) – TFUEL (female) (A) and chassis ground		Resistance	Min. 1 MΩ
			★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
	4	Defective engine controller	ENG (female)	Fuel temperature	Resistance	
			Between (30) and (47)	10 – 100°C (50 – 212°F)	0.6 – 20 kΩ	

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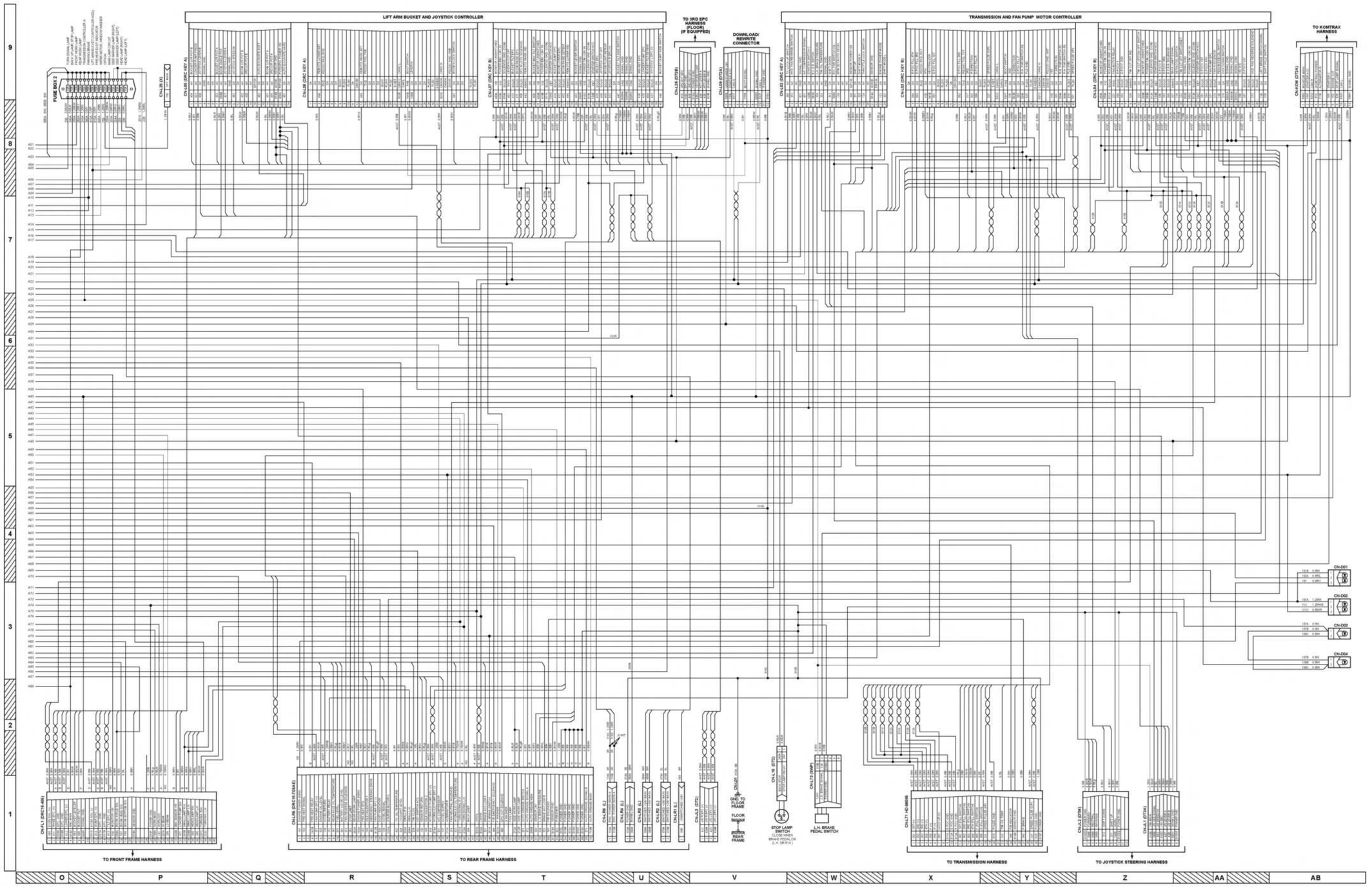
DAQ2KK

Transmission Controller Load Power Supply Line: Low Source Voltage (input)

Action Code	Failure Code	Trouble	Transmission controller load power supply line: Low source voltage (input) (Transmission controller system)
E03	DAQ2KK		
Contents of trouble	• The voltage of the 24 V solenoid power supply system is low. • Detection conditions: Terminal C input turned OFF, constant power supply (battery direct power supply) above 20 V, and solenoid power supply below 18 V		
Action of controller	• Turns the centralized warning lamp and alarm buzzer ON. • Does not display failure codes that may be falsely detected due to low 24 V solenoid source voltage. • Even if cause of failure disappears, system does not reset itself until directional lever, joystick steering FNR (directional) switch, or directional selector switch is set to N (Neutral).		
Problem that appears on machine	• Transmission is stuck in Neutral. • The fan rotates forward if reversed.		
Related information	• Method of reproducing failure code: Turn starting switch ON.		

	Cause		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	1	Defective fan motor relay (L114) (Internal disconnection or short circuit)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.		
			L114 (male)	Resistance	
			Between (1) and (2)	200 – 400 Ω	
			★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.		
			If fan motor relay (L114) is replaced with a relay of the same type (5-pin type) and the condition becomes normal, the fan motor relay is defective.		
	2	Disconnection in wiring harness (Disconnection or defective contact in connector)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.		
			Wiring harness between L04 (female) (2), (12), (22) – L114 (female) (5)	Resistance	Max. 1 Ω
			Wiring harness between L114 (female) (3) – fuse No.6 of fuse box A	Resistance	Max. 1 Ω
	3	Grounding fault in wiring harness (Contact with ground circuit)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.		
			Wiring harness between L04 (female) (2), (12), (22) – L114 (female) (5) and chassis ground	Resistance	Min. 1 MΩ
			Wiring harness between L114 (female) (3) – fuse No. 6 of fuse box A, – circuit branch end and chassis ground	Resistance	Min. 1 MΩ
	4	Defective transmission controller	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.		
			L04	Voltage	
			Between (2), (12), (22) and (21), (31), (32), (33)	20 – 30 V	

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