CEBM022801

Shop Manual

KOMATSU®

WA320-6

WHEEL LOADER

SERIAL NUMBERS **WA320-6** **A35001** and UP

ENGINE **SAA6D107E-1**

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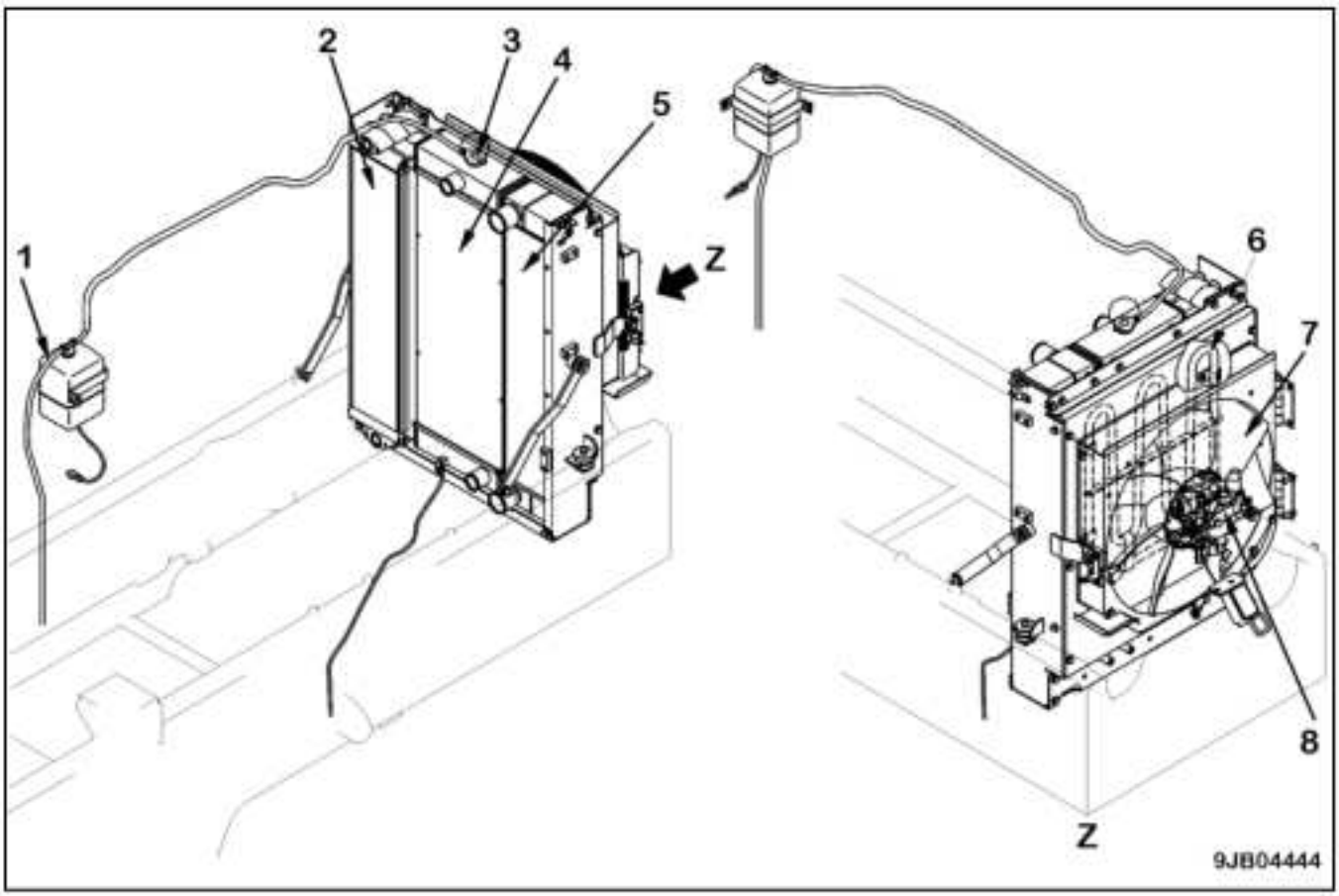
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Cooling System



1. Reservoir tank
2. Oil cooler
3. Radiator cap
4. Radiator
5. Aftercooler
6. Transfer oil cooler
7. Cooling fan
8. Cooling fan motor

Specifications

	Measurement	Radiator	Oil Cooler	Aftercooler
Core type		CF68-4	CF40-1	AL WAVE
Fin pitch	mm (in)	3.5/2 (0.14/0.08)	3.5/2 (0.14/0.08)	4.0/2 (0.16/0.08)
Total heat dissipation area	m^2 (ft^2)	35.03 (377.06)	4.84 x 3 (52.10 x 32.29)	12.79 (137.67)
Pressure valve cracking pressure	kPa (psi)	70.0 (10.15)	—	—
Vacuum valve cracking pressure	kPa (psi)	0 – 5.0 (0 – 0.73)	—	—

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CA1633

KOMNET Datalink Timeout Error

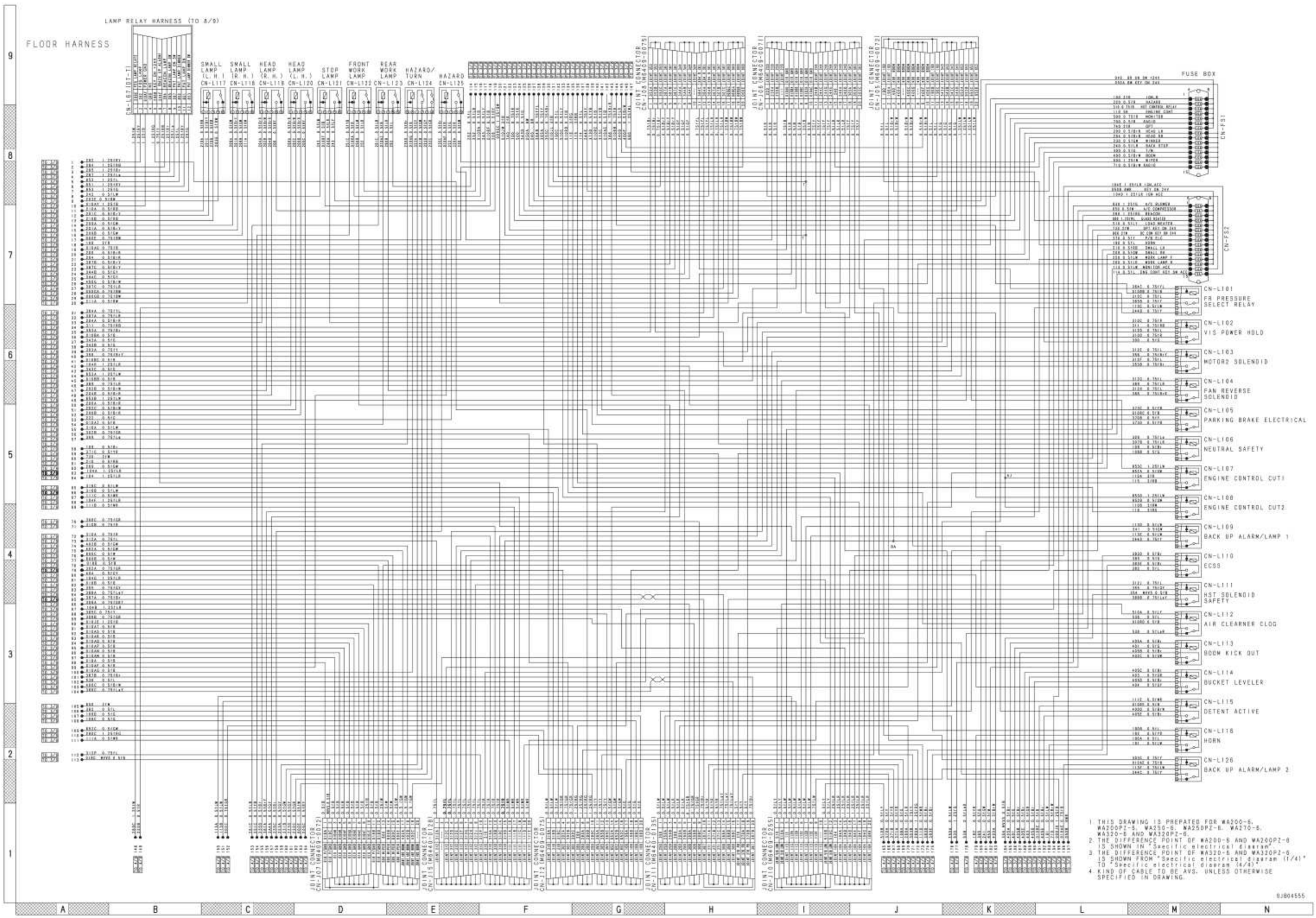
Action Code	Failure Code	Trouble	KOMNET datalink timeout error (Engine controller system)
E03	CA1633		
Contents of trouble	• Engine controller detected a communication error in the KOMNET communication circuit used for the communication between the HST controller and machine monitor.		
Action of controller	• Continues the operation from the default mode. • Turns the centralized warning lamp and alarm buzzer ON. • If problem is removed, system is returned to normal operating state.		
Problem that appears on machine	• KOMNET communication information may not be transmitted correctly to cause incorrect operation of machine. (Problem depends on failure occurrence location.)		
Related information	• If failure code [DAJRKR] is indicated simultaneously, carry out troubleshooting for it first. • Method of reproducing failure code: Turn the starting switch ON.		

	Causes		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	1	Defective CAN end point resistance	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.		
			CAN1 (male)	Resistance	
			Between (A) and (B)	110 – 140 Ω	
			★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.		
			CAN2 (male)	Resistance	
			Between (A) and (B)	110 – 140 Ω	
	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 EC2 (female) (46), (47) – HST (female) (28), (38)	Resistance	Max. 1 Ω
			Wiring harness between EC2 (female) (46), (47) – L29 (female) (3), (8)	Resistance	Max. 1 Ω
			Wiring harness between EC2 (female) (46), (47) – C140 (female) (28), (38)	Resistance	Max. 1 Ω
			Wiring harness between EC2 (female) (46), (47) – L80 (female) (7), (8)	Resistance	Max. 1 Ω
			Wiring harness between EC2 (female) (46), (47) – CAN1 (female) (A), (B)	Resistance	Max. 1 Ω
			Wiring harness between EC2 (female) (46), (47) – CAN2 (female) (A), (B)	Resistance	Max. 1 Ω

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	Causes		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	5	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 L125 (female) (3) – L49 (female) (3)	Resistance	Max. 1 Ω
			Wiring harness between L49 (female) (4) – L04 (female) (6), L124 (female) (1), (3)	Resistance	Max. 1 Ω
			Wiring harness between L49 (female) (1) – ground	Resistance	Max. 1 Ω
	6	Ground 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 L125 (female) (3) – L49 (female) (3) and ground	Resistance	Min. 1 MΩ
			Wiring harness between L49 (female) (4) – L04 (female) (6), L124 (female) (1), (3) and ground	Resistance	Min. 1 MΩ
			Wiring harness between L04 (female) (7) – R23 (female) (1) – FLC [left] (female) (C) and ground	Resistance	Min. 1 MΩ
			Wiring harness between L04 (female) (8) – R22 (female) (1) – FLC [right] (female) C and ground	Resistance	Min. 1 MΩ
	7	Hot short in wiring harness (Contact with 5 V, 24 V circuit)	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.		
			Wiring harness between L125 (female) (3) – L49 (female) (3) and ground	Voltage	Max. 1 V
			Wiring harness between L49 (female) (4) – L04 (female) (6), L124 (female) (1), (3) and ground	Voltage	Max. 1 V
			Wiring harness between L04 (female) (7) – R23 (female) (1) – FLC [left] (female) (C) and ground	Voltage	Max. 1 V
			Wiring harness between L04 (female) (8) – R22 (female) (1) – FLC [right] (female) C and ground	Voltage	Max. 1 V

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