SEN06486-00

Shop Manual

BULLDOZER

D37EXi -23
D37PXi -23
D39EXi -23
D39PXi -23

SERIAL NUMBERS

D37EXi- 80179
D37PXi- 80179
D39EXi- 90404
D39PXi- 90404

and up

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Unit: kg

Machine model	D37EXI-23
Serial No.	80179 and up
Lift cylinder assembly	20 x 2
Lift cylinder with stroke and reset sensor	23.8
Ripper assembly	470
• Ripper cylinder assembly	31
ROPS cab assembly (including floor, seat, and air conditioner)	1,050
Operator's seat	
Standard seat	42
High-back seat	53
Air suspension seat	58
Engine hood assembly (including door, pre-cleaner, and air cleaner)	171

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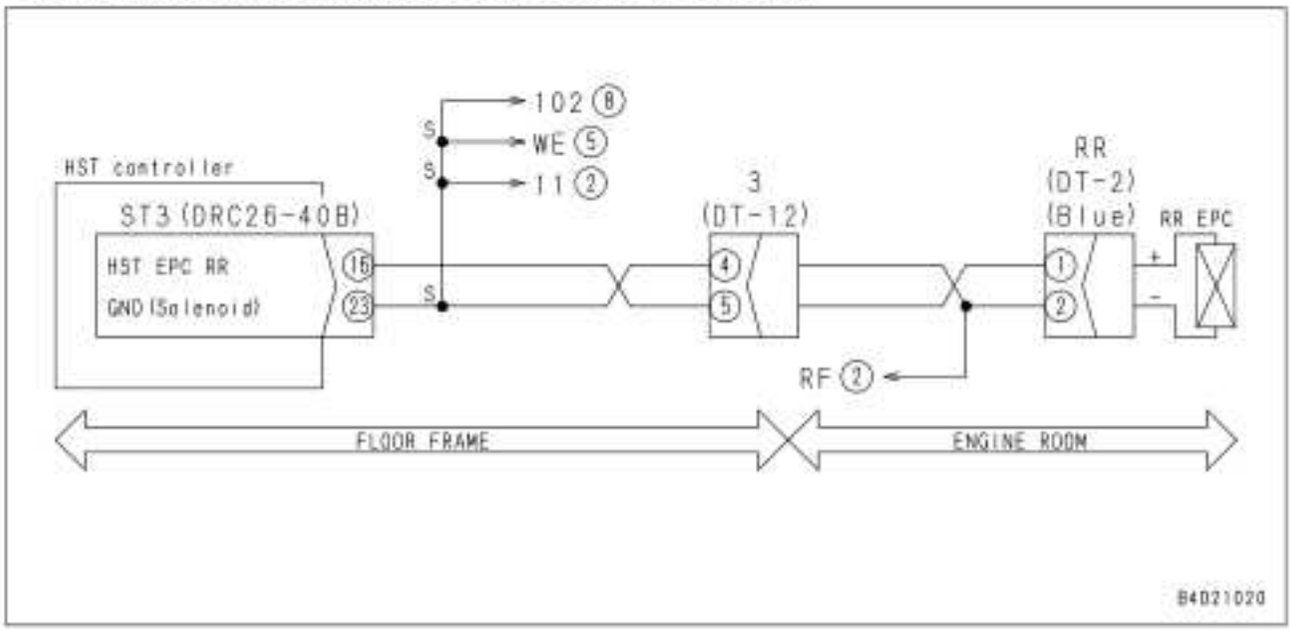
Failure code [CA692] Intake Air Temp Sens Low Error (D37-CA692-400-A-Z0-A)

Action level	Failure code	Failure	Intake Air Temperature Sensor Low Error (Engine controller system)
L01	CA692		
Detail of failure	• Low voltage occurs in signal circuit of intake air temperature sensor.		
Action of controller	• Sets intake air temperature to fixed value (25°C) and runs engine.		
Problem on machine			
Related information	• Mass air flow sensor and intake air temperature sensor are integrated. • Method of reproducing failure code: Turn starting switch to ON position.		

No.	Cause	Procedure, measuring location, criteria, and remarks			
1	Defective wiring harness connector	1. See descriptions of wiring harness and connectors in "c: Electrical equipment" in "Checks before troubleshooting" of "Related information on troubleshooting", and check it. 2. Turn starting switch to ON position.			
		If this failure code is not displayed, wiring harness connector is defective. ★ If this failure code is displayed, perform following checks.			
2	Defective intake air temperature sensor (internal defect)	1. Turn starting switch to OFF position. 2. Disconnect connector P55. 3. Turn starting switch to ON position.			
		If this failure code changes to failure code [CA691], intake air temperature sensor is defective.			
		• Reference 1. Turn starting switch to OFF position. 2. Disconnect connector P55 and connect T-adapter to male side.			
		Resistance	Between P55 (male) (3) and (4) ★ Intake air temperature-Resistance characteristics	-30°C	25 to 28 kΩ
				0°C	5.5 to 6.1 kΩ
				25°C	1.9 to 2.1 kΩ
				40°C	1.1 to 1.2 kΩ
				100°C	180 to 185 Ω
			Between P55 (male) (4) and ground (sensor body)	Whole range	Min. 1 MΩ
3	Open or short circuit in wiring harness (short circuit, wire breakage or defective contact of connector)	1. Turn starting switch to OFF position. 2. Disconnect connector J1 and connect T-adapter to female side.			
		Resistance	Between J1 (female) (6) and (22)		180 Ω to 28 kΩ
		★ Use Intake air temperature-Resistance characteristics table for check on cause 2 as resistance criteria.			
4	Ground fault in wiring harness (contact with ground circuit)	1. Turn starting switch to OFF position. 2. Disconnect connectors J1 and P55 and connect T-adapter to either female side.			
		Resistance	Between J1 (female) (6) or P55 (female) (4) and ground		Min. 1 MΩ
5	Short circuit in wiring harness	1. Turn starting switch to OFF position. 2. Disconnect connectors J1 and P55, and connect T-adapters to female side of connector J1. ★ Check by using multimeter in continuity mode.			
		Resistance	Between J1 (female) (6) and each pin other than pin (6)		Min. 1 MΩ
6	Defective engine controller	If no failure is found by above checks, engine controller is defective. (Since this is an internal defect, troubleshooting cannot be performed.)			

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Circuit diagram related to right reverse HST pump EPC solenoid

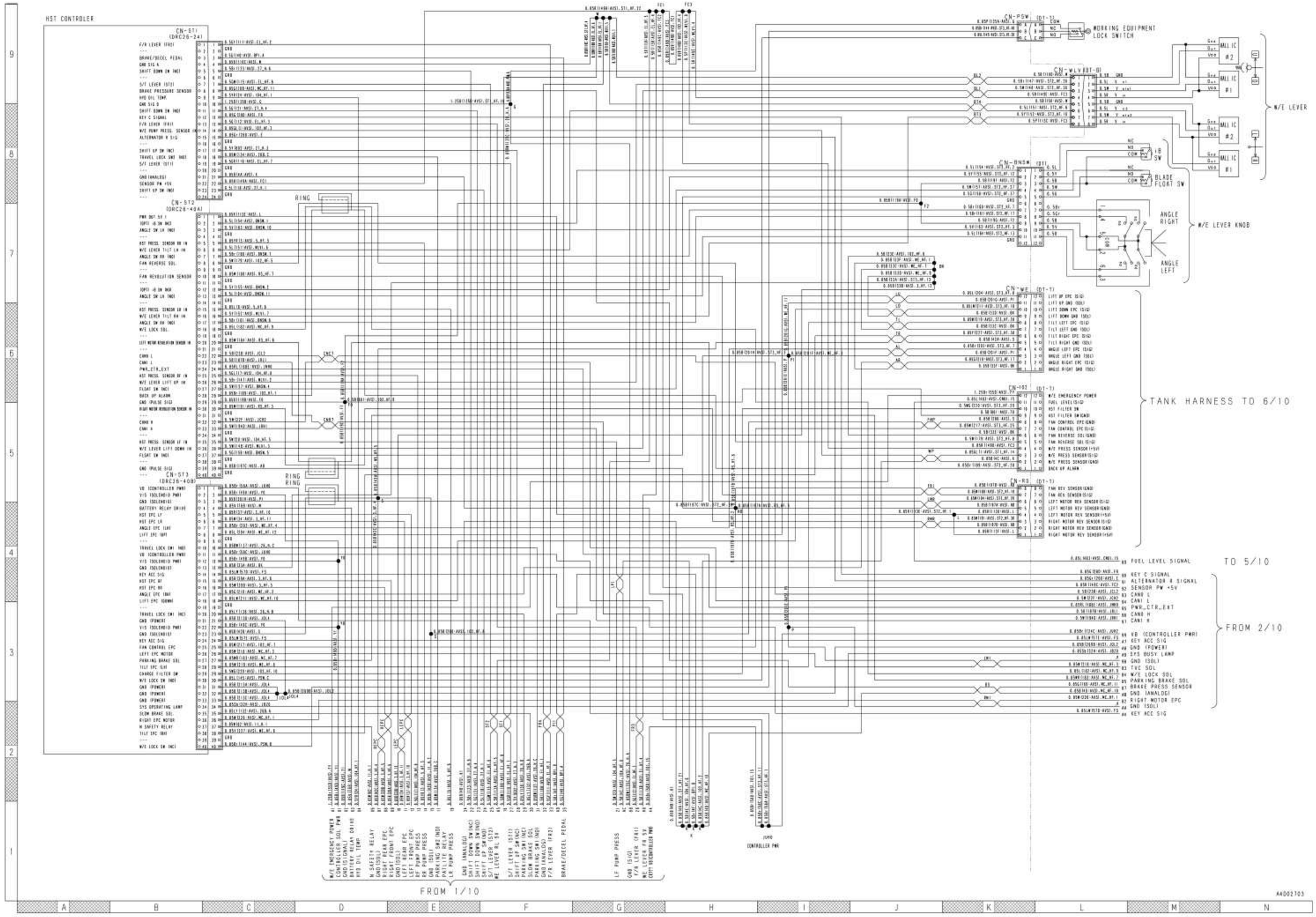


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Electrical circuit diagram (3/10)

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★ This figure covers the equipment and devices that are unavailable as optional items in some areas.



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