SEBM029508

SHOP MANUAL

KOMATSU®

D65EX-15
D65PX-15
D65WX-15

Machine model	Serial number
D65EX-15	**67001 and up**
D65PX-15	**67001 and up**
D65WX-15	**67001 and up**

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.

- D65-15 mount the SA6D125E-3 engine.
  For details of the engine, see the 125-3 Series Engine Shop Manual.

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Machine name and type				D65EX-15			D65PX-15	D65WX-15
				Semi-U dozer	Semi-U dozer with wide gauge	Semi-U dozer with long track	Power tilt dozer	Semi-U dozer
Serial No.				67001 and up			67001 and up	67001 and up
Hydraulic system	Hydraulic pump	HSS pump • Type • Theoretical capacity	cm³/rev	HPV95, variable-capacity piston, load sensing type 112				
		Cooling fan pump • Type • Theoretical capacity	cm³/rev	LPV30, variable-capacity piston type 30				
		Power train and lubricating oil pump • Type • Theoretical capacity	cm³/rev	SAL (2) 45 + 45, gear type (Tandem) 43.7 x 2				
		Scavenging pump • Type • Theoretical capacity	cm³/rev	Gear type 61.2				
	Hydraulic motor	HSS motor • Type • Motor capacity	cm³/rev	HMF95, fixed-capacity piston type with brake valve 96				
		Cooling fan motor • Type • Motor capacity	cm³/rev	LMF28, fixed-capacity piston type 28				
	Control valve	Type and quantity		3-spool type, 1 piece 4-spool type, 1 piece (Machine with ripper: Optional)				
		Control method		Hydraulic assist type				
	Hydraulic tank			Box type (External control valve type)				
	Hydraulic oil filter			Return side of tank				
	Oil cooler			Air-cooled type (3A-CS)				

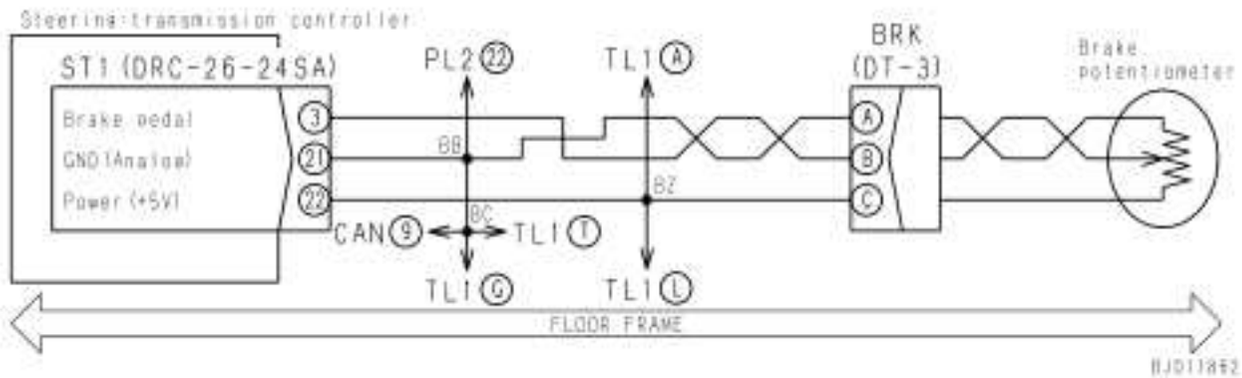
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ERROR CODE DK40KB (BRAKE POTENTIOMETER: SHORT CIRCUIT (KB))

Action code	Error code	Controller code	Trouble	Brake potentiometer: Short circuit (KB) (Steering and transmission controller system)
CALL E03	DK40KB	Steering		
Contents of trouble	• Signal voltage of brake potentiometer circuit is below 0.5 V or above 4.5 V.			
Action of controller	• Flashes caution lamp and turns on caution buzzer. • Limits operation of engine and transmission.			
Problem that appears on machine	• Auto shift-down mechanism does not work normally. • Once machine is stopped, engine speed is limited to medium (half). • Once machine is stopped, travel is limited to F1 and R1.			
Related information	• Input (Voltage) from brake potentiometer can be checked in monitoring mode. (Code 50400: Voltage of brake potentiometer) • Method of reproducing error code: Turn starting switch ON and operate brake pedal.			

	Cause		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	1	Defective 5 V sensor power source system	See if error code [DAQ5KK] [DB35KK] is displayed. If it is displayed, carry out troubleshooting for it first.		
	2	• Defective brake potentiometer (Internal disconnection or short circuit) • Defective installation of potentiometer	★Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.		
			BRK (male)	Resistance	
			(A) – (C)	4.0 – 6.0 kΩ	
			(A) – (B)	1.5 – 4.5 kΩ (Free – Stroke end)	
			(B) – (C)	4.5 – 1.5 kΩ (Free – Stroke end)	
	3	Short circuit with power source in wiring harness (Contact with 24 V circuit)	★Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.		
			Wiring harness between ST1 (female) (3) – BRK (female) (B) with chassis ground	Voltage	Max. 1 V
	4	Defective steering and transmission controller	★Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.		
			ST1	Voltage	
			Between (3) – (21)	1.5 – 4.5 V	
	5	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 ST1 (female) (21) – BRK (female) (A)	Resistance	Max. 1 Ω

Circuit diagram related to brake potentiometer



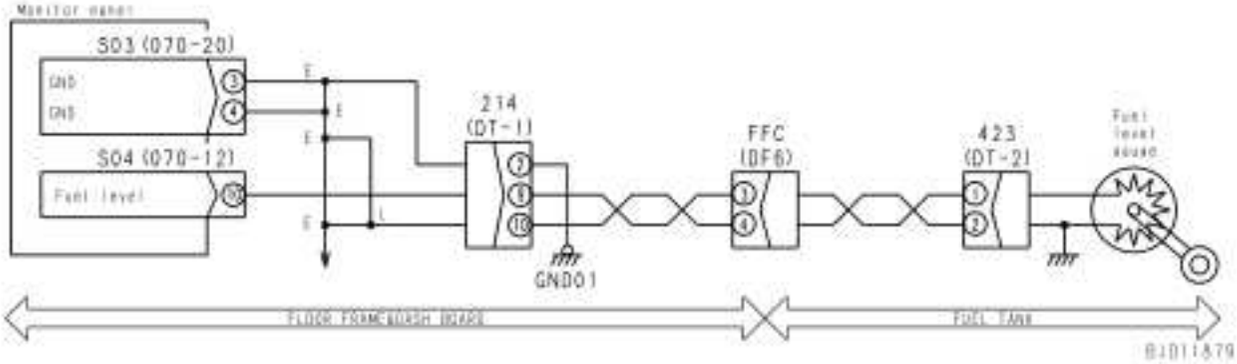
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E-11 INDICATION OF THE FUEL GAUGE IS ABNORMAL.

Trouble	• Indication of the fuel gauge is abnormal.
Related information	• Signals of the fuel level sensor are sent and received through communication by the monitor panel.

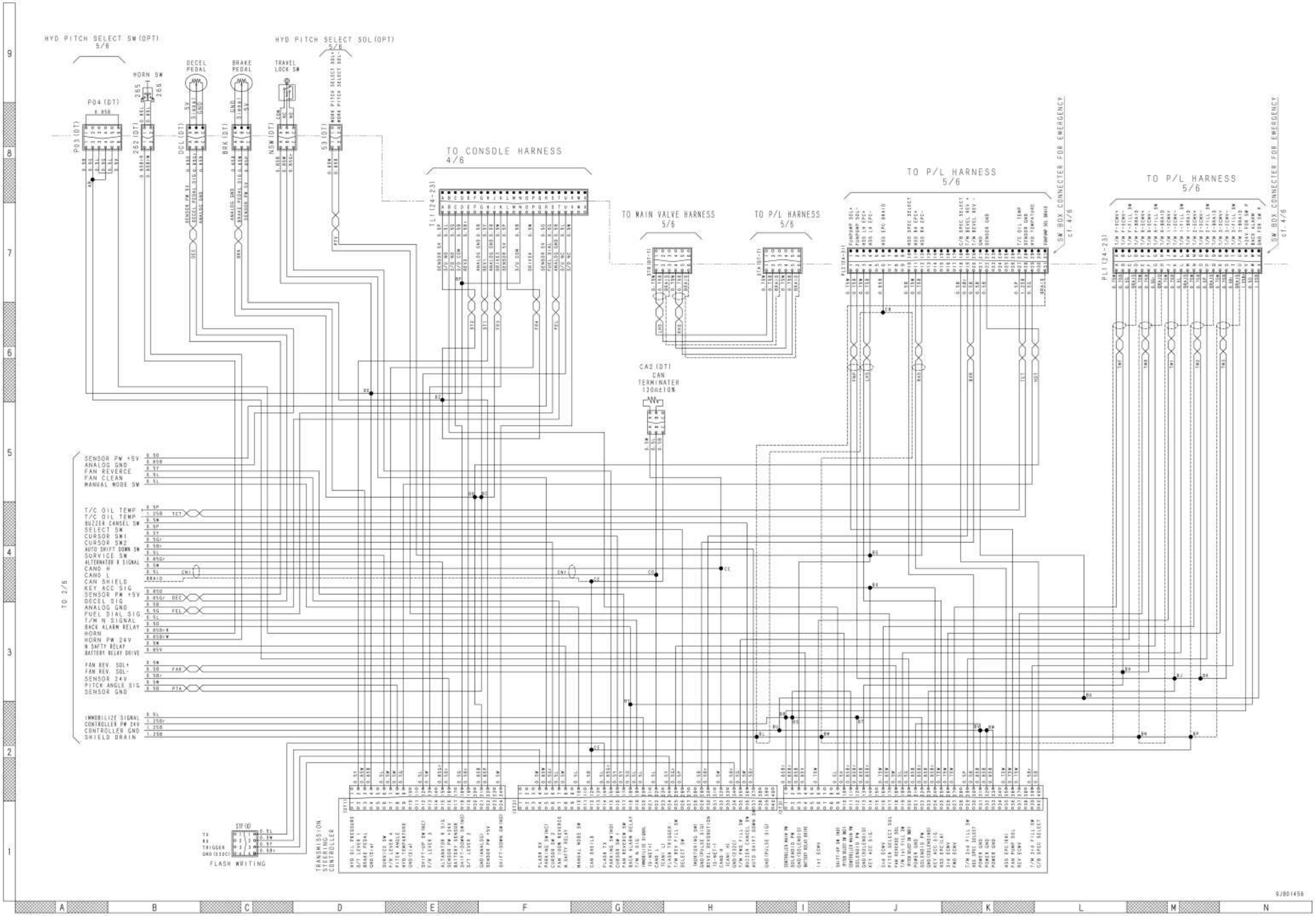
	Cause		Standard value in normal state/Remarks on troubleshooting			
Possible causes and standard value in normal state	1	Defective fuel level sensor. (Internal disconnection or short circuit)	★Prepare with the starting switch OFF, then carry out troubleshooting without turning the starting switch ON.			
			423 (male)	Remained fuel level	Resistance	
			Between (1) and (2) (ground)	Full	About 4 Ω	
				Empty	About 85 Ω	
	2	Disconnection of wiring harness (Disconnection in wiring or defective contact in connector)	★Prepare with the starting switch OFF, then carry out troubleshooting without turning the starting switch ON.			
			Wiring harness between S04 (female) (10) and 423 (female) (1)		Resistance	Max. 1 Ω
			Wiring harness between 423 (female) (2) – S03 (female) (3), (4) with ground		Resistance	Max. 1 Ω
	3	Ground fault of wiring harness (Contact with ground circuit)	★Prepare with the starting switch OFF, then carry out troubleshooting without turning the starting switch ON.			
			Between wiring harness (between S04 (female) (10) and 423 (female) (1)) and ground		Resistance	Min. 1 MΩ
	4	Hot short circuit of wiring harness (Contact with 24 V circuit)	★Prepare with the starting switch OFF, then turn the starting switch ON and carry out troubleshooting.			
			Between wiring harness (between S04 (female) (10) and 423 (female) (1)) and ground		Voltage	Max. 1 V
			Wiring harness between 423 (female) (2) – S03 (female) (3), (4) and ground		Voltage	Max. 1 V
	5	Defective monitor panel	This is an internal defect, which cannot be troubleshooting.			

Circuit diagram related to fuel level sensor



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ELECTRICAL CIRCUIT DIAGRAM (3/6)



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