SEBM033708

SHOP MANUAL

KOMATSU®

D475A-5

MACHINE MODEL **D475A-5**

SERIAL No. **20001 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.

- D475A-5 mount the SDA12V140E-1 engine.
  For details of the engine, see the 12V140-1 Series Engine Shop Manual.

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ERROR CODE [AA1ANX] (AIR CLEANER: CLOGGING (NX))

Action code	Error code	Trouble	Air cleaner: clogging (NX) (Mechanical system)
—	**AA1ANX**		
Contents of trouble	• While the engine was running, the air cleaner clogging lamp flashed.		
Action of controller			
Problem that appears on machine	• If the machine is operated as it is, the brake will be damaged.		
Related information	• Method of reproducing error code: Start the engine.		

	Cause		Standard value in normal state/Remarks on troubleshooting
Possible causes and standard value in normal state	1	Clogged air cleaner (When system is normal)	It is suspected that a problem causing clogging of the air cleaner is occurring at present or occurred in past. Investigate the cause and damage condition, and correct it.
	2	Defective air cleaner clogging caution lamp system	Carry out troubleshooting of the air cleaner clogging caution lamp system in accordance with "During running of engine, caution item flashes" in E-mode.

ERROR CODE [AB00MA] (ALTERNATOR: MALFUNCTION (MA))

Action code	Error code	Trouble	Alternator: Malfunction (MA) (Mechanical system)
—	**AB00MA**		
Contents of trouble	• During rotation of engine, charge level caution lamp flashes.		
Action of controller			
Problem that appears on machine	• If machine is operated as it is, battery may be discharged.		
Related information	• Method of reproducing error code: Start engine.		

	Cause		Standard value in normal state/Remarks on troubleshooting
Possible causes and standard value in normal state	1	Defective battery charge (When system is in normal state)	It is suspected that problem causing defective battery charge is occurring at present or occurred in past. Investigate cause and damage condition, and correct it.
	2	Defective charge level caution lamp system	Carry out troubleshooting of charge level caution lamp system in accordance with "During running of engine, emergency caution item flashes" in E mode.

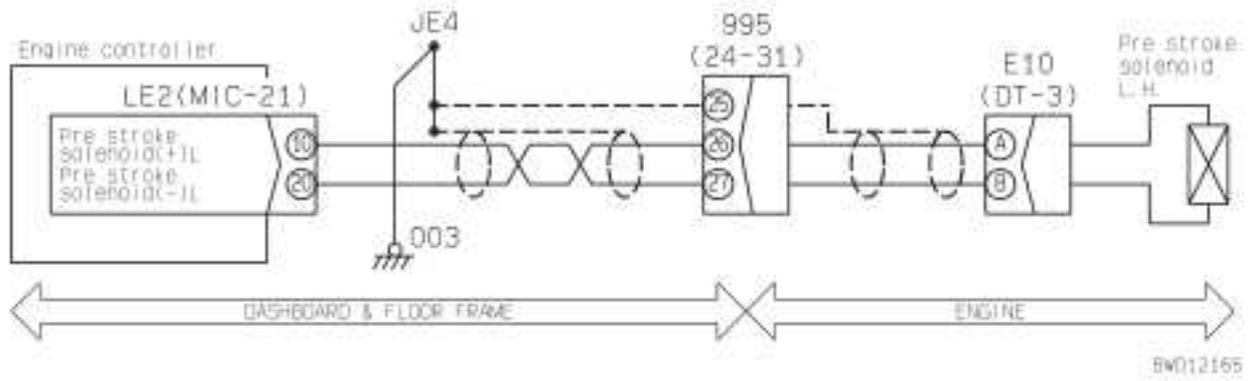
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ERROR CODE [DXHGKB] (PRE-STROKE SOLENOID LEFT: SHORT CIRCUIT (KB))

Action code	Error code	Trouble	Pre-stroke solenoid left: Short circuit (KB) (Engine controller system)
CALL E03	**DXHGKB**		
Contents of trouble	• The output current to the left bank pre-stroke solenoid is above 4 A.		
Action of controller	• Flashes the caution lamp and turns on the caution buzzer. • Reduces the engine output by 20%.		
Problem that appears on machine	• The output is reduced.		
Related information	• Method of reproducing error code: Start the engine.		

	Cause		Standard value in normal state/Remarks on troubleshooting			
Possible causes and standard value in normal state	1	Defective left bank pre-stroke solenoid (Internal disconnection)	★Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			E10 (male)	Resistance		
			Between (A) and (B)	10 – 21 Ω		
			Between (A), (B) and chassis ground	Min. 1 MΩ		
	2	Short circuit with chassis ground in wiring harness (Contact with ground circuit)	★Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Between wiring harness between LE2 (female) (10) and E10 (female) (A) and chassis ground	Resistance	Min. 1 MΩ	
	3	Hot short in wiring harness (Contact with 24-V circuit)	★Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.			
			Between wiring harness between LE2 (female) (10) and E10 (female) (A) and short circuit or short circuit with chassis ground in wiring between	Voltage	Max. 1 V	
			Between wiring harness between LE2 (female) (20) and E10 (female) (B) and chassis ground	Voltage	Max. 1 V	
	4	Defective engine controller	★Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			LE2 (female)	Resistance		
			Between (10) and (20)	10 – 21 Ω		
			Between (10), (20) and chassis ground	Min. 1 MΩ		

Circuit diagram related to left bank pre-stroke solenoid



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H-6 STEERING IS NOT POSSIBLE

Trouble	• Steering is not possible.
Related information	• Before troubleshooting, check that the power train oil level is normal. • Before troubleshooting, check that the transmission main relief pressure is normal. (See H-1.)

	Cause		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	1	Defective operation of brake	★Prepare with starting switch OFF, then drive the engine in low idle mode for troubleshooting.		
			Lift the machine with the blade and the ripper and steer the wheel for F3 travel (or R3 travel). If the track shoe stops, the brake is defective. (Execute the troubleshooting of "Brake does not work.")		
	2	Defective operation of steering clutch valve (ECMV)	★Prepare with starting switch OFF, then drive the engine in high idle mode for troubleshooting.		
			PCCS lever	Left stroke end	Right stroke end
			Left clutch pressure	Min. 2.45 MPa {Min. 25 kg/cm²}	0 MPa {0 kg/cm²}
			Right clutch pressure	0 MPa {0 kg/cm²}	Min. 2.45 MPa {Min. 25 kg/cm²}
			Left brake pressure	0 MPa {0 kg/cm²}	Min. 2.45 MPa {Min. 25 kg/cm²}
			Right brake pressure	Min. 2.45 MPa {Min. 25 kg/cm²}	0 MPa {0 kg/cm²}
	3	Defective seal of steering clutch	When the cause 2 is not applicable, the clutch seal is supposed to be defective. Check it directly.		
	4	Internal defect of steering clutch	The inside of the steering clutch is supposed to be defective, check it directly.		

H-7 STEERING IS POSSIBLE ONLY ON ONE SIDE

Trouble	• Steering is possible only on one side.
Related information	• Before troubleshooting, check that the power train oil level is normal. • Before troubleshooting, check that the transmission main relief pressure is normal. (See H-1.)

	Cause		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	1	Defective operation of steering clutch valve (ECMV)	★Prepare with starting switch OFF, then drive the engine in high idle mode for troubleshooting.		
			PCCS lever	Left stroke end	Right stroke end
			Left clutch pressure	Min. 2.45 MPa {Min. 25 kg/cm²}	0 MPa {0 kg/cm²}
			Right clutch pressure	0 MPa {0 kg/cm²}	Min. 2.45 MPa {Min. 25 kg/cm²}
			Left brake pressure	0 MPa {0 kg/cm²}	Min. 2.45 MPa {Min. 25 kg/cm²}
			Right brake pressure	Min. 2.45 MPa {Min. 25 kg/cm²}	0 MPa {0 kg/cm²}
	2	Defective seal of steering clutch	When the cause 1 is not applicable, the clutch seal is supposed to be defective. Check it directly.		
	3	Internal defect of steering clutch	The inside of the steering clutch is supposed to be defective, check it directly.		

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KUC

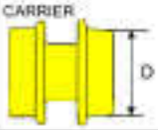
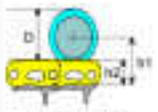
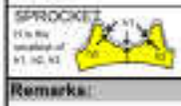
Komatsu
Undercarriage Inspection



Customer name:

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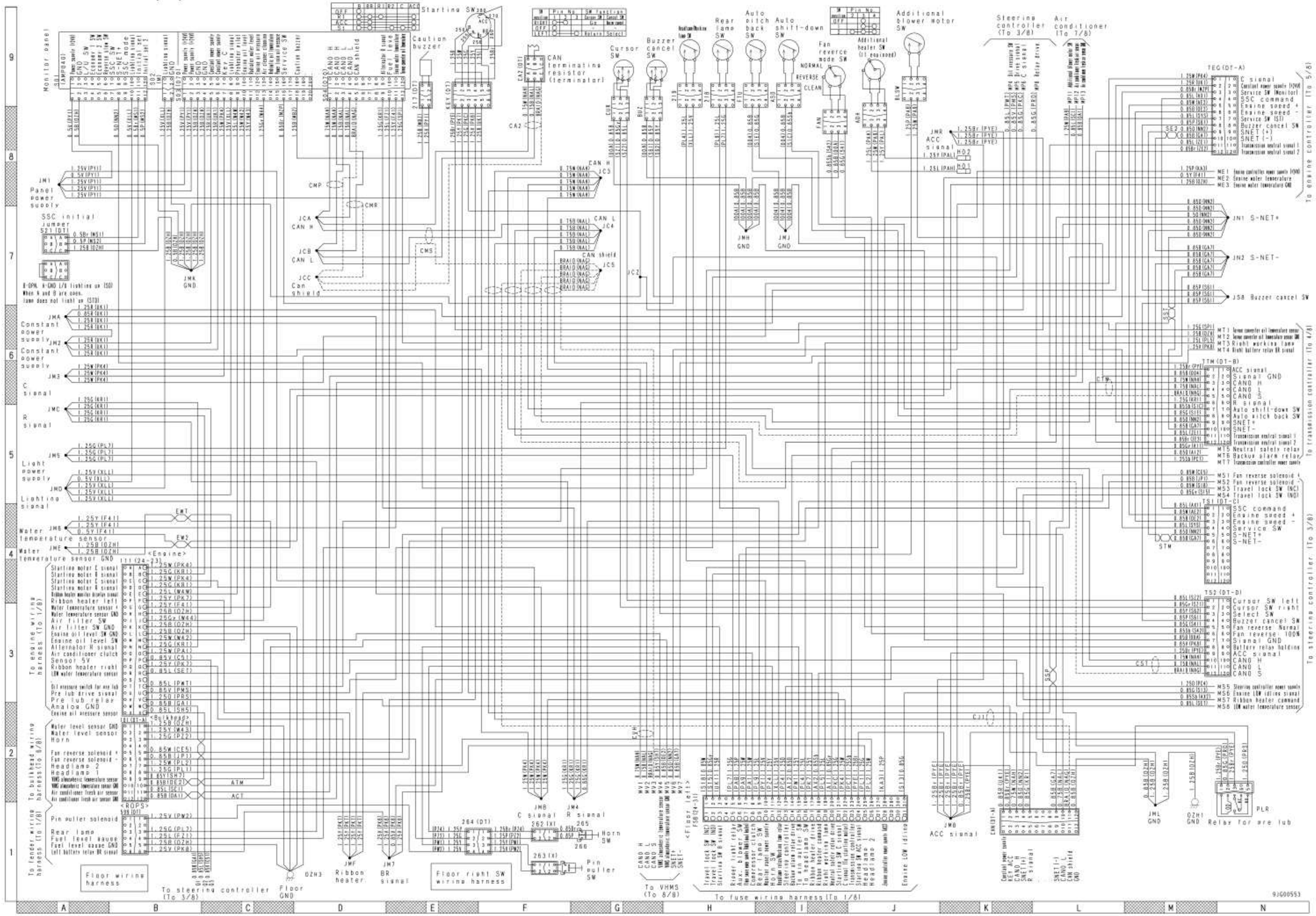
Model	D475A-5	Serial#	20001	Equip#		Work Order No	
Location		SMR				Wet,AR,HD or Dry	WET
Soil condition		Dealer				Shoe width (mm)	
Working condition		Inspector				Shoe type	SINGLE
		Insp.Date(yyyy/mm/dd)			(yyyy/mm)	Wear type	NORMAL

			New	100% Wear	Measured mm	Wear %	SMR New	SMR Rebuilt	Hours on Parts:	Comments/Observation
LINK PITCH 	ft	LH	1271.0	1283.0						
		RH	1271.0	1283.0						
	M	LH	317.80	320.80						
		RH	317.80	320.80						
 LINK HEIGHT		LH	199.0	181.0						
		RH	199.0	181.0						
BUSHING 		LH	116.0	107.5			New	Turned		
		RH	116.0	107.5			New	Turned		
GROUSER HIGHT 		LH	105.0	35.0						
		RH	105.0	35.0						
CARRIER 	Front	LH	240.0	215.0						
		RH	240.0	215.0						
	Rear	LH	240.0	215.0						
		RH	240.0	215.0						
IDLER 	Front	LH	26.5	42.0						
		RH	26.5	42.0						
	Rear	LH	26.5	42.0						
		RH	26.5	42.0						
TRACK ROLLER  D=2(h1 - h2)	1	LH	300.0	230.0						
	2	LH	300.0	246.0						
	3	LH	300.0	246.0						
	4	LH	300.0	246.0						
	5	LH	300.0	246.0						
	6	LH	300.0	246.0						
	7	LH	300.0	230.0						
	8	LH	300.0	230.0						
	9	LH	300.0	230.0						
	10	LH	300.0	230.0						
	1	RH	300.0	230.0						
	2	RH	300.0	246.0						
	3	RH	300.0	246.0						
	4	RH	300.0	246.0						
	5	RH	300.0	246.0						
	6	RH	300.0	246.0						
	7	RH	300.0	230.0						
	8	RH	300.0	230.0						
	9	RH	300.0	230.0						
	10	RH	300.0	230.0						
SPROCKET 		LH	0.0	6.0						
		RH	0.0	6.0						

Remarks:

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ELECTRICAL CIRCUIT DIAGRAM (2/8)



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