SHOP MANUAL

KOMATSU®

D275A-5

Machine model	Serial number
D275A-5	**25001 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.

- D275A-5 mounts the SDA6D140E-3 engine.
  For details of the engine, see the 140-3 Series Engine Shop Manual.

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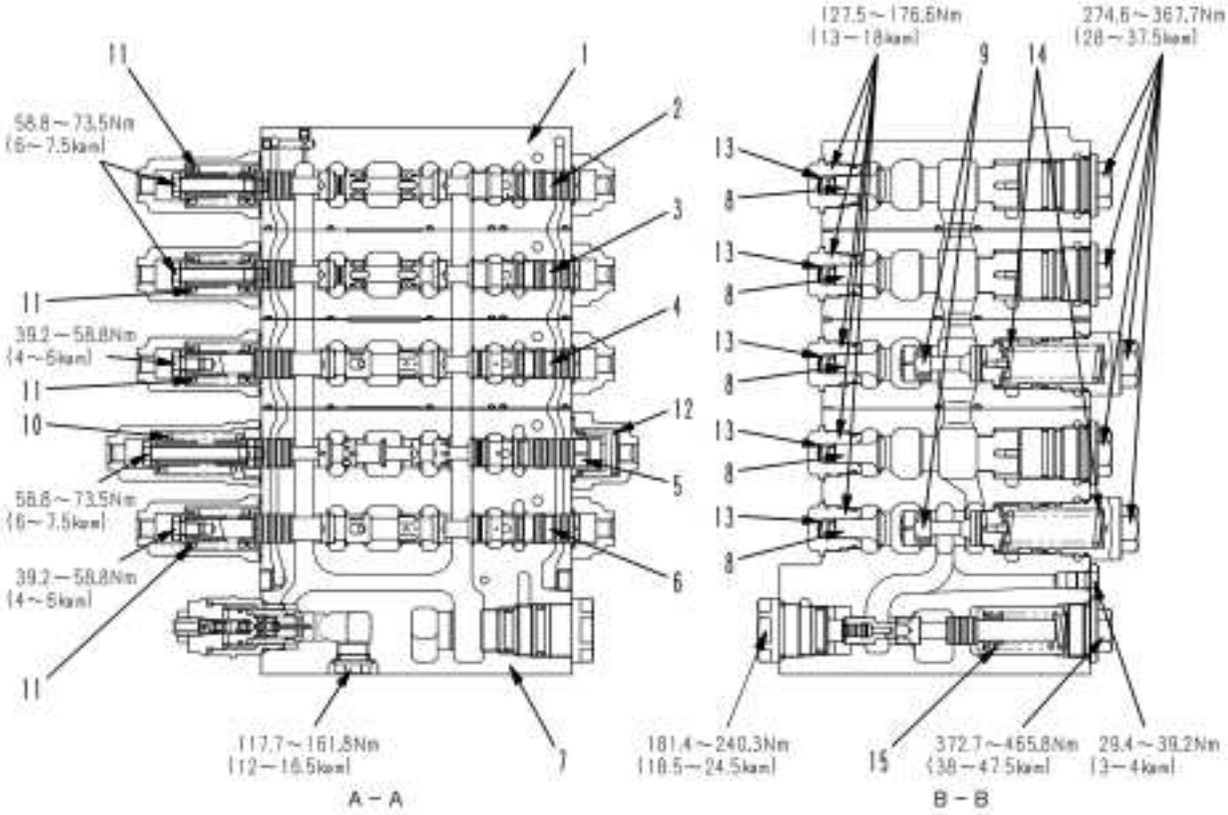
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SJ004515

1. Valve block
2. Ripper tilt spool
3. Ripper lift spool
4. Blade tilt left spool
5. Blade lift spool
6. Blade tilt right spool
7. Valve body
8. Load check valve
9. Pressure compensation valve

Unit: mm

No.	Check item	Criteria					Remedy
		Standard size			Repair limit		Replace
10	Spool return spring (only for blade lift)	Free length × Outside diameter	Installed length	Installed load	Free length	Installed load	If damaged or deformed, replace spring
		76.3 × 30	68.5	223.4N {22.8kg}	–	178.4N {18.2kg}	
11	Spool return spring	51.7 × 31.3	50	140.1N {14.3kg}	–	111.7N {11.4kg}	
12	Spool return spring (for blade lift FLOAT)	54.7 × 36.5	33.5	216.6N {22.1kg}	–	173.5N {17.7kg}	
13	Load check valve spring	20.8 × 10.2	13.5	12.7N {1.3kg}	–	9.8N {1.0kg}	
14	Pressure compensation valve spring	108.3 × 29.5	81	562N {57.3kg}	–	449N {45.8kg}	
15	Unload spring	86.7 × 30	66	192.4N {19.63kg}	–	154N {15.7kg}	

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ERROR CODE B@BAZG (ENGINE OIL: OIL PRESSURE REDUCTION (ZG))

Action code	Error code	Trouble	Engine oil: Oil pressure reduction (ZG) (Mechanical system)
—	B@BAZG		
Contents of trouble	• During rotation of engine, engine oil pressure caution lamp flashes.		
Action of controller	• Turns on caution buzzer. (Function of monitor panel)		
Problem that appears on machine	• If machine is operated as it is, engine may be damaged.		
Related information	• Method of reproducing error code: Start engine.		

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

ERROR CODE B@BCNS (RADIATOR COOLANT: OVERHEAT (NS))

Action code	Error code	Trouble	Radiator coolant: Overheat (NS) (Mechanical system)
—	B@BCNS		
Contents of trouble	• During rotation of engine, engine water temperature caution lamp flashes.		
Action of controller	• Turns on caution buzzer. (Function of monitor panel)		
Problem that appears on machine	• If machine is operated as it is, engine may be damaged.		
Related information	• Method of reproducing error code: Start engine.		

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

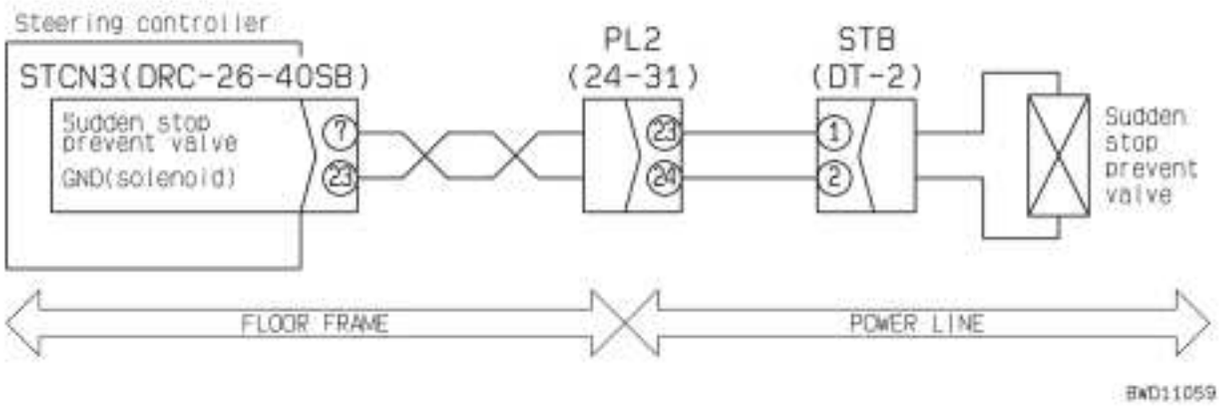
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ERROR CODE DWN3KA (SUDDEN STOP PREVENTION SOLENOID: DISCONNECTION (KA))

Action code	Error code	Trouble	Sudden stop prevention solenoid: Disconnection (KA) (Steering controller system)
CALL E04	DWN3KA		
Contents of trouble	• When signal is output to sudden stop prevention solenoid circuit, any current does not flow.		
Action of controller	• Flashes caution lamp and turns on caution buzzer. • Limits operation of engine, transmission, and brake.		
Problem that appears on machine	• Brake is applied lightly during travel. • Once machine is stopped, engine speed is limited to medium (half). • Once machine is stopped, it cannot travel any more.		
Related information	• Output (Current) to sudden stop prevention solenoid can be checked in monitoring mode. (Code 31628: Sudden stop prevention solenoid drive current) • Method of reproducing error code: Turn starting switch ON.		

	Cause		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	1	Defective sudden stop prevention solenoid (Internal disconnection)	★Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.		
			STB (male)	Resistance	
			Between ① – ②	5 – 25Ω	
	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 STCN3 (female) ⑦ – STB (female) ①	Resistance	Max. 1Ω
			Wiring harness between STCN3 (female) ㉓ – STB (female) ②	Resistance	Max. 1Ω
	3	Short circuit with power source in wiring harness (Contact with 24V circuit)	★Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.		
			Short circuit of wiring harness between STCN3 (female) ⑦ – STB (female) ① with chassis ground	Voltage	Max. 1V
	4	Defective steering controller	★Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.		
			STCN3	Resistance	
			Between ⑦ – ㉓	5 – 25Ω	

Circuit diagram related to sudden stop prevention solenoid



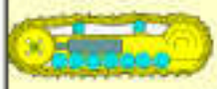
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UNDERCARRIAGE TROUBLESHOOTING REPORT (IMPACT)

(Program form No.: SELA195001)

KUC

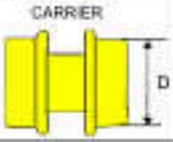
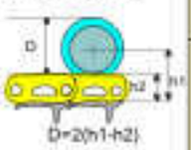
Komatsu Undercarriage Inspection



Customer name:

Address:

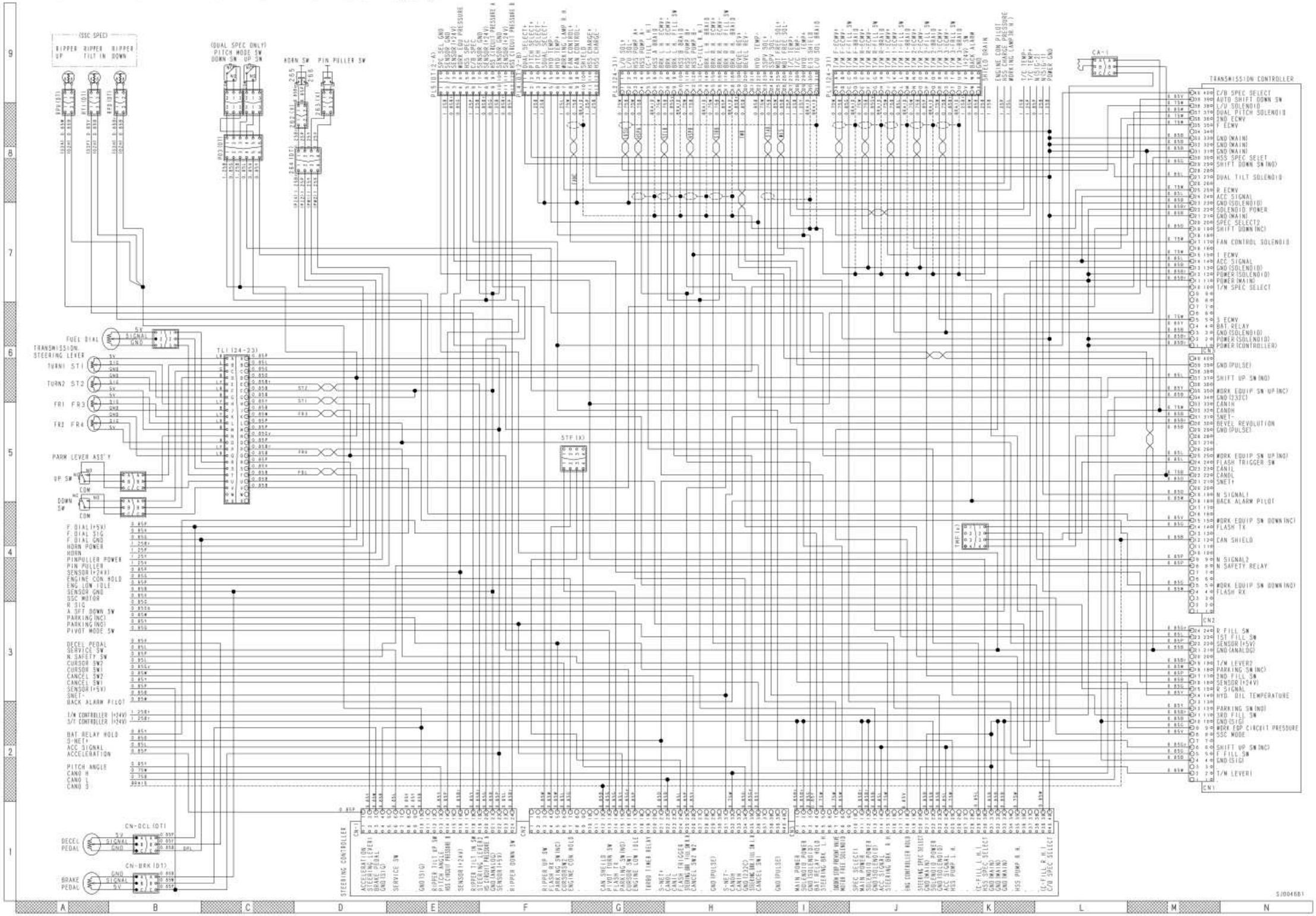
Model	D275A-5	Serial#	Equip#	Work Order No	
Location		SMR		Wet,AR,HD or Dry	Wet
Soil condition		Dealer		Shoe width (mm)	
Working condition		Inspector		Shoe type	SINGLE
		Insp.Date(yy/mm/dd)	(yyyy/mm/dd)	Wear type	IMPACT

			New	100% Wear	Measured mm	Wear %	SMR New	SMR Rebuilt	Hours on Parts:	Comments/Observation
LINK PITCH 	R	LH	1042.4	1054.4						
		RH	1042.4	1054.4						
	M	LH	260.60	263.60						
		RH	260.60	263.60						
LINK HEIGHT		LH	166.0	148.0						
		RH	166.0	148.0						
BUSHING 		LH	90.5	84.5			New	Turned		
		RH	90.5	84.5			New	Turned		
GROUSER HIGHT 		LH	88.0	30.0						
		RH	88.0	30.0						
CARRIER 	Front	LH	200.0	175.0						
		RH	200.0	175.0						
	Rear	LH	200.0	175.0						
		RH	200.0	175.0						
IDLER 	Front	LH	21.0	33.5						
		RH	21.0	33.5						
	Rear	LH	21.0	33.5						
		RH	21.0	33.5						
TRACK ROLLER  D=2(h1-h2)	1	LH	255.0	195.0						
	2	LH	255.0	195.0						
	3	LH	255.0	195.0						
	4	LH	255.0	195.0						
	5	LH	255.0	195.0						
	6	LH	255.0	195.0						
	7	LH	255.0	195.0						
	8	LH	255.0	195.0						
	9	LH	255.0	195.0						
	10	LH	255.0	195.0						
	1	RH	255.0	195.0						
	2	RH	255.0	195.0						
	3	RH	255.0	195.0						
	4	RH	255.0	195.0						
	5	RH	255.0	195.0						
	6	RH	255.0	195.0						
	7	RH	255.0	195.0						
	8	RH	255.0	195.0						
	9	RH	255.0	195.0						
	10	RH	255.0	195.0						
SPROCKET 		LH	0.0	8.0						
		RH	0.0	8.0						

Remarks:

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DIAGRAM FOR ELECTRICAL CIRCUIT (3/4)



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