SEN02158-14

Shop Manual

BULLDOZER

D275A-5R

SERIAL NUMBERS 35001 and up

KOMATSU®

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Testing and adjusting item	Symbol		Part No.	Part name	Q'ty	Remarks
Testing power train oil pressure	N	1	799-101-5002	Hydraulic tester	1	Pressure gauge: 2.5, 6, 40, 60 MPa {25, 60, 400, 600 kg/cm²}
			790-261-1204	Digital hydraulic tester	1	Pressure gauge: 60 MPa {600 kg/cm²}
		2	799-401-2320	Hydraulic tester	1	Pressure gauge: 1 MPa {10 kg/cm²}
		3	799-101-5220	Nipple	1	Size: 10 × 1.25 mm
			07002-11023	O-ring	1	
Emergency escape when power train has trouble	Q	1	19M-06-32820	Switch assembly	1	
			7824-66-6430	Resistor	1	
			17M-06-41530	Wiring harness	1	
		2	790-190-1601	Pump assembly	1	
Testing and adjusting work equipment oil pressure	R	1	799-101-5002	Hydraulic tester	1	Pressure gauge: 2.5, 6, 40, 60 MPa {25, 60, 400, 600 kg/cm²}
			790-261-1204	Digital hydraulic tester	1	Pressure gauge: 60 MPa {600 kg/cm²}
		2	799-101-5220	Nipple	1	Size: 10 × 1.25 mm
			07002-11023	O-ring	1	
Testing control circuit basic pressure	S	1	799-101-5002	Hydraulic tester	1	Pressure gauge: 2.5, 6, 40, 60 MPa {25, 60, 400, 600 kg/cm²}
			790-261-1204	Digital hydraulic tester	1	Pressure gauge: 60 MPa {600 kg/cm²}
		2	799-401-3100	Oil pressure pickup adapter	1	Size: 02
			02896-11008	• O-ring	1	
Testing PPC valve output pressure	T	1	799-101-5002	Hydraulic tester	1	Pressure gauge: 2.5, 6, 40, 60 MPa {25, 60, 400, 600 kg/cm²}
			790-261-1204	Digital hydraulic tester	1	Pressure gauge: 60 MPa {600 kg/cm²}
		2	799-401-3100	Oil pressure pickup adapter	1	Size: 02
			02896-11008	• O-ring	1	
		3	799-401-3200	Oil pressure pickup adapter	1	Size: 03
			02896-11009	• O-ring	1	
Testing ripper pin puller solenoid valve outlet pressure	U	1	799-101-5002	Hydraulic tester	1	Pressure gauge: 2.5, 6, 40, 60 MPa {25, 60, 400, 600 kg/cm²}
			790-261-1204	Digital hydraulic tester	1	Pressure gauge: 60 MPa {600 kg/cm²}
		2	799-401-3200	Oil pressure pickup adapter	1	Size: 03
			02896-11009	• O-ring	1	
Testing leakage in work equipment cylinder	V		Commercially available	Measuring cylinder	1	
Testing coolant temperature and oil temperature	—		799-101-1502	Digital thermometer	1	– 99.9 – 1,299°C
Testing operating effort and pressing force	—		79A-264-0021	Push-pull scale	1	0 – 294 N {0 – 30 kg}
			79A-264-0091	Push-pull scale	1	0 – 490 N {0 – 50 kg}
Testing stroke and hydraulic drift	—		Commercially available	Ruler	1	

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Failure code [2302NR] Left steering brake thermal load

Action code	Failure code	Trouble	Left steering brake thermal load (Abnormal heating) (Steering controller system)
—	**2302NR**		
Contents of trouble	• Steering controller judged from pitch angle, travel speed and continuous left steering operation time that left steering brake was heating abnormally.		
Action of controller	• None in particular.		
Problem that appears on machine			
Related information			

Possible causes and standard value in normal state	Cause		Standard value in normal state/Remarks on troubleshooting
	1	Improper steering during downslope travel (e.g. Continuous downhill travel with left steering ON)	
	2	Defective steering controller	When the operation in cause 1 is not performed

Failure code [6001ZK] Failure code for design

Action code	Failure code	Trouble	Failure code for design
—	**6001ZK**		
Contents of trouble			
Action of controller	• None in particular.		
Problem that appears on machine	• None in particular.		
Related information	• Since this failure code is for design, it does not occur actually. It appears in mechanical system failure code list, however.		

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Failure code [CA351] Injectors drive circuit error

Action code	Failure code	Trouble	Injectors drive circuit error (Engine controller system)
CALL E03	**CA351**		
Contents of trouble	• Trouble occurred in injector drive circuit.		
Action of controller	• Limits engine output and continues operation (Limits common rail pressure).		
Problem that appears on machine	• Engine output drops.		
Related information	• Source voltage of engine controller can be checked with real-time monitoring mode. (Code: **03203** Engine controller power supply voltage)		

	Cause		Standard value in normal state/Remarks on troubleshooting		
Possible causes and standard value in normal state	1	Defective related system	If another failure code (failure code of trouble in injector system) is indicated, carry out troubleshooting for it.		
	2	Defective circuit breaker (CB30 or CB8)	If circuit breaker is turned OFF, circuit probably has ground fault (See cause 4).		
	3	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 EGC3 (female) (3), (4) – CB7 (B7L)	Resistance	Max. 1 Ω
			Wiring harness between CB7 (B7S) – terminal BRB	Resistance	Max. 1 Ω
			Wiring harness between EGC3 (female) (1), (2) – chassis ground (GND11)	Resistance	Max. 1 Ω
	4	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 EGC3 (female) (3), (4) – CB8 (2) and chassis ground	Resistance	Min. 1 MΩ
			Wiring harness between CB7 (B7S) – terminal BRB and chassis ground	Resistance	Min. 1 MΩ
			Wiring harness between EGC3 (female) (1), (2) – chassis ground (GND11) and chassis ground	Resistance	Min. 1 MΩ
	5	Defective engine controller	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.		
			EGC3	Voltage	
			Between (3), (4) – (1), (2)	20 – 30 V	

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Undercarriage troubleshooting report (Normal)

(Program form No.: SELA195001)

Komatsu
Undercarriage Inspection

Customer name:
Address:

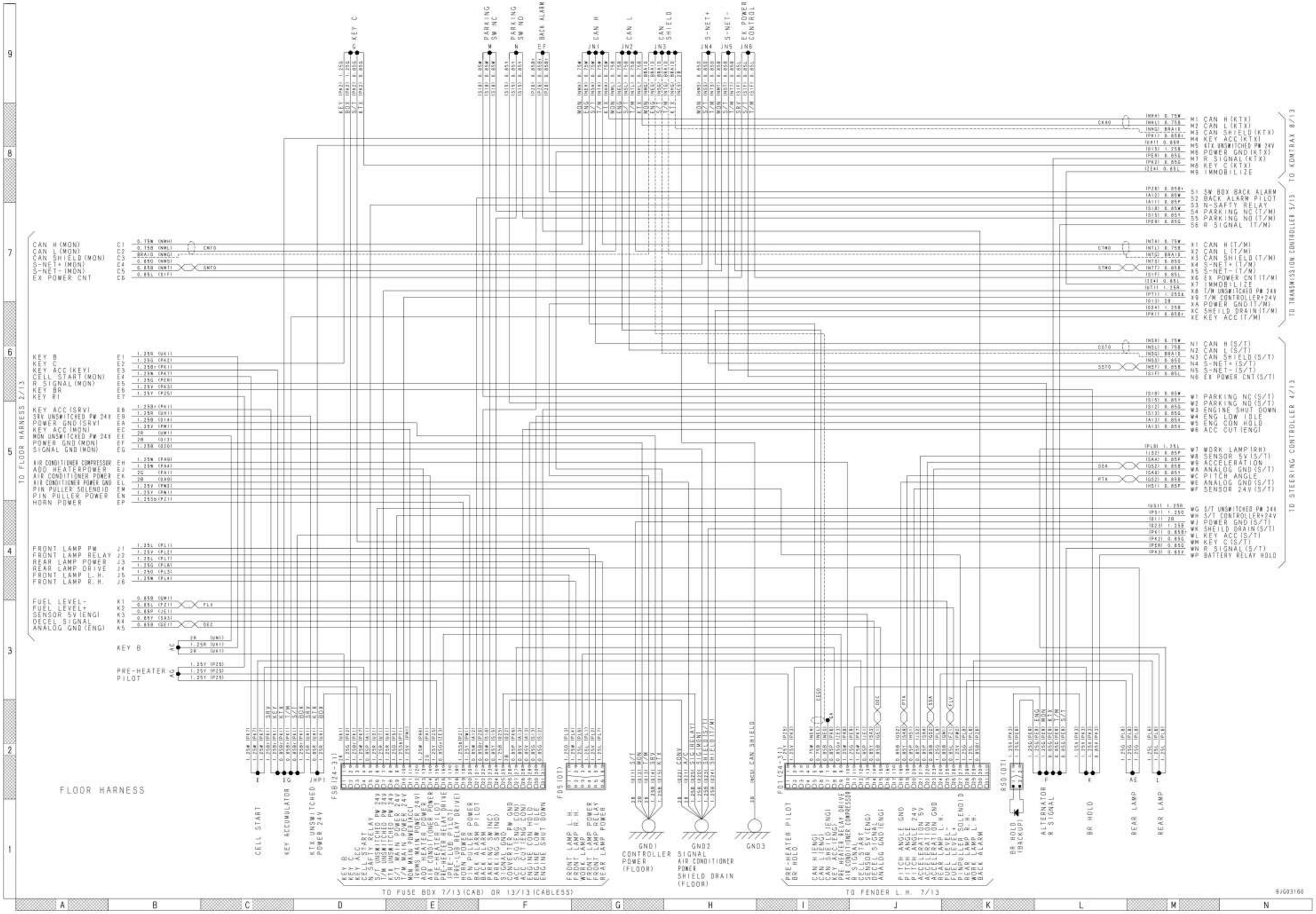
Model	D275A-5R	Serial#	Equip#	Work Order No	
Location		SMR		Wet,AR,HD or Dry	Wet
Soil condition		Dealer		Shoe width (mm)	
Working condition		Inspector		Shoe type	SINGLE
Insp.Date(yy/mm/dd)			yy/mm/d	Wear type	NORMAL

			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	82.0			New	Turned		
		RH	90.5	82.0			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	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						
D=2(h1-h2)	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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Electrical circuit diagram (3/13)
D275A-5R



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