SEN06611-02

Shop Manual

BULLDOZER

D375A-8

SERIAL NUMBERS 80001 and up

KOMATSU®

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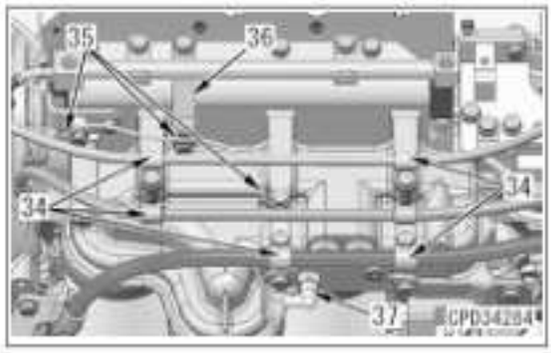
FAILURE CODE [DHABMA]

Action level	Failure code	Failure	KDPF Differential Pressure Sensor Frozen_2 (Engine controller system)
-	DHABMA		
Detail of failure	Signal voltage from KDPF differential pressure sensor does not show a correct value when ambient temperature is low because of frozen KDPF differential pressure sensor. (Signal voltage is within normal or "operating" range.)		
Action of controller	Normal operation		
Phenomenon on machine	None in particular.		
Related information	⚠ **KDPF and KDOC are heated to 500 °C or higher. Be careful not to get burn injury.** • If failure code [CB1883] is displayed, or if it is logged in the abnormality record, perform troubleshooting for failure code [CB1883] first. • The cause of this failure code is solved after freeze is solved. Troubleshooting is not necessary. • If the ambient temperature is not at freezing point of the sensor when this failure code is displayed on abnormality record, identify the cause according to the following procedures. • KDPF differential pressure sensor and KDPF outlet pressure sensor are provided as a unit. • Signal voltage from KDPF differential pressure sensor can be checked with monitoring function.(Code: 47103 (V)) • Differential pressure detected by KDPF differential pressure sensor can be checked with monitoring function. (Code: 47102 (kPa)) • Temperature detected by KDOC inlet temperature sensor can be checked with monitoring function. (Code: 47302 (°C)) • Temperature detected by KDOC outlet temperature sensor can be checked with monitoring function. (Code: 47402 (°C)) • Temperature detected by KDPF outlet temperature sensor can be checked with monitoring function. (Code: 47202 (°C)) • The KDOC inlet temperature sensor, KDOC outlet temperature sensor, and KDPF outlet temperature sensor are integrated into one sensor, and controller of integrated sensor communicates with the engine controller through CAN communication. • For details of access to KDPF differential pressure sensor, wiring harness and tube, see "Chapter 50 DISASSEMBLY AND ASSEMBLY, "REMOVE AND INSTALL KDPF ASSEMBLY" and "DISASSEMBLE AND ASSEMBLE OF KDPF ASSEMBLY". • To restart engine, wait until system operating lamp goes out after turning starting switch to OFF position, and then turn the starting switch to ON position. • Mass air flow sensor and intake air temperature sensor are provided as a unit.		

No.	Cause	Procedure, measuring location, criteria and remarks
1	Defective intake air temperature sensor	Check the installation of the intake air temperature sensor, if there is a defective installation, install it again correctly.
2	Defective engine controller	If this failure code displays when the ambient temperature is high, the engine controller is defective. (In case of an internal defect, troubleshooting is impossible as an assembly. Replace whole assembly.)

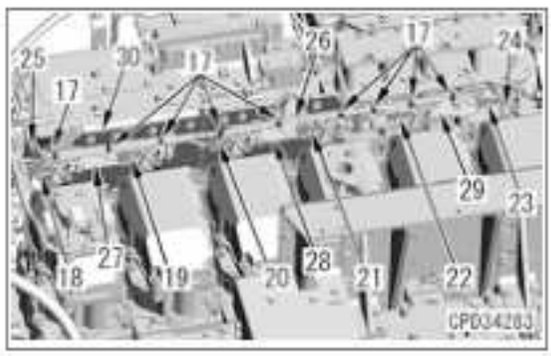
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63. Connect the connector POIL (37), and install the clips (35) (3 places) and clamp (36) (1 place).
64. Install the clamps (34) (5 places).

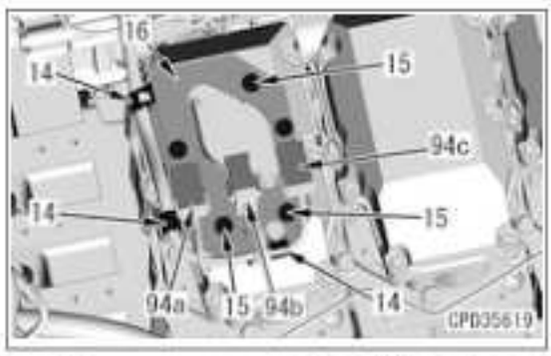


Plate, cover, connector

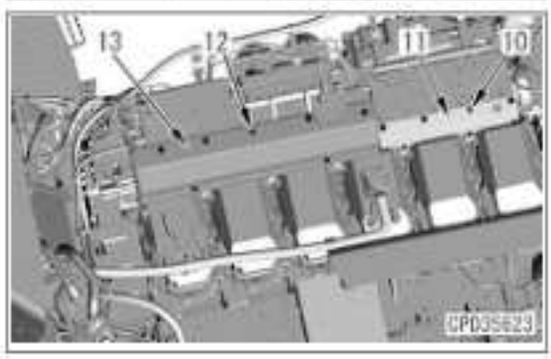
65. Install the bracket fixing plate (30).
66. Install the wiring harness holders (29) (6 places).
67. Install the wiring harness assembly (24) to the brackets (25), (26), and (27), and connect the connector INJ (28).
68. Connect the connectors CN61 (18), CN5 (19), CN4 (20), CN3 (21), CN2 (22), and CN1 (23).
69. Install the bands (17) (9 places).



70. Install the wiring harness bracket (16) with the bolts (15) (3 pieces).
71. Install the connectors JC02 (94a), JC03 (94b), and JC07 (94c) to the connector board.
72. Install the wiring harness clamps (14) (3 places).

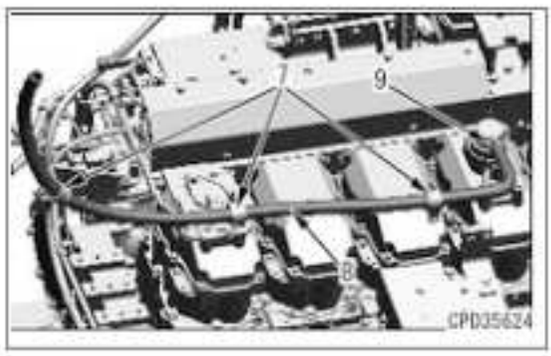


73. Install the injector wiring harness cover (13) with the bolts (12) (7 pieces).
74. Install KDPF fixing plate (11) with the bolts (10) (7 pieces).



Breather assembly

75. Connect the piping (8) between the breather and KCCV ventilator, and install the hose band (9).
76. Install the clamp (7).



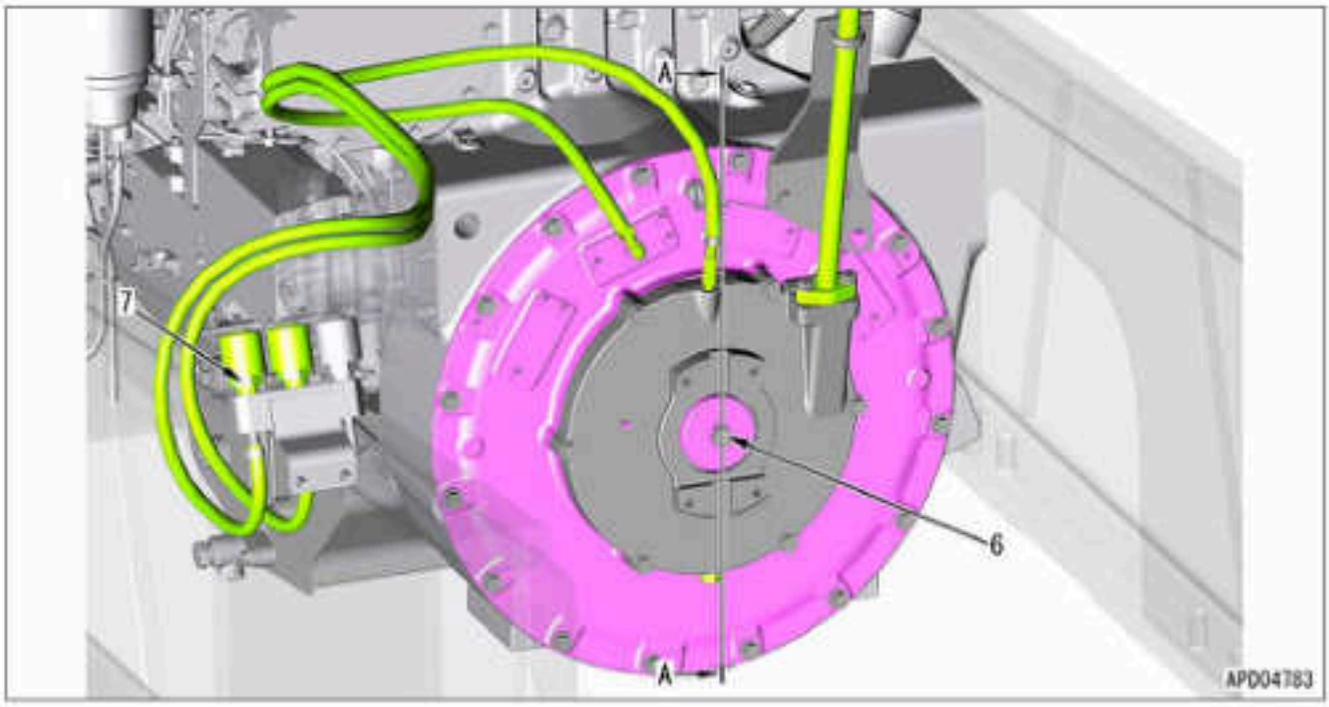
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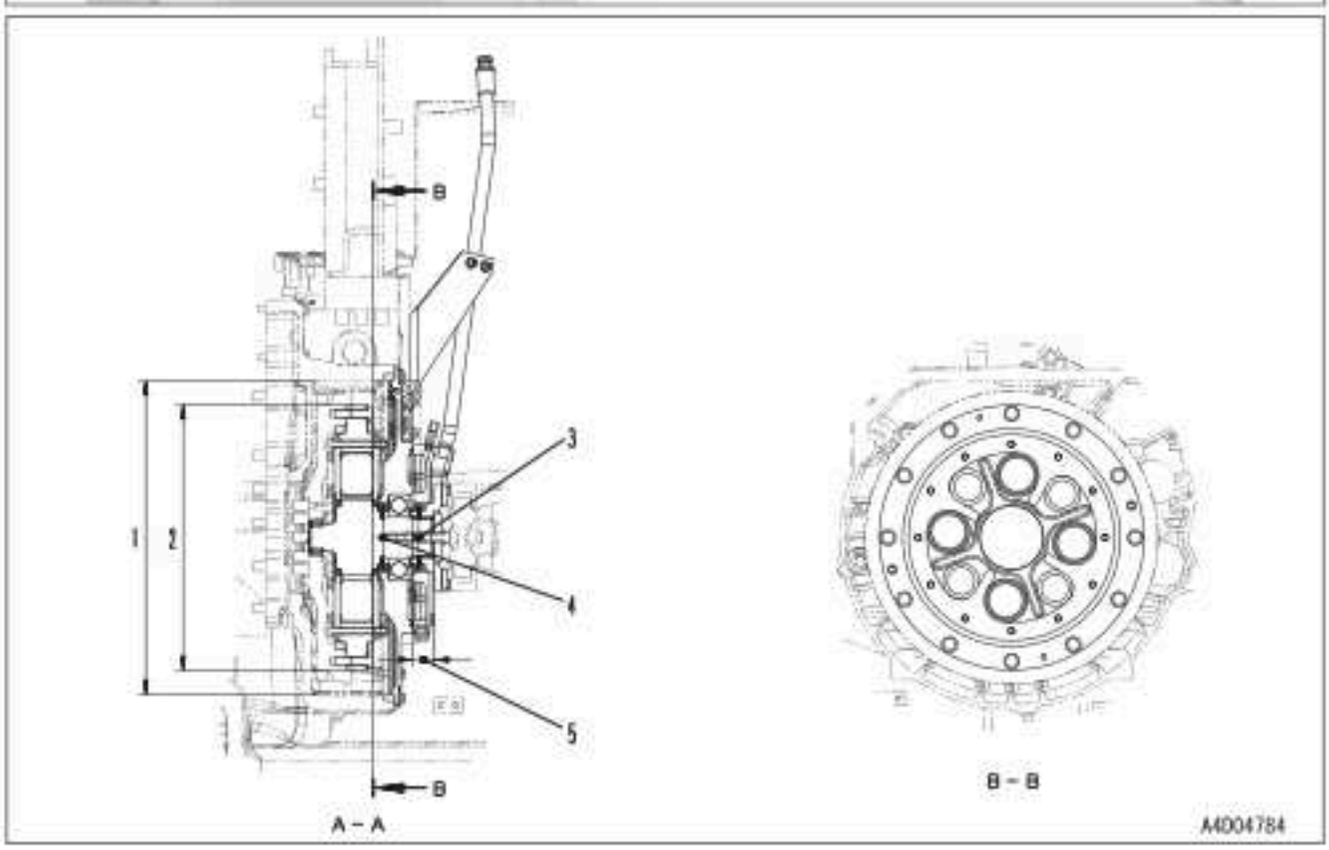
Unit mm

No.	Item	Judgment criteria					Remedy
		Standard dimensions			Repair limit		
1	Suction valve spring	Free length x outside diameter	Installed height	Load at installed height	Free height	Load at installed height	Replace the spring if damaged or deformed
		64.9 x 12.5	56	6.37 N {0.65 kg}	-	5.10 N {0.52 kg}	
2	Check valve spring	9.4 x 4.6	7.75	0.49 N {0.05 kg}	-	0.39 N {0.04 kg}	
3	Tightening torque of the main relief valve	176.6 to 196.1 Nm {18 to 20 kgm}					Re-tighten
4	Tightening torque of the unload valve	137 to 157 Nm {14 to 16 kgm}					
5	Tightening torque of the plug	107.9 to 147.1 Nm {11 to 15 kgm}					
6	Tightening torque of the plug	372.7 to 465.8 Nm {38 to 47.5 kgm}					
7	Tightening torque of the plug	107.8 to 140.7 Nm {11.0 to 15.0 kgm}					
8	Tightening torque of the suction valve	176.6 to 196.1 Nm {18 to 20 kgm}					
9	Tightening torque of the plug	176.6 to 196.1 Nm {18 to 20 kgm}					
10	Tightening torque of the plug	181.4 to 240.3 Nm {18.5 to 24.5 kgm}					

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MAINTENANCE STANDARD OF DAMPER

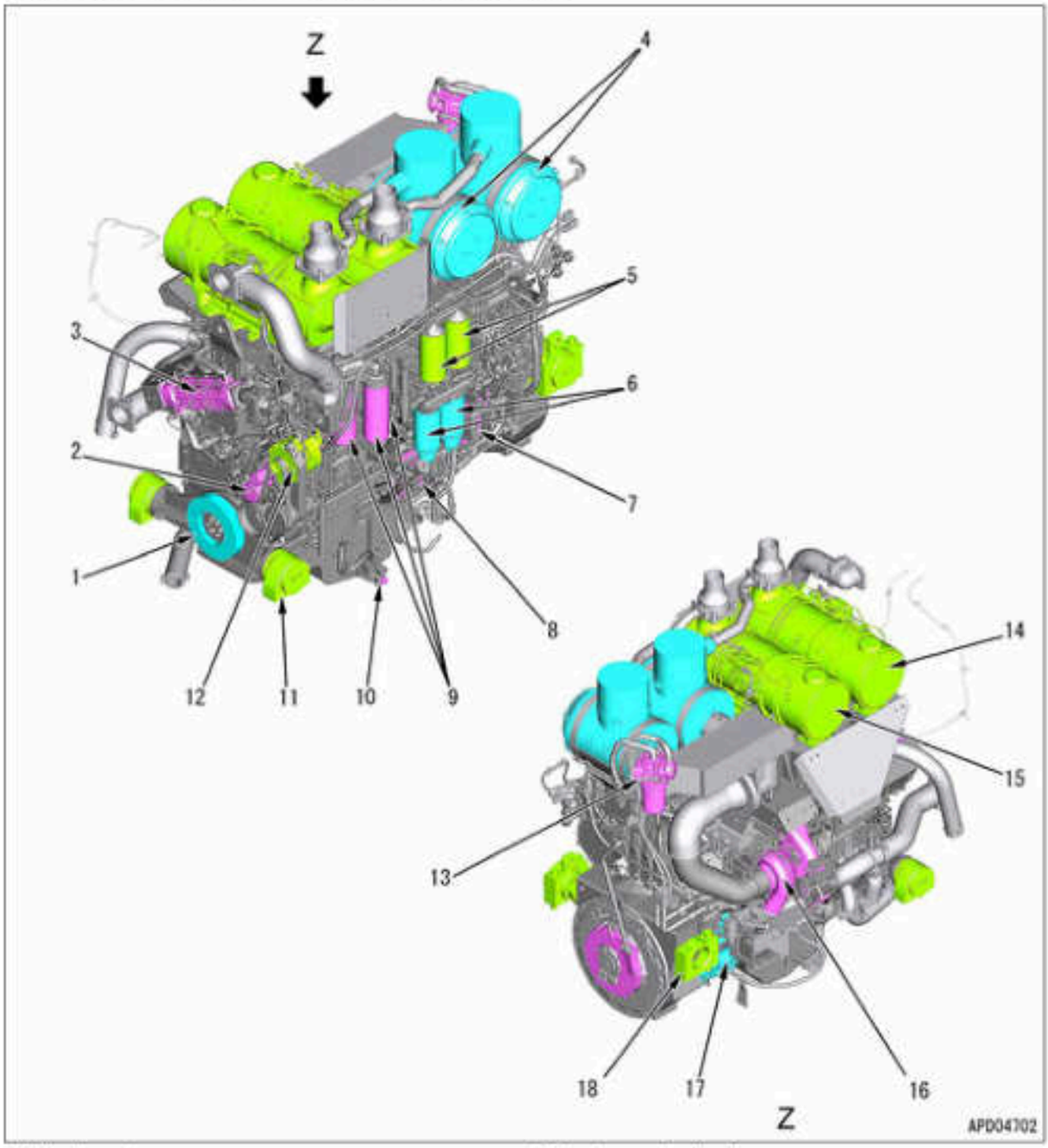




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ENGINE SYSTEM

LAYOUT DRAWING OF ENGINE SYSTEM



1: Vibration damper
2: Auto-tensioner
3: EGR cooler
4: Air cleaner
5: Fuel main filter
6: Fuel prefilter
7: Engine controller-A
8: Engine controller-B
9: Engine oil filter
10: Drain plug
11: Front engine mount
12: Alternator

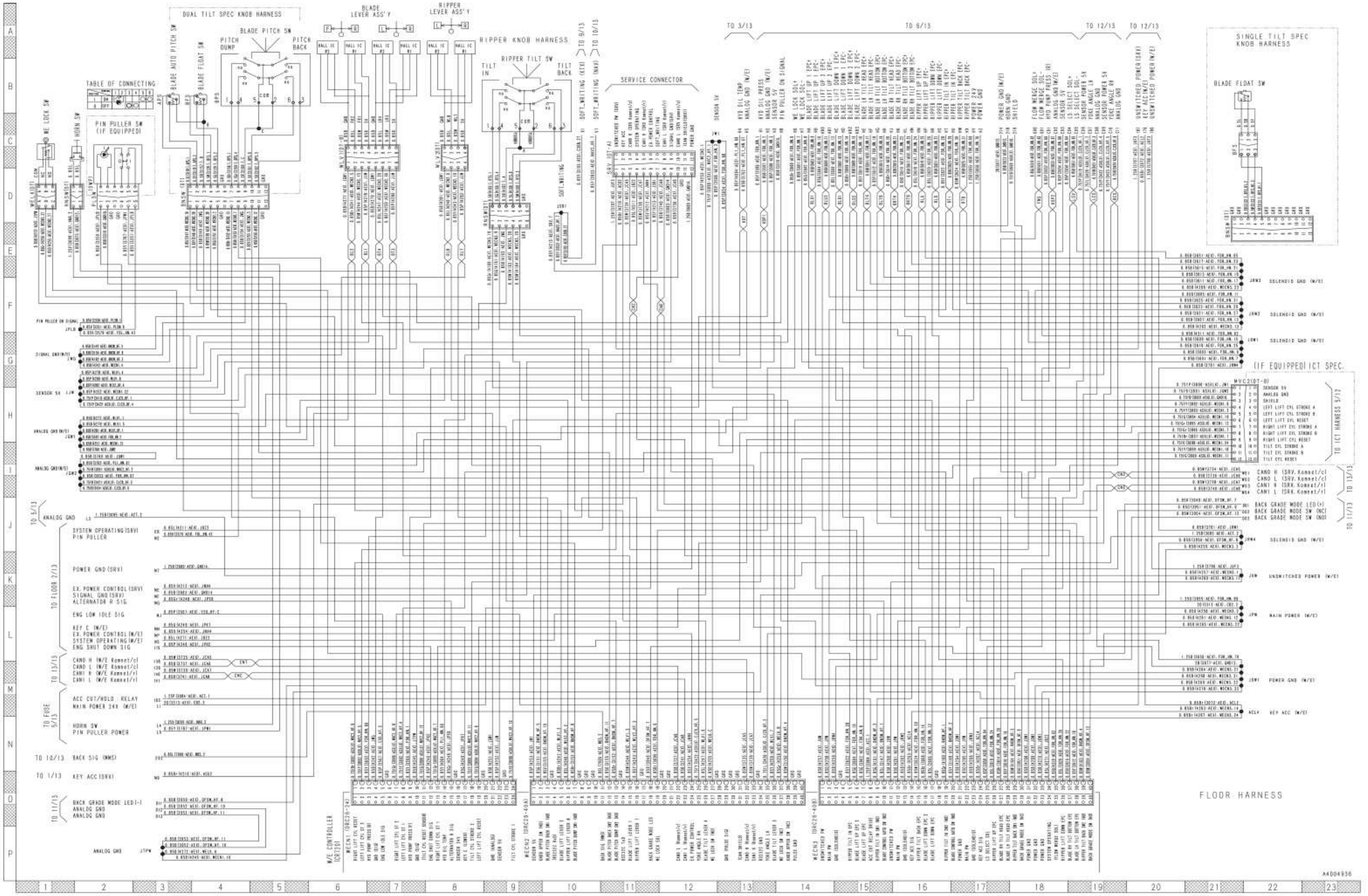
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INSIDE CAB ELECTRICAL CIRCUIT DIAGRAM(4/13)

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REMARK

This figure includes the equipment and device that are unavailable as optional items in some areas.



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