SEBM018225

SHOP MANUAL

KOMATSU®

WA1200-3

MACHINE MODEL	SERIAL NO.
WA1200-3	**50001 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.

- WA1200-3 mount the Cummins QSK60 engine.

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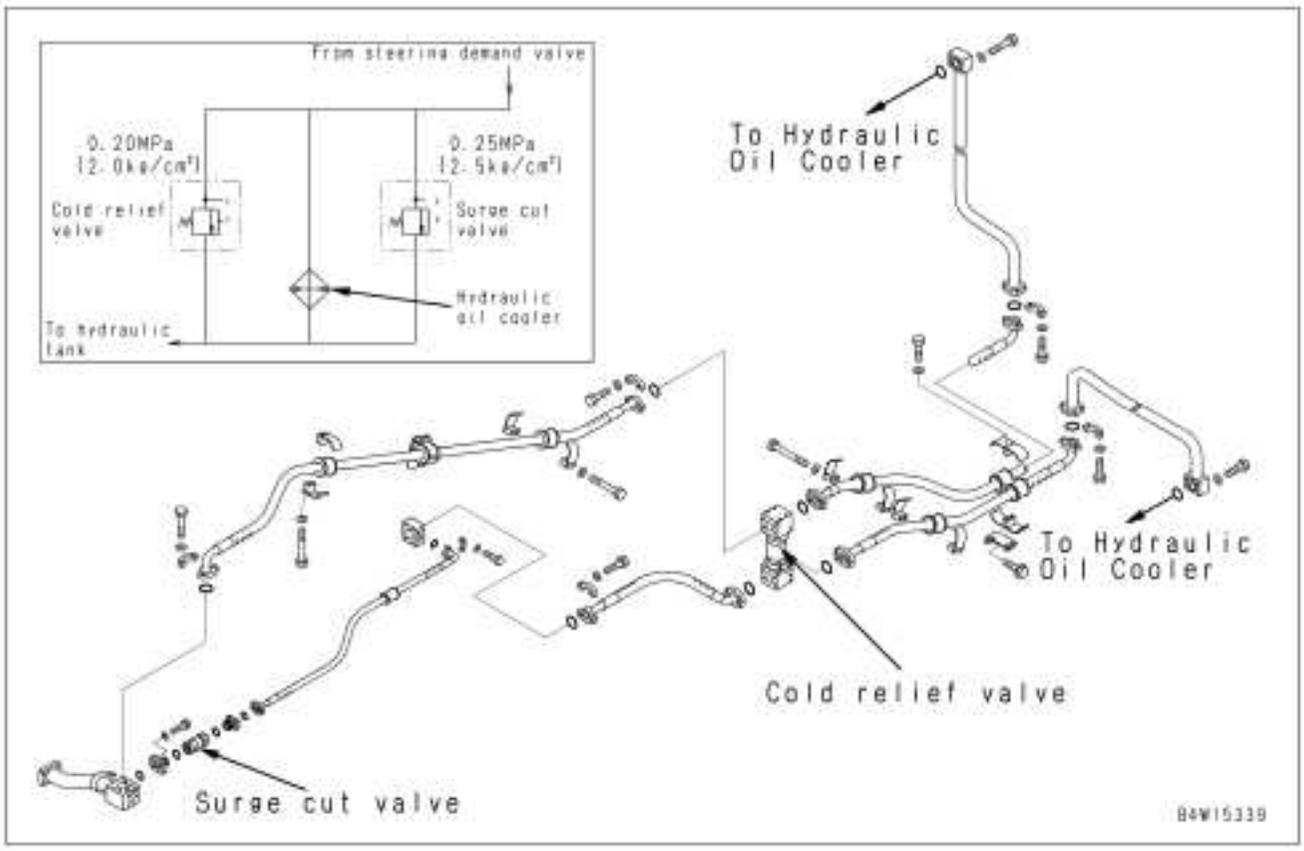
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Hydraulic oil cooler oil pressure and oil temperature characteristics

	Hydraulic oil cooler inlet pressure	Hydraulic oil cooler oil temperature	Engine speed	Flow rate (Reference)	Remarks
Normality	0.26 – 0.30 MPa (2.6 – 3.0 kg/cm²)	40°C	Low idle (650 rpm)	380 ℓ	<Reference> Cold relief valve set pressure: 0.5 MPa {5.1 kg/cm²} Surge cut valve set pressure: 0.5 MPa {5.1 kg/cm²}
	0.30 – 0.34 MPa (3.0 – 3.4 kg/cm²)	40°C	Rated speed (1,900 rpm)	560 ℓ	
	0.34 – 0.38 MPa (3.4 – 3.8 kg/cm²)	40°C	High idle (2,050 rpm)	713 ℓ	
Abnormality	0.15 MPa (1.5 kg/cm²)	40°C	Low idle (650 rpm)	380 ℓ	Cold relief valve set pressure is low
	0.69 MPa (7.0 kg/cm²)	40°C	High idle (2,050 rpm)	700 ℓ	Cold relief valve set pressure is high
	0.29 MPa (3.0 kg/cm²)	100°C	High idle (2,050 rpm)	713 ℓ	• Inside of hydraulic oil cooler is clogged • Cold relief valve set pressure is low • Steering pump delivery is low



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Failure code [DXH5KZ] Transmission 2nd solenoid system abnormality

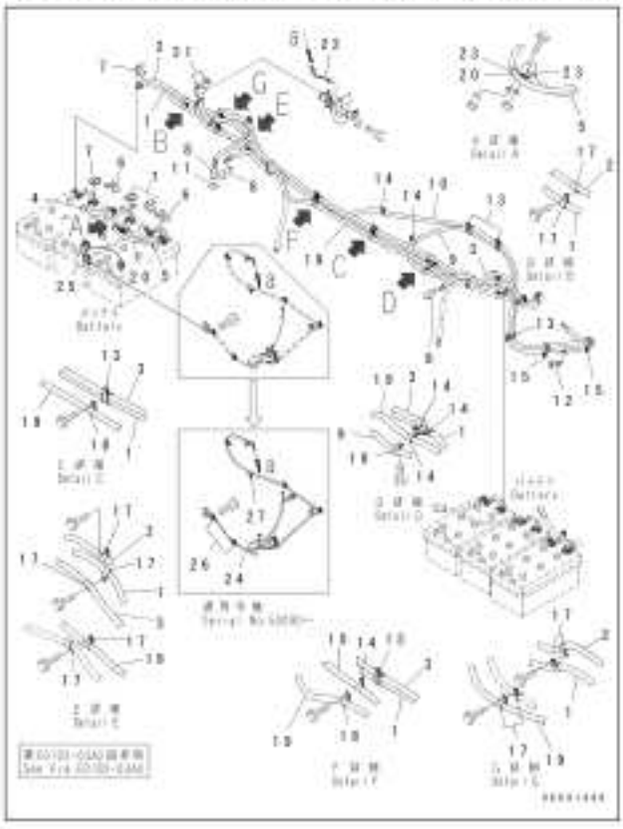
Action code	Failure code	Trouble	Transmission 2nd solenoid system abnormality (Transmission controller system)
CALL	DXH5KZ		
Contents of trouble	Transmission 2nd solenoid circuit has disconnection or hot short.		
Action of controller	Neutral (All ECMV outputs: OFF)		
Problem that appears on machine	Machine cannot travel.		
Related information	★ When connector is disconnected and T-adapter is inserted for troubleshooting while abnormality is detected or when T-adapter is removed and connector is connected again, if failure code is not displayed on monitor, system has reset itself.		

	Cause		Standard value in normal state/Remarks on troubleshooting			
Possible causes and standard value in normal state	1	Defective 2nd solenoid	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			T5 (male)	Resistance		
			Between (1) – (2)	5 – 15 Ω		
			Between (1), (2) – chassis	Min. 1 MΩ		
	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 C2 (female) (8) – T5 (female) (1)	Resistance	Max. 1 Ω	
			Wiring harness between C2 (female) (18) – T5 (female) (2)	Resistance	Max. 1 Ω	
	3	Ground fault in wiring harness (Contact with GND circuit)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between C2 (female) (18) – T5 (female) (2) and chassis ground	Resistance	Min. 1 MΩ	
			Wiring harness between C2 (female) (8) – T5 (female) (1) and chassis ground	Resistance	Min. 1 MΩ	
	4	Short circuit in wiring harness (with another wiring harness)	★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between C2 (female) (8) – T5 (female) (1) and between C2 (female) (18) – T5 (female) (2)	Resistance	5 – 15 Ω	
	5	Hot short (Contact with 24 V circuit) in wiring harness	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.			
			Wiring harness between C2 (female) (18) – T5 (female) (2) and chassis ground	Voltage	Max. 1 V	
			Wiring harness between C2 (female) (8) – T5 (female) (1) and chassis ground	Voltage	Max. 1 V	
	6	Defective transmission controller	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.			
			C2	Directional switch	Voltage	
			Between (8) – chassis	Neutral	Max. 1 V	

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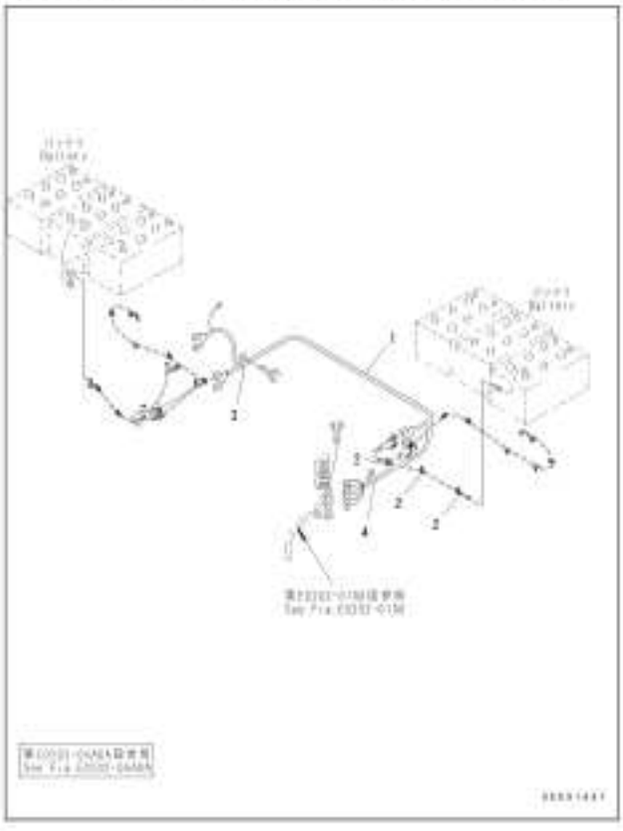
SERVICE KIT PARTS LIST

KIT Part No. : 42C-06-05040 (Replacement of rear harness)
Fig. No. : Y0000-R0179 (BATTERY DISCONNECT SWITCH CABLE) (R.H.)



Index	Parts No.	Part name	Q'ty
1	08028-DE375	CABLE	1
2	08028-DE150	CABLE	1
3	42C-06-12840	CABLE	1
4	427-06-12353	CABLE	1
5	08028-FE040	CABLE	1
6	424-09-12530	BOOT	2
7	424-09-12540	BOOT	4
8	08038-00035	CAP	3
9	42C-06-12672	CABLE	1
10	42C-06-12682	CABLE	1
11	01643-31032	WASHER	2
12	08038-00035	CAP	1
13	21J-62-18380	CLIP	6
14	04434-52312	CLIP	6
15	21J-62-18380	CLIP	2
17	04434-52312	CLIP	11
18	04434-52312	CLIP	3
19	42C-06-13890	CABLE	1
20	08028-FE065	CABLE	1
21	08038-00035	CAP	2
22	22T-05-15630	DIODE	1
23	04434-52312	CLIP	3
24	42C-06-14541	WIRING HARNESS	1
25	7861-93-4400	SENSOR	2
26	600-051-2080	CLIP	2
27	600-05-12100	CLIP	7

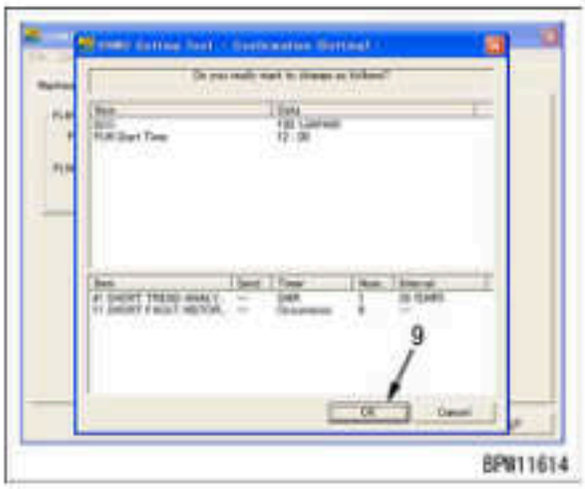
KIT Part No. : 42C-06-05040 (Replacement of rear harness)
Fig. No. : Y0000-R0180 (BATTERY BOX LINE)



Index	Parts No.	Part name	Q'ty
1	42C-06-14520	WIRING HARNESS	1
2	04434-51710	CLIP	4
3	04434-52110	CLIP	1
4	04434-52512	CLIP	2

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iii) Press the [Apply] button.
- Only the changed data are displayed. Check them and press [OK] button (9).



iv) The OK screen appears. Press [Close] button (10), and then press the [Exit] button to finish the VHMS Setting Tool and turn the starting switch OFF.



5. Initial setting of VHMS controller (Ver. 3.5.2.1 or later version)

★ This work is done inside the cab (from PC).

★ It is prohibited in the initial setting to modify the data of service meter [SMR].

1) Select [VHMS Setting] and then press [Next] button.

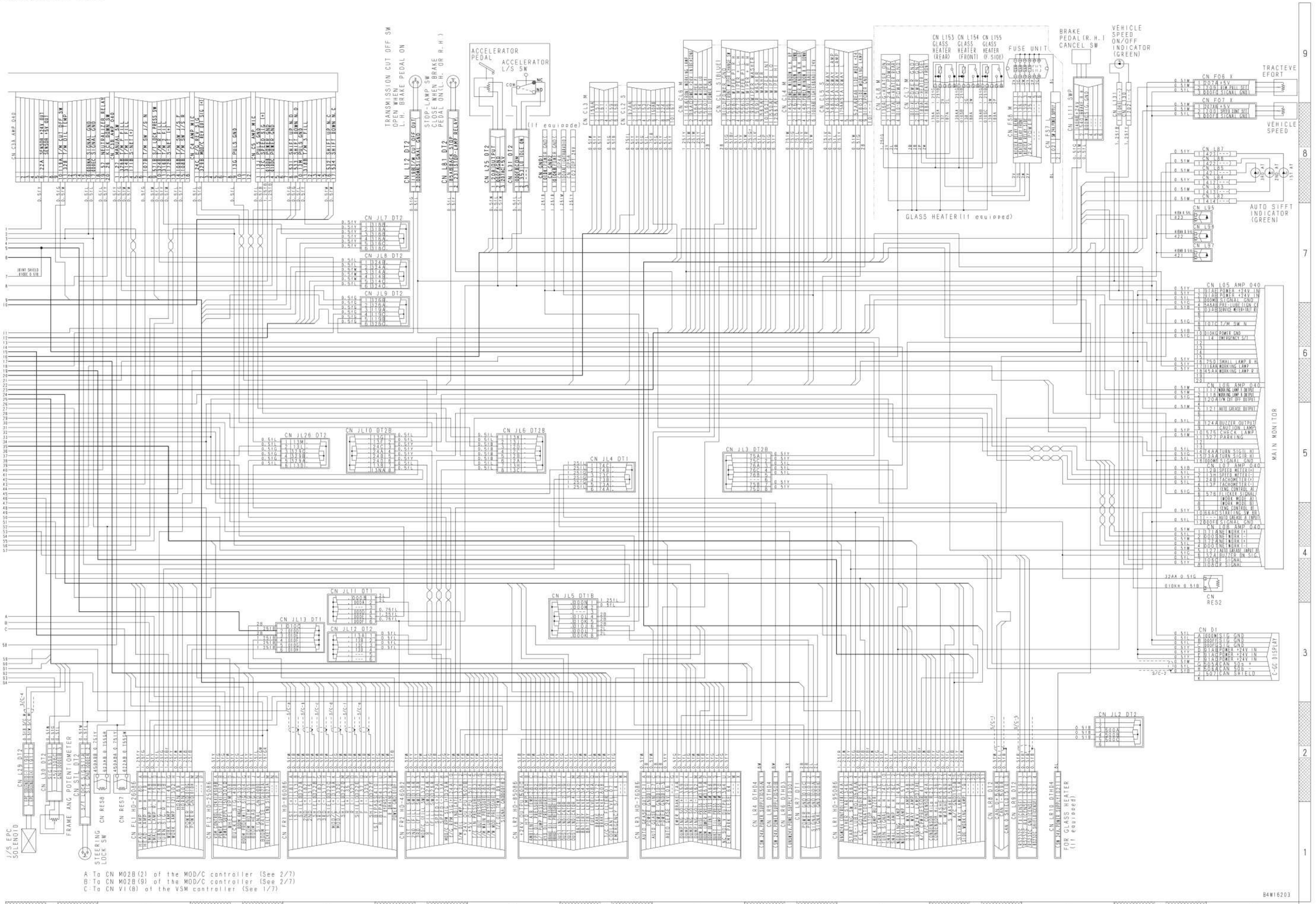


2) Select [Set up & All clear] and press [Next] button.



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ELECTRICAL CIRCUIT DIAGRAM (3/7)
Serial No. : 50001 – 50038



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