CEBM022701

Shop Manual

KOMATSU®

WA380-6

WHEEL LOADER

SERIAL NUMBERS WA380-6 A54001 and up

ENGINE SAA6D107E-1

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Machine Model Name	WA380-6
Serial Number	A53001 and up
Rear frame	1,380 (3,042)
Counterweight	1,640 (3,616)
Engine hood assembly • Hood body •Side door (1 piece) • Hydraulic tank (excluding hydraulic oil)	369 (814) 191 (421) 32 (71) 178 (392)
Fuel tank (excluding fuel)	178 (392)
Lift arm (including bushing)	1,074 (2,368)
Bucket link	55 (121)
Bell crank	316 (697)
Bucket (2,905 mm wide, including BOC)	1,606 (3,541)
Operator's cab (including floor assembly)	981 (2,163)
Operator seat	35 (77)
Air conditioner unit	5 (11)
Battery (1 piece)	45 (99)

★ BOC: Abbreviation for Bolt-On Cutting edge

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Categories and Method of Using Troubleshooting Charts

Categories of Troubleshooting Codes

★ If the machine monitor displays a failure code, the name of the controller is also displayed at the same time.
★ The troubleshooting codes are categorized according to the name of each controller.
(This may also include some failure codes for the electrical system that are not displayed.)
★ Failures of the hydraulic and mechanical systems that the machine monitor cannot display are categorized as H mode.

Troubleshooting Code	Troubleshooting System
Display of code	Troubleshooting by failure code (code shown on monitor)
E-mode	Troubleshooting of electrical system
H-mode	Troubleshooting of hydraulic and mechanical system
S-mode	Troubleshooting of engine

Procedure for Troubleshooting

If a problem occurs on the machine, or if any problem is felt, carry out troubleshooting as follows.

1. Failure code is displayed on machine monitor.
   ★ A failure code is displayed on the machine monitor at the same time as the problem occurs.
      ★ Each failure code flashes when the problem corresponding to it is detected. Even if a failure code lights up when the starting switch is turned ON, the problem corresponding to that failure code may not have been repaired. Certain problems can be detected by simply turning the starting switch ON.
      ★ Check the content of the display, then go to the applicable troubleshooting for the failure code.

2. No failure code is displayed on the machine monitor but the failure is recorded in memory.
   ★ It is impossible to check the failure code display on the machine monitor when a problem occurs.
      ★ Each failure code flashes when the problem corresponding to it is detected. Even if a failure code lights up when the starting switch is turned ON, the problem corresponding to that failure code may not have been repaired. Some problems can be detected by simply turning the starting switch ON.
      ★ Use the Troubleshooting History display function in the Service mode of the machine monitor to check if there is a failure code.
      ★ If a failure code is recorded, it is probable that it is the cause; go to the applicable troubleshooting for the failure code.

3. If no failure code is displayed and no failure history is recorded.
   ★ It is impossible to check the failure display on the machine monitor when a problem occurs, and there is also no failure code recorded in the Troubleshooting History display function in the Service mode of the machine monitor.
      ★ It is probable that a problem has occurred in the hydraulic, mechanical, or electrical system that the controller cannot detect.
      ★ In such a case, check the condition of the failure carefully and select the failure/phenomenon from the Mode chart in this section. Go to the applicable troubleshooting for the failure (E-mode, H-mode, or S-mode).

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	Cause		Standard value in normal state/Remarks on troubleshooting			
Possible causes and standard value in normal state	3	Defective A/C control panel power supply and disconnection of GND wring harness (Disconnection or defective contact in connector)	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.			
			C48	Starting switch	Voltage	
			Between (7) and (1)	ON	20 – 30 V	
				OFF	Max. 1 V	
			★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between fuse No. 8 of fuse box 2 – C48 (female) (7)		Resistance	Max. 1 Ω
			Wiring harness between C48 (female) (1) – chassis ground		Resistance	Max. 1 Ω
	4	Disconnection in relay wiring harness of relay power supply (Disconnection or defective contact in connector)	★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.			
			Blower OFF relay, pressure switch	Starting switch	Voltage	
			Between blower OFF relay (15A fuse line) – chassis ground	ON	20 – 30 V	
				OFF	Max. 1 V	
			Blower OFF relay (5A fuse line of main circuit) and chassis ground	ON	20 – 30 V	
				OFF	Max. 1 V	
			Pressure switch (5A fuse line of main circuit) and chassis ground	ON	20 – 30 V	
				OFF	Max. 1 V	
			★ Prepare with starting switch OFF, then carry out troubleshooting without turning starting switch ON.			
			Wiring harness between fuse No. 8 of fuse box 2 – blower OFF relay (on the 15A fuse line)		Resistance	Max. 1 Ω
			Wiring harness between fuse No. 8 of fuse box 2 – blower OFF relay (on the 5A fuse line side of main circuit)		Resistance	Max. 1 Ω
			Wiring harness between fuse No. 8 of fuse box 2 – pressure switch (on the 5A fuse line side of main circuit)		Resistance	Max. 1 Ω
			Wiring harness between pressure switch – compressor clutch relay		Resistance	Max. 1 Ω

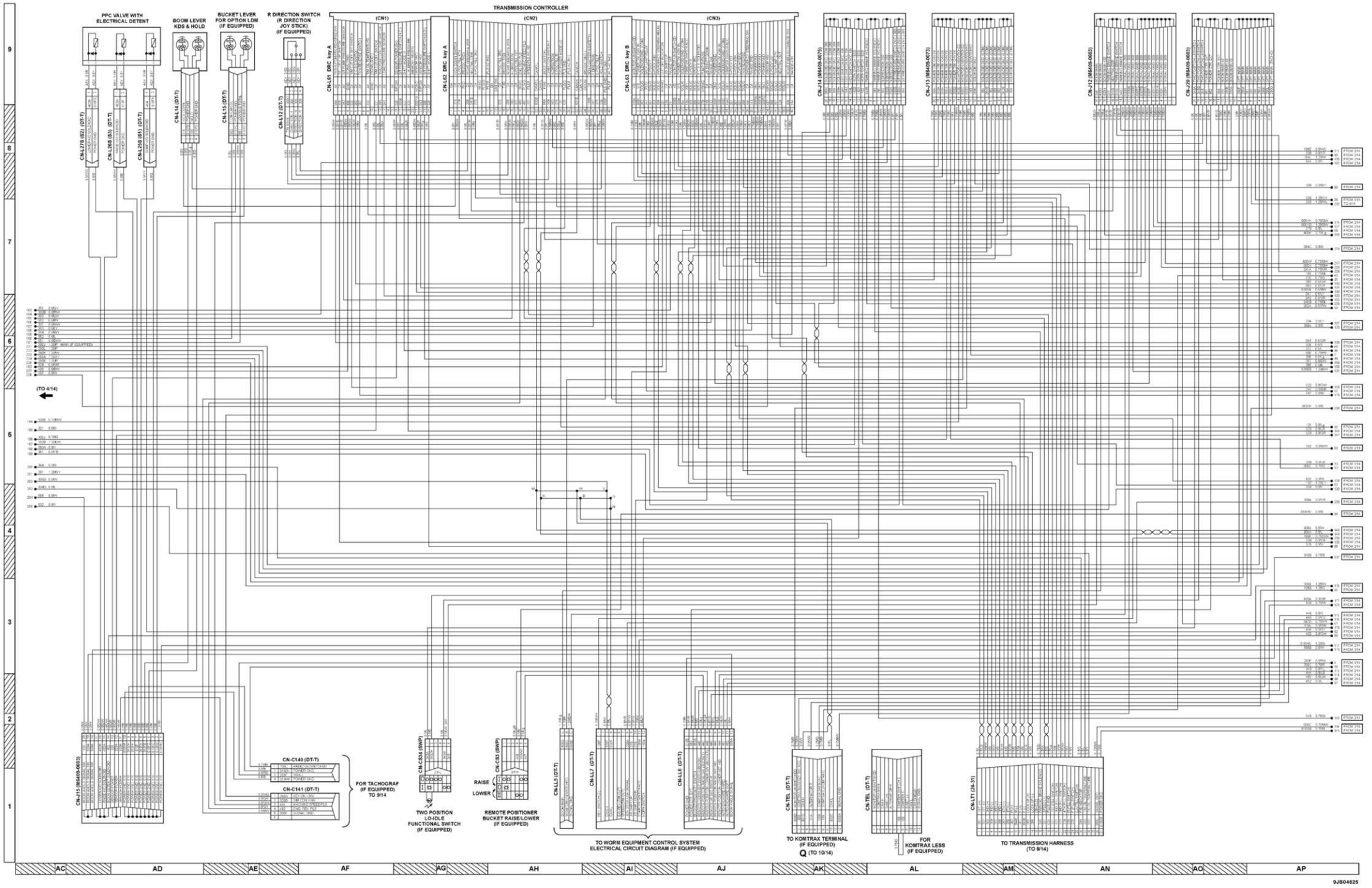
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ELECTRICAL SYSTEM

Electrical Circuit Diagram (3/14)

Common to WA380-6, WA430-6, WA470-6 and WA480-6

*** This circuit diagram covers equipment and devices that are unavailable as options in some areas.**



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