CEBM003803

Shop Manual

KOMATSU®

avance LOADER

WA800-3LC

WHEEL LOADER

SERIAL NUMBERS **WA800-3LC** **A50001** and UP

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November 2002
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❍	New page to be added	Add
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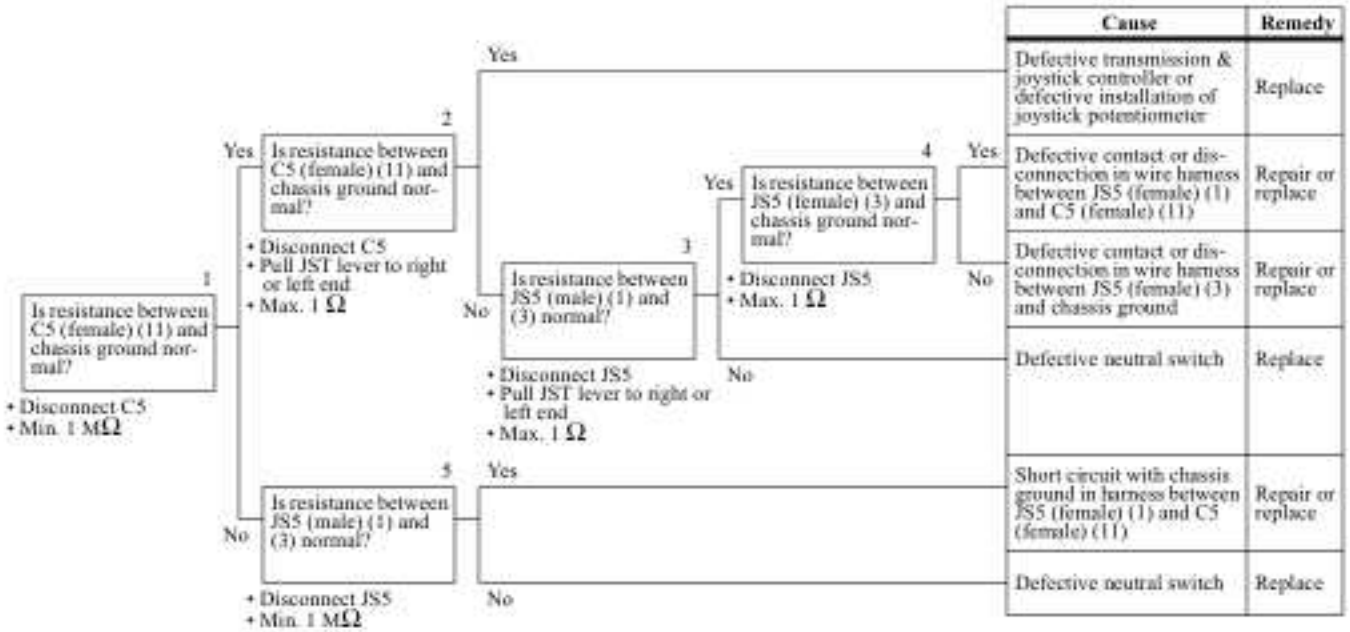
- The work equipment system consists of the hydraulic circuit and steering circuit. The hydraulic circuit controls the operation of the bucket and attachment.
- The oil from hydraulic tank is sent from main pump (4), steering pump, and switch pump (7) through the steering valve to two main control valves (10). If the dump and lift spools of the main control valve are both in neutral, the oil passes through the drain circuit of the main control valve, is filtered by the filter inside the hydraulic tank, and returns to the tank.
- The dump or lift spool in PPC valve is activated by operating the work equipment control lever, causing each spool in the work equipment valve to be hydraulically activated. Thereby, the oil is allowed to flow from the work equipment valve to lift cylinder (9) or dump cylinder (1), thus operating the lift arm or the bucket.
- The maximum pressure of the hydraulic circuit is regulated by the relief valve inside the main control valve. There are two safety valves (with suction valve) and an unloader valve in the dump cylinder circuit to protect the circuit.
- Even when engine is at rest, the lift arm can be lowered to the ground because accumulator (3) is provided in the circuit.
- Hydraulic tank is a pressurized, sealed type and has a breather with a relief valve. This acts to pressurize the tank and at the same time prevents negative pressure. This protects the pump from cavitation.
- In the hydraulic tank there is pressurizing valve installed to pressurize the hydraulic tank with air pressure. It is used to carry out air bleeding of the pump when changing the oil inside the tank or when assembling after removing the piping of the piston pump and pump.

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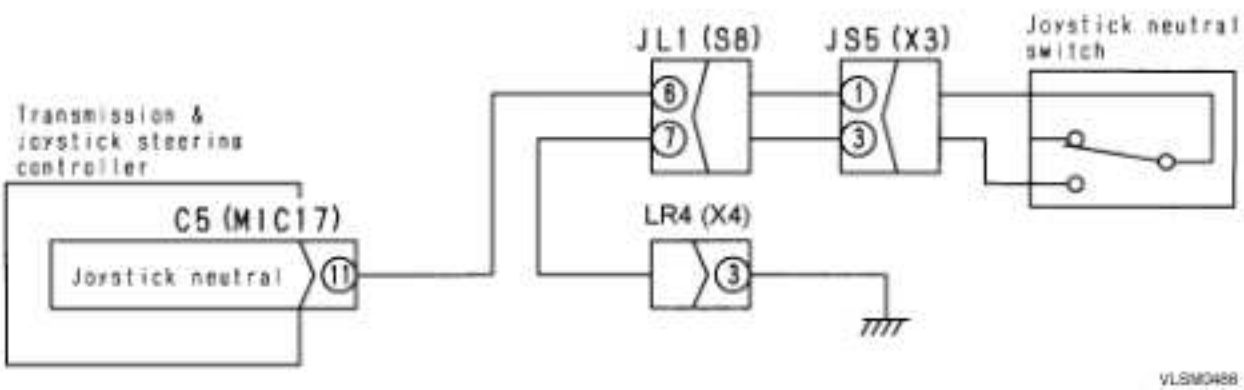
Failure code [62] (Short circuit, disconnection in joystick steering neutral circuit) is displayed

- ★ Before carrying out troubleshooting, check that all related connectors are properly inserted
- ★ Always connect any disconnected connectors before going on to the next step
- ★ When joystick steering lever is not being used, leave it at the neutral position and turn the joystick steering selector switch ON

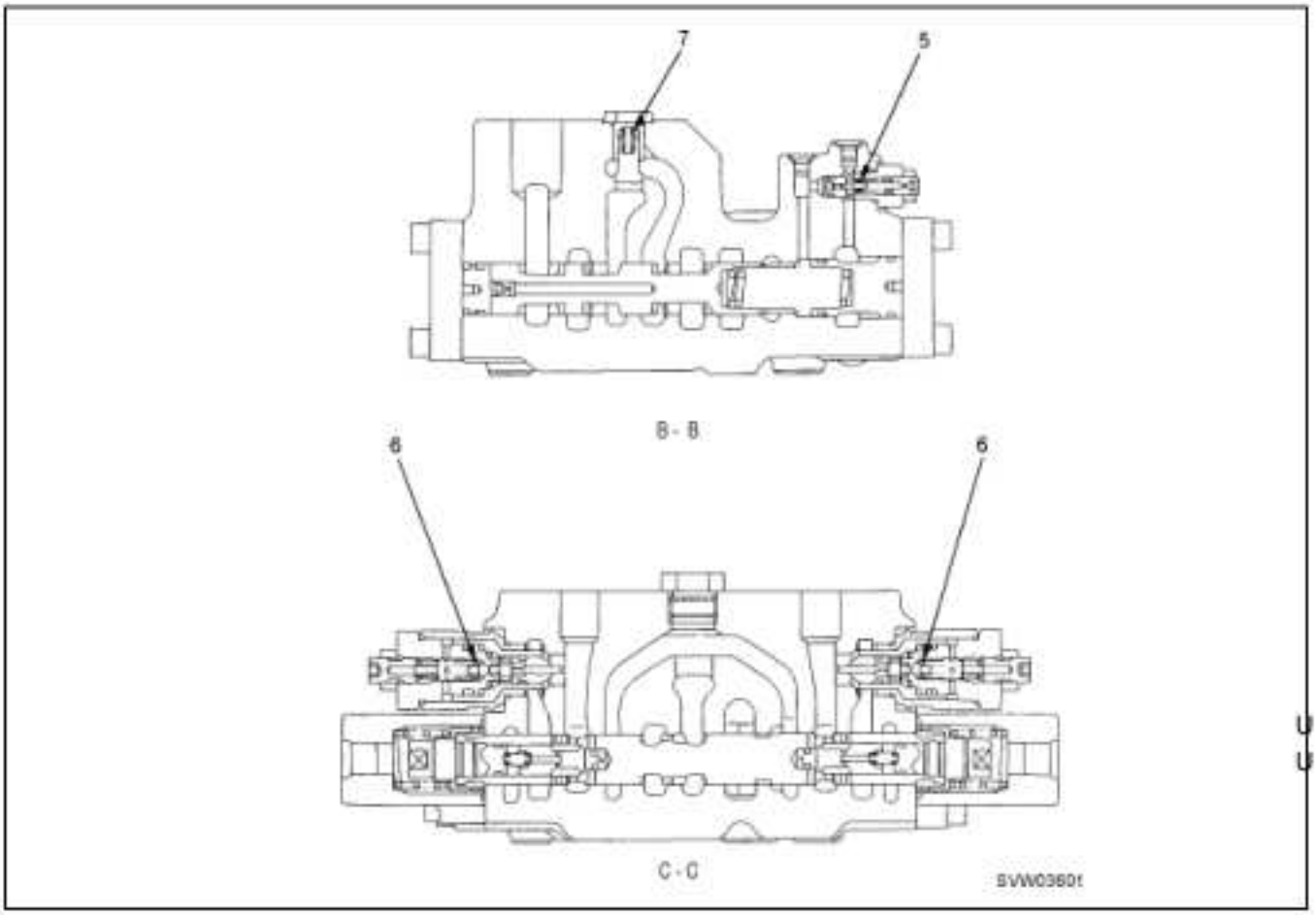


Cause	Remedy
Defective transmission & joystick controller or defective installation of joystick potentiometer	Replace
Defective contact or disconnection in wire harness between JS5 (female) (1) and C5 (female) (11)	Repair or replace
Defective contact or disconnection in wire harness between JS5 (female) (3) and chassis ground	Repair or replace
Defective neutral switch	Replace
Short circuit with chassis ground in harness between JS5 (female) (1) and C5 (female) (11)	Repair or replace
Defective neutral switch	Replace

J-7 Related electrical circuit diagram



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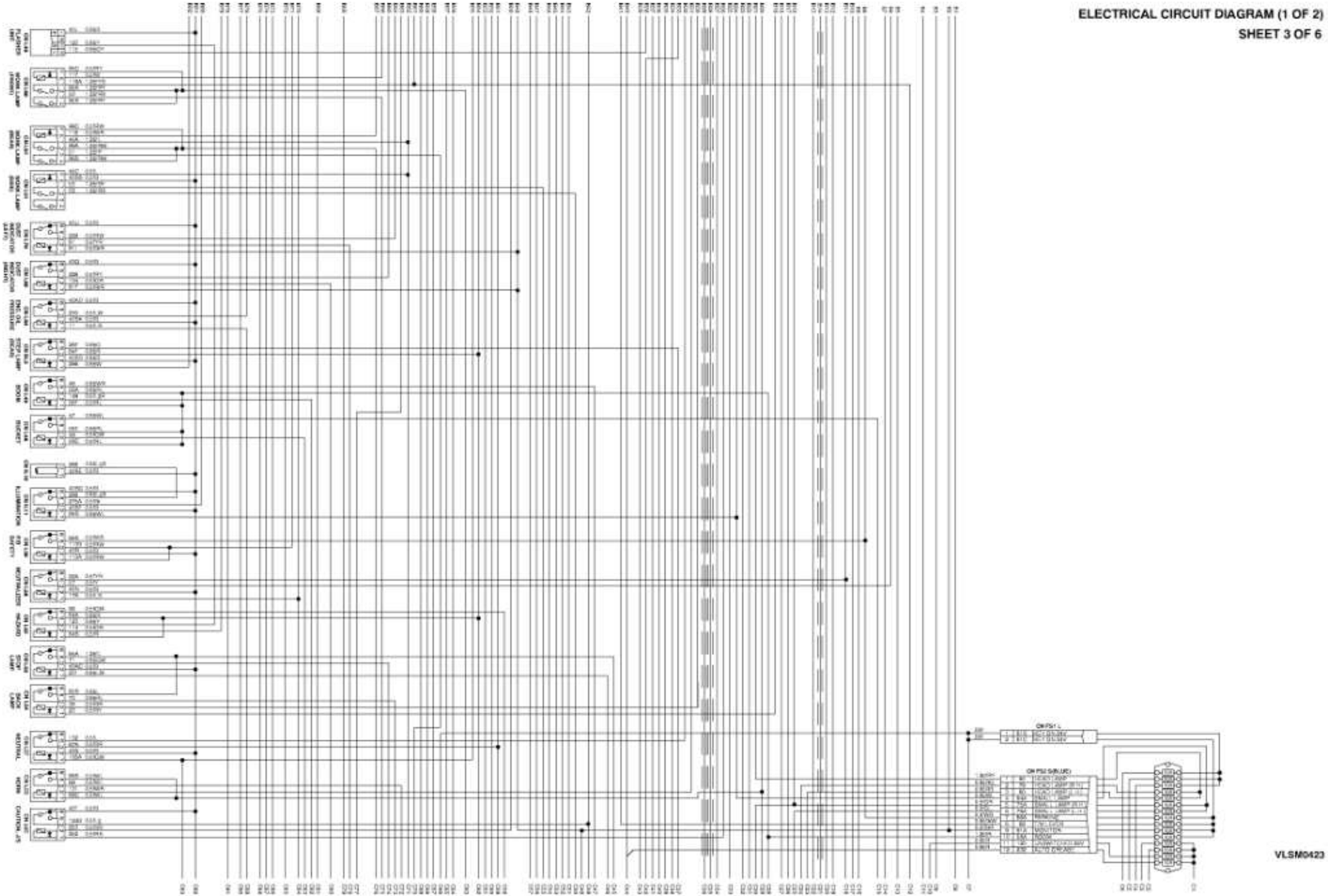


Unit: mm

	Check item	Criteria					Remedy
		Standard size			Repair limit		
1	Steering spool return spring	Free length	Installation length	Installation load	Free Length	Installation load	Replace
		41.8	38.0	7.6 kg (16.8 lb)	-	6 kg (13.2 lb)	
2	Load check valve spring	20.9	13.2	0.9 kg (2 lb)	-	0.71 kg (1.6 lb)	
3	Demand spool return spring	90.8	83.0	41.8 kg (92.2 lb)	-	33.4 kg (73.6 lb)	
4	Surge cut relief valve spring	24.0	22.19	18.6 kg (41 lb)	-	14.8 kg (32.6 lb)	
5	Main relief valve spring	24.0	22.19	18.6 kg (41 lb)	-	14.8 kg (32.6 lb)	
6	Overload relief valve spring	39.5	35.7	60.2 kg (132.7 lb)	-	40.8 kg (90 lb)	
7	Check valve return spring	20.9	13.2	0.9 kg (2 lb)	-	0.71 kg (1.6 lb)	

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ELECTRICAL CIRCUIT DIAGRAM (1 OF 2)
SHEET 3 OF 6



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