CEBMW24020

SHOP MANUAL

KOMATSU®

WA420-1LC

WHEEL LOADER

MACHINE MODEL	SERIAL NUMBERS
WA420-1LC	A25001 and up

It is our policy to improve our products whenever it is possible and practical to do so. We reserve the right to make changes or add improvements at any time without incurring any obligation to install such changes on products sold previously.

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3. **Lift arm movement becomes slow after it reaches a certain height.**

Check before troubleshooting.
- Visible deformation of lift cylinder.

Cause
- Swollen or internally damaged lift cylinder tube.
- ★ Regarding other faults occurring during lift arm ascent, refer to item "2. Lift arm moves slowly or does not have sufficient lifting power".

4. **Bucket cannot be held down with lift arm cylinder.**

If the relief pressure in the circuit at the bottom of the lift cylinder is insufficient, refer to item "2. Lift arm moves slowly or does not have sufficient lifting power".

Checks before troubleshooting.
- Is level of oil in the hydraulic tank correct?
- Is stroke of main control valve and lift spool correct?

Cause
- Faulty main control valve or suction valve seat on lift cylinder rod side.
- Oil leakage from lift cylinder piston seal.

5. **Lift arm has large hydraulic drift.**

Ask the operator the following questions.
- Did the hydraulic drift suddenly become large? → Dirt lodged in valve or damaged parts.
- Did the hydraulic drift gradually become large? → Worn parts.

Checks before troubleshooting.
- Is the type and temperature of the oil in the hydraulic tank correct?
- Is the lift arm spool in the neutral position? → Seized link bushing, faulty spool detent.

Problem and cause
- When measuring hydraulic drift, internal of lift cylinder produces oil leak noise → Damaged piston packing.

6. **Lift arm movement is unsteady during work.**

During excavation or ground leveling when the lift arm control lever is in the "Hold" position, the bucket and lift arm move up and down in accordance with the terrain.

Problem and cause

Check the amount of hydraulic drift and whether or not the machine body can be lifted up by the lift cylinder.

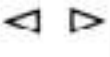
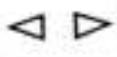
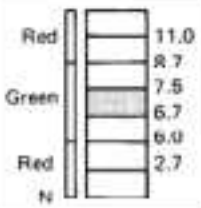
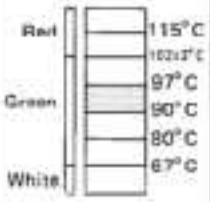
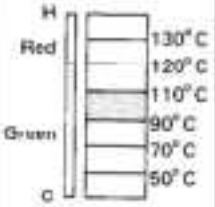
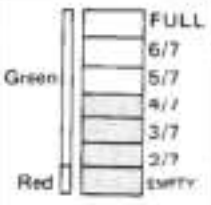
1) If the amount of hydraulic drift is greater than the standard value, refer to item "5. Lift arm has large hydraulic drift".
2) If the machine body can be lifted up by the lift cylinder, refer to item "4. Bucket cannot be held down with lift arm cylinder".
3) If the amount of hydraulic drift is normal and the machine body can be lifted up by the lift cylinder after the lift arm is moved several times to cause the lift cylinder to move through its entire stroke → the trouble is due to the generation of a vacuum in the cylinder.
   - ★ If a vacuum is generated frequently, → faulty suction valve on lift cylinder rod side.

7. **Lift arm descends momentarily when control lever is shifted from "Hold" to "Raise".**

The lift arm descends momentarily under its own weight when the lift arm control lever is gradually shifted from the "Hold" position to the "Raise" position while the engine is at low idling. When the control lever is put completely into the "Raise" position, the lift arm behaves normally.

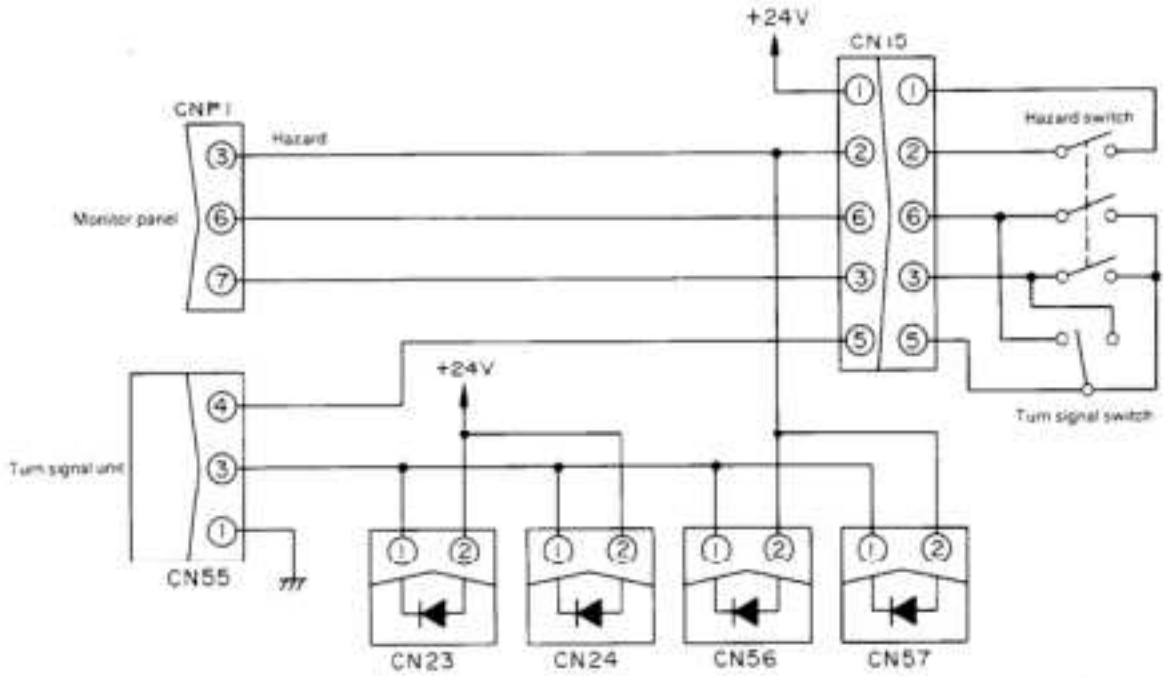
Cause
- Faulty seating of main control valve or lift arm load check valve.

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Category	Symbol	Indication item	Indication range	Description
Speed-ometer		Travel speed	0-100 MPH	Digital display
		High beam	When operated	Displays when starting switch is turned ON; Lights up when operated
		Signal lamps (right, left)	When operated	
		Hazard	When operated	Lights up when operated
Service meter		Service meter	0-99999/h displayed	Actuated when engine oil pressure is normal. Advances 1 for every hour of operation
		Service meter indicator		Flashes when service meter is operating
Gauge		Air pressure		One lamp lights up to indicate level
		Coolant temperature		One lamp lights up to indicate level
		Torque converter oil temperature		One lamp lights up to indicate level
		Fuel level		All lamps light up below indicated level

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M-10 Related electrical circuit drawing (Fig. 19).

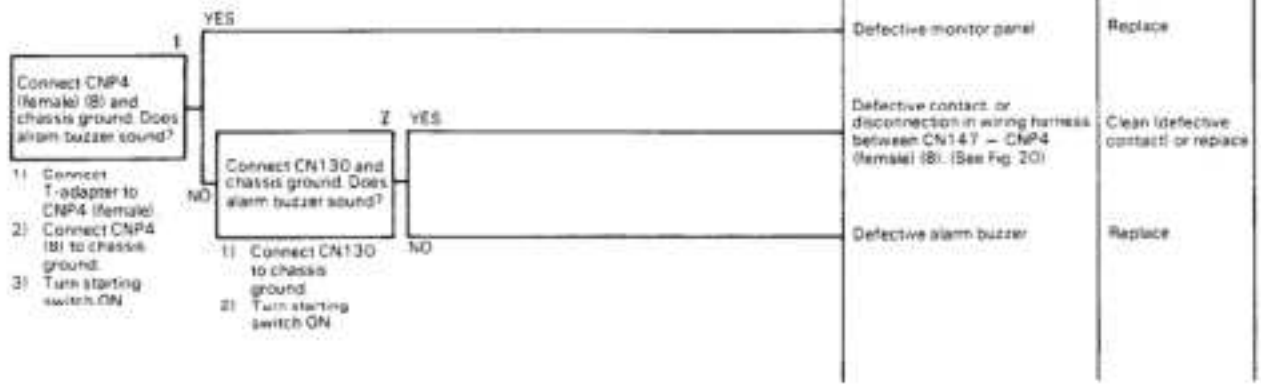


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TROUBLESHOOTING CHART No. M-11

Failure mode: **M-11 WHEN STARTING SWITCH IS TURNED TO ON POSITION (ENGINE STOPPED), BUZZER DOES NOT SOUND FOR 1 SEC. CAUTION ITEM IS FLASHING BUT BUZZER DOES NOT SOUND.**

- The buzzer does not sound for charge level and fuel level of CAUTION items.



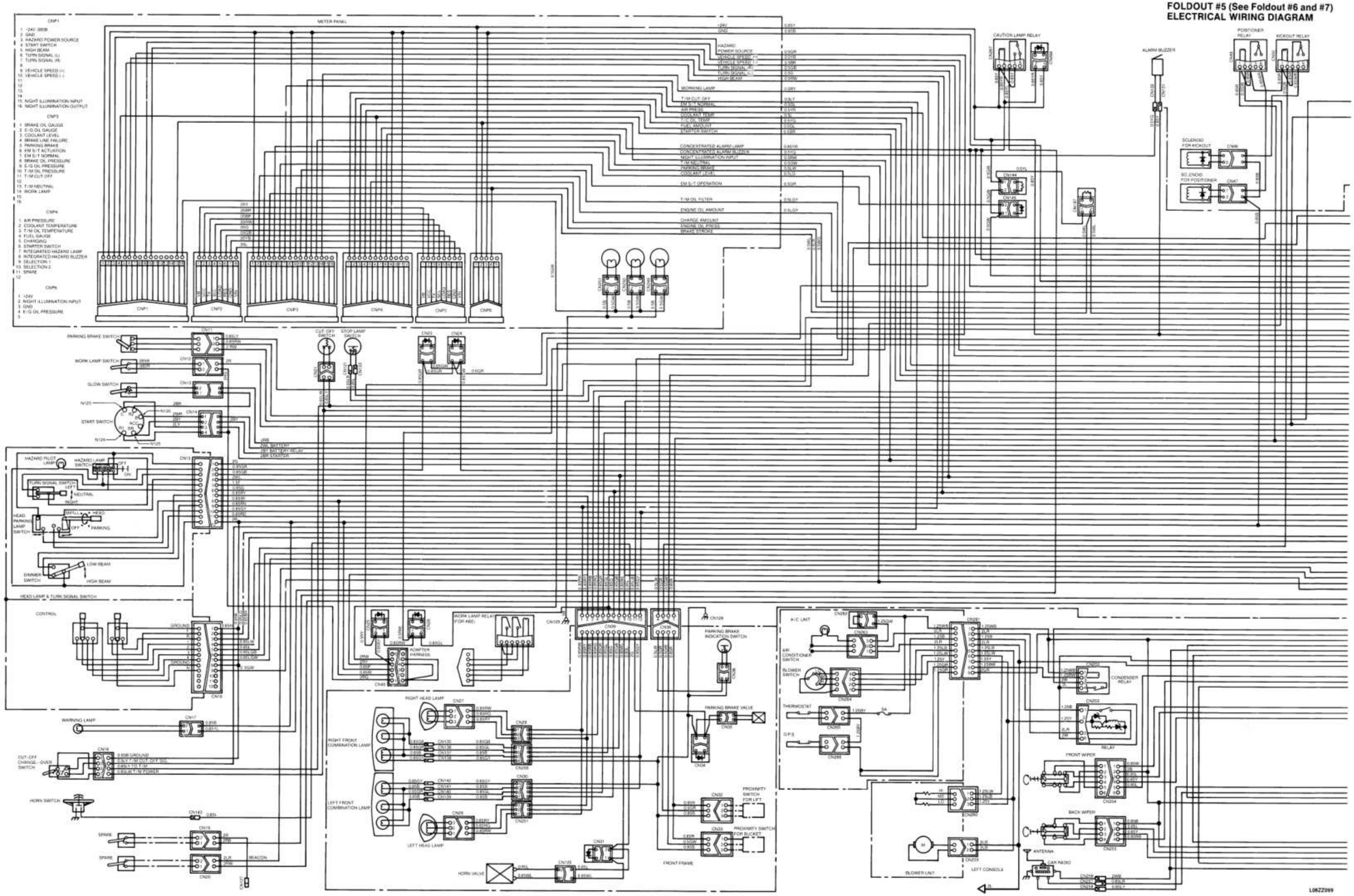
Cause	Remedy
Defective monitor panel	Replace
Defective contact, or disconnection in wiring harness between CN147 – CNP4 (female) (8). (See Fig. 20)	Clean (defective contact) or replace
Defective alarm buzzer	Replace

Trouble-shooting tools	T-adapter	Wiring harness with crocodile clip

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FOLDOUT #5 (See Foldout #6 and #7)
ELECTRICAL WIRING DIAGRAM



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