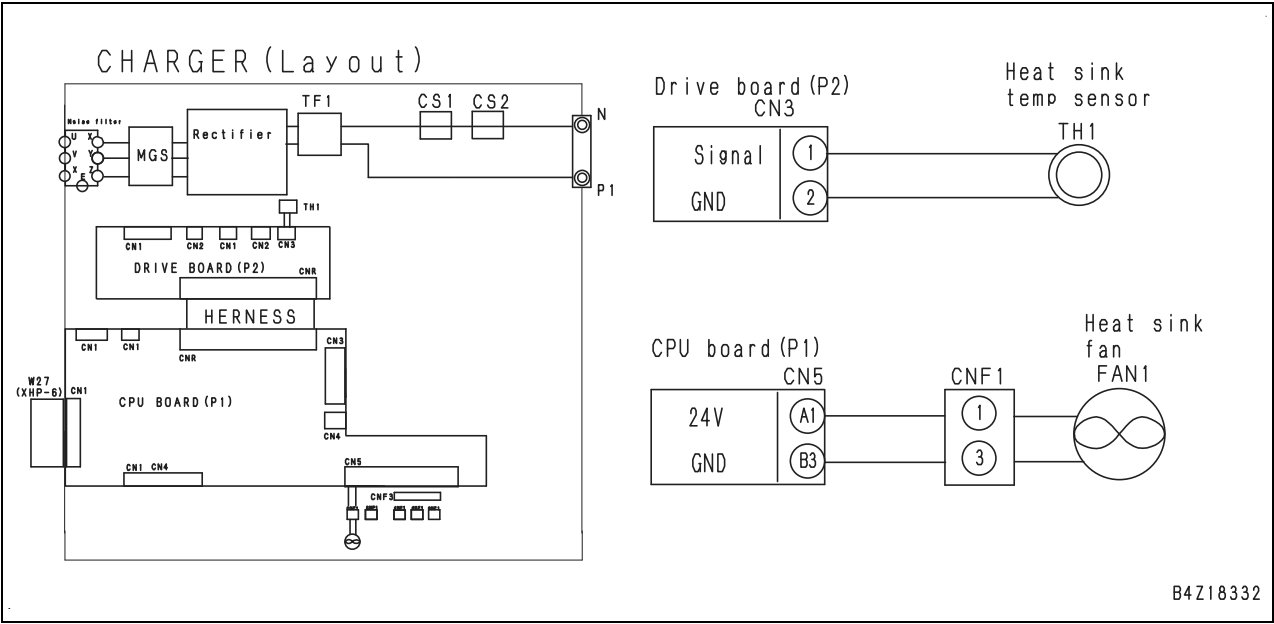


Failure code [GFABMA] ABNL) Temp.Sensor HEATSINK (Serial number: 300001 to 304911)

Action level	Failure code	Failure	Abnormal heatsink temperature sensor of charger (Charger system)
L03	GFABMA		
Detail of failure	The temperature signal of charger heatsink has exceeded the normal range. (0.15V or less, or 4.95V or more)		
Action of controller	- Stops charging. - The caution symbol is displayed on the monitor panel, and an alarm buzzer is activated.		
Problem on lift truck	Battery cannot be charged.		
Related information			

No.	Cause	Procedure, measuring location, criteria and remarks		
1	Open circuit in wiring harness	1. Unplug the charger plug, and turn OFF the breaker of AC power breaker. When 10 minutes or more have passed, open the charger cover.) 2. Measure the resistance of the heatsink temperature sensor signal line.		
		Resistance	Between drive board (P2) CN3-1 and heatsink temperature sensor TH1-1 (red)	Max. 1Ω
			Between drive board (P2) CN3-2 and heatsink temperature sensor TH1-2 (blue)	Max. 1Ω
2	Defective temperature sensor	1. Unplug the charger plug, and turn OFF the breaker of AC power breaker. When 10 minutes or more have passed, open the charger cover.) 2. Disconnect connector CN-3 of drive board, and measure the resistance of temperature sensor TH1.		
		Resistance	Between CN-3-1 and CN-3-2	150Ω to 450kΩ
3	Defective drive board (P2)	If no failure is found by the above checks, the drive board (P2) is defective. (Since this is an internal defect, troubleshooting cannot be performed.)		
4	Defective CPU board (P1)	If no failure is found by the above checks, the CPU board (P1) of the charger is defective. (Since this is an internal defect, troubleshooting cannot be performed.)		
5	Defective charger	If no failure is found by the above checks, the charger is defective. (Since this is an internal defect, troubleshooting cannot be performed.)		

Circuit diagram related to heatsink temperature sensor



Failure code [GFABMA] ABNL) Temp.Sensor HEATSINK (Serial number: 304912 and up)

Action level	Failure code	Failure	Abnormal heatsink temperature sensor of charger (Charger system)
L03	GFABMA		
Detail of failure	The temperature signal of charger heatsink has exceeded the normal range. (0.15V or less, or 4.95V or more)		
Action of controller	- Stops charging. - The caution symbol is displayed on the monitor panel, and an alarm buzzer is activated.		
Problem on lift truck	Battery cannot be charged.		
Related information			

No.	Cause	Procedure, measuring location, criteria and remarks		
1	Open circuit in wiring harness	1. Unplug the charger plug, and turn OFF the breaker of AC power breaker. When 10 minutes or more have passed, open the charger cover.) 2. Measure the resistance of the heatsink temperature sensor signal line.		
		Resistance	Between CPU board (P1) CN4-9 and heatsink temperature sensor TH1-1 (red)	Max. 1Ω
			Between CPU board (P1) CN4-10 and heat-sink temperature sensor TH1-2 (blue)	Max. 1Ω
2	Defective temperature sensor	1. Unplug the charger plug, and turn OFF the breaker of AC power breaker. When 10 minutes or more have passed, open the charger cover.) 2. Disconnect connector CN-4 of CPU board, and measure the resistance of temperature sensor TH1.		
		Resistance	Between CN-4-9 and CN-4-10	150Ω to 450kΩ
3	Defective CPU board (P1)	If no failure is found by the above checks, the CPU board (P1) of the charger is defective. (Since this is an internal defect, troubleshooting cannot be performed.)		
4	Defective charger	If no failure is found by the above checks, the charger is defective. (Since this is an internal defect, troubleshooting cannot be performed.)		

Circuit diagram related to heatsink temperature sensor

