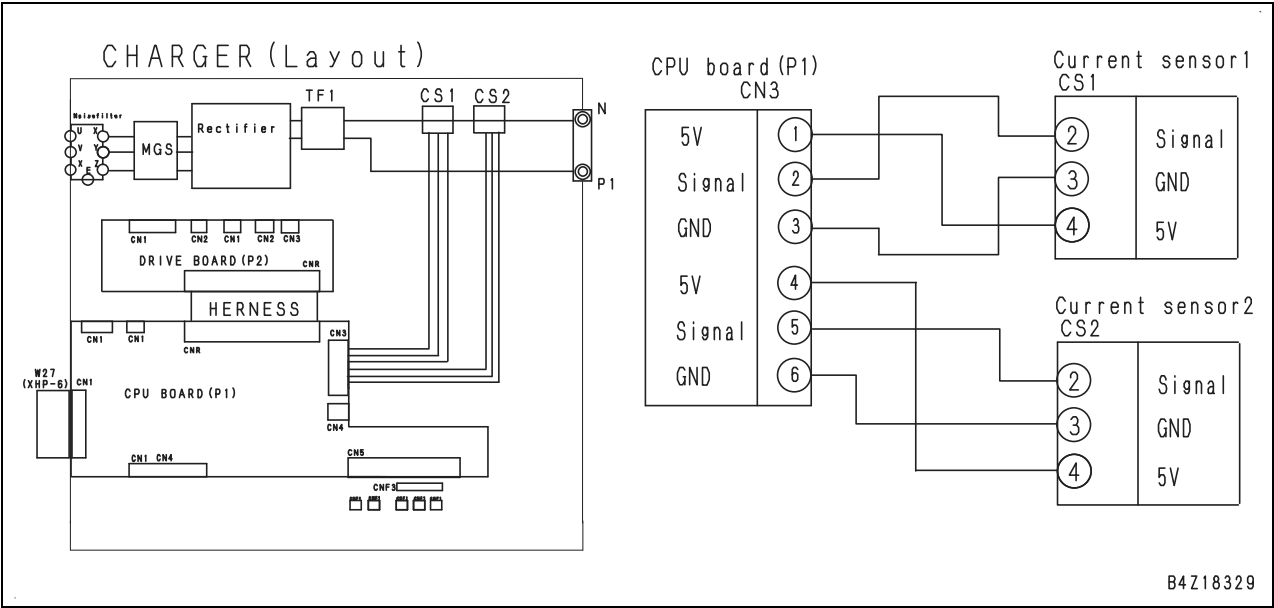


Failure code [GFA1KN] ABNL) POWER CURRENT (CHGR) (Serial number: 300001 to 304911)

Action level	Failure code	Failure	Charger over-current (Charger system)
L03	GFA1KN		
Detail of failure	Excessive charging current flows.		
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	Dropped AC power voltage	1. Unplug the charger plug, and turn OFF the breaker of AC power breaker. 2. Make sure that other devices are not loaded, and turn ON the AC power breaker. 3. Measure the AC power voltage ⚠ When you measure the AC voltage, be careful not to receive an electric shock.		
		Voltage	Between U and V terminals of AC power breaker	AC182 to 222V
			Between V and W terminals of AC power breaker	AC182 to 222V
			Between W and U terminals of AC power breaker	AC182 to 222V
2	Disconnection of wiring harness (Current sensor CS1)	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 CN3 of CPU board (P1). 3. Disconnect the connector of current sensor CS1, and measure the resistance.		
		Resistance	Between CS1-4 and CN3-1	Max. 1Ω
			Between CS1-3 and CN3-3	Max. 1Ω
			Between CS1-2 and CN3-2	Max. 1Ω
3	Defective current sensor 1 (CS1)	If no failure is found by the preceding checks, current sensor CS1 is defective.		
4	Defective CPU board (P1)	If no failure is found by the preceding checks, the CPU board (P1) of the charger is defective.		
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 charger overvoltage



Failure code [GFA1KN] ABNL) POWER CURRENT (CHGR) (Serial number: 304912 and up)

Action level	Failure code	Failure	Charger over-current (Charger system)
L03	GFA1KN		
Detail of failure	Excessive charging current flows.		
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	Dropped AC power voltage	1. Unplug the charger plug, and turn OFF the breaker of AC power breaker. 2. Make sure that other devices are not loaded, and turn ON the AC power breaker. 3. Measure the AC power voltage ⚠ When you measure the AC voltage, be careful not to receive an electric shock.		
		Voltage	Between U and V terminals of AC power breaker	AC182 to 222V
			Between V and W terminals of AC power breaker	AC182 to 222V
			Between W and U terminals of AC power breaker	AC182 to 222V
2	Disconnection of wiring harness (Current sensor CS1)	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 CN3 of CPU board (P1). 3. Disconnect the connector of current sensor CS1, and measure the resistance.		
		Resistance	Between CS1-4 and CN3-1	Max. 1Ω
			Between CS1-3 and CN3-3	Max. 1Ω
			Between CS1-2 and CN3-2	Max. 1Ω
3	Defective current sensor 1 (CS1)	If no failure is found by the preceding checks, current sensor CS1 is defective.		
4	Defective CPU board (P1)	If no failure is found by the preceding checks, the CPU board (P1) of the charger is defective.		
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 charger overvoltage

