

1) Alarm No. ① Motor is overheated.

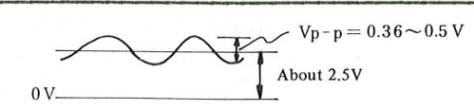
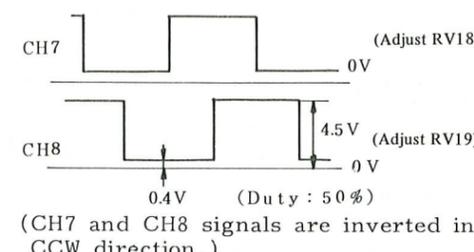
Item	Causes	Check procedure	Remedy
1	Built-in fan motor of spindle motor is defective.		Replace fan motor.
2	Overload operation	Check it using a load meter.	Re-examine cutting conditions and tools.
3	Motor cooling system is dirty.		Clean it using compressed air or vacuum cleaner.
4	Disconnection or poor contact of wiring	Check connections between motor and servo unit.	Confirm the connection of connector for signal.

2) Alarm No. ② Speed is deviated from the command value.

Item	Causes	Check procedure	Remedy
1	Overload	Check it using a load meter.	Re-examine cutting conditions and tools.
2	Transistor module is defective.	Transistor collector-emitter is open.	Replace transistor module.
3	Blow out of fuse in regeneration circuit.	Check fuses F5 and F6 for continuity by using a circuit tester.	Check if the acceleration/deceleration on cycle is too frequent. Replace fuses.
4	Blow out or poor connection of the driver protective fuse on PCB.	Check fuses FA, FB, ... FG for blown out or missing.	Connect fuses securely, and replace blown out fuses, if any.
5	Speed feedback signal is defective.	Check the speed feedback signal level.	Adjust RV18 and RV19. Set duty to about 50%.
6	Wiring failure (disconnection, poor contact, etc.)	Check if connection cables are normally connected.	

Note 1) Speed feedback signal check

Observe the speed feedback signal using an oscilloscope under the rotation command off (motor stop, drive power off) condition after turning on the power supply. Observe it at the following check terminals, while slowly turning the motor by hand.

Check terminals	Normal wave forms
CH3-0V (PA)	
CH4-0V (PB)	Same as shown above
CH5-0V (RA)	DC 2.5 V \pm 0.2 V
CH6-0V (RB)	Same as shown above
CH7-0V CH8-0V (In case of CW rotation)	

3) Alarm No. ③

- ① MODEL 1/2/small MODEL 3 regenerative circuit is faulty.
 In MODEL 1/2/small MODEL 3, alarm No. 3 indicates that the regenerative circuit is faulty. A transistor may be defective. Locate a defective element, and replace it according to the following procedure.
 Replace PCB if a transistor is faulty due to a trouble of control PCB. Please contact our service center, if repair is difficult.