

BNE-51S Machine Alarms F18-TB

AL1

Upper turret position detector in the servo amp. If the alarm lamps on the servo amp are on, see sec. 4.6 on fault finding on page 95.

If lamps are OFF, the position detector is missed.

cause

(1) Power failure while turret indexing. (2) In index is incomplete due to mechanical problem or a faulty valve.

solution

1. Check servo alarm lamp conditions in Fanuc or Fuji manuals, if lamps are on. 2. Swap indexing valves if applicable.

AL2 D0.1

Clamp / Unclamp time over of upper turret. Machine alarm lamp on.

cause

Proper timing of clamp/ unclamp not correct.

solution

1. Check clamp / unclamp switch adjustment. (dgnos No. x1008.5).
2. swap solenoid valve

AL3 D0.2

Index time over of upper turret.

cause

After unclamping index does not complete in a certain time.

solution

1. Check and adjust index mechanism.
2. Faulty valve.
3. obstruction.

AL4 D0.3

No.1 position alarm of upper turret.

cause

No.1 position switch (detector) of upper turret does not turn on.

solution

Check and adjust the switch LS-10. (dgnos. No. x1008.3)

AL7 D0.6

Left spindle inverter alarm.
Inverter alarm lamp ON.

cause

1. If the digital display on the L-spindle inverter indicates an alarm, see item 4.5.1 on L- and R- spindle inverter on page 93.
2. Thermal relay (OL11) in the inverter box trips.

solution

1. [4.5.1](#) L- and R-spindle inverter (type Frenic 5000M3) on display.

LU= under voltage

OU= over voltage

OC= over current

OL1= overload

OL2= motor overload

OH1= inverter overheat

OH2= external faults

See Fuji manual for detail.

Remove the cause and press reset.

2. OL11 is tripped the braking resistors are overloaded.
Reduce frequency of spindle accel or decel.

AL8 D0.7

Revolving tool inverter alarm.
Inverter lamp ON.

cause

1. Check that the revolving tool motor is not overloaded.
2. If inverter power is OFF, the cause is an overheated braking resistor.

solution

Reduce the frequency of revolving tool accel or decel.

AL10 D1.1

Closed-end alarm of L-spindle chuck.

cause

When the L-spindle chuck cylinder is equipped with the closed end switch, after commanding chuck open or close, the switch does not turn on or off in a certain time.

solution

1. Check and adjust switch (dgnos No. x1005.5)
2. Check chuck cylinder function.

AL13 D1.4

Lock pin Alarm of L-spindle positioning

cause

After commanding the positioning pin in or out. This does not complete in a certain time.

solution

Check and adjust original position. (dgnos x1005.6)
check advanced end (dgnos x1005.7)
check solenoid valve (SOL 12)
CHECK LOCK PIN CYLINDER

AL14 D1.5

Lock pin switch alarm of L-spindle positioning.

cause

The original position (dgnos x1005.6) or the advanced end (x1005.7) SWITCH TURNS ON OR OFF WITHOUT A MOVEMENT COMMAND.

solutuion

check and adjust both switches.

AL15 D1.6

Time over of bar feeder M-code.

cause

After commanding a bar feeder M-code, bar feeder does not complete in a certain time.

solution

Check and adjust the bar feeder completion signal. (dgnos. x1010.3)

AL16 D1.7

M-code time over of head 1.

cause

After commanding M-code, M-code does not complete in a certain time.

solution

Check and adjust device operated by the M-code.

AL17 D2.0

Spindle 2 (right spindle) work piece confirmation alarm.

cause

no work piece in spindle. Switches not confirming work piece.

solution

Check switches are adjusted.