

## Electrical Troubleshooting Guide CP-50S

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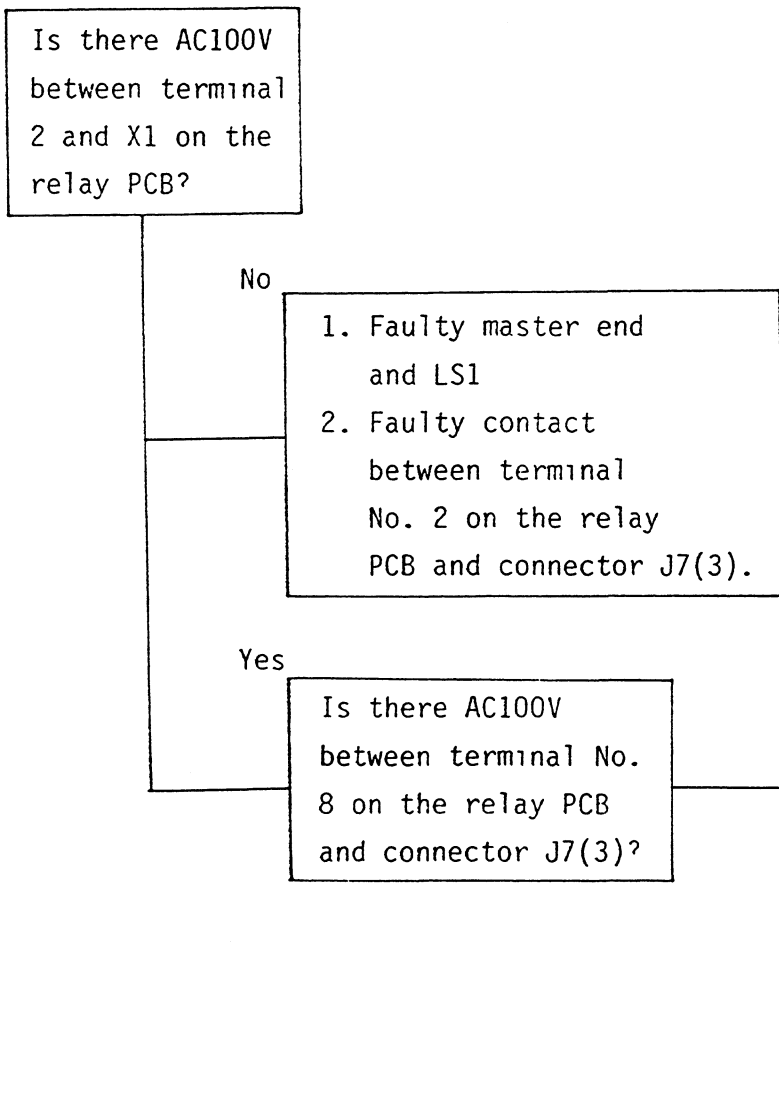
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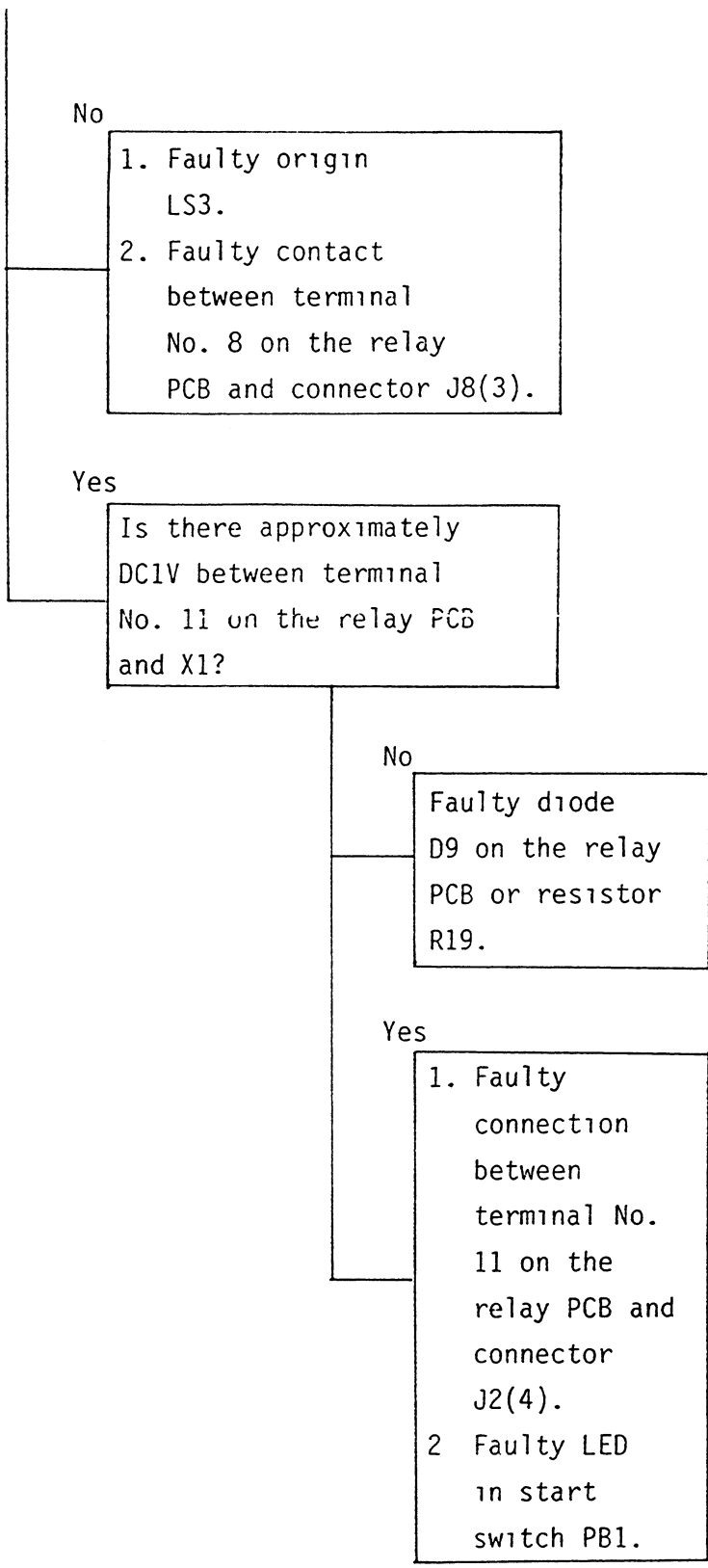
\* General checkpoints

1. Check the voltage between connector terminals (e.g., is there AC100V between connectors J4(1) and (3)?) In this case, all measurements must be done under a full load condition. (Load = motor, microswitch etc.) This is done to find faulty connector contacts more precisely.
2. If a faulty connector contact is suspected, gently pull on its wires once.

1) Starts OK, but pilot lamp (PL) does not light.

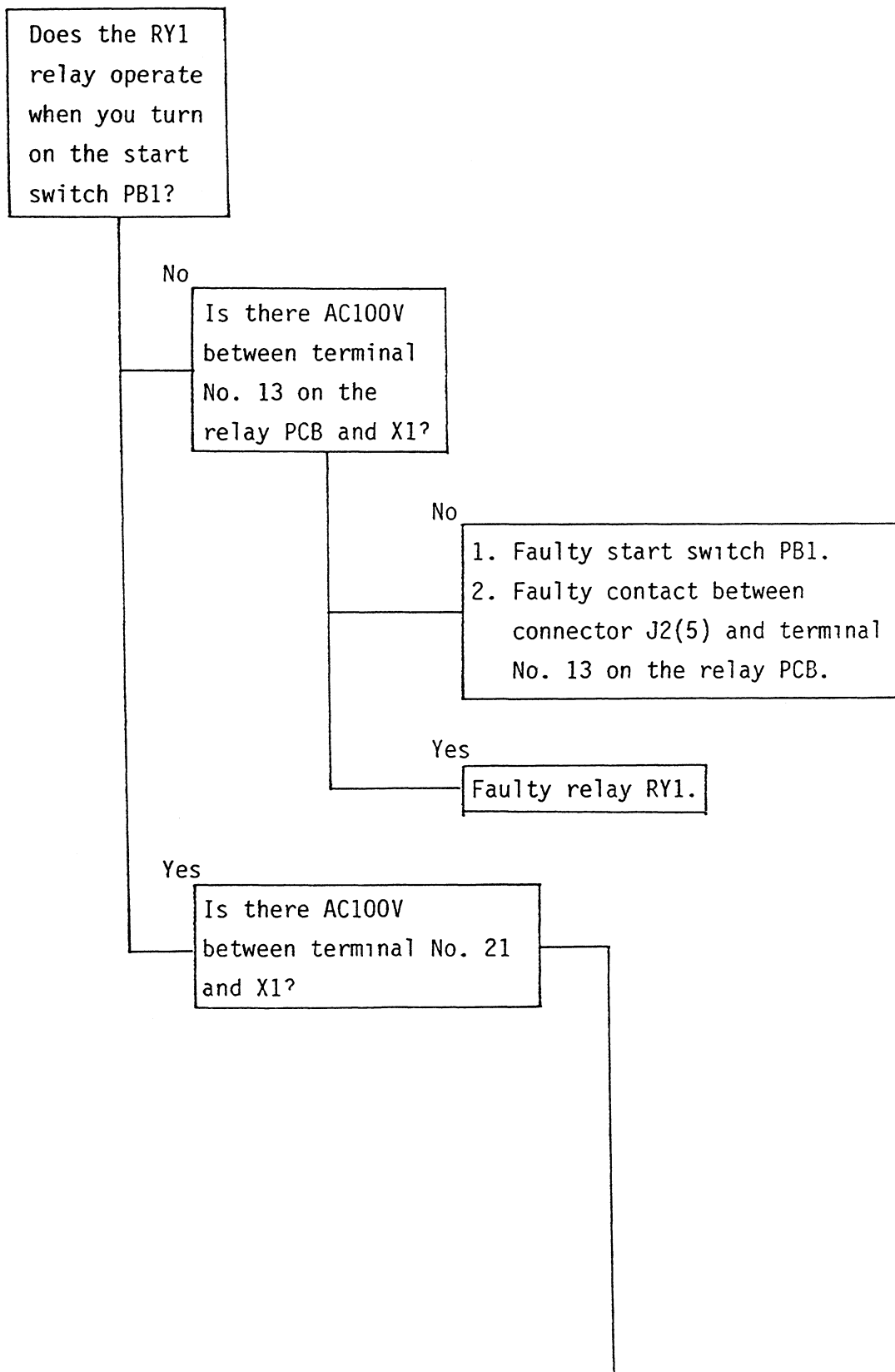
- Items to be confirmed:
- (1) Is the power source connected?
  - (2) Are the no fuse breakers on?
  - (3) Have the F1, F2 5A fuses blown?
  - (4) Is it at master end (end PL lit)?





2) Does not start.

- Items to be confirmed:
1. Is the power source connected?
  2. Is the Start OK PL lit?



No

1. Faulty limit switch LS4 or LS5.
2. Faulty contact between terminal no. 17 on the relay PCB and J11.
3. Faulty contact between J11(3) and J12.
4. Faulty contact between J12(3) and terminal No. 21.

Yes

1. Faulty motor RM2.
2. Faulty contact between terminal No. 21 and connector J15(1).
3. Faulty contact between terminal No. X1 and J15(3).
4. Faulty contact between condenser CM3 and terminal No. 21 or 22.

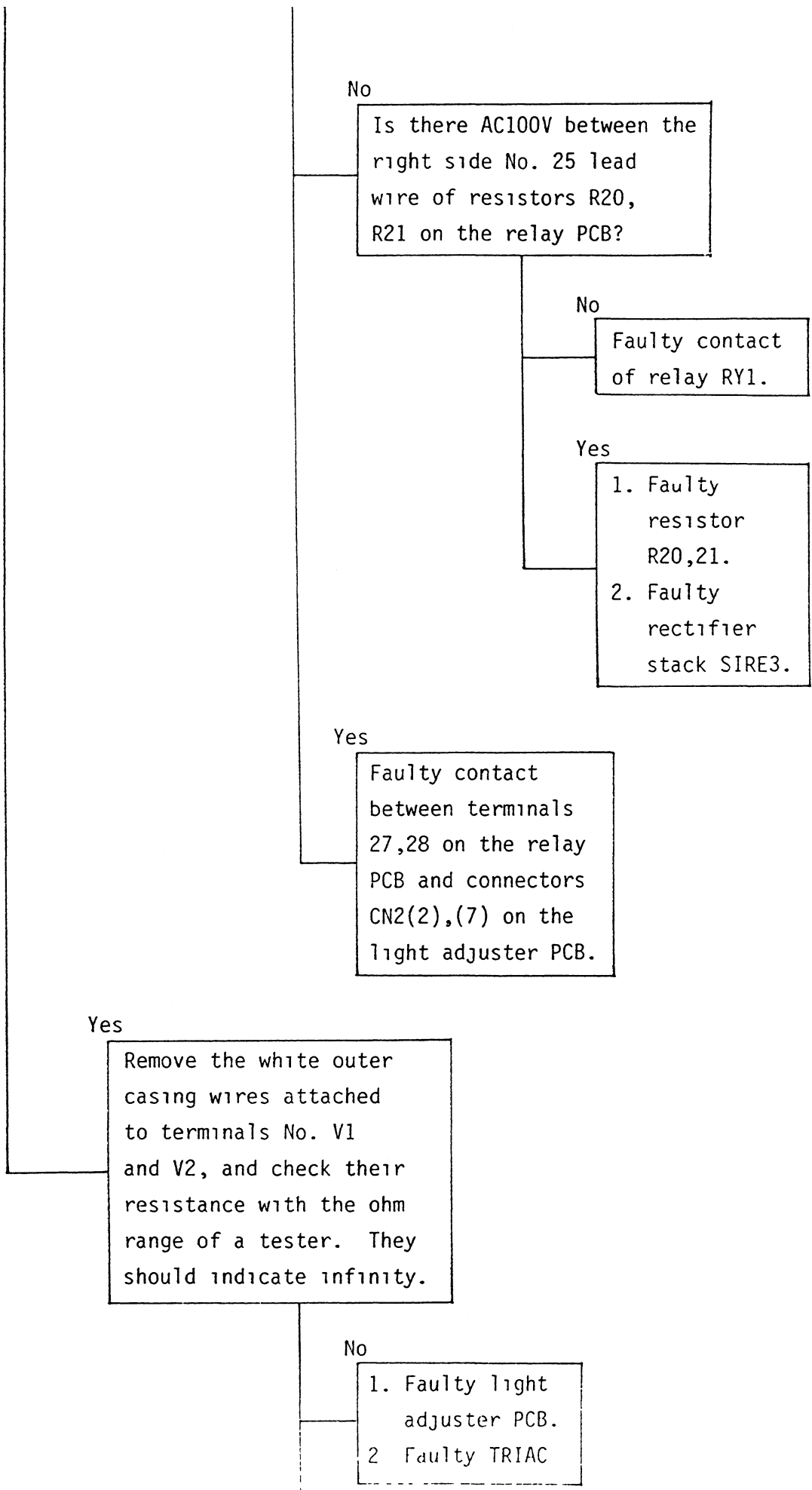
3) Exposure lamp does not light.

Items to be confirmed: (1) Have the F5,F6 10A fuses blown?

Is the relay RY4  
(the larger one)  
on the light adjuster  
PCB functioning?

No

Is there DC24V  
between terminals  
27-28 on the relay  
PCB?



No

Is there AC100V between the right side No. 25 lead wire of resistors R20, R21 on the relay PCB?

No

Faulty contact of relay RY1.

Yes

- 1. Faulty resistor R20,21.
- 2. Faulty rectifier stack SIRE3.

Yes

Faulty contact between terminals 27,28 on the relay PCB and connectors CN2(2),(7) on the light adjuster PCB.

Yes

Remove the white outer casing wires attached to terminals No. V1 and V2, and check their resistance with the ohm range of a tester. They should indicate infinity.

No

- 1. Faulty light adjuster PCB.
- 2. Faulty TRIAC

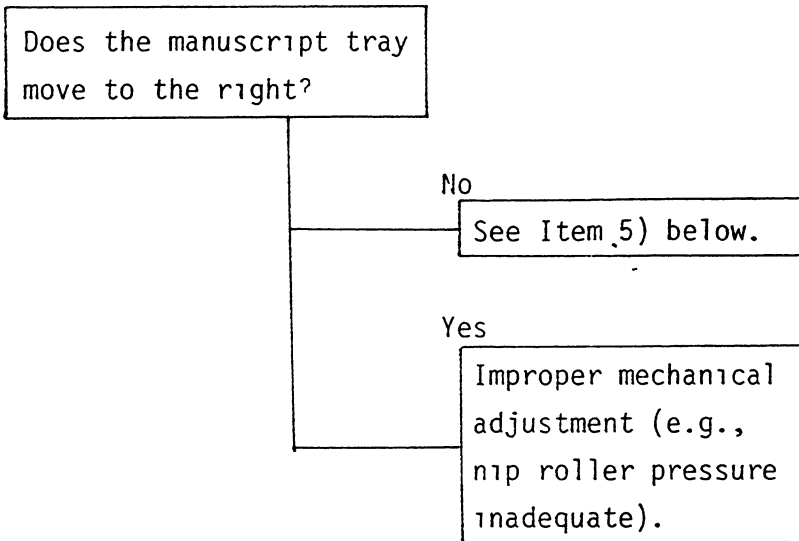
Yes

Malfunction caused  
by broken main  
light source wire.

4) Will not send master.

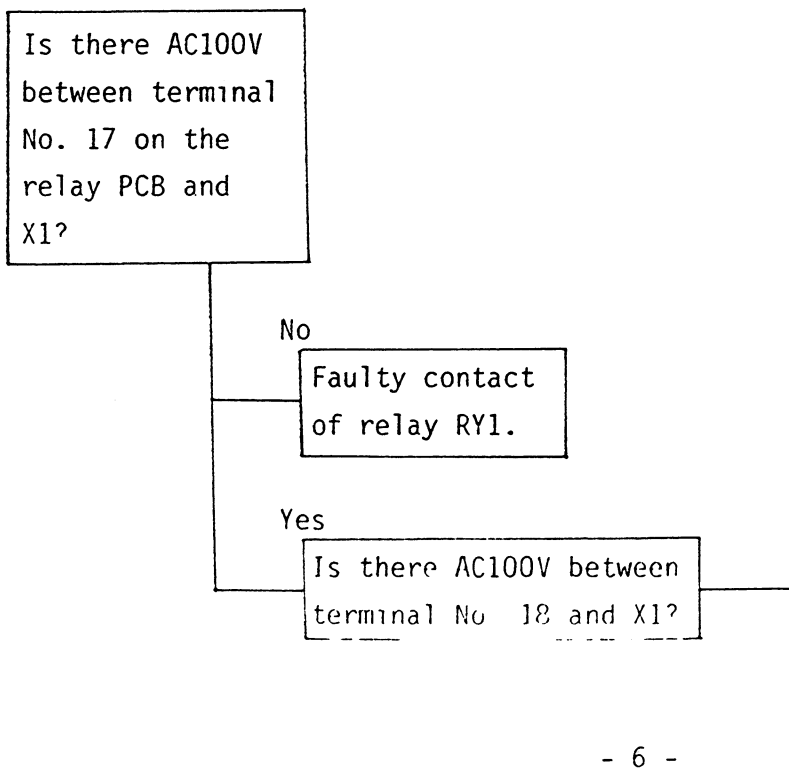
Note: Master sending motor also serves to move the manuscript tray.

Items to be confirmed: Is the Start OK PL lit?



5) Manuscript tray does not move

A) Will not move to the left when photographing.





No

1. Faulty contact between terminal No. 17 on the relay PCB and J11(7).
2. Faulty contact between J11(3) and terminal No. 18.
3. Malfunction in limit switch LS4.

Yes

Is there AC100V between terminal No. 21 and X1?

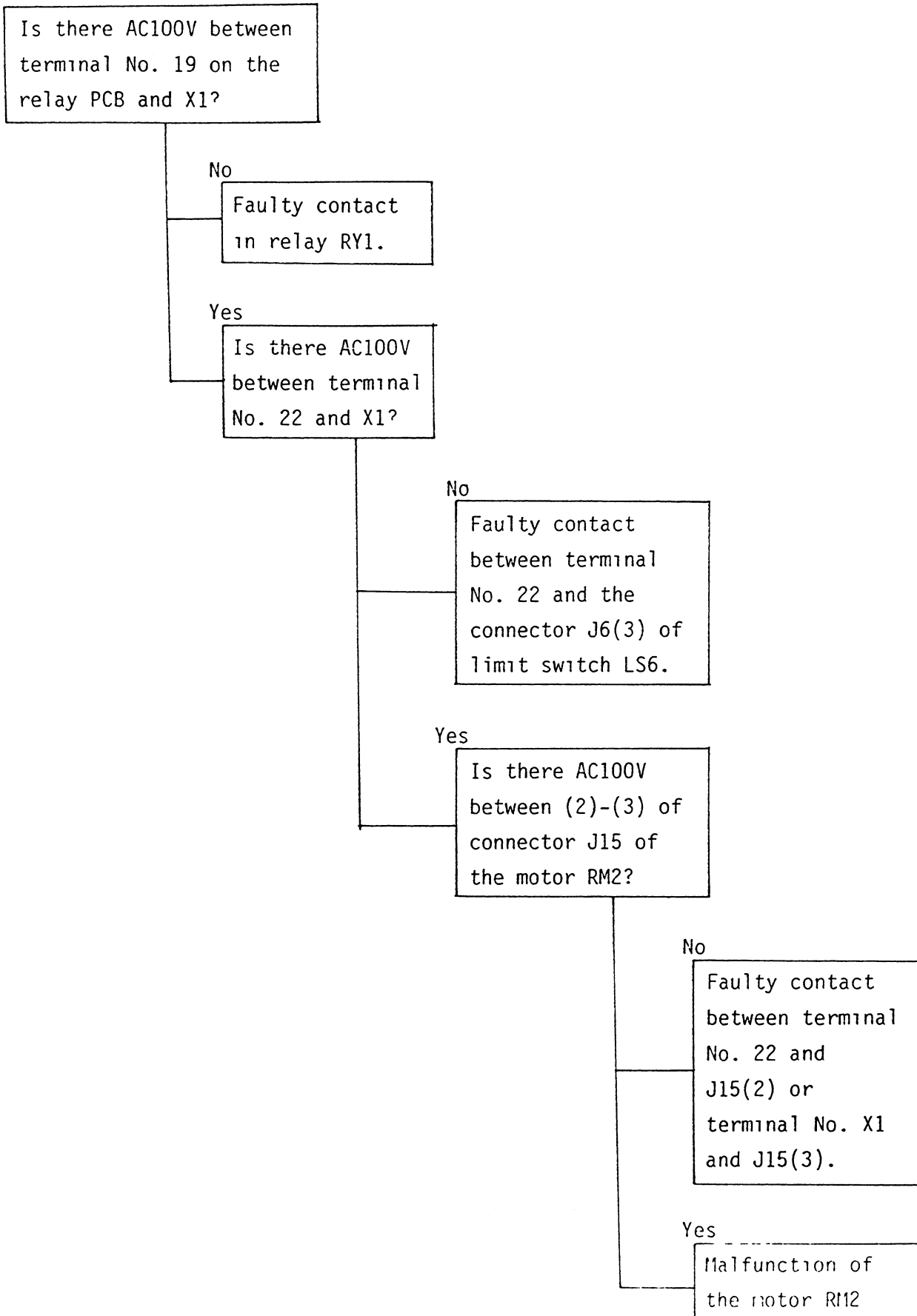
No

1. Faulty contact between terminal No. 18 and J12.
2. Faulty contact between J12(3) and terminal No. 23.
3. Malfunction of limit switch LS5.

Yes

1. Malfunction of motor RM2.
2. Faulty contact between terminal No. 21 and J15 (1) or terminal No. X7 and J15(3).
3. Faulty contact between No 21,22 condenser CM3 and terminal No 21,22

B) Will not move to the starting point (right) after photographing.

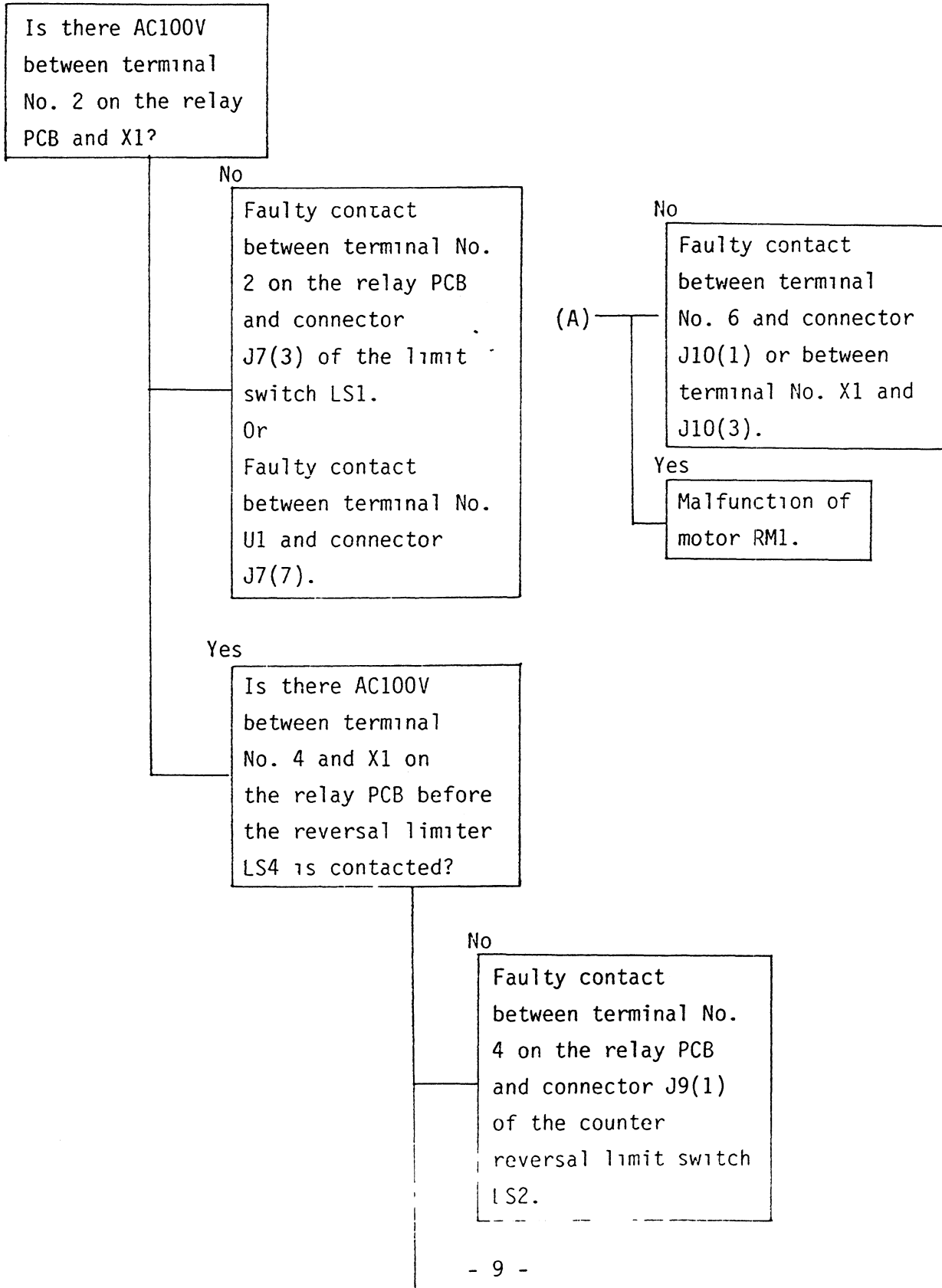


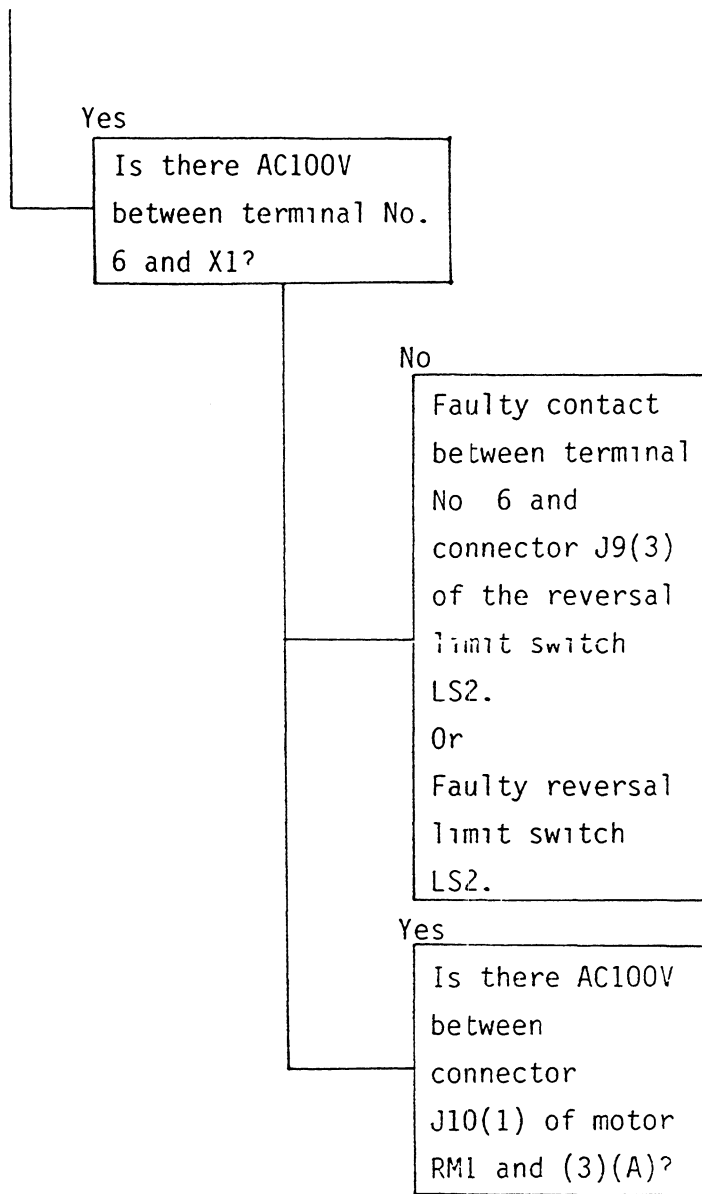
6) Master cutter does not operate.

A) Does not move in master cutter direction.

Note: Cutting will not occur at master end.

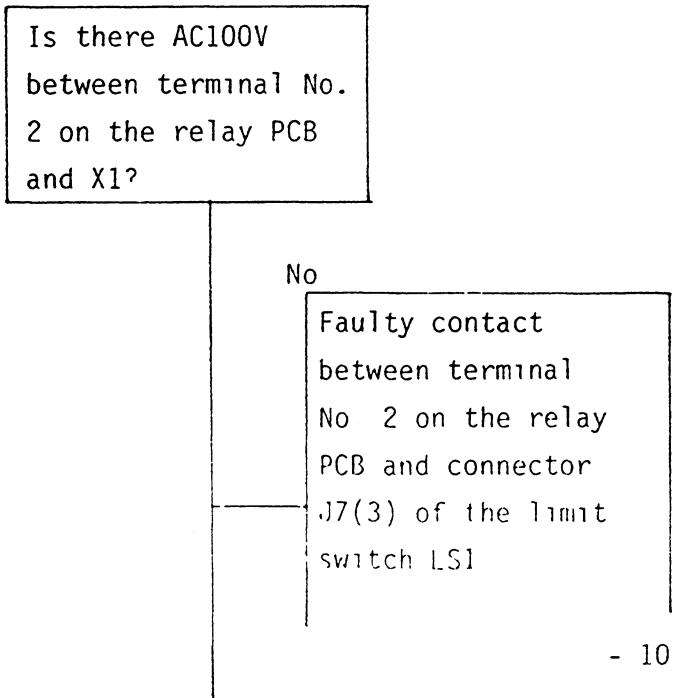
Items to be confirmed: Make sure there is no undue mechanical force applied to the cutter mechanism.





B) Will not return to cutter origin point.

Items to be confirmed: Make sure there is no undue mechanical force applied to the cutter mechanism



Or  
Faulty contact  
between terminal  
No. U1 and connector  
J7(1).

Yes

Is there AC100V  
between terminal No.  
5 on the relay PCB  
and terminal No. X1?

No

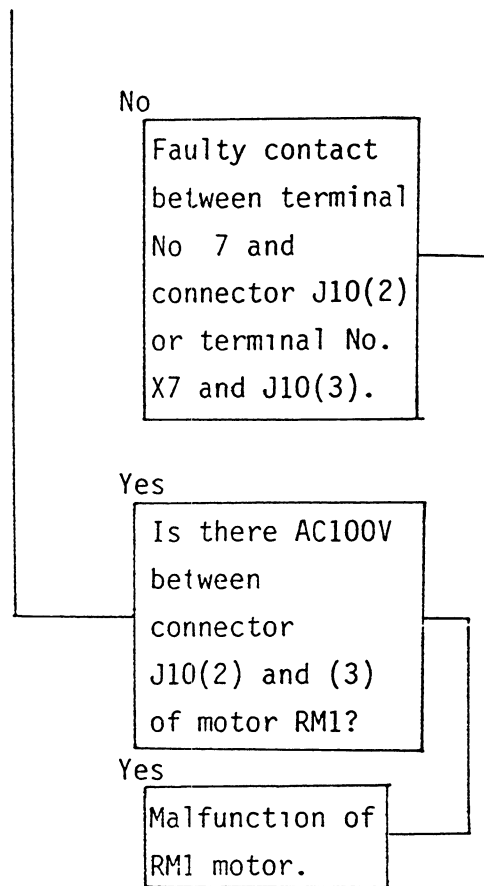
Faulty contact in  
relay RY2.

Yes

Is there AC100V  
between terminal No.  
7 and X1?

No

Faulty contact  
between terminal  
no. 7 and  
connector J8(2)  
of origin point  
limit switch  
LS3.  
Or  
Malfunction of  
origin point  
limit switch  
LS3.

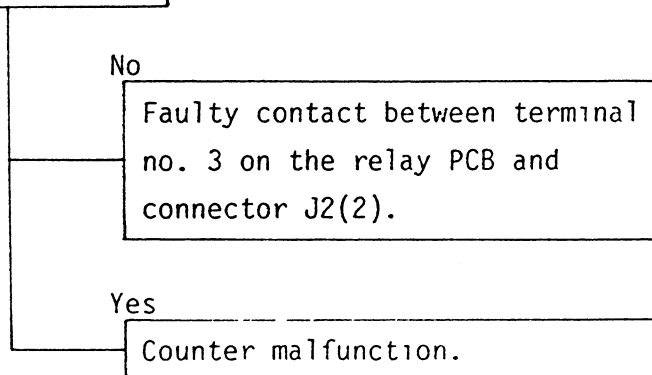


7) Counter does not operate.

When exposure ends and the cutter functions, the counter begins counting (stopping between numbers). When the cutting ends, counting ends (adding one whole number).

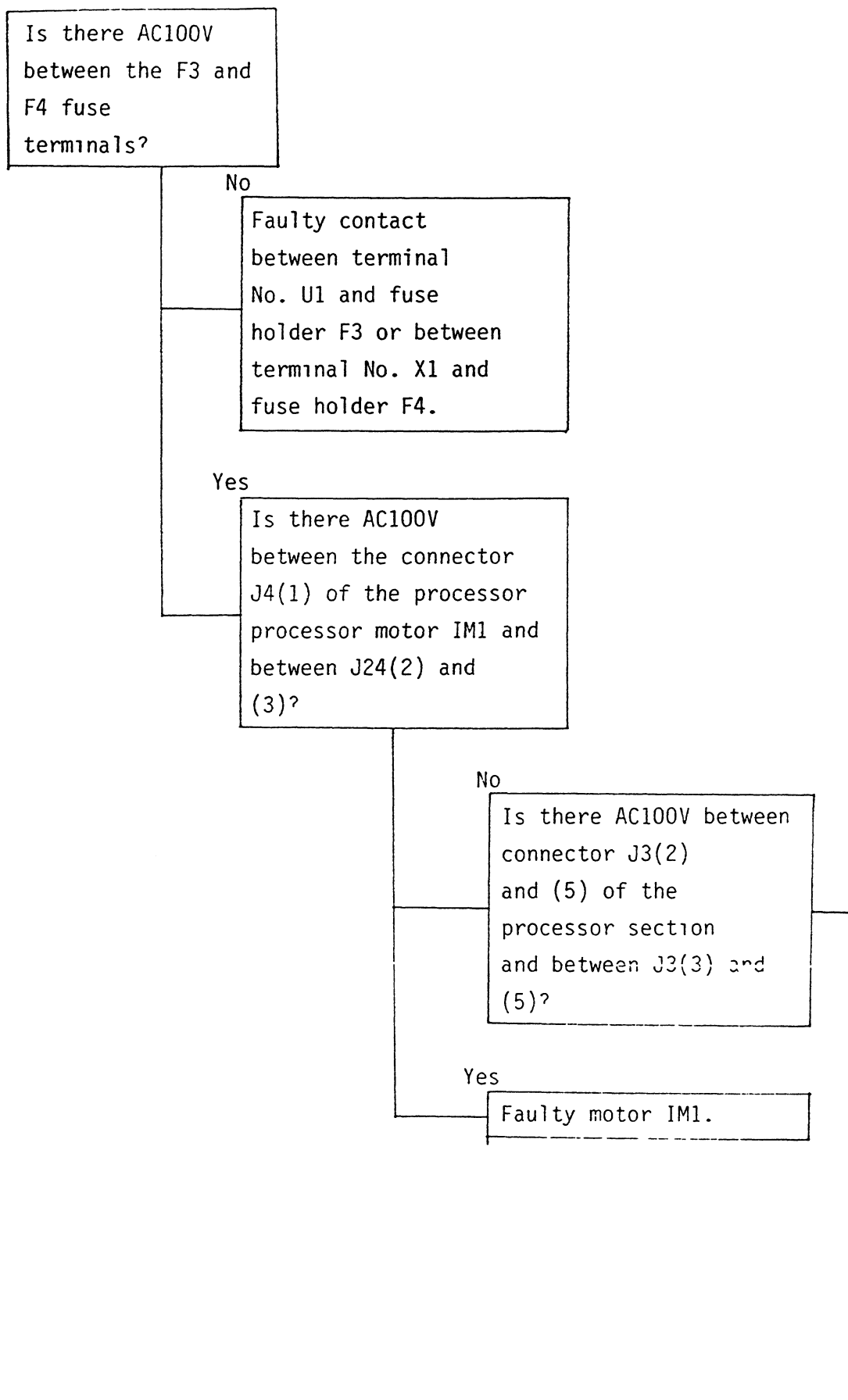
Items to be confirmed: Cutter functioning is normal.

Loosen the screws so that the inside of the control panel can be seen. Is there AC100V between (2) and (9) of connector J2?



8) Processor motor does not function.

Items to be confirmed: Have the F3,F4 1A fuses blown?



No

\*Faulty contact between terminal No. U2 and connector J3(2) and between No. U3 and J3(3).

\*Faulty contact between condenser CM1's No. U2 terminal and terminal No. U2, CM1's No. U3 terminal and terminal No. U3.

Yes

Faulty contact between connector J3(2) and J4(1), J3(3) and J4(2), J3(5) and J4(3).

9) Exhaust fan does not function.

Items to be confirmed: Have the F1,F2 5A fuses blown?

Is there AC100V between (1) and (3) of the exhaust fan connectors J13, J14?



No

Faulty contact between terminal No. U1 and (1) of connectors J13, J14 or between terminal no. X1 and (2) of connectors J13, J14.

Yes

Malfunction of exhaust fan FM1 or FM2.

10) Master end pilot lamp (PL) does not light.

Items to be confirmed: Is the actuator of the master end detector limit switch LS1 stuck?

Loosen the screws so that the inside of the control panel is visible. Is there AC100V in the conductive portion of the master end PL?

No

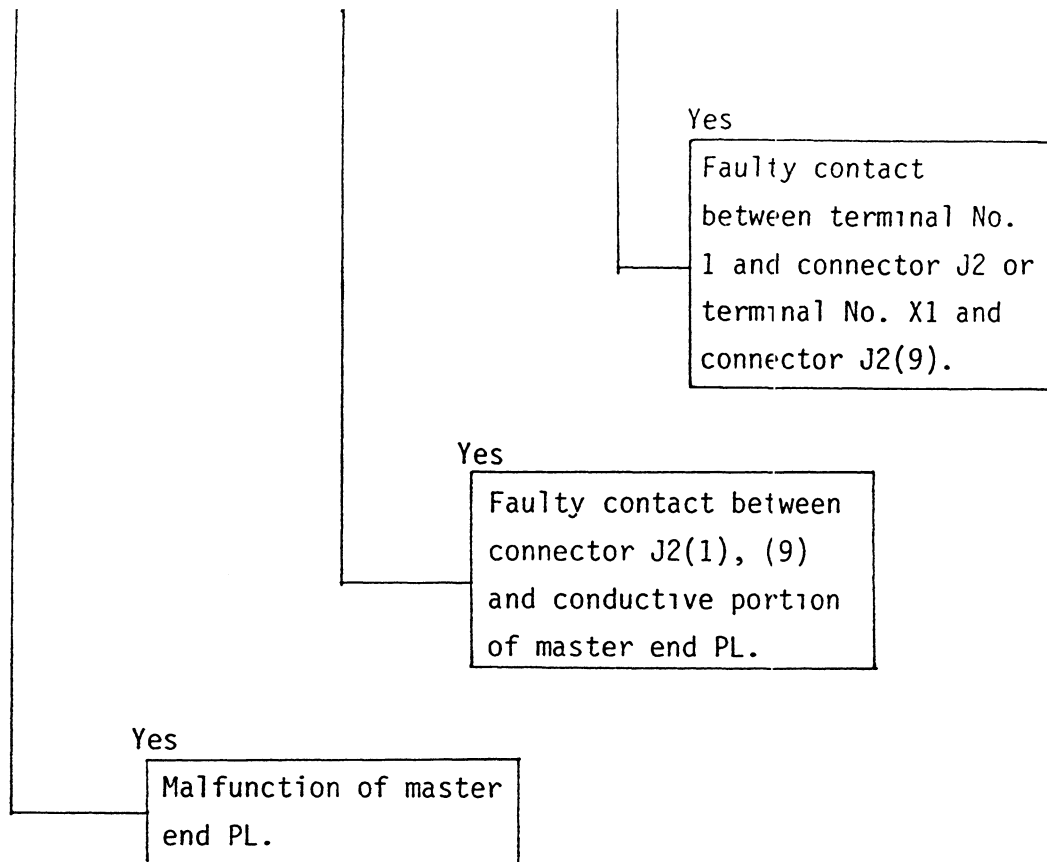
Is there AC100V between control panel connector J2(1) and (9)?

No

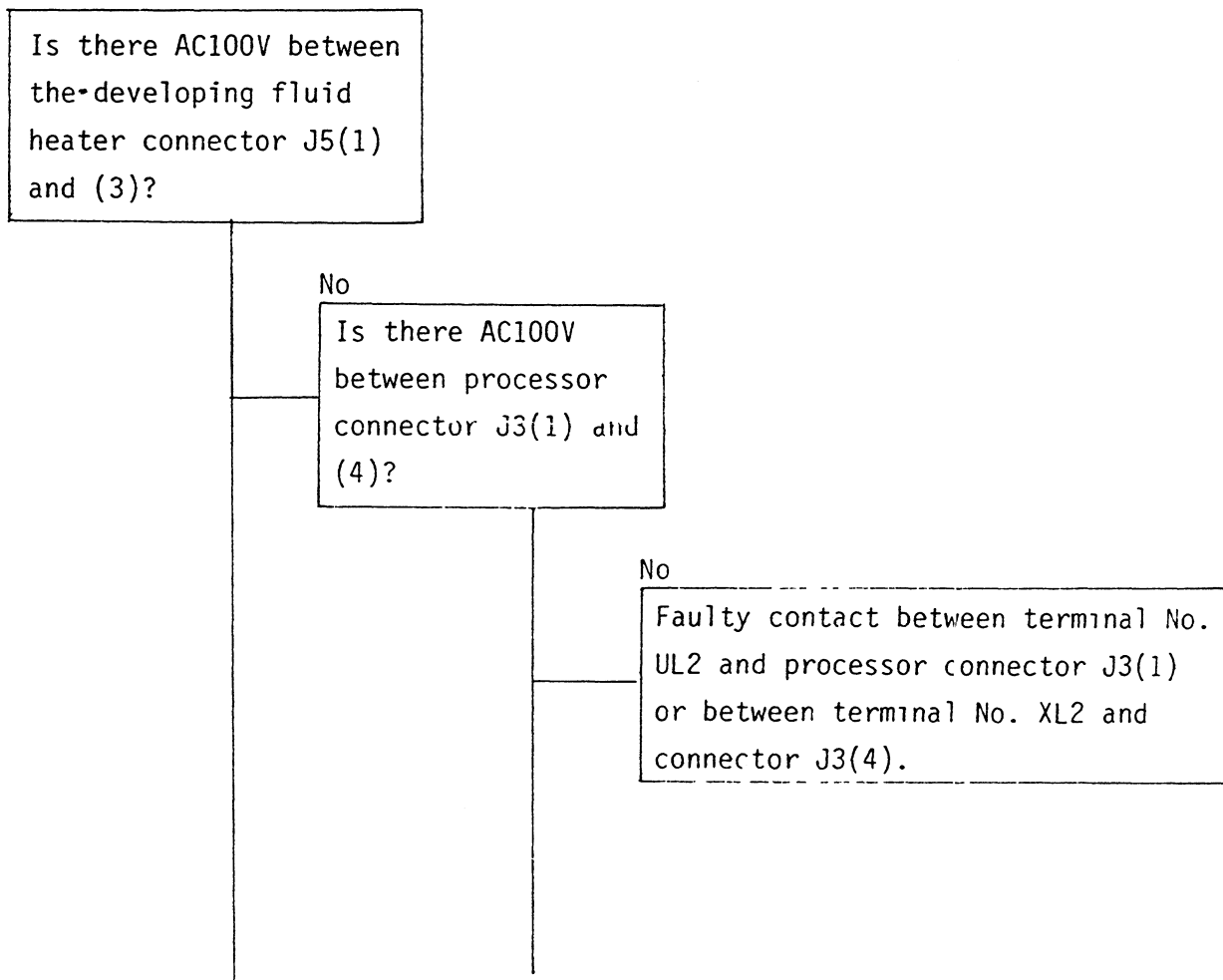
Is there AC100V between terminal No. 1 and X1?

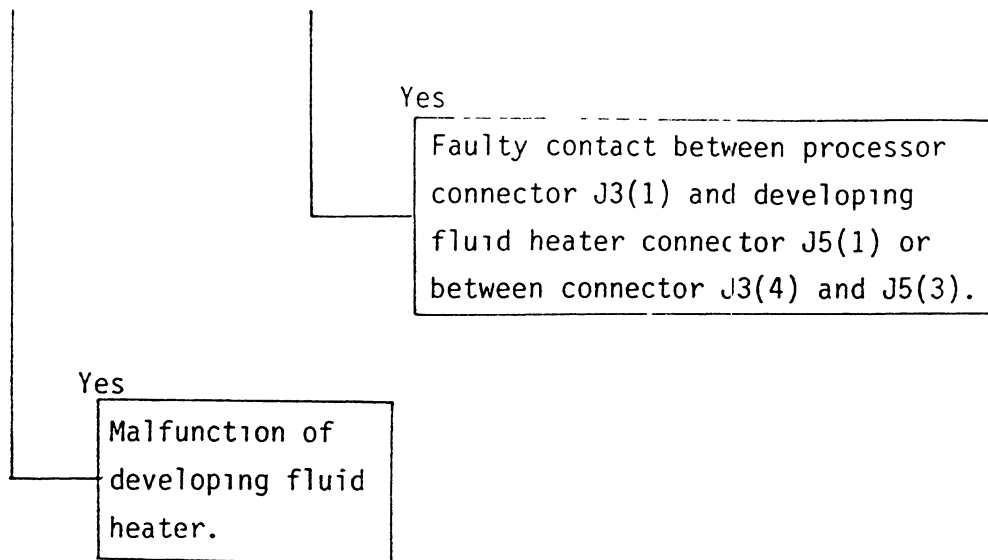
No

\*Malfunction of master end detector limit switch LS1.  
\*Faulty contact between terminal No. 1 and connector J7(2) of LS1.

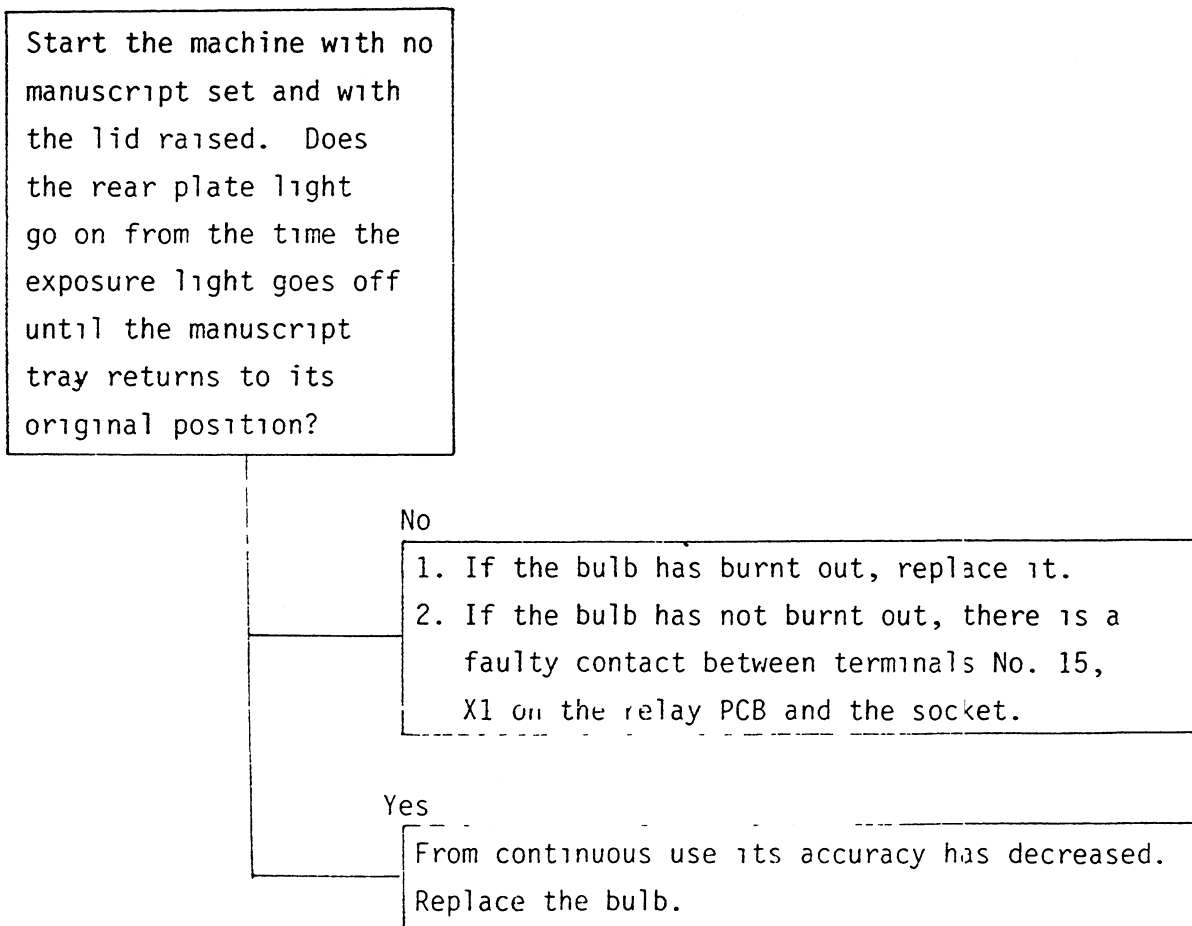


11) Developing fluid motor does not function (developing fluid temperature does not rise).





12) Rear plate light does not go on. Rear plate portion does not become solid black.



13) During use, NFB trips off.

If the NFB trips off during use, consider the following two possibilities:

1. Due to a fault in the TRIAC (located near the light adjuster PCB) which turns the exposure light source on and off, the circuit which trips the NFB to protect against bulb damage is operating.

Repair: 1. Replace TRIAC.  
2. Replace light adjuster PCB.

2. The circuit which trips the NFB as protection against damage to the manuscript tray glass due to heat caused by continuous lighting is working. (In this case, the manuscript tray will move its full length.)

Repair: 1. Due to damage or maladjustment of limit switch LS4 which shuts off the manuscript size setter and the light source, it will not move. Safety limit switch LS5 is thus actuated. Adjust limit switch LS4 or, if damaged, replace it.



