

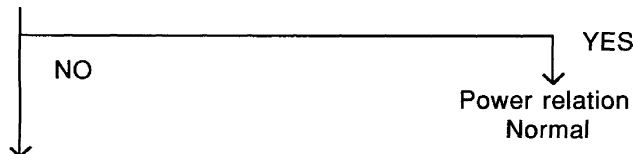
TROUBLESHOOTING

1. POWER SUPPLY TROUBLE

Power related problems will result in no picture, no high voltage output or no deflection, etc. Due to a breakdown at the PS unit or a power line short on one of the PWBs, the overcurrent protector circuit will operate or the output voltage will fall, causing abnormal operation. Therefore when trouble occurs, first check all the power related sections to determine where the problem might be before going on to check other sections.

Are the following voltages being output at the connectors on the PS DIV PWB? (Setting for VIDEO mode, no signal)

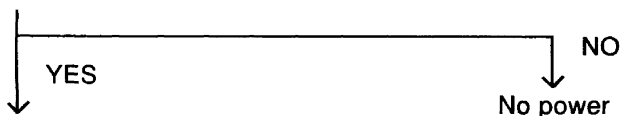
	Connector	Pin	Voltage
BASE Connectors	IA	①	Approx. 40 V
	IB	①	Approx. 8 V
	IB	⑤	Approx. 8 V
	IC	①	Approx. 180 V
	IC	②	Approx. 110 V
	IC	③	Approx. 15 V
	IC	④	Approx. -15 V
	IC	⑤	Approx. 6.3 V
	ID	①	Approx. 36 V
	ID	②	Approx. -36 V

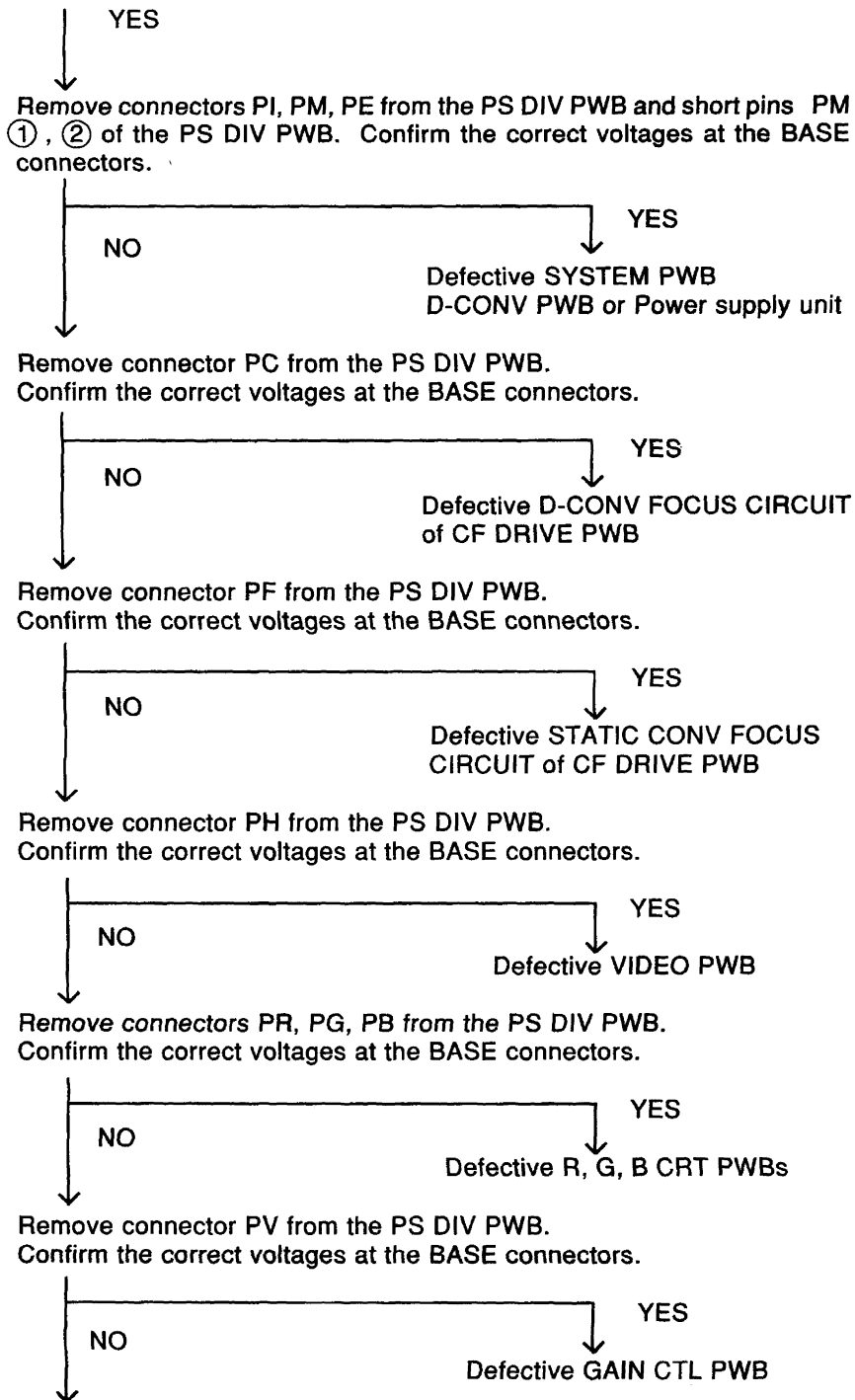


Remove connectors IE, IF and BASE connectors (IA, IB, IC and ID) from the PS DIV PWB and short connector IE. Apply the voltage which value is approx. 2.2V_{DC} to IA ② pin. Check the voltage of BASE connectors. Confirm the correct voltages at the BASE connectors.



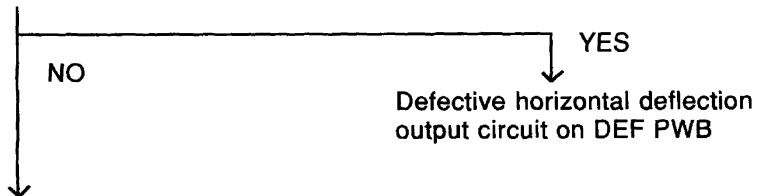
Insert connectors IE, IF and BASE connectors to the PS DIV PWB. Cut off the high voltage to protect CRT. Remove connectors KA, KB from the HV PWB. Is STAND BY LED lit when MAIN POWER SW on PS unit is turned on?



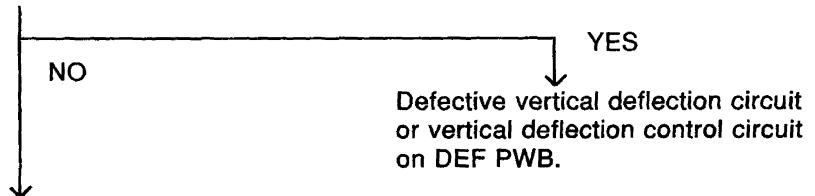


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Remove connector PA from the PS DIV PWB.
Apply the voltage approx. 2.2Vdc and confirm the correct voltages at the BASE connectors.



Remove connector PD from the PS DIV PWB.
Confirm the correct voltages at the BASE connectors.



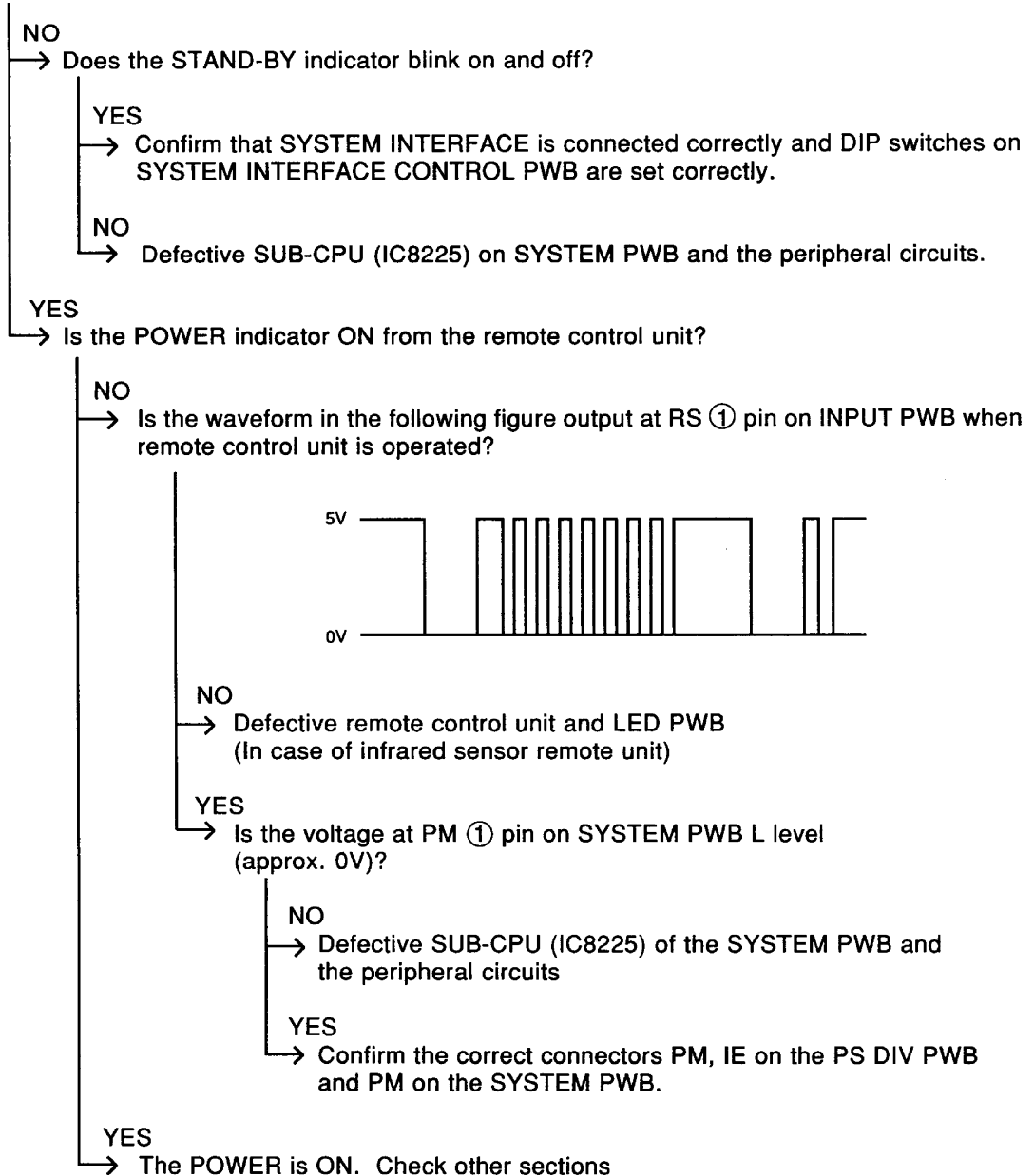
Reconnect all the connectors to the original positions.
And remove connector PK from the PS DIV PWB.
Confirm the correct voltages at the BASE connectors.



Confirm that the pattern on PS DIV PWB is not shorted.

2. NO POWER

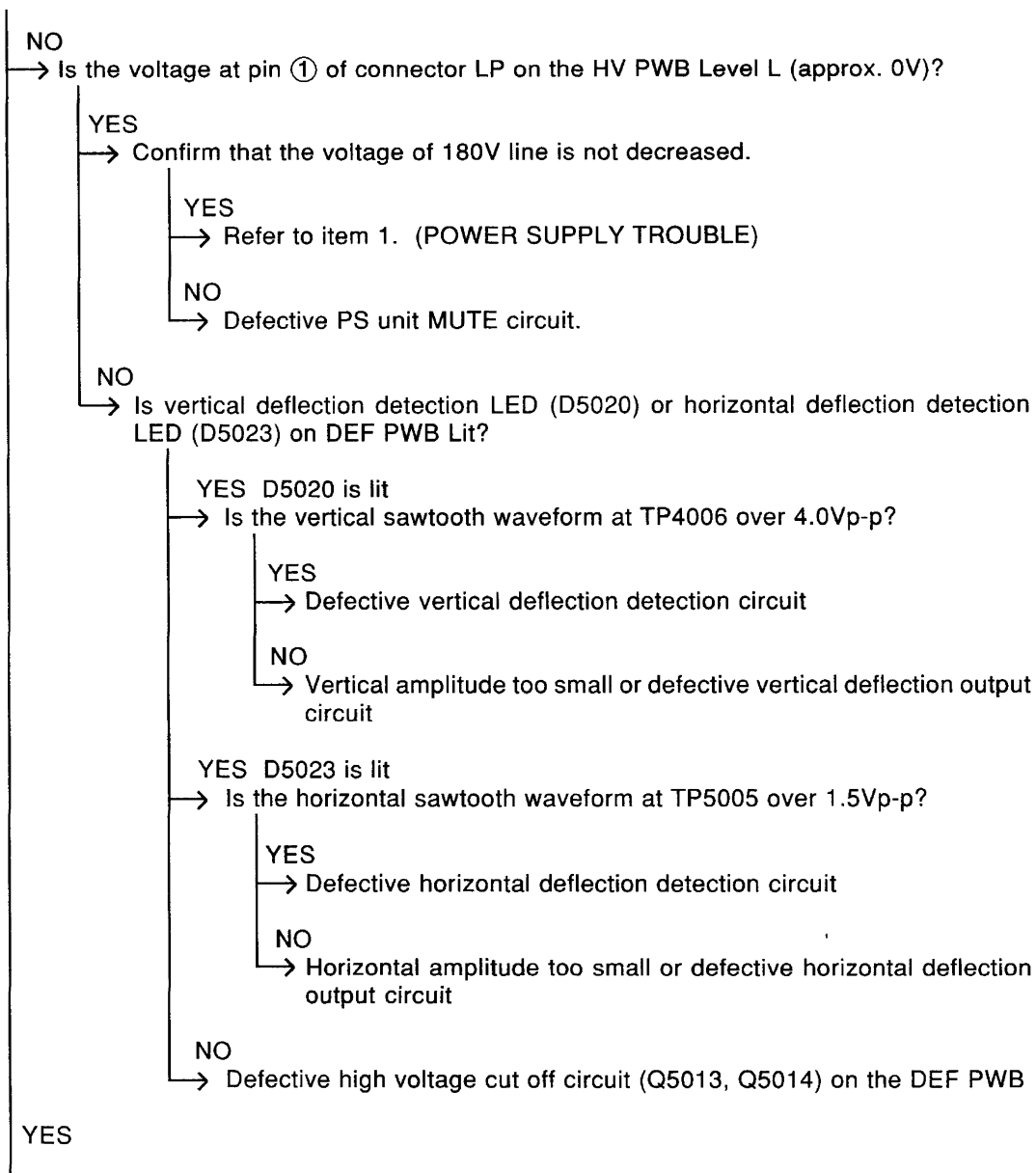
Is the STAND-BY indicator always lit?



3. NO HIGH VOLTAGE OUTPUT

The function to cut off high voltage output is provided with this projector to protect CRT when horizontal and vertical deflections are not output. Note that high voltage output is also cut off when the high voltage is abnormally increased.

Is the voltage at pin ① of IC5501 on the HV PWB Level L (approx. 0V)?



YES

→ Is the high voltage drive pulse at pins ①⑨ and ②⑩ of IC5501 on HV PWB approx. 6.4Vp-p?

YES

→ Defective voltage output circuit (Q5503, 5504, 5505, 5506, etc.) or F.B.T.

NO

→ Defective high voltage control circuit (IC5501, HV PROTECTOR etc.) on HV PWB.

4. HIGH VOLTAGE OUTPUT BUT NO PICTURE

Is there a picture at R, G, or B CRT?

YES

NO

Is the voltage at pin ⑤ of connector BK on the GAIN CTL PWB over 10V?

YES

NO

Defective HV PWB High voltage control circuit (IC5501 etc.)

Does the voltage at BC connector on the GAIN CTL PWB change from -3V to +3V when CONTRAST control is turned from MAX to MIN?

YES

NO

Is the "ON SCREEN" correctly displayed?

YES

NO

Defective SYSTEM PWB

Defective LEVEL CONTROL circuit on the SYSTEM PWB

Set CONTRAST to maximum.

Is the voltage at pin ⑭ of IC7101 on the GAIN CTL PWB approx. 10V?

YES

NO

Defective LIMITER circuit on the GAIN CTL PWB
(Q7101, 7102, 7103 etc.)

Is there a horizontal clamp pulse (approx. 5Vp-p) at pin ⑬ of IC7306 on the GAIN CTL PWB?

YES

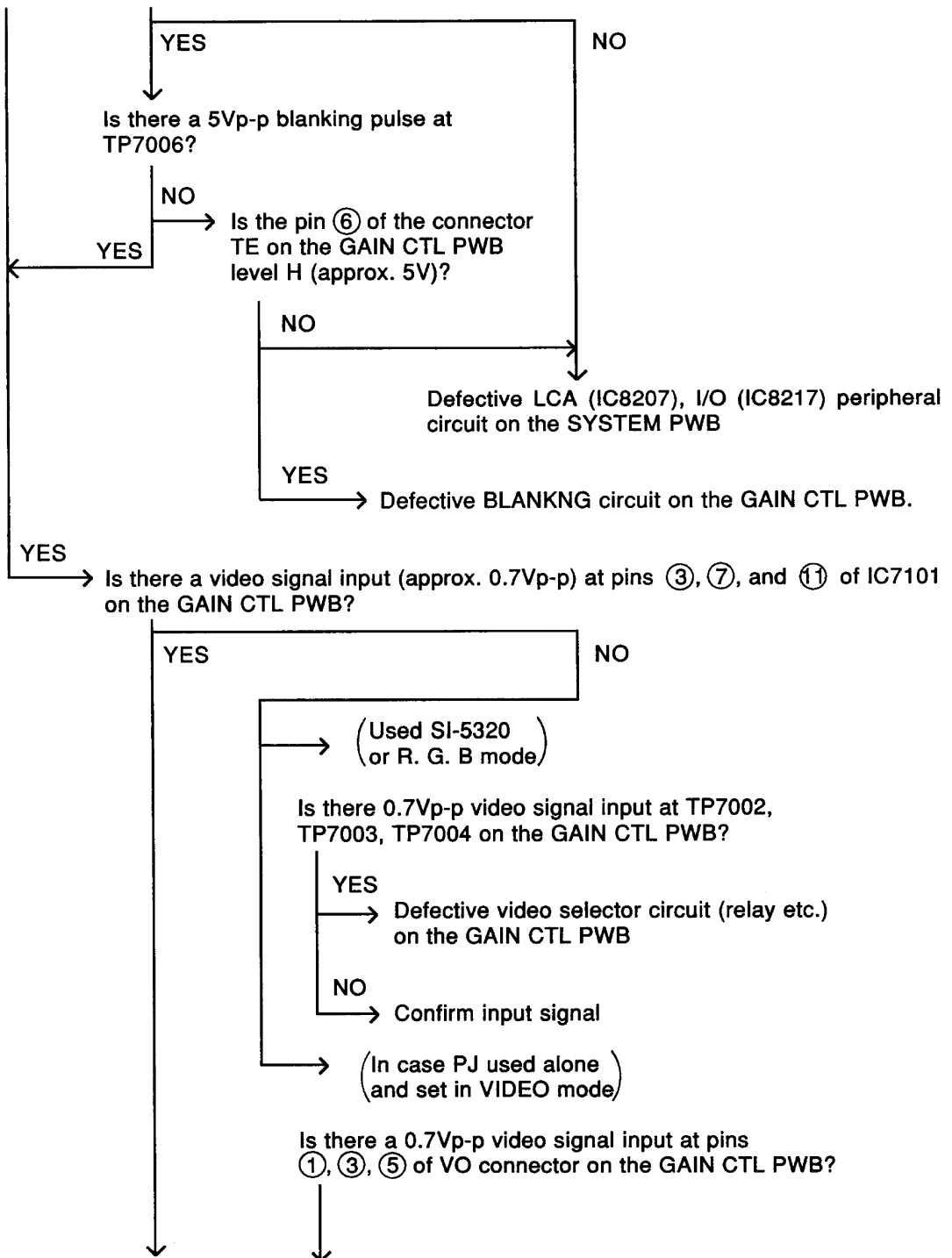
NO

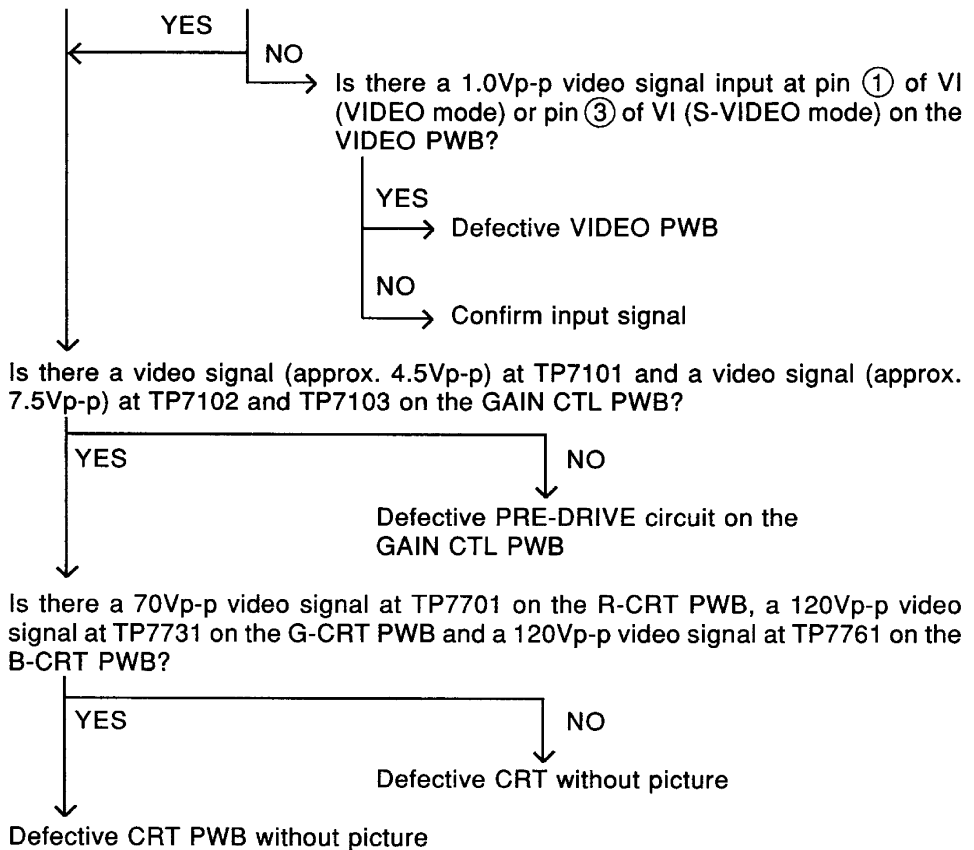
Defective SYNC circuit

Is the voltage at ⑨, ⑩, ⑪ pins of connector BC on the GAIN CTL PWB approx. 5V?

YES

NO





5. NO TEST SIGNAL

Is the signal waveform at pin ② of connector TE approx. 5Vp-p?

YES

NO

Defective LCA (IC8207, IC8269) on the SYSTEM PWB and PLL circuit.

Is the signal waveform at emitter of Q7009 approx. 0.7Vp-p?

YES

NO

Defective TEST signal circuit (IC7001, Q7008, Q7009 etc.)

Is the voltage at pins ⑨, ⑩, ⑪ of connector BC on the GAIN CTL PWB Level H (approx. 5V)?

NO

YES

Refer to item 4 (HIGH VOLTAGE OUTPUT BUT NO PICTURE)

Confirm that R. G. B MUTE signal from Remote Control Unit.

Is the voltage at pins ⑨, ⑩, ⑪ of connector BC Level H (approx. 5V)?

And confirm the TEST signal is output.

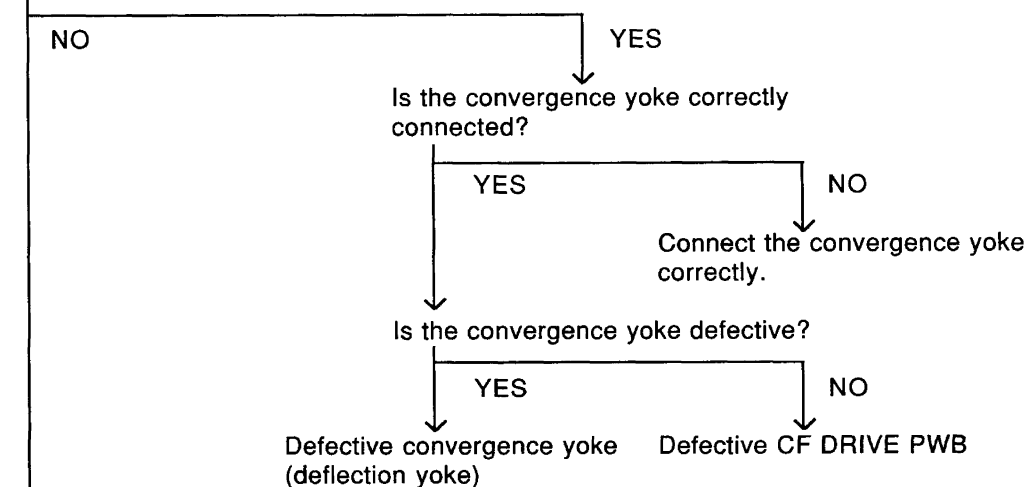
NO

Defective LCA (IC8207), I/O (IC8217) peripheral circuit on the SYSTEM PWB.

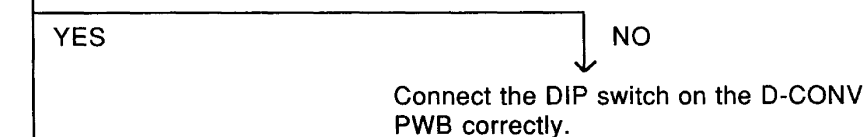
6. NO CONVERGENCE OPERATION

Confirm the convergence adjustment according to the owner's manual.

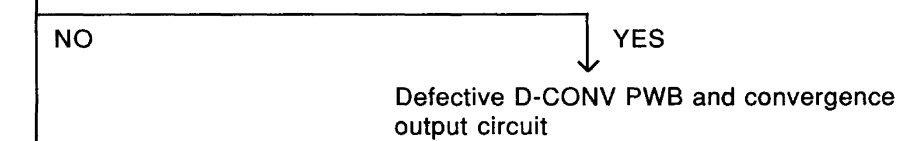
Is there a waveform at TP8001, 8002, 8003, 8004, 8005, 8006 on the CF DRIVE PWB approx. 6Vp-p?



Is the DIP switch (S8501) on the D-CONV PWB normally setting?



Is there a waveform at pins ①, ②, ③, ⑤, ⑫, ⑬ of IC8591 and IC8592 on the D-CONV PWB approx. 6Vp-p?



Is there approx. 5Vp-p at the following pins:

1 through 4, 9 through 16, 23 and 24 of IC8538, IC8547, IC8557, IC8567, IC8577 and IC8587 on the D-CONV PWB?

