

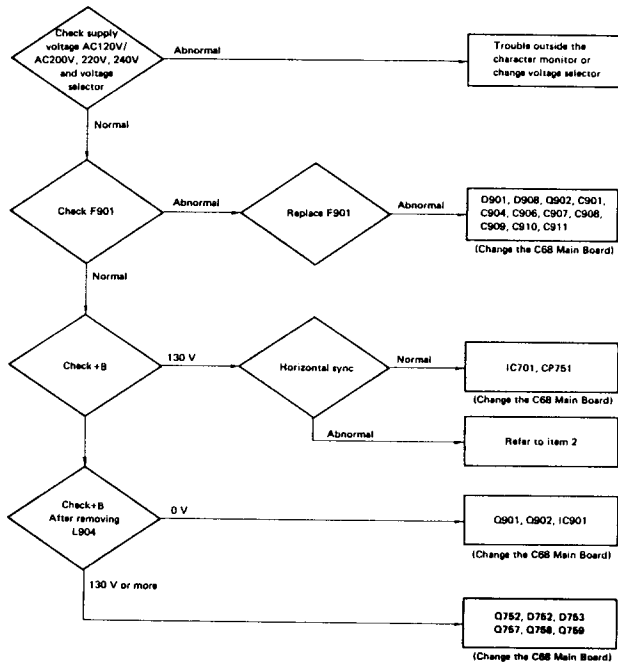
**C-68 CHASSIS.
CM-1686A1EX.
CM-1686A3EW.
No. 0019E.**



TROUBLESHOOTING

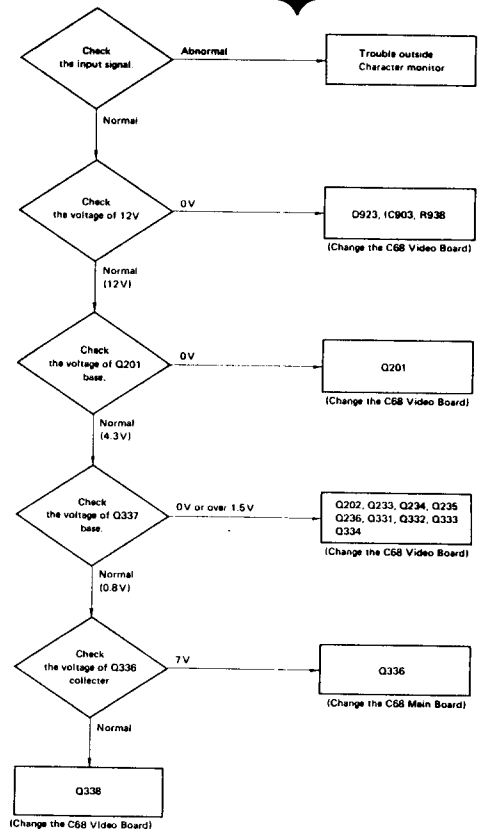
1. RASTER DOES NOT APPEAR

Relevant circuits: Power circuit, Horizontal deflection circuit, High voltage limiter circuit



5. COLOR DOES NOT APPEAR

Relevant circuit: Video amplifier circuit



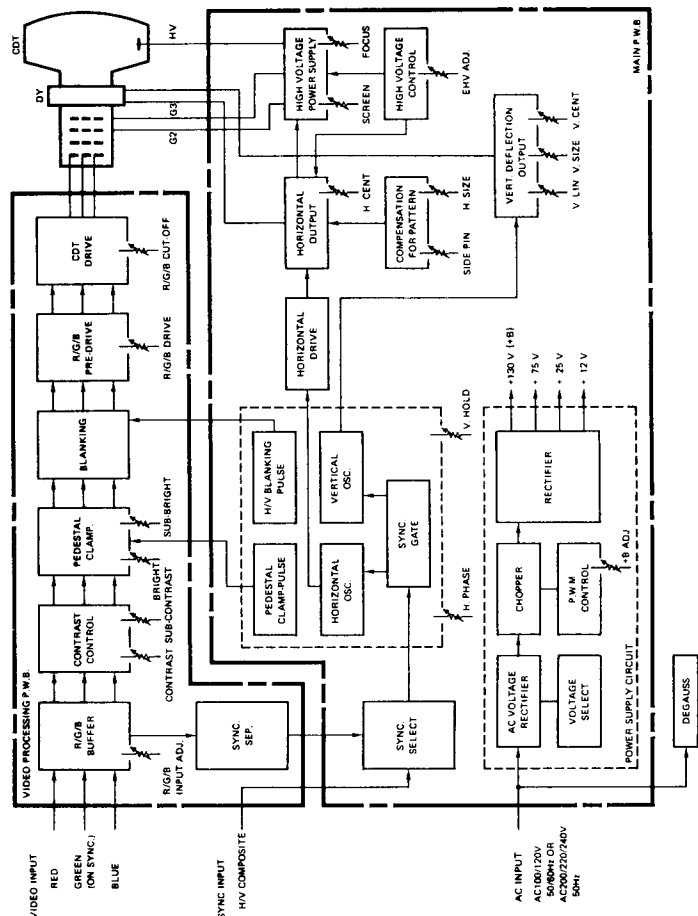
Note: Trouble in the red circuit is shown in this diagram as representative color. Refer to: when green does not appear, and when blue does not appear.

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8 Cherry Tree Road, Chinnor
Oxfordshire, OX9 4QY.
Tel (01844) 351694
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Adjustment shown below is required when signals other than the recommended signal are received.

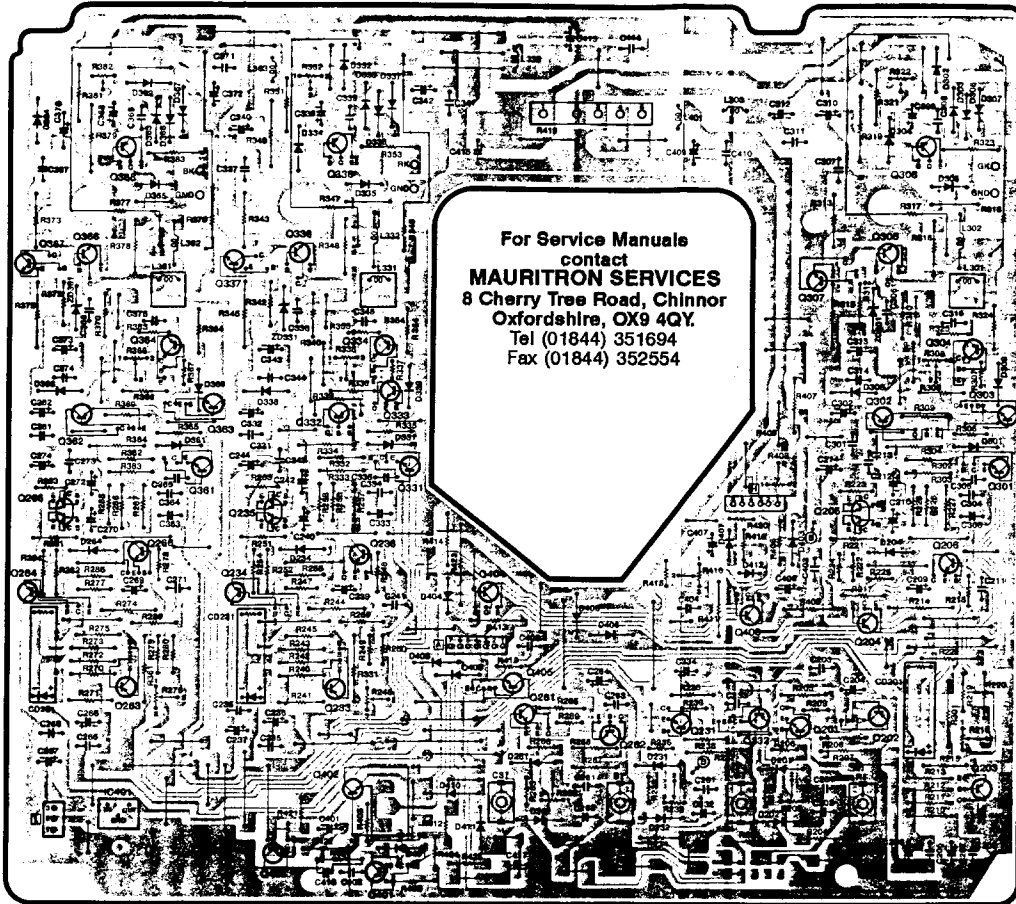
Condition	Position to be adjusted	Condition	Position to be adjusted
Picture too wide 	Adjust H Size R772	Picture too narrow 	Adjust H Size R772
Picture shortened vertically 	Adjust V Size R615	Picture stretched vertically. 	Adjust V Size R615
Picture deviated to the right 	Adjust H phase R703 (Adjust H center position R789)	Picture deviated to the left 	Adjust H phase R703 (Adjust H center position R789)
Picture deviated upward 	Adjust V center position R605	Picture deviated downward 	Adjust V center position R605
Picture has horizontal stripes 	Adjust H Hold R722	Picture rolls vertically 	Adjust V Hold R602

Table-2

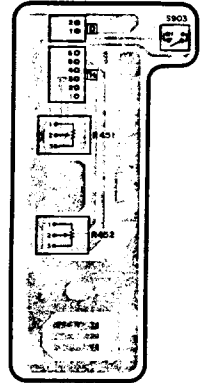


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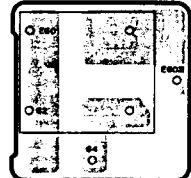
VIDEO P.W.B.



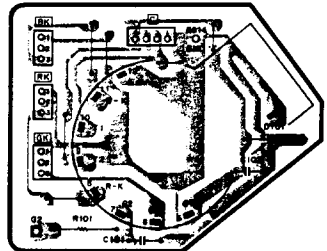
CONTROL P.W.B.



AC INLET P.W.B.



CDT P.W.B.



trouble outside
character monitor

23, IC803, R936
the C68 Video Board)

Q201
the C68 Video Board)

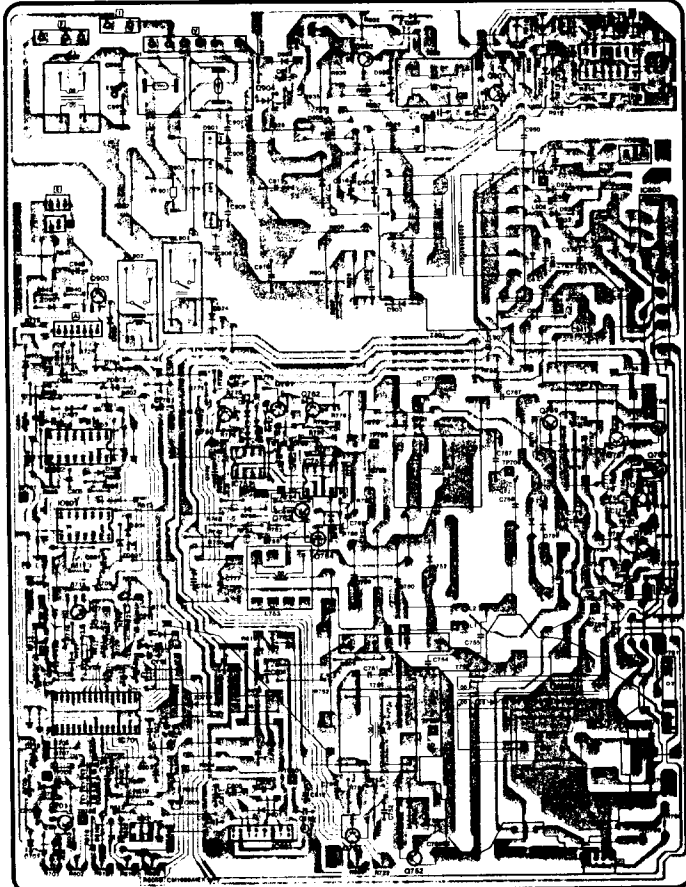
Q233, Q234, Q235
Q331, Q332, Q333
the C68 Video Board)

Q336
the C68 Main Board)

entative color.
not appear.

MAIN P.W.B.

MAIN P.W.B.



POWER SUPPLY CIRCUIT
18 ADJ.
CONTROL
SELECT
DEGAUSS

ADJUSTMENTS

1. Horizontal/Vertical sync. adjustment

- (1) Monitor a pattern.
- (2) Remove the sync input signal.
- (3) Adjust R722 (H. HOLD) so that the picture nearly stops rolling horizontally.
- (4) Turn R602 (V. HOLD) to adjust to become the center of the vertical sync holding range.

2. Other adjustment

- Receive a cross-hatch test signal
- (1) Adjust vertical linearity to its best using the V. LIN VR (R614).
 - (2) Adjust the vertical amplitude to 270 mm using the V. SIZE VR (R615).
 - (3) Adjust the vertical position of the picture to the center of the CDT using the V. CENT VR (R605).
 - (4) Apply marking in the center position of screen VR (T752), next turn the screen VR counterclockwise to appear back raster. Adjust the H. CENT VR (R789) so that the center of back raster is positioned 1 mm to the center of the CDT. Then, return the screen VR to its original position.
 - (5) Adjust the H. PHASE VR (R703) so that the horizontal picture position is roughly at the center of the CDT.
 - (6) Adjust the SIDE PIN VR (R620) so that the pin-cushion distortion on the left and right side of the picture is minimum.

3. Focus adjustment

- (1) Receive the white "E" signal of characters.
- (2) Adjust the focus VR so that the characters all over the screen are clear (with a signal green color).
- (3) Check the focus characteristics of signal red color and signal blue color in the same way as in item (2). When the characteristics for either of the colors are incorrect, re-adjust focus.

4. White balance adjustment (Back ground)

- Special adjusting tool is provided for turning VRs on the current board inside of the shielded case.
- (1) Ensure monitor has warmed up for at least 60 minutes.
 - (2) Set user contrast control at maximum and user brightness control at mechanical center.
 - (3) Receive no monitor signal but sync. signal ... Black monitor.
 - (4) Turn the SCREEN VR 10° to clockwise.
 - (5) Turn three BKG VRs fully counterclockwise.
 - (6) Set the SUB BRIGHTNESS VR at the mechanical center.
 - (7) Set the S601 to service side.
 - (8) Turn three BKG VRs clockwise to set them just before three colors appear as horizontal single line.
 - (9) Set the SCREEN VE at the first position (V screen ≈ 600 ± 10V).
 - (10) Set the S601 to normal side.
 - (11) Put all white signal.
 - (12) Set the user contrast control at minimum.

5. White balance adjustment

- (1) Receive all white signal.
- (2) Turn the user brightness control fully clockwise.
- (3) Turn the user contrast control so that the brightness is 28 ± 1 ft-L.
- (4) Adjust high light white balance by DRIVE VRs.
- (5) Turn the user contrast control to counter clockwise so that the screen is dark (≈ 3 ft-L).
- (6) Adjust BKG VRs to obtain low light white and high light white.

6. Sub-brightness adjustment

- (1) Set user contrast control at maximum and user brightness control at maximum.
- (2) Receive a stairstep signal.
- (3) Adjust SUB-BRIGHTNESS VR R416 so that the first black step just disappear.

7. Sub-contrast adjustment

- (1) Set user contrast control at maximum and user brightness control maximum.
- (2) Adjust SUB-CONTRAST VR R408 not to saturate the white characters.

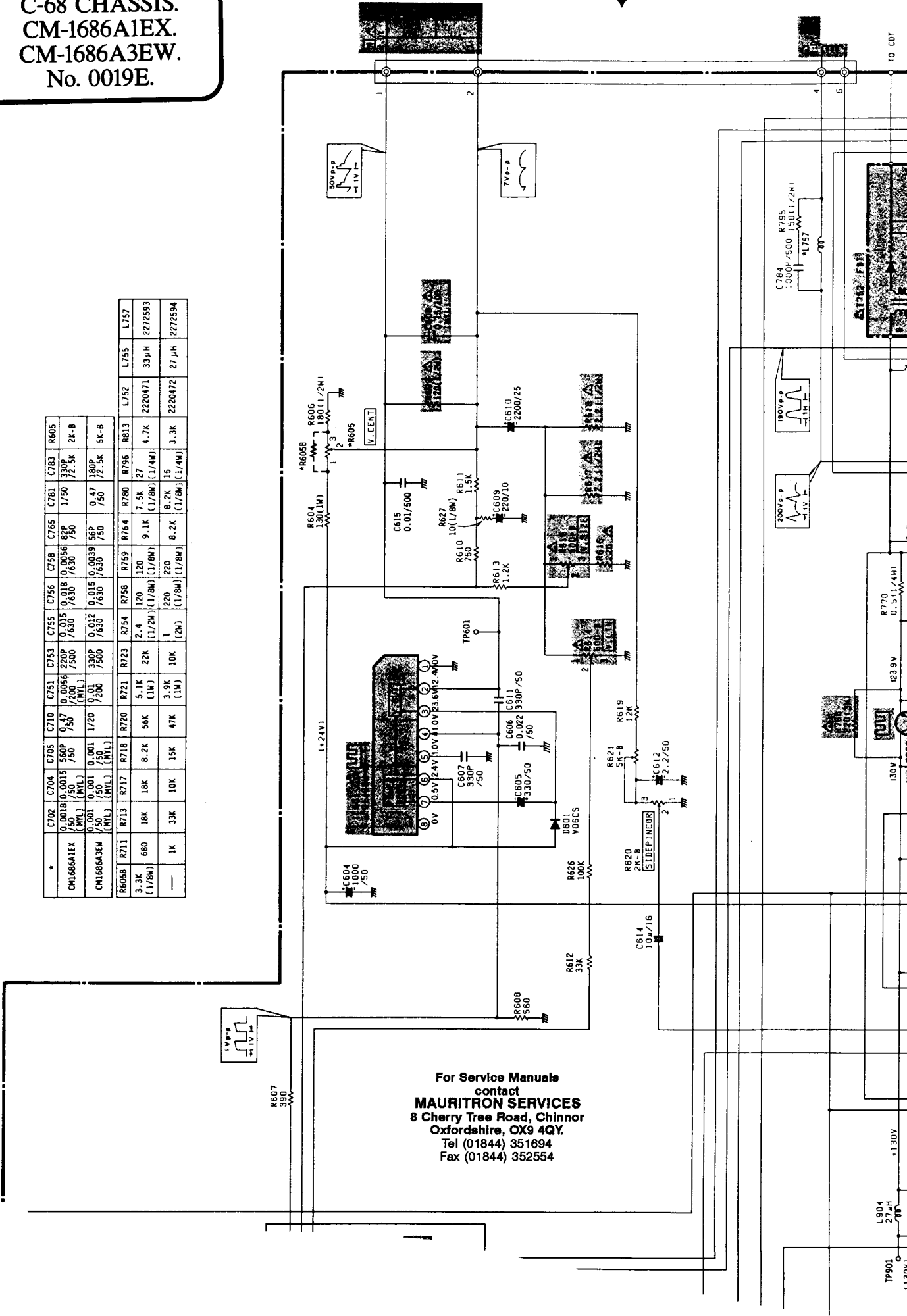
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75

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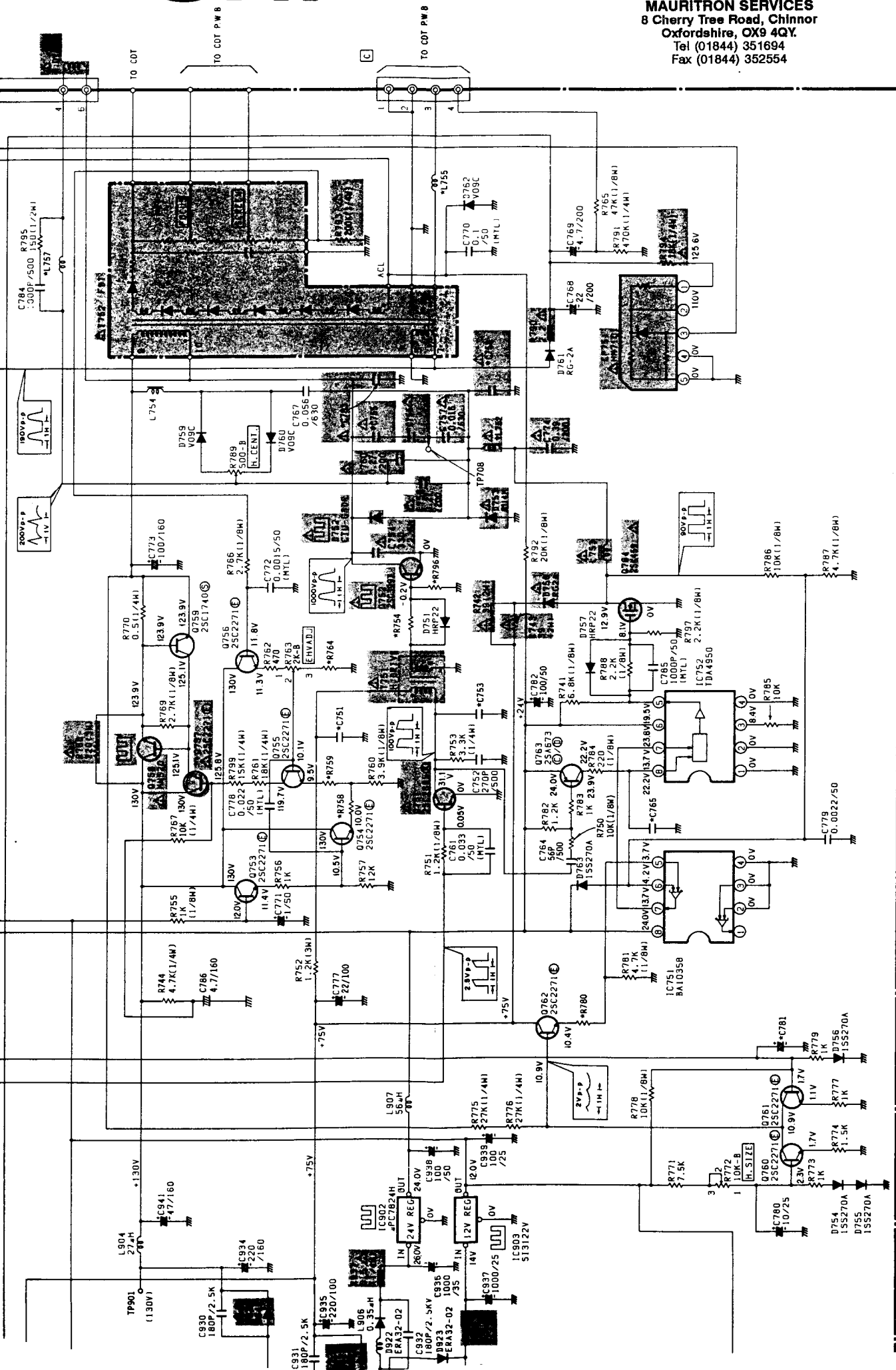
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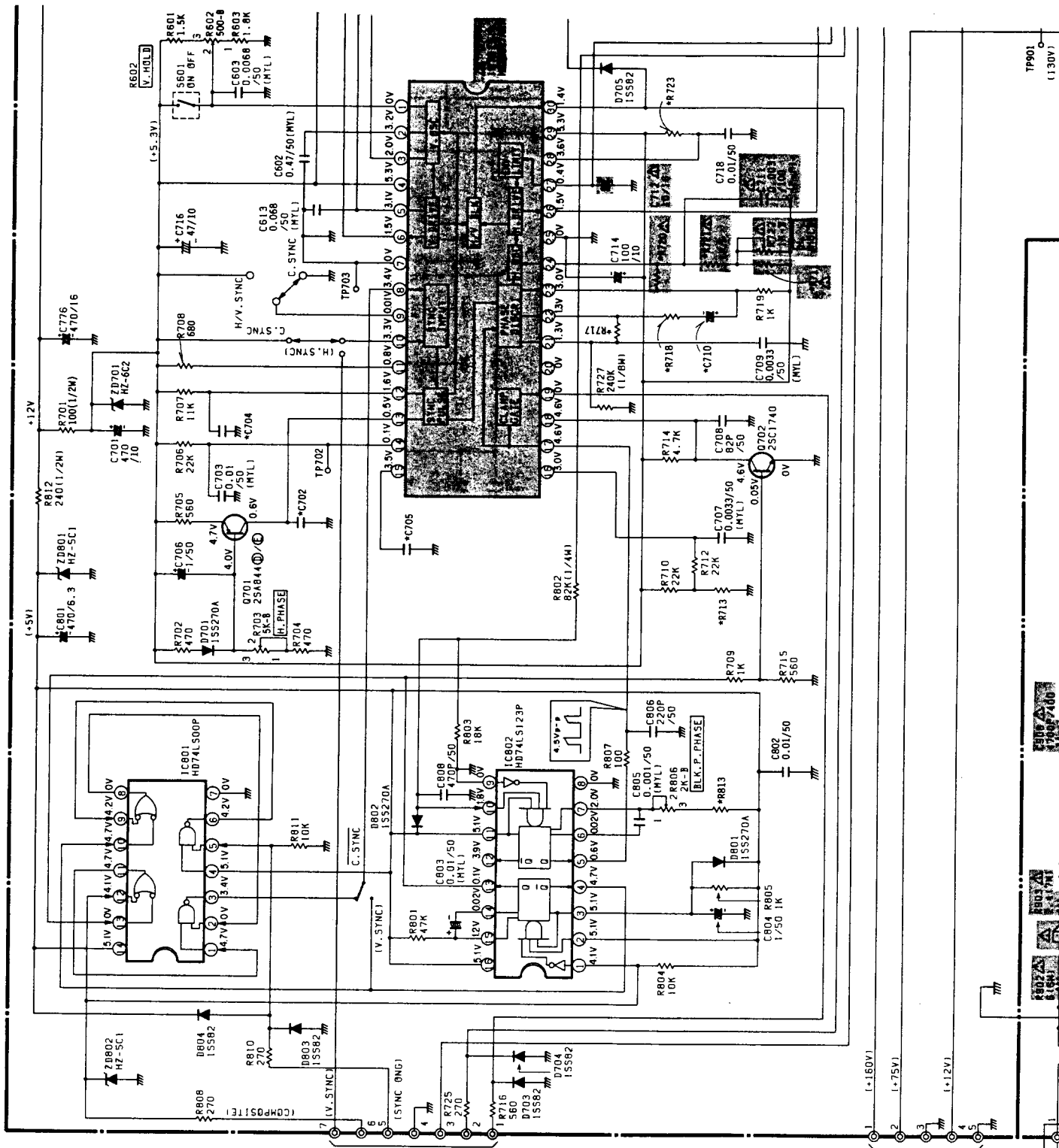
*	C702	C704	C705	C710	C753	C755	C756	C758	C765	C781	C783	R605	
	0.0018 (MYL)	0.0015 (MYL)	560P (MYL)	0.47 (MYL)	0.0056 (MYL)	0.015 (MYL)	0.018 (MYL)	0.0056 (MYL)	82P (MYL)	1/50	320P (MYL)	2K-B	
	/50	/50	/50	/50	/200	/630	/630	/630	/50	/50	7.25K		
	0.001 (MYL)	0.001 (MYL)	0.001 (MYL)	0.001 (MYL)	330P (MYL)	0.012 (MYL)	0.015 (MYL)	0.0039 (MYL)	56P (MYL)	0.47 (MYL)	180P (MYL)	5K-B	
	/50	/50	/50	/50	/500	/630	/630	/630	/50	/50			
	1K	18K	18K	8.2K	5.1K	22K	2.4	120	120	7.5K	27	L757	
	3.3K	18K	18K	8.2K	5.1K	22K	2.4	120	120	7.5K	27	33µH	
	(1/8W)	(1/8W)	(1/8W)	(1/8W)	(1/8W)	(1/8W)	(1/8W)	(1/8W)	(1/8W)	(1/8W)	(1/8W)	4.7K	2272593
	---	1K	33K	10K	15K	47K	1	220	220	8.2K	15	3.3K	2220472
													27 µH
													2272594



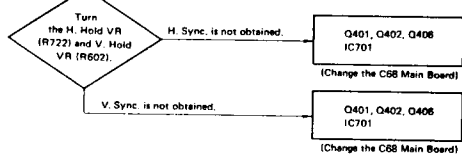
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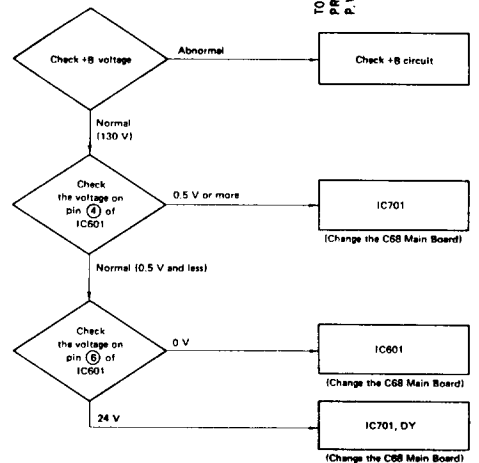
2. SYNCHRONIZATION IS NOT OBTAINED
 Relevant circuit: Sync. input circuit, IC701



3. SINGLE VERTICAL LINE
 Relevant circuit: Horizontal output circuit

DY fault, Q752, D752, D753

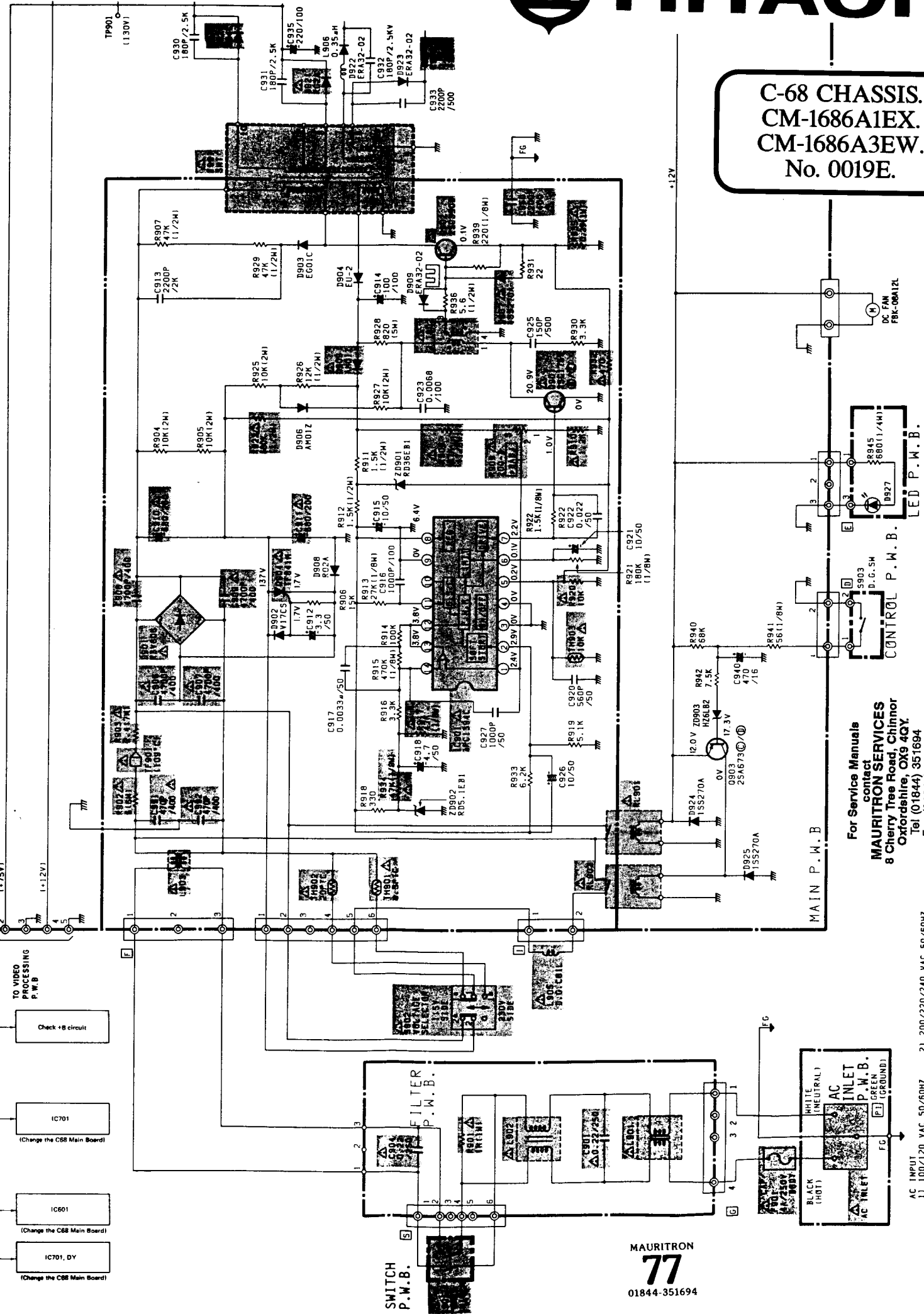
4. HORIZONTAL SINGLE LINE
 Relevant circuit: Vertical deflection circuit





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TO VIDEO PROCESSING P.W.B.
 Check +8 circuit

IC701
(Change the C68 Main Board)

IC601
(Change the C68 Main Board)

IC701_DY
(Change the C68 Main Board)

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AC INPUT
 11 100/120 VAC 50/60HZ
 AT 115VAC SIDE

21 200/220/240 VAC 50/60HZ
 AT 230 VAC SIDE