

# TV5-303M

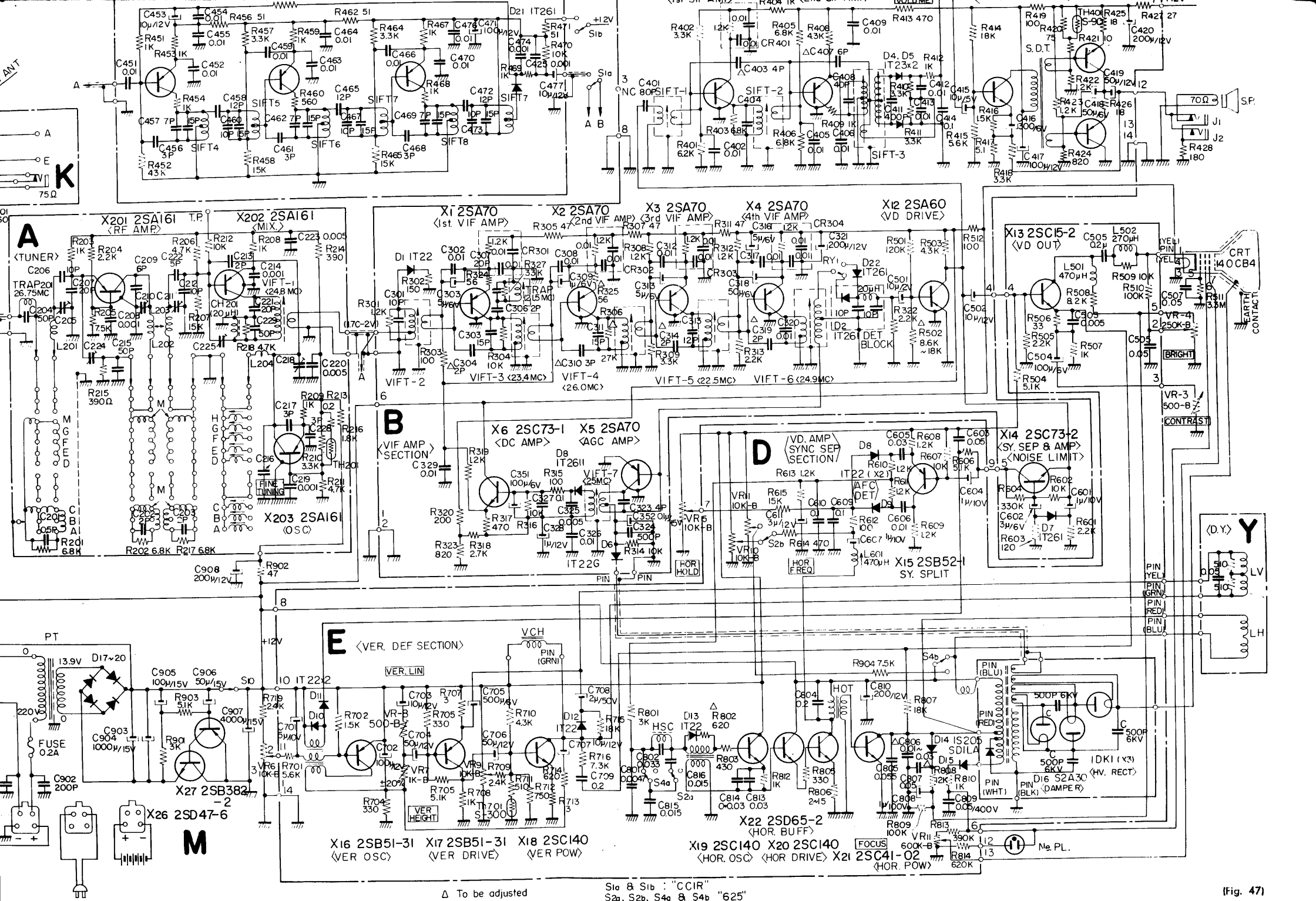


## Specifications

<b>Picture Tube :</b>	5", 70° Deflection, Aluminized Screen		
<b>Transistor :</b>	30 (6 Silicon-including 3 Epitaxial, 24 Germanium)		
<b>Diode :</b>	22 (including 4 Selenium Rectifier)		
<b>Channel Coverage :</b>	CCIR Western VHF Channels E-2 to E-11 French VHF Channels 6, 8, 8A, 12 7, 9, 11 (correspond to E-5, E-7, E-9) Belgian VHF Channels E-2 to E-11 (For UHF reception, connect SONY UHF Converter, VUC-5E.)		
<b>IF Circuit :</b>	4 Stages with 5 stagger tuned elements Video Bandwidth; 3 Mc/-3 dB		
<b>Intercarrier System</b>		Video IF (AM)	Sound IF (FM)
	CCIR	26.75 Mc	21.25 Mc
<b>Separate-Carrier System</b>		Video IF (AM)	Sound IF (AM)
	French VHF	26.75 Mc	15.6 Mc
	French UHF	26.75 Mc	20.25 Mc
	Belgian (625 lines)	26.75 Mc	21.25 Mc
	Belgian (819 lines)	26.75 Mc	21.25 Mc
<b>Resolution :</b>	Vertical 400 lines, Horizontal 300 lines		
<b>Sound System :</b>	5.5 Mc Intercarrier and Separate Systems (Can be selected by push button provided in the set.) Power Output stage; OTL system, 150 mW Speaker; 3" 70Ω Voice Coil		
<b>Automatic Control :</b>	Puls-operated AGC, Diode AFC, Sync. ANS (Automatic Noise Suppressor)		
<b>Power Requirement :</b>	AC 220 V, 50 or 60 c/s, 12 V Battery (3.5 AH)		
<b>Power Consumption :</b>	AC 13 W, DC 9.6 W (0.8 A)		
<b>Dimensions :</b>	4-1/4" (H) × 7-5/8" (W) × 7-7/8" (D)		
<b>Weight :</b>	8.0 lbs.		
<b>Glare Proofing :</b>	Smoked Filter, 70% Transparency		

**SONY®**  
**SERVICING GUIDE**

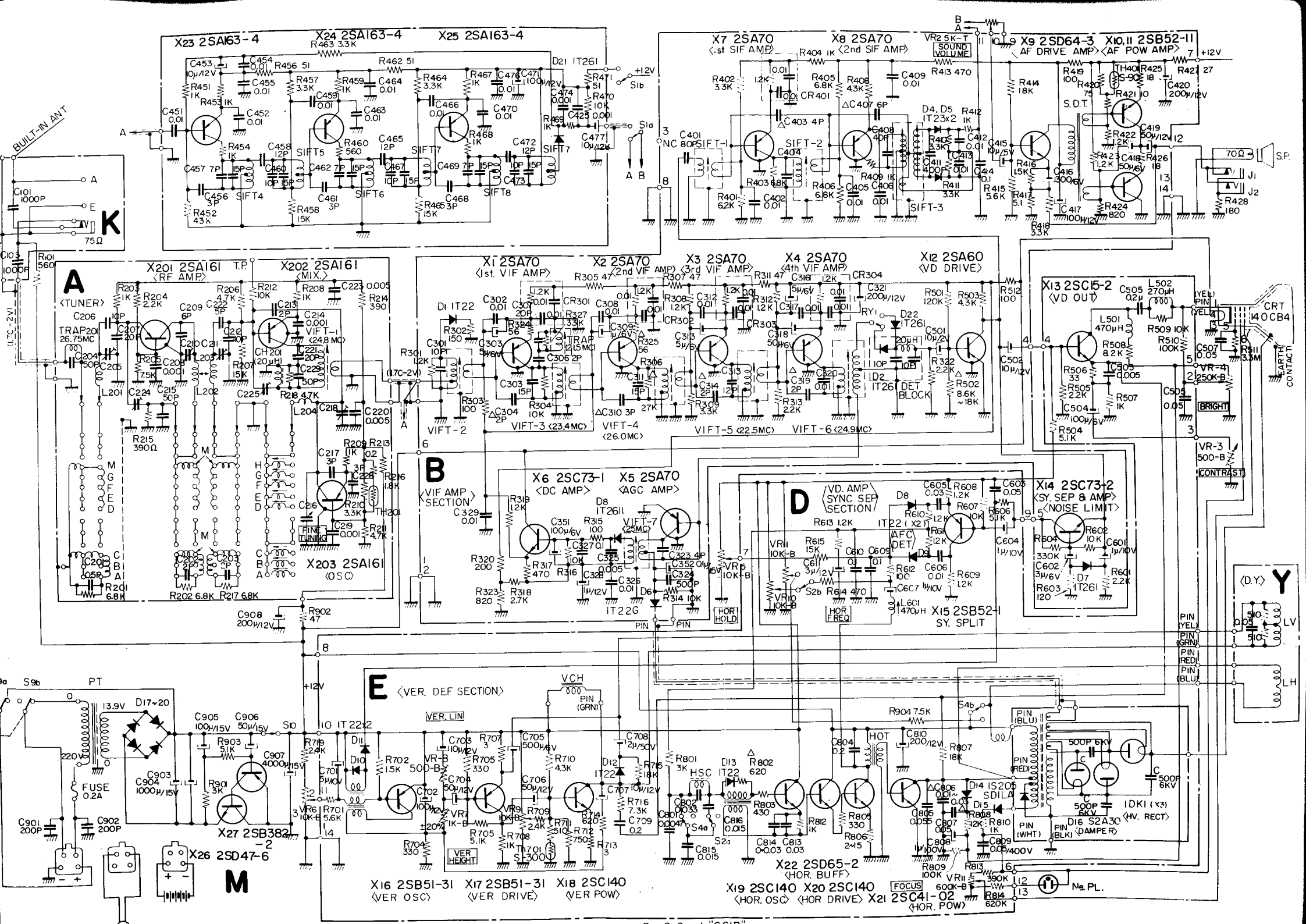


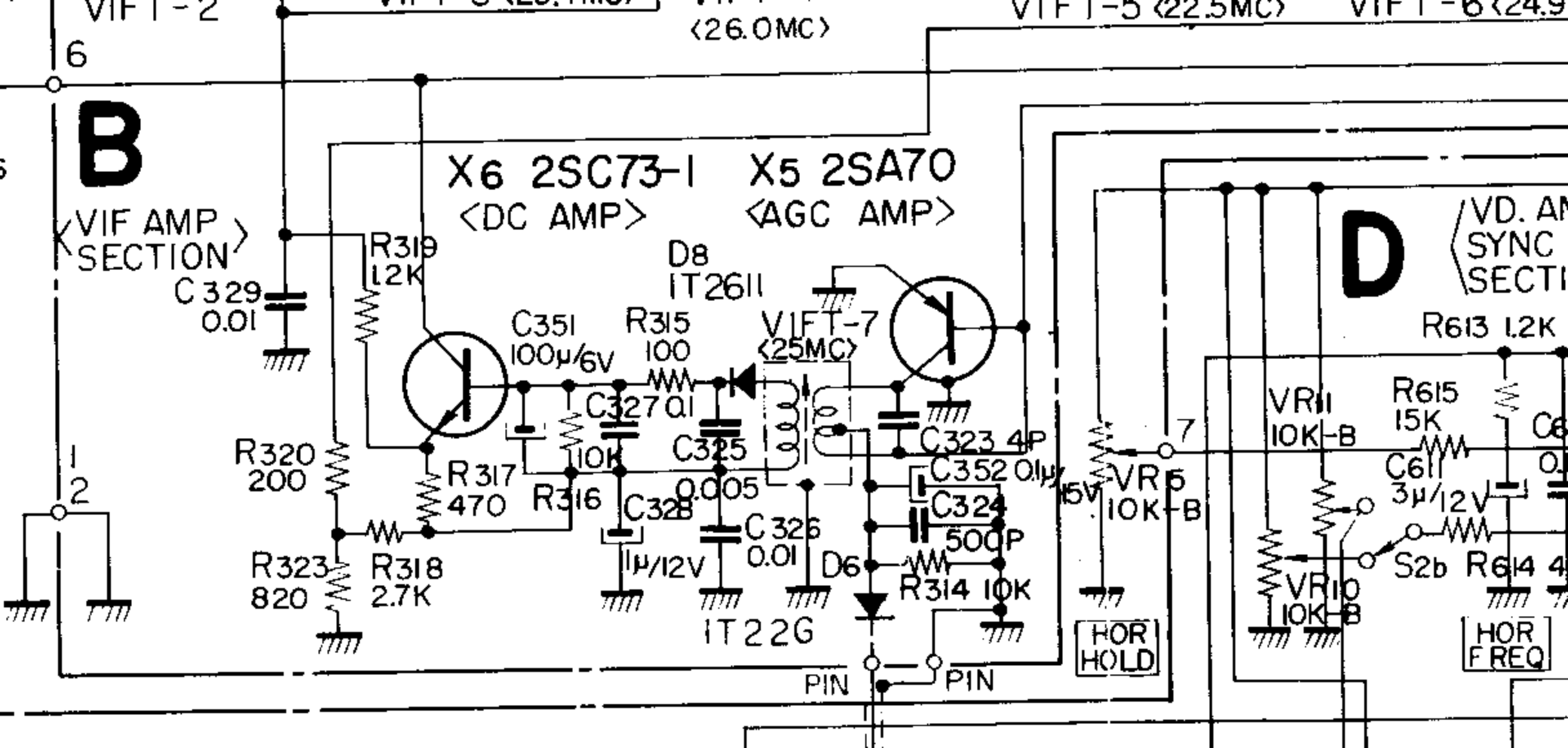


Δ To be adjusted

S10 & S1b : "CCR"  
S2a, S2b, S4a & S4b "625"

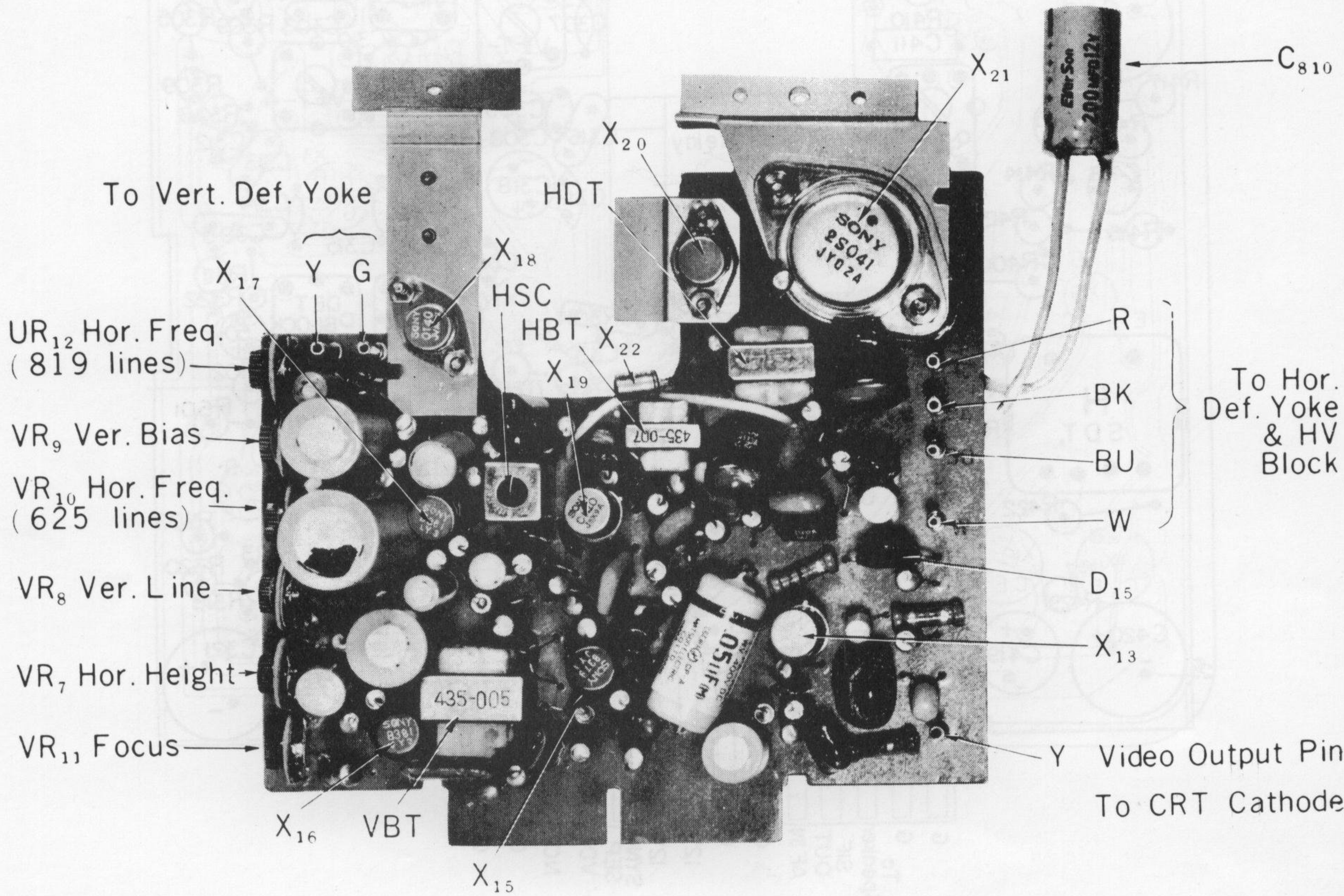
[Fig. 47]







# Deflection Circuit Board

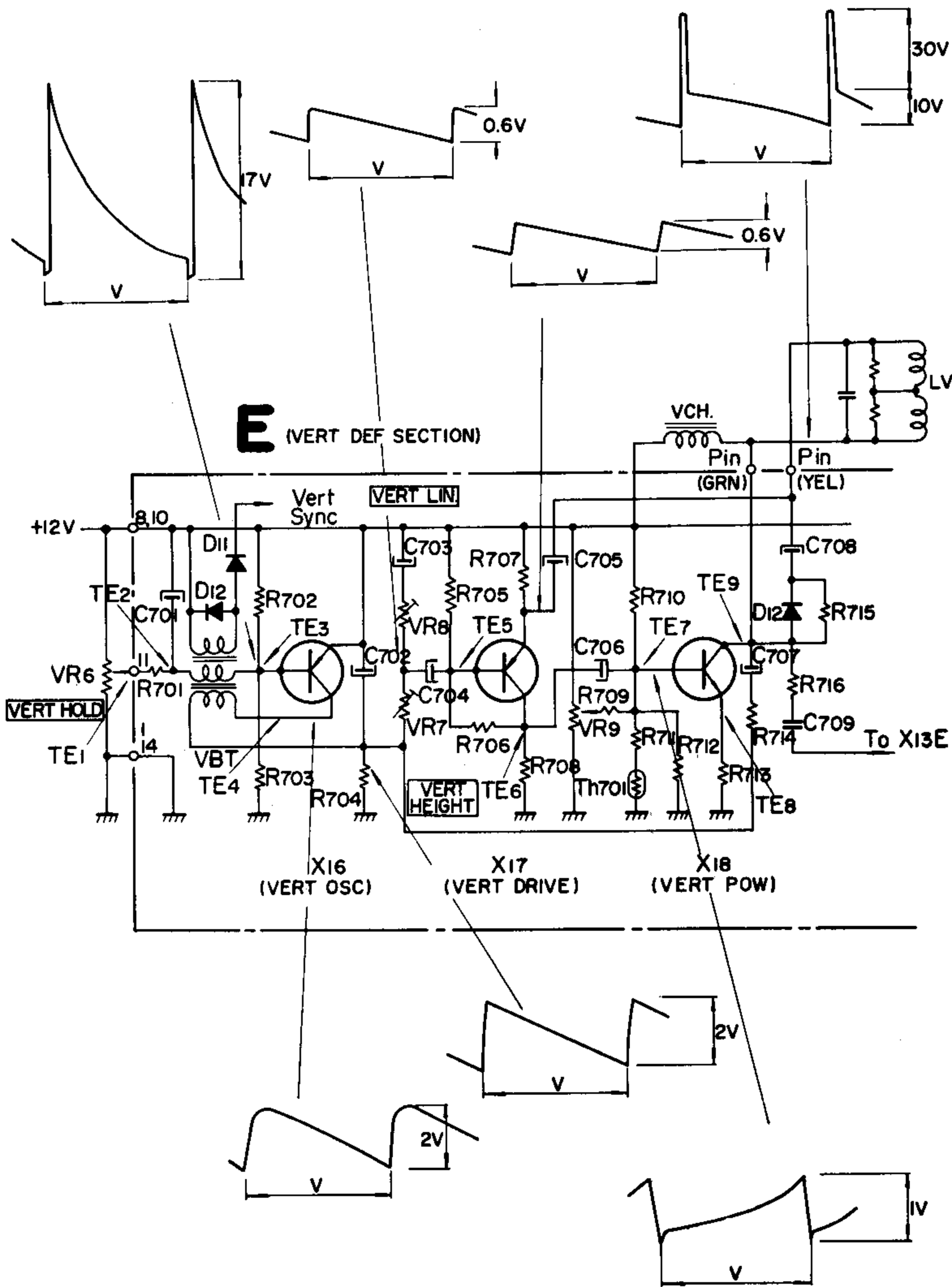


(Fig. 60)



## Voltage Distribution Chart

—VERT Deflection Circuit—

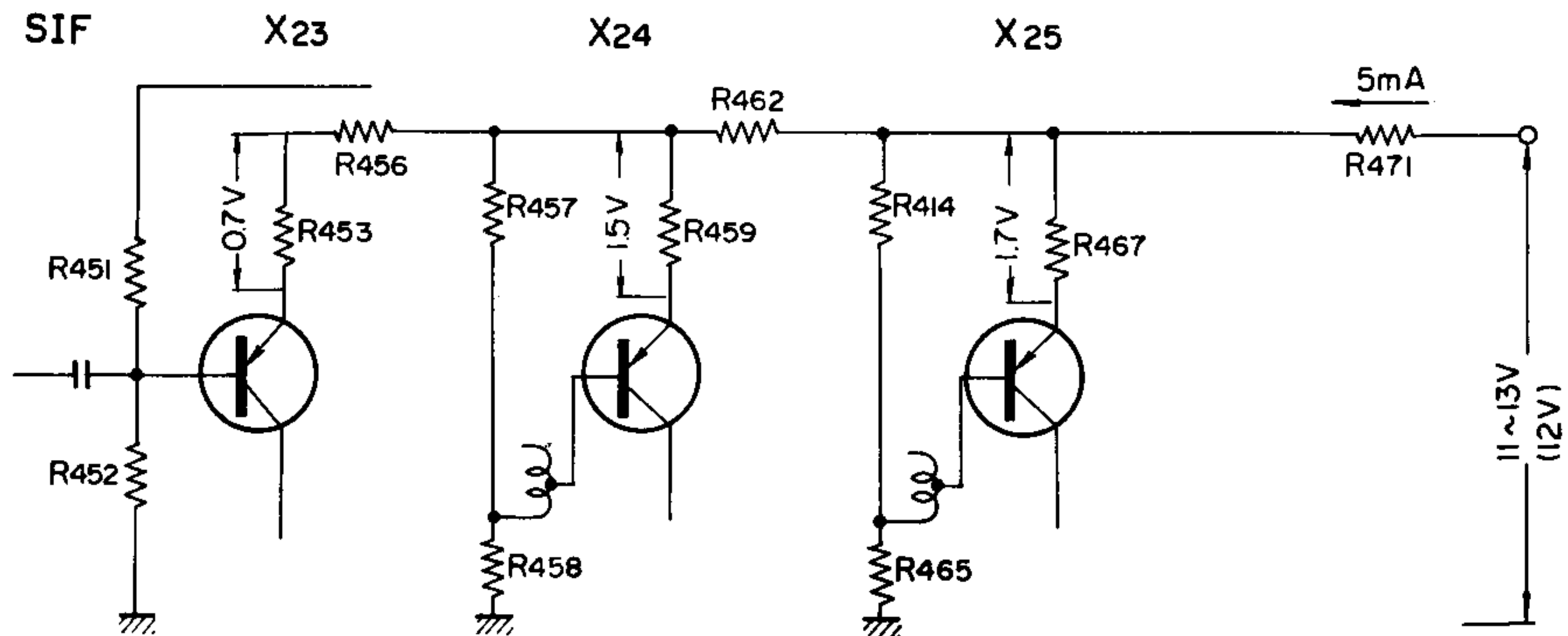


DC Voltage: TE<sub>1</sub>...6~9V, TE<sub>2</sub>...16V, TE<sub>3</sub>...16V, TE<sub>4</sub>...5.5V, TE<sub>5</sub>...11.7V,  
TE<sub>6</sub>...8.0V, TE<sub>7</sub>...1.0V, TE<sub>8</sub>...0.33V, TE<sub>9</sub>...9.5V

(Fig. 53)

## Voltage Distribution Chart

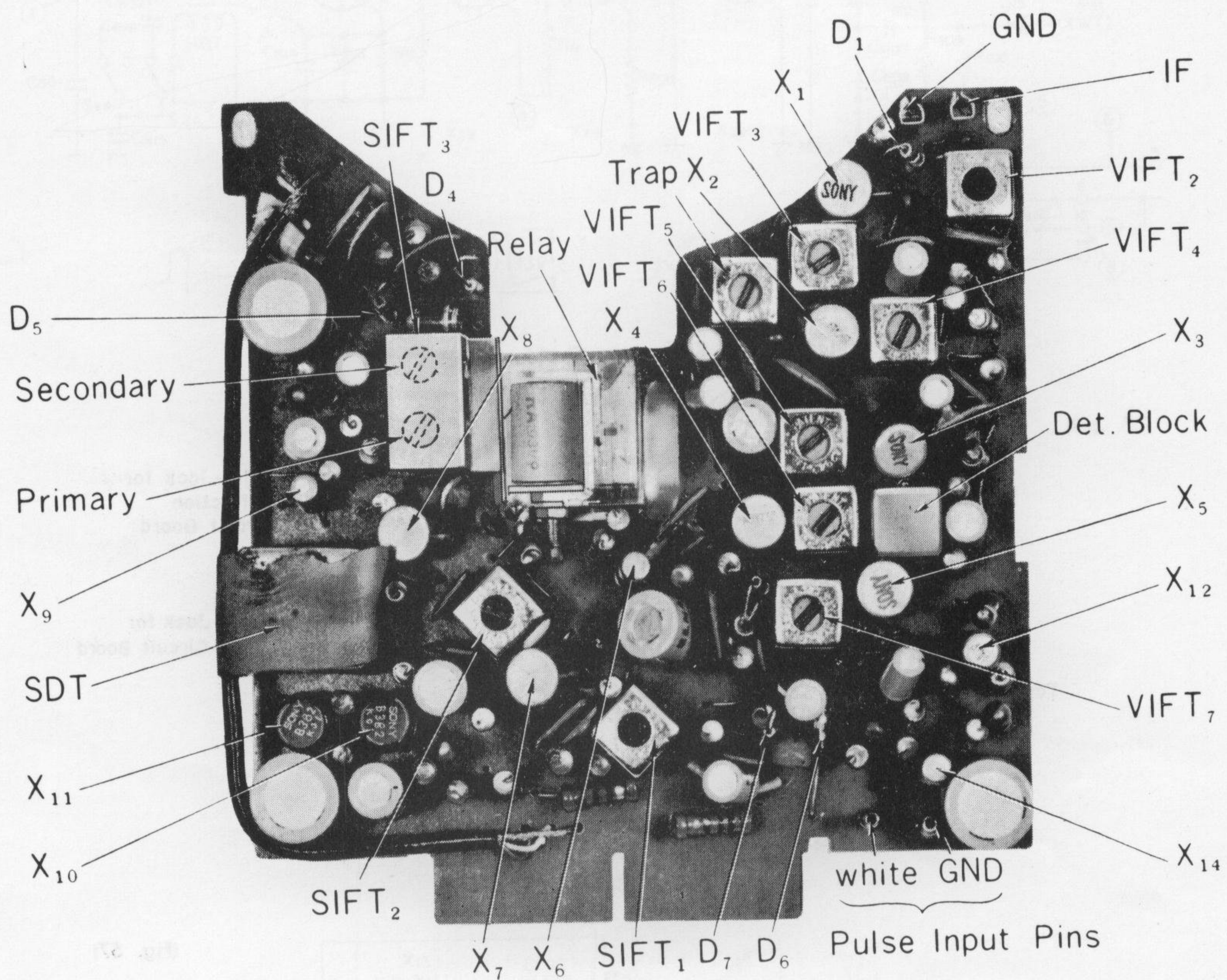
—AM SIF AMP Circuit—



(Fig. 54)



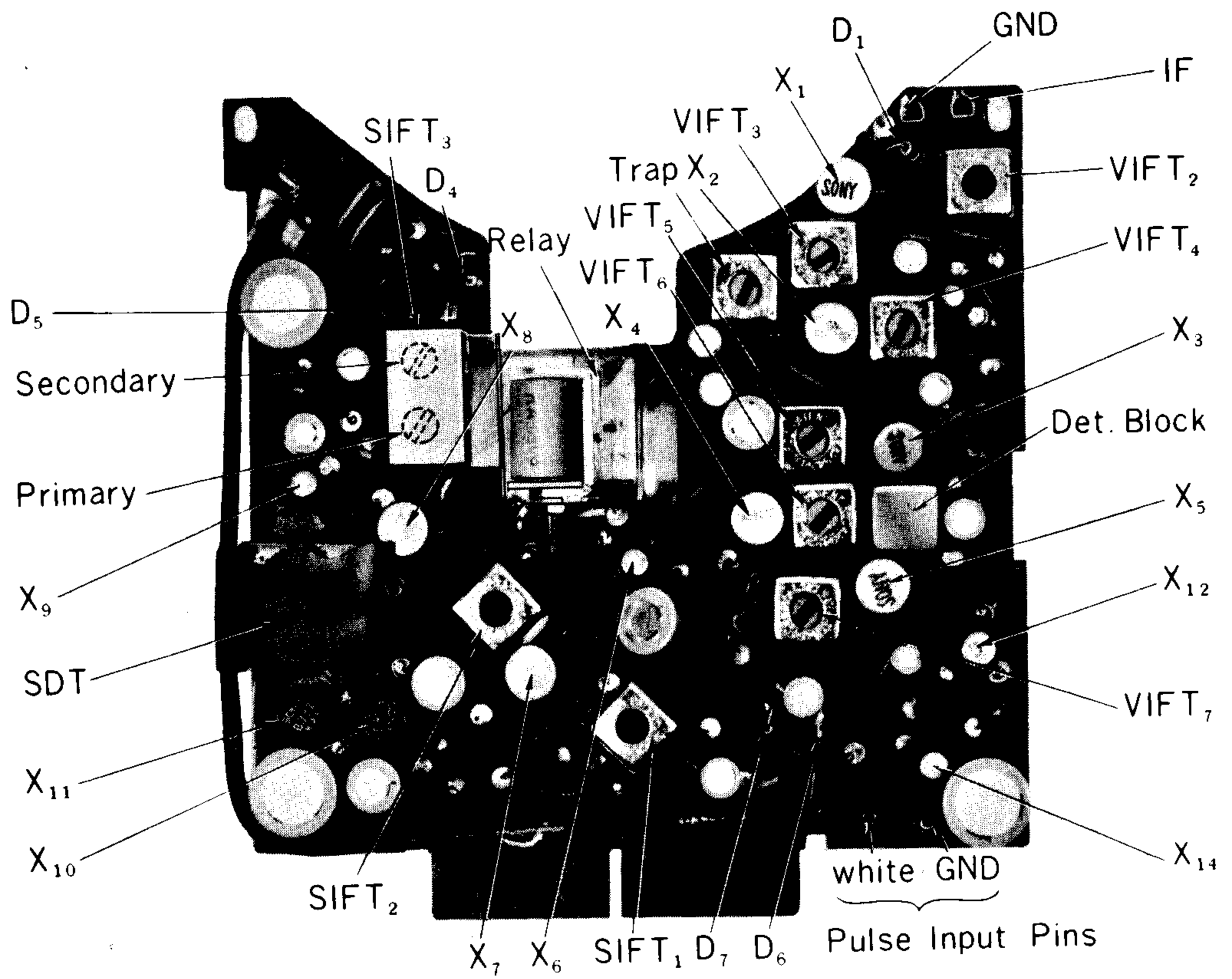
# Signal Circuit Board



(Fig. 58)



# Signal Circuit Board

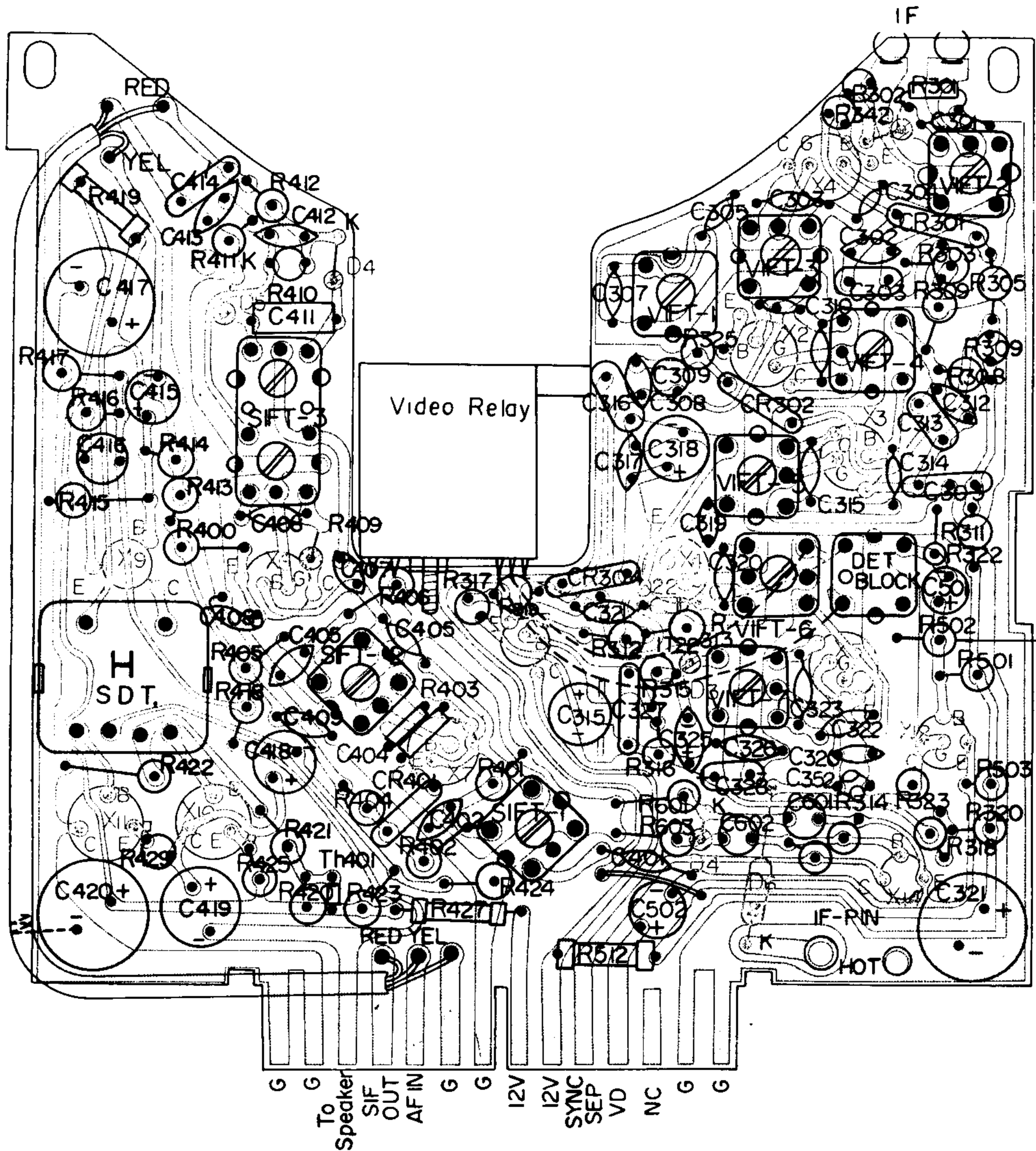


(Fig. 58)

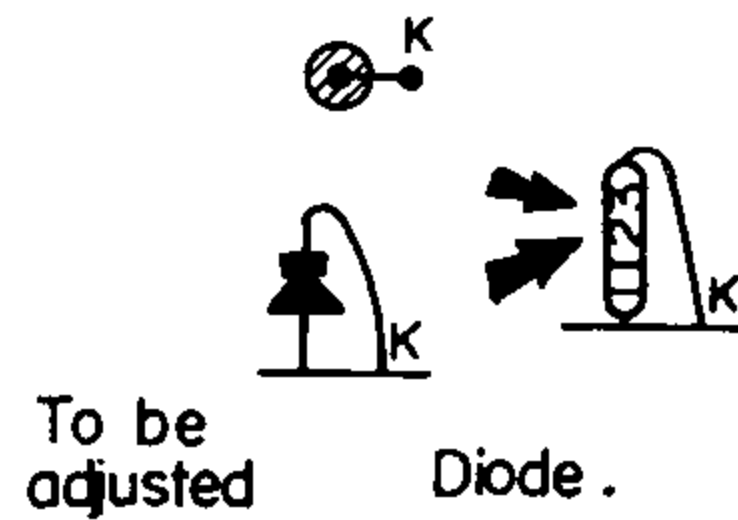
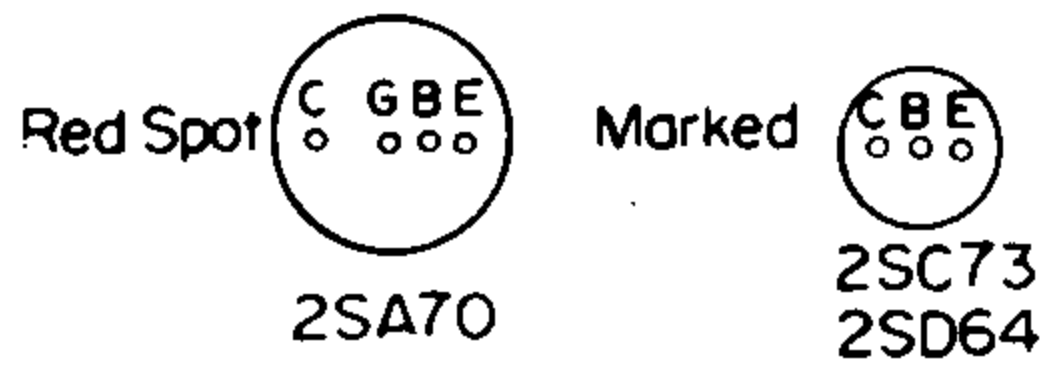


# Mounting Diagram

— Signal Circuit Board —



Transistor (Bottom View)



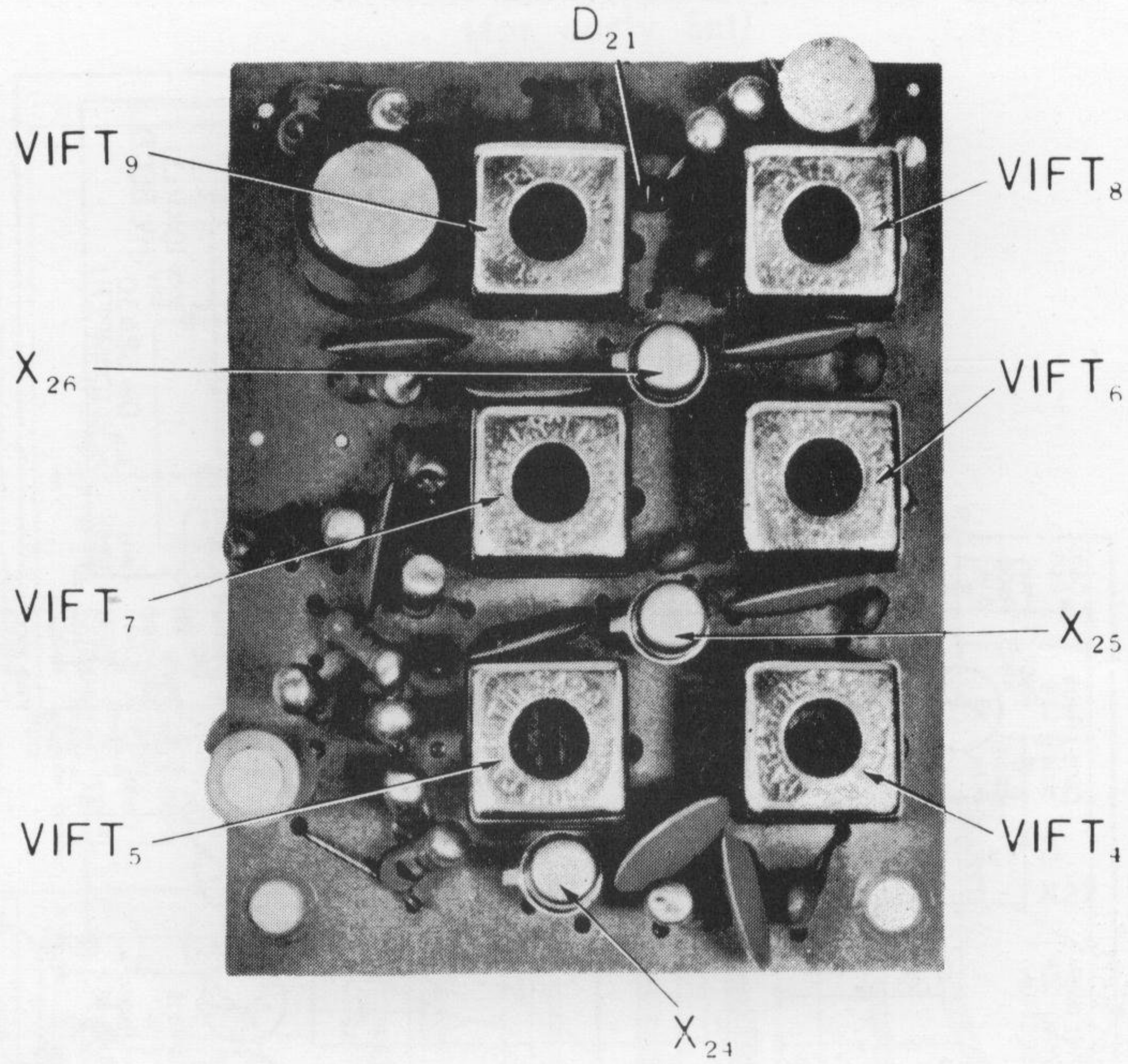
Jumper Wire



(Fig. 59)



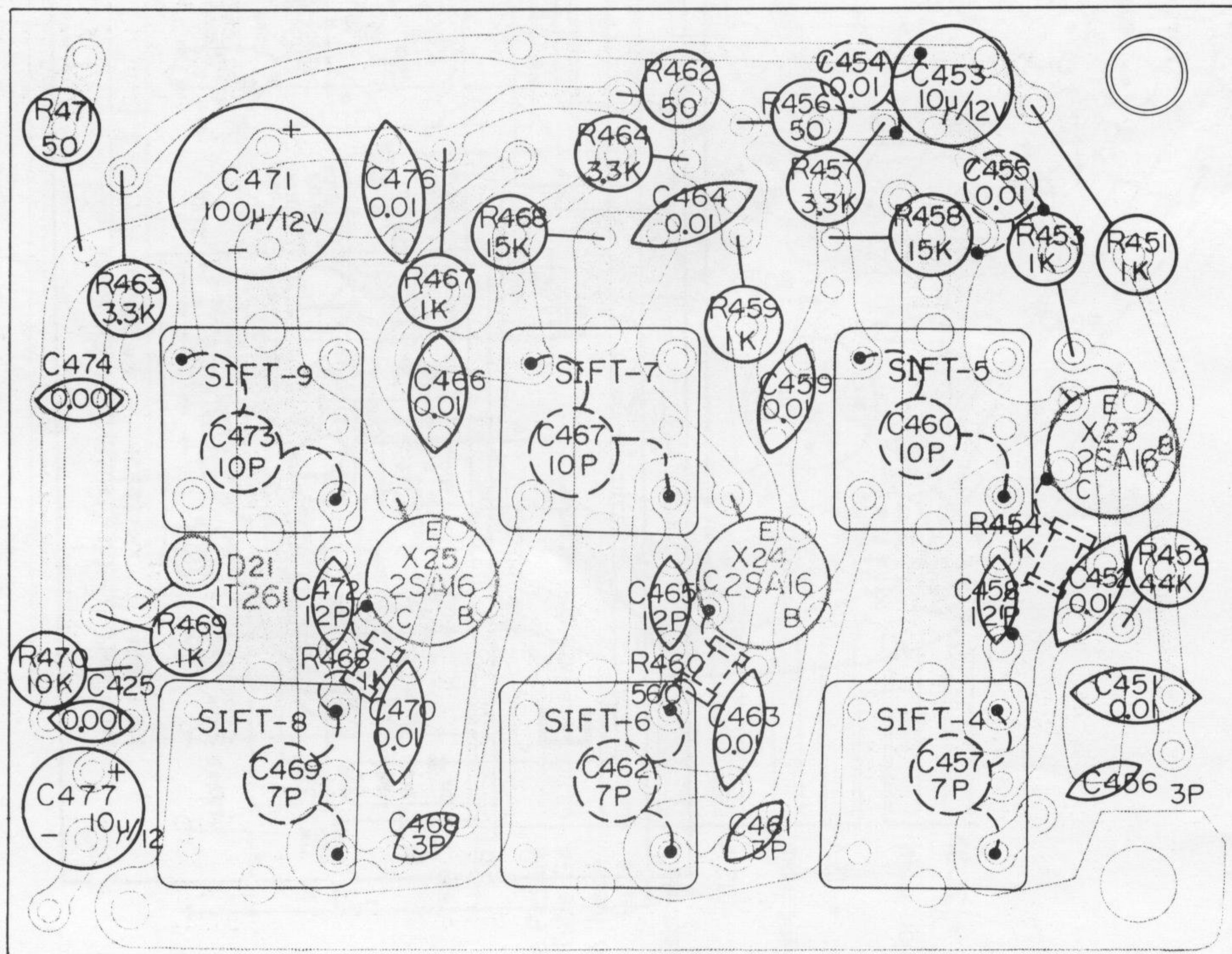
# AM SIF Circuit Board



(Fig. 64)

## Mounting Diagram

AM SIF Circuit Board

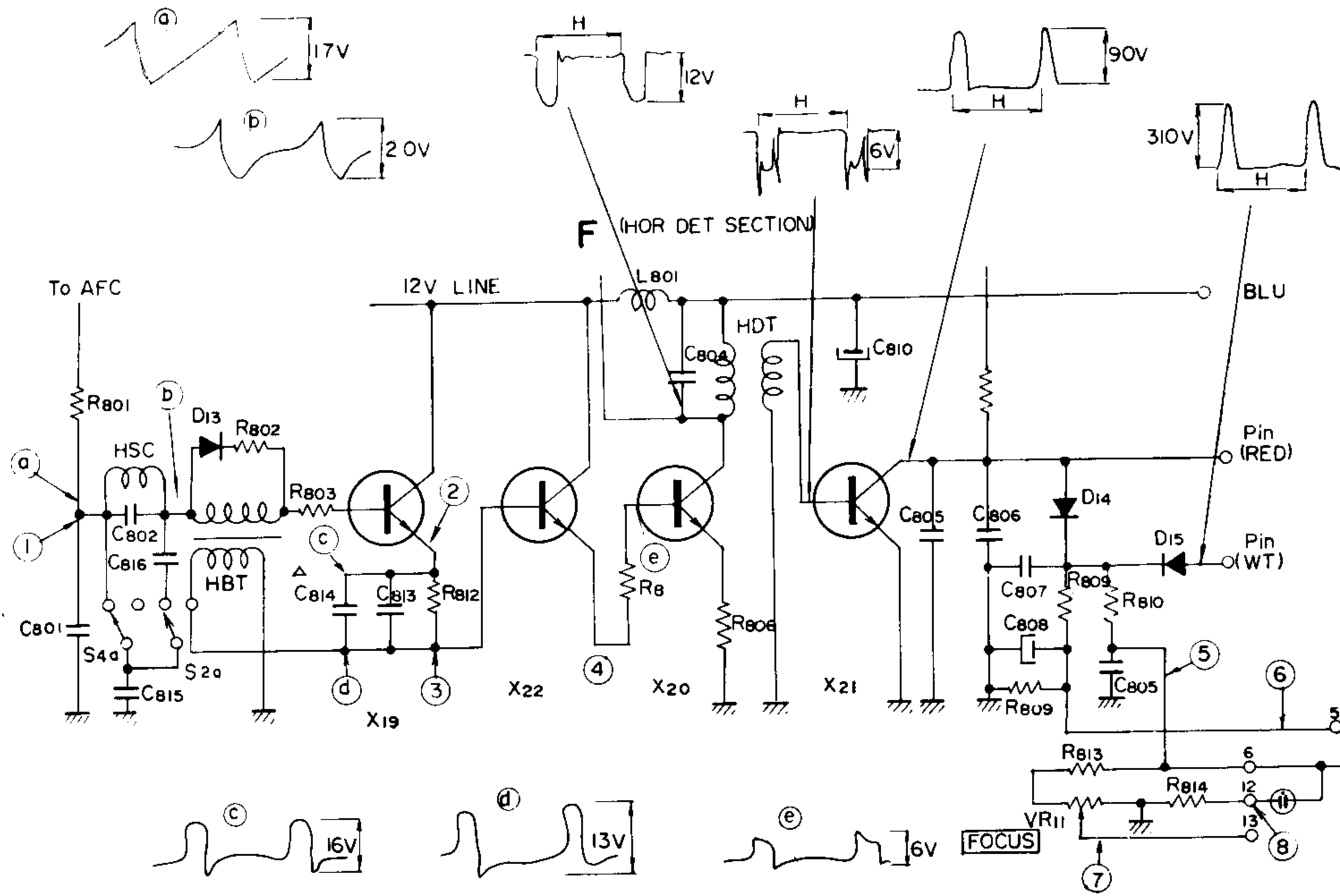


(Fig. 65)



## Voltage Distribution Chart

—HOR DEF Circuit—



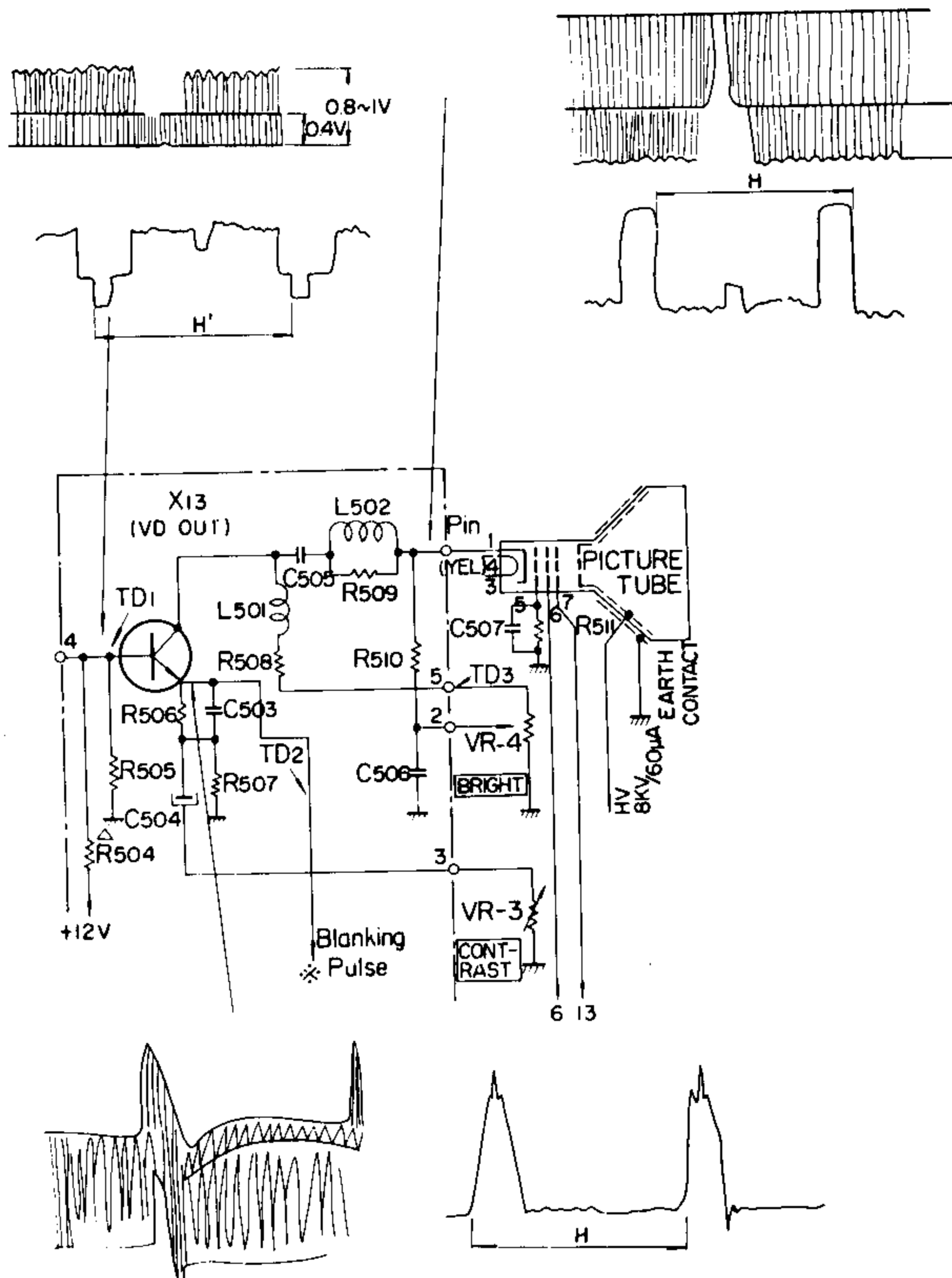
DC Voltage: TD<sub>1</sub>...3.2V, TD<sub>2</sub>...2.6V, TD<sub>3</sub>...50V

DC Voltage: ①...2.1V, ②...2.7V, ③...0.02V, ④...17V  
 ⑤...290V, ⑥...50V, ⑦...50~100V, ⑧...230V

(Fig. 55)

## Voltage Distribution Chart

—VIDEO Output Circuit—

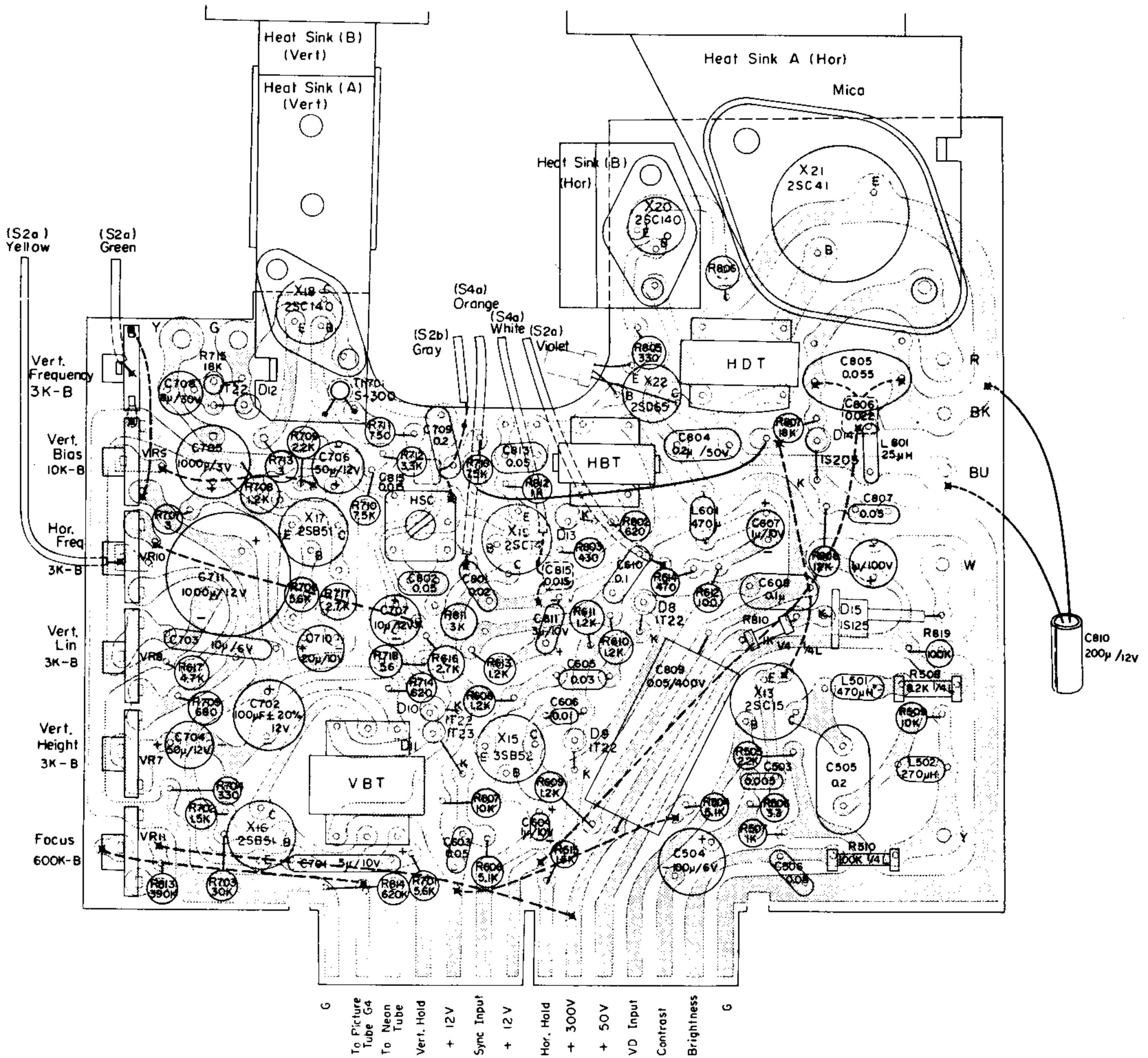


(Fig. 56)



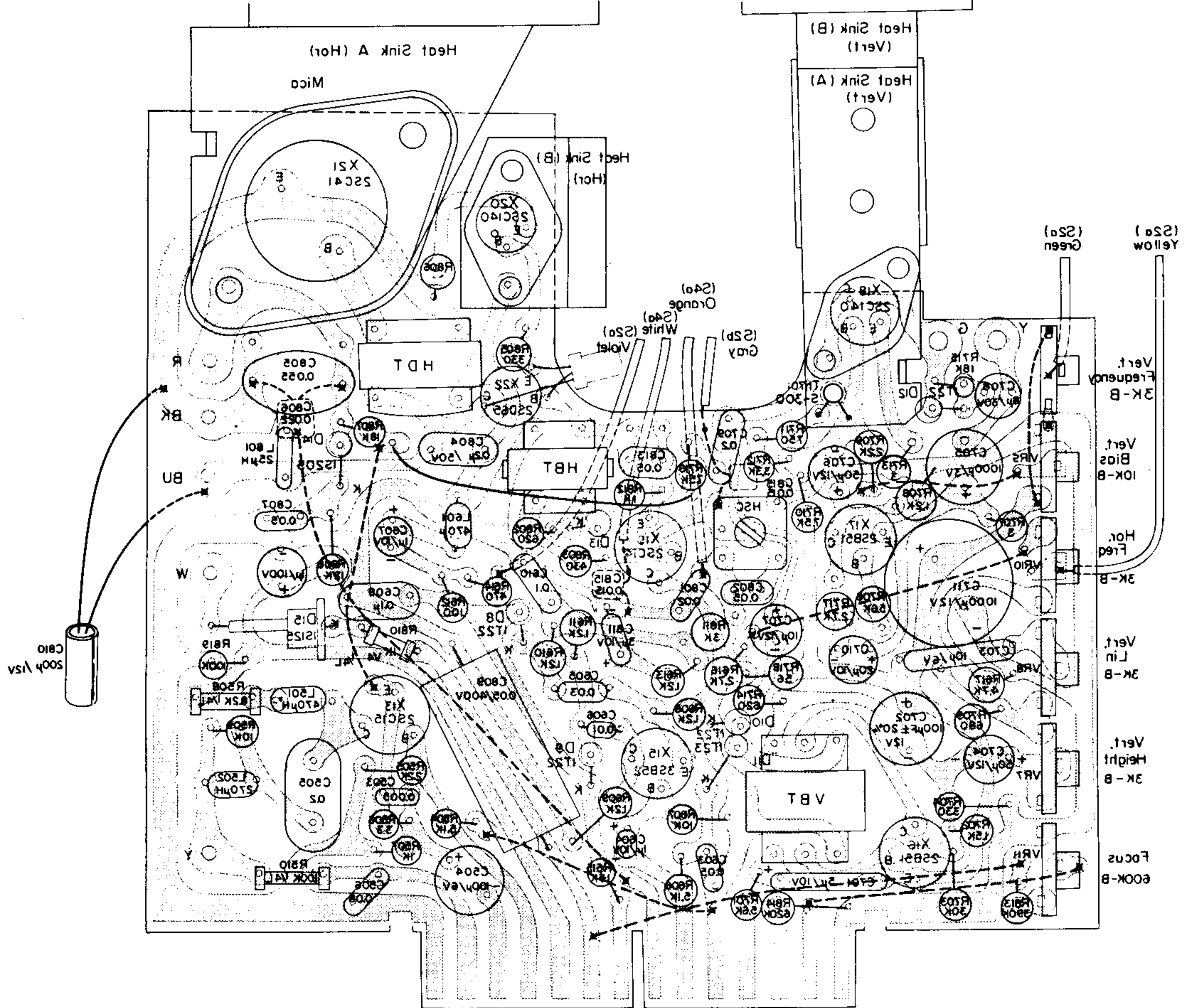
# Mounting Diagram

— Deflection Circuit Board —



(Fig. 61)



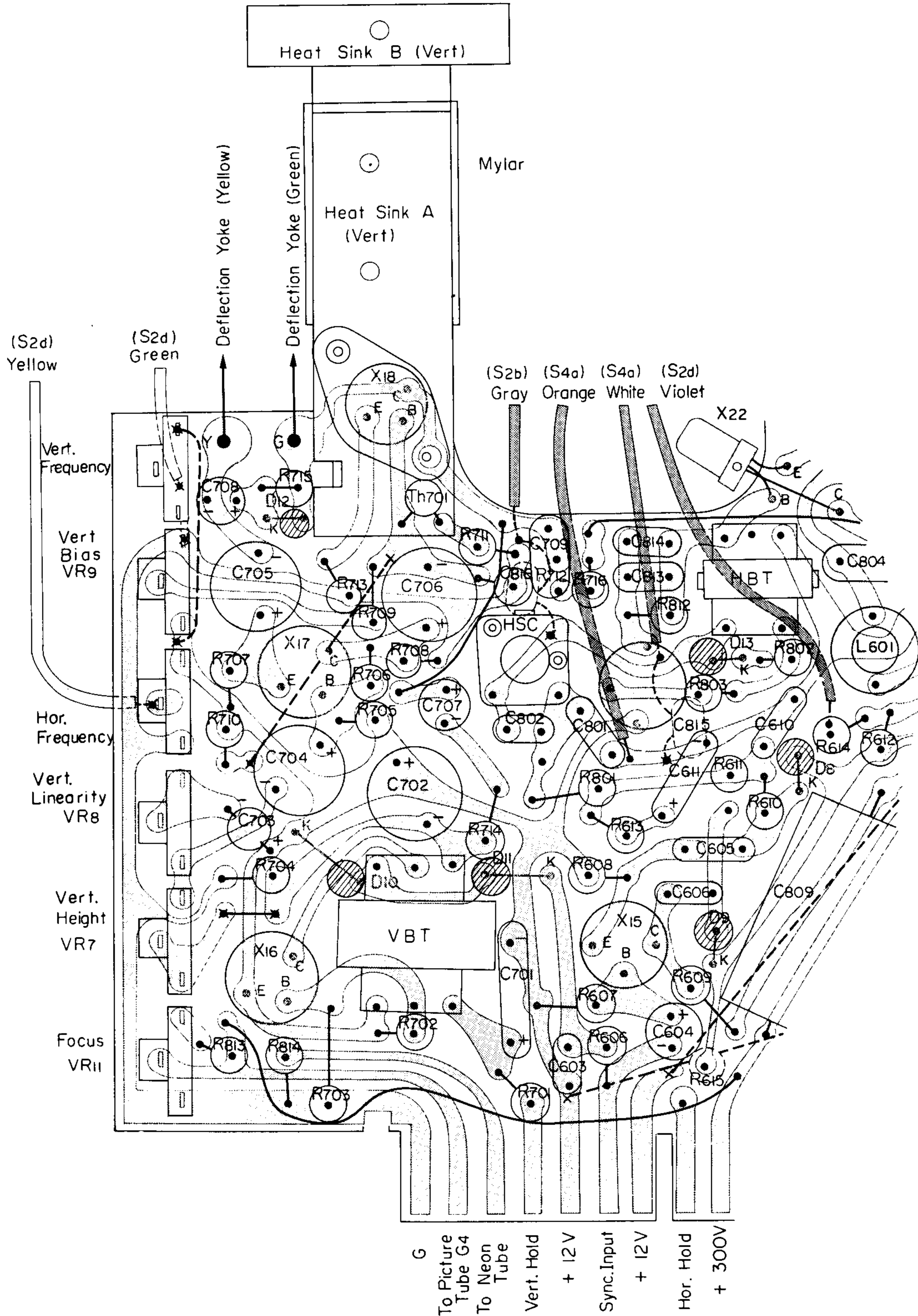


B  
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T  
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X  
Y  
Z



# Mounting Diagram

— Deflection Circuit Board —  
(for early Set)



(Fig. 62)



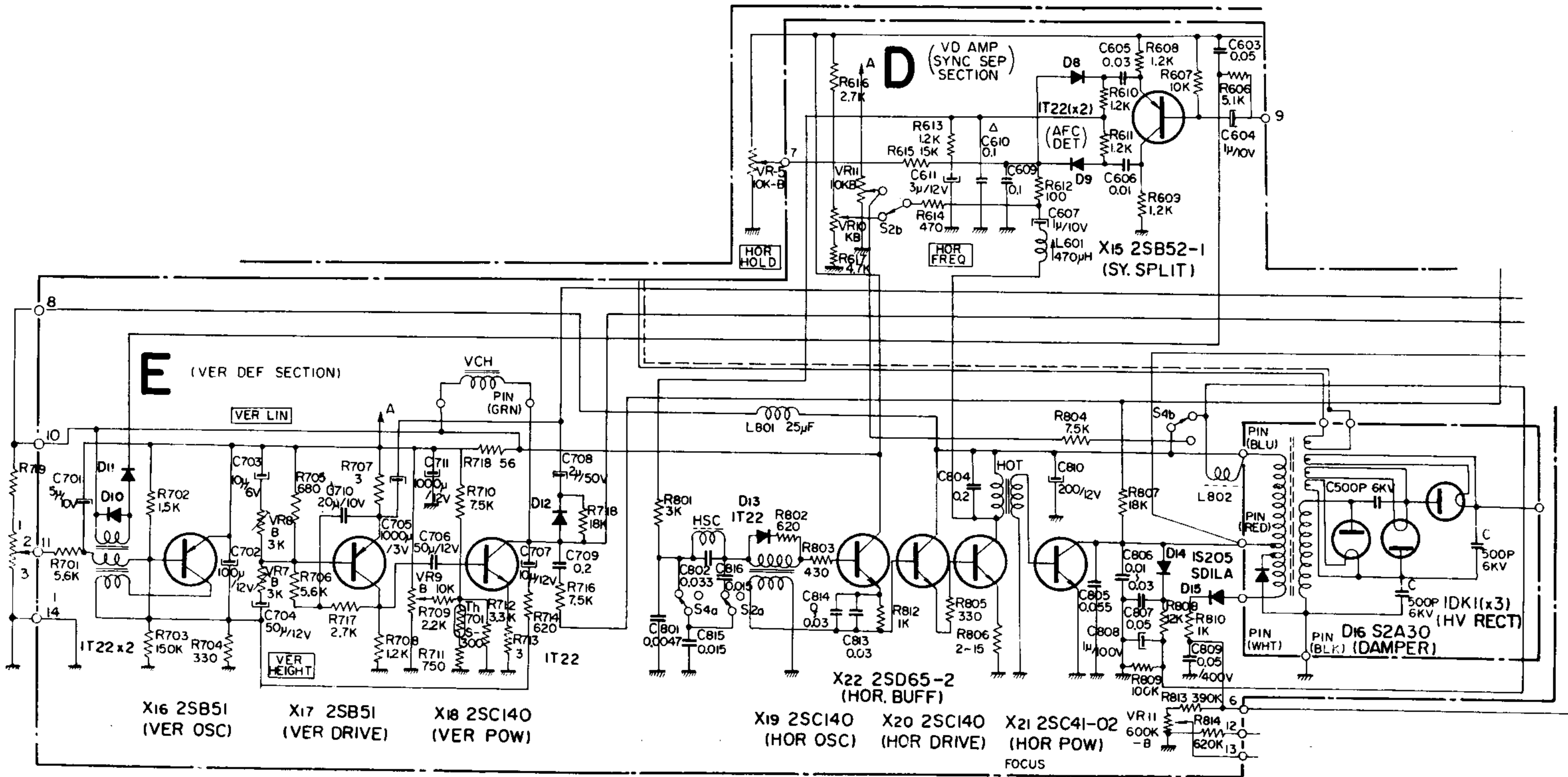




# Schematic Diagram

—Deflection Circuit Board—

(for early Set)



(Fig. 63)



## Electrical Parts List (A)

Part No.	Symbol	Description	Part No.	Symbol	Description
		<b>Transistor</b>	1-403-426-11	VIFT <sub>2</sub>	Video IF Transformer
	X <sub>201</sub>	2SA 161 (RF AMP)	-424-02	VIFT <sub>3</sub>	"
	X <sub>202</sub>	2SA 161 (MIX)	-425-02	VIFT <sub>4</sub>	"
	X <sub>203</sub>	2SA161 (OSC)	-417-02	VIFT <sub>5</sub>	"
	X <sub>1</sub>	2SA70 (1st VIF AMP)	-418-02	VIFT <sub>6</sub>	"
	X <sub>2</sub>	2SA70 (2nd VIF AMP)	-419-02	VIFT <sub>7</sub>	"
	X <sub>3</sub>	2SA70 (3rd VIF AMP)	-306-02	SIFT <sub>1</sub>	Sound IF Transformer
	X <sub>4</sub>	2SA70 (4th VIF AMP)	-311-02	SIFT <sub>2</sub>	"
	X <sub>5</sub>	2SA70 (AGC AMP)	-310-02	SIFT <sub>3</sub>	IF Transformer for FM Detector
	X <sub>6</sub>	2SC73 (DC AMP)	X-40032-85-1	L <sub>201-204</sub>	Tuner Rotary Coil
	X <sub>7</sub>	2SA70 (1st SIF AMP)	1-409-029-12	Trap <sub>201</sub>	Video IF Trap Coil
	X <sub>8</sub>	2SA70 (2nd SIF AMP)	1-407-001-00	CH <sub>201</sub>	IF Choke Coil
	X <sub>9</sub>	2SD64 (AF DRIVE AMP)	-013-03	Trap 1	Sound Signal Trap
	X <sub>10</sub>	2SB52 (AF POW AMP)	1-403-420-00	DET	Video Detector Block
	X <sub>11</sub>	2SB52 (AF POW AMP)	1-423-048-00	SDT	Sound Driver Transformer
	X <sub>12</sub>	2SA60 (VD DRIVE)	1-411-003-11	L <sub>501</sub>	Peaking Coil 470 $\mu$ H
	X <sub>13</sub>	2SC15 (VD OVT)	-002-11	L <sub>502</sub>	" 270 $\mu$ H
	X <sub>14</sub>	2SC73 (SYNC SEP. AMP, NOISE LIMIT)	-003-11	L <sub>601</sub>	" 470 $\mu$ H
	X <sub>15</sub>	2SB382 (SY SPLIT)	1-421-013-11	L <sub>902</sub>	Horizontal Choke Coil
	X <sub>16</sub>	2SB381 (VER OSC)	1-435-005-00	VBT	Vertical Blocking Transformer
	X <sub>17</sub>	2SB381 (VER DRIVE)	1-421-106-17	VCH	Vertical Output Choke Coil
	X <sub>18</sub>	2SC140 (VER POW)	1-413-011-11	HSC	Stabilizing Coil for Horizontal Sweep
	X <sub>19</sub>	2SC140 (HOR OSC)	1-435-007-12	HBT	Horizontal Blocking Transformer
	X <sub>20</sub>	2SC140 (HOR DRIVE)	1-437-002-00	HDT	Horizontal Driver Transformer
	X <sub>21</sub>	2SC41 (HOR POW)	1-439-003-02	HOT	Horizontal Output Transformer
	X <sub>22</sub>	2SD65 (HOR BUFFER)	1-441-147-11	PT	Power Transformer
	X <sub>23</sub>	2SA163			
	X <sub>24</sub>	2SA163			
	X <sub>25</sub>	2SA163	1-221-276-11	VR <sub>2</sub>	<b>Potentiometer</b> Volume Control 5 K $\Omega$ -T
	X <sub>26</sub>	2SD47	-275-11	VR <sub>3</sub>	Contrast Control 500 $\Omega$ -E
	X <sub>27</sub>	2SB382	-265-11	VR <sub>4</sub>	Brightness Control 250 K $\Omega$ -B
		<b>Diode</b>	-297-11	VR <sub>5</sub>	Horizontal Hold Control 10 K $\Omega$ -B
	D <sub>1</sub>	1T22AJ	-297-11	VR <sub>6</sub>	Vertical Hold Control 10 K $\Omega$ -B
	D <sub>2</sub>	1T261J	-335-00	VR <sub>7</sub>	Vertical Height Control 1 K $\Omega$ -B
	D <sub>3</sub>	1T261J	-326-00	VR <sub>8</sub>	Vertical Linearity Control 500 $\Omega$ -B
	D <sub>4</sub>	1T23J	-327-00	VR <sub>9</sub>	Vertical Bias Control 10 K $\Omega$ -B
	D <sub>5</sub>	1T23J	-327-00	VR <sub>10</sub>	Horizontal Frequency Control 10 K $\Omega$ -B
	D <sub>6</sub>	1T22AJ	-351-00	VR <sub>11</sub>	Focus Control 600 K $\Omega$ -B
	D <sub>7</sub>	1T261J			
	D <sub>8</sub>	1T22AJ			
	D <sub>9</sub>	1T22AJ	1-101-406-01	CR <sub>301</sub>	<b>Encapsulated Component</b> 1.2K $\Omega$ 0.01 $\mu$ F 0.01 $\mu$ F
	D <sub>10</sub>	1T22AJ	-406-01	CR <sub>302</sub>	"
	D <sub>11</sub>	1T22AJ	-406-01	CR <sub>303</sub>	"
	D <sub>12</sub>	1T22AJ	-406-01	CR <sub>304</sub>	"
	D <sub>13</sub>	1T22AJ	-406-01	CR <sub>305</sub>	"
	D <sub>14</sub>	1S205			
	D <sub>15</sub>	SD-11A			
	D <sub>16</sub>	S2A30	1-201-454-01	R <sub>101</sub>	<b>Resistor</b> 560 $\Omega$ RC $\frac{1}{4}$ L
1-531-103-02	D <sub>17-20</sub>	Selenium Rectifier	1-203-190-00	R <sub>201</sub>	10K $\Omega$ RD $\frac{1}{16}$ L
	D <sub>21</sub>	1T261J	1-204-111-11	R <sub>202</sub>	6.8K $\Omega$ RD $\frac{1}{32}$ L
	D <sub>22</sub>	1T261J	-111-11	R <sub>203</sub>	" "
		<b>Thermistor</b>	1-203-184-00	R <sub>204</sub>	2.2K $\Omega$ RD $\frac{1}{16}$ L
1-800-001-00	Th <sub>201</sub>	S-10K	-188-00	R <sub>205</sub>	7.5K $\Omega$ "
8-860-003-00	Th <sub>401</sub>	S-90	-182-00	R <sub>206</sub>	1K $\Omega$ "
8-860-005-00	Th <sub>701</sub>	S-300	-181-00	R <sub>207</sub>	390 $\Omega$ "
		<b>HV Rectifier</b>	-185-00	R <sub>208</sub>	4.7K $\Omega$ "
1-525-039-00		1DK1	-889-00	R <sub>209</sub>	27K $\Omega$ "
		<b>Coil and Transformer</b>	1-204-204-00	R <sub>210</sub>	240 $\Omega$ "
1-403-401-00	VIFT <sub>1</sub>	Video IF Transformer	1-203-184-00	R <sub>211</sub>	2.2K $\Omega$ "
			-182-00	R <sub>212</sub>	1K $\Omega$ "
			-182-00	R <sub>213</sub>	1K $\Omega$ "
			-460-00	R <sub>214</sub>	2.7K $\Omega$ "



—continued—

Part No.	Symbol	Description	Part No.	Symbol	Description
1-203-190-00	R <sub>215</sub>	10K Ω RD <sup>1/16</sup> L	1-203-434-00	R <sub>464</sub>	3.3K Ω RD <sup>1/16</sup> RL
460-00	R <sub>216</sub>	2.7K Ω //	-629-00	R <sub>465</sub>	15K Ω //
-187-00	R <sub>217</sub>	6.8K Ω //	-421-00	R <sub>467</sub>	1K Ω //
-185-00	R <sub>218</sub>	4.7K Ω //	-182-00	R <sub>468</sub>	1K Ω RD <sup>1/16</sup> L
1-201-457-00	R <sub>301</sub>	1.2K Ω RC <sup>1/8</sup> L	-421-00	R <sub>469</sub>	1K Ω RD <sup>1/16</sup> RL
1-203-415-00	R <sub>302</sub>	150 Ω RD <sup>1/8</sup> RL	-427-00	R <sub>470</sub>	10K Ω //
-357-00	R <sub>303</sub>	100 Ω //	1-204-210-11	R <sub>471</sub>	51 Ω //
-190-00	R <sub>304</sub>	10K Ω RD <sup>1/16</sup> L	1-203-400-00	R <sub>501</sub>	120K Ω RD <sup>1/8</sup> RL
-414-00	R <sub>305</sub>	47 Ω RD <sup>1/8</sup> RL	-386-00	R <sub>502</sub>	15K Ω //
-889-00	R <sub>306</sub>	27K Ω RD <sup>1/16</sup> L	-375-00	R <sub>503</sub>	4.3K Ω //
-414-00	R <sub>307</sub>	47 Ω RD <sup>1/8</sup> RL	-377-00	R <sub>504</sub>	5.1K Ω //
-368-00	R <sub>308</sub>	1.2K Ω //	-370-00	R <sub>505</sub>	2.2K Ω //
-373-00	R <sub>309</sub>	3.3K Ω //	-354-00	R <sub>506</sub>	33 Ω //
-414-00	R <sub>311</sub>	47 Ω //	-367-00	R <sub>507</sub>	1.0K Ω //
-368-00	R <sub>312</sub>	1.2K Ω //	-403-00	R <sub>508</sub>	8.2K Ω //
-370-00	R <sub>313</sub>	2.2K Ω //	-383-00	R <sub>509</sub>	10K Ω //
-412-00	R <sub>314</sub>	390 Ω //	-100-00	R <sub>510</sub>	100K Ω RD <sup>1/4</sup> L
-357-00	R <sub>315</sub>	100 Ω //	1-201-596-00	R <sub>511</sub>	3.3M Ω RC <sup>1/2</sup> L
-383-00	R <sub>316</sub>	10K Ω //	1-203-011-00	R <sub>512</sub>	100 Ω RD <sup>1/4</sup> L
-361-00	R <sub>317</sub>	470 Ω //	-387-00	R <sub>601</sub>	22K Ω RD <sup>1/8</sup> RL
-372-00	R <sub>318</sub>	2.7K Ω //	-383-00	R <sub>602</sub>	10K Ω //
-368-00	R <sub>319</sub>	12.K Ω //	-759-00	R <sub>603</sub>	120 Ω //
-404-00	R <sub>320</sub>	200 Ω //	-411-00	R <sub>604</sub>	330K Ω //
-370-00	R <sub>322</sub>	2.2K Ω //	-377-00	R <sub>606</sub>	5.1K Ω //
-366-00	R <sub>323</sub>	820 Ω //	-383-00	R <sub>607</sub>	10K Ω //
1-201-657-00	R <sub>324</sub>	56 Ω RC <sup>1/8</sup> L	-368-00	R <sub>608</sub>	1.2K Ω //
-657-00	R <sub>325</sub>	56 Ω //	-368-00	R <sub>609</sub>	1.2K Ω //
1-203-884-00	R <sub>327</sub>	33K Ω RD <sup>1/16</sup> L	-363-00	R <sub>610</sub>	1.2K Ω //
-380-00	R <sub>401</sub>	6.2K Ω RD <sup>1/8</sup> RL	-368-00	R <sub>611</sub>	1.2K Ω //
-373-00	R <sub>402</sub>	3.3K Ω //	-357-00	R <sub>612</sub>	100 Ω //
1-201-123-00	R <sub>403</sub>	6.8K Ω RC <sup>1/8</sup> L	-368-00	R <sub>613</sub>	1.2K Ω //
1-203-381-00	R <sub>405</sub>	6.8K Ω RD <sup>1/8</sup> RL	-561-00	R <sub>614</sub>	470 Ω //
-381-00	R <sub>406</sub>	6.8K Ω //	-385-00	R <sub>615</sub>	15K Ω //
-375-00	R <sub>408</sub>	4.3K Ω //	-378-00	R <sub>701</sub>	5.6K Ω //
1-201-133-00	R <sub>409</sub>	1K Ω RC <sup>1/8</sup> L	-405-00	R <sub>702</sub>	1.5K Ω //
1-203-373-00	R <sub>410</sub>	3.3K Ω RD <sup>1/8</sup> RL	-360-00	R <sub>704</sub>	330 Ω //
-373-00	R <sub>411</sub>	3.3K Ω //	-360-00	R <sub>705</sub>	330 Ω //
-367-00	R <sub>412</sub>	1K Ω //	-377-00	R <sub>706</sub>	5.1K Ω //
-361-00	R <sub>413</sub>	470 Ω //	1-207-018-00	R <sub>707</sub>	3 Ω RW <sup>1/4</sup> RL
-385-00	R <sub>414</sub>	18K Ω //	1-203-367-00	R <sub>708</sub>	1.0K Ω RD <sup>1/8</sup> RL
-378-00	R <sub>415</sub>	5.6K Ω //	-773-00	R <sub>709</sub>	2.4K Ω //
-405-00	R <sub>416</sub>	1.5K Ω //	-306-00	R <sub>710</sub>	4.3K Ω //
-351-00	R <sub>417</sub>	5.1 Ω //	-316-00	R <sub>711</sub>	510 Ω //
-370-00	R <sub>418</sub>	2.2K Ω //	-335-00	R <sub>712</sub>	750 Ω //
-011-00	R <sub>419</sub>	100 Ω RD <sup>1/4</sup> L	1-207-018-00	R <sub>713</sub>	3 Ω RW <sup>1/4</sup> RL
-356-00	R <sub>420</sub>	75 Ω RD <sup>1/8</sup> RL	1-203-857-00	R <sub>714</sub>	620 Ω RD <sup>1/8</sup> RL
-315-00	R <sub>421</sub>	10 Ω //	1-201-147-00	R <sub>715</sub>	18K Ω RC <sup>1/8</sup> L
-368-00	R <sub>422</sub>	1.2K Ω //	1-203-382-00	R <sub>716</sub>	7.5K Ω RD <sup>1/8</sup> RL
-368-00	R <sub>423</sub>	1.2K Ω //	-773-00	R <sub>719</sub>	2.4K Ω //
-308-00	R <sub>425</sub>	18 Ω //	-443-00	R <sub>801</sub>	3.0K Ω //
-308-00	R <sub>426</sub>	18 Ω //	-857-00	R <sub>802</sub>	620 Ω //
-006-00	R <sub>427</sub>	27 Ω RD <sup>1/4</sup> L	-760-00	R <sub>803</sub>	430 Ω //
-334-00	R <sub>428</sub>	180 Ω //	-360-00	R <sub>805</sub>	330 Ω //
-421-00	R <sub>451</sub>	1K Ω RD <sup>1/16</sup> RL	1-207-024-00	R <sub>806</sub>	8.2 Ω RW <sup>1/4</sup> RL
-430-00	R <sub>452</sub>	43K Ω //	1-203-386-00	R <sub>807</sub>	18K Ω RD <sup>1/8</sup> RL
-421-00	R <sub>453</sub>	1K Ω //	-384-00	R <sub>808</sub>	12K Ω //
-182-00	R <sub>454</sub>	1K Ω RD <sup>1/16</sup> L	-399-00	R <sub>809</sub>	100K Ω //
1-204-210-11	R <sub>456</sub>	51 Ω RD <sup>1/16</sup> RL	-031-00	R <sub>810</sub>	1K Ω RD <sup>1/4</sup> L
1-203-434-00	R <sub>457</sub>	3.3K Ω //	-367-00	R <sub>812</sub>	1K Ω RD <sup>1/8</sup> RL
-659-00	R <sub>458</sub>	15K Ω //	-867-00	R <sub>813</sub>	390K Ω //
-421-00	R <sub>459</sub>	1K Ω //	-868-00	R <sub>814</sub>	620K Ω //
-488-00	R <sub>460</sub>	560 Ω RD <sup>1/16</sup> L	-306-00	R <sub>901</sub>	4.3K Ω //
1-204-210-11	R <sub>462</sub>	51 Ω RD <sup>1/16</sup> RL	-148-00	R <sub>902</sub>	47 Ω RD <sup>1/4</sup> L
1-203-434-00	R <sub>463</sub>	3.3K Ω //	-377-00	R <sub>903</sub>	5.1K Ω RD <sup>1/8</sup> RL



—continued—

Part No.	Symbol	Description	Part No.	Symbol	Description
1-121-161-05	C <sub>705</sub>	500 $\mu$ F 6WV Electrolytic	1-105-681-12	C <sub>818</sub>	0.047 $\mu$ F 50WV Mylar
-122-05	C <sub>706</sub>	50 $\mu$ F 12WV "	-679-12	C <sub>814</sub>	0.033 $\mu$ F 50WV "
-164-05	C <sub>707</sub>	10 $\mu$ F 12WV "	-675-12	C <sub>815</sub>	0.015 $\mu$ F 50WV "
-136-05	C <sub>708</sub>	2 $\mu$ F 50WV "	-679-12	C <sub>816</sub>	0.033 $\mu$ F 50WV "
1-105-637-00	C <sub>709</sub>	0.2 $\mu$ F Mylar	-753-12	C <sub>817</sub>	0.01 $\mu$ F 200WV "
-669-12	C <sub>801</sub>	0.047 $\mu$ F 50WV Mylar	1-109-010-11	C <sub>901</sub>	200PF 500V Mica
-681-12	C <sub>802</sub>	0.047 $\mu$ F 50WV "	-010-11	C <sub>902</sub>	200PF 500V "
-685-12	C <sub>804</sub>	0.1 $\mu$ F 50WV "	1-121-245-11	C <sub>903</sub>	1000 $\mu$ F 15WV Electrolytic
1-105-122-11	C <sub>805</sub>	0.055 $\mu$ F "	-245-11	C <sub>904</sub>	1000 $\mu$ F 15WV "
-757-12	C <sub>906</sub>	0.022 $\mu$ F 200WV "	-082-11	C <sub>905</sub>	100 $\mu$ F 15WV "
-721-12	C <sub>807</sub>	0.047 $\mu$ F 100WV "	1-121-139-11	C <sub>906</sub>	50 $\mu$ F 15WV "
1-121-148-05	C <sub>808</sub>	1 $\mu$ F 100WV Electrolytic	-003-11	C <sub>907</sub>	4000 $\mu$ F 15WV "
1-115-046-00	C <sub>809</sub>	0.05 $\mu$ F 400WV Oil	-121-11	C <sub>908</sub>	2000 $\mu$ F 12WV "
1-121-220-11	C <sub>810</sub>	200 $\mu$ F 12WV Electrolytic			

### Electrical Parts List (B)

Part No.	Description	Q'ty	Part No.	Description	Q'ty
	<b>A. General</b>		1-525-039-00 } -039-03 }	High Voltage Rectifier 1DK1 HV1, 2, 3	3
	<b>Video Signal Block</b>			<b>C. Wires &amp; Miscellaneous</b>	
1-538-110-03	Printed Circuit Board	1		<b>Video Signal Block</b>	
1-506-108-00	Connecting Pin	2		Thermo Stable PVC Wire, Black	mm
1-507-109-00	Connecting Tip	4		16/0.16 1.6 $\phi$ in Diameter	200
1-515-024-11	Relay	1		Cable (Two Conductors) Black	170
	<b>Deflection Block</b>			Spaghetti Gray 23 mm	26
1-538-124-11	Printed Circuit Board	1		<b>Deflection Block</b>	
1-506-108-00	Connecting Pin	7		Thermo Stable PVC Wire	
4-003-051-01	Ceramic Spacer	2		Yellow 0.6 $\phi$	125
	<b>Sound IF Block</b>			Black 16/0.12	155
1-538-254-11	Printed Circuit Board	1		Black 26/0.16	120
	<b>High Voltage Block</b>			Black 26/0.16	35
1-453-001-02	High Voltage Block (Complete)	1		<b>Main Block</b>	
	<b>Deflection Yoke Block</b>			PVC Wire	
1-451-012-12	Deflection Yoke (Complete)	1		Red 12/0.18 1.5 $\phi$ in Diameter	
	<b>Main Block</b>			Orange " " "	
1-502-068-02 } -068-04 }	Speaker	1		Yellow " " "	
1-506-020-11	4 Pole Plug for Power Receptacle	1		Green " " "	
1-507-203-00	Multi-Jack	2		Blue " " "	
1-513-176-03 } -176-13 }	Power ON-OFF Switch	1		Gray " " "	
1-526-052-03 } -052-04 }	Picture Tube Socket	1		White " " "	
1-532-031-11	Fuse	1		Brown " " "	
X-40026-29-0	Neon Lamp with Holder	1		Black " " "	
1-514-081-11	Micro Switch	1		Violet " " "	
4-002-713-01	Micro Switch Actuator	1		Black 20/0.18 2 $\phi$	
1-531-103-02 } -106-16 }	Selenium Rectifier	1		Brown " " "	
1-536-045-11	Terminal Plate (2P)	1		Red " " "	
1-514-138-11	Push Button Switch for System Selection	1		Gray " " "	
1-536-083-11	Terminal Plate (1-4P)	1		White " " "	
	<b>Cabinet &amp; Appearance Block</b>			Cables (Two Conductors) 7/0.12 Black	335
1-507-047-00 } -065-11 }	Double Jack	1	7-631-102-04	" " " 12/0.12 Gray	
	Antenna Jack	1		Tinned Copper Wire 0.6 $\phi$	80
				" " " 1.0 $\phi$	100
	<b>B. Tube</b>			Spaghetti Yellow 1 $\phi$	35
7311-510	Picture Tube 140CB4	1		Braided Wire 16/14/0.02	160
				Coaxial Cable	



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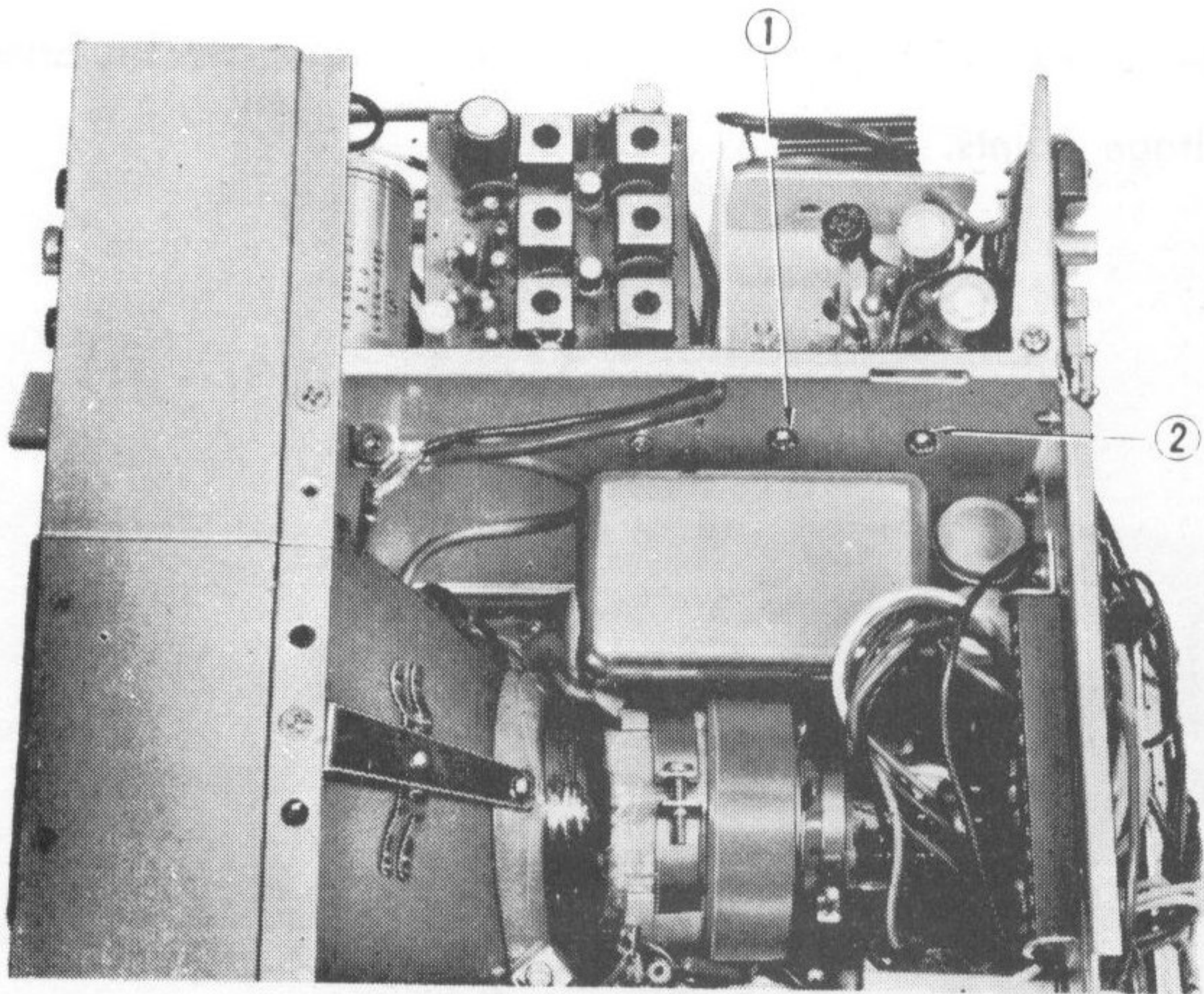
Part No.	Description	Q'ty	Part No.	Description	Q'ty
Y-44032-85-1	Tuner Block Complete	1	X-40049-53-1	Deflection Block Complete	1
X-40049-51-1	Video Signal Block Complete	1	1-453-001-02	High Voltage Block Complete	1
-52-1	SIF Block Complete	1	1-451-012-11	Deflection Yoke	1

### Mechanical Parts List

Part No.	Description	Q'ty	Part No.	Description	Q'ty
<b>A. General</b>					
<b>Cabinet &amp; Appearance Block</b>					
4-002-603-03	Cabinet Front	1	4-004-912-01	Double Clamp for Capacitor	1
-604-01	Picture Tube Mask	1	4-002-800-02	Heat Sink	1
-611-00	Antenna Bushing	1	4-004-918-01	SP Holding Bracket	1
-765-01	Picture Tube Protector	1	4-002-646-01	Earphone Jack Plate	1
-781-00	Rubber Band for Picture Tube	1	-819-01	SP Cushion Rubber	1
-782-00	Black Spacer (upper) for Tube Clamp	1	-806-03	SP Holding Screw	4
-783-00	Black Spacer (lower) for Tube Clamp	1	-647-00	Multi-Jack Holding Bracket	2
-784-00	Deflection Yoke Spacer	1	-785-00	Fiber Washer for Video Signal Board	1
X-40026-50-0	Picture Tube Clamp Ass'y, including	1	X-40026-16-2	4 Pole Plug Mounting Bracket	1
4-002-778-00	Picture Tube Clamp	(1)	4-002-653-01	Micro Switch Connecting Pin	1
-779-00	Tube Holding Bracket	(1)	-674-00	Spacer for Micro Switch	1
-780-00	Earth Spring	(1)	3-815-521-11	Push Button "CCIR"	1
X-40026-72-2	Telescopic Antenna Ass'y, including	1	-521-12	" " "625"	1
X-40026-71-2	Telescopic Antenna	(1)	-521-13	" " "B and F"	1
4-002-715-00	Antenna Washer	(1)	-521-14	" " "819"	1
-716-00	Antenna Holding Bracket	(1)	X-40026-66-0	<b>Video Signal Block</b>	1
-717-00	Insulator Bushing	(1)		Shield Plate	1
-718-00	Antenna Lug	(1)	4-002-680-01	<b>Deflection Block</b>	
-727-00	Antenna Holding Nut	(1)	-681-01	Heat Sink for Hor. Power Transistor (A)	1
-728-00	Antenna Holding Lock Nut	(1)	-682-03	" " (B)	1
-764-00	Antenna Tip (Red Ball)	(1)	-682-02	Heat Sink for Vert. Power Transistor (A)	1
X-40049-02-1	Cabinet Back	1	-683-01	" " (B)	1
-904-01	Insulating Fiber	1	-684-00	Mylar Insulator for Vert. Power Transistor	1
-905-01	Specification Label	1	-685-00	Bakelite Washer for Heat Sink	2
4-002-847-02	Telescopic Antenna Clamper	1	-686-01	Black Sheet on Deflection Circuit Board	1
X-40026-05-0	Carrying Handle	1	4-003-051-01	Ceramic Washer	2
X-40026-06-2	Table Stand Ass'y, including	1	4-002-766-01	<b>Accessories and Packing Materials</b>	
4-002-623-02	Table Stand	(1)	X-40049-06-1	Carrying Bag	1
-791-00	Table Stand Holding Bracket (Right)	(1)	X-40026-48-7	Carton Box for Carrying Bag	1
-790-00	" (Left)	(1)	4-002-771-00	Master Carton for Two Sets	1/2
-788-00	Table Stand Cushion	(1)		Styro-Foam Cushion	
-789-01	Table Stand Holding Screw	(2)	4-004-913-01	(Outside of Carrying Case)	2
-732-02	Friction Spring for Table Stand	(2)	-914-01	(Front Inside of Carrying Case)	1
	Screw $\oplus R2 \times 6$ Black	(3)	4-002-773-00	(Back Inside of Carrying Case)	1
	Nut $2.6\phi$ for Table Stand Holding Screw	(2)	-669-00	(Bottom Inside of Carrying Case)	1
4-002-730-00	Rubber Foot	2	-770-00	Polyethylene Bag for Set	1
X-40049-01-1	Channel Selector Knob	1	4-495-053-75	" for Carrying Bag	1
X-40026-10-3	Fine Tuning Knob	1	X-40049-07-1	Instruction Manual	1
-11-0	Volume Control Knob	1	4-003-032-01	Caution Tag Assembly, including	1
4-002-762-00	Vertical Hold Control Knob	1	4-498-053-15	Inspection Sheet	(1)
-635-00	Control Knob	3	-053-40	Tag for the best reception (English)	(1)
-761-00	Control Panel	1	4-493-053-75	" (French)	(1)
-742-00	Badge "SONY"	1	X-44900-02-1	Caution Tag	(1)
	<b>Main Block</b>		X-40029-04-1	Set Polishing Cloth	1
4-004-906-01	Chassis	1	4-002-667-00	Accessory Case Assembly, including	1
-909-01	Heat Sink for Regulator	1		Accessory Carton Box	(1)
-910-01	SIF Board Holding Bracket	1	1-534-041-03	AC Power Cord (4P)	(1)
-911-01	Adjustable Clamp for Capacitor	1	-042-03	Extension Cord	(1)
	4000 $\mu$ F	1	1-532-031-11	Spare Fuse 0.2 A	(2)
			1-504-010-02	Earphone	(1)
			Y-44017-03-3	External Antenna Connector	1

Part No.	Description	Q'ty	Part No.	Description	Q'ty
	<b>B. Screws &amp; Washers</b>				
	<b>Main Block</b>			<b>Solder Lug</b>	
	<b>Screw</b>		7-623-508-01	3φ (for Transistor)	1
7-621-259-62	⊕P 2.6φ × 10 (for Earphone)	2		<b>PC Board Block</b>	
-261-32	⊕P 3φ × 5 (for Multi-Jack (2), 4P Plug Mounting Bracket (3), High Voltage Block (1), Power Switch (2), Regulator Heat Sink (2), Adjustable Clamp (1), SIF Board (2), SIF Board Mounting Bracket (2))	15	7-621-261-52	⊕P 3φ × 8 (for Transistor (2), Video Board Mount (1))	3
-261-42	⊕P 3φ × 6 (for Power Transformer)	1	-255-52	⊕P 2φ × 8 (for Transistor)	4
-561-43	⊕K 3φ × 6 (for Power Transformer)	1	-555-33	⊕K 2φ × 5 (for Deflection Circuit Board)	3
-111-42	⊖R 3φ × 6 (for Tuner)	2	-261-32	⊕P 3φ × 5 (for Video & Sound Signal Circuit Board)	1
-261-12	⊕P 3φ × 3 (for Lamp Holder)	1	-255-42	⊕P 2φ × 6 (for Heat Sink)	2
-561-33	⊕K 3φ × 5 (for 4 Pole Plug)	3		<b>Nut</b>	
-261-62	⊕P 3φ × 10 (for Adjustable Clamp)	1	7-622-108-02	3φ (for Transistor)	2
-261-82	⊕P 3φ × 14 (for Selenium Rectifier)	1	-105-02	2φ (for Transistor)	4
-311-32	⊖F 3φ × 5 (for Picture Tube Mask)	1	7-623-408-01	<b>Star Washer</b>	
-261-52	⊕P 3φ × 8 (for 2P Lug (1), Transistor (2))	3		3φ (for Transistor)	2
-259-42	⊕P 2.6φ × 6 (for System Selector Switch)	2		<b>Cabinet &amp; Appearance Block</b>	
-261-22	⊕P 3φ × 4 (for Adjustable Clamp)	1		<b>Screw</b>	
	<b>Nut</b>		7-621-559-43	⊕K 2.6φ × 6 (for Telescopic Antenna Clamper)	1
7-622-107-02	2.6φ (for Earphone)	2	-561-33	⊕K 3φ × 5 (for Telescopic Antenna Bushing (1), Telescopic Antenna Holding Bracket (1), Cabinet Front (4))	6
-308-02	3φ (for Speaker)	4	-261-36	⊕P 3φ × 5 (for Cabinet Back)	3
-108-02	3φ (for 2P Lug (1), Transistor (2))	3	-259-38	⊕P 2.6φ × 5 (for Cabinet Back)	3
	<b>Lock Washer</b>		-561-53	⊕K 3φ × 8 (for Picture Tube Clamp)	2
7-623-307-01	2.6φ (for Earphone)	2	-262-22	⊕P 3φ × 20 (for Picture Tube Clamp)	1
	<b>Spring Washer</b>		-268-42	⊕P 4φ × 6 (for Grip Handle)	2
7-623-208-21	3φ (for Selenium Rectifier)	1	-555-29	⊕K 2φ × 4 (for "SONY" Badge)	2
-208-11	3φ (for 4P Plug Mounting Bracket (3), Power Transformer (1), Multi-Jack Holding Bracket (2))	7	-259-39	⊕P 2.6φ × 5 (for Table Stand Holding Bracket)	4
-207-12	2.6φ (for System Selector Switch)	2	-770-34	⊕B 2.5φ × 5 (for Control Panel)	1
	<b>Star Washer</b>		-555-33	⊕K 2φ × 5 (for Control Panel)	1
7-623-408-01	3φ (for Tuner (2), Transistor (2))	4		<b>Spring Washer</b>	
			7-623-210-22	4φ (for Grip Handle)	2



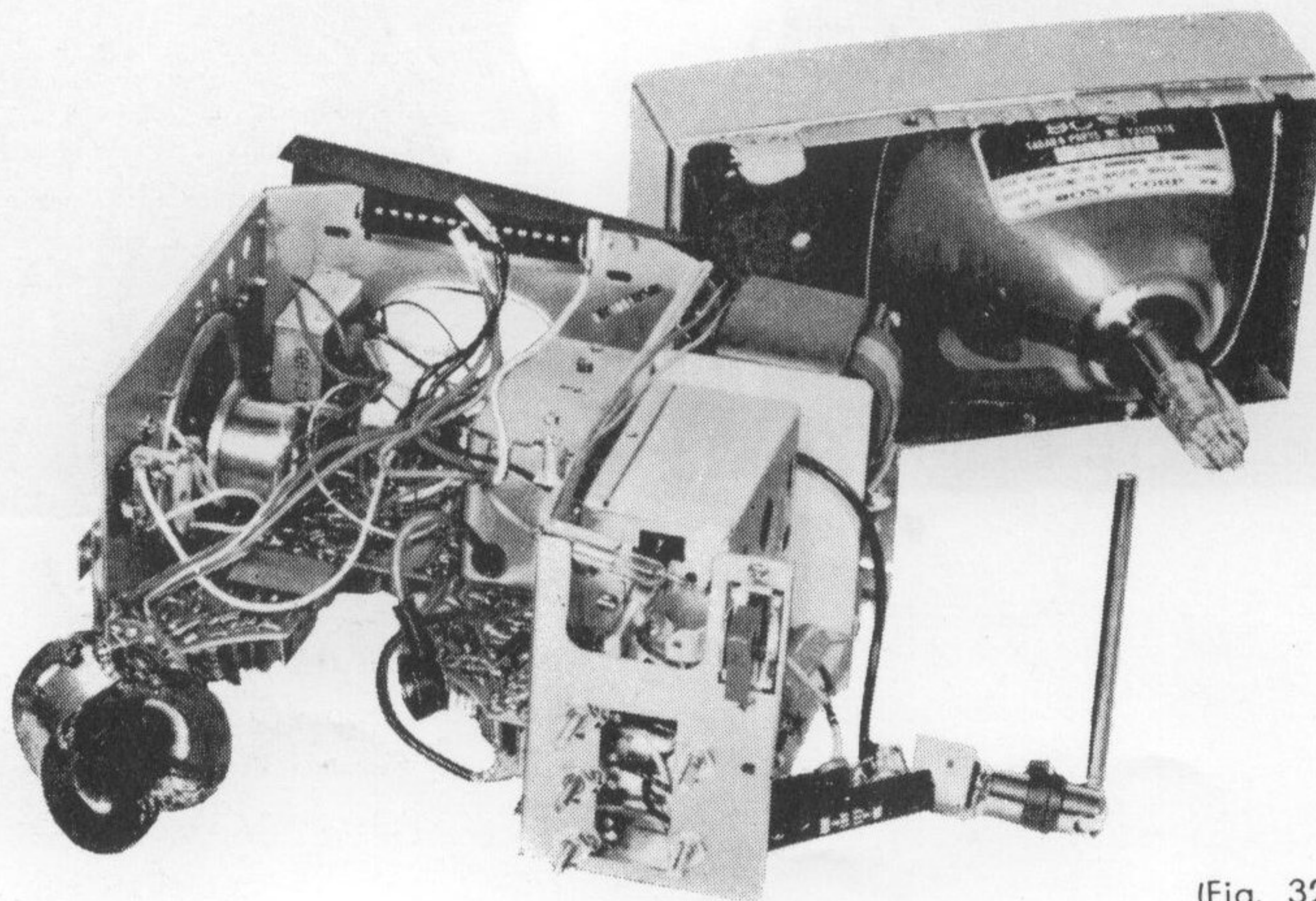


(Fig. 28)

## To Remove the High Voltage Block

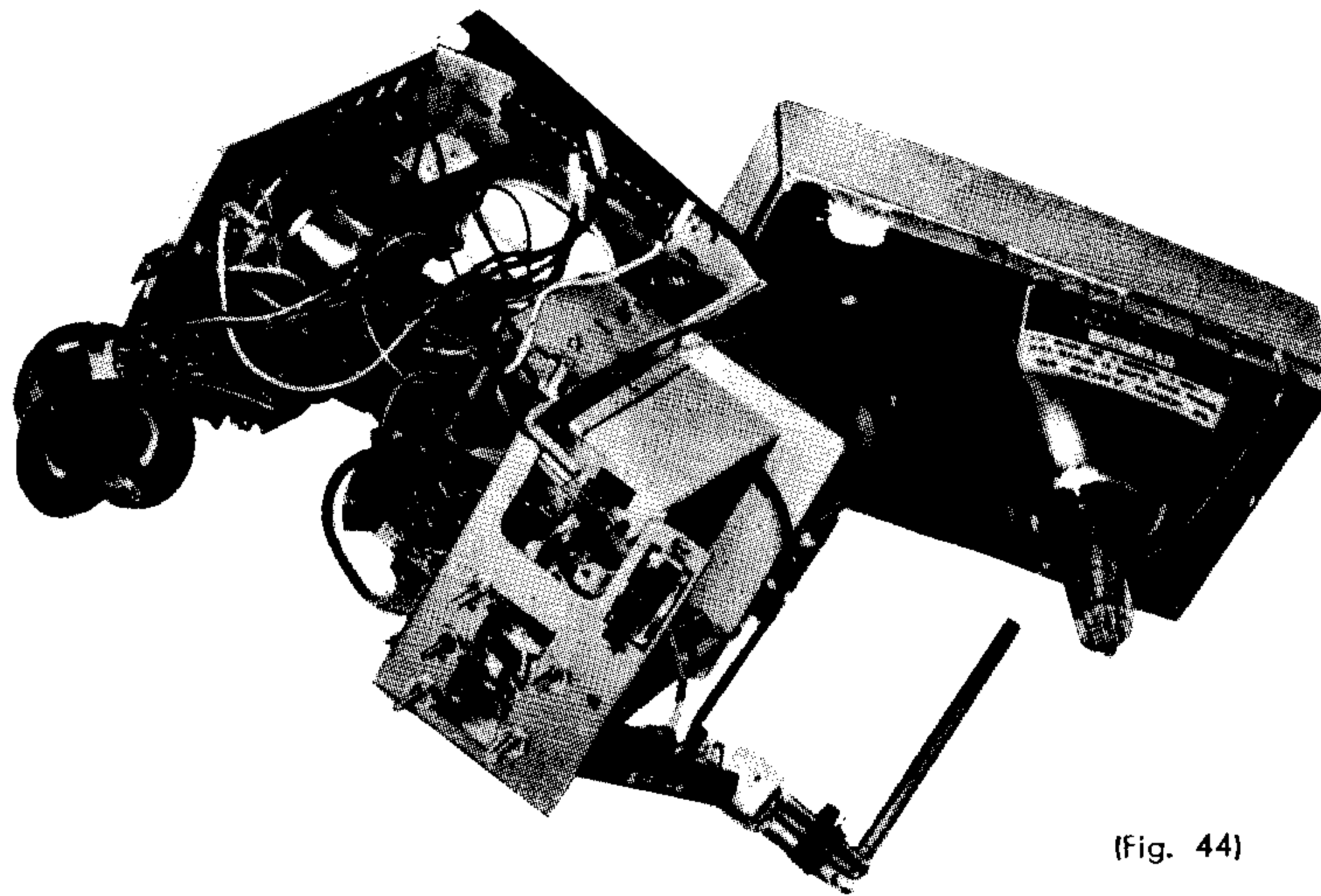
1. Unsolder three lead wires (Red, Blue and Black).
2. Pull off the Anode Cap.
3. Pull off the Pulse Supplying Pin Connectors coming from the Signal Circuit Board.
4. Remove the Phillips Screw.

**NOTE:** It is not recommended that the High Voltage Block is disassembled because a special Insulating Material is used inside to coat all High Voltage Points.



(Fig. 32)

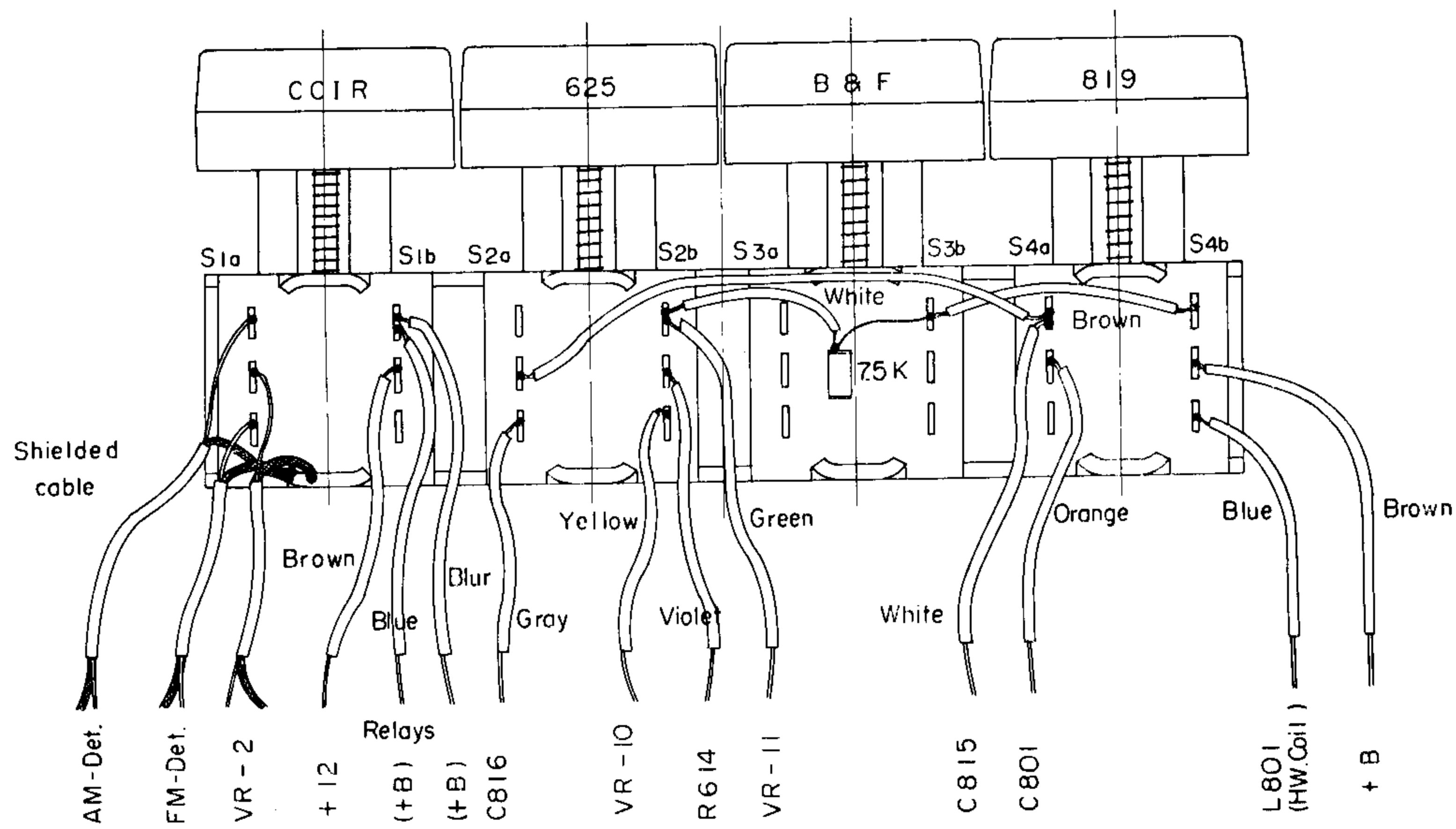




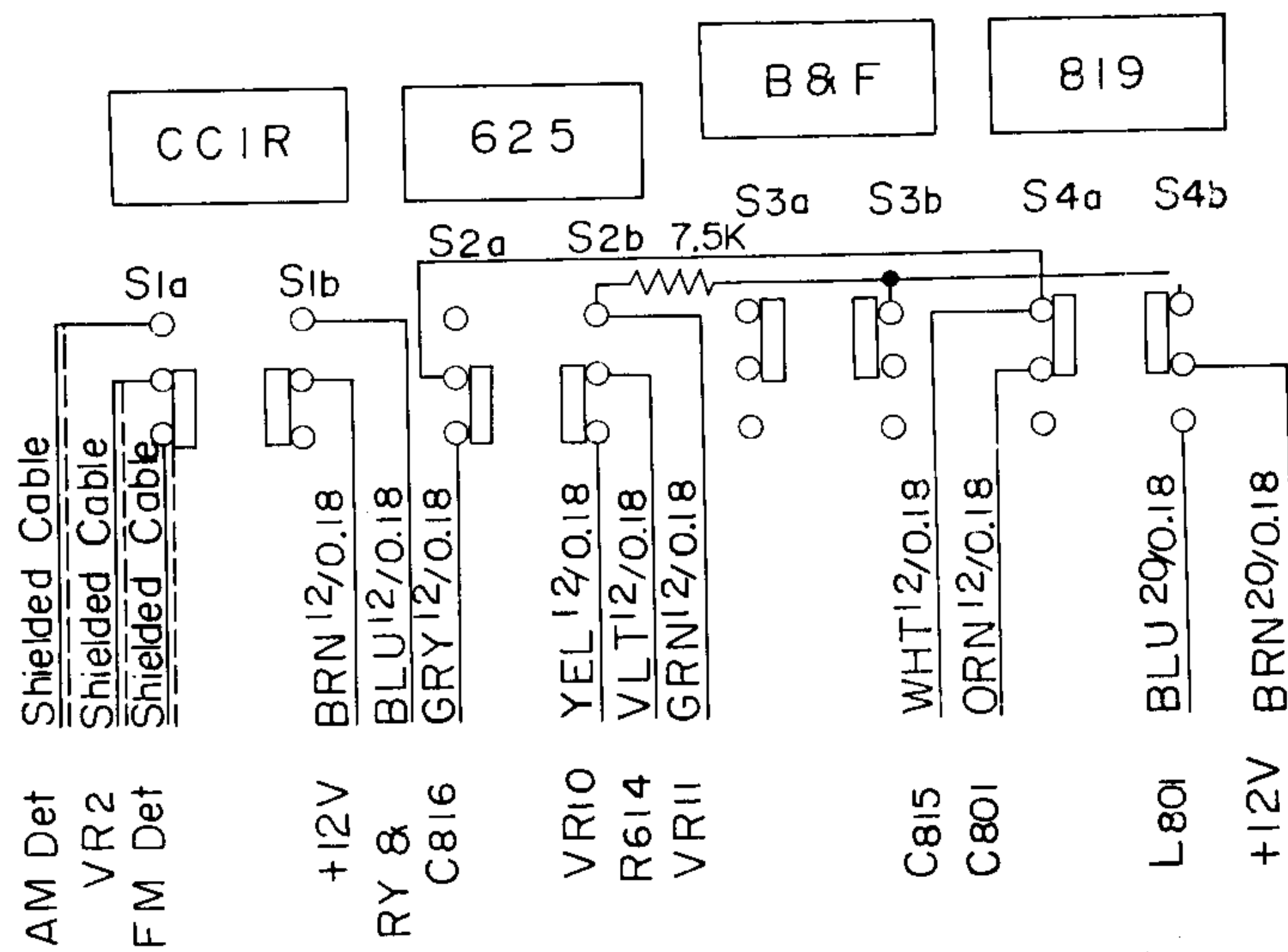
(Fig. 44)

### Wiring Diagram

—Standard Selector Buttons—



(Fig. 45)



Switch Position when CCIR and 625 Buttons are pressed

(Fig. 46)