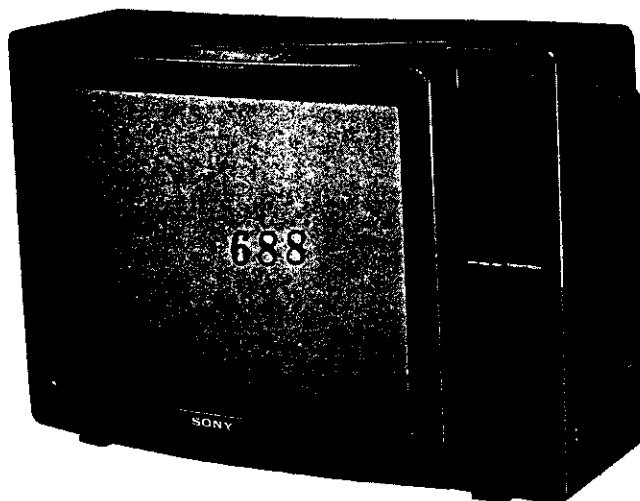


KV-2204UB

RM-604B

Chassis No. SCC-244A-A



TRINITRON®
COLOUR TV

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

SPECIFICATIONS

Television System:	British TV standards
Colour System:	PAL
Picture Tube:	56 cm, 22" (53.8 cm screen measured diagonally), 114° deflection TRINITRON system
Semiconductors:	50 transistors, 2 FETs, 9 ICs, 57 diodes and 1 GCS (Gate Control Switch)
Aerial:	75 Ω standard antenna socket
Channel Coverage:	UHF channels: 21 – 68
Intermediate Frequencies:	Picture i-f carrier: 39.5 MHz Colour subcarrier: 35.07 MHz Sound i-f carrier: 33.5 MHz
Sound System:	6 MHz intercarrier Output power: 2 W (at 10 % harmonic distortion) Speaker: 12 cm (4 ¾ inches) dia., 8 Ω
Video System:	R, G, B cathode drive

— Continued on next page —

SONY®

SERVICE MANUAL

Automatic Controls: ABL (automatic brightness limiter)
ACC (automatic colour control)
ACK (automatic colour killer)
ADG (automatic degaussing)
AFC (automatic frequency control)
AFT (automatic fine tuning)
AGC (automatic gain control)
ANC (automatic noise canceller)
APC (automatic phase control)
AVR (automatic voltage regulator)

Anode Voltage: 24.5 kV at zero beam current

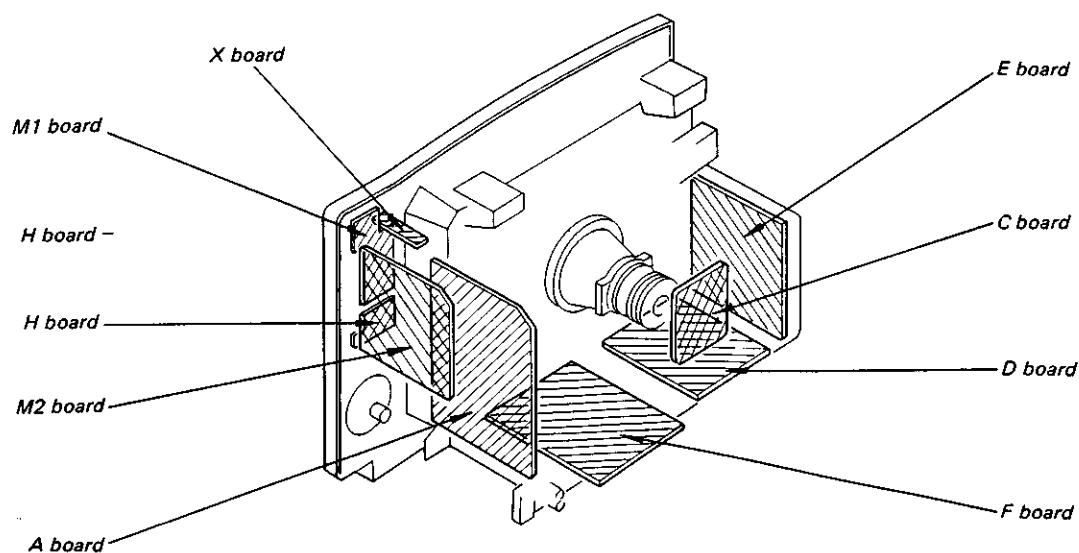
Power Requirement: 200 — 240 V ac, 50 Hz

Power Consumption: 98 W ac
8 W ac (in stand-by condition)

Dimensions: Approx. 669 (w) x 459 (h) x 413 (d) mm
26 $\frac{3}{8}$ (w) x 18 $\frac{1}{8}$ (h) x 16 $\frac{3}{8}$ (d) inches

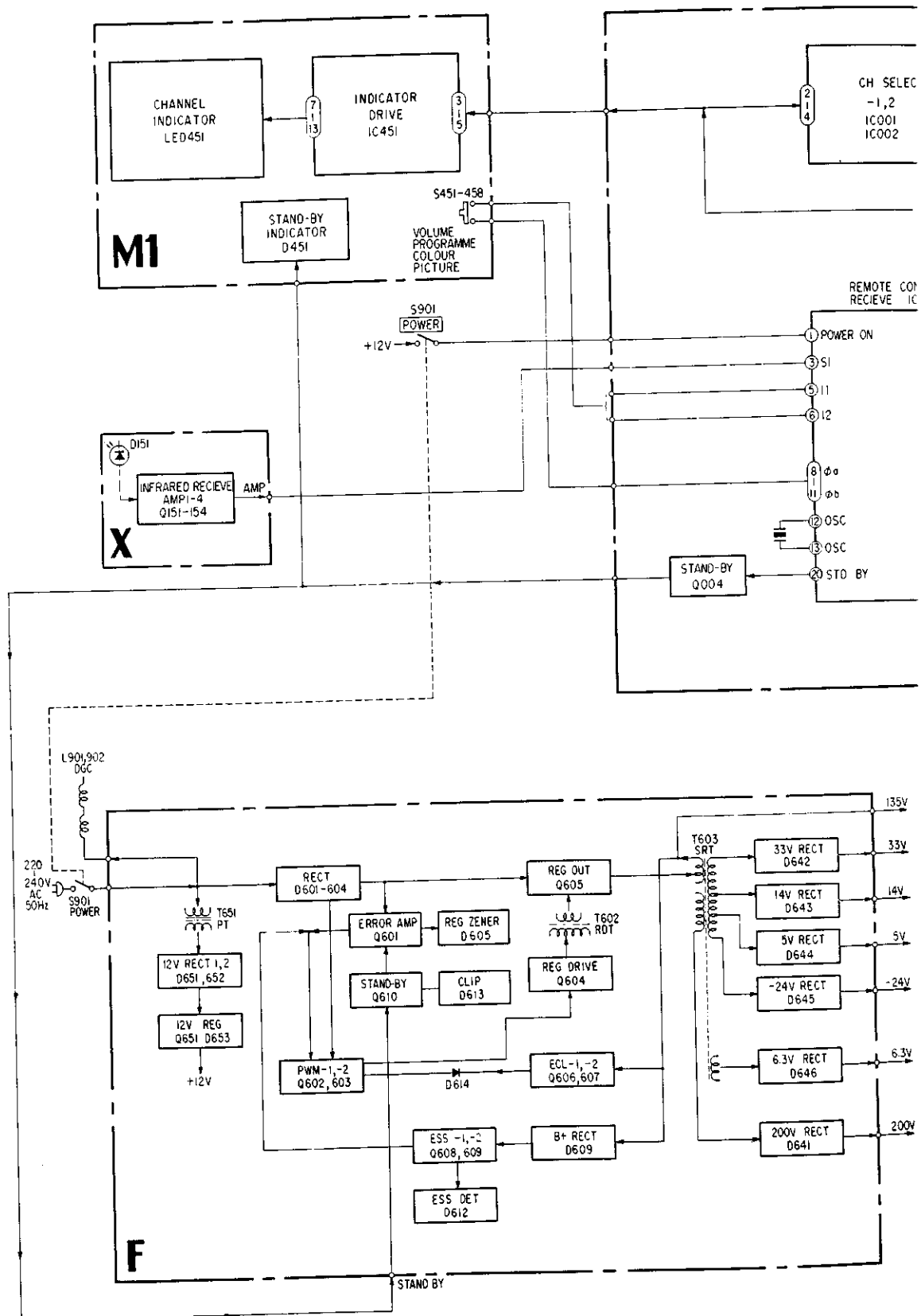
Net Weight: Approx. 31.5 kg (69 lb 7 oz)

Accessories Supplied: Remote commander RM-604B
Earpiece (ME-20E)
Instruction manual

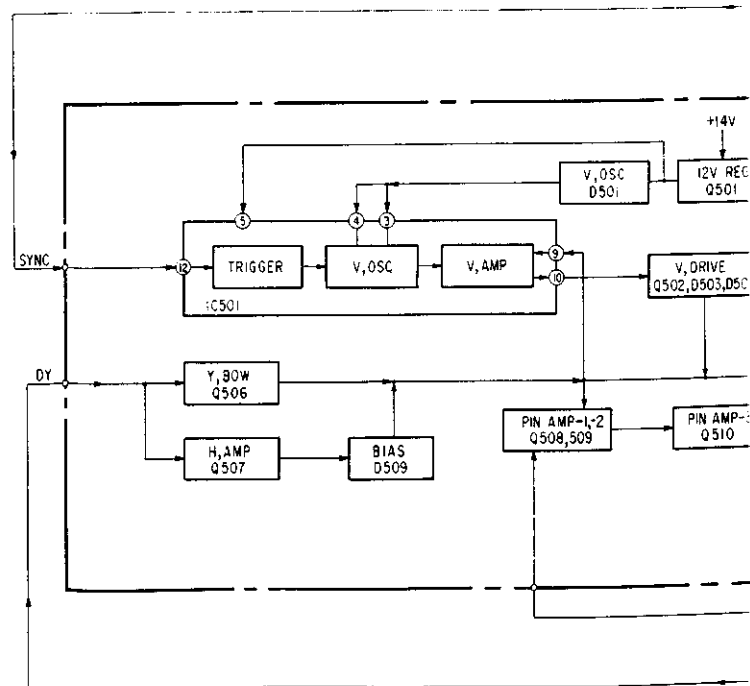
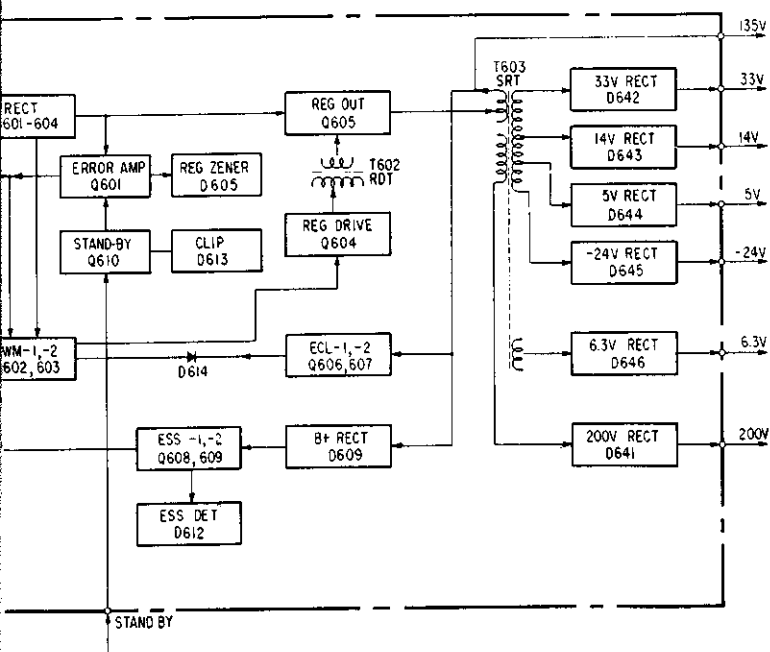
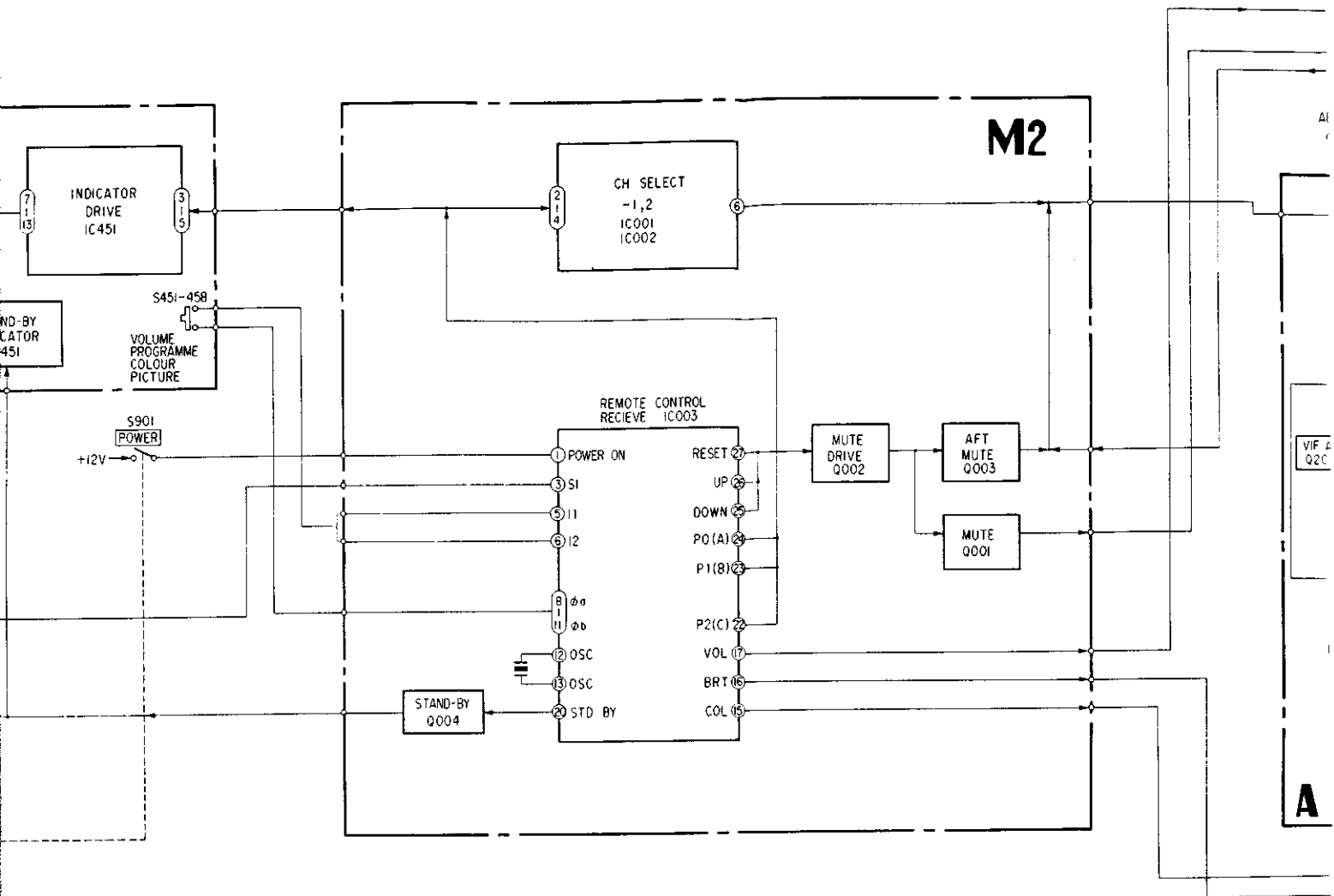
CIRCUIT BOARDS LOCATION

SECTION 1 OUTLINE

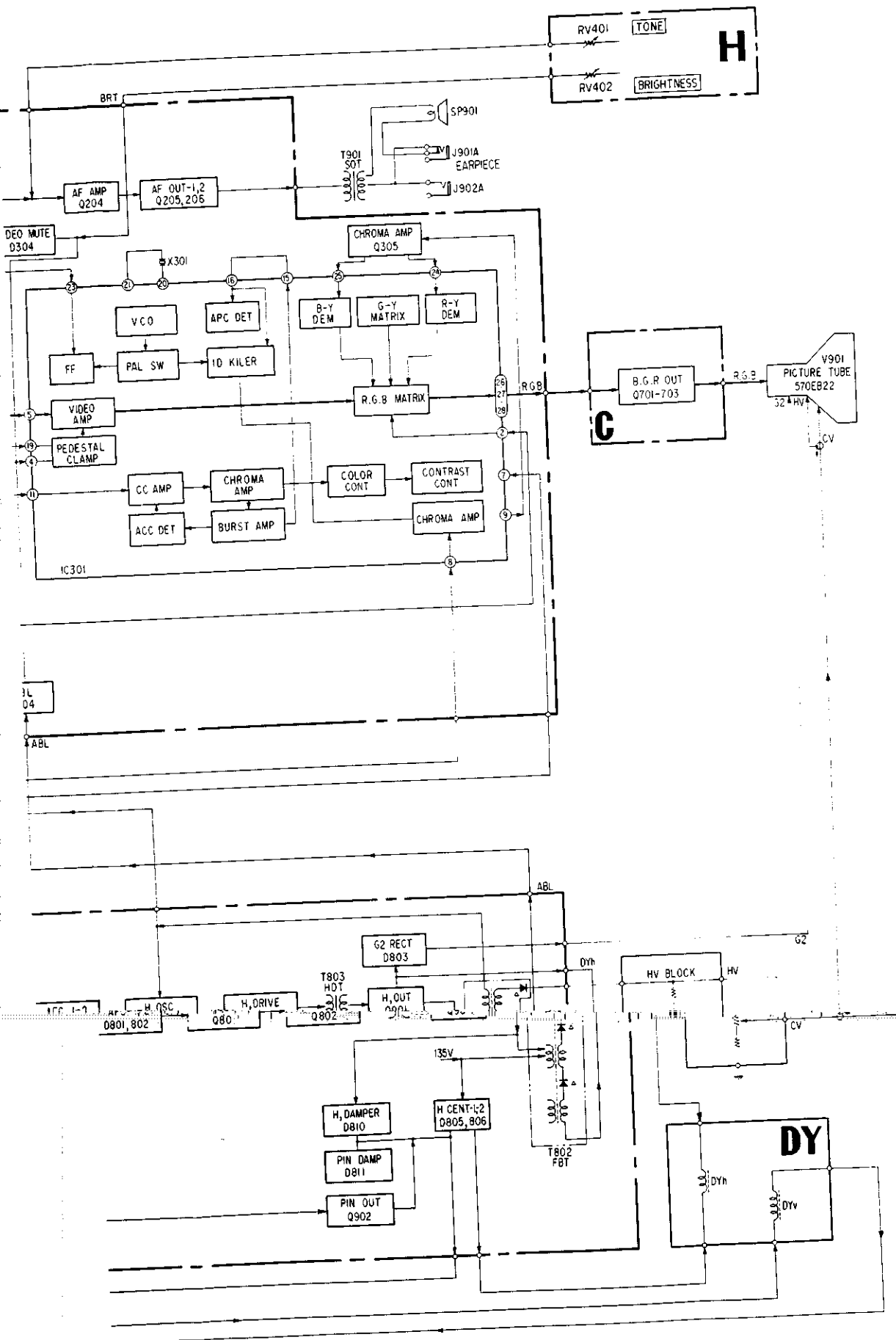
1-1. BLOCK DIAGRAM



SECTION 1 OUTLINE







⑥ anode ca

remover
(Part No. 3-

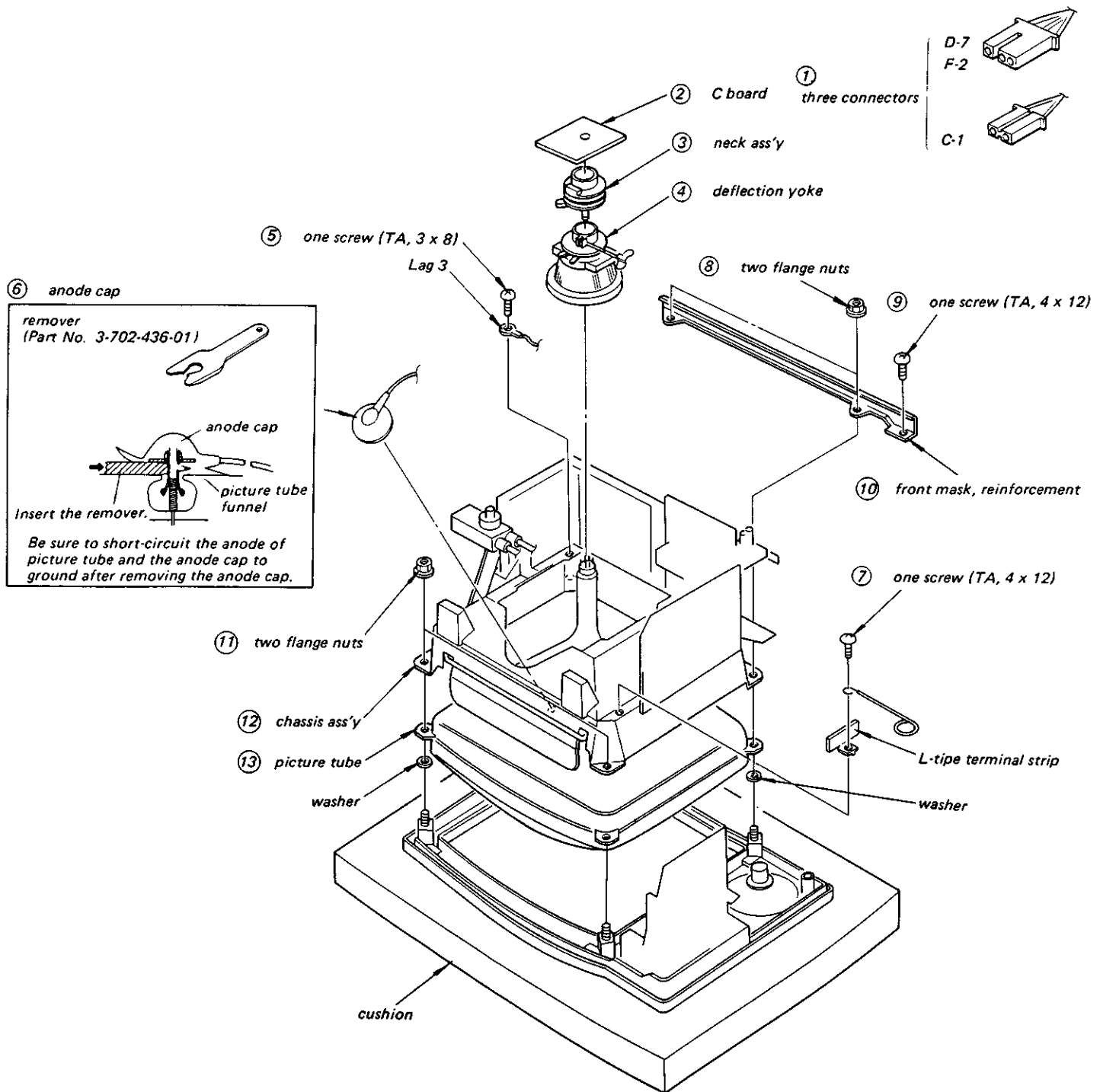


Insert the ren

Be sure to s
picture tub
ground afte

SECTION 2 DISASSEMBLY

2-1. PICTURE TUBE REMOVAL



SECTION 3 SETUP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted:

- (picture) controlmaximum
 (Press (picture) + button)
 BRIGHTNESS controlmaximum
 (fully clockwise)
 AFT switchON

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. White Balance

Note: Test Equipment Required.

1. Colour-bar/Pattern Generator
2. Degausser

3-1. BEAM LANDING

Preparation:

- Feed in the white pattern.
- Before starting, degauss the entire screen.

1. Loosen deflection yoke screw.
2. Adjust purity control as shown in Fig. 3-1.
3. Slide deflection yoke as far forward as it will go.
4. Position neck ass'y as shown in Fig. 3-2.
5. Disconnect leads (G) and (B) on the C board.
6. Adjust purity control to centre vertical red band as shown in Fig. 3-3.
7. Slide deflection yoke back for a uniform red screen.
8. Check green and blue rasters for uniformity by performing the same way as steps 5, 6 and 7.

To get a uniform green screen, connect lead (G) on the C board and disconnect leads (R) and (B).

To get a uniform blue screen, connect lead (B) on the C board and disconnect leads (R) and (G).

After these checks, connect the leads (R), (G), and (B).

9. Tighten the deflection yoke screw.
10. Check if mislanding appears at corners a - d as shown in Fig. 3-4. If mislanding is observed, correct it as shown in Fig. 3-4.
11. Confirm that beam landing is correct when the receiver is faced in all directions.

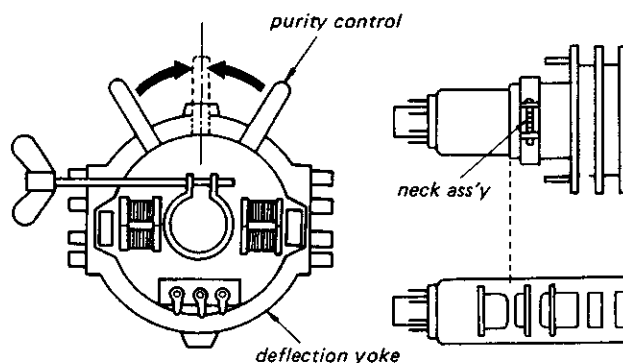


Fig. 3-1.

Fig. 3-2.

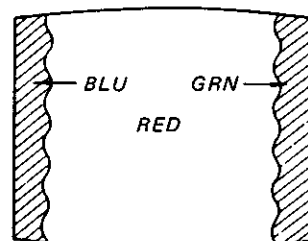


Fig. 3-3.

Disk magnets or rotatable disk magnets correct these areas (a-d).

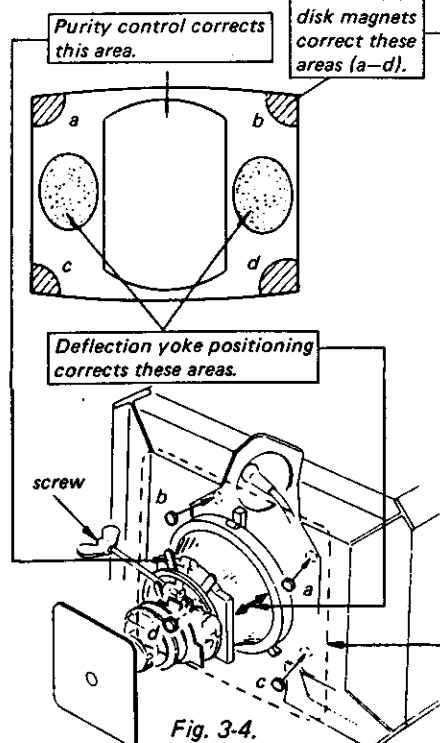
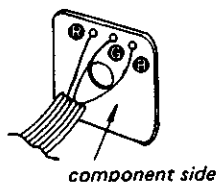
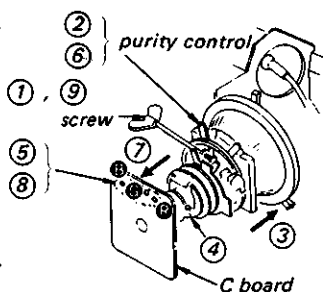


Fig. 3-4.



Note: The circled numbers (1 - 9) show above steps.

3-2. CONVERGENCE

Preparation:

- Before starting this adjustment, perform FOCUS, H. SIZE and V. SIZE adjustments.
- Turn BRIGHTNESS control fully counterclockwise.
- Feed in a dot pattern.

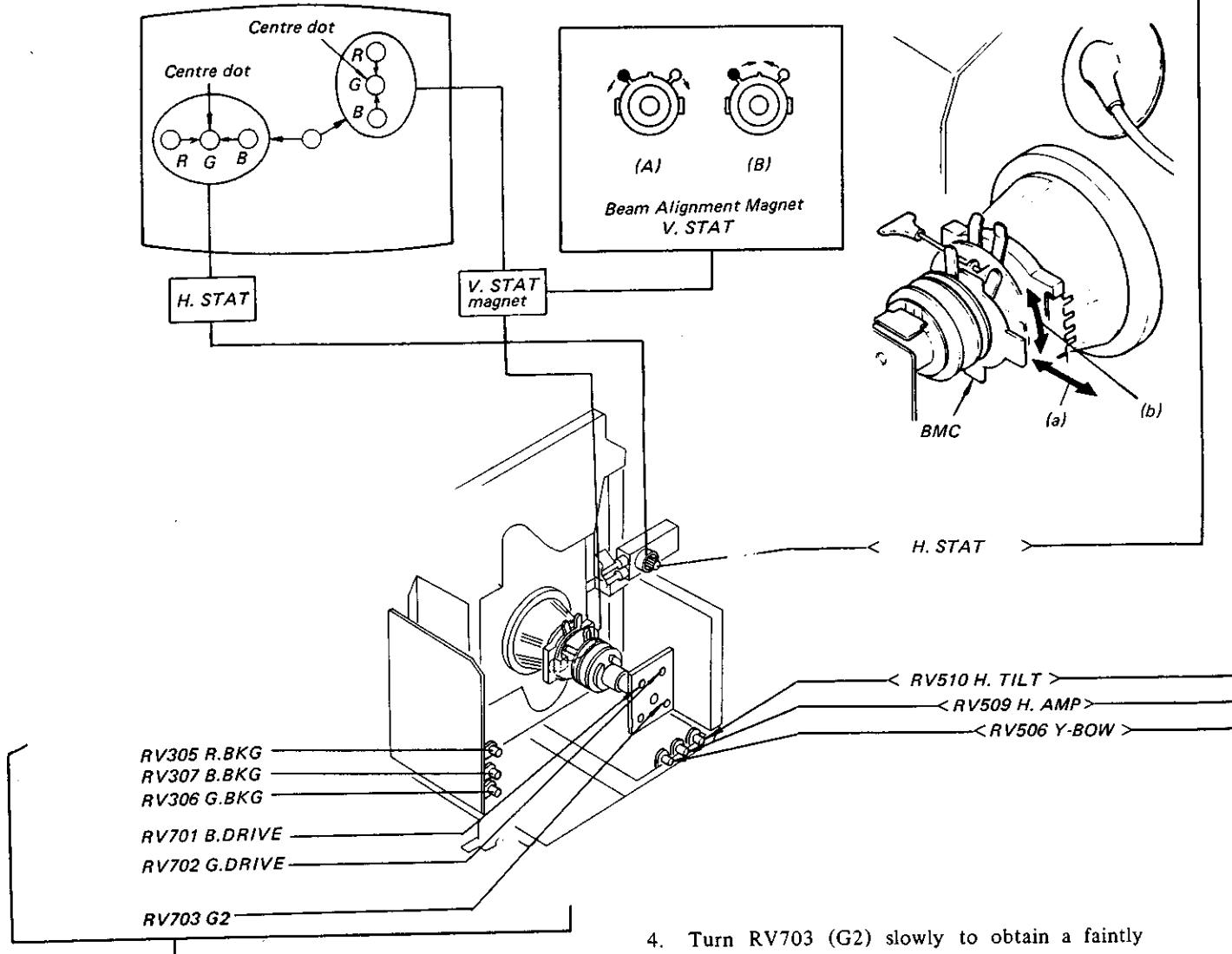
(1) Horizontal and Vertical Static Convergence

If blue dot does not coincide with red and green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H. static convergence.

Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.



3-3. WHITE BALANCE

Feed in a cross-hatch pattern.

1. Turn BRIGHTNESS control fully counterclockwise and press **● -** (picture) button to obtain a minimum picture position.
2. Turn RV701 (B.DRIVE) and RV702 (G.DRIVE) fully clockwise.
3. Set RV305 (R.BKG), RV306 (G.BKG) and RV307 (B.BKG) to mechanical centre.
4. Turn RV703 (G2) slowly to obtain a faintly visible cross-hatch. Note the colour which first becomes visible by turning RV703. Do not turn a BKG control for this colour.
5. Adjust the other two BKG controls for best white balance (neutral gray) of faint cross-hatch.
6. Turn BRIGHTNESS control fully clockwise and press **● +** (picture) button to obtain a maximum picture position. Observe the screen and adjust the DRIVE control for best white balance.
7. Repeat Steps 1 through 6 several times.

If blue dot does not coincide with red and green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H. static convergence.

Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.

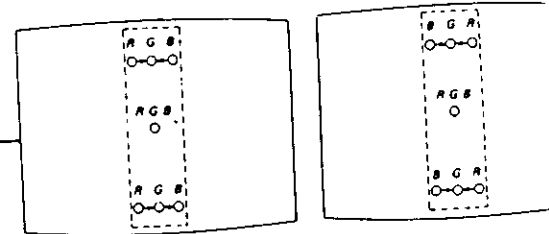
(2) Dynamic Convergence

[Misconvergence at Both Sides of Screen.]

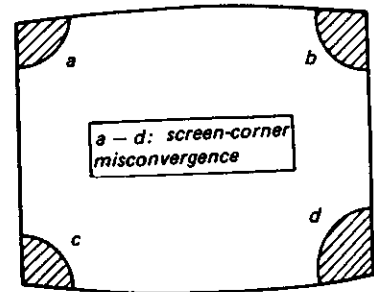
1. Set RV509 and RV510 to mechanical centre.
2. Adjust H. STAT control so that green and blue dots coincide at centre of screen.
3. Adjust RV510 so that X1 is equal to X3.
4. Adjust RV509 so that X2 is equal to X3.
5. Repeat above Steps 1 through 4 two or three times.

[Top and Bottom Misconvergence]

(A)



(3) Screen-corner Convergence

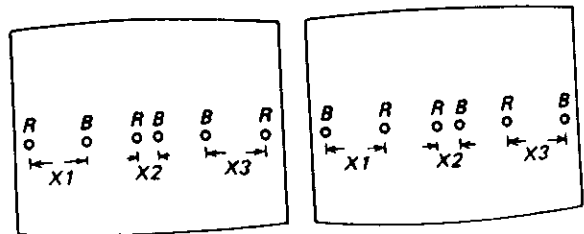


4. Turn RV703 (G2) slowly to obtain a faintly visible cross-hatch. Note the colour which first becomes visible by turning RV703. Do not turn a BKG control for this colour.
5. Adjust the other two BKG controls for best white balance (neutral gray) of faint cross-hatch.
6. Turn BRIGHTNESS control fully clockwise and press **+** (picture) button to obtain a maximum picture position. Observe the screen and adjust the DRIVE control for best white balance.
7. Repeat Steps 1 through 6 several times.

(2) Dynamic Convergence

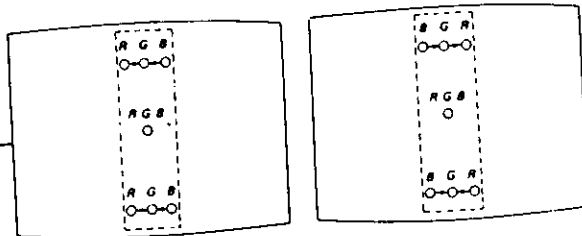
[Misconvergence at Both Sides of Screen.]

1. Set RV509 and RV510 to mechanical centre.
2. Adjust H.STAT control so that green and blue dots coincide at centre of screen.
3. Adjust RV510 so that X1 is equal to X3.
4. Adjust RV509 so that X2 is equal to X3.
5. Repeat above Steps 1 through 4 two or three times.

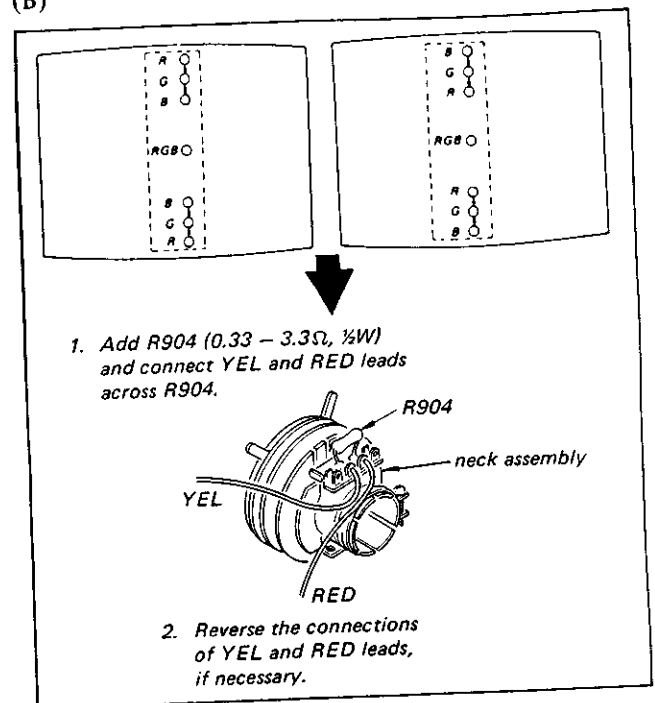


[Top and Bottom Misconvergence]

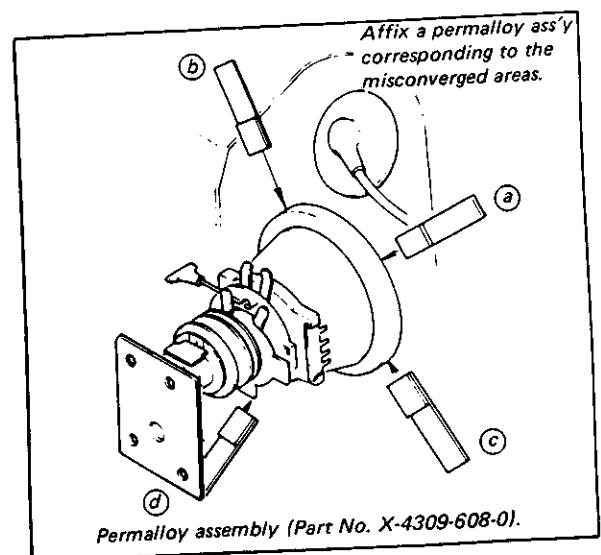
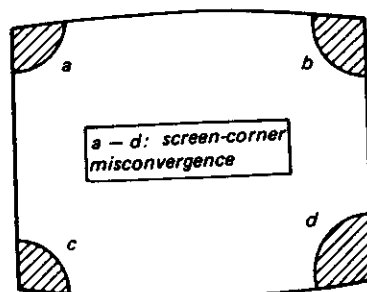
(A)



(B)



(3) Screen-corner Convergence



SECTION 4 CIRCUIT ADJUSTMENTS

Note: (1) TEST EQUIPMENT REQUIRED

1. Oscilloscope
2. Voltmeter (VOM)
3. Colour-bar/pattern generator
4. Variable auto-transformer
5. Isolation transformer

(2) INPUT SIGNAL

When making these adjustments, supply a cross-hatch, a colour-bar or an off-air signal.

(3) CONTROL SETTINGS

Controls and switch should be set as follows

- | | |
|---------------------|-----------------------|
| ● (picture) control | set for best picture |
| BRIGHTNESS control | or press NORM. button |
| ● (colour) control | on remote commander. |

- (4) These adjustment should be performed with rated power supply voltage unless otherwise noted.

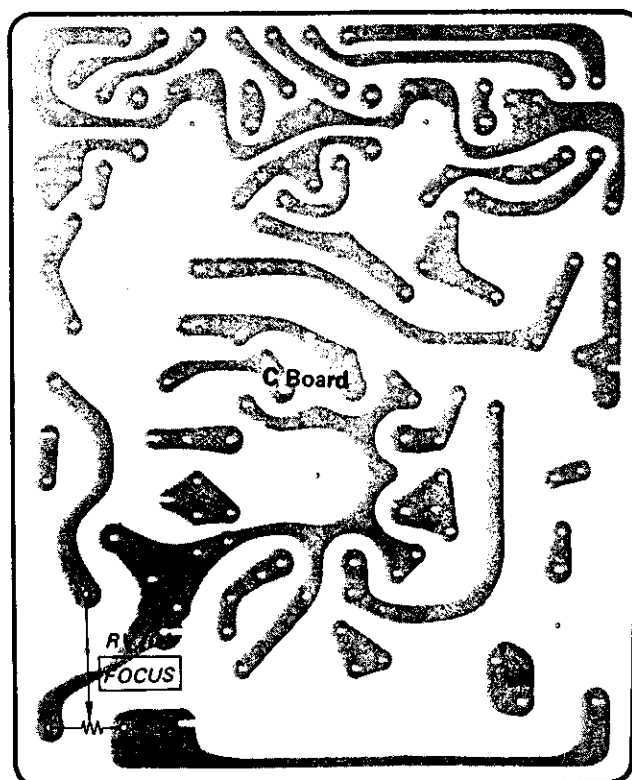
(5) ADJUSTMENT

Adjustment	Circuit board	Page
FOCUS	C	11
135V ADJ	F	12
PIN AMP AND PHASE	D	13
TOP AND BOTTOM PINCUSHION		
H. OSC	E	14
CW PHASE	A	15 and 16
SIF		
AFT		
RF AGC		
IH DELAY		
APC (4.433MHz)		
SUB BRT		
SUB COLOUR		

4-1. C BOARD ADJUSTMENT

FOCUS

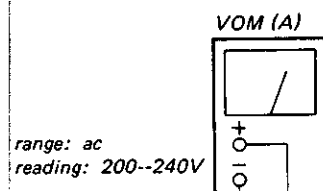
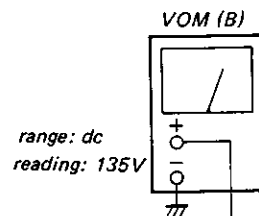
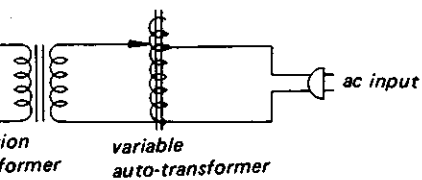
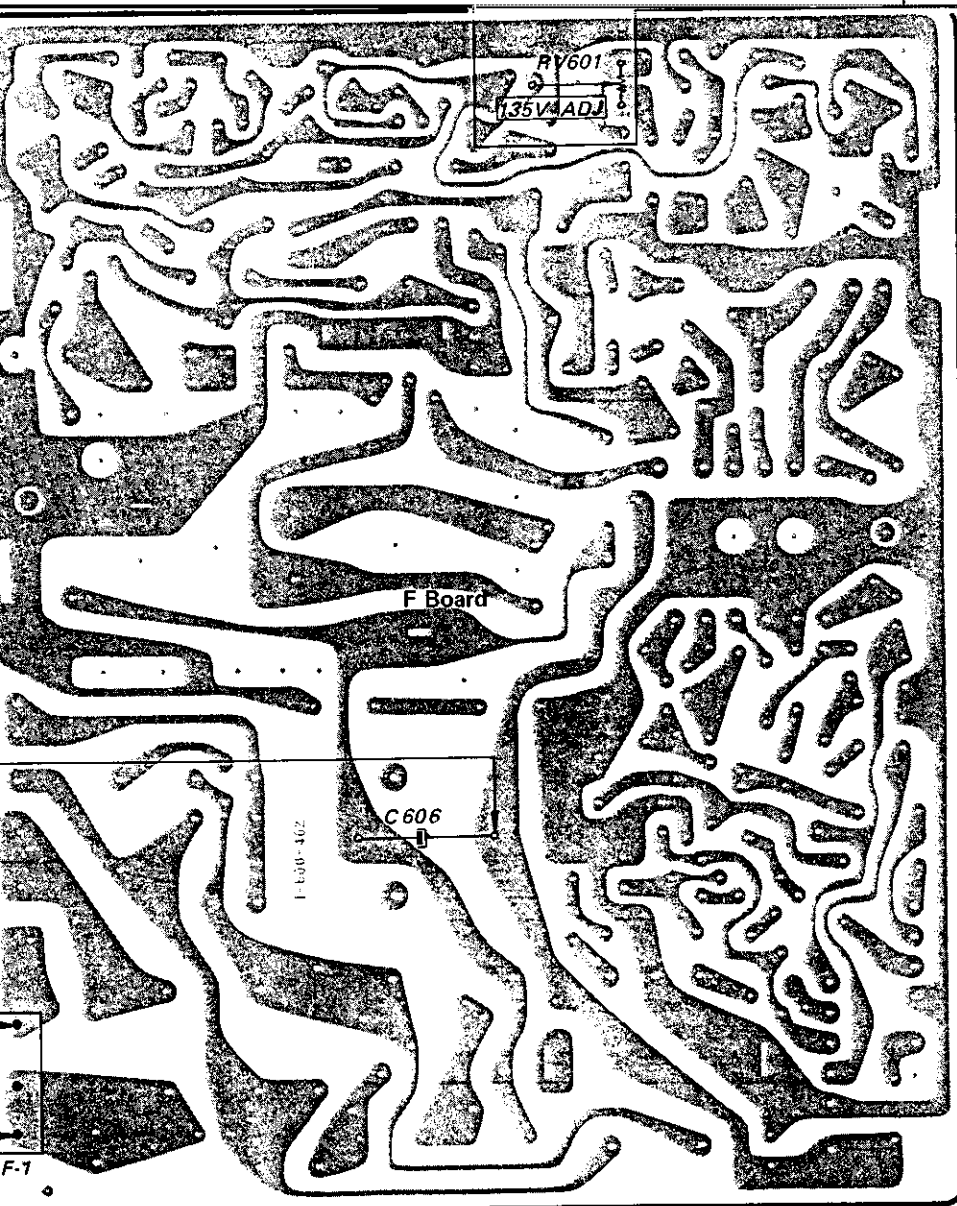
Adjust RV704 for a best focus.



4-2. F BOARD ADJUSTMENT

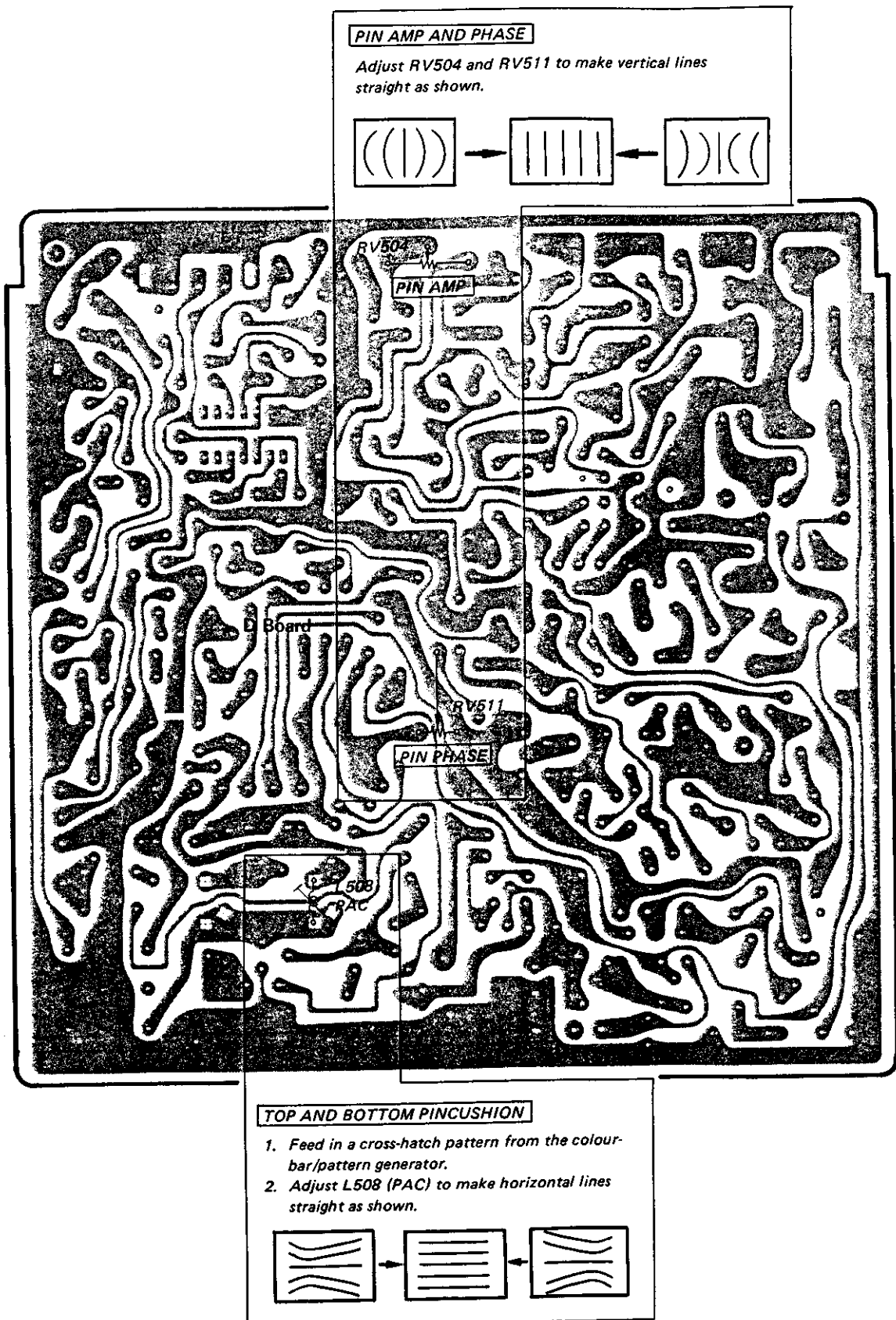
135V ADJ

1. Adjust variable auto-transformer for 200–240V ac on VOM (A).
2. Adjust RV601 for 135V dc on VOM (B).



isolat
trans

4.3. D BOARD ADJUSTMENTS



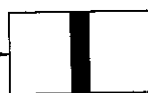
4.4. E BOARD ADJUSTMENT

H. OSC

1. Connect a 10 μ F/50V electrolytic capacitor during this adjustment as shown.
2. Adjust T801 for stable picture as shown.



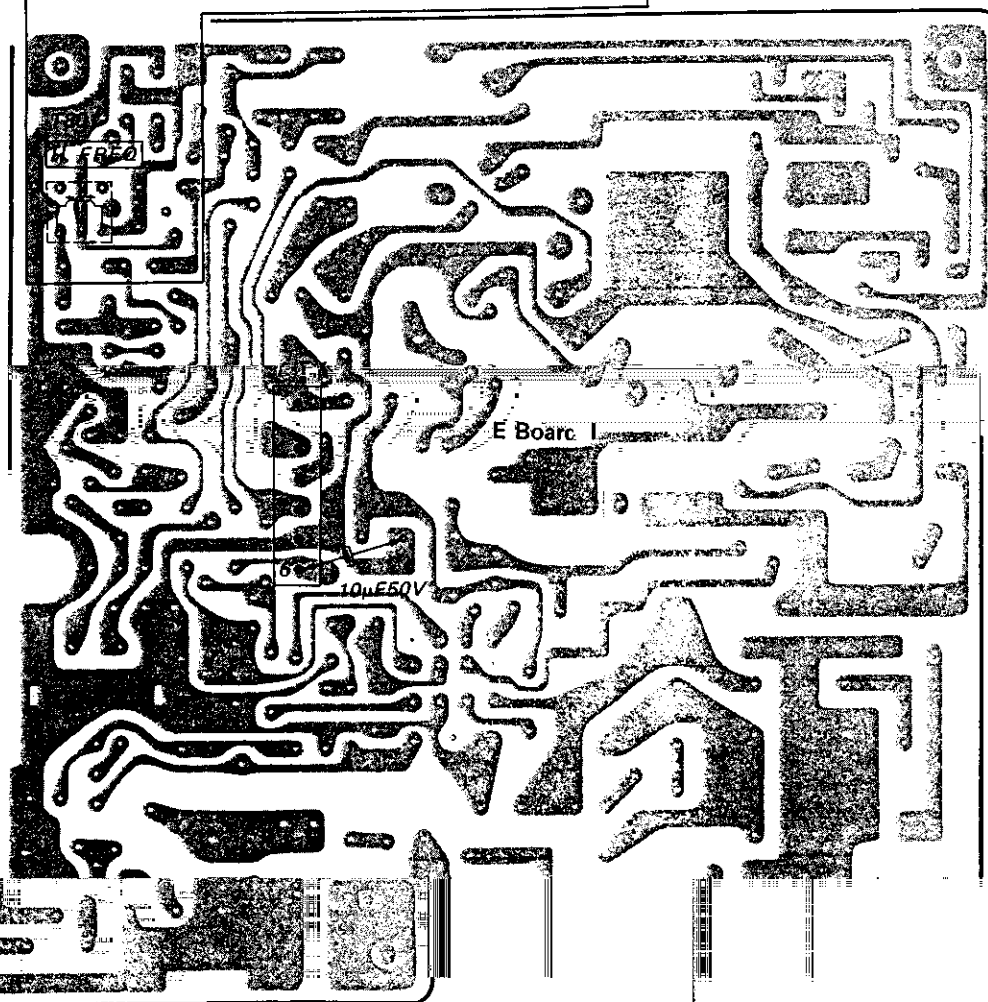
fo: too low



fo: suitable



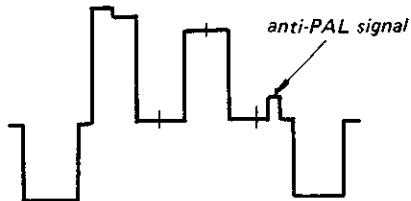
fo: too high



4-5. A BOARD ADJUSTMENTS

CW PHASE

1. Feed in a special colour-bar signal.
2. Connect an oscilloscope (B) to the pin 7 of A-8 connector.
3. Adjust RV304 so that the anti-pal signal of the red output is disappeared.

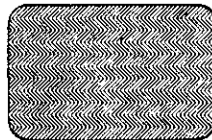
**SIF**

1. Tune in an off-air signal.
2. Adjust T206 for a maximum clear sound.

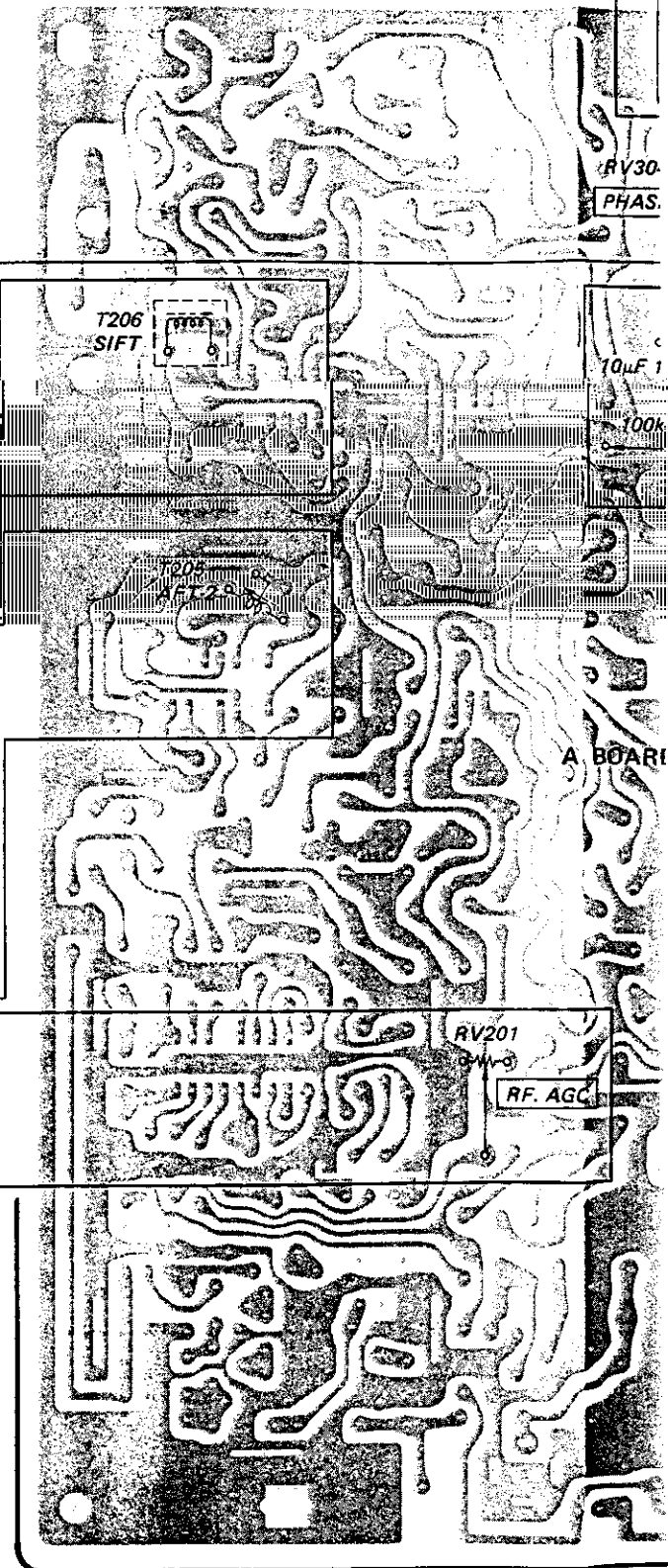
AFT

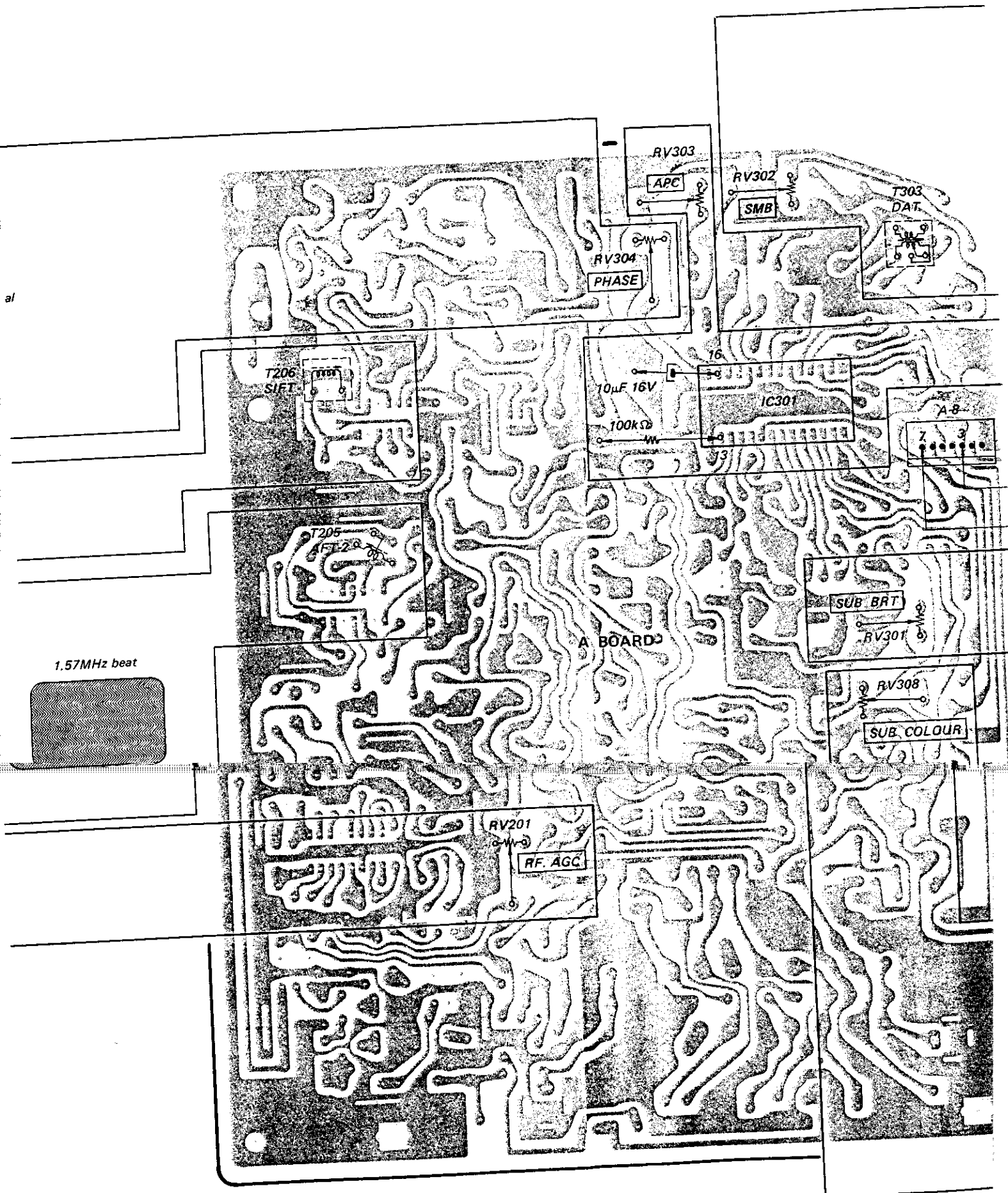
1. Tune in an off-air signal.
2. Set AFT switch to OFF (manual operation).
3. Turn tuning knob clockwise to obtain 1.57 MHz beat.
4. Set tuning knob to the point where the 1.57MHz beat just disappears by slowly turning tuning knob counterclockwise.
5. Set AFT switch to ON. The 1.57 MHz if the adjustment is improper.
6. Set T205 to the point where the 1.57MHz beat just disappears or normal colour is obtainable.

1.57MHz beat

**RF AGC**

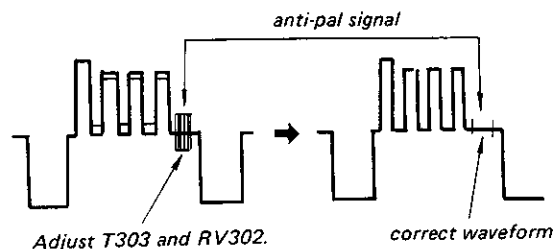
1. Tune in an off-air signal.
2. Adjust RV201 so that snow-noise cross-modulation just disappear from the picture.





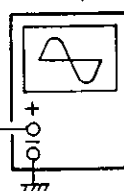
1H DELAY

1. Feed in a special colour-bar signal.
2. Connect an oscilloscope (A) to the pin 3 of A-8 connector.
3. Adjust T303 and RV302 to obtain the waveform as shown.

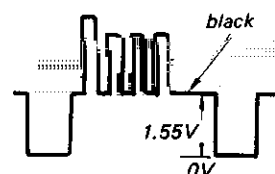
**APC (4.433MHz)**

1. Feed in a colour-bar signal from colour-bar/pattern generator.
2. Connect a 100k Ω resistor between pin 13 of IC301 and ground during this adjustment as shown.
3. Connect a 10 μ F/16V capacitor between pin 16 of IC301 and ground during this adjustment as shown.
4. Adjust RV303 for the stable colour pattern.

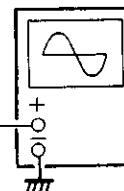
oscilloscope (A)

**SUB BRT**

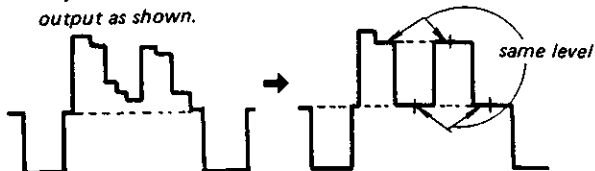
1. Feed in a colour-bar signal from colour-bar/pattern generator.
2. Connect an oscilloscope (A) to the pin 3 of A-8 connector. (This connecting point is same as that of 1H DELAY adjustment.)
3. Press the **—(picture)** buttons to (obtain the minimum picture position).
4. Turn the BRIGHTNESS control fully counterclockwise.
5. Adjust RV301 to obtain the waveform as shown.



oscilloscope (B)

**SUB COLOUR**

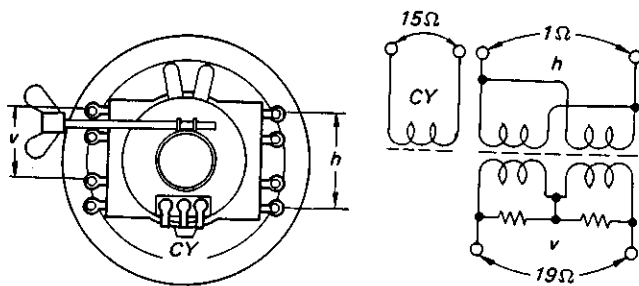
1. Feed in a colour-bar signal from colour-bar/pattern generator.
2. Connect an oscilloscope (B) to the pin 7 of A-8 connector.
3. Adjust RV308 for a best waveform of the red output as shown.



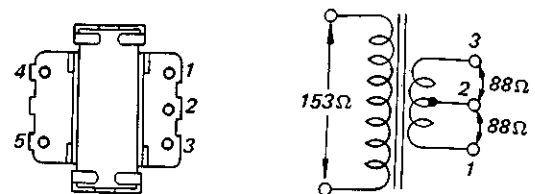
SECTION 5 DIAGRAMS

5-1. DC RESISTANCES AND WINDING DIAGRAMS OF COILS AND TRANSFORMERS

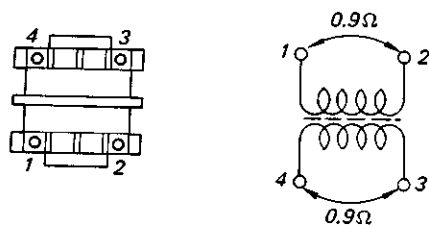
L904 DY



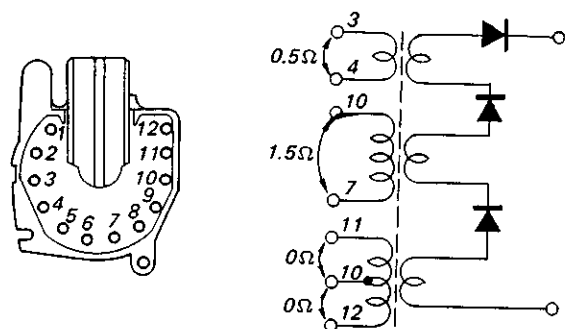
T651 PT



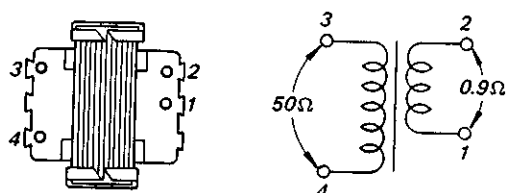
T601 LFT



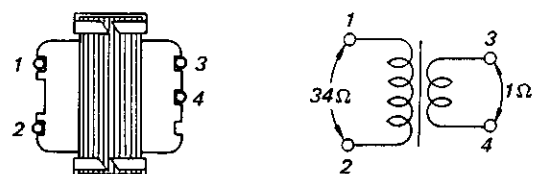
T802 FBT



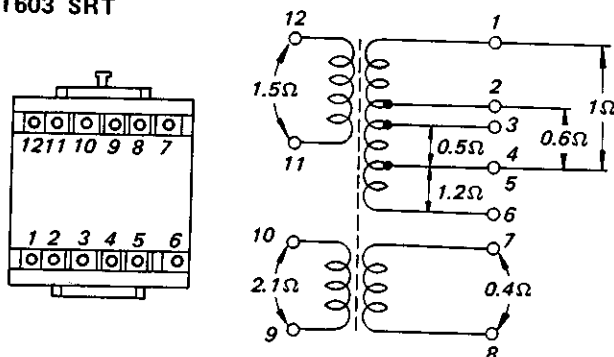
T602 RDT



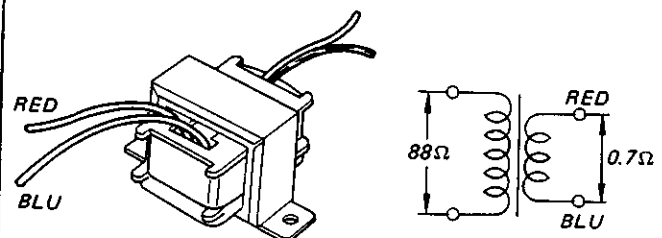
T803 HDT



T603 SRT



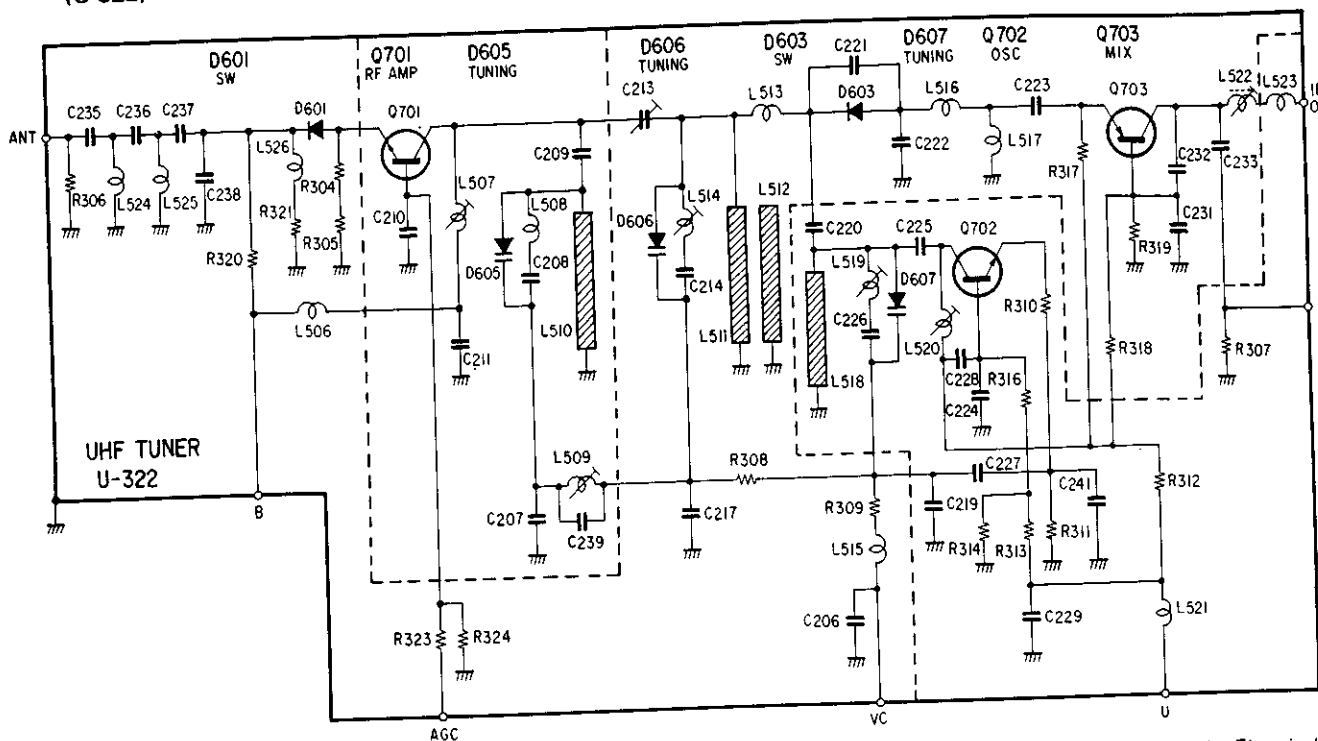
T901 SOT



Note:

- DC resistance measurements shown with coils and transformers disconnected from circuit.

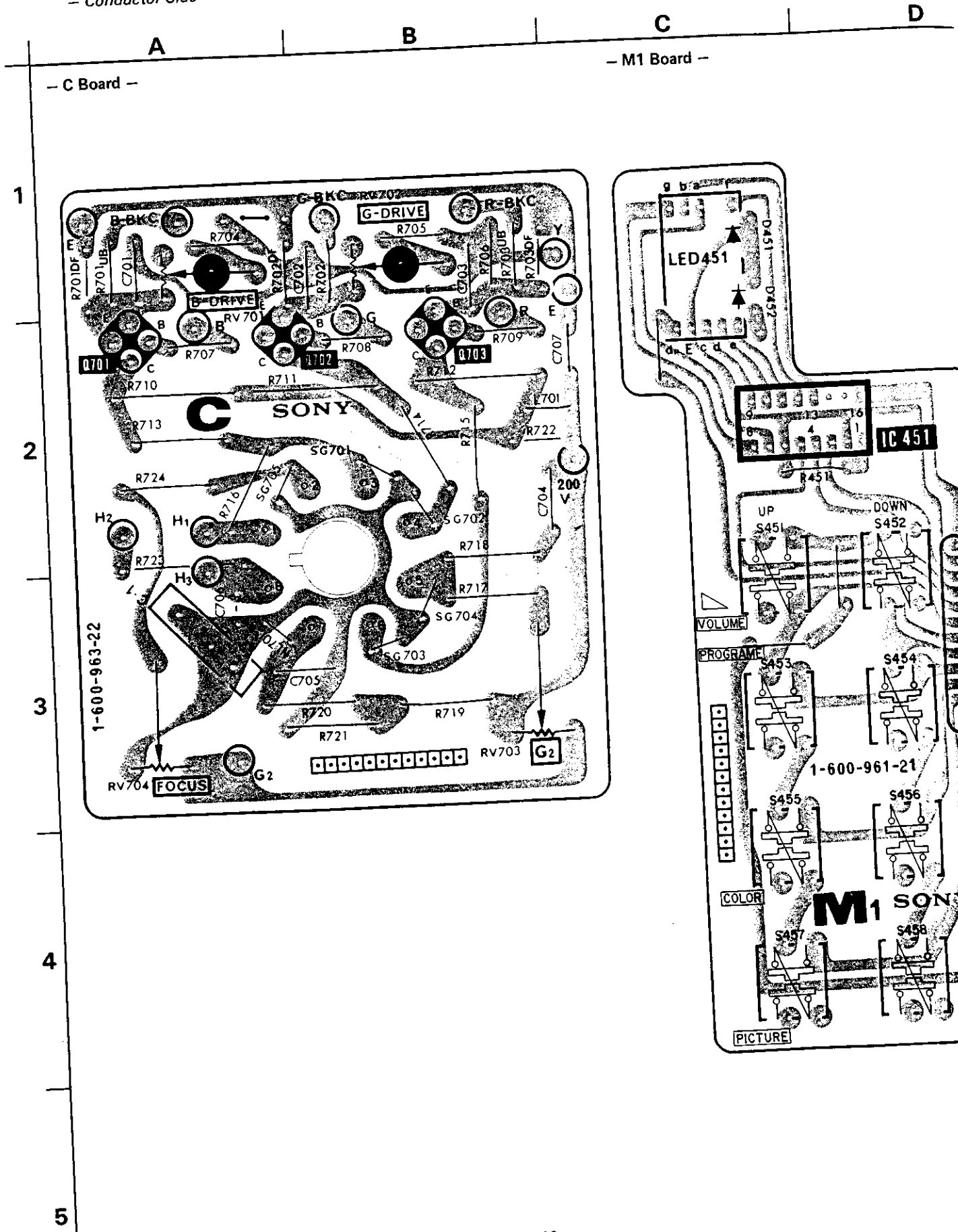
5-2. UHF TUNER SCHEMATIC DIAGRAM - UHF Tuner - (U-322)



- Tuner reference numbers are not included in the Electrical Parts List (Page 40 to 47).

5-3. MOUNTING DIAGRAMS
- Conductor Side -

[R-G-B OUT] **C** [CUSTOMER CONTROL INDICATOR] **M1**



[R-G-B OUT]

C

[CUSTOME
CONTROL
INDICATOR]

M1

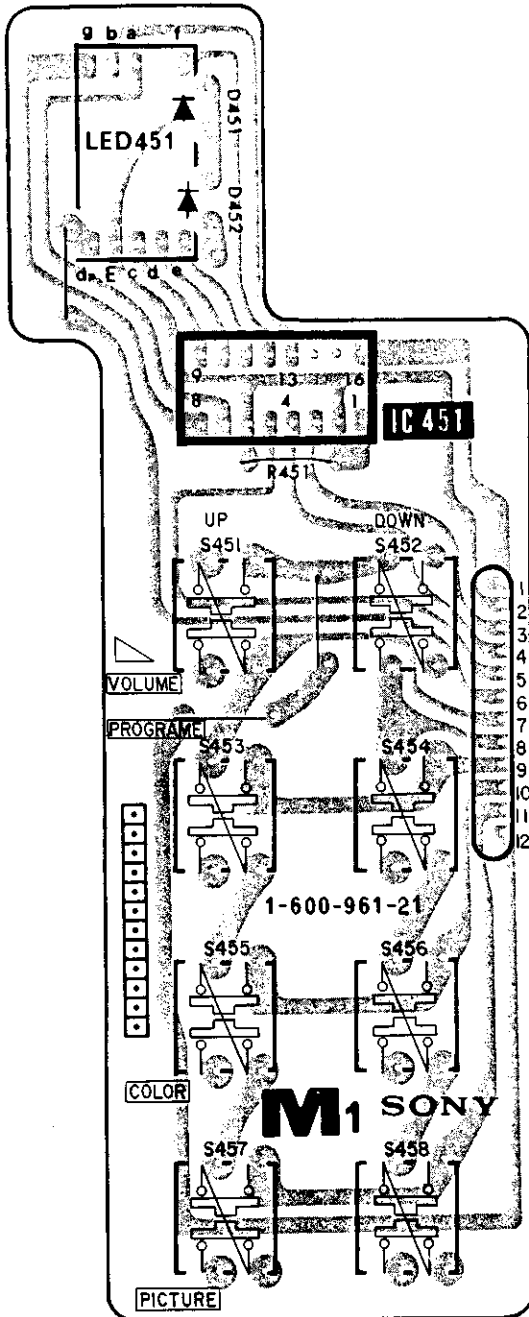
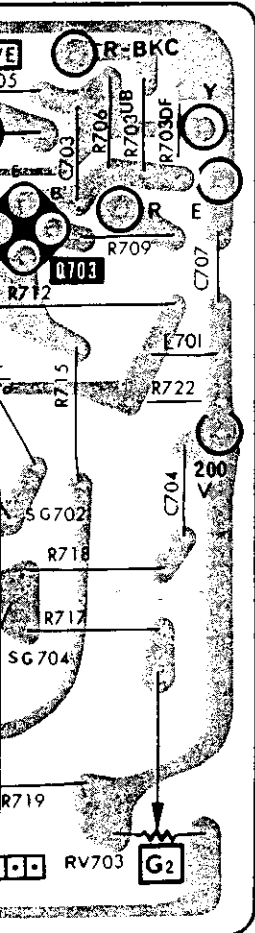
H

[CUSTOME
CONTROL]

X

[AMP]

— M1 Board —



— H Board —

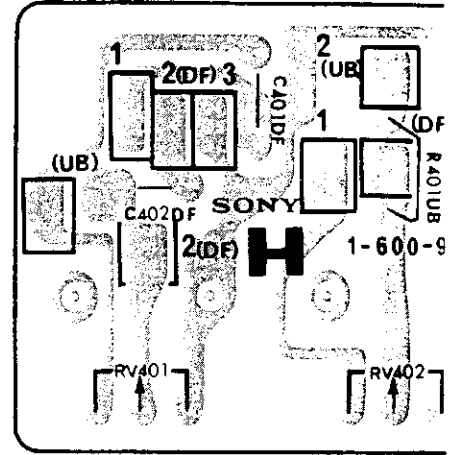
1

2

3

4

5



4UB

KV-2204UB

SCC-244A-A

M1

H

[CUSTOME
CONTROL]

X

[AMP]

D

A

B

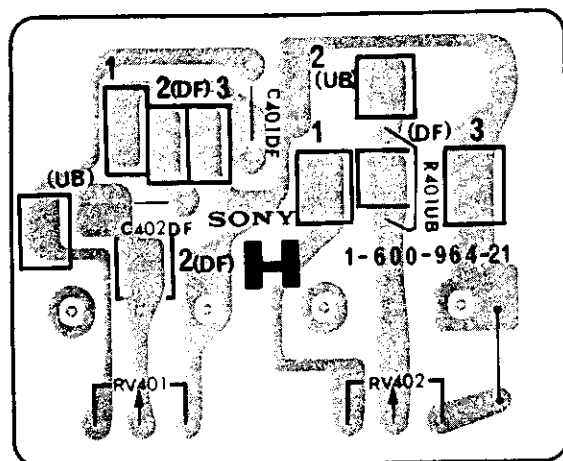
C

D

- H Board -

- X Board -

1

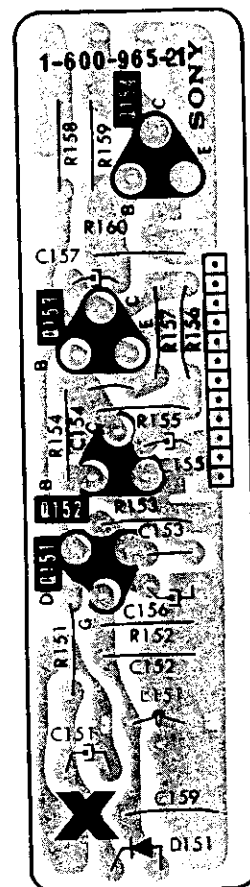


2

3

4

5

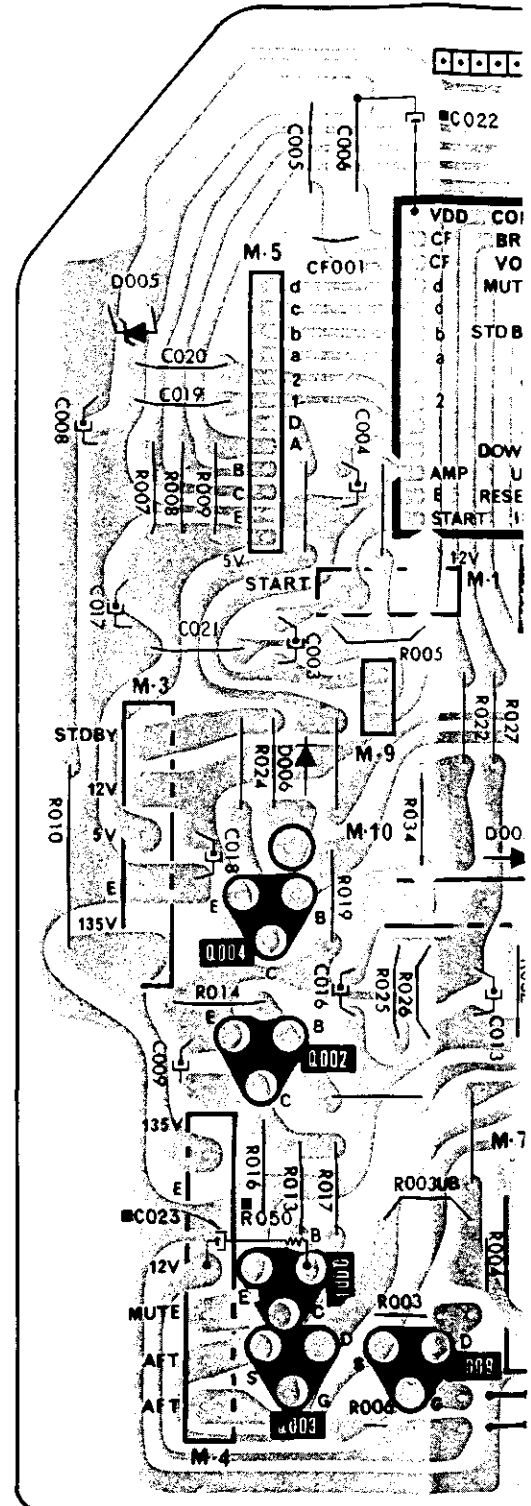


M2

M2

— M2 Board —

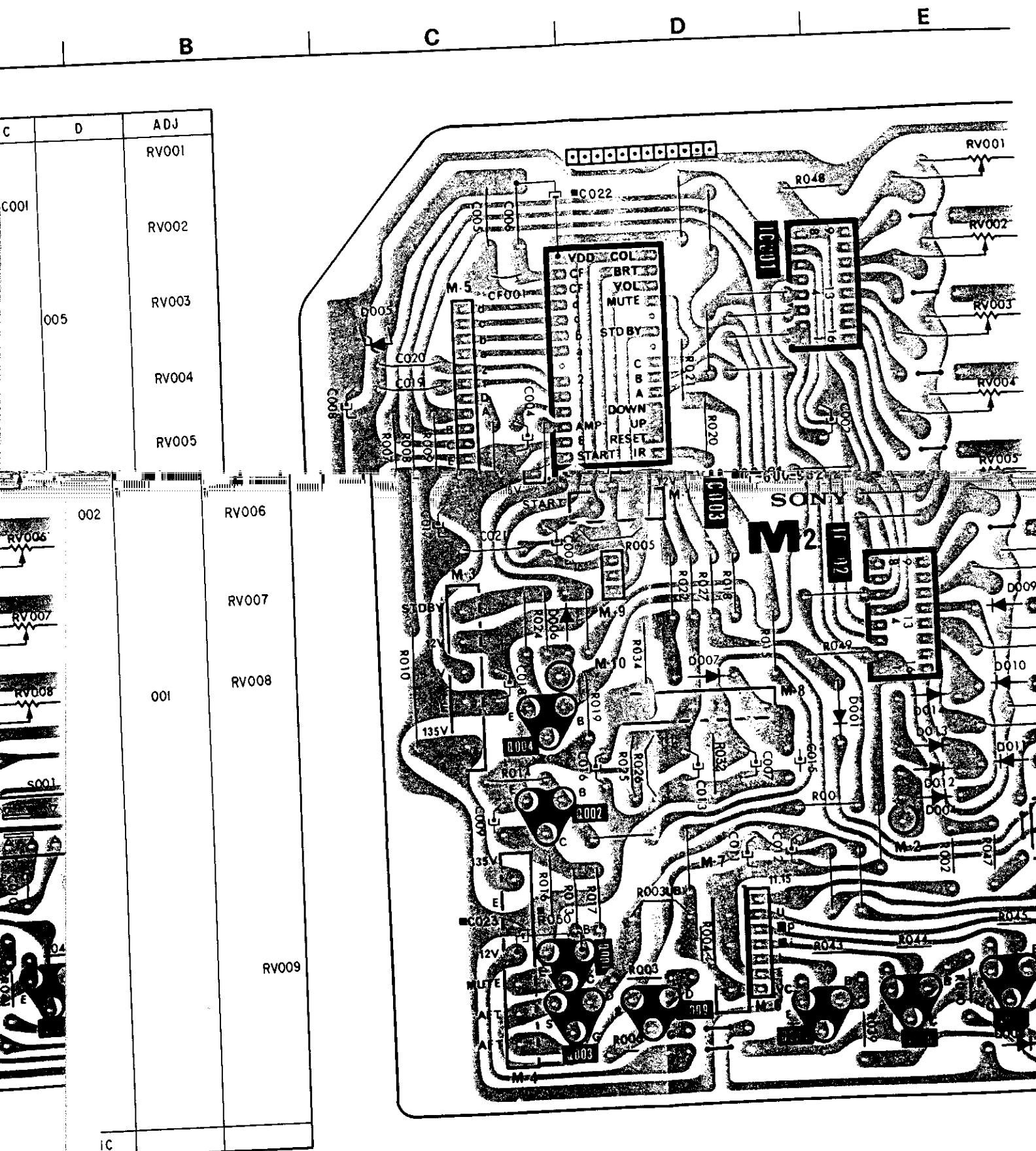
Q, IC	D	ADJ
		RV001
IC001		RV002
IC003	005	RV003
		RV004
		RV005
IC002		RV006
		RV007
004	001	RV008
002		
001		RV009
003		
Q, IC		



M2

M2

CH SELECT, CH PRESET,
STANDBY, AFT
REMOTE CONTROL



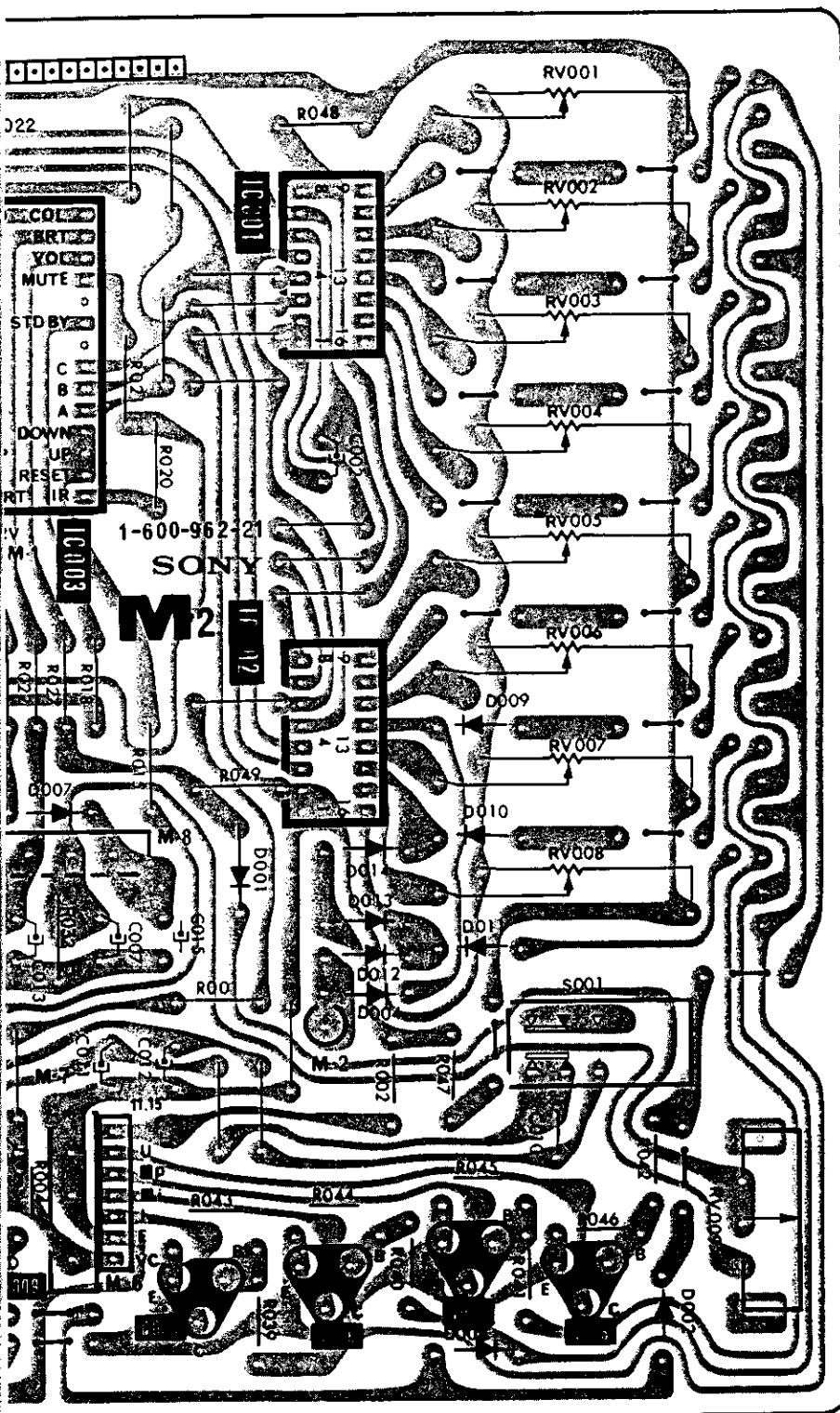
M2

CH SELECT, CH PRESET,
STANDBY, AFT
REMOTE CONTROL

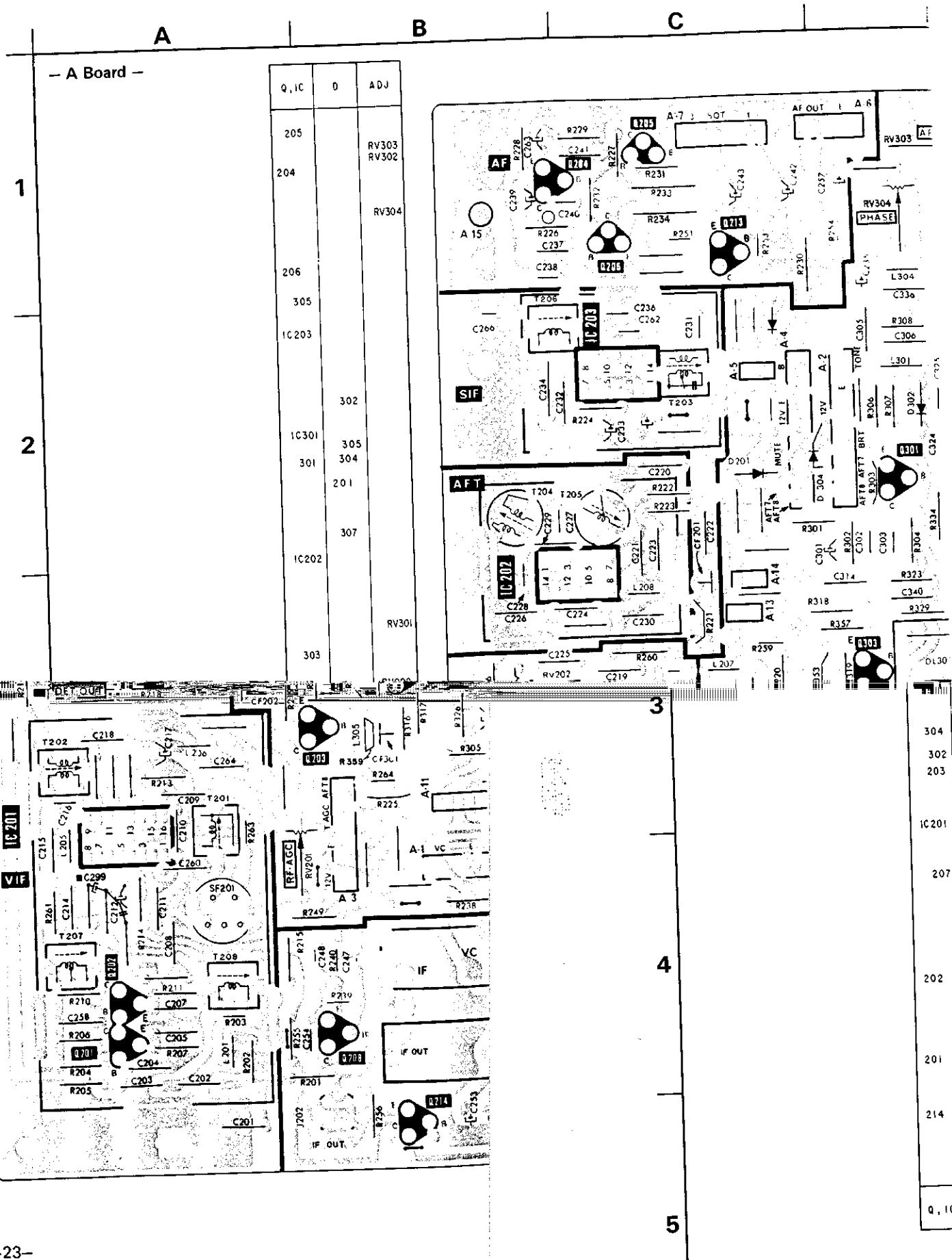
D

E

F



TUNER, Y-CHROMA
12V REGU, VIF, AFT,
SIF, AF



TUNER, Y-CHROMA
12V REGU, VIF, AFT,
SIF, AF

A

A

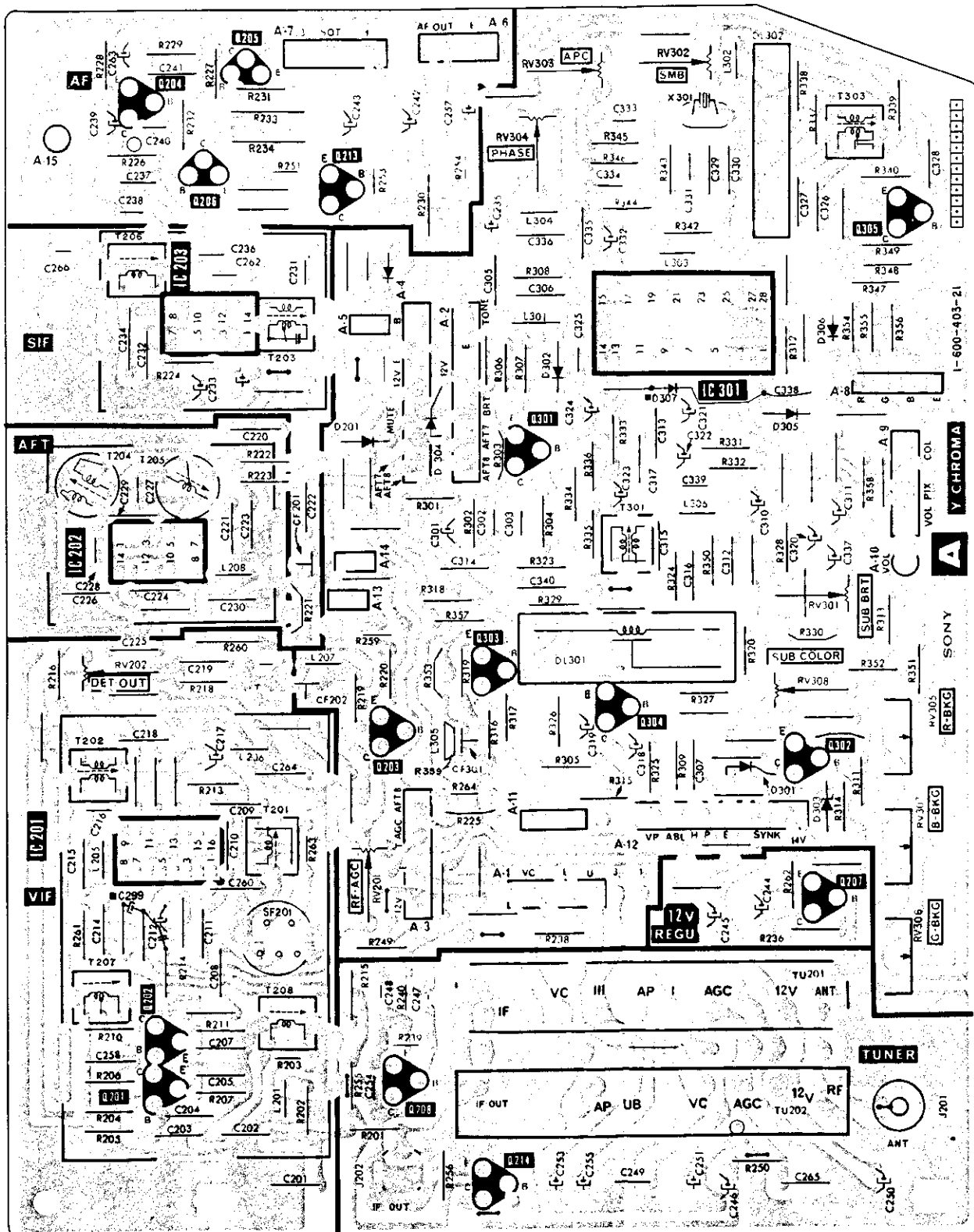
B

C

D

E

D	ADJ
	RV303
	RV302
	RV304
302	
305	
304	
01	
307	
	RV301
	RV202
	RV308
301	RV305
303	RV307
	RV201
	RV306
D	ADJ

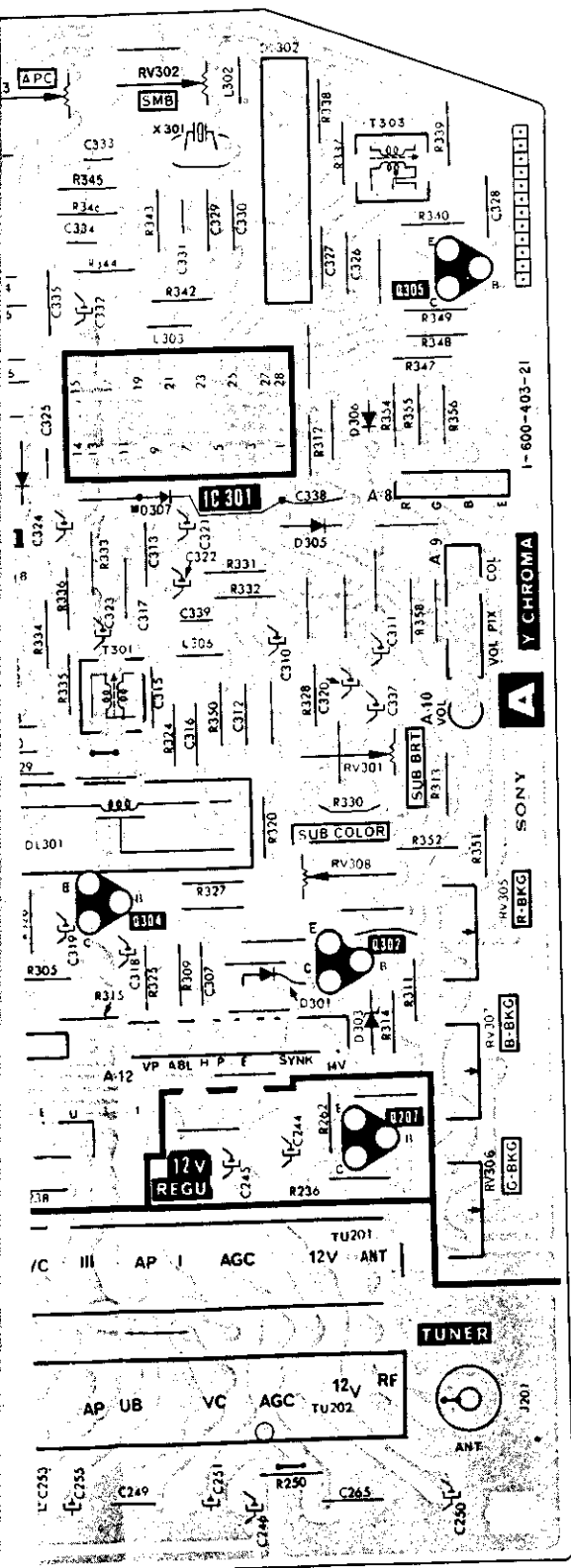


A A

D

E

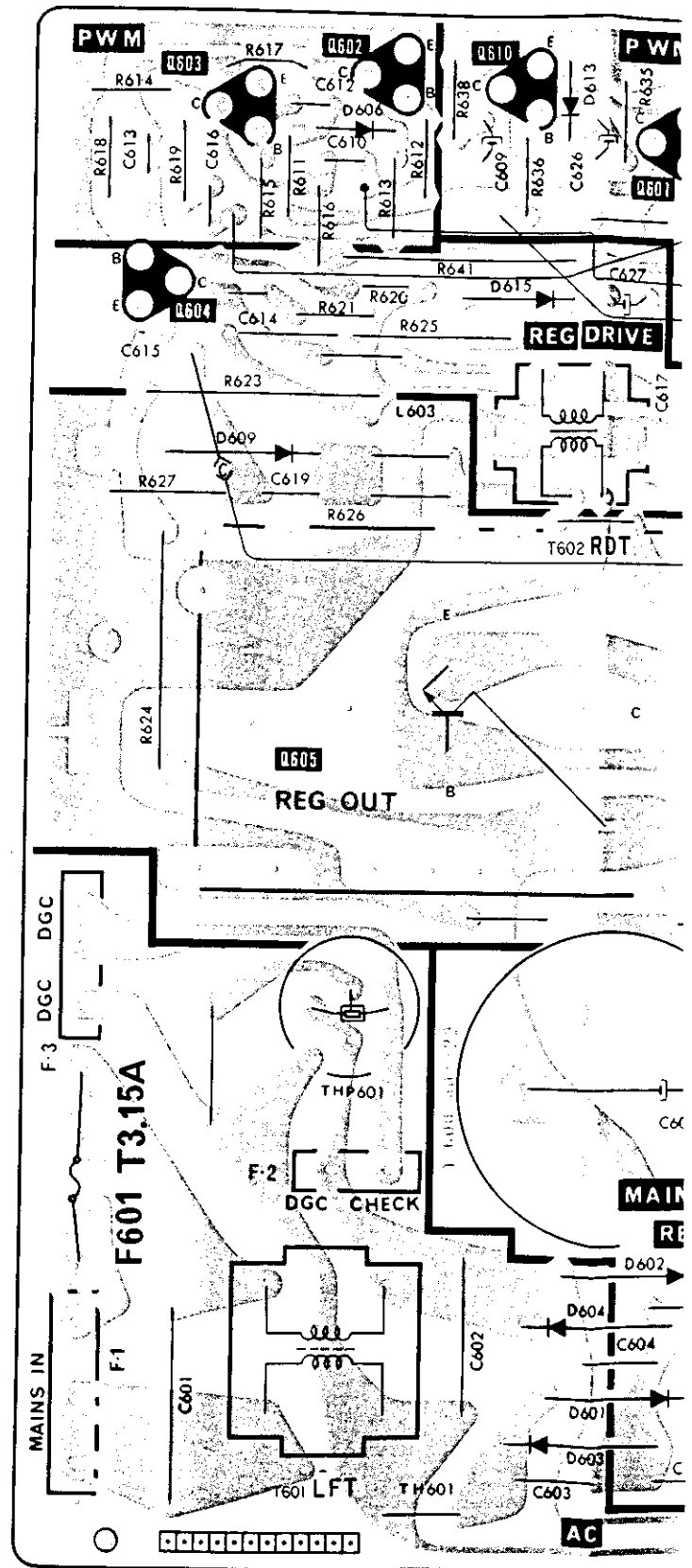
F



F F

— F Board —

Q	D	ADJ
602 610 613 605	606 612	RV601
603 601 608 609		
607	615	
604		
606	614	
	609 641 646	
605	645	
	643 650	
	653	
651	652	
	651	
	602 604 601 603	
Q	D	ADJ



F

F

POWER-SUPPLY CONTROL
PWM, REG-DRIVE
MAINS RECT

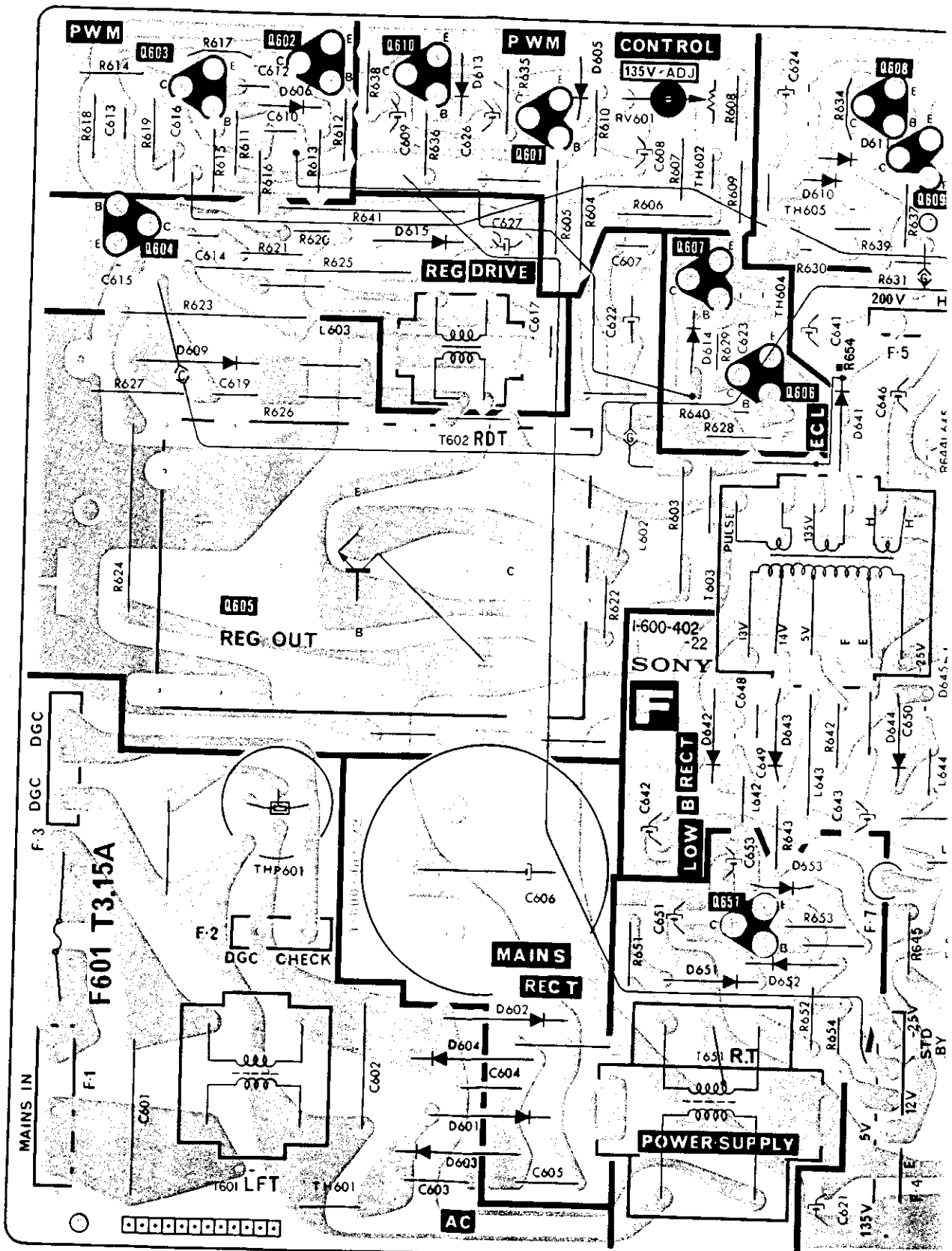
B

C

D

E

D	ADJ
613 605	RV601
606	
612	
615	
614	
609 641	
646	
645	
643 650	
642	
653	
652	
651	
602	
604	
601	
603	
D	ADJ



- E Board -

1

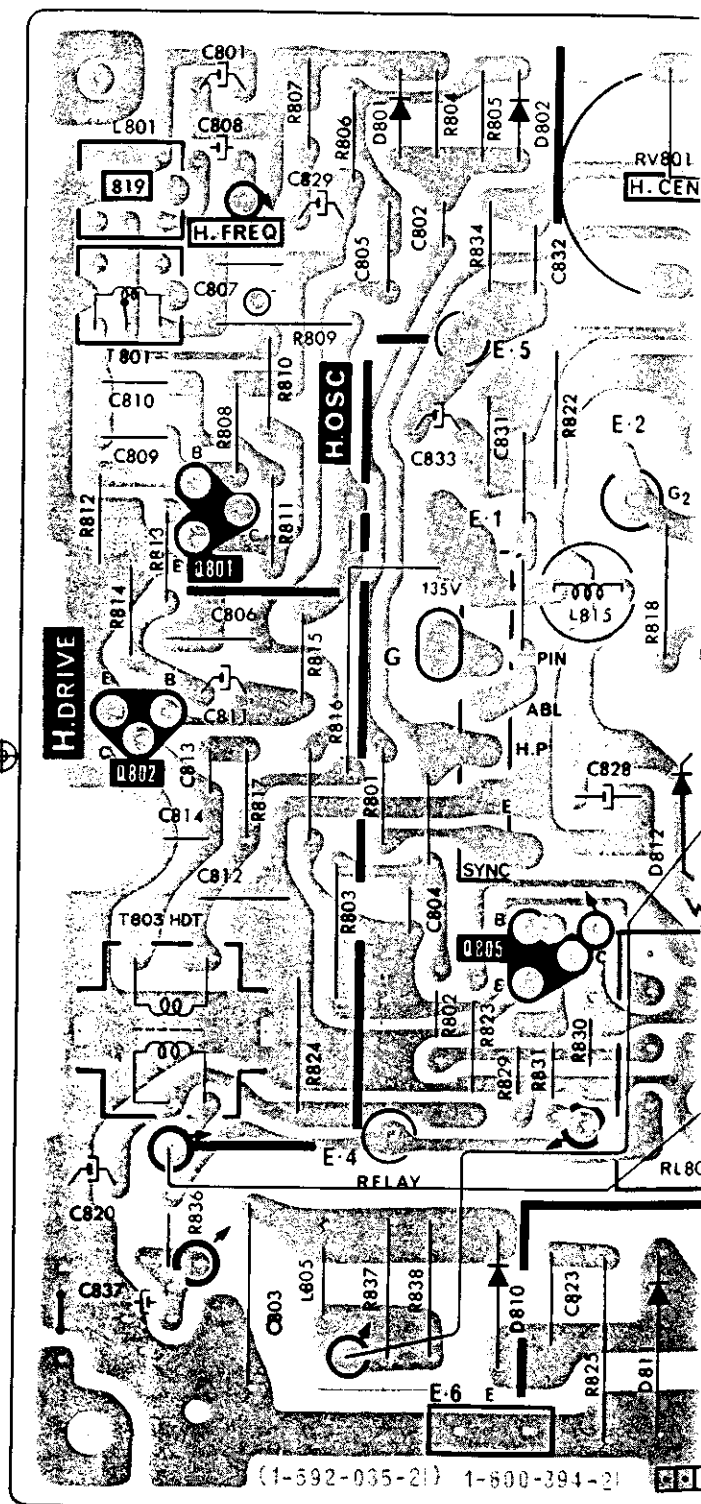
2

3

4

5

Q	D	ADJ
	801 802	RV801
	806 805	
801	803	
802		
	810 811	
Q	D	ADJ



KV-2204UB

KV-2204UB

[H-OSC, PIN-OUT]
[H-DRIVE, H-OUT]

E

E

B

C

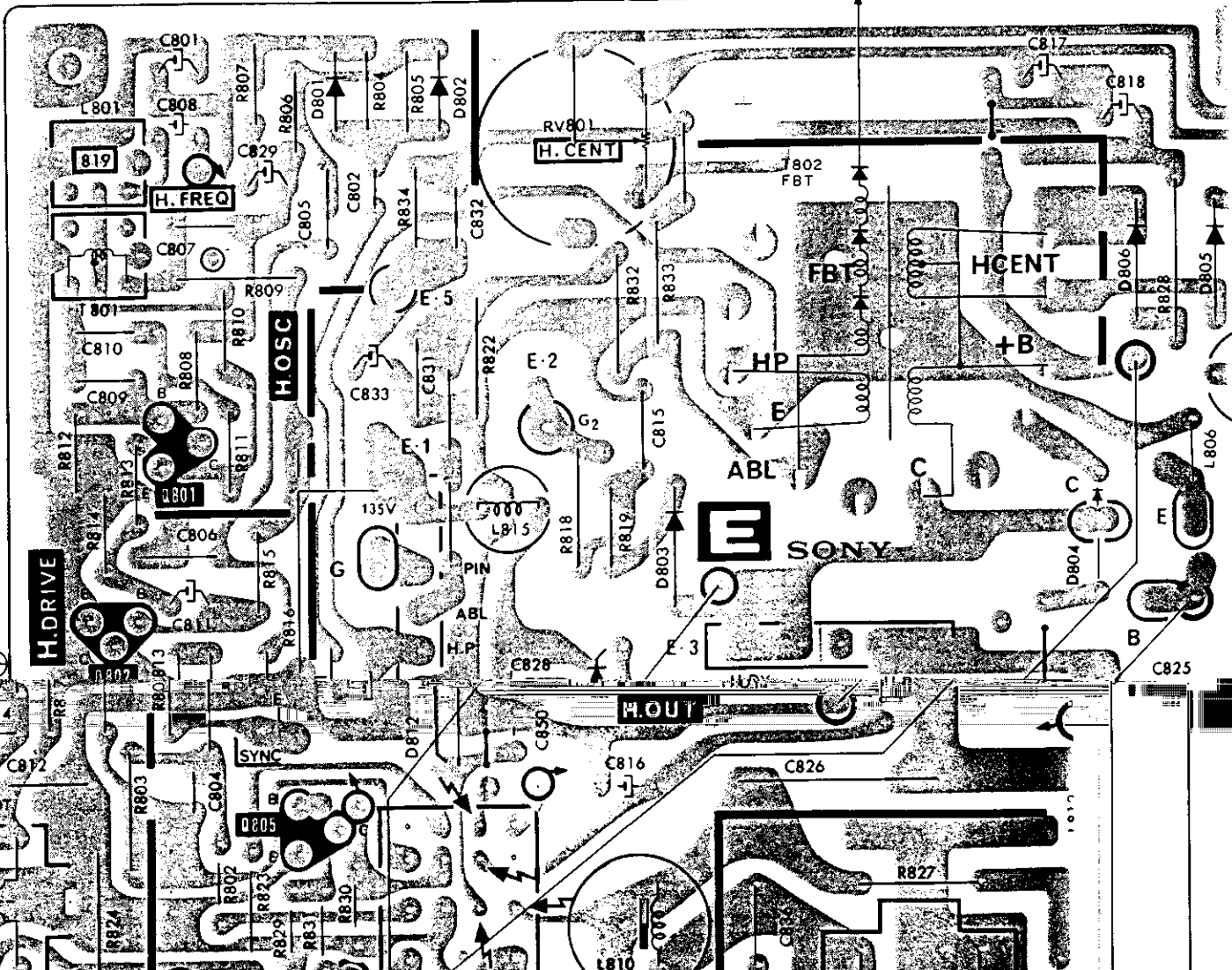
D

E

ADJ

RV801

HV BLOCK

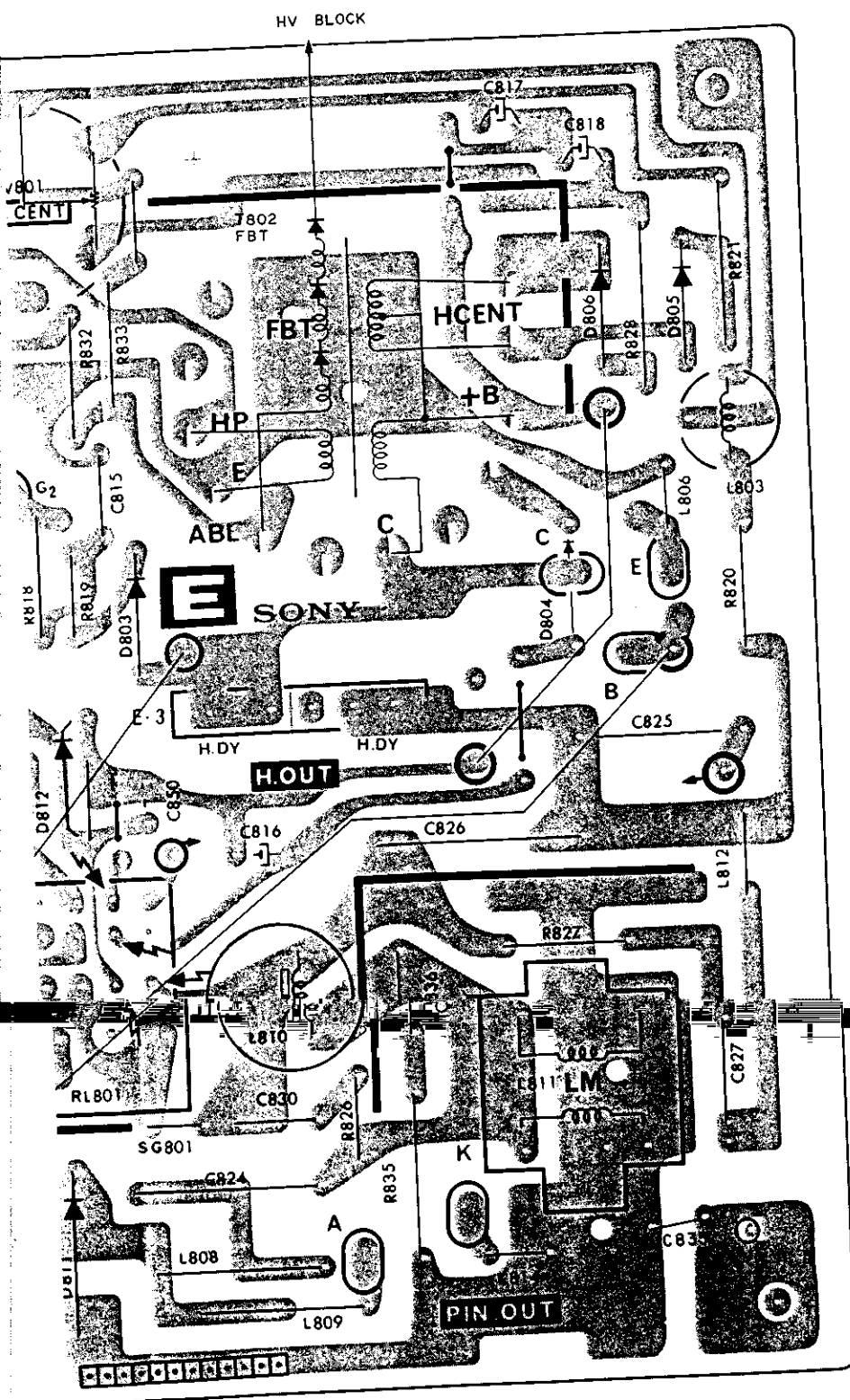


E E

D

E

F



D

E

A

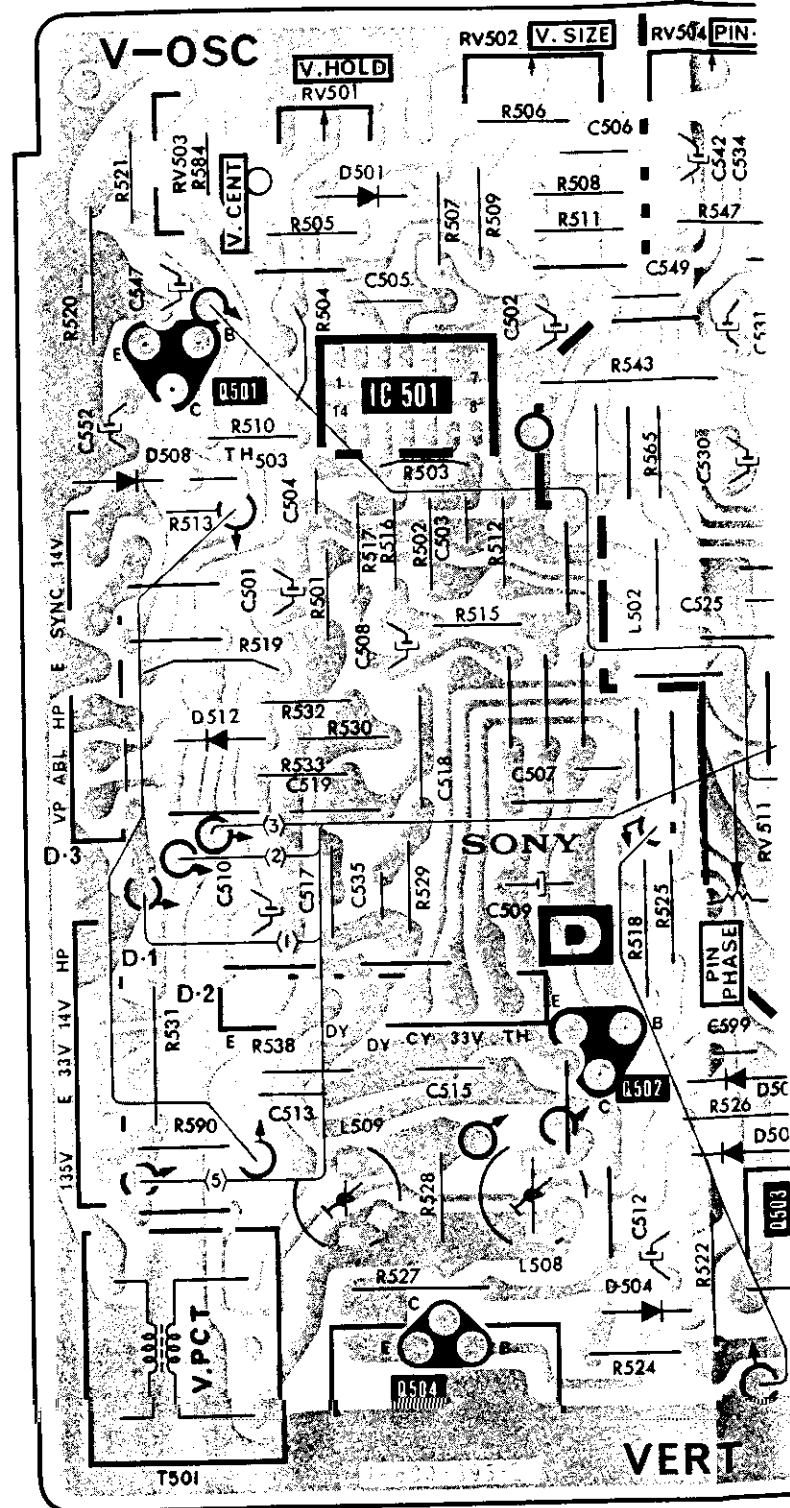
B

C

D

- D Board -

Q, IC	D	ADJ
507	509	RV502 RV504 RV501 RV506 RV503 RV509 RV510
506		
501 IC501	501	
	508	
	510	
	512	
		RV511 RV505
511		
508	511	
502	507	
509		
	503	
503		
512		
	504	
504	505 506	
Q, IC	D	ADJ



D

D

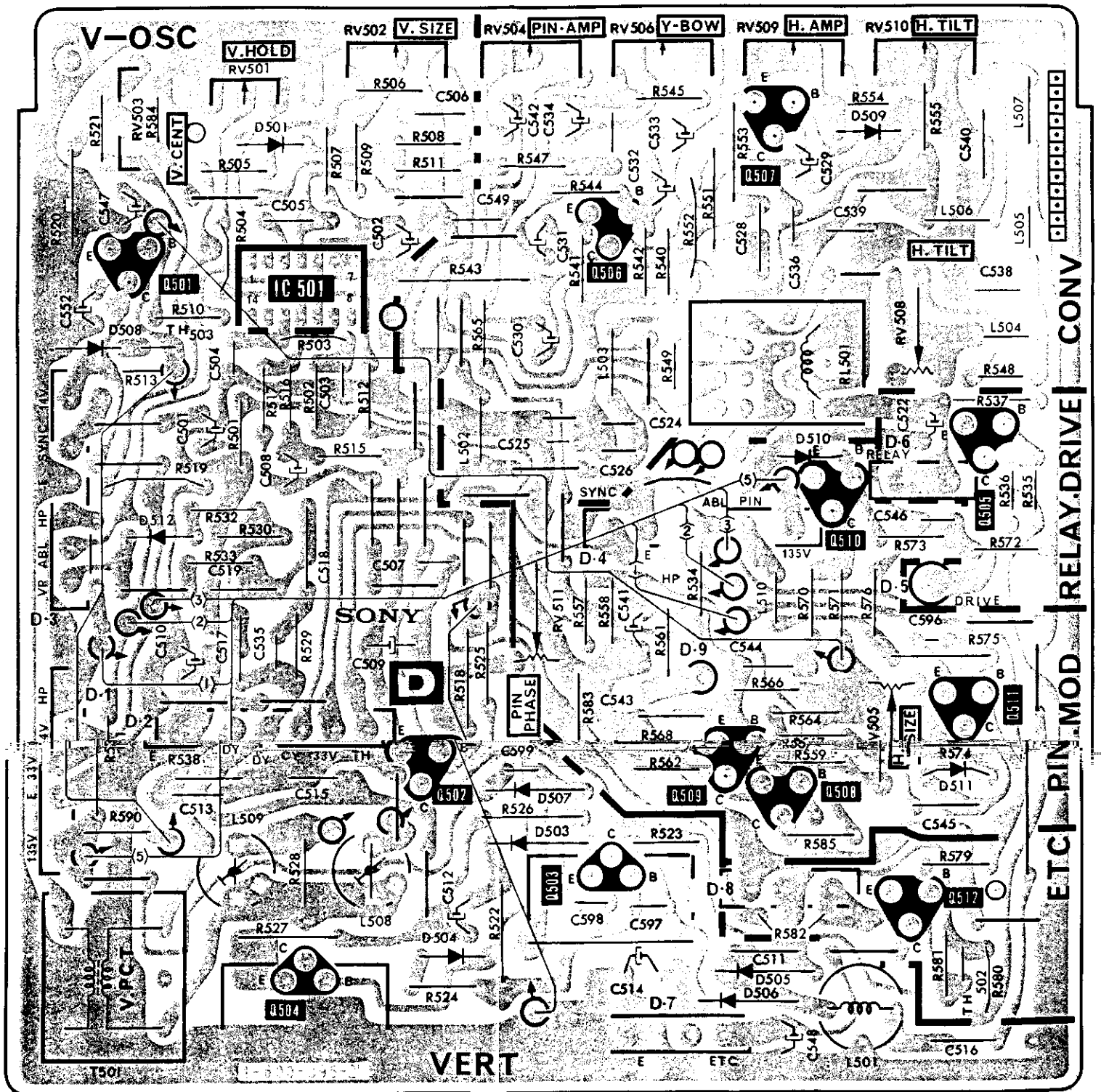
 VERT, ETC
 PIN-MOD
 RELAY-DRIVE CONV

C

D

E

F



5-4. SCHEMATIC DIAGRAM

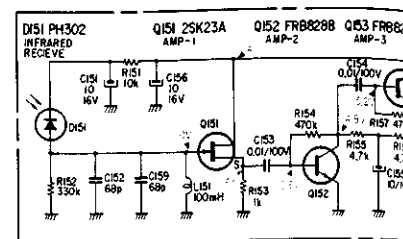
Note: The components identified by shading and mark  are critical for safety. Replace only with part number specified.

Note:

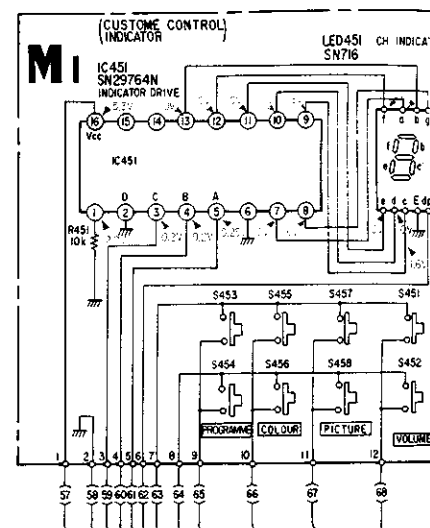
- All capacitors are in μF unless otherwise noted. pF: μF 50 WV or less are not indicated except for electrolytics.
- All resistors are in ohms, $\frac{1}{4}\text{W}$ unless otherwise noted. $\text{k}\Omega = 1000\Omega$, $\text{M}\Omega = 1000\text{k}\Omega$
-  : nonflammable resistor.
-  : internal component.
-  : panel designation.
- All adjustable resistors have characteristic curve B, unless otherwise noted.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 20,000-ohm-per-volt VOM.
-  : selected to yield optimum performance.
-  : adjustable without removing cabinet.
-  : adjustment for repair.
- Voltage variations may be noted due to normal production tolerances.
- Do not touch the base of Q608 with the VOM probe, as B+ voltage will not be supplied to the set.
- Voltages of Q512 are taken with D-7 removed and also TH502 short-circuited.

A

1



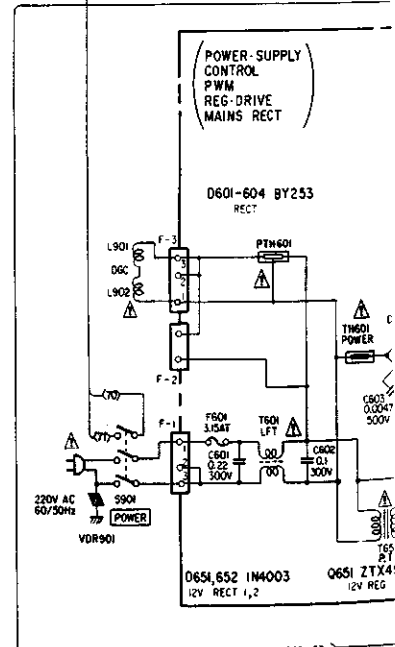
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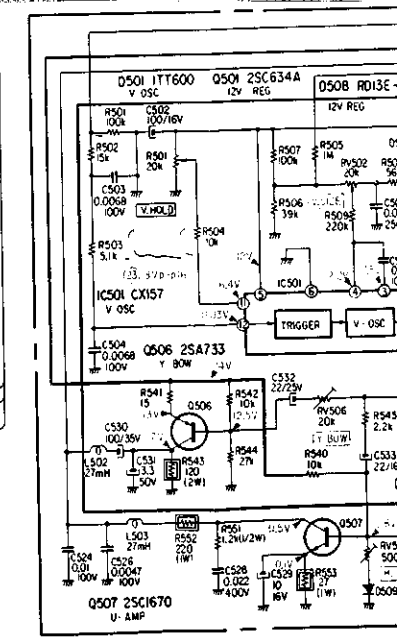


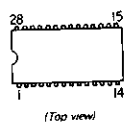
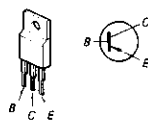
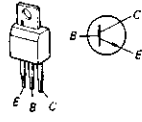
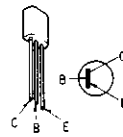
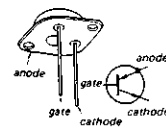
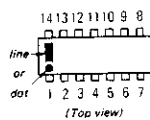
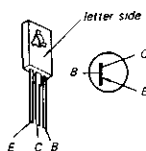
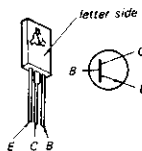
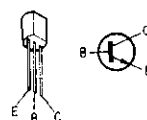
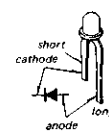
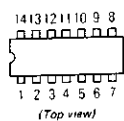
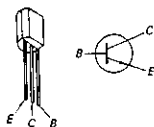
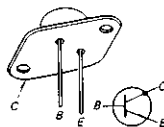
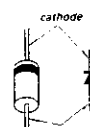
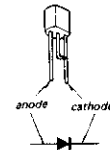
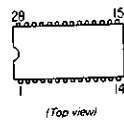
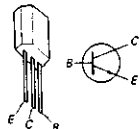
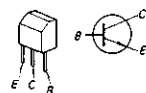
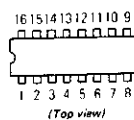
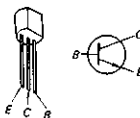
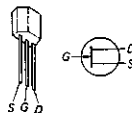
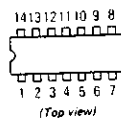
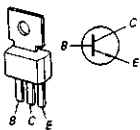
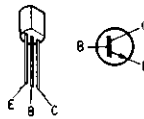
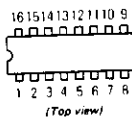
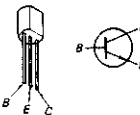
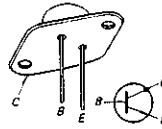
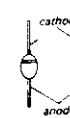
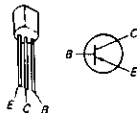
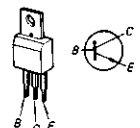
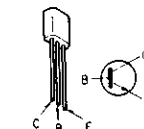
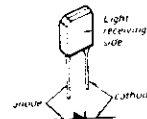
3

4

5





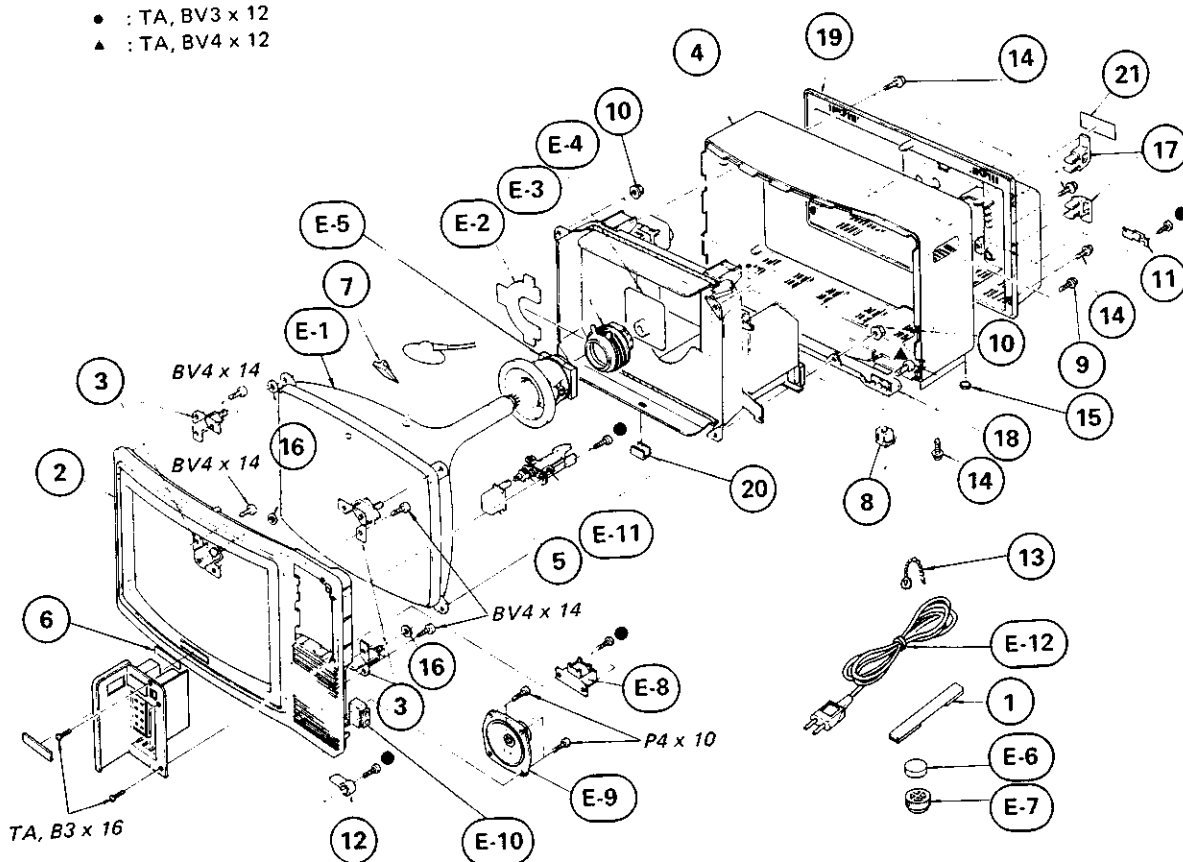
μPC1365C**2SA951****2SC2278****FRB829****SG264****CX157****2SB649A****2SD669A****ZTX450****TLR124****M5135P****2SB739****2SD725****1N4003****μPC574J****M58485P****2SC634A
2SC926A****2SD773****1S1555
1TT600
BZX79-C4V3
RD13E-B2Z****SN29764N
SN29770AN
SN29771AN****2SC1670****2SK23A****BA158
BY253
BY299
RGP15J****TBA120U****2SC1723****BC237****TBA1440G****2SC2009****BU500****ERB26-20
ERC26-15****2SA639S
2SA733****2SC2141****FRB828B****PH302**

SECTION 6 EXPLODED VIEWS

(1) CABINET

- Note:**
- Items with no part number and no description are not stocked because they are seldom required for routine service.
 - All screws are Phillips (cross recess) type unless otherwise noted.
(-) = slotted head
 - : TA, BV x 8
 - : TA, BV3 x 12
 - ▲ : TA, BV4 x 12

- Items marked "▲" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- As to the part numbered with E—, refer to the electrical parts list.



No.	Part No.	Description
1	X-4309-608-0	Convergence Permalloy Ass'y
2	X-4323-909-0	Sub Mask Ass'y
3	▲ X-4323-911-0	Picture Tube Bracket Ass'y
4	X-4323-914-0	Cabinet Ass'y
5	X-4336-401-1	Power Button Ass'y
6	3-701-912-00	Emblem, SONY
7	3-703-003-00	DY Spacer
8	3-703-036-00	Grommet
9	4-304-494-11	TA, P4 x 16
10	4-306-034-00	Flange Nut
11	4-307-238-00	Clamp, ac cord

No.	Part No.	Description
12	4-307-250-00	Stopper, ac cord
13	4-308-870-00	Clip, lead wire
14	4-309-749-00	Tapping Screw
15	4-310-333-00	Foot, Cushion
16	▲ 4-311-141-00	Washer, picture tube
17	4-316-003-00	Holder, cord
18	▲ 4-323-918-00	Reinforcement, mask
19	4-323-923-00	Cover, rear
20	▲ 4-323-942-00	Hook
21	▲ 4-337-101-00	Label, model number

D

A

B

C

D

(2) CHASSIS

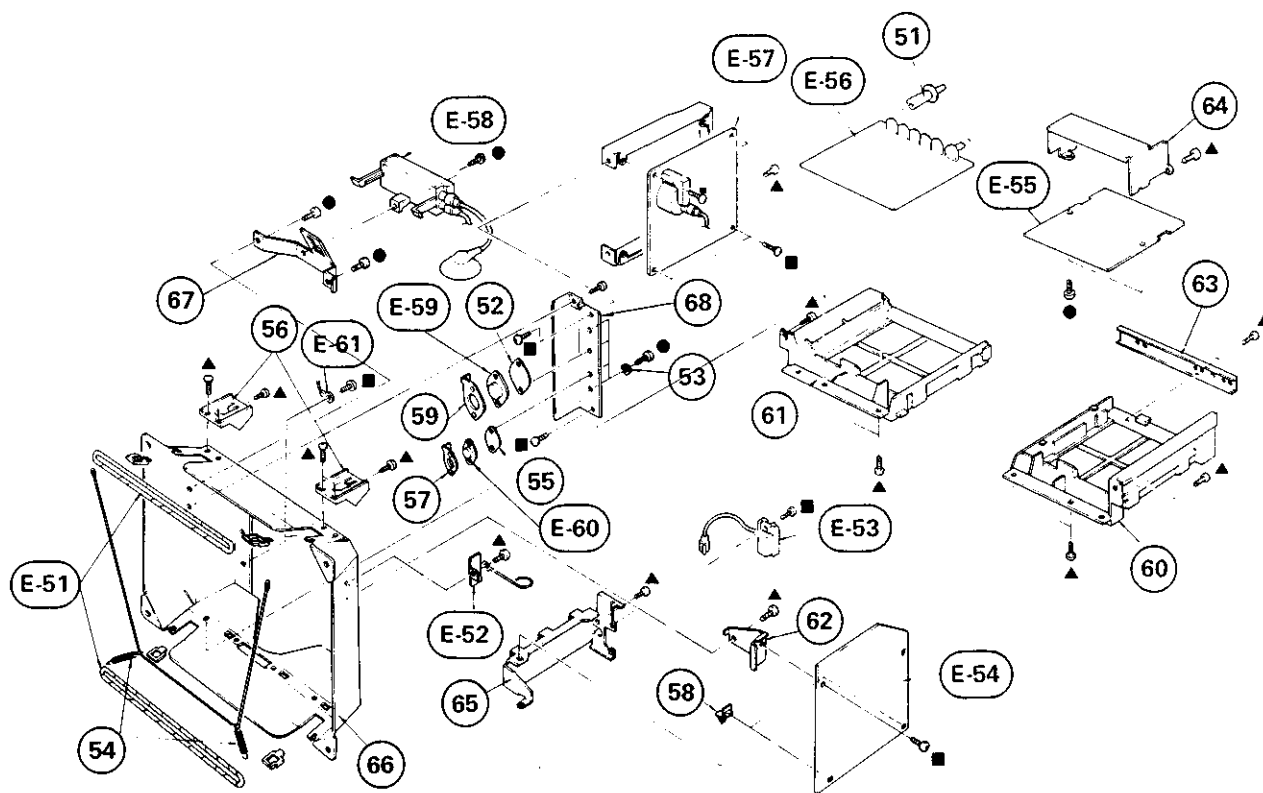
Note:

- Items marked "♣" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

1

2

3



emark

<u>No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
51	X-4314-615-0	Knob Ass'y, V. HOLD		60	♣ 4-317-720-00	Bracket, F board	
52	3-701-353-00	Spacer, mica		61	♣ 4-317-721-00	Bracket, D board	
53	3-701-453-00	Bushing, insulator		62	♣ 4-317-754-00	Bracket, A board	
54	4-303-774-XX	Spring		63	♣ 4-318-215-00	Reinforcement	
55	4-303-844-00	Spacer, mica		64	♣ 4-318-282-00	Holder, F board	
56	♣ 4-309-643-11	Bracket, cabinet		65	♣ 4-318-283-00	Guide, A board	
57	♣ 4-309-762-00	Retainer, transistor		66	♣ 4-323-920-00	Shield, picture tube	
58	♣ 4-313-732-00	Clip, hinge; circuit board		67	♣ 4-336-407-00	Bracket, HVR case	
59	♣ 4-314-938-01	Retainer, transistor		68	♣ 4-336-413-00	Heat Sink (E)	

A

B

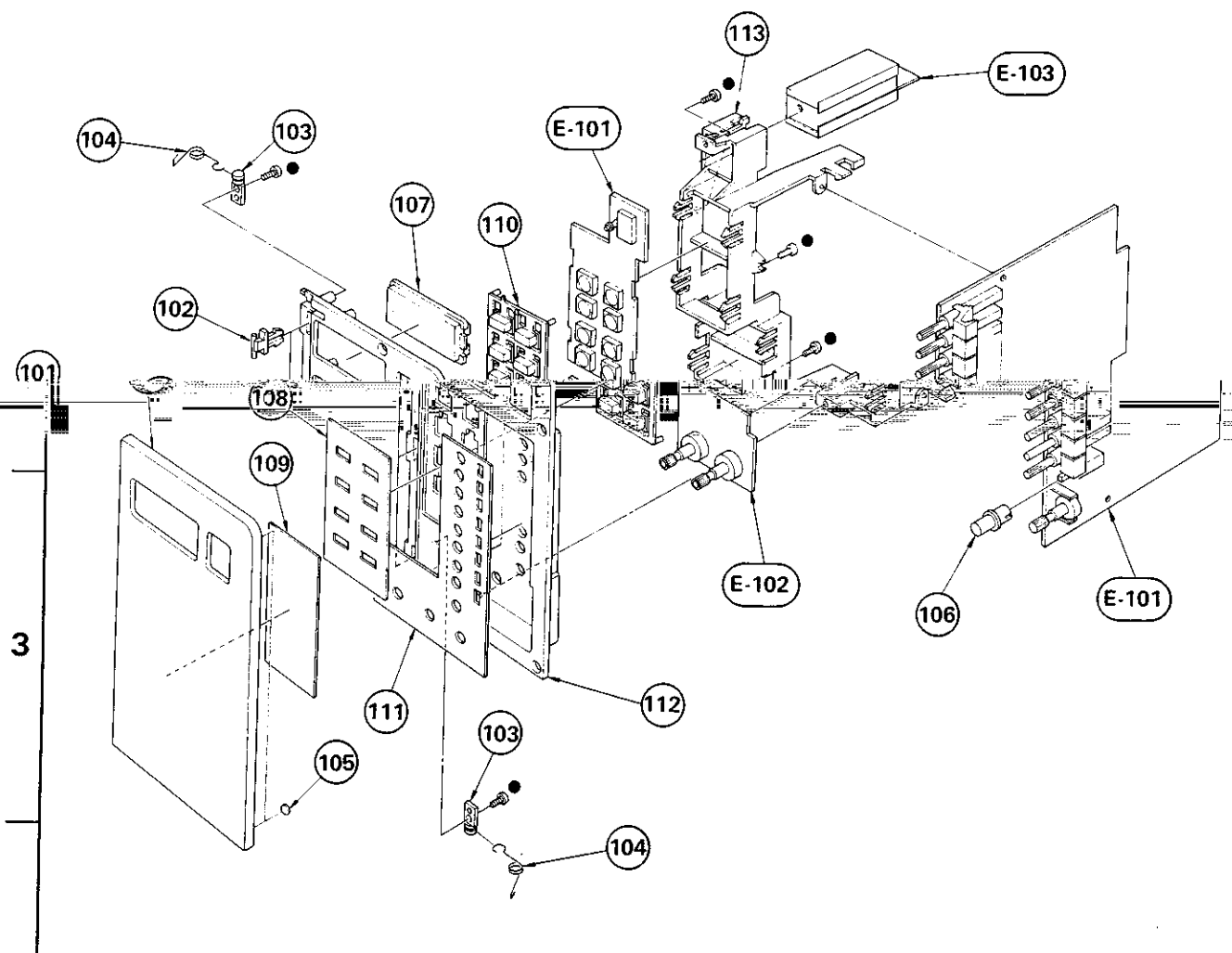
C

D

(3) CONTROL SECTION

Note:

- Items marked "●" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



<u>No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
101	X-4324-003-1	Lid Ass'y	
102	3-703-035-11	Shaft, lid	
103	4-310-303-00	Hook, spring	
104	4-314-336-00	Spring	
105	4-314-871-00	Cushion	
106	4-325-610-01	Knob, AFT	
107	4-336-406-00	Window, channel indication	

<u>No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
108	4-337-102-00	Label (A), control panel	
109	4-337-103-00	Label, preset explanation	
110	4-337-104-00	Button, UP/DOWN	
111	4-337-105-00	Label (B), control panel	
112	4-337-106-00	Panel, control	
113	● 4-337-107-00	Bracket, circuit board	

SECTION 7 ELECTRICAL PARTS LIST

Note: The components identified by shading and mark  are critical for safety. Replace only with part number specified.

- $\Rightarrow$: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.
- $\ast$: selected to yield optimum performance.
- Items marked "!" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The components identified by  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

CAPACITORS

- All capacitors are in μF and ceramic unless otherwise noted. 50WV or less are not indicated except for electrolytics. p : μF , elect : electrolytic

RESISTORS

- All resistors are in ohms. Common $\frac{1}{4}\text{W}$ carbon resistors are omitted. Refer to the list on page 69 for their part numbers.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
k Ω : 1000 Ω , M Ω : 1000k Ω

COILS

- All coils are microinductors unless otherwise noted.

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
A BOARD							
● A-1295-330-A A Board, complete			E-54				
CAPACITORS							
C200	1-161-328-00	0.0047		C244	1-123-321-00	220 16V elect	
C201	1-161-259-00	10p		C245	1-123-319-00	47 16V elect	
C202	1-161-290-00	5.6p		C246	1-123-317-00	22 16V elect	
C203	1-161-268-00	56p		C249	1-108-389-00	0.1 100V polyethylene	
C204	1-161-259-00	10p		C250	1-123-316-00	10 16V elect	
C205	1-161-270-00	82p		C258	1-161-328-00	0.0047	
C207	1-161-271-00	100p		C260	1-161-328-00	0.0047	
C208-211	1-161-328-00	0.0047		C262	1-108-385-00	0.047 250V polyethylene	
C212	1-123-355-00	4.7 50V elect		C263	1-123-316-00	10 16V elect	
C214	1-161-323-00	0.001		C264	1-161-328-00	0.0047	
C215	1-161-280-00	12p		C265	1-108-393-00	0.22 100V polyethylene	
C216	1-102-529-00	100p		C299	1-123-352-00	1 50V elect	
C217	1-123-316-00	10 16V elect		C301	1-123-352-00	1 50V elect	
C218	1-161-328-00	0.0047		C302	1-130-247-00	0.033 250V polyethylene	
C219	1-161-263-00	22p		C303	1-108-367-00	0.0015 100V mylar	
C220-224	1-161-328-00	0.0047		C305,306	1-161-319-00	470p	
C225	1-161-259-00	10p		C307	1-101-804-00	10p 500V	
C226	1-161-328-00	0.0047		C310	1-123-316-00	10 16V elect	
C227	1-102-852-00	47p		C311	1-123-352-00	1 50V elect	
C228	1-102-525-00	68p		C312	1-161-265-00	33p	
C229	1-161-249-00	1.5p		C313	1-161-051-00	0.01	
C230	1-161-328-00	0.0047		C314	1-161-269-00	68p	
C231	1-101-006-00	0.047		C315	1-161-271-00	100p	
C232	1-161-051-00	0.01		C316	1-161-316-00	270p	
C233	1-123-352-00	1 50V elect		C317	1-161-051-00	0.01	
C234	1-103-725-00	0.001		C318	1-123-351-00	0.47 50V elect	
C235	1-123-316-00	10 16V elect		C319	1-123-354-00	3.3 50V elect	
C236	1-101-006-00	0.047		C320	1-123-328-00	4.7 25V elect	
C237	1-108-393-00	0.022 100V polyethylene		C321	1-123-354-00	3.3 500V elect	
C238	1-108-365-00	0.001 100V mylar		C322,323	1-123-352-00	1 50V elect	
C239	1-123-352-00	1 50V elect		C324	1-123-286-00	0.33 50V elect	
C240	1-101-810-00	100p 500V		C325	1-101-006-00	0.047	
C241	1-161-317-00	330p		C326-328	1-161-051-00	0.01	
C242	1-123-253-00	22 160V elect		C329	1-161-269-00	68p	
C243	1-121-999-00	10 160V elect		C330	1-161-262-00	18p	
				C331	1-102-525-00	68p	
				C332	1-123-351-00	0.47 50V elect	
				C333,334	1-108-385-00	0.047 250V polyethylene	
				C335	1-161-271-00	100p	
				C336	1-161-270-00	82p	

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<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
C337	1-123-319-00	47 16V elect		Q207	8-729-177-33	2SD773	
C338	1-161-265-00	33p		Q214	8-729-663-47	2SC1364	
CF201	1-527-262-00	Ceramic Filter		⇒ Q301	8-729-612-77	2SA1027R	
DIODES				⇒ 302-304	8-729-663-47	2SA1364	
⇒ D201	8-719-815-55	1S1555		⇒ Q305	8-729-612-77	2SA1027R	
⇒ D301, 302	8-719-815-55	1S1555		RESISTORS			
⇒ D303	8-719-143-07	RD4.3E		R233,234	1-244-875-00	33 ½W carbon (nonflammable)	
⇒ D304,305	8-719-815-55	1S1555		RV201	1-224-644-XX	4.7k, adjustable; TU. AGC	
⇒ D307	8-719-815-55	1S1555		RV202	1-224-645-XX	10k, adjustable; DET. OUT	
DL301	1-415-186-00	Delay Line, Y		RV301	1-224-645-XX	10k, adjustable; SUB BRT	
DL302	1-415-185-00	Delay Line, 1H		RV302	1-224-641-XX	470, adjustable; SMB	
ICS				RV303	1-224-644-XX	4.7k, adjustable; APC	
IC201	8-759-014-40	TBA1440G		RV304	1-224-642-XX	1k, adjustable; PHASE	
IC202	8-759-651-35	M5135P		RV305	1-222-344-00	5k, adjustable; R. BKG	
IC203	8-759-001-20	TBA120U		RV306	1-222-344-00	5k, adjustable; G. BKG	
IC301	8-759-113-65	μPC1365C		RV307	1-222-344-00	5k, adjustable; B. BKG	
COILS				RV308	1-224-644-XX	4.7k, adjustable; SUB. COLOUR	
L201	1-408-268-00	4.7μH		SF201	1-404-190-00	Filter, surface wave	
L205	1-407-738-00	10μH		TRANSFORMERS			
L206	1-408-267-00	3.3μH		T201	1-404-207-00	VIFT-3	
L207	1-407-740-00	15μH		T202	1-404-203-00	T. REF	
L208	1-408-267-00	3.3μH		T203	1-404-097-00	SIFT-1	
L301	1-408-245-00	22mH		T204	1-403-810-00	AFT-1	
L302	1-408-307-00	8.2μH		T205	1-403-811-00	AFT-2	
L303	1-408-270-00	6.8μH		T206	1-404-135-00	SIFT-2	
L304	1-407-742-00	22μH		T207	1-404-206-00	VIFT-2	
L305	1-407-743-00	27μH		T208	1-403-990-00	VIFT-1	
L306	1-407-753-00	180μH		T301	1-425-995-00	TOT	
TRANSISTORS				T303	1-425-928-00	DAT	
Q201,202	8-765-300-00	2SC2009		TU202	△ 1-463-236-00	UHF Tuner U321	
⇒ Q203	8-729-663-47	2SC1364		X301	1-527-530-00	Crystal	
Q204	8-720-950-03	2SC926A					
C205	8-729-306-92	2SD669A					
C206	8-729-304-92	2SB649A					

Note: The components identified by shading and mark  are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
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C BOARD

● A-1330-211-A C Board, complete	E-4
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CAPACITORS

C701,702	1-161-313-00	150p	
C703	1-161-315-00	220p	
C704	1-129-718-00	0.022 630V	film
C705	1-108-389-00	0.1 250V	polyethylene
C707	1-102-155-00	330p 2kV	
L701	1-407-755-00	270μH	
NL701	1-519-108-XX	Lamp, neon 2mA	

TRANSISTORS

Q701-703	8-729-322-78	2SC2278
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RESISTORS

R701-703	1-246-485-00	3.3k	carbon
R704,705	1-246-457-00	220	carbon
R706	1-246-461-00	330	carbon
R707-709	1-246-457-00	220	carbon
R710-712	1-206-692-00	15k	2W metal oxide (nonflammable)
R713-715	1-202-585-00	3.3k	½W composition
R716	1-202-639-00	560k	½W composition
R717	1-244-945-00	1M	½W composition
R718	1-202-543-00	56	½W composition
R719	1-202-635-00	390k	½W composition
R720	1-202-633-00	330k	½W composition
R721	1-202-619-00	82k	½W composition
R724	1-244-945-00	1M	½W composition
RV701	1-226-105-00	220, adjustable; B. DRIVE	
RV702	1-226-105-00	220, adjustable; G. DRIVE	
RV703	1-226-157-00	1M, adjustable; G2	
RV704	1-226-114-00	2.2M, adjustable; FOCUS	

SG701-705	1-519-063-XX	Spark Gap
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Ref. No.	Part No.	Description	Rem
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D BOARD

● A-1345-238-A D Board, complete	E-56
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CAPACITORS

C501	1-123-352-00	1	50V	elect
C502	1-123-320-00	100	16V	elect
C503,504	1-108-375-00	0.0068	100V	mylar
C505	1-108-389-00	0.1	100V	polyethylene
C506	1-108-385-00	0.047	250V	polyethylene
C507	1-106-188-00	0.0047	100V	mylar
C508	1-123-317-00	22	16V	elect
C509	1-123-363-00	470	50V	elect
C510	1-123-356-00	10	50V	elect
C511	1-102-050-00	0.01	500V	
C512	1-123-356-00	10	50V	elect
C513	1-130-243-00	0.15	100V	polyethylene
C514	1-123-269-00	4.7	160V	elect
C515	1-108-381-00	0.022	400V	polyethylene
C516	1-129-708-00	3300p	630V	polyethylene
C517	1-108-381-00	0.022	400V	polyethylene
C518	1-108-393-00	0.22	100V	polyethylene
C519	1-108-389-00	0.1	100V	polyethylene
C524	1-129-701-00	0.01	100V	film
C526	1-106-188-00	0.0047	100V	mylar
C528	1-108-381-00	0.022	400V	polyethylene
C529	1-131-199-00	10	16V	tantalum
C530	1-123-345-00	100	35V	elect
C531	1-123-354-00	3.3	50V	elect
C532	1-123-330-00	22	25V	elect
C533	1-123-317-00	22	16V	elect
C534	1-121-450-00	2.2	50V	elect
C536	1-108-375-00	0.0068	100V	mylar
C539	1-108-637-00	0.082	100V	mylar
C540	1-108-382-00	0.027	100V	mylar
C541	1-123-352-00	1	50V	elect
C542	1-123-355-00	4.7	50V	elect
C543	1-108-377-00	0.01	400V	polyethylene
C544	1-108-389-00	0.1	100V	polyethylene
C545	1-108-369-11	0.0022	100V	mylar

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<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
C546	1-102-030-00	330p 500V	
C547	1-123-319-00	47 16V elect	
C548	1-123-352-00	1 50V elect	
C549	1-108-389-00	0.1 100V polyethylene	
C552	1-123-320-00	100 16V elect	
C597	1-102-030-00	330p 500V	
C599	1-102-030-00	330p 500V	

DIODES

⇒ D501	8-719-815-55	1S1555	
⇒ D503	8-719-200-02	10E2	
⇒ D504	8-719-815-55	1S1555	
⇒ D505-507	8-719-815-55	10E2	
⇒ D508	8-719-113-07	RD13E	
⇒ D509-512	8-719-815-55	1S1555	

IC

IC501	8-751-570-00	CX157	
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COILS

L501	1-459-105-00	2.7mH	
L502,503	1-408-246-00	27mH	
L506	1-408-242-00	10mH	
L507	1-408-247-00	33mH	
L508	1-435-055-21	PAC	
L510	1-408-270-00	6.8μH	

TRANSISTORS

⇒ Q501	8-726-663-47	2SC1364	
⇒ Q502	8-762-170-01	2SC1962	
Q503	8-765-500-00	2SC2141	
Q504	8-765-510-00	2SA951	
⇒ Q506	8-760-468-43	2SA684	
⇒ Q507	8-762-170-01	2SC1962	
⇒ Q508-510	8-729-663-47	2SC1364	
⇒ Q511	8-760-523-10	2SA772	
⇒ Q512	8-729-201-52	2SA1015	

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
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RESISTORS

R518	1-212-360-00	1 1W	metal oxide (nonflammable)
R519	1-213-140-00	560 1W	metal oxide (nonflammable)
R520	1-213-142-00	820 1W	metal oxide (nonflammable)
R522	1-244-875-00	1.2k ½W	carbon
R523	1-217-394-00	39 ¼W	Fuse (nonflammable)
R524	1-211-930-00	33 ¼W	carbon (nonflammable)
R525	1-244-999-00	10 ¼W	carbon (nonflammable)
R526, 527	1-212-361-00	1.2 1W	metal oxide (nonflammable)
R531	1-202-625-00	150k ½W	composition
R543	1-206-642-00	120 2W	metal oxide (nonflammable)
R551	1-244-875-00	1.2k ½W	carbon
R552	1-213-135-00	220 1W	metal oxide (nonflammable)
R553	1-213-124-00	27 1W	metal oxide (nonflammable)
R575	1-213-126-00	39 1W	metal oxide (nonflammable)

RV501	1-224-972-00	20k, variable; V. HOLD	
RV502	1-222-807-XX	20k, adjustable; V. SIZE	
RV503	1-221-970-XX	500, adjustable; V. CENT	
RV504	1-221-956-XX	50k, adjustable; PIN AMP	
RV505	1-224-642-XX	1k, adjustable; H. SIZE	

RV506	1-222-807-XX	20k, adjustable; Y. BOW	
RV509	1-221-970-XX	500, adjustable; H. AMP	
RV510	1-222-344-00	5k, adjustable; H. TILT	
RV511	1-224-640-XX	330, adjustable; PIN. PHASE	

T501	1-421-245-11	Transformer, pincushion	
TH502	1-800-279-12	Thermister, 5k	
TH503	1-800-378-00	Thermister, S-150	

E BOARD

● A-1345-239-A E Board, complete

E-57

CAPACITORS

C801	1-123-329-00	10 25V elect	
C802	1-108-369-00	0.0022 100V mylar	
C803	1-130-228-00	0.011 1.2kV film	
C804	1-102-030-00	330p 500V	
C805,806	1-108-383-00	0.033 250V Polyethylene	
C807	1-108-387-00	0.068 100V polyethylene	
C809	1-130-272-00	0.033 100V polyethylene	
C810	1-108-389-00	0.1 100V polyethylene	

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<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
C811	1-123-351-00	0.47 50V elect	
C812	1-108-377-00	0.01 400V polyethylene	
C813	1-102-228-00	470p 500V	
C814	1-102-212-00	820p 500V	
C815	1-102-223-00	4700p 1.6kV	
C817,818	1-123-320-00	100 16V elect	
C820	1-123-310-00	470 10V elect	
C823	1-102-249-00	680p 2kV	
C824	1-130-157-00	1 200V polyethylene	
C826	1-129-949-00	1 400V polyethylene	
C827	1-108-393-00	0.22 250V polyethylene	
C828	1-121-757-00	33 160V elect	
C829	1-123-328-00	4.7 25V elect	
C830	1-108-377-00	0.01 400V polyethylene	
C831,832	1-108-389-00	0.1 250V polyethylene	
C833	1-123-351-00	0.47 50V elect	
C835	1-102-155-00	330p 2kV	
C836	1-102-249-00	680p 2kV	

DIODES

⇒ D801,802	8-719-815-55	1S1555
D803	8-719-926-20	ERB26-20
⇒ D805,806	8-719-900-93	V09C
⇒ D810	8-719-305-15	GH3F
⇒ D811	8-719-305-15	GH3F

COILS

L803	1-459-059-00	12mH
L805	1-408-225-00	3.3μH
L806	1-407-365-00	0.74μH
L808,809	1-408-225-00	3.3μH
L810	1-459-125-00	HLC
L811	1-459-263-00	300μH
L812	1-408-241-00	8.2mH
L814	1-407-365-00	0.74μH
L815	1-459-215-00	120μH

TRANSISTORS

⇒ Q801	8-729-612-77	2SA1027R
Q802	8-729-372-31	2SC1723

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
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RESISTORS

R803	1-202-597-00	10k ½W	composition
R809	1-213-162-00	39k 1W	metal oxide (nonflammable)
R816	1-206-733-00	2.2k 3W	metal oxide (nonflammable)
R818	1-202-635-00	390k ½W	composition
R819	1-247-040-00	1k ⅛W	carbon (nonflammable)
R820	1-212-376-00	22 1W	metal oxide (nonflammable)
R821	1-206-443-00	1.5 2W	metal oxide (nonflammable)
R822	1-202-589-00	4.7k ½W	composition
R824	1-212-360-00	1 1W	metal oxide (nonflammable)
R825	1-206-664-00	1k 2W	metal oxide (nonflammable)
R827	1-213-133-00	150 1W	metal oxide (nonflammable)
R828	1-206-443-00	1.5 2W	metal oxide (nonflammable)
R832	1-202-597-00	10k ½W	composition
R833	1-202-615-00	56k ½W	composition
R835	1-206-664-00	1k 2W	metal oxide (nonflammable)
R837,838	1-212-370-00	6.8 1W	metal oxide (nonflammable)

RV801 1-223-064-00 150, adjustable; H. CENT

SG801 1-519-063-XX Spark Gap

TRANSFORMERS

T801	1-405-760-00	Horizontal Blocking Oscillation, HBT
T802	⚠ 1-439-244-00	Flyback, FBT
T803	1-437-078-00	Horizontal Drive, HDT

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
F BOARD							
● A-1245-108-A F Board, complete			E-55				
CAPACITORS							
C601	△ 1-108-745-00	0.22 300V film		⇒D615	8-719-200-02	10E2	
C602	△ 1-108-747-00	0.1 300V film		⇒D641	8-719-305-15	GH3F	
C603-605	1-102-085-00	0.0047 500V		⇒D642, 643	8-719-924-06	ERC24-06C	
C606	1-125-167-00	250 400V elect		⇒D644, 645	8-719-305-15	GH3F	
C607	1-102-845-00	3.3 50V elect		⇒D646	8-719-924-06	ERC24-06C	
C608	1-123-354-00	3.3 50V elect		⇒D651, 652	8-719-200-02	10E2	
C609	1-123-351-00	0.47 50V elect		⇒D653	8-719-113-07	RD13E	
C610	1-130-017-00	820p polyethylene		F601	△ 1-532-237-00	Fuse, 3.15 AT	
C612	1-130-026-00	0.0047 film		COILS			
C613	1-108-381-00	0.022 400V polyethylene		L602	1-407-365-00	0.74μH	
C614	1-102-030-00	330p 500V		L603	1-408-300-00	6.8μH	
C616	1-101-810-00	100p 500V		L604	1-408-315-00	120μH	
C617	1-108-423-00	0.015 400V polyethylene		L642	1-407-167-XX	68μH	
C619	1-102-327-00	330p 1.5kV		L643	1-407-364-00	3.3μH	
C621	1-121-999-00	10 160V elect		L644	1-407-184-XX	3.3μH	
C622	1-121-757-00	33 160V elect		PTH601	△ 1-800-955-00	Thermister, 1	
C623	1-108-365-00	0.001 100V mylar		TRANSISTORS			
C625	1-123-297-00	330 6.3V elect		⇒Q601	8-729-201-52	2SA1015	
C626	1-123-352-00	1 50V elect		⇒Q602	8-726-663-47	2SC1364	
C627	1-123-252-00	1 160V elect		⇒Q603	8-729-663-47	2SC1364	
C641	1-123-254-00	10 250V elect		⇒Q604	8-765-170-01	2SC1962	
C642	1-123-362-00	330 50V elect		⇒Q605	8-729-341-34	2SC1413A	
C643	1-123-334-00	220 25V elect		Q606	8-729-163-93	2SA639S	
C644	1-123-308-00	220 10V elect		⇒Q607	8-729-663-47	2SC1364	
C645	1-123-356-00	10 50V elect		⇒Q608	8-729-201-52	2SA1015	
C646	1-123-334-00	220 25V elect		⇒Q609,610	8-729-663-47	2SC1364	
C647	1-161-731-00	1000p 2kV		⇒Q651	8-760-413-10	2SC1475	
C649	1-102-030-00	330p 500V		RESISTORS			
C651	1-123-360-00	100 50V elect		R603	1-214-475-00	68k 2W	
C653	1-123-316-00	10 16V elect		R604	1-213-160-00	27k 1W	
DIODES				R605	1-202-643-00	820k ½W	
⇒D601-604	8-719-911-55	U05G		R606	1-213-161-00	33k 1W	
D605	8-719-113-25	RD13E		R623, 624	1-206-758-00	24k 3W	
⇒D606	8-719-815-55	1S1555					
⇒D609	8-719-305-15	GH3F					
⇒D612-614	8-719-815-55	1S1555					

Note: The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

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<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
R625	1-206-696-00	22k 2W metal oxide (nonflammable)	
R626	1-211-427-00	100 $\frac{1}{8}$ W metal oxide (nonflammable)	
R627	1-212-358-00	0.68 1W metal oxide (nonflammable)	
R628	1-212-353-00	0.27 1W metal oxide (nonflammable)	
R640	1-247-436-00	10k $\frac{1}{8}$ W carbon	
R641	1-206-749-00	10k 3W metal oxide (nonflammable)	
R642	1-246-979-00	1.2 $\frac{1}{8}$ W carbon (nonflammable)	
R644	1-207-451-00	0.1 $\frac{1}{2}$ W wirewound	
R651, 652	1-246-979-00	1.2 $\frac{1}{8}$ W carbon (nonflammable)	
RV601	1-224-643-XX	2.2k, adjustable; 135V ADJ	

TRANSFORMERS

T601	Δ 1-421-352-00	Line Filter, LFT
T602	1-446-194-00	Regulator Drive, RDT
T603	1-413-040-00	Switching Regulator, SRT
T651	Δ 1-446-360-00	Power, PT

THERMISTER

TH601	Δ 1-800-820-00	Power
TH602	1-800-070-00	TH-4700
TH603, 604	1-800-202-XX	S-10k

H BOARD

• 1-600-964-00 H Board

E-102

RV401	1-224-554-00	20k, variable; TONE
RV402	1-224-554-00	20k, variable; BRIGHTNESS

M BOARD

• A-1306-030-A M Board, complete

E-101

CAPACITORS

C002	1-123-316-00	10 16V elect
------	--------------	--------------

Note: The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
C003, 004	1-123-352-00	1 50V elect	
C005, 006	1-161-313-00	150p	
C007	1-123-354-00	3.3 50V elect	
C008	1-123-352-00	1 50V elect	
C009	1-123-354-00	3.3 50V elect	
C010	1-121-806-00	10 16V elect	
C011-013	1-123-352-00	1 50V elect	
C016	1-123-351-00	0.47 50V elect	
C017	1-123-316-00	10 16V elect	
C018	1-123-319-00	47 16V elect	
C019, 020	1-161-051-00	0.01	
C021	1-161-271-00	100p	
C022	1-123-352-00	1 50V elect	
C023	1-123-353-00	2.2 50V elect	
CF001	1-527-476-00	Radiator, ceramic	

DIODES

$\Rightarrow$ D001	8-719-815-55	1S1555
D005	8-759-157-40	μ PC574J
D451	8-719-812-41	TLR124

ICS

IC001	8-759-997-70	SN29770AN
IC002	8-759-997-71	SN29771AN
IC003	8-759-684-85	M58485P
IC451	8-759-997-64	SN29764N

LED451	8-719-171-60	SN716
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TRANSISTORS

$\Rightarrow$ Q001	8-729-663-47	2SC1364
$\Rightarrow$ Q002	8-729-201-52	2SA1015
Q003	8-722-383-40	2SK23A
$\Rightarrow$ Q004	8-729-201-52	2SA1015

RESISTORS

R010	1-206-690-00	12k 2W metal oxide (nonflammable)
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RV001-008	1-226-343-00	Variable; CH PRESET
RV009	1-226-637-00	20k, variable; SOUND SUB VOLUME

• Items marked "•" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
S001	1-516-933-00	Switch, pushbutton; AFT		MISCELLANEOUS			
S451	1-552-174-00	Switch, pushbutton; VOLUME UP		C901	△ 1-130-334-00	0.001 1.2kV film	
S452	1-552-174-00	Switch, pushbutton; VOLUME DOWN		C902	1-108-377-00	0.01 100V mylar	
S453	1-552-174-00	Switch, pushbutton; PROGRAMME UP		C903	1-121-257-00	4.7 16V elect	
S454	1-552-174-00	Switch, pushbutton; PROGRAMME DOWN		J901	1-507-539-11	Jack; EARPIECE	E-10
S455	1-552-174-00	Switch, pushbutton; COLOUR UP		L901, 902	△ 1-454-166-00	Coil, degaussing, DGC	E-51
S456	1-552-174-00	Switch, pushbutton; COLOUR DOWN		L904	△ 1-451-175-11	Deflection Yoke, DY	E-5
S457	1-552-174-00	Switch, pushbutton; PICTURE UP		L905	△ 1-452-099-11	Neck Ass'y, picture tube	E-3
S458	1-552-174-00	Switch, pushbutton; PICTURE DOWN		L906	1-407-364-00	Coil, spook choke	
				L907	1-407-780-00	Coil, spook choke; 3.3μH	
X BOARD				TRANSISTOR			
	● A-1394-004-A	X Board, complete	E-103	Q901	8-729-372-51	2SD725	E-59
CAPACITORS				THYRISTOR			
C151	1-123-316-00	10 16V elect		Q902	8-726-400-00	SG264A	E-60
C152	1-161-269-00	68p		R901	1-202-549-00	100 ½W composition	
C153, 154	1-108-377-00	0.01 100V mylar		S901	△ 1-552-116-00	Switch, pushbutton POWER	E-11
C155, 156	1-123-316-00	10 16V elect		SP901	1-502-650-00	Speaker, 8Ω	E-9
C157	1-123-352-00	1 50V elect		T901	△ 1-427-402-00	Transformer, sound output; SOT	E-8
C159	1-161-269-00	68p		V901	△ 8-737-606-00	Picture Tube, 570EB22	E-1
DIODE				VDR901	△ 1-800-782-00	Varistor	
⇒ D151	8-729-100-03	PH302A			△ 1-226-271-00	Resistor Ass'y, high-voltage	E-58
COIL					1-452-032-00	Magnet, disc; 10mm dia.	E-6
L151	1-409-315-00	100mH			1-452-094-00	Magnet, rotatable disk; 15mm dia.	E-7
TRANSISTORS					1-452-133-00	Magnet, BMC	E-2
Q151	8-722-383-40	2SK23A			1-526-086-XX	Socket, picture tube	
⇒ Q152	8-729-663-47	2SC1364			● 1-535-283-11	Terminal, ground	E-61
⇒ Q153	8-729-201-52	2SA1015			1-536-392-XX	Terminal strip	E-52
⇒ Q154	8-729-663-47	2SC1364			△ 1-536-473-00	Terminal, antenna	E-53
					△ 1-551-487-00	Cord, power	E-12

Note: The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

Items marked "●" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

ACCESSORIES & PACKING MATERIALS

<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
-----------------	--------------------	---------------

A-1009-014-A	Commander, RM-604B	
--------------	--------------------	--

1-504-034-72	Earpiece, ME-20E	
--------------	------------------	--

3-701-626-00	Bag, polyethylene	
--------------	-------------------	--

4-323-926-00	Cushion (upper right)	
--------------	-----------------------	--

4-323-927-00	Cushion (upper left)	
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4-323-928-00	Cushion (lower right)	
--------------	-----------------------	--

4-323-929-00	Cushion (lower left)	
--------------	----------------------	--

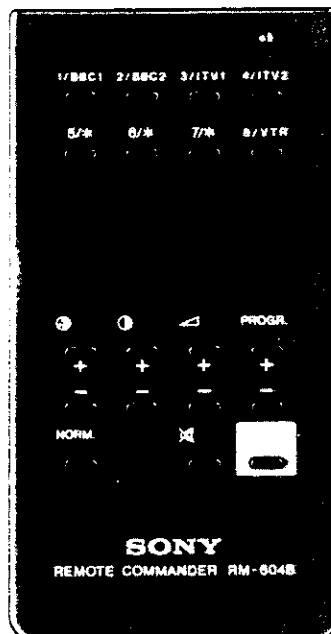
4-323-939-00	Spacer	
--------------	--------	--

4-323-940-00	Sheet, protect	
--------------	----------------	--

4-337-108-01	Carton	
--------------	--------	--

4-495-857-41	Manual, instruction	
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RM-604B



REMOTE COMMANDER

SPECIFICATIONS

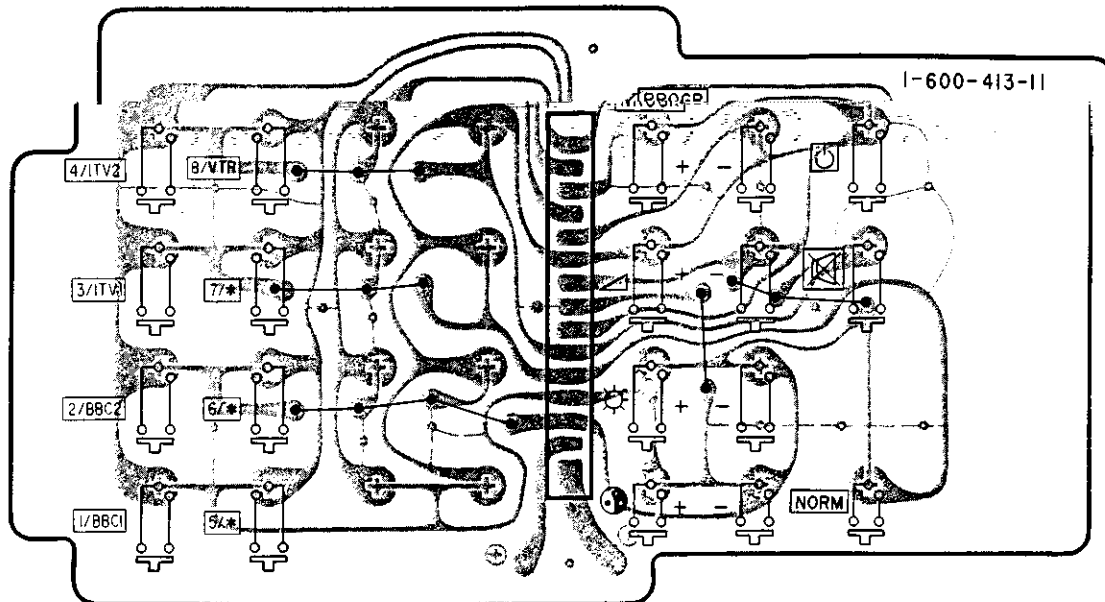
Remote Control System:	Infrared control
Power Requirements:	6Vdc, 4 batteries size "AA" (IEC designation R6)
Dimensions:	Approx. 75(w) x 40(h) x 135(d) mm 3(w) x 1 ⁵ / ₈ (h) x 5 ³ / ₈ (d) inches
Net Weight:	Approx. 215g (8 oz.) including batteries
Accessories Supplied:	Batteries size "AA" (IEC designation R6)

1. MOUNTING DIAGRAM

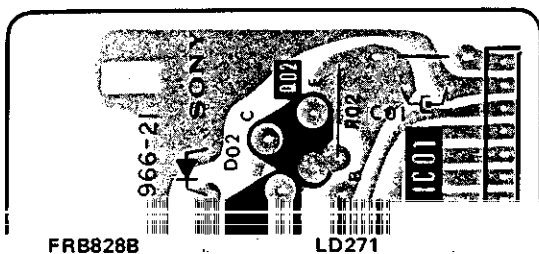
— Conductor Side —

A B C D

— R2 Board —

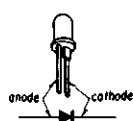
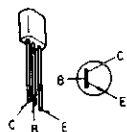


— R1 Board —

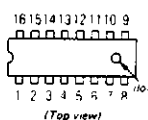


FRB828B

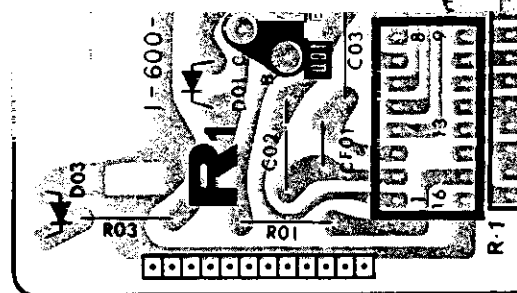
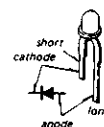
LD271



M58484P

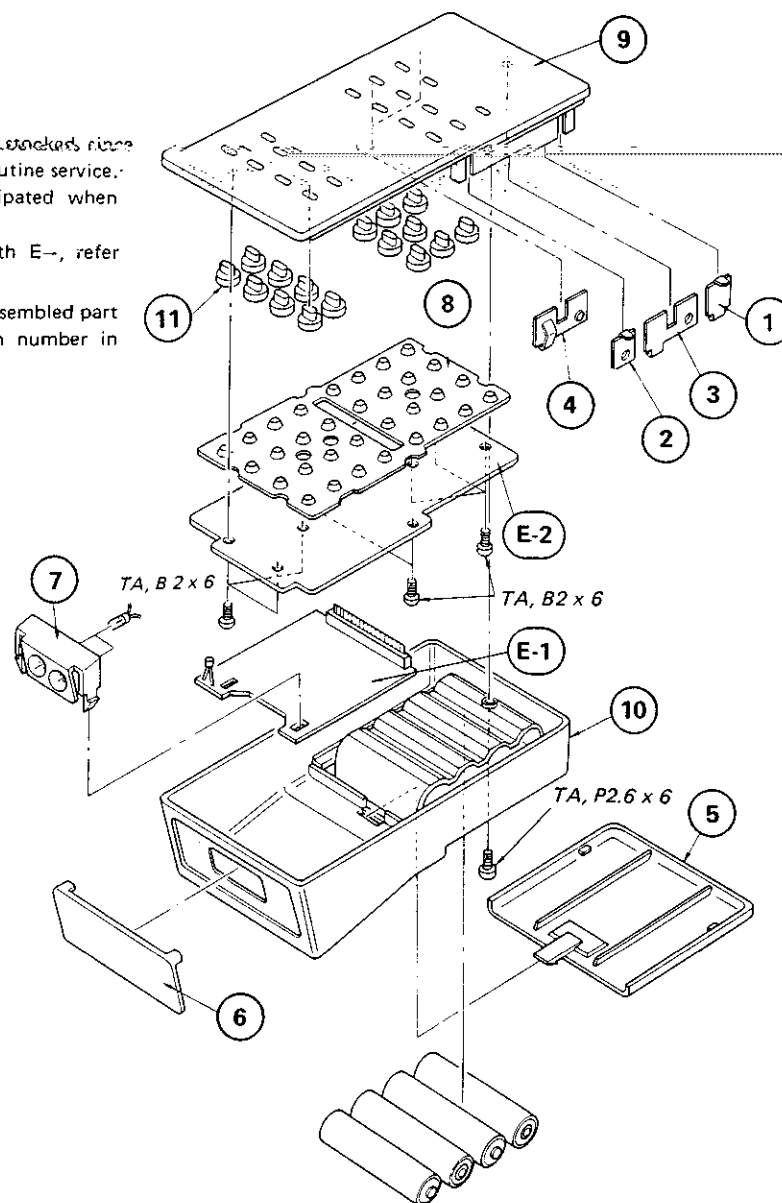


TLR124



3. EXPLODED VIEW

- Note:**
- Items with no part number and no description are not stocked because they are seldom required for routine service.
 - All screws are Phillips (cross recess) type unless otherwise noted.
(-) = slotted head
 - : TA, BV3 x 8
 - : TA, BV3 x 12
 - ▲ : TA, BV4 x 12
 - Items marked "E" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
 - As to the part numbered with E-, refer to the electrical parts list.
 - The construction parts of an assembled part are indicated with a collation number in the remark column.



No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
1	2-249-918-00	Terminal (A), battery		7	2-249-924-00	Reflector	
2	2-249-919-00	Terminal (B), battery		8	2-249-925-00	Contact, rubber	
3	2-249-920-00	Terminal (C), battery		9	2-249-926-00	Case (upper)	
4	2-249-921-00	Terminal (D), battery		10	2-249-927-00	Case (lower)	
5	2-249-922-00	Cover, battery		11	3-706-272-00	Key, top	
6	2-249-923-00	Plate, frosted					

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
-----------------	-----------------	--------------------	---------------

R1 BOARD

1-600-966-00	R1 Board	E-1
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CAPACITORS

C01	1-131-199-00	10 16V tantalum
C02, 03	1-161-313-00	150p
CF01	1-527-476-00	Ceramic Filter

DIODES

⇒D01, 02	8-719-103-03	SE303A
D03	8-719-812-41	TLR124

IC

IC01	8-759-684-84	M58484P
------	--------------	---------

TRANSISTORS

⇒Q01, 02	8-729-663-47	2SC1364
----------	--------------	---------

R2 BOARD

1-600-413-00	R2 Board	E-2
--------------	----------	-----

ACCESSORIES AND PACKING MATERIALS

<u>Part No.</u>	<u>Description</u>
1-528-067-00	Battery, size "AA" (IEC designation R6)
3-701-616-00	Bag, polyethylene
3-701-624-00	Bag, polyethylene

Note:

- ⇒: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.
- Items marked "⚡" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

CAPACITORS

- All capacitors are in μF and ceramic unless otherwise noted. 50WV or less are not indicated except for electrolytics. p: μF , elect: electrolytic

RESISTORS

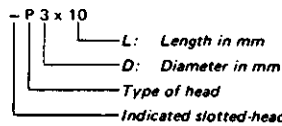
- All resistors are in ohms. Common $\frac{1}{4}\text{W}$ carbon resistors are omitted. Refer to the list on the last page for their part numbers.

1/4 WATT CARBON RESISTORS

Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1.0M	1-246-545-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00	1.1M	1-210-814-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1.2M	1-210-815-00
1.3	1-246-404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-476-00	13k	1-246-500-00	130k	1-246-524-00	1.3M	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-477-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1-210-817-00
1.6	1-246-406-00	16	1-246-430-00	160	1-246-454-00	1.6k	1-246-478-00	16k	1-246-502-00	160k	1-246-526-00	1.6M	1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180	1-246-455-00	1.8k	1-246-479-00	18k	1-246-503-00	180k	1-246-527-00	1.8M	1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	2.0k	1-246-480-00	20k	1-246-504-00	200k	1-246-528-00	2.0M	1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-481-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-482-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-00
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-483-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-00
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-484-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-00
3.3	1-246-413-00	33	1-246-437-00	330	1-246-461-00	3.3k	1-246-485-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-00
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-486-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-00
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-487-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-00
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4.3k	1-246-488-00	43k	1-246-512-00	430k	1-246-536-00	4.3M	1-244-760-00
4.7	1-246-417-00	47	1-246-441-00	470	1-246-465-00	4.7k	1-246-489-00	47k	1-246-513-00	470k	1-246-537-00	4.7M	1-244-761-00
5.1	1-246-418-00	51	1-246-442-00	510	1-246-466-00	5.1k	1-246-490-00	51k	1-246-514-00	510k	1-246-538-00	5.1M	1-244-762-00
5.6	1-246-419-00	56	1-246-443-00	560	1-246-467-00	5.6k	1-246-491-00	56k	1-246-515-00	560k	1-246-539-00		
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

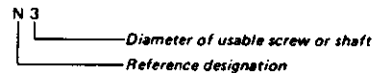
HARDWARE NOMENCLATURE

Screw:



Unless otherwise indicated, it means
cross-recessed head (Phillips type).

Nut, Washer, Retaining ring:



Reference Designation	Shape	Description	Remarks
SCREWS			
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-fillister-head screw	
RF		fillister-head screw	
BV		brazer-head screw	

Reference Designation	Shape	Description	Remarks
SELF-TAPPING SCREWS			
TA		self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head self-tapping screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self-tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
SET SCREWS			
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
NUT			
N		nut	
WASHERS			
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex: LW3, internal
LW		external-tooth lock washer	ex: LW3, external
RETAINING RINGS			
E		retaining ring	
G		grip-type retaining ring	

Sony Corporation

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SONY (U.K.) LTD

Technical bulletin

CURRYS GROUP SERVICE LIMITED

TECHNICAL TIP NO. 39

Technical Publication
Ascot Road, Feltham, Middlesex
Telephone Ashford (Middx) 50021
Telex 934910

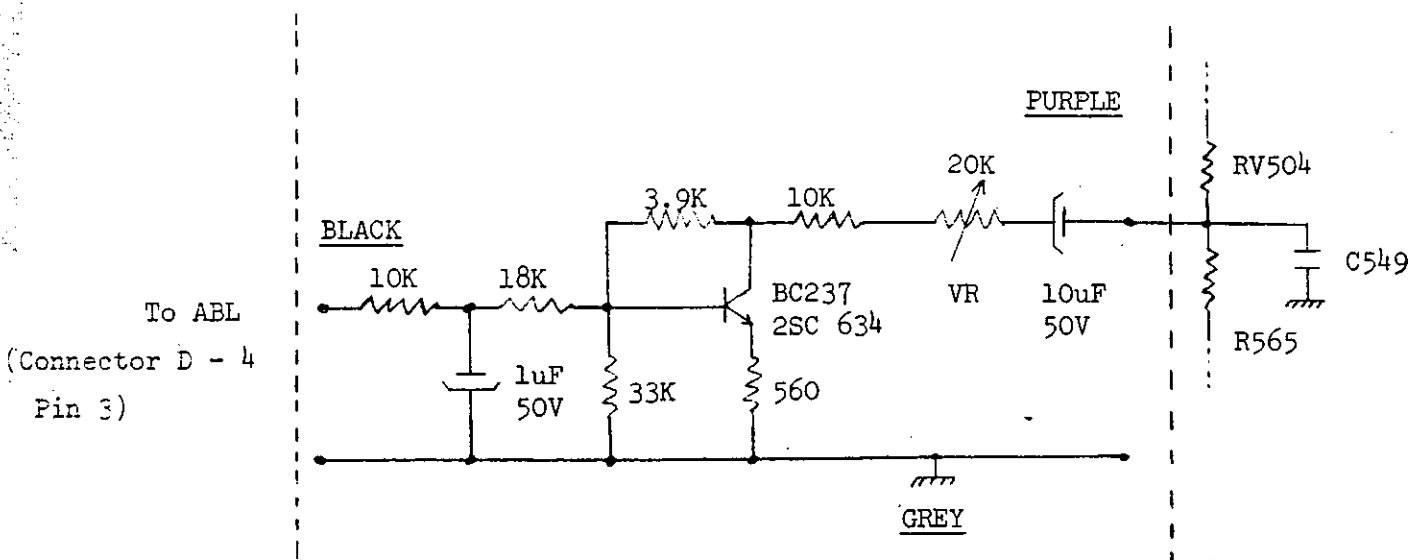
Model KV - 2204
Date April '80 Ref. KVK-0210

Subject

KV - 2204 PIN CUSHION DISTORTION

If pin cushion distortion is experienced on this model, an additional board is available to provide extra correction. The part number of this board is A-134-035-1A and the connector is 1-551-675-11.

Circuit is as follows:-



All three connections can be made on to D Board.

ADJUSTMENT

Set variable resistor to maximum and with brightness at maximum, adjust Pin Amp on receiver for least distortion. Set brightness at minimum and adjust VR for least distortion. Repeat adjustments for optimum performance.

Note that a power supply is NOT required for this board.

Physical location is to be decided by service personnel, but the board should be kept away from EHT etc..

SONY TRINITRON® COLOUR TV

KV-2204UB

Chassis No. SCC-244A-A

MOUNTING DIAGRAM

WARNING

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

CAUTION

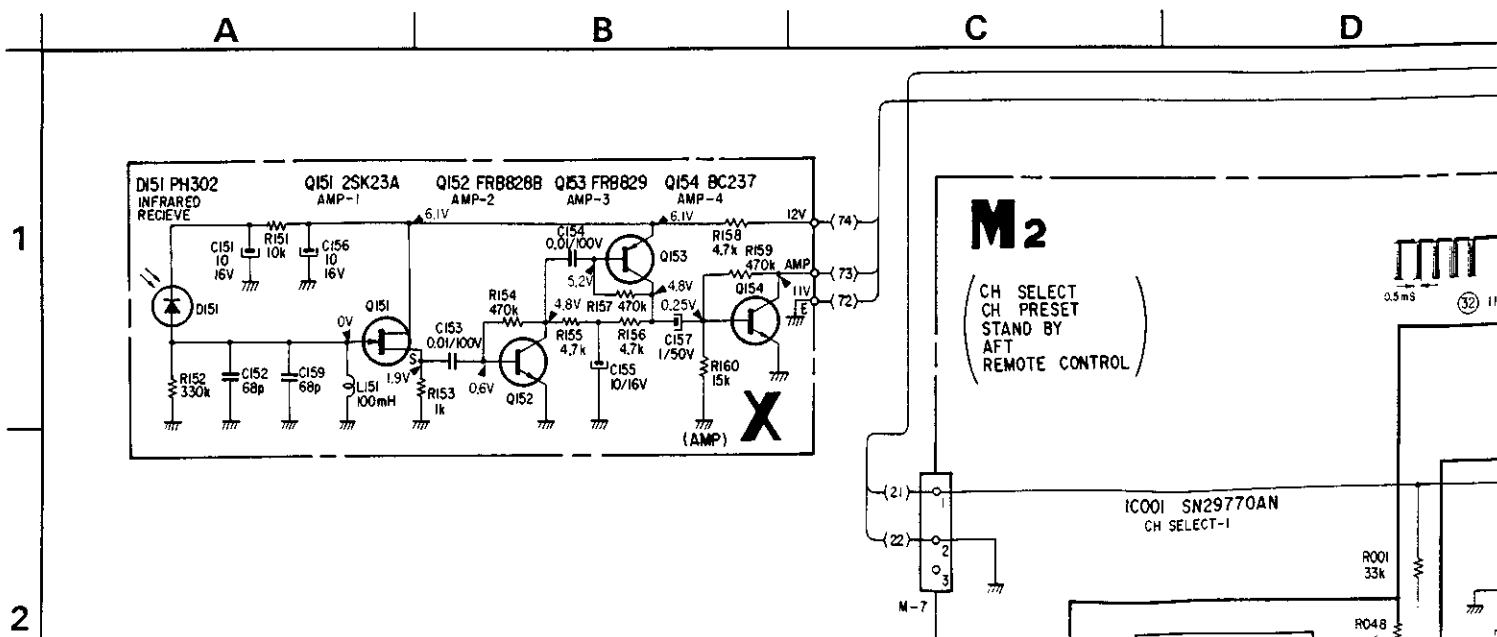
- Avoid rubbing the inked surface.
- Do not allow the paper to contact hot power resistor, soldering irons, etc.

Note: The components identified by shading and mark  are critical for safety. Replace only with part number specified.

Note:

- All capacitors are in μF unless otherwise noted. p : μpF . 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, $\frac{1}{4}\text{W}$ unless otherwise noted. k Ω : 1000 Ω , M Ω : 1000k Ω .
-  : nonflammable resistor.
-  : internal component.
-  : panel designation.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 20,000-ohm-per-volt VOM.
- * : selected to yield optimum performance.
-  : adjustable without removing cabinet.
-  : adjustment for repair.
- Voltage variations may be noted due to normal production tolerances.
- Do not touch the base of Q608 with the VOM probe, as B+ voltage will not be supplied to the set.
- Voltages of Q512 are taken with D-7 removed and also TH502 short-circuited.

SCHEMATIC DIAGRAM



MOUNTING DIAGRAM

H

[CUSTOMER
CONTROL]

Note: The components identified by shading and mark  are critical for safety. Replace only with part number specified.

Capacitors are in μF unless otherwise noted. p : μF
0WV or less are not indicated except for electrolytics.
Resistors are in ohms, $\frac{1}{4}\text{W}$ unless otherwise noted.
 Ω : 1000 Ω , M Ω : 1000k Ω

 : nonflammable resistor.

 : internal component.

 : panel designation.

Variable and adjustable resistors have characteristic curve B, unless otherwise noted.

Voltages are dc with respect to ground unless otherwise noted.

Readings are taken with a 20,000-ohm-per-volt VOM.

* : selected to yield optimum performance.

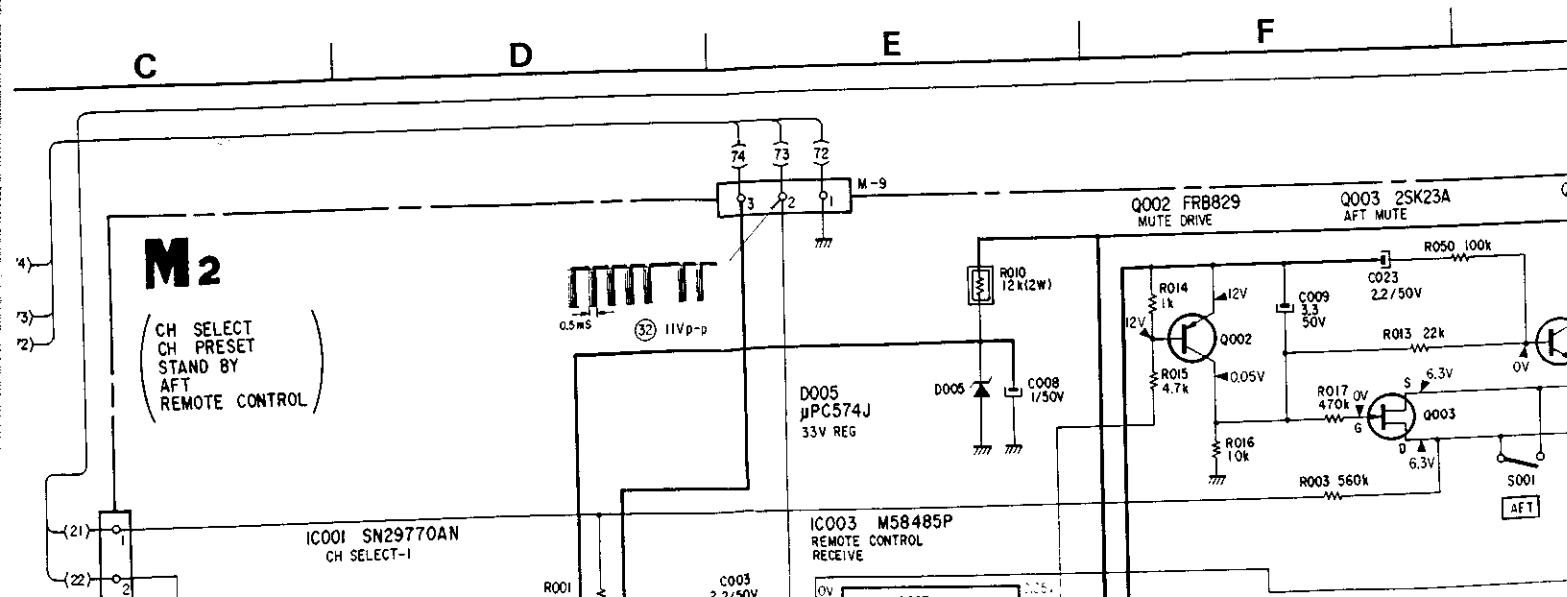
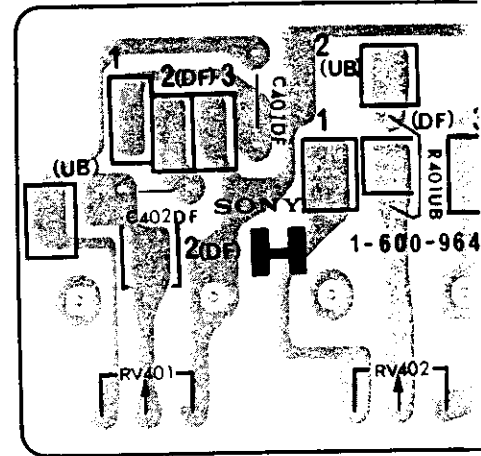
⊙ : adjustable without removing cabinet.

 : adjustment for repair.

Voltage variations may be noted due to normal production tolerances.

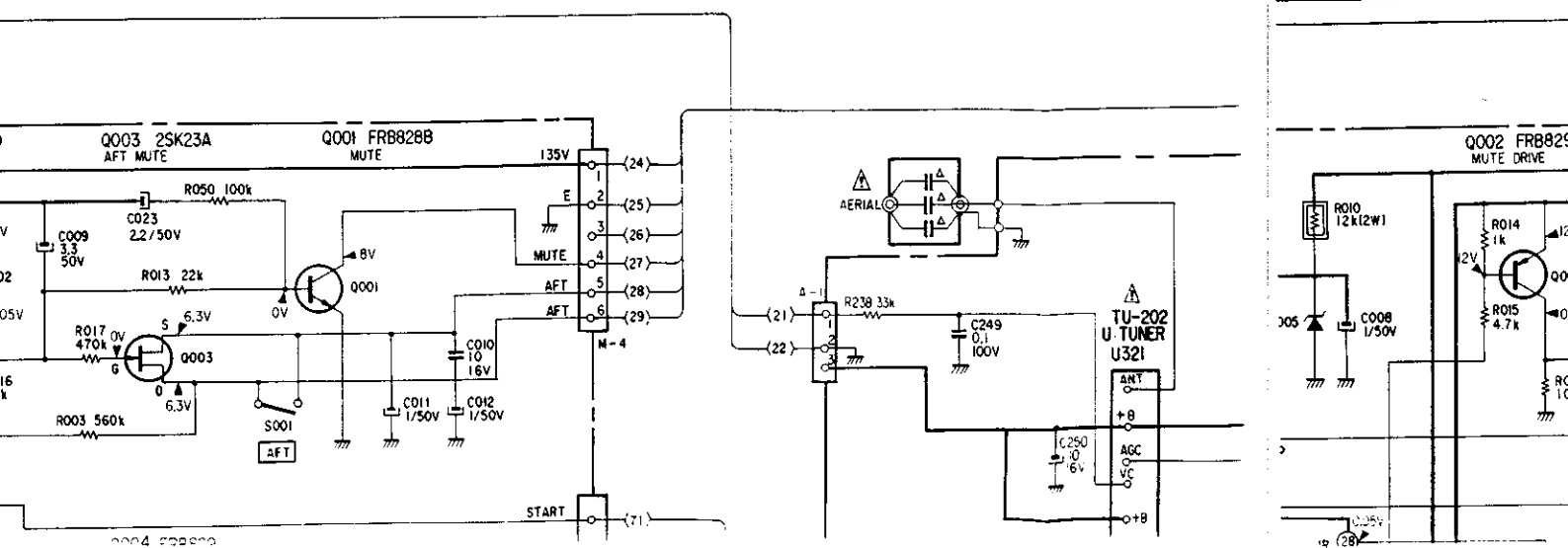
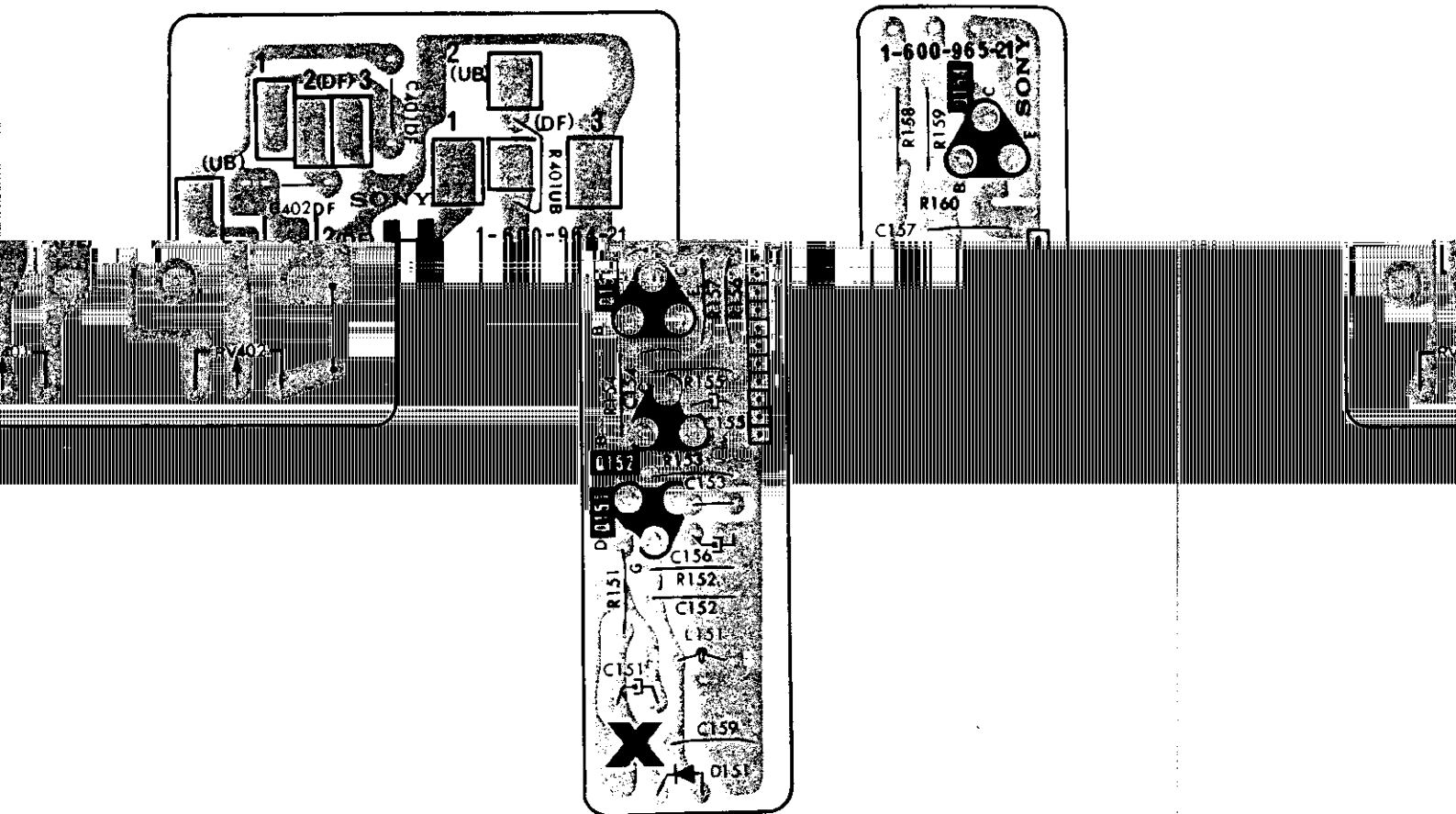
Do not touch the base of Q608 with the VOM probe, as B+ voltage will not be supplied to the set.

Voltages of Q512 are taken with D-7 removed and also H502 short-circuited.



TOMER]
TROL]

X [AMP]



D

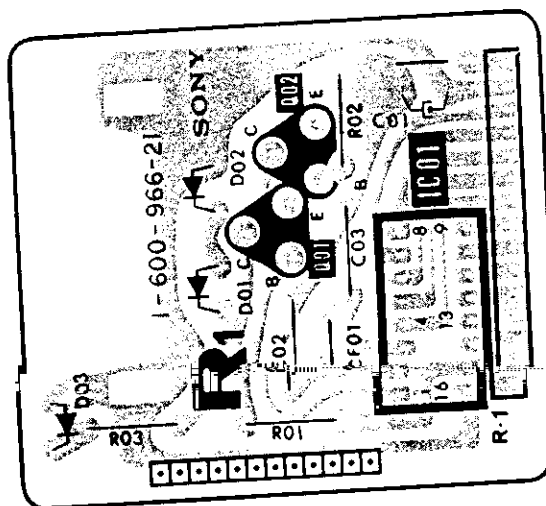
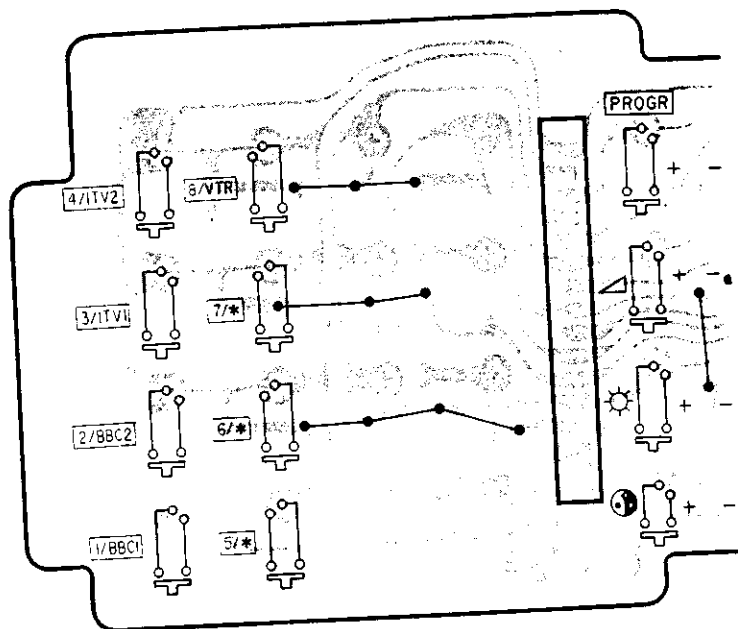
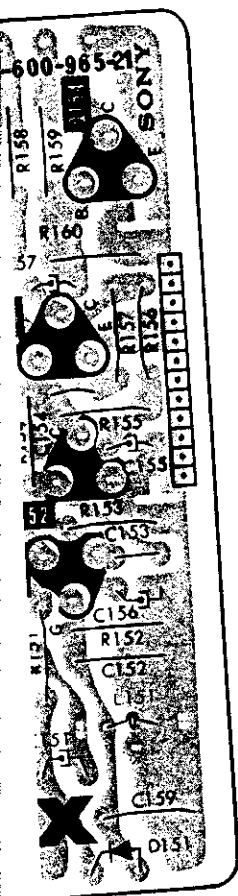
E

F

G

REMOTE COMMANDER RM-604B

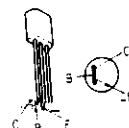
[P]



M58484P



FRB828B

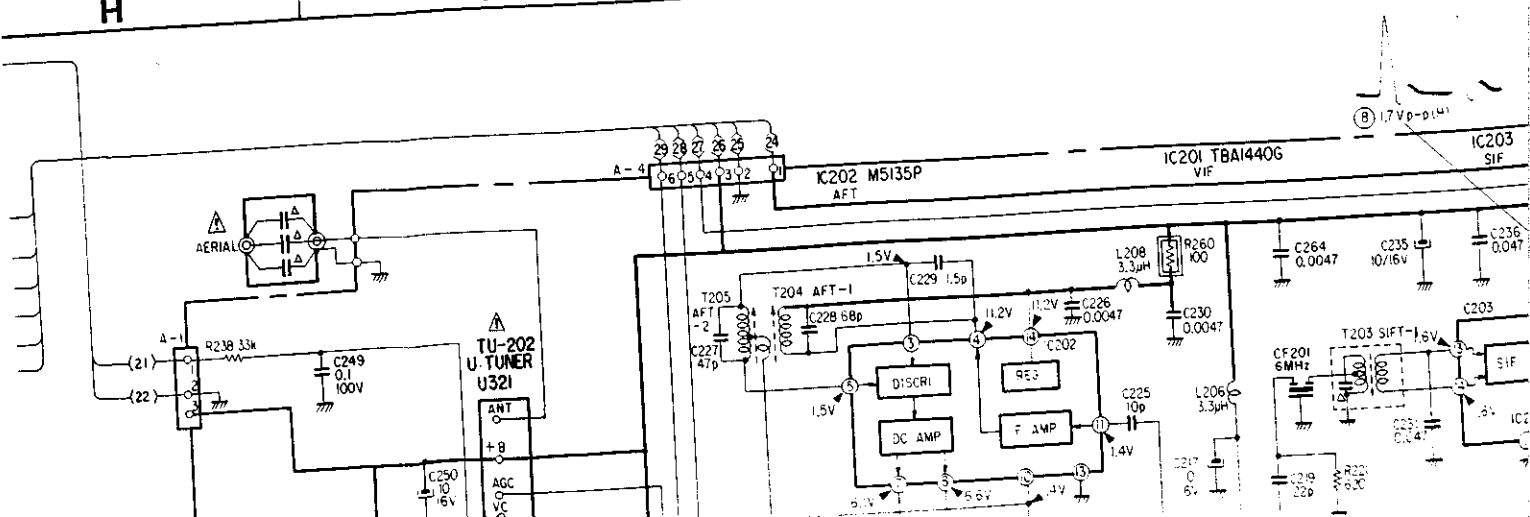


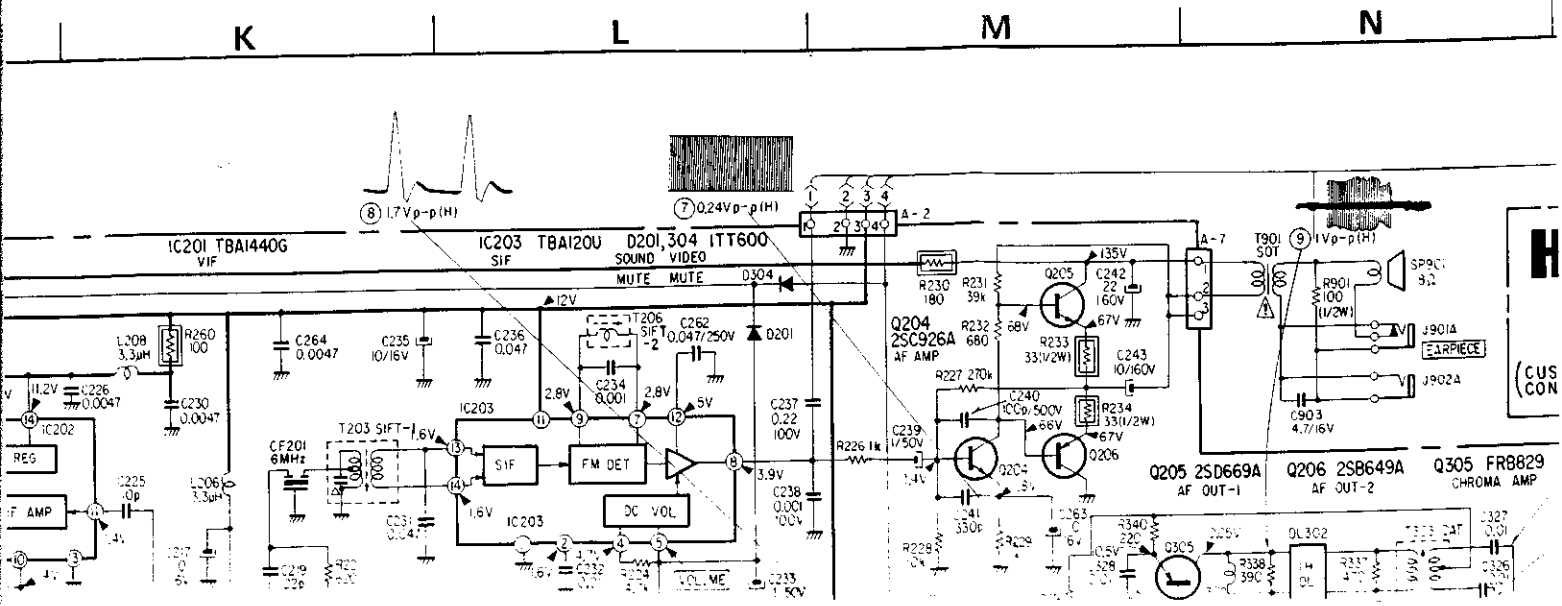
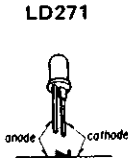
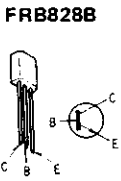
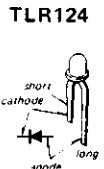
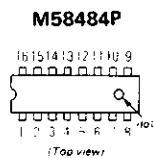
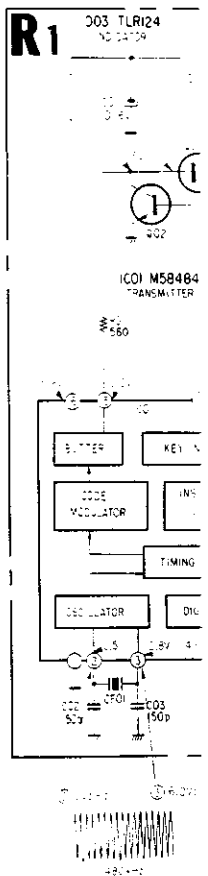
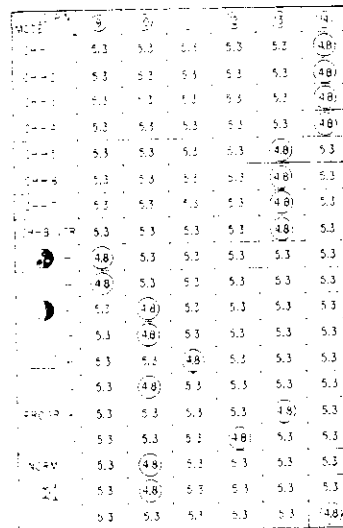
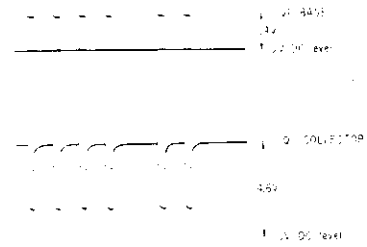
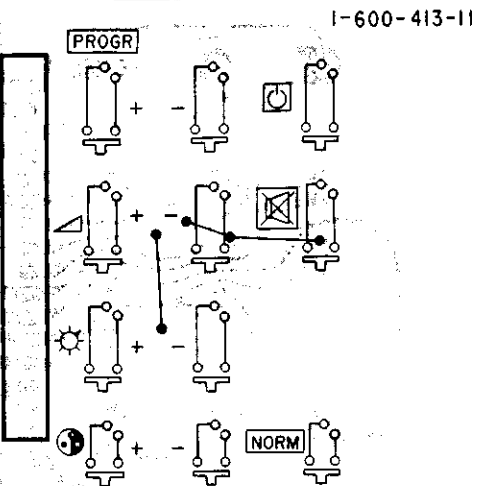
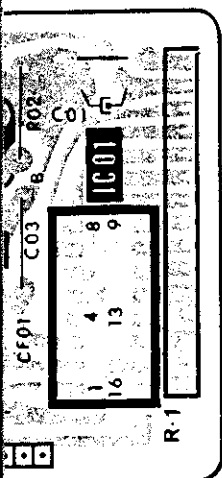
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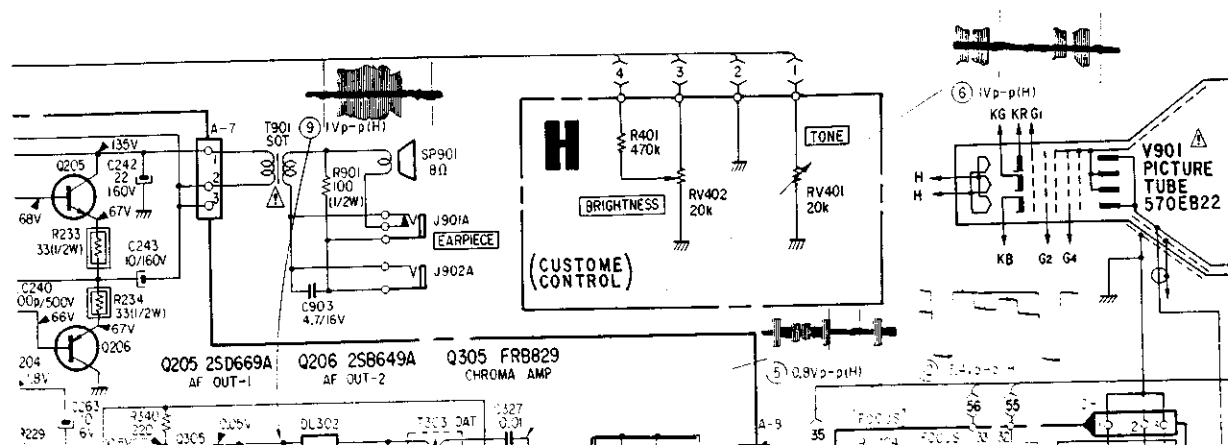
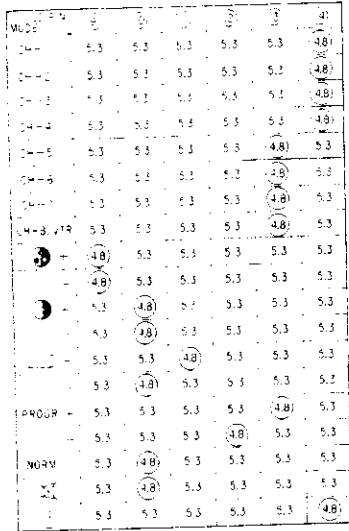
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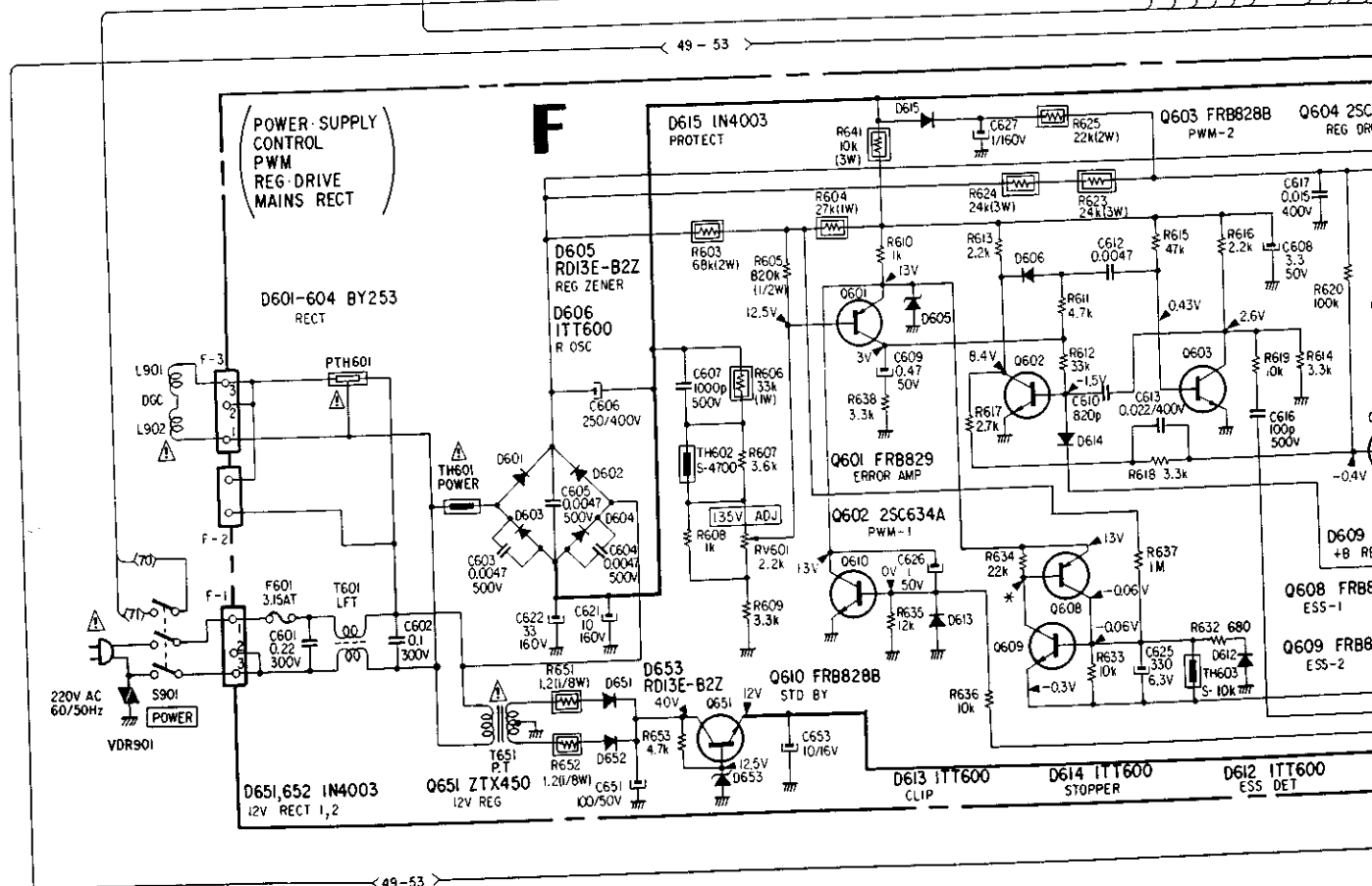
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K

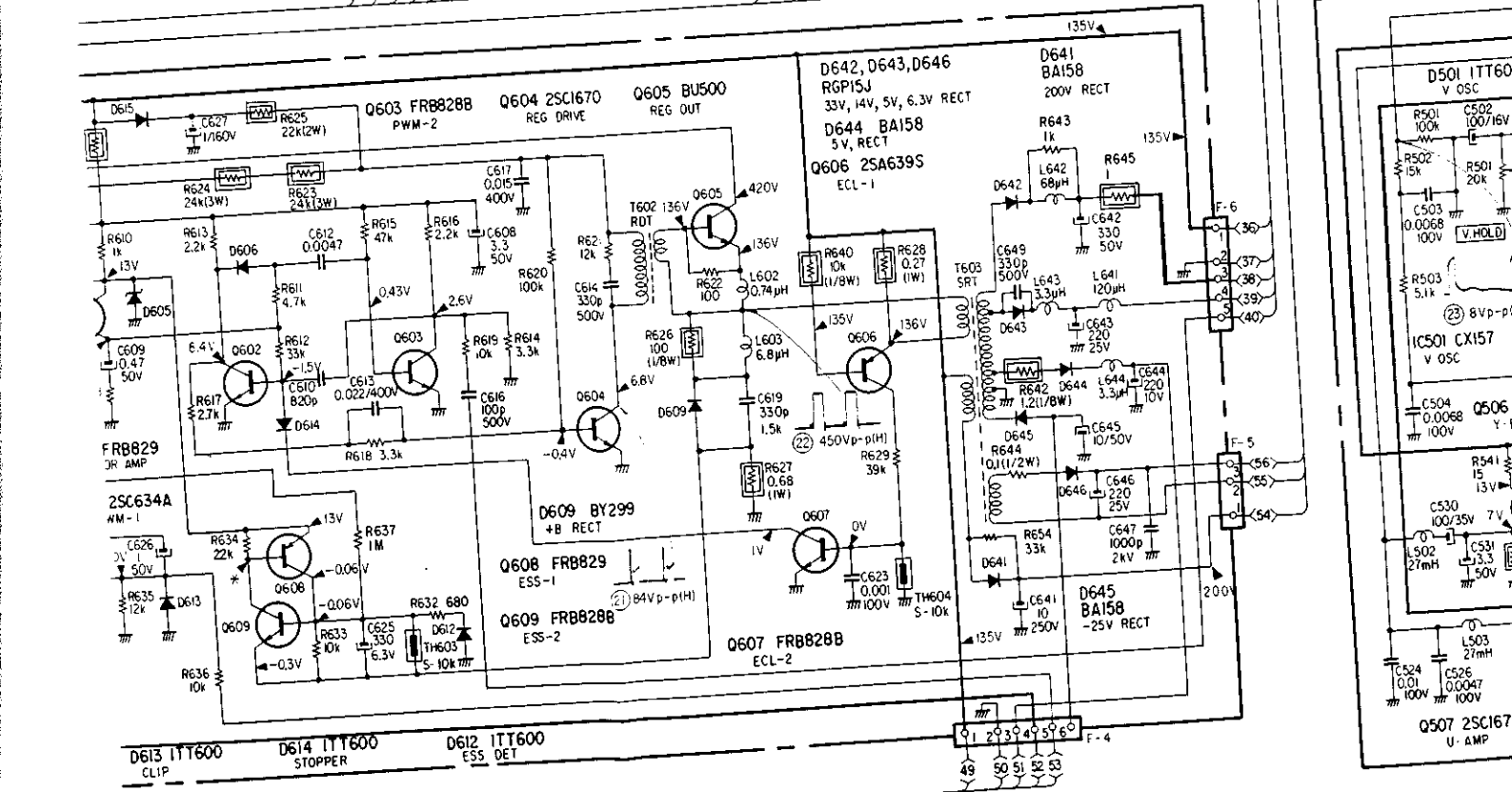
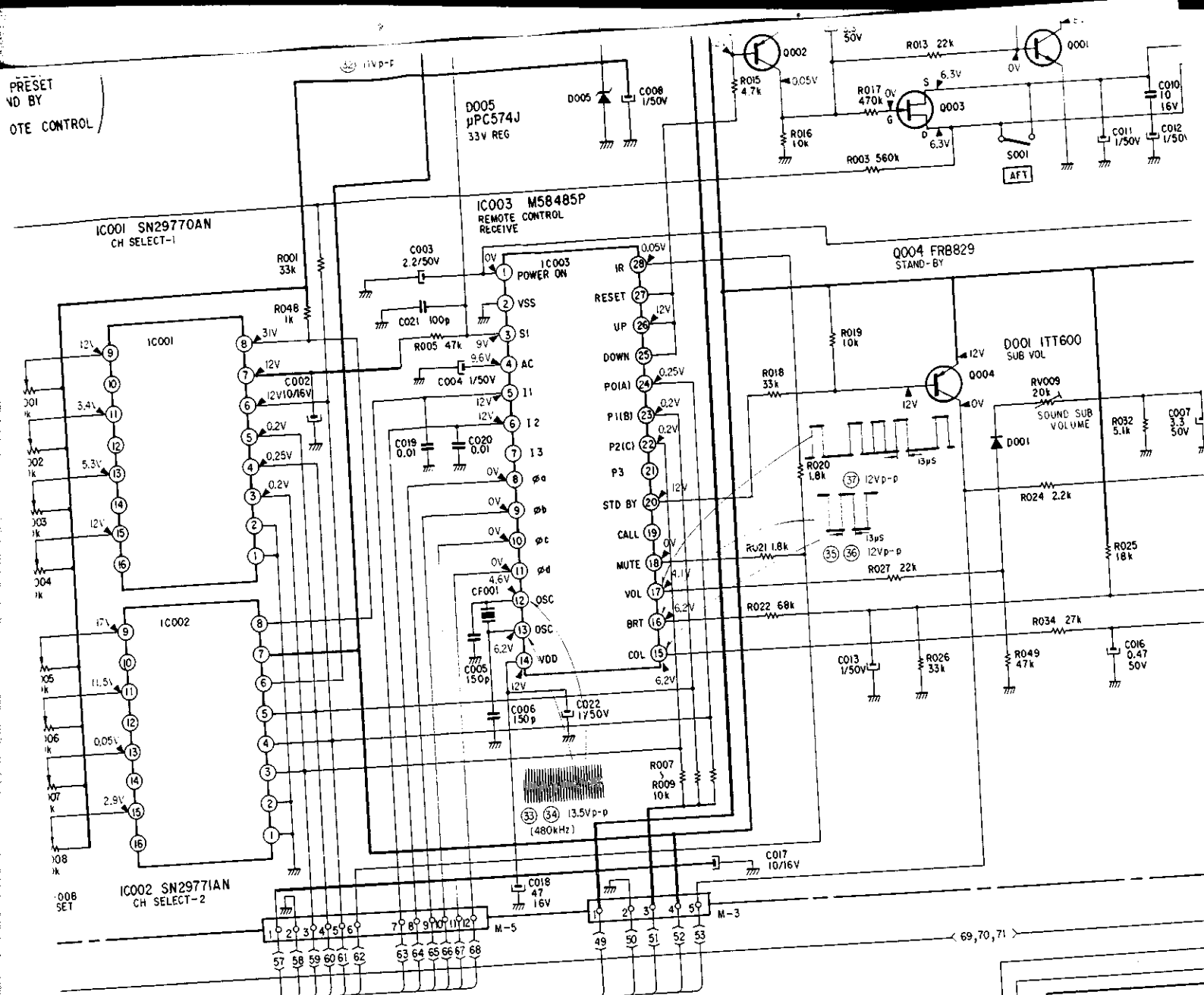


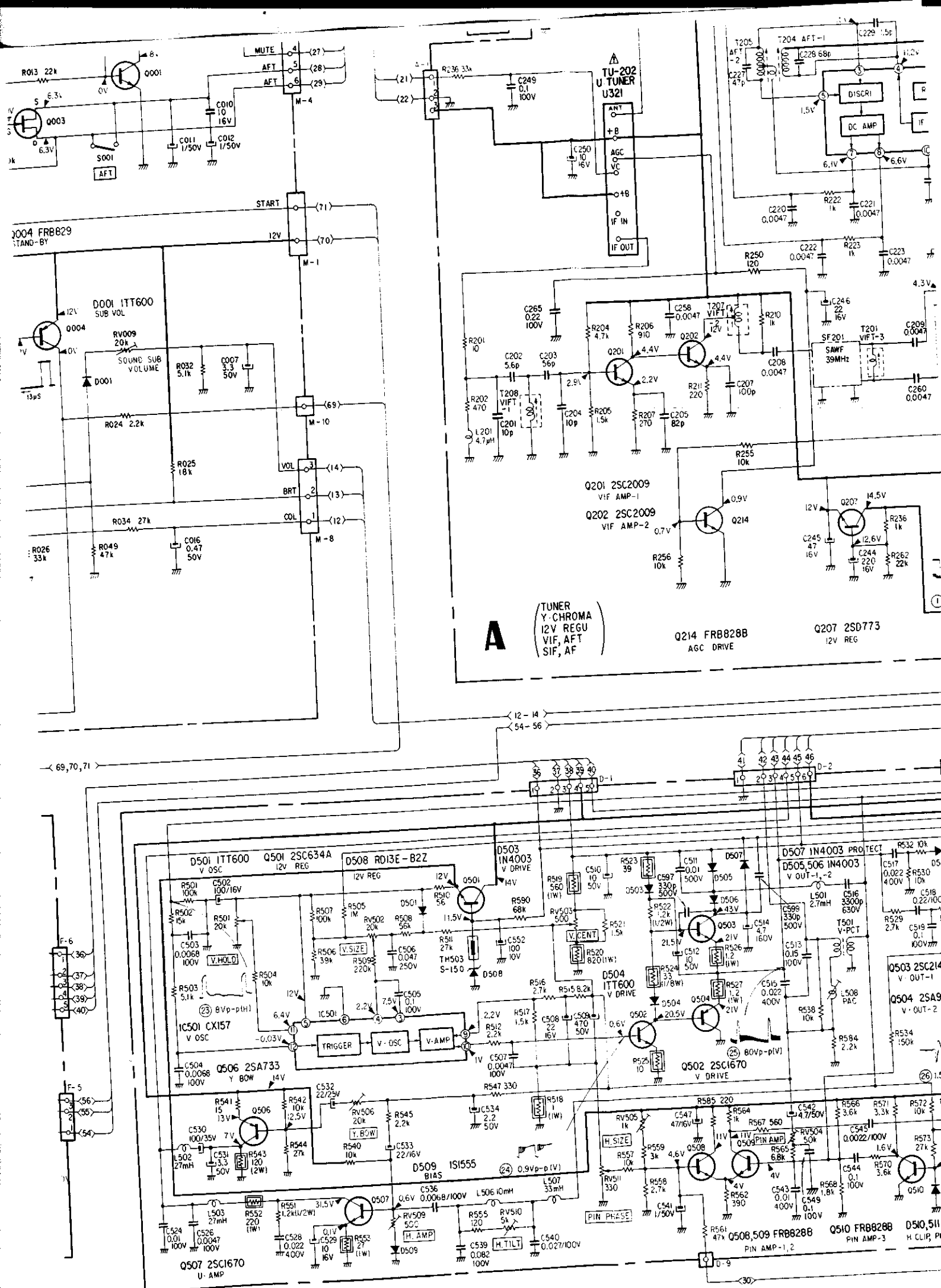


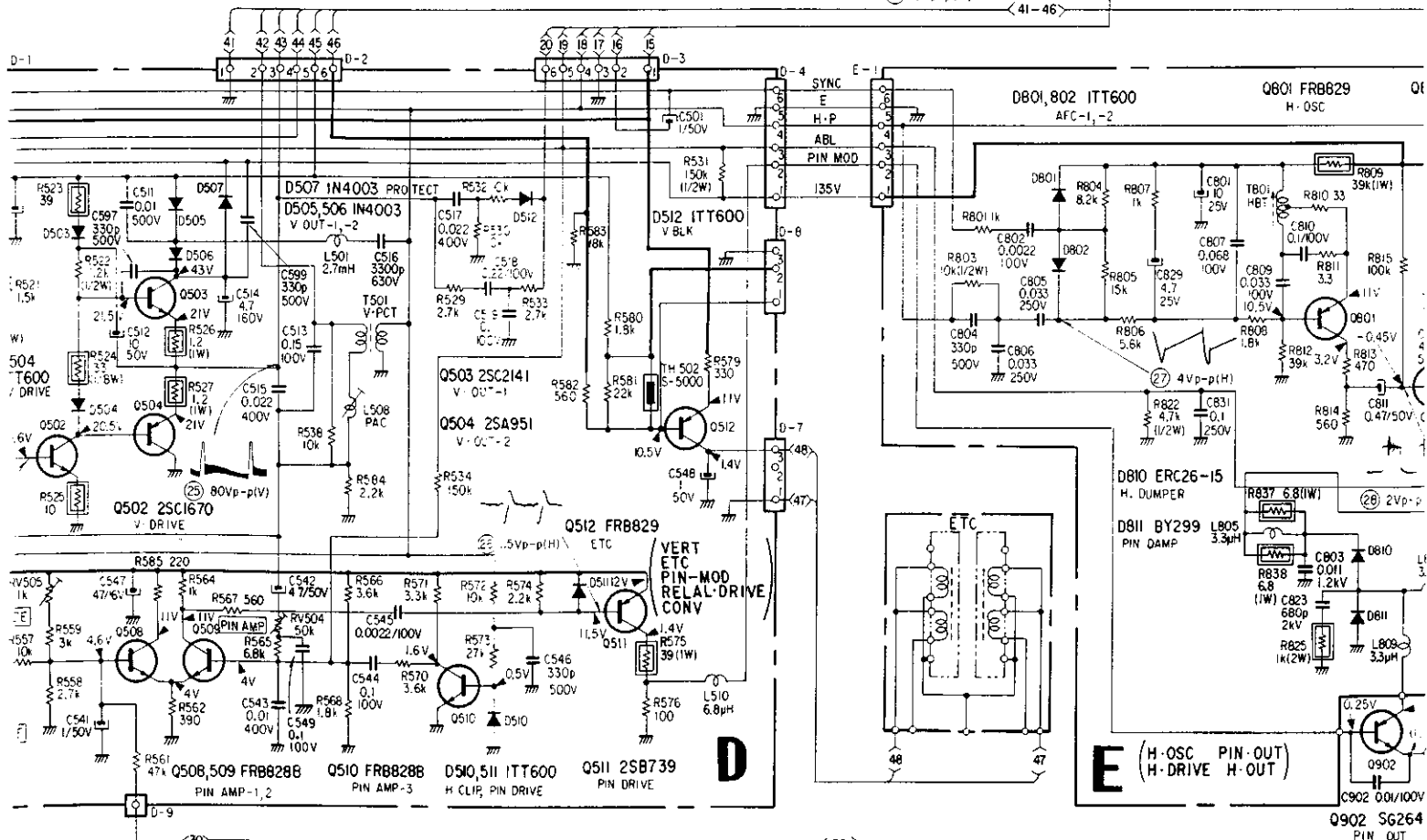
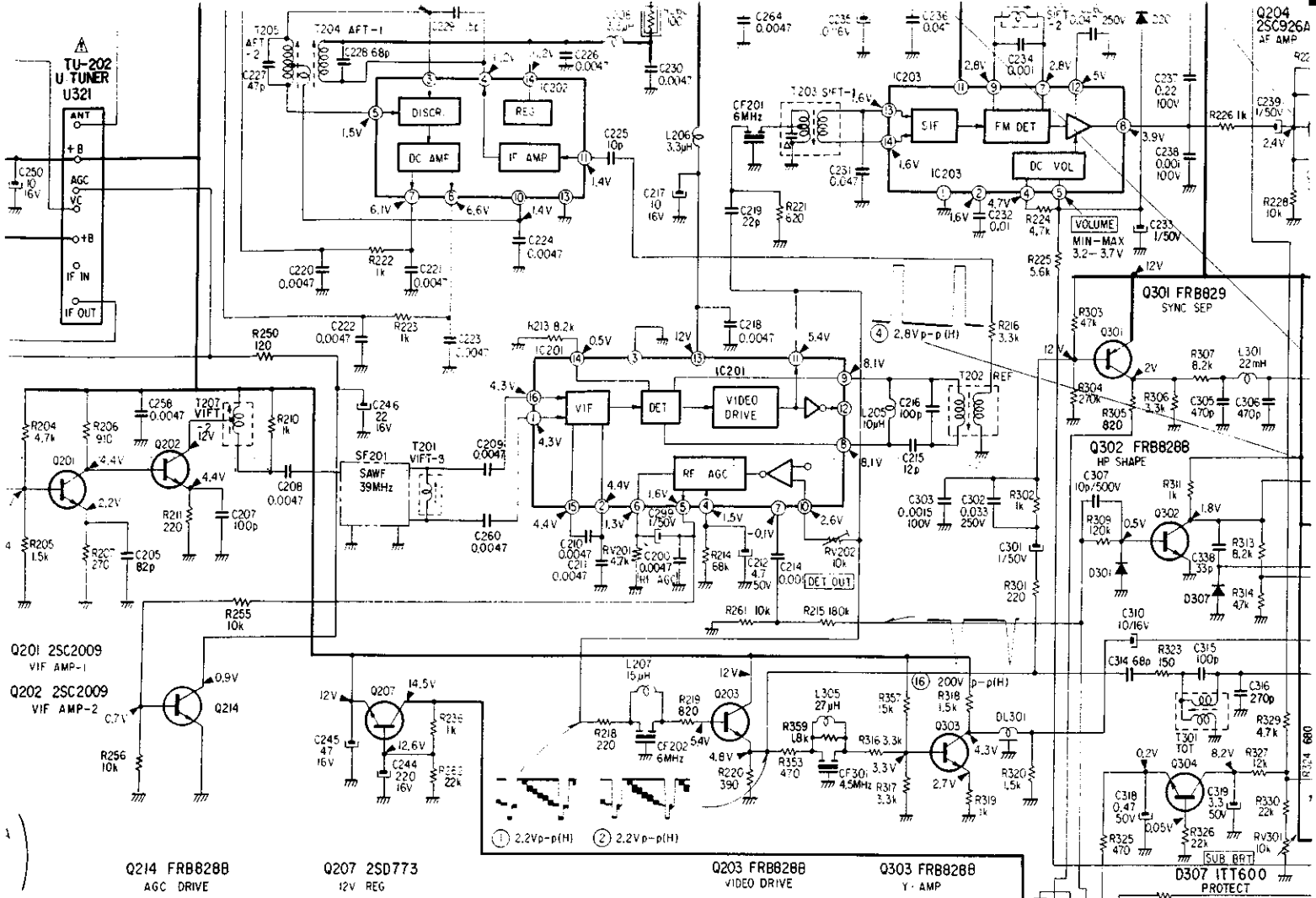




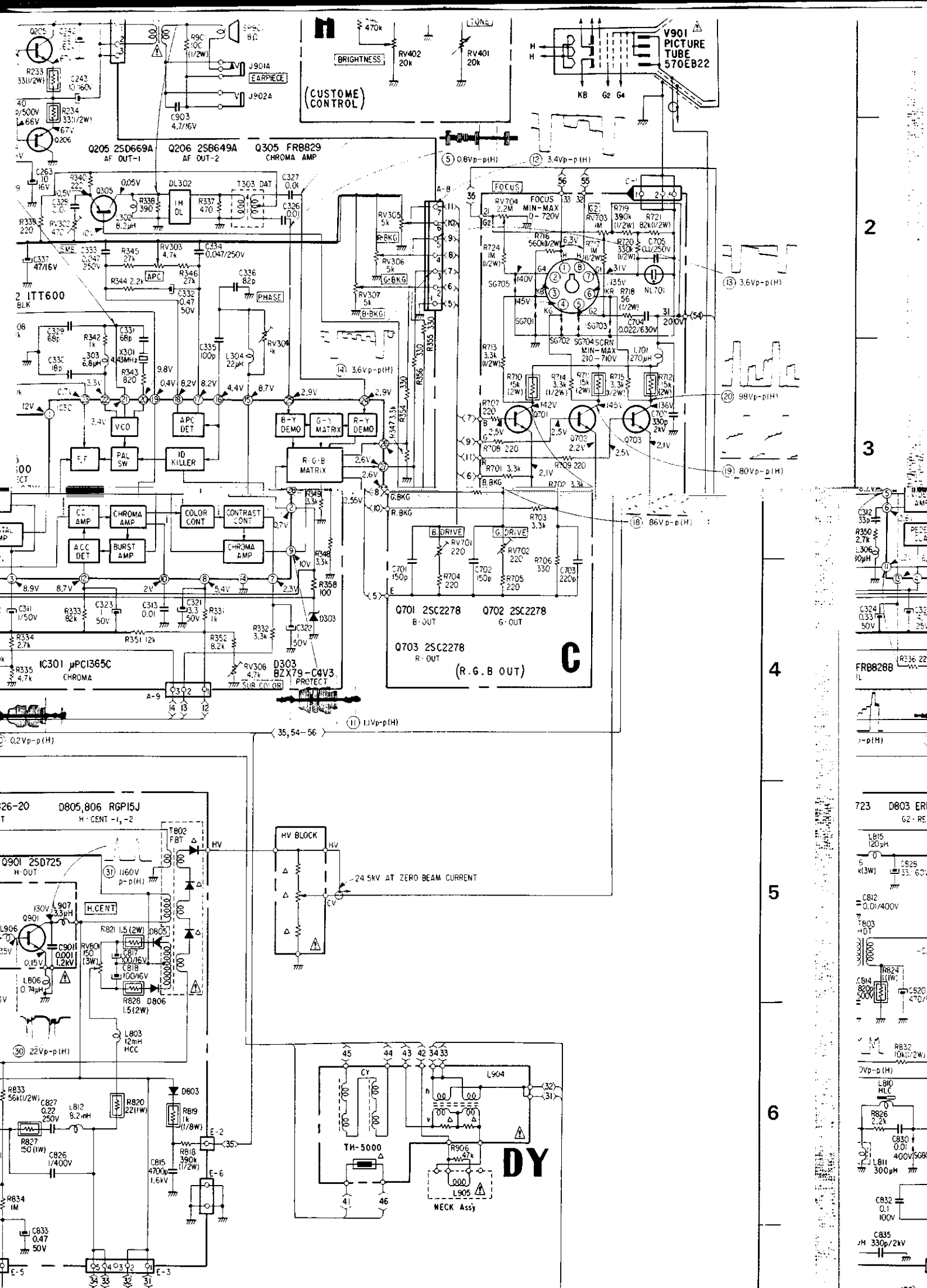
PRESET
VD BY
OTE CONTROL











A

B

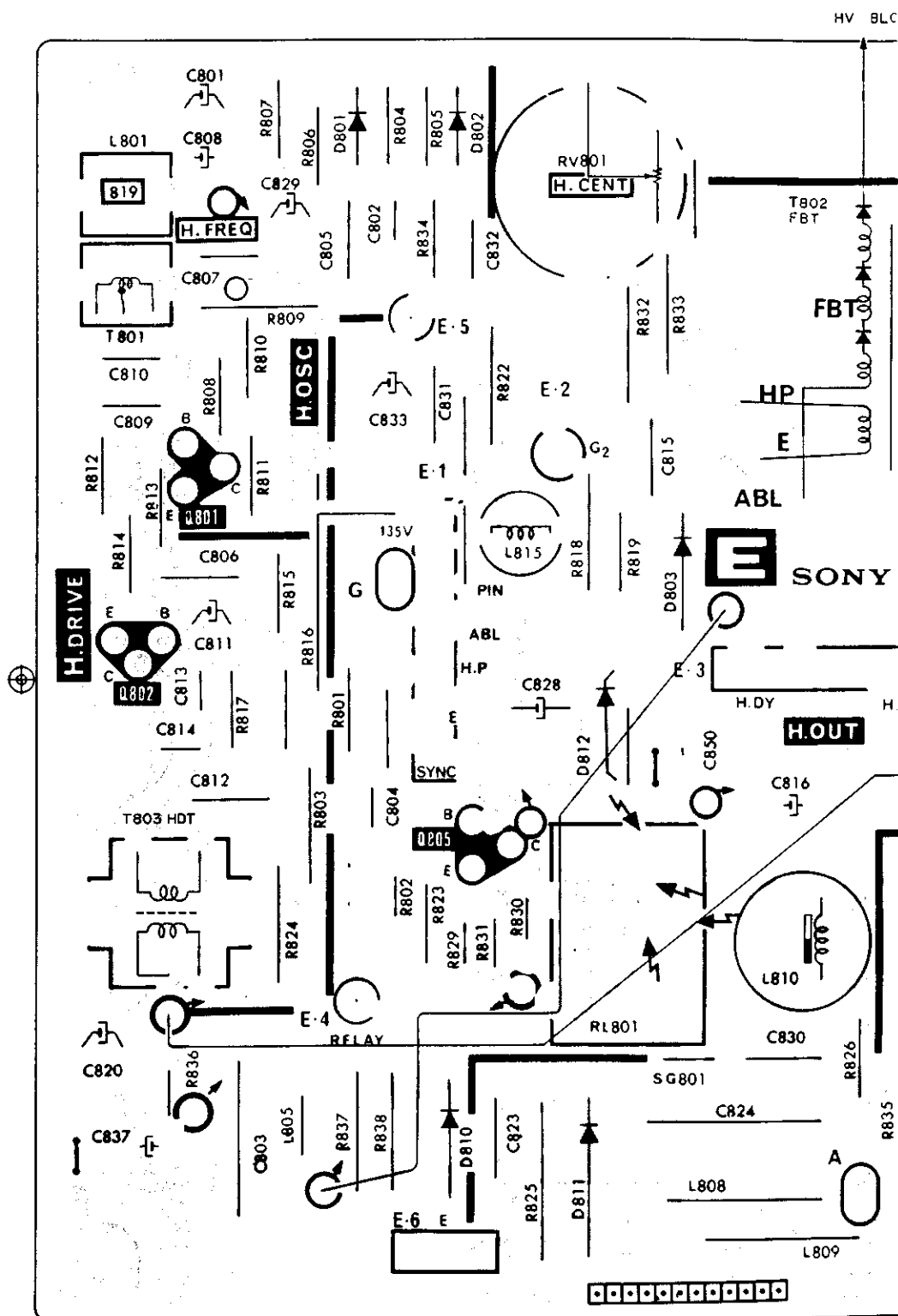
C

D

E

[H-OSC, PIN-OUT]
[H-DRIVE, H-OUT]

Q	D	ADJ
	801 802	RV801
	806 805	
801	803	
802		
	810 811	
Q	D	ADJ



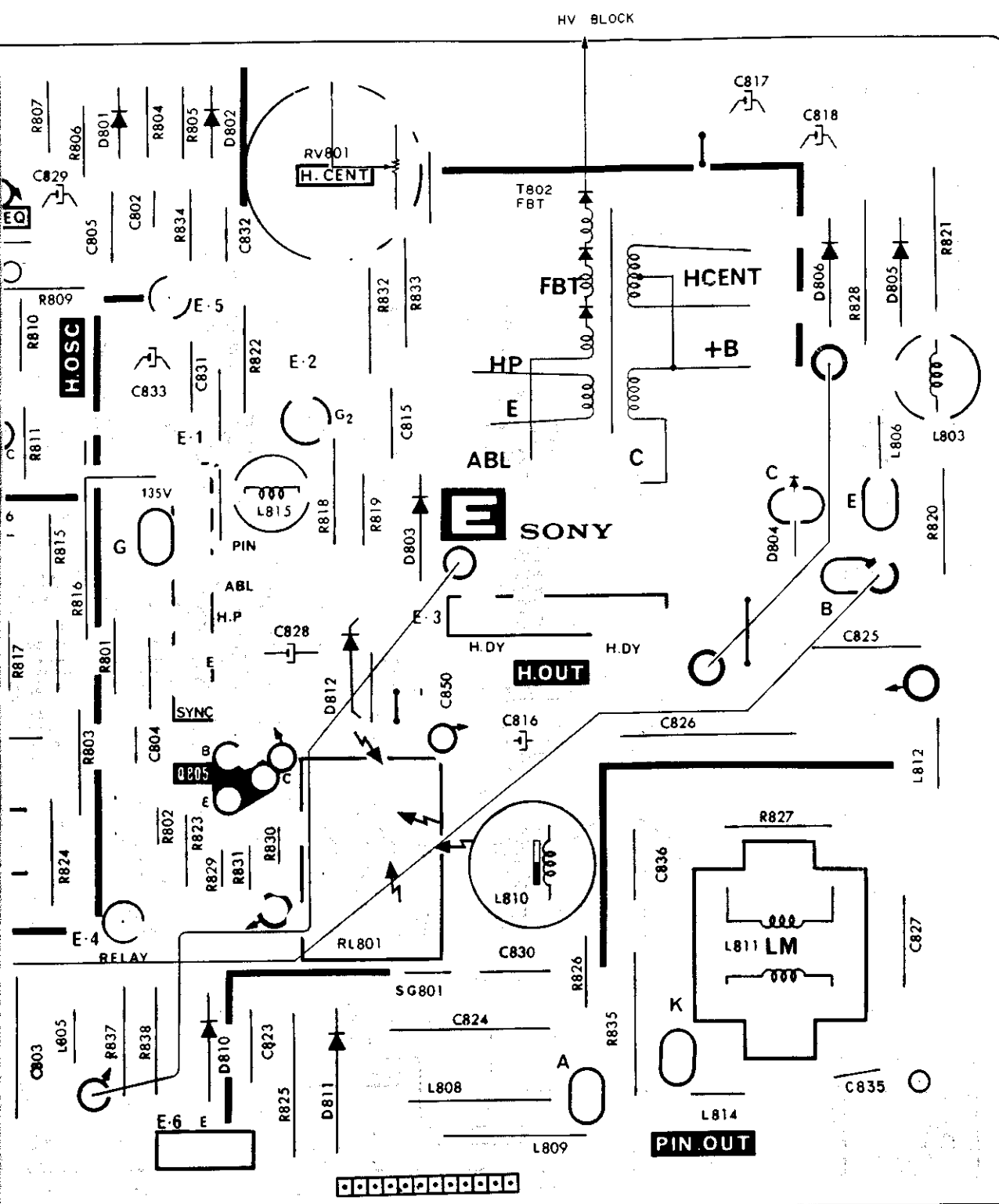
C

D

E

F

F



Q	602	6
603	601	6
604	607	6
605	604	6
651	605	6
Q		

E

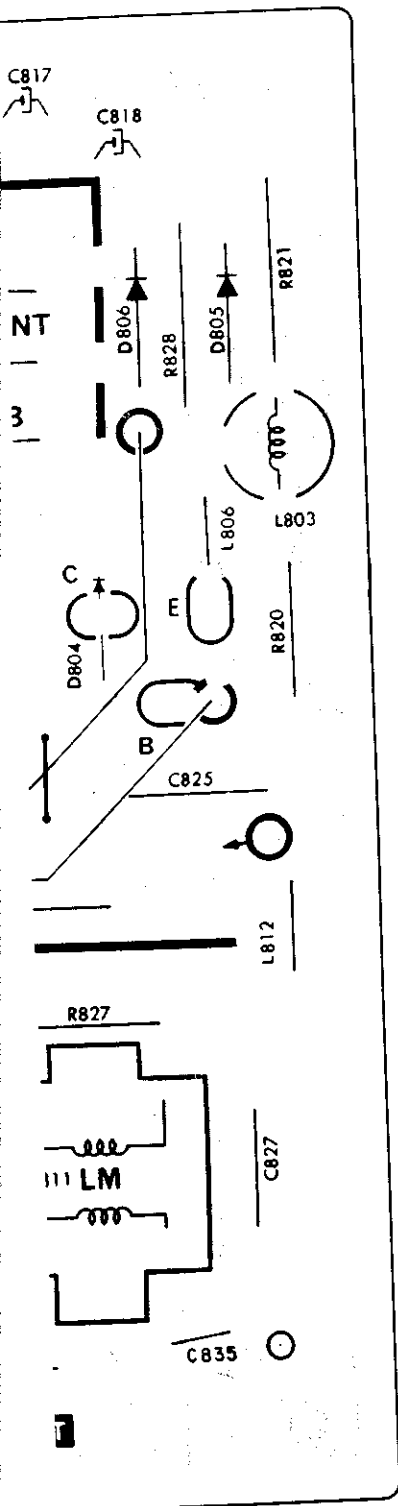
F

G

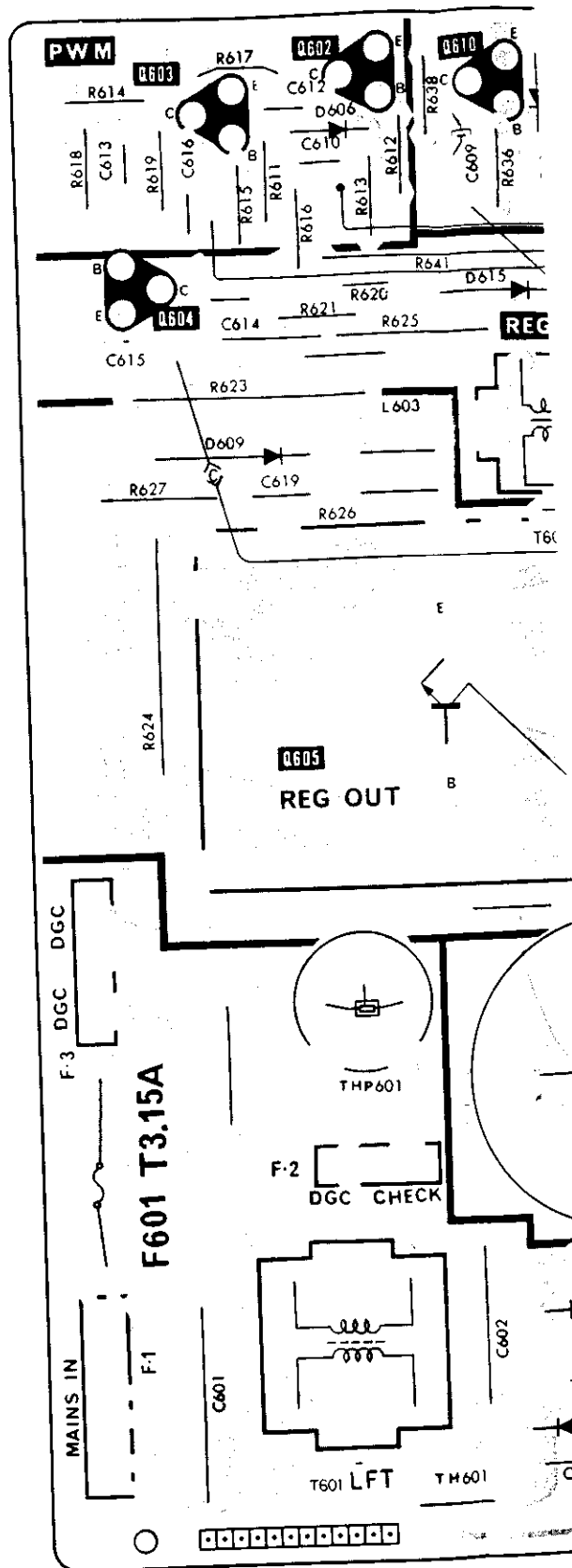
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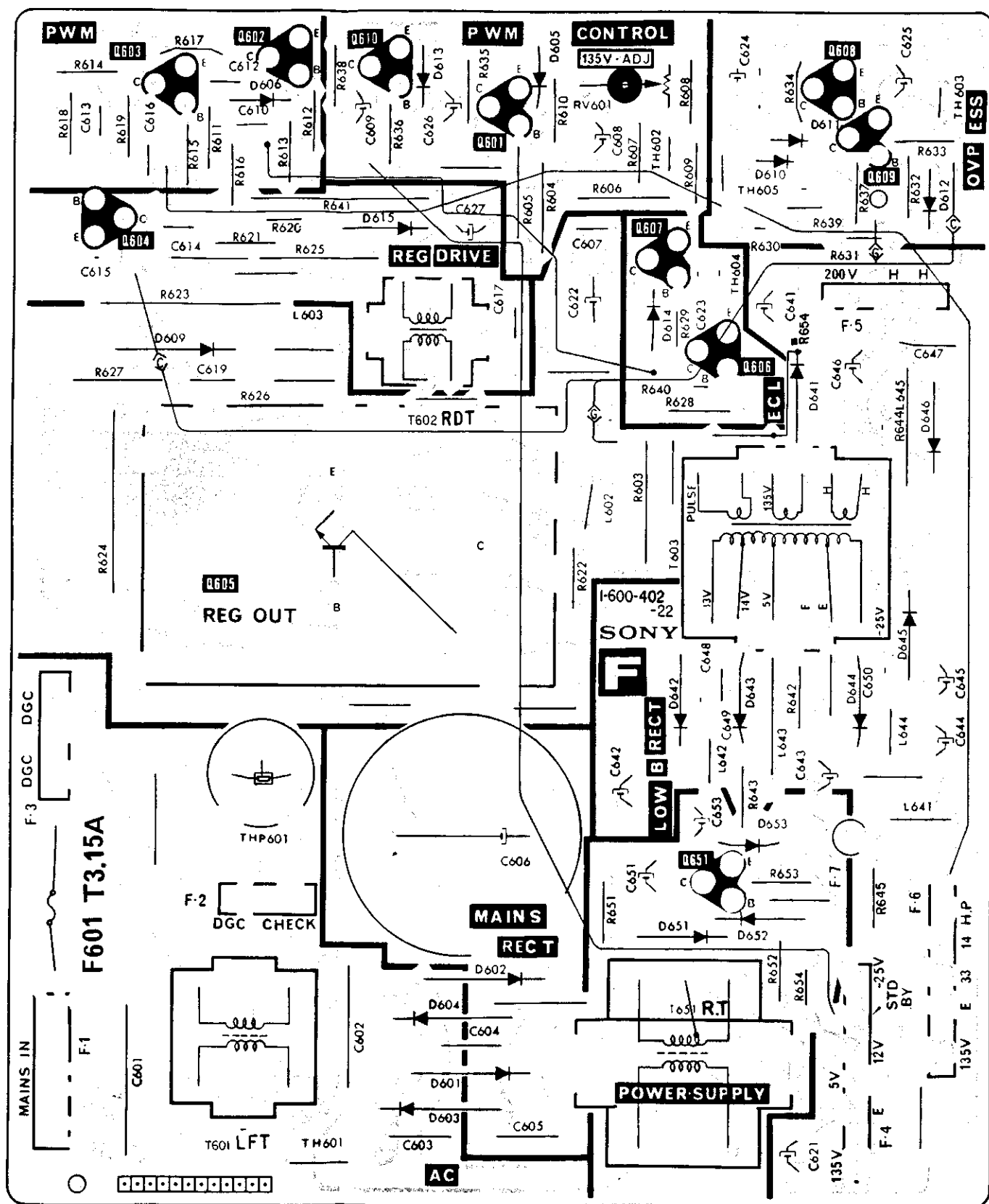
F

POWER-SUPPLY CONTROL
PWM, REG-DRIVE
MAINS RECT



Q	D	ADJ
602	613 605	RV601
603	606	
601	612	
608		
609		
607	615	
604		
606	614	
	609 641	
	646	
605	645	
	642 643 650	
	653	
651	652	
	651	
	602	
	604	
	601	
	603	
Q	D	ADJ



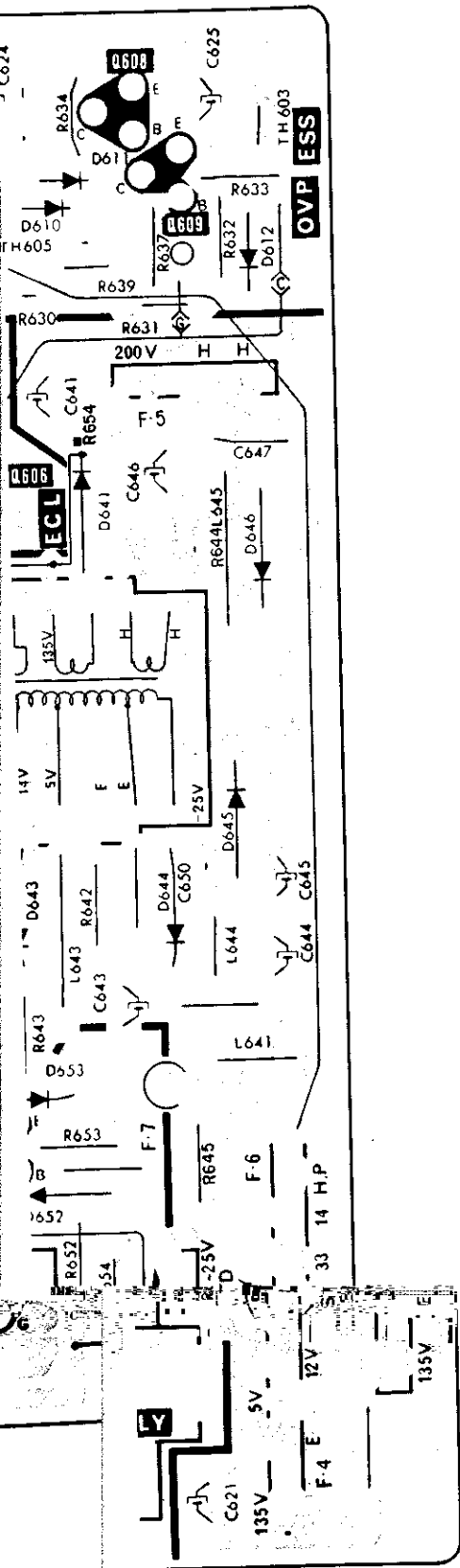
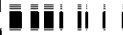


K

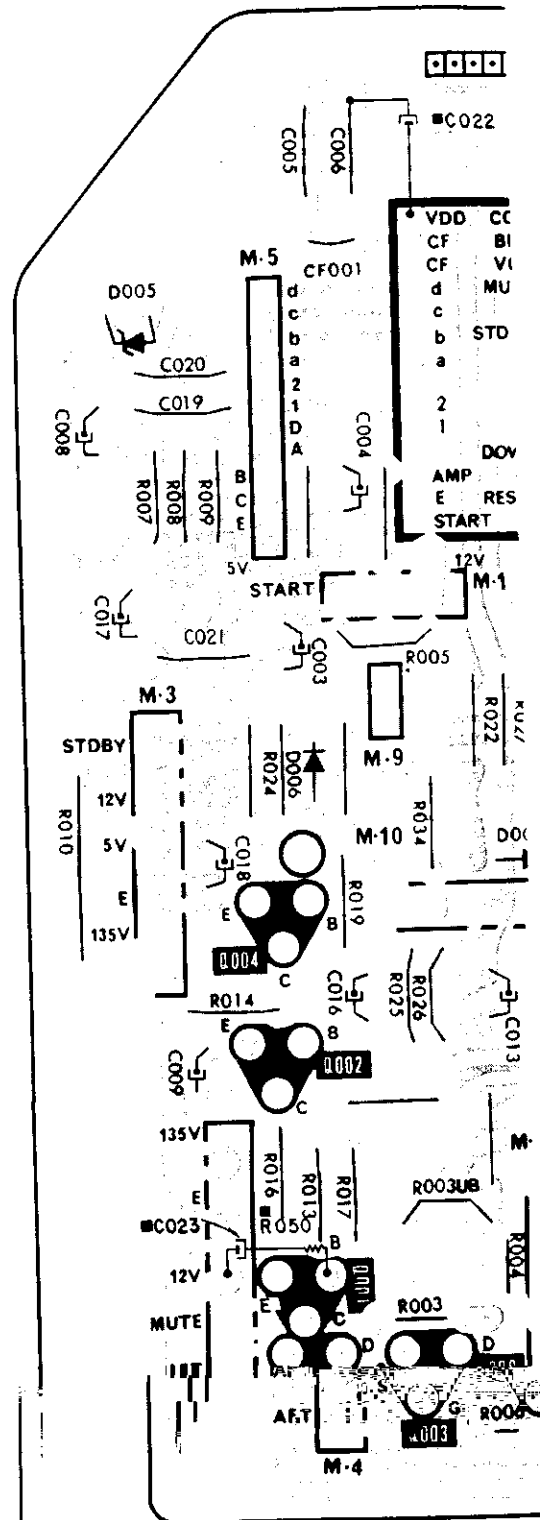
L

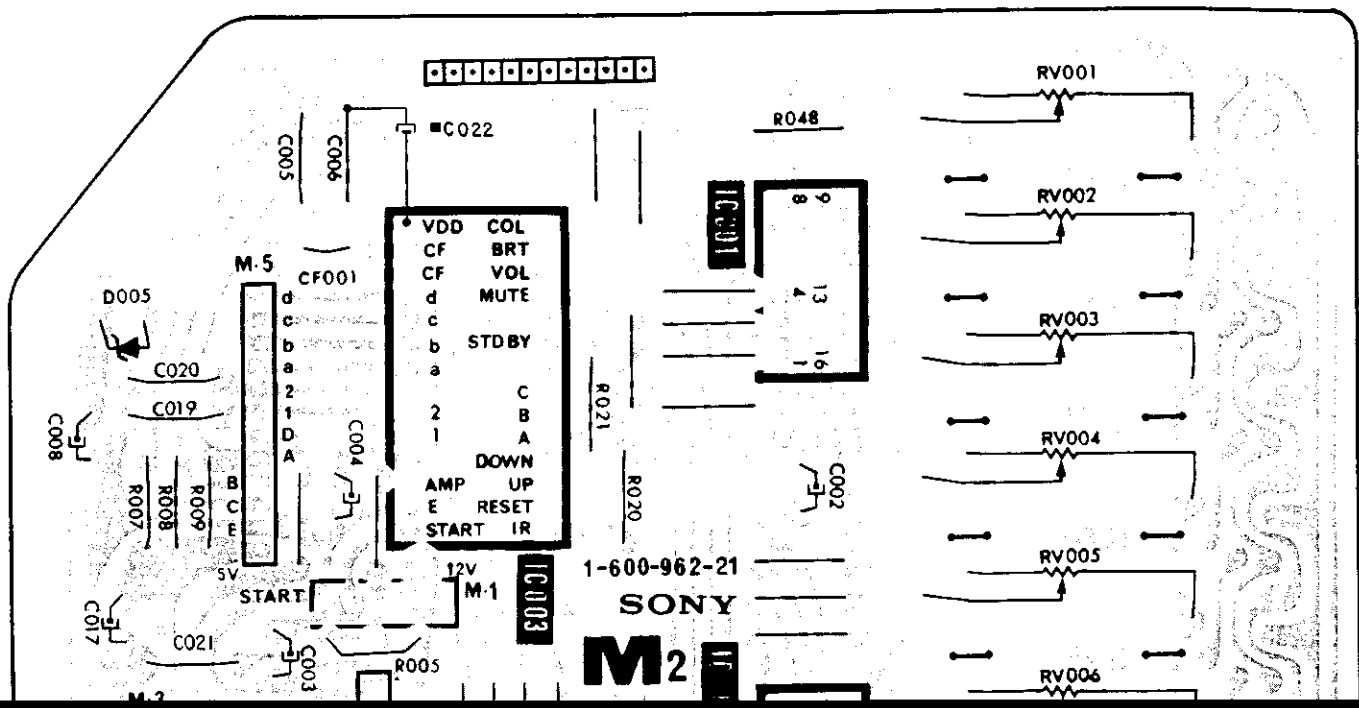
M

N

M2CH SELECT, CH PRESET,
STANDBY, AFT
REMOTE CONTROL

Q, IC	D	ADJ
IC001		RV001
IC003		RV002
	005	RV003
		RV004
		RV005
IC002		RV006
		RV007
		RV008
004	001	
002		
001		RV009
003		
Q, IC		





6

7

8

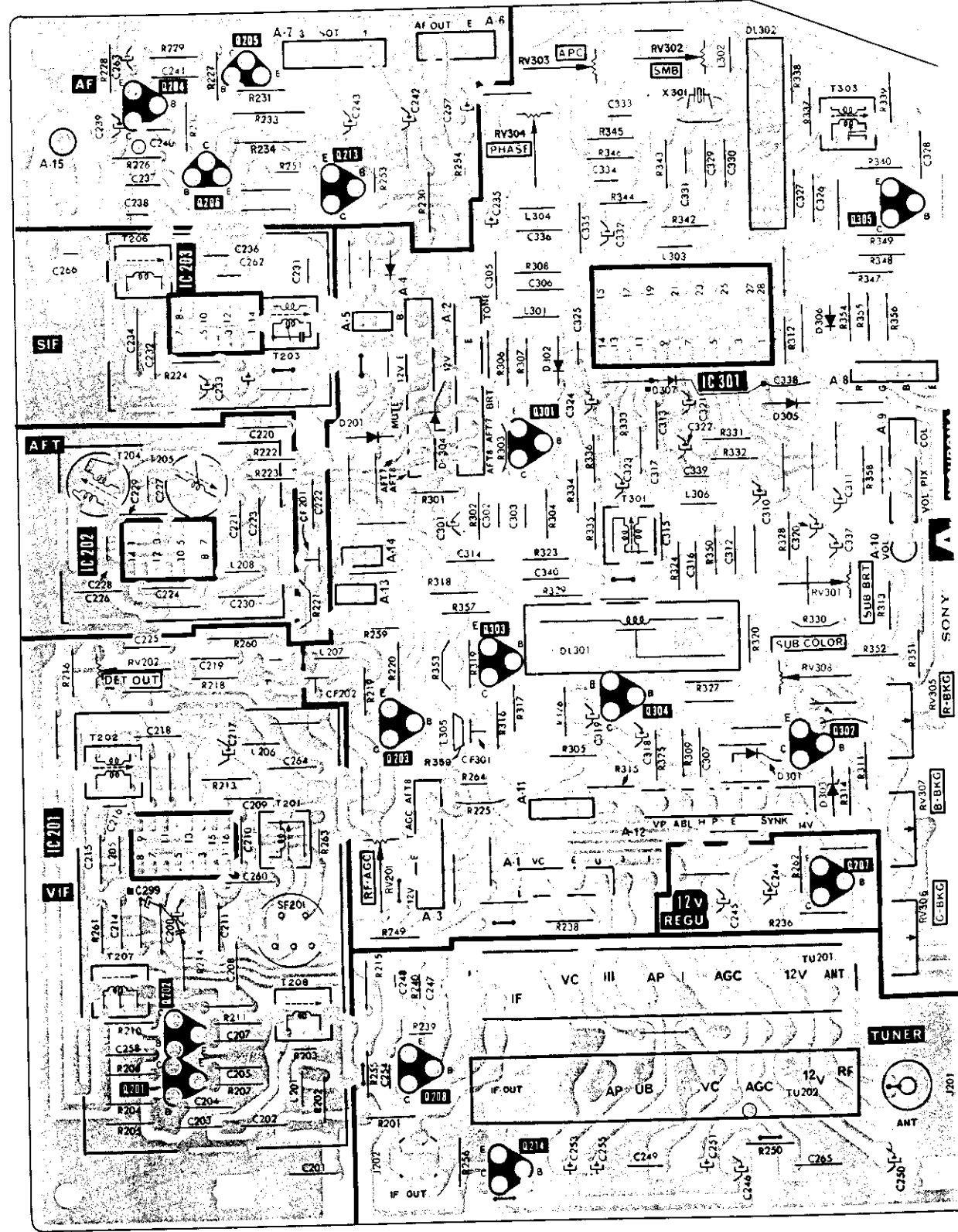
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10

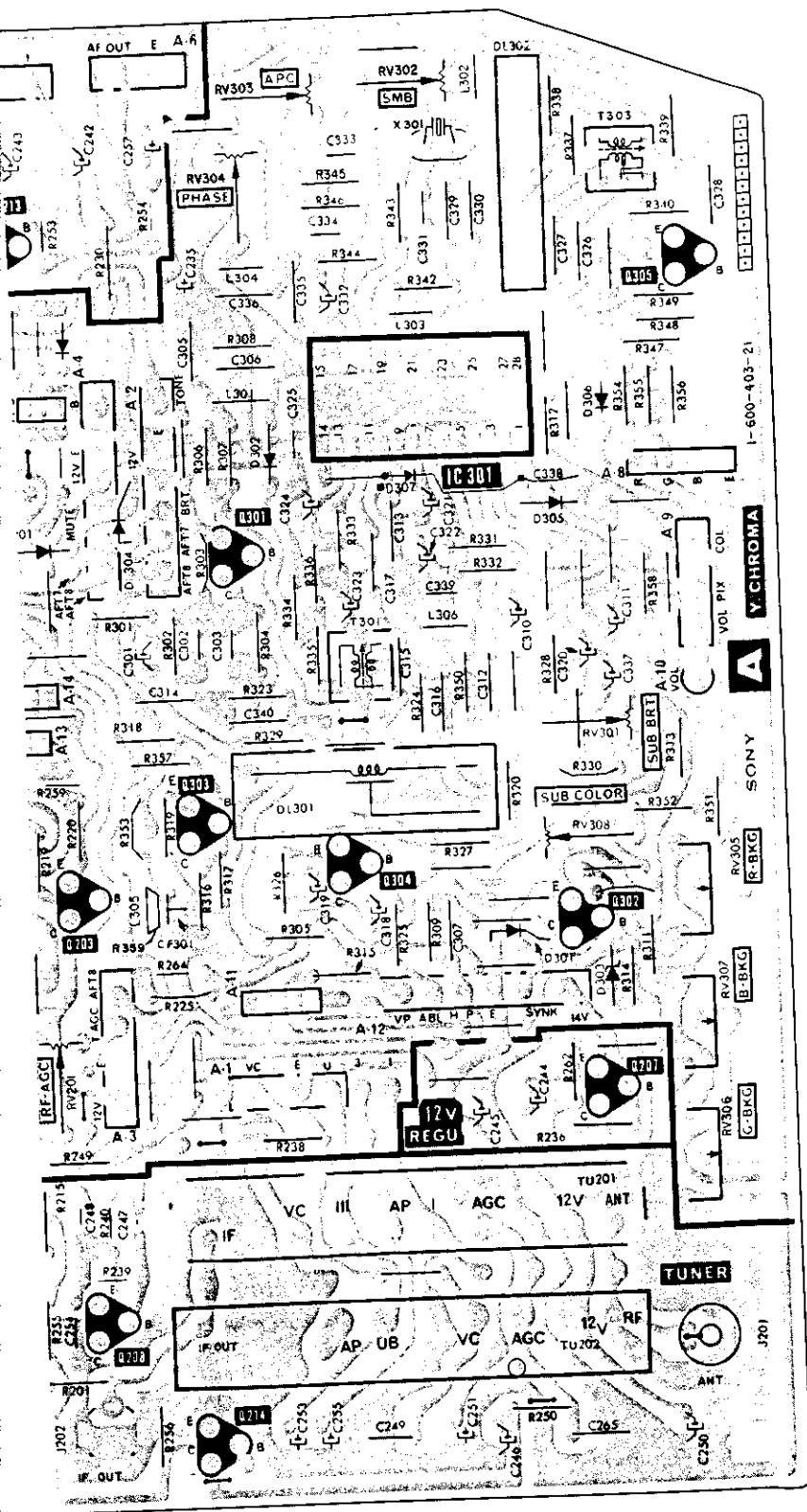
11

A [TUNER, Y-CROMA
12V REGU, VIF, AFT,
SIF, AF]

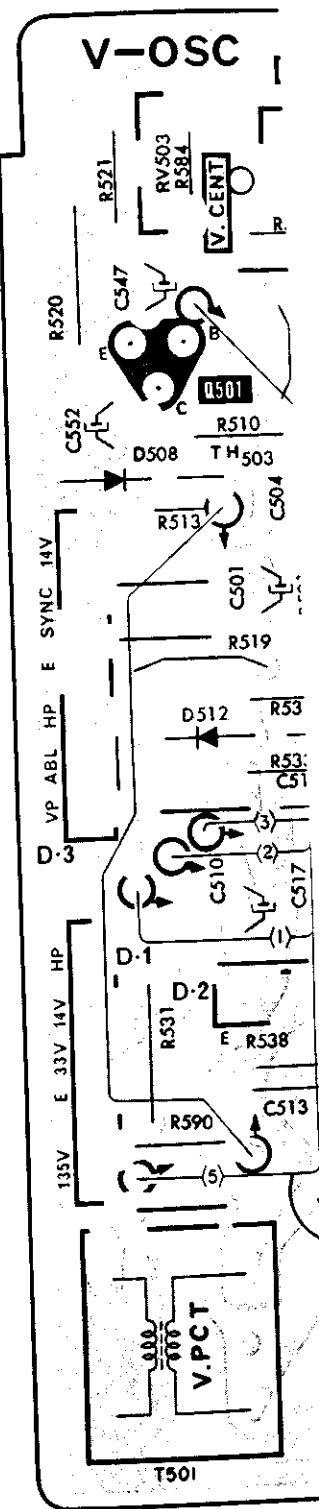
Q, IC	D	ADJ
205		RV303
204		RV302
		RV304
206		
305		
IC203		
302		
IC301		
305		
301		
201		
307		
IC202		
		RV301
303		
		RV202
		RV308
304		
302		
203		
IC201		
207		
		RV307
		RV201
		RV306
202		
201		
214		
Q, IC	D	ADJ



D VERT, ETC
PIN-MOD
RELAY-DRIVE CONV

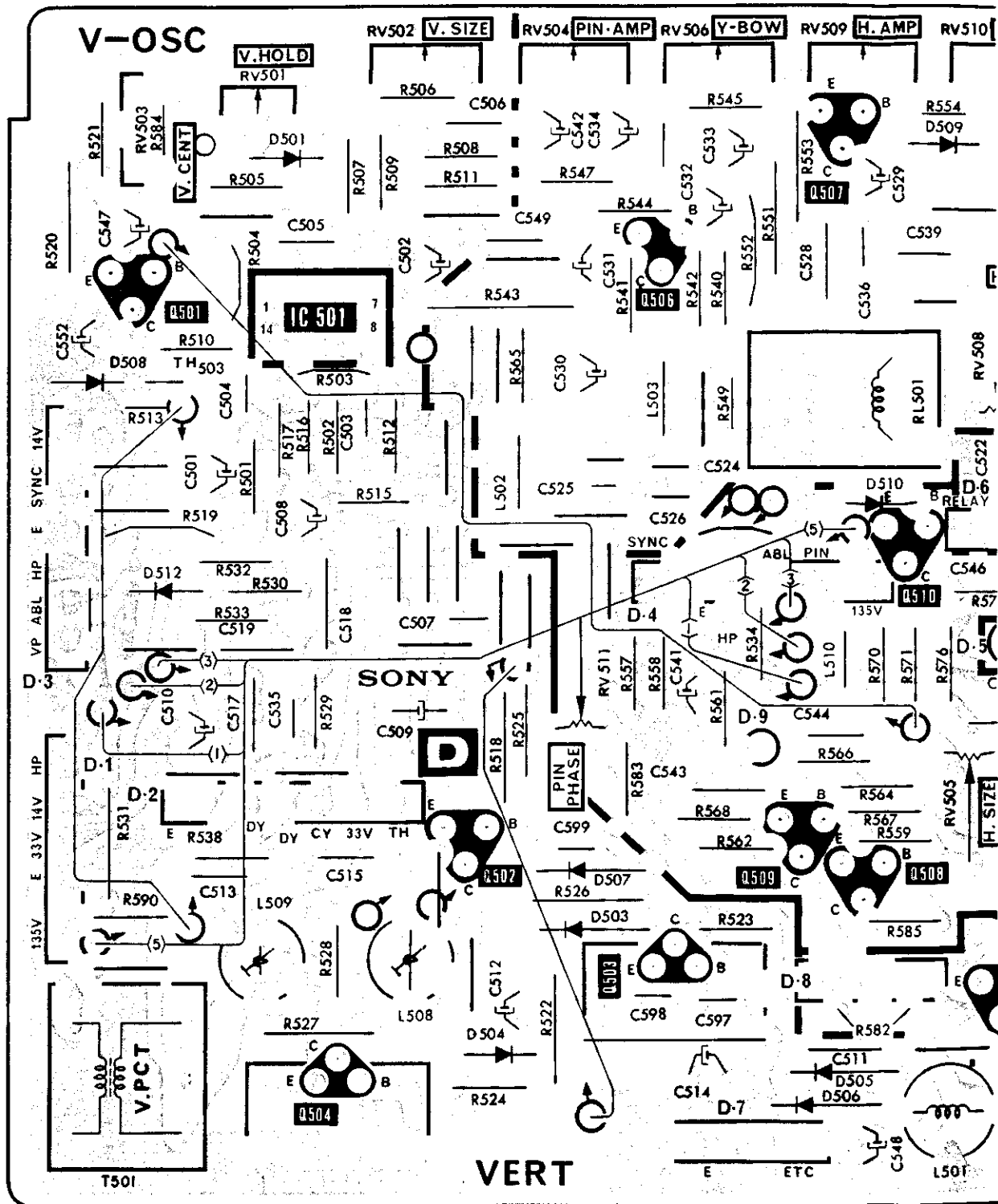


Q, IC	D	ADJ
507	509	RV502 RV504 RV501 RV506 RV503 RV509 RV510
506	501	
501	508	
IC501	510	
510	512	
511	511	RV511 RV505
502	507	
509	503	
503	512	
504	504 505 506	
Q, IC	D	ADJ



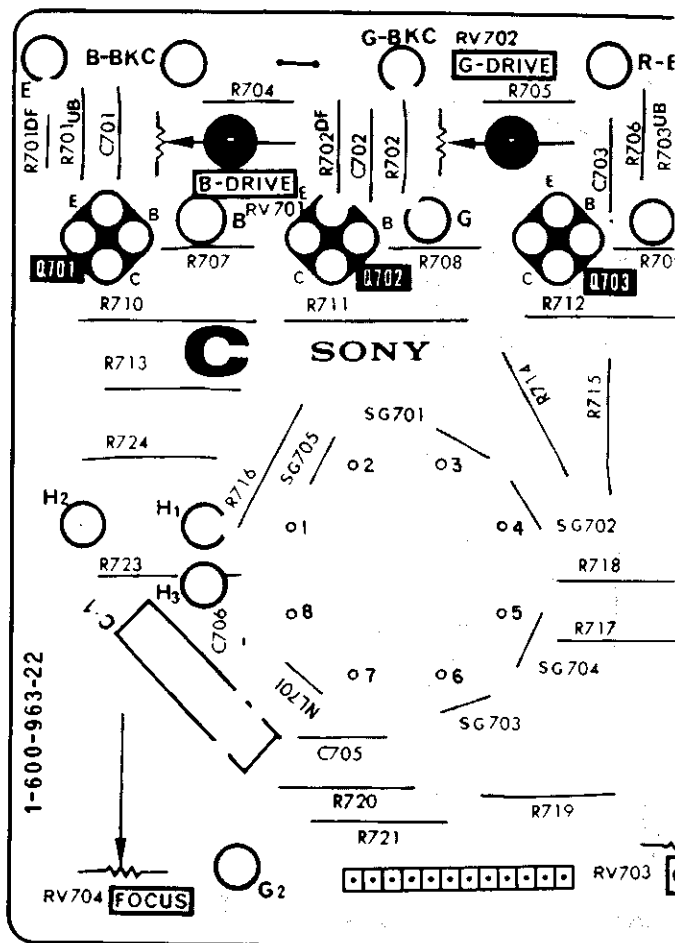
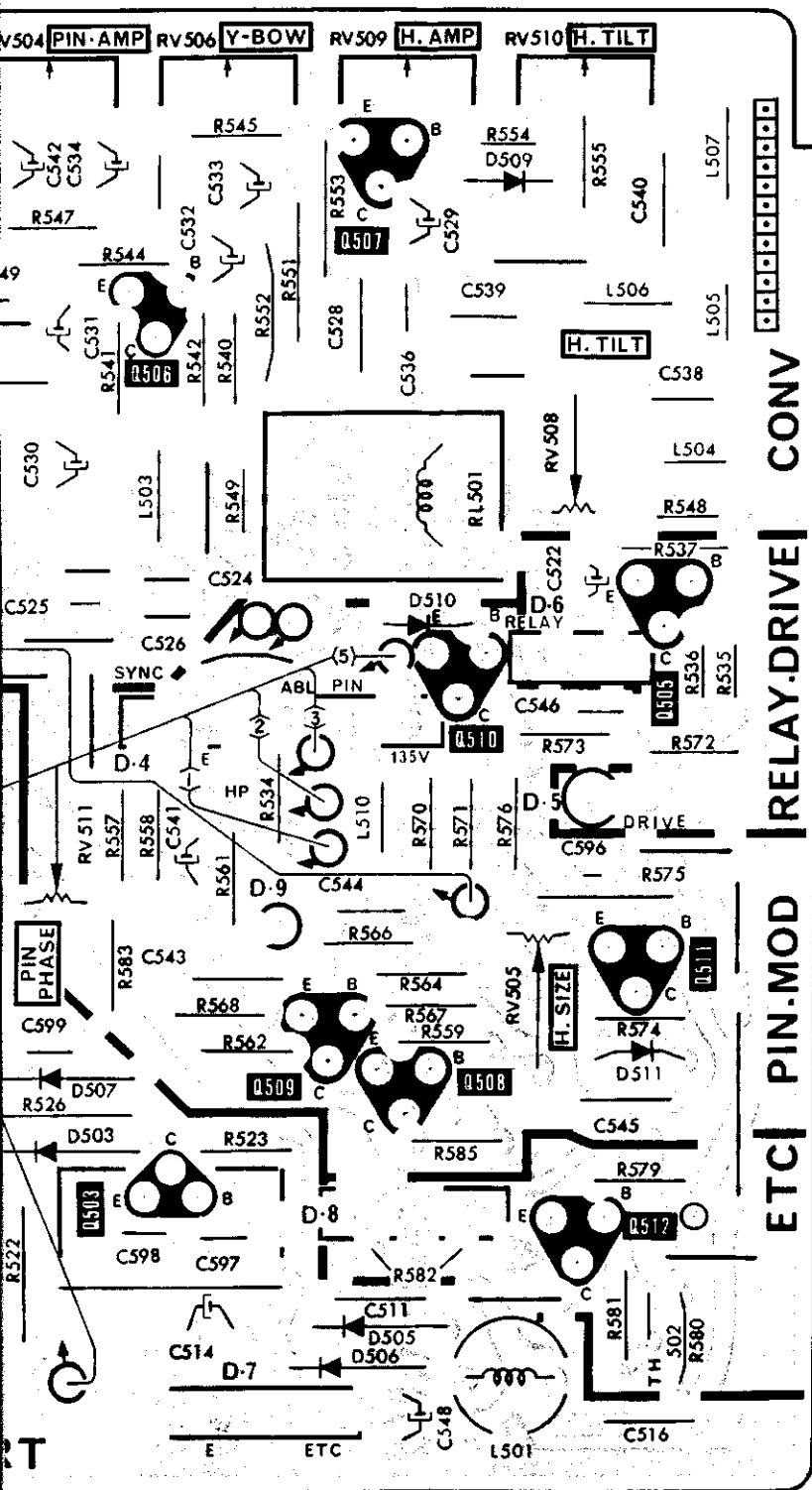
VERT, ETC
PIN-MOD
RELAL-DRIVE CONV

C	D	ADJ
507	509	RV502 RV504 RV501 RV506 RV503 RV509 RV510
501		
506		
508		
510		
512		
511		RV511 RV505
508	511	
509	507	
503		
512		
504	504	
505	505	
506	506	
C	D	ADJ



C

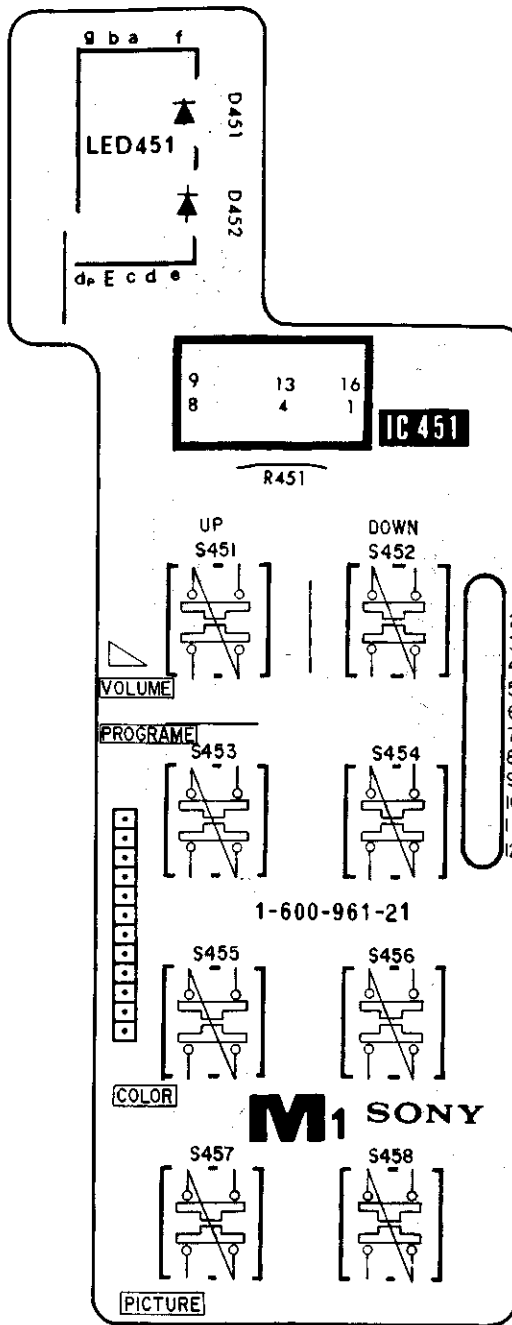
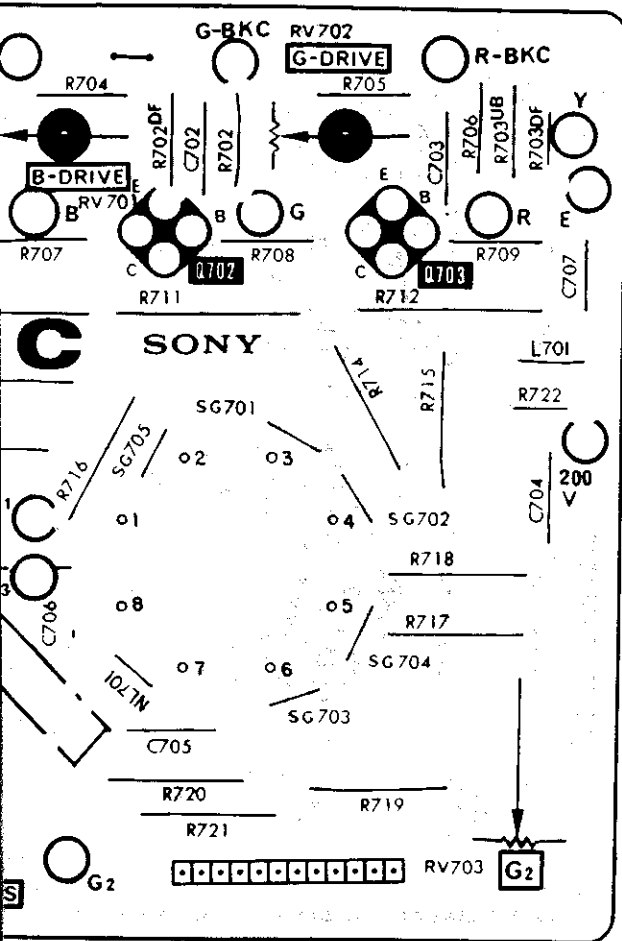
[R-G-B-OUT]



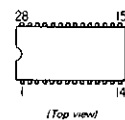
OUT]

M1

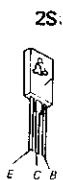
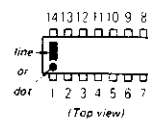
[CUSTOMER CONTROL
INDICATOR]



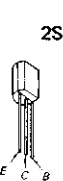
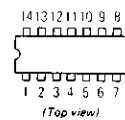
μPC1365C



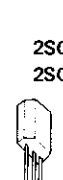
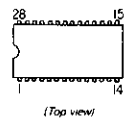
CX157



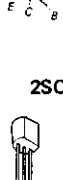
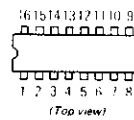
M5135P



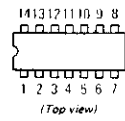
M58485P



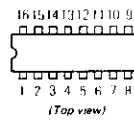
SN29764N
SN29770AN
SN29771AN



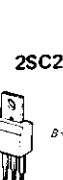
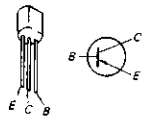
TBA120U



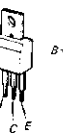
TBA1440G



2SA639S
2SA733

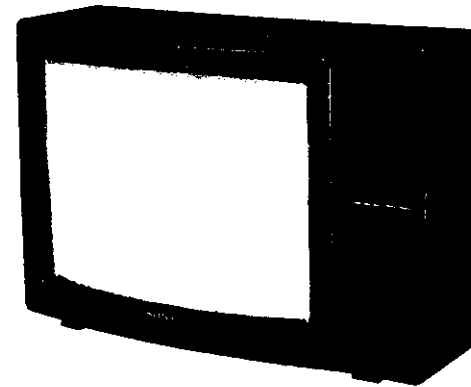


2SC21

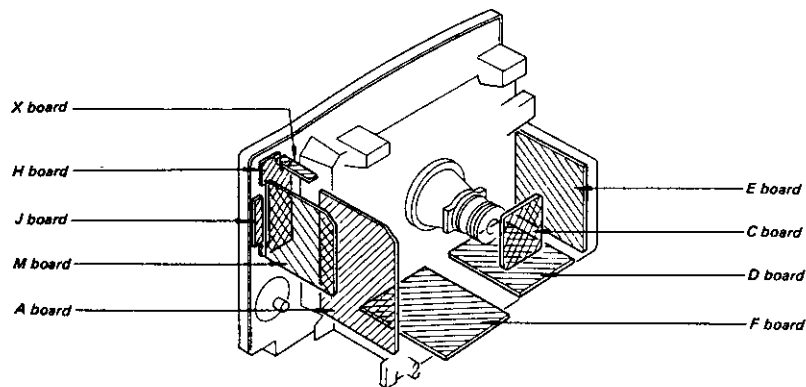


KV-2204E / KV-2204EC

RM-605



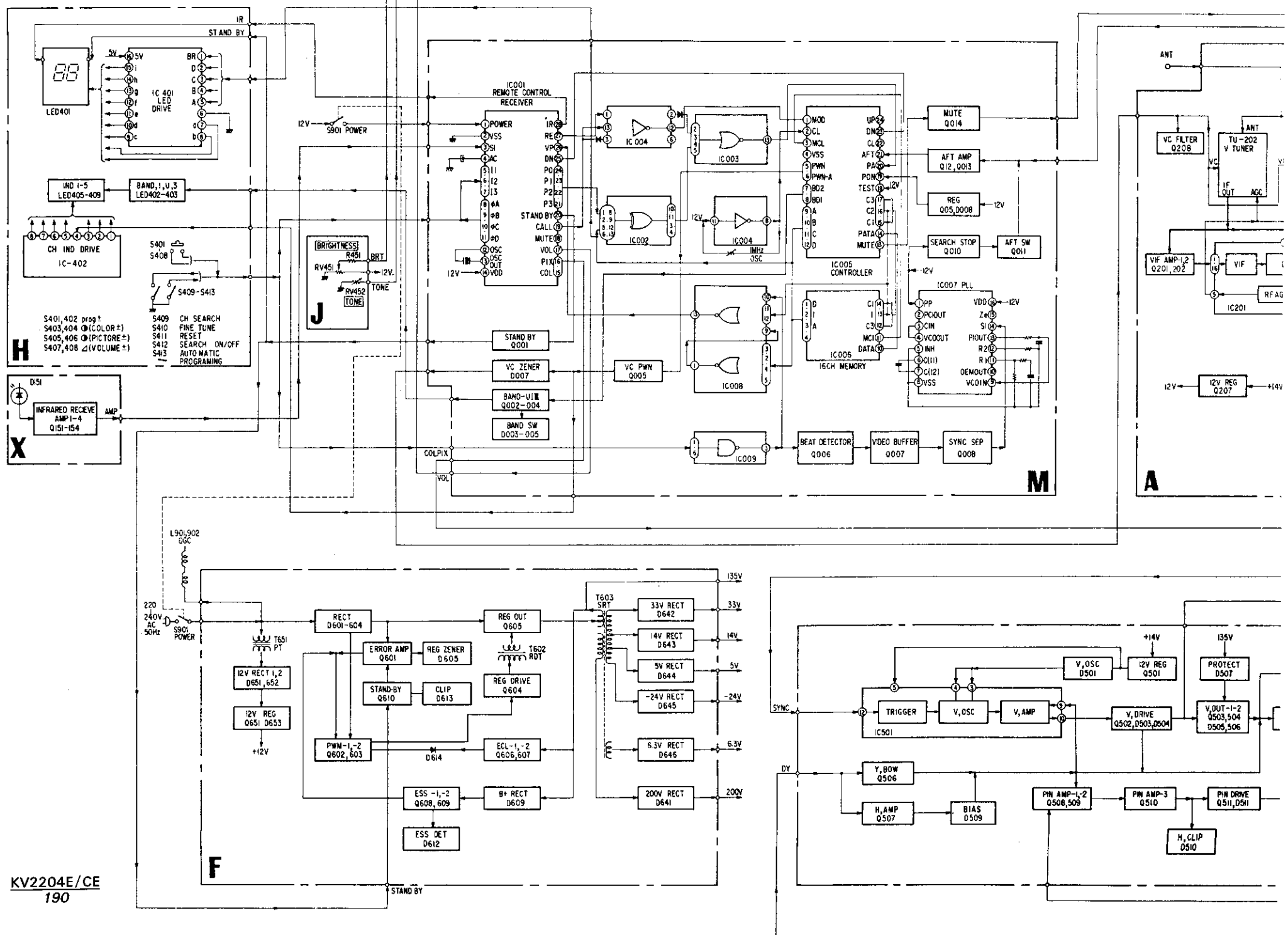
CIRCUIT BOARDS LOCATION

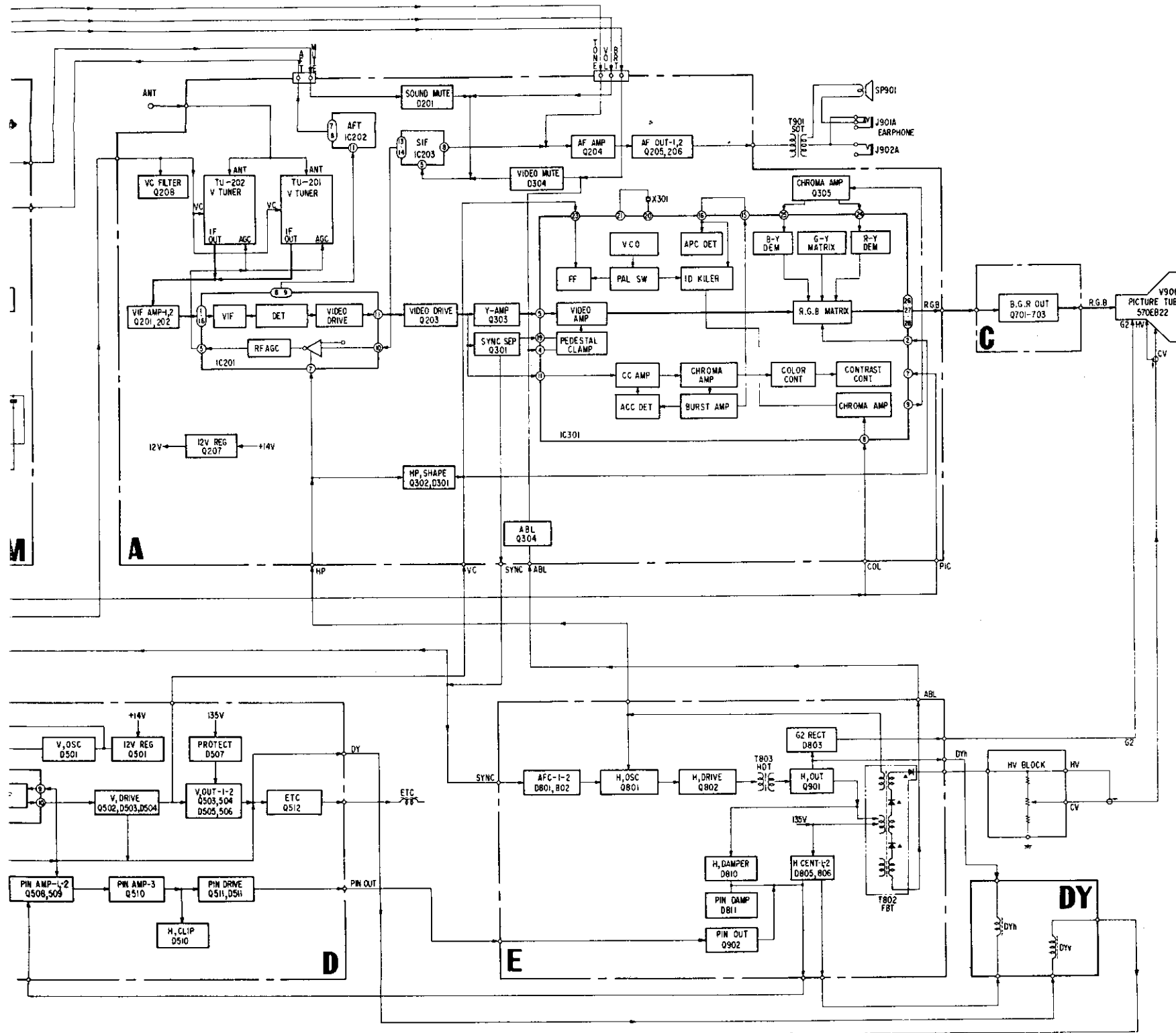


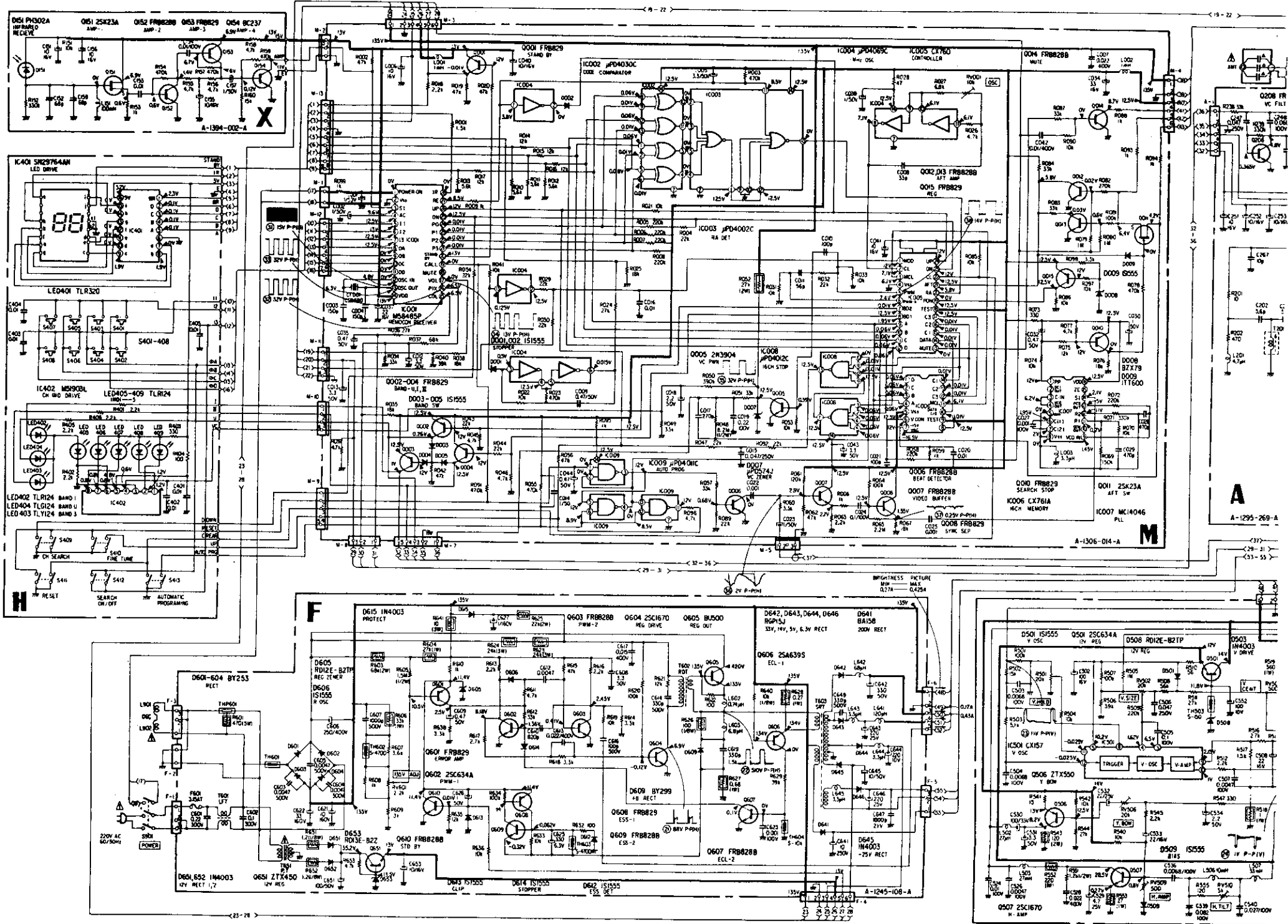
SPECIFICATIONS

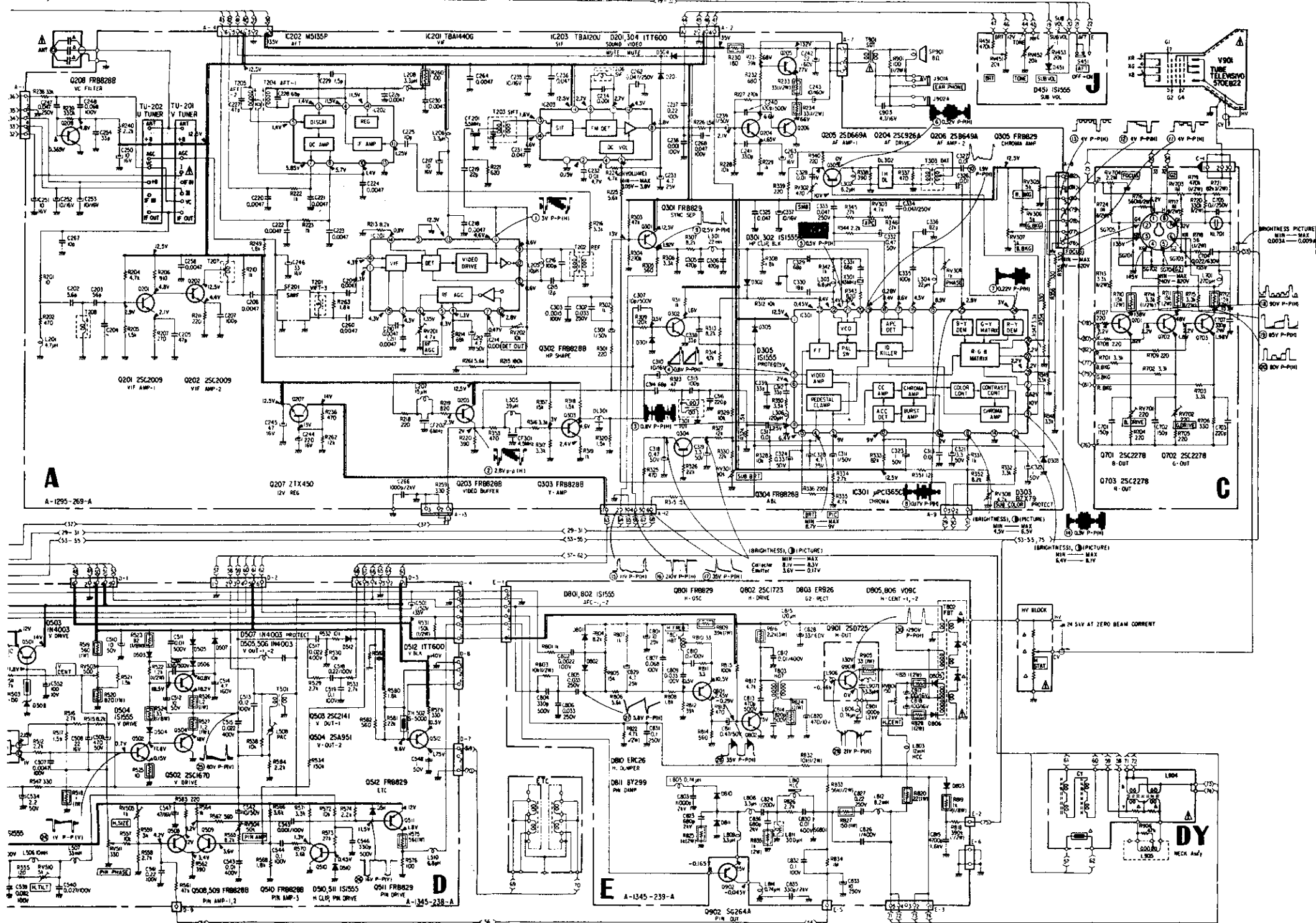
Television System:	CCIR system B, G and H	Anode Voltage:	24.5 kV at zero beam current
Color System:	PAL	Hochspannung:	24.5 kV bei 0 mA strahlstrom
Picture Tube:	56 cm, 22" (53.8 cm screen measured diagonally), 114° deflection TRINITRON system	Power Requirement:	220 - 240 V ac, 50 Hz
Semiconductors:	42 transistors, 1 FET, 7 ICs and 56 diodes	Power Consumption:	98 W ac 7 W ac (in stand-by condition)
Antennas:	75 Ω standard antenna socket	Dimensions:	Approx. 669 (w) x 459 (h) x 413 (d) mm 26 3/8 (w) x 18 1/8 (h) x 16 3/8 (d) inches
Channel Coverage:	VHF channels: E2-4 (BAND I) E5-12 (BAND III)	Net Weight:	Approx. 32 kg (70 lb 9 oz)
	UHF channels: E21-68 (BAND IV/V)	Accessories Supplied:	Remote commander RM-605 Earpiece (ME-20B) Instruction manual
Intermediate Frequencies:	Picture i-f carrier: 38.9 MHz Color subcarrier: 34.47 MHz Sound i-f carrier: 33.4 MHz		
Sound System:	5.5 MHz intercarrier Output power: 2 W (at 10 % harmonic distortion) Speaker: 12 cm (4 3/4 inches) dia., 8 Ω		
Video System:	R, G, B cathode drive		
Automatic Controls:	ABL (automatic brightness limiter) ACC (automatic color control) ACK (automatic color killer) ADG (automatic degaussing) AFC (automatic frequency control) AFT (automatic fine tuning) AGC (automatic gain control) ANC (automatic noise canceller) APC (automatic phase control) AVR (automatic voltage regulator)		

BLOCK DIAGRAM

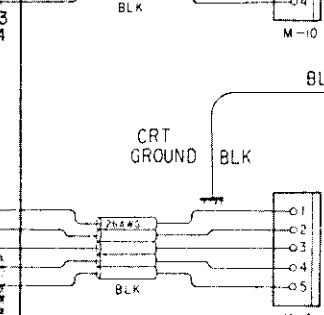
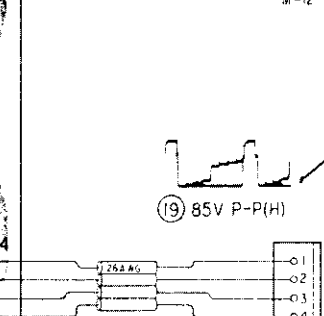
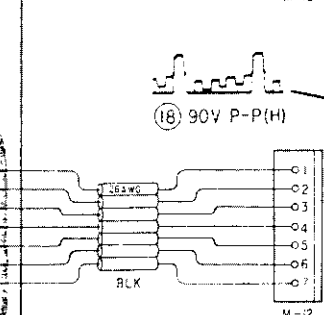
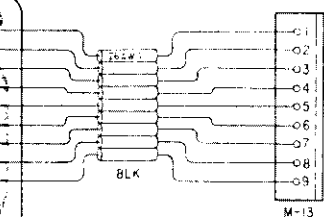
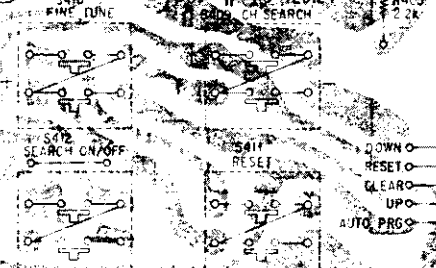
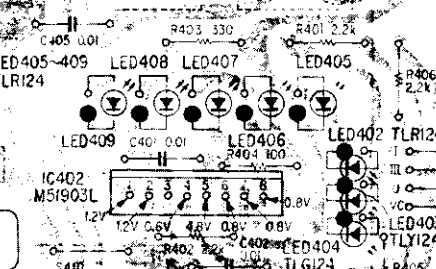
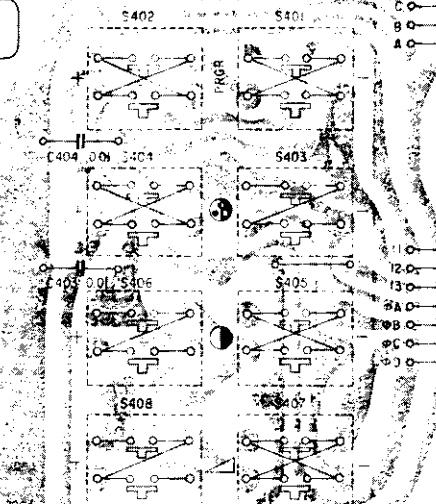
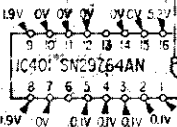
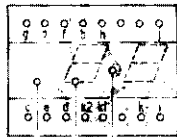




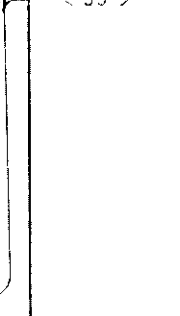
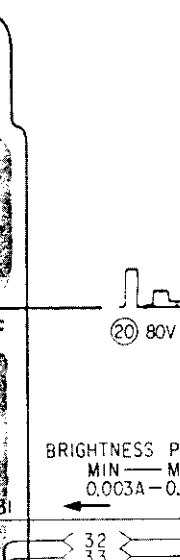
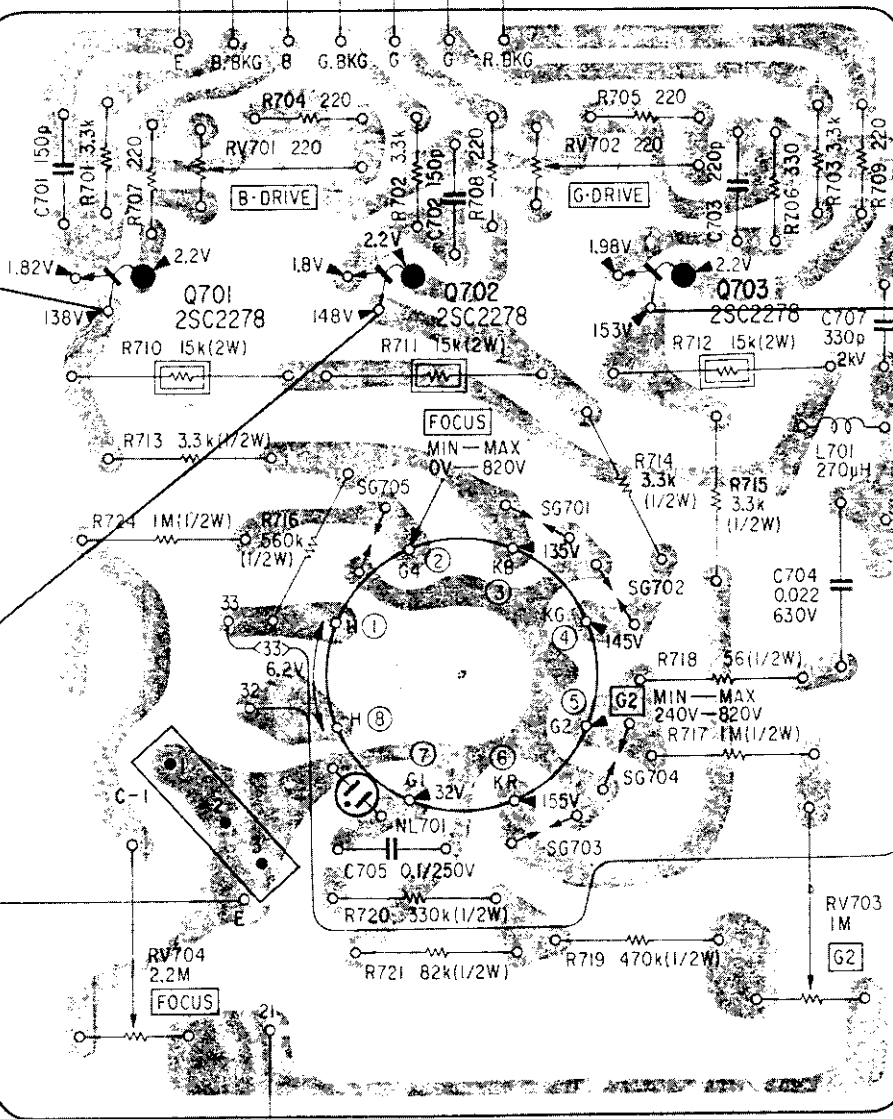




LED401 TLR320

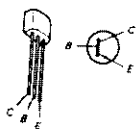


C board

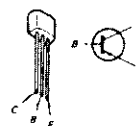


Q	D	ADJ
602 610 603 608 601 609	613 605 606	RV601
04 607	612 615	
606	614	
	609	
	641 646	
605		
	645	
	642 643 644	
651	653	
	652 651	
	602 604 601 603	
Q	D	ADJ

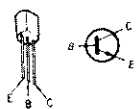
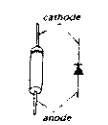
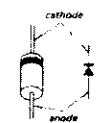
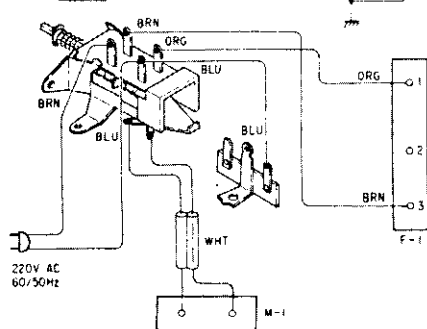
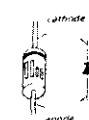
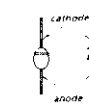
FRB828B



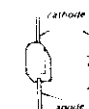
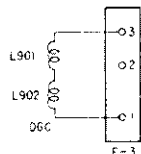
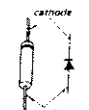
FRB829



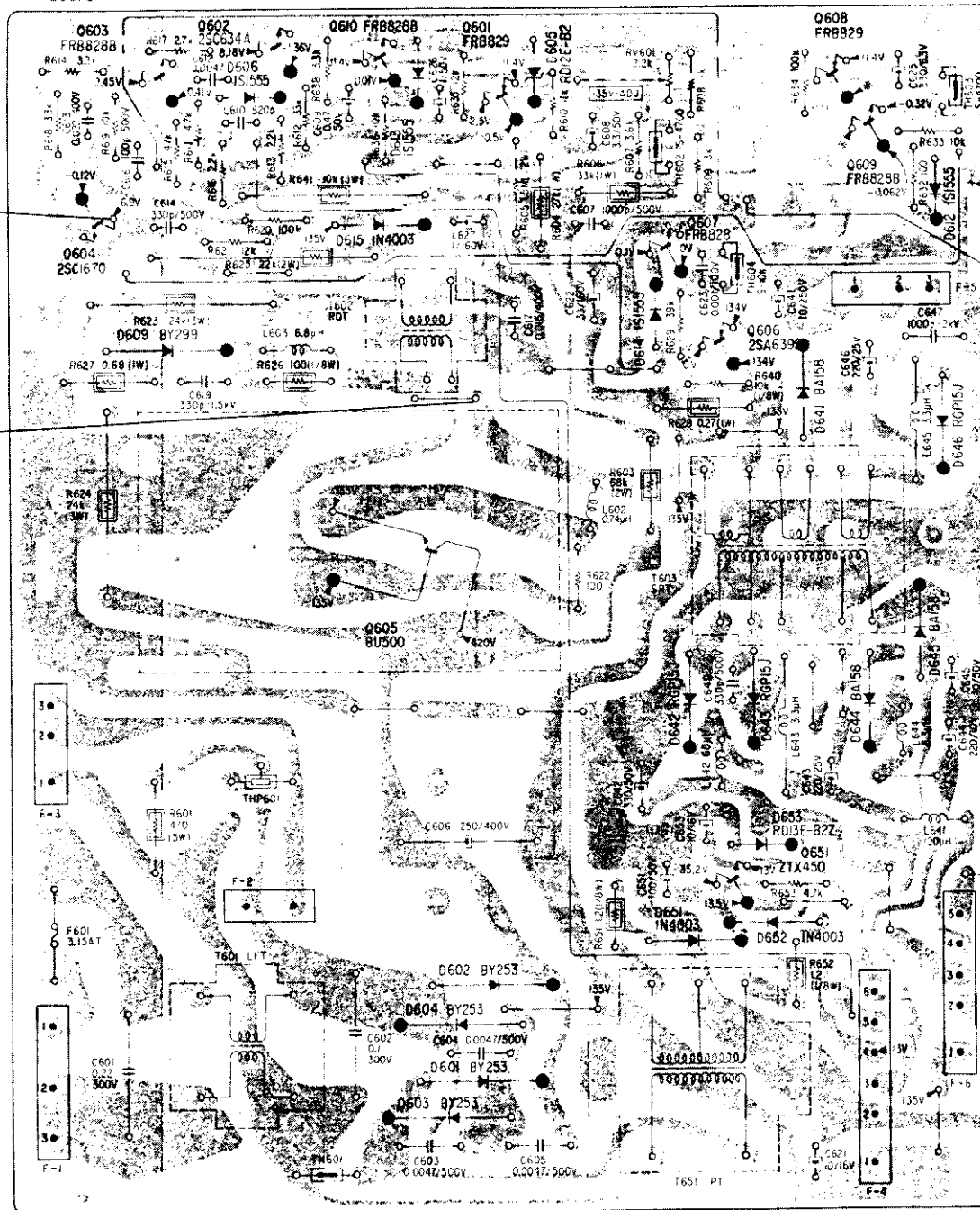
ZTX450

10E2
1S15551N4003
BA158
BY253
BY299
RGP15JS901
POWEREQ801-12Z
EQ801-13GH3F
U05G

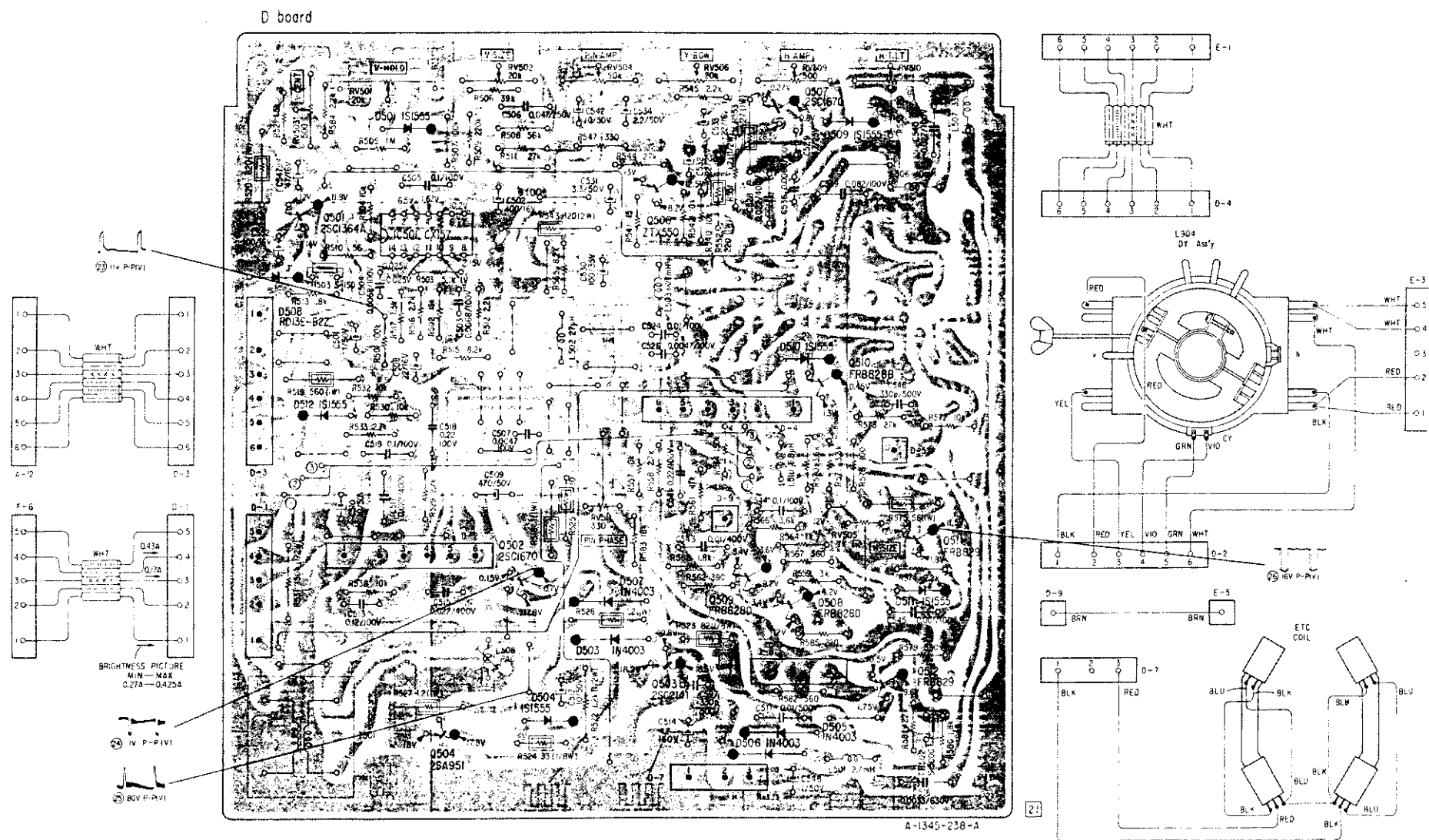
HF1A

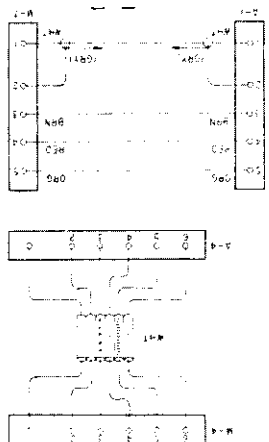
RD12E-B2TP
RD13E-82Z
RD39E-84TP
RD39E-84TZ

F board



IC, Q	D	ADJ
507	509	RV503 RV501 RV502 RV504 RV506 RV509 RV510
506		
501		
IC501		
	508	
	510	
	512	
		RV511 RV505
511		
509	511	
502		
508	507	
	503	
503		
512	504	
	505	
504	506	
IC, Q	D	ADJ

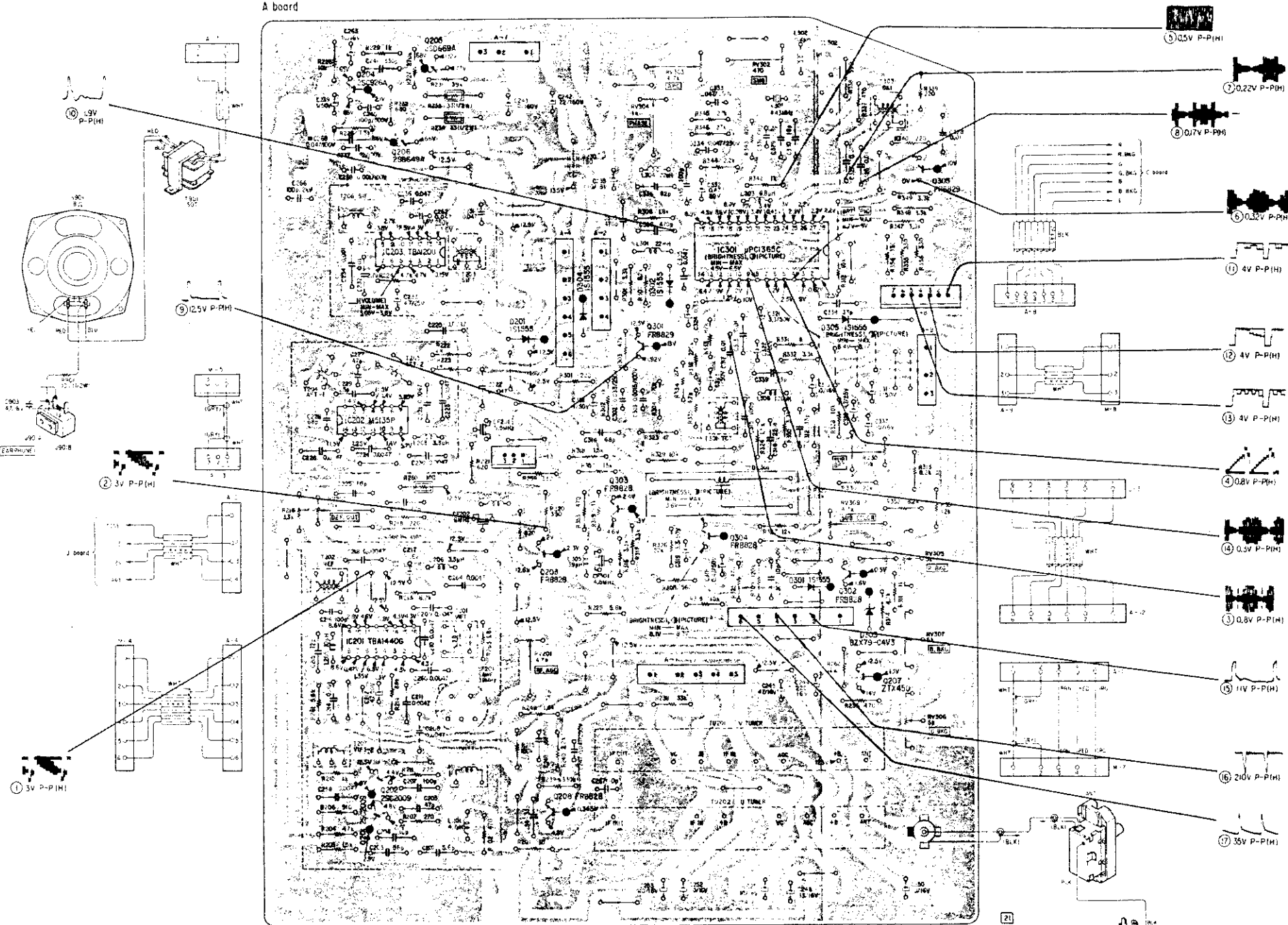




IC, Q	D	ADJ
006		
008		
1C009		
007		
010		
002	451	
003		
1C004		
005		
1C005		
006		
007		
008		
009		
010		
011		
012		
013		
014		
015		
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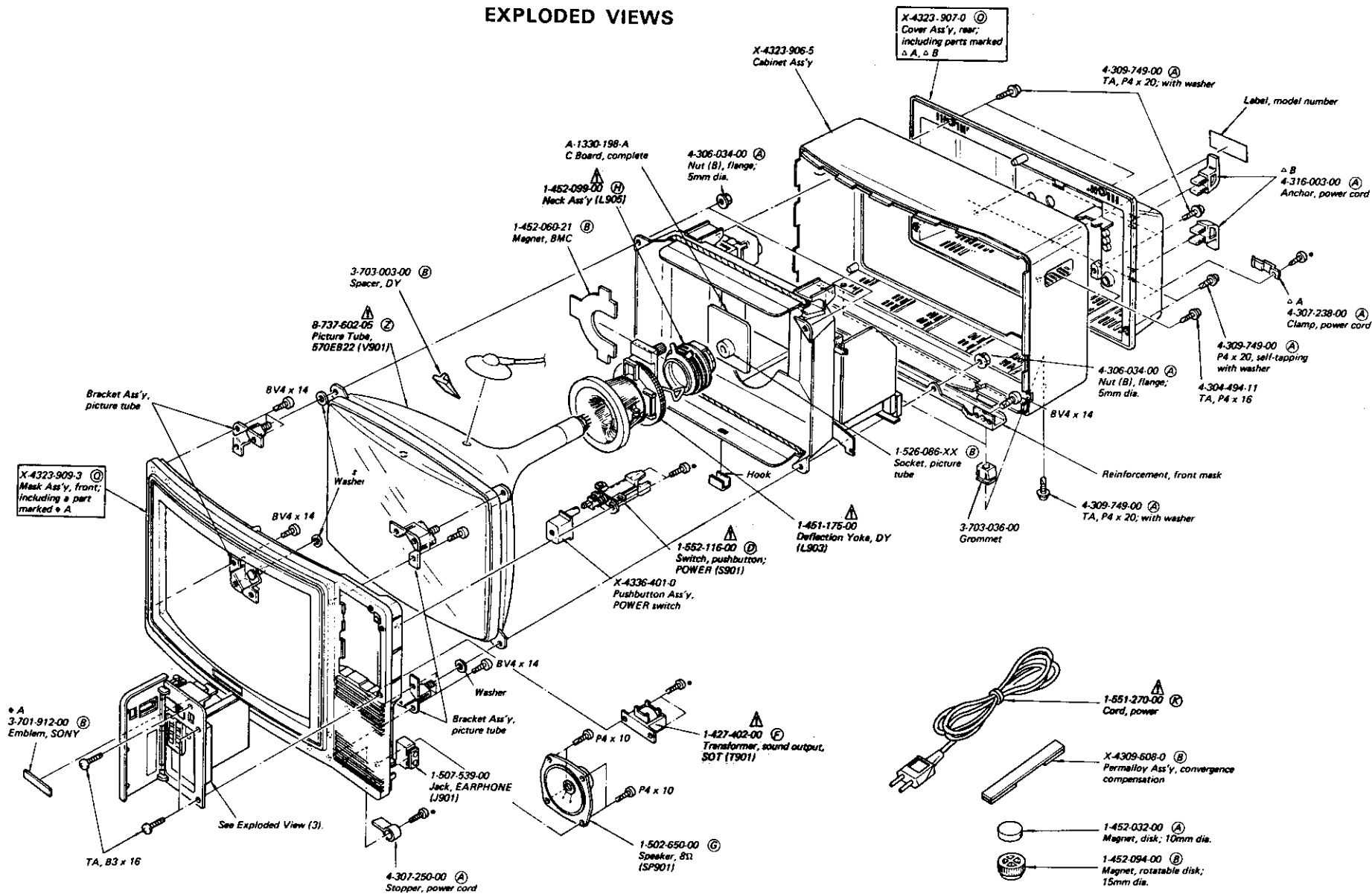
IC, Q	D	ADJ
		RV302
205		RV303
204		RV304
206		
305		
IC203		
IC301		
	302	
	305	
	304	
301	201	
IC202		RV301
303		RV202
304		RV308
203		RV305
302	301	
	303	
IC201		RV201
		RV307
207		
		RV306
202		
201		
208		
IC, Q	D	ADJ

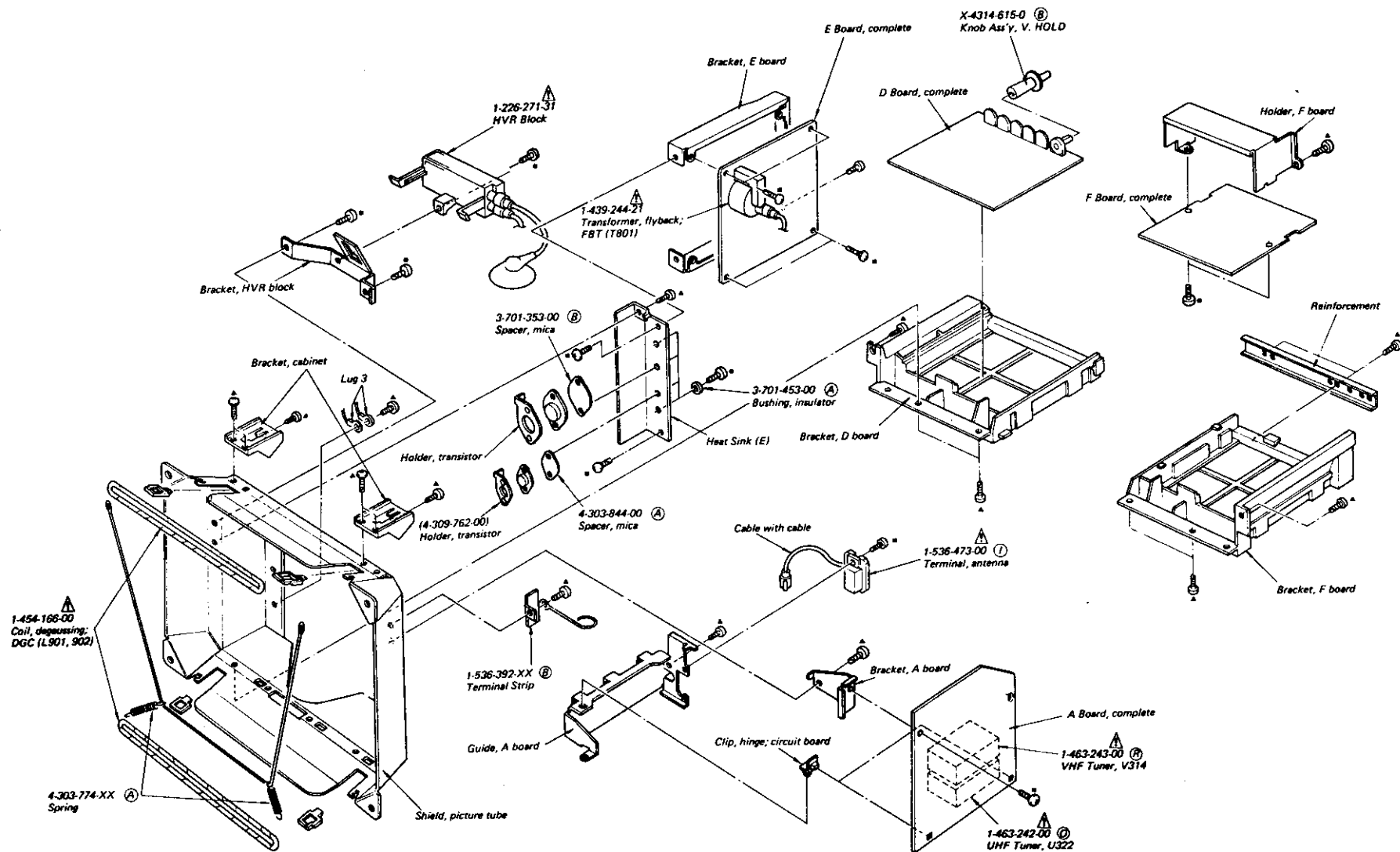
A board

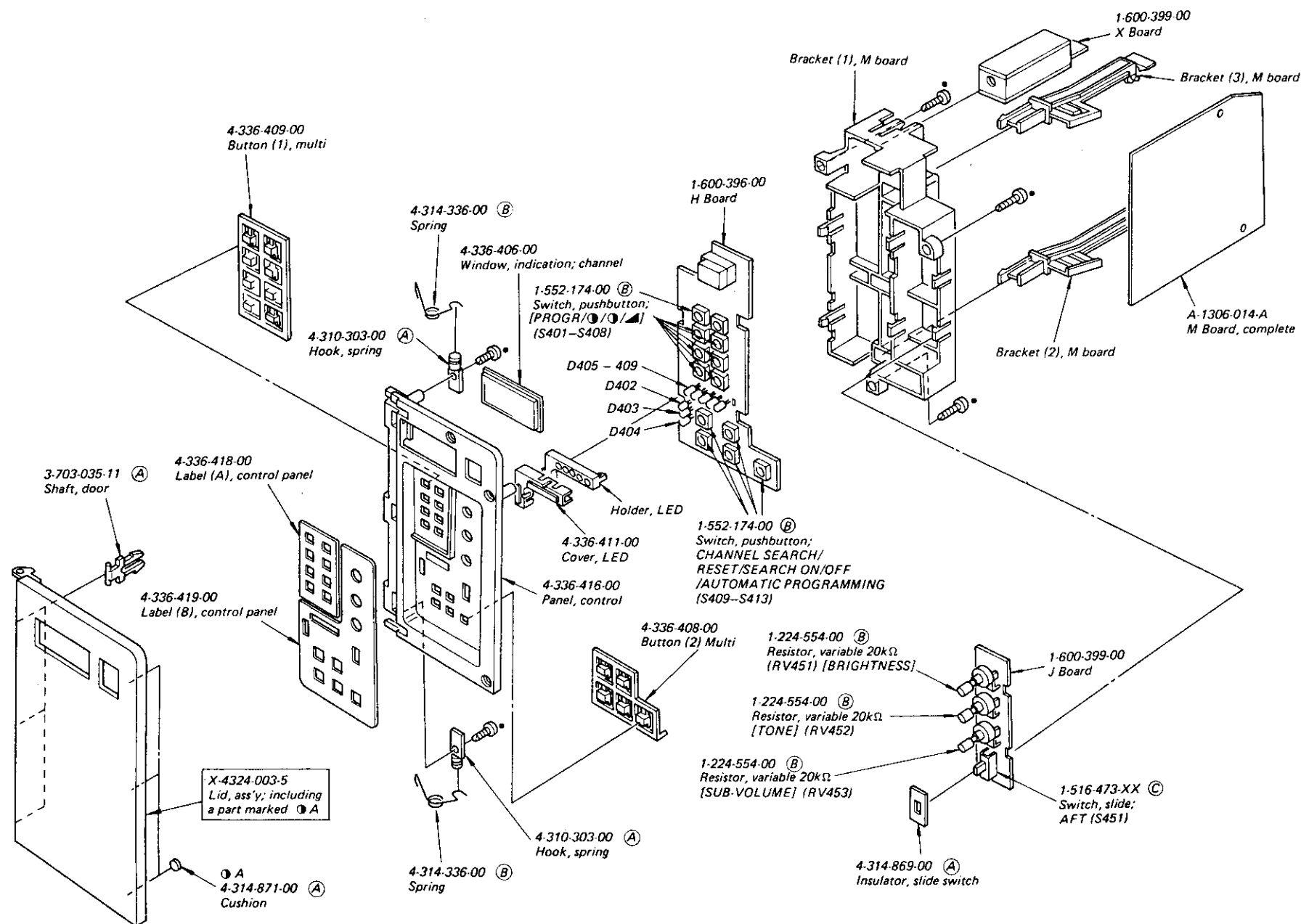


A-1295-269 - A

EXPLODED VIEWS







ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description
TUNERS AND CIRCUIT BOARDS		
TU201	△ 1-463-243-11	(R) VHF Tuner, V314
TU202	△ 1-463-242-11	(P) UHF Tuner, U322
	1-600-396-00	H Board
	1-600-397-00	J Board
	A-1245-108-A	F Board, complete
	A-1295-269-A	A Board, complete
	A-1306-014-A	M Board, complete
	A-1330-198-A	C Board, complete
	A-1345-238-A	D Board, complete
	A-1345-239-A	E Board, complete
	A-1394-002-A	X Board, complete

SEMICONDUCTORS

Transistors		
⇒ Q001-004	8-729-612-77	(B) 2SA1027R
Q005	8-729-139-04	(B) 2N3904
⇒ Q006, 007	8-729-663-47	(C) 2SC1364
⇒ Q008	8-729-612-77	(B) 2SA1027R
Q010	8-729-612-77	(B) 2SA1027R
Q011	8-722-381-20	(C) 2SK23A
⇒ Q012-014	8-729-663-47	(C) 2SC1364
⇒ Q015	8-729-612-77	(B) 2SA1027R
Q151	8-722-381-20	(C) 2SK23A
⇒ Q152	8-729-663-47	(C) 2SC1364
⇒ Q153	8-729-612-77	(B) 2SA1027R
⇒ Q154	8-729-663-47	(C) 2SC1364
Q201, 202	8-765-300-00	(B) 2SC2009
⇒ Q203	8-729-663-47	(C) 2SC1364
Q204	8-720-950-30	2SC926A
Q205	8-729-306-92	(C) 2SD669A
Q206	8-729-304-92	(C) 2SB649A
⇒ Q207	8-729-663-47	(C) 2SC1364
⇒ Q208	8-729-663-47	(C) 2SC1364
⇒ Q301	8-729-612-77	(B) 2SA1027R

Ref. No.	Part No.	Description
⇒ Q302-304	8-729-663-47	(D) 2SC1364
Q305	8-729-612-77	(B) 2SA1027R
⇒ Q501	8-729-663-47	(C) 2SC1364
⇒ Q502	8-765-170-01	(E) 2SC1962
Q503	8-765-500-00	2SC2141
Q504	8-765-510-00	(C) 2SA951
⇒ Q506	8-729-468-43	(C) 2SA684
⇒ Q507	8-765-170-01	(E) 2SC1962
⇒ Q508-510	8-729-663-47	(C) 2SC1364
⇒ Q511, 512	8-729-612-77	(B) 2SA1027R
⇒ Q601	8-729-612-77	(B) 2SA1027R
⇒ Q602	8-729-663-47	(C) 2SC1364
⇒ Q603	8-729-663-47	(C) 2SC1364
⇒ Q604	8-765-170-01	(E) 2SC1962
⇒ Q605	8-729-301-32	2SC1413A
Q606	8-729-163-93	(C) 2SA639S
⇒ Q607	8-729-663-47	(C) 2SC1364
⇒ Q608	8-729-612-77	(B) 2SA1027R
⇒ Q609, 610	8-729-663-47	(C) 2SC1364
Q651	8-729-157-11	(B) 2SD571
Q701-703	8-729-322-78	(C) 2SC2278
⇒ Q801	8-729-612-77	(B) 2SA1027R
Q802	8-729-372-31	2SC1723
Q901	8-729-372-51	2SD725
Q902	8-726-420-00	(H) SG264A
ICs		
IC001	8-759-684-85	M58485P
IC002	8-759-140-30	μPD4030C
IC003	8-759-140-02	μPD4002C
IC004	8-759-140-69	μPD4069C
IC005	8-757-600-00	CX760
IC006	8-757-610-00	CX761A
IC007	8-759-040-46	MC140468CP
IC008	8-759-140-12	μPD4012C
IC009	8-759-140-11	μPD4011C

Ref. No.	Part No.	Description
IC201	8-759-014-40	TBA1440G
IC202	8-759-651-35	(H) M5135P
IC203	8-759-001-20	TBA120U
IC301	8-759-113-65	μPC1365C
IC401	8-759-997-64	(G) SN29764N
IC402	8-759-619-03	M51903L
IC501	8-751-570-00	(F) CX157
Diodes		
D001-005	8-719-815-55	(B) 1S1555
D007	8-759-157-40	(E) μPC574J
⇒ D008	8-719-191-07	(B) RD9.1E
D151	8-729-103-03	PH302A
D201	8-719-815-55	(B) 1S1555
D301, 302	8-719-815-55	(B) 1S1555
⇒ D303	8-719-143-07	RD4.3E
D304, 305	8-719-815-55	(B) 1S1555
D451	8-719-815-55	(B) 1S1555
D501	8-719-815-55	(B) 1S1555
⇒ D503	8-719-200-02	(B) 10E2
D504	8-719-815-55	(B) 1S1555
⇒ D505-507	8-719-200-02	(B) 10E2
⇒ D508	8-719-930-12	(B) EQB01-12Z
D509-512	8-719-815-55	(B) 1S1555
⇒ D601-604	8-719-911-55	(B) U05G
⇒ D605	8-719-930-12	(B) EQB01-12Z
D606	8-719-815-55	(B) 1S1555
⇒ D609	8-719-305-15	(D) GH-3F
D610	8-719-815-55	(B) 1S1555
D611	8-719-139-27	RD39E-B4Z
D612-614	8-719-815-55	(B) 1S1555
⇒ D615	8-719-200-02	(B) 10E2
⇒ D641	8-719-320-11	(B) HF-1A

Ref. No.	Part No.	Description
⇒ D642-644	8-719-305-15	(D) GH-3F
⇒ D645	8-719-200-02	(B) 10E2
⇒ D646	8-719-305-15	(D) GH-3F
⇒ D651, 652	8-719-200-02	(B) 10E2
⇒ D653	8-719-931-13	(B) EQB01-13
D801, 802	8-719-815-55	(B) 1S1555
D803	8-719-926-20	ERB26
D805, 806	8-719-900-93	(B) V09C
⇒ D810	8-719-305-15	(D) GH-3F
⇒ D811	8-719-305-15	(D) GH-3F
LED401	8-719-803-20	(J) TLR320
LED402	8-719-812-41	(B) TLR124
LED403	8-719-812-42	TLY124
LED404	8-719-812-43	TLG124
LED405-409	8-719-812-41	(B) TLR124

Miscellaneous

TH502	1-800-070-XX	(A) Thermistor, S-5000
TH503	1-800-378-00	(A) Thermistor, S-150
TH601	1-800-820-00	Thermistor, power
TH602, 603	1-800-070-XX	(A) Thermistor, S-4700
TH604	1-800-202-XX	(A) Thermistor, S-10k
TH605		Thermistor, S-1000
THP601	1-800-362-21	(F) Posistor
SG701-705	1-519-063-XX	(B) Discharging Gap, 1.5k
SG801	1-519-063-XX	(B) Discharging Gap, 1.5k

COILS

All coils are microinductors unless otherwise noted.

L001, 002	1-407-762-00	(B) 1mH
L003	1-408-267-00	3.3μH
L151	1-409-315-00	(B) 100mH
L201	1-408-268-00	47μH
L205	1-407-738-00	(A) 10μH
L206	1-408-267-00	3.3μH

⇒: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

Ref. No.	Part No.	Description
L207	1-407-740-00	(B) 15μH
L208	1-408-267-00	3.3μH
L301	1-408-245-00	22mH
L302	1-408-307-00	8.2μH
L303	1-408-270-00	6.8μH
L304	1-407-742-00	(B) 22μH
L305	1-407-745-00	(B) 39μH
L306	1-407-751-00	(B) 120μH
L501	1-459-105-00	2.7mH
L502, 503	1-408-246-00	27μH
L506	1-408-242-00	10mH
L507	1-408-247-00	33mH
L508	1-435-055-21	Phase Adjust, PAC
L510	1-408-270-00	6.8μH
L602	1-407-365-00	(A) 0.74μH
L603	1-408-300-00	(B) 6.8μH
L641	1-459-215-00	(B) 120μH
L642	1-407-169-XX	(A) 68μH
L643	1-407-364-00	(B) 3.3μH
L644	1-408-267-00	3.3μH
L645	1-407-364-00	(B) 3.3μH
L701	1-407-755-00	270μH
L803	1-459-059-00	(C) 12mH RCC
L805, 806	1-407-365-00	(A) 0.74μH
L808, 809	1-408-225-00	(B) 3.3μH
L810	1-459-125-00	(C) HLC
L811	1-459-263-00	300μH
L812	1-408-241-00	(B) 8.2mH
L814	1-407-365-00	(A) 0.74μH
L815	1-459-215-00	(B) 120μH
L901, 902	1-454-166-12	Degaussing, DGC
L904	1-451-175-11	Deflection Yoke, DY
L905	1-452-099-11	Neck Ass'y
L906	1-407-364-00	(B) Choke
L907	1-407-780-00	(B) 3.3μH

Ref. No.	Part No.	Description
DL301	1-415-186-00	Delay Line, Y
DL302	1-415-185-00	Delay Line, 1H DL
TRANSFORMERS AND FILTERS		
CF001	1-527-476-00	Ceramic Radiator
CF201	1-527-263-00	Ceramic Filter
CF202	1-404-134-00	(B) Ceramic Trap
CF301	1-409-332-00	Ceramic Trap
T201	1-404-207-00	(B) VIFT-3
T202	1-404-203-00	(B) REF
T203	1-404-097-00	(B) SIFT
T204	1-403-810-00	(B) AFT-1
T205	1-403-811-00	(B) AFT-2
T206	1-404-135-00	(B) SIFT
T207	1-404-206-00	(B) VIFT-2
T208	1-403-990-00	(B) VIFT-1
T301	1-425-995-00	(B) TOT
T303	1-425-928-00	(B) Delay Adjustment, DAT
T501	1-421-245-11	Vertical Pincushion Correction, PCT
T601	1-421-352-00	Line Filter, LFT
T602	1-446-194-00	Regulator Drive, RDT
T603	1-413-040-00	Switching Regulator, SRT
T651	1-446-360-00	Power, PT
T801	1-405-760-00	(B) Horizontal Blocking, HBT
T802	1-439-244-21	Flyback, FBT
T803	1-437-078-00	Horizontal Drive, HDT
T901	1-427-402-00	Sound Output, SOT
CAPACITORS		
All capacitors are in μF and ceramic unless otherwise noted. 50WV or less are not indicated except for electrolytics. p : μμF, elect : electrolytic		
C001, 002	1-123-352-00	1 50V elect
C003, 004	1-161-313-00	150p
C005	1-123-354-00	3.3 50V elect

Ref. No.	Part No.	Description
C006	1-123-316-00	10 16V elect
C007	1-130-257-00	0.022 400V polyethylene
C008	1-161-265-00	33p
C009	1-123-021-00	0.47 50V elect
C010	1-161-271-00	100p
C011	1-161-268-00	56p
C012, 013	1-123-354-00	3.3 50V elect
C014	1-123-352-00	1 50V elect
C015	1-130-248-00	0.047 250V polyethylene
C016	1-161-330-00	0.01
C017	1-161-316-00	270p
C018	1-123-353-00	2.2 50V elect
C019	1-130-244-00	0.22 100V polyethylene
C020	1-102-129-00	(A) 0.01
C021	1-102-973-00	(A) 100p
C022	1-161-323-00	0.001
C023	1-123-352-00	1 50V elect
C024	1-130-242-00	0.10 100V polyethylene
C025	1-161-323-00	0.001
C027	1-108-365-00	(A) 0.001 100V mylar
C028, 029	1-161-319-00	470p
C030	1-123-352-00	1 50V elect
C032	1-121-951-00	(A) 0.47 50V elect
C034	1-123-318-00	(A) 33 16V elect
C035	1-121-951-00	(A) 0.47 50V elect
C037	1-123-317-00	22 16V elect
C039	1-123-352-00	1 50V elect
C040, 041	1-123-316-00	10 16V elect
C042	1-130-255-00	0.01 400V polyethylene
C043	1-123-354-00	3.3 50V elect
C044	1-121-951-00	(A) 0.47 50V elect
C151	1-123-316-00	10 16V elect
C152	1-161-269-00	(A) 68p
C153	1-161-051-00	(A) 0.01
C154	1-108-377-00	(A) 0.01 100V mylar
C155, 156	1-123-316-00	(B) 10 16V elect
C157	1-123-352-00	(B) 1 50V elect
C159	1-161-269-00	(A) 68p

Ref. No.	Part No.	Description
C202	1-161-290-00	5.6p
C203	1-161-268-00	56p
C204	1-161-259-00	10p
C205	1-161-267-00	47p
C207	1-161-271-00	100p
C208-211	1-161-328-00	0.0047
C212	1-123-355-00	4.7 50V elect
C214	1-161-323-00	0.001
C215	1-161-280-00	12p
C219	1-161-263-00	22p
C220-224	1-161-328-00	0.0047
C225	1-161-259-00	10p
C226	1-161-328-00	0.0047
C227	1-102-852-00	47p
C228	1-102-525-00	(A) 68p
C229	1-161-249-00	1.5p
C230	1-161-328-00	0.0047
C231	1-101-006-00	(A) 0.047
C232	1-161-379-00	0.01
C233	1-123-328-00	4.7 25V elect
C234	1-103-725-00	0.001
C235	1-123-316-00	10 16V elect
C236	1-101-006-00	(A) 0.047
C237	1-130-244-00	0.22 100V polyethylene
C238	1-108-614-00	(A) 0.001 100V mylar
C239	1-123-352-00	1 50V elect
C240	1-101-810-00	100p 500V
C241	1-161-317-00	330p
C242	1-123-253-00	(B) 22 160V elect
C243	1-121-999-00	(B) 10 160V elect
C244	1-123-321-00	(B) 220 16V elect
C245	1-123-319-00	(B) 47 16V elect
C246	1-123-318-00	(A) 33 16V elect
C247	1-130-248-00	0.047 250V polyethylene
C248	1-130-241-00	0.068 100V polyethylene
C250-253	1-123-316-00	10 16V elect
C254	1-161-265-00	33p
C258, 260	1-161-328-00	0.0047
C262	1-130-248-00	0.047 250V polyethylene

No.	Part No.	Description
3	1-123-316-00	10 16V elect
4	1-161-328-00	0.0047
6	1-161-731-00	1000p 2000V
7	1-161-259-00	10p
8	1-108-634-00	0.047 100V mylar
1	1-123-352-00	1 50V elect
2	1-130-247-00	0.033 250V polyethylene
3	1-108-616-00	0.015 100V mylar
5, 306	1-161-319-00	470p
7	1-101-804-00	10p 500V
1	1-123-316-00	10 16V elect
	1-123-352-00	1 50V elect
	1-161-265-00	330p
	1-161-379-00	0.01
	1-161-269-00	68p
	1-161-271-00	100p
	1-161-315-00	220p
	1-161-379-00	0.01
	1-123-351-00	0.47 50V elect
	1-123-354-00	3.3 50V elect
	1-123-328-00	4.7 25V elect
	1-123-354-00	3.3 50V elect
323	1-123-352-00	1 50V elect
	1-123-286-00	0.33 50V elect
	1-101-006-00	(A) 0.047
-328	1-161-379-00	0.01
	1-161-269-00	68p
	1-161-262-00	18p
	1-102-525-00	(A) 68p
	1-123-351-00	0.47 50V elect
334	1-130-248-00	0.047 250V polyethylene
	1-161-271-00	100p
	1-161-270-00	82p
	1-123-316-00	10 16V elect
339	1-161-265-00	33p
-405	1-161-051-00	(A) 0.01
	1-123-352-00	(B) 1 50V elect

Ref. No.	Part No.	Description
C502	1-123-320-00	(B) 100 16V elect
C503, 504	1-108-375-00	(A) 0.0068 100V mylar
C505	1-130-242-00	0.1 100V polyethylene
C506	1-130-248-00	0.047 250V polyethylene
C507	1-106-188-00	0.0047 100V mylar
C508	1-123-317-00	(B) 22 16V elect
C509	1-123-363-00	(C) 470 50V elect
C510	1-123-356-00	(A) 10 50V elect
C511	1-102-050-00	(B) 0.01 500V
C512	1-123-356-00	(B) 10 50V elect
C513	1-108-639-00	(B) 0.12 100V mylar
C514	1-123-269-00	(C) 4.7 160V elect
C515	1-130-257-00	0.022 400V polyethylene
C516	1-129-708-00	(A) 0.033 630V polypropylene
C517	1-130-257-00	0.022 400V polyethylene
C518	1-130-244-00	0.22 100V polyethylene
C519	1-130-242-00	0.10 100V polyethylene
C524	1-129-701-00	(A) 0.01 100V film
C526	1-106-188-00	(B) 0.0047 100V mylar
C528	1-130-257-00	0.022 400V polyethylene
C529	1-123-328-00	(B) 4.7 25V elect
C530	1-123-345-00	(B) 100 35V elect
C531	1-123-354-00	(B) 3.3 50V elect
C532	1-123-330-00	(A) 22 25V elect
C533	1-123-317-00	(B) 22 16V elect
C534	1-121-986-00	(B) 2.2 50V elect
C536	1-108-624-00	(B) 0.0068 100V mylar
C539	1-108-637-00	(B) 0.082 100V mylar
C540	1-108-631-00	(B) 0.027 100V mylar
C541	1-130-244-00	0.22 100V polyethylene
C542	1-123-356-00	(A) 10 50V elect
C543	1-130-255-00	0.01 400V polyethylene
C544	1-130-242-00	0.1 100V polyethylene
C545	1-108-614-00	(A) 0.001 100V mylar
C546	1-102-030-00	(A) 330p 500V
C547	1-123-319-00	(B) 47 16V elect
C548	1-123-352-00	(B) 1 50V elect
C552	1-123-320-00	(B) 100 16V elect
C597	1-102-030-00	(A) 330p 500V

Ref. No.	Part No.	Description
C601	1-108-745-00	0.22 300V mylar
C602	1-108-747-00	0.1 300V mylar
C603-605	1-102-085-00	0.0047 500V
C606	1-125-167-00	(C) 250 400V elect
C607	1-101-845-00	(A) 0.001 500V
C608	1-123-354-00	3.3 50V elect
C609	1-123-351-00	0.47 50V elect
C610	1-130-017-00	(A) 820 50V polypropylene
C612	1-130-026-00	0.0047 50V film
C613	1-130-257-00	0.022 400V polyethylene
C614	1-102-030-00	330p 500V
C616	1-101-810-00	100p 500V
C617	1-130-256-00	0.015 400V polyethylene
C619	1-102-327-00	330p 1500V
C621	1-121-999-00	(B) 10 160V elect
C622	1-123-024-00	33 160V elect
C623	1-108-365-00	(A) 0.001 100V mylar
C625	1-123-297-00	(B) 330p 6.3V elect
C626	1-123-352-00	1 50V elect
C627	1-123-252-00	(A) 1 160V elect
C641	1-123-254-00	10 250V elect
C642	1-123-362-00	(B) 330 50V elect
C643	1-123-334-00	(B) 220 25V elect
C644	1-123-308-00	(A) 220 10V elect
C645	1-123-356-00	(A) 10 50V elect
C646	1-123-334-00	(B) 220 25V elect
C647	1-161-731-00	(B) 1000p 200V
C649	1-102-030-00	(A) 330p 500V
C651	1-123-360-00	(B) 100 50V elect
C653	1-123-316-00	(B) 10 16V elect
C701, 702	1-161-313-00	(A) 150p
C703	1-161-315-00	(A) 220p
C704	1-129-718-00	(A) 0.022 630V plastic
C705	1-130-250-00	0.1 250V polyethylene
C707	1-102-155-00	(B) 330p 2000V
C801	1-123-329-00	(B) 10 25V elect
C802	1-108-369-00	(A) 0.0022 100V mylar

Ref. No.	Part No.	Description
C803	1-130-228-00	(C) 0.011 1200V film
C804	1-102-030-00	(A) 330p 500V
C805, 806	1-130-247-00	0.033 250V polyethylene
C807	1-130-241-00	0.068 100V polyethylene
C809	1-130-272-00	0.033 100V polyethylene
C810	1-130-242-00	0.1 100V polyethylene
C811	1-123-351-00	(B) 0.47 50V elect
C812	1-130-255-00	0.01 400V polyethylene
C813	1-102-228-00	(A) 470p 500V
C814	1-102-212-00	(A) 820p 500V
C815	1-102-223-00	(B) 4700p 1600V
C817, 818	1-123-320-00	(B) 100 16V elect
C820	1-123-310-00	(Z) 470 10V elect
C823	1-102-249-00	(B) 680p 2000V
C824	1-130-157-00	(D) 1 200V polyethylene
C826	1-129-949-00	(F) 1 400V polyethylene
C827	1-130-252-00	0.22 250V polyethylene
C828	1-123-024-00	(B) 33 160V elect
C829	1-123-328-00	(B) 4.7 25V elect
C830	1-130-255-00	0.01 400V polyethylene
C831	1-130-250-00	0.1 250V polyethylene
C832	1-130-242-00	0.1 100V polyethylene
C833	1-123-329-00	10 25V elect
C835	1-102-155-00	(B) 330p 2000V
C836	1-102-249-00	(B) 680p 2000V
C901	1-130-334-00	(B) 0.001 1200V
C903	1-121-257-00	(B) 4.7 16V elect
RESISTORS		
All resistors are in ohms. Common 1/4W carbon resistors are omitted. Refer to the list on the last page for their part numbers. All variable and adjustable resistors have characteristic curve B, unless otherwise noted. k Ω : 1000 Ω , M Ω : 1000k Ω		
R048	1-202-730-00	(A) 8.2M 1/4W composition
R052	1-206-698-00	(B) 27k 2W metal oxide (nonflammable)
R233, 234	1-246-875-00	(A) 33 1/4W carbon (nonflammable)

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R518	1-212-360-00	(A) 1 1W metal oxide (nonflammable)	R627	1-212-358-00	(B) 0.68 1W metal oxide (nonflammable)	R828	1-206-439-00	(A) 1 2W metal oxide (nonflammable)	RV601	1-224-643-XX	(B) 2.2k, adjustable; 135V ADJ
R519	1-213-140-00	(A) 560 1W metal oxide (nonflammable)	R628	1-212-353-00	0.27 1W metal oxide (nonflammable)	R832	1-202-597-00	(A) 10k 1/2W composition	RV701	1-226-105-00	(B) 220, adjustable; B. DRIVE
R520	1-213-142-00	(A) 820 1W metal oxide (nonflammable)	R640	1-247-436-00	10k 1/8W carbon	R833	1-244-915-00	(A) 56k 1/2W composition	RV702	1-226-105-00	(B) 220, adjustable; G. DRIVE
R522	1-244-875-00	(A) 1.2k 1/2W carbon	R641	1-206-749-00	10k 3W metal oxide (nonflammable)	R835	1-206-664-00	(B) 1k 2W metal oxide (nonflammable)	RV703	1-226-157-00	(C) 1M, adjustable; G2 ADJ
R523	1-211-929-00	(A) 82 1/8W carbon (nonflammable)	R642	1-246-979-00	1.2 1/8W carbon (nonflammable)	R901	1-244-849-00	(A) 100 1/2W wirewound	RV704	1-226-114-00	(C) 2.2M, adjustable; FOCUS
R524	1-211-930-00	(A) 33 1/8W carbon (nonflammable)	R651, 652	1-246-979-00	1.2 1/8W carbon (nonflammable)	* R904	1-207-457-00	0.33 1/2W wirewound	RV801	1-223-064-00	150, adjustable; H. CENT
R526, 527	1-212-361-00	(A) 1.2 1W metal oxide (nonflammable)	R710-712	1-206-692-00	(A) 15k 2W metal oxide (nonflammable)	R905	1-207-462-00	0.82 1/2W wirewound	SWITCHES		
R531	1-202-625-00	(A) 150k 1/2W composition	R713-715	1-244-885-00	(A) 3.3k 1/2W composition	RV001	1-224-645-XX	(B) 10k, adjustable; OSC	S401, 402	1-552-174-00	(B) Push, PRGR
R543	1-206-642-00	(A) 120 2W metal oxide (nonflammable)	R716	1-244-939-00	(A) 560k 1/2W composition	RV201	1-224-644-XX	(B) 4.7k, adjustable; RF AGC	S403-408	1-552-174-00	(B) Push
R551	1-244-875-00	(A) 1.2k 1/2W carbon	R717	1-244-945-00	(A) 1M 1/2W composition	RV202	1-224-645-XX	(B) 10k, adjustable; DET OUT	S409	1-552-174-00	(B) Push, SEARCH
R552	1-213-135-00	(A) 220 1W metal oxide (nonflammable)	R718	1-244-843-00	(A) 56 1/2W composition	RV301	1-224-645-XX	(B) 10k, adjustable; SUB BRT	S410	1-552-174-00	(B) Push, FINE TUNE
R553	1-213-124-00	(A) 27 1W metal oxide (nonflammable)	R719	1-244-937-00	(A) 470k 1/2W composition	RV302	1-224-641-XX	(B) 470, adjustable; SMB	S411	1-552-174-00	(B) Push, RESET
R575	1-213-128-00	(A) 56 1W metal oxide (nonflammable)	R720	1-244-933-00	(A) 330k 1/2W composition	RV303	1-224-644-XX	(B) 4.7k, adjustable; APC	S412	1-552-174-00	(B) Push, SEARCH ON/OFF
R601	1-217-318-00	(B) 470 5W wirewound (nonflammable)	R721	1-244-919-00	(A) 82k 1/2W composition	RV304	1-224-642-XX	(B) 1k, adjustable; PHASE	S413	1-552-174-00	(B) Push, AUTOMATIC PROGRAMMING
R603	1-214-475-00	(B) 68k 2W metal oxide (nonflammable)	R724	1-244-945-00	(A) 1M 1/2W composition	RV305	1-222-344-00	(B) 5k, adjustable; R. BKG	S451	1-516-473-XX	(C) AFT
R604	1-213-160-00	(B) 27k 1W metal oxide (nonflammable)	R803	1-202-597-00	(A) 10k 1/2W composition	RV306	1-222-344-00	(B) 5k, adjustable; G. BKG	S901	(A) 1-552-116-00	(D) Push, POWER
R605	1-202-643-00	820k 1/2W composition	R809	1-213-162-00	(A) 39k 1W metal oxide (nonflammable)	RV307	1-222-344-00	(B) 5k, adjustable; B. BKG	MISCELLANEOUS		
R606	1-213-161-00	33k 1W metal oxide (nonflammable)	R816	1-206-733-00	(B) 2.2k 3W metal oxide (nonflammable)	RV308	1-224-644-XX	(B) 4.7k, adjustable; SUB COLOR	F601	(A) 1-532-465-11	(B) Fuse, 3.15AT
R623	1-206-758-00	24k 3W metal oxide (nonflammable)	R818	1-202-635-00	(A) 390k 1/2W composition	RV451	1-224-554-00	(B) 20k, variable; BRIGHTNESS	J901A, B	1-507-539-11	(B) Jack, EARPHONE
R624	1-206-758-00	24k 3W metal oxide (nonflammable)	R819	1-247-040-00	(A) 1.0k 1/8W carbon (nonflammable)	RV452	1-224-554-00	(B) 20k, variable; TONE	NL701	1-519-108-XX	(B) Lamp, Neon Ass'y
R625	1-206-696-00	(A) 22k 2W metal oxide (nonflammable)	R820	1-212-376-00	(A) 22 W metal oxide (nonflammable)	RV453	1-224-554-00	(B) 20k, variable; SUB VOL1	SF201	1-404-208-00	(G) Filter, SAWF; 39MHz
R626	1-247-033-00	100 1/8W carbon (nonflammable)	R821	1-206-439-00	(A) 1 2W metal oxide (nonflammable)	RV501	1-224-972-00	(B) 20k, variable; V. HOLD	SP901	1-502-650-00	(G) Speaker, cone; 8Ω
			R822	1-202-589-00	(A) 4.7k 1/2W composition	RV502	1-222-807-XX	(B) 20k, adjustable; V. SIZE	V901	(A) 8-737-602-05	(Z) Picture Tube 570EB22
			R824	1-212-360-00	(A) 1 1W metal oxide (nonflammable)	RV503	1-221-970-XX	(B) 500, adjustable; V. CENT	X301	1-527-530-00	Radiator, crystal; 4.43MHz
			R825	1-206-664-00	(B) 1k 2W metal oxide (nonflammable)	RV504	1-221-956-XX	(B) 50k, adjustable; PIN AMP		1-226-271-00	Resistor Ass'y, high-voltage
			R827	1-213-133-00	(A) 150 1W metal oxide (nonflammable)	RV505	1-224-642-XX	(B) 1k, adjustable; H. SIZE		1-452-032-00	(A) Magnet, disc
						RV506	1-222-807-XX	(B) 20k, adjustable; Y. BOW		1-452-133-00	(C) Magnet
						RV509	1-221-970-XX	(B) 500, adjustable; H. AMP		1-526-086-XX	(B) Socket, picture tube
						RV510	1-222-344-00	(B) 5k, adjustable; H. TILT		(A) 1-536-473-00	(K) Terminal, antenna
						RV511	1-224-640-XX	(B) 330, adjustable; PIN PHASE		(A) 1-551-270-00	(K) Cord, power

* : selected to yield optimum performance.

ACCESSORIES AND PACKING MATERIALS

Part No.	Description
A-1470-313-A	Commander Ass'y, RM-605
4-495-824-11	Manual, instruction

KV-2204E

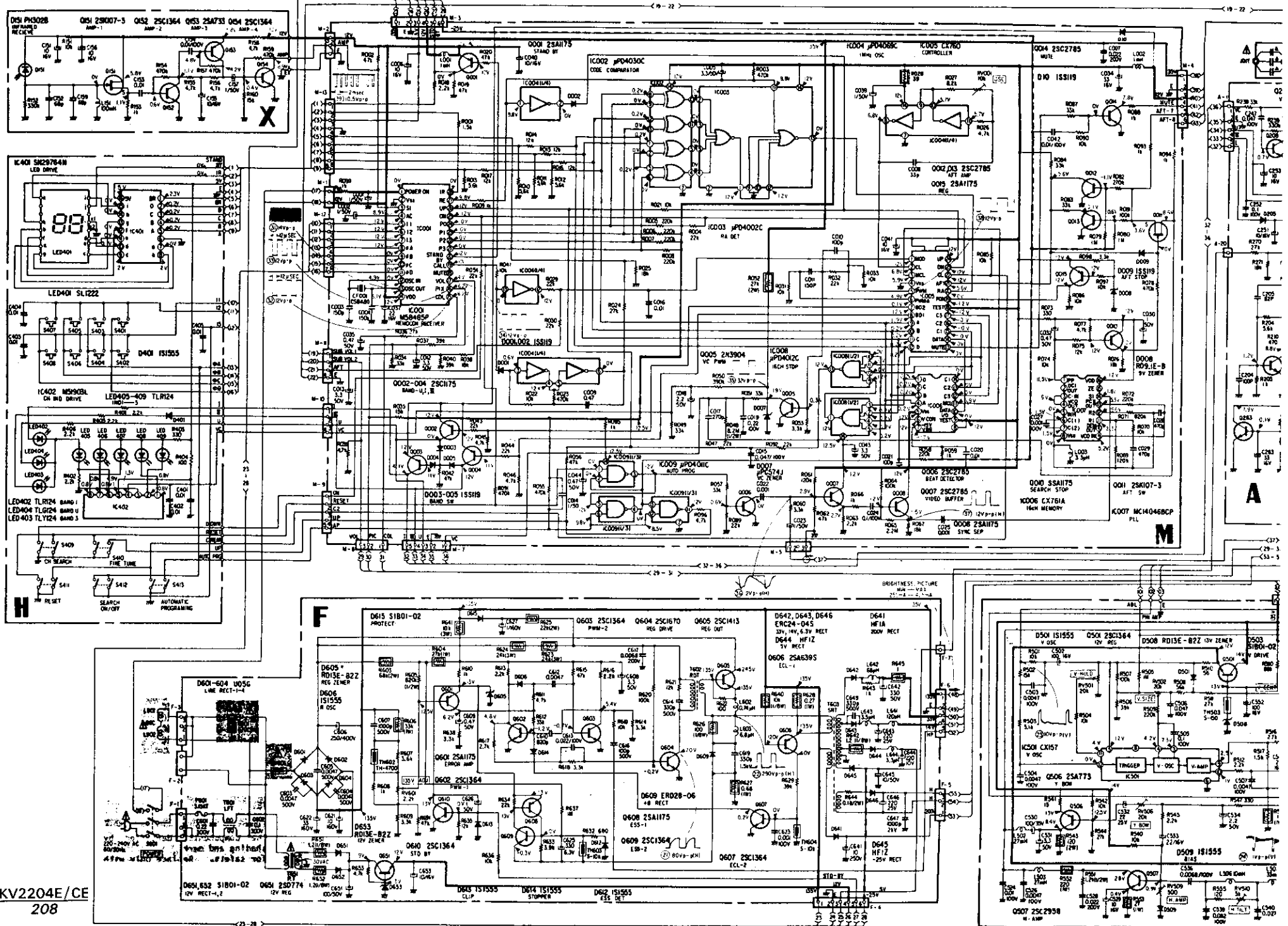
No. 1
July, 1981

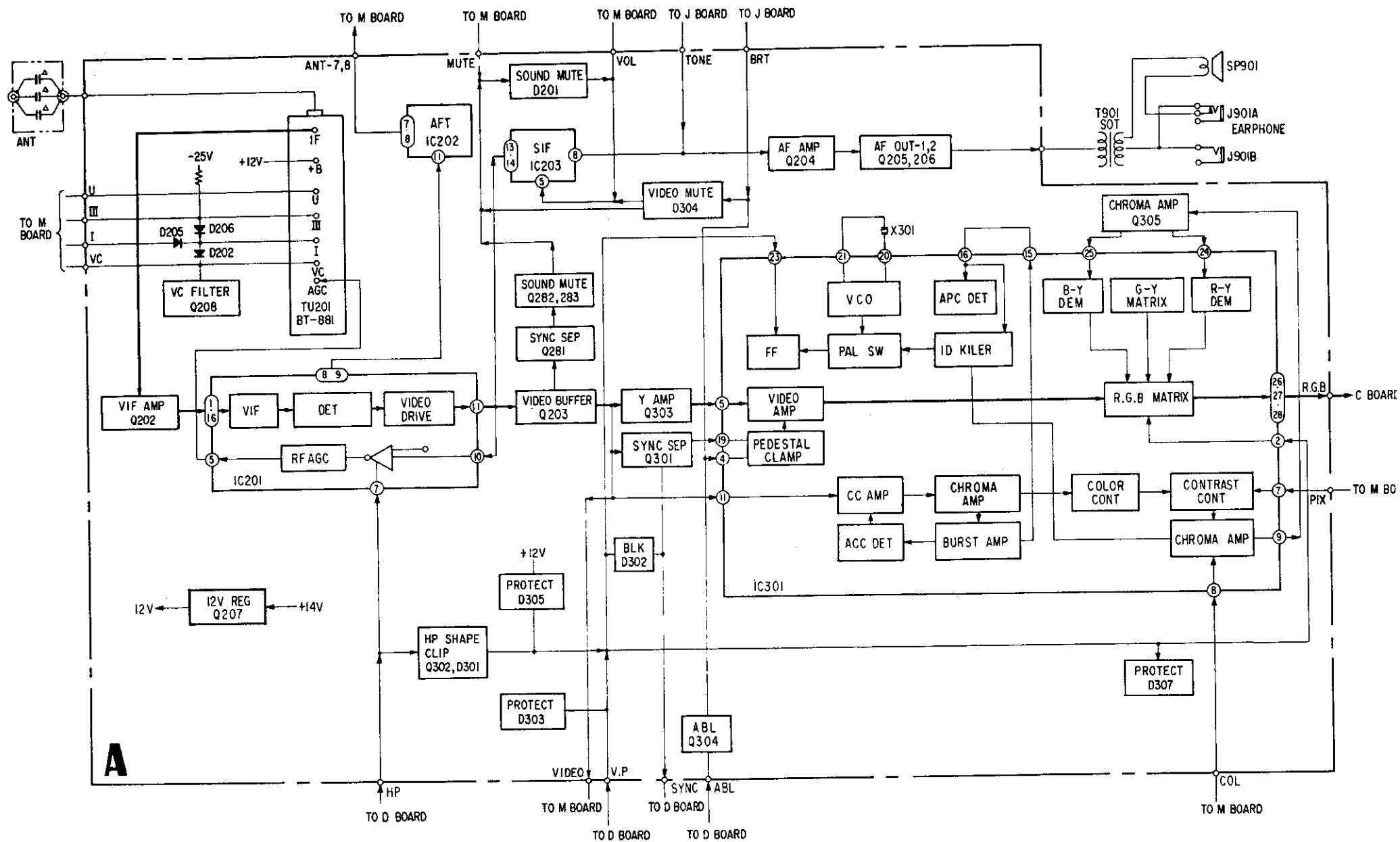
*Chassis No. SCC-216E-A
(Serial No. 350,001 and later)*

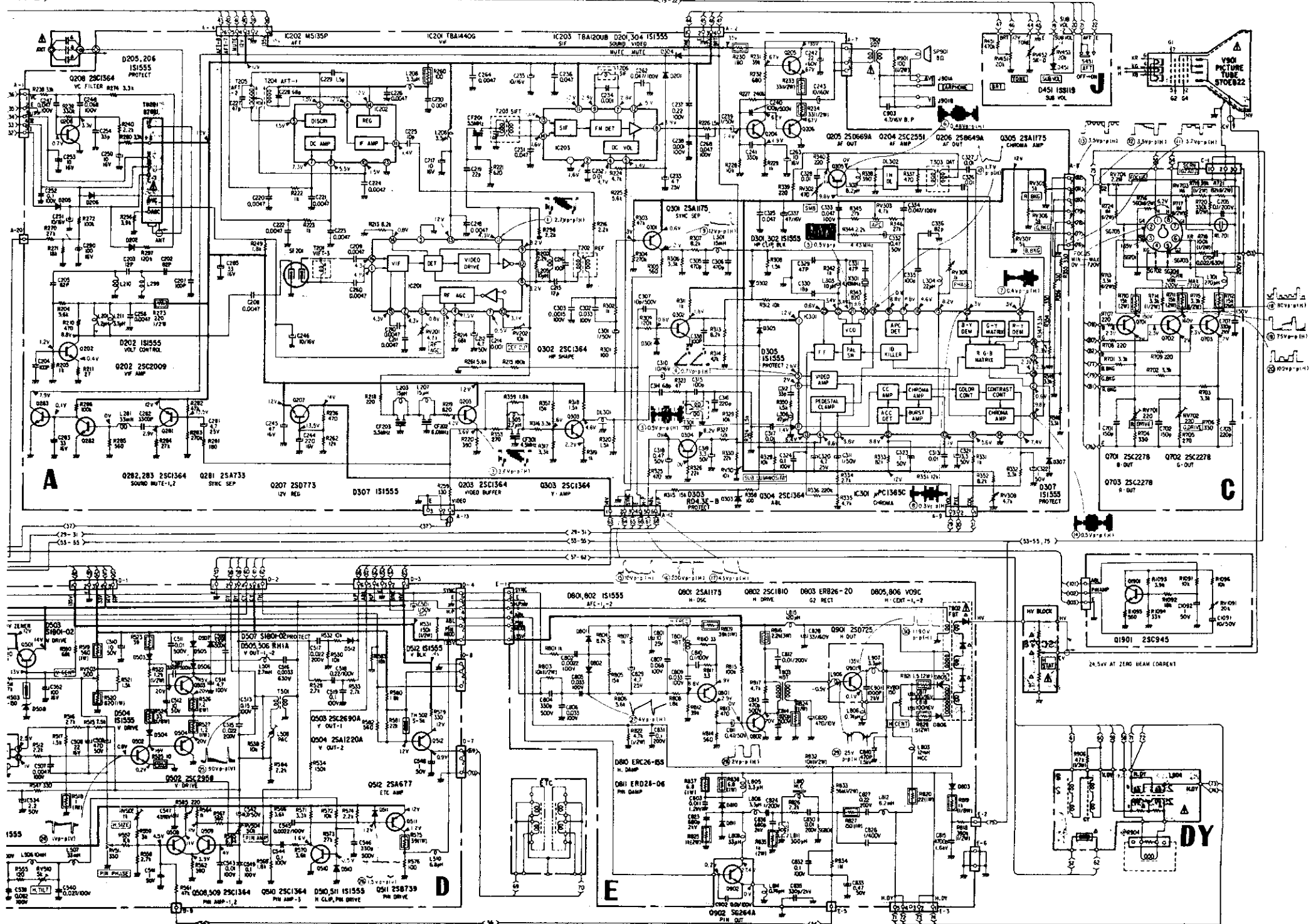
SUPPLEMENT

File this supplement with the service manual.

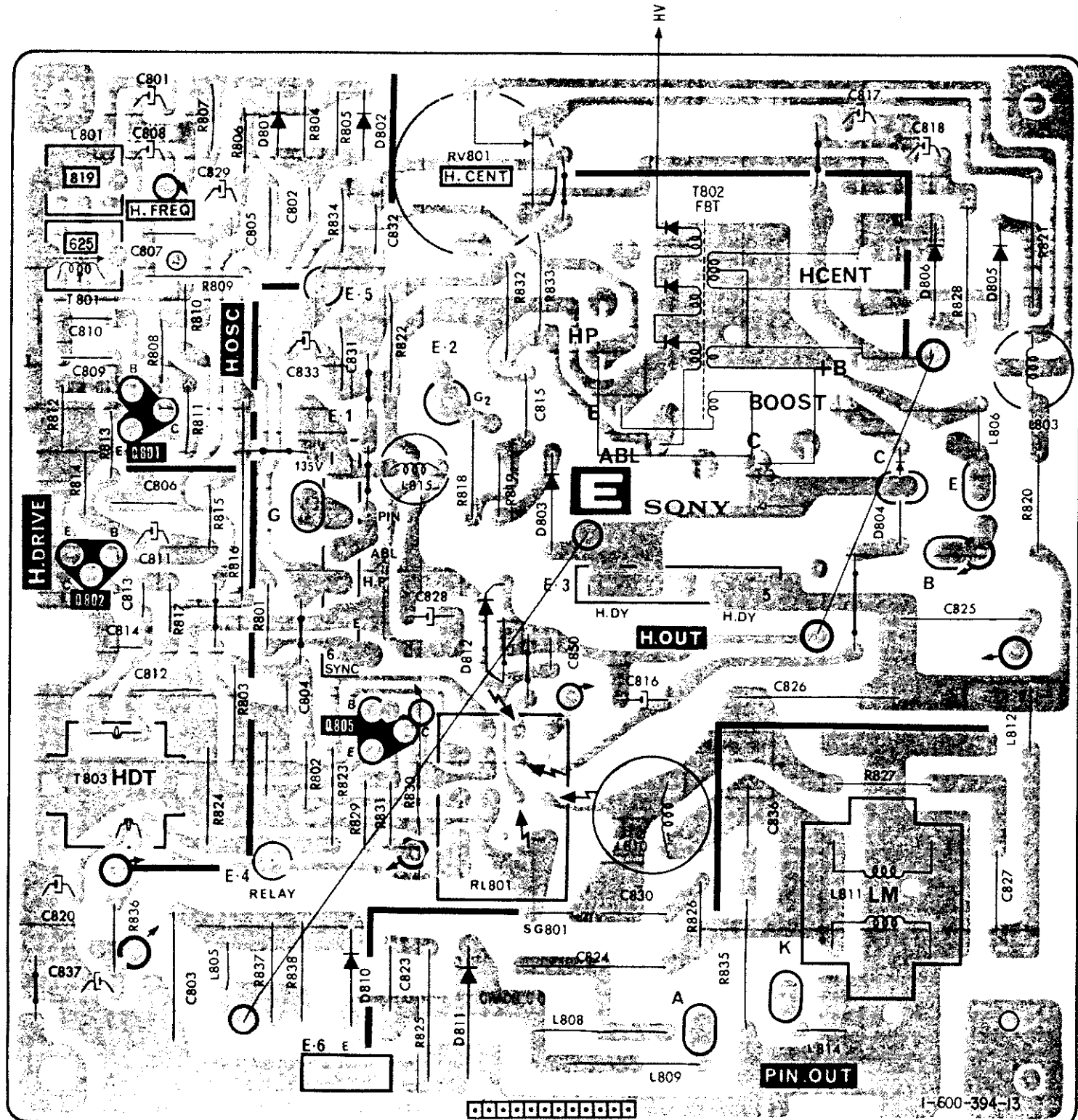
Subject: • A board modification.
• Antenna terminal plate change.



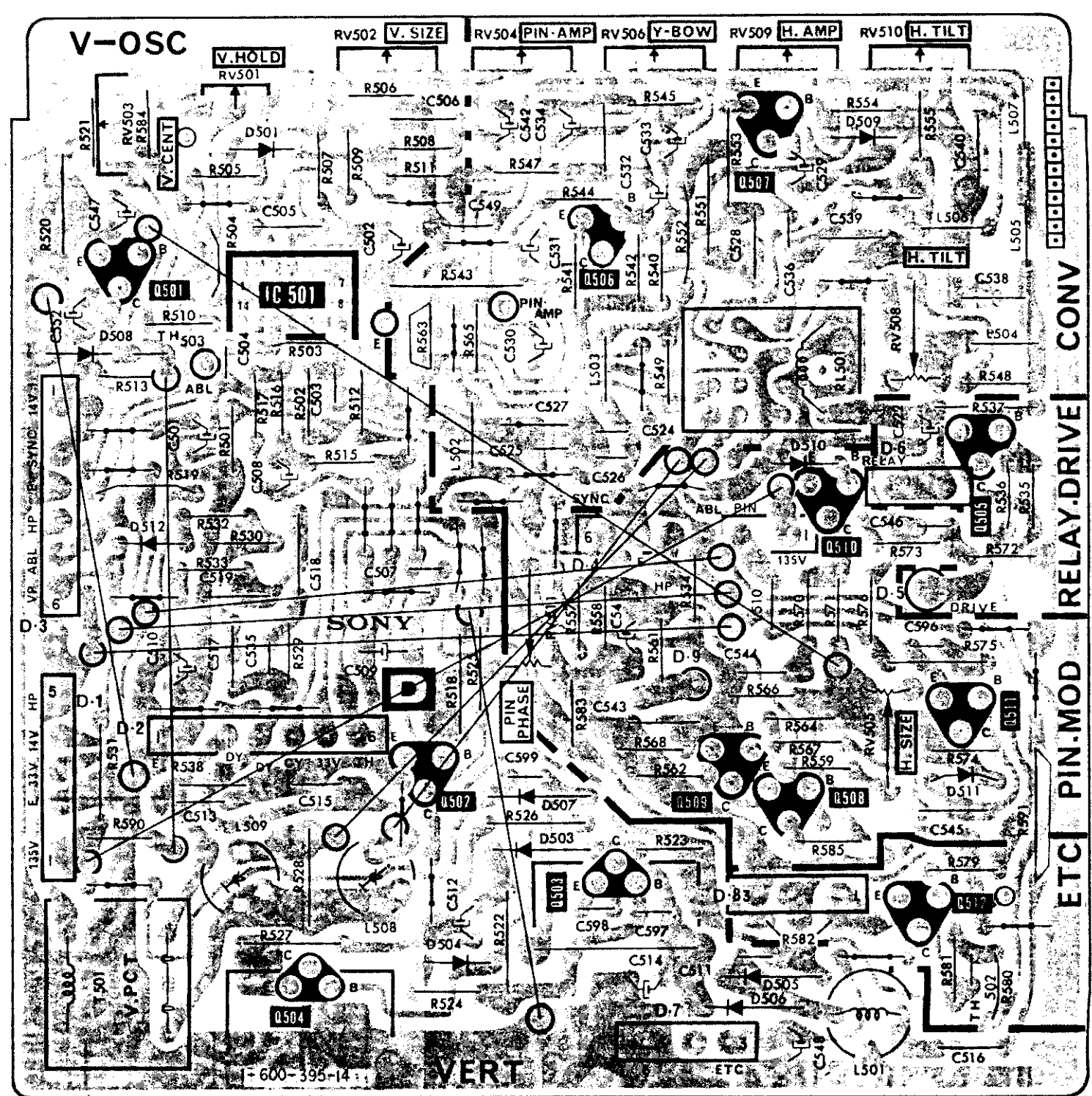


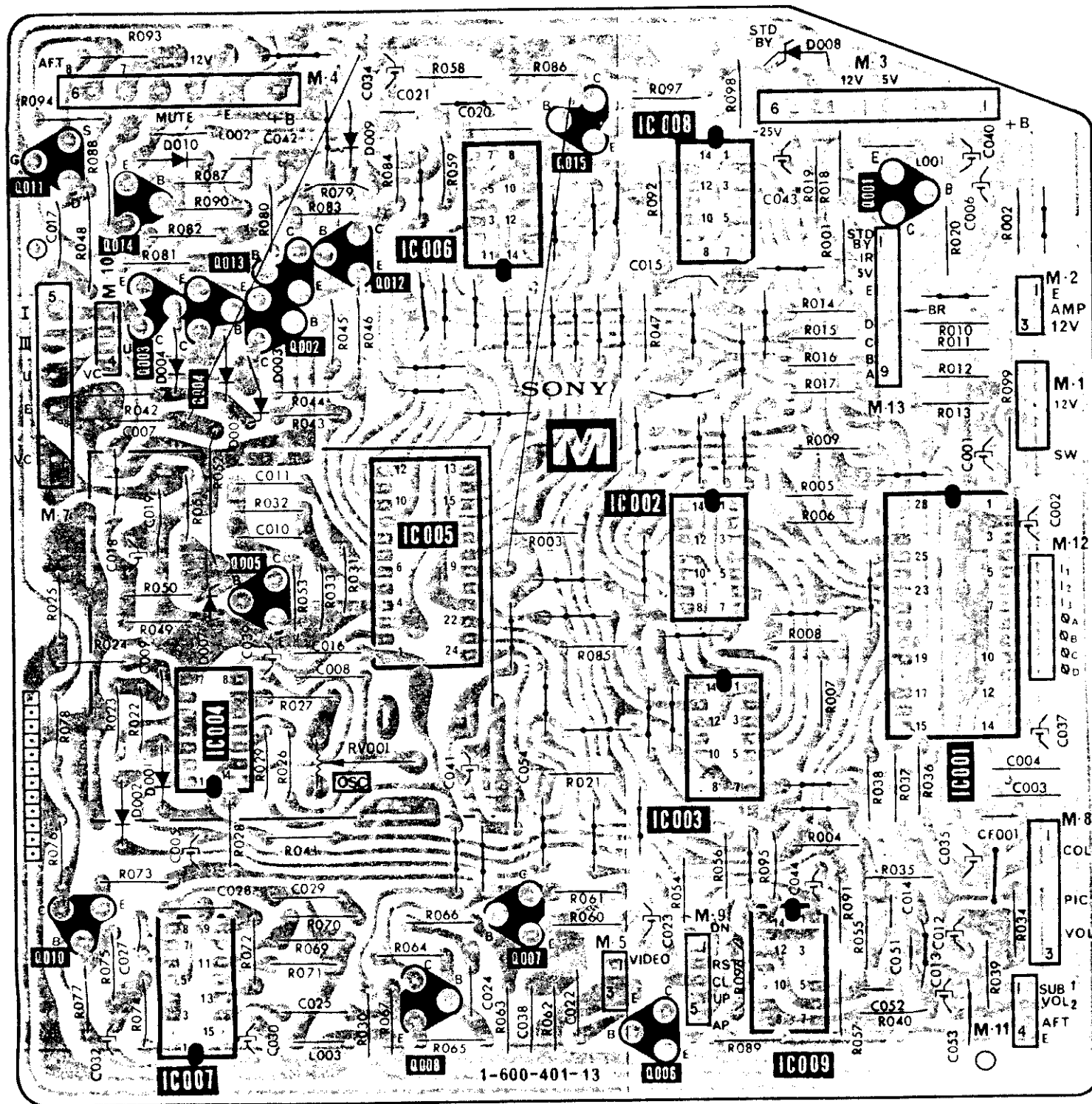


Q, IC	D	ADJ
		RV801
801		
803		
802		
812		
805		
810		
811		
Q, IC	D	ADJ



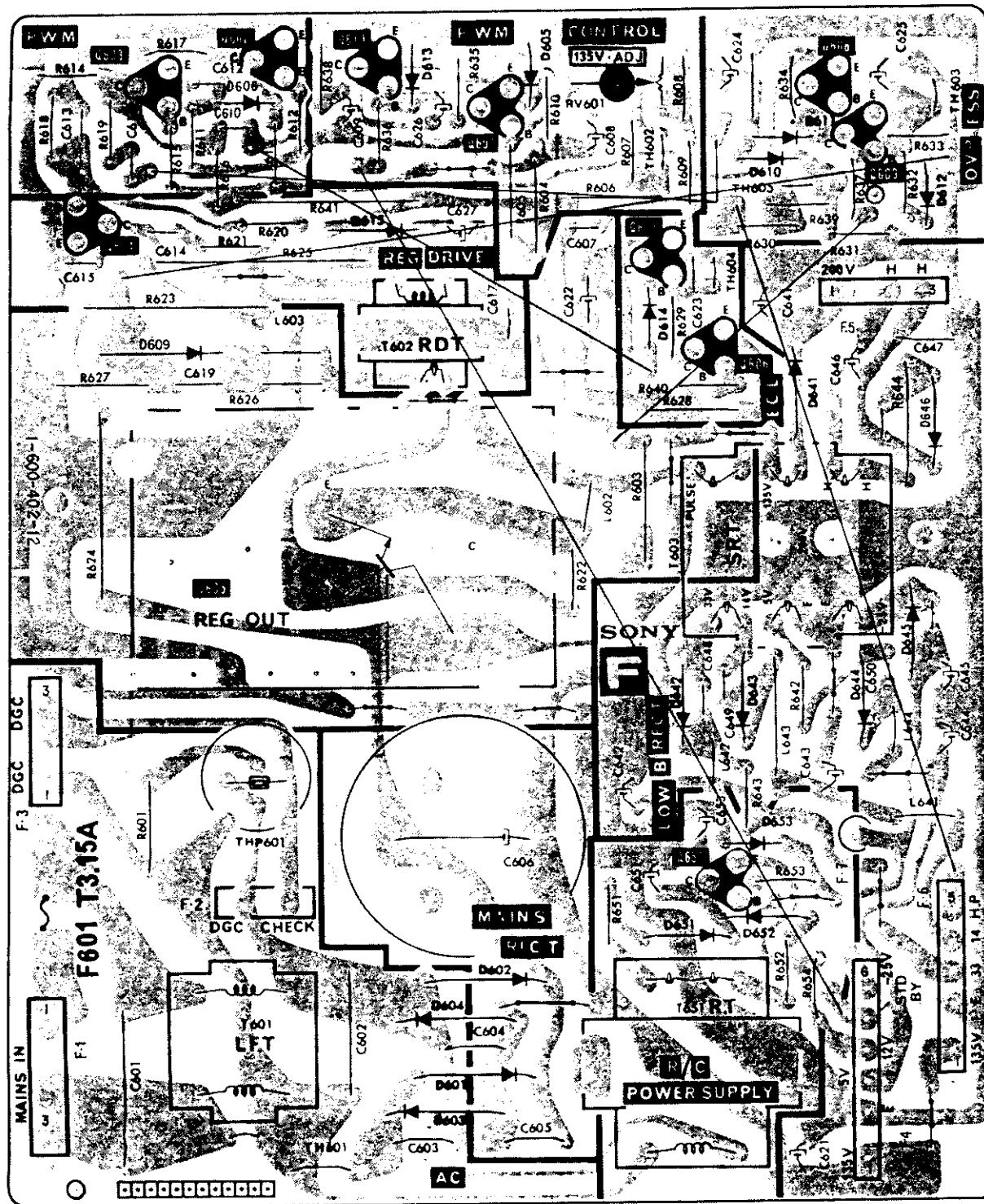
Q, IC	D	ADJ
507	509 501	RV501 RV502 RV503 RV504 RV506 RV509 RV510
506 501		
	508	RV508
505 510	510	
	512	RV511
511 502 509 508	511 507	RV505
503 512	503	
504	504	
	505	
	506	
Q, IC	D	ADJ



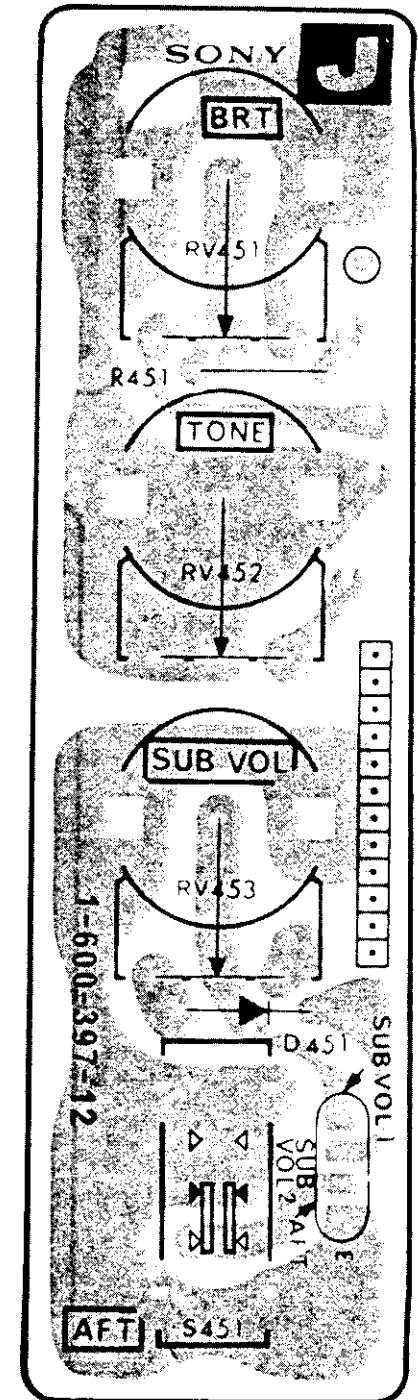
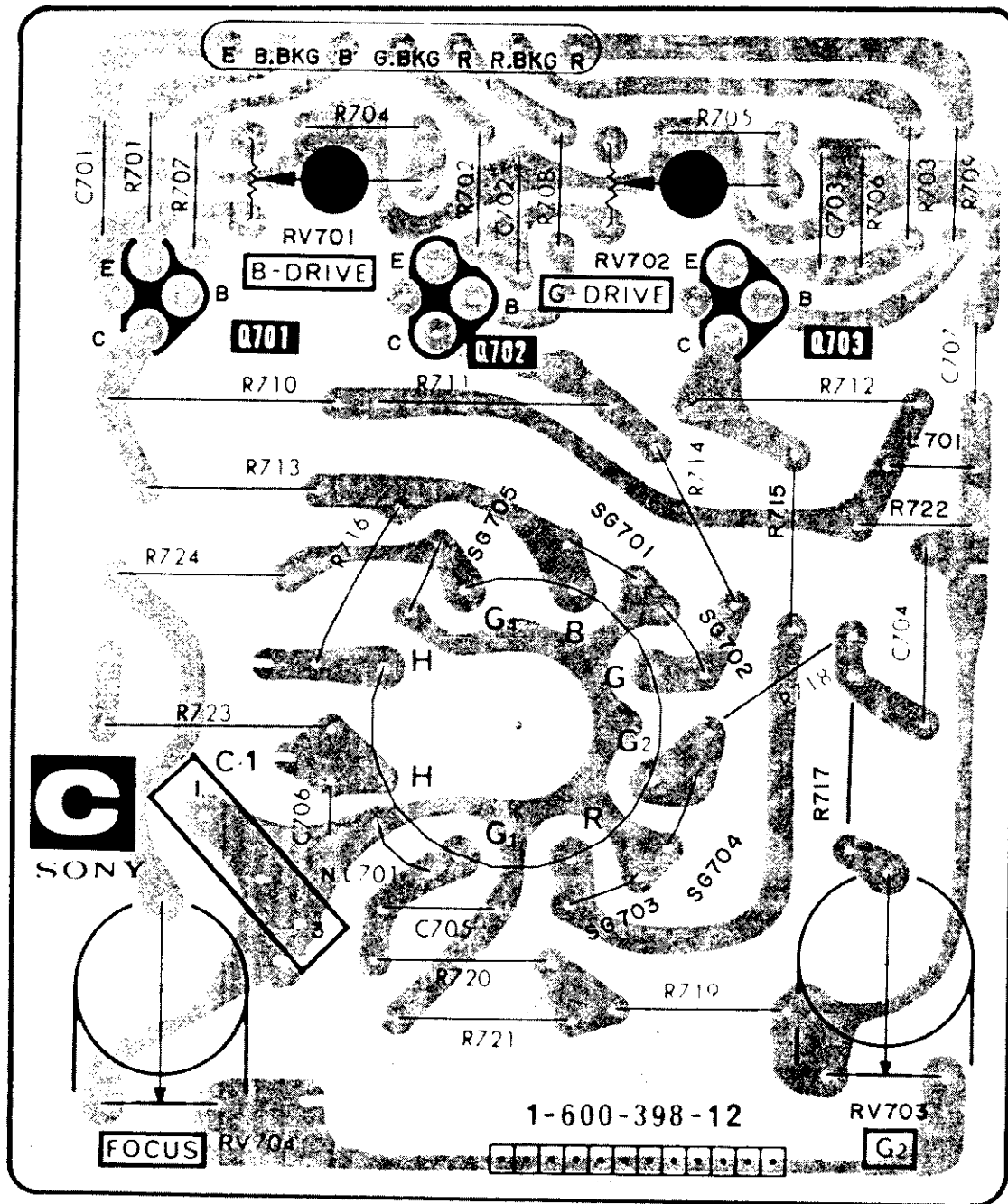


Q, IC	D	ADJ
	008	
015		
011	009	
014	010	
IC006		
001	IC008	
012		
013		
003		
004		
002		
	004	
	005	
	003	
IC005		
IC002		
IC001		
005		
	007	
IC004		
IC003		
001		RV001
002		
010	007	
IC007		
IC009		
008		
006		
Q, IC	D	ADJ

- F Board -

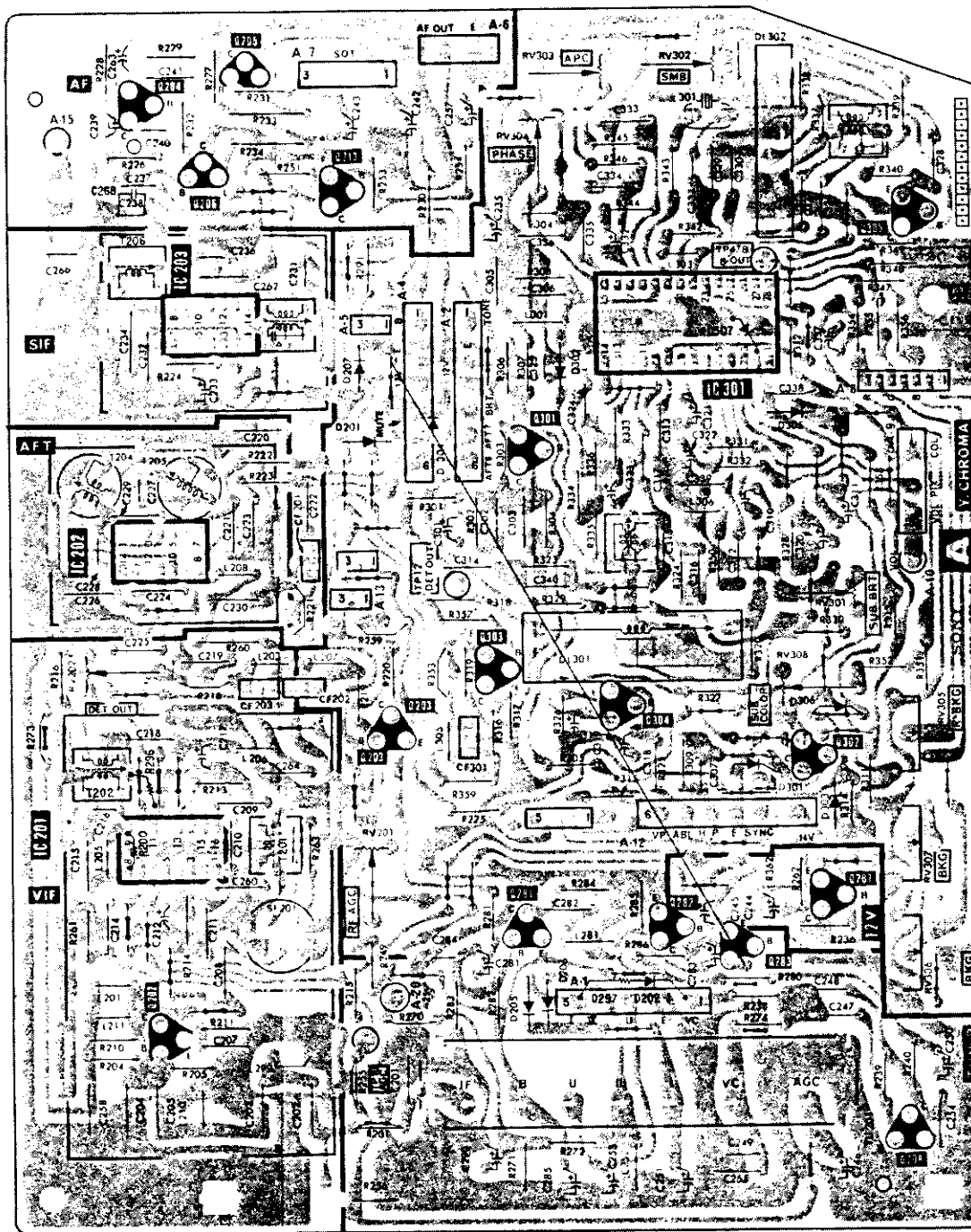


Q, IC	D	ADJ
603	613	RV601
602	605	
610	606	
601		
608	611	
609	610	
	612	
604	615	
607		
	614	
	609	
606	641	
	646	
605		
	645	
	642	
	643	
	644	
	653	
651		
	652	
	651	
	602	
	604	
	601	
	603	



- A Board -

Q, IC	0	ADJ
205		RV302
204		RV303
206		RV304
213		
305		
IC203	307	
IC301	207 302	
301	201 305 304	
IC202		RV301
303		RV305
304	306	RV202
203		RV308
302	301	
	303	
IC201		RV201
207		RV307
281, 282		RV306
283		
202	202 205 206	
208		
Q, IC	0	ADJ



ELECTRICAL PARTS LIST

F A

[illegible]

NOTE:

- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.
- Items marked " & " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
• MF : μ F, PF : μ F

RESISTORS

- All resistors are in ohms
- F : nonflammable

COILS
• MPH : MPH, UH : UH

KV2204E/CE
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Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark
R328	1-246-497-00	CARBON	10K 5% 1/4W	T206	1-404-135-00	COIL, SIF DISCRI		C032	1-123-379-00	ELECT	0.47MF 20% 50V	M13	▲:1-560-129-00	PLUG, CONNECTOR (2.5MM) 9P	
R329	1-246-497-00	CARBON	10K 5% 1/4W	T301	1-425-995-00	TRANSFORMER, INPUT		C034	1-123-318-00	ELECT	33MF 20% 16V				
R330	1-246-505-00	CARBON	22K 5% 1/4W	T303	1-425-928-00	TRANSFORMER, DELAY ADJUSTING		C035	1-123-379-00	ELECT	0.47MF 20% 50V				
R331	1-246-473-00	CARBON	1K 5% 1/4W					C037	1-123-330-00	ELECT	22MF 20% 16V				
R332	1-246-485-00	CARBON	3.3K 5% 1/4W					C039	1-123-380-00	ELECT	1MF 20% 50V				
R333	1-246-519-00	CARBON	82K 5% 1/4W					C040	1-123-356-00	ELECT	10MF 20% 16V				
R334	1-246-483-00	CARBON	2.7K 5% 1/4W	TP10	▲:1-535-084-00	1P TERMINAL PIN		C041	1-123-356-00	ELECT	10MF 20% 16V				
R335	1-246-489-00	CARBON	4.7K 5% 1/4W	TP12	▲:1-535-084-00	1P TERMINAL PIN		C042	1-108-377-00	MYLAR	0.01MF 10% 100V				
R336	1-246-529-00	CARBON	220K 5% 1/4W	TP47B	▲:1-535-084-00	1P TERMINAL PIN		C043	1-123-382-00	ELECT	3.3MF 20% 50V				
R337	1-246-465-00	CARBON	470 5% 1/4W					C044	1-123-379-00	ELECT	0.47MF 20% 50V				
R338	1-246-463-00	CARBON	390 5% 1/4W												
R339	1-246-457-00	CARBON	220 5% 1/4W	TU201A	1-463-350-00	TUNER (BT-881)									
R340	1-246-457-00	CARBON	220 5% 1/4W												
R342	1-246-473-00	CARBON	1K 5% 1/4W												
R343	1-246-471-00	CARBON	820 5% 1/4W												
R344	1-246-481-00	CARBON	2.2K 5% 1/4W												
R345	1-246-507-00	CARBON	27K 5% 1/4W												
R346	1-246-507-00	CARBON	27K 5% 1/4W												
R347	1-246-485-00	CARBON	3.3K 5% 1/4W												
R348	1-246-485-00	CARBON	3.3K 5% 1/4W												
R349	1-246-485-00	CARBON	3.3K 5% 1/4W												
R350	1-246-477-00	CARBON	1.5K 5% 1/4W												
R351	1-246-499-00	CARBON	12K 5% 1/4W												
R352	1-246-495-00	CARBON	8.2K 5% 1/4W												
R353	1-246-459-00	CARBON	270 5% 1/4W												
R354	1-246-461-00	CARBON	330 5% 1/4W												
R355	1-246-461-00	CARBON	330 5% 1/4W												
R356	1-246-461-00	CARBON	330 5% 1/4W												
R357	1-246-501-00	CARBON	15K 5% 1/4W												
R358	1-246-449-00	CARBON	100 5% 1/4W												
R359	1-246-479-00	CARBON	1.8K 5% 1/4W												
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Ref.No Part No Description Remark						Ref.No Part No Description Remark						Ref.No Part No Description Remark						Ref.No Part No Description Remark						
035	1-246-501-00	CARBON	15K	5%	1/4W	R089	1-246-505-00	CARBON	22K	5%	1/4W	RESISTOR						RESISTOR						
036	1-246-507-00	CARBON	27K	5%	1/4W	R090	1-246-497-00	CARBON	10K	5%	1/4W	R701	1-246-485-00	CARBON	3.3K	5%	1/4W	R1091	1-246-497-00	CARBON	10K	5%	1/4W	
037	1-246-511-00	CARBON	39K	5%	1/4W	R091	1-246-537-00	CARBON	470K	5%	1/4W	R702	1-246-485-00	CARBON	3.3K	5%	1/4W	R1092	1-246-503-00	CARBON	18K	5%	1/4W	
038	1-246-503-00	CARBON	18K	5%	1/4W	R092	1-246-505-00	CARBON	22K	5%	1/4W	R703	1-246-485-00	CARBON	3.3K	5%	1/4W	R1093	1-246-487-00	CARBON	3.9K	5%	1/4W	
039	1-246-489-00	CARBON	4.7K	5%	1/4W	R093	1-246-473-00	CARBON	1K	5%	1/4W	R704	1-246-461-00	CARBON	330	5%	1/4W	R1094	1-246-509-00	CARBON	33K	5%	1/4W	
040	1-246-511-00	CARBON	39K	5%	1/4W	R094	1-246-473-00	CARBON	1K	5%	1/4W	R705	1-246-459-00	CARBON	270	5%	1/4W	R1095	1-246-467-00	CARBON	560	5%	1/4W	
041	1-246-497-00	CARBON	10K	5%	1/4W	R095	1-246-473-00	CARBON	1K	5%	1/4W	R706	1-246-461-00	CARBON	330	5%	1/4W	R1096	1-246-497-00	CARBON	10K	5%	1/4W	
042	1-246-513-00	CARBON	47K	5%	1/4W	R096	1-246-489-00	CARBON	4.7K	5%	1/4W	R707	1-246-457-00	CARBON	220	5%	1/4W	VARIABLE RESISTOR						
043	1-246-505-00	CARBON	22K	5%	1/4W	R097	1-246-497-00	CARBON	10K	5%	1/4W	R708	1-246-457-00	CARBON	220	5%	1/4W	RV1091	1-222-807-XX	RES, ADJ, CARBON 20K				
044	1-246-505-00	CARBON	22K	5%	1/4W	R098	1-246-485-00	CARBON	3.3K	5%	1/4W	R709	1-246-457-00	CARBON	220	5%	1/4W							
045	1-246-489-00	CARBON	4.7K	5%	1/4W	R099	1-246-473-00	CARBON	1K	5%	1/4W	R710	1-206-692-00	METAL	15K	5%	2W	F						
046	1-246-489-00	CARBON	4.7K	5%	1/4W	VARIABLE RESISTOR						R711	1-206-692-00	METAL	15K	5%	2W	F						
047	1-246-505-00	CARBON	22K	5%	1/4W	RV001	1-224-645-XX	RES, ADJ, CARBON 10K				R712	1-206-692-00	METAL	15K	5%	2W	F						
048	1-202-667-00	COMPOSITION	8.2M	10%	1/2W							R713	1-202-585-00	COMPOSITION	3.3K	5%	1/2W							
049	1-246-509-00	CARBON	33K	5%	1/4W							R714	1-202-585-00	COMPOSITION	3.3K	5%	1/2W							
050	1-246-535-00	CARBON	390K	5%	1/4W							R715	1-202-585-00	COMPOSITION	3.3K	5%	1/2W							
051	1-246-509-00	CARBON	33K	5%	1/4W							R716	1-202-639-00	COMPOSITION	560K	10%	1/2W							
052	1-206-698-00	METAL	27K	5%	2W	A:1-1330-314-A C BOARD, COMPLETE						R717	1-202-645-00	COMPOSITION	1M	10%	1/2W	A:1-555-614-00 CONNECTOR ASSY (2.5MM) 3P						
053	1-246-485-00	CARBON	3.3K	5%	1/4W							R718	1-202-621-00	COMPOSITION	100K	10%	1/2W	A:4-342-076-00 HEAT SINK, V. OUT						
054	1-246-505-00	CARBON	22K	5%	1/4W							R719	1-202-635-00	COMPOSITION	390K	10%	1/2W	CAPACITOR						
055	1-246-537-00	CARBON	470K	5%	1/4W							R720	1-202-633-00	COMPOSITION	330K	10%	1/2W	C501 1-123-380-00 ELECT 1MF 20% 50V						
056	1-246-513-00	CARBON	47K	5%	1/4W							R721	1-202-619-00	COMPOSITION	82K	10%	1/2W	C502 1-123-333-00 ELECT 100MF 20% 16V						
057	1-246-509-00	CARBON	33K	5%	1/4W							R724	1-202-645-00	COMPOSITION	1M	10%	1/2W	C503 1-108-373-00 MYLAR 0.0047MF 10% 100V						
058	1-246-529-00	CARBON	220K	5%	1/4W													C504	1-108-373-00	MYLAR	0.0047MF	10%	100V	
059	1-246-473-00	CARBON	1K	5%	1/4W													C505	1-108-389-00	MYLAR	0.1MF	10%	100V	
060	1-246-485-00	CARBON	3.3K	5%	1/4W							VARIABLE RESISTOR						C506	1-108-385-00	MYLAR	0.047MF	10%	100V	
061	1-246-523-00	CARBON	120K	5%	1/4W							RV701	1-226-105-00	RES, ADJ, CARBON 220				C507	1-106-188-00	MYLAR	0.0047MF	5%	100V	
062	1-246-513-00	CARBON	47K	5%	1/4W							RV702	1-226-105-00	RES, ADJ, CARBON 220				C508	1-123-330-00	ELECT	22MF	20%	16V	
063	1-246-481-00	CARBON	2.2K	5%	1/4W							RV703	1-226-157-00	RES, ADJ, METAL GLAZE 1M				C509	1-123-363-00	ELECT	470MF	20%	50V	
064	1-246-521-00	CARBON	100K	5%	1/4W							RV704	1-226-114-00	RES, ADJ, METAL GLAZE 2.2M				C510	1-123-356-00	ELECT	10MF	20%	50V	
065	1-202-463-00	COMPOSITION	2.2M	5%	1/4W							SPARK GAP						C511	1-102-050-00	CERAMIC	0.01MF	50%	500V	
066	1-246-473-00	CARBON	1K	5%	1/4W							SG701	1-519-063-XX	DISCHARGING GAP				C512	1-123-356-00	ELECT	10MF	10%	50V	
067	1-246-503-00	CARBON	18K	5%	1/4W							SG702	1-519-063-XX	DISCHARGING GAP				C513	1-106-224-00	MYLAR	0.15MF	20%	100V	
069	1-246-523-00	CARBON	120K	5%	1/4W							SG703	1-519-063-XX	DISCHARGING GAP				C514	1-123-269-00	ELECT	4.7MF	20%	160V	
070	1-246-497-00	CARBON	10K	5%	1/4W							SG704	1-519-063-XX	DISCHARGING GAP				C515	1-108-425-00	MYLAR	0.022MF	10%	200V	
071	1-246-543-00	CARBON	820K	5%	1/4W							SG705	1-519-063-XX	DISCHARGING GAP				C516	1-129-708-00	FILM	0.0033MF	10%	630V	
072	1-246-529-00	CARBON	220K	5%	1/4W													C517	1-108-425-00	MYLAR	0.022MF	10%	200V	
073	1-246-461-00	CARBON	330	5%	1/4W							E2	A:1-551-854-00	CONNECTOR ASSY 1P				C518	1-108-393-00	MYLAR	0.22MF	10%	100V	
074	1-246-497-00	CARBON	10K	5%	1/4W							F5	A:1-551-450-00	CONNECTOR ASSY, 3P				C519	1-108-389-00	MYLAR	0.1MF	10%	100V	
075	1-246-499-00	CARBON	12K	5%	1/4W							COIL						C524	1-129-701-00	FILM	0.01MF	5%	100V	
076	1-246-503-00	CARBON	18K	5%	1/4W							L701	1-407-710-00	MICRO INDUCTOR 270UH				C526	1-106-188-00	MYLAR	0.0047MF	5%	100V	
077	1-246-489-00	CARBON	4.7K	5%	1/4W							NEON LAMP						C528	1-108-425-00	MYLAR	0.022MF	10%	200V	
078	1-246-537-00	CARBON	470K	5%	1/4W													C529	1-131-199-00	TANTALUM	10MF	20%	16V	
079	1-246-545-00	CARBON	1M	5%	1/4W													C530	1-123-345-00	ELECT	100MF	20%	35V	
080	1-246-545-00	CARBON	1M	5%	1/4W													C531	1-123-382-00	ELECT	3.3MF	20%	50V	
081	1-246-521-00	CARBON	100K	5%	1/4W							HL701	1-519-108-XX	LAMP, NEON ASSY				C532	1-123-330-00	ELECT	22MF	20%	25V	
082	1-246-531-00	CARBON	270K	5%	1/4W							TRANSFORMER						C1091	1-123-356-00	ELECT	10MF	20%	50V	
083	1-246-509-00	CARBON	33K	5%	1/4W							Q701	8-729-322-78	TRANSISTOR 2SC2278				C1092	1-123-380-00	ELECT	2.2MF	20%	50V	
084	1-246-509-00	CARBON	33K	5%	1/4W							Q702	8-729-322-78	TRANSISTOR 2SC2278				C536	1-108-375-00	MYLAR	0.0068MF	10%	100V	
085	1-246-497-00	CARBON	10K	5%	1/4W							Q703	8-729-322-78	TRANSISTOR 2SC2278				C539	1-108-637-00	MYLAR	0.082MF	10%	100V	
086	1-246-497-00	CARBON	10K	5%	1/4W													TRANSISTOR						
087	1-246-509-00	CARBON	33K	5%	1/4W													Q1091	8-729-178-54	TRANSISTOR 2SC22785				
088	1-246-473-00	CARBON	1K	5%	1/4W													C540	1-108-382-00	MYLAR	0.027MF	10%	100V	
																		C541	1-123-380-00	ELECT	1MF	20%	50V	
																		C542	1-123-369-00	ELECT	4.7MF	20%	50V	

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Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark	
C543	1-108-377-00	MYLAR 0.01MF 10% 100V		Q508	8-729-663-47	TRANSISTOR ZSC1364		R561	1-246-513-00	CARBON 47K 5% 1/4W		C806	1-108-383-00	MYLAR 0.033MF 10% 100V		
C544	1-108-389-00	MYLAR 0.1MF 10% 100V		Q509	8-729-663-47	TRANSISTOR ZSC1364		R562	1-246-463-00	CARBON 390 5% 1/4W		C807	1-108-387-00	MYLAR 0.068MF 10% 100V		
C545	1-108-369-00	MYLAR 0.0022MF 10% 100V		Q510	8-729-663-47	TRANSISTOR ZSC1364		R564	1-246-473-00	CARBON 1K 5% 1/4W		C809	1-130-272-00	FILM 0.033MF 5% 100V		
C546	1-102-030-00	CERAMIC 330PF 10% 500V		Q511	8-729-373-92	TRANSISTOR ZSB739		R565	1-246-493-00	CARBON 6.8K 5% 1/4W		C810	1-108-389-00	MYLAR 0.1MF 10% 100V		
C547	1-123-332-00	ELECT 47MF 20% 16V		Q512	8-729-117-54	TRANSISTOR ZSA1175		R566	1-246-486-00	CARBON 3.6K 5% 1/4W		C811	1-123-379-00	ELECT 0.47MF 20% 50V		
C548	1-123-380-00	ELECT 1MF 20% 50V		RESISTOR				R567	1-246-467-00	CARBON 560 5% 1/4W		C812	1-108-421-00	MYLAR 0.01MF 10% 200V		
C549	1-108-389-00	MYLAR 0.1MF 10% 100V		R501	1-246-497-00	CARBON 10K 5% 1/4W		R568	1-246-479-00	CARBON 1.8K 5% 1/4W		C813	1-102-228-00	CERAMIC 470PF 10% 500V		
C552	1-123-333-00	ELECT 100MF 20% 16V		R502	1-246-501-00	CARBON 15K 5% 1/4W		R570	1-246-486-00	CARBON 3.6K 5% 1/4W		C814	1-102-212-00	CERAMIC 820PF 10% 500V		
C597	1-102-030-00	CERAMIC 330PF 10% 500V		R503	1-246-490-00	CARBON 5.1K 5% 1/4W		R571	1-246-485-00	CARBON 3.3K 5% 1/4W		C815	1-102-223-00	CERAMIC 0.0047MF 20% 1.6V		
C599	1-102-030-00	CERAMIC 330PF 10% 500V		R504	1-246-497-00	CARBON 10K 5% 1/4W		R572	1-246-497-00	CARBON 10K 5% 1/4W		C817	1-123-333-00	ELECT 100MF 20% 16V		
CONNECTOR				R505	1-246-545-00	CARBON 1M 5% 1/4W		R573	1-246-507-00	CARBON 27K 5% 1/4W		C818	1-123-333-00	ELECT 100MF 20% 16V		
D1	1-508-767-00	5P PLUG		R506	1-246-511-00	CARBON 39K 5% 1/4W		R574	1-246-481-00	CARBON 2.2K 5% 1/4W		C820	1-123-310-00	ELECT 470MF 20% 10V		
D2	1-508-768-00	6P PLUG		R507	1-246-521-00	CARBON 100K 5% 1/4W		R575	1-213-126-00	METAL 39 5% 1W		C823	1-102-249-00	CERAMIC 680PF 20% 2KV		
D3	1-508-768-00	6P PLUG		R508	1-246-515-00	CARBON 56K 5% 1/4W		R576	1-246-449-00	CARBON 100 5% 1/4W		C824	1-130-157-00	FILM 1MF 5% 200V		
D4	1-508-768-00	6P PLUG		R509	1-214-791-00	METAL 220K 5% 1/4W		R579	1-246-461-00	CARBON 330 5% 1/4W		C826	1-129-949-00	FILM 1MF 5% 400V		
D7	1-508-765-00	3P PLUG (M)		R510	1-246-443-00	CARBON 56 5% 1/4W		R580	1-246-479-00	CARBON 1.8K 5% 1/4W		C827	1-108-437-00	MYLAR 0.22MF 10% 200V		
D8	1-508-765-00	3P PLUG (M)		R511	1-246-507-00	CARBON 27K 5% 1/4W		R581	1-246-505-00	CARBON 22K 5% 1/4W		C828	1-121-757-00	ELECT 33MF 20% 160V		
D9	1-508-784-00	1P PLUG		R512	1-246-481-00	CARBON 2.2K 5% 1/4W		R582	1-246-467-00	CARBON 560 5% 1/4W		C829	1-123-328-00	ELECT 4.7MF 20% 25V		
DIODE				R515	1-246-494-00	CARBON 7.5K 5% 1/4W		R583	1-246-503-00	CARBON 18K 5% 1/4W		C830	1-108-421-00	MYLAR 0.01MF 10% 200V		
D501	8-719-911-19	DIODE 1SS119		R516	1-246-483-00	CARBON 2.7K 5% 1/4W		R584	1-246-481-00	CARBON 2.2K 5% 1/4W		C831	1-108-433-00	MYLAR 0.1MF 10% 200V		
D503	8-719-900-93	DIODE V09C		R517	1-246-477-00	CARBON 1.5K 5% 1/4W		R585	1-246-457-00	CARBON 220 5% 1/4W		C832	1-108-389-00	MYLAR 0.1MF 10% 100V		
D504	8-719-911-19	DIODE 1SS119		R518	1-212-360-00	METAL 1 5% 1W	F	R590	1-246-517-00	CARBON 68K 5% 1/4W		C833	1-123-379-00	ELECT 0.47MF 20% 50V		
D505	8-719-300-76	DIODE RH-1A		R519	1-213-140-00	METAL 560 5% 1W	F	R592	1-244-875-00	CARBON 1.2K 5% 1/2W		C835	1-102-155-00	CERAMIC 330PF 20% 2KV		
D506	8-719-300-76	DIODE RH-1A		R520	1-213-142-00	METAL 820 5% 1W	F	VARIABLE RESISTOR				C836	1-102-249-00	CERAMIC 680PF 20% 2KV		
D507	8-719-900-93	DIODE V09C		R521	1-246-477-00	CARBON 1.5K 5% 1/4W		RV501	1-224-972-00	RES, VAR, CARBON (SNAP IN) 20K		C840	1-161-513-00	CERAMIC 470PF 20% 1.5V		
D508	8-719-113-25	DIODE RD13E-BZZ		R522	1-244-875-00	CARBON 1.2K 5% 1/2W		RV502	1-222-807-XX	RES, ADJ, CARBON 20K		DIODE				
D509	8-719-911-19	DIODE 1SS119		R523	1-217-394-00	FUSIBLE 39 5% 1/4W	F	RV503	1-221-970-XX	RES, ADJ, CARBON 500		D801	8-719-911-19	DIODE 1SS119		
D510	8-719-911-19	DIODE 1SS119		R524	1-211-930-00	CARBON 33 5% 1/8W	F	RV504	1-221-956-XX	RES, ADJ, CARBON 50K		D802	8-719-911-19	DIODE 1SS119		
D511	8-719-911-19	DIODE 1SS119		R525	1-211-409-00	CARBON 10 5% 1/4W	F	RV505	1-226-819-00	RES, ADJ, CARBON 1K		D803	8-719-926-20	DIODE ERB26-20		
D512	8-719-911-19	DIODE 1SS119		R526	1-212-361-00	METAL 1.2 5% 1W	F	RV506	1-222-807-XX	RES, ADJ, CARBON 20K		D805	8-719-900-93	DIODE V09C		
IC				R527	1-212-361-00	METAL 1.2 5% 1W	F	RV509	1-221-970-XX	RES, ADJ, CARBON 500		D806	8-719-900-93	DIODE V09C		
IC501	8-751-570-00	IC CX-157		R529	1-246-483-00	CARBON 2.7K 5% 1/4W		RV510	1-222-344-00	RES, ADJ, CARBON 5K		D810	8-719-305-15	DIODE GH3F		
COIL				R530	1-246-497-00	CARBON 10K 5% 1/4W		RV511	1-224-640-XX	RES, ADJ, CARBON 330		D811	8-719-928-08	DIODE ERD28-08		
L501	1-459-105-21	COIL (WITH CORE)		R531	1-244-925-00	CARBON 150K 5% 1/2W		TRANSFORMER				CONNECTOR				
L502	1-408-246-00	MICRO INDUCTOR 27MH		R532	1-246-497-00	CARBON 10K 5% 1/4W		T501	1-421-245-11	TRANSFORMER, PZN CUSHION		E1	1-508-768-00	6P PLUG		
L503	1-408-246-00	MICRO INDUCTOR 27MH		R533	1-246-483-00	CARBON 2.7K 5% 1/4W		THERMISTOR				E3	1-508-767-00	5P PLUG		
L506	1-408-242-00	MICRO INDUCTOR 10MH		R534	1-246-525-00	CARBON 150K 5% 1/4W		TH502	1-800-070-XX	THERMISTOR 5K		E5	1-508-784-00	1P PLUG		
L507	1-408-247-00	MICRO INDUCTOR 33MH		R538	1-246-497-00	CARBON 10K 5% 1/4W		TH503	1-800-378-00	THERMISTOR S-150		E6	1-508-786-00	2P PLUG (M)		
L508	1-435-055-21	COIL, PHASE ADJUST		R540	1-246-497-00	CARBON 10K 5% 1/4W		*****				COIL				
L510	1-407-188-XX	MICRO INDUCTOR 6.8UH		R541	1-246-429-00	CARBON 15 5% 1/4W		*****A-1345-271-A E BOARD, COMPLETE*****					L803	1-459-059-00	COIL, DUST CORE	
TRANSISTOR				R542	1-246-497-00	CARBON 10K 5% 1/4W		C801	1-123-356-00	ELECT 10MF 20% 25V		L805	1-408-225-00	MICRO INDUCTOR 3.3UH		
Q501	8-729-663-47	TRANSISTOR ZSC1364		R543	1-206-642-00	METAL 120 5% 2W	F	C802	1-108-369-00	MYLAR 0.0022MF 10% 100V		L806	1-407-365-00	COIL, CHOKE		
Q502	8-729-195-92	TRANSISTOR ZSC2959		R544	1-246-507-00	CARBON 27K 5% 1/4W		C803	1-130-228-00	FILM 0.01MF 3% 1.2KV		L808	1-408-225-00	MICRO INDUCTOR 3.3UH		
Q503	8-729-169-02	TRANSISTOR ZSC2690A-Q		R545	1-246-481-00	CARBON 2.2K 5% 1/4W		C804	1-102-030-00	CERAMIC 330PF 10% 500V		L809	1-408-225-00	MICRO INDUCTOR 3.3UH		
Q504	8-729-122-02	TRANSISTOR ZSA1220A-Q		R547	1-246-461-00	CARBON 330 5% 1/4W		C805	1-108-383-00	MYLAR 0.033MF 10% 100V		L810	1-459-125-00	COIL, HORIZONTAL LINEARITY		
Q506	8-729-374-02	TRANSISTOR ZSB740		R551	1-244-875-00	CARBON 1.2K 5% 1/2W						L811	1-459-263-00	COIL, MODULATION		
Q507	8-729-195-92	TRANSISTOR ZSC2959		R552	1-213-135-00	METAL 220 5% 1W	F					L812	1-408-241-00	MICRO INDUCTOR 8.2MH		
				R553	1-213-124-00	METAL 27 5% 1W	F					L814	1-407-365-00	COIL, CHOKE		
				R555	1-246-451-00	CARBON 120 5% 1/4W						L815	1-459-215-00	CORE COIL		
				R557	1-246-497-00	CARBON 10K 5% 1/4W										
				R558	1-246-483-00	CARBON 2.7K 5% 1/4W										
				R559	1-246-484-00	CARBON 3K 5% 1/4W										

Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark
<u>TRANSISTOR</u>				<u>DIODE</u>				<u>DIODE</u>				<u>DIODE</u>			
801	8-729-117-54	TRANSISTOR 2SA1175		Δ:1-600-397-11	J BOARD			LED404	8-719-812-43	DIODE TLR124		D151	8-719-110-32	DIODE PH302B	
802	Δ8-729-372-31	TRANSISTOR 2SC1723		*****				LED405	8-719-812-41	DIODE TLR124		<u>COIL</u>			
<u>RESISTOR</u>				1-592-036-11	PC BOARD, H COMBINED			LED406	8-719-812-41	DIODE TLR124		L151	1-409-315-00	COIL	
801	1-246-473-00	CARBON 1K 5% 1/4W		<u>CONNECTOR</u>				LED407	8-719-812-41	DIODE TLR124		<u>CONNECTOR</u>			
803	1-202-597-00	COMPOSITION 10K 5% 1/2W		A2	Δ:1-551-620-00	CONNECTOR ASSY, MINIATURE 4P		LED408	8-719-812-41	DIODE TLR124		<u>CONNECTOR</u>			
804	1-246-495-00	CARBON 8.2K 5% 1/4W		<u>DIODE</u>				<u>CONNECTOR</u>				M2	Δ:1-551-832-00	CONNECTOR ASSY 3P	
805	1-246-501-00	CARBON 15K 5% 1/4W		D451	8-719-922-19	DIODE 1SS119		M9	Δ:1-551-815-00	CONNECTOR ASSY 5P		<u>TRANSISTOR</u>			
806	1-246-491-00	CARBON 5.6K 5% 1/4W		<u>CONNECTOR</u>				M10	Δ:1-551-786-00	CONNECTOR 4P		Q151	Δ8-769-200-30	TRANSISTOR 2SK107-3	
807	1-246-473-00	CARBON 1K 5% 1/4W		<u>DIODE</u>				M12	Δ:1-551-797-00	CONNECTOR 7P		Q152	Δ8-729-178-54	TRANSISTOR 2SC2785	
808	1-246-479-00	CARBON 1.8K 5% 1/4W		M11	Δ:1-551-786-00	CONNECTOR 4P		M13	Δ:1-551-660-00	CONNECTOR ASSY 9P		Q153	Δ8-729-117-54	TRANSISTOR 2SA1175	
809	1-213-162-00	METAL 39K 5% 1W F		<u>RESISTOR</u>				R401	1-246-481-00	CARBON 2.2K 5% 1/4W		Q154	Δ8-729-178-54	TRANSISTOR 2SC2785	
810	1-246-437-00	CARBON 33 5% 1/4W		R451	1-246-537-00	CARBON 470K 5% 1/4W		R402	1-246-481-00	CARBON 2.2K 5% 1/4W		<u>RESISTOR</u>			
811	1-246-413-00	CARBON 3.3 5% 1/4W		<u>VARIABLE RESISTOR</u>				R403	1-246-461-00	CARBON 330 5% 1/4W		R151	1-246-497-00	CARBON 10K 5% 1/4W	
812	1-246-511-00	CARBON 39K 5% 1/4W		RV451	1-224-554-00	RES, VAR, CARBON 20K		R404	1-246-449-00	CARBON 100 5% 1/4W		R152	1-246-533-00	CARBON 330K 5% 1/4W	
813	1-246-465-00	CARBON 470 5% 1/4W		RV452	1-226-102-00	RES, VAR 5K		R405	1-246-481-00	CARBON 2.2K 5% 1/4W		R153	1-246-473-00	CARBON 1K 5% 1/4W	
814	1-246-467-00	CARBON 560 5% 1/4W		RV453	1-224-554-00	RES, VAR, CARBON 20K		<u>SWITCH</u>				R154	1-246-537-00	CARBON 470K 5% 1/4W	
815	1-246-521-00	CARBON 100K 5% 1/4W		<u>SWITCH</u>				S401	1-552-174-00	SWITCH, PUSH		R155	1-246-489-00	CARBON 4.7K 5% 1/4W	
816	1-206-733-00	METAL 2.2K 5% 3W F		S451	1-516-473-XX	AFT SWITCH		S402	1-552-174-00	SWITCH, PUSH		R156	1-246-489-00	CARBON 4.7K 5% 1/4W	
817	1-246-489-00	CARBON 4.7K 5% 1/4W		*****				S403	1-552-174-00	SWITCH, PUSH		R157	1-246-537-00	CARBON 470K 5% 1/4W	
818	1-202-635-00	COMPOSITION 390K 5% 1/2W		Δ:1-600-396-00	H BOARD			S404	1-552-174-00	SWITCH, PUSH		R158	1-246-489-00	CARBON 4.7K 5% 1/4W	
819	1-246-783-00	CARBON 1K 5% 1/8W F		*****				S405	1-552-174-00	SWITCH, PUSH		R159	1-246-537-00	CARBON 470K 5% 1/4W	
820	1-212-376-00	METAL 22 5% 1W F		Δ:1-526-634-00	SOCKET, IC (8P)			S406	1-552-174-00	SWITCH, PUSH		R160	1-246-501-00	CARBON 15K 5% 1/4W	
821	1-206-443-00	METAL 1.5 5% 2W F		1-592-036-11	PC BOARD, H COMBINED			S407	1-552-174-00	SWITCH, PUSH		<u>MISCELLANEOUS</u>			
822	1-202-589-00	COMPOSITION 4.7K 5% 1/2W		Δ:4-336-410-00	HOLDER, LED			S408	1-552-174-00	SWITCH, PUSH		Δ:1-226-271-00	RES ASSY, HIGH VOLTAGE		
824	1-212-360-00	METAL 1 5% 1W F		4-336-411-00	COVER, LED			S409	1-552-174-00	SWITCH, PUSH		1-452-032-00	MAGNET, DISC		
825	1-206-664-00	METAL 1K 5% 2W F		<u>CAPACITOR</u>				S410	1-552-174-00	SWITCH, PUSH		Δ:1-452-099-00	CRT NECK ASSY		
826	1-246-481-00	CARBON 2.2K 5% 1/4W		C401	1-161-051-00	CERAMIC 0.01MF 30% 25V		S411	1-552-174-00	SWITCH, PUSH		1-452-133-00	MAGNET		
827	1-213-133-00	METAL 150 5% 1W F		C402	1-161-051-00	CERAMIC 0.01MF 30% 25V		S412	1-552-174-00	SWITCH, PUSH		1-452-185-21	COIL ASSY, ETC		
828	1-206-443-00	METAL 1.5 5% 2W F		C403	1-161-051-00	CERAMIC 0.01MF 30% 25V		S413	1-552-174-00	SWITCH, PUSH		1-508-966-82	CONNECTOR ASSY (3P)		
832	1-202-597-00	COMPOSITION 10K 5% 1/2W		C404	1-161-051-00	CERAMIC 0.01MF 30% 25V		*****				Δ:1-509-778-00	CONNECTOR ASSY, 5P		
833	1-202-615-00	COMPOSITION 56K 5% 1/2W		C405	1-161-051-00	CERAMIC 0.01MF 30% 25V		1-600-399-11	X BOARD			Δ:1-509-779-00	6P CONNECTOR ASSY		
834	1-246-545-00	CARBON 1M 5% 1/4W		<u>DIODE</u>				1-592-036-11	PC BOARD, H COMBINED			Δ:1-509-779-00	6P CONNECTOR ASSY		
835	1-206-664-00	METAL 1K 5% 2W F		D401	8-719-815-55	DIODE 1S1555		Δ:4-330-112-00	CAP, SHIELD			Δ:1-509-780-82	CONNECTOR ASSY, 6P		
837	1-212-370-00	METAL 6.8 5% 1W F		<u>IC</u>				<u>CAPACITOR</u>				Δ:1-536-683-11	ANTENNA TERMINAL		
838	1-212-370-00	METAL 6.8 5% 1W F		IC401	8-759-997-64	IC SN29764N		C151	1-123-356-00	ELECT 10MF 20% 16V		Δ:1-509-812-00	CONNECTOR ASSY, 6P		
<u>VARIABLE RESISTOR</u>				IC402	8-759-619-03	IC M51903L		C152	1-161-269-00	CERAMIC 68PF 5% 50V		Δ:1-535-283-11	TERMINAL, EARTH		
V801	1-223-064-00	RES, ADJ, WIREWOUND 150		<u>DIODE</u>				C153	1-161-051-00	CERAMIC 0.01MF 30% 25V		Δ:1-536-683-11	CONNECTOR, COAXIAL ANTENNA		
<u>SPARK GAP</u>				<u>DIODE</u>				C154	1-108-377-00	MYLAR 0.01MF 10% 100V		Δ:1-551-270-11	CORD, POWER		
G801	1-519-063-XX	DISCHARGING GAP		<u>DIODE</u>				C155	1-123-356-00	ELECT 10MF 20% 16V		Δ:1-551-427-11	CORD, POWER, EARTH PLUG		
<u>TRANSFORMER</u>				<u>DIODE</u>				C156	1-123-356-00	ELECT 10MF 20% 16V		Δ:1-551-489-00	CABLE, WITH PIN		
801	1-405-760-00	COIL, OSC		LED401	Δ8-719-803-20	DIODE TLR320		C157	1-123-380-00	ELECT 1MF 20% 50V		Δ:1-551-611-00	CONNECTOR ASSY, MINI (2P)		
802	Δ1-439-244-00	TRANSFORMER ASSY, FLYBACK		LED402	8-719-812-41	DIODE TLR124		C159	1-161-269-00	CERAMIC 68PF 5% 50V		Δ:1-551-670-00	CONNECTOR ASSY, MINIATURE 1P		
803	1-437-078-00	TRANSFORMER, HORIZONTAL DRIVE		LED403	8-719-812-42	DIODE TLY124						Δ:1-551-683-00	CONNECTOR ASSY, MINIATURE 3P		
												Δ:1-551-686-00	CONNECTOR ASSY 5P		
												Δ:1-551-832-00	CONNECTOR ASSY 3P		
												Δ:1-551-956-00	CONNECTOR ASSY, MINIATURE 3P		

STANDARD PARTS LIST

ELECTROLYTIC CAPACITORS

CAP. (μF)	RATING → Use the high voltage rated one.						
	6.3 VOLT.	10 VOLT.	16 VOLT.	25 VOLT.	35 VOLT.	50 VOLT.	63 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.47							
1.0							
2.2							
3.3							
4.7							1-123-369-00
10						1-123-356-00	1-123-370-00
22				1-123-330-00		1-123-357-00	1-123-371-00
33	→	→	1-123-318-00		1-123-343-00		1-123-372-00
47	→	1-123-306-00		1-123-332-00	→	1-123-359-00	1-123-373-00
100	→	1-123-307-00	→	1-123-333-00	1-123-345-00	1-123-360-00	1-123-374-00
220	→	1-123-308-00	1-123-321-00	1-123-334-00	1-123-346-00	1-123-361-00	1-123-375-00
330	→	1-123-309-00	1-123-322-00	1-123-335-00	1-123-347-00	1-123-362-00	1-123-376-00
470	1-123-298-00	1-123-310-00	1-123-323-00	1-123-336-00	1-123-348-00	1-123-363-00	1-123-377-00
1000	1-123-299-00	1-123-311-00	1-123-324-00	1-123-337-00	1-123-349-00	1-123-364-00	1-123-378-00
2200	1-123-300-00	→	1-123-325-00	1-123-338-00	1-123-350-00		
3300	1-123-301-00	1-123-313-00	1-123-326-00	1-123-339-00			
4700	1-123-302-00	1-123-314-00	1-123-327-00				
6800	1-123-303-00	1-123-315-00					
10000	1-123-304-00						

CAP. (μF)	100 VOLT.	160 VOLT.	250 VOLT.	350 VOLT.
	PART No.	PART No.	PART No.	PART No.
0.47	1-123-379-00			
1.0	1-123-380-00	1-123-252-00	1-123-003-00	1-121-168-00
2.2	1-123-381-00	1-123-026-00	1-123-027-00	1-123-028-00
3.3	1-123-382-00	1-121-707-00	1-123-004-00	1-123-006-00
4.7	1-123-383-00	1-121-246-00	1-121-759-00	1-123-007-00
10	1-123-384-00	1-121-999-00	1-123-254-00	1-123-008-00
22	1-123-385-00	1-123-253-00	1-123-005-00	1-123-021-00
33	1-123-386-00	1-121-757-00		
47	1-123-387-00	1-121-919-00		
100	1-123-388-00			
220	1-123-389-00			
330	1-123-390-00			
470	1-123-391-00			

CERAMIC CAPACITORS

CAP. (pF)	RATING						
	50 VOLT.	50 VOLT.	50 VOLT.	50 VOLT.	50 VOLT.	50 VOLT.	50 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.5	1-101-837-00	22	1-102-959-00	150	1-101-361-00	0.001	1-102-074-00
0.75	1-101-586-00	24	1-102-960-00	160	1-101-367-00	0.0012	1-102-118-00
1.0	1-102-954-00	27	1-102-961-00	180	1-102-976-00	0.0015	1-102-119-00
1.5	1-101-576-00	30	1-102-962-00	200	1-102-977-00	0.0018	1-102-120-00
2.0	1-102-955-00	33	1-102-963-00	220	1-102-978-00	0.0022	1-102-121-00
3	1-102-936-00	36	1-102-964-00	240	1-102-979-00	0.0027	1-102-122-00
4	1-102-937-00	39	1-102-965-00	270	1-102-980-00	0.0033	1-102-123-00
5	1-102-942-00	43	1-102-966-00	300	1-102-981-00	0.0039	1-102-124-00
6	1-102-943-00	47	1-101-880-00	330	1-102-820-00	0.0047	1-102-125-00
7	1-102-944-00	51	1-101-882-00	360	1-102-821-00	0.0056	1-102-126-00
8	1-102-945-00	56	1-101-884-00	390	1-102-822-00	0.0068	1-102-127-00
9	1-102-946-00	62	1-101-886-00	430	1-102-823-00	0.0082	1-102-128-00
10	1-102-947-00	68	1-101-888-00	470	1-102-824-00	0.01	1-102-129-00
11	1-102-948-00	75	1-101-890-00	510	1-101-059-00	0.012	1-101-003-00
12	1-102-949-00	82	1-102-971-00	560	1-102-115-00	0.047	1-101-006-00
13	1-102-950-00	91	1-102-972-00	680	1-102-116-00		
15	1-102-951-00	100	1-102-973-00	820	1-102-117-00		
16	1-102-952-00	110	1-102-815-00				
18	1-102-953-00	120	1-102-816-00				
20	1-102-958-00	130	1-101-081-00				

MYLAR CAPACITORS

CAP. (μF)	RATING						
	50 VOLT.	100 VOLT.	200 VOLT.	50 VOLT.	100 VOLT.	200 VOLT.	50 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.001	1-108-227-00	1-108-365-00	1-108-409-00	0.01	1-108-239-00	1-108-377-00	1-108-421-00
0.0012	1-108-351-00	1-108-366-00	1-108-410-00	0.012	1-108-337-00	1-108-378-00	1-108-422-00
0.0015	1-108-218-00	1-108-367-00	1-108-411-00	0.015	1-108-340-00	1-108-379-00	1-108-423-00
0.0018	1-108-352-00	1-108-368-00	1-108-412-00	0.018	1-108-318-00	1-108-380-00	1-108-424-00
0.0022	1-108-230-00	1-108-369-00	1-108-413-00	0.022	1-108-242-00	1-108-381-00	1-108-425-00
0.0027	1-108-353-00	1-108-370-00	1-108-414-00	0.027	1-108-339-00	1-108-382-00	1-108-426-00
0.0033	1-108-232-00	1-108-371-00	1-108-415-00	0.033	1-108-244-00	1-108-383-00	1-108-427-00
0.0039	1-108-354-00	1-108-372-00	1-108-416-00	0.039	1-108-360-00	1-108-384-00	1-108-428-00
0.0047	1-108-234-00	1-108-373-00	1-108-417-00	0.047	1-108-246-00	1-108-385-00	1-108-429-00
0.0056	1-108-355-00	1-108-374-00	1-108-418-00	0.056	1-108-361-00	1-108-386-00	1-108-430-00
0.0068	1-108-237-00	1-108-375-00	1-108-419-00	0.068	1-108-249-00	1-108-387-00	1-108-431-00
0.0082	1-108-356-00	1-108-376-00	1-108-420-00	0.082	1-108-362-00	1-108-388-00	1-108-432-00

0.001μF = 1,000pF

Ref.No	Part No	Description	Remark	Part No	Description	Remark
	4:1-555-348-00	CONNECTOR, MINIATURE 1P				
	4:1-561-023-00	CONNECTOR ASSY 6P				
	1-800-070-XX	THERMISTOR 5K				
C901	1-130-334-00	CAP, MEDIUM-VOLT FILM 1000P 2KV				
C902	1-108-377-00	CAP, MYLAR 0.01MF 100V				
C903	1-121-257-00	CAP, ELECT 4.7MF 16V				
J901A	1-507-539-11	JACK, JM35A				
J901B	1-507-539-11	JACK, JM35A				
L901A	1-426-034-00	COIL, DEGAUSS				
L902A	1-426-034-00	COIL, DEGAUSS				
L904A	1-451-175-21	DEFLECTION YOKE (5Y,88V)				
L907	1-407-780-00	COIL, SPOOK CHOKE 3.3UH				
Q901	8-729-372-51	TRANSISTOR 2SD725				
Q902	8-726-420-00	THYRISTOR SG264A				
R901	1-202-549-00	RES, SOLID 100 1/2W				
R904	1-207-457-00	RES, WIRE .33				
R904	1-207-462-00	RES, WIRE .82				
R904	1-207-465-00	RES, WIRE 1.50				
R904	1-207-469-00	RES, WIRE 3.30				
R906	1-246-513-00	RES, CARBON 47K 1/3W				
S901A	1-552-116-00	SWITCH, PUSP				
SP901	1-502-666-00	SPEAKER				
T901A	1-127-402-00	TRANSFORMER, SOUND OUTPUT				
V901A	8-737-606-05	PICTURE TUB				

ACCESSORIES AND PACKING MATERIALS

Part No	Description	Remark
1-504-034-72	MAGNETIC EARPHONE ME-20	
3-701-627-00	BAG, POLYETHYLENE	
4-495-824-11	MANUAL, INSTRUCTION	
4-323-939-00	SPACER	
4-323-940-00	SHEET, PROTECTION	
4-337-109-00	CUSHION (UPPER) (ASSY)	
4-323-926-00	CUSHION (UPPER RIGHT)	
4-323-927-00	CUSHION (UPPER LEFT)	
4-337-110-00	CUSHION (LOWER) (ASSY)	
4-323-928-00	CUSHION (LOWER RIGHT)	
4-323-929-00	CUSHION (LOWER LEFT)	
4-352-411-00	INDIVIDUAL CARTON	
6-047-001-10	HANDLE	

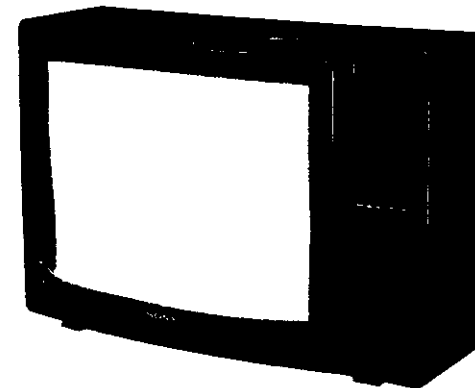
KV2204E/CE

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KV-2204EC

Belgium Model

Chassis No. SCC-216C-A



TRINITRON®
COLOR TV

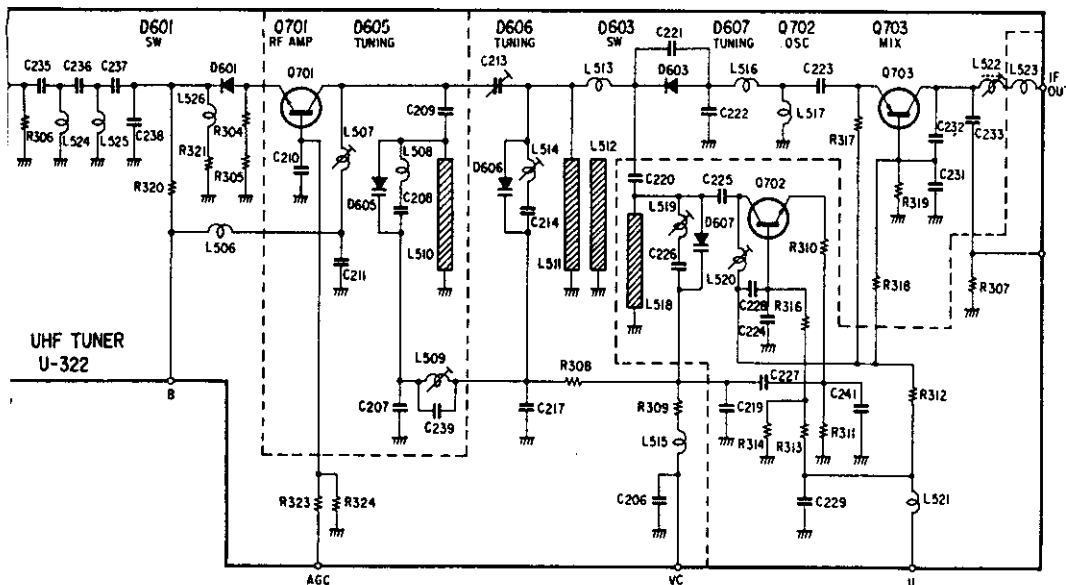
SPECIFICATIONS

Television System:	CCIR system B, G and H
Color System:	PAL
Picture Tube:	56 cm, 22" (53.8 cm screen measured diagonally), 114° deflection TRINITRON system
Semiconductors:	63 transistors, 2 FETs, 16 ICs, 85 diodes and 1 GCS (Gate Controlled Switch)
Antennas:	75 Ω standard antenna socket
Channel Coverage:	VHF channels: LOW (45 – 110 MHz) HIGH (110 – 280 MHz) UHF channels: E21 – 68
Intermediate Frequencies:	Picture i-f carrier: 38.9 MHz Color subcarrier: 34.47 MHz Sound i-f carrier: 33.4 MHz
Sound System:	5.5 MHz intercarrier Output power: 2 W (at 10 % harmonic distortion) Speaker: 12 cm (4½ inches) dia., 8 Ω
Video System:	R, G, B cathode drive
Automatic Controls:	ABL (automatic brightness limiter) ACC (automatic color control) ACK (automatic color killer) ADG (automatic degaussing) AFC (automatic frequency control) AFT (automatic fine tuning) AGC (automatic gain control) ANC (automatic noise canceller) APC (automatic phase control) AVR (automatic voltage regulator)

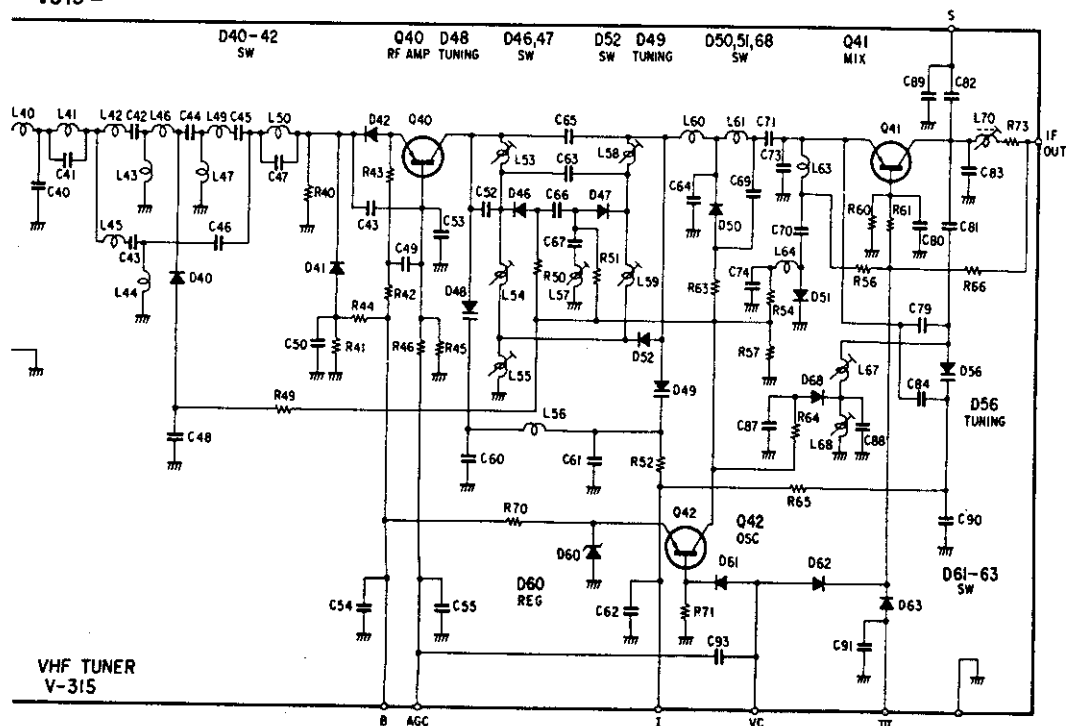
Note: KV-2204EC is much the same to KV-2204E, so this service manual has only different portions.
Refer to the KV-2204E Service Manual for related information (block diagram, disassembly, setup and circuit adjustments, mounting diagrams, exploded views, electrical parts list).

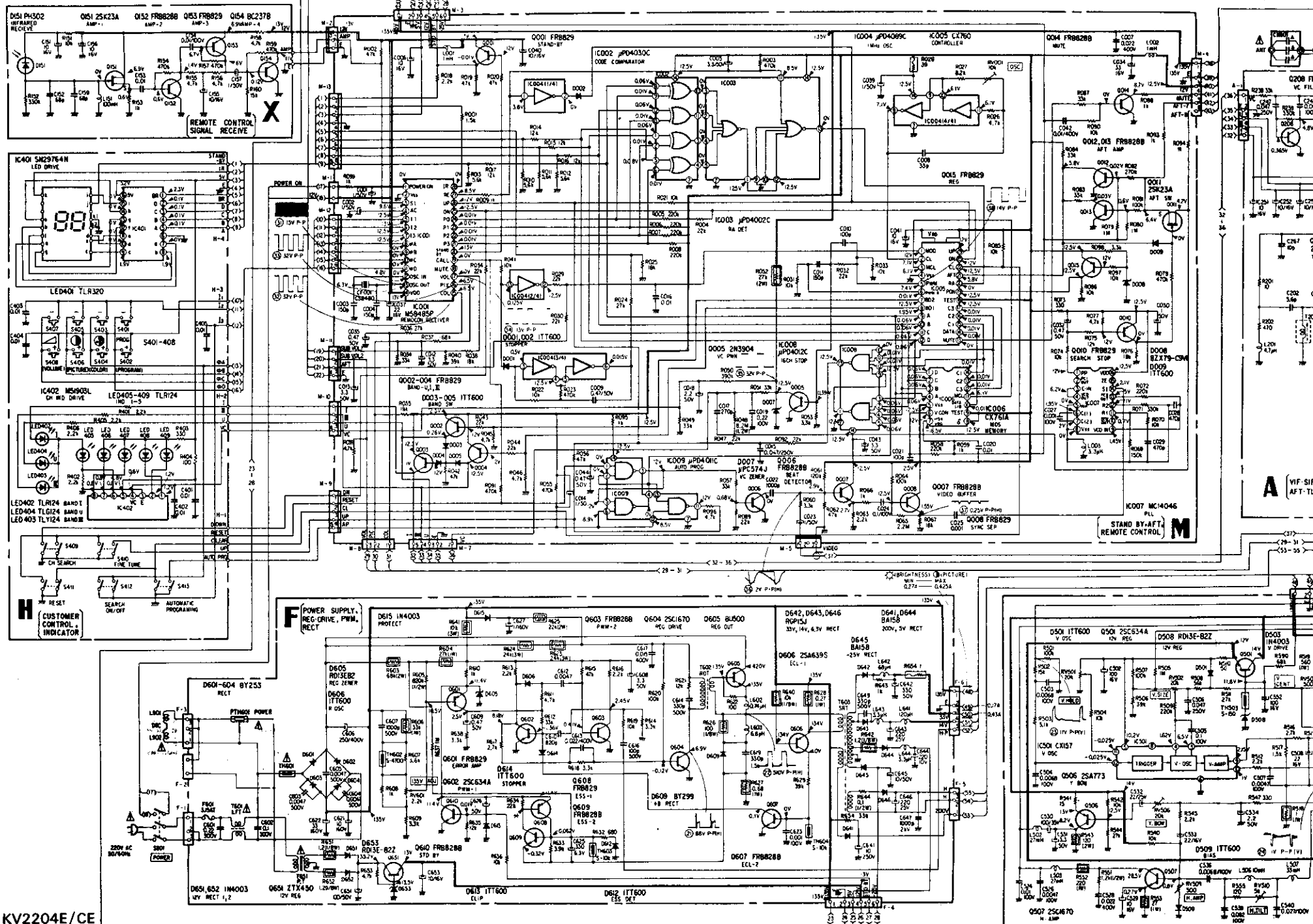
KV2204E/CE
225

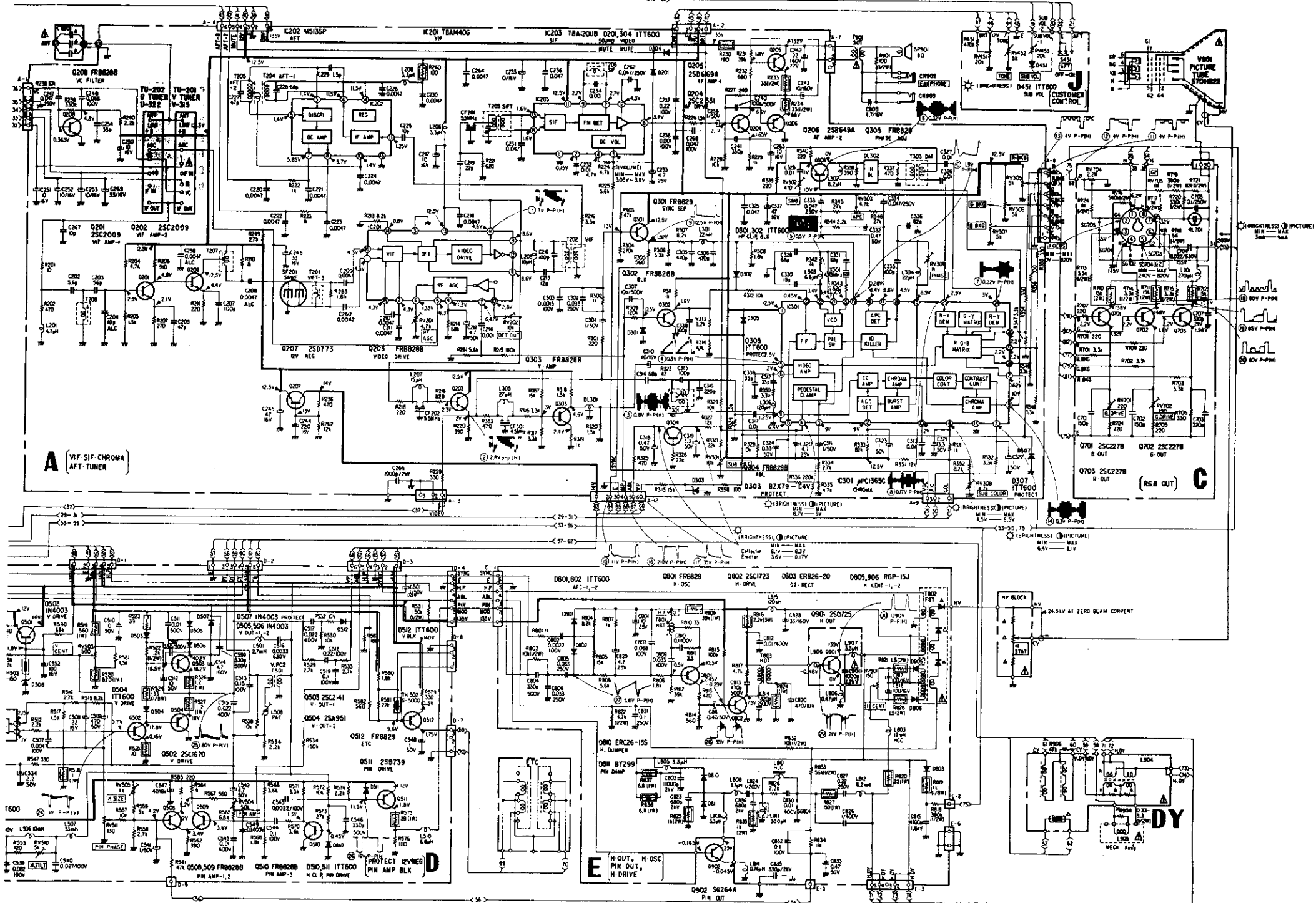
HF TUNER
U322 -



VHF TUNER
- V315 -







ELECTRICAL PARTS LIST

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
A BOARD			
	▲ A-1295-356-A	A Board, complete	
CAPACITORS			
C216	1-102-529-00	100p	
C217	1-123-316-00	10 16V elect	
C218	1-161-328-00	0.0047	
C269	1-123-318-00	33 16V elect	
C337	1-123-319-00	47 16V elect	
C338	1-161-271-00	100p	
DIODE			
→ D307	8-719-815-55	1S1555	
COILS			
L305	1-407-743-00	27μH	
L306	1-407-753-00	180μH	
C BOARD			
RESISTOR			
R719	1-202-635-00	390k ½W	

• Items marked "▲" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
D BOARD			
CAPACITORS			
C513	1-130-243-00	0.15 100V film	
C529	1-131-199-00	10 16V tantalum	
C541	1-123-352-00	1 50V elect	
C542	1-123-355-00	4.7 50V elect	
C545	1-108-618-00	0.0022 100V mylar	
C549	1-130-242-00	0.10 100V film	
C599	1-102-030-00	330p 500V	
RESISTOR			
R523	1-217-394-00	39 ¼W carbon (nonflammable)	
E BOARD			
CAPACITOR			
C833	1-123-351-00	0.47 50V elect	
COIL			
L805	1-408-225-00	3.3μH	

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
RESISTORS			
R821	1-206-443-00	1.5 1W metal oxide (nonflammable)	
R828	1-206-443-00	1.5 1W metal oxide (nonflammable)	
R837	1-212-370-00	6.8 1W metal oxide (nonflammable)	
R838	1-212-370-00	6.8 1W metal oxide (nonflammable)	
F BOARD			
RESISTORS			
R644	1-207-451-00	10 ½W wirewound	
R645	1-217-375-00	1 ¼W fusible	
M BOARD			
CAPACITOR			
C011	1-161-313-00	150p	
DIODE			
→ D009	8-719-815-55	1S1555	
MISCELLANEOUS			
TU201	▲ 1-463-244-00	VHF Tuner, V315	
V901	▲ 8-737-606-05	Picture Tube, 570HB22	
	1-533-149-00	Holder, fuse	
	▲ 1-535-283-00	Terminal, ground	
	▲ 1-535-489-00	Cable with Pin	
	1-535-506-21	Terminal, press	
	▲ 1-551-270-00	Cord, power; parallel blade	
	▲ 1-551-427-11	Cord, power; euro plug	

ACCESSORIES AND PACKING MATERIALS

<u>Part No.</u>	<u>Description</u>
3-701-360-00	Label, tack
4-491-416-12	Leaflet, instruction