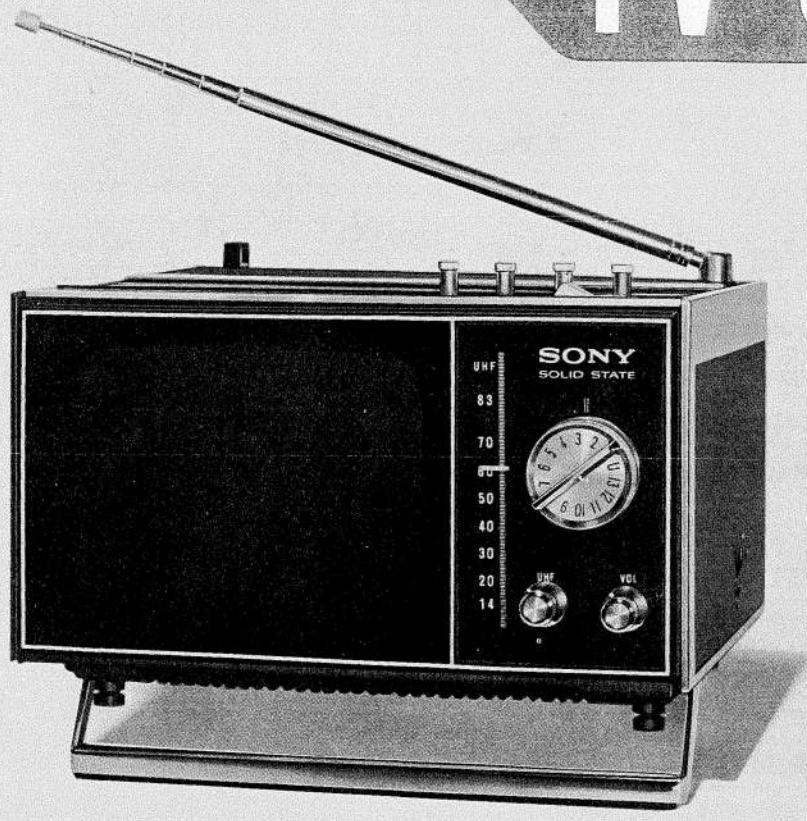
TV-500U



Specifications

Picture Tube:	5″, 70° Deflection, Aluminized Screen Direct Heating Cathode
Transistor:	22 (9 Silicon 13 Germanium)
Diode:	16 (including 4 Selenium)
Channel Coverage:	A2—A13 in VHF Band and A14—A83 in UHF Band
Tuner:	Disc Turret Type for VHF Band and Continuous Tuning Type for UHF Band
Maximum Sensitivity:	VHF 5μV (10 Vpp at Picture Tube Cathode) UHF 5μV (10 Vpp at Picture Tube Cathode)
IF Circuit:	3 Stages with 4 Stagger Tuned Elements Video IF 45.75 Mc, Sound IF 41.25 Mc, Band Width 3.1 Mc
Sound System:	4.5 Mc Intercarrier System Power Output Stage; OTL System, 300 mW Speaker 2¾″×4″, 40Ω Voice Coil
Automatic Control:	Forward AGC, Pulse-operated AGC, Diode AFC, (Automatic Noise Suppressor)
Power Requirements:	AC 117 V, 60 c/s, DC 12 V Battery
Power Consumption:	AC 14.0 W (maximum) DC 8.2 W (maximum)
Dimensions:	8⅛″ (W)×8⅝″ (D)×5⅛″ (H)
Weight:	9 lbs. 8 ozs.

SONY®

SERVICING GUIDE

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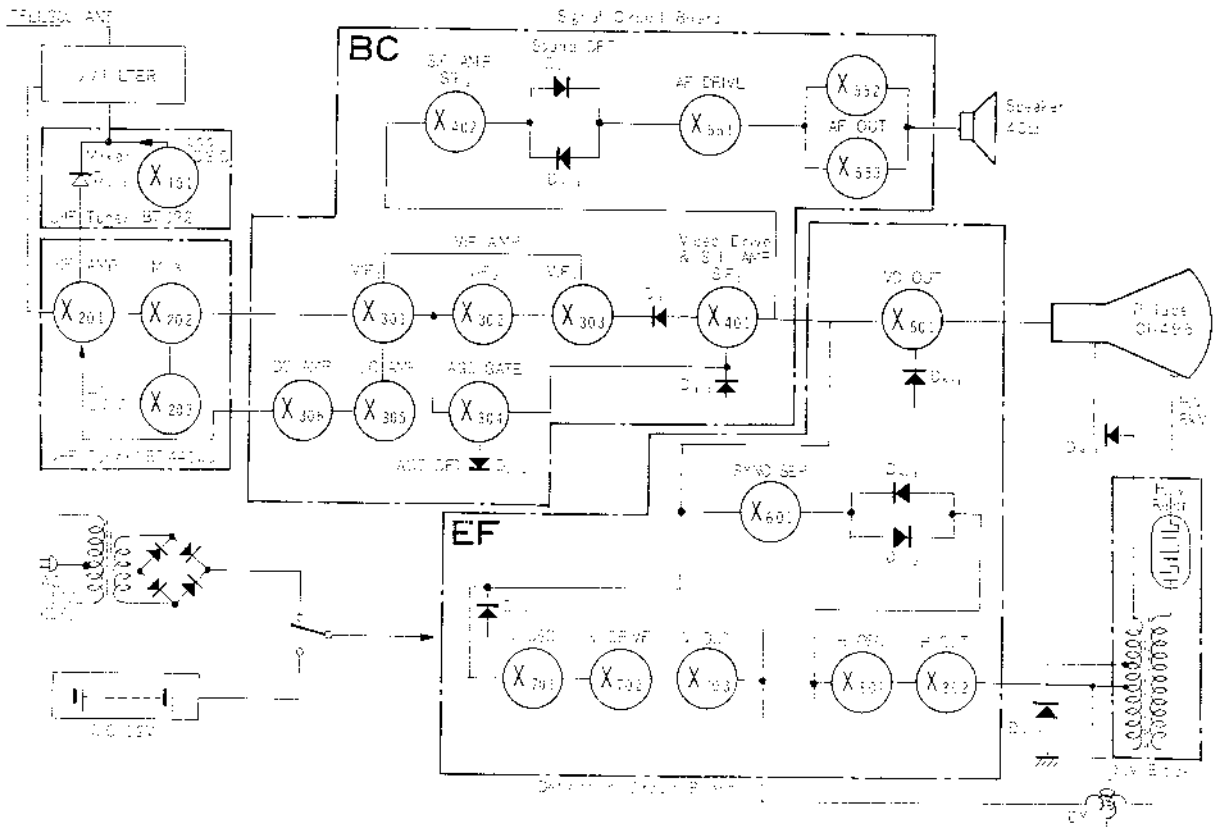
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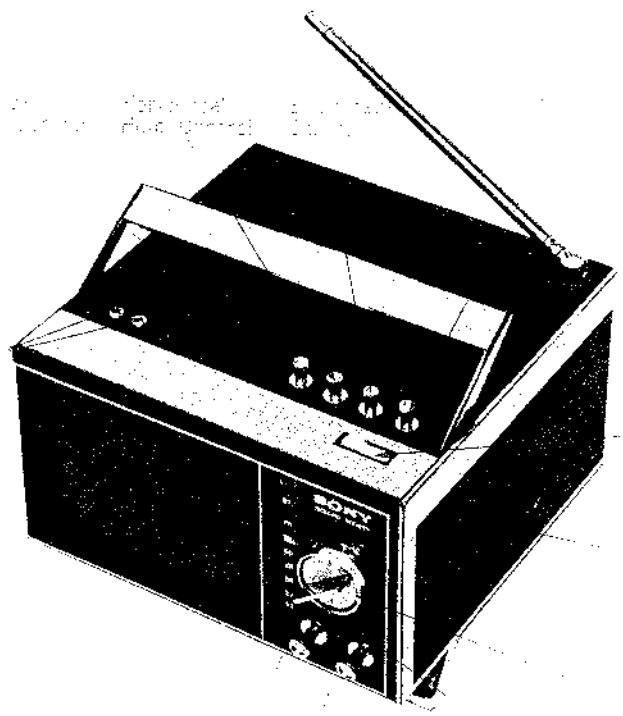

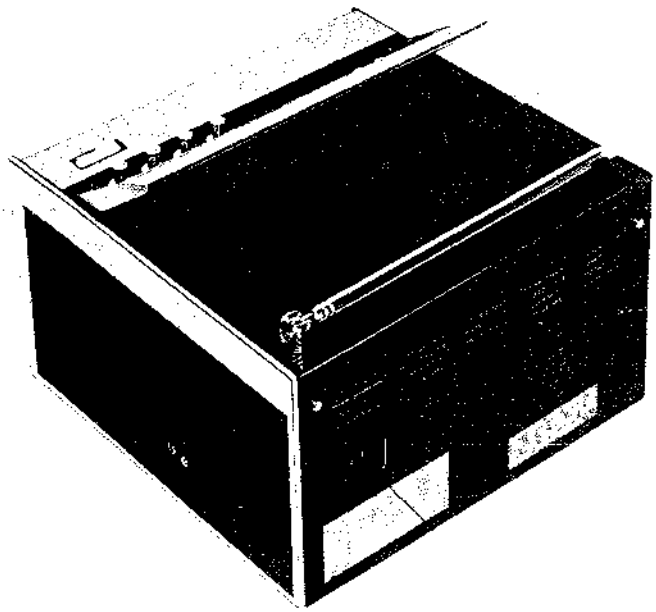

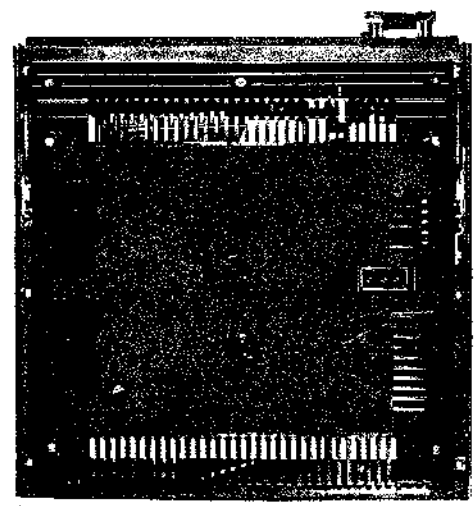

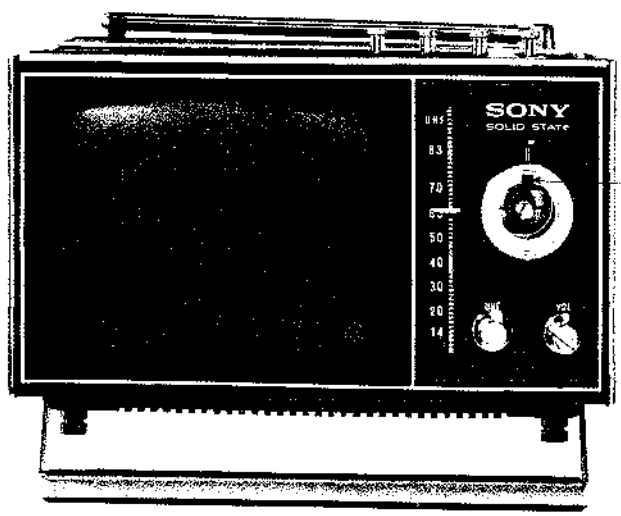
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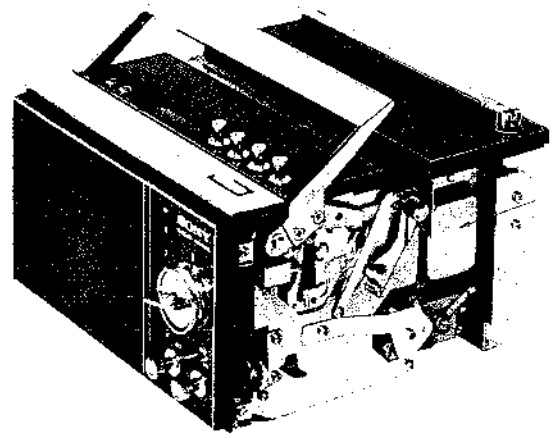
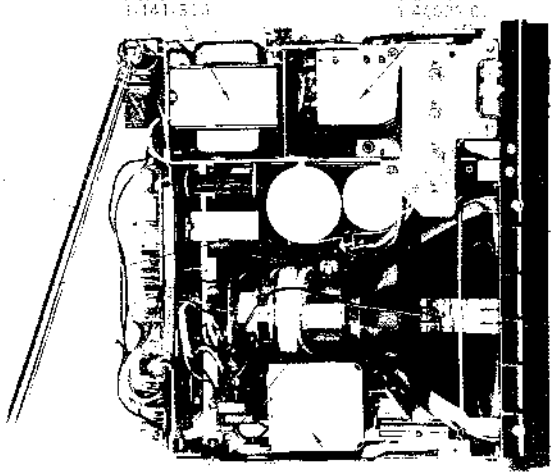
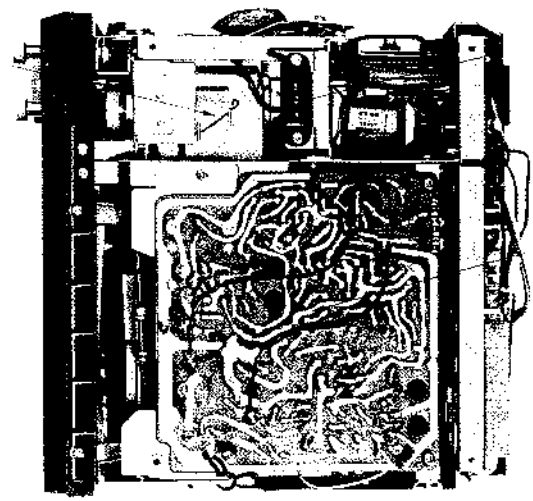
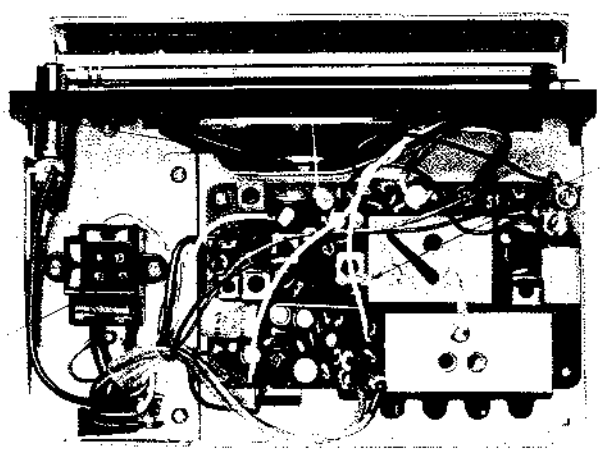






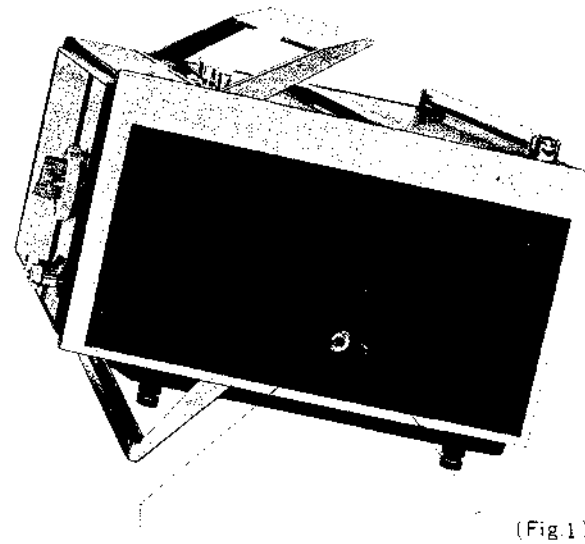


To Remove the Rear Cabinet Cover

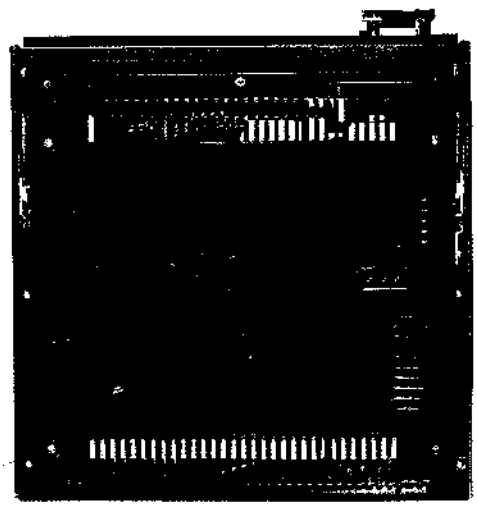
(1) Remove the Screws (in Fig. 1).

(2) Remove the Antenna Jack Nut (in Fig. 1).

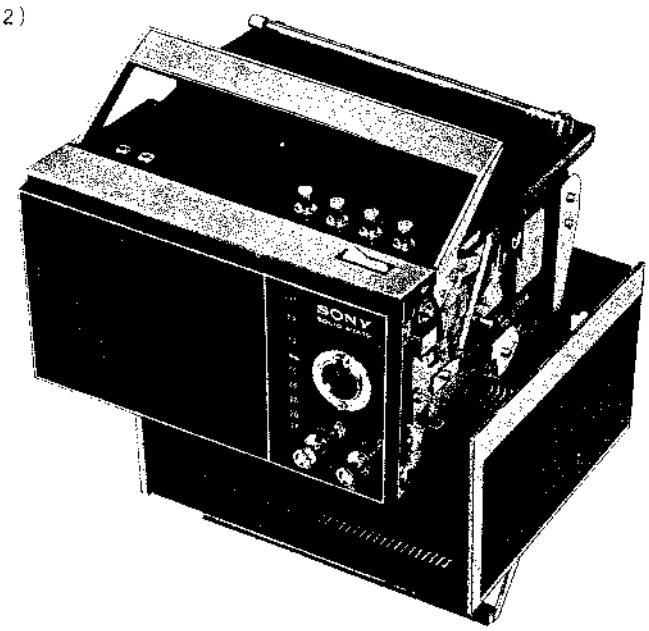
(3) Remove the four Feet (and in Fig. 2).



(Fig. 1)

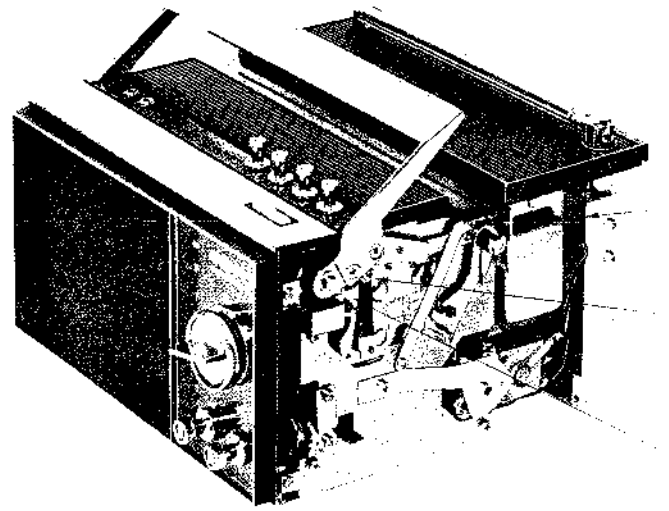


(Fig. 2)

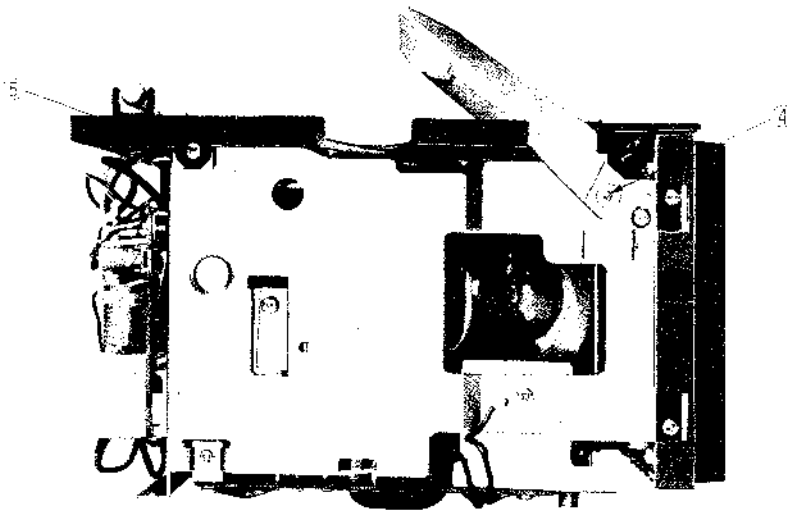


To Remove the Upper Cabinet Cover
(For the Set up to Serial No. 16,500)

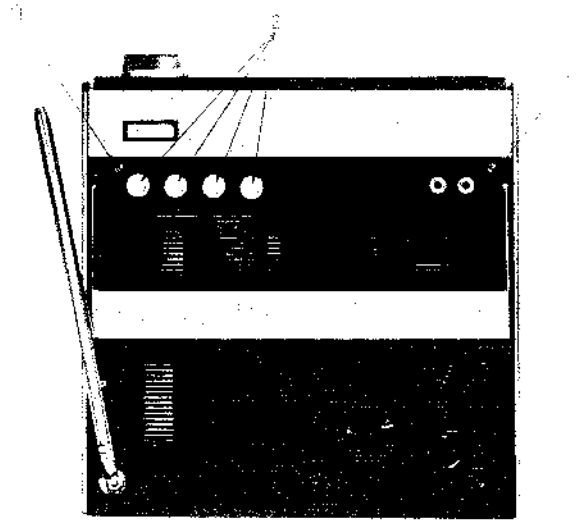
(1) Remove the Rear Cabinet Cover.
(2) Remove the five Screws (①, ②, ③, ④ and ⑤ in Fig. 3, 4).
(3) Pull four Control Knobs Straight out (② in Fig. 5).
(4) Remove the two Screws (① ③ in Fig. 5).



(Fig. 3)



(Fig. 4)



(Fig. 5)

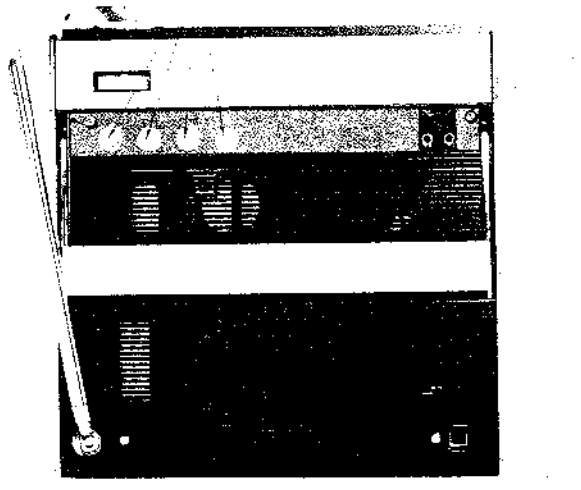
To Remove the Upper Cabinet Cover
(Serial No. 16,501 and After)

(1) Remove the four Screws (, and in Fig. 6).

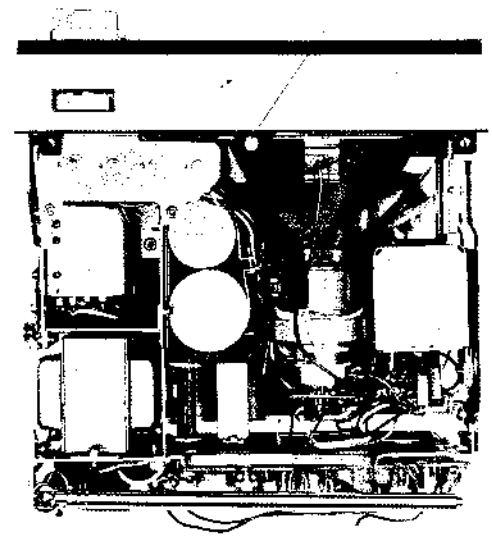
(2) Pull four Control Knobs Straight out (in Fig. 6).

To Remove the Upper Ornamental Plate

(1) Remove the Screws (in Fig. 7).



(Fig. 6)



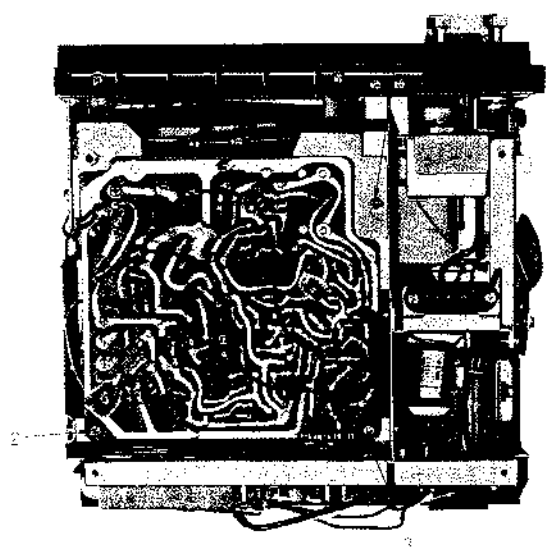
(Fig. 7)

To Remove the Deflection Circuit Board

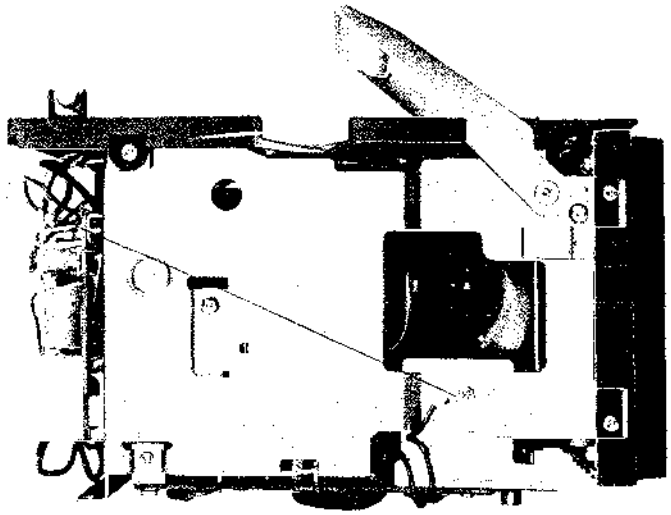
(1) Remove the four Screws (and in Fig. 8, 9).

(2) Pull out the six Connectors (, , , , and in Fig. 10).

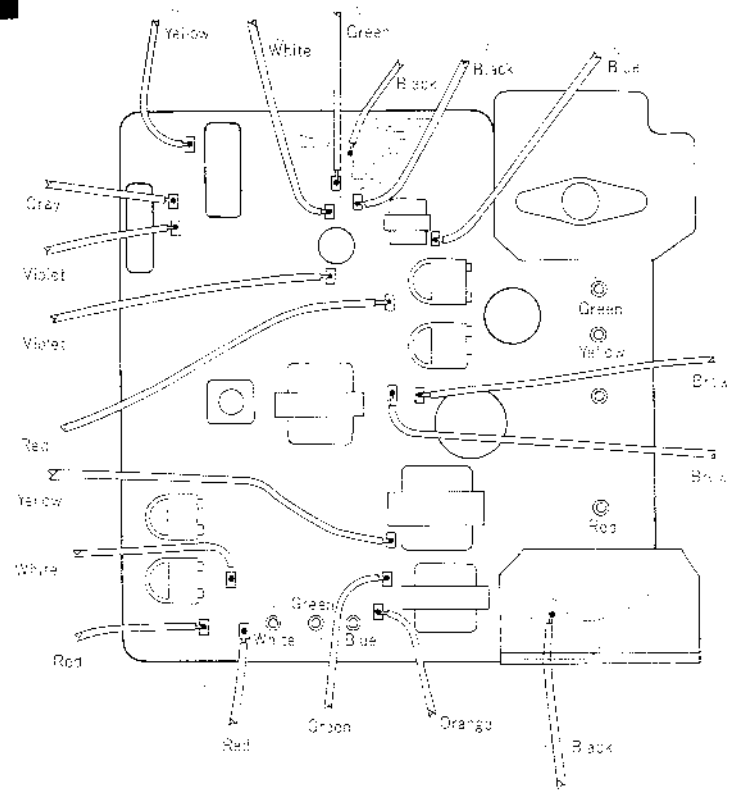
(3) Unsolder the nineteen Leads (~ in Fig. 10).



(Fig. 8)



(Fig. 9)

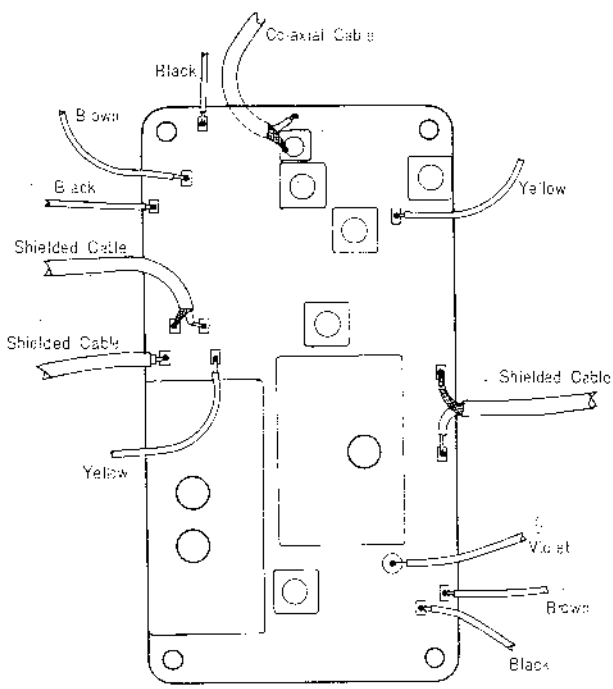


(Fig. 10)

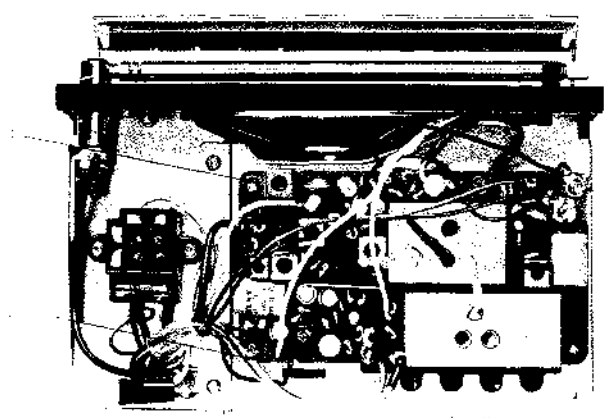
To Remove the Signal Circuit Board

(1) Unsolder the two Shielded Leads, one Co-ax Cable and eight Leads (~ , in Fig. 11).

(2) Remove the three Screws (, and in Fig. 12).



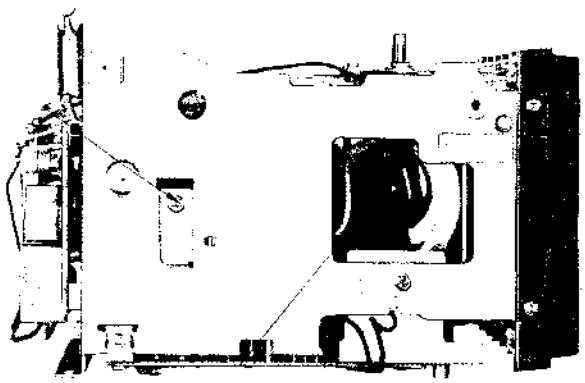
(Fig. 11)



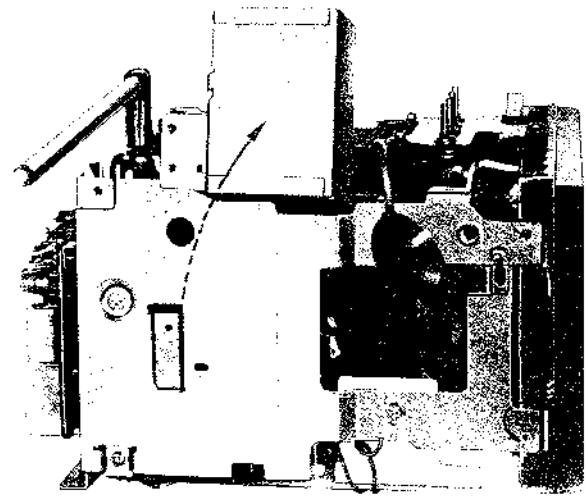
(Fig. 12)

To Remove the High Voltage Block

(1) Remove the three Screws (. . and in Fig. 13).
(2) Remove the Anode Cap (in Fig. 13).
(3) Pull out High Voltage Block from the Chassis (Fig. 14).
(4) Unsolder all the corresponding Leads on the High Voltage Block.



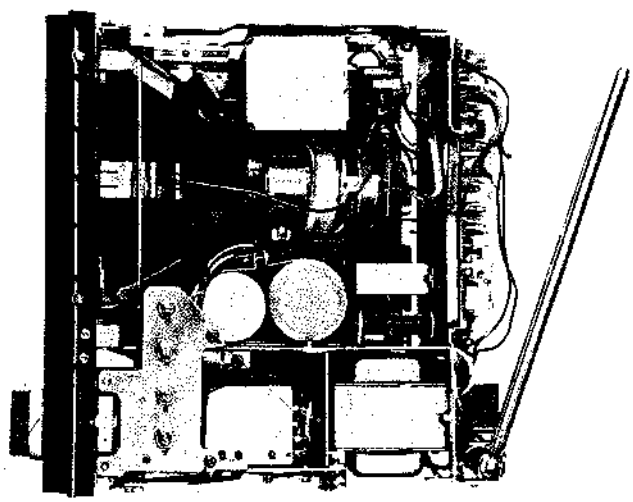
(Fig. 13)



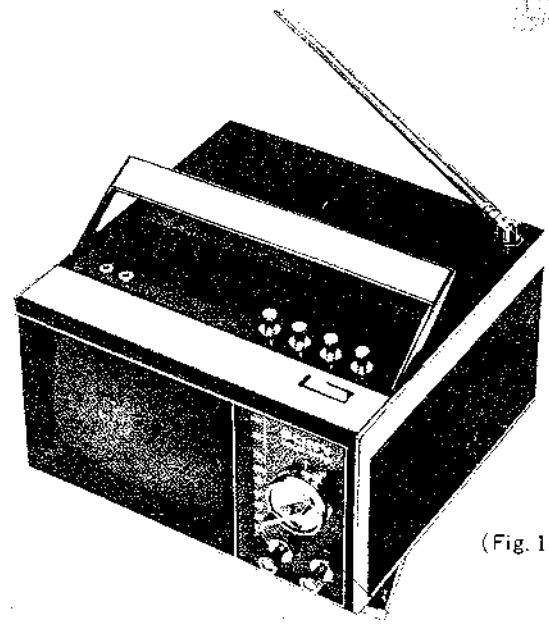
(Fig. 14)

To Remove the Tuner Block

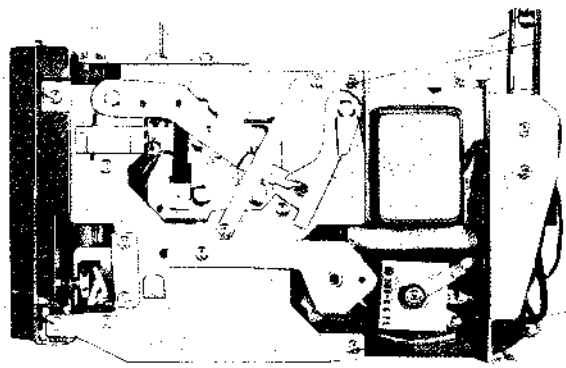
(1) Remove the Potentiometer Holding Plate by removing two Screws (in Fig. 15).
(2) Pull out VHF Channel Selector Knob, VHF Fine Tuning Knob, UHF Tuning Knob and Volume Control Knob (Fig. 16).
(3) Remove the six Screws (. and in Fig. 15, 17 and 18).
(4) Tuner block can now be detached from the Chassis.



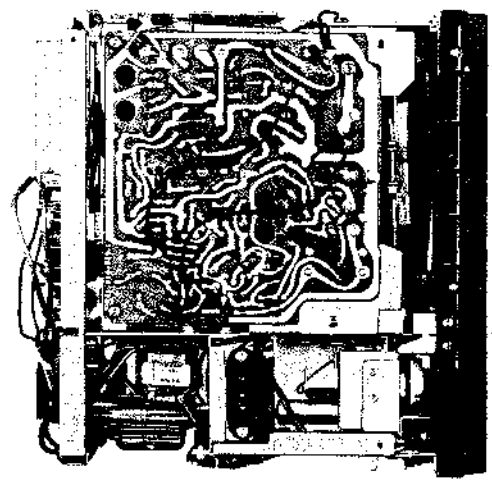
(Fig. 15)



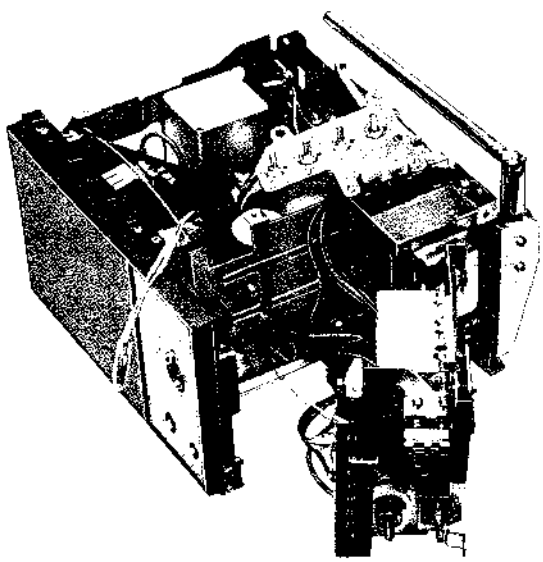
(Fig. 16)



(Fig. 17)



(Fig. 18)

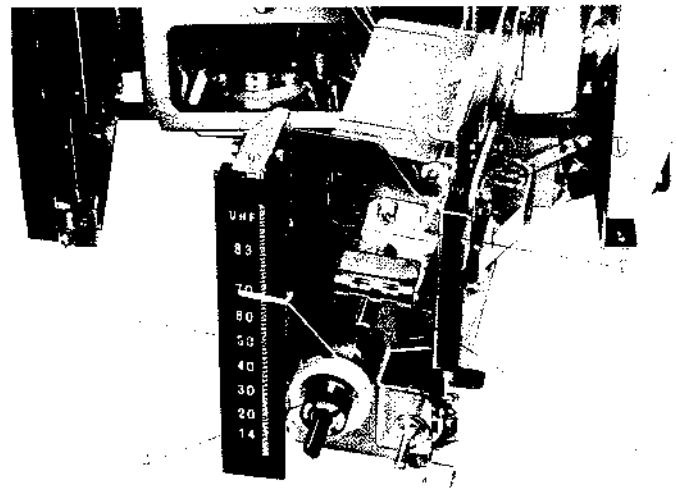


To Separate the VHF Tuner from the Tuner Block

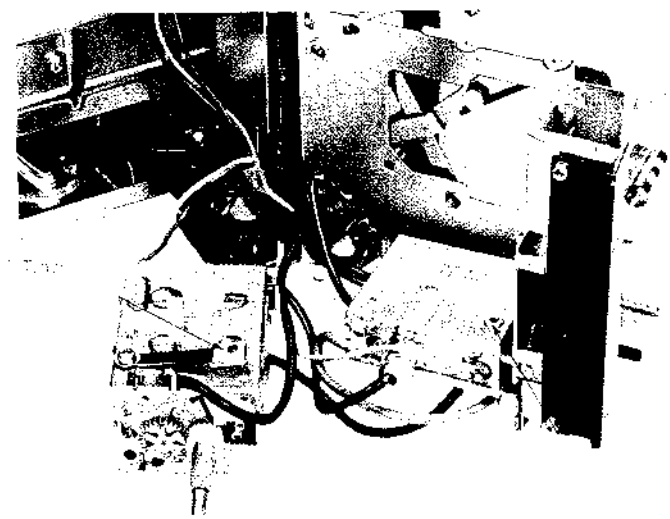
(1) Remove the three Screws (①, ② and ③ in Fig. 19).
(2) Unsolder all the Corresponding Leads on the VHF Tuner Block (Fig. 20).

To Separate the UHF Tuner from the Tuner Block

(1) Pull out the Dial Drum (④ in Fig. 19).
(2) Remove the 14φ Nut (⑤ in Fig. 19).
(3) Unsolder all the Corresponding Leads on the UHF Tuner Block (Fig. 20).



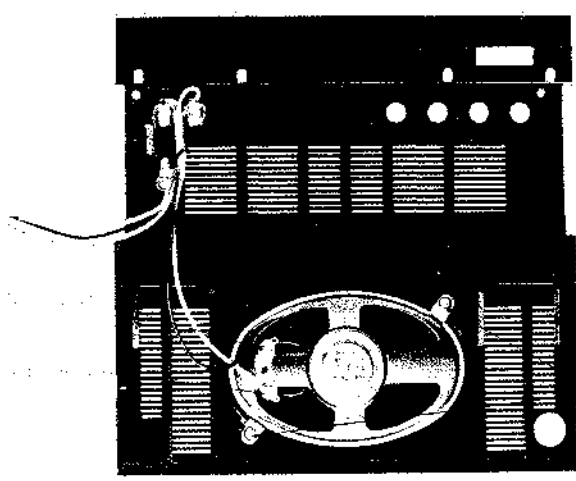
(Fig. 19)



(Fig. 20)

To Remove the Speaker

(1) Remove the Upper Cabinet Cover.
(2) Remove the two Screws (⑥ in Fig. 21).
(3) Unsolder the two Leads (Black and White in Fig. 21).

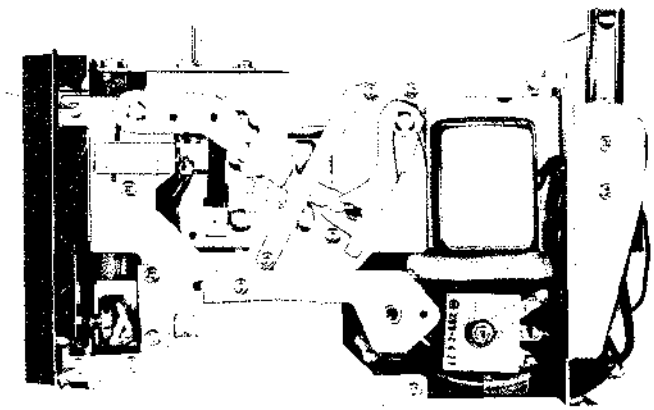


(Fig. 21)

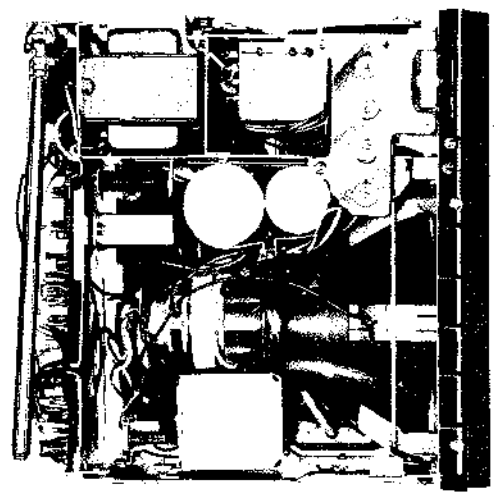
To Remove the Picture Tube-1

(1) Remove the Upper Cabinet Cover and Rear Cabinet Cover.

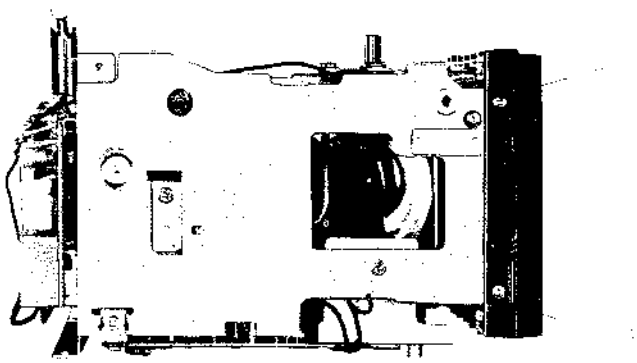
(2) Remove the eight Screws (and in Fig. 22, 23, 24 and 25).



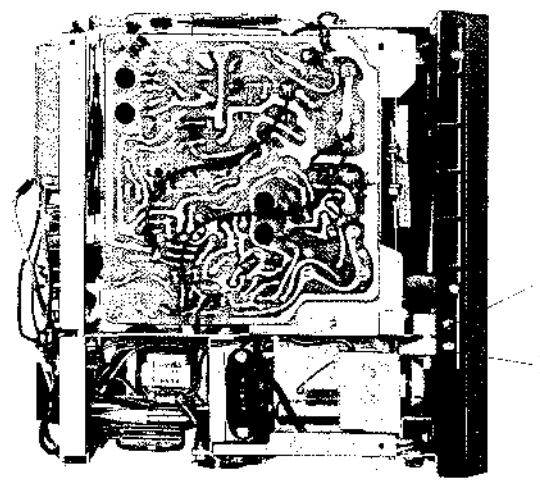
(Fig. 22)



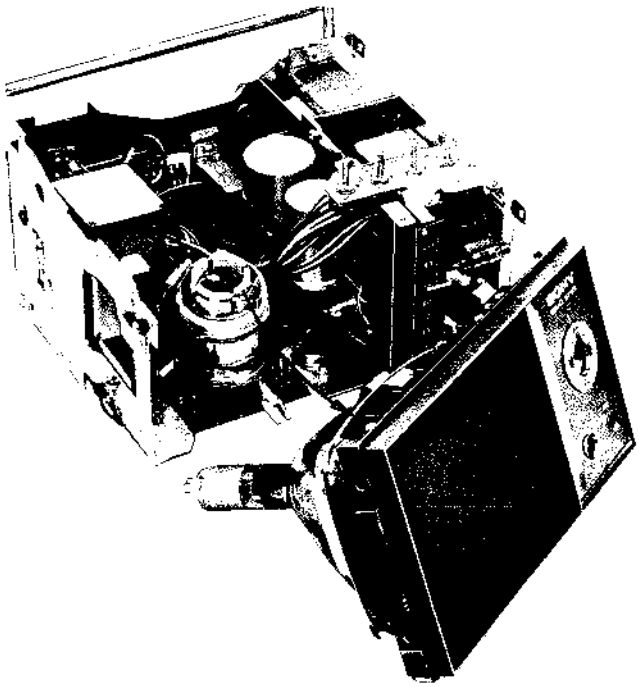
(Fig. 23)



(Fig. 24)



(Fig. 25)



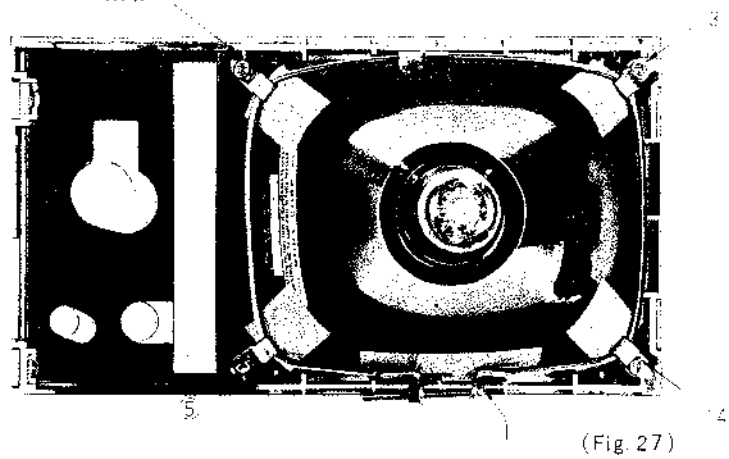
(Fig. 26)

To Remove the Picture Tube-2

(3) Remove the Front Cabinet from the Chassis (Fig. 26).

(4) Loosen the Picture tube Clamp Screws (① in Fig. 27).

(5) Remove the four Screws (②, ③, ④ and ⑤ in Fig. 27).



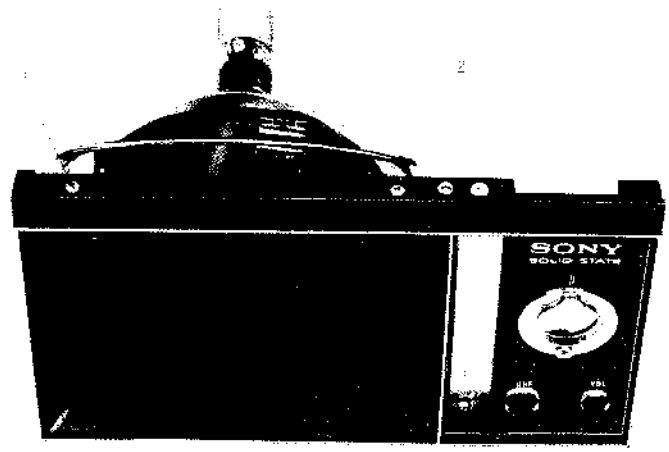
(Fig. 27)

To Remove the Protecter

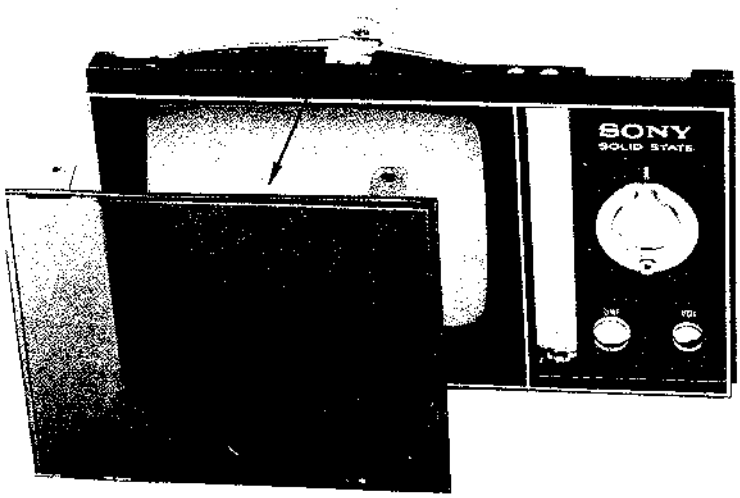
(1) Remove the Upper Cabinet Cover and Rear Cabinet Cover.

(2) Remove the four Screws (①, ②, ③ and ④ in Fig. 28, 29).

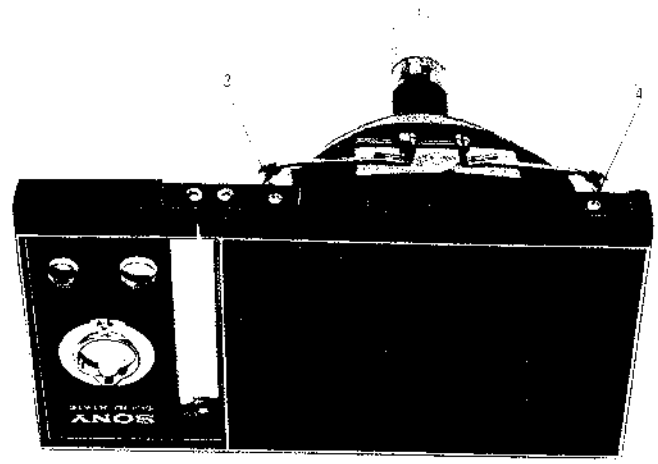
(3) Pull out Protector from the Front Cabinet (Fig. 30).



(Fig. 28)



(Fig. 30)



(Fig. 29)

Adjustment Procedure

A. VIF Response Curve Adjustments

Pre-Alignment Steps

(1) Unsolder the Keying Pulse Lead.

(2) Connect an Oscilloscope to the Base of X_{401} and the ground through a Noise Filter, which consists of a 10KΩ resistor and a 500μμF Capacitor as shown in Fig. 17.

(3) Connect a Sweep Generator and a Marker Generator to the Test Point (TP) of the Tuner through a 0.02μF capacitor.

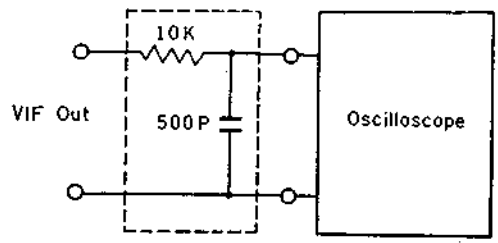
(4) Set the Tuner to a free channel in area.

Step	Equipment	Connection	Freq.	Adjust	
1	Signal Gen. Oscilloscope	VIF Input Terminal VIDEO DET OUT (Base of X_{401} and the ground)	34Mc (AM, 1Kc, 40%)	TRAP-4	for minimum modulated Waveform.

Step	Marker Gen. Freq.	Adjust	Correct Marker position on the response curve	Remarks
2	41.25 Mc	TRAP-301	Ⓢ (dip)	
3	47.25 Mc	TRAP-302	Ⓛ (dip)	
4	42.5 Mc	VIFT-2	Ⓟ (50%)	VIF Standar
5	45.75 Mc	VIFT-3 VIFT-4	Ⓥ (45%)	Response Curve. See Fig. 18.
6	45 Mc	VIFT-3 VIFT-4	Ⓐ (100%—1.4 Vpp)	

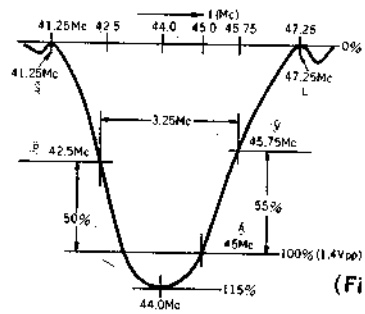
Note: If a proper response curve similar to Fig. 18 is not obtained by the adjustment procedures described above, replace the damping resistor (R_{306} or R_{314}) with proper one for best result.

Noise Filter



(Fig. 31)

VIF Standard Response Curve



(Fig. 32)

B. SIF Adjustments

Pre-Alignment Steps

(1) Set the Brightness Control to the optimum and the Contrast Control to the maximum positions.

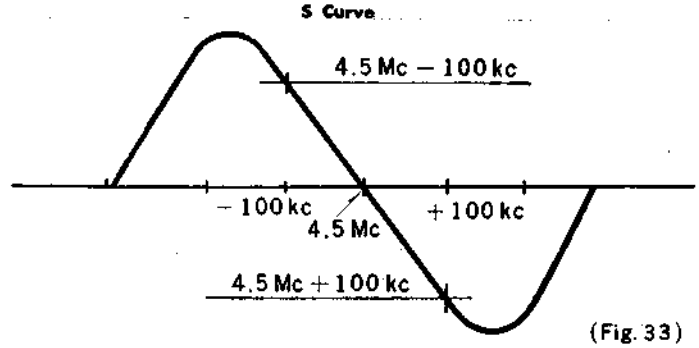
(2) Remove the Tuner Output Leads.

(3) Connect a 5KΩ resistor across SIF output terminal and ground.

Step	Equipment	Connection	Freq.	Adjust	
1	Test Oscillator	VIDEO DET OUT	4.5 Mc	TRAP-3	for minimum stripes on the picture.
2	Same Voltmeter	Same Across R_{411}	4.5 Mc	$SIFT_1$ & Pri. of $SIFT_2$ (Pink)	for maximum reading on the Voltmeter.
3	Sweep Gen. Standard Signal Gen. Oscilloscope	VIDEO DET OUT Same SIF output terminals Across a Dummy resistor of 5KΩ	4.5 Mc (AM)	Sec. of $SIFT_2$	for minimum modulated waveform.

Note: (1) Repeat the above procedures two or three times.

(2) If S curve is not symmetrical with respect to the intersection of the S curve and return line, adjust primary of $SIFT_2$ for optimum result.

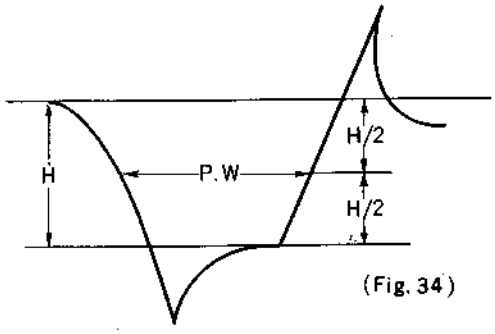


(Fig. 33)

C. Deflection Circuit Adjustments

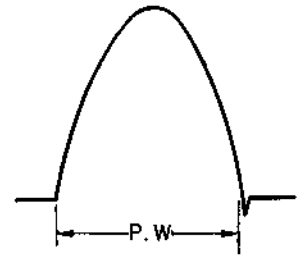
Step	Adjustment for	Preliminary Instruction	Equipment	Connection	Adjust	
1	Ic of X_{501} (VID. Out)	Set to free channel. Check 12V and 50V Power Supply.	Voltmeter	Across R_{504}	R_{502} (57K–75KΩ)	For approx. 18.5V reading.
2	Heater Voltage (Picture tube)	Check 12V Power Supply.	Voltmeter	Between Picture tube Heater Pins	R_{509} (1Ω~2Ω)	For approx. 0.6V reading.
3	Ic of X_{702} (Vert. Out)	Lock in Sync. Check 12V Power Supply.	Same	Across R_{710}	R_{707} (120Ω–1.5KΩ)	For approx. 0.38–0.41V reading.
4	Vert. Height and Linearity	Receive a Test Pattern.			VR_{703} (Vert. Linearity) VR_{701} (Vert. Height)	For optimum Vertical Height and Linearity on the Picture.
5	Pulse Width	Lock in Sync.	Oscilloscope	Emitter of X_{801}	C_{804} (0.068–0.22μF)	For 7.5–8.5μsec. (Fig. 34)
6	HSC (Horizontal Stability Coil)	Lock in Sync. Receive a Test Pattern.			HSC	So that the picture is stable in either case whether HSC is shorted or normal.
7	Horizontal Width	Lock in Sync. Brightness Controls to optimum positions.	Oscilloscope	Collector of X_{802}	C_{808} (0~0.015μF)	For 11.6–12.2μsec. (Fig. 35)
8	Horizontal Frequency	Set the Contrast and Brightness Controls to optimum positions. Receive a Test Pattern.			VR_{402} (Hor. Freq.)	To obtain same number of diagonal bars by applying some electrical shocks respectively when setting VR_{401} to fully clockwise and counter-clockwise positions.
9	Focus	Same Lock in Sync.			VR_{801} (600KΩ)	To obtain best focus on the picture.

Waveform of Horizontal X_{801} Transistor



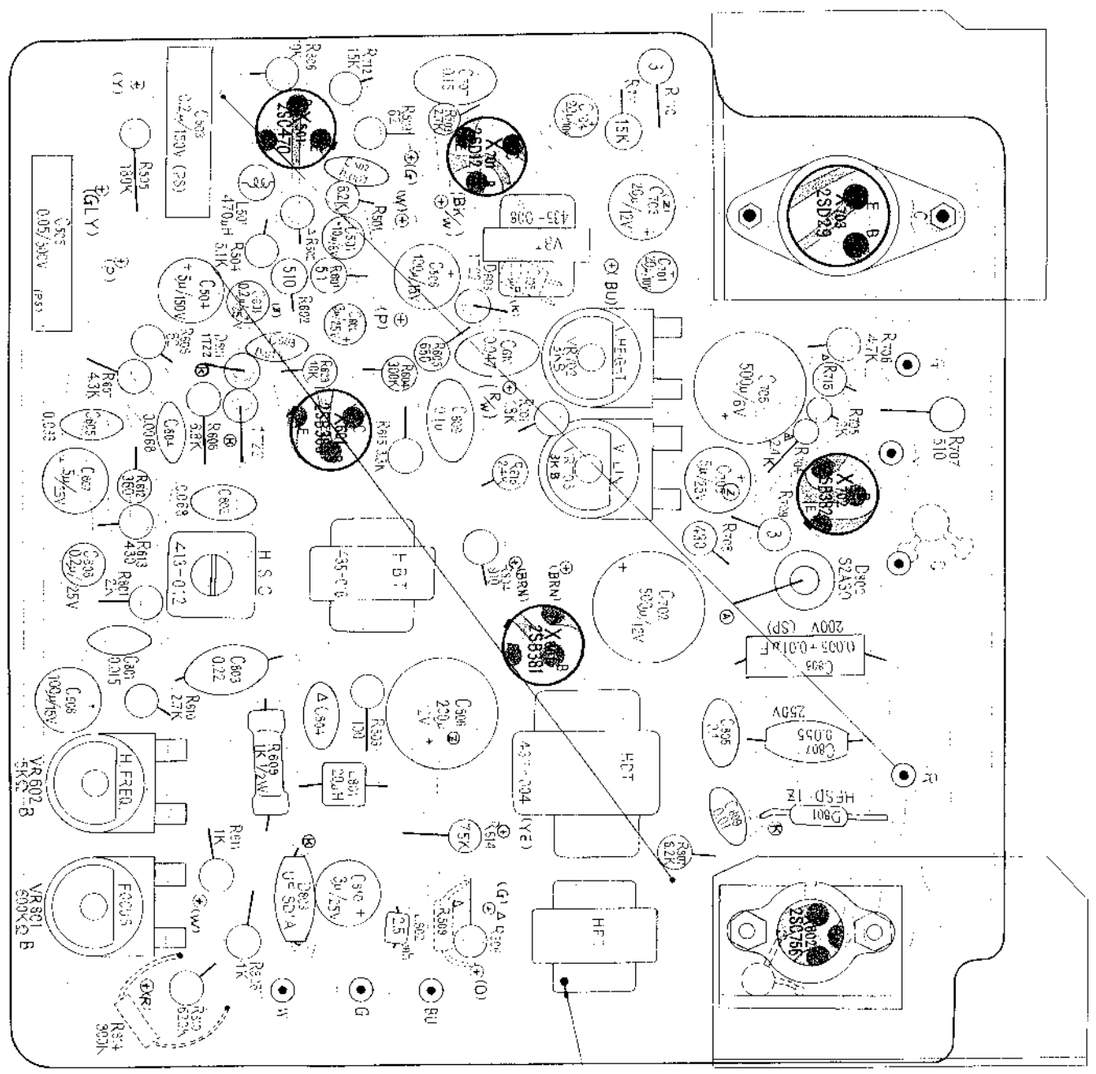
(Fig. 34)

Waveform of Horizontal X_{802} Transistor

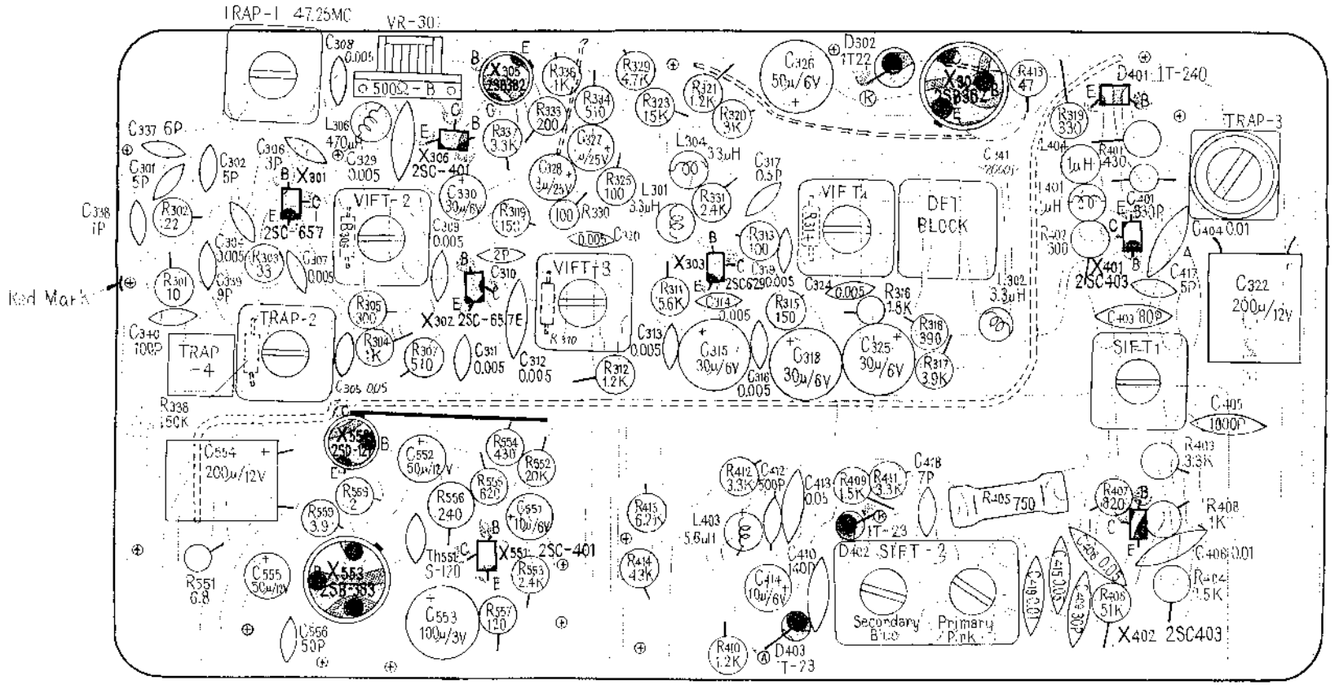


(Fig. 35)

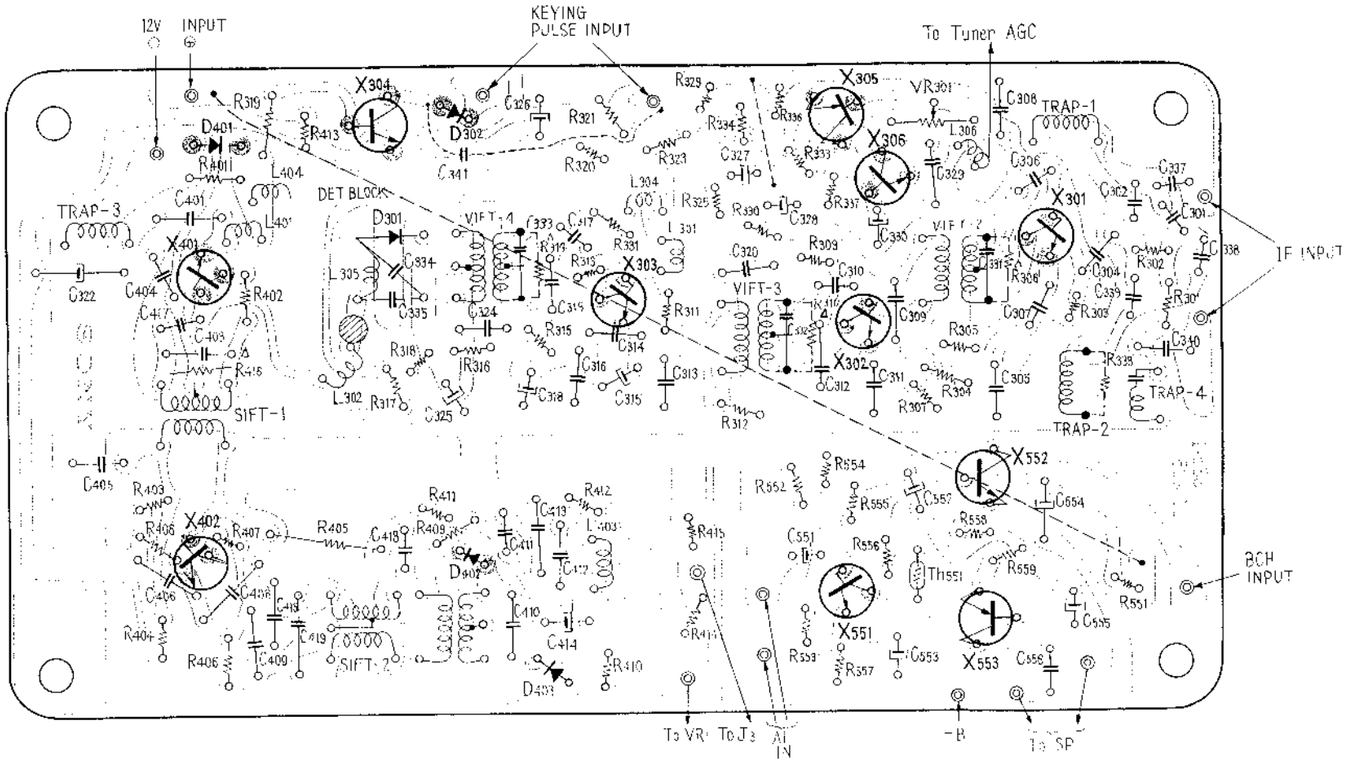
Deflection Circuit Board



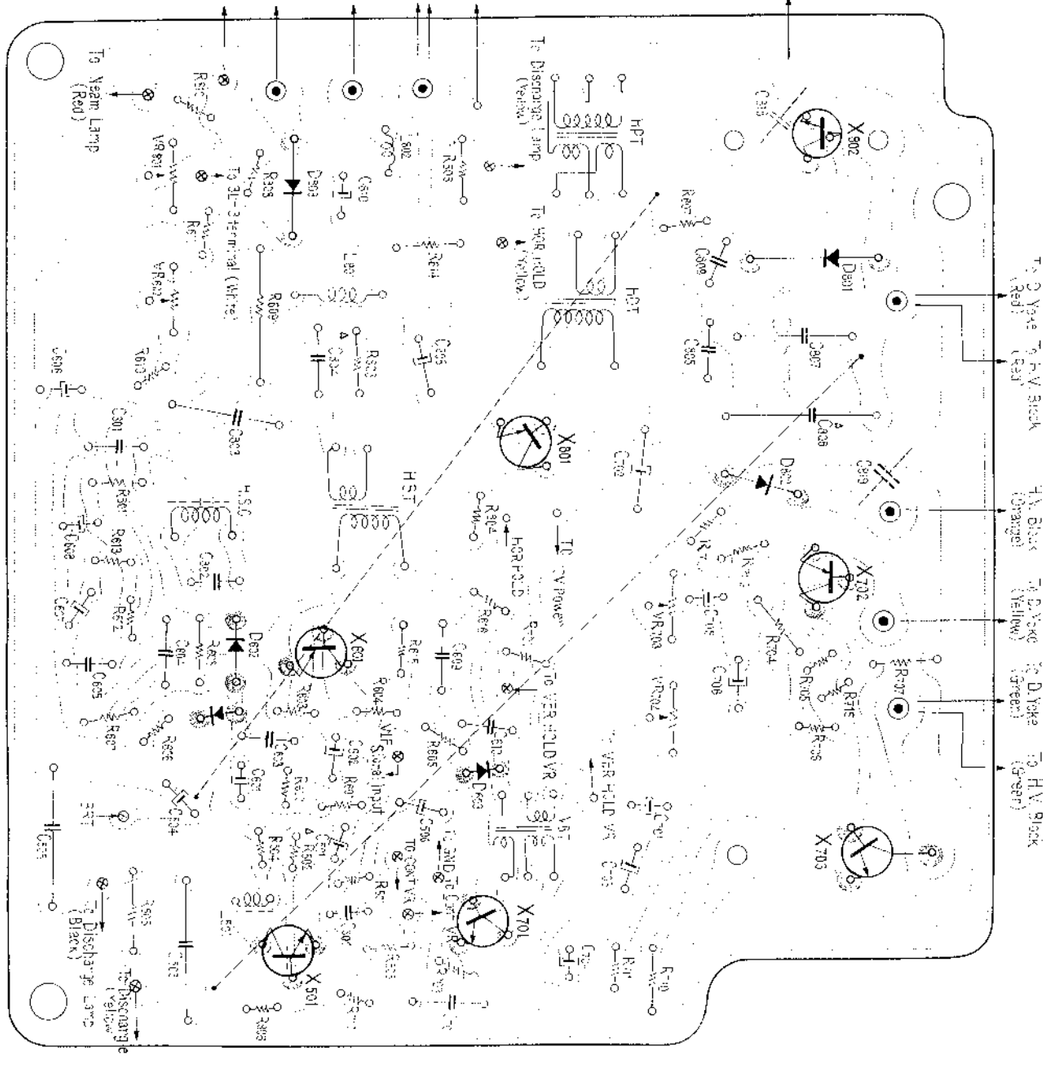
Signal Circuit Board



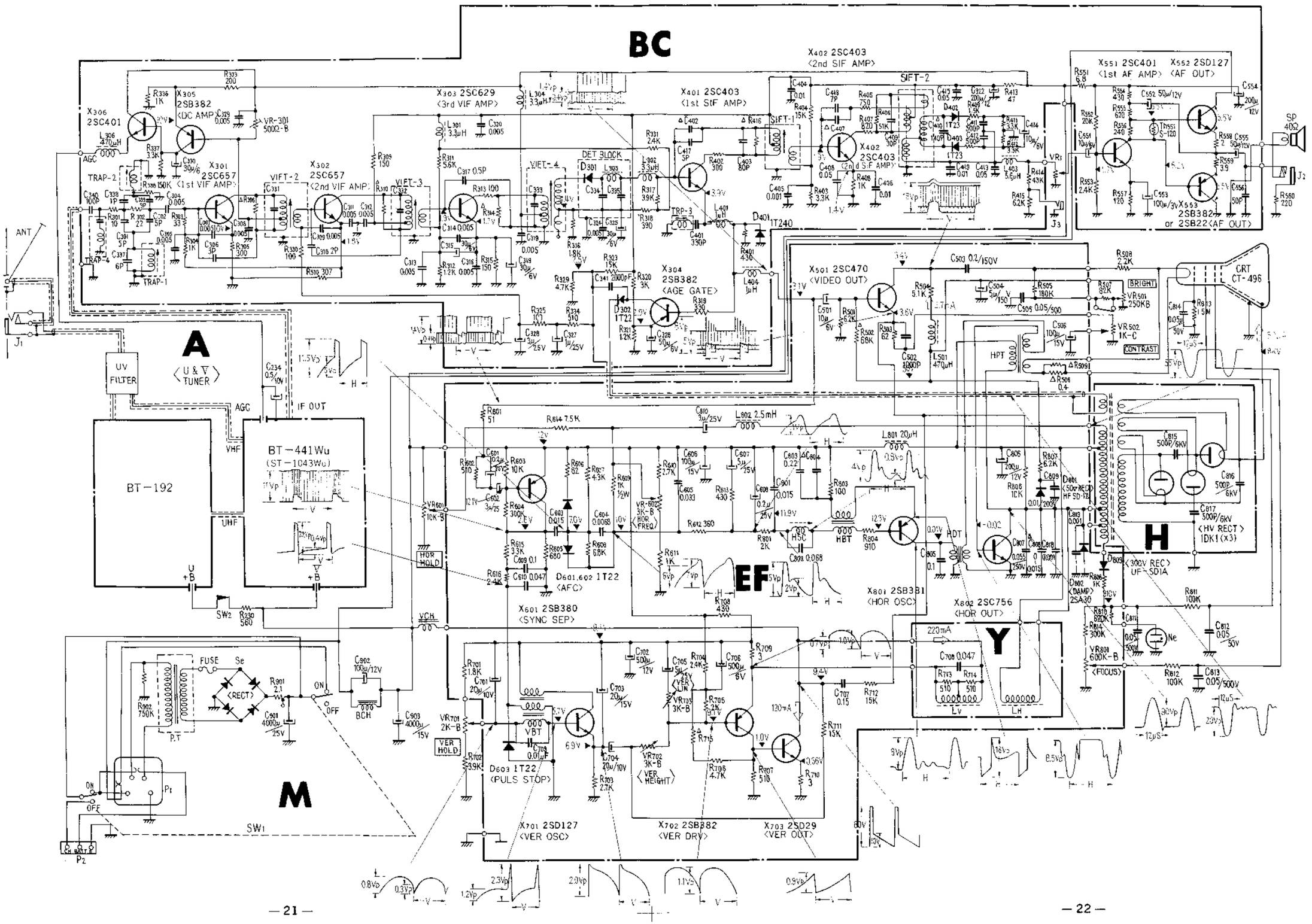
Signal Circuit Board



Deflection Circuit Board



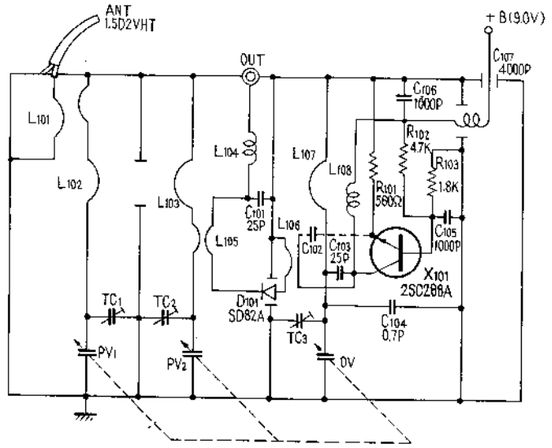
Circuit Schematic



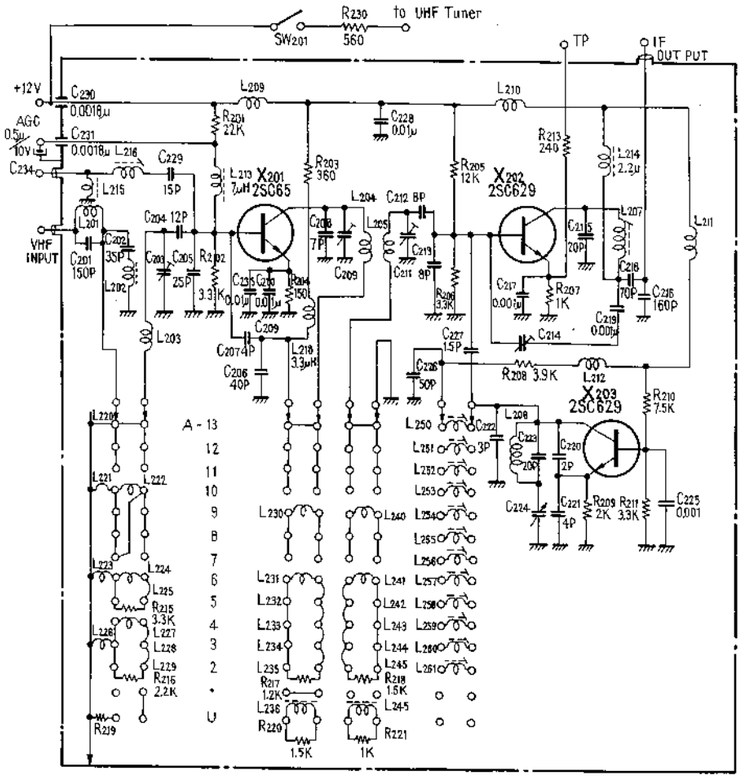
Circuit Schematic

-Tuner Section-

UHF



VHF



b-O Sept-1967

SONY CORPORATION

Printed in Japan

Betrieb mit der Batterie BP-12/563 (für TV-500UET)

Die Metallriegel an beiden Seiten des Batteriegehäuses werden herausgezogen und das Fernsehgerät aufgesetzt.
Das Gleichstrom-kabel der Batterie wird in den Stromanschluß des Gerätes ge-steckt. Dann wird das Gerät eingeschaltet. Es arbeitet jetzt mit Batteriestrom.

Aufladen der Betterie:
Dazu wird der Ladeadapter (wird mit der Batterie mitgeliefert) in den Stromanschluß des Fernsehgerätes gesteckt. Das Netzstromkabel des Gerätes wird an einen der Adapteranschlusse angeschlossen und mit einer wechselstromsteckdose verbunden. Das Gleichstromkabel der Batterie wird ebenfalls an den Adapter angeschlossen. Der Ladeschalter ist nach unten auf [CHARGE] zu schieben.
Wenn das Gerät nun eingeschaltet wird, beginnt das Aufladen der Akku-Batterie. Nach je 2 Stunden Benutzung soll die Batterie zwölf Stunden lang aufgeladen werden.

* Wenn nach häufigem Aufladen die Betriebszeit mit einer Batterieladung allmählich kürzer wird, so ist die Lebensdauer der Akku-Batterien erschöpft.

Funzionamento con BP-12/563 (per TV-500UET)

Tirate fuori le due chiavi metalliche che si trovano sul dosso del Pacco di pile. Procedete poi alla messa a posto sul medesimo Pacco del vostro apparecchio. Innestate il cavo di alimentazione di corrente continuata dalla pacco alla Presa di potenza in entrata dell' apparecchio. Mettete in marcia l'apparecchio, portando l'interruttore alla posizione marcata (ON) : ora, il vostro apparecchio ricevitore si trova pronto per funzionare con il Pacco di pile.

Ricarica:
Attaccate l'Adattatore-caricatore(fornito con il Pacco di pile) alla Presa di corrente di alimentazione del ricevitore. Innestate il cavo di alimentazione di corrente alternata ad una delle prese contatti dell'Adattatore. All'altra presa contatto del medesimo Adattatore viene innestato il cavo di alimentazione di corrente continuata dalla parte del Pacco di pile. Final-mente, collegate il cavo di alimentazione di corrente alternata a una presa di corrente di casa, mettete in marcia l'apparecchio e, allo stesso tempo, portate l'Interruttore di carica alla posizione inferiore marcata [CHARGE]. Ricaricate le pile interne per dodici ore per ogni consumazione di due ore.

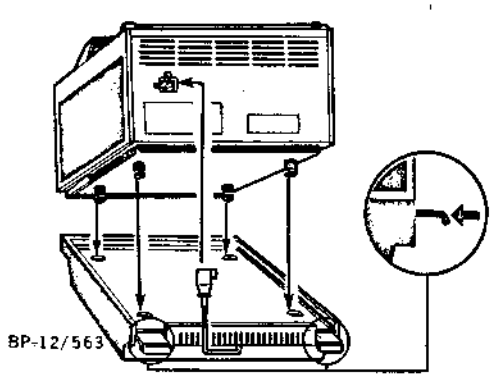
* Se, dopo parecchie ricaricate, le pile non si ricaricano più, ne darà una evidenza immancabile l'effetto di scorcio sullo schermo.

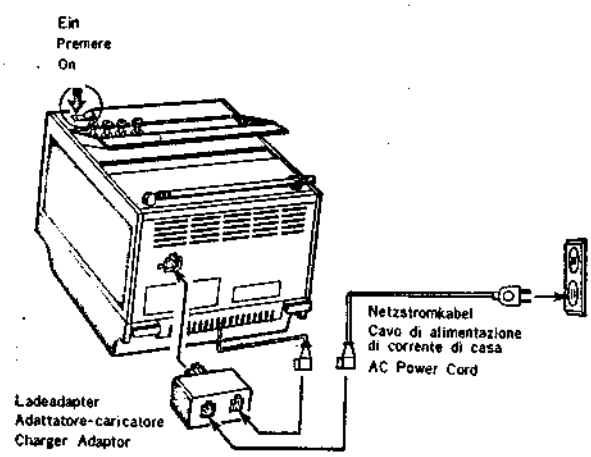
Operation on BP-12/563 (for TV-500UET)

Pull out the metal keys on both sides in the rear of the Battery Pack and place the set on it. Insert the DC power cord of the Battery Pack into the Power Socket of the set. Then turn the set ON, it will operate on the battery.

Recharging:
Attach the Charger Adaptor (supplied with the Battery Pack) to the Power Socket of the set. Connect the AC power cord to one of the outlets of the Adaptor and to the other connect the DC power cord of the Battery Pack. Then connect the AC power cord into an AC outlet, turn the set ON and set the Charging Switch to the down position [CHARGE]. Recharge the internal batteries for 12 hours for every 2 hours of battery operation.

* If after many charges, the batteries will not hold a charge, it is evidenced by a foreshortening of the TV Picture.





SONY CORPORATION

Printed in Japan

Complete Spare Parts List for TV-500U

August 15, 1967

General

Part No.	Description	Q'ty
1-463-001	UHF Tuner BT-192	1
98-0101-10	VHF Tuner BT-441WU	1
98-0101-20	Signal Circuit Board (BC) Completed	1
98-0101-30	Deflection Circuit Board (EF) completed	1
1-451-003	Deflection Yoke Ass'y	1
1-453-019	High Voltage Block Ass'y	1

A. Mechanical Parts

a. Cabinet and Appearance Block

X-40083-01	Front Cabinet Ass'y	1
* (X-40083-02	Upper Cabinet Ass'y	1
X-40083-03	Carrying Handle Ass'y	1
X-40083-04	Channnel Selecting Knob Ass'y	1
X-40083-05	UHF Selecting Knob Ass'y	1
X-40083-06	Volume Control Knob Ass'y	1
X-40083-07	Fine Tuning Knob Ass'y	1
X-40083-08	Dial Drum Ass'y	1
X-40083-09	Dial String Ass'y	1
X-40083-10	Handle Mechanism Ass'y	1
X-40083-11	Side Panel Ass'y (right)	1
X-40083-12	Side Panel Ass'y (left)	1
X-40083-17	Side Panel Sub Ass'y (left)	1
X-40083-13	Video IF Shield Case Ass'y	1
X-40083-18	Front Stand Ass'y	1
X-40083-19	Upper Ornamental Disk Ass'y	1
4-008-321	Cushion Actuator Plate	1
-303	Upper Cabinet	1
-330	Picture Tube Protector	1
-331	Dial Cover	1
-332	Picture Tube Mt'g Ring	1
-333	Picture Tube Mt'g Bracket	4
-334	Speaker Net	1
-336	Name Plate	1
-337	Foot	4
-340	Screw, special	1
-343	Tuner Mounting Bracket	1
-344	UHF Dial, scale plate	1
-345	Dial Pointer	1

*For the up to Set Serial No. 16500

Part No.	Description	Q'ty
4-008-346	Variable Resistor Mt'g Bracket	1
-347	Chassis, power supply section	1
-348	Clamp, electric capacitor	1
-349	Control Knob	4
-351	Main Chassis	1
-352	Variable Resistor Mt'g Bracket	1
-353	Heat Shield Plate	1
-355	Heat Sink for Horizontal Power Transistor	1
-356	Heat Sink for Vertical Power Transistor	1
-357	EF Printed Circuit Board Mt'g Bracket	2
-358	Collar, tuner shaft	1
-359	Bracket, pilot lamp	1
-360	Video IF Shield Case	1
-361	Heat Sink for TO-1	1
-371	Short Plate	1
-377	Spacer 3 Pole Connector	1
-374	Volume Knob Spacer	1
-373	UHF Knob Spacer	1
-379	Short, foil	2
-380	Antenna Terminal Mt'g Bracket	1
-382	Pulley	4
4-003-220	Picture Tube Ground Spring	1
4-005-359	Cord Clamp	1
-615	Insulating Tube for 1-1 Pole Terminal	1
4-006-255	Terminal Pin	30
4-007-043	Sound IF Shield Case (Parts Side)	1
-044	Sound IF Shield Case (Print Side)	1
-045	Heat Sink for Transistor X262	1
-051	Insulating Fiber for Sound IF Shield	1
3-804-510	Speaker Mt'g Spring	2
4-405-094	Switch 14%	1
-095	Nut 14%	1

b. Carton & Accessories

4-495-157-11	Instruction Manual	1
	Qustionnaire	1
X-40083-15	Warranty Card Ass'y	1
X-40083-14	Card Ass'y	1
X-40058-58	Accessory Ass'y	1
3-813-651	Colored Label	3
X-44900-03	Polishing Cloth in Polyethylene Bag	1
Y-44017-31	External Antenna Connector EAC-6 Complete	1

Part No.	Description	Q'ty
4-008-364	Caution Lable	1
	IMB Card	1
4-002-839	IBM Card Envelope	1
4-005-537	High Voltage Caution Lable	1
4-008-365	Packing Carton	1
-367	Cushion A foamed polystylene	1
-368	" B " "	1
-378	Master Carton 2 sets	1/2
-369	Polyethylene Bag Cabinet	1
4-004-143	Serial Number Label	1

c. Screws, Nut & Washers

7-621-255-22	Screw Phill	P 2 x 4; Separator Mt'g	2
-259-48	"	P 2.6 x 6; Side Panel Mt'g	8
-261-35	"	P 3 x 5; Pilot Lamp	1
-261-35	"	P 3 x 5; Rod Antenna	2
-261-45	"	P 3 x 6; Cushion Actuator Plate	1
-261-45	"	P 3 x 6; Actuator Guide	2
-261-45	"	P 3 x 6; Front Cabinet	8
-261-69	"	P 3 x 10; Upper Cabinet	2
-261-72	"	P 3 x 12; EF Printed Circuit Board	4
-261-72	"	P 3 x 12; Tuner Mt'g with Collar	1
-261-65	"	P 3 x 10; Vertical Output Choke Coil Mt'g	1
-261-79	"	P 3 x 12; Upper Cabinet Mt'g	2
-261-95	"	P 3 x 15; Foot Mt'g	4
-261-95	"	P 3 x 15; Tuner Mt'g	2
-262-15	"	P 3 x 18; Selenium Rectifier Mt'g	1
-262-25	"	P 3 x 20; AC Connector Mt'g	2
-262-75	"	P 3 x 35; Picture Tube Ring Binding	1
-262-85	"	P 3 x 49; Resistor F.901	1
-268-45	"	P 4 x 6; Picture Tube Mt'g	2
-561-45	"	K 3 x 6; Carrying Handle	2
-561-45	"	K 3 x 6; Upper Cabinet Mt'g	1
-561-69	"	K 3 x 10; Antenna Terminal Mt'g Bracket	1
-722-33	Tapping Screw Phill	BV 3 x 5; Vertical Output Choke Coil Mt'g	2
-722-33	"	BV 3 x 5; 3L-3 Pole Terminal	1
-722-48	"	BV 3 x 6; Filter Choke Coil for Power Supply	2
-722-48	"	BV 3 x 6; 1-1 Pole Terminal	1

Part No.	Description	Q'ty
7-621-722-48	Tapping Screw Phill BV 3 x 6; Main Chassis	2
-722-48	" BV 3 x 6; High Voltage Block Mt'g	1
-722-48	" BV 3 x 6; Speaker Mt'g	2
-722-48	" BV 3 x 6; Lug Washer on Upper Cabinet	1
-722-48	" BV 3 x 6; BC Printed Circuit Board	3
-722-41	" R 3 x 6; Picture Tube Protector Mt'g	4
-722-63	" BV 3 x 10; Picture Tube Mt'g	4
-721-87	" K 2.6 x 8; Dial Cover	1
7-622-108-01	Hex Nut 3ϕ; Picture Tube Binding	1
-108-01	" 3ϕ; EF Printed Circuit Board	4
7-623-108-12	Washer 3ϕ; Filter Choke Coil for Power Supply	2
-108-12	" 3ϕ; 3L-3 Pole Lug	1
-108-12	" 3ϕ; 1-1 Pole Lug Mt'g	1
-113-27	" 6ϕ; 0.4t (large); antenna jack	1
-208-22	Spring Washer 3ϕ; Rod Antenna	2
7-623-210-22	" 4ϕ; Picture Tube Mt'g	2
-210-22	" 4ϕ; Front Foot Mt'g	1
-408-01	Ext Teeth Washer 3ϕ; Heat Sink for Vertical Power Transistor	2
-408-01	" 3ϕ; Lug Washer	2
-408-01	" 3ϕ; Selenium Rectifier Mt'g	1
-408-01	" 3ϕ; BC Printed Circuit Board (Lug)	1
-408-01	" 3ϕ; Heat Sink for Horizontal Power Transistor	4
-408-01	" 3ϕ; Heat Sink for Vertical Power Transistor	1
-508-01	Lug Washer 3ϕ; Main Chassis & Power Supply Chassis	2
-508-01	" 3ϕ; Upper Cabinet	1
-508-01	" 3ϕ; BC Printed Circuit Board (Lug)	1
7-624-108-01	E Type Retainer E-4; Handles Mechanism	2
7-628-251-25	Spring Washer 3ϕ; Volume Control Mt'g Bracket	4
-251-25	" 3ϕ; Handles Mechanism Mt'g Bracket	4
-251-25	" 3ϕ; Antenna Terminal Mt'g Bracket	1
-251-25	" 3ϕ; Capacitors Clamp Mt'g	2
-251-25	" 3ϕ; Heat Shield Mt'g	2
-251-25	" 3ϕ; 3 Pole Connector Mt'g	2
-251-25	" 3ϕ; Power Switch Mt'g	2

Part No.	Description	Q'ty
7-628-251-25	Spring Washer 3ϕ; EF Printed Circuit Board Mt'g	6
-251-25	" 3ϕ; UHF Dial Scale Mt'g	2

B. Electrical Parts

1. Semi-conductors

a. Signal Circuit Board (BC) Block

	Transistor	2SC657, X301, 302	2
		2SC629, X303	1
		2SB382, X304, 305	2
		2SC401, X306	1
		2SC403, X401, 402	2
		2SD127, X552	1
		2SB382, X553	1
		2SC401, X551	1
	Diode	1T261 D301	1
		1T22 D302	1
		1T23 D402, 403	2
		1T240 D401	1
8-691-001-	Thermistor	CS-120 Th-551	1

b. Deflection Circuit Board (EF) Block

	Transistor	2SC470, X501	1
		2SB380, X601	1
		2SD127, X701	1
		2SB382, X702	1
		2SD29, X703	1
		2SB381, X801	1
		2SC756, X802	1
	Diode	1T22 D601, 602	2
		S2A30 D802	1
		HF-SDIZ D801	1
		UF-SDIA D803	1
		1T-22A D603	1

2. Coils & Transformer

a. Signal Circuit Board (BC) Block

1-403-486	Video IF Transformer, VIFT-2	1

Part No.	Description	Q'ty
1-403-487	Video IF Transformer, VIFT-3	1
-488	" , VIFT-4	1
-485	Video Detector Block, DET	1
-313	Sound IF Transformer, SIFT-2	1
-316	" , SIFT-1	1
1-409-114	Video IF Trap Coil, Trap-4	1
-036	Sound IF Trap Coil, Trap -3	1
-067	Video IF Trap Coil, Trap-2	1
-090	" " " " , Trap-1	1
1-407-133	RF Choke Coil 1uH L404	1
-177	Micro Inductor 470uH L306	1
-178	Micro Inductor 1uH L401	1
-184	Micro Inductor 3.3uH L301, 302, 304	3
-187	Micro Inductor 5.6uH L403	1

b. Deflection Circuit Board (EF) Block

1-407-083	Micro Indutor 2.5mH L802	1
-177, -052	" 470uH L501	1
1-421-013	RF Filter Inductor 20uH L801	1
1-413-012	Horizontal Ringing Coil, HSC	1
1-425-348	Horizontal Pulse Trans, HPT	1
1-435-008	Vertical Blocking OSC Trans, VBT	1
-016	Horizontal OSC Trans, HBT	1
1-437-004	Horizontal Drive Trans, HDT	1

c. Main Block

1-421-150	Filter Choke for Power Rectifier, BCH	1
-201	Vertical Output Choke Coil, VCH	1
1-441-316	Power Transformer	1

3. Electrical Parts

a. Signal Circuit Board (BC) Block

1-538-609	Printed Circuit Board	1
1-221-463	Resistor, adjustable B-500 ohms VR301	1

b. Deflection Circuit Board (EF) Block

1-538-610	Printed Circuit Board	1

Part No.	Description	Q'ty
1-221-475	Adjustable Carbon Resistor 5K-B VR602	1
-871	" " " 3K-B VR702, 703	2
-872	" " " 600K-B VR801	1
1-506-108	SV - Pin	7
1-526-075	Picture Tube Socket	1

c. Main Block

1-221-276	Variable Resistor T-5K ohms VR-1	1
-297	" " B-10K " VR601	1
-403	" " B-2K " VR701	1
-429	" " B-250K " VR501	1
-709	" " B-1K " VR502	1
1-501-087	Rod Antenna Completed	1
1-502-169	Speaker	1
1-507-075	Earphone Jack	1
-166	Antenna Jack	1
-901	Nut for Jack	3
1-508-155	3 Pole Connector	1
-156	Power Plug with Switch	1
1-513-346	Seesaw Switch	1
1-519-007	Neon Lamp	1
1-531-106	Selenium Rectifier	1
1-532-039	Fuse	1
1-536-107	1-1 Pole Lug Terminal Board	1
-154	3L3 Lug Terminal Board	1
X-40047-58	Neon Lamp Ass'y	1
X-40033-09	E Terminal with Lead Wire	1
8-731-105	Picture Tube	1

4. Resistors

a. Signal Circuit Board (BC) Block

1-242-615	Resistor, carbon RD1/4UR	3.9 ohms	R559		1
-621	" " "	6.8 "	R551		1
-625	" " "	10 "	R301		1
-637	" " "	33 "	R303		1
-641	" "	47 "	R413		1
-633	" " "	22 "	R302		1
-649	" " "	100 "	R313, 325, 330		3
-651	" " "	120 "	R557		1
-653	" " "	150 "	R309, 315		2

Part No.	Description					Q'ty
1-242-656	Resistor, carbon		RD1/4UR	200	ohms	R333, 402 --- 2
-658	"	"	"	240	"	R556 -------- 1
-660	"	"	"	300	"	R305, 402---- 2
-661	"	"	"	330	"	R319 -------- 1
-664	"	"	"	430	"	R401, 554 --- 2
-666	"	"	"	510	"	R334, 307 --- 2
-668	"	"	"	620	"	R555, ------- 1
-671	"	"	"	820	"	R407 -------- 1
-673	"	"	"	1K	"	R304, 336, 408 3
-675	"	"	"	1.2K	"	R321, 312, 410 3
-677	"	"	"	1.5K	"	R409 -------- 1
-679	"	"	"	1.8K	"	R316 -------- 1
-682	"	"	"	2.4K	"	R331, 553 --- 2
-684	"	"	"	3K	"	R320 -------- 1
-685	"	"	"	3.3K	"	R337, 403, 411, 412 ---- 4
-687	"	"	"	3.9K	"	R317 -------- 1
-689	"	"	"	4.7K	"	R329 -------- 1
-691	"	"	"	5.6K	"	R311 -------- 1
-701	"	"	"	15K	"	R323, 404 --- 2
-704	"	"	"	20K	"	R552 -------- 1
-712	"	"	"	43K	"	R414 -------- 1
-714	"	"	"	51K	"	R406 -------- 1
-692	"	"	"	6.2K	"	R415 -------- 1
1-244-670	"	"	RD1/4SR	750	"	R405 -------- 1
1-207-014	Resistor, wire wound		RW1/4RL	2	"	R558 -------- 1
1-202-113	Resistor, compositon		RC1/8L	150K	"	R338 -------- 1
1-203-451	Resistor, carbon		RD1/16L	3K	"	R306, 310 --- 2/13
-194	"	"	"	3.3K	"	R306, 310 --- 2/13
-892	"	"	"	3.6K	"	R306, 310 --- 2/13
-497	"	"	"	3.9K	"	R306, 310 --- 2/13
-698	"	"	"	4.3K	"	R306, 310 --- 2/13
-185	"	"	"	4.7K	"	R306, 310 --- 2/13
-183	"	"	"	1.5K	"	R306, 310 --- 2/13
-184	"	"	"	2.2K	"	R306, 310 --- 2/13
-460	"	"	"	2.7K	"	R306, 310 --- 2/13
-853	"	"	"	1.2K	"	R306, 310 --- 2/13
1-204-070	"	"	"	2.4K	"	R306, 310 --- 2/13
-195	"	"	"	2.0K	"	R306, 310 --- 2/13
-535	"	"	"	1.8K	"	R306, 310 --- 2/13
-186	"	"	"	5.6K	"	R314 -------- 1/13
-187	"	"	"	6.8K	"	R314 -------- 1/13
-188	"	"	"	7.5K	"	R314 -------- 1/13
-189	"	"	"	8.2K	"	R314 -------- 1/13
1-204-191	"	"	"	9.1K	"	R314 -------- 1/13
1-203-190	"	"	"	10K	"	R314 -------- 1/13

Part No.	Description	Q'ty
1-203-191	Resistor, carbon RD1/16L 12K ohms R314	1/13
-192	" " " 15K " R314	1/13
-891	" " " 22K " R314	1/13
-428	" " " 27K " R314	1/13
1-209-045	" " " 39K " R314	1/13
1-204-192	" " " 47K " R314	1/13
-015	" " " 56K " R314	1/13

b. Deflection Circuit Board (EF) Block

1-207-018	Resistor, wire wound RW1/4RL 3 ohms R709, 710	2
1-242-642	" carbon RD1/4UR 51ohms R601	1
-644	" " " 62 " R503	1
-647	" " " 82 " R606	1
-649	" " " 100 " R803	1
-662	" " " 360 " R612	1
-664	" " " 430 " R613, 708	2
-666	" " " 510 " R602, 707	2
-669	" " " 680 " R605	1
-673	" " " 1K " R611, 808	2
-680	" " " 2K " R705, 801	2
-682	" " " 2.4K " R616,	1
-683	" " " 2.7K " R610, 703	2
-685	" " " 3.3K " R615	1
-688	" " " 4.3K " R607	1
-679	" " " 1.8K " R701	1
-689	" " " 4.7K " R706	1
-690	" " " 5.1K " R504	1
-692	" " " 6.2K " R501, 807	2
-693	" " " 6.8K " R608	1
-694	" " " 7.5K " R614	1
-697	" " " 10K " R603, 805	2
-701	" " " 15K " R711, 712	2
-727	" " " 180K " R505	1
-732	" " " 300K " R604	1
-740	" " " 620K " R810	1
-672	" " " 910 " R804	1
1-203-032	" " RL1/2L 1K " R609	1
1-207-223	Resistor, wire wound 1/4L 0.33 ohms R506	1/4
-224	" " " " 0.39 " R506	1/4
-225	" " " " 0.47 " R506	1/4
-064	" " " " 0.62 " R506	1/4

Part No.	Description					Q'ty
1-242-651	Resistor, carbon	RD1/4UR	120	ohms	R715 -----	1/9
-658	"	"	240	"	R715 -----	1/9
-662	"	"	360	"	R715 ------	1/9
-666	"	"	510	"	R715 -----	1/9
-669	"	"	680	"	R715 -----	1/9
-671	"	"	820	"	R715 -----	1/9
-673	"	"	1K	"	R715 -----	1/9
-675	"	"	1.5K	"	R715 -----	1/9
-677	"	"	1.5K	"	R715 -----	1/3
-716	"	"	62K	"	R502 -----	1/3
-717	"	"	68K	"	R502 -----	1/3
-718	"	"	75K	"	R502 -----	1/3
-732	"	"	300K	"	R814 -----	1
1-207-086	Resistor, wire wound	RW1/2RL	2	"	R509 -----	1/10
-087	"	"		"	R509 -----	1/10

c. Main Block

1-201-676	Composition Resistor	RC1/2L	750K	ohms	R902 --	1
1-202-431	"	RC1/4	100K	"	R811, 812 ---	2
-649	"	RC1/2	1.5M	ohms	R813 ----	1
1-207-208	Wire Resistor				R901 ---	1
1-244-687	Carbon Resistor	RD1/4SR	3.9K	ohms	R702 ----	1
1-203-018	"	RD1/4L	220	ohms	R560 --------	1

5. Capacitors

a. Signal Circuit Board (BC) Block

1-101-837	Capacitor, ceramic	0.5PF	50WV		C317 ---------	1
-951	"	1pF	"		C338, 402 ----	2
-952	"	2pF	"		C310 ---------	1
-953	"	3PF	"		C306 ---------	1
-955	"	5PF	"		C301, 302, 417	3
-956	"	6PF	"		C337 ---------	1
-957	"	7PF	"		C418 ---------	1
-860	"	9PF	"		C339 ---------	1
-115	"	30PF	"		C409 ---------	1
-312	"	50PF	75WV		C556 --------	1
-113	"	80PF	50WV		C403 ---------	1
-963	"	100PF	"		C340 ---------	1
-571	"	140PF	"		C410 ---------	1
-423	"	500PF	75WV		C411, 412 ----	2

Part No.	Description				Q'ty
1-101-003	Capacitor, ceramic		0.005uF	50WV	C304, 305, 307, 308, 309, 311, 312, 313, 314, 316, 319, 320, 324, 329 ---- 14
-001	"	"	0.001uF	"	C405 --------- 1
-007	"	"	0.05uF	"	C408, 413, 415 3
-004	"	"	0.01uF	"	C404, 406, 419 3
-002	"	"	2000PF	"	C341 --------- 1
1-103-663	Capacitor, polystyrene		330PF		C401 --------- 1
1-101-951	Capacitor, ceramic		1PF	50WV	C407 --------- 1/5
-952	"	"	2PF	"	C407 --------- 1/5
-953	"	"	3PF	"	C407 --------- 1/5
-954	"	"	4PF	"	C407 --------- 1/5
-955	"	"	5 PF	"	C407 --------- 1/5
1-121-230	Capacitor, electrolytic		1uF	25WV	C327 --------- 1
-232	"	"	3uF	"	C328 --------- 1
-104	"	"	10uF	6WV	C414, 551 ---- 2
-102	"	"	30uF	"	C315, 318, 325, 330 ---------- 4
-135	"	"	50uF	"	C326 ---------- 1
-111	"	"	100uF	3WV	C553 ---------- 1
-121	"	"	200uF	12WV	C322, 554 ----- 2
-122	"	"	50uF	"	C552, 555 ----- 2

b. Deflection Circuit Board (EF) Block

1-101-845	Capacitor, ceramic		1000PF	500WV	C818, 819 ----- 2
1-105-671	"	mylar	0.0068u	50WV	C604 ---------- 1
-661	"	"	0.001uF	"	C502 ---------- 1
-683	"	"	0.068uF	"	C802 ---------- 1
-292	"	"	0.055uF	250WV	C807 ---------- 1
-681	"	"	0.047uF	50WV	C610 ---------- 1
-679	"	"	0.033uF	"	C605 ---------- 1
-753	"	"	0.01uF	200WV	C809 ---------- 1
-675	"	"	0.015uF	50WV	C603, 801 ----- 2
-689	"	"	0.22uF	"	C803 ---------- 1
-687	"	"	0.15uF	"	C707 ---------- 1
-685	"	"	0.1uF	"	C805, 609 ----- 2
-274	Capacitor, mylar block		0.015uF	"	C808 ---------- 1
-041	"	"	0.01uF	50WV	C708 ---------- 1
1-113-122	Capacitor, paper		0.05uF	500WV	C505 ---------- 1
-124	"	"	0.2uF	150WV	C503 ---------- 1
1-127-091	Capacitor, electrolytic		0.2uF	25WV	C601, 608 ----- 2

Part No.	Description	Q'ty
1-121-241	Capacitor, electrolytic 3uF 25WV C602	1
-232	" " 3uF " C810	1
-233	" " 5uF " C607, 705	2
-246	" " 5uF 150WV C504	1
-104	" " 10uF 6WV C501	1
-249	" " 20uF 10WV C701, 704	2
1-131-088	" " 22uF 15WV C703	1
1-121-220	" " 200uF 12WV C806	1
-342	" " 500uF 6WV C706	1
-084	" " 500uF 12WV C702	1
1-105-683	Capacitor, mylar 0.068uF 50WV C804	1/4
-685	" " 0.1uF " C804	1/4
-687	" " 0.15uF " C804	1/4
-689	" " 0.22uF " C804	1/4

c. Main Block

1-113-122	PS Capacitor 0.05uF 500WV C811, 812, 813, 814	4
1-119-106	Electrolytic Capacitor 100uF 15WV C902	1
1-121-023	" " 4000uF " C903	1
-500	" " 4000uF 25WV C901	1