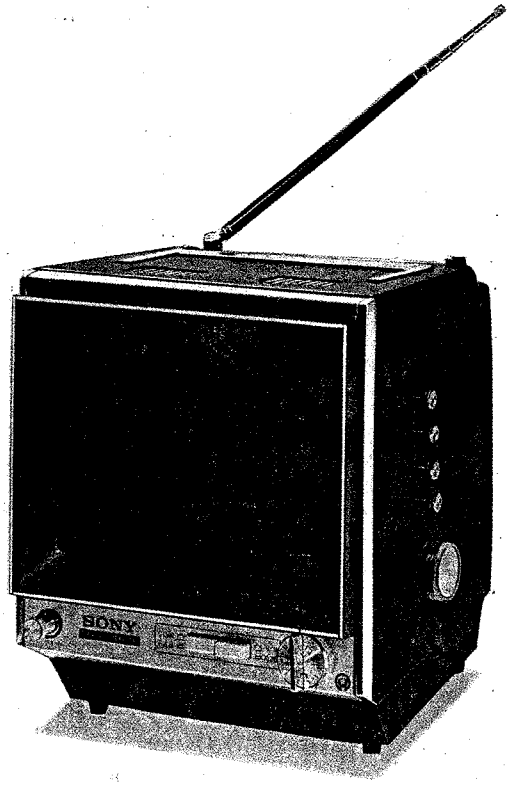
FOR BELGIAN, FRENCH AND WESTERN EUROPEAN MODEL

ISO Set using ISO Screws

TV9-90UM

Serial No. 40,501 and later



SPECIFICATIONS

Picture tube: 9" 90° deflection aluminized screen; 230DB4

Channel coverage: VHF; French F2, F4 - F12
CCIR Western European, Belgian E2 - E12
Italian B(E-4), D(E-5), H(E-10)
UHF; CCIR and French 21-69

Antenna system: Built-in telescopic antenna
Terminals for 75 ohm external antenna

Tuner: Disc turret type for VHF band (BT-435M)
Continuous tuning type for UHF band (BT-186)

IF circuit: 3 stages with 4 stagger tuned elements
Video bandwidth; 3.8 MHz/-3 dB

		Video IF (AM)	Sound IF (AM)
Intercarrier system	CCIR	38.9 MHz	33.4 MHz
Separate-carrier system	French VHF French UHF	38.9 & 34.9 38.9	27.75 & 46.05 32.4
	Belgian (625 lines)	38.9	33.4
	Belgian (819 lines)	38.9	

Transistors: 32
Diodes: 17
IC: 1
Power rectifier: 1 (selenium)
High voltage rectifiers: 3 (selenium)
Sound system: 5.5 MHz intercarrier
Separate systems (Can be selected by push button provided in the set)
Power amplifier; OTL system
Power output; 300 mW
Speaker; 2¾" x 3 5/16" oval type, 40 ohms

REC OUT jack: Impedance 1k ohm, level -60 dB (0.78 mV)

Automatic controls: Forward AGC (VHF tuner & VIF), Reverse AGC (SIF) and Single pulse AFC

Power requirements & consumptions: AC 110, 130, 220 volts, 50/60 Hz 21.5W (maximum)
DC 12 volts 13.0W (maximum)

Dimensions: 8 13/16" (W) x 10½" (H) x 9⅝" (D) (224 x 266 x 245 mm)

Weights: 12 lb (5.6 kg)

SONY®

SERVICE MANUAL

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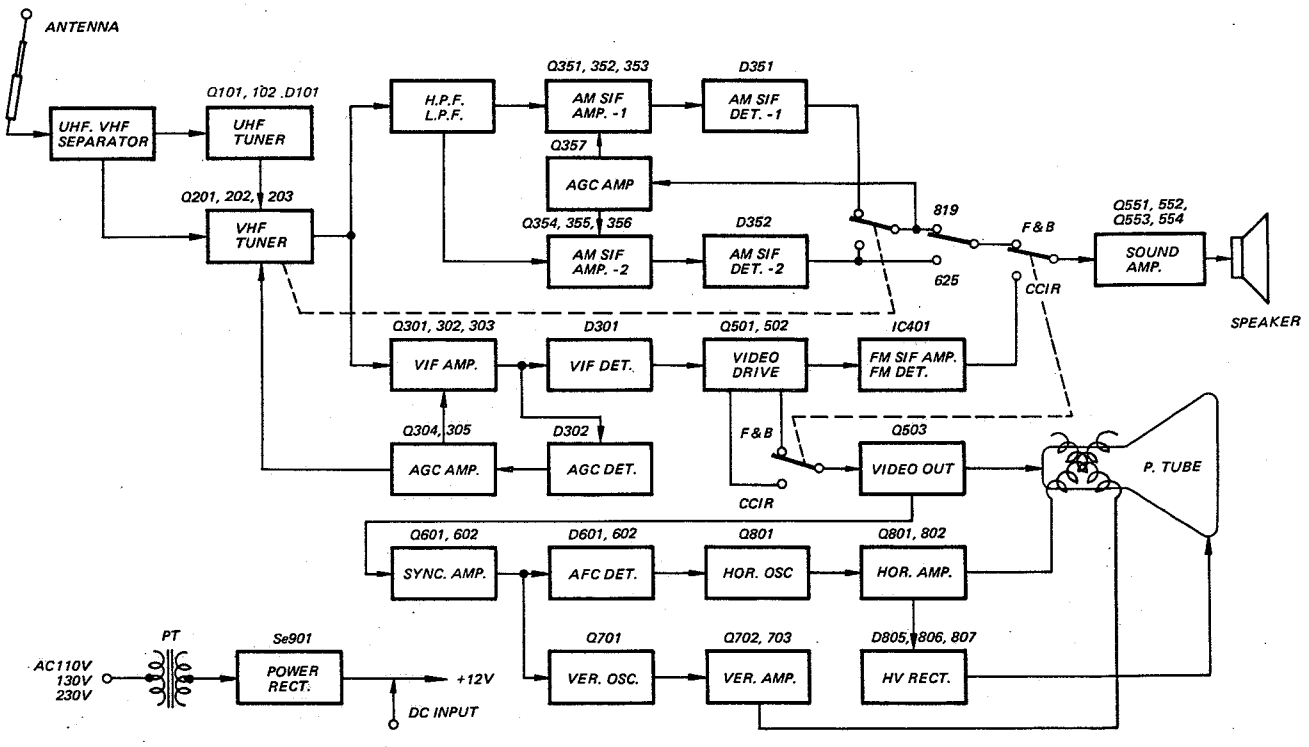
BLOCK DIAGRAM



SONY®

Complete Spare Parts List

Model TV9-90UM

(Serial No. 40,501 and later)

"IMPORTANT"

When ordering parts, please do not fail to furnish us the following:

1. Part Number
2. Model Name
3. Description as mentioned in this parts list

We are now using EDPS (Electronic Data Processing System) in all the departments concerned, for procurement, inventory control, packing, warehousing, etc. Your orders are processed mainly from the PART NUMBERS referred by you. Incorrect part numbers, therefore, will result in incorrect parts shipment. To assure prompt shipment of correct parts, your cooperation will be appreciated.

NOTE:

Prices are subject to change without notice.

COMPLETE SPARE PARTS LIST FOR TV9-90UM

(Serial No. 40,501 and later)

JANUARY, 1972

Part No.	Description	Unit Price
	I. MECHANICAL PARTS	
X-40128-01	Cabinet Ass'y, front	
X-40128-02	Knob Ass'y, channel	
X-40128-03	Knob Ass'y, fine tuning	
X-40128-04	Cabinet Ass'y, rear	
X-40128-05	Clamp Ass'y, power cord	
X-40032-04	Mounting Bracket Ass'y, picture tube	
X-40062-16	Knob Ass'y, VOL control	
X-40074-07	Knob Ass'y, UHF dial	
X-40097-05-2S	Handle Support Ass'y, left	
X-40097-06-2S	Handle Support Ass'y, right	
X-40097-07	UHF Dial Ass'y	
X-40097-09	Shield Plate Ass'y, video out	
4-012-808	Mounting Bracket, pushbutton switch	
4-012-809	Mounting Bracket, signal circuit board	
4-012-810	Shield Case	
4-012-811	Shield Cover	
4-012-813	Holder, selenium rectifier	
0-051-221	Spacer, pushbutton switch	
3-001-706	Clamp, cord	
4-002-847-02	Clamp, antenna	
4-003-220	Grounding Spring, picture tube	
4-003-506	Drive Screw	
4-005-359	Clamp, lead	
4-005-556	Shield Plate, cushion	
4-005-565	Cushion, picture tube	
4-006-103-04S	Support, power transformer	
4-006-233	Control Knob	
4-006-255	Terminal Pin	
4-007-208	Spacer	
4-007-411	Mounting Bracket, picture tube	
4-007-455	Mounting Wire Ring, picture tube	
4-009-724	Protector, picture tube	
4-009-725	Hold, protector	
4-009-726	Carrying Handle	
4-009-729-02S	Screw, handle	

Part No.	Description	Unit Price
4-009-728	Pushbutton	
4-009-729-06S	Mounting Bracket, tuner	
4-009-730-02S	Support, tuner bracket	
4-009-733	Mounting Wire, speaker	
4-009-734	Mounting Plate, volume control	
4-009-735	Clamp, electrolytic capacitor	
4-009-736-02S	Mounting Bracket, deflection circuit board	
4-009-739	Connection Plate, cabinet	
4-009-740-03S	Mounting Plate, antenna	
4-009-741-04S	Heat Sink, horizontal output transformer	
4-009-759	Dust Proof Protector, cushion	
4-011-457	Shield Case, SIF block; upper	
4-011-458	Shield Case, SIF block; lower	
4-011-437	Heat Sink	
	II. MOUNTING HARDWARE	
7-621-259-48	Screw, (+) P 2.6 x 6	
7-621-259-69	Screw, (+) P 2.6 x 10	
7-621-721-87	Self-tapping Screw, (+) K 2.6 x 8	
7-621-722-57	Self-tapping Screw, (+) BV 3 x 8	
7-621-722-63	Self-tapping Screw, (+) BV 3 x 10	
7-621-722-99	Self-tapping Screw, (+) BV 3 x 16	
7-621-724-45	Self-tapping Screw, (+) BV 4 x 10	
7-682-145-01	Screw, (+) P 3 x 4	
7-682-147-01	Screw, (+) P 3 x 6	
7-682-149-12	Screw, (+) P 3 x 10	
7-682-161-13	Screw, (+) P 4 x 8	
7-682-198-01	Screw, (+) P 3 x 50	
7-682-646-01	Screw, (+) PS 3 x 5	
7-623-108-12	Washer, 3 mm dia.	
7-623-112-12	Washer, 5 mm dia.	
7-623-207-22	Washer, spring; 2.6 mm dia.	
7-623-208-22	Washer, spring; 3 mm dia.	
7-623-210-28	Washer, spring; 4 mm dia.	
7-623-408-05	Washer, external tooth; 3 mm dia.	
7-623-508-01	Terminal Lug, 3 mm dia.	
7-684-013-01	Nut, 3 mm dia.	
7-684-014-01	Nut, 4 mm dia.	

Ref. No.	Part No.	Description	Unit Price
		III. ELECTRICAL PARTS	
		General	
	8-980-155-15	VHF Tuner Ass'y (BT-435M) ----------	
	1-463-004	UHF Tuner Ass'y (BT-186) ----------	
	8-980-159-25	Signal Circuit Board (BC), complete ----------	
	8-980-159-35	Deflection Circuit Board (EF), complete -----	
	8-980-159-95	FM Sound IF Circuit Board (FM, SIF), complete	
		Semiconductors	
Q301		Transistor, 2SC657 ----------	
Q302		Transistor, 2SC657 ----------	
Q303		Transistor, 2SC629 ----------	
Q304		Transistor, 2SC633 ----------	
Q305		Transistor, 2SA677 ----------	
Q351		Transistor, 2SC629 ----------	
Q352		Transistor, 2SC657 ----------	
Q353		Transistor, 2SC629 ----------	
Q354		Transistor, 2SC629 ----------	
Q355		Transistor, 2SC657 ----------	
Q356		Transistor, 2SC629 ----------	
Q357		Transistor, 2SC633 ----------	
Q501		Transistor, 2SC403A ----------	
Q502		Transistor, 2SC403A ----------	
Q503		Transistor, 2SC1127 ----------	
Q551		Transistor, 2SC403 ----------	
Q552		Transistor, 2SB324 ----------	
Q553		Transistor, 2SD72 ----------	
Q554		Transistor, 2SB324 ----------	
Q601		Transistor, 2SA182 ----------	
Q602		Transistor, 2SC633 ----------	
Q701		Transistor, 2SC633 ----------	
Q702		Transistor, 2SA677 ----------	
Q703		Transistor, 2SD292 ----------	
Q801		Transistor, 2SC403A ----------	
Q802		Transistor, 2SD292 ----------	
Q803		Transistor, 2SC806A ----------	
D301		Diode, 1T261 ----------	
D302		Diode, 1T261 ----------	

Ref. No.	Part No.	Description	Unit Price
D353		Diode, 1T261 ----------	
D354		Diode, 1T261 ----------	
D501		Diode, 1T243 ----------	
D601		Diode, 1T22A ----------	
D602		Diode, 1T22A ----------	
D701		Diode, 1T22A ----------	
D702		Diode, 1T22A ----------	
D801		Diode, 1T22A ----------	
D802		Diode, SB-2 ----------	
D803		Diode, HFSD-1Z ----------	
D804		Diode, HFSD-1Z ----------	
D808		Diode, HFSD-1A ----------	
Th301	8-690-003	Thermistor, S-90 ----------	
Th551	8-690-003	Thermistor, S-90 ----------	
IC401	8-759-101-60	IC, µPC-16C ----------	
		Coils	
L301	1-409-153	40.4 MHz, trap ----------	
L302	1-409-150	33.4 MHz, trap ----------	
L305	1-407-184	3.3 µH, micro inductor ----------	
L306	1-407-177	470 µH, micro inductor ----------	
L307	1-407-177	470 µH, micro inductor ----------	
L308	1-407-177	470 µH, micro inductor ----------	
L360	1-407-184	3.3 µH, micro inductor ----------	
L361	1-407-184	3.3 µH, micro inductor ----------	
L501	1-407-178	1 µH, micro inductor ----------	
L502	1-407-159	15 µH, micro inductor ----------	
L504	1-407-174	270 µH, micro inductor ----------	
L505	1-407-173	220 µH, micro inductor ----------	
L701	1-421-127	Choke Coil, vertical output ----------	
L801	1-421-013	25 µH, micro inductor ----------	

Ref. No.	Part No.	Description	Unit Price
L802	1-407-366	1.7 µH, coil, RF choke	
L803	1-407-366	1.7 µH, coil, RF choke	
L804	1-407-220	2.2 µH, micro inductor	
L805	1-459-043	Horizontal Linearity	
L806	1-407-175	330 µH, micro inductor	
L901	1-421-142	Choke Coil, filter	
DY	1-451-056-11	Deflection Yoke Ass'y	
		Transformers	
T301	1-403-508	Transformer, first video i-f	
T302	1-403-508	Transformer, second video i-f	
T303	1-403-510	Transformer, third video i-f	
T351	1-403-534	Transformer, first sound i-f	
T352	1-403-534	Transformer, second sound i-f	
T353	1-403-535	Transformer, third sound i-f	
T354	1-403-536	Transformer, fourth sound i-f	
T355	1-403-536	Transformer, fifth sound i-f	
T356	1-403-537	Transformer, sixth sound i-f	
T357	1-403-538	Transformer, seventh sound i-f	
T402	1-403-364-11	Discriminator	
T403	1-403-364-21	Discriminator	
T501	1-403-354	SIF Input	
T701	1-435-008	Vertical Blocking Osc.	
T801	1-435-034	Horizontal Blocking Osc.	
T802	1-437-019	Horizontal Drive	
T803	1-453-021-12S	High Voltage Cage Block	
T805	1-459-043	Horizontal Linearity Coil	
T901	1-441-531	Power Trans	
	1-403-351	AGC Detector Block	
	1-403-353	Video Detector Block	
	1-403-366	AM SIF Detector Block	

Ref. No.	Part No.	Description	Unit Price
		Capacitors	
		Capacitors are +100 -0 %, 50 WV and ceramic unless otherwise specified.	
C301	1-101-552	3.5 pF ±0.2 pF 50 WV, ceramic ---------	
C302	1-101-552	3.5 pF ±0.2 pF 50 WV, ceramic ---------	
C304	1-101-004	0.01 µF ----------	
C305	1-101-004	0.01 µF ----------	
C306	1-101-004	0.01 µF ----------	
C308	1-101-004	0.01 µF ----------	
C309	1-101-004	0.01 µF ----------	
C310	1-101-004	0.01 µF ----------	
C311	1-101-004	0.01 µF ----------	
C313	1-101-004	0.01 µF ----------	
C314	1-121-413	100 µF +100 -10 % 6.3 WV, electrolytic-	
C315	1-101-004	0.01 µF ----------	
C316	1-121-482	33 µF +100 -10 % 6.3 WV, electrolytic-	
C317	1-101-837	0.5 pF ±0.2 pF 50 WV, ceramic --------	
C319	1-101-004	0.01 µF ----------	
C324	1-101-004	0.01 µF ----------	
C325	1-121-471	10 µF +100 -10 % 16 WV, electrolytic -	
C326	1-121-712	200 µF ±20 % 10 WV, electrolytic -	
C327	1-121-338	47 µF +100 -10 % 16 WV, electrolytic -	
C328	1-101-004	0.01 µF ----------	
C329	1-121-341	220 µF +100 -10 % 16 WV, electrolytic -	
C330	1-101-004	0.01 µF ----------	
C331	1-101-004	0.01 µF ----------	
C332	-	-	
C333	1-121-485	33 µF +100 -10 % 16 WV, electrolytic-	
C360	1-101-004	0.01 µF ----------	
C361	1-101-004	0.01 µF ----------	
C362	1-101-004	0.01 µF ----------	
C364	1-101-004	0.01 µF ----------	
C365	1-101-004	0.01 µF ----------	
C366	1-101-004	0.01 µF ----------	
C368	1-101-004	0.01 µF ----------	
C369	1-101-004	0.01 µF ----------	
C370	1-121-482	33 µF +100 -10 % 6.3 WV, electrolytic-	
C371	1-101-004	0.01 µF ----------	
C373	1-101-004	0.01 µF ----------	
C376	1-101-004	0.01 µF ----------	
C377	1-101-004	0.01 µF ----------	

Ref. No.	Part No.	Description			Unit Price
C378	1-101-004	0.01 µF	----------	----------	
C379	1-101-004	0.01 µF	----------	----------	
C381	1-101-004	0.01 µF	----------	----------	
C382	1-101-004	0.01 µF	----------	----------	
C383	1-101-004	0.01 µF	----------	----------	
C385	1-101-004	0.01 µF	----------	----------	
C386	1-101-004	0.01 µF	----------	----------	
C387	1-121-482	33 µF	+100 -10 %	6.3 WV, electrolytic-	
C388	1-101-004	0.01 µF	----------	----------	
C389	1-101-584	2 pF	±0.2 pF	50 WV, ceramic ------	
C391	1-101-004	0.01 µF	----------	----------	
C392	1-101-552	3.5 pF	±0.2 pF	50 WV, ceramic ------	
C396	1-101-004	0.01 µF	----------	----------	
C397	1-101-004	0.01 µF	----------	----------	
C398	1-121-341	220 µF	+100 -10 %	16 WV, electrolytic -	
C399	1-121-716	10 µF	±20 %	50 WV, electrolytic -	
C401	1-101-004	0.01 µF	----------	----------	
C402	1-101-004	0.01 µF	----------	----------	
C403	1-101-004	0.01 µF	----------	----------	
C404	1-101-004	0.01 µF	----------	----------	
C407	1-101-002	0.002 µF	----------	----------	
C408	1-101-058	0.005 µF	±20 %	50 WV, ceramic ------	
C409	1-121-729	10 µF	+100 -10 %	6.3 WV, electrolytic-	
C501	1-121-471	10 µF	+100 -10 %	16 WV, electrolytic -	
C502	1-101-583	60 pF	±5 %	50 WV, ceramic ------	
C503	1-101-583	60 pF	±5 %	50 WV, ceramic ------	
C504	1-121-338	47 µF	+100 -10 %	16 WV, electrolytic -	
C505	1-121-338	47 µF	+100 -10 %	16 WV, electrolytic -	
C506	1-105-701-12	0.001 µF	±10 %	100 WV, mylar -------	
C507	1-121-356	100 µF	+100 -10 %	16 WV, electrolytic -	
C508	1-113-124	0.2 µF	±20 %	150 WV, paper -------	
C509	1-121-246	4.7 µF	+100 -10 %	160 WV, electrolytic-	
C510	1-113-122	0.05 µF	±20 %	500 WV, paper -------	
C511	1-113-122	0.05 µF	±20 %	500 WV, paper -------	
C512	1-102-849	62 pF	±5 %	50 WV, ceramic ------	
C513	1-102-888	150 pF	±5 %	50 WV, ceramic ------	
C551	1-121-471	10 µF	+100 -10 %	16 WV, electrolytic -	
C552	1-121-732	470 µF	+100 -10 %	16 WV, electrolytic -	
C553	1-121-341	220 µF	+100 -10 %	16 WV, electrolytic -	
C554	1-121-485	33 µF	+100 -10 %	16 WV, electrolytic -	
C555	1-121-555	47 µF	+100 -10 %	16 WV, electrolytic -	

Ref. No.	Part No.	Description			Unit Price
C556	1-101-005	0.02 µF		----------	
C557	1-105-685-12	0.1 µF	±10 %	50 WV, mylar --------	
C558	1-101-005	0.02 µF		----------	
C601	1-127-021	0.3 µF	±20 %	10 WV, electrolytic (alox) -------	
C602	1-127-025	3 µF	±20 %	10 WV, electrolytic (alox) -------	
C603	1-121-464	4.7 µF	+100 -10 %	25 WV, electrolytic -	
C604	1-121-338	47 µF	+100 -10 %	16 WV, electrolytic -	
C605	1-105-713-12	0.01 µF	±10 %	100 WV, mylar -------	
C606	1-105-713-12	0.01 µF	±10 %	100 WV, mylar -------	
C607	1-105-709-12	0.0047 µF	±10 %	100 WV, mylar -------	
C608	1-105-715-12	0.015 µF	±10 %	100 WV, mylar -------	
C609	1-127-025	3 µF	±20 %	10 WV, electrolytic (alox) -------	
C610	1-105-721-12	0.047 µF	±10 %	100 WV, mylar -------	
C611	1-121-458	3.3 µF	+150 -10 %	50 WV, electrolytic -	
C612	1-101-424	500 pF	±20 %	250 WV, ceramic -----	
C613	1-105-711-12	0.0068 µF	±10 %	100 WV, mylar -------	
C701	1-127-232	4.7 µF	±20 %	25 WV, electrolytic (alox) -------	
C702	1-121-732	470 µF	+100 -10 %	16 WV, electrolytic -	
C703	1-131-116	10 µF	±20 %	15 WV, tantalum -----	
C704	1-121-403	33 µF	+100 -10 %	16 WV, electrolytic -	
C705	1-127-025	3.3 µF	±20 %	10 WV, electrolytic (alox) -------	
C706	1-121-414	100 µF	+100 -10 %	10 WV, electrolytic -	
C707	1-105-727-12	0.15 µF	±10 %	100 WV, mylar -------	
C801	1-105-715-12	0.015 µF	±10 %	100 WV, mylar -------	
C802	1-105-711-12	0.0068 µF	±10 %	100 WV, mylar -------	
C804	1-101-007	0.05 µF		----------	
C805	1-129-163	0.022 µF	±5 %	50 WV, styrol -------	
C806	1-105-717-12	0.022 µF	±10 %	100 WV, mylar -------	
*C807,808	1-105-715-12	0.015 µF	±10 %	100 WV, mylar -------	
*C807,808	1-105-703-12	0.0015 µF	±10 %	100 WV, mylar -------	
*C807,808	1-105-705-12	0.0022 µF	±10 %	100 WV, mylar -------	
*C807,808	1-105-707-12	0.0033 µF	±10 %	100 WV, mylar -------	
*C807,808	1-105-709-12	0.0047 µF	±10 %	100 WV, mylar -------	
*C807,808	1-105-711-12	0.0068 µF	±10 %	100 WV, mylar -------	
*C807,808	1-105-713-12	0.01 µF	±10 %	100 WV, mylar -------	

* Mark to be selected.

Ref. No.	Part No.	Description			Unit Price
C809	1-105-725-12	0.1 µF	±10 %	100 WV, mylar -------	
C810	1-101-821	0.002 µF	+100 -0 %	500 WV, ceramic -----	
C814	1-101-845	0.001 µF	+100 -0 %	500 WV, ceramic -----	
C812	1-105-466-12	0.0068 µF	±10 %	600 WV, mylar -------	
*C811,813	1-105-461-12	0.001 µF	±10 %	600 WV, mylar -------	
*C811,813	1-105-462-12	0.0015 µF	±10 %	600 WV, mylar -------	
*C811,813	1-105-463-12	0.0022 µF	±10 %	600 WV, mylar -------	
*C811,813	1-105-464-12	0.0033 µF	±10 %	600 WV, mylar -------	
*C811,813	1-105-465-12	0.0047 µF	±10 %	600 WV, mylar -------	
*C811,813	1-105-466-12	0.0068 µF	±10 %	600 WV, mylar -------	
C815	1-101-845	0.001 µF	+100 -0 %	500 WV, ceramic -----	
C816	1-129-496	1.8 µF	±10 %	100 WV, styrol ------	
C817	1-129-497	1 µF	±10 %	100 WV, styrol ------	
C818	1-101-845	0.001 µF	+100 -0 %	500 WV, ceramic -----	
C819	1-121-703	100 µF	+100 -10 %	50 WV, electrolytic -	
C820	1-121-703	100 µF	+100 -10 %	50 WV, electrolytic -	
C821	1-105-755-12	0.015 µF	±10 %	200 WV, mylar -------	
C822	1-113-122	0.05 µF	±20 %	500 WV, paper -------	
C823	1-105-749-12	0.0047 µF	±10 %	200 WV, mylar -------	
C824	1-101-845	0.001 µF	+100 -0 %	500 WV, ceramic -----	
C828	1-105-465-12	0.0047 µF	±10 %	600 WV, mylar -------	
C901	1-109-015	2000 pF	±10 %	500 WV, mica --------	
C902	1-109-015	2000 pF	±10 %	500 WV, mica --------	
C903	1-121-023	4000 µF		15 WV, electrolytic -	
C904	1-119-101	100 µF	+30 -10 %	12 WV, electrolytic -	
C905	1-121-023	4000 µF		15 WV, electrolytic -	

* Mark to be selected.

Ref. No.	Part No.	Description	Unit Price
		Resistors	
		Resistors are ±5 %, ERD14V, and carbon unless otherwise specified.	
R151	1-246-653	150 Ω ERD14T, carbon	
R301	1-246-637	33 Ω ERD14T, carbon	
R302	1-248-649	100 Ω	
R303	1-248-659	270 Ω	
*R304	1-204-154	510 Ω RD1/16L, carbon	
*R304	1-203-182	1 kΩ RD1/16L, carbon	
*R304	1-204-195	2 kΩ RD1/16L, carbon	
R305	1-246-666	510 Ω ERD14T, carbon	
R306	1-246-649	100 Ω ERD14T, carbon	
R307	1-248-659	270 Ω ERD14T, carbon	
*R308	1-203-469	6.2 kΩ RD1/16L, carbon	
*R308	1-203-189	8.2 kΩ RD1/16L, carbon	
*R308	1-203-190	10 kΩ RD1/16L, carbon	
*R308	1-203-699	20 kΩ RD1/16L, carbon	
R309	1-248-653	150 Ω	
R310	1-248-691	5.6 kΩ	
R311	1-248-675	1.2 kΩ	
R312	1-248-653	150 Ω	
*R313	1-203-469	6.2 kΩ RD1/16L, carbon	
*R313	1-203-189	8.2 kΩ RD1/16L, carbon	
*R313	1-203-190	10 kΩ RD1/16L, carbon	
*R313	1-203-699	20 kΩ RD1/16L, carbon	
R314	1-248-646	75 Ω	
R315	1-248-687	3.9 kΩ	
R316	1-248-696	9.1 kΩ	
*R317	1-248-688	4.3 kΩ	
*R317	1-248-689	4.7 kΩ	
*R317	1-248-690	5.1 kΩ	
R318	1-248-676	1.3 kΩ	
R319	1-248-655	180 Ω	
R320	1-248-657	220 Ω	
R321	1-248-667	560 Ω	
R322	1-248-641	47 Ω	
*R323	1-246-703	18 kΩ ERD14T, carbon	
*R323	1-246-704	20 kΩ ERD14T, carbon	
*R323	1-246-705	22 kΩ ERD14T, carbon	

* Mark to be selected.

Ref. No.	Part No.	Description	Unit Price
R324	1-246-681	2.2 kΩ ERD14T, carbon	
R351	1-246-649	100 Ω ERD14T, carbon	
R352	1-248-673	1 kΩ	
R353	1-246-660	300 Ω ERD14T, carbon	
*R354	1-203-469	6.2 kΩ RD1/16L, carbon	
*R354	1-203-189	8.2 kΩ RD1/16L, carbon	
*R354	1-203-190	10 kΩ RD1/16L, carbon	
*R354	1-203-699	20 kΩ RD1/16L, carbon	
R355	1-248-660	300 Ω	
R356	1-248-695	8.2 kΩ	
R357	1-248-684	3 kΩ	
R358	1-248-660	300 Ω	
*R359	1-204-195	2 kΩ RD1/16L, carbon	
*R359	1-203-451	3 kΩ RD1/16L, carbon	
*R359	1-204-345	5.1 kΩ RD1/16L, carbon	
R360	1-248-660	300 Ω	
R361	1-248-696	9.1 kΩ	
R362	1-248-675	1.2 kΩ	
R363	1-248-651	120 Ω	
*R364	1-203-469	6.2 kΩ RD1/16L, carbon	
*R364	1-203-189	8.2 kΩ RD1/16L, carbon	
*R364	1-203-190	10 kΩ RD1/16L, carbon	
*R364	1-203-699	20 kΩ RD1/16L, carbon	
R365	1-248-653	150 Ω	
R366	1-246-673	1 kΩ ERD14T, carbon	
R367	1-248-649	100 Ω	
R368	1-248-660	300 Ω	
*R369	1-204-154	510 Ω RD1/16L, carbon	
*R369	1-203-182	1 kΩ RD1/16L, carbon	
*R369	1-204-195	2 kΩ RD1/16L, carbon	
R370	1-246-660	300 Ω ERD14T, carbon	
R371	1-246-695	8.2 kΩ ERD14T, carbon	
R372	1-248-684	3 kΩ	
R373	1-248-660	300 Ω	
*R374	1-203-856	150 Ω RD1/16L, carbon	
*R374	1-204-534	300 Ω RD1/16L, carbon	
*R374	1-204-154	510 Ω RD1/16L, carbon	
R375	1-248-660	300 Ω	
R376	1-248-696	9.1 kΩ	
R377	1-248-675	1.2 kΩ	
R378	1-248-651	120 Ω	

* Mark to be selected.

Ref. No.	Part No.	Description	Unit Price
*R379	1-204-195	2 kΩ RD1/16L, carbon	
*R379	1-203-451	3 kΩ RD1/16L, carbon	
*R379	1-204-345	5.1 kΩ RD1/16L, carbon	
R380	1-248-653	150 Ω	
*R381	1-204-195	2 kΩ RD1/16L, carbon	
*R381	1-203-451	3 kΩ RD1/16L, carbon	
*R381	1-204-345	5.1 kΩ RD1/16L, carbon	
R382	1-246-641	47 Ω ERD14T, carbon	
R383	1-246-704	20 kΩ ERD14T, carbon	
R384	1-248-703	18 kΩ	
R385	1-248-699	12 kΩ	
R401	1-248-656	200 Ω	
R402	1-246-688	4.3 kΩ ERD14T, carbon	
R404	1-202-018	3.9 kΩ RC1/8, composition	
R405	1-248-661	330 Ω	
R501	1-248-714	51 kΩ	
R502	1-248-710	36 kΩ	
R503	1-248-663	390 Ω	
R504	1-248-663	390 Ω	
R505	1-248-673	1 kΩ	
R507	1-248-708	30 kΩ	
R508	1-248-693	6.8 kΩ	
R509	-		
R510	1-248-643	56 Ω	
R511	1-248-673	1 kΩ	
R512	1-244-891	5.6 kΩ RD12T, carbon	
R513	1-244-921	100 kΩ RD12T, carbon	
R514	1-248-697	10 kΩ	
R515	1-248-732	300 kΩ	
R551	1-246-715	56 kΩ ERD14T, carbon	
R552	1-246-673	1 kΩ ERD14T, carbon	
R553	1-248-697	10 kΩ	
R554	1-248-697	10 kΩ	
R555	1-248-679	1.8 kΩ	
R556	1-248-612	3 Ω	
R557	1-248-693	6.8 kΩ	
R558	1-248-675	1.2 kΩ	
R559	1-248-641	47 Ω	
R560	1-248-655	180 Ω	
R561	1-248-656	200 Ω	

* Mark to be selected.

Ref. No.	Part No.	Description	Unit Price
R562	1-248-675	1.2 kΩ	
R563	1-248-612	3 Ω	
R564	1-248-618	5.1 Ω	
R565	1-246-631	18 Ω ERD14T, carbon	
R566	1-246-655	180 Ω ERD14T, carbon	
R601	1-248-642	51 Ω	
R602	1-248-661	330 Ω	
R603	1-248-697	10 kΩ	
R604	1-248-737	470 kΩ	
R605	1-248-684	3 kΩ	
R606	1-248-697	10 kΩ	
R607	1-248-701	15 kΩ	
R608	1-248-712	43 kΩ	
R609	1-248-656	200 Ω	
R610	1-248-682	2.4 kΩ	
R611	1-248-697	10 kΩ	
R612	1-248-686	3.6 kΩ	
R613	1-211-063	2 kΩ RD1P, carbon	
R614	1-248-680	2 kΩ	
R615	1-248-666	510 Ω	
R616	1-248-701	15 kΩ	
R617	1-248-680	2 kΩ	
R618	1-248-704	20 kΩ	
R619	1-248-662	360 Ω	
R620	1-248-625	10 Ω	
R621	1-206-057	150 Ω 2 WV, metal oxide	
R701	1-248-660	300 Ω	
R702	1-248-688	4.3 kΩ	
R703	1-248-677	1.5 kΩ	
R704	1-248-625	10 Ω	
R705	1-248-688	4.3 kΩ	
R706	1-248-690	5.1 kΩ	
R707	1-246-703	18 kΩ ERD14T, carbon	
R708	1-248-680	2 kΩ	
R709	1-248-680	2 kΩ	
R710	1-248-688	4.3 kΩ	
*R711	1-248-671	820 Ω	
*R711	1-248-673	1 kΩ	
*R711	1-248-675	1.2 kΩ	
*R711	1-248-677	1.5 kΩ	

* Mark to be selected.

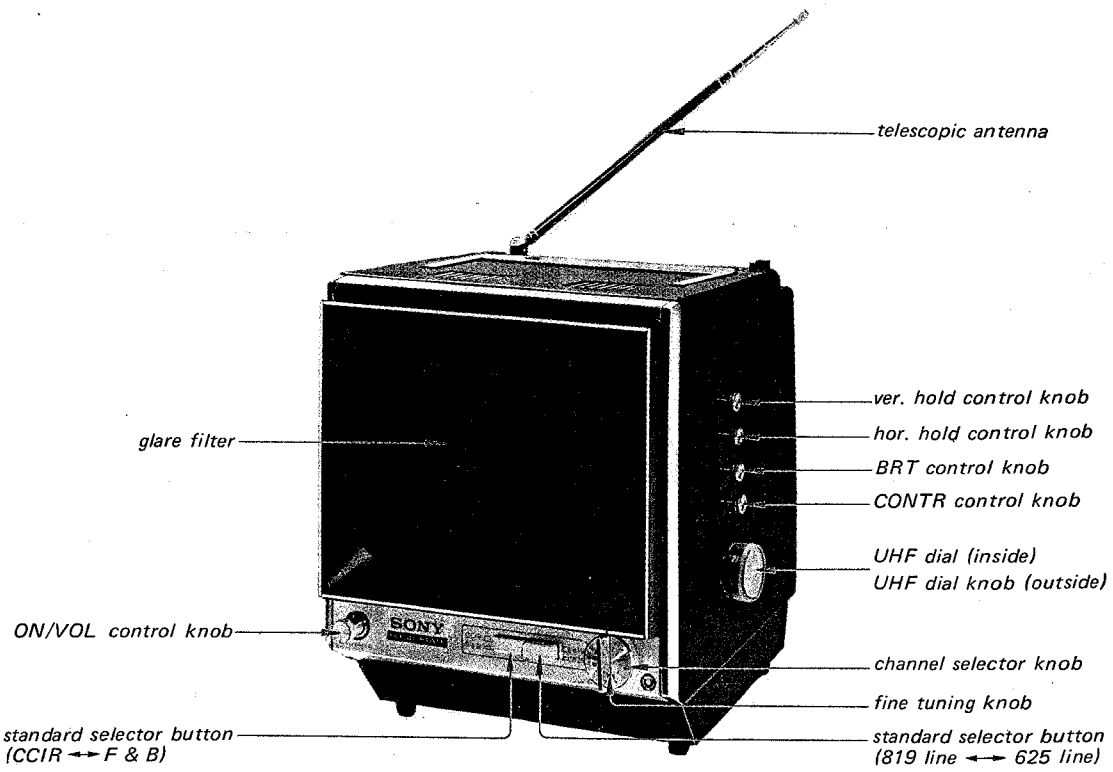
Ref. No.	Part No.	Description	Unit Price
*R711	1-248-679	1.8 kΩ	
*R711	1-248-680	2 kΩ	
*R711	1-248-681	2.2 kΩ	
*R711	1-248-682	2.4 kΩ	
R712	1-248-665	470 Ω	
R713	1-207-073	3 Ω RW1/2RL, wire wound	
R714	1-248-661	330 Ω	
R715	-	-	
R716	1-248-697	10 kΩ	
R801	1-248-688	4.3 kΩ	
R802	1-248-673	1 kΩ	
R803	1-248-666	510 Ω	
R804	1-248-666	510 Ω	
R805	1-248-660	300 Ω	
R806	1-207-092	8.2 Ω RW1/2RL, wire wound	
R807	1-248-691	5.6 kΩ	
R808	1-248-658	240 Ω	
R809	1-248-673	1 kΩ	
R810	1-248-621	100 kΩ RC1/2, composition	
R811	1-202-621	100 kΩ RC1/2, composition	
R812	1-246-704	20 kΩ ERD14T, carbon	
R813	1-207-094	11 Ω RW1/2RL, wire wound	
R901	1-207-054	3.9 Ω RW3L, wire wound	
VR301	1-221-326	500 Ω-B, adjustable (AGC)	
VR501	1-221-709	1 kΩ-E, variable (contrast)	
VR502	1-221-429	250 kΩ-B, variable (brightness)	
VR551	1-222-271	5 kΩ-D, variable (sound)	
VR601	1-221-297	10 kΩ-B, variable (H. hold)	
VR602	1-221-390	3 kΩ-B, variable (H. freq.) 819 lines	
VR603	1-221-390	3 kΩ-B, variable (H. freq.) 625 lines	
VR701	1-221-403	2 kΩ-B, variable (V. hold)	
VR702	1-221-389	5 kΩ-B, variable (V. hieg)	
VR703	1-221-390	3 kΩ-B, variable (V. lin)	

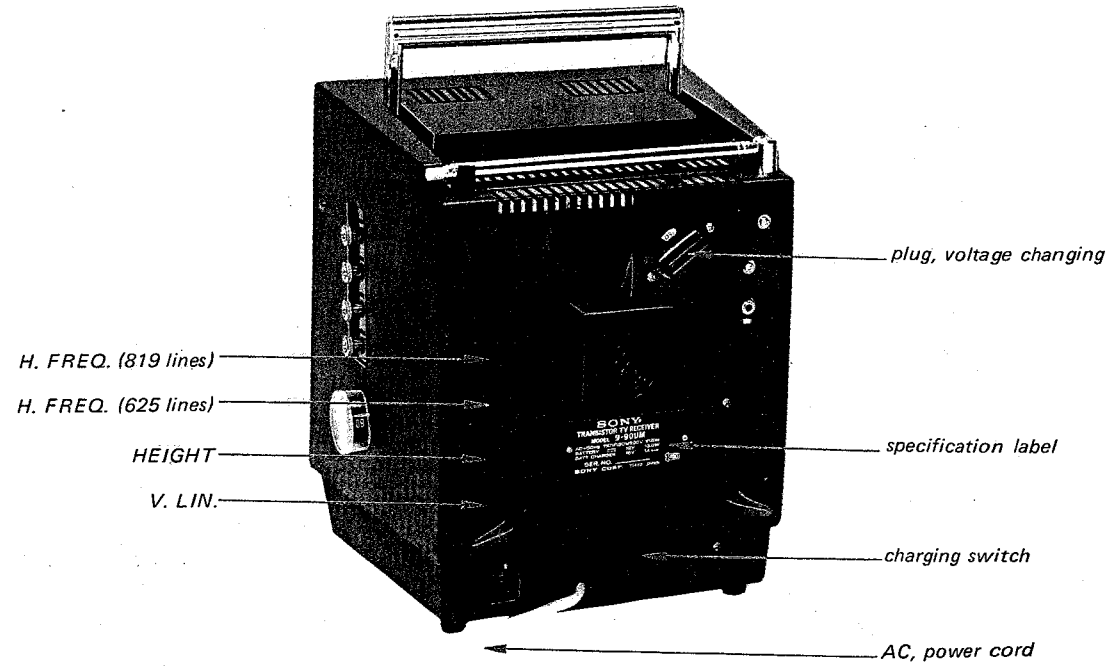
* Mark to be selected.

Ref. No.	Part No.	Description	Unit Price
		Miscellaneous	
	1-231-089-11	AM SIF Filter Block	
	1-509-344	Socket, voltage changing	
	1-506-108	Terminal Pin, SV	
	1-508-044-21	Plug, 9 pin	
	1-507-134-21	Jack, 9 pin	
	1-509-091-12	Connector, 3 pin	
	1-526-083-42	Socket, picture tube	
	1-514-593	Switch, 2-pushbutton	
	1-536-149	Terminal Strips, 2-L	
	1-536-171	Terminal Strips, L-7-L	
CRT	8-731-209-99	Picture Tube (230DB4)	
DFM-1	1-417-027	U.V. Tuner Separator with High Pass Filter	
	1-502-169	Speaker	
	1-501-092-12S	Antenna Ass'y, telescopic	
	1-507-174-22	Jack, 2 P earphone	
J901	1-508-082-23	Terminal, 4 pole	
Se901	1-531-027	Selenium Rectifier	
S902	1-513-216-14	Switch, charging	
F901	1-532-201-12	Fuse, thermal	
F902	1-532-204	Fuse, 2 A	
	1-506-198	DC2p Plug with Fuse Holder	
	1-534-379-51	Cable, IF output	
	1-534-587-11	Cord, AC power	
	1-536-144	Terminal Strips, L-1	
	1-536-192	Terminal Strips, 2-L-2	
P901	1-536-249	Terminal, 4 pole power	

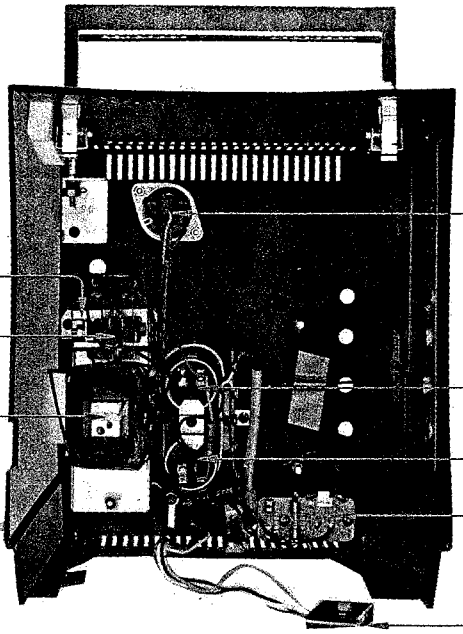
Part No.	Description	Unit Price
	IV. CARTONS & ACCESSORIES	
4-012-817	Packing Carton	
4-012-816	Master Carton (2 sets)	
4-012-818	Cushion, right	
4-012-819	Cushion, left	
4-011-018	Polyethylene Bag	
X-40128-06	Card Ass'y	
X-44900-03	Polishing Cloth in Polyethylene Bag	
4-495-234-11	Instruction Manual	
1-504-034-22	Earphone (ME-20A)	
4-004-143	Serial Number Label	
3-701-161	Polyethylene Bag, accessories	

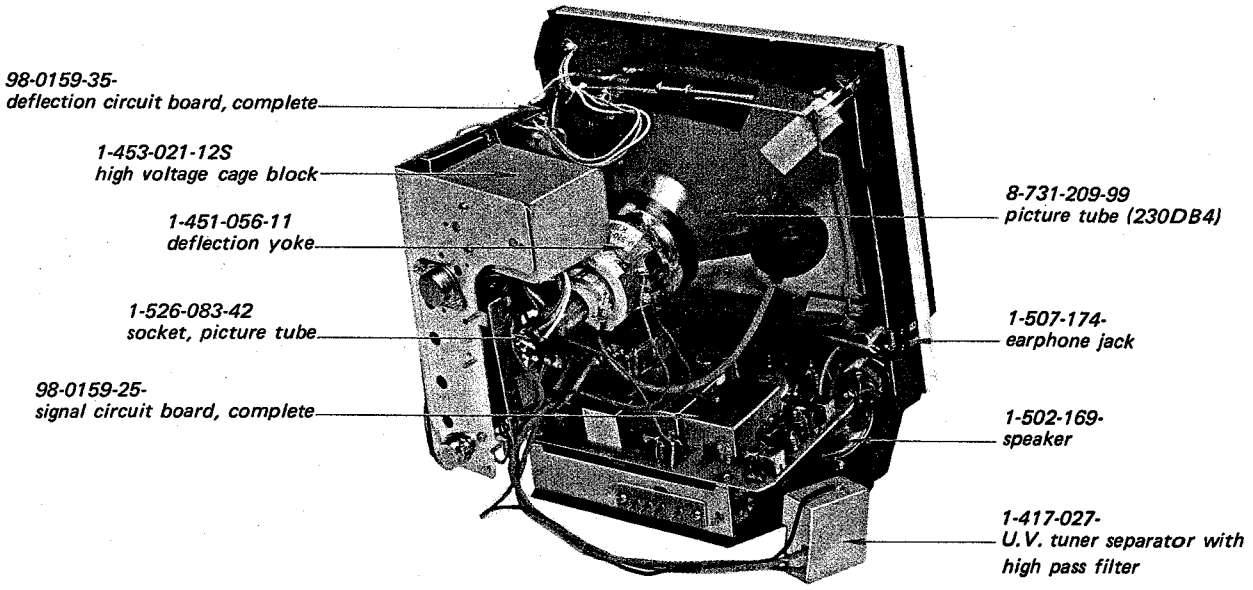
EXTERNAL VIEW





MAJOR PARTS LOCATION





DISASSEMBLY

Rear Cabinet Removal

1. Pull off the four control knobs and UHF dial and UHF dial knob (①, ② in Fig. 1).
2. Remove the two screws (③ , ④ in Fig. 1).
3. Remove the three screws (① , ② , ③ in Fig. 2).
4. Remove the two screws (② , ③ in Fig. 3).

Glare Filter Removal

1. Remove the two screws (① in Fig. 3).

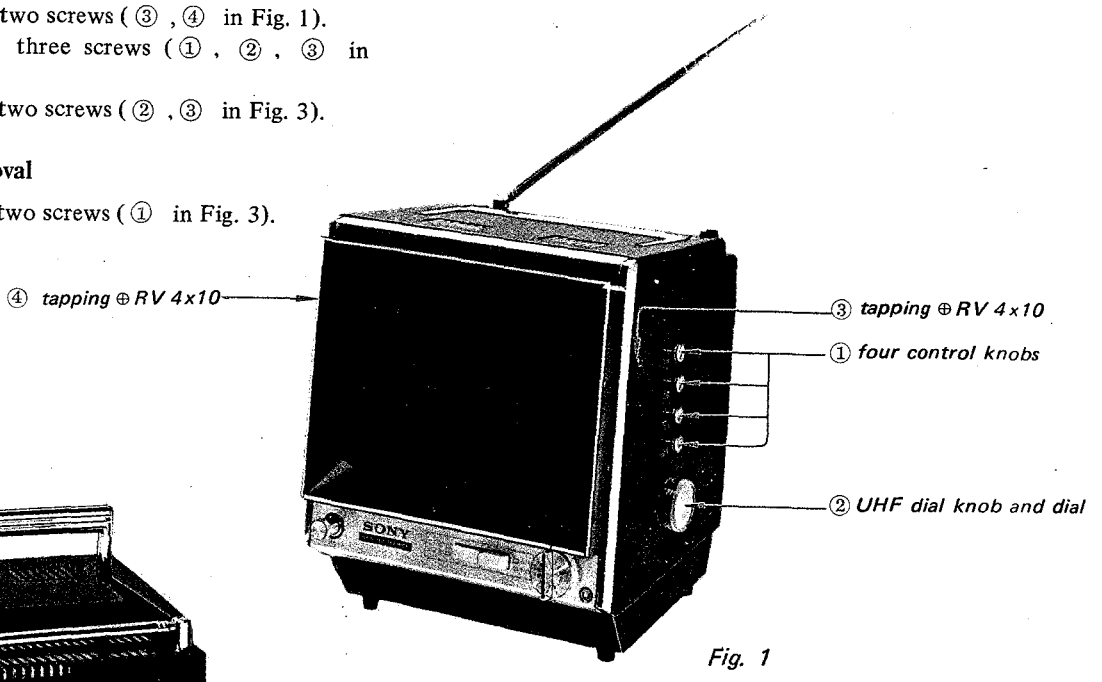


Fig. 1

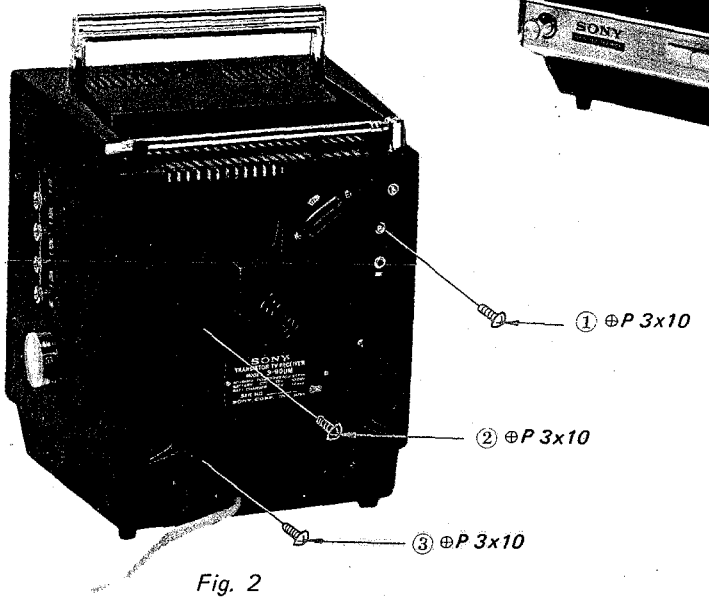


Fig. 2

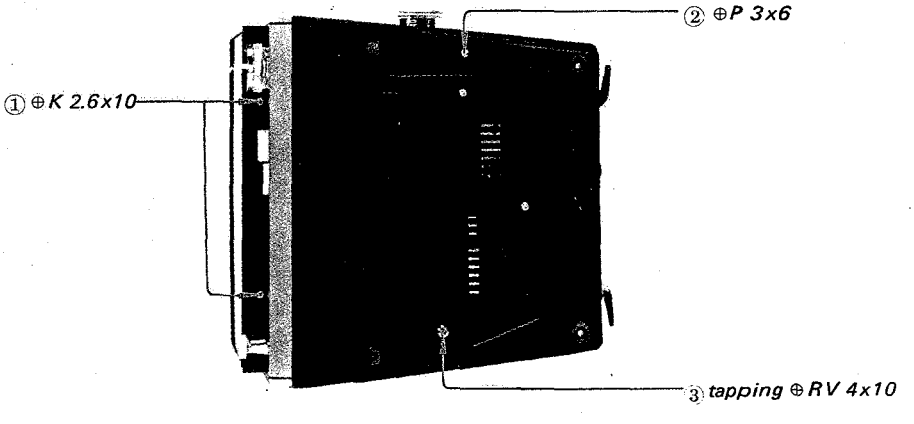


Fig. 3

Deflection Circuit Board Removal

1. Remove the two screws (① , ② in Fig. 4).
2. Unsolder the braided wire (③ in Fig. 4).
3. Pull off the anode cap and picture tube socket (① , ② in Fig. 5).
4. Disconnect the 3-pole connector and 9-pole connector (③ , ④ in Fig. 5).
5. Unsolder the three black leads (⑥ in Fig. 5).
6. Unsolder a brown lead (⑤ in Fig. 5).
7. Unsolder the two shielded cables (⑥ , ⑩ in Fig. 6).
8. Unsolder the eight leads (① , ② , ③ , ④ , ⑤ , ⑦ , ⑧ , ⑨ , in Fig. 6).

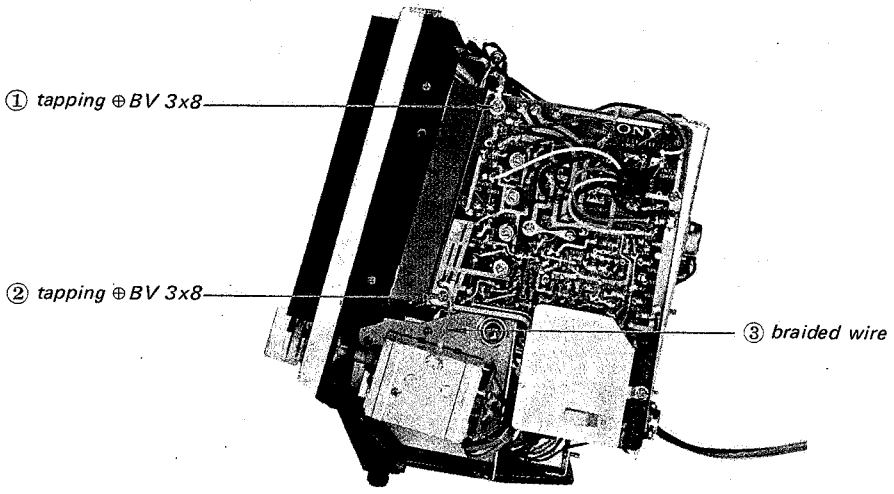


Fig. 4

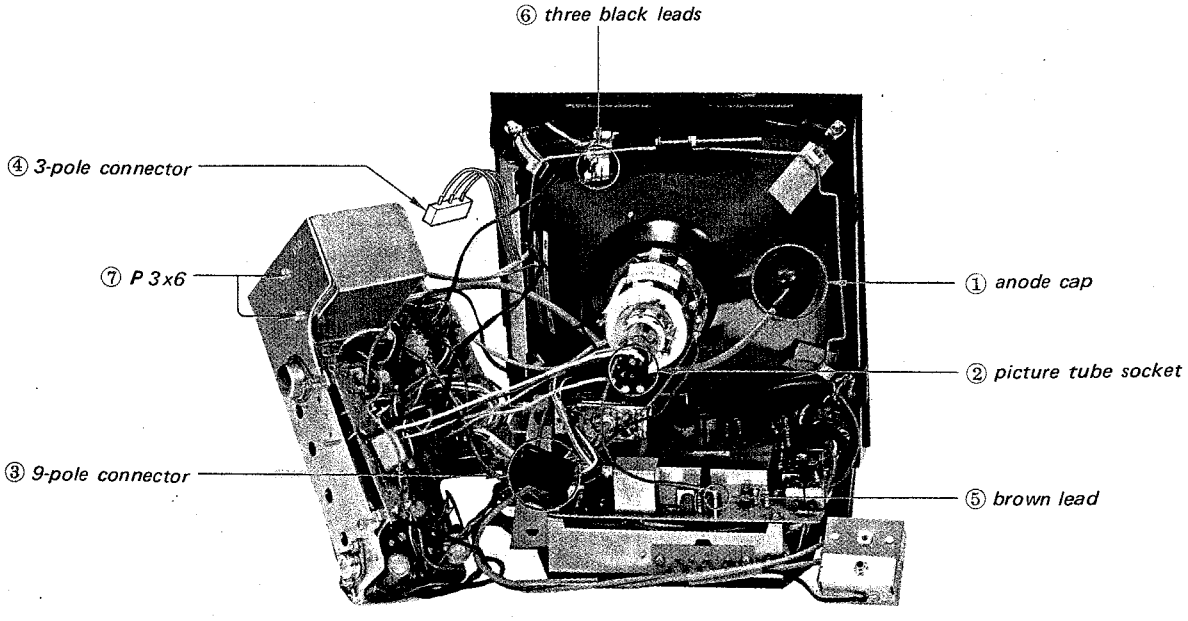


Fig. 5

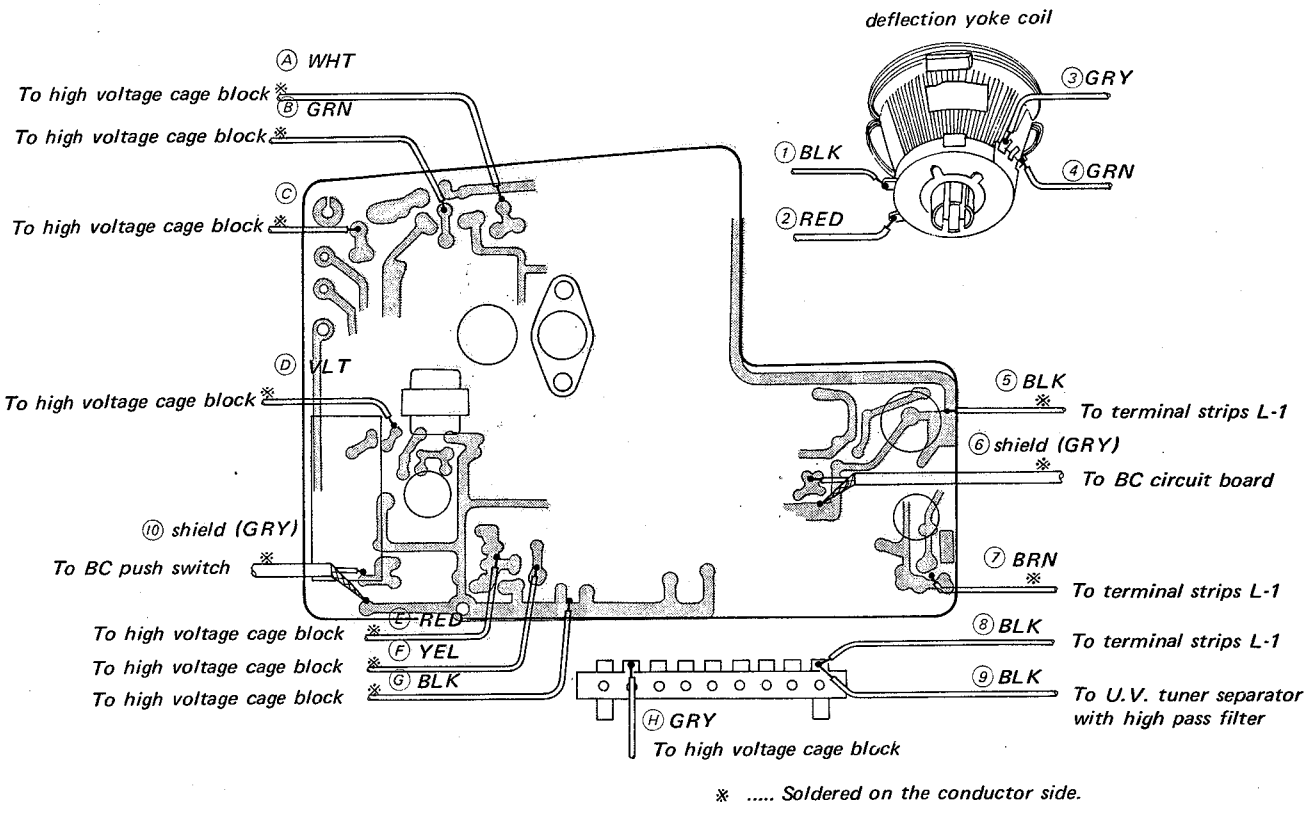


Fig. 6

High Voltage Block Removal

1. Remove the two screws (⑦ in Fig. 5).
2. Unsolder the eight leads (Ⓐ , Ⓑ , Ⓒ , Ⓓ , Ⓔ , Ⓕ , Ⓖ , Ⓗ in Fig. 6).

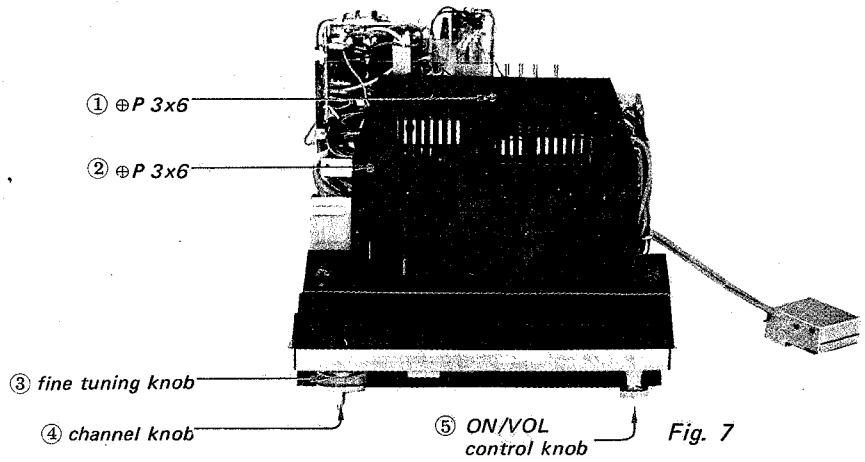


Fig. 7

Signal Circuit Board Removal

1. Take out the EF block.
2. Pull off the channel knob, fine tuning knob and ON/VOL control knob(③ , ④ , ⑤ in Fig. 7).
3. Remove the two screws (① , ② in Fig. 7).
4. Remove a screw (① in Fig. 8).
5. Unsolder a brown lead (② in Fig. 9).
6. Unsolder a shielded cable (③ in Fig. 9).
7. Remove the two screws (① in Fig. 9).
8. Unsolder the all leads in Fig. 10.

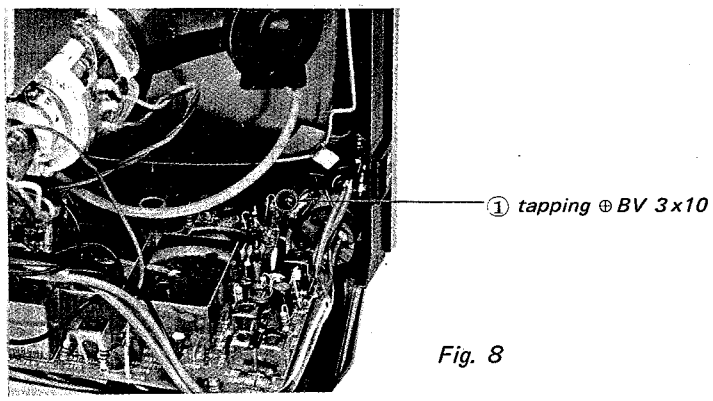


Fig. 8

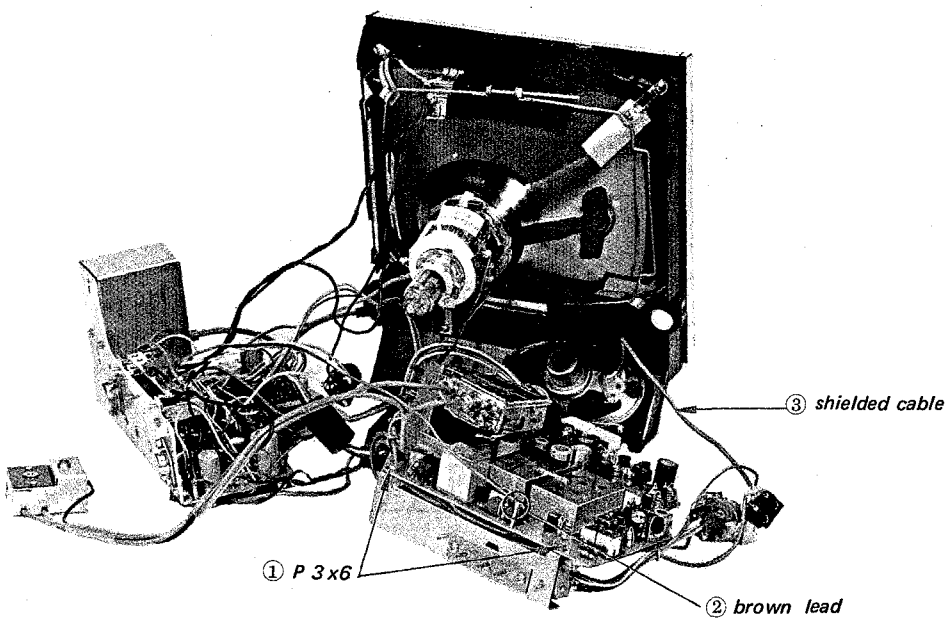
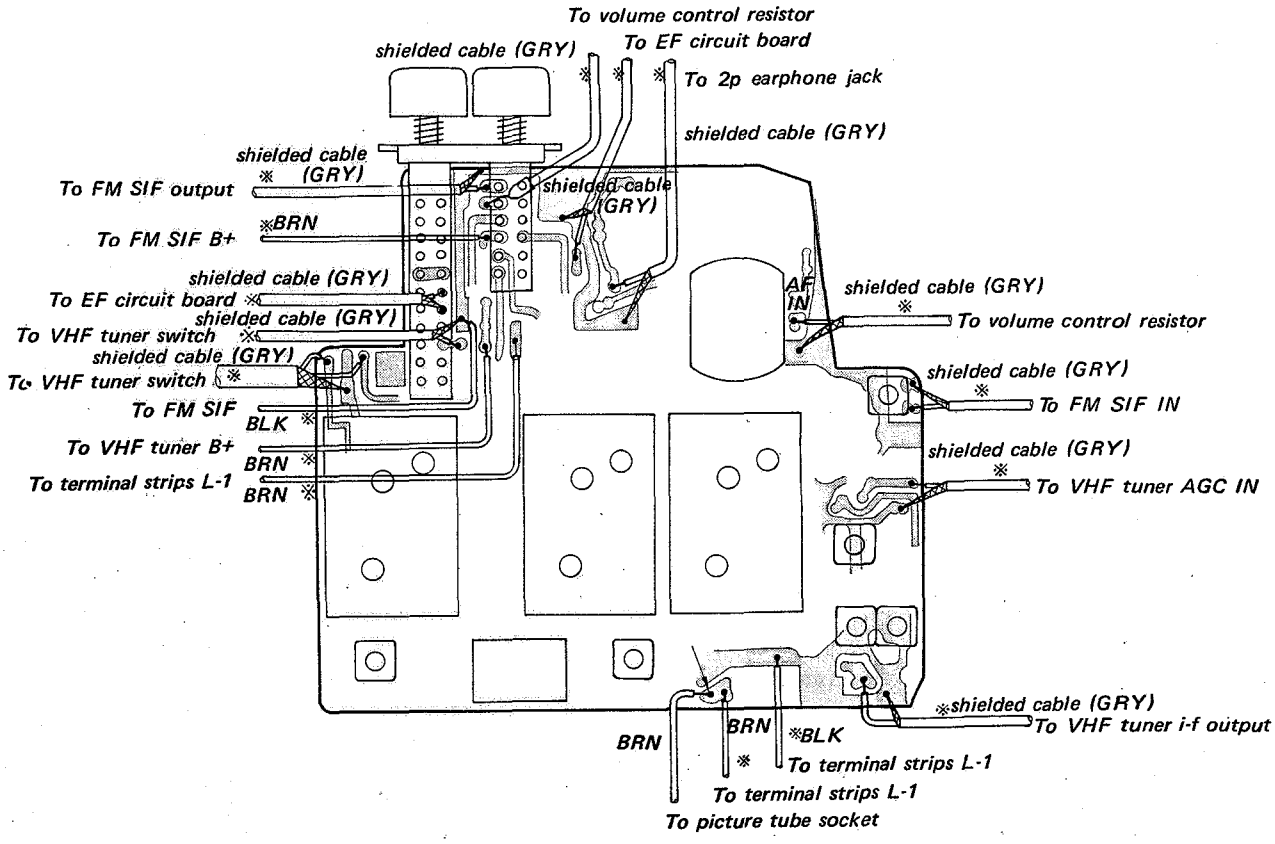


Fig. 9



※..... Soldered on the conductor side

Fig. 10

FM SIF Block Removal

1. Take out BC block.
2. Remove the two screws (① in Fig. 11).
3. Unsolder the two leads and the two shielded cables in Fig. 12.

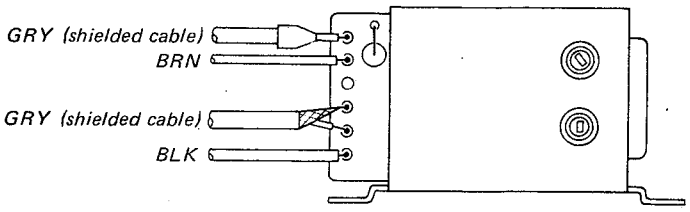


Fig. 12

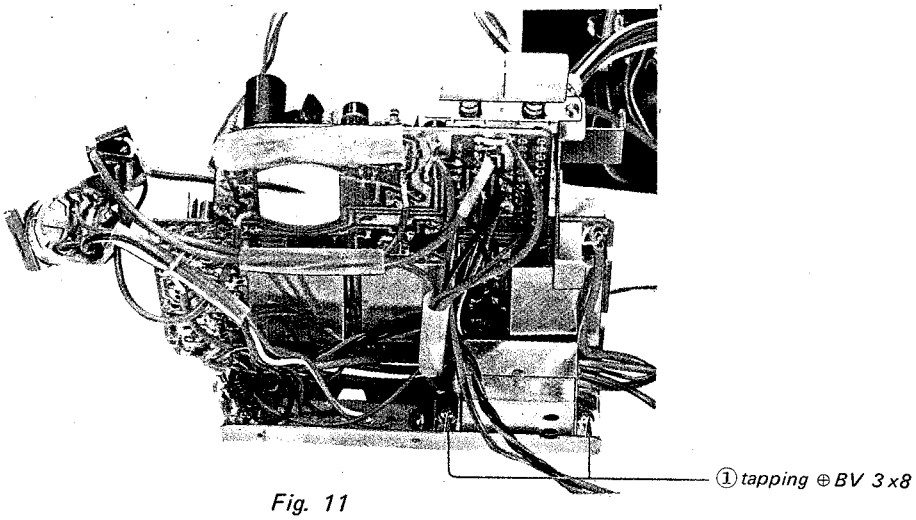


Fig. 11

UHF Tuner Removal

1. Take out the BC block.
2. Remove a nut (② in Fig. 13).
3. Disconnect a phono plug in Fig. 14.
4. Unsolder a coaxial cable, and a orange lead (① , ② in Fig. 14).

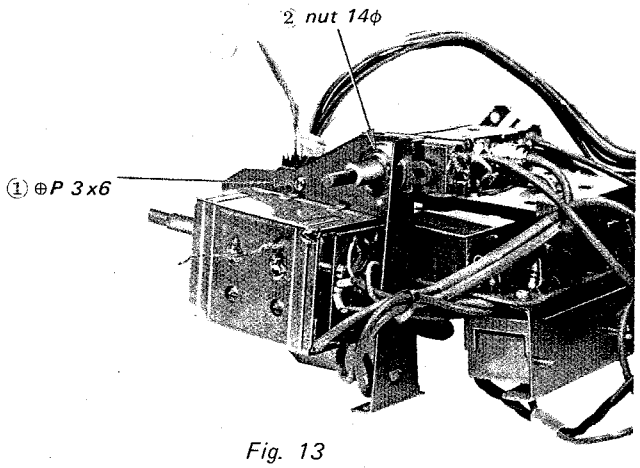


Fig. 13

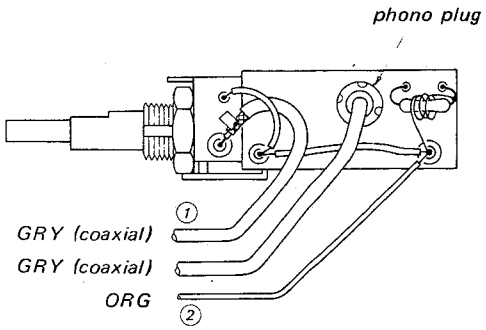


Fig. 14

VHF Tuner Removal

1. Take out the BC block.
2. Remove a screw (① in Fig. 13).
3. Unsolder a coaxial cable (② in Fig. 15).
4. Remove the three screws (① in Fig. 15).
5. Unsolder the three coaxial cables (① in Fig. 16).
6. Unsolder a brown lead (② in Fig. 16).
7. Remove the three screws (③ in Fig. 16).

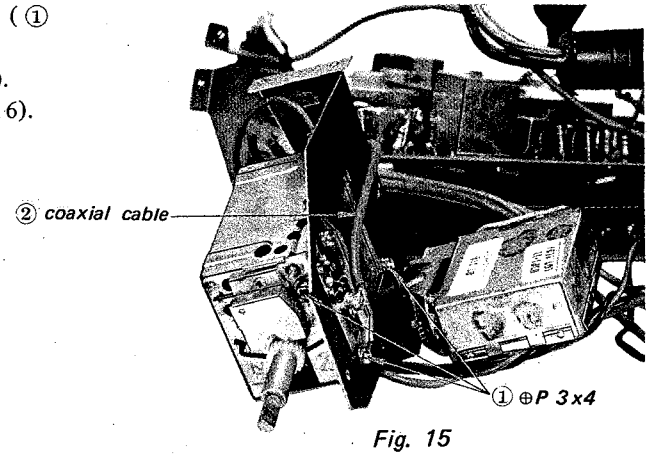


Fig. 15

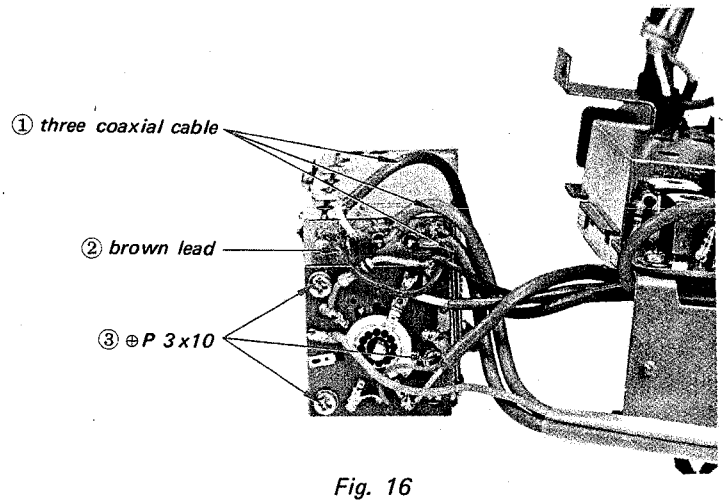


Fig. 16

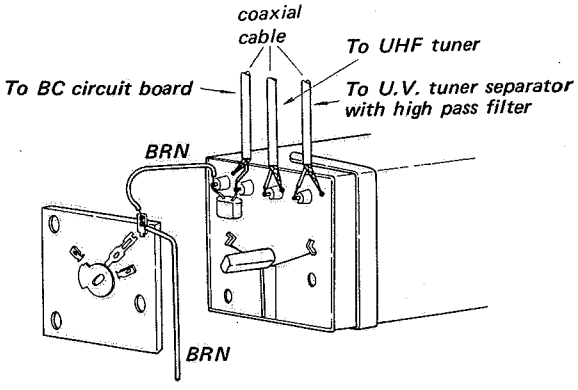


Fig. 17

Picture Tube Removal

1. Remove the four screws (① , ② in Fig. 18).

Speaker Removal

1. Remove a screw (③ in Fig. 18).

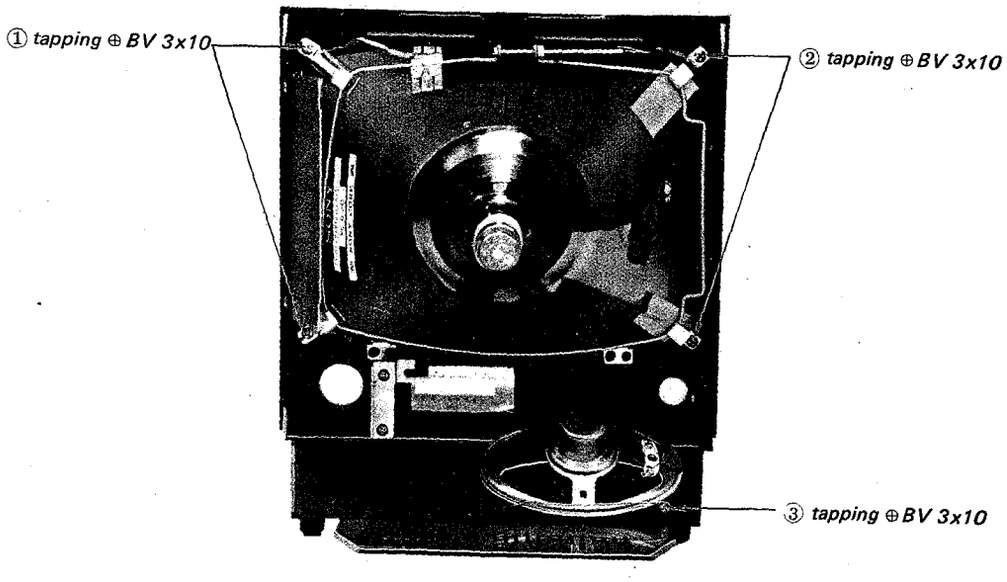


Fig. 18

ADJUSTMENTS PROCEDURE

VIF Adjustments

Pre-alignment Procedures

1. Set the channel selector to a highest inactive channel in the area.
2. Remove the coaxial cable from the RF input terminal of tuner.
3. Check the 12V line.
4. Connect a VOM to AGC input terminal of tuner.
5. Set the push switch button to CCIR (625 lines) position.
6. Set a resistor R323 (18k - 20k ohms) for a reading of 1.25 - 1.35 volts. (See Fig. 19).
7. Disconnect the VOM.

VIF Response Curve Alignment Procedures

1. Connect a signal generator to the test point of tuner through a 0.01 μF capacitor (Ⓐ in Fig. 19).
2. Connect a scope to the VIF output terminal (VIDEO OUT) through a noise filter consisting of a 10k-ohm resistor and 200pF capacitor (Ⓑ in Fig. 19).
3. Set the signal generator to 40.4 MHz with 1 kHz AM modulation.
4. Adjust a coil L301 for obtaining minimum modulated waveform on the scope.
5. Reset the signal generator to 33.4 MHz with 1 kHz AM modulation.

6. Adjust a coil L302 for obtaining minimum modulated waveform on the scope.
7. Make the adjustments specified in the following Table 1.
8. Disconnect the signal generator from the test point.
9. Connect the sweep/marker generator to the test point (Ⓒ in Fig. 19).
10. Connect a rheostat (10k-ohm) to the point indicated with Ⓓ in Fig. 19 .
11. Connect a VOM across a resistor R303 (Ⓔ in Fig. 19).
12. Adjust the rheostat for a reading of approx. 1.5 volts on the VOM.
13. Disconnect the VOM.
14. Adjust the output level of sweep generator to obtain a 1.5 Vp-p VIF response curve on the scope.
15. Readjust T301, T302 and T303 to obtain the VIF response curve as shown in Fig. 20.
16. Adjust L207 in the tuner when satisfactory VIF response curve is not obtained by foregoing procedures (Ⓕ in Fig. 19).
17. Repeat steps from 1 to 15.

TABLE 1 VIF ADJUSTMENTS

Frequency (MHz) with 1 kHz AM modulation	Adjust	Remarks
36.8	T301	Adjust T301 for obtaining maximum modulated waveform on the scope.
36.8	T302	Same as above.
35.4	T303	Same as above.

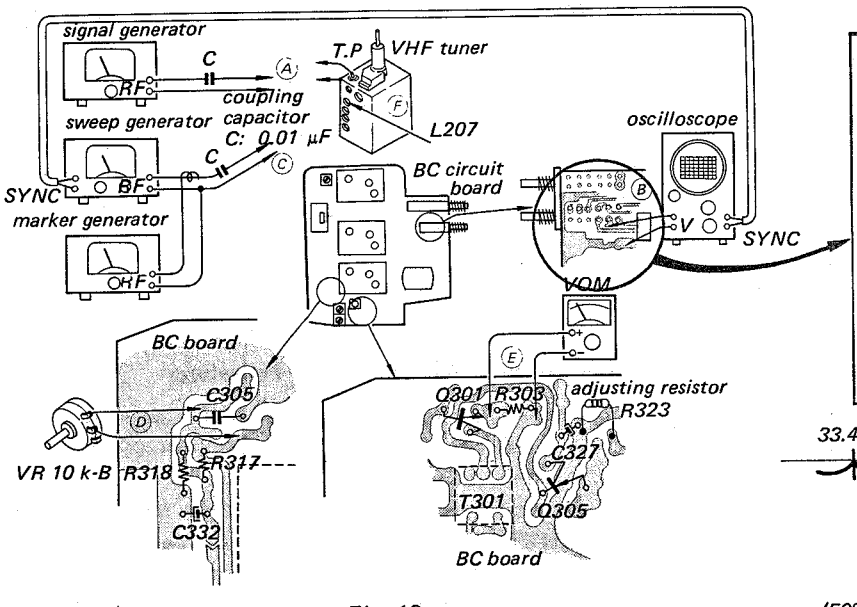


Fig. 19

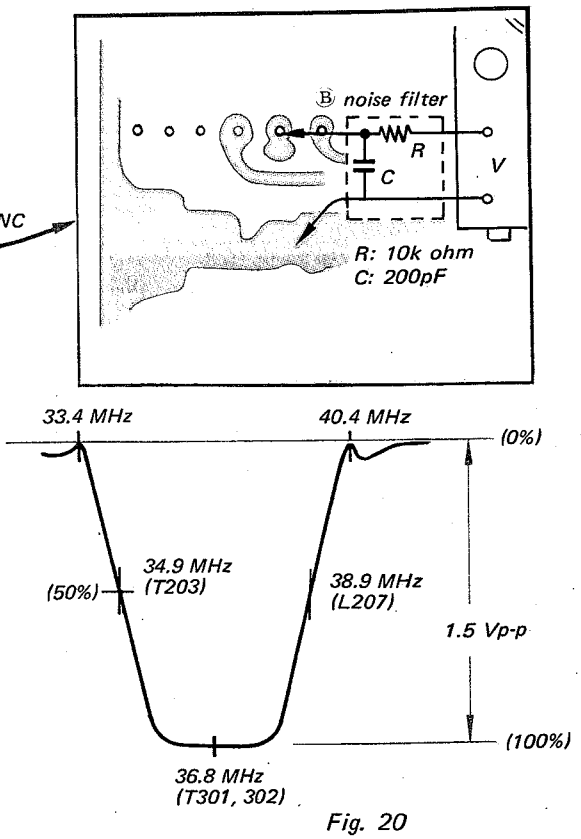


Fig. 20

SIF Adjustments

Unsolder the VIF INPUT coaxial cable first. Remove the SIF and VIF shield covers.
Equipment setup is shown in Fig. 21.

Items	Equipment Connection	Adjust	Remarks
T501 T402 T403	Signal Generator ..... Ⓐ Signal: 5.5 MHz (400 Hz 30% AM) VOM ..... Ⓑ Range: 0.5V or 1.5V dc Scope ..... Ⓒ	T501 T402 (pink core) T403 (blue core)	Adjust for maximum indication on the VOM. Adjust for minimum modulated waveform.
Confirmation of S curve	Sweep/marker generator.. Ⓐ Freq.: 5.5 MHz Scope ..... Ⓒ	T501 T402 (pink core) T403 (blue core)	Turn up sweep generator output to produce an S curve. If the S curve is not symmetrical as illustrated in Fig. 22, adjust T501, T402 and T403 for best result.

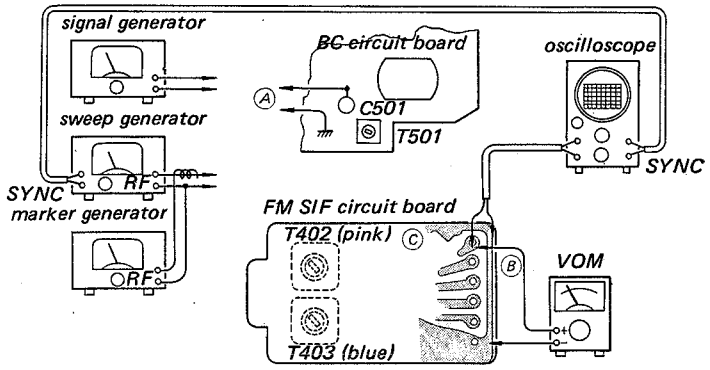


Fig. 21

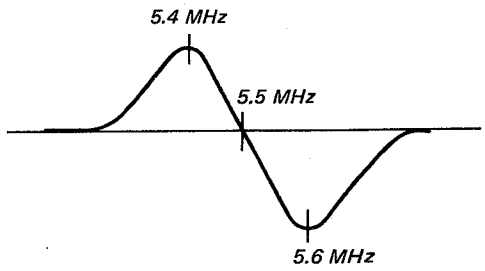


Fig. 22

AM-SIF Adjustments

46.5 MHz AM-SIF response curve adjustments

1. Set the push switch button to F & B (819 lines).
2. Unsolder the tuner output lead from signal circuit board (BC).
3. Connect a dummy resistor (5k-ohm) across the scope input terminal through a noise filter consisting of a 10k-ohm resistor and a 200pF capacitor as shown in Fig. 23.
4. Connect a sweep/marker generator to the AM-SIF input to the signal circuit board (BC) through a 0.01μF capacitor as shown in Fig. 23.
5. Make the adjustments specified in the following table.

Equipment	Connection	Frequency	Adjust	Indication
Signal generator Scope	AM-SIF input (Ⓐ in Fig. 23) AM-SIF output (Ⓑ in Fig. 23)	46.5 MHz (with 1 kHz AM)	T351 T352 T353	For maximum modulated waveform on the scope.
Sweep generator Marker generator Scope	AM-SIF input (Ⓒ in Fig. 23) AM-SIF output (Ⓑ in Fig. 23).			Set the sweep generator switch on. Confirm that the AM-SIF (46.5 MHz) response curve will appear on the scope (See Fig. 24).

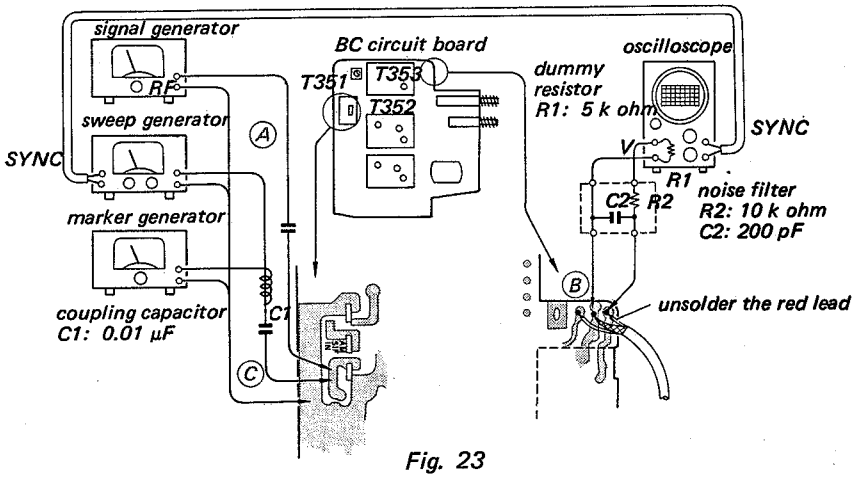


Fig. 23

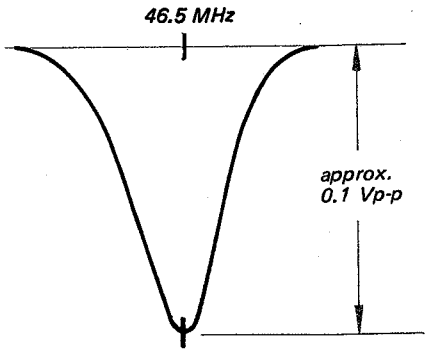


Fig. 24

27.5 MHz & 32.6 MHz AM-SIF response curve adjustments

1. Set the push switch button to F & B (625 lines).
2. Unsolder the tuner output lead from signal circuit board (BC).
3. Connect a dummy resistor (5k-ohm) across the scope input terminal through a noise filter consisting of a 10k-ohm resistor and a 200pF capacitor as shown in Fig. 25.
4. Connect a sweep/marker generator to the AM-SIF input to the signal circuit board (BC) through a 0.01μF capacitor as shown in Fig. 25.
5. Adjust T354 and T355 to obtain the maximum AM-SIF response curve on the scope.
6. Make the adjustments specified in the following table.

Marker generator Frequency (MHz)	Adjust	Correct marker position on the response curve	Indication
27.5 32.6	T356 T357	A (peak) B (peak)	Adjust T356 and T357 to obtain the AM-SIF response curve as shown in Fig. 26.

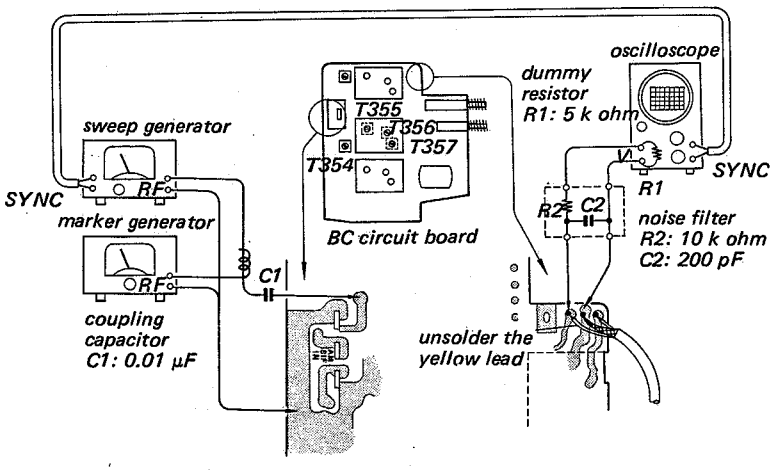


Fig. 25

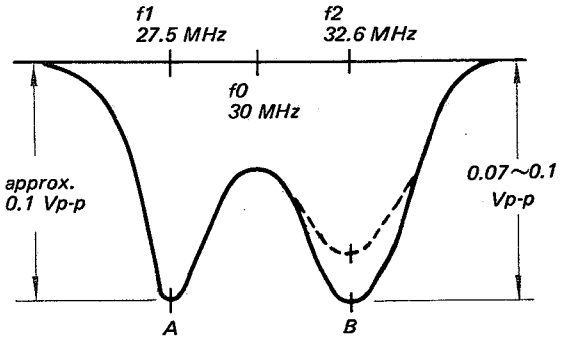
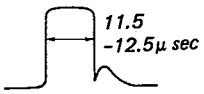
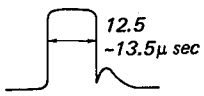


Fig. 26

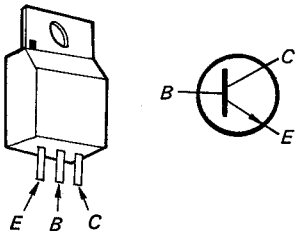
Deflection Circuit Adjustments

Items	Preparations	Equipment	Connection	Adjust	Remarks
Collector current of Q703 (Vert. OUT)	1. Set the push switch button to CCIR (625 lines). 2. Lock in sync. 3. Check 12V power supply. 4. Unsolder a green lead which is connected to the collector of Q703.	ammeter	Between the green lead and the collector of Q703	△R711 (820 ~ 2.4 kohm)	for reading of 120 ~ 126 mA.
Vert. Height and Linearity	1. Set the push switch button to CCIR (625 lines). 2. Receive a test pattern for CCIR (625 lines). 3. Check 12V power supply.			VR702 & VR703	for obtaining the optimum vert. height and linearity.
Pulse-width F & B (819 lines)	1. Set the push switch button to F & B (819 lines). 2. Receive a test pattern for F & B (819 lines). 3. Lock in sync.			△C807 (0.001 - 0.01 μF)	for pulse-width of 11.5 - 12.5μ sec.  Horizontal pulse-width
Pulse-width CCIR (625 lines)	1. Set the push switch button to CCIR (625 lines). 2. Receive a test pattern for CCIR (625 lines). 3. Lock in sync.			△C808 (0.001 - 0.01 μF)	for pulse-width of 12.5 - 13.5μ sec.  Horizontal pulse-width
Horizontal Frequency F & B (819 lines)	1. Set the push switch button to F & B (819 lines) 2. Receive a test pattern for F & B (819 lines). 3. Set the contrast and brightness controls to the optimum position.			VR602	Adjust VR602 so that the number of diagonal bars are almost same for both extreme clockwise and counterclockwise settings of VR601 (H. hold).
Horizontal Frequency CCIR (625 lines)	1. Set the push switch button to CCIR (625 lines). 2. Receive a test pattern for CCIR (625 lines). 3. Set the contrast and brightness controls to the optimum positions.			VR603	Adjust VR603 so that the number of diagonal bars are almost same for both extreme clockwise and counterclockwise settings of VR601 (H. hold).

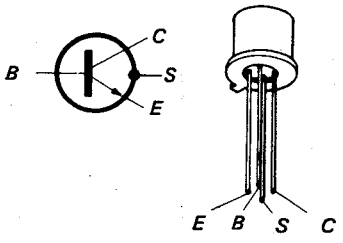
TERMINAL VIEW

Semiconductor

2SC1127

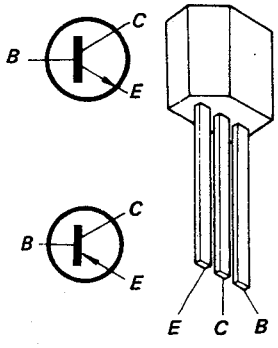


SE5020

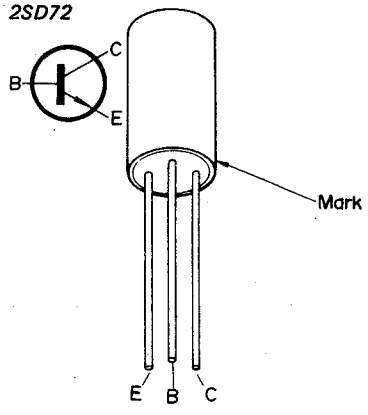


2SC629
2SC657
2SC633
2SC403A

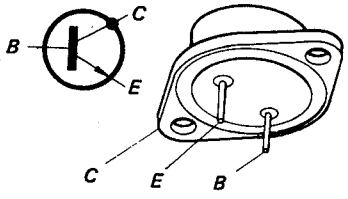
2SA677



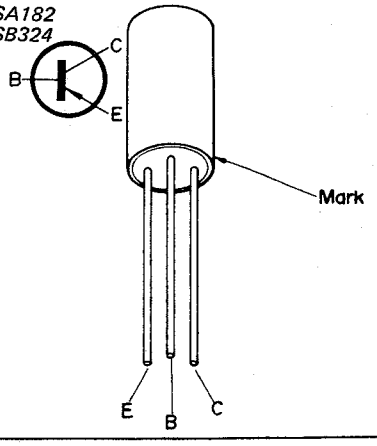
2SD72



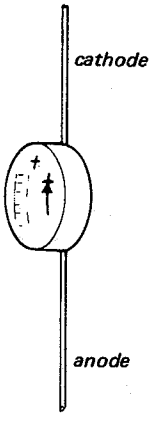
2SD292
2SC806A



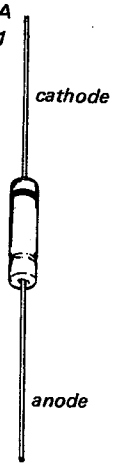
2SA182
2SB324



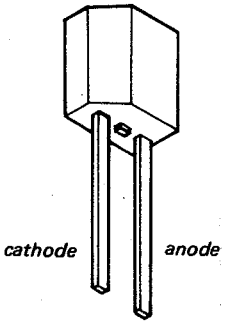
HF SD - 1Z
UF SD - 1A



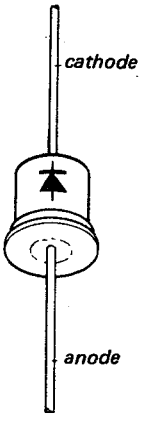
1T22A
1T261
1N60



1T243



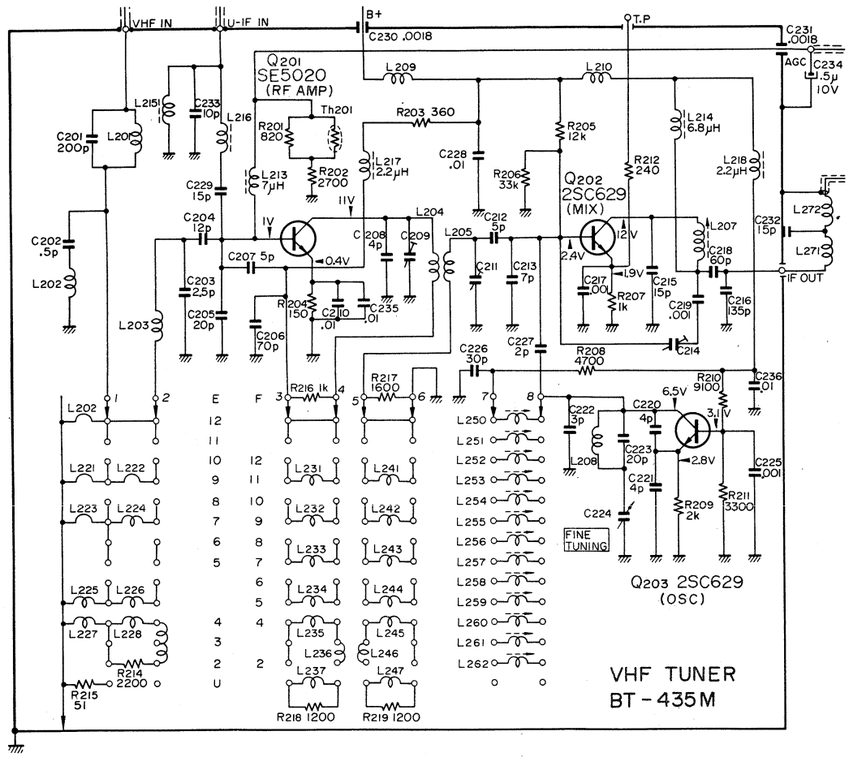
SB-2



E : Emitter
C : Collector
B : Base
S : Shield

SCHEMATIC DIAGRAM

Tuner circuit

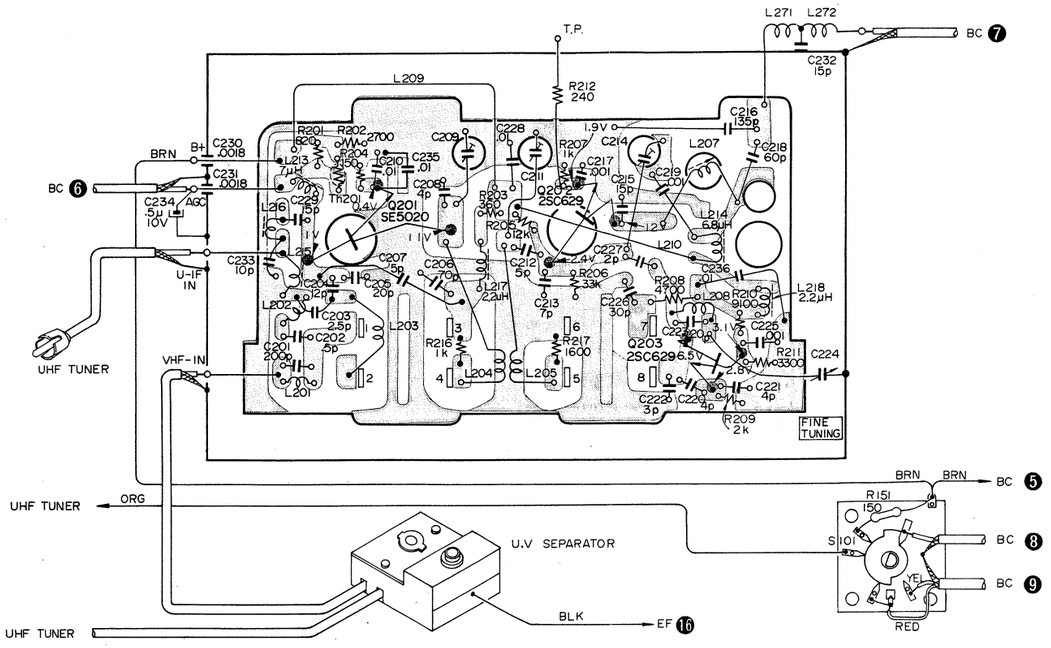


☆ Voltages measured from chassis to point indicated with a VOM (20k ohm/V), with no signal input.

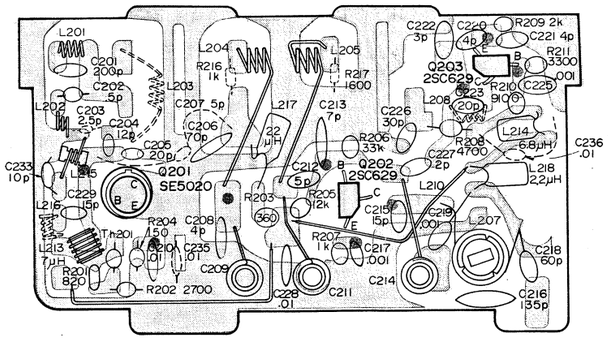
MOUNTING DIAGRAM

VHF tuner circuit board

— Conductor side —



— Component side —



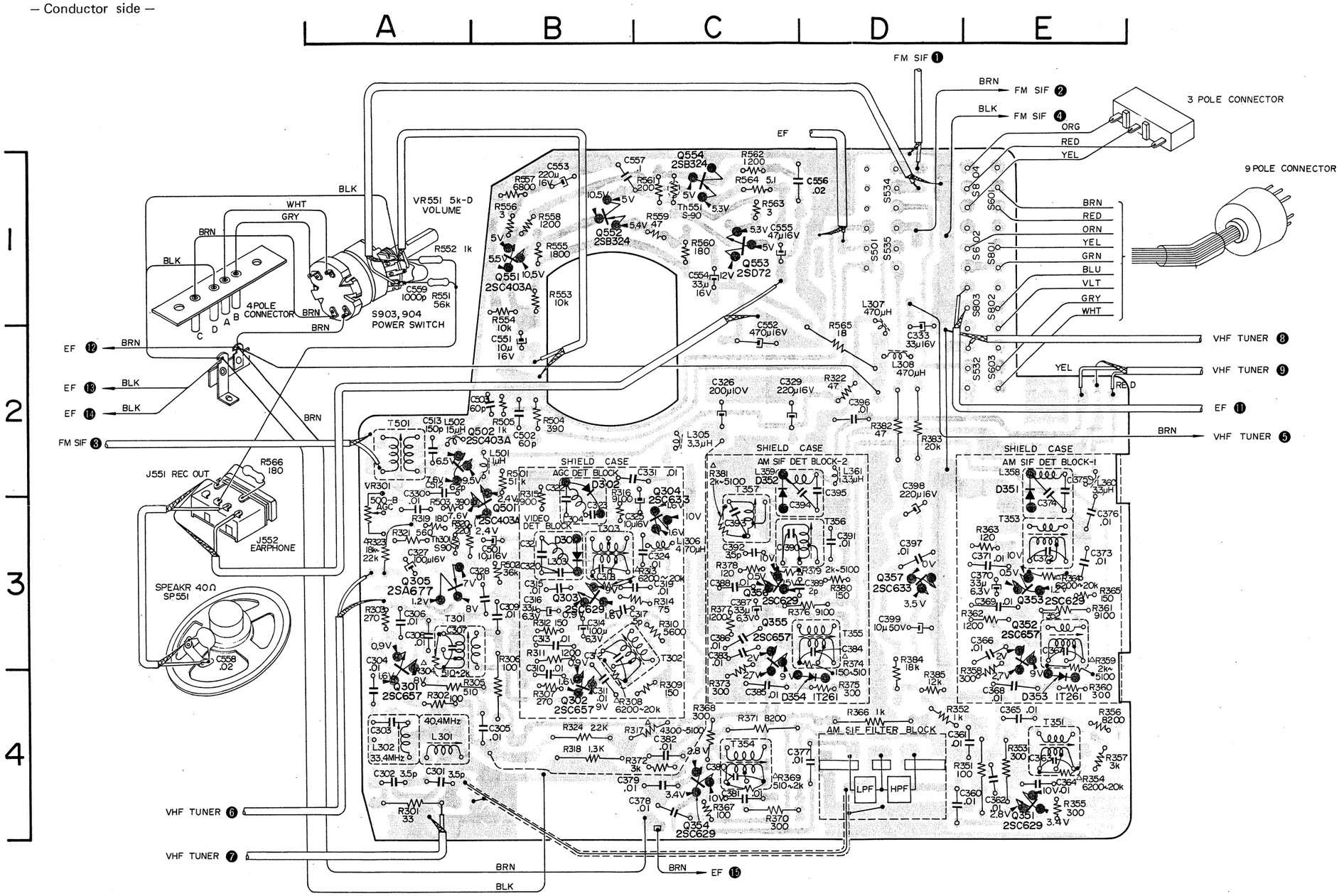
☆ Q201, Q202, Q203, L203, L208, L216, R216, R217, C203, C207, C235, C236: Mounted on the conductor side.

☆ Voltages measured from chassis to point indicated with a VOM (20k ohm/V), with no signal input.

MOUNTING DIAGRAM

Signal circuit board (BC)

— Conductor side —



Symbol No.	Location
Q301	A-4
Q302	B-4
Q303	B-3
Q304	C-3
Q305	A-3
Q351	E-4
Q352	E-4
Q353	E-3
Q354	C-4
Q355	C-4
Q356	C-3
Q357	D-3
Q501	B-3
Q502	A-2
Q551	B-1
Q552	B-1
Q553	C-1
Q554	C-1
D301	B-3
D302	B-3
D351	E-3
D352	C-3
D353	E-4
D354	D-4
Th301	A-3
Th551	C-1
VR301	A-3
VR551	A-1

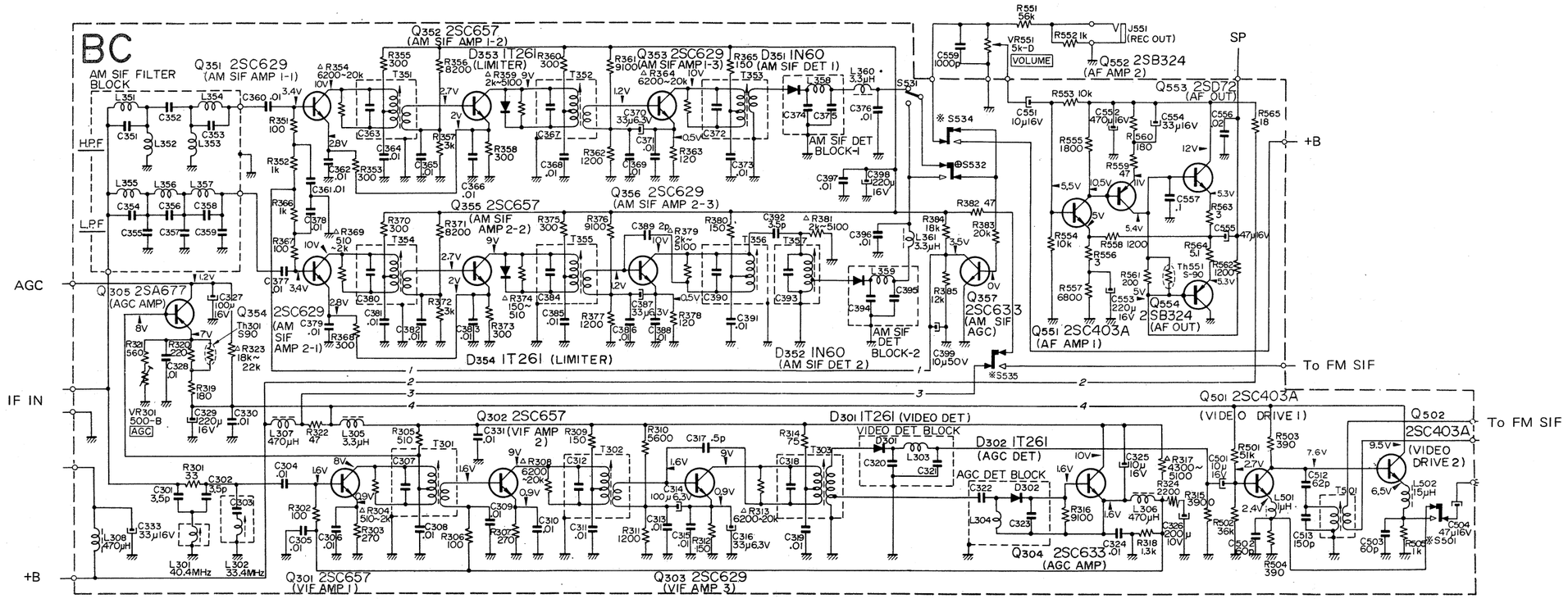
☆ R304, R308, R313, R323, R354, R359, R364, R369, R374, R379, R381: Mounted on the conductor side.

☆ Resistance values marked with △ are to be selected.

☆ Voltages measured from chassis to point indicated with a VOM (20k ohm/V), with no signal input.

SCHEMATIC DIAGRAM

Signal circuit



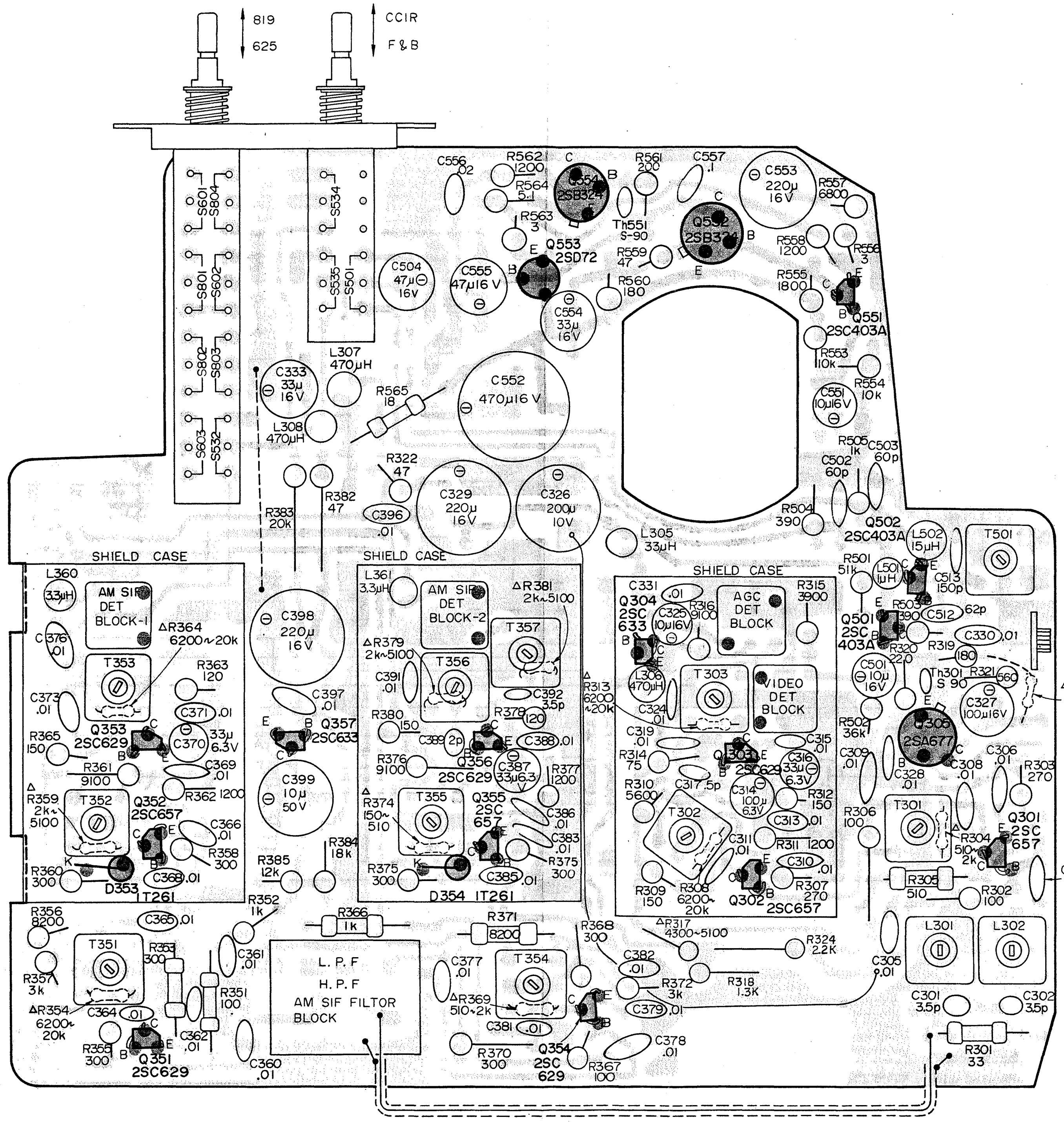
☆ Resistance values marked with △ are to be selected.

☆ Voltages measured from chassis to point indicated with a VOM (20k ohm/V), with no signal input.

MOUNTING DIAGRAM

Signal circuit board (BC)

— Component side —

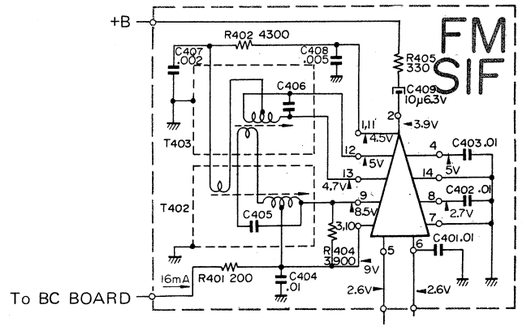


☆ R304, R308, R313, R323, R354, R359, R364, R369, R374, R379, R381: Mounted on the conductor side.

☆ Resistance values marked with △ are to be selected.

SCHEMATIC DIAGRAM

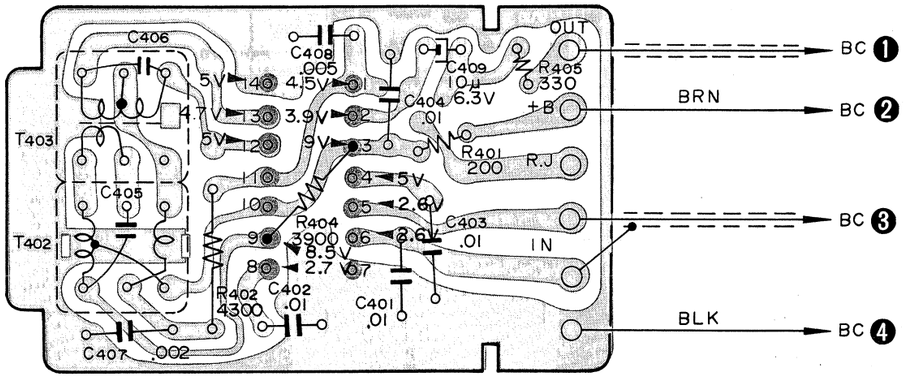
FM SIF circuit



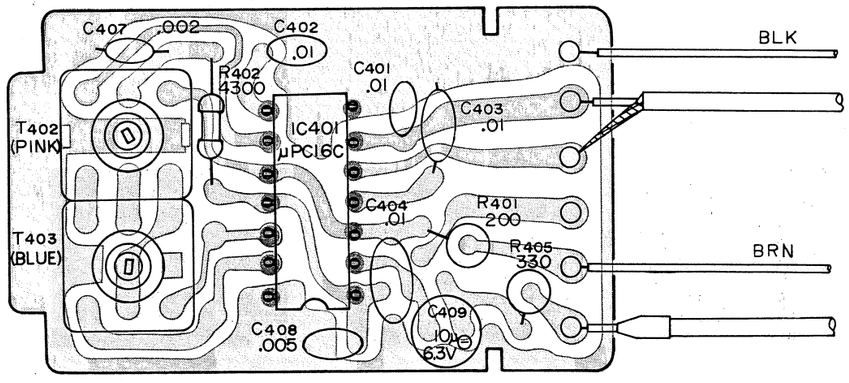
MOUNTING DIAGRAM

FM SIF circuit board

— Conductor side —



— Component side —

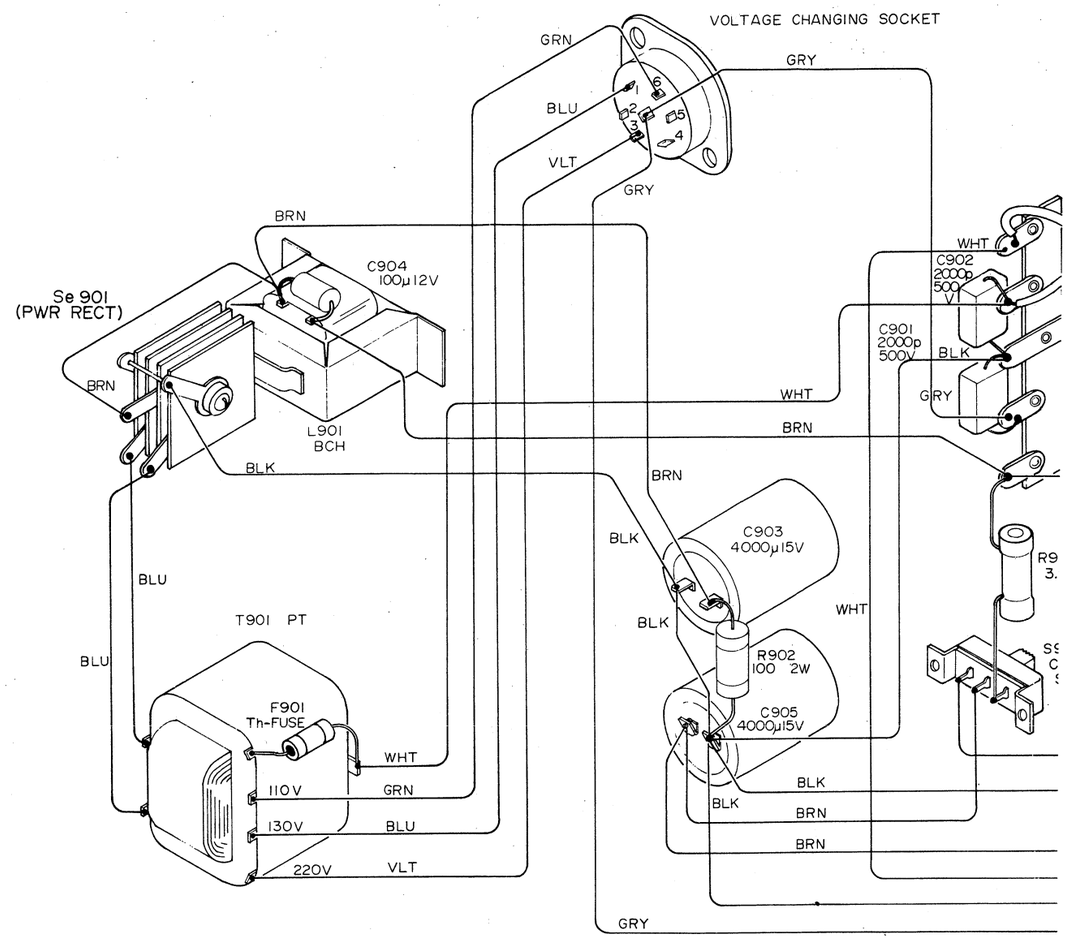


☆ R404: Mounted on the conductor side.

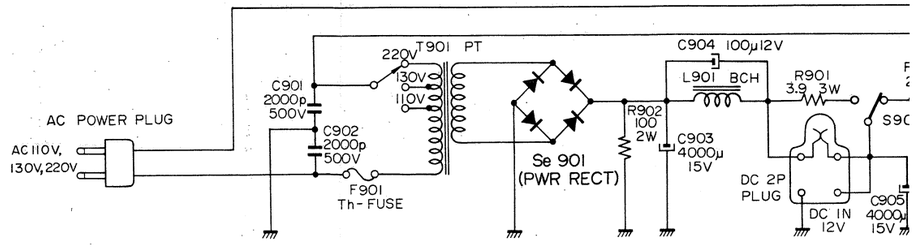
☆ Voltages measured from chassis to point indicated with a VOM (20k ohm/V), with no signal input.

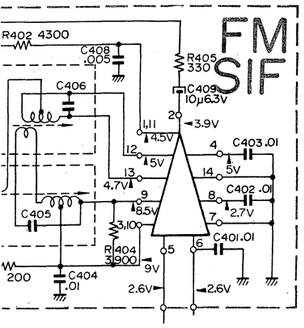
MOUNTING DIAGRAM

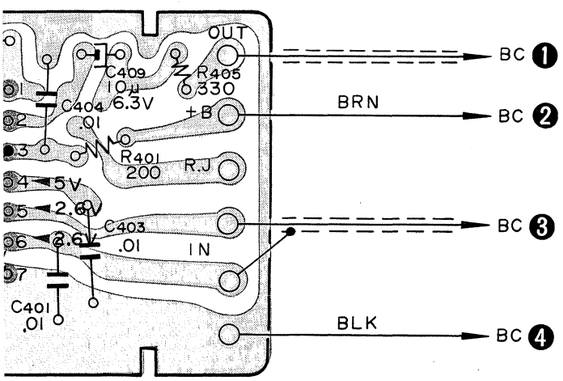
Power supply block

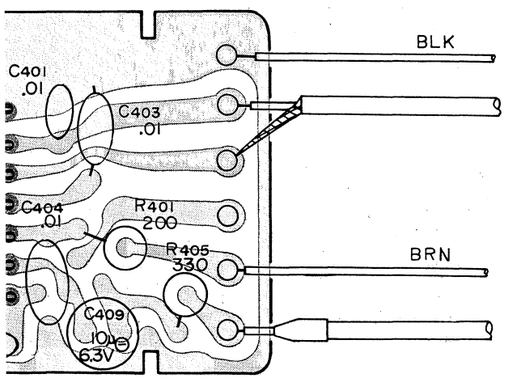


SHECMATIC DIAGRAM





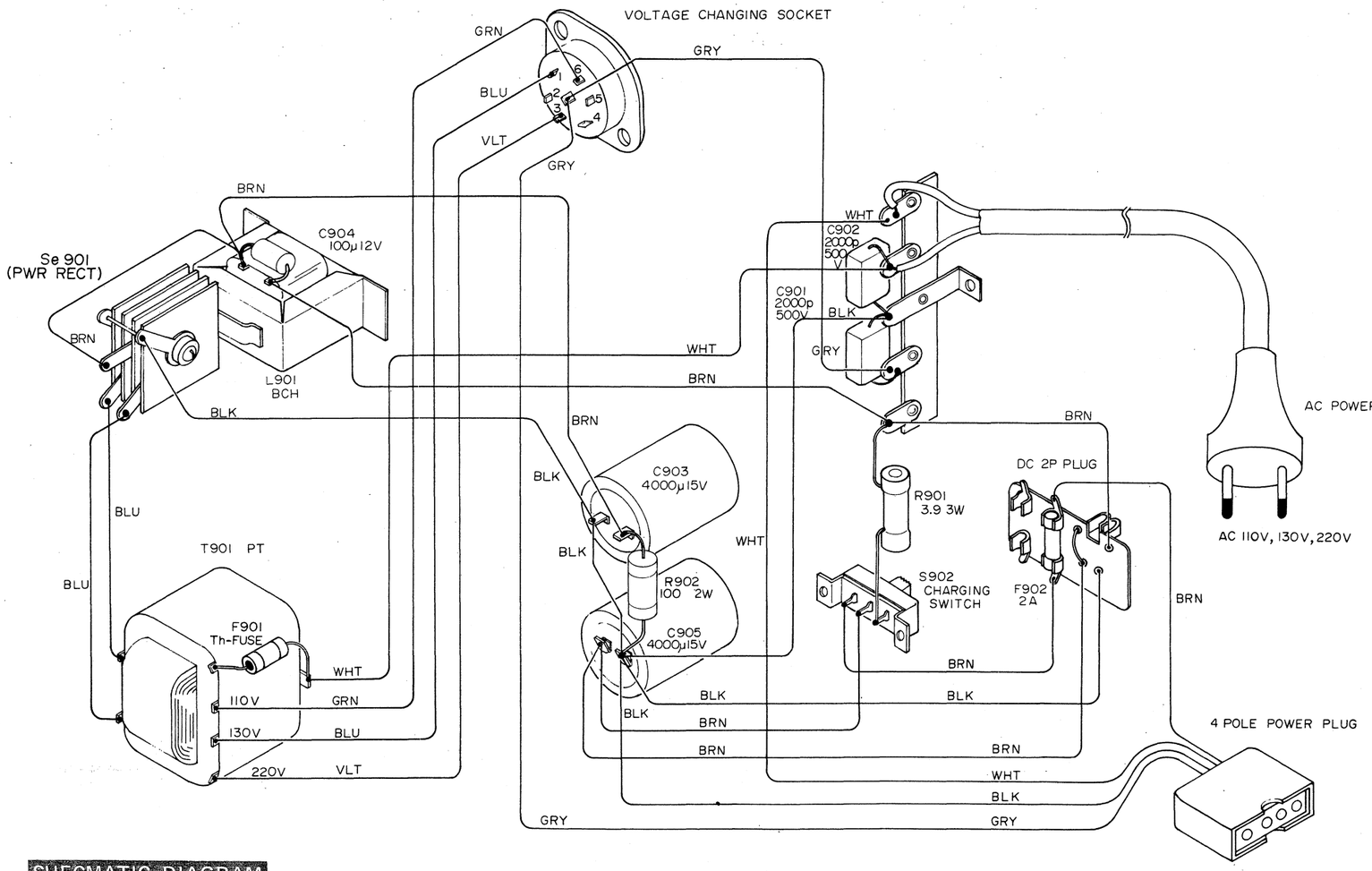




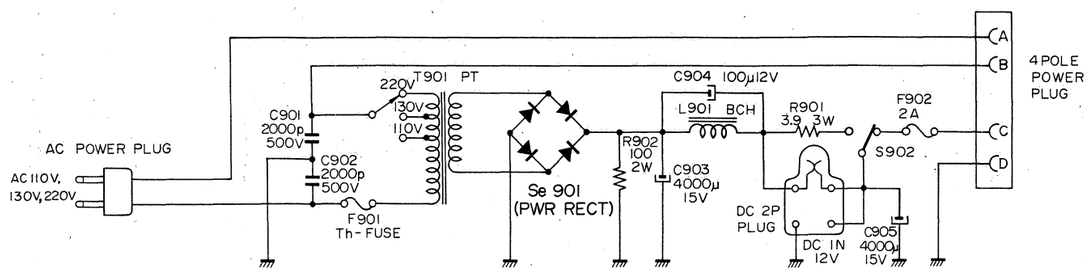
indicated with a VOM (20k ohm/V),

MOUNTING DIAGRAM

Power supply block

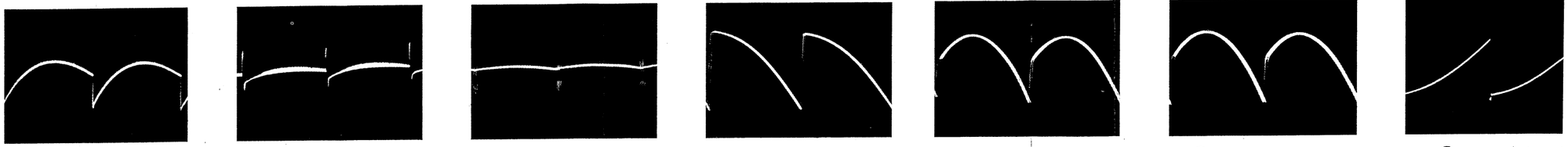


SHECMATIC DIAGRAM

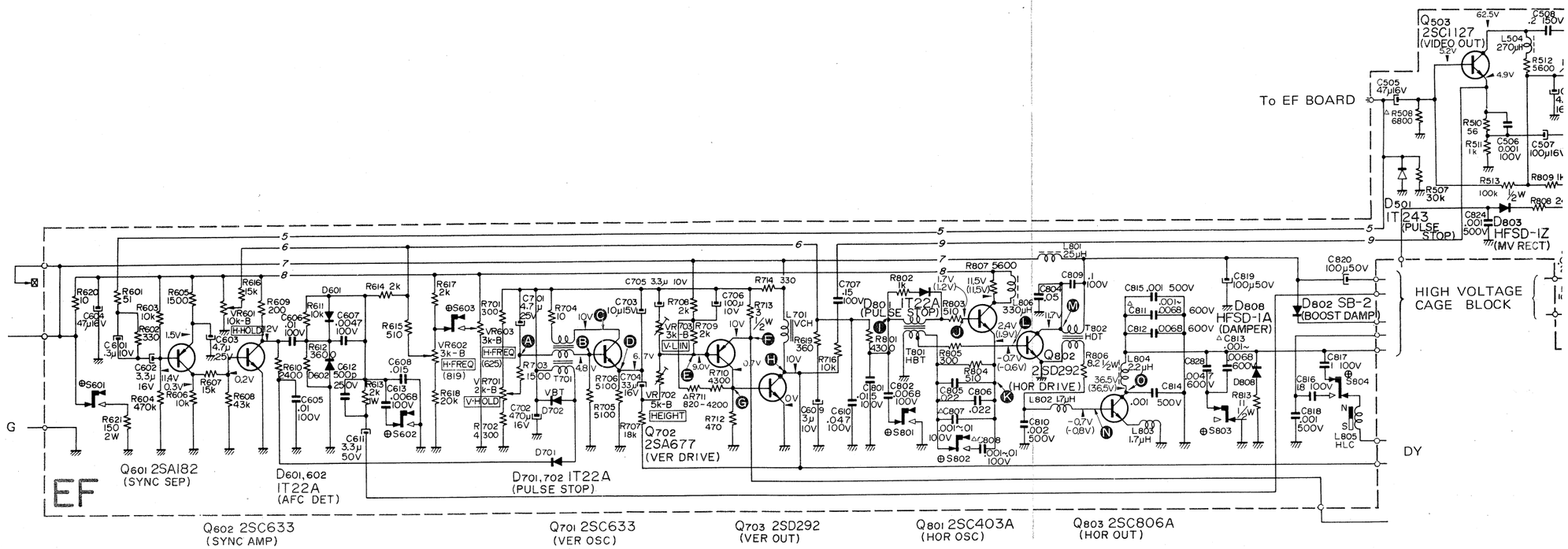


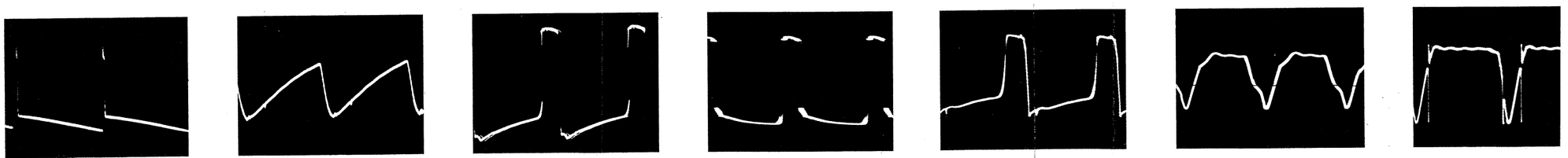
SCHEMATIC DIAGRAM

Deflection circuit



Ⓐ 1.7 Vp-p (Vert.)　Ⓑ 7.5 Vp-p (Vert.)　Ⓒ 7.5 Vp-p (Vert.)　Ⓓ 2.7 Vp-p (Vert.)　Ⓔ 1.25 Vp-p (Vert.)　Ⓕ 1.25 Vp-p (Vert.)　Ⓖ 1V p-p (Vert.)





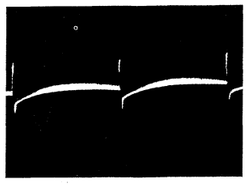
Ⓗ 60 Vp-p (Vert.)　Ⓘ 2 Vp-p (Horiz.)　Ⓙ 20 Vp-p (Horiz.)　Ⓚ 15 Vp-p (Horiz.)　Ⓛ 2.5 Vp-p (Horiz.)　Ⓜ 18 Vp-p (Horiz.)　Ⓝ 12.5 Vp-p (Horiz.)

Voltages measured from chassis to point indicated with a VOM (20k ohm/V), with no signal input.
The waveforms numbers (A ~ O) refer to the schematic diagram.

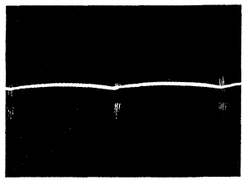
SCHEMATIC DIAGRAM

Deflection circuit

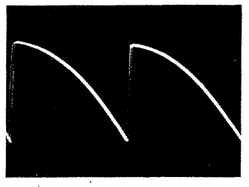
Vert.)



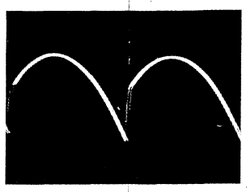
Ⓑ 7.5 Vp-p (Vert.)



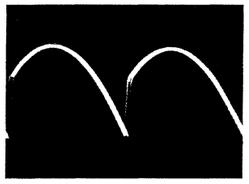
Ⓒ 7.5 Vp-p (Vert.)



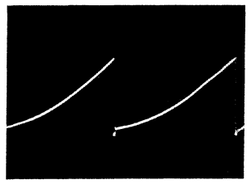
Ⓓ 2.7 Vp-p (Vert.)



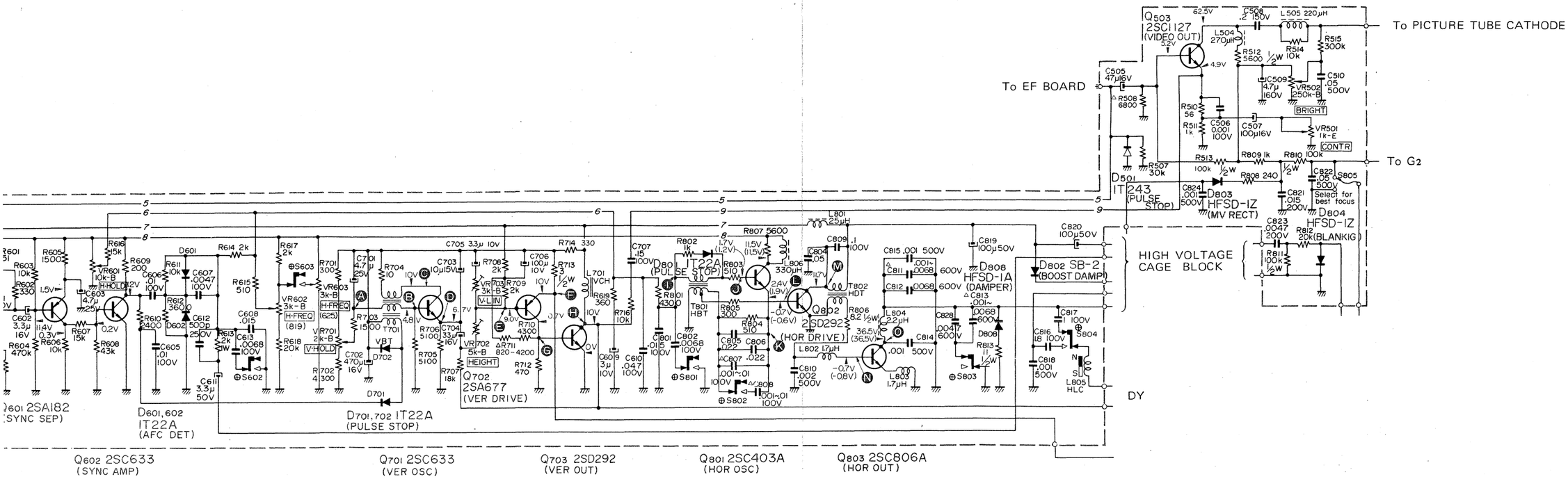
Ⓔ 1.25 Vp-p (Vert.)



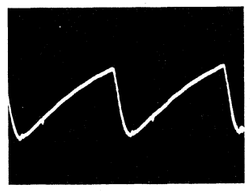
Ⓕ 1.25 Vp-p (Vert.)



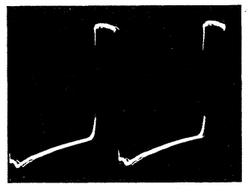
Ⓖ 1V p-p (Vert.)



Vert.)

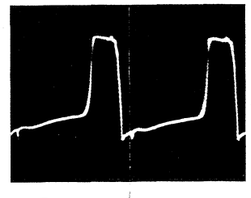


Ⓘ 2 Vp-p (Horiz.)

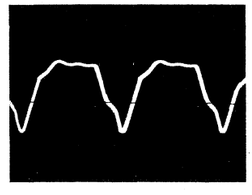


Ⓙ 20 Vp-p (Horiz.)

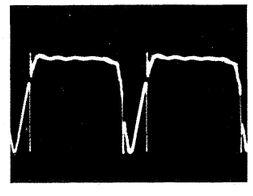
Ⓚ 15 Vp-p (Horiz.)



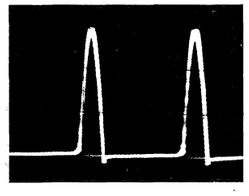
Ⓛ 2.5 Vp-p (Horiz.)



Ⓜ 18 Vp-p (Horiz.)



Ⓝ 12.5 Vp-p (Horiz.)



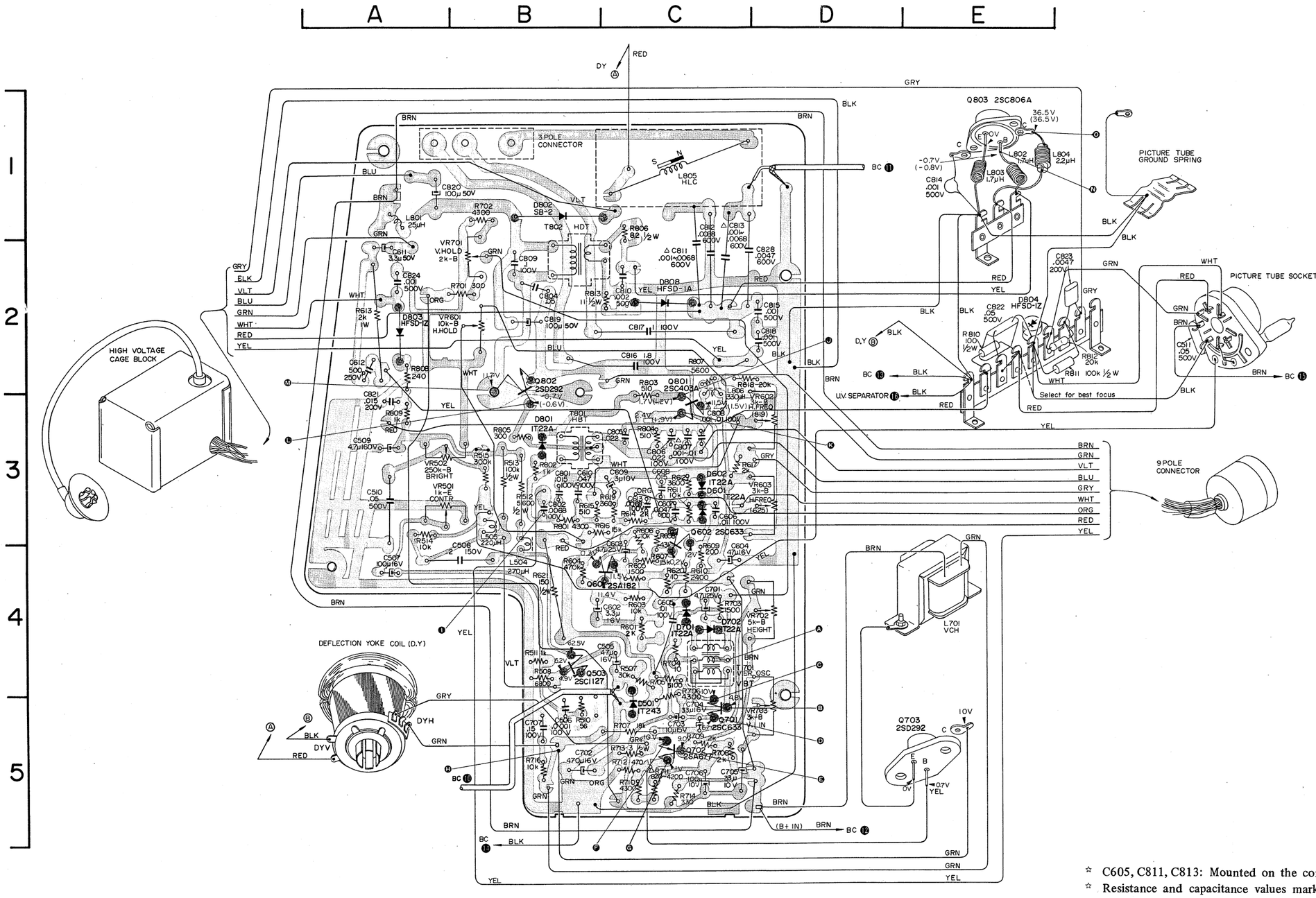
Ⓞ 300 Vp-p (Horiz.)

Voltages measured from chassis to point indicated with a VOM (20k ohm/V), with no signal input.
The waveforms numbers (A ~ O) refer to the schematic diagram.

MOUNTING DIAGRAM

Deflection circuit board

— Conductor side —

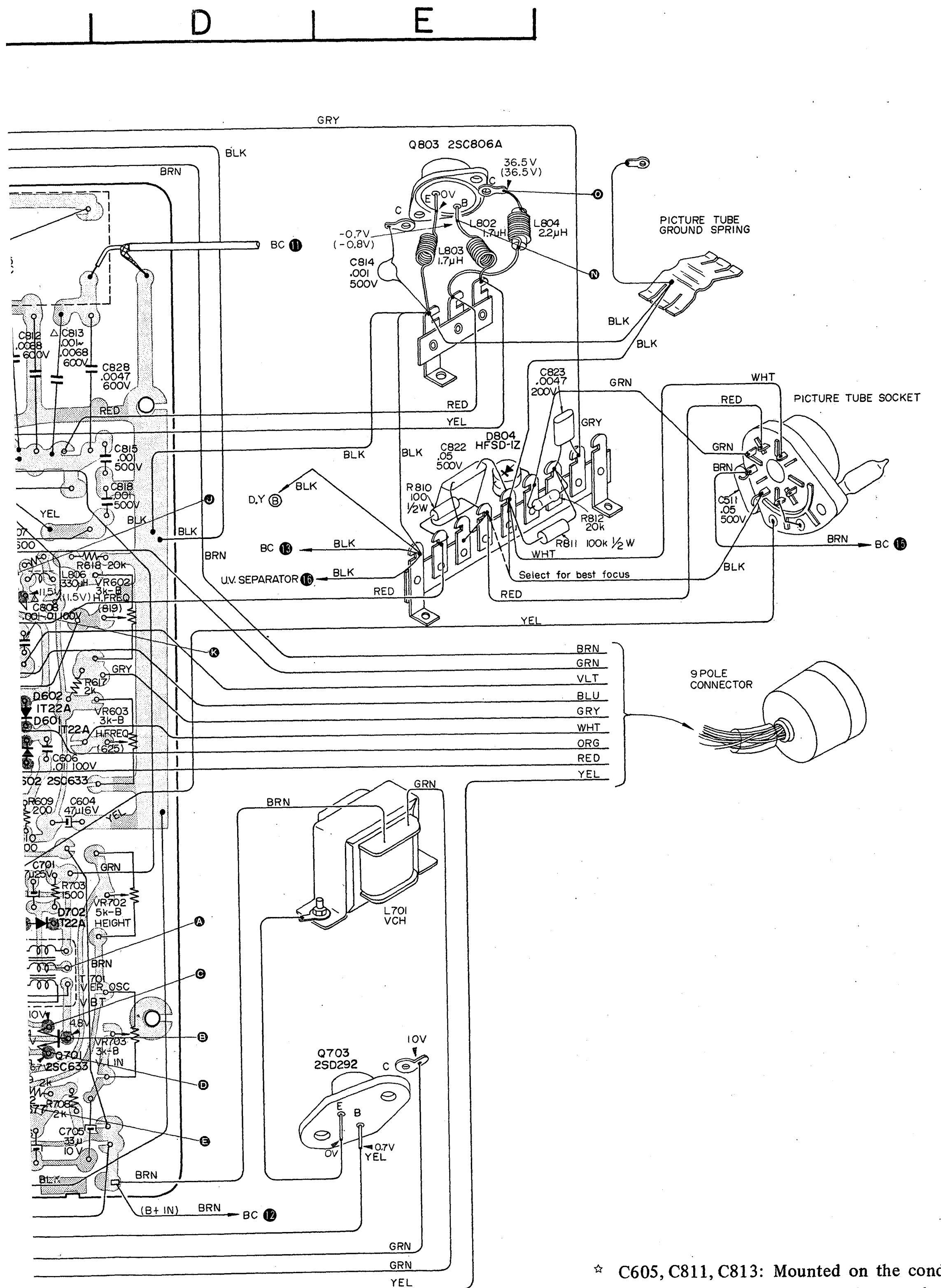


Symbol No.	Location
Q503	B-4
Q601	C-4
Q602	C-3
Q701	C-5
Q702	C-5
Q703	E-5
Q801	C-3
Q802	E-2
Q803	E-1
D501	C-4, 5
D601	C-3
D602	C-3
D701	C-4
D702	C-4
D801	B-3
D802	B-1
D803	A-2
D804	E-2
D808	C-2
VR501	A, B-3
VR502	A, B-3
VR601	B-2
VR602	D-3
VR603	D-3
VR701	B-2
VR702	D-4
VR703	D-4, 5

☆ C605, C811, C813: Mounted on the conductor side.

☆ Resistance and capacitance values marked with △ are to be selected.

☆ Voltages measured from chassis to point indicated with a VOM (20k ohm/V), with no signal input.



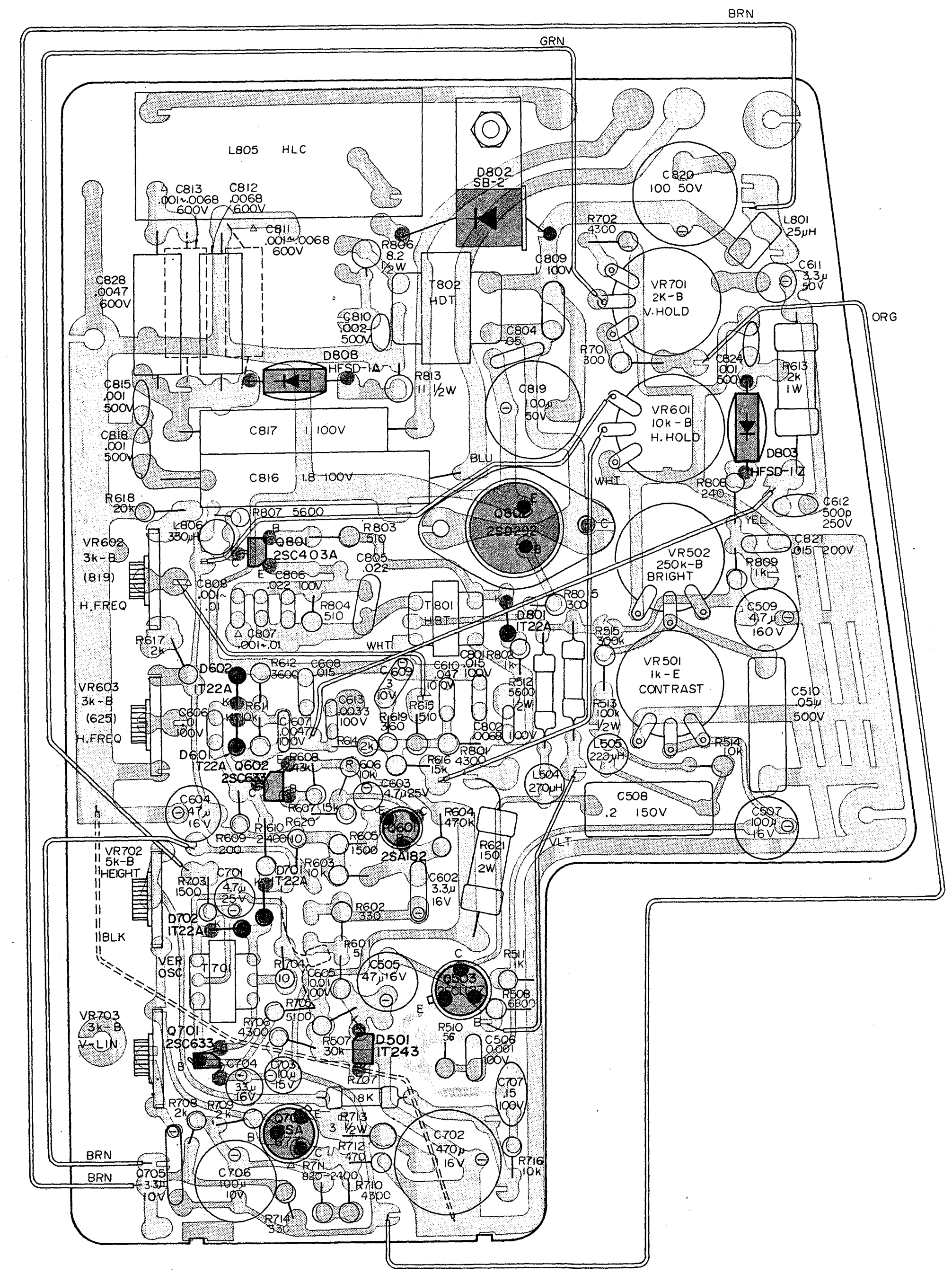
Symbol No.	Location
Q503	B-4
Q601	C-4
Q602	C-3
Q701	C-5
Q702	C-5
Q703	E-5
Q801	C-3
Q802	E-2
Q803	E-1
D501	C-4, 5
D601	C-3
D602	C-3
D701	C-4
D702	C-4
D801	B-3
D802	B-1
D803	A-2
D804	E-2
D808	C-2
VR501	A, B-3
VR502	A, B-3
VR601	B-2
VR602	D-3
VR603	D-3
VR701	B-2
VR702	D-4
VR703	D-4, 5

☆ C605, C811, C813: Mounted on the conductor side.

☆ Resistance and capacitance values marked with △ are to be selected.

☆ Voltages measured from chassis to point indicated with a VOM (20k ohm/V), with no signal input.

— Component side —



☆ C605, C811, C813: Mounted on the conductor side.

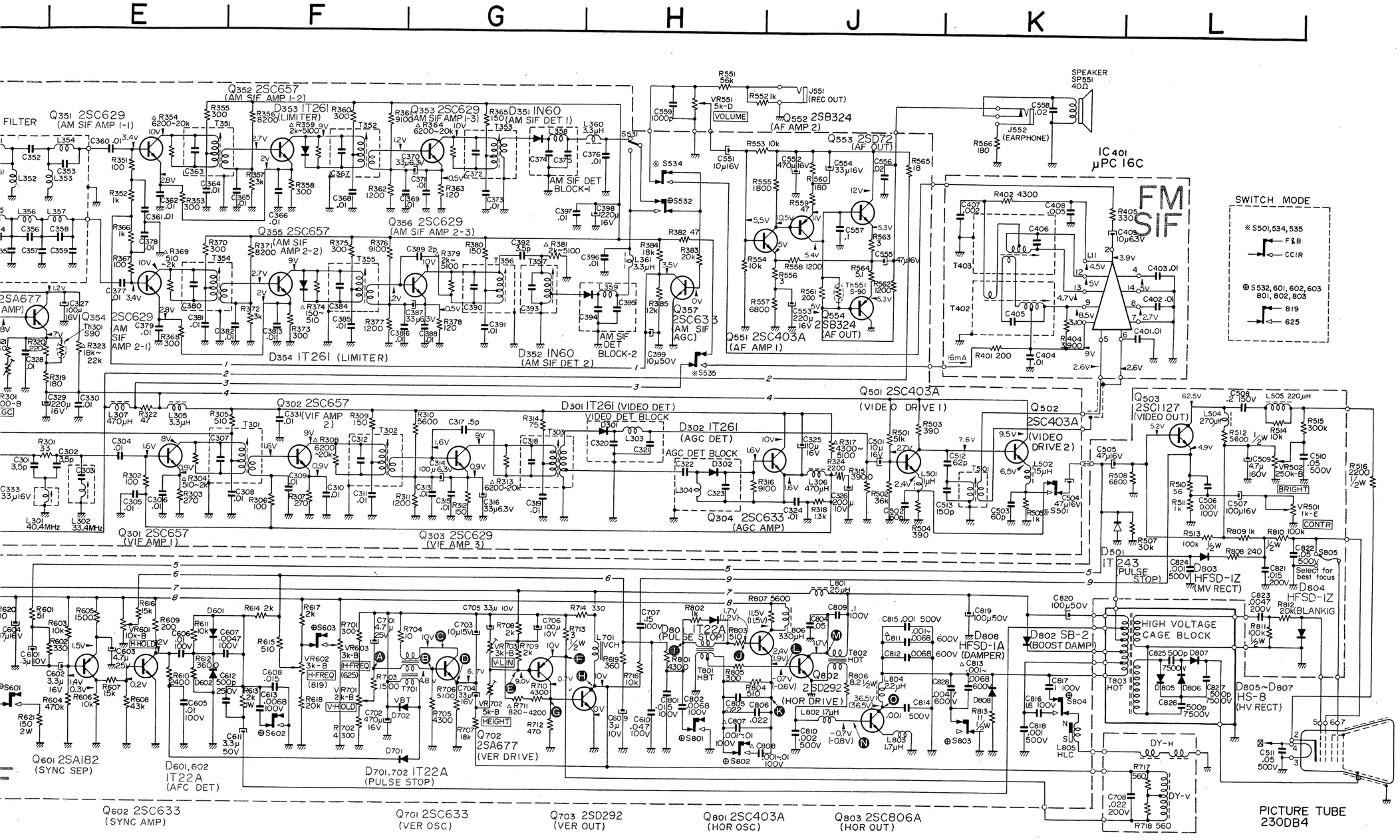
☆ Resistance and capacitance values marked with △ are to be selected.

SCHEMATIC DIAGRAM

— Overall —

☆ Resistance and capacitance values marked with △ are to be selected.

☆ Voltages measured from chassis to point indicated with a VOM (20k ohm/V), with no signal input and the values shown in ( ) are taken with push switch set to 819.

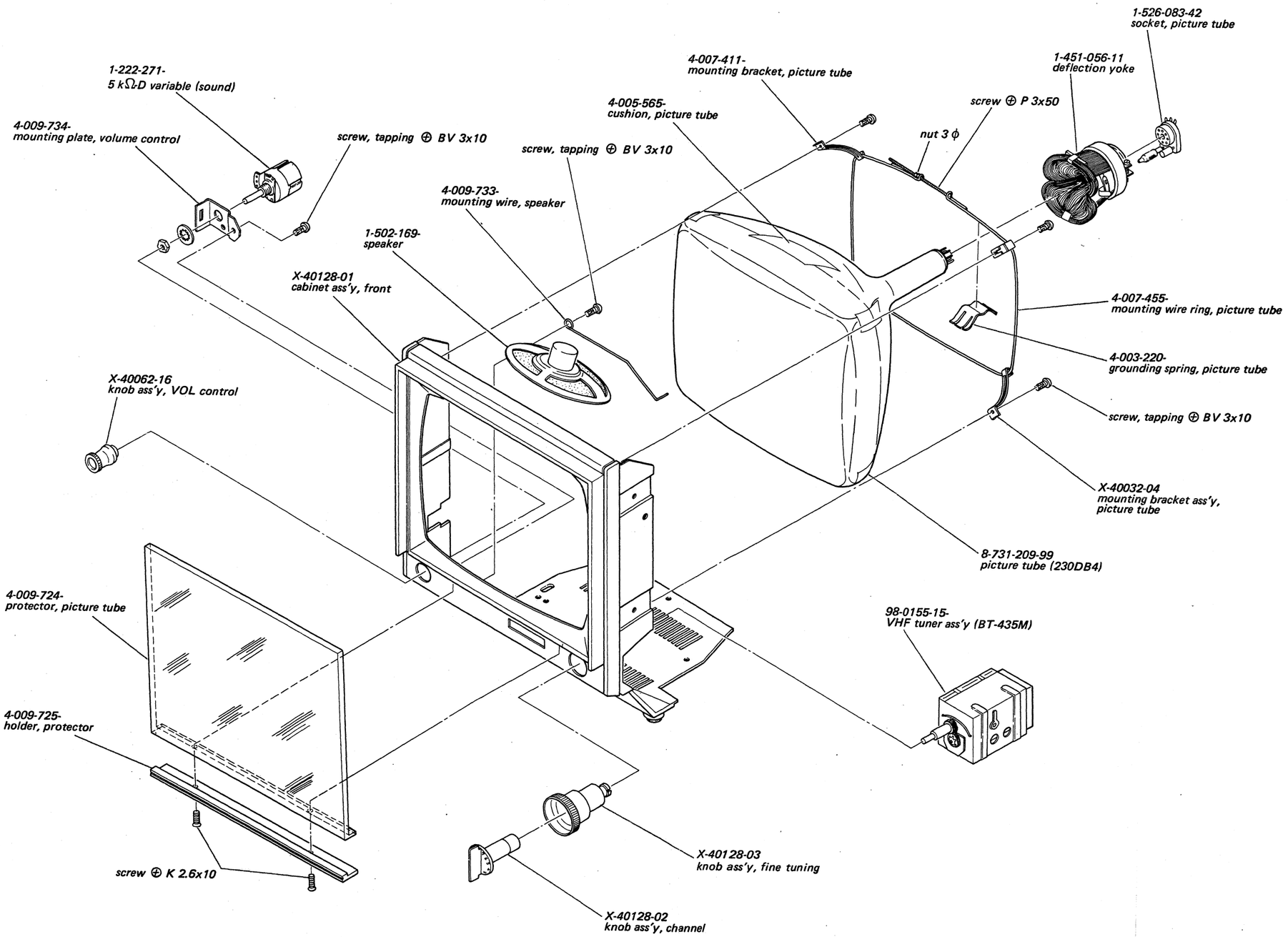


Symbol No.	Location
IC401	K, L-2
Q101	B-1
Q102	C-1
Q201	B-3
Q202	C-3
Q203	C-3
Q301	E-3
Q302	F-3
Q303	G-3
Q304	J-3
Q305	D-2
Q351	E-1
Q352	F-1
Q353	G-1
Q354	E-2
Q355	F-2
Q356	G-2
Q357	H-2
Q501	J-3
Q502	K-3
Q503	L-3
Q551	H, J-2
Q552	J-2
Q553	J-1, 2
Q554	J-2
Q601	E-4
Q602	E-4
Q701	G-4
Q702	G-4
Q703	G, H-4
Q801	H, J-4
Q802	J-4
Q803	J-4
D101	G-1
D301	H-3
D302	H-3
D351	G-1
D352	H-2
D353	F-1
D354	F-2
D501	K, L-3
D601	E-4
D602	E-4
D701	F, G-4
D702	F, G-4, 5
D801	H-4
D802	K-4
D803	L-3
D804	L, M-4
D805	L-4
D806	L-4
D807	L-4
D808	K-4
Se901	B-4
Th201	B-2
Th301	E-2
Th551	J-2
VR301	D-2
VR501	L, M-3
VR502	L-3
VR551	H-1
VR601	E-4
VR602	F-4
VR603	F-4
VR701	F-4
VR702	G-4
VR703	G-4

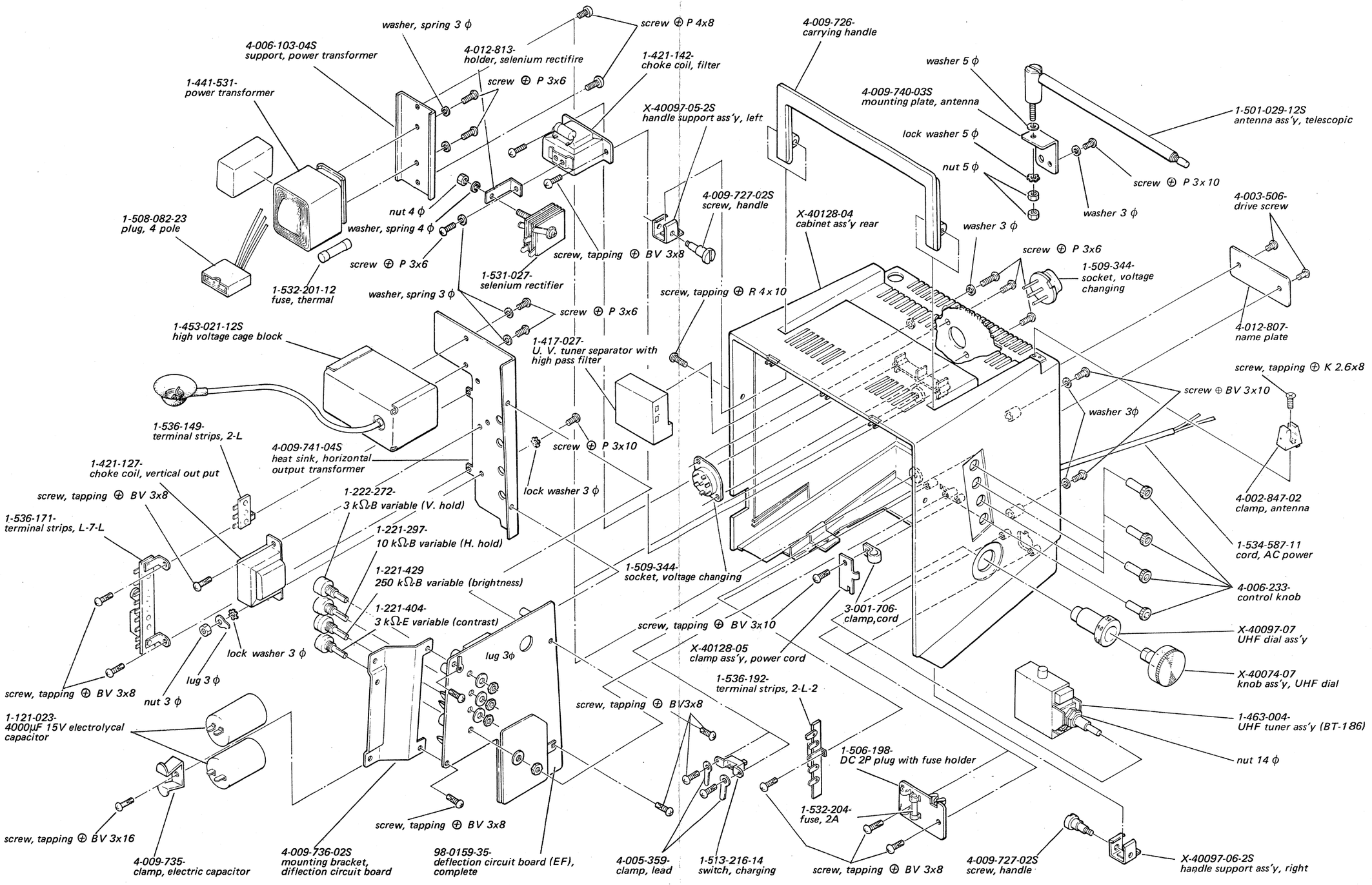
☆ Resistance and capacitance values marked with △ are to be selected.

☆ Voltages measured from chassis to point indicated with a VOM (20k ohm/V), with no signal input and the values shown in ( ) are taken with push switch set to 819.

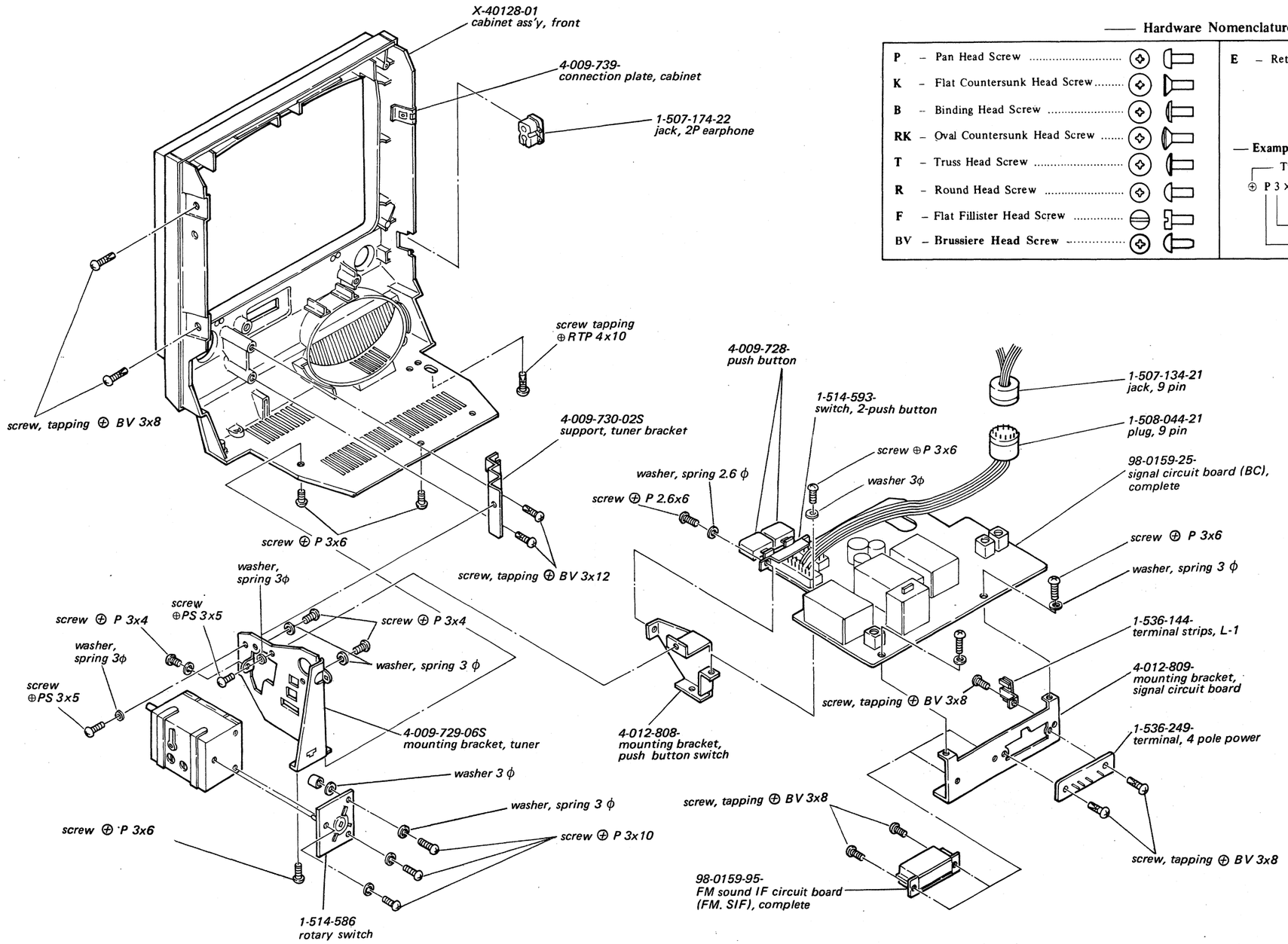
EXPLODE VIEW (1)



EXPLODED VIEW (2)



EXPLODE VIEW (3)



Hardware Nomenclature

P	– Pan Head Screw	
K	– Flat Countersunk Head Screw	
B	– Binding Head Screw	
RK	– Oval Countersunk Head Screw	
T	– Truss Head Screw	
R	– Round Head Screw	
F	– Flat Fillister Head Screw	
BV	– Brussiere Head Screw	

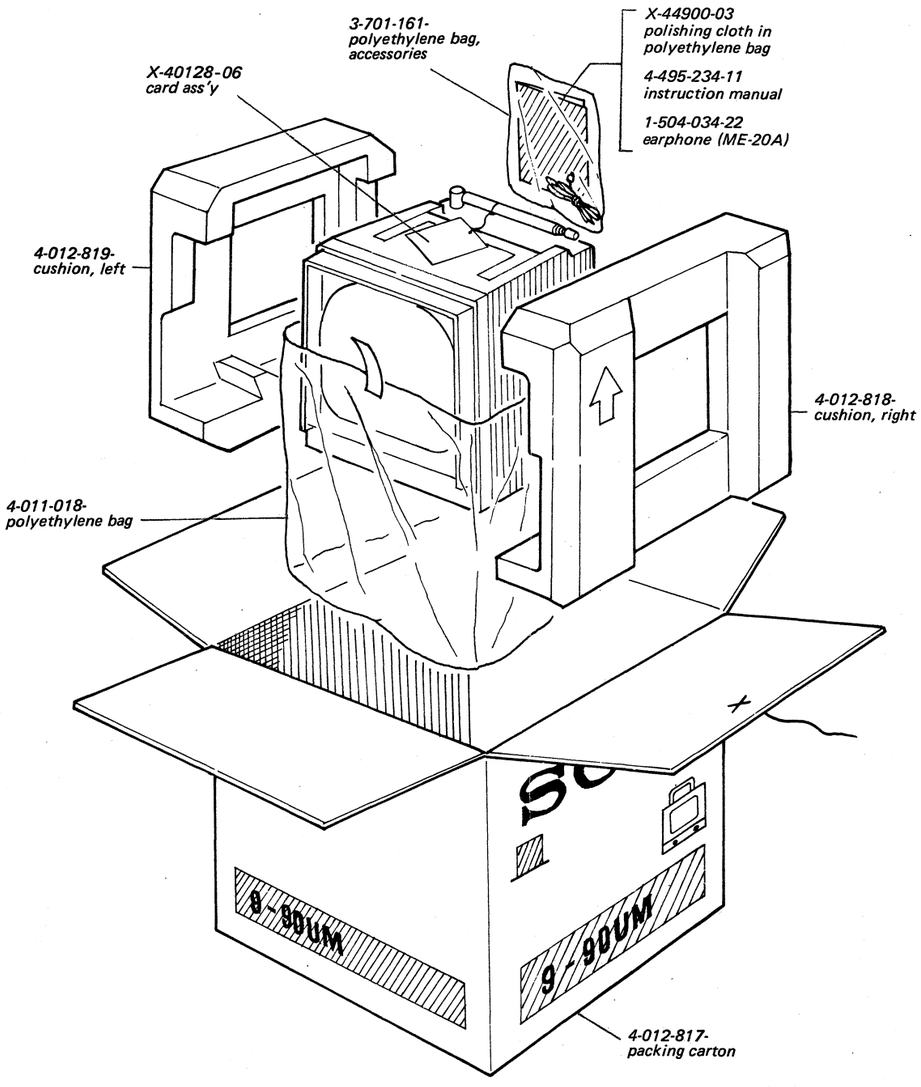
E – Retaining Ring (E Washer)

W – Washer
SW – Spring Washer
LW – Lock Washer
N – Nut

— Example —

⊕ P 3 x 10
- Type of Slit
- Length in mm (L)
- Diameter in mm (D)
- Type of Head

PACKING



When ordering replacement parts, you should use PART NUMBER listed on the Complete Spare Parts List or shown in the Exploded View. The symbol number should not be used for ordering purposes.

2B0655-1

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