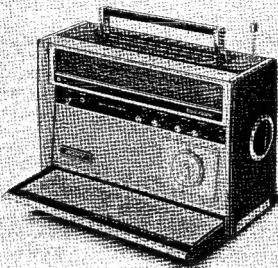




Set using ISO screws

CRF-5080

*GEP Model
General Export Model*



SPECIFICATIONS

Circuit System:	13-transistor 8-diode superheterodyne 6-transistors and 1 diode for auxiliary circuit	Selectivity at ± 10 kHz off-resonance:	35 dB at 1,400 kHz
Frequency Coverage:	FM 87.5 – 108 MHz (3.42 – 2.78 m) LW 150 – 400 kHz (2,000 – 750 m) MW 530 – 1,605 kHz (566 – 187 m) SW1 1.6 – 3.5 MHz (187 – 86 m) SW2 3.5 – 9.0 MHz (86 – 33 m) SW3 9.0 – 14.0 MHz (33 – 21 m) SW4 14 – 21 MHz (21 – 14 m) SW5 21 – 26 MHz (14 – 11 m)	Power Output at 10 % distortion:	1.8 W maximum: 2.7 W
Intermediate Frequency:	FM 10.7 MHz LW/MW/SW 455 kHz	Current Drain at zero signal:	FM 40 mA, MW 35 mA maximum: 320 mA
Antenna System:	FM telescopic antenna or external antenna (impedance 75 Ω) LW/MW built-in ferrite bar antenna or external antenna (high impedance) SW telescopic antenna or external antenna (high impedance)	Power Requirement:	DC eight "D" size flashlight batteries 12 volts or car battery by using SONY car battery cord DCC-2AW AC house current 100 V, 120 V, 220 V or 240 VAC; 50 Hz or 60 Hz
Sensitivity at 50 mW output, S/N 6 dB:	FM 0.7 μ V (–3 dB) LW 83 μ V/m (36 dB/m) MW 24 μ V/m (27 dB/m) SW1 1.2 μ V (1 dB) SW2 1 μ V (0 dB) SW3 1 μ V (0 dB) SW4 1.2 μ V (1 dB) SW5 1.3 μ V (2 dB)	Speaker:	10 cm x 15 cm (4" x 6"), 8 Ω
		Dimensions:	340 mm (W) x 230 mm (H) x 160 mm (D) (13 $\frac{3}{8}$ " x 9 $\frac{1}{8}$ " x 6 $\frac{3}{16}$ ")
		Weight:	6.6 kg (14 lb 9 oz) overall with batteries

SONY®
SERVICE MANUAL

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>	<u>Section</u>	<u>Title</u>	<u>Page</u>
	Specifications	1			
1. OUTLINE			3-2.	AM I-f Alignment	9
1-1.	Block Diagram	3	3-3.	Bfo Osc Coil Adjustment.	9
1-2.	External View	3	3-4.	Frequency Coverage and Tracking Adjustment	10
2. DISASSEMBLY AND REASSEMBLY			4. DIAGRAMS		
2-1.	Front Panel Removal	4	4-1.	Schematic Diagram.	13
2-2.	Chassis Removal	4	4-2.	Mounting Diagram	15
2-3.	FM Front End Removal	5	5. EXPLODED VIEW AND PACKING		
2-4.	FM Front End Reassembly.	5	5-1.	Exploded View (1).	17
2-5.	Dial Scale Reassembly	5	5-2.	Exploded View (2).	19
2-6.	Circuit Board Removal.	6	5-3.	Packing	21
2-7.	Dial Cord Stringing.	6	6. ELECTRICAL PARTS LIST.		22
3. CIRCUIT ADJUSTMENTS					
3-1.	FM I-f Alignment	8			

Hardware Nomenclature

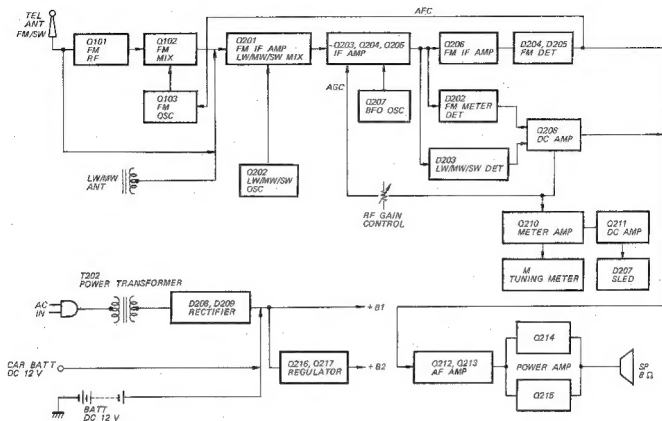
P — Pan Head Screw		E — Retaining Ring (E Washer)	
K — Flat Countersunk Head Screw		W — Washer	
B — Binding Head Screw		SW — Spring Washer	
RK — Oval Countersunk Head Screw		LW — Lock Washer	
T — Truss Head Screw		N — Nut	
R — Round Head Screw			
F — Flat Fillister Head Screw			
SC — Set Screw			

Example	
Type of Slot	
Length in mm (L)	
Diameter in mm (D)	
Type of Head	

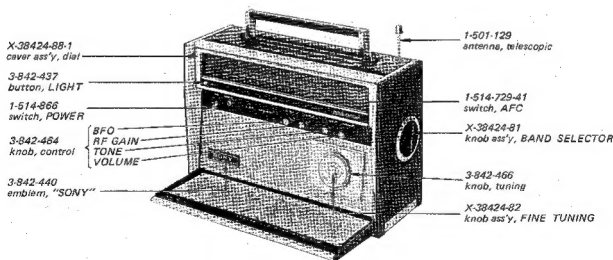
When ordering replacement parts, you should use **PART NUMBER** listed on the Parts List or shown in the **EXPLODED VIEW**.
The reference number should not be used for ordering purposes.

SECTION 1 OUTLINE

1-1. BLOCK DIAGRAM



1-2. EXTERNAL VIEW



SECTION 2 DISASSEMBLY AND REASSEMBLY

2-1. FRONT PANEL REMOVAL

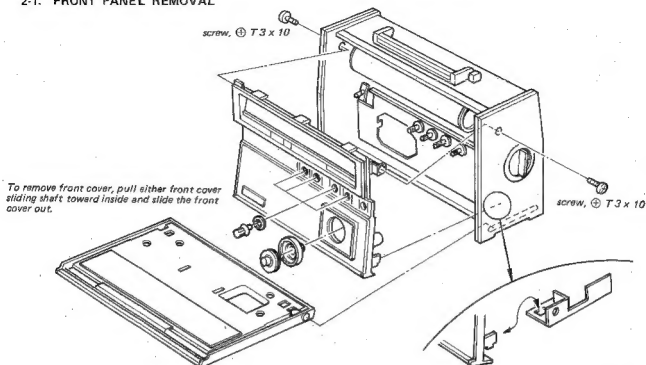


Fig. 2-1.

2-2. CHASSIS REMOVAL

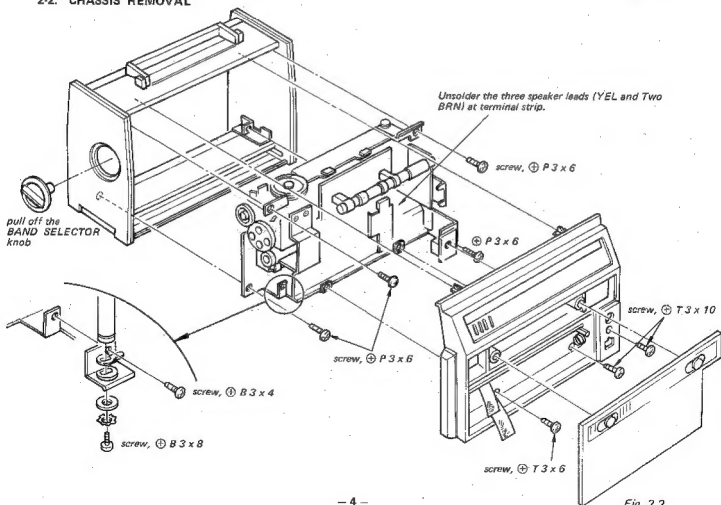
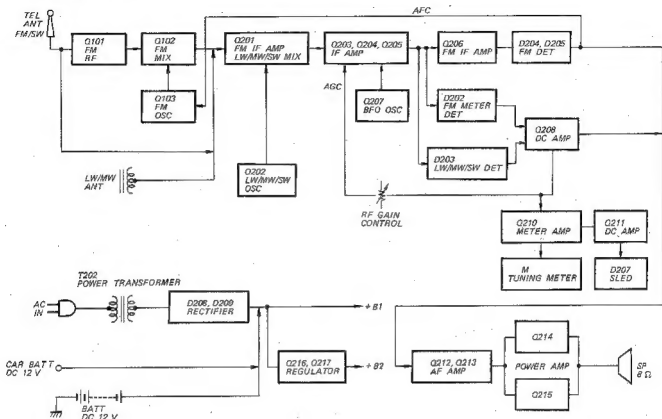


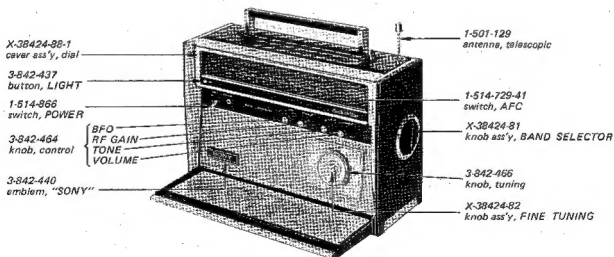
Fig. 2.2.

SECTION 1 OUTLINE

1-1. BLOCK DIAGRAM



1-2. EXTERNAL VIEW



SECTION 2 DISASSEMBLY AND REASSEMBLY

2.1. FRONT PANEL REMOVAL

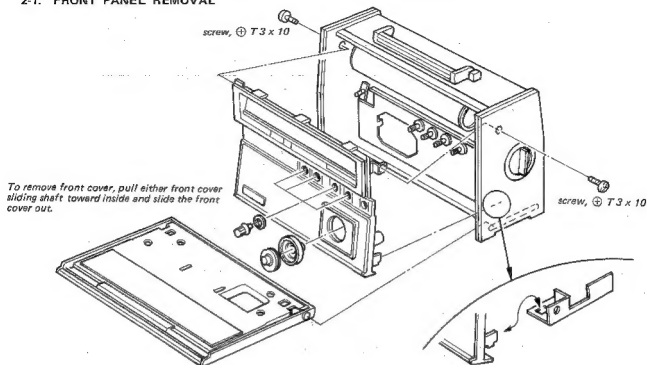


Fig. 2-1.

2.2. CHASSIS REMOVAL

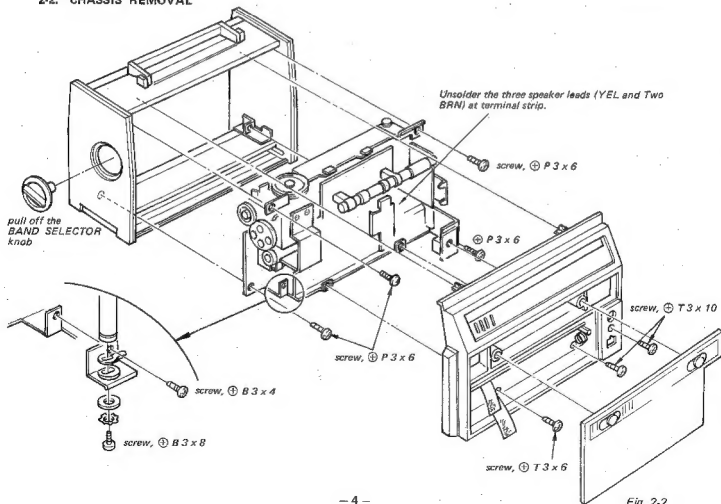


Fig. 2-2.

23. FM FRONT END REMOVAL

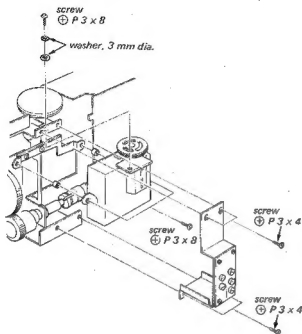


Fig. 2-3.

24. FM FRONT END REASSEMBLY

1. Rotate the dial drum fully clockwise and the double gear ass'y fully counterclockwise.
2. Set the fm front end with three screws. See Fig. 2-3. above.

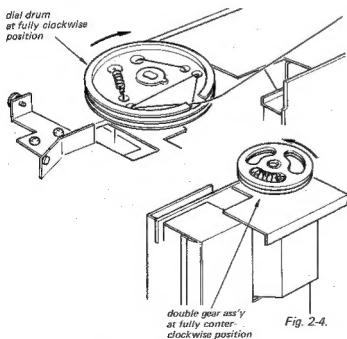


Fig. 2-4.

25. DIAL SCALE REASSEMBLY

1. Rotate the BAND SELECTOR knob fully clockwise.
2. Set the dial drum adjusting the two machine screws (A) so that it shows FM band and that the tip of the pointer is on the line of FM band as shown in Fig. 2-6.

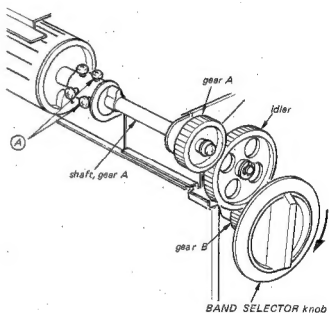


Fig. 2-5.

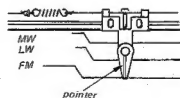
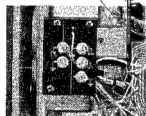
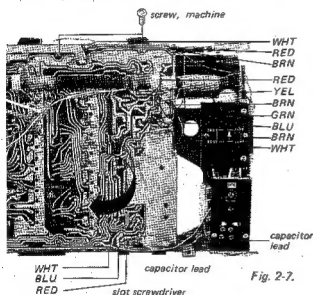


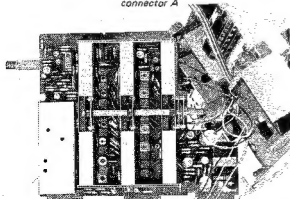
Fig. 2-6.

2-6. CIRCUIT BOARD REMOVAL

1. Remove the chassis.
2. Unsolder the 13 wires and capacitor lead shown in Fig. 2-7.
3. Remove the connector A from the band selector switch shaft by wedging with a slot screwdriver in the direction shown by the arrow in Fig. 2-8.
4. Remove the two screws.
5. Remove the circuit board in the direction shown by the arrow in Fig. 2-7.
6. The removed circuit board is shown in Fig. 2-9.



3-842-488
connector A



2-7. DIAL CORD STRINGING

Dial Drum Driving Cord

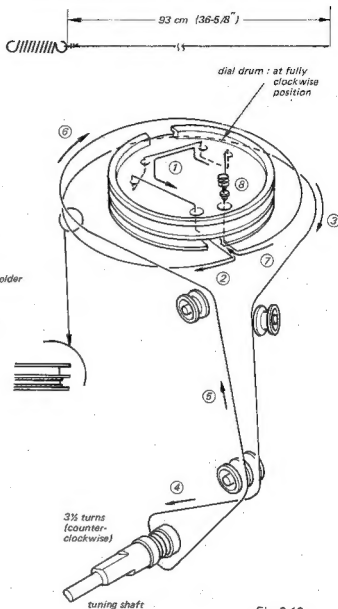


Fig. 2-10.

Pointer Driving Cord

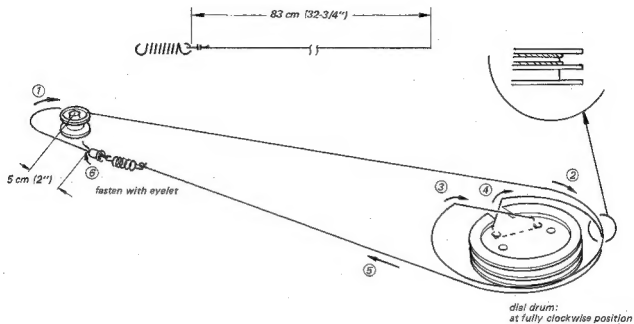


Fig. 2-11.

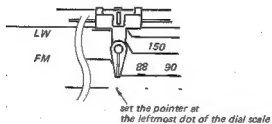


Fig. 2-12.

SECTION 3 CIRCUIT ADJUSTMENTS

Test Equipment/Tools Required:

Rf signal generator (for fm and a-m)
Loop antenna
VTVM
8 Ω resistor
0.01 μ F ceramic capacitor
Screwdriver for alignment

Preparation

VTVM Connection:

To EARPHONE jack with 8 Ω load resistor in parallel

Modulation:

FM 400 Hz, ± 22.5 kHz frequency-modulated signal
AM 400 Hz, 30% amplitude-modulated signal

VOLUME Control Setting: Mechanical mid position

TONE Control Setting: Mechanical mid position

AFC Switch: OFF

BFO Control Setting: OFF

RF Gain Control Setting: NORMAL

3-1. FM I-F ALIGNMENT

Setup is shown in Fig. 3-1.

Set the POWER switch to ON.

Set the BAND SELECTOR to FM.

Connect the rf signal generator to the FM ext ant terminal after detaching antenna lug as shown in Fig. 3-2.

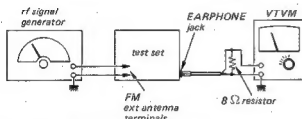


Fig. 3-1. FM i-f alignment, frequency coverage and tracking adjustment setup

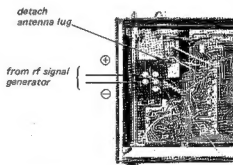


Fig. 3-2. Rf signal generator coupling

Rf Signal Generator Frequency	Rf Signal Modulation	Adjust	Remarks
10.7 MHz	400 Hz, 30% a-m modulation	IFT F-4 See Fig. 3-6.	Adjust for minimum meter reading(*1).
10.7 MHz	400 Hz, ± 22.5 kHz fm modulation	IFT F101 IFT F-2(*2) IFT F-3 See Fig. 3-4 and Fig. 3-6.	Set the tuning knob at the best signal position. Adjust for maximum meter reading.

Note: *1. Minimum output will be observed at both extremes of the discriminator. The real null point will be obtained in the middle of the core thread length and maximum output will be obtained at both sides of the true null point. Slowly and carefully turn the core to obtain minimum output.

*2. IFT F-2 is unable to adjust from rear part of the set. Remove the front panel and adjust IFT F-2 from front part. (See Fig. 3-4).

3-2. AM IF ALIGNMENT

A-m i-f alignment can be eliminated except when necessary. The ceramic filter CFT is factory preset and i-f transformer IFT A1 is shielded by shield case. The intermediate frequency of the set is characterized by the ceramic filter because a ceramic filter has a peculiar vibrating frequency which depends on its size.

Preparation:

POWER switch : ON
BAND SELECTOR : MW
BFO switch : OFF
Rf Signal Generator Coupling:
Loop antenna (See Fig. 3-3)

Modulation:

400 Hz 30 % amplitude-modulated signal

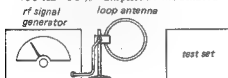


Fig. 3-3. A-m i-f alignment and bfo osc coil adjustment setup

Modulate the rf signal with 400 Hz a-m modulation. Vary the rf signal around 455 kHz to find i-f frequency of the set. The dial of the rf signal generator shows i-f frequency of the set when the output power of the speaker becomes maximum. If the peak of the output power is not found around 455 kHz, adjust the ceramic filter cores after removing front panel and dial drum as shown in Fig. 3-4.

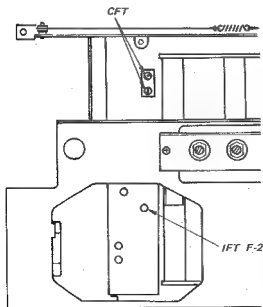


Fig. 3-4. Adjustment locations

3-3. BFO OSC COIL ADJUSTMENT

Preparation:

POWER switch: ON
BAND SELECTOR: MW
BFO switch: ON
BFO Control Setting:

Mechanical mid position as shown in Fig. 3-5.
Rf Signal Generator Coupling: Loop antenna
Setup: See Fig. 3-3.

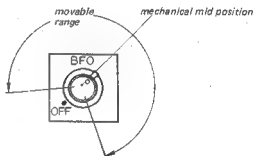


Fig. 3-5. BFO control setting

Rf Signal Generator Frequency	Adjust	Remarks
455 kHz unmodulated signal (*)	BFO osc coil L220 See Fig. 3-6.	Adjust for zero beating.

Note: (*) Tune the rf signal generator frequency to the i-f frequency of the set which is found in AM IF ALIGNMENT.

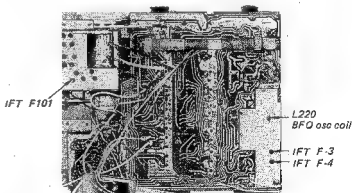


Fig. 3-6. Adjustment locations

3-4. FREQUENCY COVERAGE AND TRACKING ADJUSTMENT

Setup: FM See Fig. 3-7.
 LW/MW See Fig. 3-8.
 SW1 ~ 5 See Fig. 3-7.

Note: Fully telescope the telescopic antenna.

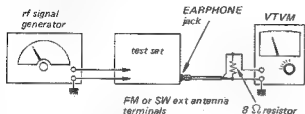


Fig. 3-7. FM/SW1 ~ 5 frequency coverage and tracking adjustment setup

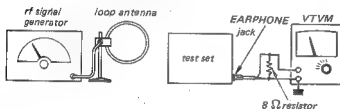


Fig. 3-8. LW/MW frequency coverage and tracking adjustment setup

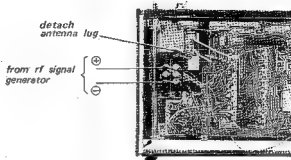


Fig. 3-9. SW1 ~ 5 rf signal generator coupling

Note: For best accuracy, the fm frequency coverage should be within the range between 87.5 MHz and 108 MHz. Make the frequency coverage by adjusting osc coil L106 and osc trimmer CT105 with the intended frequency signal from the rf signal generator.

Adjustment	Rf Signal Generator Coupling	Rf Signal Generator Frequency	Receiver Pointer Setting	Adjust	Remarks	
FM Frequency Coverage	To FM ext ant terminal by detaching ant lug (See Fig. 3-2)	86.5 MHz	Fully left	FM osc coil L106	BAND SELECTOR : FM Adjust for maximum meter reading.	
		109.5 MHz	Fully right	FM osc trimmer CT105		
FM Tracking		86.5 MHz	Tune to 86.5 MHz signal	FM ant coil L101 FM rf coil L103		
109.5 MHz		Tune to 109.5-MHZ signal	FM ant trimmer CT101 FM rf trimmer CT103			
MW Frequency Coverage	Loop antenna (See Fig. 3-8)	520 kHz	Fully left	MW osc coil L202	BAND SELECTOR : MW Adjust for maximum meter reading.	
		1,680 kHz	Fully right	MW osc trimmer CT202		

Adjustment	Rf Signal Generator Coupling	Rf Signal Generator Frequency	Receiver Pointer Setting	Adjust	Remarks
MW Tracking	Loop antenna	620 kHz	Tune to 620 kHz signal	Position of MW ant coil L210	BAND SELECTOR : MW Adjust for maximum meter reading.
		1,400 kHz	Tune to 1,400-kHz signal	MW ant trimmer CT209	
LW Frequency Coverage	Loop antenna (See Fig. 3-8).	145 kHz	Fully left	LW osc coil L201	BAND SELECTOR : LW Adjust for maximum meter reading.
		410 kHz	Fully right	LW osc trimmer CT201	
LW Tracking		160 kHz	Tune to 160 kHz signal	Position of LW ant coil L208	
		360 kHz	Tune to 360 kHz signal	LW ant trimmer CT208	
SW1 Frequency Coverage	To SW ext ant terminals (See Fig. 3-9)	1.55 MHz	Fully left	SW1 osc coil L203	BAND SELECTOR : SW1 Adjust for maximum meter reading.
		3.6 MHz	Fully right	SW1 osc trimmer CT203	
SW1 Tracking		1.55 MHz	Tune to 1.55 MHz signal	SW1 ant coil L211	
		3.6 MHz	Tune to 3.6 MHz signal	SW1 ant trimmer CT210	
SW2 Frequency Coverage	- ditto -	3.4 MHz	Fully left	SW2 osc coil L204	BAND SELECTOR : SW2 Adjust for maximum meter reading.
		9.2 MHz	Fully right	SW2 osc trimmer CT204	
SW2 Tracking		3.4 MHz	Tune to 3.4 MHz signal	SW2 ant coil L212	
		9.2 MHz	Tune to 9.2 MHz signal	SW2 ant trimmer CT211	
SW3 Frequency Coverage	- ditto -	8.9 MHz	Fully left	SW3 osc coil L205	BAND SELECTOR : SW3 Adjust for maximum meter reading.
		14.3 MHz	Fully right	SW3 osc trimmer CT205	
SW3 Tracking		8.9 MHz	Tune to 8.9 kHz signal	SW3 ant coil L213	
		14.3 MHz	Tune to 14.3 kHz signal	SW3 ant trimmer CT212	

Adjustment	Rf Signal Generator Coupling	Rf Signal Generator Frequency	Receiver Pointer Setting	Adjust	Remarks
SW4 Frequency Coverage	To SW ext ant terminals (See Fig. 3-9)	13.8 MHz	Fully left	SW4 osc coil L206	BAND SELECTOR : SW4 Adjust for maximum meter reading.
		21.4 MHz	Fully right	SW4 osc trimmer CT206	
SW4 Tracking		13.8 MHz	Tune to 13.8 MHz signal	SW4 ant coil L214	
		21.4 MHz	Tune to 21.4 MHz signal	SW4 ant trimmer CT213	
SW5 Frequency Coverage	- ditto -	20.7 MHz	Fully left	SW5 ant coil L207	BAND SELECTOR : SW5 Adjust for maximum meter reading.
		27 MHz	Fully right	SW5 osc trimmer CT207	
SW5 Tracking		20.7 MHz	Tune to 20.7 MHz signal	SW5 ant coil L215	
		27 MHz	Tune to 27 MHz signal	SW5 ant trimmer CT214	

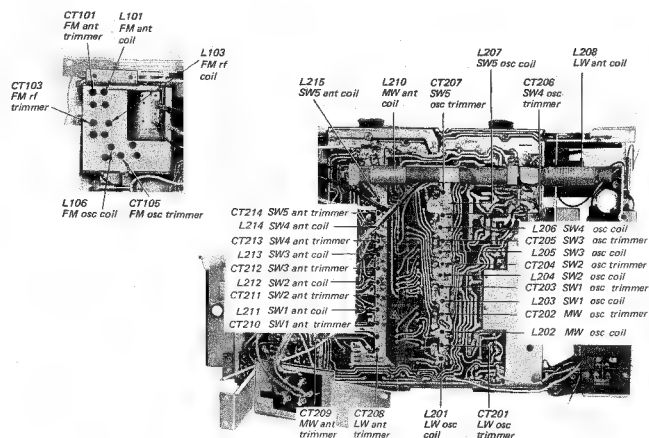
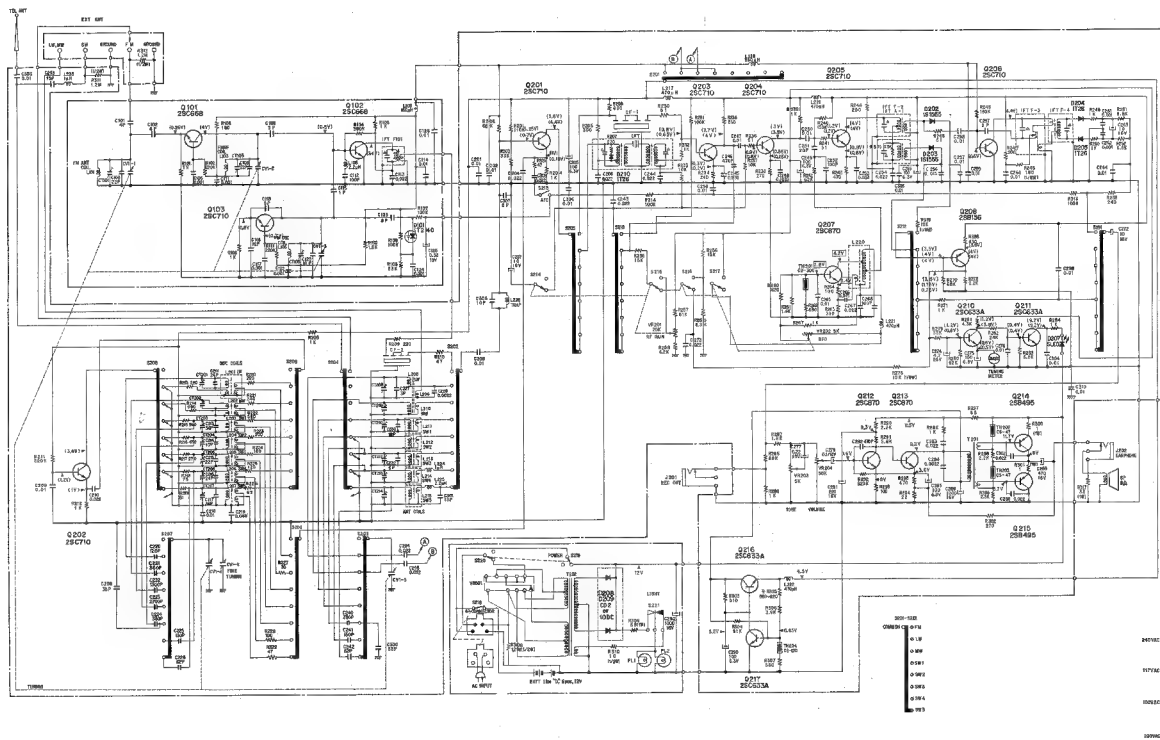


Fig. 3-10. Adjustment locations

SECTION 4 DIAGRAMS

4-1. SCHEMATIC DIAGRAM



Notes:

1. All resistance values in Ω and all capacitance values in μF unless otherwise noted.
2. All voltages measured to ground circuit with a dc voltmeter with no signal received. Variations may be noted due to normal production tolerances.
3. The values in () measured with band selector set to FM, in < > MW and in $\square$ MW with BFO control set to ON.
4. Capacitors marked Δ built in t-f transformers and ceramic filter.

D101 : 1T240



D201, D204, D205, D210 : 1726

D202, D203 : 1S1555



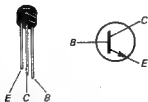
D208, D209 : CD2 or 10DC



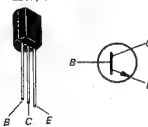
Fig. 4-1.

4.2. MOUNTING DIAGRAM

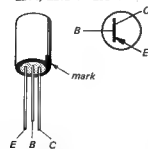
Q101, Q102 : 2SC868



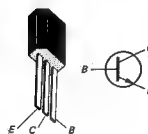
Q103, Q201-Q206 : 2SC710
Q207, Q213 : 2SC870



Q208 : 2SB136
Q214, Q215 : 2SB495



Q210-Q212, Q216, Q217 : 2SC633A



D207 : SLED

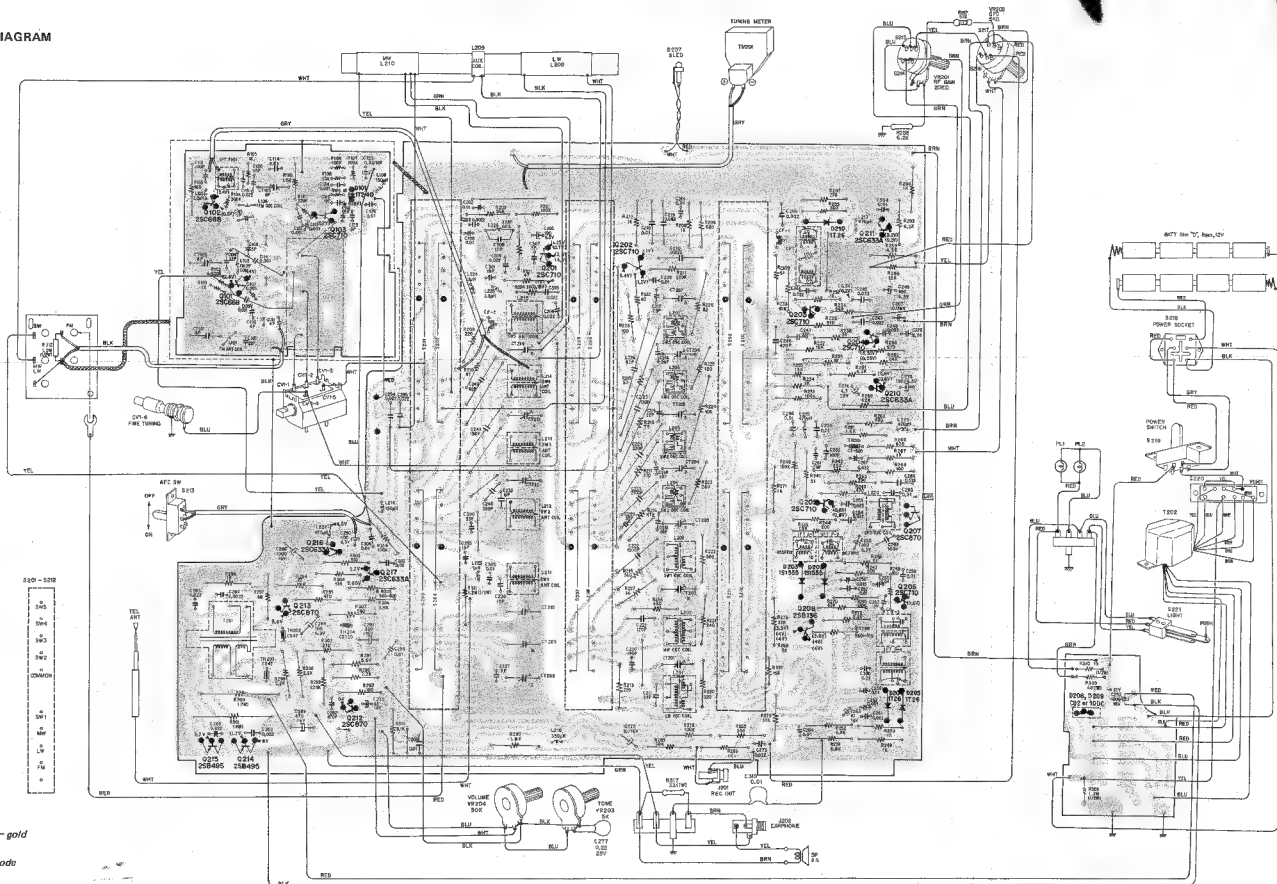
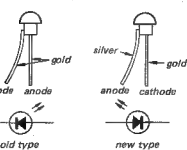


Fig. 4.2.

SECTION 5

EXPLODED VIEW AND PACKING

5-1. EXPLODED VIEW (1)

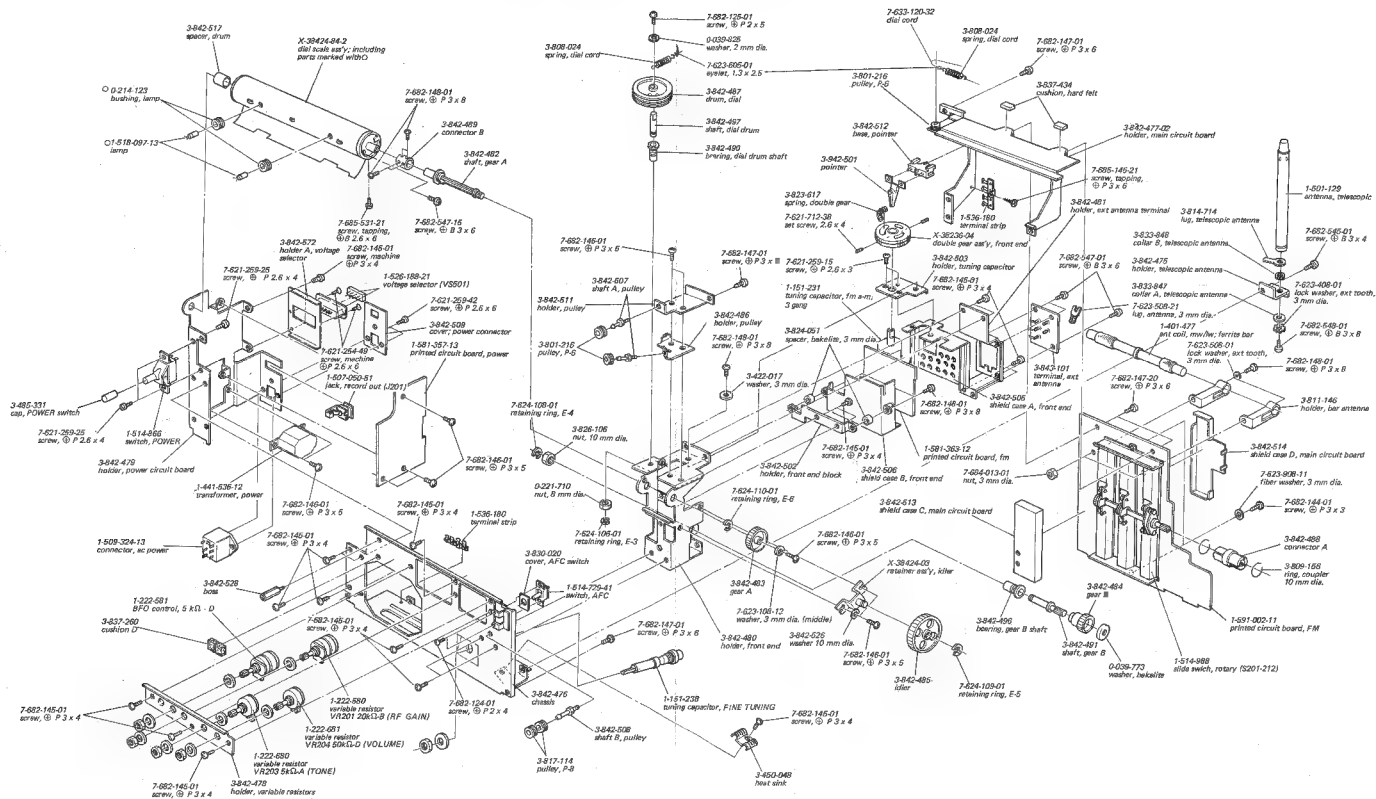


Fig. 5-1.

5-2. EXPLODED VIEW (2)

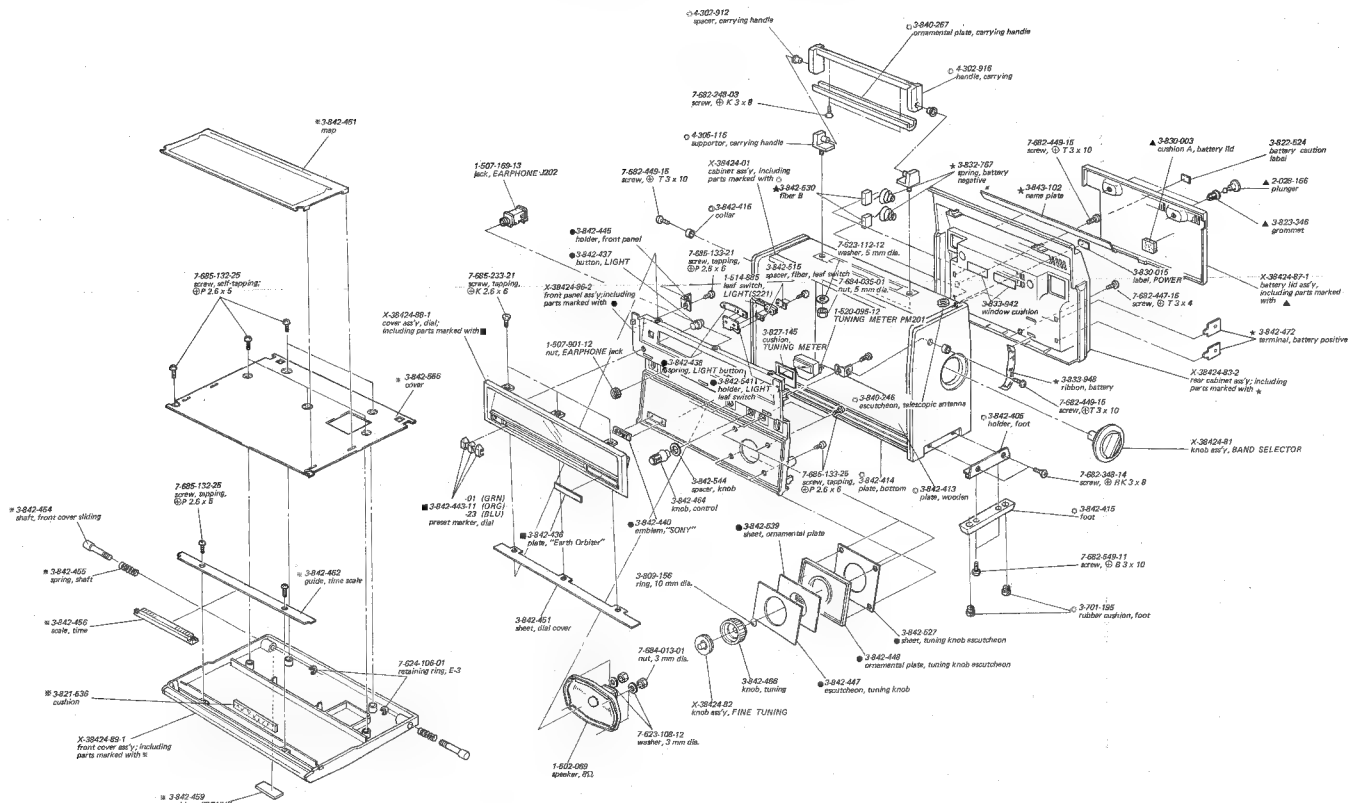


Fig. 5-2

5-3. PACKING

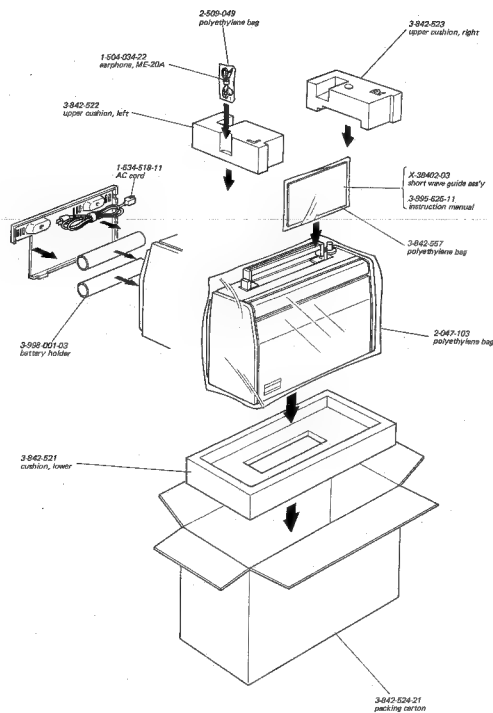


Fig. 5-3.

SECTION 6
ELECTRICAL PARTS LIST

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
SEMICONDUCTORS			L205	1-405-499	osc coil, sw 3
Q101	transistor	2SC668	L206	1-405-500	osc coil, sw 4
Q102	transistor	2SC668	L207	1-405-501	osc coil, sw 5
Q103	transistor	2SC710	L208		
Q201	transistor	2SC710	L209	1-401-477-12	ant coil, mw/lw; ferrite bar
Q202	transistor	2SC710	L210		
Q203	transistor	2SC710	L211	1-401-373	ant coil, sw 1
Q204	transistor	2SC710	L212	1-401-478	ant coil, sw 2
Q205	transistor	2SC710	L213	1-401-479	ant coil, sw 3
Q206	transistor	2SC710	L214	1-401-480	ant coil, sw 4
Q207	transistor	2SC870	L215	1-401-481	ant coil, sw 5
Q208	transistor	2SB136	L216		
Q209			L217	1-407-177	470 μ H, micro inductor
Q210	transistor	2SC633A	L218	1-407-175	330 μ H, micro inductor
Q211	transistor	2SC633A	L219	1-407-177	470 μ H, micro inductor
Q212	transistor	2SC633A	L220	1-405-502	osc coil, bfo
Q213	transistor	2SC870	L221	1-407-177	470 μ H, micro inductor
Q214	transistor	2SB495	L222	1-407-177	470 μ H, micro inductor
Q215	transistor	2SB495	L223	1-407-178	1 μ H, micro inductor
Q216	transistor	2SC633A	L224	1-407-178	1 μ H, micro inductor
Q217	transistor	2SC633A	L225	1-407-182	2.2 μ H, micro inductor
D101	diode	1T240	L226	1-401-201	trap coil
D201	diode	1T26	L227		
D202	diode	1S1555	IFT F101	1-403-242-15	transformer, fm i-f
D203	diode	1S1555	IFT F-2	1-403-555	transformer, fm i-f
D204	diode	1T26	IFT F-3	1-403-287-11	transformer, fm discriminator; primary
D205			IFT F-4	1-403-287-21	transformer, fm discriminator; secondary
D206	diode	1T26	IFT A-1	1-403-174	transformer, a-m i-f
D207	diode	SLED	CF1	1-527-184-11	{ ceramic filter, fm i-f
D208-D209	diode	CD-2 or 10DC		1-527-184-15	
D210	diode	1T26	CF2	1-527-184-11	{ ceramic filter, fm i-f
TH201	8-690-005	thermistor		1-527-184-15	
TH202	8-691-002-11	thermistor	CFT	1-403-165-21	ceramic filter, a-m i-f
TH203	8-691-002-11	thermistor	T201	1-423-140	transformer, driver
TH204	8-691-001-11	thermistor	T202	1-441-536-12	transformer, power
COILS AND TRANSFORMERS			CAPACITORS		
L101	1-425-350	ant coil, fm	CV1-1~5	1-151-231	tuning capacitor, fm a-m 3-gang
L102			CV1-6	1-151-238	tuning capacitor, FINE TUNING
L103	1-425-350	rf coil, fm	CT101	1-141-097-21	capacitor, trimmer
L104			CT102		
L105	1-407-182	2.2 μ H, micro inductor	CT103	1-141-097-21	capacitor, trimmer
L106	1-405-503	osc coil, fm	CT104		
L107			CT105	1-141-097-21	capacitor, trimmer
L108	1-407-171	150 μ H, micro inductor	C101	1-102-937	4 pF ceramic
L201	1-405-497	osc coil, lw	C102	1-102-937	4 pF ceramic
L202	1-405-399	osc coil, mw	C103	1-102-959	22 pF ceramic
L203	1-405-451	osc coil, sw 1	C104		
L204	1-405-498	osc coil, sw 2			

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
C105	1-102-918	0.001 μ F ceramic	C218	1-105-673-12	0.01 μ F mylar
C106	.....	.....	C219	1-105-683-12	0.068 μ F mylar
C107	.....	.....	C220	1-107-087	120 pF silvered mica
C108	1-102-942	5 pF ceramic	C221	1-107-182	360 pF silvered mica
C109	1-102-959	22 pF ceramic	C222	1-103-728	1300 pF styrol
C110	.....	.....	C223	1-103-735	2700 pF styrol
C111	1-105-661-12	0.001 μ F mylar	C224	1-107-097	330 pF silvered mica
C112	1-107-085	100 pF mica	C225	1-107-088	130 pF silvered mica
C113	1-102-924	0.022 μ F ceramic	C226	1-107-080	62 pF silvered mica
C114	1-102-924	0.022 μ F ceramic	C227	1-102-940	3 pF ceramic
C115	1-102-934	1 pF ceramic	C228	1-105-665-12	0.0022 μ F mylar
C116	1-102-510	12 pF ceramic	C229	.....	.....
C117	1-102-918	0.001 μ F ceramic	C230	1-102-953	18 pF ceramic
C118	1-102-864	5 pF ceramic	C231	.....	.....
C119	.....	.....	C232	1-102-943	6 pF ceramic
C120	1-102-893	18 pF ceramic	C233	.....	.....
C121	.....	.....	C234	.....	.....
C122	1-105-661-12	0.001 μ F mylar	C235	.....	.....
C123	1-102-865	8 pF ceramic	C236	.....	.....
C124	1-105-661-12	0.001 μ F mylar	C237	.....	.....
C125	1-127-021	0.33 μ F 10 V electrolytic (alox)	C238	.....	.....
C126	1-105-673-12	0.01 μ F mylar	C239	.....	.....
CT201	1-141-142	capacitor, trimmer	C240	1-107-097	330 pF silvered mica
CT202	1-141-142	capacitor, trimmer	C241	1-107-088	130 pF silvered mica
CT203	1-141-142	capacitor, trimmer	C242	1-107-080	62 pF silvered mica
CT204	1-141-142	capacitor, trimmer	C243	1-105-677-12	0.022 μ F mylar
CT205	1-141-142	capacitor, trimmer	C244	1-105-677-12	0.022 μ F mylar
CT206	1-141-142	capacitor, trimmer	C245	1-105-679-12	0.033 μ F mylar
CT207	1-141-142	capacitor, trimmer	C246	1-107-185	470 pF silvered mica
CT208	1-141-140	capacitor, trimmer	C247	1-105-673-12	0.01 μ F mylar
CT209	1-141-140	capacitor, trimmer	C248	1-105-679-12	0.033 μ F mylar
CT210	1-141-140	capacitor, trimmer	C249	1-121-491	100 μ F 6.3 V electrolytic
CT211	.....	.....	C250	1-105-673-12	0.01 μ F mylar
CT212	1-141-140	capacitor, trimmer	C251	1-107-068	20 pF silvered mica
CT213	1-141-140	capacitor, trimmer	C252	1-107-085	100 pF silvered mica
CT214	1-141-140	capacitor, trimmer	C253	1-105-679-12	0.033 μ F mylar
C201	1-105-673-12	0.01 μ F mylar	C254	1-105-677-12	0.022 μ F mylar
C202	1-105-673-12	0.01 μ F mylar	C255	1-121-491	100 μ F 6.3 V electrolytic
C203	.....	.....	C256	1-105-675-12	0.015 μ F mylar
C204	1-105-677-12	0.022 μ F mylar	C257	1-105-673-12	0.01 μ F mylar
C205	1-121-491	100 μ F 6.3 V electrolytic	C258	1-105-673-12	0.01 μ F mylar
C206	1-101-924	0.022 μ F ceramic	C259	1-105-673-12	0.01 μ F mylar
C207	1-121-471	10 μ F 16 V electrolytic	C260	1-105-673-12	0.01 μ F mylar
C208	1-105-673-12	0.01 μ F mylar	C261	1-105-661-12	0.001 μ F mylar
C209	1-105-673-12	0.01 μ F mylar	C262	1-105-661-12	0.001 μ F mylar
C210	1-105-677-12	0.022 μ F mylar	C263	1-121-471	10 μ F 16 V electrolytic
C211	1-102-960	24 pF ceramic	C264	1-105-673-12	0.01 μ F mylar
C212	.....	.....	C265	1-105-673-12	0.01 μ F mylar
C213	1-102-964	36 pF ceramic	C266	1-105-675-12	0.015 μ F mylar
C214	1-102-947	10 pF ceramic	C267	1-105-677-12	0.022 μ F mylar
C215	1-102-959	22 pF ceramic	C268	1-102-734	100 pF ceramic
C216	1-102-960	24 pF ceramic	C269	.....	.....
C217	1-102-960	24 pF ceramic	C270	.....	.....

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
C271			R104	1-244-734	360 k Ω
C272	1-121-471	10 μ F 16 V electrolytic	R105	1-242-673	1 k Ω
C273	1-105-677-12	0.022 μ F mylar	R106	1-242-673	1 k Ω
C274	1-121-464	4.7 μ F 25 V electrolytic	R107	1-242-721	100 k Ω
C275	1-121-491	100 μ F 6.3 V electrolytic	R108	1-242-709	33 k Ω
C276	1-105-673-12	0.01 μ F mylar	R109	1-242-721	100 k Ω
C277	1-127-046	0.22 μ F 10 V electrolytic (alox)	R110	1-242-677	1.5 k Ω
C278	.....	.....	R111	1-242-729	220 k Ω
C279	1-127-045	0.1 μ F 10 V electrolytic (alox)	R201	1-244-722	110 k Ω
C280	.....	.....	R202	1-244-717	68 k Ω
C281	1-121-421	220 μ F 16 V electrolytic	R203	1-244-709	33 k Ω
C282	1-102-098	470 pF ceramic	R204	1-244-673	1 k Ω
C283	1-105-677-12	0.022 μ F mylar	R205	1-244-662	360 Ω
C284	1-105-665-12	0.0022 μ F mylar	R206	1-244-669	680 Ω
C285	1-121-491	100 μ F 6.3 V electrolytic	R207	1-244-659	270 Ω
C286	1-121-186	1000 μ F 16 V electrolytic	R208	1-244-673	1 k Ω
C287	.....	.....	R209	1-244-657	220 Ω
C288	1-105-677-12	0.022 μ F mylar	R210	1-244-641	47 Ω
C289	1-121-426	470 μ F 16 V electrolytic	R211	1-244-729	220 k Ω
C290	1-121-491	100 μ F 6.3 V electrolytic	R212	1-244-673	1 k Ω
C291	.....	.....	R213	1-244-657	220 Ω
C292	1-121-186	1000 μ F 16 V electrolytic	R214	1-244-669	680 Ω
C293	1-102-951	15 pF ceramic	R215	1-244-667	560 Ω
C294	1-101-924	0.022 μ F ceramic	R216	1-244-665	470 Ω
C295	1-101-924	0.022 μ F ceramic	R217	1-244-659	270 Ω
C296	1-105-673-12	0.01 μ F mylar	R218	1-244-646	75 Ω
C297	1-102-939	2 pF ceramic	R219	1-244-642	51 Ω
C298	1-105-673-12	0.01 μ F mylar	R220	1-244-657	220 Ω
C299	1-102-963	33 pF ceramic	R221	1-244-658	240 Ω
C300	1-102-963	33 pF ceramic	R222	1-244-667	560 Ω
C301	1-102-953	18 pF ceramic	R223	1-244-656	200 Ω
C302	1-105-677-12	0.022 μ F mylar	R224	1-244-649	100 Ω
C303	1-101-923	0.01 μ F ceramic	R225	1-244-651	120 Ω
C304	1-101-923	0.01 μ F ceramic	R226	1-244-647	82 Ω
C305	1-105-673-12	0.01 μ F mylar	R227	1-244-636	30 Ω
C306	1-101-923	0.01 μ F ceramic	R228	1-244-649	100 Ω
C307	1-102-942	5 pF ceramic	R229	.....	.....
C308	1-102-947	10 pF ceramic	R230	1-244-642	51 Ω
C309	1-105-677-12	0.022 μ F mylar	R231	1-244-721	100 k Ω
C310	1-101-923	0.01 μ F ceramic	R232	1-244-673	1 k Ω
			R233	1-244-697	10 k Ω
			R234	1-244-658	240 Ω
			R235	1-244-666	510 Ω
			R236	1-244-642	51 Ω
			R237	1-244-697	10 k Ω
			R238	1-244-659	270 Ω
			R239	1-244-673	1 k Ω
			R240	1-244-725	150 k Ω
			R241	1-244-642	51 Ω
			R242	1-244-716	62 k Ω
			R243	1-244-665	470 Ω
			R244	1-244-656	200 Ω
			R245	1-244-723	120 k Ω

RESISTORS

All resistors are $\frac{1}{4}$ W, $\pm 5\%$, carbon type resistors unless otherwise noted.

VR201	1-222-580	RF GAIN control	20 k Ω B
VR202	1-222-581	BFO control	5 k Ω D
VR203	1-222-680	TONE control	5 k Ω A
VR204	1-222-681	VOLUME control	50 k Ω D
R101	1-242-673		1 k Ω
R102	1-242-740		620 k Ω
R103	1-244-655		180 Ω

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
C105	1-102-918	0.001 μ F ceramic	C218	1-105-673-12	0.01 μ F mylar
C106	.....	.....	C219	1-105-683-12	0.068 μ F mylar
C107	.....	.....	C220	1-107-087	120 pF silvered mica
C108	1-102-942	5 pF ceramic	C221	1-107-182	360 pF silvered mica
C109	1-102-959	22 pF ceramic	C222	1-103-728	1300 pF styrol
C110	.....	.....	C223	1-103-735	2700 pF styrol
C111	1-105-661-12	0.001 μ F mylar	C224	1-107-097	330 pF silvered mica
C112	1-107-085	100 pF mica	C225	1-107-088	130 pF silvered mica
C113	1-102-924	0.022 μ F ceramic	C226	1-107-080	62 pF silvered mica
C114	1-102-924	0.022 μ F ceramic	C227	1-102-940	3 pF ceramic
C115	1-102-934	1 pF ceramic	C228	1-105-665-12	0.0022 μ F mylar
C116	1-102-510	12 pF ceramic	C229	.....	.....
C117	1-102-918	0.001 μ F ceramic	C230	1-102-953	18 pF ceramic
C118	1-102-864	5 pF ceramic	C231	.....	.....
C119	.....	.....	C232	1-102-943	6 pF ceramic
C120	1-102-893	18 pF ceramic	C233	.....	.....
C121	.....	.....	C234	.....	.....
C122	1-105-661-12	0.001 μ F mylar	C235	.....	.....
C123	1-102-865	8 pF ceramic	C236	.....	.....
C124	1-105-661-12	0.001 μ F mylar	C237	.....	.....
C125	1-127-021	0.33 μ F 10 V electrolytic (alox)	C238	.....	.....
C126	1-105-673-12	0.01 μ F mylar	C239	.....	.....
CT201	1-141-142	capacitor, trimmer	C240	1-107-097	330 pF silvered mica
CT202	1-141-142	capacitor, trimmer	C241	1-107-088	130 pF silvered mica
CT203	1-141-142	capacitor, trimmer	C242	1-107-080	62 pF silvered mica
CT204	1-141-142	capacitor, trimmer	C243	1-105-677-12	0.022 μ F mylar
CT205	1-141-142	capacitor, trimmer	C244	1-105-677-12	0.022 μ F mylar
CT206	1-141-142	capacitor, trimmer	C245	1-105-679-12	0.033 μ F mylar
CT207	1-141-142	capacitor, trimmer	C246	1-107-185	470 pF silvered mica
CT208	1-141-140	capacitor, trimmer	C247	1-105-673-12	0.01 μ F mylar
CT209	1-141-140	capacitor, trimmer	C248	1-105-679-12	0.033 μ F mylar
CT210	1-141-140	capacitor, trimmer	C249	1-121-491	100 μ F 6.3 V electrolytic
CT211	.....	.....	C250	1-105-673-12	0.01 μ F mylar
CT212	1-141-140	capacitor, trimmer	C251	1-107-068	20 pF silvered mica
CT213	1-141-140	capacitor, trimmer	C252	1-107-085	100 pF silvered mica
CT214	1-141-140	capacitor, trimmer	C253	1-105-679-12	0.033 μ F mylar
C201	1-105-673-12	0.01 μ F mylar	C254	1-105-677-12	0.022 μ F mylar
C202	1-105-673-12	0.01 μ F mylar	C255	1-121-491	100 μ F 6.3 V electrolytic
C203	.....	.....	C256	1-105-675-12	0.015 μ F mylar
C204	1-105-677-12	0.022 μ F mylar	C257	1-105-673-12	0.01 μ F mylar
C205	1-121-491	100 μ F 6.3 V electrolytic	C258	1-105-673-12	0.01 μ F mylar
C206	1-101-924	0.022 μ F ceramic	C259	1-105-673-12	0.01 μ F mylar
C207	1-121-471	10 μ F 16 V electrolytic	C260	1-105-673-12	0.01 μ F mylar
C208	1-105-673-12	0.01 μ F mylar	C261	1-105-661-12	0.001 μ F mylar
C209	1-105-673-12	0.01 μ F mylar	C262	1-105-661-12	0.001 μ F mylar
C210	1-105-677-12	0.022 μ F mylar	C263	1-121-471	10 μ F 16 V electrolytic
C211	1-102-960	24 pF ceramic	C264	1-105-673-12	0.01 μ F mylar
C212	.....	.....	C265	1-105-673-12	0.01 μ F mylar
C213	1-102-964	36 pF ceramic	C266	1-105-675-12	0.015 μ F mylar
C214	1-102-947	10 pF ceramic	C267	1-105-677-12	0.022 μ F mylar
C215	1-102-959	22 pF ceramic	C268	1-102-734	100 pF ceramic
C216	1-102-960	24 pF ceramic	C269	.....	.....
C217	1-102-960	24 pF ceramic	C270	.....	.....

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
C271			R104	1-244-734	360 k Ω
C272	1-121-471	10 μ F 16 V electrolytic	R105	1-242-673	1 k Ω
C273	1-105-677-12	0.022 μ F mylar	R106	1-242-673	1 k Ω
C274	1-121-464	4.7 μ F 25 V electrolytic	R107	1-242-721	100 k Ω
C275	1-121-491	100 μ F 6.3 V electrolytic	R108	1-242-709	33 k Ω
C276	1-105-673-12	0.01 μ F mylar	R109	1-242-721	100 k Ω
C277	1-127-046	0.22 μ F 10 V electrolytic (alox)	R110	1-242-677	1.5 k Ω
C278	.....		R111	1-242-729	220 k Ω
C279	1-127-045	0.1 μ F 10 V electrolytic (alox)	R201	1-244-722	110 k Ω
C280	.....		R202	1-244-717	68 k Ω
C281	1-121-421	220 μ F 16 V electrolytic	R203	1-244-709	33 k Ω
C282	1-102-098	470 pF ceramic	R204	1-244-673	1 k Ω
C283	1-105-677-12	0.022 μ F mylar	R205	1-244-662	360 Ω
C284	1-105-665-12	0.0022 μ F mylar	R206	1-244-669	680 Ω
C285	1-121-491	100 μ F 6.3 V electrolytic	R207	1-244-659	270 Ω
C286	1-121-186	1000 μ F 16 V electrolytic	R208	1-244-673	1 k Ω
C287	.....		R209	1-244-657	220 Ω
C288	1-105-677-12	0.022 μ F mylar	R210	1-244-641	47 Ω
C289	1-121-426	470 μ F 16 V electrolytic	R211	1-244-729	220 k Ω
C290	1-121-491	100 μ F 6.3 V electrolytic	R212	1-244-673	1 k Ω
C291	.....		R213	1-244-657	220 Ω
C292	1-121-186	1000 μ F 16 V electrolytic	R214	1-244-669	680 Ω
C293	1-102-951	15 pF ceramic	R215	1-244-667	560 Ω
C294	1-101-924	0.022 μ F ceramic	R216	1-244-665	470 Ω
C295	1-101-924	0.022 μ F ceramic	R217	1-244-659	270 Ω
C296	1-105-673-12	0.01 μ F mylar	R218	1-244-646	75 Ω
C297	1-102-939	2 pF ceramic	R219	1-244-642	51 Ω
C298	1-105-673-12	0.01 μ F mylar	R220	1-244-657	220 Ω
C299	1-102-963	33 pF ceramic	R221	1-244-658	240 Ω
C300	1-102-963	33 pF ceramic	R222	1-244-667	560 Ω
C301	1-102-953	18 pF ceramic	R223	1-244-656	200 Ω
C302	1-105-677-12	0.022 μ F mylar	R224	1-244-649	100 Ω
C303	1-101-923	0.01 μ F ceramic	R225	1-244-651	120 Ω
C304	1-101-923	0.01 μ F ceramic	R226	1-244-647	82 Ω
C305	1-105-673-12	0.01 μ F mylar	R227	1-244-636	30 Ω
C306	1-101-923	0.01 μ F ceramic	R228	1-244-649	100 Ω
C307	1-102-942	5 pF ceramic	R229	.....	
C308	1-102-947	10 pF ceramic	R230	1-244-642	51 Ω
C309	1-105-677-12	0.022 μ F mylar	R231	1-244-721	100 k Ω
C310	1-101-923	0.01 μ F ceramic	R232	1-244-673	1 k Ω
			R233	1-244-697	10 k Ω
			R234	1-244-658	240 Ω
			R235	1-244-666	510 Ω
			R236	1-244-642	51 Ω
			R237	1-244-697	10 k Ω
			R238	1-244-659	270 Ω
			R239	1-244-673	1 k Ω
			R240	1-244-725	150 k Ω
			R241	1-244-642	51 Ω
			R242	1-244-716	62 k Ω
			R243	1-244-665	470 Ω
			R244	1-244-656	200 Ω
			R245	1-244-723	120 k Ω

RESISTORS

All resistors are $\frac{1}{4}$ W, $\pm 5\%$, carbon type resistors unless otherwise noted.

VR201	1-222-580	RF GAIN control	20 k Ω B
VR202	1-222-581	BFO control	5 k Ω D
VR203	1-222-680	TONE control	5 k Ω A
VR204	1-222-681	VOLUME control	50 k Ω D
R101	1-242-673		1 k Ω
R102	1-242-740		620 k Ω
R103	1-244-655		180 Ω

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
R246	1-244-642	51 Ω	R298	1-244-679	1.8 k Ω
R247	1-244-656	200 Ω	R299	1-244-681	2.2 k Ω
R248	1-201-829	180 Ω $\frac{1}{2}$ W composition	R300	1-210-226	1 Ω 1 W carbon
R249	1-244-673	1 k Ω	R301	1-210-226	1 Ω 1 W carbon
R250	1-244-673	1 k Ω	R302	1-244-659	270 Ω
R251	1-244-693	6.8 k Ω	R303	1-244-666	510 Ω
R252	1-244-693	6.8 k Ω	R304	1-244-720	91 k Ω
R253	1-244-658	240 Ω		1-244-667	560 Ω
R254	.....	.....		1-244-668	620 Ω
R255	1-244-701	15 k Ω	R305	1-244-669	680 Ω
R256	1-244-701	15 k Ω		1-244-670	750 Ω
R257	1-244-714	51 k Ω		1-244-671	820 Ω
R258	1-244-692	6.2 k Ω	R306	1-244-687	3.9 k Ω
R259	1-244-688	4.3 k Ω	R307	1-244-667	560 Ω
R260	1-244-668	620 Ω	R308	1-202-647	1.2 M Ω $\frac{1}{2}$ W composition
R261	1-244-678	1.6 k Ω	R309	1-202-762	68 Ω 1 W composition
R262	1-244-669	680 Ω	R310	1-202-525	10 Ω $\frac{1}{2}$ W composition
R263	1-244-663	390 Ω	R311	1-202-647	1.2 M Ω $\frac{1}{2}$ W composition
R264	1-244-649	100 Ω	R312	1-202-647	1.2 M Ω $\frac{1}{2}$ W composition
R265	.....	.....	R313	1-244-721	100 k Ω
R266	.....	.....	R314	1-244-721	100 k Ω
R267	1-244-673	1 k Ω	R315	1-244-694	7.5 k Ω
R268	1-244-664	430 Ω	R316	.....	.....
R269	1-244-684	3 k Ω	R317	1-209-154	33 Ω 1 W carbon
R270	1-244-717	68 k Ω	R318	.....	.....
R271	1-244-673	1 k Ω	R319	1-201-866	15 k Ω $\frac{1}{2}$ W composition
R272	1-244-681	2.2 k Ω	R320	.....	.....
R273	.....	.....	R321	1-244-641	47 Ω
R274	.....	.....	R322	1-244-641	47 Ω
R275	.....	.....			
R276	.....	.....			
R277	.....	.....			
R278	1-201-865	10 k Ω $\frac{1}{2}$ W composition	TEL ANT	1-501-129	antenna, telescopic
R279	1-244-709	33 k Ω	SP	1-502-069	speaker, 8 Ω
R280	1-244-716	62 k Ω	J201	1-507-050-51	jack, record out
R281	1-244-688	4.3 k Ω	J202	1-507-169-13	jack, EARPHONE
R282	1-244-706	24 k Ω		1-507-901-12	nut, EARPHONE jack
R283	1-244-692	6.2 k Ω	TM201	1-520-095-12	TUNING METER
R284	1-244-673	1 k Ω	PL1	1-518-097-13	lamp, LIGHT 5 V 50 mA
R285	1-244-717	68 k Ω	PL2	1-518-097-13	lamp, LIGHT 5 V 50 mA
R286	1-244-673	1 k Ω	S201-212	1-514-988	switch, band selector
R287	1-244-679	1.8 k Ω	S213	1-514-729-41	switch, AFC
R288	.....	.....	S218	1-509-324-13	connector, ac power
R289	.....	.....	S219-220	1-514-866	switch, POWER
R290	1-244-681	2.2 k Ω	S221	1-514-885	leaf switch, LIGHT
R291	1-244-691	5.6 k Ω		1-591-002-11	printed circuit board, main
R292	1-244-743	820 k Ω		1-581-363-12	printed circuit board, fm front end
R293	1-244-649	100 Ω		1-581-357-13	printed circuit board, power
R294	1-244-633	22 Ω		1-536-180	terminal strip
R295	1-244-665	470 Ω		8-981-425-16	mounted circuit board, main
R296	1-244-673	1 k Ω		8-981-425-90	mounted circuit board, fm front end
R297	1-244-645	68 Ω	VS501	1-526-188-21	mounted circuit board, power supply voltage selector

MISCELLANEOUS

SONY CORPORATION

280558-1

© 1972

Printed in Japan