

# ICF-5800L

AEP Model  
Canada Model



## 5-BAND PORTABLE RADIO

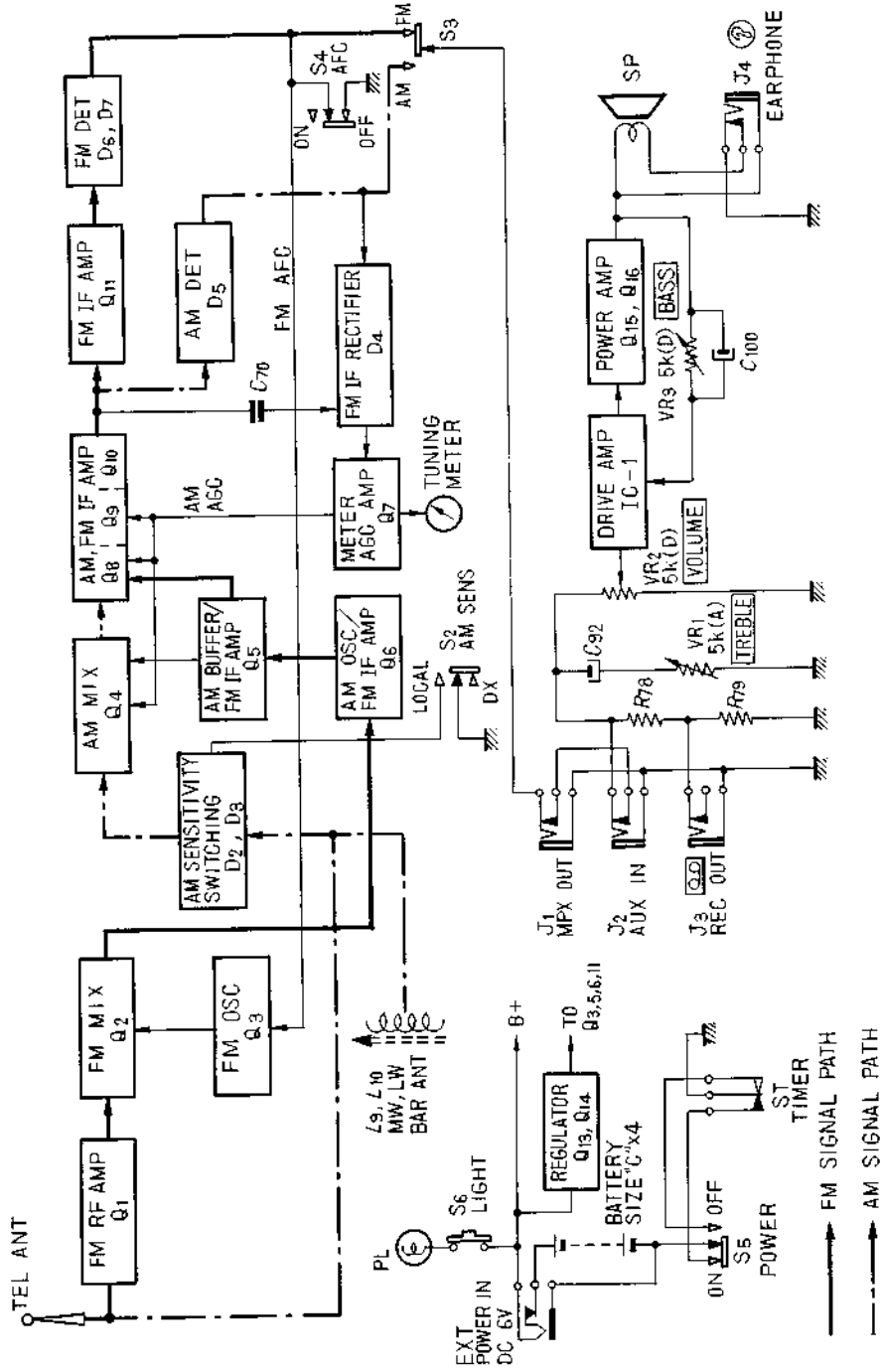
### SPECIFICATIONS

<b>Circuit:</b>	Superheterodyne	<b>SW1:</b>	46 dB at 3 MHz, with 160 $\mu$ V (44 dB) input
<b>Antennas:</b>	FM/SW telescopic antenna (11 steps, 10 cm) MW/LW bar antenna (10 mm dia. x 160 mm)	<b>SW2:</b>	44 dB at 7 MHz, with 160 $\mu$ V (44 dB) input
<b>Frequency Ranges:</b>	FM: 87.5 – 108 MHz (3.43 – 2.78 m) MW: 530 – 1,605 kHz (566 – 187 m) LW: 150 – 285 kHz (2,000 – 1,050 m) SW1: 1.6 – 4.5 MHz (187 – 66.7 m) SW2: 4.5 – 12 MHz (66.7 – 25 m)	<b>Jacks:</b>	Earphone jack Record out jack AUX IN jack MPX OUT jack EXT POWER IN DC 6 V
<b>Intermediate Frequencies:</b>	FM: 10.7 MHz MW/LW: 468 kHz	<b>Power Requirements:</b>	DC: 6 V Battery size C, 4 pcs Car battery cord DCC-127 for 12-V car battery AC power adaptor AC-456 for AC power supply
<b>Sensitivity at 50 mW output:</b>	FM: Maximum: 0.79 $\mu$ V (-2 dB) at 6 dB S/N Usable: 2.5 $\mu$ V (8 dB) at 30 dB S/N MW: Maximum: 25 $\mu$ V/m (28 dB/m) at 6 dB S/N LW: Maximum: 100 $\mu$ V/m (40 dB/m) at 6 dB S/N SW1: Maximum: 1.58 $\mu$ V (4 dB) at 6 dB S/N SW2: Maximum: 1.58 $\mu$ V (4 dB) at 6 dB S/N	<b>Current Drain:</b>	DC 33 mA with no signal input at AM DC 40 mA with no signal input at FM
<b>Selectivity:</b>	MW: 43 dB at 1,400 kHz, $\pm$ 10 kHz off-resonance	<b>Maximum Power Output:</b>	2,200 mW at 10% distortion 4,000 mW maximum
<b>Signal-to-Noise Ratio:</b>	FM: 60 dB at 98 MHz, with 560 $\mu$ V (55 dB) input MW: 38 dB at 1,000 kHz with 1 mV/m (60 dB/m) input LW: 31 dB at 220 kHz, with 1 mV/m (60 dB/m) input	<b>Speaker:</b>	10 cm (4 inches) dia, 8 $\Omega$
		<b>Semiconductors:</b>	14 transistors, 9 diodes, 1 IC
		<b>Dimensions:</b>	208 (w) x 228 (h) x 84 (d) mm 8 1/4 (w) x 9 (h) x 3 3/8 (d) inches
		<b>Weight:</b>	2 kg, 4 lb 7 oz with batteries

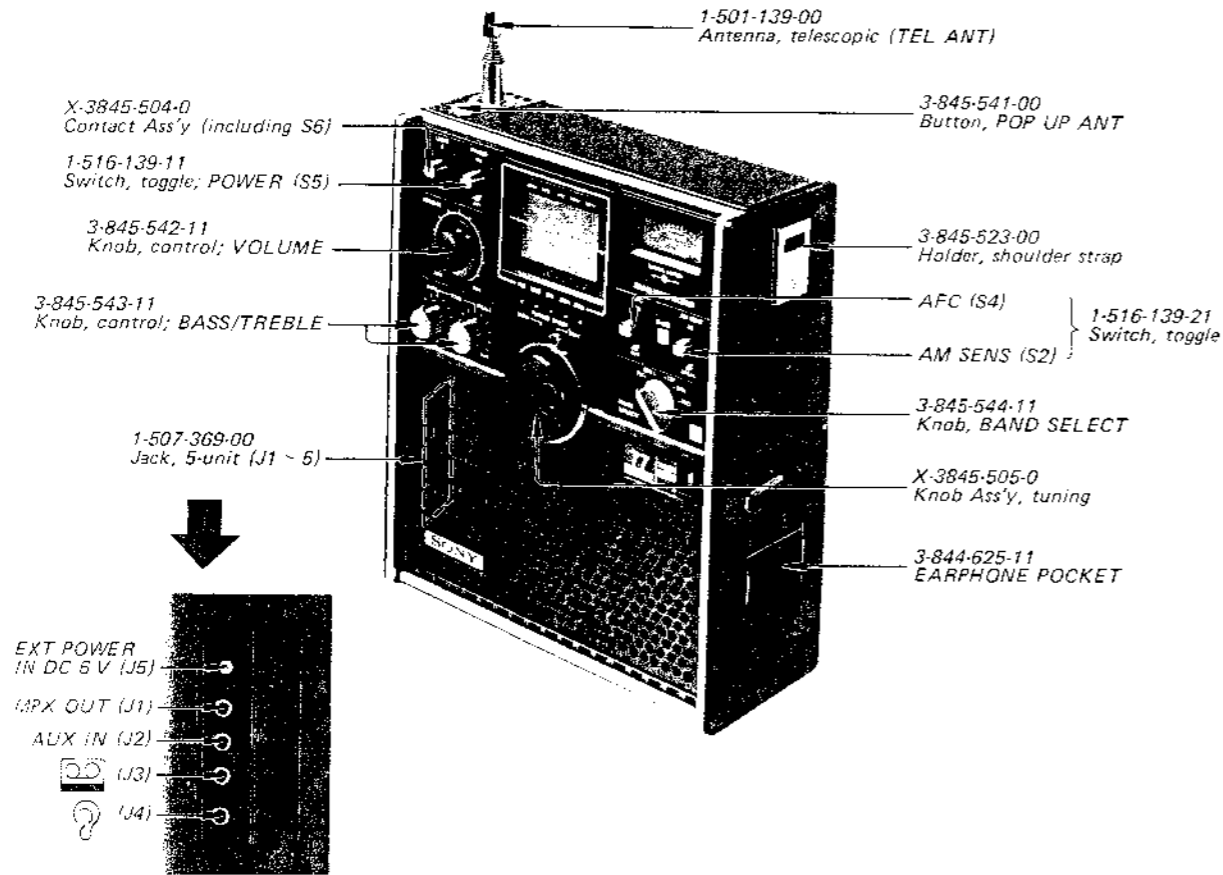
**SONY**<sup>®</sup>  
**SERVICE MANUAL**

## SECTION 1 OUTLINE

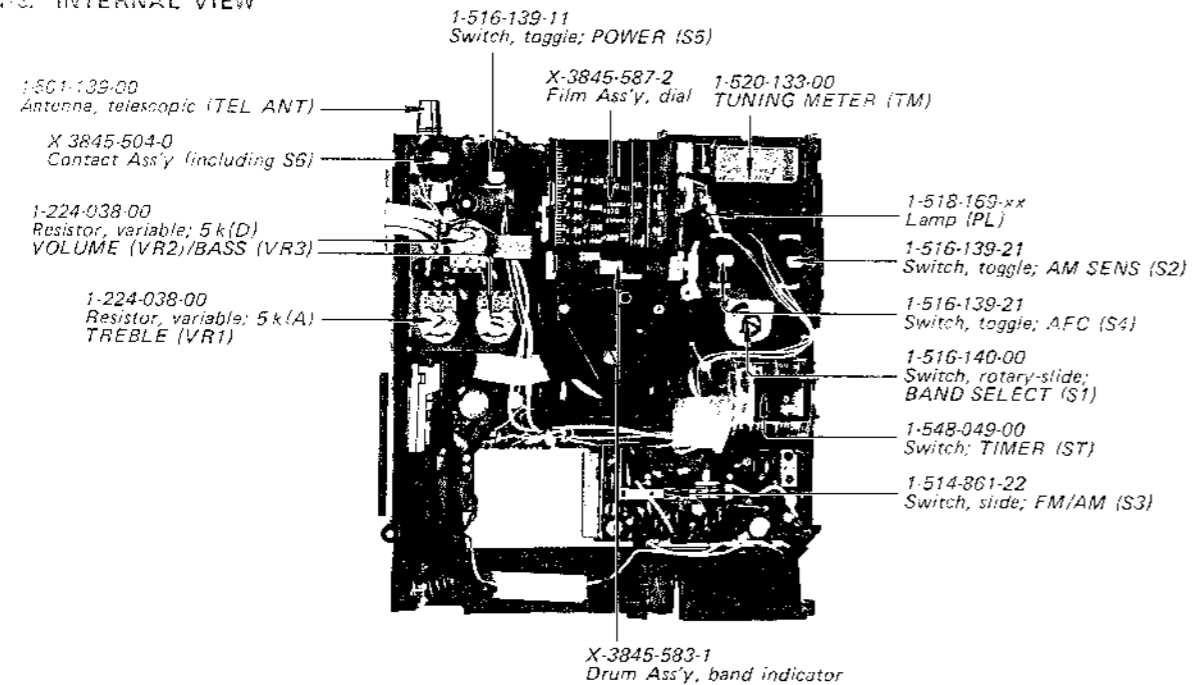
### 1-1. BLOCK DIAGRAM



1-2. EXTERNAL VIEW



1-3. INTERNAL VIEW



1-4. TUNING DIAL MECHANISM

The ICF-5800L uses a two-speed tuning mechanism. The tuning mechanism uses a combination planetary-drive reduction mechanism with steel balls and clutches. It makes the short-wave reception easy.

Fig. 1 shows the fundamental speed-reduction system. When the follower wheel is fixed and the drive shaft is rotated, the steel balls (three) rotate around the drive shaft as shown by the arrows → and revolves around the follower wheel as shown by the arrow ↻ simultaneously. Rotation with reduced speed is obtained coaxially with the drive shaft by utilizing the revolution. When the follower wheel is not fixed and the drive shaft is rotated, the steel balls do not rotate themselves but revolve together with the drive shaft and the follower wheel around the drive shaft, and no speed reduction is obtained.

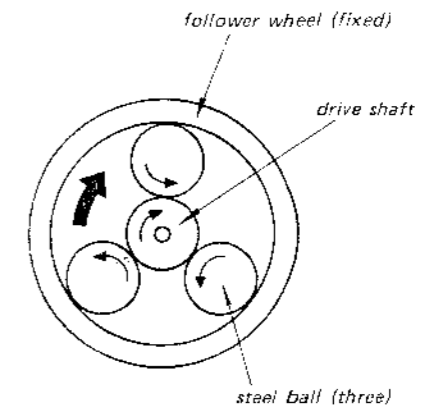


Fig. 1

Fig. 2 shows the tuning mechanism of the ICF-5800L. This figure shows that the clutch A is separated from clutch B by the clutch lever and is pressed against the rubber brake. In this condition, the clutch A does not rotate. Accordingly the follower wheel does not rotate and the rotation force of the drive shaft is transmitted to the pulley with speed reduced.

When the clutch lever is pressed in the direction shown by the arrow, clutch A separates from the rubber brake with the aid of the clutch return spring and the clutch A gangs clutch B. In this condition, the mechanism is so designed that the clutch B rotates together with the tuning shaft. So the clutch B, clutch A ganged to clutch B and the follower wheel rotate following the rotation of the tuning shaft and the rotation speed is not reduced. The speed reduction ratio of the mechanism is 5 to 1.

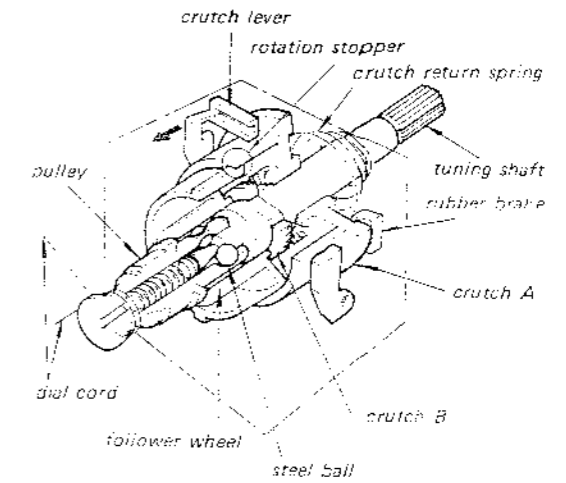
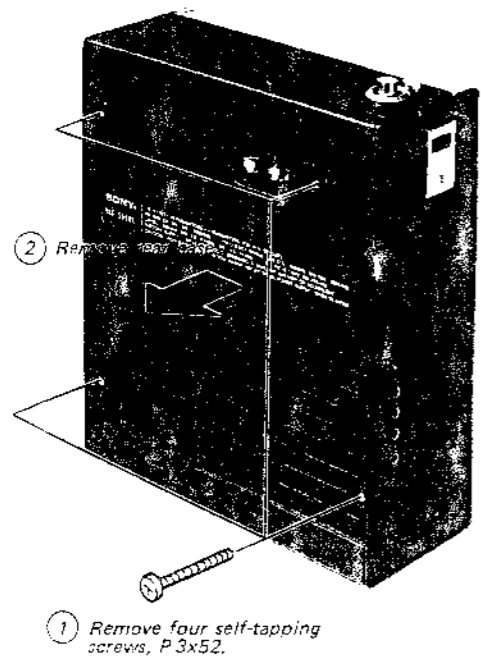


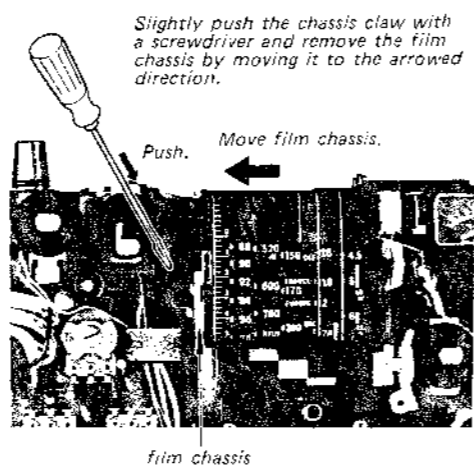
Fig. 2

SECTION 2  
DISASSEMBLY

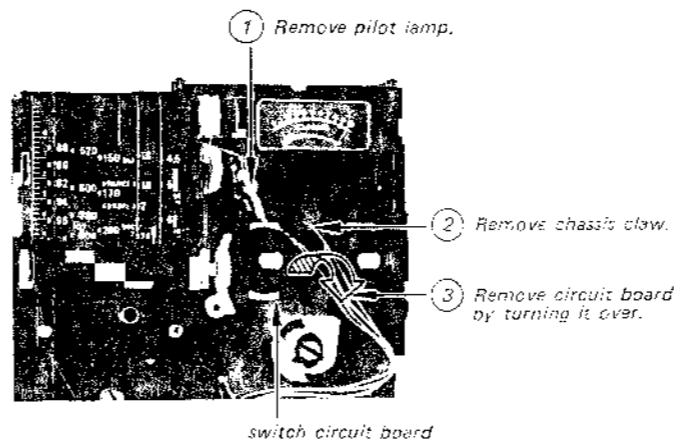
REAR CASE REMOVAL



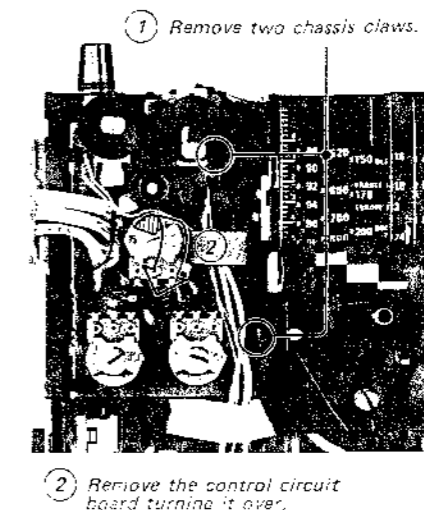
DIAL FILM CHASSIS REMOVAL



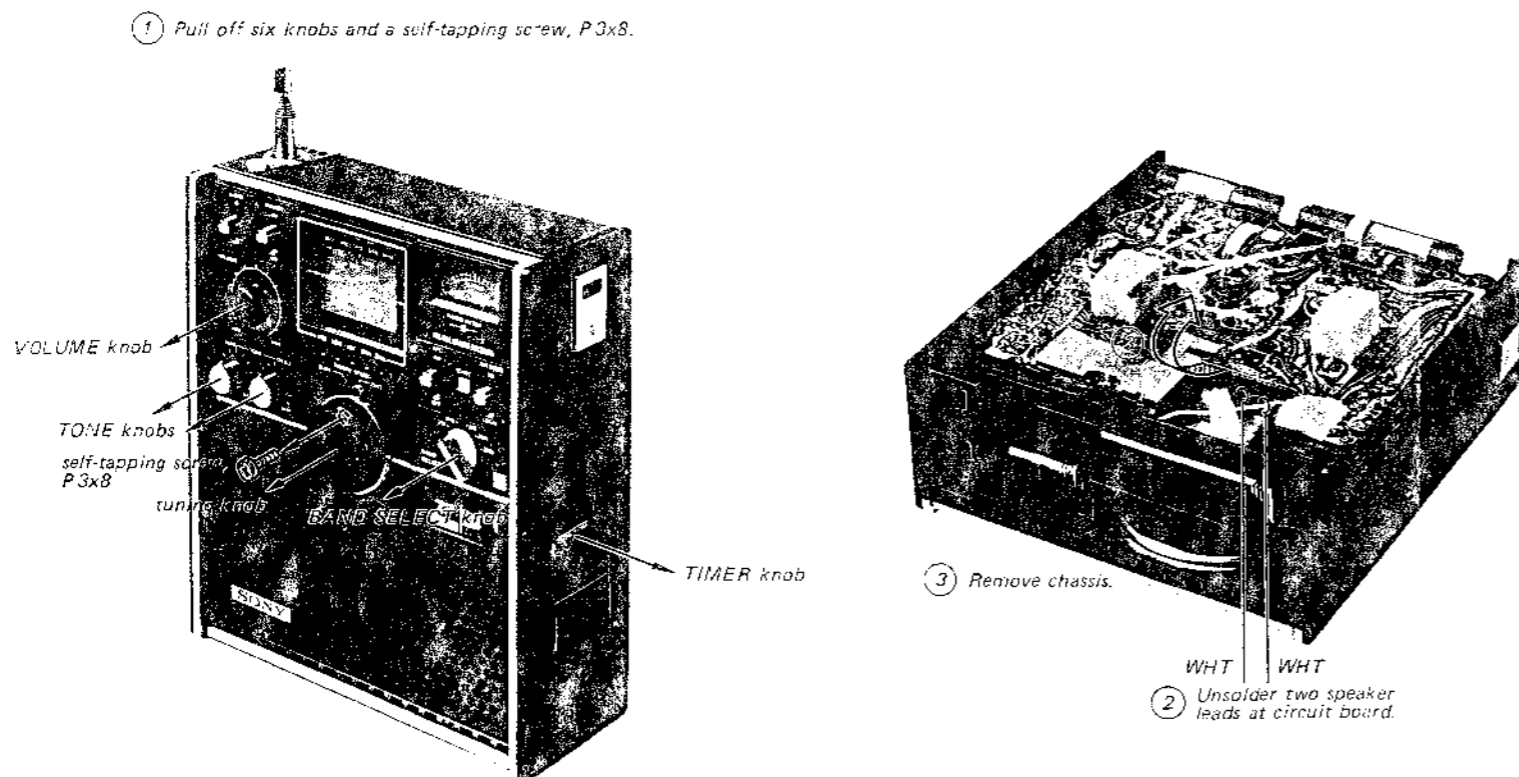
SWITCH CIRCUIT BOARD REMOVAL



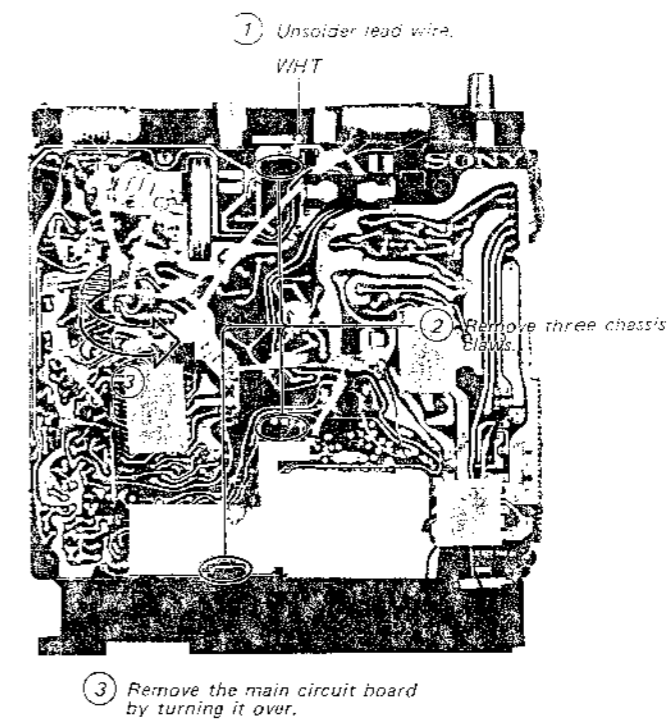
CONTROL CIRCUIT BOARD REMOVAL



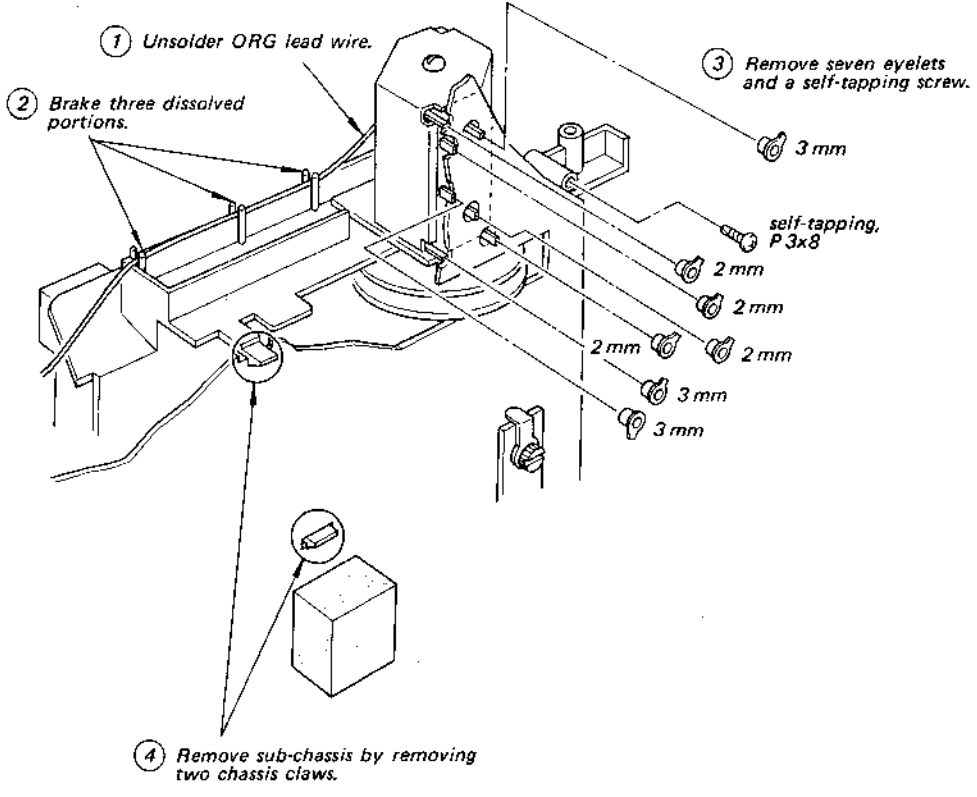
MAIN CHASSIS REMOVAL



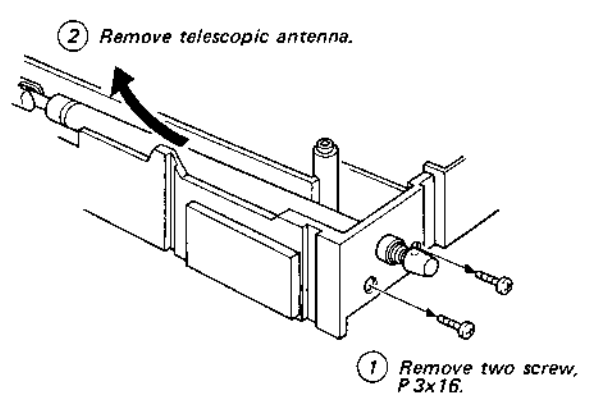
MAIN CIRCUIT BOARD REMOVAL



**SUB CHASSIS REMOVAL**



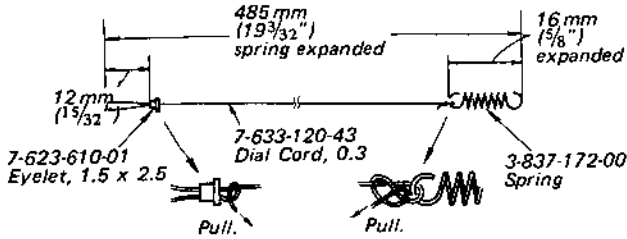
**TELESCOPIC ANTENNA REMOVAL**



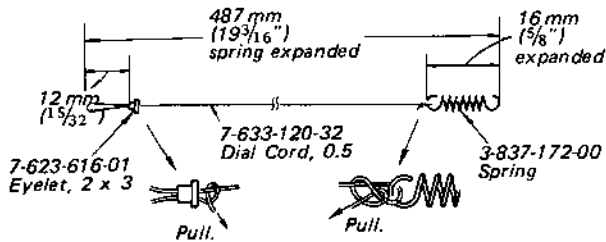
## DIAL CORD STRINGING

1. Remove the main circuit board, dial film chassis and the sub chassis.
2. Assemble dial cords, eyelets and springs as shown below.

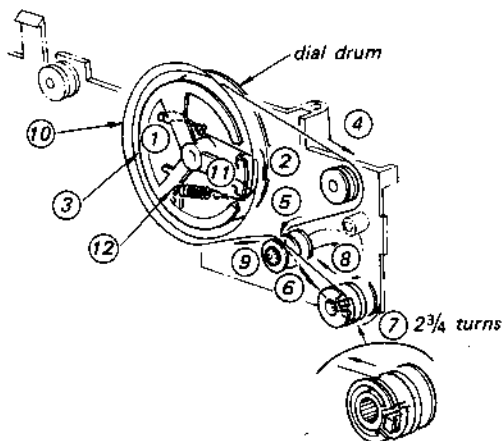
Dial Cord (A)



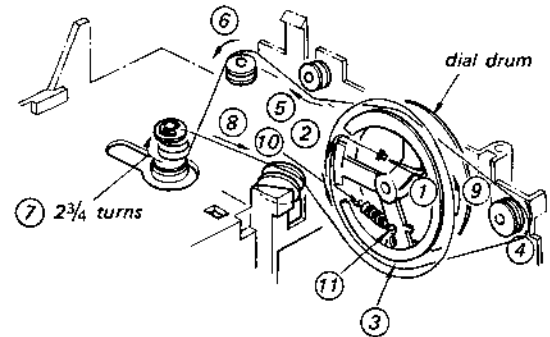
Dial Cord (B)



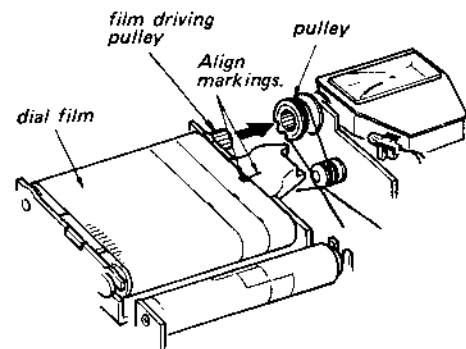
3. Set the dial drum to the full clockwise position, and string the dial cord (A) in the numerical order



4. Set the dial drum to the full counterclockwise position and string the dial cord (B) in the numerical order.



5. Apply a little amount of locking compound to the knotted portions.
6. Set the sub chassis back onto the main circuit board.
7. Align the markings on the dial film and the dial scale transparent cover, and put the film driving pulley into the pulley on the sub chassis.

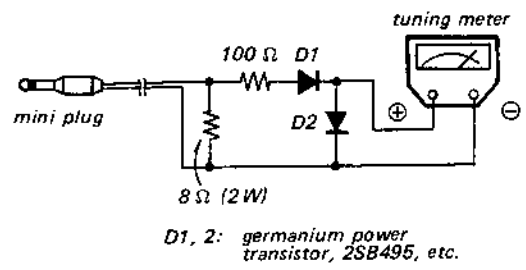


## SECTION 3 ADJUSTMENTS

**Test Equipment/Tools Required:**

- AM rf signal generator
- FM rf signal generator
- VOM
- Lead antenna
- 8 Ω, 2 W resistor

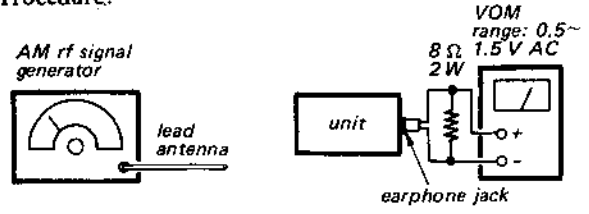
- Note:**
1. Modulation
    - AM: 30 % amplitude modulation by 400 Hz signal.
    - FM: ±22.5 kHz frequency deviation modulated by 400 Hz signal.
  2. AM, FM rf signal generator output level should be useable lowest possible for following adjustments.
  3. When 0.5~1.5 V AC range is not available on the VOM, use a tuning meter together with the network as shown below.



**1. AM 1-f Alignment**

- Settings:**
- BAND SELECT switch: MW
  - VOLUME control: MAX
  - TONE controls: MAX
  - AM SENS switch: LOCAL

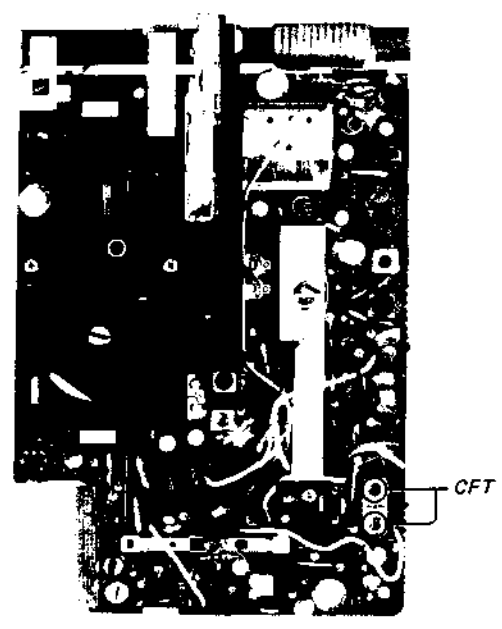
**Procedure:**



455 kHz (modulated 30 % by 400 Hz signal)

Adjust	VOM reading
CFT	maximum

**Adjustment Location:**

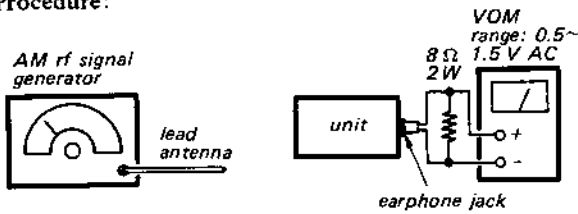


## 2. LW Frequency Coverage and Tracking Adjustments

### Settings:

BAND SELECT switch: LW  
 VOLUME control: MAX  
 TONE controls: MAX  
 AM SENS switch: LOCAL

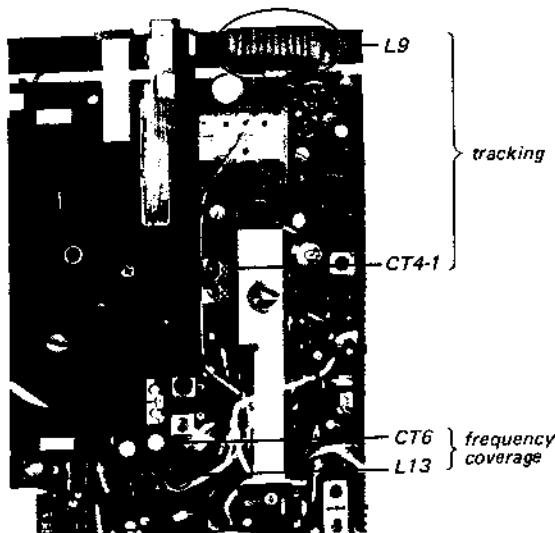
### Procedure:



Adjustment	Step	AM rf signal generator frequency	Tuning knob	Adjust	VOM reading
Frequency Coverage	1	145 kHz	fully counter-clockwise	L13	maximum
	2	300 kHz	fully clockwise	CT6	maximum
Tracking	1	185 kHz	tune in 185 kHz	L9	maximum
	2	260 kHz	tune in 260 kHz	CT4-1	maximum

**Note:** Repeat above steps two or three times until desired result is obtained ending with step 2. Fix L9 with wax after adjustment.

### Adjustment Locations:

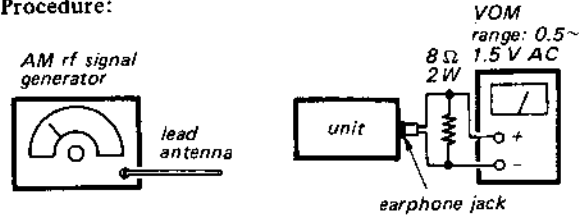


## 3. MW Frequency Coverage and Tracking Adjustments

### Settings:

BAND SELECT switch: MW  
 VOLUME control: MAX  
 TONE controls: MAX  
 AM SENS switch: LOCAL

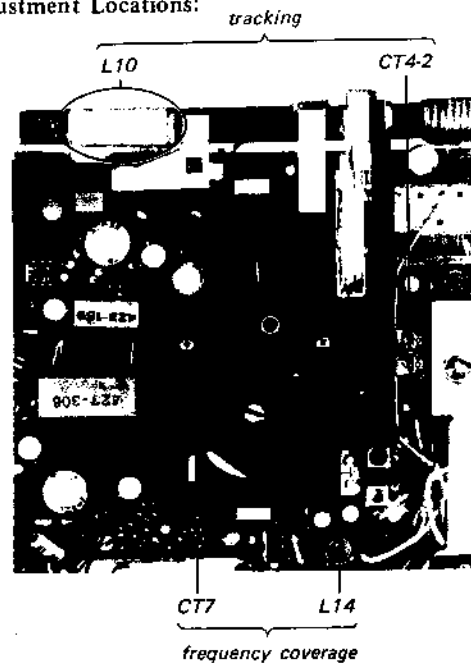
### Procedure:



Adjustment	Step	AM rf signal generator frequency	Tuning knob	Adjust	VOM reading
Frequency Coverage	1	510 kHz	fully counter-clockwise	L14	maximum
	2	1,680 kHz	fully clockwise	CT7	maximum
Tracking	1	620 kHz	tune in 620 kHz	L10	maximum
	2	1,440 kHz	tune in 1,440 kHz	CT4-2	maximum

**Note:** Repeat above steps two or three times until desired result is obtained ending with step 2. Fix L10 with wax after adjustment.

### Adjustment Locations:



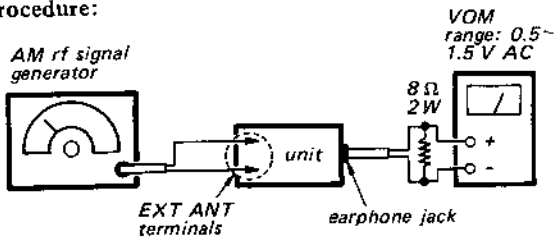


**4. SW1 Frequency Coverage and Tracking Adjustments**

**Settings:**

BAND SELECT switch: SW1  
 VOLUME control: MAX  
 TONE controls: MAX  
 AM SENS switch: LOCAL

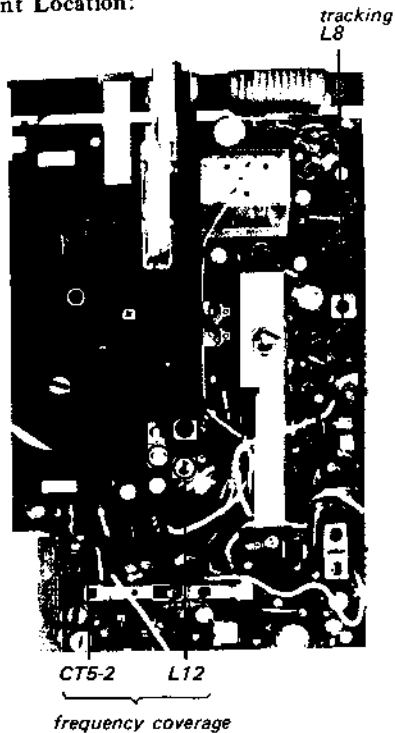
**Procedure:**



Adjustment	Step	AM rf signal generator frequency	Tuning knob	Adjust	VOM reading
Frequency Coverage	1	1.55 MHz	fully counter-clockwise	L12	maximum
	2	4.55 MHz	fully clockwise	CT5-2	maximum
Tracking	1	1.55 MHz	tune in 1.55 MHz	L8	maximum

**Note:** Repeat above steps two or three times until desired result is obtained ending with step 2 (frequency coverage).

**Adjustment Location:**

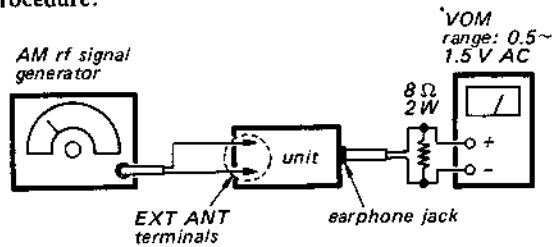


**5. SW2 Frequency Coverage and Tracking Adjustments**

**Settings:**

BAND SELECT switch: SW2  
 VOLUME control: MAX  
 TONE controls: MAX  
 AM SENS switch: LOCAL

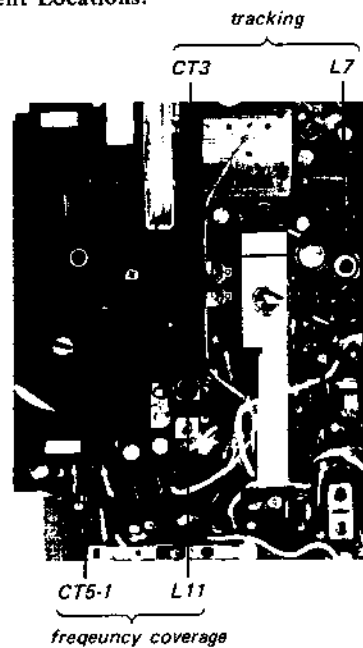
**Procedure:**



Adjustment	Step	AM rf signal generator frequency	Tuning knob	Adjust	VOM reading
Frequency Coverage	1	4.3 MHz	fully counter-clockwise	L11	maximum
	2	12.6 MHz	fully clockwise	CT5-1	maximum
Tracking	1	4.3 MHz	tune in 4.3 MHz	L7	maximum
	2	12.6 MHz	tune in 12.6 MHz	CT3	maximum

**Note:** Repeat above steps two or three times until desired result is obtained ending with steps 2.

**Adjustment Locations:**



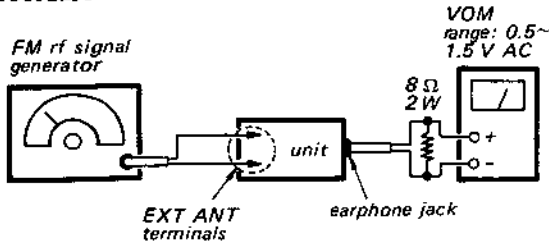
## 6. FM I-f Alignment and Discriminator Adjustment

### Adjustment Locations:

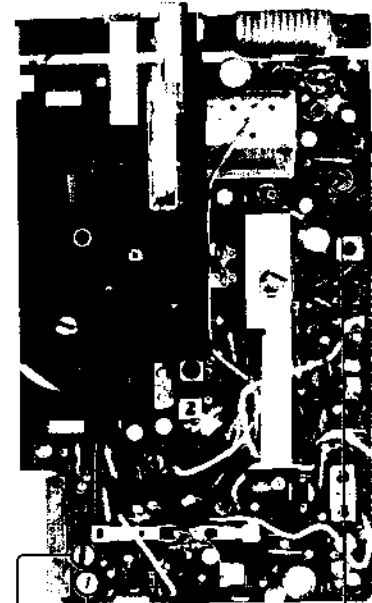
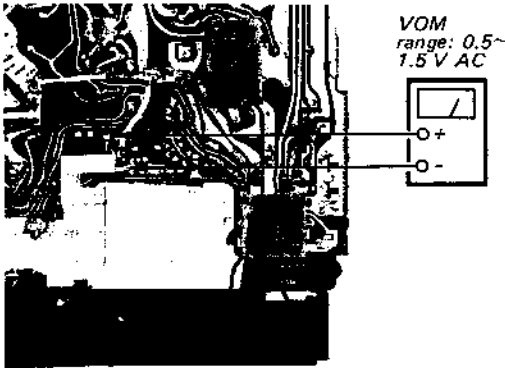
#### Settings:

BAND SELECT switch: FM  
 VOLUME control: MAX  
 TONE controls: MAX  
 AFC switch: OFF

#### Procedure:



VOM connection for step 4.



IFT F-3 IFT F-2 IFT F-1

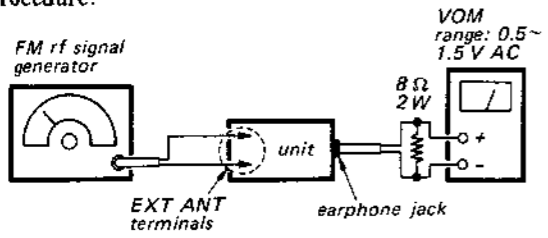
Step	FM rf signal generator frequency	Tuning knob	Adjust	VOM reading
1	10.7 MHz with FM modulation	No station, no beating position	Rf signal generator frequency	maximum
2	- ditto -	- ditto -	IFT F-1~3	maximum
3	Repeat steps 1 and 2 two or three times.			
4	Turn modulation off. Increase output a little.	- ditto -	IFT F-3	"0 V DC"

7. FM Frequency Coverage and Tracking Adjustments

Settings:

BAND SELECT switch: FM  
 VOLUME control: MAX  
 TONE controls: MAX  
 AFC switch: OFF

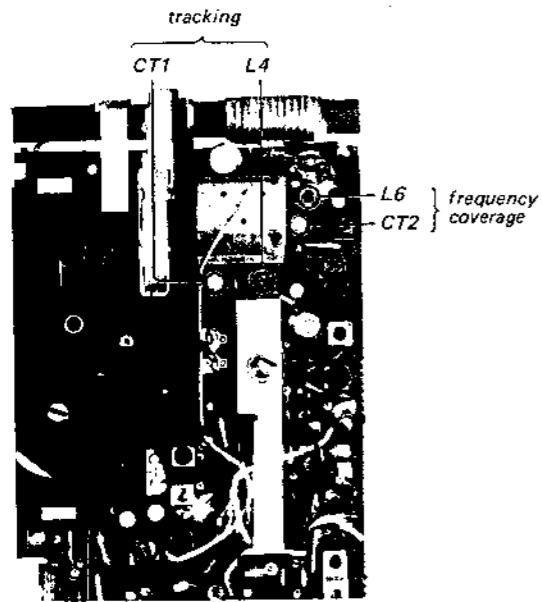
Procedure:



Adjustment	Step	AM rf signal generator frequency	Tuning knob	Adjust	VOM reading
Frequency Coverage	1	87.1 MHz	fully counter-clockwise	L6	maximum
	2	108.5 MHz	fully clockwise	CT2	maximum
Tracking	1	87.1 MHz	fully counter-clockwise	L4	maximum
	2	108.5 MHz	fully clockwise	CT1	maximum

Note: Repeat above steps two or three times until desired result is obtained ending with steps 2. Fix L4 with wax after adjustment.

Adjustment Locations:



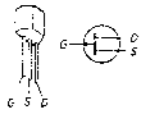
MEMO

A series of horizontal dotted lines provided for recording notes during the adjustment process.

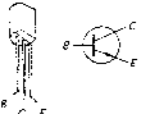
SECTION 4  
DIAGRAMS

4-1. MOUNTING DIAGRAM

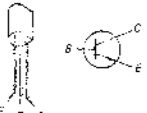
Q1: 2SK40



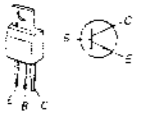
Q2-6,  
8-11: 2SC710



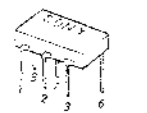
Q7,13,14: 2SC545



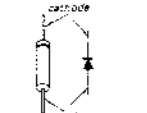
Q15,16: 2SC1429



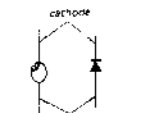
CX-1: CX-025D



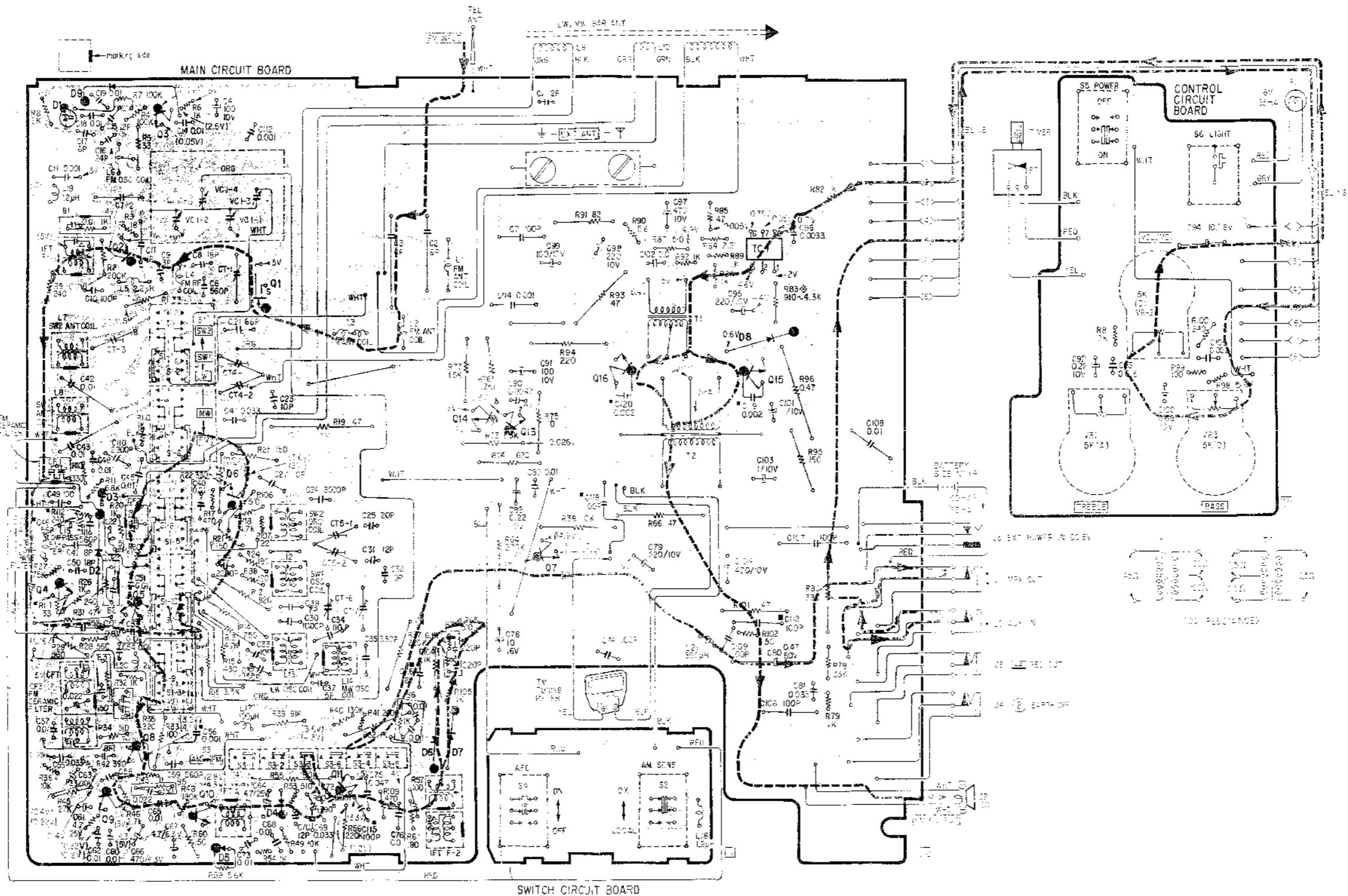
D1: 1S2139C  
D2-4: 1S1555  
D5,9: 1T23  
D6,7: 1T26



DB: 1S1209



D	IC, Q
D9	Q3
D1	
IC1	
Q2	
Q1	
Q8	
Q15	
Q16	
Q13	
Q14	
D3	Q6
D2	Q7
Q4	
C5	
D6	Q8
D7	
Q11	
D4	Q9
Q10	
D5	

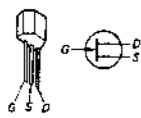


Note:  
 : FM signal path  
 : B+ pattern

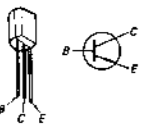
SECTION 4  
DIAGRAMS

4-1. MOUNTING DIAGRAM

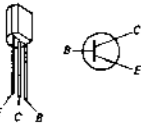
Q1: 2SK40



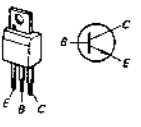
Q2-6,  
8-11: 2SC710



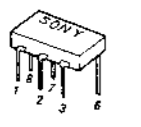
Q7,13,14: 2SC945



Q15,16: 2SC1429



CX-1: CX-025D

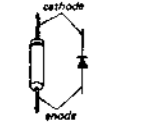


D1: 1S2139C

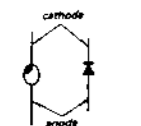
D2-4: 1S1555

D5,9: 1T23

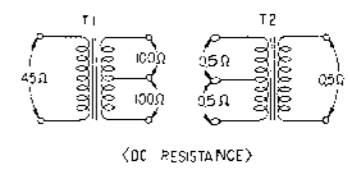
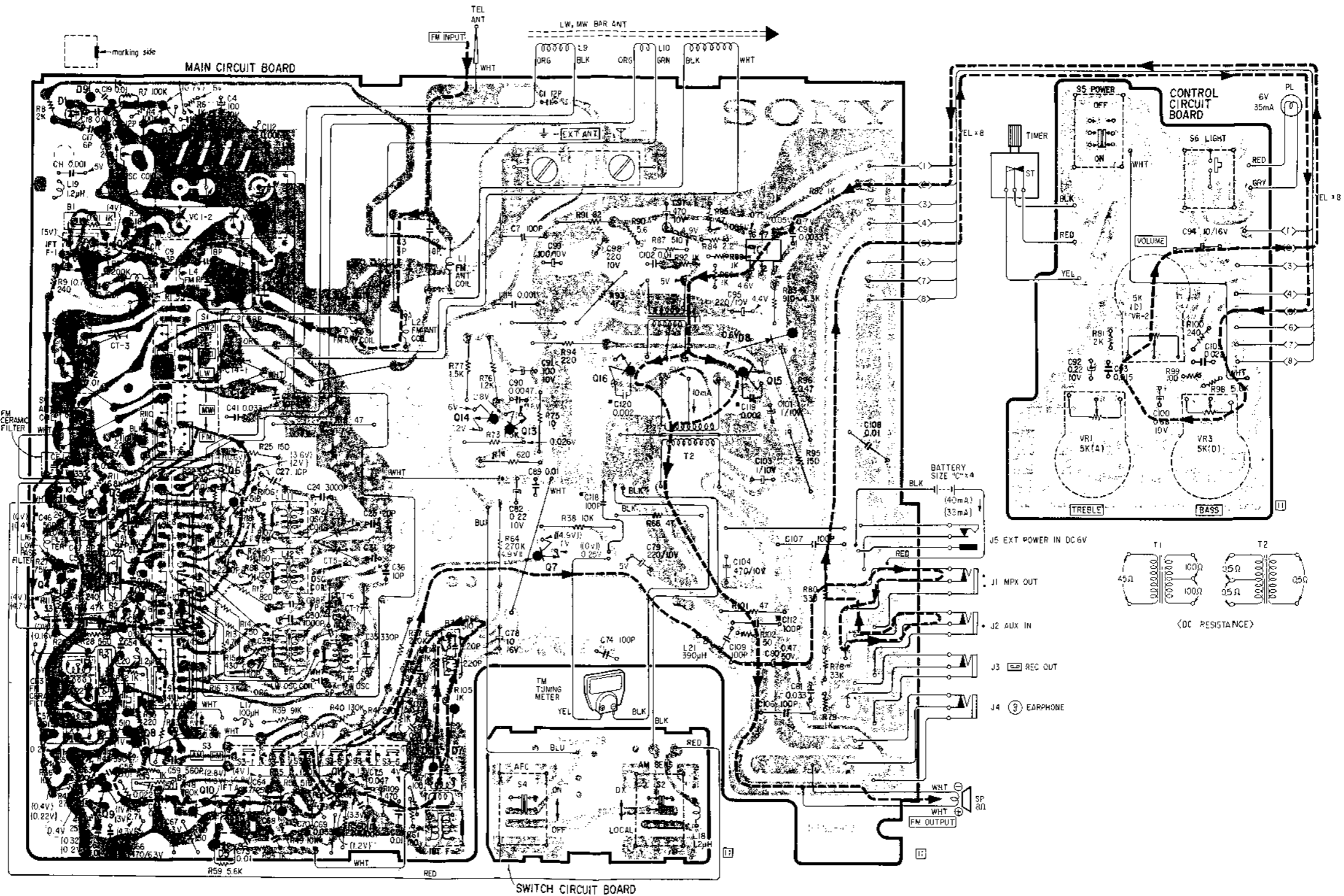
D6,7: 1T26



D8: 1S1209

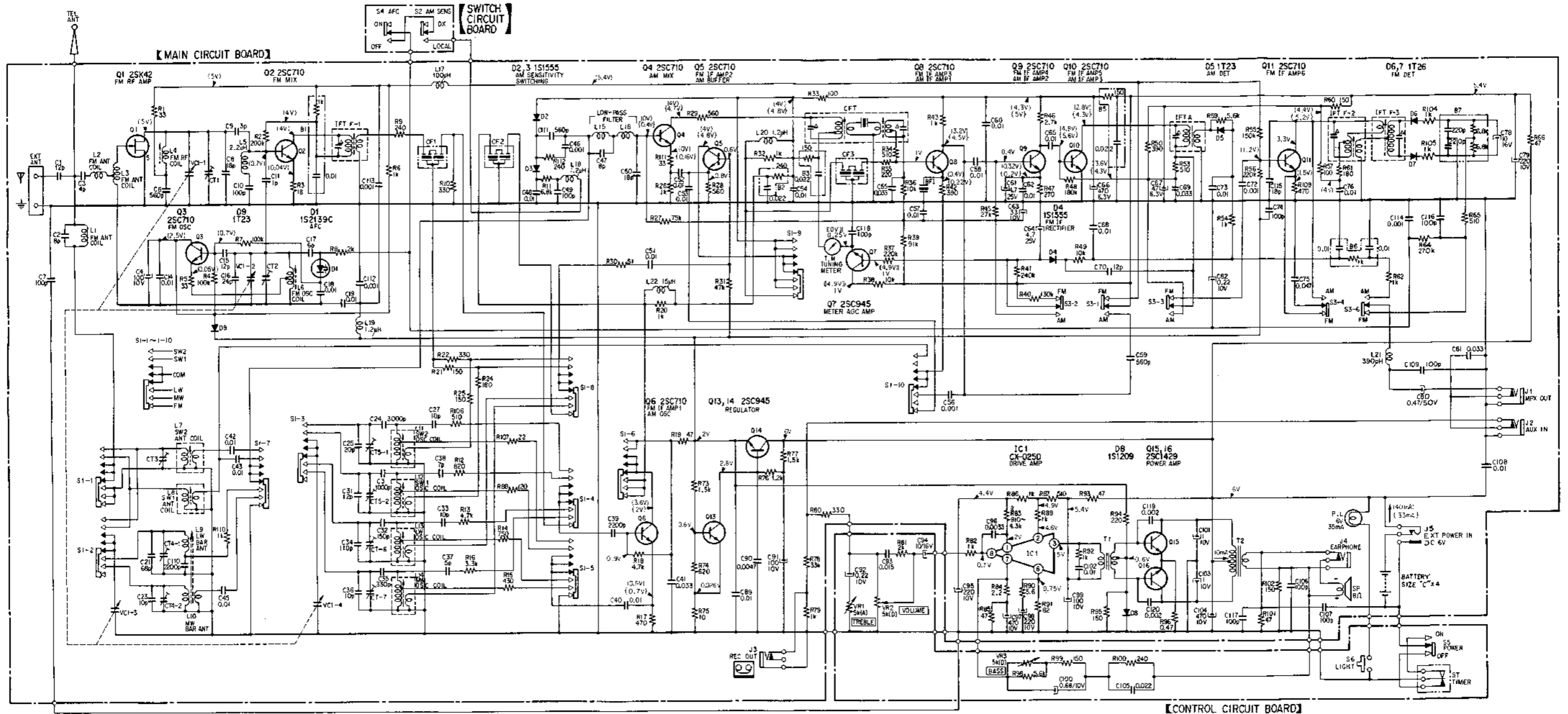


D	IC, Q
D9	Q3
D1	Q1
IC1	Q2
Q1	Q1
D8	Q15
	Q16
	Q13
	Q14
D3	Q6
D2	Q7
	Q4
	Q5
D6	Q8
D7	Q8
D4	Q11
	Q9
	Q10
D5	Q10



Note:  
 : FM signal path  
 : B+ pattern

4-2. SCHEMATIC DIAGRAM



Note:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $p = \mu\text{F}$
  - All resistors are in  $\Omega$ ,  $\frac{1}{2}W$ , unless otherwise noted.  $k = 1,000$   $M = 1,000k$
  - Coil resistances are out-of-circuit values.
  - $\Delta$  indicates internal components.
  - Voltages are DC with respect to ground unless otherwise noted. Readings taken under no-signal conditions with a VOM (20  $k\Omega/V$ ).
  - ( ): FM
  - { }: AM
  - ( ( ): at tuned-in condition
  - no mark: common for FM and AM
- Voltage variations may be noted due to normal production tolerances.

○ Switch Mode:

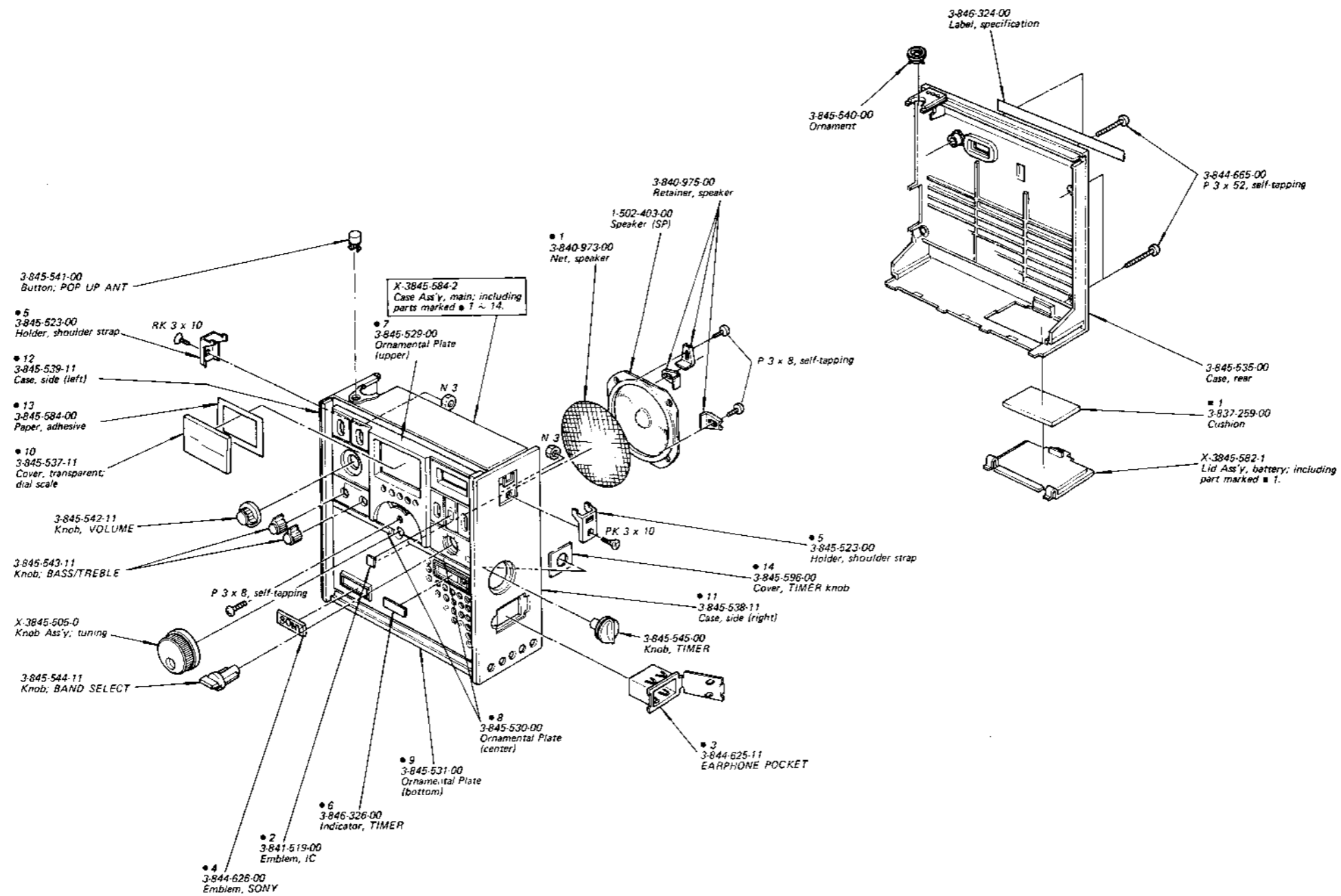
Ref. No.	Switch	Position
S1-1~10	BAND SELECT	FM
S2	AM SENS	DX
S3-1~6	FM/AM	FM
S4	AFC	ON
S5	POWER	OFF
S6	LIGHT	OFF
ST	TIMER	OFF

○ R83 (X) is to be selected.

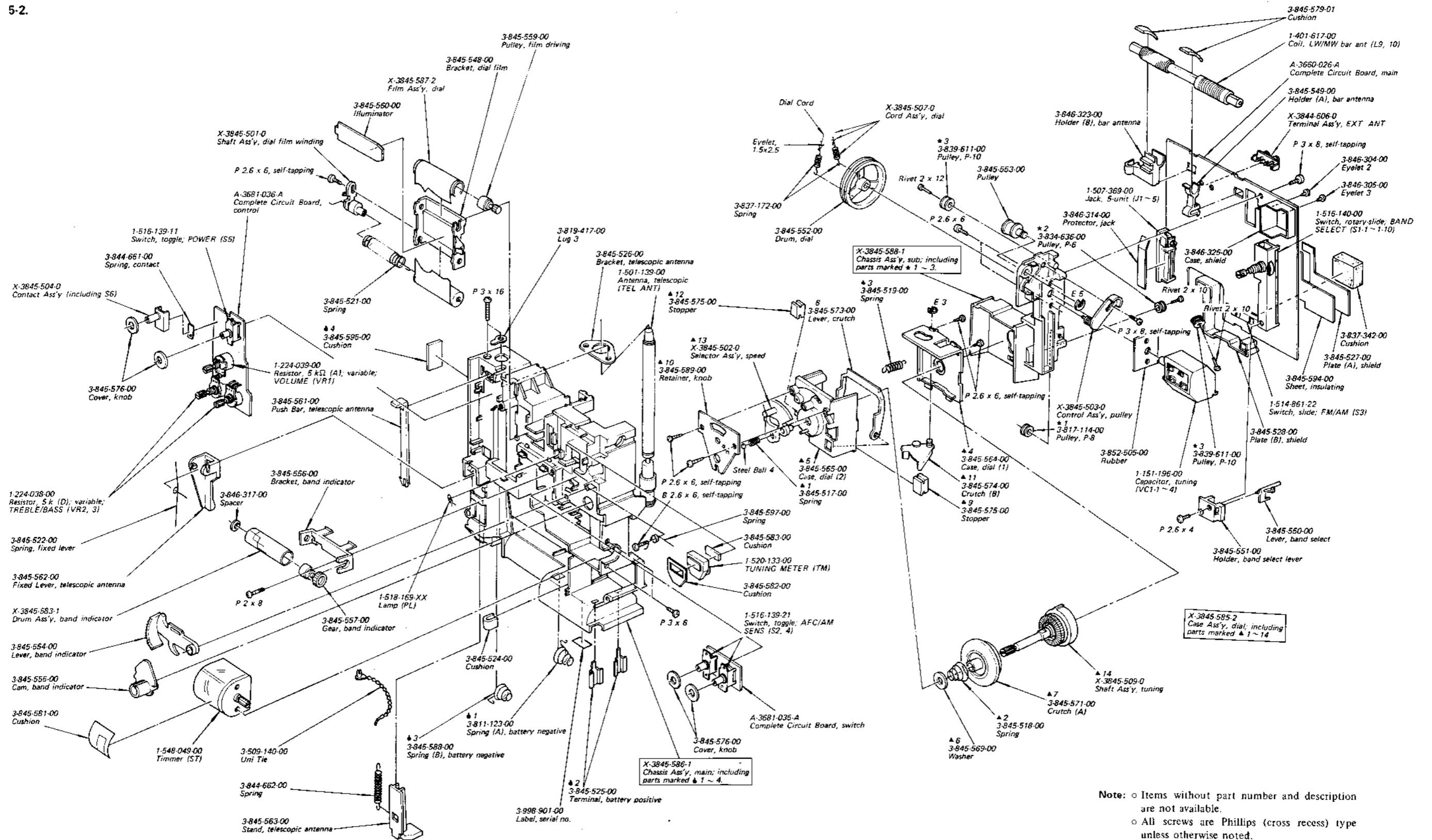
IC1	Q15,16	
	2SC1429-3	2S C1429-4
CX-025-10	4.3 k	1.5 k
CX-025-20	1.5 k	910

SECTION 5  
EXPLODED VIEWS

5-1.



Note: ○ Items without part number and description are not available.  
○ All screws are Phillips (cross recess) type unless otherwise noted.  
(-) = slotted head



Note: ○ Items without part number and description are not available.  
 ○ All screws are Phillips (cross recess) type unless otherwise noted.  
 (-) = slotted head



SECTION 6  
ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
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COMPLETE CIRCUIT BOARDS

- A-3660-026-A Main
- A-3681-035-A Switch
- A-3681-036-A Control

- L9,10 1-401-617-00 LW/MW Bar Ant
- L11 1-405-679-00 SW2 OSC
- L12 1-405-678-00 SW1 OSC
- L13 1-405-680-00 LW OSC
- L14 1-405-520-00 MW OSC

SEMICONDUCTORS

- CX-1 Integrated Circuit, CX-025D

Transistors

- Q1 2SK42
- Q2-6 2SC710
- Q7 2SC945
- Q8-11 2SC710
- Q13,14 2SC945
- Q15,16 2SC1429

TRANSFORMERS

- CFT 1-403-829-21 Ceramic Filter
- IFT A 1-403-137-00 AM IFT
- IFT-F1 1-403-872-00 FM IFT
- IFT-F2 1-403-869-00 FM discr (primary)
- IFT-F3 1-403-870-00 FM discr (secondary)
- T1 1-423-159-00 Driver
- T2 1-427-306-00 Output

Diodes

- D1 1S2139C
- D2-4 1S1555
- D5 1T23
- D6,7 1T26
- D8 1S1209
- D9 1T23

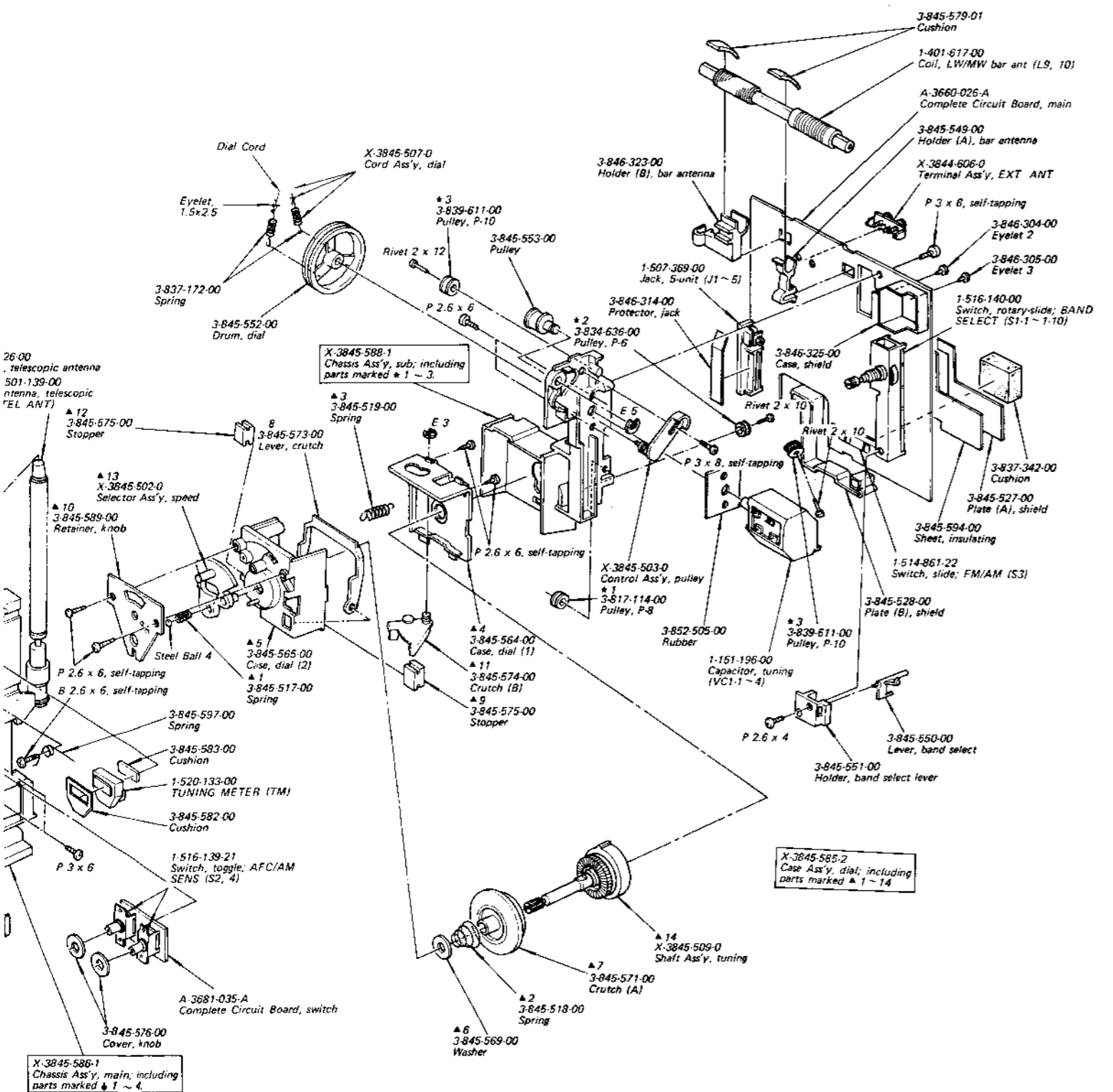
CAPACITORS

All capacitors are  $\mu\text{F}$  unless otherwise indicated. 50 or less working volts are omitted except for electrolytic type. (elect = electrolytic, p =  $\mu\text{F}$ )

COILS

- L1 1-401-456-00 FM Ant
- L2 1-401-527-00 FM Ant
- L3 1-401-455-00 FM Ant
- L4 1-425-739-00 FM RF
- L5 1-407-182-00 2.2 $\mu\text{H}$ , microinductor
- L6 1-405-568-00 FM OSC
- L7 1-401-618-00 SW2 Ant
- L8 1-401-619-00 SW1 Ant

- C1 1-102-949-11 12p ceramic
- C2 1-102-945-11 8p ceramic
- C3 1-102-937-11 4p ceramic
- C4 1-121-414-11 100 10V elect
- C6 1-102-115-11 560p ceramic
- C7 1-102-975-11 100p ceramic
- C8 1-102-953-11 18p ceramic
- C9 1-102-936-11 3p ceramic
- C10 1-102-975-11 100p ceramic
- C11 1-102-934-11 1p ceramic
- C14 1-102-833-12 0.01 mylar
- C15 1-102-949-11 12p ceramic



Note:  $\circ$  Items without part number and description are not available.  
 $\circ$  All screws are Phillips (cross recess) type unless otherwise noted.  
 (-) = slotted head

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C16	1-102-721-11	24p ceramic	C69	1-105-839-12	0.033 mylar
C17	1-102-943-11	6p ceramic	C70	1-102-949-11	12p ceramic
C18,19	1-101-923-11	0.01 ceramic	C72	1-102-074-11	0.001 ceramic
C21	1-101-888-11	68p ceramic	C73	1-105-833-12	0.01 mylar
C23	1-102-947-11	10p ceramic	C74	1-102-975-11	100p ceramic
C24	1-103-636-11	3000p polystyrene	C75	1-101-925-11	0.047 ceramic
C25	1-102-801-11	20p ceramic	C76	1-105-833-12	0.01 mylar
C27	1-102-947-11	10p ceramic	C78	1-121-651-11	10 16V elect
C30	1-103-625-11	1000p polystyrene	C79	1-121-420-11	220 10V elect
C31	1-102-288-11	12p ceramic	C80	1-121-726-11	0.47 50V elect
C32	1-107-089-11	150p silvered mica	C81	1-105-839-12	0.033 mylar
C33	1-102-947-11	10p ceramic	C82	1-127-020-11	0.22 solid
C34	1-107-086-11	110p silvered mica	C89	1-105-833-12	0.01 mylar
C35	1-107-097-11	330p silvered mica	C90	1-105-829-12	0.0047 mylar
C36	1-101-997-11	10p ceramic	C91	1-121-414-11	100 10V elect
C37	1-102-942-11	5p ceramic	C92	1-127-020-11	0.22 solid
C38	1-102-944-11	7p ceramic	C93	1-105-835-12	0.015 mylar
C39	1-102-100-11	2200p ceramic	C94	1-121-651-11	10 16V elect
C40	1-105-833-12	0.01 mylar	C95	1-121-420-11	220 10V elect
C41	1-105-839-12	0.033 mylar	C96	1-105-827-12	0.0033 mylar
C42,43,45	1-101-923-11	0.01 ceramic	C97	1-121-425-11	470 10V elect
C46	1-105-821-12	0.001 mylar	C98	1-121-420-11	220 10V elect
C47	1-102-945-11	8p ceramic	C99	1-121-414-11	100 10V elect
C48	1-101-923-11	0.01 ceramic	C100	1-127-378-11	0.68 10V elect
C49	1-102-975-11	100p ceramic	C101	1-127-023-11	1 10V elect
C50	1-102-953-11	18p ceramic	C102	1-105-833-12	0.01 mylar
C51,52	1-101-923-11	0.01 ceramic	C103	1-127-023-11	1 10V elect
C53,54	1-105-833-12	0.01 mylar	C104	1-121-425-11	470 10V elect
C55	1-105-839-12	0.033 mylar	C105	1-105-837-12	0.022 mylar
C56	1-102-074-11	0.001 ceramic	C106,107	1-102-975-11	100p ceramic
C57,58	1-105-833-12	0.01 mylar	C108	1-101-923-11	0.01 ceramic
C59	1-102-115-11	560p ceramic	C109	1-102-975-11	100p ceramic
C60	1-105-833-12	0.01 mylar	C110	1-102-100-11	2200p ceramic
C61	1-121-395-11	4.7 25V elect	C111	1-102-115-11	560p ceramic
C62	1-105-833-12	0.01 mylar	C112~114	1-101-918-11	0.001 ceramic
C63	1-121-402-11	33 10V elect	C115	1-102-953-11	18p ceramic
C64	1-121-395-11	4.7 25V elect	C116~118	1-102-975-11	100p ceramic
C65	1-105-833-12	0.01 mylar	C119,120	1-102-100-11	2200p ceramic
C66	1-121-425-11	470 10V elect	CT1,2	1-141-097-21	Trimmer (single)
C67	1-121-487-11	47 6.3V elect	CT3	1-141-097-31	Trimmer (single)
C68	1-105-833-12	0.01 mylar			

Ref. No.	Part No.	Description
CT4-1~2	1-141-144-00	Trimmer (2-unit)
CT5-1~2	1-141-146-00	Trimmer (2-unit)
CT6,7	1-141-097-31	Trimmer (single)
VCI-1~4	1-151-196-00	Tuning

RESISTORS

All resistors are in  $\Omega$ .  $\frac{1}{4}W$ ,  $\pm$  carbon resistors (except special type) are omitted. Check schematic diagram for the resistance values.

Ref. No.	Part No.	Description
R9	1-202-368-11	240 composition
R29	1-202-377-11	560 composition
R33	1-202-359-11	100 composition
R54	1-202-383-11	1k composition
R56	1-202-439-11	220k composition
R59	1-202-591-11	240 composition
R78	1-202-419-11	33k composition
R79	1-202-383-11	1k composition
R96	1-207-459-11	0.47 $\frac{1}{2}W$ metal wire
R111	1-202-337-11	33 composition
VR1	1-224-039-00	5k (A), variable; TREBLE
VR2,3	1-224-038-00	5k (D), variable; VOLUME/BASS

ENCAPSULATED COMPONENTS, CR

Ref. No.	Part No.	Description
B1	1-231-221-00	0.01 $\mu F$ + 1 k $\Omega$
B2	1-231-223-00	0.022 $\mu F$ + 240 $\Omega$
B3,5	1-231-222-00	0.022 $\mu F$ + 150 $\Omega$
B6	1-231-204-11	0.01 $\mu F$ + 0.01 $\mu F$ + 1 k $\Omega$
B7	1-231-202-00	220 pF + 220 pF + 6.8 k $\Omega$ + 6.8 k $\Omega$

SWITCHES

Ref. No.	Part No.	Description
S1	1-516-140-00	Rotary-slide, BAND SELECT
S2	1-516-139-21	Toggle, AM SENS
S3	1-514-861-22	Slide, FM/AM
S4	1-516-139-21	Toggle, AFC
S5	1-516-139-11	Toggle, POWER
S6		Included in Contact Ass'y (X-3845-504-0)
S7	1-548-049-00	Timer

MISCELLANEOUS

Ref. No.	Part No.	Description
BFI	1-403-997-00	Filter, ceramic
CF1~3	1-527-198-51	Filter, ceramic
J1~5	1-507-369-00	Jack, 5-unit
PL	1-518-169-xx	Lamp
SP	1-502-403-00	Speaker
TM	1-520-133-00	TUNING METER
TEL ANT	1-501-139-00	Antenna, telescopic

ACCESSORIES & PACKING MATERIALS

Part No.	Description
X-3847-902-0	Shoulder Strap Ass'y
1-504-034-12	Earphone, ME-20
3-701-239-00	Bag, plastic
3-845-590-00	Carton
3-845-592-00	Cushion
3-845-593-12	Cushion
3-846-303-00	Sheet, packing
3-995-709-11	Manual, instruction
3-998-901-00	Label, serial No.

Ref. No.	Part No.	Description
CT4-1~2	1-141-144-00	Trimmer (2-unit)
CT5-1~2	1-141-146-00	Trimmer (2-unit)
CT6,7	1-141-097-31	Trimmer (single)
VCI-1~4	1-151-196-00	Tuning

**RESISTORS**

All resistors are in  $\Omega$ .  $\frac{1}{4}W$ ,  $\pm$  carbon resistors (except special type) are omitted. Check schematic diagram for the resistance values.

R9	1-202-368-11	240	composition
R29	1-202-377-11	560	composition
R33	1-202-359-11	100	composition
R54	1-202-383-11	1k	composition
R56	1-202-439-11	220k	composition
R59	1-202-591-11	240	composition
R78	1-202-419-11	33k	composition
R79	1-202-383-11	1k	composition
R96	1-207-459-11	0.47 $\frac{1}{2}W$	metal wire
R111	1-202-337-11	33	composition

VR1	1-224-039-00	5k (A), variable; TREBLE
VR2,3	1-224-038-00	5k (D), variable; VOLUME/BASS

**ENCAPSULATED COMPONENTS, CR**

B1	1-231-221-00	0.01 $\mu F$ + 1 k $\Omega$
B2	1-231-223-00	0.022 $\mu F$ + 240 $\Omega$
B3,5	1-231-222-00	0.022 $\mu F$ + 150 $\Omega$
B6	1-231-204-11	0.01 $\mu F$ + 0.01 $\mu F$ + 1 k $\Omega$
B7	1-231-202-00	220 pF + 220 pF + 6.8 k $\Omega$ + 6.8 k $\Omega$

Ref. No.	Part No.	Description
<b>SWITCHES</b>		
S1	1-516-140-00	Rotary-slide, BAND SELECT
S2	1-516-139-21	Toggle, AM SENS
S3	1-514-861-22	Slide, FM/AM
S4	1-516-139-21	Toggle, AFC
S5	1-516-139-11	Toggle, POWER
S6		Included in Contact Ass'y (X-3845-504-0)
S7	1-548-049-00	Timer

<b>MISCELLANEOUS</b>		
BFI	1-403-997-00	Filter, ceramic
CF1~3	1-527-198-51	Filter, ceramic
J1~5	1-507-369-00	Jack, 5-unit
PL	1-518-169-xx	Lamp
SP	1-502-403-00	Speaker
TM	1-520-133-00	TUNING METER
TEL ANT	1-501-139-00	Antenna, telescopic

**ACCESSORIES & PACKING MATERIALS**

X-3847-902-0	Shoulder Strap Ass'y
1-504-034-12	Earphone, ME-20
3-701-239-00	Bag, plastic
3-845-590-00	Carton
3-845-592-00	Cushion
3-845-593-12	Cushion
3-846-303-00	Sheet, packing
3-995-709-11	Manual, instruction
3-998-901-00	Label, serial No.

**HARDWARE**

**SCREWS**

All screws are Phillips type (cross recess type) unless otherwise indicated. (-); slotted head

7-621-259-25	P	2.6 x 4
7-621-259-45	P	2.6 x 6
7-682-147-01	P	3 x 6
7-682-156-01	P	3 x 16

Part No.	Description
7-685-105-21	P 2 x 8, self-tapping
7-685-133-21	P 2.6 x 6, self-tapping
7-685-146-21	P 3 x 8, self-tapping
7-685-533-21	B 2.6 x 6, self-tapping
7-623-610-01	Eyelet 1.5 x 2.5
7-623-616-01	Eyelet 2 x 3
7-625-209-00	Rivet 2 x 10
7-633-120-32	Dial Cord, 0.5 mm
7-633-120-43	Dial Cord, 0.3 mm

**- Hardware Nomenclature -**

