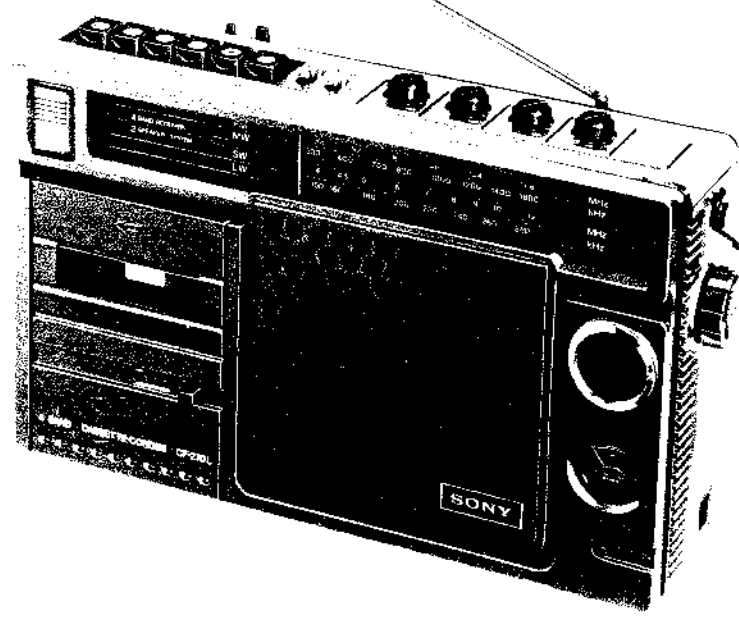


# CF-270L

1195



Canadian Model  
AEP Model  
GEP Model

## 4-BAND CASSETTE RECORDER

### SPECIFICATIONS

#### GENERAL

- Power Requirements:** 120 V ac, 60 Hz (Canadian model)  
220 V ac, 50/60 Hz (AEP, GEP model)  
12 V dc, eight batteries size "D"  
(IEC Designation R20)
- Power Consumption:** 10 W ac
- Power Output:** 3 W (total harmonic distortion 10%)
- Speakers:** Two-way speaker  
16 cm (6 1/2 inches) woofer  
5 cm (2 inches) tweeter
- Dimensions:** Approx. 415 (w) x 257 (h) x 109 (d) mm  
16 3/16 (w) x 10 1/8 (h) x 4 3/16 (d) inches  
(including projecting parts and controls,  
not including handle)
- Weight:** Approx. 5.2 kg, 11 lb 11 oz  
(including batteries)

#### TAPE RECORDER SECTION

- Recording System:** 2-track 1-channel monaural
- Fast Winding Time:** Approx. 2 min. with Sony cassette C-60
- Frequency Response:** 100-8,000 Hz
- Inputs:** MIC ..... 1 (m) ijack  
sensitivity 0.2 mV (-72 dB)  
for low impedance microphone  
LINE IN ..... 1 (m) ijack  
sensitivity 0.1 V (-17 dB)  
input impedance 100 k ohms
- Output:** EARPHONE ..... 1 (m) ijack  
8-ohm earphone or load impedance  
10 k ohms or higher
- Other Jack:** REMOTE ..... 1

0 dB = 0.775 V

#### RADIO SECTION

- Frequency Range:** FM 87.5-108 MHz  
SW 3.9-12 MHz (77-25 m)  
LW 150-285 kHz (2,000-1,050 m)  
MW 530-1,605 kHz
- Antennas:** FM, SW: Telescopic antenna  
LW, MW: Built-in ferrite-rod

#### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

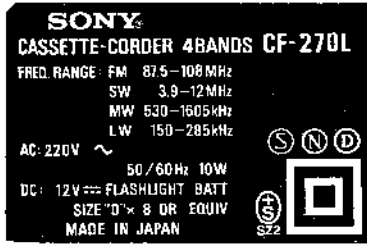
# SONY

## SERVICE MANUAL

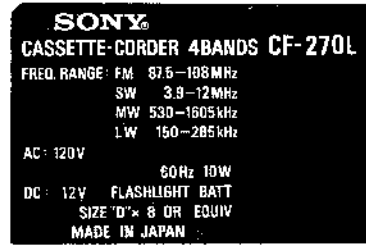
1195

## MODEL IDENTIFICATION (Specification Label)

AEP, GEP model



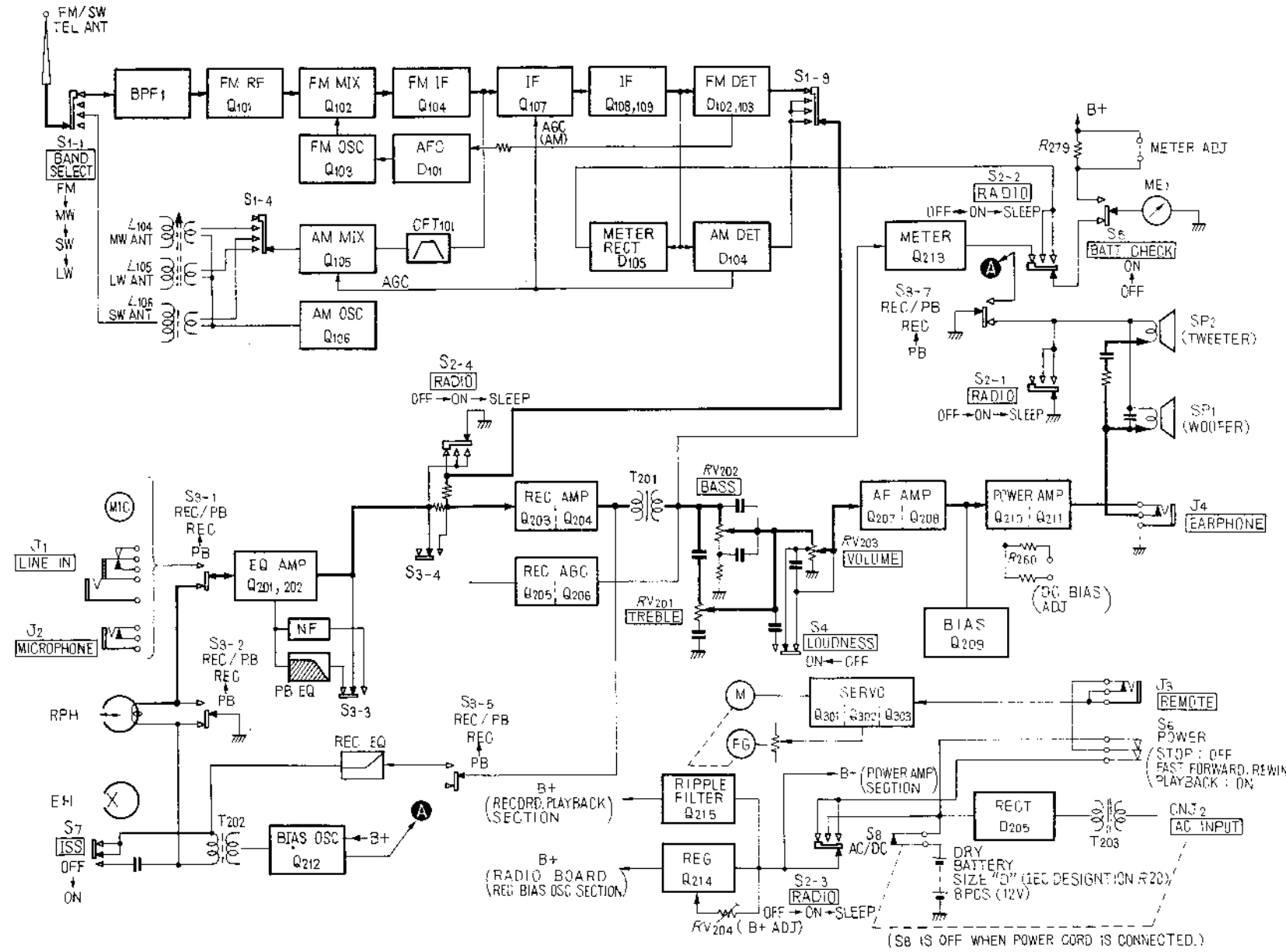
Canadian model



## MEMO

SECTION 1  
BLOCK DIAGRAM

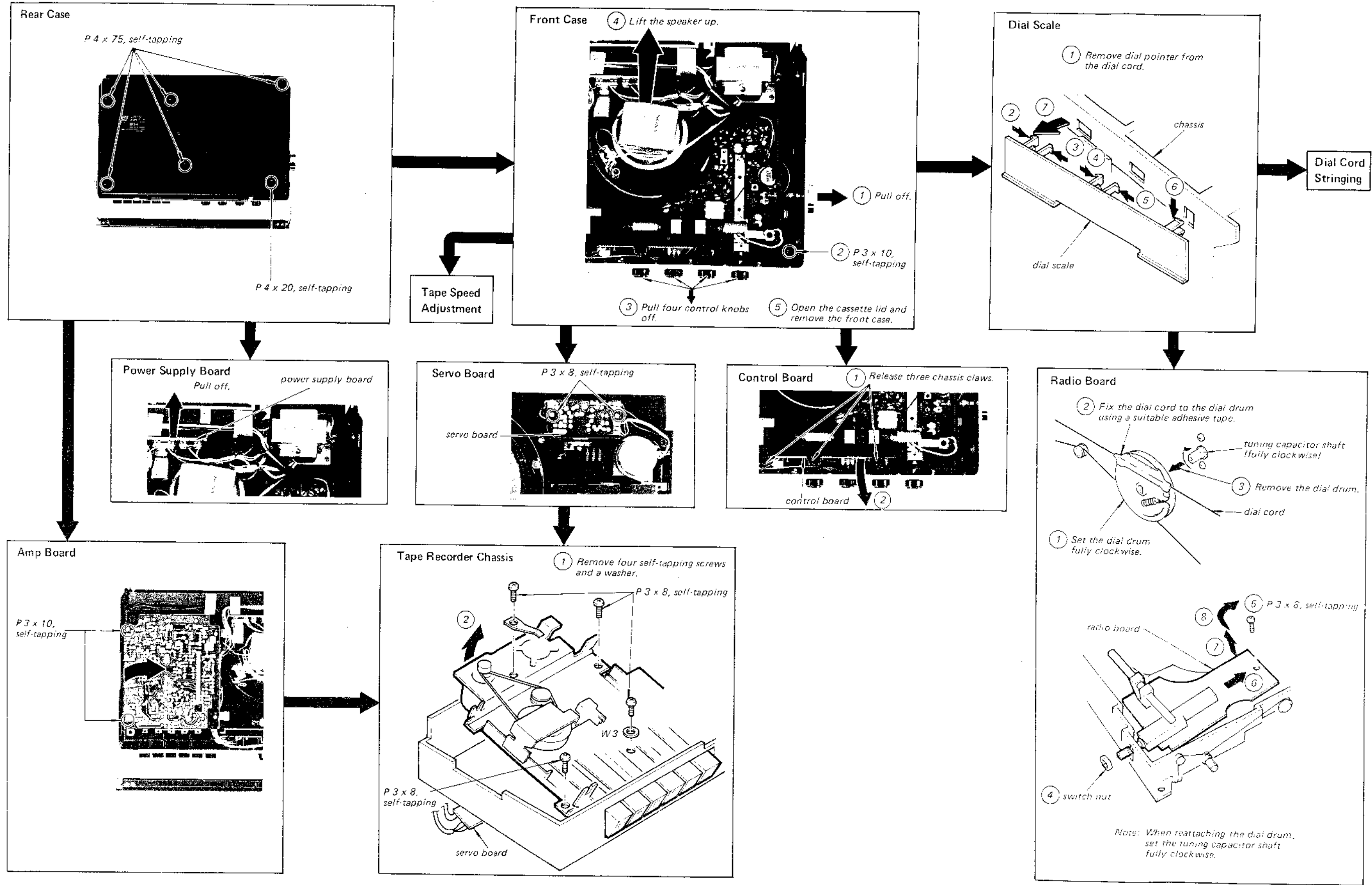
CF-270L CF-270L



SECTION 2

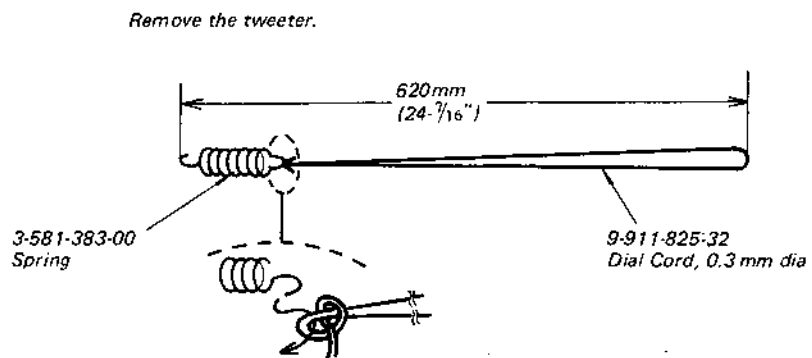
DISASSEMBLY AND REPLACEMENT

2-1.

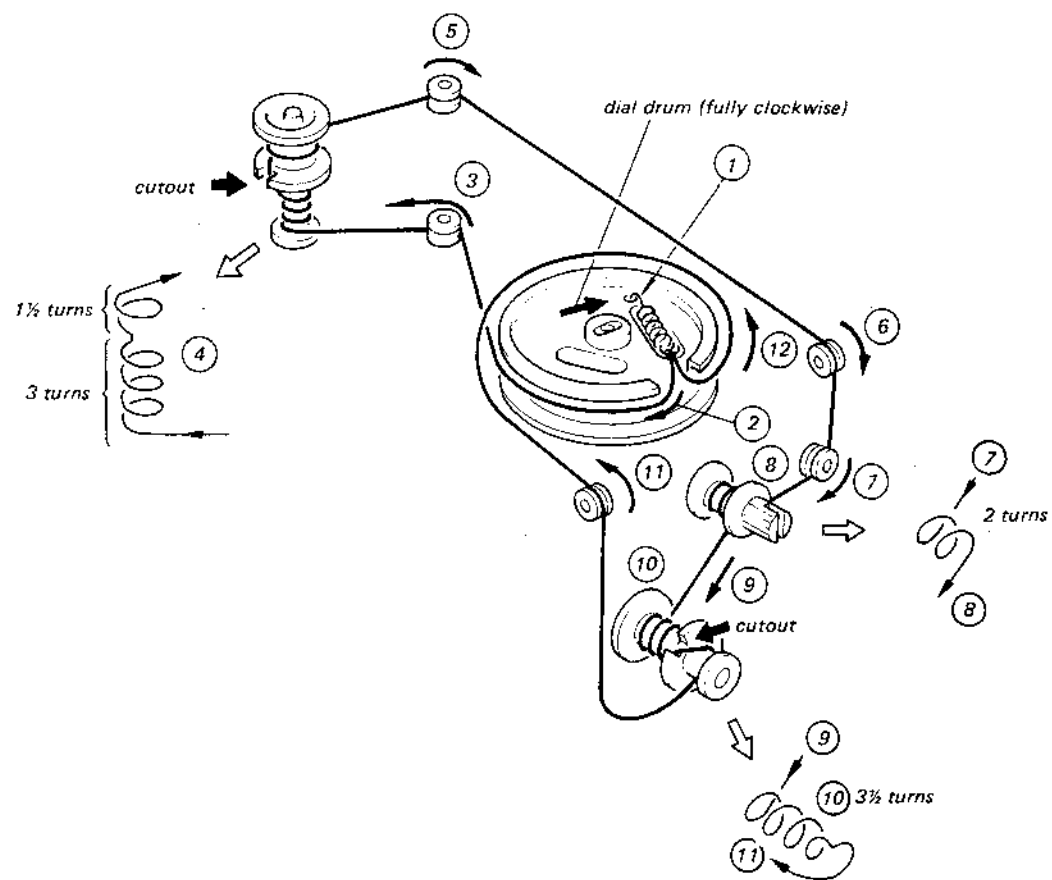


2-2. DIAL CORD STRINGING

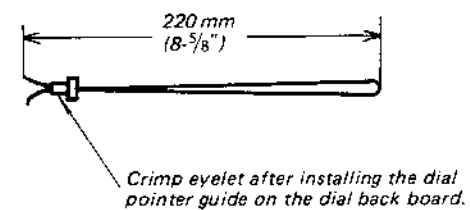
1) Dial Cord Preparation



2) Dial Cord Stringing

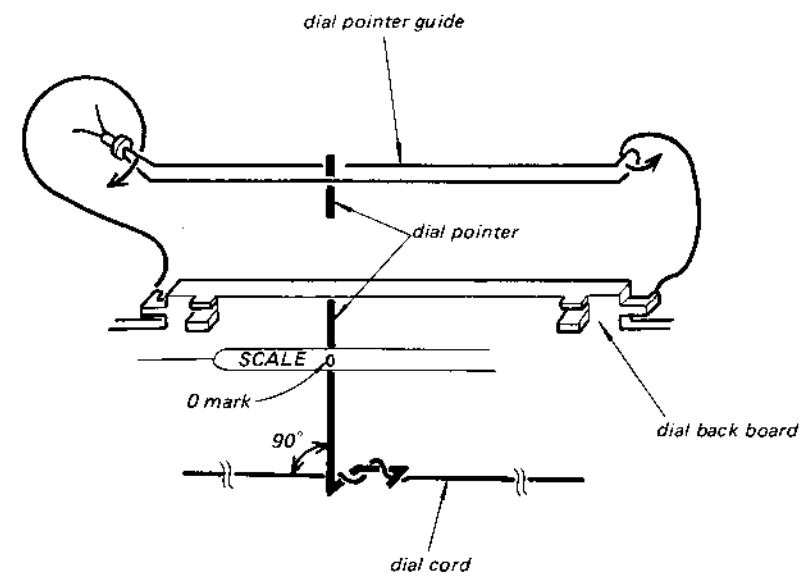


3) Preparation of Dial Pointer Guide



4) Dial Pointer Setting

Set the tuning shaft to fully counterclockwise position.



## SECTION 3 ADJUSTMENTS

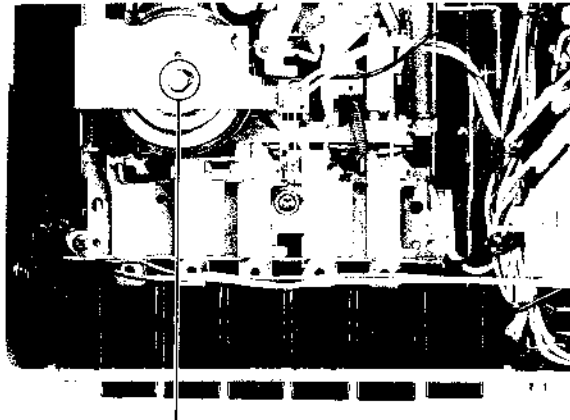
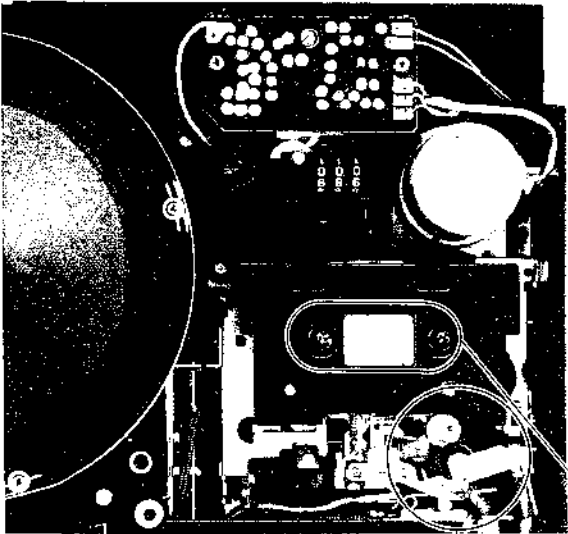
**PRECAUTION**

1. Clean the following parts with a denatured-alcohol-moistened swab:
 

record/playback head	pinch roller
erase head	rubber belts
capstan	
2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply a suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

### 3-1. TAPE RECORDER SECTION

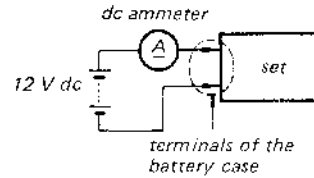
#### 3-1-1. MECHANICAL ADJUSTMENTS



#### Flywheel Thrust Play Adjustment

**Procedure:**

1. Mode: playback



2. Loosen the screw until the screw tip is detached from the flywheel shaft.
3. Gradually turn the screw clockwise to the position where the motor current suddenly increases.
4. Then, loosen the screw about 1/4 turn from the position obtained in step 3.

#### Take-up Torque Measurement

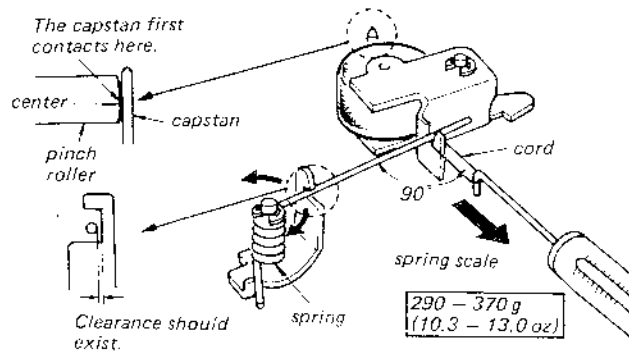
Power supply voltage: 12 V dc.

	SONY torque meter	Torque
forward	CQ-101A, CQ-102A, CQ-103A	25 - 55 g·cm (0.35 - 0.77 oz·inch)
fast forward, rewind	CQ-201A	60 g·cm (0.84 oz·inch) or more

#### Pinch Roller Pressure Adjustment

— playback mode —

1. Pull the spring scale.
2. Slowly return the pinch roller and read the spring scale just when the pinch roller starts to rotate.



**3-1-2. ELECTRICAL ADJUSTMENTS**

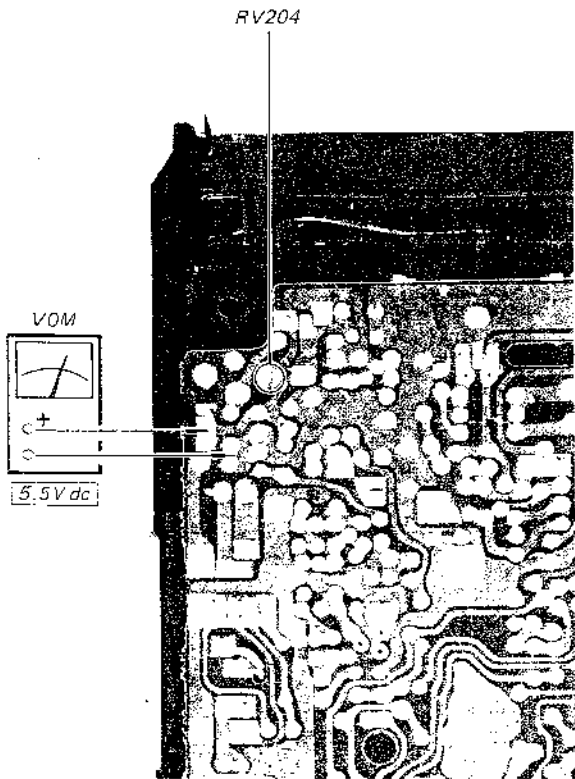
**B+ Voltage Adjustment**

**Setting:**

- Power supply voltage: 12 V dc
- RADIO switch: OFF
- VOLUME control: MIN
- Mode: playback with no cassette installed

**Adjustment Location and Specification:**

— Amp Board —



**Tape Speed Adjustment**

**Setting:**

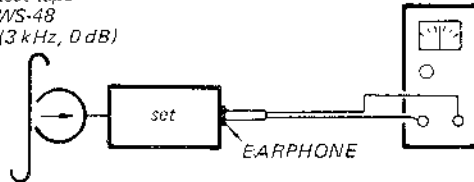
- VOLUME control: center of rotation
- Power source: 12 V dc

**Procedure:**

Mode: playback

*speed checker  
LFM-30  
or  
digital frequency  
counter*

*test tape  
WS-48  
(3 kHz, 0 dB)*



Adjust RV301 for 0% checker or 3000 Hz counter reading.

**Specification:**

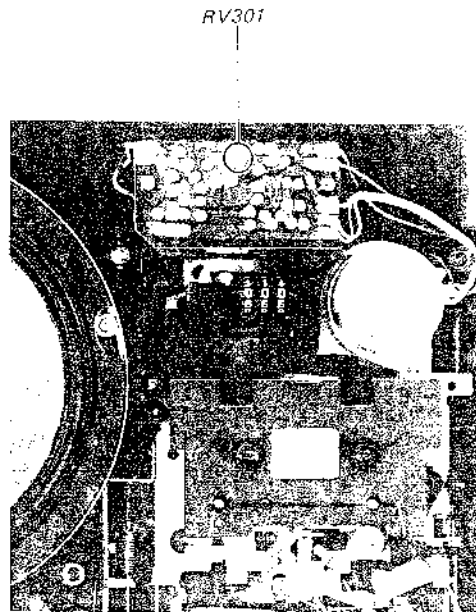
Speed Checker	Digital Frequency Counter
-1% ~ +2%	2970 - 3060 Hz

Frequency difference between beginning and end of tape should be within 1% (30 Hz).

**Adjustment Location:**

— Servo Board —

Clockwise rotation: speeds down



**Record/playback Head Azimuth Adjustment**

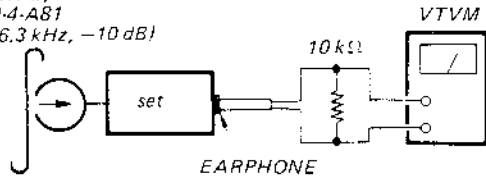
**Setting:**

VOLUME control: center of rotation

**Procedure:**

1. Mode: playback

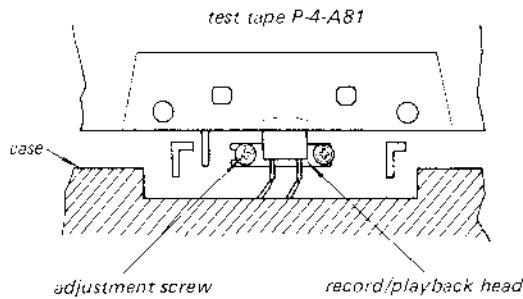
test tape  
P-4-A81  
(6.3 kHz, -10 dB)



2. Turn the adjustment screw for the highest VTVM reading.

**Note:** Several peaks may appear, take the highest.

**Adjustment Location:**



**Battery Meter Calibration**

**Setting:**

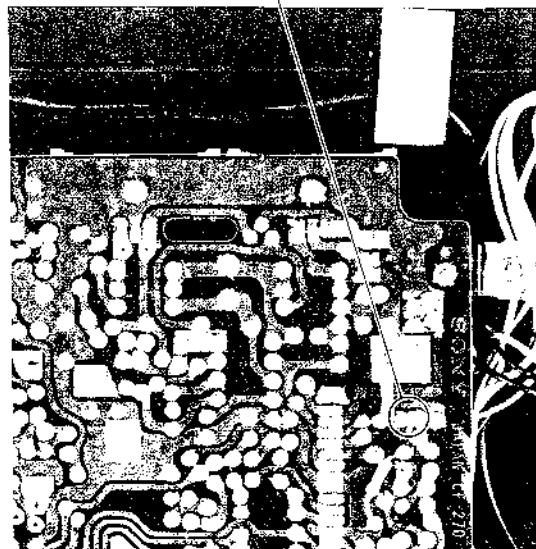
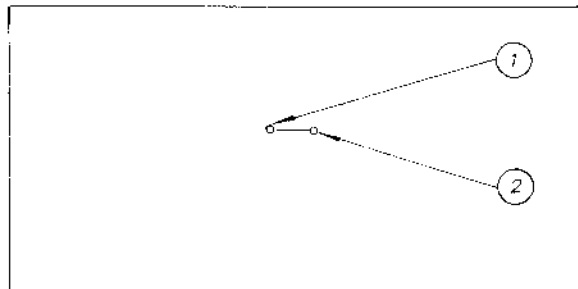
Power supply voltage: 8.8 V dc  
VOLUME control: MIN  
RADIO switch: OFF  
Mode: playback with no cassette installed

**Adjustment Location and Specification:**

– Amp Board –

Push BATT CHECK button.

Pattern Connection	Pointer Deflection	Meter Indication
Open	down	
① and ②	up	





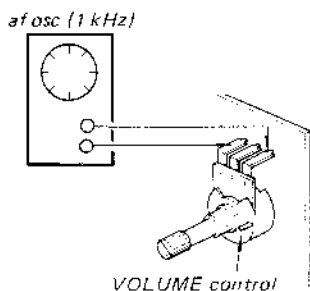
**AC Bias Adjustment**

**Setting:**

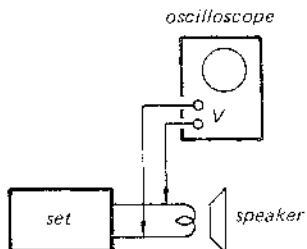
RADIO switch: OFF  
 VOLUME control: MAX  
 RADIO switch: OFF  
 Mode: playback with no cassette installed

**Procedure:**

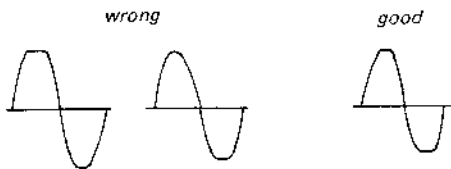
1. Input signal connection



Output signal connection

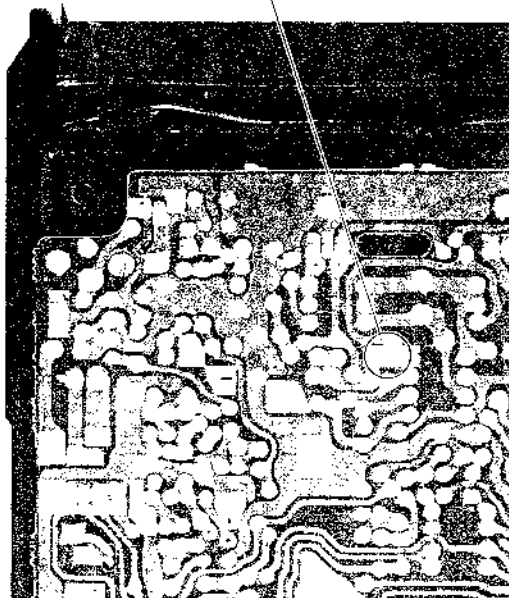
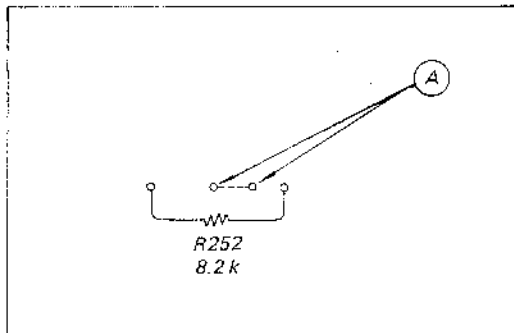


- Adjust output level of the audio oscillator so that either positive- or negative-going half of output waveform starts to clip.
- Connect or open the patterns at (A) so that both halves start to clip simultaneously.



**Adjustment Location:**

— Amp Board —



**DC Bias Adjustment**

**Setting:**

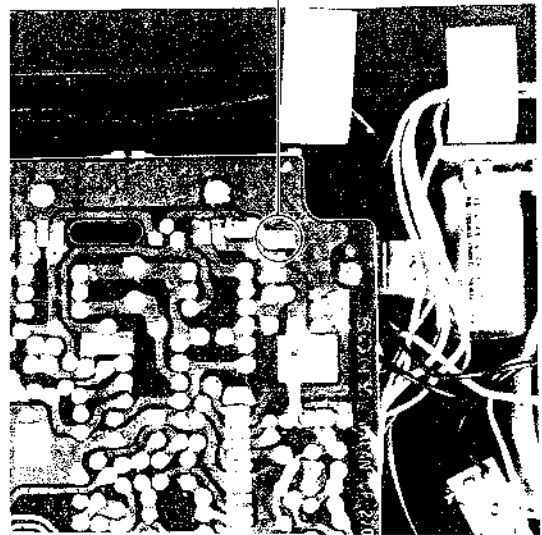
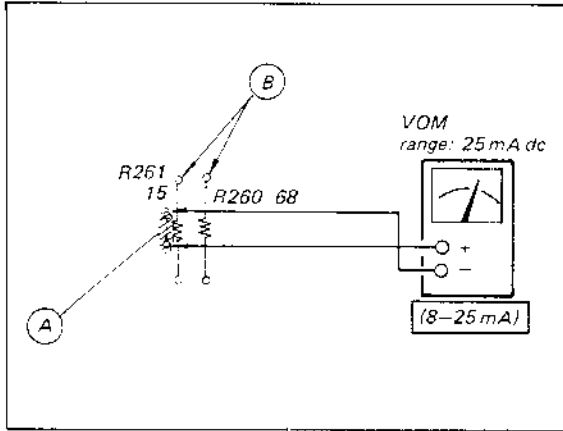
RADIO switch: OFF  
 VOLUME control: MIN  
 Mode: playback with no cassette installed

**Procedure:**

1. Remove the soldered bridge at A.
2. Measure current. If it is from 8 to 25 mA, resolder the patterns.
3. If the current is below 8 mA, solder the patterns at B and resolder the patterns at A.

**Adjustment Location:**

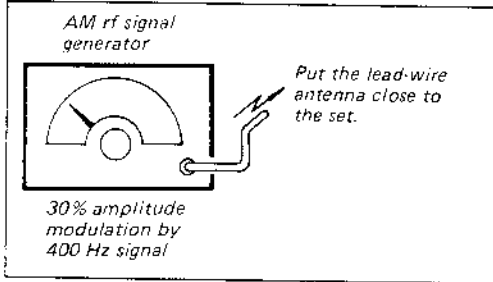
— Amp Board —



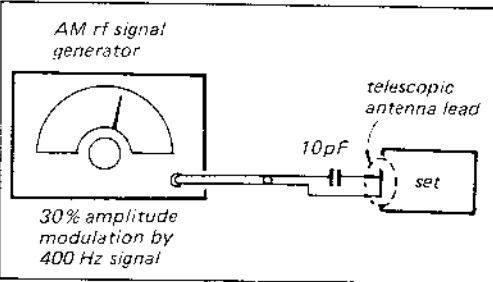
**3-2. RADIO SECTION**

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

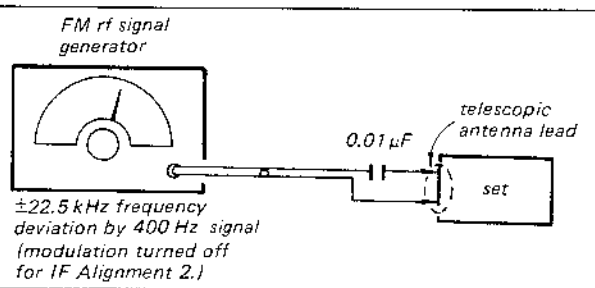
**For AM IF Alignment and MW Adjustments**



**For SW Adjustments**



**For FM Adjustment**



SW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
L106	3.8 MHz
CT104	12.5 MHz

MW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
L107	520 kHz
CT106	1650 kHz

SW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
CT107	12.5 MHz
L108	3.8 MHz

LW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
L109	145 kHz
CT108	300 kHz

LW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
CT105	L105
300 kHz	145 kHz

MW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
CT103	L104
1400 kHz	600 kHz

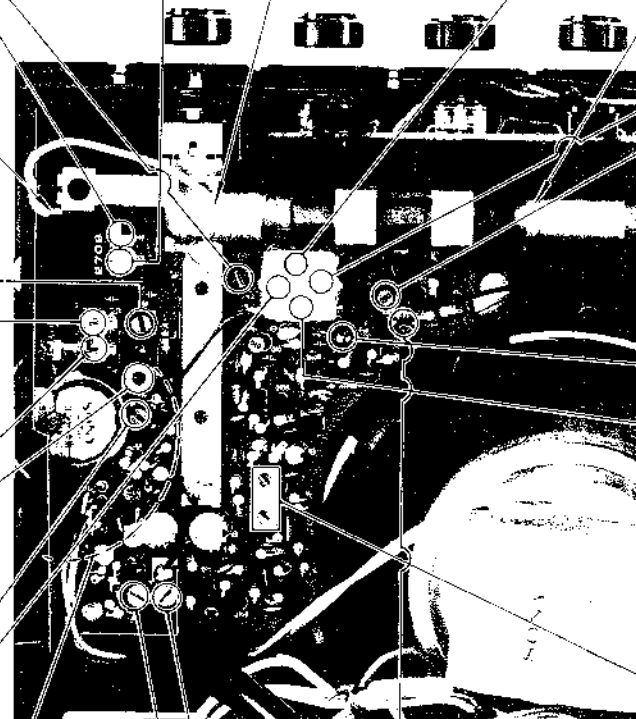
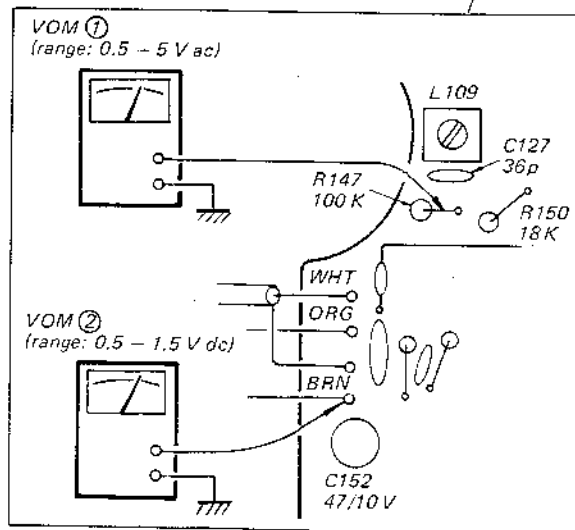
FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
CT101	109 MHz (108 MHz)
L101	87 MHz (87.5 MHz)

FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
L103	87 MHz (87.5 MHz)
CT102	109 MHz (108 MHz)

AM IF ALIGNMENT	
Adjust for a maximum reading on VOM ①.	
CFT101	455 kHz

FM IF ALIGNMENT 1 (10.7 MHz with modulation)	
Adjust for a maximum reading on VOM ①.	
IFT101	
IFT102	
IFT103	

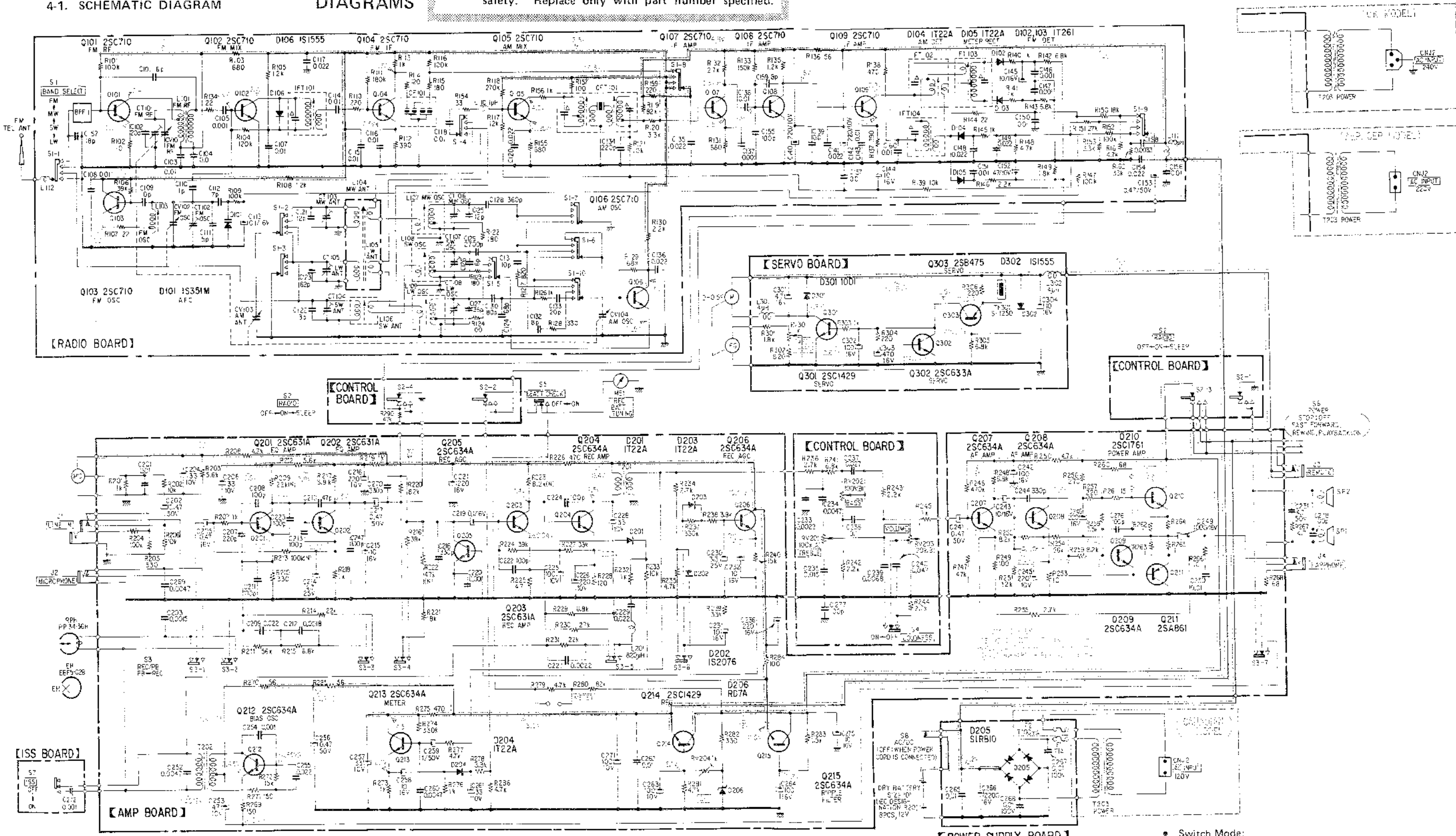
FM IF ALIGNMENT 2 (10.7 MHz with no modulation)	
Adjust for a 0V reading on VOM ②.	
IFT103	



SECTION 4  
DIAGRAMS

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

4-1. SCHEMATIC DIAGRAM



- Note:**
- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF} = \mu\mu\text{F}$ . 50 WV or less are not indicated except for electrolytics.
  - All resistors are in ohms,  $\frac{1}{2}\text{W}$  unless otherwise noted.  $\text{k}\Omega = 1000\Omega$ ;  $\text{M}\Omega = 1000\text{k}\Omega$ .
  - All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
  - IN: low-noise capacitor and resistor.
  - : internal component.

- ⊕: B+ bus.
- : panel designation.
- ▭: adjustment for repair.
- ⊥: chassis ground.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal (detuned) conditions with a VOM (20  $\text{k}\Omega/\text{V}$ ).

- ⊕: RECORD < >: PLAYBACK ( ) : AM
- no mark: common
- AC voltage reading in the bias oscillator circuit are taken with a VTVM.
- Transistor base-emitter voltages are measured on the 2.5 V range.
- Total current is measured with no cassette installed.
- Voltage variations may be noted due to normal production tolerances.

• Switch Mode:

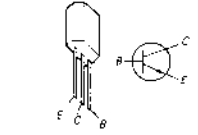
Ref. No.	Switch	Position
S1	BAND SELECT	FM
S2	RADIO	OFF
S3	REC	PB
S4	LOUDNESS	OFF
S5	BATT CHECK	OFF
S6	POWER	OFF
S7	ISS	OFF
S8	AC/DC	DC

# CF-270L CF-270L

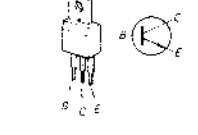
## 4-2. MOUNTING DIAGRAM — Power Supply, Servo and Amp Boards — — Conductor Side —

Note: ( ) : Replacement Semiconductors

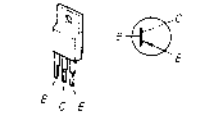
- Q201, 202: 2SC631A (2SC632A)
- Q203: 2SC634A (2SC632A)
- Q204 - 209, Q212, 213, 215: 2SC634A
- Q302: 2SC633A (2SC634A)



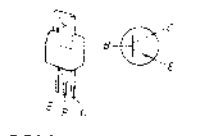
- Q210: 2SC1761 (2SC1760)



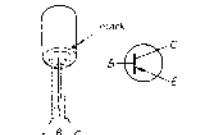
- Q211: 2SA861



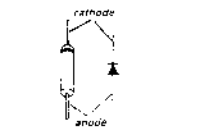
- Q214, 301: 2SC1429



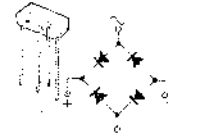
- Q303: 2SB475 (2SB324)



- D201, 203, 204: 1T22A
- D206: 1S2076
- (D301: 10E2)
- D302: 1S1555



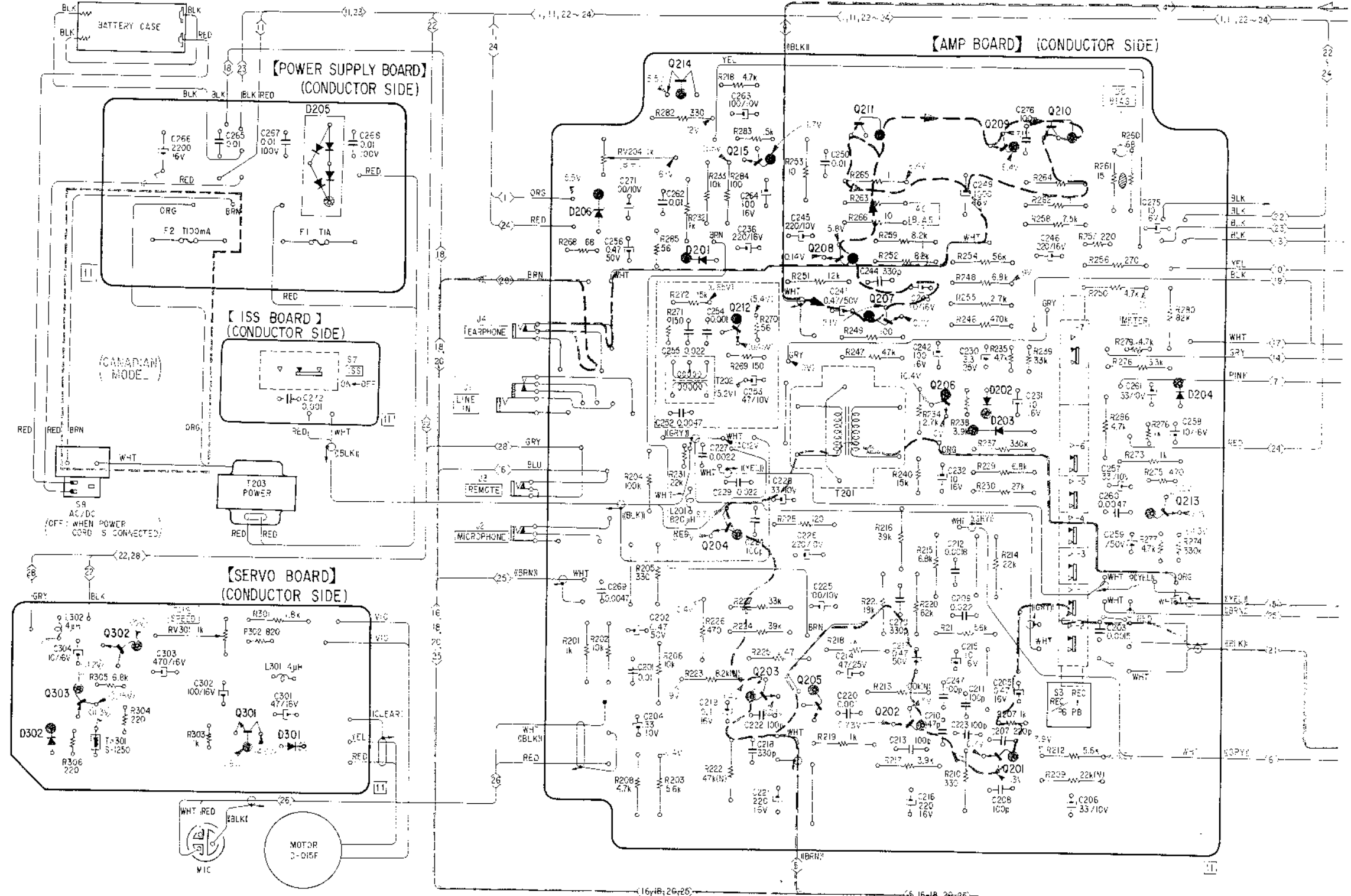
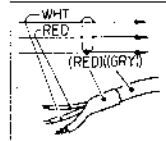
- D205: 1SR10



- D301: 10D1

Note:

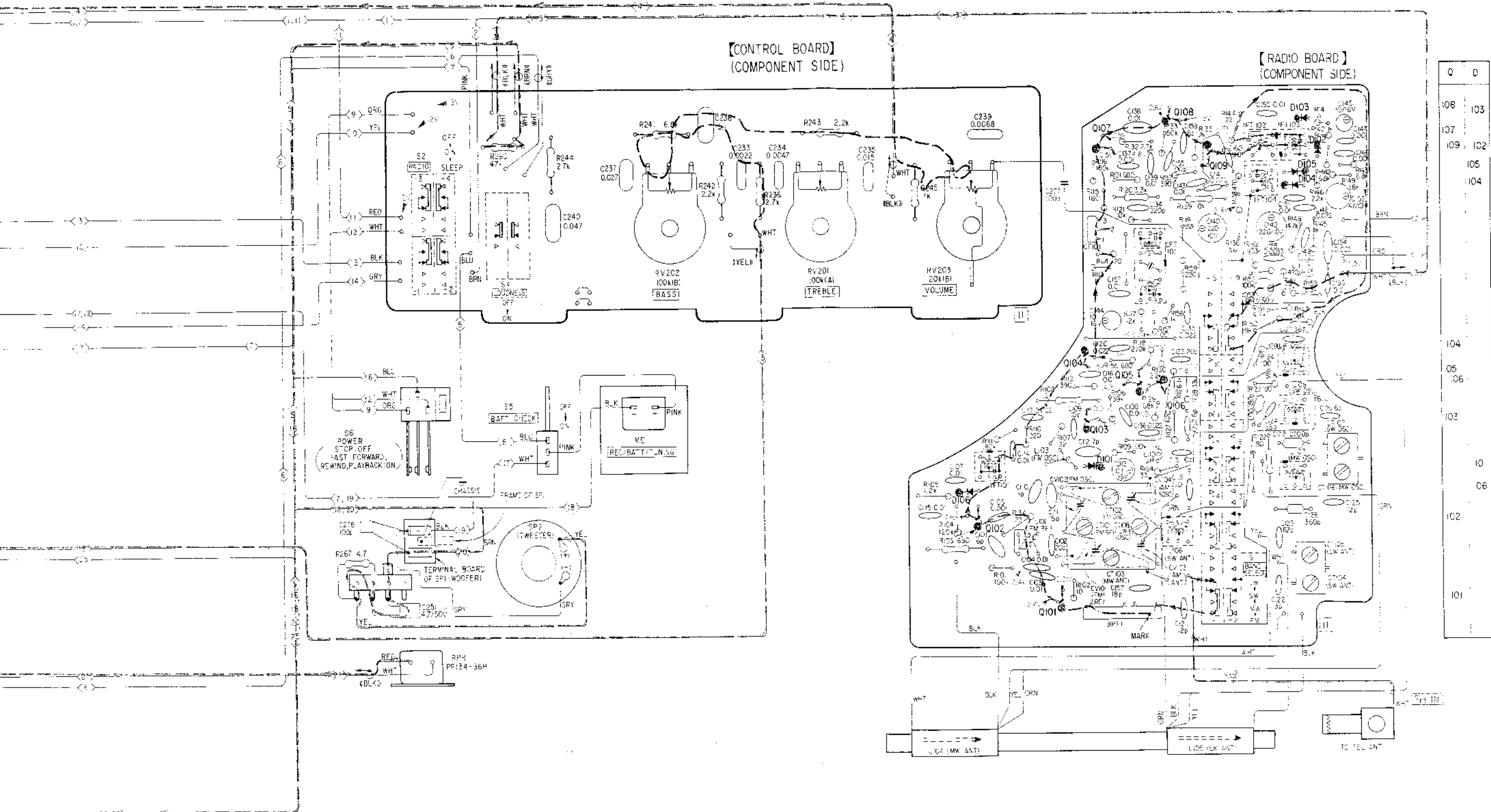
- Color code of sleeving over the end of the jacket.



Q	303	302	301	214	212	215	208	211	207	206	209	210	213
D	302		301	205	205	201	205	202	202	206	201	202	204

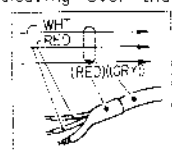
# CF-270L CF-270L

## 4-3. MOUNTING DIAGRAM — Control and Radio Boards — — Component Side —



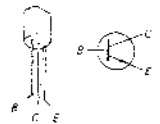
**Note:**

- Color code of sleeving over the end of the jacket.

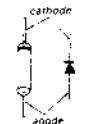


- [Dashed box symbol] : indicates side identified with part number or with marking.
- [B+ pattern symbol] : B+ pattern
- [Dashed line symbol] : signal path

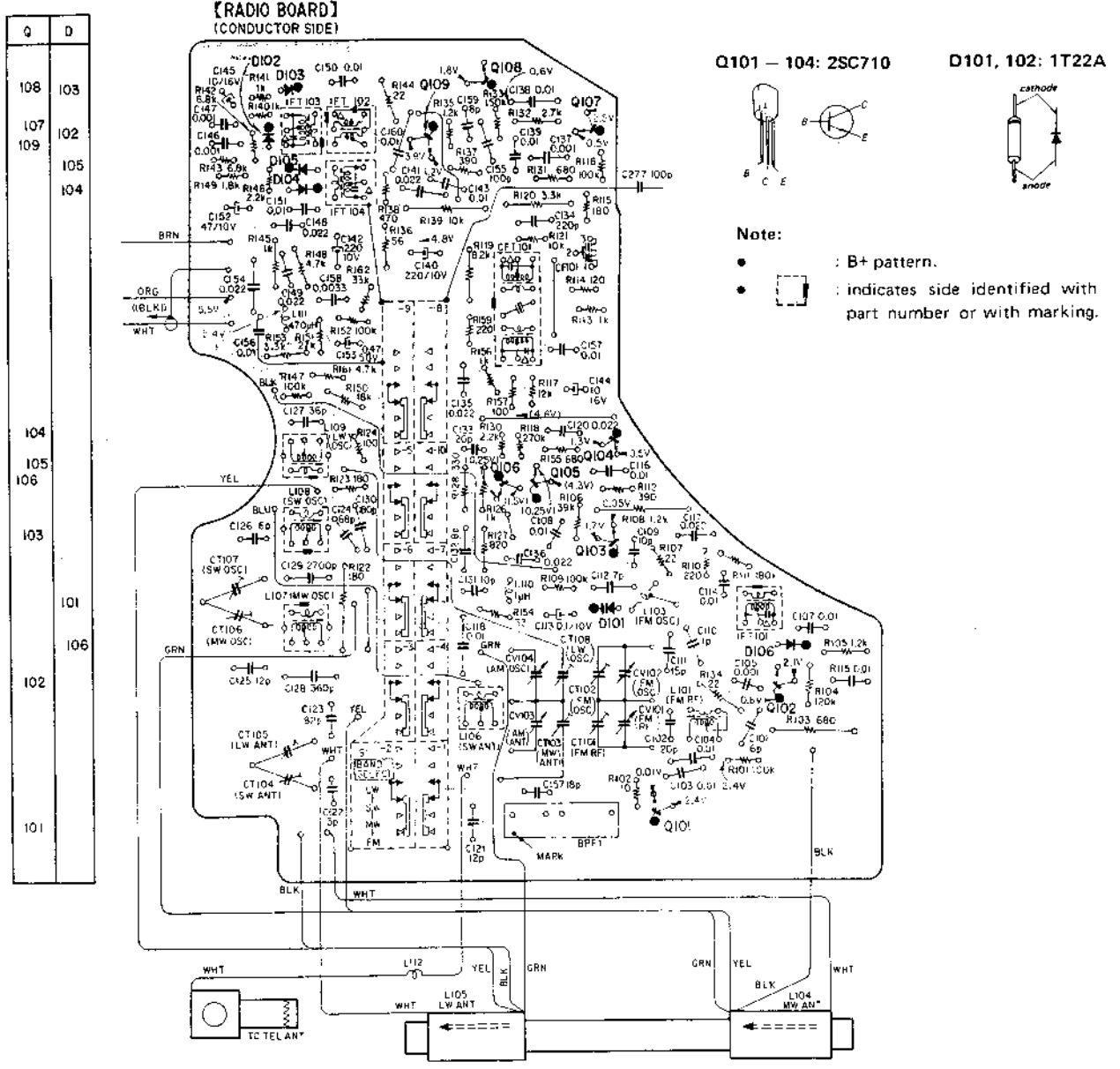
Q101 - 104: 2SC710



D101, 102: 1T22A

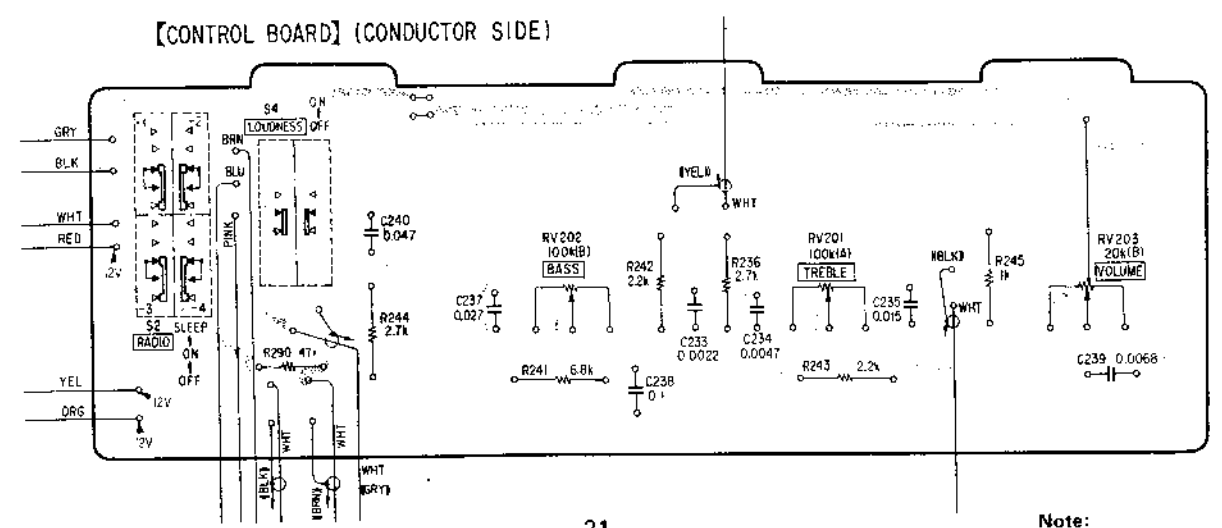


4-4. MOUNTING DIAGRAM - Radio Board -  
- Conductor Side -

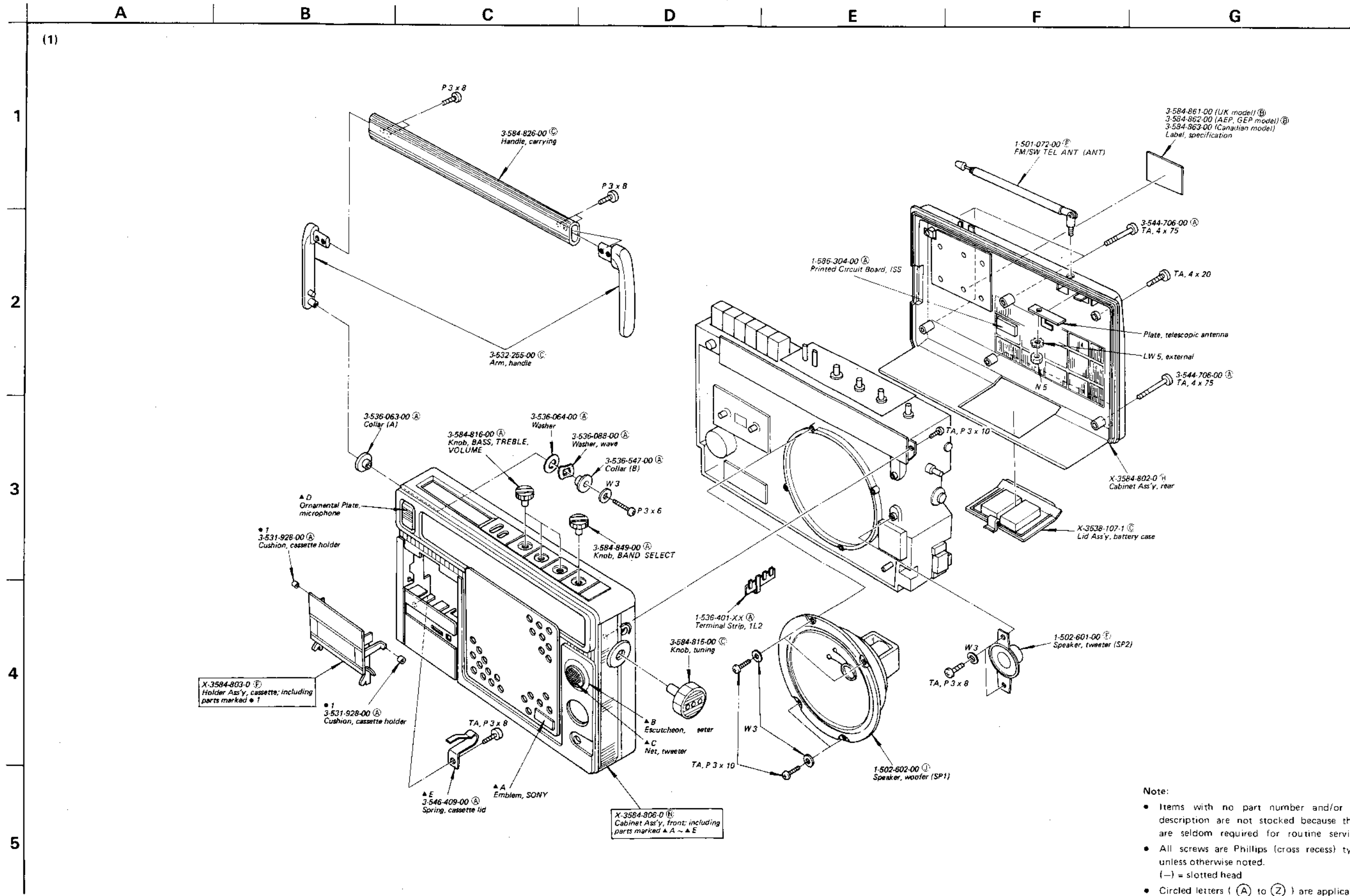


MEMO

4-5. MOUNTING DIAGRAM - Control Board -  
- Conductor Side -

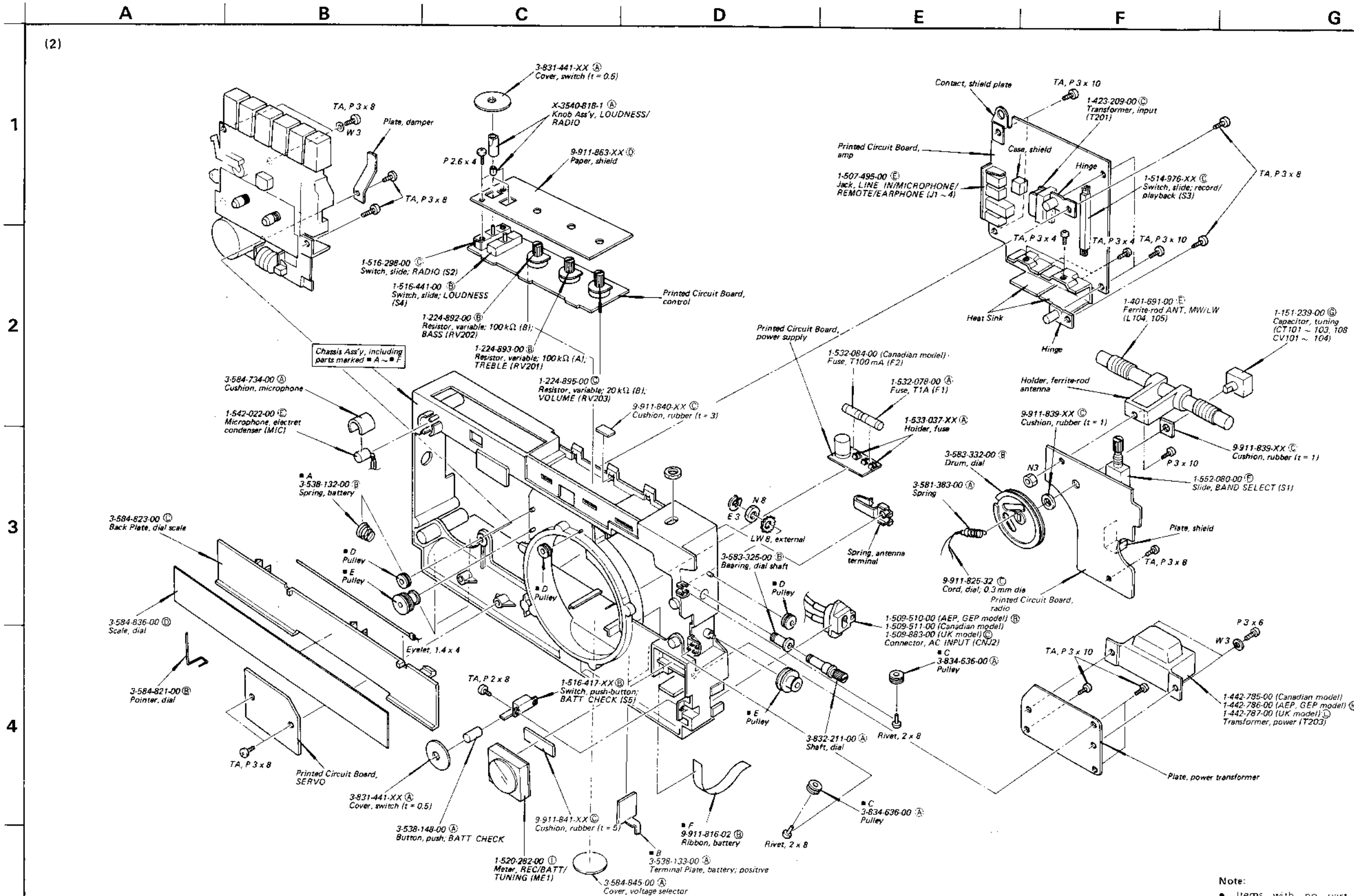


**SECTION 5  
EXPLODED VIEWS**



**Note:**

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.  
(-) = slotted head
- Circled letters ( A to Z ) are applicable to European models only.



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

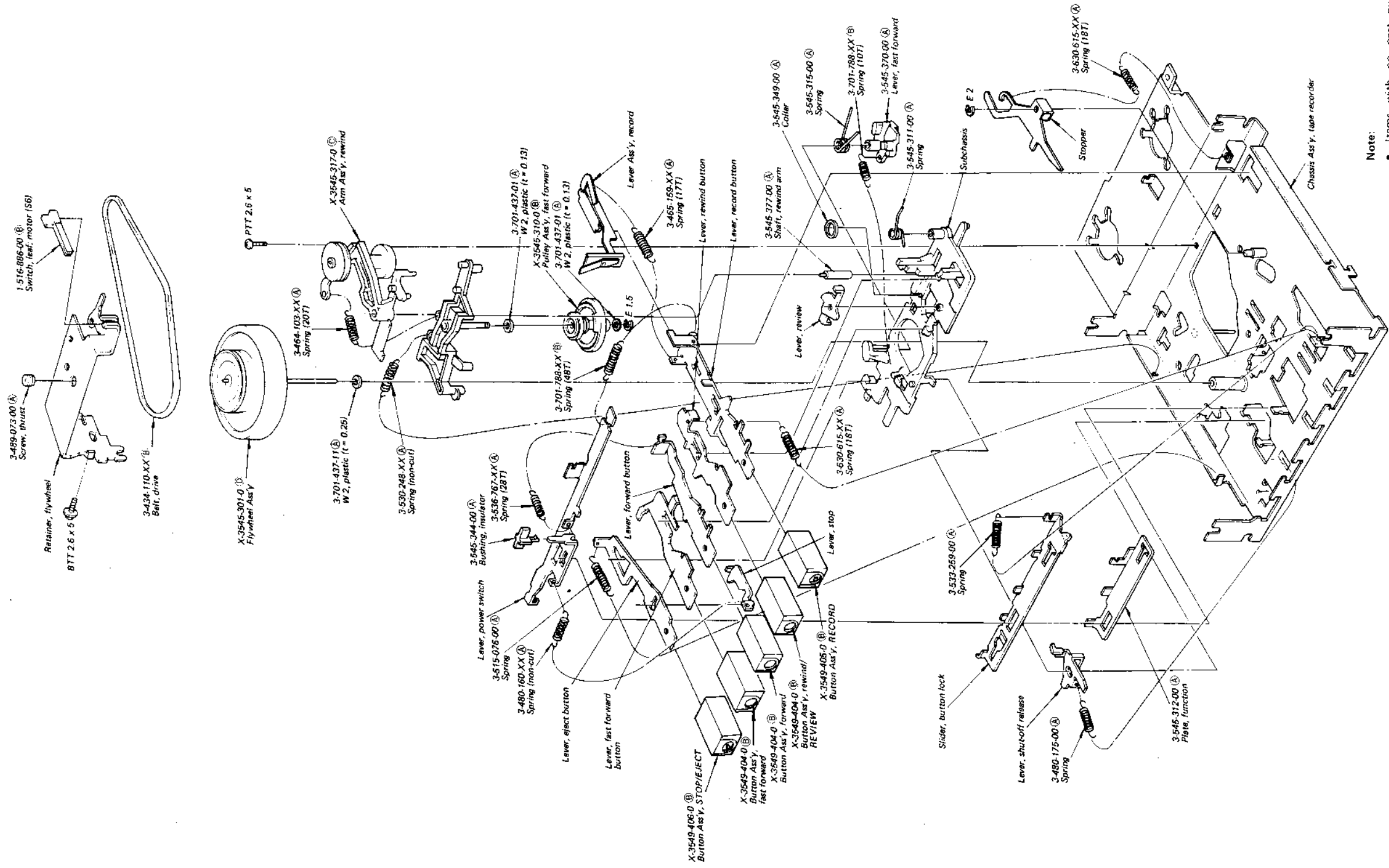
**Note:**

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted. (-) = slotted head
- Circled letters (A) to (Z) are applicable to European models only.



A B C D E

(3)

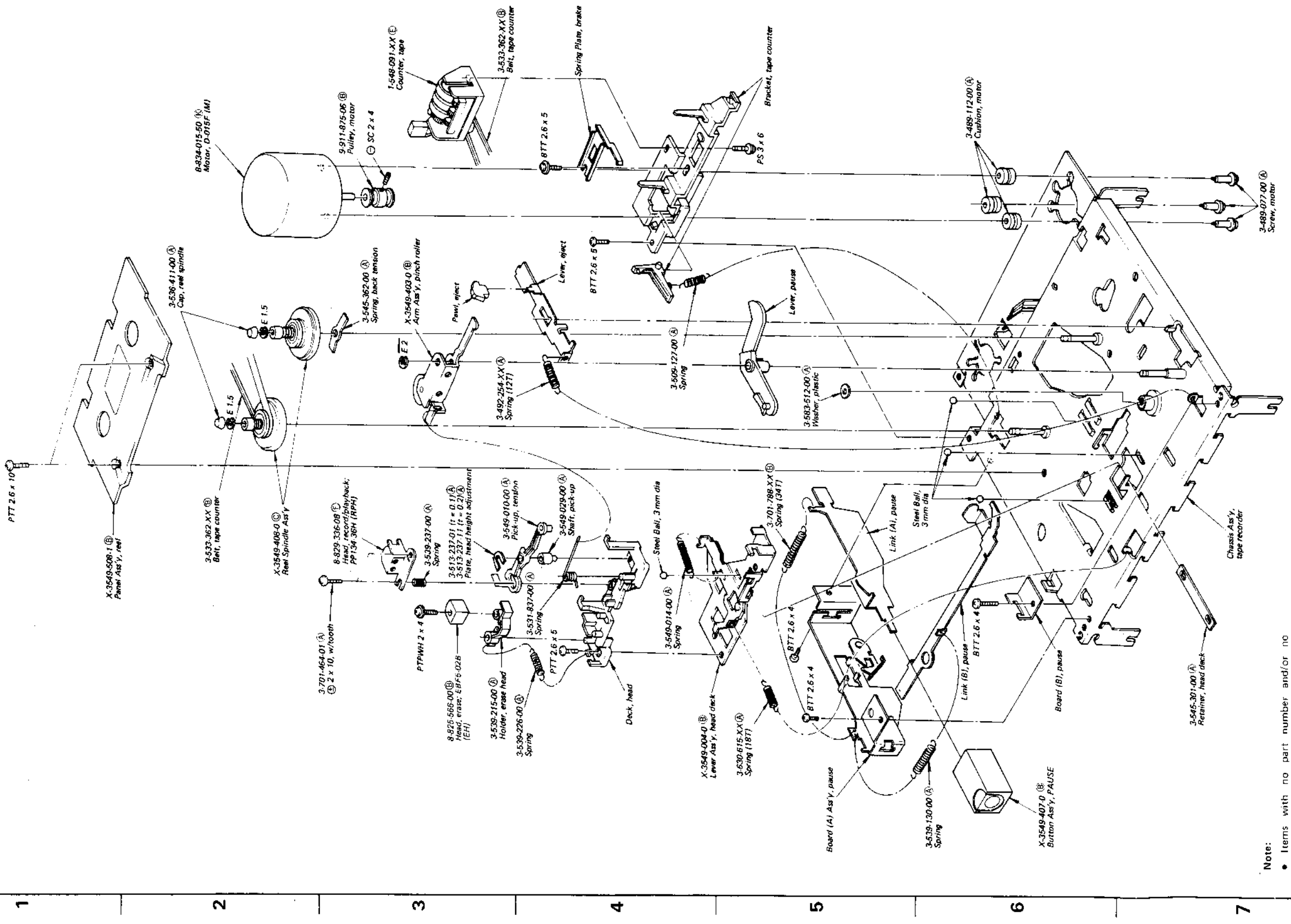


Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
- (DOT) shows the number of coils in spring.
- Circled letters (A) to (Z) are applicable to European models only.

A B C D E  
1 2 3 4 5 6 7

(4)



**Note:**

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
- (INT) shows the number of coils in spring.
- Circled letters (A) to (Z) are applicable to European models only.

SECTION 6

ELECTRICAL PARTS LIST

Note: Circled letters (A to Z) are applicable to European models only.

Note: Circled letters (A to Z) are applicable to European models only.

Ref. No.	Part No.	Description
<b>PRINTED CIRCUIT BOARD</b>		
	1-585-304-00	(A) ISS
<b>SEMICONDUCTORS</b>		
<b>Transistor</b>		
Q101 ~ 109	(B) 2SC710	
⇒ Q201 ~ 203	(B) 2SC631A	
Q204 ~ 209	(B) 2SC634A	
⇒ Q210	(C) 2SC1760	
Q211	(C) 2SA861	
Q212, 213	(B) 2SC634A	
⇒ Q214	(C) 2SC1429-05	
Q215	(B) 2SC634A	
⇒ Q301	(C) 2SC1429-05	
⇒ Q302	(B) 2SC634A	
⇒ Q303	(B) 2SB324	
<b>Diodes</b>		
⇒ D101	(B) 1S351M-1	
D102, 103	(B) 1T261	
D104, 105	(B) 1T22A	
D106	(B) 1S1555	
D201	(B) 1T22A	
⇒ D202	(B) 1S2076A	
D203, 204	(B) 1T22A	
D205	(C) S1RB10	
D206	(B) RD7A	
D301	(B) 10E2	
D302	(B) 1S1555	
Th301	1-800-198-XX (A) Thermistor, S-1250	
<b>COILS</b>		
L101	1-425-632-00 (B) FM ANT	
L103	1-405-595-00 (B) FM OSC	
L104, 105	1-401-691-00 (E) MW/LW ANT	
L106	1-401-496-00 (B) SW ANT	
L107	1-405-520-00 (B) MW OSC	

Ref. No.	Part No.	Description
L108	1-405-521-00 (B) SW OSC	
L109	1-405-751-00 (B) LW OSC	
L110	1-407-178-XX (A) 1μH, microinductor	
L111	1-407-661-XX (A) 470μH, microinductor	
L201	1-407-194-XX (A) 820μH, microinductor	
⇒ L301, 302	1-407-484-XX (B) 3.3μH, microinductor	
<b>TRANSFORMERS</b>		
CFT101	1-403-165-00 (C) AM CFT	
IFT101	1-403-930-00 (B) FM IFT	
IFT102	1-403-952-00 (B) FM Discriminator	
IFT103	1-403-953-00 (B) FM Discriminator	
IFT104	1-403-137-00 (B) AM IFT	
T201	1-423-209-00 (C) Input	
T202	1-433-168-00 (C) Bias Osc	
T203	1-442-785-00 (K) Power (Canadian model)	
	1-442-786-00 (K) Power (AEP, GEP model)	
	1-442-787-00 (L) Power (UK model)	
<b>FILTERS</b>		
BPF101	1-231-286-00 (B) FM Band-pass	
CF101	1-527-184-XX (B) FM IF	
<b>CAPACITORS</b>		
All capacitors are in μF and ceramic unless otherwise noted. 50WV or less are omitted except for electrolytics. pF = μμF, elect = electrolytic.		
C101	1-102-943-11 (A) 6 p	
C102	1-102-958-11 (A) 20 p	
C103, 104	1-101-004-11 (A) 0.01	
C105	1-101-001-11 (A) 0.001	
C107, 108	1-101-004-11 (A) 0.01	
C109	1-102-954-11 (A) 10 p	
C110	1-102-938-11 (A) 1 p	
C111	1-102-956-11 (A) 15 p	
C112	1-102-944-11 (A) 7 p	
C113	1-127-019-11 (A) 0.1 16 V solid aluminum	

Ref. No.	Part No.	Description
C114 ~ 116	1-101-004-11 (A) 0.01	
C117	1-101-005-11 (A) 0.022	
C118	1-101-004-11 (A) 0.01	
C120	1-108-242-12 (A) 0.022 mylar	
C121	1-102-955-11 (A) 12 p	
C122	1-102-940-11 (A) 3 p	
C123	1-102-974-11 (A) 82 p	
C124	1-101-889-11 (A) 68 p	
C125	1-102-955-11 (A) 12 p	
C126	1-102-943-11 (A) 6 p	
C127	1-101-964-11 (A) 36 p	
C128	1-103-714-11 (A) 360 p 50 V polystyrol	
C129	1-103-735-11 (A) 2700 p 50 V polystyrol	
C130	1-103-707-11 (A) 180 p 50 V polystyrol	
C131	1-102-954-11 (A) 10 p	
C132	1-102-945-11 (A) 8 p	
C133	1-102-958-11 (A) 20 p	
C134	1-102-983-11 (A) 220 p	
C135, 136	1-101-005-11 (A) 0.022	
C137	1-101-001-11 (A) 0.001	
C138, 139	1-101-004-11 (A) 0.01	
C140	1-121-420-11 (A) 220 10 V elect	
C141	1-101-005-11 (A) 0.022	
C142	1-121-420-11 (A) 220 10 V elect	
C143	1-101-004-11 (A) 0.01	
C144, 145	1-121-651-11 (A) 10 16 V elect	
C146, 147	1-108-227-12 (A) 0.001 mylar	
C148, 149	1-101-005-11 (A) 0.022	
C150	1-108-239-12 (A) 0.01 mylar	
C151	1-101-004-11 (A) 0.01	
C152	1-121-352-11 (A) 47 10 V elect	
C153	1-121-726-11 (A) 0.47 50 V	
C154	1-101-005-11 (A) 0.022	
C155	1-102-975-11 (A) 100 p	
C156, 157	1-101-004-11 (A) 0.01	
C158	1-108-232-12 (A) 0.0033 mylar	
C159	1-102-945-11 (A) 8 p	
C160	1-108-239-12 (A) 0.01 mylar	

Ref. No.	Part No.	Description
C201	1-108-239-12 (A) 0.01 mylar	
C202	1-121-726-11 (A) 0.47 50 V elect	
C203	1-108-228-12 (A) 0.0015 mylar	
C204	1-121-402-11 (A) 33 10 V elect	
C205	1-127-022-11 (A) 0.47 16 V solid aluminum	
C206	1-121-402-11 (A) 33 10 V elect	
C207	1-102-983-11 (A) 220 p	
C208	1-102-975-11 (A) 100 p	
C209	1-108-242-12 (A) 0.022 mylar	
C210	1-101-881-11 (A) 47 p	
C211	1-102-975-11 (A) 100 p	
C212	1-108-352-12 (A) 0.0018 mylar	
C213	1-102-975-11 (A) 100 p	
C214	1-121-395-11 (A) 4.7 25 V elect	
C215	1-121-651-11 (A) 10 16 V elect	
C216	1-121-421-11 (B) 220 16 V elect	
C217	1-121-726-11 (A) 0.47 50 V elect	
C218	1-102-832-11 (A) 330 p	
C219	1-127-019-11 (A) 0.1 16 V solid aluminum	
C220	1-108-227-12 (A) 0.001 mylar	
C221	1-121-421-11 (B) 220 16 V elect	
C222 ~ 224	1-102-975-11 (A) 100 p	
C225	1-121-414-11 (A) 100 10 V elect	
C226	1-121-420-11 (A) 220 10 V elect	
C227	1-108-230-12 (A) 0.0022 mylar	
C228	1-121-402-11 (A) 33 10 V elect	
C229	1-108-242-12 (A) 0.022 mylar	
C230	1-121-392-11 (A) 3.3 25 V elect	
C231, 232	1-121-651-11 (A) 10 16 V elect	
C233	1-108-230-12 (A) 0.0022 mylar	
C234	1-108-234-12 (A) 0.0047 mylar	
C235	1-108-240-12 (A) 0.015 mylar	
C236	1-121-421-11 (B) 220 16 V elect	
C237	1-108-259-12 (A) 0.027 mylar	
C238	1-108-251-12 (B) 0.1 mylar	
C239	1-108-237-12 (A) 0.0068 mylar	
C240	1-108-246-12 (A) 0.047 mylar	
C241	1-121-726-11 (A) 0.47 50 V elect	

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

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

Note: Circled letters (A to Z) are applicable to European models only.

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
C242	1-121-415-11 (A) 100	16 V elect
C243	1-121-651-11 (A) 10	16 V elect
C244	1-102-832-11 (A) 330p	
C245	1-121-420-11 (A) 220	10 V elect
C246	1-121-421-11 (B) 220	16 V elect
C247	1-102-975-11 (A) 100p	
C249	1-121-245-11 (B) 1000	16 V elect
C250	1-108-239-12 (A) 0.01	mylar
C251	1-119-427-11 (B) 4.7	50V elect
C252	1-108-234-12 (A) 0.0047	mylar
C253	1-121-352-11 (A) 47	10 V elect
C254	1-108-227-12 (A) 0.001	mylar
C255	1-108-242-12 (A) 0.022	mylar
C256	1-121-726-11 (A) 0.47	50V elect
C257	1-121-402-11 (A) 33	10 V elect
C258	1-121-651-11 (A) 10	16 V elect
C259	1-121-391-11 (A) 1	50V elect
C260	1-108-234-12 (A) 0.0047	mylar
C261	1-121-402-11 (A) 33	10 V elect
C262	1-108-239-12 (A) 0.01	mylar
C263	1-121-414-11 (A) 100	10 V elect
C264	1-121-415-11 (A) 100	16 V elect
C265	1-108-239-12 (A) 0.01	mylar
C266	1-121-660-11 (B) 2200	16 V elect
C267, 268	1-108-377-12 (A) 0.01	100 V mylar
C269	1-108-234-12 (A) 0.0047	mylar
C270	1-102-832-11 (A) 330p	
C271	1-121-414-11 (A) 100	10 V elect
C272	1-108-227-12 (A) 0.001	mylar
C275	1-121-651-11 (A) 10	16 V elect
C276 ~ 278	1-102-975-11 (A) 100p	
C301	1-121-409-11 (A) 47	16 V elect
C302	1-121-415-11 (A) 100	16 V elect
C303	1-121-426-11 (B) 470	16 V elect
C304	1-121-651-11 (A) 10	16 V elect
CT101~103, 108 CV101~104	1-151-239-00 (G) Tuning	

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
CT104 ~ 107	1-141-146-XX (B) Trimmer	

### RESISTORS

All resistors in ohms. Common 1/4W carbon resistors are omitted. Check schematic diagram for values. (k = 1000)

RV201	1-224-893-00 (B) 100 kΩ, variable; TREBLE
RV202	1-224-892-00 (B) 100 kΩ, variable; BASS
RV203	1-224-895-00 (C) 20 kΩ, variable; VOLUME
RV204	1-224-642-XX (B) 1 kΩ, adjustable
RV301	1-224-642-XX (B) 1 kΩ, adjustable

### SWITCHES

S1	1-552-080-00 (F) Slide, BAND SELECT
S2	1-516-298-00 (C) Slide, RADIO
S3	1-514-976-XX (C) Slide, record/playback
S4	1-516-441-00 (B) Slide, LOUDNESS
S5	1-516-417-XX (B) Push-button, BATT CHECK
S6	1-516-886-00 (B) Leaf, motor
S7	1-516-226-00 (B) Slide, ISS

### FUSES

F1	1-532-078-00 (A) T1A
F2	1-532-084-00 T100mA (Canadian model)

### MISCELLANEOUS

ANT	1-501-072-00 (E) FM/SW TEL ANT
CNJ2	1-509-510-00 (B) Connector, AC INPUT (AEP, GEP model)
	1-509-511-00 Connector, AC INPUT (Canadian model)
	1-509-883-00 (C) Connector, AC INPUT (UK model)
EH	8-825-566-00 (B) Head, erase; EBF5-02B
J1 ~ 4	1-507-495-00 (E) Jack, LINE IN/MICROPHONE/REMOTE/EARPHONE
M	8-834-015-50 (K) Motor, D-015F
ME1	1-520-282-00 (I) Meter, REC/BATT/TUNING
MIC	1-542-022-00 (E) Microphone, electret condenser

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

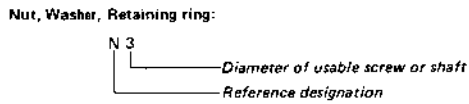
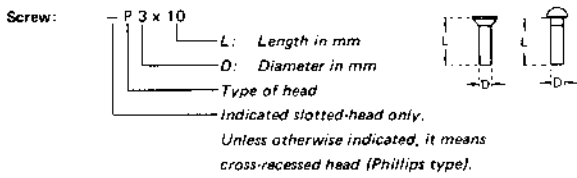
Note: Circled letters (A to Z) are applicable to European models only.

Ref. No.	Part No.	Description
RPH	8-829-336-08	(F) Head, record/playback; PPI34-36H
SP1	1-502-602-00	(J) Speaker, woofer
SP2	1-502-601-00	(F) Speaker, tweeter
	1-533-037-XX	(A) Holder, fuse
	1-536-401-XX	(A) Terminal Strip, 1L2

ACCESSORIES AND PACKING MATERIALS	
Part No.	Description
1-506-309-13	(A) Plug, shorting (SP-100)
1-534-840-XX	(D) Cord, power (DK-38) (AEP, GEP model)
1-534-879-00	(G) Cord, power (DK-44) (UK model)
1-551-002-00	Cord, power (DK-36) (Canadian model)
3-584-852-11	(C) Manual, instruction
3-584-858-00	(D) Carton
3-584-859-00	(C) Cushion
3-701-630-00	(A) Bag, plastic; accessories
3-701-638-00	(B) Bag, plastic; set
3-793-828-00	(A) Card, caution; cassette
8-890-205-00	(D) Tape, cassette; C-30

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

**HARDWARE NOMENCLATURE**



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

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

Sony Corporation

6L0553-1

9-954-493-01

© 1976

Printed in Japan