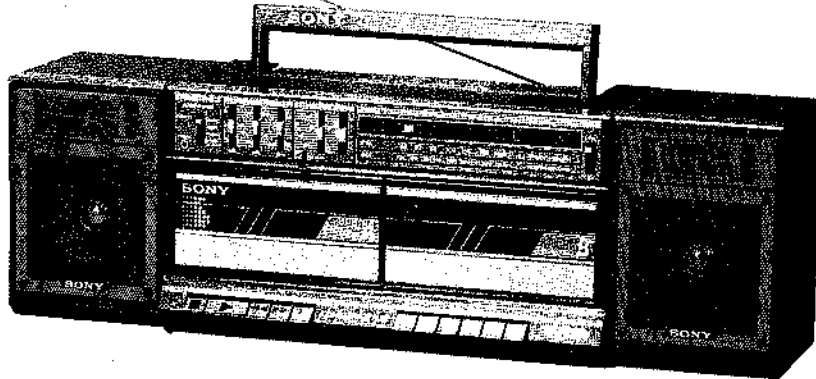


# CFS-W440L

## SERVICE MANUAL

*AEP Model  
UK Model*



### SPECIFICATIONS

Tape Transport Mechanism Type	MF-W400PB-75 (DECK A) MF-W400RP-75 (DECK B)
-------------------------------	--

#### Radio section

Frequency range FM 87.6–107 MHz  
 MW 530–1,605 kHz (566–187 m)  
 LW 150–255 kHz (2,000–1,176 m)  
 SW 6–18 MHz (50.4–16.7 m)

Antennas FM/SW: Telescopic antenna  
 MW/LW: Built-in ferrite bar antenna

#### Tape recorder section and general

Recording system 4-track 2-channel stereo  
 Fast winding time Approx. 1 min. 30 sec. with Sony C-60 cassette  
 Frequency response 100–8,000 Hz  
 Speakers Two way:  
 Approx. 10 cm (4 inches) dia. woofer x 2  
 Approx. 2 cm ( $\frac{3}{16}$  inches) dia. tweeter x 2

Power output 4 W + 4 W (at 10 % harmonic distortion) at dc operation

Inputs Two external microphone input jacks (minijack)  
 sensitivity 1.38 mV (–55 dB)  
 for low impedance microphone

Outputs Headphones jack (stereo minijack)  
 for 8–300-ohm impedance headphones

Power requirements 220 V ac, 50 Hz (European model)  
 240 V ac, 50 Hz (UK model)  
 9 V dc, six batteries IEC designation R20 (size D)

Power consumption 25 W at ac operation

Battery life

Batteries	Tape playback	FM recording	Dubbing
Sony New Super SUM-1 (NS)	15	13	9
Sony Eveready AM1 alkaline	26	23	16

(hours)

Dimensions Approx. 570 x 178 x 188 mm (w/h/d)  
(22  $\frac{1}{2}$  x 7 x 7  $\frac{1}{2}$  inches)

incl. projecting parts and controls, not incl. handle

Weight Approx. 5.2 kg (11 lb 8 oz) incl. batteries

#### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK  $\Delta$  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.

## FM/MW/LW/SW STEREO CASSETTE-CORDER

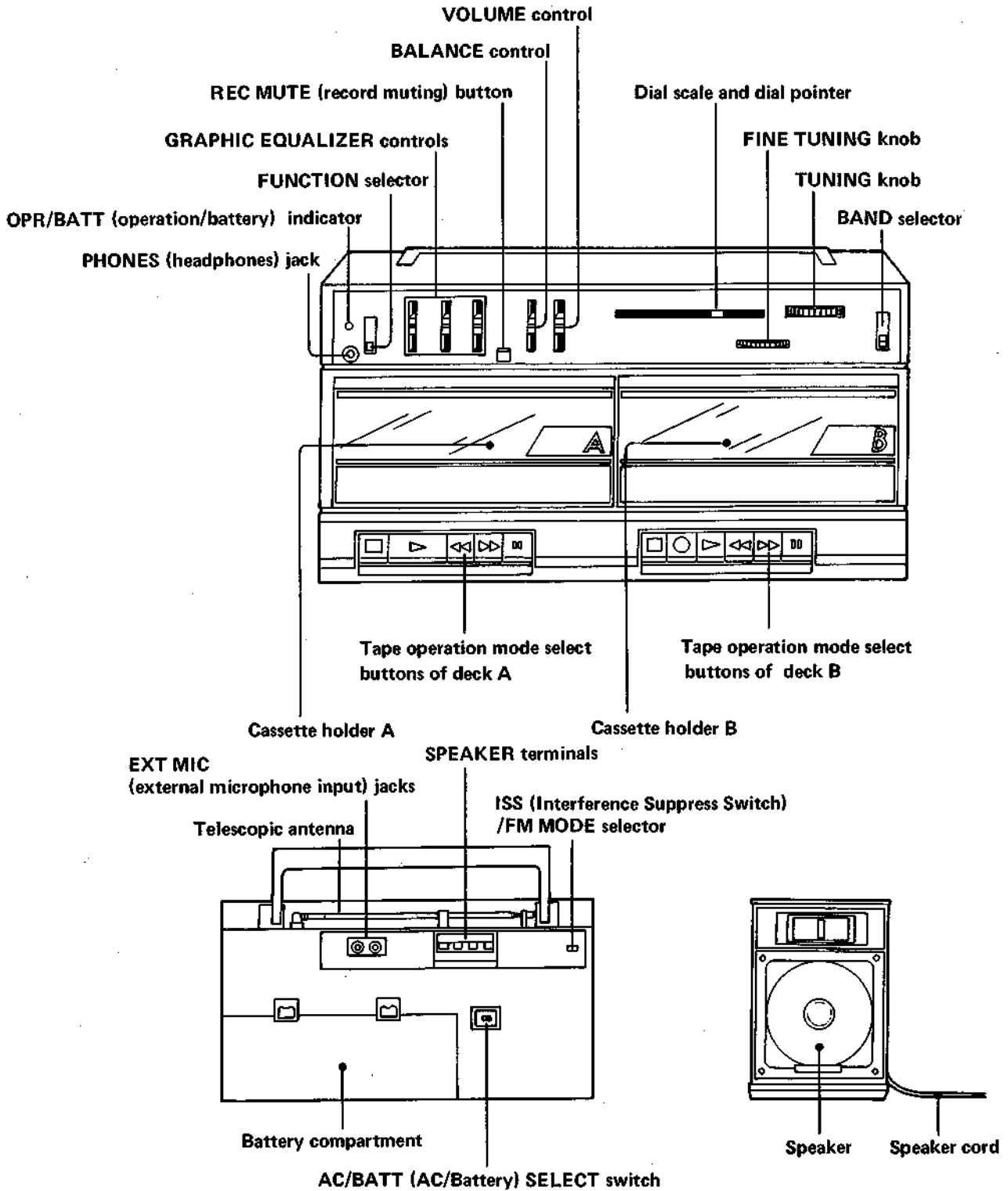
# SONY®



TC

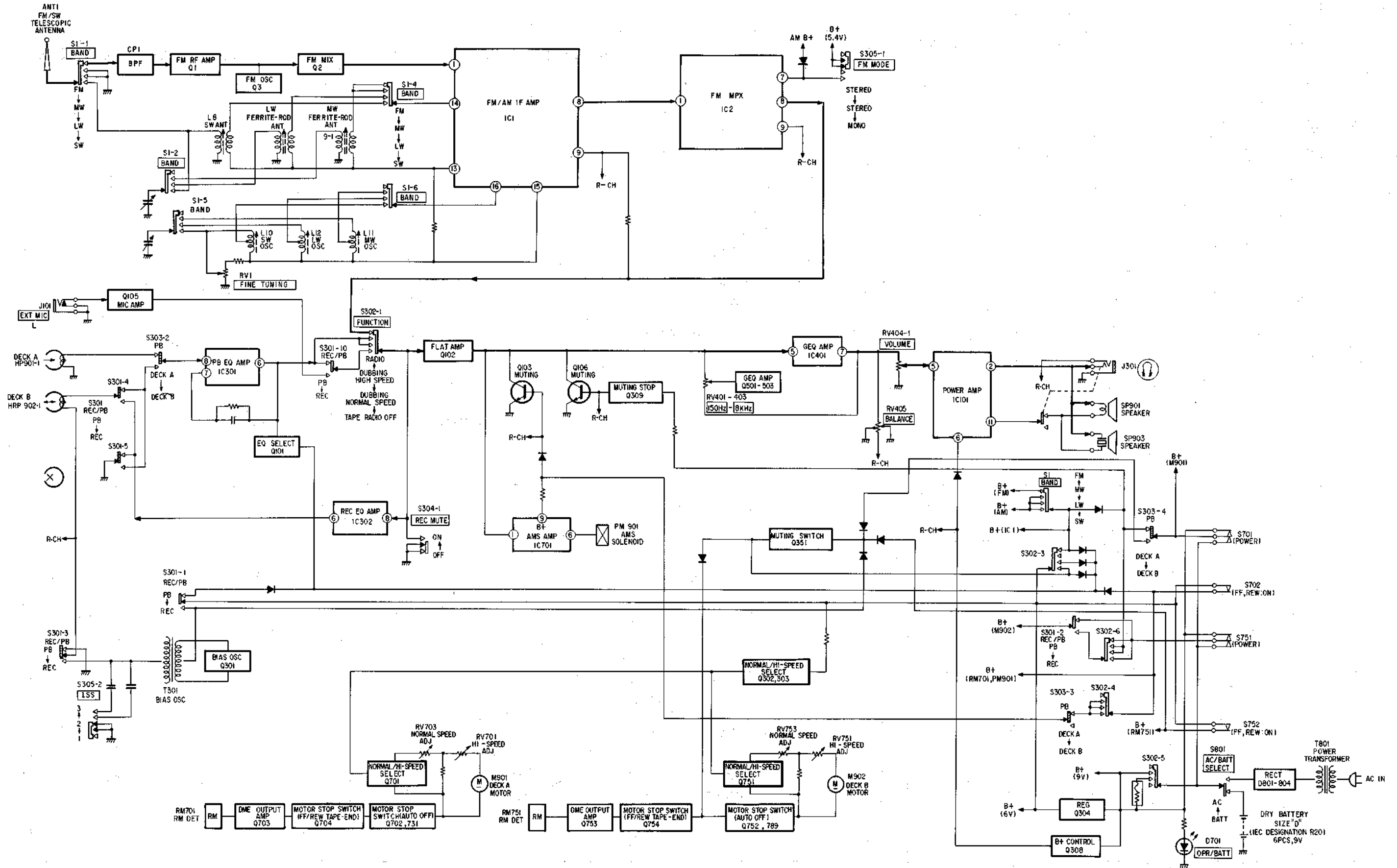
# CFS-W440L

## LOCATION OF CONTROLS



CFS-W440L CFS-W440L

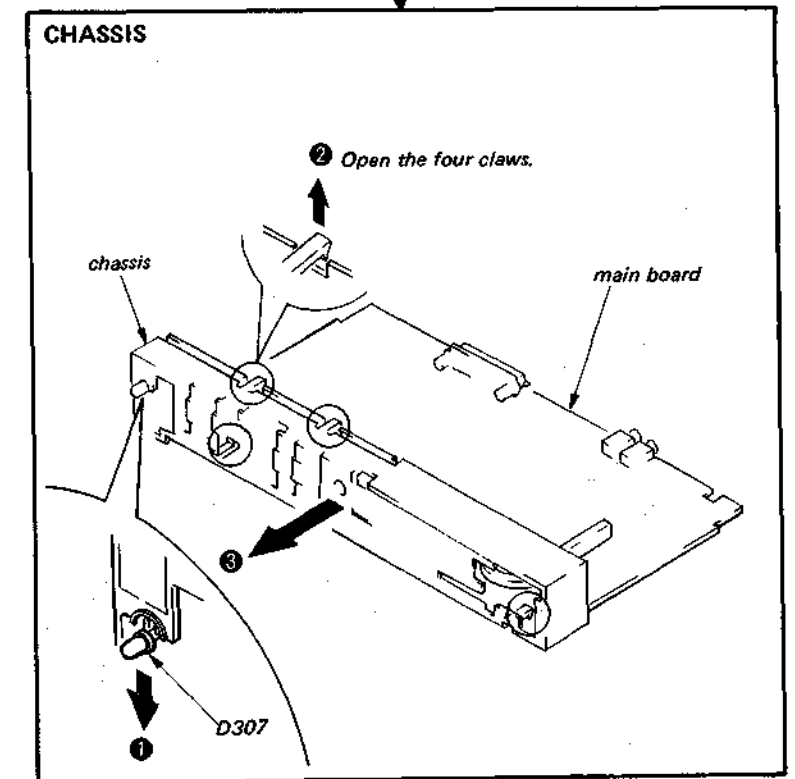
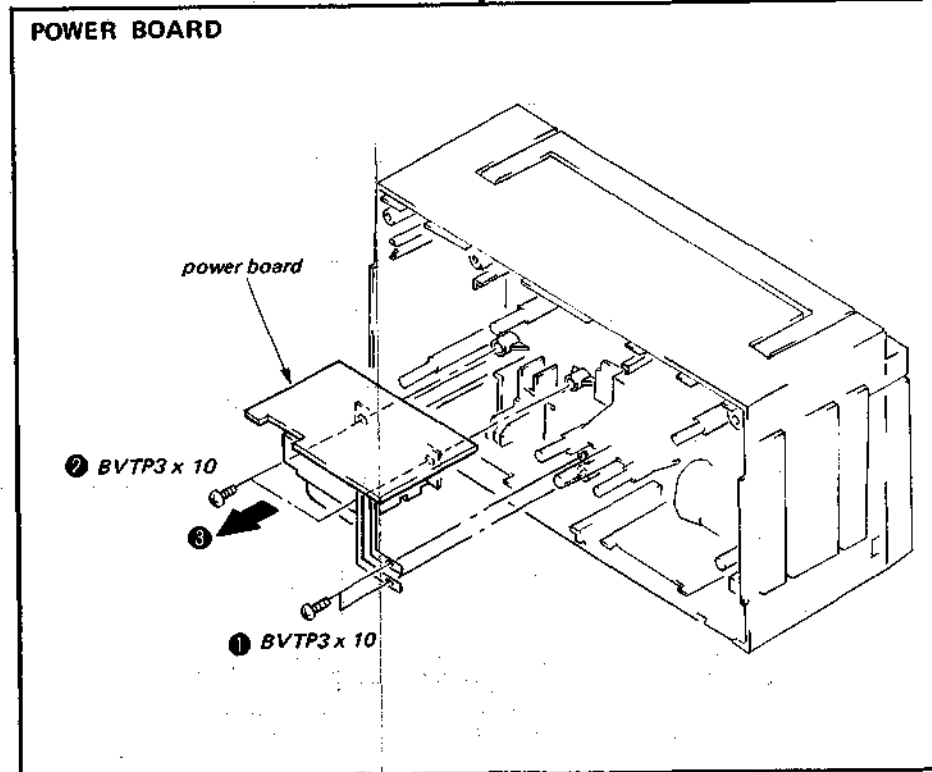
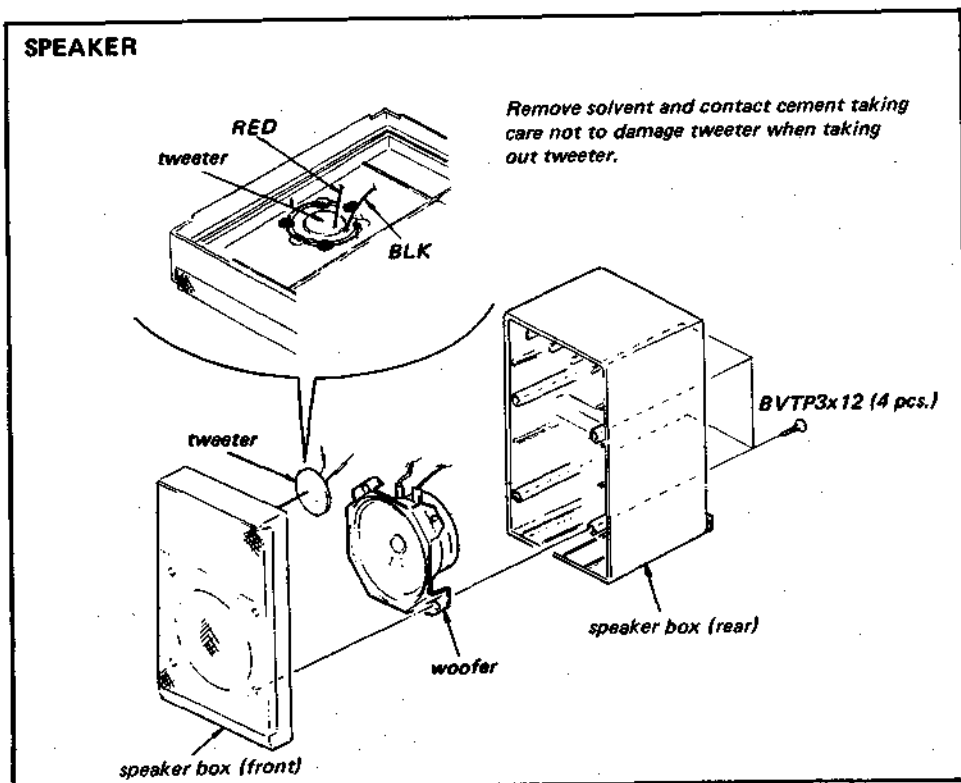
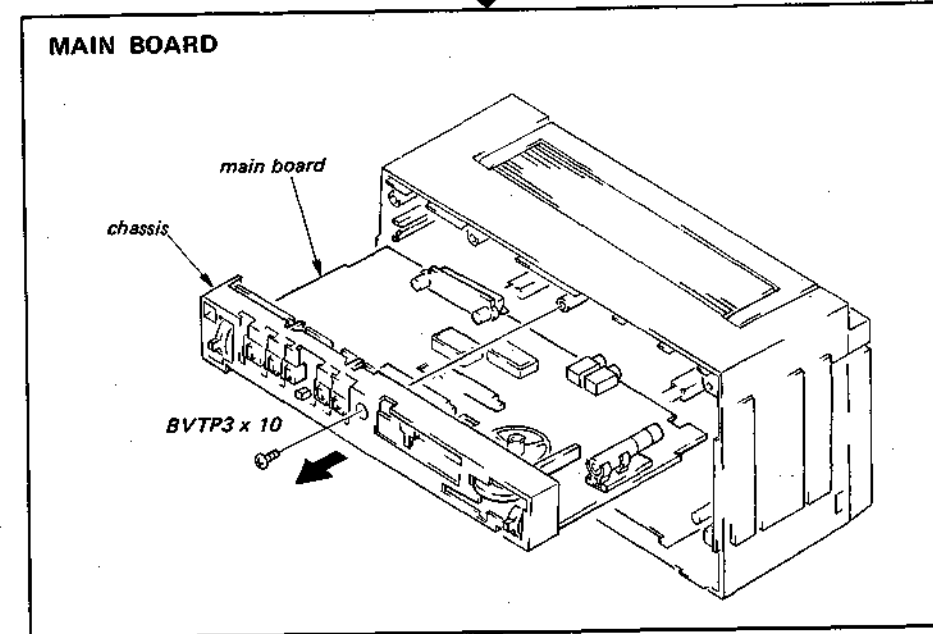
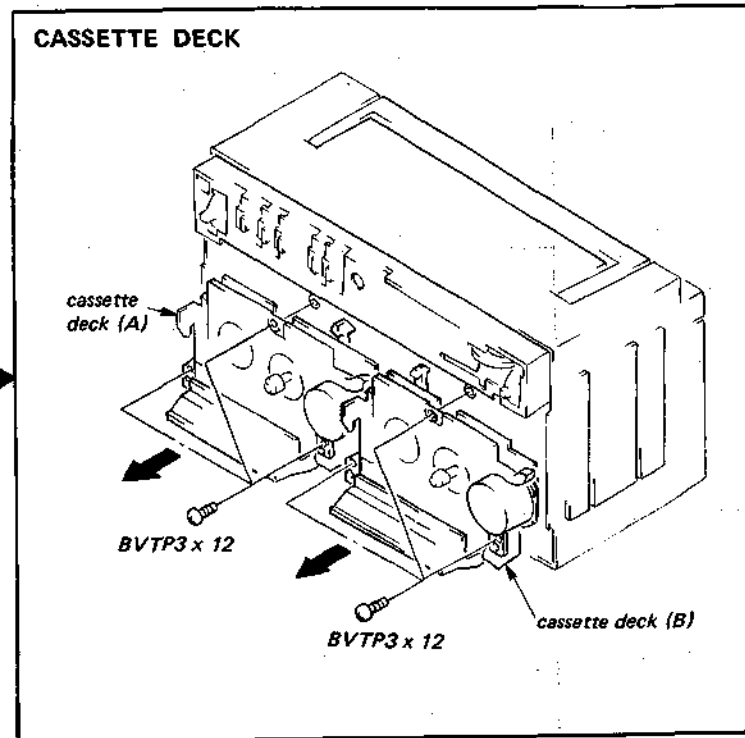
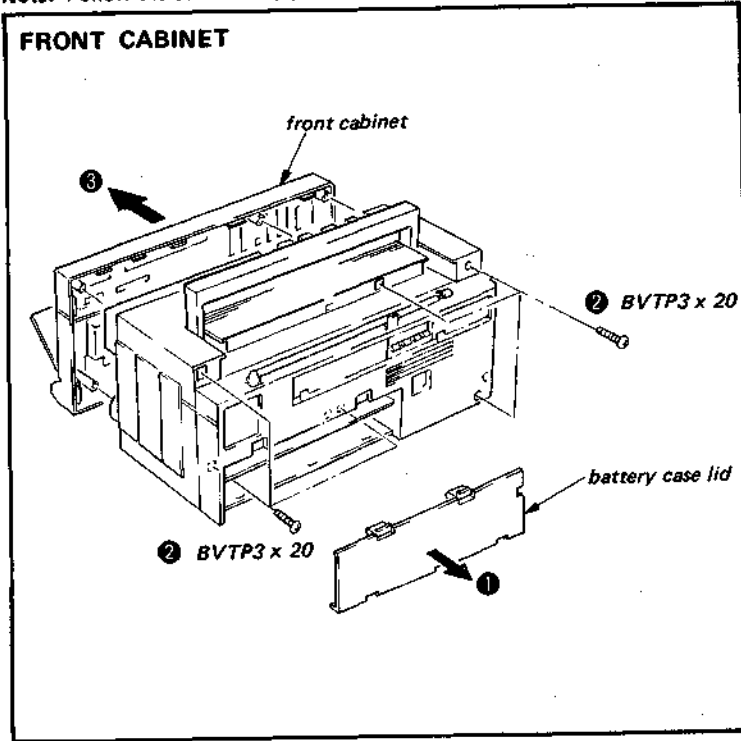
SECTION 1  
BLOCK DIAGRAM



SECTION 2  
DISASSEMBLY

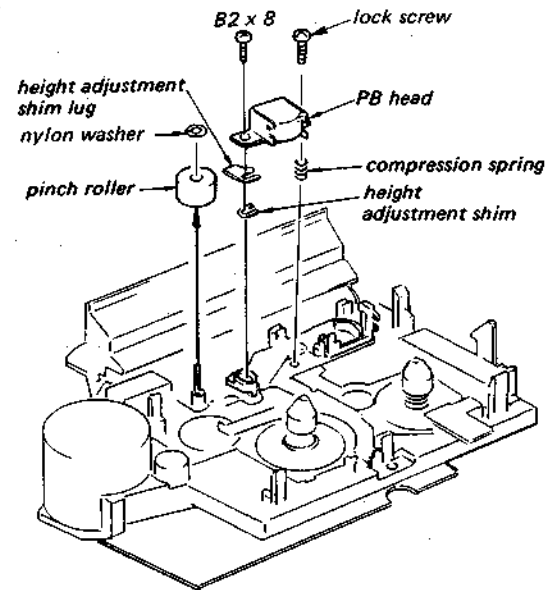
2-1. REMOVAL

Note: Follow the disassembly procedure in the numerical order given.

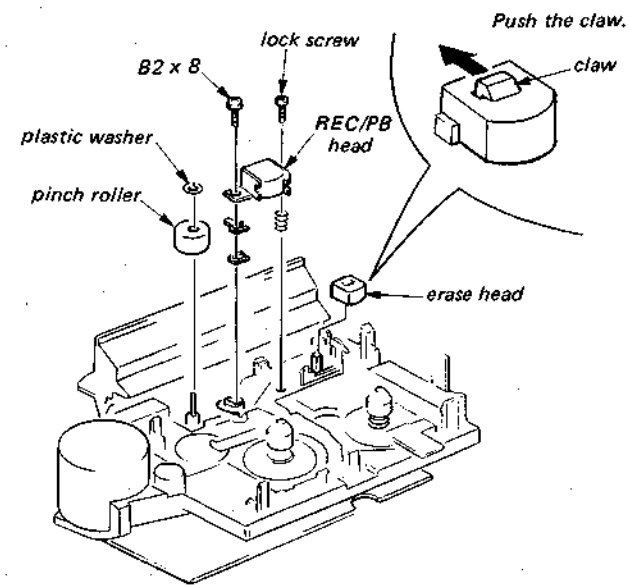


HEAD AND PINCH ROLLER

DECK A

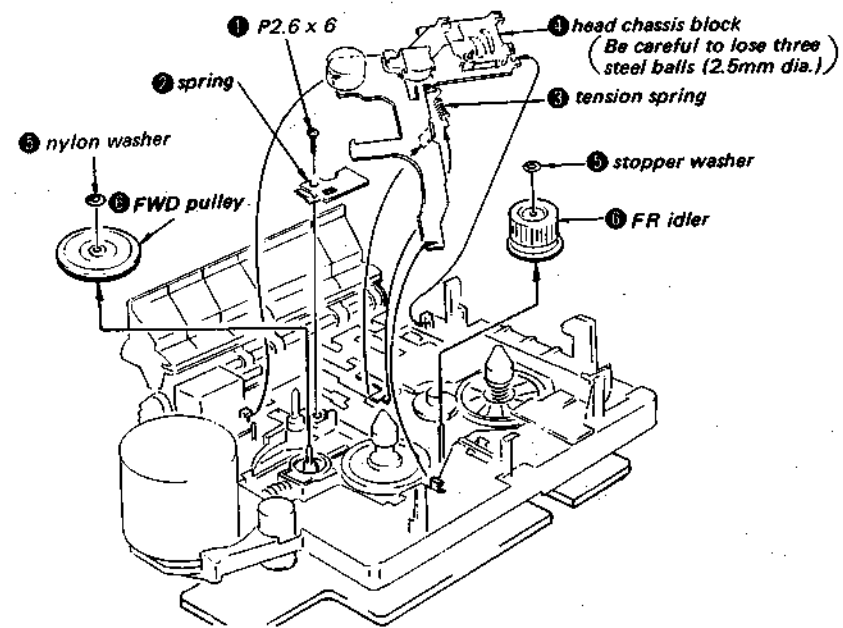


DECK B

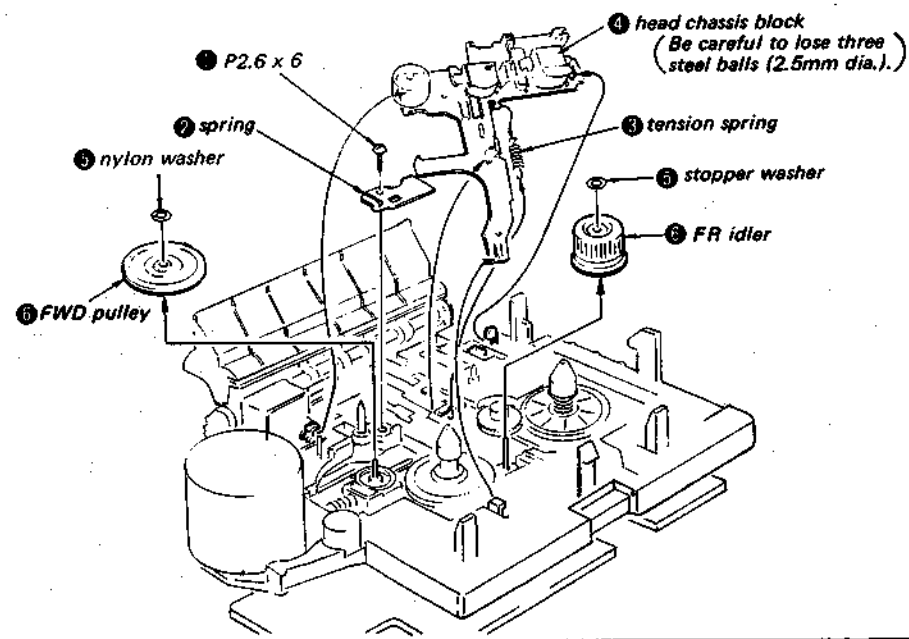


FWD PULLEY AND FR IDLER

DECK A



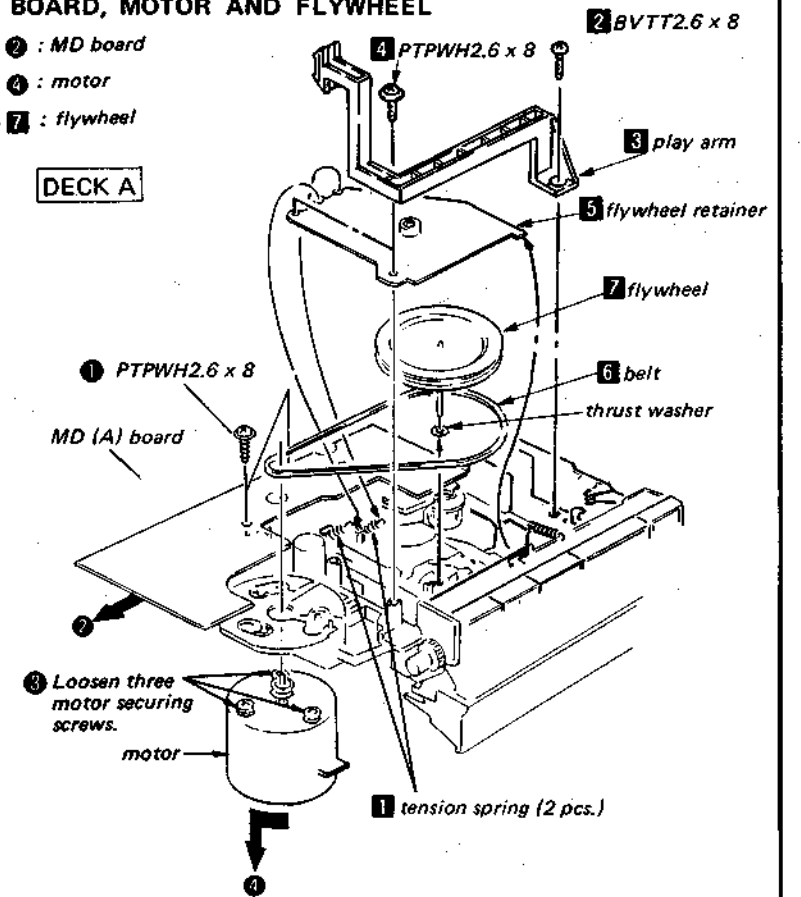
DECK B



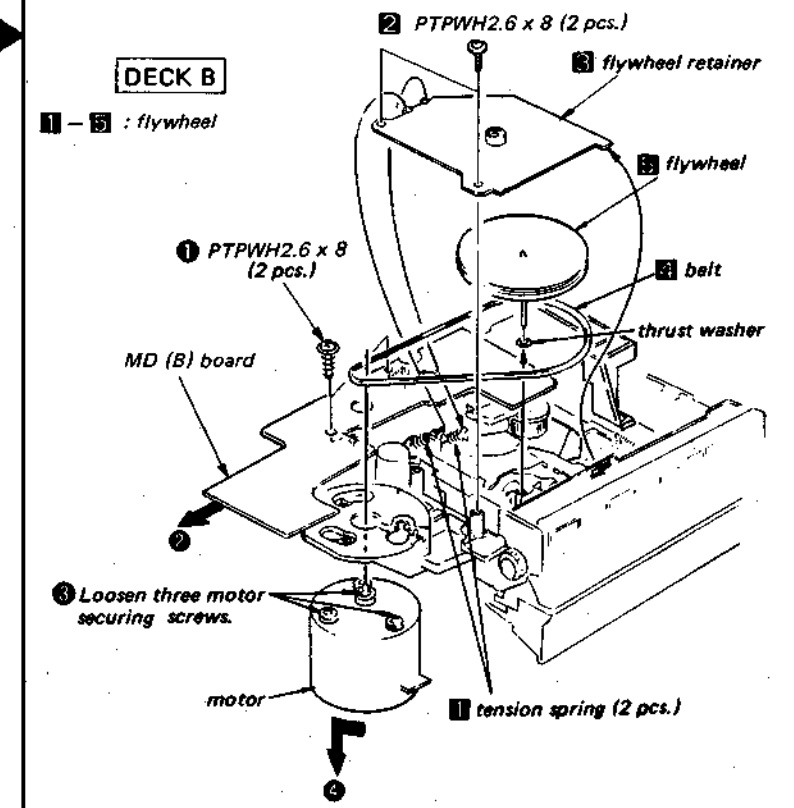
MD BOARD, MOTOR AND FLYWHEEL

- ①, ② : MD board
- ③, ④ : motor
- ① - ⑦ : flywheel

DECK A

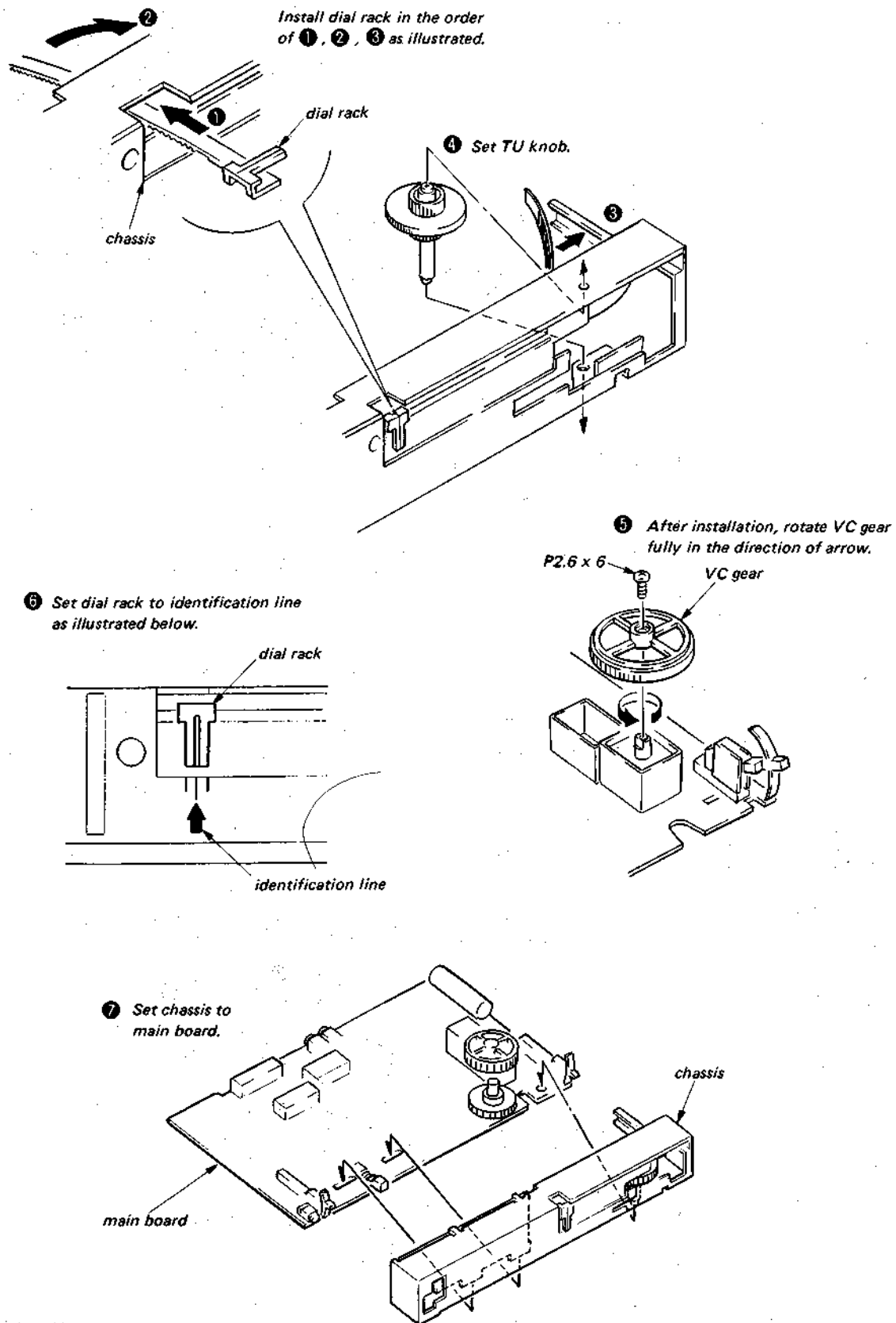


DECK B



SECTION 3  
ADJUSTMENTS

2-2. POINTER DRIVE BLOCK INSTALLATION



3-1. MECHANICAL ADJUSTMENTS AND MEASUREMENTS

PRECAUTION

- Clean the following parts with a denatured-alcohol-moistened swab:
  - record/playback head
  - erase head
  - capstan
  - pinch roller
  - rubber belts
  - idlers
- Demagnetize the record/playback and erase head with a head demagnetizer.
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

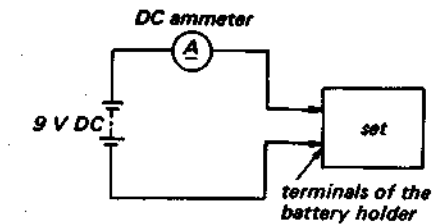
Torque	Torque Meter	Meter Reading
Playback	CQ-102C	25 - 50 g-cm (0.34 - 0.69 oz-inch)
Rewind	CQ-201B	85 - 120 g-cm (1.17 - 1.66 oz-inch)
Fast Forward	CQ-201B	more than 85 g-cm (more than 1.17 oz-inch)
Back Tension	CQ-102C	2.5 - 5 g-cm (0.03 - 0.07 oz-inch)

Tape Tension Measurement

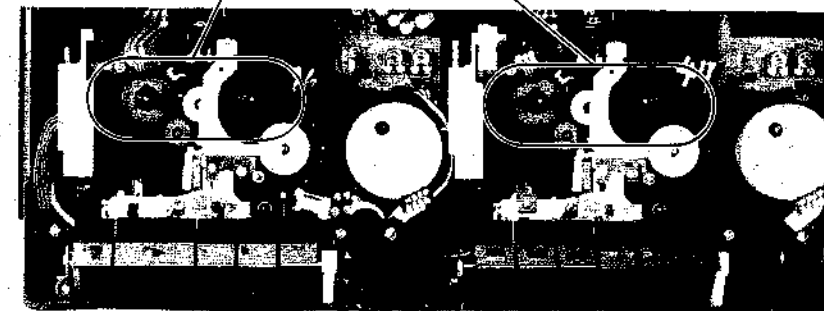
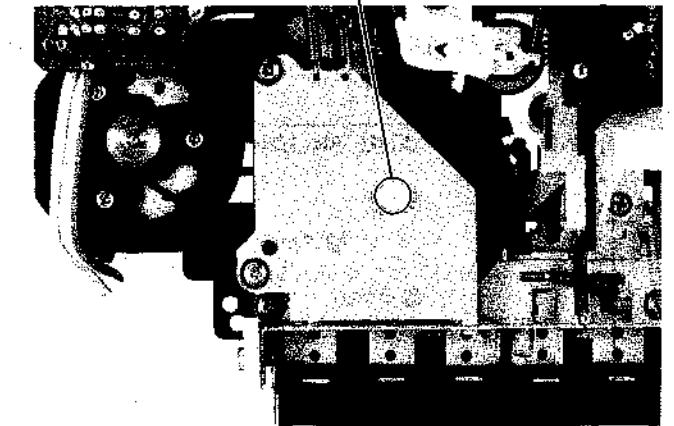
Meter	Meter Reading
CQ-403A	more than 170g (5.99 oz)

Flywheel Thrust Play Adjustment  
(for both decks A, B)

- Playback Mode -



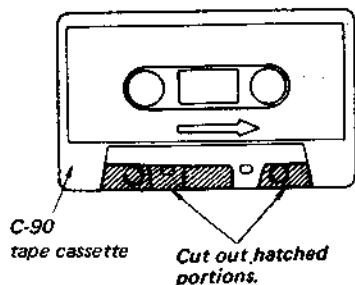
- Turn the thrust screw counterclockwise until the screw tip leaves from the flywheel shaft.
- Gradually turn the thrust screw clockwise to the position where the motor current suddenly increases.
- Then, turn the thrust screw counterclockwise about 1/4 turn from the position obtained in step 2.
- Secure the adjustment screw with locking compound.



**Tape Path Adjustment**

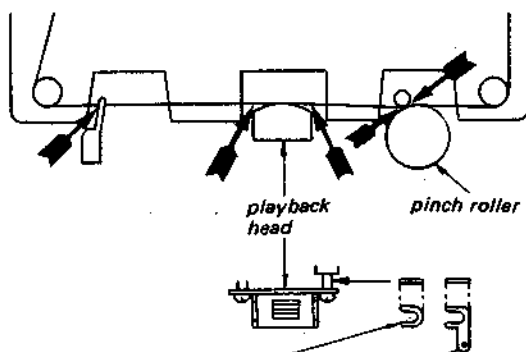
**Procedure:**

1. Prepare an adjustment cassette as shown below.



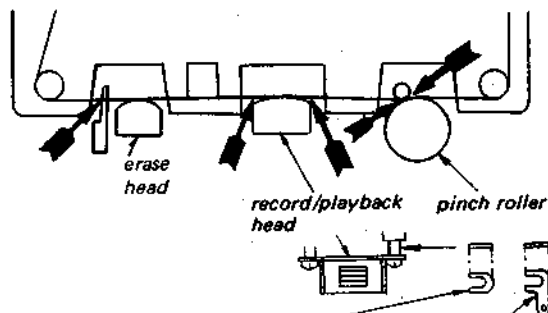
2. In playback mode and viewing from the front, adjust the head heights to eliminate tape curl and tape twist at portions shown by arrow.

- DECK A -

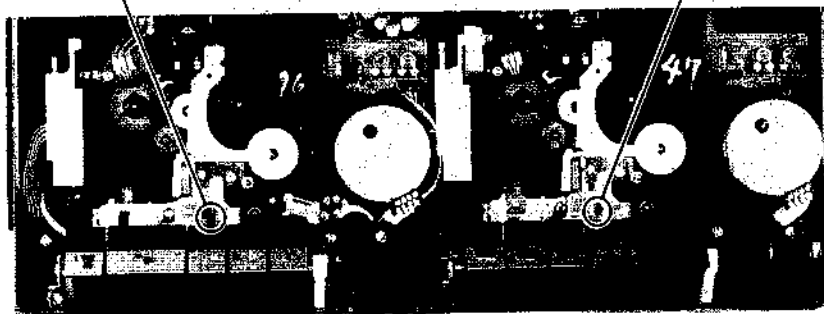


height adjustment shim		height adjustment shim	
Part No.	t (mm)	Part No.	t (mm)
3-578-138-01	0.1	3-313-386-11	0.2
3-578-138-11	0.2	3-313-386-21	0.3
3-578-138-21	0.3	3-313-386-31	0.5

- DECK B -



height adjustment shim		height adjustment shim	
Part No.	t (mm)	Part No.	t (mm)
3-578-138-01	0.1	3-313-386-11	0.2
3-578-138-11	0.2	3-313-386-21	0.3
3-578-138-21	0.3	3-313-386-31	0.5

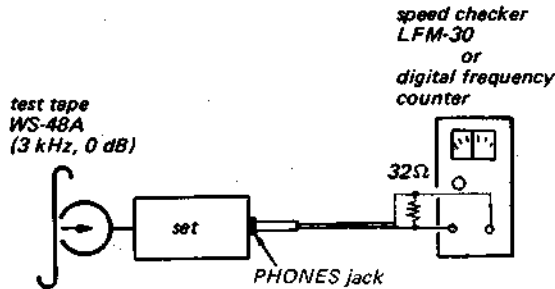


## 3-2. TAPE RECORDER SECTION ELECTRICAL ADJUSTMENTS

### Tape Speed Adjustment (for both decks A, B)

#### Procedure:

Mode: playback



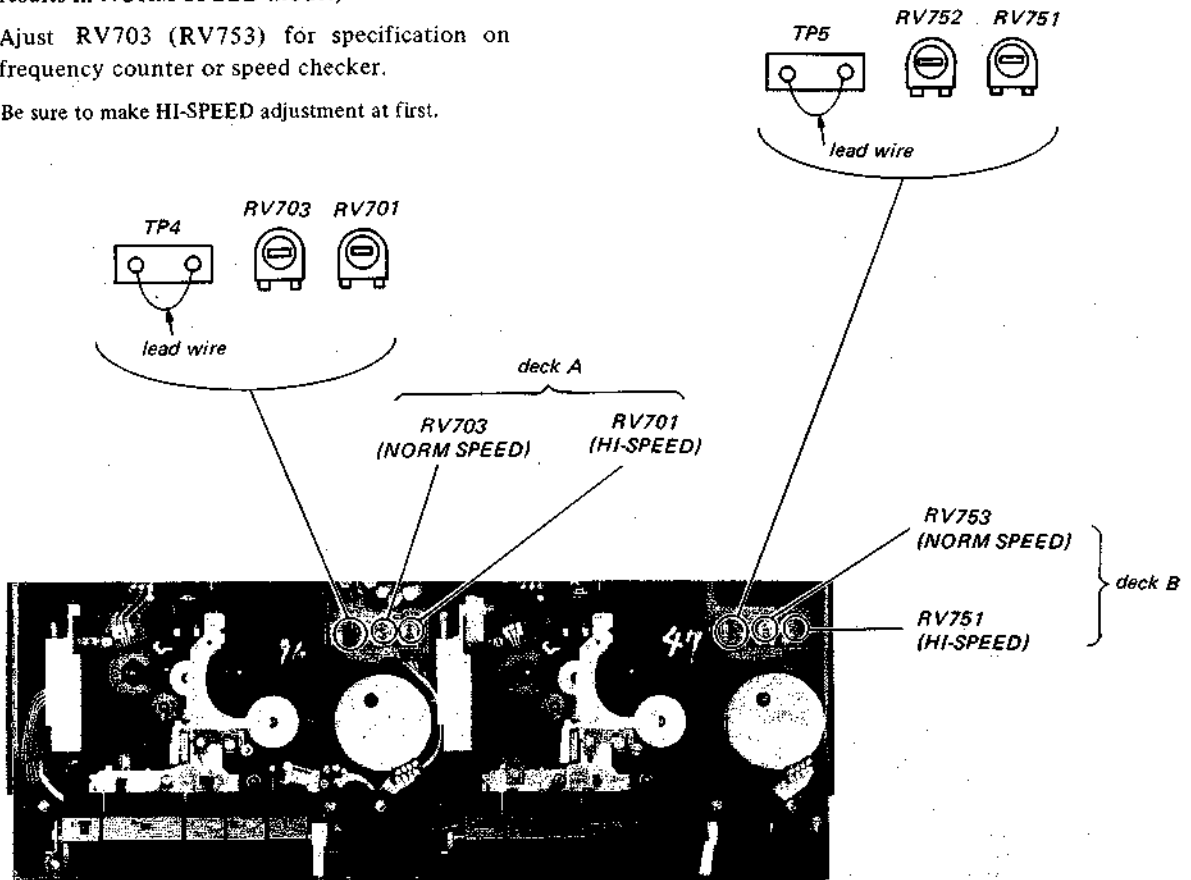
1. Short TP4 (TP5) with lead wire to place the set to HI-SPEED mode.
2. Set test tape WS-48A to cassette deck A (deck B) and place the set in playback mode.
3. Adjust RV701 (RV751) for specification on frequency counter or speed checker.
4. Remove lead wire connected in step 1. (it results in NORM SPEED mode.)
5. Adjust RV703 (RV753) for specification on frequency counter or speed checker.

**Note:** Be sure to make HI-SPEED adjustment at first.

#### Specification:

Tape speed	Digital frequency counter	Speed checker
HI-SPEED	5,820 – 6,180Hz	± 3%
NORM SPEED	2,910 – 3,090Hz	

Frequency difference between the beginning and the end of the tape should be within ±1% (±60 Hz: HI-SPEED, ±30 Hz: NORM SPEED).

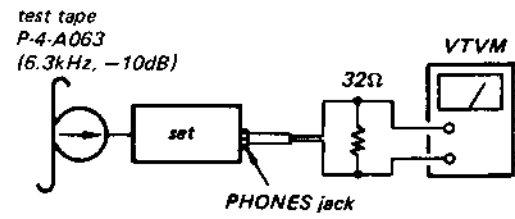




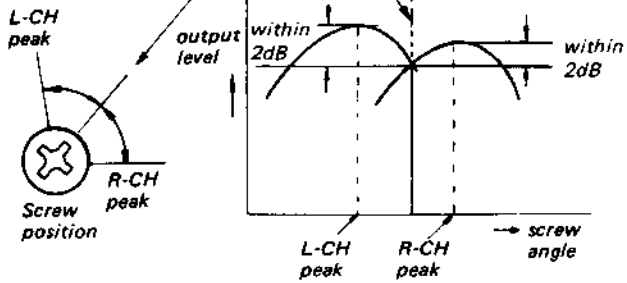
Playback Head Azimuth Adjustment (Deck A)  
Record/Playback Head Azimuth Adjustment (Deck B)

Procedure:

1. Mode: playback

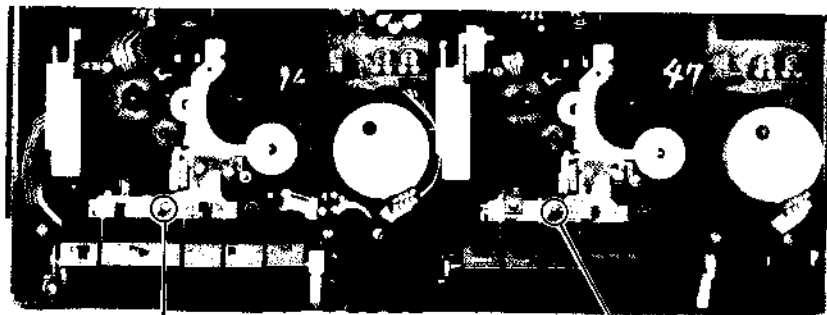


2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 2 dB.



Note: Finish the screw adjustment with a turn in the clockwise direction. After the adjustment, lock the adjustment screw with suitable locking compound.

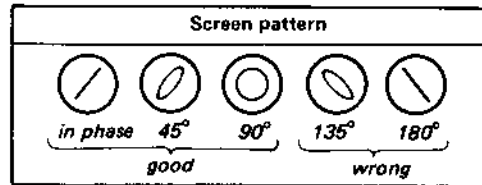
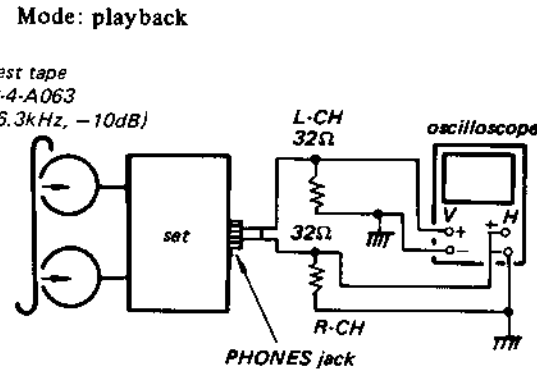
Adjustment Location:



deck A adjustment screw

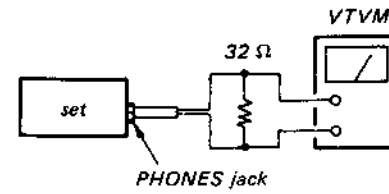
deck B adjustment screw

3. Phase Check



3-3. RADIO SECTION  
ELECTRICAL ADJUSTMENTS

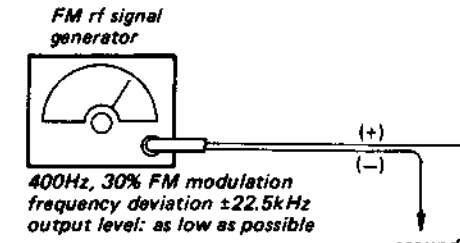
FM Section



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

FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VOM.	
108.0MHz	87.35MHz
CT2	L4

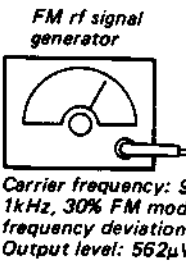
T2	T1
Adjust for a maximum reading on VTVM.	
FM IF ALIGNMENT	



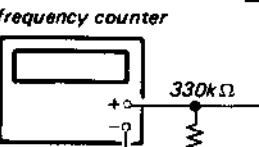
VCO Adjustment

A) Regular Method

Procedure:



1. Connect frequency counter
2. Tune the set to 98MHz.
3. Adjust RV2 for 38kHz frequency counter.



B) Simple Method

Procedure:

1. Tune the set to the FI
2. Turn RV2 clockwise memorize the light STEREO lamp.
3. Secure RV2 at the center of both turns as shown.



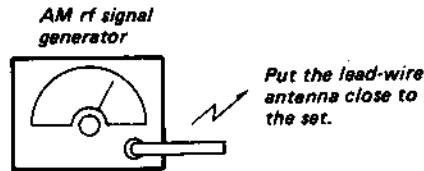
- FM tracking adjustment should be made after FM IF alignment.

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
87.35MHz	L2
108.0MHz	CT1

MW/LW/SW Section

MW/LW

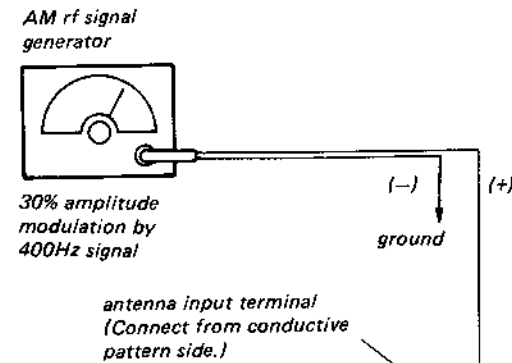
Setting:  
 FUNCTION switch: RADIO  
 BAND switch: MW/LW



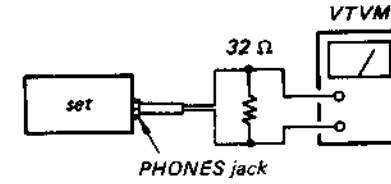
30% amplitude modulation by 400Hz signal

SW

Setting:  
 FUNCTION switch: RADIO  
 BAND switch: SW



30% amplitude modulation by 400Hz signal

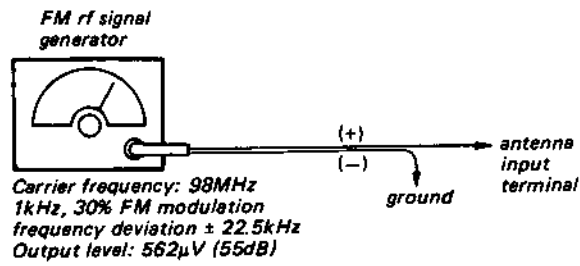


- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.
- Set the FINE TUNING knob in the center position for the SW adjustments.

VCO Adjustment

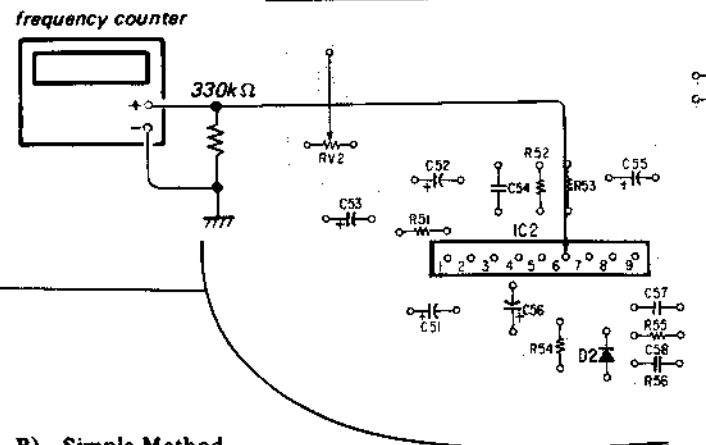
A) Regular Method

Procedure:



1. Connect frequency counter to it as shown below.
2. Tune the set to 98MHz.
3. Adjust RV2 for 38kHz ± 0.2kHz reading on the frequency counter.

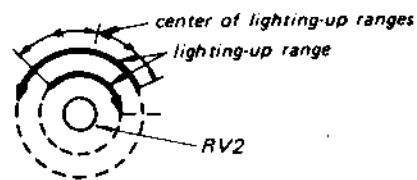
MAIN BOARD - Conductor Side -



B) Simple Method

Procedure:

1. Tune the set to the FM stereo broadcasting signal.
2. Turn RV2 clockwise or counterclockwise and memorize the lighting-up range of the FM STEREO lamp.
3. Secure RV2 at the center of the lighting-up range of both turns as shown below.



**SW TRACKING ADJUSTMENT**  
 Adjust for a maximum reading on VTVM.

18.4MHz	5.8MHz
CT5	L8

**LW TRACKING ADJUSTMENT**  
 Adjust for a maximum reading on VTVM.

240kHz	160kHz
CT6	L9-3, 4

**MW FREQUENCY COVERAGE ADJUSTMENT**  
 Adjust for a maximum reading on VTVM.

520kHz	1,680kHz
L11	CT4

**LW FREQUENCY COVERAGE ADJUSTMENT**  
 Adjust for a maximum reading on VTVM.

265kHz	CT8
145kHz	L12

**AM IF ALIGNMENT**  
 Adjust for a maximum reading on VTVM.

455kHz	T3
--------	----

**SW FREQUENCY COVERAGE ADJUSTMENT**  
 Adjust for a maximum reading on VTVM.

5.8MHz	18.4MHz
L10	CT7

**MW TRACKING ADJUSTMENT**  
 Adjust for a maximum reading on VTVM.

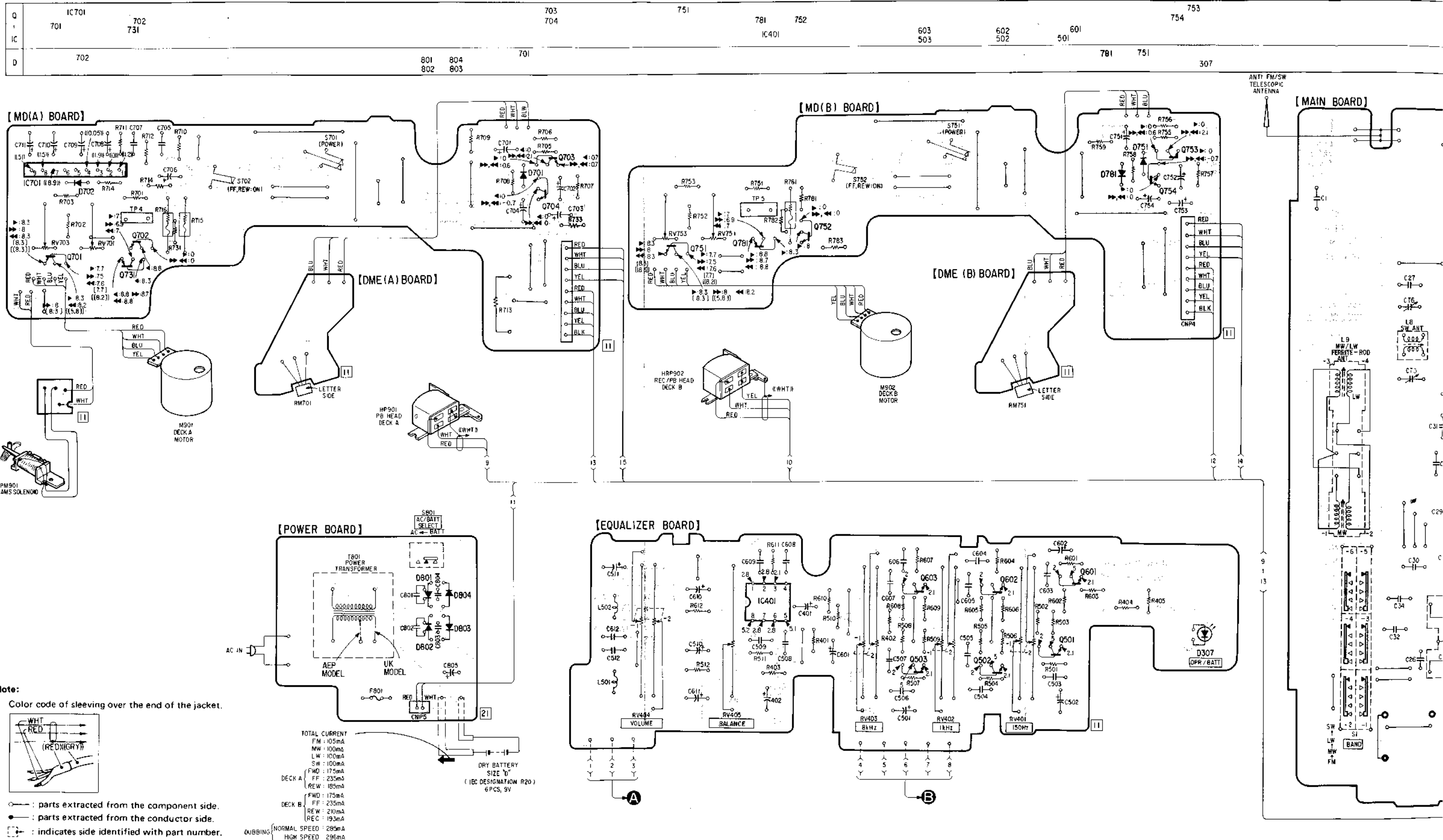
1,400kHz	620kHz
CT3	L9-1, 2

SECTION 4  
DIAGRAMS

CFS-W44OL CFS-W44OL

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

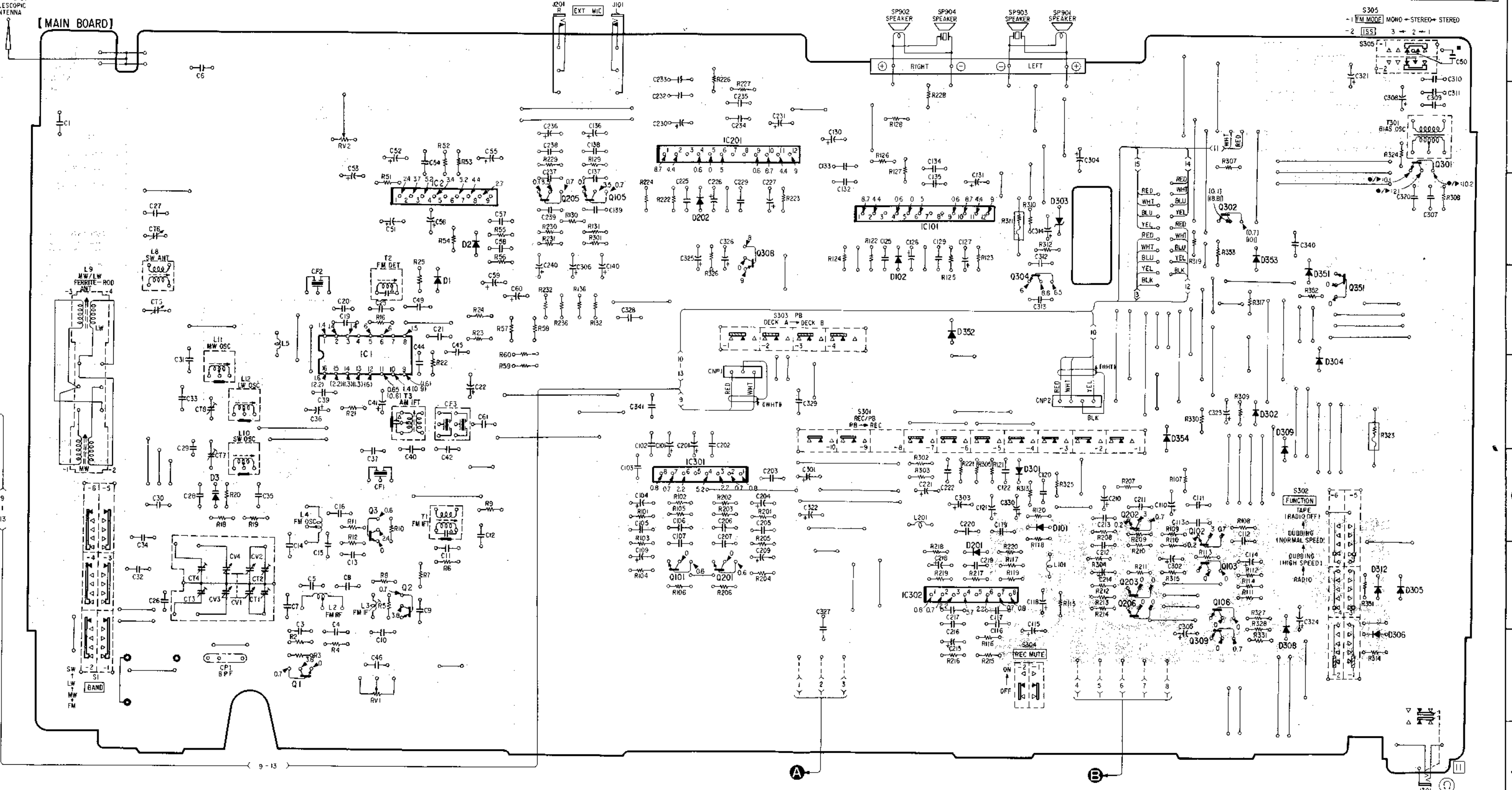
4-1. MOUNTING DIAGRAM - Conductor Side - See page 24 for semiconductor lead layouts.



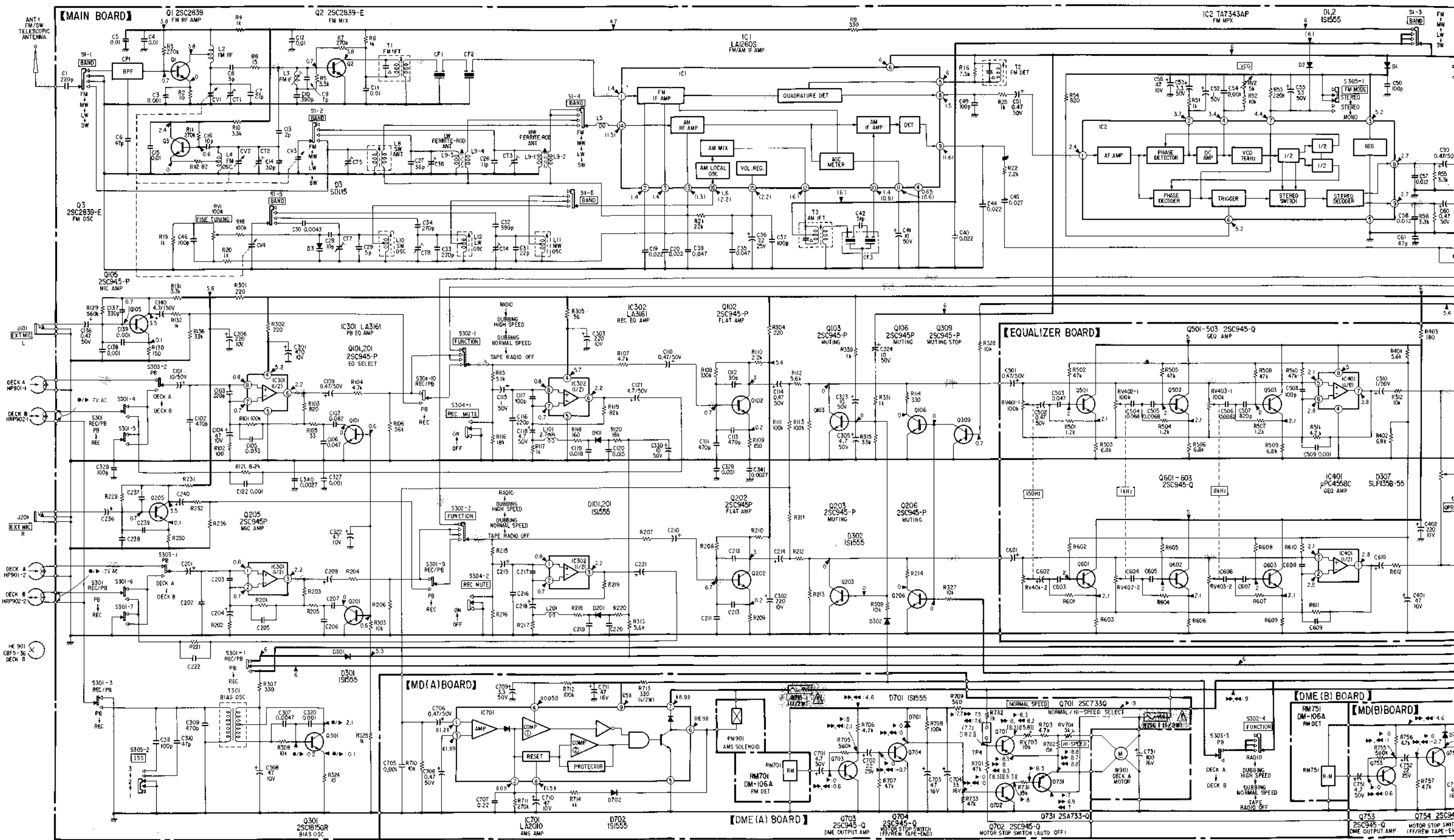
# CFS-W440L CFS-W440L

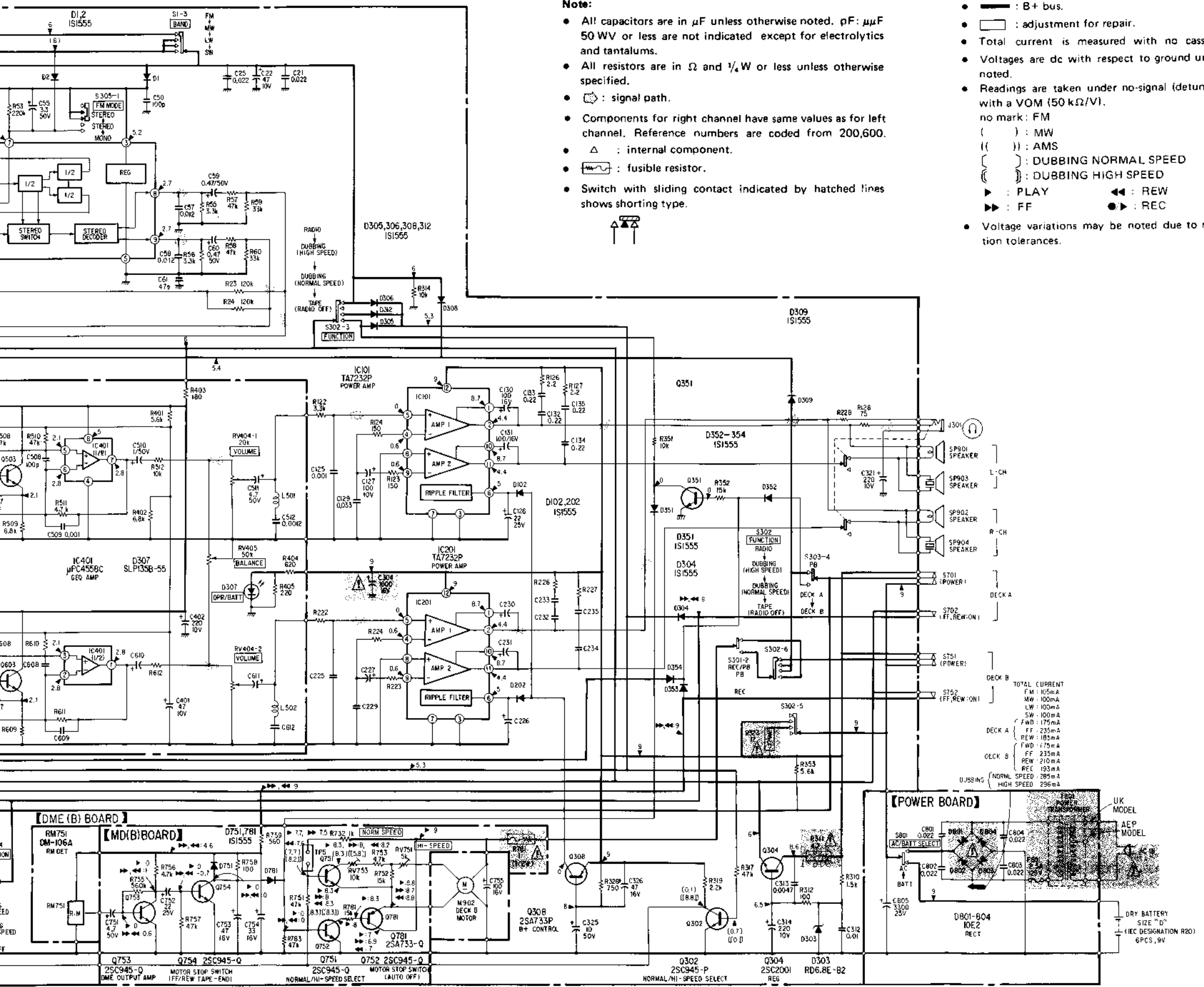
15    16    17    18    19    20    21    22    23    24    25    26    27    28    29    30    31

IC1	IC2	205	105	IC201	308	IC101	304	202	102	302	103	106	309	351	301	Q
																IC
																D



4.2. SCHEMATIC DIAGRAM





**Note:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{4}W$  or less unless otherwise specified.
- ☞ : signal path.
- Components for right channel have same values as for left channel. Reference numbers are coded from 200,600.
- $\Delta$  : internal component.
- $\text{---}/\text{---}$  : fusible resistor.
- Switch with sliding contact indicated by hatched lines shows shorting type.

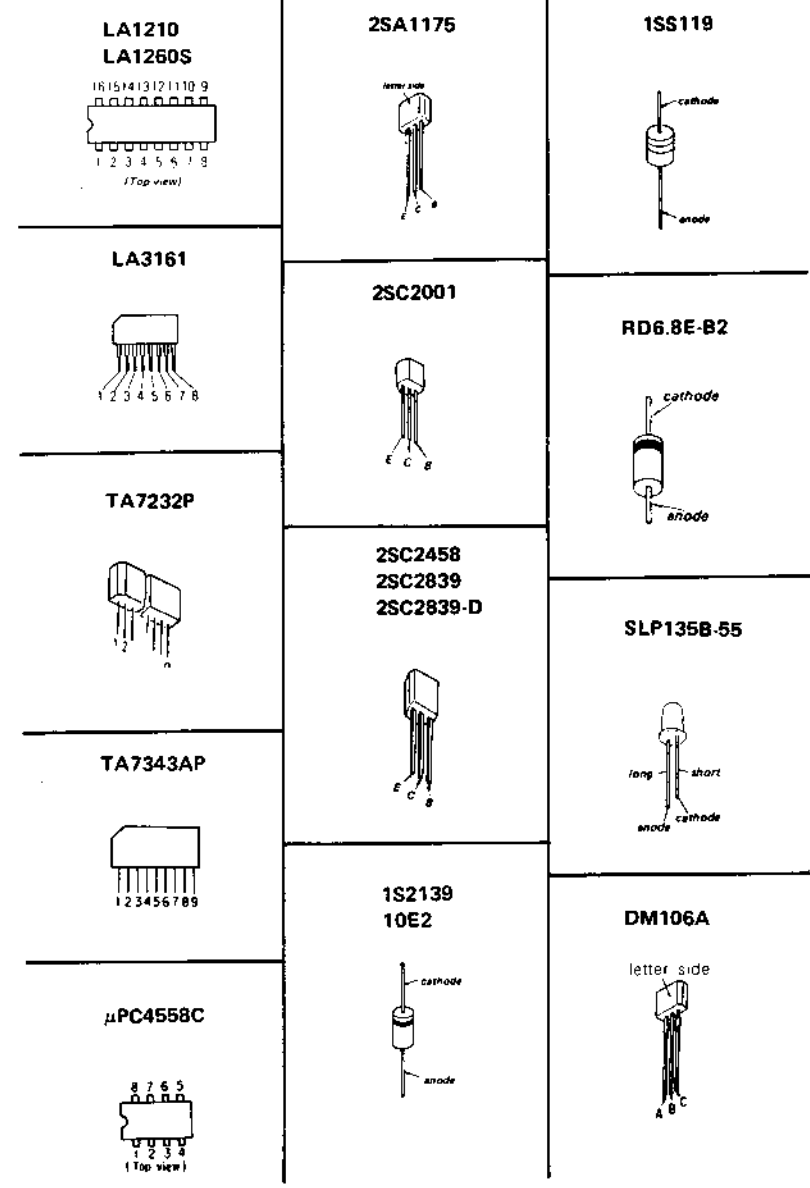
- : B+ bus.
- : adjustment for repair.
- Total current is measured with no cassette installed.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal (detuned) conditions with a VOM (50  $\text{k}\Omega/\text{V}$ ).
- no mark : FM
- ( ) : MW
- ( ) : AMS
- ( ) : DUBBING NORMAL SPEED
- ( ) : DUBBING HIGH SPEED
- ▶ : PLAY      ◀◀ : REW
- ▶▶ : FF      ●▶ : REC
- Voltage variations may be noted due to normal production tolerances.

• Switch

Ref. No.	Switch	Position
S1	BAND	FM
S301	REC/PB	PB
S302	FUNCTION	RADIO
S303	PB	DECK A
S304	REC MUTE	OFF
S305	ISS/FM MODE	1/STEREO
S701	DECK A POWER	OFF
S702	DECK A FF, REW	OFF
S751	DECK B POWER	OFF
S752	DECK B FF, REW	OFF
S801	AC/BATT SELECT	BATT

Note: The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

• Semiconductor Lead Layouts



## SECTION 5 EXPLODED VIEWS AND PARTS LIST

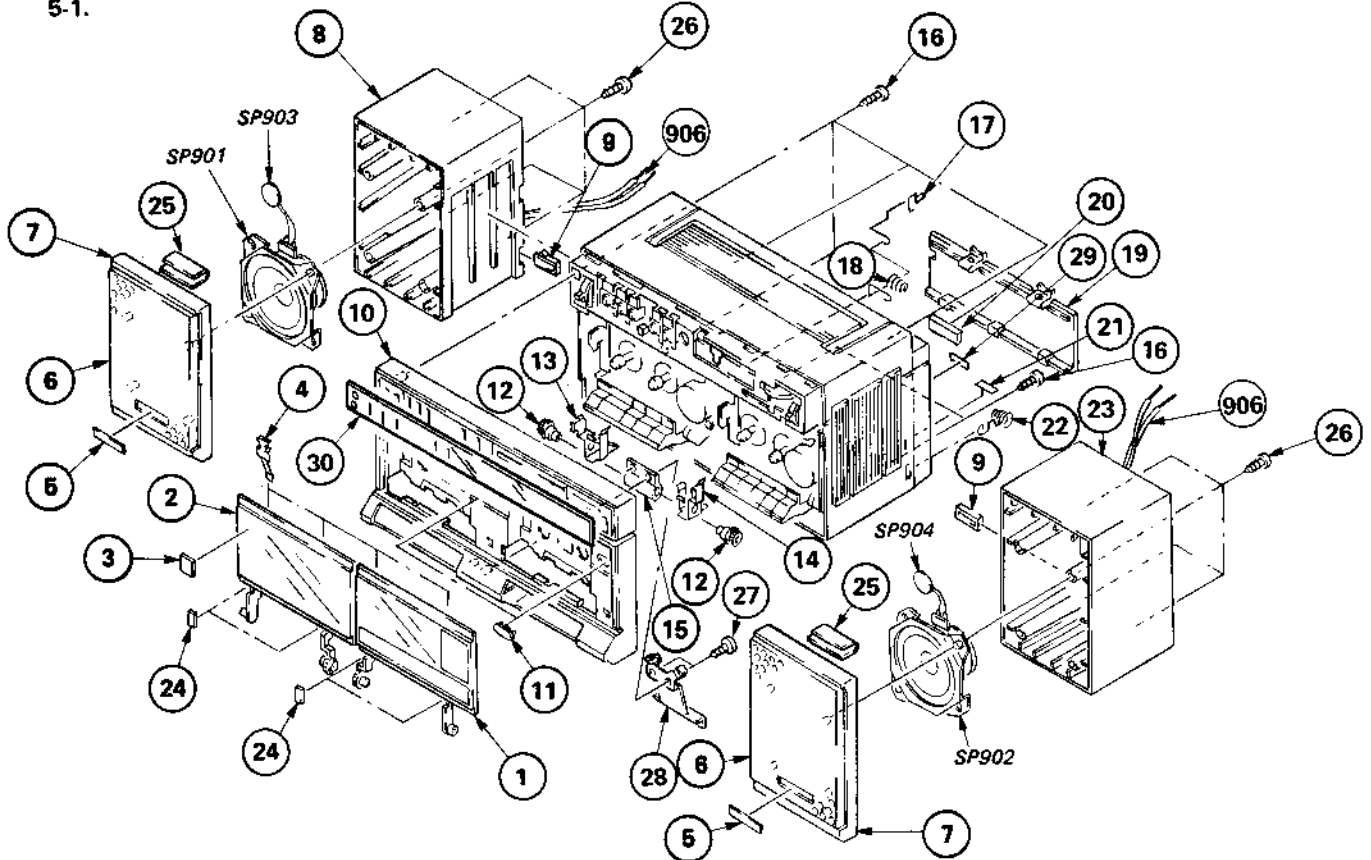
**NOTE:**

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- The construction parts of an assembled part are indicated with a collation number in the remark column.

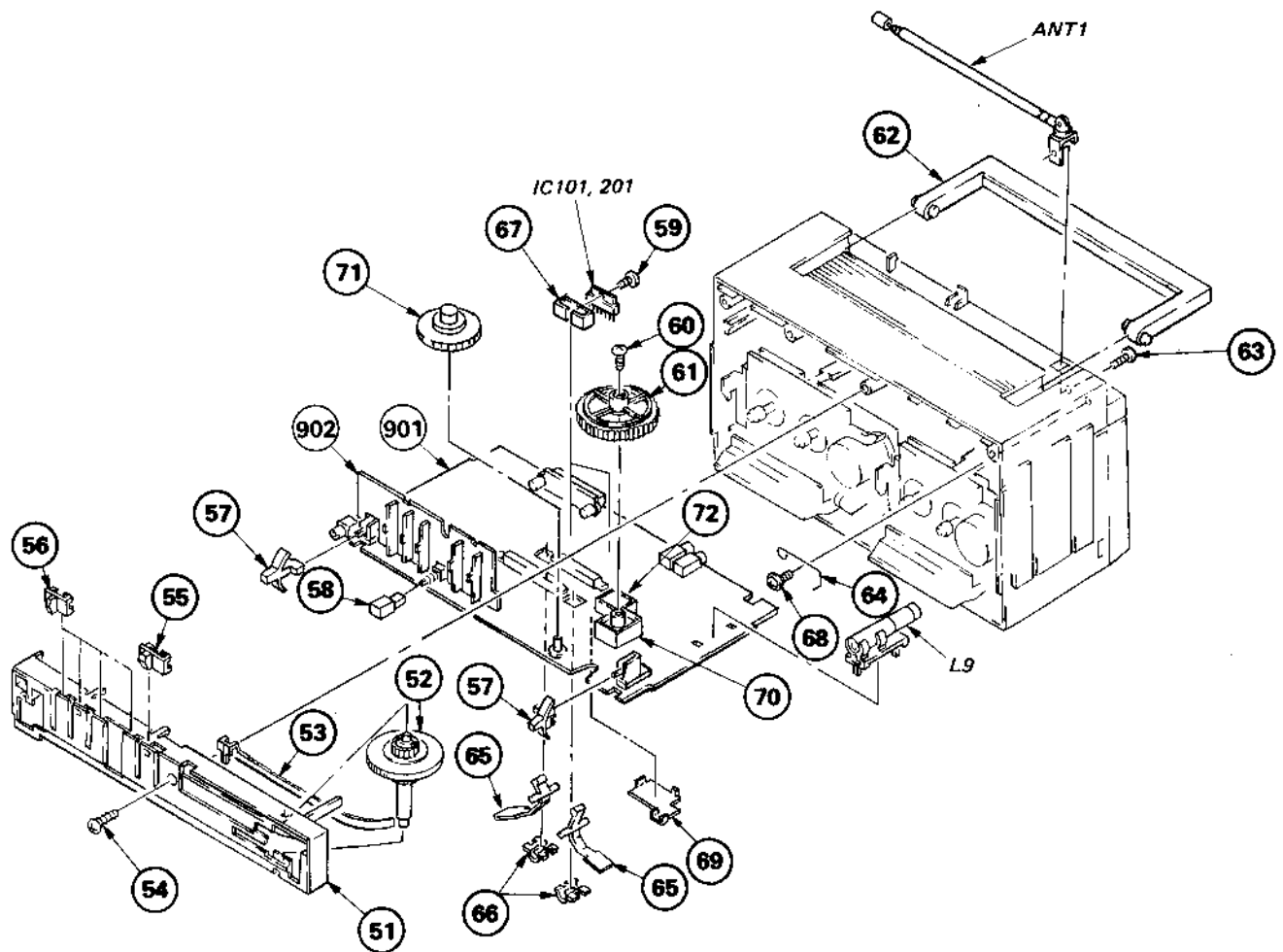
The components identified by shading and mark are critical for safety. Replace only with part number specified.

5-1.



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	3-330-719-11	HOLDER (RIGHT), CASSETTE		19	3-327-938-01	(SILVER)...LID, BATTERY CASE	
2	3-330-720-01	HOLDER (LEFT), CASSETTE			3-327-938-11	(BLACK)...LID, BATTERY CASE	
3	3-703-707-01	STICKER, SONY SYMBOL (21)		20	4-308-878-XX	CUSHION, BATTERY	
4	3-308-823-01	SPRING		21	3-527-213-00	(AEP)...LABEL, SERIAL NUMBER	
5	3-849-510-01	BADGE, SONY		22	*3-327-910-01	TERMINAL, BATTERY	
6	3-327-915-01	GRILLE, SPEAKER		23	3-319-548-01	(SILVER)...BOX (REAR)(RIGHT), SPK	
7	3-330-721-01	(SILVER)...BOX (FRONT), SPK			3-322-366-11	(BLACK)...BOX (REAR)(RIGHT), SPK	
8	3-319-549-01	(SILVER)...BOX (REAR)(LEFT), SPK		24	9-911-845-XX	CUSHION (A)	
	3-322-367-11	(BLACK)...BOX (REAR)(LEFT), SPK		25	*3-846-311-00	SPACER (D)	
9	3-319-266-01	CLAW, SPK LOCK		26	7-685-648-71	SCREW +BVTP 3X12 TYPE2 N-S	
10	3-330-722-01	(SILVER)...CABINET, FRONT		27	7-685-647-14	SCREW +BVTP 3X10 TYPE2 N-S	
	3-330-722-11	(BLACK)...CABINET, FRONT		28	*3-330-703-01	HOLDER, SPRING	
11	3-327-913-01	(SILVER)...CAP, ADJUSTMENT HOLE		29	3-701-999-02	(UK)...LABEL, SERIAL NUMBER	
	3-327-913-11	(BLACK)...CAP, ADJUSTMENT HOLE		30	3-330-718-01	PLATE, INDICATION	
12	3-326-411-01	GEAR, EJECT		906	1-557-463-11	CORD, SPEAKER	
13	3-327-933-01	SPRING (LEFT)		SP901	1-503-527-11	SPEAKER	
14	3-327-932-01	SPRING (RIGHT)		SP902	1-503-527-11	SPEAKER	
15	*3-327-902-01	BRACKET, EJECT		SP903	1-529-030-21	BUZZER	
16	7-685-651-11	SCREW +BVTP 3X20 TYPE1		SP904	1-529-030-21	BUZZER	
17	3-327-912-01	TERMINAL, PLUS					
18	3-327-911-01	TERMINAL, MINUS					

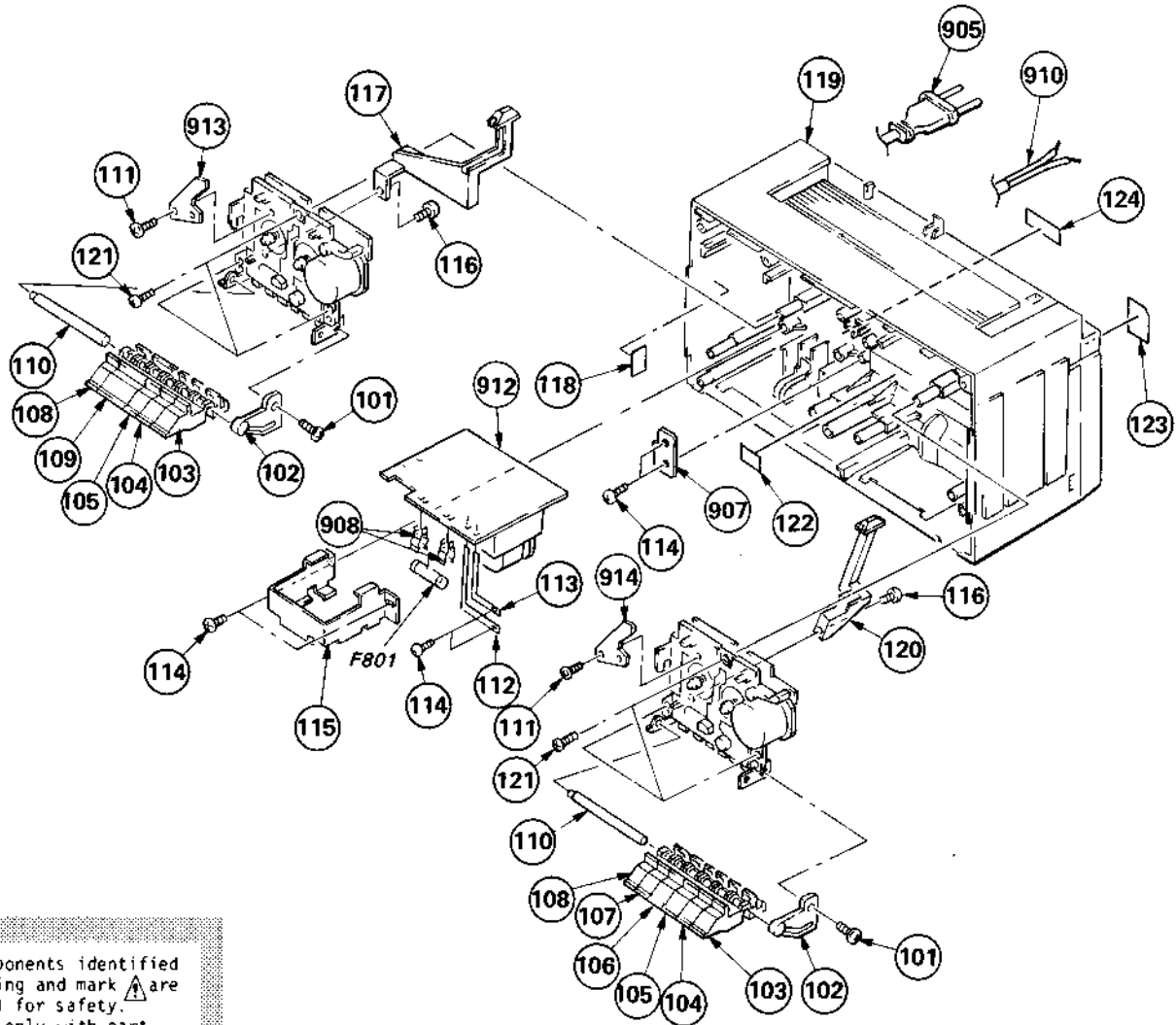
5-2.





No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
51	3-327-934-01	CHASSIS		65	3-327-906-01	LEVER, SW	
52	3-327-917-01	KNOB, TUN		66	3-319-541-01	BRACKET, REC LEVER	
53	*3-327-914-11	RACK, DIAL		67	*3-327-949-01	HEAT SINK	
54	7-685-647-14	SCREW +BVTP 3X10 TYPE2 N-S		68	4-303-483-00	HEAD, WASHER, TAPPING SCREW	
55	3-327-905-11	KNOB, VOL		69	*3-327-960-01	PLATE, SHIELD	
56	3-327-904-11	KNOB, GEQ		70	*3-327-961-01	CASE (B), SHIELD	
57	3-327-943-01	KNOB, BAND		71	3-327-944-01	KNOB, FINE TUNE	
58	3-322-334-11	KNOB, REC MUTE		72	*3-327-948-01	CASE, SHIELD	
59	7-682-546-04	SCREW +P 3X5		901	*A-3260-362-A	MOUNTED PCB, MAIN	
60	7-621-770-67	SCREW +P 2.6X6		902	*A-3279-483-A	(AEP)...MOUNTED PCB, GEQ	
61	3-327-901-01	GEAR, VC			A-3279-484-A	(UK)...MOUNTED PCB, GEQ	
62	3-327-916-01	(SILVER)...HANDLE		918	1-536-834-11	TERMINAL BOARD (SPEAKER)	
	3-327-916-11	(BLACK)...HANDLE		ANT102	1-501-306-11	ANTENNA, TELESCOPIC	
63	7-682-552-04	SCREW +B 3X16					
64	*3-327-909-01	SPRING					



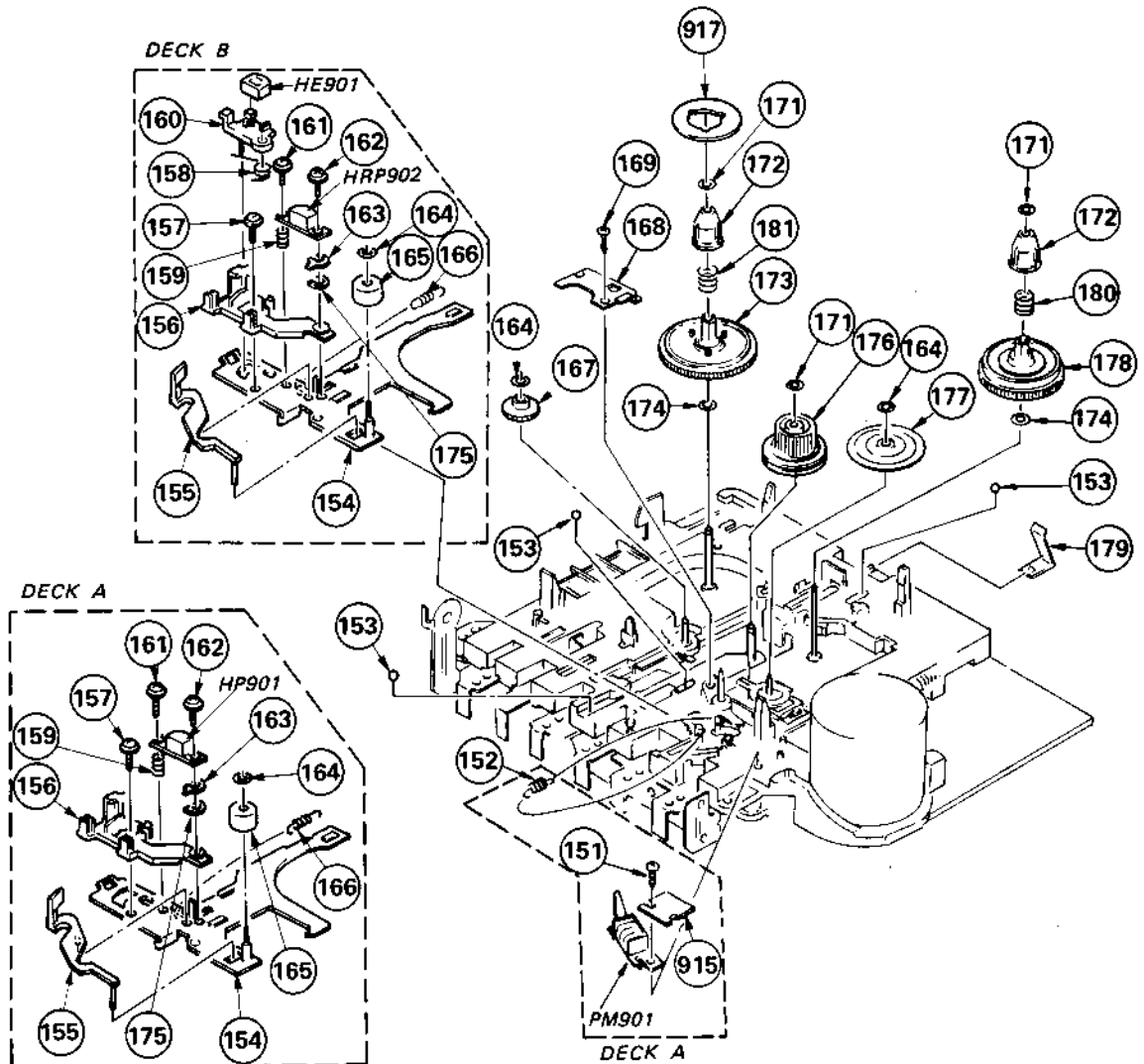
5-3.



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

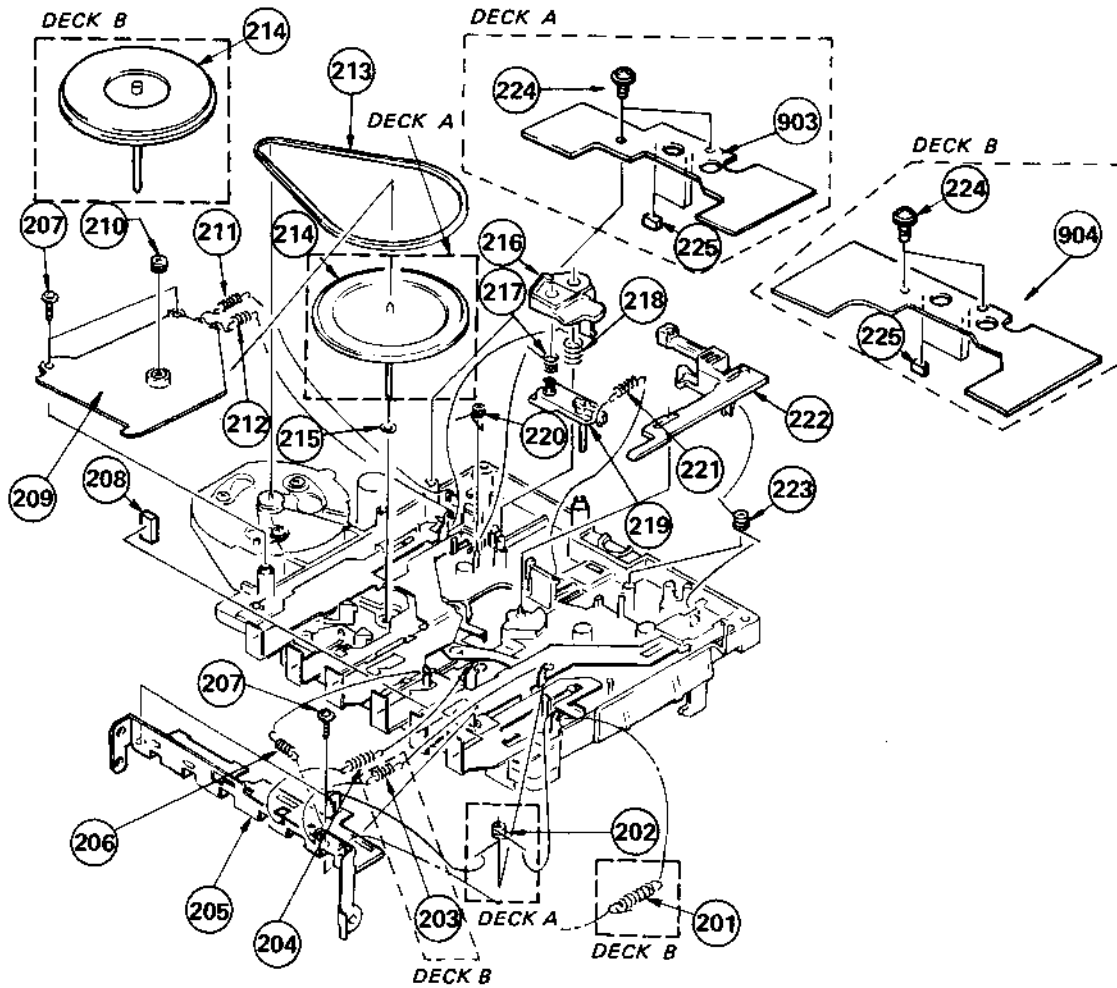
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
101	7-682-547-04	SCREW +P 3X6		117	3-327-927-01	ARM, PLAY	
102	*3-327-903-01	BEARING, MD BUTTON		118	*3-703-044-26	LABEL, CAUTION	
103	3-327-920-01	BUTTON, PAUSE		119	3-327-940-21	(SILVER)...CABINET, REAR	
104	3-327-924-01	BUTTON, FF			3-327-940-31	(BLACK)...CABINET, REAR	
105	3-327-921-01	BUTTON, REW		120	3-327-926-01	ARM, REC	
106	3-327-923-01	BUTTON (RIGHT), PLAY		121	7-685-648-71	SCREW +BVTP 3X12 TYPE2 N-S	
107	3-327-922-01	BUTTON, REC		122	*3-330-711-01	(AEP)...LABEL, CORD	
108	3-327-918-01	BUTTON, S/E		123	3-330-717-01	LABEL, MODEL NUMBER (AEP)	
109	3-327-919-01	BUTTON (LEFT), PLAY		124	3-703-845-01	(UK)...LABEL, (N)(U/C) MAIN CAUTION	
110	3-319-513-01	SHAFT, MD BUTTON		905	 1-551-908-00	CORD, POWER, EURO PLUG	
111	7-685-133-14	SCREW +P 2.6X6 TYPE2 SLIT		907	*1-616-248-11	PC BOARD, CORD CLAMP	
112	*3-327-907-01	TERMINAL BOARD (A), POWER		908	1-533-162-00	HOLDER, FUSE	
113	*3-327-908-01	TERMINAL BOARD (B), POWER		910	1-555-001-12	(UK)...CORD, POWER	
114	7-685-647-14	SCREW +BVTP 3X10 TYPE2 N-S		912	*1-616-249-21	PC BOARD, POWER	
115	*3-327-931-01	BRACKET, TRANSFORMER		913	*1-616-417-11	PC BOARD, DME (A)	
116	7-685-793-04	SCREW +BVTT 2.6X8 (S)		914	1-616-417-11	PC BOARD, DME (B)	

5-4.



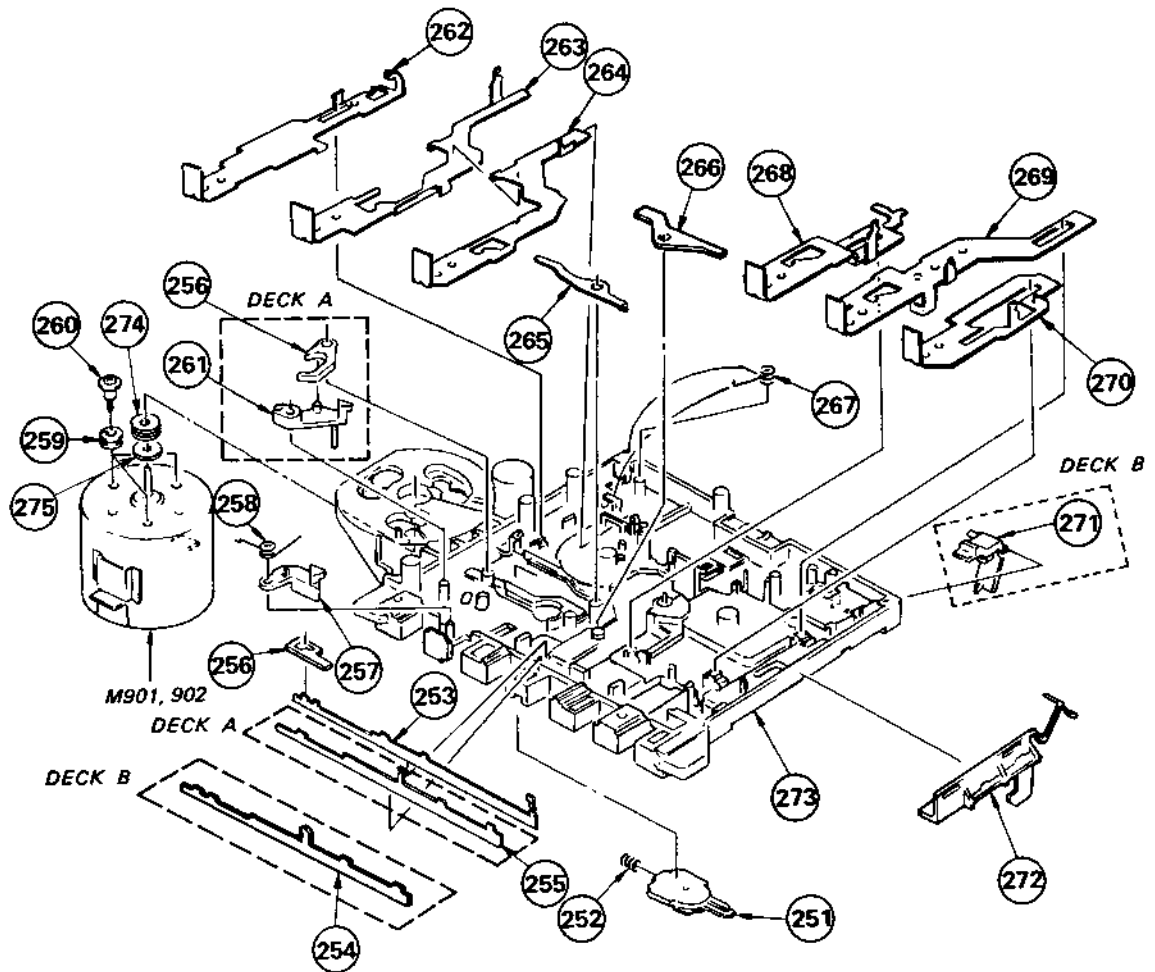
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
151	7-685-105-14	SCREW (2X8), +PTPH		169	7-685-133-14	SCREW +P 2.6X6 TYPE2 SLIT	
152	3-313-384-01	(DECK A)...SPRING, TENSION		171	3-558-708-01	WASHER, STOPPER	
153	7-671-112-11	BALL, STEEL		172	3-313-333-00	CLAW, REEL	
154	X-3313-311-1	CHASSIS ASSY		173	3-313-305-00	TABLE, REEL, SUPPLY	
155	3-313-316-00	PULLEY		174	3-701-437-21	WASHER	
156	3-334-717-01	BRACKET (M), HEAD		175	3-578-138-01	SEAM (t=0.1)	
157	7-621-955-35	SCREW (2MMX5), +PWH			3-578-138-11	SEAM (t=0.2)	
158	3-313-339-00	(DECK B)...SPRING			3-578-138-21	SEAM (t=0.3)	
159	3-313-340-00	SPRING, COMPRESSION		176	X-3313-310-1	(DECK A)...IDLER ASSY, FR	
160	3-313-361-00	(DECK B)...ARM, ERASE HEAD			X-3313-312-1	(DECK B)...IDLER ASSY, FR	
161	3-701-465-00	SCREW, LOCK		177	X-3313-307-0	PULLEY ASSY, FWD	
162	7-621-772-40	SCREW +B 2X8		178	A-3130-031-A	TABLE ASSY, REEL, TAKE-UP	
163	3-331-108-01	LUG (T), SEAM (t=0.1)		179	3-313-902-00	SPRING	
	3-331-108-11	LUG (T), SEAM (t=0.2)		180	3-324-213-01	SPRING, COMPRESSION	
	3-331-108-21	LUG (T), SEAM (t=0.3)		181	3-324-214-01	SPRING, COMPRESSION	
	3-331-108-31	LUG (T), SEAM (t=0.4)		915	*1-602-735-00	(DECK A)...PC BOARD	
	3-331-108-41	LUG (T), SEAM (t=0.5)		917	1-452 209-11	MAGNET	
164	3-307-948-01	WASHER, NYLON		HE901	8-658-096-02	(DECK B)...HEAD, ERASE EBF 5-36	
165	3-703-597-41	PINCH ROLLER, STANDARD		HP901	1-543-283-11	(DECK A)...HEAD, MAGNETIC (REC/PB)	
166	3-313-342-00	SPRING, TENSION		HRP902	1-543-283-11	(DECK B)...HEAD, MAGNETIC (REC/PB)	
167	3-558-620-11	GEAR, REWIND		PM901	1-454-395-00	(DECK A)...SOLENOID, PLUNGER	
168	3-313-328-00	SPRING					

5-5.



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
201	3-313-372-01	(DECK B)...SPRING, TENSION		214	A-3109-028-A	(DECK B)...FLYWHEEL ASSY (NS)	
202	3-313-331-00	(DECK A)...SPRING			A-3109-175-A	(DECK A)...FLYWHEEL (W) ASSY	
203	3-322-529-01	(DECK B)...SPRING TENSION		215	3-313-387-01	WASHER, THRUST (t=0.3)	
204	3-313-369-00	SPRING, TENSION			3-313-387-11	WASHER, THRUST (t=0.4)	
205	*3-313-382-01	RETAINER, LEVER		216	3-313-314-00	LEVER (SI), FR	
206	3-313-272-01	(DECK B)...SPRING TENSION		217	3-313-313-00	SPRING	
	3-322-343-00	(DECK A)...SPRING		218	3-313-315-00	SPRING	
207	7-687-234-11	SCREW +PTPWH 2.6X8		219	X-3313-304-0	ARM ASSY, REW	
208	9-911-837-XX	CUSHION, BUTTON		220	3-313-338-00	SPRING	
209	*3-313-319-00	RETAINER, FLY		221	3-313-365-00	SPRING, TENSION	
210	3-570-205-00	SCREW, THRUST		222	3-313-356-00	BRAKE	
211	3-313-349-00	SPRING, TENSION		223	3-313-327-00	SPRING	
212	3-313-348-00	SPRING, TENSION		224	7-687-234-11	SCREW +PTPWH 2.6X8	
213	3-313-389-01	BELT		225	3-315-203-00	SPACER, LEAF	
				903	*A-3279-479-A	MOUNTED PCB, MD (A)	
				904	*A-3279-537-A	MOUNTED PCB, MD (B)	

5-6.



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
251	X-3313-301-0	BRACKET ASSY, T PULLEY		264	*3-313-353-21	LEVER, FF BUTTON	
252	3-573-464-00	SPRING, COMPRESSION		265	*3-313-320-00	LEVER, RCP	
253	*3-313-352-00	PLATE (B), LOCK		266	*3-313-321-11	LEVER, RFR PREVENTION	
254	*3-313-351-11	(DECK B)...PLATE (A), LOCK		267	3-313-378-01	SPRING (A)	
255	*3-313-351-00	(DECK A)...PLATE (A), LOCK		268	*3-313-326-21	LEVER, FWD BUTTON	
256	*3-313-337-00	CHIP, JOINT, S.OFF		269	*3-313-350-21	LEVER, REC BUTTON	
257	3-313-322-02	LEVER (A), S.OFF		270	*3-313-325-21	LEVER, STOP BUTTON	
258	3-313-323-00	SPRING		271	3-313-357-00	(DECK B)...CLAW, REC PREVENTION	
259	3-570-118-00	CUSHION, MOTOR		272	3-313-383-01	CLAW (B), EJECT	
260	3-570-027-00	SCREW, MOTOR		273	A-3102-059-A	CHASSIS ASSY, MECHANICAL	
261	X-3313-306-0	(DECK A)...LEVER (B) ASSY, SHUT-OFF		274	X-3330-617-1	PULLEY (S), MOTOR	
262	*3-313-381-21	LEVER (B), PAUSE BUTTON		M901	A-3133-251-A	(DECK A)...MOTOR ASSY	
263	*3-313-354-21	LEVER, REW BUTTON		M902	A-3133-251-A	(DECK B)...MOTOR ASSY	

SECTION 6  
ELECTRICAL PARTS LIST

NOTE:

Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:

MF:μF, PF:μμF.

RESISTORS


All resistors are in ohms.  
F : nonflammable

COILS


MMH : mH, UH : μH

SEMICONDUCTORS

In each case, U : μ, for example:  
UA...: μA..., UPA...: μPA..., UPC...: μPC,  
UPD...: μPD...

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

ELECTRICAL PARTS


Ref.No.	Part No.	Description
901	*A-3260-362-A	MOUNTED PCB, MAIN
902	*A-3279-483-A A-3279-484-A	(AEP)...MOUNTED PCB, GEQ (UK)...MOUNTED PCB, GEQ
903	*A-3279-479-A	MOUNTED PCB, MD (A)
904	*A-3279-537-A	MOUNTED PCB, MD (B)
905	 1-551-908-00	CORD, POWER, EURO PLUG
906	1-557-463-11	CORD, SPEAKER
907	*1-616-248-11	PC BOARD, CORD CLAMP
908	1-533-162-00	HOLDER, FUSE
910	1-555-001-12	(UK)...CORD, POWER
912	*1-616-249-21	PC BOARD, POWER
913	*1-616-417-11	PC BOARD, DME (A)
914	1-616-417-11	PC BOARD, DME (B)
915	*1-602-735-00	(DECK A)...PC BOARD
917	1-452-209-11	MAGNET
918	1-536-834-11	TERMINAL BOARD (SPEAKER)
ANT102	1-501-306-11	ANTENNA, TELESCOPIC
C1	1-102-110-00	CERAMIC 220PF 10% 50V
C3	1-101-001-00	CERAMIC 0.001MF 50V
C4	1-101-004-00	CERAMIC 0.01MF 50V
C5	1-101-004-00	CERAMIC 0.01MF 50V
C6	1-101-880-00	CERAMIC 47PF 5% 50V
C7	1-102-961-00	CERAMIC 27PF 5% 50V
C8	1-102-936-00	CERAMIC 3PF 0.25PF 50V
C9	1-102-944-00	CERAMIC 7PF 0.5PF 50V
C10	1-102-113-00	CERAMIC 390PF 10% 50V
C11	1-101-004-00	CERAMIC 0.01MF 50V
C12	1-101-004-00	CERAMIC 0.01MF 50V
C13	1-102-502-00	CERAMIC 2PF 0.25PF 50V
C14	1-102-645-00	CERAMIC 33PF 5% 50V
C15	1-101-004-00	CERAMIC 0.01MF 50V
C16	1-102-508-00	CERAMIC 10PF 0.5PF 50V
C19	1-101-005-00	CERAMIC 0.022MF 50V
C20	1-101-005-00	CERAMIC 0.022MF 50V
C21	1-101-005-00	CERAMIC 0.022MF 50V
C22	1-123-306-00	ELECT 47MF 20% 10V
C25	1-101-005-00	CERAMIC 0.022MF 50V
C26	1-102-948-00	CERAMIC 11PF 5% 50V
C27	1-102-890-00	CERAMIC 36PF 5% 50V
C28	1-102-508-00	CERAMIC 10PF 0.5PF 50V
C29	1-102-281-00	CERAMIC 5PF 0.5PF 50V
C30	1-103-740-00	POLYSTYRENE 0.0043MF 5% 50V
C31	1-102-751-00	CERAMIC 22PF 5% 50V
C32	1-104-067-00	POLYSTYRENE 390PF 5% 50V
C33	1-103-711-00	POLYSTYRENE 270PF 5% 50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description
C34	1-103-711-00	POLYSTYRENE 270PF 5% 50V
C35	1-101-006-00	CERAMIC 0.047MF 50V
C36	1-123-330-00	ELECT 22MF 20% 25V
C37	1-102-973-00	CERAMIC 100PF 5% 50V
C39	1-101-006-00	CERAMIC 0.047MF 50V
C40	1-101-005-00	CERAMIC 0.022MF 50V
C41	1-123-356-00	ELECT 10MF 20% 50V
C42	1-101-882-00	CERAMIC 51PF 5% 50V
C44	1-161-055-00	CERAMIC 0.022MF 10% 25V
C45	1-161-056-00	CERAMIC 0.027MF 10% 25V
C46	1-102-973-00	CERAMIC 100PF 5% 50V
C49	1-102-973-00	CERAMIC 100PF 5% 50V
C50	1-102-973-00	CERAMIC 100PF 5% 50V
C51	1-123-379-00	ELECT 0.47MF 20% 50V
C52	1-123-380-00	ELECT 1MF 20% 50V
C53	1-123-382-00	ELECT 3.3MF 20% 50V
C54	1-104-077-00	POLYSTYRENE 0.001MF 5% 50V
C55	1-123-382-00	ELECT 3.3MF 20% 50V
C56	1-123-306-00	ELECT 47MF 20% 10V
C57	1-161-052-00	CERAMIC 0.012MF 10% 25V
C58	1-161-052-00	CERAMIC 0.012MF 10% 25V
C59	1-123-379-00	ELECT 0.47MF 20% 50V
C60	1-123-379-00	ELECT 0.47MF 20% 50V
C61	1-101-880-00	CERAMIC 47PF 5% 50V
C101	1-123-356-00	ELECT 10MF 20% 50V
C102	1-102-114-00	CERAMIC 470PF 10% 50V
C103	1-102-110-00	CERAMIC 220PF 10% 50V
C104	1-123-306-00	ELECT 47MF 20% 10V
C105	1-130-489-00	MYLAR 0.033MF 5% 50V
C106	1-130-491-00	MYLAR 0.047MF 5% 50V
C107	1-136-164-00	FILM 0.082MF 5% 50V
C109	1-123-379-00	ELECT 0.47MF 20% 50V
C110	1-123-379-00	ELECT 0.47MF 20% 50V
C111	1-102-114-00	CERAMIC 470PF 10% 50V
C112	1-102-962-21	CERAMIC 30PF 5% 50V
C113	1-102-114-00	CERAMIC 470PF 10% 50V
C114	1-123-379-00	ELECT 0.47MF 20% 50V
C115	1-123-380-00	ELECT 1MF 20% 50V
C116	1-102-110-00	CERAMIC 220PF 10% 50V
C117	1-102-973-00	CERAMIC 100PF 5% 50V
C118	1-123-369-00	ELECT 4.7MF 20% 50V
C119	1-136-156-00	MYLAR 0.018MF 5% 50V
C120	1-130-485-00	MYLAR 0.015MF 5% 50V
C121	1-123-369-00	ELECT 4.7MF 20% 50V
C122	1-130-471-00	MYLAR 0.001MF 5% 50V
C125	1-102-074-00	CERAMIC 0.001MF 10% 50V

## ELECTRICAL PARTS

Ref.No.	Part No.	Description				
C126	1-123-330-00	ELECT	22MF	20%	25V	
C127	1-123-307-00	ELECT	100MF	20%	10V	
C129	1-161-057-00	CERAMIC	0.033MF	10%	25V	
C130	1-123-333-00	ELECT	100MF	20%	16V	
C131	1-123-333-00	ELECT	100MF	20%	16V	
C132	1-136-169-00	FILM	0.22MF	5%	50V	
C133	1-136-169-00	FILM	0.22MF	5%	50V	
C134	1-136-169-00	FILM	0.22MF	5%	50V	
C135	1-136-169-00	FILM	0.22MF	5%	50V	
C136	1-123-379-00	ELECT	0.47MF	20%	50V	
C137	1-102-112-00	CERAMIC	330PF	10%	50V	
C138	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C139	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C140	1-123-369-00	ELECT	4.7MF	20%	50V	
C301	1-123-310-00	ELECT	470MF	20%	10V	
C302	1-123-308-00	ELECT	220MF	20%	10V	
C303	1-123-308-00	ELECT	220MF	20%	10V	
C304	1-123-324-00	ELECT	1000MF	20%	16V	
C305	1-123-369-00	ELECT	4.7MF	20%	50V	
C306	1-123-308-00	ELECT	220MF	20%	10V	
C307	1-130-479-00	MYLAR	0.0047MF	5%	50V	
C308	1-123-306-00	ELECT	47MF	20%	10V	
C309	1-130-467-00	MYLAR	470PF	5%	50V	
C310	1-101-880-00	CERAMIC	47PF	5%	50V	
C311	1-102-973-00	CERAMIC	100PF	5%	50V	
C312	1-101-004-00	CERAMIC	0.01MF		50V	
C313	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C314	1-123-308-00	ELECT	220MF	20%	10V	
C320	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C321	1-123-308-00	ELECT	220MF	20%	10V	
C322	1-123-306-00	ELECT	47MF	20%	10V	
C323	1-123-356-00	ELECT	10MF	20%	50V	
C324	1-123-356-00	ELECT	10MF	20%	50V	
C325	1-123-356-00	ELECT	10MF	20%	50V	
C326	1-123-332-00	ELECT	47MF	20%	25V	
C327	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C328	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C329	1-102-973-00	CERAMIC	100PF	5%	50V	
C330	1-123-356-00	ELECT	10MF	20%	50V	
C340	1-102-122-00	CERAMIC	0.0027MF	10%	50V	
C341	1-102-122-00	CERAMIC	0.0027MF	10%	50V	
C401	1-123-306-00	ELECT	47MF	20%	10V	
C402	1-123-308-00	ELECT	220MF	20%	10V	
C501	1-123-379-00	ELECT	0.47MF	20%	50V	
C502	1-123-379-00	ELECT	0.47MF	20%	50V	
C503	1-161-059-00	CERAMIC	0.047MF	10%	25V	
C504	1-161-023-00	CERAMIC	0.068MF	10%	25V	
C505	1-161-049-00	CERAMIC	0.0068MF	10%	25V	
C506	1-161-012-00	CERAMIC	0.0082MF	10%	25V	
C507	1-102-117-00	CERAMIC	820PF	10%	50V	
C508	1-102-973-00	CERAMIC	100PF	5%	50V	
C509	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C510	1-123-380-00	ELECT	1MF	20%	50V	
C511	1-123-369-00	ELECT	4.7MF	20%	50V	
C512	1-110-196-00	MYLAR	0.0012MF	5%	50V	

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

## ELECTRICAL PARTS

Ref.No.	Part No.	Description				
C701	1-123-369-00	ELECT	4.7MF	20%	50V	
C702	1-123-330-00	ELECT	22MF	20%	25V	
C703	1-123-332-00	ELECT	47MF	20%	25V	
C704	1-123-318-00	ELECT	33MF	20%	16V	
C705	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C706	1-123-379-00	ELECT	0.47MF	20%	50V	
C707	1-136-169-00	FILM	0.22MF	5%	50V	
C708	1-123-379-00	ELECT	0.47MF	20%	50V	
C709	1-123-382-00	ELECT	3.3MF	20%	50V	
C710	1-123-306-00	ELECT	47MF	20%	10V	
C711	1-123-332-00	ELECT	47MF	20%	25V	
C731	1-123-333-00	ELECT	100MF	20%	16V	
C751	1-123-369-00	ELECT	4.7MF	20%	50V	
C752	1-123-330-00	ELECT	22MF	20%	25V	
C753	1-123-332-00	ELECT	47MF	20%	25V	
C754	1-123-318-00	ELECT	33MF	20%	16V	
C755	1-123-333-00	ELECT	100MF	20%	16V	
C801	1-101-005-00	CERAMIC	0.022MF		50V	
C802	1-101-005-00	CERAMIC	0.022MF		50V	
C803	1-101-005-00	CERAMIC	0.022MF		50V	
C804	1-101-005-00	CERAMIC	0.022MF		50V	
C805	1-123-500-00	ELECT	3300MF		25V	
CF1	1-527-808-00	FILTER, CERAMIC				
CF2	1-527-808-00	FILTER, CERAMIC				
CF3	1-527-865-00	FILTER, CERAMIC				
CNJ3	*1-562-560-11	SOCKET, CONNECTOR 9P				
CNJ4	*1-562-560-11	SOCKET, CONNECTOR 9P				
CNJ5	*1-561-696-00	SOCKET, CONNECTOR 2P				
CNP1	*1-508-912-00	PIN, CONNECTOR 3P				
CNP2	1-508-913-00	PIN, CONNECTOR 4P				
CNP3	*1-506-667-11	PIN, CONNECTOR 9P				
CNP4	*1-506-667-11	PIN, CONNECTOR 9P				
CNP5	*1-560-596-00	PIN, CONNECTOR 2P				
CP1	1-231-720-00	FILTER, BANDPASS				
CT1-4	1-151-498-11	CAP, VAR, POLYETHYLENE				
CV1-4						
CT5	1-141-290-11	CAP, FILM TRIMMER				
CT6	1-141-245-00	TRIMMER, CERAMIC				
CT7	1-141-290-11	CAP, FILM TRIMMER				
CT8	1-141-245-00	TRIMMER, CERAMIC				
D1	8-719-911-19	DIODE 1SS119				
D2	8-719-911-19	DIODE 1SS119				
D3	8-719-713-93	DIODE 1S2839C				
D101	8-719-911-19	DIODE 1SS119				
D102	8-719-911-19	DIODE 1SS119				
D201	8-719-911-19	DIODE 1SS119				
D202	8-719-911-19	DIODE 1SS119				
D301	8-719-911-19	DIODE 1SS119				
D302	8-719-911-19	DIODE 1SS119				
D303	8-719-100-41	DIODE RD6.8E-82				
D304	8-719-911-19	DIODE 1SS119				
D305	8-719-911-19	DIODE 1SS119				
D306	8-719-911-19	DIODE 1SS119				
D307	8-719-903-39	DIODE SLP135B-55				
D308	8-719-911-19	DIODE 1SS119				

## ELECTRICAL PARTS

Ref.No.	Part No.	Description
D309	8-719-911-19	DIODE 1SS119
D312	8-719-911-19	DIODE 1SS119
D351	8-719-911-19	DIODE 1SS119
D352	8-719-911-19	DIODE 1SS119
D353	8-719-911-19	DIODE 1SS119
D354	8-719-911-19	DIODE 1SS119
D701	8-719-911-19	DIODE 1SS119
D702	8-719-911-19	DIODE 1SS119
D751	8-719-911-19	DIODE 1SS119
D781	8-719-911-19	DIODE 1SS119
D801 <sup>▲</sup>	8-719-200-02	DIODE 10E2
D802 <sup>▲</sup>	8-719-200-02	DIODE 10E2
D803 <sup>▲</sup>	8-719-200-02	DIODE 10E2
D804 <sup>▲</sup>	8-719-200-02	DIODE 10E2
F801 <sup>▲</sup>	1-532-203-00	FUSE, TIME-LAG
HE901	8-658-096-02	(DECK B)...HEAD, ERASE EBF 5-36
HP901	1-543-283-11	(DECK A)...HEAD, MAGNETIC (REC/PB)
HRP902	1-543-283-11	(DECK B)...HEAD, MAGNETIC (REC/PB)
IC1	8-759-801-24	IC LA1260S
IC2	8-759-203-87	IC TA7343AP
IC101	1-806-765-11	IC TA7232P
IC201	1-806-765-11	IC TA7232P
IC301	8-759-800-66	IC LA3161
IC302	8-759-800-66	IC LA3161
IC401	8-759-145-58	IC UPC4558C
IC701	8-759-800-71	IC LA2010
J101	1-507-578-00	JACK (EXT MIC L)
J201	1-507-578-00	JACK (EXT MIC R)
J301	1-507-806-00	JACK (PHONES)
L2	1-425-180-11	COIL, FM RF
L3	*1-409-293-00	COIL, AIR CORE
L4	*1-425-873-00	COIL
L5	*1-409-293-00	COIL, AIR CORE
L8	1-402-103-11	COIL, ANT (SW)
L9	1-402-176-11	ANTENNA, FERRITE-ROD (LW/MM)
L10	1-406-105-11	COIL, OSC (SW)
L11	1-406-059-00	COIL, OSC
L12	1-406-126-11	COIL, LW OSC
L101	1-407-961-00	MICRO INDUCTOR 2.7MMH
L201	1-407-961-00	MICRO INDUCTOR 2.7MMH
L501	1-409-389-11	COIL, TRAP
L502	1-409-389-11	COIL, TRAP
M901	A-3133-251-A	(DECK A)...MOTOR ASSY
M902	A-3133-251-A	(DECK B)...MOTOR ASSY
PM901	1-454-355-00	(DECK A)...SOLENOID, PLUNGER
Q1	8-729-883-91	TRANSISTOR 2SC2839D
Q2	8-729-883-91	TRANSISTOR 2SC2839D
Q3	8-729-883-92	TRANSISTOR 2SC2839
Q101	8-729-245-83	TRANSISTOR 2SC2458
Q102	8-729-245-83	TRANSISTOR 2SC2458
Q103	8-729-245-83	TRANSISTOR 2SC2458

## ELECTRICAL PARTS

Ref.No.	Part No.	Description			
Q105	8-729-245-83	TRANSISTOR 2SC2458			
Q106	8-729-245-83	TRANSISTOR 2SC2458			
Q201	8-729-245-83	TRANSISTOR 2SC2458			
Q202	8-729-245-83	TRANSISTOR 2SC2458			
Q203	8-729-245-83	TRANSISTOR 2SC2458			
Q205	8-729-245-83	TRANSISTOR 2SC2458			
Q206	8-729-245-83	TRANSISTOR 2SC2458			
Q301	8-729-245-83	TRANSISTOR 2SC2458			
Q302	8-729-245-83	TRANSISTOR 2SC2458			
Q304	8-729-100-13	TRANSISTOR 2SC2001			
Q308	8-729-117-54	TRANSISTOR 2SA1175			
Q309	8-729-245-83	TRANSISTOR 2SC2458			
Q351	8-729-245-83	TRANSISTOR 2SC2458			
Q501	8-729-245-83	TRANSISTOR 2SC2458			
Q502	8-729-245-83	TRANSISTOR 2SC2458			
Q503	8-729-245-83	TRANSISTOR 2SC2458			
Q601	8-729-245-83	TRANSISTOR 2SC2458			
Q602	8-729-245-83	TRANSISTOR 2SC2458			
Q603	8-729-245-83	TRANSISTOR 2SC2458			
Q701	8-729-117-54	TRANSISTOR 2SA1175			
Q702	8-729-245-83	TRANSISTOR 2SC2458			
Q703	8-729-245-83	TRANSISTOR 2SC2458			
Q704	8-729-245-83	TRANSISTOR 2SC2458			
Q731	8-729-117-54	TRANSISTOR 2SA1175			
Q751	8-729-117-54	TRANSISTOR 2SA1175			
Q752	8-729-245-83	TRANSISTOR 2SC2458			
Q753	8-729-245-83	TRANSISTOR 2SC2458			
Q754	8-729-245-83	TRANSISTOR 2SC2458			
Q781	8-729-127-54	TRANSISTOR 2SA1175			
R2	1-247-783-00	CARBON	10	5%	1/6W
R3	1-247-889-00	CARBON	270K	5%	1/6W
R4	1-247-831-00	CARBON	1K	5%	1/6W
R5	1-247-843-00	CARBON	3.3K	5%	1/6W
R6	1-247-831-00	CARBON	1K	5%	1/6W
R7	1-247-889-00	CARBON	270K	5%	1/6W
R8	1-247-787-00	CARBON	15	5%	1/6W
R9	1-247-819-00	CARBON	330	5%	1/6W
R10	1-247-843-00	CARBON	3.3K	5%	1/6W
R11	1-247-889-00	CARBON	270K	5%	1/6W
R12	1-247-805-00	CARBON	82	5%	1/6W
R16	1-247-852-00	CARBON	7.5K	5%	1/6W
R18	1-247-879-00	CARBON	100K	5%	1/6W
R19	1-247-831-00	CARBON	1K	5%	1/6W
R20	1-247-831-00	CARBON	1K	5%	1/6W
R21	1-249-433-11	CARBON	22K	5%	1/6W
R22	1-249-421-11	CARBON	2.2K	5%	1/6W
R23	1-247-881-00	CARBON	120K	5%	1/6W
R24	1-247-881-00	CARBON	120K	5%	1/6W
R25	1-247-831-00	CARBON	1K	5%	1/6W
R51	1-247-831-00	CARBON	1K	5%	1/6W
R52	1-249-429-11	CARBON	10K	5%	1/6W
R53	1-247-887-00	CARBON	220K	5%	1/6W
R54	1-247-829-00	CARBON	820	5%	1/6W

The components identified by shading and mark <sup>▲</sup> are critical for safety. Replace only with part number specified.

# CFS-W440L

## ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R55	1-247-843-00	CARBON	3.3K	5%	1/6W
R56	1-247-843-00	CARBON	3.3K	5%	1/6W
R57	1-249-437-11	CARBON	47K	5%	1/6W
R58	1-249-437-11	CARBON	47K	5%	1/6W
R59	1-247-867-00	CARBON	33K	5%	1/6W
R60	1-247-867-00	CARBON	33K	5%	1/6W
R101	1-247-879-00	CARBON	100K	5%	1/6W
R102	1-247-807-00	CARBON	100	5%	1/6W
R103	1-247-829-00	CARBON	820	5%	1/6W
R104	1-249-425-11	CARBON	4.7K	5%	1/6W
R105	1-247-795-00	CARBON	33	5%	1/6W
R106	1-247-873-00	CARBON	56K	5%	1/6W
R107	1-249-425-11	CARBON	4.7K	5%	1/6W
R108	1-247-891-00	CARBON	330K	5%	1/6W
R109	1-247-811-00	CARBON	150	5%	1/6W
R110	1-249-421-11	CARBON	2.2K	5%	1/6W
R111	1-247-879-00	CARBON	100K	5%	1/6W
R112	1-247-849-00	CARBON	5.6K	5%	1/6W
R113	1-247-879-00	CARBON	100K	5%	1/6W
R114	1-247-819-00	CARBON	330	5%	1/6W
R115	1-247-872-00	CARBON	51K	5%	1/6W
R116	1-249-432-11	CARBON	18K	5%	1/6W
R117	1-247-831-00	CARBON	1K	5%	1/6W
R118	1-247-812-00	CARBON	160	5%	1/6W
R119	1-249-440-11	CARBON	82K	5%	1/6W
R120	1-249-432-11	CARBON	18K	5%	1/6W
R121	1-247-853-00	CARBON	8.2K	5%	1/6W
R122	1-247-843-00	CARBON	3.3K	5%	1/6W
R123	1-247-811-00	CARBON	150	5%	1/6W
R124	1-247-811-00	CARBON	150	5%	1/6W
R126	1-247-767-00	CARBON	2.2	5%	1/6W
R127	1-247-767-00	CARBON	2.2	5%	1/6W
R128	1-247-804-00	CARBON	75	5%	1/6W
R129	1-247-897-00	CARBON	560K	5%	1/6W
R130	1-247-811-00	CARBON	150	5%	1/6W
R131	1-247-843-00	CARBON	3.3K	5%	1/6W
R132	1-247-831-00	CARBON	1K	5%	1/6W
R136	1-247-867-00	CARBON	33K	5%	1/6W
R301	1-247-815-00	CARBON	220	5%	1/6W
R302	1-247-815-00	CARBON	220	5%	1/6W
R303	1-249-429-11	CARBON	10K	5%	1/6W
R304	1-247-815-00	CARBON	220	5%	1/6W
R305	1-247-801-00	CARBON	56	5%	1/6W
R307	1-247-818-00	CARBON	300	5%	1/6W
R308	1-249-429-11	CARBON	10K	5%	1/6W
R309	1-249-429-11	CARBON	10K	5%	1/6W
R310	1-249-419-11	CARBON	1.5K	5%	1/6W
R311	△.1-217-383-00	FUSIBLE	4.7	5%	1/4W
R312	1-247-807-00	CARBON	100	5%	1/6W
R313	1-247-849-00	CARBON	5.6K	5%	1/6W
R314	1-249-429-11	CARBON	10K	5%	1/6W
R315	1-247-867-00	CARBON	33K	5%	1/6W
R317	1-249-437-11	CARBON	47K	5%	1/6W
R319	1-249-421-11	CARBON	2.2K	5%	1/6W

## ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R323	△.1-217-388-00	FUSIBLE	12	5%	1/4W F
R324	1-247-783-00	CARBON	10	5%	1/6W
R325	1-247-831-00	CARBON	1K	5%	1/6W
R326	1-247-828-00	CARBON	750	5%	1/6W
R327	1-249-429-11	CARBON	10K	5%	1/6W
R328	1-249-429-11	CARBON	10K	5%	1/6W
R330	1-247-831-00	CARBON	1K	5%	1/6W
R331	1-247-831-00	CARBON	1K	5%	1/6W
R351	1-249-429-11	CARBON	10K	5%	1/6W
R352	1-247-859-00	CARBON	15K	5%	1/6W
R353	1-247-849-00	CARBON	5.6K	5%	1/6W
R401	1-247-849-00	CARBON	5.6K	5%	1/6W
R402	1-247-851-00	CARBON	6.8K	5%	1/6W
R403	1-247-813-00	CARBON	180	5%	1/6W
R404	1-247-826-00	CARBON	620	5%	1/6W
R405	1-247-815-00	CARBON	220	5%	1/6W
R501	1-247-833-00	CARBON	1.2K	5%	1/6W
R502	1-249-437-11	CARBON	47K	5%	1/6W
R503	1-247-851-00	CARBON	6.8K	5%	1/6W
R504	1-247-833-00	CARBON	1.2K	5%	1/6W
R505	1-249-437-11	CARBON	47K	5%	1/6W
R506	1-247-851-00	CARBON	6.8K	5%	1/6W
R507	1-247-833-00	CARBON	1.2K	5%	1/6W
R508	1-249-437-11	CARBON	47K	5%	1/6W
R509	1-247-851-00	CARBON	6.8K	5%	1/6W
R510	1-249-437-11	CARBON	47K	5%	1/6W
R511	1-249-425-11	CARBON	4.7K	5%	1/6W
R512	1-249-429-11	CARBON	10K	5%	1/6W
R701	1-249-437-11	CARBON	47K	5%	1/6W
R702	1-247-859-00	CARBON	15K	5%	1/6W
R703	1-249-425-11	CARBON	4.7K	5%	1/6W
R705	1-247-897-00	CARBON	560K	5%	1/6W
R706	1-249-425-11	CARBON	4.7K	5%	1/6W
R707	1-249-437-11	CARBON	47K	5%	1/6W
R708	1-247-879-00	CARBON	100K	5%	1/6W
R709	1-249-414-11	CARBON	560	5%	1/6W
R710	1-249-429-11	CARBON	10K	5%	1/6W
R711	1-247-889-00	CARBON	270K	5%	1/6W
R712	1-247-879-00	CARBON	100K	5%	1/6W
R713	1-247-745-11	CARBON	330	5%	1/2W
R714	1-247-831-00	CARBON	1K	5%	1/6W
R715	△.1-217-422-00	FUSIBLE	1	5%	1/2W F
R716	△.1-217-422-00	FUSIBLE	1	5%	1/2W F
R731	1-247-859-00	CARBON	15K	5%	1/6W
R732	1-247-831-00	CARBON	1K	5%	1/6W
R733	1-249-437-11	CARBON	47K	5%	1/6W
R751	1-249-437-11	CARBON	47K	5%	1/6W
R752	1-247-859-00	CARBON	15K	5%	1/6W
R753	1-249-425-11	CARBON	4.7K	5%	1/6W
R755	1-247-897-00	CARBON	560K	5%	1/6W
R756	1-249-425-11	CARBON	4.7K	5%	1/6W
R757	1-249-437-11	CARBON	47K	5%	1/6W
R758	1-247-879-00	CARBON	100K	5%	1/6W
R759	1-249-414-11	CARBON	560	5%	1/6W

The components identified by shading and mark △ are critical for safety. Replace only with part number specified.



## ELECTRICAL PARTS

Ref.No.	Part No.	Description
R761	1-217-422-00	FUSIBLE 1 5% 1/2W
R781	1-247-859-00	CARBON 15K 5% 1/6W
R782	1-247-831-00	CARBON 1K 5% 1/6W
R783	1-249-437-11	CARBON 47K 5% 1/6W
RM701	8-749-016-01	DM-106A
RM751	8-749-016-01	DM-106A
RV1	1-230-477-11	RES, VAR, CARBON 100K
RV2	1-228-723-00	RES, ADJ, CARBON 5K
RV401	1-230-908-11	RES, VAR, SLIDE 100K/100K
RV402	1-230-908-11	RES, VAR, SLIDE 100K/100K
RV403	1-230-908-11	RES, VAR, SLIDE 100K/100K
RV404	*1-230-910-11	RES, VAR, SLIDE 20K/20K (VOLUME)
RV405	1-230-909-11	RES, VAR, SLIDE 50K (BALANCE)
RV701	1-228-723-00	RES, ADJ, CARBON 5K
RV703	1-228-724-00	RES, ADJ, CARBON 10K
RV751	1-228-723-00	RES, ADJ, CARBON 5K
RV753	1-228-724-00	RES, ADJ, CARBON 10K
S1	1-554-885-11	SWITCH, LEVER SLIDE (BAND)
S301	1-570-346-11	SWITCH, SLIDE (REC/PB)
S302	1-570-348-11	SWITCH, LEVER SLIDE (FUNCTION)
S303	1-570-345-11	SWITCH, SLIDE (PB)
S304	1-554-491-00	SWITCH, PUSH (1 KEY)(REC MUTE)
S305	1-554-061-00	SWITCH, SLIDE (ISS)
S701	1-554-495-00	SWITCH, LEAF (DECK A POWER)
S702	1-570-012-11	SWITCH, LEAF
S752	1-570-012-11	SWITCH, LEAF
S751	1-554-495-00	SWITCH, LEAF (DECK B POWER)
S801	1-552-844-11	SWITCH, SLIDE (AC/BATT SELECT)
SP901	1-503-527-11	SPEAKER
SP902	1-503-527-11	SPEAKER
SP903	1-529-030-21	BUZZER
SP904	1-529-030-21	BUZZER
T1	1-403-872-00	I.F.T CONVERTER FM(SMALL TYPE)
T2	1-404-249-00	COIL, FM DETECTOR
T3	1-404-552-11	TRANSFORMER, IF
T301	1-433-222-00	TRANSFORMER, BIAS OSCILLATOR
T801	1-448-252-11	TRANSFORMER, POWER

## ACCESSORY & PACKING MATERIAL

Part No.	Description
3-324-066-01	SHEET, PROTECTION
3-327-954-01	CUSHION (UPPER)
3-327-955-01	CUSHION (INNER)
3-327-956-01	CUSHION (LOWER)
3-330-714-01	(UK)...LABEL, MODEL NUMBER
3-330-724-01	INDIVIDUAL CARTON
3-701-632-00	BAG, POLYETHYLENE
3-703-539-01	(AEP)...INSTRUCTION, FTZ
3-703-895-01	LABEL, COLOR
3-703-906-01	LABEL, COLOR
3-765-046-11	MANUAL, INSTRUCTION
3-881-644-00	PEOTECTION BAG

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.