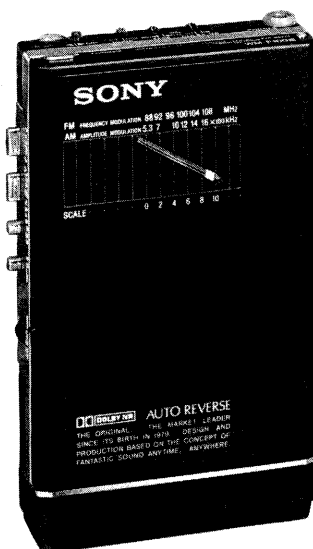


# WM-F100III/F103


## SERVICE MANUAL

US Model  
Canadian Model  
WM-F100 III

AEP Model  
E Model  
WM-F103



SEE ADDITIONAL  
INFORMATION

Dolby noise reduction manufactured under license from  
Dolby Laboratories Licensing Corporation.  
"DOLBY" and the double-D symbol  are trademarks of  
Dolby Laboratories Licensing Corporation.

### SPECIFICATIONS

#### Cassette player section

Tape track  
4-track 2 channel stereo  
Fast winding time  
Approx. 3 min. 20 sec. with Sony C-60  
cassette  
Frequency response (DOLBY NR off)  
40—15,000Hz

#### Radio section

Frequency range  
FM: 87.6—108MHz  
AM: 530—1,605kHz  
Antennas  
FM: Headphone cord antenna  
AM: Built-in ferrite bar antenna

#### General

Power output  
4mW+4mW at DC operation (at 10% harmonic  
distortion)  
Power requirements  
1.5V DC  
Size AA (R6) battery  
Rechargeable battery  
DC IN 1.5V jack accepts:  
Sony AC-D1M AC power adaptor (optional)  
for use with 120 V AC, 60 Hz  
Sony EBP-10 battery case (optional)  
for use on two size AA (R6) batteries  
Sony DCC-70 car battery cord (optional)  
for use with 12 V car battery

#### Dimensions

not incl. projecting parts and controls  
Approx. 69.8 × 110.8 × 21.5 mm (w/h/d)  
(2 3/4 × 4 3/8 × 7/8 inches)  
with rechargeable battery case attached  
Approx. 69.8 × 119.4 × 21.5 mm (w/h/d)  
(2 3/4 × 4 3/4 × 7/8 inches)  
with battery case attached

#### Weight

Approx. 200 g (7.1 oz) incl. rechargeable bat-  
tery case and rechargeable battery (or battery  
and battery case) not incl. other accessories

Model Name Using Similar Mechanism	WM-F200II / F203
Tape Transport Mechanism Type	MF-WMF102-01

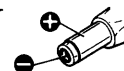
#### Accessories supplied

Rechargeable battery (1) Battery charger (1)  
Stereo headphones (open-air type, 1)  
Rechargeable battery case (attached to the unit, 1)  
Battery case (1) Carrying case (1)

#### Optional Accessory

AC power adaptor AC-D1M  
Car battery cord DCC-70  
Battery case EBP-10  
Rechargeable battery NC-5WM, NC-6WM

**Note:** Use only the recommended AC power  
adaptor or car battery cord manufactured by  
Sony. Polarity of the plugs of other manufac-  
turers may be different.



Polarity of the Sony plug

### FEATURES

- Auto-reverse function changes the tape  
playback direction without turning the  
cassette over.
- Built-in FM/AM tuner.
- Dolby NR\* system reduces tape hiss  
noise during playback.
- TAPE selector for optimum playback with  
standard tapes as well as high-perform-  
ance metal tapes.

## FM/AM STEREO CASSETTE PLAYER

# SONY®



## SERVICING NOTE

## Flexible Circuit Board Repairing

Keep the temperature of the soldering iron around  $270^{\circ}\text{C}$  during repairing.

- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

## Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

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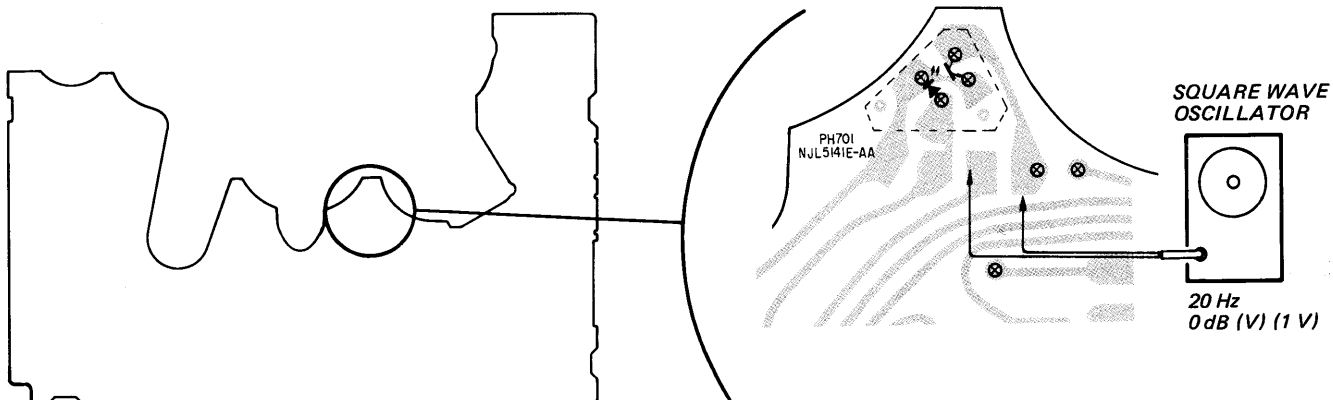
<u>Section</u>	<u>Title</u>	<u>Page</u>
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## SERVICING NOTE

This set detects rotation of reel table by PH701 (Photo interrupter).

It cannot be detected when the audio board is removed, because PH701 is mounted on the audio board.

—Audio board (side B) —

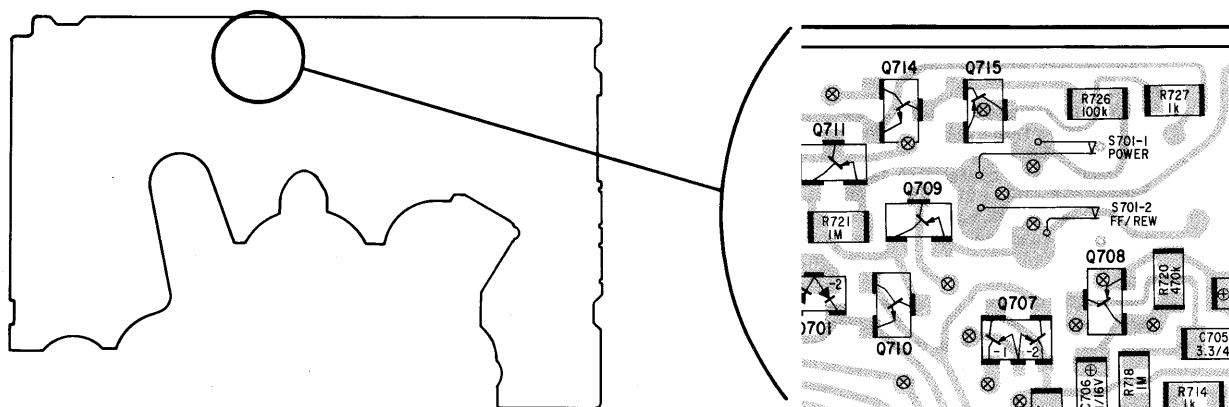


- For PLAY, press the ► button and turn only the POWER switch ON.

Therefore, the auto off circuit and tape end detection will misoperate.

Operation check can be done by the method shown below even when the audio board is removed.

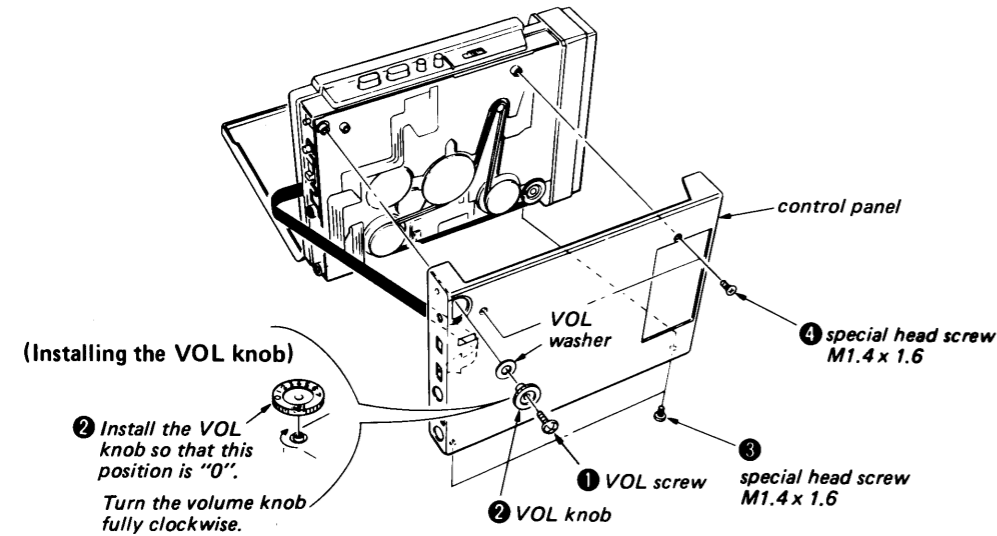
—Audio board (side A) —



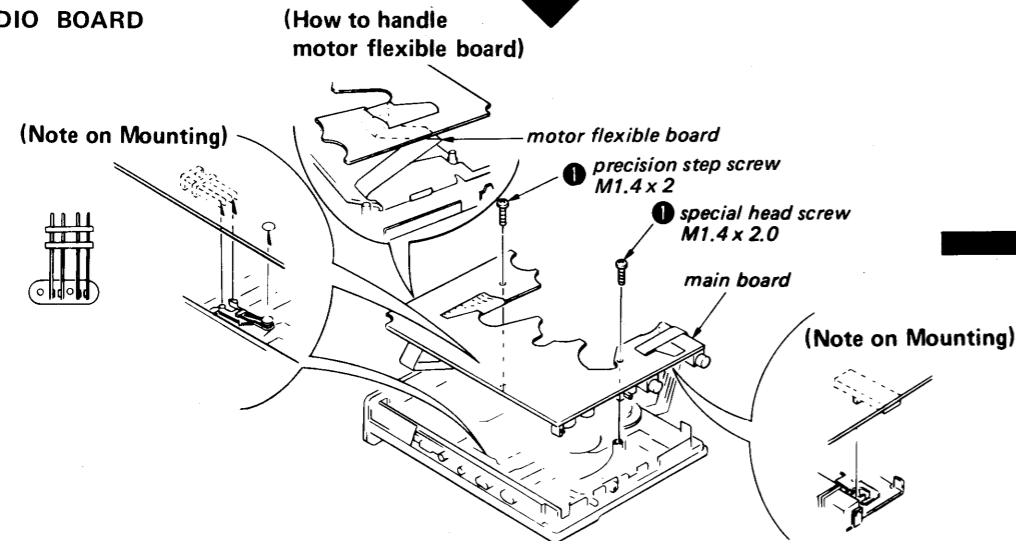
# SECTION 1 DISASSEMBLY

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

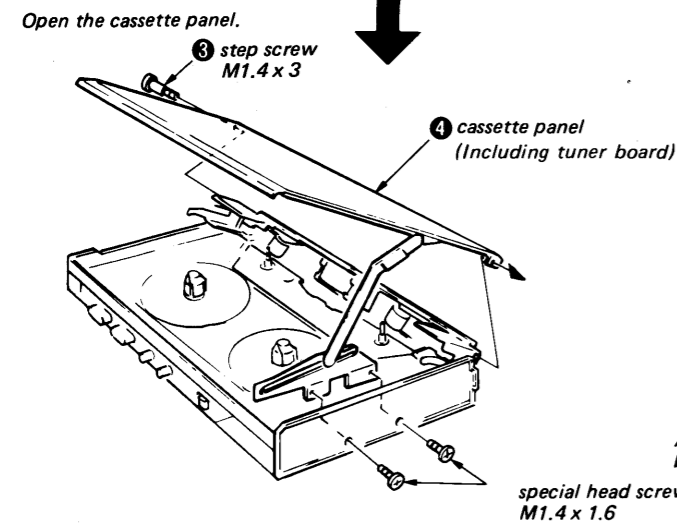
## CONTROL PANEL



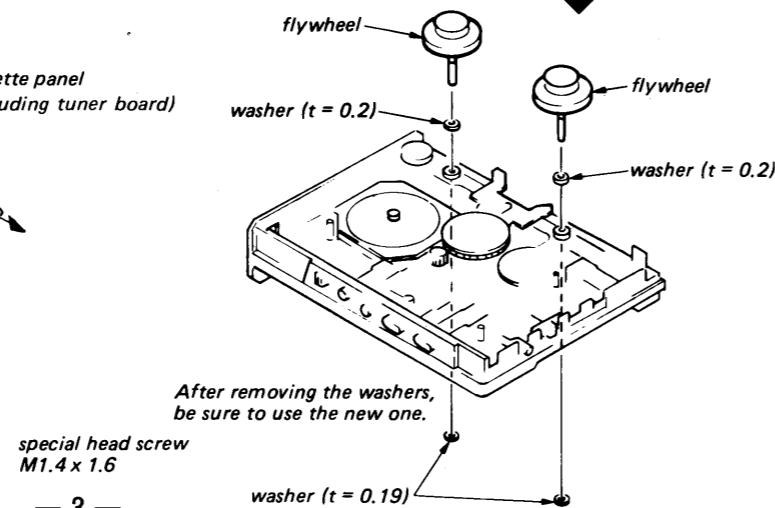
## AUDIO BOARD



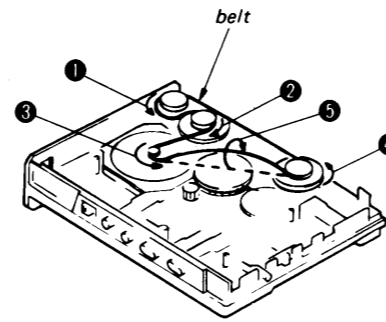
## CASSETTE PANEL



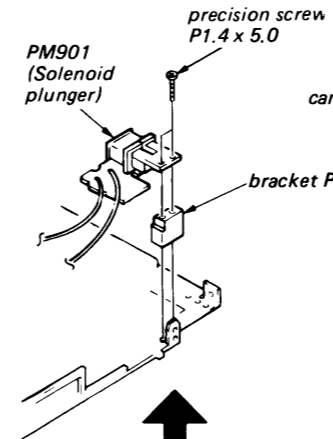
## FLYWHEEL



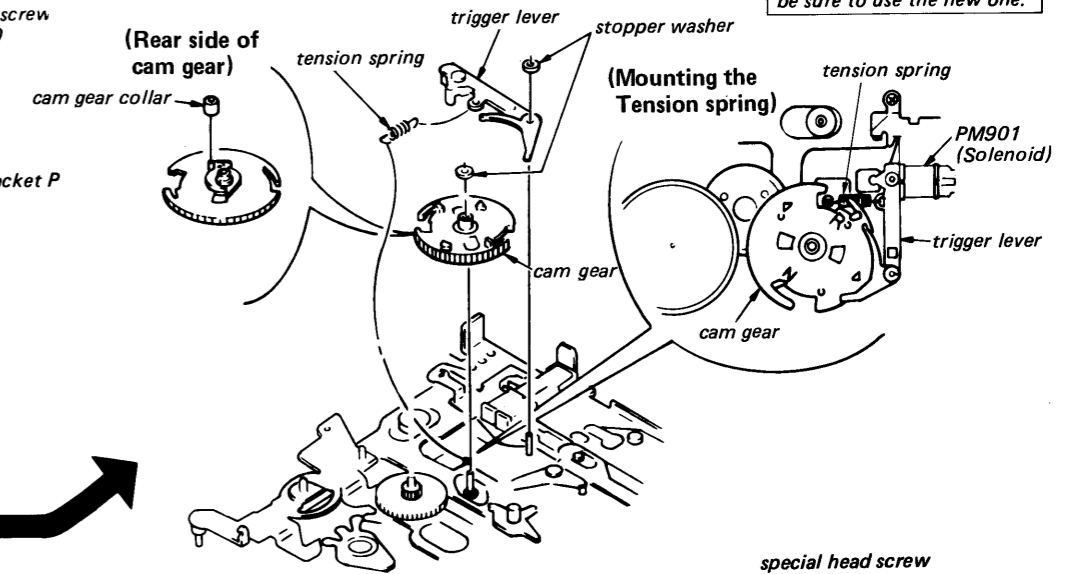
## INSTALLING THE BELT



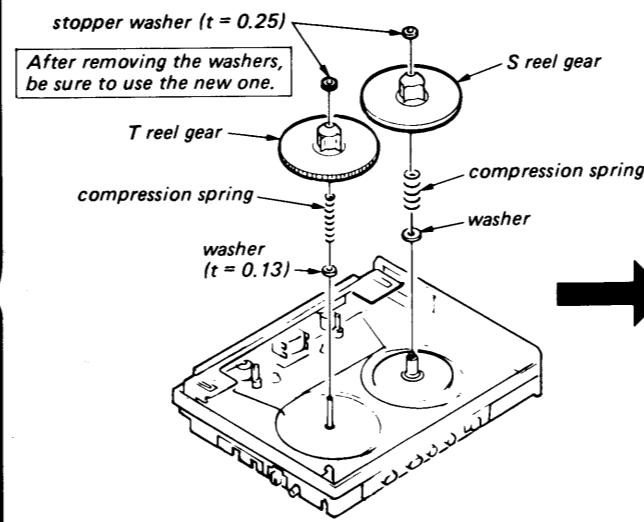
## SOLENOID PLUNGER



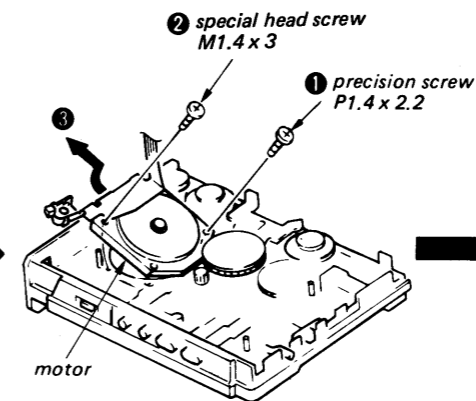
## TRIGGER LEVER, CAM GEAR



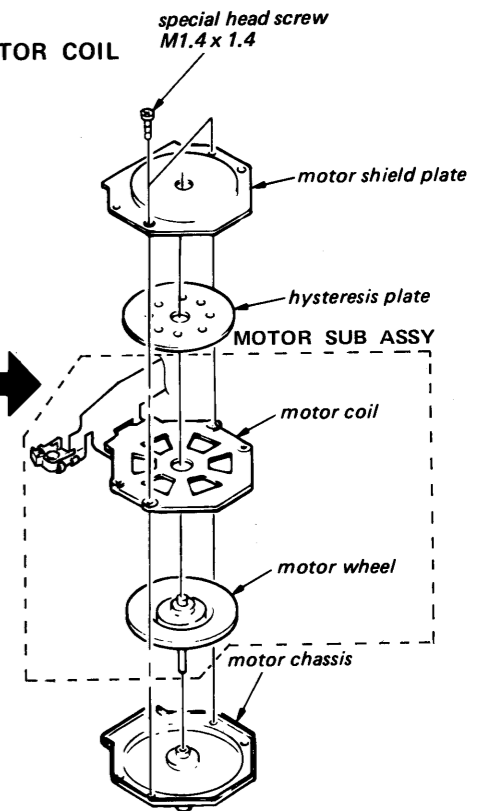
## REEL GEAR



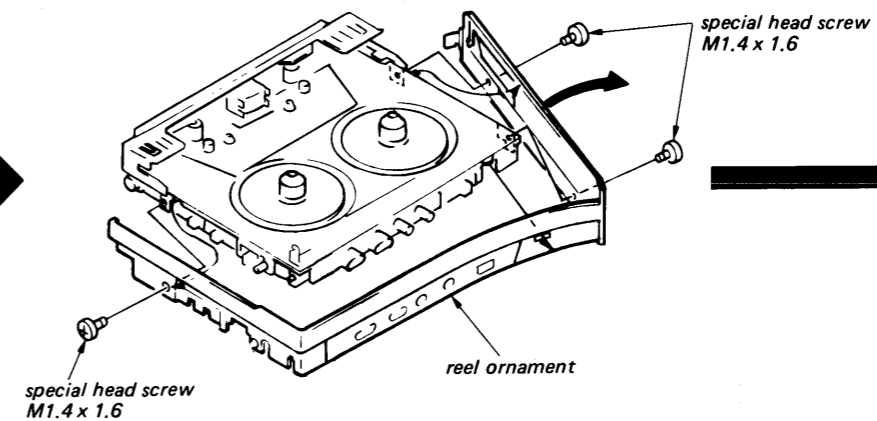
## MOTOR



## MOTOR COIL



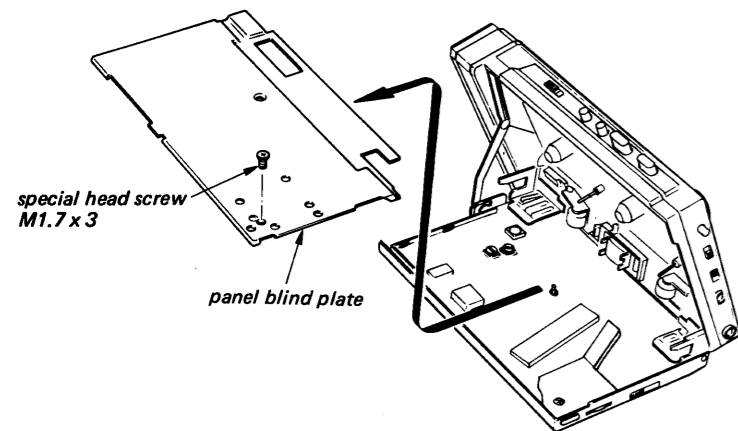
## REEL ORNAMENT



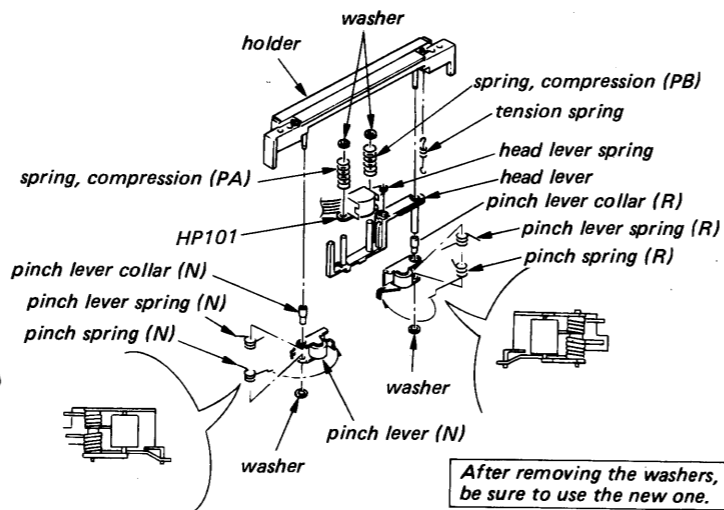
## SECTION 2

### MECHANICAL ADJUSTMENTS

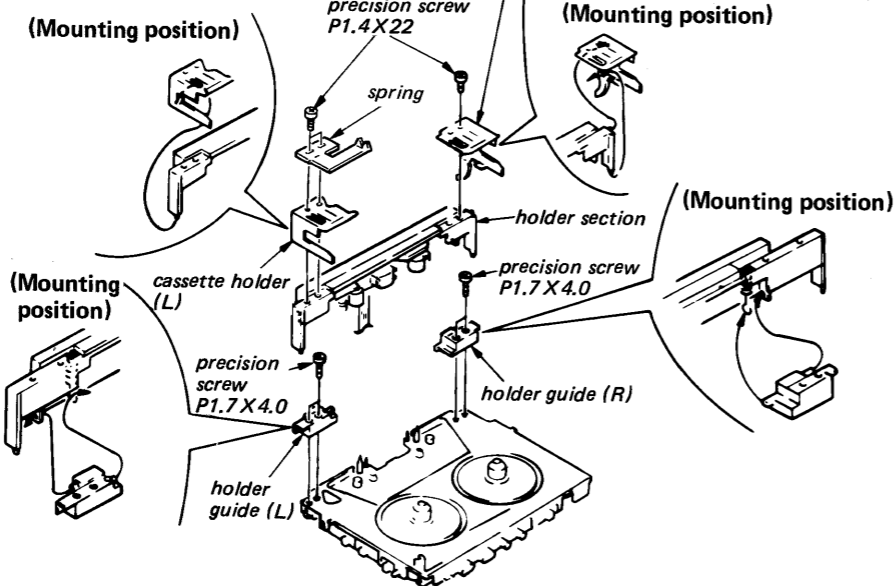
## TUNER BOARD



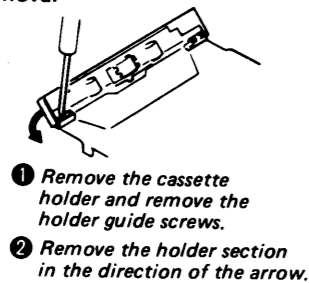
## HEAD AND PINCH ROLLER



***After removing the washers, be sure to use the new one.***

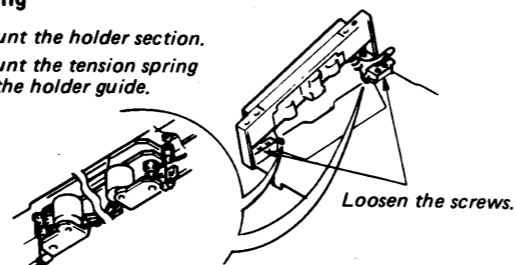
**HOLDER**

## Removal



## Mounting

- 1 Mount the holder section.
- 2 Mount the tension spring on the holder guide.



*It is easier to install when the tension spring is hooked on the holder guide as illustrated.*

## MECHANICAL ADJUSTMENTS AND MEASUREMENT

## PRECAUTION

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

playback head	rubber belts
capstan	idlers
pinch roller	
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage (1.3V) unless otherwise noted.

### Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	23 – 40 g·cm 0.32 – 0.55 oz·inch
FWD Back Tension		1.5 – 3 g·cm 0.02 – 0.04 oz·inch
REV	CQ-102RB	23 – 40 g·cm 0.32 – 0.55 oz·inch
REV Back Tension		1.5 – 3 g·cm 0.02 – 0.04 oz·inch
FF	CQ-201B	more than 60 g·cm more than 0.83 oz·inch
REW		more than 60 g·cm more than 0.83 oz·inch

### Tape Pulling Force Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 50g more than 17.6 oz
REV	CQ-403R	more than 50g more than 17.6 oz

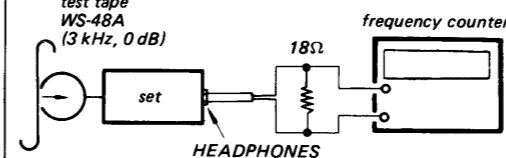
**Standard Playback Level:**

1. Standard test tape: P-4-L300 (315 Hz, 0 dB)
2. Set the VOL control to the position where -20 dB (77.0 mV) is obtained across 18  $\Omega$  load at PHONES jack.

### Tape Speed Adjustment

**Procedure:**

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



1. Play back WS-48A (Tape center portion) in FWD mode.  
Adjust the RV601 so that the frequency counter reads 3,000 Hz ( $\pm 5$  Hz).
2. Play back WS-48A (Tape center portion) in REV mode.  
Confirm that the reading of frequency counter is within 1.5% from the reading in step 1.

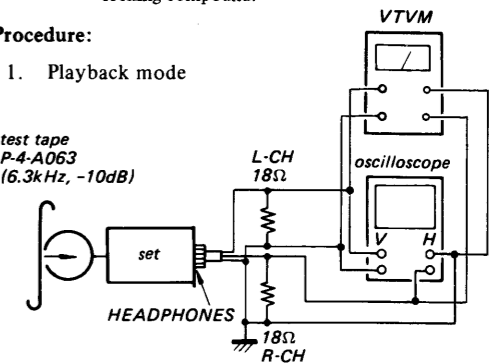
### Playback Head Azimuth Adjustment

**Note:** Adjustment should be made in both directions of FWD and REV.  
Adjustment screws should be stopped by turning in the clockwise direction.  
After the adjustment, lock the screws with locking compound.

**Procedure:**

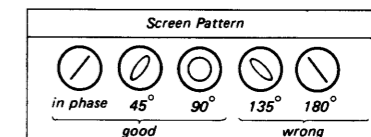
- ## 1. Playback mode

test tape  
P-4-A063  
(6.3kHz, -10dB)



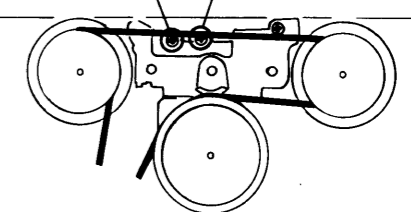
2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1 dB.

- ### 3. Phase Check

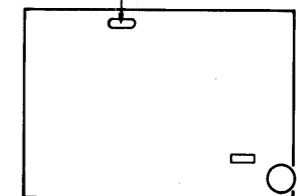


**Adjustment Location:**

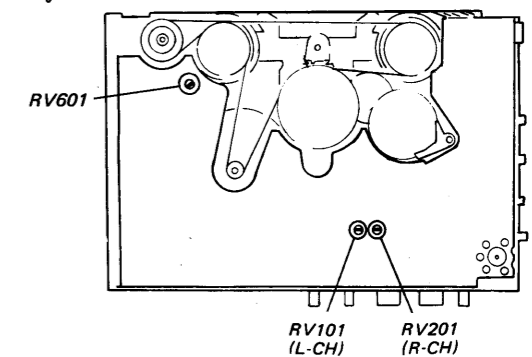
*REV adjustment screw*      *FWD adjustment screw*



**Remove blind sheet when the adjustment is performed with the rear case installed.**



**Adjustment Location:**



## SECTION 3 ELECTRICAL ADJUSTMENTS

### FM Section

#### Setting:

FUNCTION Selector: FM  
BAND Selector: FM

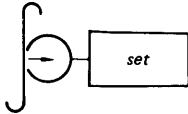
#### Playback Level Adjustment

DOLBY NR switch . . . . . OFF  
VOL knob . . . . . MINIMUM  
TAPE . . . . . NORMAL TAPE

#### Procedure:

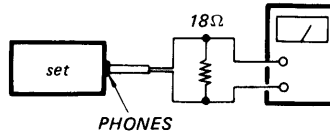
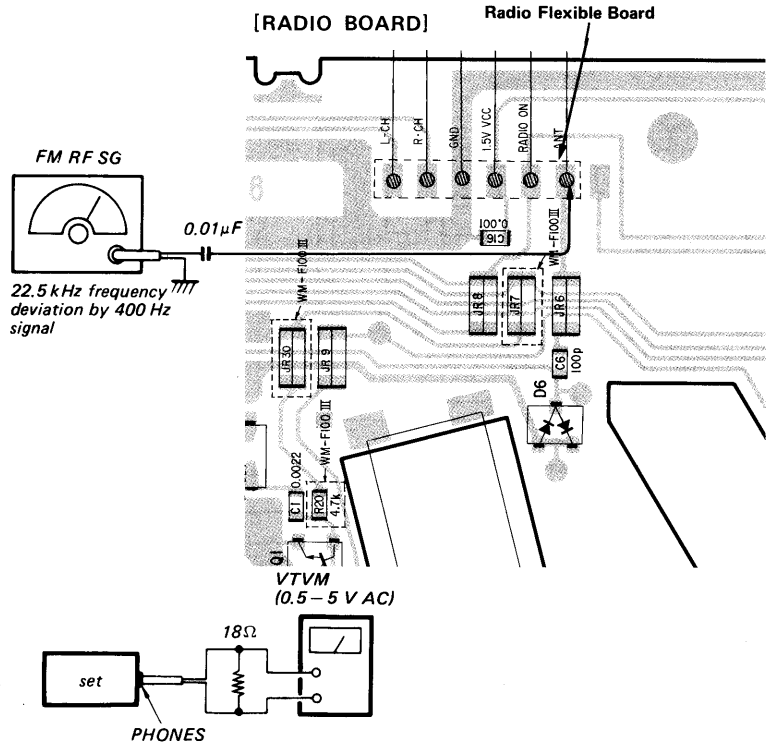
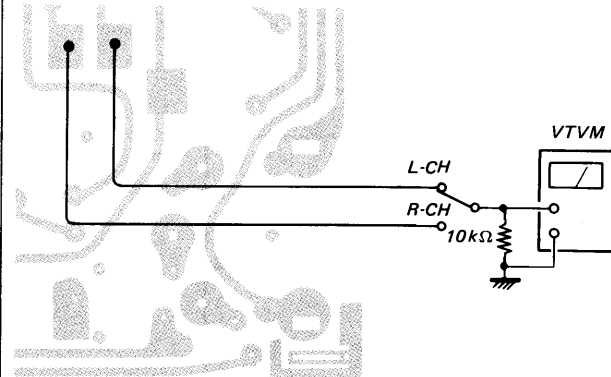
1. Playback mode

test tape  
P-4-L300  
(315 Hz, 0 dB)



2. Adjust RV101 (L-CH), RV201 (R-CH) so that the VTVM reading is  $-20.5 \pm 1$  dB (65 ~ 82 mV).
3. Set the DOLBY switch to ON position. VTVM reading should be within 1 dB from that obtained in step 2.

Adjustment Location: Audio Board — Side B —

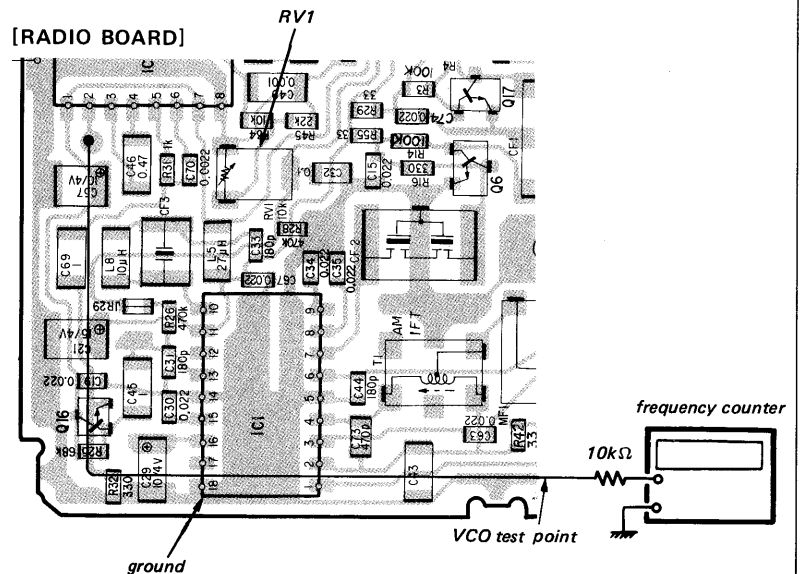


- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

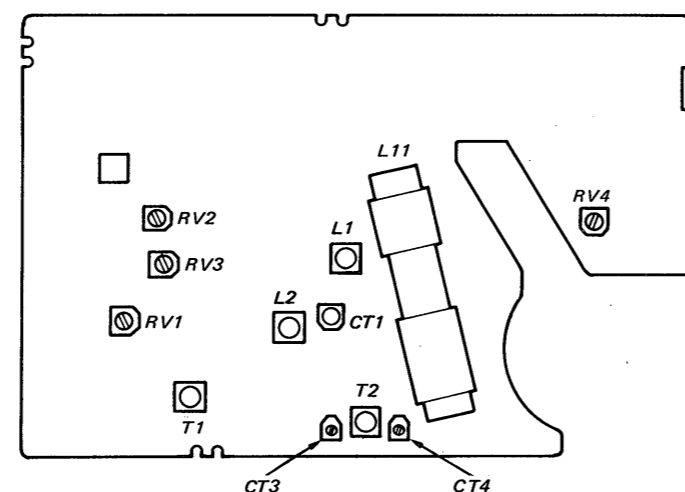
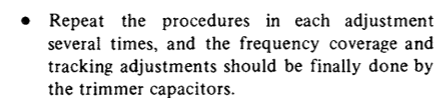
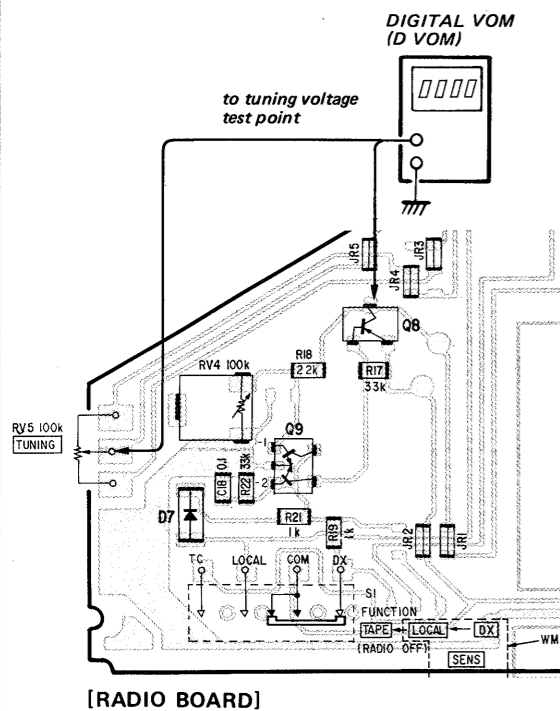
#### VCO Frequency Adjustment

Adjust RV1 for 19 kHz  $\pm 0.02$  kHz reading on the frequency counter.

#### [RADIO BOARD]



SET ADDITIONAL  
INFORMATION

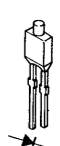


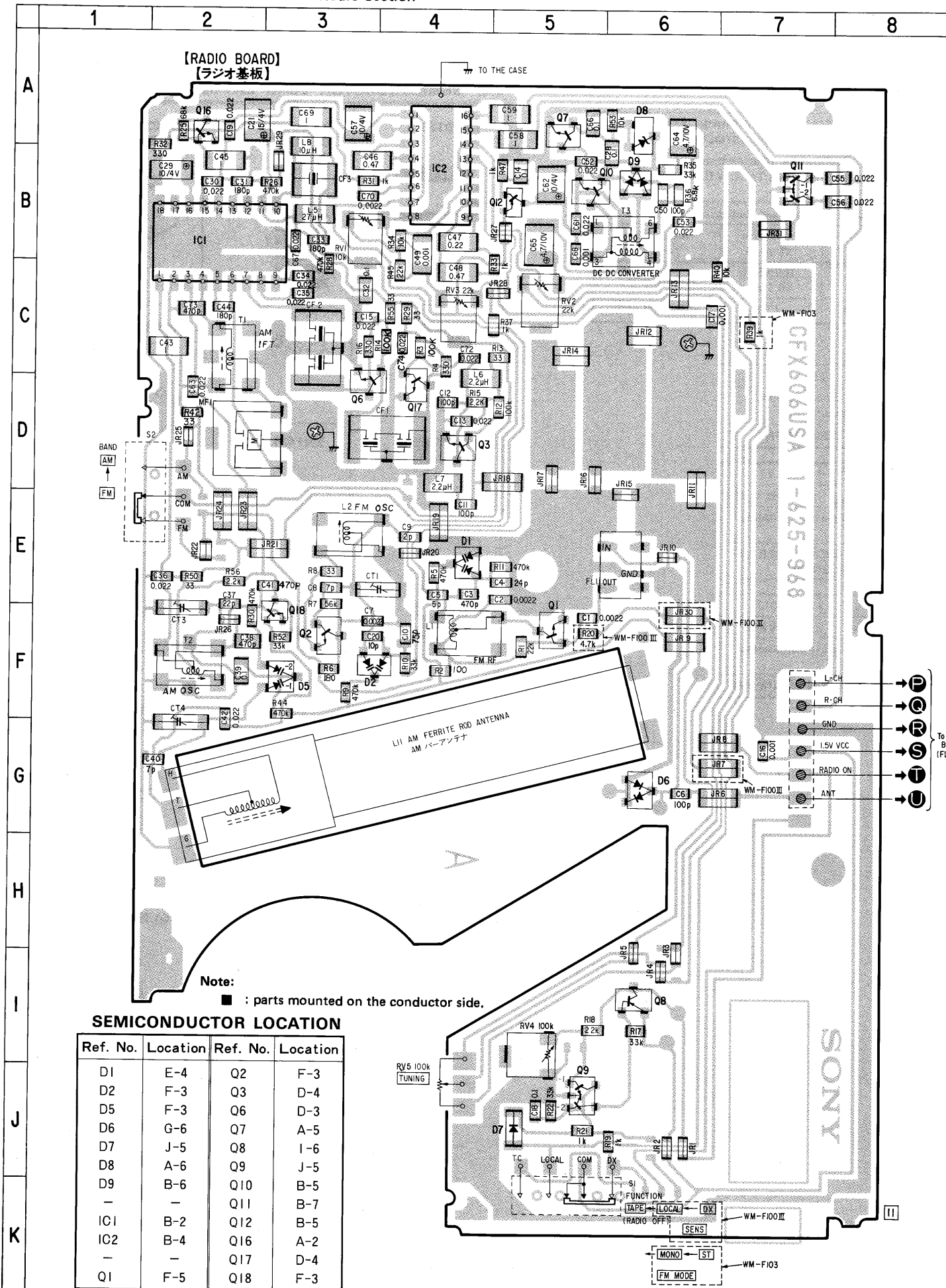
leftmost (f min.)		rightmost (f max.)	dial-pointer position
86.5 MHz ±0.3 MHz		109.5 MHz ±0.3 MHz	SSG frequency
L2	L1	CT1	adjustment parts

### AM IF ADJUSTMENT

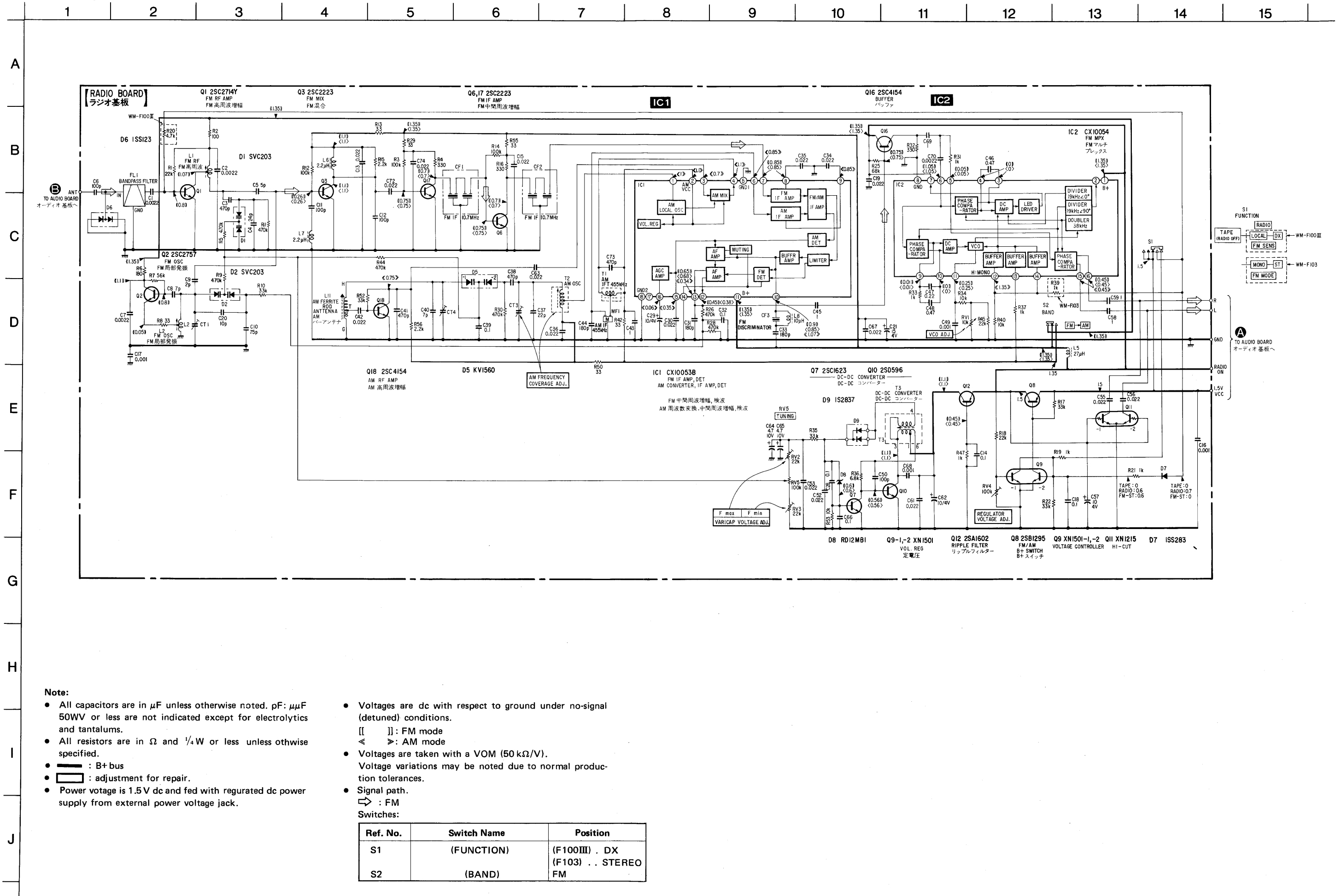
CT3	T2
1,680 kHz $\begin{smallmatrix} +40, \\ -20\text{kHz} \end{smallmatrix}$	515 kHz $\pm 3$ kHz
Adjust for a maximum reading on VTVM.	
<b>AM FREQUENCY COVERAGE ADJUSTMENT</b>	

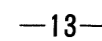
CT4	L11
1,400 kHz	620 kHz
Adjust for a maximum reading on VTVM.	
<b>AM TRACKING ADJUSTMENT</b>	



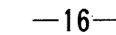


**SEE ADDITIONAL INFORMATION**



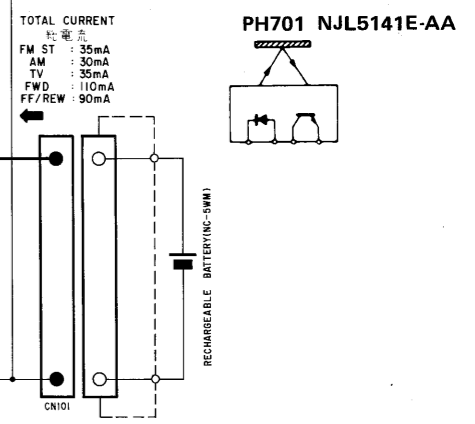


— 15 —



Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D302	A-12	Q602	C-2	Q711	A-6
D303	A-13	Q603	C-3	Q713	A-5
D701	B-5	Q604	C-2	Q714	A-6
D801	G-3	Q701	G-4	Q715	A-6
—	—	Q702	G-4	Q716	B-5
■ IC301	C-10	Q703	F-4	Q718	A-10
■ IC302	D-12	Q704	D-8	Q801	F-2
■ IC303	E-12	Q705	D-8	Q802	E-2
■ IC601	B-3	Q706	C-7	Q803	G-2
—	—	Q707	B-7	Q804	G-2
Q301	B-9	Q708	B-7	Q805	F-3
Q303	A-11	Q709	B-6	Q806	F-3
Q601	B-2	Q710	B-6		

–Audio Section–

**WM-F100Ⅲ/F103**

SEE ADDITIONAL  
INFORMATION

# SECTION 5 EXPLODED VIEWS

NOTE:

The mechanical parts with no reference number in the exploded views are not supplied.

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

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

- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.

Color Indication of Appearance Parts  
Example:

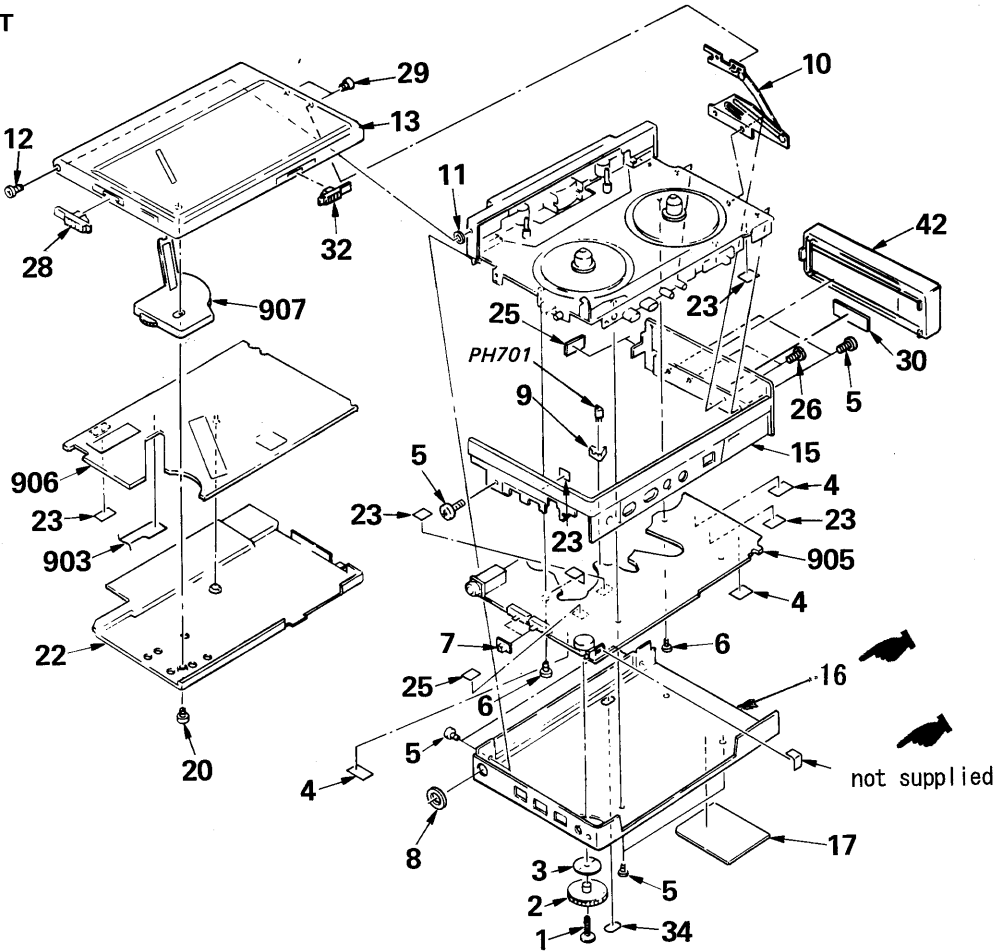
(RED) ... KNOB, BALANCE (WHITE)

↑  
Cabinet's Color

↑  
Parts Color

REVISED

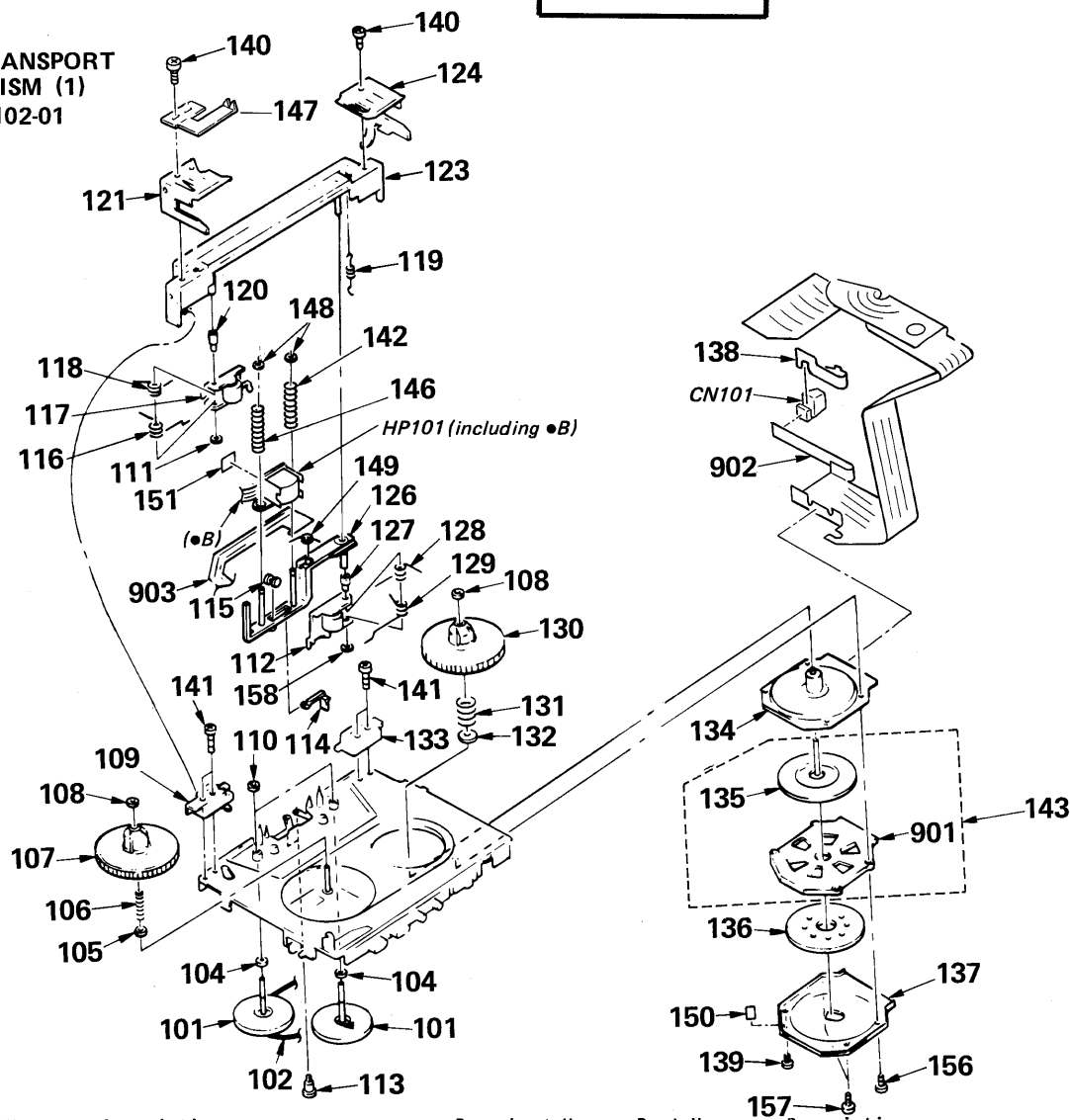
(1). CABINET



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	3-340-031-11	SCREW (M1.4X3.8), VOL FITTING		20	3-342-512-11	SCREW (B1.7X3), TAPPING	
2	3-338-659-11	KNOB, VOL		22	★3-342-305-21	PLATE, BLIND, PANEL	
3	3-315-467-00	WASHER, CONTROL		23	3-327-119-01	SHEET (B), INSULATING	
4	3-831-441-XX	CUSHION, CABINET UPPER 10X7X0.3		25	3-703-929-01	SPACER (P)	
5	3-704-197-01	SCREW (M1.4X1.6), NYLON		26	3-703-816-31	SCREW (M1.4X1.6), SPECIAL HEAD	
6	3-703-816-01	SCREW (M1.4X2.0), SPECIAL HEAD		28	3-338-655-01	KNOB FUNCTION	
7	3-329-762-01	KNOB, SW		29	7-627-451-07	SCREW, PRECISION +K 1.4X1.6	
8	3-342-508-01	PROTECTOR, JACK		30	★3-701-999-00	LABEL, SERIAL NUMBER	
9	3-329-761-01	ADJUSTOR, REFLECTOR		32	3-342-304-01	KNOB, BAND	
10	X-3329-738-1	BRACKET (T) ASSY, ARM		34	3-333-162-11	SHEET, AZIMUTH HOLE	
11	3-563-124-11	WASHER, RATTLE ABSORBER (t=0.19)		42	X-3329-739-1	CASE (B) ASSY, BATTERY	
12	3-563-124-21	WASHER, RATTLE ABSORBER (t=0.30)			X-3329-779-1	CASE (B) ASSY, BATTERY (Rechargeable)	
13	X-3331-051-1	(F100-3:US,Canadian) ...LID ASSY (B), CASSETTE		903	1-617-100-11	PC BOARD, RADIO CONNECTION	
	X-3331-053-1	(F103:AEP,E)...LID ASSY (B), CASSETTE		905	A-3070-183-A	PC BOARD ASSY, AU	
15	3-335-952-01	ORNAMENT (F), REEL		906	A-3089-351-A	(F100-3:US,Canadian)..MOUNTED PCB, TUNER	
16	X-3331-050-1	CASE ASSY (B)			A-3266-457-A	(F103:AEP,E).....MOUNTED PCB, TUNER	
17	★3-345-712-01	(F100-3:US,Canadian) ...LABEL, MODEL NUMBER (U)		907	1-237-792-11	TUNING UNIT (including RV5)	
	★3-345-713-01	(F103:AEP,E)....LABEL, MODEL NUMBER		PH701	8-719-751-42	DIODE NJL5141E-AA	

REVISED

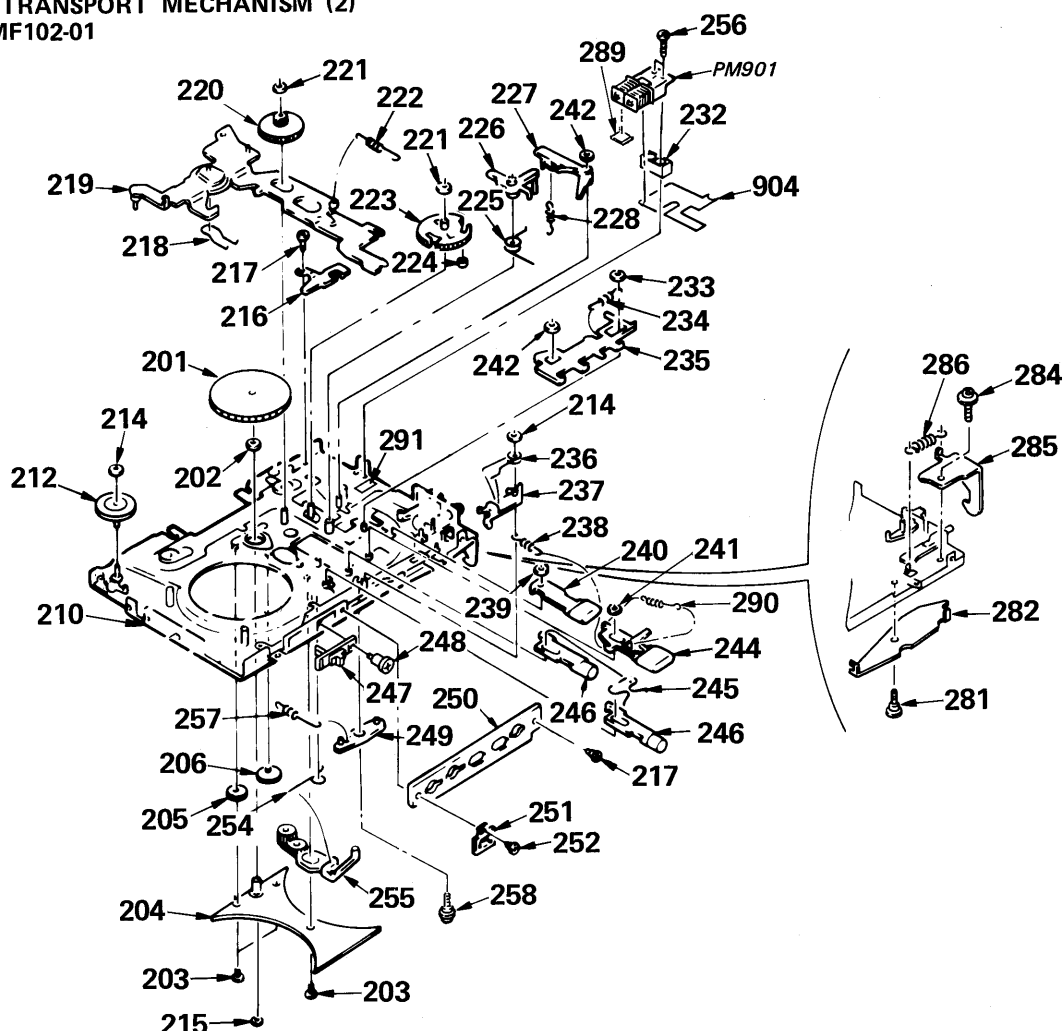
(2). TAPE TRANSPORT  
MECHANISM (1)  
MF-WMF102-01



No.	Part No.	Description	Remarks
101	X-3329-670-1	FLYWHEEL ASSY (N)	
102	3-329-695-01	BELT	
104	3-321-394-21	WASHER	
105	3-315-415-23	WASHER (1.5-2.3)	
106	3-331-013-01	SPRING, COMPRESSION (T-REEL)	
107	X-3329-705-1	GEAR (R) ASSY, T REEL	
108	3-315-384-11	WASHER, STOPPER (t=0.25)	
109	3-329-736-01	GUIDE (RIGHT), HOLDER	
110	3-331-007-01	WASHER	
111	3-331-036-01	WASHER	
	3-331-036-11	WASHER (t=0.19)	
112	X-3329-602-1	PINCH LEVER (R) ASSY	
113	3-331-097-01	SCREW, AZIMUTH	
114	3-333-101-01	LEVER, AZIMUTH	
115	3-333-102-01	SHAFT, AZIMUTH ( 1 )	
	3-333-102-31	SHAFT, AZIMUTH ( 0.9 )	
116	3-341-431-01	SPRING (NB)	
117	X-3329-601-1	PINCH LEVER (N) ASSY	
118	3-329-642-01	SPRING (N)	
119	3-331-012-01	SPRING (HOLDER), TENSION	
120	3-329-637-01	COLLAR, PINCH LEVER	
121	3-329-714-01	HOLDER (RIGHT), CASSETTE	
123	X-3329-708-1	HOLDER (TD) ASSY	
124	3-329-713-12	HOLDER (LEFT), CASSETTE	
126	X-3329-765-1	LEVER ASSY, HEAD	
127	3-331-027-01	COLLAR (R), PINCH LEVER	
128	3-329-641-01	SPRING (R)	
129	3-329-643-01	SPRING (R)	

No.	Part No.	Description	Remarks
130	3-329-729-01	GEAR, SUPPLY REEL	
131	3-331-014-01	SPRING, COMPRESSION (S-REEL)	
132	3-320-354-01	WASHER	
133	3-329-737-01	GUIDE (LEFT), HOLDER	
134	X-3329-625-1	CHASSIS ASSY, MOTOR	
135	A-3133-236-A	WHEEL BLOCK ASSY, MOTOR	
136	3-333-173-01	PLATE (S), HYSTERESIS	
137	*3-333-126-01	PLATE (R), SHIELD, MOTOR	
138	3-335-977-01	SPRING	
139	7-627-551-98	PRECISION SCREW +P 1.4X2.2	
140	3-345-710-11	SCREW (M1.4X2.5), TAPPING	
141	3-704-244-63	SCREW (P1.7X4.0)	
142	3-337-942-01	SPRING, COMPRESSION (PB)	
143	X-3330-054-1	MOTOR SUB, ASSY	
146	3-337-943-01	SPRING, COMPRESSION (PA)	
147	*3-331-059-02	SPRING	
148	3-335-902-01	WASHER (t=0.25)	
149	3-338-616-01	SPRING (A)	
150	*3-335-904-01	SHEET, INSULATING	
151	*3-338-667-01	SHEET, ADHESIVE, DOUBLE-FACE	
156	3-703-816-71	SCREW (M1.4X3.0), SPECIAL HEAD	
157	3-338-687-11	SCREW (M1.4X3), TAPPING	
158	3-331-036-11	WASHER (t=0.25)	
901	1-462-230-11	COIL, MOTOR (STATOR)	
902	1-617-017-11	PC BOARD, MOTOR CONNECTION	
903	1-617-100-11	PC BOARD, RADIO CONNECTION	
CN101	1-506-573-12	CONNECTOR 2P	
HP101	1-543-310-11	HEAD, MAGNETIC (PLAYBACK)	
904	1-617-019-11	PC BOARD, MP FLEXIBLE	

(3). TAPE TRANSPORT MECHANISM (2)  
MF-WMF102-01



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
201	X-3329-749-1	PULLEY (B) COMP ASSY, MIDWAY		237	3-329-692-05	LEVER, SW	
202	3-321-394-21	WASHER		238	3-331-010-01	SPRING (STOP LEVER), TENSION	
203	3-331-047-01	SCREW (M1.4X1.4), SPECIAL HEAD		239	3-570-615-00	POLY-WASHER (DIA.1.2)	
204	X-3329-618-1	COVER ASSY, REEL		240	X-3329-679-1	LEVER ASSY, PLAY	
205	3-329-689-01	GEAR (B), T		241	3-341-434-01	WASHER, STOPPER	
206	3-329-688-01	GEAR (A), T		242	3-311-815-11	WASHER, POLYETHYLENE	
210	X-3329-794-1	CHASSIS COMP ASSY		244	X-3329-678-1	LEVER ASSY, STOP	
212	3-338-628-01	WHEEL, REVERSE		245	3-331-016-01	SPRING	
214	3-338-645-31	WASHER (0.8-2.5)		246	X-3329-696-1	LEVER (A) ASSY, FR	
215	3-331-007-01	WASHER		247	3-337-994-01	KNOB, SAFTY LOCK	
216	3-329-685-01	SPRING (A)		248	3-329-697-01	SCREW, STEP, PRECISION	
217	3-703-816-31	SCREW (M1.4X1.6), SPECIAL HEAD		249	X-3329-617-1	LEVER (B) ASSY, DRIVING	
218	3-329-698-01	SPRING (B)		250	*3-329-734-01	HOLDER, BUTTON	
219	X-3329-755-1	LEVER (AD) (P) ASSY, DRIVING		251	3-331-043-01	SPRING	
220	3-329-687-01	GEAR, DRIVING		252	3-703-816-02	SCREW (M1.4X2.0), SPECIAL HEAD	
221	3-315-384-21	WASHER, STOPPER (t=0.20)		254	3-329-699-01	SPRING	
222	3-337-962-01	SPRING, TENSION (DRIVING LEVER)		255	X-3329-626-1	LEVER (B) ASSY, F.R	
223	3-329-730-01	GEAR, CAM		256	7-627-551-37	SCREW, PRECISION +P 1.4X5	
224	3-329-693-01	COLLAR, CAM GEAR		257	3-331-018-01	SPRING, TENSION (DRIVING LEVER B)	
225	3-329-700-01	SPRING		258	3-331-056-01	SHAFT, DRIVING LEVER (B)	
226	3-329-733-01	LEVER (A), SHUT-OFF		281	3-333-124-01	SCREW (M1.4), STEP, PRECISION	
227	X-3329-615-1	LEVER ASSY, TRIGGER		282	*3-335-942-01	LEVER (B), EJECT	
228	3-338-623-01	SPRING, TENSION		284	3-338-625-61	SCREW (M1.4X1.4), WASHER HEAD	
232	*3-331-041-01	BRACKET, P		285	*3-335-943-01	LEVER (A), EJECT	
233	3-578-224-00	WASHER (t=0.25)		286	3-337-964-01	SPRING, TENSION (EJECT LEVER A)	
234	3-331-009-01	SPRING (LOCK LEVER), TENSION		289	*3-338-668-01	SHEET	
235	3-329-731-01	LEVER, LOCK		290	3-331-111-01	SPRING, TENSION	
236	3-329-702-01	SPRING		291	*3-341-417-01	SPACER (D)	
				PM901	1-454-406-11	SOLENOID, PLUNGER	

## ELECTRICAL PARTS LIST

## NOTE:

Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.

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:  $\mu$ F, PF:  $\mu$ F.

## RESISTORS

- All resistors are in ohms.
- F: nonflammable

## COILS

- MMH: mH, UH:  $\mu$ H

## SEMICONDUCTORS

In each case, U:  $\mu$ , for example:UA....:  $\mu$ A...., UPA....:  $\mu$ PA....,UPC....:  $\mu$ PC, UPD....:  $\mu$ PD...

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No.	Part No.	Description			
901	1-462-230-11	COIL, MOTOR (STATOR)			
902	1-617-017-11	PC BOARD, MOTOR CONNECTION			
903	1-617-100-11	PC BOARD, RADIO CONNECTION			
904	1-617-019-11	PC BOARD, MP FLEXIBLE			
905	A-3070-183-A	PC BOARD ASSY, AU			
906	A-3089-351-A	(F100-3:US,Canadian)			
		...MOUNTED PCB, TUNER			
	A-3266-457-A	(F103:AEP,E).....MOUNTED PCB, TUNER			
907	1-237-792-11	TUNING UNIT (including RV5)			
C1	1-162-966-11	CERAMIC CHIP 0.0022MF	10%	50V	
C2	1-162-966-11	CERAMIC CHIP 0.0022MF	10%	50V	
C3	1-162-962-11	CERAMIC CHIP 470PF	10%	50V	
C4	1-162-975-11	CERAMIC CHIP 24PF	5%	50V	
C5	1-162-936-11	CERAMIC CHIP 5PF	0.25PF	50V	
C6	1-162-953-11	CERAMIC CHIP 100PF	5%	50V	
C7	1-162-966-11	CERAMIC CHIP 0.0022MF	10%	50V	
C8	1-162-996-11	CERAMIC CHIP 7PF	0.5PF	50V	
C9	1-162-932-11	CERAMIC CHIP 2PF	0.25PF	50V	
C10	1-163-603-91	CERAMIC CHIP 75PF	5%	50V	
C11	1-162-953-11	CERAMIC CHIP 100PF	5%	50V	
C12	1-162-953-11	CERAMIC CHIP 100PF	5%	50V	
C13	1-162-995-11	CERAMIC CHIP 0.022MF		50V	
C14	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C15	1-162-995-11	CERAMIC CHIP 0.022MF		50V	
C16	1-162-964-11	CERAMIC CHIP 0.001MF	10%	50V	
C17	1-162-964-11	CERAMIC CHIP 0.001MF	10%	50V	
C18	1-164-156-11	CERAMIC CHIP 0.1MF		25V	
C19	1-162-995-11	CERAMIC CHIP 0.022MF		50V	
C20	1-162-997-11	CERAMIC CHIP 10PF	0.5PF	50V	
C21	1-135-158-21	TANTAL. CHIP 15MF	20%	4V	
C28	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C29	1-135-104-00	TANTAL. CHIP 10MF	20%	4V	
C30	1-162-995-11	CERAMIC CHIP 0.022MF		50V	
C31	1-162-956-11	CERAMIC CHIP 180PF	5%	50V	
C32	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C33	1-162-956-11	CERAMIC CHIP 180PF	5%	50V	
C34	1-162-995-11	CERAMIC CHIP 0.022MF		50V	
C35	1-162-995-11	CERAMIC CHIP 0.022MF		50V	
C36	1-162-995-11	CERAMIC CHIP 0.022MF		50V	
C37	1-162-998-11	CERAMIC CHIP 22PF	5%	50V	
C38	1-163-133-00	CERAMIC CHIP 470PF	5%	50V	
C39	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C40	1-162-996-11	CERAMIC CHIP 7PF	0.5PF	50V	
C41	1-162-962-11	CERAMIC CHIP 470PF	10%	50V	
C42	1-162-995-11	CERAMIC CHIP 0.022MF		50V	

Ref.No.	Part No.	Description			
C43	1-162-638-11	CERAMIC CHIP 1MF		16V	
C44	1-162-956-11	CERAMIC CHIP 180PF	5%	50V	
C45	1-162-638-11	CERAMIC CHIP 1MF		16V	
C46	1-162-637-11	CERAMIC CHIP 0.47MF		16V	
C47	1-163-081-00	CERAMIC CHIP 0.22MF		25V	
C48	1-162-637-11	CERAMIC CHIP 0.47MF		16V	
C49	1-163-205-00	CERAMIC CHIP 0.001MF	5%	50V	
C50	1-162-953-11	CERAMIC CHIP 100PF	5%	50V	
C52	1-162-995-11	CERAMIC CHIP 0.022MF		50V	
C53	1-162-995-11	CERAMIC CHIP 0.022MF		50V	
C55	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	
C56	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	
C57	1-135-104-00	TANTAL. CHIP 10MF	20%	4V	
C58	1-162-638-11	CERAMIC CHIP 1MF		16V	
C59	1-162-638-11	CERAMIC CHIP 1MF		16V	
C61	1-162-995-11	CERAMIC CHIP 0.022MF		50V	
C62	1-135-104-00	TANTAL. CHIP 10MF	20%	4V	
C63	1-162-995-11	CERAMIC CHIP 0.022MF		50V	
C64	1-135-096-21	TANTAL. CHIP 4.7MF	20%	10V	
C65	1-135-096-21	TANTAL. CHIP 4.7MF	20%	10V	
C66	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C67	1-162-995-11	CERAMIC CHIP 0.022MF		50V	
C68	1-162-964-11	CERAMIC CHIP 0.001MF	10%	50V	
C69	1-162-638-11	CERAMIC CHIP 1MF		16V	
C70	1-162-966-11	CERAMIC CHIP 0.0022MF	10%	50V	
C72	1-162-995-11	CERAMIC CHIP 0.022MF		50V	
C73	1-163-133-00	CERAMIC CHIP 470PF	5%	50V	
C74	1-162-995-11	CERAMIC CHIP 0.022MF		50V	
C101	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C102	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C103	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C104	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C105	1-135-104-00	TANTAL. CHIP 10MF	10%	4V	
C106	1-163-016-00	CERAMIC CHIP 0.0039MF	10%	50V	
C107	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V	
C108	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V	
C109	1-163-019-00	CERAMIC CHIP 0.0068MF	10%	50V	
C110	1-163-075-00	CERAMIC CHIP 0.047MF	10%	25V	
C111	1-135-087-21	TANTAL. CHIP 0.68MF	10%	20V	
C112	1-163-017-00	CERAMIC CHIP 0.0047MF	5%	50V	
C113	1-163-078-11	CERAMIC CHIP 0.033MF	5%	25V	
C114	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V	
C116	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V	
C117	1-163-081-00	CERAMIC CHIP 0.22MF		25V	
C118	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	

Ref.No.	Part No.	Description				Ref.No.	Part No.	Description			
C119	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V		D7	8-719-118-21	DIODE 1SS283			
C201	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V		D8	8-719-106-70	DIODE RD12M-B1			
C202	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V		D9	8-719-100-05	DIODE 1S2837			
C203	1-163-117-00	CERAMIC CHIP 100PF	5%	50V		D302	8-719-908-30	DIODE DA106K			
C204	1-163-117-00	CERAMIC CHIP 100PF	5%	50V		D303	1-807-305-11	DIODE GL2PR9 (LED)			
C205	1-135-104-00	TANTAL. CHIP 10MF	10%	4V		D701	8-719-101-23	DIODE 1SS123			
C206	1-163-016-00	CERAMIC CHIP 0.0039MF	10%	50V		D801	8-719-105-57	DIODE RD3.9M-B1			
C207	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V		FL1	1-236-053-11	FILTER, BAND PASS			
C208	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V		HP101	1-543-310-11	HEAD, MAGNETIC (PLAYBACK)			
C209	1-163-019-00	CERAMIC CHIP 0.0068MF	10%	50V		IC1	8-759-923-96	IC CX10053B			
C210	1-163-075-00	CERAMIC CHIP 0.047MF	10%	25V		IC2	8-759-910-53	IC CX10054			
C211	1-135-087-21	TANTAL. CHIP 0.68MF	10%	20V		IC301	8-759-203-85	IC TA7739F			
C212	1-163-017-00	CERAMIC CHIP 0.0047MF	5%	50V		IC302	8-759-701-07	IC NJM2063AM			
C213	1-163-078-11	CERAMIC CHIP 0.033MF	5%	25V		IC303	8-759-802-80	IC LA4535M			
C214	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V		IC601	8-752-012-32	IC CX20123			
C216	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V		J301	1-562-974-11	JACK (PHONES)			
C217	1-163-081-00	CERAMIC CHIP 0.22MF		25V		JR1	1-216-864-11	METAL GLAZE	0	5%	1/16W
C218	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V		JR2	1-216-864-11	METAL GLAZE	0	5%	1/16W
C219	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V		JR3	1-216-864-11	METAL GLAZE	0	5%	1/16W
C301	1-124-431-00	ELECT 33MF	20%	4V		JR4	1-216-864-11	METAL GLAZE	0	5%	1/16W
C303	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V		JR5	1-216-864-11	METAL GLAZE	0	5%	1/16W
C304	1-163-038-00	CERAMIC CHIP 0.1MF		25V		JR6	1-216-296-00	METAL GLAZE	0	5%	1/8W
C305	1-124-431-00	ELECT 33MF	20%	4V		JR7	1-216-296-00	(F100-3:US,Canadian)			
C307	1-135-104-00	TANTAL. CHIP 10MF	10%	4V		JR8	1-216-296-00	...METAL GLAZE	0	5%	1/8W
C308	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V		JR9	1-216-296-00	METAL GLAZE	0	5%	1/8W
C309	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V		JR10	1-216-864-11	METAL GLAZE	0	5%	1/16W
C310	1-124-576-11	ELECT 220MF	20%	4V		JR11	1-216-296-00	METAL GLAZE	0	5%	1/8W
C311	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V		JR12	1-216-296-00	METAL GLAZE	0	5%	1/8W
C312	1-135-104-00	TANTAL. CHIP 10MF	10%	4V		JR13	1-216-296-00	METAL GLAZE	0	5%	1/8W
C601	1-135-070-00	TANTAL. CHIP 0.1MF	10%	35V		JR14	1-216-296-00	METAL GLAZE	0	5%	1/8W
C602	1-163-023-00	CERAMIC CHIP 0.015MF	10%	50V		JR15	1-216-864-11	METAL GLAZE	0	5%	1/16W
C603	1-135-087-21	TANTAL. CHIP 0.68MF	10%	20V		JR16	1-216-864-11	METAL GLAZE	0	5%	1/16W
C604	1-135-070-00	TANTAL. CHIP 0.1MF	10%	35V		JR17	1-216-864-11	METAL GLAZE	0	5%	1/16W
C605	1-135-071-21	TANTAL. CHIP 0.15MF	10%	35V		JR18	1-216-296-00	METAL GLAZE	0	5%	1/8W
C606	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V		JR19	1-216-296-00	METAL GLAZE	0	5%	1/8W
C607	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V		JR20	1-216-864-11	METAL GLAZE	0	5%	1/16W
C701	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V		JR21	1-216-296-00	METAL GLAZE	0	5%	1/8W
C702	1-135-073-00	TANTAL. CHIP 0.33MF	10%	35V		JR22	1-216-864-11	METAL GLAZE	0	5%	1/16W
C703	1-135-073-00	TANTAL. CHIP 0.33MF	10%	35V		JR23	1-216-296-00	METAL GLAZE	0	5%	1/8W
C704	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V		JR24	1-216-296-00	METAL GLAZE	0	5%	1/8W
C705	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V		JR25	1-216-864-11	METAL GLAZE	0	5%	1/16W
C706	1-135-091-00	TANTAL. CHIP 1MF	10%	16V		JR26	1-216-864-11	METAL GLAZE	0	5%	1/16W
C707	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V		JR27	1-216-864-11	METAL GLAZE	0	5%	1/16W
C709	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V		JR28	1-216-864-11	METAL GLAZE	0	5%	1/16W
C801	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V		JR29	1-216-864-11	METAL GLAZE	0	5%	1/16W
C802	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V		JR30	1-216-296-00	(F100-3:US,Canadian)			
C803	1-135-104-00	TANTAL. CHIP 10MF	10%	4V		JR31	1-216-296-00	...METAL GLAZE	0	5%	1/8W
C804	1-124-576-11	ELECT 220MF	20%	4V		L1	1-459-641-11	COIL (WITH CORE)(FM RF)			
C805	1-135-104-00	TANTAL. CHIP 10MF	10%	4V		L2	1-459-641-11	COIL (WITH CORE)(FM OSC)			
CF1	1-567-338-65	FILTER, CERAMIC 10.7MHz (FM IF:including CF2,3)				L5	1-410-209-51	INDUCTOR CHIP 27UH			
CN101	1-506-573-12	CONNECTOR 2P				L6	1-410-196-11	INDUCTOR CHIP 2.2UH			
CT1	1-141-333-11	CAP, VAR, TRIMMER				L7	1-410-196-11	INDUCTOR CHIP 2.2UH			
CT3	1-141-333-11	CAP, VAR, TRIMMER				L8	1-410-204-31	INDUCTOR CHIP 10UH			
CT4	1-141-333-11	CAP, VAR, TRIMMER				L11	1-402-282-11	ANTENNA, FERRITE-ROD (AM)			
D1	8-719-939-02	DIODE SVC203CP				L101	1-410-204-31	INDUCTOR CHIP 10UH			
D2	8-719-939-02	DIODE SVC203CP									
D5	8-719-951-05	DIODE KV1560									
D6	8-719-101-23	DIODE 1SS123									

Ref.No.	Part No.	Description
L201	1-410-204-31	INDUCTOR CHIP 10UH
L301	1-410-204-31	INDUCTOR CHIP 10UH
L801	1-410-213-51	INDUCTOR CHIP 56UH
MF1	1-567-693-11	FILTER, CERAMIC AM (455kHz)
PH701	8-719-751-42	DIODE NJL5141E-AA
PM901	1-454-406-11	SOLENOID, PLUNGER
Q1	8-729-200-87	TRANSISTOR 2SC2714Y
Q2	8-729-175-73	TRANSISTOR 2SC2757
Q3	8-729-102-06	TRANSISTOR 2SC2223
Q6	8-729-102-06	TRANSISTOR 2SC2223
Q7	8-729-100-66	TRANSISTOR 2SC1623
Q8	8-729-807-87	TRANSISTOR 2SB1295-UL6
Q9	8-729-402-13	TRANSISTOR XN1501
Q10	8-729-159-64	TRANSISTOR 2SD596
Q11	8-729-403-17	TRANSISTOR XN1215
Q12	8-729-602-36	TRANSISTOR 2SA1602
Q16	8-729-602-21	TRANSISTOR 2SC4154T
Q17	8-729-102-06	TRANSISTOR 2SC2223
Q18	8-729-602-21	TRANSISTOR 2SC4154T
Q301	8-729-100-66	TRANSISTOR 2SC1623
Q302	8-729-100-66	TRANSISTOR 2SC1623
Q303	8-729-100-76	TRANSISTOR 2SA812
Q601	8-729-162-43	TRANSISTOR 2SB624-BV3
Q602	8-729-100-66	TRANSISTOR 2SC1623
Q603	8-729-100-66	TRANSISTOR 2SC1623
Q604	8-729-162-43	TRANSISTOR 2SB624-BV3
Q701	8-729-402-13	TRANSISTOR XN1501
Q702	8-729-100-66	TRANSISTOR 2SC1623
Q703	8-729-162-43	TRANSISTOR 2SB624-BV3
Q704	8-729-100-66	TRANSISTOR 2SC1623
Q705	8-729-900-51	TRANSISTOR DTA114TK
Q706	8-729-402-13	TRANSISTOR XN1501
Q707	8-729-403-42	TRANSISTOR XN1401
Q708	8-729-100-76	TRANSISTOR 2SA812
Q709	8-729-900-51	TRANSISTOR DTA114TK
Q710	8-729-902-99	TRANSISTOR DTC114TK
Q711	8-729-900-51	TRANSISTOR DTA114TK
Q713	8-729-403-17	TRANSISTOR XN1215
Q714	8-729-100-66	TRANSISTOR 2SC1623
Q715	8-729-162-43	TRANSISTOR 2SB624-BV3
Q716	8-729-403-17	TRANSISTOR XN1215
Q718	8-729-100-76	TRANSISTOR 2SA812
Q719	8-729-403-17	TRANSISTOR XN1215
Q801	8-729-402-13	TRANSISTOR XN1501
Q802	8-729-162-43	TRANSISTOR 2SB624-BV3
Q803	8-729-100-66	TRANSISTOR 2SC1623
Q804	8-729-159-64	TRANSISTOR 2SD596
Q805	8-729-100-66	TRANSISTOR 2SC1623
Q806	8-729-162-43	TRANSISTOR 2SB624-BV3
R1	1-216-837-11	METAL GLAZE 22K 5% 1/16W
R2	1-216-809-11	METAL GLAZE 100 5% 1/16W
R3	1-216-845-11	METAL GLAZE 100K 5% 1/16W
R4	1-216-815-11	METAL GLAZE 330 5% 1/16W
R5	1-216-853-11	METAL GLAZE 470K 5% 1/16W
R6	1-216-812-11	METAL GLAZE 180 5% 1/16W
R7	1-216-842-11	METAL GLAZE 56K 5% 1/16W
R8	1-216-803-11	METAL GLAZE 33 5% 1/16W
R9	1-216-853-11	METAL GLAZE 470K 5% 1/16W

Ref.No.	Part No.	Description
R10	1-216-839-11	METAL GLAZE 33K 5% 1/16W
R11	1-216-853-11	METAL GLAZE 470K 5% 1/16W
R12	1-216-845-11	METAL GLAZE 100K 5% 1/16W
R13	1-216-803-11	METAL GLAZE 33 5% 1/16W
R14	1-216-845-11	METAL GLAZE 100K 5% 1/16W
R15	1-216-825-11	METAL GLAZE 2.2K 5% 1/16W
R16	1-216-815-11	METAL GLAZE 330 5% 1/16W
R17	1-216-839-11	METAL GLAZE 33K 5% 1/16W
R18	1-216-837-11	METAL GLAZE 22K 5% 1/16W
R19	1-216-821-11	METAL GLAZE 1K 5% 1/16W
R20	1-216-829-11	(F100-3:US,Canadian) ...METAL GLAZE 4.7K 5% 1/16W
R21	1-216-821-11	METAL GLAZE 1K 5% 1/16W
R22	1-216-839-11	METAL GLAZE 33K 5% 1/16W
R25	1-216-843-11	METAL GLAZE 68K 5% 1/16W
R26	1-216-853-11	METAL GLAZE 470K 5% 1/16W
R28	1-216-853-11	METAL GLAZE 470K 5% 1/16W
R29	1-216-803-11	METAL GLAZE 33 5% 1/16W
R30	1-216-853-11	METAL GLAZE 470K 5% 1/16W
R31	1-216-821-11	METAL GLAZE 1K 5% 1/16W
R32	1-216-815-11	METAL GLAZE 330 5% 1/16W
R33	1-216-821-11	METAL GLAZE 1K 5% 1/16W
R34	1-216-833-11	METAL GLAZE 10K 5% 1/16W
R35	1-216-839-11	METAL GLAZE 33K 5% 1/16W
R36	1-216-831-11	METAL GLAZE 6.8K 5% 1/16W
R37	1-216-821-11	METAL GLAZE 1K 5% 1/16W
R39	1-216-821-11	(F103)...METAL GLAZE 1K 5% 1/16W
R40	1-216-833-11	METAL GLAZE 10K 5% 1/16W
R42	1-216-803-11	METAL GLAZE 33 5% 1/16W
R44	1-216-853-11	METAL GLAZE 470K 5% 1/16W
R45	1-216-837-11	METAL GLAZE 22K 5% 1/16W
R47	1-216-821-11	METAL GLAZE 1K 5% 1/16W
R50	1-216-803-11	METAL GLAZE 33 5% 1/16W
R52	1-216-839-11	METAL GLAZE 33K 5% 1/16W
R53	1-216-833-11	METAL GLAZE 10K 5% 1/16W
R55	1-216-803-11	METAL GLAZE 33 5% 1/16W
R56	1-216-825-11	METAL GLAZE 2.2K 5% 1/16W
R101	1-216-085-00	METAL GLAZE 33K 5% 1/10W
R102	1-216-085-00	METAL GLAZE 33K 5% 1/10W
R103	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R104	1-216-117-00	METAL GLAZE 680K 5% 1/10W
R105	1-216-085-00	METAL GLAZE 33K 5% 1/10W
R106	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W
R107	1-216-058-00	METAL GLAZE 2.4K 5% 1/10W
R108	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R109	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R110	1-216-112-00	METAL GLAZE 430K 5% 1/10W
R111	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
R112	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W
R201	1-216-085-00	METAL GLAZE 33K 5% 1/10W
R202	1-216-085-00	METAL GLAZE 33K 5% 1/10W
R203	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R204	1-216-117-00	METAL GLAZE 680K 5% 1/10W
R205	1-216-085-00	METAL GLAZE 33K 5% 1/10W
R206	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W
R207	1-216-058-00	METAL GLAZE 2.4K 5% 1/10W
R208	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R209	1-216-089-00	METAL GLAZE 47K 5% 1/10W



Ref.No.	Part No.	Description			
R210	1-216-112-00	METAL GLAZE	430K	5%	1/10W
R211	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R212	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R301	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R302	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R303	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R304	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R307	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R308	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R309	1-216-056-00	METAL GLAZE	2K	5%	1/10W
R310	1-216-058-00	METAL GLAZE	2.4K	5%	1/10W
R311	1-216-025-00	METAL GLAZE	100	5%	1/10W
R312	1-216-103-00	METAL GLAZE	180K	5%	1/10W
R313	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R601	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R602	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R603	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R604	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R605	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R606	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R607	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R608	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R609	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R610	1-216-001-00	METAL GLAZE	10	5%	1/10W
R611	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R612	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R613	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R614	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R615	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R616	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R617	1-216-001-00	METAL GLAZE	10	5%	1/10W
R618	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R701	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R702	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R703	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R705	1-216-035-00	METAL GLAZE	270	5%	1/10W
R706	1-216-105-00	METAL GLAZE	220K	5%	1/10W
R707	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R708	1-216-025-00	METAL GLAZE	100	5%	1/10W
R709	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R710	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R711	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R712	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R713	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R714	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R715	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R716	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R717	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R718	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R719	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R720	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R721	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R722	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R723	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R724	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R725	1-216-025-00	METAL GLAZE	100	5%	1/10W
R726	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R727	1-216-049-00	METAL GLAZE	1K	5%	1/10W

Ref.No.	Part No.	Description			
R728	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R732	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R733	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R734	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R801	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R802	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R803	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R804	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R805	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R806	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R807	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R808	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R809	1-216-035-00	METAL GLAZE	270	5%	1/10W
R810	1-216-007-00	METAL GLAZE	18	5%	1/10W
RV1	1-230-990-11	RES, ADJ, METAL GLAZE	10K (VCO)		
RV2	1-228-356-00	RES, ADJ, METAL GLAZE	22K (F MAX)		
RV3	1-228-356-00	RES, ADJ, METAL GLAZE	22K (F MIN)		
RV4	1-230-215-00	RES, ADJ, METAL GLAZE	100K (TUNING)		
RV101	1-237-002-11	RES, ADJ, METAL GLAZE	2.2K (LEVEL L)		
RV201	1-237-002-11	RES, ADJ, METAL GLAZE	2.2K (LEVEL R)		
RV301	1-230-955-11	RES, VAR, CARBON	10K/10K (VOL)		
RV601	1-237-004-11	RES, ADJ, METAL GLAZE	10K (SPEED)		
S1	1-571-121-11	SWITCH, SLIDE (FUNCTION)			
S2	1-571-120-11	SWITCH, SLIDE (BAND)			
S301	1-570-396-11	SWITCH, SLIDE (FWD/REV)			
S302	1-570-397-11	SWITCH, SLIDE (TAPE)			
S303	1-570-397-11	SWITCH, SLIDE (DOLBY NR)			
S701	1-570-548-11	SWITCH, LEAF (POWER TAPE)			
S702	1-570-395-11	SWITCH, LEAF (DIR)			
T1	1-404-690-11	TRANSFORMER, IF (AM IFT)			
T2	1-406-177-11	COIL (AM OSC)			
T3	1-448-302-11	TRANSFORMER, DC-DC CONVERTER			
T801	1-447-864-11	TRANSFORMER, DC-DC CONVERTER			


## ACCESSORY &amp; PACKING MATERIAL

1-528-176-11	(F100-3:US,Canadian,F103:AEP)	...BATTERY, STORAGE (NC-5WM)
△1-528-249-11	(F100-3:US).....	BATTERY CHARGER (BC-7S)
△1-528-250-11	(F100-3:Canadian)...	BATTERY CHARGER (BC-7S)
△1-528-251-11	(F103:AEP).....	BATTERY CHARGER (BC-7S)
3-335-959-01	CUSHION	
3-335-960-01	LID, CUSHION	
3-335-961-01	SPACER	
3-338-669-01	(F103:AEP)...	SPACER
*3-345-716-01	(F100-3:US,Canadian)...	INDIVIDUAL CARTON
*3-345-718-01	(F103:AEP).....	INDIVIDUAL CARTON
*3-345-719-01	(F103:E).....	INDIVIDUAL CARTON
3-769-932-11	(F103:AEP,E).....	MANUAL, INSTRUCTION
3-769-932-21	(F100-3:US,Canadian)...	MANUAL, INSTRUCTION
3-769-932-31	(F100-3:Canadian).....	MANUAL, INSTRUCTION
3-769-932-41	(F103:AEP).....	MANUAL, INSTRUCTION
3-342-508-01	PROTECTOR, JACK	
3-345-726-01	CASE, CARRYING	
3-701-622-00	(F100-3:US,Canadian)...	BAG, POLYETHYLENE
8-952-266-89	(F100-3:US,Canadian,F103:AEP)	...HEADPHONE MDR-A10L/A SET
8-952-350-90	(F103:E).....	EARPHONE MDR-E454 SET
X-3329-779-1	CASE (B) ASSY, BATTERY	(Rechargeable)

## Note:

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

## Note:

Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



# WM-F100III/F103

## SONY<sup>®</sup> SERVICE MANUAL

*US Model*  
*Canadian Model*  
*WM-F100 III*

*AEP Model*  
*E Model*  
*WM-F103*

## SUPPLEMENT-1

Subject: Addition of West Germany Model

- Refer to WM-F100III/F103 Service Manual (WM-F103: AEP model) previously issued for the information of this set.
- Only following items differ from those in WM-F103 (AEP model)

Page	Items	Part No.	Description
1	Frequency range	_____ _____	FM: 87.6 - 107MHz AM: 531 - 1,602kHz
9	L1/L2 CT1	_____ _____	87.35MHz $\pm$ 0.3MHz 107.8MHz $\pm$ 0.5MHz
11/22	C10	1-163-601-91	62PF 5% 50V
19/22	906	A-3266-493-A	MOUNTED PCB, TUNER
19	13	X-3331-055-1	LID ASSY, CASSETTE
19	17	3-345-731-01	LABEL, MODEL NUMBER