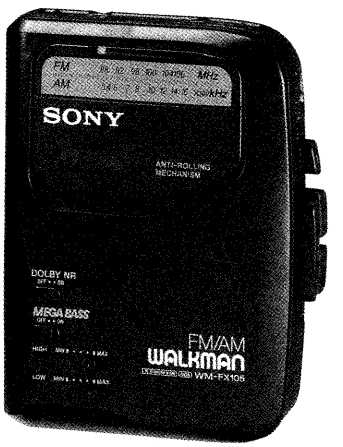
WM-FX105

SERVICE MANUAL

Canadian Model
AEP Model
E Model



Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MF-WMFX105-49

SPECIFICATIONS

Radio FM: 87.5 — 108 MHz; Italian Model
87.6 — 107.9 MHz; AEP, German, E Model
87.6 — 108 MHz; Canadian Model
65.0 — 108 MHz; East European Model
AM: 526.5 — 1606.5 kHz; Italian Model
530 — 1710 kHz; Canadian Model
531 — 1602 kHz; Other Models

Power requirements
- 3 V DC batteries R6 (AA) x 2
- External DC 3 V power sources

Battery life (approximate hours)

Sony Alkaline AM3 (N)	Sony SUM-3 (NS)
8 hrs. (playback) 30 hrs. (radio)	4 hrs. (playback) 15 hrs. (radio)

Dimensions
93.9 x 118.5 x 34.8 mm (w/h/d)
(3 3/4 x 4 3/4 x 1 3/8 in) incl. projecting parts

Mass 205 g (7.3 oz) incl. batteries

Supplied accessories
- Stereo headphones (1)
- Belt clip (1)

Your dealer may not handle some of the above listed accessories.
Please ask the dealer for detailed information.

Design and specifications are subject to change without notice.

Note
This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

使用時は添付資料も参照のこと
Refer to the additional documents.

RADIO CASSETTE PLAYER

SONY®

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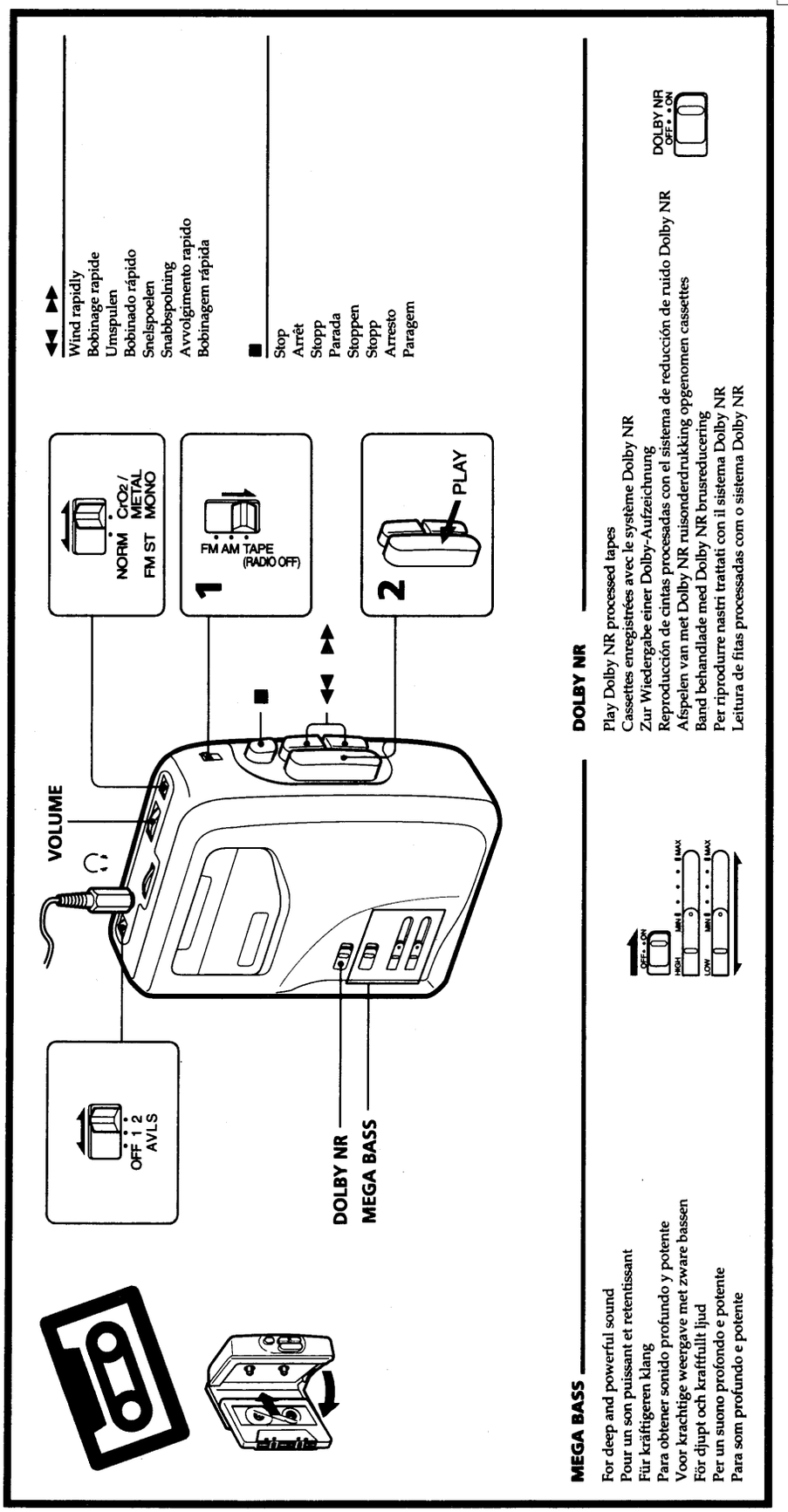
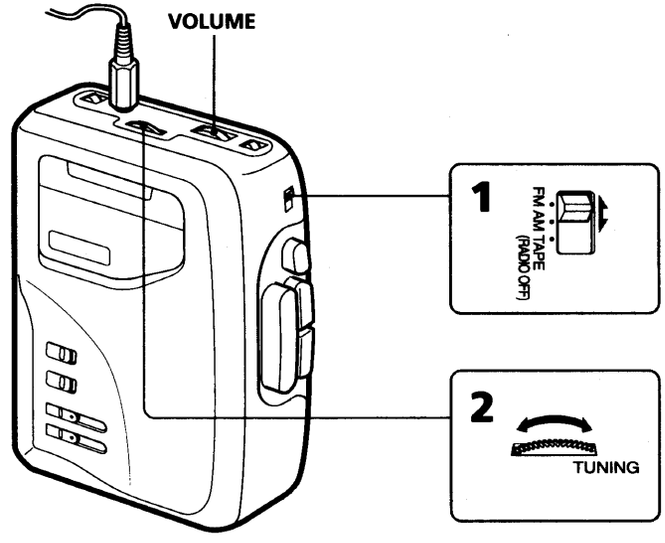
SECTION 1
GENERAL

This section is extracted from instruction manual.

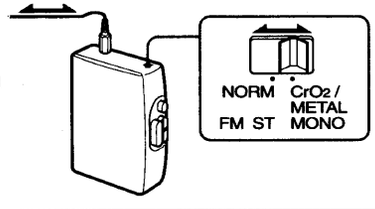




Improve radio reception/Amélioration de la réception radio/Für optimalen Empfang/Mejora de la radiorrecepción
Verbeteren van de radio-ontvangst/Tydligare radiomottagning/Per migliorare la ricezione radio/Para melhorar a recepção de rádio

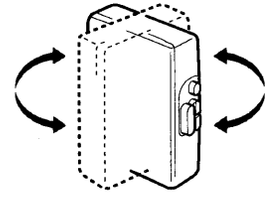
FM (UKW)

Extend the headphones cord or adjust the FM ST/MONO selector.
Déployer le cordon du casque et régler le sélecteur FM ST/MONO.
Extienda el cable de los auriculares o ajuste el selector FM ST/MONO.
Estire o fio dos auscultadores ou ajuste o selector FM ST/MONO.
Das Kopfhörerkabel ausbreiten und den FM ST/MONO-Wähler entsprechend den Empfangsbedingungen einstellen.
Strek het hoofdtelefoonsnoer uit of verschuif de FM ST/MONO schakelaar.
Sträck ut hörlurssladden eller ställ in väljaren FM ST/MONO i lämpligt läge.
Estendere il filo delle cuffie o regolare il selettore FM ST/MONO.



AM (MW)

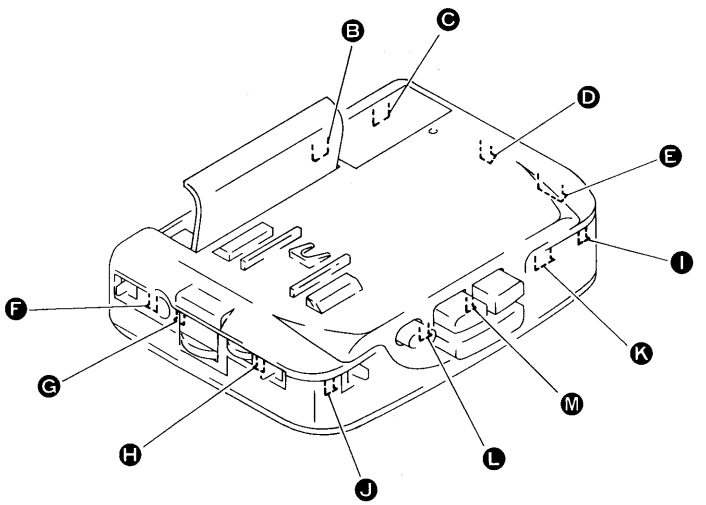
Rotate the Walkman.
Tourner le Walkman.
Gire el Walkman.
Gire o Walkman.
Den Walkman drehen.
Verdraai de Walkman in een horizontaal vlak.
Vrid kassettradion på det horisontella planet.
Ruotare il Walkman.

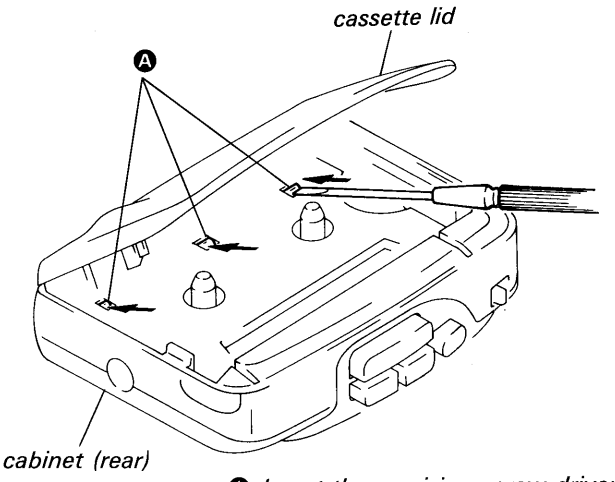


SECTION 2
DISASSEMBLY

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

2-1. CABINET (REAR)

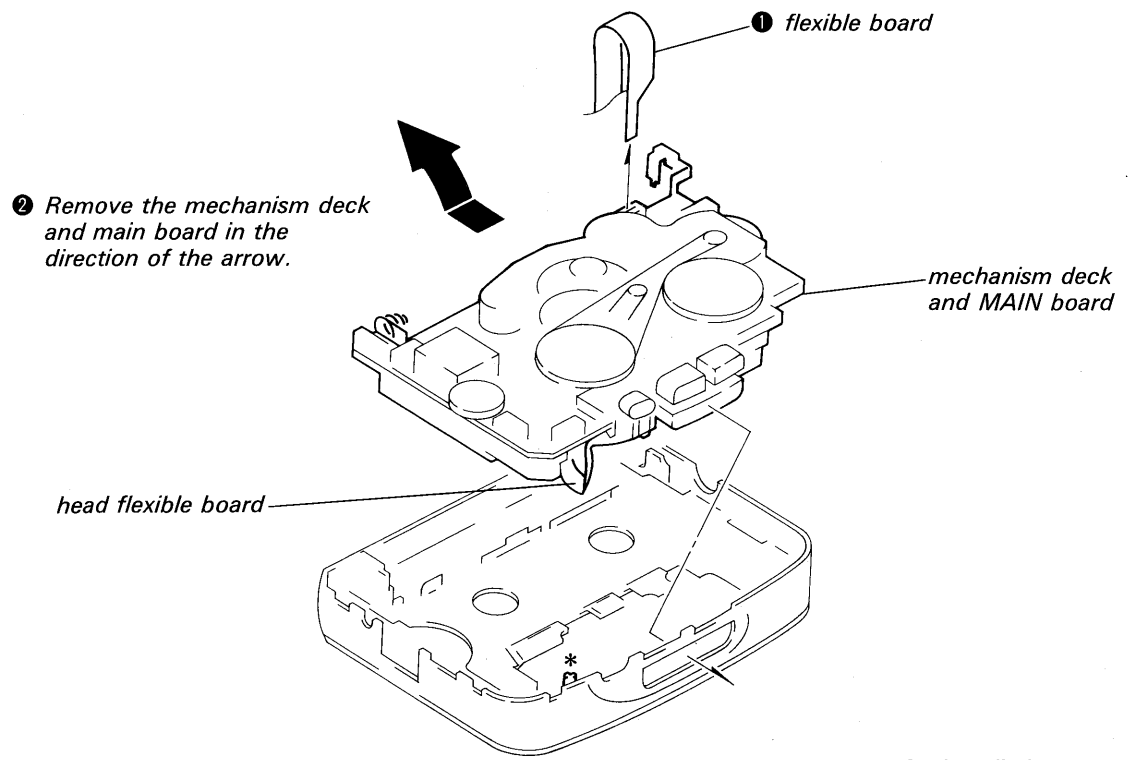




❶ *Insert the precision screw driver (1.4mm flat-blade) in to the slit at claw Ⓐ and release the claw.*

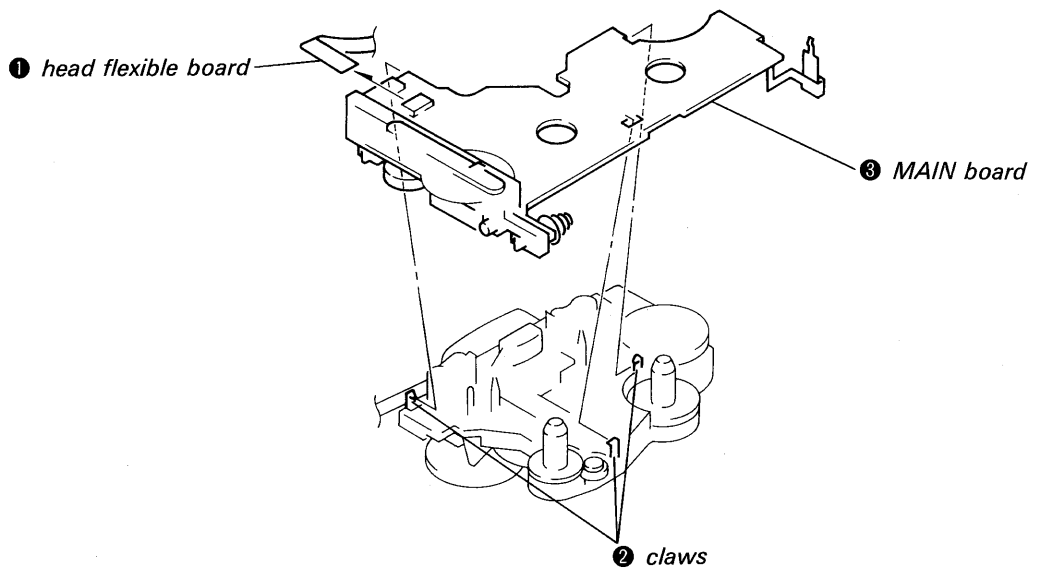
❷ *Remove the cabinet (rear). (Release all claw Ⓑ to Ⓜ in alphabetical order.)*

2-2. MECHANISM DECK AND MAIN BOARD

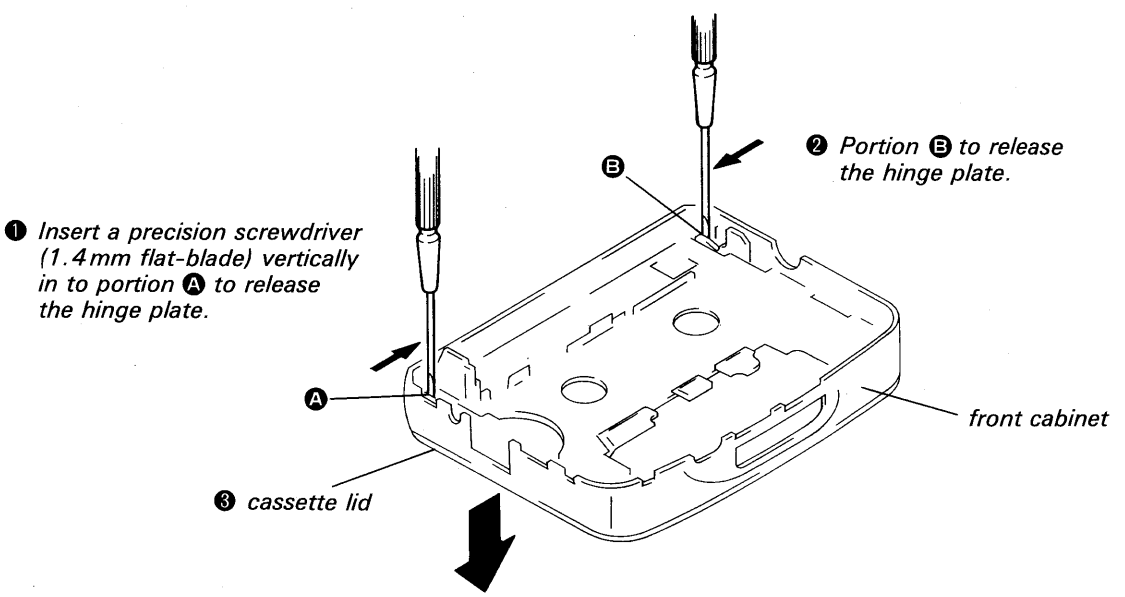


* *note for installation :*
Make sure to put the head flexible board to ditch before install the mechanism deck and MAIN board.

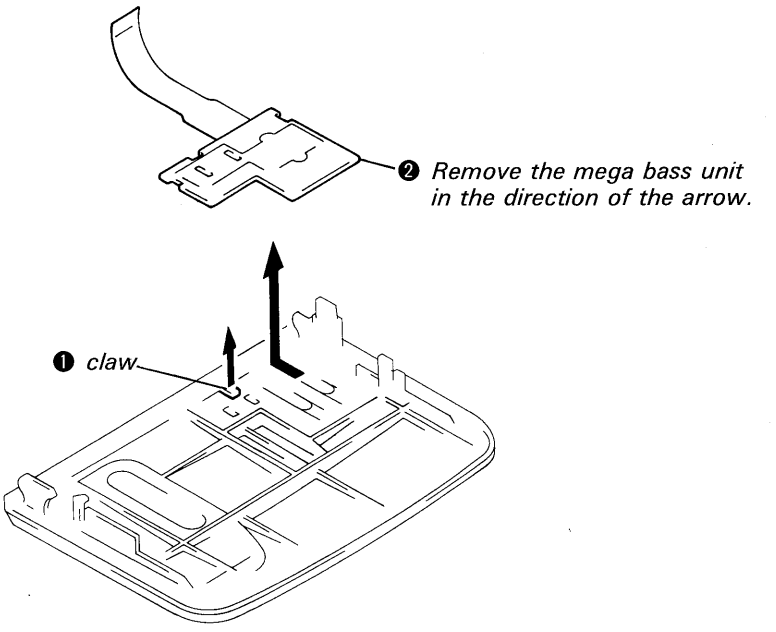
2-3. MAIN BOARD



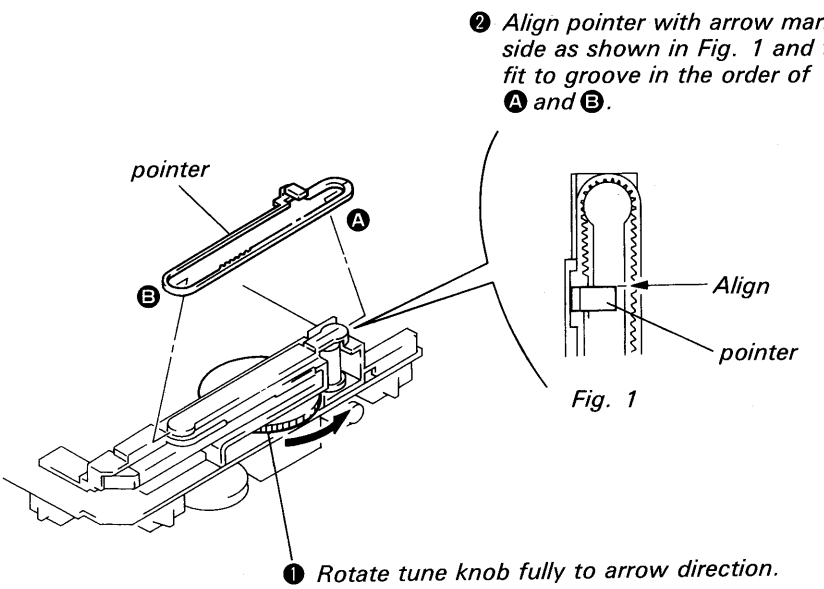
2-4. CASSETTE LID



2-5. MEGA BASS UNIT



2-6. DIAL POINTER SETTING



SECTION 3
ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS

Precaution

1. Clean the following parts with a denatured-alcohol-moistened swab :
   playback head　　pinch roller
   capstan　　rubber belts
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 (2.5V) unless otherwise noted.

Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	20 - 42 g-cm (0.28 - 0.58 oz-inch)
FWD Back Tension		less than 2 g-cm (less than 0.03 oz-inch)
FF, REW	CQ-201B	more than 60 g-cm (more than 0.83 oz-inch)

Tape Pulling Froce Measurement

Mode	Torque meter	Meter reading
FWD	CQ-403A	more than 40g (more than 1.4 oz)

3-2. ELECTRICAL ADJUSTMENTS

Precaution

- Supplied voltage : 2.5V
- Switch and control position
  TAPE switch : NORM
  MEGA BASS switch : OFF
  VOLUME control : maximum
  AVLS switch : OFF
  DOLBY NR switch : OFF

Tape section

- FUNCTION switch : TAPE

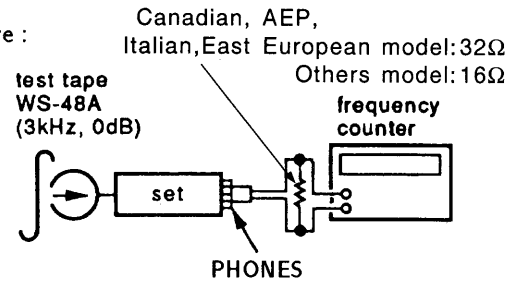
Test tape

Type	Signal	Used for
WS-48A	3kHz, 0dB	Tape Speed Adjustment

Tape speed adjustment

Tape selection switch : NORM

Procedure :

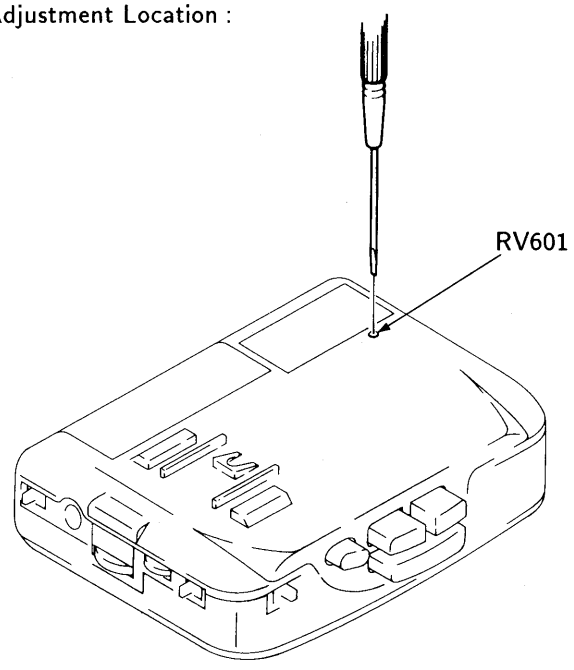


Play back WS-48A(tape center portion) in reverse mode.

Adjust the RV601 so that the frequency counter reads 2.970Hz ± 15Hz.

Frequency difference between the begining and the end of the tape should be within ±1.5%.

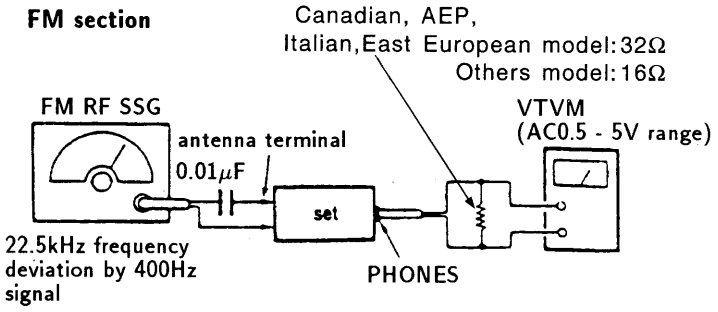
Adjustment Location :



Radio section

-FUNCTION switch : RADIO

FM section



-Repeat the procedure in each adjustment several times since L (3, 2) affects CT (3, 2) and CT (3, 2) affects L (3, 2). Both the frequency coverage and tracking adjustments should end with the final adjustment of the trimmer capacitors.

FM Frequency Coverage Adjustment

Pointer position	SG frequency	Adjustment part	Reading on VTVM
f minimum	86MHz ((64MHz)) [87.35MHz] 〈87.35MHz〉	L3	maximum
f maximum	109.5MHz ((109.5MHz)) [108.25MHz] 〈107.8MHz〉	CT3	

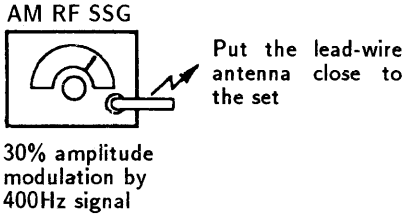
(( )) : East European model, [ ] : Italian model,
〈 〉 : Saudi Arabia model

FM Tracking Adjustment

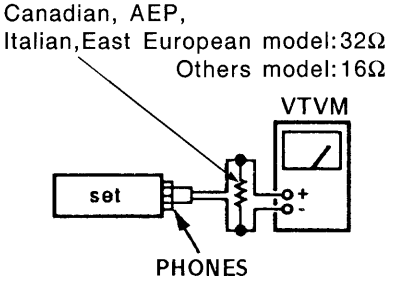
SG and set frequency	Adjustment part	Reading on VTVM
86MHz ((64MHz)) [87.35MHz] 〈87.35MHz〉	L2	maximum
109.5MHz ((109.5MHz)) [108.25MHz] 〈107.8MHz〉	CT2	

(( )) : East European model, [ ] : Italian model,
〈 〉 : Saudi Arabia model

AM section



-Repeat the procedure in each adjustment several times since L (4, 1) affects CT (4, 1) and CT (4, 1) affects L (4, 1). Both the frequency coverage and tracking ajustments should end with the final adjustment of the trimmer capacitors.



AM IF Adjustment

SG and set frequency	Adjustment part	Reading on VTVM
455kHz	T1	maximum

AM Frequency Coverage Adjustment

Pointer position	SG frequency	Adjustment part	Reading on VTVM
f minimum	505kHz ((516.5kHz)) [516.5kHz]	L4	maximum
f maximum	1,750kHz ((1,631kHz)) [1,631.5kHz]	CT4	

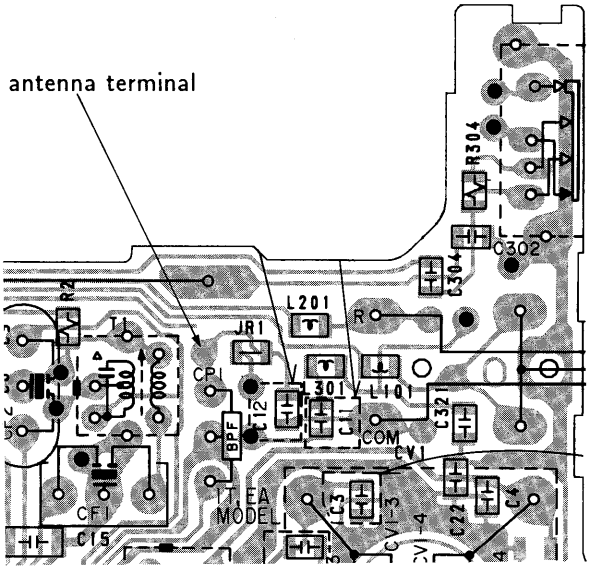
(( )) : East European, Saudi Arabia model,
[ ] : Italian model

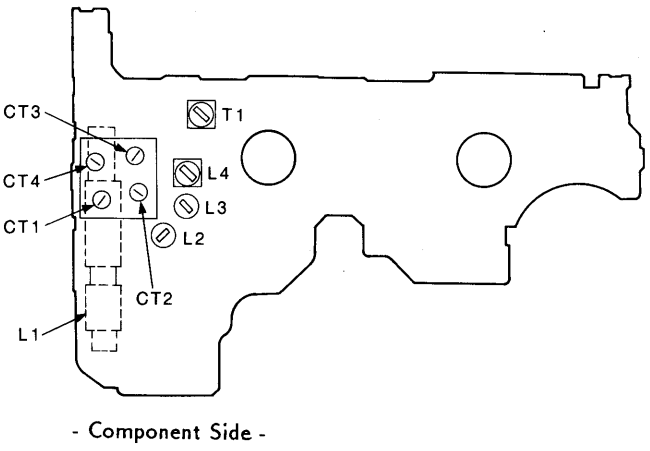
AM Tracking Adjustment

SG and set frequency	Adjustment part	Reading on VTVM
620kHz ((800kHz)) [800kHz]	L1	maximum
1,400kHz ((1,300kHz)) [1,300kHz]	CT1	

(( )) : East European, Saudi Arabia model,
[ ] : Italian model

Adjustment Location : main board



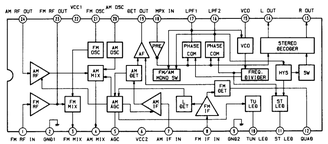


- Component Side -

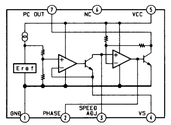
SECTION 4
DIAGRAMS

● IC Block Diagrams

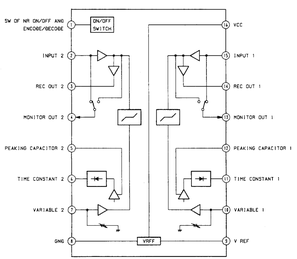
IC1 TA8122AF



IC601 MM1038BFF-T1



IC331 NJM2063AM

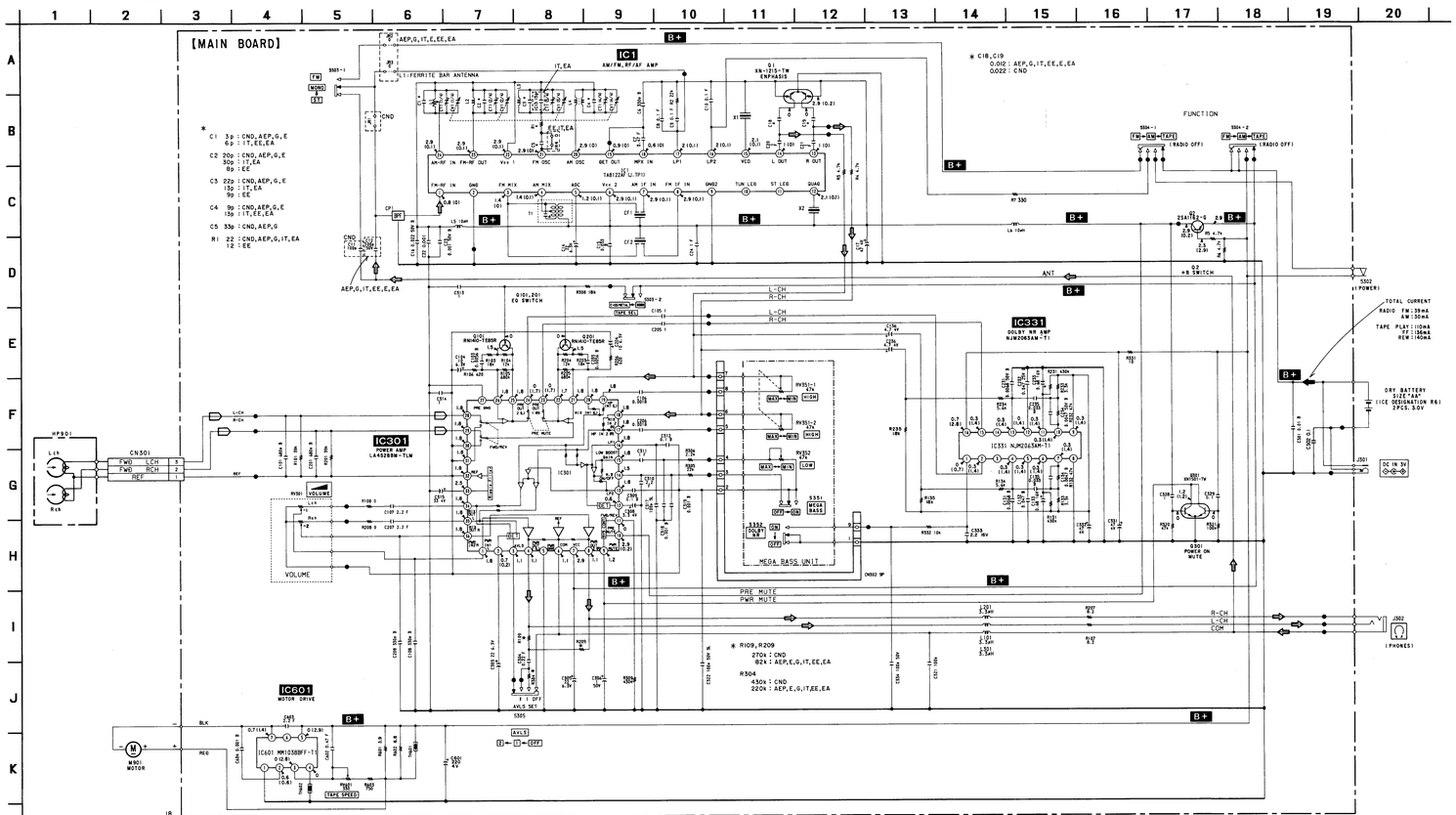


Note:

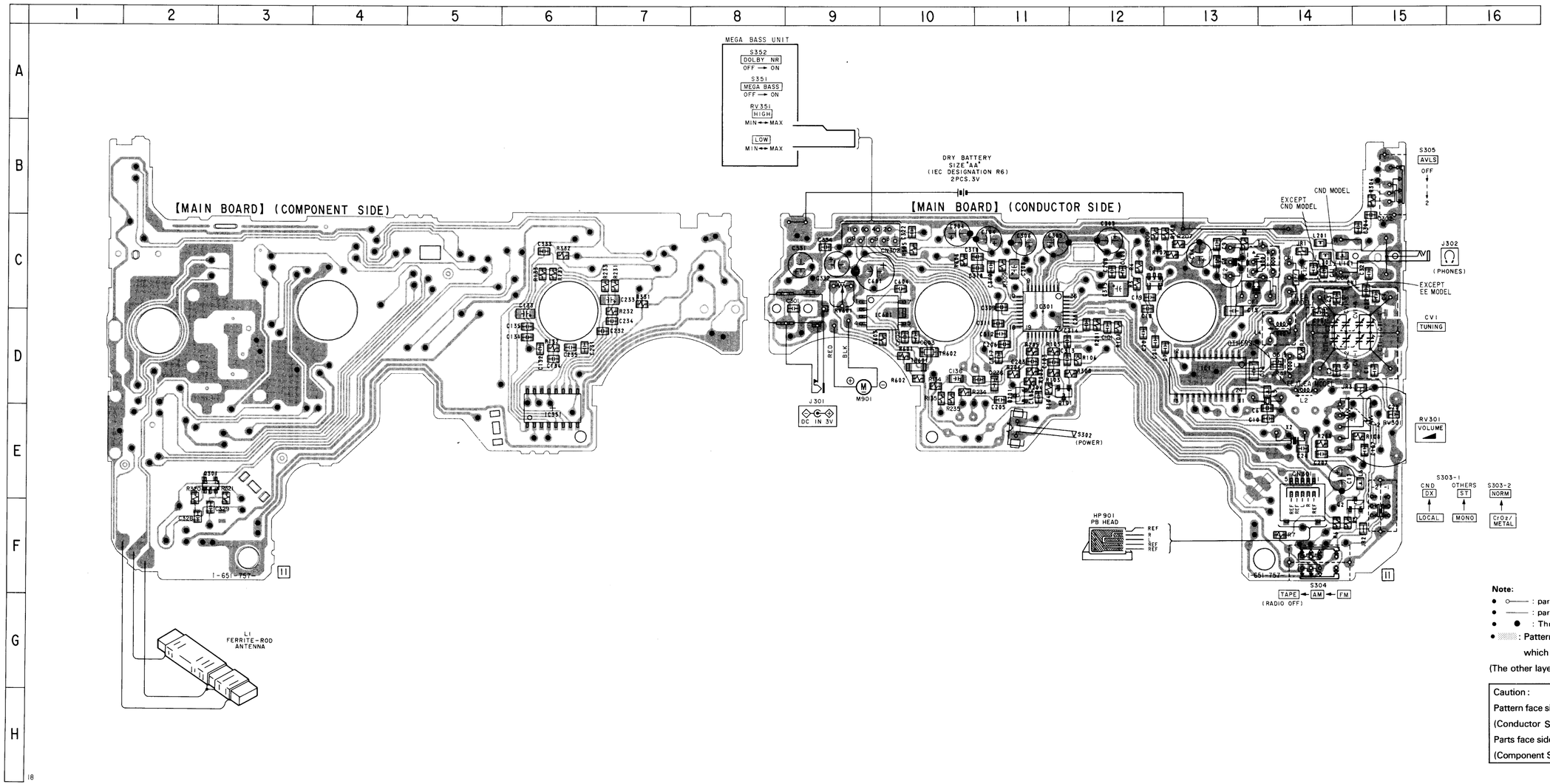
- All capacitors are in μF unless otherwise noted. pF: μμF
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : internal component.
- **B+** : B+ Line
- Total current is measured with no cassette installed.
- Power voltage is dc 3 V and fed with regulated dc power supply from external power voltage jack.
- Voltage are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : PB
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM ⇨ : PB

CND : Canadian EA : Saudi Arabia
G : Germany EE : East European
IT : Italian

4-1. SCHEMATIC DIAGRAM



4-2. PRINTED WIRING BOARD

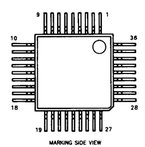


● **Semiconductor Location**

Ref. No.	Location
IC1	D-13
IC301	D-11
IC331	E-6
IC601	D-9
Q1	C-12
Q2	E-14
Q101	D-12
Q201	D-11
Q301	E-2

● **Semiconductor Lead Layout**

LA4582BM



Note:

- ○—— : parts extracted from the component side.
- —— : parts extracted from the conductor side.
- ● : Through hole.
- ▒▒ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

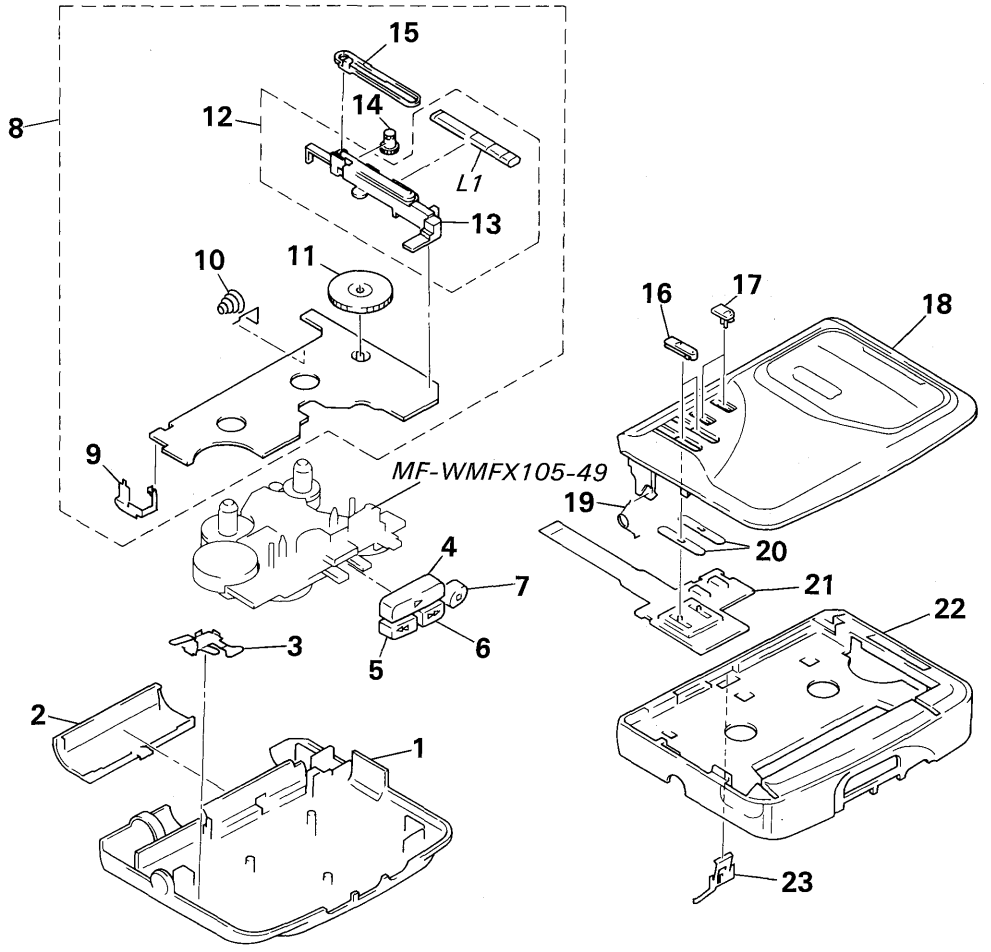
Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

SECTION 5
EXPLODED VIEWS

NOTE:

- -xx,-x mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE)...(RED)
  ↑ ↑
  Parts color Cabinet's color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (#mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviations
  CND: Canadian
  IT: Italian
  G: German
  EE: East European
  EA: Saudi Arabia

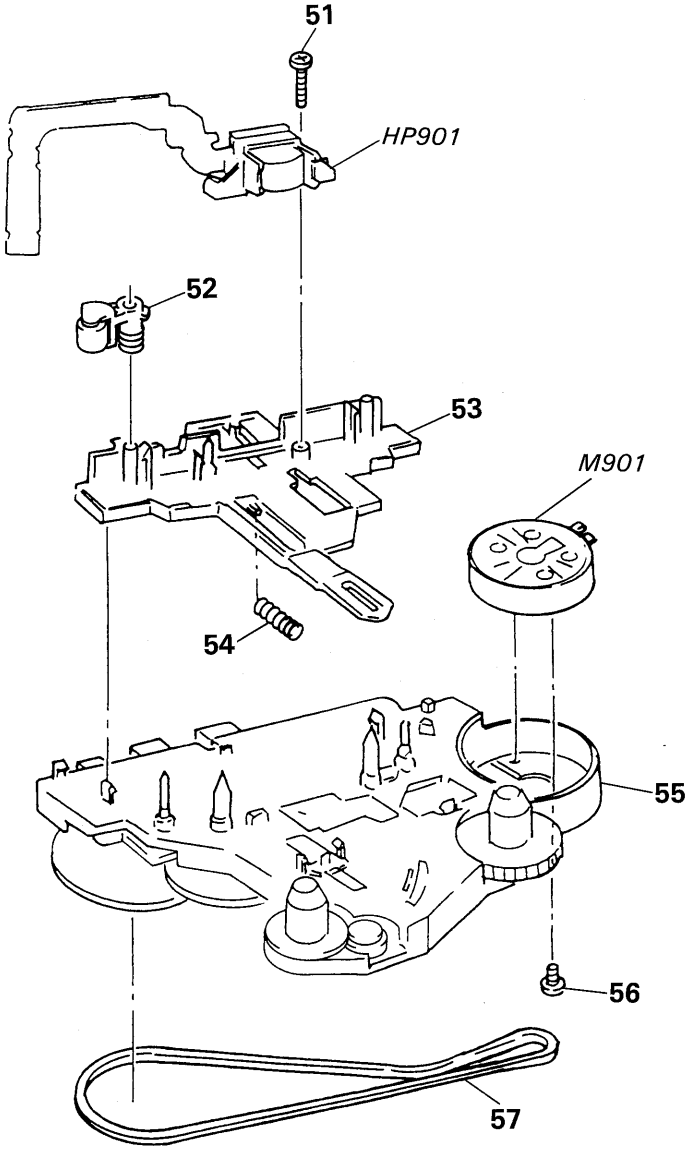
5-1. MAIN SECTION



Ref.No.	Part No.	Description	Remark
1	3-910-921-01	CABINET (REAR) (CF-0)	
2	3-910-899-01	LID, BATT	
3	3-910-896-01	GROUND, MOTOR	
4	3-910-538-01	BUTTON (PLAY)	
5	3-910-540-01	BUTTON (REW)	
6	3-910-539-01	BUTTON (FF)	
7	3-910-541-01	BUTTON (STOP)	
8	A-3016-539-A	MAIN BOARD, COMPLETE (AEP,E,G)	
8	A-3016-540-A	MAIN BOARD, COMPLETE (IT)	
8	A-3016-542-A	MAIN BOARD, COMPLETE (CND)	
8	A-3016-548-A	MAIN BOARD, COMPLETE (EE)	
8	A-3016-600-A	MAIN BOARD, COMPLETE (EA)	
9	3-910-894-01	TERMINAL (+), BATTERY	
10	3-910-895-01	TERMINAL (-), BATTERY	
11	3-910-902-01	KNOB (TUNE)	
12	X-3368-117-1	ANTENNA SUB ASSY, BAR	

Ref.No.	Part No.	Description	Remark
*13	3-910-904-01	CHASSIS, ANTENNA	
14	3-910-897-01	GEAR (TUNE)	
15	3-910-893-01	POINTER	
16	3-910-536-01	KNOB (MB-SL)	
17	3-910-542-01	KNOB (MB-FO)	
18	X-3367-933-1	HOLDER (CF-S)SUB ASSY,CASSETTE (CND)	
18	X-3367-934-1	HOLDER (CF-S)SUB ASSY,CASSETTE (EE)	
18	X-3367-938-1	HOLDER (CF-S)SUB ASSY,CASSETTE (AEP,E,G)	
18	X-3367-957-1	HOLDER (CF-S)SUB ASSY,CASSETTE (IT,EA)	
19	3-910-903-01	SPRING, TORSION	
20	3-910-927-01	PLATE	
21	1-467-641-11	MEGA BASS UNIT (SLIDE)	
22	3-910-920-01	CABINET (FRONT) (CFO) (CND)	
22	3-910-920-11	CABINET (FRONT) (CFO) (AEP,E,G,IT,EE,EA)	
23	3-364-675-01	SPRING (CASSETTE)	
L1	1-501-665-11	ANTENNA, FERRITE-ROD (MW)	

5-2. MECHANISM SECTION (MF-WMFX105-49)



Ref.No.	Part No.	Description	Remark
51	3-910-635-01	SCREW	
52	X-3367-902-1	ARM (N) ASSY, PINCH	
53	3-910-647-01	LEVER (PR/O), PLAY	
54	3-364-328-01	SPRING, COMPRESSION	
55	X-3368-729-1	CHASSIS ASSY	

Ref.No.	Part No.	Description	Remark
56	3-352-758-21	SCREW (M1.7), TOOTHED LOCK	
57	3-354-868-11	BELT	
HP901	1-500-116-11	HEAD, MAGNETIC (PLAYBACK)	
M901	1-698-352-11	MOTOR, DC	

SECTION 6
ELECTRICAL PARTS LIST

MAIN

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.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ, for example:
  uA··· : μA···, uPA··· : μPA···, uPB··· : μPB···, uPC··· : μPC···, uPD··· : μPD···
- CAPACITORS
  uF : μF
- COILS
  uH : μH

When indicating parts by reference number, please include the board.

- Abbreviations
  CND: Canadian
  IT: Italian
  G: German
  EE: East European
  EA: Saudi Arabia

Ref.No.	Part No.	Description			Remark
	A-3016-542-A	MAIN BOARD, COMPLETE (CND)			
	A-3016-539-A	MAIN BOARD, COMPLETE (AEP, E, G)			
	A-3016-540-A	MAIN BOARD, COMPLETE (IT)			
	A-3016-548-A	MAIN BOARD, COMPLETE (EE)			
	A-3016-600-A	MAIN BOARD, COMPLETE (EA)			
		**********			
	3-910-895-01	TERMINAL (-), BATTERY			
	3-910-894-01	TERMINAL (+), BATTERY			
	3-910-923-01	KNOB (TUNE) (EE)			
	3-910-902-01	KNOB (TUNE) (EXCEPT EE)			
		< CAPACITOR >			
C1	1-163-086-00	CERAMIC CHIP	3PF		50V(CND, AEP, E, G)
C1	1-163-089-00	CERAMIC CHIP	6PF		50V(IT, EE, EA)
C2	1-163-100-00	CERAMIC CHIP	20PF	5%	50V(CND, AEP, E, G)
C2	1-163-104-00	CERAMIC CHIP	30PF	5%	50V(IT, EA)
C2	1-163-091-00	CERAMIC CHIP	8PF		50V(EE)
C3	1-163-101-00	CERAMIC CHIP	22PF	5%	50V(CND, AEP, E, G)
C3	1-163-096-00	CERAMIC CHIP	13PF	5%	50V(IT, EA)
C3	1-163-092-00	CERAMIC CHIP	9PF	0.25PF	50V(EE)
C4	1-163-092-00	CERAMIC CHIP	9PF	0.25PF	50V(CND, AEP, E, G)
C4	1-163-096-00	CERAMIC CHIP	13PF	5%	50V(IT, EE, EA)
C5	1-163-239-11	CERAMIC CHIP	33PF	5%	50V(CND, AEP, E, G)
C6	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C7	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C8	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C9	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C10	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C11	1-163-117-00	CERAMIC CHIP	100PF	5%	50V(CND)
C12	1-163-117-00	CERAMIC CHIP	100PF	5%	50V(AEP, E, G, IT, EE, EA)
C13	1-163-097-00	CERAMIC CHIP	15PF	5%	50V(IT, EA)
C14	1-126-153-11	ELECT	22uF	20%	6.3V
C15	1-163-078-11	CERAMIC CHIP	0.033uF	10%	25V
C16	1-163-063-00	CERAMIC CHIP	0.022uF	10%	50V
C17	1-126-154-11	ELECT	47uF	20%	4V
C18	1-163-022-00	CERAMIC CHIP	0.012uF	10%	50V(AEP, E, G, IT, EE, EA)
C18	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V(CND)
C19	1-163-022-00	CERAMIC CHIP	0.012uF	10%	50V(AEP, E, G, IT, EE, EA)
C19	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V(CND)
C20	1-164-346-11	CERAMIC CHIP	1uF		16V
C21	1-164-346-11	CERAMIC CHIP	1uF		16V
C22	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C23	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C24	1-164-346-11	CERAMIC CHIP	1uF		16V
C101	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C103	1-163-018-00	CERAMIC CHIP	0.0056uF	5%	50V
C104	1-126-157-11	ELECT	10uF	20%	6.3V
C105	1-164-346-11	CERAMIC CHIP	1uF		16V
C106	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C107	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C108	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C131	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C132	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C133	1-135-226-21	TANTAL. CHIP	0.68uF	10%	16V
C134	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C135	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C136	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V
C201	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C203	1-163-018-00	CERAMIC CHIP	0.0056uF	5%	50V
C204	1-126-157-11	ELECT	10uF	20%	6.3V
C205	1-164-346-11	CERAMIC CHIP	1uF		16V
C206	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C207	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C208	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C231	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C232	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C233	1-135-226-21	TANTAL. CHIP	0.68uF	10%	16V
C234	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C235	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C236	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V

MAIN

Ref.No.	Part No.	Description			Remark
C301	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C302	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C303	1-126-153-11	ELECT	22uF	20%	6.3V
C304	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C305	1-126-153-11	ELECT	22uF	20%	6.3V
C306	1-126-160-11	ELECT	1uF	20%	50V
C308	1-135-180-21	TANTALUM CHIP	3.3uF	20%	4V
C309	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C310	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C311	1-164-346-11	CERAMIC CHIP	1uF		16V
C312	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C313	1-164-346-11	CERAMIC CHIP	1uF		16V
C314	1-164-346-11	CERAMIC CHIP	1uF		16V
C315	1-135-318-11	TANTAL. CHIP	33uF	20%	4V
C317	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C318	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C319	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C321	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C322	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C328	1-164-346-11	CERAMIC CHIP	1uF		16V
C329	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C331	1-126-154-11	ELECT	47uF	20%	4V
C332	1-126-154-11	ELECT	47uF	20%	4V
C333	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C334	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C601	1-124-434-00	ELECT	220uF	20%	4V
C602	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C603	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C604	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
		< FILTER >			
CF1	1-527-870-00	FILTER			
CF2	1-577-339-11	FILTER, CERAMIC			
		< CONNECTOR >			
CN301	1-569-252-21	HOUSING, CONNECTOR (FPC) 5P			
CN302	1-764-854-12	HOUSING, CONNECTOR 9P			
		< CONPOSITION CIRCUIT BLOCK >			
CP1	1-236-711-21	FILTER, BAND PASS			(CND, AEP, E, G, IT, EA)
CP1	1-239-813-11	FILTER, BAND PASS			(EE)
		< VARIABLE CAPACITOR >			
CV1 CT1	0-755-306-00	CAP, VAR, POLYETHYLENE (TUNING) (EE)			
CV1 CT1	1-151-629-31	CAP, VAR, POLYETHYLENE (TUNING) (CND, AEP, E, G, IT, EA)			

Ref.No.	Part No.	Description			Remark
		< IC >			
IC1	8-759-230-39	IC TA8122AF (AM/FM, RF/AF AMP)			
IC301	8-759-257-22	IC LA4582BM			
IC331	8-759-701-07	IC NJM2063AM			
IC601	8-759-166-43	IC MM1038BFF-T1			
		< JACK >			
J301	1-750-061-11	JACK, DC (POLARITY UNIFIED TYPE) (DC IN 3V)			
J302	1-565-287-11	JACK (PHONES)			
		< JUMPER RESISTOR >			
JR1	1-216-295-00	METAL CHIP	0	5%	1/10W(CND)
JR2	1-216-295-00	METAL CHIP	0	5%	1/10W(AEP, E, G, IT, EE, EA)
JR3	1-216-295-00	METAL CHIP	0	5%	1/10W(AEP, E, G, IT, EE, EA)
JR4	1-216-295-00	METAL CHIP	0	5%	1/10W(EE, IT, EA)
		< COIL >			
L1	1-501-665-11	ANTENNA, FERRITE-ROD (MW)			
L2	1-460-120-11	COIL (WITH CORE) (FM RF) (CND, AEP, E, G)			
L2	1-460-122-11	COIL (WITH CORE) (FM RF) (EA)			
L2	1-460-124-11	COIL (WITH CORE) (FM RF) (IT)			
L2	1-426-578-11	COIL (WITH CORE) (FM RF) (EE)			
L3	1-403-695-11	COIL (WITH CORE) (FM OSC) (EA)			
L3	1-403-696-11	COIL (WITH CORE) (FM OSC) (CND, AEP, E, G)			
L3	1-409-655-11	COIL (WITH CORE) (FM OSC) (EE)			
L3	1-403-697-11	COIL (WITH CORE) (FM OSC) (IT)			
L4	1-406-408-11	COIL (AM OSC) (CND, AEP, E, G)			
L4	1-406-409-11	COIL (AM OSC) (IT, EE, EA)			
L5	1-412-006-31	INDUCTOR CHIP	10uH		
L6	1-412-006-31	INDUCTOR CHIP	10uH		
L101	1-410-999-11	INDUCTOR CHIP	3.3uH		
L201	1-410-999-11	INDUCTOR CHIP	3.3uH		
L301	1-410-999-11	INDUCTOR CHIP	3.3uH		
		< TRANSISTOR >			
Q1	8-729-403-17	TRANSISTOR	XN1215		
Q2	8-729-216-22	TRANSISTOR	2SA1162-G		
Q101	8-729-207-65	TRANSISTOR	RN1410		
Q201	8-729-207-65	TRANSISTOR	RN1410		
Q301	8-729-402-13	TRANSISTOR	XN1501		
		< RESISTOR >			
R1	1-216-009-00	METAL CHIP	22	5%	1/10W(CND, AEP, E, G, IT, EA)
R1	1-216-003-11	METAL GLAZE	12	5%	1/10W(EE)
R2	1-216-081-00	METAL CHIP	22K	5%	1/10W
R3	1-216-065-00	METAL CHIP	4.7K	5%	1/10W

MAIN

Ref.No.	Part No.	Description			Remark
R4	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R5	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R6	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R7	1-216-037-00	METAL CHIP	330	5%	1/10W
R101	1-216-689-11	METAL CHIP	39K	5%	1/10W
R103	1-216-079-00	METAL CHIP	18K	5%	1/10W
R104	1-216-075-00	METAL CHIP	12K	5%	1/10W
R105	1-216-117-00	METAL CHIP	680K	5%	1/10W
R106	1-216-044-00	METAL CHIP	620	5%	1/10W
R107	1-216-313-00	METAL CHIP	8.2	5%	1/10W
R108	1-216-295-00	METAL CHIP	0	5%	1/10W
R109	1-216-095-00	METAL CHIP	82K	5%	1/10W(AEP, E, G, IT, EE, EA)
R109	1-216-107-00	METAL CHIP	270K	5%	1/10W(CND)
R131	1-216-112-00	METAL GLAZE	430K	5%	1/10W
R132	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R133	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R134	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R135	1-216-079-00	METAL CHIP	18K	5%	1/10W
R201	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R203	1-216-079-00	METAL CHIP	18K	5%	1/10W
R204	1-216-075-00	METAL CHIP	12K	5%	1/10W
R205	1-216-117-00	METAL CHIP	680K	5%	1/10W
R206	1-216-044-00	METAL CHIP	620	5%	1/10W
R207	1-216-313-00	METAL CHIP	8.2	5%	1/10W
R208	1-216-295-00	METAL CHIP	0	5%	1/10W
R209	1-216-107-00	METAL CHIP	270K	5%	1/10W(CND)
R209	1-216-095-00	METAL CHIP	82K	5%	1/10W(AEP, E, G, IT, EE, EA)
R231	1-216-112-00	METAL GLAZE	430K	5%	1/10W
R232	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R233	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R234	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R235	1-216-079-00	METAL CHIP	18K	5%	1/10W
R304	1-216-112-00	METAL GLAZE	430K	5%	1/10W(CND)
R304	1-216-105-00	METAL CHIP	220K	5%	1/10W(AEP, E, G, IT, EE, EA)
R305	1-216-081-00	METAL CHIP	22K	5%	1/10W
R306	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R308	1-216-079-00	METAL CHIP	18K	5%	1/10W
R309	1-216-112-00	METAL GLAZE	430K	5%	1/10W
R320	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R321	1-216-097-00	METAL CHIP	100K	5%	1/10W
R331	1-216-001-00	METAL CHIP	10	5%	1/10W
R332	1-216-073-00	METAL CHIP	10K	5%	1/10W
R601	1-216-306-11	METAL CHIP	3.9	5%	1/10W
R602	1-216-311-00	METAL CHIP	6.8	5%	1/10W
R603	1-216-046-00	METAL CHIP	750	5%	1/10W

Ref.No.	Part No.	Description	Remark
		< VARIABLE RESISTOR >	
RV301	1-223-610-11	RES, VAR, CARBON 10K/10K (VOLUME)	
RV601	1-241-028-11	RES, ADJ, CARBON 330	
		< SWITCH >	
S302	1-571-986-11	SWITCH, LEAF (POWER)	
S303	1-692-298-12	SWITCH, SLIDE (TAPE SEL)	
S304	1-692-299-11	SWITCH, SLIDE (FM/AM/TAPE)	
S305	1-692-898-11	SWITCH, SLIDE (AVLS)	
		< TRANSFORMER >	
T1	1-404-949-11	TRANSFORMER, IF (CND, AEP, E, G, IT, EE, EA)	
		< THERMISTOR >	
TH601	1-809-279-11	THERMISTOR, POSITIVE	
TH602	1-809-029-11	THERMISTOR, POSITIVE	
		< VIBRATOR >	
X1	1-577-091-21	OSCILLATOR, CRYSTAL (19kHz)	
X2	1-577-341-11	FILTER, CERAMIC (10.7MHz)	

****

MISCELLANEOUS
****

21	1-467-641-11	MEGA BASS UNIT (SLIDE)	
HP901	1-500-116-11	HEAD, MAGNETIC (PLAYBACK)	
M901	1-698-352-11	MOTOR, DC	

****

ACCESSORIES & PACKING MATERIALS
****

	1-504-521-11	HEADPHONE (MDR-015) (CND)
	1-528-179-11	BATTERY, STORAGE, NI-CD (G)
	1-528-406-11	BATTERY CHARGER (BC-800Y) (G)
	3-346-518-01	CLIP, BELT
	3-758-255-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, GERMAN, DUTCH, SWEDISH, ITALIAN, PORTUGUESE) (AEP, E, IT, G)
	3-758-255-21	MANUAL, INSTRUCTION (ENGLISH) (CND)
	3-758-255-31	MANUAL, INSTRUCTION (FRENCH) (CND)
	3-758-255-41	MANUAL, INSTRUCTION (ENGLISH, GERMAN, POLISH, RUSSIAN, HUNGARIAN, CZECH) (EE)

Ref.No.	Part No.	Description	Remark
*	3-910-219-01	INDIVIDUAL CARTON (AEP, G, IT, EE)	
*	3-910-221-01	INDIVIDUAL CARTON (E, EA)	
*	3-910-312-01	CUSHION (AEP, E, G, IT, EE, EA)	
	8-953-538-90	HEADPHONE MDR-E741//K SET (AEP, E, G, IT, EE, EA)	
	X-3329-657-1	ATTACHMENT ASSY (AEP, E, G, IT, EE, EA)	

9-959-394-11

Sony Corporation
General Audio Group

English
94C1863-1
Printed in Japan

Published by Audio Sector Quality Assurance Dept.

WM-FX105

SONY

SERVICE MANUAL

REVISED

Discard WM-FX105 SERVICE MANUAL, SUPPLEMENT-1 (No. 9-959-394-81) previously issued. This service manual contains it.

Canadian Model
AEP Model
E Model

SUPPLEMENT-1R

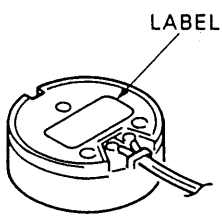
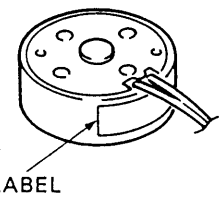
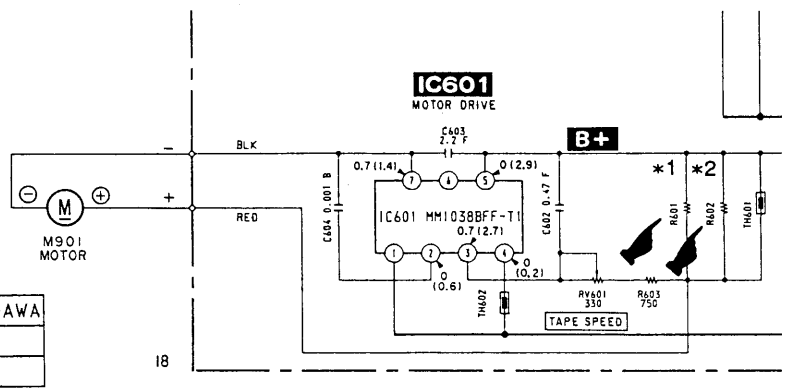
File this supplement with the service manual.

Subject : Motor change

(ECN-WM500093/WM500094)

• There are two kinds of motor (M901) for this unit. A part of circuit will be different according to a motor.

☛ : **Changed portion**

Page	TYPE "SANKYO"	TYPE "KATSURAGAWA"
	 1-698-352-11 MOTOR, DC (SANKYO)	 1-698-398-11 MOTOR, DC (KATSURAGAWA)
13	**Location :** K2-6  ☛	

	SANKYO	KATSURAGAWA
*1	3.9	3.3
*2	8.2	4.7

22

Ref. No.	Part No.	Description			Remark
R601	1-216-306-11	METAL CHIP	3.9	5%	1/10W
R602	1-216-313-00	METAL CHIP	8.2	5%	1/10W

Ref. No.	Part No.	Description			Remark
R601	1-216-304-11	METAL CHIP	3.3	5%	1/10W
R602	1-216-308-00	METAL CHIP	4.7	5%	1/10W

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WM-FX105

SONY

SERVICE MANUAL

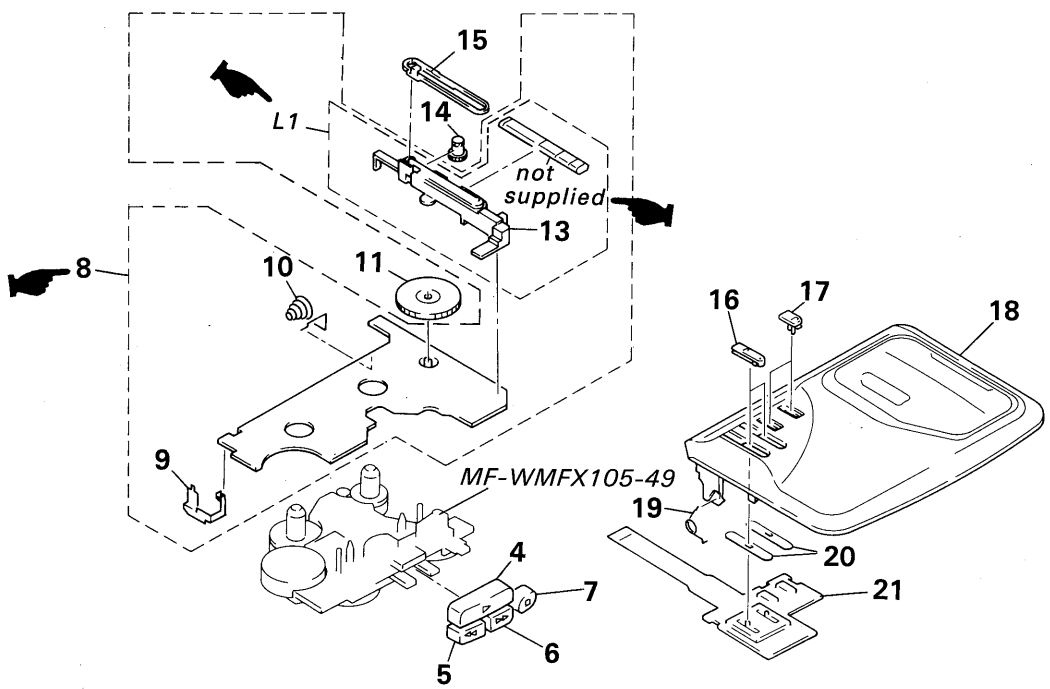
Canadian Model
AEP Model
E Model

CORRECTION-1

Correct your service manual as shown below.

☛ : Indicates Corrected portion

Page	INCORRECT			CORRECT		
	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
18	5	3-910-540-01	BUTTON (REW)	5	3-910-540-11	BUTTON (REW)
	6	3-910-539-01	BUTTON (FF)	6	3-910-539-11	BUTTON (FF)
	7	3-910-541-01	BUTTON (STOP)	7	3-910-541-11	BUTTON (STOP)
	12	X-3368-117-1	ANTENNA SUB ASSY, BAR	L1	X-3368-118-1	ANTENNA SUB ASSY, BAR
	L1	1-501-665-11	ANTENNA, FERRITE-ROD (MW)			not supplied
21	L1	1-501-665-11	ANTENNA, FERRITE-ROD (MW)	L1	X-3368-118-1	ANTENNA SUB ASSY, BAR



MICROFILM

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