

WM-BF43

SERVICE MANUAL

AEP Model



SPECIFICATIONS

Radio section

Frequency range

In West Germany
FM: 87.6-107 MHz
AM: 531-1,602 kHz
In Italy
FM: 87.5-108 MHz
AM: 526.5-1,606.5 kHz
in the other countries

Tape playback and general

Frequency response (DOLBY NR OFF)
40—15,000 Hz

Power output

10 mW + 10 mW load impedance
32 ohms at DC operation

Power requirements

3V DC
Two R6 (size AA) batteries
Sony BP-700 rechargeable battery
DC IN 3V jack accepts:
Sony AC-D2L AC power adaptor
available in the United Kingdom for
use on 240V, AC, 50 Hz
available in the other countries for
use on 220V AC, 50 Hz

Battery life

Approx. 7 hours for playback and ap-
prox. 30 hours for FM reception using
Sony alkaline batteries AM3 (N).

Dimensions

Approx. 93.1 × 133.3 × 38.1 mm (w/h/d)
incl. projecting parts and controls

Model Name Using Similar Mechanism

WM-F69

Tape Transport Mechanism Type

MF-WMF39-80

Weight

Approx. 265 g incl. batteries

Accessories supplied

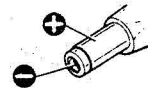
Stereo headphones (open-air type, 1)
Beltclip (1)

Optional accessories

AC power adaptor AC-D2L
Battery case EBP-500B
Car battery cord DCC-70
Battery charger BC-700
Rechargeable battery BP-700

Your dealer may not handle some of above
listed optional accessories. Please ask the
dealer for detailed information about the
optional accessories available in your
country.

Note: If an AC power adaptor or a car bat-
tery cord not manufactured by Sony is
used, a fuse must be installed in the
battery cord and the polarity of the plug
must be as illustrated.



Dolby noise reduction manufactured under license from
Dolby Laboratories Licensing Corporation.
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Dolby Laboratories Licensing Corporation.

RADIO CASSETTE PLAYER
SONY®



SERVICING NOTE

Flexible Circuit Board Repairing

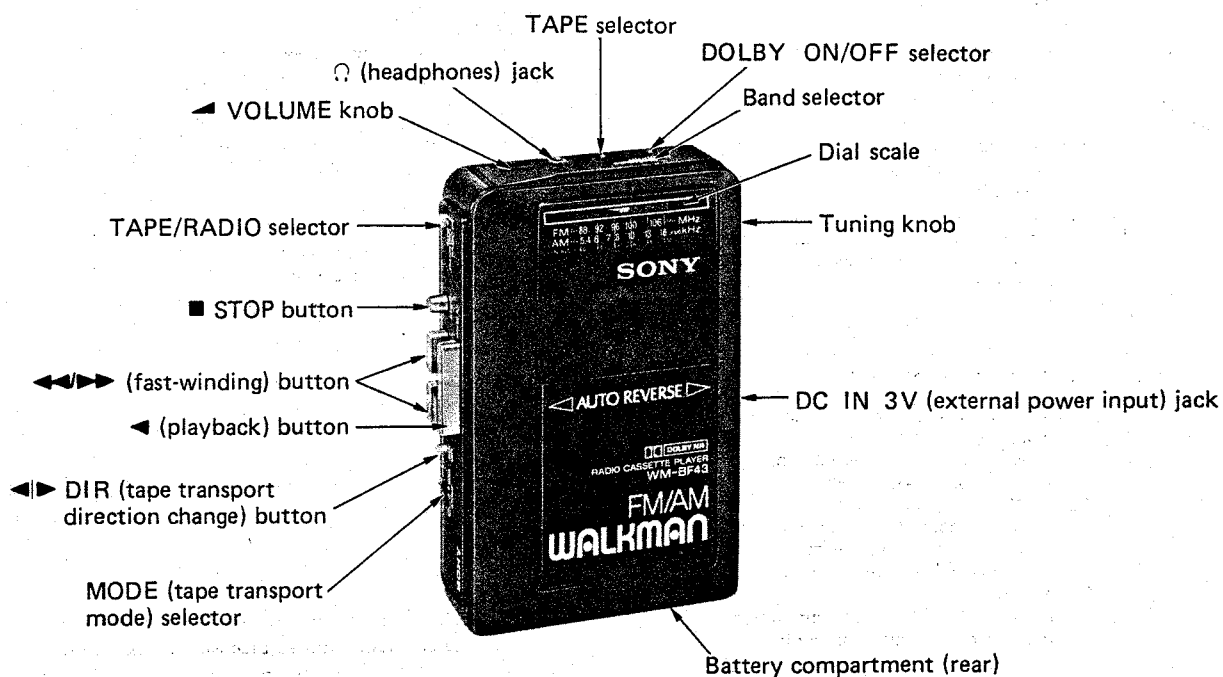
- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

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.

SECTION 1
GENERAL

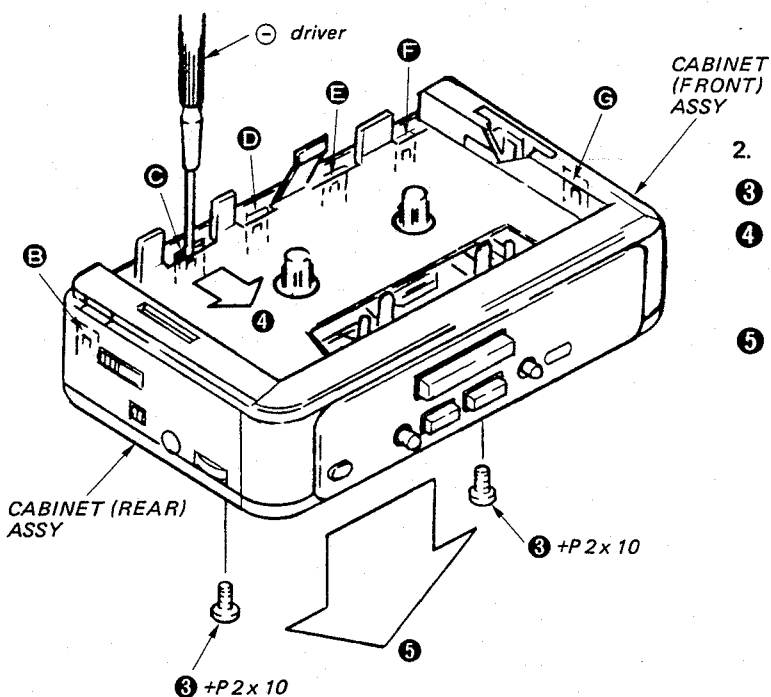
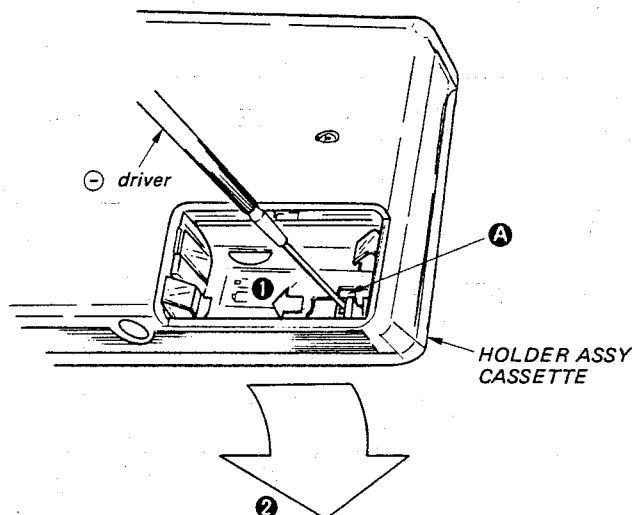
FUNCTION OF CONTROLS



SECTION 2 DISASSEMBLY

1. CASSETTE HOLDER ASSY REMOVAL

- ① Insert a precision driver (-) into the portion **A** inside the battery chamber.
- ② Move the latch in the direction of the arrow **1** to release it, then pull CASSETTE HOLDER ASSY in the direction of the arrow.

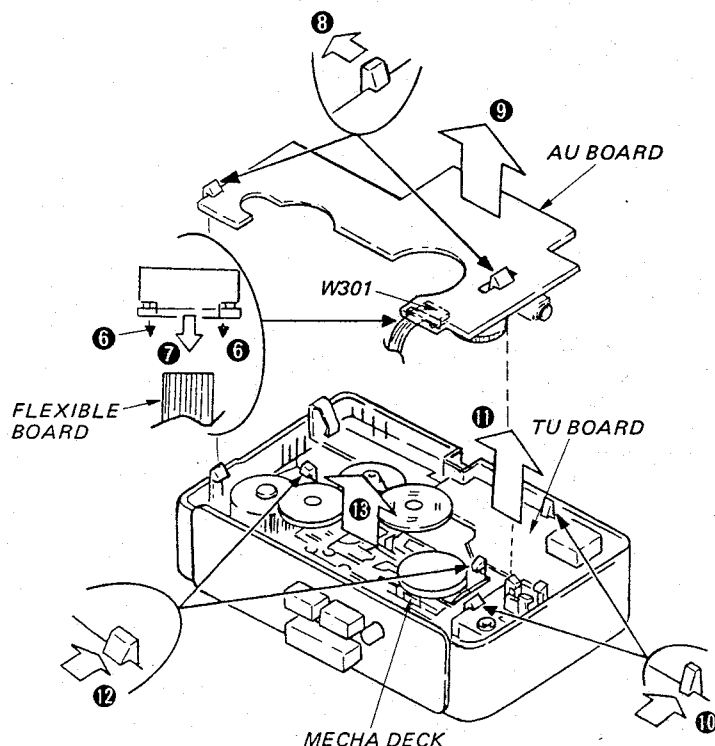


2. CABINET (REAR) ASSY REMOVAL

- ③ Remove +P2 x 10 (2 pcs.)
- ④ Move claws **B** to **G** with a driver (-) inward of the body to release them.
(at **C** portion move the claw like the arrow **4**)
- ⑤ Remove CABINET (REAR) ASSY in the direction of the arrow.

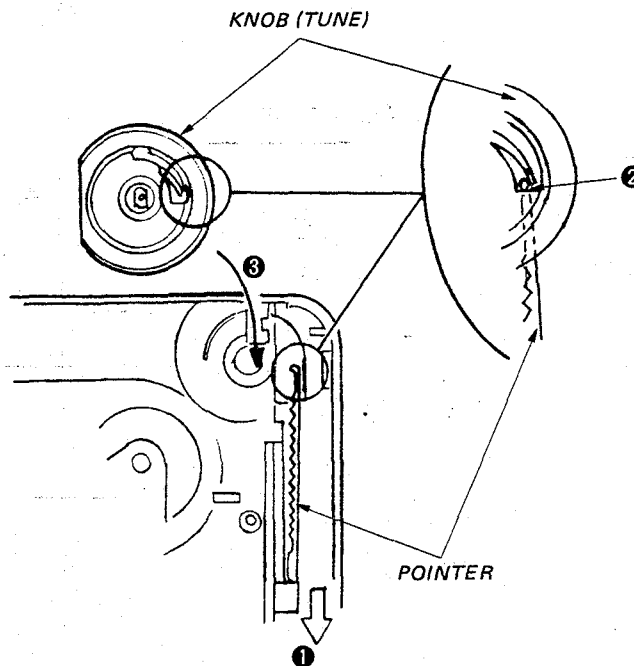
3. AU AND TU BOARDS, MECHA DECK REMOVAL

- ⑥ (AU BOARD) Move the connector housing W301 in the direction of the arrow.
- ⑦ Pull out the flexible board from PB HEAD.
- ⑧ Release the claws.
- ⑨ Remove AU BOARD.
- ⑩ (TU BOARD) Release the claws.
- ⑪ Lift TU BOARD up.
- ⑫ (MECHA DECK) Release the claws.
- ⑬ Lift MECHA DECK up.



4. DIAL POINTER Setting

- Move the pointer fully in the direction of the arrow ① (f min).
- Set the end of the pointer at the portion ② of KNOB (TUNE).
- Install the knob in the portion ③.
- Confirm the pointer to move smoothly with turning KNOB (TUNE) from f min to f max.



SECTION 3 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	22 – 55 g·cm (0.30 – 0.76 oz·inch)
FWD Back Tension		less than 3 g·cm (less than 0.04 oz·inch)
REV	CQ-102RB	22 – 55 g·cm (0.30 – 0.76 oz·inch)
REV Back Tension		less than 3 g·cm (less than 0.04 oz·inch)
FF, REW	CQ-201B	more than 60 g·cm (more than 0.83 oz·inch)

Tape Tension Measurement

Mode	Torque meter	Meter reading
FWD	CQ-403A	more than 55 g·cm (more than 0.76 oz·inch)
REV	CQ-403R	

SECTION 4 ELECTRICAL ADJUSTMENTS

CASSETTE SECTION

Playback Head Azimuth Check

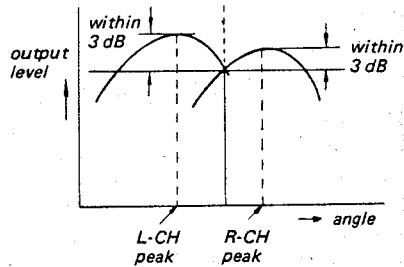
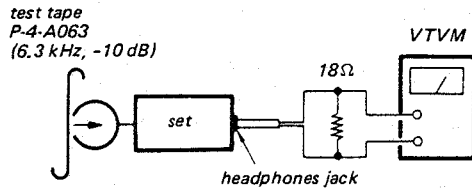
- Perform this check both in FWD and REV mode.

Note: This set is not featured the head azimuth adjustment.

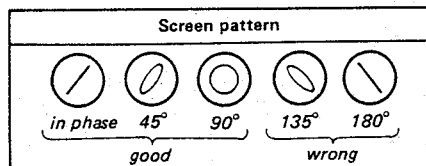
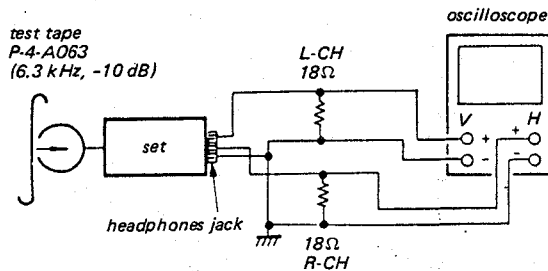
When replacing the head, check the both L-ch and R-ch output levels and also those phases.

Procedure:

1. Level Check
Mode: playback



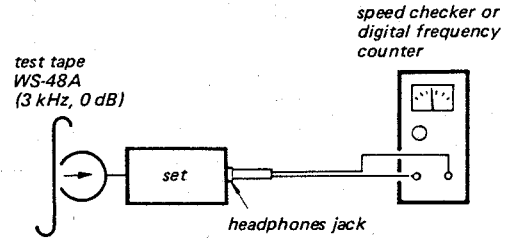
2. Phase Check
Mode: playback



Tape Speed Adjustment

Procedure:

Mode: playback

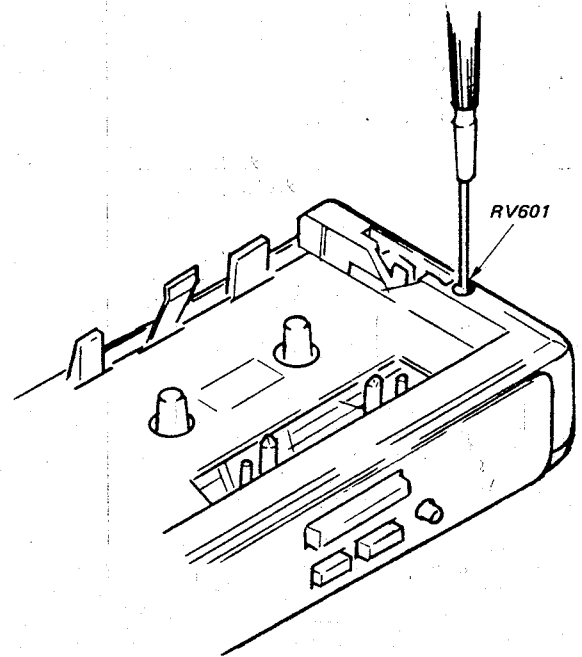


Specification:

speed checker	digital frequency counter
±1%	2,970 – 3,030 Hz

Frequency difference between the beginning and the end of the tape should be within ±2.5% (±75 Hz).

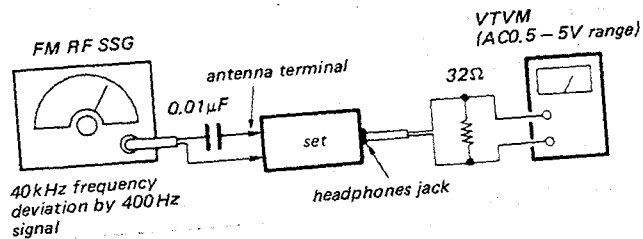
Adjustment Location:



WM-BF43

RADIO SECTION

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.

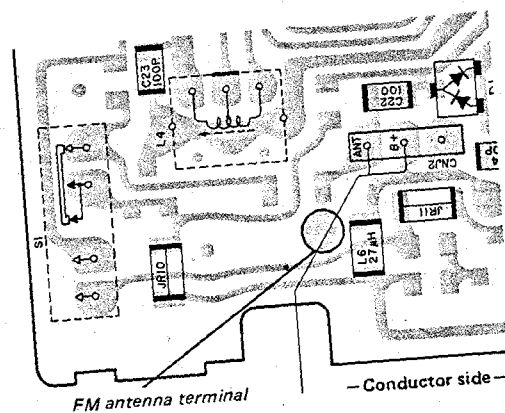
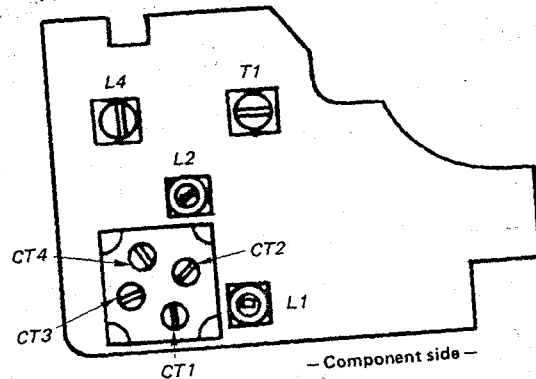
1 Frequency Coverage Adjustment

Pointer position	SG frequency	Adjustment part	Reading on VTVM
f minimum	87.35 MHz	L2	maximum
f maximum	107.8 MHz (108.25 MHz)	CT2	

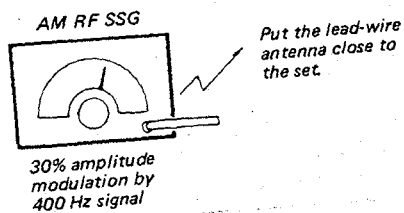
1 Tracking Adjustment

SG and set frequency	Adjustment part	Reading on VTVM
87.35 MHz	L1	maximum
107.8 MHz (108.25 MHz)	CT1	

ADJUSTMENT LOCATION: TU BOARD



AM SECTION



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

AM Frequency Coverage Adjustment

Pointer position	SG frequency	Adjustment part	Reading on VTVM
f minimum	516.5 kHz	L4	maximum
f maximum	1,631.5 kHz	CT4	

AM Tracking Adjustment

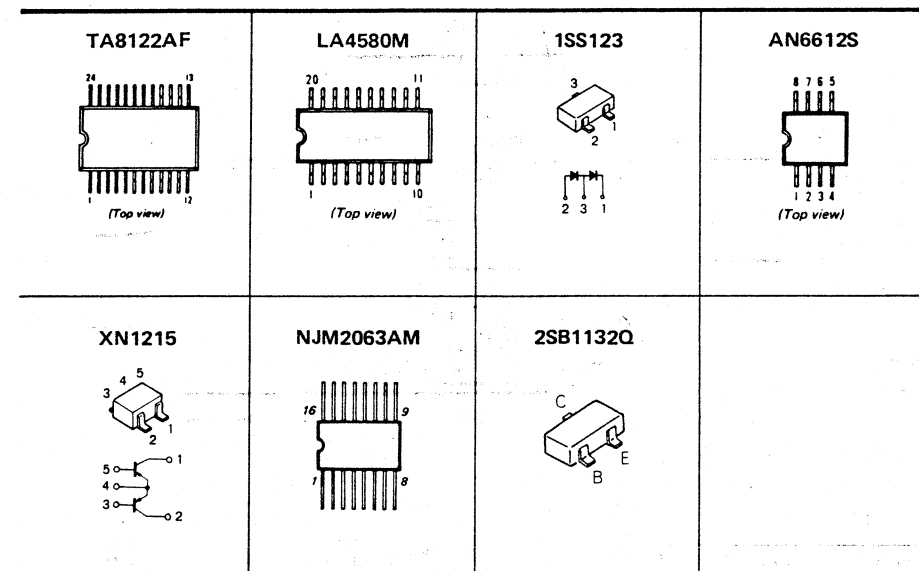
SG and set frequency	Adjustment part	Reading on VTVM
600 kHz	L3	maximum
1,400 kHz	CT3	

VI IF Alignment

SG Frequency	Adjustment part	Reading on VTVM
450 kHz	T1	maximum

SECTION 5 DIAGRAMS

5-1. SEMICONDUCTOR LEAD LAYOUTS



● Semiconductor Location

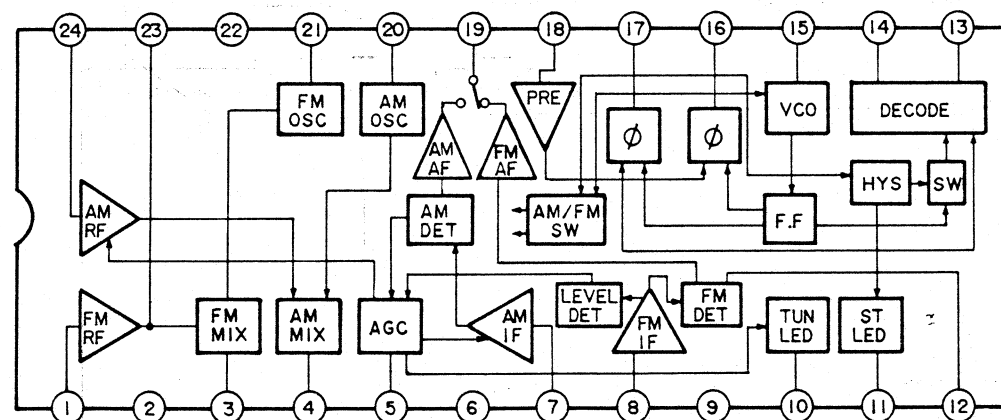
Ref. No.	Location
D1	D-3
IC1	F-4
IC301	E-18
IC302	E-12
IC601	D-9
Q1	G-5
Q601	D-9

Note:

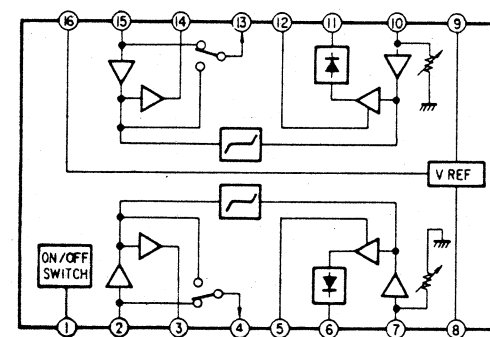
- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : parts mounted on the conductor side.
- ⊗ : Through hole.
- ▨ : Pattern on the side which is seen.
- ▩ : Pattern of the rear side.
- : Chip components extracted from the rear side.

IC BLOCK DIAGRAMS

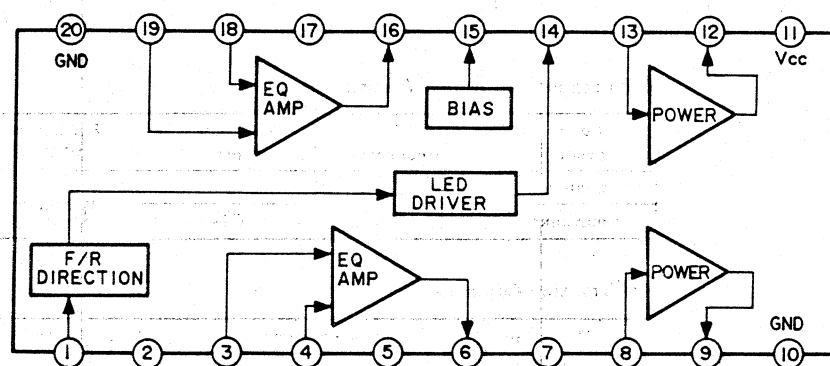
TA8122AF



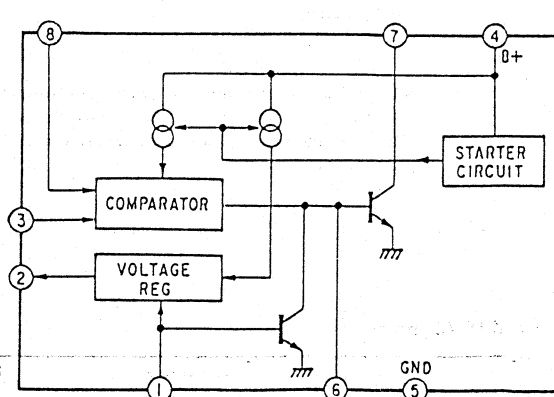
NJM-2063AM



LA4580M

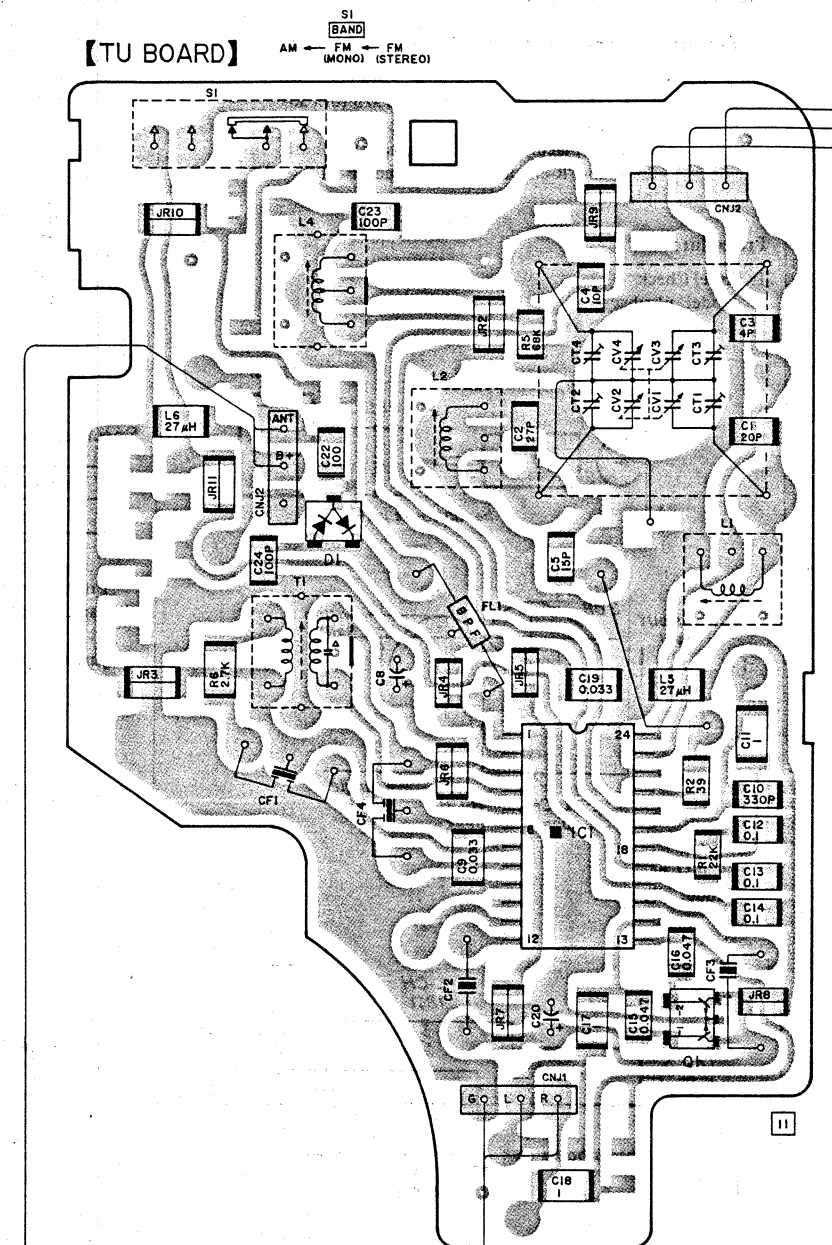


AN6612S

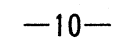


5-2. PRINTED WIRING BOARDS

【TU BOARD】

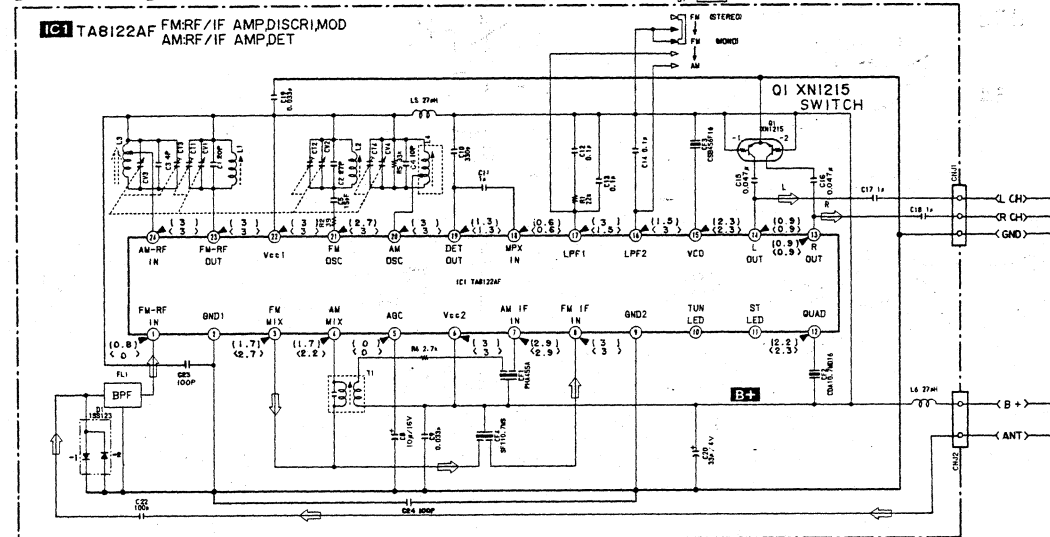


DRY B/A
SIZE
IEC DESIGN
2PCS.

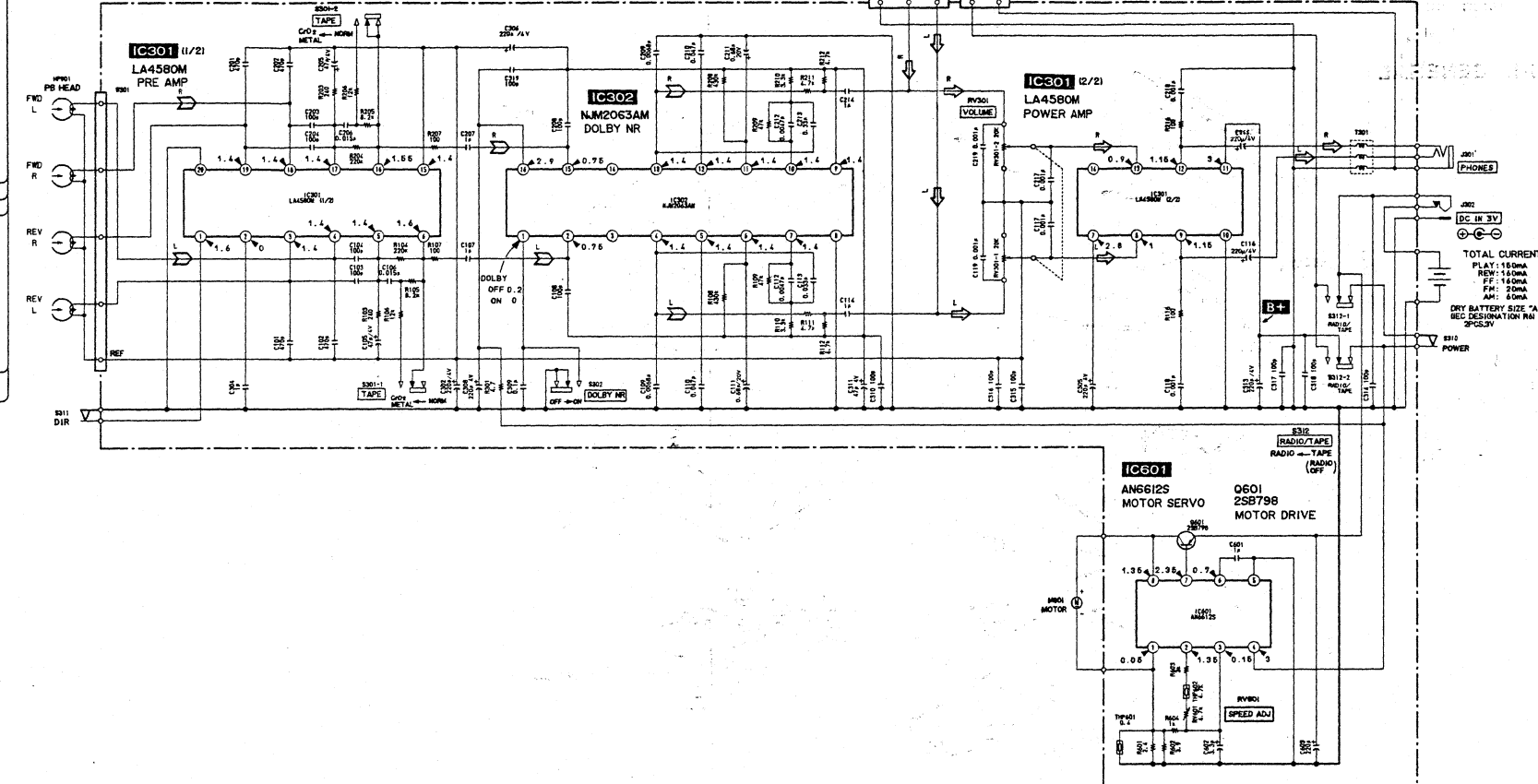


5-3. SCHEMATIC DIAGRAM

【TU BOARD】



【AU BOARD】



Note:

- All capacitors are in μF unless otherwise noted. pF: μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{8}W$ or less unless otherwise specified.
- : adjustment for repair.
- Total current measured with no cassette installed.
- Power voltage is dc 3 V and fed with regulated dc power supply from external power voltage jack.
- Voltage and waveforms are dc with respect to ground in playback mode.
no mark: TAPE PB
() : FM
< > : AM
- Voltages are taken with a VOM (50 k Ω/V).
Voltage variations may be noted due to normal production tolerances.
- Signal path.
 $\Rightarrow$: FM
 $\Rightarrow$: PB
- Switches:

Ref. No.	Switch	Position
S1	BAND	FM (STEREO)
S301	TAPE	NORM
S302	DOLBY NR	OFF
S310	POWER	OFF
S312	RADIO/TAPE	TAPE

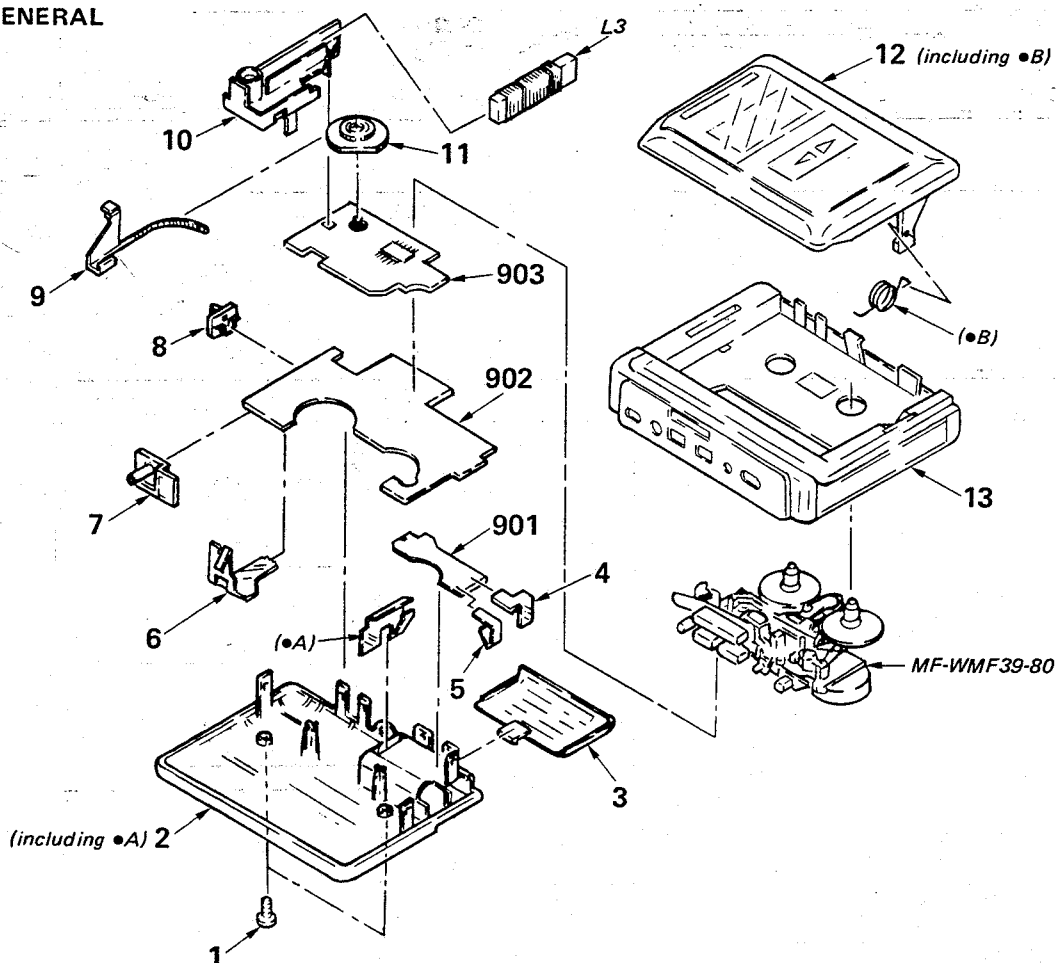
SECTION 6

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

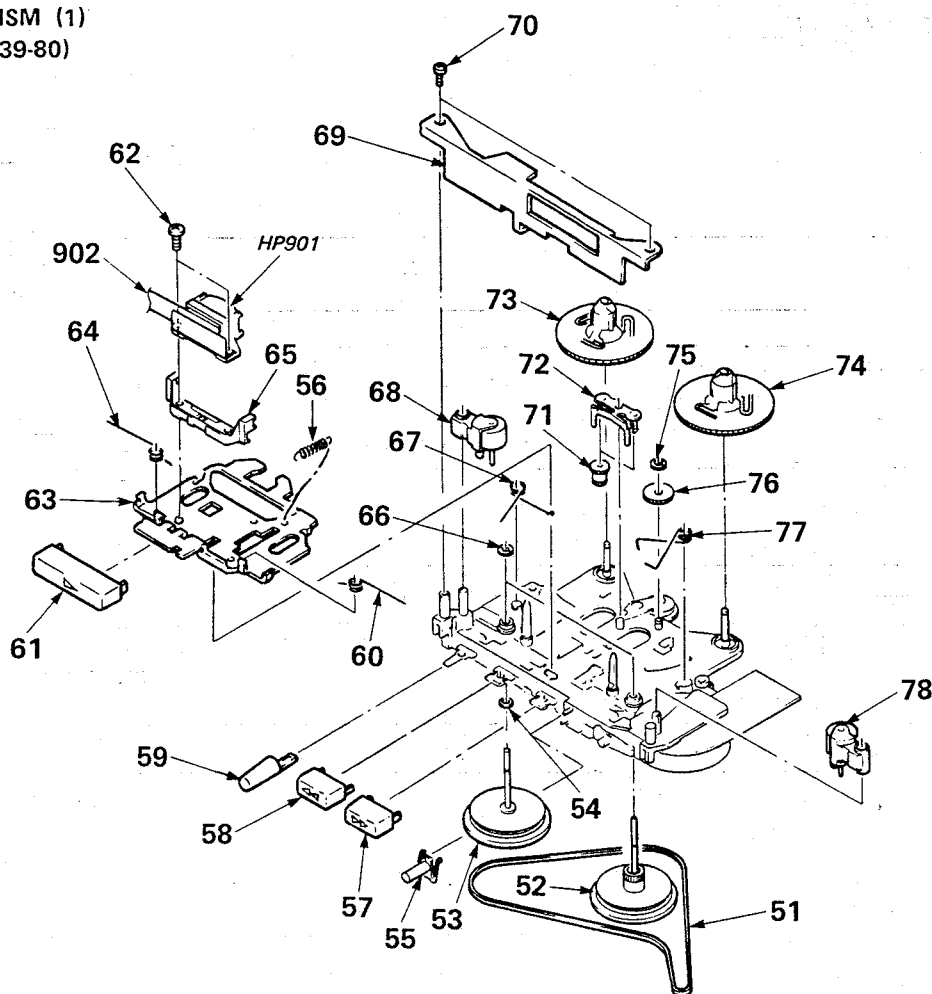
6-1. GENERAL



<u>Ref.No</u>	<u>Part No.</u>	<u>Description</u>
1	7-685-105-19	TAPPING +P 2X8 NON-SLIT
2	X-3346-518-1	CABINET (REAR) (CF) (B) ASSY
3	3-346-585-01	LID (B), BATTERY CASE
4	3-346-589-01	TERMINAL (PLUS), BATTERY
5	3-346-590-01	TERMINAL (MINUS), BATTERY
6	*3-346-714-01	PLATE (HD), SHIELD
7	3-346-596-01	RNOB (FUNC)
8	3-346-592-01	KNOB (SW)
9	3-346-702-01	POINTER
10	*3-346-701-01	HOLDER, ANTENNA

<u>Ref.No</u>	<u>Part No.</u>	<u>Description</u>	<u>Remarks</u>
11	3-346-599-01	KNOB (TUN)	
12	X-3346-557-1	HOLDER (CF) (B) ASSY, CASSETTE	
13	X-3346-535-1	CABINET (FRONT) (CF) (H) ASSY	
13	X-3346-556-1	(WG)....CABINET (FRONT) (CF) (I) ASSY	
901	*1-626-543-21	PC BOARD, BATTERY TERMINAL	
902	A-3270-509-A	MOUNTED PCB, AU	
903	A-3216-549-A	(IT)....PC BOARD ASSY, TU	
903	A-3216-553-A	(WG)....PC BOARD ASSY, TU	

6-2. MECHANISM (1) (MF-WMF39-80)

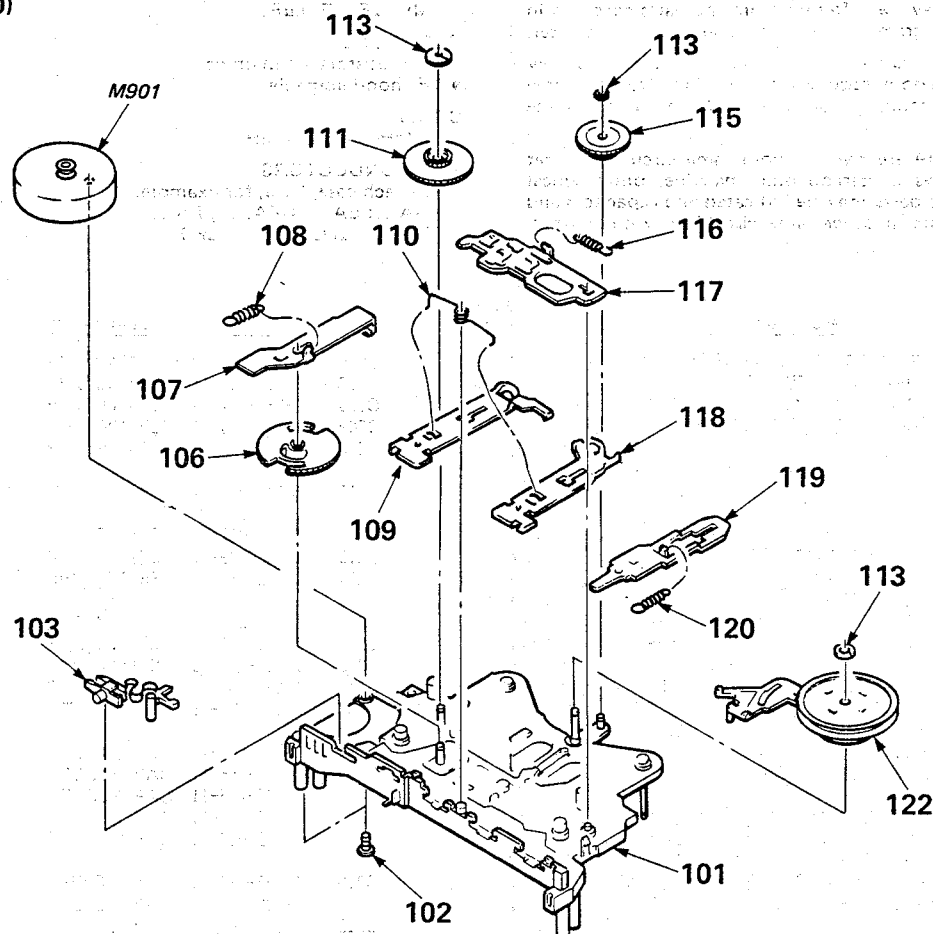


No.	Part No.	Description	Remarks
51	3-341-267-01	BELT, CAPSTAN	
52	X-3335-635-1	FLYWHEEL (T) ASSY	
53	X-3335-636-1	FLYWHEEL ASSY	
54	3-701-437-11	WASHER (242T), TEFLON	
55	3-341-294-01	BUTTON (DIR)	
56	3-341-271-01	SPRING, TENSION	
57	3-346-587-01	BUTTON (F)	
58	3-346-588-01	BUTTON (R)	
59	3-341-961-01	BUTTON (STOP)	
60	3-341-276-11	SPRING (N)	
61	3-346-586-01	BUTTON (P)	
62	3-704-252-21	SCREW (M1.4 X 3.8)	
63	3-341-711-01	LEVER, PLAY	
64	3-341-277-11	SPRING (R)	
65	3-341-702-01	GUIDE, TAPE	

No.	Part No.	Description	Remarks
66	3-321-483-11	RING, RETAINING	
67	3-341-270-01	SPRING (R)	
68	X-3335-624-1	PINCH LEVER (R) ASSY	
69	3-341-762-01	HOLDER, S	
70	3-893-942-21	SCREW (1.7 X 5), TAPPING (B)	
71	3-341-275-01	GEAR, FR	
72	3-341-701-01	LEVER, FR	
73	3-341-291-01	GEAR, S REEL	
74	3-341-290-01	GEAR, T REEL	
75	3-341-752-01	WASHER, POLYETHYLENE (t=0.13)	
	3-341-752-11	WASHER, POLYETHYLENE (t=0.25)	
76	3-341-265-01	GEAR, R	
77	3-341-763-01	SPRING	
78	X-3335-623-1	PINCH LEVER (N) ASSY	
HP901	1-543-524-11	HEAD, MAGNETIC (PLAY BACK)	
902	1-623-643-11	PC BOARD, HEAD FLEXIBLE	

Part No.	Description	Quantity
3-341-267-01	BELT, CAPSTAN	1
X-3335-635-1	FLYWHEEL (T) ASSY	1
X-3335-636-1	FLYWHEEL ASSY	1
3-701-437-11	WASHER (242T), TEFLON	1
3-341-294-01	BUTTON (DIR)	1
3-341-271-01	SPRING, TENSION	1
3-346-587-01	BUTTON (F)	1
3-346-588-01	BUTTON (R)	1
3-341-961-01	BUTTON (STOP)	1
3-341-276-11	SPRING (N)	1
3-346-586-01	BUTTON (P)	1
3-704-252-21	SCREW (M1.4 X 3.8)	1
3-341-711-01	LEVER, PLAY	1
3-341-277-11	SPRING (R)	1
3-341-702-01	GUIDE, TAPE	1

6-3. MECHANISM (2) (MF-WMF39-80)



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
101	A-3163-146-A	CHASSIS ASSY		113	3-341-753-01	WASHER, POLYETHYLENE (t=0.13)	
102	3-335-797-31	SCREW (M 1.4 X 3), TOOTHED LOCK			3-341-753-11	WASHER, POLYETHYLENE (t=0.25)	
103	3-341-293-01	LEVER, MODE		115	3-341-266-01	GEAR, T	
106	3-341-292-01	GEAR, CAM		116	3-341-272-01	SPRING, TENSION	
107	3-341-299-01	LEVER, DIR		117	3-341-298-01	PLATE, LOCK	
108	3-341-274-01	SPRING (POWER TENSION), TENSION		118	3-341-296-01	LEVER, REW	
109	3-341-295-01	LEVER, FF		119	3-341-297-01	LEVER, STOP	
110	3-341-268-01	SPRING		120	3-341-273-01	SPRING, TENSION	
111	3-341-289-01	GEAR, DECELERATION		122	A-3239-894-A	WHEEL ASSY, MIDWAY	
				M901	A-3133-336-A	MOTOR BLOCK, ASSY	

SECTION 7

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: μ F, PF: μ MF.**RESISTORS**

- All resistors are in ohms.
- F: nonflammable

COILS

- MMH: mH, UH: μ H

SEMICONDUCTORSIn each case, U: μ , for example:UA...: μ A..., UPA...: μ PA...,UPC...: μ PC, UPD...: μ PD...

Ref.No	Part No.	Description				
901	*1-626-543-21	PC BOARD, BATTERY TERMINAL				
902	A-3270-509-A	MOUNTED PCB, AU				
903	A-3216-549-A	(IT)....PC BOARD ASSY, TU				
903	A-3216-553-A	(WG)....PC BOARD ASSY, TU				
<u>CAPACITOR</u>						
C1	1-163-100-00	CERAMIC CHIP	20PF	5%	50V	
C2	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	
C3	1-163-087-00	CERAMIC CHIP	4PF	0.25PF	50V	
C4	1-163-353-91	CERAMIC CHIP	10PF	5%	50V	
C5	1-163-097-00	CERAMIC CHIP	15PF	5%	50V	
C8	1-126-157-11	ELECT	10MF	20%	16V	
C9	1-163-078-11	CERAMIC CHIP	0.033MF	10%	25V	
C10	1-163-129-00	CERAMIC CHIP	330PF	10%	50V	
C11	1-162-638-11	CERAMIC CHIP	1MF		16V	
C12	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C13	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C14	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C15	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V	
C16	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V	
C17	1-162-638-11	CERAMIC CHIP	1MF		16V	
C18	1-162-638-11	CERAMIC CHIP	1MF		16V	
C19	1-163-078-11	CERAMIC CHIP	0.033MF	10%	25V	
C20	1-124-431-00	ELECT	33MF	20%	4V	
C22	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C23	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C24	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C101	1-163-133-00	CERAMIC CHIP	470PF	10%	50V	
C102	1-163-133-00	CERAMIC CHIP	470PF	10%	50V	
C103	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C104	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C105	1-126-208-11	CAP, ELECT	47MF	20%	4V	
C106	1-163-023-00	CERAMIC CHIP	0.015MF	5%	50V	
C107	1-162-638-11	CERAMIC CHIP	1MF		16V	
C108	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C109	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V	
C110	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V	
C111	1-135-087-21	TANTAL. CHIP	0.68MF	10%	20V	
C111	1-135-087-21	TANTAL. CHIP	0.68MF	10%	20V	
C112	1-163-017-00	CERAMIC CHIP	0.0047MF	5%	50V	
C113	1-163-989-11	CERAMIC CHIP	0.033MF	5%	25V	
C114	1-162-638-11	CERAMIC CHIP	1MF		16V	
C116	1-126-246-11	CAP, ELECT	220MF	20%	4V	
C117	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V	
C118	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V	
C119	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V	
C201	1-163-133-00	CERAMIC CHIP	470PF	10%	50V	
C202	1-163-133-00	CERAMIC CHIP	470PF	10%	50V	
C203	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C204	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C205	1-126-208-11	CAP, ELECT	47MF	20%	4V	

Ref.No	Part No.	Description				
C206	1-163-023-00	CERAMIC CHIP	0.015MF	5%	50V	
C207	1-162-638-11	CERAMIC CHIP	1MF		16V	
C208	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C209	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V	
C210	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V	
C211	1-135-087-21	TANTAL. CHIP	0.68MF	10%	20V	
C211	1-135-087-21	TANTAL. CHIP	0.68MF	10%	20V	
C212	1-163-017-00	CERAMIC CHIP	0.0047MF	5%	50V	
C213	1-163-989-11	CERAMIC CHIP	0.033MF	5%	25V	
C214	1-162-638-11	CERAMIC CHIP	1MF		16V	
C216	1-126-246-11	CAP, ELECT	220MF	20%	4V	
C217	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V	
C218	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V	
C219	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V	
C302	1-126-246-11	CAP, ELECT	220MF	20%	4V	
C304	1-162-638-11	CERAMIC CHIP	1MF		16V	
C305	1-126-246-11	CAP, ELECT	220MF	20%	4V	
C306	1-126-246-11	CAP, ELECT	220MF	20%	4V	
C308	1-126-246-11	CAP, ELECT	220MF	20%	4V	
C309	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C310	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C311	1-126-208-11	CAP, ELECT	47MF	20%	4V	
C313	1-126-246-11	CAP, ELECT	220MF	20%	4V	
C314	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C315	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C316	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C317	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C318	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C319	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C601	1-162-638-11	CERAMIC CHIP	1MF		16V	
C602	1-126-196-11	CAP, ELECT	3.3MF	20%	50V	
C603	1-126-246-11	CAP, ELECT	220MF	20%	4V	
CF1	1-567-090-00	FILTER, CERAMIC				
CF2	1-577-090-61	FILTER, CERAMIC				
CF3	1-577-091-11	OSCILLATOR, CRYSTAL				
CF4	1-577-090-61	FILTER, CERAMIC				
CNJ1	★1-565-368-11	PIN, CONNECTOR 3P				
CNJ2	★1-565-368-11	PIN, CONNECTOR 3P				
CV1	1-151-605-11	CAP, VAR, POLYETHYLENE				
D1	8-719-101-23	DIODE 1SS123				
FL1	1-236-169-11	FILTER, BAND PASS				
HP901	1-543-524-11	HEAD, MAGNETIC (PLAY BACK)				
IC1	8-759-230-39	IC TA8122AF				
IC301	8-759-820-66	IC LA4580M				
IC302	8-759-701-07	IC NJM2063AM				
IC601	8-759-400-12	IC AN6612S				
J301	1-566-800-11	JACK				
J302	1-565-371-21	JACK, OUTER POWER				

Ref.No	Part No.	Description
JR1-1	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR2	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR2-1	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR3	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR3-1	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR4	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR4-1	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR5	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR5-1	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR6	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR6-1	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR7	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR7-1	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR8	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR9	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR10	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR11	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR13	1-216-295-00	METAL GLAZE 0 5% 1/10W

L1	1-459-848-11	COIL (WITH CORE) (RF) (FM)
L2	1-459-859-11	COIL (OSC) (FM)
L3	1-402-369-11	ANTENNA, FERRITE-ROD MW
L4	1-406-285-11	COIL (OSC) (AM)
L5	1-410-209-51	INDUCTOR CHIP 27UH

L6	1-410-209-51	INDUCTOR CHIP 27UH
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M901	A-3133-336-A	MOTOR BLOCK ASSY
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Q1	8-729-403-17	TRANSISTOR XN1215
Q601	8-729-903-47	TRANSISTOR 2SB1132Q

RESISTOR

R1	1-216-081-00	METAL GLAZE 22K 5% 1/10W
R2	1-216-009-00	METAL GLAZE 22 5% 1/10W
R5	1-216-093-00	METAL GLAZE 68K 5% 1/10W
R6	1-216-208-00	METAL GLAZE 2.7K 5% 1/8W
R103	1-216-034-00	METAL GLAZE 240 5% 1/10W

R104	1-216-105-00	METAL GLAZE 220K 5% 1/10W
R105	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W
R106	1-216-075-00	METAL GLAZE 12K 5% 1/10W
R107	1-216-025-00	METAL GLAZE 100 5% 1/10W
R108	1-216-112-00	METAL GLAZE 430K 5% 1/10W

R109	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R110	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
R111	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W
R112	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W
R116	1-216-025-00	METAL GLAZE 100 5% 1/10W

R203	1-216-034-00	METAL GLAZE 240 5% 1/10W
R204	1-216-105-00	METAL GLAZE 220K 5% 1/10W
R205	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W
R206	1-216-075-00	METAL GLAZE 12K 5% 1/10W
R207	1-216-025-00	METAL GLAZE 100 5% 1/10W

R208	1-216-112-00	METAL GLAZE 430K 5% 1/10W
R209	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R210	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
R211	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W
R212	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W

R216	1-216-025-00	METAL GLAZE 100 5% 1/10W
R301	1-216-308-00	METAL GLAZE 4.7 5% 1/10W
R601	1-216-135-00	METAL GLAZE 2.4 5% 1/8W
R602	1-216-140-00	METAL GLAZE 3.9 5% 1/8W
R603	1-216-060-00	METAL GLAZE 3K 5% 1/10W

R604	1-216-049-00	METAL GLAZE 1K 5% 1/10W
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RV301	1-238-161-11	RES, VAR 20K/20K (VOLUME)
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RV601	1-238-181-11	RES, ADJ, CERMET 4.7K
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Ref.No	Part No.	Description
S1	1-570-386-21	SWITCH, SLIDE (BAND)
S301	1-571-277-11	SWITCH, SLIDE (TAPE)
S302	1-571-275-11	SWITCH, SLIDE (DOLBY)
S310	1-571-518-11	SWITCH, LEAF (POWER)
S311	1-571-519-11	SWITCH, LEAF (DIR)
S312	1-571-277-11	SWITCH, SLIDE (TAPE/RADIO)
T1	1-404-793-11	TRANSFORMER, IF
T301	1-409-445-11	COIL, TRAP
THP601	1-808-389-11	THERMISTOR, POSITIVE
THP602	1-808-388-11	THERMISTOR, POSITIVE
TP1	*1-535-657-11	TERMINAL
TP2	*1-535-657-11	TERMINAL
W301	*1-565-370-11	HOUSING, CONNECTOR 5P
W310	*1-565-369-11	SOCKET, CONNECTOR 3P
W311	*1-565-369-11	SOCKET, CONNECTOR 3P

ACCESSORY & PACKING MATERIAL

3-701-622-00	BAG, POLYETHYLENE
3-346-518-01	CLIP, BELT
*3-346-565-01	CUSHION (UPPER)
*3-346-574-01	CUSHION (LOWER)
*3-346-783-01	INDIVIDUAL CARTON
3-786-016-41	MANUAL, INSTRUCTION
8-952-313-90	HEADPHONE MDR-005L/B SET