

WM-F18

SERVICE MANUAL

US Model
Canadian Model



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Tape Transport Mechanism Type MF-WMF18

SPECIFICATIONS

Radio section

Frequency range: FM: 88-108 MHz

AM: 530-1,605 kHz

Antenna: FM: Headphones cord antenna

AM: Built-in ferrite bar antenna

Tape player section and general

Tape track: 4-track 2-channel stereo

Fast winding time: Approx. 3min. with Sony cassette C-60

Frequency response

40-15,000 Hz (with the TAPE selector set to METAL/CrO₂)

40-15,000 Hz (with the TAPE selector set to NORM)

Graphic equalizer

Boost/cut range: Approx. ± 10 dB

Center frequencies: 150 Hz, 1 kHz, 8 kHz

Power output

25 mW $\times 2$ (max.)

15 mW $\times 2$ load impedance 32 ohms at dc operation

Power requirements;

3V dc, two size AA batteries (IEC designation R6)

DC IN 3V accepts:

Sony EBP-500 battery case (optional)

for use on two size D batteries (IEC designation R20)

Sony AC-D2 ac power adaptor (optional)

for use on 120V ac, 60 Hz

Sony DCC-70 car battery cord (optional)

for use with 12V car battery

Battery life:

Batteries	FM reception	Tape playback
Sony New Super SUM-3 (NS) or Eveready No. 1015	17	3
Eveready No. E91 alkaline	30	6

(hours)

For maximum performance we recommend the use of alkaline batteries.

Dimensions: Approx. 144.5 \times 92 \times 37.5 mm (w/h/d)

(5 $\frac{1}{4}$ \times 3 $\frac{3}{4}$ \times 1 $\frac{1}{2}$ inches)

incl. projecting parts and controls

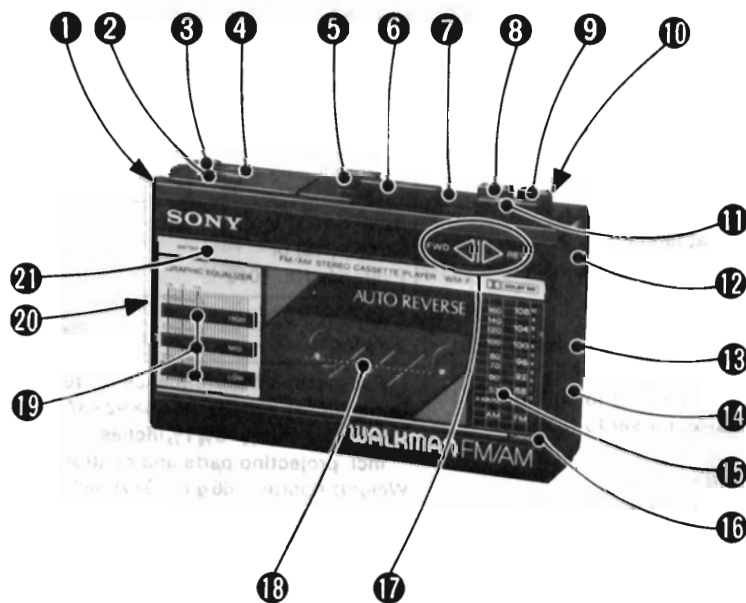
Weight: Approx. 366 g (12.9 oz) incl. batteries, not incl. other accessories

FM/AM STEREO CASSETTE PLAYER
SONY[®]



PARTS IDENTIFICATION

- ① DC IN 3V (external power input) jack
- ② VOL (volume) control
- ③ (headphones) jack
- ④ Function selector (TAPE/RADIO OFF, RADIO)
- ⑤ ◀▶ DIRECTION (tape transport direction) button
- ⑥ PLAY (playback) button
- ⑦ MODE selector
- ⑧ ◀◀ (fast-forward) button
- ⑨ ▶▶ (fast-reverse) button
- ⑩ TAPE selector
- ⑪ STOP button
- ⑫ TUNING knob
- ⑬ FM SENS (sensitivity)/DOLBY NR (noise reduction) selector
- ⑭ Band selector
- ⑮ Dial scale
- ⑯ TUNING indicator
- ⑰ Tape transport direction indicators (FWD ◀, ▷ REV)
- ⑱ Cassette holder
- ⑲ GRAPHIC EQUALIZER controls
- ⑳ Battery compartment (rear)
- ㉑ BATTERY indicator



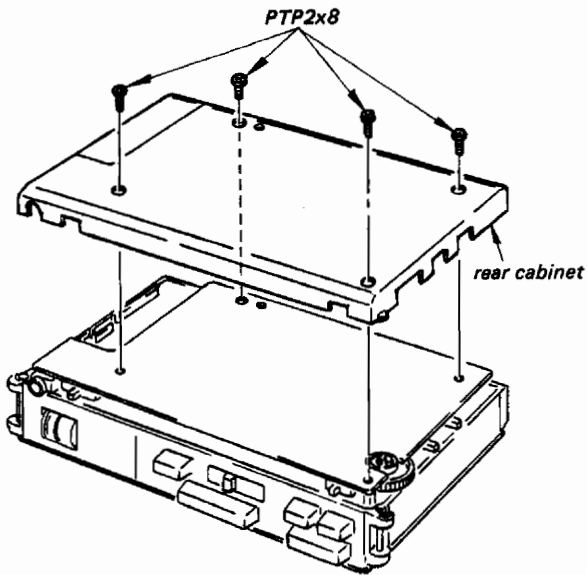
WM-F18



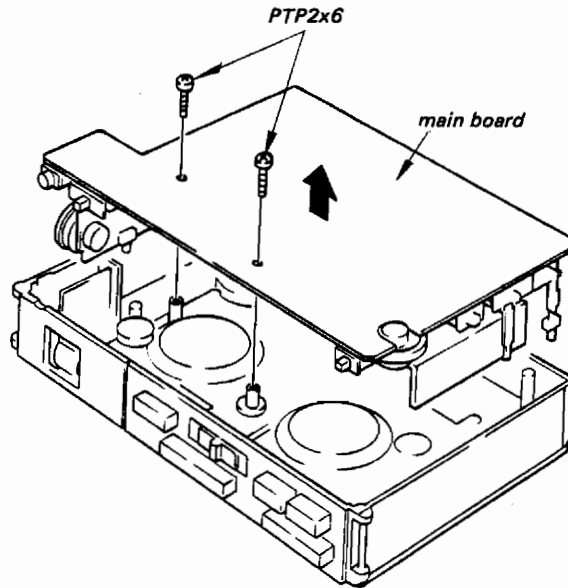
SECTION 2 DISASSEMBLY

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

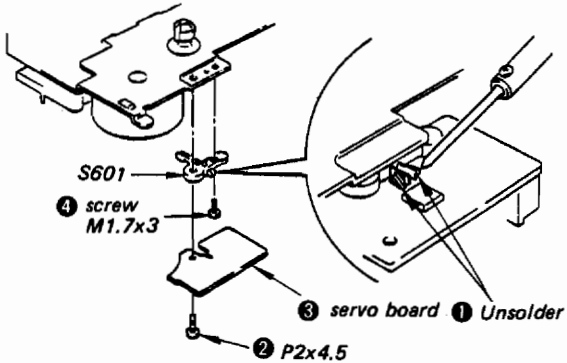
REAR CABINET



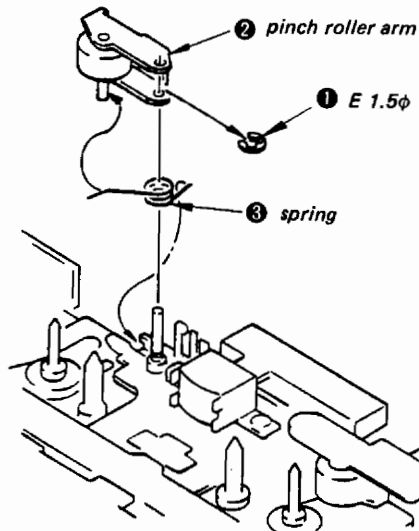
MAIN BOARD



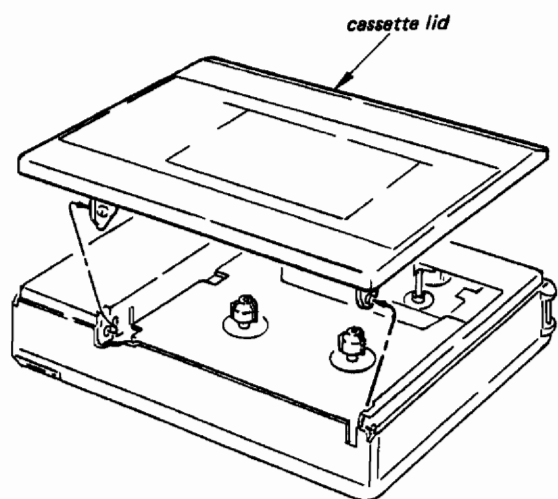
SERVO BOARD



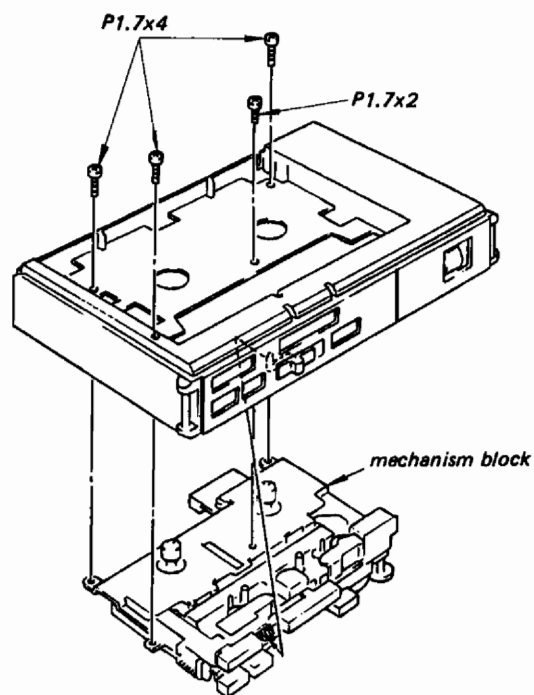
PINCH ROLLER ARM



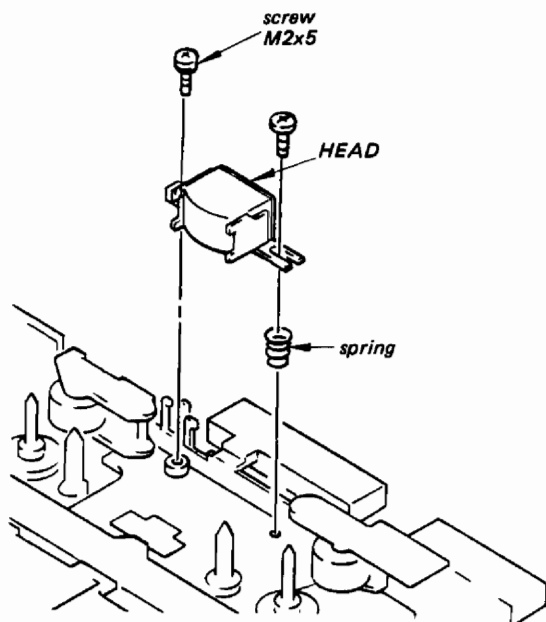
CASSETTE LID



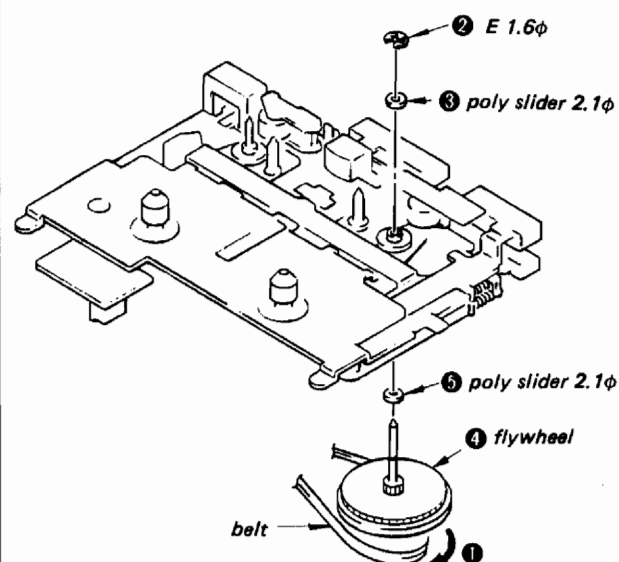
MECHANISM BLOCK



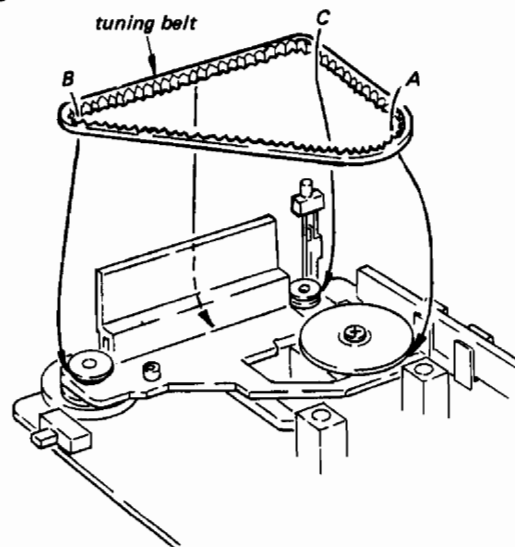
HEAD



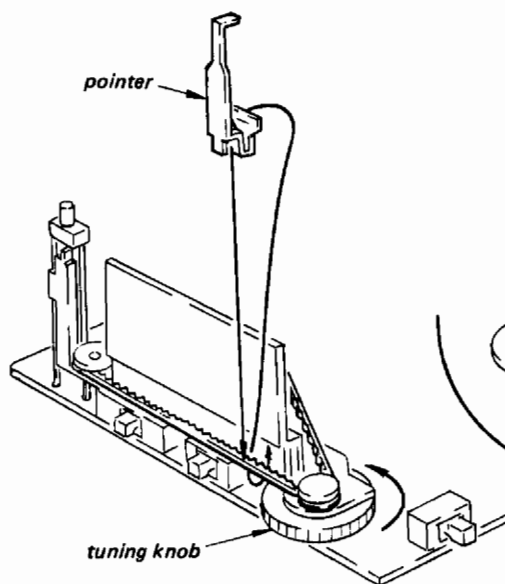
FLYWHEEL



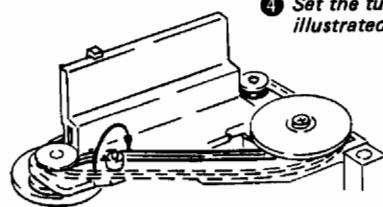
TUNING BELT SETTING



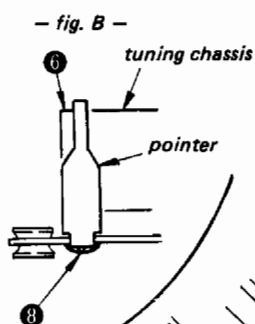
- ① Set the tuning belt in the alphabetical order given.



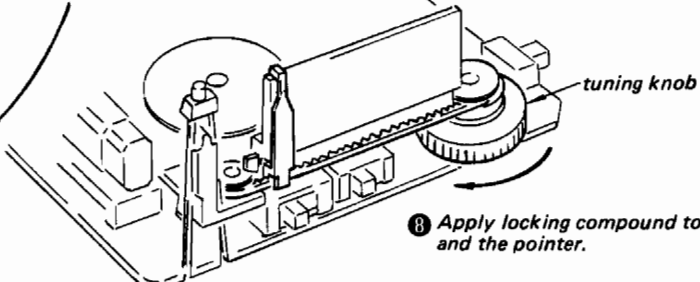
- ② Turn the tuning knob fully counterclockwise
- ③ Set the pointer as illustrated in the figure.
- ④ Set the tuning belt as illustrated in fig. A.



— fig. A —



- ⑤ Turn the tuning knob fully clockwise.
- ⑥ Set the left end of pointer to the left end of tuning chassis.
- ⑦ Turn the tuning knob fully clockwise, then turn fully counterclockwise to confirm that the pointer is set as illustrated in fig. B.



- ⑧ Apply locking compound to fix the tuning belt and the pointer.

SECTION 3 ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS

PRECAUTION

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

playback head	pinch roller
capstan	idlers
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 unless otherwise noted.

Torque Measurement

Torque	Meter Reading	Torque Meter
Forward	25–50 g•cm (0.35–0.7 oz•inch)	CQ-102C
Fast Forward and Rewind	60–200 g•cm (0.84–2.8 oz•inch)	CQ-201 B
Back Tension	1–5 g•cm (0.014–0.07 oz•inch)	CQ-102C

Tape Tension Measurement

Meter	Meter Reading
CQ-403A	more than 50g (1.76 oz)

3-2. ELECTRICAL ADJUSTMENTS

CASSETTE Section

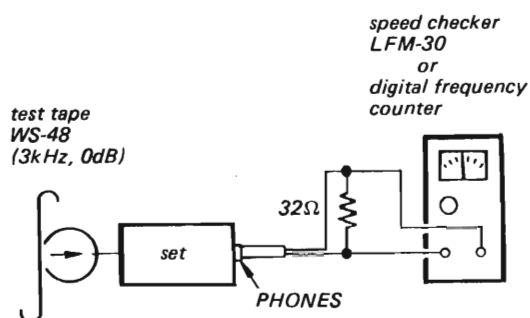
Tape Speed Adjustment

Setting:

VOL control: mechanical mid

Procedure:

Mode: playback



Speed checker

-0 - +0.5%

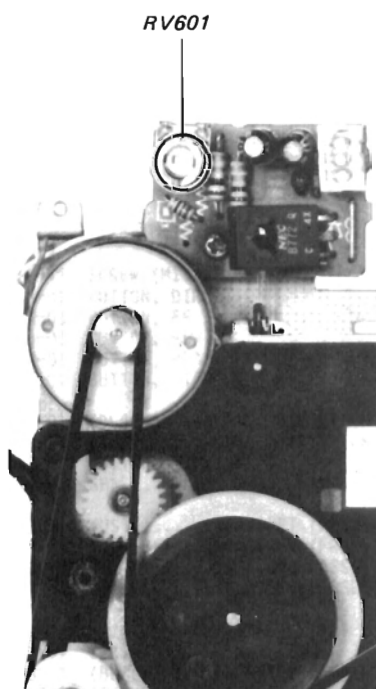
Digital frequency counter

3,000~3,015Hz

Specifications:

Frequency difference between beginning and end of tape should be within $\pm 2\%$ (60Hz).

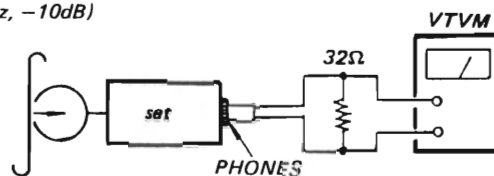
Adjustment Location:



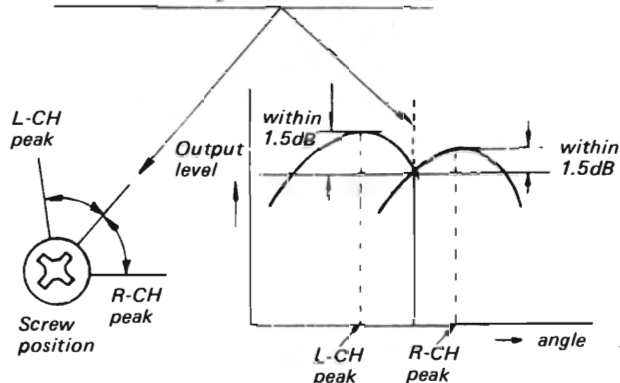
Playback Head Azimuth Adjustment

Procedure:

1. Mode: playback

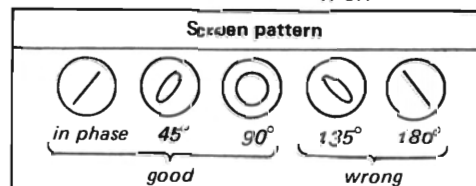
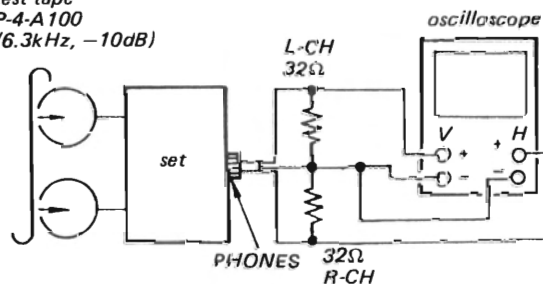
test tape
P-4-A100
(6.3kHz, -10dB)

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 1.5dB.

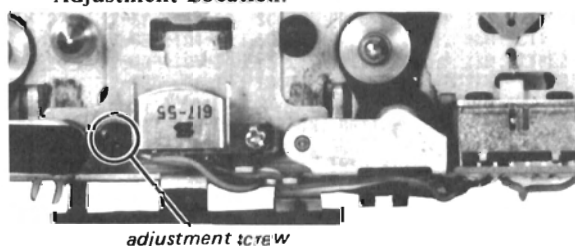


3. Phase Check

Mode: playback

test tape
P-4-A100
(6.3kHz, -10dB)

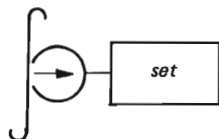
Adjustment Location:



DOLBY NR Adjustment**Setting:**

TAPE Switch: NORM
DOLBY NR Switch: OFF

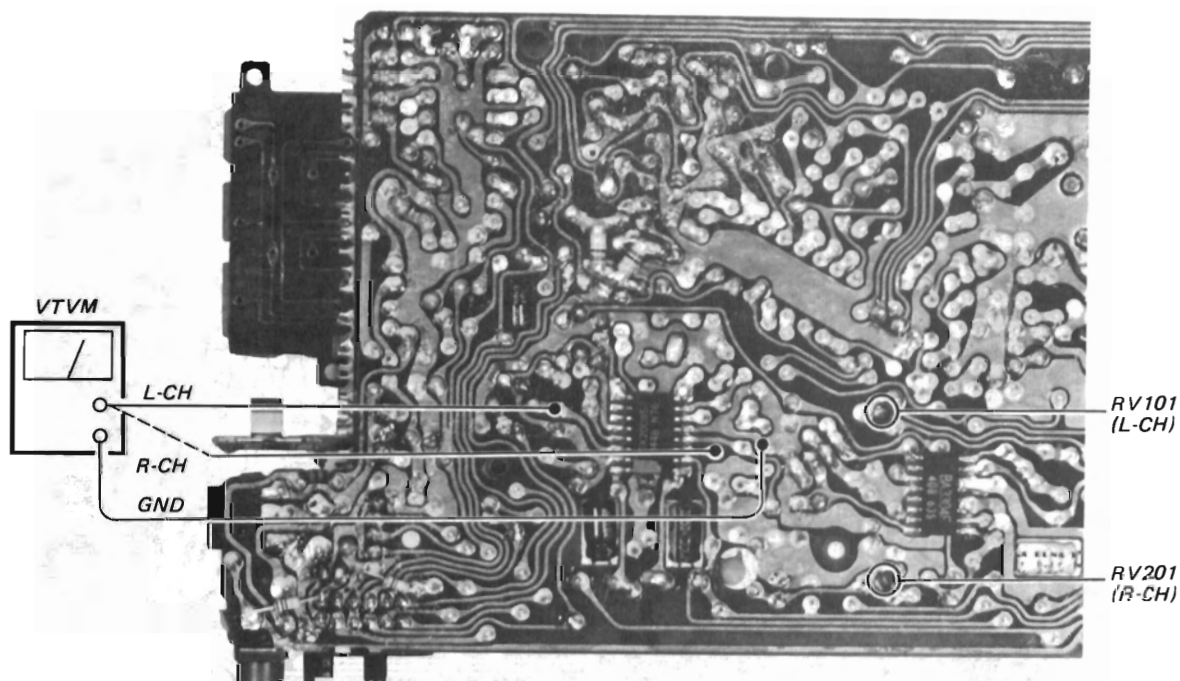
test tape
P-4-L300
(315Hz, 0dB)

**Procedure:**

Adjust RV101 (L-CH), RV201 (R-CH) for
 $-27.7\text{dB} \pm 0.5\text{dB}$ (0.030V–0.033V)
reading on the VTVM.

Adjustment Location:

Main board

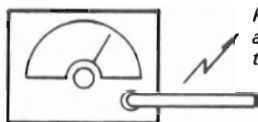


AM Section

• Setting:

FUNCTION Switch: RADIO
Band Switch: AM

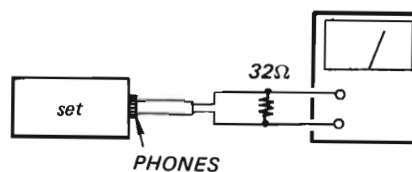
AM RF SG



30% amplitude
modulation by
400 Hz signal

Put the lead-wire
antenna close to
the set.

VTVM
(0.5–5V AC range)



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

AM IF ADJUSTMENT

Adjust for a maximum reading
on VTVM.

455kHz

T4, T2

AM TRACKING ADJUSTMENT

Adjust for a maximum reading
on VTVM.

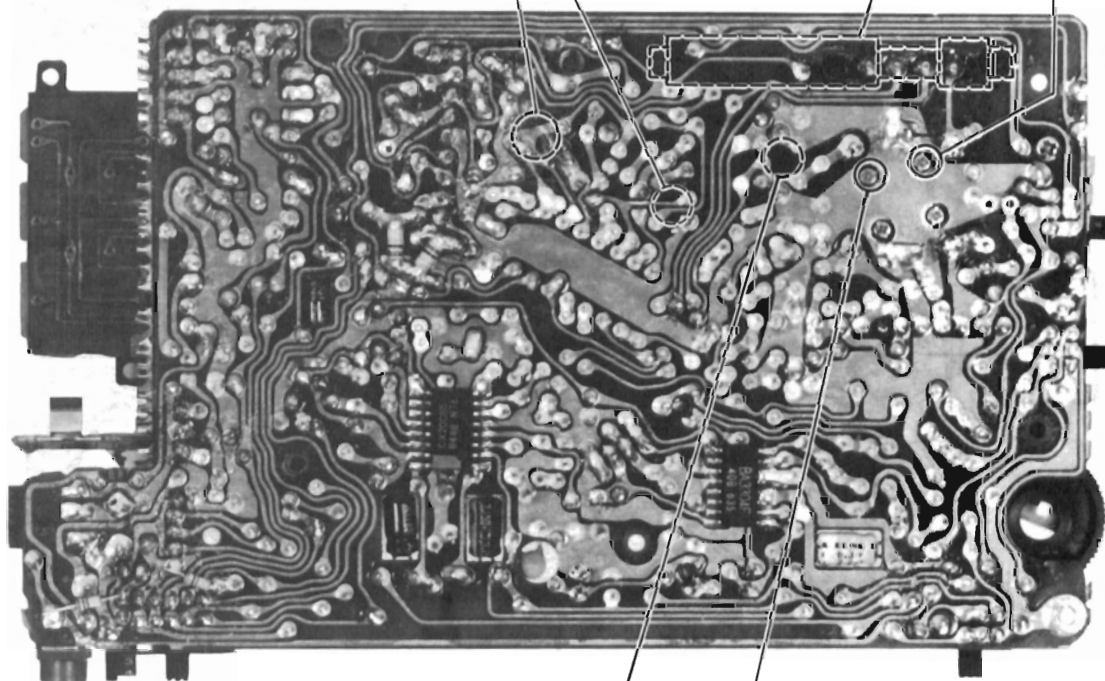
620kHz

1,400kHz

L3 (AM ANT)

CT3

Main board



L4

CT4

520kHz

1,680kHz

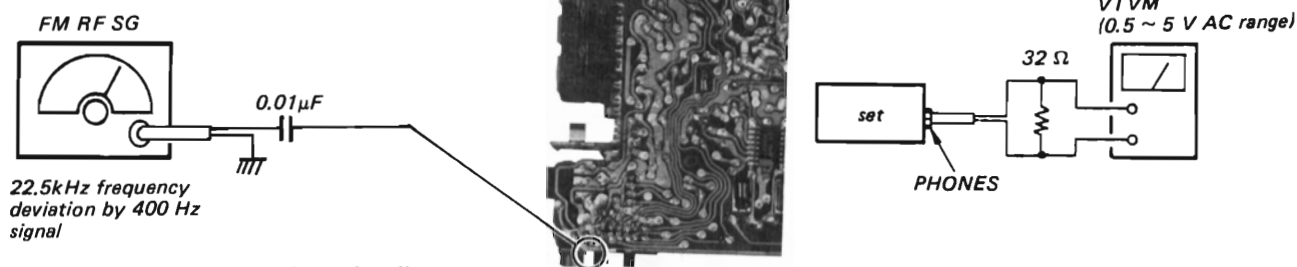
Adjust for a maximum reading
on VTVM.

AM FREQUENCY COVERAGE
ADJUSTMENT

FM Section

Setting:

FUNCTION switch: RADIO
 BAND switch: FM
 FM SENS switch: DX

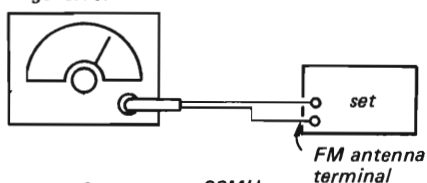


- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

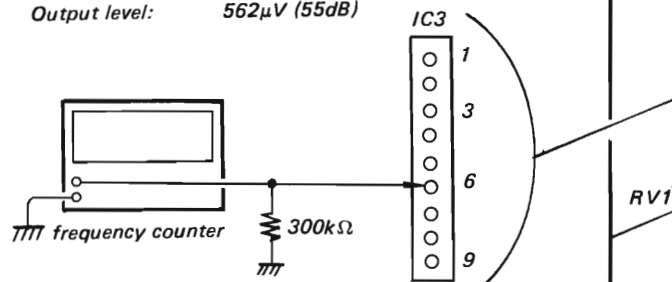
VCO Adjustment

Procedure:

FM rf signal generator



Carrier frequency: 98MHz
 Modulation: 1kHz deviation (30%)
 Output level: 562 μ V (55dB)



- Tune the set to 98MHz.
- Adjust RV1 for 38kHz \pm 200Hz on the counter.

FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
86.5MHz	109.5MHz
L2	CT2

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
109.5MHz	86.5Hz
CT1	L1

Main board

IC3

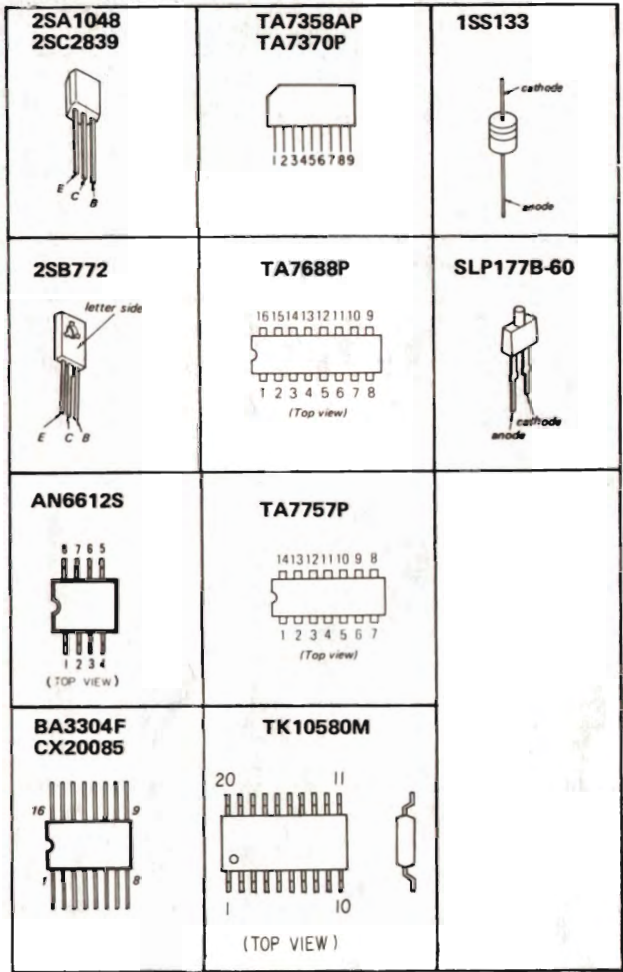
T3	T1
Adjust for a maximum reading on VTVM.	
FM IF ADJUSTMENT	

[
MEMO

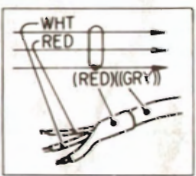
S

SECTION 4
DIAGRAMS

• Semiconductor Lead Layouts

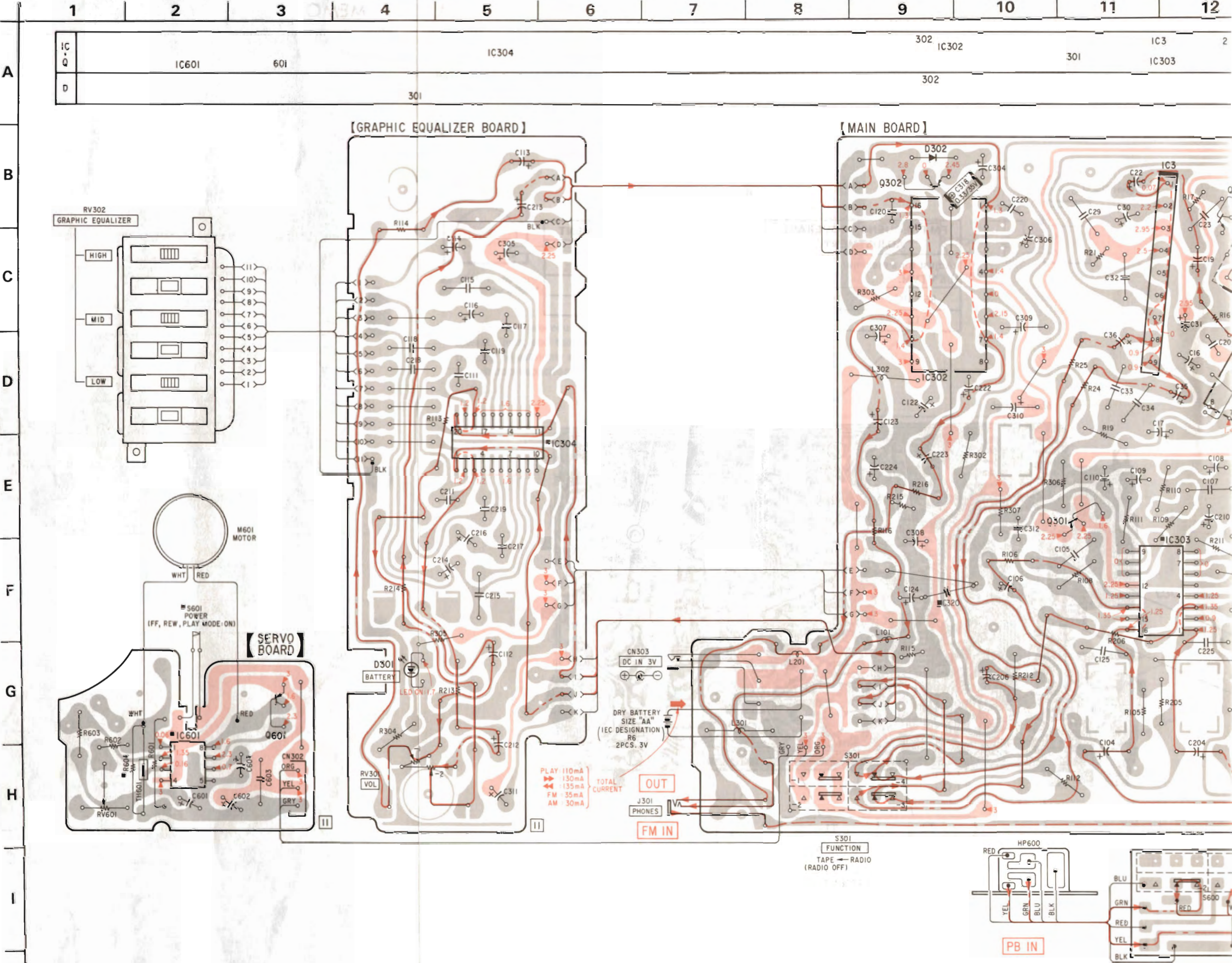


Note:
• Color code of sleeving over the end of the jacket.



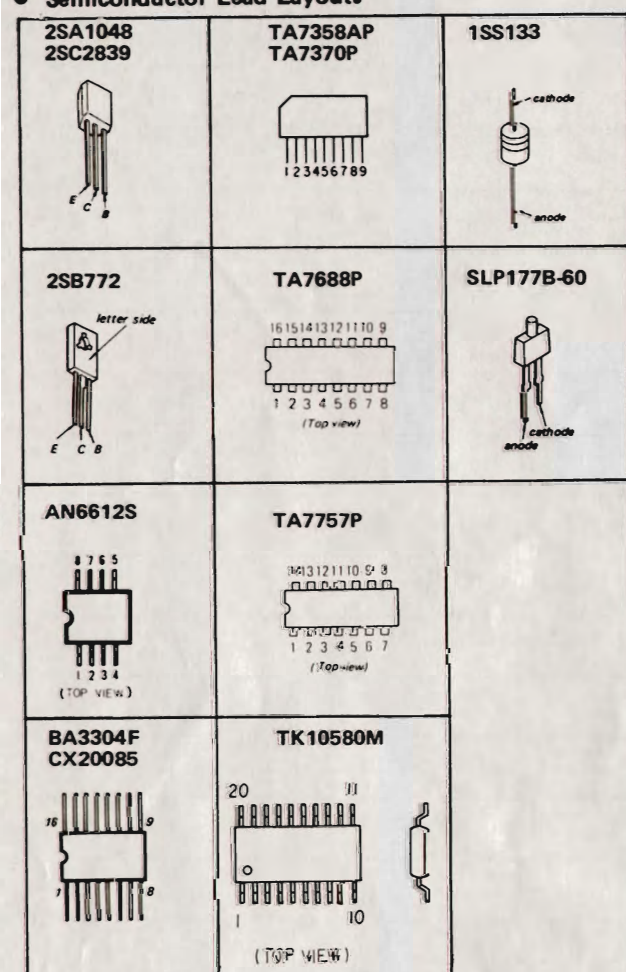
- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : part mounted on the conductor side.
- : indicates side identified with part number.
- : signal path
- : L-CH signal path
- : R-CH signal path
- : B + pattern

4-1. MOUNTING DIAGRAM
—Conductor Side—



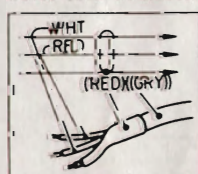
SECTION 4
DIAGRAMS41. MOUNTING DIAGRAM
—Conductor Side—

● Semiconductor Lead Layouts

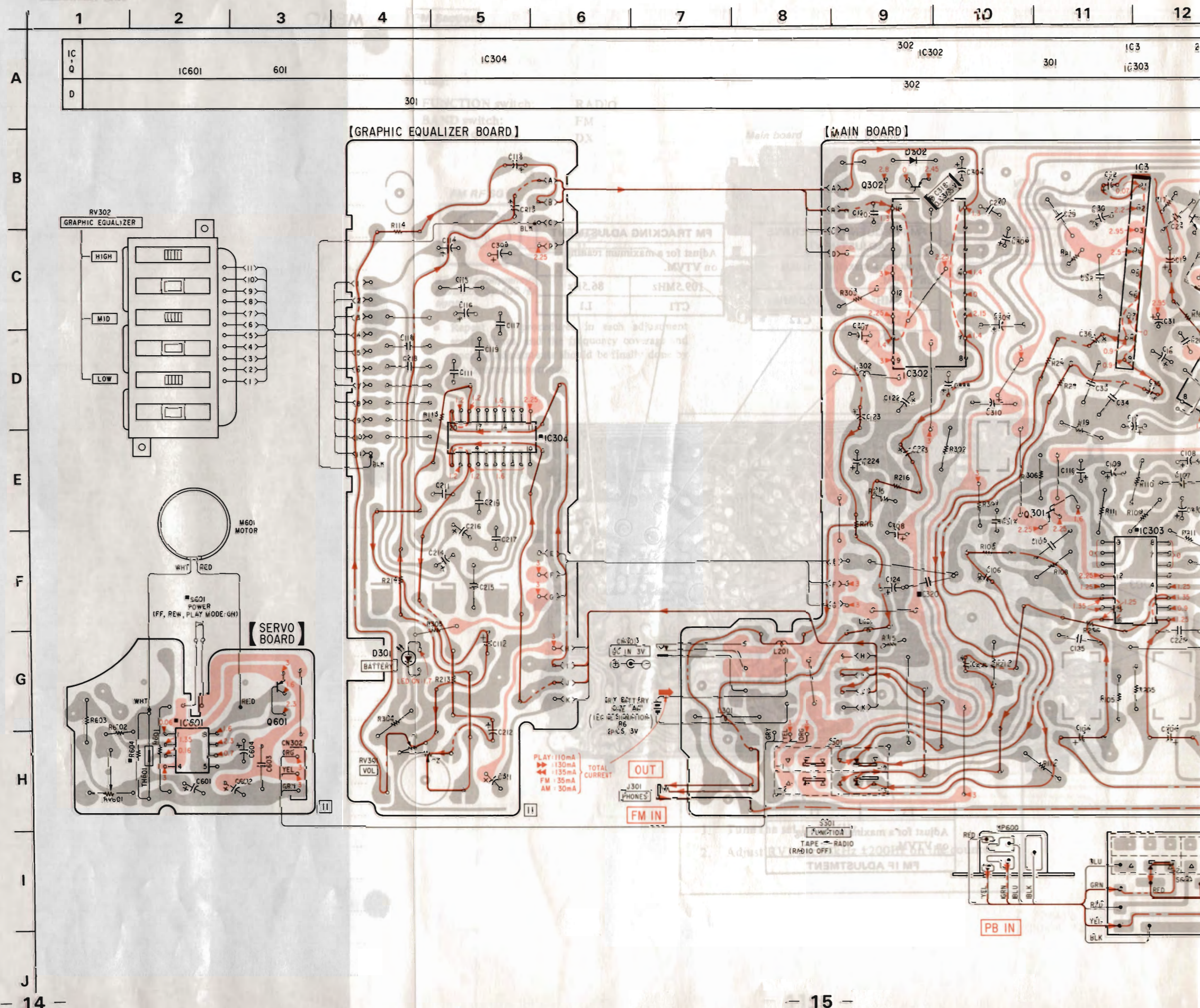


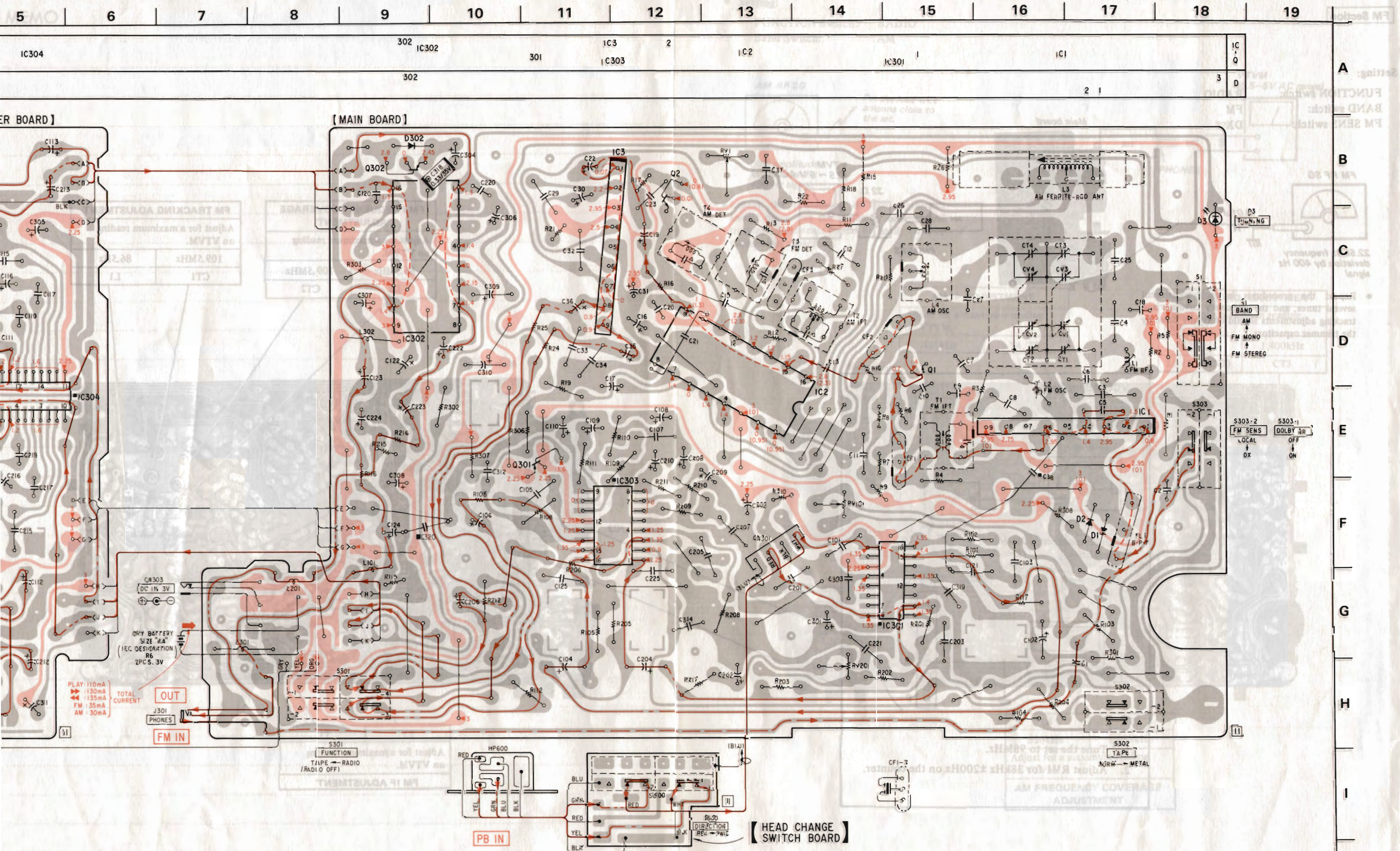
Note:

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

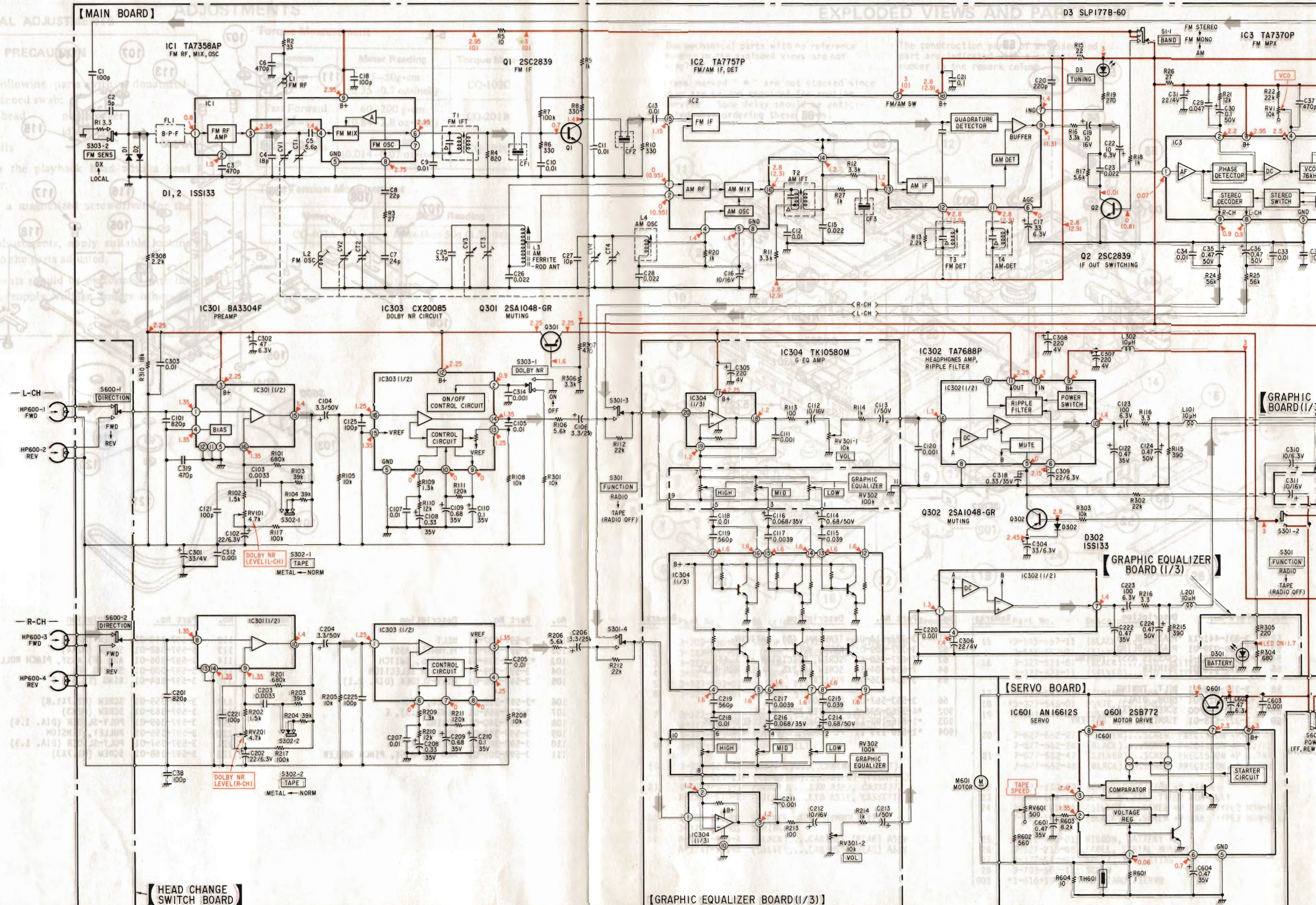


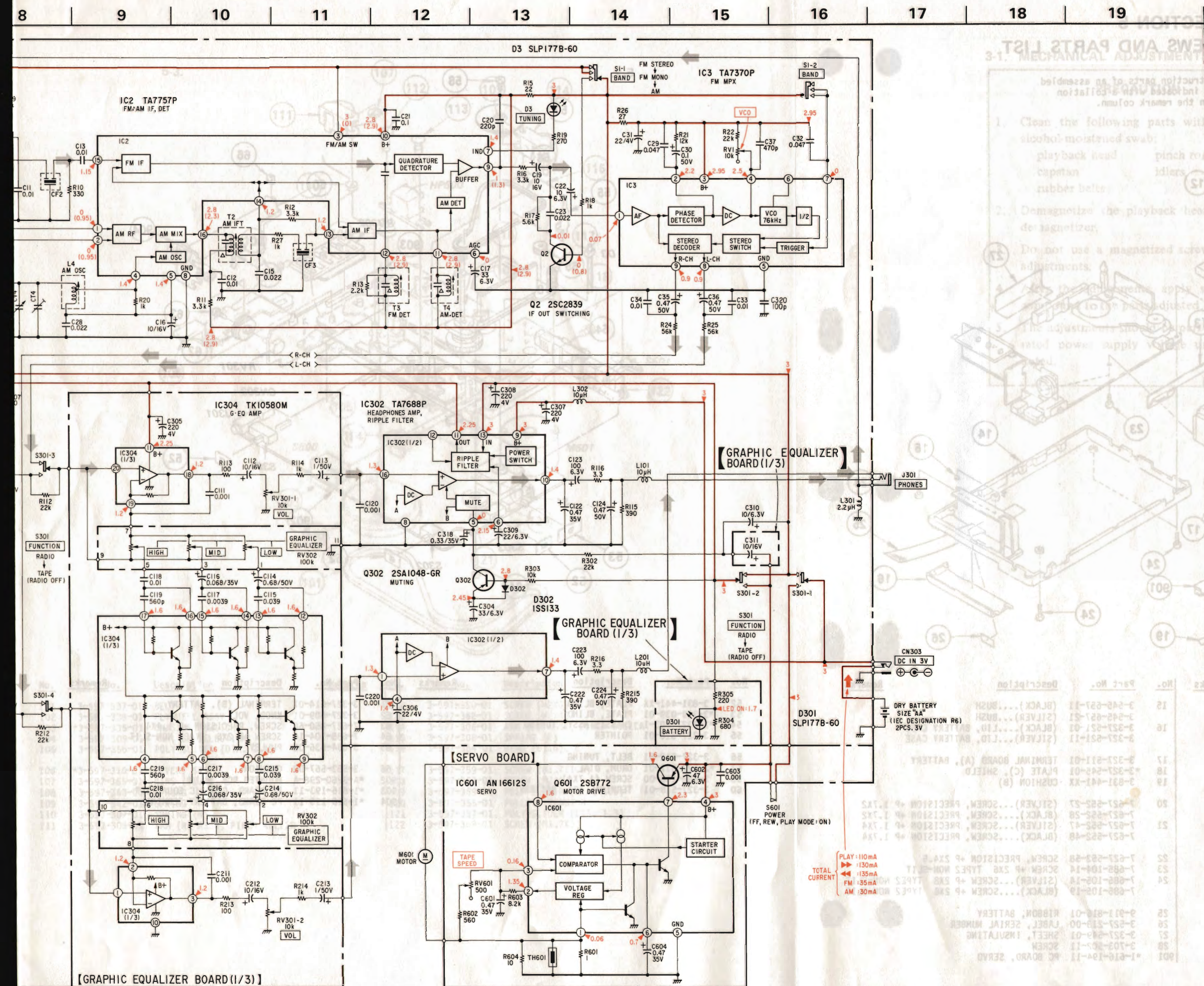
- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : part mounted on the conductor side.
- : indicates side identified with part number.
- : signal path
- : L-CH signal path
- : R-CH signal path
- : B + pattern





4-2. SCHEMATIC DIAGRAM





Note:

- A
- All capacitors are in μF unless otherwise noted. pF : μpF 50 WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
 - \square : signal path.
 - \triangle : internal component.
- B
- Switch

Ref. No.	Switch	Position
S1	BAND	FM STEREO
S301	FUNCTION	RADIO
S302	TAPE	NORM
S303-1	DOLBY NR	OFF
S303-2	FM SENS	LOCAL
S600	DIRECTION	FWD
S601	POWER	OFF

- C
- \square : B+ bus.
 - \square : adjustment for repair.
 - Total current is measured with no cassette installed.
 - Voltages are dc with respect to ground unless otherwise noted.
 - Readings are taken under no-signal (detuned) conditions with a VOM (50 $\text{k}\Omega/\text{V}$).
 - () : AM no mark : FM
 - Power voltage is 3 V and fed with regulated dc power supply from DC JACK.
 - Voltages are dc with respect to ground in NO SIGNAL mode.
 - Voltage variations may be noted due to normal production tolerances.
- D
- E
- F
- G
- H
- I
- J

SECTION 5

EXPLODED VIEWS AND PARTS LIST

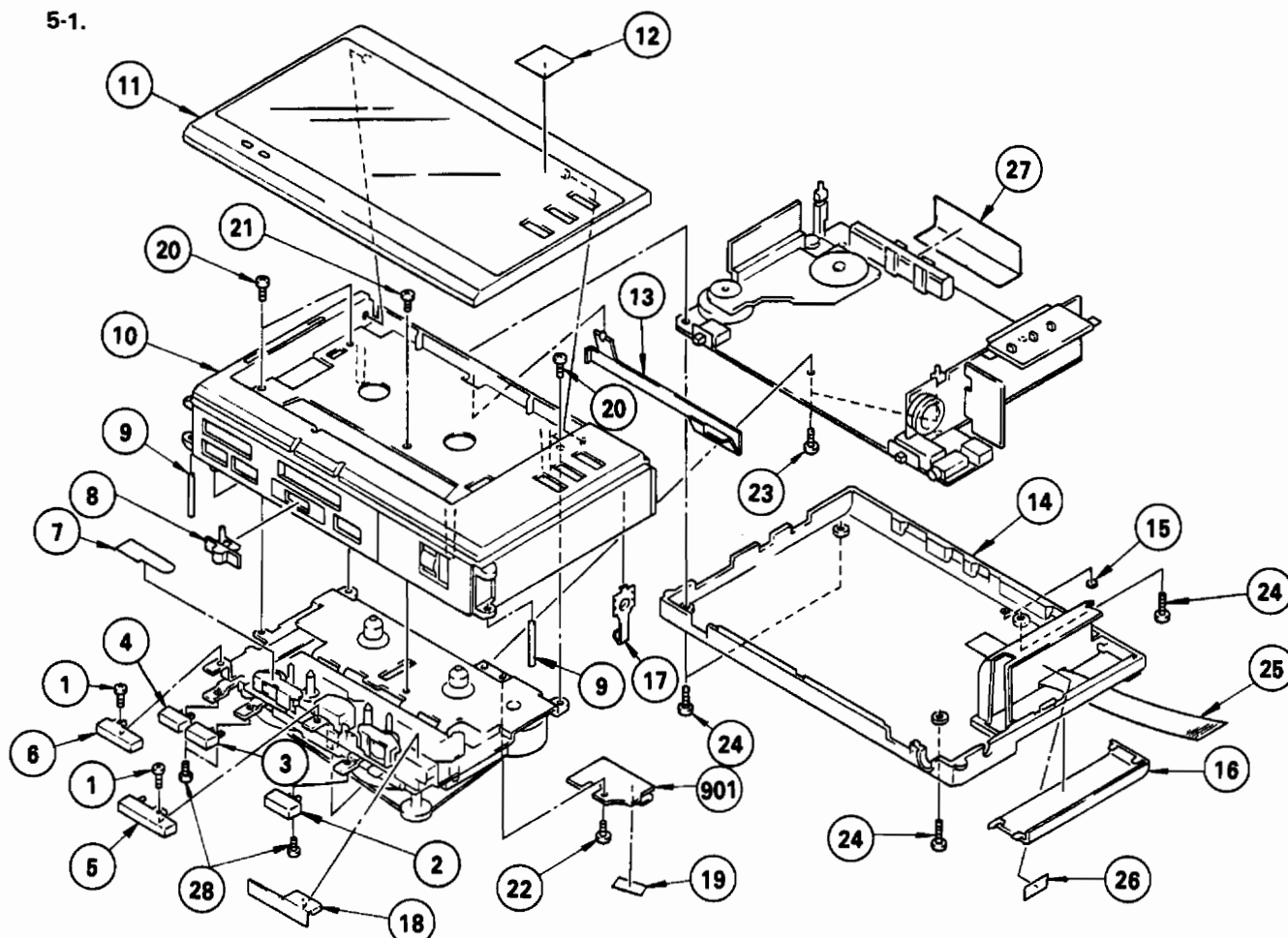
NOTE:

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

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

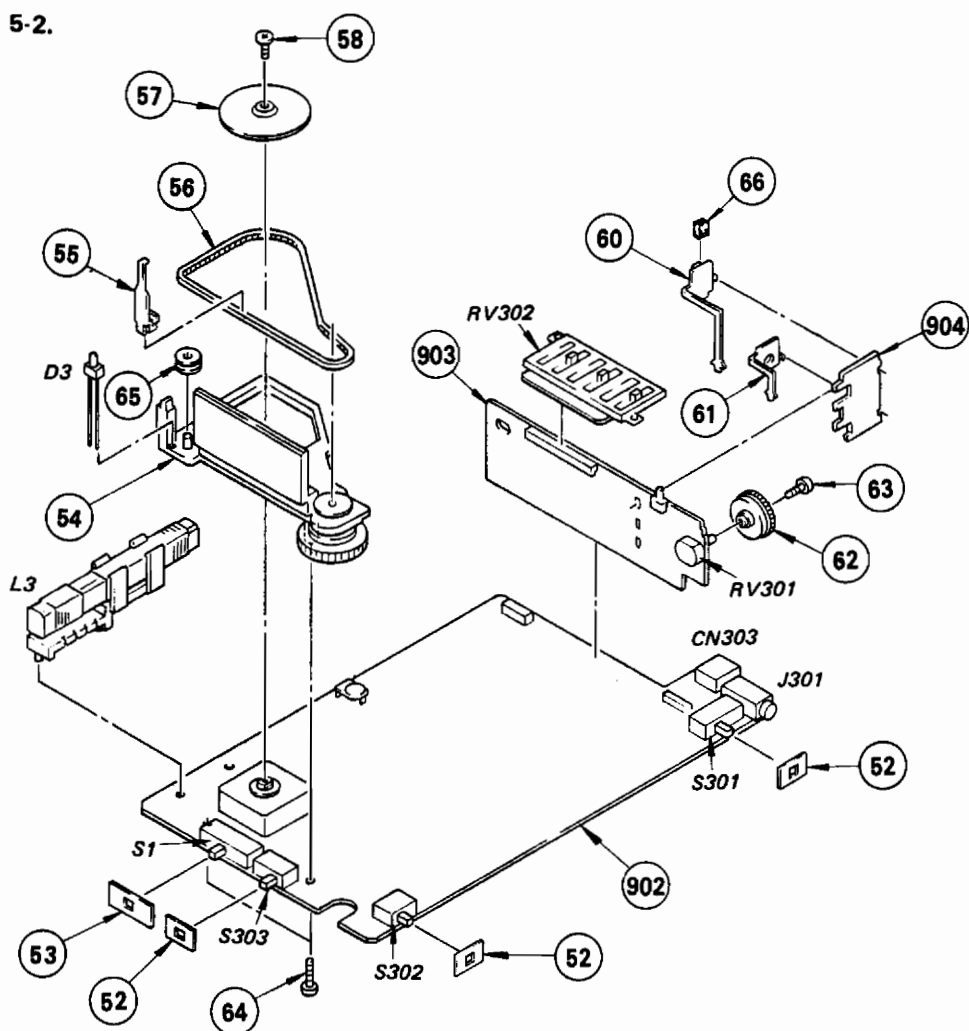
The construction parts of an assembled part are indicated with a collation number in the remark column.

5-1.



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	3-703-816-42	SCREW (M1.4X2.5), SPECIAL HEAD		15	3-545-657-11	(BLACK)...BUSH	
2	3-327-507-01	BUTTON, DIRECTION			3-545-657-21	(SILVER)...BUSH	
3	3-327-505-01	BUTTON, FF		16	3-327-521-01	(BLACK)...LID, BATTERY CASE	
4	3-327-504-01	BUTTON, REW			3-327-521-11	(SILVER)...LID, BATTERY CASE	
5	3-327-503-01	BUTTON, PLAY		17	3-327-511-01	TERMINAL BOARD (A), BATTERY	
6	3-327-506-01	BUTTON, STOP		18	*3-327-545-01	PLATE (C), SHIELD	
7	3-327-508-01	(BLACK)...PLATE, DIRECTION		19	3-831-441-XX	CUSHION (B)	
	3-327-508-11	(SILVER)...PLATE, DIRECTION		20	7-627-552-27	(SILVER)...SCREW, PRECISION +P 1.7X2	
8	3-327-513-01	BUTTON, MODE			7-627-552-28	(BLACK)...SCREW, PRECISION +P 1.7X2	
9	3-327-510-01	SHAFT, BELT		21	7-627-552-47	(SILVER)...SCREW, PRECISION +P 1.7X4	
10	3-327-523-11	(US).....CABINET (FRONT)			7-627-552-48	(BLACK)...SCREW, PRECISION +P 1.7X4	
	3-327-523-21	(Canadian)...CABINET (FRONT)		22	7-627-553-58	SCREW, PRECISION +P 2X4.5	
11	X-3327-501-1	(BLACK)...LID ASSY, CASSETTE		23	7-685-104-14	SCREW +P 2X6 TYPE2 NON-SLIT	
	X-3327-510-1	(SILVER)...LID ASSY, CASSETTE		24	7-685-105-14	(SILVER)...SCREW +P 2X8 TYPE2 NON-SLIT	
12	3-703-710-01	STICKER, SONY SYMBOL (12)			7-685-105-19	(BLACK)...SCREW +P 2X8 TYPE2 NON-SLIT	
13	3-327-520-01	SPRING		25	9-911-816-01	RIBBON, BATTERY	
14	A-3241-089-A	(BLACK)...CABINET (REAR) ASSY		26	3-527-213-00	LABEL, SERIAL NUMBER	
	A-3241-109-A	(SILVER)...CABINET (REAR) ASSY		27	3-327-549-01	SHEET, INSULATING	
				28	3-703-502-11	SCREW	
				901	*1-616-194-11	PC BOARD, SERVO	

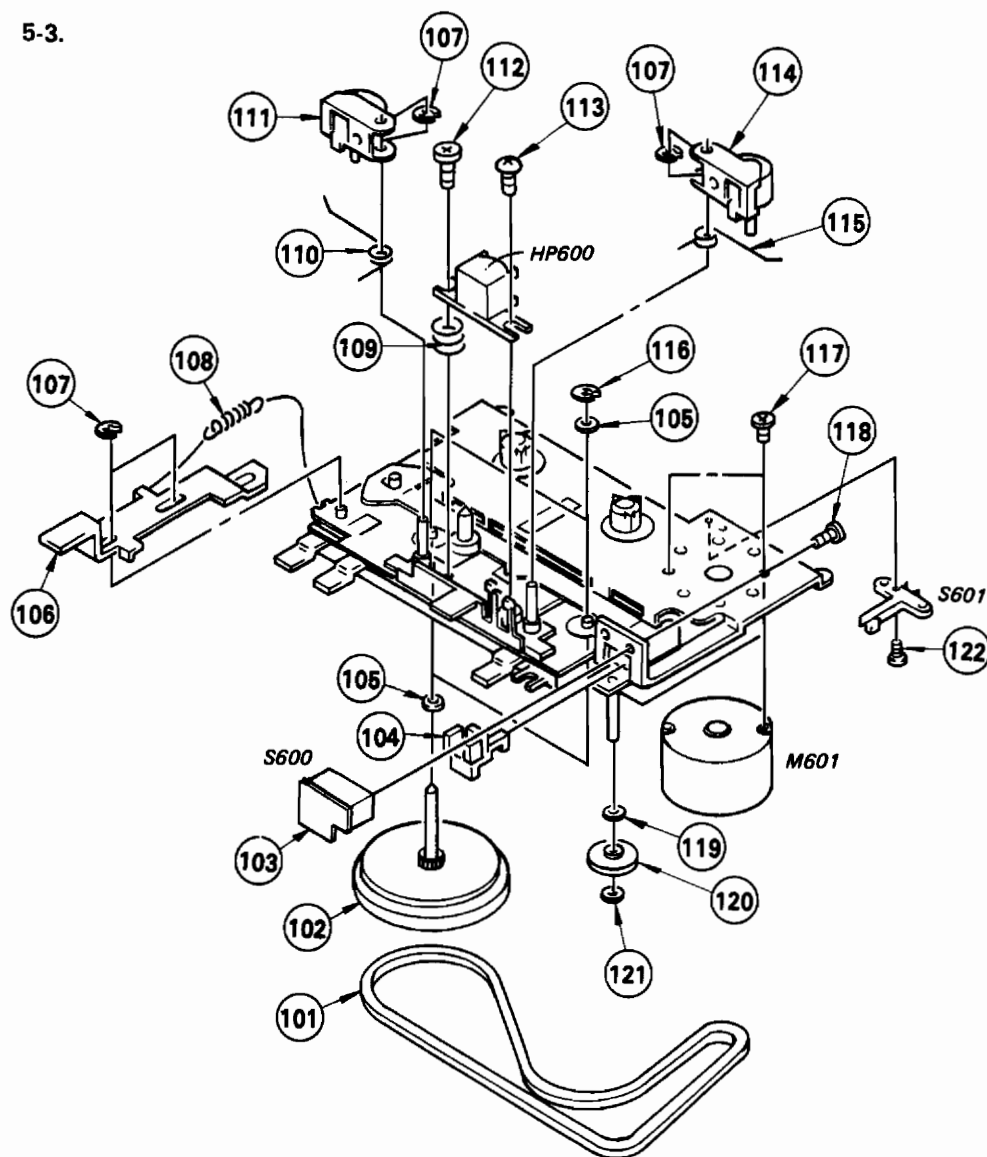
5-2.



No.	Part No.	Description	Remarks
52	3-831-441-XX	PLATE, BLIND	
53	*3-319-039-01	PLATE, BLIND	
54	*X-3327-503-1	CHASSIS ASSY, TUNING	
55	3-327-516-01	POINTER	
56	3-327-512-01	BELT, TUNING	
57	*3-327-517-01	DRUM, DIAL	
58	3-888-156-00	SCREW (1.7X4)	
60	3-327-518-01	TERMINAL (C), BATTERY	

No.	Part No.	Description	Remarks
61	3-327-514-01	TERMINAL (B), BATTERY	
62	3-327-509-01	KNOB, VOL	
63	7-627-850-68	SCREW, PRECISION +P 1.4X4	
64	7-685-104-14	SCREW +P 2X6 TYPE2 NON-SLIT	
65	3-834-636-00	PULLEY	
66	3-553-567-00	CUSHION	
902	*A-3260-298-A	MOUNTED PCB, MAIN	
903	*1-616-193-11	PC BOARD, GRAPHIC EQUALIZER	
904	*1-616-195-11	PC BOARD, BATTERY TERMINAL	

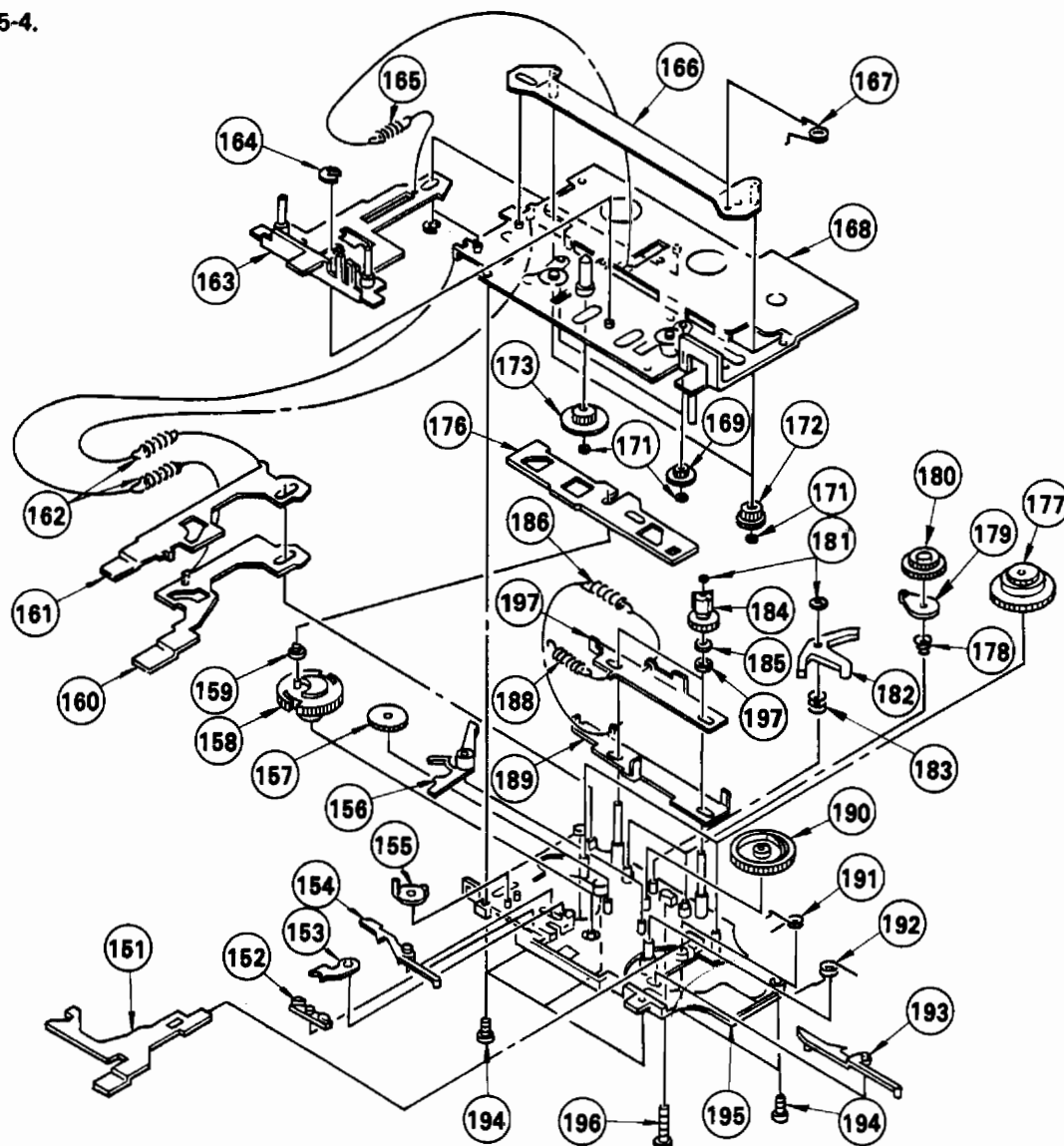
5-3.



No.	Part No.	Description	Remarks
101	3-597-337-01	BELT	
102	3-597-338-01	FLYWHEEL ASSY	
103	*3-597-335-01	CHASSIS, SWITCH	
104	3-597-309-01	ARM, SW SELECTION	
105	3-597-356-01	POLY-SLIDER (DIA. 2.1)	
106	*3-597-310-01	LEVER, STOP	
107	3-597-365-01	RING (E1.5), E	
108	3-597-340-01	SPRING	
109	3-597-342-01	SPRING	
110	3-597-307-01	SPRING (R)	
111	3-597-305-01	ARM (R) ASSY, PINCH ROLLER	

No.	Part No.	Description	Remarks
112	3-597-350-01	SCREW (M2X5)	
113	3-597-362-01	SCREW (M2X4)	
114	3-597-306-01	ARM (F) ASSY, PINCH ROLLER	
115	3-597-308-01	SPRING (F)	
116	3-597-364-01	RING (E1.6), E	
117	3-597-359-01	SCREW (M1.7X1.8)	
118	3-597-363-01	SCREW (M2X3)	
119	3-597-369-01	POLY-SLIDER (DIA. 1.6)	
120	3-597-355-01	PULLEY, TENSION	
121	3-597-357-01	POLY-SLIDER (DIA. 1.3)	
122	3-597-368-01	SCREW (M1.7X3)	

5-4.



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
151	*3-597-317-01	LEVER, PROGRAM		176	*3-597-331-01	LEVER, REVERSE	
152	3-597-320-01	LEVER, CANCEL		177	3-597-326-01	GEAR ASSY, FRICTION	
153	3-597-318-01	LEVER, MODE		178	3-597-346-01	SPRING	
154	3-597-321-01	LEVER (B), SHUT-OFF		179	3-597-327-01	CAM, DETECTION	
155	3-597-319-01	LEVER (A), SHUT-OFF		180	3-597-328-01	GEAR, MIDWAY	
156	3-597-323-01	ARM, GEAR LOCK		181	3-597-358-01	POLY-SLIDER (DIA. 1.6)	
157	3-597-325-01	GEAR (B), DECELERATION		182	3-597-354-01	ARM, DETECTION	
158	3-597-324-01	GEAR, SELECTOR		183	3-597-351-01	SPRING	
159	3-597-349-01	ROLLER, SELECT		184	3-597-315-01	SPINDLE ASSY, REEL	
160	*3-597-312-01	LEVER, FF		185	3-597-356-01	POLY-SLIDER (DIA. 2.1)	
161	*3-597-311-01	LEVER, REW		186	3-597-345-01	SPRING	
162	3-597-339-01	SPRING		187	*3-597-314-01	PLATE, LOCK	
163	3-597-303-01	BASE ASSY, HEAD		188	3-597-353-01	SPRING	
164	3-597-366-01	RING (E2), E		189	*3-597-313-01	PLATE, FUNCTION, SWITCH	
165	3-597-341-01	SPRING		190	3-597-322-01	GEAR, DETECTION	
166	*3-597-304-01	ARM ASSY, FR		191	3-597-344-01	SPRING	
167	3-597-347-01	SPRING		192	3-597-343-01	SPRING	
168	3-597-301-01	CHASSIS		193	3-597-316-01	RATCHET	
169	3-597-330-01	GEAR, T,U		194	3-597-360-01	SCREW (M2X4.5)	
170	3-597-365-01	RING (E1.5), E		195	3-597-302-01	BASE ASSY, GEAR	
172	3-597-332-01	GEAR, F,R		196	3-597-361-01	SCREW (M2X8)	
173	3-597-329-01	GEAR (A), DECELERATION		197	3-597-367-01	RING (E2.5), E	

NOTE:

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

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

CAPACITORS:

MF: μ F, PF: μ PF.

RESISTORS

All resistors are in ohms.

F : nonflammable

COILS

MMH : mH, UH : μ H

SEMICONDUCTORS

In each case, U : μ , for example:

UA...: μ A..., UPA...: μ PA..., UPC...: μ PC,

UPD...: μ PD...

ELECTRICAL PARTS

Ref.No.	Part No.	Description
901	*1-616-194-11	PC BOARD, SERVO
902	*A-3260-298-A	MOUNTED PCB, MAIN
903	*1-616-193-11	PC BOARD, GRAPHIC EQUALIZER
904	*1-616-195-11	PC BOARD, BATTERY TERMINAL
905	*A-3260-299-A	PC BOARD ASSY
906	*1-562-930-11	SOCKET, CONNECTOR 4P
907	*1-535-366-21	CONTACT
C1	1-162-282-31	CERAMIC 100PF 10% 50V
C2	1-102-807-00	CERAMIC 5PF 1PF 50V
C3	1-162-290-31	CERAMIC 470PF 10% 50V
C4	1-162-205-31	CERAMIC 18PF 5% 50V
C5	1-162-196-31	CERAMIC 5.6PF 10% 50V
C6	1-162-290-31	CERAMIC 470PF 10% 50V
C7	1-102-515-00	CERAMIC 24PF 5% 50V
C8	1-162-207-31	CERAMIC 22PF 5% 50V
C9	1-161-013-00	CERAMIC 0.01MF 20% 25V
C10	1-161-013-00	CERAMIC 0.01MF 20% 25V
C11	1-162-306-31	CERAMIC 0.01MF 30% 16V
C12	1-162-306-31	CERAMIC 0.01MF 30% 16V
C13	1-162-306-31	CERAMIC 0.01MF 30% 16V
C15	1-161-494-00	CERAMIC 0.022MF 30% 25V
C16	1-123-617-00	ELECT 10MF 20% 16V
C17	1-123-646-00	ELECT 33MF 20% 6.3V
C18	1-102-106-00	CERAMIC 100PF 10% 50V
C19	1-123-617-00	ELECT 10MF 20% 16V
C20	1-102-110-00	CERAMIC 220PF 10% 50V
C21	1-161-773-00	CERAMIC 0.1MF 20% 25V
C22	1-124-435-00	ELECT 10MF 20% 6.3V
C23	1-161-055-00	CERAMIC 0.022MF 20% 25V
C25	1-162-193-31	CERAMIC 3.3PF 10% 50V
C26	1-161-055-00	CERAMIC 0.022MF 20% 25V
C27	1-162-199-31	CERAMIC 10PF 5% 50V
C28	1-161-055-00	CERAMIC 0.022MF 20% 25V
C29	1-161-059-00	CERAMIC 0.047MF 20% 25V
C30	1-123-607-00	ELECT 0.1MF 20% 50V
C31	1-124-430-00	ELECT 22MF 20% 4V
C32	1-161-059-00	CERAMIC 0.047MF 20% 25V
C33	1-162-306-31	CERAMIC 0.01MF 30% 16V
C34	1-162-306-31	CERAMIC 0.01MF 30% 16V
C35	1-124-465-00	ELECT 0.47MF 20% 50V
C36	1-124-465-00	ELECT 0.47MF 20% 50V
C37	1-130-500-00	MYLAR 470PF 10% 50V
C38	1-162-282-31	CERAMIC 100PF 10% 50V
C101	1-162-293-31	CERAMIC 820PF 10% 50V
C102	1-123-618-00	ELECT 22MF 20% 6.3V
C103	1-162-303-31	CERAMIC 0.0033MF 20% 16V

ELECTRICAL PARTS

Ref.No.	Part No.	Description
C104	1-123-613-00	ELECT 3.3MF 20% 50V
C105	1-162-585-00	CERAMIC 0.01MF 5% 16V
C106	1-124-436-00	ELECT 3.3MF 20% 25V
C107	1-162-585-00	CERAMIC 0.01MF 5% 16V
C108	1-131-344-00	TANTALUM 0.33MF 20% 35V
C109	1-131-346-00	TANTALUM 0.68MF 20% 35V
C110	1-131-341-00	TANTALUM 0.1MF 20% 35V
C111	1-161-039-00	CERAMIC 0.001MF 20% 25V
C112	1-123-617-00	ELECT 10MF 20% 16V
C113	1-123-611-00	ELECT 1MF 20% 50V
C114	1-124-254-00	ELECT 0.68MF 20% 50V
C115	1-161-058-00	CERAMIC 0.039MF 10% 25V
C116	1-131-401-00	TANTALUM 0.068MF 20% 35V
C117	1-161-046-00	CERAMIC 0.0039MF 10% 25V
C118	1-162-306-31	CERAMIC 0.01MF 30% 16V
C119	1-102-115-00	CERAMIC 560PF 10% 50V
C120	1-161-039-00	CERAMIC 0.001MF 20% 25V
C121	1-162-282-31	CERAMIC 100PF 10% 50V
C122	1-131-345-00	TANTALUM 0.47MF 20% 35V
C123	1-123-661-00	ELECT 100MF 20% 6.3V
C124	1-123-610-00	ELECT 0.47MF 20% 50V
C125	1-162-282-31	CERAMIC 100PF 10% 50V
C201	1-162-293-31	CERAMIC 820PF 10% 50V
C202	1-123-618-00	ELECT 22MF 20% 6.3V
C203	1-162-303-31	CERAMIC 0.0033MF 20% 16V
C204	1-123-613-00	ELECT 3.3MF 20% 50V
C205	1-162-585-00	CERAMIC 0.01MF 5% 16V
C206	1-124-436-00	ELECT 3.3MF 20% 25V
C207	1-162-585-00	CERAMIC 0.01MF 5% 16V
C208	1-131-344-00	TANTALUM 0.33MF 20% 35V
C209	1-131-346-00	TANTALUM 0.68MF 20% 35V
C210	1-131-341-00	TANTALUM 0.1MF 20% 35V
C211	1-161-039-00	CERAMIC 0.001MF 20% 25V
C212	1-123-617-00	ELECT 10MF 20% 16V
C213	1-123-611-00	ELECT 1MF 20% 50V
C214	1-124-254-00	ELECT 0.68MF 20% 50V
C215	1-161-058-00	CERAMIC 0.039MF 10% 25V
C216	1-131-401-00	TANTALUM 0.068MF 20% 35V
C217	1-161-046-00	CERAMIC 0.0039MF 10% 25V
C218	1-162-306-31	CERAMIC 0.01MF 30% 16V
C219	1-102-115-00	CERAMIC 560PF 10% 50V
C220	1-161-039-00	CERAMIC 0.001MF 20% 25V
C221	1-162-282-31	CERAMIC 100PF 10% 50V
C222	1-131-345-00	TANTALUM 0.47MF 20% 35V
C223	1-123-661-00	ELECT 100MF 20% 6.3V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C224	1-123-610-00	ELECT	0.47MF	20%	50V
C225	1-162-282-31	CERAMIC	100PF	10%	50V
C301	1-124-220-00	ELECT	33MF	20%	4V
C302	1-123-647-00	ELECT	47MF	20%	6.3V
C303	1-162-294-31	CERAMIC	0.001MF	10%	50V
C304	1-123-646-00	ELECT	33MF	20%	6.3V
C305	1-123-827-00	ELECT	220MF	20%	4V
C306	1-124-430-00	ELECT	22MF	20%	4V
C307	1-124-434-00	ELECT	220MF	20%	4V
C308	1-123-827-00	ELECT	220MF	20%	4V
C309	1-123-618-00	ELECT	22MF	20%	6.3V
C310	1-124-435-00	ELECT	10MF	20%	6.3V
C311	1-123-617-00	ELECT	10MF	20%	16V
C312	1-161-039-00	CERAMIC	0.001MF	20%	25V
C314	1-102-074-00	CERAMIC	0.001MF	10%	50V
C318	1-135-073-00	TANTAL. CHIP	0.33MF	20%	35V
C319	1-162-290-00	CERAMIC	470PF	10%	50V
C320	1-162-282-31	CERAMIC	100PF	10%	50V
C601	1-131-345-00	TANTALUM	0.47MF	20%	35V
C602	1-123-647-00	ELECT	47MF	20%	6.3V
C603	1-162-294-31	CERAMIC	0.001MF	10%	50V
C604	1-131-345-00	TANTALUM	0.47MF	20%	35V
CF1	1-527-879-00	FILTER, CERAMIC			
CF2	1-527-879-00	FILTER, CERAMIC			
CF3	1-527-870-00	FILTER			
CN303	1-507-951-11	JACK, EXTERNAL POWER (DC IN 3V)			
CNP302	*1-562-943-11	SOCKET, CONNECTOR 3P			
CT1-4	1-151-433-00	CAP, TUNING, POLYETHYLENE			
CV1-4	1-151-433-00	CAP, TUNING, POLYETHYLENE			
D1	8-719-901-33	DIODE 1SS133			
D2	8-719-901-33	DIODE 1SS133			
D3	8-719-920-69	DIODE SLP177B-60 (TUNING)			
D301	8-719-920-69	DIODE SLP177B-60 (BATTERY)			
D302	8-719-901-33	DIODE 1SS133			
FL1	1-235-171-00	FILTER, BAND PASS			
HP600	3-597-336-01	HEAD ASSY			
IC1	8-759-204-03	IC TA7358AP			
IC2	8-759-205-80	IC TA7757P			
IC3	8-759-205-81	IC TA7370P			
IC301	8-759-910-18	IC BA3304F			
IC302	8-759-201-23	IC TA7688P			
IC303	8-759-908-08	IC CX20085			
IC304	8-759-920-15	IC TK10580M			
IC601	8-759-400-12	IC AN6612S			

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
J301	1-562-917-11	JACK (SMALL TYPE DIA. 3.5)(PHONES)			
L1	*1-422-233-11	COIL, AIR-CORE (FM RF)			
L2	*1-422-232-11	COIL, AIR-CORE (FM OSC)			
L3	1-402-170-11	ANTENNA, FERRITE-ROD (AM)			
L4	1-406-153-21	COIL (AM OSC)			
L101	1-410-021-11	MICRO INDUCTOR 10UH			
L201	1-410-021-11	MICRO INDUCTOR 10UH			
L301	1-408-555-00	MICRO INDUCTOR 2.2UH			
L302	1-408-563-00	MICRO INDUCTOR 10UH			
M601	3-597-333-01	MOTOR ASSY			
P301	*1-562-918-11	PIN, CONNECTOR 4P			
P302	*1-506-495-11	PIN, CONNECTOR 4P			
P303	*1-506-506-11	PLUG (L TYPE) 4P			
P304	*1-564-347-00	PLUG (L TYPE) 3P			
P305	*1-506-505-11	PIN, CONNECTOR 11P			
P601	*1-562-942-11	PIN, CONNECTOR 3P			
Q1	8-729-883-92	TRANSISTOR 2SC2839			
Q2	8-729-883-92	TRANSISTOR 2SC2839			
Q301	8-729-204-83	TRANSISTOR 2SA1048			
Q302	8-729-204-83	TRANSISTOR 2SA1048			
Q601	8-729-177-23	TRANSISTOR 2SB772			
R1	1-247-771-00	CARBON	3.3	5%	1/6W
R2	1-247-795-00	CARBON	33	5%	1/6W
R3	1-247-793-00	CARBON	27	5%	1/6W
R4	1-247-829-00	CARBON	820	5%	1/6W
R5	1-247-783-00	CARBON	10	5%	1/6W
R6	1-247-819-00	CARBON	330	5%	1/6W
R7	1-247-879-00	CARBON	100K	5%	1/6W
R8	1-247-819-00	CARBON	330	5%	1/6W
R9	1-247-831-00	CARBON	1K	5%	1/6W
R10	1-247-819-00	CARBON	330	5%	1/6W
R11	1-247-843-00	CARBON	3.3K	5%	1/6W
R12	1-247-843-00	CARBON	3.3K	5%	1/6W
R13	1-249-421-11	CARBON	2.2K	5%	1/6W
R15	1-247-791-00	CARBON	22	5%	1/6W
R16	1-247-843-00	CARBON	3.3K	5%	1/6W
R17	1-247-849-00	CARBON	5.6K	5%	1/6W
R18	1-247-831-00	CARBON	1K	5%	1/6W
R19	1-247-817-00	CARBON	270	5%	1/6W
R20	1-247-831-00	CARBON	1K	5%	1/6W
R21	1-247-857-00	CARBON	12K	5%	1/6W
R22	1-247-863-00	CARBON	22K	5%	1/6W
R24	1-247-873-00	CARBON	56K	5%	1/6W
R25	1-247-873-00	CARBON	56K	5%	1/6W
R26	1-247-793-00	CARBON	27	5%	1/6W
R27	1-247-831-00	CARBON	1K	5%	1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R101	1-247-899-00	CARBON	680K	5%	1/6W
R102	1-247-835-00	CARBON	1.5K	5%	1/6W
R103	1-247-869-00	CARBON	39K	5%	1/6W
R104	1-247-869-00	CARBON	39K	5%	1/6W
R105	1-247-855-00	CARBON	10K	5%	1/6W
R106	1-247-849-00	CARBON	5.6K	5%	1/6W
R108	1-247-855-00	CARBON	10K	5%	1/6W
R109	1-247-834-00	CARBON	1.3K	5%	1/6W
R110	1-247-857-00	CARBON	12K	5%	1/6W
R111	1-247-881-00	CARBON	120K	5%	1/6W
R112	1-247-863-00	CARBON	22K	5%	1/6W
R113	1-247-807-00	CARBON	100	5%	1/6W
R114	1-247-831-00	CARBON	1K	5%	1/6W
R115	1-247-821-00	CARBON	390	5%	1/6W
R116	1-247-771-00	CARBON	3.3	5%	1/6W
R117	1-247-879-00	CARBON	100K	5%	1/6W
R201	1-247-899-00	CARBON	680K	5%	1/6W
R202	1-247-835-00	CARBON	1.5K	5%	1/6W
R203	1-247-869-00	CARBON	39K	5%	1/6W
R204	1-247-869-00	CARBON	39K	5%	1/6W
R205	1-247-855-00	CARBON	10K	5%	1/6W
R206	1-247-849-00	CARBON	5.6K	5%	1/6W
R208	1-247-855-00	CARBON	10K	5%	1/6W
R209	1-247-834-00	CARBON	1.3K	5%	1/6W
R210	1-247-857-00	CARBON	12K	5%	1/6W
R211	1-247-881-00	CARBON	120K	5%	1/6W
R212	1-247-863-00	CARBON	22K	5%	1/6W
R213	1-247-807-00	CARBON	100	5%	1/6W
R214	1-247-831-00	CARBON	1K	5%	1/6W
R215	1-247-821-00	CARBON	390	5%	1/6W
R216	1-247-771-00	CARBON	3.3	5%	1/6W
R217	1-247-879-00	CARBON	100K	5%	1/6W
R301	1-247-855-00	CARBON	10K	5%	1/6W
R302	1-247-863-00	CARBON	22K	5%	1/6W
R303	1-247-855-00	CARBON	10K	5%	1/6W
R304	1-247-827-00	CARBON	680	5%	1/6W
R305	1-247-815-00	CARBON	220	5%	1/6W
R306	1-247-843-00	CARBON	3.3K	5%	1/6W
R307	1-247-823-00	CARBON	470	5%	1/6W
R308	1-249-421-11	CARBON	2.2K	5%	1/6W
R310	1-247-861-00	CARBON	18K	5%	1/6W
R601	1-249-447-11	CARBON	1	5%	1/4W
R602	1-247-825-00	CARBON	560	5%	1/6W
R603	1-247-853-00	CARBON	8.2K	5%	1/6W
R604	1-247-783-00	CARBON	10	5%	1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description
RV1	1-230-503-11	RES, ADJ, CARBON 10K
RV101	1-226-709-00	RES, ADJ, SOLID 4.7K
RV201	1-226-709-00	RES, ADJ, SOLID 4.7K
RV301	1-230-890-11	RES, VAR, CARBON 10K (VOLUME)
RV302	1-230-889-11	RES, VAR, SLIDE 100K (GRAPHIC EQUALIZER)
RV601	1-230-884-11	RES, ADJ, CARBON 500
S1	1-554-061-00	SWITCH, SLIDE (BAND)
S301	1-570-323-11	SWITCH, SLIDE (FUNCTION)
S302	1-554-123-00	SWITCH, SLIDE (TAPE)
S303	1-554-123-00	SWITCH, SLIDE (FM SENS)
S600	3-597-334-01	SWITCH, SLIDE (DIRECTION)
S602	3-597-352-01	SWITCH, LEAF (FF,REW,PLAY)
T1	1-404-628-11	TRANSFORMER, IF (FM IFT)
T2	1-404-627-11	TRANSFORMER, IF (AM IFT)
T3	1-404-630-21	TRANSFORMER, IF (FM DET)
T4	1-404-629-11	TRANSFORMER, IF (AM DET)
TH601	1-807-273-11	THERMISTOR (POSITIVE)

ACCESSORY & PACKING MATERIAL

Part No.	Description
3-321-020-01	BELT, SHOULDER
3-327-529-01	SPACER
3-327-530-01	SHEET, PROTECTION
3-327-531-01	(US).....INDIVIDUAL CARTON
3-327-544-01	(Canadian)...INDIVIDUAL CARTON
3-527-213-00	LABEL, SERIAL NUMBER
3-760-641-21	MANUAL, INSTRUCTION
3-760-641-31	(Canadian)...MANUAL, INSTRUCTION
8-952-201-90	MDR-03L/J HEADPHONES SET

Sony Corporation

SERVICE MANUAL

*US Model
Canadian Model*

CORRECTION

File this correction with the Service Manual.

1. Correct the Part No. as shown below.

(Page 20)

	INCORRECT	CORRECT	
No.	Part No.	Part No.	Description
14	A-3241-089-A	X-3327-517-1	(BLACK) CABINET (REAR) ASSY
	A-3241-109-A	X-3327-518-1	(SILVER) CABINET (REAR) ASSY

(page 21 and 24)

	INCORRECT	CORRECT	
No.	Part No.	Part No.	Description
902	A-3260-298-A	A-3215-789-A	MOUNTED PCB, MAIN

2. Delete the following part on page 24.

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
905	A-3260-299-A	PC BOARD ASSY

3. Correct the No. on page 23 as shown below.

(Parts list)

INCORRECT	CORRECT		
No.	No.	Part No.	Description
170	171	3-597-365-01	RING (E1.5), E

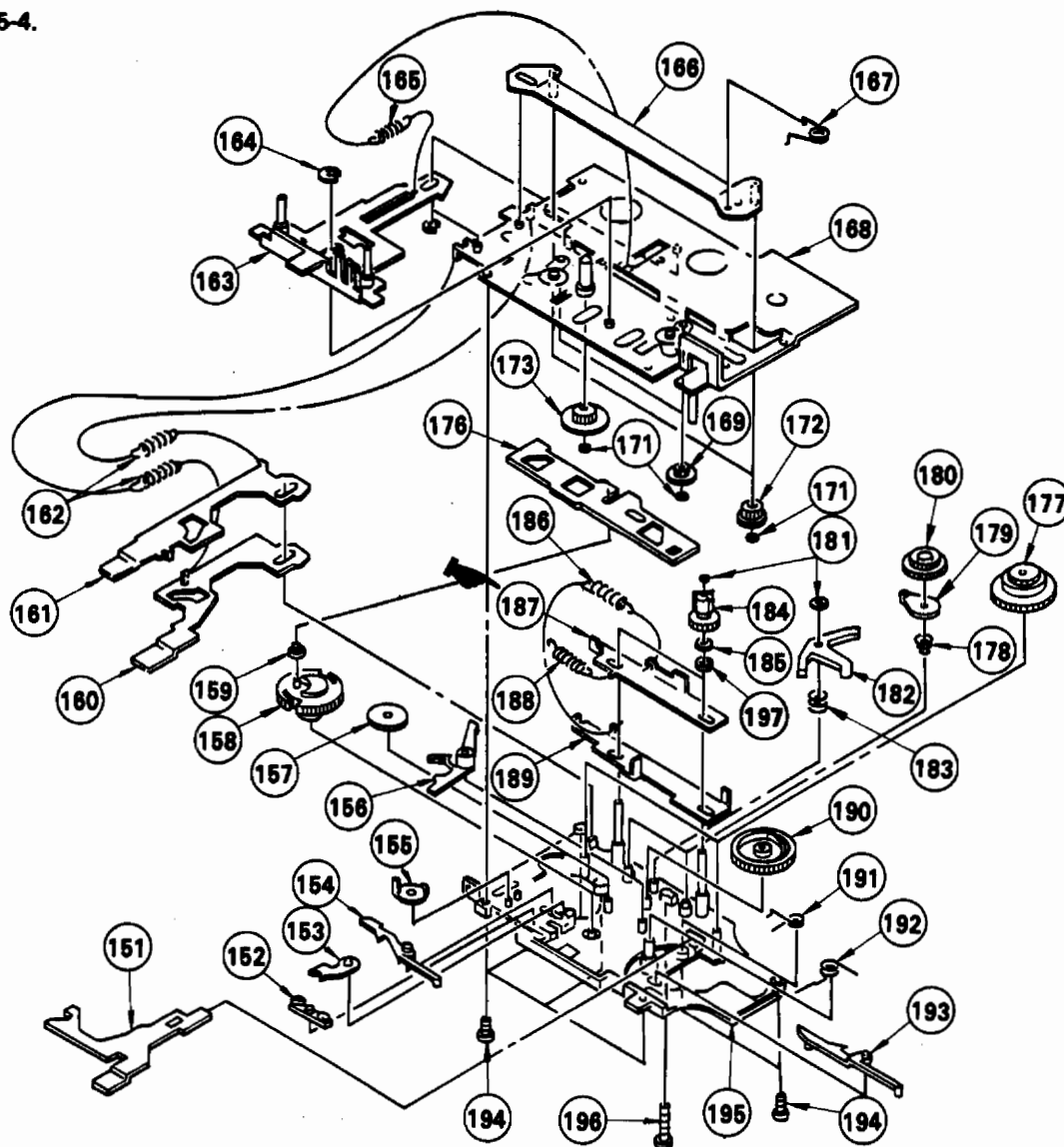
(Exploded view)

INCORRECT	CORRECT
197	187

- See next page for details.

FM/AM STEREO CASSETTE PLAYER
SONY®

5-4.



No.	Part No.	Description	Remarks
151	*3-597-317-01	LEVER, PROGRAM	
152	3-597-320-01	LEVER, CANCEL	
153	3-597-318-01	LEVER, MODE	
154	3-597-321-01	LEVER (B), SHUT-OFF	
155	3-597-319-01	LEVER (A), SHUT-OFF	
156	3-597-323-01	ARM, GEAR LOCK	
157	3-597-325-01	GEAR (B), DECELERATION	
158	3-597-324-01	GEAR, SELECTOR	
159	3-597-349-01	ROLLER, SELECT	
160	*3-597-312-01	LEVER, FF	
161	*3-597-311-01	LEVER, REW	
162	3-597-339-01	SPRING	
163	3-597-303-01	BASE ASSY, HEAD	
164	3-597-366-01	RING (E2), E	
165	3-597-341-01	SPRING	
166	*3-597-304-01	ARM ASSY, FR	
167	3-597-347-01	SPRING	
168	3-597-301-01	CHASSIS	
169	3-597-330-01	GEAR, T,U	
171	3-597-365-01	RING (E1.5), E	
172	3-597-332-01	GEAR, F.R	
173	3-597-329-01	GEAR (A), DECELERATION	

No.	Part No.	Description	Remarks
176	*3-597-331-01	LEVER, REVERSE	
177	3-597-326-01	GEAR ASSY, FRICTION	
178	3-597-346-01	SPRING	
179	3-597-327-01	CAM, DETECTION	
180	3-597-328-01	GEAR, MIDWAY	
181	3-597-358-01	POLY-SLIDER (DIA. 1.6)	
182	3-597-354-01	ARM, DETECTION	
183	3-597-351-01	SPRING	
184	3-597-315-01	SPINDLE ASSY, REEL	
185	3-597-356-01	POLY-SLIDER (DIA. 2.1)	
186	3-597-345-01	SPRING	
187	*3-597-314-01	PLATE, LOCK	
188	3-597-353-01	SPRING	
189	*3-597-313-01	PLATE, FUNCTION, SWITCH	
190	3-597-322-01	GEAR, DETECTION	
191	3-597-344-01	SPRING	
192	3-597-343-01	SPRING	
193	3-597-316-01	RATCHET	
194	3-597-360-01	SCREW (M2X4.5)	
195	3-597-302-01	BASE ASSY, GEAR	
196	3-597-361-01	SCREW (M2X8)	
197	3-597-367-01	RING (E2.5), E	

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Service Bulletin No.181

CONSUMER SERVICE COMPANY
Technical Department

Date: February 7, 1986

Model: WM-F18

Subject: Part Number Correction - Cabinet Assembly

Note the correct part number for the cabinet assembly as follows:

Exploded View p. 20.

Ref. No.	Description	Part Number	
		Incorrect	Correct
14	Cabinet (Rear) Ass'y, Black	A-3241-089-A	X-3327-517-1
	Cabinet (Rear) Ass'y, Silver	A-3241-109-A	X-3327-518-1

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Service Bulletin No.190

CONSUMER SERVICE COMPANY
Technical Department

Model: WM-F18

Date: February 28, 1986

Subject: Part Number Change - Mounted CKT Board

The Main PCB Assembly (Ref. #902) and the Graphic EQ PCB Assembly (Ref. #905) are no longer available separately. The two boards are now connected at the factory for ease of adjustment and are supplied as an assembled part. Note the part number as follows:

Ref. No.	Description	Part Number	
		Former	New
902	Main PCB Ass'y	A-3260-298-A	A-3215-789-A
905	GEQ PCB Ass'y	A-3260-299-A	

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Service Bulletin No.193

CONSUMER SERVICE COMPANY
Technical Department

Model: WM-F18

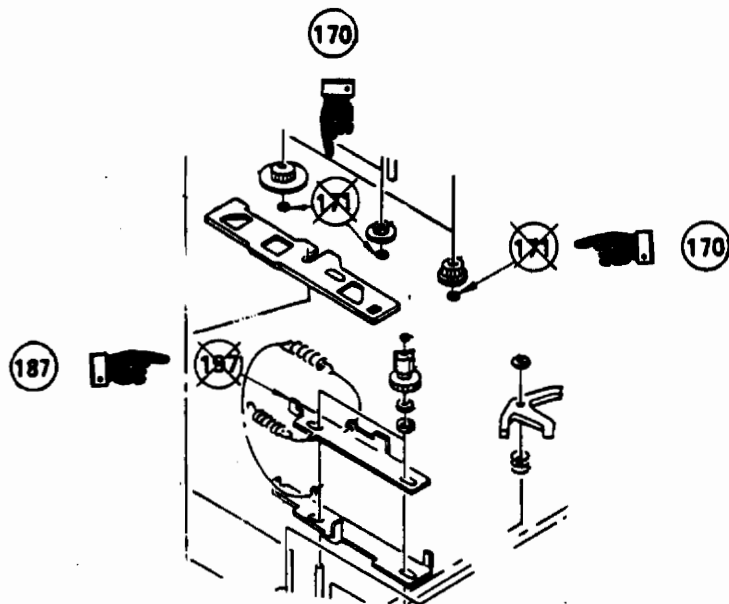
Date: March 12, 1986

Subject: Reference Number Correction -
E Ring (E1.5), Lock Plate

Note the reference number correction for the lock plate and the E ring (E1.5) as follows:

Exploded views - page 23

Reference Number		Description	Part Number
Incorrect	Correct		
171	170	Ring (E1.5), E	3-597-365-11
197	187	Plate, Lock	3-597-314-01



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Service Bulletin No.197

Technical Department
Sony Service Company
A Division of Sony Corporation of America
Sony Drive, Park Ridge, New Jersey 07656

Model: WM-F18

Subject: Reference Number Correction -
SWITCH, LEAF (FF, REW, PLAY)

Date: May 12, 1986

The reference number for the LEAF SWITCH (FF, REW, PLAY) in the parts list on page 26 is incorrect. Please note the correction as follows:

Reference No.		Description	Part Number
Incorrect	Correct		
S602	S601	SWITCH, LEAF (FF, REW, PLAY)	3-597-352-01