

WM-FS393/FS395

SERVICE MANUAL

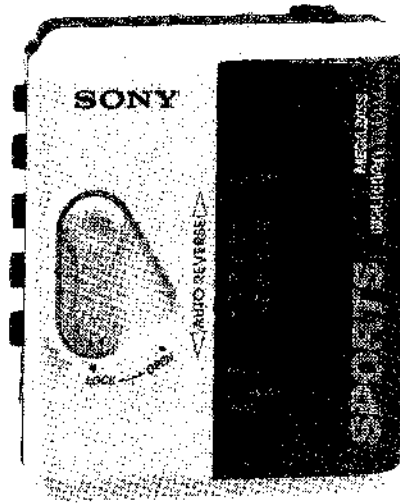


Photo : WM-FS393

US Model
Canadian Model
AEP Model
UK Model
WM-FS393/FS395
E Model
WM-FS393

Model Name Using Similer Mechanism	NEW
Tape Transport Mechanism Type	MF-WMFS395

SPECIFICATIONS

Radio FM: 65.0 – 108 MHz (Eastern and Central European countries, CIS); 87.5 – 108 MHz (Italy, Saudi Arabia); 87.6 – 108 MHz (Canada); 87.6 – 107.9 MHz (Other countries)
AM: 526.5 – 1,606.5 kHz (Italy, Saudi Arabia); 530 – 1,710 kHz (Canada); 531 – 1,602 kHz (Europe); 530 – 1,605 kHz (Other countries)

Power requirements

- 3 V DC batteries R6 (AA) x 2

Battery life (approximate hours)

Sony Alkaline AM3 (N)	Sony SUM-3 (NS)
7 hrs. (playback) 30 hrs. (radio)	3 hrs. (playback) 13 hrs. (radio)

Dimensions

104.4 x 120.5 x 50 mm (w/h/d)
(4 1/8 x 4 3/4 x 2 in.) incl. projecting parts


Mass 300 g (10.6 oz) incl. batteries

Supplied accessories

- Stereo headphones (1)
- Belt clip (1)
- Hand strap (1) (FS395)
- Strap loop (1) (FS395)

Note

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

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

Design and specifications are subject to change without notice.

RADIO CASSETTE PLAYER
SONY[®]



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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.

Flexible Circuit Board Repairing

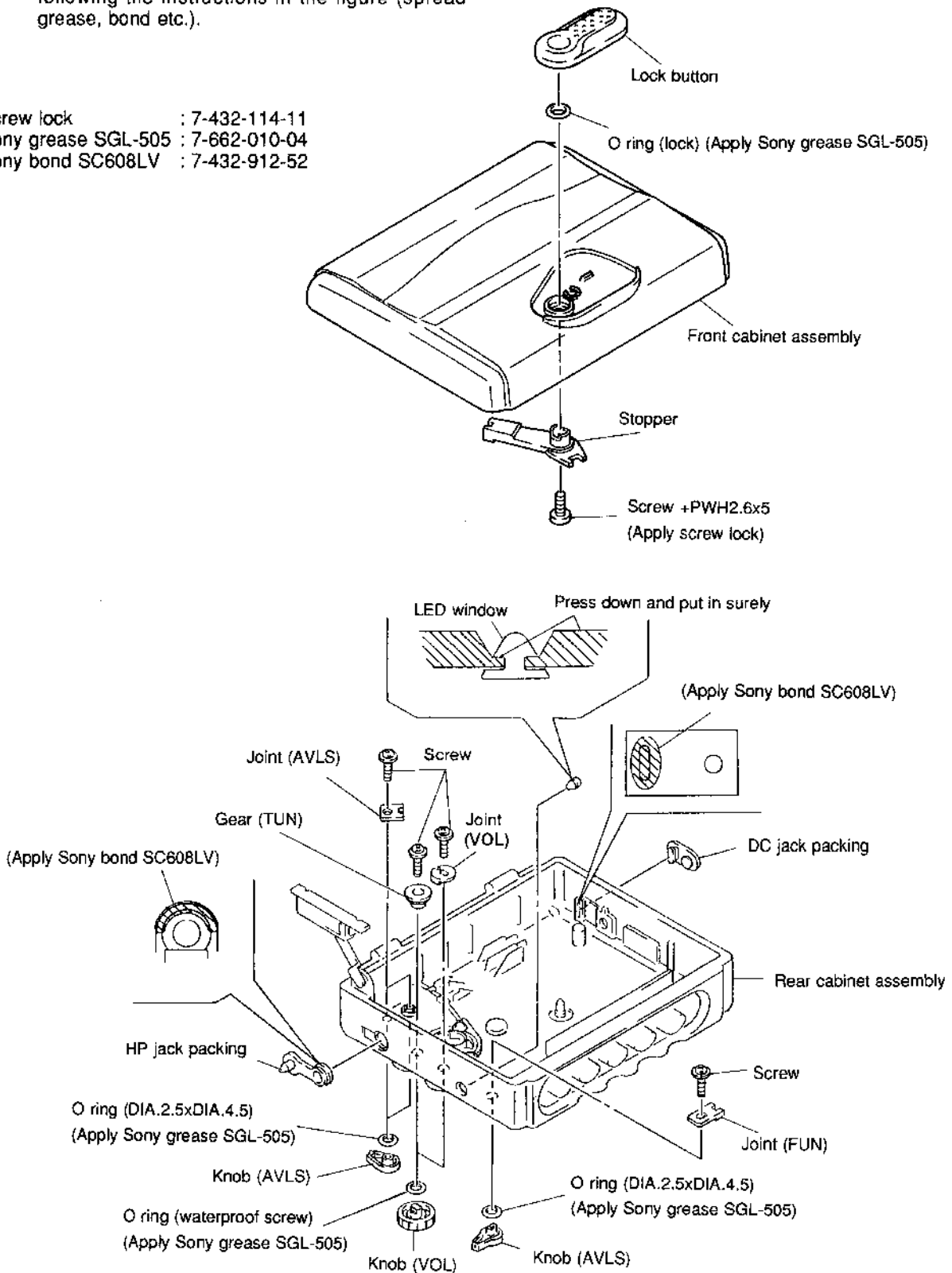
- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

SECTION 1 SERVICE NOTE

WATERPROOFED SECTION

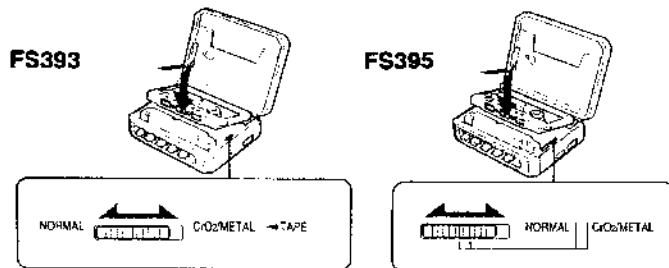
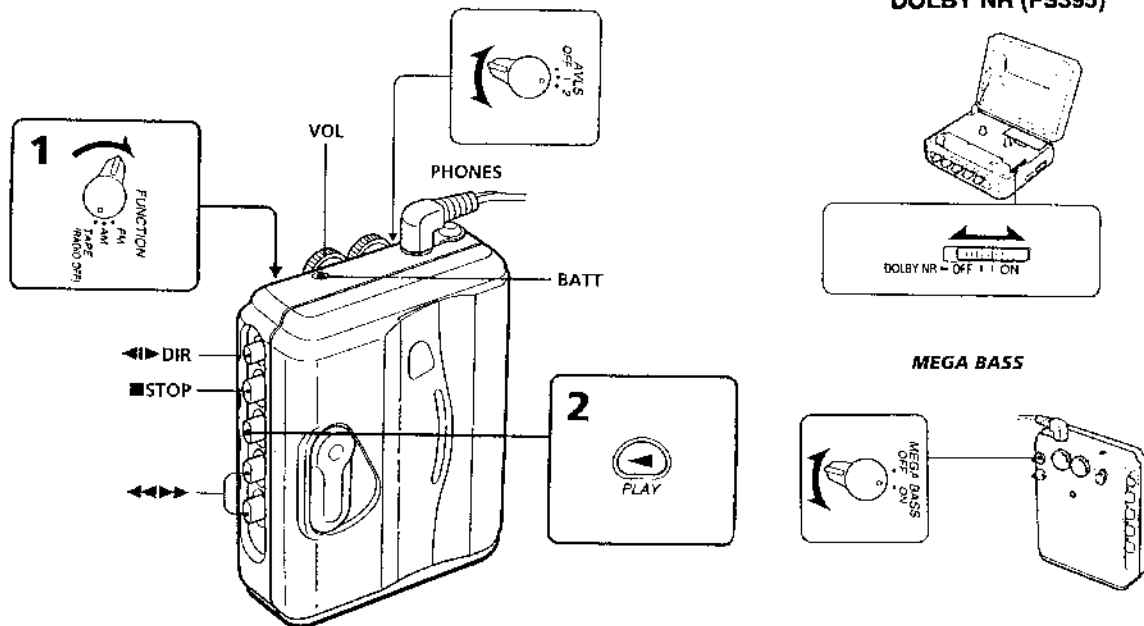
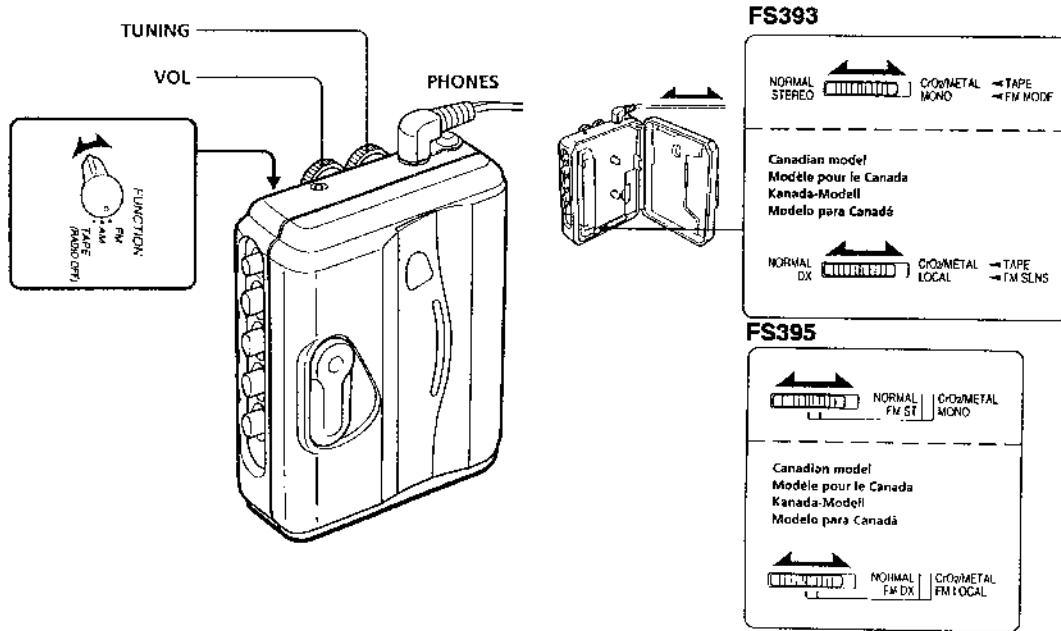
NOTE : In case the parts in the figure are removed for repair, treat them to protect from water drop following the instructions in the figure (spread grease, bond etc.).

- Screw lock : 7-432-114-11
- Sony grease SGL-505 : 7-662-010-04
- Sony bond SC608LV : 7-432-912-52



SECTION 2 GENERAL

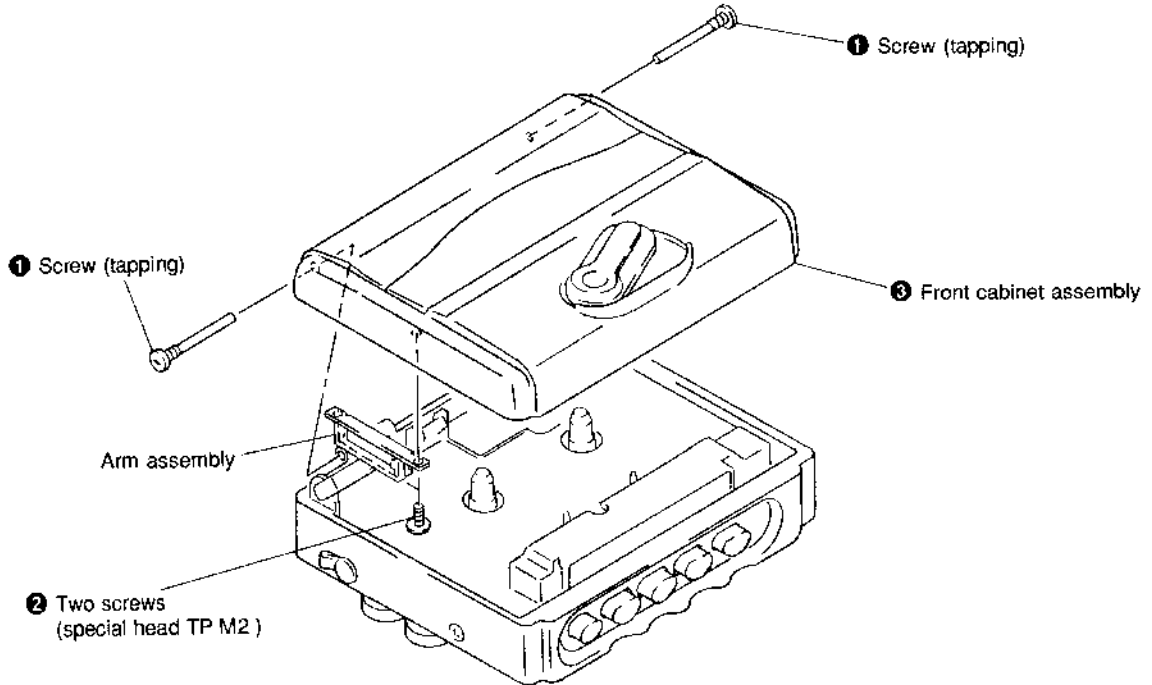
This section is extracted from instruction manual.



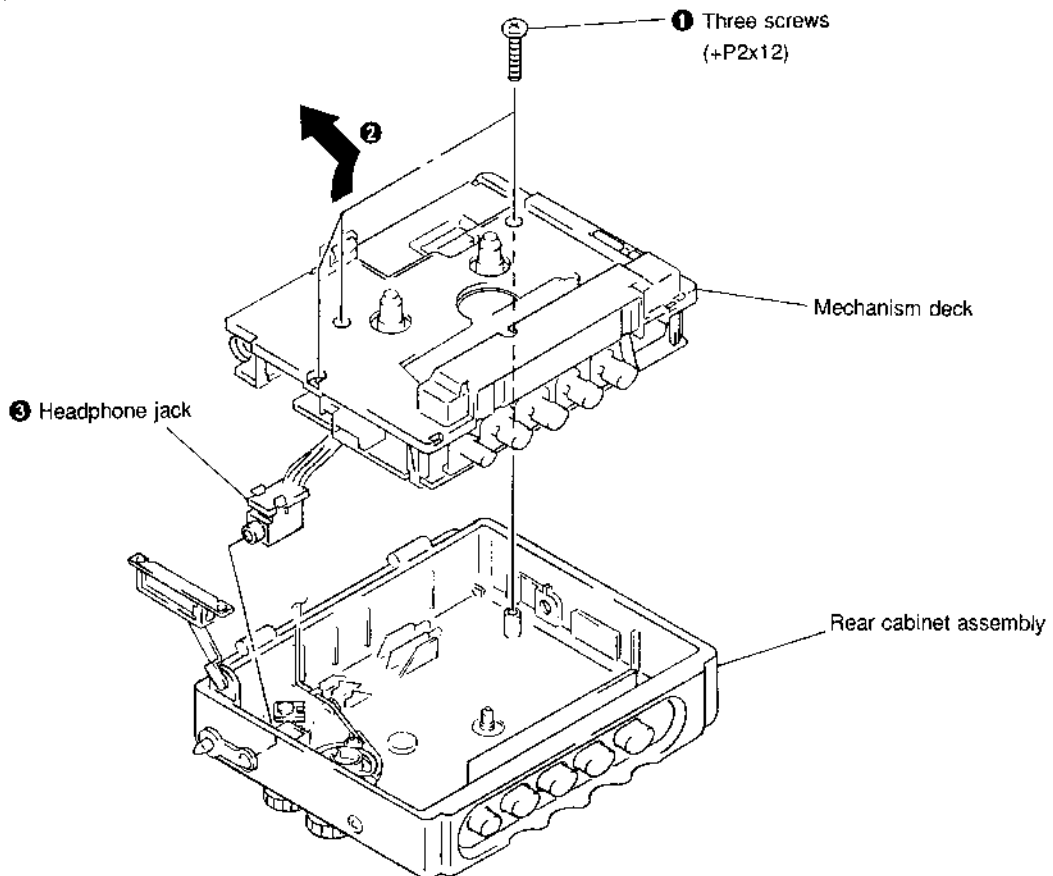
SECTION 3 DISASSEMBLY

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

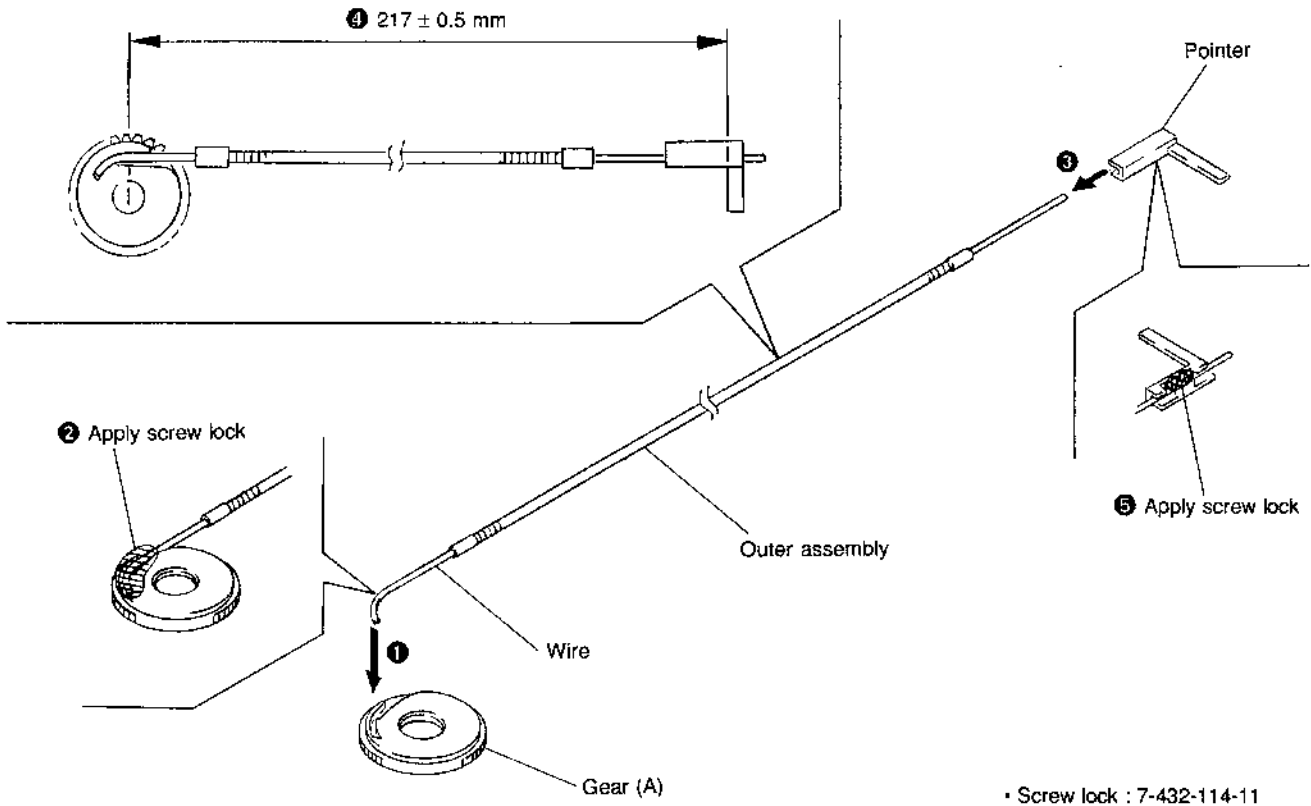
3-1. FRONT CABINET

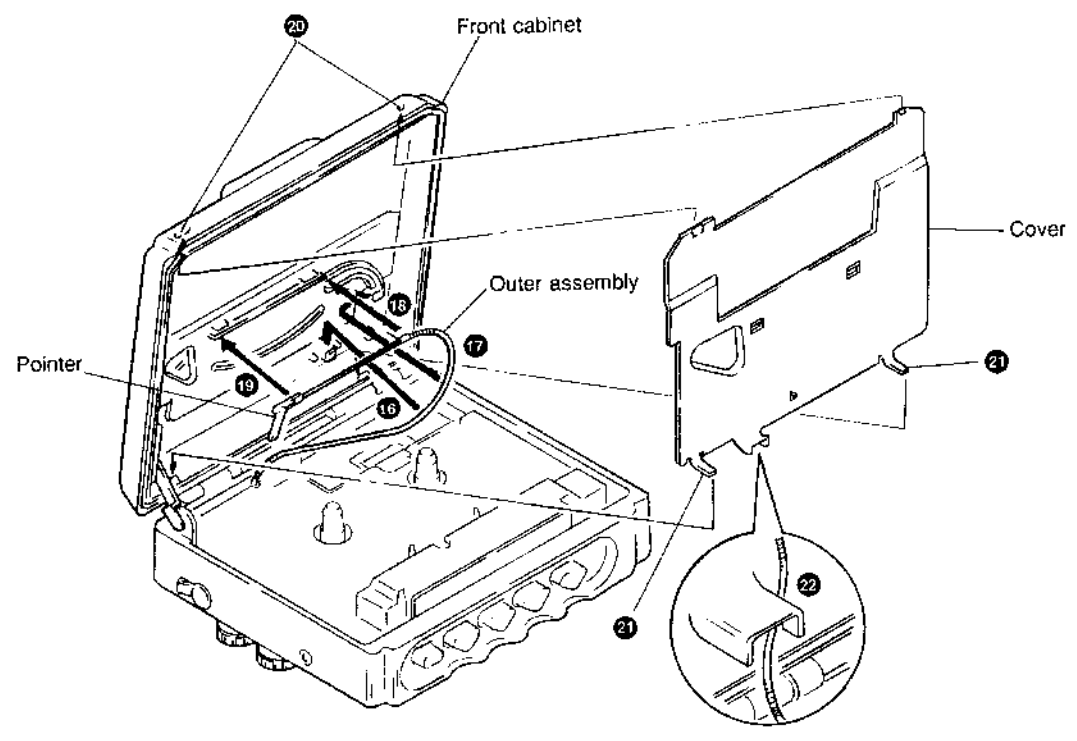
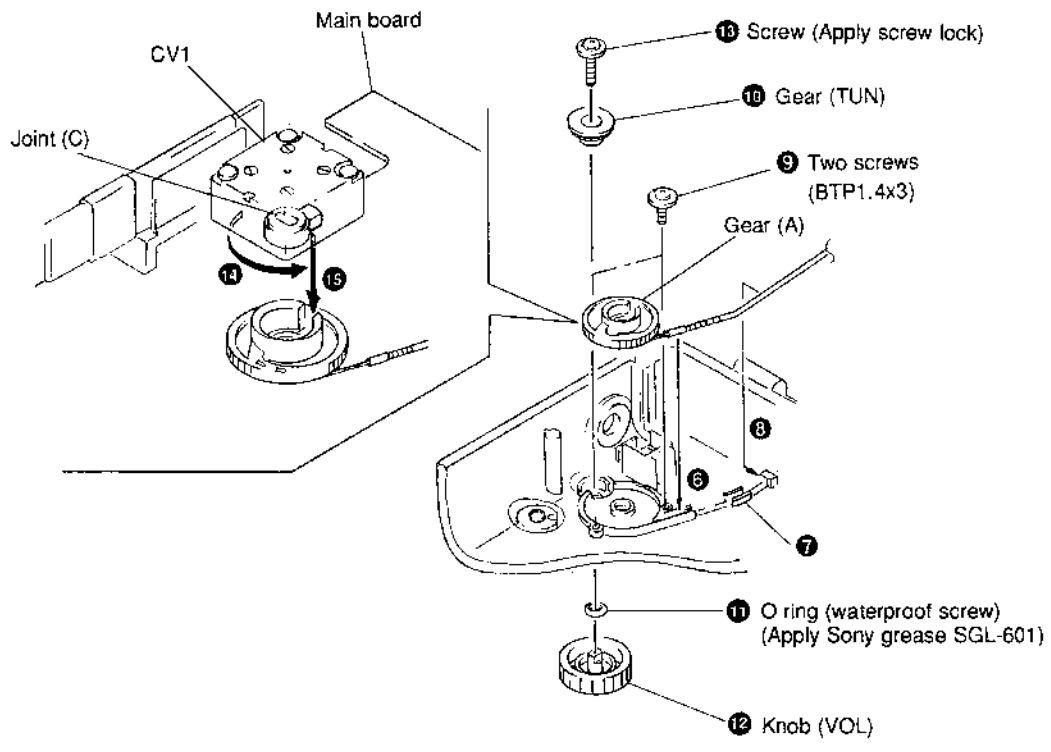


3-2. MECHANISM DECK



3-3. POINTER RACK SETTING





SECTION 4 ADJUSTMENTS

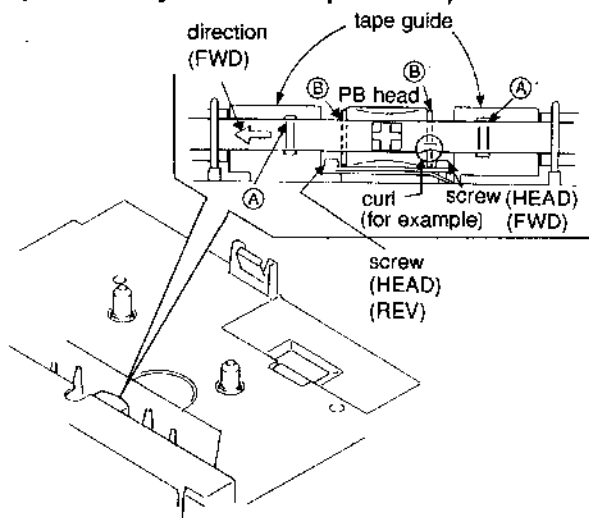
4-1. MECHANICAL ADJUSTMENTS

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.

Playback Head Height Adjustment (Note on Playback Head Replacement)



1. Turn the screw (HEAD) so that the (B) - (B') line of HEAD GUIDE becomes approximately parallel to the (A) - (A') line of TAPE GUIDE.
2. When there is a tape curl on HEAD GUIDE ((B), (B')) using a mirror cassette, turn the screw (HEAD) to eliminate the tape curl.
For example in the figure :
(The curl marked O is eliminated by turning clockwise the screw (HEAD) (FWD).)
3. Check in the REV mode by the same way as in the FWD mode.

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	20 — 42 g • cm (0.28 — 0.58 oz • inch)
FWD Back Tension		1 — 3 g • cm (0.01 — 0.04 oz • inch)
RVS	CQ-102RC	20 — 42 g • cm (0.28 — 0.58 oz • inch)
RVS Back Tension		1 — 3 g • cm (0.01 — 0.04 oz • inch)
FF. REW	CQ-201B	more than 50 g • cm (more than 0.69 oz • inch)

4-2. ELECTRICAL ADJUSTMENTS

PRECAUTION

- Supplied voltage : 2.5V
- Switch and control position
 MODE switch : FM ST.....EXCEPT US, Canadian model
 FM SENS switch : DX.....US, Canadian model
 TAPE switch : NORMAL
 MEGA BASS switch : OFF
 VOLUME control : maximum
 DOLBY NR switch : OFF (FS395)

Tape section

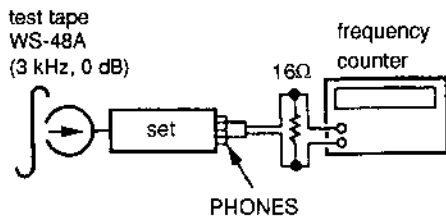
FUNCTION switch : TAPE

Test tape

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

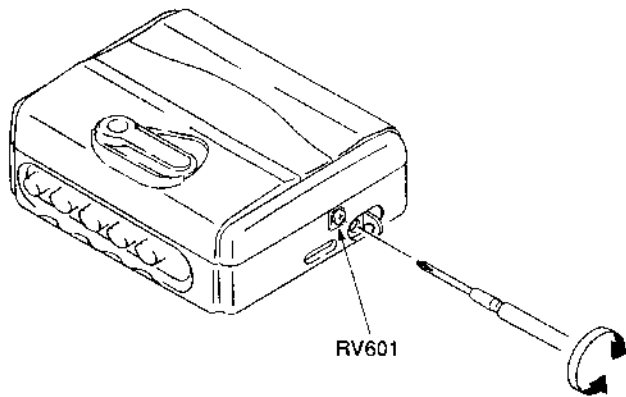
Tape speed adjustment

Procedure :



Play back WS-48A (tape center portion) in reverse mode. Adjust the RV601 so that the frequency counter reads 3,000 Hz \pm 15Hz.

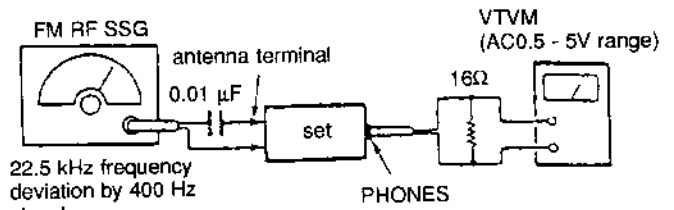
Adjustment Location :



Radio section

FM section

FUNCTION switch : FM



22.5 kHz frequency deviation by 400 Hz signal

Output level : as low as possible

- Repeat the procedure in each adjustment several times since L3, 2 affects CT1-3, 2 and CT1-3, 2 affects L3, 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	86.5 MHz ((87.35 MHz)) [64.00 MHz]	L3	maximum
f maximum	109.5 MHz ((108.25 MHz)) [109.5 MHz]	CT1-3	

(()) : IT, EA model, [] : EE model

FM Tracking Adjustment

SG and set frequency	Adjustment part	Reading on VTVM
86.5 MHz ((87.35 MHz)) [64.00 MHz]	L2	maximum
109.5 MHz ((108.25 MHz)) [109.5 MHz]	CT1-2	

(()) : IT, EA model, [] : EE model

- Repeat the procedures in each adjustment several times, and the tracking adjustment should be finally done by the trimmer capacitors.
- Abbreviation
IT : Italian model
EE : East European model
EA : Saudi Arabia model

AM section

FUNCTION switch : AM

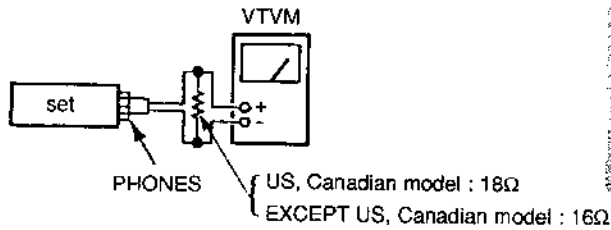
AG F SSG



Put the lead-wire antenna close to the set

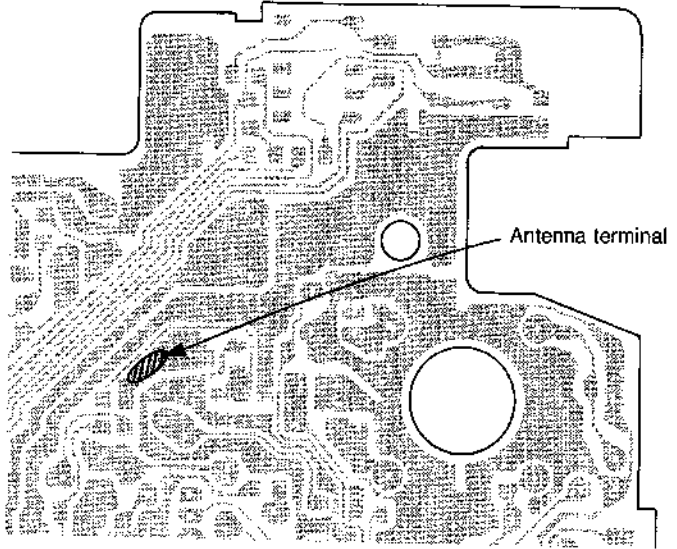
30% amplitude modulation by 400 Hz signal
Output level : as low as possible

- Repeat the procedure in each adjustment several times since L4, 1 affects CT1-4, 1 and CT1-4, 1 affects L4, 1. Both the frequency coverage and tracking adjustments should end with the final adjustment of the trimmer capacitors.



Adjustment Location :

[MAIN BOARD] (Conductor Side)



AM IF Alignment

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

AM Frequency Coverage Adjustment

Pointer position	SG frequency	Adjustment part	Reading on VTVM
f minimum	520 kHz (520 kHz) [516.5 kHz]	L4	maximum
f maximum	1,750 kHz (1,680 kHz) [1,631.5 kHz]	CT1-4	

(()) : AEP, UK, G, E, IT, EE model, [] : IT, EA model

AM Tracking Adjustment

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

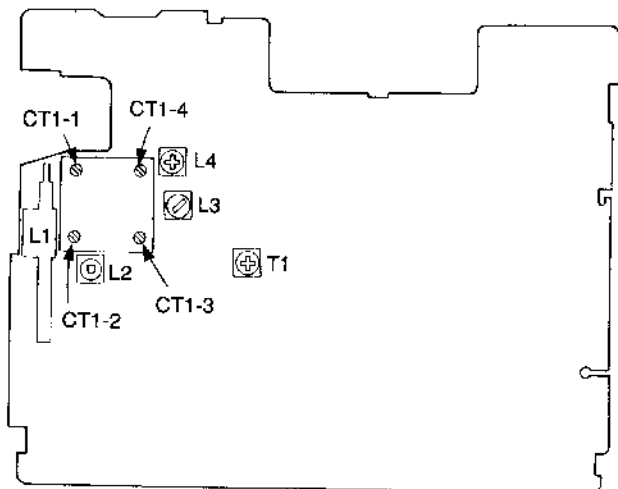
(()) : IT, EE, EA model

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

Abbreviation

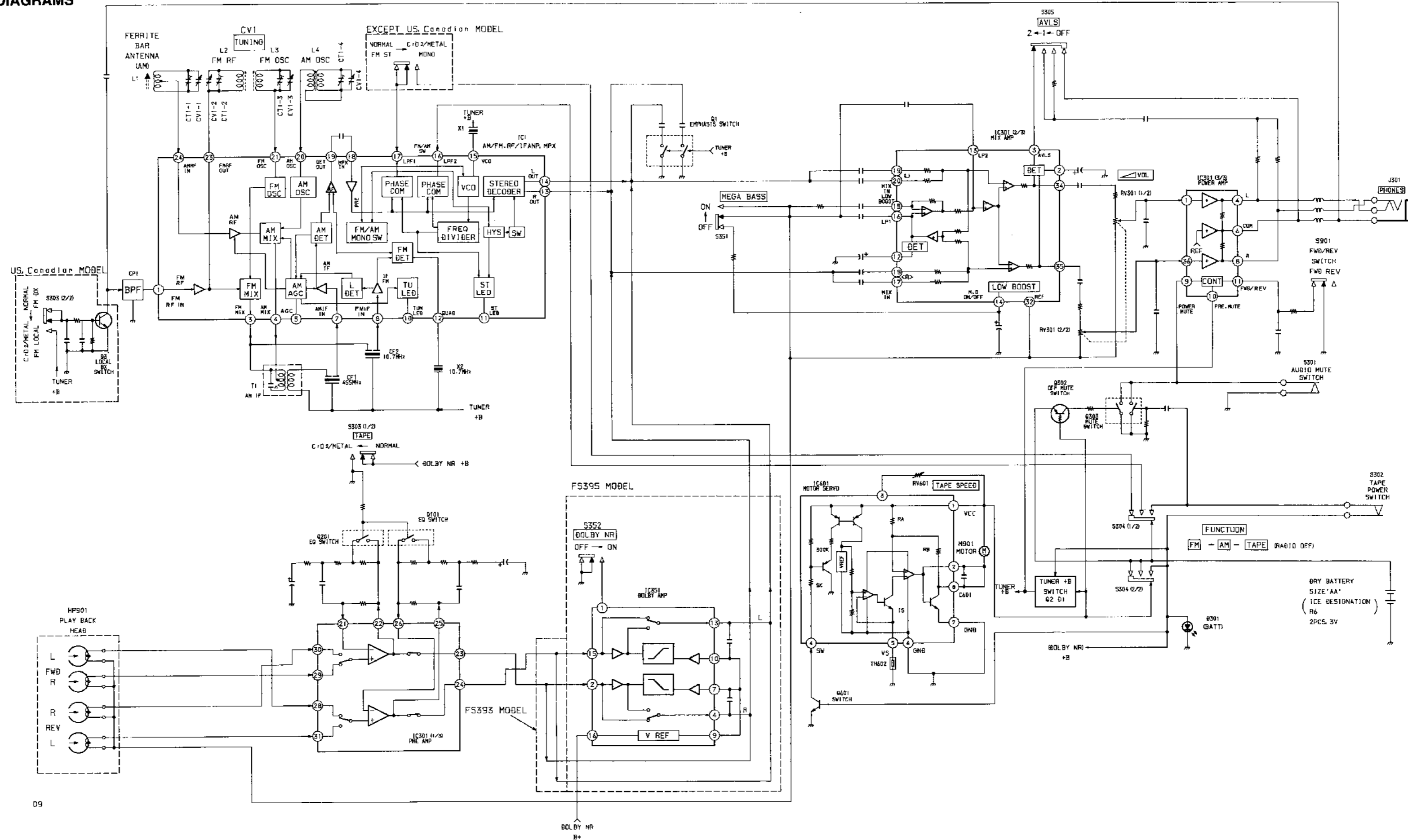
- G : German model
- IT : Italian model
- EE : East European model
- EA : Saudi Arabia model

[MAIN BOARD] (Component Side)



SECTION 5
DIAGRAMS

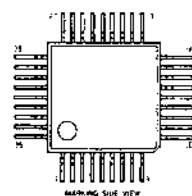
5-1. BLOCK DIAGRAM



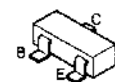
D9

• Semiconductor Lead Layouts

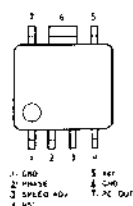
LA4582BM



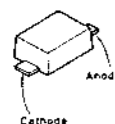
2SA1162G
2SC2223



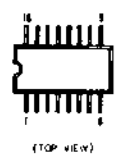
MM1038AFF



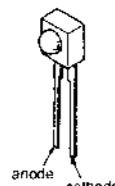
MA732



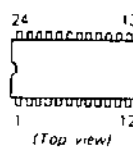
NJM2063AM



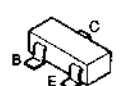
BR4371F



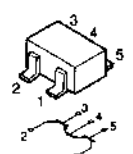
TA8122AF



RN1304
UN2216



XN1215
XN1501



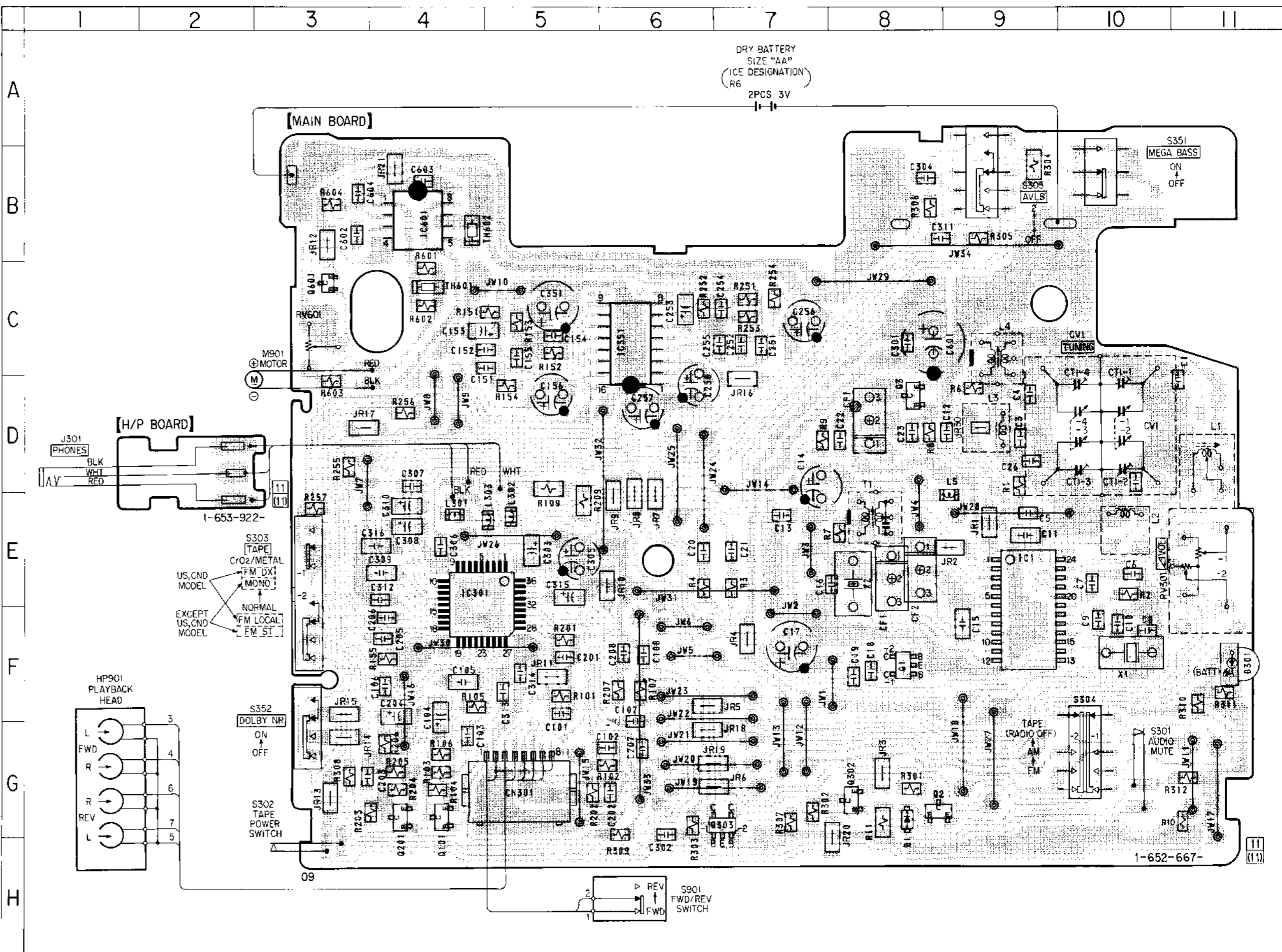
5-2. PRINTED WIRING BOARD

• Semiconductor Location

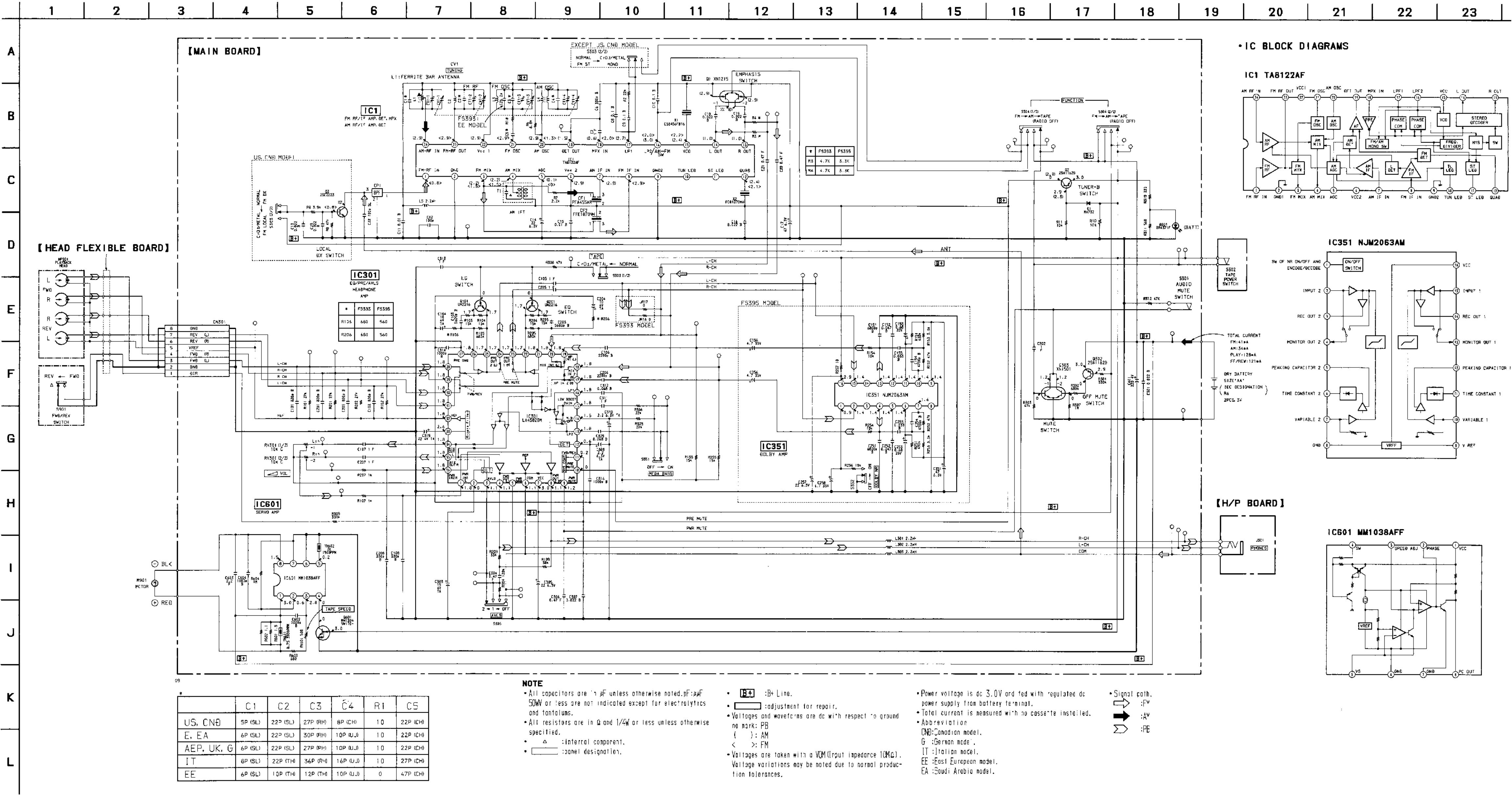
Ref. No.	Location
D1	G-8
D301	F-11
IC1	E-9
IC301	E-4
IC351	C-6
IC601	B-4
Q1	F-8
Q2	G-8
Q3	D-8
Q101	G-4
Q102	G-4
Q302	G-8
Q303	G-7
Q601	C-3

Note:

- : parts extracted from the conductor side.
- ◀ : indicates side identified with part number.
- ◻ : internal component.
- ▨ : Pattern from the side which enable seeing.
- Abbreviation
- CND : Canadian model.



5-3. SCHEMATIC DIAGRAM



SECTION 6 EXPLODED VIEWS

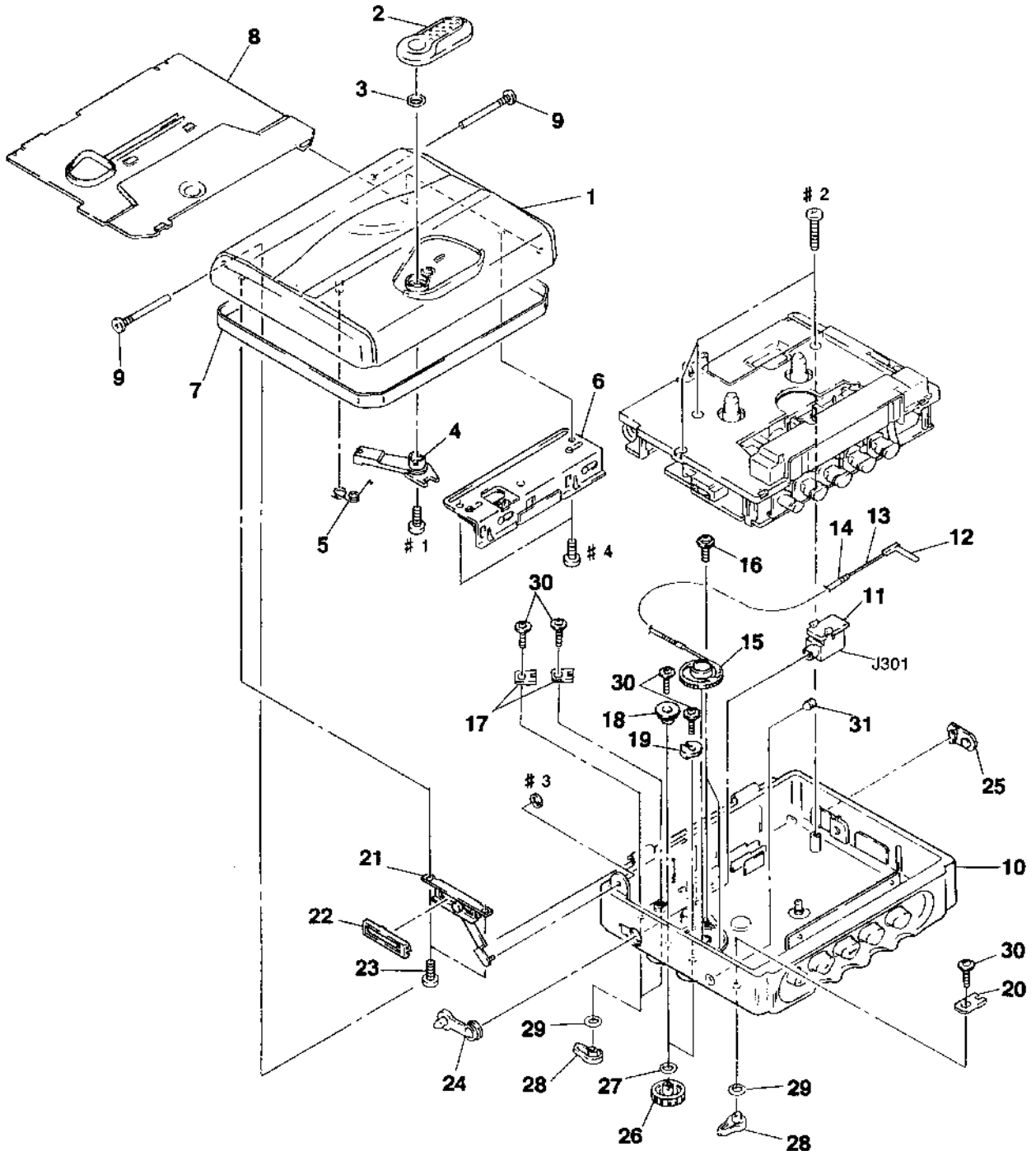
NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts Example:
KNOB, BALANCE (WHITE) . . . (RED)

↑ ↑
 Parts color Cabinet's color

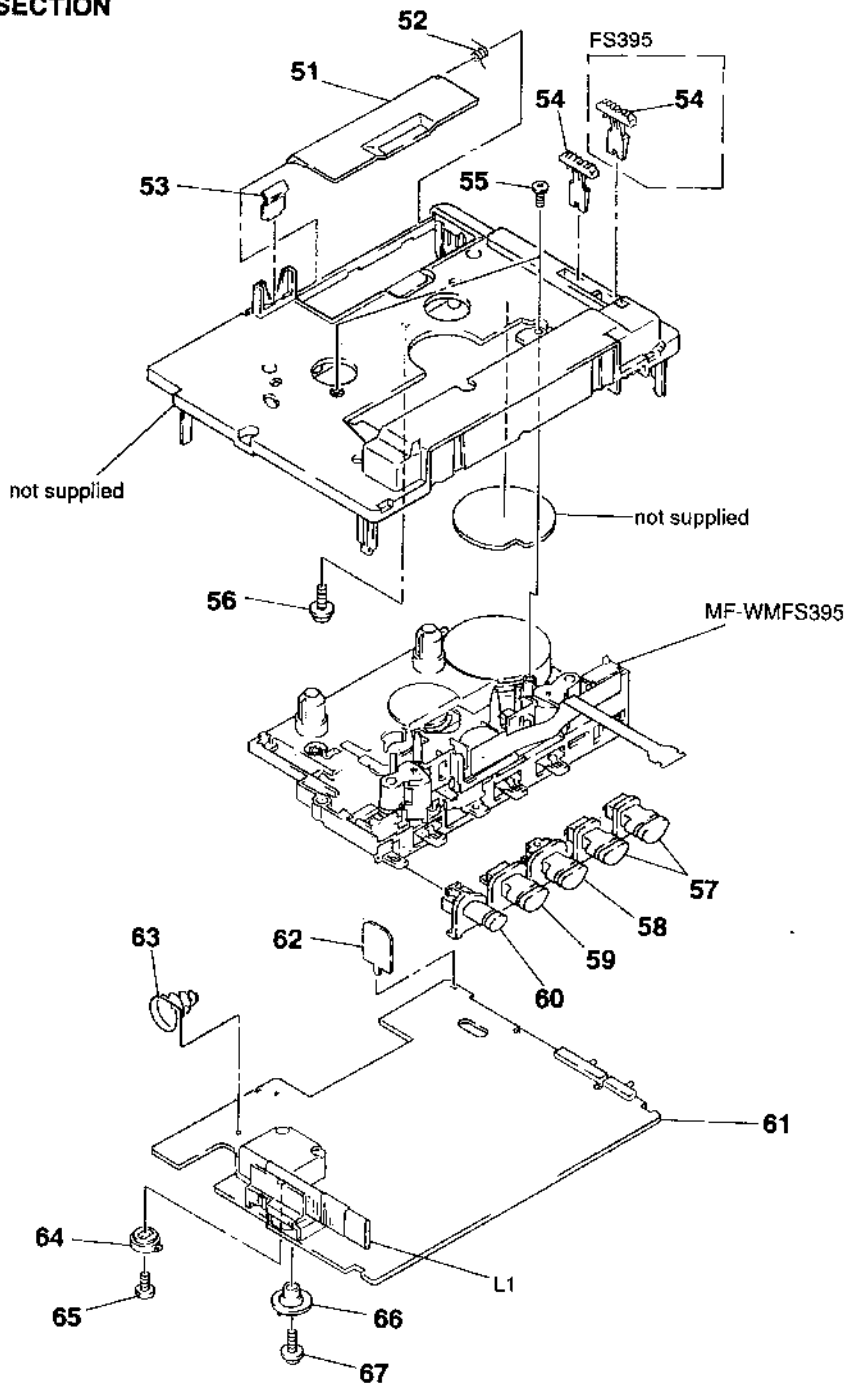
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
 CND : Canadian model
 G : German model
 IT : Italian model
 EE : East European model
 EA : Saudi Arabia model

6-1. FRONT AND REAR CABINET SECTION



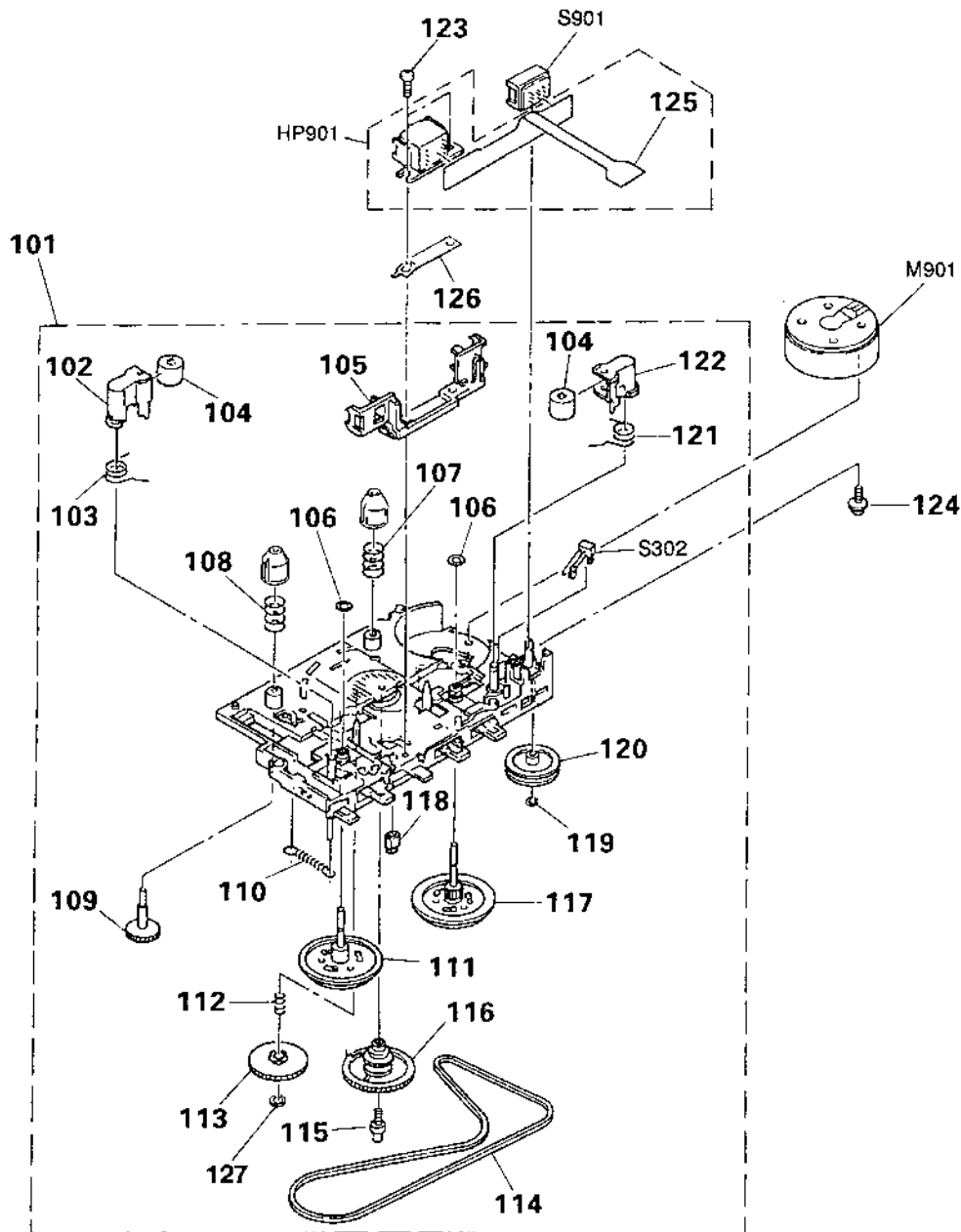
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-3368-371-1	CABINET (FRONT) ASSY (YELLOW) (393:IT, EA)		10	X-3369-003-1	CABINET (REAR) ASSY (393:AEP, UK, IT, EE)	
1	X-3368-372-1	CABINET (FRONT) ASSY (YELLOW) (393:AEP, UK, E, G)		10	X-3369-004-1	CABINET (REAR) ASSY (393:E, EA)	
1	X-3368-373-1	CABINET (FRONT) ASSY (GRAY) (393:US)		* 11	1-653-922-11	H/P BOARD	
1	X-3368-374-1	CABINET (FRONT) ASSY (YELLOW, GREEN, VIOLET) (393:CND)		12	3-913-602-01	POINTER	
1	X-3368-383-1	CABINET (FRONT) ASSY (YELLOW) (395:AEP, UK, G)		13	3-913-604-01	WIRE	
				14	X-3368-376-1	OUTER ASSY	
				15	3-351-171-01	GEAR (A)	
1	X-3368-384-1	CABINET (FRONT) ASSY (GRAY) (395:US)		16	3-381-629-11	SCREW, (B) (1.4X3), TAPPING	
1	X-3368-385-1	CABINET (FRONT) ASSY (YELLOW) (395:CND)		17	3-913-611-01	JOINT (AVLS)	
1	X-3368-386-1	CABINET (FRONT) ASSY (YELLOW) (395:IT)		18	3-913-619-01	GEAR (TUN)	
1	X-3369-001-1	CABINET (FRONT) ASSY (YELLOW) (393:EE)		19	3-913-612-01	JOINT (VOL)	
2	3-913-652-01	BUTTON, LOCK (ORANGE) (EXCEPT US)		* 20	3-378-016-01	JOINT (FUN)	
2	3-913-652-11	BUTTON, LOCK (VIOLET) (US)		21	X-3365-453-1	ARM ASSY	
3	3-913-609-01	RING (LOCK), O		22	3-375-281-01	SPRING, CLICK	
4	3-913-610-01	STOPPER		23	3-909-342-01	SCREW	
5	3-913-608-01	SPRING (LOCK), COIL		24	3-386-371-01	PACKING, HP JACK	
6	X-3368-464-1	SHAFT ASSY		25	3-386-372-01	PACKING, DC JACK	
7	3-381-902-01	PACKING, CABINET		26	3-913-618-01	KNOB (VOL)	
8	3-913-657-01	COVER		27	3-913-607-01	RING (WATERPROOF SCREW), O	
9	3-386-373-01	SCREW, TAPPING		28	3-904-785-11	KNOB (AVLS)	
10	X-3368-370-1	CABINET (REAR) ASSY (393:US, CND)		29	3-326-560-02	RING (DIA. 2.5XDIA. 4.5), O	
10	X-3368-381-1	CABINET (REAR) ASSY (395:US, CND)		30	3-915-700-01	SCREW	
10	X-3368-382-1	CABINET (REAR) ASSY (395:G)		31	3-914-156-01	WINDOW, LED	
10	X-3368-460-1	CABINET (REAR) ASSY (393:G)		J301	1-565-376-11	JACK, HEADPHONE (PHONES)	
10	X-3369-002-1	CABINET (REAR) ASSY (395:AEP, UK, IT)					

6-2. CHASSIS SECTION



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
51	3-381-907-01	LID, BATTERY CASE		* 61	A-3060-959-A	MAIN BOARD, COMPLETE (395:IT)	
52	3-353-712-01	SPRING, TORSION		* 61	A-3060-968-A	MAIN BOARD, COMPLETE (395:US, CND)	
53	3-904-803-01	DETENT, CASSETTE		* 61	A-3060-969-A	MAIN BOARD, COMPLETE (395:AEP, UK, G)	
54	3-913-655-01	KNOB (MODE)		* 61	A-3060-976-A	MAIN BOARD, COMPLETE (393:EE)	
55	3-383-671-11	SCREW (2X5)		62	3-904-600-01	TERMINAL BOARD, BATTERY	
56	3-389-713-01	SCREW (2X4)		63	3-913-622-01	SPRING, BATTERY COIL	
57	3-913-614-01	BUTTON (FF)		64	3-351-169-01	JOINT (C)	
58	3-913-615-01	BUTTON (PLAY)		65	3-386-374-01	SCREW (1.7)	
59	3-913-616-01	BUTTON (STOP)		66	3-334-019-01	JOINTER (B)	
60	3-913-613-01	BUTTON (DIR)		67	3-911-203-01	SCREW	
* 61	A-3060-956-A	MAIN BOARD, COMPLETE (393:IT)		L1	1-501-692-11	ANTENNA, FERRITE-ROD (MW) (US, CND)	
* 61	A-3060-957-A	MAIN BOARD, COMPLETE (393:AEP, UK, E, G, EA)		L1	1-501-693-11	ANTENNA, FERRITE-ROD (MW)	
* 61	A-3060-958-A	MAIN BOARD, COMPLETE (393:US, CND)				(AEP, UK, G, IT, E, EA, EE)	

**6-3. MECHANISM DECK SECTION
(MF-WMFS395)**



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	X-3368-485-1	CHASSIS (SS) ASSY		117	3-905-695-01	FW (F) ASSY	
102	3-906-023-01	ARM (PINCH) (R)		118	3-381-858-01	CAP (H)	
103	3-906-024-01	SPRING		119	3-905-702-01	WASHER (IDLER)	
104	3-905-717-01	PINCH ROLLER (R)		120	3-905-701-01	PULLEY (IDLER)	
105	3-905-733-01	GUIDE, TAPE		121	3-905-718-01	SPRING	
106	3-381-882-01	WASHER (FW STOPPER)		122	3-381-850-01	ARM (PINCH) (F)	
107	3-905-722-01	SPRING (T REEL)		123	3-905-735-01	SCREW (HEAD)	
108	3-905-723-01	SPRING (S REEL)		124	3-381-883-01	SCREW (MOTOR)	
109	3-905-709-01	GEAR (REEL) (L)		125	1-649-464-11	FLEXIBLE BOARD	
110	3-905-729-01	SPRING (DIR)		126	3-905-734-01	SPRING, LEAF	
111	3-905-696-01	FW (R) ASSY		127	3-905-704-01	WASHER (UPPER & LOWER)	
112	3-381-868-01	SPRING (UPPER & LOWER)		HP901	1-500-070-11	HEAD, MAGNETIC (PLAYBACK)	
113	3-381-842-01	GEAR (TU)		M901	X-3367-148-1	MOTOR ASSY	
114	3-905-703-01	BELT		S302	1-692-302-11	SWITCH, LEAF (POWER)	
115	3-905-712-01	SCREW (CLUTCH)		S901	1-692-684-11	SWITCH, SLIDE (FWD/REV)	
116	X-3367-147-1	CLUTCH ASSY					

SECTION 7

ELECTRICAL PARTS LIST

H/P	MAIN
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NOTE:

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

- 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.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts Example:
 KNOB, BALANCE (WHITE) . . . (RED)
 ↑ ↑
 Parts color Cabinet's color
- RESISTORS
 All resistors are in ohms
 METAL: Metal-film resistor
 METAL OXIDE: Metal Oxide-film resistor
 F : nonflammable
- SEMICONDUCTORS
 In each case, μ : for example:
 uA...: μ A..., uPA...: μ PA..., uPB...: μ PB...,
 uPC...: μ PC..., uPD...: μ PD...
- CAPACITORS
 uF : μ F
- COILS
 uH : μ H
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviations
 CND : Canadian model
 G : German model
 IT : Italian model
 EE : East European model
 EA : Saudi Arabia model

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	1-653-922-11	H/P BOARD ***** < JACK >		C2	1-163-529-00	CERAMIC CHIP 22PF 5% 50V (393:IT/395:IT)	
J301	1-565-376-11	JACK, HEADPHONE (PHONES)		C3	1-163-095-00	CERAMIC CHIP 12PF 5% 50V (393:EE)	
*****				C3	1-163-103-00	CERAMIC CHIP 27PF 5% 50V (EXCEPT 393:EE, IT/395:IT)	
*	A-3060-956-A	MAIN BOARD, COMPLETE (393:IT) *****		C3	1-163-104-00	CERAMIC CHIP 30PF 5% 50V (393:IT/395:IT)	
*	A-3060-957-A	MAIN BOARD, COMPLETE (393:AEP, UK, E, G, EA) *****		C4	1-163-091-00	CERAMIC CHIP 8PF 50V (393:US, CND/395:US, CND)	
*	A-3060-958-A	MAIN BOARD, COMPLETE (393:US, CND) *****		C4	1-163-093-00	CERAMIC CHIP 10PF 5% 50V (393:AEP, UK, E, G, EA, EE/395:AEP, UK, G)	
*	A-3060-959-A	MAIN BOARD, COMPLETE (395:IT) *****		C4	1-163-098-00	CERAMIC CHIP 16PF 5% 50V (393:IT/395:IT)	
*	A-3060-968-A	MAIN BOARD, COMPLETE (395:US, CND) *****		C5	1-163-235-11	CERAMIC CHIP 22PF 5% 50V (393:US, CND, AEP, UK, E, G, EA/395:US, CND, AEP, UK, G)	
*	A-3060-969-A	MAIN BOARD, COMPLETE (395:AEP, UK, G) *****		C5	1-163-237-11	CERAMIC CHIP 27PF 5% 50V (393:IT/395:IT)	
*	A-3060-976-A	MAIN BOARD, COMPLETE (393:EE) *****		C5	1-163-243-11	CERAMIC CHIP 47PF 5% 50V (393:EE)	
	3-334-019-01	JOINTER (B)		C6	1-163-003-11	CERAMIC CHIP 330PF 10% 50V	
	3-351-169-01	JOINT (C)		C7	1-164-346-11	CERAMIC CHIP 1uF 16V	
	3-386-374-01	SCREW (1.7)		C8	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
	3-904-600-01	TERMINAL BOARD, BATTERY		C9	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
	3-911-203-01	SCREW		C10	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
	3-913-622-01	SPRING, BATTERY COIL		C11	1-163-059-91	CERAMIC CHIP 0.01uF 10% 50V	
		< CAPACITOR >		C12	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C1	1-163-088-00	CERAMIC CHIP 5PF 50V (393:US, CND, IT/395:US, CND, IT)		C13	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V (393:US, CND/395:US, CND)	
C1	1-163-089-00	CERAMIC CHIP 6PF 50V (393:AEP, UK, E, G, EA, EE/395:AEP, UK, G)		C14	1-126-153-11	ELECT 22uF 20% 6.3V	
C2	1-163-093-00	CERAMIC CHIP 10PF 5% 50V (393:EE)		C15	1-163-059-91	CERAMIC CHIP 0.01uF 10% 50V	
C2	1-163-101-00	CERAMIC CHIP 22PF 5% 50V (393:US, CND, AEP, UK, E, G, EA/395:US, CND, AEP, UK, G)		C16	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V	
				C17	1-126-154-11	ELECT 47uF 20% 6.3V	
				C18	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V	
				C19	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V	
				C20	1-164-005-11	CERAMIC CHIP 0.47uF 25V	
				C21	1-164-005-11	CERAMIC CHIP 0.47uF 25V	
				C22	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
				C23	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V (393:US, CND/395:US, CND)	
				C26	1-163-085-00	CERAMIC CHIP 2PF 50V (393:EE)	

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C101	1-163-139-00	CERAMIC CHIP	820PF 5% 50V			< FILTER >	
C102	1-163-139-00	CERAMIC CHIP	820PF 5% 50V				
C103	1-163-018-00	CERAMIC CHIP	0.0056uF 5% 50V	CF1	1-567-090-00	FILTER, CERAMIC (455MHz)	
C104	1-135-201-11	TANTALUM CHIP	10uF 20% 4V	CF2	1-567-097-61	FILTER, CERAMIC (10.7MHz)	
C105	1-162-638-11	CERAMIC CHIP	1uF 16V			< CONNECTOR >	
C106	1-164-161-11	CERAMIC CHIP	0.0022uF 10% 100V				
C107	1-164-346-11	CERAMIC CHIP	1uF 16V	CN301	1-568-558-21	HOUSING, CONNECTOR (FPC) 8P	
						< BAND PASS FILTER >	
C108	1-163-003-11	CERAMIC CHIP	330PF 10% 50V	CP1	1-235-826-11	FILTER, BAND PASS (393:EE)	
C151	1-163-019-00	CERAMIC CHIP	0.0068uF 10% 50V (395)	CP1	1-236-711-21	FILTER, BAND PASS	
C152	1-163-809-11	CERAMIC CHIP	0.047uF 10% 25V (395)			(393:US, CND, AEP, UK, E, G, IT, EA/395)	
C153	1-135-176-21	TANTALUM CHIP	0.68uF 10% 20V (395)			< VARIABLE CAPACITOR >	
C154	1-163-017-00	CERAMIC CHIP	0.0047uF 5% 50V (395)	CV1	1-151-653-11	CAP, VARIABLE (TUNING)	
						(393:US, CND/395:US, CND)	
C155	1-163-989-11	CERAMIC CHIP	0.033uF 10% 25V (395)	CV1	1-151-654-11	CAP, VARIABLE (TUNING)	
C156	1-126-163-11	ELECT	4.7uF 20% 50V (395)			(EXCEPT 393:US, CND/395:US, CND)	
C201	1-163-139-00	CERAMIC CHIP	820PF 5% 50V			< DIODE >	
C202	1-163-139-00	CERAMIC CHIP	820PF 5% 50V	D1	8-719-421-03	DIODE MA732 (393:US, CND/395)	
C203	1-163-018-00	CERAMIC CHIP	0.0056uF 5% 50V	D301	8-719-984-02	DIODE BR4371F (BATT)	
						< IC >	
C204	1-135-201-11	TANTALUM CHIP	10uF 20% 4V	IC1	8-759-230-39	IC TA8122AF	
C205	1-164-346-11	CERAMIC CHIP	1uF 16V	IC301	8-759-257-22	IC LA4582BM-TLM	
C206	1-164-161-11	CERAMIC CHIP	0.0022uF 10% 100V	IC351	8-759-701-07	IC NJM2063AM (395)	
C207	1-164-346-11	CERAMIC CHIP	1uF 16V	IC601	8-759-260-31	IC MM1038AFF	
C208	1-163-003-11	CERAMIC CHIP	330PF 10% 50V			< JUMPER RESISTOR >	
				JR1	1-216-296-00	METAL GLAZE 0 5% 1/8W	
C251	1-163-019-00	CERAMIC CHIP	0.0068uF 10% 50V (395)	JR2	1-216-296-00	METAL GLAZE 0 5% 1/8W	
C252	1-163-809-11	CERAMIC CHIP	0.047uF 10% 25V (395)	JR3	1-216-296-00	METAL GLAZE 0 5% 1/8W	
C253	1-135-176-21	TANTALUM CHIP	0.68uF 10% 20V (395)	JR4	1-216-296-00	METAL GLAZE 0 5% 1/8W	
C254	1-163-017-00	CERAMIC CHIP	0.0047uF 5% 50V (395)	JR5	1-216-296-00	METAL GLAZE 0 5% 1/8W	
C255	1-163-989-11	CERAMIC CHIP	0.033uF 10% 25V (395)			(393:US, CND/395:US, CND)	
				JR7	1-216-296-00	METAL GLAZE 0 5% 1/8W	
C256	1-126-163-11	ELECT	4.7uF 20% 50V (395)	JR8	1-216-296-00	METAL GLAZE 0 5% 1/8W	
C257	1-126-153-11	ELECT	22uF 20% 6.3V (395)	JR9	1-216-296-00	METAL GLAZE 0 5% 1/8W	
C258	1-126-163-11	ELECT	4.7uF 20% 50V (395)	JR10	1-216-296-00	METAL GLAZE 0 5% 1/8W	
C301	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V	JR11	1-216-296-00	METAL GLAZE 0 5% 1/8W	
C302	1-164-346-11	CERAMIC CHIP	1uF 16V	JR12	1-216-296-00	METAL GLAZE 0 5% 1/8W	
				JR13	1-216-296-00	METAL GLAZE 0 5% 1/8W	
C303	1-135-158-21	TANTALUM CHIP	15uF 20% 4V	JR14	1-216-296-00	METAL GLAZE 0 5% 1/8W (395)	
C304	1-164-005-11	CERAMIC CHIP	0.47uF 25V	JR15	1-216-296-00	METAL GLAZE 0 5% 1/8W (395)	
C305	1-126-153-11	ELECT	22uF 20% 6.3V	JR16	1-216-296-00	METAL GLAZE 0 5% 1/8W (393)	
C306	1-164-005-11	CERAMIC CHIP	0.47uF 25V				
C307	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V	JR17	1-216-296-00	METAL GLAZE 0 5% 1/8W (393)	
				JR18	1-216-296-00	METAL GLAZE 0 5% 1/8W	
C308	1-135-149-21	TANTALUM CHIP	2.2uF 20% 10V			(EXCEPT 393:US, CND/395:US, CND)	
C309	1-164-157-11	CERAMIC CHIP	0.068uF 10% 25V	JR19	1-216-296-00	METAL GLAZE 0 5% 1/8W	
C310	1-135-149-21	TANTALUM CHIP	2.2uF 20% 10V	JR20	1-216-296-00	METAL GLAZE 0 5% 1/8W	
C311	1-164-346-11	CERAMIC CHIP	1uF 16V				
C312	1-164-344-11	CERAMIC CHIP	0.068uF 10% 25V				
C313	1-164-346-11	CERAMIC CHIP	1uF 16V				
C314	1-163-009-11	CERAMIC CHIP	1000PF 10% 50V				
C315	1-104-847-11	TANTAL. CHIP	22uF 20% 4V				
C351	1-126-154-11	ELECT	47uF 20% 6.3V (395)				
C601	1-124-434-00	ELECT	220uF 20% 4V				
C602	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V				
C603	1-164-505-11	CERAMIC CHIP	2.2uF 16V				
C604	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V				

MAIN

Ref. No.	Part No.	Description	Remark
		< SWITCH >	
S301	1-571-621-21	SWITCH, LEAF (AUDIO MUTE)	
S302	1-692-302-11	SWITCH, LEAF (TAPE POWER)	
S303	1 570-087-11	SWITCH, SLIDE (TAPE)	
S304	1-692-034-11	SWITCH, SLIDE (FUNCTION)	
S305	1-692-034-11	SWITCH, SLIDE (AVLS)	
S351	1-571-674-11	SWITCH, SLIDE (MEGA BASS)	
S352	1-570-675-11	SWITCH, SLIDE (DOLBY NR) (395)	
		< TRANSFORMER >	
T1	1-404-899-21	TRANSFORMER, IF	
		< THERMISTOR >	
TH601	1-809-003-11	THERMISTOR, POSITIVE	
TH602	1-809-275-21	THERMISTOR, POSITIVE	
		< VIBRATOR >	
X1	1-577-091-51	OSCILLATOR, CRYSTAL	
X2	1-567-097-61	FILTER, CERAMIC (10.7MHz)	

		MISCELLANEOUS	

125	1-649-464-11	FLEXIBLE BOARD	
HP901	1-500-070-11	HEAD, MAGNETIC (PLAYBACK)	
J301	1-565-376-11	JACK, HEADPHONE (PHONES)	
L1	1-501-692-11	ANTENNA, FERRITE-ROD (MW) (US, CND)	
L1	1-501-693-11	ANTENNA, FERRITE-ROD (MW) (AEP, UK, G, IT, E, EA, EE)	
M901	X-3367-148-1	MOTOR ASSY	
S302	1-692-302-11	SWITCH, LEAF (POWER)	
S901	1-692-684-11	SWITCH, SLIDE (FWD/REV)	

		ACCESSORIES & PACKING MATERIALS	

	3-326-162-01	WASHER, POLYETHYLENE, SLIT	
	3-378-331-11	SCREW, CARRYING CASE	
	3-758-747-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, SPANISH) (395:CND, AEP, UK, G, IT)	
	3-758-747-21	MANUAL, INSTRUCTION (ENGLISH) (395:US)	
	3-758-747-41	MANUAL, INSTRUCTION (DUTCH, SWEDISH, ITALIAN, PORTUGUESE) (395:AEP, G, IT)	
	3-758-945-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, SPANISH) (393:CND, AEP, UK, E, G, IT, EA, EE)	
	3-758-945-21	MANUAL, INSTRUCTION (ENGLISH) (393:US)	

Ref. No.	Part No.	Description	Remark
	3-758-945-41	MANUAL, INSTRUCTION (DUTCH, SWEDISH, ITALIAN, PORTUGUESE) (393:AEP, G, IT)	
	3-758-945-51	MANUAL, INSTRUCTION (POLISH, CZECH, HUNGARIAN, RUSSIAN) (393:EE)	
*	3-913-140-01	CUSHION (UPPER) (US)	
*	3-913-141-01	CUSHION (LOWER) (393:US)	
*	3-913-145-01	INDIVIDUAL CARTON (393:CND)	
*	3-913-147-01	INDIVIDUAL CARTON (393:AEP, UK, G, IT)	
*	3-913-149-01	INDIVIDUAL CARTON (393:E, EA)	
*	3-913-150-01	INDIVIDUAL CARTON (393:EE)	
*	3-913-156-01	CUSHION (EXCEPT US)	
*	3-913-157-01	INDIVIDUAL CARTON (395:CND)	
*	3-913-159-01	INDIVIDUAL CARTON (395:AEP, UK, G, IT)	
	3-913-600-01	BELT (395)	
	3-913-621-01	BRACKET, BELT	
	8-952-265-90	HEADPHONE MDR-E215/Y SET (YELLOW) (EXCEPT US, CND)	
	8-953-580-90	HEADPHONE MDR-W07G SET (YELLOW) (US, CND)	
	8-953-580-92	HEADPHONE MDR-W07G/GK SET (GREEN) (393:CND)	
	8-953-580-93	HEADPHONE MDR-W07G/VK SET (VIOLET) (393:CND)	

		HARDWARE LIST	

#1	7-682-902-11	SCREW +PWH 2.6X5	
#2	7-685-107-11	SCREW +P 2X12 TYPE2 NON-SLIT	
#3	7-624-101-01	STOP RING 1.2 (E TYPE)	
#4	7-685-102-19	SCREW (+BTP) (2X4)	

WM-FS393/FS395

SONY SERVICE MANUAL

*US Model
Canadian Model
AEP Model
UK Model
WM-FS393/FS395*

*E Model
WM-FS393*

SUPPLEMENT-1

File this supplement with the service manual.

Subject : Change of the Outer Assy and wire

(ECN-WM400894, WM401309)


Page	Ref.No.	FORMER		NEW	
		<u>Part No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Description</u>
22	13	3-913-604-01	WIRE (232mm)	3-913-604-21	WIRE (256mm)
	14	X-3368-376-1	OUTER ASSY (166mm)	*3-375-277-02	OUTER (180mm)
				*3-381-892-02	OUTER (190mm)

NOTE :

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

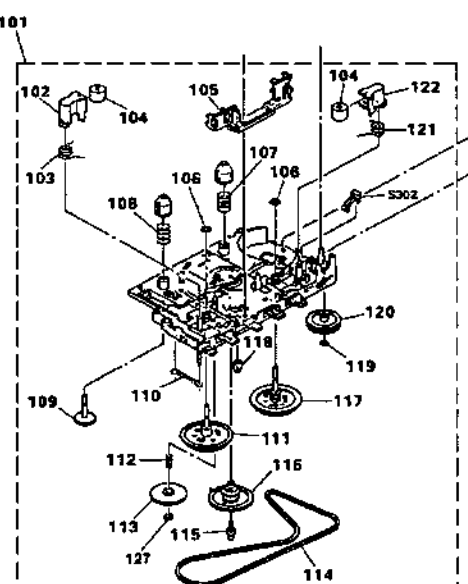
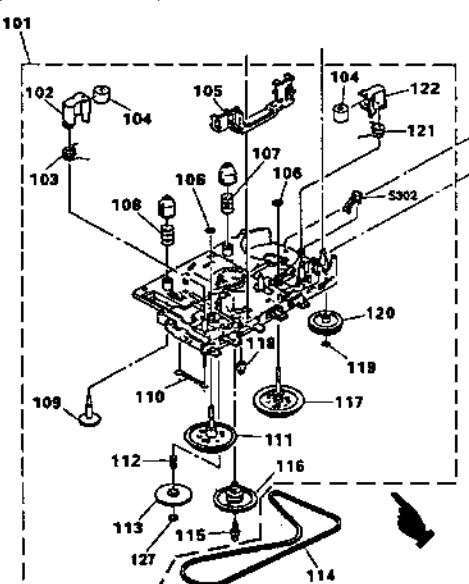
● **CORRECTION**

Correct your service manual as shown below.

 : indicates corrected portion.

Page	INCORRECT			CORRECT	
22	Ref.No.	Part No.	Description	Part No.	Description
	1	X-3368-374-1	CABINET (FRONT) ASSY (YELLOW, GREEN, VIOLET) (393 : CND)	X-3368-374-1	CABINET (FRONT) ASSY <u>(YELLOW)</u> (393 : CND)
				X-3369-675-1	CABINET (FRONT) ASSY <u>(GREEN)</u> (393 : CND)
				X-3369-676-1	CABINET (FRONT) ASSY <u>(VIOLET)</u> (393 : CND)
				X-3370-080-1	CABINET (FRONT) ASSY <u>(GREEN)</u> (395 : US)
				X-3370-081-1	CABINET (FRONT) ASSY <u>(VIOLET)</u> (395 : US)

(RPC-95048)

Page	INCORRECT	CORRECT
24	<p>6-3. MECHANISM DECK SECTION (MF-WMFS395)</p> 	<p>6-3. MECHANISM DECK SECTION (MF-WMFS395)</p> 

(SPM-95019)

Sony Corporation

Consumer A&V Products Company

Personal A&V Products Div.

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