

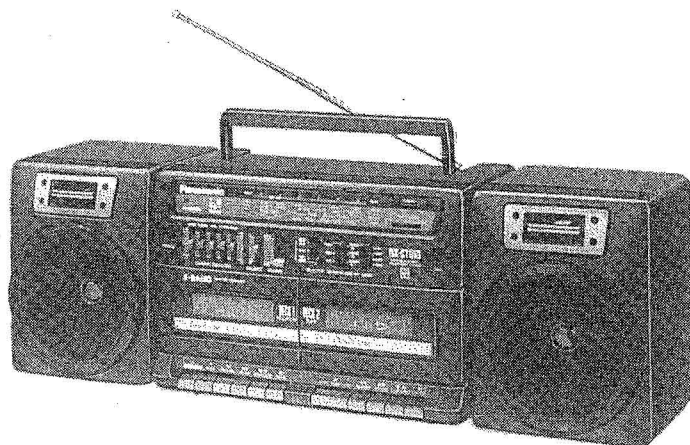
Service Manual

Portable Stereo Component System

Radio Cassette
RX-CT810

Color

(K) Black Type



Area

Country Code	Area	Color
(E)	Continental Europe	(K)
(EB)	Great Britain	
(EG)	F. R. Germany/Italy	

SG-20 MECHANISM SERIES

■ SPECIFICATIONS

General

Power Requirement: AC; (E) (EG) ..230V, 50 Hz
(EB)230 ~ 240V, 50 Hz
Battery; 9V (SIX UM - 1 "R20/LR20"
Batteries)

Power Consumption: 15W (AC only)

Power Output: 8W (4W x 2) ... RMS (max.)

20W (10W x 2) ... PMPO

Speaker: Woofer; 12cm PM Dynamic Speaker
(2.7 Ω)

Tweeter; 2cm Ceramic Speaker

Jacks:

Input; CD/LINE IN: 398mV, 47 k Ω

Output; EXT. SP; 2.7 ~ 8 Ω

HEADPHONES; 32 Ω , $\varnothing$ 3.5

Dimensions:

597(W) x 199(H) x 163(D)mm

Main Unit; 305(W) x 199(H) x 163(D)mm

Speaker Box; 150(W) x 198(H) x 154(D)mm

Weight: 3.8kg without batteries.

Radio Section

Radio Frequency Range: FM; 87.5 ~ 108 MHz
LW; 148.5 ~ 285 kHz
MW; 520 ~ 1610 kHz
SW; 5.9 ~ 18.0 MHz

Intermediate Frequency: FM; 10.7 MHz

AM; 459 kHz

Sensitivity: FM; 2 μ V/50 mW output
(-3 dB Limit Sens.)

LW; 224 μ V/m/50 mW output

MW; 178 μ V/m/50 mW output

SW; 10 μ V/50 mW output

Tape Deck Section:

TAPE 1

Frequency Response: 60 ~ 12,000 Hz

Tape Speed: 4.8 cm/s

Track System: 4-Track 2-channel stereo playback

Tape Deck Section:

TAPE 2

Frequency Response: 60 ~ 12,000Hz

Recording System: AC Bias, Magnet erase

Tape Speed: 4.8 cm/s

Track System: 4-Track 2-channel stereo recording and
playback.

Notes:

1. Weights and dimensions shown are approximate.

2. Design and specifications are subject to change without notice.

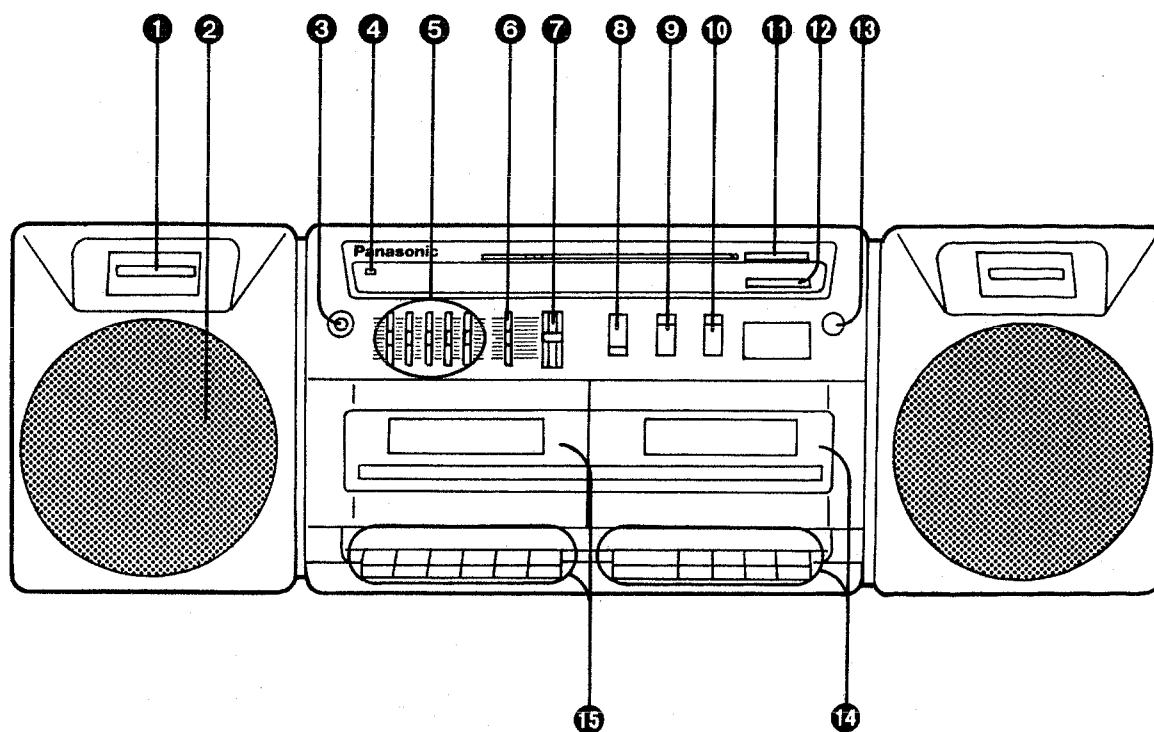
Panasonic

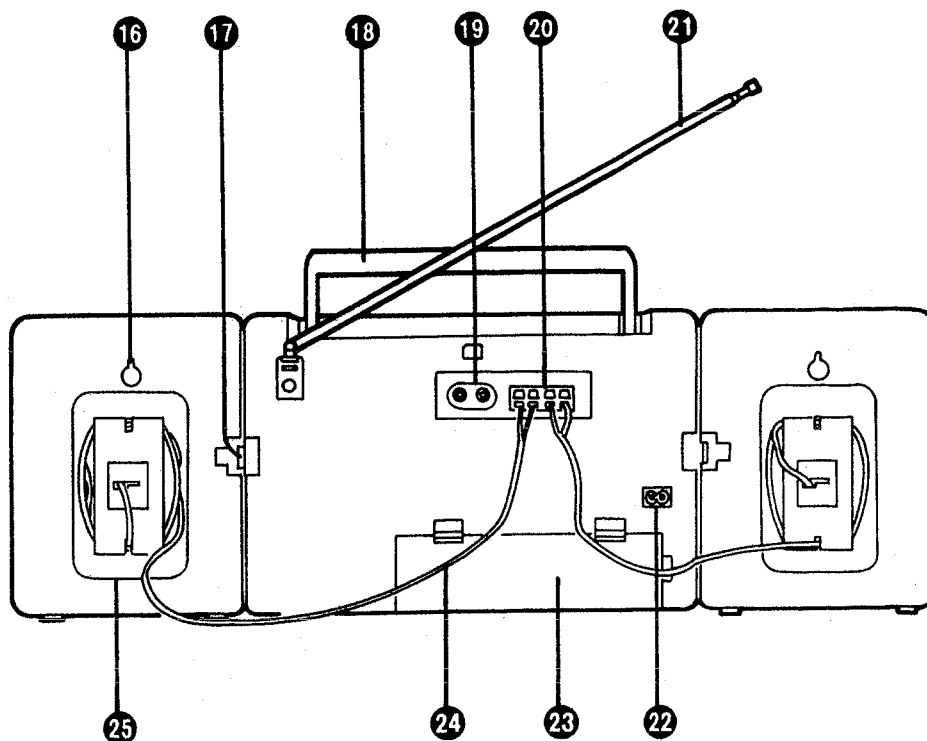
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■ LOCATION OF CONTROL





- ① Speakers [Tweeter]
- ② Speakers [Woofer]
- ③ Headphones Jack (PHONES)
- ④ FM Stereo Indicator (FM STEREO)
- ⑤ Graphic Equalizer Controls (GRAPHIC EQUALIZER)
(10kHz, 3.3kHz, 1kHz, 330Hz, 100Hz)
- ⑥ Balance Control (BALANCE)
- ⑦ Volume Control (VOLUME)
- ⑧ Function Selector (SELECTOR) (CD/LINE, RADIO,
TAPE/OFF)
- ⑨ Editing/FM Mode/Beat Proof Selector (EDITING/FM
MODE/B.P)
- ⑩ Band Selector (BAND) (FM, LW, MW, SW)
- ⑪ Tuning Control (TUNING)
- ⑫ Fine Tuning Control (FINE TUNING)
- ⑬ Built-in Microphone (MIC)
- ⑭ Deck 2 Controls (PLAY)

CASSETTE COMPARTMENT

- Playback Button (▶PLAY)
- Rewind/Review Button (◀◀REW/REV)
- Fast Forward/Cue Button (▶▶FF/CUE)
- Stop/Eject Button (■/▲STOP/EJECT)
- Pause Button (||PAUSE)

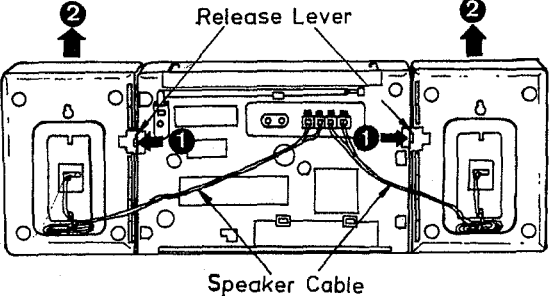
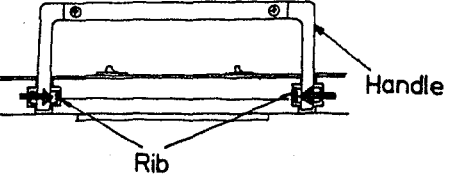
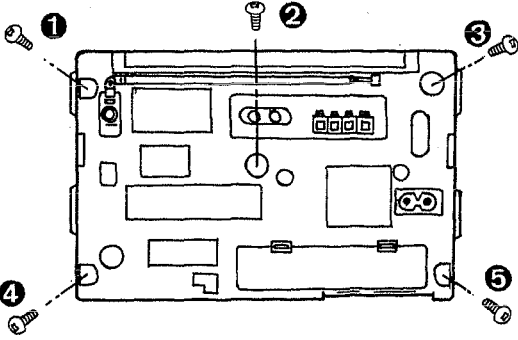
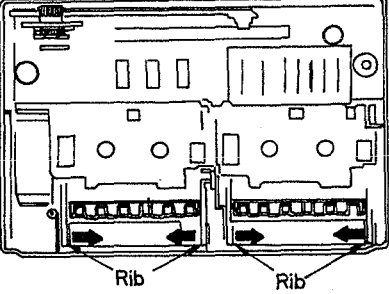
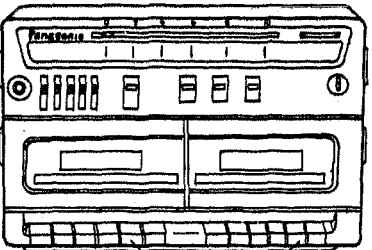
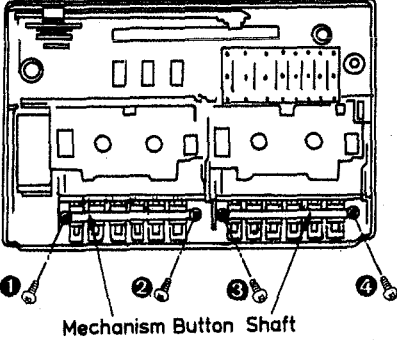
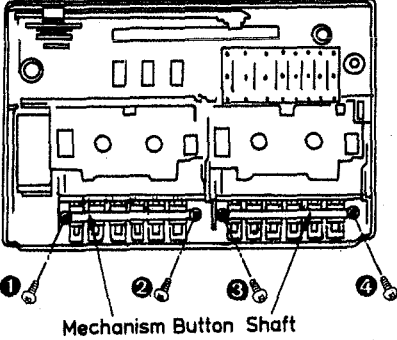
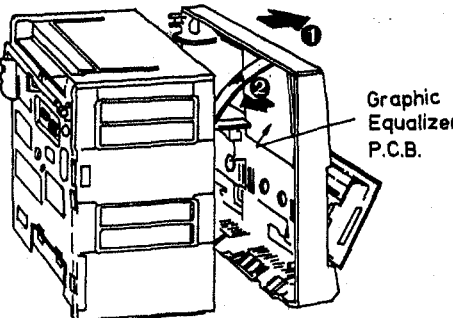
- ⑮ Deck 1 Controls (REC/PLAY)

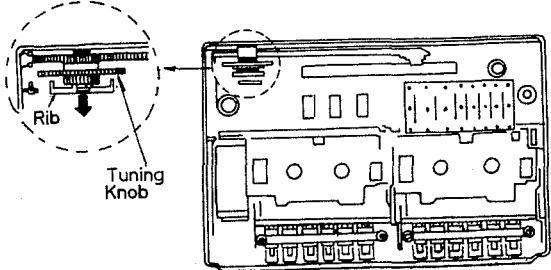
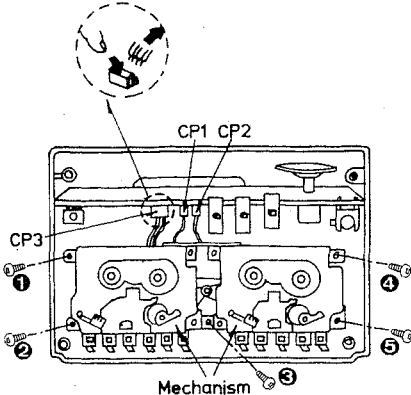
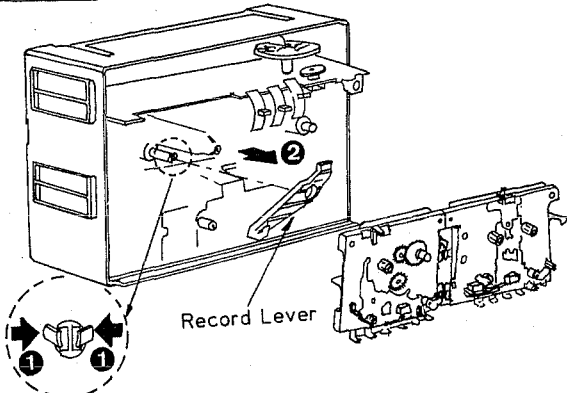
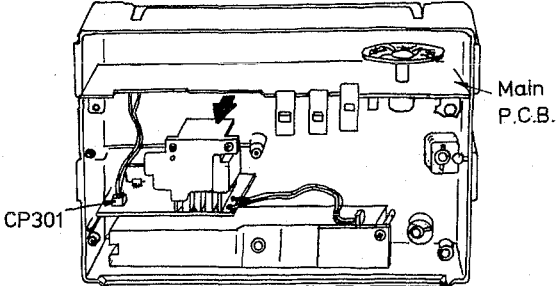
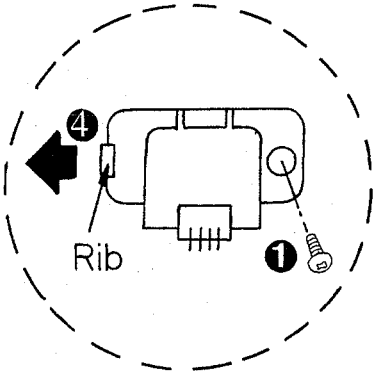
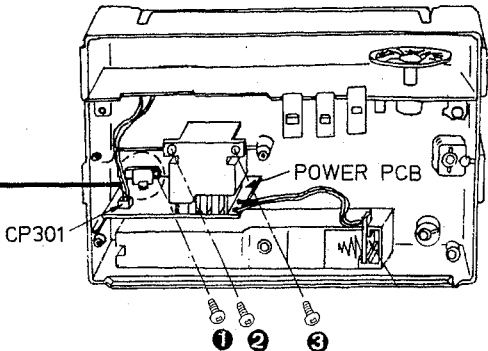
CASSETTE COMPARTMENT

- Record Button (●RECORD)
- Playback Button (▶PLAY)
- Rewind/Review Button (◀◀REW/REV)
- Fast Forward/Cue Button (▶▶FF/CUE)
- Stop/Eject Button (■/▲STOP/EJECT)
- Pause Button (||PAUSE)

- ⑯ Speaker Wall Mounts
- ⑰ Speaker Release Levers (RELEASE)
- ⑱ Handle
- ⑲ CD/LINE Input Jacks (CD/LINE IN)
- ⑳ Speaker Terminals [SPEAKERS (IMP 2.7 - 8Ω)]
- ㉑ Telescopic Antenna
- ㉒ AC Socket (AC IN ~)
- ㉓ Battery Compartment
- ㉔ Speaker Cables
- ㉕ Speaker Cable Compartments.

DISASSEMBLY INSTRUCTIONS

Ref. No. 1	Detaching the Speaker Box	Ref. No. 2	Removal of the Handle
Procedure 1	1. Press the release lever in the direction of arrow ①. 2. Lift up the speaker box in the direction of arrow ②.	Procedure 1 → 2	1. Release 2 ribs. 2. Slide out the handle.
			
Ref. No. 3	Removal of the Front Cabinet	Ref. No. 3	Removal of the Front Cabinet
Procedure 1 → 3	1. Remove 5 screws (①~⑤).	Procedure 1 → 3	1. Remove 5 screws (①~⑤).
Ref. No. 4	Removal of the Cassette Lids		
Procedure 1 → 3 → 4	• Remove 4 ribs in the direction of arrows.	2. Press the stop/eject Button.	
			
Ref. No. 5	Removal of the Mechanism Button	3. Remove the front cabinet in the direction of arrow ①. 4. Remove the graphic equalizer P.C.B. in the direction of arrow ②.	
Procedure 1 → 3 → 4 → 5	1. Remove 4 screws (①~④).		
			

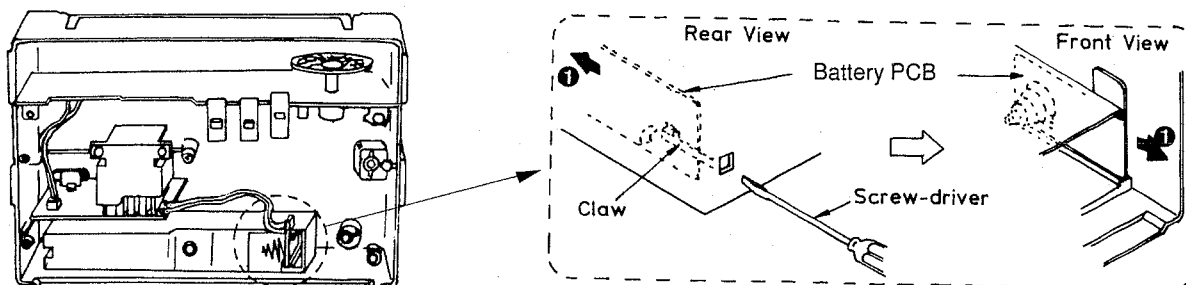
Ref. No. 6	Removal of the Tuning Knob	Ref. No. 7	Removal of the Mechanism
Procedure 1 → 3 → 6	• Press the rib in the direction of arrow and pull out the knob.	Procedure 1 → 3 → 7	
			 1. Remove 3 connectors (CP1, CP2, CP3). 2. Remove 5 screws (①~⑤).
Ref. No. 8	Removal of the Record lever		
Procedure 1 → 3 → 7 → 8	• Press the rib in the direction of arrow ① and pull out in the direction of arrow ②		
			
Ref. No. 10	Removal of the Power P.C.B.	Ref. No. 9	Removal of the Main P.C.B.
Procedure 1 → 3 → 7 → 8 → 10	1. Remove the connector (CP301) 2. Remove 3 screws (①~③). 3. Release the rib in the direction of arrow ④.	Procedure 1 → 3 → 7 → 8 → 9	 1. Remove the connector (CP301). 2. Pull out the main P.C.B.
			

Ref. No.
11

Removal of the Battery P.C.B.

Procedure
1 → 3 →
7 → 11

1. Release the claw using a screwdriver.
2. Pull out the battery P.C.B. in the direction of arrow ①.

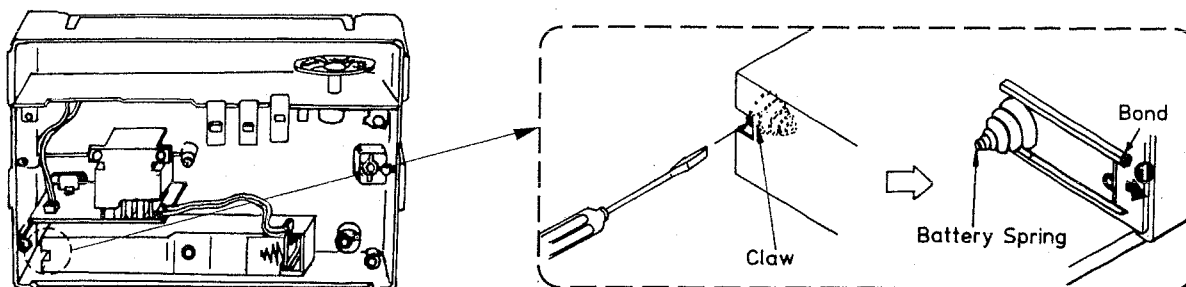


Ref. No.
12

Removal of the Battery Spring

Procedure
1 → 3 →
7 → 12

1. Remove the bond.
2. Release the claw.
3. Pull out the battery spring in the direction of arrow ①.



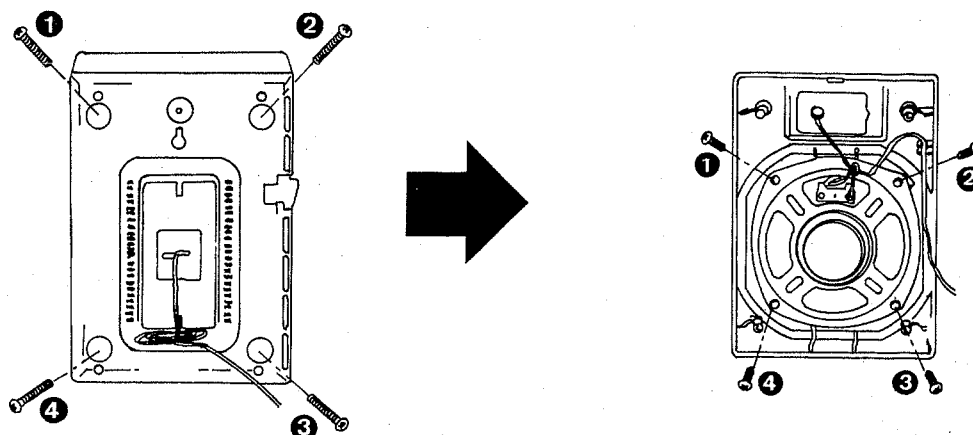
Ref. No.
13

Removal of the Speaker (Woofer)

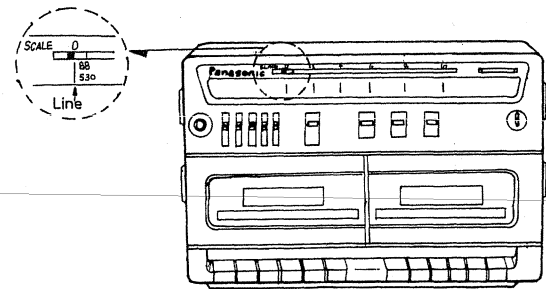
Procedure
1 → 13

1. Remove 4 screws (①~④).

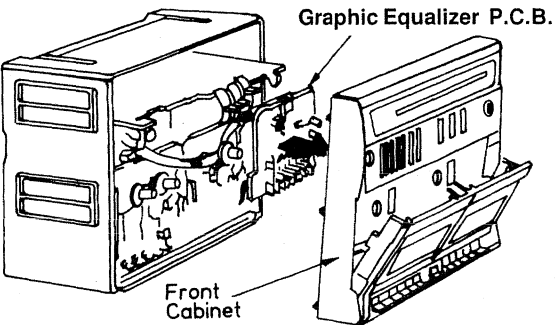
2. Remove 4 screws (①~④).



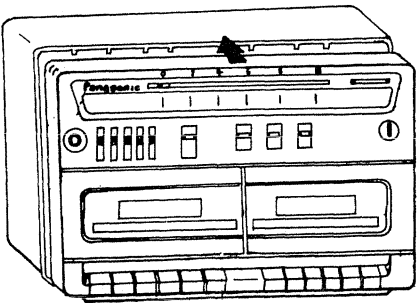
FRONT CABINET ASSEMBLY



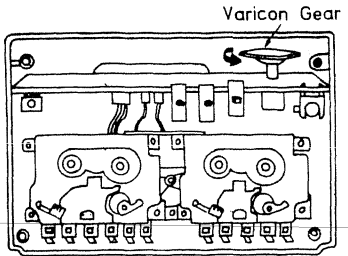
1. Line the dial pointer in the front cabinet assembly exactly before the line.



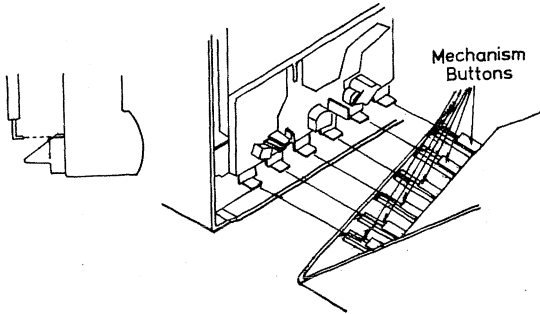
3. Assemble the graphic equalizer P.C.B. onto the front cabinet.



6. Replace the front cabinet.
7. Ensure the cassette lid is closed before fixing.

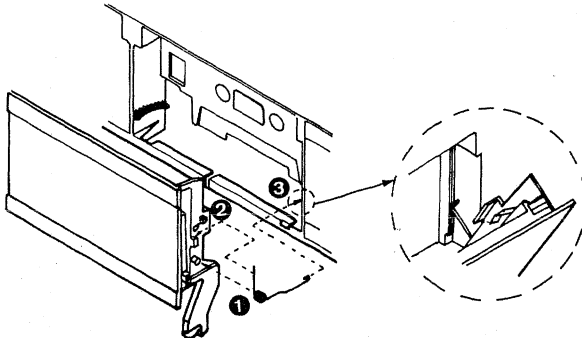


2. Turn the varicon gear on the main P.C.B. fully in anti-clockwise direction.

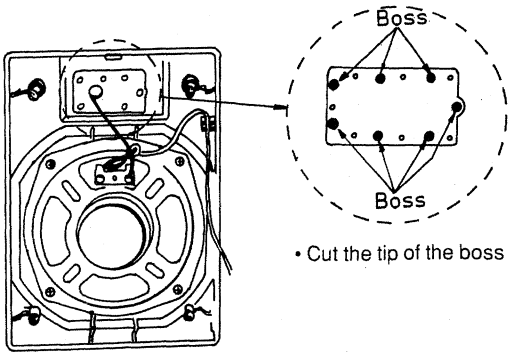


4. Assemble the front cabinet mechanism button with mechanism lever.
5. Ensure mechanism button is below mechanism lever when fixing.

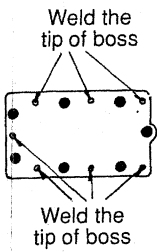
CASSETTE COMPARTMENT ASSEMBLY



TWEETER DISASSEMBLY AND ASSEMBLY



DISASSEMBLY



When replacing the tweeter, attach the tweeter to the speaker cabinet by welding it to the remainder of the boss.

ASSEMBLY

A MAIN P.C.B.

B GRAPHIC EQUALIZER P.C.B.

C MECHANISM CONTROL P.C.B.

D POWER SUPPLY P.C.B.

CAUTION
RISK OF ELECTRIC SHOCK
AC voltage line. Please do not touch this portion.

COMPONENTS:

- IC1:** IC1 (C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C95, C96, C97, C98, C99, C100, C101, C102, C103, C104, C105, C106, C107, C108, C109, C110, C111, C112, C113, C114, C115, C116, C117, C118, C119, C120, C121, C122, C123, C124, C125, C126, C127, C128, C129, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C144, C145, C146, C147, C148, C149, C150, C151, C152, C153, C154, C155, C156, C157, C158, C159, C160, C161, C162, C163, C164, C165, C166, C167, C168, C169, C170, C171, C172, C173, C174, C175, C176, C177, C178, C179, C180, C181, C182, C183, C184, C185, C186, C187, C188, C189, C190, C191, C192, C193, C194, C195, C196, C197, C198, C199, C200, C201, C202, C203, C204, C205, C206, C207, C208, C209, C210, C211, C212, C213, C214, C215, C216, C217, C218, C219, C220, C221, C222, C223, C224, C225, C226, C227, C228, C229, C230, C231, C232, C233, C234, C235, C236, C237, C238, C239, C240, C241, C242, C243, C244, C245, C246, C247, C248, C249, C250, C251, C252, C253, C254, C255, C256, C257, C258, C259, C260, C261, C262, C263, C264, C265, C266, C267, C268, C269, C270, C271, C272, C273, C274, C275, C276, C277, C278, C279, C280, C281, C282, C283, C284, C285, C286, C287, C288, C289, C290, C291, C292, C293, C294, C295, C296, C297, C298, C299, C300, C301, C302, C303, C304, C305, C306, C307, C308, C309, C310, C311, C312, C313, C314, C315, C316, C317, C318, C319, C320, C321, C322, C323, C324, C325, C326, C327, C328, C329, C330, C331, C332, C333, C334, C335, C336, C337, C338, C339, C340, C341, C342, C343, C344, C345, C346, C347, C348, C349, C350, C351, C352, C353, C354, C355, C356, C357, C358, C359, C360, C361, C362, C363, C364, C365, C366, C367, C368, C369, C370, C371, C372, C373, C374, C375, C376, C377, C378, C379, C380, C381, C382, C383, C384, C385, C386, C387, C388, C389, C390, C391, C392, C393, C394, C395, C396, C397, C398, C399, C400, C401, C402, C403, C404, C405, C406, C407, C408, C409, C410, C411, C412, C413, C414, C415, C416, C417, C418, C419, C420, C421, C422, C423, C424, C425, C426, C427, C428, C429, C430, C431, C432, C433, C434, C435, C436, C437, C438, C439, C440, C441, C442, C443, C444, C445, C446, C447, C448, C449, C450, C451, C452, C453, C454, C455, C456, C457, C458, C459, C460, C461, C462, C463, C464, C465, C466, C467, C468, C469, C470, C471, C472, C473, C474, C475, C476, C477, C478, C479, C480, C481, C482, C483, C484, C485, C486, C487, C488, C489, C490, C491, C492, C493, C494, C495, C496, C497, C498, C499, C500, C501, C502, C503, C504, C505, C506, C507, C508, C509, C510, C511, C512, C513, C514, C515, C516, C517, C518, C519, C520, C521, C522, C523, C524, C525, C526, C527, C528, C529, C530, C531, C532, C533, C534, C535, C536, C537, C538, C539, C540, C541, C542, C543, C544, C545, C546, C547, C548, C549, C550, C551, C552, C553, C554, C555, C556, C557, C558, C559, C560, C561, C562, C563, C564, C565, C566, C567, C568, C569, C570, C571, C572, C573, C574, C575, C576, C577, C578, C579, C580, C581, C582, C583, C584, C585, C586, C587, C588, C589, C590, C591, C592, C593, C594, C595, C596, C597, C598, C599, C600, C601, C602, C603, C604, C605, C606, C607, C608, C609, C610, C611, C612, C613, C614, C615, C616, C617, C618, C619, C620, C621, C622, C623, C624, C625, C626, C627, C628, C629, C630, C631, C632, C633, C634, C635, C636, C637, C638, C639, C640, C641, C642, C643, C644, C645, C646, C647, C648, C649, C650, C651, C652, C653, C654, C655, C656, C657, C658, C659, C660, C661, C662, C663, C664, C665, C666, C667, C668, C669, C670, C671, C672, C673, C674, C675, C676, C677, C678, C679, C680, C681, C682, C683, C684, C685, C686, C687, C688, C689, C690, C691, C692, C693, C694, C695, C696, C697, C698, C699, C700, C701, C702, C703, C704, C705, C706, C707, C708, C709, C710, C711, C712, C713, C714, C715, C716, C717, C718, C719, C720, C721, C722, C723, C724, C725, C726, C727, C728, C729, C730, C731, C732, C733, C734, C735, C736, C737, C738, C739, C740, C741, C742, C743, C744, C745, C746, C747, C748, C749, C750, C751, C752, C753, C754, C755, C756, C757, C758, C759, C760, C761, C762, C763, C764, C765, C766, C767, C768, C769, C770, C771, C772, C773, C774, C775, C776, C777, C778, C779, C780, C781, C782, C783, C784, C785, C786, C787, C788, C789, C790, C791, C792, C793, C794, C795, C796, C797, C798, C799, C800, C801, C802, C803, C8

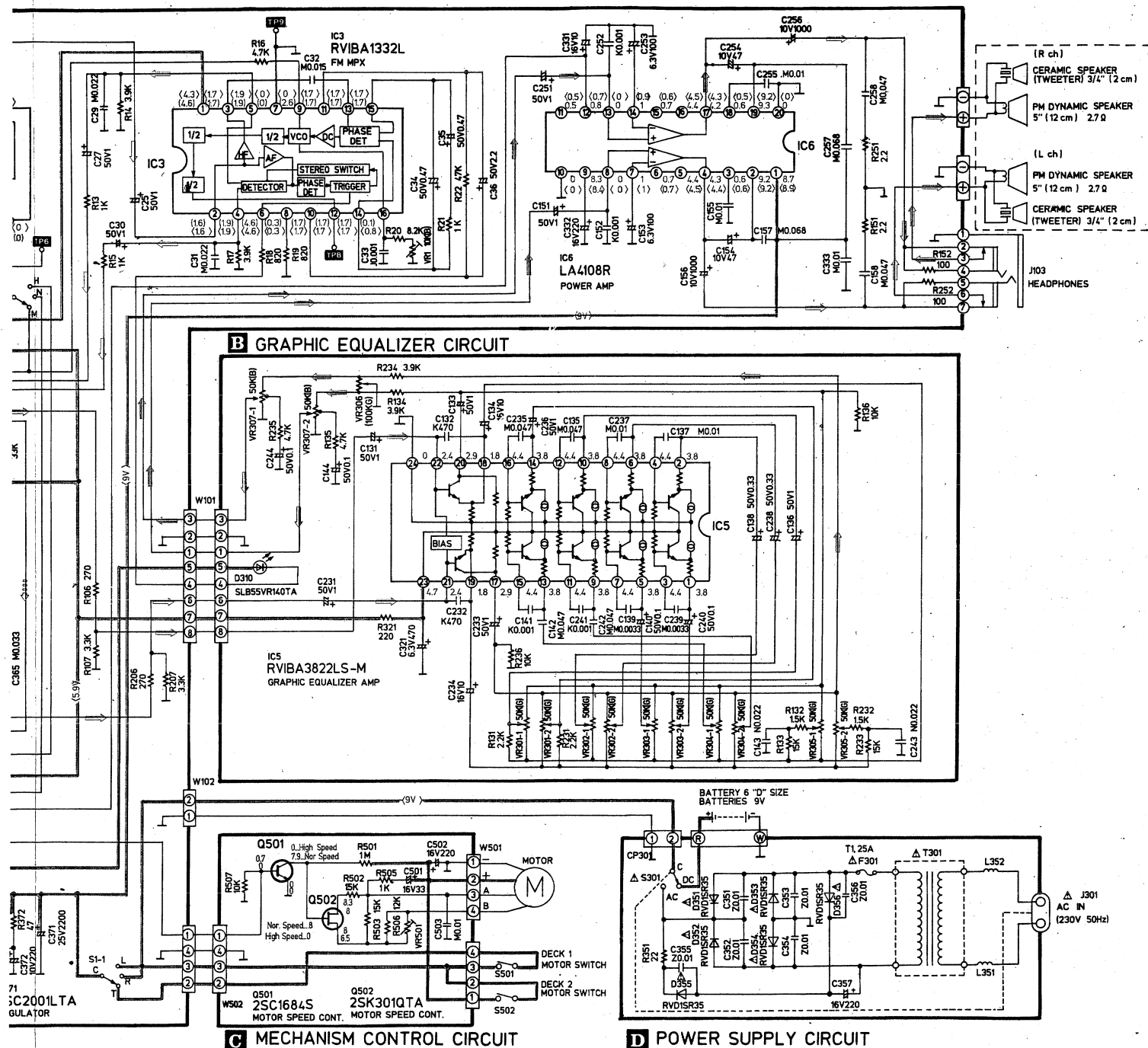
CAUTION
RISK OF ELECTRIC
SHOCK
AC voltage line. Please
do not touch this
portion.

(230V 50HZ) .. (E, EG)
(230 ~ 240V 50 Hz) .. (EB)

A horizontal number line with 11 tick marks labeled 1 through 10. The line is slightly curved and has a light blue shaded area under the first few numbers.



CIRCUIT



C MECHANISM CONTROL CIRCUIT

D POWER SUPPLY CIRCUIT

NOTES:

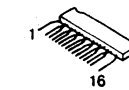
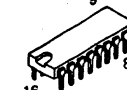
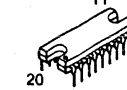
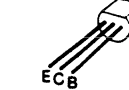
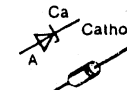
- S1-1 ~ S1-4:
 - S2-1 ~ S2-2:
 - S3-1 ~ S3-8:
 - S4-1 ~ S4-6:
 - S301:
 - S501:
 - S502:
 - VR1:
 - VR301-1, VR301-2:
 - VR302-1, VR302-2:
 - VR303-1, VR303-2:
 - VR304-1, VR304-2:
 - VR305-1, VR305-2:
 - VR306:
 - VR307-1, VR307-2:
 - VR501:
 - Battery current:
- Function select switch in "TAPE/OFF" position.
(T...TAPE/OFF, R...RADIO, L...CD/LINE)
Editing /FM mode select switch in "MIC" position.
(M...MIC/MONO, N...NORMAL/STEREO/II, H...HIGH/STEREO/II)
Band select switch in "FM" position.
(F... FM, L...LW, M...MW, S...SW)
Record/Playback switch in "PLAYBACK" position.
(R...RECORD, P...PLAYBACK).
AC/DC select switch in "AC" position.
Deck 1 motor switch.
Deck 2 motor switch.
FM VCO adjustment VR.
Graphic Equalizer VR (10 kHz).
Graphic Equalizer VR (3.3 kHz).
Graphic Equalizer VR (1 kHz).
Graphic Equalizer VR (330 Hz).
Graphic Equalizer VR (100 kHz).
Balance Control VR.
Volume control VR.
Tape Speed Adjustment VR.
Vol. min..... 70mA (Radio...FM)
170mA (Tape Playback)
Vol. max..... 570mA (Radio).
(G. EQ VR: Centre) 440mA (Tape Playback)
200mA (Recording)
Measurement Instruction
(Radio: FM 60dB, 30% Mod.
Tape: 315 Hz, Tape Playback.)
18. DC voltage measurements are taken with electronics voltmeter from negative terminal of the battery.
< >...FM ()...AM []...RECORD NO MARK...PLAYBACK
19. Important Safety Notice:
Components identified by Δ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
20. The mark (■) shows test point eg: TPI test point 1.

- PLAYBACK SIGNAL LINE
.... PLAYBACK/ FM SIGNAL LINE
.... FM SIGNAL LINE
.... RECORD SIGNAL LINE
.... +B LINE

Caution!

- IC and LSI are sensitive to static electricity.
Secondary trouble can be provided by taking care during repair.
- Cover the parts boxes made of plastics with aluminium foil.
 - Ground the soldering iron.
 - Put a conductive mat on the work table.
 - Do not touch the pins of IC or LSI with fingers directly.

TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES

AN7205 	BA4236L 
RV1BA1332L 	AN7317 
RV1BA3822LS 	LA4108R 
	2SC1684S 2SA564RA 2SC1684RTA 2SC2001LTA 2SC829BTA
2SK301QTA 	RVD1SS133 RVD1SR35 
SLB55VR140TA 	RVDMTZ6R8BTA 

MEASUREMENT AND ADJUSTMENTS

ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

1. Set volume control to maximum.
2. Set balance control to center.
3. Set band switch to LW, MW, SW or FM ST.
4. Set function selector to radio or tape.
5. Set Fine tuning control to center.
6. Set Graphic EQ to center.
7. Set power source voltage to 9V DC.
8. Set FM mode/B.P switch to STEREO/III.
9. Output of signal generator should be no higher than necessary to obtain an output reading.

LW, MW and SW ALIGNMENT

LW, MW and SW ALIGNMENT						
BAND	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT	REMARKS
	CONNECTIONS	FREQUENCY				
AM-IF ALIGNMENT						
(1)	MW	Fashion a loop of several turns of wire and radiate signal into loop ant. of the receiver.	459kHz 30% Mod. at 400Hz	Point of non-interference. (on/ about 600 kHz)	Headphones Jack (32Ω) (Fabricate the plug as shown in Fig. 2. and then connect the lead wires of the plug to the measuring instrument.)	T2 (AM IFT) Adjust for maximum output.
LW-RF ALIGNMENT						
(2)	LW	"	(E) (EB) 136kHz (EG) 136 ± 4kHz	Tuning capacitor fully closed.	"	L7 (LW OSC Coil) "
(3)	LW	"	297kHz	Tuning capacitor fully open.	"	CT6 (LW OSC Trimmer) "
(4)	LW	"	145kHz	Tune to signal.	"	(*1) L12(LW ANT Coil) Adjust for maximum output. Adjust L12 by moving the ferrite core.
(5)	LW	"	285kHz	"	"	CT5(LW ANT Trimmer) Adjust for maximum output. Repeat steps (2)~(5).
(*2) Cement antenna ferrite core with wax after completing alignment.						
MW-RF ALIGNMENT						
(6)	MW	"	(E) (EB)...511kHz (EG)...514±3kHz	Tuning capacitor fully closed.	"	L5(MW OSC Coil) Adjust for maximum output.
(7)	MW	"	(E)(EB)...1650kHz (EG)...1639±5kHz	Tuning capacitor fully open.	"	CT4 (MW OSC Trimmer) "
(8)	MW	"	550kHz	Tuning to signal.	"	(*2) L3(MW ANT Coil) Adjust for maximum output. Adjust L3 by moving the ferrite core.
(9)	MW	"	1500kHz	"	"	CT2 (AM ANT Trimmer) Adjust for maximum output. Repeat steps (6) ~ (9).
(*2) Cement antenna ferrite core with wax after completing alignment.						
SW-RF ALIGNMENT						
(10)	SW	Connect to test point TP1 through ceramic capacitor (10pF). Negative side to test point TP2 .	5.75MHz	Tuning capacitor fully closed.	Headphones Jack (32Ω) (Fabricate the plug as shown in Fig. 2. and then connect the lead wires of the plug to the measuring instrument.)	L9(SW2 OSC Coil) Adjust for maximum output.
(11)	SW		18.8MHz	Tuning capacitor fully open.	"	CT7(SW OSC Coil) "
(12)	SW		5.9MHz	Tuning to signal.	"	L13 (SW ANT Coil) Adjust for maximum amplitude. (10) ~ (12).

■ FM ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
FM-IF ALIGNMENT							
(13)	FM	High side thru. 0.001 μ F to test point TP3 . Negative side to test point TP2 .	10.7MHz (SWP.)	Point of non-interference.(on/ about 90MHz)	Connect vert. amp. of scope to test point TP3 . Negative side to test point TP5 .	T1(FM 1st IFT)	Wave form is shown Fig.3.
(14)	FM	"	"	"	"	T3(FM 2nd IFT)	Wave form is shown Fig.4.
FM-RF ALIGNMENT							
(15)	FM	Connect to test point TP1 through FM dummy antenna. Negative side to test point TP2 .	(E)(EB) ...86.2MHz (EG) ...87.35MHz	Variable capacitor fully closed.	Headphones Jack (32 Ω) Fabricate the plug as shown in Fig. 2. and then connect the lead wires of the plug to the measuring instrument.	L6(FM OSC Coil)	(*2) Adjust for maximum output
(16)	FM		(E)(EB) ...109.2MHz (EG) ... 108.3MHz	Variable capacitor fully open.	"	CT3(FM OSC Trimmer)	"
(17)	FM		106MHz	Tune to signal	"	CT1(FM ANT Trimmer)	Adjust for maximum output. Repeat steps (15) ~ (17).
(*2) three output responses will be present; proper tuning is the center frequency.							

(*2) three output responses will be present; proper tuning is the center frequency.

■ SEPARATION ALIGNMENT

FM SIGNAL GENERATOR SOURCE CONNECTION	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
98 MHz, 60 dB (CW) Connect to test point TP1 through FM dummy antenna. Negative side to TP2 .	TP8 ... (+) TP9 ... (-)	VR1	19kHz	Adjust VR1 for 19kHz $\pm$ 50Hz reading on frequency counter.

■ HEAD AZIMUTH ALIGNMENT

TEST TAPE	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
QZZCFM (8kHz, -20 dB)	(Headphone Jack (32 Ω) Fabricate the plug as shown in Fig. 2. and then connect the lead wires of the plug to the measuring instrument.)	Azimuth screw (Shown in Fig. 5)	Maximum output.	•Playback mode.

■ TAPE SPEED ADJUSTMENT

TEST TAPE	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	REMARKS
QZZCWAT (3kHz)	(Headphone Jack (32 Ω) Fabricate the plug as shown in Fig. 2. and then connect the lead wires of the plug to the measuring instrument.)	VR501 (Shown in Fig.6)	Normal Speed Adjustment 1. Insert a test tape (QZZCWAT) in Deck 1 and play it back. 2. Adjust VR501 until the measured value becomes 3000$\pm$30 Hz . 3. Check Deck 2 in the same way to make sure it satisfies the specification. Deck 2 ... $\pm$ 50 Hz of the speed of Deck 1. If it doesn't repeat steps 1 and 2 above. Note: This set uses one drive motor, so be sure to perform the adjustment in Deck1. High Speed Measurement 4. Insert the playback tape into Deck 1 and the editing tape into Deck 2. 5. Set the editing Mode Selector to the "HIGH" position. 6. Press the Deck 2 Pause button, then press the Record Button. 7. Press the Deck 1 Playback Button. • Editing is started by means of the Synchro-Start function. 8. Check to ensure that the measured speed is at least 1.7 times faster than normal speed.

ALIGNMENT POINT

• Please refer to Circuit Board and Wiring Connection Diagram for test point locations.

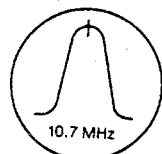
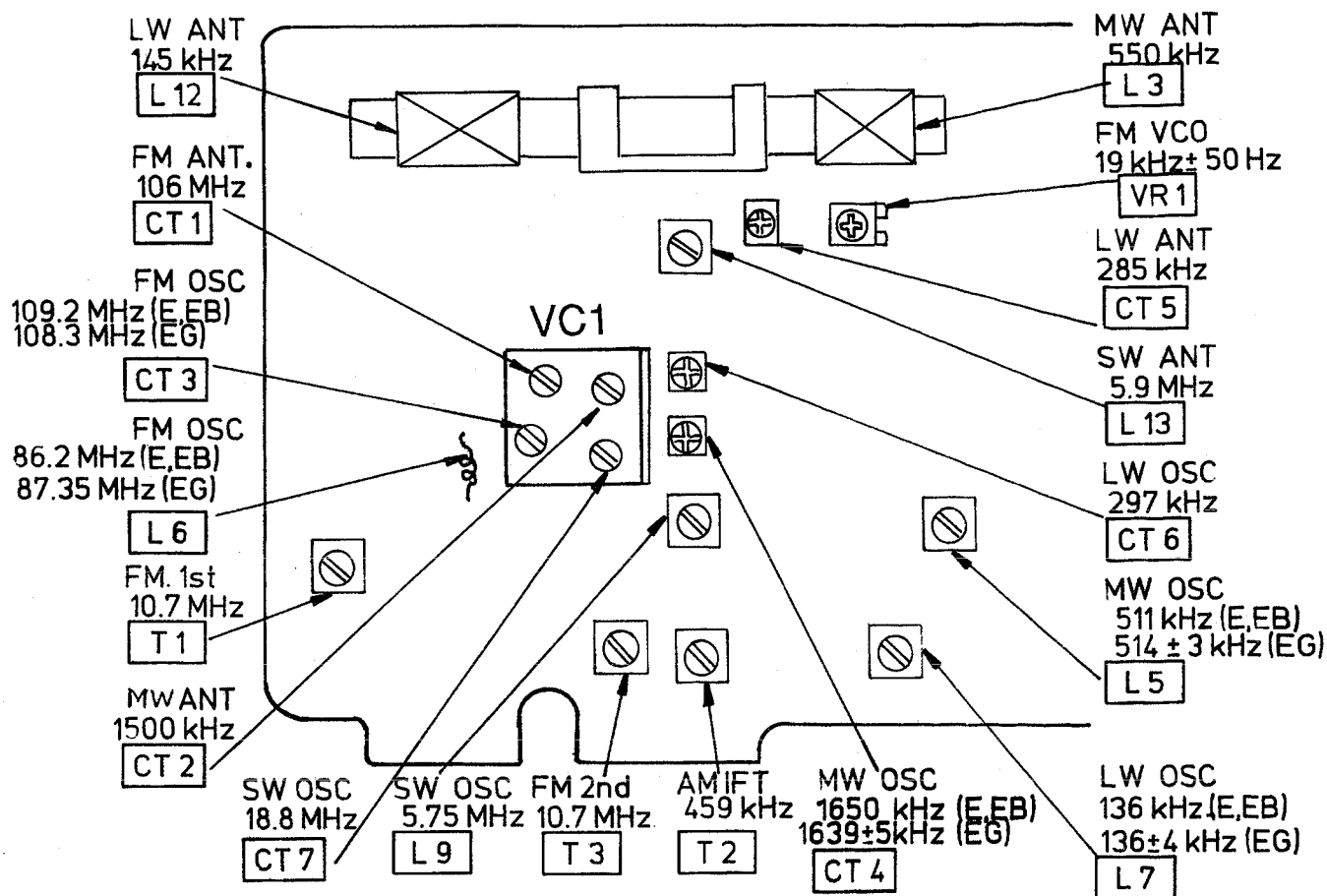


Fig. 3

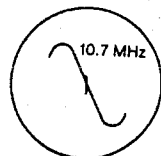


Fig. 4

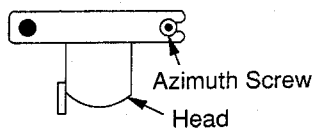


Fig. 5

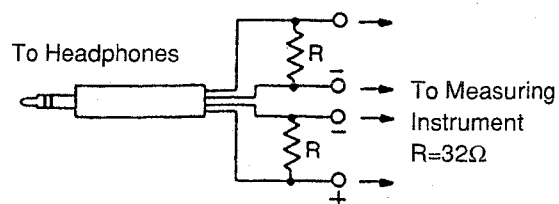


Fig. 2

MECHANISM CONTROL P.C.B.

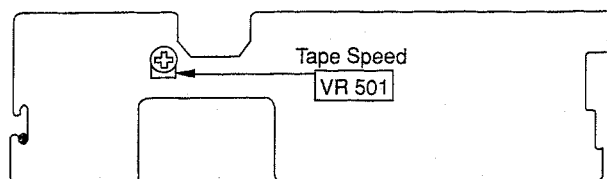
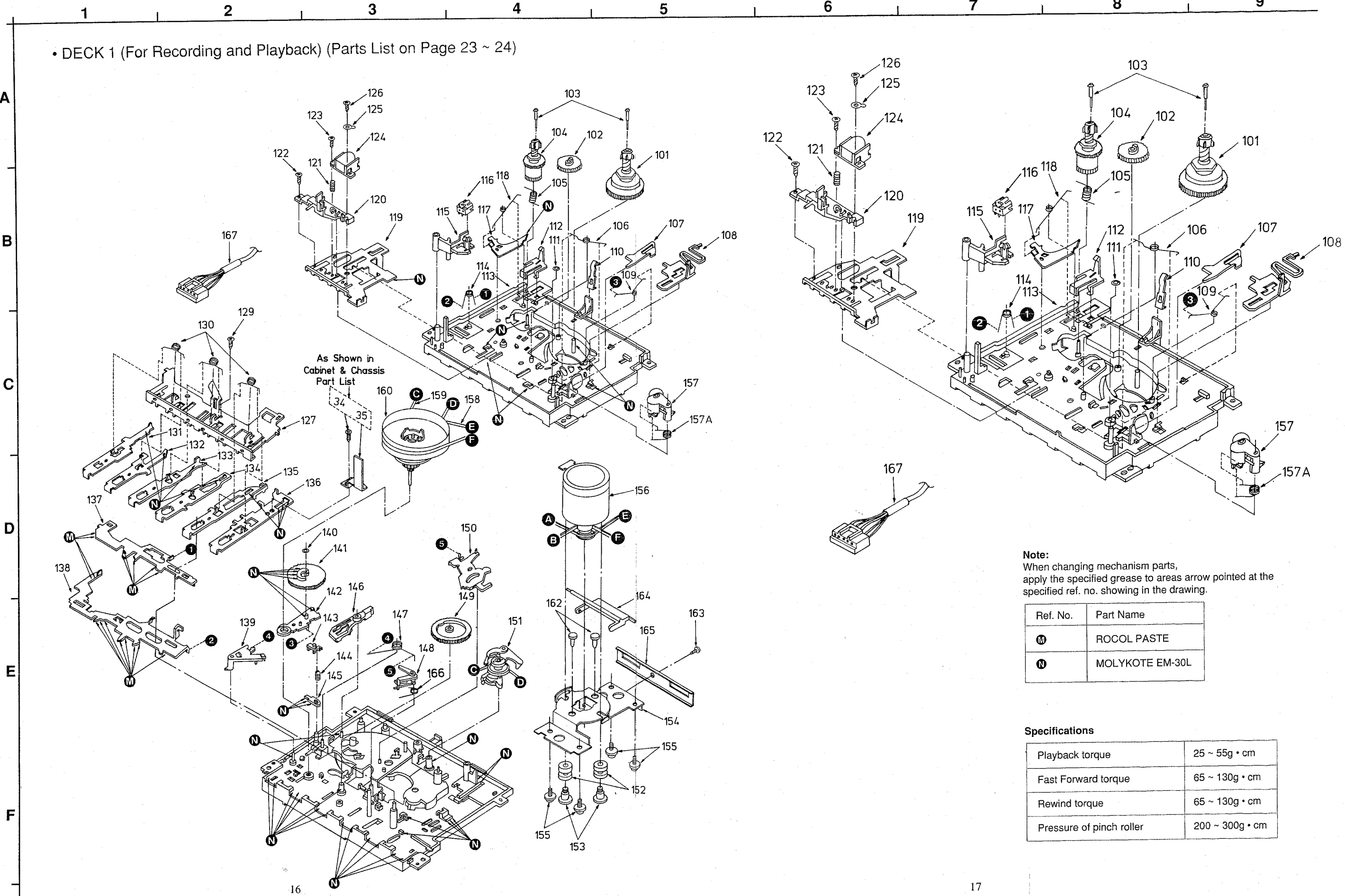


Fig. 6

MECHANISM PARTS LOCATION

SF
<D

• DECK 1 (For Recording and Playback) (Parts List on Page 23 ~ 24)



Note:
When changing mechanism parts,
apply the specified grease to areas arrow pointed at the
specified ref. no. showing in the drawing.

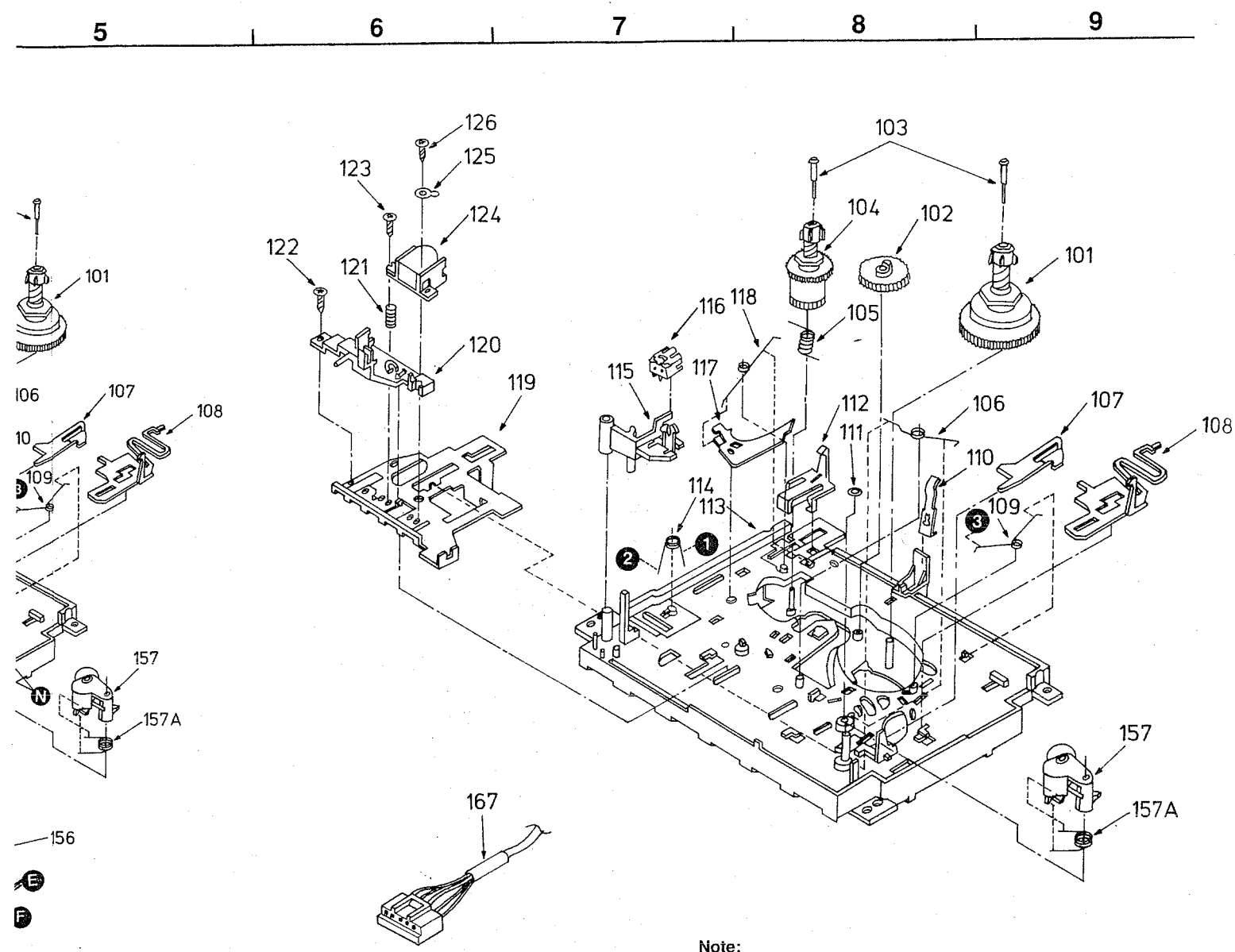
Ref. No.	Part Name
M	ROCOL PASTE
N	MOLYKOTE EM-30L

Specifications	
Playback torque	25 ~ 55g • cm
Fast Forward torque	65 ~ 130g • cm
Rewind torque	65 ~ 130g • cm
Pressure of pinch roller	200 ~ 300g • cm

SF
• The ill.
(The ill

SPRING LOCATION

<DECK 1, DECK 2>

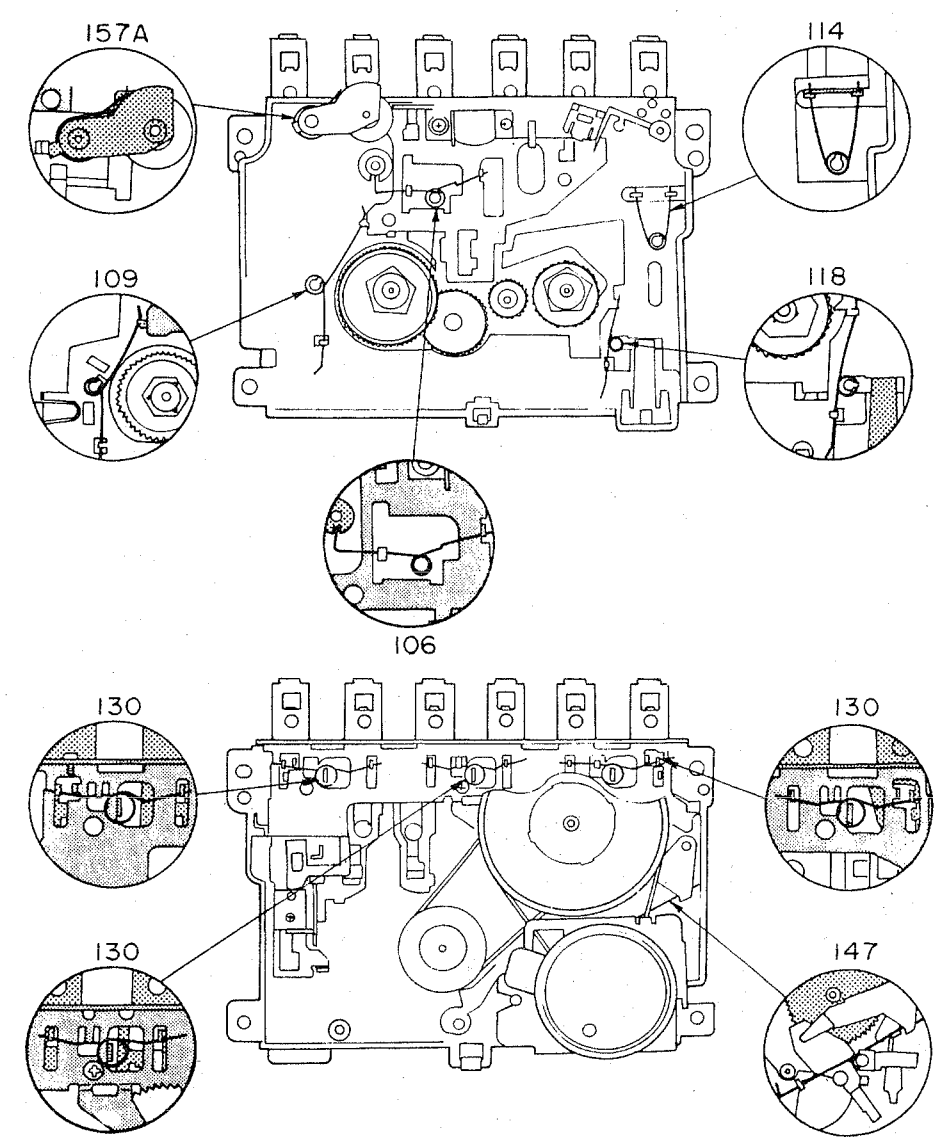


Note:
When changing mechanism parts,
apply the specified grease to areas arrow pointed at the
specified ref. no. showing in the drawing.

Ref. No.	Part Name
M	ROCOL PASTE
N	MOLYKOTE EM-30L

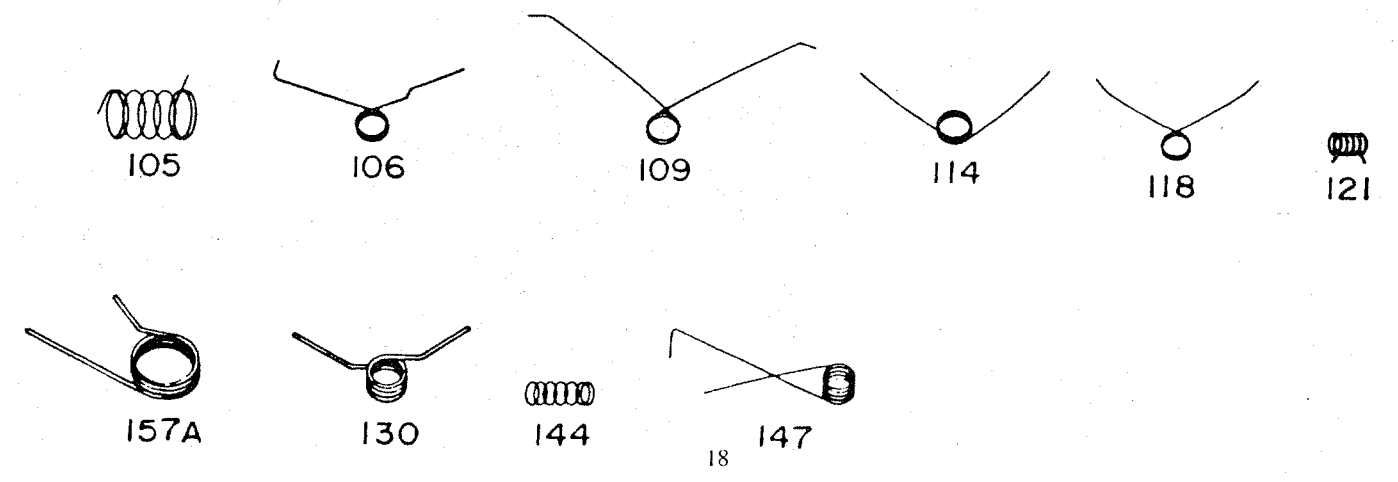
Specifications

Playback torque	25 ~ 55g • cm
Fast Forward torque	65 ~ 130g • cm
Rewind torque	65 ~ 130g • cm
Pressure of pinch roller	200 ~ 300g • cm



SPRING ILLUSTRATION

The illustration shows the actual size of the springs so it can be used to check their shapes.
(The illustration shows the springs separated from the mechanism.)

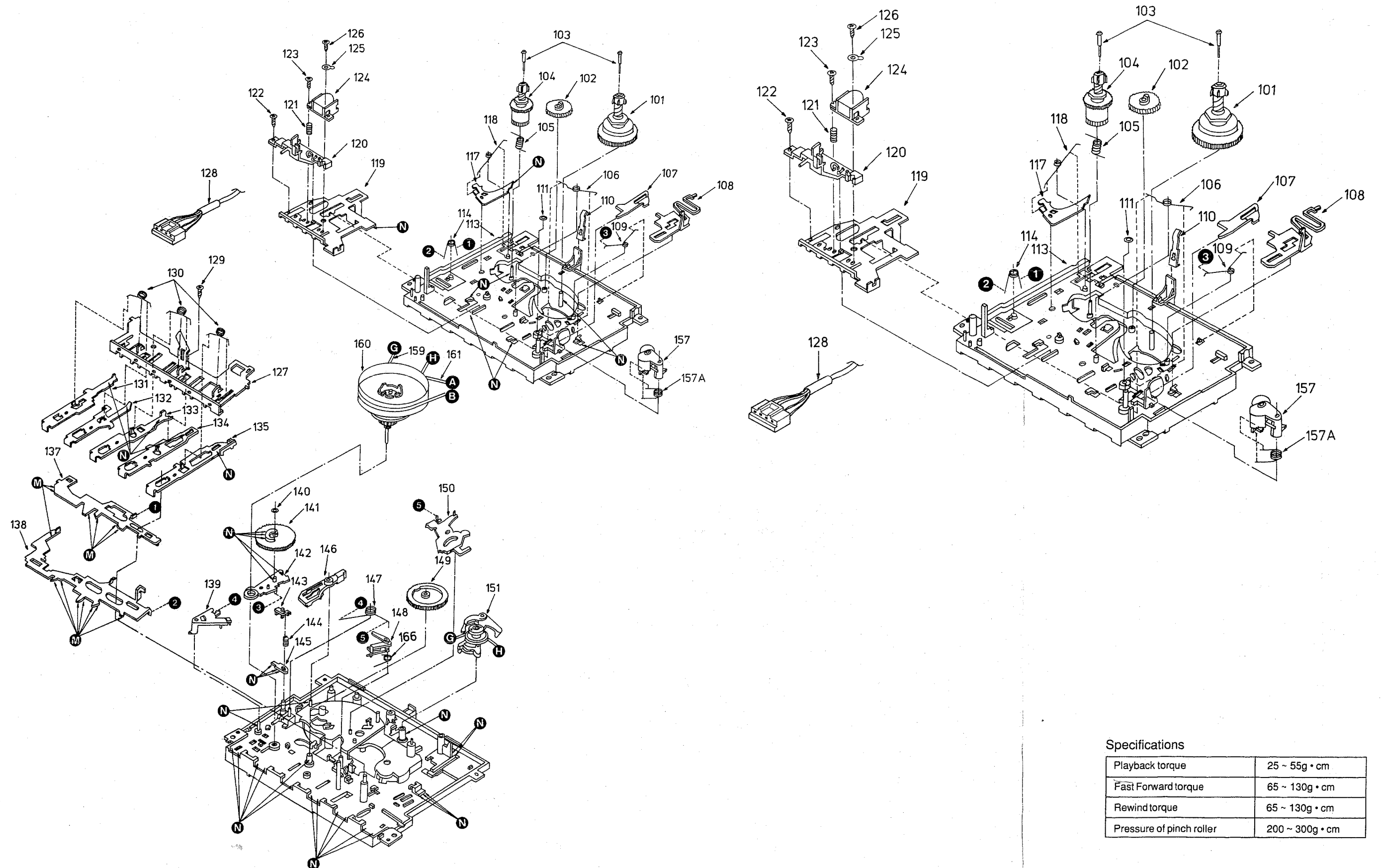


MECHANISM PARTS LOCATION

• DECK 2 (For Playback) (Parts List on Page 23 ~ 24)

A
B
C
D
E
F

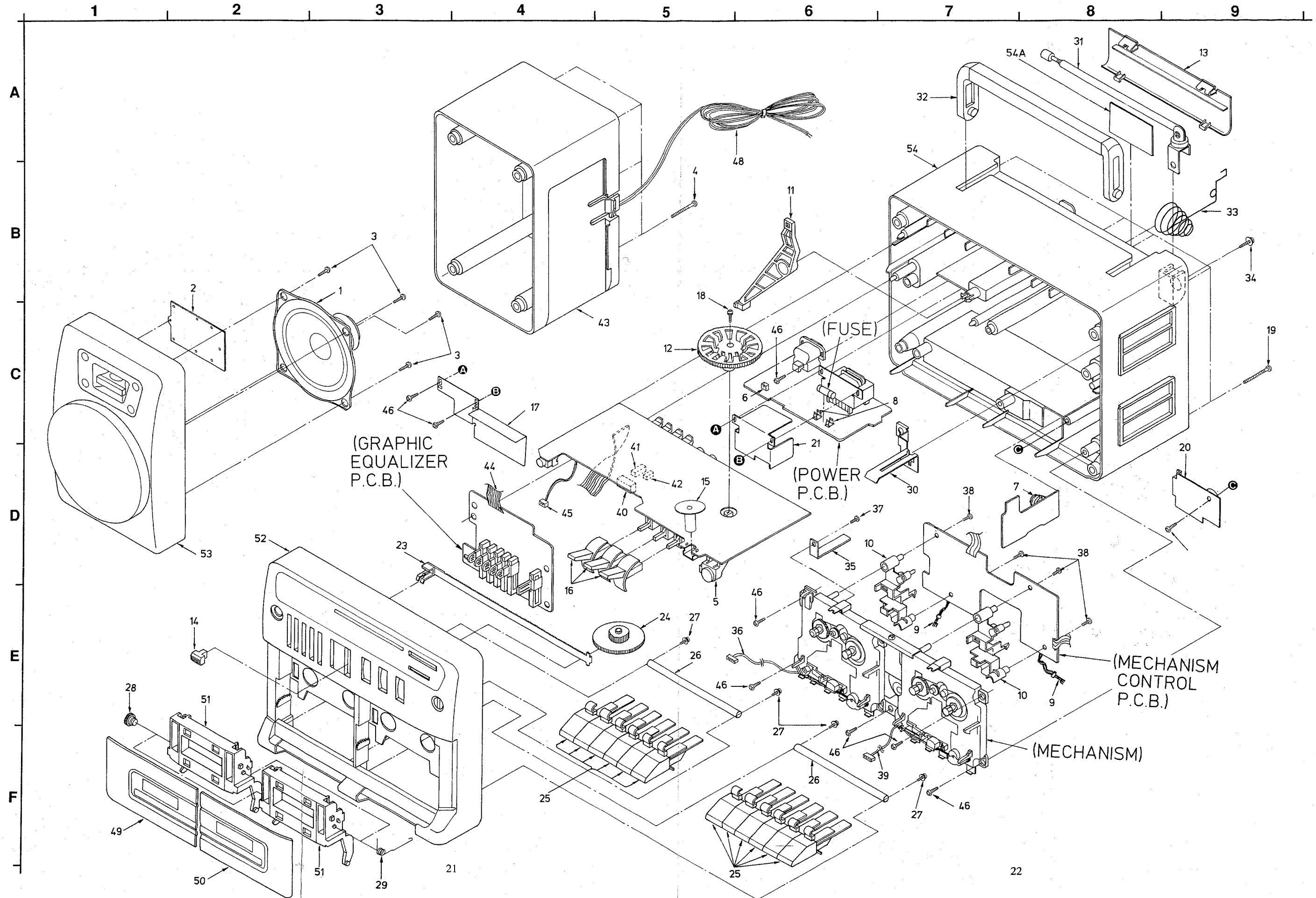
1 2 3 4 5 6 7 8 9



Specifications

Playback torque	25 ~ 55g • cm
Fast Forward torque	65 ~ 130g • cm
Rewind torque	65 ~ 130g • cm
Pressure of pinch roller	200 ~ 300g • cm

■ CABINET PARTS LOCATION



REPLACEMENT PARTS LIST

Notes : * Important safety notice:
Components identified by  mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
* Bracketed indications in Remarks columns specify the area (Refer to the first page for area)
Parts without these indications can be used for all areas.
* [M] Indicates parts that are supplied by MESA.

Ref No.	Part No.	Part Name & Description	Remarks	Ref No.	Part No.	Part Name & Description	Remarks
		CABINET CHASSIS		29	RUS781ZA	EJECT SPRING	[M]
				30	RMAX0002	ANTENNA PLATE	[M]
				31	XEARR175FD-Y	ANTENNA ROD	[M]
1	RAS12P18ZA-F	SPEAKER (WOOFER)	[M]	32	RKX45ZA-0	HANDLE	[M]
2	RAT0009	SPEAKER (TWEETER)	[M]	33	RJC931ZC	BATTERY SPRING	
3	XTV3+8G	SCREW, SPEAKER		34	XYN3+8FY	SCREW	
4	XTV3+20G	SCREW, SPEAKER BOX		35	RMC0076	REC SPRING	[M]
5	RJM164YA	C. MICROPHONE	[M]	36	REXX0009-1	DECK 1 HEAD LEAD	[M]
6	RJP2G4YA	CONNECTOR (CP301)		37	XTN2+4F	SCREW	
7	RJC511ZBS	BATTERY SPRING	[M]	38	XTN2+16GFZ	SCREW	
8	RJF28ZA	FUSE HOLDER		39	REXX0010-1	DECK 2 HEAD LEAD	[M]
9	RSH1A013-J	SW, LEAF	[M]	40	RJS4T5ZA	SOCKET	
10	RMR0368	CHASSIS	[M]	41	RJP4G18ZA	R/P HEAD CONNECTOR (CP2)	
11	RMLX0002	R/P LEVER	[M]	42	RJP5G18ZA	PB HEAD CONNECTOR (CP1)	
12	RDGX0005	VARICON GEAR	[M]	43	RKPX0003-K	SP. REAR CABINET	[M]
13	RKK2SZA-0	BATTERY COVER	[M]	44	RWJ0108150KK	CONNECTOR (W101)	[M]
14	RGVX0003-H	VOLUME KNOB	[M]	45	REXX0013	CONNECTOR (W102)	[M]
15	RGXX0003-K	KNOB, FINE TUNING	[M]	46	XTV3+12G-M	SCREW	
16	RBD562ZA-0	KNOB, SELECTOR	[M]	48	RJE297ZA	SPEAKER CORD	[M]
17	RSCX0004	SHEILD PLATE	[M]	49	RKFX0002	CASSETTE LID (R)	[M]
18	XYN26+C6	SCREW, VARICON GEAR		50	RKFX0003	CASSETTE LID (L)	[M]
19	XTV3+20G	SCREW, CAB.		51	RFKLXCT810PK	CASS. HOLDER ASS'Y	[M]
20	RMVX0005	BATT. HOLE COVER	[M]	52	RFKGXCT810EK	FRONT CAB. ASS'Y	[M] (E, EB)
21	RMC1249ZA	SHEILD PLATE	[M]	52	RFKGXCT810EG	FRONT CAB. ASS'Y	[M] (EG)
23	RGJX0001	POINTER	[M]	53	RFKAXCT810PK	SP. FRONT CAB. ASS'Y	[M]
24	RGXX0006-K	KNOB, TUNING	[M]	54	RKSX0002A-K	REAR CABINET	[M] (E)
25	RGZX0002-K	MECHA BUTTON	[M]	54	RFKHXCT810EK	REAR CABINET ASS'Y	[M] (E, EB)
26	SUX102	MECHA BUTTON FIXTURE	[M]	54	RKSX0002C-K	REAR CABINET	[M] (EG)
27	XTWS3+8T	SCREW, MECHA BUTTON		54A	RGNX0012B-K	NAMEPLATE	[M] (EB)
28	RDG5874ZB	DAMPER GEAR	[M]				

Ref No.	Part No.	Part Name & Description	Remarks	Ref No.	Part No.	Part Name & Description	Remarks
		MECHANISM		107	RML0076	EJECT SELECTION LEVER	[M]
				108	RMM0029	EJECT SLIDE LEVER	[M]
				109	RMB0048-1	IDLER LEVER SPRING	[M]
101	RXR0004	TAKE UP REEL ASS'Y	[M]	110	RMC0061	PACK SPRING	[M]
102	RDG0059	FF RELAY GEAR	[M]	111	RHW16009	CAPSTAN WASHER	[M]
103	RMS0055-1	REEL SHAFT	[M]	112	RML0081-1	RECORD SAFETY LEVER	[M]
104	RXR0005	SUPPLY REEL ASS'Y	[M]	113	RFU189ZA	MECHA CHASSIS ASS'Y	[M]
105	RMB0125	BACK TENSION SPRING	[M]	114	RMB0046-1	LOCK PLATE SPRING	[M]
106	RMB0047	HEAD PANEL SPRING	[M]	115	RML0080	ERASE HEAD ARM	[M]

Ref No.	Part No.	Part Name & Description	Remarks	Ref No.	Part No.	Part Name & Description	Remarks
116	RBR2CY009	ERASE HEAD		143	RMR0211-1	PAUSE BUSH	[M]
117	RML0116	BRAKE ARM		144	RMB0053	PAUSE LEVER SPRING	[M]
118	RMB0109-1	BRAKE SPRING	[M]	145	RML0082	PAUSE LEVER	[M]
119	RMA0107-1	HEAD PANEL	[M]	146	RML0071-1	SWAY LEVER	[M]
120	RMR0149	HEAD BASE	[M]	147	RMB0045-1	A.S. SPRING	[M]
121	RMB0059	AZIMUTH SPRING	[M]	148	RML0075	TRIGGER LEVER	[M]
122	XTN2+4F	HEAD BASE SCREW		149	RDK0005	CAM GEAR	[M]
123	XTN2+8F	AZIMUTH SCREW		150	RML0073-1	PROTECT LEVER	[M]
124	RBR4CM001-M	R/P HEAD	[M]	151	RXP0014	RF CLUTCH ASS'Y	[M]
125	RJR0033	EARTH LUG	[M]	152	RMG0102	MOTOR RUBBER CUSHION	[M]
126	RHD20003	SCREW	[M]	153	RHD26002	SCREW	
127	RMA0109	BACK PLATE	[M]	154	RMA0122	MOTOR BRACKET	
128	REXX0010	HEAD WIRE (DECK 1)	[M]	155	XTW26+6L	SCREW	
129	XTN2+6J	BACK PLATE SCREW		156	RFKPXF1510K	MOTOR ASS'Y	[M]
130	RMB0043-1	ROD OPERATION SPRING	[M]	157	PXP0015	PINCH ROLLER ASS'Y	[M]
131	RMM0027	PAUSE ROD	[M]	157 A	RMB0049	PINCH ROLLER SPRING	[M]
132	RMM0026	STOP ROD	[M]	158	RDV0007	MAIN BELT	[M]
133	RMM0025	FF ROD	[M]	159	RDV0006-1	RF BELT	[M]
134	RMM0024	REW ROD	[M]	160	RXF0012	FLYWHEEL ASS'Y	[M]
135	RMM0023	PLAY ROD	[M]	161	RDV0009	MAIN BELT B	[M]
136	RMM0028	REC ROD	[M]	162	RMG0131	SUPPORT RUBBER, CUSHION	[M]
137	RML0078	FUNCTION PLATE	[M]	163	XTN26+3F	SCREW	[M]
138	RML0077-1	LOCK PLATE	[M]	164	RML0085	PAUSE RELEASE LEVER	[M]
139	RML0072	RELEASE LEVER	[M]	165	RMA0121	ANGLE	[M]
140	RMR0227	IDLER GEAR BUSH	[M]	166	RMB0044	TRIGGER LEVEL SPRING	[M]
141	RDG0057-1	IDLER GEAR	[M]	167	REXX0009	HEAD WIRE (DECK 2)	[M]
142	RML0074	IDLER LEVER	[M]				

Ref No.	Part No.	Part Name & Description	Remarks	Ref No.	Part No.	Part Name & Description	Remarks
				Q501	2SC1684S	TRANSISTOR	
		INTEGRATED CIRCUIT(S)		Q502	2SK301QTA	TRANSISTOR	[M]
						DIODE (S)	
IC 1	AN7205	I.C, FM FRONT END					
IC 2	BA4236L	I.C, FM/AM IF AMP		D 1	RVD1SS133	DIODE	
IC 3	RV1BA1332L	I.C, FM MPX		D301	RVD1SS133	DIODE	
IC 4	AN7317	I.C, LINEAR	[M]	D310	SLB55VR140TA	RED LED	[M]
IC 5	BA3822LS-M	I.C, LINEAR	[M]	D351	RVD1SR35	DIODE	
IC 6	LA4108R	I.C, POWER AMP		D352	RVD1SR35	DIODE	
				D353	RVD1SR35	DIODE	
		TRANSISTOR (S)		D354	RVD1SR35	DIODE	
				D355	RVD1SR35	DIODE	
Q 1	2SC829BTA	TRANSISTOR		D356	RVD1SR35	DIODE	
Q121	2SC1684S	TRANSISTOR		D361	RVD1SS133	DIODE	
Q221	2SC1684S	TRANSISTOR		D371	RVDMTZ6R8BTA	DIODE	
Q341	2SA564RTA	TRANSISTOR				VARIABLE RESISTOR (S)	
Q342	2SC1684S	TRANSISTOR					
Q344	2SC1684S	TRANSISTOR					
Q361	2SC1684RTA	TRANSISTOR					
Q371	2SC2001LTA	TRANSISTOR	[M]	VR 1	RVNCA14B1T-A	V.R, FM VCO	[M]

Ref No.	Part No.	Part Name & Description	Remarks	Ref No.	Part No.	Part Name & Description	Remarks
VR301	RVV2I4G54A	V.R, G. EQ. (10kHz)	[M]				
VR302	RVV2I4G54A	V.R, G. EQ. (3.3kHz)	[M]			CERAMIC FILTER (S)	
VR303	RVV2I4G54A	V.R, G. EQ. (1kHz)	[M]				
VR304	RVV2I4G54A	V.R, G. EQ. (330Hz)	[M]	CF 1	RVF107WDZT	CERAMIC FILTER	
VR305	RVV2I4G54A	V.R, G. EQ. (100Hz)	[M]	CF 2	RVFSFZ459JL	CERAMIC FILTER	[M]
VR306	RVV1I5G15A	V.R, BALANCE	[M]				
VR307	RRV20R03B54A	V.R, VOLUME	[M]			FUSE (S)	
VR501	EVNDXAA00B14	V.R, TAPE SPEED					
				F301	XBA2C12TR0	FUSE	⚠
		VARIABLE CAPACITOR (S)					
						SWITCH (ES)	
VC 1	RCV4RC2V2K-A	V.C, VARICON					
VC 5	RCVMFTPC7B	V.C, FINE TUNING		S1	RST3D28ZA-H	SW, SELECTOR	[M]
CT 4	ECLRA010A53R	TRIMMER		S2	RST3B35ZA-H	SW, MODE	[M]
CT 5	ECRLA020E53R	TRIMMER		S3	RST4H18ZA-H	SW, BAND	[M]
CT 6	ECRLA020E53R	TRIMMER		S4	RSH2F18ZA-A	SW, RECORD	
CT 8	RCVCTZ3110	TRIMMER	(EG)				
						JACK (S)	
		COIL (S) AND TRANSFORMER (S)					
				J101	RJF1098ZA-H	JACK, SPEAKER	[M]
L 1	RLQY30S1	FM COIL		J102	RJF1099YA	JACK, LINE IN	
L 3	RLF6W9-OZ	COIL	[M]	J103	RJJD7S2YA-C	JACK, HEADPHONE	
L 5	RL02B108-M	COIL		J301	RJJ1SE01-H	JACK, AC	⚠
L 6	RLD4Y44	FM OSC COIL	(E, EB)				
L 6	RL04N233-0	COIL	[M] (EG)			PACKING MATERIAL (S)	
L 7	RL01B13-M	COIL					
L 9	RL03B87-M	COIL		P 1	RPH657ZA	MIRAMAT SHEET	[M]
L 10	RLQY30S1	FM COIL		P 2	RPK0267	GIFT BOX	[M]
L 13	RLA3B41-M	COIL		P 3	RPN0462	POLYFOAM	[M]
L341	RL09B17-T	COIL					
L351	RLQZB470KT-D	COIL				ACCESSORIES	
L352	RLQZB470KT-D	COIL					
T 1	RLI4B153-MB	FM IF COIL		A1	RFKSXC810EK	INSTRUCTION MANUAL ASS'Y	[M] (E)
T 2	RLI2B153-M	COIL, AM		A1	RQT1107-G	INSTRUCTION MANUAL	[M] (EB, EG)
T 3	RLI4B153-MB	FM IF COIL		A2	SFDAC05E03	POWER CORD	(E, EG) ⚠
T301	RTP1K1E002-X	POWER TRANSFORMER	[M] ⚠	A2	RJA86ZB-K	POWER CORD	(EB) ⚠

RESISTORS & CAPACITORS

Notes : * Capacitance values are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000k (OHM)

Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks
		RESISTORS						
R2	ERDS2TJ220T	22 1/4W	R9	ERDS2TJ680T	68 1/4W	R16	ERDS2TJ472T	4.7K 1/4W
R4	ERDS2TJ101T	100 1/4W	R10	ERDS2TJ392T	3.9K 1/4W	R17	ERDS2TJ392T	3.9K 1/4W
R5	ERDS2TJ100T	10 1/4W	R11	ERDS2TJ822T	8.2K 1/4W	R18	ERDS2TJ821T	820 1/4W
R7	ERDS2TJ221T	220 1/4W	R12	ERDS2TJ822T	8.2K 1/4W	R19	ERDS2TJ821T	820 1/4W
R8	ERDS2TJ101T	100 1/4W	R13	ERDS2TJ102T	1K 1/4W	R20	ERDS2TJ822T	8.2K 1/4W
			R14	ERDS2TJ392T	3.9K 1/4W	R21	ERDS2TJ102T	1K 1/4W
			R15	ERDS2TJ102T	1K 1/4W			

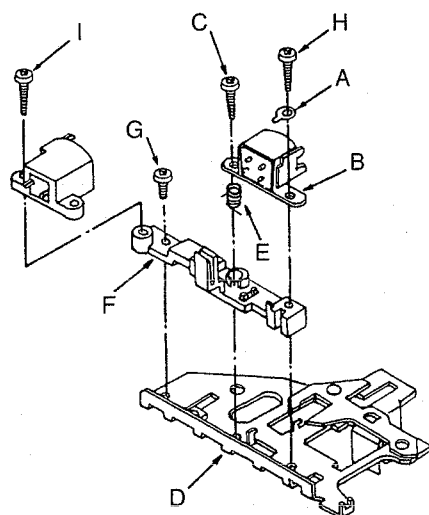
Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks
R22	ERDS2TJ473T	47K 1/4W	R252	ERDS2TJ101T	100 1/4W	C16	ECFR1C223MR	0.022 16V
R24	ERDS2TJ470T	47 1/4W	R261	ERDS2TJ333T	33K 1/4W	C17	ECBT1H331KB5	330P 50V
R26	ERDS2TJ562T	5.6K 1/4W	R301	ERDS2TJ101T	100 1/4W	C18	ECFR1C223MR	0.0022 16V
R55	ERDS2TJ471T	470 1/4W	R302	ERDS2TJ225T	2.2M 1/4W	C19	ECEA0JU221B	220 6.3V
R56	ERDS2TJ334T	330K 1/4W	R303	ERDS2TJ222T	2.2K 1/4W	C20	ECBT1C103MS5	0.01 16V
R57	ERDS2TJ820T	82 1/4W	R311	ERDS2TJ103T	10K 1/4W	C21	ECBT1C103MS5	0.01 16V
R101	ERDS2TJ472T	4.7K 1/4W	R312	ERDS2TJ103T	10K 1/4W	C22	ECBT0J223NS5	0.022 6.3V
R102	ERDS2TJ560T	56 1/4W	R313	ERDS2TJ103T	10K 1/4W	C23	ECEA1CU100B	10 16V
R103	ERDS2TJ222T	2.2K 1/4W	R321	ERDS2TJ221T	220 1/4W	C24	ECFR1C153MR	0.015 16V
R104	ERDS2TJ104T	100K 1/4W	R341	ERDS2TJ562T	5.6K 1/4W	C25	ECEA1HU010B	1 50V
R105	ERDS2TJ333T	33K 1/4W	R342	ERDS2TJ561T	560 1/4W	C27	ECEA1HU010B	1 50V
R106	ERDS2TJ271T	270 1/4W	R343	ERDS2TJ102T	1K 1/4W	C29	ECFR1C223MR	0.022 16V
R107	ERDS2TJ332T	3.3K 1/4W	R344	ERDS2TJ6R8T	6.8 1/4W	C30	ECEA1HU010B	1 50V
R108	ERDS2TJ153T	15K 1/4W	R345	ERDS2TJ223T	22K 1/4W	C31	ECFR1C223MR	0.022 16V
R109	ERDS2TJ104T	100K 1/4W	R346	ERDS2TJ101T	100 1/4W	C32	ECBT0J153MS5	0.015 6.3V
R121	ERDS2TJ103T	10K 1/4W	R347	ERDS2TJ223T	22K 1/4W	C33	ECQP1102JZT	0.001 100V
R122	ERDS2TJ562T	5.6K 1/4W	R348	ERDS2TJ223T	22K 1/4W	C34	ECEA1HUR47B	0.47 50V
R123	ERDS2TJ102T	1K 1/4W	R351	ERG1SJ220P	22 1/4W	C35	ECEA1HUR47B	0.47 50V
R131	ERDS2TJ222T	2.2K 1/4W	R361	ERDS2TJ104T	100K 1/4W	C36	ECEA1HU2R2B	2.2 50V
R132	ERDS2TJ152T	1.5K 1/4W	R362	ERDS2TJ332T	3.3K 1/4W	C37	ECBT1H102KB5	0.001 50V
R133	ERDS2TJ153T	15K 1/4W	R363	ERDS2TJ332T	3.3K 1/4W	C38	ECBT1H471KB5	470P 50V
R134	ERDS2TJ392T	3.9K 1/4W	R364	ERDS2TJ102T	1K 1/4W	C39	ECBT1H102KB5	0.001 50V
R135	ERDS2TJ472T	4.7K 1/4W	R365	ERDS2TJ334T	330K 1/4W	C41	ECBT1H100JC5	10P 50V
R136	ERDS2TJ103T	10K 1/4W	R366	ERDS2TJ101T	100 1/4W	C42	ECBT1H220JC5	22P 50V
R141	ERDS2TJ393T	39K 1/4W	R367	ERDS2TJ332T	3.3K 1/4W	C43	ECBT1H470J5	47P 50V
R141	ERDS2TJ393T	39K 1/4W	R371	ERDS2TJ680T	68 1/4W	C44	ECBT1H1R5MC5	1.5P 50V
R142	ERDS2TJ104T	100K 1/4W	R372	ERDS2TJ471T	47 1/4W	C46	ECBT1H6R8KC5	6.8P 50V
R151	ERDS2TJ2R2T	2.2 1/4W	R501	ERDS2TJ105T	1M 1/4W	C47	ECBT1H100JC5	10P 50V
R152	ERDS2TJ101T	100 1/4W	R502	ERDS2TJ153T	15K 1/4W	C48	ECQP2A221JZT	220P 100V
R161	ERDS2TJ333T	33K 1/4W	R503	ERDS2TJ153T	15K 1/4W	C49	ECQP2A151JZT	150P 100V
R201	ERDS2TJ472T	4.7K 1/4W	R505	ERDS2TJ102T	1K 1/4W	C50	ECQP2A361JZT	360P 100V
R202	ERDS2TJ560T	56 1/4W	R506	ERDS2TJ123T	12K 1/4W	C51	ECQP1392JZ	0.0039 100V
R203	ERDS2TJ222T	2.2K 1/4W	R507	ERDS2TJ103T	10K 1/4W	C52	ECFR1C333MR	0.033 16V
R204	ERDS2TJ104T	100K 1/4W				C55	ECBT1C103MS5	0.01 16V
R205	ERDS2TJ333T	33K 1/4W			CAPACITORS	C56	ECBT1C103MS5	0.01 16V
R206	ERDS2TJ271T	270 1/4W				C61	ECBT1H102KB5	0.001 50V
R207	ERDS2TJ332T	3.3K 1/4W	C1	ECBT1H470J5	47P 50V	C62	ECBT1H102KB5	0.001 50V
R208	ERDS2TJ153T	15K 1/4W	C2	ECBT1H8R2KC5	8.2P 50V	C102	ECEA1CU101B	100 16V
R209	ERDS2TJ104T	100K 1/4W	C3	ECBT1H100JC5	10 50V	C103	ECFR1E273KR	0.027 25V
R221	ERDS2TJ103T	10K 1/4W	C4	ECBT1H102KB5	0.001 50V	C104	ECEA1CU100B	10 16V
R222	ERDS2TJ562T	5.6K 1/4W	C5	ECBT1H240J5	24 50V	C105	ECBT1H102KB5	0.001 50V
R223	ERDS2TJ102T	1K 1/4W	C6	ECBT1H102KB5	0.001 50V	C106	ECEA1CU100B	10 16V
R231	ERDS2TJ222T	2.2K 1/4W	C7	ECBT1C103MS5	0.01 16V	C108	ECBT1H102KB5	0.001 50V
R232	ERDS2TJ152T	1.5K 1/4W	C8	ECBT1H120JC5	12P 50V	C109	ECBT1H102KB5	0.001 50V
R233	ERDS2TJ153T	15K 1/4W	C9	ECBT1H4R7KC5	4.7P 50V	C110	ECBT1H101KB5	100P 50V
R234	ERDS2TJ392T	3.9K 1/4W	C10	ECBT1H180JC5	18P 50V	C131	ECEA1HU010B	1 50V
R235	ERDS2TJ472T	4.7K 1/4W	C11	ECBT1H470J5	47P 50V	C132	ECBT1H471KB5	470P 50V
R236	ERDS2TJ103T	10K 1/4W	C12	ECBT1H120JC5	12P 50V	C133	ECEA1HU010B	1 50V
R242	ERDS2TJ104T	100K 1/4W	C13	ECBT1C103MS5	0.01 16V	C134	ECEA1CU100B	10 16V
R251	ERDS2TJ2R2T	2.2 1/4W	C14	ECBT0J223NS5	0.022 6.3V	C135	ECFR1C473MR	0.047 16V

Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks
C136	ECEA1HU010B	1 50V	C234	ECEA1CU100B	10 16V	C343	ECQP1272JZ	0.0027 100V
C137	ECBT1C103MS5	0.01 16V	C235	ECFR1C473MR	0.047 16V	C344	ECEA0JU221B	220 6.3V
C138	ECEA1HUR33B	0.33 50V	C236	ECEA1HU010B	1 50V	C345	ECBT1C682MR5	0.0068 16V
C139	ECBT1C332MR5	0.0033 16V	C237	ECBT1C103MS5	0.01 16V	C346	ECBT1H102KB5	0.001 50V
C140	ECEA1HU0R1B	0.1 50V	C238	ECEA1HUR33B	0.33 50V	C347	ECKR1H181KB5	180P 50V
C141	ECBT1H102KB5	0.001 50V	C239	ECBT1C332MR5	0.0033 16V	C348	ECKR1H103ZF5	0.01 50V
C142	ECFR1C473MR	0.047 16V	C240	ECEA1HU0R1B	0.1 50V	C349	ECKR1H471KB5	470P 50V
C143	ECBT0J223NS5	0.022 6.3V	C241	ECBT1H102KB5	0.001 50V	C350	ECKR1H103ZF5	0.01 50V
C144	ECEA1HU0R1B	0.1 50V	C242	ECFR1C473MR	0.047 16V	C351	ECKR1H103ZF5	0.01 50V
C151	ECEA1HU010B	1 50V	C243	ECBT0J223NS5	0.022 6.3V	C352	ECKR1H103ZF5	0.01 50V
C152	ECBT1H102KB5	0.001 50V	C244	ECEA1HU0R1B	0.1 50V	C353	ECKR1H103ZF5	0.01 50V
C153	ECEA0JU101B	100 6.3V	C251	ECEA1HU010B	1 50V	C354	ECKR1H103ZF5	0.01 50V
C154	ECEA1AU470B	47 10V	C252	ECBT1H102KB5	0.001 50V	C355	ECKR1H103ZF5	0.01 50V
C155	ECBT1C103MS5	0.01 16V	C253	ECEA0JU101B	100 6.3V	C356	ECKR1H103ZF5	0.01 50V
C156	ECEA1AU102E	1000 10V	C254	ECEA1AU470B	47 10V	C357	ECEA1CU221B	220 16V
C157	ECFR1C683MR	0.068 16V	C255	ECBT1C103MS5	0.01 16V	C361	ECEA1CU100B	10 16V
C158	ECFR1C473MR	0.047 16V	C256	ECEA1AU102E	1000 10V	C362	ECBT1H102KB5	0.001 50V
C202	ECEA1CU101B	100 16V	C257	ECFR1C683MR	0.068 16V	C363	ECFR1C473MR	0.047 16V
C203	ECFR1E273KR	0.027 25V	C258	ECFR1C473MR	0.047 16V	C364	ECEA1HU010B	1 50V
C204	ECEA1CU100B	10 16V	C301	ECEA0JU221B	220 6.3V	C365	ECFR1C333MR	0.033 16V
C205	ECBT1H102KB5	0.001 50V	C302	ECFR1E393KR	0.039 25V	C371	ECEA1EU222E	2200 25V
C206	ECEA1CU100B	10 16V	C303	ECEA1CU330B	33 16V	C372	ECEA1AU221B	220 10V
C208	ECBT1H102KB5	0.001 50V	C304	ECEA0JU471B	470 6.3V	C501	ECEA1CU330B	33 16V
C209	ECBT1H102KB5	0.001 50V	C311	ECEA1CU100B	10 16V	C502	ECEA1CU221B	220 16V
C210	ECBT1H101KB5	100P 50V	C321	ECEA0JU471B	470 6.3V	C503	ECBT1C103MS5	0.01 16V
C231	ECEA1HU010B	1 50V	C331	ECEA1CU100B	10 16V	C504	ECEA1CF221	220 16V
C232	ECBT1H471KB5	470P 50V	C332	ECEA1CU221B	220 16V			
C233	ECEA1HU010B	1 50V	C333	ECBT1C103MS5	0.01 16V			

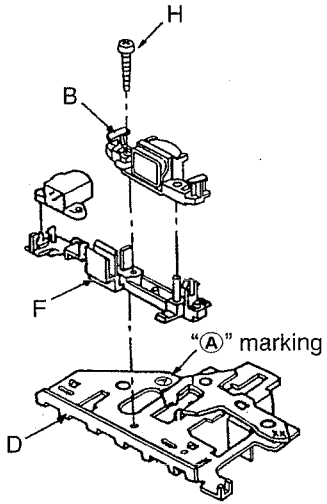
■ For Model:

RX-CT980, RX-DT401, RX-DT610, SA-DH30

■ MECHANISM PARTS LOCATION
(Rec/Playback side)



Original Service Manual



Technical Information

■ PARTS COMPARISON TABLE

Notes : [M] indicates parts that are supplied by MESA.

Ref. No.	Description	Change of Parts Number		Remarks
		Original	 Technical Information	
MECHANISM PARTS LIST				
A	TERMINAL	RJR0033	—	(Deleted)
B	R/P HEAD	RJH4C29MZAS	RBR4CY016-M	(Changed) [M]
C	SCREW	RHD20003	—	(Deleted)
D	HEAD PANEL	RMA0107	RFKRACH46GCK	(Changed) [M]
E	SPRING	RMB0059	—	(Deleted)
F	HEAD BASE	RMR0159	RMQ0383	(Changed) [M]
G	SCREW	XTN2+4F	—	(Deleted)
H	SCREW	XTN2+8F	XTN2+12F	(Changed) [M]
I	SCREW	XTN2+6J	—	(Deleted)

Parts Change Notice

Model No. RX-CT810 E/EG/GC/PC-K
RX-CT840 GC-K

Please revise the original parts list in the Service Manual to conform to the change(s) shown herein. If new part numbers are shown, be sure to use them when ordering parts.

Reason for Change		*The circled item indicates the reason. If no marking, see the Notes in the bottom column.				
1. Improve performance						
② Change of material or dimension						
3. To meet approved specification						
4. Standardization						
5. Addition						
6. Deletion						
7. Correction						
8. Other						
Interchangeability Code		**The circled item indicates the interchangeability. If no marking, see the Notes in the bottom column.				
Parts	Set Production					
A Original	Early	Original or new parts may be used in early or late production set. Use original parts until exhausted, then stock new parts.				
New	Late					
Ⓑ Original	Early	Original parts may be used in early production sets only. New parts may be used in early or late production sets. Use original parts where possible, then stock new parts.				
New	Late					
C Original	Early	New parts only may be used in early or late production sets. Stock new parts.				
New	Late					
D Original	Early	Original parts may be used in early production sets only. New parts may be used in late production sets only. Stock both original and new parts.				
New	Late					
E Other						
Part Number						
Model No.	Ref. No.	Original Part No.	New Part No.	Notes(*,**)	Part Name & Descriptions	
CABINET & CHASSIS						
RX-CT810 E/EG/GC	8	RJF28ZA	EYF52BC	2, B	FUSE HOLDER	
RX-CT810 PC	51	RJF28ZA	EYF52BC	2, B	FUSE HOLDER	
RX-CT840 GC	52	RJF28ZA	EYF52BC	2, B	FUSE HOLDER	

File this Parts Change Notice together with your copy of the Service Manual for Model No. RX-CT810 E/EB/EG

RX-CT810 EP
RX-CT810 G/GC
RX-CT810 P/PC
RX-CT840 G/GC

ORDER NO. : MD9105051C2

MD9108088A2
MD9108086C3
MD9103020C1
MD9107085C3

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MESA Printed in Singapore
P940801550L

T/I NO. : 13508

Service Manual

Portable Stereo Component System

Radio Cassette

RX-CT810

Colour

(K) ... Black Type

Supplement-1

- Please file and use this Supplement Manual together with the Service Manual for Model No. RX-CT810 P,PC Order No. MD9103020C1
RX-CT810 E,EB,EG MD9105051C2
RX-CT810 G,GC MD9108086C3
RX-CT810 GN MD9107082A3
RX-CT810 EP MD9108088A2

- This supplement is intended to provide additional information or corrections to the existing service manual for model No. RX-CT810. Be sure to update your service manual for future reference.

- The mechanism unit in Model RX-CT810 has been modified during mid-production for improved operation.
Major change of old mechanism to modified mechanism :

R/P HEAD ⇒ AZTEC HEAD.

AZTEC HEAD : R/P Head with self alignment capability of azimuth.

Area

Suffix for Model No.	Area	Colour
(E)	Europe	(K)
(EB)	Great Britain	
(EG)	Germany & Italy	
(EP)	Poland	
(P)	U.S.A	
(PC)	Canada	
(G)	Third Region	
(GC)	Saudi Arabia & Kuwait	
(GN)	Oceania	

How to identify the unit with a modified mechanism

- The unit with a modified mechanism can be identified by their serial number suffix label affixed on the rear side of the unit. (Refer to Table 1)
A serial number consists of 10 alphanumeric characters.
A unit with a modified mechanism has a "C" onward suffix number.
- The modified mechanism can also be identified by a (A) marking on the Head panel of the mechanism. (Refer to Figure 1)

eg. ○○○○○○ ○○○○○○

↑
SUFFIX

D U 1 E **B** 2 3 4 5 6 (Old mechanism)

D U 1 E **C** 2 3 4 5 6 (Modified mechanism)

↙ suffix "C" onward is modified mechanism

[Table 1]

Applicable Model	Serial No. Suffix
RX-CT810 P,PC	E
RX-CT810 E,EB,EG	C
RX-CT810 GC	D
RX-CT810 G,GN	C

- This Service Manual Supplement is strictly used for unit with a modified mechanism.

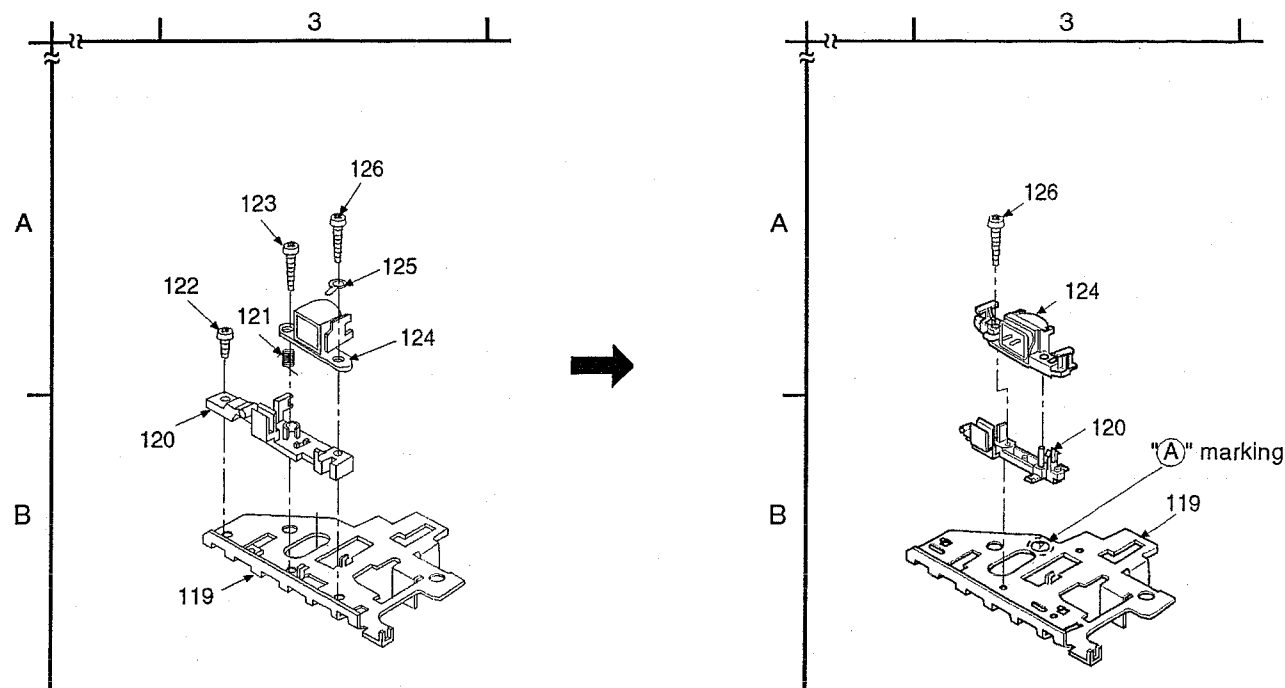
⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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MECHANISM PARTS LOCATION



RX-CT810 (ORIGINAL)

RX-CT810 (SUPPLEMENT)

PARTS COMPARISON TABLE

Notes: [M] Indicates parts that are supplied by MESA.

Ref. No.	Description	Change of Parts Number		Remarks
		Original	➡ Supplement	
MECHANISM PARTS LIST				
119	HEAD PANEL [M]	RMA0107	RMA0696	(Changed)
120	HEAD BASE [M]	RMR0149	RMQ0384	(Changed)
121	SPRING [M]	RMB0059	_____	(Deleted)
122	SCREW	XTN2+4F	_____	(Deleted)
123	AZIMUTH SCREW [M]	RHD20003	_____	(Deleted)
124	R/P HEAD [M]	RBR4CM001-M	RBR4CY016-M	(Changed)
125	EARTH LUG [M]	RJR0033	_____	(Deleted)
126	SCREW [M]	XTN2+8F	XTN2+12F	(Changed)