ORDER NO. TD96030546C3

Service Manual

DOLBY SYSTEM*

Stereo Radio Cassette Player

Radio Cassette

RQ-V203

Colour

(K)····· Black Type

Area

Suffix for Model No	Areas	Colour
[GC]	Asia, Latin America, Middle Near East and Africa areas.	(K)
[GN]	Oceania	

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

■ SPECIFICATIONS

General:

Power Requirement:	Battery; 3V [Two "AA" size, (R6/LR6) batteries] AC; with optional AC adaptor RP-AC31
Power Output:	12mW(6.0mW×2)···RMS (max.)
Input:	DC IN; 3V (⟐⊂⟐)
Output:	Headphones; 16Ω, φ3.5
Dimensions:	114.3(W)×86.6(H)×37.9(D)mm
Weight:	185g without batteries

Radio Section:

Radio Frequency Range:	FM; 87.5~108MHz (0.05MHz step) AM; 531~1602 kHz(9kHz step) 530~1600kHz (10kHz step)
Intermediate Frequency:	FM; 10.7MHz AM; 450kHz
Sensitivity:	FM; 5.62μV/0.5mW output (−3dB Limit, Sens) AM; 398μV/m/0.5mW output

Tape Deck Section:

Frequency Response:	40~16,000Hz (Normal, CrO_2/Metal)
Tape Speed:	4.8cm/s
Program Time:	1 hour with C-60 cassette tape
Track System:	4-track, 2-channel stereo playback

Notes:

1. Weights and dimensions shown are approximate.
2. Design and specifications are subject to change without notice.

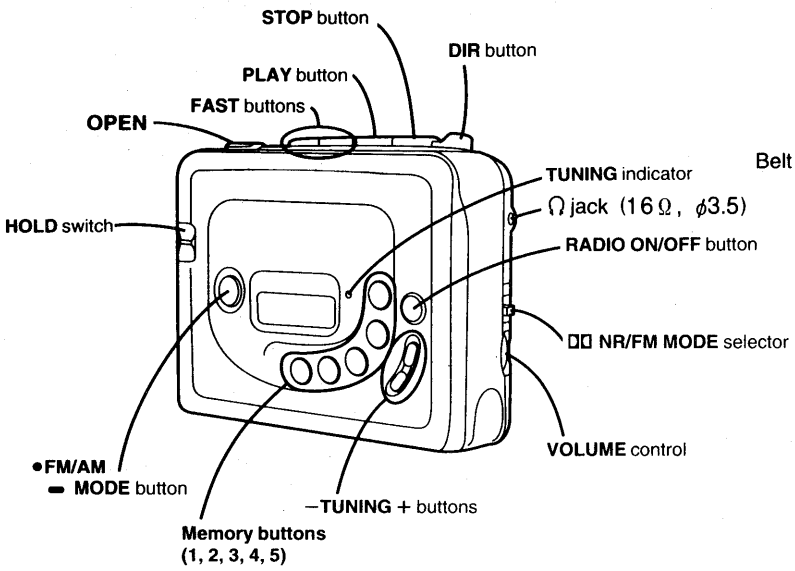
⚠ WARNING

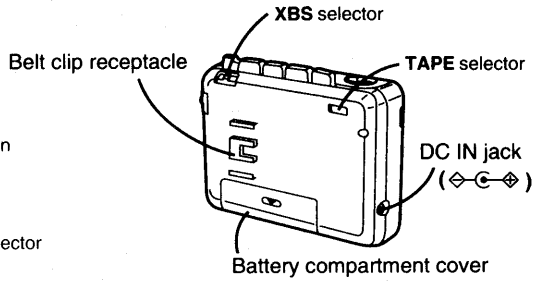
This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should 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.

Panasonic®

Contents

■ LOCATION OF CONTROLS





■ DISASSEMBLY INSTRUCTIONS

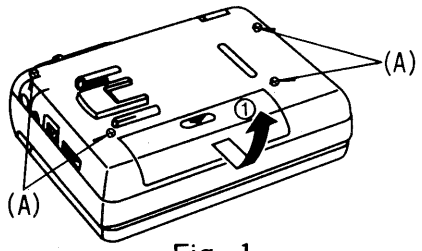


Fig. 1

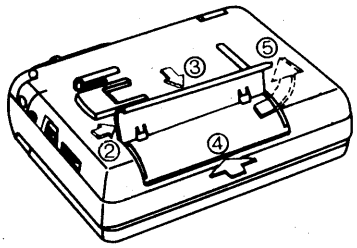


Fig. 2

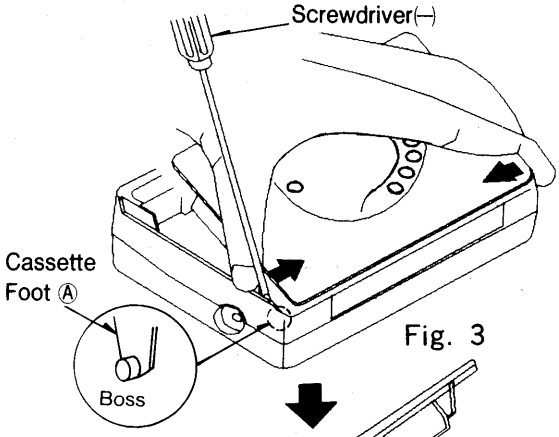


Fig. 3

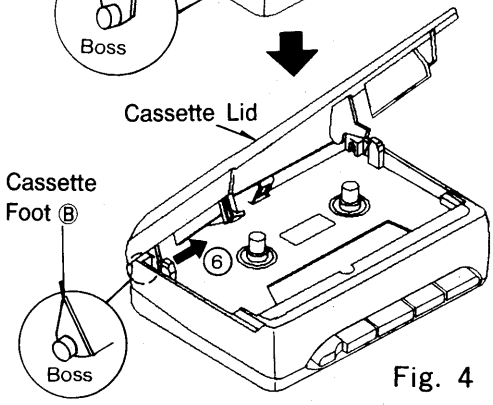


Fig. 4

● Removal of the battery cover and Rear Cabinet

1. Open the battery cover in the direction of arrow①.
2. Remove the battery cover in the direction of arrow ② and ③.
3. Remove the screws (A) (2×10)mm×4.
4. Remove the rear cabint in the direction of arrow④&⑤.

● How to Removal of the Cassette Lid

Note: Be careful not to break cassette foots Ⓐ and Ⓑ when removing the cassette lid.

1. Strongly press two sides of the cassette lid, then it was bent a little.
2. With a (–) screwdriver as shown in Fig 3, and pull out the right-side of the cassette lid.
3. By the direction of⑥, remove the cassette foot.

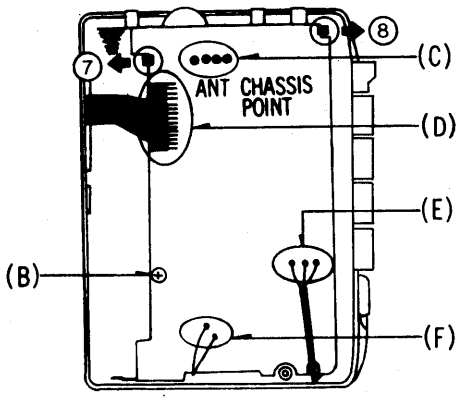


Fig. 5

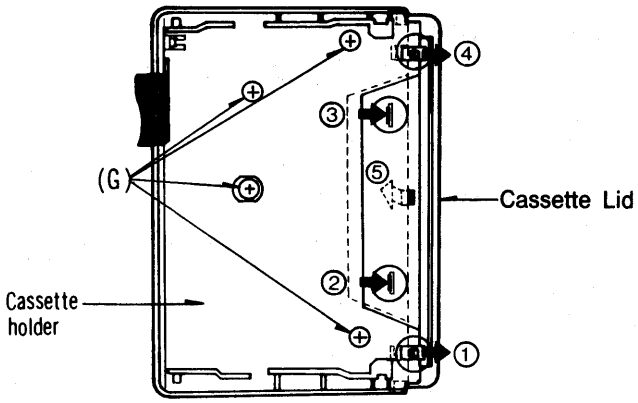


Fig. 6

●Removal of ANT Chassis and Circuit Board (Fig. 5)

1. Remove the screw (B) (2×6)mm×1.
2. Disconnect the solder(C).
3. Remove the ANT chassis in the direction of arrow ⑦, ⑧.
4. Remove the solder(D).(E).(F) from flexible P.C.B.

●Removal of the LCD P.C.B. (Fig. 6)

1. Remove the screws (G) (1.4×3.5)mm×4.
2. Remove the Cassette holder in the direction of arrow ①,②,③,④,⑤.
3. Remove the LCD P.C.B.

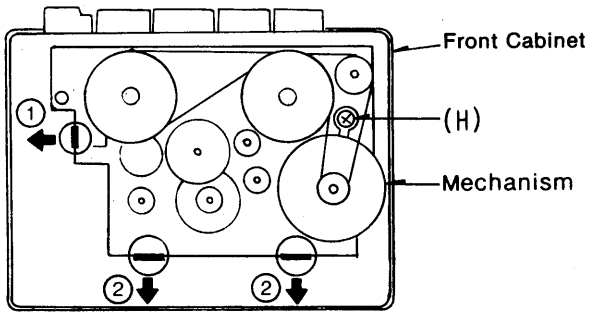


Fig. 7

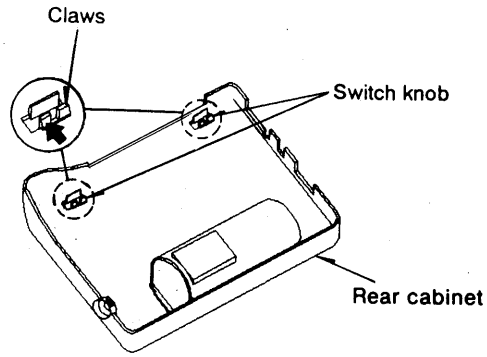


Fig. 8

●Removal of the Front Cabinet and Mechanism

1. Remove the deck screw (H) (2×6)mm×1
2. Remove the front cabinet & mechanism in the direction of arrow ①, ②.

● Removal of the switch knobs (Fig. 8)

1. Release the claws of knobs in the direction of arrow, and then remove the switch knobs.

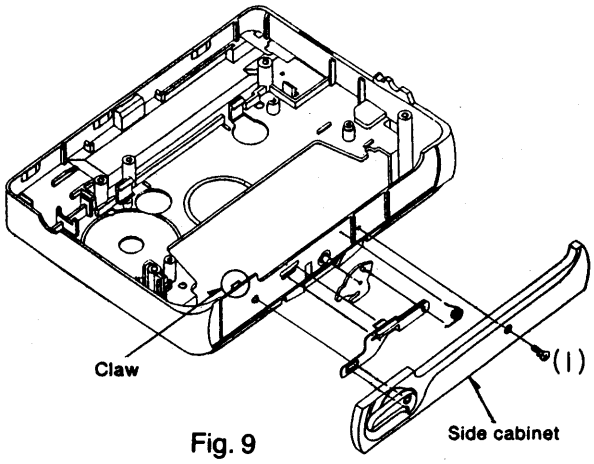


Fig. 9

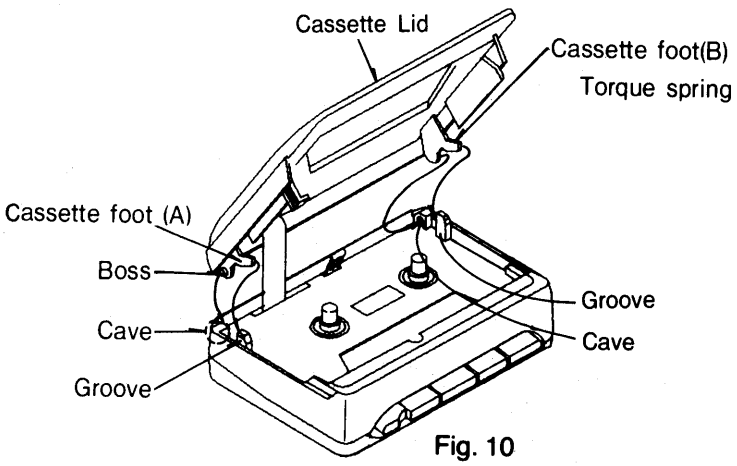


Fig. 10

●Removal of the side cabinet

1. Remove the screw (I)×1.
2. Remove the claw.
3. Remove the side cabinet.

●How to Replace the Cassette Lid Spring

1. Enter the cassette foot (A) into the groove of the case body.
2. Enter the boss of the cassette foot into the cave.
3. Enter the cassette foot (B) into the groove of the case body.

■ REPLACEMENT PARTS LIST

Notes: Ⓣ Indicates parts that are supplied by TAMACO

Ref. No.	Parts No.	Parts Name & Description
INTEGRATED CIRCUITS, TRANSISTORS AND DIODES		
IC1	AN6612SE2	I.C.MOTOR DRIVE
IC2 Ⓣ	TA8122AFT	I.C.FM RF/IF AMP
IC3 Ⓣ	LA4571MBT	I.C.PRE/POWER AMP
IC4 Ⓣ	BA1106FT	I.C.DOLBY
IC201 Ⓣ	TC9316FB071	I.C.MICRO COMPUTER
IC202	S80719SLAGT1	I.C.RESET
IC203	TD6134AFT	I.C.RESET
Q1,3,5,11 Ⓣ	RVTDTC144EUX	Transistor
Q2,6,13 Ⓣ	2SA1577QT106	Transistor
Q4 Ⓣ	RVTDTA143XUX	Transistor
Q7	2SB1132RTX	Transistor
Q8 Ⓣ	RVTDTC143TUX	Transistor
Q9 Ⓣ	RVTDTC124EUX	Transistor
Q10 Ⓣ	2SC4326LKSTX	Transistor
Q14 Ⓣ	RVTDTA124EUX	Transistor
Q201,202, 204,205 Ⓣ	2SC4081RTX	Transistor
Q203 Ⓣ	2SK303V3TB	F.E.T.
D1 Ⓣ	SB07-03CTX	Diode
D3,4 Ⓣ	KV1450TLA3-4	Diode
D5,202,210 Ⓣ	RVDDAN202UTX	Diode
D6 Ⓣ	KV1560TL3-0	Diode
D204,207, 208,209	LN1261CTR	L.E.D.
D205 Ⓣ	DCC010TX	Diode
D206 Ⓣ	DZD12YTB	Diode
COILS AND TRANSFORMERS		
L1 Ⓣ	RL04Y254-L	Antenna Coil FM
L2 Ⓣ	RL04Y15-2	Oscillator Coil FM
L3 Ⓣ	RL02A011M-M	Oscillator Coil AM
L4 Ⓣ	REKT0006	Bar Antenna Ass'y (Withe Antenna Chassis)
L5 Ⓣ	RLQZ010KM-M	Choke Coil RF
L201 Ⓣ	RL09U019T-M	Oscillator Coil
T1 Ⓣ	RLI2A37M-M	I.F.T. AM

Ref. No.	Parts No.	Parts Name & Description
VARIABLE RESISTORS		
VR1 Ⓣ	EVNDXAA02B32	V.R.Tape Speed
VR2	EVUBAAT50A54	V.R. Volume
TRIMMER CAPACITOR		
CT1	ECRLA010A53R	Trimmer CAP
CERAMIC FILTERS AND CRYSTAL		
CF1,2 Ⓣ	RLFFETWL06AD	Ceramic Filter FM
CF3 Ⓣ	RLFDFT15AD	Ceramic Filter FM
CF4 Ⓣ	RVFPFA450AR3	Ceramic Filter AM
CX1 Ⓣ	RSXZ456KM05	Ceramic Crystal AM
CRYSTAL		
X201 Ⓣ	RSXD75K0S07	Crystal
LCD		
LCD201 Ⓣ	RSL5124-P	L.C.D.
COMPONENT COMINATION		
Z1	RCRBMT002-H	Band Pass Filter
SWITCHES		
S1 Ⓣ	RSH1A021-I	SW, Motor
S2 Ⓣ	RSS2B54VA-K	SW, DX/LOCAL
S3 Ⓣ	RSS2B013-A	SW, MET/NOR
S4 Ⓣ	RSS2B017-K	SW, SBX
S5 Ⓣ	RFA117ZA	SW, FWD/REV
S201	RSS2A010-1A	Switch,Hold
JACKS		
J1 Ⓣ	RJJ43K08-H	DC IN Jack
J2 Ⓣ	RJJD3S5ZB-C	Headphones Jack

Ref. No.	Parts No.
RESISTORS	
R1,2	ERJ6GEYJ122V
R3,4	ERJ6GEYJ393V
R5,6	ERJ6GEYJ273V
R7,8	ERJ6GEYJ684V
R9,10,50, 66	ERJ6GEYJ102V
R11,12	ERJ6GEYJ473V
R14,15	ERJ3GEYJ102V
R16,17	ERJ3GEYJ224V
R18,19	ERJ3GEYJ822V
R20	ERJ3GEYJ560V
R21,23	ERJ3GEYJ473V
R22,24	ERJ3GEYJ332V
R25,27	ERJ3GEYJ824V
R26	ERJ3GEYJ434V
R28	ERJ6GEYJ434V
R29 Ⓣ	ERSL39JR70U
R30 Ⓣ	ERJ6GEYJ1R2V
R31,33	ERJ6GEYJ821V
R32	ERJ6GEYJ103V
R34,42,43	ERJ6GEYJ472V
R35,38	ERJ6GEYJ471V
R36,39,65, 69	ERJ6GEYJ223V
R37,68	ERJ6GEYJ104V
R40	ERJ6GEYJ105V
R41	ERJ6GEYJ4R7V
R51	ERJ3GEYJ103V
R52,57,58, 61	ERJ3GEYJ104V
R53 Ⓣ	ERJ6GEYJ1R8V
R54	ERJ3GEYJ4R7V
R55	ERJ3GEYJ153V
R56	ERJ3GEYJ152V
R59	ERJ3GEYJ473V
R60	ERJ3GEYJ472V
R64	ERJ3GEYJ470V

Ref. No.	Parts No.
R70	ERJ6GEYJ151V
R71,72	ERJ6GEYJ683V
R201	ERJ6GEYJ101V
R202,223, 224,227	ERJ6GEYJ104V
R203	ERJ6GEYJ333V
R204,205, 210,221, 228,237	ERJ6GEYJ102V
R206,231	ERJ6GEYJ103V
R208	ERJ6GEYJ272V
R209	ERJ6GEYJ474V
R215,216, 217,218	ERJ6GEYJ472V
R219,220, 222	ERJ6GEYJ684V
R225	ERJ6GEYJ153V
R230,234	ERJ6GEYJ151V
R232	ERJ6GEYJ271V
R233	ERJ6GEYJ152V
R235	ERJ6GEYJ682V
R236	ERJ6GEYJ121V
CHIP JUMPERS	
RJ1~5,RJ11 202~204	ERJ6GEY0R00V
RJ6,7	ERJ3GEY0R00V
CAPACITORS	
C1,2,12,13 40,69,87	ECUV1H102KBN
C3 Ⓣ	RCST0GX226RR
C4,15	ECEA0JKS220I
C5,6	ECUV1H101KCN
C7,8,30,32	ECUV1H472KBV
C9,78	ECUV1H681KBN
C10,11,25, 26,77,85	ECUVNC105ZFN

Ref. No.	Parts No.
C14	RCST1CY105RR
C16,29,45	ECEA0GKS221I
C17,80	ECUV1C683MBN
C18	ECUV1H220KCV
C19,20	ECUV1H150JCV
C21,22	ECUV1H272MBV
C23,24	ECUV1C684ZFN
C27,47,54, 55,93	ECUV1H102KBV
C28,31,34	ECUV1C333MBV
C33,35	ECUV1E103MBN
C36	ECUV1C333MBN
C37,56,61, 70	ECUV1C104ZFV
C38,67,79, 81	ECUV1C104ZFN
C39	ECEA1HKS010I
C41	ECUV1C223MBN
C42,43,44, 60,86	ECUV1H221KBN
C48	ECEA1CKS100I
C50	ECUV1H470KCN
C52,76	ECUV1H470KCV
C53	ECUV1H020CCV
C57	ECUV1H680KCN
C58,65	ECUV1E103MBV
C59,83	ECEA0GKS101I
C62,63,71, 73	ECUV1H100DCV
C64	ECUV1H391GCN
C72	ECUV1H020CCN
C74	ECUV1C223MBV
C84	ECEA0GKS330I
C88,89	ECUV1C153MBN
C90,91	ECUV1C473MBN
C201,202	RCST0GY475RE
C203,233	ECUVNC105ZFN

Ref No.	Parts No.
C204,215, 216,217, 218,219, 229,238, 240,243	ECUV1H103ZFN
C205	ECUV1H151KCN
C206	ECUV1H070DCN
C207,209, 228	ECUV1E103MBN
C208	ECUV1H121JCN
C210	ECST1CY105RR
C211,221	ECUV1H102KBN
C212,231, 235	ECUVNC105ZFN
C214,223, 224,225, 230,242	ECUV1C104ZFN
C222	ECUV1C104MBN
C226	ECUV1H120JCN
C227	ECUV1H150JCN
C234	ECUV1H101KCN
C236	ECUV1H331KBN
C245	ECUV1H221KBN

■ MEASUREMENTS AND ADJUSTMENTS

● ADJUSTMENT POINT

Please refer to the Printed Circuit Board and Wiring connection Diagram for test point locations.

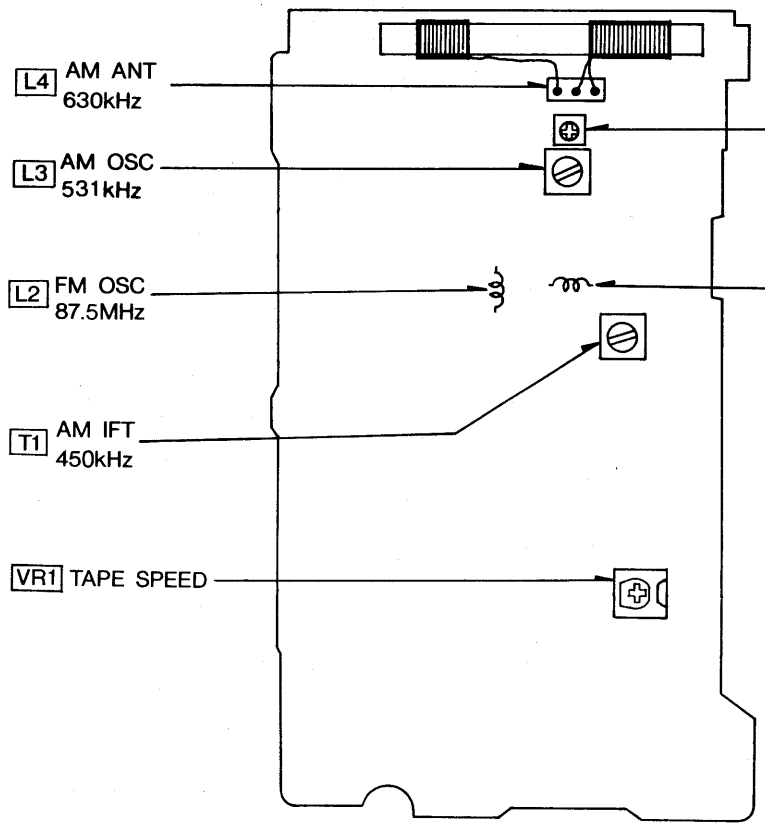


Fig. 1

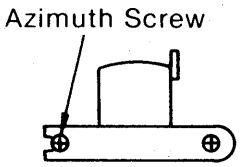


Fig. 2

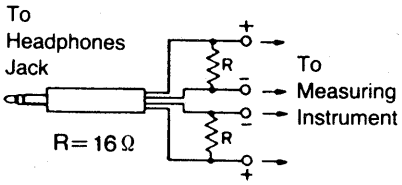
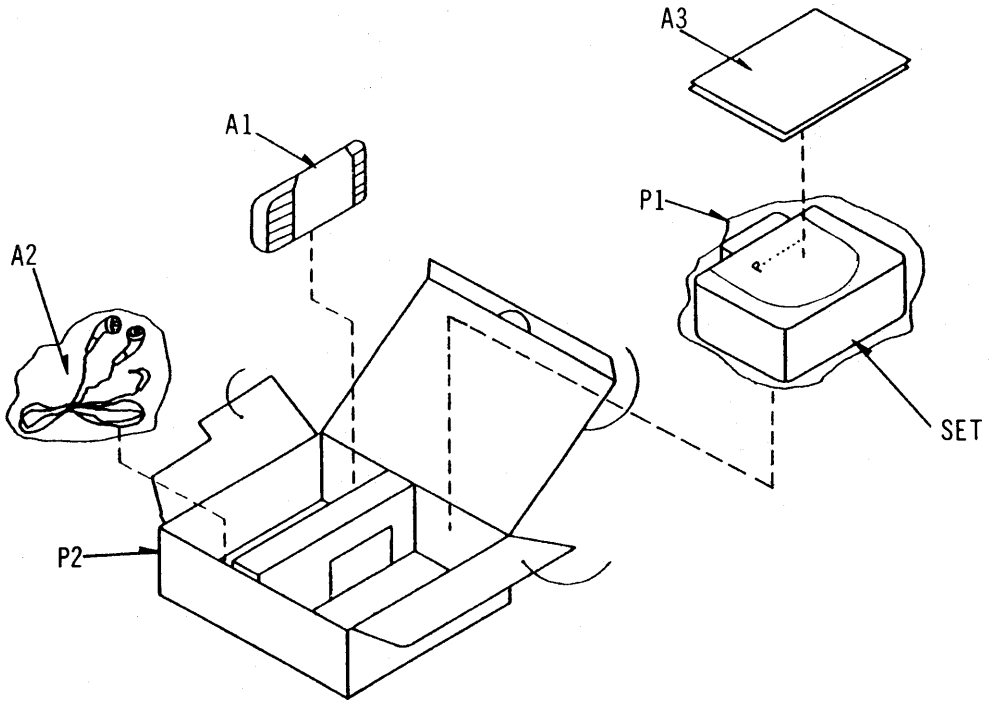


Fig. 3

■ PACKAGING



● ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

1. Set volume control to maximum.
2. Set band selector switch to AM or FM.
3. Set Function selector switch to radio or tape.
4. Set Tape Selector Switch to normal.
5. Set power source voltage to 3.0V DC.
6. Output of signal generator should not be higher than necessary to obtain an output reading.
7. Make sure heads are clean.
8. Make sure capstan and pinch roller are clean.

● TUNER SECTION

AM ADJUSTMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT POINT	REMARKS
		CONNECTIONS	FREQUENCY				
	AM-IF ADJUSTMENT						
(1)	AM	Fashion a loop of several turns of wire and radiate signal into loop of receiver.	450kHz 30% Mod. at 400Hz	Point of non-interference. (on/ about 600kHz)	Headphones Jack (16Ω) (Refer to Fig.3)	T1 (AM IFT)	Adjust for maximum output.
	AM-RF ADJUSTMENT						
(2)	AM	〃	531kHz	Tuning capacitor fully closed.	〃	L3 (AM OSC Coil)	Adjust for maximum output.
(3)	AM	〃	630kHz	Tune to signal.	〃	(*1) L4 (AM ANT Coil)	Adjust for maximum output. Adjust L4 by moving coil bobbin along ferrite core.
(4)	AM	〃	1494kHz	〃	〃	CT1 (AM ANT Trimmer)	Adjust for maximum output. Repeat steps (2)~(4).
	(*1) Cement antenna bobbin with wax after completing adjustment.						

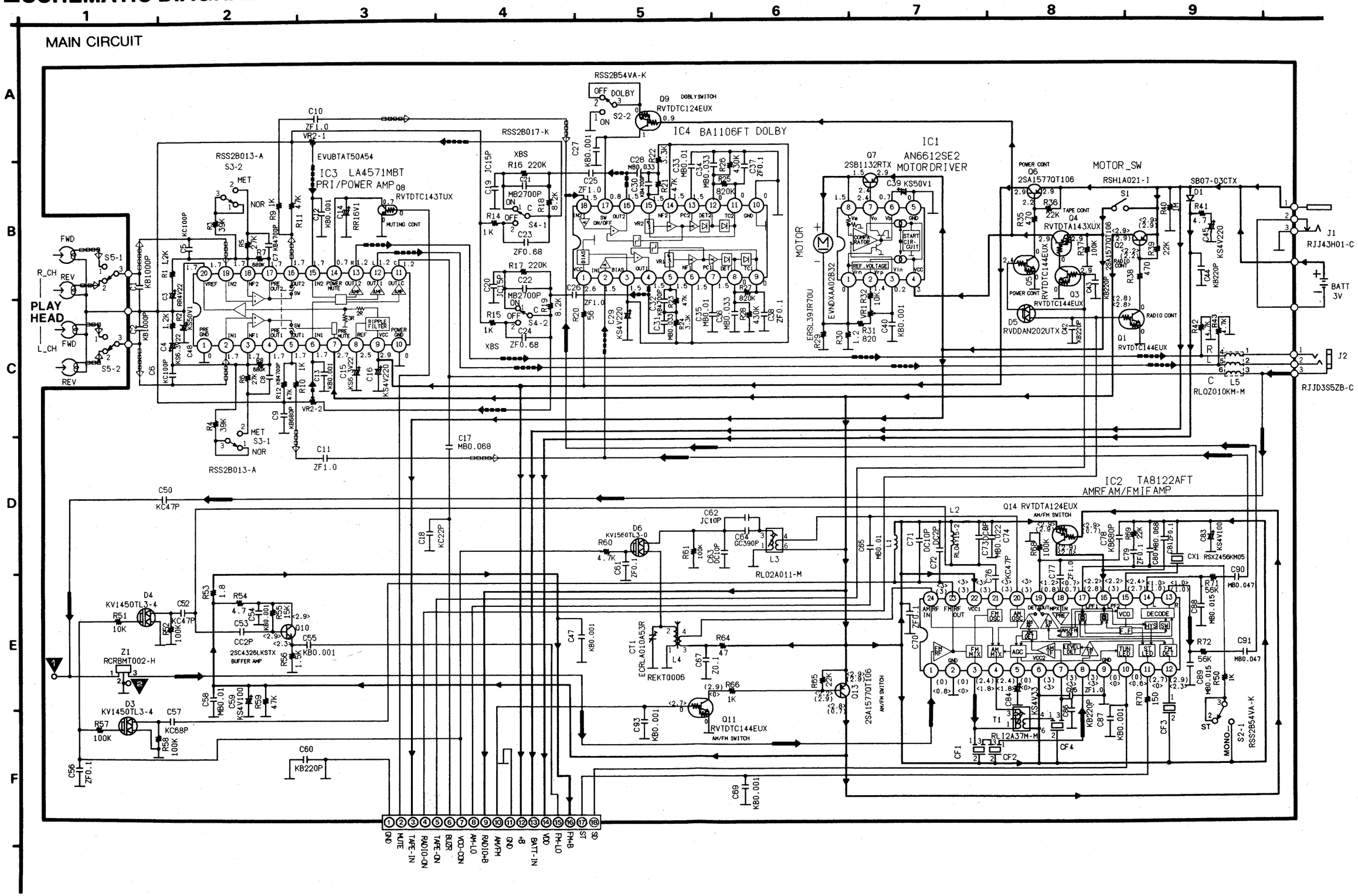
FM ADJUSTMENT

	BAND	SIGNAL GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT POINT	REMARKS
		CONNECTIONS	FREQUENCY				
	FM-RF ADJUSTMENT						
(1)	FM	Connect to test point ▼1 through FM dummy antenna. Negative side to test point ▼2.	87.5 MHz	Variable capacitor fully closed.	Headphones Jack (16Ω) (Refer to Fig.3)	L2 (FM OSC Coil)	(*2) Adjust for maximum output.
(2)	FM		90.1 MHz	Tune to signal.	〃	L1 (FM ANT Coil)	〃
	(*2) Three output responses will be present; proper tuning is the center frequency.						

● TAPE DECK SECTION

ITEM	INPUT	MEASUREMENT POINT	ADJUSTMENT POINT	PROCEDURE
(A) Azimuth	QZZCFM (8kHz, −20dB)	Headphones Jack (16Ω) (Fabricate the plug as shown in Fig. 3 and then connect the lead wires of the plug to the measuring instrument.)	Azimuth adjustment screw (Refer to Fig.2)	Adjust the azimuth adjustment screw during repeated forward and reverse playback to obtain the maximum head azimuth allgnment with both channels equal. Then screw-lock the adjustment in place.
(B) Tape speed	QZZCWAT (3kHz, −10 dB)		VR1 (Refer to Fig.1)	Playback the central part of the tape and adjust VR 1 so that the tape speed is as follows. 3000±60Hz (Forward & Reverse)

■SCHEMATIC DIAGRAM



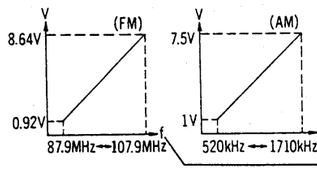
■SCHEMATIC DIAGRAM

LCD CIRCUIT

Notes:

- ●S1: Motor switch in "OFF" position.
- ●S2-1: FM mode switch in "ST" position. (1···MONO,2···ST)
- ●S2-2: Dolby NR switch in "OFF" position.
- ●S3-1, 3-2: Tape selector switch in "NOR" position, (1···NOR,2···CrO_2/MET)
- ●S4-1, 4-2: XBS switch in "ON" position. (1···ON, 2···OFF)
- ●S5-1, 5-2: FWD/REV select switch in "REV" position. (1···FWD, 2···REV)
- ●S201: Hold switch in "OFF" position
- ●S202~206: Direct tuning switchs. [S202: 1, S203: 2, S204: 3, S205: 4, S206: 5]
- ●S207: Band/Mode select (• FM/AM/-MODE) switch in "OFF" position.
- ●S208: Tuning down switch in "OFF" position.
- ●S209: Tuning up switch in "OFF" position.
- ●S210: Radio ON/OFF switch in "OFF" position.
- ●VR1: Tape speed adjustment VR.
- ●VR2-1: Volume control VR (Rch).
- VR2-2: Volume control VR (Lch).
- ●The mark (▼) shows test point e.g. ▼=test point 1.
- ●DC voltage measurement are taken with electronics voltmeter from negative terminal of battery.
  < >···FM position, ( )···AM position.
  No mark·····Playback position

- ●Battery current: Volume minimum output (Radio)·····75mA
  Volume minimum output (Tape)·····160mA
  Volume Maximum output (Radio)·····125mA
  Volume Maximum output (Tape)·····200mA
  (Radio, 74dB 30% Modulation. Tape, 315Hz 0dB tape playback)
- +B Voltage Line.
- Playback Signal.
- FM Signal.
- Playback and Radio Signal.
- **●This schematic diagram may be modified at any time with the development of new technology.**



Q204,205
2SC4081RTX
DC-DC CONV

Q203
2SK303V3TB
FET STABLIZER

Q201,202
2SC4081RTX
POWER SUPPLY CONT

LCD201
RSL5124-P

IC201
TC9316FB071
MICRO COMPUTER

IC202 S80719SLAGT1

IC203 TD6134AFT

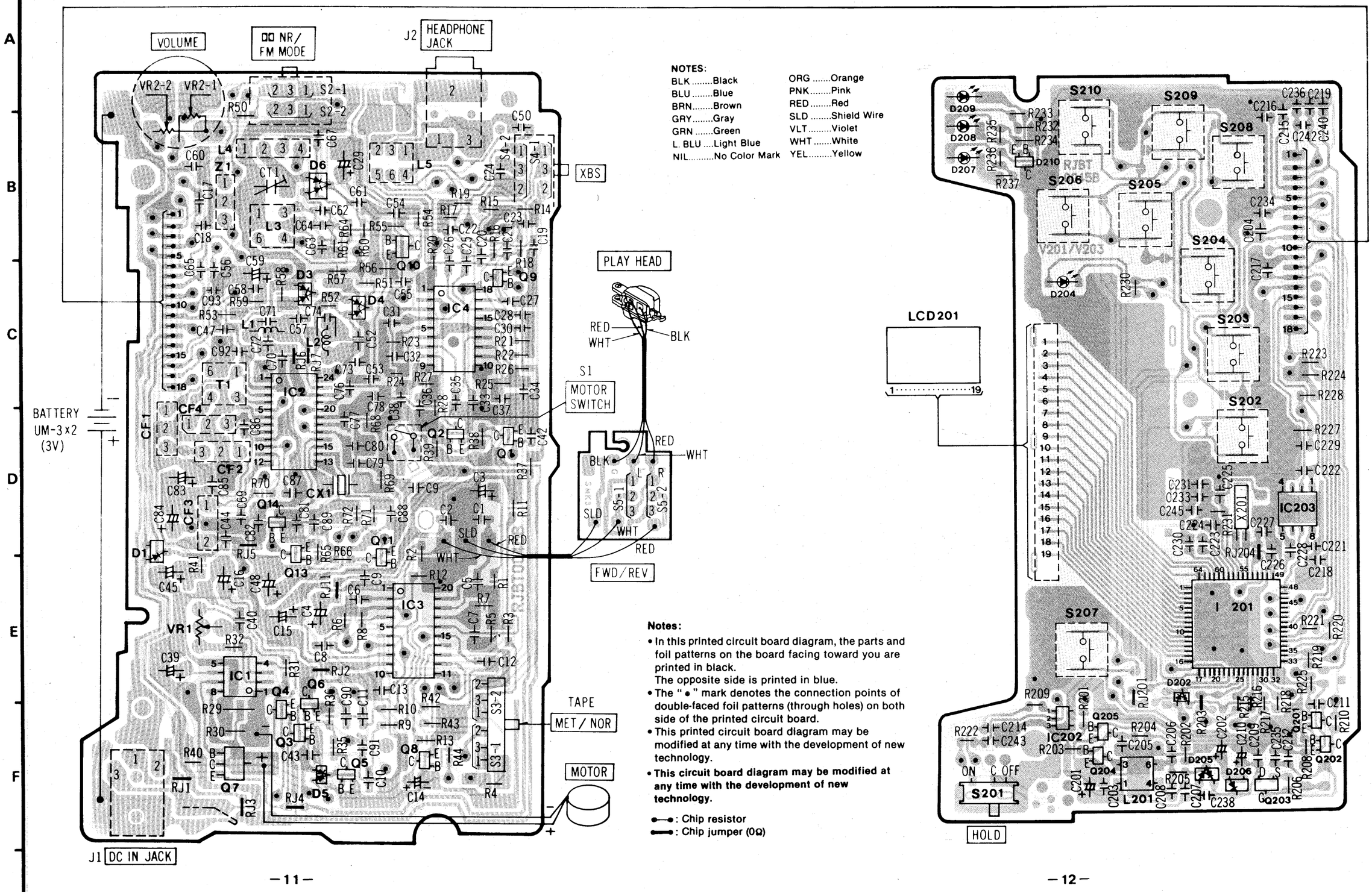
IC203
TD6134AFT
PRE SCALER

IC203
TD6134AFT
PRE RESET

RESET
IC202
S80719SLAGT1

S201 HOLD
OFF ON

■CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



NOTES:

BLK.....Black	ORG.....Orange
BLU.....Blue	PNK.....Pink
BRN.....Brown	RED.....Red
GRY.....Gray	SLD.....Shield Wire
GRN.....Green	VLT.....Violet
L. BLU....Light Blue	WHT.....White
NIL.....No Color Mark	YEL.....Yellow

Notes:

- In this printed circuit board diagram, the parts and foil patterns on the board facing toward you are printed in black.
  The opposite side is printed in blue.
- The "•" mark denotes the connection points of double-faced foil patterns (through holes) on both side of the printed circuit board.
- This printed circuit board diagram may be modified at any time with the development of new technology.
- **This circuit board diagram may be modified at any time with the development of new technology.**

●—●: Chip resistor
●—●: Chip jumper (0Ω)

■TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES

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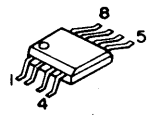
<td> 
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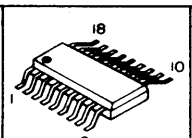
<td> 
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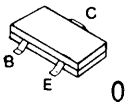
<td colspan="2"> 
Q1~6,8~11,13,14,
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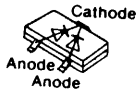
<td> 
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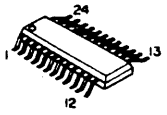
<td> 
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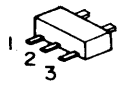
<td> 
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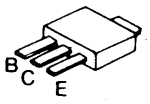
<td> 
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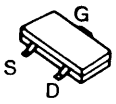
<td> 
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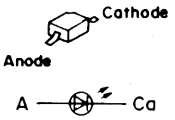
<td> 
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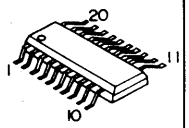
<td> 
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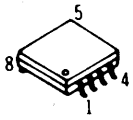
<td> 
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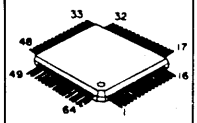
<td> 
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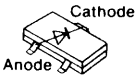
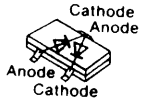
<td> 
D1,206.</td>
<td> 
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■TERMINAL FUNCTIONS OF IC

●IC201 (TC9316FB071): SYSTEM CONTROL & LCD DRIVE

Terminal No.	Terminal Name	I/O	Function
1 ~ 15, 17	LCD1 ~ LCD16	O	Outputs terminals for LCD segment signals.
16,18 ~ 21,32,43 44,48,64	NC	—	Not connected
22 ~ 23	KO ~ KI	I	Terminals for Key return signal input.
24, 56	VDD	—	Power terminal.
25 ~ 26	K2 ~ K3	I	Terminals for Key return signal input.
27 ~ 30	TO ~ T3	O	Key return signal source output terminals for momentary switch on the key matrix.
31	RADIO ON	O	Radio ON outputs the power out terminal.
33	TAPE ON	O	Tape ON outputs the power out terminal.
34	TAPE IN	I	Data signal input terminal
35	AM/FM	O	Band select output terminal.
36	VCHK	I	Inputs the battery voltagedet signal.
37	BATT IN	I	Data signal input terminal
38	BEEP	O	Outputs the buzzer out terminal.
39	HOLD	I	Data signal input terminal
40	/ST	I	
41	/SD	I	

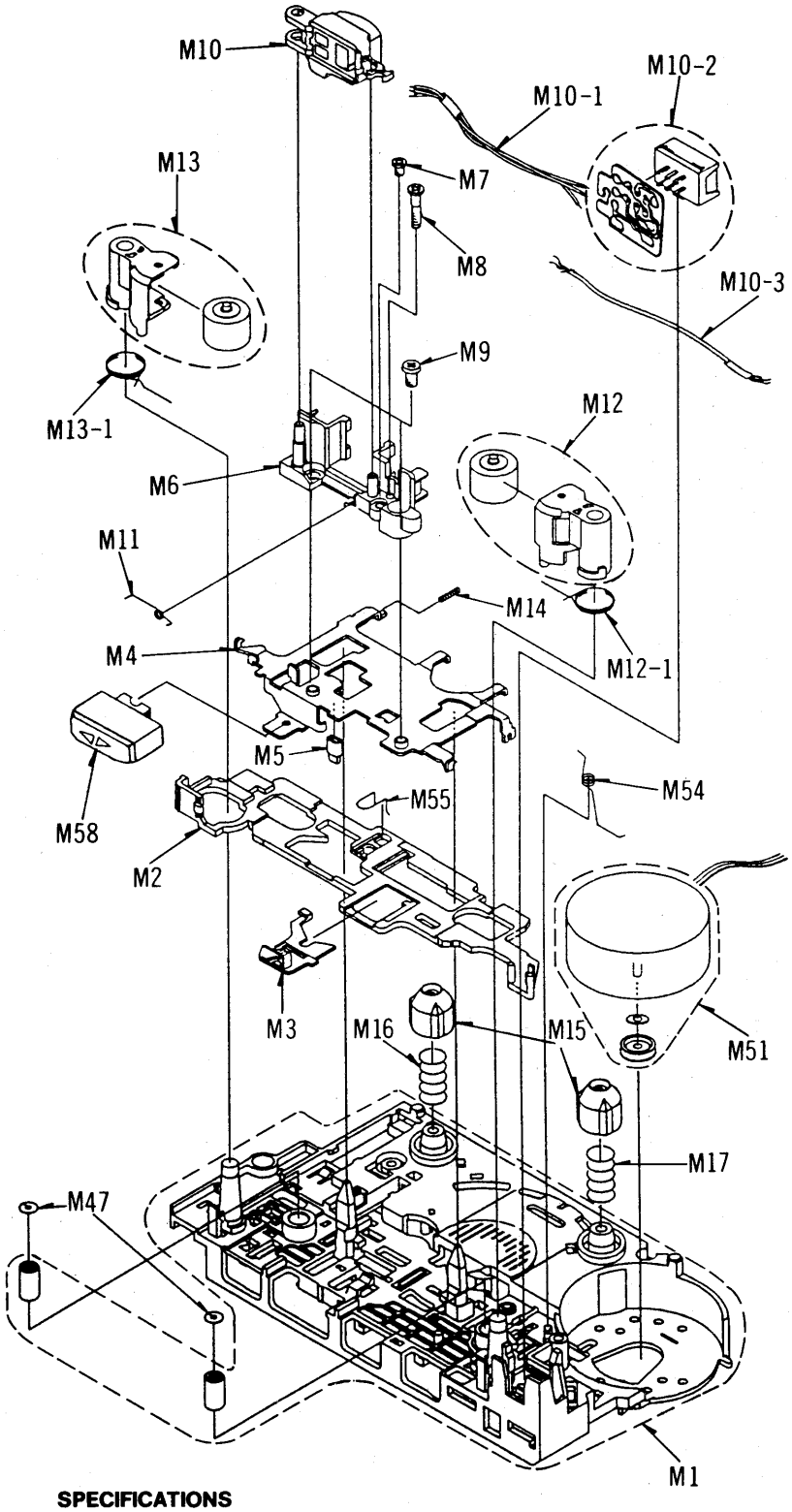
Terminal No.	Terminal Name	I/O	Function
42	MUTE	O	Muting signal output terminal.
45	VCO CON	O	PLL error output terminal.
46	VCOL (AM IN)	I	Inputs the local oscillator (VCO) (0.5~40MHz)
47	PSC	O	Counter input prescaler.
49	VCOH (FM IN)	I	Inputs the local oscillator (VCO) (10~130MHz)
50	GND	—	For ground connection.
51	RADIO B⊕	I	Radio switch ON radio signal unused on this unit.
52	TEST	I	Test terminal.
53 ~ 54	XT	O	Terminals used for connecting a quartz oscillator.
55	/INI	I	Device select signal input terminal.
57	VLCD	—	Condenser external terminals.
58	C1	—	
59	C2	—	
60	C3	—	
61 ~ 63	COM1 ~ COM3	O	Outputs terminals for LCD common signals.

■ MECHANISM PARTS LOCATION

1 2 3 4 5

A B C D E F

(Front View)



■ REPLACEMENT PARTS LIST

Ⓣ Indicates parts that are supplied by TAMACO.

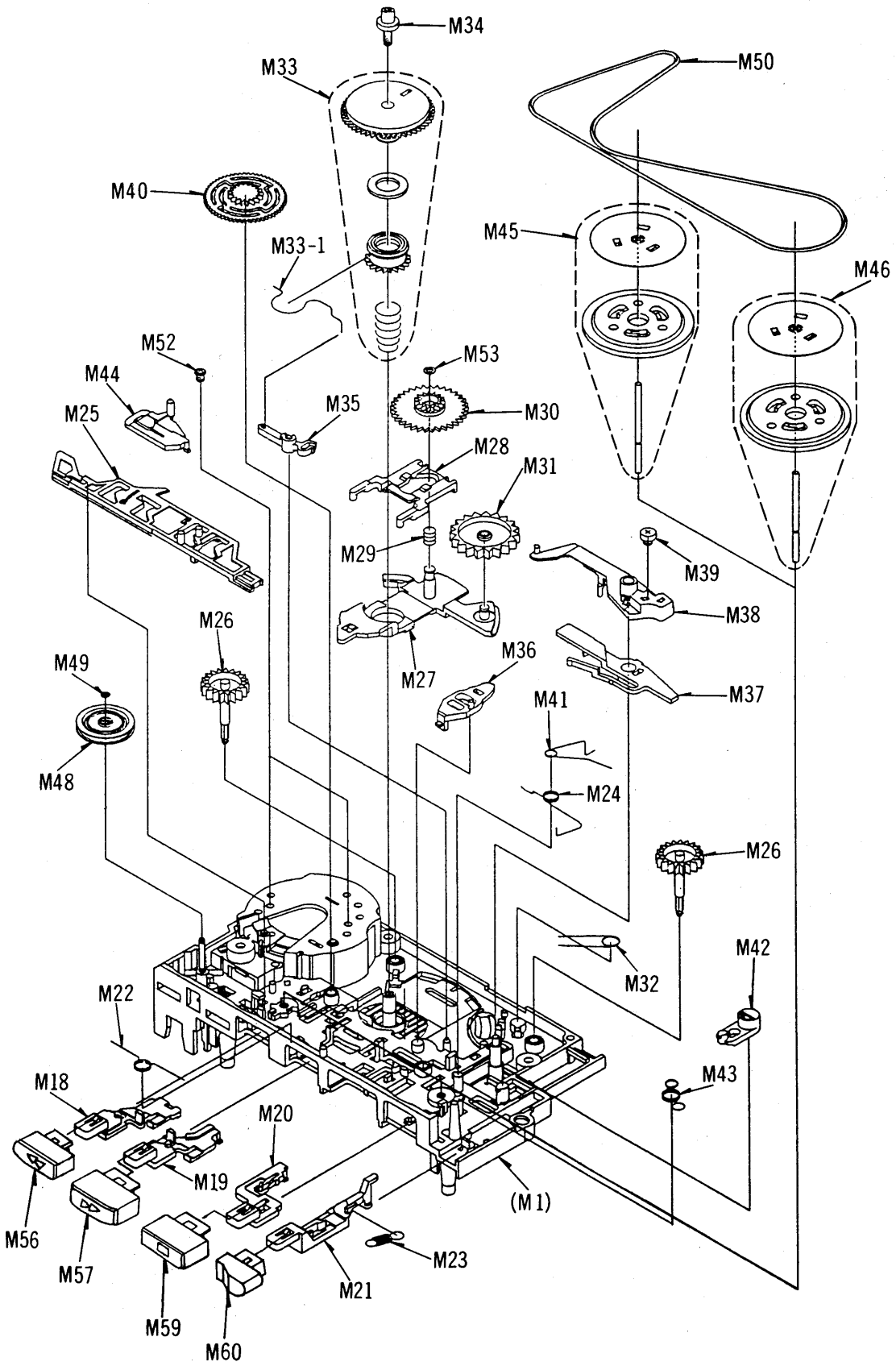
Ref No.	Parts No.	Parts Name & Description
	MECHANICAL PARTS	
M1 Ⓣ	RFU227ZA	Chassis Ass'y
M2 Ⓣ	RFY1085ZA	Plate Slide R
M3 Ⓣ	RFY1086ZA	UD SUB Slide
M4 Ⓣ	RFU232ZA	UD Chassis Head
M5 Ⓣ	RFX184ZA	CAP H
M6 Ⓣ	RFE610ZA	UD Guide Tape
M7 Ⓣ	RFE611ZA	UD Screw AF
M8 Ⓣ	RFE612ZA	UD Screw AR
M9 Ⓣ	RFE613ZA	Screw
M10 Ⓣ	RFH62ZA	Head
M10-1 Ⓣ	RFE614ZA	Head Wire
M10-2 Ⓣ	RFA117ZA	Slide Switch Ass'y
M10-3 Ⓣ	RFE617ZA	Head Wire
M11 Ⓣ	RFS996ZA	UD Spring
M12 Ⓣ	RFR75ZA	Pinch Arm F
M12-1 Ⓣ	RFS1000ZA	Spring
M13 Ⓣ	RFR76ZA	Pinch Arm R
M13-1 Ⓣ	RFS1001ZA	Spring
M14 Ⓣ	RFS962ZA	Spring
M15 Ⓣ	RFJ101ZA	Reel CAP
M16 Ⓣ	RFS1002ZA	Spring
M17 Ⓣ	RFS1003ZA	Spring R
M18 Ⓣ	RFY1090ZA	Lever FF
M19 Ⓣ	RFY1091ZA	Lever REW
M20 Ⓣ	RFY1052ZA	Lever Stop
M21 Ⓣ	RFY1053ZA	Lever Direction
M22 Ⓣ	RFS974ZA	Spring
M23 Ⓣ	RFS1004ZA	Spring
M24 Ⓣ	RFS967ZA	Spring
M25 Ⓣ	RFD452ZA	Plate Lock
M26 Ⓣ	RFG167ZA	Gear Reel
M27 Ⓣ	RFY1077ZA	Arm TU
M28 Ⓣ	RFY1056ZA	Lever Wedge
M29 Ⓣ	RFS968ZA	Spring
M30 Ⓣ	RFG169ZA	Gear TU
M31 Ⓣ	RFG170ZA	Gear Idler B
M32 Ⓣ	RFS969ZA	Spring
M33 Ⓣ	RFG177ZA	Ass'y CLUTCH
M33-1 Ⓣ	RFS970ZA	Spring
M34 Ⓣ	RFE589ZA	Screw
M35 Ⓣ	RFY1057ZA	Arm Sensor
M36 Ⓣ	RFY1089ZA	Arm Change T
M37 Ⓣ	RFY1059ZA	Arm Cancel D
M38 Ⓣ	RFY1063ZA	Arm Cancel R
M39 Ⓣ	RFE561ZA	Screw
M40 Ⓣ	RFG171ZA	Gear Idler A
M41 Ⓣ	RFS972ZA	Spring Friction
M42 Ⓣ	RFY1061ZA	Arm Switch
M43 Ⓣ	RFS973ZA	Spring
M44 Ⓣ	RFY1062ZA	Arm Switch
M45 Ⓣ	RFF97ZA	Flywheel F Ass'y
M46 Ⓣ	RFF98ZA	Flywheel R Ass'y
M47 Ⓣ	RFN241ZA	Washer
M48 Ⓣ	RFQ74ZA	Pulley Idler
M49 Ⓣ	RFN242ZA	Washer
M50 Ⓣ	RFB129ZA	Belt
M51 Ⓣ	RFM195ZA	Motor Ass'y
M52 Ⓣ	RFE616ZA	Screw, Motor
M53 Ⓣ	RFN253ZA	Washer
M54 Ⓣ	RFS986ZA	Spring
M55 Ⓣ	RFS995ZA	Spring Change
M56 Ⓣ	RGUT0039-K	FF, Button
M57 Ⓣ	RGUT0040-K	REW, Button
M58 Ⓣ	RGUT0041-K	PLAY, Button
M59 Ⓣ	RGUT0042-K	STOP, Button
M60 Ⓣ	RGUT0043-K	Direction, Button

SPECIFICATIONS

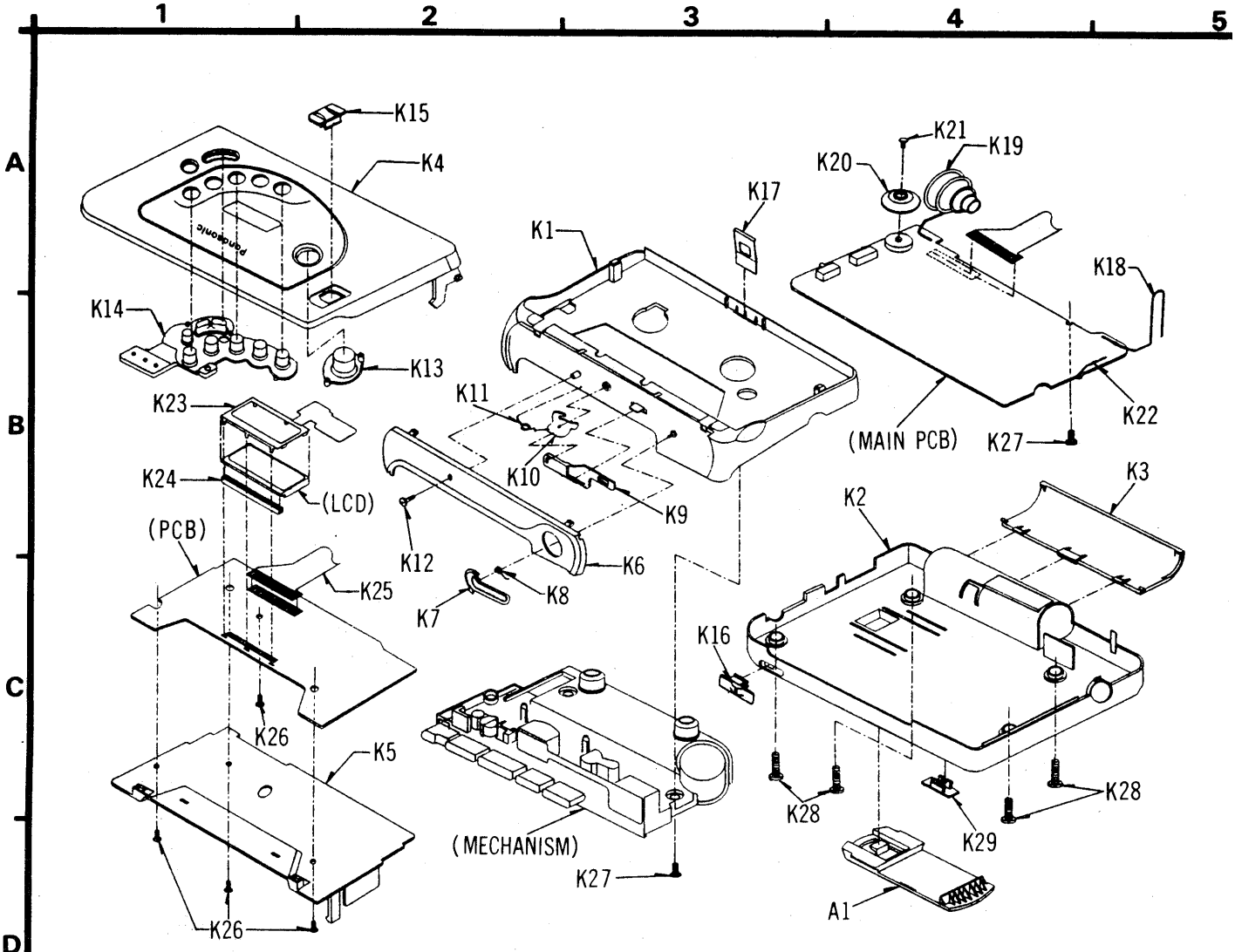
Pressure of Pressure roller	160gr
Wow & flutter	Less than 0.5% (WRMS)
Playback torque	20～45gr-cm
FF torque	50～150gr-cm
REW torque	50～150gr-cm

6 7 8 9

(Rear View)



■ CABINET PARTS LOCATION



■REPLACEMENT PARTS LIST

Notes: Ⓣ Indicates parts that are supplied by TAMACO

Ref. No.	Parts No.	Parts Name & Description
	CABINET PARTS	
K1 Ⓣ	RKMT0015D-K	Front Cabinet
K2 Ⓣ	RFKKQV203GC	Rear Cabinet Ass'y
K3 Ⓣ	RKKT0007-K	Battery Cover
K4 Ⓣ	RKFT0020-Q	Cassette Cover
K5 Ⓣ	RKUT0001-K	Cassette Holder
K6 Ⓣ	RKQT0004-S	Upper Cabinet
K7 Ⓣ	RGWT0011-S	Open Knob
K8 Ⓣ	RMBT0008	Spring
K9 Ⓣ	RMMT0008	Link
K10 Ⓣ	RMAT0011	Lock Cam
K11 Ⓣ	RMBT0007	Lock Spring
K12 Ⓣ	RHDT0002-S	Screw
K13 Ⓣ	RGUT0036-K	Band Button
K14 Ⓣ	RGUT0037-K	DIR/Tuning Button
K15 Ⓣ	RGVT0020-K	Hold Knob
K16 Ⓣ	RGVT0019-K	XBS Knob
K17 Ⓣ	RUS231TZB	Tape Spring
K18 Ⓣ	RJCT30010	Battery Terminal (+)
K19 Ⓣ	RJCT70001-1	Battery Terminal (-)
K20 Ⓣ	RGWT0007-K	Volume Knob

Ref No.	Parts No.	Parts Name & Description
K21 Ⓣ	XSH17+3.5	Screw (Volume)
K22 Ⓣ	RMET0002	Earth Terminal
K23 Ⓣ	RMNT0022	LCD Holder
K24 Ⓣ	RSQT0002	Electric Gum
K25 Ⓣ	RJBT0019A-2	FPC PWB
K26 Ⓣ	XTNR17+4CFZ	Screw
K27 Ⓣ	RHD006TZA	Screw
K28	XTNR2+10CFZ	Screw (CAB)
K29 Ⓣ	RGVT0010-K	Tape Knob
	ACCESSORIES	
A1 Ⓣ	RKQT0002-K	Belt Clip
A2 Ⓣ	RFEV310P-KS	Innerphones
A3 Ⓣ	RQTT0168-G	Instruction Book
	PACKING MATERIALS	
P1 Ⓣ	RPFT0015	Set Bag
P2 Ⓣ	RPKT0099	Decoration Box

TAMACO Printed in Taiw
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