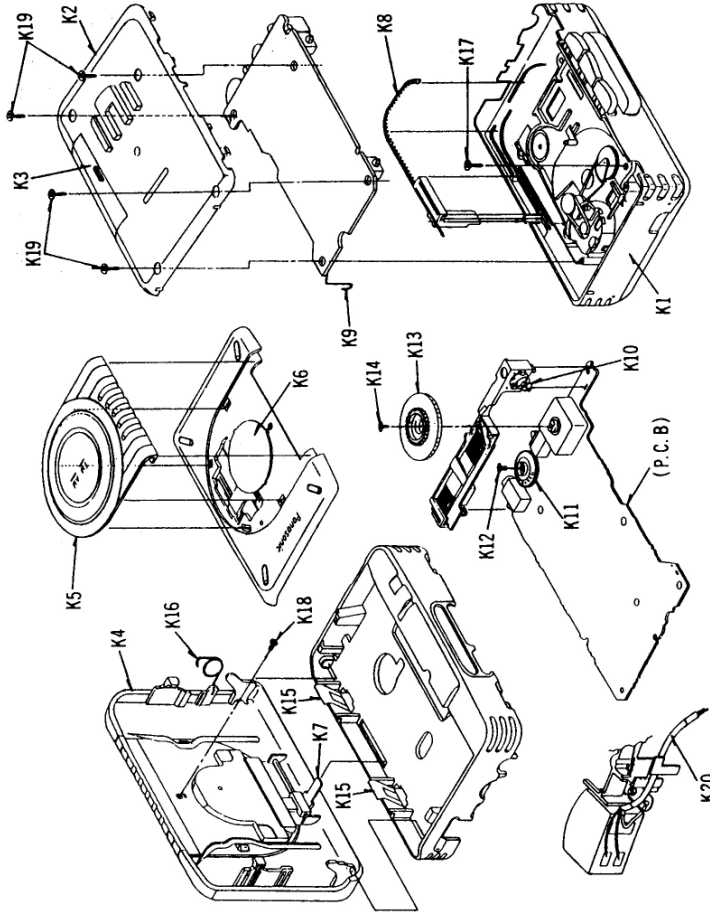
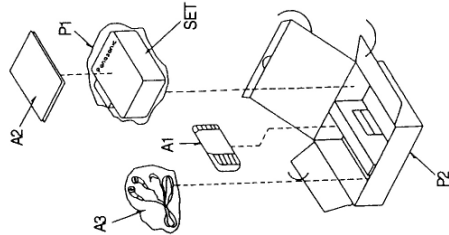


CABINET PARTS LOCATION



PACKAGING

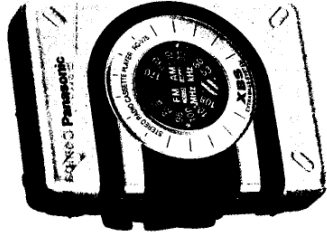


Service Manual

Stereo Radio Cassette Player

Radio Cassette
RQ-V75

Stereo Radio Cassette Player



Colour
(S).....Silver Type

Area	Suffix for Model No.	Areas	Colour
	[GN]	Australia	(S)

MECHANISM SERIES: TN9X

SPECIFICATIONS

General:

Power Requirements: Battery: 3V (Two UM-3, R6/LR6, batteries)

Power Output: 10mW (5mW x2)...RMS (max.)

Output: Headphones: 30 Ω , ϕ 3.5

Dimensions: 87.9(W)x115.1 (H)x34.1(D)mm

Weight: 166g Without batteries

Radio Section:

Radio Frequency Range: FM: 87.5~108.0MHz

AM: 520~1610kHz

Intermediate Frequency: FM: 10.7MHz

AM: 455kHz

Radio Sensitivity:

FM: 5.01 μ V/0.1 mW output

(-3dB Limit, Sens)

AM: 316.8 μ V/m/0.1 mW output

(MAX, Sens)

Tape Deck Section:

Frequency Response: 60~ 16,000Hz (Normal, High/Metal)

(-6dB)

Tape Speed: 4.8cm/s

Program Time: 1 hour with C-60 cassette tape

Track System: 4-track, 2-channel stereo playback

Wow & Flutter: 0.25% (WRMS)

Notes:

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

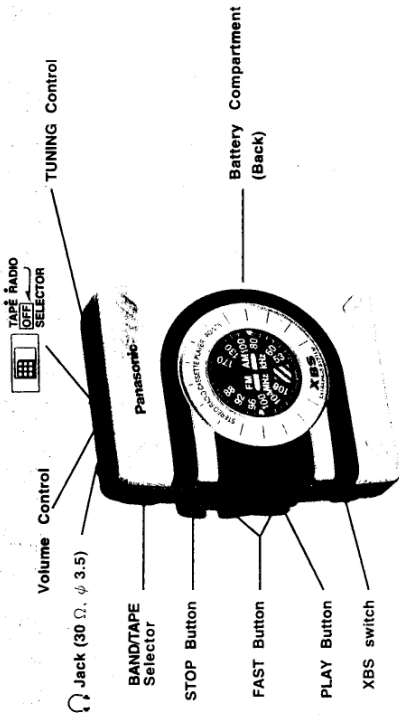
WARNING

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®

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LOCATION OF CONTROLS



DISASSEMBLY INSTRUCTIONS

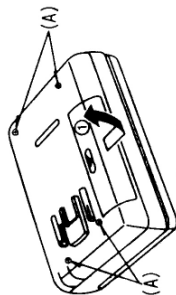


Fig. 1

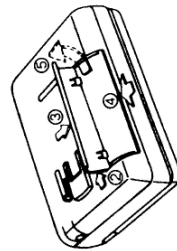


Fig. 2

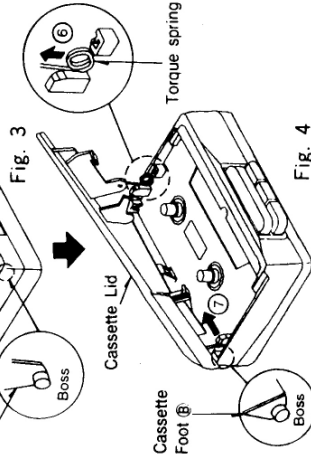


Fig. 4

Removal of the battery cover and Rear Cabinet

1. Open the battery cover in the direction of arrow (A).
2. Remove the battery cover in the direction of arrow (B) and (C).
3. Remove the screws (A) (2x10mm x 4).
4. Remove the rear cabinet in the direction of arrow (D) and (E).

How to Removal of the Cassette Lid

- Note: Be careful not to break cassette foots (A) and (B) when removing the cassette lid, then it was bent a little.
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. Remove the torque spring (C) in the direction of arrow.
 4. By the direction of (D), remove the cassette foot.

REPLACEMENT PARTS LIST (MECHANISM, CABINET, ACCESSORIES, PACKING AND JIG/TOOL)

Notes:

1. (M) indicates parts that are supplied MESA.
2. The reference number SA represent the grease tool use for unit.

Ref No.	Parts No.	Parts Name & Description	Values & Remarks
MECHANISM PARTS			
M1	RFRPQ788P	Motor Assy	(M)
M2	RFR77ZA	Pinch Roller Arm Assy	(M)
M3	RFE598ZA	Tapping Screw	(M)
M4	RFG75ZA	Trans Pulley	(M)
M5	RFE510-S	Lumilar Washer	(M)
M6	RFB124ZA	M Belt	(M)
M7	RFB124ZA	Stop Lever	(M)
M8	RFB124ZA	Rwd Lever	(M)
M9	RFB124ZA	FF Lever	(M)
M10	RFB124ZA	Take Up Reel Assy	(M)
M11	RFB124ZA	Sensor Spring	(M)
M12	RFB124ZA	HP Spring	(M)
M13	RFB124ZA	T Up Gear	(M)
M14	RFB124ZA	Cam Gear	(M)
M15	RFB124ZA	Rwd Reel Hub	(M)
M16	RFB124ZA	B T Spring	(M)
M17	RFB124ZA	Auto Lever	(M)
M18	RFB124ZA	HLW Cut (Washer)	(M)
M19	RFB124ZA	Flywheel Assy	(M)
M20	RFB124ZA	FL Bracket	(M)
M21	RFB124ZA	PST (Washer)	(M)
M22	RFB124ZA	PR Spring	(M)
M23	RFB124ZA	Rwd Hub Gear	(M)
M24	RFB124ZA	Chassis Assy	(M)
M25	RFB124ZA	Rwd Gear	(M)
M26	RFB124ZA	Screw	(M)
M27	RFB124ZA	P Head	(M)
M28	RFB124ZA	Head SPR-PL	(M)
M29	RFB124ZA	Tapping Screw	(M)
M30	RFB124ZA	Tape Guide	(M)
M31	RFB124ZA	Head Panel	(M)
M32	RFB124ZA	Stop Spring	(M)
M33	RFB124ZA	Lock Plate	(M)
M34	RFB124ZA	FL Spring	(M)
M35	RFB124ZA	FL Belt	(M)
M36	RFB124ZA	HLW (Washer)	(M)
M37	RFB124ZA	FF Stopper	(M)
M38	RFB124ZA	A Push Arm	(M)
M39	RFB124ZA	Blance Plate	(M)
M40	RFB124ZA	PW Cut	(M)
M41	RFB124ZA	HLW	(M)
M42	RFB124ZA	+ - Screw	(M)
M43	RFB124ZA	LUG Plate	(M)
M44	RFB124ZA	Button FF	(M)
M45	RFB124ZA	Button REW	(M)
M46	RFB124ZA	Button Stop	(M)
M47	RFB124ZA	Button REW	(M)
M48	RFB124ZA	Button Stop	(M)
M49	RFB124ZA	Button Stop	(M)
CABINET PARTS			
K1	RKM0346A-K	Middle Cabinet	(M)
K2	RFKKQV75GN	Rear Cabinet Assy	(M)
K3	RFKK0104-K	Battery Cover	(M)
K4	RFE510-S	Cassette Cover	(M)
K5	RFG0889A-Q	Panel	(M)
K6	RKD0007A-K	Return Plate	(M)
K7	RDP0093-K	Cassette Rack	(M)
K8	RDP0094-K	Connection Rack	(M)
K9	RJC30025-1	Battery Terminal (+)	(M)
K10	RJC30023-1	Battery Terminal (-)	(M)
K11	RGM0251-K	Volume Knob	(M)
K12	RGM0252-K	Screw (Volume)	(M)
K13	XSH17-3	Tuning Knob	(M)
K14	RUS252TZA	Tape Spring	(M)
K15	RMET0005-1	Cassette Spring	(M)
K16	RHD006TZA	Screw (DECK)	(M)
K17	XTNR14+35CFZ	Screw (CAB)	(M)
K18	XTNR2+10CFZ	Screw (CAB)	(M)
K19	ZA03V60PMA	Head Wire	(M)
K20	ZA03V60PMA	Head Wire	(M)
ACCESSORY			
A1	RKQ10002-K1	Belt Clipper	(M)
A2	RGT10328-G	Instruction Book	(M)
A3	RFEV317P-KS	Earphones	(M)
PACKING MATERIALS			
P1	RPF10015	Set Bag	(M)
P2	RPK10278	Decorative Box	(M)
JIG/TOOL			
SA1	QZCZCAT	TEST TAPE (Tape Speed etc)	(M)
SA2	QZCZCFM	TEST TAPE (AZIMUTH/FREQ)	(M)
MEC1	RKA3302	DECK MECHANISM	(M)
PCB1	RFK1QV75E	P C B Assy	(M)



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

1. Disconnect the solder (B).
2. Remove the dial chassis in the direction of arrow ①, ②.
3. Remove the solder (C), (D), (E) from flexible PC board.

● Removal of the Front Cabinet and Mechanism (Fig. 6).

1. Remove the deck screws (F) (2X6)mm X 1
2. Remove the front cabinet & mechanism

- Removal of the panel. (Fig. 7)

1. Remove the screws (G) (1.4X3.5)mm X 1
2. Remove the Ribs.

● How to assemble the rack, the compass, and the panel.

1. Put the line A of the rack ① position at mark 1 of cassette cover ② (Shown at fig. 1).
2. Let the concave point ⑧ of compass ③ face position ② and put ③ onto the boss of ② (Shown at fig. 2). After assemble, check the compass ③ and the rack ① must be at right position (Shown at fig. 3).
3. Combine the panel ④ and the cassette cover ②. (Shown at fig. 4).
4. After combined them, reverse the assembly and then fix the panel ④ and cassette cover ② with screw ⑤.



MEASUREMENTS AND ADJUSTMENTS

●ADJUSTMENT POINT

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

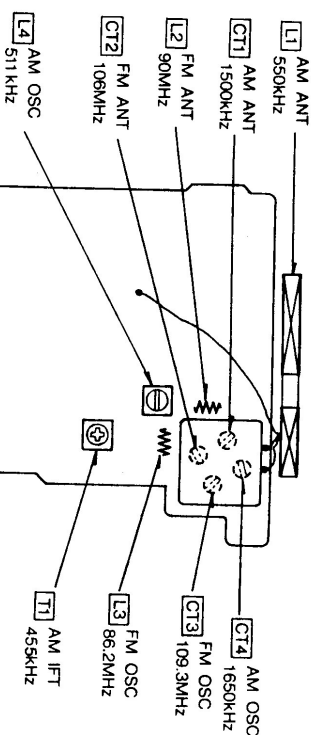


- **How to Replace the VC Order Rack (Fig.6)**

1. Put the position A B C of the rack ⑥ onto the position A' B' C' of the cabinet ⑦.

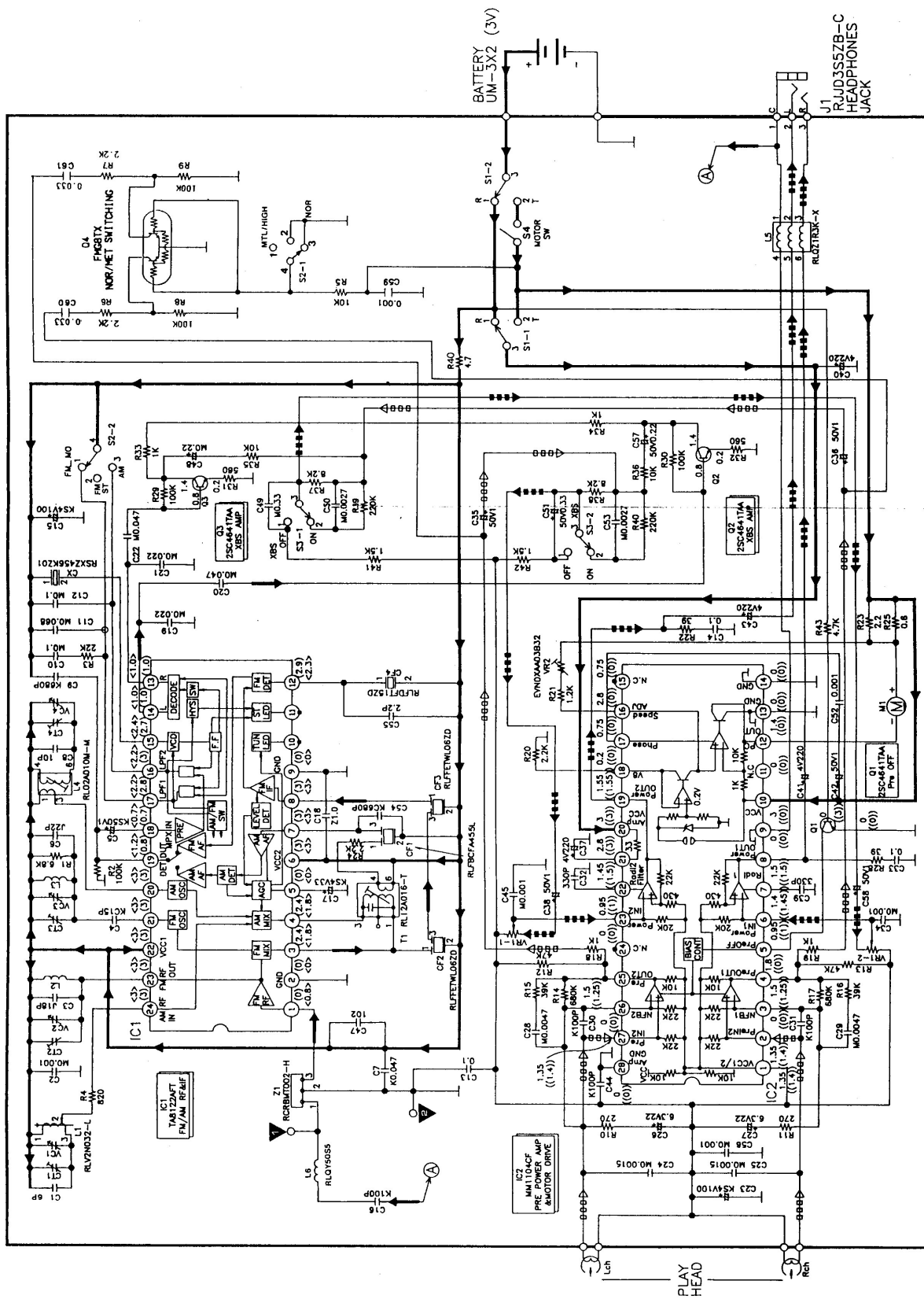
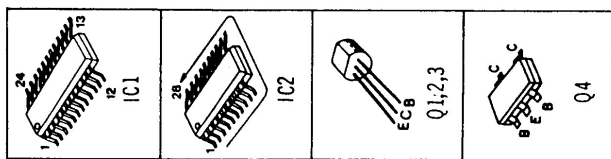
● How to Replace the Cassette Lid Spring (See Fig.7)

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. To plug the torque spring into the groove of the case body.
4. Enter the cassette foot (B) into the groove of the case body.



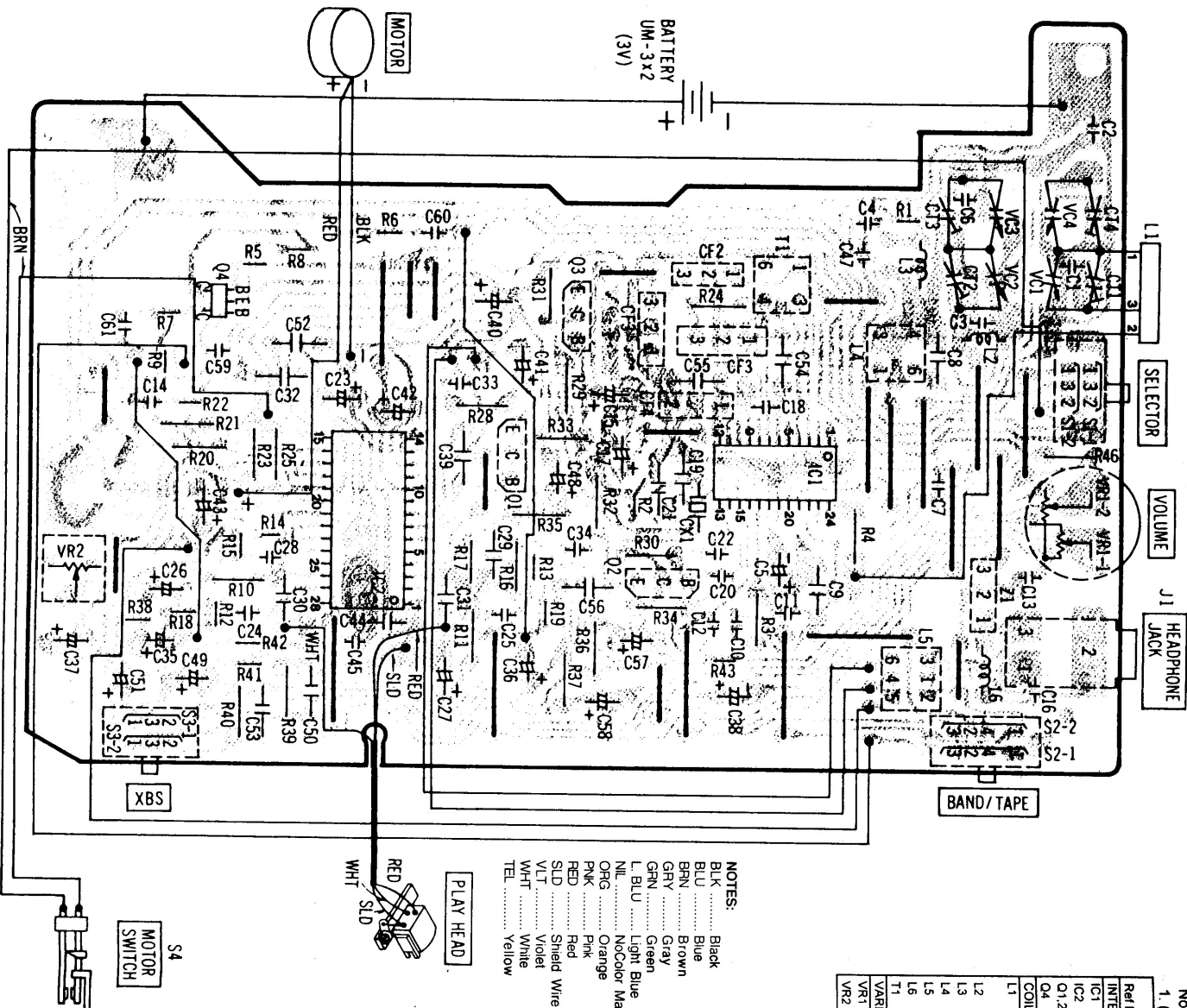
RQ-V75 RQ-V75

SCHEMATIC DIAGRAM



- S1-1, S1-2: Function switch in "RADIO" position.
(1...RADIO, 2...TAPE)
- S2-1: Tape selector switch in "NOR" position.
(1...HIGH/MTL, 3...NOR)
- S2-2: Band select switch in "FM MONO" position.
(1...FM MONO, 2...FM ST, 3...AM.)
- S3-1, 3-2: XBS switch in "ON" position.
(1...OFF, 2...ON)
- S4: Motor switch in "OFF" position.
- VR1-1, 1-2: Volume control VR.
Tape speed adjustment VR.
- VR2: 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 ...Play back position,
(()) ...RADIO position.
- Battery current: Volume minimum output (Radio).....33mA
Volume maximum output (Radio).....48mA
Volume minimum output (Tape).....118mA
Volume maximum output (Tape).....170mA
(Radio, 74dB 30% Modulation
Tape, 315Hz 0dB tape playback)
- This schematic diagram may be modified at any time with
the development of new technology.

CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



REPLACEMENT PARTS LIST (ELECTRICAL)

Notes:

1. (M) Indicates parts that are supplied MESA

Ref No.	Parts No.	Parts Name & Description	Values & Remarks
INTEGRATED CIRCUITS, TRANSISTORS AND DIODES			
IC1	TA8122AFT	I.C. FM RF AMP	(M)
IC2	MM1104CFE	I.C.	(M)
Q1,2,3	2SC4841TA	Transistor	(M)
Q4	FMG8TX	Transistor	(M)
COILS AND TRANSFORMERS			
L1	RENT0020	Ferrite Bar Antenna Assy	(M)
L2	RL04Y15-2F	Antenna Coil FM	(M)
L3	RL04Y19-4F	Oscillator Coil FM	(M)
L4	RL02A010M-M	Oscillator Coil AM	(M)
L5	RL02YR3K-X	RF Choke Coil	(M)
L6	RL01Y50S5	Choke Coil	(M)
L7	RL12A016-T	IF T. AM	(M)
VARIABLE RESISTORS			
VR1	RVY2H3A54-2A	V R Volume	(M)
VR2	EVNDAA03B32	V R Tape Speed	(M)

Ref No.	Parts No.	Parts Name & Description	Values & Remarks
VARIABLE CAPACITOR			
VC1-4	RCV4PCT6R-T	Tuning Capacitor W/ Trimmer Capacitor (CT1-4)	(M)
CERAMIC FILTERS			
CF1	RLFBCFA45L	Ceramic Filter	(M)
CF2,3	RLFETWLO6ZD	Ceramic Filter FM	(M)
CF4	RLFDF115ZD	Ceramic Filter FM	(M)
CK1	RSX2456K201	Ceramic Crystal	(M)
COMPONENT COMINATION			
Z1	RCRMT002-H	Band Pass Filter	(M)
SWITCHES			
ST	RS52B030-J	SW. Band	(M)
S2	RS53B019-J	SW. Selector	(M)
S3	RS52B030-J	SW. XBS	(M)
S4	RF41142A	SW. Moler	(M)
J1	RJUD3552B-C	Headphones Jack	(M)

REPLACEMENT PARTS LIST (RESISTORS AND CAPACITORS)

Notes:

1. (M) Indicates parts that are supplied MESA

Ref No.	Parts No.	Parts Name & Description	Values & Remarks
RESISTORS			
R1	ERJ6GEVJ682V	(M)	(M)
R2,8,9,29	ERJ6GEVJ104V	(M)	(M)
R3	ERJ6GEVJ104V	(M)	(M)
R4	ERJ6GEVJ104V	(M)	(M)
R5	ERJ6GEVJ103V	(M)	(M)
R6,7	ERJ6GEVJ103V	(M)	(M)
R10,11	ERJ6GEVJ103V	(M)	(M)
R12,13	ERJ6GEVJ103V	(M)	(M)
R14	ERJ6GEVJ103V	(M)	(M)
R15	ERJ6GEVJ103V	(M)	(M)
R16	ERJ6GEVJ103V	(M)	(M)
R17	ERJ6GEVJ103V	(M)	(M)
R18,19	ERJ6GEVJ103V	(M)	(M)
R20,24	ERJ6GEVJ103V	(M)	(M)
R21	ERJ6GEVJ103V	(M)	(M)
R22	ERJ6GEVJ103V	(M)	(M)
R23	ERJ6GEVJ103V	(M)	(M)
R25	ERJ6GEVJ103V	(M)	(M)
R28	ERJ6GEVJ103V	(M)	(M)
R30	ERJ6GEVJ103V	(M)	(M)
R31,32	ERJ6GEVJ103V	(M)	(M)
R33	ERJ6GEVJ103V	(M)	(M)
R34	ERJ6GEVJ103V	(M)	(M)
R35,36	ERJ6GEVJ103V	(M)	(M)
R37	ERJ6GEVJ103V	(M)	(M)
R38	ERJ6GEVJ103V	(M)	(M)
R39,40	ERJ6GEVJ103V	(M)	(M)
R41,42	ERJ6GEVJ103V	(M)	(M)
R43	ERJ6GEVJ103V	(M)	(M)
R46	ERJ6GEVJ103V	(M)	(M)
R47	ERJ6GEVJ103V	(M)	(M)
CHIP JUMPERS			
R11-R123	ZRWHT16	(M)	(M)
R30,31	ERJ6GEVJ103V	(M)	(M)

Ref No.	Parts No.	Parts Name & Description	Values & Remarks
CAPACITORS			
C1	ECUV1H060CCN	(M)	(M)
C2,25,44,45,47,59	ECUV1H102MBN	(M)	(M)
C3	ECUV1H180JCN	(M)	(M)
C4	ECUV1H150KCN	(M)	(M)
C5,35	ECGE4HKA010	(M)	(M)
C6	ECUV1H420JCN	(M)	(M)
C7,28	ECUV1H473MBN	(M)	(M)
C8	ECB1H100JCS	(M)	(M)
C9,54	ECB1H1681KBS	(M)	(M)
C10,12,13	ECUV1C104MBN	(M)	(M)
C11	ECUV1C683MBN	(M)	(M)
C14,33	ECUV1C104ZFN	(M)	(M)
C15,23	ECFA00GKS101	(M)	(M)
C16	ECUV1H101KCN	(M)	(M)
C17	ECGE4HKA301	(M)	(M)
C18,57,58	ECUV1C105ZFM	(M)	(M)
C19,21	ECB1H102KBS	(M)	(M)
C20,22	ECUV1C473MBM	(M)	(M)
C24,25	ECUV1H152MBN	(M)	(M)
C26	ECGE4HKA220	(M)	(M)
C27	ECGE4HKA5201	(M)	(M)
C29	ECB1H102KBS	(M)	(M)
C30,31,44	ECB1H101KBS	(M)	(M)
C32,39	ECB1H103KBS	(M)	(M)
C36,38,42	ECGE4HKA5010	(M)	(M)
C37	ECGE4HKA2211V	(M)	(M)
C40,41,43	ECFA00GKS211	(M)	(M)
C48	ECGE4HKA2221	(M)	(M)
C49,51	ECGE4HKA331	(M)	(M)
C50,53	ECB1H102KBS	(M)	(M)
C52,56	ECB1H102KBS	(M)	(M)
C55	ECB1H102KBS	(M)	(M)
C60,61	ECUV1H820KCN	(M)	(M)

• This printed circuit board diagram may be modified at any time with the development of new technology.

• — RESISTOR
• — JUMPER

MEASUREMENTS AND ADJUSTMENTS

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 CONNECTIONS	FREQUENCY	RADIO/DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
AM-IF ALIGNMENT						
AM	Fashion a loop of several turns of wire and radiate the signal into the loop antenna of the receiver.	455kHz 30 % Mod. at 400Hz	Point of non-interference (on/ about 600kHz)	Headphones Jack (30 Ω) (Refer to Fig.3)	T1 (AM IFT)	Adjust for maximum output.
AM-RF ALIGNMENT						
AM	"	511kHz	Tuning capacitor fully closed.	"	L4 (AM OSC Coil)	Adjust for maximum output.
AM	"	1650kHz	Tuning capacitor fully open.	"	CT4 (AM OSC Trimmer)	"
AM	"	550kHz	Tune to signal.	"	(*) L1 (AM ANT Coil)	Adjust for maximum output. Adjust L1 by moving coil bobbin along ferrite core.
AM	"	1,500kHz	"	"	CT1 (AM ANT Trimmer)	Adjust for maximum output. Repeat steps (2)~(5).

(*) Fix antenna coil with wax after completing alignment.

FM ALIGNMENT

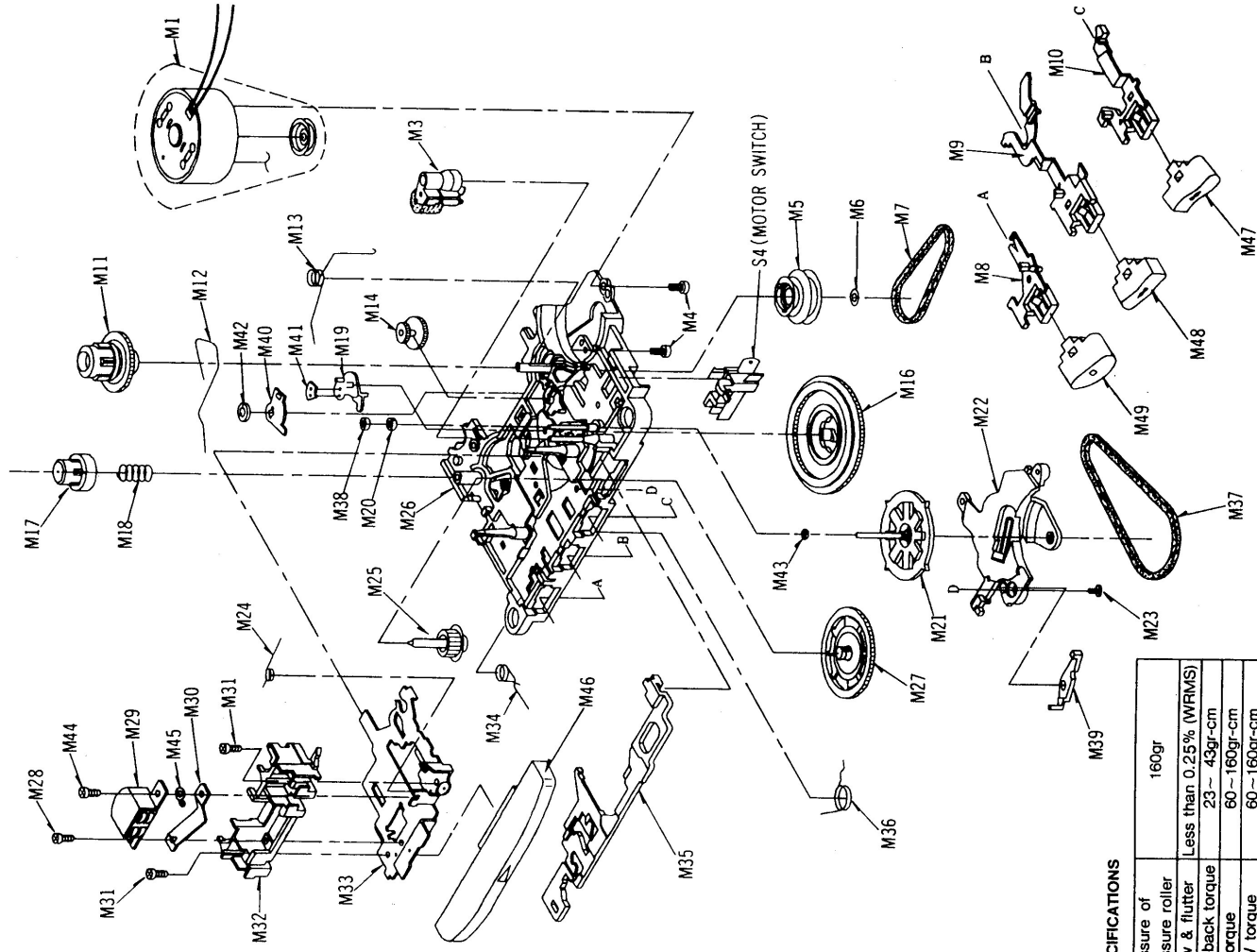
BAND	SIGNAL GENERATOR or SWEEP GENERATOR CONNECTIONS	FREQUENCY	RADIO/DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
FM-RF ALIGNMENT						
FM	Connect to test point ∇ through FM dummy antenna. Negative side to test point ∇	86.2MHz	Variable capacitor fully closed.	Headphones jack (30 Ω) (Refer to Fig.3)	L3 (FM OSC Coil)	(*) Adjust for maximum output.
FM		109.3MHz	Variable capacitor fully open.		CT3 (FM OSC Trimmer)	"
FM		90MHz	Tune to signal.		L2 (FM ANT Coil)	"
FM		106MHz	"		CT2 (FM ANT Trimmer)	(*) Adjust for maximum output. Repeat steps (3)~(6).

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

TAPE DECK SECTION

ITEM	INPUT	MEASUREMENT POINT	ADJUSTMENT POINT	PROCEDURE
Azimuth	QZZCFM (8kHz, -20dB)	Headphones Jack (30 Ω)	Azimuth adjustment screw (Refer to Fig.2)	Adjust the azimuth adjustment screw during repeated forward and reverse playback to obtain the maximum head azimuth alignment with both channels equal.
Tape speed	QZZCWAT (3kHz, -10dB)	VR2 (Refer to Fig.1)		Play back the central part of the tape and adjust VR2 so that the tape speed is as follows. 3000 ± 60Hz (Forward & Reverse)

MECHANISM PARTS LOCATION



SPECIFICATIONS

Pressure of Pressure roller	160gr
Wow & flutter	Less than 0.25% (WRMS)
Playback torque	23 ~ 43gr-cm
FF torque	60 ~ 160gr-cm
REW torque	60 ~ 160gr-cm