

Service Manual

Stereo Radio Cassette Recorder

Radio Cassette

RX-FS430

Colour

(K) Black Type



Area

Suffix for Model No.	Area	Colour
(P)	U.S.A	(K)
(PC)	Canada	

SPECIFICATIONS

General :

Power Requirement : AC; 120V, 60Hz
 Battery; 9V, 6 UM-1 "D" size batteries
 Power Consumption : 12 W (AC only)
 Power Output : 7W (3.5 X 2) ... RMS (max.)
 Speaker : 2 X Woofers; 10cm (4") (2.7Ω)
 2 X Tweeters; 1.5cm (5/16")
 Output; Headphone; (32Ω, Ø3.5)
 Jacks :
 Dimensions : 460 (W) x 149 (H) x 149 (D) mm
 (18 1/8" X 5 7/8" X 5 7/8")
 Weight : 2.4 kg (5lb 5oz) without batteries.

Radio Section :

Radio Frequency Range : FM; 88 ~ 108MHz
 AM; 525 ~ 1705kHz
 Intermediate Frequency : FM; 10.7MHz
 AM; 455kHz
 Sensitivity : FM : 12dB/50mW
 AM : 42.5dB/m/50mW

Tape Deck Section :

Frequency Response : 70 ~ 10,000Hz
 Recording System : AC bias, Magnet erase
 Tape Speed : 4.8cm/s (1 7/8 ips)
 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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SAFETY PRECAUTION (This "Safety Precaution" is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock .
2. When replacing parts ,use only manufacturer's recommended components for safety .
3. Check the condition of the power cord .Replace if wear or damage is evident .
4. After servicing ,be sure to restore the lead dress ,insulation barriers ,insulation papers ,shields ,etc .
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard .

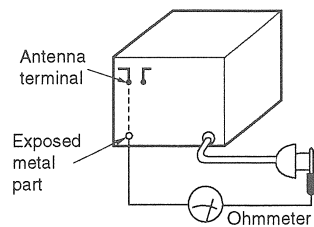


Fig. 1

Resistance = $3\text{M}\Omega$ - $5.2\text{M}\Omega$

INSULATION RESISTANCE TEST

1. Unplug the power cord and short the two prongs of the plug with a jumper wire .
2. Turn on the power switch .
3. Measure the resistance value with ohmmeter between the jumper AC plug and each exposed metal cabinet part ,such as screwheads, antenna ,control shafts ,handle brackets , etc . Equipment with antenna terminals should read between $3\text{M}\Omega$ and $5.2\text{M}\Omega$ to all exposed parts* .(Fig. 1) Equipment without antenna terminals should read approximately infinity to all exposed parts . (Fig. 2)
*Note :Some exposed parts may be isolated from the chassis by design. These will read infinity .
4. If the measurement is outside the specified limits ,there is a possibility of a shock hazard .The equipment should be repaired and rechecked before it is returned to the customer .

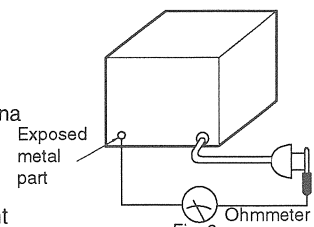
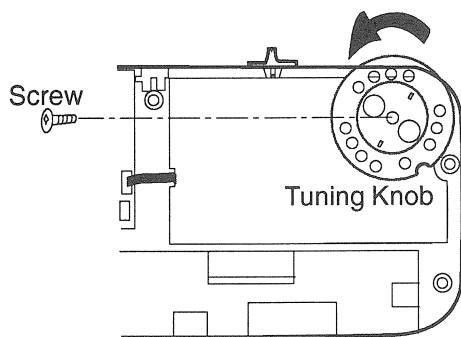


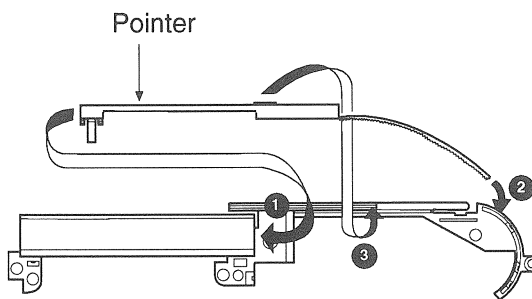
Fig. 2

Resistance = Approx ∞

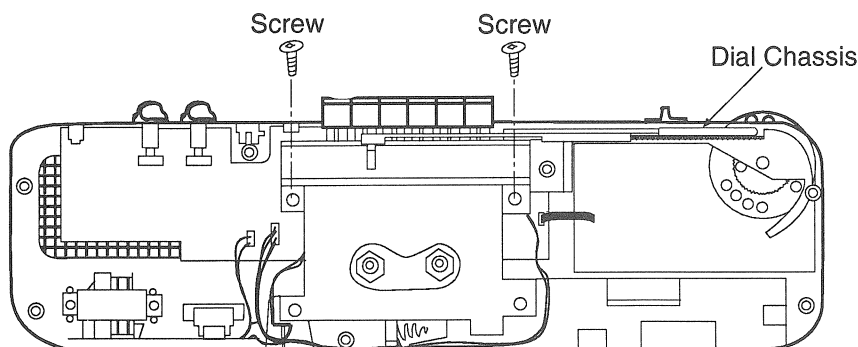
DIAL CHASSIS ASSEMBLY



1. Screw the tuning knob.
2. Turn the knob fully in an anticlockwise direction.

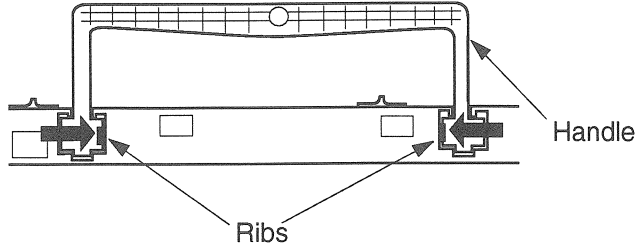
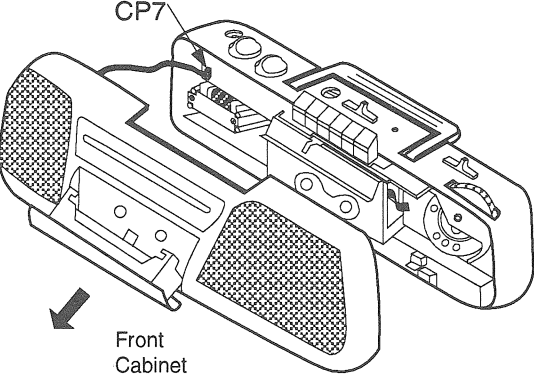
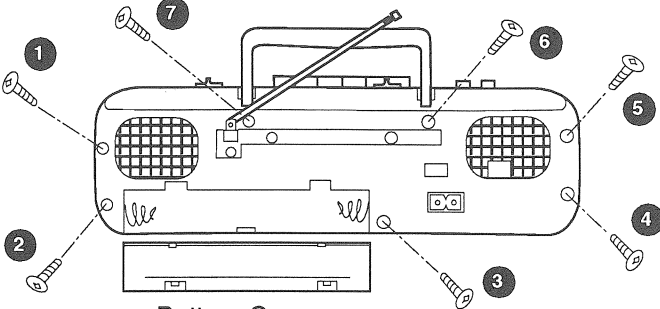
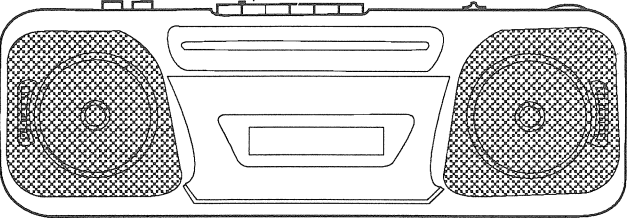
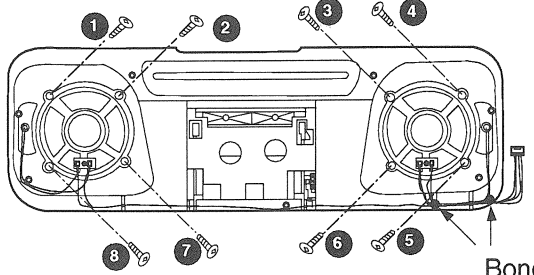
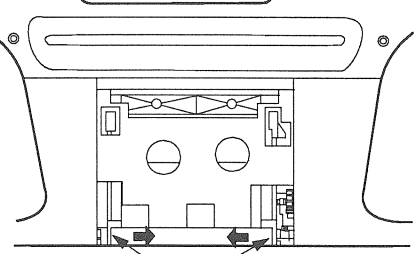
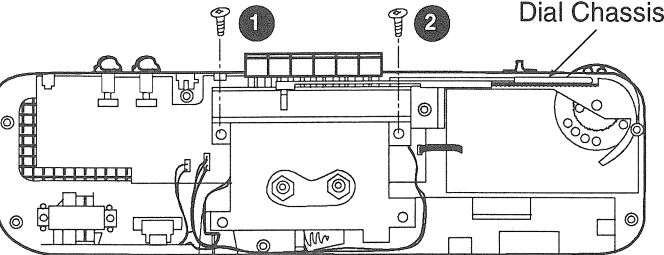
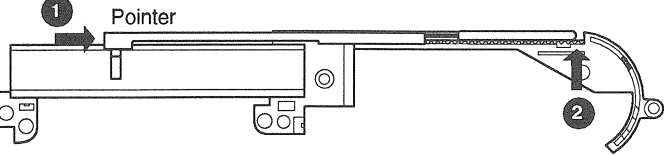


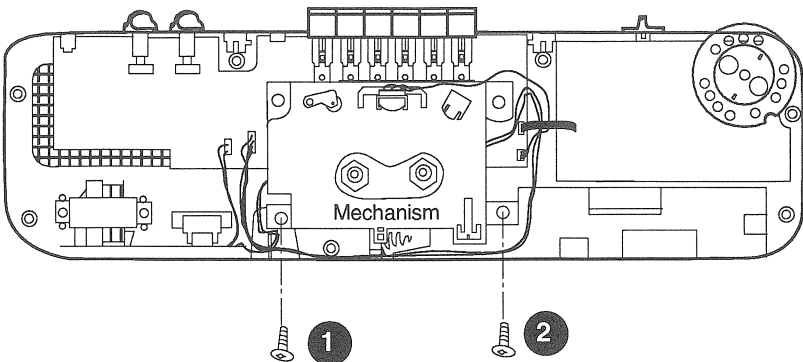
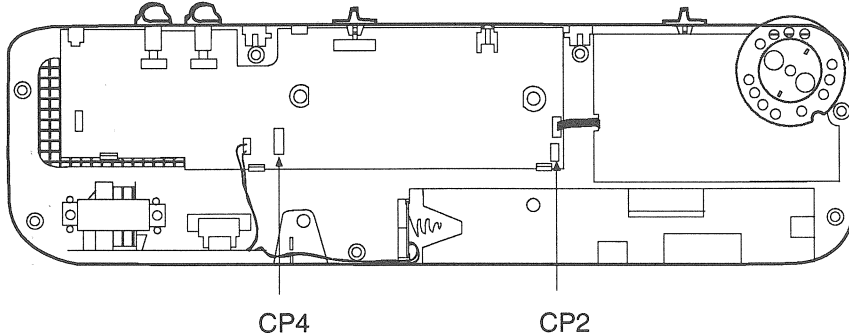
3. Install the pointer in the direction arrow ①, follow by ②, then ③.
4. Push the pointer fully to the left.

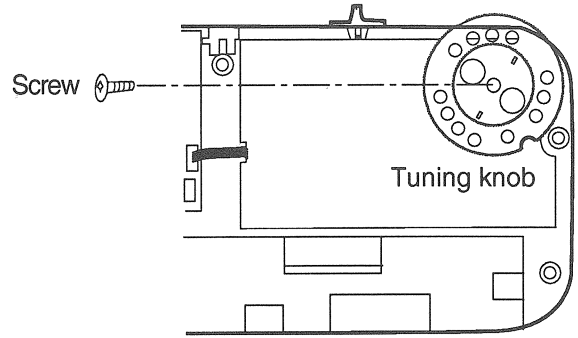
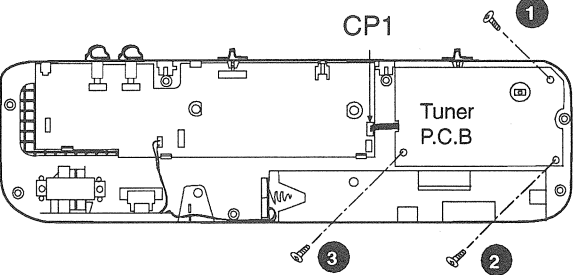


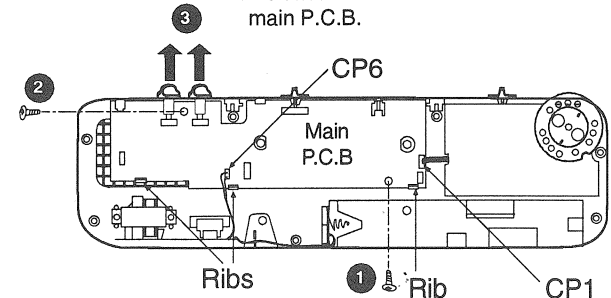
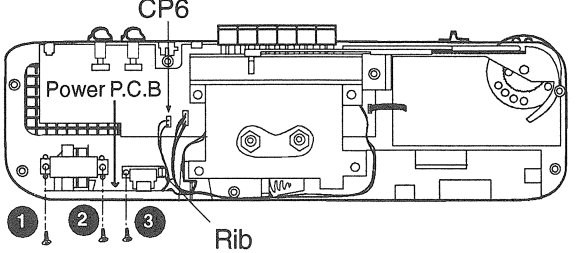
5. Install the dial chassis in the cabinet and then replace 2 screws.

DISASSEMBLY INSTRUCTIONS

Ref. No. 1	Removal of the Handle	Ref. No. 2	Removal of the Front Cabinet
Procedure 1	1. Release the 2 ribs. 2. Slide out the handle.	Procedure 2	1. Remove the battery cover. 2. Remove 7 screws (① ~ ⑦).
 4. Remove the front cabinet in the direction of the arrow. 5. Remove the connector CP7. 		 3. Press the STOP/EJECT button to open the cassette holder. 	
Ref. No. 3	Removal of the Speaker	Ref. No. 4	Removal of the Cassette Compartment
Procedure 2 → 3	1. Remove 8 screws (① ~ ⑧). 2. Remove the black bond.	Procedure 2 → 4	• Push 2 ribs in the direction of the arrows.
			
Ref. No. 5	Removal of the Dial Chassis	Ref. No. 6	Removal of the Pointer
Procedure 2 → 5	• Remove 2 screws (① ~ ②).	Procedure 2 → 5 → 6	1. Push the pointer to the extreme right in the direction of arrow ①. 2. Lift up the pointer in the direction of arrow ②.
			

Ref. No. 7	Removal of the Mechanism	
Procedure 2 ➡ 5 ➡ 7	1. Remove 2 screws (❶ ~ ❷).  2. Remove 2 connectors (CP2 and CP4). 	

Ref. No. 8	Removal of the Tuning Knob	Ref. No. 9	Removal of the Tuner P.C.B
Procedure 2 ➡ 5 ➡ 8	• Remove the screw and pull out the tuning knob. 	Procedure 2 ➡ 5 ➡ 7 ➡ 8 ➡ 9	1. Remove the connector CP1. 2. Remove 3 screws (❶ ~ ❸) and remove the P.C.B. 

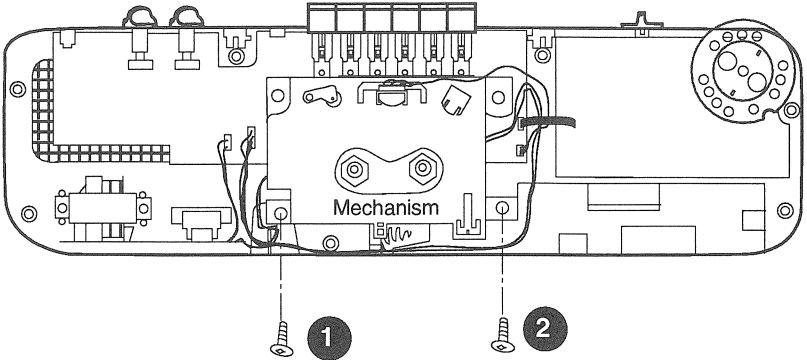
Ref. No. 10	Removal of the Main P.C.B.		Ref. No. 11	Removal of the Power P.C.B.	
Procedure 2 ➡ 5 ➡ 7 ➡ 10	1. Remove 2 screws (❶ ~ ❷). 2. Pull out 2 knobs in the direction of arrows ❸. 3. Remove 2 connectors (CP1 and CP6). 4. Release the ribs and remove the main P.C.B. 		Procedure 2 ➡ 11	1. Pull out the connector CP6. 2. Remove 3 screws (❶ ~ ❸). 3. Release the rib and remove the P.C.B. 	

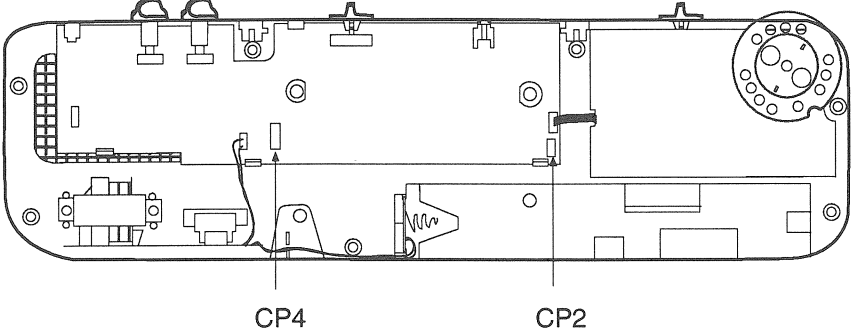
Ref. No.
7

Removal of the Mechanism

Procedure
2 ➡ 5 ➡ 7

1. Remove 2 screws (❶ ~ ❷).





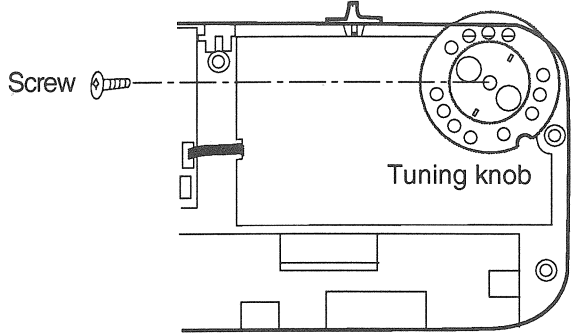
2. Remove 2 connectors (CP2 and CP4).

Ref. No.
8

Removal of the Tuning Knob

Procedure
2 ➡ 5 ➡ 8

• Remove the screw and pull out the tuning knob.

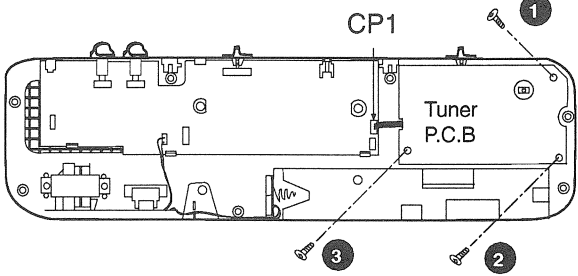


Ref. No.
9

Removal of the Tuner P.C.B.

Procedure
2 ➡ 5 ➡ 7 ➡ 8 ➡ 9

1. Remove the connector CP1.
2. Remove 3 screws (❶ ~ ❸) and remove the P.C.B.

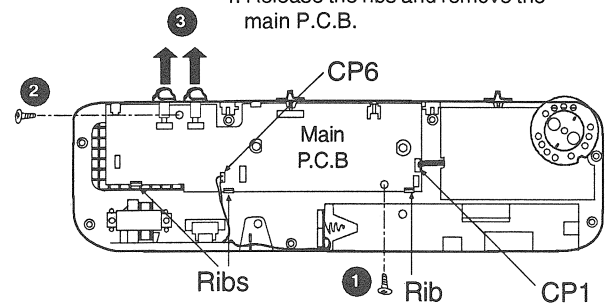


Ref. No.
10

Removal of the Main P.C.B.

Procedure
2 ➡ 5 ➡ 7 ➡ 10

1. Remove 2 screws (❶ ~ ❷).
2. Pull out 2 knobs in the direction of arrows ❸.
3. Remove 2 connectors (CP1 and CP6).
4. Release the ribs and remove the main P.C.B.

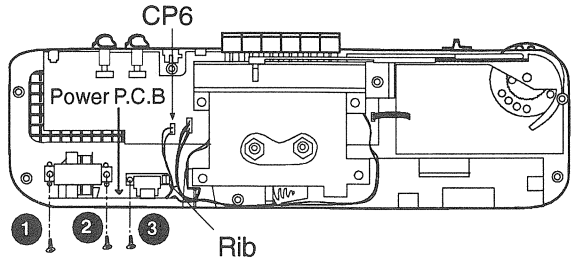


Ref. No.
11

Removal of the Power P.C.B.

Procedure
2 ➡ 11

1. Pull out the connector CP6.
2. Remove 3 screws (❶ ~ ❸).
3. Release the rib and remove the P.C.B.

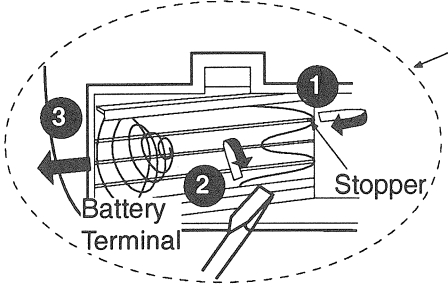


Ref. No.
12

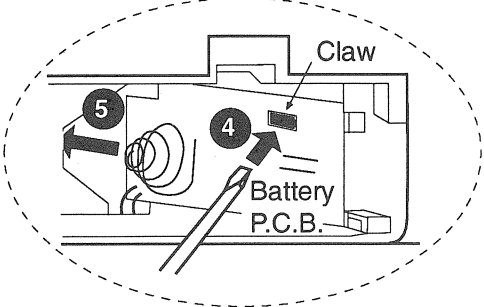
Removal of the Battery P.C.B. and Battery Terminal.

Procedure
2 ➡ 12

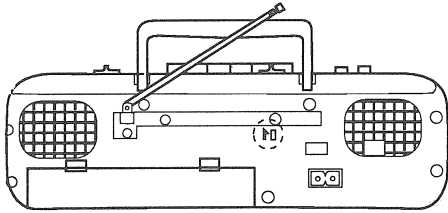
1. Lift up the battery terminal from the stopper in the direction of arrow ❶ and follow by ❷.
2. Pull out the battery terminal in the direction of arrow ❸.



3. Push in the claw in the direction of arrow ❹.
4. Pull out the battery terminal from the front side of the cabinet in the direction of arrow ❺.



What to do when the tape is entangled



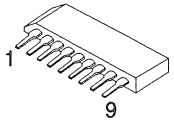
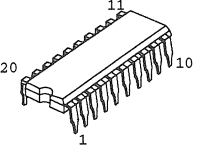
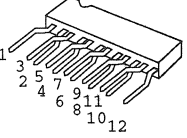
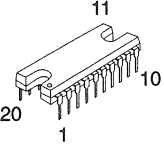
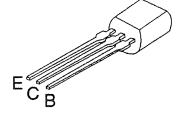
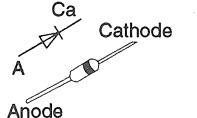
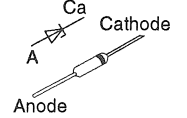
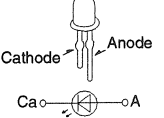
When the tape is caught in the pinch roller, etc. Release the tape by turning the pulley on the motor with a screwdriver in the direction of arrow.

BATTERY SERVICE LIFE

UM-1 (D-size) Batteries
Approx. 32 hours of recording (EIAJ)
Approx. 16.5 hours of playback (EIAJ)

The above battery service life is measured according to the conditions set fort by EIAJ (Electronic Industries Association of Japan). As the battery service life varies with the method of operation and environmental conditions,use these values as reference.

■ TERMINAL GUIDE OF ICs, TRANSISTORS & DIODES

AN7205 	BA1442 	BA3313L 	RVILA4108R 
2SC1684RTA 2SC2001KTA 	RVD1SS133TA RVD1SR35TR 	RVDMTZ6R8BTA 	LN28RPH 

NOTES:

- S1-1 ~ S1-2 : Band select switch in "FM STEREO" position.
(S ... FM STEREO, F...FM, A...AM)
 - S3-1 ~ S3-4 : Function select switch in "TAPE/ **OFF**" position.
(T...TAPE/ **OFF**, R...RADIO)
 - S4-1 ~ S4-6 : Record/Playback switch in "PLAYBACK" position.
(R...RECORD, P...PLAYBACK)
 - S6 : Motor switch in "OFF" position.
 - S304 : AC/DC select switch in "DC" position.
 - VR301-1 ~ VR301-2 : Volume control VR.
 - VR302-1 ~ VR302-2 : Tone control VR.
- | | | | |
|---------------------|-----------------|-------------------------|-------------------------|
| • Battery Current : | Radio | 28.9mA (FM, min volume) | 28.5mA (AM, min volume) |
| | | 56.2mA (FM, max volume) | 64.2mA (AM, max volume) |
| | Tape | 33.4mA (volume min) | |
| | | 82.6mA (volume max) | |
| | Recording | 31.4mA (mic, tape) | 61.4mA (radio, tape) |
| | | 30.9mA (mic, w/o tape) | 61.2mA (mic, w/o tape) |

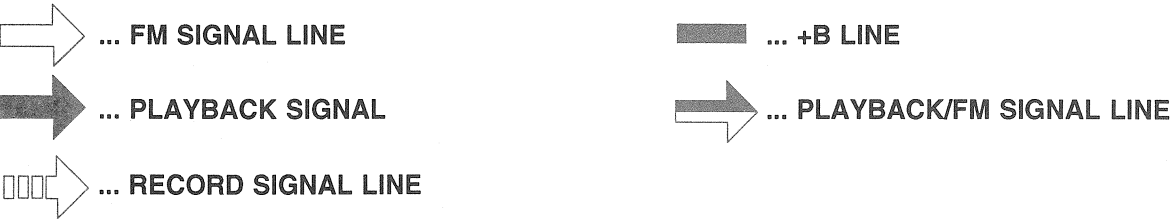
Measurement condition:
Radio: FM 60 dB, 30%mod
AM 74 dB, 30%mod
Tape: 315 Hz, 0dB
Tone: centre

- DC voltage measurements are taken with electronic voltmeter from negative terminal of battery.
- *L5 and *L6 are printed coils formed on the P.C.B and thus not found in the Replacement Parts List.

No mark ... Playback < > ... FM () ... AM

- Important Safety Notice:
Component identified by  have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

- This schematic diagram may be modified at anytime with the development of new technology.

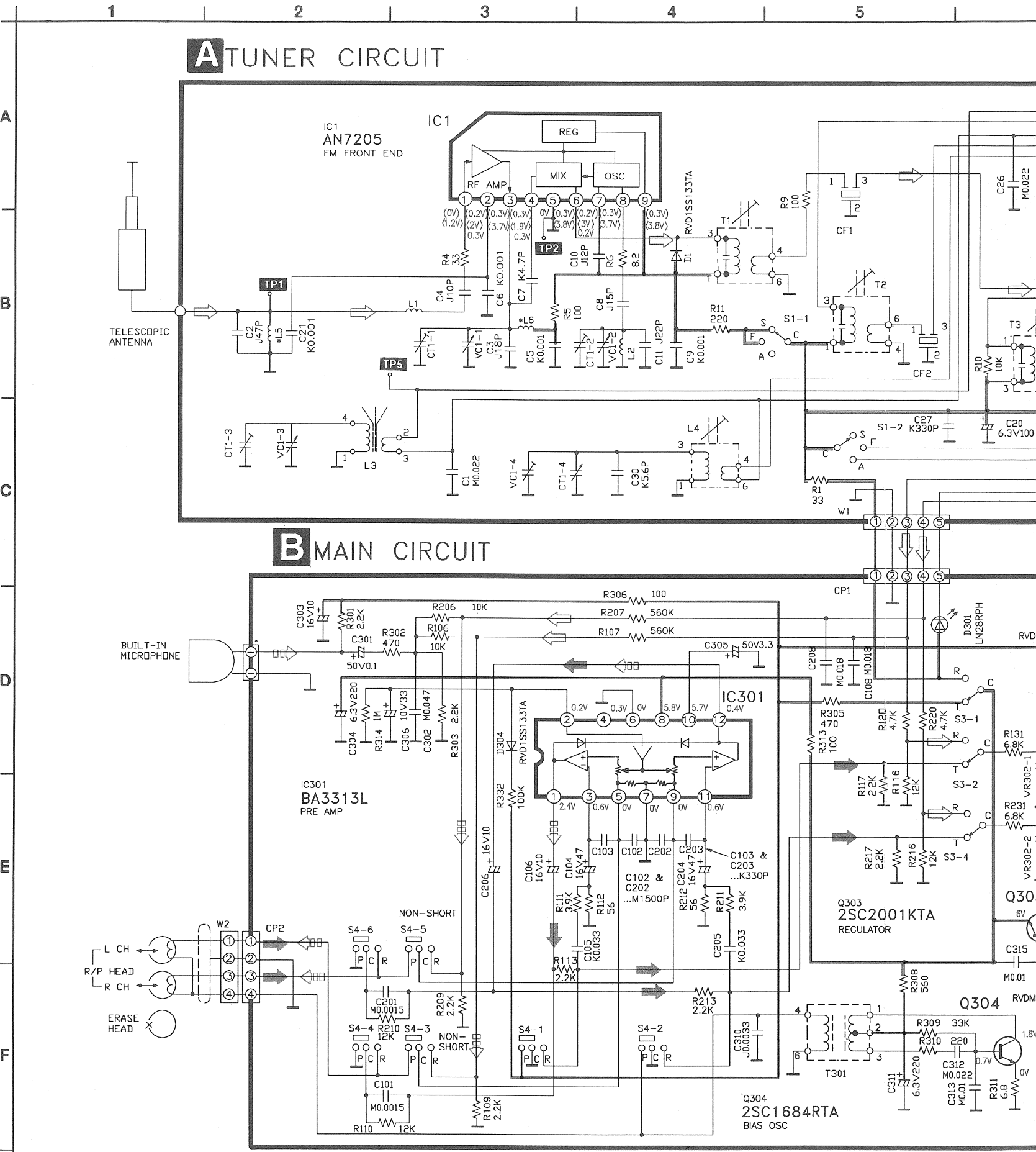


FUSE CAUTION

 This symbol located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire hazard, replace with the same type fuse. For fuse rating, refer to the rating adjacent to the symbol.

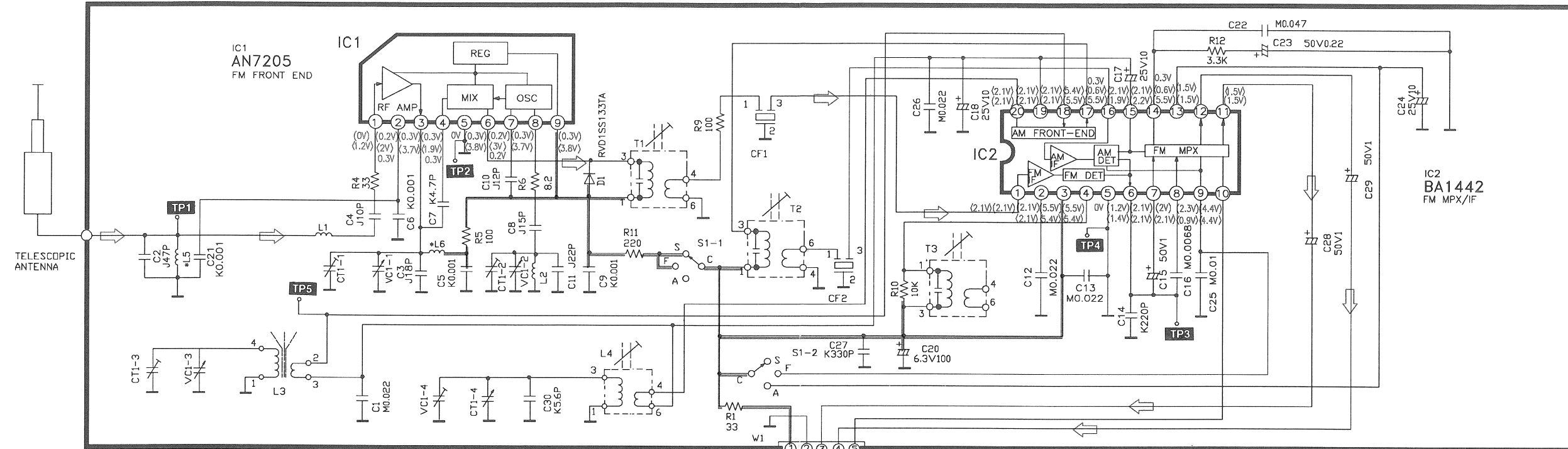
 Ce symbole indique que le fusible utilisé est à rapide. Pour une protection permanente, n'utiliser que des fusibles de même type. Ce dernier est indiqué là qu le présent symbole est apposé.

SCHEMATIC DIAGRAM

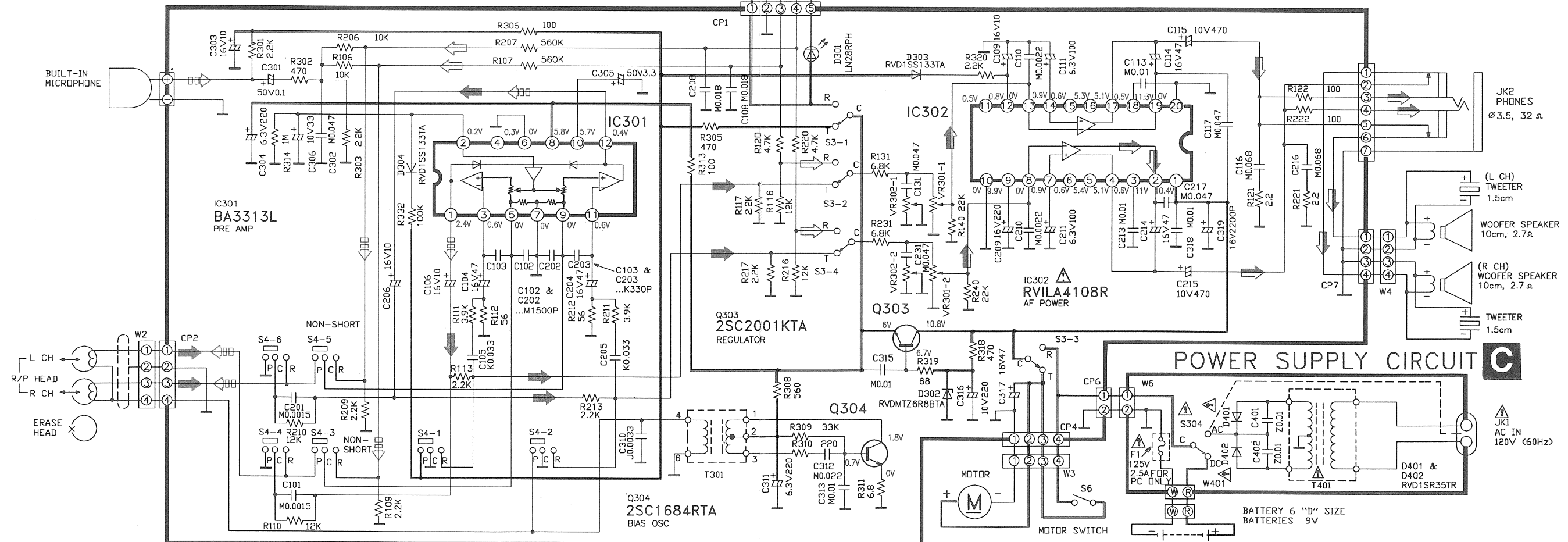


■ SCHEMATIC DIAGRAM

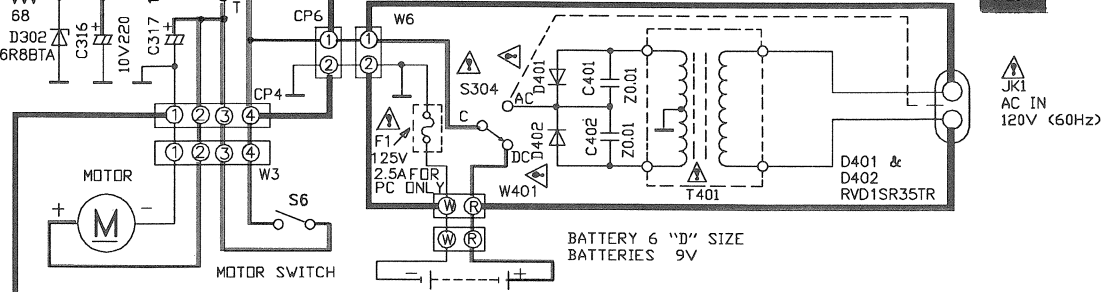
A TUNER CIRCUIT



B MAIN CIRCUIT



C POWER SUPPLY CIRCUIT



B MAIN P.C.B (REP1714A)

FM STEREO SELECTOR MIC TONE VOLUME PHONES

A TUNER P.C.B (REP1716A)

BAND TP1 TP2 TP3 TP4 TP5

C POWER SUPPLY P.C.B FOR PC area (REP1715G)

AC IN 120V (60Hz)

(Power Transformer)

C POWER SUPPLY P.C.B FOR P area (REP1715A)

AC IN 120V (60Hz)

(Power Transformer)

BATTERY 6 "D" SIZE BATTERIES 9V

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

MEASUREMENTS AND ADJUSTMENTS

ALIGNMENT INSTRUCTIONS

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT	
1. Set volume control to maximum.	5. Set power source voltage to 9V DC.
2. Set tone control to center.	6. Output of signal generator should be no higher than necessary to obtain an output reading.
3. Set band switch to AM,FM or FM STEREO.	
4. Set function selector to RADIO or TAPE/OFF.	

AM-IF ALIGNMENT

SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT (Shown in Fig.1)	REMARKS
CONNECTIONS	FREQUENCY				
Fashion a loop of several turns of wire and radiate signal into loop of receiver.	455kHz 30% Mod. at 400Hz	Point of non-interference.(on/ about 600kHz)	Headphone 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.

AM-RF ALIGNMENT

Fashion a loop of several turns of wire and radiate signal into loop of receiver.	511kHz	Tuning capacitor fully closed.	"	L4 (AM OSC Coil)	Adjust for maximum output.
"	1753kHz	Tuning capacitor fully open.	"	CT1-4 (AM OSC Trimmer)	"
"	600kHz	Tune to signal	"	[*1] L3 (AM ANT Coil)	Adjust for maximum output. Adjust L3 by moving coil along the ferrite core.
"	1500kHz	"	"	CT1-3 (AM ANT Trimmer)	Adjust for maximum output.
[*1] Fix antenna coil with wax after completing alignment.					

FM-IF ALIGNMENT

SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT (Shown in Fig. 1)	REMARKS
CONNECTIONS	FREQUENCY				
Connect to test point TP1 through ceramic capacitor. Negative side to test point TP2 .	10.7MHz (Sweep)	Point of non-interference.(on/ about90MHz)	Connect vert. amp. of scope to test point TP3. Negative side to test point TP4 .	T1 (FM 1st IFT)	Waveform is shown in Fig. 3
"	"	"	"	T3 (FM 2nd IFT)	Waveform is shown in Fig. 4

FM-RF ALIGNMENT

Connect to test point TP1 through FM dummy antenna. Negative side to test point TP2 .	86.2MHz	Variable capacitor fully closed.	Headphone Jack (32Ω) (Fabricate the plug as shown in Fig.2 and then connect the lead wires of the plug to the measuring instrument.)	L2 (FM OSC Coil)	[*2] Adjust for maximum output.
	109.2MHz	Variable capacitor fully open.	"	CT1-2 (FM OSC Trimmer)	
	106.0 MHz	Tune to signal.	"	CT1-1 (FM ANT Trimmer)	
[*2] Three output responses will be present; proper tuning is the centre frequency.					

TAPE SPEED ALIGNMENT

TEST TAPE	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
QZZCWAT (3 kHz)	Headphone Jack (32Ω) (Fabricate the plug as shown in Fig.2 and then connect the lead wires of the plug to the measuring instrument.)	Motor VR (As shown in Fig 5)	3000 ± 90 Hz	Playback mode

ALIGNMENT POINT

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

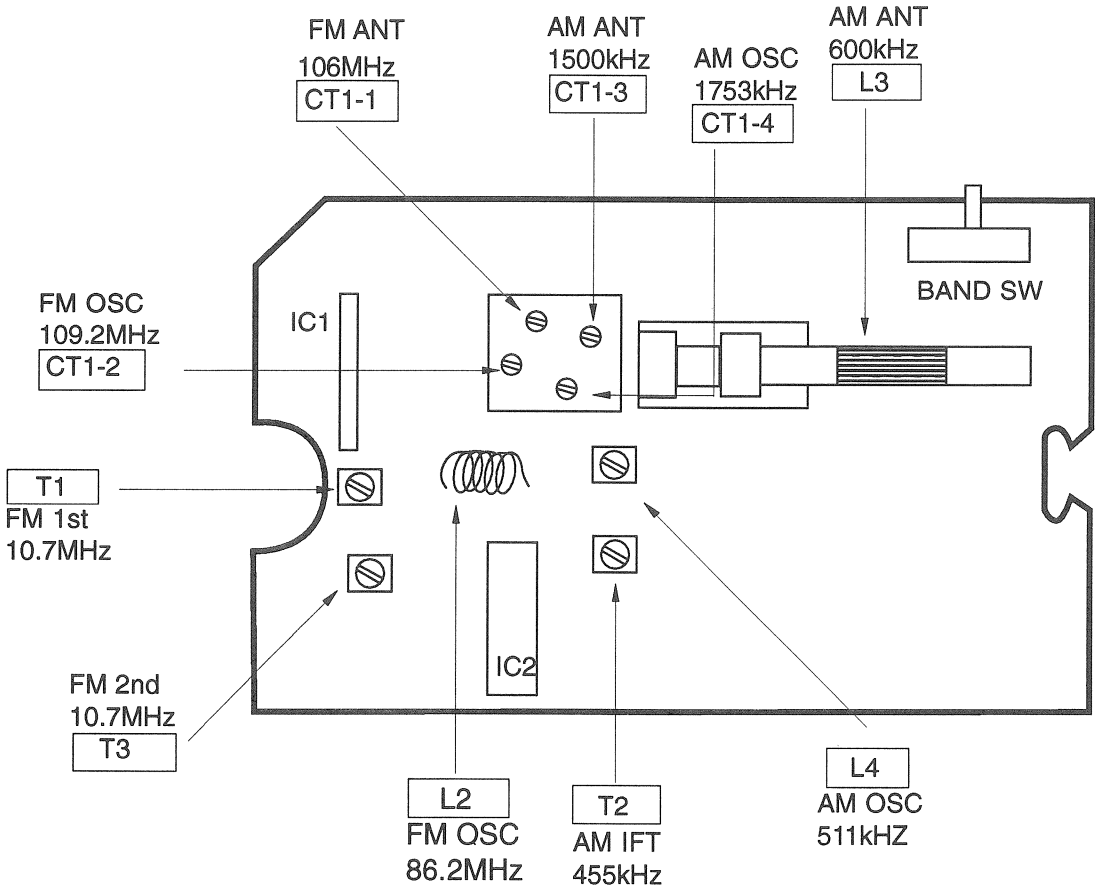


Fig. 1

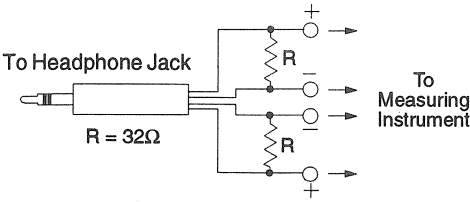


Fig. 2

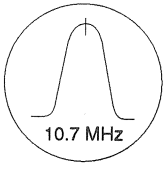


Fig. 3

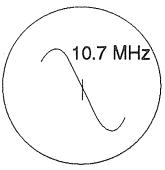
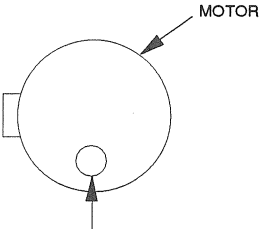


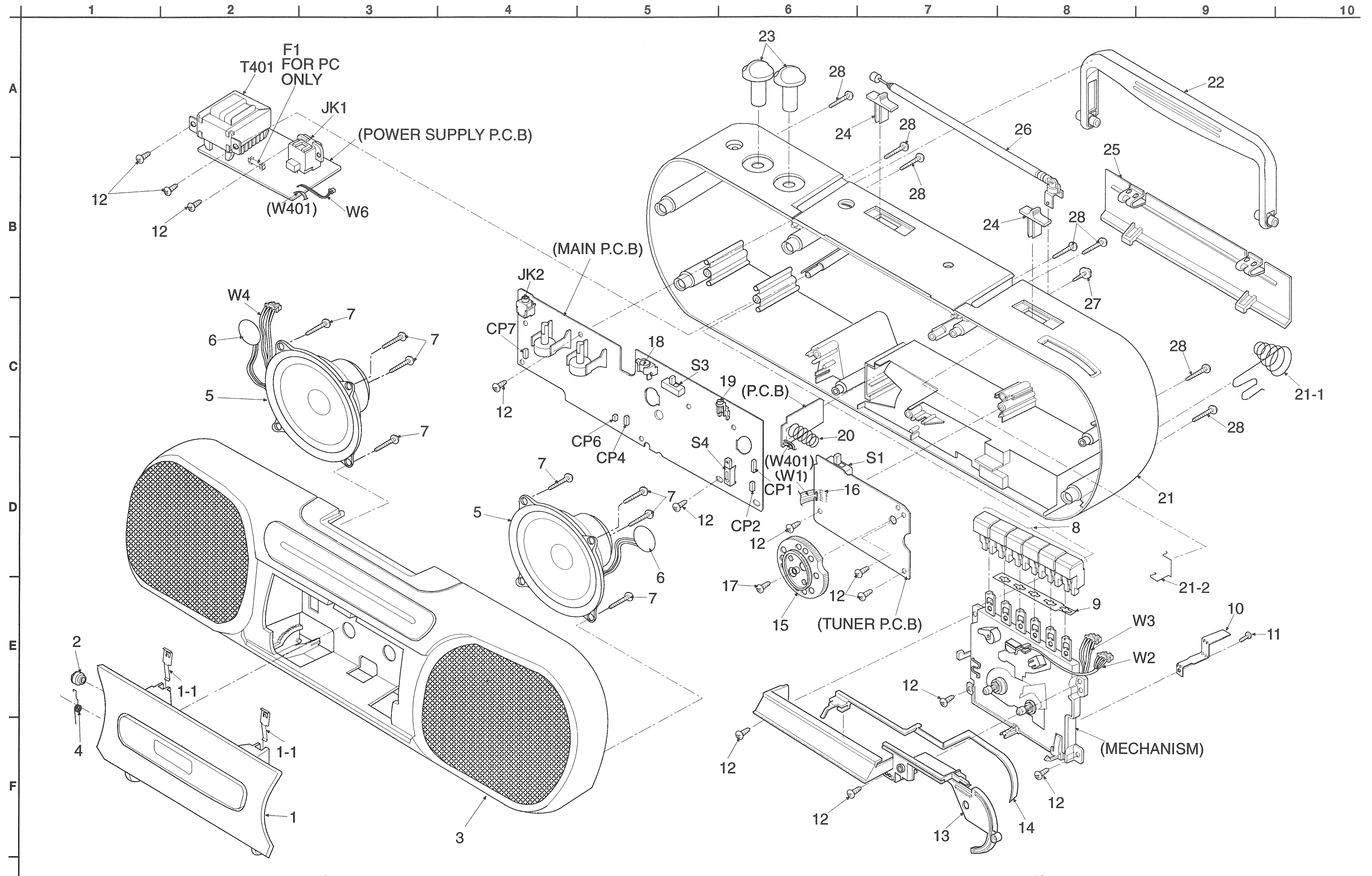
Fig. 4



Motor VR

Fig. 5

CABINET PARTS LOCATION



REPLACEMENT PARTS LIST

Notes: * Important safety notice:

Components identified by  mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.

When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.

* The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area)

Parts without these indications can be used for all areas.

* [M] Indicates in the Remarks columns indicates parts supplied by MESA.

Ref No.	Part No.	Part Name & Description	Remarks	Ref No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS		IC2	BA1442	IC,MPX / IF	[M]
				IC301	BA3313L	IC,PREF AMP	[M]
				IC302	RVILA4108R	IC,AF POWER	
1	RKFLFS430PK	CASSETTE LID ASS'Y	[M]			TRANSISTORS	
1-1	RUS757ZAA	HALF SPRING	[M]				
2	RDG0183-J	DAMPER GEAR	[M]				
3	RFKGFS430PK	FRONT CABINET ASS'Y	[M]	Q303	2SC2001KTA	TRANSISTOR	
4	RMB0347	OPEN SPRING	[M]	Q304	2SC1684RTA	TRANSISTOR	
5	EAS10P241JA3	SPEAKER	[M]			DIODES	
6	EFBS10D48A1	TWEETER	[M]				
7	XTV3+10G	SCREW (SPEAKER)		D1	RVD1SS133TA	DIODE	
8	RGZ0016-K	MECHA BUTTON BLOCK	[M]	D301	LN28RPH	LED	[M]
9	RMXX0002	SPACER	[M]	D302	RVDMTZ6R8BTA	DIODE	
10	RMC0220	REC SPRING PLATE	[M]	D303	RVD1SS133TA	DIODE	
11	XTN2+3F	SCREW (PLATE)		D304	RVD1SS133TA	DIODE	
12	XTV3+12G	SCREW (PCB & MECH)		D401	RVD1SR35TR	DIODE	
13	RMK0218	DIAL CHASSIS	[M]	D402	RVD1SR35TR	DIODE	
14	RGJ0012-W	POINTER	[M]			VARIABLE RESISTORS	
15	RGX0015-K	TUNER KNOB	[M]				
16	RMR0314	CABLE HOLDER (5P)	[M]	VR301	EWCUVAF15A54	VR,VOLUME	
17	XYN26+C6	SCREW (TUNING KNOB)		VR302	EWCVVAF15D54	VR,TONE	
18	RJM164YA	MIC	[M]			VARIABLE CAPACITORS	
19	RMN0238	LED HOLDER	[M]				
20	RMBX0002	SPRING TERMINAL		VC1	RCV4PCT0V1-A	TRIMMER	[M]
21	RFKHFS430PK	BACK CABINET ASS'Y	(P) [M]			SWITCHES	
21	RFKHFS430PCK	BACK CABINET ASS'Y	(PC) [M]				
21-1	RJC91003	+ - BATTERY TERMINAL	[M]	S1	RSS3B45XA-H	SW,BAND	[M]
21-2	RJR0112	ANTENNA TERMINAL	[M]	S3	RSS2D32ZA-H	SW,FUNCTION	[M]
22	RKX0031-K	HANDLE	[M]	S4	RSP2F001-A	SW,RECORD	[M]
23	RGW0186-K	VOLUME TONE KNOB	[M]	S6	RSH1A003-U	SW,DECK MOTOR	[M]
24	RBD563ZA-0	FUNCTION BAND KNOB	[M]	S304	RJJ1SM02-H	JACK W/SW (JK1)	
25	RKK318ZC-0	BATTERY COVER	[M]			CONNECTORS	
26	XEARR175ED-Y	WHIP ANTENNA					
27	XYN3+F8FY	ANTENNA SCREW		CP1	RJS1A5205	CONNECTOR (5P)	[M]
28	XTV3+20G	CABINET SCREW					
		INTEGRATED CIRCUITS					
IC1	AN7205	IC,RF					

Ref No.	Part No.	Part Name & Description	Remarks
CP2	RJP4G18ZA	CONNECTOR (4P)	
CP4	RJP4G18ZA	CONNECTOR (4P)	
CP6	RJP2G4YA	CONNECTOR (2P)	
CP7	RJP4G4YA	CONNECTOR (4P)	
		COILS & TRANSFORMERS	
L1	RLQY30S1W	COIL	[M]
L2	RLD4Y53W	OSC COIL	[M]
L3	RLV2C018-0	AM FERRITE ANT	[M]
L4	RL02B105-M	AM OSC COIL	
T1	RLI4B153-M	FM IFT	
T2	RLI2B458-M	AM IFT	
T3	RLI4B153-M	FM IFT	
T301	RL09B17-T	BIAS OSC COIL	
T401	RTP1K1C004-X	POWER TRANSFORMER	[M] ⚠
		CERAMIC FILTERS	
CF1	RVF107WDZT	FM CF	
CF2	RVFSFU455B	AM CF	
		FUSES	
F1	XBA1C25NBAL	FUSE	(PC) [M] ⚠
		FUSE CLIPS	
FC1	EYF52BC	FUSE HOLDER	(PC)
FC2	EYF52BC	FUSE HOLDER	(PC)
		JACKS	
JK1	RJJ1SM02-H	JACK W/SW (S304)	⚠
JK2	RJJ37TK01-C	JACK,PHONE	[M]
		WIRES	
W2	REX0575	WIRE,HEAD TO MAIN	[M]
W3	REX0541	WIRE,MECH TO MAIN	[M]
W4	REX0582	WIRE,SPEAKER TO MAIN	[M]
W6	REX0574	WIRE,POWER TO MAIN	[M]
		PACKING MATERIALS	
P1	RPG1763	GIFT BOX	(P) [M]
P1	RPG1828	GIFT BOX	(PC) [M]

[illegible]

RESISTORS & CAPACITORS

Notes : * Capacitor values are in microfarads (μF) unless specified otherwise, P=Pico-farads (pF) F=Farads
 * Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM).
 * Bracketed indications in Ref. No. columns specify the area (Refer to the first page for area).
 Parts without these indications can be used for all areas.
 * [M] Indicates in the values & remarks column indicates parts supplied by MESA

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
	RESISTORS		R309	ERDS2TJ333T	33K 1/4W	C105	ECFR1C333KR	0.033 16V
			R310	ERDS2TJ221T	220 1/4W	C106	ECEA1CU100B	10 16V
			R311	ERDS2TJ6R8T	6.8 1/4W	C108	ECFR1C183MR	0.018 16V
R1	ERDS2TJ330T	33 1/4W	R313	ERDS2TJ101T	100 1/4W	C109	ECEA1CU100B	10 16V
R4	ERDS2TJ330T	33 1/4W	R314	ERDS2TJ105T	1M 1/4W	C110	ECBT1C222MR5	2200P 16V
R5	ERDS2TJ101T	100 1/4W	R318	ERDS2TJ471T	470 1/4W	C111	ECEA0JU101B	100 6.3V
R6	ERDS2TJ8R2T	8.2 1/4W	R319	ERDS2TJ680T	68 1/4W	C113	ECBT1C103MS5	0.01 16V
R9	ERDS2TJ101T	100 1/4W	R320	ERDS2TJ222T	2.2K 1/4W	C114	ECEA1CU470B	47 16V
R10	ERDS2TJ103T	10K 1/4W	R332	ERDS2TJ104T	100K 1/4W	C115	ECEA1AU471B	470 10V
R11	ERDS2TJ221T	220 1/4W		CAPACITORS		C116	ECFR1C683MR	0.068 16V
R12	ERDS2TJ332T	3.3K 1/4W				C117	ECFR1C473MR	0.047 16V
R106	ERDS2TJ103T	10K 1/4W				C131	ECFR1C473MR	0.047 16V
R107	ERDS2TJ564T	560K 1/4W	C1	ECFR1C223MR	0.022 16V	C201	ECBT1C152MR5	1500P 16V
R109	ERDS2TJ222T	2.2K 1/4W	C2	ECBT1H470J5	47P 50V	C202	ECBT1C152MR5	1500P 16V
R110	ERDS2TJ123T	12K 1/4W	C3	ECBT1H180JC5	18P 50V	C203	ECBT1H331KB5	330P 50V
R111	ERDS2TJ392T	3.9K 1/4W	C4	ECBT1H100J5	10P 50V	C204	ECEA1CU470B	47 16V
R112	ERDS2TJ560T	56 1/4W	C5	ECBT1H102KB5	1000P 50V	C205	ECFR1C333KR	0.033 16V
R113	ERDS2TJ222T	2.2K 1/4W	C6	ECBT1H102KB5	1000P 50V	C206	ECEA1CU100B	10 16V
R116	ERDS2TJ123T	12K 1/4W	C7	ECBT1H4R7KC5	4.7P 50V	C208	ECFR1C183MR	0.018 16V
R117	ERDS2TJ222T	2.2K 1/4W	C8	ECBT1H150J5	15P 50V	C209	ECEA1CU221B	220 16V
R120	ERDS2TJ472T	4.7K 1/4W	C9	ECBT1H102KB5	1000P 50V	C210	ECBT1C222MR5	2200P 16V
R121	ERDS2TJ2R2T	2.2 1/4W	C10	ECBT1H120J5	12P 50V	C211	ECEA0JU101B	100 6.3V
R122	ERDS2TJ101T	100 1/4W	C11	ECBT1H220JC5	22P 50V	C213	ECBT1C103MS5	0.01 16V
R131	ERDS2TJ682T	6.8K 1/4W	C12	ECFR1C223MR	0.022 16V	C214	ECEA1CU470B	47 16V
R140	ERDS2TJ223T	22K 1/4W	C13	ECFR1C223MR	0.022 16V	C215	ECEA1AU471B	470 10V
R206	ERDS2TJ103T	10K 1/4W	C14	ECBT1H221KB5	220P 50V	C216	ECFR1C683MR	0.068 16V
R207	ERDS2TJ564T	560K 1/4W	C15	ECEA1HU010B	1 50V	C217	ECFR1C473MR	0.047 16V
R209	ERDS2TJ222T	2.2K 1/4W	C16	ECBT1C682MR5	6800P 16V	C231	ECFR1C473MR	0.047 16V
R210	ERDS2TJ123T	12K 1/4W	C17	ECEA1EU100B	10 25V	C301	ECEA1HU0R1B	0.1 50V
R211	ERDS2TJ392T	3.9K 1/4W	C18	ECEA1EU100B	10 25V	C302	ECFR1C473MR	0.047 16V
R212	ERDS2TJ560T	56 1/4W	C20	ECEA0JU101B	100 6.3V	C303	ECEA1CU100B	10 16V
R213	ERDS2TJ222T	2.2K 1/4W	C21	ECBT1H102KB5	1000P 50V	C304	ECEA0JU221B	220 6.3V
R216	ERDS2TJ123T	12K 1/4W	C22	ECFR1C473MR	0.047 16V	C305	ECEA1HU3R3B	3.3 50V
R217	ERDS2TJ222T	2.2K 1/4W	C23	ECEA1HUR22B	0.22 50V	C306	ECEA1AU330B	33 10V
R220	ERDS2TJ472T	4.2 1/4W	C24	ECEA1EU100B	10 25V	C310	ECQP1332JZ3	3300P 100V
R221	ERDS2TJ2R2T	2.2 1/4W	C25	ECBT1C103MS5	0.01 16V	C311	ECEA0JU221B	220 6.3V
R222	ERDS2TJ101T	100 1/4W	C26	ECFR1C223MR	0.022 16V	C312	ECFR1C223MR	0.022 16V
R231	ERDS2TJ682T	6.8K 1/4W	C27	ECBT1H331KB5	330P 50V	C313	ECBT1C103MS5	0.01 16V
R240	ERDS2TJ223T	22K 1/4W	C28	ECEA1HU010B	1 50V	C315	ECBT1C103MS5	0.01 16V
R301	ERDS2TJ222T	2.2K 1/4W	C29	ECEA1HU010B	1 50V	C316	ECEA1AU221B	220 10V
R302	ERDS2TJ471T	470 1/4W	C30	ECBT1H5R6KC5	5.6P 50V	C317	ECEA1CU470B	47 16V
R303	ERDS2TJ222T	2.2K 1/4W	C101	ECBT1C152MR5	1500P 16V	C318	ECBT1C103MS5	0.01 16V
R305	ERDS2TJ471T	470 1/4W	C102	ECBT1C152MR5	1500P 16V	C319	ECA1CM222EV	2200 16V [M]
R306	ERDS2TJ101T	100 1/4W	C103	ECBT1H331KB5	330P 50V	C401	ECKR1H103ZF5	0.01 50V
R308	ERDS2TJ561T	560 1/4W	C104	ECEA1CU470B	47 16V	C402	ECKR1H103ZF5	0.01 50V