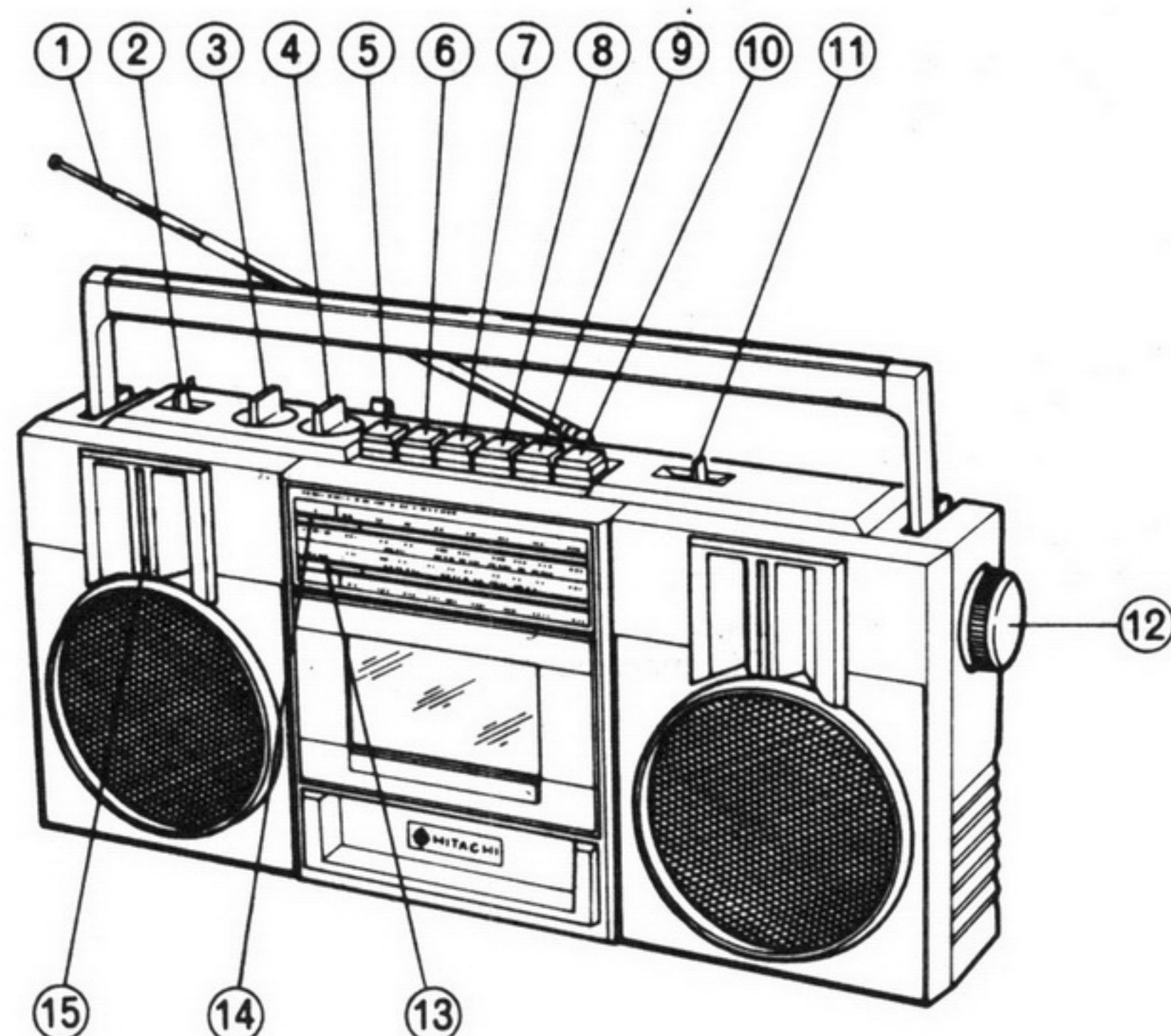




HITACHI

SERVICE MANUAL

TK**No. 2037E****TRK-6801E/E(BS)**

CONTENTS

SPECIFICATIONS.....	2
DISASSEMBLY	2
INSPECTION OF MECHANISM.....	3
LUBRICATION	3
ADJUSTMENT	4
REPLACEMENT PARTS LIST.....	6
SCHEMATIC DIAGRAM.....	7
CIRCUIT BOARD DIAGRAM.....	11
EXPLODED VIEW.....	14

KEY TO ILLUSTRATIONS

- | | |
|-------------------------------|----------------------------------|
| ① TELESCOPIC ANTENNA (AERIAL) | ⑨ PLAYBACK BUTTON |
| ② FUNCTION SELECTOR | ⑩ RECORD BUTTON |
| ③ TONE CONTROL | ⑪ BAND SELECTOR |
| ④ VOLUME CONTROL | ⑫ TUNING CONTROL |
| ⑤ PAUSE BUTTON | ⑬ RECORD/BATTERY INDICATOR |
| ⑥ STOP/EJECT BUTTON | ⑭ FM STEREO INDICATOR |
| ⑦ FAST FORWARD BUTTON | ⑮ BUILT-IN MICROPHONE (MONAURAL) |
| ⑧ REWIND BUTTON | |

SAFETY PRECAUTION

The following precautions should be observed when servicing.

1. Since many parts in the unit have special safety-related characteristics, always use genuine Hitachi's replacement parts. Especially critical parts in the power circuit block should not be replaced with other makes. Critical parts are marked with $\triangle$ in the schematic diagram, and circuit board diagram.
2. Before returning a repaired unit to the customer, the service technician must thoroughly test the unit to ascertain that it is completely safe to operate without danger of electrical shock.

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT

CASSETTE TAPE RECORDER WITH FM/SW/MW/LW RADIO

SPECIFICATIONS

GENERAL SECTION

Semi-conductors :	IC's : 3 Transistors : 11 (E) 10 (E(BS)) Diodes : 7 LED's : 2 Zener diode : 1
Power (Mains) Supply :	AC : 220V, 50 Hz (E) 240V, 50 Hz (E(BS)) DC : 9V (IEC R20 × 6 or equivalent)
Power (Mains) Consumption :	8W
Dimensions :	438(W) × 201(H) × 123(D) mm
Weight :	3.3 kg (with batteries)
Power output :	3W M.P.O. (AC operation) 1.2W/ch (T.H.D. 10%)
Speakers :	100mm, 8 ohms × 2
TUNER SECTION	
Circuit System :	FM/SW/MW/LW 4-band superheterodyne
Tuning Range :	FM : 87.5 to 108 MHz SW : 6 to 18 MHz MW : 530 to 1605 kHz LW : 150 to 350 kHz
Sensitivity :	FM : 8 dB (pra.), 0 dB (max.) SW : 30 dB (pra.), 20 dB (max.) MW : 48 dB (pra.), 40 dB (max.) LW : 55 dB (pra.), 45 dB (max.)
Intermediate Frequency :	FM : 10.7 MHz SW/MW/LW : 465 kHz

Antennas (Aerials) :	FM/SW : Telescopic antenna (aerial) MW/LW : Built-in ferrite-core antenna (aerial)
----------------------	---

TAPE RECORDER SECTION

Tape :	Cassette tape
Tape Speed :	4.75 cm/s
Recording System :	AC bias, 64 kHz
Erasing System :	DC erase
Track System :	4 track 2 channel
Frequency Response :	80 Hz to 10 kHz (Normal tape)
S/N (Signal to Noise Ratio) :	43 dB
Wow and Flutter :	0.25% (WRMS)
Crosstalk :	65 dB (Between tracks) 40 dB (Between channels)
Erase Ratio :	60 dB
Input Impedance :	Din in : 1 mV/k ohms, 700 ohms
Output Level and Impedance :	Din out : 700mV, 8 ohms Headphone : 8 to 100 ohms
Fast Forward or Rewinding Time :	110 sec. (Using C-60)
Distortion :	3%
Motor :	DC micromotor

DISASSEMBLY

1. Cassette lid

Push the tab with minus (⊖) screwdriver in the direction of arrow and pull out the cassette lid.

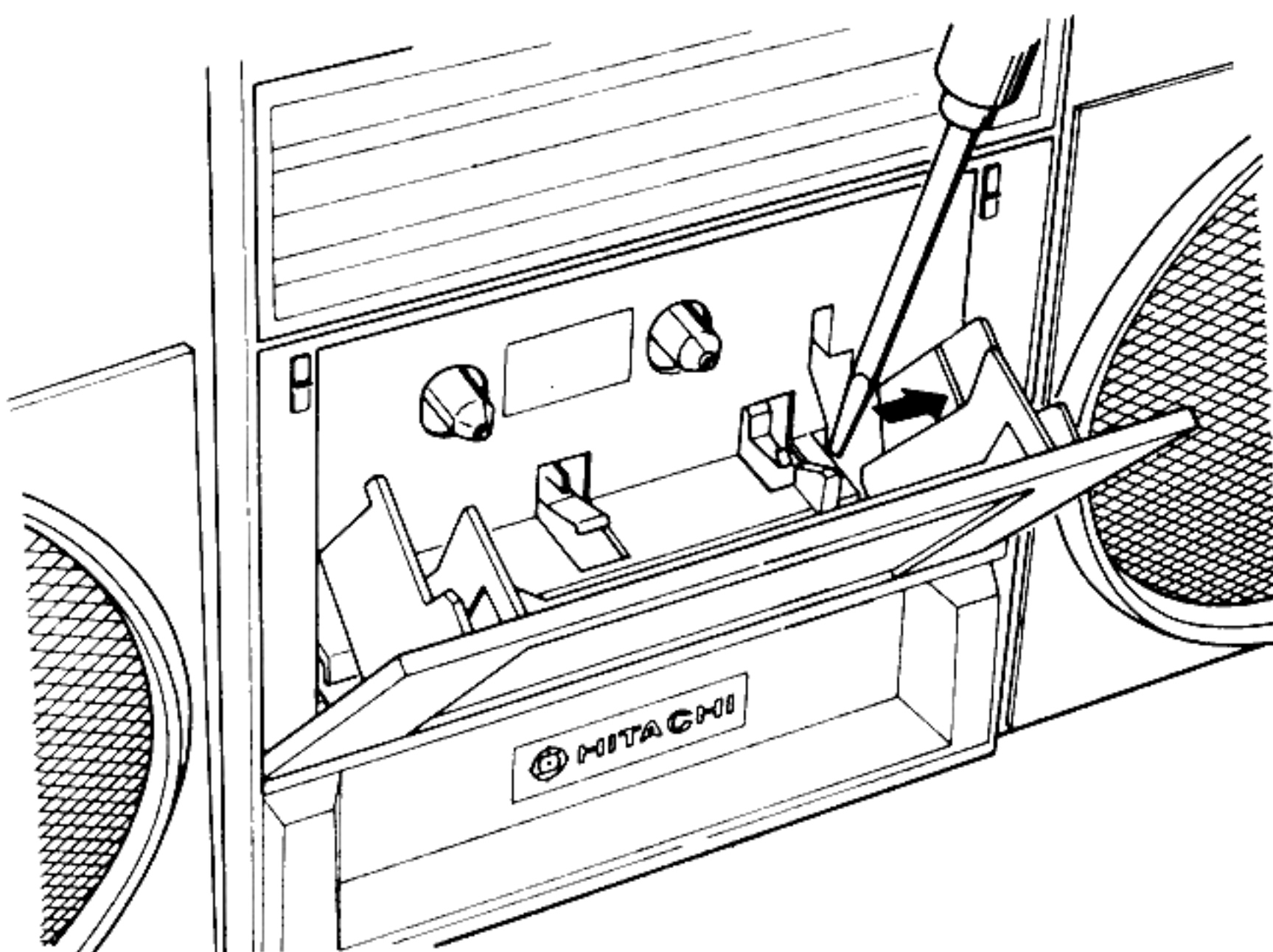


Fig. 1

2. Rear case

Remove (A) (six) screws.

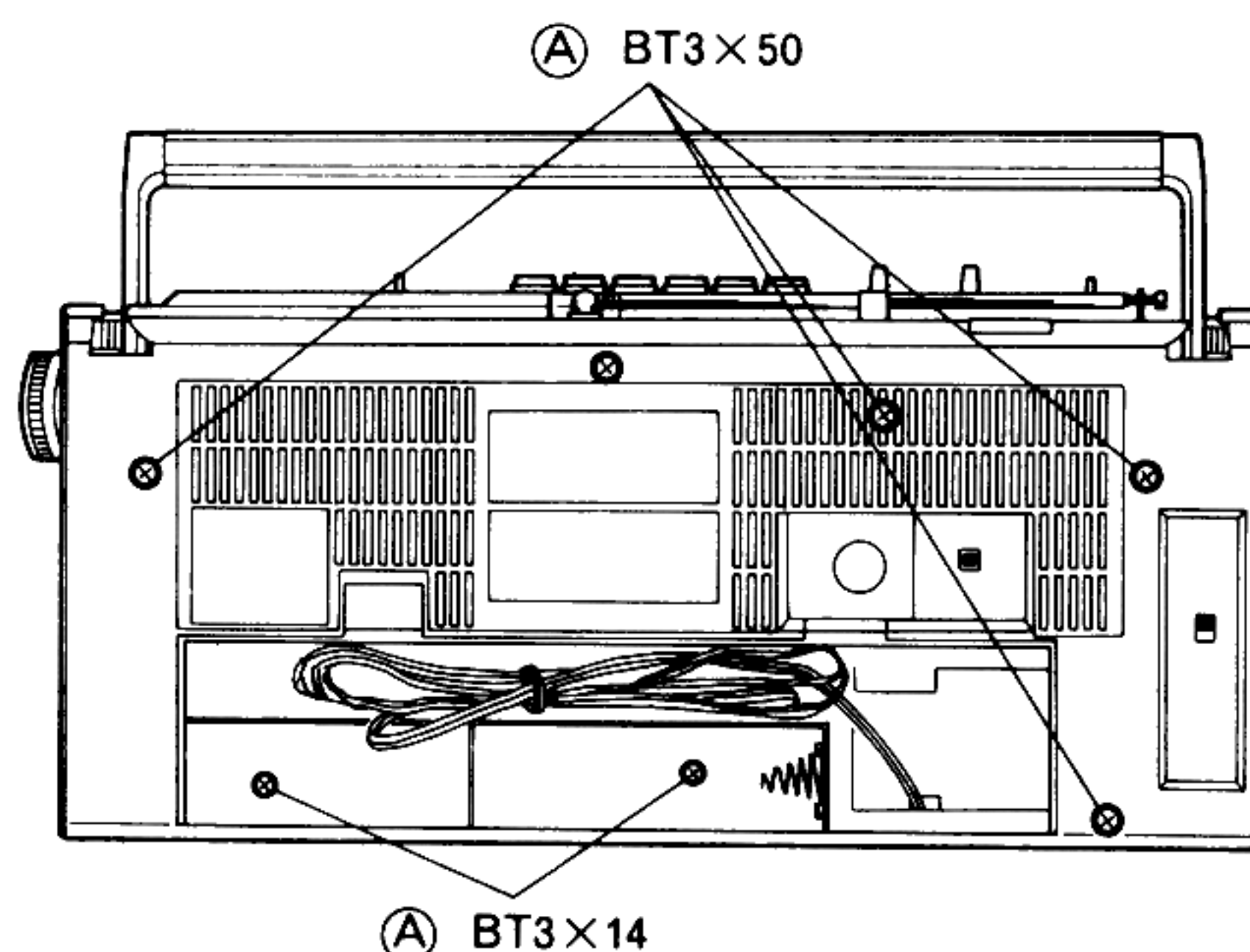


Fig. 2

SCHEMATIC DIAGRAM (Tuner Section)

Note

1. Voltage measured at base of chassis with minimum volume control and no signal.
2. Nomenclature of Resistors and Capacitors.

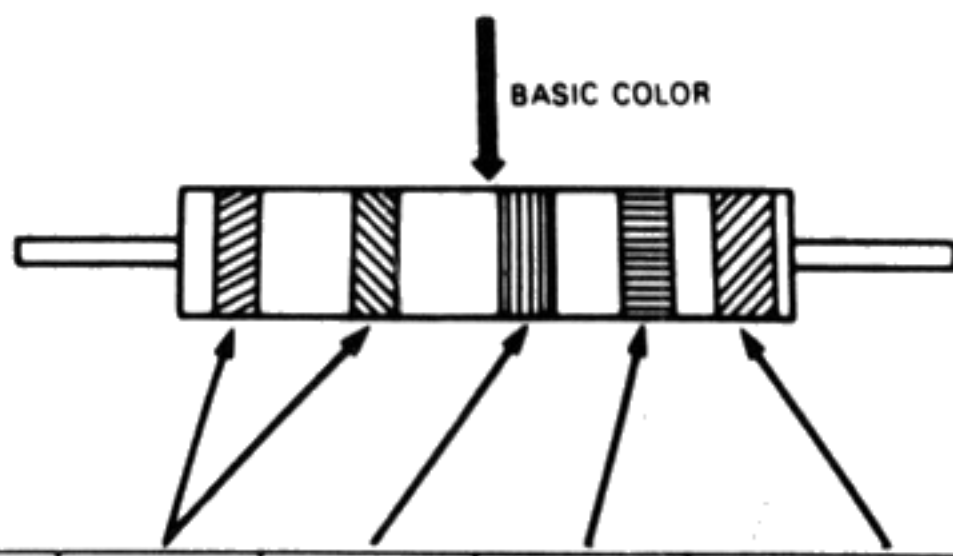
Circuit No.	
Value	No indicated Ω (Ohm) M : 1000 k Ω
Tolerance	No indicated $\pm 5\%$ K : $\pm 10\%$ M : $\pm 20\%$
Wattage	No indicated $\frac{1}{4}W$
Sort	No indicated Carbon film RC : Composition RW : Wire wound RS : Oxide metal film RN : Fixed metal film

Circuit No.	
Value	No indicated μF P : PF
Tolerance	No indicated $\pm 10\%$ J : $\pm 5\%$ M : $\pm 20\%$ Z : $+80\%$, -20% D : $\pm 0.5pF$ C : $\pm 0.25pF$
Sort	Ceramic Electrolytic Mylar Polyester Styrol
Voltage	No indicated 50VV

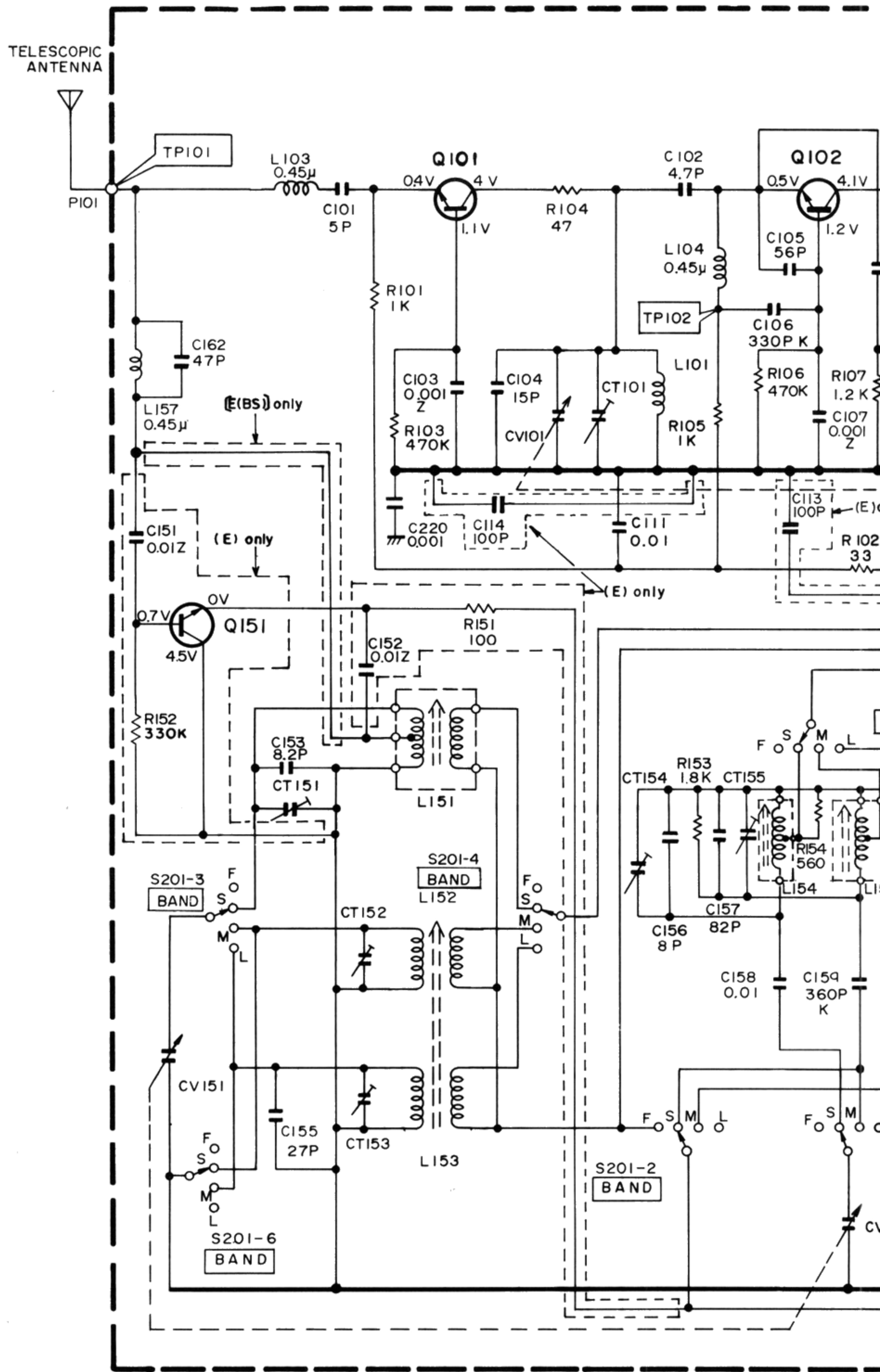
3. Be sure to make your orders of resistors and capacitors with value, voltage, tolerance and sort.
4. When replacing capacitors marked with *, use specified ones stated on parts list since required temperature characteristics.

HOW TO READ CAPACITY OF RESISTOR SHAPE CAPACITORS

COLOR	RATED VOLTAGE
Pink	25V
Light green	50V



COLOR	CAPACITY	MULTIPLE	TOLERANCE	CHARACTERISTICS
Black	0	10^0	$\pm 20\%$	For temperature compensation
Brown	1	10^1		
Red	2	10^2		
Orange	3	10^3		
Yellow	4	10^4		
Green	5	10^5		
Blue	6			
Violet	7			
Grey	8		$\pm 30\%$	High dielectric constant type
White	9			For temperature compensation
Gold		10^{-1}	$\pm 5\%$	
Silver			$\pm 10\%$	High dielectric constant type



Q 101
HIT9016G
FM RF AMP.

Q 102
HIT9016G
FM CONV.

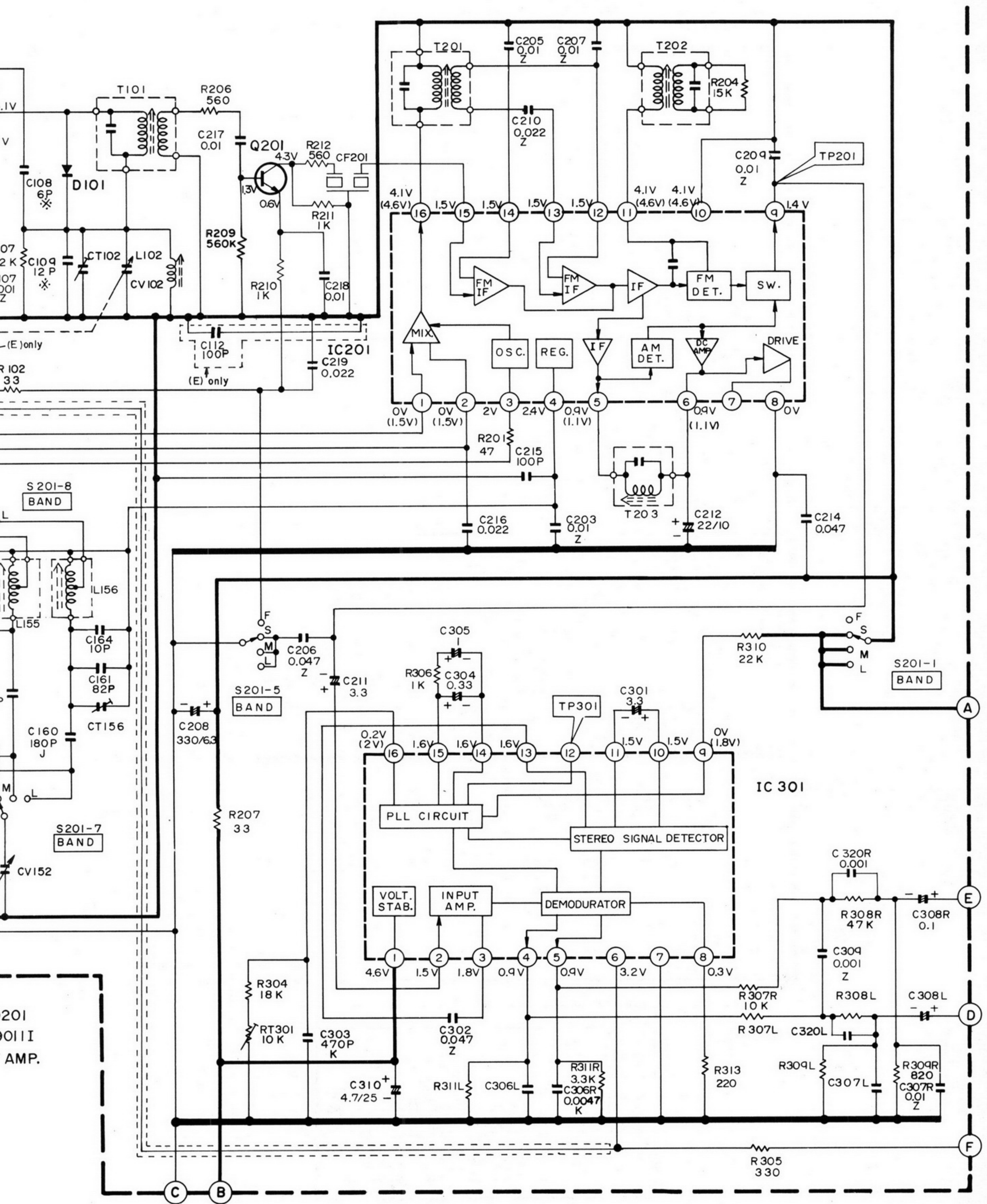
D 101
IN4148
LIMITER

Q201
HIT9011
FM IF AM

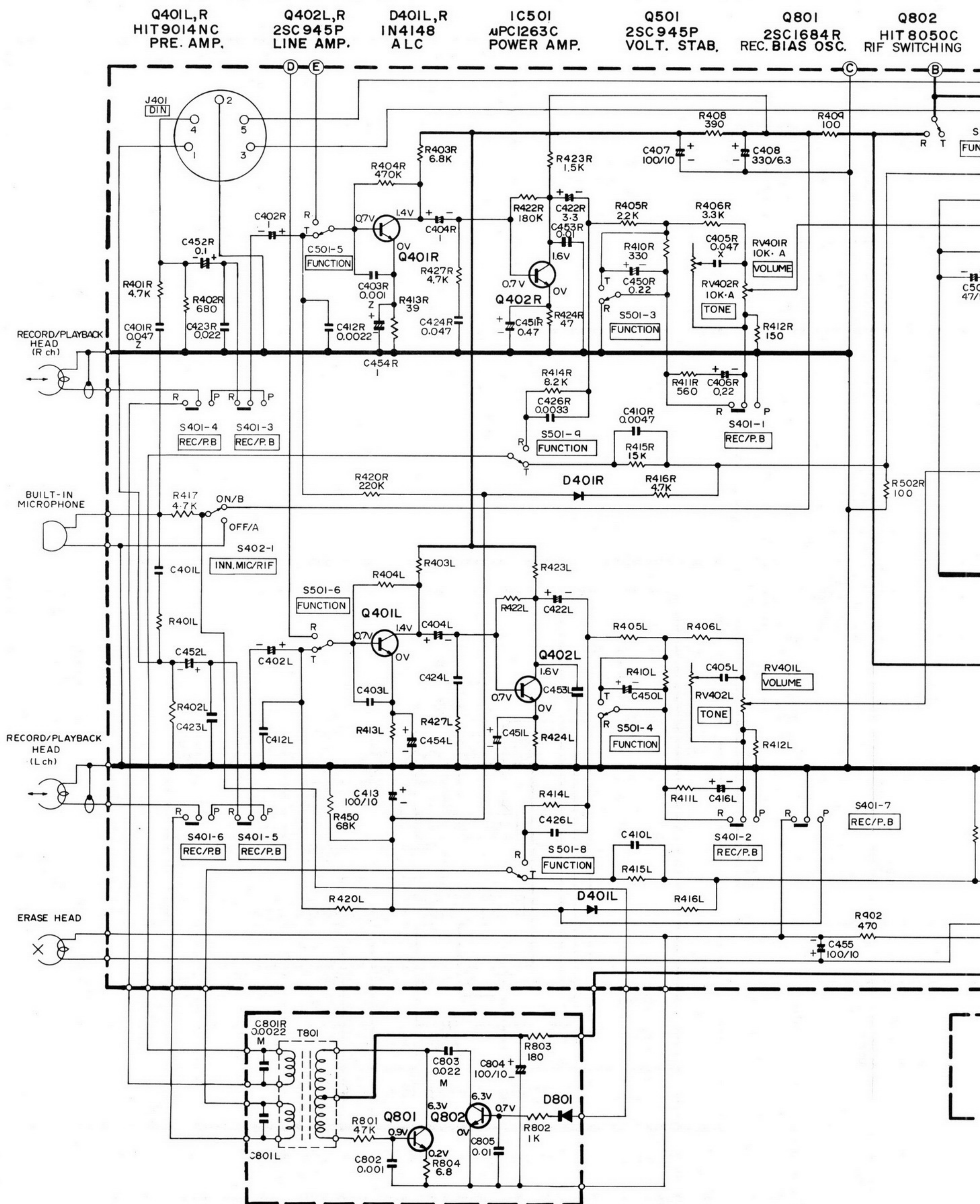
IC201
TA 7640AP
FM/AM IF AMP.
FM/AM DET.
AM MIX.

IC 301
HA12026
FM MPX.

Q151
HIT9011
SW RF AMP.
(E) only



SCHEMATIC DIAGRAM (Tape Recorder Section)



TRK-6801E/E(BS)

