



**ALL TRANSISTOR  
 FM/AM COMPACT STEREO  
 with CASSETTE TAPE RECORDER  
 MODEL KST-3400H  
 SERVICE MANUAL**

No. 287

1970

**SPECIFICATIONS**
**RADIO & AMPLIFIER**

CIRCUIT SYSTEM.....FM /AM all transistor  
 superheterodyne with  
 FM multiplex stereo adaptor

TUNING RANGE.....FM: 88 ~ 108 MHz  
 AM: 530 ~ 1,605 KHz

INTERMEDIATE FREQ.....FM: 10.7 MHz  
 AM: 455 KHz

**TRANSISTORS**

Q101 2SC535.....FM RF Amp.  
 Q102 2SC535.....FM Conv.  
 Q103 2SC535.....FM Osc.  
 Q104 2SC460.....FM 1st IF Amp.  
 Q105 2SC460.....AM Conv.  
 Q106 2SC460.....FM 2nd & AM 1st IF Amp.  
 Q107 2SC460.....FM 3rd & AM 2nd IF Amp.  
 Q108 2SC460.....FM 4th IF Amp.  
 Q201 2SC458.....19 KHz Amp.  
 Q202 2SC458.....19KHz Amp.  
 Q203 2SC458.....38KHz Amp.  
 Q204 2SC458.....DC Amp.  
 Q001A 2SC458 (LG).....PRE Amp. (R)  
 Q001B 2SC458 (LG).....PRE Amp. (L)  
 Q301A 2SC458 (LG).....AF Amp. (R)  
 Q301B 2SC458 (LG).....AF Amp. (L)  
 Q303A 2SC458.....AF Amp. (R)  
 Q303B 2SC458.....AF Amp. (L)  
 Q304A 2SB367 (P) }.....Power Amp. (R)  
 Q305A 2SB367 (P) }  
 Q304B 2SB367 (P) }.....Power Amp. (L)  
 Q305B 2SB367 (P) }

**DIODES**

CR101 1N60.....FM Limiter  
 CR102 1N60.....Temp. Comp.  
 CR103 1S85.....FM AFC  
 CR104 1N60.....FM Limiter  
 CR105 1N60.....AM AGC  
 CR106 1N34 A.....AM Det.  
 CR107 1N60 (P) }.....FM RATIO Det.  
 CR108 1N60 (P) }  
 CR201 1N34 A }.....Doublor  
 CR202 1N34 A }  
 CR203 1N60 }  
 CR204 1N60 }.....Switching  
 CR205 1N60 }  
 CR206 1N60 }  
 CR051 VO6C }  
 CR052 VO6C }.....Rectifier  
 CR054 VO6C }  
 CR055 VO6C }  
 CR053 AW01-13.....Voltage stabilizer  
 (Zener diode)

**VARISTORS**

VR101 HV-23 }.....Voltage stabilizer  
 VR102 HV-23 }  
 VR201 HV-23.....Voltage stabilizer

**THERMISTORS**

TH301A 13D27 }.....Temperature  
 TH302A 13D27 }.....Compensator  
 TH301B 13D27 }  
 TH302B 13D27 }

SPEAKER.....6½" (16cm) P.M., 8ohms × 2

AUDIO OUTPUT.....10W (Music power) × 2

FREQUENCY RANGE.....50 ~ 12,000Hz

POWER SUPPLY.....AC 120V, 60Hz

POWER CONSUMPTION.....50W

ANTENNA.....Built-in ferrite-core  
 and line cord antenna

SENSITIVITY.....FM: 4µV (max.)  
 6µV (practical)  
 AM: 80µV (max.)  
 250µV (practical)

**TERMINALS & IMPEDANCE**

- HEADPHONE JACK (8 ohms)
- PHONO JACKS (100k ohms)
- SPEAKER JACKS (8ohms)
- FM ANTENNA TERMINALS

**TAPE DECK**
**TRANSISTORS**

TR1 2SC458LG }  
 TR2 2SC458LG }.....PRE Amp.  
 TR3 2SC458 }  
 TR4 2SC458 }  
 TR5 2SC458 }  
 TR6 2SC458LG }  
 TR7 2SC458LG }.....PRE Amp.  
 TR8 2SC458 }  
 TR9 2SC458 }  
 TR10 2SC458 }  
 TR11 2SB77(P) }.....Bias OSC.  
 TR12 2SB77(P) }

**DIODES**

D1 1N34A.....Rect. for level meter(right)  
 D2 1N34A.....Rect. for level meter (left)

**TERMINAL & IMPEDANCE**

- MIC. JACK (5k ohms)

TAPE.....Compact cassette

TAPE SPEED.....1⅞ ips (4.75cm/s)

**RECORDING OR**

PLAYING TIME.....60min. (using C-60)

RECORDING SYSTEM.....AC bias

ERASING SYSTEM.....AC erase

TRACK SYSTEM.....Stereo 4 track

DIMENSIONS.....RADIO: 10"(H) × 21"(W) × 5½"(D)

SPEAKER: 10"(H) × 10½"(W) × 5½"(D) × 2

WEIGHT.....RADIO: 17 lbs. 2 oz.

SPEAKER: 4 lbs. 3 oz. × 2

**ACCESSORIES**

Dynamic microphone (with stand)..... 2  
 Compact cassette..... 1

# MODEL KST-3400H SERVICE MANUAL

## CONTROLS

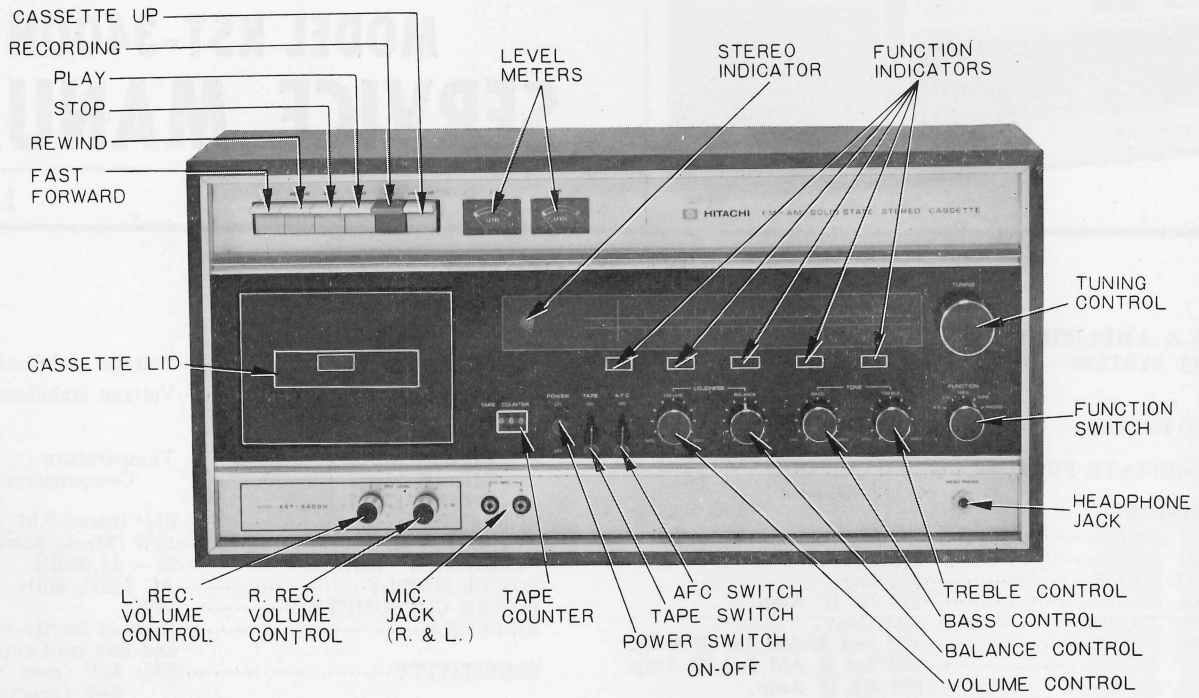


Fig. 1

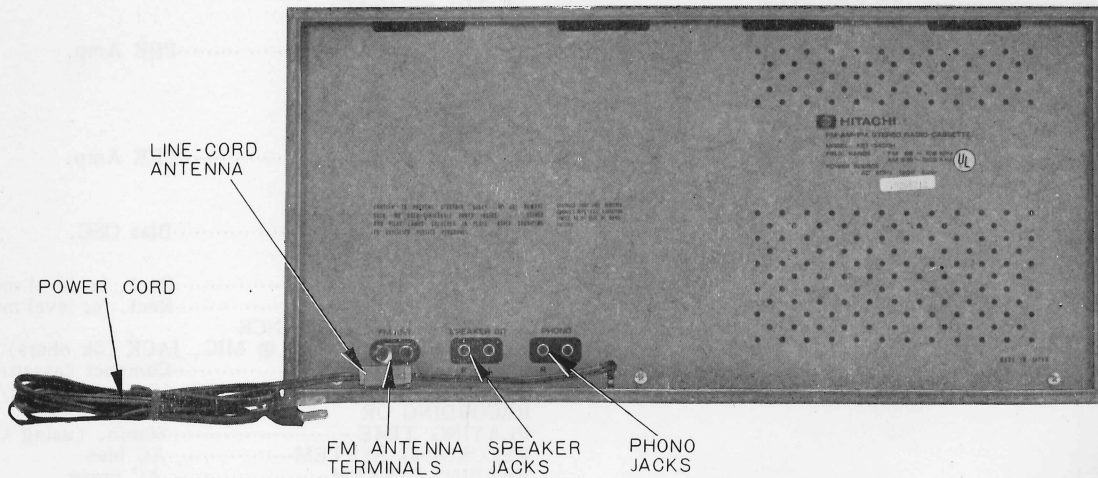


Fig. 2

## BLOCK DIAGRAM

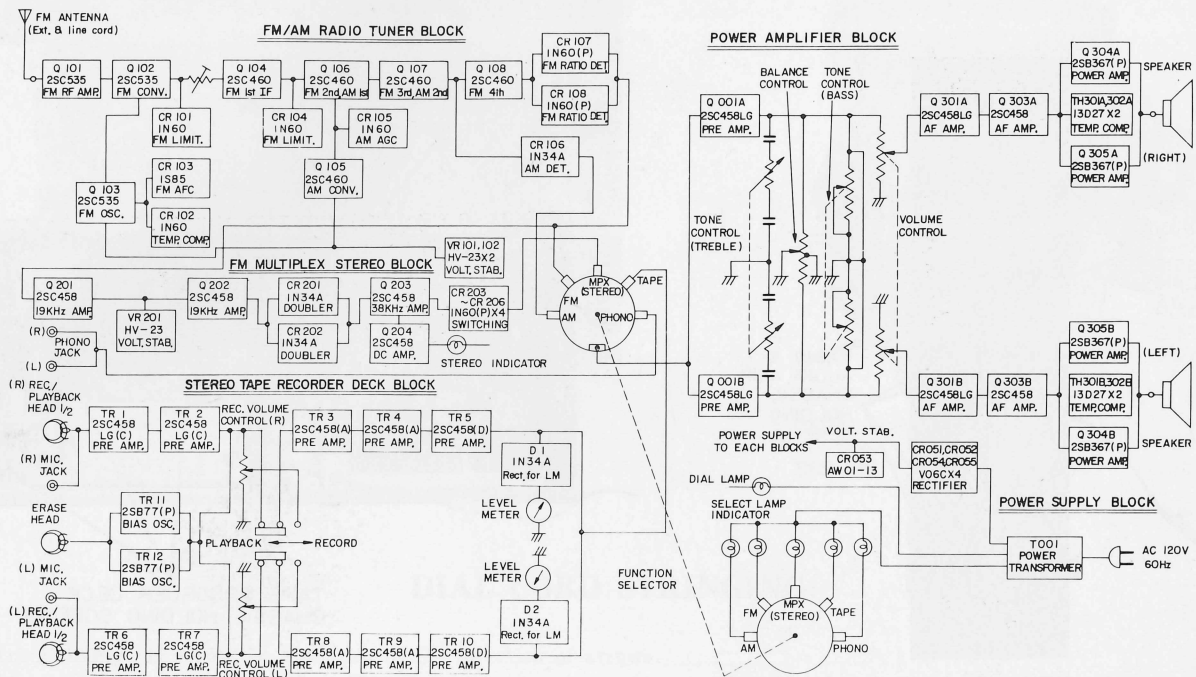


Fig. 3

## DISASSEMBLY

### 1. Removal of back cover

Remove three screws holding back cover shown in Fig. 4.

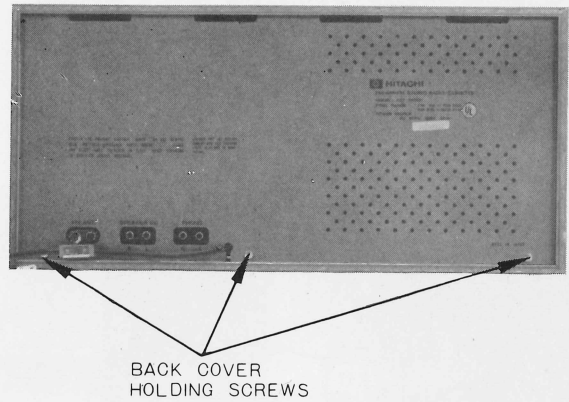


Fig. 4

# MODEL KST-3400H SERVICE MANUAL

## 2. Removal of Radio, Audio amp. and Tape recorder deck chassis

Remove six screws holding Radio & Audio amp. chassis

and six screws holding Tape recorder deck chassis shown in Figs.5 and 6.

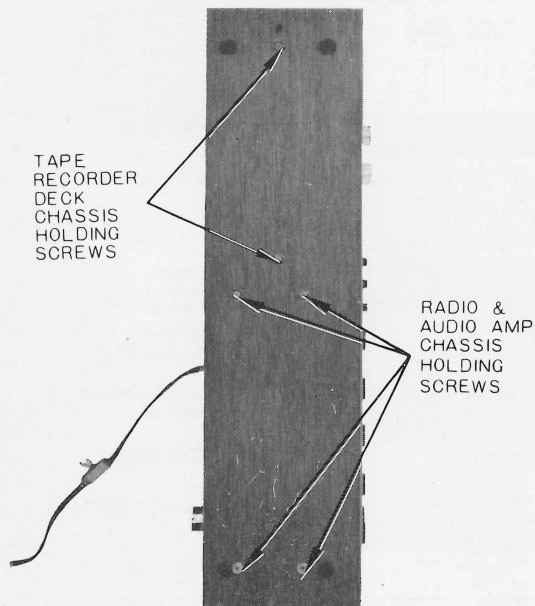


Fig. 5

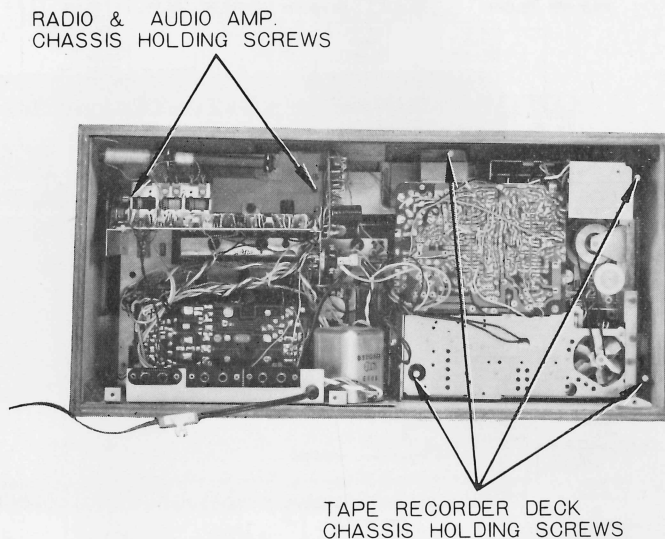


Fig. 6

## 3. Removal of Radio, Audio amp. and Tape recorder deck circuit board

Remove five screws holding FM/AM RF, IF block, two screws holding Multiplex block, two solder capacitor

terminals holding Power supply block and two screws holding Audio amp. block holder shown in Figs. 8, 9 and 10.

Remove four screws holding Tape recorder deck circuit board shown in Fig. 8.

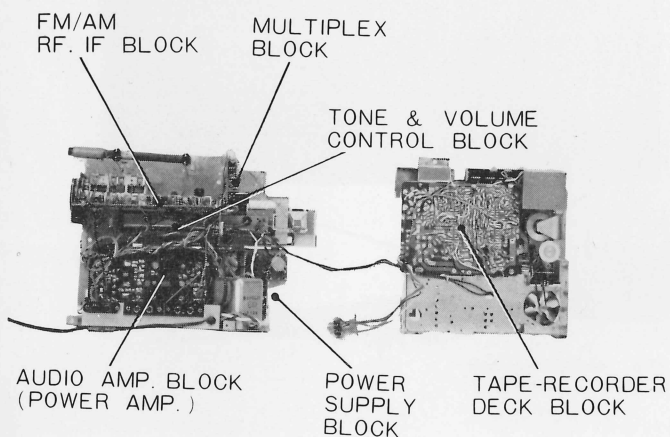


Fig. 7

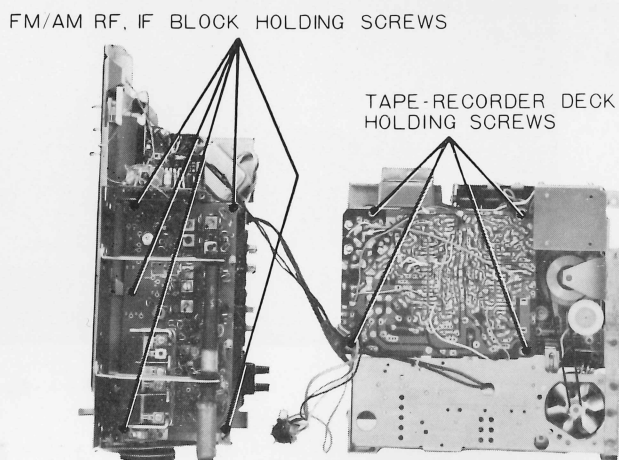
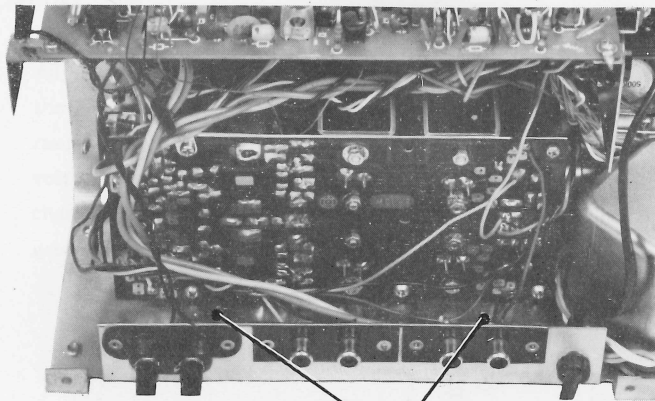
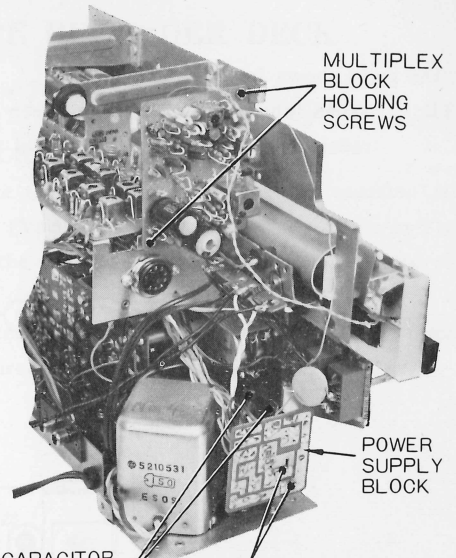


Fig. 8



AUDIO AMP BLOCK HOLDER  
HOLDING SCREWS

Fig. 9



CAPACITOR  
HOLDING SCREWS

SOLDERED CAPACITOR  
TERMINALS

Fig. 10

### DIAL CORD STRINGING

Referring to Fig. 11, loop the dial cord in the direction of arrows.

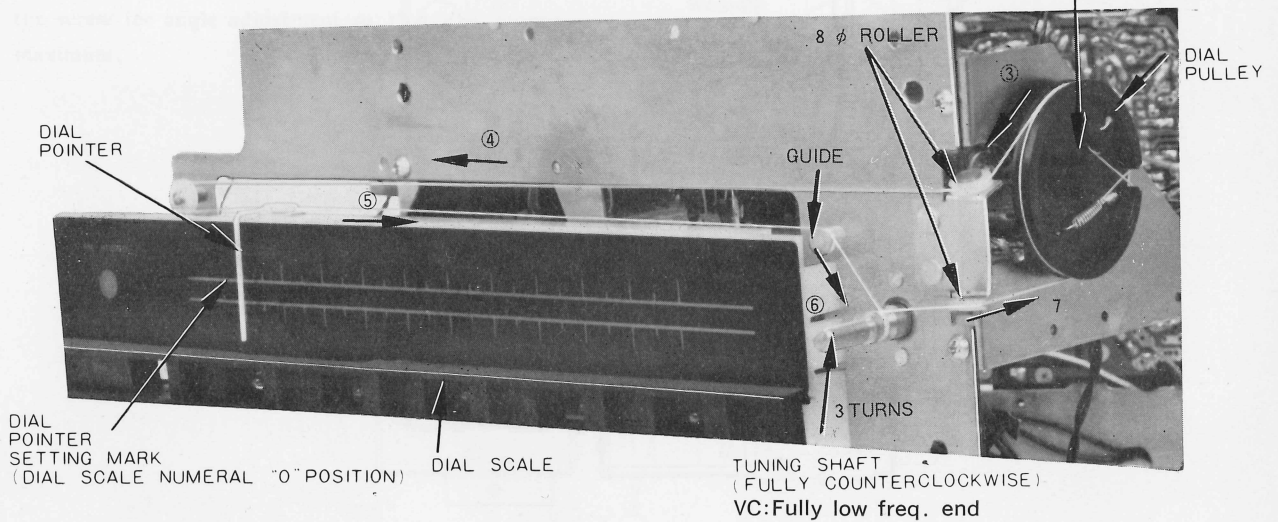
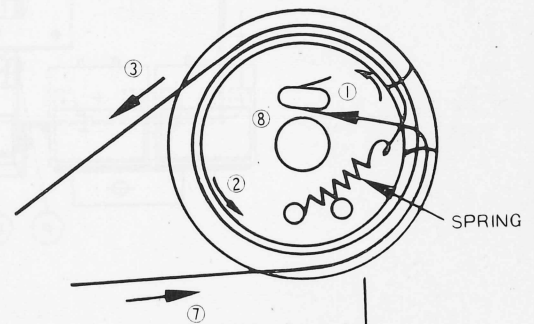


Fig. 11

INTERNAL VIEW

FM/AM RADIO TUNER & POWER AMP

CASSETTE STEREO TAPE RECORDER DECK

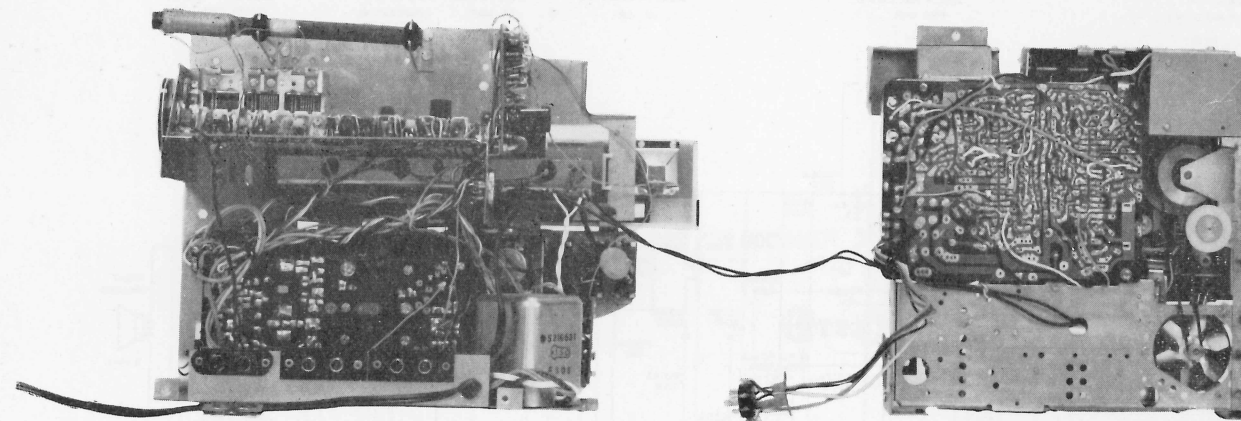


Fig. 20

FM/AM RF TUN. VARIABLE CAPACITOR

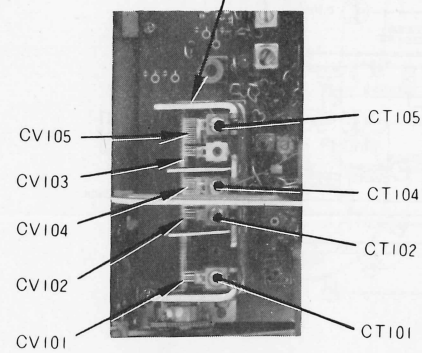
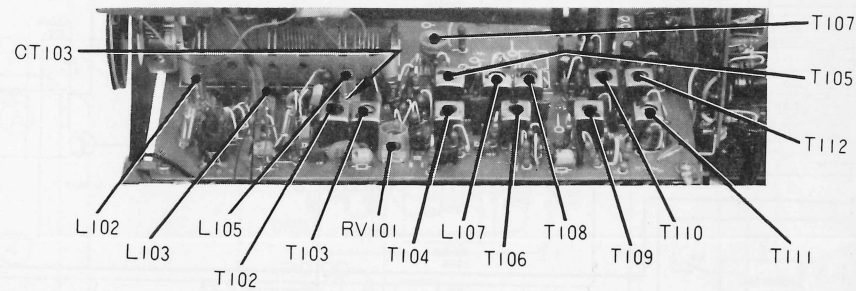


Fig. 21 (A)



FM/AM RF IF BLOCK

Fig. 21 (B)

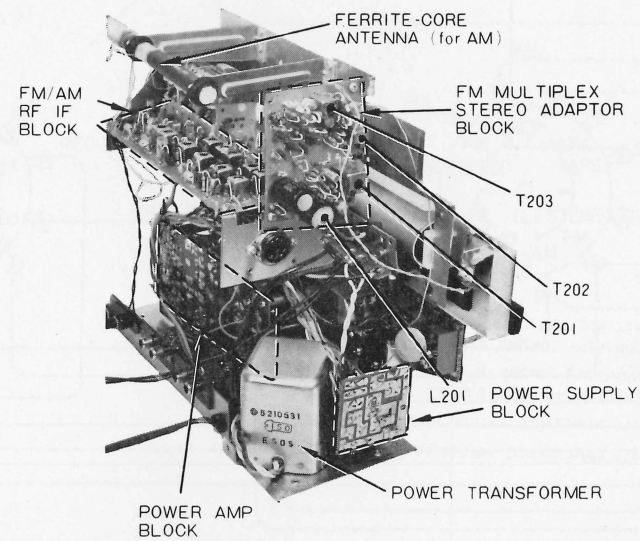


Fig. 22

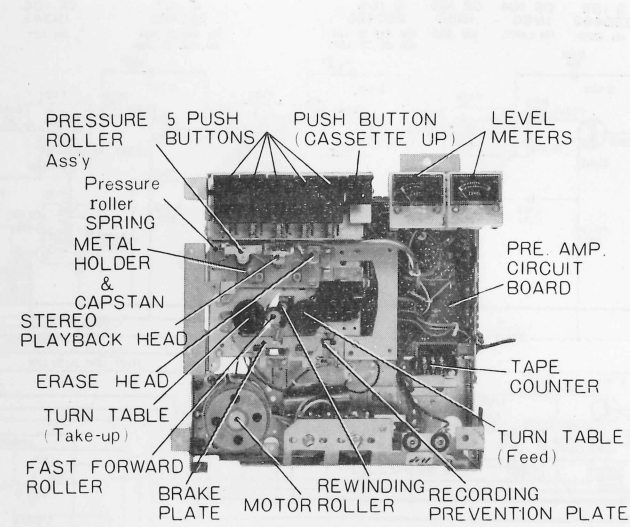


Fig. 23

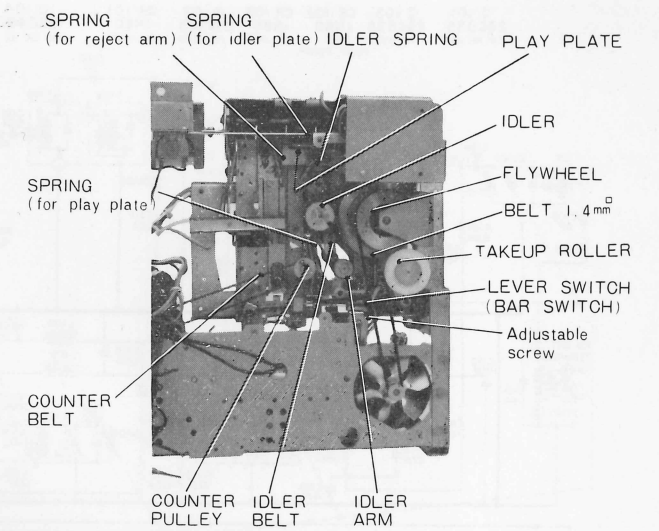


Fig. 24

CIRCUIT BOARD DIAGRAM

