

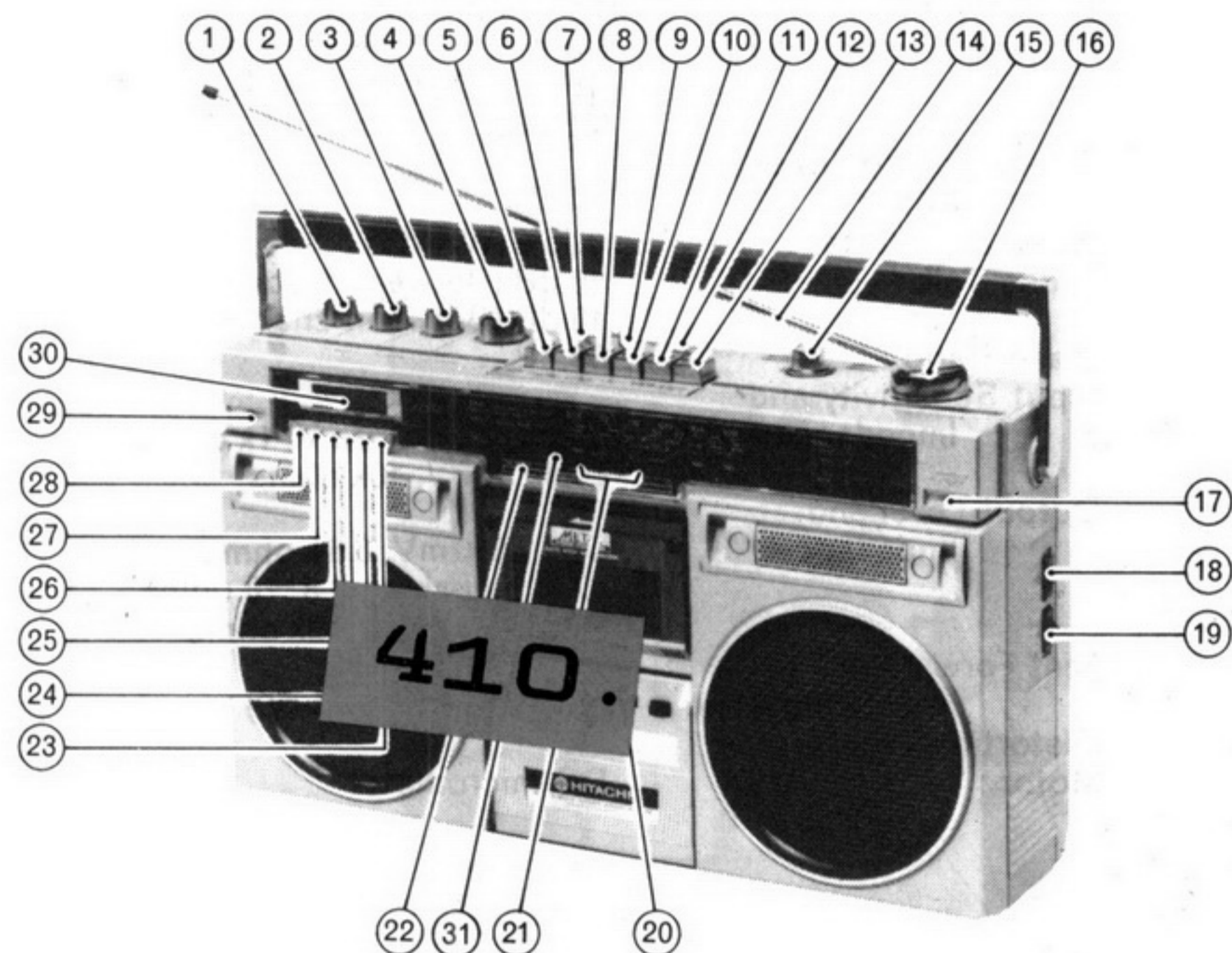
# HITACHI

## SERVICE MANUAL

TK

No. 1679E

TRK-7910E, E(BS), EZ



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### KEY TO ILLUSTRATIONS

- |                               |                                       |
|-------------------------------|---------------------------------------|
| ① BALANCE CONTROL             | ①⑦ BUILT IN MICROPHONE (RIGHT)        |
| ② BASS CONTROL                | ①⑧ AFC SWITCH                         |
| ③ TREBLE CONTROL              | ①⑨ FM MODE SWITCH                     |
| ④ VOLUME CONTROL              | ②⑩ TAPE COUNTOR                       |
| ⑤ PAUSE BUTTON                | ②⑪ LED LEVEL INDICATORS               |
| ⑥ FAST FORWARD BUTTON         | ②⑫ FM STEREO INDICATOR                |
| ⑦ FUNCTION SELECTOR           | ②⑬ SLEEP OFF/SNOOZE BUTTON            |
| ⑧ REWIND BUTTON               | ②⑭ SLEEP ON BUTTON                    |
| ⑨ TAPE SELECTOR               | ②⑮ TIMER BUTTON                       |
| ⑩ PLAYBACK BUTTON             | ②⑯ TIME SET BUTTON                    |
| ⑪ RECORD BUTTON               | ②⑰ MINUTE SET BUTTON                  |
| ⑫ POWER SWITCH                | ②⑱ HOUR SET BUTTON                    |
| ⑬ STOP/EJECT BUTTON           | ②⑲ BUILT IN MICROPHONE (LEFT)         |
| ⑭ TELESCOPIC ANTENNA (AERIAL) | ③⑰ TIME DISPLAY                       |
| ⑮ BAND SELECTOR               | ③⑱ AC POWER (MAINS) INDICATOR [E(BS)] |
| ⑯ TUNING CONTROL              |                                       |

### 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 : 7 Transistors : 6 [E, E(BS)] 7 (EZ)
	Diodes : 10 LED's : 6 (E, EZ) 7 [E (BS)]
	Varicap : 1 Zener diode : 1
Power (Mains) Supply :	AC : 220V, 50 Hz (E), (EZ) 240V, 50 Hz (E(BS)) DC : 12V (IEC R20×8 or equivalent) DC : 3V (IEC R6×2 or equivalent)
Power (Mains) Consumption :	26W
Dimensions :	474(W)×276(H)×157(D)mm
Weight :	6 kg (with batteries)
Power output :	5W/ch (T.H.D. 10%), 15W M.P.O. (AC operation)
Speaker :	120mm, 2.8 ohms×2 30mm, 3,000 ohms×2
<b>TUNER SECTION</b>	
Circuit System :	FM/SW/MW/LW 4-band superheterodyne
Tuning Range :	FM : 87.5 to 108 MHz SW : 6.0 to 18.0 MHz MW : 530 to 1605 kHz LW : 150 to 350 kHz
Sensitivity :	FM : 10 dB (pra.), 3 dB (max.) SW : 25 dB (pra.), 18 dB (max.) MW : 48 dB (pra.), 35 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 MW/LW : Built-in ferrite-core antenna

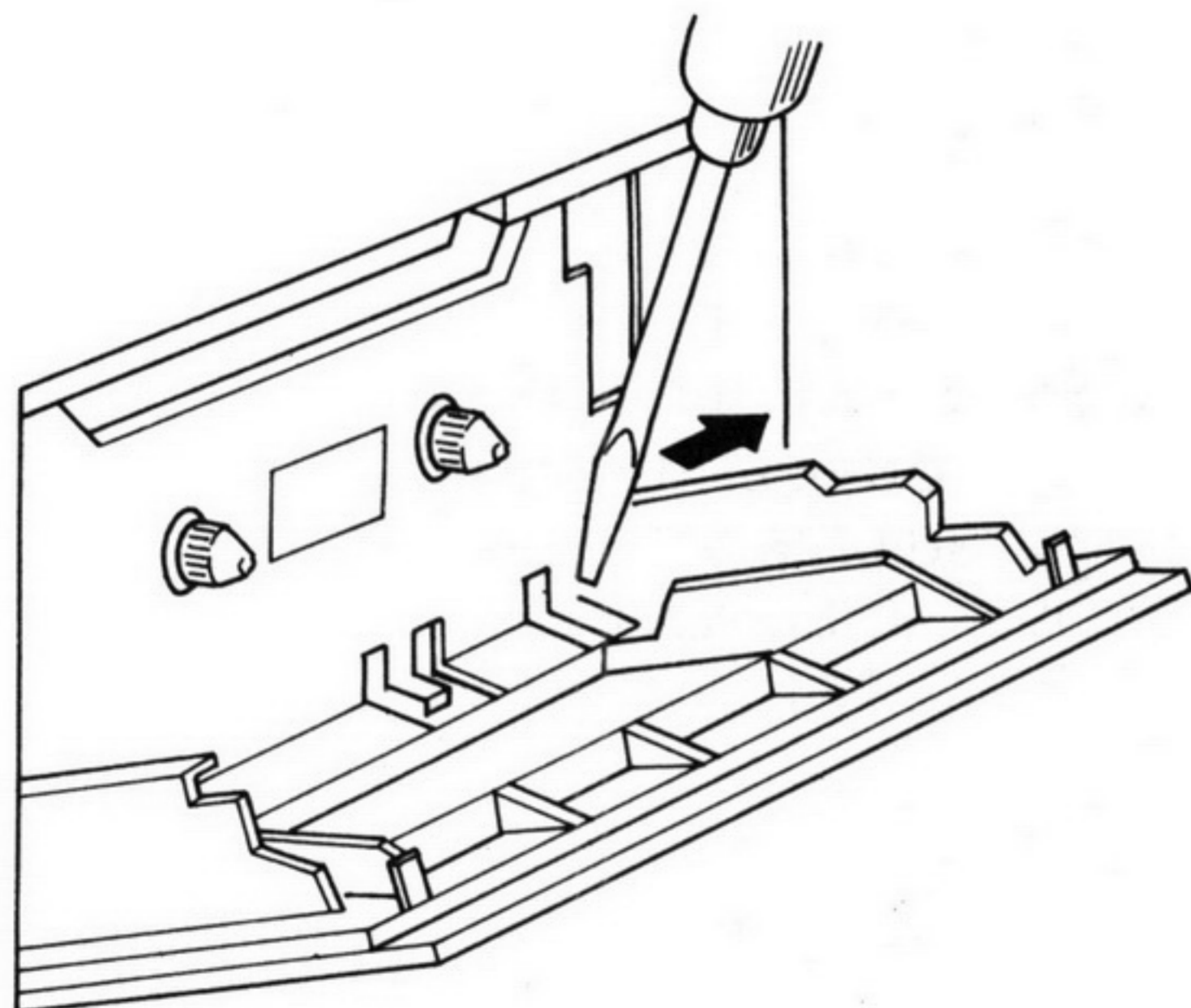
### TAPE RECORDER

Tape :	Cassette tape (C-30, 60, 90)
Tape Speed :	4.75cm/s
Recording System :	AC bias, 57 kHz
Erasing System :	AC erase
Track System :	4 track 2 channel
Frequency Response :	Normal : 70 Hz to 12 kHz CrO <sub>2</sub> : 70 Hz to 13 kHz METAL : 70 Hz to 14 kHz

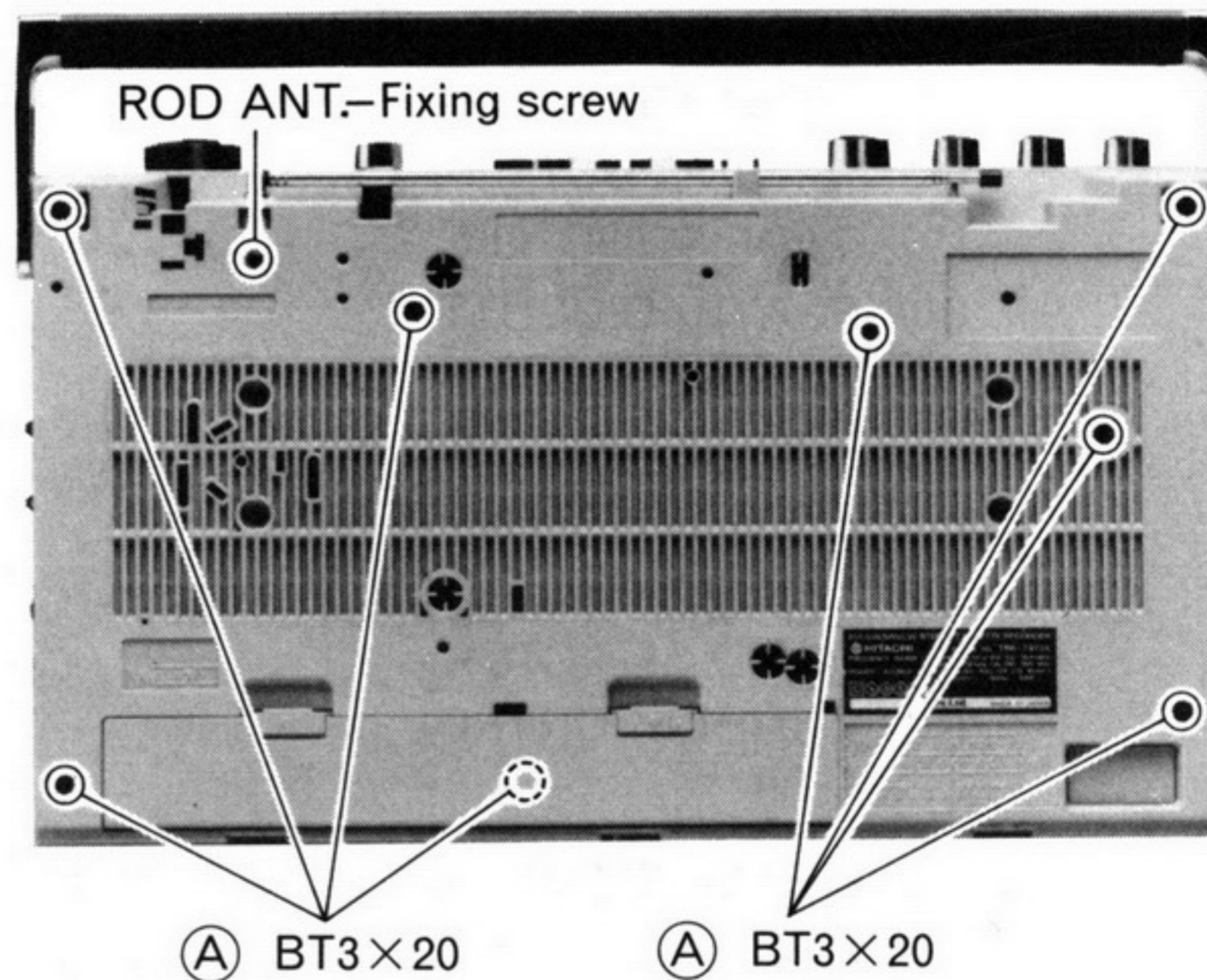
S/N (Signal to Noise Ratio) :	40 dB
Wow and Flutter :	0.15% (WRMS)
Cross Talk :	60 dB (Between tracks) 40 dB (Between channels)
Erase Ratio :	60 dB
Input Sensitivity and Impedance :	Microphone : 2 mV, 1k ohms DIN : 8mV, 10k ohms
Output Level and Impedance :	DIN : 500 mV, 6.8k ohms EXT. Speaker : 2.8~8 ohms Headphone : 8~2k ohms
Fast Forward or Rewinding Time :	120 sec. (Using C-60)
Distortion :	2%
Motor :	DC micromotor

## DISASSEMBLY

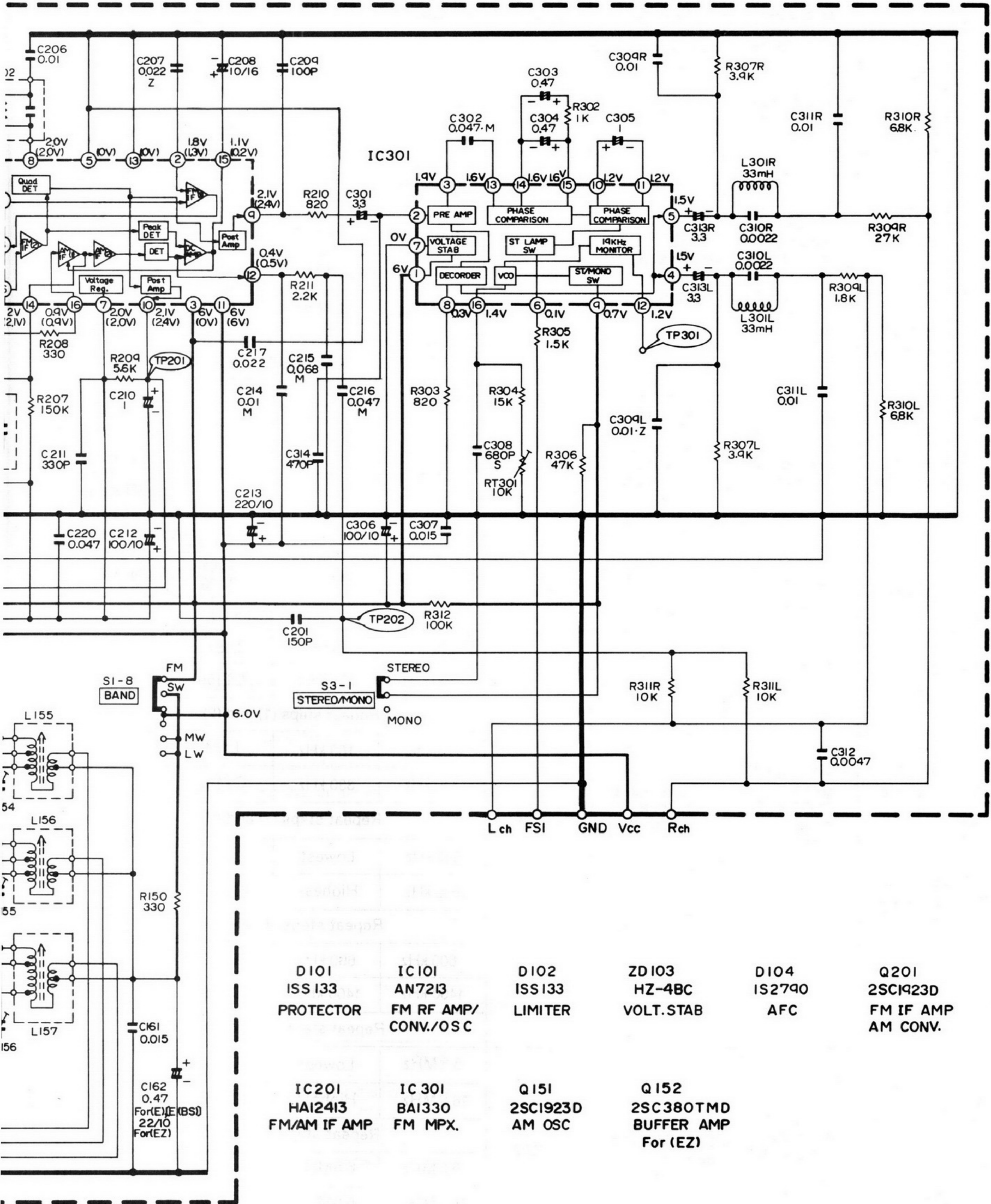
### 1. Cassette lid



### 2. Rear case : Fixing screws (A) (8)

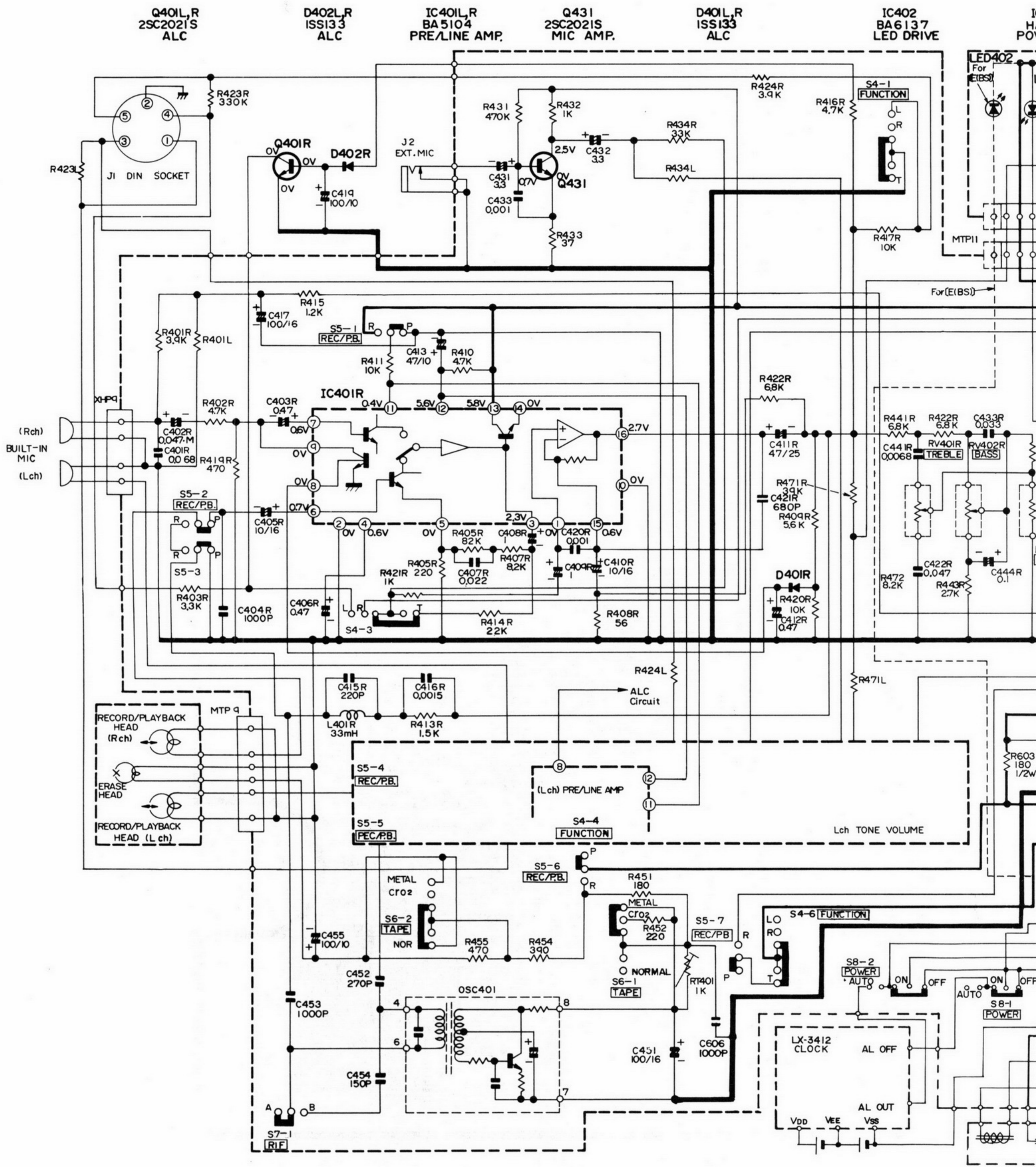






- |                                  |  |                            |   |                       |   |
|----------------------------------|--|----------------------------|---|-----------------------|---|
| D101<br>ISS 133<br>PROTECTOR     | IC101<br>AN7213<br>FM RF AMP/<br>CONV./OSC | D102<br>ISS133<br>LIMITER  | ZD103<br>HZ-48C<br>VOLT.STAB                | D104<br>IS2790<br>AFC | Q201<br>2SC1923D<br>FM IF AMP<br>AM CONV. |
| IC201<br>HA12413<br>FM/AM IF AMP | IC301<br>BA1330<br>FM MPX.                 | Q151<br>2SC1923D<br>AM OSC | Q152<br>2SC380TMD<br>BUFFER AMP<br>For (EZ) |                       |   |

SCHEMATIC DIAGRAM (Tape Recorder Section)



VE

IC501  
HA1392  
POWER AMP.

LED401  
GL-105R53  
LEVEL IND. FM

LED301  
GL-9PR23  
STEREO IND.

D603  
VO3C  
PROTECTOR

D601  
SRP02-100NLF  
RECT

D602  
SRN02-100NLF  
RECT

Q701  
2SC1213C  
RELAY DRIVE

LED402  
GL-9PR23  
AC POWER IND.  
For (E)(BS)

