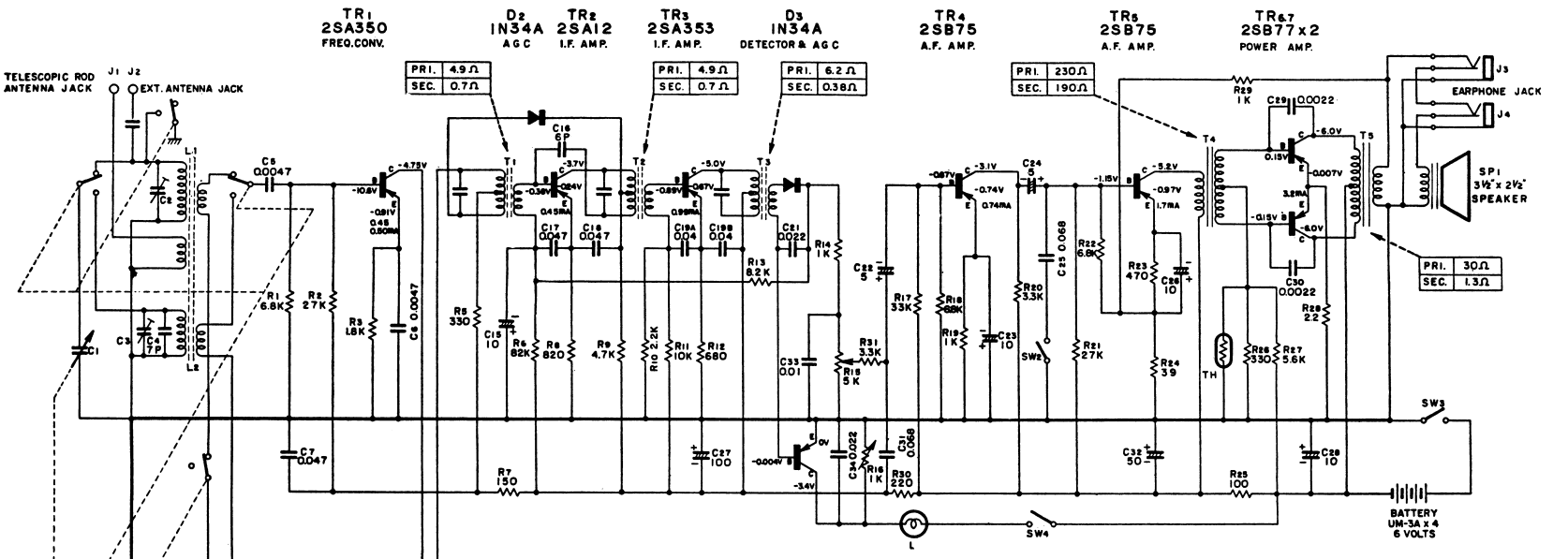
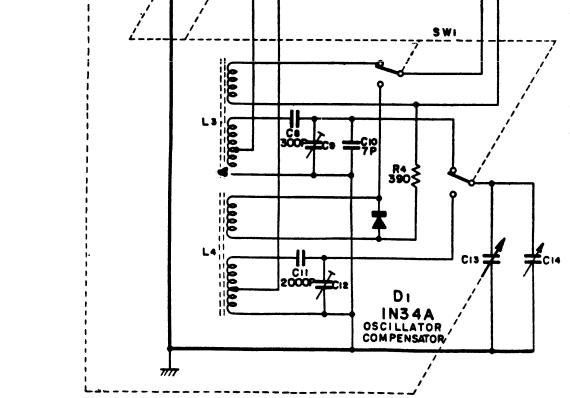
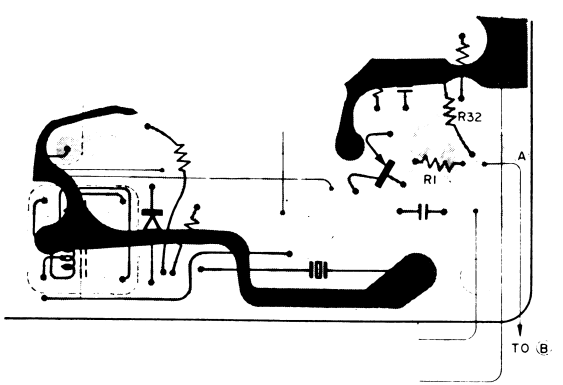
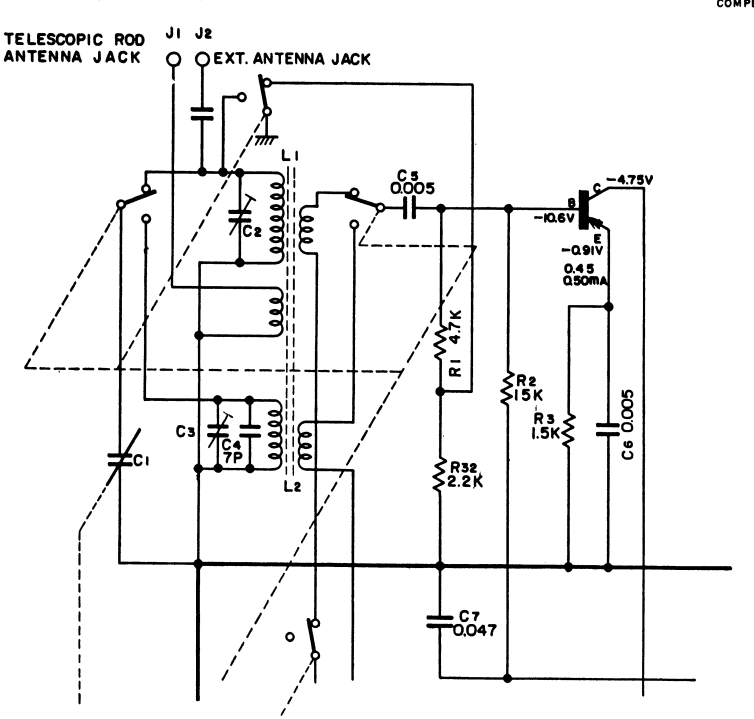



(WH-888H)



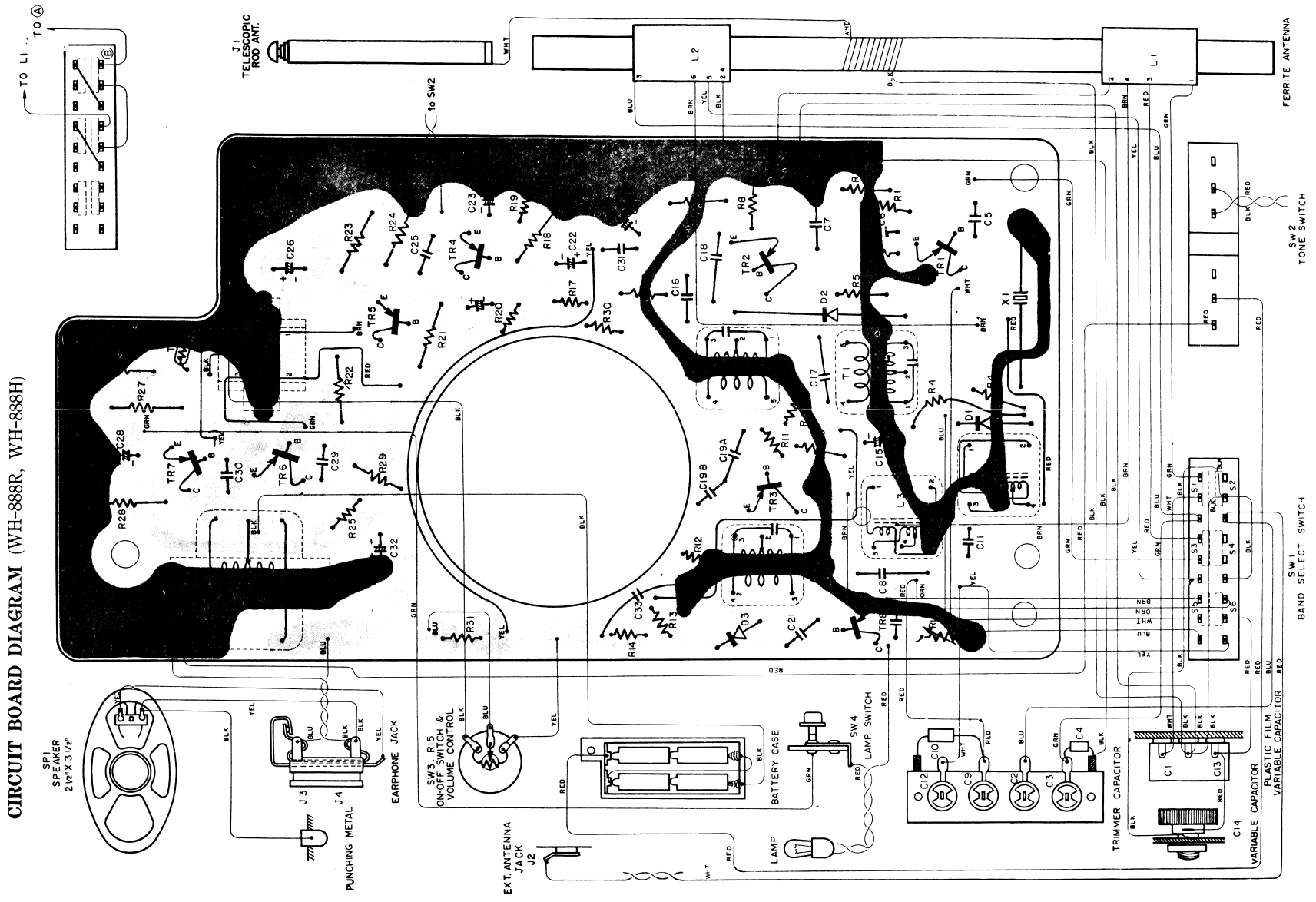

**NOTES:**

1.

| WH-888R | | WH-888H | |
|---|---|---|---|
| RESISTORS: | | | |
| $R_1$ | 6.8K | $R_1$ | 4.7K |
| $R_2$ | 27K | $R_2$ | 15K |
| $R_3$ | 1.8K | $R_3$ | 1.5K |
| $R_4$ | 390 | $R_4$ | 100 |
| CAPACITORS: | | | |
| $C_5$ | 0.005 | $C_5$ | 1.005 |
| $C_6$ | 0.0047 | $C_6$ | 0.005 |
| $C_{11}$ | 20001 | $C_{11}$ | 3000 |
| $C_{28}$ | 50 | $C_{28}$ | 100 |

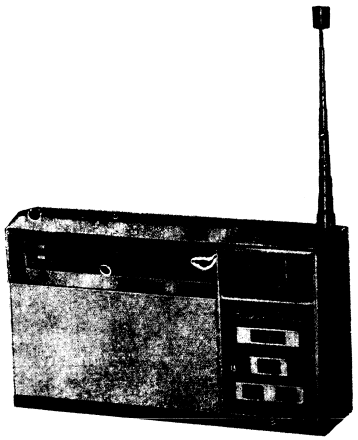
2. This circuit diagram shows the condition of MW reception.
3. $R_3$ and $R_8$ are the resistors for adjusting the emitter current.
4. The unit for resistance is Ω and that for capacity is μF or F.
5. The voltage between the electrodes of $TR_8$ is the value when $SW_4$ is placed on ON position.

HITACHI WH-888R-H



H21

# HITACHI TRANSISTOR RADIO
# MODEL WH-888R
# MODEL WH-888H



## SPECIFICATIONS

CIRCUIT SYSTEM .....8-transistor superheterodyne
TUNING RANGE .....Medium Wave (MW, 530~1,605 kc
(WH-888R) Short Wave (SW, 3.8~12 MC)
(WH-888H) Short Wave (SW, 6~18MC)
TRANSISTOR COMPONENT
2SA350 .....Freq. Converter (WH-888R)
2SA233.....Freq. Converter (WH-888H)
2SA 12.....1st I. F. Amp.
2SA353 .....2nd I. F. Amp.
2SB 75 .....1st A. F. Amp.
2SB 75 .....2nd A. F. Amp.
2SB 77×2 .....Class-B Push-pull Power Amp.
2SB 77 .....DC Amp.
GERMANIUM DIODE
1N34 A .....Oscillator
1N34 A .....Detector & A. G. C.
1N34 A .....A. G. C.

THERMISTOR
B-2B .....Temperature Compensator
POWER OUTPUT .....280mW (Maximum)
180mW (Undistorted)
LOUDSPEAKER .....2½″×3½″ P. M.
EARPHONE JACK .....Two. Accessory Hitachi Magnetic Earphone EL-216 is recommended.
ANTENNA .....Ferrite-core antenna and telescopic rod antenna built-in and external antenna wire attached.
POWER SOURCE .....6 volts (Penlight battery ×4)
CABINET DIMENSIONS .....4″(100mm) High, 6¾″(170mm) Wide, 1¾″ (45mm) Deep.
WEIGHT .....Approx. 1.7 lbs. (780g) including batteries.

## ALIGNMENT PROCEDURE

1. The battery voltage should be over 5.5V with the switch in ON position (with no signal).
2. Place the volume control knob on its maximum volume position.
3. Turn the fine tuning knob at the center of its range (where the black base point can be seen).
4. Connect the output of the oscillator (modulated 30 % at 400 ⁄s or 1,000 ⁄s) to the rod antenna through 10 pF. Connect the oscillator and radio ground leads to the ground.
5. Connect the output meter (vacuum tube voltmeter or tester with AC 3 V range) to the earphone jack of the set.
6. Use an insulated screw driver or regular adjusting rod when making adjustments.
7. When the output meter needle deflects greatly with the set adjustment, decrease the oscillator output.

Intermediate Frequency Circuits Alignment *.....(WH-888H)

| Step | Set Band-Switch to— | Sig. Gen. Output | Dial Pointer Setting | Adjust-for |
|---|---|---|---|---|
| ⓐ | MW | 455kc | Maximum | $T_3$ |
| ⓑ | | | | $T_2$ |
| ⓒ | | | | $T_1$ |
| ⓓ | Repeat steps ⓐ ⓑ, and ⓒ | | | |

Radio Frequency Circuit Alignment

| Step | Set Band-Switch to— | Sig. Gen. Output | Dial Pointer Setting | Adjust-for |
|---|---|---|---|---|
| ⓔ | MW | 515 kc | Minimum | $L_3$ |
| ⓕ | | 1,650 kc | Maximum | $C_9$ |
| ⓖ | | Repeat steps ⓔ and ⓕ | | |
| ⓗ | | 600 kc | 600 kc | $L_1$ |
| ⓘ | | 1,400 kc | 1,400 kc | $C_2$ |
| ⓙ | | Repeat steps ⓗ and ⓘ | | |
| ⓚ | SW | 3.7 Mc * (5.8MC) | Minimum | $L_4$ |
| ⓛ | | 12.5 Mc * (18.5MC) | Maximum | $C_{12}$ |
| ⓜ | | Repeat steps ⓚ and ⓛ | | |
| ⓝ | | 4 Mc * (6.5MC) | 4 Mc | $L_2$ |
| ⓞ | | 12.5 Mc * (18.5MC) | Maximum | $C_8$ |
| ⓟ | | Repeat steps ⓝ and ⓞ | | |

**2. Threading the dial string:**

(1) Turn the variable capacitor to its maximum capacity (lowest frequency).

(2) Tie one end of the string to the spring through the shafts ① and ②: wind it 1¾ turns around the tuning control knob shaft; catch it on the notched section; take it through the shaft ④ and roller ⑤ and attach it to the other end of the spring by means of a string fixing piece.

(3) Next, turn the variable capacitor to its minimum capacity; with the indicator on the inscribed line, attach the dial string.

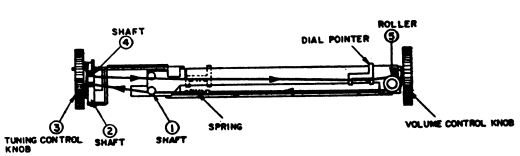
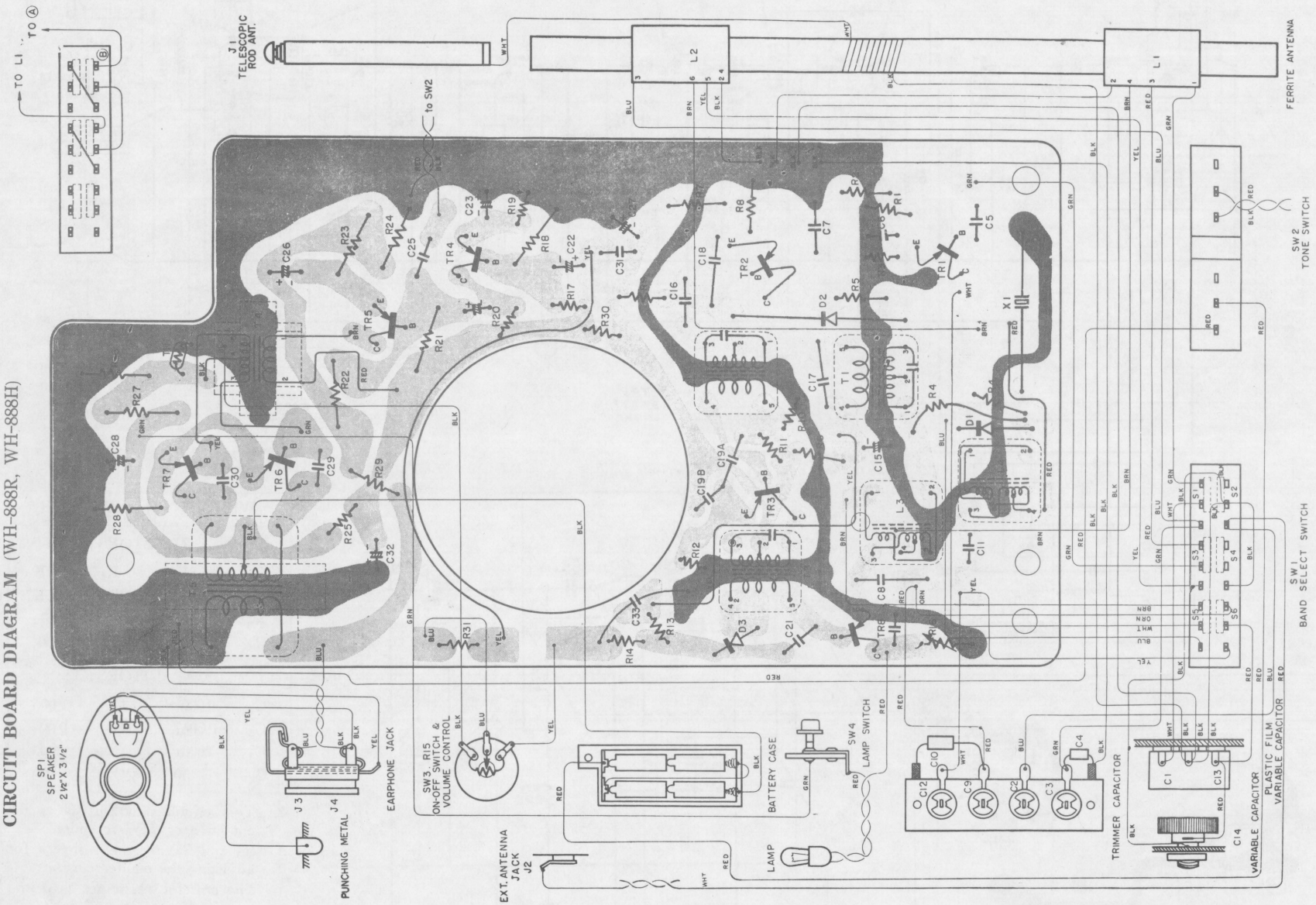



Fig. 2 Threading the dial string.

HITACHI WH-888R-H




CIRCUIT BOARD DIAGRAM (WH-888R, WH-888H)