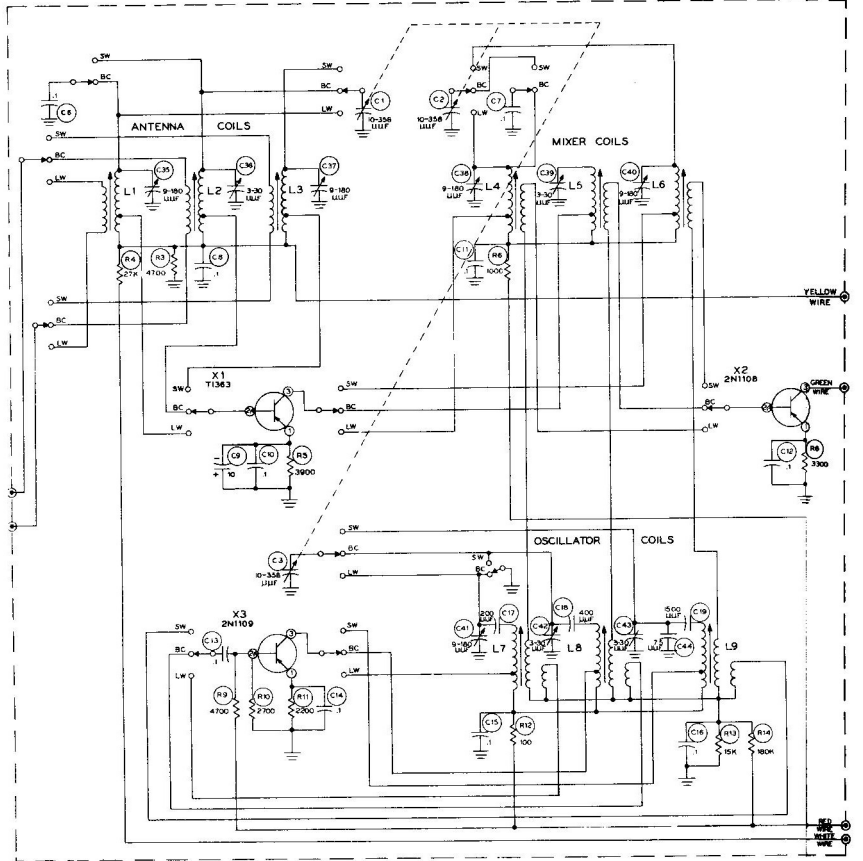


**SCHEMATIC OF THE
HEATHKIT MARINER®
RADIO DIRECTION FINDER
MODEL MR-21**

- NOTES:**
- ALL RESISTORS ARE 1/2 WATT UNLESS SHOWN OTHERWISE.
 - ALL RESISTOR VALUES ARE IN OHMS, 1 K = 1000 Ω, 1 MEG = 1,000,000 Ω.
 - ALL CAPACITOR VALUES ARE IN μfd UNLESS OTHERWISE SHOWN.
 - ALL VOLTAGES ARE FROM POINT INDICATED TO CHASSIS GROUND EXCEPT AC VOLTAGES ON POWER TRANSFORMER WINDING. READINGS WERE TAKEN WITH AN 11 MEGOHM INPUT VTVM WITH THE SENSITIVITY AND VOLUME CONTROLS TURNED TO THE FULL CLOCKWISE POSITIONS.
 - NORMAL VOLTAGE VARIATIONS +10%.

PREASSEMBLED PREALIGNED
TUNING UNIT



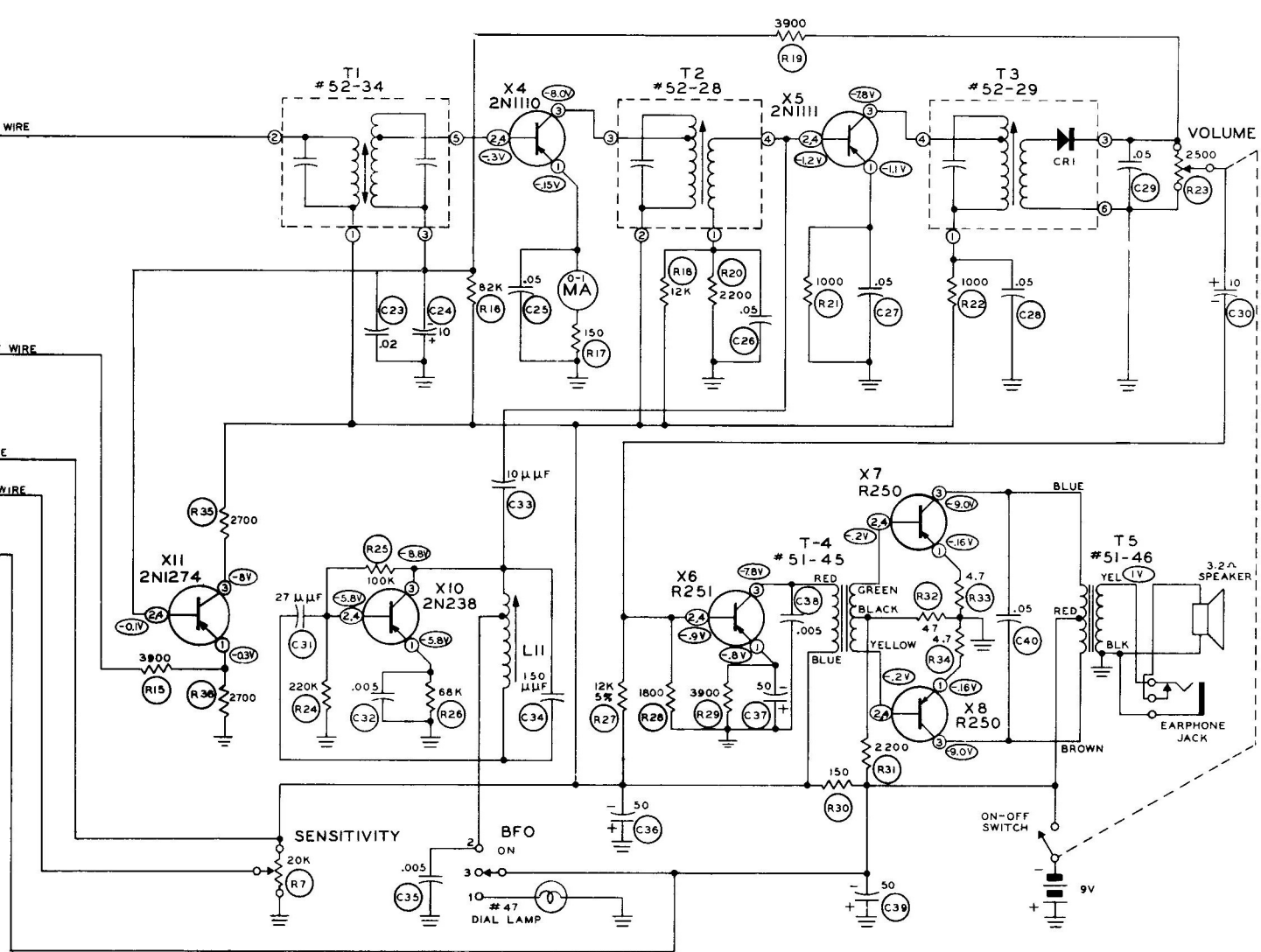
PREASSEMBLED PREALIGNED
TUNING UNIT

WIRE

WIRE

E

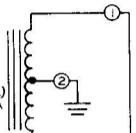
WIRE



SENSE (WHIP) ANTENNA



L10
ROD
(FERRITE)
ANTENNA



455 KC
CERAMIC
BYPASS
FILTER



.005

C4

470 K

R1

X9
2N1108

-.13V

2.4

3

1

27K

R2

3.6V

1

.005

C5

SENSE

DF

1

PREASSEMBLED, PREALIGNED
TUNING UNIT
(SEE SCHEMATIC DIAGRAM
BELOW)

GREEN WIRE

0.75V

YELLOW WIRE

7.8V

RED WIRE

WHITE WIRE

7.8V