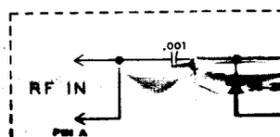


SYNTHESIZER

NOTES:

1. COMPONENTS LISTED IN THIS SECTION ARE IDENTIFIED BY A CIRCLE.
2. ALL RESISTORS ARE 1% TOLERANCE UNLESS OTHERWISE NOTED.
3. CAPACITORS ARE 5% TOLERANCE UNLESS OTHERWISE NOTED.
4. ARROW POINTS TO THE VIEWED SIDE OF THE BOARD.
5. CIRCLE WITH NUMBER: TYPICAL VALUE.
6. INVERTED TRIANGLE: TRANSISTOR CONNECTION.
7. TRIANGLE: TRANSISTOR CONNECTION.
8. SQUARE: TRANSISTOR CONNECTION.
9. TRIANGLE WITH NUMBER: TRANSISTOR CONNECTION.
10. RECTANGLE WITH NUMBER: RESISTOR CONNECTION.
11. CIRCLE WITH NUMBER: TRANSISTOR CONNECTION.



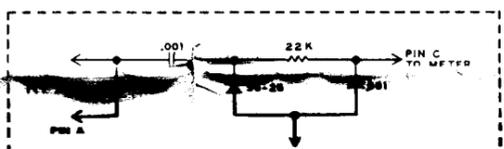
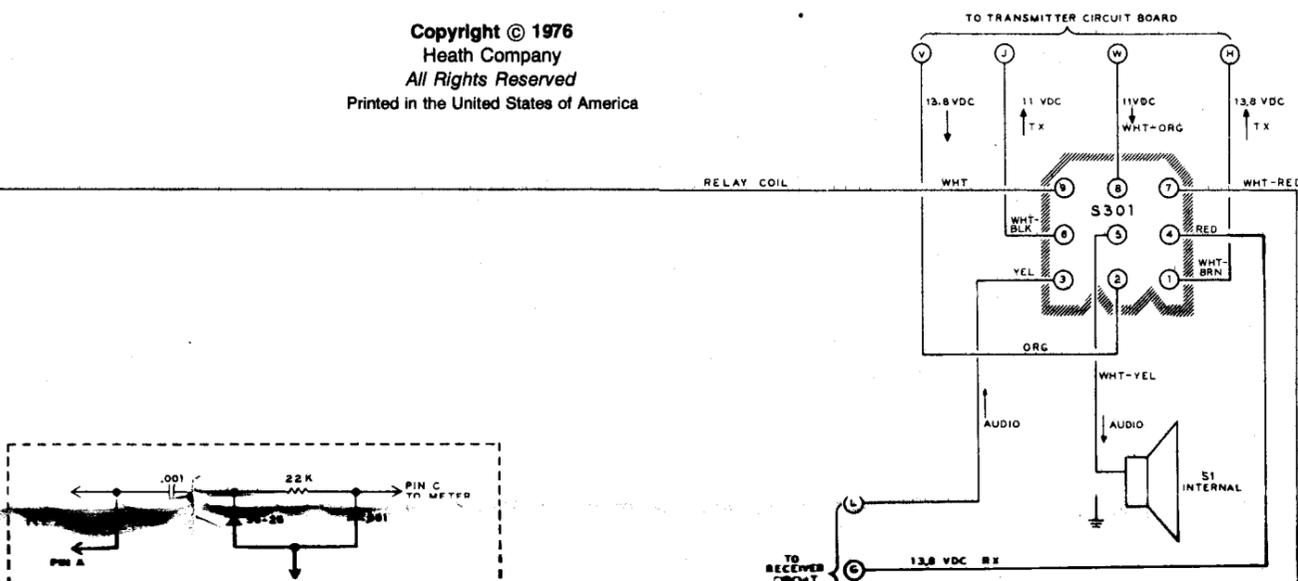
SCHEMATIC OF THE HEATHKIT® SYNTHESIZED 2-METER FM TRANSCEIVER MODEL HW-2036

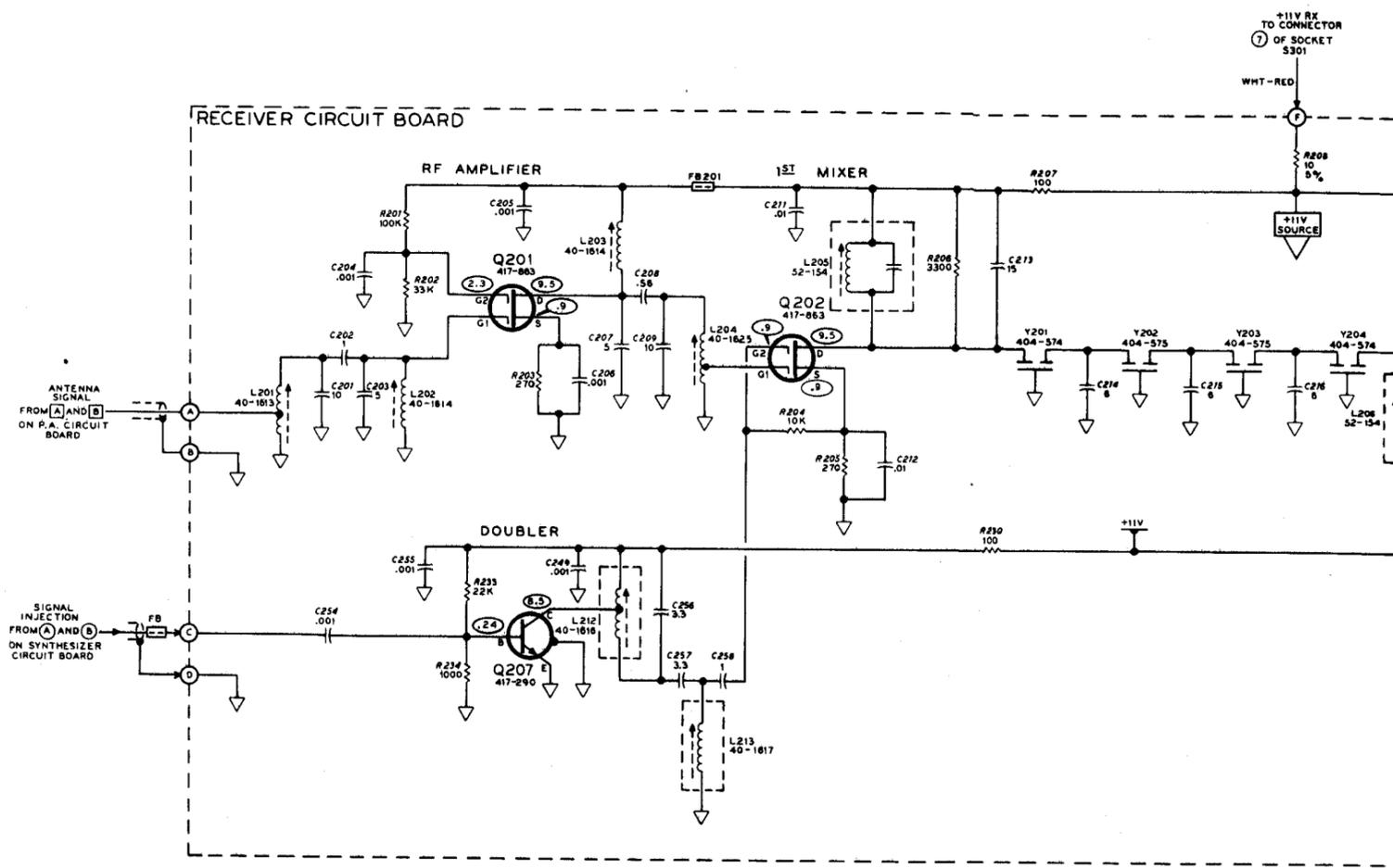
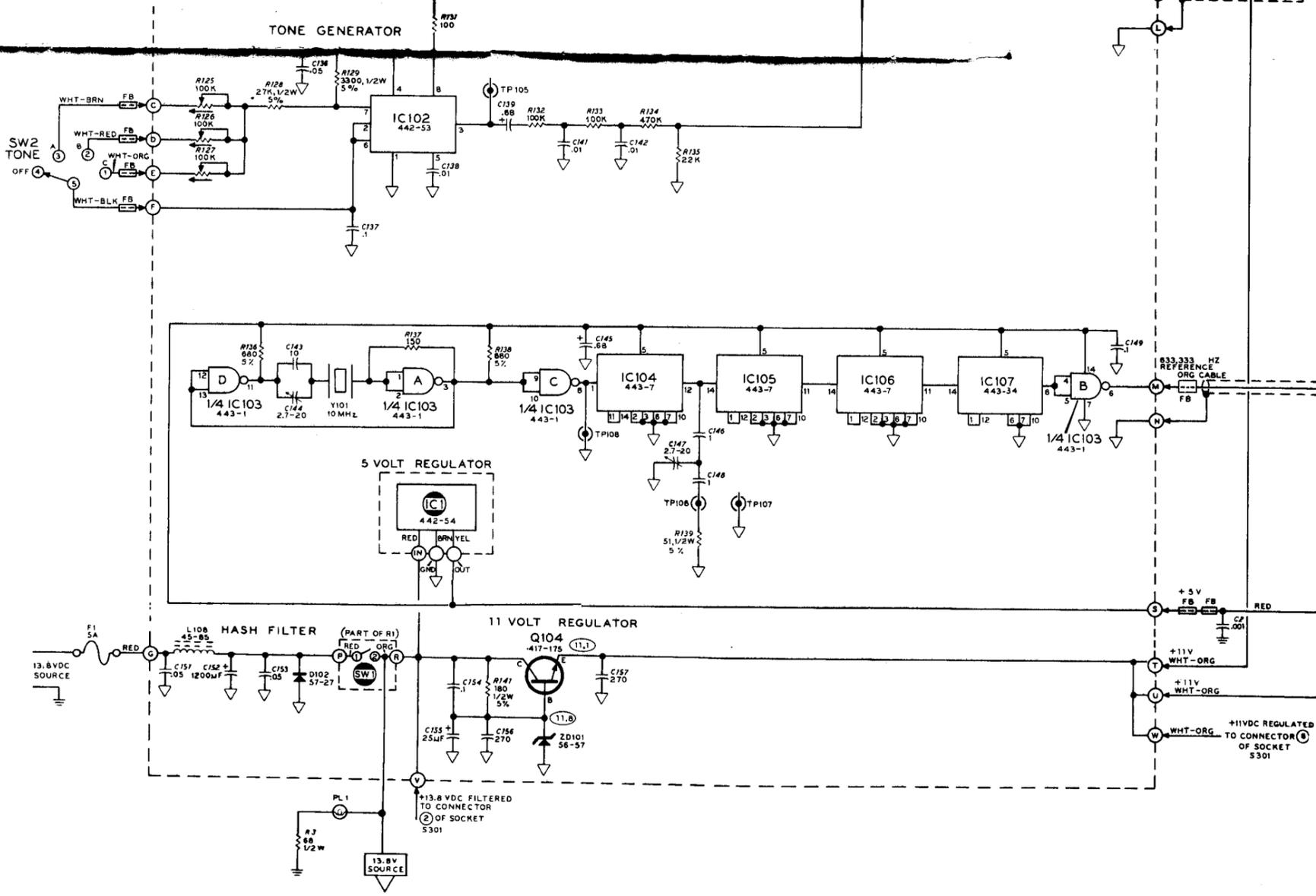
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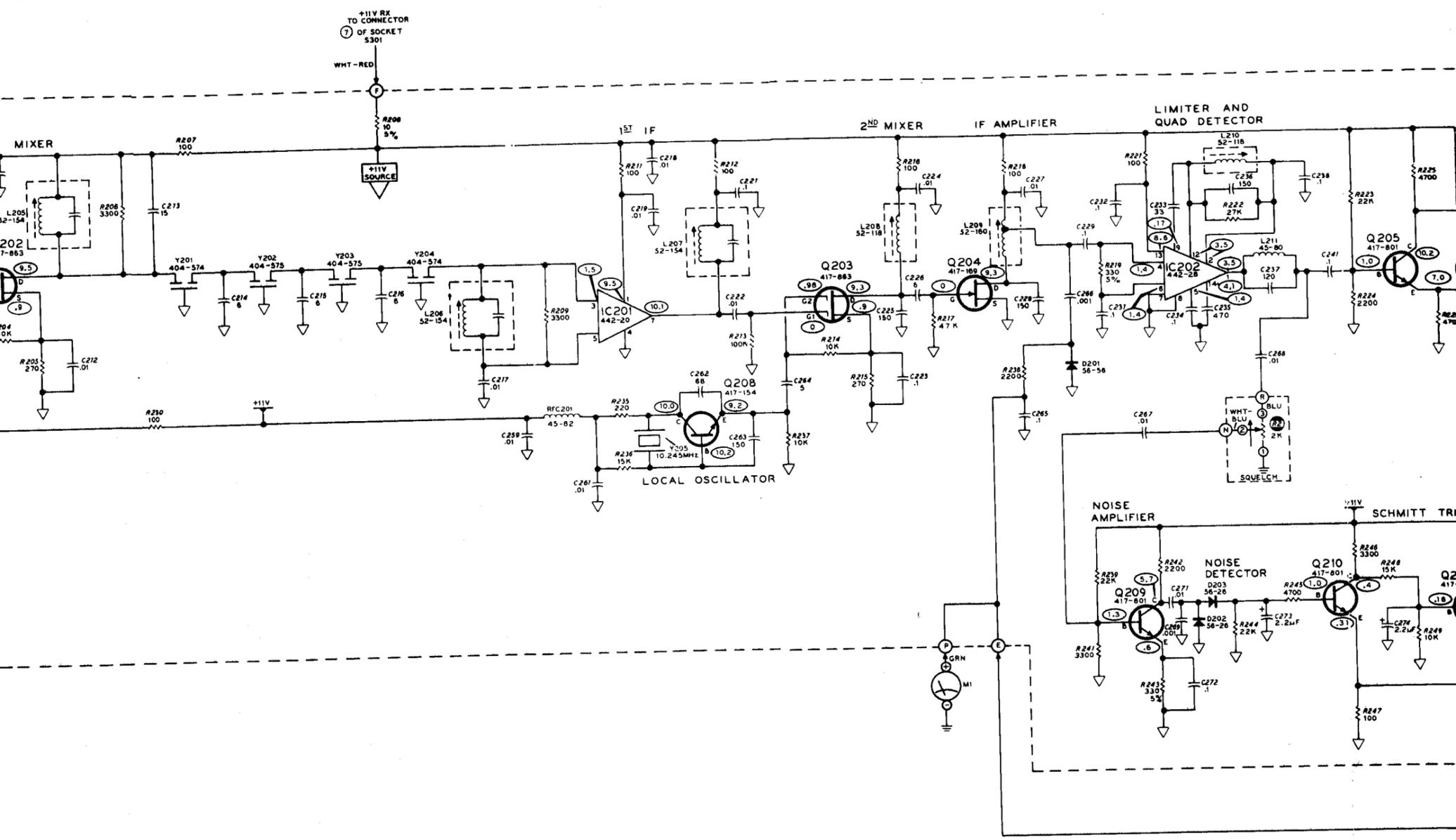
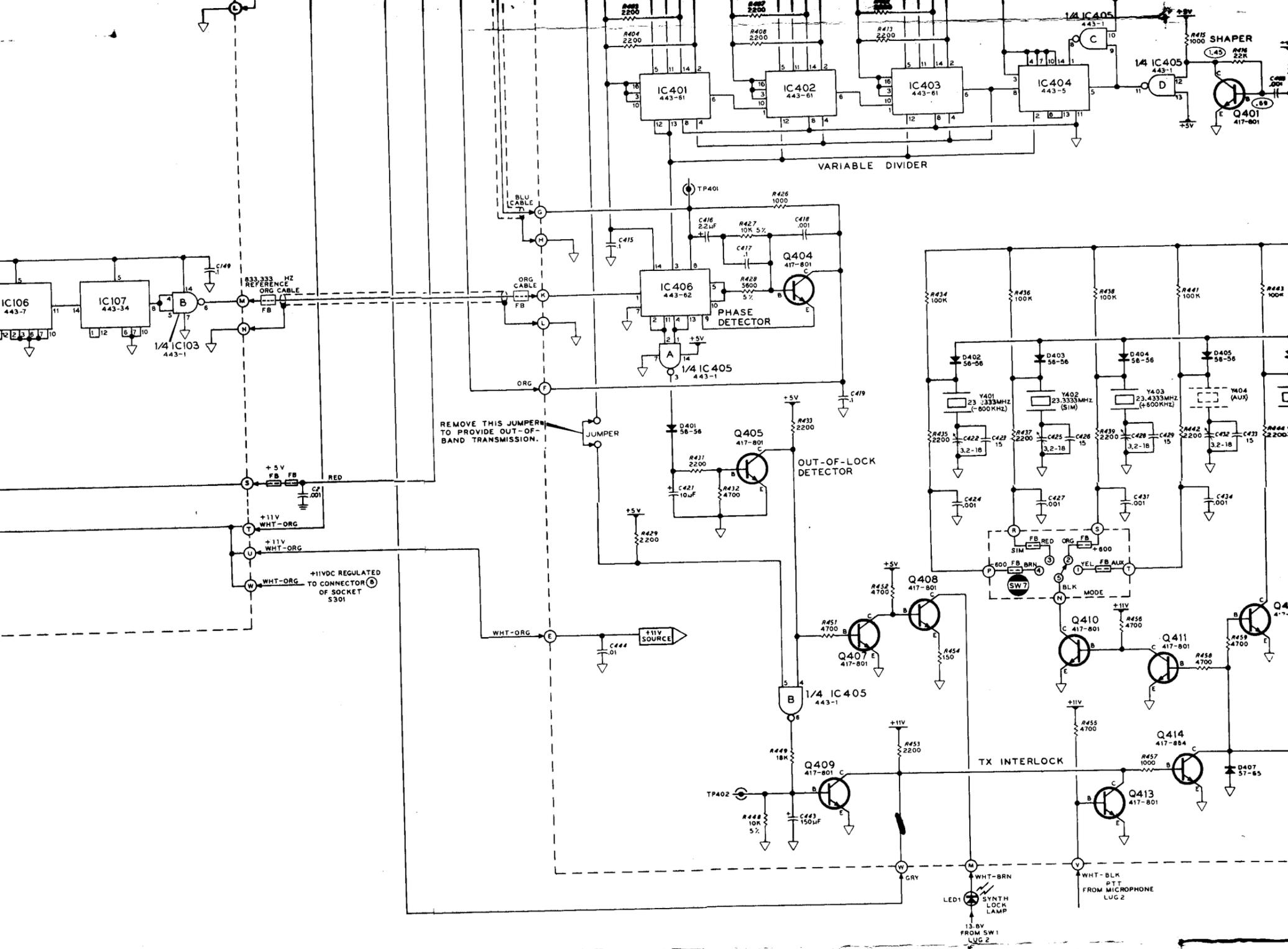
NOTES:

- COMPONENTS IN THE YELLOW GROUPS:
- 1-99 PARTS MOUNTED ON THE CHASSIS.
 - 100-199 PARTS MOUNTED ON THE TRANSMITTER CIRCUIT BOARD.
 - 200-299 PARTS MOUNTED ON THE RECEIVER CIRCUIT BOARD.
 - 300-399 PARTS MOUNTED ON THE POWER AMPLIFIER CIRCUIT BOARD.
 - 400-499 PARTS MOUNTED ON THE SYNTHESIZER CIRCUIT BOARD.
 - 500-599 PARTS MOUNTED ON THE VCO CIRCUIT BOARD.
2. ALL RESISTORS ARE 1/4-WATT, 10% TOLERANCE, UNLESS OTHERWISE NOTED. RESISTOR VALUES ARE IN OHMS; k=1000, M=1,000,000.
 3. CAPACITORS LESS THAN 1 ARE IN μ F (MICROFARADS). ALL OTHER CAPACITORS ARE IN pF (PICOFARADS) UNLESS OTHERWISE NOTED.
 4. ARROWS AT CONTROLS INDICATE CLOCKWISE ROTATION AS VIEWED FROM THE SHAFT END OF THE CONTROL.
 5. ○ THIS SYMBOL INDICATES A POSITIVE DC VOLTAGE MEASURED WITH A HIGH IMPEDANCE VOLTMETER FROM THE POINT INDICATED TO CHASSIS GROUND UNDER THE FOLLOWING CONDITIONS:
 1. NO SIGNAL INPUT.
 2. RECEIVER SQUELCHED AT THRESHOLD.
 3. VOLUME CONTROL FULLY COUNTERCLOCKWISE.
 4. TRANSMITTER VOLTAGES: KEYED WITHOUT MODULATION.
 6. ▽ THIS SYMBOL INDICATES CIRCUIT BOARD GROUND.
 7. ≡ THIS SYMBOL INDICATES CHASSIS GROUND.
 8. □ THIS SYMBOL INDICATES A SOLDERED CONNECTION TO A CIRCUIT BOARD.
 9. ▼ THIS SYMBOL INDICATES A COIL WOUND BY THE KIT BUILDER.
 10. REFER TO THE "CIRCUIT BOARD X-RAY VIEWS" FOR THE PHYSICAL LOCATION OF PARTS.
 11. ⊙ THIS SYMBOL INDICATES A TEST POINT.

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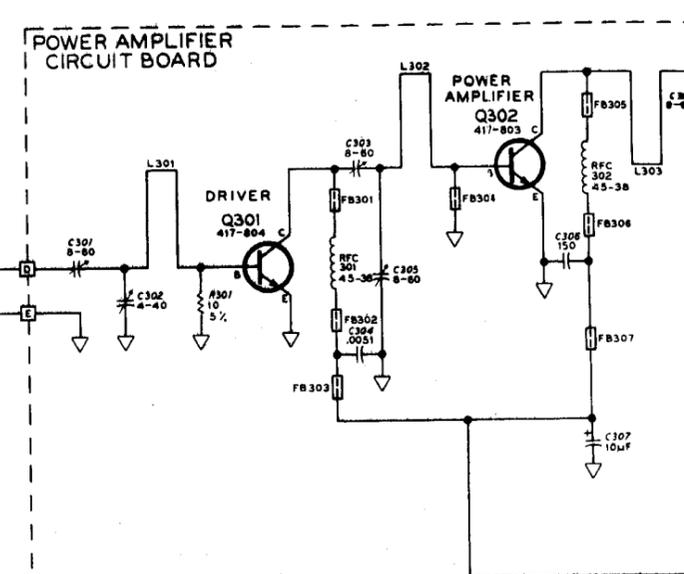
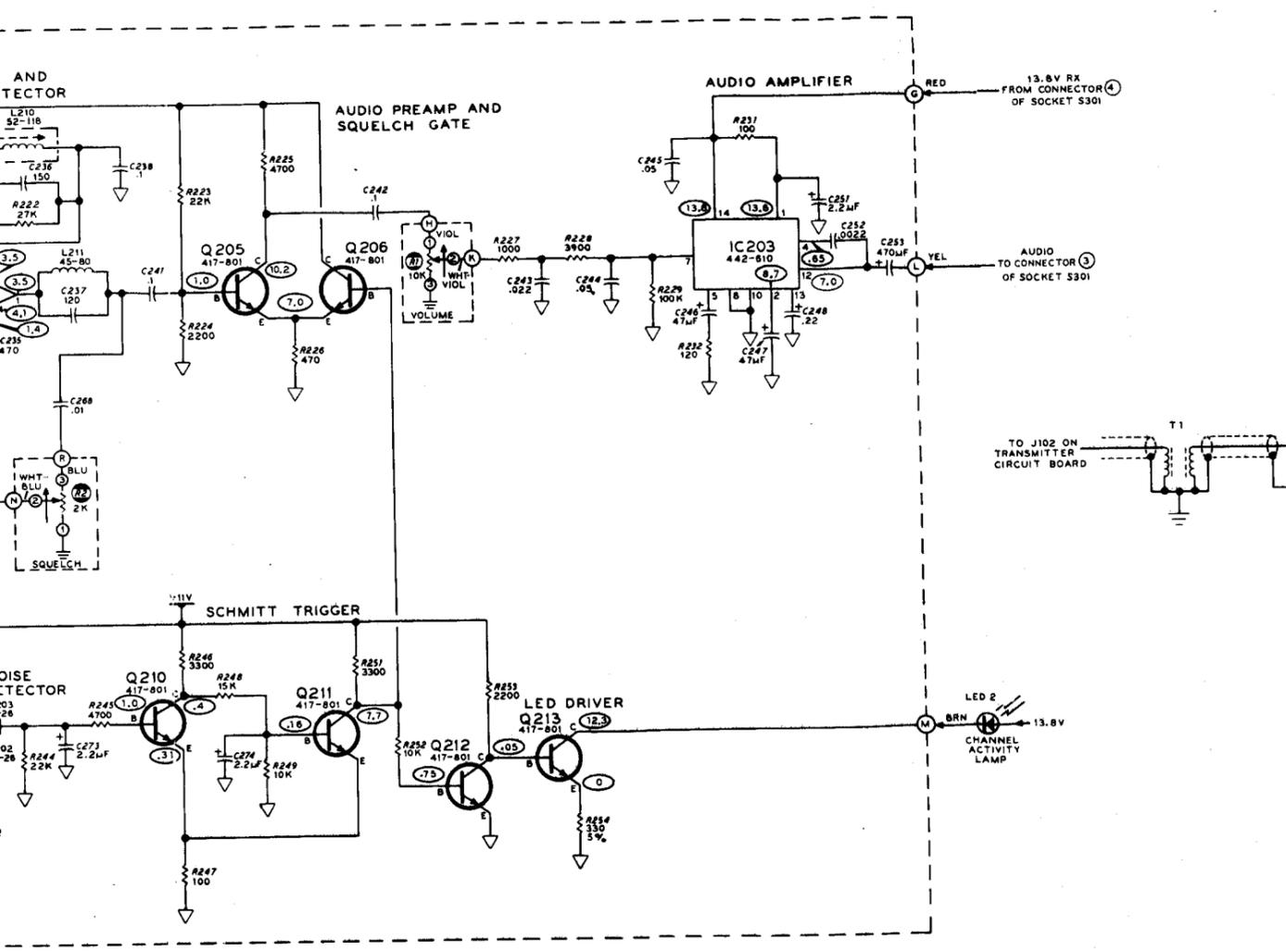
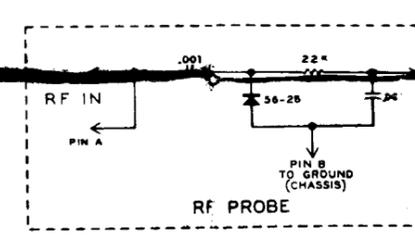
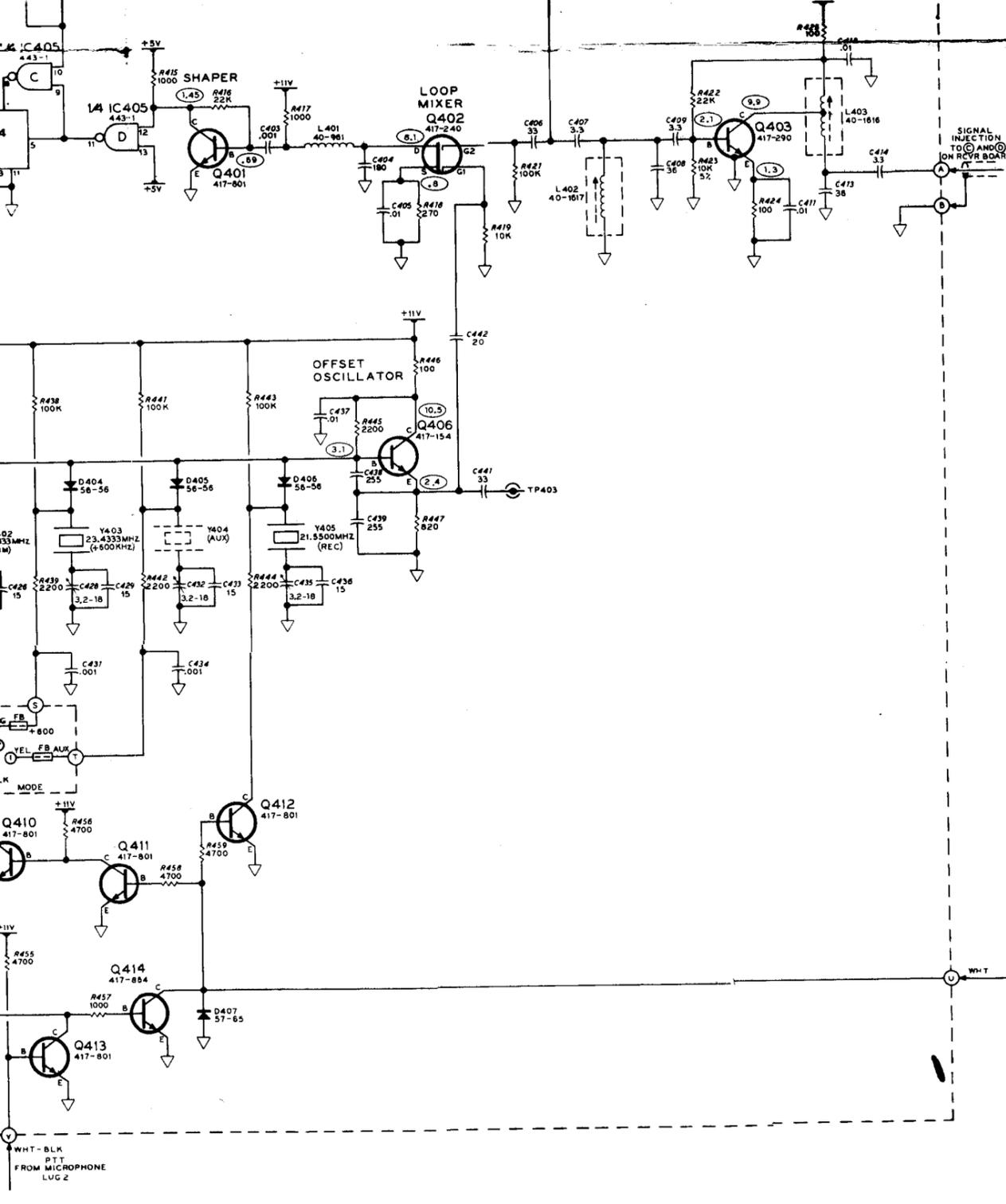






- 1-99 PARTS MO...
- 100-199 PARTS MO...
- 200-299 PARTS MO...
- 300-399 PARTS MO...
- 400-499 PARTS MO...
- 500-599 PARTS MO...

- 2. ALL RESISTORS ARE OTHERWISE NOTED. M=1,000,000.
- 3. CAPACITORS LESS OTHER CAPACITORS NOTED.
- 4. ARROWS AT CONTR VIEWED FROM THE
- 5. ○ THIS SYMBOL MEASURED AT THE POINT IN THE FOLLOWING C
 - 1. NO SIGN
 - 2. RECEIVER
 - 3. VOLUME
 - 4. TRANSMI
- 6. ▽ THIS SYMBOL
- 7. ≡ THIS SYMBOL
- 8. □ THIS SYMBOL CIRCUIT BOA
- 9. ▾ THIS SYMBOL BUILDER.
- 10. REFER TO THE PHYSICAL LO
- 11. ⊙ THIS SYMBOL



Printed

NOTES-

COMPONENT NUMBERS ARE IN THE FOLLOWING GROUPS.

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 - 100-199 PARTS MOUNTED ON THE TRANSMITTER CIRCUIT BOARD.
 - 200-299 PARTS MOUNTED ON THE RECEIVER CIRCUIT BOARD.
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