

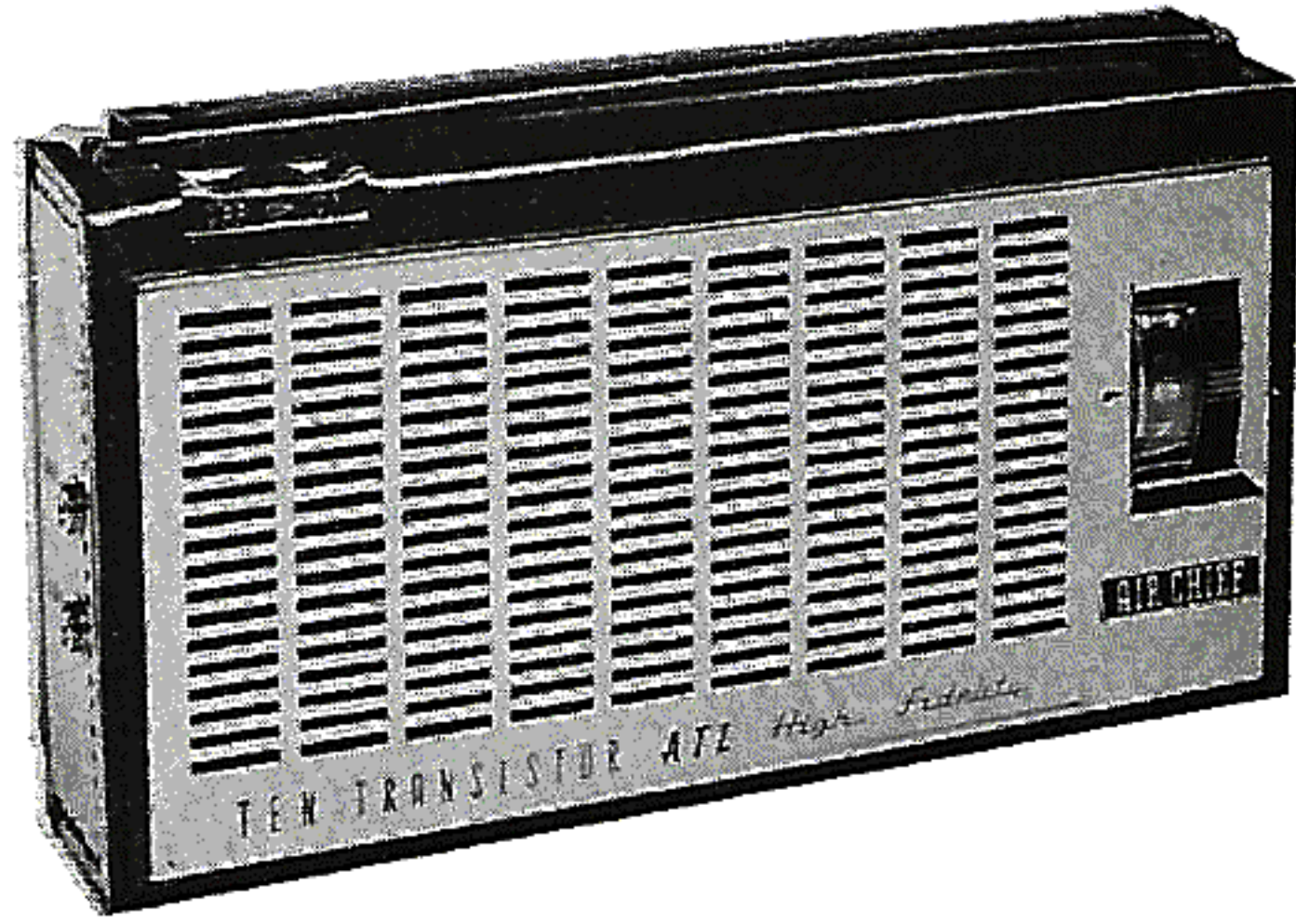


PHOTOFACT® with



Met dank aan Jef Bos

TRADE NAME: Air Chief Model 4-C-66
 SUPPLIER: Firestone Tire & Rubber Company
 1200 Firestone Parkway, Akron 17, Ohio
 TYPE SET: 10 Transistor AM Receiver
 POWER SUPPLY: 6 Volts DC
 RATING: 40MA @ 6VDC (No Signal, Min. Volume)
 50MA @ 6VDC (Signal, Normal Volume)
 TUNING RANGE: BROADCAST 535 ~ 1640KC

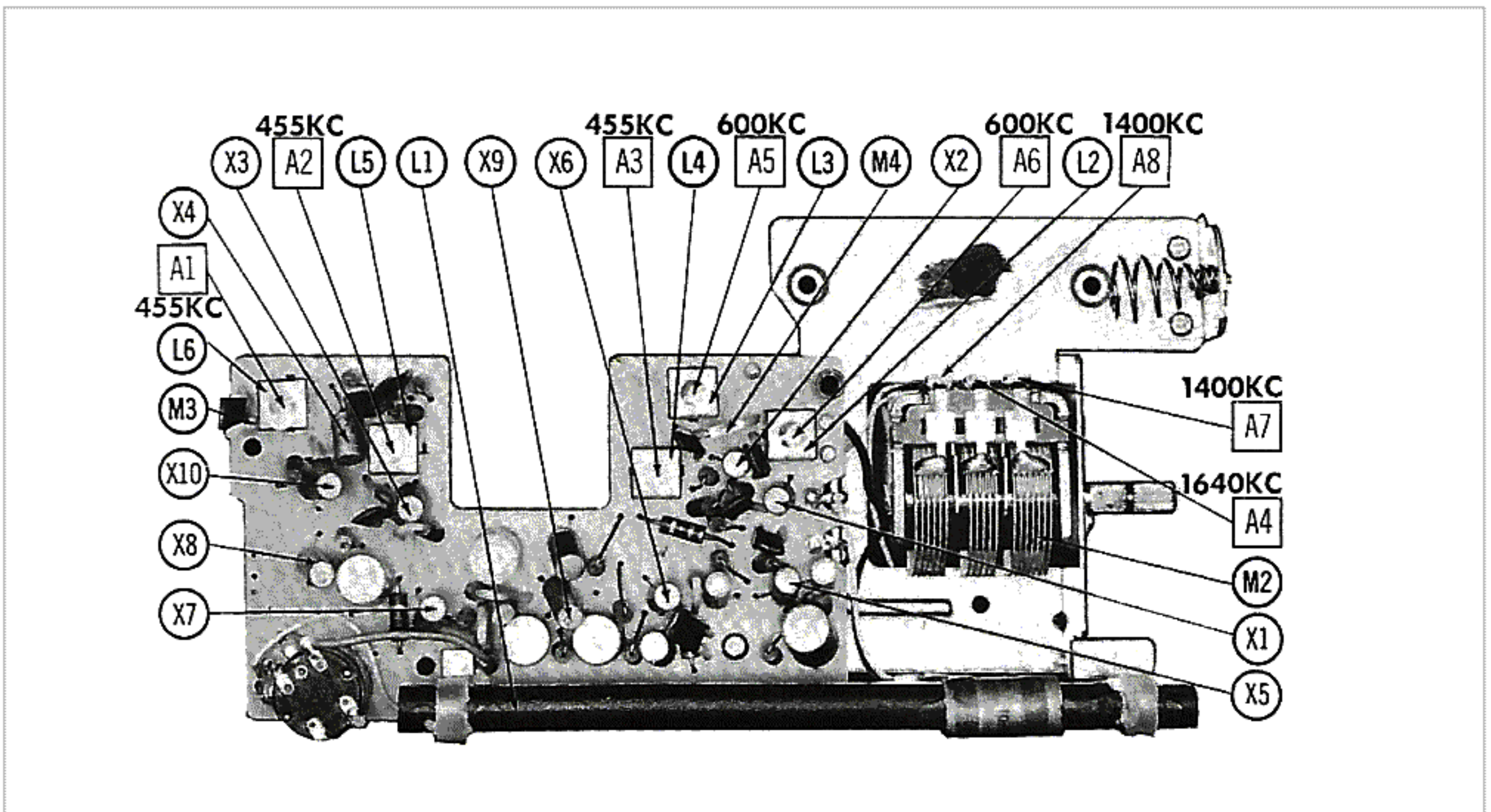


ALIGNMENT INSTRUCTIONS

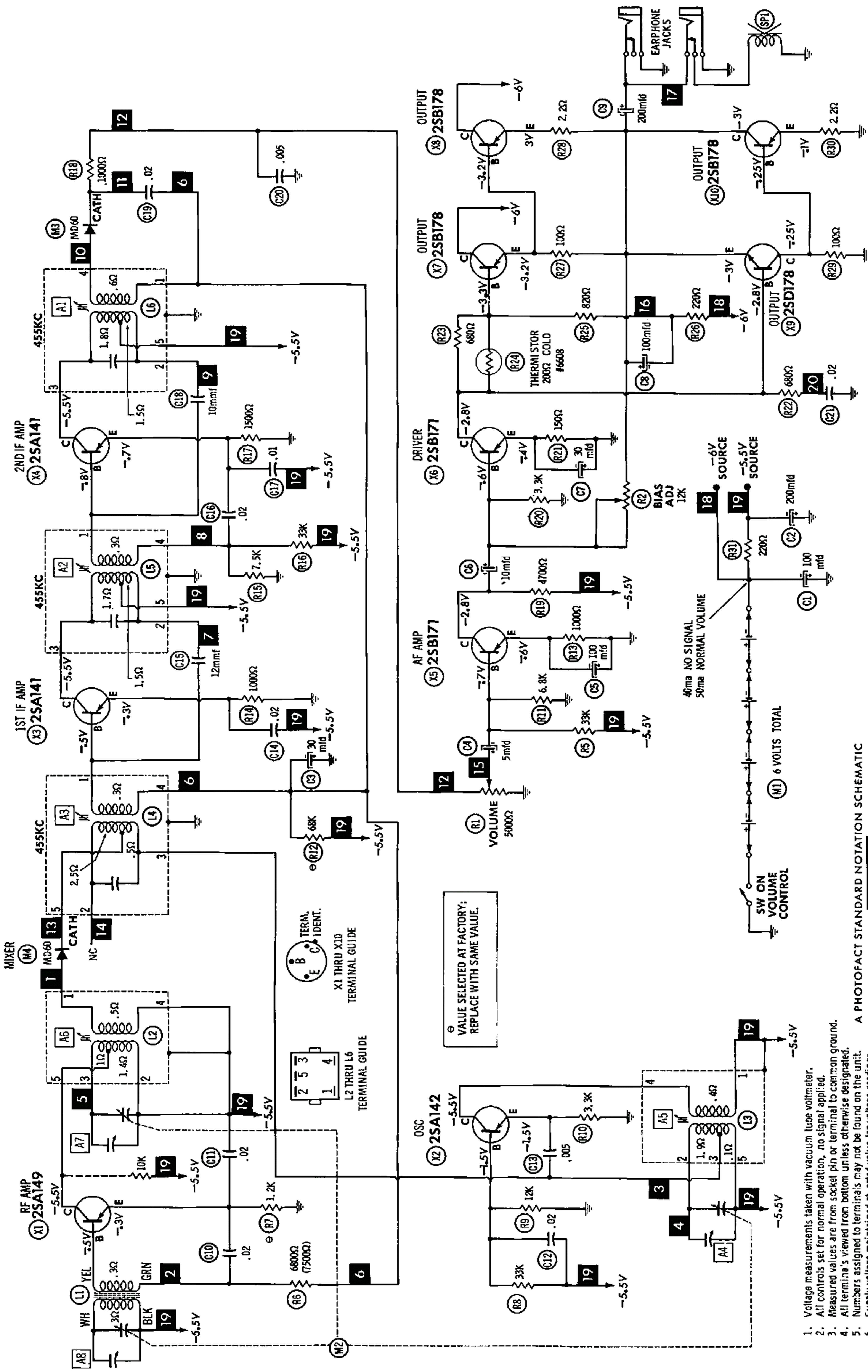
Check for specified source voltage.
 Fashion loop of several turns of wire and connect generator across loop.
 Adjust output of generator to radiate only enough signal into receiver to obtain a suitable indication.
 Suggested Alignment Tools:

A1 thru A8..... GENERAL CEMENT #5000, 5066, 8290
 WALSCO #2512, 2525, 2528

| | SIGNAL GENERATOR FREQUENCY | RADIO DIAL SETTING | INDICATOR | ADJUST | REMARKS |
|----|----------------------------|-------------------------|---------------------------------|------------|--|
| 1. | 455KC (400% Mod.) | Tuning gang fully open. | Output Meter across voice coil. | A1, A2, A3 | Adjust for maximum. Repeat as required. |
| 2. | 1640KC | " | " | A4 | Adjust for maximum. |
| 3. | 600KC | Tune to Signal. | " | A5, A6 | Rock tuning gang and adjust for maximum. Repeat steps 2 and 3. |
| 4. | 1400KC | " | " | A7, A8 | Adjust for maximum. |



HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

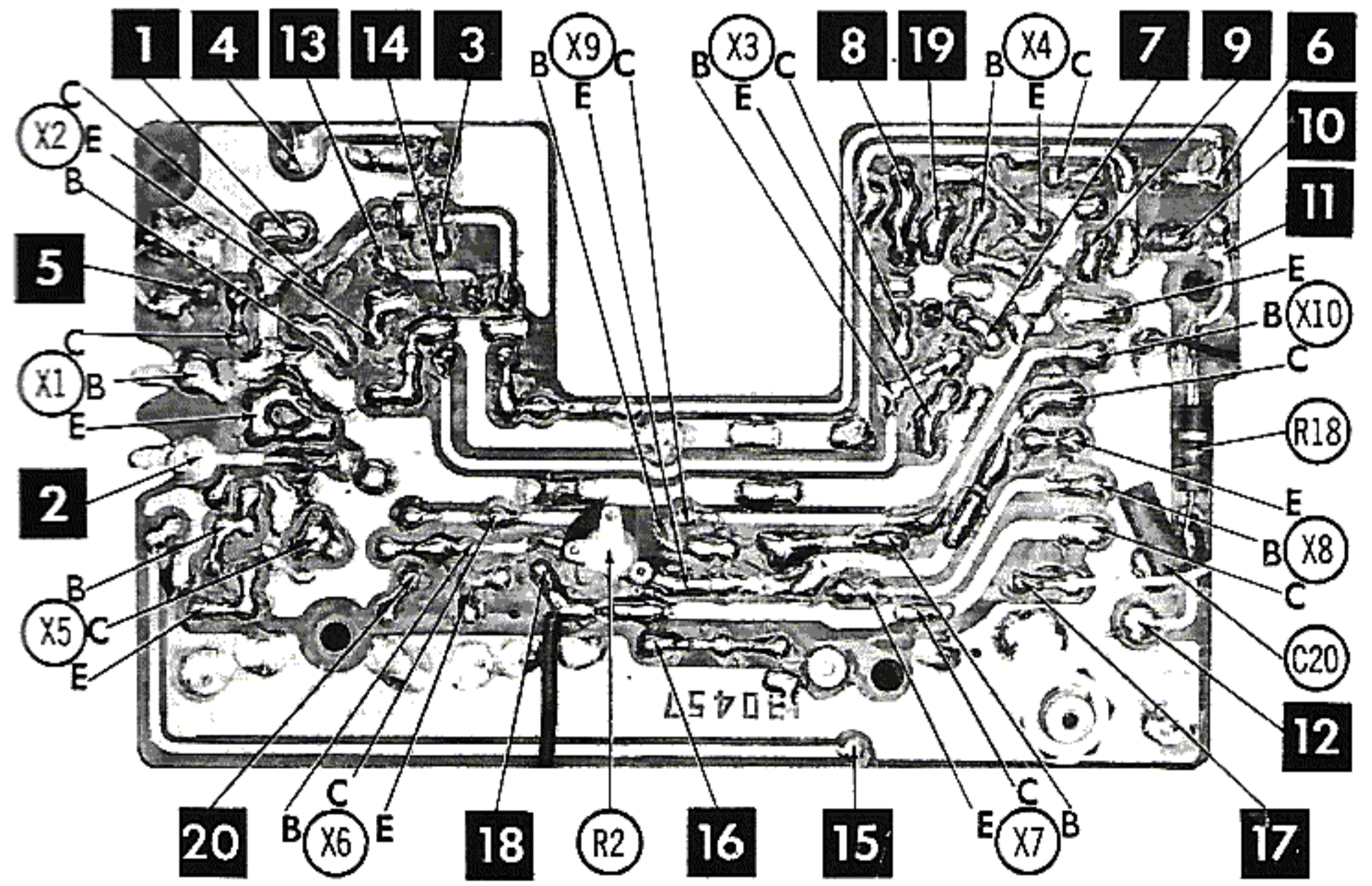
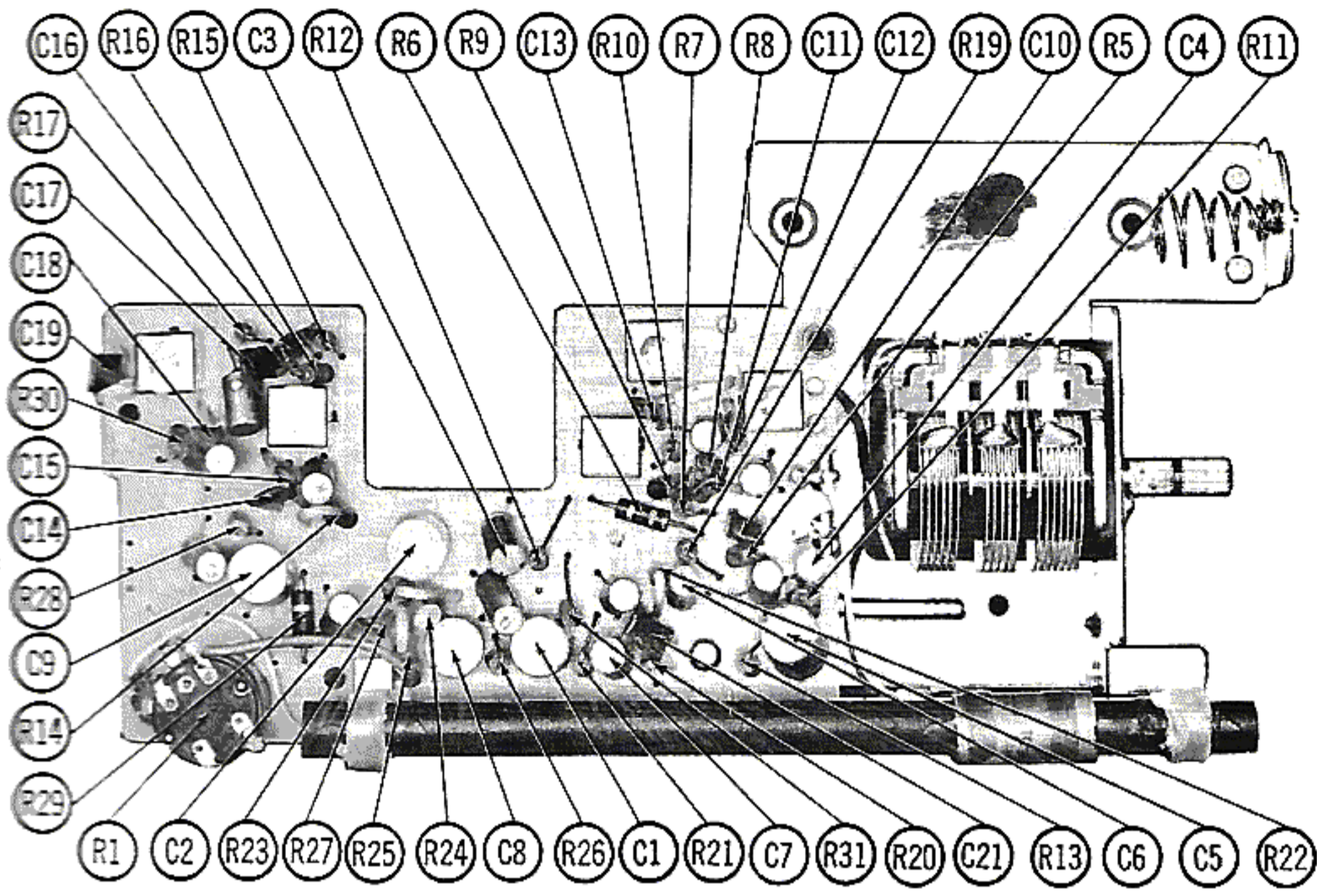


1. Voltage measurements taken with vacuum tube voltmeter.
2. All controls set for normal operation, no signal applied.
3. Measured values are from socket pin or terminal to common ground.
4. All terminals viewed from bottom unless otherwise designated.
5. Numbers assigned to terminals may not be found on the unit.
6. Supply voltage maintained at rated value for voltage readings.
7. Resistance measurements not given because of the wide variation in internal resistance of transistor.

A PHOTOFACT STANDARD NOTATION SCHEMATIC
with **CIRCUITRACE**

©Howard W. Sams & Co., Inc. 1963

AIR CHIEF MODEL 4-C-66



WIRING DATA

| | | |
|---|-----------------------------------|-----------|
| General-use Unshielded Hook-up Wire | Use BELDEN No. 8530 (Solid 22AWG) | Available |
| | 8524 (Stranded 22AWG) | in |
| | 8570 (Stranded 26AWG) | 12 Colors |

TRANSISTORS

| ITEM No. | ORIG. TYPE | USE | REPLACEMENT DATA | | | NOTES |
|----------|------------|-------------|------------------|---------------------------|--------------|-------|
| | | | DELCO PART No. | GENERAL ELECTRIC PART No. | RCA PART No. | |
| X1 | 2SA149 | RF Amp. | DS-25 | GE-1 | | PNP |
| X2 | 2SA142 | Osc. | DS-25 | GE-1 | 2N412 | PNP |
| X3 | 2SA141 | 1st IF Amp. | DS-25 | GE-1 | 2N410 | PNP |
| X4 | 2SA141 | 2nd IF Amp. | DS-25 | GE-2 | 2N410 | PNP |
| X5 | 2SB171 | AF Amp. | DS-26 | GE-2 | 2N406 | PNP |
| X6 | 2SB171 | Driver | DS-26 | GE-2 | 2N406 | PNP |
| X7 | 2SB178 | Output | DS-26 | GE-2 | | PNP |
| X8 | 2SB178 | Output | DS-26 | GE-2 | | PNP |
| X9 | 2SD178 | Output | DS-46 | GE-8 | | NPN |
| X10 | 2SB178 | Output | DS-26 | GE-2 | | PNP |

ELECTROLYTIC CAPACITORS

| ITEM No. | RATING | | REPLACEMENT DATA | | | | | | |
|----------|--------|-------|--------------------|------------------|---------------------------|---------------------------|-----------------------------|------------------|------------------|
| | CAP. | VOLT. | AIR CHIEF PART No. | AEROVOX PART No. | CORNELL-DUBILIER PART No. | GENERAL ELECTRIC PART No. | GENERAL INSTRUMENT PART No. | MALLORY PART No. | SPRAGUE PART No. |
| C1 | 100 | 6 | | | | | | | TE-1102 |
| C2 | 200 | 6 | | | | | | | |
| C3 | 30 | 6 | | CRE313A | ECPB412 | MT1-13 | | | TE-1092 |
| C4 | 5 | 6 | | BCD6005 | ECPB405 | MT1-3 | BL1020 | PET1210 | TE-1084 |
| C5 | 100 | 6 | | | | | | | TE-1102 |
| C6 | 10 | 6 | | BCD6010 | ECPB408 | MT1-5 | BL1220 | PET1340 | TE-1087 |
| C7 | 30 | 6 | | CRE313A | ECPB412 | MT1-13 | | | TE-1092 |
| C8 | 100 | 6 | | | | | | | TE-1102 |
| C9 | 200 | 6 | | | | | | | |

FIXED CAPACITORS

| ITEM No. | RATING | REMARKS | REPLACEMENT DATA | | | | | | |
|----------|--------|---------|------------------|--------------------|---------------------------|------------------|------------------|------------------|-----------|
| | | | AEROVOX PART No. | CENTRALAB PART No. | CORNELL-DUBILIER PART No. | ELMENCO PART No. | MALLORY PART No. | SPRAGUE PART No. | |
| C10 | .02 | | TTD-02 | CK-203 | H3 | | | TA-120 | TG-820 |
| C11 | .02 | | TTD-02 | CK-203 | H3 | | | TA-120 | TG-820 |
| C12 | .02 | | TTD-02 | CK-203 | H3 | | | TA-120 | TG-820 |
| C13 | .005 | | TTD-005 | CK-502 | H1 | | | TA-250 | TG-1050 |
| C14 | .02 | | TTD-02 | CK-203 | H3 | | | TA-120 | TG-820 |
| C15 | 12 | | | TCZ-12 | | | CCTO-120 | CNO-412 | 10TCC-Q12 |
| C16 | .02 | | TTD-02 | CK-203 | H3 | | | TA-120 | TG-820 |
| C17 | .01 | | TTD-01 | CK-103 | H2 | | | TA-110 | TG-810 |
| C18 | 10 | | NPO-DI 10 | DTZ-10 | C10Q1C | | CCTO-100 | CNO-410 | 10TCC-Q10 |
| C19 | .02 | | TTD-02 | CK-203 | H3 | | | TA-120 | TG-820 |
| C20 | .005 | | TTD-005 | CK-502 | H1 | | | TA-250 | TG-1050 |
| C21 | .02 | | TTD-02 | CK-203 | H3 | | | TA-120 | TG-820 |

DESCRIPTION

CONTROLS

All wattages 1/2 watt, or less, unless otherwise listed.

| ITEM No. | USE | RESIST- ANCE | REPLACEMENT DATA | | | | |
|----------|--------------------------------|--------------|--------------------|--------------------|--------------------|------------------|------------------|
| | | | AIR CHIEF PART No. | CENTRALAB PART No. | CLAROSTAT PART No. | CTS-IRC PART No. | MALLORY PART No. |
| R1 R2 | Volume & Switch Output Bias | 5000Ω 12K | | | | | |

COILS (RF-IF)

| ITEM No. | USE | REPLACEMENT DATA | | | | | NOTES |
|----------|-----------|--------------------|----------------|-----------------|------------------|------------------|-------|
| | | AIR CHIEF PART No. | MERIT PART No. | MILLER PART No. | STANCOR PART No. | WORKMAN PART No. | |
| L1 | Loopstick | 6609 | | | | | |
| L2 | RF | 6611 | | | | | |
| L3 | Osc. | 6610 | | | | | |
| L4 | 1st IF | 6612 | | | | | |
| L5 | 2nd IF | 6613 | | | | | |
| L6 | 3rd IF | 6614 | | | | | |

SPEAKER

| ITEM No. | TYPE | REPLACEMENT DATA | | NOTES |
|----------|-----------------|--------------------|---------------|-------|
| | | AIR CHIEF PART No. | QUAM PART No. | |
| SP1 | 3 1/2" PM 8-10Ω | 6617 | 3A05RZ8 | |

BATTERIES

| ITEM No. | VOLTAGE | AIR CHIEF PART No. | REPLACEMENT DATA | | | NOTES |
|----------|---------|--------------------|------------------|--------------|-------------------|------------|
| | | | BURGESS | EVEREADY | MALLORY | |
| M1 | 0 | | 130 (or AL-1) | 635 (or E93) | M-14R (or MN1400) | 4 Required |

MISCELLANEOUS

| ITEM No. | PART NAME | AIR CHIEF PART No. | NOTES |
|----------------|--|----------------------|--------|
| M2 M3 M4 | Tuning Cap. Detector (MD80) Mixer (MD80) | 6615 6607 6607 | 3 Gang |