

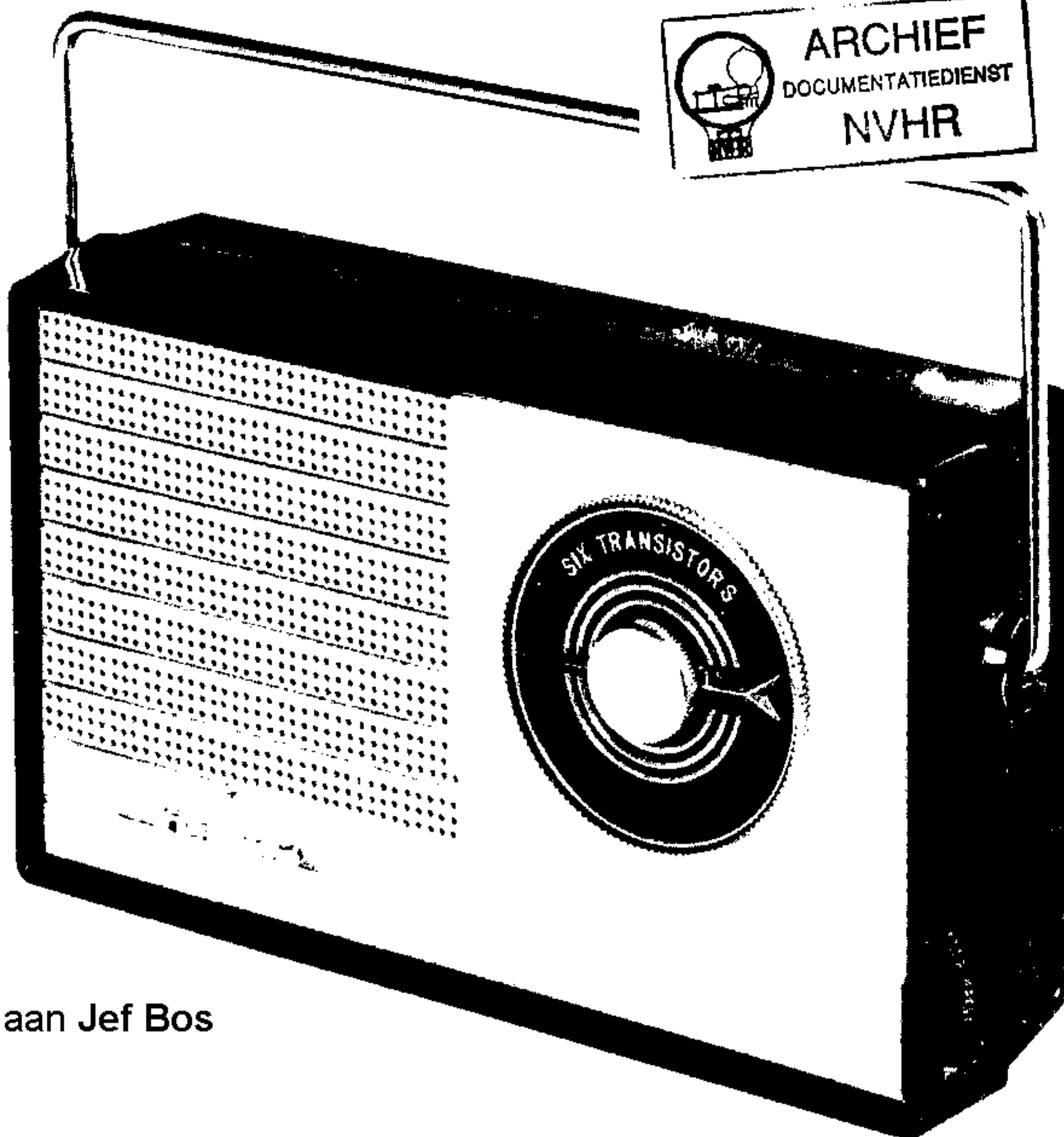
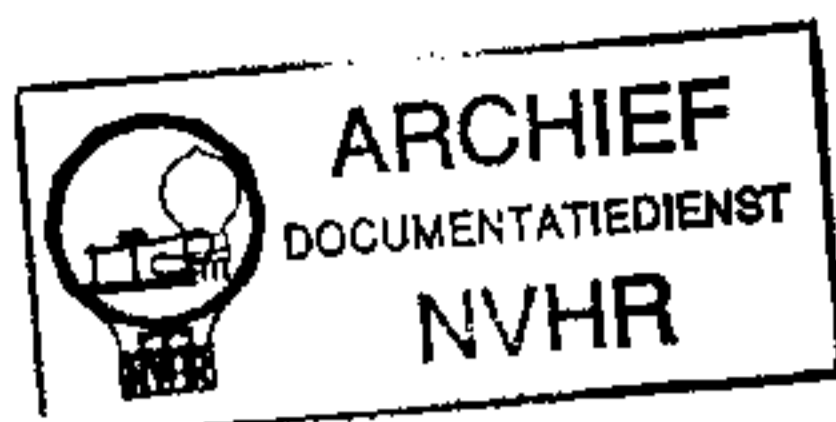
PHOTOFACT* Folder



**CROWN
MODEL TR-610**

Ned. Ver. v. Historie v/d Radio_

with **CIRCUITRACE***



Met dank aan Jef Bos

TRADE NAME Crown Model TR-610
 IMPORTER Shiro, Inc., 276 Fourth Ave., New York 10, N. Y.
 TYPE SET Battery Operated Portable Transistorized AM Receiver

POWER SUPPLY 6 Volts DC
 TUNING RANGE—BROADCAST 525 — 1650KC
 RATING 7.6MA@6 Volts DC (No Signal, Min. Volume)
 9.5MA@6 Volts DC (Signal, Normal Volume)

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading.

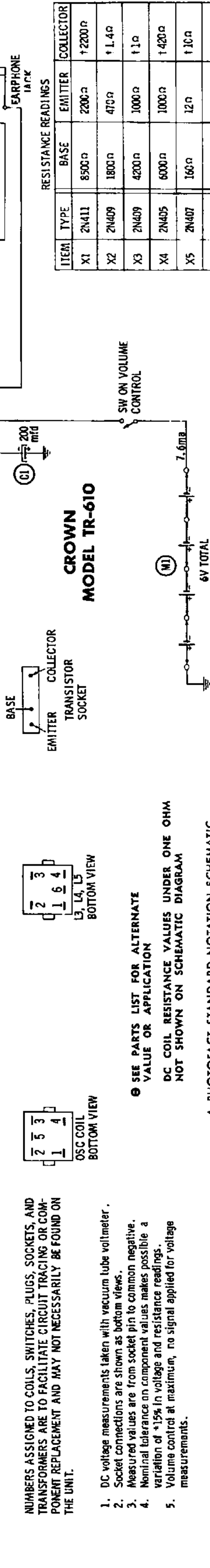
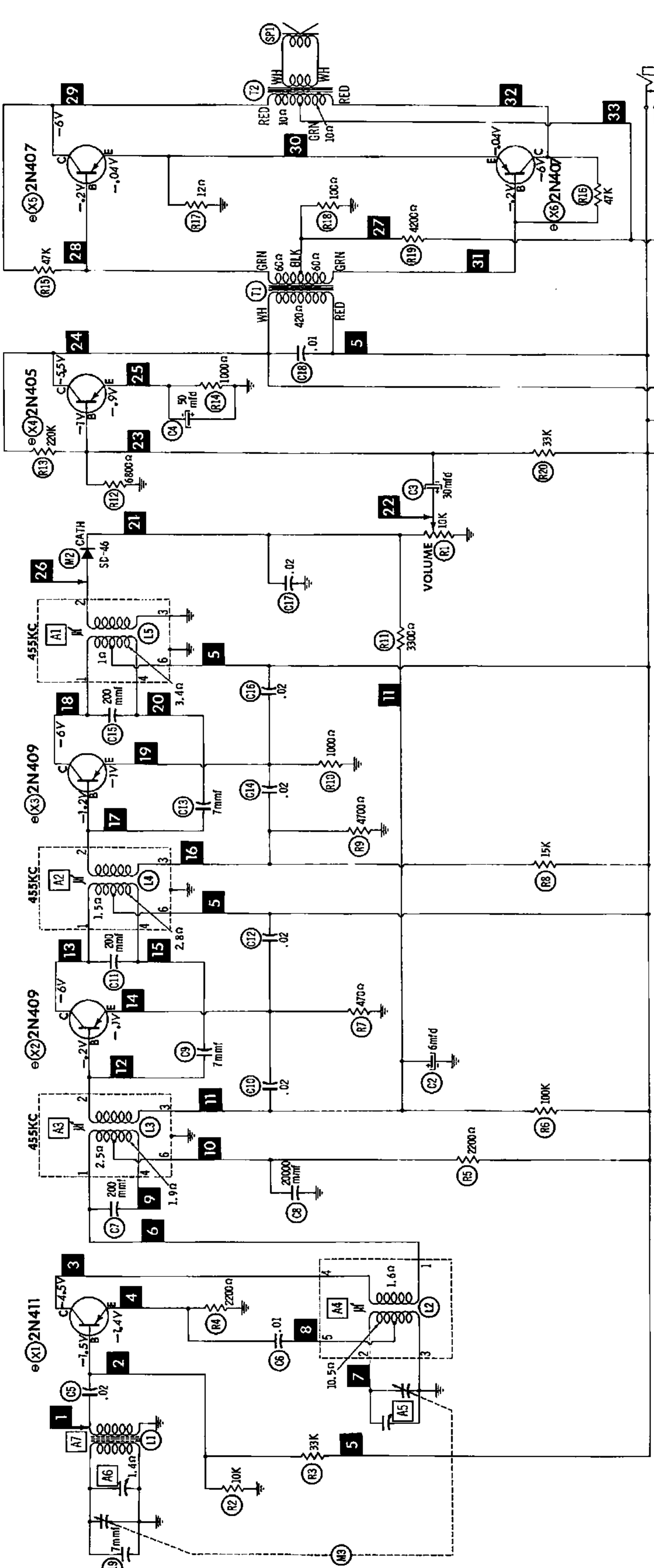
Suggested alignment tools: A5, A6..... GENERAL CEMENT #5004, 5008, 5009
 WALSCO #2520

| DUMMY ANTENNA | SIGNAL GENERATOR COUPLING | SIGNAL GENERATOR FREQUENCY | RADIO DIAL SETTING | OUTPUT METER | ADJUST | REMARKS |
|---------------|---------------------------|----------------------------|--------------------------|-------------------|------------|--|
| | Loop | 455KC (400v Mod.) | Tuning gang fully open | Across voice coil | A1, A2, A3 | Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output. |
| | " | 525KC | Tuning gang fully closed | " | A4 | " |
| | " | 1650KC | Tuning gang fully open | " | A5, A6 | " |
| | " | 650KC | 650KC | " | A7 | " |

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

The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of JF220

the particular type of replacement part listed. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. © 1959 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America



NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

1. DC voltage measurements taken with vacuum tube voltmeter.
 2. Socket connections are shown as bottom views.
 3. Measured values are from socket pin to common negative.
 4. Nominal tolerance on component values makes possible a variation of +15% in voltage and resistance readings.
 5. Volume control at maximum, no signal applied for voltage measurements.

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

OSC COIL
BOTTOM VIEW

L3, L4, L5
BOTTOM VIEW

BASE
EMITTER
COLLECTOR
TRANSISTOR
SOCKET

SW ON VOLUME CONTROL

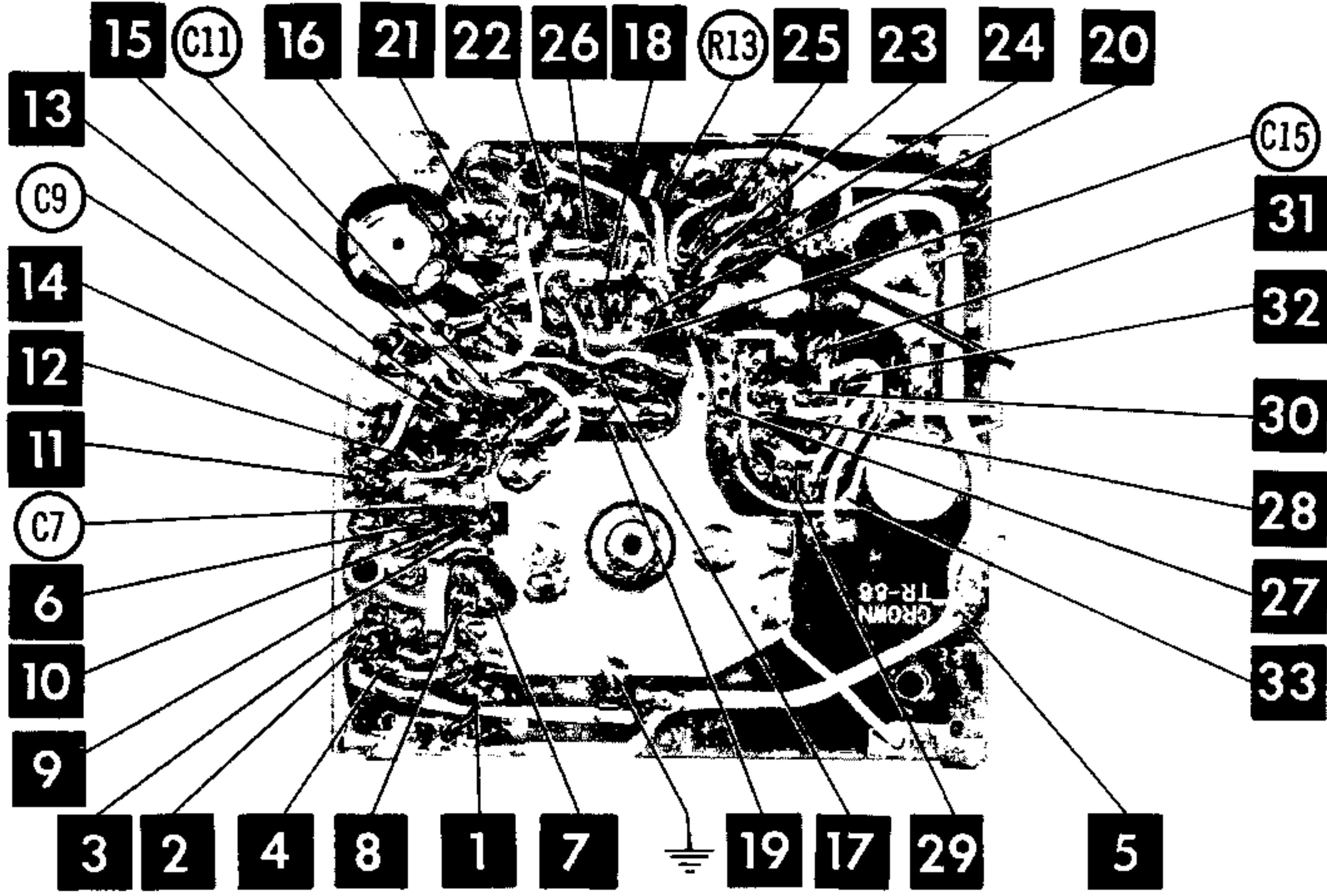
6V TOTAL

**CROWN
MODEL TR-610**

† TRANSISTORS REMOVED FOR RESISTANCE MEASUREMENTS.
 † MEASURED FROM JUNCTION OF C1 AND R20.

PRINTED BOARD

A Howard W. Sams **CIRCUITRACE** Photo



PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

| ITEM No. | USE | REPLACEMENT DATA | | | | | | NOTES |
|----------------------------|---|------------------|-----------------|-------------------|----------------|-----------------|--------------|-------|
| | | CROWN PART No. | Gramer PART No. | Meissner PART No. | Merit PART No. | Miller PART No. | Rom PART No. | |
| L1 L2 L3 L4 L5 | Loopstick Osc. Coil 1st IF Trans. 2nd IF Trans. 3rd IF Trans. | | | | | | | |

TRANSFORMER (DRIVER)

| ITEM No. | TURNS RATIO | | REPLACEMENT DATA | | | | | NOTES |
|----------|-------------|------|------------------|---------------------|----------------|------------------|---------------------|-------|
| | | | CROWN PART No. | Halldorson PART No. | Merit PART No. | Stancor PART No. | Thordarson PART No. | |
| | PRI. | SEC. | | | | | | |
| T1 | 2 | 1 | TRT-3 | | | | | |

TRANSFORMER (AUDIO OUTPUT)

| ITEM No. | IMPEDANCE | | REPLACEMENT DATA | | | | | | NOTES |
|----------|------------|--------|------------------|---------------------|----------------|--------------|------------------|---------------------|-------|
| | | | CROWN PART No. | Halldorson PART No. | Merit PART No. | Ram PART No. | Stancor PART No. | Thordarson PART No. | |
| | PRI. | SEC. | | | | | | | |
| T2 | 350Ω CT | 12-14Ω | TRT-4 | TR-16 | | | TA-20 | TR-16 | |

SPEAKER

| ITEM No. | TYPE | | | REPLACEMENT DATA | | NOTES |
|----------|------|-------|------------|------------------|---------------|-------|
| | | | | CROWN PART No. | QUAM PART No. | |
| | SIZE | FIELD | V. C. IMP. | | | |
| SP1 | 2½" | PM | 12-14Ω | | | |

BATTERIES

| ITEM No. | VOLTAGE | CROWN PART No. | REPLACEMENT DATA | | | | | | NOTES |
|----------|---------|----------------|------------------|-------|----------|--------|---------|---------|----------|
| | | | BURGESS | | EVEREADY | | MALLORY | | |
| | | | "A" | "B" | "A" | "B" | "A" | "B" | |
| M1 | 6V | | | 930 ① | | 1015 ① | | M-15R ① | ① 4 Used |

CRYSTAL DIODES

| ITEM No. | ORIG. TYPE | REPLACEMENT DATA | | | | NOTES |
|----------|------------|------------------|--------------|-------------------|-------------------|--------------------|
| | | CROWN PART No. | CBS PART No. | RAYTHEON PART No. | SYLVANIA PART No. | |
| M2 | | SD-46 | 1N60 | 1N60 | 1N295 | Detector (Pigtail) |

MISCELLANEOUS

| ITEM No. | PART NAME | CROWN PART No. | NOTES |
|----------|-----------------------------|----------------|--------|
| M3 | Tuning Cap Printed Board | TR-86 | 2 Gang |

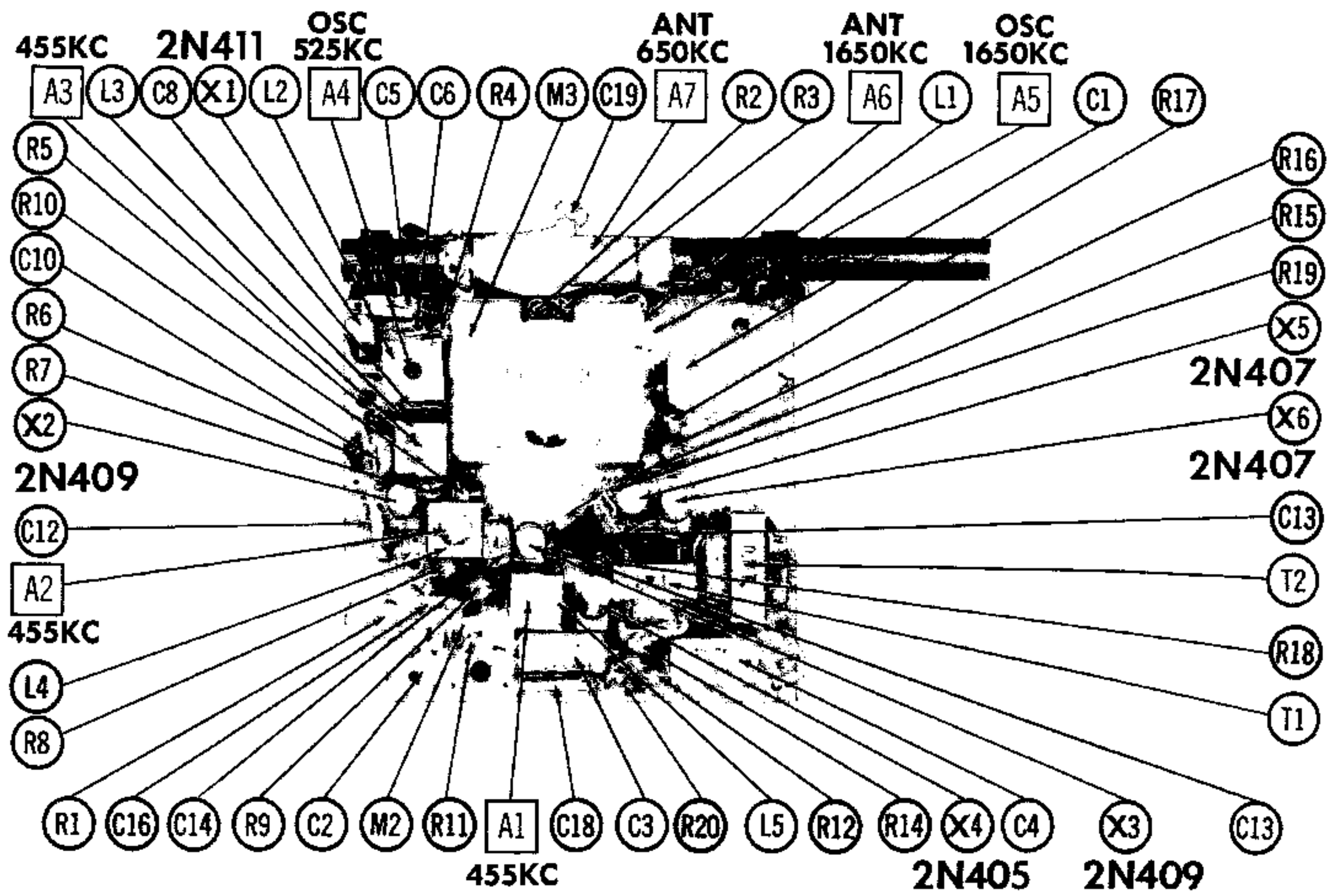
CABINETS & CABINET PARTS

(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in Ten Colors
8524 (Stranded) Available in Ten Colors

CHASSIS--TOP VIEW



455KC

2N411

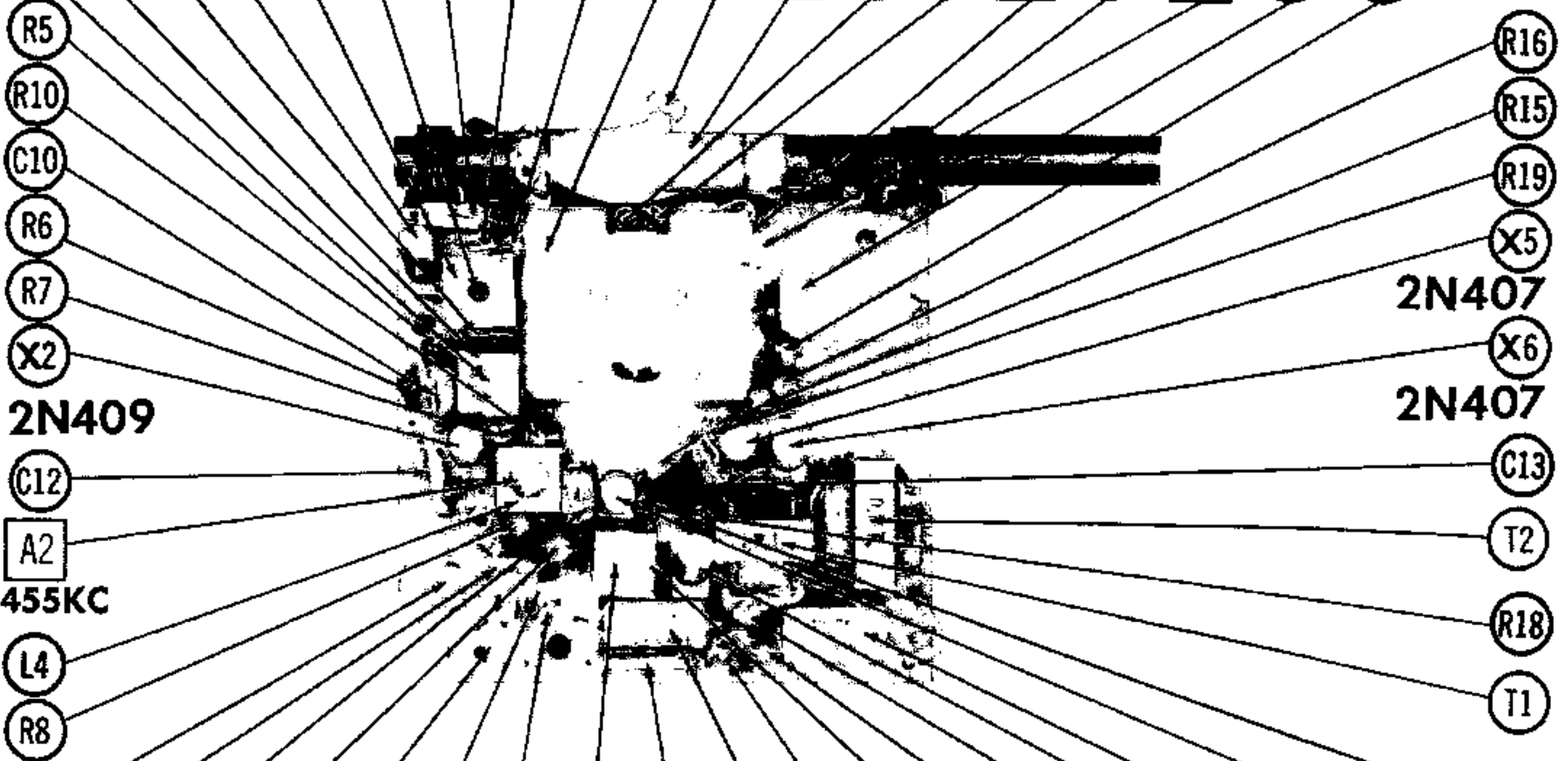
OSC
525KC

ANT
650KC

ANT
1650KC

OSC
1650KC

A3 L3 C8 X1 L2 A4 C5 C6 R4 M3 C19 A7 R2 R3 A6 L1 A5 C1 R17



2N409

455KC

R1 C16 C14 R9 C2 M2 R11 A1 C18 C3 R20 L5 R12 R14 X4 C4 X3 C13

455KC

2N405

2N409

2N407

2N407

R16
R15
R19
X5
X6
C13
T2
R18
T1