

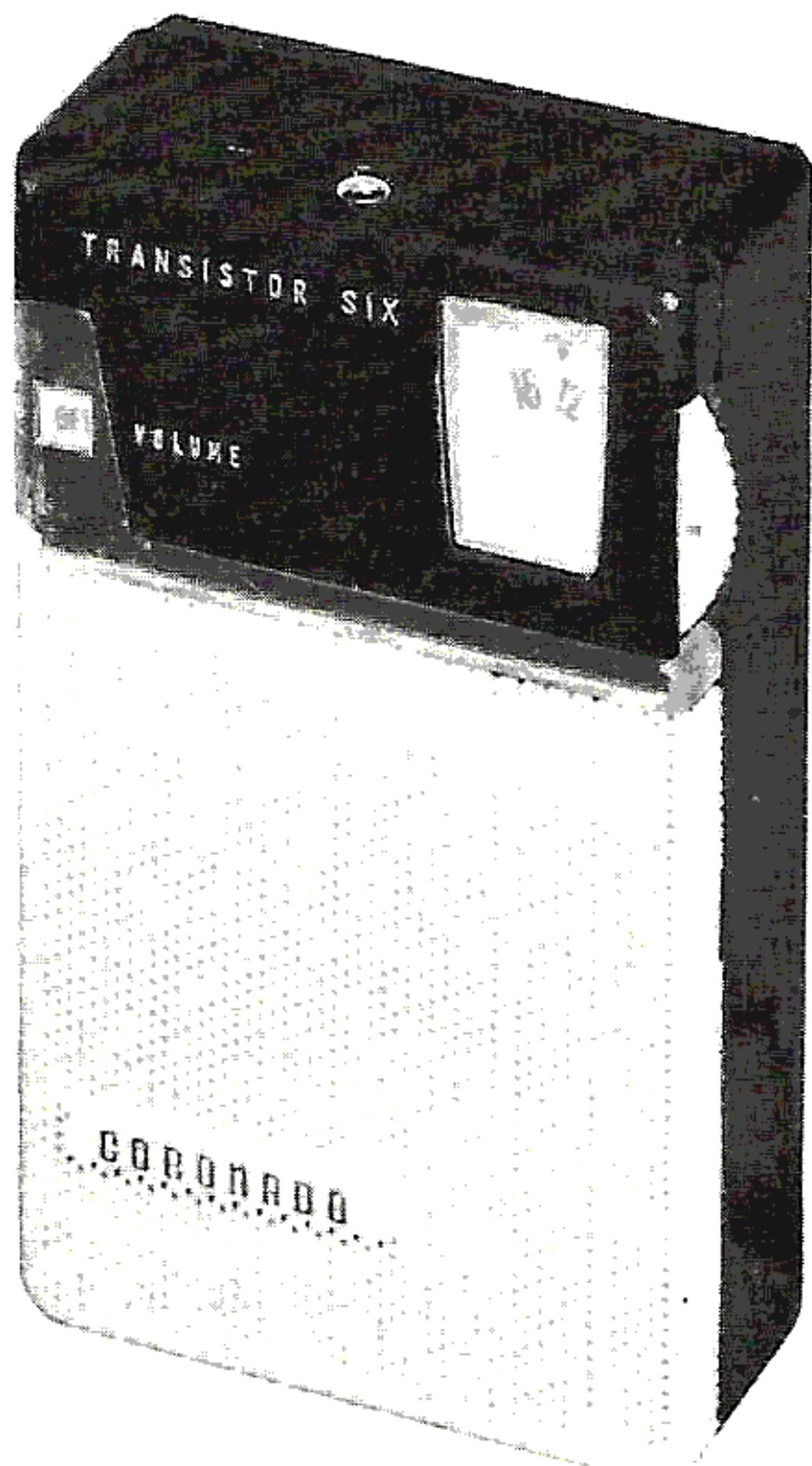
PHOTOFACT® Folder

with CIRCUITRACE®

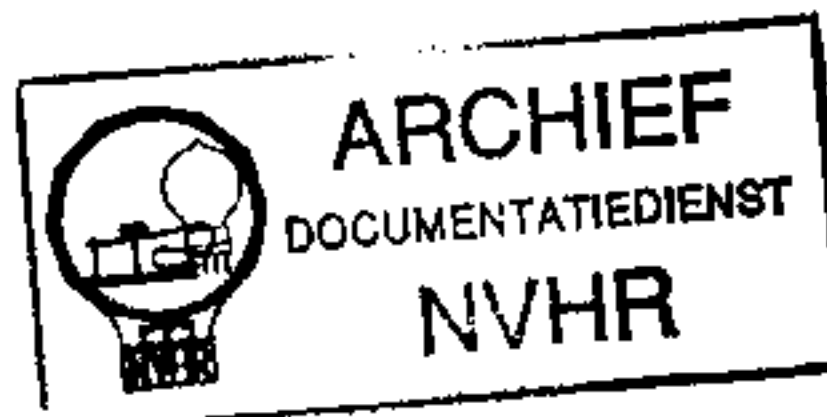
CORONADO MODEL
RA50-9900A



Met dank aan Jef Bos



Ned. Ver. v. Historie v/d Radio



| | | | |
|------------------------|--|--------|--|
| TRADE NAME | Coronado Model RA50-9900A | | |
| SUPPLIER | Gamble-Skogmo, Inc., 15 N. Eighth Street, Minneapolis 3, Minn. | | |
| TYPE SET | Battery Operated Transistorized Portable AM Receiver | | |
| POWER SUPPLY | 9 Volts DC | RATING | 5 MA @ 9 Volts DC (No Signal, Min. Volume) |
| TUNING RANGE—BROADCAST | 525 — 1670KC | | 15 MA @ 9 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.

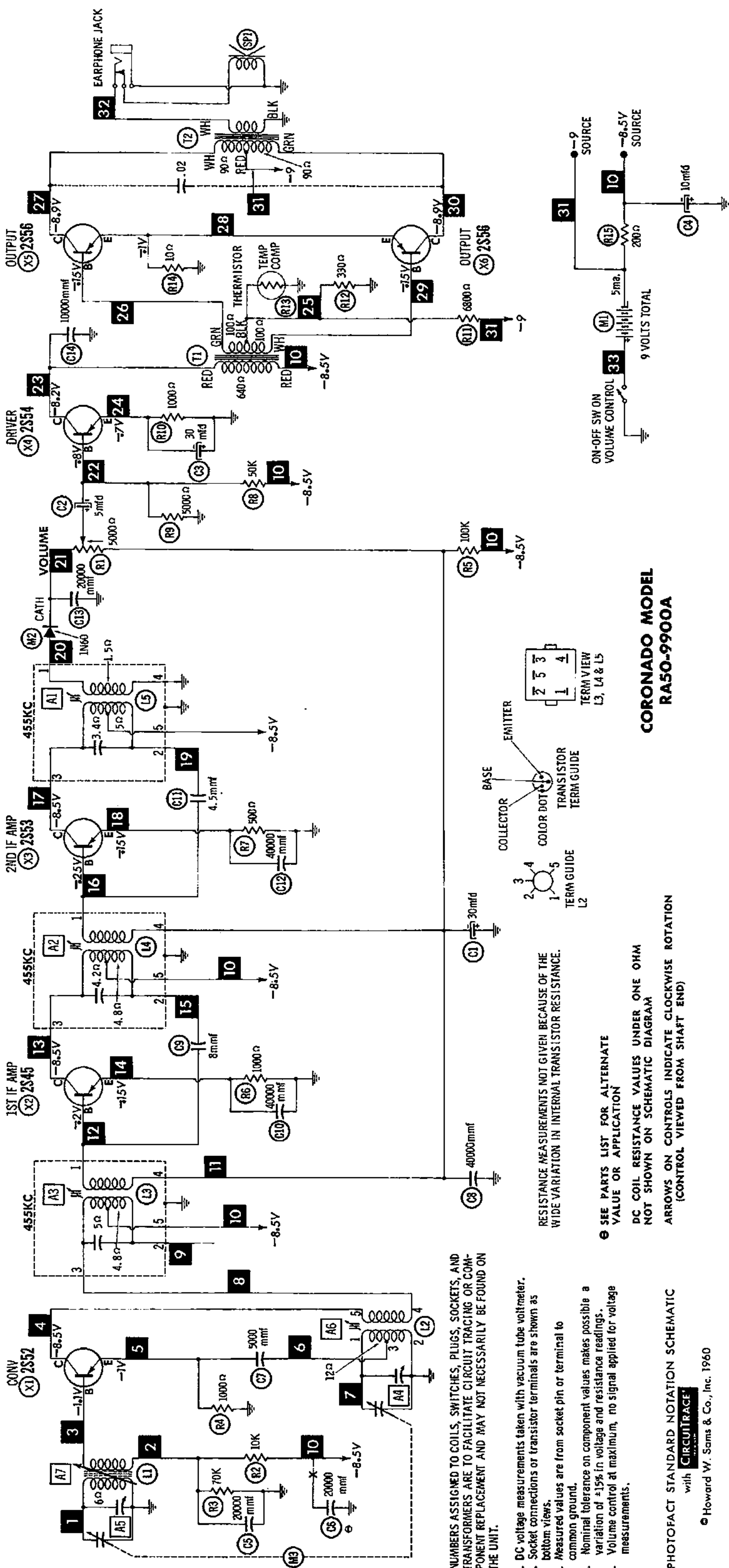
Suggested Alignment Tools: A1, A2, A3... GENERAL CEMENT #8607, 9291, 9294
WALSCO #2520, 2522, 2523, 2524, 2534, 2537
A4, A5.....GENERAL CEMENT #5000, 5003, 5066, 8276, 8290, 9087, 9089
WALSCO #2512, 2525, 2528

| | SIGNAL GENERATOR COUPLING | SIGNAL GENERATOR FREQUENCY | RADIO DIAL SETTING | OUTPUT METER | ADJUST | REMARKS |
|----|---|----------------------------|---------------------------|--------------------|------------|--|
| 1. | High side thru .05mfd to base of converter transistor. Low side to chassis. | 455KC (400v Mod.) | Tuning gang fully open. | Across voice coil. | A1, A2, A3 | Adjust for maximum output. |
| 2. | Loop | 1670KC | " | " | A4 | Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output. |
| 3. | " | 1400KC | 1400KC Signal. | " | A5 | " |
| 4. | " | 525KC | Tuning gang fully closed. | " | A6 | " |
| 5. | " | 600KC | 600KC Signal. | " | A7 | Adjust for maximum output. Repeat Steps 2, 3, 4 and 5. |

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 KF126

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. © 1960 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America



**CORONADO MODEL
RA50-9900A**

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.

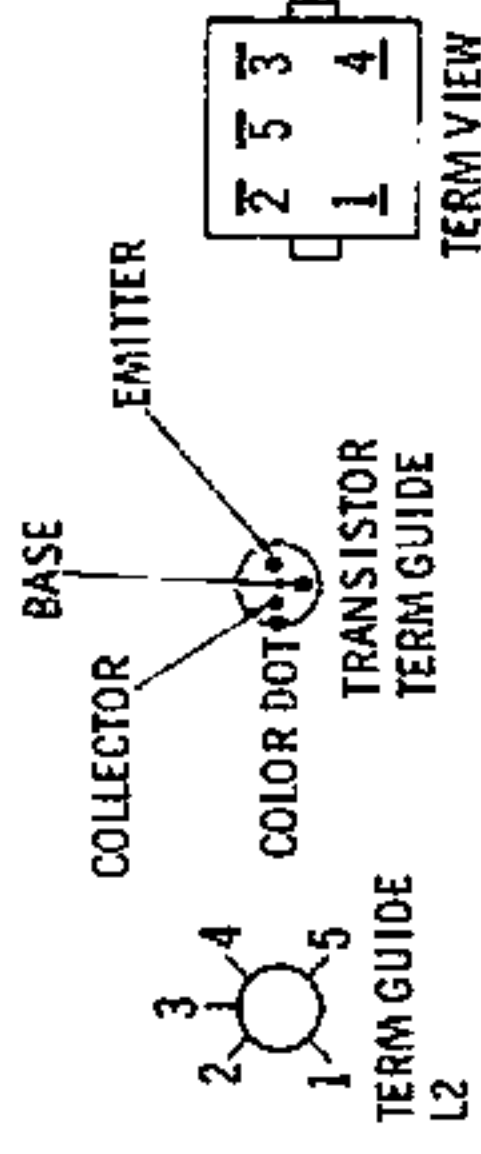
1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections or transistor terminals are shown as bottom views.
3. Measured values are from socket pin or terminal to common ground.
4. Nominal tolerance on component values makes possible a variation of $\pm 15\%$ in voltage and resistance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

RESISTANCE MEASUREMENTS NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

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

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)



A PHOTOFACIT STANDARD NOTATION SCHEMATIC with **CIRCUITRACE**

PARTS LIST AND DESCRIPTIONS

TRANSISTORS

| ITEM No. | ORIG. TYPE | USE | REPLACEMENT DATA | | | | NOTES |
|----------|------------|------------------|------------------|--------------|-------------------|-------------------|--------------------|
| | | | CBS PART No. | RCA PART No. | RAYTHEON PART No. | SYLVANIA PART No. | |
| X1 | 2S52 | Converter | | | | 2N411 | PNP |
| X2 | 2S45 | 1st IF Amplifier | | 2N410 | 2N483 | 2N410 | PNP |
| X3 | 2S53 | 2nd IF Amplifier | | 2N410 | 2N483 | 2N410 | PNP |
| X4 | 2S54 | Driver | | 2N406 | 2N406 | 2N410 | PNP |
| X5 | 2S56 | Output | | 2N408 | 2N632 | 2N408 | PNP |
| X6 | 2S56 | Output | | 2N408 | 2N632 | 2N408 | PNP } Matched Pair |

ELECTROLYTIC CAPACITORS

| ITEM No. | RATING | | REPLACEMENT DATA | | | | | | NOTES |
|----------|--------|-------|-------------------|------------------|---------------------------|------------------|------------------|------------------|-------|
| | CAP. | VOLT. | CORONADO PART No. | AEROVOX PART No. | CORNELL-DUBILIER PART No. | MALLORY PART No. | PYRAMID PART No. | SPRAGUE PART No. | |
| C1 | 30 | 3 | J9711 | PTT3030 | NLW25-3 | TT3X25 | ML25-3 | TE-1055 | |
| C2 | 5 | 3 | J9712 | XPP-3005 | NLW5-6 | TT6X5 | ML5-6 | TE-1052.2 | |
| C3 | 30 | 3 | J9711 | PTT3030 | NLW25-3 | TT3X25 | ML25-3 | TE-1055 | |
| C4 | 10 | 10 | J974 | XPP-10010 | NLW10-10 | TT12X10 | ML10-15 | TE-1114 | |

FIXED CAPACITORS

Capacity values given in the rating column are in mfd. for Paper Capacitors, and in mmfd. for Mica and Ceramic 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. | |
| C5 | 20000 | Note 1 | C80V203AM | DDM-203 | H-05S2 | CCD-502 | TA-120 | TG-S20 | |
| C6 | 20000 | | C80V203AM | DDM-203 | H-05S2 | | TA-120 | TG-S20 | |
| C7 | 5000 | | C80V502AM | DDM-502 | H-05D5 | | TA-250 | TG-D50 | |
| C8 | 40000 | | NPO-SI 8.2 | | | C10V8C | | | 10TCC-V82 |
| C9 | 8 | | | | | | | | 10TCC-V82 |
| C10 | 40000 | | NPO-SI 4.7 | | TCZ-4R7 | C10V47C | CCTO-4R7 | CNO-547 | 10TCC-V47 |
| C11 | 4.5 | | | | | | | | 10TCC-V47 |
| C12 | 40000 | | C80V203AM | DDM-203 | H-05S2 | | | TA-120 | TG-S20 |
| C13 | 20000 | | | | | | | | TG-S20 |
| C14 | 10000 | | | | | | | | C80V103AM |

Note 1. Not used in some versions.

CONTROLS

| ITEM No. | RATING | | REPLACEMENT DATA | | | | INSTALLATION NOTES | |
|----------|------------|-------|-------------------|--------------------|--------------------|------------------|--------------------|------------------|
| | RESISTANCE | WATTS | CORONADO PART No. | CENTRALAB PART No. | CLAROSTAT PART No. | CTS-IRC PART No. | | MALLORY PART No. |
| R1 | 5000Ω | 1/4 | V-502S | BI6-214 | | | | Volume & Switch |

RESISTORS (IRC or EQUIVALENT)

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

| ITEM No. | RATING | REMARKS |
|----------|--------|---------|
| R2 | 10K | |
| R3 | 70K | |
| R4 | 1000Ω | |
| R5 | 100K | |
| R6 | 1000Ω | |

| ITEM No. | RATING | REMARKS |
|----------|--------|---------|
| R7 | 500Ω | |
| R8 | 50K | |
| R9 | 5000Ω | |
| R10 | 1000Ω | |
| R11 | 6800Ω | |

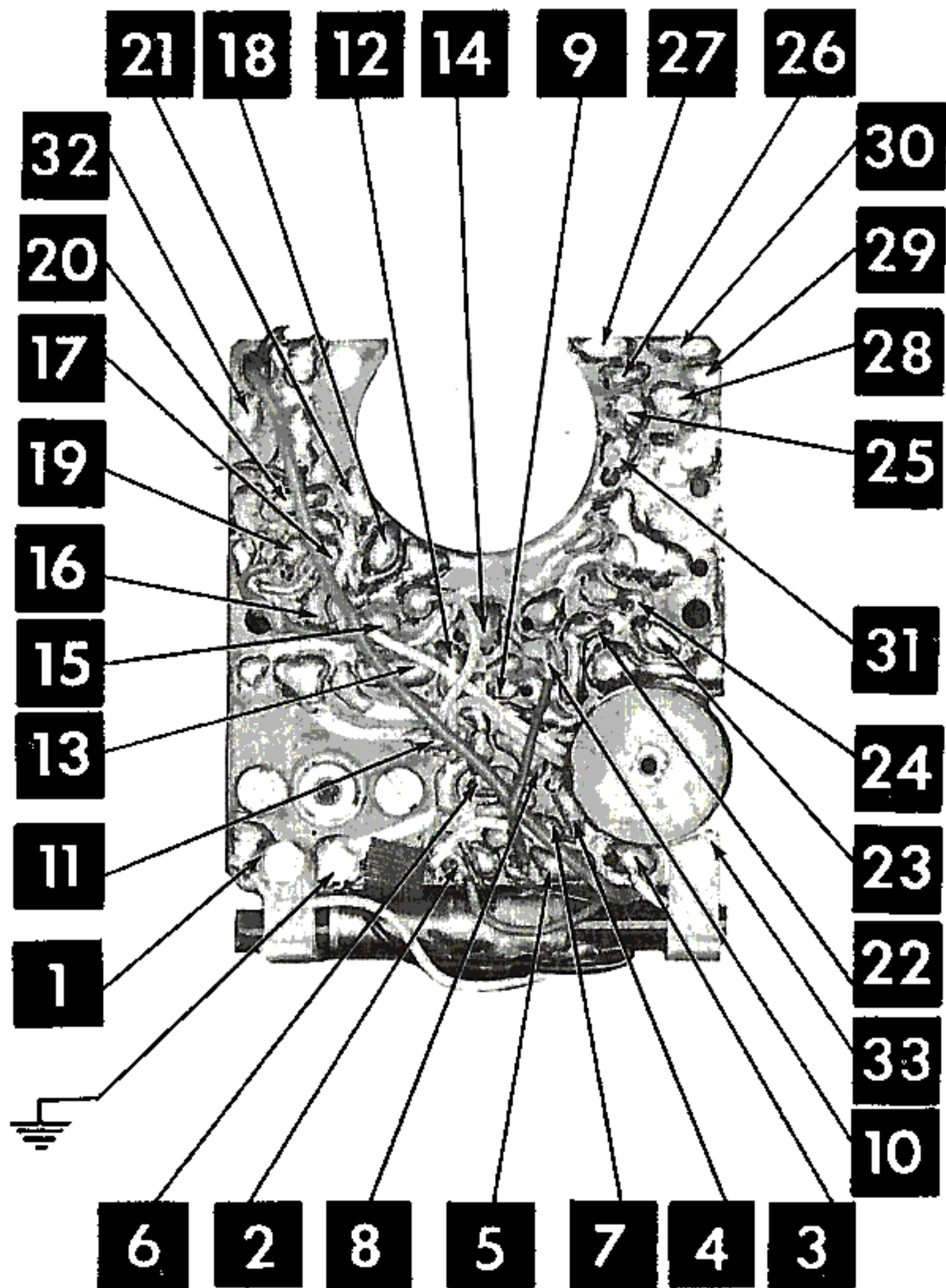
| ITEM No. | RATING | REMARKS |
|----------|-------------|---------|
| R12 | 330Ω | #M8601 |
| R13 | Temp. Comp. | |
| R14 | 10Ω | |
| R15 | 200Ω | |
| | | |

Coronado Part Number

PRINTED BOARD

A Howard W. Sams **CIRCUITRACE** Photo

ARROWS INDICATING TUBE LOCATIONS ARE POINTING TO PIN 1 UNLESS OTHERWISE INDICATED



PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

| ITEM No. | USE | REPLACEMENT DATA | | | | NOTES |
|----------|---------------|-------------------|----------------|-----------------|--------------|-------|
| | | CORONADO PART No. | Merit PART No. | Miller PART No. | Ram PART No. | |
| L1 | Loopstick | LA-510 | | | | |
| L2 | Osc. Coll | LB-507 | | | | |
| L3 | 1st IF Trans. | XC-84 | | | | |
| L4 | 2nd IF Trans. | XC-85 | | | | |
| L5 | 3rd IF Trans. | XC-86 | | | | |

TRANSFORMER (DRIVER)

| ITEM No. | TURNS RATIO | | REPLACEMENT DATA | | | | | NOTES |
|----------|-------------|------|-------------------|----------------|------------------|---------------------|----------------|-------|
| | PRI. | SEC. | CORONADO PART No. | Merit PART No. | Stancor PART No. | Thordarson PART No. | Triad PART No. | |
| T1 | 2.4 | 1 | IT502A | | | TR-40 | | |

TRANSFORMER (AUDIO OUTPUT)

| ITEM No. | IMPEDANCE | | REPLACEMENT DATA | | | | | NOTES |
|----------|-----------|------|-------------------|----------------|--------------|------------------|---------------------|-------|
| | PRI. | SEC. | CORONADO PART No. | Merit PART No. | Ram PART No. | Stancor PART No. | Thordarson PART No. | |
| T2 | 800Ω CT | 6-8Ω | OT-507 | | | | | |

SPEAKER

| ITEM No. | TYPE | | | REPLACEMENT DATA | | NOTES |
|----------|--------|-------|------------|-------------------|---------------|-------|
| | SIZE | FIELD | V. C. IMP. | CORONADO PART No. | QUAM PART No. | |
| SP1 | 1 3/4" | PM | 6-8Ω | 4.6P-1A | | |

BATTERIES

| ITEM No. | VOLTAGE | CORONADO PART No. | REPLACEMENT DATA | | | | | | NOTES |
|----------|---------|-------------------|------------------|------|----------|-----|---------|--------|-------|
| | | | BURGESS | | EVEREADY | | MALLORY | | |
| | | | "A" | "B" | "A" | "B" | "A" | "B" | |
| M1 | 9V | I7-330 | | 2U 6 | | 216 | | M-1604 | |

CRYSTAL DIODES

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

MISCELLANEOUS

| ITEM No. | PART NAME | CORONADO PART No. | NOTES |
|----------|-------------|-------------------|--------|
| M3 | Tuning Cap. | C-132 | 2 Gang |

CABINETS & CABINET PARTS

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

| NAME | PART NO. | DESCRIPTION |
|---------|----------|---------------------|
| Knob | 1235-03 | Tuning |
| Knob | 1235-04 | Volume |
| Cabinet | 1235-01 | Includes Rear Cover |

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

