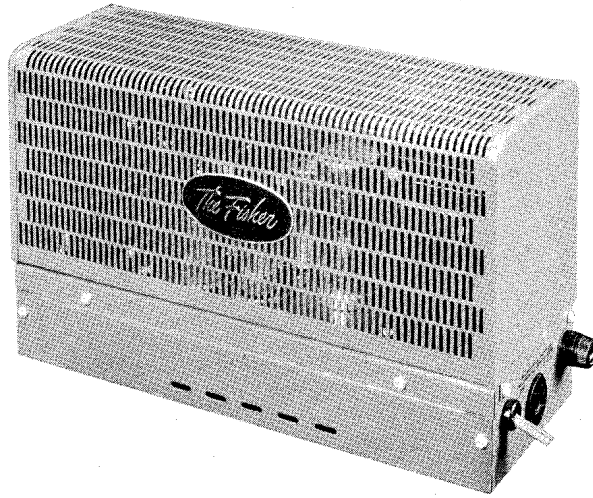


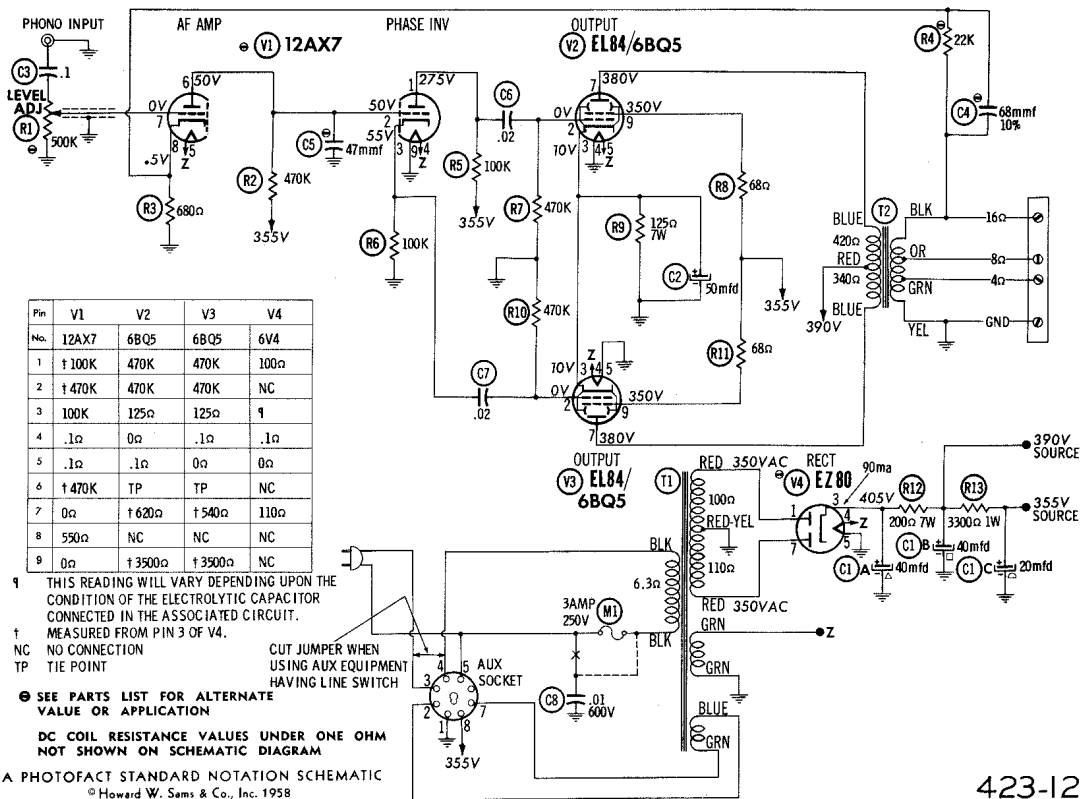


FISHER MODEL  
20-A



|              |   |        |                                     |
|--------------|---|--------|-------------------------------------|
| TRADE NAME   | Fisher Model 20-A   |        |                                     |
| MANUFACTURER | Fisher Radio Corp., 21-21 44th. Drive, Long Island City, 1, N. Y.               |        |                                     |
| TYPE SET     | AC Operated Audio Amplifier   |        |                                     |
| TUBES (Four) | Types 12AX7/ECC83 AF Amp. -Phase Inv., (2) EL84/6BQ5 Output, EZ80/6V4 Rectifier |        |                                     |
| POWER SUPPLY | 105-125 Volts AC-50/60 Cycles   | RATING | .695 Amp. @ 117 Volts AC (68 Watts) |

FISHER MODEL  
20-A



423-12

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 H702

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. © 1958 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America

# PARTS LIST AND DESCRIPTIONS

## TUBES ( GENERAL ELECTRIC, SYLVANIA )

| ITEM No. | USE                 | TYPE         | ITEM No. | USE              | TYPE      |
|----------|---------------------|--------------|----------|------------------|-----------|
| V1       | AF Amp. -Phase Inv. | 12AX7/ ECC83 | V3       | Output Rectifier | EL84/8BQ5 |
| V2       | Output              | EL84/8BQ5    | V4       | Rectifier        | EZ80/6V4  |

### ELECTROLYTIC CAPACITORS

| ITEM No. | RATING |       | REPLACEMENT DATA |                  |                           |                  |                  |                  |                  |
|----------|--------|-------|------------------|------------------|---------------------------|------------------|------------------|------------------|------------------|
|          | CAP.   | VOLT. | FISHER PART No.  | AEROVOX PART No. | CORNELL-DUBILIER PART No. | MALLORY PART No. | PYRAMID PART No. | SANGAMO PART No. | SPRAGUE PART No. |
| CLA      | .40    | 450   | P-563-127 ①      | AFH3-43-50       | C0344                     | FP376.9          | TMT-39           | T-165            | TVL-3786         |
| B        | .40    | 450   |                  |                  |                           |                  |                  | MT-4510          |                  |
| C        | .40    | 450   |                  |                  |                           |                  |                  |                  |                  |
| C2       | .50    | 25    | C-556-128        | PRS25V50         | BBR50-25                  | TC29             | TD-50-25         | MT-0250          | TVA-1206         |

① Alternate Part #C-563-127.

### 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 |       | REPLACEMENT DATA |                  |                    |                           |                  | NOTES  |                  |
|----------|--------|-------|------------------|------------------|--------------------|---------------------------|------------------|--------|------------------|
|          | CAP.   | VOLT. | FISHER PART No.  | AEROVOX PART No. | CENTRALAB PART No. | CORNELL-DUBILIER PART No. | MALLORY PART No. |        | SPRAGUE PART No. |
| C8       | .1     | 200   | C88P104M2        | P288N-1          | DF-104             | CUB2P1                    | GEM-201          | 2TM-P1 | 10% ①            |
| C4       | .68    |       | CC2IGP680K5      | NPO-SI 68        | D6-680             | L10Q68                    |                  | MS-468 |                  |
| C5       | .47    |       | CC2IGP470K5      | NPO-SI 47        | D6-470             | L10Q47                    |                  | MS-447 |                  |
| C6       | .02    | 400   | C88P203M4        | P488N-02         | DD-203             | CUB4S2                    | GEM-412          | 4TM-S2 |                  |
| C7       | .02    | 400   | C88P203M4        | P488N-02         | DD-203             | CUB4S2                    | GEM-412          | 4TM-S2 |                  |
| C8       | .01    | 600   | C-2747           | P688N-01         | D6-103             | CUB6S1                    | GEM-611          | 6TM-S1 |                  |

① Some versions may use 24mmf 10% in this application (Part #CC2IGP240K5).

② Some versions may use 68mmf 10% in this application (Part #CC2IGP680K5).

### CONTROLS

| ITEM No. | RATING      |       | REPLACEMENT DATA |                    |                    |              |                  | INSTALLATION NOTES |
|----------|-------------|-------|------------------|--------------------|--------------------|--------------|------------------|--------------------|
|          | RESIST-ANCE | WATTS | FISHER PART No.  | CENTRALAB PART No. | CLAROSTAT PART No. | IRC PART No. | MALLORY PART No. |                    |
| RI       | 500K        | 1/2   | R-582-117        | JP-504             |                    |              |                  | Level Adjust ①     |

① Part #R-520-139 may be used in some versions.

### RESISTORS

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

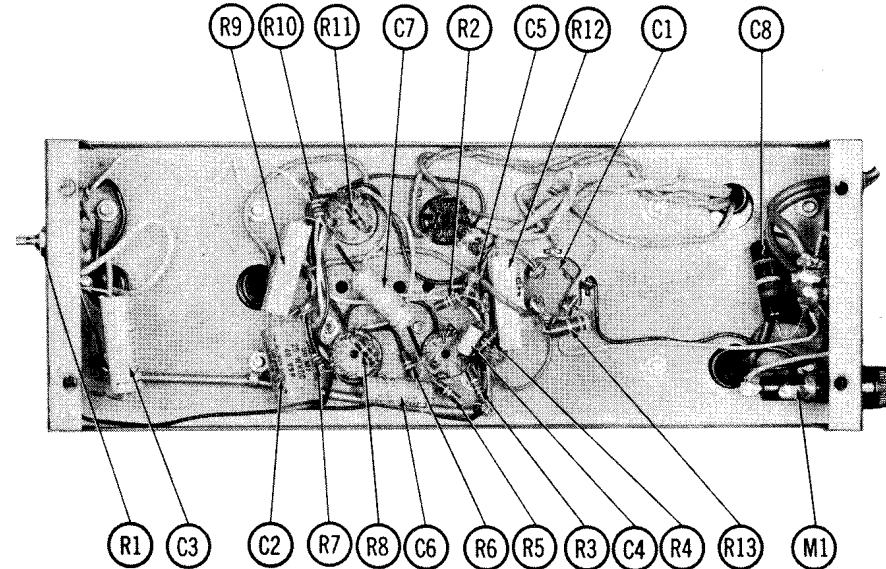
| ITEM No. | RATING |      | FISHER PART No. | NOTES  | ITEM No. | RATING |        | FISHER PART No. | NOTES |
|----------|--------|------|-----------------|--------|----------|--------|--------|-----------------|-------|
|          | OHMS   | WATT |                 |        |          | OHMS   | WATT   |                 |       |
| R2       | 470K   |      | RC20BF474K      | Note 1 | R8       | 68Ω    |        | RC20BF680K      |       |
| R3       | 680Ω   |      | RC20BF681K      |        | R9       | 125Ω   | 7(W/W) | R-556-124       |       |
| R4       | 22K    |      | RC20BF223K      |        | R10      | 470K   |        | RC20BF474K      |       |
| R5       | 100K   |      | RC20BF104K      |        | R11      | 68Ω    |        | RC20BF680K      |       |
| R6       | 100K   |      | RC20BF104K      |        | R12      | 200Ω   | 7(W/W) | R-559-120       |       |
| R7       | 470K   |      | RC20BF474K      |        | R13      | 3300Ω  | 1      | RC30BF332K      |       |

Note 1. Some versions may use 15K in this application (Part #RC20BF153K).

### TRANSFORMER (POWER)

| ITEM No. | RATING  |         |        | REPLACEMENT DATA |                     |                |              |                  |                     |                |
|----------|---------|---------|--------|------------------|---------------------|----------------|--------------|------------------|---------------------|----------------|
|          | PRI.    | SEC. 1  | SEC. 2 | FISHER PART No.  | Hallderson PART No. | Merit PART No. | Ram PART No. | Stancor PART No. | Thordarson PART No. | Triad PART No. |
|          | @ .695A | @ .090A | @ 2.3A |                  |                     |                |              |                  |                     |                |
| T1       | 117V    | 700VCT  | 6.3V   | T-582-12         |                     |                |              |                  |                     |                |
|          |         |         |        |                  |                     |                |              |                  |                     |                |
|          |         |         |        |                  |                     |                |              |                  |                     |                |
|          | 6.3V    |         |        |                  |                     |                |              |                  |                     |                |
|          | @1A     |         |        |                  |                     |                |              |                  |                     |                |

## CHASSIS—BOTTOM VIEW



### TRANSFORMER (AUDIO OUTPUT)

| ITEM No. | IMPEDANCE |              | REPLACEMENT DATA |                     |                |              |                  |                     |                | NOTES                       |
|----------|-----------|--------------|------------------|---------------------|----------------|--------------|------------------|---------------------|----------------|-----------------------------|
|          | PRI.      | SEC.         | FISHER PART No.  | Hallderson PART No. | Merit PART No. | Ram PART No. | Stancor PART No. | Thordarson PART No. | Triad PART No. |                             |
| T2       | 10K       | 18Ω          | T-582-113        | Z1405 ①             | A-3132 ①       |              | A-3311 ①         | 22S93 ①             |                | ① Drill new mounting holes. |
|          | CT        | tap @ 8Ω, 4Ω |                  |                     |                |              |                  |                     |                |                             |

### FUSES

| ITEM No. | TYPE | RATING  | REPLACEMENT DATA |        |                       |        |               |        |
|----------|------|---------|------------------|--------|-----------------------|--------|---------------|--------|
|          |      |         | FISHER PART No.  |        | LITTELFUSE PART No.   |        | BUSS PART No. |        |
|          |      |         | FUSE             | HOLDER | FUSE                  | HOLDER | FUSE          | HOLDER |
| M1       | 3AG  | 3A 250V | F-3000           |        | 312003. (3AG 3A 250V) | 342001 | AGC 3         | HKP    |

### WIRING DATA

General-use Unshielded Hook-up Wire ..... Use BELDEN No. 8530 (Solid) Available in Ten Colors  
 8524 (Stranded) Available in Ten Colors  
 Power Cord ..... Use BELDEN No. 1765-B (6 Ft. Length)  
 1725-K (7½ Ft. Length)