

OPERATING INSTRUCTIONS

Threading the Tape

1. Depress the Stop key.
2. Open the lid.
3. Place a reel of tape on supply spindle (12).
4. Place an empty reel on the take-up spindle (11).
5. Unwind about eight inches of tape, hold a section taut and insert it in the tape slot. Insert the free end in one of the reel slots, turn the reel a few turns clockwise to secure the tape to the reel.

NOTE: Place the full reel of tape on the supply spindle so the tape will unwind in a clockwise direction.

Recording from a Microphone

1. Insert the microphone into the input jack color coded red.
2. Depress the Record key, color coded red.
3. Plug the earphone into the output jack, color coded blue.
4. Thread the tape.
5. Turn the remote control switch so the black portion is showing.
6. Depress the forward key, marked by a single arrow.

7. Adjust the Volume control so a clear tone is heard while monitoring through the earphone.

Recording from a Radio or TV

Recordings from a radio or TV may be made in one of three ways:

1. Across Voice Coil Terminals

- a. Connect a patch cord across the voice coil terminals and plug the other end into the input jack.
- b. Adjust the volume of the sound source.
- c. Proceed with steps 2 through 7 as outlined in "Recording from Microphone."

2. From Speakers, Using Microphone

- a. Adjust the volume of the sound source.
- b. Proceed with steps 1 through 7 as outlined in "Recording from Microphone."

3. Across Audio Detector

- a. Connect a patch cord to the detector output and plug the other end into the input jack.
6. Proceed with steps 2 through 7 as outlined in "Recording from Microphone."

Dual-Track Recording

After one track of the tape has been recorded, remove the full reel from the take-up (right) spindle. Remove the empty reel from the supply (left) spindle.

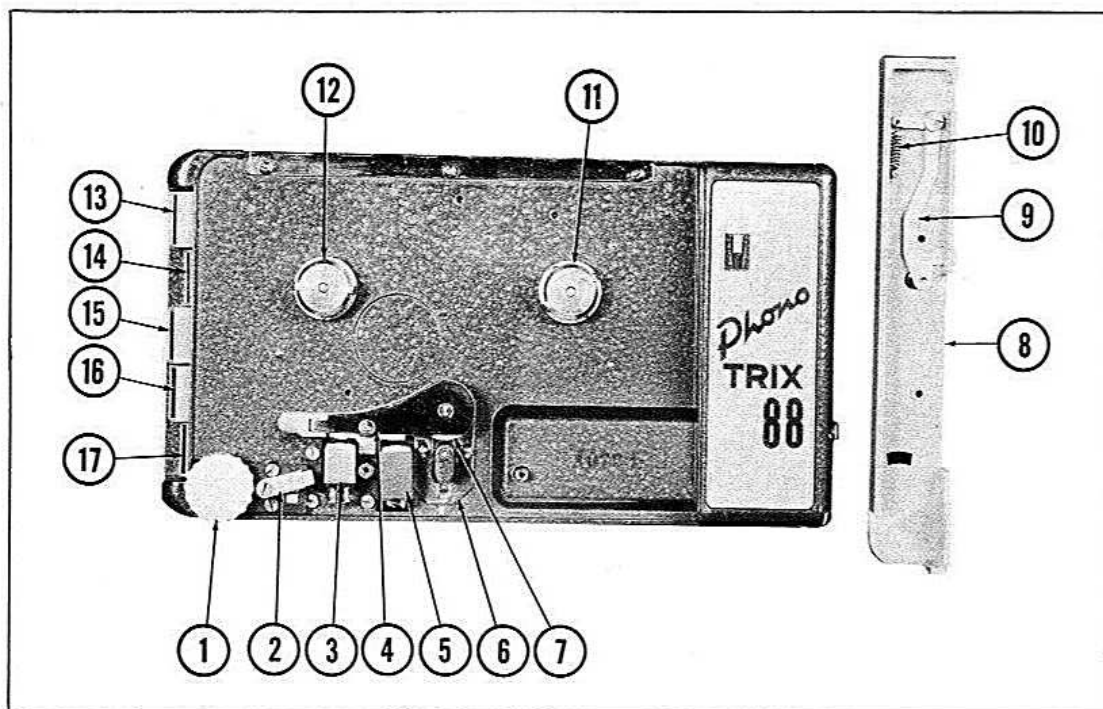


FIG. 1 TOP VIEW OF MECHANISM WITH COVERS REMOVED

Turn the full reel over and place it on the supply (left) spindle. Place the empty reel on the take-up (right) spindle. Rethread the tape and continue the recording.

Rewind

The rewind key is marked with a double arrow. When the key is pushed in, the record button is released. This prevents accidental erasing. The tape will rewind onto the supply (left) spindle at a rapid speed.

Playback

1. Connect the earphone to the output jack.
2. Thread the tape.
3. Depress the Playback key.
4. Depress the Forward key.

5. Adjust the Volume control to the desired listening level.

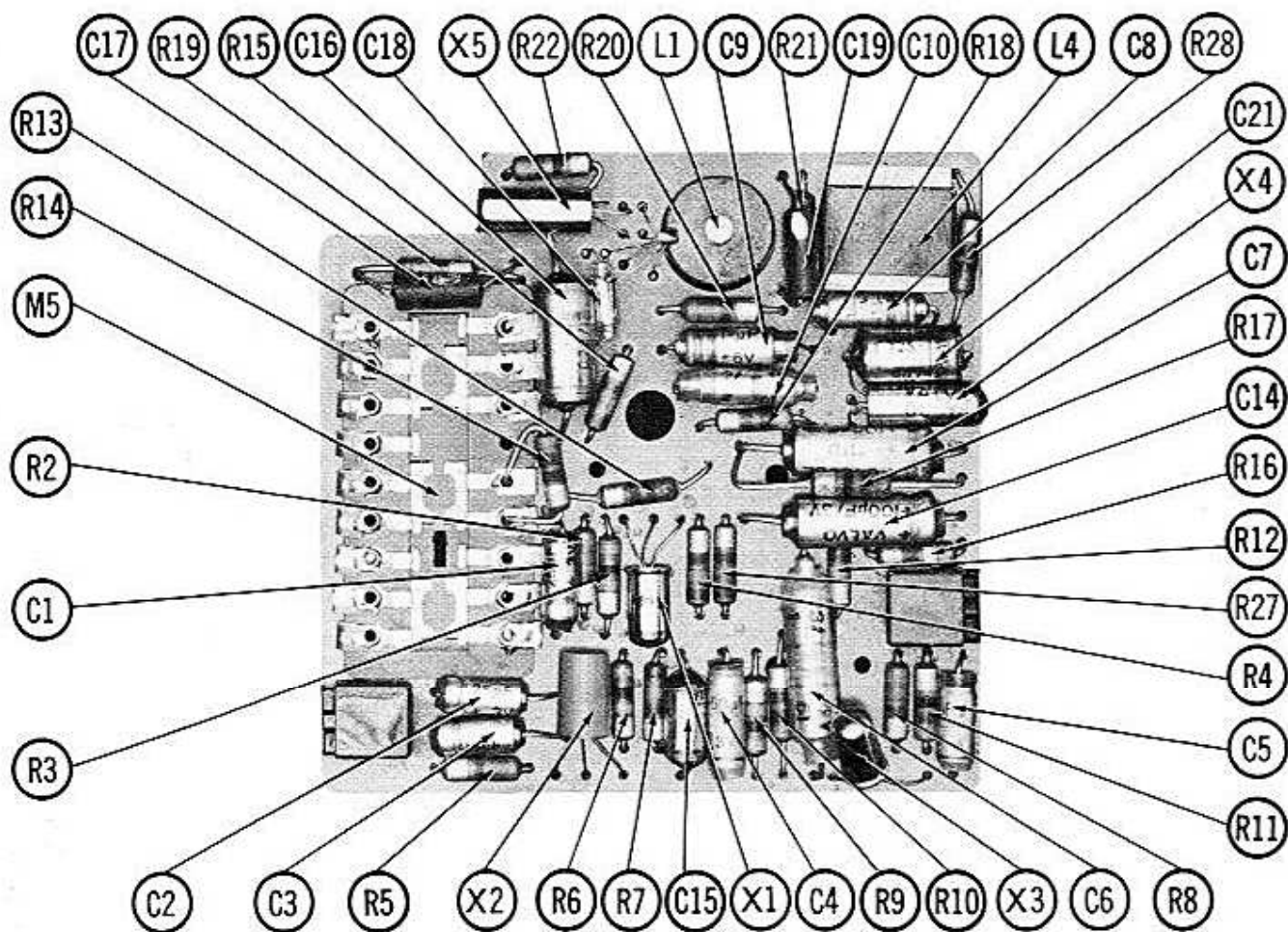
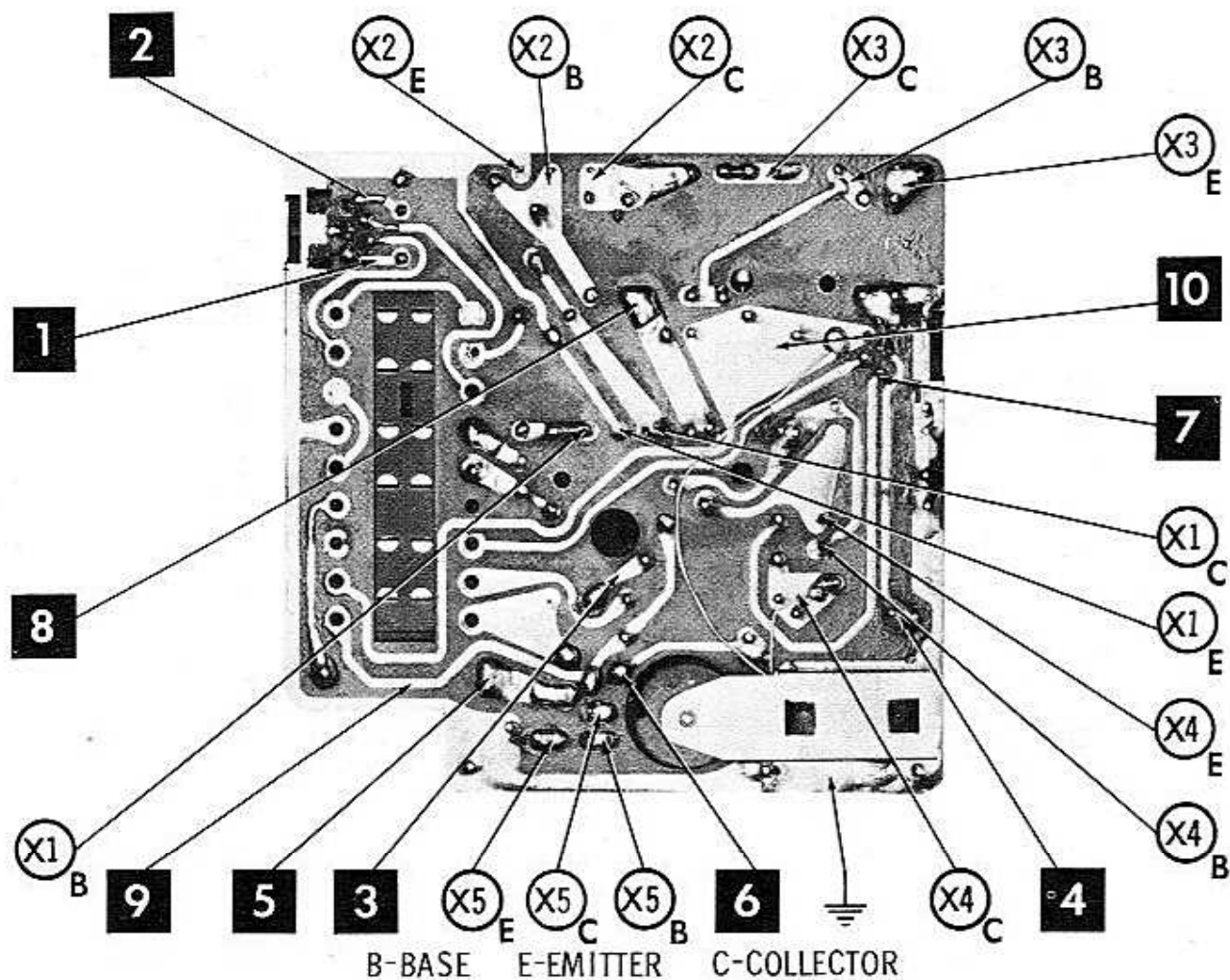
Playback through a Radio

Connect one end of a patch cord across the volume control of the radio. Plug the other end to the recorder output jack. The volume can be controlled from either the radio or recorder.

Erasing Tape

A tape is automatically erased before new material is recorded. To erase tape without recording new material, depress the Record key and the Forward key. Turn the Volume control to its minimum position. After one track is erased, reverse the reels, rethread the tape, and repeat the procedure.

PHONO TRIX
MODELS 88, 88B, 8810



PREAMP PARTS LIST AND DESCRIPTIONS

TRANSISTORS

| ITEM No. | ORIG. TYPE | USE | REPLACEMENT DATA | | | NOTES |
|----------|----------------|---------------------|------------------|-------------------|-----|-------|
| | | | RCA PART No. | RAYTHEON PART No. | PNP | |
| X1 | TF85 OC403* | AF Amplifier | 2N408 | | PNP | |
| X2 | TF85 | AF Amplifier | 2N408 | | PNP | |
| X3 | TF85 | AF Amplifier | 2N408 | | PNP | |
| X4 | OC74 | AF Amplifier | 2N408 | | PNP | |
| X5 | OC76* | Driver | 2N360 | | PNP | |
| X6 | OC74 | Driver | 2N360 | | PNP | |
| | | Blas Oscillator | 2N360 | | PNP | |
| | | Motor Speed Control | 2N360 | | PNP | |

* Alternate

ELECTROLYTIC CAPACITORS

| ITEM No. | RATING CAP. | VOLT. | Photo Trix PART No. | REPLACEMENT DATA | | | | |
|----------|-------------|-------|---------------------|------------------|---------------------------|---------------------------|------------------|-----------|
| | | | | AEROVOX PART No. | CORNELL-DUBILIER PART No. | GENERAL ELECTRIC PART No. | SPRAGUE PART No. | |
| C1 | 25 | 3 | 346/C1 | | NLW50-10 | MTI-15 | MLV50-6 | TE-1100 |
| C2 | 25 | 3 | 346/C3 | | NLW10-6 | MTI-6 | MLV100-3 | TE-1059.5 |
| C3 | 25 | 3 | 346/C2 | | NLW10-6 | MTI-6 | MLV10-6 | TE-1087 |
| C4 | 50 | 3 | Note 1 | | NLW10-6 | MTI-6 | MLV10-3 | TE-1087 |
| C5 | .5 | 70 | Note 1 | | NLW10-6 | MTI-6 | MLV10-3 | TE-1053 |
| C6 | 50 | 4 | Note 1 | | NLW3-25 | MTI-3 | MLV2-6 | TE-1100 |
| C7 | 100 | 3 | 349/C9 | | NLW100-12 | MTI-10 | MLV100-6 | TE-1102 |
| C8 | 10 | 6 | 345/C10 | | | | MLV100-3 | TE-1059.5 |
| C9 | 10 | 6 | 345/C11 | | | | | |
| C10 | 10 | 3 | 345/C18 | | | | | |
| C11 | 50 | 6 | 3471 | | | | | |
| C12 | 2.5 | 6 | | | | | | |
| C13 | 100 | 6 | 350/C19 | | | | | |
| C14 | 100 | 3 | 349/C4 | | | | | |

Note 1. Some versions may use 25mfd in this application.

FIXED CAPACITORS

| ITEM No. | RATING | REMARKS | REPLACEMENT DATA | | | |
|----------|-----------|----------|------------------|--------------------|---------------------------|------------------|
| | | | AEROVOX PART No. | CENTRALAB PART No. | CORNELL-DUBILIER PART No. | ELMENDO PART No. |
| C15 | .047 125V | #354/C21 | | | | SPRAGUE 22WF-547 |
| C16 | .22 125V | #344/C8 | | | | |
| C17 | .005 | | DD-503 | BYA10D5 | BYA10D5 | B-250 |
| C18 | .0016 | | DD-152 | BYA10D5 | BYA10D5 | B-215 |
| C19 | .005 | | DD-503 | BYA10D5 | BYA10D5 | B-250 |
| C20 | .005 | SI 5000 | DD-502 | BYA10D5 | BYA10D5 | B-250 |
| C21 | .1 125V | U94C231 | | | | |

CONTROLS

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

| ITEM No. | USE | RESISTANCE | REPLACEMENT DATA | | | |
|----------|--------|------------|---------------------|--------------------|--------------------|-----------------|
| | | | Photo Trix PART No. | CENTRALAB PART No. | CLAROSTAT PART No. | CTS-RC PART No. |
| RL | Volume | 10K | | | | |

RESISTORS

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

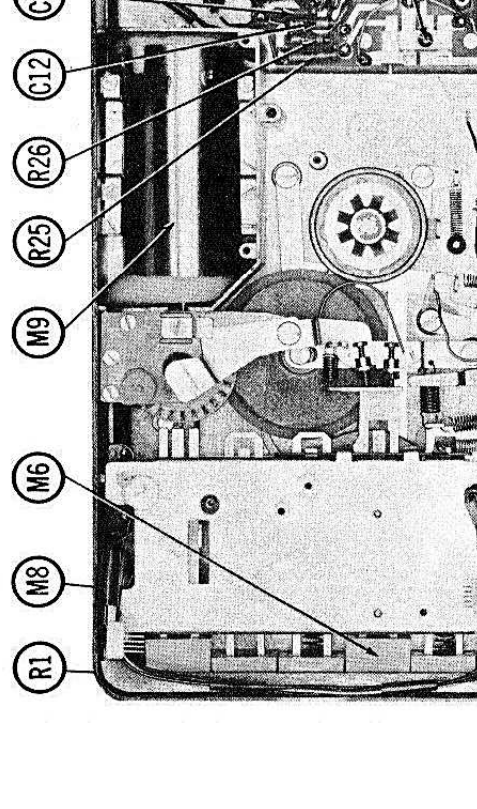
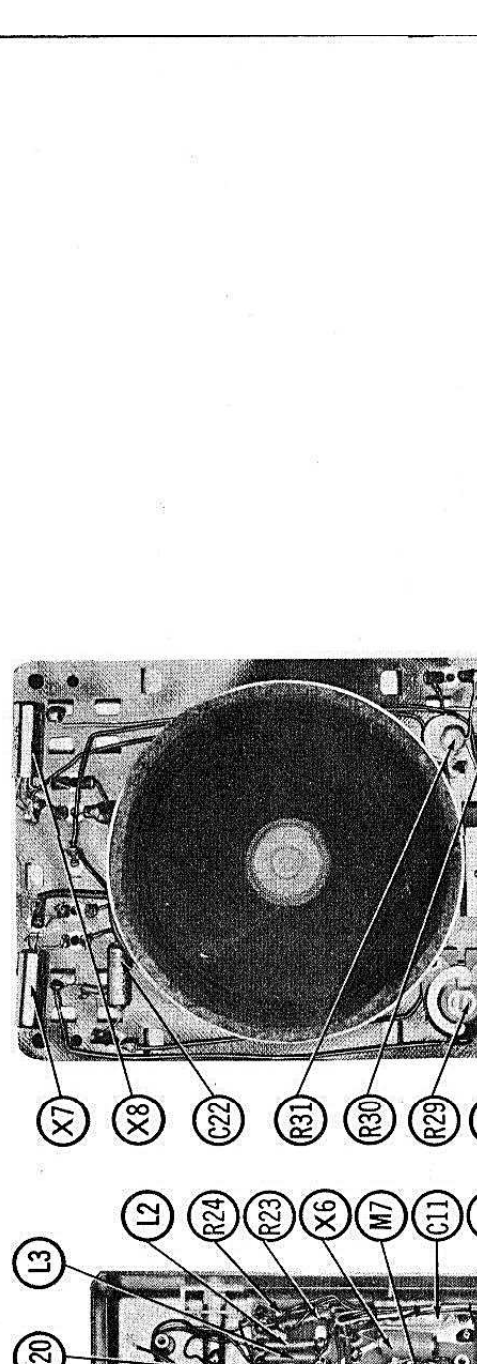
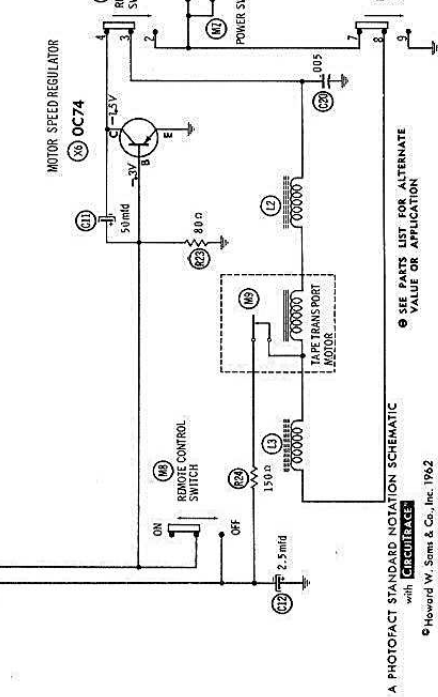
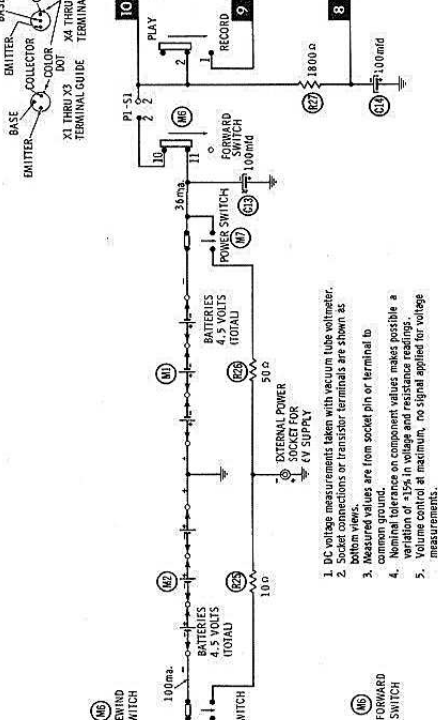
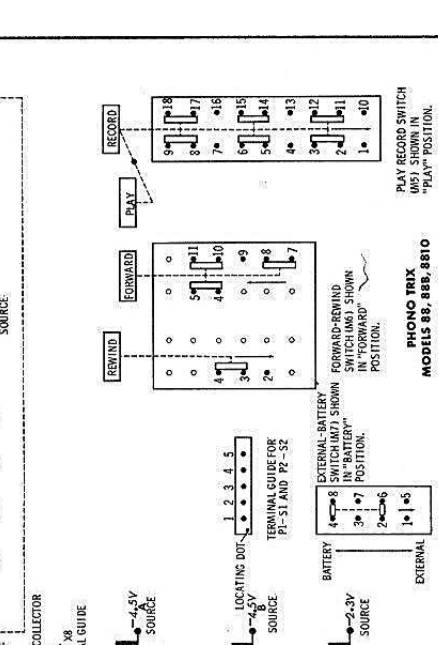
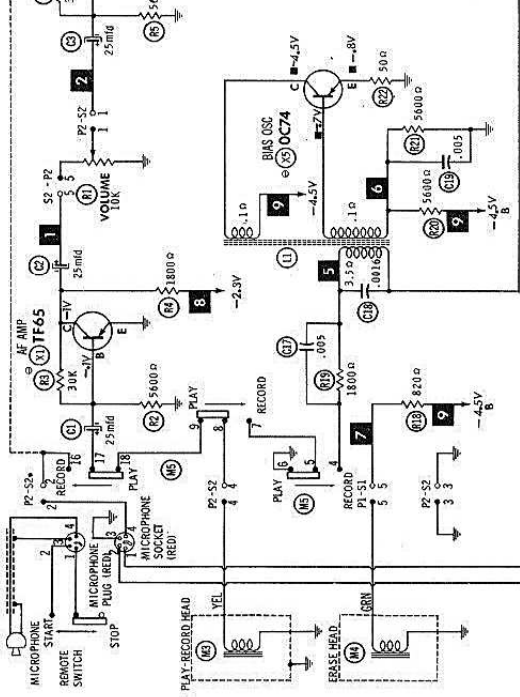
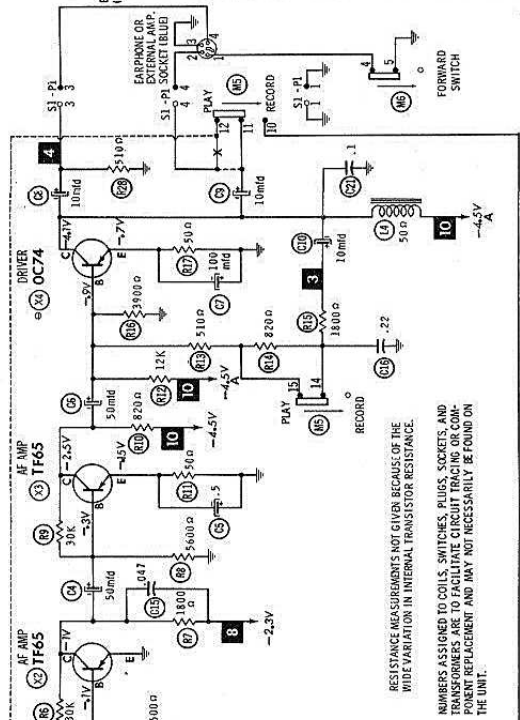
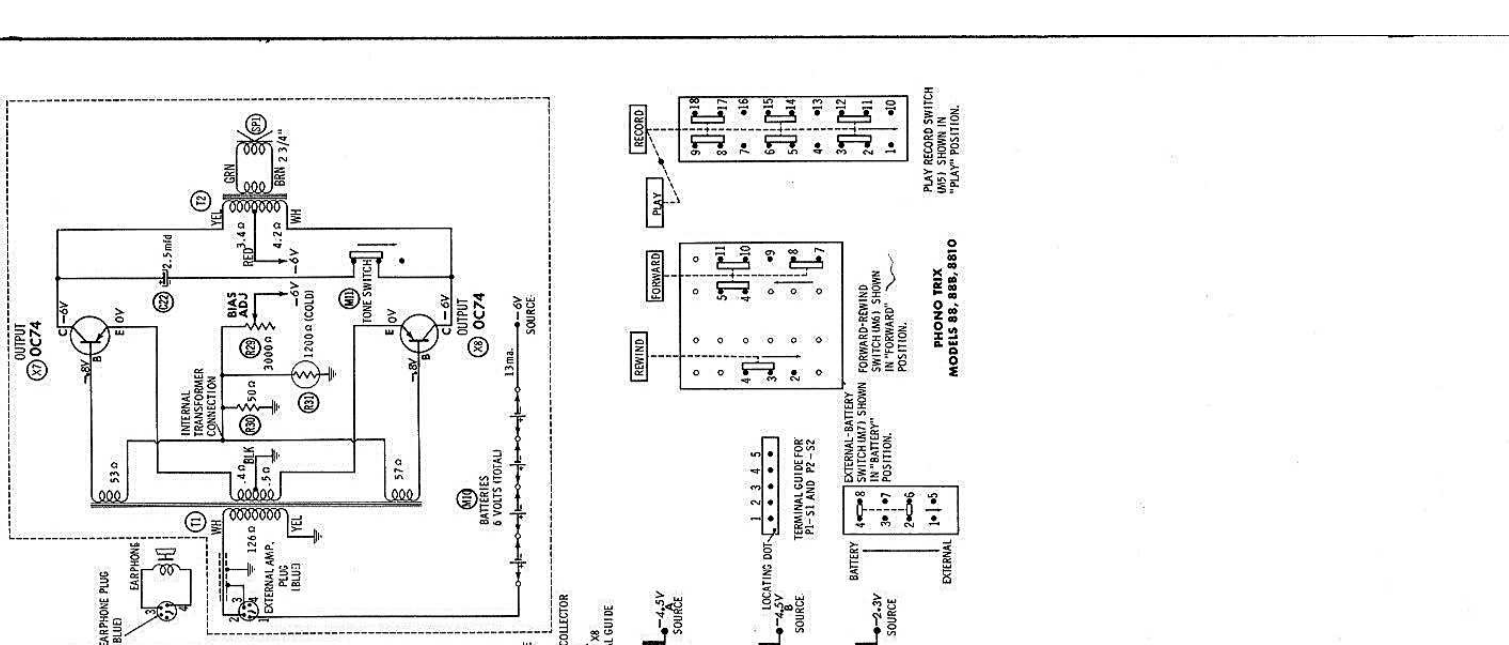
| ITEM No. | RATING | REPLACEMENT DATA | | ITEM No. | RATING | REPLACEMENT DATA | |
|----------|--------|------------------|------------------|----------|--------|------------------|------------------|
| | | IRC PART No. | WORKMAN PART No. | | | IRC PART No. | WORKMAN PART No. |
| R2 | 5000Ω | | | R16 | 3000Ω | | |
| R3 | 30K | | | R17 | 50Ω | | |
| R4 | 1800Ω | | | R18 | 820Ω | | |
| R5 | 5000Ω | | | R19 | 1800Ω | | |
| R6 | 30K | | | R20 | 5000Ω | | |
| R7 | 1800Ω | | | R21 | 5000Ω | | |
| R8 | 5000Ω | | | R22 | 50Ω | | |
| R9 | 30K | | | R23 | 80Ω | | |
| R10 | 820Ω | | | R24 | 150Ω | | |
| R11 | 50Ω | | | R25 | 10Ω | | |
| R12 | 12K | | | R26 | 50Ω | | |
| R13 | 510Ω | | | R27 | 1800Ω | | |
| R14 | 820Ω | | | R28 | 510Ω | | |
| R15 | 1800Ω | | | | | | |

COILS (RF-IF)

| ITEM No. | USE | REPLACEMENT DATA | | | |
|----------|-------------|---------------------|----------------|-----------------|------------------|
| | | Photo Trix PART No. | Merit PART No. | Miller PART No. | Stancor PART No. |
| L1 | Blas Osc. | | | | |
| L2 | Motor Choke | 297 | | | |
| L3 | Motor Choke | 298 | | | |

DRIVER CHOKE

| ITEM No. | CURRENT (Measured) | DC RES. (1000 Ω) | INDUCTANCE | REPLACEMENT DATA | | | |
|----------|--------------------|------------------|------------|---------------------|----------------|------------------|---------------------|
| | | | | Photo Trix PART No. | Merit PART No. | Stancor PART No. | Thordarson PART No. |
| L4 | 50Ω | 3HY | 296 | | | | |



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

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 transformer terminals are shown as bottom views.
3. Measured values are from socket pin or terminal to common.
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.

PHONO TRIX
MODELS 88, 88B, 8810

EXTERNAL BATTERY SHOWN IN "BATTERY" POSITION.
EXTERNAL BATTERY SHOWN IN "FORWARD" POSITION.
EXTERNAL BATTERY SHOWN IN "RECORD" POSITION.

PLAY RECORD SWITCH
"PLAY" POSITION.

SEE PARTS LIST FOR ALTERNATE VALUE ON APPLICATION

A PHOTOFAC T STANDARD NOTATION SCHEMATIC with Circuits

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