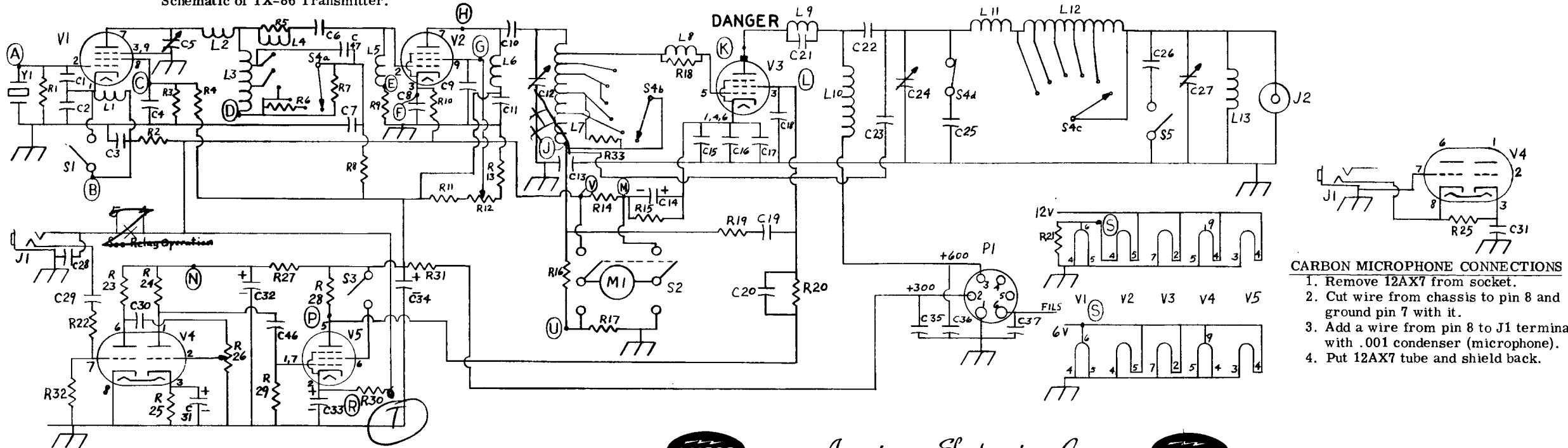


Schematic of TX-86 Transmitter.



**CARBON MICROPHONE CONNECTIONS**

1. Remove 12AX7 from socket.
2. Cut wire from chassis to pin 8 and ground pin 7 with it.
3. Add a wire from pin 8 to J1 terminal with .001 condenser (microphone).
4. Put 12AX7 tube and shield back.



American Electronics Co.  
178 HERRICKS ROAD  
MINEOLA, L. I., N. Y.



**TX-86 PARTS LIST**

- Tubes**
- |      |       |       |
|------|-------|-------|
|      | 12V   | 6V    |
| V1 - | 12BY7 | 12BY7 |
| V2 - | 6BQ5  | 6BQ5  |
| V3 - | 6883  | 6146  |
| V4 - | 12AX7 | 12AX7 |
| V5 - | 12AQ5 | 6AQ5  |

- Inductances**
- L 1 - 2.5 mh RF choke
  - L 2 - 6 turns #16
  - L 3 - Special-Osc. plate coil
  - L 4 - 5 turns #22 Parasitic suppressor
  - L 5 - 1. mh RF choke
  - L 6 - 2.5 mh RF choke
  - L 7 - Special - Final grid coil
  - L 8 - 5 turns #22 Parasitic suppressor
  - L 9 - 3 turns #14 Parasitic suppressor
  - L10 - Special RF choke
  - L11 - 4-1/2 turns #14. 6 meter PI-net coil
  - L12 - Special 10 thru 80 meter PI-net coil
  - L13 - 2.5 mh RF choke

- Connectors**
- J1 - Microphone and Key jack #JK33
  - J2 - SO-239 Coaxial jack
  - P1 - Amphenol 86CP6

- Capacitors**
- C 1 - 22 mmfd. disc ceramic NPO
  - C 2 - 100 mmfd tubular ceramic N750
  - C 3 - .001 mfd. disc ceramic
  - C 4 - .001 mfd. disc ceramic
  - C 5 - 100 mmfd. variable (OSC PLATE)
  - C 6 - 100 mmfd. tubular ceramic
  - C 7 - .001 mfd. disc ceramic
  - C 8 - .001 mfd. disc ceramic
  - C 9 - .001 mfd. disc ceramic
  - C10 - 100 mmfd. tubular ceramic
  - C11 - .001 mfd. disc ceramic
  - C12 - 80 mmfd. variable (FINAL GRID)
  - C13 - 470 mmfd. ceramic feed-thru
  - C14 - 10 mfd. electrolytic 50V
  - C15 - .001 mfd. disc ceramic
  - C16 - .001 mfd. disc ceramic
  - C17 - .001 mfd. disc ceramic
  - C18 - .002 mfd. disc ceramic 1.5 KV
  - C19 - 0.1 mfd. tubular paper 600V
  - C20 - .22 mfd. tubular paper 200V
  - C21 - 7 mmfd. disc ceramic NPO
  - C22 - .002 mfd. disc ceramic 1.5KV
  - C23 - 2 mmfd. tubular
  - C24 - 140 mmfd. variable (PLATE)
  - C25 - 82 mmfd. disc ceramic 2.0KV
  - C26 - 680 mmfd. mica
  - C27 - Dual-525 mmfd. variable (LOAD)

- C28 - .005 mfd. disc ceramic
- C29 - .001 mfd. disc ceramic
- C30 - .005 mfd. disc ceramic
- C31 - 5.mfd. electrolytic 6V.
- C32 - 8.mfd. electrolytic 450V.
- C33 - 10.mfd. electrolytic 150V.
- C34 - 8. mfd. electrolytic 450V.
- C35 - .005 mfd. disc ceramic
- C36 - .002 mfd. disc ceramic 1.5KV
- C37 - .005 mfd. disc ceramic
- C28, 39 - .001 mfd. disc ceramic from meter to chassis.
- C40 thru 45 - .001 mfd. disc ceramic from filaments to chassis.
- C38 thru 45 not drawn to make drawing easier to read.
- C46 - .005mfd. disc ceramic
- C47 - 22mmfd. disc ceramic NPO

- Resistors**
- in ohms. K=X1,000 M=X1,000,000
- R 1 - 100K 1/2 watt
  - R 2 - 100 1/2 watt
  - R 3 - 15K 1 watt
  - R 4 - 39K 2 watt
  - R 5 - 47 1/2 watt

- R 6 - 27 1/2 watt
- R 7 - 1000 2 watt
- R 8 - 100 1/2 watt
- R 9 - 22K 1 watt
- R10 - 100 1/2 watt
- R11 - 3.9K 1 watt
- R12 - 25K 4 watt Potentiometer (DRIVE)
- R13 - 2.2K 1/2 watt
- R14 - Meter shunt - special
- R15 - 200 10 watts, wire wound
- R16 - 5.6K 1 watt
- R17 - Meter shunt - special
- R18 - 47 1/2 watt
- R19 - 3.9K 1 watt
- R20 - 8.2K 2 watt
- R21 - 39 2 watt
- R22 - 10K 1/2 watt
- R23 - 470K 1/2 watt
- R24 - 470K 1/2 watt
- R25 - 2.2K 1/2 watt
- R26 - 500K potentiometer (AF GAIN)
- R27 - 47K 1/2 watt
- R28 - 4K 10 watt wire wound
- R29 - 470K 1/2 watt
- R30 - 330 1 watt
- R31 - 47 1 watt
- R32 - 5.6M 1/2 watt
- R33 - 2.2K 1/2 watt

- Switches**
- S1 - SPST Slide Switch Open on CRYSTAL, closed on VFO
  - S2 - DPDT Slide Switch Meter Selector
  - S3 - SPST on R26. Open on CW, closed on PHONE
  - S4 - Band selector switch, 3 sections. S4d is closed on 80M only. Switch is shown in 80M position.
  - S5 - SPST Slide Switch. Adds 680mmfd. to LOAD capacitor when needed on 80 and 40M only.

- M1 - Meter 5 ma. movement, 10 and 200ma. scales.
- Y1 - Crystal