

SECTION F, REAR CHASSIS ASSEMBLY

Rear Chassis Assembly

PARTS LIST

Symbol	Description	Qty.
Markings Indicated by Quotation Marks (" ")		
C-38, C-39	Capacitor, can-type electrolytic, 450 volt, 40, 20, 20, 10 mf., "40-20-20-10 MFD".	2
C-40	Capacitor, tubular, 0.5 mf., 1000 volt, ".5 MFD, 1000 WVDC"	1
R-11	Potentiometer, 5K ohms, enclosed type, "5K"	1
R-23	Resistor, 82K ohms, 5%, 1/2-watt, "82K, 5%, 5"	1
R-63	Resistor, 4.7K ohms, 10%, 1/2-watt, "ylw, viol, red, silv"	1
R-64	Resistor, 1500 ohms, 7 watt, 10%, ceramic case 1-3/8" X 5/16"	1
R-65	Resistor, 2500 ohms, 5 watt, 10%, ceramic case 7/8" X 5/16"	1
R-66	Resistor, 2.2K ohms, 10%, 1/2-watt, "red, red, red silv"	1
R-67	Resistor, 47K ohms, 5%, 1/2-watt, "47K, 5%, 5"	1
R-68	Potentiometer, 100K ohms, open-type, "100K"	1
R-69	Resistor, 180K ohms, 10%, 1/2-watt, "brn, gray, ylw, silv"	1
R-72	Resistor, 120K ohms, 10%, 1/2-watt, "brn, red, ylw, silv"	1
R-76	Potentiometer, 10K ohms, open type, "10K"	1
R-78	Resistor, 15K ohms, 10%, 1/2-watt, "brn, grn, org, silv"	1
R-80	Resistor, 820 ohms, 1 watt, 10%, "gray red, brn, silv"	1

MISCELLANEOUS

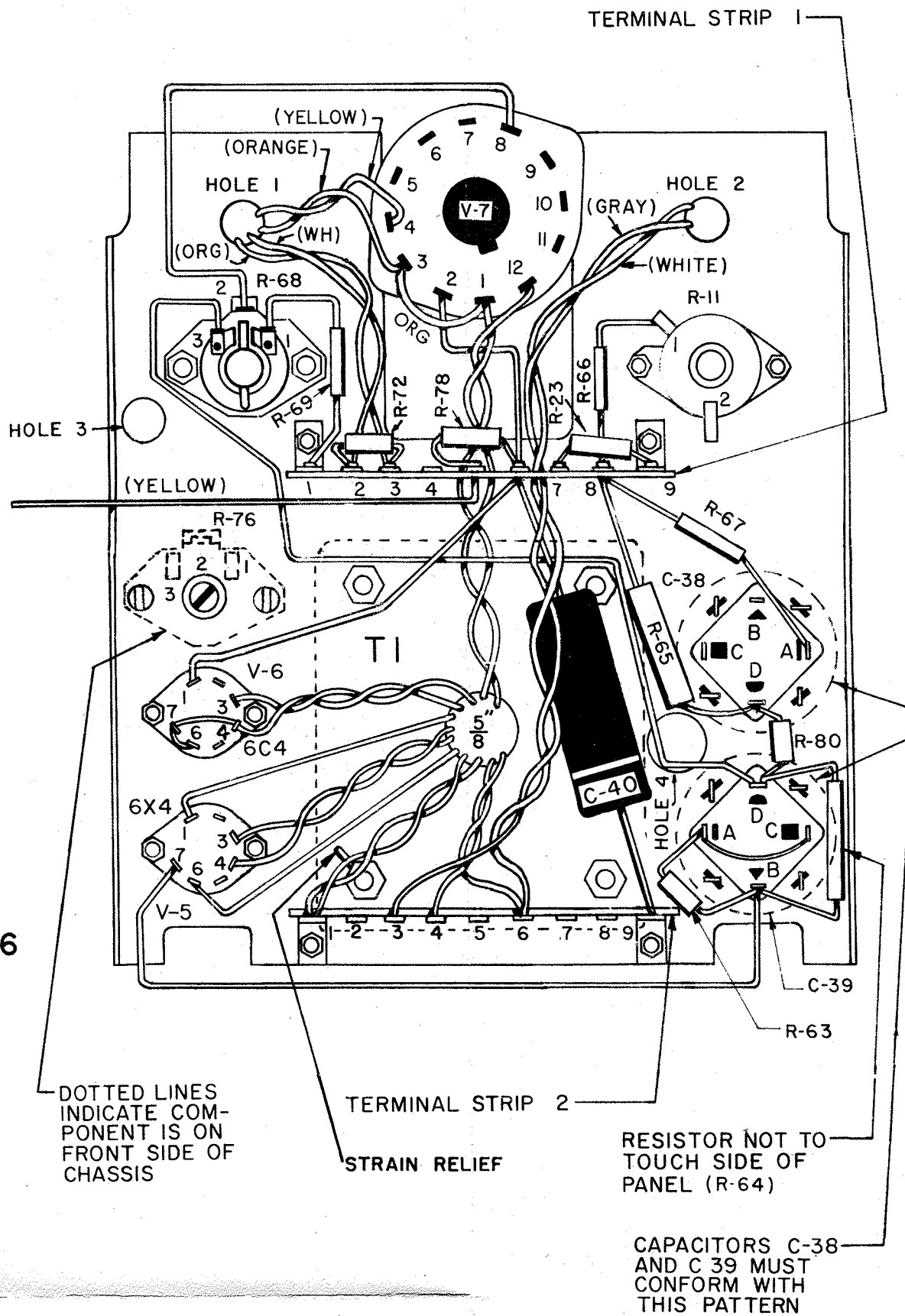
TS-1	Terminal strip #1, having 9 lugs	1
TS-2	Terminal strip #2, having 9 lugs	1
T-1	Power transformer, in black can	1
	12-pin socket for CRT 3AQP1	1
	Rear chassis for WO-33A	1
	7-pin tube sockets for V-5 and V-6	2
	#4-40 x 1/4 inch-long machine screws	10
	#4 hex nuts	10
	#4 internal-tooth lockwashers	10
	#2-56 x 1/4 inch-long machine screws	4
	#2 hex nuts	4
	#2 internal-tooth lockwashers	4
	#8 hex nuts	5
	#8 internal-tooth lockwashers	5
	Strain-relief-clasp, twisted chain link	1

Illustration: Figure 6.

Steps 1 through 63. Check (✓) each step as it is completed.

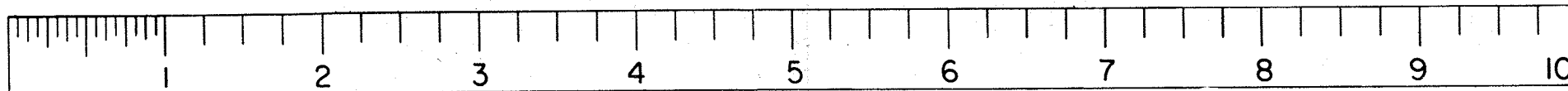
- ( ) Cut the following lengths of insulated hookup wire:  
White: 5" ( ) 16" ( ) 18" ( )  
Orange: 2" ( ) 7 1/2" ( ) 9" ( ) 13 1/2" ( ) 17 1/2" ( )  
Yellow: 12 1/2" ( ) 18" ( )  
Gray: 3 1/2" ( ) 16" ( )  
Violet: 5 1/2" ( )
- ( ) Strip and tin the above cut wires as in previous procedures.
- ( ) Place chassis in position as shown in Figure 6. The bent-over sides should be toward you. The chassis is now in the position shown, therefore the parts and lug numbers can be identified easily.
- ( ) Mount a 7-pin tube socket against the facing side (side toward you) of the chassis in the position marked "V-6, 6C4". Rotate into position with lugs as shown. Fasten securely with two #4-40 x 1/4 inch-long machine screws and two #4 nuts, using lockwashers under the nut.
- ( ) Mount a 7-pin tube socket in position "V-5, 6X4", same as above.
- ( ) Mount R-76 on opposite side of chassis as indicated by the dashed lines. Fasten securely with two #2-56 x 1/4 inch-long machine screws, two #2-25 nuts and internal-tooth lockwashers.
- ( ) Mount R-68 on facing side of chassis in position as shown. Fasten securely with two #2-56 x 1/4 inch-long machine screws, two #2-56 nuts and internal-tooth lockwashers.
- ( ) Mount R-11 on facing side of chassis, and fasten securely with two #4-40 machine screws, two #4-40 nuts and internal-tooth lockwashers.
- ( ) Mount C-38 on opposite side of chassis, with lugs protruding through on facing side of chassis. Observe A, B, C, D positions, and locate triangle-marked terminal at "B" as indicated. Twist each can-lug a quarter-turn, thereby locking the capacitor securely to the chassis.
- ( ) Mount C-39 same as C-38, but note different position of "B" for triangle-marked terminal.
- ( ) Mount terminal strip #1 on facing side of chassis, and fasten securely with two #4-40 x 1/4 inch-long machine screws, two #4-40 nuts and lockwashers.
- ( ) Mount the power transformer, (T-1) on opposite side of chassis, passing leads through 5/8-inch hole. Fasten securely with the four stud-screws, using four #8-32 nuts and internal-tooth lockwashers.
- ( ) Identify the strain-relief-clasp (twisted chain-link) and place one of its looped-ends over the lower-left-hand T-1 stud. Fasten securely with another #8-32 nut and internal-tooth lockwasher.
- ( ) Mount terminal strip #2 on facing side of chassis, and fasten securely with two #4-40 x 1/4 inch-long machine screws, two #4-40 nuts and internal-tooth lockwashers.
- ( ) Clip each lead of R-69 to a length of 3/4-inch, and connect between R-68 lug #1 and terminal strip #1 lug #1. Solder both ends.
- ( ) Connect one end of a 5-inch cut-length of white wire to R-68 lug #2. (S)
- ( ) Connect one end of a 9-inch cut-length of orange wire to R-68 lug #3. (S)
- ( ) Clip each lead of R-78 to a length of 3/4-inch, and connect between terminal-strip #1 lugs #5 and #6. (NS)
- ( ) Connect a 5 1/2-inch cut-length of violet wire between terminal strip #1 lug #6, and V-6 socket lug #1. Solder V-6 lug #1 only.
- ( ) Clip each lead of C-40 to a length of 1 1/4-inches, and connect the banded-end lead of C-40 to terminal strip #2 lug #9, and the unbanded-end lead to terminal strip #1 lug #6. Solder terminal strip #2 lug #9 only.
- ( ) Connect one end of a 3 1/2-inch cut-length of gray wire to terminal strip #1 lug #6. (S)

FIGURE 6



- ( ) Clip each lead of R-72 to a length of 3/4-inch and connect between terminal strip #1 lugs #2 and #3. (NS)
- ( ) Connect one end of a 13 1/2-inch cut-length of orange wire to terminal strip #1 lug #3. (S)
- ( ) Connect one end of an 18-inch cut-length of white wire to terminal strip #1 lug #2. (S)
- ( ) Connect one end of an 18-inch cut-length of yellow wire to terminal strip #1 lug #5. (S)
- ( ) Twist together (about 1-turn-per-inch) the wires from lugs #2 and #5 of terminal strip #1, and pass the twisted pair through hole #1.
- ( ) Clip each lead of R-66 to a length of 1-inch, and connect between terminal strip #1 lug #8 and R-11 lug #1. (NS)  
(Be careful that this connection does not touch chassis.)
- ( ) Clip each lead of R-65 to a length of 1 1/4-inches, and connect between terminal strip #1 lug #8 and C-38 lug "D". (NS)
- ( ) Connect R-67 between terminal strip #1 lug #8 and C-38 lug "A". Solder terminal strip #1 lug #8 only.
- ( ) Clip each lead of R-23 to a length of 3/4-inches and connect between terminal strip #1 lugs #7 and #9. (NS)
- ( ) Use a 1-inch length of bare wire to connect between lug "C" and lug "A" of C-39. Solder lug "C" only.
- ( ) Clip each lead of R-63 to a length of 3/4-inch, and connect between C-39 lug "B" and C-39 lug "A". (NS)
- ( ) Clip each lead of R-64 to a length of 1 1/4-inches, and connect between C-39 lug "D" and C-39 lug "B", keeping body of resistor away from chassis. (NS)
- ( ) Connect a 7 1/2-inch cut-length of orange wire between V-5 lug #7 and C-39 lug "B". Solder both ends.
- ( ) Clip each lead of R-80 to a length of 1-inch, and connect between C-38 lug "D" and C-39 lug "D". (NS)
- ( ) Twist together the orange wire and the yellow wire from T-1 along their length. Do not confuse orange wire with the two light brown wires from T-1.
- ( ) Connect yellow wire from T-1 to V-6 socket lug #3. (S)
- ( ) Connect the orange wire from T-1 to V-6 socket lug #4. (NS)
- ( ) Using a piece of bare wire, connect V-6 lug #4 to lug #7, and lug #7 to lug #6. Be sure that the bare wire does not touch other lugs on the socket. Solder lugs #4, #6 and #7.
- ( ) Connect the red-and-yellow striped wire from T-1 to V-5 socket lug #1. (S)
- ( ) Twist together the T-1 blue wire and the T-1 blue-and-yellow striped wire.
- ( ) Connect the T-1 blue wire to V-5 socket lug #4. (NS)
- ( ) Connect the T-1 blue-and-yellow striped wire to V-5 socket lug #3. (NS)
- ( ) Connect the T-1 red wire to V-5 socket lug #6. (S)
- ( ) Connect both the T-1 black wire and the T-1 white wire to terminal strip #2 lug #1. (S)
- ( ) Twist together the T-1 brown wires along their length.
- ( ) Connect one of the T-1 brown wires to terminal strip #2 lug #4. (S)
- ( ) Connect the other T-1 brown wire to terminal strip #2 lug #6. (NS)
- ( ) Connect one end of a 16-inch cut-length of gray wire to terminal strip #2 lug #6. (S)
- ( ) Connect one end of a 16-inch cut-length of white wire to terminal strip #2 lug #3. (S)
- ( ) Twist together the above 16-inch gray and white wires; dress as shown in Figure 6; and pass the twisted pair through hole #2.
- ( ) Place the cathode ray tube socket into position as shown in Figure 6.
- ( ) Connect the open end of the gray wire from terminal strip #1 lug #6 to the CRT (cathode ray tube) socket lug #2. (S)
- ( ) Connect the open end of the white wire from R-68 lug #2 to the CRT socket lug #8. (S)
- ( ) Twist together the T-1 green wire and the T-1 yellow-and-green striped wire, and run the twisted pair under terminal strip #1.
- ( ) Connect the T-1 green wire to CRT socket lug #12. (S)
- ( ) Connect the T-1 yellow-and-green striped wire to CRT socket lug #1. (NS) lug #3. (NS)
- ( ) Connect one end of a 17 1/2-inch cut-length of orange wire to CRT socket lug #3. (NS)
- ( ) Connect a 2 inch cut-length of orange wire between lugs #1 and #3 of the CRT socket. Solder both lugs.
- ( ) Connect one end of a 12 1/2-inch cut-length of yellow wire to CRT socket lug #4. (S)
- ( ) Twist together the above orange and yellow wires along their length and run the twisted pair through hole #1.
- ( ) Dress the orange wire from R-68 lug #3 along the chassis as shown on Figure 6, and connect to C-39 lug "D". (NS)
- ( ) Inspect work. Shake out any loose wire clippings. Examine each connection, and make sure that no adjacent lugs are touching each other—particularly the lugs on V-5 and V-6. The body or unshielded lead of any component must not touch the chassis, or any other component. All terminals with connections should be soldered except:  
Terminal strip #1, lug #7, lug #9.  
Capacitor C-38, lugs "A", and "D".  
R-11, lug #1.  
V-5, lugs #3 and #4.  
Capacitor C-39, lugs "A" and "D".

WORK AREA



RADIO CORPORATION OF AMERICA  
ELECTRON TUBE DIVISION, CAMDEN, N. J.

Trade Mark(s) Registered — Marca(s) Registrada(s)

Printed in U.S.A.