

ACTION CODE		COPIES FURNISHED		REMARKS
ROUTING CODE	INITIALED BY DATE			
235	OK 3/7			Request estimate cost of converting BC-348 Receivers in accordance with attached modification plan.
226	T 3/7			XXXXXXXXXX AC conversion kit, pre-wired, is available for each receiver. Additional requirement is one (1) AC Power Plug and Cable only.
				There are approximately 100 of these receivers to be converted, however, XXXXXX only a few would be accomplished at one time.
				M.E.C. M. E. CORNELIUS
				128 M.E.C. (10 on J.O. 3/10/50) (only 9 in stock (128R per stubbed out 5))
				Edman
				TO MODIFY RECEIVERS AND CHECK IF THEY OPERATE ON 115 V A.C.
				L - M - T 420 - 5 - 425
				Edman (code 235) ph 250

RETURN FILE TO CODE _____

Fold back and use reverse side for additional Office Routing.

CROSS FILE _____

Normally pins 3 and 4 are wired in parallel and pins 7 and 8 are wired in parallel.

(1) Remove all leads to pins 4 and 8 and reconnect the wires to pins 3 and 7 respectively. This leaves pins 4 and 8 free for the 115

volt a-c wiring.

(2) Connect a 13 inch #20 insulated lead to pin #4 and an 8 inch #20 insulated lead to pin #8. Do not twist these leads together, let them hang free for the present.

ELECTRONICS TECHNICAL FILES

BUILDING 78

PUGET SOUND NAVAL SHIPYARD

September, 1947

94x253

INSTALLATION INSTRUCTIONS

for

A. C. POWER SUPPLY PACK (EP-298)

in

RADIO RECEIVER BC-348-()

Manufactured by

the hallicrafters co.

A 105-125 VOLT A.C. POWER SUPPLY UNIT FOR RADIO RECEIVER BC-348-().

Power supply (EP-298) is designed to convert d-c operated BC-348-() receivers into a-c receivers capable of operating from a 105-125 volt 50/60 cycle a-c source. The power drain of the converted receiver will run about 65 watts at 117 volts.

The conversion from d-c to a-c operation is carried out in five steps described and illustrated below.

The conversion will permit the receiver's AVC-OFF-MVC switch to act as power switch.

The power pack, complete with 5Y3GT/G rectifier tube and filter system, is mechanically interchangeable with the original dynamotor unit, hence, the external appearance of the converted receiver will be unchanged.

STEP ONE

POWER UNIT INSTALLATION

(1) Disconnect the five wires from the terminal board of the dynamotor unit. Remove dynamotor and mounting plate. It will be necessary to disengage the cabinet locking rod and slide it out of the way.

(2) Lower the a-c power pack into the chassis feeding the black primary wires through the space between the chassis casting and sheet

metal platform at the rear of the receiver. Fasten the pack down with the four machine screws that are supplied with the conversion kit.

(3) Reconnect the five wires originally disconnected from the dynamotor terminal board, connecting them in the same sequence, namely, as they break out of the wiring harness.

STEP TWO

POWER SOCKET WIRING

Normally pins 3 and 4 are wired in parallel and pins 7 and 8 are wired in parallel.

(1) Remove all leads to pins 4 and 8 and reconnect the wires to pins 3 and 7 respectively. This leaves pins 4 and 8 free for the 115

volt a-c wiring.

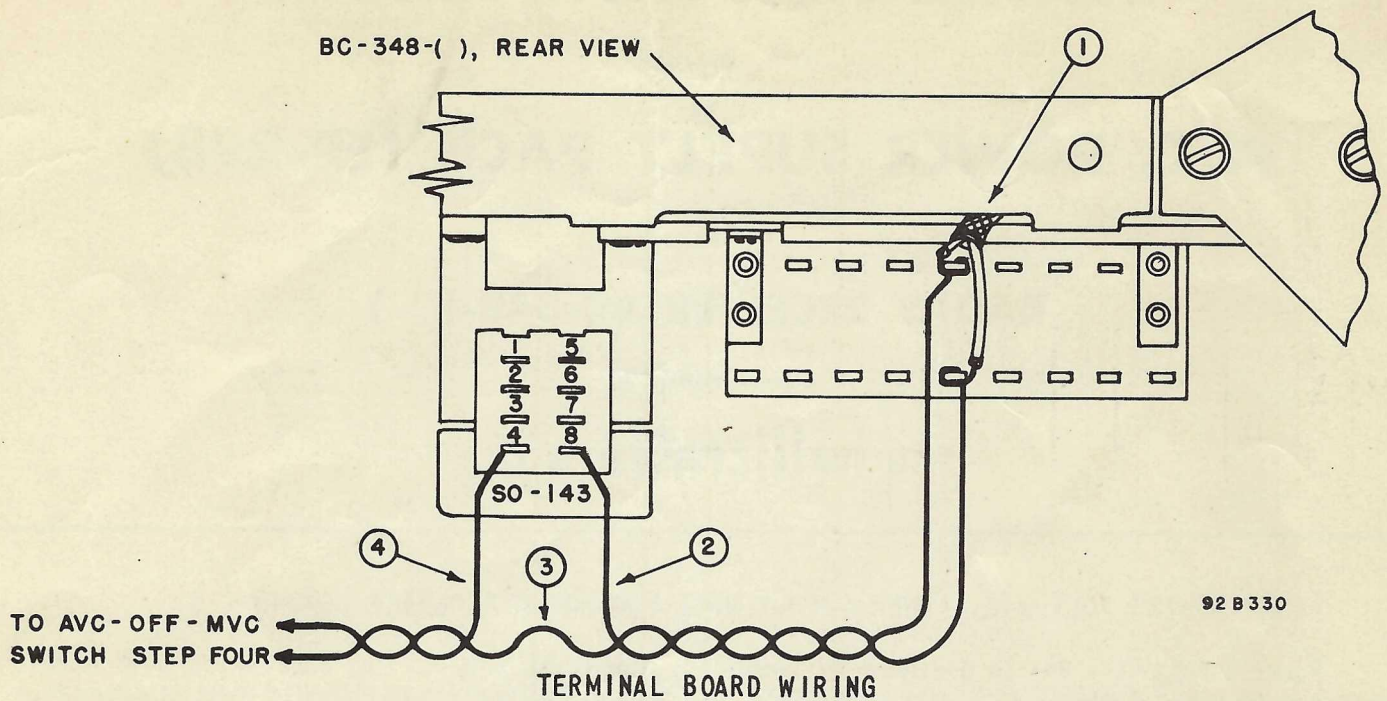
(2) Connect a 13 inch #20 insulated lead to pin #4 and an 8 inch #20 insulated lead to pin #8. Do not twist these leads together, let them hang free for the present.

ELECTRONICS TECHNICAL FILES

BUILDING 78

PUGET SOUND NAVAL SHIPYARD

STEP THREE



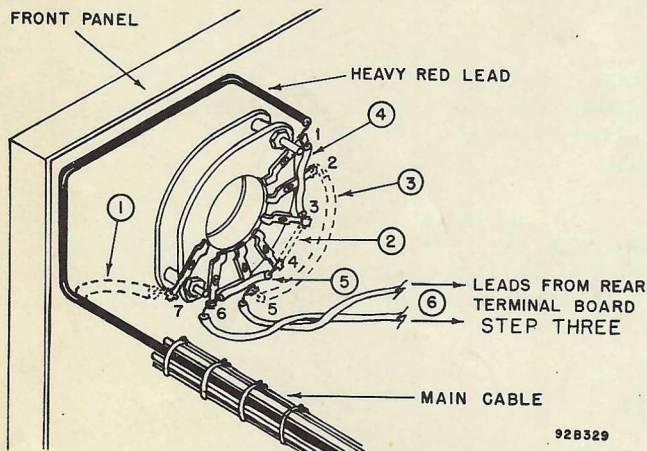
(1) Connect the two transformer primary leads fed out through the rear of the receiver chassis in step ONE, to the third or fourth pair of free terminals on the terminal board as shown in the illustration.

(2) Connect the 8 inch wire connected to pin 8 of SO-143 in step one to one of the pair of lugs wired to the a-c power unit.

(3) Connect an 18 inch length of #20 insulated wire to the remaining lug and twist together with the 8 inch wire as shown. Lay the twisted pair along the wiring harness.

(4) At socket SO-143 pick up the 13 inch lead connected to pin 4 and continue twisting the pair of wires together. Lay them along the wiring harness to the AVC-OFF-MVC switch.

STEP FOUR



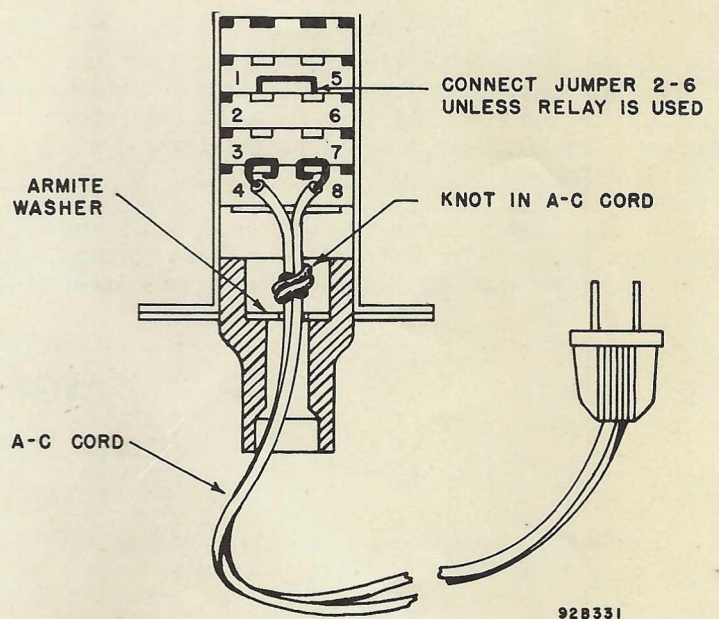
(1) Disconnect heavy red dynamotor lead from normal (dotted) position and connect to lug 1., on rear wafer as shown.

(2) (3) Disconnect jumpers between lugs 3 and 4 and lugs 2 and 5. Disconnected jumpers are shown in dotted lines.

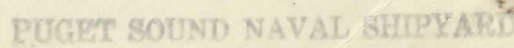
(4) (5) Connect jumpers between lugs 1 and 3 and lugs 4 and 6 as shown.

(6) Connect the 18 and 13 inch twisted leads from the rear terminal board and socket SO-143 to lugs 5 and 6 as shown. This completes the set rewiring.

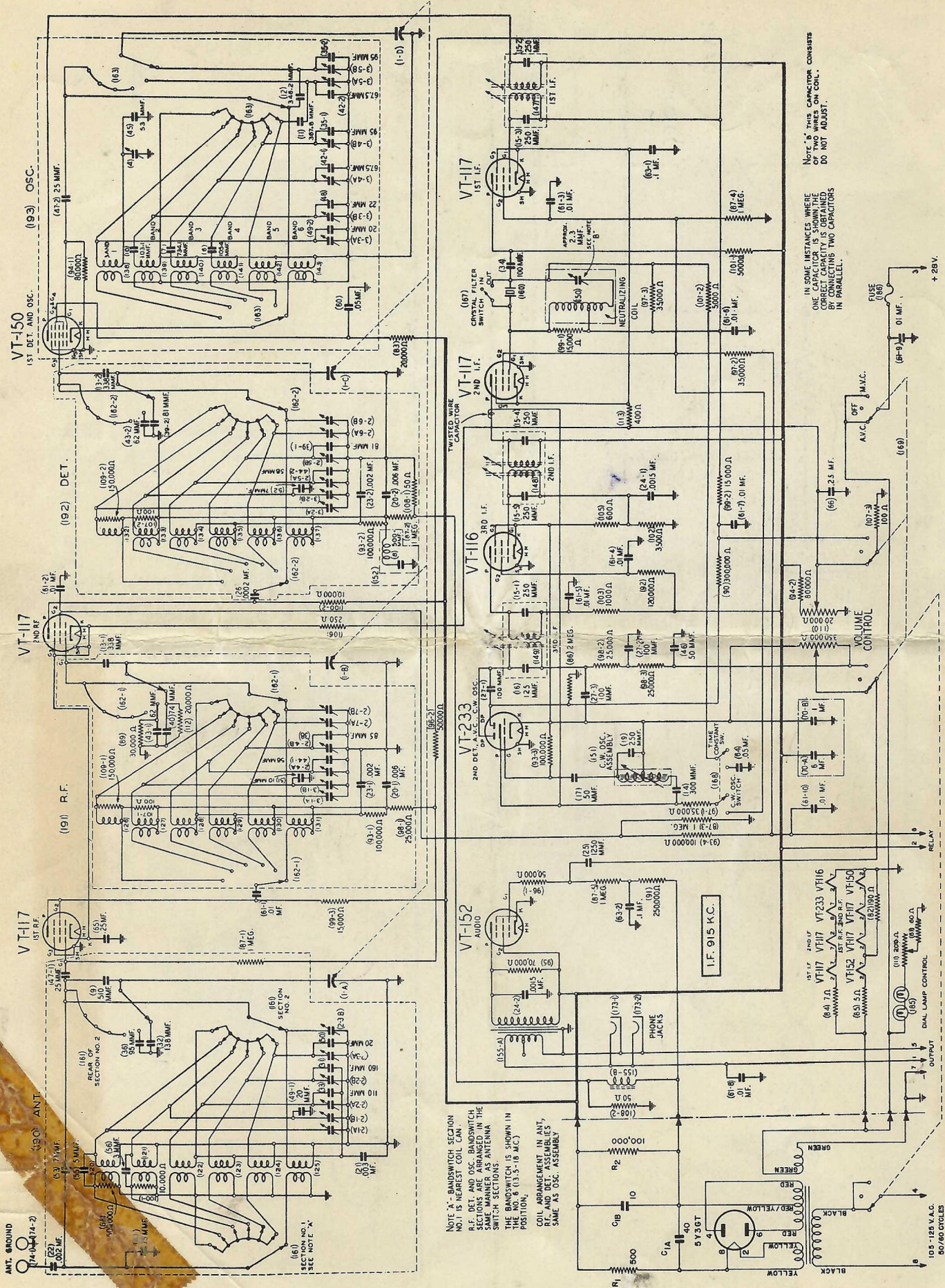
STEP FIVE



Wire the line cord to pins 4 and 8 and connect a jumper between pins 2 and 6 if a relay is not used. This completes the conversion. When operating the receiver use the AVC-OFF-MVC switch to turn on the a-c power.



A-C POWER SUPPLY; SCHEMATIC AND PARTS LIST.



RADIO RECEIVER BC-348-(), TYPICAL SCHEMATIC DIAGRAM REWIRED FOR A-C OPERATION.