EQUIPMENT SERIES: 51S  BULLETIN NO. 1  DATE: 2-22-63
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EQUIPMENT TYPE: RECEIVERS 51S-1/1F

SUBJECT: SUPPRESSION OF UNWANTED OSCILLATIONS IN LOW LEVEL AUDIO OUTPUT LINES AND ALLOW USE OF WIRING CONFIGURATION SHOWN IN FIGURE 1-2.a OF INSTRUCTION BOOK

The modification in this service bulletin is to add an isolation pad to the low level audio output lines to suppress oscillations that may be caused by some remote lines with reactive loads. Included in the modification procedure (step 6) is a wiring change to allow the 600-ohm line and remote r-f gain control wiring option shown in figure 1-2.a in the 51S-1 Instruction Book to be used. The performance of these modifications is not considered essential unless the remote line output, TB1, is used or if the optional wiring change would be used.

These modifications will be factory installed in 51S-1 serial numbers above 589, 51S-1F serial numbers above 163 and in all 51S-1A and 51S-1AF.

MODIFICATION PROCEDURE:

1. Remove 51S-( ) from its case and turn bottom side up.

2. Locate circular terminal strips TB8 and TB9, and transformer T4. (Reference may be made to the 51S-1/1A/1F/1AF Instruction Book, figure 6-5 for aid in locating these components.)

3. Refer to figure 1. Terminals 3 and 6 of T4 have two shielded wires on them and terminals 4 and 5 have only one shielded wire on them. Disconnect the wires from terminal 3 of T4 and connect to terminal J of TB9.

4. Disconnect the wires from T4 terminal 6 and connect to terminal H of TB8.

5. Connect one of the 220-ohm resistors (745-0725-00) between terminal 3 of T4 and terminal J of TB9. Connect other 220-ohm resistor between terminal 6 of T4 and terminal H of TB8.

6. Remove the white-brown-red-blue wire from T4 pin 5 and connect to TB8 terminal B. Connect the no. 22 AWG white-brown-red-blue wire (439-7057-00) to TB8 terminal B and J7, EXT RF GAIN.

7. Replace 51S-( ) in its case and return to operation.
PARTS REQUIRED:

<table>
<thead>
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<th>Qty</th>
<th>Description</th>
<th>Collins Part Number</th>
<th>Unit Price</th>
</tr>
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<tbody>
<tr>
<td>2</td>
<td>Resistor, 220 ohm, 1/4 watt</td>
<td>745-0725-00</td>
<td>$.19</td>
</tr>
<tr>
<td>1.0 (ft)</td>
<td>Wire, electrical, no. 22 AWG, white-brown-red-blue Teflon insulated</td>
<td>439-7057-00</td>
<td>$.01</td>
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The above parts may be obtained from Collins Radio Company, Service Parts Department, Cedar Rapids, Iowa at the prices indicated. All orders should specify the Collins part numbers and make reference to 51S Service Bulletin No. 1. The referenced prices are subject to change without notice.

Figure 1. Terminal Designation of Transformer T4 in 51S-( ).