



## CONSOLE CONNECTOR KIT 9503

### INSTALLATION INSTRUCTIONS

FOR USE WITH: HAMMOND Organ Models C-2, C-3  
LESLIE Speaker Model 760, 770, 825

#### KIT CONTENT

|                             |        |                              |       |        |
|-----------------------------|--------|------------------------------|-------|--------|
| Console Connector Assembly  | 042440 | Echo Control                 |       |        |
| Console Connector Extension | 042648 |                              | brown | 032243 |
| Hardware Package            | 044552 |                              | ebony | 032250 |
| Screw, wood, 6 x 1/2,       |        |                              | ivory | 032268 |
| Phillips head (4)           | 029124 | Tremolo Control              |       |        |
| Screw, sheet metal,         |        |                              | brown | 042606 |
| 8 x 1/2, Phillips head (2)  | 029132 |                              | ebony | 042614 |
| Screw, sheet metal,         |        |                              | ivory | 042622 |
| 8 x 1/2, Phillips head (2)  | 042408 | Cable Assembly, 9-conductor, |       |        |
| Wire Nut (7)                | 028076 | 30-foot                      |       | 021600 |
| Staple, insulated (7)       | 028464 | Oiler                        |       | 053025 |

**CAUTION:** Due to the presence of electrical potential and the danger of moving mechanical parts, installation procedures or adjustments requiring work inside the LESLIE speaker cabinet or the organ console should be performed only by a service man authorized by the dealer or factory to perform such work.

#### INSTALLATION

**CAUTION:** DISCONNECT ORGAN POWER BEFORE PROCEEDING!

1. Mount the echo and tremolo switches on the wooden rail in front of the lower manual, in a position convenient for the organist. Wood screws are provided.
2. Route the control cables under the lower manual, through the keyboard shelf, and into the amplifier section of the console.
3. Mount the console connector chassis inside the console within reach of the adapter and control cables, using sheet metal screws.
4. Tape the red, white, and black twisted wires from the connector console and fasten them out of the way; they are not used in this installation.
5. Connect the three wires from the tremolo control to the correspondingly colored jacketed wires from the console connector, using wire nuts. (B, figure 1)

6. Connect the four wires from the echo control to the correspondingly colored jacketed wires from the console connector, using wire nuts. (C)
7. Locate the "down tube" in the organ. Remove the screw from the locking clamp which holds the down tube (on top of the junction box). Slide the tube up approximately three inches. (D)
8. Guide the wires that are in the down tube through the opening in the extension chassis. (E, figure 2)
9. Drop a string through the down tube and tie the string around the plug of the extension cable. (F)
10. Pull the cable up the tube and into the tone generator section of the organ. Remove the string. Insert the plug into the appropriate socket on the console connector. (G, figure 1)
11. Connect the blue and the gray extension cable wires to the 117V AC terminals behind the protective cover on the organ pre-amplifier. (H)
12. Fit the down tube into the opening in the extension chassis. Mount the chassis, using the bronze colored wood screws from the kit. (figure 2)

NOTE: The terminals on the pre-amplifier (steps 13 and 15) may be solder-type terminals. If this is the case, cut the spade lugs from the console connector wires and solder the wires to the terminals.

13. Connect the black wire from the console connector to the GND terminal on the organ pre-amplifier. (I, figure 1)
14. Remove the red and the black wires from the two G terminals on the pre-amplifier and connect them to the two screw terminals on the console connector. (J)
15. Connect the two red wires from the console connector to the G terminals. (K)
16. Connect the speaker cable between the socket on the extension chassis and the LESLIE speaker.
17. If necessary, adjust the volume of the LESLIE speaker.

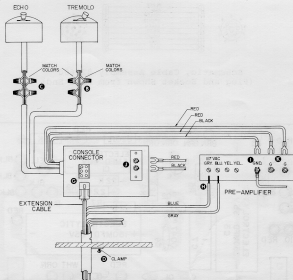


Figure 1. Interconnections

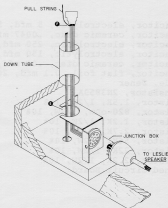
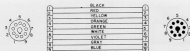


Figure 2. Cable and Down Tube Extension Installation



Schematic, Cable Assembly 021600  
(Plug and Socket Shown from Wire End)

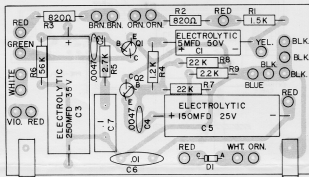


Figure 3. Circuit Board Assembly 042457

|       |  |        |
|-------|--|--------|
| C1    | Capacitor, electrolytic, 5 mfd, 50V      | 028589 |
| C2,C4 | Capacitor, ceramic disc, .0047 mfd, 100V | 028431 |
| C3    | Capacitor, electrolytic, 250 mfd, 35V    | 065086 |
| C5    | Capacitor, electrolytic, 150 mfd, 25V    | 031294 |
| C6    | Capacitor, ceramic disc, .01 mfd, 1000V  | 060467 |
| C7    | Capacitor, flat foil, 0.1 mfd, 200V      | 022251 |
| D1    | Diode, Zener                             | 118870 |
| Q1,Q2 | Transistor, 2N3859A                      | 061366 |
| R1    | Resistor, 1.5K, 1/2W, 10%                | 022277 |
| R2,R3 | Resistor, 820-ohm, 1/2W, 10%             | 028373 |
| R4    | Resistor, 1.2K, 1/2W, 10%                | 018036 |
| R5    | Resistor, 2.7K, 1/2W, 10%                | 042549 |
| R6    | Resistor, 56K, 1/2W, 10%                 | 024133 |
| R7,R8 | Resistor, 22K, 1/2W, 10%                 | 028530 |
| R9    | Resistor, 2.2K, 1/2W, 10%                | 028571 |
|       | Etched Circuit Board                     | 040931 |



## Ordering Parts

Standard hardware, connectors, and electronic components should be purchased locally. Non-standard items may be obtained through a LESLIE speaker dealer. Orders should include part numbers as listed.

### PARTS LIST: 042440 CONSOLE CONNECTOR ASSEMBLY

|                            |        |
|----------------------------|--------|
| Circuit Board Assembly     | 042457 |
| Housing, socket, 6-circuit | 042119 |
| Insert, connector, female  | 023556 |
| Contact, lug, spade, #8    | 010439 |
| Bushing, strain relief     | 034769 |

### PARTS LIST: 021600 CABLE ASSEMBLY

|                                |        |
|--------------------------------|--------|
| Plug Assembly, 9-pin           | 061879 |
| Socket, 9-contact              | 028837 |
| Cap, body                      | 022046 |
| Clamp, cut                     | 022079 |
| Screw, machine, 6-32 x 3/8 (4) | 027979 |

### PARTS LIST: TREMOLO CONTROL

|             |              |                            |        |
|-------------|--------------|----------------------------|--------|
| Switch Case |              | Switch & Cable Assembly    | 042598 |
|             | brown 103750 |                            |        |
|             | ebony 103760 | Switch Retainer (2)        | 048116 |
|             | ivory 103770 |                            |        |
| Case Cover  |              | Screw, thread-cutting,     |        |
|             | brown 048702 | 6-32 x 3/8 (2)             | 029140 |
|             | ebony 048710 |                            |        |
|             | ivory 048728 | Label, CHORALE/OFF/TREMOLO | 103650 |
| Switch Knob |              |                            |        |
|             | brown 048066 | Cork, adhesive             | 029157 |
|             | ebony 048074 |                            |        |

### PARTS LIST: ECHO CONTROL

|             |              |                           |        |
|-------------|--------------|---------------------------|--------|
| Switch Case |              | Switch & Cable Assembly   | 035584 |
|             | brown 103750 |                           |        |
|             | ebony 103760 | Switch Retainer (2)       | 048116 |
|             | ivory 103770 |                           |        |
| Case Cover  |              | Screw, thread-cutting,    |        |
|             | brown 048702 | 6-32 x 3/8 (2)            | 029140 |
|             | ebony 048710 |                           |        |
|             | ivory 048728 | Label, MAIN/ENSEMBLE/ECHO | 103670 |
| Switch Knob |              |                           |        |
|             | brown 048066 | Cork, adhesive            | 029157 |
|             | ebony 048074 |                           |        |

### MULTIPLE SPEAKER INSTALLATION

For complete information see the service manual for the LESLIE speaker to be added.

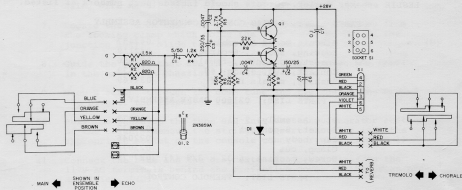


Figure 4. Schematic, 042440 Console Connector Assembly and Controls (Plugs and Sockets Shown from Wire End)

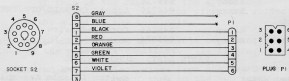


Figure 5. Schematic, 042648 Console Connector Extension (Plug and Socket Viewed from Wire End)

#### PARTS LIST: 042648 CONSOLE CONNECTOR EXTENSION

|                             |        |
|-----------------------------|--------|
| Cable Assembly, extension   | 042465 |
| Socket, 9-contact           | 028837 |
| Housing, plug, 6-circuit    | 023259 |
| Insert, contact, male       | 023309 |
| Ring, socket retainer       | 031948 |
| Screw, sheet metal, 6 x 1/4 | 042366 |

*Handwritten notes:*  
 4-pin (common) - Red & Green  
 1-pin - Red  
 1-pin - Green  
 1-pin - Yellow  
 1-pin - Black  
 1-pin - White  
 1-pin - Purple  
 1-pin - Blue  
 1-pin - Gray