INSTALLATION OF THE No. 253 CONSOLE CONNECTOR KIT For use with the Leslie Model 251 Speaker and Hammond Organ Models A-100 and M-100

The Leslie Model 251 Speaker may be used with both the A-100 and the M-100 models of the Hammond Organ. In each of these models there is a built-in reverberation unit, with a reverberation speaker in addition to the regular speaker system which handles the non-reverberated signal. Since the organ is already divided into two channels, it is a comparatively simple matter to connect the two-channel Model 251 Leslie. The necessary connector chassis, controls, and associated parts are contained in the No. 253 Console Connector kit.

Model Series A-100

Interceptor plugs at the end of the echo switch cable are not required in M-100 installations. These plugs should be removed, by cutting the wires as close as possible to the plugs. The three resulting wire ends should then be stripped of 1/2 inch insulation so that the connections may be made, as described below:

- 1. Make sure the organ is turned "off".
- 2. Mount the No. 53-1 Connector chassis on the left end panel of the console (as viewed from the rear) just over the main amplifier, using screws which are provided.
- 3. Attach the tremolo and echo controls to the wooden rail in front of the lower manual, choosing the two mounting holes which best center the wood screws in the rail. Controls may be grouped together at either end of the rail, or separated, with one at each end. Connecting cables from the two controls should be routed under the manual shelf into the organ interior, and back to the rear section of the organ.
- 4. Locate wire running from main amplifier to main speaker. Cut wire between points "D" and "E".
- 5. Connect wire from amplifier to red wire from echo switch. Also remove wire from speaker terminal at point "H" on main speaker and cut off terminal and gather it with wires at point "E" (three wires). Use wire nut provided.
- 6. Connect green wire from echo switch to point "D" at main speaker.
- 7. Cut wire at reverb speaker between points "G" and "F".
- 8. Connect blue wire from echo switch to point "G".
- 9. Connect yellow wire to point "F".
- 10. Connect the brown and black wires from the echo switch to the brown and black wires from No. 53-1 chassis, matching the colors, and using "wire nuts".
- 11. Connect the "POT" cord from the Tremolo switch to the short cord of the same type from the No. 53-1 chassis, using two of the "wire nuts" which are provided. NOTE: In using the wire nuts, hold the ends of the wires parallel and together, but do not twist them. Insert these ends into the opening of the nut, pushing firmly and turning nut in a clockwise direction until the connection is made secure.
- 12. Since there is no external speaker socket on the model M-100 organ, there will be no use for the 5-pole plug at the end of the wires leading from the No. 53-1 chassis. The plug should be cut off just behind the cover cap.
- 13. Remove the two screws and cover from the AC terminal box near the left rear corner of the organ's main amplifier.

- 14. Route the "POT" cord from which the 5-pole plug was removed down the side of the console and up through the hole in the bottom of the terminal box. Cut and strip both wires in the "POT" cord and connect the grey and brown terminals. Replace the terminal box cover and fasten it with the two original screws.
- 15. Route the red wire down the left end of the console, strip the end of the wire, and solder it to the ground terminal on the main amplifier chassis.
- 16. Insert the 6-pole plug of the 727 speaker cable into the socket of the No. 53-1 connector, then attach the plug at the other end of the cable to the Model 251 speaker. The installation is now complete.

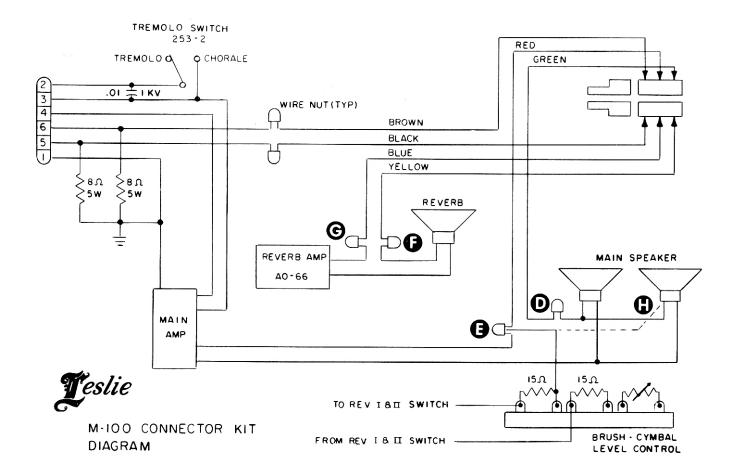
NOTE: If the organ's reverberation control does not work properly, reverse the gray and black leads (marked "Speaker") on the reverberation amplifier terminals.

The Model 251 Leslie Speaker is connected to the Model M-100 Hammond Organ in the following way:

- 1. Make sure the organ is turned" off".
- 2. Mount the No. 53-1 Connector Chassis on the left end panel of the console (as viewed from the rear) just over the main amplifier, using screws which are provided.
- 3. Attach the Tremolo and Echo controls to the wooden rail in front of the lower manual, choosing the two mounting holes which best center the wood screws in the rail. Controls may be grouped together at either end of the rail, or separated, with one at each end. Connecting cables from the two controls should be routed under the manual shelf into the organ interior, and back to the rear section of the organ.
- 4. The package of small installation parts in the No. 253 kit includes four special type connectors (two male, two female) and two short pieces of plastic sleeving. The connectors are to be clamped and soldered to four of the wires from the Echo switch: female connectors to the green and yellow wires, male connectors to the red and blue wires. The plastic sleeving is also to be placed over the red and blue wires.
- 5. Route the red and green wires across the under side of the tone generator, over to the two main console speakers. Route the remaining wires from the Echo switch (black, brown, blue, yellow, orange) and the "POT" cord from the Tremolo switch across the under side of the tone generator, to the left end of the console. Fasten cables to the shelf using the insulated staples which are furnished.
- 6. Disconnect the green wire (from the amplifier) at the speaker terminal, and connect it to the red wire by means of the special connector previously installed. Pull the plastic sleeving over the connection.
- 7. Attach the green wire (from the Echo switch) to the speaker terminal just vacated.
- 8. Connect the" POT" cord from the Tremolo switch to the short cord of the same type from the No. 53-1 chassis, using two of the "wire nuts" which are provided. NOTE: In using the wire nuts, hold the ends of the wires parallel and together, but do not twist them. Insert these ends into the opening of the nut, pushing firmly and turning nut in a clockwise direction until the connection is made secure.
- 9. Connect the brown and black wires from the Echo switch to the brown and black wires from the No. 53-1 chassis, matching the colors, and using "wire nuts".

- 10. Disconnect the gray wire (from the reverberation control) at the reverberation speaker terminal, and connect it to the blue wire (from the Echo switch) by means of the special connector previously installed. Pull the plastic sleeving over this connection. NOTE: In early organs the wire from the reverberation control will be gray rather than blue.
- 11. Attach the yellow wire from the Echo switch to the speaker terminal just vacated.
- 12. Remove the red signal input wire from the reverberation amplifier, and insulate the end with tape, since this wire will no longer be used. Attach the orange wire from the Echo switch to the reverberation amplifier input terminal just vacated. NOTE: This entire step is eliminated in early M-100 organs. Instead, the orange wire from the Echo switch is set aside, its end insulated with tape. An early Model M-100 organ may be readily identified by the presence of five tubes in its reverberation amplifier. By contrast, the current model uses just three tubes for this amplifier.
- 13. Since there is no external speaker socket on the Model M-100 organ, there will be no use for the 5-pole plug at the end of the wires leading from the No. 53-1 chassis. The plug should be cut off just behind the cover cap.
- 14. Remove the two screws and cover from the AC terminal box near the left rear corner of the organ's main amplifier.
- 15. Route the" POT" cord from which the 5-pole plug was removed down the side of the console and up through the hole in the bottom of the terminal box. Cut and strip both wires in the" POT" cord and connect to the gray and brown terminals. Replace the terminal box cover and fasten it with the two original screws.
- 16. Route the red wire down the left end of the console, strip the end of the wire, and solder it to the ground terminal on the main amplifier chassis.
- 17. Insert the 6-pole plug of the 727 speaker cable into the socket of the No. 53-1 connector, then attach the plug at the other end of the cable to the Model 251 Speaker. The installation is now complete.

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