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INSTALLATION INSTRUCTIONS and SCHEMATIC WIRING DIAGRAMS

Conversion of Model 219 Steppers and 3020(48), 3025(48), 3045(48) Wall Boxes to 3 Wire Operation.

Parts Required

1 - 53830 Kit 105
2 - 72316 32 Resistor 150 OHM-1 Watt

1. Stepper Requirements

All Model 219 Steppers that have the dual coil long pulse relay are suitable for this conversion. Others may be made suitable by installing a dual coil relay, Part No. 47624 or 48005, in accordance with Instruction Sheet, Part No. 49994, and Schematic 45967.

2. Circuit Changes

(a) The dual coil relay has a connection from its coil to ground. Open this ground lead and install one of the 150 ohm 1 watt resistors in this ground circuit in both No. 1 and No. 2 steppers.

(b) Phasing Change in Stepper #2 (only)
Reverse the 24V transformer leads to the relay coil.

3. Stepper Isolation Circuit

Insert the adapters, Part No. 53831, in the two 12 pin Jones sockets in the ends of the two steppers. Connect either loose lead from Stepper No. 1 adapter to panel post No. 1 of Stepper No. 2 and connect either lead from Stepper No. 2 adapter to panel post No. 1 of Stepper No. 1.

4. Wall Box Circuit Changes

(a) Model 3020 Wall Boxes that include Modification Kit No. 114 may be converted to 3 wire operation (see schematic wiring diagram) as follows:

The far ends of the three wires running from the cover contact plate will be removed from the center terminal of the "tune-play" switch, and from lug numbers 1 and 3 of the disconnect socket.

The wire remaining on center lug of the "tune-play" switch will be moved to lug No. 1 of the disconnect socket.

Connect the wire from the upper terminal of the cover contact plate to the inner terminal of the accumulator coil (hot side). From the terminal strip remove the wire that goes to the long pulse patch and solder in its place the wire that runs to the lower contact of the cover contact plate. Splice and tape the remain-

ing two wires to join the long pulse patch and the center contact of the cover contact plate.

(b) Model 3025 Wall Boxes that include Modification Kit 114 may be converted to 3 wire operation (see schematic wiring diagram) as follows:

Remove the wires from the three contacts of the (chassis) cover contact plate. Make necessary disassembly to lift the selector contact plate and remove the 24V lead from the long pulse patch. Solder a 12" length of #22 gage wire to the long pulse patch and re-assemble the selector contactor. Solder the wire from the common patch of the selector contactor to the No. 1 binding post of the terminal strip. Trim and solder the wire from No. 2 binding post of the terminal strip to ground. Solder the wire from the long pulse patch to the center contact of the (chassis) cover contact plate. Solder the 24V lead that was removed from the long pulse patch to the upper contact of the (chassis) cover contact plate. Solder a 6" length of #22 gage wire to the lower contact of the (chassis) cover contact plate and connect it to the solder lug of #3 binding post of the terminal strip. Fasten all wiring securely to prevent shorting or chafing and test in accordance with operational instructions, paragraph 5.

(c) Model 3045 Wall Boxes that include Modification Kit 114 may be converted to 3 wire operation (see schematic wiring diagram) as follows:

Proceed step by step as described in section (b) of this paragraph.

5. Operational Instructions

3020(48) - 3 Wire, 3025(48) - 3 Wire, 3045(48) - 3 Wire.

Connect any of the above wall boxes in parallel groups of 4 maximum and run the conventional 3 wire cable, Part No. 46066, to the phonograph. Connections to the Model 219 steppers will be as follows:

Wall Box Terminals No. 1 to the 2 stepper adapter wire.
Wall Box Terminals No. 2 to the two stepper terminals No. 2.
Wall Box Terminals No. 3 to the one (only) stepper terminal No. 3.

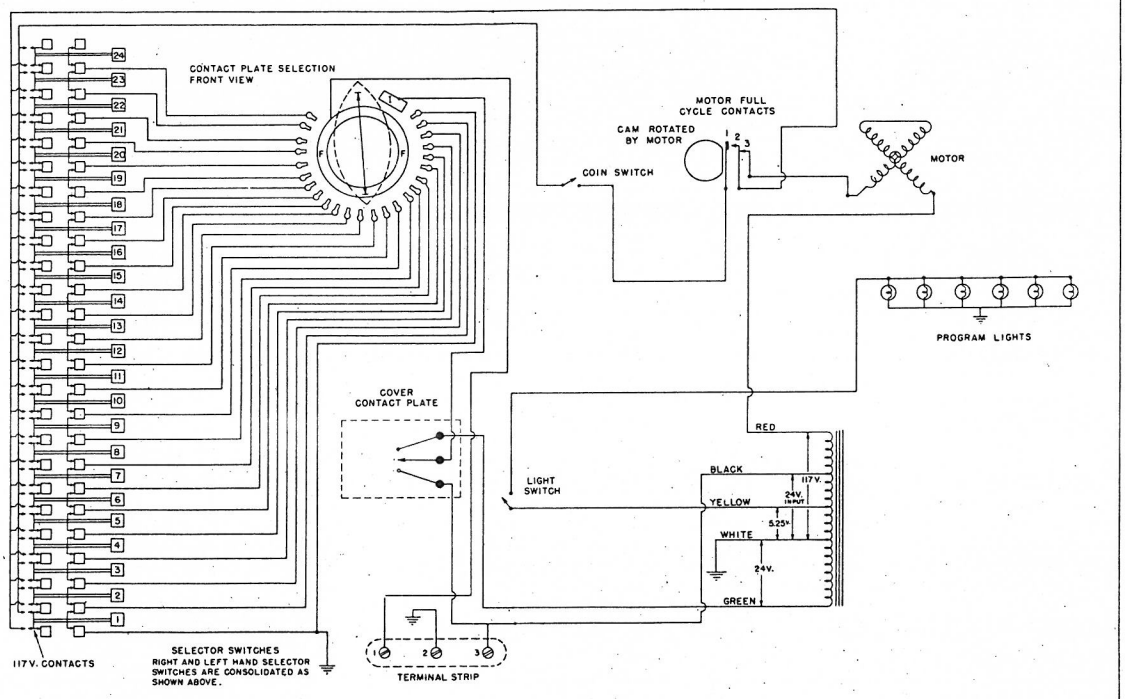
NOTE

The No. 3 stepper terminals will not be connected in parallel.

6. Limitations

The use of two steppers provides one extra 24V source of power supply on panel "B" of stepper No. 2. Four wall boxes may therefore be connected to panel "A" of stepper No. 1, four to panel "B" of stepper No. 1, and four to panel "B" of stepper No. 2. Additional groups of four may be added by using one Model 222 Booster Transformer for each group.

SCHEMATIC WIRING DIAGRAM OF MODEL 3045 (48 SELECTIONS) WALL BOX WITH KIT NO. 105 FOR 3 WIRE OPERATION



SCHEMATIC WIRING DIAGRAM OF MODEL 3025 (48 SELECTIONS) WALL BOX WITH KIT NO. 105 FOR 3 WIRE OPERATION