



HAMMARLUND

HAMMARLUND MANUFACTURING COMPANY, INC.

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Instructions for Installation of Electric Clock Timer Kit #26380-GI

FOR HAMMARLUND COMMUNICATIONS RECEIVER

TYPES HQ-100, HQ-110, HQ-170 & HQ-145

The above receivers have been designed so that the basic models which do not incorporate the clock-timer can be modified to include modification Kit 26380-61.

This work can be done by relatively inexperienced personnel and requires only light repair tools and a small soldering iron. The modification in effect converts the receiver to a clock model identical to factory production.

Please read these step-by-step instructions carefully and follow them in detail. In making solder connections, use a light, clean soldering iron and radio-grade rosin core solder only. **DO NOT** use fluxes of any kind in making solder connections. Do not overheat connections to avoid deteriorating associated insulating materials.

- STEP 1 -

Make certain that the power cord plug is removed from the power outlet. Disconnect all wires from the terminals at the rear of the chassis. Carefully turn the receiver up on its face on top of a clean towel placed over a smooth working surface. This will prevent marring of the front panel, knobs, etc. Employing a proper sized socket wrench, remove the screws at the cabinet rear which fasten the cabinet to the chassis.

For Models HQ-160, HQ-170 & HQ-145 loosen cabinet release screw at top of cabinet, if so equipped, using Phillips head screw driver.

Lift the cabinet off from the receiver assembly passing the power cord through the opening at the rear of the

cabinet. Tip the receiver back on the chassis so that the front panel is vertical.

Using a small Phillips-type screw driver, remove the four screws and sheet metal fastening nuts which hold the plastic window and medallion plate to the front panel. Please note that there are three long screws and one short screw in receivers HQ-100 and HQ-110 only.

The short screw must be used in the lower right corner hole and the sheet metal nut must be placed between the two sheet metal plates of the clock as shown in the accompanying instruction diagrams 1 and 2 (See Detail A).

First place the plastic clock window in the panel opening, making certain that the deeper dimension of the window is at the bottom of the opening. Hold the upper left side of the main tuning dial with the fingers of the right hand and carefully spring the dial away from the panel sufficiently to permit the front panel control shaft of the clock to be passed through the appropriate panel hole below the window, and the clock front plate assembly to be positioned directly behind the front panel. Engage the short screw through the front panel and into the sheet metal nut in the lower right corner of the clock. Engage the remaining three fastening screws and place the sheet metal nuts behind the rear of the clock plates. Carefully tighten all four screws. This should adequately clamp the plastic clock window and secure the clock mechanism to the front panel. When making soldered connections, be careful to prevent the hot soldering iron from contacting the plastic dial scale.

WIRING INFORMATION

HQ-170 & HQ-145

NOTE: Cut length of wires to suit the particular model.

Allow a small amount of slack in each wire.

- STEP 2 -

HQ-100

Unsolder the black-white wire from the left bottom terminal of the operations switch (shown dotted in the diagram) and connect and solder this wire together with the black-white wire of the clock assembly to the clock switch terminal (marked 3 in diagram 1).

Connect and solder the red-black lead of the clock assembly to the operations switch terminal from which the black-white wire was removed. Pass the long yellow-black wire of the clock assembly down through the rubber chassis grommet to the underside of the chassis and around the end of the chassis with the other wires adjoining it, cut it and strip it to the proper length. Connect and solder this wire to the terminal of the A.C. power line terminal strip that has the red-black wire from the power transformer connected to it as shown in the diagram. The new yellow-black wire should be dressed and tied down with the other wires under the chassis to avoid contact with the square wire-wound resistor unit and to avoid interference with the antenna capacitor drive cable and its stop pin.

HQ-110

Unsolder the red-black plastic wire from the line terminal strip and pass it up through the grommet. Connect and solder this wire to the clock switch terminal "*" shown on diagram 2.

Connect and solder the yellow-black lead of the clock assembly to the terminal of the A.C. power line terminal strip that has the black wire from the power transformer connected to it as shown in the diagram. The wires should be dressed and tied down with the other wires under the chassis to avoid contact with the square wire-wound resistor unit and to avoid interference with the antenna capacitor drive cable and its stop pin.

The black-white wire of the clock assembly should be connected to the opposite line terminal to which the yellow-black lead was connected.

Insert the three (3) wires on the clock assembly through the hole in the chassis and solder them to the appropriate terminals on the nearest terminal strip as shown in diagram 3 for HQ-170 and diagram 4 for HQ-145. Make sure that the jumper wire shown dotted in the diagram is removed.

- STEP 3 -

For HQ-100 and HQ-110 cut shaft extension enclosed with saw at first groove ($5\frac{3}{8}$ from threaded end) before attaching as noted in next paragraph.

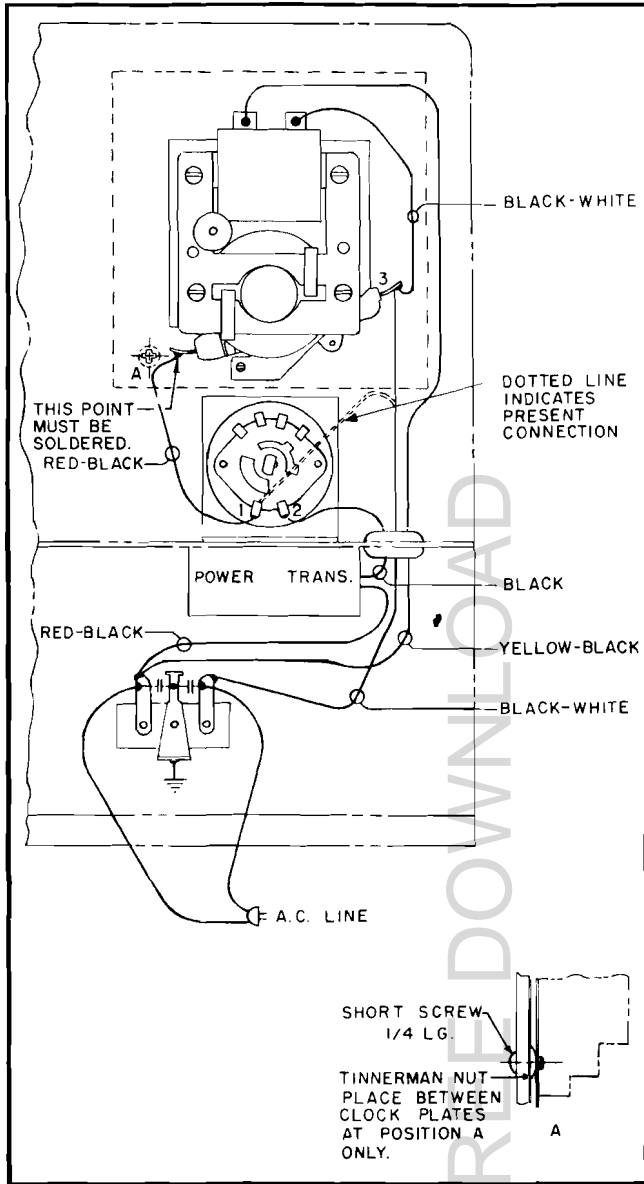
Screw the threaded end of the shaft extension provided onto the small threaded end of the rear shaft of the clock. This shaft extension must be securely tightened by clamping the small clock shaft with vise-grip or gas pipe pliers to prevent its turning loose with the shaft extension gripped in another pair of vise-grip or gas pipe pliers. Avoid bending the shaft during this tightening operation.

After completing all of the above operations and making certain that all connections are properly completed and that no foreign matter has been left in the receiver, carefully turn the receiver chassis up on its face per previous instructions. Pass the power cord through the opening at the rear of the cabinet and carefully set the cabinet down in place on top of the chassis, locating the clock shaft extension through the hole in the rear of the cabinet. Engage the front edges of the cabinet in the slot provided at the rear of the front panel and replace the rear screws which secure the receiver to the cabinet. With a small blade-type screwdriver secure the small knob on the rear adjustment shaft of the clock.

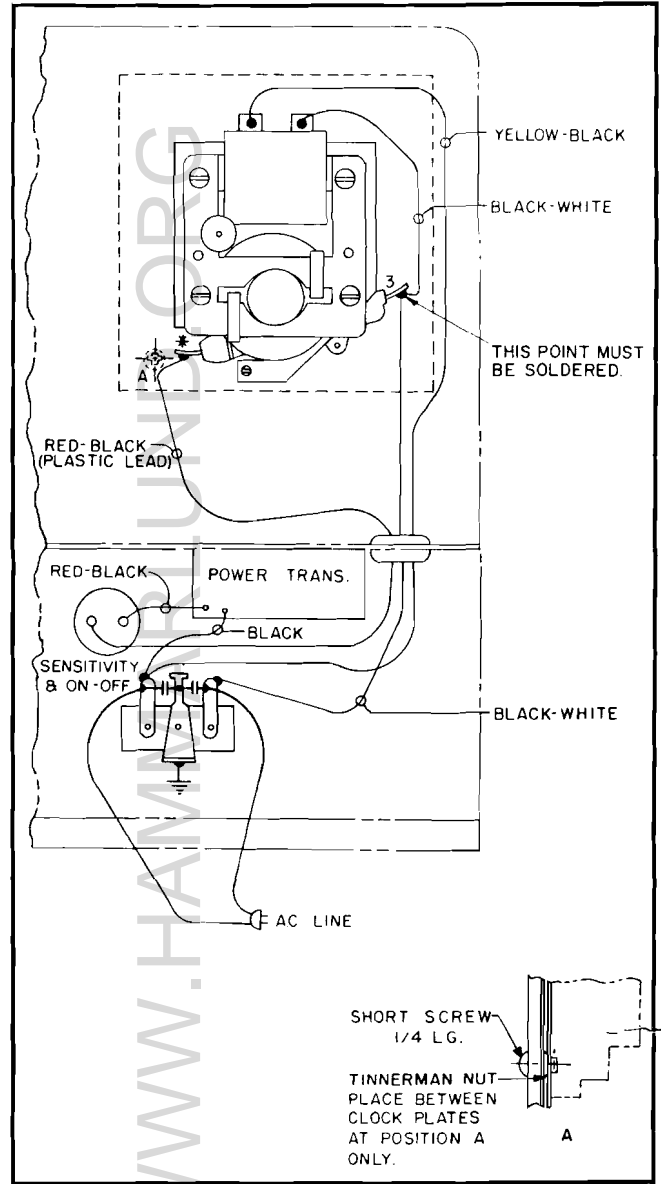
Push the small clock switch knob (supplied with the kit) into the clock switch control shaft which is located directly under the clock window.

OPERATING INSTRUCTIONS

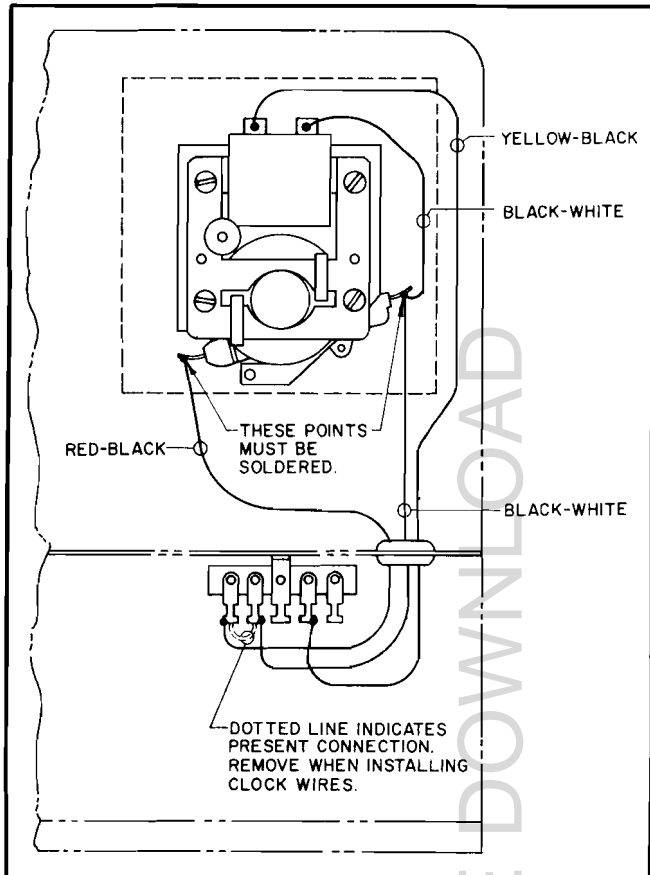
The clock hands are set by the rear knob. Push in on the knob to set the switch timing hand and pull out on the knob to set the clock hands. The front switch is set to AUTO and the operation switch is set to REC. when it is desired to use the automatic clock switch for pre-warming the receiver before operation or for use as an alarm to turn the receiver on to a pre-tuned station. To use the operation switch normally, the clock switch should be left in the ON position. The clock will run continuously so long as the power line cord is connected to a 115 volt, 60 cycle source.



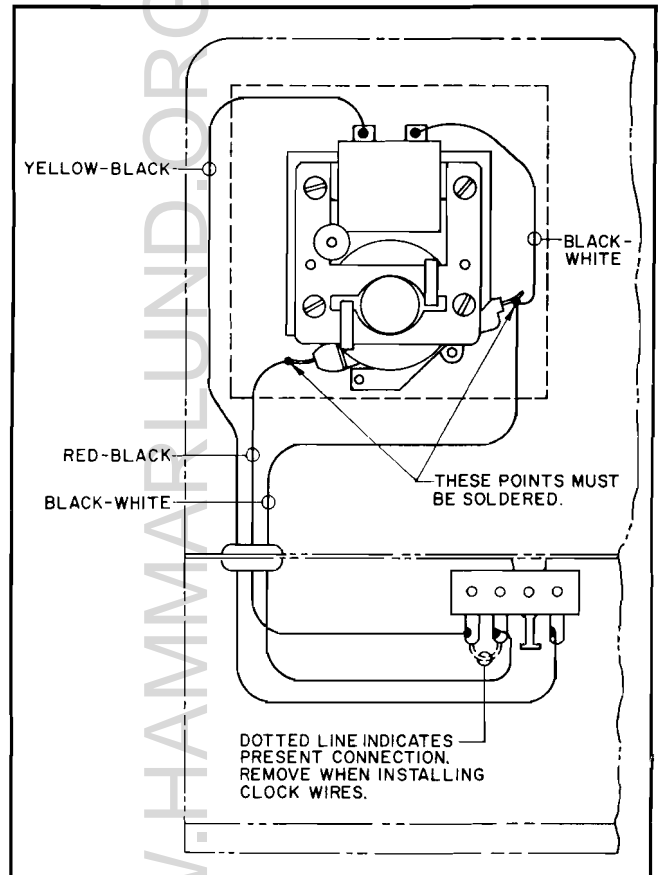
HQ-100
Diagram 1



HQ-110
Diagram 2



HQ-170
Diagram 3



HQ-145
Diagram 4

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