INSTRUCTIONS for
MODEL 312A-1
CONTROL/SPEAKER

COLLINS RADIO COMPANY
Cedar Rapids, Iowa
COLLINS AMATEUR EQUIPMENT GUARANTEE

The Collins Amateur equipment described herein is sold under the following guarantee:

Collins agrees to repair or replace, without charge, any equipment, parts, or accessories which are defective as to design, workmanship, or materials, and which are returned to Collins at its factory, transportation prepaid, provided:

(a) Buyer has completed and returned to Collins promptly following his purchase the Registration Card included in the Instruction Book furnished with the equipment.

(b) Notice of the claimed defect is given Collins within 90 days from the date of purchase and goods are returned in accordance with Collins' instructions.

(c) Equipment, accessories, tubes, and batteries not manufactured by Collins or from Collins' designs are subject to only such adjustments as Collins may obtain from the supplier thereof.

(d) No equipment or accessory shall be deemed to be defective if, due to exposure or excessive moisture in the atmosphere or otherwise after delivery, it shall fail to operate in a normal and proper manner.

(e) Any failure due to use of equipment in excess of that contemplated in normal amateur operations shall not be deemed a defect within the meaning of these provisions.

The guarantee of these paragraphs is void if equipment is altered or repaired by others than Collins or its authorized service center.

No other warranties, expressed or implied, shall be applicable to said equipment, and the foregoing shall constitute the Buyer's sole right and remedy under the agreements contained in these paragraphs. In no event shall Collins have any liability for consequential damages, or for loss, damage or expense directly or indirectly arising from the use of the products, or any inability to use them either separately or in combination with other equipment or materials or from any other cause.

IMPORTANT! It is necessary that the business reply card included herewith be filled out and mailed to the Company promptly in order for this guarantee to be effective.

HOW TO RETURN MATERIAL OR EQUIPMENT. If, for any reason, you should wish to return guarantee or otherwise, you should notify us, giving full particulars including the details listed below, insofar as applicable. If the item is thought to be defective, such notice must give full information as to nature of defect and identification (including part number if possible) of part considered defective. (With respect to tubes we suggest that your adjustments can be speeded up if you give notice of defect directly to the tube manufacturer.) Upon receipt of such notice, Collins will promptly advise you respecting the return. Failure to secure our advice prior to the forwarding of the goods or failure to provide full particulars may cause unnecessary delay in handling of your returned merchandise.

ADDRESS: Collins Radio Company
Sales Service Department
Cedar Rapids, Iowa

INFORMATION NEEDED:

(A) Type number, name, and serial number of equipment
(B) Date of delivery of equipment
(C) Date placed in service
(D) Number of hours of service
(E) Nature of trouble
(F) Cause of trouble if known
(G) Part number (9 or 10 digit number) and name of part thought to be causing trouble
(H) Item or symbol number of same obtained from parts list or schematic
(I) Collins' number (and name) of unit sub-assemblies involved in trouble
(J) Remarks

HOW TO ORDER REPLACEMENT PARTS. When ordering replacement parts, you should direct your order as indicated below and furnish the following information insofar as applicable. To enable us to give you better replacement service, please be sure to give us complete information.

ADDRESS: Collins Radio Company
Sales Service Department
Cedar Rapids, Iowa

INFORMATION NEEDED:

(A) Quantity required
(B) Collins' part number (9 or 10 digit number) and description
(C) Item or symbol number obtained from parts list or schematic
(D) Collins' type number, name, and serial number of principal equipment
(E) Unit sub-assembly number (where applicable)
Model 312A-1 SPEAKER/CONTROL

1. PURPOSE OF EQUIPMENT

   In the space normally occupied by a speaker cabinet alone, the 312A-1 provides the following:

   a. 10" PM loudspeaker and cabinet.

   b. 2 fuses for external circuits.

   c. 8-1/2" by 12" space for panel mounting auxiliary apparatus such as beam direction indicator, clock, control switches etc.

   d. Desk lamp.

   e. Terminal block for terminating circuits of apparatus mounted on the panel (as in c. above), or for terminating other circuits that may terminate at the control desk. 22 unused terminals available. (8 more terminals connected to speaker, fuses and lamp.)

2. CONSTRUCTION

   The Speaker/Control is constructed of sheet steel and is finished in St. James Grey Wrinkle. The front panel is constructed of a perforated insert in a solid frame. The insert allows the passage of sound and at the same time provides a mounting surface for controls, etc. The front panel assembly is hinged at the bottom and may be opened for installation and inspection of components as well as changing blown fuses.

   The desk lamp is mounted on the front panel above the perforated insert. It is a filament type that is free of radio interference.

   The speaker panel is recessed 5-15/32 inches in back of the front panel. A pair of extractor-type fuse posts are mounted along-side of the speaker. The speaker, panel lamp, and fuses are connected to their respective terminals at the rear of the cabinet.

3. CHARACTERISTICS

   Size: 15-1/16" W x 12-1/2" H x 11-1/2" D (Over-all)
   Weight: 17 lbs
   Finish: St. James Grey Wrinkle
   Material: Sheet Steel
   Speaker: 10" PM, 8 watts, 6-8 ohm voice coil, Collins part no. 271 0197 00
   Distance between front panel and speaker panel: 5-15/32"
   Terminals at Rear: 30 (3 strips of 10 each, part no. each strip 367 3100 00)
                  8 used by speaker, fuses, and lamp
Figure 1. Model 312A-1 Outline Dimensions

Figure 2. Model 312A-1, Front Open
Figure 3. Model 312A-1, Rear View

Fuses: 2 - 2 amp., 250-v max., Type 3AG, Collins part no. 264 4070 00
Lamp Type: 125-v, 40 watt, Lumiline Type T-8, Collins part no. 262 0170 00

4. MAINTENANCE

a. LAMP REPLACEMENT. Lift the shade off the bulb, grasp the lamp bulb caps at either end of the bulb and pull forward to release the bulb and caps from the front panel. Pull the socket caps from the bulb and press them onto the new bulb. Align the contacts and press the bulb back into the panel sockets. Replace shade.

b. FUSE REPLACEMENT. Press the cap of the fuse post and turn it a few degrees counterclockwise. Pull the cap from the fuse post and pull the fuse from the cap. Insert the new fuse into the cap and replace the fuse and cap into the post.
Figure 4. Model 312A-1, Schematic Diagram