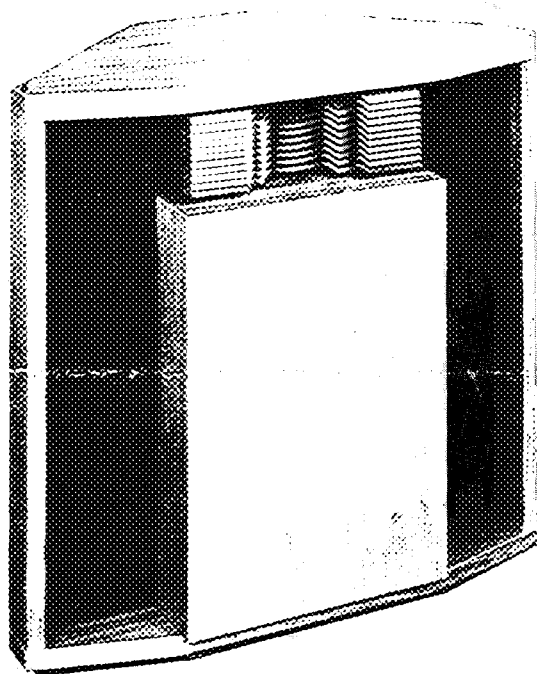


INSTALLATION OF SPEAKER SYSTEMS



JIM LANSING

Signature



the Hartsfield

IMPORTANT NOTE

It is a feature of the HARTSFIELD Enclosure that speaker systems are easily installed and removed. Some caution is required, however. Careless removal of panels other than those which are specifically mentioned below will destroy the structural unity of the folded horn. Highly skilled craftsmen have shaped this structure precisely to the designer's specifications and have put a permanent seal on all joints. The restoration of a damaged horn requires tools, materials and skills which are not available to most hobbyists.

SECTION A: Disassembly of C30 (empty) Hartsfield Enclosure for Installation of 085 System Kit.

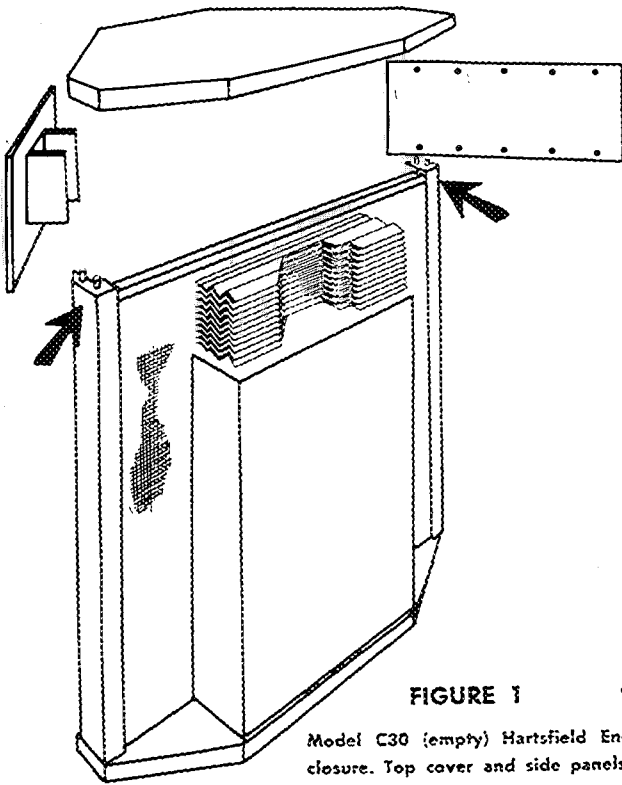


FIGURE 1

Model C30 (empty) Hartsfield Enclosure. Top cover and side panels exploded.

(1) Remove two **side panels**, loosening ten (10) #8 x 1½" long wood screws in each.

(2) The **top cover** is now secured at each of the front corners by two ¾" dowels. It can be lifted from the enclosure by exerting an upward force at these two corners (arrow position, Fig.1).

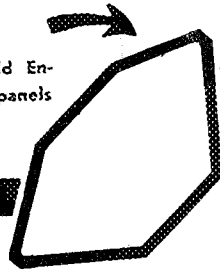


FIGURE 2

Rear view of HARTSFIELD showing baffle and components of the 085 Speaker System.

THE 085 SYSTEM KIT

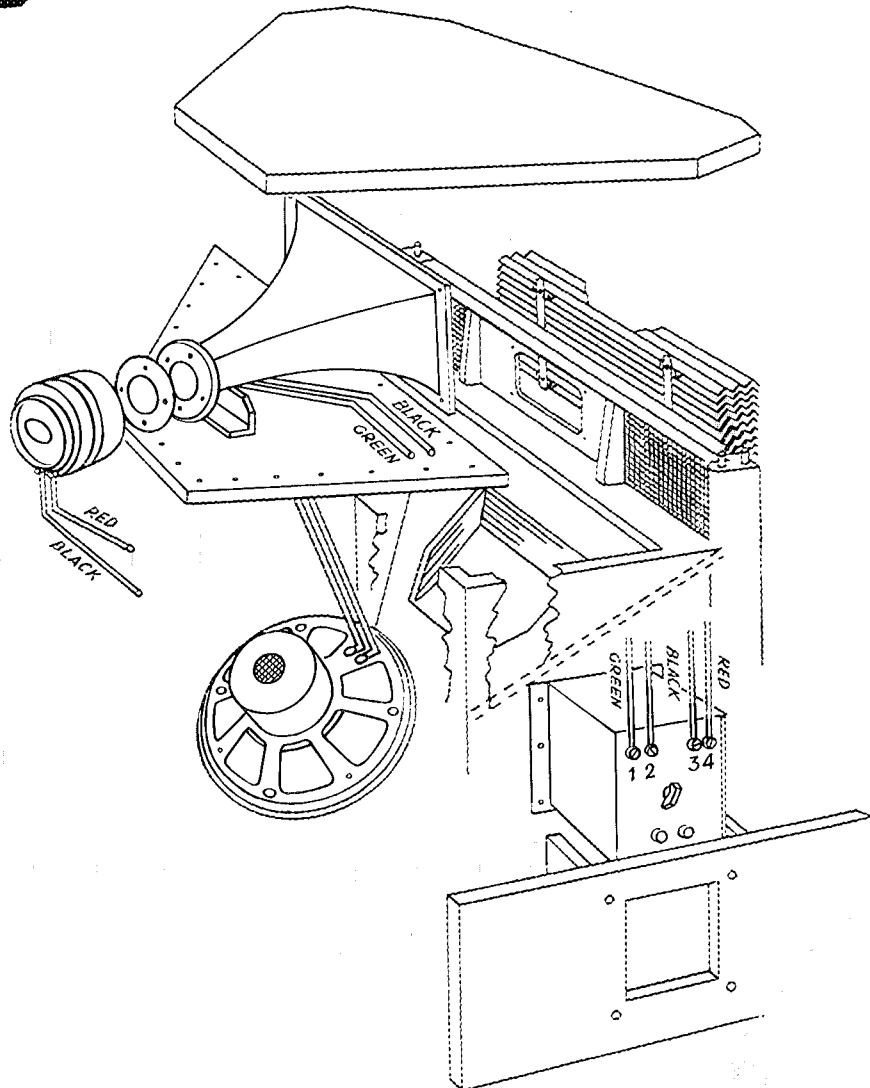
(Components packaged with associated hardware)

Model 375 HF Driver with gasket and four (4) ¼-20 x 15/16" dome screws.
Model H5039 Rectangular Exponential Horn.

Model 10DB Cavity Cover with seventeen (17) #8 flat head wood screws (Phillips) and four (4) 28" lengths of 18-gage stranded wire with insulation colored as follows: black (2), red (1), green (1).

Model 150-4C LF Speaker with four (4) ¼-20 x 1¼" machine screws.

Model N500H Dividing Network with six (6) #8 flat head wood screws (Phillips).



PART 1 D30085 SYSTEM

SECTION B: Installation of SIGNATURE 085 Speaker System Kit in the C30 (Empty) HARTSFIELD Enclosure.

(1) With the enclosure disassembled, as in Sect. A, above, note the four (4) tee-nuts (female screw fittings) which are installed in the **LF Speaker Mounting Baffle**. These indicate the position of the LF Speaker bolt ring. Install **LF Speaker** Model 150-4C with terminals toward the front of the enclosure, dropping the four machine screws through alternate bolt holes and threading them into the tee-nuts. Tighten securely and evenly, distributing pressure by tightening a little at a time and moving around the circle as many times as necessary. Do not overtighten. The cork gasket should provide a cushion between the baffle and the speaker frame. It should never be compressed to such an extent that the metal frame is in contact with the baffle.

(2) Connect lead wires to **LF Speaker**, Model 150-4C — green to red terminal; black to black. Connection is made as shown in Fig. 3.

(3) Thread lead wires through two 1/8" holes in the **Cavity Cover**, forward of the metal mounting bracket. Do not enlarge holes. Fit the gasketed surface of the **Cavity Cover** to the mounting surface of the enclosure and screw on tightly.

(4) Remove the **Serpentine Lens** by loosening four (4) 10-32 x 3/4" machine screws at the corners of the wood panel. Discard spacers found under the screw heads. **CAUTION:** As a protection against scratching, pad any finished surface of the enclosure before allowing it to come in contact with the **Serpentine Lens**.

(5) Place the Model H5039 **Exponential Horn** in a position such that the mouth flange fits against the lens panel. The position of the four corner holes should correspond with that of the holes in the panel. The forward surface of the throat flange should be flush against the metal mounting bracket. Push the four machine screws just removed through the holes in the mouth flange and in the lens panel. Now hold the **Serpentine Lens** in its mounting position and thread in the screws. Do not tighten the screws at this point.

(6) Place the gasket over the throat flange of the Model H5039 **Exponential Horn**. Now set the Model 375 **Driver**, terminals down, on the rubber pad in back of the Horn position. **CAUTION:** Be certain that the protective gummed paper has been removed from the mouth of the driver.

(7) Slip the machine screws through the throat flange of the **Exponential Horn**, through the gasket and screw them into the corresponding holes in the **HF Driver**. This is most easily accomplished by screwing into the top hole first; then into the two side holes. Do not tighten with the wrench at this point. The bottom screw, which must pass through the metal mounting bracket into the flange, can now be inserted and tightened.

(8) Tighten the remaining screws at the horn-driver and the horn-lens connections gradually, distributing the pressure between the two points to avoid excessive shearing strain on the wood lens panel.

(9) Center the Model N500H **Dividing Network** in the rectangular opening of the **left side panel** with black Bakelite panel facing out. Secure the base flange to the mounting blocks with the six wood screws. Connect lead wires to terminals of Model 375 **HF Driver** — red to red post; black to black. Bring these leads, together with the two **LF Speaker** leads, to the panel of the **Dividing Network**, where they will be accessible after the enclosure has been reassembled.

(10) Replace **top cover** and **side panels** following steps (2) and (1), Section A, in reverse.

(11) Connect speaker leads to terminal posts of Model N500H **Dividing Network** as follows: LF Green to Post 1; LF Black to Post 2; HF Black to Post 3; HF Red to Post 4.

(12) Connect amplifier leads to INPUT posts of the Model N500H **Dividing Network**. Polarity is immaterial. Leads should be connected across 16-ohm taps at the amplifier. HF attenuation can be adjusted to suit room conditions by means of the three-position panel switch.

SECTION C: Removal of SIGNATURE 085 Speaker System from D30085 Enclosure.

(1) Disconnect speaker leads at **Dividing Network**. Then remove **side panels** and **top cover** per steps (1) and (2), Section A.

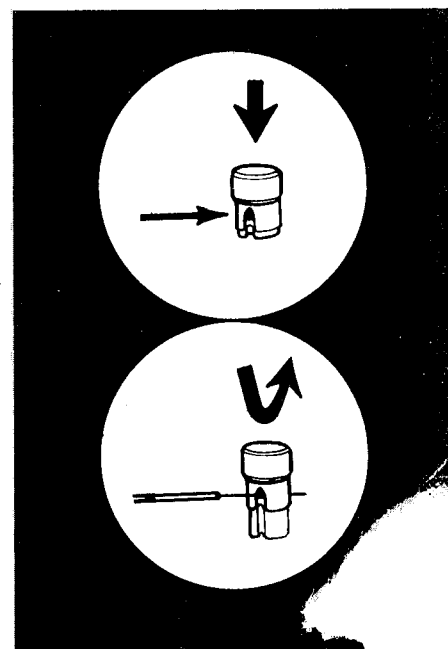
(2) Perform the following steps under Section B in reverse: (7), (6), (5), (3), (2), (1).

FIGURE 3

Connecting to terminals of SIGNATURE speakers.

1. Depress colored button, opening hole in terminal post.

2. Push stripped end of lead wire in hole and release button.



PART II D30208 SYSTEM

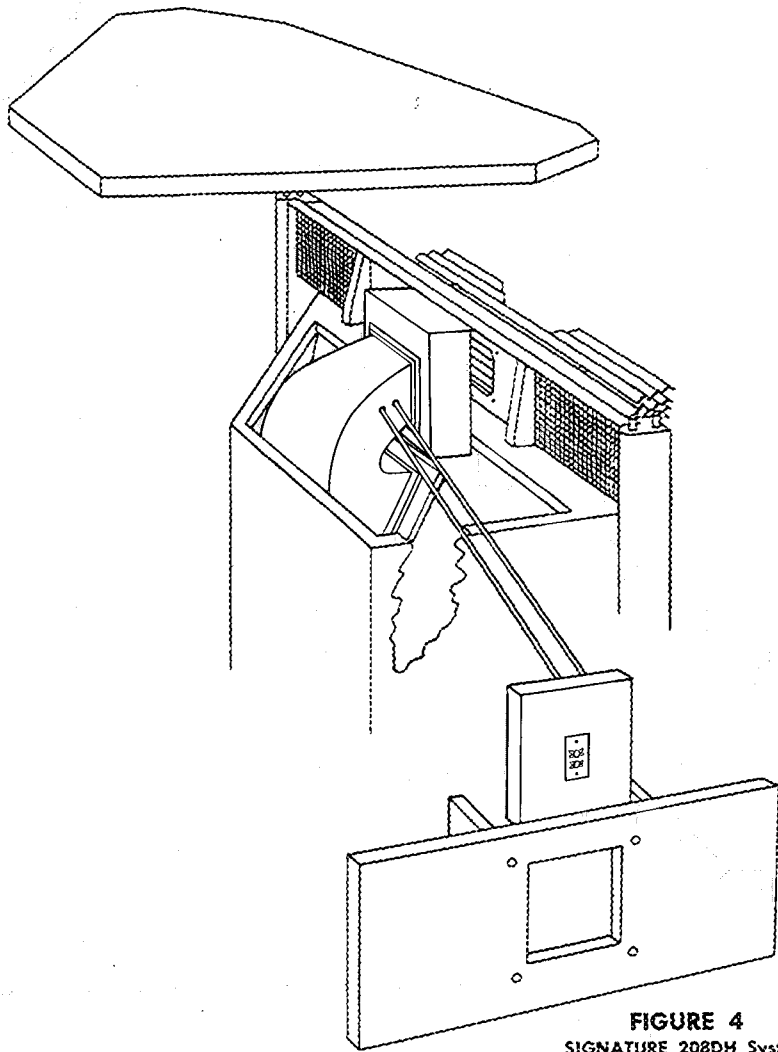


FIGURE 4
SIGNATURE 208DH System

The 208DH SYSTEM KIT

(Components packaged with associated hardware)

208DH Assembly, consisting of Speaker, Model D208, factory-mounted in H208 Horn Extension with insulated leads connected to voice coil terminals and brought out through side panel of Horn Extension. Packaged with four (4) #8 x 1/4" wood screws (Phillips).

Terminal Block with micarta terminal strip mounted and packaged with two (2) #8 x 1/8" wood screws (Phillips).

SECTION D: Disassembly of C30 (Empty) HARTSFIELD Enclosure for Installation of SIGNATURE 208DH System
Proceed as in Section A, Part I.

SECTION E: Installation of SIGNATURE 208DH System in the C30 (Empty) HARTSFIELD Enclosure.

(1) With the enclosure disassembled as in Sect A, Part I, fit the 208DH Assembly to the **LF Speaker Mounting Baffle**. If there is any question as to the orientation of parts, hold the 208DH Assembly upright, (speaker cone in a vertical plane). Turn the assembly in a direction such that the slope of the **Mounting Flange** corresponds with that of the baffle. Then slip the assembly into the enclosure. The **Mounting Flange** will rest on the baffle in one position only—the correct one. The mouth of the H208 **Horn Extension** will be centered to the aperture of the baffle and the D208 **Speaker** (at the throat of the horn extension) will face into the **Serpentine Lens**.

(2) Insert wood screws in four flange holes and screw firmly into baffle.

(3) Note that the **Terminal Block** has one stained surface. This surface is seen through the network

opening when the block is mounted and will be referred to as the outside surface. Install the **Terminal Block** as follows: (a) remove the micarta terminal strip from the outside surface, unscrewing the two round-headed screws; (b) thread speaker leads through the 5/8" hole from inside to outside; (c) solder the leads to the two lugs at the back of the terminal strip; (d) pull the lugs back into the 5/8" hole and replace the screws securing the terminal strip; (e) screw the **Terminal Block** in position, covering the Network opening.

(4) Replace **top cover** and **side panels**, performing the steps of Section A, Part I in reverse.

(5) Connect amplifier leads to screw lugs at terminal strip. Leads should be connected across 8-ohm tap at amplifier.

SECTION F: Removal of SIGNATURE 208DH System

(1) Remove **side panels** and **top cover** from enclosure, following steps (1) and (2) of Section A, Part I.

(2) Perform steps (4), (3), and (2), Section E, in reverse.

(3) Lift 208DH Assembly from the enclosure.