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## SPECIFICATIONS

|                                      |  |
|--------------------------------------|--|
| <b>Driver Complement:</b>            | One 8" long excursion woofer<br>Two 3" high sensitivity tweeters |
| <b>Nominal Impedance:</b>            | 8Ω   |
| <b>Dual Frequency™ Crossover:</b>    | Woofer Transition 2.5kHz<br>Tweeter Transition 1.5kHz            |
| <b>Amplifier Power Requirements:</b> | 10 watts minimum<br>75 watts maximum                             |
| <b>Cabinet:</b>                      | Walnut grain vinyl veneer  |
| <b>Dimensions:</b>                   | 10 1/2" H x 17" W x 9 1/2" D (27 x 43 x 24) cm                   |
| <b>Weight:</b>                       | 18 1/2 lbs. (7.1 kg)   |
| <b>Shipping Weight:</b>              | 40 lbs (18.18 kg)  |

### PROPRIETARY INFORMATION

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF BOSE® CORPORATION WHICH IS BEING FURNISHED ONLY FOR THE PURPOSE OF SERVICING THE IDENTIFIED BOSE PRODUCT BY AN AUTHORIZED BOSE SERVICE CENTER OR OWNER OF THE BOSE PRODUCT, AND SHALL NOT BE REPRODUCED OR USED FOR ANY OTHER PURPOSE.

# DISASSEMBLY/ASSEMBLY PROCEDURES

**Note:** Numbers in parenthesis refer to call outs in figure 1.

## 1. Front and Side Grille Removal

**1.1** Grasp the grille **(4)** **(3)** by an edge and pull it off.

## 2. Front and Side Grille Replacement

**2.1** Line up the grille mounting feet with the grille attachments **(10)** on the cabinet and press the grille onto the cabinet.

## 3. Woofer Removal / Crossover Access

**3.1** Perform procedure 1 first.

**3.2** Remove the four screws **(12)** that secure the woofer **(1)** to the cabinet.

**3.3** Lift the woofer out of the cabinet and cut the wires as close as possible to the woofer terminals.

**3.4** The crossover components are located on the back wall of the cabinet.

## 4. Woofer Replacement

**4.1** Attach the wires to the replacement woofer **(1)**. See the schematic diagram on page 5 for the wiring configuration.

**4.2** Replace the four screws **(12)** that secure the woofer to the cabinet.

## 5. Tweeter Removal

**5.1** Perform procedure 1 first.

**5.2** Remove the screw **(7)** that secures the tweeter to the tweeter mounting bracket **(6)**.

**5.3** Cut the wires as close as possible to the tweeter terminals.

## 6. Tweeter Replacement

**6.1** Attach the wires to the replacement tweeter. Refer to the schematic diagram on page 5 for the wiring configuration.

**6.2** Replace the screw **(7)** that secures the tweeter to the tweeter mounting bracket **(6)**.

## 7. Terminal Cup Removal

**7.1** Remove the four screws **(15)** that secure the terminal cup **(16)** to the cabinet.

**7.2** Cut the wires as close as possible to the terminal cup.

## 8. Terminal Cup Replacement

**8.1** Attach the wires to the replacement terminal cup **(16)**. Refer to the schematic diagram on page 5 for the wiring configuration.

**8.2** Replace the four screws **(15)** that secure the terminal cup to the cabinet.

## 9. Vertical Trim Strip Removal

**9.1** Grasp an edge of the vertical trim strip **(9)** and pull it off.

## 10. Vertical Trim Strip Replacement

**10.1** Line up the vertical trim strip **(9)** with the holes in the cabinet and press it into place.

# TEST PROCEDURES

## 1. Phase Test

**1.1** Momentarily apply  **$8 \pm 1\text{Vdc}$**  to the speaker input terminals. Observe polarity when connecting the dc power supply. The woofer should move outward.

**1.2** Momentarily apply the positive side of an  **$8 \pm 1\text{Vdc}$**  power supply to the red wire that is attached to the tweeter. Connect the negative side of the power supply to the speaker's negative input terminal. The tweeters should move outward.

## 2. Air Leak Test

**2.1** Apply an **8Vrms, 45Hz** signal to the speaker input terminal.

**2.2** Listen for air leaks around the woofer, tweeter mounting brackets and the terminal cup.

## 3. Rub and Tick Test

**3.1** Apply an **8Vrms, 10Hz** signal to the speaker input terminals.

**3.2** No extraneous noise such as rubbing, scraping or ticking should be heard.

**Note:** To distinguish between normal suspension noise and rubs or ticks, displace the cone of the woofer slightly with your fingers. If the noise can be made to go away or get worse, it's a rub or tick and the woofer should be replaced. If the noise stays the same, it's normal suspension noise and it will not be heard with program material.

## 4. Power Sweep Test

**4.1** Apply an **8Vrms, 10Hz** signal to the speaker input terminals.

**4.2** Sweep the speaker from **10Hz to 3kHz**.

**4.3** Lower the applied voltage to **4Vrms** and continue to sweep the speaker to **5kHz**.

**4.4** Listen for any buzzes, rattles or other extraneous noises from the speaker. Replace any woofer or tweeter that fails this test. Tighten any screws or redress any wires that buzz.

# MAIN ASSEMBLY PART LIST

\*\* Use Tweeter part number 124618 as an alternate for 130714. 10/06/00

| Item Number | Description   | Part Number  |
|-------------|---|--|
| 1           | Woofers   | 135372   |
| 2           | Tweeter   | 130714 or 124618   |
| 3           | Grille, Side, Tan<br>Grille, Side, Black<br>Grille, Side, White<br>Grille, Side, Green<br>Grille, Side, Blue<br>Grille, Side, Red<br>Grille, Side, Silver               | 120705-2<br>120705-3<br>120705-4<br>120705-5<br>120705-6<br>120705-7<br>120705-8 |
| 4           | Grille, Front, Dark Brown<br>Grille, Front, Black<br>Grille, Front, White<br>Grille, Front, Green<br>Grille, Front, Blue<br>Grille, Front, Red<br>Grille, Front, Silver | 120704-1<br>120704-3<br>120704-4<br>120704-5<br>120704-6<br>120704-7<br>120704-8 |
| 5           | Screw, Bracket Mount, Hex Wash  | 108877   |
| 6           | Tweeter Mounting Bracket  | 128501   |
| 7           | Screw, Tweeter Mount, Mach, Hex Wash  | 121441-08  |
| 8           | Port  | 118752-0   |
| 9           | Vertical Trim Strip   | 120707   |
| 10          | Rubber Grille Attachment  | 117995   |
| 11          | Trim Ring, Woofer   | 120709   |
| 12          | Screw, Wood, #8 x 20 mm L   | 129027-12  |
| 13          | Woofer Gasket   | 120715   |
| 14          | Grille Mounting Foot  | 120706   |
| 15          | Screw, SH Met, #6-20 x 5/8  | 103122-10  |
| 16          | Terminal  | 120711   |

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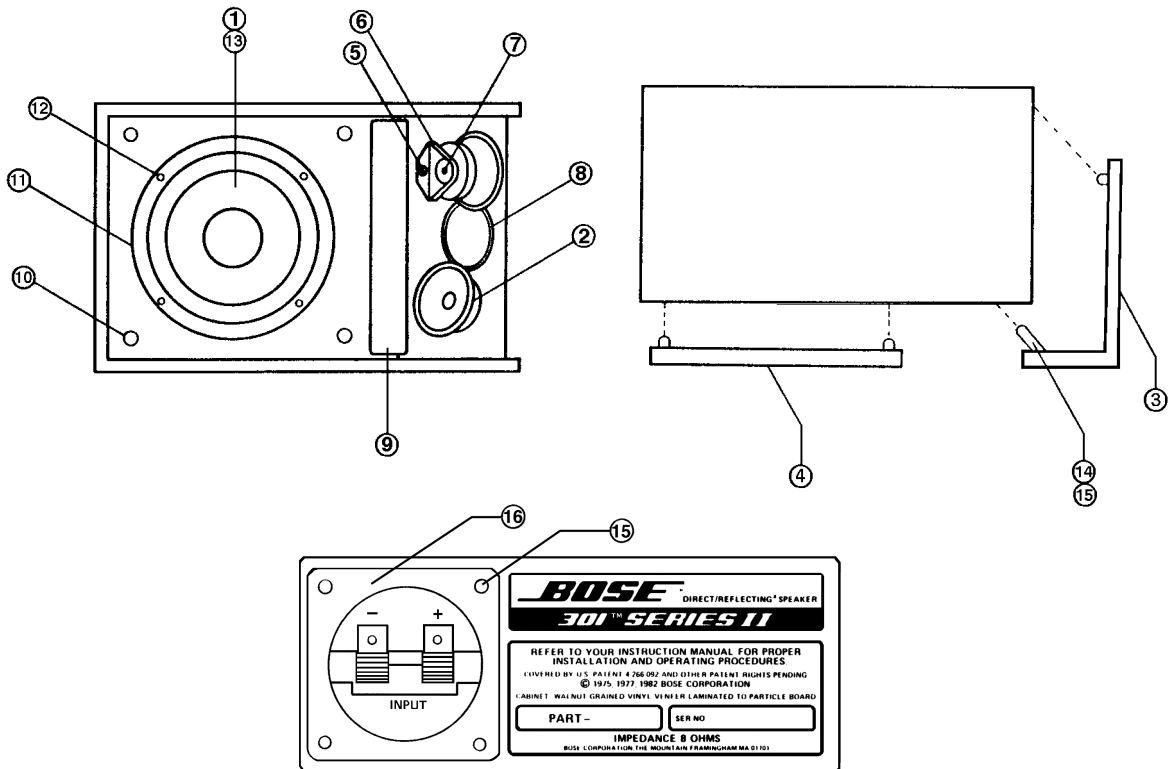
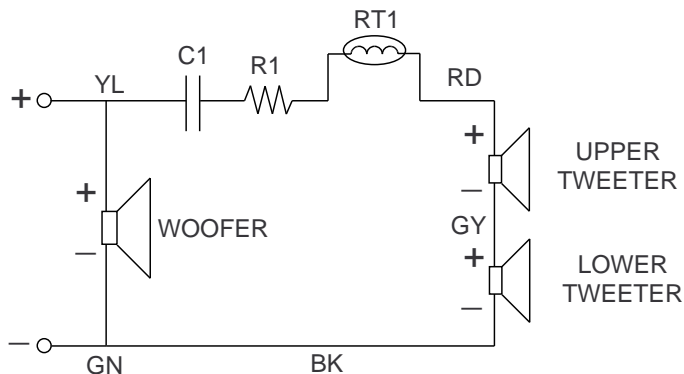


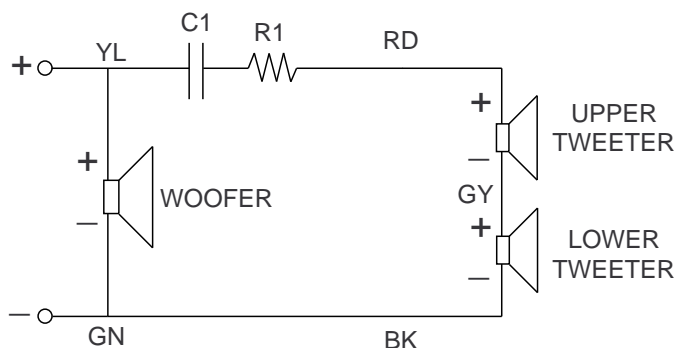
Figure 1. Exploded View

## CROSSOVER PART LIST

| Description | Part Number | Note  |
|-------------|-------------|-------|
| 3.4uf, 50V  | 106825      | Match |
| 7.5Ω        | 119094-7R5  | Match |
| 3.7uf, 50V  | 107055      | Boost |
| 6.2Ω        | 119094-6R2  | Boost |
| 3uf, 50V    | 104130      | Cut   |
| 9.1Ω        | 119094-9R1  | Cut   |
| 2.4uf, 50V  | 104131      | D Cut |
| 13Ω         | 119094-130  | D Cut |
| RT1, Lamp   | 117805      |       |



**Figure 2. Later Version Schematic Diagram**



**Figure 3. Early Version Schematic Diagram**

## PACKAGING PART LIST

| Description   | Part Number | Qty |
|---------------|-------------|-----|
| Owner's Guide | 120749      | 1   |
| Carton        | 142253      | 1   |
| Filler        | 129931      | 2   |
| Bag           | 106595      | 1   |

**Note:** 1.5A, 250V fuse kit, part number 108938-4

**301® Series II Direct/Reflecting®  
Loudspeaker**

SPECIFICATIONS AND FEATURES SUBJECT TO CHANGE WITHOUT NOTICE

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