

JBL 4343 Cabinet Design

This information on the 4343 is based on information published by members of the audioheritage.org groups.

In particular, the information here has not been verified, but is an attempt to bring together various strands which are relevant, in this case, the disassembly of the 4343 speakers.

The pictures below come from Fangio and show a pair of empty 4343 cabinets purchased on eBay for Euros170!



As the crossover has been removed there is a hole where its connections were made. Hence in the photo to the left you can see right through the speaker.

The "blurred" image on the front left is where the crossover control panel would have fitted, see how they should look in the next photo.



I assume that the shade of pink shown for the speaker is an effect of local lighting as I am not sure that pink fits well with the image of JBL ☺

The photos above are particularly useful in conjunction with the cutaway on the next page

JBL 4343 Cabinet Design

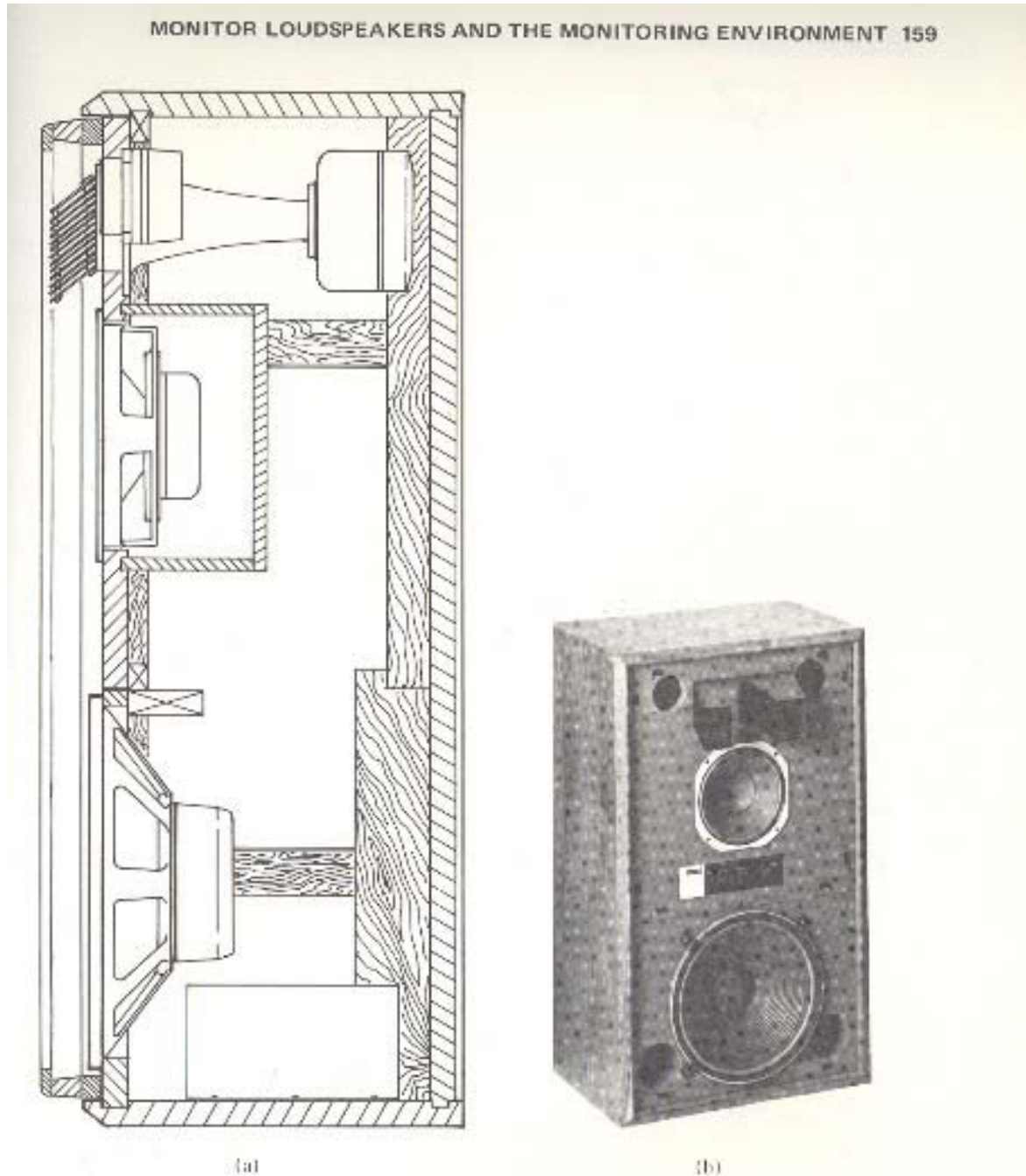


Figure 6-13. Views of the JBL Model 4343 four-way monitor system. A side-view cutaway drawing is shown in (a), and a photograph of the front with the grille removed is shown in (b). Crossover frequencies are 300 Hz, 1250 Hz and 9500 Hz. Sensitivity of the 4343 system is 93 dB, 1-watt-at-1-meter. The Model 4343 can be bi-amplified, crossing over at 300 Hz, with provision for special external equalization for proper LF transition. The LF and MF are Models 2231 and 2121; HF components are the 2420/2391 combination and the 2405 unit. The baffle can be rotated and the 2405 positioned to maintain mirror imaging in both vertical and horizontal attitudes. (Data courtesy James B. Lansing Sound, Inc.)

Given the above I knew pretty well what would be found when opening a 4343. However the issue of how to actually do this was still open, when hJames sent me a message stepping through the opening process. I have slightly edited this brilliant piece of description for the purpose of this document.

Removal of Front Panel

I recommend that you have some masking tape and a pen handy so you can label the various wires as you disconnect them from the drivers. A notepad is also handy to keep track of any funnies found during disassembly and also to make sure that you have identified all pieces so that everything will go back properly. Sticky labels are essential for accurate labelling of wires, etc.

Preparation

Lay a 2x4 or chunk of styrofoam or something on the floor (a book at the two top corners?) so once you lay the speaker on its back there is room around the edge to get your hands in and lift the cabinet back up later. (This is valuable "had I but known" information.)

Put a towel on the baffle board so you can rest the woofer magnet there when the bass speaker is removed and not scratch anything up.

If you have a lens on the horn remove that and put it aside.

I have found the plastic snap on cap from a 1 lb can of Yuban (coffee) will slip on the open end of the horn and prevent the risk of something falling into the horn. (If you have to, masking tape will cover the opening just as well).

Removing the Bass Unit

Lay the cabinet on its back.

Remove the screws holding the woofer in place and gently slip a putty knife under the edge to give you room to lift it. If it doesn't come free recheck all the screws and then careful run the putty knife under the edge of the woofer frame to be sure its not stuck to the face (careful - don't want to nick the cone or anything).

Set the speaker on the towel (mentioned above under "Preparation") and label the wires (LF red and LF blk - for the red and Black clips on the woofer)

Remove the two wires from the spring clips and move the woofer to somewhere safe.

Keep the towel for use in removing the mid-bass unit (see next).

Removing the mid-Bass Unit

Now, remove the screws holding the 10" midBass driver and lift it up, put it on the towel.

Label the wires MB red and MB blk (as needed).

Unclip the wires and put the 10" somewhere safe.

Removing the Remaining Units

Now stand the cabinet back up and you can remove the access plate on the upper back of the cabinet. I use a piece of styrofoam or similar, to wedge under the horn against the "dogbox" (the 10"s internal box) to support the compression

JBL 4343 Cabinet Design

driver. Now is as good a time as any to label the wires for the horn (HF red & HF blk), and for the slot tweeter (UH red & UH blk).

Return to the front and remove the 4 big screws that hold the horn and compression driver in place. Do them in opposing pairs and reach your hand into the cabinet to support the driver as you undo the screws.

Lower the compression driver and attached horn into the cabinet, release the wires, and lift the whole assembly out through the access hole.

You can do a similar process for the slot tweeter (2405)

Once again, thanks to hjames for the above.

To keep you motivated for the next steps, I show below some beautiful veneered cabinets from hjames.

