Speaker Foam Surround Rebuild Instructions

Kit Contains:

- Foam surrounds
- Special speaker glue
- Foam swabs
- Voice coil shims
- Dust caps
- Instructions manual

Step-by-Step Instructions

Step 1: Remove Woofer from Cabinet

1. Select the appropriate screwdriver and remove the woofer from the front of the cabinet.
2. Take care not to puncture the cone when removing the screws.
3. Observe and label the polarity of each wire before disconnecting them.
4. If desoldering is required, avoid overheating the terminals.

Step 2: Remove Gasket Material

1. If the speaker has a cork or paper surround, use a sharp utility knife to separate the gasket from the old surround.
2. Slowly work around the gasket, prying it off until the original glue seam is broken.
3. If the gasket delaminates, repair it with the provided glue.
4. Note the placement of the gasket on the basket for reassembly.

Step 3: Remove Old Foam from Basket

1. Carefully scrape off the old foam from the basket using a utility knife.
2. Clean the basket down to the paint or metal surface.
3. Wipe the basket rim clean with a rag moistened with isopropyl alcohol.

Step 4: Remove Old Foam from Cone

1. Pull the old foam from the cone without damaging it.
2. Use your fingers to rub off remaining foam particles from the cone's edge.
3. Removing as much foam as possible is recommended, but leaving a thin layer is acceptable.

Step 5: Remove Old Dust Cap from Cone

1. Using a sharp utility knife, cut an "X" into the center of the dust cap and peel it back.
2. Carefully cut around the edge of the dust cap, avoiding damage to the voice coil, lead wires, and cone.
3. Do not cut into the cone; leaving a small ridge where the cone and dust cap meet is acceptable.

Step 6: Align Assembly

1. Insert three voice coil shims into the space between the voice coil former and the center metal pole piece at 12, 4, and 8 o'clock positions.
2. These shims help maintain proper voice coil alignment during the installation of the new foam surround.
3. Choose the foam surround that matches your speakers and test-fit it with the gasket in place.

Step 7: Glue Surround to Cone

1. Apply glue to the cone edge and spread evenly with a foam swab.
2. Apply glue to the inside edge of the foam surround and spread evenly.
3. Allow the glue to cure for approximately 5 minutes until tacky.
4. Lightly place the new foam on the cone, ensuring it is centered.
5. Press around the cone edge to adhere the surround to the cone.
6. Allow the glue to bond for at least 1 hour before proceeding.

Step 8: Glue Surround Edge to Basket

1. Apply a thin bead of glue to the bottom edge of the surround and the basket frame surface.
2. Spread both surfaces evenly with a foam swab and allow to cure for 5 minutes.
3. Lift the cone until its outer edge is even or slightly higher than the basket edge.
4. Press down on the outer edge of the foam surround to bond it to the basket edge.
5. Allow the glue to bond for at least 5 minutes before proceeding.

Step 9: Reattach Gasket

1. Clean off old glue from the gasket and create a flat, smooth surface.
2. Apply a thin layer of glue to the gasket and the top of the surround.
3. Spread evenly with a foam swab and allow to cure for 5 minutes.
4. Refit the gasket material as originally positioned.
5. Turn the speaker over (gasket side down) and press on a table to bond the gasket to the basket/surround assembly.
6. Allow to cure overnight before proceeding.

Step 10: Reattach Dust Cap

1. Remove the three voice coil shims carefully.
2. Using a foam swab, apply a thin layer of glue to the rim of the dust cap.
3. Center and place the dust cap over the voice coil.
4. Allow the dust cap to bond for at least 1 hour before reinstalling the woofer into the cabinet or testing.

By following these detailed instructions and using the provided illustrations, you can successfully repair your speakers and restore their performance.