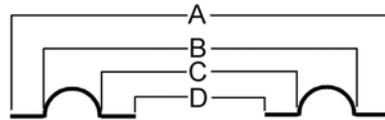
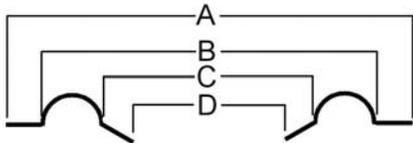




## Select and install the correct suspension ring kit

Our page of [top selling repair kits](#) covers 85% of speakers in existence. If you can't see the right kit there, read on and size it up yourself.



- A: Outer diameter of the surround
- B: Where the roll starts
- C: Where the roll ends
- D: Inner diameter of the surround

When sizing it up, the most important dimension is the “C” measurement which needs to match up with the edge of the cone fairly accurately and shouldn't deviate by more than two or three mm in either direction. It usually doesn't matter if the “D” dimension is a little different, as you don't need a great deal of surround lip (the difference between the “C” and “D” dimensions) to glue on to the cone – at least five mm is enough and ten mm or more is usually no problem. The “A” dimension of our new surround can exceed the foam surround you are replacing by up to 5 mm, but if it is shorter, check that there is sufficient area on the frame of the speaker to glue the new foam on – you need at least 5 – 7 mm here. Choose the closest model from our [range of kits](#) - one of which should fit your speakers.



*Typical Speakerbits repair kit containing two surrounds, glue, dust caps and shim*

Our kits contain **two** surrounds, glue, shims, dustcaps and clear instructions – everything you need to refoam two woofers. So if your speakers have **two** woofers in **each** cabinet you need to order **two** kits. You need to align the cone/voice coil assembly with supplied shims while you glue the new surround on. The technique is essential on all but a few speaker models and very straightforward with our clear instructions. Repair kit vendors who do not supply shims, new dustcaps and instructions should be avoided.

## Installation

Once you have ordered and received your kit, you can start work.

In each refoam kit you will receive	Quantity
Foam surrounds to suit your size speaker	2 pcs
Our special water based repair glue	50 ml
Shim for aligning the voice coil	8 pcs
Cotton bud swabs for spreading the new glue	2 pcs
New dust caps - you will cut yours off in the repair process.	2 pcs

### Instructions:



#### **Step 1 – remove woofer from cabinet**

Lay cabinet upside down at convenient working height and unscrew woofer. Note carefully the wire polarity – mark the wire and disconnect the terminals. If the wires are soldered on, be careful not to apply too much heat to the woofer's terminal plate. This could melt the solder holding the flexible lead-in wires which connect to the woofer's cone.



#### **Step 2 – remove gasket if fitted**

If the speaker is fitted with a gasket, remove it now by inserting a very sharp carton cutting knife in between the bottom of the gasket and the old surround. Try to get it off in one piece – but if it breaks apart don't worry, you can easily glue it back up with the supplied glue. Note the positioning of the gasket on the frame – most gaskets have indents cut out to clear the mounting screws. And always cut away from your other hand – it may take quite a bit of cutting force to separate the gasket from the frame and it's easy to slip



#### **Step 3 – remove the old foam surround from the frame**

Scrape the old foam off the frame with the carton knife. Clean it back to the paint or the shiny metal so the surface becomes smooth. Do the final cleaning with a rag and isopropyl alcohol (available from drug stores or chemist shops). If you don't have any or don't want to get it then just clean it up so there are no obvious lumps of glue and foam left on the frame. Old traces of glue are OK. You want it to be relatively smooth.



**Step 4 – remove the old foam surround from the cone**

Gently remove the old foam from the cone making sure not to damage or bend the cone. Use a rag on your finger to rub off as much of the old foam as possible. You will find that it dissolves away, leaving a very thin layer of foam on top of the old glue. This is what you want – the new glue will stick perfectly here.



**Step 5 – remove the dust cap from the middle of the cone**

Use a new blade here and cut an "X" into the dust cap. Peel the four pieces back and gently cut them away while being careful not to cut into the cone, lead-in wires or voice coil. Don't cut into the cone to remove the small ridge where the dust cap and cone join – it is quite OK to leave this here.



**Step 6 - align cone assembly**

Cut the small roll of clear shim (which you received in the kit) into 3 lengths approximately as long as the circumference of the voice coil. Slot one piece into the narrow gap between the round steel pole piece and the voice coil - it should slip in easily. If it overlaps, take it out and trim it down so there is approximately 1/4" of gap between the two ends of the shim. Now cut two more pieces the same length as the first. Put one of these down in the gap between the first shim and the pole piece. You should feel more resistance this time and it should fit snugly. Now try to put a third down there – it will either go in with increased resistance or it will not go in at all. If you can't get it in don't worry – two is enough for most woofers. Some woofers though will take four or even five pieces of shim.



**Step 7 – Glue surround to cone**

Take our bottle of glue and screw the top off. Stir it up thoroughly with a screwdriver or similar. Put the lid back on and apply a line of glue to the edge of the cone. If the old surround was mounted on the back of the cone then put the glue on the back of the cone. Spread it flat with the cotton buds supplied with the kit. Now apply a line of glue to the inside edge of the foam surround and spread it flat. Leave the surfaces to cure until they have gone tacky and about 70 to 80% clear. This will take between 10 and 20 minutes depending on the weather. Lightly place the foam surround on the top or bottom of the cone (on whichever way it was mounted originally) making sure the surround is centred relative to the cone. Press the foam edge onto the cone all the way around. Press out any ripples or bumps. This may take some time: the glue will still be drying as you press the surfaces together. Leave it to dry before proceeding.



**Step 8 – Glue the surround to the frame**

Place a nice thick line of glue on the frame underneath the surround. Gently move the cone up or down relative to the frame so the surround sits flat on the frame: the shims you put in at step 6 will keep the cone in place. Gently push the surround down on the frame so the glue you put there migrates over to the underside of the surround. Now lift the cone up evenly so there is a gap of at least 1/4" or 10 mm between the frame and the cone. Leave it for 10 minutes or so to go tacky and 70% clear as you did in step 7. Push the cone and surround down evenly and then press the surround down on to the frame all the way around.



**Step 9 – Replace the gasket**

Clean off the old glue from the gasket so the underside is relatively smooth. Place a thin line of glue on top of the surround and one on the underside of the gasket. Leave them both to go tacky and about 70% clear as you did in step 7. Place the gasket back on the frame making sure it is lined up with respect to the mounting holes and press the gasket on to the frame.



**Step 10 – Replace the dustcap**

Remove the shim material from inside the voice coil and discard – make sure you take them all out. Place a nice thin line of glue on the dustcap and spread it around with a cotton bud. Place the dustcap in the centre of the cone. You can clean up any excess glue with a damp cotton bud.

