

**Technical Service Data: Generic Re-Cone Instructions
R & D Department 2007**

The re-cone kit should contain the following parts:

- 1 Cone Assembly**
- 4 Spacer Cards**
- 1 Dust Cap**

You will need to supply:

- A clean work bench free from small metallic particles**
- A Scalpel**
- Masking tape**
- Cellulose based solvent for removing traces of old adhesive**
- A strong non-brittle contact adhesive**
- Medium viscosity clear cyanoacrylate glue (super glue)**
- A pair of side cutters**
- A soldering iron and solder**
- A signal generator and amplifier to test the finished unit**

INSRUCTIONS

Remove the old cone and coil assembly from the basket. As soon as the coil is removed from the magnet it is recommended that pieces of masking tape are used to cover the gap to prevent foreign material entering during the cleaning process. The gap should be covered if the unit is left standing without a cone fitted for long periods of time.

Remove all traces of old adhesive from suspensions and surround lands then clean using a good adhesive solvent.

When all surfaces are clean and dry, place the four spacer cards upright and evenly spaced in the magnet gap around the pole piece.

Apply a small even bead of solvent based adhesive to the bottom suspension land and also to the chassis top surround land at a distance of approximately 2mm from the inside edge.

Place the cone assembly over the spacer cards, ensuring that the cards are on the inside of the coil and the solder tails are aligned with the speaker terminals.

Press down the assembly with even pressure until the suspension contacts with the bead of adhesive on the suspension land. At this stage the adhesive should be starting to cure yet soft enough to penetrate the suspension fabric. Apply even pressure to the suspension joint and the top surround joint so that the adhesive is evenly distributed.

To make sure that the cone assembly is properly aligned visually check that the surround is flat, and also check that no one spacer card is held tighter in the gap than the others. Continue to apply pressure to the adhesive contact points for a couple of minutes until a good even bond is achieved.

Solder the braids to the speaker terminals but ensuring that the leads cannot come in contact with the suspension or the cone. Trim the tails as near to the solder joint as possible.

There are two types of dust cap that are used on standard speaker types. The first has a lip around the circumference edge for you to apply a bead of glue then stick to the cone face. The other will not have the lip so you need to place the dust cap on the cone and apply a bead of glue between the dust cap edge and cone body. Place a weight to the cap and leave to dry for at least 1 hour.

TESTING

The unit should be tested with a continuous sine wave across the operation frequency range. Under no circumstances should frequencies below 100Hz be applied to a midrange unit. Start by using a low level signal and gradually increase the level checking for buzzes or ticking, but ensure that the unit is only driven at high power within it's operating frequency range.