

## **Technical Service Data: LS1815 Recone Instructions**

The re-cone kit should contain the following parts:

- 1 Cone Assembly
- 4 Spacer Cards
- 1 Dust Cap
- 1 Aluminium Ring

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
- A blunt knife, or chisel to remove old aluminium ring

### **INSTRUCTIONS**

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. If both aluminium rings are still attached to the chassis, then the top ring must be removed. The bottom ring should be left in place as an extension of the chassis. Again, clean the top of this aluminium ring ready for the new suspension.

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

The new aluminium ring will be supplied between the double suspension of the new recone kit, so can as such be treated as one.

Apply a small even bead of contact adhesive to the bottom suspension land and also to the top of the lower aluminium ring in the chassis 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, the top surround joint, and the second suspension 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.

Place the dust cap onto the cone, and apply the medium viscosity clear cyanoacrylate glue around the outside of the dustcap.

## **TESTING**

The unit should be tested with a continuous sine wave across the operation frequency range. 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.