

# **LMSCA Technical data sheet**

## **No.4 SIMPLE BEADING JIGS**

### **Oh yes, another idea?**

During beading production for LMS Period II Third Corridor 1501 Derek Mason made a number of beading templates in the shape of 'T's and 'L's. While using these he came up with the idea of making a jig on which all the 'T's, 'L's and 'X's could be located in order to form the quarter round edge to ensure they were all the same profile.

However, 1501 was finished before the jig could be made and consequently the idea didn't progress any further. That was until the NRM's Period 1 Third Open 7828 arrived in the shed and I was looking for something to do. So I thought I might have a go at making Derek's idea for a beading jig a reality.

### **So what sizes of beading are we talking about then?**

There appeared to be two widths, these being 2 1/2" and 1 1/2". It was noted that the 1" h" beading tended to vary by 1/8" and it was therefore decided to go with 1 5/8" as standard. The length of the 'T's, 'L's and 'X's tended to vary quite a bit however, nothing was longer than 7 1/2" consequently the jig was designed to accommodate this length. Interestingly the radius of the quarter round curve was found to vary slightly, but a radius of 2W appeared to be an average fit. Fortunately we also happen to have a tin with the same radius around which to draw!

### **We now have the specifications, so what next?**

The next thing was to decide the form in which our 'universal' beading jig would take. Since the 'T's and 'L's can be formed from an 'X' the jig would be this shape. Consequently an 'X' with the correct beading radii and widths was marked up and cut out on the band saw, the material being 25mm thick plywood. Next some way of securing the blank to the jig was required and so a set of 'end-stops' of various sizes was devised to accommodate not only 'T's, 'L's and 'X's but also the beading widths (1 5/8" and 2 1/2"). The 'end-stops' were made from 3/8" thick hardwood, i.e. the same thickness as the finished beading.

### **Ok, but how does it accommodate slightly different lengths of beading as well?**

In order to accommodate the slight variation in the beading length, the 'end stops' incorporate a recessed slot and a securing bolt thereby butting up to the work piece ends and securing it firmly in place on top of the jig. A nut, bolt and washer arrangement is used for this purpose with the nut being recessed into the underside of the jig.

### **Great, but how is it fastened down in use?**

The only other addition to the jig was a strip of wood to its underside enabling it to be held in a woodworking vice whilst in use with a router.

### **The conclusion?**

A very much simpler and less robust template was used to mass produce the beading which is now fixed to 1501. This low-cost, more robust and simple to use jig will enable the same process to be employed much more effectively and efficiently.

The following photographs illustrate the general jig arrangement:



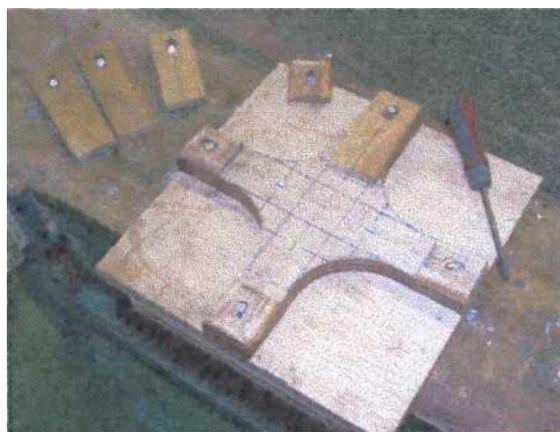
1. The completed jig with the four short 'end-stops' shown in position to accommodate the 'X' blank. Each 'end-stop' incorporates a recessed slot allowing it to be butted up to the blank before being secured in position by the bolt.



2. This view shows the blank secured in position with the four short 'end-stops'.



3. This view shows two of the longer 'ends-stops' in position to accommodate an 'L' shape blank, 1 5/8" wide.



4. This view shows the jig set up to accommodate a 2% " wide 'T' shape blank.