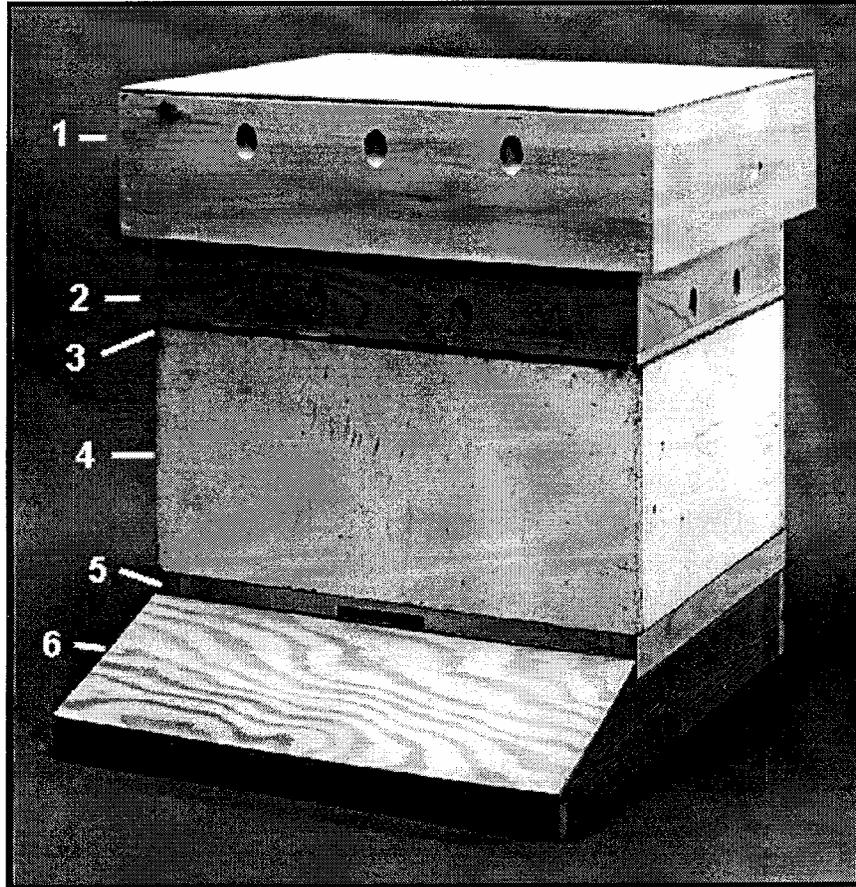


# The Bee Works

## LANGSTROTH MODIFICATION KIT.

### ASSEMBLY INSTRUCTIONS



*Fig 1: Ventilated Roof*

*2: Ventilation Box*

*3: Inner Cover*

*4: Your Box*

*5: Floor and Entrance Block*

*6: Hive Stand*

## **ASSEMBLY OF THE MODIFICATION KIT**

Congratulations on your new purchase. You can be assured that we have your best interests at heart, and if you need assistance, please don't hesitate to call.

We have machined this kit to very close tolerances and so we would like you to take care with the assembly. Please do not bang it together with a few nails, or you will certainly be disappointed with the results.

A few points that we have discovered over the years when working with wood. Nails alone will not give you strong joints, you need glue. We use one of three types depending on availability. Regular yellow carpenter's glue (provided you paint the exterior) or Titebond II (a waterproof glue) or Weldbond any of these will do a good job.

Good square boxes are a must, one easy way to check this is to measure the two diagonals. If they are equal to one another the box is square. Should one side be longer than the other, then push together the long side corners until they are equal. If you have pipe clamps then use those to hold the joints tight, while you nail them.

We do not supply nails or the roof covering, we find the shipping on these items to be excessive. We use 1 1/2" sink head galvanised nails and black tar paper (roofing felt) for the roof covering and large headed roofing nails.

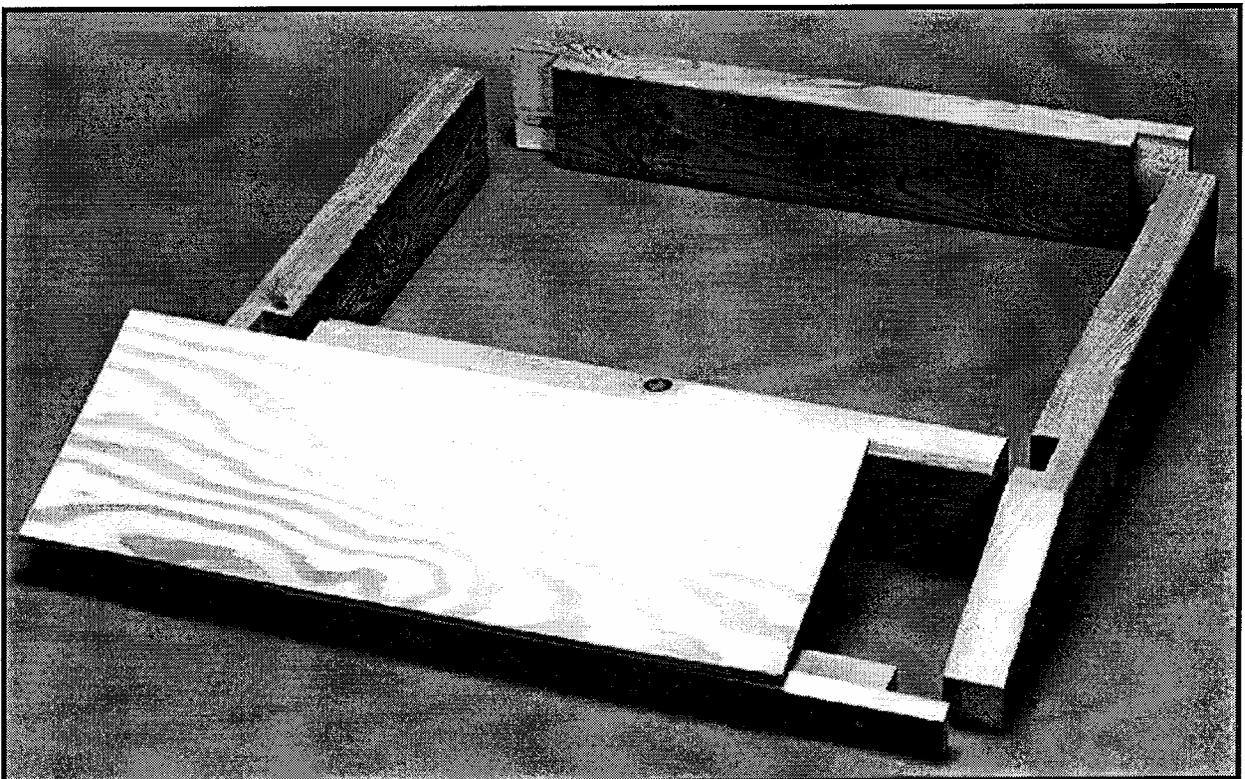
Please note: It is advisable to dry assemble before using glue.

**GOOD LUCK!**

## HIVE STAND

First assemble the parts, 4 pieces of pressure treated 2 x 4's and 1 piece of 1 1/2" x 1 1/2" pressure treated. The assembly is rather obvious if you examine the Photo 1. Nail and glue all joints. Regular 3 1/2" ardox would be a good choice, even better would be galvanised nails.

Do not fix the plywood alighting board yet. This is fixed after the floor is completed, then you can adjust the rear overhang of the floor. Some beekeepers like to heft the back of the hive approaching winter to see how heavy it is. When you have adjusted the overhang (1/2"?) glue and lightly nail the alighting board.

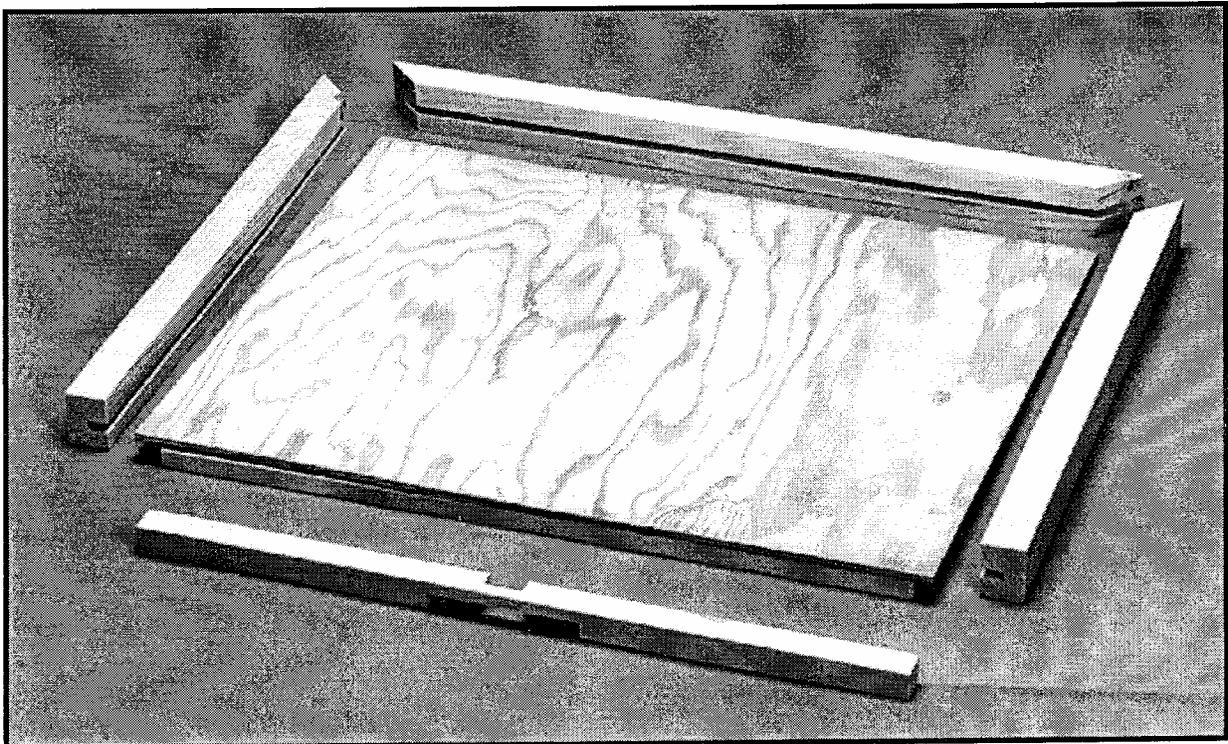


## FLOOR

Assemble parts. Plywood floor 19" x 16". Three grooved 1 1/2" x 1" with mitred ends. The entrance block and the slip to close off under the hive entrance.

Assembling mitres can be tricky, so be cautious. First take one piece the square ended 1 1/2" x 1", glue groove, and fit to the 16" side, flush square to the front of plywood. Now repeat on the other side. Take the piece with the mitre on both ends, and fit between the two pieces you have already fitted. Now measure the diagonals. Finally insert the slip to fill in the space under the entrance block. We will leave it to you to decide where to nail, set aside until the glue dries.

**Do Not Glue in the Entrance Block** It is a press fit.



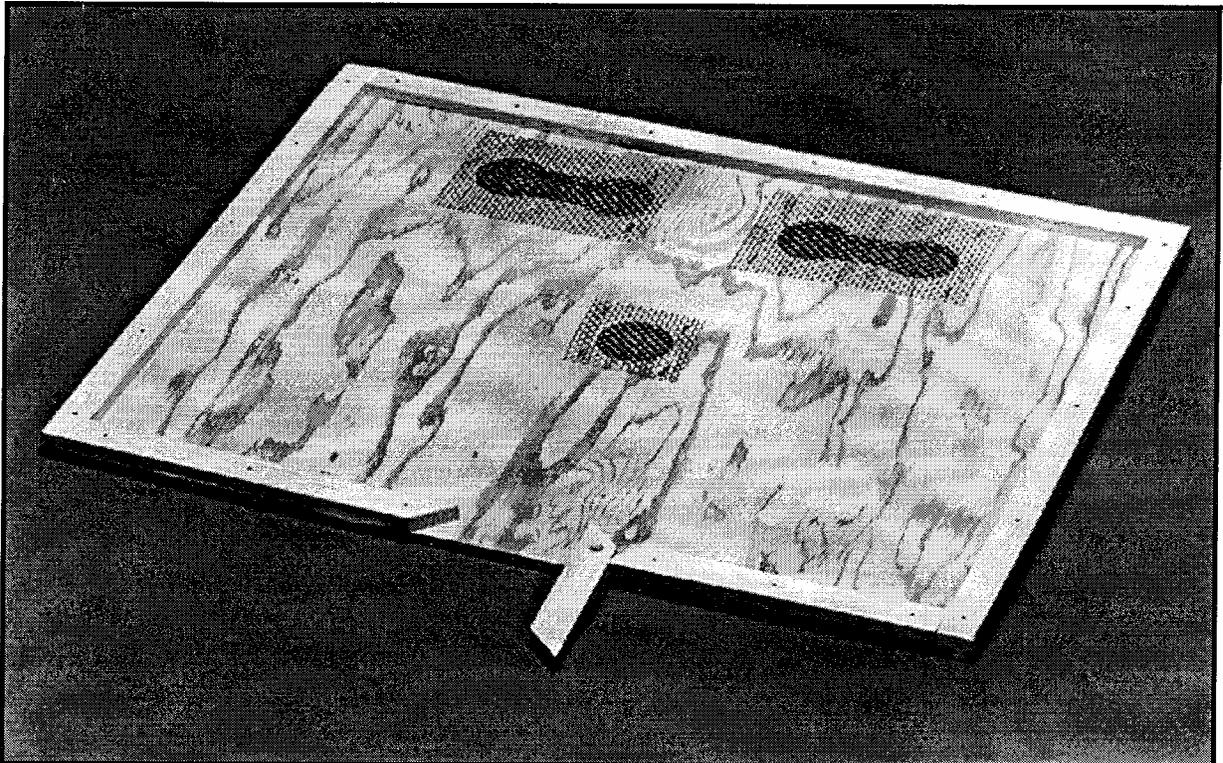
## INNER COVER

We have decided to assemble the inner cover for you.

You will notice the screening tacked down with staples, when the Mod Kit is in place you could remove the staples and just lay the screen over the holes. It would take a big bee to move it aside!!

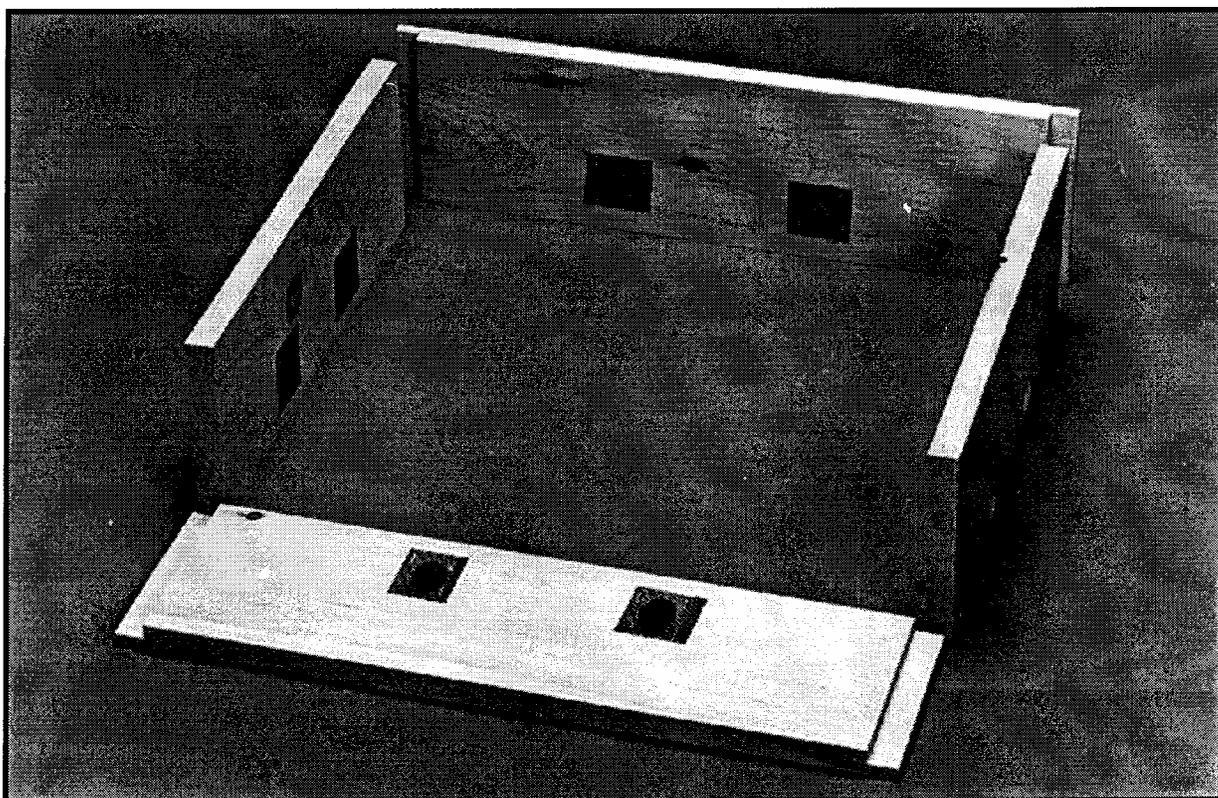
It is better to keep the bees out of this area, if the mesh becomes clogged with propolis, take the screen, place it in the deep freeze for half an hour, the propolis becomes brittle and will come off easily.

The top entrance which should face the front of the hive, should only be used in winter, or you'll have pollen in the honey, making it cloudy.



## VENTILATION BOX

Assemble parts. The ventilation box is just 4 pieces of pine with two screened holes in their lower edge. Glue and nail each edge, make good joints. Measure diagonals. Set aside until glue dries.



## ROOF

Assemble parts as per photograph. First glue and nail all four sides as previous. Check diagonals and equalise. Use four cleats with mitred corners to form a rim inside 2 1/2" up from the lower edge. Finally glue and small nail plywood roof.

To cover the top of the roof. We use two layers of black tar paper (roofing felt) and using 1" roofing nails fix around all edges. Be sure not to cover the vent holes. This should last for a considerable length of time.

Finally two coats of a good exterior latex paint, to keep out the wet.

Congratulations, you now have a complete Mod Kit we hope that you enjoy using it for many years to come.



## **MODIFICATION KIT**

The Modification Kit can be installed on a hive at any time of the year, when you are able to work with the bees.

The fitting is fairly obvious, just remove the existing pieces of equipment and replace with the equivalent Mod Kit pieces.

One area which has caused some questions in the past is the inner cover. You will note it has cleats on one side only, so let's explain our thinking. The normal inner cover is made with cleats on both sides, now with the bee space on top of the frames it makes two bee spaces. This is too much and the bees fill the top of the frames with burr comb causing all sorts of problems. So while the bees are building comb, from early spring to early fall, the new inner cover should have the cleats up, and the flat ply down on top of the frames. Now comes the fall, turn the inner cover over, cleats down, and open the top entrance. This procedure will eliminate the waste and time spent cleaning the tops of frames.

The vent box is easy to use, once the weather warms up turn the box so the holes are at the bottom. Now you have maximum ventilation, come the fall turn the vent box over, holes up underneath the roof overhang.

During deep winter, over the inner cover we use blue polystyrene, this is water proof and will not take up water, which helps to keep the roof area dryer. In colder areas it is advisable to wrap the whole hive in black tar paper to reduce snow melt against the hive and drafts, leaving openings where necessary.

You should see a significant increase in the volume of both honey and brood rearing. If you should have further questions call

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