

Chapter 2

Making a Transportable Cutting Box

Taken from the e-book

Bright Ideas for Carving & Sculpting Eggshells

By Maureen Williams & Lorna Winch.

TRANSPORTABLE CUTTING BOX

Rog and I have constructed a transportable cutting box which is light weight and easy to assemble. The main components of the unit are a set of stackable storage boxes and an exhaust fan. Below are the components and step-by-step



Components

- Starmaid Storemate System 3 pack storage boxes
- Heller 200mm Ball Bearing Exhaust Fan
- Craftwood for side panels
- 500mm length 30mm x 19mm wood for side supports
- 1 mtr length 12mm x 12mm x 1.4mm aluminium angle
- Perspex 590mm x 320mm x 5mm
- · Lid from small insect cage
- 4 x 5mm (3/16") x 15mm (5/8") bolts
- 4 wing nuts to suit bolts
- 4 x 5mm (3/16") x 25mm (1") bolts
- 4 nuts to suit bolts
- 2 mirror fixing brackets
- Light fitting
- Length of 2 core flex
- · Electrical plug
- 11 watt low energy daylight globe
- 2 x 1/2" rubber buffers
- 6 self tapper screws
- 300mm square of air-conditioning foam 3mm thick plus a thicker piece to fit inside the lid of the insect cage.









•Using the template images provided cut two pieces of craft wood for the left and right sides of the box.

Note: The two template images on page 25 need to be resized by 200% and should be printed out onto two sheets of A4 paper. Join the two printouts at the A & B points. If you are using a different box to the one suggested you will need to adjust the sides to fit.







The craftwood can be cut using a Stanley utility knife.

Check the sides fit neatly inside the box.

Cut two lengths of the 30 mm x 19 mm wood with the angle at the top the same as the relevant slope on the side. Attach the supports using 2 self tapper screws in each piece.

If desired, paint the outside of these pieces white





Cut the length of aluminium angle 570 mm long to act as a support for the Perspex across the front. This will be held in place using the mirror supports screwed into the side supports. A bumper screwed onto the front of the upright will stop the aluminium from slipping out from under the mirror support

Remove the lid from the insect cage and use a pair of cutters to clip the lugs off the handle and discard.

Trim the bottom on both ends of the lid so the lid will sit flat on the table.



Unpack the exhaust fan - there is a cardboard template inside the box. Use the template to mark a circle on the bottom of the **middle** storage box

Note: the shallow storage box is not used in the actual cutting box construction - this is for holding any other items you may wish to transport with your cutting box.









Cut out the circle in the bottom of the storage box - a large diamond wheel like the type used for cutting ostrich eggs in a Dremel or Ozito tool is ideal for this. Clean up the edges using a craft knife.

Remove the fan grill for the time being. Locate the fan housing in the bottom of the middle storage box and fasten the locking tabs in place, having the top tab between the centre groove in the box.

Do not over tighten the tabs as you will crack the storage box. Place the storage box with the fan inside the large storage box.







Four lengths of masking tape will be an advantage to hold the two storage boxes together until you get the sides positioned and held in place.

Cut a circle of air-conditioning filter foam approximately 15mm (1/2") larger than the grill size and fasten to the inside of the fan grill using twisty ties to hold it in place so the filter doesn't get sucked into the fan during operation.

Clip the fan grill back onto the fan—hold the fan housing while you do this to avoid the risk of cracking the storage box.



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Position the modified lid of the insect cage in the centre side panel of the large box. Use a marker to outline the opening to be cut out.

This opening allows the cord from the exhaust fan to be pulled through during use and also allows the air extracted from the fan to exhaust outside the box.



Drill 3 more holes in the lid and then fix in place using nuts and bolts.

A small piece of air-conditioning foam inserted between the lid and the box acts as a filter to keep the dust inside the bottom box during operation



Use a large diamond wheel to cut the opening behind the insect lid—clean up the edges with a craft knife.





A small desk lamp with a low energy globe can be used to provide light while you are carving.

Pass the cord out the side of the cutting box between the side panel and the storage box.

Alternative Light Source

The original plans for the cutting box called for a light fitting to be made up and attached through the side of the cutting box.

However, after using the box I found it was easier to use the small table lamp



Measure and mark the location for the light fitting to go through the side of the two boxes.



Use a nut and bolt to fasten two bumpers to the bottom of the large outside storage box so the cutting box sits level and stable when assembled.

They are positioned approximately 25 mm (1") in from the back and side of the box.



Unscrew the cover from the light fitting and use it to mark a circle on the side of the cutting box.



This needs to located down as far as possible from the top of the box so the globe isn't too close and in from the side so it doesn't interfere with the sides when they are in position.

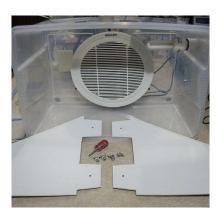
Use a small drill and make a series of holes around the marking for the hole. Use a small drum sander to round out the hole so the light fitting will fit in easily without being too tight as this will be removed for transport



Assemble the Cutting Box

Step 1

Unpack the contents from the storages box.



Step 3

Slip the aluminium angle under the mirror supports and tighten the screws

A couple of strips of non-slip fabric (available from cheap shops) glued to the top edges of the sides will hold the Perspex in place and prevent the wooden sides scratching the surface..



Step 5

Position your Perspex across the sides, resting it against the aluminium angle. A strip of cardboard clipped to the top of the Perspex will protect the eyes from the glare of the light.



Step 2

Locate the left and right side panels and fasten in place using the bolts and wing nuts. Do not tighten these too tightly.



Step 4

Take the cord from the fan out through the side opening. A 1" cut in the air-con foam will allow the cord to sit in place. Push the filter in behind the modified lid.



Additional Supplier Notes for Aussie Eggers.

- The StarMaid storage boxes are available from places like Coles Supermarkets, Sam's Warehouse, K-Mart & Big W.
- The hardware items including the exhaust fan are available from Bunnings. The Heller fan listed is a ball bearing fan (as opposed to a sleeve bearing fan) which allows it to be located vertically rather than horizontally like most fans are positioned.
- The insect cage was purchased from Cheap As Chips in South Australia but a similar item should be available from most cheap shops stocking aquarium & pet supplies.
- The air-conditioning filter foam can be purchased from Clark Rubber.

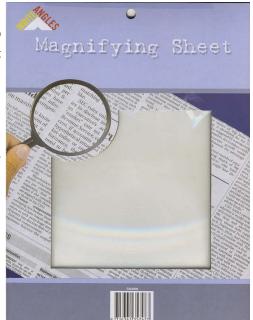
Although this is an expensive foam it is an excellent filter against the egg dust.

A magnifying sheet available from some cheap shops makes an ideal addition to the versatility of the cutting box. This just rests on the top of the Perspex against the aluminium angle strip.

The approximate cost of the materials used to complete the cutting box is \$120

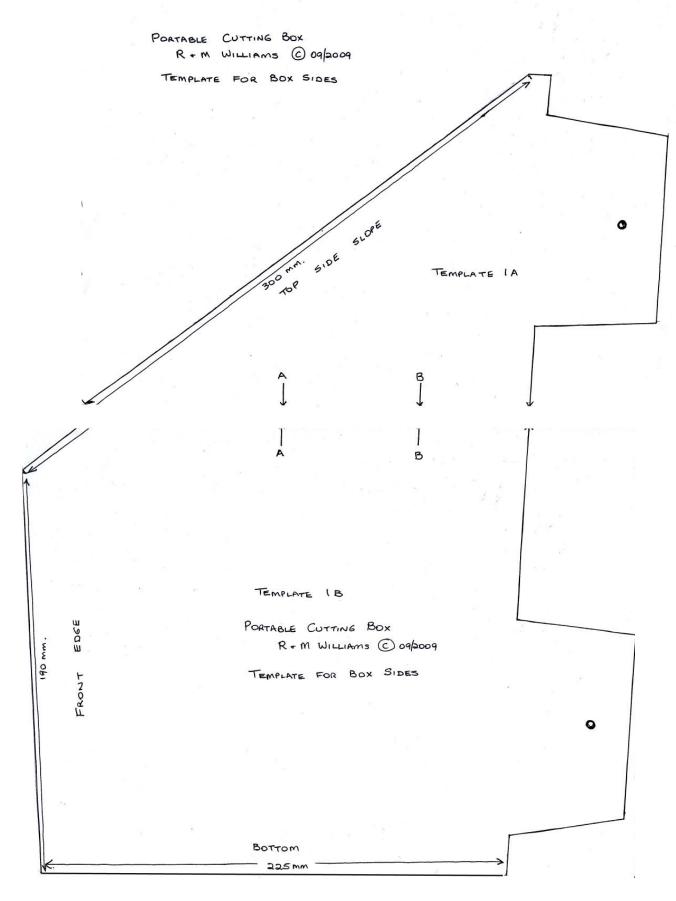
Helpful Tip

A pillowcase is a good idea to transport the Perspex in to avoid the surface getting scratched.



Maintenance Tips for the Cutting Box

- As you work the dust will be drawn through the fan into the large bottom storage box. This will need to be cleaned at regular periods depending on how frequently you use the cutting box.
- Remove the light fitting from the side of the box and take out the storage box holding the fan. This will then allow you to tip out the egg dust into a rubbish bin. A vacuum cleaner is ideal to clean the dust from around the fan. Alternatively, you could use a brush to do this. After you have removed the egg dust wipe the box and around the fan and blades using a damp sponge.
- Also remove the fan grill and rinse the grill and the foam under a running tap. Shake out any excess water before repositioning the fan grill in place. Remember to support the fan while pressing the grill into place.
- There may be a small amount of dust collect on the outside of the fan where you cut your eggs. This can be wiped down with a damp sponge as required.



Note: These template images should be rotated and enlarged in something like Paint Shop Pro by 200% so that they each fit on an A4 size sheet of paper for printing. The overall height of the side needs to fit inside the box that you plan on using.

If you have found the excerpt from this electronic book helpful you may also find our instructional carving DVD's useful as well.

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