Buffet Unit

Written and constructed by Craig Tilley

This buffet is a versatile storage unit for just about anything. The four drawers are perfect for cutlery and utensils, while the two cupboards, with their adjustable shelves, allow plenty of room for storage of crockery and larger items. Alternatively, it would make a very attractive entertainment centre and storage cupboard.

Construction is straight-forward with solid timber used extensively. The panels are biscuit jointed from narrower solid boards. Doors and drawer fronts feature inlaid panels. The buffet features an angled trim around the top edge with a matching trim around the base.

Use radiata pine to build the buffet or a suitable hardwood such as Tasmanian Oak. A creative rustic look can be achieved by using recycled timber, or distressing the surface, if desired. Finish the buffet with a couple of coats of clear estapol to protect the timber and create a hard-wearing finish.

Component Specifications

All dimensions are in mm.

Part	Description	Quantity	Width	Thickness	Length
A*	Top and base	2	500	20	1400
B*	Sides and dividers	4	500	20	780
C	Legs	4	42	42	50
D	Infills	6	20	20	440
E	Front trim pieces	2	40	30	1460
F	Side trim pieces	4	40	30	530
G*	Shelves	4	470	20	439
H	Door frames	4	42	20	736
I	Door frames	4	42	20	436
J	Door panels	2	382	12	682
K	Drawer sides	8	140	20	470
L	Drawer fronts & backs	8	140	20	396
M	Drawer bottoms	4	428	4	468
N	Drawer frames	8	42	20	436
O	Drawer frames	8	42	20	183
P	Drawer panels	4	129	12	382
Q	Runners	8	20	12	480
R	Rear panel	1	810	4	1390
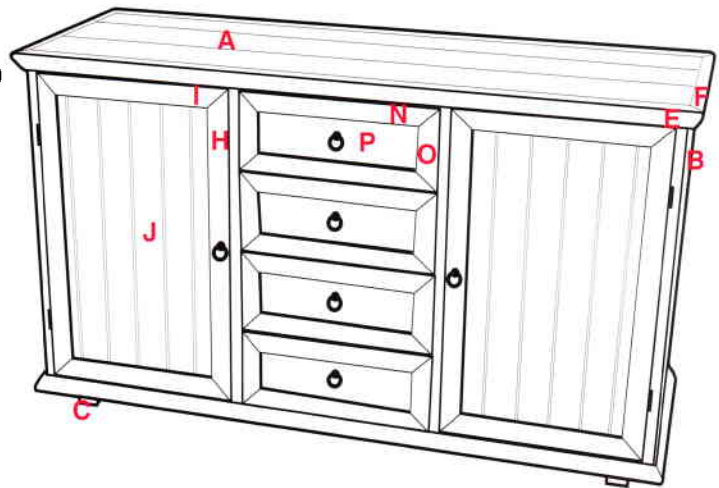
*THESE COMPONENTS ARE EDGE JOINED AS REFERRED TO IN THE MATERIAL SHOPPING LIST

Tool Requirements

1. ESSENTIAL: Triton Workcentre with power saw, Triton Router Table, Triton Biscuit Joiner, Triton Bevel Ripping Guide, router and router cutters, bar or pipe clamps, electric drill and drill bits, hammer, tape measure, try square, screwdriver, steel rule, glue brush, power plane, sanding block & sandpaper sheets, dust mask, eye goggles, ear muffs, pencil, C or F clamps, web or strap clamps, dowel jig.

2. USEFUL: Triton Sliding Extension Table, Triton Random Orbital Sander and sanding discs, drill press, long F clamps with deep throats.

Construction details

1 The top and base (A), are each made from edge joining two 190 x 20 and one 140 x 20 boards.

Cut the six pieces needed, overlength to 1500mm on the Workcentre in crosscut mode (Fig. 1).

Fig. 1
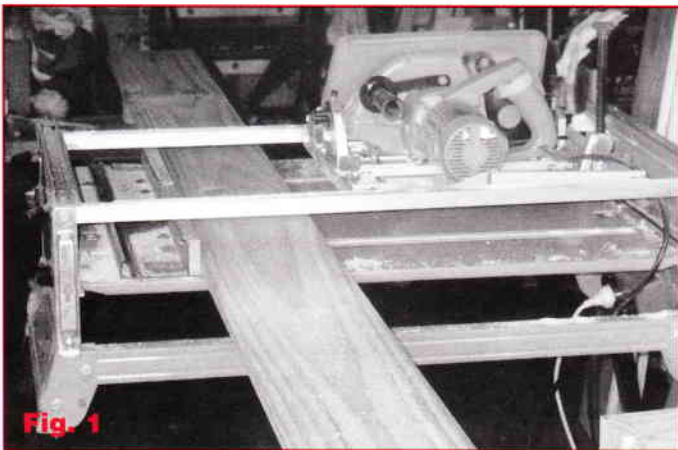
Edge join them with biscuits to make the top and base panels. Lay the boards with their edges together and mark them for 7 biscuit slots. Cut the biscuit slots on the Triton Biscuit Jointer (Fig. 2) and glue up the two panels. Clamp them with bar or pipe clamps (Fig. 3).
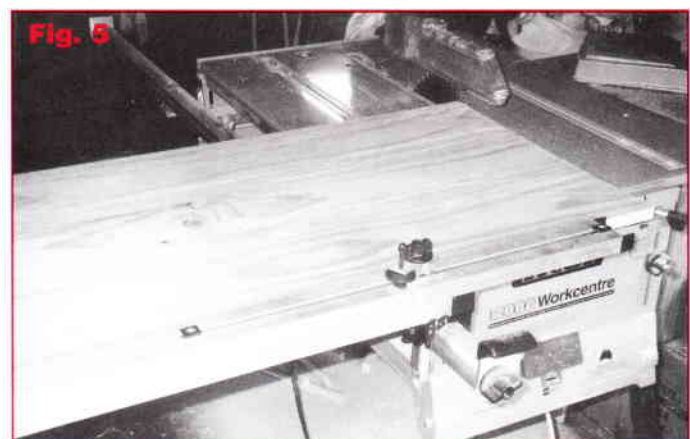

Fig. 2

Fig. 3

2 Make the two sides and two dividers (B) in the same way as the top and base. Cut the boards overlength to 800mm.
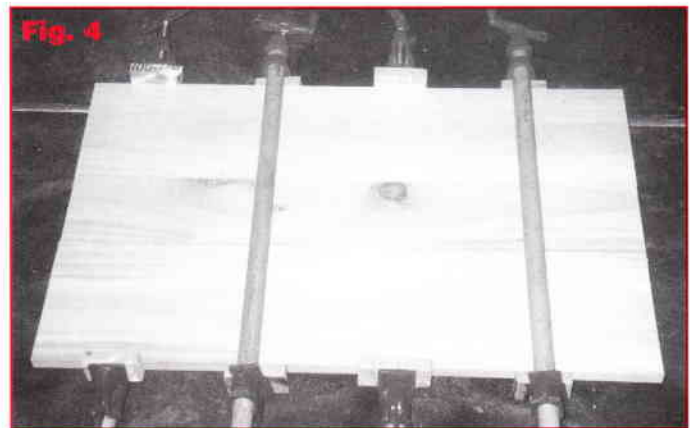
Fig. 4

Mark and cut the biscuit joints and glue and clamp the boards together (Fig. 4).

3 When the top and base panels are dry, remove the clamps and sand the joints smooth and level.

Rip the panels to width on the Workcentre with the fence set to 500mm.


Fig. 5

Cut them accurately to length using the Workcentre in crosscut mode or in tablesaw mode with the Sliding Extension Table attached (**Fig. 5**).

Do the same with the two sides and two dividers.

4 Cut the four legs (**C**) to length on the Workcentre using the protractor and fence.

Use a spacer against the fence so you don't have to mark and line up each piece. Set the fence to 50 mm plus the thickness of the spacer (**Fig. 6**).

Fig. 6
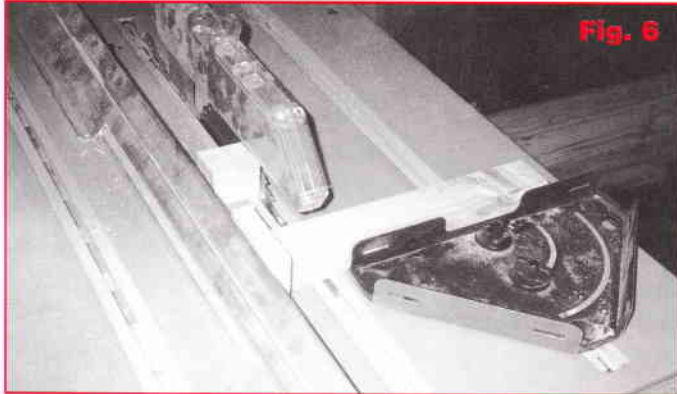
The legs are installed under the base with two 40mm woodscrews screwed through the base into the legs. Position the legs 50mm in from the sides of the buffet and 50mm from the front and back edges. Drill clearance holes then clamp each leg in position and drill pilot holes (**Fig. 7**).


Fig. 7
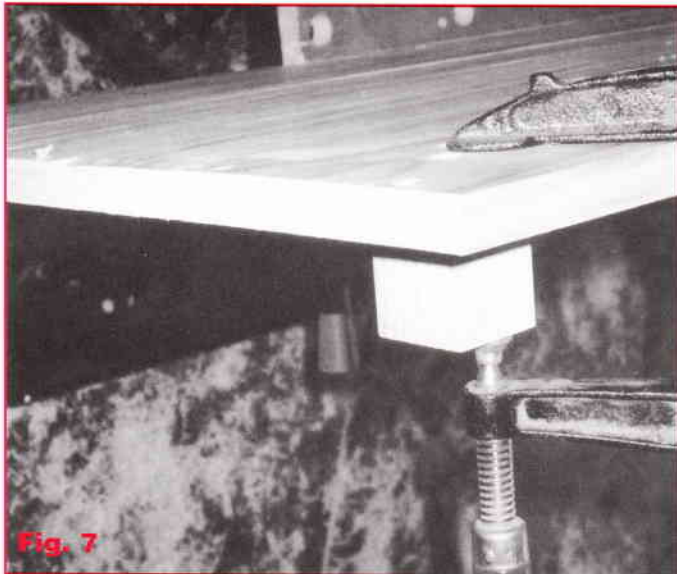
Remove the clamp and glue and screw the legs in place.

5 It is too difficult to join the sides, dividers, top and base with biscuits, due to the size of these panels. It is best to use dowels or screws to hold them together.

5 dowels can be used at each top joint as they will be concealed from view. 5 screws can be used at the bottom joints as they screw through the base from underneath and are therefore out of view too.

Mark on the top and base where the joints will be positioned. The dividers are installed 460mm from each end of the top and base. Drill clearance holes for the screws. Drill holes for the dowels using a dowel jig (**Fig. 8**).

Fig. 8
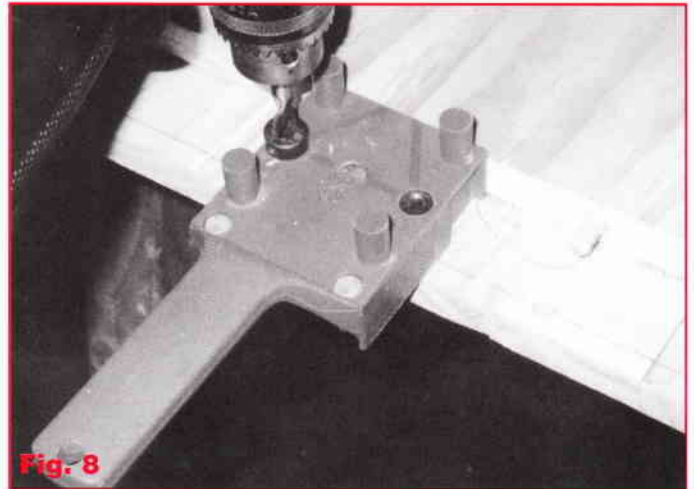
6 The sides and dividers have a series of holes drilled in them for the shelf supports that hold up the shelves.

Make a template for the holes by drilling a series of holes in a 780 x 40mm piece of scrap timber. Start the holes 120mm from the top and drill a hole every 30mm, finishing with the 19th hole, leaving a 120mm space at the bottom (**Fig. 9**).

Fig. 9 Fig. 10
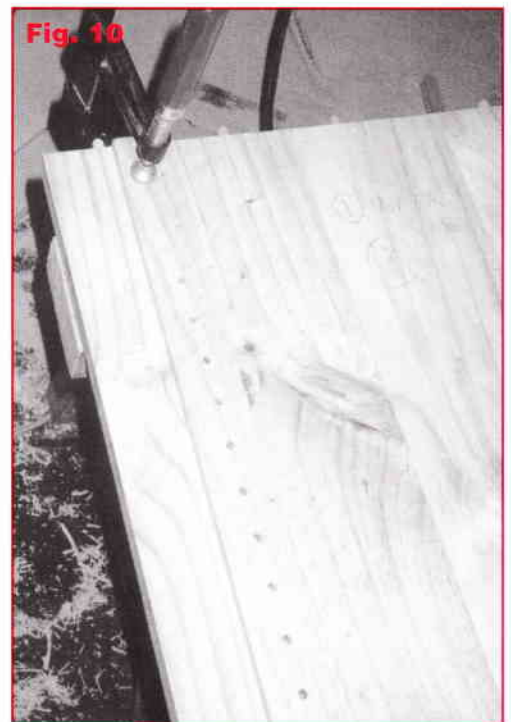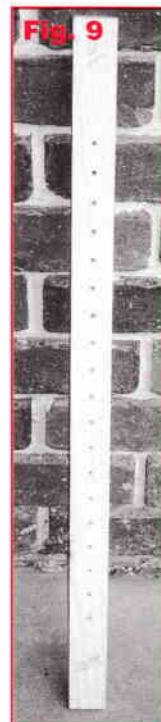
Clamp the template in place on one of the side panels, 50mm from the front edge (**Fig. 10**). Drill through the template and into the side panel to a depth of 10mm to create the holes for the shelf supports. Repeat the process with the template positioned 50mm from the back edge of the side panel.

Repeat the process for the other side panel and for both dividers.

7 Glue and screw the base to the sides and dividers using five 40mm woodscrews at each joint, then glue the top dowel joints together.
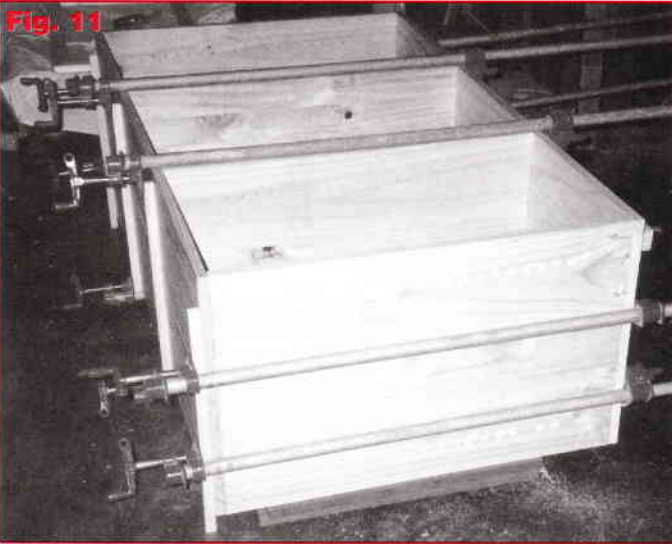

Fig. 11

Clamp these top joints using bar or pipe clamps. Use battens as clamping blocks at the top to pull the dowel joints together (**Fig. 11**). Use long F clamps with deep throats if you have them for clamping the divider joints.

When the glue is dry, remove the clamps and sand the joints smooth.

8 Cut the infill parts (**D**) from 42 x 20 timber by ripping it down the centre to make two pieces roughly 20 x 20 (**Fig. 12**).

Fig. 12

Cut the infills to length. They fit between the sides and dividers and between the dividers at the front of the buffet. They are glued and screwed in place with three 30mm woodscrews for each piece (**Fig. 13**).

Fig. 13
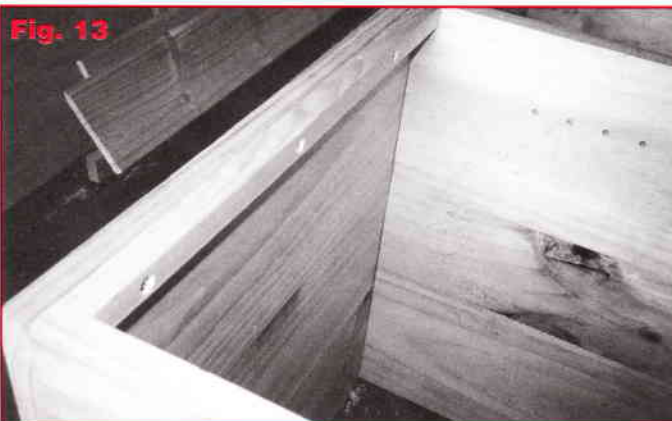
Once they are installed, drill three screw clearance holes in each piece for the 40mm woodscrews that will attach each front trim piece to the front of the buffet.

9 The trim (**E** and **F**) are cut from 42 x 42 timber. Cut them overlength on the Workcentre and then rip them to a width of 30mm.
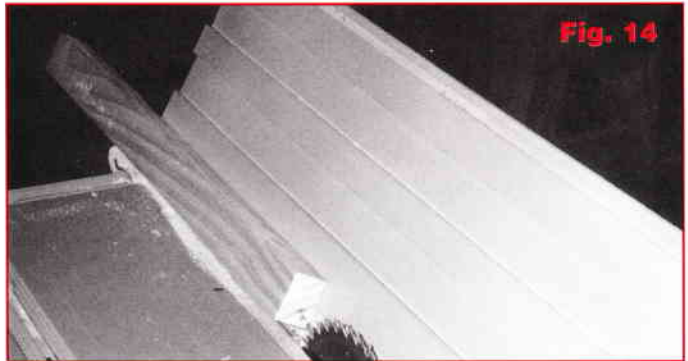

Fig. 14

Install the Bevel Ripping Guide and lock it in place at 5mm. Set the angle to 60 degrees at the front and back. Pass the trim through the saw (**Fig. 14**) and sand or plane the cut faces smooth.

Round over the edge of the trim with a rounding over bit in the router mounted on the Triton Router Table.

10 Mitre both ends of the long trim pieces at 45 degrees on the Workcentre using the protractor.

Attach the top and bottom trim pieces to the buffet with glue and nine 40mm woodscrews into each piece screwed from inside the buffet through the infills (**Fig. 15**).

Note: If you don't want the screwheads to be visible inside the cabinet, use shorter screws, counterbore the heads slightly, and cover them with wood filler later.

Fig. 15
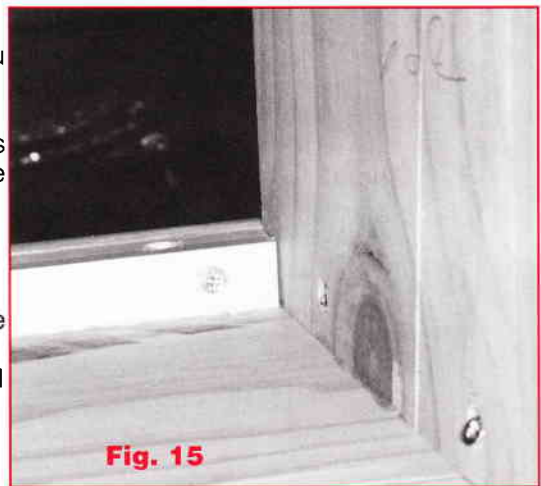
Fig. 16

The side trim pieces have their front end mitred, but their rear end is cut at 90 degrees (**Fig. 16**). Attach them with four 40 mm woodscrews each, screwed from inside the buffet through the sides into the side trim pieces.

11 Make the shelves (**G**) from edge joining two 140 x 20 and one 190 x 20 boards. Cut them overlength at 450mm on the Workcentre in the crosscut mode.

Fig. 17

Fig. 18

Edge join the pieces with three biscuits to make each shelf (**Fig. 17**). Glue and clamp them together.

When they are dry, sand the joints smooth and cut them to their finished length of 439mm.

Insert a set of shelf supports into their holes and test the fit of each shelf (**Fig. 18**).

12 Cut the door frames (**H** and **I**) to length and mitre the corners on the Workcentre using the protractor set to 45 degrees (**Fig. 19**).

Fig. 19

Cut a 12 mm deep x 15mm wide rebate in the rear face by making two cuts on the Workcentre in table saw mode. Set the saw blade to a height of 15mm and the fence to 8 mm. Remove the blade guard and make the first cut by passing the pieces through the saw (**Fig. 20**). **Caution:** Take great care with your hand positions when the blade guard is removed. Rehearse the cuts with the saw power off if need be.

Fig. 20

Readjust the fence to 28mm and lower the blade height to 12mm and make the second cut. This should create the desired rebate (**Fig. 21**).

Fig. 21

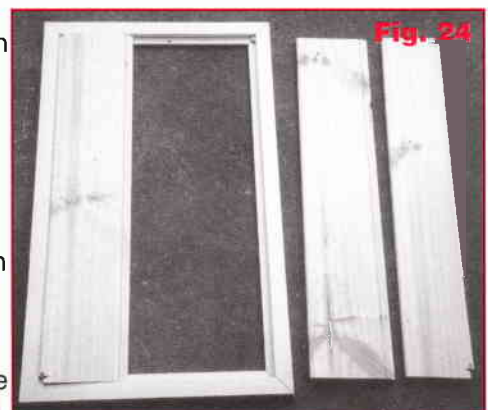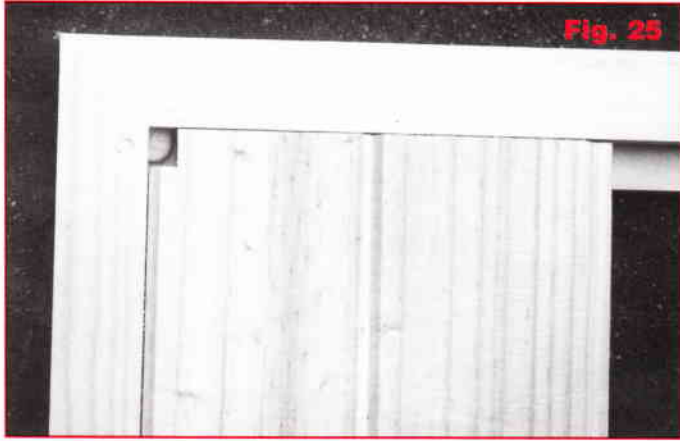Alternatively, use a straight cutter in the router to cut the rebates.

13 The door frames are assembled with a biscuit at each corner, so cut the biscuit slots next on the Biscuit Jointer (**Fig. 22**).
Note: If the biscuit slots extend into the rebates you will need to notch the corners of the door panels to avoid them.

Fig. 22

Fig. 23

Assemble the door frames with glue and clamp them together using web or strap clamps (**Fig. 23**).

The door panel (**J**) is made from lining boards (**Fig. 24**). Cut them to length, notch the corners to avoid the biscuits (**Fig. 25**) and glue and clamp them in place with F or C clamps (**Fig. 26**).
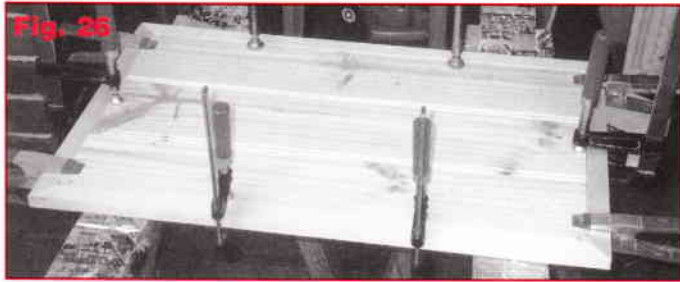

Fig. 24

Fig. 25

Fig. 26

Note: Make sure they are clamped together on a smooth, level surface so they glue up perfectly flat. Select straight wood for the door frame parts so the doors will close flush with the when hung.

14 Hang the doors with hinges positioned 120mm from the top and bottom of the doors.

Add a door handle positioned in the centre of the door frame (**Fig. 27**).
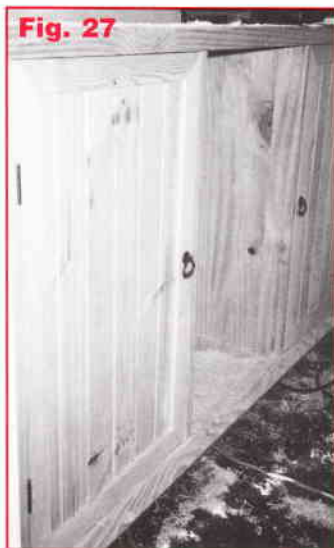

Fig. 27

Fig. 28

A magnetic catch adjacent to each handle will hold the doors shut. Mount the catches against the dividers (**Fig. 28**).

15 Cut the drawer parts (**K** and **L**) to length on the Workcentre in crosscut mode. Cutting the parts in pairs will ensure they are identical in length.

Each corner of the drawers is joined with two biscuits. Mark the parts for these joints and cut the biscuit slots (**Figs. 29** & **30**).

Fig. 29

Fig. 30

16 The drawer sides have a 20mm wide x 10mm deep rebate centrally placed in their outside face to house the drawer runners which are screwed to the dividers later.

Fig. 31

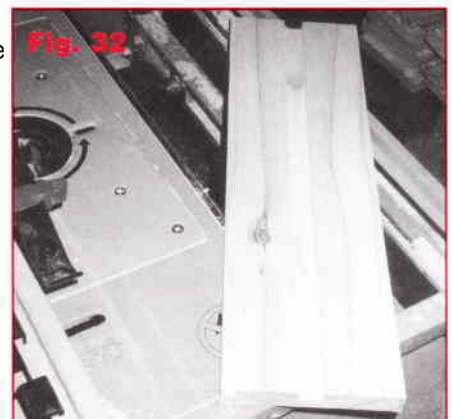Cut these rebates on the Router Table using a straight cutter (**Figs. 31** & **32**).

Fig. 32

17 Assemble the drawer parts with glue and clamp them together (**Fig. 33**).

Fig. 33

Cut the drawer bottoms (**M**) on the Workcentre (**Fig. 34**) and nail them in place using 25mm flat head nails (**Fig. 35**).
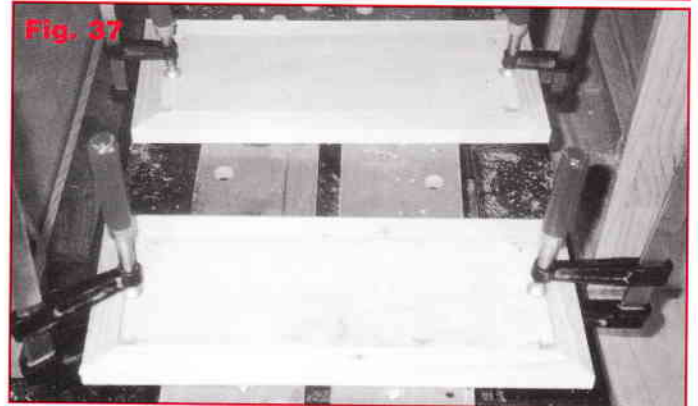

Fig. 34

Fig. 35

18 The drawer fronts are made from four pieces (**N** and **O**) in the same way as the door frames. Cut the parts to length and mitre the corners on the Workcentre using the protractor set to 45 degrees.

Cut a 12mm deep x 15mm wide rebate in the rear face by making two cuts on the Workcentre in tablesaw mode as for the door frames. **Caution:** Remember to take care with your hand positions when the blade guard is removed. Alternatively, use a straight cutter in the router to cut the rebates.

19 Assemble the drawer fronts with glue and biscuits (**Fig. 36**) and clamp them together using web or strap clamps.

The front panel is made from 12mm plywood (**P**). Cut the pieces to size and glue and clamp them in place with F or C clamps (**Fig. 37**). Alternatively, you may prefer to use more lining board inserts to match the doors.

Fig. 36

Fig. 37

20 Attach the drawer fronts to the drawer frames with glue and two 40mm woodscrews screwed through the inside of the drawers into the drawer fronts (**Fig. 38**).

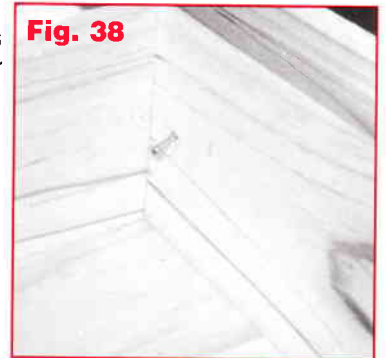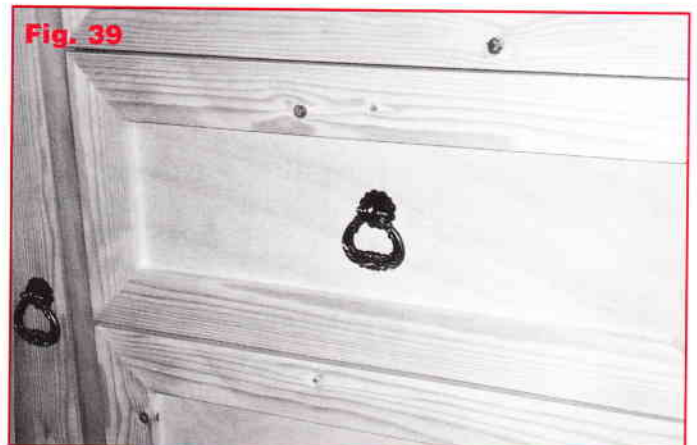Mount the drawer handles in the centre of each drawer front (**Fig. 39**).


Fig. 38

Fig. 39

21

The drawer runners (**Q**) are cut from 42 x 20 timber. Cut them to length first, then rip them to a width of 12mm.

Drill and countersink four screw holes in each runner then screw them into the dividers with 25mm woodscrews (**Fig. 40**).

Fig. 40

Install one pair of runners at a time starting from the top. The first pair should be about 84mm from the top of the divider. Screw them in position and test the first draw.

The next and subsequent pairs of runners should be spaced about 165 mm apart. Check to make sure each drawer runs smoothly without binding, that it closes flush with the front of the buffet and that the gap between each drawer and the buffet dividers and the drawer above is 1-2mm (**Fig. 41**). Adjust the location of each pair of runners if needed (**Fig. 42**).

Fig. 41

Fig. 42
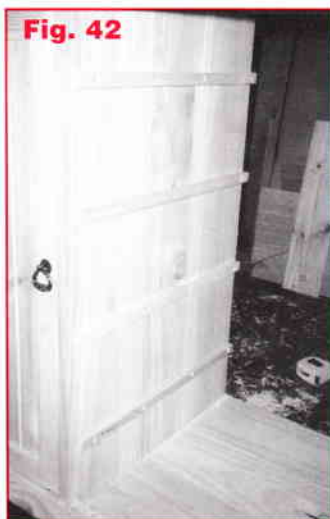
Remove each pair of runners and glue and screw them in their final positions.

Fig. 43

Fig. 44

Fig. 45

22

Cut the back panel (**R**) to size allowing a 5mm gap between the edges of the panel and the edges of the buffet to conceal it when the buffet is viewed from the front.

Install it with glue and 25mm flat head nails, nailed into the rear edges of the buffet (**Fig. 43**).

23

Sand the project smooth and dust off all parts thoroughly. Remove all hardware and apply two coats of your choice of finish.