

Kitchen Dresser

Designed and Constructed
 by Tony Judge

This is a traditional kitchen dresser, which could grace either a large country-style kitchen or a formal dining room. The timbers used in our example were Tasmanian Blackwood and Tasmanian Oak, but any furniture quality timber would be suitable.

This project was designed for us by a professional craftsman, and uses classic joinery techniques. The construction is quite complex in some parts, and will require a substantial amount of time. You will need both familiarity with Triton techniques and operations, and experience in basic cabinet making skills acquired in the making of previous woodworking projects. The components are illustrated in detail to aid you, but knowledge of how to shape the components is assumed, unless an unusual operation is specified. While the Workcentre and its accessories will be the primary tools in the manufacture of this item of furniture, some skill with hand tools is necessary. Your Workcentre, saw and router also need to be set up for optimum accuracy. (Your Operating Manual has details). Sharp blades and cutters are necessary.

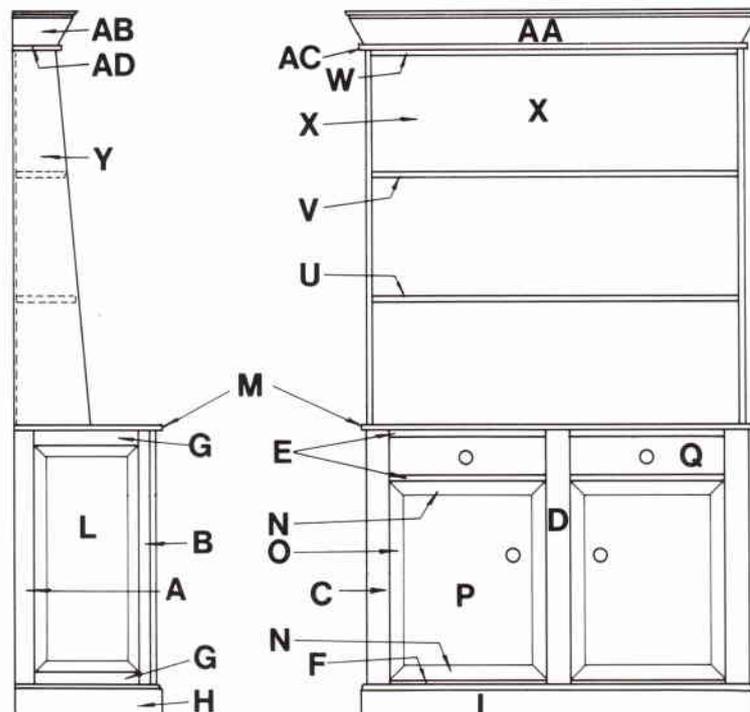


Component Specifications *All dimensions are in mm*

The majority of the components are dimensioned in the detail drawings. The items listed below are not fully detailed.

Part Description	Quantity	Width	Thickness	Length	Part Description	Quantity	Width	Thickness	Length
CABINET CASE					DRAWERS (2)				
H Skirting	2	95 x	19 x	434	S Back	2	90 x	12 x	421
I Skirting	1	95 x	19 x	1164	T Bottom (Ply)	2	345 x	6 x	420
L Side Panel	2	320 x	12 x	690	RACK				
M Top	1	445 x	35 x	1215	X Back (Ply)	1	1100 x	10 x	1100
AE Cabinet Back (Ply)	1	787 x	4 x	1128	AC Cornice Base	1	35 x	19 x	1140
AF Cabinet Shelf (Ply)	1	393 x	10 x	1088	AD Cornice Base	2	35 x	19 x	140
AG Cabinet Floor (Ply)	1	387 x	10 x	1088					

NOTE: Use the component specifications as a guide only. Check measurements and cut to exact size as construction proceeds.



Construction Details

Tool Requirements

1. ESSENTIAL Triton Workcentre and your power saw, Triton Router Table and your router*, Triton Extension Table, pencil, measuring tape, router bits ($\frac{1}{4}$ " diameter straight flute, 10mm diameter straight flute, 10mm radius rounding-over bit, dovetail taper bit, Roman Ogee Bit), screwdriver, hammer sandpaper, chisels, end-grain jig (See Jig Guide), bar and sash clamps.

A special jig is also needed to cut the bevels on the door and side panels; this jig is described in the text. A piece of scrap timber (minimum 40 x 19 x 650) is needed.

2. USEFUL Mitre corner clamp, mitre square.

*Note: Instructions are written for use of $\frac{1}{2}$ " routers. Minor amendments to procedures may be needed for $\frac{1}{4}$ " routers.

Material Shopping List

1. WOOD 12mm Panelling: Panels L and P are made from solid timbers. We suggest using 12mm V-joint panelling, with the tongues and grooves and decorative grooving removed. Fasten together with glued edge-butt joints.

The quantity needed will depend on the type of panelling used. Our example used Tasmanian Oak panelling, ripped down to 120mm wide.

4mm Plywood: 1 @ 1800 x 900mm (cabinet back).

6mm Plywood: 2 @ 500 x 400mm (drawer bottoms – offcuts will be suitable).

Veneered 9/10mm Plywood: 1 @ 2100 x 1200mm (cabinet shelf, cabinet floor, rack back)

Select seasoned furniture timber: Because of the complexity of this project, and in the absence of standard dressed timber sizes, we suggest you determine your own requirements in this area.

If you intend to purchase cabinet timbers dressed specifically to size for your project, it is advisable to simply provide your timber supplier with a list of the components required, and let him decide how to best supply it.

2. FASTENING: Wood glue; Woodscrews: 9 x 20mm/8G, 20 x 15mm/4G, 12 x 30mm/8G, 3 x 40mm/8G, 3 x 55mm/8G; small brads.

3. OTHER: (4) knobs (our example used 30mm dia. brass); (4) 50 x 15 brass hinges, (2) magnetic catches, (7) 6mm dowels.

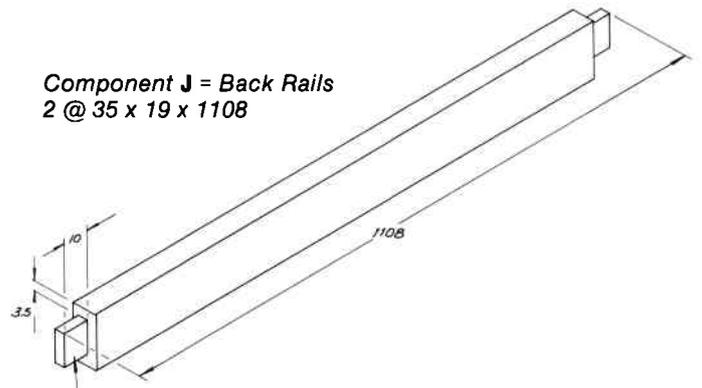
A packing piece of 19mm particle board (or a bevel cutting – router platform, as per the Jig Guide), is needed for the bevel cutting required.

4. FINISHING: See appendix on finishes.

A clear polyurethane satin or gloss finish would be satisfactory.

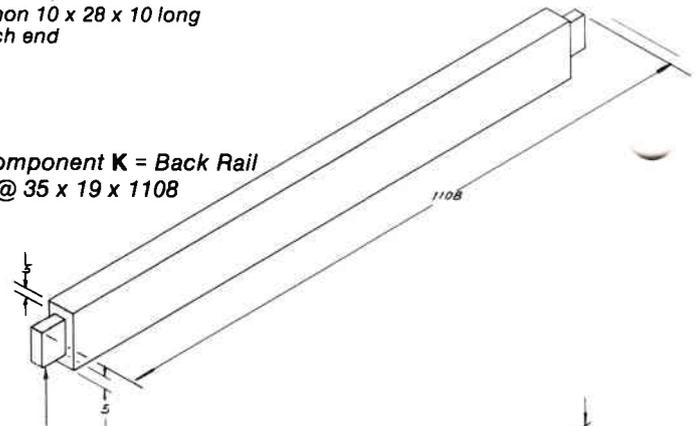
When finishing a large slab section like the case top M, it is important to apply the finish to all surfaces (including the bottom) to prevent warping.

Component J = Back Rails
2 @ 35 x 19 x 1108



Tenon 10 x 28 x 10 long
each end

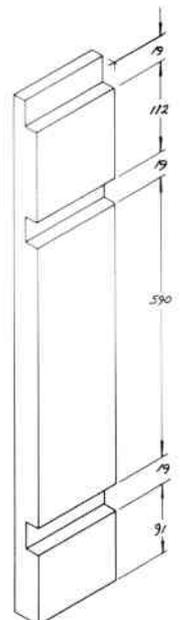
Component K = Back Rail
1 @ 35 x 19 x 1108



Tenon 10 x 25 x 10 long
each end

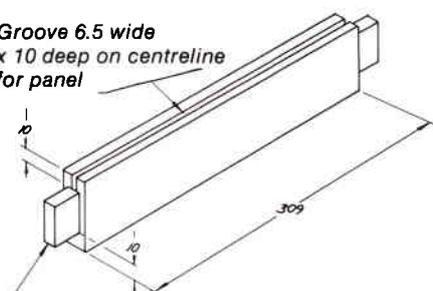
Component D = Stile
1 @ 70 x 19 x 850

Note:
The spacing of these full width grooves are the same as those on 'C' grooves are to be 10 deep



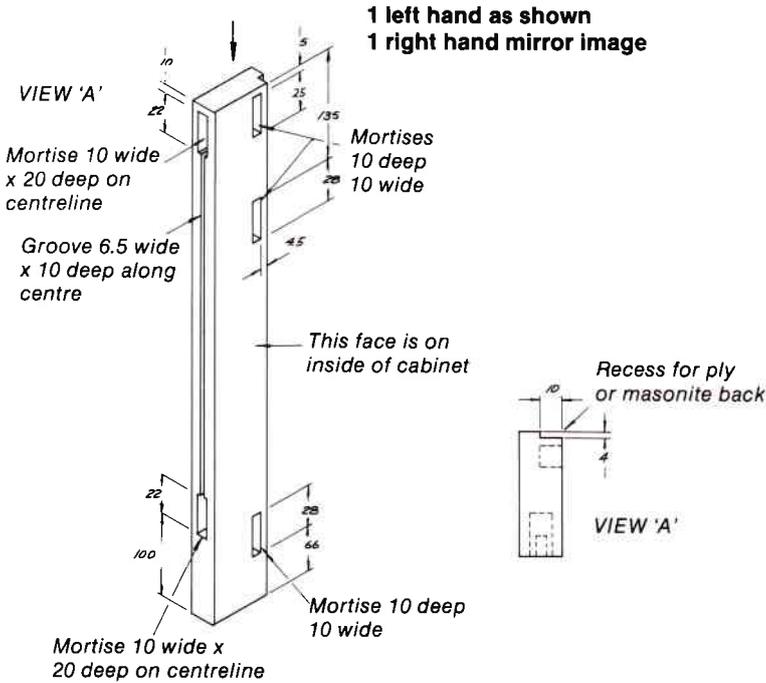
Component G = Side Rails
4 @ 42 x 19 x 349

Groove 6.5 wide
x 10 deep on centreline
for panel

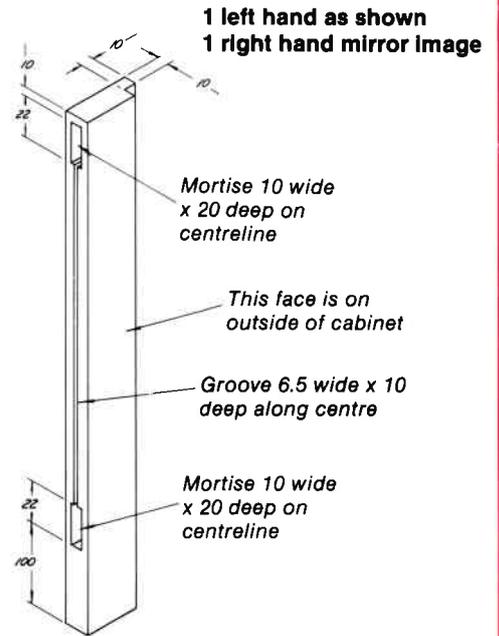


Tenon, 22 x 10 x 20 long
on centreline at both ends

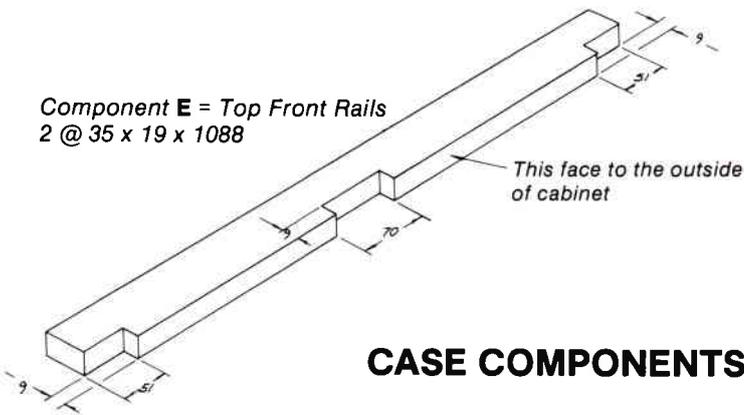
Component A = Stile
55 x 19 x 850



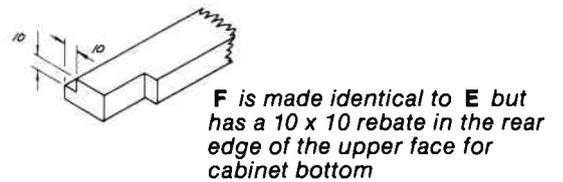
Component B = Stile
42 x 19 x 850



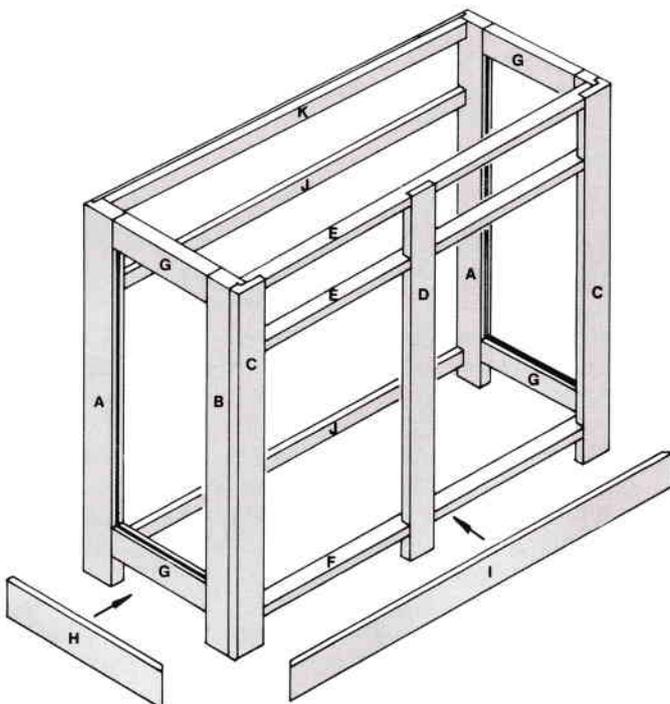
Component E = Top Front Rails
2 @ 35 x 19 x 1088



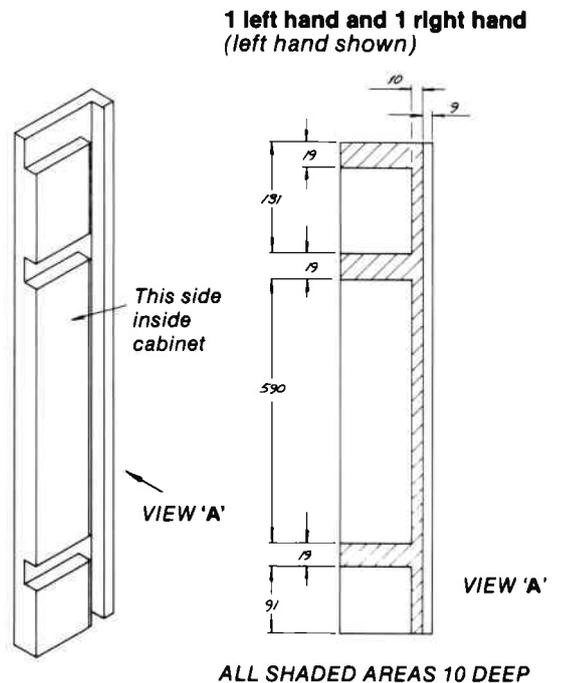
Component F = Bottom Front Rail
1 @ 35 x 19 x 1088



CASE COMPONENTS



Component C = Stile
70 x 19 x 850



Construction Details

General Points

1. When routing surfaces which can be seen after construction, proceed with small cuts to reduce the likelihood of tear out.
2. Where the terms "right side - left side" are used, they refer to your right or left when facing the front of the dresser.
Several of the components are made mirror image for opposite sides of the dresser. Where this is so, the left side component is illustrated and the drawing is noted "right side mirror imaged".
3. After cutting to length, select and mark the best face of your timber before the shaping operations commence.
4. Check fit the tenon-mortise in each case. You may need to trim the end of the tenons for clearance.

I In the crosscut mode, cut to exact length: components **A** (2), **B** (2), **C** (2), **D**, **E** (2), **F**, **G** (4), **J** (2) and **K**. Code each length for identification.

Cut the pieces for the side and door panels **L** and **P**, and the pieces for the top **M**, slightly oversize.

Raise the saw and cut rebates in components **E** (2) and **F**.

Glue and clamp the panel pieces and top pieces to make up **M**, **L** and **P**.

- 2** Convert to the tablesaw mode to:
- Trim **M**, **L** and **P** to correct size.
 - Make tenons on **G**, **J** and **K**.
- Rebate edges of components **B** (one mirror imaged).
 - Rebate edge of component **F**.
 - Rebate backs of components **A** (one mirror imaged).

3 With the router in the trenching mode, and a 10mm straight flute, make 19mm wide trenches in components **C** (2) and **D**. Note trenches in **C** are not full width, and are mirror imaged.

Convert to the shaper table mode. Use the 10mm straight flute to:

- (a) Rout mortices in **A**. (5 mortices in each - mirror imaged components).
- (b) Rout mortices in **B** (mirror imaged components).
- (c) With the 1/4" straight flute, rout the slot in components **A** (2), **B** (2) and **G** (4) for the side panels.
- (d) Use the same settings to rout a slot in the timber from which **N** (4) and **O** (4) are to be made, for the door panels.
- (e) Rout trench in components **C**.

4 Temporarily fit components **A**, **B** and **G** (2) together for each side of the cabinet (round over the tenon ends). The 1/4" panel slot faces inwards all round.

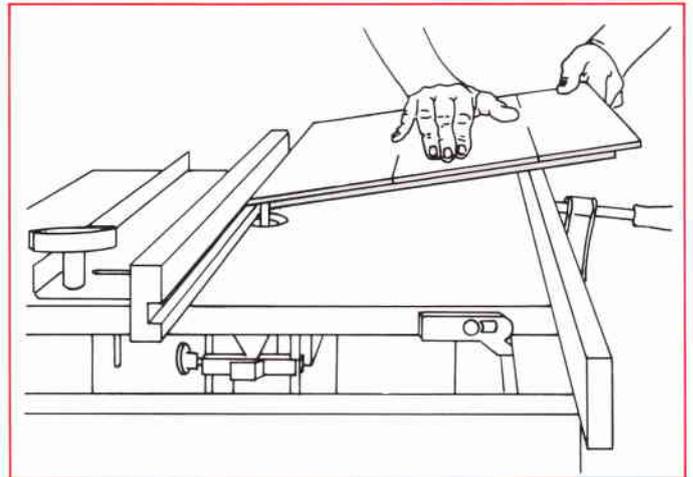


FIGURE 1

Mark where the inward facing edges of **A**, **B** and **G** meet. Note the location of each piece and identify adjoining faces before separating.

With the 10mm radius rounding over bit, round over the edge of components **A**, **B** and **G** which will be on the outside of the cabinet surrounding the panel. Stop the round over on **A** and **B** where they meet with **G**.

Raise the cutter approximately 2mm to produce the edge shown on the component drawing of **N** and **O**. Cut this edge on the timber from which components **N** and **O** are to be made (adjacent to the slot produced in Step 3 (d)).

Also put this edge on the timber from which plinth components **H** and **I** are to be made.

5 The panels **L** (2) and **P** (2) require a stepped bevel on their edges. The operations are all performed with the outside face of the panel face down, using a special "jig". **Figure 1**. The main component of this jig is made from your piece of scrap timber (40 x 19 x 650) as follows.

With the router still in the shaper table mode and a 10mm straight flute, cut a trench 10mm deep, 10mm in from the edge of the 40mm face.

Proceed as follows:

- (a) Rebate 12mm wide and 6.5mm deep on all edges of the panels to leave a shoulder 5.5mm thick, 12mm wide. (See Door Components)
- (b) Screw or clamp the "jig" made above to the router fence.
- (c) Clamp a straight edged piece of material 905mm long to the side of the Workcentre so that it protrudes evenly 35mm above the surface of the router table.
- (d) Raise the router bit to be level with the bottom of the groove in the "jig" attached to the fence. The fence should be parallel to the sides of the table with the jig just clear of the cutter.
- (e) With the protruding rebated edge of the panel resting in the jig groove and the face of the panel resting on the attachment described in (c) above, pass the panel over the router. Repeat for all 4 edges of each panel.
- (f) Repeat (e) above, adjusting the fence further away from the cutter, and widening the bevel until a

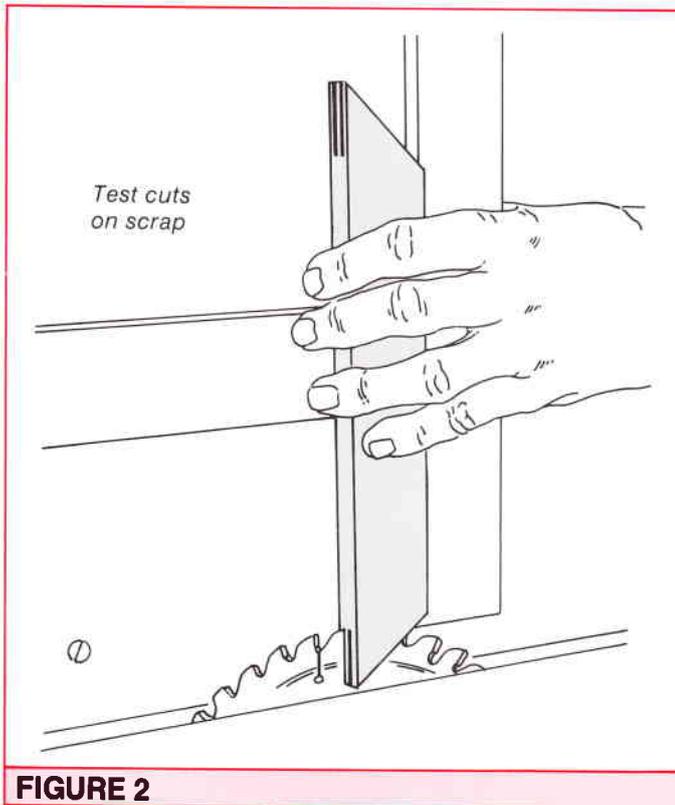


FIGURE 2

2mm high step remains at the edge of the bevel. (See door component drawings for final cross section).

- (g) Tear-out can be avoided by making very small cuts at each pass. Softwood panelling, if used, may need to be stiffened by clamping stiff battens onto the panel. . . flexing of the panel will result in stepped cuts.

6 Assemble and glue components **A, B, G** and **L** together for each side. The panel **L** should be loose in the frame to allow for humidity changes.

Assemble and glue together **C, D, E** and **F**.

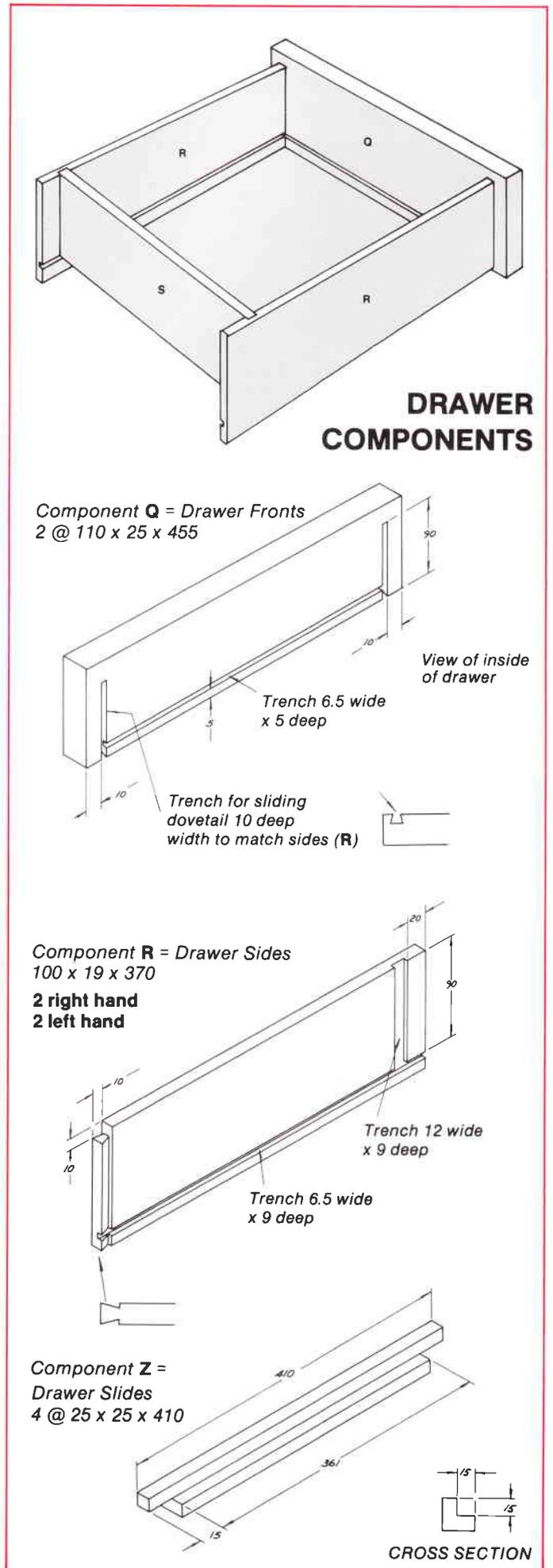
When glue is dry, assemble and join components with **J** and **K**.

7 Use a rounding over bit in your router to round and shape the edges on **M**. (If you have a bearing guide on your cutter, this is best done with the router hand held).

Attach **M** to the cabinet case with 3 screws 40mm/8G up through component **E** and 3 screws 55mm/8G through component **K**. When drilling for these screws, other components of the cabinet will be in the way, making it necessary for the holes to be slightly angled.

8 Convert to the table saw mode. Mitre cut components **N** (4) and **O** (4) to length. (Before cutting these components, check the size of the door opening in the case; adjust the length of **N** and **O** if necessary).

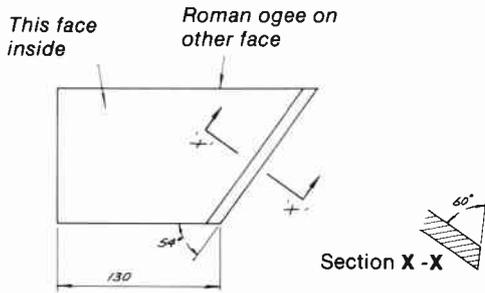
With blade height of 25mm and fence 3mm from the blade, use an end grain jig to cut two slots in each end of **N** (4) and **O** (4). (Alternate faces to fence). **Figure 2**.



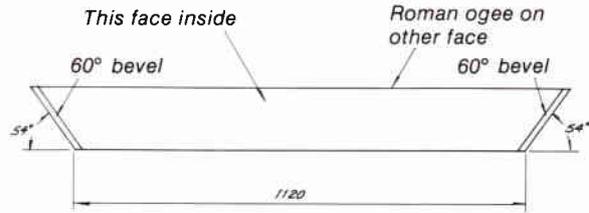
Construction Details

Component AB
120 x 19 x 217

1 right hand as shown
1 left hand mirror image

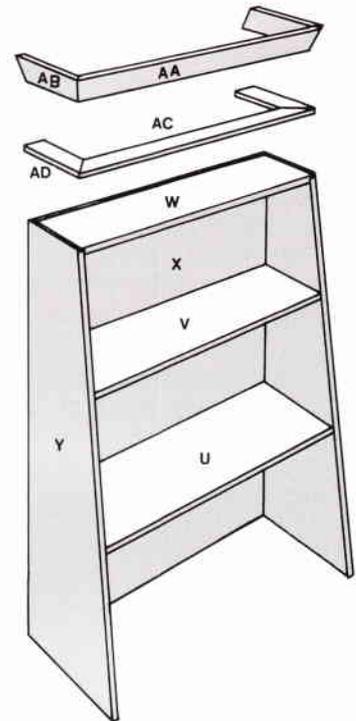
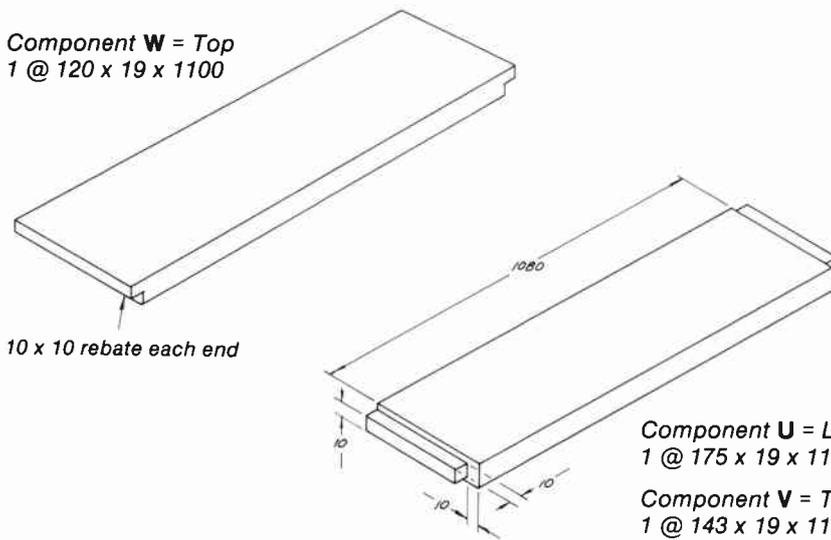


Component AA
120 x 19 x 1294



TOP RACK COMPONENTS

Component W = Top
1 @ 120 x 19 x 1100

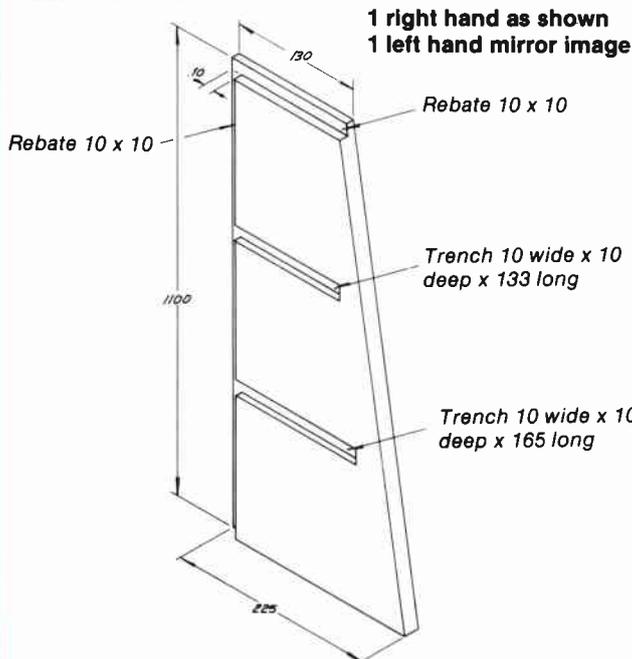


Component U = Lower Shelf
1 @ 175 x 19 x 1100

Component V = Top Shelf
1 @ 143 x 19 x 1100

U Tenon 10 wide x 165 x 10 long each end
V Tenon 10 wide x 133 x 10 long each end

Component Y = Sides
225 x 19 x 1100



1 right hand as shown
1 left hand mirror image

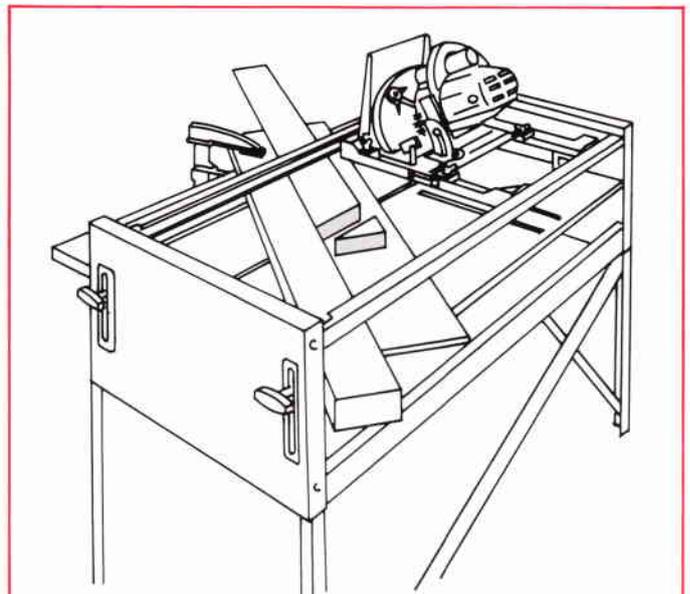


FIGURE 3

Make up some spline material from scrap. You will need 16 pieces of about 27 x 27mm.

Assemble and glue components **N**, **O**, and **P**. The splines should be kept oversize and trimmed flush once the glue sets.

As with panel **L**, the panels **P** should be left loose in their frames. Hang the doors in the cabinet case with the hinges on the outside edge of the doors approx. 50mm from top and bottom.

9 While still in the table saw mode, cut the drawer slides **Z**. (See Drawer Components)
Convert to the crosscut mode. Set the saw to 45 degrees and bevel cut components **H** (2) and **I**. Check the dimensions of the case and adjust the lengths of **H** and **I** if need be.

Fit **H** and **I** to the case with 30mm/8G screws.

With the saw reset to 90 degrees, cut the following:

- (a) Components **Q**. (Check case opening first).
- (b) Components **R** (4) and **S** (2).
- (c) Components **U**, **V**, **W** and **Y** (2) to length.

10 Convert to the router/shaper table mode for the following:
(a) With a 1/4" straight flute, cut the slots in components **R** (4) and components **Q** (2). (Note the slots in **Q** are stopped 10mm in from the ends).
(b) Radius the front edges of **Q** with a 10mm radius rounding over bit.
(c) With the dovetail router bit, shape the ends of **R** as shown in the component drawing (material passed vertically past cutter). A high timber fence extension is desirable. Owners of early model Router-Jigsaw tables will need to drill their fences to attach this.

Trim the top of the dovetail by 10mm, using a small handsaw.

- (d) With the Roman Ogee bit, shape the outside top edge of the timber which will be used to make components **AA** and **AB**.

11 Convert to the router trenching mode for the following:

- (a) With the dovetail bit, trench tapered slots in components **Q** as shown in the component drawing. To cut trenches of correct widths may require several passes, but with care, a secure neat sliding dovetail joint should be obtained.
- (b) With the 10mm straight flute bit, trench 12mm wide slots in components **R** 20mm in from their rear edges, to take the drawer backs **S**. (Mirrored components).
- (c) Cut the stopped trenches in components **Y** (2). The tapers are cut later. (The exact positioning of shelves **U** and **V** is the constructor's decision, and will depend upon the size of plates or articles to be displayed).

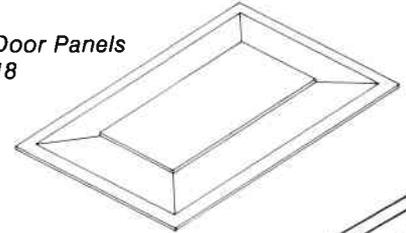
Assemble and glue components **Q**, **R** and **S**. (Note the bottom of component **S** must be clear of the horizontal slots in **R** to allow the drawer bottoms to be inserted later).

Component **N** = Door Rails
4 @ 42 x 19 x 455

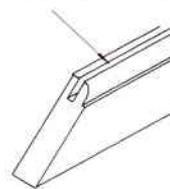
Component **O** = Door Stiles
4 @ 42 x 19 x 587



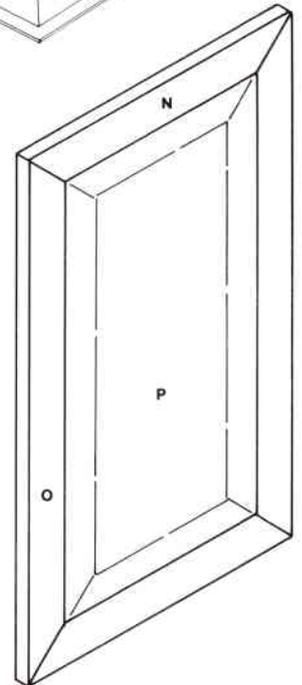
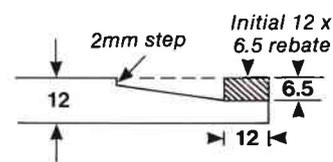
Component **P** = Door Panels
2 @ 386 x 12 x 518



Groove 6.5 wide x 10 deep



DOOR COMPONENTS



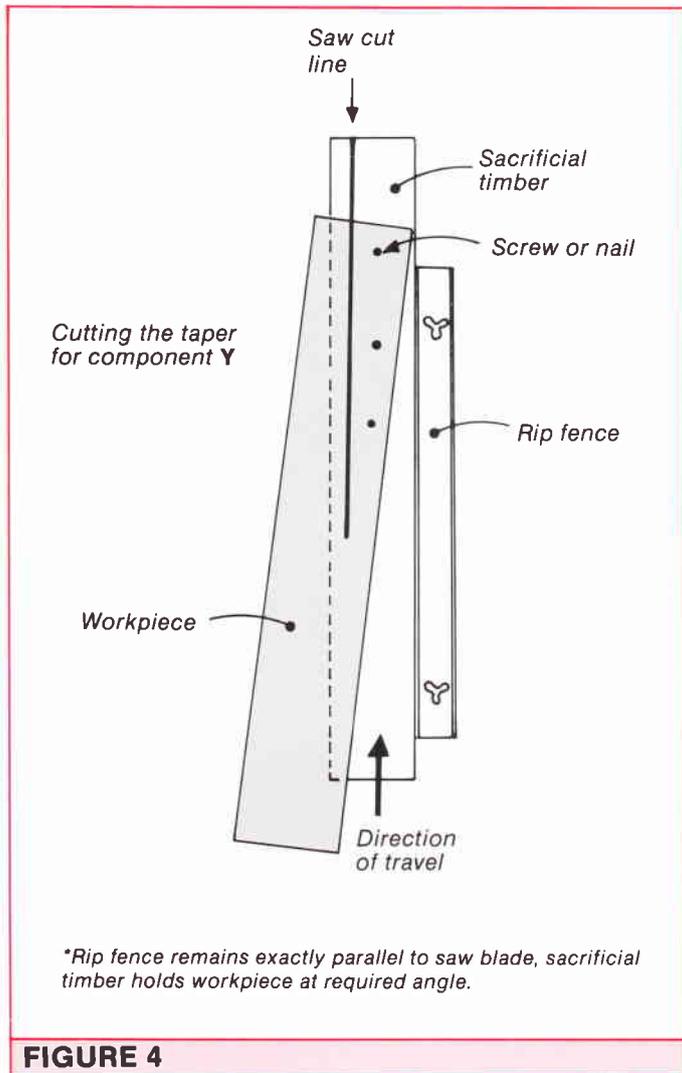
12 Components **Z**, the drawer slides, can now be fitted into the case with the drawers to determine their correct position. Adjust them so that they hold the drawer with its face parallel to the front of the cabinet and with equal gaps on each side. The front face of the drawer should be 5mm proud from the cabinet front. When correctly located, glue components **Z** into position.

13 Convert the Workcentre to the crosscut mode. Cut the components **AA** and **AB**. Compound bevel cuts are required.

The saw must be set to mitre 30 degrees from vertical. Set up a temporary angled workstop by clamping a straight scrap piece across the table. This workstop should be angled 54 degrees to the edge of the table and this angle can be established by using the protractor set at 36 degrees. **Figure 3** demonstrates the procedure.

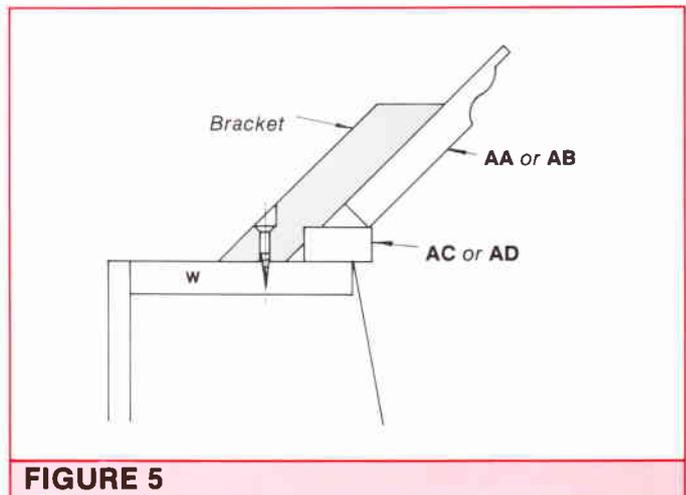
Each of the required compound angles can be cut with this one setting; two are done with the timber face up from one side of the table and two with the timber face down from the other side. Check your settings on scrap first to ensure flush fitting when the components are at 90 degrees to form the corner. Adjust the fit, if necessary, by very small adjustments to the saw bevel angle.

Construction Details



- 14** Convert to the table saw mode for the following:
- Cut components **T** for the drawers (check size first), and fit.
 - Rip components **U**, **V** and **W** to their correct width.
 - Cut the tenons on these same components **U**, **V** and **W**.
 - Using straight edged sacrificial timber, cut the tapers on components **Y**, as shown in **Figure 4**. Attach your workpiece by tack-nailing or screwing in the waste section. Determine the angle of the taper on **Y** by measurement (130mm top, 225mm base, 1100 long). Note that this method of cutting tapers is used whenever the workpiece is too long or too wide to be conveniently cut with the taper ripping jig.
 - Cut panel **X** to size.
 - Rebate edge of components **Y**.
 - Mitre cut components **AC** and **AD**.

- 15** Change to the router in the shaper mode: Using the 10mm radius, rounding over bit, round the front edges of components **U**, **V**, the lower exposed corners **AC** and **AD**, the front bottom edge of **W**, and the front edges of **Y**. With a 1/4" straight flute, cut slots in components **U** and **V** 5mm deep, about 50mm from the back edge. (These



will hold the bottom edge of plates when stood up in the completed rack). Then assemble and glue components **U**, **V**, **W** and **Y**(2).

- 16** Assemble and glue components **AA** and **AB**. These must be nailed from the **AB** side to hold the joint while the glue sets. (Afterwards, these nails can either be removed or driven in and punched.

Attach back panel **X** with screws.

Attach components **AC** and **AD** with screws. They should protrude 10mm out from the sides and front of the rack.

Make 3 small brackets of wood as shown in **Figure 5** to attach the assembly **AA/AB** to the rack.

Glue the brackets to **AA** and **AB** and screw them into the top of **W**.

- 17** Check the internal dimensions of the cabinet case and cut to size the shelf **AF** and floor **AG**. Edge the front of **AF** with a strip of solid timber for improved appearance.

Fit the floor **AG** and then drill holes 10mm deep by 6mm, 300mm above the floor, into components **A**, **B** and **D**. Insert and glue dowels to serve as supports for the shelf **AF**. Ensure the holes are not drilled through the timber!

Insert the shelf, and fit the magnetic catches to its underside.

- 18** Check the dimensions of the recess for the cabinet case back and cut the back **AE** to size - attach with 15mm/4G screws.

Sand the dresser and apply your finish.

The dresser is completed with the attachment of knobs to doors and drawers.

The rack can be located onto the cabinet case with dowels. It is best not to glue the dowels so that the dresser can be dismantled into two parts for easier moving.