

# DJ300



**trend**<sup>®</sup>  
routing technology

Dear Customer

Thank you for purchasing this Trend product, we hope you enjoy many years of creative and productive use.

Please remember to return your guarantee card within 28 days of purchase.

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## TECHNICAL DATA

Dovetail size	12.7mm
Max workpiece	300mm
Workpiece	11-25mm
Guide bush size	15.7mm
Weight	5kg
Max. router base dia.	180mm

The following symbols are used throughout this manual:



Denotes risk of personal injury, loss of life or damage to the tool in case of non-observance of the instructions in this manual.



Refer to the instruction manual of your power tool.

This unit must not be put into service until it has been established that the power tool to be connected to this unit is in compliance with 98/37/EC (identified by the CE marking on the power tool).



If you require further technical information or spare parts, please call our technical support department on 01923 224681.

## SAFETY



Observe the safety regulations in the instruction manual of the Power Tool to be used or connected to this attachment. Also observe any applicable additional safety rules. Read the following safety instructions before attempting to operate this product.

### PLEASE KEEP THESE INSTRUCTIONS IN A SAFE PLACE.

The attention of UK users is drawn to The Provision and Use of Work Equipment Regulations 1998, and any subsequent amendments.

### General

- Disconnect power tool, when not in use. Before servicing and when changing accessories such as cutters. Disconnect power tool and attachment from power supply. Ensure the machine is switched off before plugging tool in or connecting to a power supply.
- Always mount the power tool, accessory or attachment in conformity with the present instructions.
- Keep children and visitors away. Do not let children or visitors touch the tool, accessory or attachment. Keep children and visitors away from work area.
- Make the workshop child proof with padlock and master switch.
- Dress properly. Do not wear loose clothing or jewellery, they can be caught in moving parts. Rubber gloves and non-skid footwear is recommended when working outdoors. Wear protective hair covering to contain long hair.
- Consider working environment. Do not use the product in the rain or in a damp environment. Keep work area well lit. Do not use power tools near gasoline or flammable liquids. Keep workshop at a comfortable temperature so your hands are not cold.
- The accessory or attachment must be kept level and stable at all times.
- Keep work area clean. Cluttered workshops and benches can cause injuries

- Use the attachment with the power tools and accessories specified in this manual only. Do not force the tool or attachment to do a job for which it is not designed.
- Secure idle tools. When not in use, tools should be stored in a dry and high or locked up place, out of reach of children.
- For best control and safety use both hands on the power tool and attachment. Keep both hands away from cutting area. Always wait for the spindle and cutter to stop rotating before making any adjustments.
- Always keep guards in place and in good working order.
- Remove any nails, staples and other metal parts from the workpiece.
- Maintain tools and cutters with care. Keep cutters sharp and clean for better and safer performance. Do not use damaged cutters. Follow instructions for lubricating and changing accessories. Keep handles dry, clean and free from oil and grease.
- Maintain accessories. Do not use damaged accessories. Only use accessories recommended by the manufacturer.
- Check damaged parts. Before operation inspect the attachment, the power tool, the cable, extension cable and the plug carefully for signs of damage. Check for alignment of moving parts, binding, breakage, mounting and any other conditions that may effect its operation. Have any damage repaired by an Authorised Service Agent before using the tool or accessory.
- Do not use tool if switch does not turn it on or off. Have defective switches replaced by an Authorised Service Agent.
- Don't over reach. Keep proper footing and balance at all times.
- Don't abuse the cable. Never carry power tool or accessory by cord or pull it to disconnect from the socket. Keep cord from heat, oil and sharp edges. Always trail the power cord away from the work area.
- Connect dust extraction equipment. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.
- Check all fixing and fastening nuts, bolts and screws before use to ensure they are tight and secure. Periodically check when machining over long periods.
- Stay alert. Watch what you are doing. Use common sense. Do not operate tools when you are tired, under the influence of drugs or alcohol.
- Personal Protective Equipment (PPE). All PPE must meet current UK and EU legislation.
- Do not leave tools running unattended. Do not leave tool until it comes to a complete stop.
- Always clamp workpiece being machined securely.
- Only use cutting tools for woodworking that meet EN847-1/2 safety standards, and any subsequent amendments.

### Routing Safety

- Disconnect router power tool. When not in use, before servicing and when changing accessories such as cutters, disconnect router and attachment from power supply.
- Ensure router cutter has stopped rotating before changing it. Never use the spindle lock as a brake.
- Remove adjusting keys and spanners. Form the habit of checking to see that keys and adjusting spanners are removed from the router tool, cutter and attachment before turning router on. Make sure cutter can rotate freely.
- Check all ball bearing and blade fixing screws before use to ensure they are tight and secure. Periodically check when machining over long periods.
- When using a template guide bush ensure it cannot come into contact with collet and nut.
- Noise. Take appropriate measures for the protection of hearing if the sound pressure of 85dB(A) is exceeded. Routing sound pressure may exceed 85dB(A), so ear

protection must be worn.

- Eye protection. Wear safety goggles, spectacles or visors to protect the eyes from ejected waster particles.
- Respiratory protection. Wear a face or dust mask, or powered respirator. Dust masks/filters should be changed regularly.
- Do not switch router on with the cutter touching the workpiece.
- The direction of routing must always be opposite to the cutter's direction of rotation.
- After work, release the router plunge and allow spindle to stop rotating before putting machine down.
- Check before cutting that there are no obstructions in the path of the router. When cutting through the full thickness of the workpiece, ensure there are no obstacles beneath workpiece, and that a sacrificial work surface is used.

### **Additional Safety Rules For Router Cutters**

- Cutting tools are sharp. Care should be taken when handling them.
- Always use cutters with a shank diameter corresponding to the size of the collet installed in your tool.
- Always run router cutters at the spindle speed recommended and marked accordingly. Ensure cutter has reached correct speed before entering workpiece. Recommended speeds can be found on the packaging, in cutter instructions or in the Trend Routing Catalogue.
- Always use router cutters in a router. Router cutters must not be used in a drill. Drill and boring bits must not be used in a router. Router cutters must only be used for the material cutting application for which they are designed. Do not use on metal or masonry.
- Never use cutters with a diameter exceeding the maximum diameter indicated in the technical data of the power tool or attachment used.
- Do not drop cutters or knock them against hard objects. Do not use cutters that are damaged.
- Cutters should be kept clean. Resin build up should be removed at

regular intervals with Resin Cleaner<sup>®</sup>. The use of a dry lubricant (Trendicote<sup>®</sup> PTFE) will act as a preventative. Do not use PTFE spray on plastic parts.

- Cutter shanks should be inserted into the collet to the mark line on the shank. This ensures that at least  $\frac{3}{4}$  of the shank length is held in the collet. Do not over-tighten the collet nut as this will score the shank and create a weakness and fracture point.
- Observe the correct assembly instructions in the router instruction manual for fitting the collet and nut. Observe the router power tool manual instructions on fitting cutters correctly.
- It is advisable to periodically check the collet and collet nut. A worn, distorted or damaged collet can cause vibration and damage the shank, and should be replaced. Worn collet nuts should be replaced.
- Do not take deep cuts in one pass; take several shallow or light passes to reduce the side load applied to the cutter. Too deep a cut in one pass can stall the router.
- Very small diameter cutters must be handled and used with care.
- Always return cutter to its packaging after use.
- Should you experience excessive vibration during use stop immediately. Have the eccentricity of the router, router cutter and clamping system checked.
- All fastening screws and nuts should be tightened using the appropriate spanner or key in accordance with the manufacturers instructions.

### **Using Routers In A Fixed Position**

- After work, release the router plunge to protect the cutter.
- Always use a push-stick or push-block for last 300mm of the cut.
- Whenever possible use a work holding device or jig to secure component being machined.
- Ensure attachment is securely fitted to the workbench, with table surface at approximately hip height.

- Ensure a No-Volt Release Switch is fixed to or adjacent to the attachment and that it is used correctly.
- Check the direction of the workpiece is always opposite to the cutter's direction of rotation.
- Do not use awkward or uncomfortable hand positions.
- Do not reach underneath table or put your hands or fingers at any time in the cutting path while tool is connected to a power supply.

### **Useful Advice When Routing**

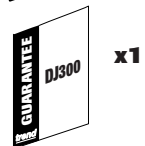
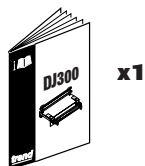
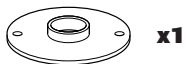
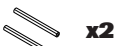
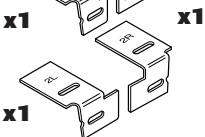
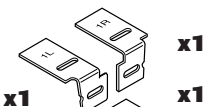
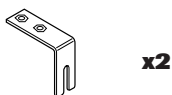
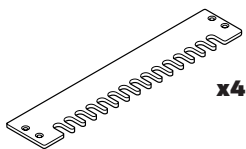
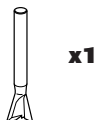
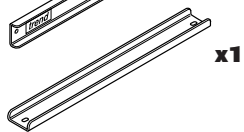
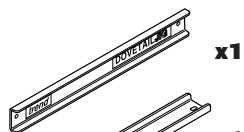
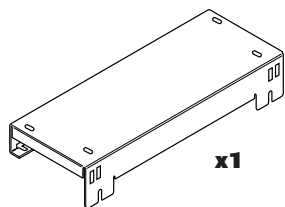
- Judge your feed rate by the sound of the motor. Feed the router at a constant feed rate. Too slow a feed rate will result in burning.
- Take many light passes rather than one deep cut to reduce the side load applied to both router and router cutter.
- Trial cuts should be made on waste material before starting any project.
- When using some attachments including a router table or dovetail jig, the use of a fine height adjuster is highly recommended.

- When using a template guide bush, ensure there is sufficient clearance between cutter tip and inside each of bush. Ensure cutter and guide bush are concentric.

### **Router Cutter Maintenance**

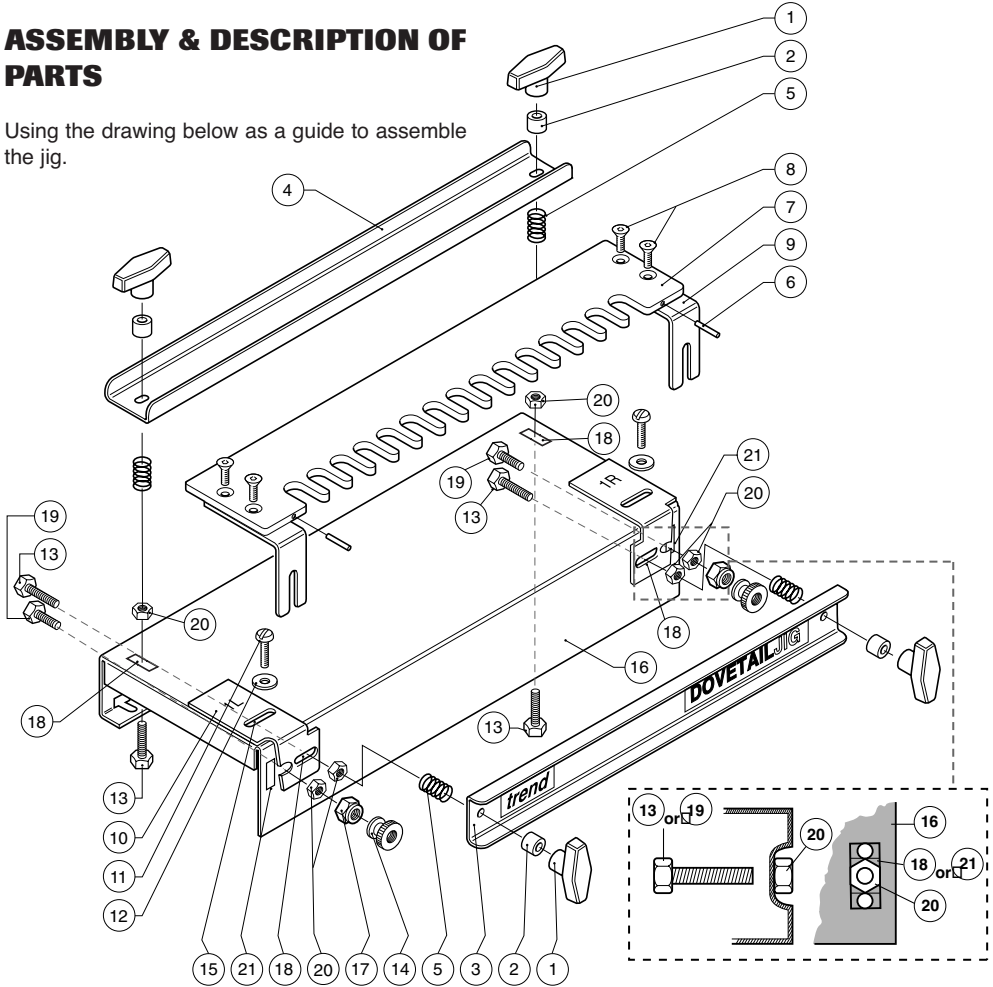
- Composite cutting tools (brazed tip) must be maintained by a competent person i.e. a person of training and experience, who has knowledge of the design requirements and understands the levels of safety to be achieved.
- The design of composite tools must not be changed in the process of maintenance.
- Replacement parts must meet Trend specification.
- Tolerances which ensure correct clamping by the collet shall be maintained.
- When re-grinding the tool, care must be taken not to cause weakening of the body or the connection between the cutting edge and the body.

**ITEMS ENCLOSED**



**ASSEMBLY & DESCRIPTION OF PARTS**

Using the drawing below as a guide to assemble the jig.

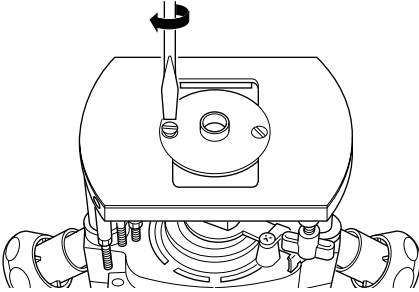


- |                                    |  |
|------------------------------------|--|
| 1. Clamp knob female               | 12. Edge guide washer  |
| 2. Nylon spacer                    | 13. Clamp bar set bolt UNC <sup>1</sup> / <sub>4</sub> " - 20 x 1 <sup>3</sup> / <sub>4</sub> " (long) |
| 3. Clamping bar - short            | 14. Knurled brass thumb screw  |
| 4. Clamping bar - long             | 15. Edge guide fastening slot  |
| 5. Spring                          | 16. Jig body   |
| 6. Template spring pin stop        | 17. Lock nut UNC <sup>1</sup> / <sub>4</sub> " - 20  |
| 7. 1/2" (12.7mm) dovetail template | 18. Embossed slot for bar set bolt (front slots hidden from view on diagram above)                     |
| 8. Template bracket screws         | 19. Template set bolt UNC <sup>1</sup> / <sub>4</sub> " - 20 x 1 <sup>1</sup> / <sub>2</sub> " (short) |
| 9. Template bracket                | 20. Half nut UNC <sup>1</sup> / <sub>4</sub> " - 20  |
| 10. Dovetail edge guide            | 21. Embossed slot for template set bolt  |
| 11. Edge guide pan head screws     |  |

**Setting-up the Router**



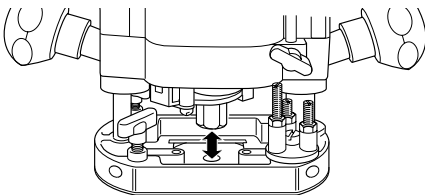
- Fit the guide bush to the base of the router.



- Fit a fine height adjuster if available, as this will make it easier to adjust the height accurately. The fine height adjuster is not required for comb jointing.

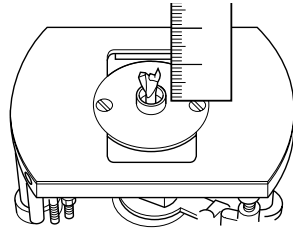


- Lower and lock the router carriage so that the collet is close to the guide bush, but not touching it.



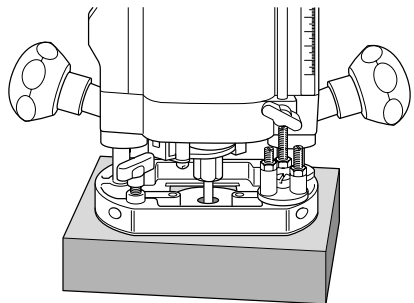
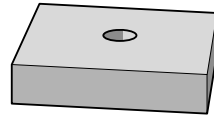
- Fit the 1/2" (12.7mm) dovetail cutter keeping 3/4 of the shank length in the collet.

Adjust the height of the cutter so that it protrudes approximately 17mm from the base of the router for 1/2" (12.7mm) dovetails and 11mm for 1/4" (6.35mm) dovetails. After a trial joint, slight adjustment may be required to ensure a well fitting joint. As the guide bush is recessed into the base of the router, these measurements should be taken from the router base not from the guide bush.



**Making a Router Stand Block**

- As the cutter for dovetailing should not be retracted into the router, a useful aid is a Router Stand Block. This is simply a piece of scrap timber with a hole large enough to take the protruding guide bush and dovetail cutter. This will allow the router to stand up safely between operations.



**Mounting to Workboard**

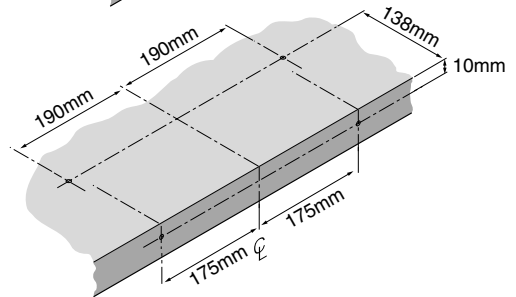
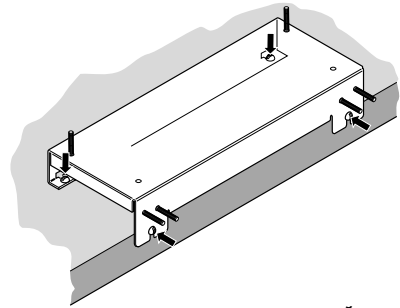


The jig should be secured to a workbench or false work surface with the four screws supplied.

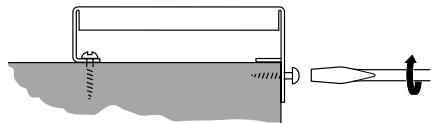
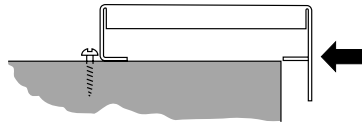
A false surface will protect the workbench and can be quickly clamped with quick release clamps.

Two screw locations are provided at the rear of the jig and two on the lip at the front.

- Mark the positions of the pilot holes for the screws as shown.
- Drill 1/8" (3.2mm) pilot holes at these locations.
- Screw two of the No. 10 x 1/2" self tapping screws in the work top and leave the screw heads 2mm proud of the surface.



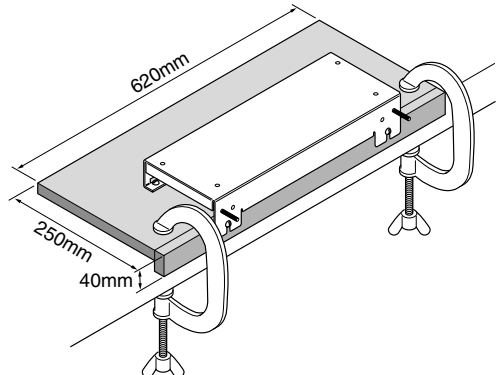
- Slide the jig over the two screw heads until they locate.
- Use the two remaining self tapping screws to secure the lip of the jig to the workbench or false work surface. The jig is now secure and ready to use.



**Making a False Work Surface**

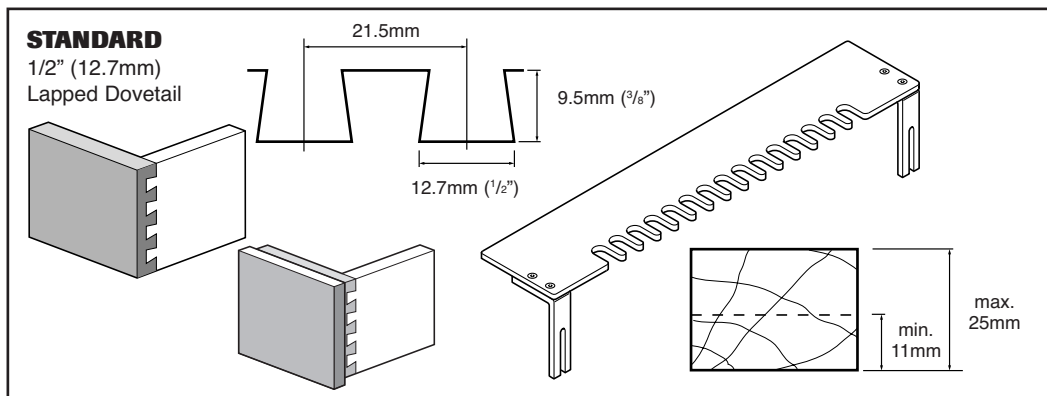


- This can be constructed from 12mm to 18mm MDF or similar material with a lip on the front which will hook over the front of the workbench. Suitable quick action clamps or similar can then be used.

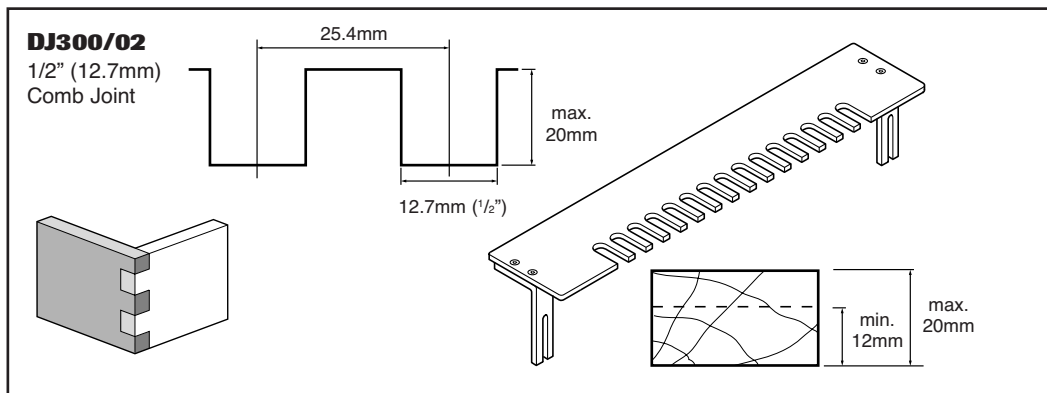
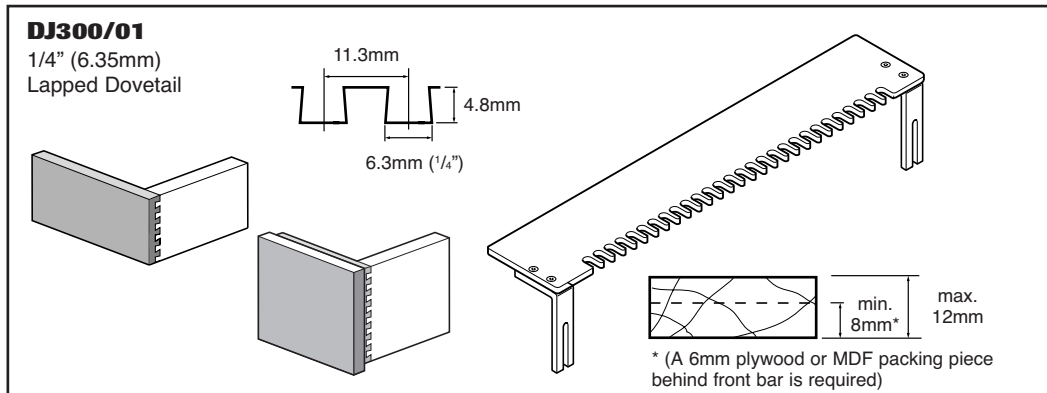




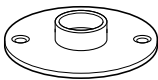
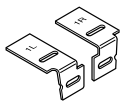

**TEMPLATE SPECIFICATION**



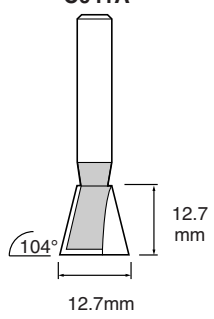
**OPTIONAL ACCESSORIES**



**CUTTERS REQUIRED**

<p>15.7mmØ</p> 	<p><b>LAPPED</b></p>  <p>No. 1</p> <p><b>REBATED</b></p>  <p>No. 2</p>
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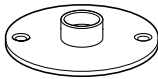
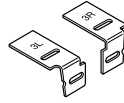
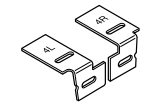
**L120  
C041A**



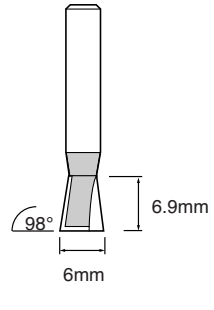
12.7 mm

104°

12.7mm

<p>7.74mmØ</p> 	<p><b>LAPPED</b></p>  <p>No. 3</p> <p><b>REBATED</b></p>  <p>No. 4</p>
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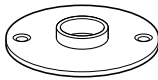
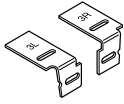
**S3/31  
C154**



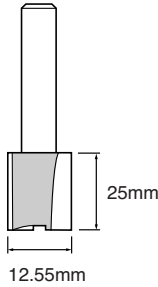
6.9mm

98°

6mm

<p>15.7mmØ</p>  <p>x1</p>	<p><b>COMB</b></p>  <p>No. 3</p>
---	---

**3/76  
C021A**



25mm

12.55mm

## TIMBER PREPARATION

It is important to plan your work before starting to save set-up time and avoid costly mistakes. Both sides of the jig can be used to make the dovetail joints. However, only clamp one pair into the jig at any one time to ensure it is clamped securely.

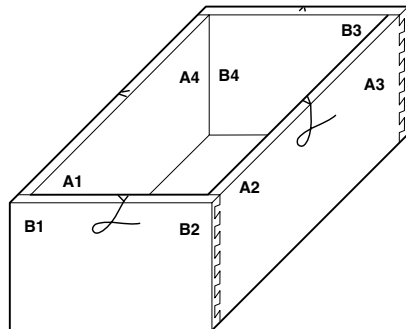
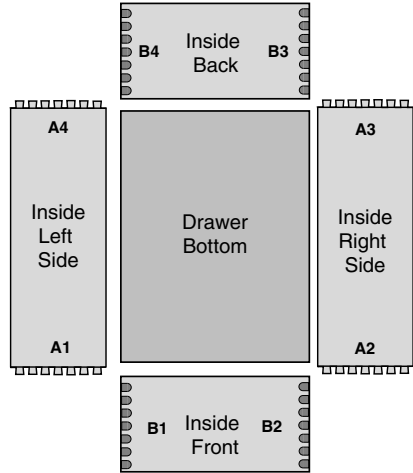
When joining multiple pieces for a drawer or series of drawers, label the pieces as front, back, sides and which face will be inside or outside. Label the pieces so it is clear which end mates with each other (see diagram).

The 'A' parts will be clamped under the front clamping bar and the 'B' under the top clamping bar. Even numbers will be placed against the left-hand edge guide and the odd numbers against the right-hand edge guide.

A typical 1/2" (12.7mm) dovetail drawer has a 3/4" (19mm) thick front with sides made of 1/2" material. The dovetail jig's design requires that you use the same stock thickness for the back as you do for the front, if you are cutting joints simultaneously. Your drawer fronts and backs must be at least 5/8" (16mm) thick to fully accommodate the length of the dovetails without compromising strength.

Before joining the actual timber components, make a trial cut on scrap timber. This will familiarise you with the jig and check all dimensions used.

After all the pieces have been cut to size and checked to ensure squareness, set them on a bench in the order and they will be fitted together. Lay each piece down so the inside faces up and label each piece on the inside as shown.



**The dimensions shown in these instructions are subject to acceptable tolerances in the manufacture of the guide bush, template and cutter. Therefore use the setting dimensions as guidance only and make a trial cut in scrap timber before starting every project.**

**Timber Widths**

- Any width of timber up to 300mm wide can be dovetail jointed. To obtain a symmetrical joint with full tails and pins at each end, see the chart on the right for the recommended widths of timber.
- The edge guides have a built in offset to produce exact fitting dovetail joints. Their position is adjustable to enable a symmetrical joint to be obtained with timber widths that are not ideal. Their position can be simply be judged by eye.

**Making a Setting Block**



To eliminate unnecessary measurements being made should you change the settings of the jig (e.g. when using other templates or adjusting the jig for awkward widths of timber). One should make a setting block which should be kept safe and used to set up the jig to create a standard 1/2" (12.7mm) dovetail joint or optional 1/4" (6.35mm) dovetail joint.

Make the setting block as follows:

- Use timber that is uniform in thickness and has a square end.
- Draw a line 3mm from the left and right edge. (2mm for 1/4" (6.35mm) dovetail template). This will be used to set the left and right edge guides.
- Draw a line 15mm from the front edge. (7.5mm for 1/4" (6.35mm) dovetail template). This offset will be used to set the template position.

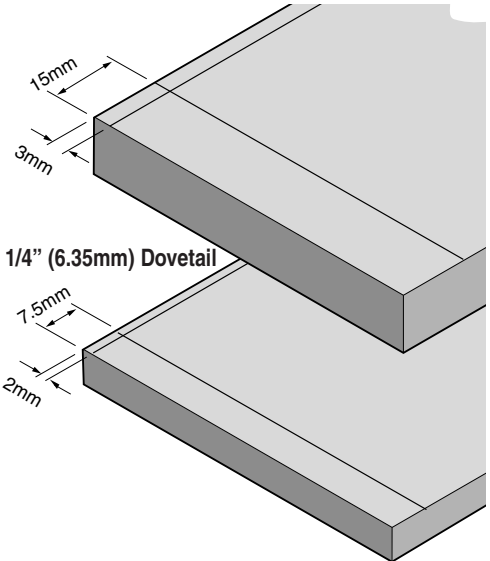
Setting-up the jig with this block is shown overleaf.

<b>1/2" (12.7mm) Dovetail Template</b>									
(21.5 mm pitch with 3mm offset line)									
No. of whole tails									
1	2	3	4	5	6	7	8	9...	
21.5	43	64.5	86	107.5	129	150.5	172	193.5	
Optimum width of timber in mm									
ie Pitch x No. of tails = Width (when 3mm offset line used).									

<b>1/4" (6.35mm) Dovetail Template</b>									
(11.3 mm pitch with 2mm offset line)									
No. of whole tails									
1	2	3	4	5	6	7	8	9	
11.3	22.6	33.9	45.2	56.5	67.8	79.1	90.4	101.7	
Optimum width of timber in mm									
ie Pitch x No. of tails = Width (when 2mm offset line used).									

**1/2" (12.7mm) Dovetail**



**OPERATION**



**Setting-up for Dovetailing**

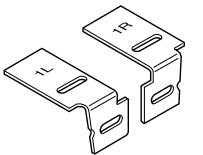
**Standard 1/2" (12.7mm)**

**Lapped Dovetails (and accessory 1/4" Lapped Dovetails)**

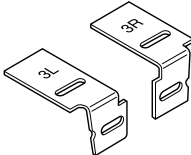
**Setting the Jig using the Setting-up Block**



- Fit the Edge Guides and leave the screw slightly loose (1).



Fit No. 1 for 1/2" (12.7mm) lapped dovetail

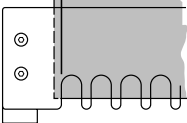


Fit No. 3 for 1/4" (6.35mm) lapped dovetail

- Position a scrap piece of timber (2) under the front clamp, slightly proud of jig surface and well away from the edge guide and clamp it in this position (3).

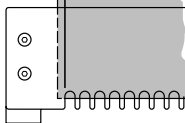
- Place the setting block under the top clamp and butt it up to the scrap piece (1). Fit the template onto the jig and lay it on top of the timber (2). Tighten the knurled brass thumb screw (3). Slide the setting block until the offset line is aligned with the left hand edge of the first slot (4). See drawings below.

3mm offset line



For 1/2" (12.7mm) lapped dovetail

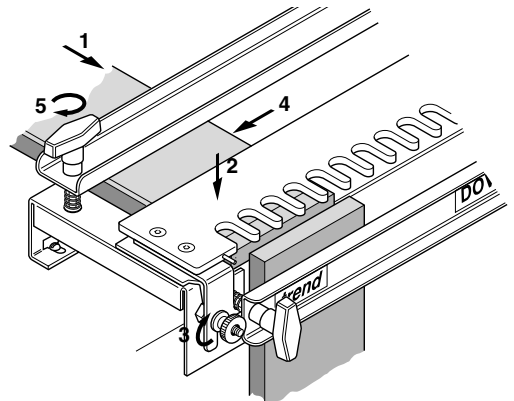
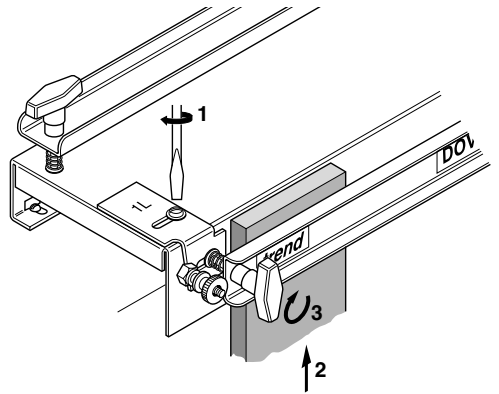
2mm offset line



For 1/4" (6.35mm) lapped dovetail

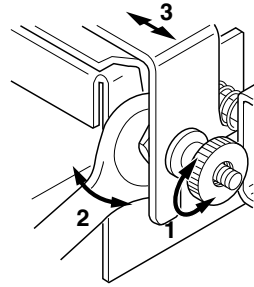


**When using 1/4" (6.35mm) dovetail template the minimum material thickness is 8mm. A 6mm packing piece (plywood or MDF) behind the front bar will be required to ensure the clamp tightens properly.**



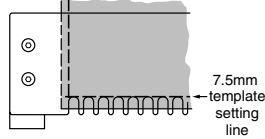
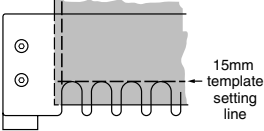
Tighten the top clamps making sure the setting block does not move (5).

- Slacken the brass thumb screw (1). Using the spanner supplied (2), adjust the position of the lock-nuts until the back of the template slots align with the Template Setting Line (3).



1/2" (12.7mm) Dovetail Template

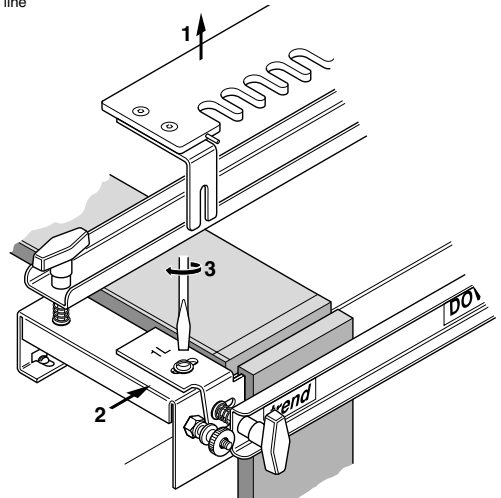
Optional 1/4" (6.35mm) Template



- Remove the template (1). Slide the edge guide up to the edge of the setting block (2). After ensuring it is square, tighten the edge guide securely (3).

Repeat the setting procedure for the right-hand edge guide.

- Remove the setting up block and the scrap timber and keep it safe. The jig is now ready to use.
- For each joint, clamp the two pieces of timber under the clamps making sure both are flush with each other and touching the edge guide. Place even numbers against the left-hand edge guide and the odd numbers against the right-hand edge guide.

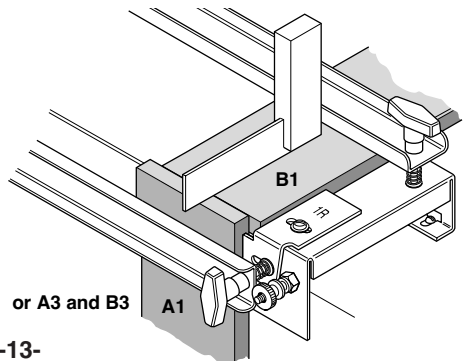
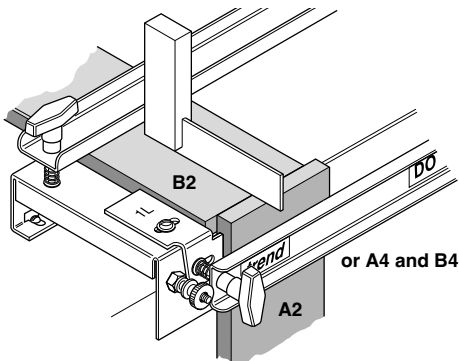


**Only clamp and rout one set at one time to ensure maximum clamping action of the clamp bars.**

**Tighten up top and side clamps evenly and tighten the template securely. DO NOT OVERTIGHTEN.**



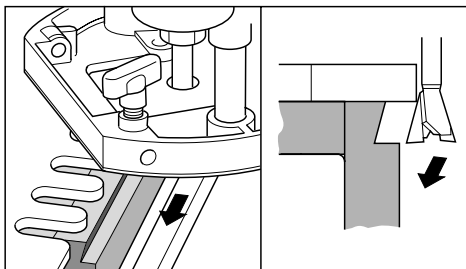
**Periodically check tightness of all nuts and bolts.**



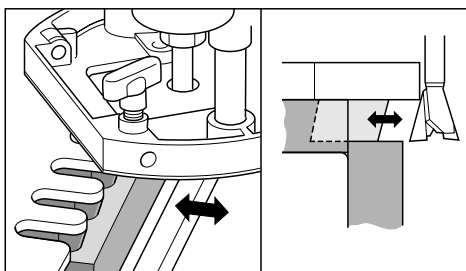
**Routing the Joint**



- Start up the router and make one very light cut from right to left, machining only the front edge. This will prevent chipping out at the next stage.



- Now carefully rout from left to right following the guide bush in each of the slots.  
Examine each of the slots to ensure all the material have been cleanly routed. If you discover that there are parts of the joint that have not been cleanly routed, without adjusting the jig, rout the joint a second time.



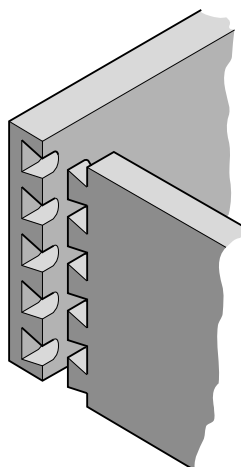
**Do not lift the router from the template with the guide bush engaged in the slots as damage to the template will occur.**

- Remove material and try the joint.

Follow the table below if the joint is not as expected.

Dovetail joint too loose	Increase depth adjustment of cutter.
Dovetail joint too tight	Decrease depth adjustment of cutter.
Dovetail joint too shallow	Move template comb towards the jig body.
Dovetail joint too deep	Move template comb away from jig body.

Adjust the jig accordingly and re-align the two pieces carefully in the jig and rout them again.



**REBATED LAPPED DOVETAILS**

The technique for setting and routing rebated dovetails are similar to flush lapped dovetails except, the drawer front and side are routed separately and the drawer front must overhang the jig when routing to allow for the rebate.

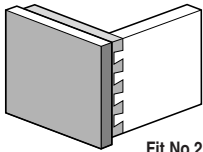
**Drawer Front Preparation**



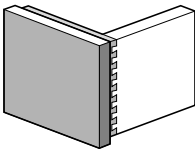
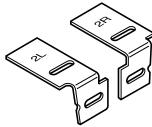
- Prepare the drawer front with a 3/4" (19mm) longer and 3/4" (19mm) wider dimension than the drawer size required.

Route a 3/8" (9.5mm) wide by 7/16" (11.1mm) deep rebate around the inside of the drawer front, using the rebate cutter ref. 46/39 or C040 fitted with ball bearing ref. B16A.

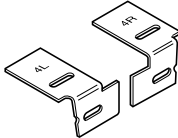
- Fit the appropriate edge guides and leave slightly loose. See below:



Fit No.2 Edge Guide for the 1/2" (12.7mm) Rebated Dovetail Template



Fit No.4 Edge Guide for the 1/4" (6.35mm) Rebated Dovetail Template

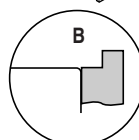
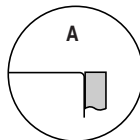
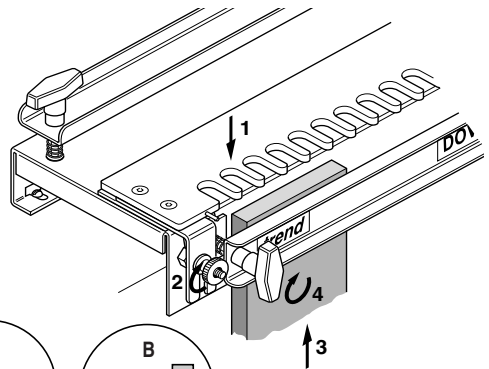
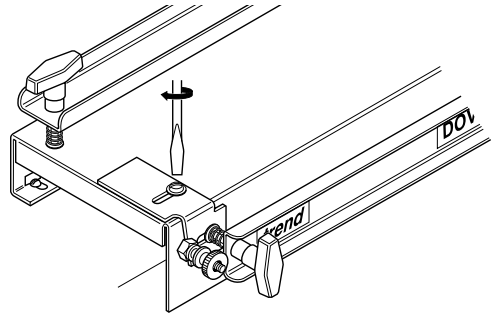
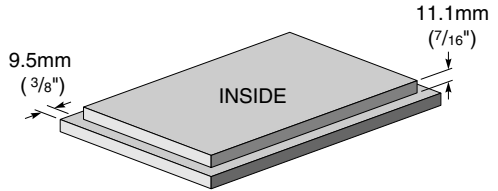
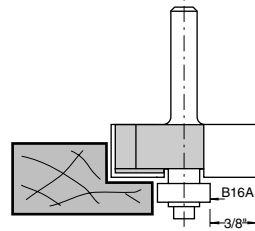


- Fit the template to the jig (1) & tighten brass thumb screw (2).

To ensure an overhang of 3/8" (9.5mm) of the drawer front, slide a piece of scrap timber 3/8" (9.5mm) thick under the front clamp (3), ensuring it is well away from the edge guide. See (A).

Alternatively use a scrap piece of timber with a 3/8" (9.5mm) deep rebate. See (B).

Clamp it in position (4).

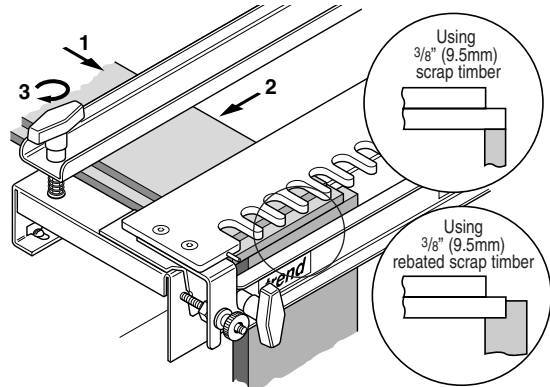




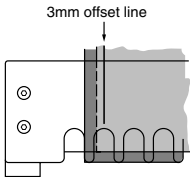
- Place the drawer front under the top clamp (1) and make sure it is flush with the 3/8" (9.5mm) timber.

Slide the drawer front until the offset line aligns with the left edge of the first slot (2).

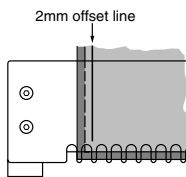
Clamp the timber securely (3).



**Timber must be moved over by one finger on template in order to locate edge guide.**

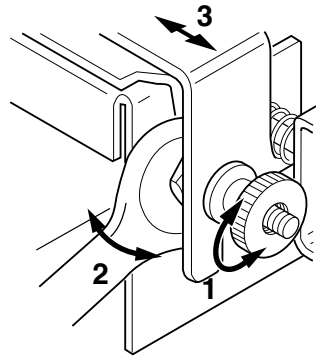


Edge Guide Setting Line  
for the 1/2" (12.7mm)  
Dovetail Template

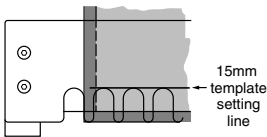


Edge Guide Setting Line  
for the 1/4" (6.35mm)  
Dovetail Template

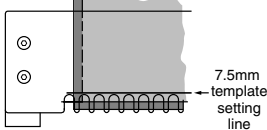
- Slacken the brass thumb screw (1). Using the spanner supplied (2), adjust the position of the lock-nuts until the back of the template slots align with the Template Setting Line (3).



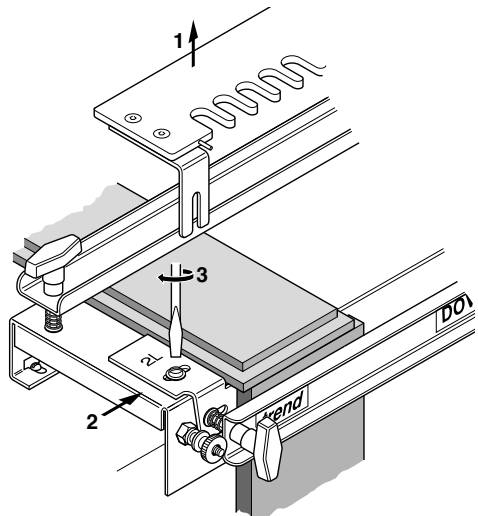
1/2" (12.7mm) Dovetail Template



Optional 1/4" (6.35mm) Template

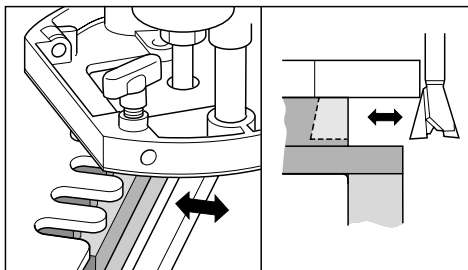


- Remove the template (1).  
Slide the edge guide up against the drawer front (2).  
Tighten the edge guide securing screw (3).  
Replace the template.





**Referring to the marking out of the timber on page 10 please place even numbers against the left-hand edge guide and the odd numbers against the right-hand edge guide when routing.**



### **Routing the Drawer Front**

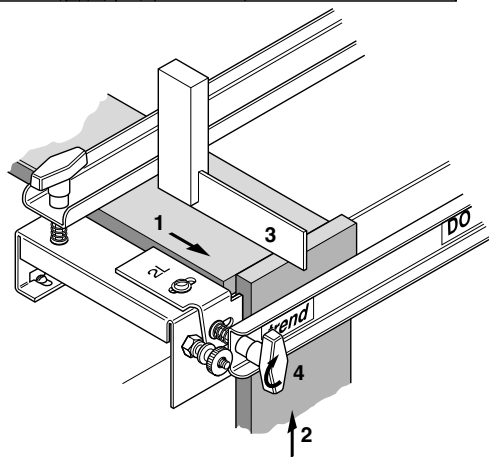


- Fit the correct guide bush and cutter.

Route from right to left following the guide bush in each of the slots.

The drawer front is now finished.

For drawer fronts with a different size of rebate, adjust dimensions accordingly.



### **Routing the Side**



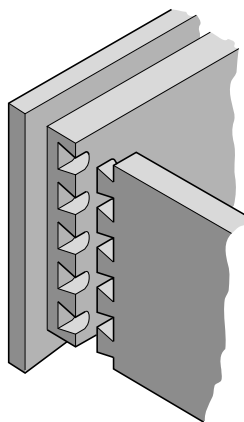
- This again is routed separately. Slide a scrap piece of timber (1), the same thickness as the side, under the top clamp. This is to prevent tear-out.

Insert the side piece (2) under the front clamp and align it with the scrap piece (1) and the Try-square (3).

Clamp it in this position (4).

Route as per normal lapped dovetail (see page 14 – Routing the Joint).

- Remove the side piece and check the joint. Use the chart on page 14 for adjusting the fit if necessary.



### **Setting the depth of cut in the future**

To ease setting up of the cutter height in the future, route a joint using the setting-up block in the same position as a drawer front. Then use this to accurately set the depth of cut of the cutter in the future.

**OPTIONAL ACCESSORIES**

**1/4" (6.35mm) Lapped Dovetail Template.**  
**(See Standard Lapped Dovetail.)**

**1/2" (12.55mm) Box Comb Template.**

The comb template is secured to the jig in the same manner as the dovetail templates.

The GB157 guide bush as supplied with the standard jig should be used together with a 12.55mm dia. straight cutter ref. 3/76 or C021A.

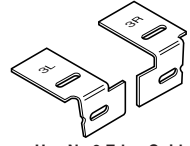
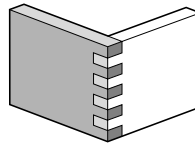
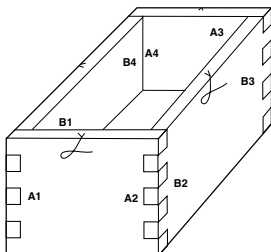
- Assemble the template to the template brackets using the machine screws supplied.
- Fit the guide bush and cutter to the router.
- The comb joint is best routed in two or three passes at increased depths. Therefore the 3 step turret stop fitted to most routers is ideal for this purpose.

The technique for setting and routing comb joints requires each piece to be clamped in the front clamp and routed separately. A wider piece of scrap is clamped under the top clamp to stop tear-out and provide support for the router. The scrap must be at least 1/4" (6.35mm) thicker to ensure you do not rout into the body of jig. When using timber over 16mm thick the nylon spacers on the clamp knob will need to be removed.

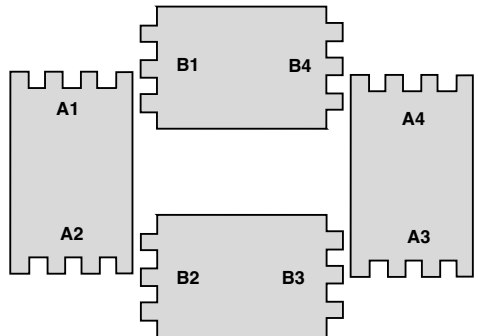
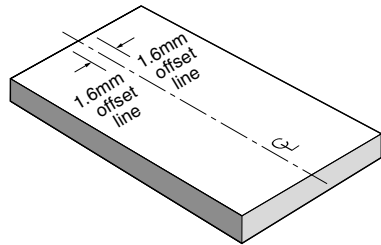
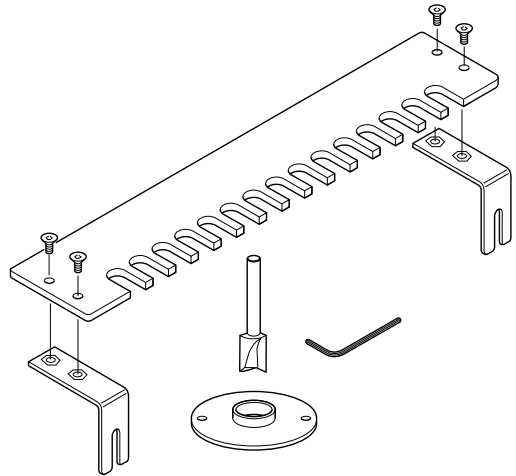
**Timber Preparation**



- Cut all four pieces for the box to the exact dimensions of the final unit. Make sure that all ends are perfectly square and exact widths.
- Mark the centre line on both pieces of material and mark a 1.6mm (1/16") offset to the left and to the right of the centre line.
- Label the piece as shown in the diagram.



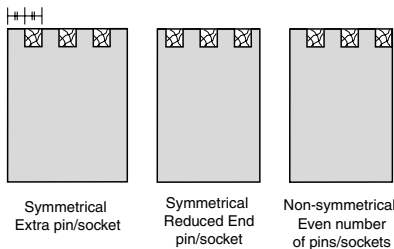
Use No.3 Edge Guides for the Comb Template



**Timber Widths**

- Any width of timber up to 300mm wide can be comb jointed, however to obtain an even looking symmetrical comb joint where there is an extra pin/socket, the timber must be machined to a width shown in the chart.
- For timber that is not machined to the recommended width, either the end pin/sockets will need to be narrow or an un-symmetrical comb will have to be machined.

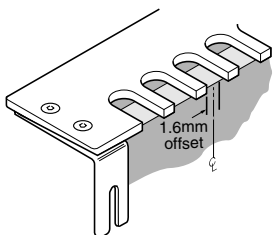
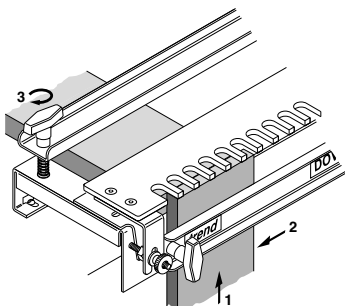
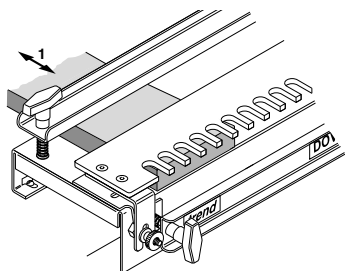
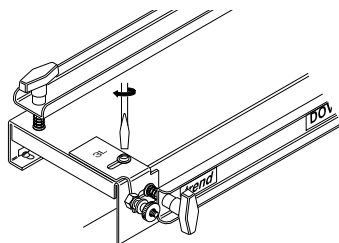
<b>1/2" (12.7mm) Comb Template</b> (25.4mm pitch with Symmetrical Sockets)								
No. of Sockets								
1	2	3	4	5	6	7	8	9...
38.1	63.5	88.9	114.3	139.7	165.1	190.5	215.9	241.3
<b>Optimum width of timber in mm</b> ie (Pitch x No. of Sockets) + 12.7mm = Width.								



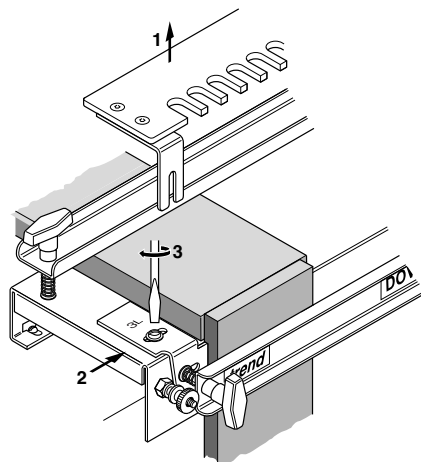
**Setting up the Jig**



- Fit the edge guides marked No. 3 and leave slightly loose.
- Fit the comb template to the jig.  
Slide a packing piece which is at least 1/4" (6.35mm) thicker than the timber for the joint, under the top clamp, flush with the front of the jig and well away from the edge guide.  
Clamp it in position.
- To set the left-hand edge guide, slide the first box side (1) under the front clamp, keeping the top edge flush underneath the template, the left-hand offset line with the edge of a finger (2).  
Clamp the piece in this position (3).



- Remove the template (1), slide the edge guide up against the box side (2) held under the front clamp. Then tighten the edge guide securing screw (3).
- Repeat the setting up operation for the right-hand side edge guide using the right-hand off-set line.
- Ensure the packing piece supports the whole width of the box side, otherwise breakout could occur when routing.



### Routing the Joint



- Set the depth of cut as follows:

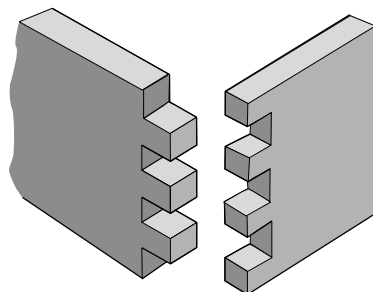
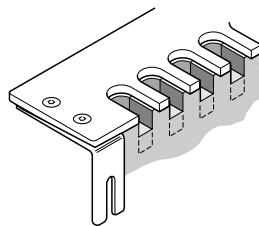
3 to 6mm - one pass

6 to 12mm - two passes

12 to 18mm - three passes

The full depth of cut should be the same as the thickness of the box side. A slightly deeper cut can be made if finishing is desired. However be careful not to rout into the body of the jig.

- To ensure a correctly fitting and a mirrored joint is obtained, place the pieces marked 'A' against the left hand edge guide and the 'B' piece against the right hand edge guide.
- Rout from left to right following each finger.
- Repeat the above steps for each box side.
- If the ends of the box sides are not flush then adjust the 1.6mm offset accordingly.
- Check the joints by assembling them dry. Any extra length to the fingers can be routed down and sanded off.



## **MAINTENANCE**

This jig has been designed to operate over a long period of time with a minimum of maintenance. Continual satisfactory operation depends upon proper tool care and regular cleaning.

### ■ **Cleaning**

Regularly clean the jig and remove resin build-up on all threads.

### ■ **Lubrication**

Your jig requires no additional lubrication.

## **RECYCLING**

Jigs, accessories and packaging should be sorted for environmentally friendly recycling.

## **GUARANTEE**

The jig carries a manufacturers guarantee in accordance with the conditions on the enclosed guarantee card.

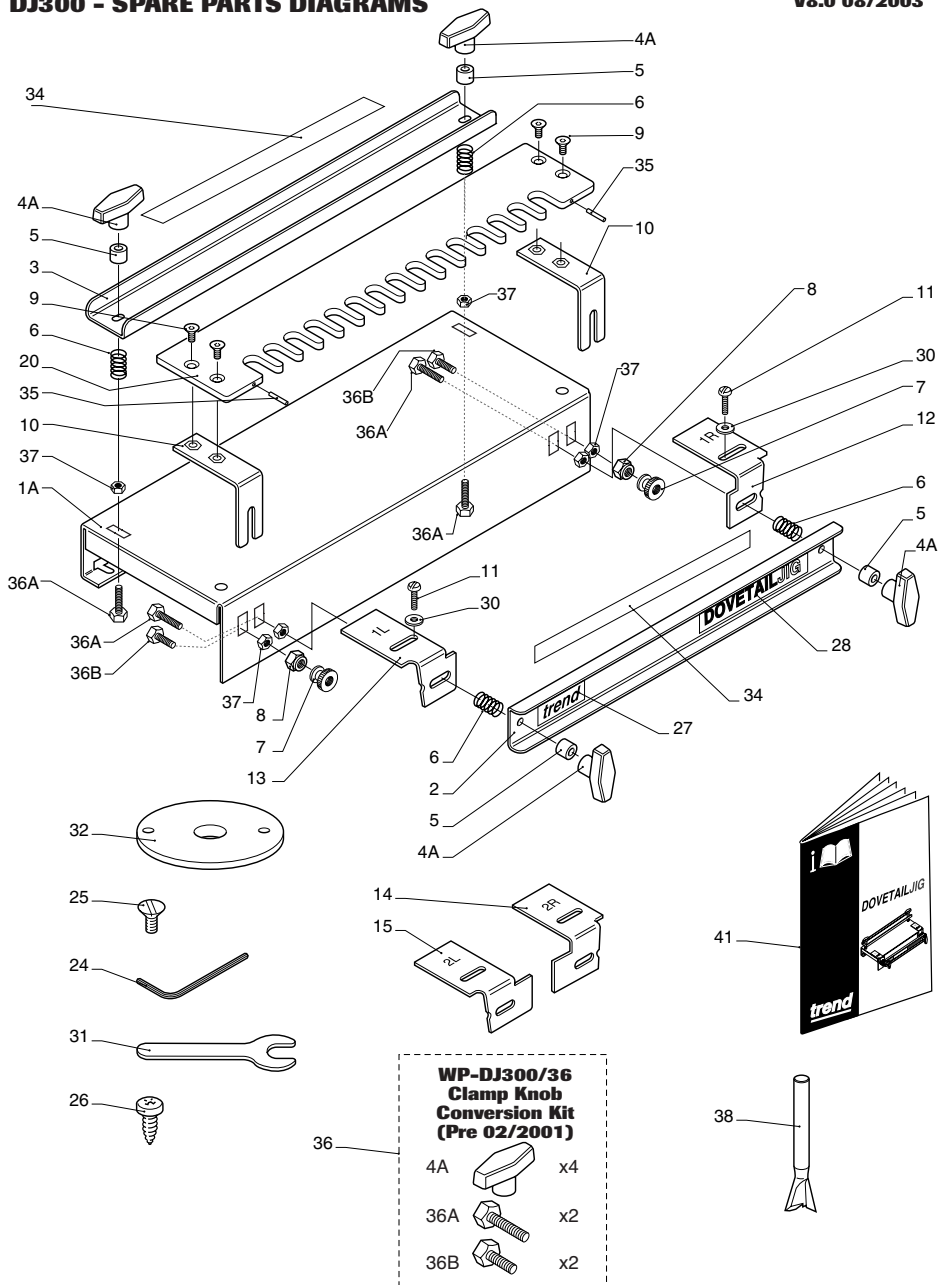
For the location of your nearest Trend Service Agent, please call the telephone number at the back of this manual.

<b>DJ300 - SPARE PARTS LIST</b>			<b>v8.0 08/2003</b>
<b>No.</b>	<b>Qty.</b>	<b>Desc.</b>	<b>Ref.</b>
1	1	DJ300 Jig Body c/w Studs (< 02/2001)	WP-DJ300/01
1A	1	DJ300 Jig Body Embossed (> 02/2001)	WP-DJ300/01A
2	1	Front Clamping Bar - short	WP-DJ300/02
3	1	Top Clamping Bar - long	WP-DJ300/03
4	4	Clamp Knob Male UNC <sup>1/4"</sup> - 20 x 1 <sup>1/2"</sup>	WP-DJ300/04
4A	4	Clamp Knob Female UNC <sup>1/4"</sup> - 20 (post 02/2001)	WP-DJ300/04A
5	4	Nylon Spacer	WP-DJ300/05
6	4	Spring For bar	WP-DJ300/06
7	2	Knurled Brass Thumb Screw	WP-DJ300/07
8	2	Lock Nut UNC <sup>1/4"</sup> - 20	WP-DJ300/08
9	4	Machine Screw 1/2" (12.7mm) Dovetail UNF10 - 32 x 3/8" Skt	WP-DJ300/09
10	2	Template Bracket c/w Nut	WP-DJ300/10
11	2	Edge Guide Pan Head Screws UNF10 - 32 x 3/8" Skt	WP-DJ300/11
12	1	No.1 1/2" (12.7mm) Edge Guide Right	WP-DJ300/12
13	1	No.1 1/2" (12.7mm) Edge Guide Left	WP-DJ300/13
14	1	No.2 1/2" (12.7mm) Rebated Edge Guide Right	WP-DJ300/14
15	1	No.2 1/2" (12.7mm) Rebated Edge Guide Left	WP-DJ300/15
16	1	No.3 1/4" (6.35mm) Edge Guide Right	WP-DJ300/16
17	1	No.3 1/4" (6.35mm) Edge Guide Left	WP-DJ300/17
18	1	No.4 1/4" (6.35mm) Rebated Edge Guide Right	WP-DJ300/18
19	1	No.4 1/4" (6.35mm) Rebated Edge Guide Left	WP-DJ300/19
20	1	1/2" (12.7mm) Dovetail Template	WP-DJ300/20
21	1	1/4" (6.35mm) Dovetail Template	WP-DJ300/21
22	1	1/2" (12.7mm) Box/Comb Joint Template	WP-DJ300/22
23	4	Machine Screw UNF10 - 32 x 5/16" Slot (1/4" Template)	WP-DJ300/23
24	1	Hex Key 1/8" (3.2mm) A/F	AK/18
25	2	Machine Screw Csk M5 X 10mm Slot	WP-SCW/13
26	4	Screw Self Tapping No. 10 x 1/2" Pozi	WP-SCW/105
27	1	Trend Label	WP-DJ300/27
28	1	DJ300 Label	WP-DJ300/28
29	-	-	-
30	2	Edge Guide Screw Washer 5.2mm x 9.8mm x 1.1mm	WP-WASH/09
31	1	Spanner 7/16" A/F	WP-SPAN/716P
32	1	Guide Bush 15.7mm Dia	GB157
33	1	Guide Bush 7.74mm Dia	GB774
34	2	Self Adhesive Friction Strip	WP-DJ300/34
35	2	Template Spring Pin Stop 3mm x 20mm	WP-DJ300/35
36	0	Clamp Knob Conversion Kit* (< 02/2001)	WP-DJ300/36
36A	4	Set Bolt Hex UNC <sup>1/4"</sup> - 20 x 1 <sup>3/4"</sup> (> 02/2001)	WP-DJ300/36A
36B	2	Set Bolt Hex UNC <sup>1/4"</sup> - 20 x 1 <sup>1/2"</sup> (> 02/2001)	WP-DJ300/36B
37	6	Half Nut Hex UNC <sup>1/4"</sup> - 20 (> 02/2001)	WP-DJ300/37
38	1	Dovetail Cutter 1/2" (12.7mm) Dia x 104°	L120 or C041A
39	1	Dovetail Cutter 6.0mm Dia x 98°	S31/11 or C154
40	1	Straight Cutter 12.55mm Dia x 25mm Cut	3/76 or C021A
41	1	Manual	MANU/DJ300

\* Converts pre 02/2001 jig to post 02/2001 version.

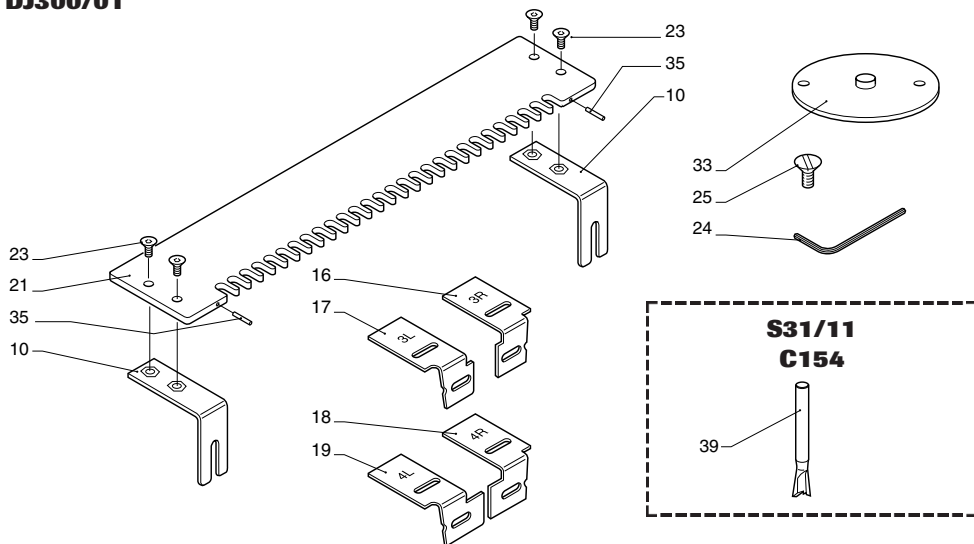
**DJ300 - SPARE PARTS DIAGRAMS**

**V8.0 08/2003**

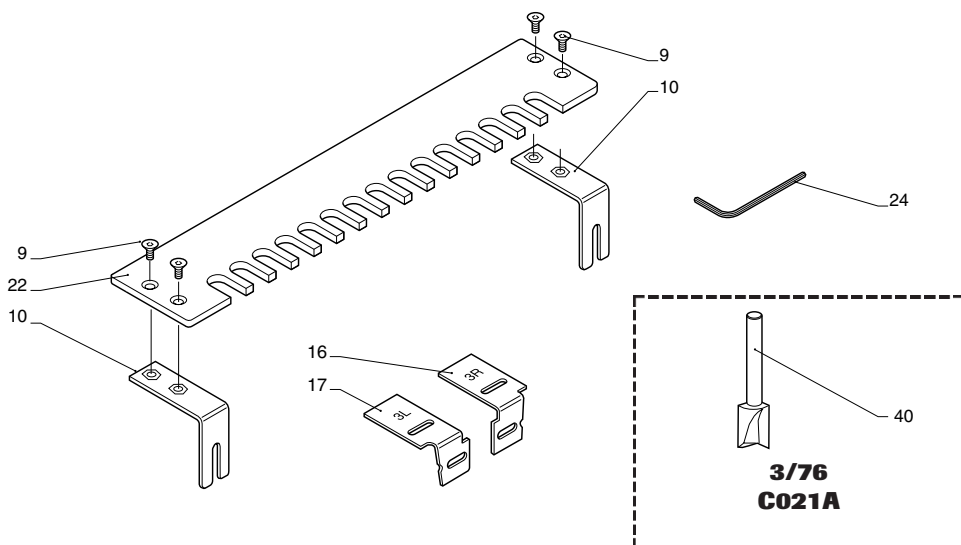




**DJ300/01**

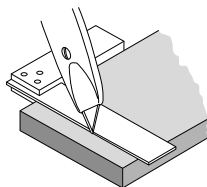


**DJ300/02**



## TROUBLE SHOOTING

- **Tear out** - this occurs when cutting across the grain and can be overcome by scribing the ends of the timber with a marking knife or gauge at the height of the cutter.



- **Dovetail joint too loose** - increase depth adjustment of cutter.
- **Dovetail joint too tight** - decrease depth adjustment of cutter.
- **Dovetail joint too shallow** - move template comb towards the jig body by adjusting locking nut.
- **Dovetail joint too deep** - move template comb away from body by adjusting locking nut.
- **Clamping bar will not adjust sufficiently for 23mm plus thickness** - remove nylon spacers and refit clamping knob.
- **Clamping bar will not tighten sufficiently for 8mm thickness for 1/4" (6.35mm) dovetails** - insert a packing piece behind clamping knob.

MANU/DJ300 v8.0



RECYCLABLE

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