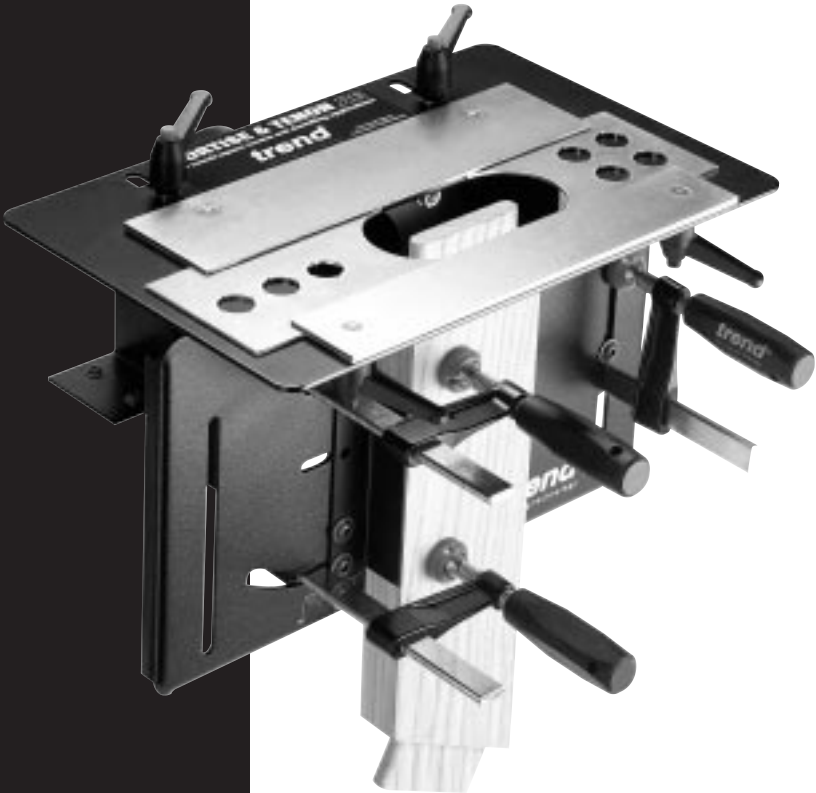


34609



MT/JIG

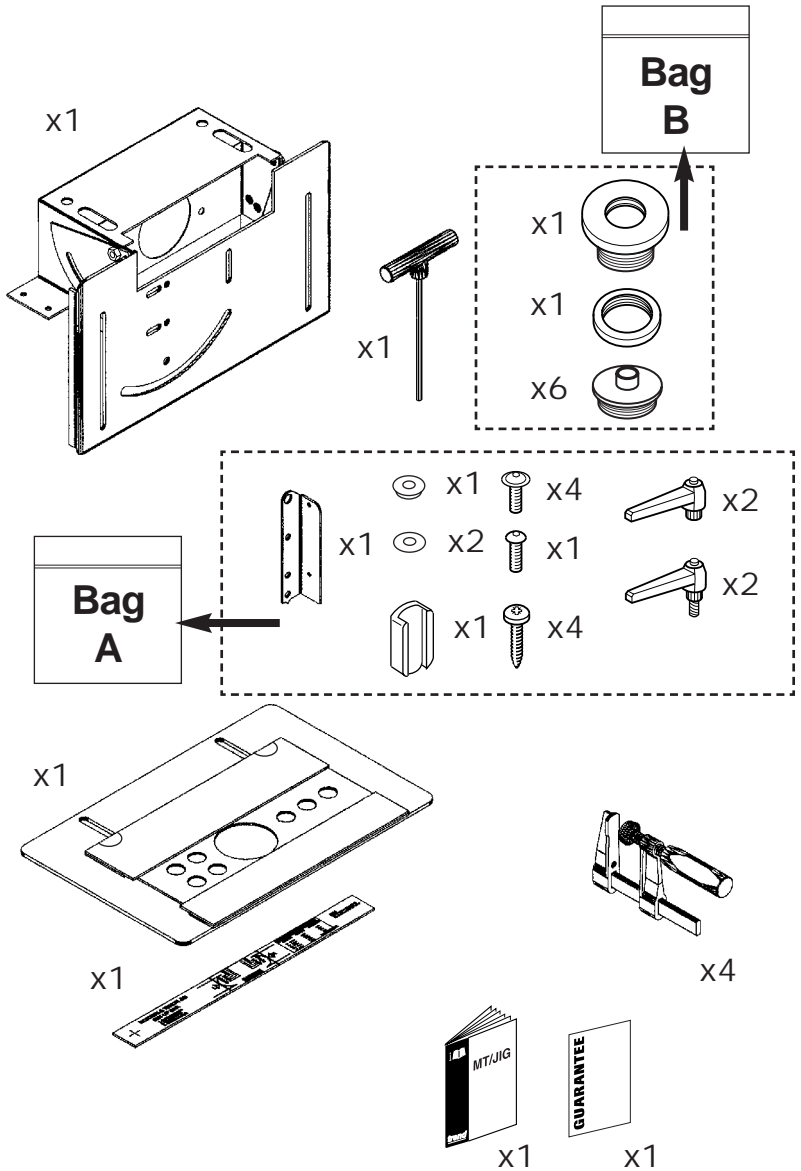
USA



trend[®]
routing technology

RTD10000037AB

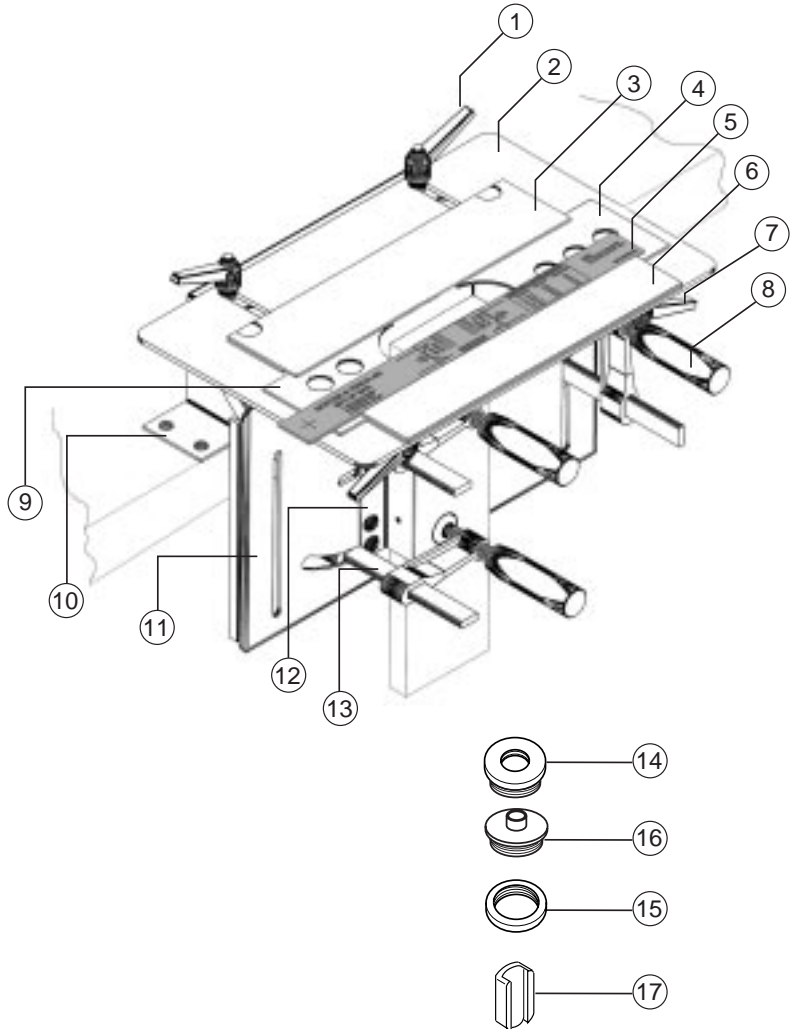
**Items
Enclosed**



For Technical Support
email: technical@trend-usa.com

**Description
of parts**

- ① Male adjustable lever
- ② Top plate assembly
- ③ Template clamp (back)
- ④ Long template
- ⑤ Set-up bar
- ⑥ Template clamp (front)
- ⑦ Female adjustable lever
- ⑧ F clamp handle
- ⑨ Short template
- ⑩ Main body
- ⑪ Tilting back plate
- ⑫ Vertical guide
- ⑬ F clamp bar
- ⑭ 2-1/8" Bush
- ⑮ Threaded ring
- ⑯ Template bushes
- ⑰ F clamp cap

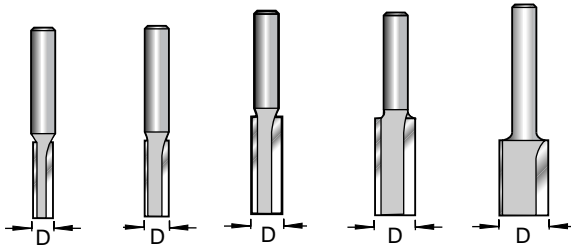


Accessories

Suitable router cutters

Although standard router bits can be used having the appropriate diameter, a set of five long reach straight bits with 1/4" shanks are available.

Ref. SET/MT1X1/4TC



Includes

Ref.	C008	C012	C015	C022	C026
D Inch	1/4	5/16	3/8	1/2	5/8

Optional mortise cutters and tenoning bushes.

Ref. C003 (3/16") diameter. Use with 1-5/16" template bush.

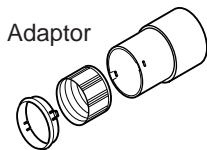
Ref. C018 (7/16") diameter. Use with 1-1/16" template bush.

Ref. C024 (9/16") diameter. Use with 15/16" template bush.

Extraction Dust Kit

For dust-free working, this kit allows connection to a 1-1/2" or 2-1/4" hose. The dust shield is only used when routing tenons.

Ref. MT/DUSTKIT

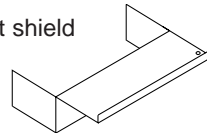


Adaptor

Dust spout



Dust shield



x4 x4 x4 x2

SAFETY PRECAUTIONS

- Always switch off the power and unplug the router when changing bits or when making adjustments.
- Always wear protective goggles when routing.
- Wear sound protective ear muffs when routing for long periods of time.
- Always wear a dust mask or respirator. Use dust extraction equipment whenever possible.
- Do not wear loose clothing. Make sure baggy sleeves are rolled up and ties are removed.
- Always remove spanners and hex keys from the work piece before switching router on.
- Keep hands well clear of the router bit when routing.
- Avoid accidental starting of the router. Make sure the power switch is in the 'Off' position before plugging in and connecting to the electrical supply.
- Never leave the router unattended when running. Always wait until the router comes to a complete stop before making any adjustments.
- Do not switch the router on with the bit touching the work piece.
- Mount the M&T Jig securely to the workbench or workboard.
- Periodically check all bolts and levers to make sure they are secure.

Cutter Care

- Do not drop bits or knock them against hard objects.
- Bits should be kept clean. Resin build-up should be removed at regular intervals with Resin Cleaner[®]. The use of a dry lubricant such as Trendicote[®] PTFE spray will act as a preventative measure.
- Bit shanks should be inserted into the collet at least 2/3 of shank length to prevent distortion. A distorted collet should be discarded, as it can cause vibration and damage the bit's shank.
- Do not over tighten the collet nut as this will

score the bit's shank and create a weakness.

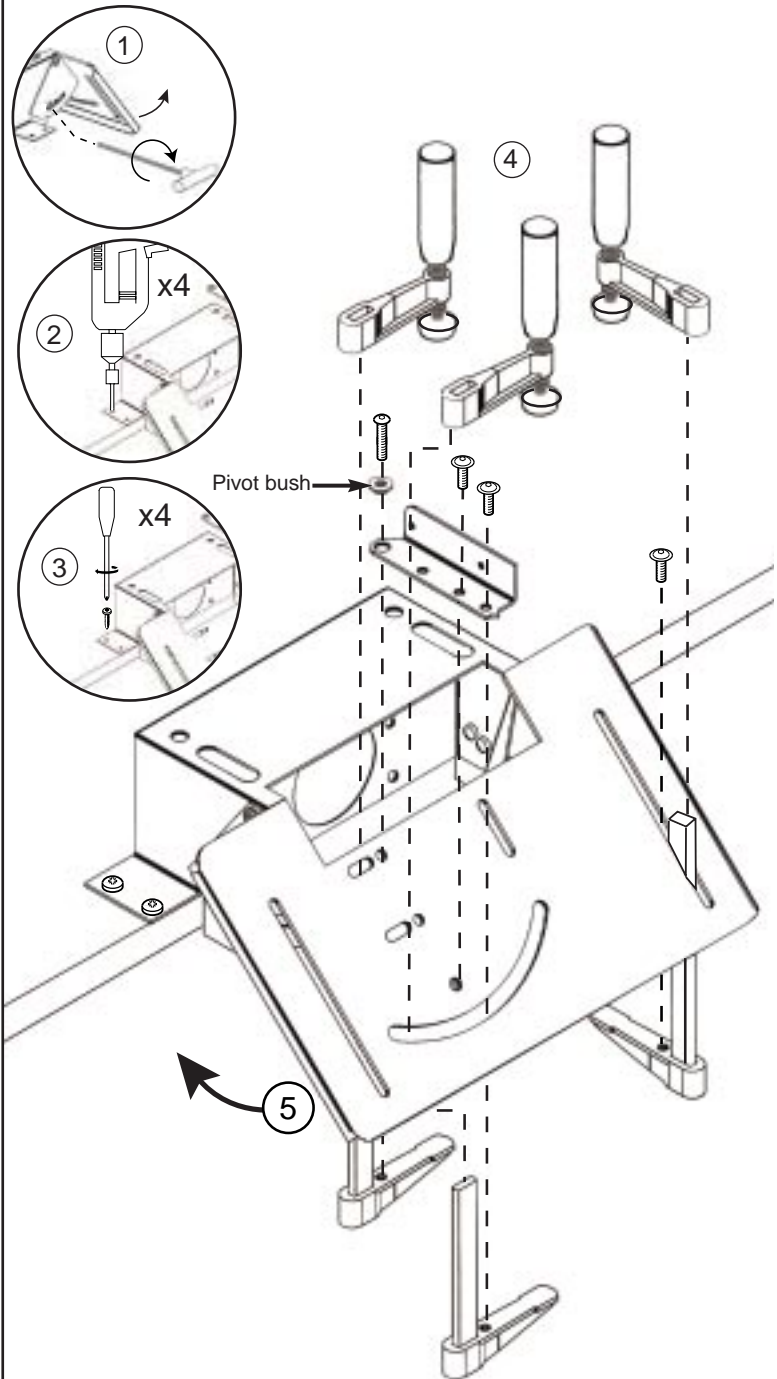
- It is advisable to periodically check the router collet nut for wear.

Useful Advice

- Judge your feed rate by the sound of the motor. In time, the operator will acquire a 'feel' for the router and an efficient feed speed will come naturally. Too slow a feed will result in burning of the timber.
- Apply the normal precautions as with any electric power tool.
- The main cause of routing machine failure is the inclination for operators to overload them. The motto is 'Keep the revs up'. The drop in revolutions should not exceed, if possible, more than 20% of full running speed.
- The motor of a router is susceptible to the accumulation of sawdust and wood chips and should be blown out, or 'vacuumed' frequently to prevent interference with normal motor ventilation.
- Refer to the Instruction Manual supplied with your router for full details of its features and safety information.
- Trial cuts should be made on waste material before starting, to obtain familiarity with the jig and check correct selection of bit and template bush.

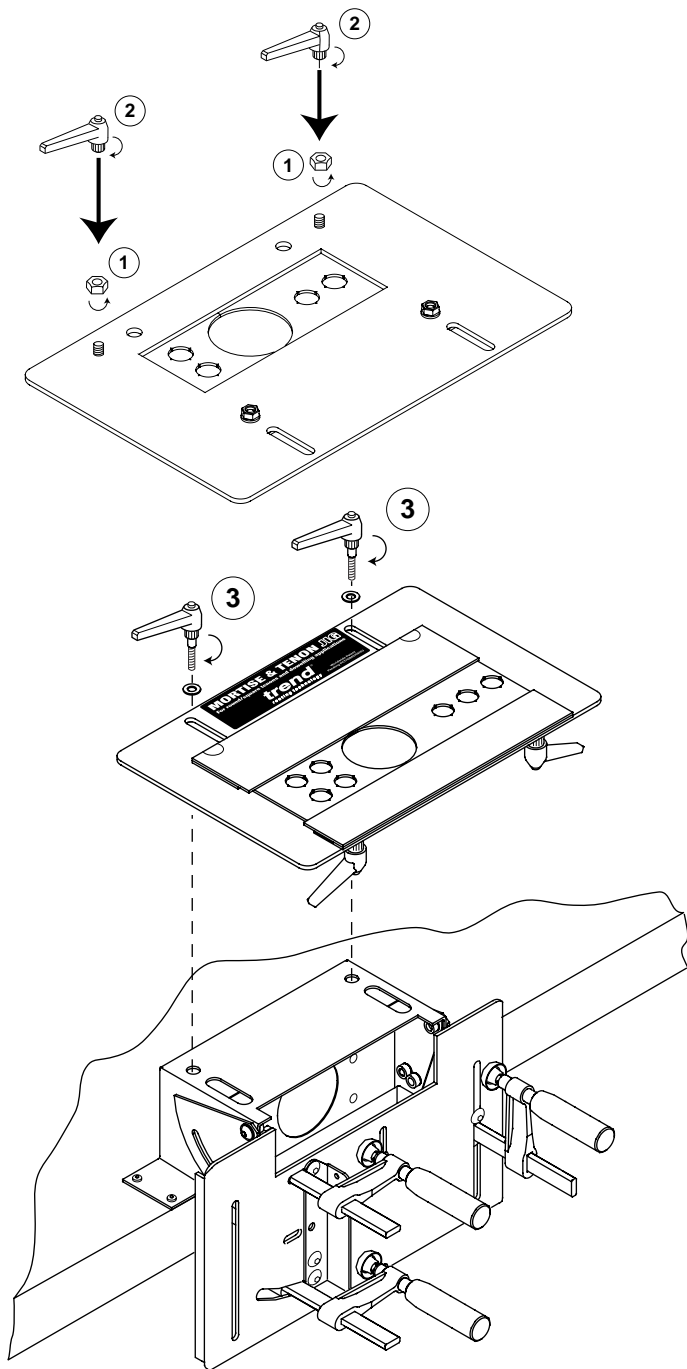
Fixing and assembly

- 1 Secure the tilting back plate in its 45° position with the two hex screws.
- 2 Position the main body on the edge of the workbench or workboard and drill four 1/8" holes 5/8" deep.
- 3 Secure the jig with the 4 self-tapping screws with a No.2 Pozi screw driver.
- 4 Fit the three F clamps and vertical guide as shown. Noting that the longer hex screw without a flange is used in conjunction with the pivot bush.
- 5 Return the tilting back plate to the 0° position and lock.



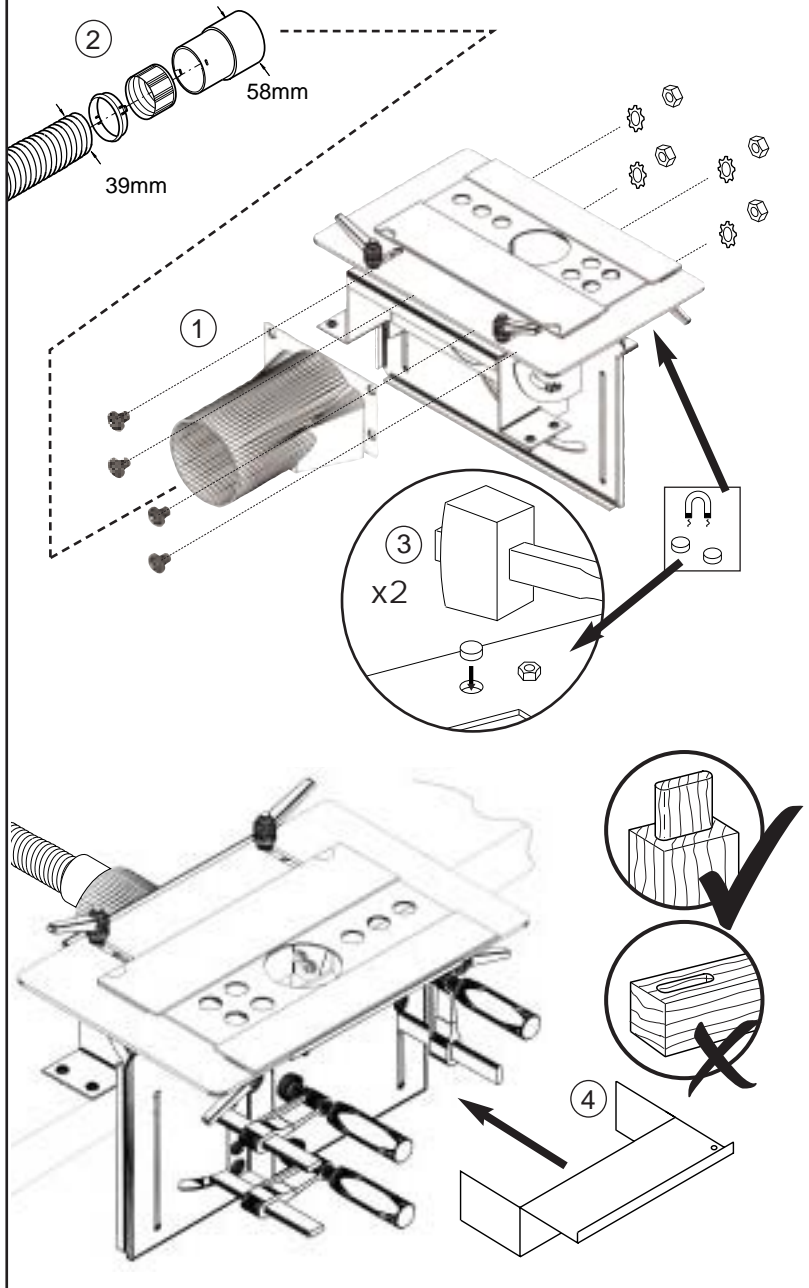
Assembly of the Top plate

- 1 Remove the transit nuts and discard.
- 2 Fit the two female adjustable levers. If fitting the optional dust extraction kit refer to opposite page.
- 3 Turn the top plate over so that it's facing up and secure the top plate with the two male adjustable levers and washers.



Fitting the optional dust extraction kit
Ref. MT/DUSTKIT

- 1 Fit the dust spout using the 4 bolts, shake-proof washers and nuts.
- 2 Assemble the ring, fitting and body of the adaptor onto the 1-1/2" hose if required.
- 3 Fit the two magnets by gently knocking them into the front edge on the underside of the top plate with a wooden mallet until flush.
- 4 The dust shield should only be fitted when cutting tenons. It is held in place by the magnets.



Marking out the Tenon

- 1 It is essential that the timber is square all round.

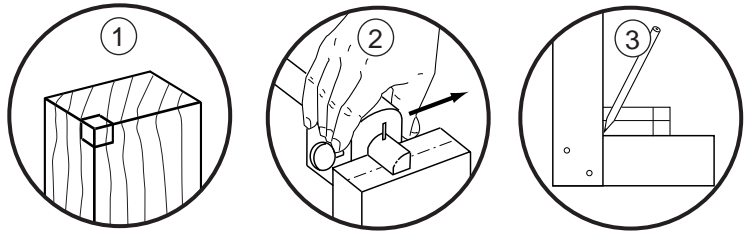
Study the drawings for the appropriate type of tenon to calculate the positions of the centre line and end tenon marks.

- 2 Mark up the centre line on the end of the first piece of timber using a marking gauge.

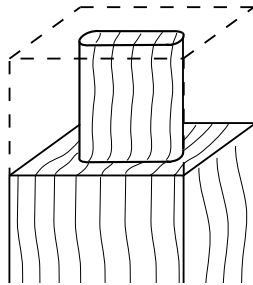
- 3 Mark the tenon end marks using a set square.

NOTE

When mounting timber in the jig keep the face side towards the jig.



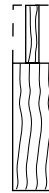
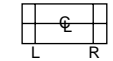
Straight tenon



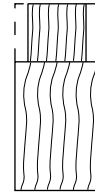
Plan view



Marked End

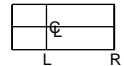
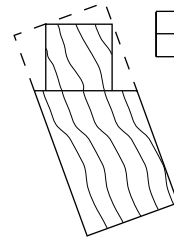
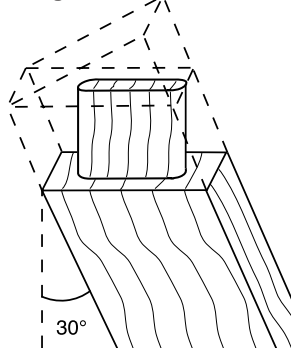


End view

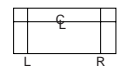
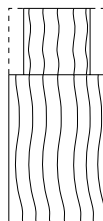
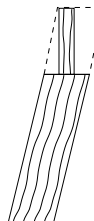
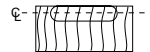
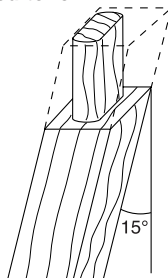


Front view

Side angled tenon



Front angled tenon



Cutter & Guide Bush Selection

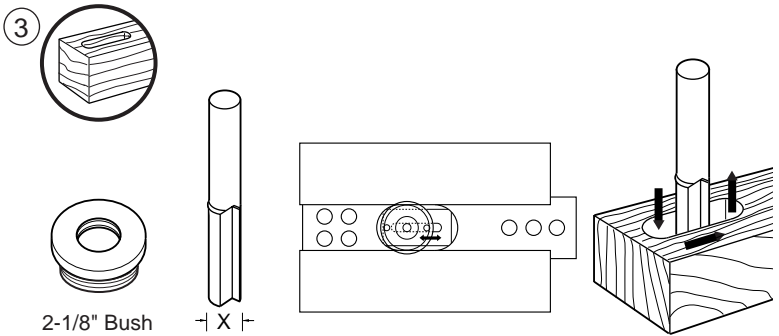
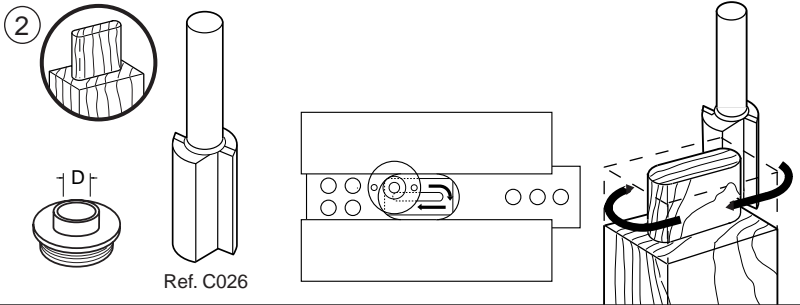
- ① Calculate an appropriate tenon width 'X' for the timber width 'W' e.g. X = 1/4" and choose the nearest appropriate tenon width from the chart below.
- ② For the tenon choose the appropriate guide bush diameter 'D' from the chart below for the tenon width, e.g. D = 1 1/4". Tenon cutter will always be Ref. C026.
- ③ For the mortise choose the cutter to suit the tenon width 'X' e.g. C008. Guide bush diameter will always be 2-1/8".

①

$$X = \frac{W}{3}$$

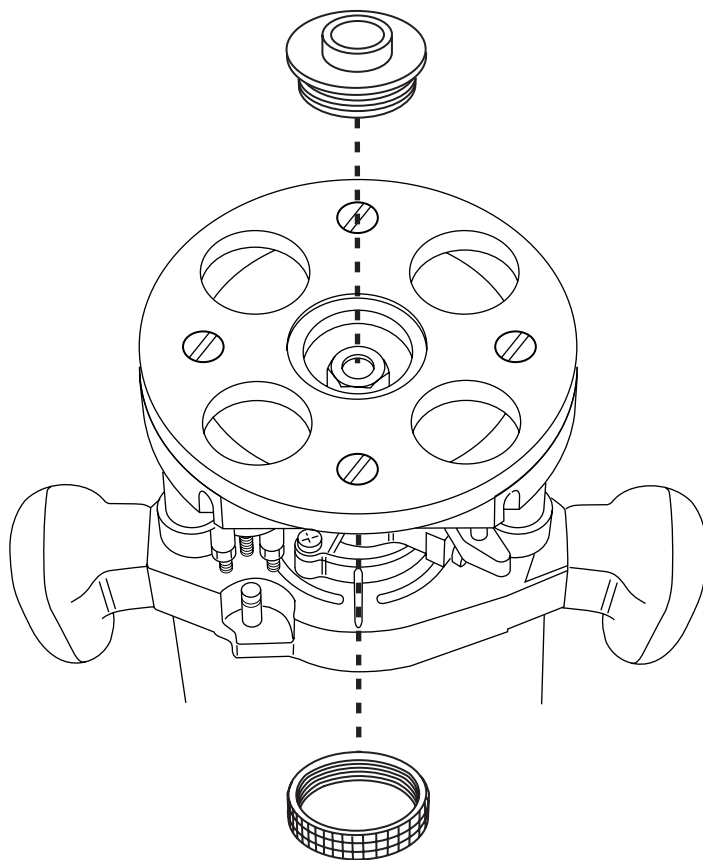
Example

Timber width of (W) 3/4". Tenon width (X) = 1/4"



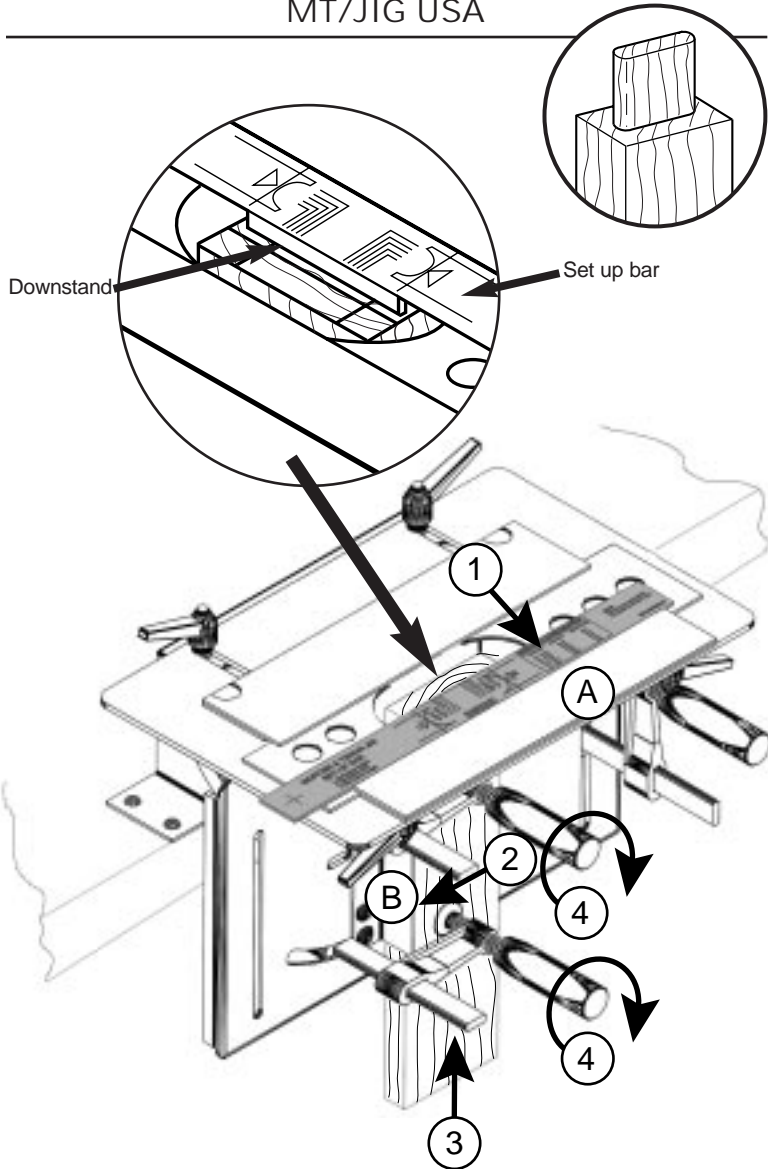
TENON WIDTH Imperial X	TENON		MORTISE	
	Guide Bush Diameter D	Cutter Ref	Guide Bush Dia	Cutter Ref
1/4"	1-1/4"		Use	C008
5/16"	1-3/16"	Use	2-1/8"	C012
3/8"	1-1/8"	C026	for	C015
1/2"	1"	for	all	C022
5/8"	7/8"	all		C026
Other sizes possible. (Guides bushes not included with jig):				
3/16"	1-5/16"			C003
7/16"	1-1/16"			C018
9/16"	15/16"			C024

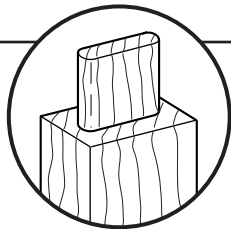
**Fitting of
guide
bushes**



Set Timber Height

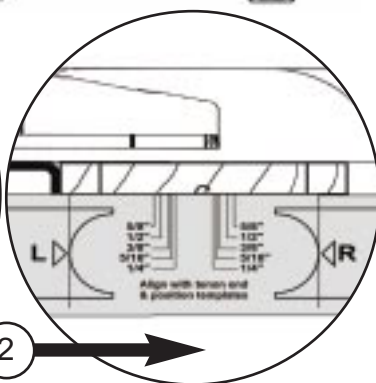
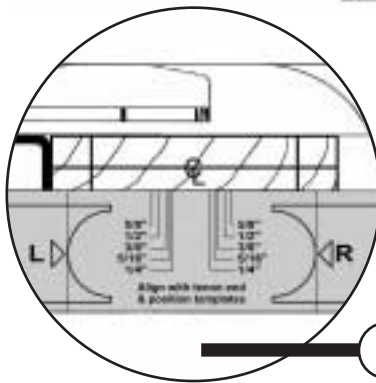
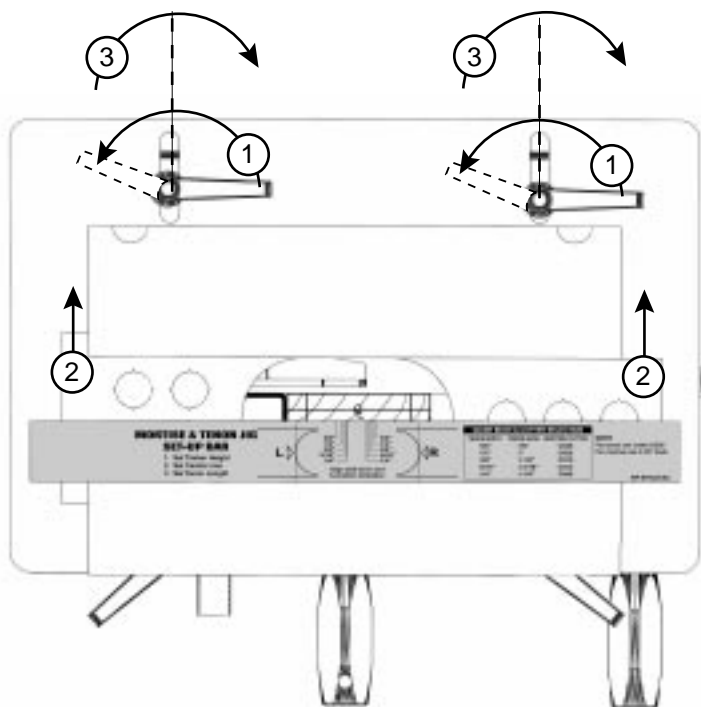
- ① Place set-up bar on templates and push it against clamping plate (A).
- ② & ③ Place timber up against vertical guide (B) and raise until it touches downstand of set-up bar.
- ④ Tighten F clamp handles securely.





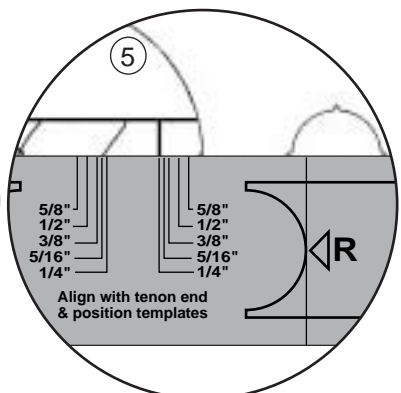
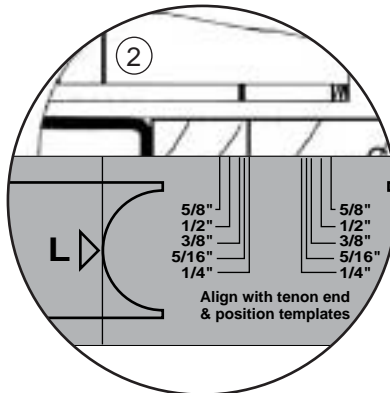
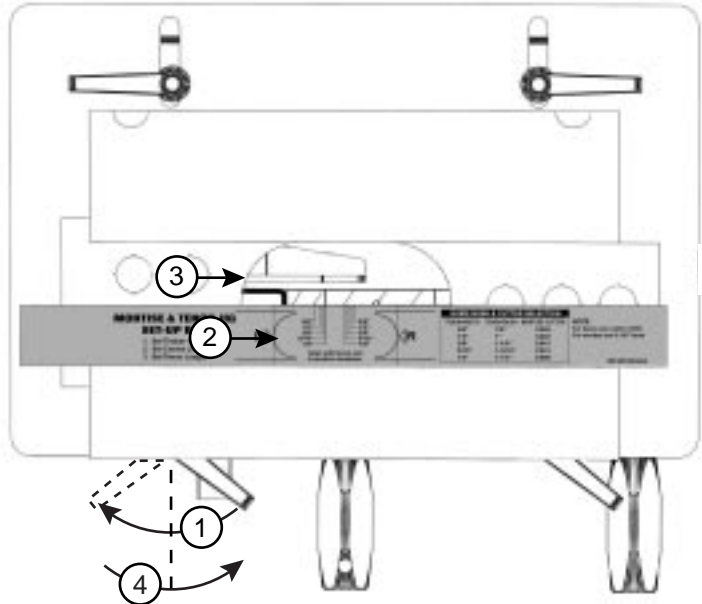
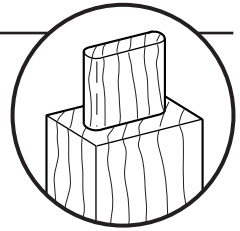
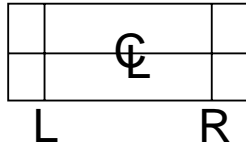
Set Centre Line

- ① Release levers.
- ② Adjust position of top plate until the down stand of the set-up bar aligns with the centre line.
- ③ Tighten levers.



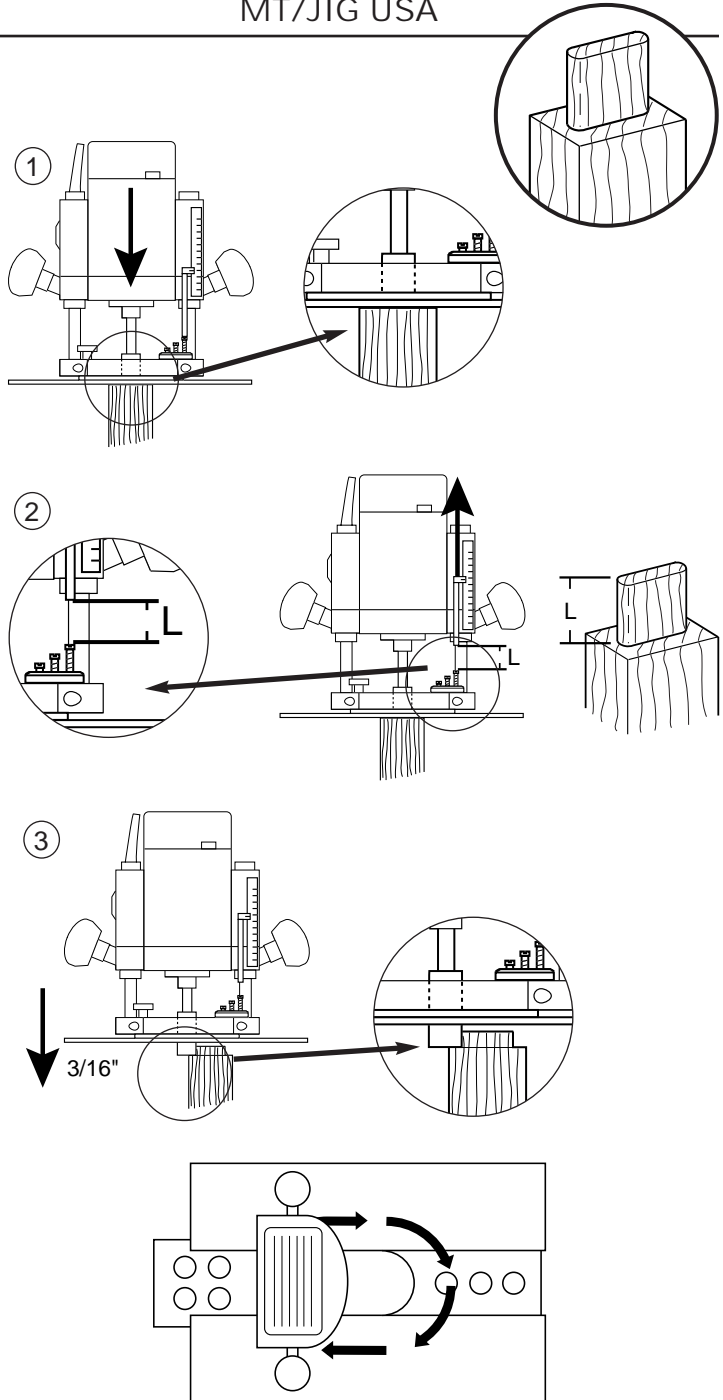
Set Tenon length

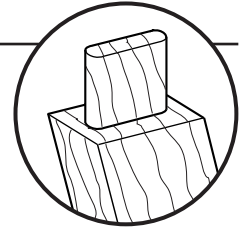
- ① Release levers.
- ② Align mark on set-up bar with relevant left hand tenon mark. E.g. 1/4" mark if using 3/4" timber.
- ③ Slide left hand template to the right until it contacts the stand of the set up bar.
- ④ Tighten lever.
- ⑤ Repeat procedure (1) to (4) for right hand template using relevant right hand mark on set-up bar.



Routing Procedure

- ① After fitting the C026 bit and appropriate template bush (see chart on page 9), lower cutter down until it touches end of timber and lock off plunge of router.
- ② Raise and lock the depth stop to the length of the tenon required.
- ③ Plunge and rout in a clockwise direction at a depth of no more than 3/16" in repeated passes until the full depth is reached as set by the depth stop. Ensure the template bush is kept firmly pressed against the circles of the templates and edges of the clamping plates.



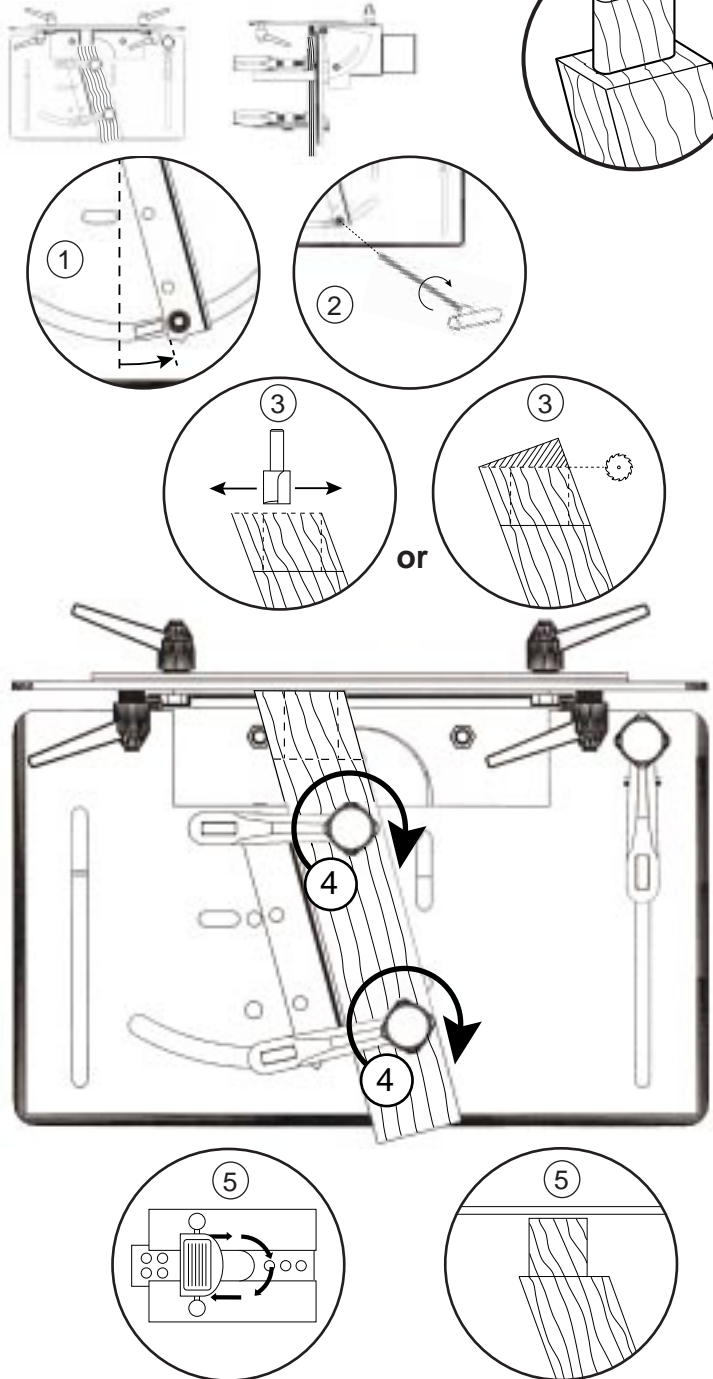


Side Angled Tenon

- ① Remove the lower F clamp head and adjust the position of the vertical guide as required.
- ② Tighten the bolt with the allen key and refit the F clamp head.
- ③ Rout the end of the timber parallel to the top plate or cut it at the appropriate angle on a snip-off saw.
- ④ Fit and clamp the timber at the correct position using the set-up bar as shown on page 11.

Set the top plate position as shown on page 12.

Set the templates as shown on page 13.
- ⑤ Set the depth of cut and rout in increasing depths to complete the tenon as shown on page 14.



Front Angled Tenon

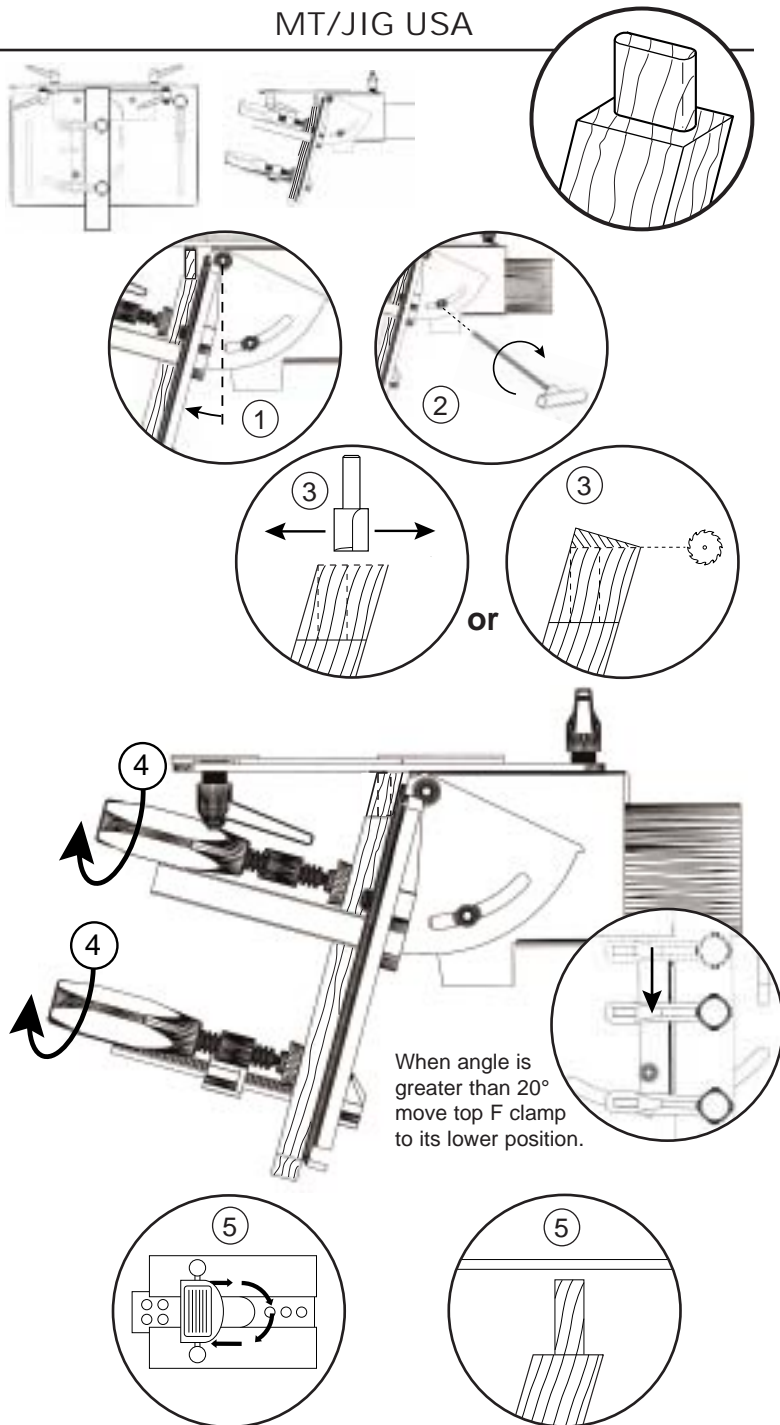
- 1 Adjust the tilting back plate to the position required.
- 2 Tighten the two bolts with the hex key.
- 3 Rout the end of the timber parallel to the top plate or cut at the appropriate angle on a snip-off saw.

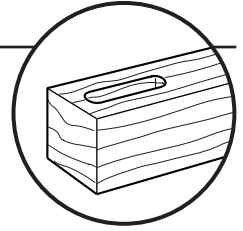
- 4 Fit and clamp the timber at the correct position using the set-up bar as shown on page 11.

Set the top plate as shown on page 12.

Set the templates as shown on page 13.

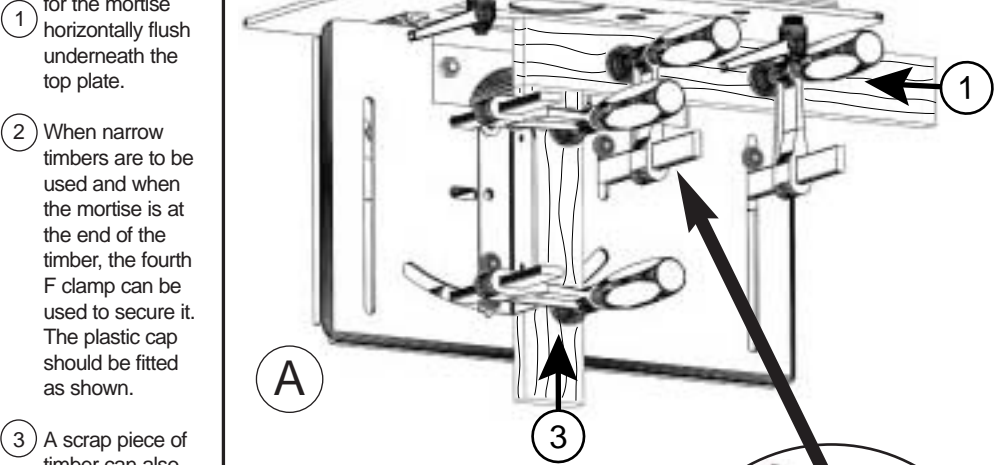
- 5 Set the depth of cut and rout in increasing depths to complete the tenon as shown on page 14.





Setting up for the Mortise

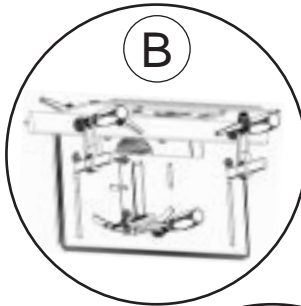
A Clamp the timber for the mortise horizontally flush underneath the top plate.



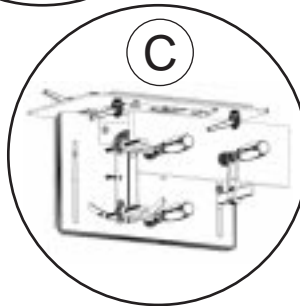
(2) When narrow timbers are to be used and when the mortise is at the end of the timber, the fourth F clamp can be used to secure it. The plastic cap should be fitted as shown.

(3) A scrap piece of timber can also be clamped vertically to give support and to assist in positioning of the horizontal timber.

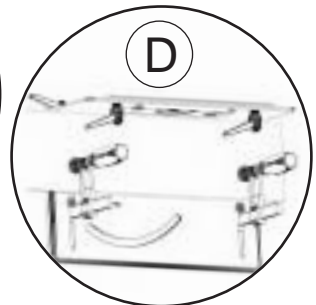
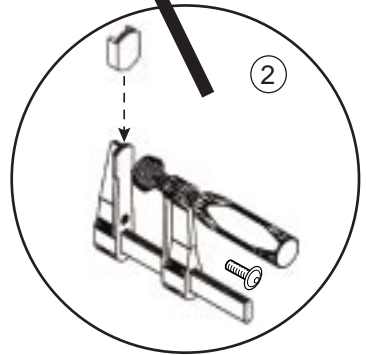
B This alternative set-up with fourth F clamp fitted in position on the left slot of the tilting back plate can be used.

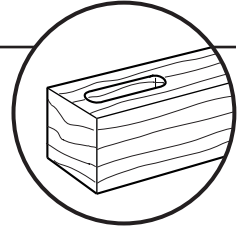


C Wider timber can be also accommodated by using the top clamp of the vertical guide.



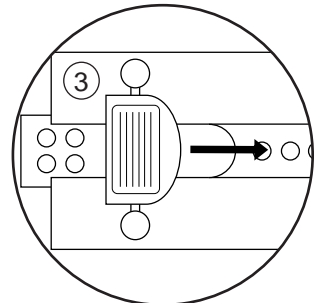
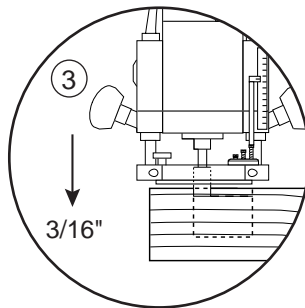
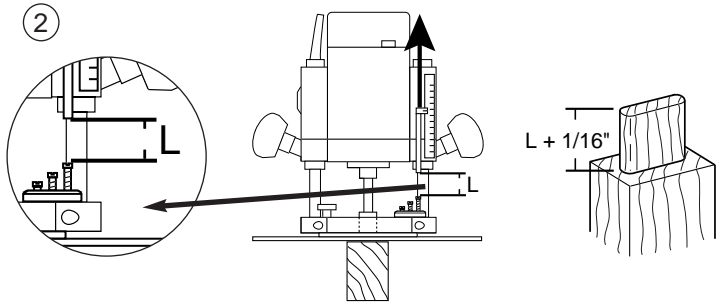
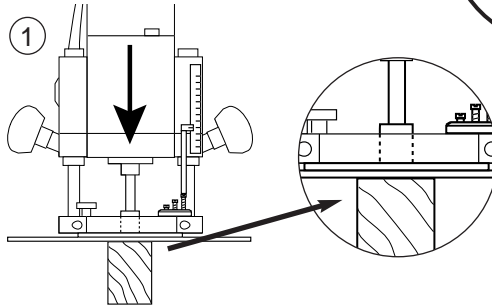
D Or removing the vertical guide and clamps and using a clamp in the left slot of the tilting back plate.

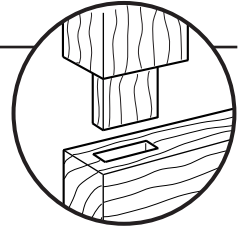




Cutting the Mortise

- 1 After fitting appropriate cutter and 2-1/8" template bush (see chart on page 9). Lower cutter down until it touches end of timber and lock off plunge of router.
- 2 Raise and lock the depth stop to the length of the tenon required plus 1/16".
- 3 Plunge and rout backwards and forwards at a depth of no more than 3/16" in repeated passes until the full depth is reached as set by the depth stop.

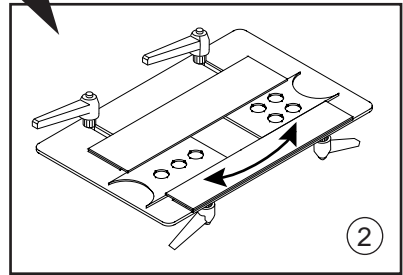
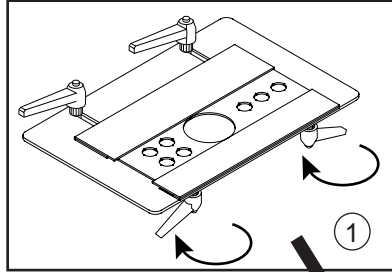




Square Mortise & Tenons

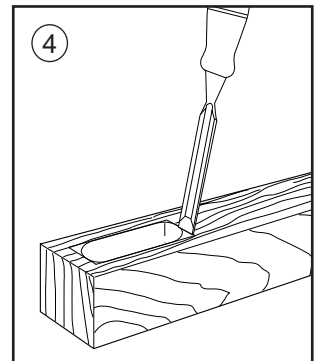
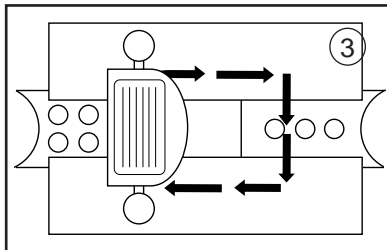
Tenons

- 1 Release locking levers.
- 2 Turn each template around. Set-up positions of top plate and templates as for round tenons. See page 11-13.
- 3 Rout in a clockwise direction following the template.



Mortise

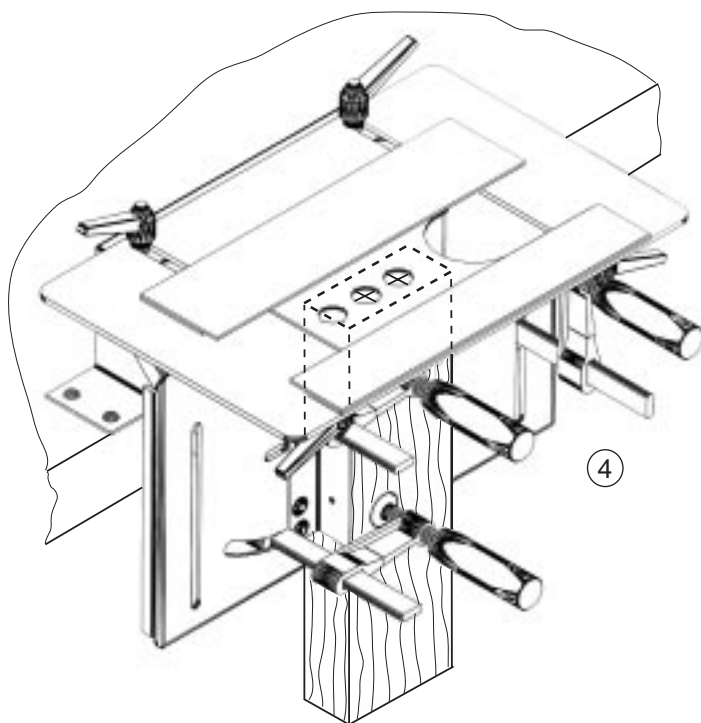
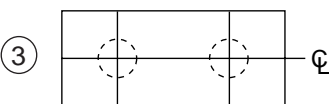
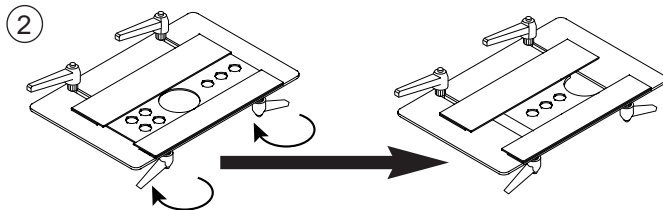
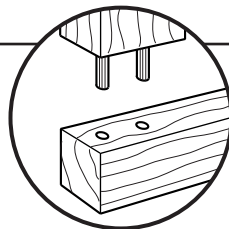
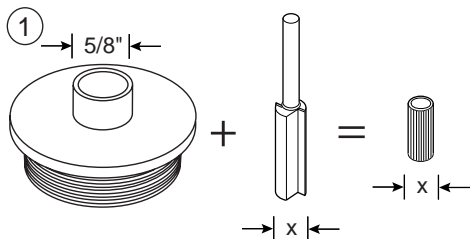
- 4 The mortise is routed in the same way. Square the ends of the mortise with a suitable size of chisel.



Doweling

- ① Select and fit the 5/8" template bush and a straight router cutter to suit the diameter of the dowels being used.
- ② Select the short or long template depending on the formation of holes to be used.
- ③ Mark the timber centre line and dowel positions. Note the template hole centres are at 1" centres.
- ④ Set-up and secure the timber in the same way as for mortise and tenons. But align the top plate using the centre line notches on the template holes. Set the cutter depth to slightly more than half the dowel length.

Locate the guide bush in each hole and rout the holes in a series of plunge cuts to prevent waste from packing around the cutter.



Doweling continued

A Position the horizontal timber tight to the underside of the top plate.

①

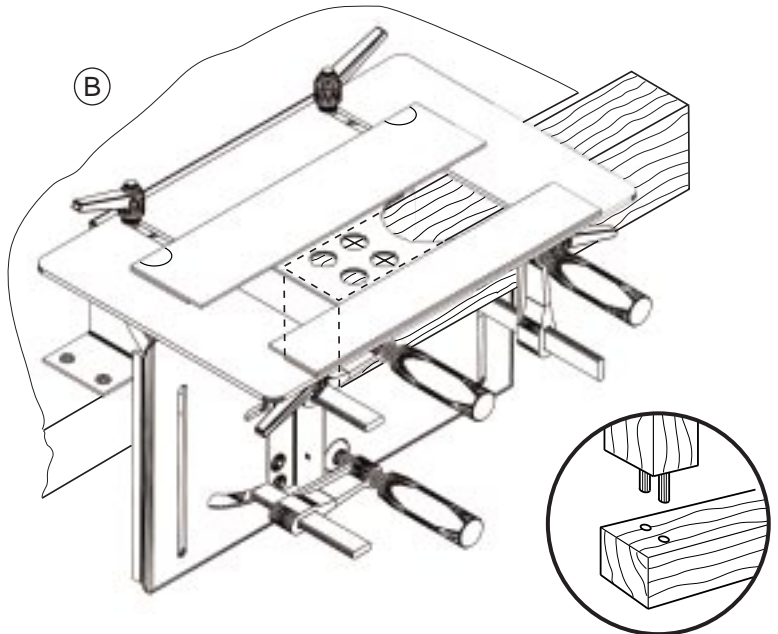
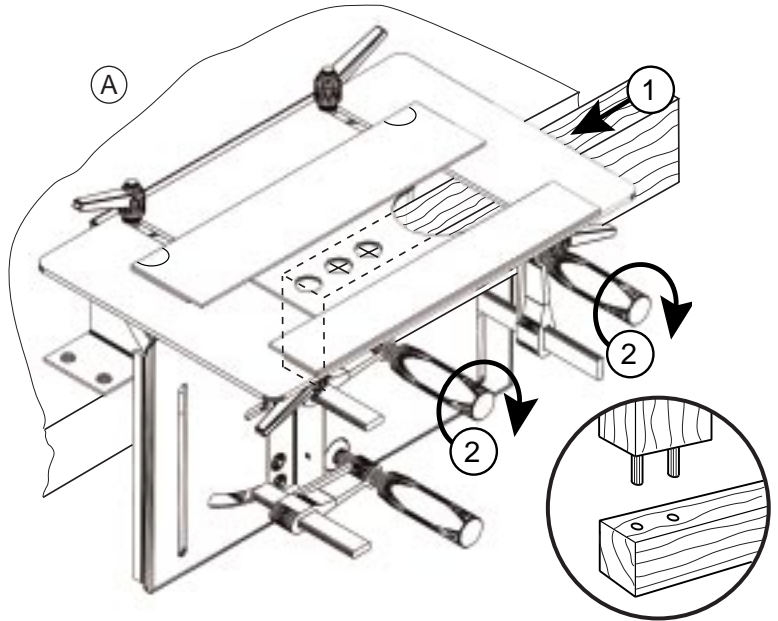
② Then clamp it securely using a vertical timber piece as a support as described on page 17 if required.

②

③ Plunge rout the holes as before.

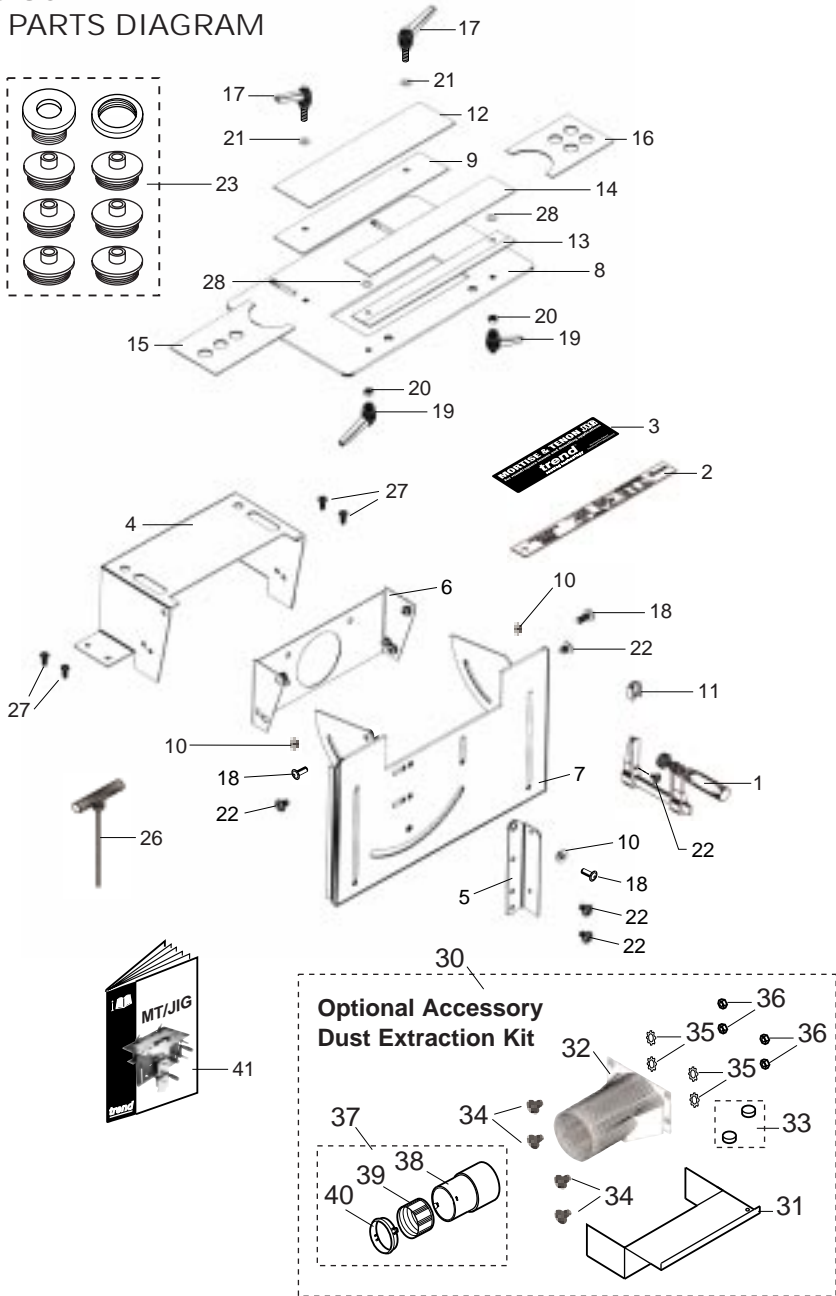
③

B Use the short plate for an alternative formation of holes.



MT/JIG USA
SPARE PARTS DIAGRAM

v1.0 05/2003



MT/JIG USA - SPARE PARTS LIST			v1.1 05/2002
No.	Qty.	Desc.	Ref.
1	4	F CLAMP FOR MT/JIG	WP-MT/01
2	1	MT/JIG SET-UP BAR USA	WP-MT/02/USA
3	1	LABEL TREND MT/JIG	WP-MT/03
4	1	MAIN BODY	WP-MT/04
5	1	VERTICAL GUIDE	WP-MT/05
6	1	INNER BODY	WP-MT/06
7	1	TILTING BACK PLATE	WP-MT/07
8	1	TOP PLATE	WP-MT/08
9	1	BACK CLAMP PLATE PACKING PIECE	WP-MT/09
10	3	PIVOT BUSH	WP-MT/10
11	1	F CLAMP SQUARE CAP	WP-MT/11
12	1	BACK CLAMP PLATE	WP-MT/12
13	1	FRONT CLAMP PLATE PACKING PIECE	WP-MT/13
14	1	FRONT CLAMP PLATE	WP-MT/14
15	1	TEMPLATE LONG	WP-MT/15
16	1	TEMPLATE SHORT	WP-MT/16
17	2	ADJUSTABLE LEVER M6 X15MM	CR/KB/PK8
18	3	MACHINE SCREW BUTTON M6 X 16MM SOCKET	WP-SCW/75
19	2	ADJUSTABLE LEVER M6 FEMALE	CR/KB/PK9
20	2	HEX NUT M6	WP-NUT/06
21	2	WASHER M6 FORM C	WP-WASH/12
22	6	MACHINE SCREW BUTTON M6 X 12MM FLANGE SOCKET	WP-SCW/73
23	1	GUIDE BUSH SET BRASS IMPERIAL	WP-MT/23/USA
26	1	T HANDLE HEX KEY 4MM X 150MM	HK/T/04
27	4	SCREW NO 10 X 3/4 PAN SELF TAP POZI	WP-SCW/108
28	2	CLAMPING BAR SHIMS	WP-MT/28
DUST EXTRACTION KIT - SPARE PARTS LIST			
31	1	DUST SHIELD	WP-MT/03
32	1	DUST SPOUT	WP-SRT/16
33	1	MAGNET PACK 10MM X3MM PACK OF FOUR	MAG/PACK/2
34	4	MACHINE SCREW BUTTON M6 X 12MM FLANGE SOCKET	WP-SCW/73
35	4	WASHER M6 INTERNAL SHAKEPROOF	WP-WASH/31
36	4	NUT M6	WP-MT/06
37	0	HOSE ADAPTOR 58MM TO 39MM 257011	CRT/3
38	1	ADAPTOR BODY FOR CRT/3	WP-CRT/97
39	1	ADAPTOR FITTING FOR CRT/3	WP-CRT/98
40	1	ADAPTOR CLIP FOR CRT/3	WP-CRT/99
41	1	MANUAL USA	MANU/MT/USA



IMPORTANT!

For use with Plunge Routers only



Caution

Carefully read through this entire instruction Manual and the entire router Operator's Manual before using your new Routasketch. Pay close attention to the Safety section and the Safety Symbols. If you use your Routasketch properly and only for what it is intended, you will enjoy years of safe, reliable service.



The operation of any router can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always wear eye protection.

MANU/MT/USA v1.0



RECYCLABLE

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