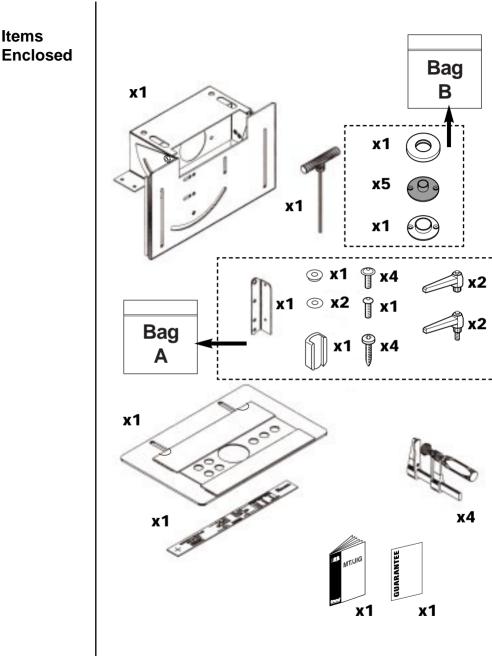


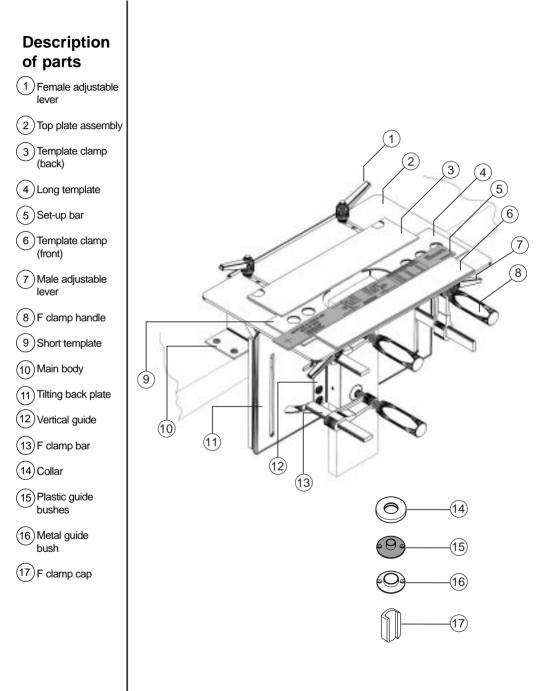




Items





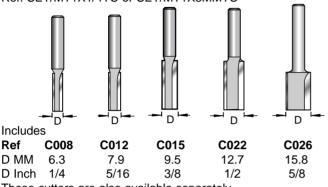




#### Accessories

#### Suitable router cutters

Although standard router cutters can be used having the appropriate diameter, a set of five long reach straight cutters with 1/4" or 8mm shanks are available. Ref. SET/MT1X1/4TC or SET/MT1X8MMTC



These cutters are also available separately.

Other cutters for alternative tenon sizes.

Ref. C003 (3/16")(4.8mm) diameter. Use with 1-5/16" guide bush (GB333).

Ref. C018 (7/16")(11.1mm) diameter. Use with 1-1/16" guide bush (GB27).

Ref. C024 (9/16")(14.3mm) diameter. Use with 15/16" guide bush (GB238).

#### **Extraction Dust Kit**

For dust-free working, this kit allows connection to a 39mm or 58mm hose. The dust shield is only used when routing  $90^{\circ}$  tenons.

Ref. MT/DUSTKIT



#### **Metal Guide Bushes**

These can be purchased to replace the plastic versions supplied with the jig or for alternative sizes of tenons.





#### SAFETY PRECAUTIONS

- Always switch off the power and unplug the router when changing cutters 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 cutter 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 cutter 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 cutters or knock them against hard objects.
- 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 such as Trendicote<sup>®</sup> PTFE spray will act as a preventative measure.
- Cutter 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 cutter's shank.
- Do not over tighten the collet nut as this will

score the cutter's shank and create a weakness.

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

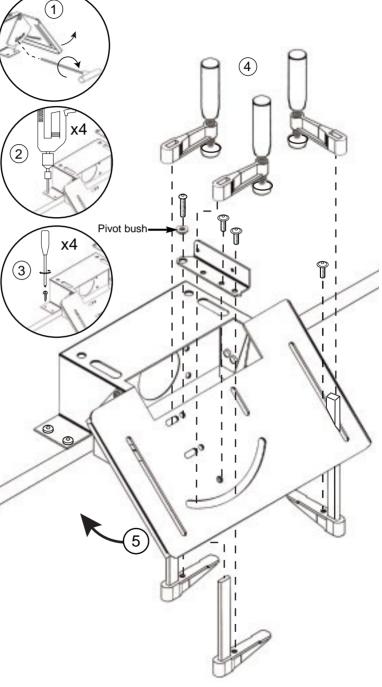
#### **Useful Advice**

- 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 cutter and guide bush.



# Fixing and assembly

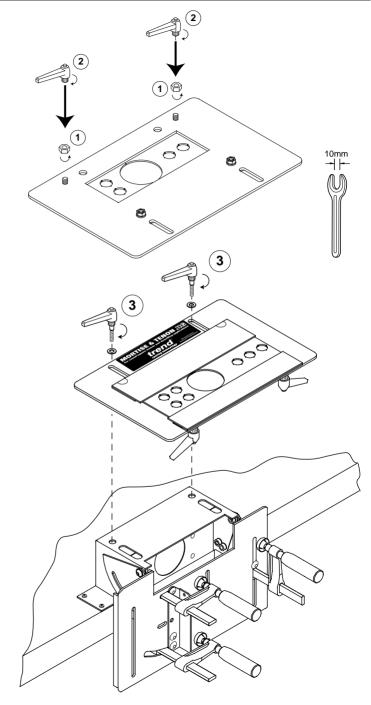
- 1 Secure the tilting back plate in its 45° position with the two hex screws.
- 2 Position the main body on the edge of the workbench or workboard and drill four 3mm/1/8" holes 15mm deep.
- 3 Secure the jig with the 4 selftapping screws with a No.2 Pozi screw driver.
- 4 Fit the three F clamps and vertical 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.



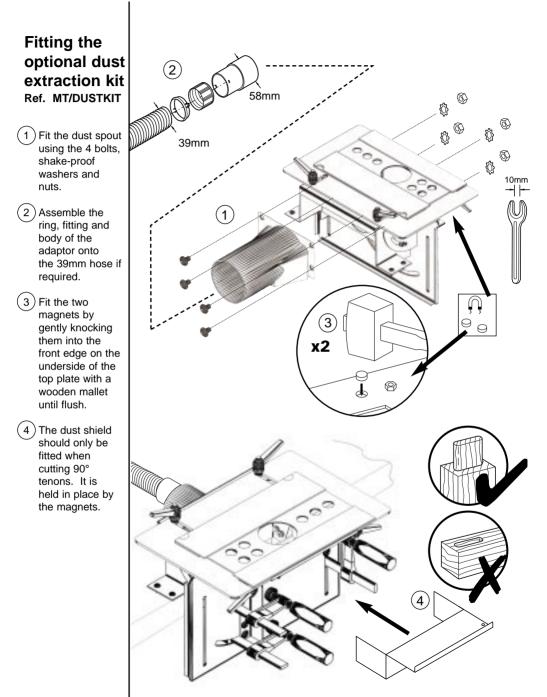


# Assembly of the Top plate

- 1 Remove the transit nuts with a 10mm spanner 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.









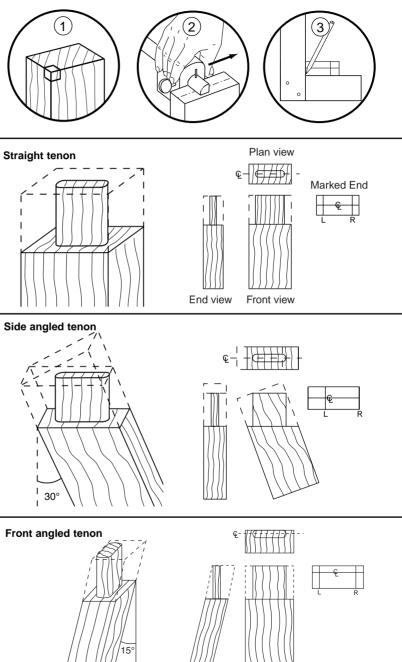
# Marking out the Tenon

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.



-8-

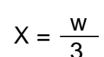


#### Cutter & Guide Bush Selection

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.

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 will always be the metal GB254 fitted with the collar.



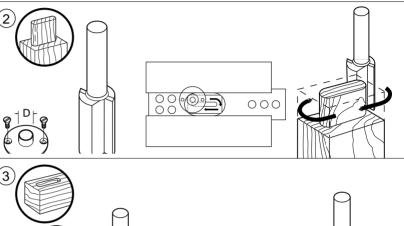
#### Example

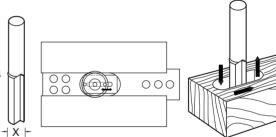
Ref. GB/COLL/25454

Ref. GB/254

1)

Timber width of (W) 3/4" (19mm). Tenon width (X) = 1/4" (6.3mm)





W

TENON WIDTH			MORTISE				
Imperial (Metric) X	Diameter (Ref)	Cutter Ref	Guide Bush Dia/Ref	Cutter Ref			
1/4" (6.3mm)	1-1/4" (GB318)		Use	C008			
5/16" (7.9mm)	1-3/16" (GB302)	Use	1"	C012			
3/8"(9.5mm)	1-1/8" (GB286)	C026	(GB254)	C015			
1/2"(12.7mm)	1" (GB254)	for	plus	C022			
5/8"(15.8mm)	7/8" (GB222)	all	collar	C026			
Other sizes possible. (Guides bushes not included with jig):							
3/16" (4.8mm)	1-5/16" (GB333)			C003			
7/16" (11.1mm)	1-1/16" (GB27)			C018			
9/16" (14.3mm)	15/16" (GB238)			C024			

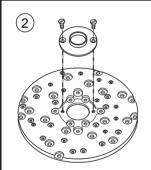


#### Fitting of guide bushes

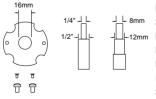
- 1 The guide bushes supplied with the jig will fit all TBC routers as listed.
- 2 A sub-base ref. Unibase will be required for all other makes of router as listed.



Trend T9



Ref. UNIBASE



# MT/JIG

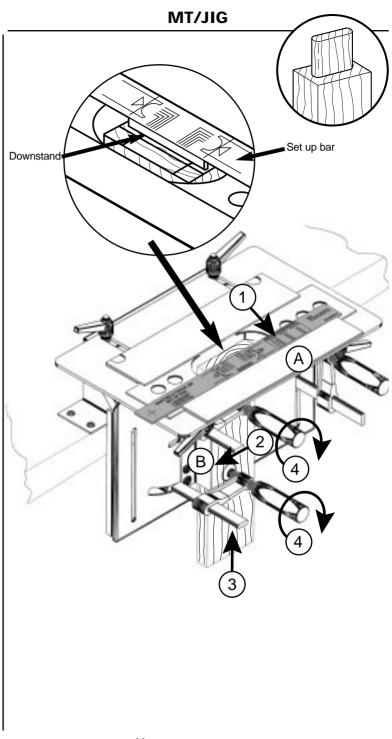
**TREND** T3 T5 T9 AEG OF450S, 500S, OFE710 ATLAS COPCO OFS50, 720, OFSE850, 1000 BLACK&DECKER SR100, BD780(E). KW779, 780(E), 800(E), **CHAMPION CPR850** DEWALT DW613, 614, 615 DRAPER R850V **EINHELL** EOF850SP ELU MOF96(E) Mk2. MOF69 FERM FBF-6E. 8E FELISATTI R346EC HOLZHER 2335, 2336, 2356 **KANGO** R8550S KRESS FM6955 NUTOOL NPT850 PERFORMANCE POWER 1020W PERLES OF808(E) **POWER DEVIL** PDW5026, 5027 STAYER PR50 **VIRUTEX** FR77C, 78C, 66F WICKES 900W

ATLAS COPCO OFSE2000 B&D BD780(E), KW779, 780(E), 800(E), SR100 BOSCH POF52A, 400A, 500A, 600ACE, 800ACE, GOF900A, 900ACE, 1300ACE, 1600A CASALS FT750,1000E, 2000VCE DEWALT DW620, 621, 624, 625EK, 629 DRAPER R1900V ELU OF97E, 131, 177(E) MK2 FESTO OF900E, 1000E, 1010EBC, 2000E FREUD FT1000(E), 2000(E) FELISATTI TP246(E) HITACHI FM8, ZK2008, M8, 8V, 12(V), M12SA MAFELL LO50E MAKITA RP0910, 1110C, 3600B, 3620, 3612BR, 3612(C) METABO OF528, 1028, 1612, OFE1229, 1812 PEUGEOT DEF570E, DF55E RYOBI R150, 151, 155, 500, 502, 600, 600N, RE120, RE155K, RE600(N), RE601, SKIL 1835U, 1875U1 SPARKY X52E WADKIN R500



# Set Timber Height

- 1 Place set-up bar on templates and push it against touching 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.



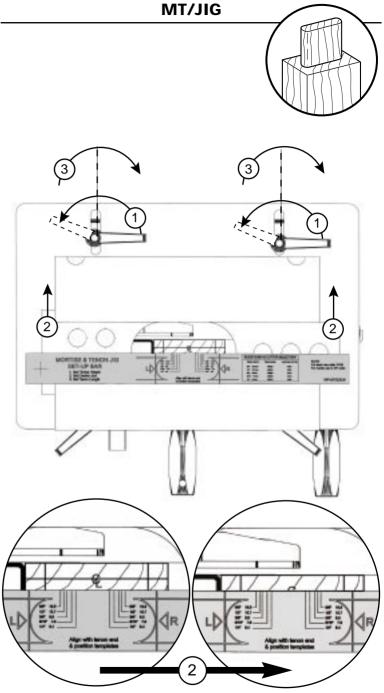


## Set Centre Line

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.

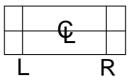


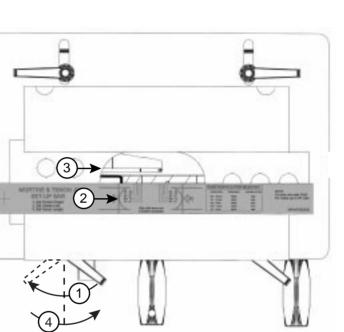


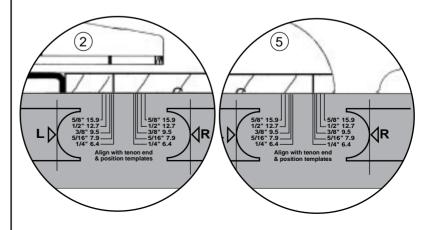
# Set Tenon length



- 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 down 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.



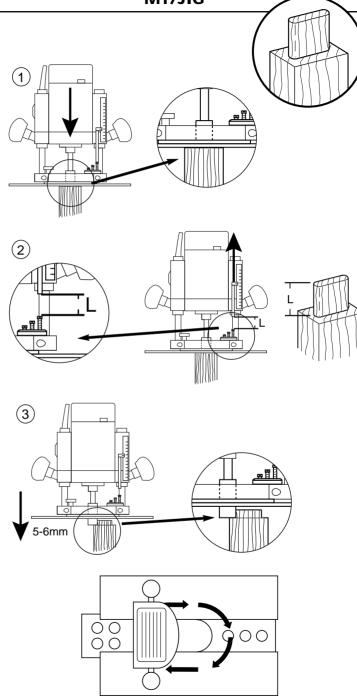






#### Routing Procedure

- 1) After fitting the C026 cutter and appropriate guide 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 5-6mm in repeated passes until the full depth is reached as set by the depth stop. Ensure the guide bush is kept firmly pressed against the circles of the templates and edges of the clamping plates.





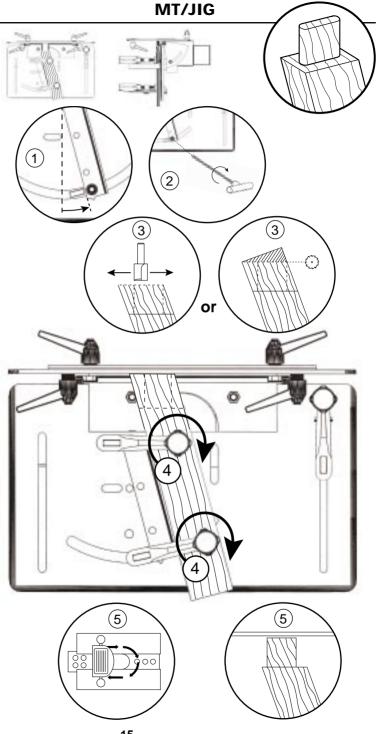
## Side Angled Tenon

- 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.





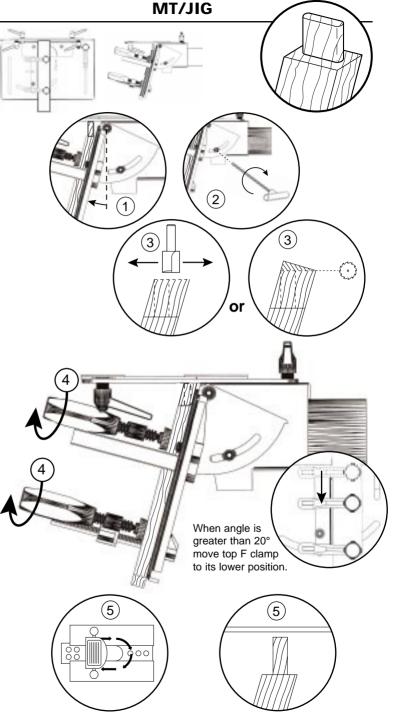
# Front Angled Tenon

- 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.

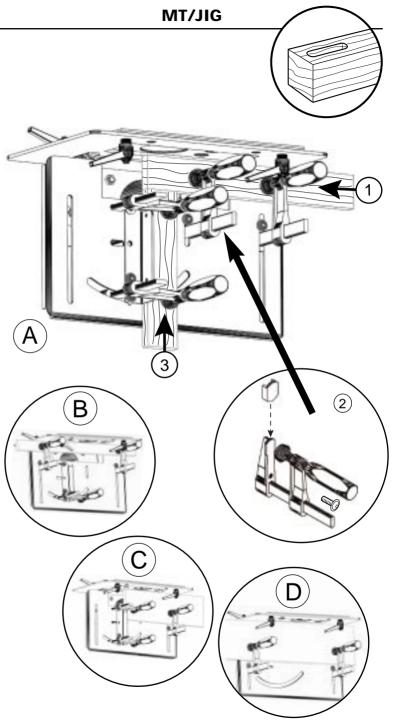
5 Set the depth of cut and rout in increasing depths to complete the tenon as shown on page 14.





#### 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.
- 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.

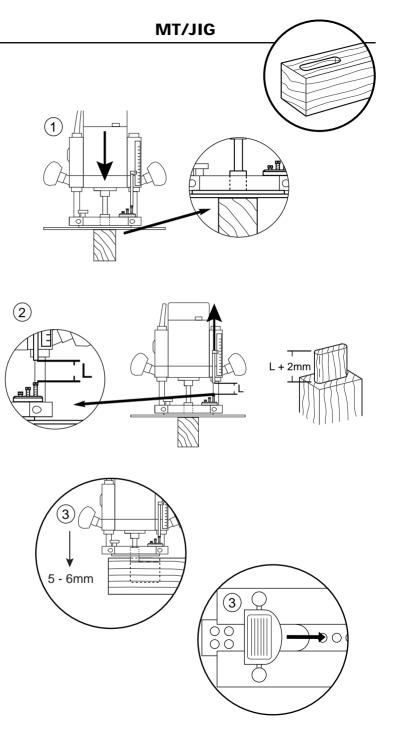




# Cutting the Mortise

1 After fitting appropriate cutter and 1" guide bush (GB254) with collar (see chart on page 9). Lower cutter down until it touches end of timber and lock off plunge of router.

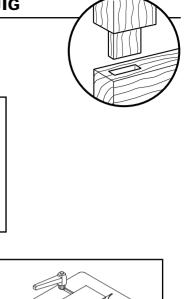
- (2) Raise and lock the depth stop to the length of the tenon required plus 2mm.
- 3 Plunge and rout backwards and forwards at a depth of no more than 5-6mm in repeated passes until the full depth is reached as set by the depth stop.





1

000



2

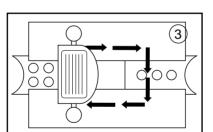
#### Square Mortise & Tenons

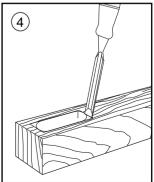
#### Tenons

- 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.





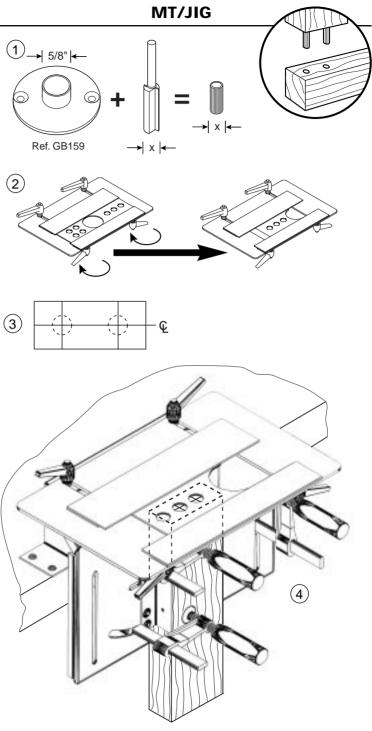


## Doweling

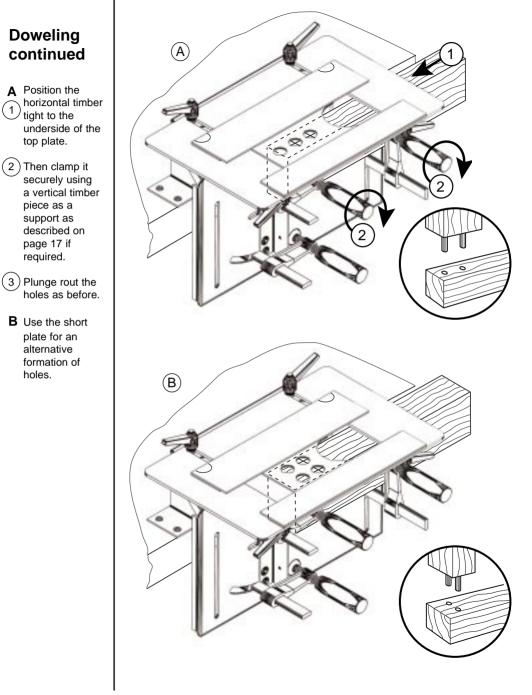
- 1 Select and fit the 5/8" plastic guide bush and a straight router cutter to suit the diameter of the dowels being used.
- (2) Select the short or long template depending on the formation of holes to be used.
- (3) Mark the timber centre line and dowel positions. Note the template hole centres are at 1" (25mm) 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.

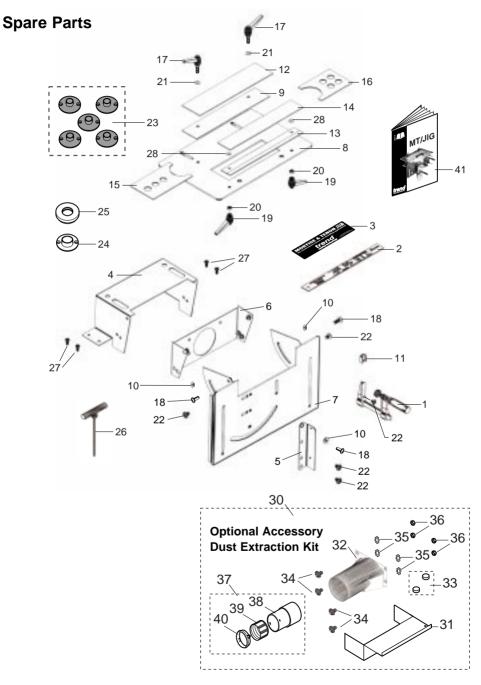
> Locate the guide bush in each hole and rout the holes in a series of plunge cuts to prevent waste from packing around the cutter.











ltem	UK	Euro		Description	
	•	Euro	U5A	Description	Ref.
1	4	4	4	F CLAMP FOR MT/JIG	WP-MT/01
2	1	-	-	MT/JIG SET-UP BAR UK	WP-MT/02/UK
	-	1	-	MT/JIG SET-UP BAR EURO	WP-MT/02/EURC
	-	-	1	MT/JIG SET-UP BAR USA	WP-MT/02/USA
3	1	1	1	LABEL TREND MT/JIG	WP-MT/03
4	1	1	1	MAIN BODY	WP-MT/04
5	1	1	1	VERTICAL GUIDE	WP-MT/05
6	1	1	1	INNER BODY	WP-MT/06
7	1	1	1	TILTING BACK PLATE	WP-MT/07
8	1	1	1	TOP PLATE	WP-MT/08
9	1	1	1	BACK CLAMP PLATE PACKING PIECE WP-M	
10	3	3	3	PIVOT BUSH	WP-MT/10
11	1	1	1	F CLAMP SQUARE CAP	WP-MT/11
12	1	1	1	BACK CLAMP PLATE	WP-MT/12
	1	1	1	FRONT CLAMP PLATE PACKING PIECE	WP-MT/13
13	-		-		
14	1	1	1	FRONT CLAMP PLATE	WP-MT/14
15	1	1	1	TEMPLATE LONG	WP-MT/15
16	1	1	1	TEMPLATE SHORT	WP-MT/16
17	2	2	2	CR/KB/8 ADJUSTABLE LEVER M6X15MM	CR/KB/PK8
18	3	3	3	M6 X 16 SOCKET BUTTON SCREW	WP-SCW/75
19	2	2	2	CR/KB/9 ADJUSTABLE LEVER M6 FEMALE	CR/KB/PK9
20	2	2	2	FULL NUT M6	WP-NUT/06
21	2	2	2	WASHER M6 FORM C	WP-WASH/12
22	6	6	6	M6 X 12 SKT BUTTON FLANGE SCREW	WP-SCW/73
23	1	-	-	GUIDE BUSH SET PLASTIC IMPERIAL (TBC) 5 off	WP-MT/23/UK
	-	1	-	GUIDE BUSH SET PLASTIC METRIC (TBC) 5 off	WP-MT/23/EURO
	-	-	1	GUIDE BUSH SET BRASS IMPERIAL	WP-MT/23USA
24	1	-	-	GUIDE BUSH 25.4MM (1 INCH) DIAMETER	GB254
	-	1	-	GUIDE BUSH 30MM DIAMETER	GB30
25	1	-	-	GUIDE BUSH COLLAR 25.4MM TO 54MM	GB/COLL/25454
	-	1	-	GUIDE BUSH COLLAR 30MM TO 54MM	GB/COLL/3054
26	1	1	1	T HANDLE HEX KEY 4MM X 150MM	HK/T/04
27	4	4	4	NO 10 X 3/4 PAN SELF TAP POZI SCREW	WP-SCW/108
28	2	2	2	CLAMPING BAR SHIMS	WP-MT/28
20	2	2	2		VVI -IVI1/20
DI	UST	EXTRA	CTIC	ON KIT - SPARE PARTS LIST	
31	1	1	1	DUST SHIELD	WP-MT/03
32	1	1	1	DUST SPOUT	WP-SRT/16
33	1	1	1	MAGNET PACK 10MM X3MM PACK OF FOUR	MAG/PACK/2
34	4	4	4	M6 X 12 SKT BUTTON FLANGE SCREW	WP-SCW/73
35	4	4	4	M6 INTERNAL SHAKEPROOF WASHER	WP-WASH/31
36	4	4	4	NUT M6	WP-MT/06
37	0	0	0	HOSE ADAPTOR 58MM TO 39MM 257011	CRT/3
38	1	1	1	ADAPTOR BODY FOR CRT/3	WP-CRT/97
39	1	1	1	ADAPTOR FITTING FOR CRT/3	WP-CRT/98
40	1	1	1	ADAPTOR CLIP FOR CRT/3	WP-CRT/99
	1	1			
	1		-		N/I/N NII 1/N/I I
41	1 -	- 1	-	MANUAL FOR MORTISE & TENON JIG MANUAL FOR MORTISE & TENON JIG	MANU/MT MANU/MT/EURC





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