LEIGH ISOLOC JOINT TEMPLATES

User Guide

I1A/B/C, I18B, I24A/B and I1600A/B/C Templates for Leigh D-Series and SuperJigs Dovetail Jigs

Dedicated Customer Support
1-800-663-8932

Joining Tradition with Today

Your New Leigh Isoloc™ Joint Template

The Leigh Isoloc* (equal locking) Templates and Variable Guidebush System (VGS)* are used on all 16" and 24" D-Series jigs, plus Super18" and Super24" jigs. They will allow you to rout uniquely beautiful half-blind corner joints, plus end-on-end, all with perfect fit thanks to the VGS.

This user guide is common to all Leigh Isoloc joint templates. Almost all illustrations show only the "A" template mounted on the D4 jig in the "Key" joint pattern mode. However, the joint icons ① are identical on all templates and all Isoloc templates work in exactly the same way …regardless of the jig or template model. Note that the drawings in this user guide depict earlier model templates. The latest templates are engraved, with no decals ③.

The I1 template scales are different in shape than the I1600, I18 and I24 scales. Where scale readings are illustrated, the I1 scale will appear at the top ②.

Isoloc joint templates have dual inch and metric settings and may be used with either 5⁄16"or 8mm diameter bits. Only one variable guidebush (No. 713V; included) is required.

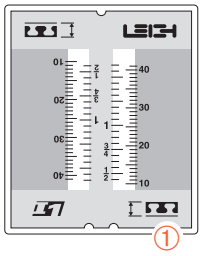
Carefully follow the mounting instructions for your jig model in the first section of the user guide. Then read the rest of the guide, following along with the basic functions. We suggest you rout some practice joints in scrap wood before you rout any precious hardwood work pieces.

Note: All operating references to D1600 jigs and I1600 templates throughout this guide apply equally to the I18 and I24 templates on Leigh Super Jigs.

Customer Support

If you have any questions that are not answered in this user guide, please call Leigh Customer Support: 1-800-663-8932 in North America or email: help@leighjigs.com. For support contacts in your country of purchase, see Customer Support at the end of this Guide. Leigh user guides are updated as required. A downloadable pdf of the latest version can be found on the Support page at leighjigs.com.

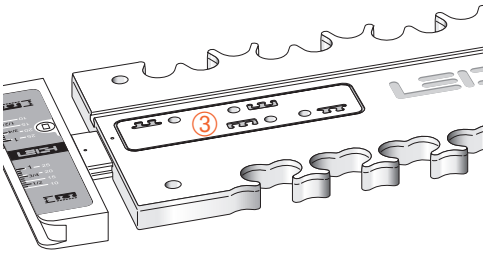
*Leigh Isoloc joints, Isoloc templates, and Variable Guidebush System are protected by U.S., Canadian and European patents.



I1 Scale

I18, I24 Scale

Illustrated

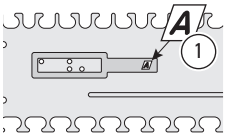


Engraved template

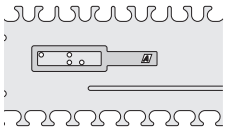
How to Read the Symbols

To help you understand the instructions and illustrations in this user guide, we have used a number of international symbols, plus a few special ones of our own. They are all explained below and are repeated frequently in the user guide, and you will soon get used to them.

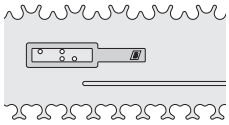
There are three templates in the Isoloc Series. Each template has two Isoloc joint patterns for a total of six available joint shapes. Each template is identified by letter; A, B, or C ①, and each joint pattern is named in texts for reference, as below:



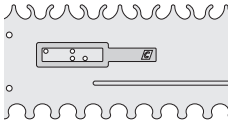
Only the Isoloc *A* "Key" template pattern is used in this user guide. Procedures for all other joints are similar.



"Mirror Key"
A
"Key"



"Bears Ears"
B
"Clover"



"Wave"
C
"Ellipse"

Scale Icons

The scales all feature the same icon which (this way up) indicates the active scale.

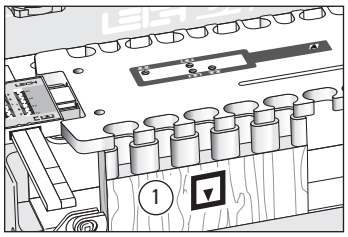
Template Icons

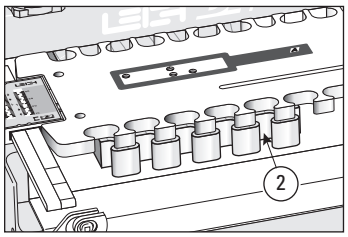
Indicates the template position for vertical pin boards.

Indicates the template position for horizontal socket boards.

Isoloc Joint Terminology

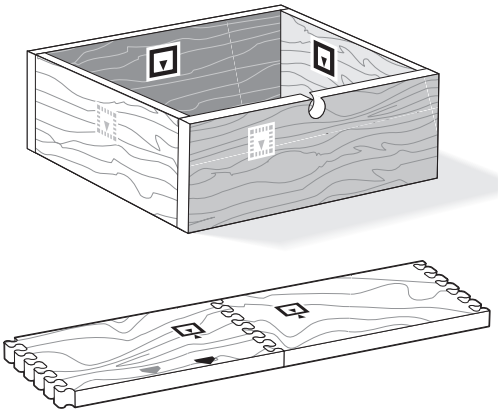
It's a novel joint with a unique name, but we thought we would keep the joint part terminology simple. It is similar to typical dovetail terminology and should be easy to remember. Straight parts, cut in line with the grain are "pins" ①. Curved parts, cut across the grain are "sockets" ②.





Which Way Round Should the Board Go?

Most joinery done on the Leigh Isoloc templates is for boxes, In nearly all the illustrations we have indicated which side of the board faces you when it is in the jig. *Note: On all Isoloc joint boards except end-on-end joints, the inside ⊡ of the board faces away from the jig body.*



⊡ Indicates the side of the board that will face outward.

⊡ Dotted icons are on the other side of the board.

⊡ Boards are clamped in the jig both "face in" and "face out" for alternate end cuts; e.g. all regular end-on-end Isolocs are routed this way.

The following symbols indicate:

◀ This edge against side stop

▶ This edge against side stop

◀▶ As above, other side of board

⚠ Caution: use special care for this operation

①②③ Numbered References in text

⊕ Centreline of board or layout

± Plus/Minus

= Equals

≠ Does not equal

~ Approximately

Mounting and Template Alignment

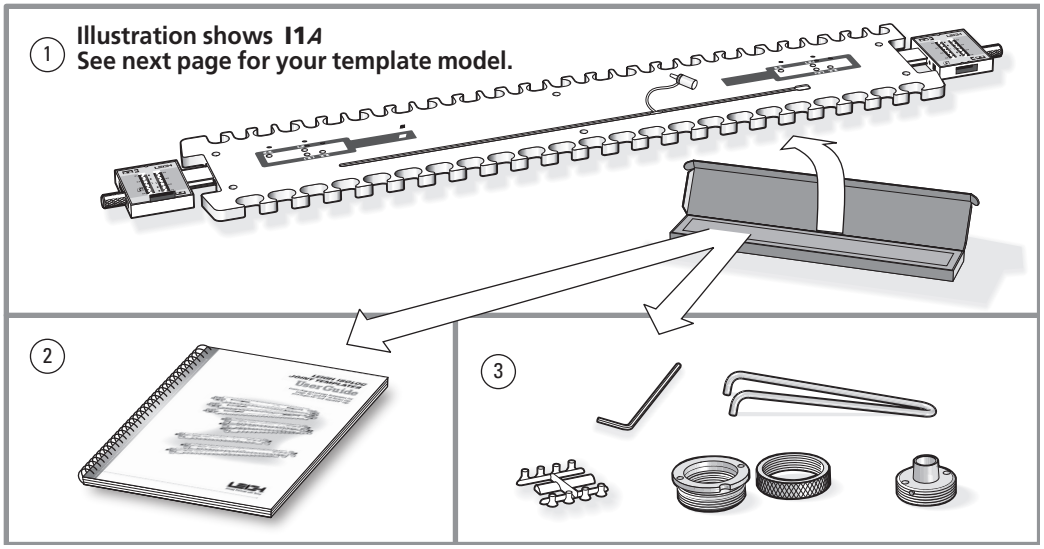
Assembly and Mounting

First, before you begin mounting your Leigh Isoloc template to your Leigh jig, make sure you have all the necessary parts.

1. **One only** complete Isoloc template assembly.
   Make sure it is the model you ordered (see next page).
2. 1 User Guide
3. Variable Guidebush System consisting of:
   1 713V Guidebush
   1 700V Holder complete with lock ring
   1 Pin Wrench
   6 Bush Plugs (on one tree)
   1 Allen Key (for use on I1A, I1B and I1C Templates only)

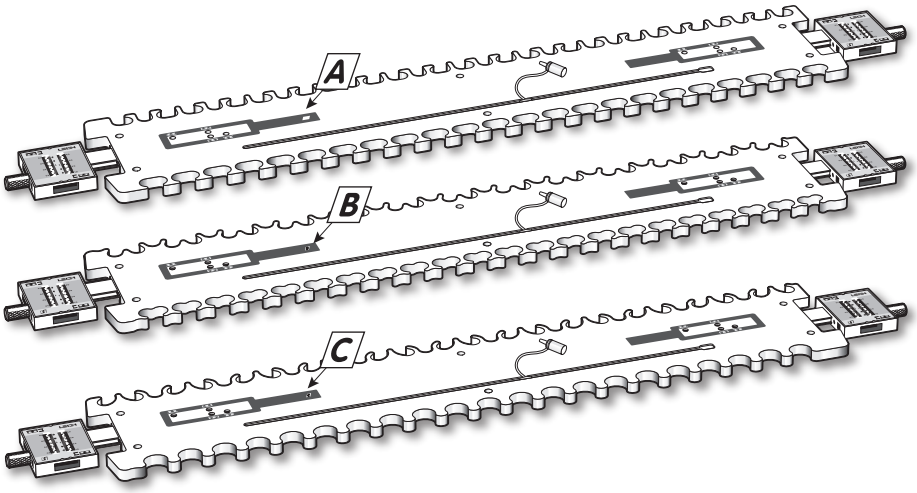
If any of these items are missing from your order, please notify your supplier or Leigh Industries immediately.

Your Leigh Isoloc template comes fully assembled and requires only mounting and indexing to your Leigh jig body. **This procedure is critical to the accuracy of the finished joinery, so please follow the mounting instructions carefully.**

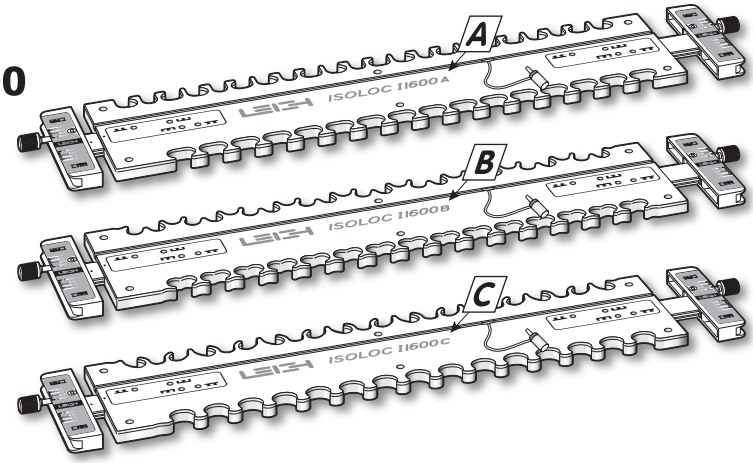


Check that you received one of the templates shown below:

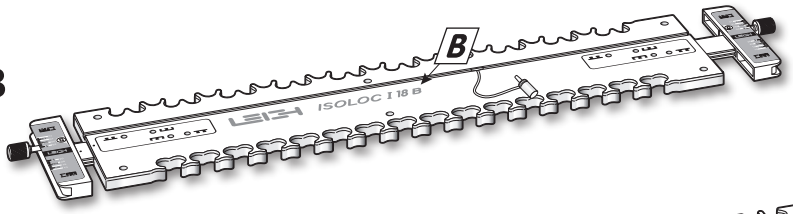
I1



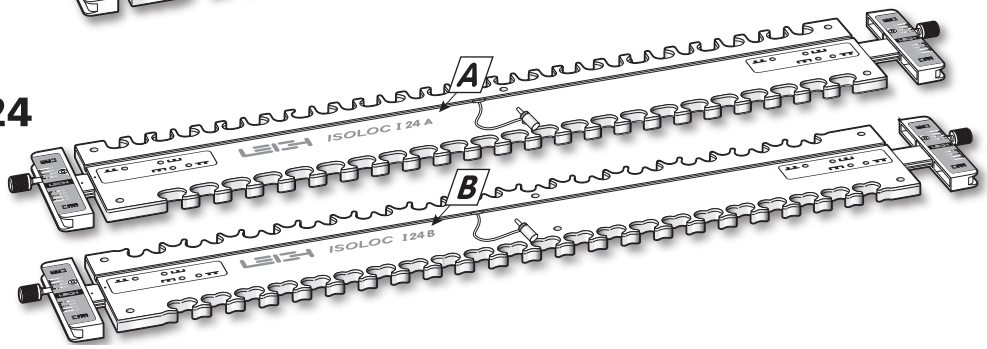
I1600

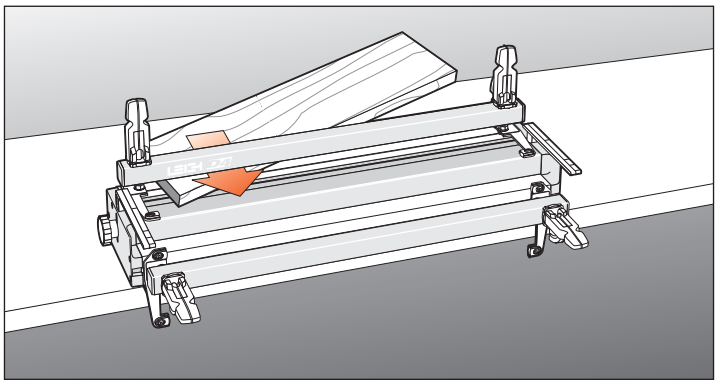


I18



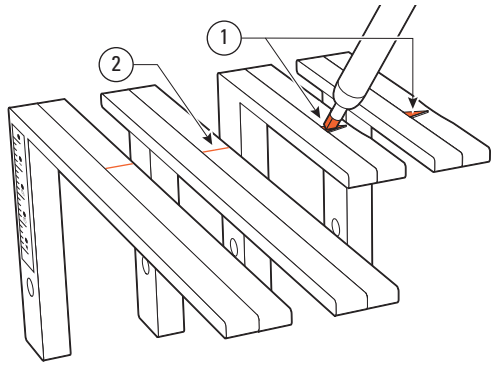
I24



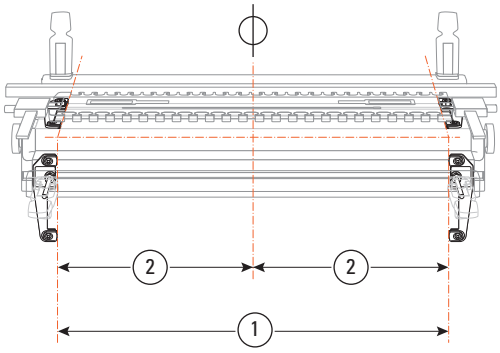


1-1 Mounting the 24" Template

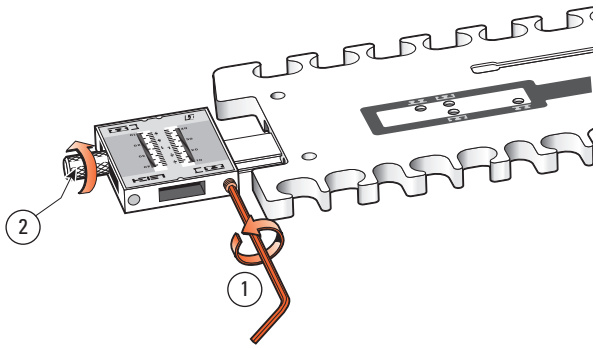
For I1600, I18 and I24 Isoloc mounting go directly to 1-10. Mount the 24" D Series dovetail jig body firmly to a bench as per that jig's instructions. Clamp the spacer board into the rear clamp.
The spacer board should be approximately ¾" x 6" x 23"[20 x 150 x 575mm].



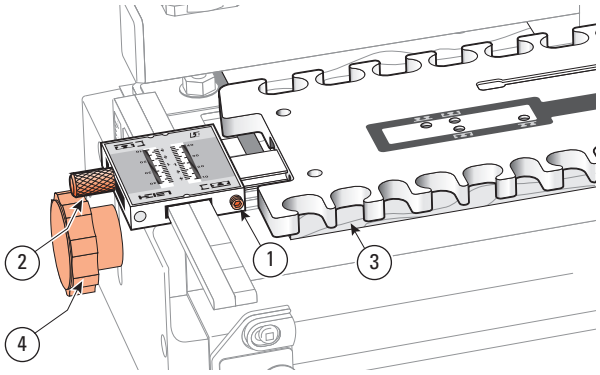
1-2 Support Bracket Markings D1258, D1258R and D3 jigs have short brackets marked with an 'arrow' for scale line-up. Shade the arrows with a black felt pen ① for better visibility.
D4 and D4R jigs have either long or short brackets with lines ② in the correct location.
Brackets supplied with the optional M2 or VRS systems may be used as is.



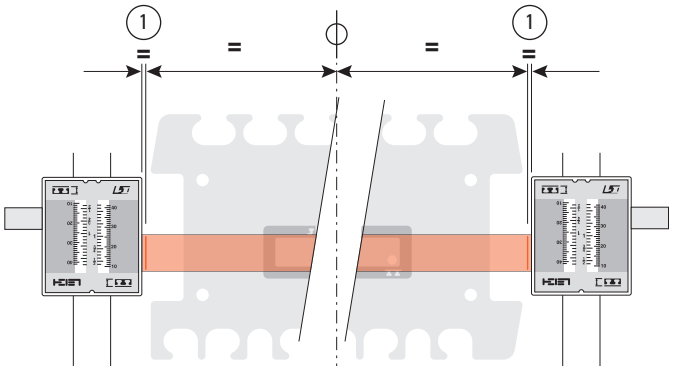
1-3 To ensure the accurate joints your Leigh Isoloc was designed to produce, check that the jig side stops are correctly positioned as per the original jig body instructions, i.e. 24⅛"[613mm] apart ① and equidistant from the centreline ②. D4R side stops are machined as part of the body.



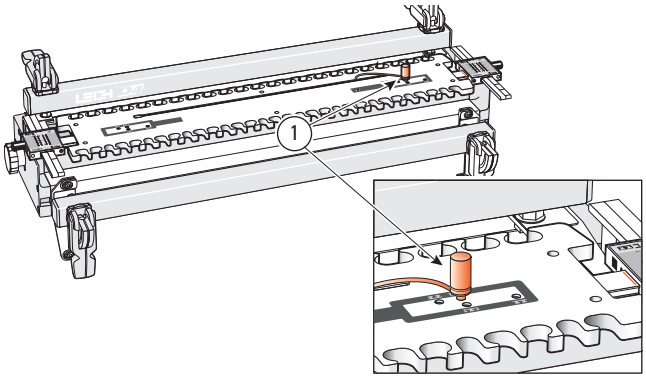
1-4 Loosen the two scale bar set screws ①, and the two scale thumb screws ② at both ends of the template.



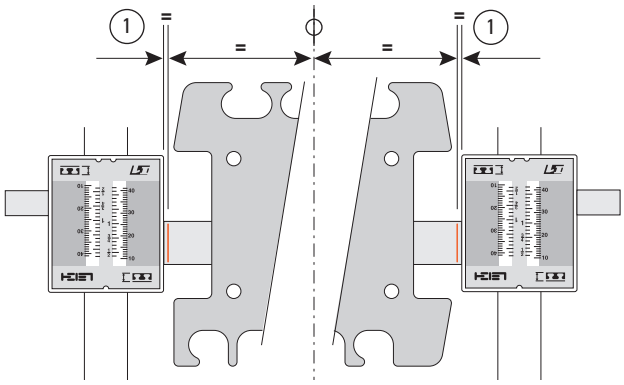
1-5 Slide the template assembly onto the jig support brackets with the set screws ① toward you and lower the completed assembly gently onto the spacer board ③. Tighten the support bracket knobs ④. **Do not tighten the set screws** ①. Make sure the scale reading is the same on both scales, say on the 1"[25mm] mark, then tighten the thumb screws ②.



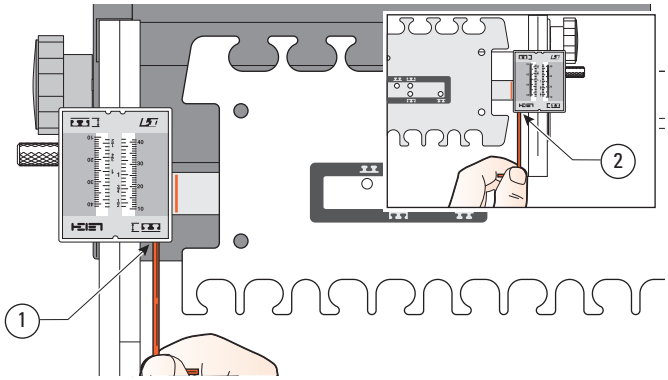
1-6 The template bar must now be centred between the two scale assemblies ①. The following instructions show how to do this.



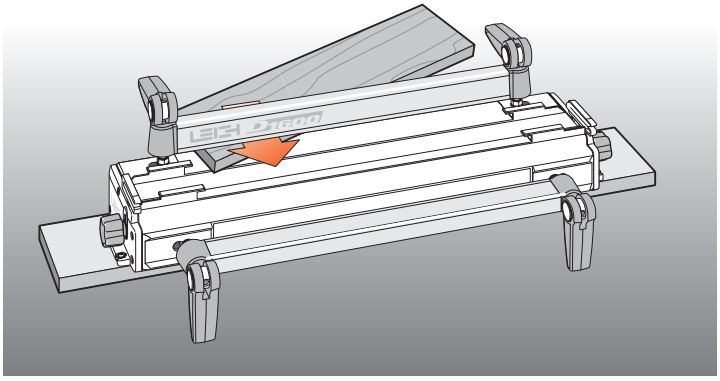
1-7 Discard the plastic shipping plug from its hole in the template. Move the template until you can insert the template pin through the rear right hand hole ① and into the bar.



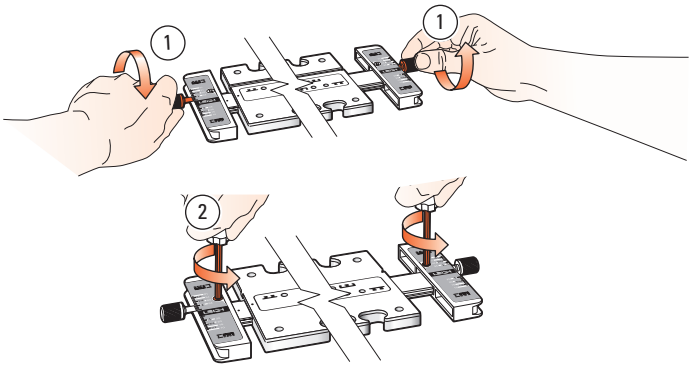
1-8 Move the template with its template bar left and right in the scales until **the scored lines at each end of the bar** are approximately equidistant from the scales ①. You can do this by eye; the human eye is an excellent comparator. If the gap appears the same, it is close enough. If you're more comfortable using a rule or dial caliper, by all means use it.
Note: The scored lines are illustrated in red for clarity.



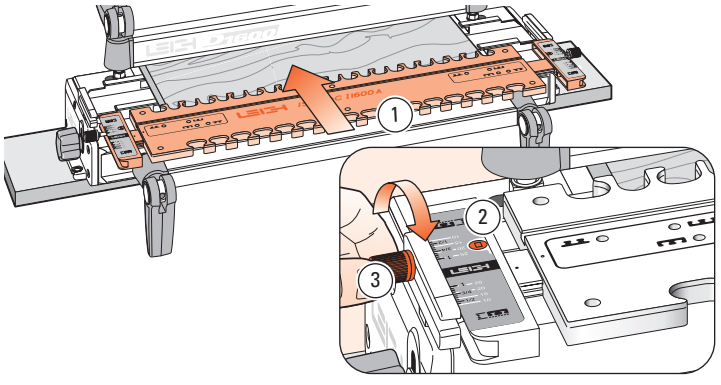
1-9 Taking care not to move the template and template bar, tighten first one scale bar screw ①, then the scale screw at the other end ②. The template bar is now centred.



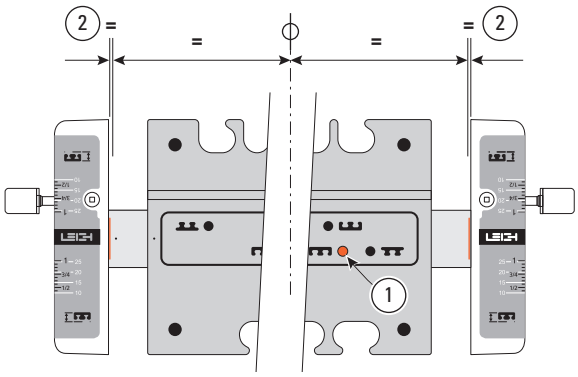
1-10 Mount a Superjig or D1600 jig body firmly to a bench as per that jig's instructions. Clamp the spacer board into the rear clamp.
The spacer board should be approximately ¾" x 6"[20 x 150mm] x 1"[25mm] less than jig length.



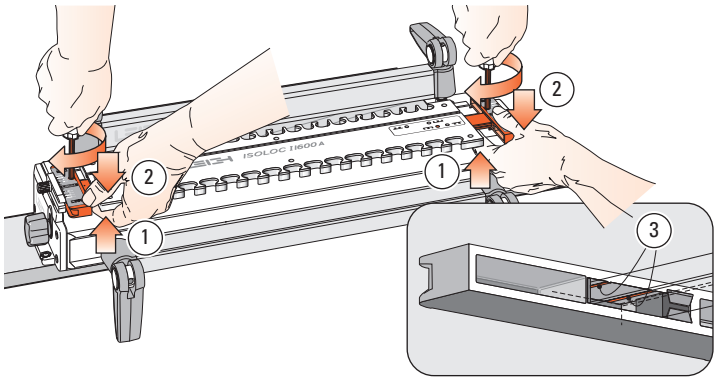
1-11 Mounting I1600, I18, and I24 Isoloc Templates
Install the two thumbscrews a few turns into the scales ①. Loosen the scale lock screw ② at **both** ends (by one turn only).



1-12 Slide the finger assembly onto the support brackets, in the "single" joint pattern (key, clover or ellipse) to the front ① and the scale lock screw to the rear ② and set on ¾"[20mm]. **Tighten both thumbscrews** ③.



1-13 Lower the template onto the spacer board. Discard the plastic shipping pin from its hole in the template. Move the template until you can insert the steel template pin through the right front hole ①. Move the assembly left and right until the scored lines ② (illustrated in red for clarity) at each end of the template bar are about equidistant from the scales. You can do this by eye. If the gap appears the same, it is close enough. If you are more comfortable using a rule or caliper, by all means use it.



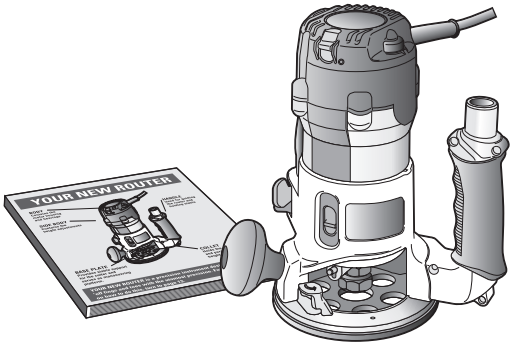
1-14 Taking care to not move the template, pull up on the template bar ① while pushing down on the scale ② to ensure the bar is touching the two registration pads ③ inside the scale. Maintain pressure and tighten the scale lock-screw. Repeat at the other end. The template is now centred.

To maintain correct assembly alignment, follow this procedure whenever you remove the scales from the template assembly. ■

ISOLOC - CHAPTER 2

Using Your Template Safely

Safety is not optional.
Read and follow the recommendations in this chapter.



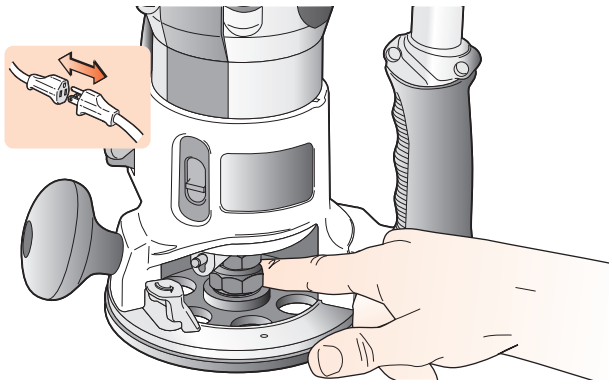
2-1 **Read the owner's manual that came with your router. It is essential to understand the router manufacturer's instructions completely.**

2-2 Most importantly, always wear approved safety glasses when using a router.

Always wear hearing protection when using a router.

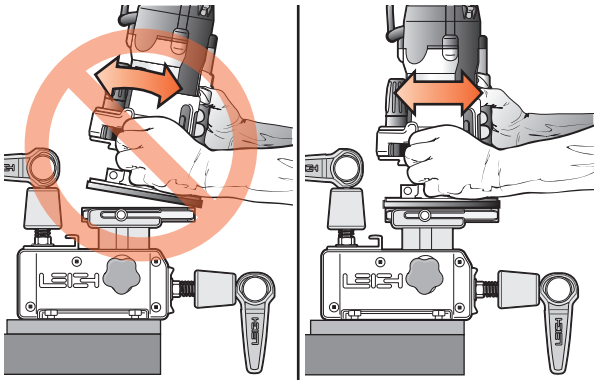
Protect yourself from harmful dust by wearing a face mask.

2-3 ⚠**Never drink alcohol or take medications** that may cause drowsiness when you will be operating a router.

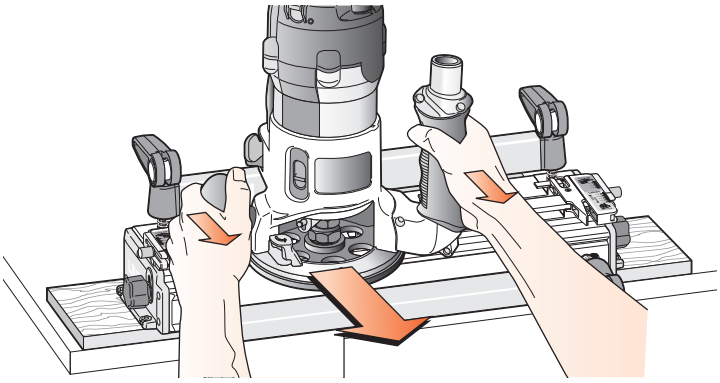


2-4 Always disconnect the power source from the router when fitting bits or guidebushes, or making adjustments.

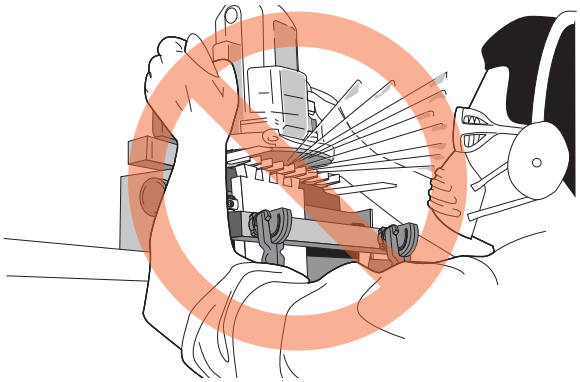
Before connecting the router to the power source, make sure the bit and collet revolve freely in all the areas you plan to rout, and the bit does not touch the guidebush or jig.



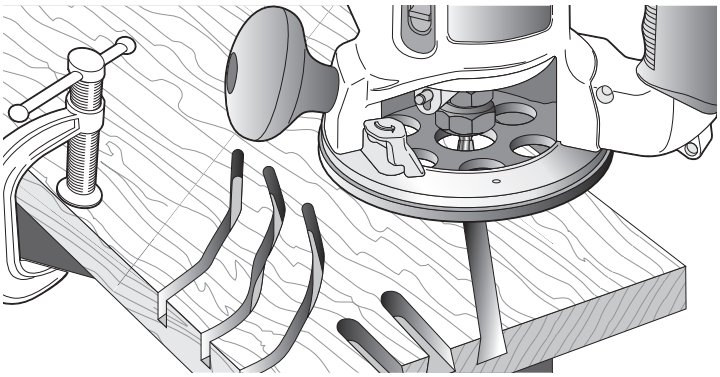
2-5 Do not tilt the router on the jig.
Keep the router flat on the jig assembly.



2-6 If you insist on removing the router from the jig while it is still revolving, **always pull it straight off the jig horizontally, and do not raise or lower the router until it is completely clear of the jig.**



2-7 Do not rout at face level.

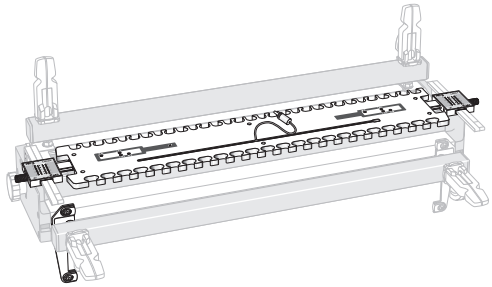


2-8 If you have never used your router before, be sure to follow the router manufacturer's instructions for its use. Make plenty of simple open-face practice cuts *without a guidebush* before you try to use the router on the Leigh jig. You must, of course, **always use a guidebush when routing on the Leigh Jig.** ■

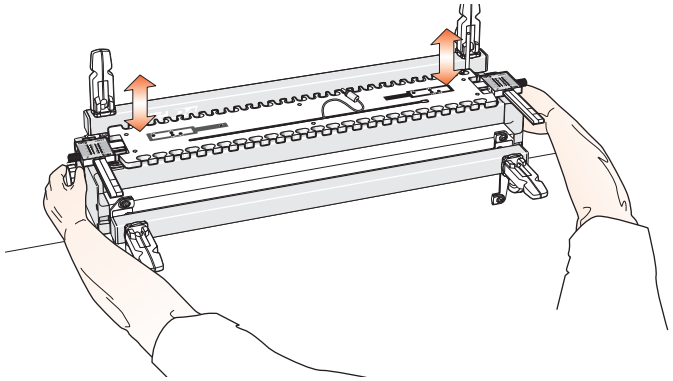
Operation Concepts and Basic Template Functions

There are:

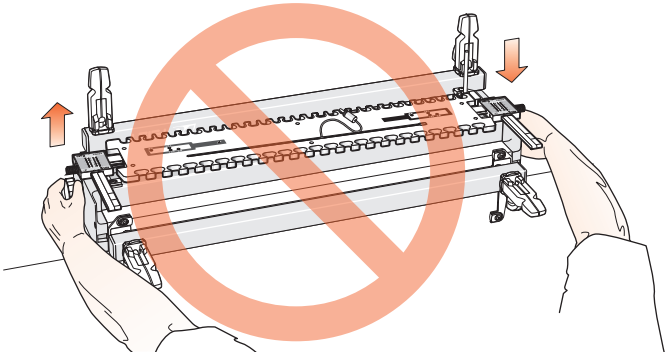
Three 24" I1 Isoloc templates, three 16" I1600 templates, one 18" I18 template, and two 24" I24 templates. This user guide is common to all; the routing procedures for all Isolocs are identical.



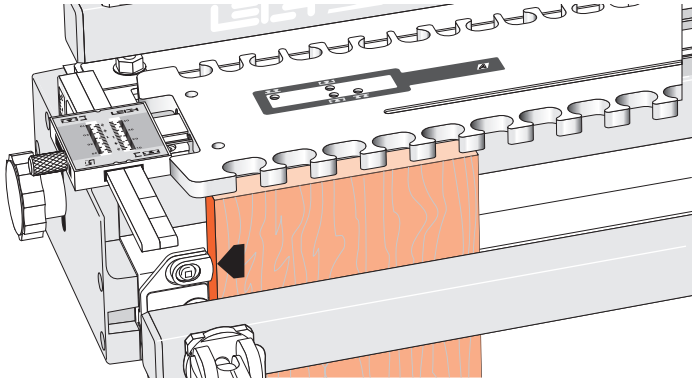
3-1 Each Isoloc template has two different joint patterns. The "active" pattern (the one you wish to use) is positioned toward you at the front of the jig. **Always start at the left hand side of the template using the left hand side stops.**



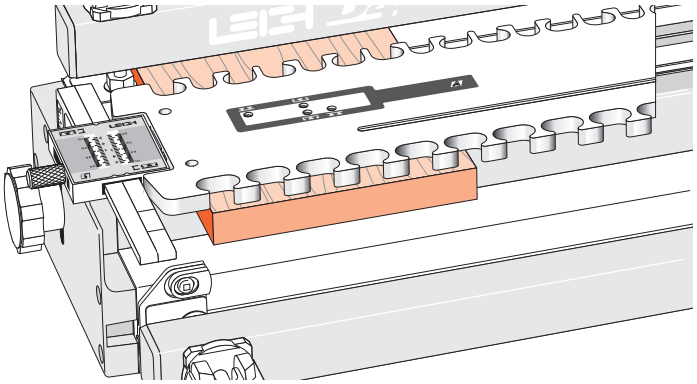
3-2 The template is raised or lowered using the support brackets to suit different thicknesses of horizontal boards.



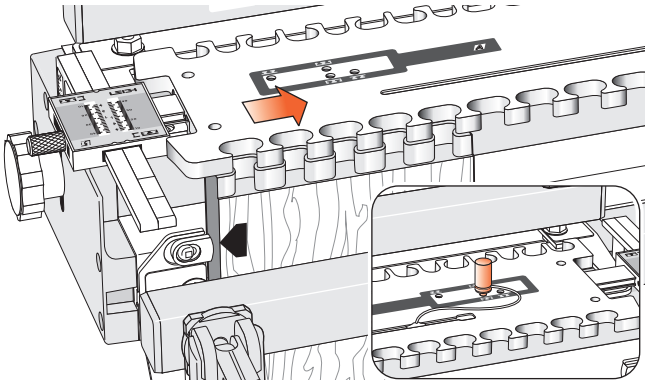
3-3 Do not raise or lower one end of the template at a time.



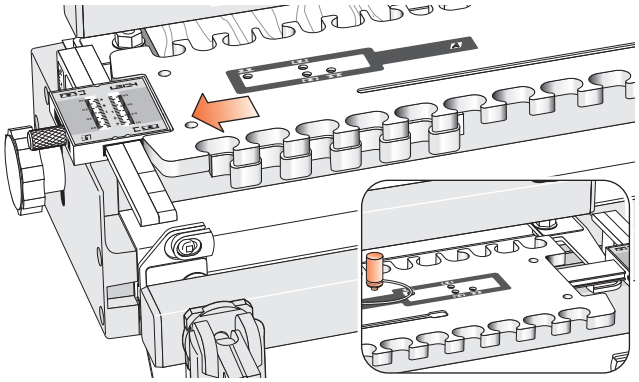
3-4 You will clamp your work pieces against the left hand front side stop or...



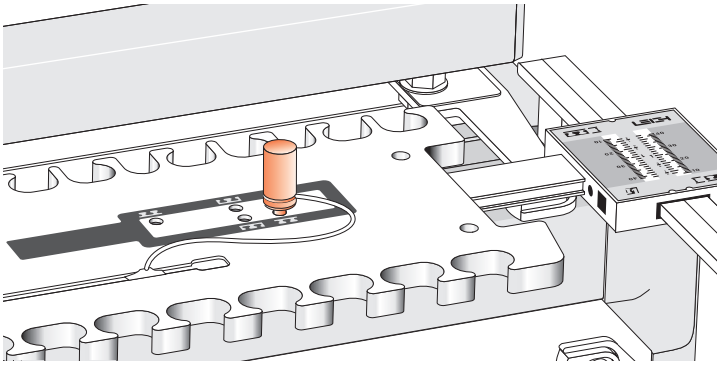
3-5 ...the mating left hand rear side stop, depending on which procedure is to be used. *Note: Except where specific procedures call for blocking or spacing away from the side stops.*



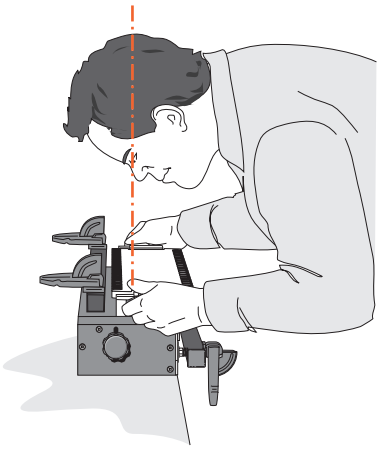
3-6 Mating joints routed under the same pattern have to be offset to achieve correct joint alignment. On the Leigh Isoloc templates the offset is achieved by moving the template left or right by half the pitch of the pattern. This movement is controlled by the template pin, at the opposite end of the template. Here, the vertical pin board is routed.



3-7 In this illustration, the template is moved to the left by half the pattern pitch to rout the mating horizontal socket part of the joint in 3-6. The precisely machined template pin holes always ensure exact template position.

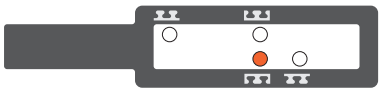


3-8 The active template pin holes are always at the right hand end of the template, out of the way of the router. Use only the pin holes closest to the front, or active joint pattern. On wide boards, the pin is moved from the right end hole to the matching left end hole to allow the router access to the right side of the board. Most illustrations will have an inset showing the correct template pin hole position for the procedure. ■

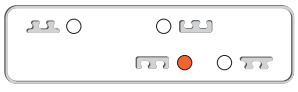


Always read scales from directly overhead to avoid parallax problems.

I1

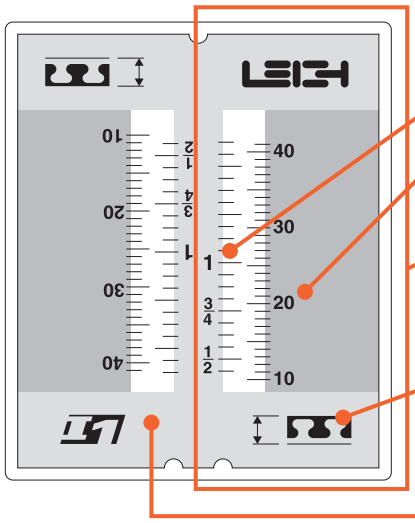


I1600
I18
I24



Template pin hole icons denote the joint edge finish at each position. *See Chapter 5 for notes on symmetry and board widths, .*
Throughout the user guide, the proper pin location for each step is highlighted in red. Use only the pin holes closest to the front (active) joint pattern.

All Leigh Isoloc templates are calibrated for both inch and metric use.
The specific settings for each scale are fully described in the appropriate chapters.



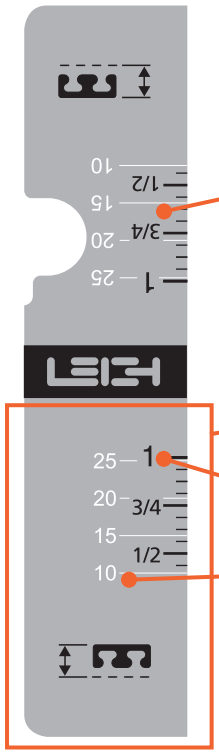
Isoloc I1 templates

Grey scales are in inches.
Green scales are in millimetres.

The active scale is always on the right side of each scale assembly. Dimensions are for matching to the vertical board thickness.

The icon and dimension arrows are a simple reminder of this.

The inactive scale is always on the left side of each scale assembly and appears upside down.



Isoloc I1600, I18 and I24 templates

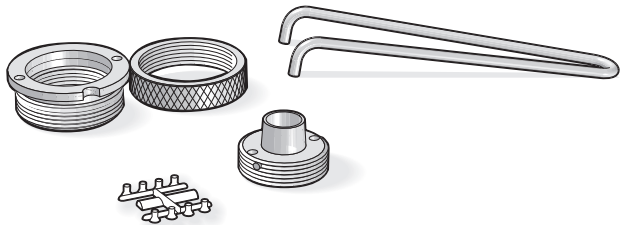
The inactive scale is always on the top side of the scale assembly (away from you) and appears upside down.

The active scale is always on the bottom of each scale assembly (toward you). Numbers are for matching to the vertical board thickness.

Inch scales have black numbers.
Millimetre scales have grey numbers.

The icon and dimension arrows are a simple reminder of this.

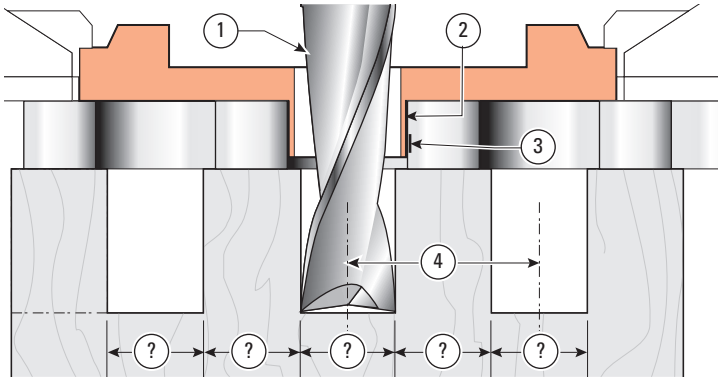
The Variable Guidebush System (VGS)



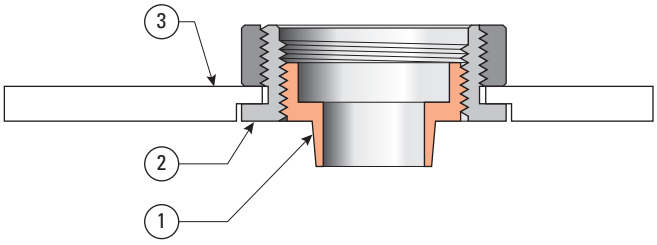
4-1 The Isoloc template comes complete with the Leigh Variable Guidebush System (VGS). The tapered bush is drilled to accept a nylon thread insert (eight of them on a "tree"). See 4-7 to fit.

Do not use the VGS on Leigh Dovetail Jigs or M2 Mortise Guide Finger accessories; they are only for templates.

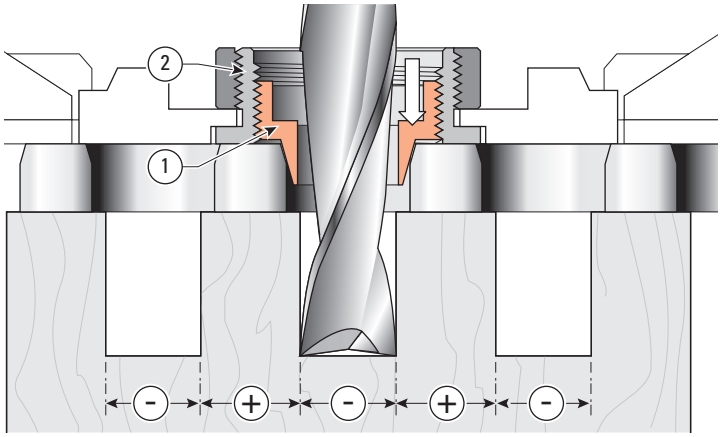
Here's why the VGS is necessary...



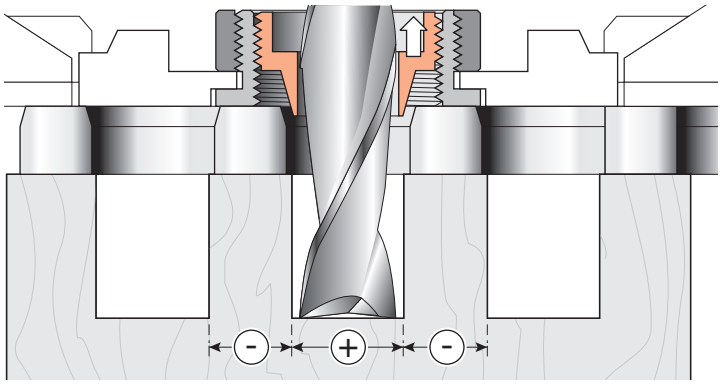
4-2 If Isoloc joints were routed with nominal-size straight bits ① and nominal-size guidebushes ② against straight guide surfaces ③ on nominal pitch centres ④, there would be no possibility of guaranteeing a good fit. There are no angles to use for fit adjustment as there are with dovetails, so manufacturing tolerances for bits, guidebushes, templates and routers give an "average" fit which is rarely correct. *To illustrate, we have used a simple box joint in this series of drawings.*



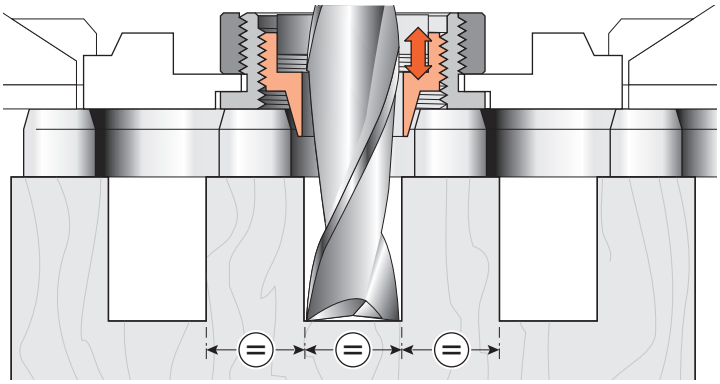
4-3 The Leigh VGS bush has a tapered barrel ① threaded into a holder ② which in turn attaches to an adaptor or directly to the router ③.



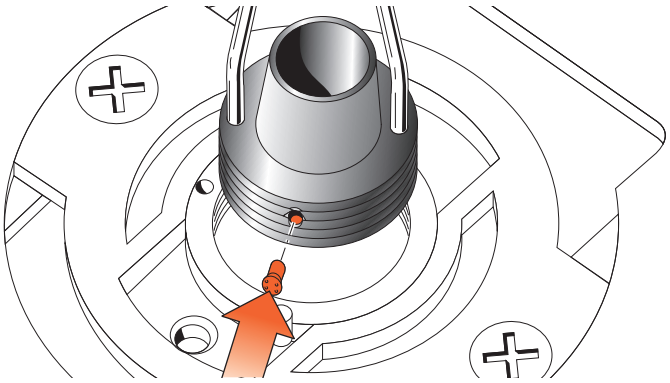
4-4 With the VGS tapered bush ① screwed down in the holder (away from the router) ② the active bush diameter is increased, allowing no side-to-side movement, and resulting in smaller sockets and larger pins. A tight fit! *Guidebush angle, scale and movement are exaggerated in this sequence of illustrations.*



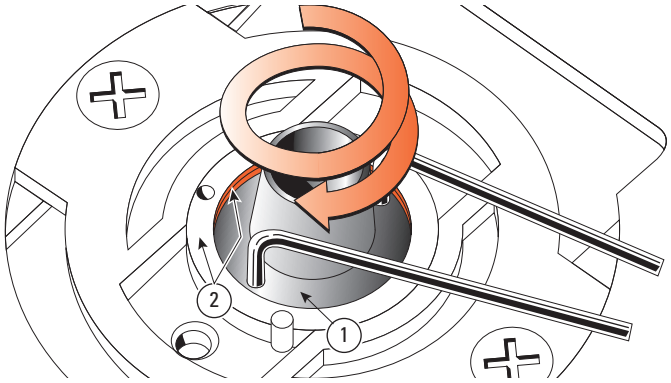
4-5 Raising the bush (screwing the bush up into the holder) allows more side-to-side router/bit movement, producing larger sockets and smaller pins, and thus a loose fit. ⚠ **Do not rotate VGS more than three full turns above flush.**



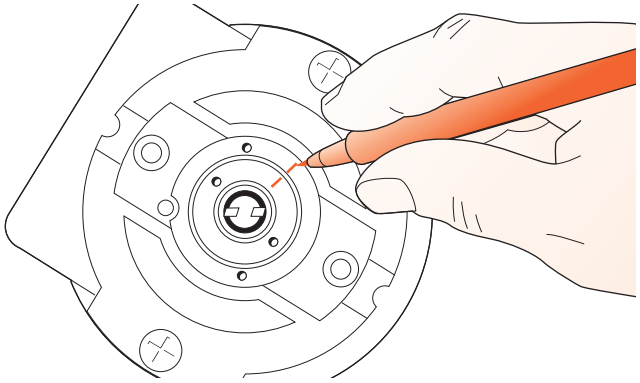
4-6 A few trial-and-error test cuts and VGS adjustments will allow you to establish the right pin and socket sizes for a perfect fit. **Note: One eighth of a turn of the variable bush changes the joint glue-line interface by one thousandth of an inch (.001"[.025mm]).**



4-7 Fit the holder to the router first. Before fitting a variable bush to a holder, fit a nylon thread insert in the hole in the thread. Leave the insert on its "tree" and push into the hole. Then snap off the "tree". The insert will become trapped and should not fall out when removed. However, if you remove the bush from its holder, wrap some scotch tape around the bush to prevent this. The spare inserts will last a long time.



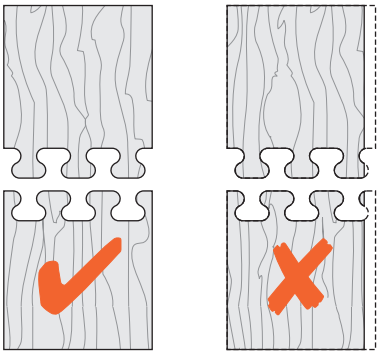
4-8 Always start test routing with the bush flange ① turned one to one-and-a-half turns farther in than the holder flange ②.



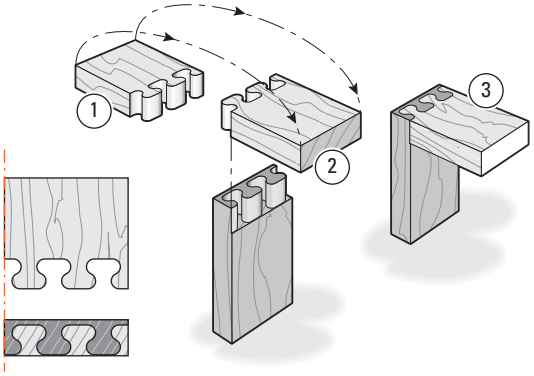
4-9 When you have the best joint fit, mark the bush and holder with permanent ink for future reference. Use the same bit next time. ■

ISOLOC - CHAPTER 5

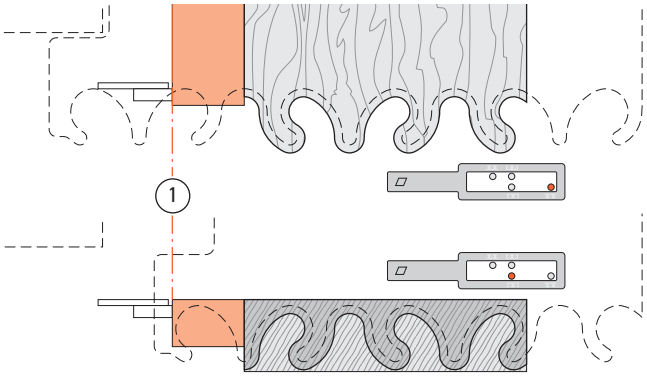
Board Width Selection



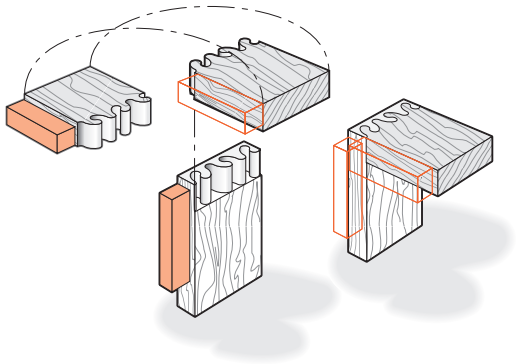
5-1 Board Widths and Isoloc Joint Symmetry
Unlike the infinitely variable Leigh Dovetail Jig, a fixed template cannot accommodate random board widths and still produce an even finish on both side edges of a joint. Usually, the boards should be cut to specific widths, depending on the pitch of the pattern. A complete chart of board widths is at the end of this chapter. Joint specifications are in Appendix II.



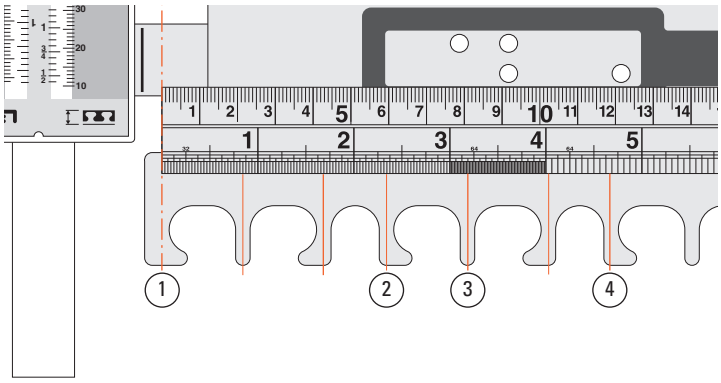
5-2 However, this is not a firm rule for Isoloc joints. This rule is made to be broken; for instance, to achieve a particular depth drawer may require an asymmetrical layout.
This drawing shows the socket board position for cutting in the jig ①, being rotated into position ② to fit into the pin board, and the finished joint ③. Although asymmetrical, it is still an attractive joint.



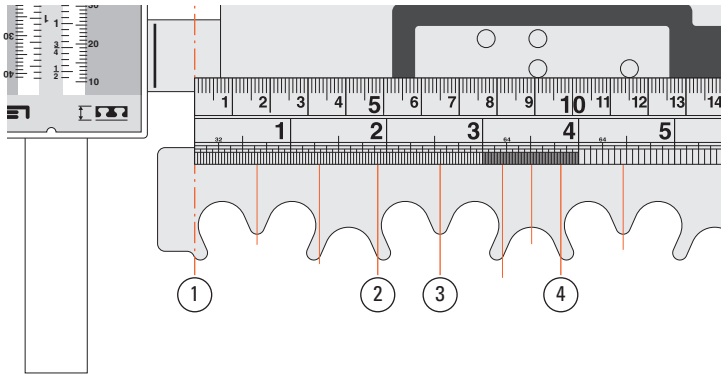
5-3 Also, joints made on "double" patterns like *Wave, Mirror Key* and *Bears Ears* may be started at points other than the left edge by simply blocking the mating pieces away from the side stop, shown here as a base line ①.



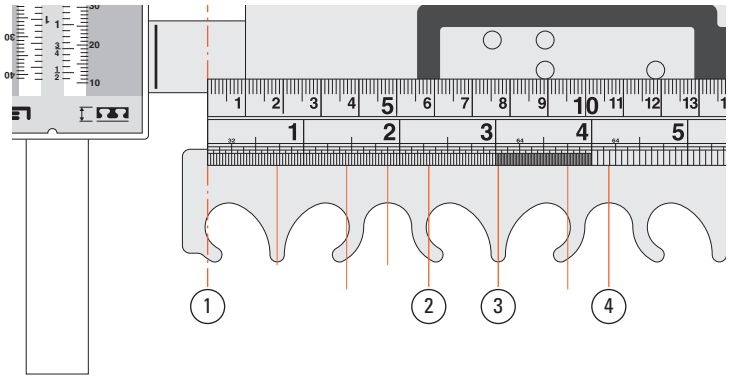
5-4 The joint is cut and assembled exactly the same way as before.



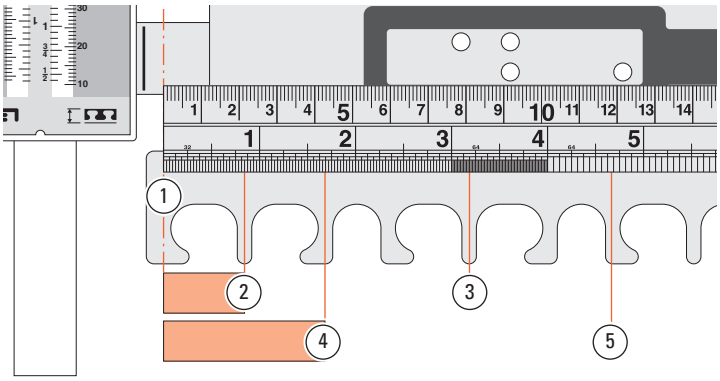
5-5 If the board width selection chart does not provide the width you require, try this. Measure the template from ① to find the width required for your layout. For instance, with the *Mirror Key* template, joints could be multiples of the pitch (2.339"[59.4mm]) or as shown here (approximate measurement), starting from ①:
② 2⅜" [60mm], ③ 3⅛" [79mm], ④ 4 11⁄16" [118mm], etc.



5-6 With the *Bear Ears* template, joints could be multiples of the pitch 1.919"[48.7mm] or as shown here (approximate measurement), starting from ①:
② 1⅞"[48mm],
③ 2 11⁄16"[65mm],
④ 3⅞"[98mm], etc.



5-7 The *Wave* template joints could be multiples of the pitch 2.312"[58.7mm] or as shown here (approximate measurement), starting from ①:
② 2⅜"[60mm],
③ 3"[76mm],
④ 4 5⁄16"[109mm], etc.



5-8 In the three previous examples the board widths are from the same start point ①. Here, you can see that by blocking away from the side stops, other widths and/or different edge treatments are possible, i.e.,
② to ③=2⅜"[60mm] and
④ to ⑤=3"[76mm]. ■

BOARD WIDTH SELECTION CHART

A I1, I1600, I24

KEY		MIRROR KEY	
inches	mm	inches	mm
1 1/32	26	1 11/16	43
2 1/16	52	4 1/32	102
3 3/32	79	6 3/8	162
4 1/8	105	8 23/32	221
5 5/32	131	11 1/32	280
6 3/16	157	13 3/8	340
7 7/32	184	15 23/32	399
8 1/4	210	18 1/8	460
9 5/16	236	20 13/32	518
10 11/32	262	22 3/4	578
11 3/8	289		
12 13/32	315		
13 7/16	341		
14 15/32	367		
15 1/2	394		
16 17/32	420		
17 9/16	446		
18 19/32	472		
19 5/8	499		
20 21/32	525		
21 23/32	551		
22 3/4	577		
23 25/32	604		

I1600 Template

I1 & I24 Templates

B I1, I1600, I18, I24

CLOVER		BEARS EARS	
inches	mm	inches	mm
1 3/32	28	1 1/4	31
2 5/32	55	3 5/32	80
3 1/4	83	5 1/16	129
4 11/32	110	7	178
5 13/32	138	8 29/32	226
6 1/2	165	10 27/32	275
7 19/32	193	12 3/4	324
8 11/16	220	14 21/32	373
9 3/4	248	16 19/32	421
10 27/32	275	18 1/2	470
11 15/16	303	20 7/16	519
13	330	22 11/32	567
14 3/32	358		
15 3/16	385		
I18 16 1/4	413		
17 11/32	440		
18 7/16	468		
19 1/2	496		
20 19/32	523		
21 11/16	551		
22 3/4	578		
23 27/32	606		

I1600 Template

I1 & I24 Templates

C I1, I1600

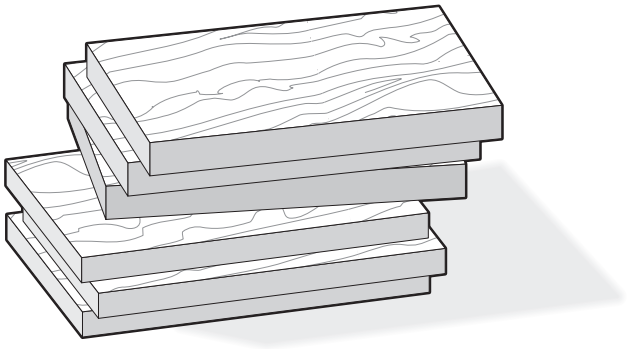
ELLIPSE		WAVE	
inches	mm	inches	mm
1 3/32	28	1 1/2	38
2 7/32	56	3 13/16	97
3 5/16	84	6 1/8	156
4 7/16	112	8 7/16	215
5 17/32	140	10 3/4	273
6 5/8	169	13 1/16	332
7 3/4	197	15 3/8	391
8 27/32	225	17 11/16	449
9 31/32	253	20	508
11 1/16	281	22 5/16	567
12 5/32	309		
13 9/32	337		
14 3/8	365		
15 15/32	393		
16 19/32	421		
17 11/16	449		
18 13/16	477		
19 29/32	505		
21	534		
22 1/8	562		
23 7/32	590		

I1600 Template

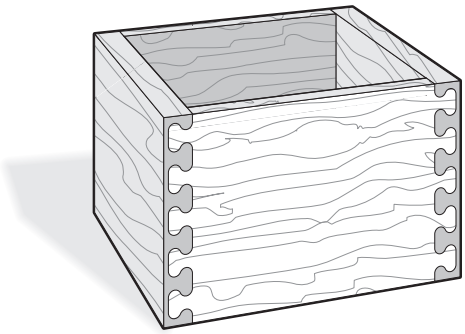
I1 Template

Note: For much greater options of board widths on the three double joint patterns, please see pages 19 and 20.

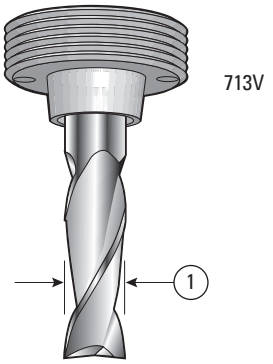
Half-Blind Isoloc Joint Procedures



6-1 Always use scrap boards to practice and test for fit. Rip the boards to width to suit the chosen template. The pin boards should not be less than ¾"[19mm] thick. For this test, make the socket boards ⅜"[10mm] to ½"[12mm] thick.
Joint specifications are in Appendix II.

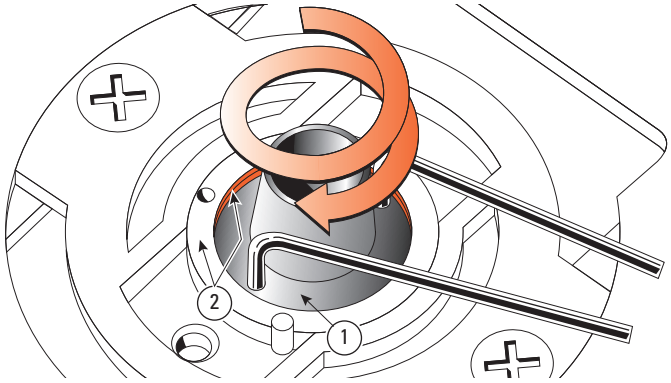


6-2 Let's rout a flush Isoloc joint. **These generic instructions are the same for any of the patterns.** The illustrations always show the left-hand side of the jig, which is where every Isoloc joint is started. Rout only single corners to adjust the joint fit.
Note: This chapter combines instruction for joint procedures and joint fit. It's a good idea to follow through step by step the first time, but there is also a "quick fit test" method in Chapter 11, Figs 11-11 to 11-15.

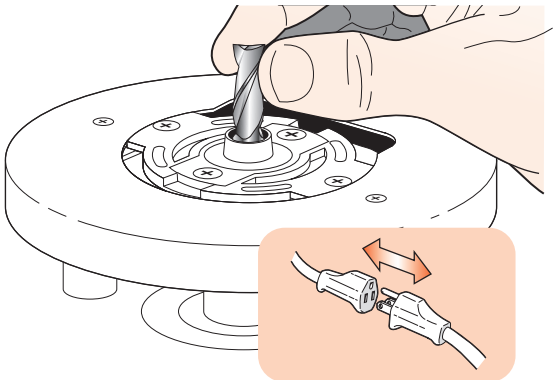


6-3 Guidebush and Bit Selection

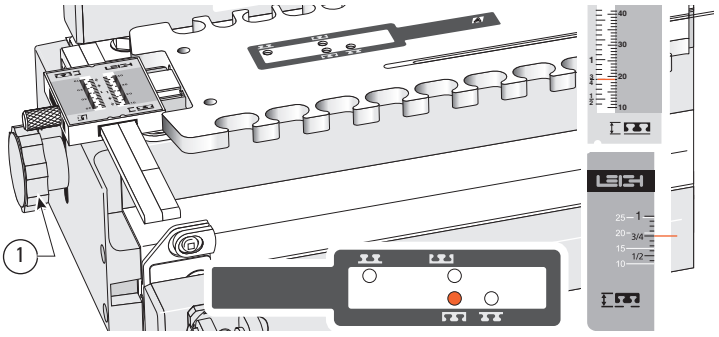
This is really easy!
Use only the 713V guidebush and either a Leigh No.170 or 170C (5/16"), or an 8mm diameter straight bit ①. **Spiral upcut bits** are much preferred for cleanly routed Isoloc joints. We also recommend solid carbide for stiffness and long life.



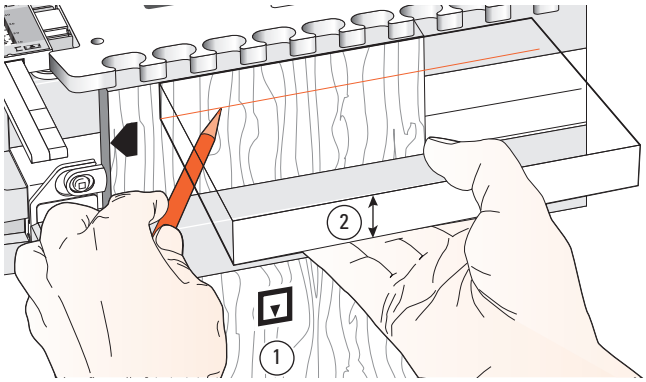
6-4 Always start test routing with the bush flange ① turned one to one-and-a-half turns farther into the holder flange ②.
Note: Some guide bush adaptors may already be set up into the router base. If so, the test could be started with the bush flange flush with the holder flange.



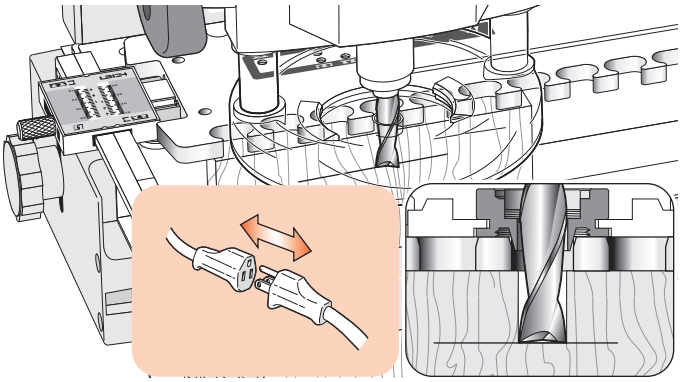
6-5 Fit the 5⁄16" or 8mm bit to the router and tighten securely. If you don't have an 8mm collet you will need an 8mm collet reducer (Leigh part No. 172-8) in your ½"[12.7mm] collet.



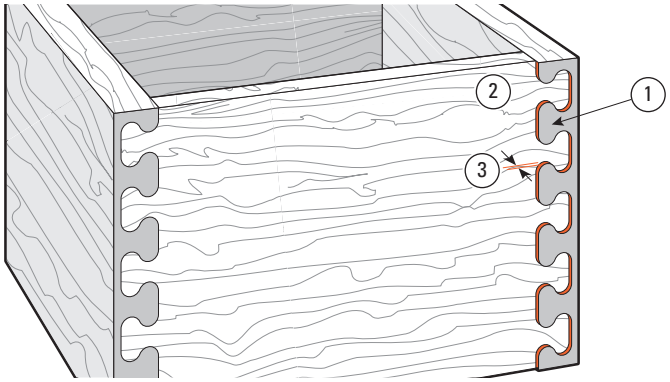
6-6 With the selected Isoloc pattern to the front, set the scales **to your vertical pin board thickness**. This is the only scale setting used. This example is shown on ¾"[19mm]. Your pin board and scale setting may be greater. Lower the template onto the spacer board and tighten the support bracket knobs ①. Position the template with the template pin in the ⊓ position at the right hand end of the template. *Remember, the template pin is always positioned at the right end of the template, except when routing the right side of wide boards.*



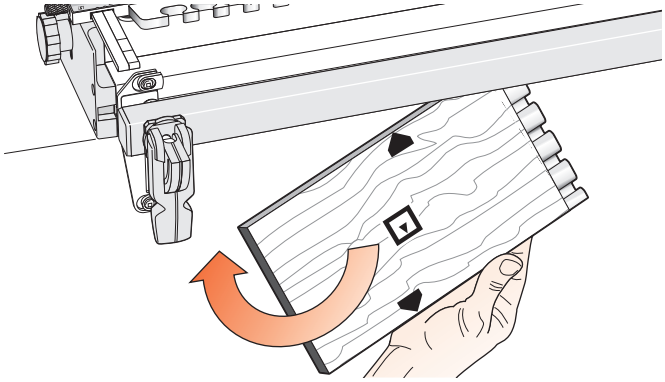
6-7 Clamp the pin board ① against the left side stop, with the end edge flush under the template. The board must be clamped with the inside face ⊡ away from the jig. Mark and adjust the depth of cut to suit the thickness of the socket board. Use the socket board ② to mark the depth of cut.



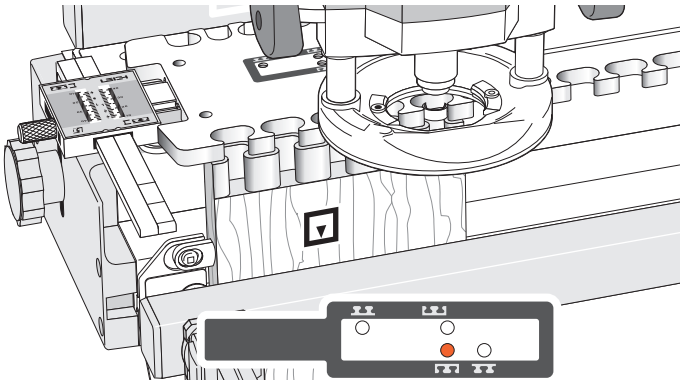
6-8 Adjust the bit to cut down to the centre of the pencil line. Make sure the collet will not rub on the guidebush.



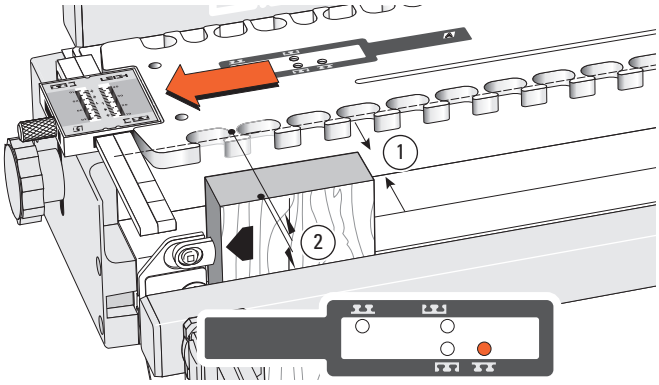
6-9 You want the pins ① to come through the socket board ② by a maximum of 1⁄64"[.40mm] ③ for cleanup later, just like half-blind dovetails. Setting the bit to the pencil centreline should ensure this.



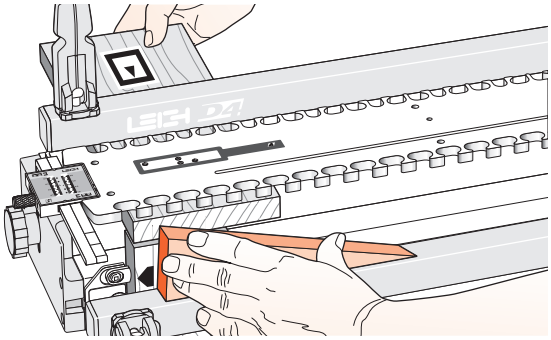
6-10 The inside surfaces of all boards used for making Isoloc corner joints always face away from the jig body ⊡ just like half-blind dovetail boards on the dovetail jig. So alternate side edges go against the side stop and **joining boards must all be exactly the same width.**



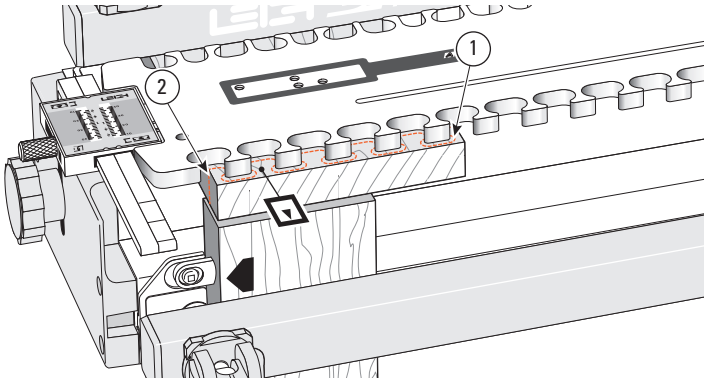
6-11 See Chapter 12 Routing Procedures Hints & Tips. Rout one end of a scrap pin board. Make sure to touch the guide-bush continuously on the sides of each template opening.



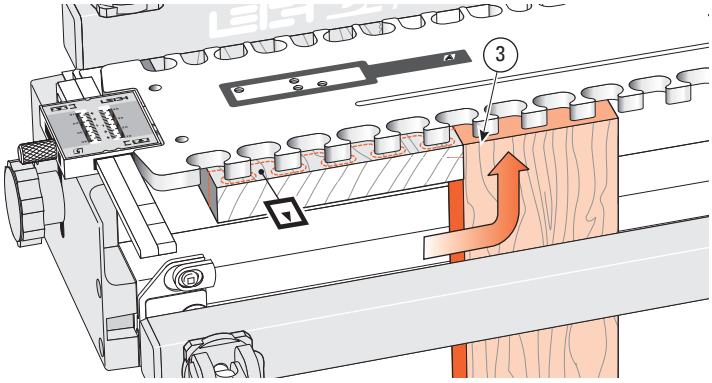
6-12 Remove the test pin board and insert the template pin in the hole. Do not change any other setting. Clamp a scrap board of **exactly the same thickness as the pin board** ① in the front clamp, with the top end edge slightly below the top surface of the jig body ②. **Leave the scale setting the same as for pin boards.**



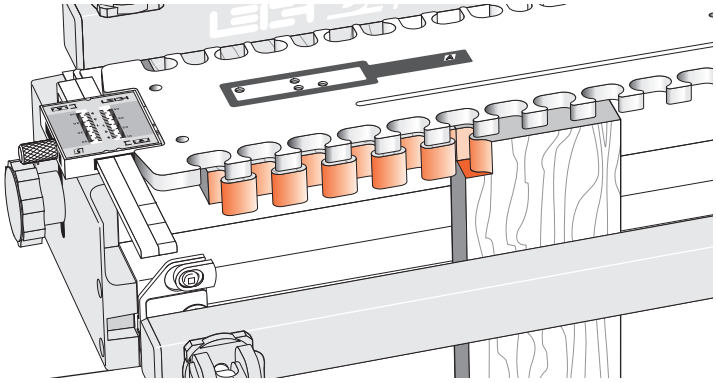
6-13 Remove the spacer board and clamp a test socket board horizontally in the rear clamp, inside face ▽ of the board facing away from the jig body and the **end edge flush with the outer edge of the vertical scrap board.** Lower the template flush and level onto the socket board.
⚠**Tear-out Warning! Don't rout this board before reading the next two paragraphs** and 11-5 through 11-10, Routing Technique for Sockets.



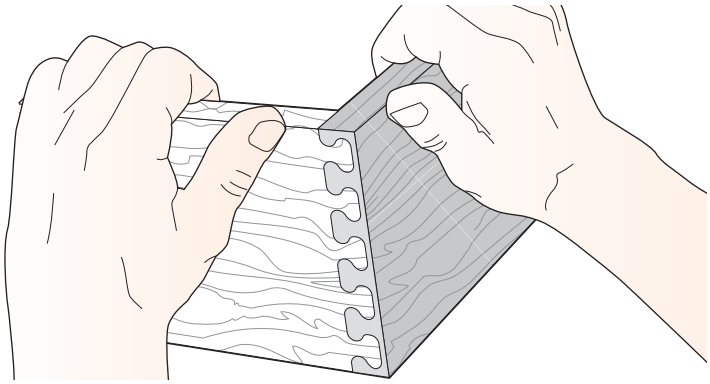
6-14 If you rout this horizontal socket board in the conventional way you may tear away the right hand board edge ①, although some woods will rout quite cleanly.
The edge at ② may cause the router to pull itself quickly into the template comb, **so good router control is important**.



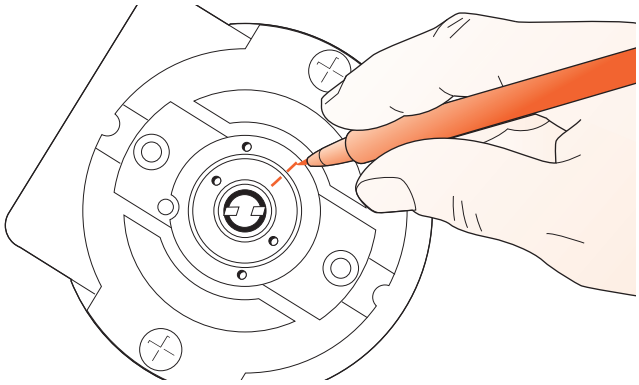
6-15 If necessary, the best way to avoid the right-edge tearout problem is to clamp the front scrap ③ against the right side edge of the board. Simply clamp it under the front clamp bar, making sure it's firmly against the right edge of the socket board. By rotating and flipping its position, one scrap will be good for 4 cuts.



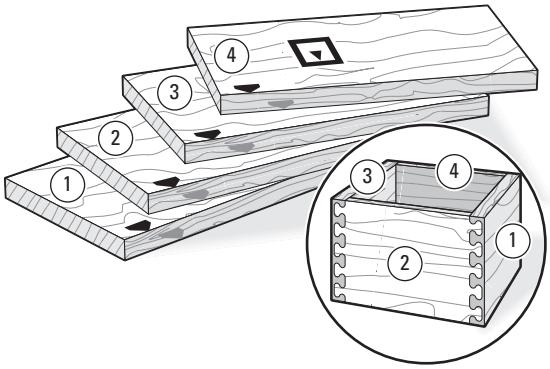
6-16 Rout one end of the socket board, with the inside face ▽ away from the jig body.
See Chapter 11, Routing Procedures Hints and Tips.



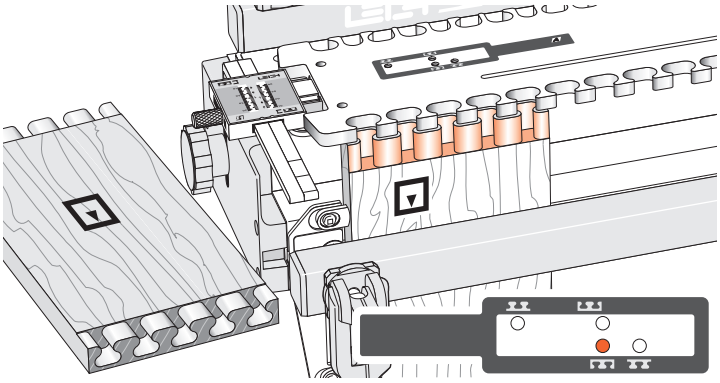
6-17 Test the two boards for fit. Adjust the height of the variable guide-bush by trial and error and rout more pairs of test boards to achieve the desired fit. **Remember, lower the variable bush (out of the base) for a tighter joint and raise the variable bush (into the base) for a looser joint.** The fit should be a firm sliding fit, just like dovetails and box joints.
Note: For a "quick-fit test" method, see Chapter 11, Figs 11-11 to 11-14 .



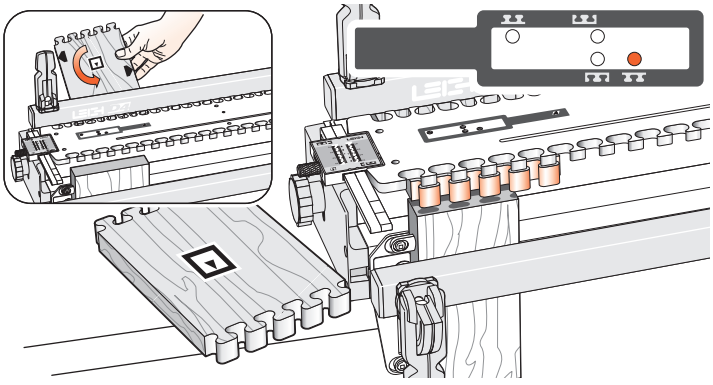
6-18 When the fit is just right, mark the bush and holder with permanent ink for future reference.



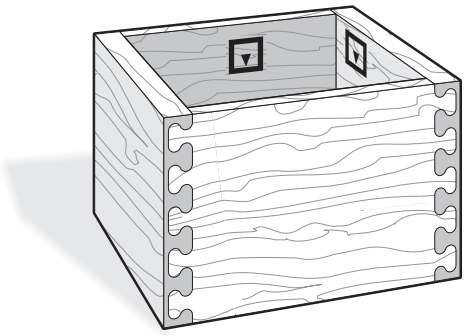
6-19 Let's make a box.
Prepare four boards and mark the selected inside faces. The opposite sides of the box must of course be equal lengths.



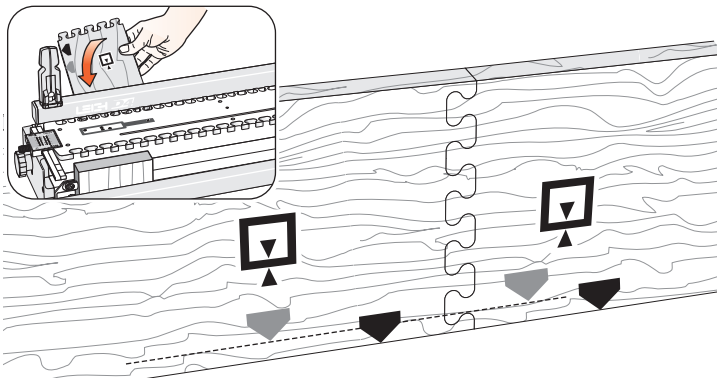
6-20 Rout both ends of pin boards 1 and 3 in template position .

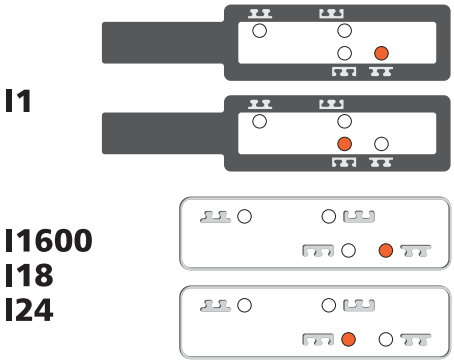


6-21 Rout both ends of socket boards 2 and 4 in position .



6-22 Assemble in the usual way. You may need to clamp in both directions when gluing up. Check for squareness and correct as necessary when clamping.



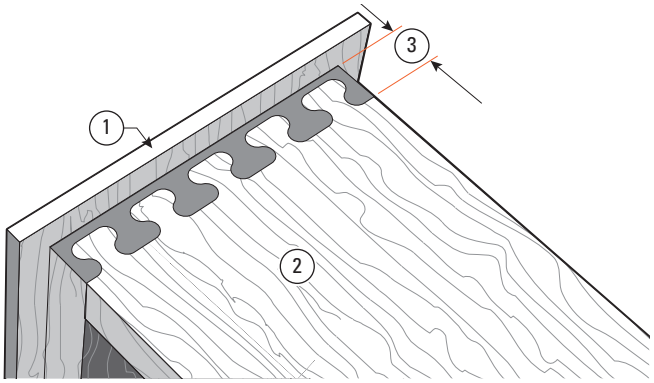


6–23 End-on-End Isoloc Joints

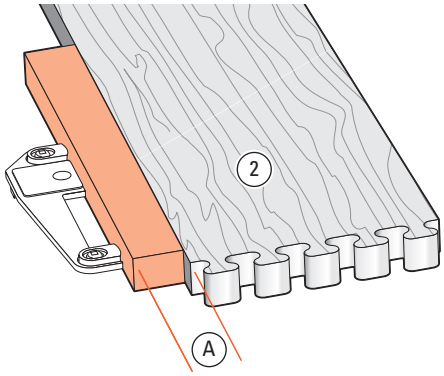
These are routed exactly the same way as the socket boards in the previous instruction, **except that you must keep the same side edges against the side stop and alternate face side up/face side down**.

6–24 Rout half the end-on-end boards at the setting and the other half at the setting. ■

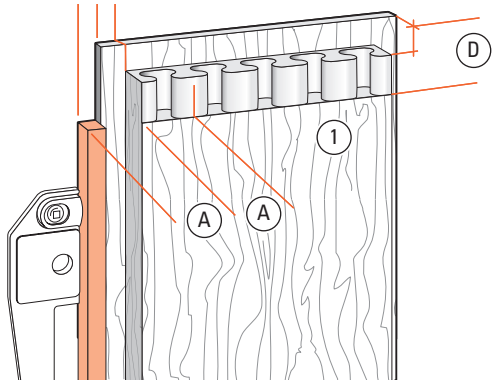
Rabbeted Half-Blind Isoloc Joint Procedures



7-1 Rabbeted drawer fronts ① and the mating sides ② have to be blocked away from the side stops. Dimension ③ must be minimum 11⁄16"[17,5mm].
Note: The 16" Leigh jig's thickness capacity is 1" maximum.



7-2 Block drawer sides ② away from the side stops by one complete pattern pitch A.



7-3 Block the drawer front ① away from the side stop by B which is pattern pitch A minus rabbet width C. Adjust bit depth to D (rabbet plus drawer side thickness). ■

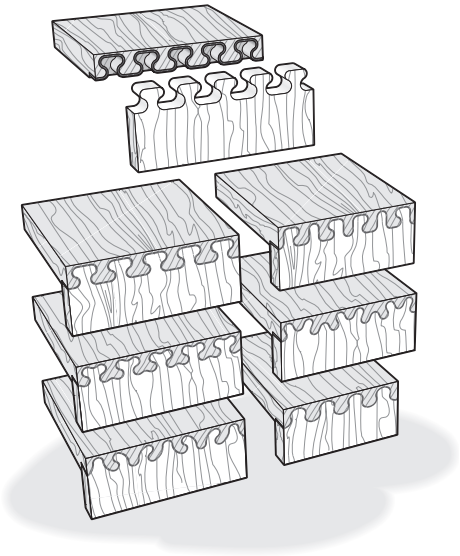
ISOLOC - CHAPTER 8

Inlaid Half-Blind Isoloc Joint Procedures

It's hard to describe Isoloc joints as plain, but all plain Isoloc joints are routed with a single bit; either 5/16" or 8mm diameter, as described in the previous chapters.

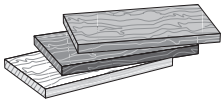
However, by using two different sized bits (1/4" and 3/8", or 6mm and 10mm), an even more unique effect can be produced: inlaid Isoloc joints.

Isoloc Patterns

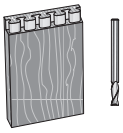


Cutting Inlaid Isoloc Joints

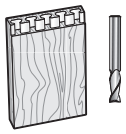
Use 2 bits and
1 guidebush



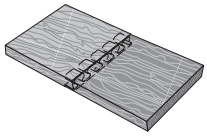
1 Pin board
1 Inlay board
1 Socket board



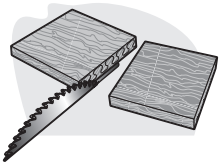
Rout Inlay board vertically with small cutter.



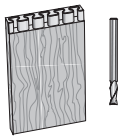
Rout Pin board vertically with large cutter.



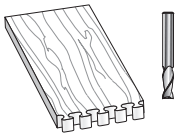
Glue Pin and Inlay boards end-to-end.



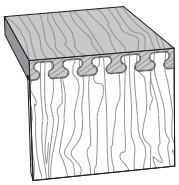
Saw Inlay board off flush with Pin Board.



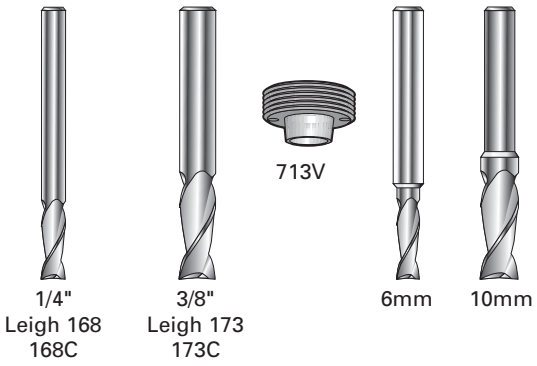
Re-rout inlaid Pin board in original position with small cutter.



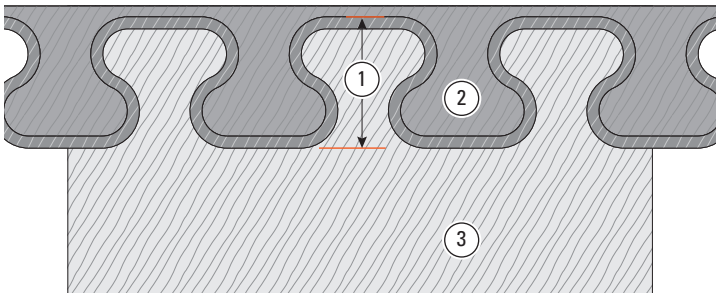
Rout Socket board horizontally with large cutter.



Glue and assemble in usual way.



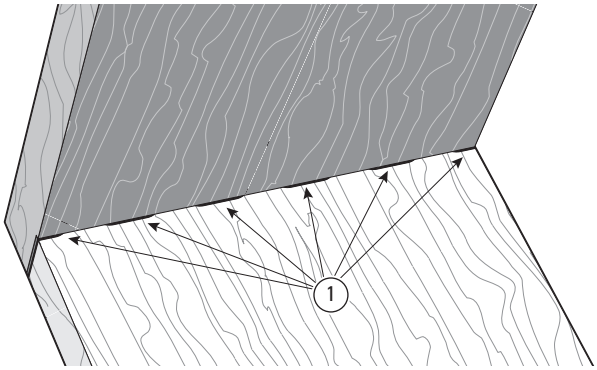
8-1 Inlaid Isoloc joints require two bits, either a ¼" with ⅜", or 6mm with 10mm. Only one variable bush (713V) is used.



8-2 The dark inlay boards should be ¾"[19mm] thick ①. Any thinner may leave flat spots; any thicker wastes wood. *(exceptions see 8-19 and 8-20)*

However, scale settings will be set on 1/32"[1mm] less than inlay board thickness (see 8-5).

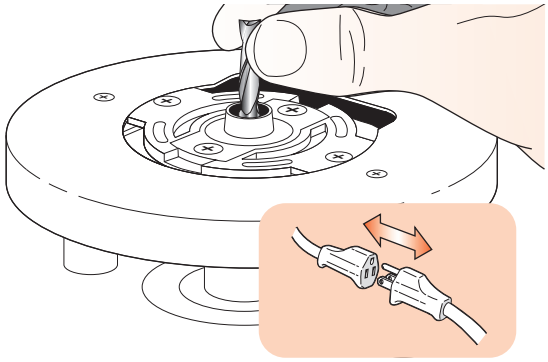
② is the Pin Board. ③ is the Socket Board.



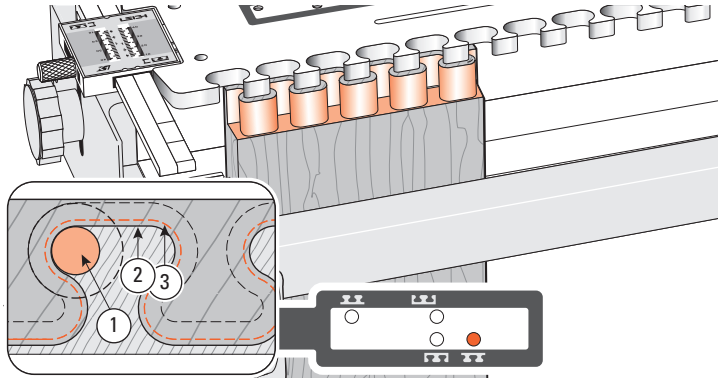
8-3 Inside Corner Exposed

Pin board material must be at least 13/16"[21mm] thick to ensure the inlay does not show inside the finished corner, as it does in this illustration ①.

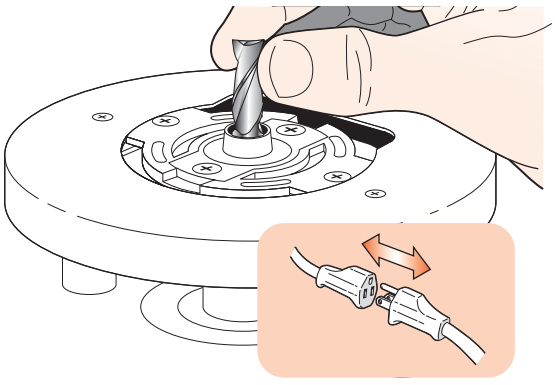
However, scale settings will be set on 1/16"[2mm] less than pin board thickness (see 8-7).



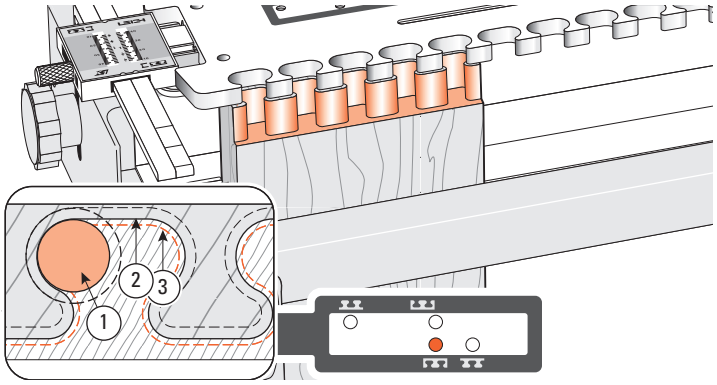
8-4 Set Up for Joint Fit This joint fit test is similar to the quick-fit test at 11-11 to 11-14, except two sizes of bit are used and test cuts are made on **two** vertical boards to join end-to-end. Depth of cut is not critical for testing. Best use the same wood species as the final project. For instructional clarity, we show a *medium* coloured pin board, *dark* inlay board, and *white* socket board. Start with the smaller bit in the router.



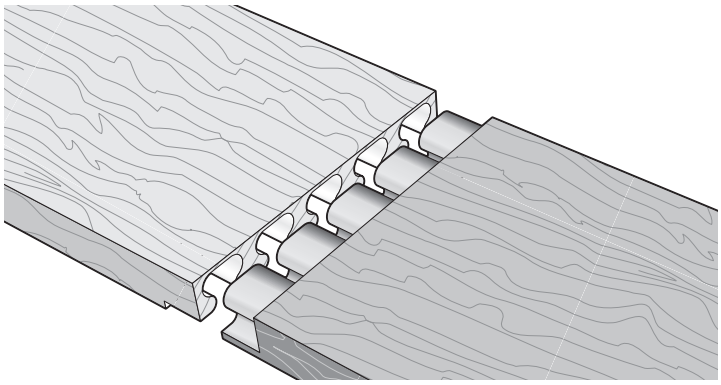
8-5 Move the template to the socket position . Set the scale on 1/32"[1mm] **less than the inlay board thickness.**
Rout the inlay board using the smaller bit ①. You will be removing 1/32"[1mm] ② **less** wood than with a "plain" ③ Isoloc joint.



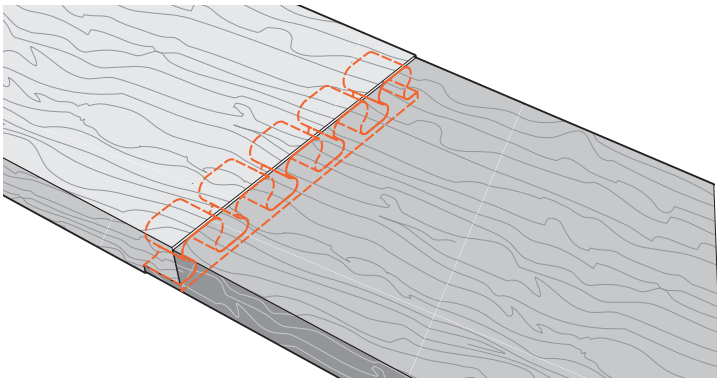
8-6 Fit the larger bit to the router.



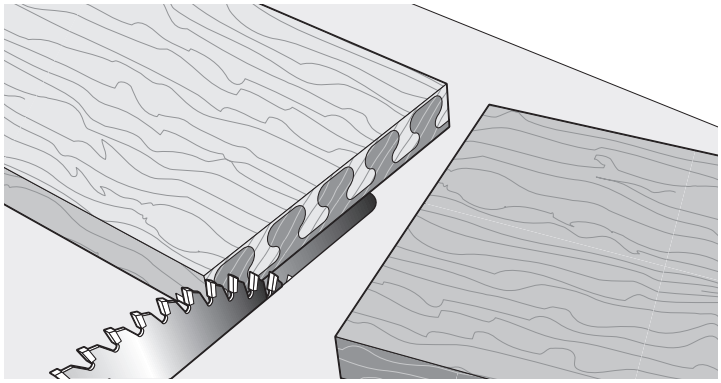
8-7 Move the template to the pin position . Set the scale on 1/16"[2mm] **less than the pin board thickness**. See step 8-2.
⚠**Do not change the scale setting on any of the following steps. This will ensure an even inlay band thickness on the finished joint.**
Rout the pin board using the larger bit ①. You will be removing 1/32"[1mm] ② **more** wood than with a "plain" ③ Isoloc joint.



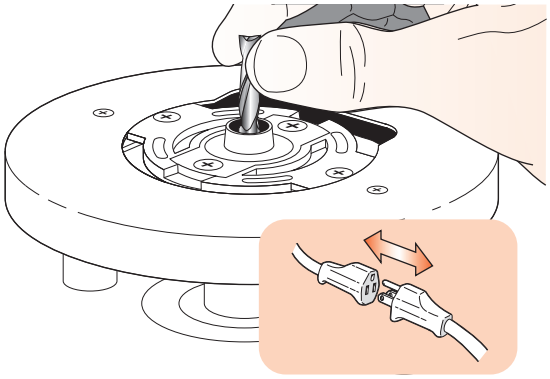
8-8 Test the fit end-on-end between the pin board and inlay board. Make any necessary VGS adjustments to achieve the desired fit (*See Chapter 4*) and if necessary, repeat steps 8-4 through 8-7.



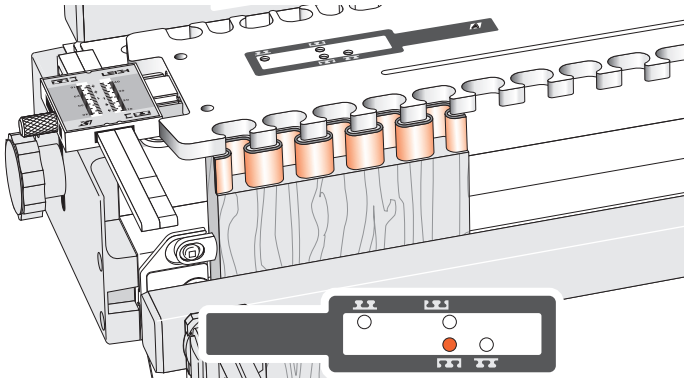
8-9 Having tested with scrap boards, now rout the working boards.
⚠**The depth of cut must be set to match the final socket board thickness.**
Leave the scale setting exactly where it is.
Glue each inlay board to its pin board end-to-end.



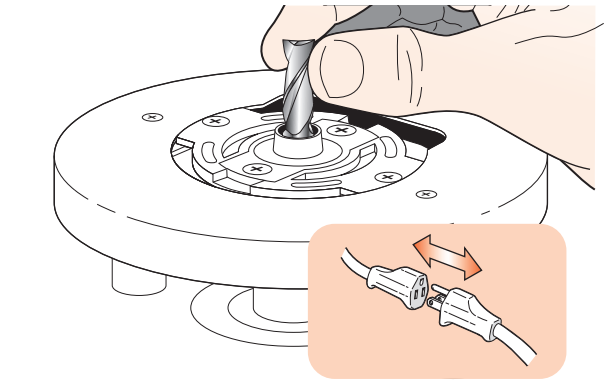
8-10 When the glue is set, saw off the inlay boards flush with the end of the pin boards. ⚠You will be using two or more species of wood with differing grains and moisture contents. Do not delay the second routing of the inlaid pin boards. Any delay here could allow shrinkage and cause uneven inlay "strip" thickness in the final assembly. *See 8-17.*



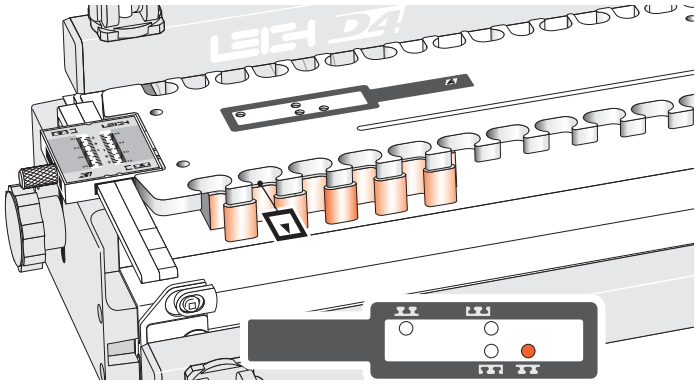
8-11 Re-fit the smaller bit to the router.
Note: For half-thickness inlays see 8-15.



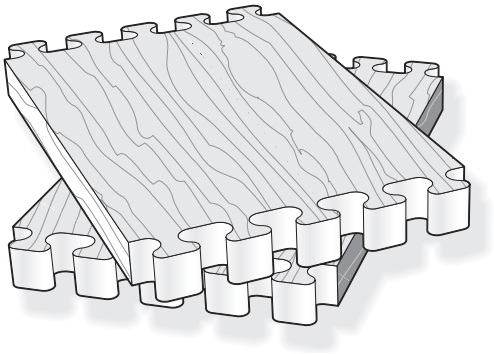
8-12 Move the template to the pin position . Reset the pin boards back in the jig, touching the side stop. Make sure the smaller bit is in the router. **The scale settings and cutting depth must be exactly as they were for the original pinboard cuts. Now rout all the pin ends using the smaller bit.**
This leaves the 1/16"[2mm] inlay attached to the pins.



8-13 Re-fit the larger bit to the router.



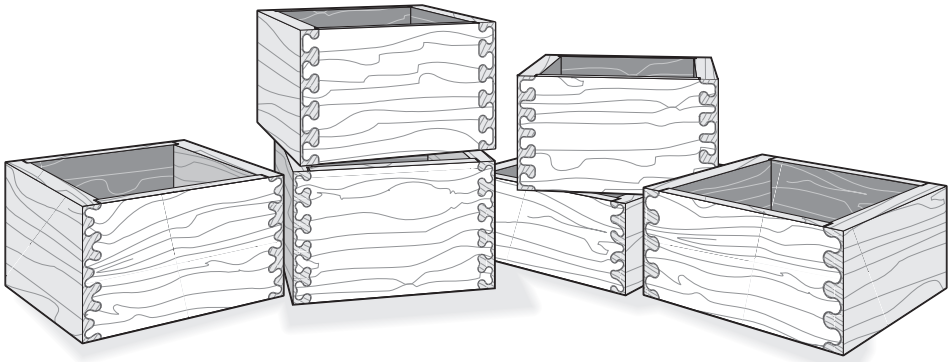
8-14 Move the template to socket position .
Wood routed horizontally may behave differently from vertical grain, so rout a test socket board using the larger bit. Use the same wood species as the final project board. Test and adjust the final fit if necessary. If any VGS adjustment is needed, it will be very small.



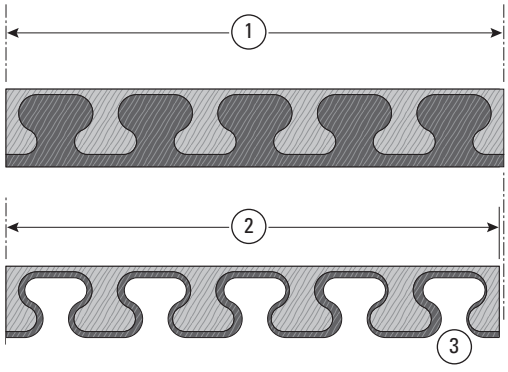
8-15 When the fit is satisfactory, rout all socket boards with the larger bit.

Half -Thickness Inlays

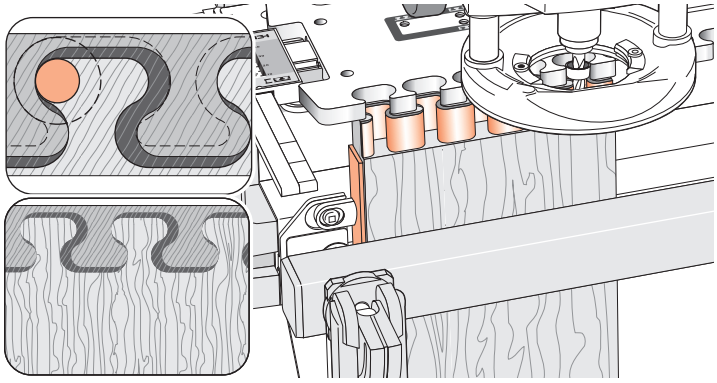
It's just as easy to make inlays half the thickness. *If you use a 5⁄16"[8mm] bit through steps 8-11 to 8-14 the inlay strip would be only half as thick i.e. 1⁄32"[1mm].*



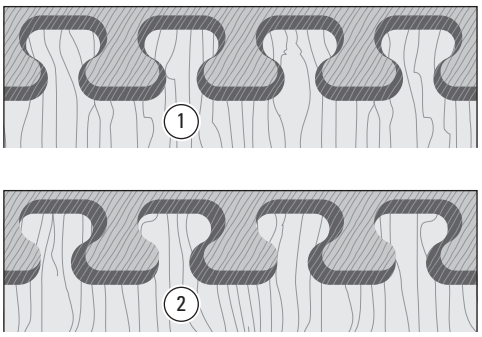
8-16 Glue, assemble, and finish in the usual way.
⚠To avoid shrinkage problems noted earlier, do not delay between routing parts and gluing up, particularly on wide boards. See below.



8-17 This is how the shrinkage of an inlaid board can cause uneven inlay thickness. The original pin board and inlay wood ① glued together and put aside may contract across the grain ②. The template does not change size, so the difference to inlay thickness is progressively greater as the router moves to the right ③.

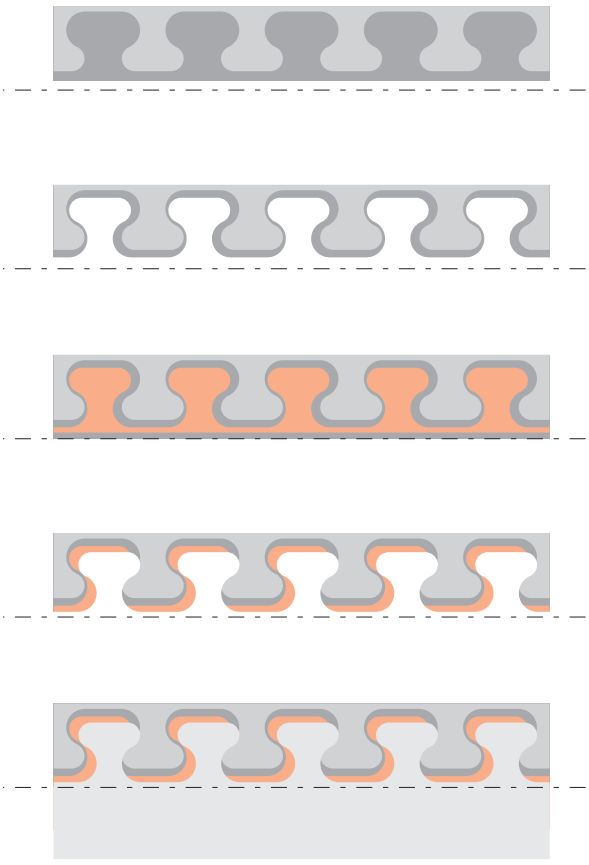


8-18 "Shadow" Inlaid Joints
Imagine you deliberately offset the inlaid pin board in the jig; for example, you blocked it away from the side stop by 1⁄16"[2mm], as shown here. This will produce spectacular shadow effects.
Make sure you also block the socket board away by the same distance to ensure board alignment



8-19 You can also use a different scale setting for a shadow effect. Example ① shows the result of a 1/16"[2mm] higher scale setting.

Combining blocking and offset scale settings results in effects similar to ②.
Make sure your inlay and pin boards have sufficient thickness for this, as indicated by the dotted lines on illustration 8-20.



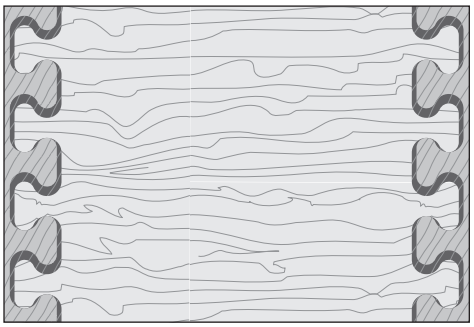
8-20 For even more spectacular "double inlay" effects, try this: After gluing the first inlay material...

...offset and re-rout the inlaid pin board with the small bit.

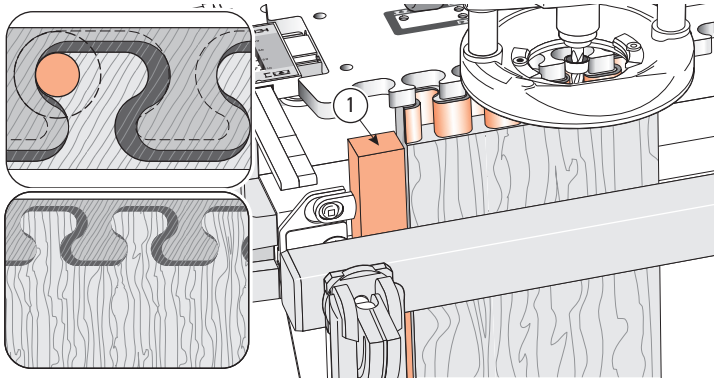
Now rout a second, contrasting inlay board, **but with the large bit.** Glue this into the inlaid pin board and saw off as before.

Offset and re-rout this double-inlaid pin board with the small bit.

Rout the final socket board with the large bit, glue and assemble.
The potential range of effects is limitless.
Have fun!



8-21 "Shadow" Joint Symmetry
Here's how to make the shadow joint on the other end of the socket board match.

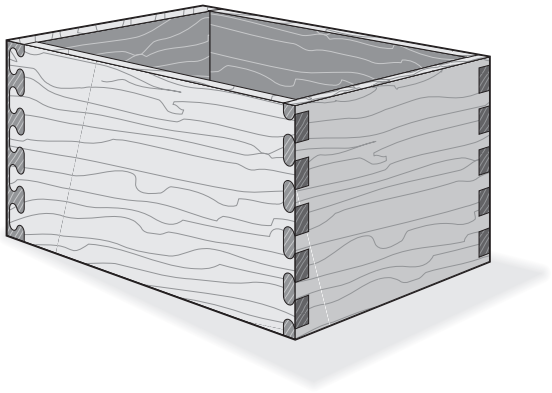


8-22 You cannot move pieces to the left of the side stop, so use a spacer block ① equal to one whole joint pattern pitch, **minus** the desired offset. In our example, we made the spacer block one pitch minus 1/16"[2mm]. This will give the matching side to side result shown in 8-18 and 8-21.
Note: Also see Chapter 10 on joint symmetry and asymmetry. ■

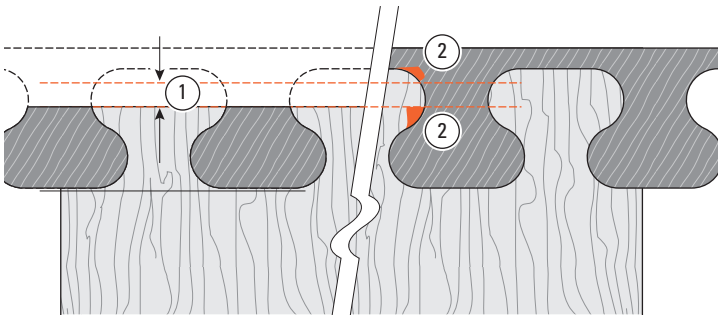
ISOLOC - CHAPTER 9

Through Isoloc Joint Procedures

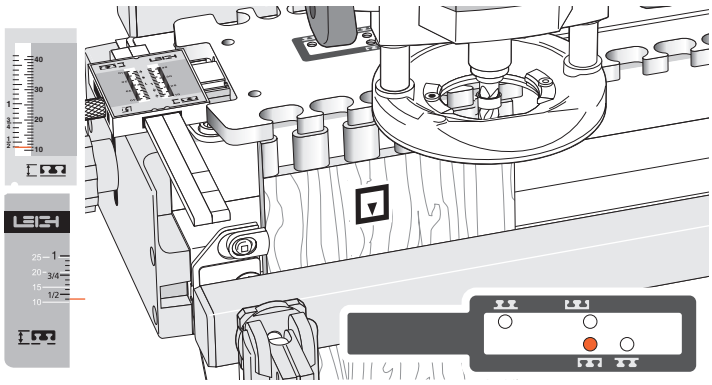
These instructions are based on the assumption that you have mastered the routing of the basic Isoloc half blind joint, and are thoroughly familiar with those procedures. Also that you have read the Hints and Tips Chapter 11.



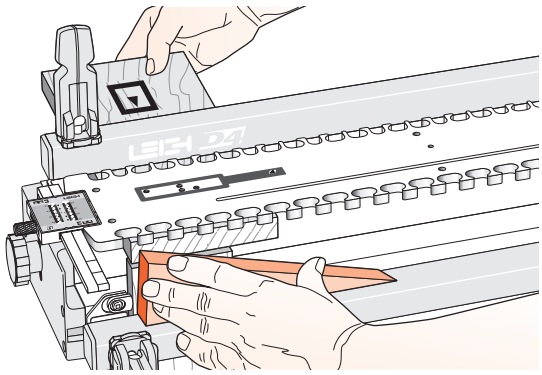
9-1 Although intended primarily as a half-blind joint, the Isoloc can easily be used for attractive through joinery. This is particularly suitable on the rear corners of drawers where the same Isoloc pattern had been used on the drawer front.



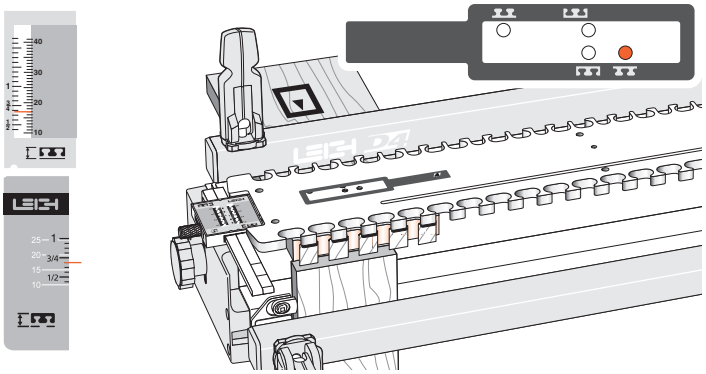
9-2 The ideal thickness range for through Isoloc boards is 7⁄16"[11mm] to 9⁄16"[14mm] ①; perfect for drawer sides to drawer rears, or for small to medium boxes. Anything more or less than these thicknesses could cause tear-out problems at ②.



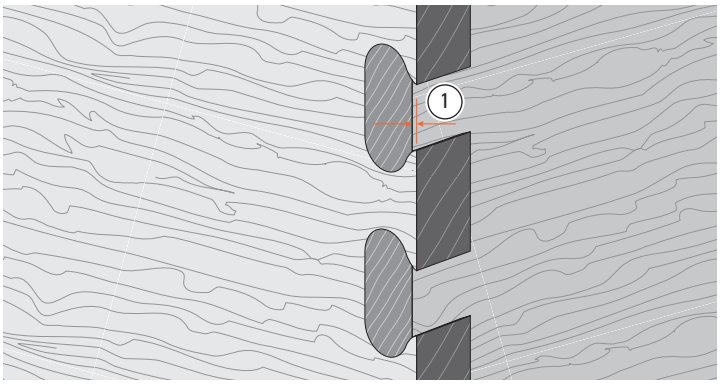
9-3 Routing the through pins is straight forward. Set the template on the pin icon and the scale on **the actual pin board thickness** (shown here at 7⁄16"[11mm]). The inside face ⊡ of the board is away from the jig body as before.



9-4 Mount a scrap piece **of exactly the same thickness** as the pin board in the front clamp, slightly below the top surface. Remove the spacer board. Clamp the through socket board horizontally in the rear clamp, inside face ⊡ of the board away from the jig body and the **end edge flush with the outer edge of the vertical scrap board**. Lower the template flush and level onto the socket board.



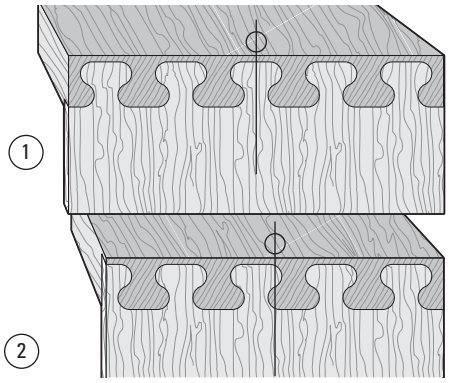
9-5 Set the template on the socket icon. **Set the scale on 17mm** (there is no precise equivalent setting on the inch scale). Now rout a test socket board.



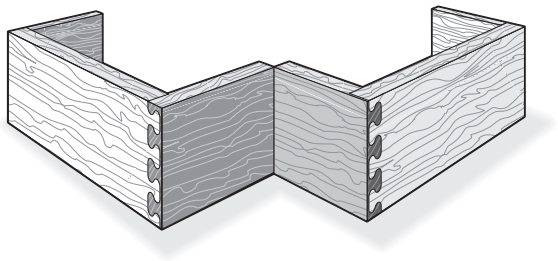
9-6 The ends of the socket board should slightly project through the pins ① for cleanup after gluing. Move the template in for more socket board projection; out for less projection. **The 17mm scale setting works for all through pin board thicknesses.** ■

ISOLOC - CHAPTER 10

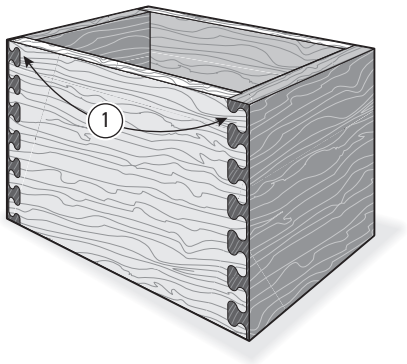
Isoloc Joint Symmetry and Asymmetry



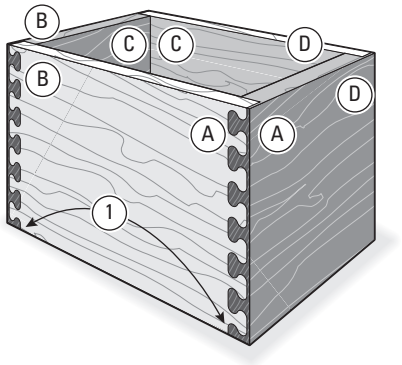
10-1 Isoloc joints are template-made joints, but they are only symmetrical if the pattern appears to be even about the board centreline.
Pattern ① is symmetrical.
The pattern in the more narrow joint ② is asymmetrical.



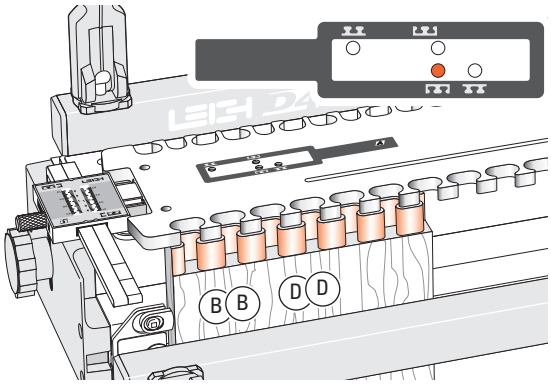
10-2 Symmetry is not critical when only one corner can be seen at one time; as in this "split" drawing of a typical drawer front and sides.



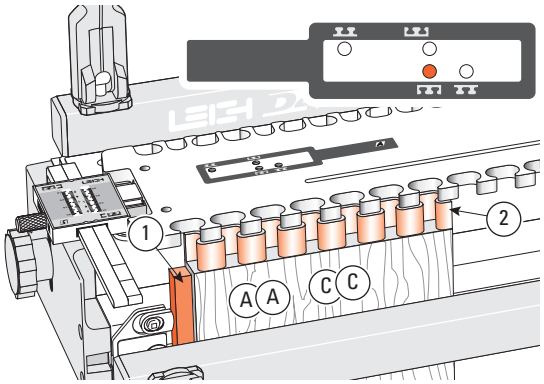
10-3 However, on this box, while it's okay to have asymmetrical joints, the corner patterns are both visible and do not mirror one another as they should ①.



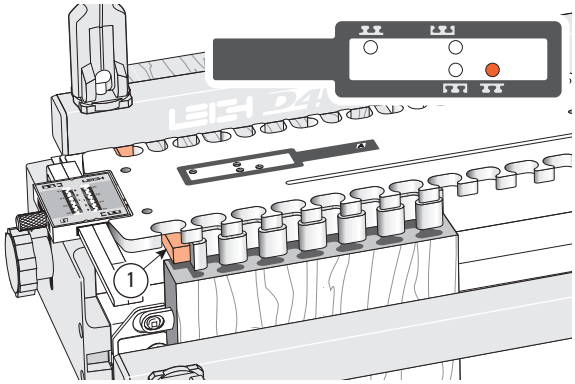
10-4 So if your joints need to be asymmetrical for dimensional reasons, here's how to mirror-image them correctly as shown here ①.



10-5 Rout pin and socket boards for corners B and D against the left hand side stops.
Illustrations 10-5 and 10-6 show pin boards only.



10-6 Rout pins for corners A and C blocked away from the left side stop ① so that the right edge finish ② mirrors the B and D left edge finish in 10-5.



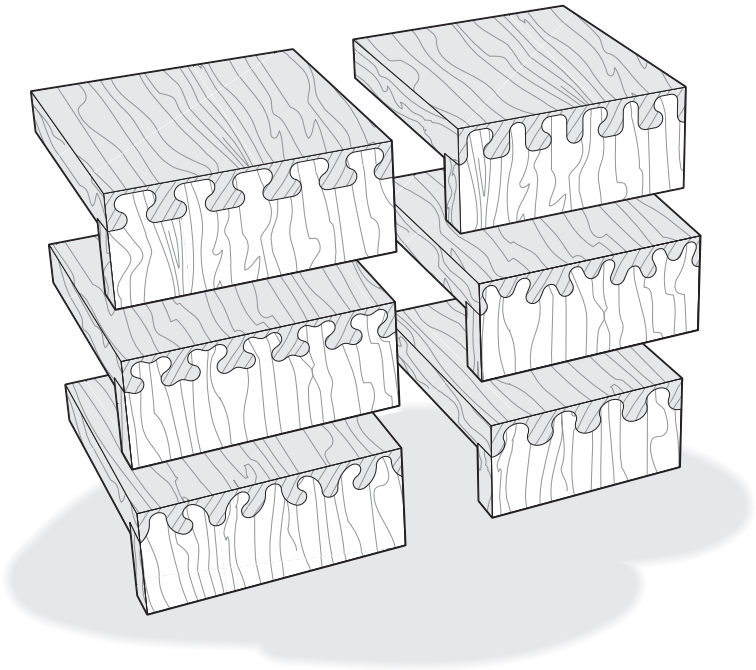
10-7 Use the same block ① to space the A and C socket boards away from the rear stop.
Note: Also see 8-21, "Shadow" Joint Symmetry. ■

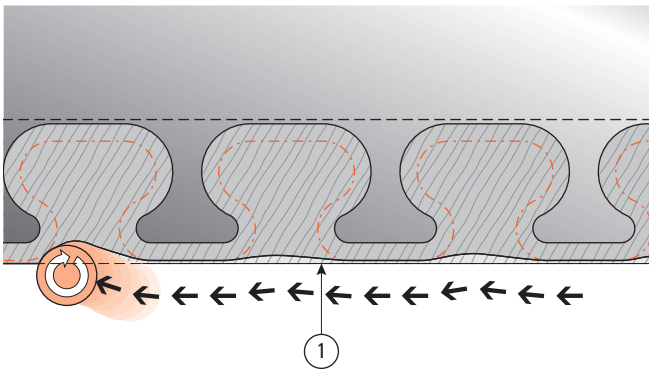
ISOLOC - CHAPTER 11

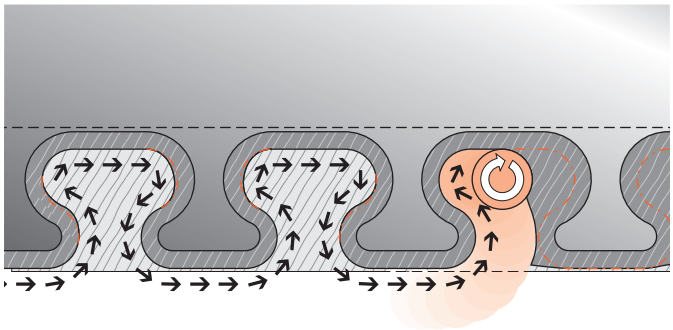
Routing Procedures Hints and Tips

Isoloc joints are unique, beautiful, and strong. They are different from routed dovetail joints and require different routing techniques, particularly the horizontal socket boards.

Here are some special techniques and ideas to help you get the most out of your Leigh Isoloc Template.



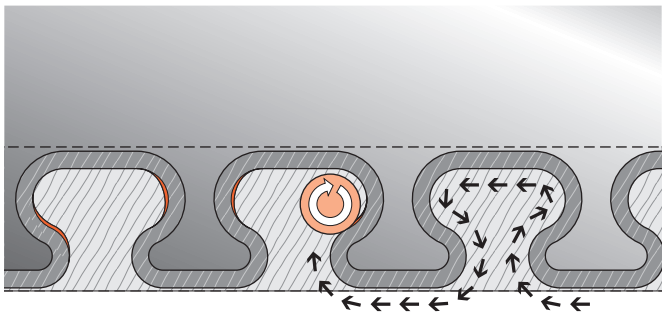




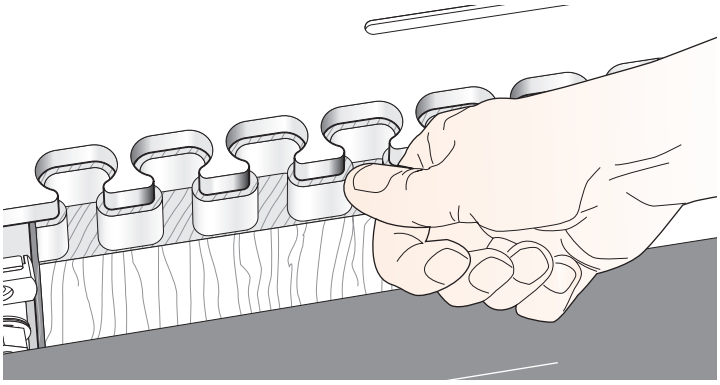
11-1 Routing Techniques for Pins The vertical pin boards are the easiest to rout and require little in the way of special technique. ⚠For the first light cut, move the router from right to left, across the face. **Make sure you control the router firmly, because it is driven in this direction by the bit rotation.** This "back" or "climb" routing leaves a very clean shoulder in the side grain ①.

11-2 Now rout left to right, following the template contours to rout out the pins.

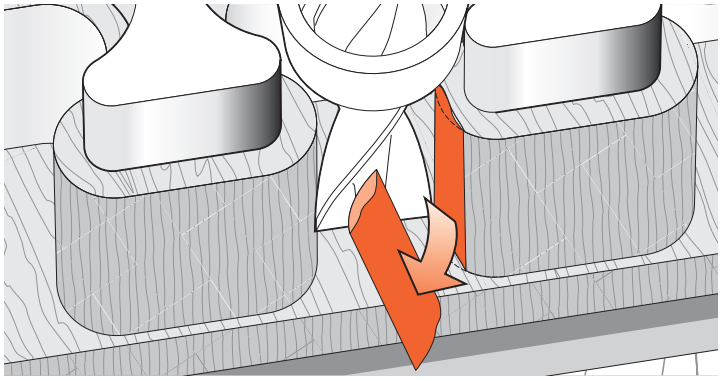
Keep the feed rate up; routing too slowly will cause the bit to overheat. Remember, you will be coming back for a cleanup cut.



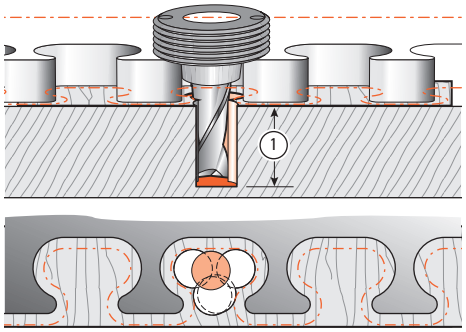
11-3 Go back from right to left to make a final cleaning cut and to ensure no tiny parts have been missed.



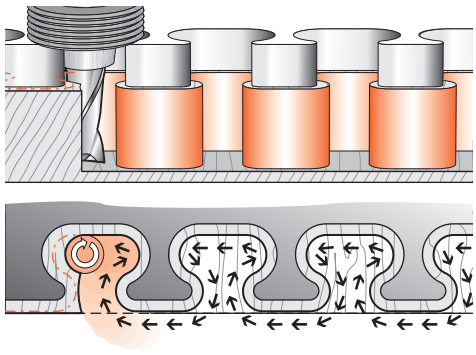
11-4 Before removing the board, examine the routed pins to ensure a clean cut.



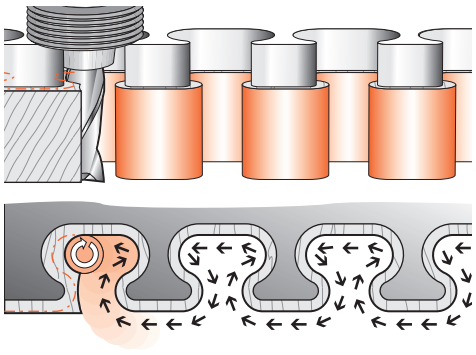
11-5 Routing Techniques for Sockets
While there is no "exiting" of the bit to cause tear-out, the combination of horizontal and end grain in horizontal socket boards can present its own problems. Much depends on the wood species. The most vulnerable part when routing is shown here.



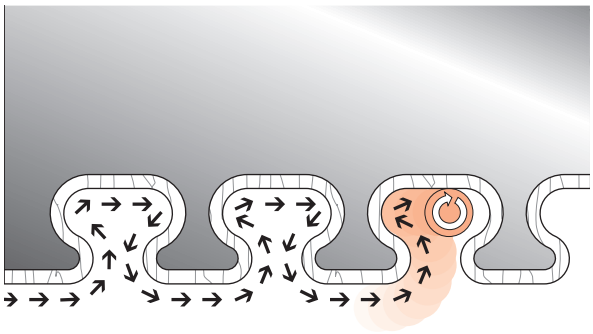
11-6 The quickest solution in troublesome wood is to plunge two to four times in each opening to **90% of board thickness only** ①.
Note: Any slight "breakout" in the first 90% of cut will be buried in the finished joint, and will not be visible on the outside.



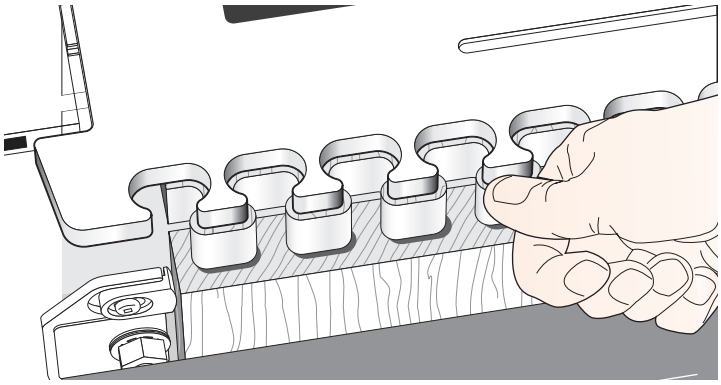
11-7 Now rout right to left, following the template contours, the bit still set at 90% depth. *Note: In thicker socket boards and hardwoods, rout in several passes at progressively deeper cuts.*



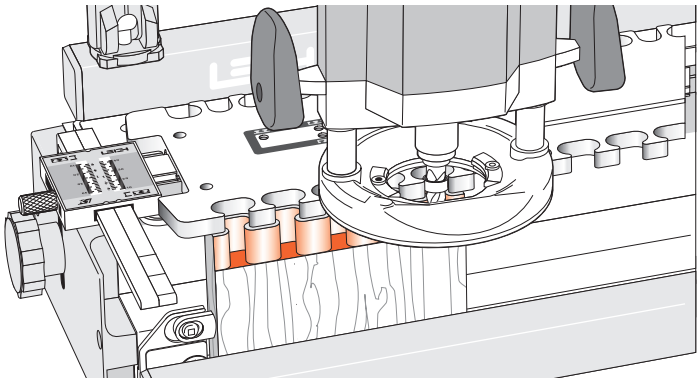
11-8 Now rout right to left again at **full through**.



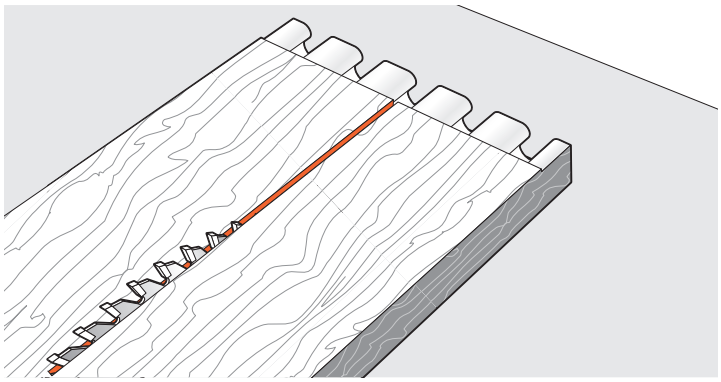
11-9 Finish up left to right at full through.



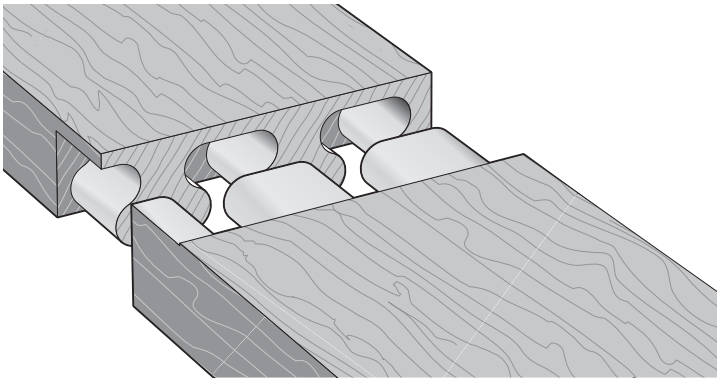
11-10 Before removing the board, examine the routed sockets to ensure a clean cut.



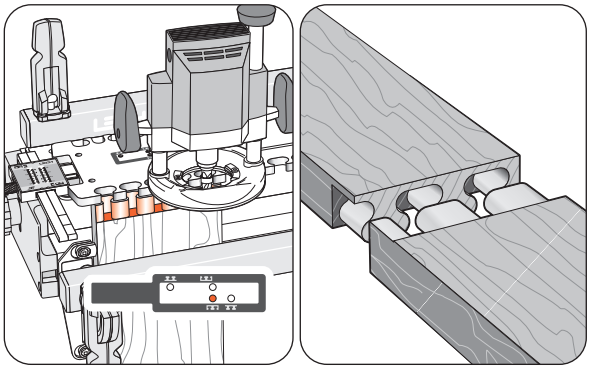
11-11 Quick-Fit Test
Rather than rout two test pieces, here is a quick way to get 99% of the way there.
Rout one scrap pin board, at least four pins wide.



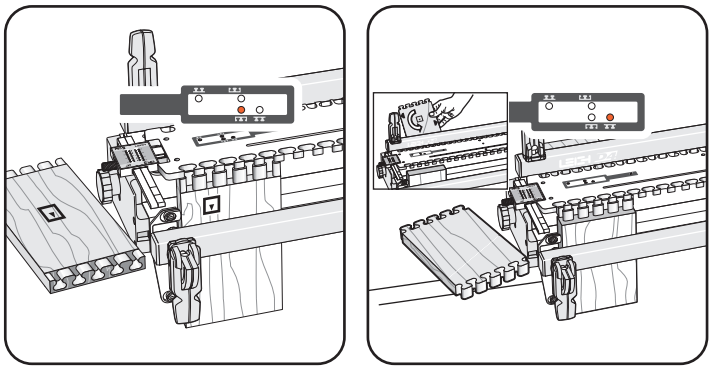
11-12 Saw the board in half.



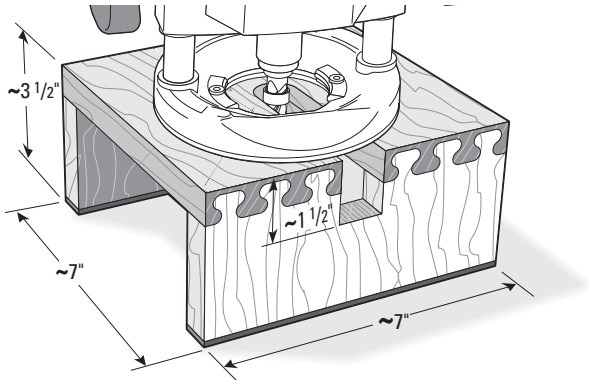
11-13 Try the boards end-on-end for fit.
If too loose, lower the bush.
If too tight, raise the bush.



11-14 Rout and test again.

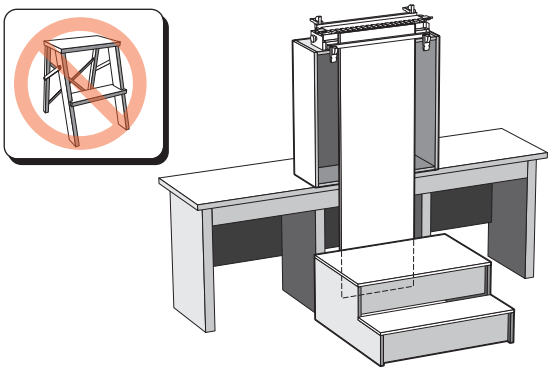


11-15 Once you have a good fit, rout a complete pin and socket joint, using the same species wood as for the workpieces, to test for final fit.



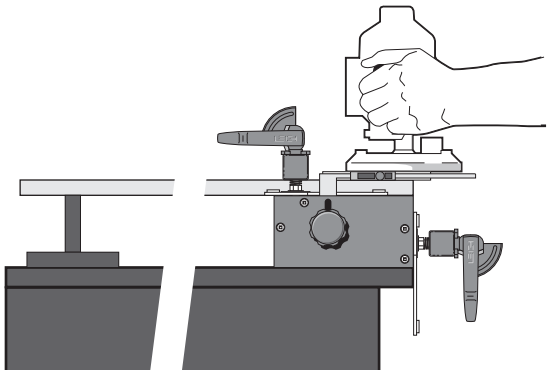
11-16 Router Stand

If you do not already have one, make up a small router stand as illustrated, to mount the router securely on the bench when not in use.



11-17 Routing Long Vertical Boards

To rout long vertical boards, you may need to build a jig stand to mount on your bench. Make the stand and bench height combination sufficient to accept the board length you have in mind. Bolt the stand securely to the bench. Make a stable platform to stand on as illustrated. Portable steps are too unstable.



11-18 Routing Long Horizontal Boards

When placing long horizontal boards in the rear clamp, make sure the rear end of the board is supported to prevent unnecessary racking of the jig. ■

ISOLOC - Appendix I

VGS Guidebush and Bit Selection

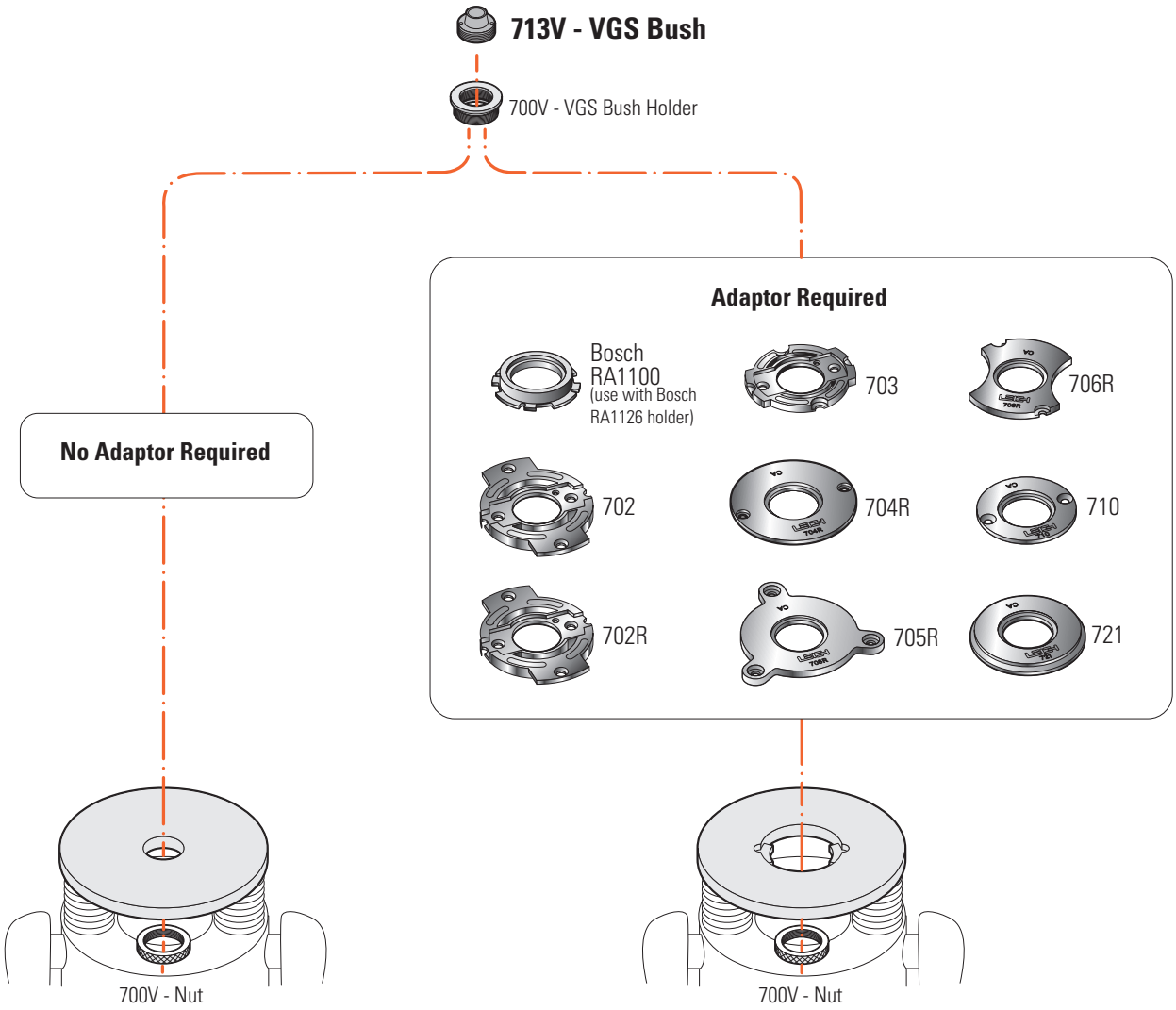
VGS: The Leigh Variable Guidebush System

The 5-piece VGS comes with Isoloc Joint Templates, but you may need an adaptor for your router (see the next two pages for adaptor selection).

Do not use the VGS on D-series jig's dovetail fingers or the M2 as the tapered VGS bushes will not index properly on the guide fingers and guide rails.

The Vital Link Between Your Router and Leigh Isoloc Joint Templates

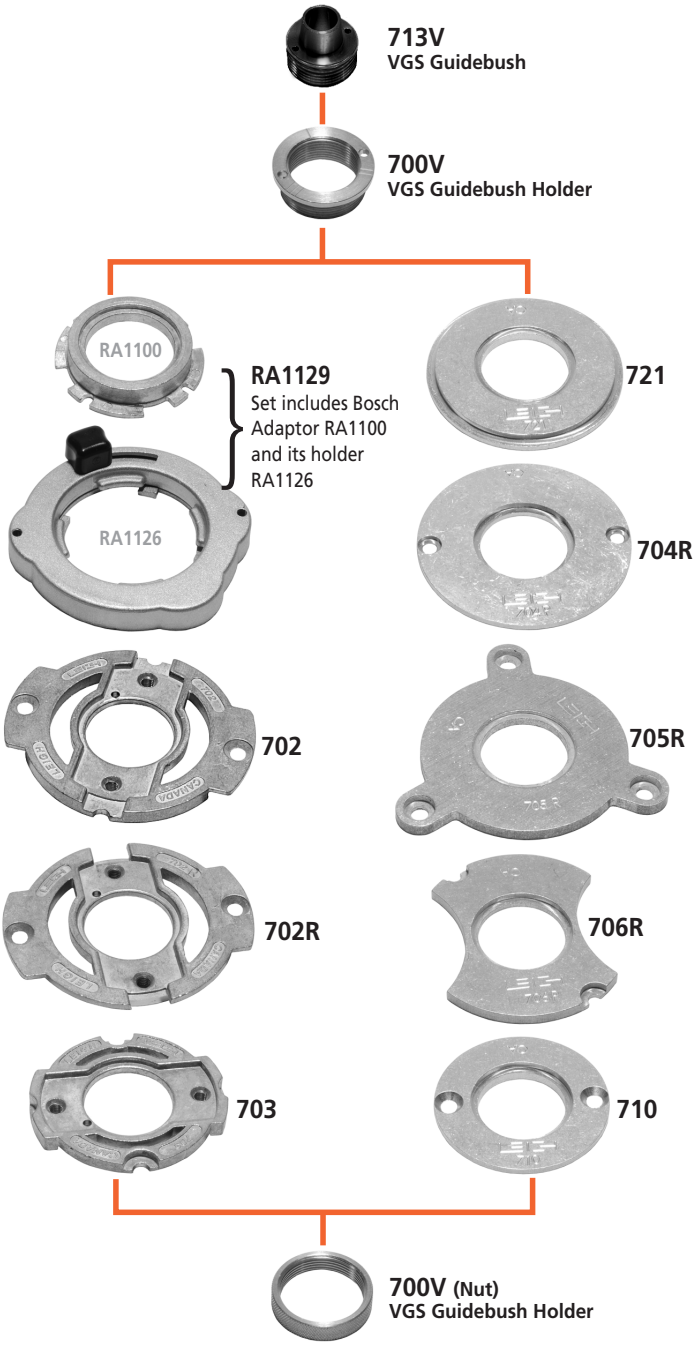
Because there is little or no standardization in the router industry, Leigh has developed a comprehensive guidebush and adaptor system to match your router to Leigh jigs and attachments. The diagram below shows how the VGS parts relate to each other and how they adapt to a router. **There are many adaptor-to-router mounting options. See the complete selection of guide bushing adaptors on the next page. For a list of routers see the VGS Guidebush Adaptor Selection chart on page 47.**



NOTE: Do not use this diagram for part selection. See following pages.

The Leigh VGS guidebush/holder fits directly to most popular router models such as Porter Cable, Black & Decker and Dewalt. Many other makes, e.g., Bosch, Fein, Festool, Milwaukee, etc. either offer or come complete with base adaptors that accept the VGS bush. In addition Leigh offers the nine adaptors below to allow the use of over one hundred other router models, new and old. For a complete list of routers, see the VGS Guidebush Adaptor Selection chart on the opposite page.

VGS Guidebush Adaptors



VGS Guidebush Adaptor Selection

In order to fit your Leigh VGS holder to your router, you may need an adaptor. Find out in the chart below.
See www.leighjigs.com for the complete list of routers.

DIRECTIONS

A. Locate name of router maker in Column 1.

B. Locate router model in Column 2. If your router is not listed visit leighjigs.com for a complete, up-to-date list of routers.

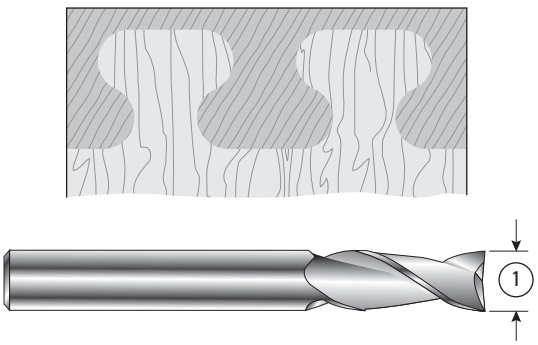
C. Locate adaptor required for your router in Column 3.
- Order Leigh adaptors (part no's in red) in Column 3 from Leigh.
- Order Bosch adaptors RA1100 and RA1126 in Column 3 from Leigh or your Bosch dealer.
- Order all other adaptors in Column 3 from the router manufacturer's dealer.

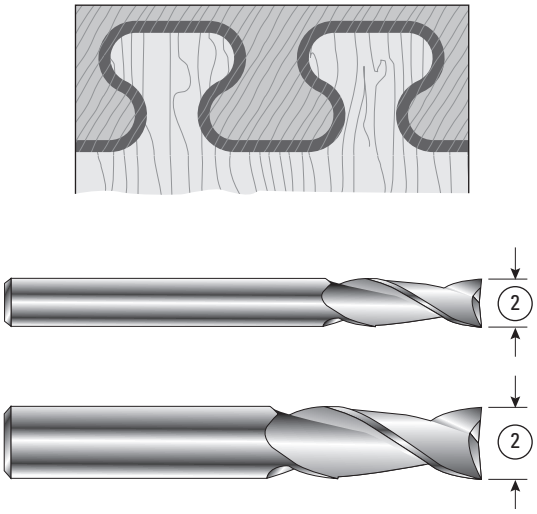
Note: Adaptor mounting screws are included with router.

■ MAFELL – Rework adaptor slightly.

1 ROUTER MAKER	2 ROUTER MODEL	3 ROUTER ADAPTOR
AEG	OFE 710 in plunge base	Not Required
	OFSE 2000	703
	RT1350E	706R
BLACK & DECKER	All Professional, HD1250, RP400K, 7614	Not Required
	6200	720673-00
	SR100, 7AEE, KW780 series, KW800, KW850	710
BOSCH	90085, 90088, 90098, 90140, 90150, 90300, 90303, 90305, 91264	Aftermarket base plate required
	1600, 1601, 1602, 1603, 1604, 1606, B1350	RA1110
	North American ROUTERS PRODUCED AFTER mid-2010: 1613EVS, 1613AEVS, 1617, 1617EVS, 1618, 1618EVS, 1619EVS, MR23EVS, MRC23EVS, MRF23EVS, MRP23EVS	RA1126 quick change adaptor and RA1100 bushing adaptor req'd
	North American ROUTERS PRODUCED BEFORE mid-2010 and others available worldwide that include the RA1126 adaptor: 1613(EVS)(AEVS), 1614(EVS), 1617EVS, 1618EVS, 1619EVS, B1450, GOF900(CE)(ACE), GOF1200, GOF1250(CE)(LCE), GOF1300(CE)(ACE), GOF1600CE, GOF2000CE, GMF1400, GMF1600CE, POF800ACE, POF1100AE, POF1200AE, POF1400ACE	RA1100
	1611, 1611EVS, 1615, 1615EVS, B1550, GOF1600, GOF1700ACE	702
CRAFTSMAN (SEARS)	All non-plunge models	Aftermarket base plate required
	135275070 Plunge	See Skil 1823 or 1835
	Other plunge models	702
	MD11 Plunge & Fixed Base. MD9.5 Fixed Base	Not Required
DEWALT	DW610, DW616, DW618	Not Required
	DW613, DW615(UK)	710
	DW614, DW615, DW621, DW624, DW625, DW626	N. America Only, Supplied w/router
	DW621K, DW622 and DW626 outside N. America	706R
	DW625 Type 1,2,3,5 outside N. America	702
	DW624 & DW625 Type 4 outside N.America, DW625EK	702R
ELU	OF15, OF15E, OF97, OF97E	706R
	MOF68, MOF69, MOF96, MOF96E	710
	MOF131, MOF177 Type 1,2, & 3	702
	MOF177 Type 4, MOF177EK	702R
	2720, 2721, 3328	Not Required
	3303, 3304	E09600 or 761 270-00
	3337, 3338, 3339	702
FEIN	RT1800	Supplied w/router
FESTOOL	OF1E , OF2E, OF650, OF900E ,OF1000, OF1010E	704R
	OF2000, OF2000E	705R
	OF1400 and OF2200 North America Only	Supplied w/router
	OF1400 Outside North America	493566
	OF2200 Outside North America	494627 O-Ring may be required to keep bushing centered
FREUD	FT1700(2), FT2000, FT2200, FT3000	721
HITACHI	TR8, TR12, FM8, M8, M12 Series	325211 OR 703
	M12VC, KM12SC, KM12VC	Not Required
	M12SA2, M12V2	325224
MAFELL	LO65E	702 ■
MAKITA	M363, MRP090, RP1800(F), RP1801(F), RP2300(FC), RP2301(FC), 3612C Europe Qk Fit Base	721
	3600, 3606, 3608, 3612, 3612B, 3612BR, 3612C N. America, 3620, 3621, RP0900, RP900K	703
	3601B	321 493-1
	RP0910, RP1110C	706R
	RF1100, RF1101, RD1100, RD1101, RP1101	Not Required
MASTERCRAFT	Please contact Leigh for assistance	
METABO	OF1612, OFE1812 (for all others, please contact Leigh for assistance)	704R
MILWAUKEE	5615, 5616, 5619	49-54-1040 (replacement base)
	5625	49-54-1026 (replacement base)
	5670	Not Required
PERLES	OF808 Series, OFE6990	710
PORTER CABLE (ROCKWELL)	All	Not Required or Supplied w/router
RIDGID	R2930 (for all others, please contact Leigh for assistance)	704R
RYOBI	R30, R50, R150, R151, RE155, R500, R501, R502	703
	R600, R601, RE600, RE601	702
	R160, R161, R162, R163K, R165, R170, R175, RE175, R180, R180PL, R181, R185, ERT1150	706R
SKIL	1823 or 1835	91803
	SK1810, 1815, 1820, 1825	RAS140
	All others	Aftermarket base plate required
TREND	T3, T4, T5, T9, T10, T11–UniBase required	710
TRITON	TRC001	TGA006 or 704R
	JOF001, MOF001, TRA001	Accessory Kit (includes adaptor) TGA001 or TGA150
WEGOMA	OF850 Series	710

ISOLOC JOINT BIT SELECTION





Plain Joints: Half-Blind or Through

For plain joints without inlay, use only a single straight bit; either Leigh No.170 or 170C, 5/16" diameter or 8mm diameter ①.
The 0.0025"[0.0635mm] diameter difference is easily "adjusted out" with the Leigh VGS.

Inlaid Joints

Inlay joints require two straight bits ②: For 1/16" wide inlays, use:
1/4" diameter (Leigh 168 or 168C),
and 3/8" diameter (Leigh 173 or 173C).
For 2mm wide inlays use 6mm and 10mm diameter.
Note: For narrower inlays of 1/32" or 1mm, see Step 8-15.

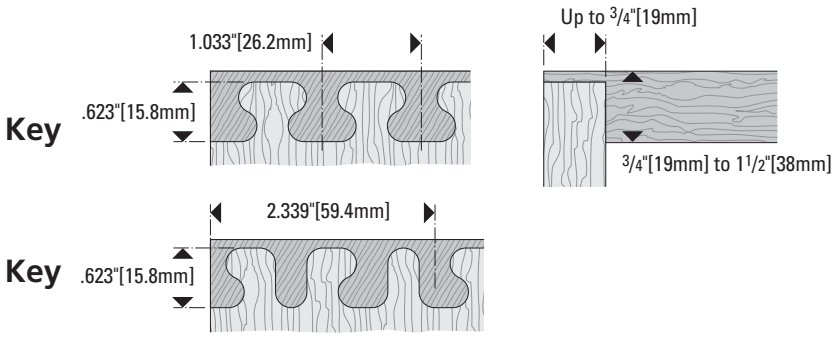
Joint Specifications

Isoloc Joint Specifications

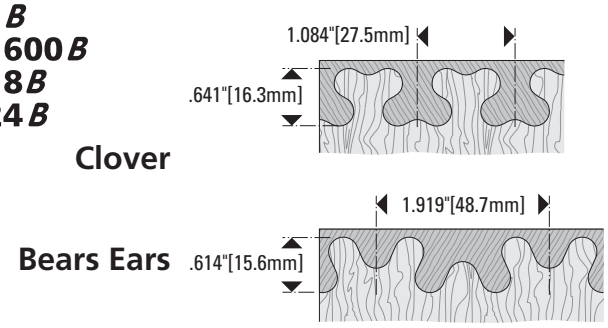
These drawings show the precise Isoloc joint specifications. Pin boards may be up to 1½"[38mm] thick on the 24" D type jig, and 1" thick on the D1600 and Superjigs. Socket boards have a maximum practical thickness of ¾" to 1", depending on wood species. Routing thicker socket boards with a 5/16"[8mm] bit is not practical, even using progressive depth routing. For maximum board widths, see Chapter 5.

Inlay strips are generally 1/16" or 2mm thick, but it's easy to achieve 1/32" or 1mm (see 8-15).

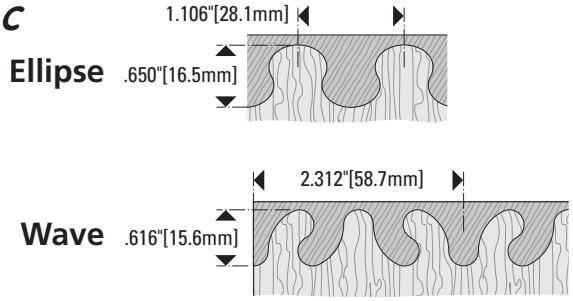
I1*A*
I1600*A*
I24*A*



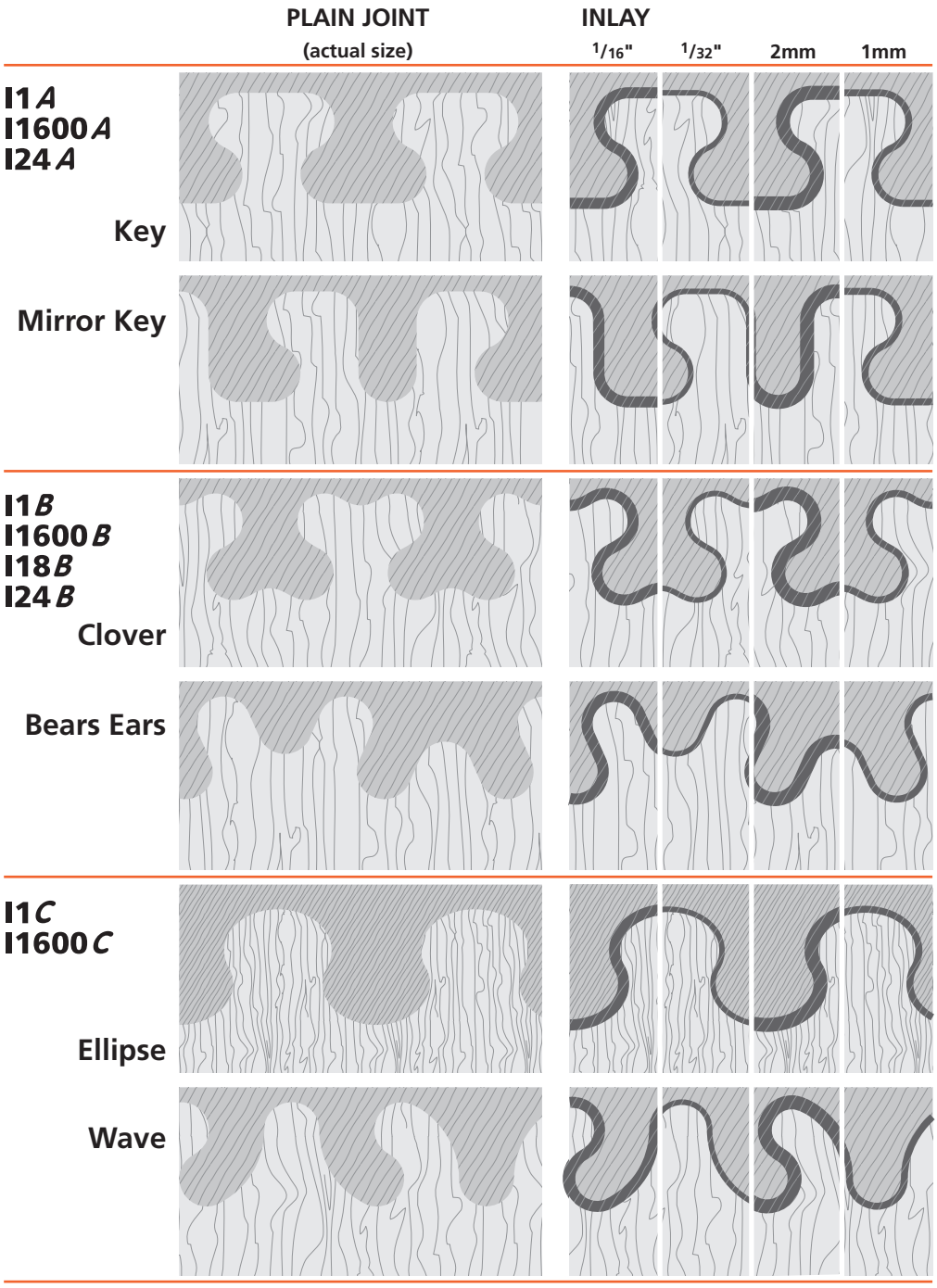
I1*B*
I1600*B*
I18*B*
I24*B*



I1*C*
I1600*C*



Isoloc Joint Identification and Design Reference



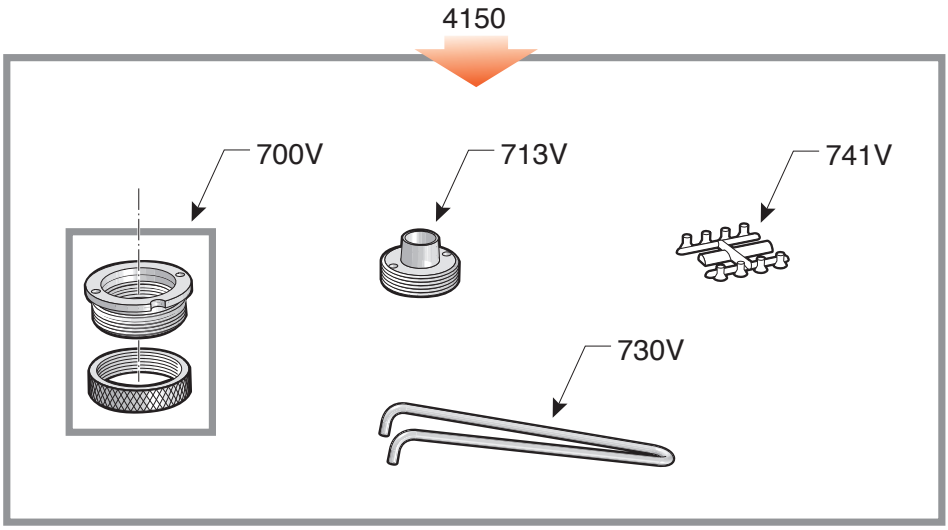
Inlay strips are generally 1/16" or 2mm thick, but it's easy to achieve 1/32" or 1mm (see 8-15).

Template Parts List

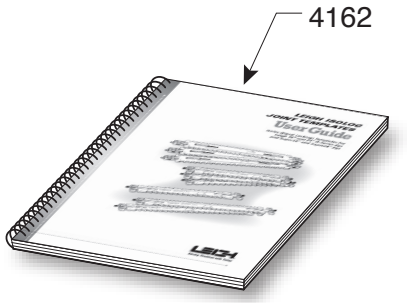
Parts List for VGS Package supplied with all Isoloc Templates

When ordering parts, please quote the number (A, or B, or C) that matches your template; its serial number, the part numbers required, and part descriptions.

PART NO.		PART DESCRIPTION
4150	1	Isoloc VGS Set - Complete
700V	1	VGS Holder (2 pieces)
713V	1	VGS Bush
730V	1	Pin Wrench for VGS
741V	1	6 Nylon Thread Inserts for VGS (on tree)



PART NO.		PART DESCRIPTION
4162	1	Isoloc User Guide (for all Isoloc models)



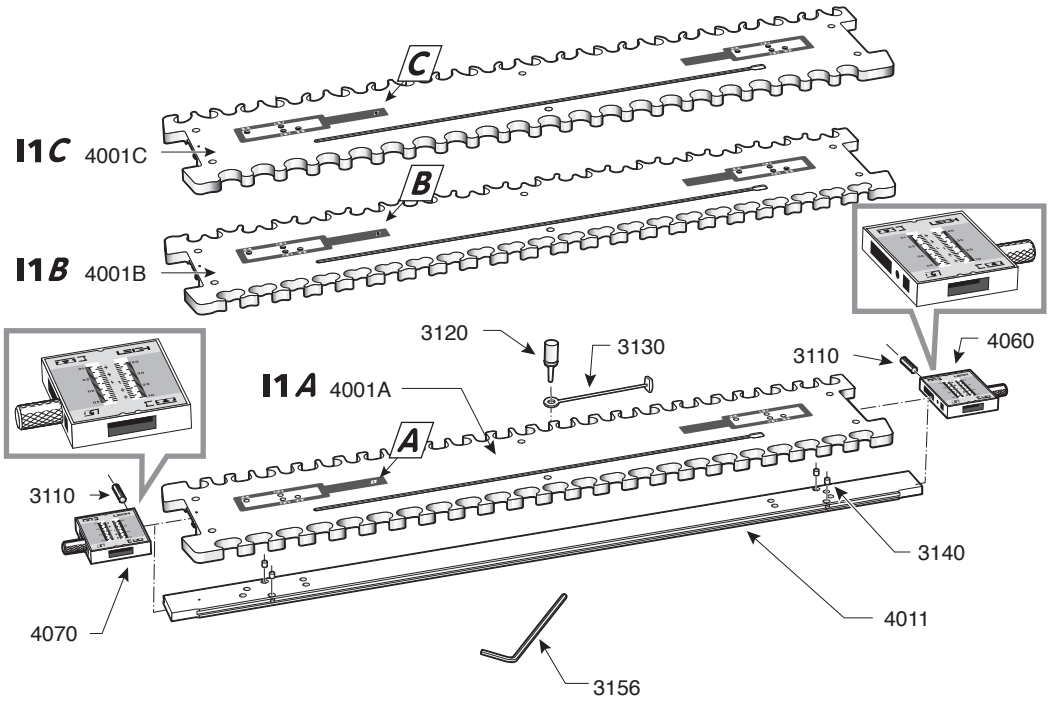
Parts List for I1 24" Isoloc Templates

When ordering parts, please quote the number (A, B, or C) that matches your template; its serial number, the part numbers required, and part descriptions.

PART NO.	TEMPLATE DESCRIPTION
4001A	Key & Mirror Key Template "A"
4001B	Clover & Bears Ears Template "B"
4001C	Ellipse & Wave Template "C"

I1 Parts and Sub-Assemblies:

PART NO.	QUANTITY PER TEMPLATE	PART DESCRIPTION
3110	2	Scale Bar Set Screws
3120	1	Template Pin
3130	1	Template Pin Tie
3140	4	Template Bar Glides (installed in Template Bar)
3156	1	Allen Wrench for Scale Set Screws
4011	1	Template Bar (complete with four glides)
4060	1	RH Scale Assembly (RH with 3110 screws away from you)
4070	1	LH Scale Assembly (LH with 3110 screws away from you)

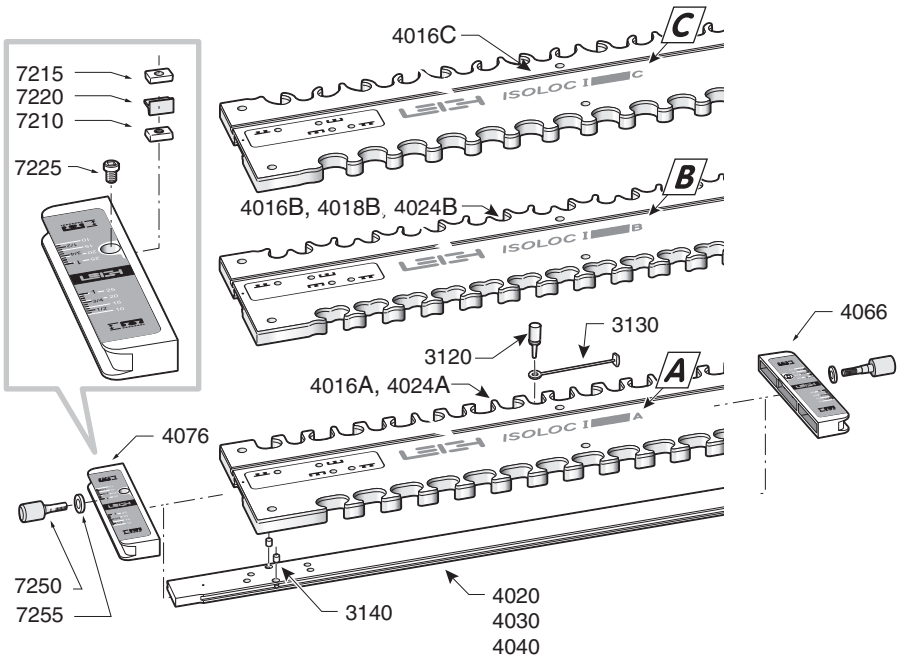


I1600, I18, I24 Isoloc Templates

When ordering parts, please quote the number and letter (A, B, or C) of your template; its serial number, the part numbers required, and part descriptions.

PART NO.	TEMPLATE DESCRIPTION
4016A	Key & Mirror Key Template "A"
4016B	Clover & Bears Ears Template "B"
4016C	Ellipse & Wave Template "C"
4018B	Clover & Bears Ears Template "B"
4024A	Key & Mirror Key Template "A"
4024B	Clover & Bears Ears Template "B"

PART NO.	QUANTITY PER TEMPLATE	PART DESCRIPTION
4020	1	16" Template Bar complete with four glides
4030	1	18" Template Bar complete with four glides
4040	1	24" Template Bar complete with four glides
4066	1	RH Scale Assembly
7250	2	Scale Thumb Screws
7255	2	Nylon Washers
4076	1	LH Scale Assembly
3110	2	Scale Bar Set Screws
3120	1	Template Pin
3130	1	Template Pin Tie
3140	4	Template Bar Glides (installed in Template Bar)



Appendix IV
Customer Support

Our Commitment to You *Leigh Industries takes pride in its commitment to providing excellence in customer service and support. This user guide is designed to provide you with the answers to any questions you have. However, if you require assistance, please feel free to contact our technical support staff or a distributor listed below.*

Manufacturer: Canada/USA

TEL/FAX

Customer Service and Technical Support
800-663-8932 (Canada/USA)
604-464-2700 (Tel.)
604 464-7404 (Fax.)

EMAIL/WEB

Customer Service
leigh@leighjigs.com

Technical Support
help@leighjigs.com

Website
www.leighjigs.com

NOTE: Email can be useful, but technical queries usually raise queries from us. A phone call is the quickest and most convenient way to get queries answered, either directly to Leigh (toll free in N. America) or to your national distributor. ***–Thanks!***

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