

LEIGH[®]

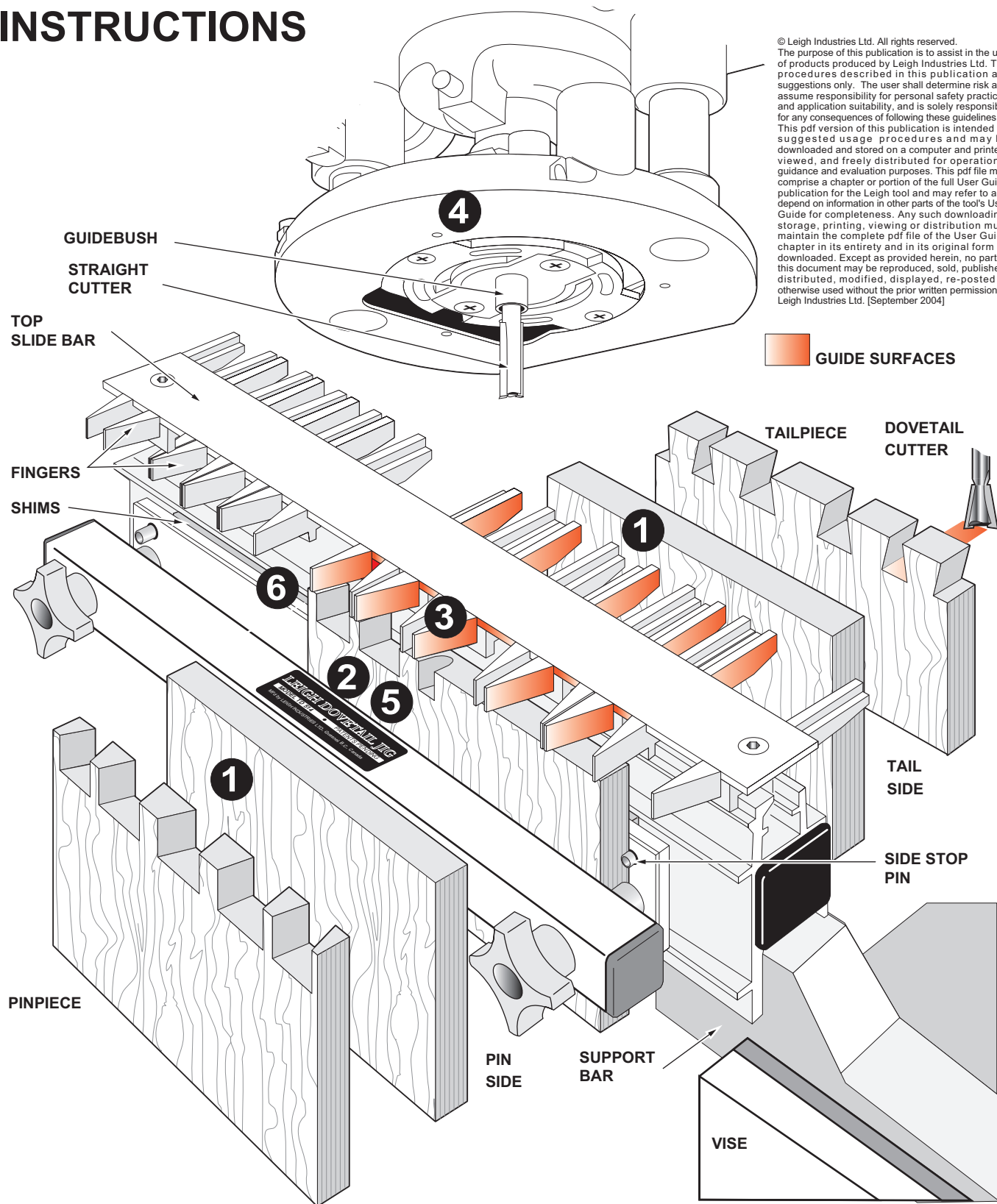
DOVETAIL JIGS

TD 514

TD 514-L

INSTRUCTIONS

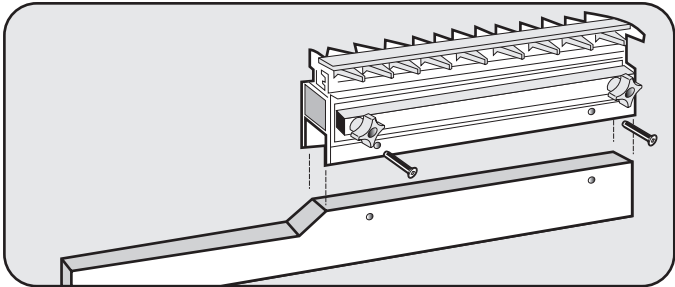
© Leigh Industries Ltd. All rights reserved.
The purpose of this publication is to assist in the use of products produced by Leigh Industries Ltd. The procedures described in this publication are suggestions only. The user shall determine risk and assume responsibility for personal safety practices and application suitability, and is solely responsible for any consequences of following these guidelines. This pdf version of this publication is intended as suggested usage procedures and may be downloaded and stored on a computer and printed, viewed, and freely distributed for operational guidance and evaluation purposes. This pdf file may comprise a chapter or portion of the full User Guide publication for the Leigh tool and may refer to and depend on information in other parts of the tool's User Guide for completeness. Any such downloading, storage, printing, viewing or distribution must maintain the complete pdf file of the User Guide chapter in its entirety and in its original form as downloaded. Except as provided herein, no part of this document may be reproduced, sold, published, distributed, modified, displayed, re-posted or otherwise used without the prior written permission of Leigh Industries Ltd. [September 2004]



Precise through dovetails have been a hallmark of fine cabinet-makers for generations. With the unique TD514 Leigh Dovetail Jig , you too will master this most attractive of joints.

SUPPORT BAR

Make up and mount support bar (not supplied) as shown before using the jig. Never mount the jig directly in the vise.



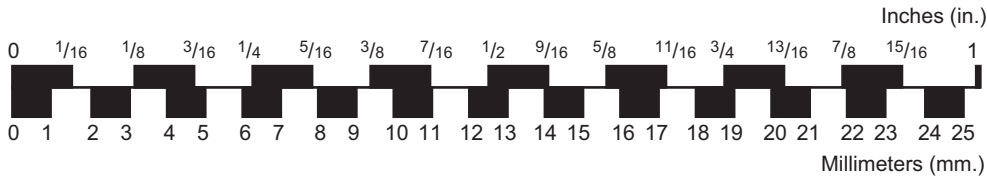
PREPARE ROUTER

Select cutter/guidebush combination from chart. Fit guidebush concentrically with cutter.

Pinpiece Thickness	Straight Cutter Dia.	Tailpiece Thickness	Dovetail Cutter	Guidebush Dia.	Approx. No. of Shims	Actual Shims:
UP TO 3/8"	5/16" #140	UP TO 1"	3/8" x 14° #110	7/16"	19-20**	
UP TO 1/2"			1/2" x 14° #120		19-20	
UP TO 3/4"	1/2" #160		3/4" x 14° #130	5/8" *	11-12	

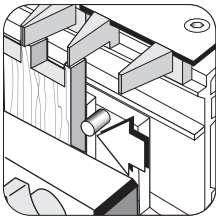
*Guide fingers must be at least 3/16" apart.
 **Add 1/4" packing piece (see special case).

METRIC CONVERSION



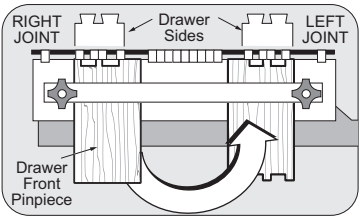
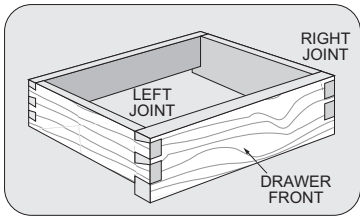
SPECIAL CASE- 3/8" PINS

Make up an insert 1/4" packing piece for pin side as illustrated.



SPECIAL CASE- ASYMMETRICAL JOINTS

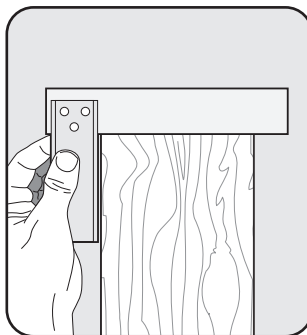
Set a similar layout of fingers at each end of the jig. In the example shown both drawer front and sides are mounted with the top edge to the stop pin at each end of the jig. Joints at the rear of the drawer may be different again.



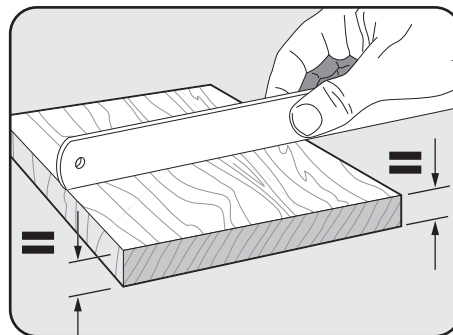
GENERAL INSTRUCTIONS

Follow these instructions in sequence and refer each step to the illustration above. Repeat for each cutter guidebush combination.

STEP 1 PREPARE JOINT PIECES

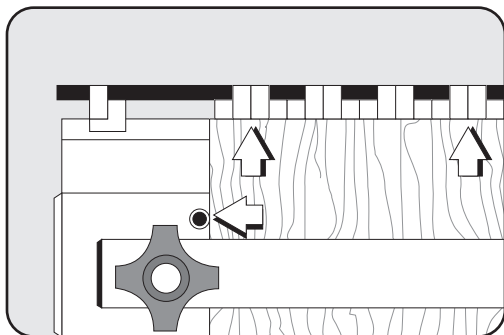


Square



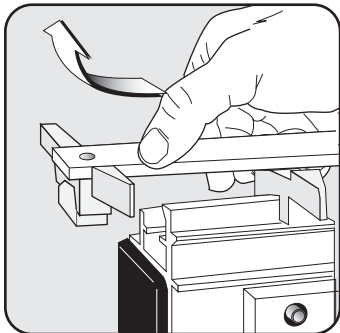
Flat and even thickness.

STEP 2 MOUNT JOINT PIECE

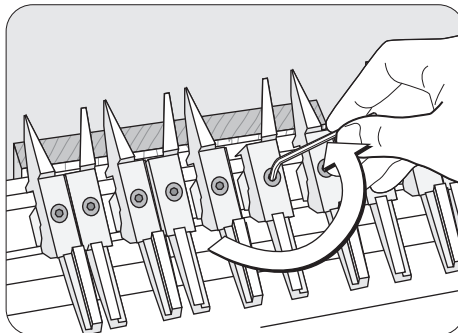


Fit joint pieces flush under fingers and against side stop pin, face sides away from jig body.

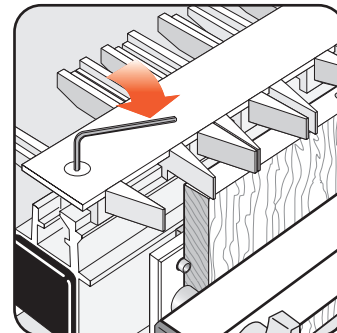
STEP 3 ARRANGE FINGERS



Loosen the two top slide bar screws and remove slide bar as shown. Do not remove screws.



Loosen finger screws 180°, arrange fingers to required joint layout by eye and re-tighten. Ensure no dust is trapped between fingers and rail.

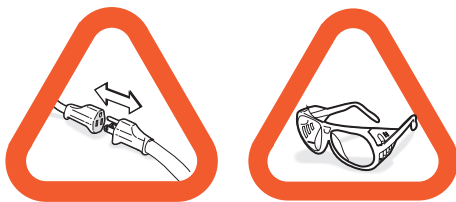


IMPORTANT. Replace top slide bar. Do not overtighten any screws.

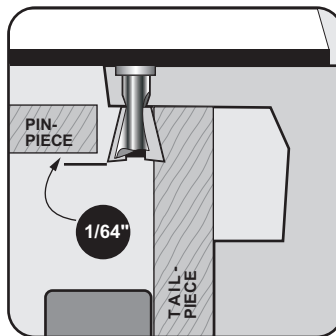
STEP 4

SET DEPTH OF CUT

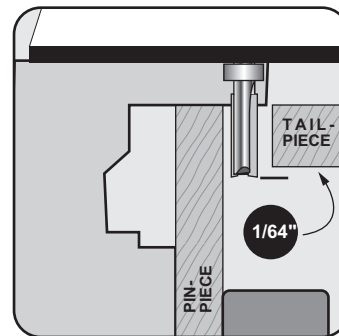
Prepare the router (see above). Familiarize yourself with the router and safety instructions supplied with the tool.



CAUTION: Always disconnect the router before changing or adjusting cutters. Always wear approved eye protection when operating the router.



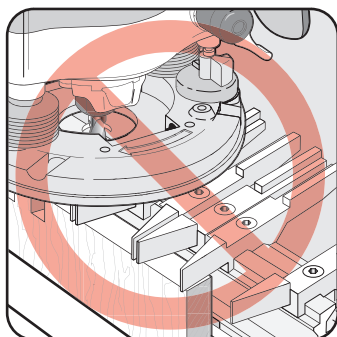
Set dovetail cutter to thickness of pinpiece plus $\frac{1}{64}$ ".



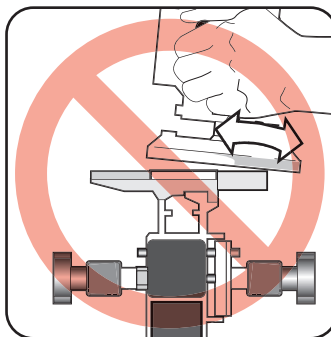
Set straight cutter to thickness of tailpiece plus $\frac{1}{64}$ " and not more than 1" deep.

STEP 5

CUT TEST JOINT



Top slide bar must be in place when routing



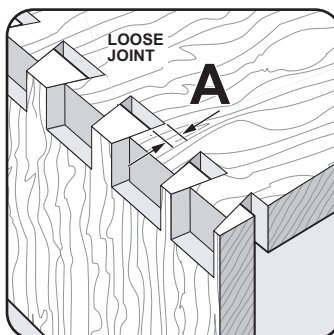
Keep router flat down on top surface of jig.

Work the guidebush along the guide faces and ensure that all waste is removed from joint sockets before removing jointpieces from jig.

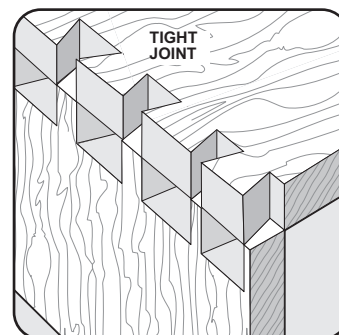
STEP 6

ADJUST JOINT TENSION

Adjustment of shims does not affect tail size, each shim is $\frac{1}{64}$ " thick and will alter pin width by .008". Repeat steps 5 and 6 until joint fits, cutting only new pins for re-testing. For each cutter/guidebush combination record on the chart above the number of shims remaining in the jig. Re-check adjustment when using new or reground cutters. Joint tension will also vary with differing hardness of wood.



Remove shims equal in thickness to joint gap A to form larger pins.



Add shims to form smaller pins.

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**

1-800-267-8761 (Canada)

1-800-267-8735 (USA)

EMAIL/WEB

Customer Service

customerservice@leevalley.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 Lee Valley (toll free in N. America) or to your national distributor. –Thanks!

MAILING ADDRESS

Lee Valley Tools Ltd.
P.O. Box 6295, Station J
Ottawa, ON
K2A 1T4

LOCATION

Lee Valley Tools Ltd.
1090 Morrison Dr,
Ottawa, ON
K2H 1C2

Distributors

AUSTRALIA & NEW ZEALAND

Carbatec - The Home of Woodworking
Unit 2, 364 New Cleveland Road
Tingalpa, QLD 4173 Australia
Tel: 07 3569 3205
Tel (Int.): +61 7 3292 0392
Email: Purchasing@carbatec.com.au
Web: carbatec.com.au

CHINA

Nanjing Haiwei Machinery Co., Ltd.
Harvey Woodworking Technology(Nanjing) Co., Ltd.
68-10 Suyuan Avenue, Jiangning District,
Nanjing, 211100 China
Tel: 86-(0)25-8666-8172 / 5792 8021
Fax: 86-(0)25-5792-8826
Email: cassie@harvey.cn
Web: www.harveymachinery.com
Web: www.harveyworks.cn

FRANCE

Ets Bordet
98 Rue Louis Ampère,
Neuilly Sur Marne, 93330 France
Tel: 01 41 53 40 40
Email: info@bordet.fr
Web: www.bordet.fr

GERMANY

Hacker GmbH
Holzbearbeitungsmaschinen
Traberhofstraße 103 D-83026 Rosenheim,
Deutschland
Tel: 08031/68171
Fax: 08031 68221
Email: hacker.rosenheim@t-online.de
Web: www.hacker-rosenheim.de

ITALY

Ferrari Macchine Legno SRL
Via Gallarate 76 Settimo,
20019 Settimo M.se (MI) Italy
Tel: 39 02 335 010 95
Fax: 39 02 335 005 27
Email: info@ferrarimacchine.com
Web: www.ferrarimacchine.com

JAPAN

Off Corporation Inc.
785-1 Hirose, Shimizu-ku, Shizuoka-shi
Shizuoka Ken, 424-0102 Japan
Tel: 81-50-3816-0115
Fax: 81-54-367-6515
Email: info@off.co.jp
Web: www.off.co.jp/category/LEIGH/

KOREA

Leigh Korea
604, 13-1, Gugal-Ro 72beon-gil,
Giheung[1]Youngin-si,
Gyeonggi Republic of Korea ,
16972 South-Korea
Tel: +82-(0)31-281-1141
Fax: +82-0504-192-0629
Email: maengha@leighkorea.com
Web: www.leighkorea.com

SOUTH AFRICA

Hardware Centre, Handico PTY Ltd/A Hardware
Centre
Shop 8 Homeworld Centre
CNR. Malibongwe & Rocky ST.
Randburg, Ferndale
South Africa
Tel: +27 011 791-0844/46
Fax: +27 011 791-0850
Email: info@hardwarecentre.co.za
Web: www.hardwarecentre.co.za

SWEDEN

Toolbox Sweden AB
Facetten Kaj 9
Atvidaberg, 59730
Sweden
Tel: 46 120 854 50
Fax: 46 120 854 69
Email: info@toolbox.se
Web: www.toolbox.se

UNITED KINGDOM & IRELAND

Axminster Tools & Machinery
Headquarters, Unit 10. Weycroft Ave.
Millwey Rise Industrial Estate
Axminster, EX13 5PH, United Kingdom
Tel: 011 44-927-630-007
Tel: 01297 630813
Fax: 011 44-870 432-7622
Fax: 01-297-631-224
Email: procurement@axminstertools.com
Web: www.axminster.co.uk/leigh

USA

Rockler
Woodcraft
Infinity Cutting Tools
Highland Hardware