



CT154 24" DOVETAIL JIG



COPYRIGHT © 2009 BY CRAFTEX INDUSTRIES INC.

NO PORTION OF THIS MANUAL MAY BE REPRODUCED WITHOUT
THE WRITTEN CONSENT OF CRAFTEX INDUSTRIES INC.



Important Safety Instructions

Like all tools and machines, proper safety and attention must be adhered to. There is danger associated with using any tool or machine so pay careful attention each and every time you use your tool. IF you are not familiar with the operations of this product, you should obtain the advice and/or instructions from a qualified professional.

- Do not wear loose clothing, jewelry or anything that could get caught in moving parts of the machine. Tie back long hair.
- Always use approved safety equipments, such as dust masks that are specially designed to filter out microscopic particles and safety glasses to protect your eyes.
- Guard against electric shock. Keep the jig clear of the electric cables while working. Do not work on or near “live” equipment or services.
- Always keep bystanders safely away while the machine is in operation.
- Always use the correct tool. Do not attempt to use the jig for a purpose of which it was not designed. A router will give much better service if you do not use excessive force. Excessive force will overheat the router and damage the internal parts.
- Do not use the jig in damp or wet areas or near flammable gas or liquids.
- When not in use, store in a dry place or locked ways out of reach of children.
- The sides of the test piece & the work piece must be square to each other and to the surfaces.
- Never try to rout a board with thickness lower than the recommended value. All work pieces shall be uniform in thickness.
- Connect your machine ONLY to the matched and specific power source.

IMPORTANT: The safety instructions given above can not be complete because the environment in every shop is different. Always consider safety first as it applies to your individual working conditions.



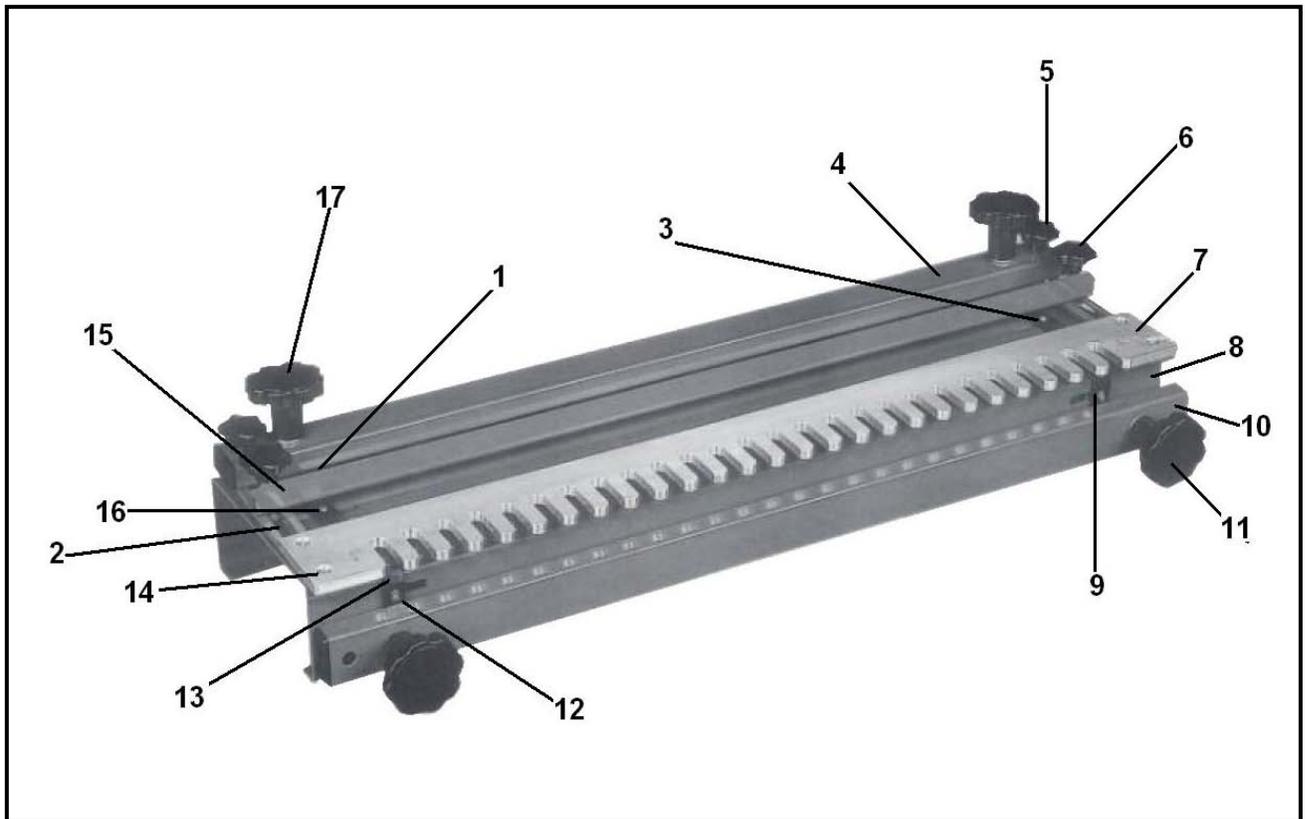
24" Dovetail Jig Specifications

As part of the growing line of Craftex woodworking equipment, we are proud to offer CT154-24" Dovetail Jig. The Craftex name guarantees Craft Excellence. By following the instructions and procedures laid out in this owner's manual, you will receive years of excellent service and satisfaction. The CT154 is a professional tool and like all power tools, proper care and safety procedures should be adhered to.

- **Product Size: 30-1/8" (765mm) x 11" (280mm) x 6-3/4" (170mm)**
- **Side Stops Offset Capacity: Up to 1" (25mm)**
- **Comb Size: 1/2" comb finger, 29-7/8" (758mm) x 2-3/4" (70mm) x 5/16" (8mm)**
- **1/2" Aluminum Comb is CNC machined**
- **General Construction: Heavy Forced Stamped Steel For Rigidity & Long Life**
- **Thickness Capacity: 1/2" (12.7mm)-1-1/4" (32mm)**
- **Net Weight: 13.3 Kgs**



Physical Features



- | | |
|------------------------------|----------------------------|
| 1) Clamp Bar Spring | 10) Front Clamp |
| 2) Connecting Rod | 11) Clamp Knobs |
| 3) Side Stops (Top/Right) | 12) Side Stop Fixing Screw |
| 4) Upper Bracket – Top Clamp | 13) Side Stop (Front/Left) |
| 5) Comb Adjustment Knobs | 14) Comb Fixing Screw |
| 6) Back Stop Fixing Knobs | 15) Back Stop |
| 7) 1/2" Comb (24") | 16) Side Stop (Top/Left) |
| 8) Main body | 17) Clamp Knobs |
| 9) Side Stop (Front/Right) | |

CT154-24” Dovetail Jig

This dovetail jig is suitable for production runs as well as single use applications by enabling you to simultaneously cut 24” stock up to 1-1/4”. The jig can be mounted easily to your bench top. Heavy, stamped steel construction provides rigidity and vertical cam action clamps securely hold the wood in place.

Unpacking

Carefully remove the items packed in the carton. It may be a good idea to save the carton and packing material in case it might be needed in the future.

Mounting the Dovetail Jig to the Work Bench

To mount the dovetail jig to the bench place it on the bench top so that the front lap rests against your bench top.

Locate the mounting holes in the rear of the jig and mark the hole locations with a pen and determine whether to use nuts and bolts or lag screws. Remove the dovetails jig and drill the appropriate size holes on the marked locations.

Now put the Jig back on your bench top and secure it to the bench top. Screws can be tightened by inserting a long screwdriver through the unthreaded holes in the back of the jig.

HINT: *If you do not wish to permanently devote bench space to the dovetail jig, mount the jig to a piece of 3/4” plywood that can be clamped to your work bench top or clamp the jig to the front of your bench.*

Operation & Setup

The 24" Dovetail Jig comes with a 1/2" template. It should be used with a 1/2" dovetail router bit (1/4" shank, 14°) and a 7/16" guide bushing.



Figure-1

2. Slide the work piece marked "Front" or "Back" under the top clamping assembly and tighten the knob. The side marked inside should face up. See Figure-3

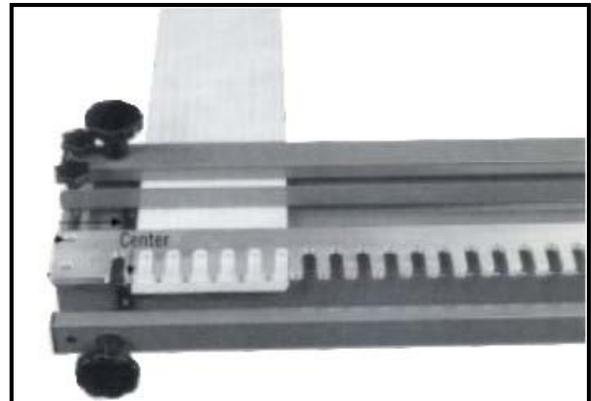


Figure-3

Always set up and practice on a test piece.

1. Lay out the work piece and mark according to the finished position. See figure 2

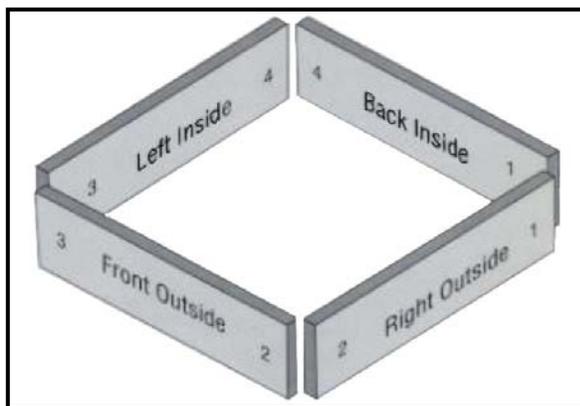


Figure-2

3. Set the horizontal stop so that the edge of the work piece comes up in the center of one of the template fingers. See Figure-4

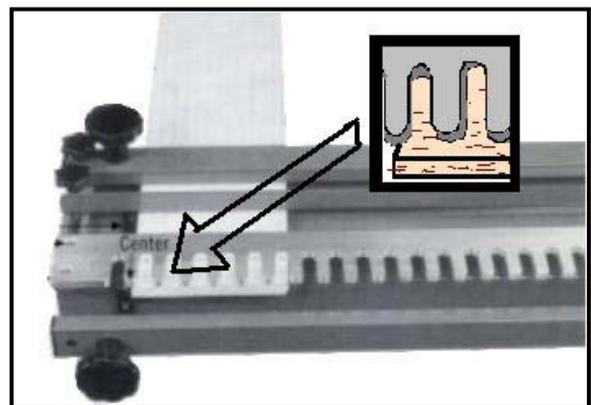


Figure-4

4. Loosen the screws that hold the template in its position and remove the template.
5. Remove the front clamping assembly by un-screwing the two knobs in the front.
6. Now, mark the work piece $1/2''$ from the edge (template finger width). Adjust the vertical stops against the square. See Figure-5



Figure-5

7. Reinstall the template and front clamping assembly.
8. Slide the work piece marked "side" under the front clamping assembly when the two knobs are in a release position. The side marked "inside" should face out. Match up the numbers you marked.
9. Set the template back from the front edge of the work piece by approximately $1/8''$. See Figure-6

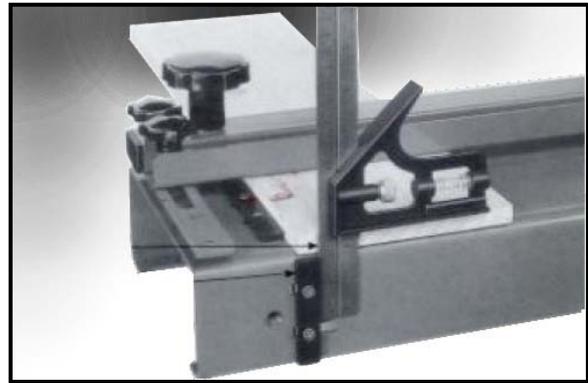


Figure-6

10. Adjust the clamping pressure knobs so that the bar is just over the work piece. The work piece should still move freely. Clamp the work piece in place by tightening the knobs.
11. Loosen the two knobs to position the template. Measure from the two ends of the work piece to the template to make sure the template is parallel to the front edge of the work piece. See Figure-6
12. The fence should be set from template finger tip according to a simple equation found in Table 1. (Page-8). Loosen the two knobs to position the fence.
13. Set the router bit so that it is approximately $11/16''$ lower than the router abase.
14. Rout off the front edge of the work piece following along the template fingers. Then rout out the rest of the material.
15. Remove the work piece the work piece and check for fit.

TABLE 1 - EQUATION

<p>Equation: Stock Thickness x 2 + Router Base Radius – Bit Radius = Distance from Teplate Finger to Fence</p>			
<p>Example</p>			
<p>Stock Thickness</p>	<p>Router Base Radius</p>	<p>Router Bit Radius</p>	<p>Distance from Fence to Template Finger</p>
<p>1/2" Times 2 = 1</p>	<p>6" divided by 2 = 3"</p>	<p>1/2" divided by 2 = 1/4"</p>	<p>3 – 3/4"</p>

Fitting & Adjusting

If the dovetail fit is too tight, simply decrease the router bit distance from router base slightly. But if the dovetail fit is too loose, increase the router bit distance from the router base slightly.

If the pins on the side pieces fit too deeply in the tails of the front, or back pieces the cut is too deep. The solution to this is to move the fence forward the same amount the pins are exposed.

If the side pieces sticks out from the front or back piece, the cut is too shallow. Move the fence back the same amount the sides stick out.

If the edges on the front and side piece do not match, adjust the stop. The front stop must be offset from the top stop, the width of the template finger, in this case should be 1/2".

When you have the jig properly adjusted, you can dovetail the actual drawer parts.

It is important to take the time to properly set the dovetail jig upon initial set up. Once completed, the jig becomes very handy, easy to use and a great addition to your shop.

NOTE

Joints for the left front corner and the right rear corner of a drawer or a box are cut on the left side of the jig. Joints for the right front corner and the left rear corner of a drawer or a box are cut on the right side of the jig.

NOTE

The drawer sides should be cut to the finished height. They can be left longer and cut to the finished length later.



WARRANTY

CRAFTEX 2 YEARS LIMITED WARRANTY

Craftex warrants every product to be free from defects in materials and agrees to correct such defects where applicable. This warranty covers **two years** for parts and 90 days for labor (unless specified otherwise), to the original purchaser from the date of purchase but does not apply to malfunctions arising directly or indirectly from misuse, abuse, improper installation or assembly, negligence, accidents, repairs or alterations or lack of maintenance.

Proof of purchase is necessary.

All warranty claims are subject to inspection of such products or part thereof and Craftex reserves the right to inspect any returned item before a refund or replacement may be issued.

This warranty shall not apply to consumable products such as blades, bits, belts, cutters, chisels, punches etceteras.

Craftex shall in no event be liable for injuries, accidental or otherwise, death to persons or damage to property or for incidental contingent, special or consequential damages arising from the use of our products.

RETURNS, REPAIRS AND REPLACEMENTS

To return, repair, or replace a Craftex product, you must visit the appropriate Busy Bee Tools showroom or call 1-800-461-BUSY. Craftex is a brand of equipment that is exclusive to Busy Bee Tools.

For replacement parts directly from Busy Bee Tools, for this machine, please call 1-800-461-BUSY (2879), and have your credit card and part number handy.

- All returned merchandise will be subject to a minimum charge of 15% for re-stocking and handling with the following qualifications.
- Returns must be pre-authorized by us in writing.
- We do not accept *collect* shipments.
- Items returned for warranty purposes must be insured and shipped pre-paid to the nearest warehouse
- Returns must be accompanied with a copy of your original invoice as proof of purchase. Returns must be in an un-used condition and shipped in their original packaging a letter explaining your reason for the return. Incurred shipping and handling charges are not refundable.
- Busy Bee will repair or replace the item at our discretion and subject to our inspection.
- Repaired or replaced items will be returned to you pre-paid by our choice of carriers.
- Busy Bee reserves the right to refuse reimbursement or repairs or replacement if a third party without our prior authorization has carried out repairs to the item.
- Repairs made by Busy Bee are warranted for 30 days on parts and labor.
- Any unforeseen repair charges will be reported to you for acceptance prior to making the repairs.
- The Busy Bee Parts & Service Departments are fully equipped to do repairs on all products purchased from us with the exception of some products that require the return to their authorized repair depots. A Busy Bee representative will provide you with the necessary information to have this done.

For faster service it is advisable to contact the nearest Busy Bee location for parts availability prior to bringing your product in for repair.

