

D1600 CHAPTER 1

Jig Assembly, Mounting and Using The Clamps



Make Sure You Have All the Parts!

Before you start to assemble your Leigh D1600 jig, check to make sure you have received all the required parts.

The small carton you removed from the end of the main carton contains:

1. 1 DVD instructional video (English only)
2. Cutters:
 - 2 Dovetail, 1 straight, 1 Collet Reducer, 1 Guidebush
3. 2 scale thumbscrews and nylon washers
4. 2 support brackets
5. 2 knobs
 - 2 nylon washers
6. 1 square-head guidefinger screwdriver
7. 4 clamp springs
 - 4 clamp T-bolts
 - 4 flat washers
 - 4 T-bolt nuts
 - 4 Jig Hold-down Nuts & Machine Screws ¼"-20
8. 4 cam-action speed clamps
 - 4 cam clamp pivot nuts
 - ...and any other small optional items you may have ordered with your new jig. Check the packing slip for this information.

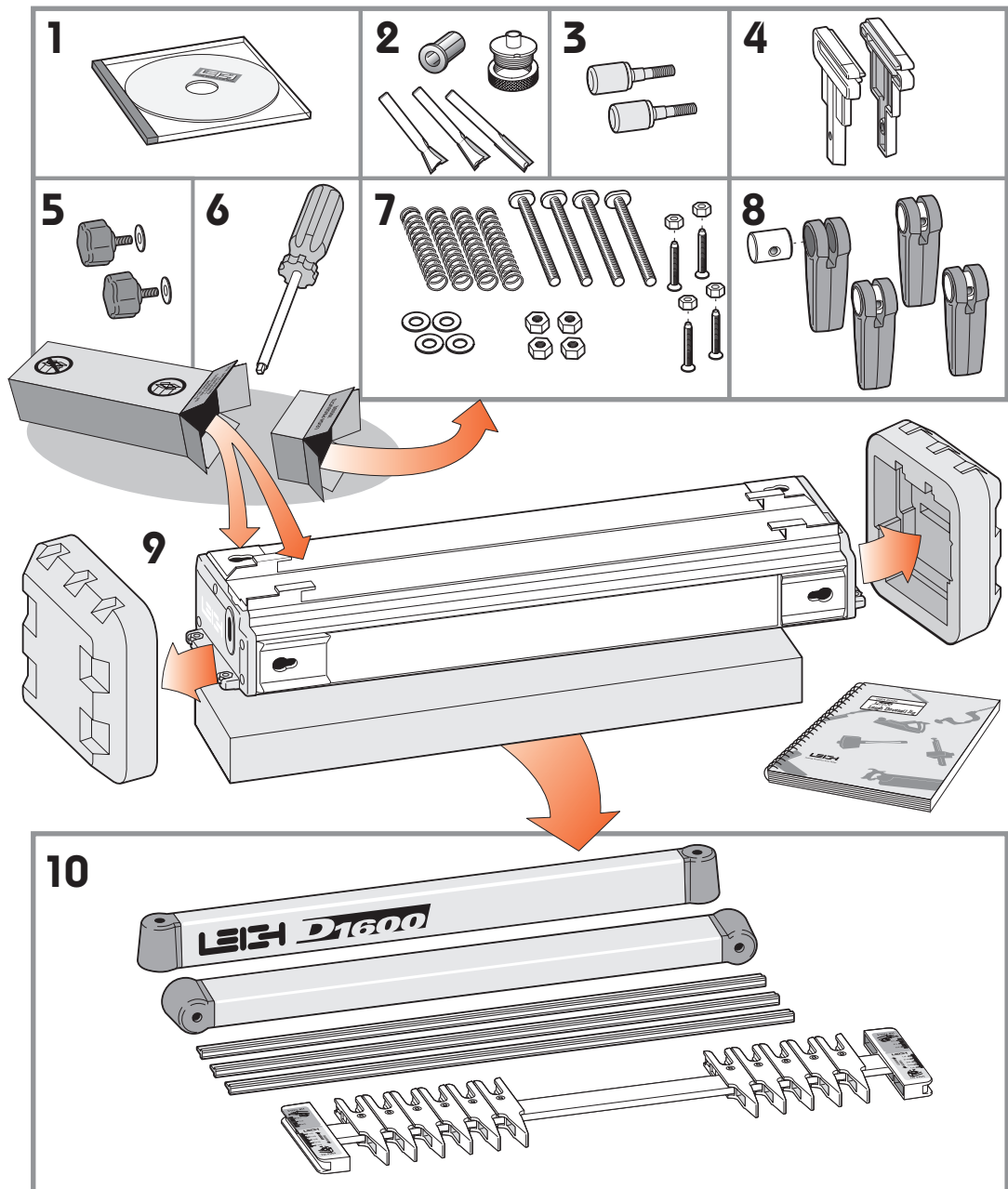
The main carton contains:

9. 1 main jig body
 - 1 Leigh jig user guide

The large inner box contains:

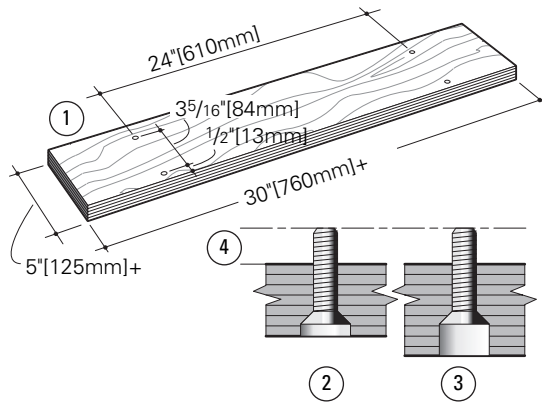
- 10.1 finger assembly on a bar, complete with scales
 - (D1600 jig has 11 guidefingers)
 - 2 lengths bridge material
 - 1 cross cut fence (identical to bridge)
 - 2 clamp bars c/w end plugs

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



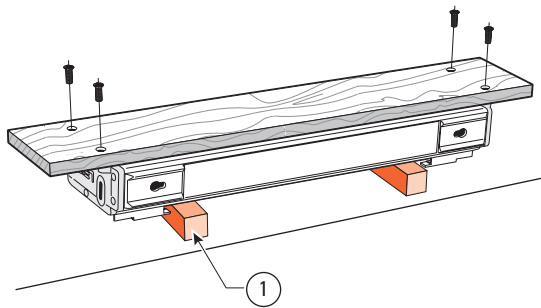
Important Note

Mount your jig securely and assemble it completely before you try to use it. Make sure you have read and understood all the material in the Safety section of this user guide before using the jig.

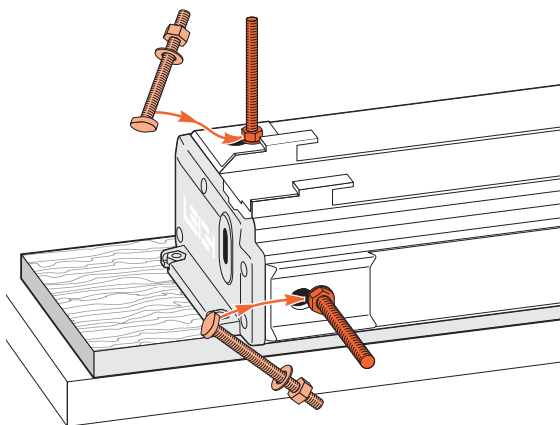
**1-1**

Prepare a flat board at least $\frac{3}{4}$ " [20mm] thick, a minimum of 30"x5" [760x125mm]. Drill four $\frac{9}{32}$ " [7mm] holes on 24" x $3\frac{5}{16}$ " [610x84mm] centres, $\frac{1}{2}$ " [13mm] in from the front edge of the board .

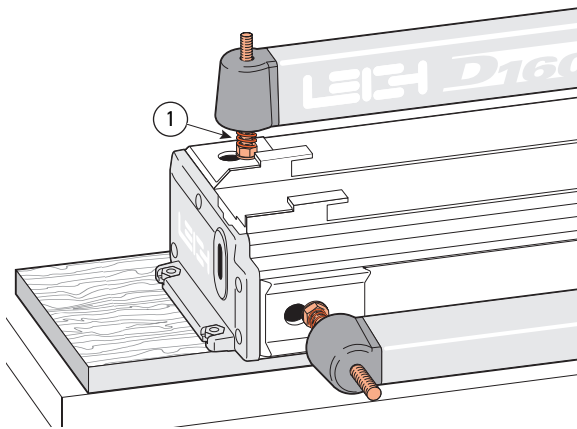
Countersink (2) or counter-bore (3) if the board is thicker, the underside so that the four $\frac{1}{4}$ -20x1" long machine screws will project above the top surface by $\frac{3}{8}$ " [9,5mm] (4).

**1-2**

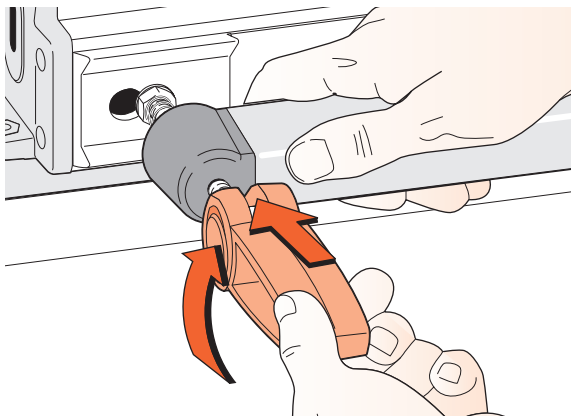
Turn the jig upside down on two blocks (1) to protect the side stops. Using the four nuts and four countersunk machine screws, bolt the base board to the jig using the two nut recesses in each end housing. The $\frac{1}{2}$ " [13mm] front edge to the front of the jig (of course).

**1-3**

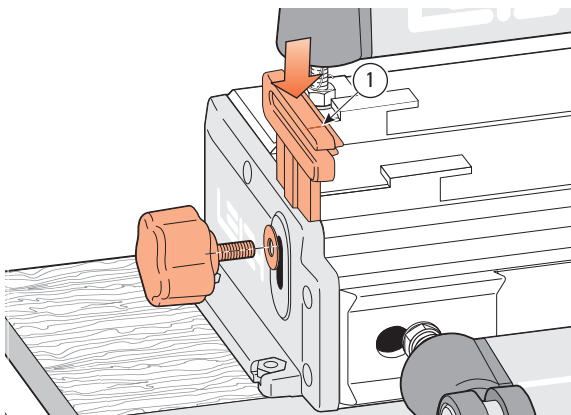
Insert the four clamp T-bolts into the key hole openings (two at each end of the jig). Position so that the T-bolts are at the inner ends of the key holes. Tighten the four clamp bolt nuts with the Leigh wrench.

**1-4**

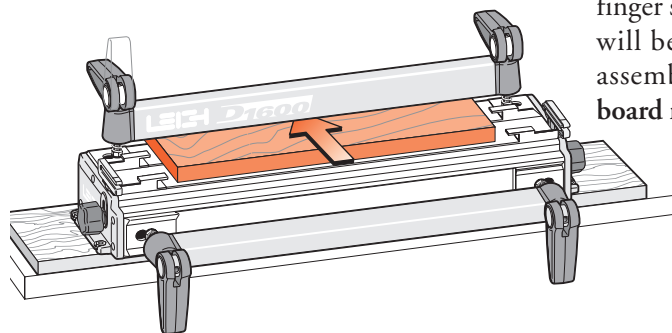
Place four springs ① and two clamp bars on the T-bolts. Make sure the clamp bars move freely on the T-bolts.

**1-5**

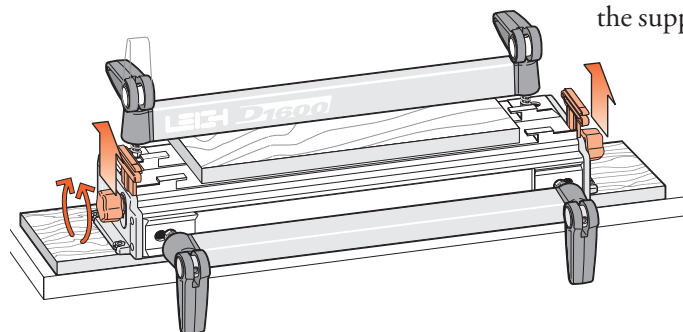
Screw a clamp lever assembly onto each T-bolt.

**1-6**

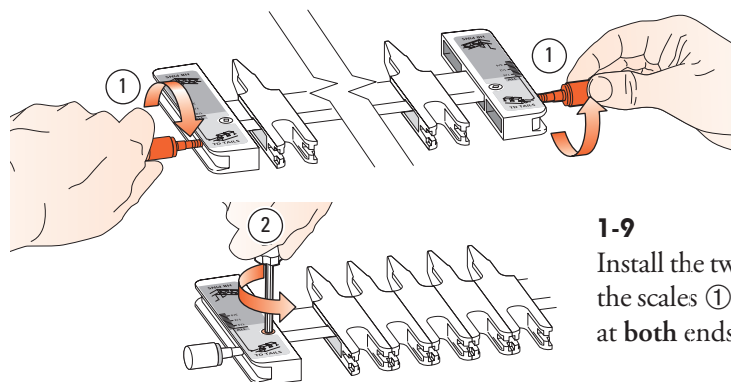
Insert the right and left support brackets. Attach the knobs and nylon washers, raise them to full height and tighten the knobs. **Note:** The set line on this support bracket ① is shown in red for clarity in this manual only. The actual bracket lines are black.

**1-7**

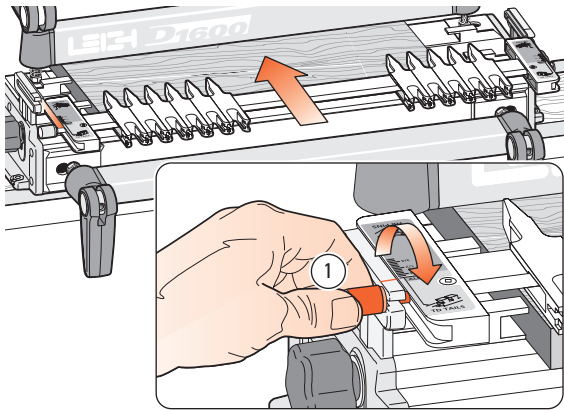
Make up a $\frac{3}{4}$ " x 6" x 15" [20x150x380mm] finger support board as shown. This board will be used to support the guidefinger assembly in all front-clamping vertical board modes.


**1-8**

Raise both end support brackets and tighten the support bracket knobs.

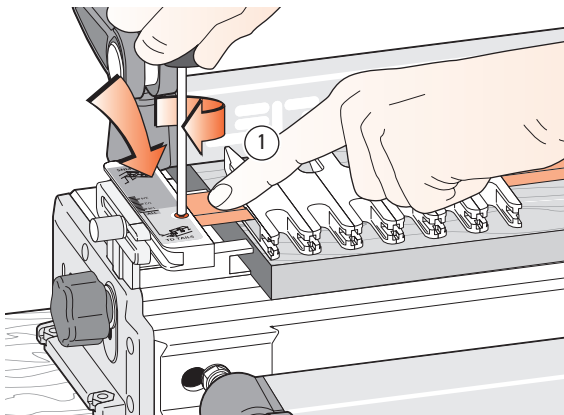
**1-9**

Install the two thumbscrews a few turns into the scales ①. Loosen the scale lock screw ② at both ends (by one turn only).

**1-10**

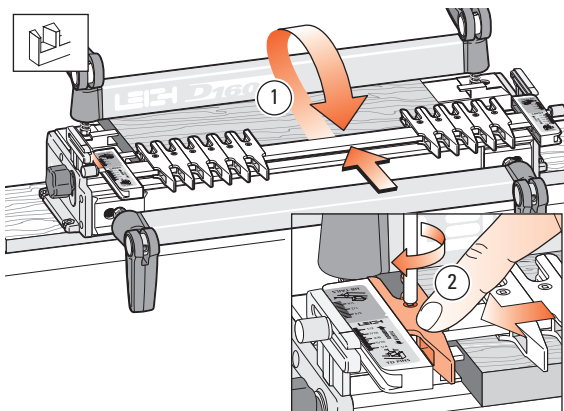
Slide the finger assembly onto the support brackets, in the  TD Tails mode and set on the ALL setting. Tighten both thumb-screws ①.


Do not lower the assembly onto the finger support board.

**1-11**

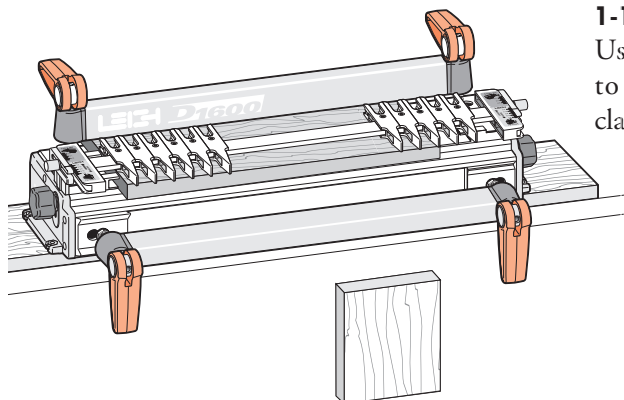
Now tighten both scale lock screws ①. Press down on the bar as you do this to ensure proper positioning of the bar in the block. Now when the thumbscrews are loosened, the finger assembly should easily slide on and off the support brackets.

If they are sticky to move on the support brackets, apply a little candle wax or TopCote® to the mating surfaces. To ensure correct finger assembly alignment, follow this same procedure whenever you remove the scales from the finger assembly.

**1-12**

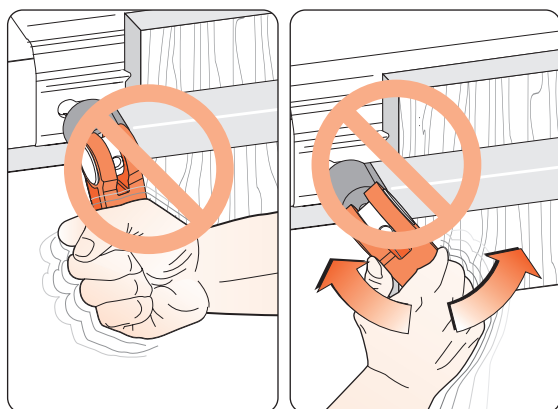
Rotate the finger assembly to the  TD Pins mode ①, and move the outer guidefingers to touch the scale block and lock in position ②.

Note: the outer guidefingers are used for router support only.



1-13 The Jig Clamps

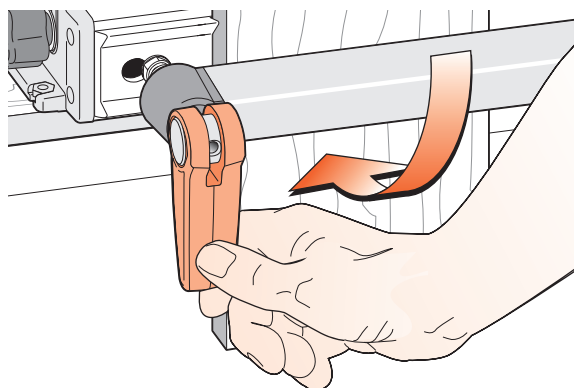
Use a piece of flat, even thickness wood to familiarize yourself with the jig cam clamps.



1-14

You will operate the cam-action speed clamps every time you use the jig, so get used to the feel of the clamps first. **Do not force the cam-action speed-clamp.** It has great leverage, and excessive force may damage the workpiece or the jig.

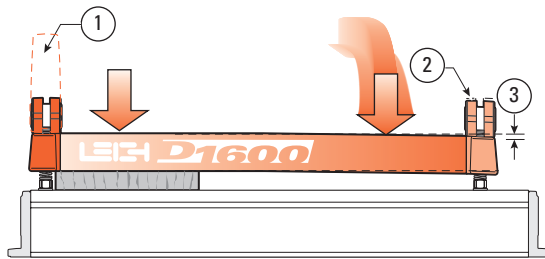
Do not use the lever as a torque arm. Adjust the clamp tension only with the clamp disengaged.



1-15

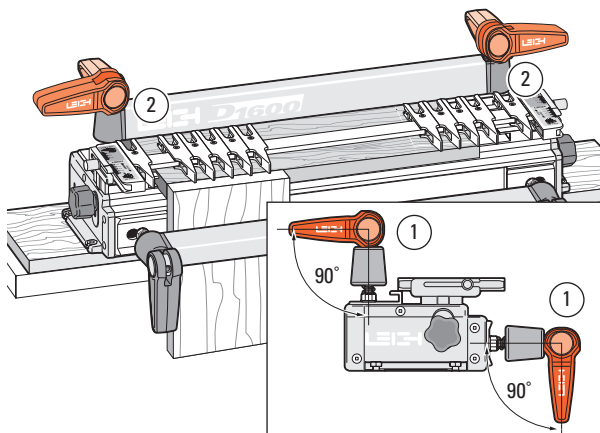
A smooth, firm action is enough to engage the clamp.

Rule of thumb: If you can't throw the lever by pressing the end of it firmly with your thumb, reduce the tension. **Firm thumb pressure is about right.** A few minutes of trial and error will help you feel the right clamp tension.



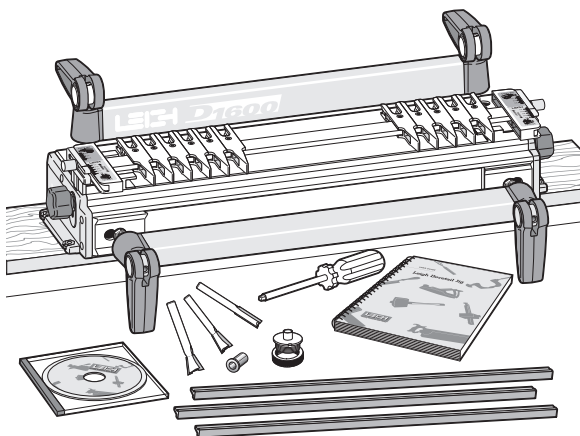
1-16

For all but the wider workpieces, you need only operate the clamp on the workpiece end of the jig to release the board ①. For narrower boards, the clamp at the free end ② should be just tight enough to bow the clamp bar about $\frac{1}{16}$ " [2mm] ③.



1-17

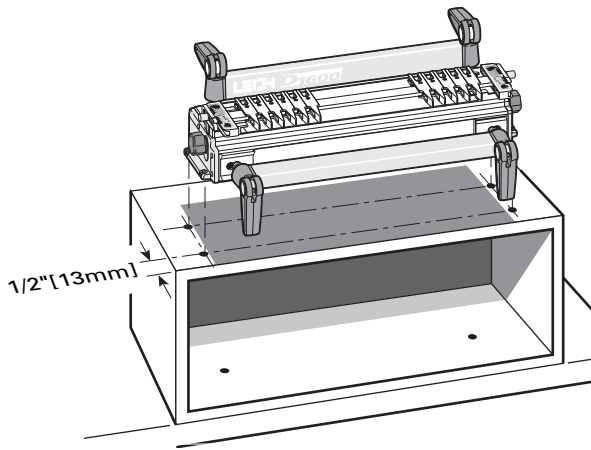
When engaged, the front clamp levers should normally point down and the rear levers should point away from the operator ① or up to 90° either side ② as required to obtain the optimum clamping pressure.



1-18

After you mounted the jig and finger assembly, you should have these items left over:

- 1 DVD instructional video (English only)
- 1 Guidebush and nut
- Cutters: 2 Dovetail, 1 straight
- 1 Collet Reducer
- 1 square-head guidefinger screwdriver
- 1 Leigh jig user guide
- 2 lengths bridge material
- 1 cross cut fence (identical to bridge)

**1-19**

To gain height for a more comfortable working position or for routing longer boards, mount the jig to a box that can be bolted securely to a bench.

See also 15-13 ■