

Bandsaw Fence

555645

PARTS LIST

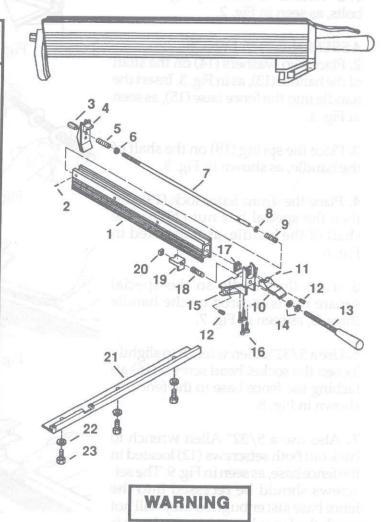
Ref. No.	Part No.	Description	Qty.
1	518012	Rip Fence	1
2	518005	Roll Pin	1
3	514392	Special Hex Nut, 5/16"-18	1
4	518013	Rear Clamp	1
5	514463	Spring	1
6	102634	Hex Nut, 5/16"-18	1
7	518004	Lock Rod	1
8	514407	Retaining Ring	1
9	514353	Spring	1
10	514257	Rear Clamp Lever	1
-11	514527	Roll Pin	1-
12	102388	Setscrew	2
13	518016	Handle	1
14	513792	Flat Washer	2
15	518018	Fence Base	1
16	518017	Socket Head Screw, 10-24 x 1"	4
17	514317	Wear Plate	1
18	514463	Spring	1 -
19	518011	Front Fence Lock	1
20	518019	Hex Nut	1
21	516687	Bar	1
22	120393	Flat Washer	3
23	120834	Hex Head Bolt	3

We recommend the bandsaw fence for ripping and resawing. For further information about ripping and resawing with a bandsaw, consult the Shopsmith textbook, **Power Tool Woodworking for Everyone**. Read, understand and follow the safety warnings, as well as the assembly, alignment and operating procedures described below. The numbers in parentheses refer to the above Parts List and Exploded View.

Safety

WARNING

- Do not remove stock or scraps until the blade has stopped.
- Maintain proper adjustment of blade tension, blade guides and bearings.
- Keep the upper guide adjusted to a maximum of 1/4" above the stock.
- Never reach close to the blade or under the table while the machine is running.
- · Hold stock firmly against the table.



- · Use a push stick to finish a resawing or ripping cut.
- · Support long stock with a roller stand.
- Never cut extremely small stock. Cut small components from larger stock.
- If the blade breaks, turn off the machine and stand away until it stops.
- Never turn on the machine with stock pressed against the blade.

Tools Needed for Assembly and Alignment:

- 5/32" Allen wrench
- 1/2" wrench
- Jointed board,
 3/4" thick x 7" wide x 18" long
- Pencil
- Straightedge

INSTALL THE TABLE BAR

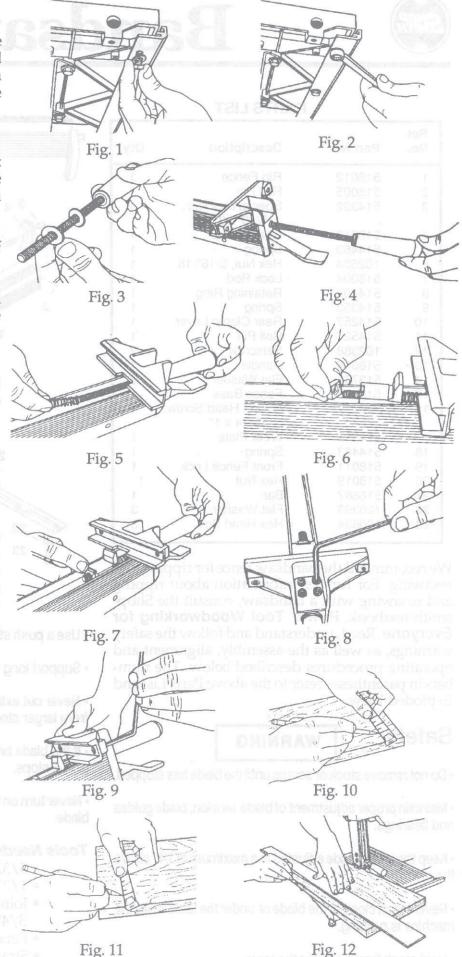
1. Attach the table bar (21) to the bandsaw table with bolts (23) and washers (22), as shown in Fig. 1. Use a 1/2" wrench to securely tighten the bolts, as seen in Fig. 2.

ASSEMBLE THE FENCE

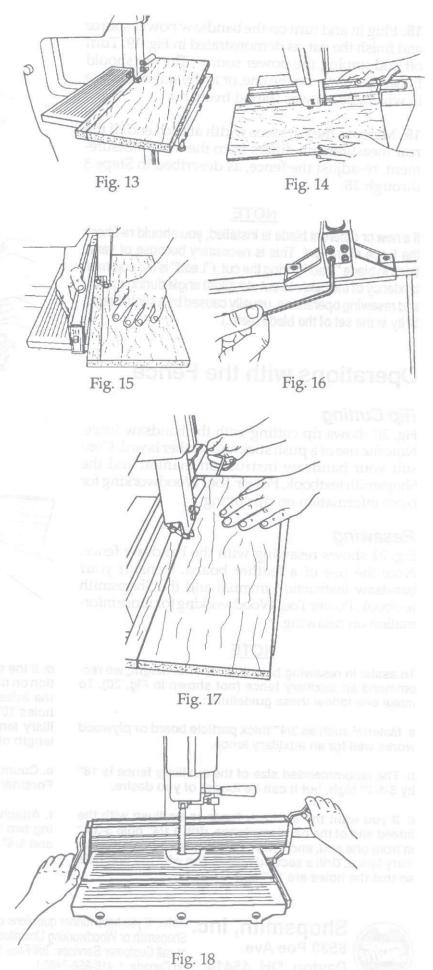
- 2. Place two washers (14) on the shaft of the handle (13), as in Fig. 3. Insert the handle into the fence base (15), as seen in Fig. 4.
- **3.** Place the spring (18) on the shaft of the handle, as shown in Fig. 5.
- **4.** Place the front fence lock (19) and then the special hex nut (20) on the shaft of the handle, as illustrated in Fig. 6.
- **5.** Turn the handle so the special square nut is secured on the handle threads, as seen in Fig. 7.
- **6.** Use a 5/32" Allen wrench to slightly loosen the socket head screws (16) attaching the fence base to the fence, as shown in Fig. 8.
- 7. Also use a 5/32" Allen wrench to back out both setscrews (12) located in the fence base, as seen in Fig. 9. The setscrews should be recessed into the fence base just enough so they will not touch the fence bar when the fence is attached.

ALIGN THE FENCE

- **8.** Use a pencil, as in Fig. 10, to make a mark about 1" to 2" from the edge of a jointed board approximately 3/4" thick x 7" wide x 18" long. Make a mark on the other end the same width as the first one, as seen in Fig. 11.
- **9.** Use a straightedge to draw a line the length of the board connecting the marks, as shown in Fig. 12. The fence should not be installed on the table at this time.



- **10.** Plug in and turn on the bandsaw power source. Cut freehand along the marked line about 4" to 5" into the board. See Fig. 13. Turn off and unplug the power source. Do NOT move the board. Clamp the board to the table, if desired, to prevent it from moving.
- 11. Mount the fence on the bandsaw table, and slide the fence so it touches the board (but does not move it), as seen in Fig. 14.
- **12.** Tighten the handle (13). You may see a gap at some area between the fence and the board.
- **13.** Hold down the board (if not clamped to the table) and move the fence so its entire length contacts the board (eliminating any gap), as shown in Fig. 15.
- **14.** While holding the fence in place, tighten the four socket head screws (16), as shown in Fig. 16.
- 15. The fence should now be parallel to the board. If a small gap still exists along the fence and board, use a 5/32" Allen wrench to adjust the setscrews (12) located in the end of the fence base (15), as seen in Fig. 17. This will eliminate any remaining gap. The setscrews should be used only to correct minor misalignment.
- 16. Lock down the rear clamp lever (10).
- 17. If the rear clamp is too tight (rear clamp lever is hard to lock or won't lock at all), or too loose (allowing fence slippage once it is locked), then the rear clamp needs adjusting. To adjust the rear clamp, do the following:
- a. If too tight, raise the handle, then use a 1/2" wrench to loosen the special hex nut (3). Continue loosening this nut until the rear clamp lever can be locked firmly. See Fig. 18.
- **b.** If too loose, raise the handle, then use a 1/2" wrench to tighten the special hex nut (3). Continue tightening this nut until the rear clamp lever can be locked firmly. See Fig. 18.



- 18. Plug in and turn on the bandsaw power source and finish the cut, as demonstrated in Fig. 19. Turn off and unplug the power source. The cut should finish up exactly on the line, or to the side of the line in which the cut was started freehand.
- 19. Measure the cut piece width at each end. If the rear measurement differs from the front measurement, re-adjust the fence, as described in Steps 8 through 18.

NOTE

If a new or different blade is installed, you should re-check the fence alignment. This is necessary because of variations in blade "lead" during the cut. ("Lead" is the common tendency of the blade to cut at a slight angle during ripping and resawing operations, usually caused by a slight irregularity in the set of the blade teeth.)

Operations with the Fence

Rip Cutting

Fig. 20 shows rip cutting with the bandsaw fence. Note the use of a push stick and feather board. Consult your bandsaw instruction manual and the Shopsmith textbook, Power Tool Woodworking for more information on rip cutting.

Resawing

Fig. 21 shows resawing with the bandsaw fence. Note the use of a feather board. Consult your bandsaw instruction manual and the Shopsmith textbook, Power Tool Woodworking for more information on resawing.

NOTE

To assist in resawing boards over 4" in height, we recommend an auxiliary fence (not shown in Fig. 20). To make one follow these guidelines:

- a. Material such as 3/4" thick particle board or plywood works well for an auxiliary fence.
- b. The recommended size of the auxiliary fence is 18" by 5-1/2" high, but it can be longer of you desire.
- c. If you want the auxiliary fence to be flush with the infeed end of the bandsaw fence, drill a 1/4" hole 3-3/4" in from one end, and 1-1/8" from the bottom of the auxiliary fence. Drill a second hole in line with the first hole so that the holes are 10" apart.

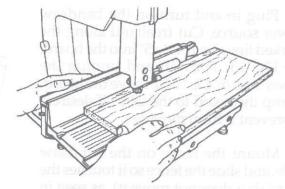


Fig. 19

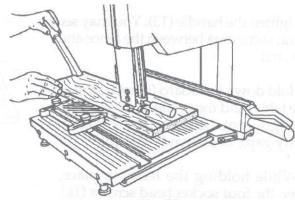


Fig. 20

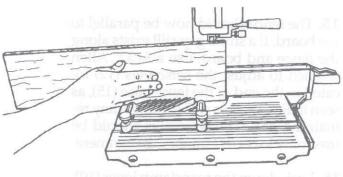


Fig. 21

d. If the auxiliary fence is longer than 18", or if its location on the bandsaw fence is better located more toward the infeed or outfeed end, make sure to drill the two holes 10" apart, and 1-1/8" from the bottom of the auxiliary fence. They may be located anywhere along the length of the auxiliary fence.

- e. Counterbore each hole using a 5/8" bit (preferably a Forstner or spade bit in a drill press) 1/4" deep.
- f. Attach the auxiliary fence to the bandsaw fence using two 1/4" x 2-1/2" long carriage bolts, 1/4" washers and 1/4" nuts or wing nuts.

Shopsmith, Inc. Note: If you have further questions or need help, visit the Shopsmith or Woodworking Unlimited store in your area, or call Customer Services: Toll Free 1-800-762-7555. (In Canada, 1-416-858-2400.)