

PARTS list - Router Table ProFence

	Quantity
A Aluminum Fence	1
B Adjustable MDF Fence Faces	2
C Bit Safety Guard	1
D 5/16-18 T-Knobs	2
E 5/16-18 x 1¼" T-Bolts	6
F 1" Round Knobs	6
G 5/16-18 x 1½" T-Bolts	2

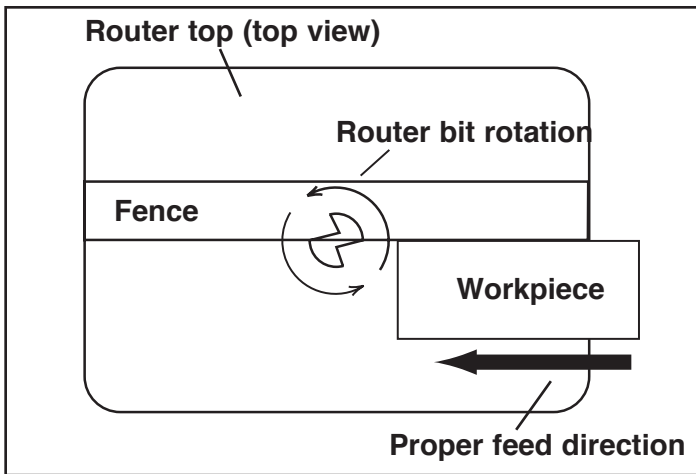


Fig. 1 - A typical setup. Here, the fence is partially covering the router bit.

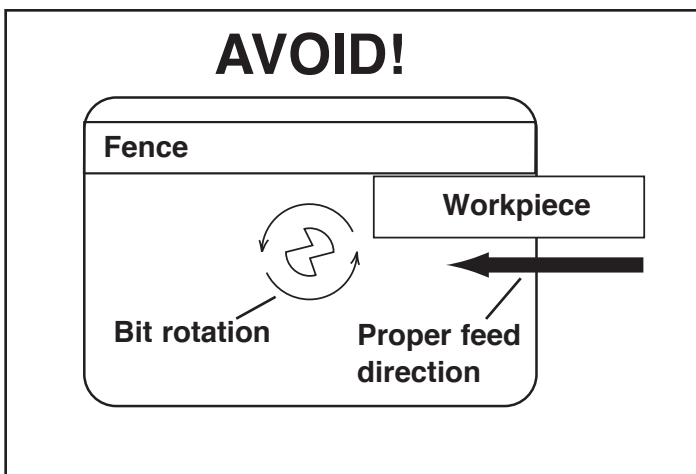


Fig. 2 - A classic trap resulting in a climb cut. Always avoid this set-up!

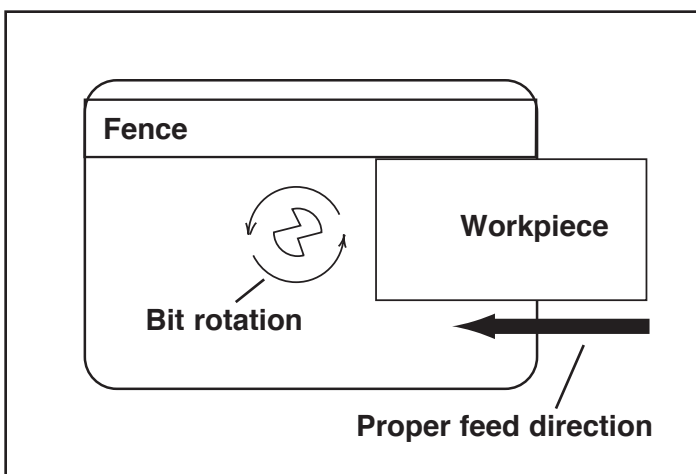


Fig. 3 - Not a trap as long as the router bit does not cut all the way through the stock.

Feed Direction

Always feed the workpiece against the cutter rotation, as shown in **Figure 1**. Feeding the workpiece with the cutter rotation is called “climb cutting”. Climb cutting is very dangerous, because the cutter will grab the workpiece and thrust it the same direction as the cutter rotation. Even small router bits will overpower your ability to hold onto the workpiece during a climb cut.

Do not use this router table until you understand proper feed direction and bit rotation. If climb cutting is still unclear, ask your retailer for help, give us a call, or reference a book on router table usage.

CAUTION: NEVER CLIMB CUT!

Avoiding Fence Traps

Fence traps occur when the work piece is fully “trapped” between the router bit and fence. Fence traps pose two real concerns: the possibility of climb feeding, and human exposure to the router bit. As stated earlier, climb cutting should be avoided as loss of control of the operation is a possibility!

Figure 2 shows a classic trap to be avoided. What appears as a normal feed direction (working from right to left) is wrong, and will instead produce a climb cut. Because the work piece is trapped it can easily be pulled from one’s grip and thrown with great velocity. Feeding the stock from left to right will eliminate the climb cut but not the danger. It will be difficult to keep the stock tight against the fence as the bit’s rotation will thrust the stock away from the fence. Also, your body will be dangerously exposed to the spinning router bit. The bit guard will not protect you against flying stock, nor guard against this level of exposure.

Whereas **Figure 3** is not a trap, as long as the router bit cuts only partially into the stock. In other words, the router bit must not completely cut through the workpiece. In this cut, the bit will grab and push the stock toward the fence. This is good, as the fence will control the workpiece better than your hands. Typical dado cuts resemble this set-up, and are commonly performed on router tables. If the dado is to be widened with two (or more) passes, be careful not to set a classic trap or climb cut.

Adjusting the Subfences

The (2) MDF (medium density fiberboard) subfences are designed to slide along the fence approximately 2". This results in a router bit opening from 0 to 4".

A. “Close” Setting, Many applications require adjusting the subfences close to the router bit. This accomplishes nearly the same benefits of a true “zero clearance” setting (“B”) without cutting the subfences. Before the router is turned on, and after the fence and router bit height are properly adjusted, slide the subfences toward the bit to reduce the gap. Confirm that the router bit can freely rotate without touching the subfences!

B. “Zero Clearance” Setting, Cutting the router bit into the subfences produces “zero clearance”. Zero clearance eliminates the gap between the fence and router bit. This prevents the workpiece from getting pulled into the fence just before the router bit. Moreover, a zero clearance setting achieves a cleaner cut because the subfence supports the workpiece fibers. If a true zero clearance setting is desired, follow these steps:

1. Adjust the bit height and fence position.
Note: The subfences must NOT contact the router bit at this time.
2. Install the bit guard and secure.
4. Start router, and use dust collection. From the back of the fence, slightly loosen the subfence knobs and carefully slide the infeed subfence into the spinning router bit. Hold onto the subfence knobs.
5. After the subfence has reached the guide bearing of the router bit, fully tighten the knobs on the subfence.
Note: If the bit does not have a guide bearing (i.e. vertical raised panel bits), slide the subfence half-way into the bit, then tighten the subfence knobs.



Caution: Never adjust or slide the subfences from the front! Always work from the back with both hands on the adjustment knobs.

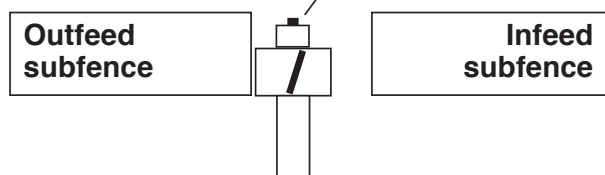
Important Notes:

The outfeed subfence is rarely set to zero clearance, because doing so has little performance benefit and can damage the subfence. A “close” setting is more desirable for most applications. Setting the outfeed subfence to zero requires great care because the router bit can cause a portion of the subfence to chip or break. If an outfeed zero clearance is absolutely necessary, slide the outfeed subfence very slowly into the bit to minimize the chipping and tearing.

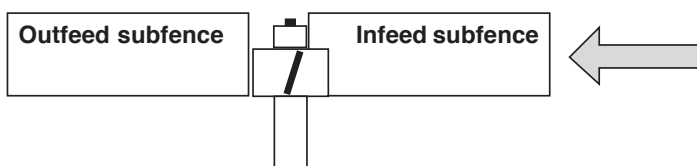


To reset the subfence position, loosen the 4 knurled knobs on the back and slide subfence into desired position. Be sure to retighten all knobs prior to using.

Router bit guide bearing



The infeed subfence is wide open, and the outfeed subfence is set “close”.



Here the infeed subfence has been adjusted to zero clearance.

MDF works very well as a subfence because it is softer than most woods and is much less likely to damage expensive router bits. MDF also retains the shape of delicate profiles and thus allows proper support for zero clearance settings.

When adjusting the fence, ensure that no part of the aluminum fence body could contact the router bit.

IMPORTANT SAFETY POINTS

Before operating your router table please read this manual thoroughly. Safety and use tips are contained in the manual. This page is not the sole source of safety information. Retain the manual for future reference. Refer to your router owner's manual for safety instructions regarding use of that tool. This manual is not an instruction book on how to do woodworking with a power tool. We encourage all woodworkers to continually seek improvement in their woodworking skills, regardless of their craftsmanship or years of experience. The router table, fence and accessories must only be used for their intended purpose: woodworking via normal routing operations. "Normal operations" means basic shaping of wood in conditions where grounded electricity, sharp tools, dust, and rapidly spinning parts can be used or encountered safely. The following instructions elaborate on this concept.

1. Do not use your router table as a step or seat.
2. The top and cabinet must be properly secured, and must be level before use. Inspect your table and base for damage and levelness prior to each use.
3. Keep work area clean, dry and well lit.
4. The hardware affixing the insert to the router top must be installed for safe use. Tighten insert hold-down screws before each use.
5. Safe operation requires a router table fence, bit guard, dust collection system, starting pin or fulcrum, and speed reducer for large diameter bits. We recommend reducing router speed for 1" or larger diameter bits. Consult your bit manufacturer for the exact speed.
6. Use the right tool for the job. Do not force a tool or attachment to do a job for which it was not designed.
7. Secure your work with a featherboard, clamps, or a vice when appropriate. The use of inappropriate accessories may cause injury.
8. Wear safety glasses, dust mask, face shield and ear protection. This is not an exhaustive list. Every-day eye glasses do not substitute for safety glasses.
9. Do not wear gloves or jewelry while using a power tool.
10. Maintain your equipment and its accessories in good working condition. Look for wear, poor alignment of moving parts, binding of moving parts, breakage, poor mounting, or other conditions that may affect operation and safety. Repair or replace any damaged parts.
11. Disconnect the power before moving, adjusting, or repairing parts, or otherwise maintaining your router table and any accessories you may be using.
12. Keep children, pets, and those who may disregard safety away from work area, cords, sockets and tools.
13. Wear snug fitting clothes and keep long hair back to avoid catching in moving parts.
14. Do not overreach. Maintain balanced footing and stance.
15. Stay alert. Use common sense.