Jointer Quick Start Guide

This jointer runs on 220V (208V really because, 3 phase power).

Don’t joint anything that might have metal in it, like nails or screws.
Any metal that hits the blades ruins them.

Only joint natural wood, no plywood, MDF or other composites.

Don’t joint any stock smaller than the minimum sizes shown on page 7.

Use Push Pads when appropriate for safety. (Page 9)

The off button has to be twisted to reset itself.

Please read the next 10 pages of this guide to gain an understanding of the operation of the jointer itself.

The full manual is available online and a paper copy is here in the shop.

This SOP compiled by @pberglund

Controls & Components

This section covers the basic controls used during routine operations.

STOP Button: Stops motor when pushed in and disables the START button. Enable the START button by twisting the STOP button until it springs forward in the out position.

START Button: Starts motor only if the STOP button is in the out position (see **Figure 3**).

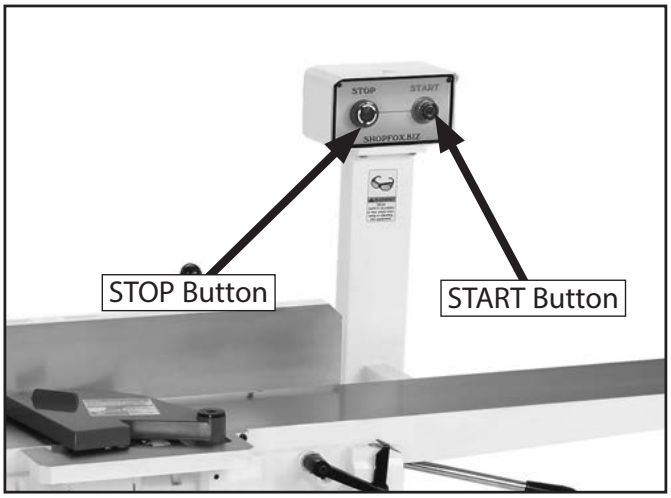


Figure 3. START/STOP button locations.

Table Movement: To move the infeed table, loosen the table lock (see **Figure 4**), move the table with the table lever, then tighten the table lock. The infeed table will only move through the preset range of the positive stops. To adjust the infeed table positive stops, refer to **Setting Infeed Table Height** on **Page 47**.

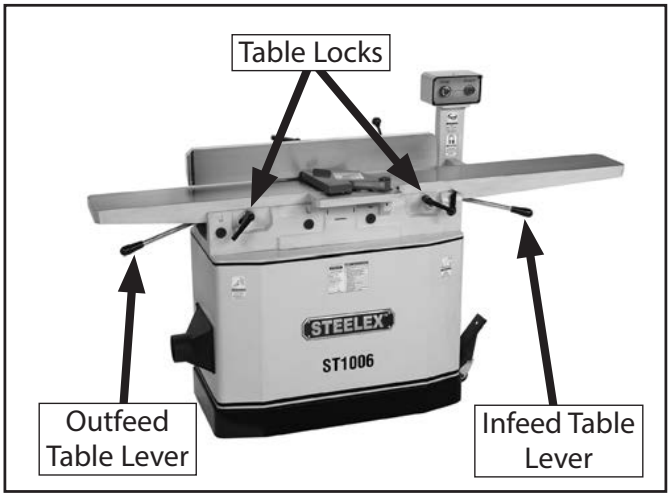


Figure 4. Table control locations.

The outfeed table is preset with positive stops, so no range of movement is allowed (if it gets accidentally unlocked it will not move). To adjust the outfeed table positive stops refer to **Setting Outfeed Table Height** on **Page 46**.

Fence Movement: The fence has a lock handle that keeps it in position (see **Figure 5**). To move the fence, loosen the lock handle and slide the fence where needed.

Fence Tilting: The tilt lock (see **Figure 5**) secures the fence at any position in the available range. The plunger locks into an indexing ring to easily set the fence tilt to 90°. Positive stops stop the fence at 45° inward and 45° outward, for common 45° bevel cuts. Even when the fence is resting against the positive stops, the tilt lock must be tightened before cutting.

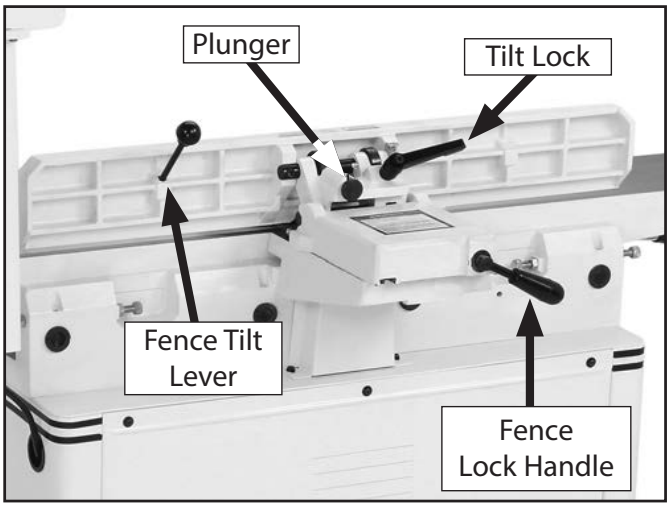


Figure 5. Fence lock, tilt lock and stop block locations.

Please read the general jointer safety guidelines on the next two pages.

⚠WARNING

WEARING PROPER APPAREL. Do not wear clothing, apparel or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

HAZARDOUS DUST. Dust created by machinery operations may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material. Always wear a NIOSH-approved respirator to reduce your risk.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

USE CORRECT TOOL FOR THE JOB. Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications—modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area.Stop using machine if they become a distraction.

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly BEFORE operating machine.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

NEVER STAND ON MACHINE. Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn machine ***OFF*** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

DAMAGED PARTS. Regularly inspect machine for damaged, loose, or mis-adjusted parts—or any condition that could affect safe operation. Immediately repair/replace BEFORE operating machine. For your own safety, DO NOT operate machine with damaged parts!

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

EXPERIENCING DIFFICULTIES. If at any time you experience difficulties performing the intended operation, stop using the machine! Contact our Technical Support at (570) 546-9663.

Additional Safety for Jointers

⚠WARNING

Serious cuts, amputation, entanglement, or death can occur from contact with rotating cutterhead or other moving components! Flying chips can cause blindness or eye injuries. Workpieces or inserts/ knives thrown by cutterhead can strike nearby operator or bystanders with deadly force. To reduce the risk of these hazards, operator and bystanders MUST completely heed the hazards and warnings

KICKBACK. Occurs when workpiece is ejected from machine at a high rate of speed. To reduce the risk of kickback-related injuries, use quality workpieces, safe feeding techniques, and proper machine setup or maintenance.

GUARD REMOVAL. Operating jointer without guard exposes operator to knives/inserts. Except when rabbeting, never remove guards for regular operations or while connected to power. Turn jointer OFF and disconnect power before clearing any shavings or sawdust from around cutterhead. After rabbeting or maintenance is complete, immediately replace all guards and ensure they are properly adjusted before resuming regular operations.

DULL/DAMAGED KNIVES/INSERTS. Dull knives/ inserts can increase risk of kickback and cause poor workpiece finish. Only use sharp, undamaged knives/ inserts.

OUTFEED TABLE ALIGNMENT. Setting outfeed table too high can cause workpiece to hit table and get stuck, increasing risk of kickback. Setting outfeed table too low may cause workpiece to become tapered from front to back. Always keep outfeed table even with knives/inserts at top dead center (highest point during rotation).

INSPECTING STOCK. Impact injuries or fire may result from using poor workpieces. Thoroughly inspect and prepare workpiece before cutting. Verify workpiece is free of nails, staples, loose knots or other foreign material. Workpieces with minor warping should be surface planed first with cupped side facing infeed table.

GRAIN DIRECTION. Jointing against the grain or end grain can increase the risk of kickback. It also requires more cutting force, which produces chatter or excessive chip out. Always joint or surface plane WITH the grain.

MAXIMUM CUTTING DEPTH. To reduce risk of kickback, never cut deeper than ⅛" per pass.

CUTTING LIMITATIONS. Cutting a workpiece that does not meet the minimum dimension requirements can result in breakup, kickback, or accidental contact with cutterhead during operation. Never perform jointing, planing, or rabbeting cuts on pieces smaller than 8" long, ¾" wide, or ¼" thick.

PUSH BLOCKS. Not using push blocks when surface planing may result in accidental cutterhead contact. Always use push blocks when planing materials less than 3" high or wide. Never pass your hands directly over cutterhead without a push block.

WORKPIECE SUPPORT. Loss of workpiece control while feeding can increase risk of kickback or accidental contact with cutterhead. Support workpiece continuously during operation. Position and guide workpiece with fence. Support long or wide stock with auxiliary stands.

FEED WORKPIECE PROPERLY. Kickback or accidental cutterhead contact may result if workpiece is fed into cutterhead the wrong way. Allow cutterhead to reach full speed before feeding. Never start jointer with workpiece touching cutterhead. Always feed workpiece from infeed side to outfeed side without stopping until cut is complete. Never back work toward infeed table.

SECURE KNIVES/INSERTS. Loose knives or improperly set inserts can become dangerous projectiles or cause machine damage. Always verify knives/inserts are secure and properly adjusted before operation. Straight knives should never project more than ⅛" (0.125") from cutterhead body.

Test Run

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning correctly.

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem BEFORE operating the machine again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

⚠WARNING

Serious injury or death can result from using this machine BEFORE understanding its controls and related safety information. DO NOT operate, or allow others to operate, machine until the information is understood.

⚠WARNING

DO NOT start machine until all preceding setup instructions have been performed. Operating an improperly set up machine may result in malfunction or unexpected results that can lead to serious injury, death, or machine/property damage.

To test run machine:

1. Clear all setup tools away from machine.

2. Push STOP button in (see **Figure 26**).

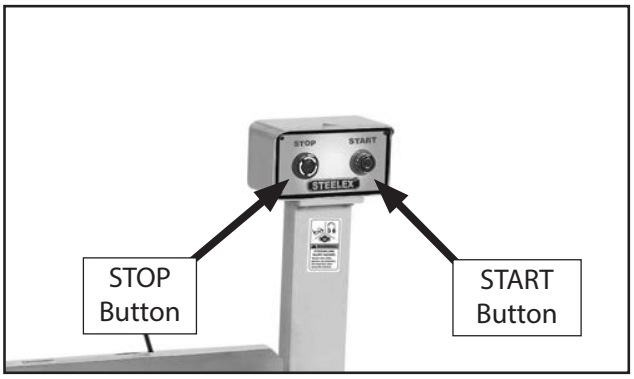


Figure 26. STOP/START button locations.

3. Connect machine to power supply.

4. Twist STOP button clockwise until it pops out (see **Figure 27**). This resets switch so machine will start.

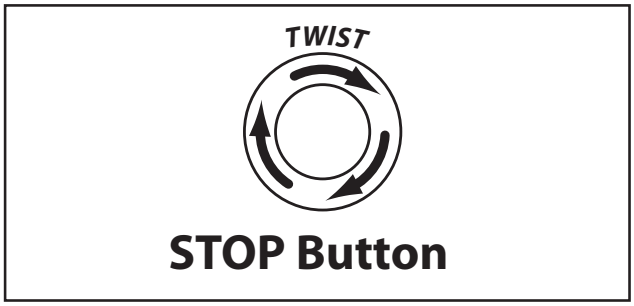


Figure 27. Resetting the switch.

5. Push START button to start machine. A correctly operating machine runs smoothly with little or no vibration or rubbing noises.

6. Press STOP button to turn machine ***OFF***.

7. WITHOUT resetting STOP button, press START button. Machine should not start.

   —If machine *does not* start, the STOP button safety feature is working correctly. Congratulations! The Test Run is complete.

   —If machine *does* start (with STOP button pushed in), immediately disconnect power to machine. The STOP button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

OPERATIONS

Overview

The Model ST1006/ST1011 will perform many types of operations that are beyond the scope of this manual. Many of these operations can be dangerous or deadly if performed incorrectly.

The instructions in this section are written with the understanding that the operator has the necessary knowledge and skills to operate this machine. If at any time you are experiencing difficulties performing any operation, stop using the machine!

If you are an inexperienced operator, we strongly recommend that you read books, trade articles, or seek training from an experienced jointer operator before performing any unfamiliar operations. **Above all, your safety should come first!**

To complete typical operation, operator does following:

1. Examines workpiece to verify it is safe and suitable for cutting.

2. Adjusts fence for width of workpiece and locks it in place.

3. Adjusts fence tilt, if necessary.

4. Adjusts infeed table height to set depth of cut per pass.

5. Puts on safety glasses, respirator, and ear protection.

6. Locates push blocks.

7. Starts jointer.

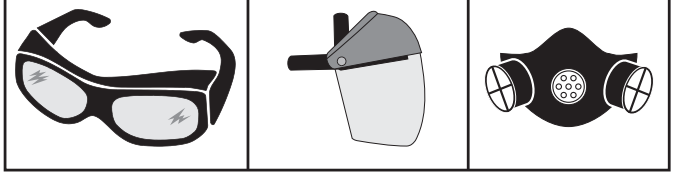
8. Holds workpiece firmly against infeed table and fence, and slides it into cutterhead at a steady and controlled rate until entire length of workpiece has advanced beyond cutterhead to outfeed table.

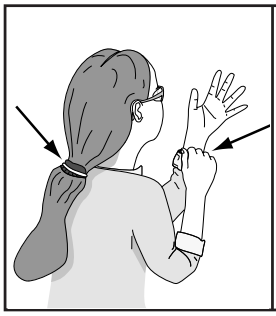
9. Repeats cutting process until desired results are achieved.

10. Stops jointer.

⚠WARNING

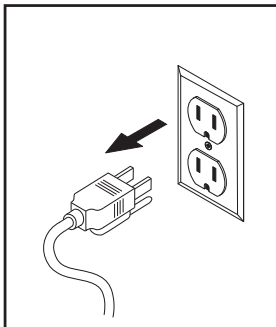
Eye injuries or respiratory problems can occur while operating this tool. Wear personal protective equipment to reduce your risk from these hazards.





⚠WARNING

Loose hair/clothing could get caught in machinery and cause serious personal injury. Keep clothing and long hair away from moving machinery.



⚠WARNING

DO NOT investigate problems or adjust the lathe while it is running. Wait until the machine is turned OFF, unplugged and all working parts have come to a complete stop before proceeding!

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects.

Stock Inspection & Requirements

Follow these rules when choosing and jointing stock:

- **DO NOT joint or surface plane stock that contains large or loose knots.** Injury to the operator or damage to the workpiece can occur if a knot becomes dislodged during the cutting operation.

- **Jointing and surface planing with the grain is safer for the operator and produces a better finish.** Cutting against the grain increases the likelihood of kickback and workpiece tear-out. DO NOT cut against the grain! Cutting with the grain is feeding the stock across the cutterhead so the grain points down and back, as viewed from the front edge of the stock (see **Figure 28**).

  Note: If the grain changes direction along the edge of the workpiece, decrease the depth of cut and make additional passes.

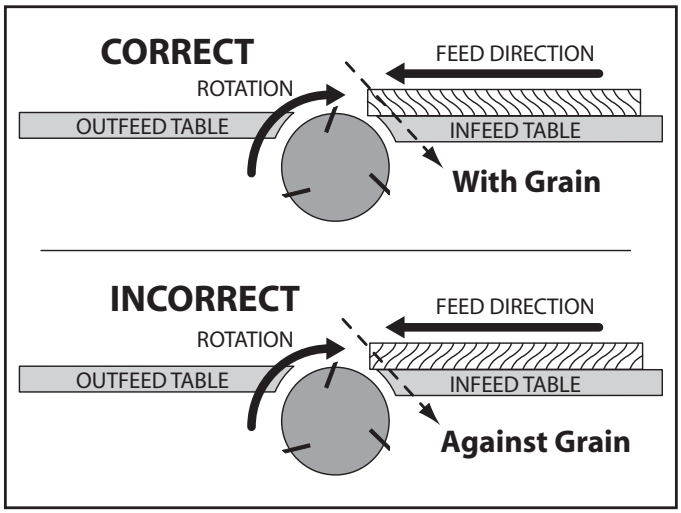


Figure 28. Proper grain alignment with the cutterhead.

- **Only process natural wood fiber through your jointer.** Your jointer is designed to cut only natural wood stock. This machine is NOT designed to cut metal, glass, stone, tile, products with lead-based paint, or products that contain asbestos—cutting these materials with a jointer may lead to injury.

- **Scrape all glue off the workpiece before jointing.** Glue deposits on the workpiece, hard or soft, will gum up the cutterhead and produce poor results.

- **Remove foreign objects from the workpiece.** Make sure that any stock you process with the jointer is clean and free of dirt, nails, staples, tiny rocks or any other foreign objects that could damage the cutterhead. These particles could also cause a spark as they strike the cutterhead and create a fire hazard.

  Note: Wood stacked on a concrete or dirt surface can have small pieces of concrete or stone pressed into the surface.

- **Make sure all stock is sufficiently dried before jointing.** Wood with a moisture content over 20% will cause unnecessary wear on the cutters and poor cutting results. Excess moisture can also hasten rust and corrosion.

- **Make sure your workpiece exceeds the minimum dimension requirements, as shown in Figure 29, before processing it through the jointer, or the workpiece may break or kickback during the operation.**

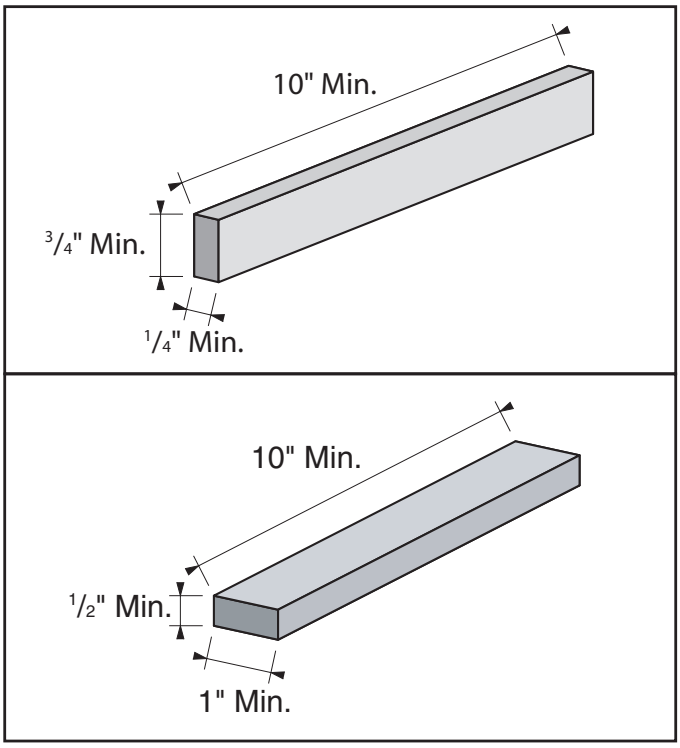


Figure 29. Minimum stock dimensions for jointer.

Squaring Stock

Squaring stock involves four steps performed in the order below:

1. **Surface Plane On The Jointe**r: The concave face of the workpiece is surface planed flat with the jointer (see **Figure 30**).

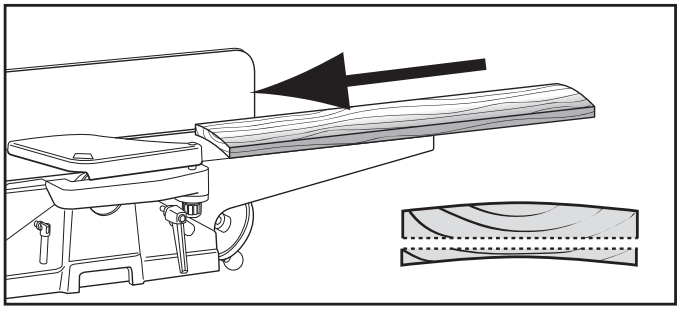


Figure 30. Surface plane on the jointer.

2. **Surface Plane On a Thickness Planer**: The opposite face of the workpiece is surface planed flat with a thickness planer (see **Figure 31**).

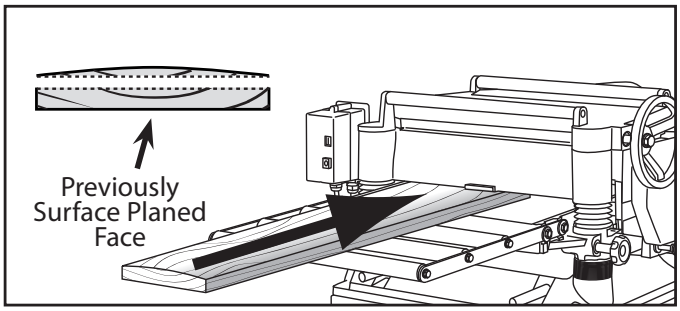


Figure 31. Surface plane on a thickness planer.

3. **Edge Joint On The Jointer**: The concave edge of the workpiece is jointed flat with the jointer (see **Figure 32**).

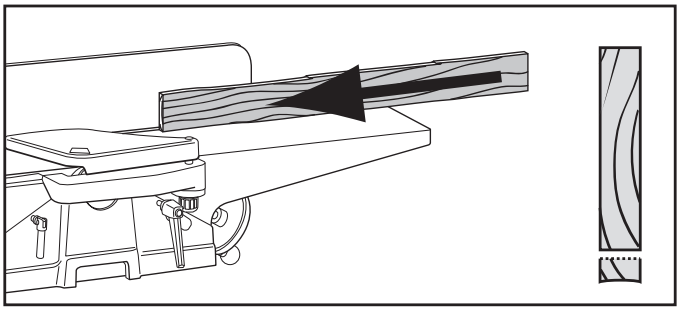


Figure 32. Edge joint on the jointer.

4. **Rip-Cut On A Table Saw**: The jointed edge of the workpiece is placed against a table saw fence and the opposite edge cut off (see **Figure 33**).

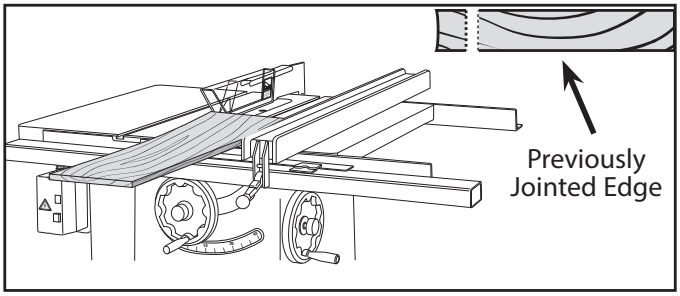


Figure 33. Rip-cut on a table saw.

Surface Planing

The purpose of surface planing (see **Figures 34–35**) on the jointer is to make one flat face on a piece of stock to prepare it for thickness planing on a planer.

NOTICE

If you are not experienced with a jointer, set depth of cut to "0" and practice feeding workpiece across the tables as described for each of the jointing procedures. This process will better prepare you for actual operation.

Figure 34. Example of surface planing operations.

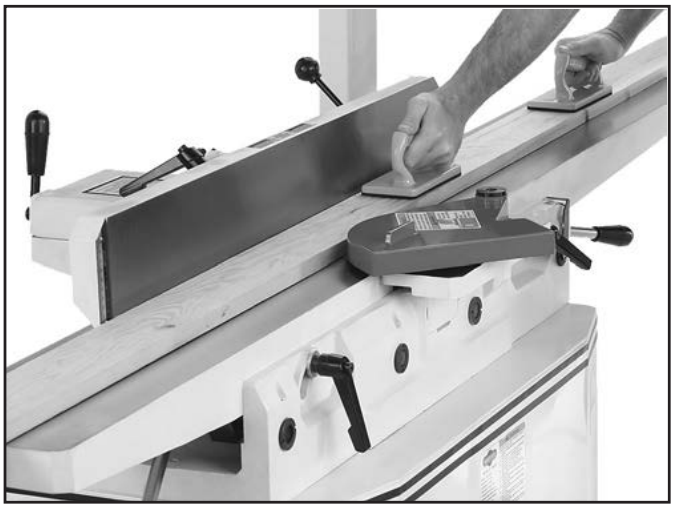


Figure 35. Illustration of surface planing results.

To surface plane on jointer:

1. Inspect stock to ensure it is safe and suitable for the operation (see **Stock Inspection & Requirements** section).

2. Set infeed table height to desired cutting depth for each pass.

   IMPORTANT: For safety reasons, do not exceed a cutting depth of 1/16" per pass when surface planing.

3. Set fence to 90˚.

4. Start jointer.

5. Place workpiece firmly against fence and infeed table.

   IMPORTANT: To ensure workpiece remains stable during cut, concave sides of workpiece must face toward table and fence.

6. Feed workpiece completely across cutterhead while keeping it firmly against fence and tables during the entire cut.

   IMPORTANT: Keep hands at least 4" away from cutterhead during the entire cut. Instead of allowing a hand to pass directly over cutterhead, lift it up and over cutterhead, and safely reposition it on the outfeed side to continue supporting workpiece. Use push blocks whenever practical to further reduce risk of accidental hand contact with cutterhead.

7. Repeat **Step 6** until entire surface is flat.

   Tip: *When squaring up stock, cut opposite side of workpiece with a planer instead of the jointer to ensure boths sides are parallel.*

⚠WARNING

Failure to use push blocks when surface planing could result in your hands contacting rotating cutterhead, which will cause serious personal injury. ALWAYS use push blocks when surface planing on jointer!

Edge Jointing

The purpose of edge jointing is to produce a finished, flat-edged surface that is suitable for joinery or finishing, as shown in **Figures 36–37**. It is also a necessary step when squaring rough or warped stock.

Figure 36. Example of edge jointing operation.

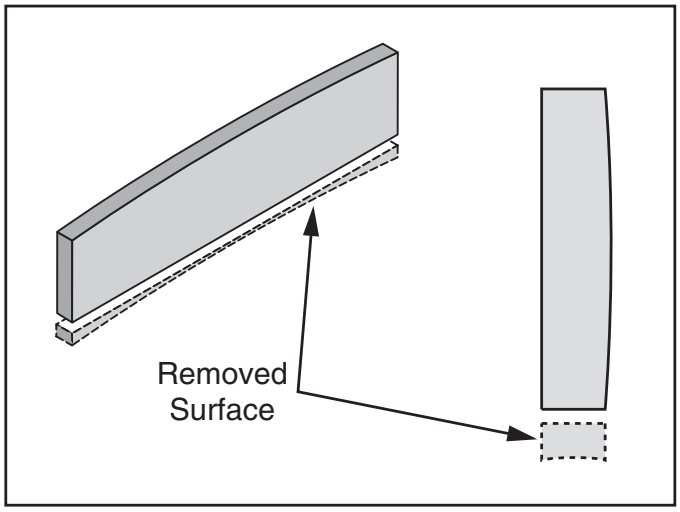


Figure 37. Illustration of edge jointing results.

To edge joint on jointer:

1. Inspect stock to ensure it is safe and suitable for the operation (see **Stock Inspection & Requirements** section).

2. Set infeed table height to desired cutting depth for each pass.

   IMPORTANT: For safety reasons, cutting depth should never exceed ⅛" per pass.

3. Set fence to 90˚.

4. Start jointer.

5. Place workpiece firmly against fence and infeed table.

   IMPORTANT: To ensure workpiece remains stable during cut, concave sides of workpiece must face toward table and fence.

6. Feed workpiece completely across cutterhead while keeping it firmly against fence and tables during the entire cut.

   IMPORTANT: Keep hands at least 4" away from cutterhead during the entire cut. Instead of allowing a hand to pass directly over cutterhead, lift it up and over cutterhead, and safely reposition it on the outfeed side to continue supporting workpiece. Use push blocks whenever practical to further reduce risk of accidental hand contact with cutterhead.

7. Repeat **Step 6** until the entire edge is flat.

   Tip: *When squaring up stock, cut opposite edge of workpiece with a table saw instead of the jointer—otherwise, both edges of workpiece will not be parallel with each other.*

Bevel Cutting

Bevel cuts (see **Figures 38–39**) can be made by setting the fence at the desired angle and feeding the workpiece firmly along the fence face, with the bottom inside corner firmly against the table. The cutting process typically requires multiple passes or cuts to bevel the entire edge of a workpiece.

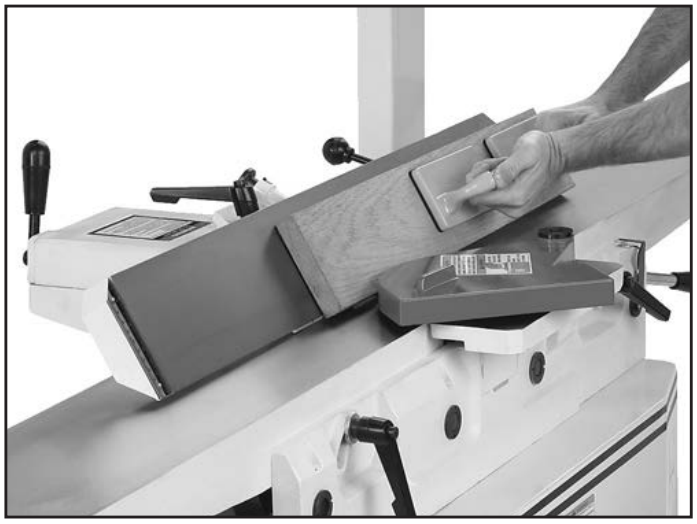


Figure 38. Fence setup for a bevel cut of 45°.

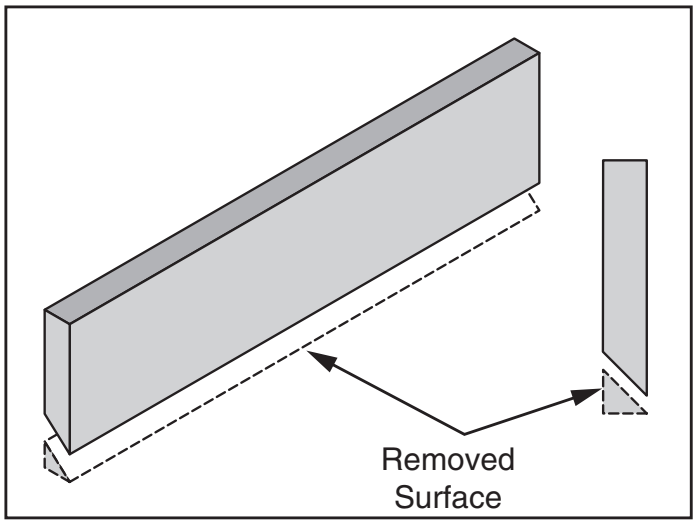


Figure 39. Illustration of bevel cutting results.

To bevel cut on jointer:

1. Inspect stock to ensure it is safe and suitable for the operation (see **Stock Inspection & Requirements** section).

2. Set infeed table height to cutting depth desired for each pass.

   Note: *Cutting depth for bevel cuts is typically between 1/16" and 1/8", depending on hardness and width of stock.*

3. Set fence tilt to desired angle of cut.

4. Place workpiece against fence and infeed table with concave side face down.

5. Start jointer.

6. With a push block in your leading hand, press workpiece against table and fence with firm pressure, and feed workpiece over cutterhead with a push block in your trailing hand.

   Note: *When your leading hand gets within 4" of the cutterhead, lift it up and over cutterhead, and place push block on portion of the workpiece once it is 4" past cutterhead. Now, focus your pressure on outfeed end of the workpiece while feeding, and repeat same action with your trailing hand when it gets within 4" of cutterhead. To help keep your hands safe, DO NOT let them get closer than 4" from moving cutterhead at any time during operation!*

7. Repeat cutting process, as necessary, until you are satisfied with the results.