The jointer is used to make one side of a board flat and straight. The jointer can remove cups and twists so that the board can be then planed, or ripped to provide a straight board with parallel sides. The jointer is used to surface both the face and the edge of boards. The jointer uses a horizontal cutterhead that is located between the infeed and the outfeed tables. The outfeed table surface is level with the top of the cutterhead. The infeed table is adjustable with a lever located at the right-front of the machine. A scale mounted near the lever indicates the amount of material that will be removed in each pass. A fence is mounted at the far side of the tables and is used to steady the work when jointing the face of a board. The fence is also used to support the board when jointing the edge of a board. The angle of the fence relative to the tables is adjustable and determines the angle between the surface and edge of a board. A guard is attached to the infeed table and covers the cutterhead. The guard swings away from the fence as a board is passed by the cutterhead but still covers the portion of the cutterhead to the left of the board. To avoid accidents, the following operational safety rules must be observed by everyone using the Powermatic wide belt sander. Failure to follow the safety rules will result in a loss of shop privileges.

**Jointer Safety Rules:**

1. **WARNING!** The jointer has sharp rotating carbide inserts that can cause serious injury including amputation and death. Do not allow any portion of your body to contact the rotating cutters. Use all guards provided and push sticks and push pads as required.

2. Follow the 3” rule; always keep fingers at least 3” from the opening where the cutter head is located. Your hand could get drawn into the cutterhead causing serious injury or amputation.

3. Keep a balanced stance at the planer.

4. Never clear small pieces from the input or output tables with your hand while the jointer is running. Use a brush, or stop the thickness planer.

5. Do not joint boards with loose knots. The knots may come loose and be thrown at you.

6. Always use a guard provided by Powermatic. If you are performing a special operation such as jointing a board wider than 8”, you must use the guard made for that purpose.

**Start with a Risk Assessment to ensure a safe work area:**
1. A three foot perimeter around the thickness planer should be kept clear of people, debris and sawdust that might impair traction or footing to avoid slips and falls and to provide easy access to both the infeed and outfeed tables of the machine. However, a helper may assist with supporting long boards and in the removal of boards from the outfeed table.

2. Safety glasses with side shields and hearing protection must be worn.

3. Remove loose fitting clothing, jewelry, and tie back long hair.

4. **WARNING!!** The jointer has a horizontal cutterhead that is partially exposed while the machine is in use. The guard over the cutterhead can also be intentionally or accidently swung to the side exposing the cutterhead. The rotating cutterhead can easily amputate fingers or hands if they come in contact.

5. Give the work your undivided attention.

**Operational Safety Rules:**

1. Approach your work in the CLUB Shop and on the jointer with a safe attitude!

2. Do not joint MDF or Chip Board (OSB). The resin in the board will quickly dull the knives.

3. Open the blast gate from the Powermatic dust collector before starting the jointer. Ensure that the Powermatic dust collector started and is running. Close the blast gate when you are finished using the jointer if no one else is using it.

4. Do not surface boards with loose knots, nails or any foreign material on the surface.

5. Always use two push blocks when face jointing. If the board is not too long, use a push block with a cleat at the rear of the board to prevent slippage of the push block.

6. When jointing stock that is nearly square, use the orange push block with the “V” shaped rubber sole to hold the stock against the fence and tables.

7. Do not face join boards thinner than 1/4”, and takes cuts of no more than 1/64” deep when jointing boards 3/8” or thinner. Always use push blocks.

8. Do not face joint boards narrower than 3/4”. When jointing boards that are not very wide, use the orange push block with the “V” shaped rubber sole to hold the stock against the fence and tables.

9. Do not edge joint the end grain of boards narrower than 10”. When edge jointing the end grain, cut far enough for the leading edge to land on the outfeed table. Then rotate the board 180° and joint the entire edge. This will minimize tearout. A backup board at least 6” high and 12” long will help control the cut.

10. Always feed the stock from right to left. Never feed the stock in the direction of rotation of the cutter head. This can cause the blades to grab the stock and propel it off the infeed table.

11. Do not try to join boards that are shorter than 12” long. It is difficult to control short boards and short boards are not supported very well by the infeed and outfeed tables. As a result, the board may dive into the cutterhead causing a kickback resulting in an increased potential for your hand to fall into the cutterhead.

12. Do not make freehand cuts. Keep the stock against the fence or you may lose control. The amount of effort required to pass a board over the jointer is dependent on the depth of cut. The jointer can remove as much as 1/2” of material per pass. This is may be fine for edge
jointing wide boards. In most instances however, you should not remove more than 1/8” per pass when edge jointing. When face jointing, removal of more than 1/16” per pass may make it difficult to feed the board and there is the potential for slipping or loosing you balance. For most face jointing operations with stock wider that 6”, a stock removal of 1/32” or less is recommended.

13. If the work is too large for one person to handle, Cut it into manageable lengths (4-6’ or less) if possible. If longer lengths are needed, consider getting help to holding the stock or use infeed or outfeed supports.

14. Lockout/Tagout the jointer before changing the cutterhead’s carbide inserts or performing any other maintenance operation. All insert changes must be done under the direction of the Shop Leader.

15. When you have finished your use of the jointer, push both the stop button and close the blast gate to the Powermatic dust collector. Then cleanup the area.