

Note: Using the Sawstop.pdf covers basic controls and usage. It is a compilation of selected pages from the SawStop manual. See the full manual for more detailed information.

## Using Your Saw

### 1. Adjusting the Blade Height:

The height of the blade can be adjusted from  $\frac{1}{8}$  inch below the table top to  $3 \frac{1}{8}$  inch above the table top. To adjust the height of the blade, loosen the elevation locking knob and turn the elevation hand wheel until the blade is at the desired height (see Fig. 25). Turn the hand wheel clockwise to raise the blade, and counter-clockwise to lower the blade. Lock the blade height by tightening the elevation locking knob.

For through-cuts (i.e., cuts where the wood is cut through its entire thickness), the blade height should be adjusted so that the top of the blade is no more than  $\frac{1}{8}$  inch to  $\frac{1}{4}$  inch above the workpiece.

The saw includes limit stops to prevent the height of the blade from being adjusted past the maximum and minimum setpoints. These limit stops are pre-set at the factory and should not need adjustment. If you decide to adjust the blade elevation limit stops, see page 56 for instructions.



Fig. 25

**CAUTION!** When adjusting the height or tilt angle of the blade, reverse the hand wheel slightly to release tension after reaching the limit stops. This prevents any slight twisting of the cast iron assembly that might affect blade parallelism and table alignment.

### 2. Adjusting the Blade Tilt Angle:

The tilt (bevel) angle of the blade can be adjusted between  $0^\circ$  and  $45^\circ$ . To adjust the tilt angle of the blade, loosen the tilt locking knob and turn the tilt hand wheel until the blade is at the desired angle. The tilt angle of the blade is indicated by the position of the tilt angle indicator on the tilt angle scale (see Fig. 26). Turn the tilt hand wheel clockwise to increase the tilt angle, and counter-clockwise to decrease the tilt angle. Lock the tilt angle by tightening the tilt locking knob.

The saw includes limit stops to prevent the tilt angle of the blade from being adjusted past the  $0^\circ$  and  $45^\circ$  setpoints. These limit stops are pre-set at the factory and should not need adjustment. If you decide to adjust the blade tilt limit stops, see page 58 for instructions.

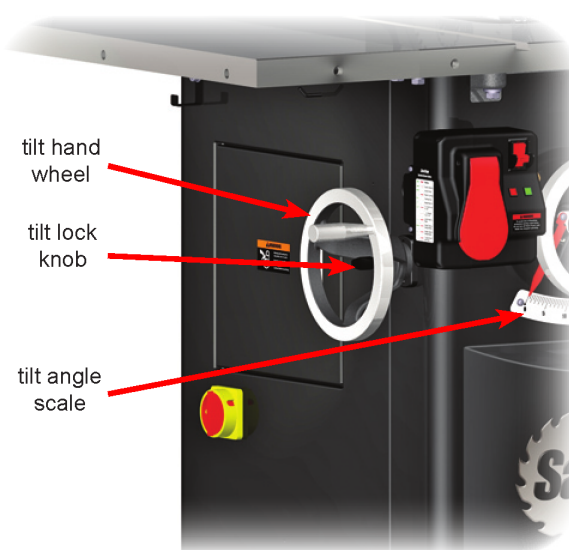


Fig. 26

# Using Your Saw

## 3. Turning on Main Power and Starting the Motor:

Your SawStop® saw is equipped with an Electrical Disconnect Switch to supply power to the saw, a Main Power Switch to supply power to the SawStop® safety system, and a Start/Stop paddle to turn the motor on and off. Both the Main Power Switch and the Start/Stop paddle are mounted on the Switch Box, which is located just below the front edge of the table and to the left of the elevation hand wheel (see Fig. 27). The Switch Box also includes red and green LEDs that display the current status of the safety system and saw. A label describing the System Status LED displays is positioned on the side of the Switch Box. In addition, the displays are described in more detail below.

**WARNING!** Never start the saw when the blade is in contact with the workpiece or any other object.

After ensuring that the Start/Stop paddle is in the “OFF” position (i.e., pushed in), turn the Main Power Switch to the “ON” position by flipping the toggle upward. This will turn on power to the SawStop® safety system, which will run through a brief initialization routine to test whether the system is operating properly. During this initialization period (approximately 5–10 seconds), the LEDs will blink in different patterns as the safety system steps through various self-check steps. Once the safety system completes the initialization routine, the LEDs will display the “READY” status display (green LED on solid, red LED off). The saw is now ready for use.

If the READY status is not displayed after 15 seconds, the safety system has detected an error that must be corrected before the saw can be used. See page 30 for a key to the LED status codes and an explanation of the error detected for each code.

To start the motor, pull the Start/Stop paddle out. To stop the motor, push the Start/Stop paddle in. The paddle is designed so that it can be pushed in by the operator’s upper leg or knee in an emergency.

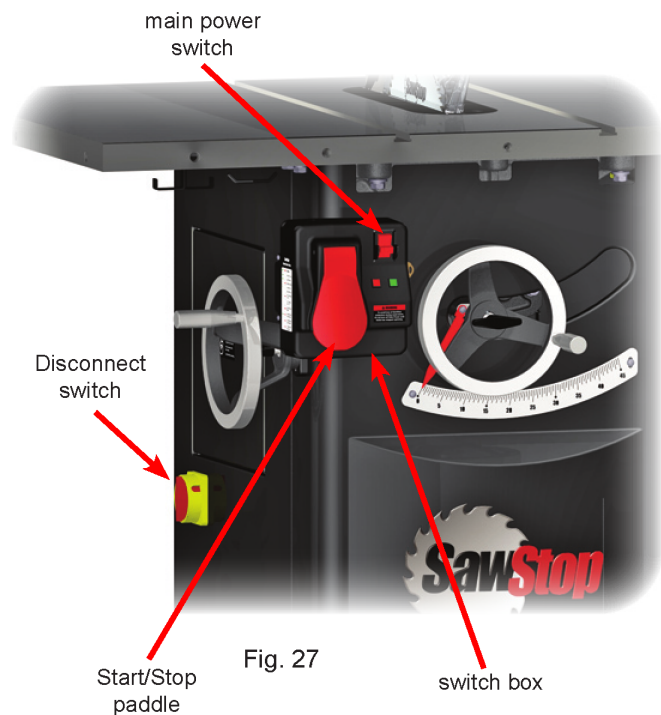


Fig. 27

**WARNING!** Never switch the Disconnect Switch or the Main Power Switch to OFF until the blade has come to a complete stop. In the event of accidental contact with the blade during coast down, the safety system will not activate if the Main Power has been switched OFF and a serious injury could result.

# Using Your Saw

## 4. System Status Codes:

In the event that the safety system detects an error, the LEDs on the Switch Box will display a status code to indicate what error has been detected. Table 1 shows the different status codes which can be displayed. A complete description of each status code and the necessary corrective action is provided below.



















System Status Codes		
Green LED	Red LED	Status
		System Initializing
		System Ready
		Replace the Brake Cartridge
		Blade is Coasting Down
		Bypass Mode is ON
		Switch the Start/Stop Paddle to OFF
		Turn the Cartridge Key to ON
		Close Belt Access Door and Motor Cover
		Adjust Position of the Brake Cartridge
		Contact was Detected During Standby
		Contact was Detected During Bypass
		Overload Due to Wet Wood

Table 1

### Symbol Key:

 Green LED blinks fast

 Red LED blinks fast

 Green LED blinks slowly

 Red LED blinks slowly

 Green LED is on solid

 Red LED is on solid

**WARNING!** Always switch both the Disconnect Switch and the Main Power Switch to OFF before performing adjustments or maintenance to the saw.

# Using Your Saw

## 6. Using the Blade Guard:

Using the blade guard is one of the most important steps you can take to prevent injury when using your saw. Most table saw injuries occur when the blade guard is either not being used or not being used properly. Your SawStop saw is equipped with a narrow profile blade guard that allows you to use the rip fence even when making narrow rip cuts. As a result, there are only a few situations where the blade guard cannot be used (e.g., dado cuts, rabbet cuts, and extremely narrow cuts). For all other situations, use the blade guard as described below.

Install the blade guard as described on page 20. The guard shell is mounted on a pivot arm that allows the guard to automatically adjust to the height of the workpiece (up to 3 1/8 inches high). The pivot arm also allows the guard shell to be pivoted upward to a balance point where the guard will stay without further support. This allows you to adjust or change the blade without removing the guard.

To use the guard, set the blade elevation and tilt angle to the desired settings. If necessary, swing the pivot arm down to ensure the guard is resting on the table or insert. Cut the workpiece as described beginning on page 37. The guard will “float” on the top of the workpiece as it passes under the guard. The guard shell is constructed of clear polycarbonate to allow you to clearly see the blade and the workpiece as it passes under the guard. After making the cut, the cut-off portion of the workpiece may be held beneath one of the anti-kickback pawls. In this case, turn off the motor and wait until the blade completes coast-down before pushing the cut-off portion past the anti-kickback pawl.

Keep the guard shells clean and free of dust to allow unobstructed viewing of the blade and workpiece. For successful operation, the spreader must remain flat, and the guard shells, pivot arm and anti-kickback pawls must pivot freely. If any portion of the guard ceases to function properly, replace or repair it before continuing to use the saw. When not in use, the blade guard can be stored on the guard / riving knife storage pin on the left side of the cabinet (see Fig. 3 on page 14).

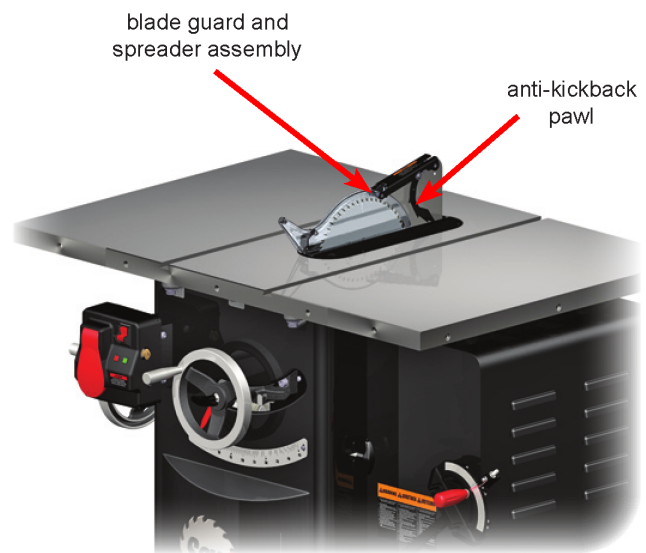


Fig. 30

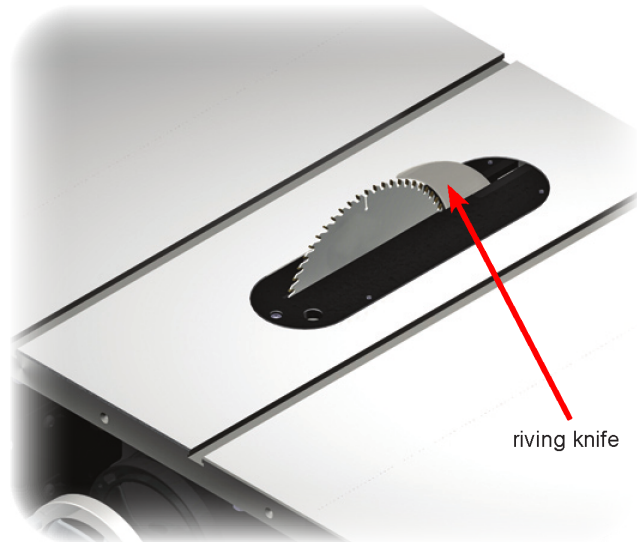
**WARNING!** Use the blade guard and spreader for every operation for which it can be used, including all through-sawing.

# Using Your Saw

## 7. Using the Riving Knife:

The riving knife should be used whenever the blade guard cannot be used. The only operation where neither the guard nor the riving knife can be used is making dado cuts. To use the riving knife, remove the blade guard and install the riving knife as described on page 20. When the blade guard / riving knife clamping bracket is properly aligned, the riving knife will be positioned below the top of the blade and inside the kerf of the blade. As a result, the riving knife can be used even for rabbet cuts and other non-through cuts.

For successful operation, the riving knife must remain flat so that the full height of the riving knife is positioned inside the kerf of the blade. In the event the riving knife becomes bent, replace it or have it straightened before continuing to use it. When not in use, the riving knife can be stored on the guard / riving knife storage pin on the left side of the cabinet (see Fig. 3 on page 14).



riving knife

Fig. 31

**WARNING!** Use the riving knife for every operation where the blade guard cannot be used. Neither the blade guard nor the riving knife can be used when making dado cuts.

## 8. Using the Miter Gauge:

The miter gauge included with your saw allows you to easily make miter cuts and perform cross-cuts (cuts across the grain of the wood). When not in use, the miter gauge can be stored in the brackets formed on the front of the motor cover (see Fig. 32).

The main bar of the miter gauge fits in the slots in the table which are located on either side of the blade. The miter gauge can be used in either slot; however, do not use the miter gauge in the slot on the left of the blade when making bevel cuts. Positioning the miter gauge in the left slot when making bevel cuts causes the blade to be tilted toward the miter gauge and the operator's hand which could result in a serious injury.



miter gauge in storage location

Fig. 32



# Using Your Saw

## 10. Rip Cutting:

Rip cutting or cutting with the grain of the workpiece must be performed with a rip fence to support and guide the workpiece. The miter gauge should not be used when making rip cuts. The blade guard should be used for all through cuts.

To begin, make sure the motor is off and the blade is completely stopped. Tilt the blade to the desired tilt angle and adjust the blade elevation to about  $\frac{1}{8}$  inch above the workpiece. Position the rip fence for the desired rip width and lock the fence in place. Refer to the owner's manual that accompanied your rip fence for instructions on using your fence.

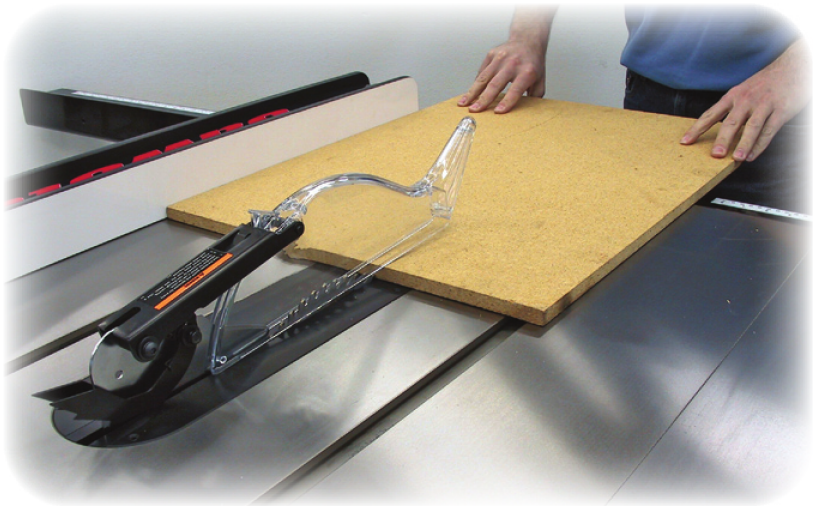


Fig. 36

**WARNING!** A rip fence must always be used when making rip cuts. Never perform a ripping operation freehand or a serious injury may result.

Position the workpiece flat on the table and flush against the side of the rip fence. Turn on the motor. Use both hands to push the workpiece smoothly toward the blade, as shown in Figs. 36 and 37. It is important to always maintain at least 6 inches between your hands and the blade. If your hand farthest from the fence comes within 6 inches of the blade, remove that hand from the workpiece and continue the cut using the other hand or with both hands near the fence. If your hand closest to the fence also comes within 6 inches of the blade, remove that hand and use a push stick to finish the cut. (See page 75 for instructions on making a push stick.)

If your cut requires the fence to be positioned too close to the blade to use a push stick, use an auxiliary fence and push block to make the cut. (See pages 77 and 76 for instructions on making an auxiliary fence and push block.) In this case, clamp the auxiliary fence to the rip fence and slide the workpiece along the auxiliary fence. When your hand comes within 6 inches of the blade, remove your hand from the workpiece and finish the cut using the push block.

**WARNING!** To reduce the chance of a serious injury, always use a push stick or push block when your hand comes within 6 inches of the blade.

## Using Your Saw

Continue pushing the workpiece toward the back of the saw until it clears the anti-kickback pawls on the spreader. Turn off the motor. Do not attempt to remove the cut-off portion until the blade has come to a complete stop.

When ripping pieces longer than approximately 4 feet, use rollers, an out-feed table or a similar support to prevent the workpiece from dropping off the back of the table.



Fig. 37

When making non-through cuts, the blade guard and spreader must be removed. For these cuts, install the riving knife (except when making dado cuts) and use one or more featherboards to hold down the workpiece and help prevent kickback. (See page 78 for instructions on making a featherboard.) The featherboard should be clamped to the rip fence. Alternatively, the featherboard can be clamped to an extender board that is clamped or screwed to the rip fence as shown in Fig. 38. Although not shown in the illustration, a second featherboard can be clamped to the top of the table and against the left side of the workpiece to hold the workpiece against the rip fence.



Fig. 38