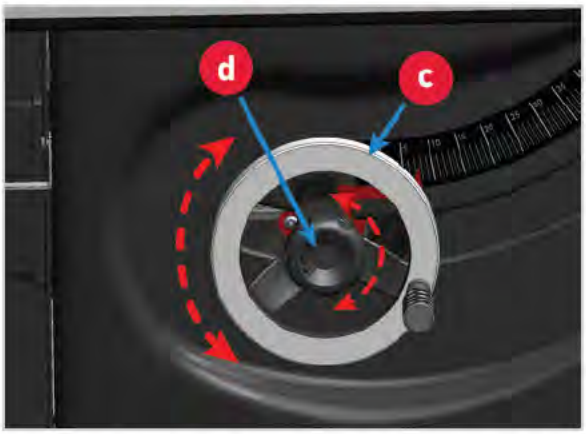
ADJUST THE BLADE HEIGHT

To maximize safety, the height of the saw blade above the table should be as low as possible while still allowing a complete and precise cut. 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 1/8 (3mm) to 1/2" (12mm) above the workpiece.

The blade can be adjusted from 1/8" (3mm) below the table top to 3 1/8" (79mm) above the table top. To adjust the height of the blade, follow these steps:

1. Locate the handwheel on the front of the saw (c).



2. Loosen the elevation lock knob (d) located in the center of the handwheel.
3. Turn the Elevation Handwheel until the blade is at the desired height. Clockwise to raise the blade height and counter-clockwise to lower the blade height.
4. Tighten the elevation lock knob when the desired height is reached. Do NOT overtighten.

The saw includes limit stops to prevent the height of the blade from being adjusted past the maximum and minimum set points. The upper limit stop is adjustable and pre-set at the factory. It should not need further adjustment, but if you decide to adjust the upper blade elevation limit stop, see page 55 for instructions.

IMPORTANT:

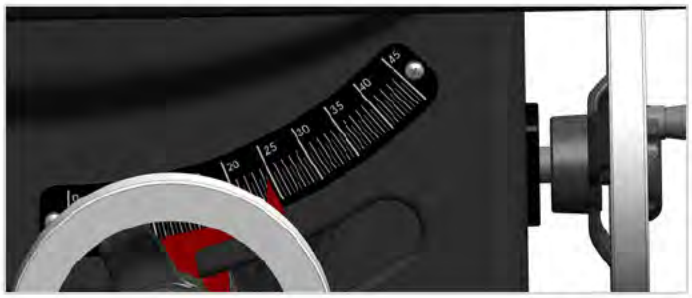
When adjusting the height or tilt angle of the blade, reverse the handwheel slightly to release tension after reaching the limit stops. This prevents any slight twisting of the cast iron assembly that might affect blade alignment.

ADJUST THE BLADE TILT ANGLE

The tilt (bevel) angle of the blade can be adjusted between 0° and 45°. Follow these steps to adjust the tilt angle of the blade.

1. Locate the handwheel on the right side of the saw.
2. Loosen the lock knob at the center of the handwheel.
3. Turn the Tilt Handwheel until the blade is at the desired angle. Rotate the handwheel clockwise to increase the tilt angle or counter-clockwise to decrease the tilt angle.
4. Tighten the tilt lock knob when the desired angle is reached. Do NOT overtighten.

The tilt-angle of the blade is indicated by the position of the red tilt angle indicator on the tilt-angle scale.



To learn how to calibrate the bevel indicator, see page 48.

The saw includes limit stops to prevent the tilt angle from being adjusted past the 0° and 45° set points. 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 56 for instructions.

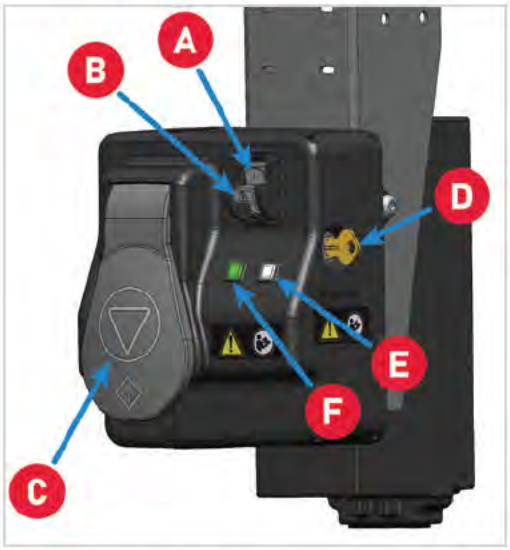
TURNING ON MAIN POWER AND STARTING THE MOTOR

Your SawStop saw is equipped with 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. Learn and understand the power controls and procedure that follows.

WARNING:

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

POWER CONTROLS



A. **Main Power Switch:** Activates power for the saw (but does not spin the blade).

B. **Lock Out Key:** Remove to disable the saw (see page 41).

C. **Start/Stop Paddle:** Pull out to turn on the motor and spin the blade. Push in to turn off the motor.

D. **Bypass Key:** Turn key to run the saw in Bypass Mode. Remove key to lock out Bypass Mode (see page 41).

E. **WHITE Status Light:** (see page 39).

F. **GREEN Status Light:** (see page 39).

START THE SAW - NORMAL MODE

Start your saw in Normal Mode to cut NON-CONDUCTIVE materials such as:

- Dry wood
- Dry plywood or OSB
- Dry pressure-treated wood
- MDF
- Plastic
- Solid surface
- Laminate
- Cardboard
- Foam

WARNING:
Cutting conductive material in Normal Mode will cause the safety system to activate.

WARNING:
Always wear hearing and eye protection when using saw!

Procedure

1. To start your saw, make sure the Start/Stop paddle (C) is in the off (pushed in) position, then turn the main power switch (A) to the on position by flipping the toggle upward.

   This will turn on power to the SawStop safety system. A brief initialization routine will be performed to test whether the system is operating properly. During this initialization period (approximately 5–10 seconds), green and white lights on the Switch Box (E, F) may blink in different patterns as the safety system runs through various self-check steps.

2. Once the safety system completes the initialization routine, the LEDs (E, F) will display the "READY" status display (green LED on solid, white LED off). The saw is now ready for use.

3. To start the motor, pull the Start/Stop paddle (C) out.

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

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 **USING YOUR SAW** on page 39 for a key to the LED status codes and an explanation of the error detected for each code.

STOP THE SAW - NORMAL MODE

It is not necessary to turn off the main power switch (A) after pushing in the Start/Stop paddle (C) to turn off the motor. If you plan to make several cuts with the saw, you can leave the main power switch (A) in the on (upward) position between cuts to eliminate the delay due to the initialization routine.

1. To stop the motor, push the Start/Stop (C) paddle in.

The paddle is designed so that it can be pushed in by the operator's upper leg or knee in an emergency.

Green status light flashes fast while blade spins down.

> **WARNING:**
> Do not touch the blade while it is coasting down. Your touch will cause the safety system to activate.

2. Once you have finished using the saw, turn the main power switch (A) to off (flip the toggle downward) to reduce the likelihood of inadvertent start-up.

USING THE MITER GAUGE

The miter gauge included with your saw allows you to make miter cuts and cross-cuts (cuts across the grain of the wood). When not in use, the miter gauge can be stored by inserting it into the miter gauge slot in the accessory tool holder mounted to the side of the saw.

The main bar of the miter gauge fits in the T-shaped slots in the saw table. There is one slot on each side of the blade and 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.

> **WARNING:**
> Understand the difference between rip cuts and cross cuts and how to safely perform them before cutting. Complete details for safe and proper execution of these and several other cut types are provided in the **Safety and General Use Instructions for Table Saws** manual included with your saw. Reference those instructions before proceeding.

The face of the miter gauge (A) can be adjusted between -60° and +60° relative to the blade. To adjust the miter angle, turn the handle (B) counter-clockwise approximately 1/2 turn to unlock the miter gauge head (C). Pull the indexing pin (D) out until it stops, and then rotate the head (C) until the indicator is positioned over the desired angle on the miter gauge scale. Use an angle gauge to set the angle between the miter gauge head and the blade if precise alignment is needed. Once the angle is correct, turn the handle (B) clockwise to lock the miter gauge head.

Adjustable index stops at -45°, 0°, and +45° are provided to allow quick and precise alignment at those angles. To use the index stops, rotate the miter gauge head (C) until the angle indicator reads approximately 5° higher (more positive) than the desired angle, and then push the indexing pin (D) forward until it stops. Next, rotate the miter gauge head counter-clockwise until the index stop hits the indexing pin. Lastly, tighten the handle (B) to lock the gauge at the desired angle.

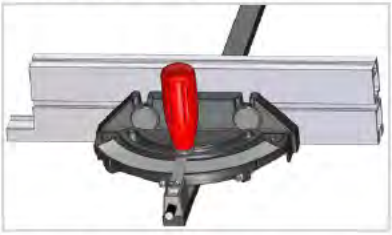
The index stops are preset at the factory so further adjustment should not be necessary. If you wish to adjust the index stops, see **Calibrating 0° and 45° Index Stops** on page 64 for instructions.

WARNING:
Use the miter gauge for cross-cutting operations. To reduce the potential for kickback and serious injury, move the fence out of contact with the workpiece when cross-cutting to prevent the workpiece from binding between the fence and the blade.

Also see **ADJUSTING THE MITER GAUGE** on page 64.

Crosscut Fence

A crosscut fence is included with your miter gauge. The fence consists of an aluminum extrusion that attaches to the face of the included miter gauge.



When attached, the fence offers additional support for a larger workpiece when passing it through the saw. For instructions, **ASSEMBLE THE MITER GAUGE** on page 33.

WARNING:
Use the miter gauge for cross-cutting operations. To reduce the potential for kickback and serious injury, move the fence out of contact with the workpiece when cross-cutting to prevent the workpiece from binding between the fence and the blade.

USING THE FENCE

WARNING:
Understand the difference between rip cuts and cross cuts and how to safely perform them before cutting. Complete details for safe and proper execution of these and several other cut types are provided in the **Safety and General Use Instructions for Table Saws** manual included with your saw. Reference those instructions before proceeding.

Also see **ADJUSTING THE FENCE** on page 63.

The SawStop T-Glide Advance Fence System is a is constructed of a heavy-duty steel body for maximum rigidity. Rollers under the main body ensures smooth, effortless repositioning when moving the fence to the desired rip width. It also features a sliding, moveable face consisting of a versatle aluminum extrusion. The face can be positioned (no tools required) fore and aft in relation to the main body in order to optimize the setup and safety for a variety of cut types. The extrusion can also be attached to the main fence body laying in a low fence orientation to ensure safe cuts for narrow pieces. The fence is reversible such that the moveable face can be placed on the left or

right side of the main body to accommodate use of fence at the left or right side of the blade. This fence system is available in either a 36" (900mm) or 52" (1320mm) version.

Be sure to also read and thoroughly understand the Owner's Manual included with your fence system.

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

START THE SAW - BYPASS MODE

If you need to cut electrically conductive materials with this saw, you must operate the saw in Bypass Mode to prevent the brake from activating. In order to operate the saw in Bypass Mode, the safety system requires you to follow the procedure described below to ensure that the saw is never placed in Bypass Mode accidentally. If you are unsure whether a particular material is conductive, see **How to Test Material Conductivity** on the next page.

NOTE:
The saw will not start in Bypass Mode unless the Brake Cartridge is properly installed and all error codes are cleared. It is not possible to "override" an error by starting the saw in Bypass Mode.

Start your saw in Bypass Mode to cut CONDUCTIVE materials such as:

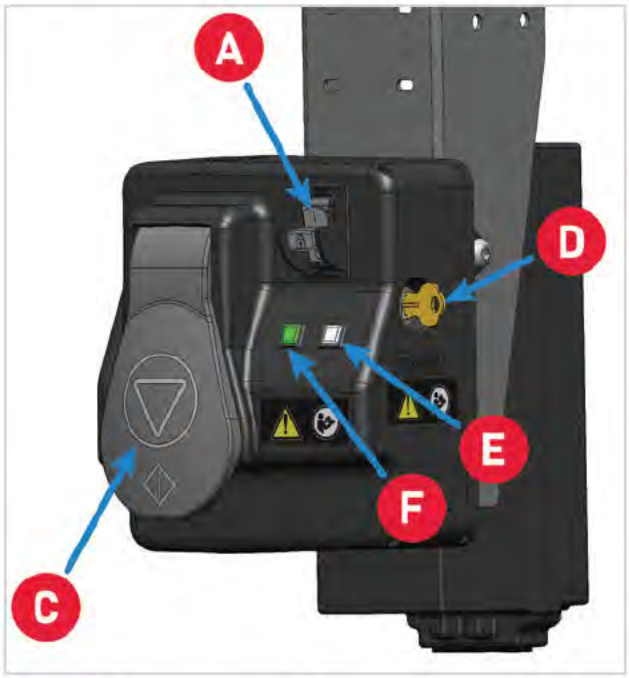
- Green or very wet wood
- Wet pressure-treated wood
- Very wet plywood or OSB
- Aluminum and other metals
- Carbon-filled materials
- Foil
- Mirrors

WARNING:
There is no protection in Bypass Mode! Use Bypass Mode only to cut conductive materials or to test conductivity (see page 46).

NOTE:
You cannot start in Bypass Mode unless the Brake Cartridge is installed and all error codes are cleared.

To Operate The Saw in Bypass Mode:

1. Make sure the Start/Stop paddle (C) is in the off (pushed in) position, then turn the main power switch (A) to the on position by flipping the toggle upward. Wait until the safety system completes the initialization routine and the system status code indicates the saw is ready for operation.



2. Turn the Bypass Key (D) clockwise and hold it for at least 1 second. The green LED (F) will begin blinking slowly and the white LED will flash once to let you know when the 1 second has elapsed.
3. While still holding the Bypass Key (D) turned, pull the Start/ Stop paddle (C) out to the ON position. The blade will start to spin.
4. Continue to hold the Bypass Key (D) turned for at least 1 second after the motor starts—the white (E) LED will flash once again to let you know when the 1 second elapses. If you release the Bypass Key before 1 second has elapsed, the motor will stop and the "Push Start/Stop Paddle to OFF" error code will be displayed. If this happens, switch the Start/Stop paddle (C) to OFF and repeat this procedure from the beginning.

The green light (F) flashes while saw is running in Bypass Mode.

NOTE:
You cannot start in Bypass Mode unless the Brake Cartridge is installed and all error codes are cleared.

STOP THE SAW - BYPASS MODE

1. When you have completed your cut, push the Start/Stop paddle (C) in to turn off the motor.

   The paddle is designed so that it can be pushed in by the operator's upper leg or knee in an emergency.

   The green status light (F) flashes fast while blade spins down.

   WARNING:
   The saw is still in Bypass Mode until the blade comes to a complete stop. The saw returns to Normal Mode automatically after the blade stops.

   The next time you start the motor, the safety system will be active unless you repeat the procedure described above to start the motor in Bypass Mode.

2. Once you have finished using the saw, turn the main power switch (A) to off (flip the toggle downward) to reduce the likelihood of inadvertent start-up.

MORE ABOUT BYPASS MODE

How to Test Material Conductivity

Use Bypass Mode to see if material is conductive and would cause the brake to activate. Start the saw in Bypass Mode (45), and then carefully make several cuts on a scrap piece of the material.

When testing conductive material, the following status light pattern indicates that the material is conductive and must be cut in Bypass mode to prevent the safety system from activating.

GREEN: Slow blink

WHITE: Fast blink

If this status code is not displayed after several trial runs, then it is likely the material is not conductive and you can make future cuts in Normal Mode.

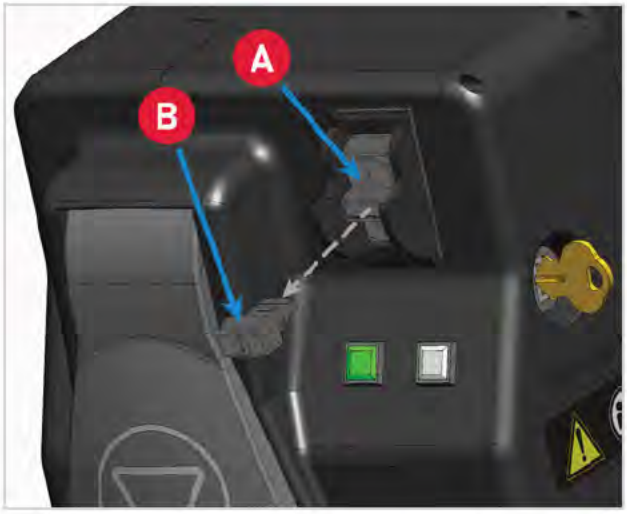
How to Lock Out Bypass Mode

To prevent unauthorized use of the saw in Bypass Mode, remove the Bypass Key (D) from the saw when not in use.

HOW TO DISABLE YOUR SAW

The main power switch has a lockout key (D) that you can remove to prevent children or other non-authorized users from turning the saw on.

1. To remove the key (B), pull it out, away from the switch.



   To replace the key, press it back into the socket until it snaps into place. When the key is removed, the main power switch (A) can be turned OFF, but it cannot be turned ON.

THERMAL OVERLOAD PROTECTION

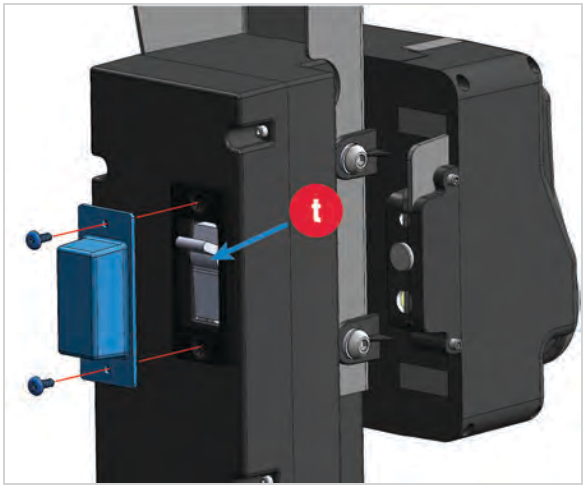
The saw is equipped with a thermal overload relay that protects the motor from overheating due to prolonged overloading. If the thermal overload protection trips, it will shut off the motor automatically.

Resetting the thermal overload relay must be performed by a qualified service technician. Do not attempt to reset the overload relay yourself, as it may require inspection of internal wiring and motor conditions.

OVERCURRENT PROTECTION

Your saw includes an overcurrent protection circuit breaker, which trips in the event of a short circuit or sudden surge in current exceeding the circuit breaker rated value. This helps protect the wiring and internal components of the saw. If the circuit breaker trips, perform the following steps to reset it:

1. Turn the main power switch (A) to the OFF (downward) position and ensure the saw is off..
2. Wait two minutes for safety..
3. Using a #2 Phillips screwdriver, remove the two screws securing the clear lens on the back of the contactor box.



4. Press the reset switch (t) downward. You should hear a soft click when it resets.
5. Reattach the clear lens and screws.

Once reset, double-check the electrical circuit and connections before resuming use. Always use an appropriate feed rate for the material being cut.

USING A MOBILE BASE

The Professional Cabinet Saw is a stationary saw. In some situations it is important to be able to relocate your stationary saw from one position to another in your workshop. For example, you may want to store any stationary saw against a wall in your workshop, then move the saw away from the wall to use it. An optional mobile base accessory allows you to reposition your stationary saw with ease. It attaches to the cabinet and lifts the saw onto the wheels when you step on a lever. When the wheels are down, you can roll the saw from one location to another. Stepping on a release will then raise the wheels and lower the saw back onto its feet. SawStop offers two mobile base accessories that are compatible with your Professional Cabinet Saw.

Integrated Mobile Base

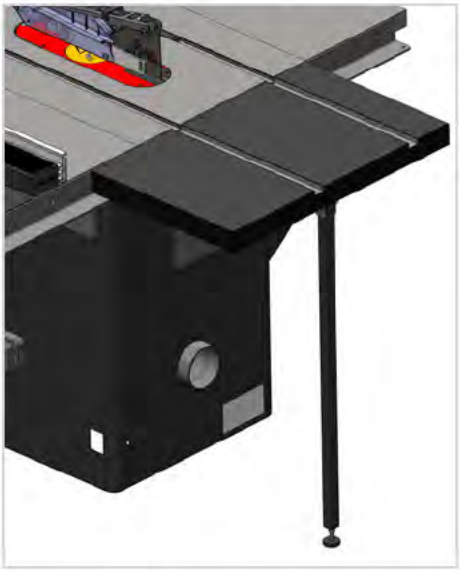
Designed to smoothly move your saw on any flat surface with the easy step of the lift pedal. The mechanism lifts with one-foot simplicity, and two polyurethane fixed-direction wheels and two 360° casters ensure easy movement. Powder-coated steel ensures durability, and allows the base to support the saw without the need for any extension pieces.

Industrial Mobile Base

The SawStop Industrial Mobile Base comes with four, 360° casters to provide more flexible mobility. A foot operated hydraulic jack and quick release lever allow for the saw to be easily raised off the floor and lowered again.

USING AN OUTFEED TABLE

You should use an out-feed table to support your work when cutting pieces longer than approximately 4' (122cm). The out-feed table attaches flush against the back edge of your saw and prevents your workpiece from dropping off the back of your saw during cutting.



Assembly instructions for the outfeed table included with your saw are found on page 16.

MAKING ADJUSTMENTS TO YOUR SAW

Your SawStop Professional Cabinet Saw has been factory adjusted to rigid specifications to provide the highest quality performance and results. Additional adjustment or alignment should not be necessary. Nevertheless, your SawStop Professional Cabinet Saw has been designed to allow a wide range of adjustments and alignments to achieve the ultimate in precision. Before changing the alignment of any portion of the saw, make sure you read and understand the entire alignment procedure.

WARNING:

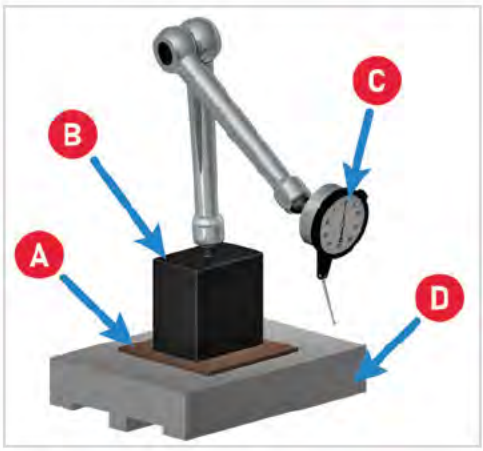
Maintenance shall only be performed on your saw when it is isolated from power. Always turn off the main power switch and unplug the power cord before working on or maintaining your saw.

ALIGNING THE TABLE

For accurate cuts with the miter gauge, the miter slots in the table should be parallel to the blade. This is also important for rip cuts since the rip fence should be aligned to the miter slots. Two procedures for aligning the table are described below. The preferred procedure is described first and provides an accuracy of about ±0.002" (0.005mm). An alternative procedure is also described which provides an accuracy of about ±0.010" (0.254mm).

Preferred Table Alignment Procedure

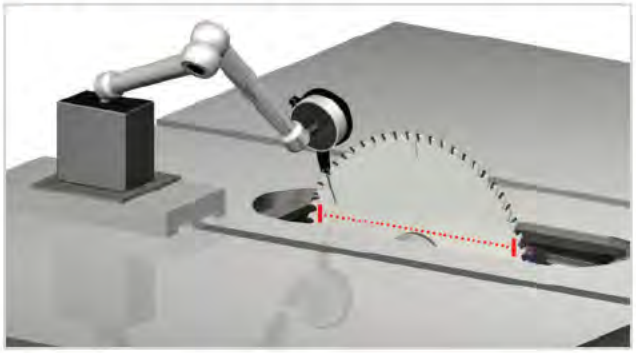
To align the table precisely, you will need a dial test indicator with a resolution and accuracy of at least 0.0005 inches, and a mount for the indicator that will slide smoothly in the miter slots. The mount should slide on the table on either smooth plastic glide plates or on ball bearing rollers. The mount should also include a lower rail or similar structure that fits relatively tightly in the miter slot, but not so tight as to prevent the mount from sliding. A sample mount is shown below.



A. Steel plate
B. Magnetic base
C. Dial test indicator
D. Plastic mount

Determine If Adjustment is Needed:

1. Remove the table insert (see page 29), and install a clean, high-quality blade or precision blank onto the arbor as described (see page 69). The blade should be flat and parallel to within 0.001 inch or less, and should not be coated with paint or similar materials that may affect the measurement. Attempting to align the table using a blade that is not very flat will cause inaccuracy in the alignment.
2. Set the tilt angle to 0°. When setting the tilt angle and blade elevation, be sure to back the handwheels off slightly after reaching the limit stops. As with all table saws, pulling the handwheels tight against the limit stops can cause a slight twisting of the trunnion assembly and lead to inaccurate alignment measurements.
3. Raise the blade elevation to about 3" (76mm) above the table. Position the dial test indicator so that the measurement arm rests against the right side of the blade and about 1/4" (6mm) above the center of the arbor flange. Slide the mount forward until the measurement arm is about 1/2" (12mm) inside the front edge of the blade.



4. Set the dial indicator to zero. Slide the dial test indicator mount smoothly toward the back of the saw until the measurement arm is about 1/2" (12mm) inside the rear edge of the blade. Note the reading of the dial indicator as the mount moves across the blade.

   If the dial indicator moves positive and then negative (or vice versa) a substantial amount, or if there is a sudden change in the reading rather than a gradual change, this indicates a non-flat area of the blade. If this happens, try rotating the blade 1/4 turn and retesting. Repeat this process until you get a reading that is not significantly affected by blade flatness. If you cannot get a good reading, try a different blade.

   If there is a gradual and continuous change in the dial reading of over 0.002" (0.005mm) in either the positive or negative direction, rotate the blade 1/2 turn. Slide the dial indicator mount back toward the front of the blade and reset the indicator to zero. Now slide the mount toward the back of the saw again while noting the dial reading. If there is similar change but in the opposite direction, this indicates that the left and right surfaces of the blade are not parallel. Rotate the blade 1/4 turn and repeat the process from the beginning. If you cannot get consistent readings, try a different blade.

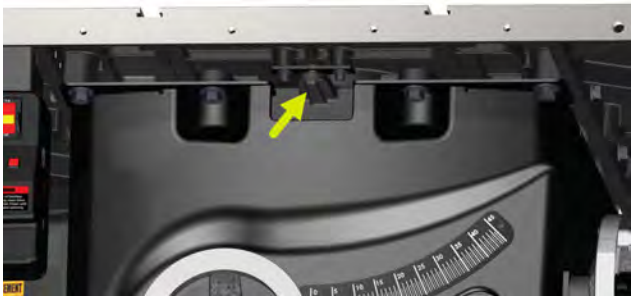
   If the dial indicator reads a relatively consistent difference between the front and rear of the blade, take the average of the readings. A measurement of 0.002" (0.005mm) or less indicates that the table is aligned within the margin of error for this measurement and no further alignment is necessary. For measurements larger than 0.002" (0.005mm), you can adjust the position of the table to improve the parallelism between the blade and the miter slot.

Adjusting The Table

1. To adjust the alignment of the table, begin by loosening the four mounting bolts that attach the table to the cabinet by using a 17mm wrench, socket, or adjustable wrench.

> **NOTE:**
> The bolts that attach the table to the front of the cabinet are shown below. The bolts that attach the table to the back of the cabinet (not shown) can be accessed by opening the motor cover and side access panel. Tilt the blade to approximately 30° to access the left, rear bolt.

2. After loosening the front and rear bolts described above, slide the dial indicator to the front of the blade and set the readout to zero. Slide the dial indicator mount to the rear of the blade. The dial indicator should now be reading close to the average measurement you made previously. Note the direction of the dial indicator reading, whether it is positive or negative.
3. The table alignment is set by a pivot pin pressed into the boss indicated below at the front of the table.



4. Use the included 5mm hex wrench to adjust the positioning screws. The right positioning screw is shown below. There is also a left positioning screw (not pictured).

If the measurement is positive, loosen the left positioning screw and tighten the right positioning screw. If the measurement is negative, loosen the right positioning screw and tighten the left positioning screw. Make sure that before tightening one screw you loosen the opposite screw.

5. You should see the readout on the dial indicator change as you adjust the positioning screws. Adjust the screws until the readout is the same, but in the reverse direction. For example, if the initial reading was +0.006" (0.152mm), adjust the positioning screw until the reading is -0.006" (0.152mm).
6. Now slide the dial indicator mount back to the front of the blade and re-zero the readout. Slide the indicator mount smoothly toward the back of the saw until the indicator measurement arm is about 1/2 inch inside the rear edge of the blade. The new measurement should be much closer to 0.000".
7. If the new measurement is still too high, repeat the above process until the parallelism between the blade and the miter slot is satisfactory. Now, tighten the positioning screw that you loosened until it stops. Do not apply a lot of torque to this screw since that could push the table back out of alignment.
8. If you are going to make adjustments in the blade tilt alignment go on to the section **ALIGNING THE BLADE TO THE TILT AXIS** on the facing page. Otherwise, tighten the four table mounting bolts to secure the table to the cabinet. For best results, tighten each bolt a little at a time in a “star pattern” until all are tight. Watch the dial indicator while tightening, and if one bolt causes a significant change, tighten the other bolts first.

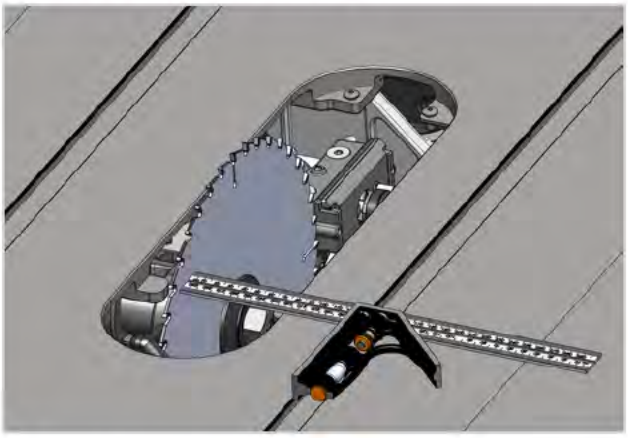
Alternate Table Alignment Procedure

For this procedure you will need a set of calipers or a combination square.

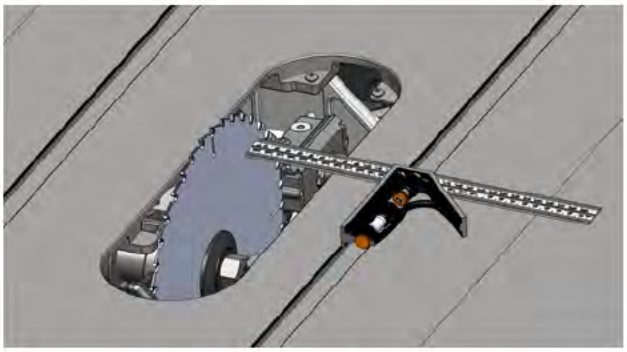
1. Remove the table insert and install a blade or reference plate as described in the **Preferred Table Alignment Procedure** on page 48. Set the tilt angle to 0° and raise the blade elevation to approximately 3" (76mm) above the table.
2. Select a point on the edge of the blade that is between two consecutive teeth and place a mark near that point.
3. Rotate the blade until that mark is just above the table and toward the front of the saw.

4. If you are using calipers, measure the distance between the left edge of the right-hand miter slot and the left side of the blade. (Make sure to measure the flat plate of the blade rather than the tooth.)

   If you are using a combination square, set the end of the ruler flat against the right side of the blade, and position the base to be flush against the left side of the right-hand miter slot.



5. Write the measurement down.
6. Rotate the blade until the point you marked is just above the table but toward the back of the saw. Repeat the measurements above.

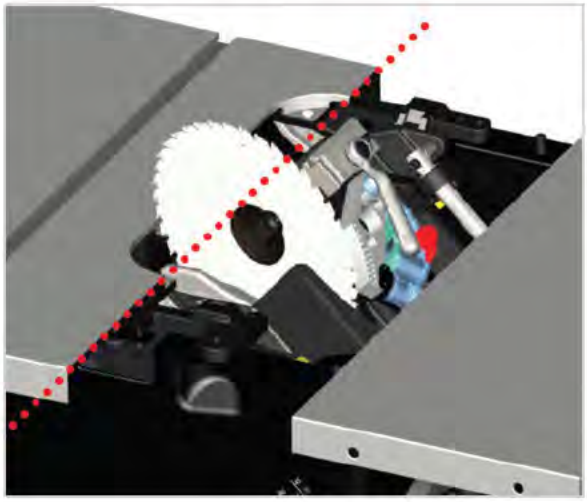


7. If necessary, loosen the table mounting bolts and adjust the position of the table as described in the **Preferred Table Alignment Procedure** on page 48.
8. Repeat the above measurements and table alignment until you are satisfied with the parallelism between the blade and the miter slot.
9. Tighten the table mounting bolts.

ALIGNING THE BLADE TO THE TILT AXIS

When making bevel cuts, the blade is tilted on an axis that runs along the surface of the table between the front and rear trunnion brackets. If the blade is not parallel to this axis, the blade will move out of parallel with the miter slots when it is tilted away from 0° (this assumes the table has been aligned to be parallel to the blade at 0° tilt angle). SawStop cabinet saws are the only major cabinet saws that allow you to fine tune the parallelism of the blade to the tilt axis.

WARNING:
Maintenance shall only be performed on your saw when it is isolated from power. Always turn off the main power switch and unplug the power cord before working on or maintaining your saw.



NOTE:
This alignment procedure is not intuitive. Make sure you read this entire procedure before beginning and follow each step precisely. Any deviation from this procedure may create a substantial misalignment in your saw.

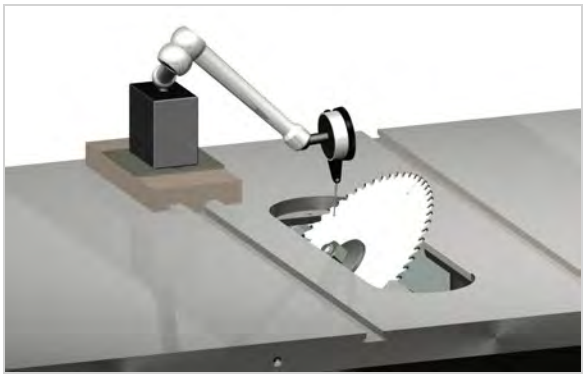
The geometry involved in this alignment procedure is tricky. That is because there is no way to easily measure the parallelism between the blade and the tilt axis. Instead, you must measure the alignment between the blade and the table at both 0° tilt and 45° tilt. The difference in those measurements is proportional to the misalignment between the blade and the tilt axis. To ensure accurate alignment, follow the procedure described below exactly.

To align the blade to the tilt axis, you will need a dial test indicator with a resolution and accuracy of at least 0.0005 inches, and a mount for the indicator that will slide smoothly in the miter slots. Another example use for this

sort of gauge can be seen in the instructions for **ALIGNING THE TABLE** on page 48. The blade should be flat and parallel within 0.001" (0.0254mm) or less, and should not be coated with paint or similar materials that may affect the measurement. Attempting to align the blade to the tilt axis using a blade that is not very flat will cause inaccuracy in the alignment.

Determine If Adjustment is Needed:

1. First, align the table as described on page 48, using the precision alignment procedure. Make sure the blade is as close to parallel to the miter slot as possible.
2. Move the dial indicator measurement arm so that it is not touching the blade and tilt the blade to approximately 45°. Make sure not to tighten the Tilt Handwheel against the 45° limit stop. Now reposition the dial indicator measurement arm against the right side of the blade and about 1/4 inch directly above the arbor flange. Slide the dial indicator mount toward the front of the saw until the measurement arm is about 1/2" (12mm) inside the front edge of the blade as shown. Set the dial indicator readout to zero.

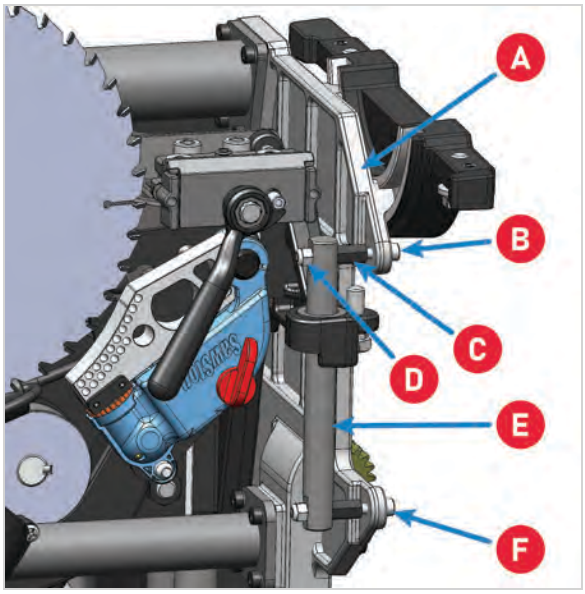


3. Slide the dial test indicator mount smoothly toward the back of the saw until the measurement arm is about 1/2" (12mm) inside the rear edge of the blade. Note the reading of the dial indicator as the mount moves across the blade. Write down the final number, including whether it is positive or negative. This number is proportional to the misalignment between the blade and the tilt axis.

   If the measurement is 0.002" (0.05mm) or less, then the blade is parallel to the tilt axis within the margin of error for this procedure and no further alignment is necessary. For measurements larger than 0.002" (0.05mm), you can adjust the angle of the blade to improve the parallelism between the blade and the tilt axis by following the steps below.

Adjust the Blade Angle:

1. Move the dial test indicator away from the blade, set the tilt angle back to 0° and reposition the dial test indicator at the front of the blade
2. When you slide the dial indicator mount across the blade, you should see little or no change in the indicator readout since the table was previously aligned. Slide the dial indicator toward the front of the saw until the measurement arm is about 1/2" (12mm) inside the rear edge of the blade.
3. Set the readout to zero.
4. The angle of the blade relative to the tilt axis is controlled by two bolts (B and F) that bolt the secondary elevation shaft (E) to the rear trunnion (A).



To align the blade to the tilt axis, you need to adjust the position of the nut (D) and standoff (C) on the top bolt (B) of the secondary elevation shaft (E) until the misalignment between the blade and the miter slot as measured by sliding the dial indicator across the blade from front to back at a 0° tilt angle is 2.4 times the measurement taken at a 45° tilt angle, but in the opposite direction.

> For example:
> If the measurement taken at 45° was +0.006" (0.152mm), then the misalignment at 0°

should be adjusted to (-2.4) x (0.006) = -0.014" (.355mm).

5. Use a 10mm wrench to turn both the small nut and the standoff on the top bolt of the secondary elevation shaft.
6. Only make small turns (about one-third of a turn at a time). To create a positive misalignment, first loosen the nut and then turn the standoff counter-clockwise the same amount so that it moves towards the nut. To make a negative misalignment, first turn the standoff clockwise and then turn the nut clockwise the same amount so that it moves towards the standoff. You will see the dial indicator reading go positive as you create a final negative misalignment and negative as you create a final positive misalignment.
7. Keeping the dial test indicator positioned toward the front of the saw with the measurement arm about 1/2" (12mm) inside the front edge of the blade, set the dial readout to zero. Slide the dial indicator mount toward the back of the saw until the measurement arm is about 1/2" (12mm) inside the rear edge of the blade. Note the readout.
8. If the readout is -2.4 times the measurement you took at 45°, the bolt should be correctly adjusted. Otherwise, repeat the above process of adjusting the top bolt on the secondary elevation shaft until the dial indicator at 0° tilt angle reads -2.4 times the measurement taken at 45° as the dial indicator is moved across the blade from the front to the back.
9. Once the bolt is adjusted correctly, the blade should now be parallel to the tilt axis. Make sure the small nut at the end of the bolt is tight. Since the alignment of the blade has been changed, the table must now be realigned. Align the table as describedon page 48, using the precision alignment procedure.
10. Once the table has been realigned, you can check the parallelism of the blade to the tilt axis by tilting the blade to 45° and measuring the alignment between the blade and the miter slot. If the misalignment of the blade and the miter slot is less than 0.002" (0.05mm) at both 0° and 45°, then the blade is parallel to the tilt axis. If necessary, you can fine tune the alignment by repeating the above procedure.

ALIGNING THE BLADE ELEVATION ASSEMBLY

The following blade elevation alignment procedure assumes the blade has already been aligned with the tilt axis. If the blade has not been aligned with the tilt axis, first follow the procedure in the section **ALIGNING THE BLADE TO THE TILT AXIS** on page 51, and then continue with aligning the blade elevation assembly.

The blade elevation assembly controls the motion of the blade as it is raised and lowered. Aligning the blade elevation assembly ensures that there is minimal lateral movement of the blade as it is raised and lowered. Although all table saws suffer from some lateral blade movement due to tolerance stack-ups in machining.

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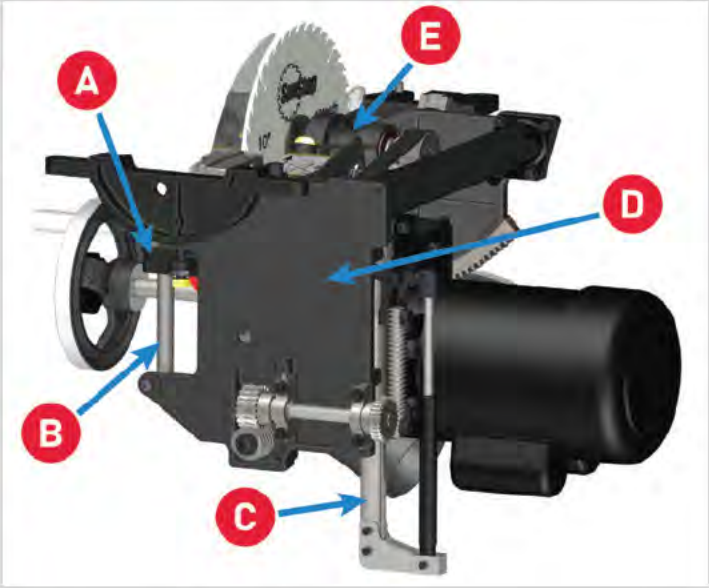
The SawStop Professional Cabinet Saw uses a vertical slide elevation design for ultra smooth operation and rigidity. The blade and arbor block are mounted on a large cast iron base called the elevation plate.



A. Elevation plate
B. Secondary elevation shaft
C. Primary elevation shaft

D. Rear trunnion
E. Arbor block

The elevation plate (A) slides up and down on two shafts that are attached to the rear trunnion (D). This blade elevation assembly is aligned by adjusting the orientation of the secondary elevation shaft (B) so that it is parallel to the primary elevation shaft (C). If the shafts are not parallel the blade will rotate about a vertical axis as the blade is raised and lowered. When the blade elevation assembly is aligned, the blade will remain parallel to the miter slots with minimum lateral movement as it is raised and lowered.

Determine If Adjustment is Needed:

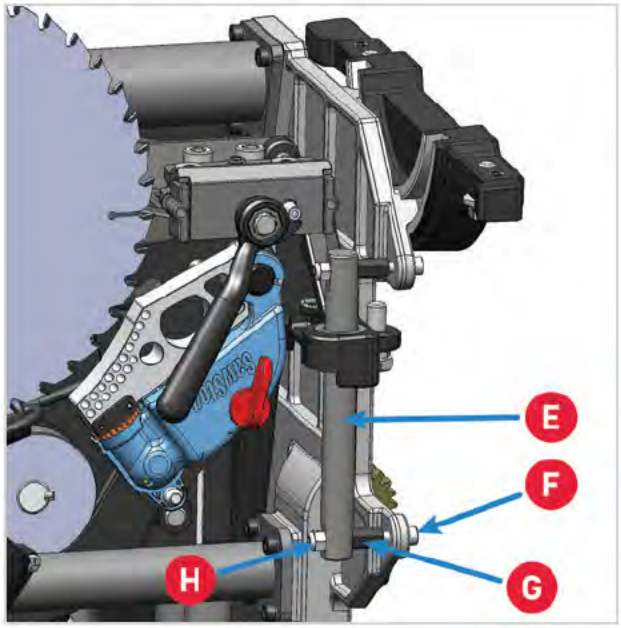
1. Verify that the table is aligned. With the blade fully elevated and at a 0° tilt angle, measure the parallelism of the blade relative to the miter slots in the table as described in the section named **ALIGNING THE TABLE** on page 48.
2. With the blade at a tilt angle of 0°, lower the blade below the table. Make sure to back the handwheels off slightly to release the pressure between the trunnion assembly and limit stops. Next, position the dial test indicator near the right side of the blade. The indicator measurement arm should rest against the blade approximately 1/2" (12mm) inside the front edge of the blade and about 1/2" (12mm) higher than the top of the arbor washer.

Depending on the geometry of your dial test indicator, it may be necessary to position the indicator below the table.

3. Now measure the parallelism of the blade relative to the miter slots in the table as described in the section **ALIGNING THE TABLE** on page 48. Note the readout of the dial indicator including whether it is positive or negative.
4. If the measurement is 0.002" (0.05mm) or less, then the blade elevation assembly is aligned within the margin of error for this measurement and, therefore, no further alignment is needed. If the measurement is greater than 0.002" (0.05mm), you can adjust alignment by following the steps below.

Alignment Procedure:

To align the blade elevation assembly, you will need to adjust the position of the nut (H) and standoff (G) on the bottom bolt (F) of the secondary elevation shaft (E) until the blade is parallel to the miter slot as measured by sliding the dial indicator across the blade.



1. Use a 10mm wrench to turn the nut (H) and standoff (G). Make only small turns (about one-third of a turn at a time). **If your reading above was negative**, first loosen the nut by turning it counter-clockwise and then turn the standoff counter-clockwise the same amount so that it moves towards the nut. **If your reading above was positive**, first turn the standoff clockwise and then turn the nut clockwise the same amount so that it moves towards the standoff. Measure the parallelism of the blade relative to the miter slots and keep adjusting the nut and standoff until the reading on the dial indicator is zero as you slide the dial indicator across the blade.
2. Once the blade is parallel to the miter slots with the blade fully lowered, make sure the small nut (H) at the end of the bolt (F) is tight.

3. Fully raise the blade.
4. Measure the parallelism of the fully raised blade. If the blade is not parallel to the miter slots, you will need to redo the alignment process. Begin by re-aligning the table with the blade fully elevated and at a 0° tilt angle (see page 48). Then continue the alignment process by re-aligning the blade to the tilt axis (see page 51) and then re-aligning the blade elevation assembly (see page 53).

ADJUSTING THE BLADE HEIGHT LIMIT STOPS

The lower elevation limit stop prevents the arbor block or blade from hitting the lower trunnion assembly and dust shroud. The arbor bumper (see page 27) serves as the lower elevation limit and cannot be adjusted.

The Upper Elevation Limit Stop prevents the arbor block and the motor belt from hitting the underside of the table. The upper limit stop is adjustable and pre-set at the factory. It should not need further adjustment but if you decide to adjust the upper blade elevation limit stop, perform the procedure described below.

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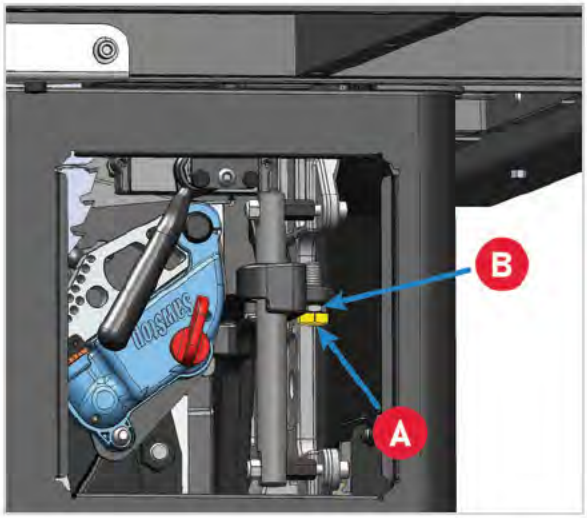
Determine If Adjustment Is Needed

1. To check the position of the Upper Elevation Limit Stop, follow the steps below.
2. Set the blade tilt to 0°.
3. Install a 10" (250mm, 254mm) saw blade on the arbor (see page 69).
4. Turn the Elevation Handwheel clockwise until the limit stop is reached.
5. Using a combination square or similar tool, measure the distance from the top of the table to the tip of the highest tooth on the blade.

6. The maximum height of the blade above the table should be 3 1/8" (79.3mm). If the blade is 33/16" (80.5mm) or higher above the table, the Upper Elevation Limit Stop should be adjusted downward. If the blade is less than 3 1 8" (79.3mm) above the table, you can adjust the limit stop upward to 3 1/8" (79.3mm). Alternatively, you can adjust the limit stop so that the maximum blade height is lower than 3 1/8" (79.3mm).

Adjust The Limit Stop

The Upper Elevation Limit Stop is fixed by the yellow painted bolt (A) located on the elevation plate and can be accessed through the side panel or the rear access panel with the blade lowered.



The Upper Elevation Limit Stop can be adjusted by using a 17mm wrench to turn the bolt (A) and a 14mm wrench to turn the locking nut (B).

Raise the Maximum Blade Elevation:

1. Loosen the locking nut (B) and back it off several turns. Then turn the upper limit bolt (A) counter-clockwise several turns.
2. Adjust the Elevation Handwheel until the blade elevation is set to the correct maximum height. If the Upper Elevation Limit Stop prevents you from raising the blade to the desired maximum elevation, continue to turn the bolt (A) counter-clockwise until the blade can be raised to the correct elevation. Make sure that neither the arbor block nor the belt comes in contact with the underside of the table or damage can result.
3. Once the blade is set to the correct maximum elevation, turn the upper limit bolt clockwise until it is tight.
4. Next, turn the locking nut (B) clockwise until it is tight. The upper elevation limit has now been set.

Lower the Maximum Blade Elevation

1. Adjust the Elevation Handwheel until the blade elevation is set to the correct maximum height. Loosen the locking nut (B) and back it off several turns.
2. Turn the bolt (A) clockwise until it is tight. If the blade elevation is still set too high, continue loosening the locking nut (B) and turning the bolt (A) clockwise until the blade is set to the correct maximum elevation.
3. Turn the locking nut (B) clockwise until it is tight.

The upper elevation limit has now been set.

ADJUSTING THE TILT LIMIT STOPS AND TILT ANGLE INDICATOR

The tilt limit stops allow you to easily and quickly set the bevel angle to 0° and 45°. However, when making precision cuts, it is always best to check the angle of the blade with a combination square or similar tool.

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0° Tilt Limit Stop

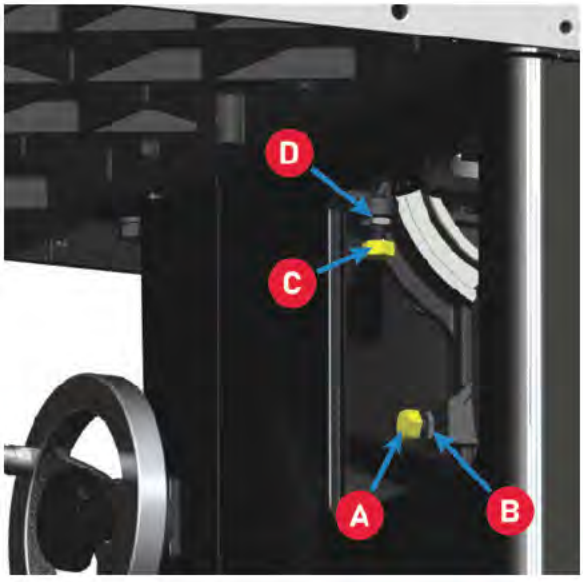
Determine If Adjustment is Needed:

1. To check the position of the 0° limit stop, install a 10" (250mm, 254mm) saw blade on the arbor (see page 69).
2. Raise the blade to its full elevation.
3. Turn the Tilt Handwheel clockwise until the limit stop is reached.
4. Using a square, check to see that the blade is at a 90° angle to the table.

If you need to adjust the position of the 0° limit stop, follow the instructions below.

Adjust the 0° Limit Stop

The 0° tilt limit stop is set by the yellow painted bolt located on the front trunnion (A) and can be accessed through the side panel. You will need a 17mm wrench to turn the bolt (A) and a 14mm wrench to turn the locking nut (B).



1. Loosen the locking nut (B) and back it off several turns.
2. Then turn the 0° tilt limit bolt (A) counter-clockwise several turns.
3. Adjust the tilt angle until the blade is at 90° to the table. If the blade still cannot reach a 90° angle with the table, keep turning the nut (B) and bolt (A) counter-clockwise until it can.
4. Once the blade is in the correct position, turn the 0° limit bolt (A) clockwise until it is tight.
5. Turn the locking nut (B) clockwise until it is tight.

If the Blade Moves Past 90°

1. If the blade moves past a 90° angle with the table at a minimum tilt angle, first position the blade so that it forms a 90° angle with the table.
2. Loosen the locking nut (B) and back it off several turns.
3. Turn the 0° limit bolt (A) clockwise until it is tight.
4. Turn the locking nut (B) clockwise until it is tight.

The 0° tilt limit stop has now been set.

45° Tilt Limit Stop

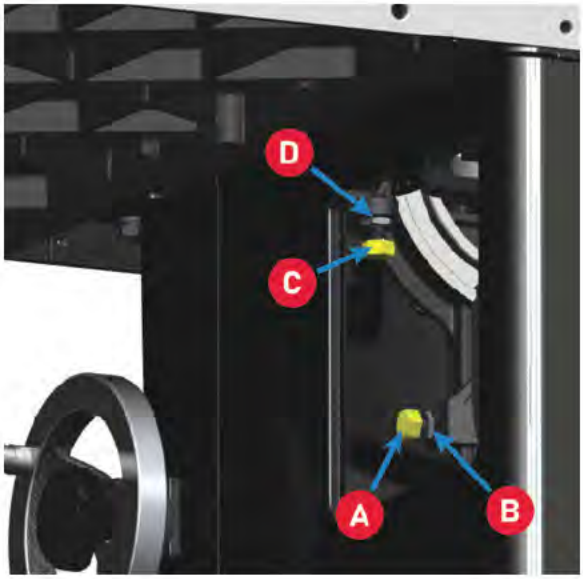
Determine If Adjustment is Needed:

1. Install a 10" (250mm, 254mm) saw blade on the arbor (see page 69).
2. Raise the blade to its full elevation.
3. Turn the Tilt Handwheel counter-clockwise until the limit stop is reached.
4. Using a combination square, check to see that the blade is at a 45° angle to the table.

If you need to adjust the position of the 45° limit stop, follow the instructions below.

Adjust the 45° Limit Stop

The 45° tilt limit stop is set by the yellow painted bolt located on the front trunnion bracket (C) and can be accessed through the side panel. Use a 17mm wrench to turn the bolt and a 14mm wrench to turn the locking nut (D).



1. Loosen the locking nut and back it off several turns.
2. Turn the 45° tilt limit bolt clockwise several turns.
3. Set the blade at a 45° angle with the table.
4. If the blade still can't reach a 45° angle with the table, keep turning the nut counter-clockwise and the 45° tilt limit bolt clockwise until the blade is at a 45° angle with the table.

5. Once the blade is in the correct position, turn the 45° tilt limit bolt counter-clockwise until tight. Finally, turn the locking nut clockwise until tight.

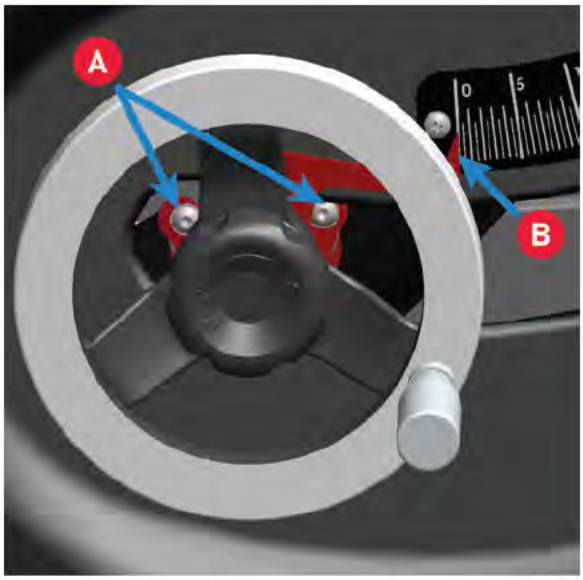
If the blade moves past 45°

1. If the blade goes past an angle of 45° with the table at maximum tilt, loosen the locking nut (D) and back it off several turns.
2. Set the blade at a 45° angle with the table.
3. Turn the 45° tilt limit bolt (C) counter-clockwise until it is tight.
4. Turn the locking nut (D) clockwise until it is tight.

The 45° tilt limit stop has now been set.

Tilt Angle Indicator

The tilt angle indicator is located at the front of the Professional Cabinet Saw, just behind the Elevation Handwheel.



The indicator shows the current angle of the blade relative to vertical (i.e., perpendicular to the table top).

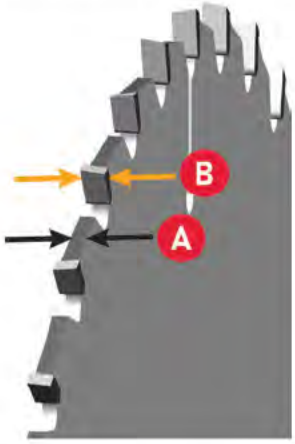
Once the 0° limit stop is correctly set, turn the tilt hand wheel clockwise until the limit stop is reached. Check the reading of the tilt angle indicator. If necessary, adjust the indicator by using a 4mm hex wrench to loosen the two locking screws that attach the indicator to the left and right sides of the elevation shaft and repositioning the indicator until it reads 0°. It may be helpful to remove the elevation hand wheel to access the screws. Lock the indicator in place by tightening the locking screws.

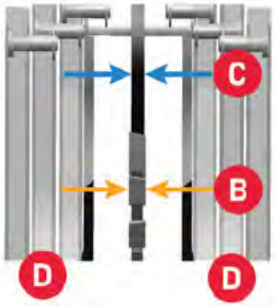
ALIGNING THE RIVING KNIFE/SPREADER TO THE BLADE

For safe operation, the spreader and Riving Knife* should be aligned parallel to the blade and within the width of the kerf. Kerf is the thickness across the width of the teeth.

NOTE:

* The riving knife is an optional accessory available for purchase through the online SawStop parts store. If you purchased your saw configured with the Floating Dust Collection Guard (TSG-FDC), a 10" / 254mm blade compatible riving knife is provided.





A. Blade thickness
B. Blade kerf
C. Spreader
D. Side guards

WARNING:

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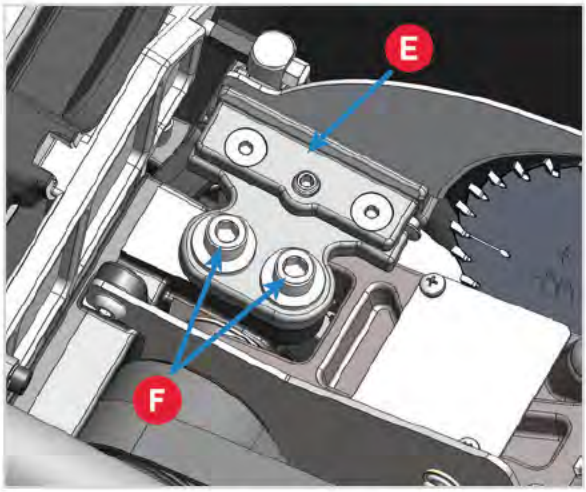
There should also be a gap of approximately 4-8mm between the front edge of the spreader or Riving Knife and the teeth of the blade. (Depicted below with spreader installed.)

If replacing the saw blade with a different size (e.g., 250mm or 254mm) be sure to also install a riving knife of matching size. Refer to the markings on the riving knife for the blade size for which it is intended. A riving knife matched for use with 254mm blades is included with the Floating Dust Collector accessory. Additionally, both sizes of riving knife are available as optional accessories from the online SawStop store.

The spreader or Riving Knife is held in position by a quick-release clamp (E) mounted under the table and behind the blade. (Depicted below with Riving Knife installed.)



If the spreader or Riving Knife is not aligned with the blade or is too close to the blade, then the position of the clamp must be adjusted. Once the clamp is properly adjusted, the spreader and Riving Knife will automatically align to the blade when installed in the clamp.

Adjust the Position of the Clamp

1. Set the tilt angle to 0° and remove the table insert.
2. Remove the blade and set it aside.
3. Make sure the spreader or Riving Knife is installed and lower the blade elevation to zero to provide access to the clamp (E).
4. Two mounting bolts (F) hold the quick-release clamp assembly (E) in the saw. Loosen both mounting bolts (F) using the included 8mm wrench just enough so that you can slide the clamp (E) along its mounting surface with some friction.
5. Reinstall the blade and raise the blade to the fully elevated position.

Align the Spreader or Riving Knife

6. So it is within the kerf of the blade, place a straight edge along the left side of the blade, making sure the straight edge runs between the teeth.
7. Slide the clamp assembly (E) left or right until the left side of the spreader is flush and flat against the straight edge.

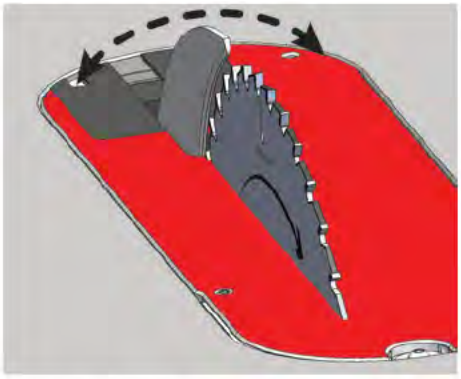
   In the event that the spreader is installed when performing this alignment and you have the optional anti-kickback pawl accessory installed, you may find it necessary to flip the left anti-kickback pawl out of the way while performing this step.

> **NOTE:**
> If you are using a thin-kerf blade (i.e., kerf is 3⁄32" (2.4mm)), you may need to place one or more shims between the straight edge and the side of the blade to ensure the spreader is centered with the blade.

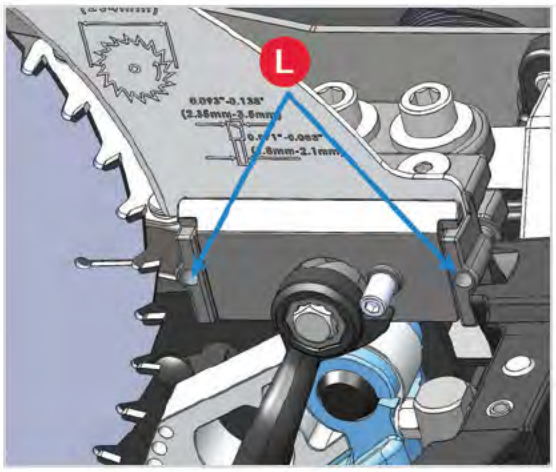
8. To adjust the gap between the front edge of the spreader or Riving Knife and the teeth of the blade, slide the clamp (E) forward or backward until the spacing is approximately correct.
9. When the spreader or Riving Knife is both aligned and spaced properly, tighten the two mounting bolts (F) to hold the quick-release clamp assembly in position.

> **WARNING:**
> Make sure there is at least 4mm spacing between the Riving Knife and blade at all points. Contact between the blade and either the Riving Knife or spreader during operation may cause the brake system to be activated.

10. With the mounting bolts (F) secure, confirm that the Riving Knife or spreader is coplanar to the blade top to bottom.



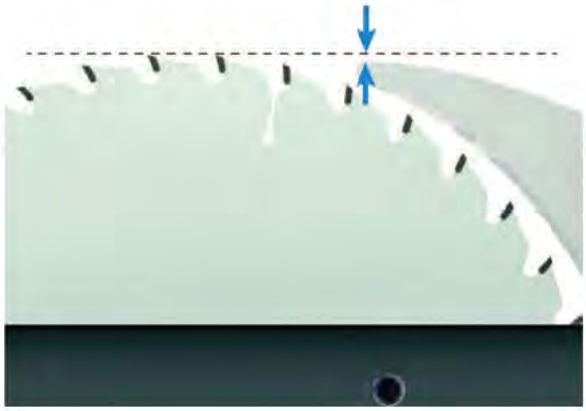
a. If the tip Riving Knife or spreader is pitched to the left in relation to the blade, rotate both horizontal positioning bolts (L) clockwise until alignment is achieved. Use the included 3mm hex wrench for this adjustment.



b. If the tip Riving Knife or spreader is angled to the right in relation to the blade, rotate both horizontal positioning bolts (L) an equal number of turns counter-clockwise until alignment is achieved.

SETTING THE HEIGHT OF THE RIVING KNIFE/SPREADER

When using the Riving Knife*, the top of the Riving Knife should be between 0-2mm below the top of the blade. This allows the Riving Knife to be used on rebate cuts and other non-through cuts.



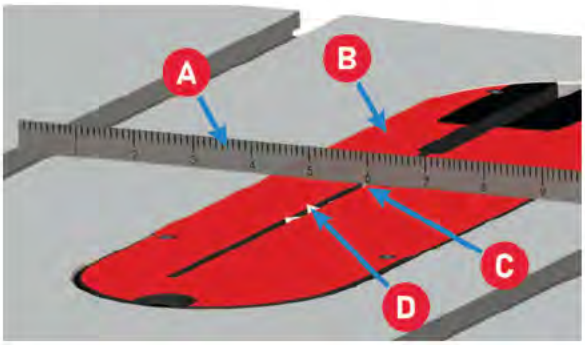
NOTE:

To learn more about non-through cuts and performing many other cut types, please refer to the **Safety and General Use Instructions for Table Saws** manual included with your saw.

NOTE:

* The riving knife is an optional accessory available for purchase through the online SawStop parts store. If you purchased your saw configured with the Floating Dust Collection Guard (TSG-FDC), a 10" / 254mm blade compatible riving knife is provided.

1. To check the height of the Riving Knife relative to the blade, lower the blade elevation until the lower limit stop is engaged.
2. Place a ruler or another straight edge (A) on the table so that it lies across the width of the table insert (B) and directly above the tip of the Riving Knife (C).



3. Raise the blade elevation until the tip of the Riving Knife (C) just comes in contact with the straight edge or ruler (A).

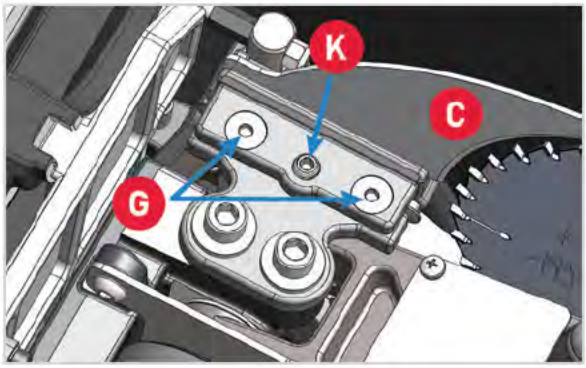
4. Measure the distance from the top of the table to the top of the blade (D). If the height of the riving knife is set correctly, the saw blade should be between 0-2mm above the table. If the distance is between 0-2mm, no further adjustments are necessary.
5. If the height of the Riving Knife is not correct, use the Elevation Handwheel to set the top of the blade to 0-2mm above the top of the table.

In some cases, adjusting the vertical alignment may cause the spacing between the front edge of the Riving Knife and the teeth of the blade to be incorrect. If this happens, repeat the steps explained in the previous section (**ALIGNING THE RIVING KNIFE/SPREADER TO THE BLADE** on page 58) to adjust the gap between the front edge of the spreader and the teeth of the blade so that it is 4-8mm.

Once the clamp has been properly positioned, further adjustment should not be necessary. Both the spreader and Riving Knife will now automatically align when installed in the clamp.

SETTING THE CONCENTRICITY OF THE RIVING KNIFE/SPREADER

The vertical adjustment bolts described in the previous procedure can also be used to set the concentricity of the Riving Knife in relation to the blade. This is achieved by adjusting only one of the adjustment bolts (G).



1. Remove the table insert (B) and loosen the set screw (K) located between the pair of vertical positioning bolts (G).
2. To change the concentricity of the arc of the Riving Knife with the blade, adjust only the front or only the rear vertical positioning bolt (G) until the desired position is achieved.
3. Once the alignment of the Riving Knife is correct, re-tighten the set screw (K).
4. Check to make sure the tip of the Riving Knife (C) is level with the table as described in the previous section. Repeat the Riving Knife height adjustment steps if necessary.

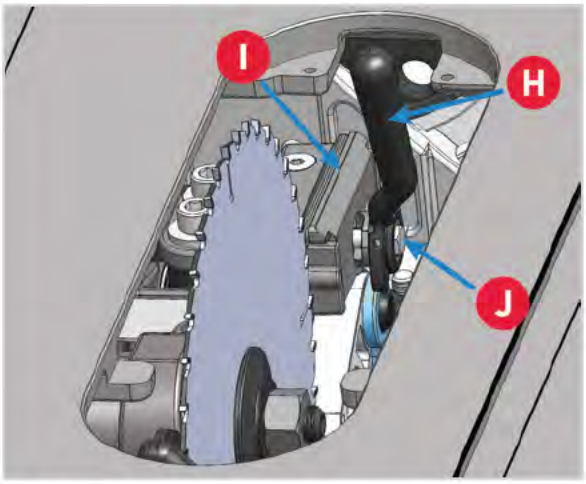
ADJUSTING THE CLAMPING FORCE FOR THE RIVING KNIFE/SPREADER

The clamping pressure holding the spreader or Riving Knife in the quick-release clamp is factory adjusted to require approximately 5-10 lbs. (2.2-4.5Kg) of force to push the handle to the fully down and clamped position. This is a moderate amount of force to apply with one hand. If excessive force is required to move the handle down, or if you are unable to move the handle down by hand, the clamp should be adjusted to reduce the clamping pressure. Alternatively, if the handle moves down with only light pressure, then the clamping force should be increased. When evaluating the clamping force, make sure the Riving Knife or spreader is properly seated in the clamp.

WARNING:
Maintenance shall only be performed on your saw when it is isolated from power. Always turn off the main power switch and unplug the power cord before working on or maintaining your saw.

1. To adjust the clamping force, begin by removing the Riving Knife or spreader.

2. Raise the handle (H) so that it faces upward, and push the handle toward the clamp (see direction of dotted arrow). The clamp assembly includes an internal spring designed to push the clamp open when the handle is raised. Push the handle (H) toward the clamp (I) against the force of the spring.



3. When the handle (H) is fully pressed against the clamp (I), the head of the adjustment bolt (J) is exposed. Turn the adjustment bolt (J) clockwise a slight amount to increase the clamping pressure, or counter-clockwise a slight amount to decrease the clamping pressure.
4. Release the handle and allow the spring to push it away from the clamp and re-engage the adjustment bolt.
5. Reinstall the spreader or Riving Knife and test the clamping pressure.
6. Repeat the adjustment as necessary until the correct clamping pressure is achieved.

WARNING:
It is important to maintain the correct clamping pressure on the Riving Knife and spreader. If the pressure is too low these important safety devices may not function properly and a serious injury could result. In addition, the spreader or Riving Knife may come into contact with the blade and cause an unintended activation of the safety system.

PREPARING A NEW TABLE INSERT

The table insert that came with your SawStop saw is pre-cut at the factory but replacement inserts are not pre-cut. The procedure below describes how to cut the slot in your new table insert for 10" blades, or dado table insert.

IMPORTANT:
Remove the blade guard or Riving Knife before you begin. If you attempt this procedure without doing so, there is risk of activating the SawStop safety system.

1. See the instructions for **How to Install the Insert** on page 29 to install the new insert into the table.
2. Follow the instructions in the next section for ADJUSTING THE TABLE INSERT.
3. Using a 3mm hex wrench, secure the locking lever with the button head screw located on top of the locking lever.
4. Clamp a piece of wood to the table top so that it partially covers the right side of table insert. Position the piece of wood so that it will not be cut by the blade or dado set as it passes through the insert. Thewood will help hold the table insert in place during cutting.
5. Slowly rotate the Elevation Handwheel clockwise to raise the spinning blade or dado set to full height and then counter-clockwise until the lower elevation limit is reached.

IMPORTANT:
Wear hearing and eye protection when performing this procedure.

If you are cutting a dado table insert you may skip steps 6.

6. With the blade fully lowered, adjust the Tilt Handwheel until the tilt is set to 45° and then repeat step 5.

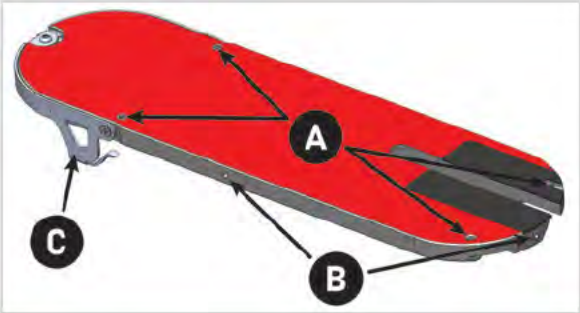
Your new table insert is now cut and ready to use. Be sure to install either the blade guard or the Riving Knife when using your saw with 10" (254mm) blades.

ADJUSTING THE TABLE INSERT

The SawStop zero-clearance insert has been designed to fit securely within the table opening and just below the table

top. The blade slot in the insert is pre-cut at the factory after all alignments to the saw have been completed.

As shown below, the insert includes front and rear leveling screws (A) to set the height of the insert. In addition, positioning screws (B) at the rear and right side of the insert prevent it from rattling in the table opening. Finally, a lock-down lever (C) at the front prevents the insert from rising unexpectedly.



WARNING:
Maintenance shall only be performed on your saw when it is isolated from power. Always turn off the main power switch and unplug the power cord before working on or maintaining your saw.

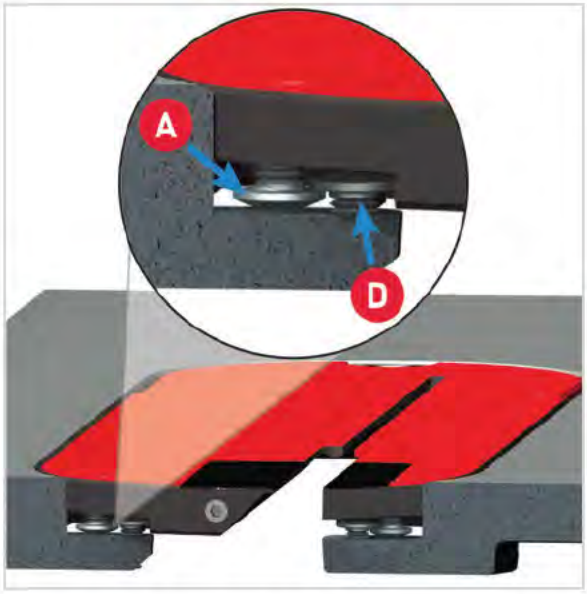
The insert should slide easily into and out of the table opening, but should not be loose in the opening.

If the insert is too loose, use the included 3mm hex wrench to turn the side and/or rear positioning screw(s) (B) counter-clockwise as needed to reduce the clearance between the insert and the table opening. If the insert is too tight, turn the side and/or rear positioning screw(s) (B) clockwise as needed to increase the clearance between the insert and the table opening.

To set the height of the insert, use the included 3mm hex wrench to adjust the front and rear leveling screws until the insert is just below the surface of the table. The lower end of each front leveling screw should rest on the corresponding support ledge on the table (highlighted as blue in the illustration below).

Adjusting the Rear Lock-Down Screws

The rear of the table insert is held down by a pair of lock-down screws (D) mounted in the table at the rear of the table opening. The lock-down screw heads overlap the heads of the rear leveling screws extending down from the insert. The overlapping screw heads hold down the table insert.



The height of the lock-down screws (D) should be adjusted to fit close above the leveling screws (A), while allowing enough clearance to install and remove the table insert without difficulty. The height of the lock-down screws can be adjusted using the included 3mm hex wrench.

ADJUSTING THE FENCE

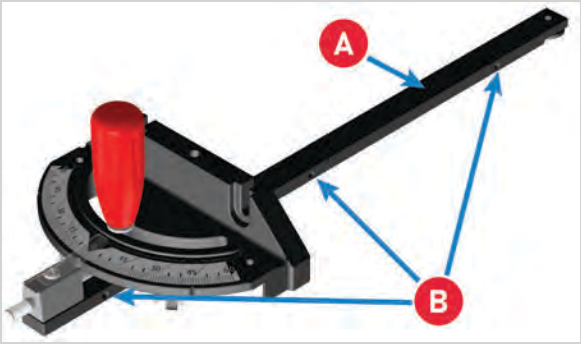
Your fence system is designed with adjustments for parallelism, clamping force, squaring the fence face to the table, precision placement of the indicator lens, and more.

- For detailed instructions regarding these adjustments, initial installation and more, refer to the manual included with your fence system.
- For the T-Glide Advance fence with the adjustable sliding face, the unique features of this fence along with safe and proper setup instructions for various cut types can also be found in the manual included with the fence system.
- To learn about basic use of the fence for rip cutting and related setups, see the **CUT TYPES** section of the **SAFETY AND GENERAL USE INSTRUCTIONS FOR TABLE SAWS** manual included with your saw.

ADJUSTING THE MITER GAUGE

Fitting the Bar to the Miter Slot

The miter gauge bar (A) includes three spring bearings which ensure a close fit between the miter gauge main bar and the miter gauge slots in the table. The bearings can be adjusted (B) to protrude further outward from the side of the main bar to tighten the fit between the main bar and the miter slots. Alternatively, the bearings can be adjusted inward to loosen the fit.

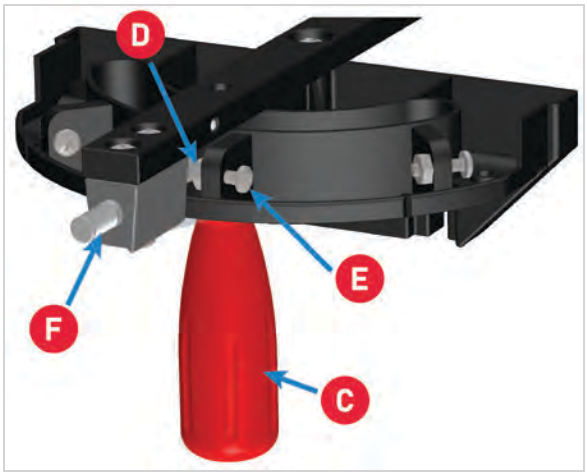


1. To adjust the position of the spring bearings, insert a 2.5mm hex wrench into the back of the bearing (B).
2. Turn the wrench clockwise to tighten the fit, or counter-clockwise to loosen the fit.

Calibrating 0° and 45° Index Stops

The miter gauge also includes indexing stops to allow you to quickly set the gauge to -45°, 0°, and +45°. If necessary, you can adjust these indexing stops to increase the precision of your miter cuts.

1. To begin, loosen the miter gauge head by turning the red locking handle (C) counter-clockwise about 1⁄2 turn.
2. Flip the miter gauge over to the orientation shown below.



3. For the indexing stop you want to adjust, loosen the corresponding locking nut (D) on the bottom of the miter gauge head.
4. Turn the set screw (E) counter-clockwise several turns.
5. Place the miter gauge in either the left or right miter slot, and set a combination square to the desired angle (e.g., -45°, 0°, or +45°).
6. Raise the saw blade.
7. Position one leg of the square flush against the saw blade and rotate the miter gauge head until it is flush against the other leg of the square.
8. Turn the red handle clockwise (C) until tight to lock the miter gauge head at the correct angle.
9. Make sure the indexing pin (F) is pressed in toward the miter gauge bar.
10. Turn the set screw (E) clockwise until it hits against the indexing pin (F).
11. Tighten the locking nut (D) to prevent the set screw from moving.

Repeat the above process for the other indexing stops if desired.

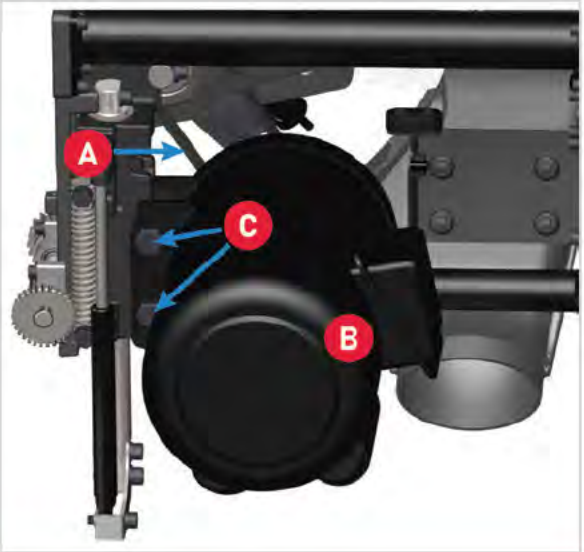
Adjust the Auxiliary Fence Position

An auxiliary fence is included with your miter gauge. The fence consists of an aluminum extrusion that attaches to the face of the included miter gauge. When attached, the fence offers additional support for a larger workpiece when passing it through the saw.

For detailed instructions, see **ASSEMBLE THE MITER GAUGE** on page 33.

ADJUSTING THE MOTOR BELT TENSION

The tension of the motor belt should be such that light finger pressure on one side of the belt (A) causes no more than about ¼" (6.3mm) deflection. If there is more than ¼" (6.3mm) deflection, the belt should be tightened. This is accomplished by adjusting the position of the motor.



WARNING:
Maintenance shall only be performed on your saw when it is isolated from power. Always turn off the main power switch and unplug the power cord before working on or maintaining your saw.

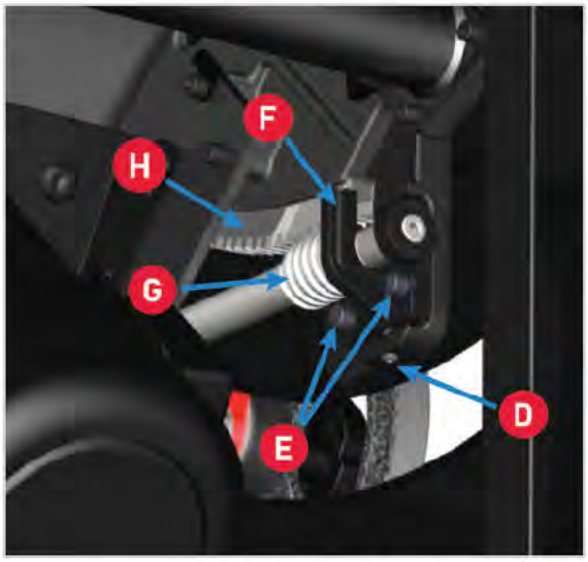
1. Open the motor cover to access the motor (B).
2. While supporting the motor (B) with one hand, loosen the two motor bolts (C) with a 19mm socket wrench. An extension on the socket will allow the wrench handle to clear the motor so that the wrench can be turned more easily.
3. Once the motor bolts are loose, lower the motor and then tighten the bolts (B) with the wrench.
4. Check the tension as described above and repeat the procedure if the belt is still too loose.

ADJUSTING THE TILT GEARING

The position of the worm at the end of the Tilt Handwheel shaft can be adjusted if necessary so that it meshes properly with the tilt sector gear. This is accomplished by adjusting the set screw at the bottom of the front trunnion bracket.

WARNING:
Maintenance shall only be performed on your saw when it is isolated from power. Always turn off the main power switch and unplug the power cord before working on or maintaining your saw.

1. Tilt the blade to 45° and open the motor cover.
2. Locate the set screw (D) and the two bolts (E) that attach the tilt worm bracket (F) to the front trunnion bracket shown in the illustration below.



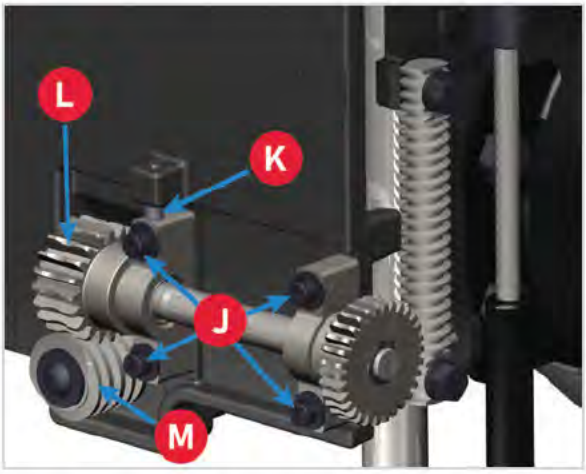
3. Loosen the two bolts (E) located just below the worm (G) using the 5mm hex wrench included with your saw.
4. Use the included 4mm hex wrench to turn the set screw (D) clockwise to move the worm (G) closer to the tilt sector gear (H).
5. Tighten the bolts (E).
6. Turn the Tilt Handwheel through its full range of motion from 0° to 45°.
7. If there is extra play when turning the handwheel, tighten the set screw farther.
8. If the handwheel binds or is difficult to turn then the set screw should be loosened.

ADJUSTING THE ELEVATION GEARING

Elevation Worm Adjustment

The position of the worm at the end of the Elevation Handwheel shaft can be adjusted if necessary so that the worm meshes properly with the worm gear. This is

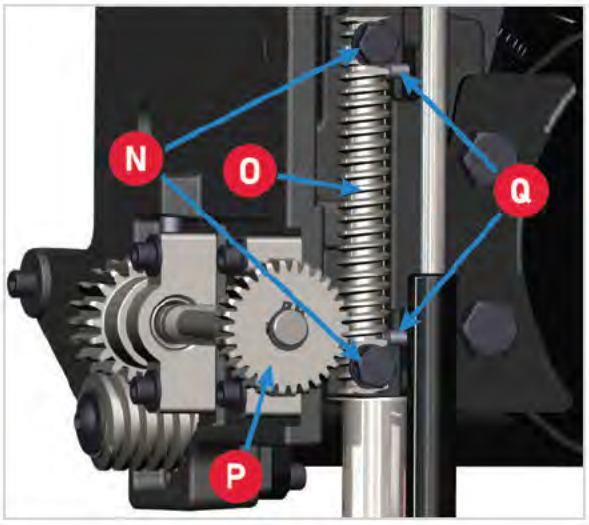
accomplished by adjusting the set screw on the lower back of the rear trunnion.



1. Tilt the blade 20-30 degrees and open the rear access panel.
2. Loosen the four bolts (J) that mount the two brackets on the back of the rear trunnion by turning each bolt about one-quarter turn using the included 5mm hex wrench.
3. Use the included 4mm hex wrench to turn the set screw (K) clockwise to move the position of the worm gear (L) closer to the worm (M).
4. Tighten the four bolts (J) that you loosened in step 2.
5. Turn the Elevation Handwheel through its full range of motion. If the there is extra play when turning the handwheel, repeat the above steps and tighten the set screw (K) farther. If the handwheel binds or is difficult to turn, the set screw should be loosened.

Elevation Threaded Rod Adjustment

The thread engagement between the threaded rod (O) and the pinion gear (P) can be adjusted if necessary so that the elevation plate moves up and down smoothly without binding. This is accomplished by adjusting the two set screws (Q) that contact the front of the threaded rod (O). This changes the position of the threaded rod with regard to the pinion gear (P) allowing the gears to mesh properly.



1. Remove the motor cover to gain access to the set screws (Q).
2. Using a 13mm wrench, loosen the two bolts (N) that mount the threaded rod (O) to the side of the elevation plate.
3. Use the included 3mm hex wrench to turn each of the set screws (Q) clockwise. This moves the threaded rod (O) closer to the pinion gear (P). Make sure to turn each set screw the same amount.
4. Tighten the two bolts (N) you loosened in step 2.
5. Turn the Elevation Handwheel through its full range of motion. If there is extra play when turning the handwheel, repeat the steps above and tighten the set screws farther. If the handwheel binds or is difficult to turn, then the set screws should be loosened.

MAINTENANCE

- Proper maintenance of your saw and proper adjustment of guards ensures best performance, safe operation and minimizes noise output from the tool.
- Address problems or defects with the machine, including issues with guards and blades, as soon as they are discovered.
- Inspect the blade before each use and check it for wear. Do not operate the saw with a dull blade. Only use sharp, properly maintained blades.

USER-REPLACEABLE PARTS AND ACCESSORIES

The following is a list of typical user-replaceable parts, and where to find replacement/installation instructions:

PART	Part #	PAGE
Cartridge	TSBC-10R3-I	72
Replacement Table Insert - PCS	TSI-SLD-I	29
Replacement Table Insert for Dado - PCS	TSI-DLD-I	29
250mm Riving Knife Kit - PCS	PCS-KIT-047	
254mm Riving Knife Kit - PCS	PCS-KIT-050	32
Replacement Blade Guard Kit - PCS	PCS-KIT-030	32
Spreader Kit - PCS	PCS-KIT-048	32
Anti-Kickback Pawl Assembly	PCS-KIT-051	32
Motor and Arbor Belt Replacement Kit	PCS-KIT-017	*
Arbor washer - with shoulder - for 30mm arbor blade - PCS	PCS-KIT-045	69
Arbor washer - no shoulder - for 5/8" arbor blades - PCS	PCS-KIT-039	69
Replacement Push Stick	PCS-KIT-001	--
Brake Cartridge Key	PCS-KIT-002	72

* Contact SawStop support for installation instructions.

HOW TO ORDER PARTS

See the Professional Cabinet Saw exploded views and parts lists available for download at SawStop.eu for a complete listing of components and part numbers. For parts and further technical assistance contact SawStop. Visit us at SawStop.eu/support.

SAWSTOP SAFETY SYSTEM

The safety system performs continuous self-checks both before and during saw operation. If a problem is detected, the appropriate status code will be shown on the LEDs on the switch box and the appropriate action should be taken. No other maintenance is required.

BRAKE CARTRIDGE

The condition of the cartridge should be checked after approximately every 50 hours of saw use. The cartridge is sealed to prevent the entry of dust or other contaminants into the housing. While a small amount of dust within the housing will not affect its operation, you should replace the cartridge if a significant amount of dust is visible inside the clear plastic housing. This would indicate that the cartridge housing seal has been damaged. The brake cartridge requires no other maintenance.

Do not use a brake cartridge if more than a small amount of dust can be seen inside the clear housing. If sawdust becomes packed inside the housing, the brake may fail to activate or may activate more slowly, thereby resulting in a serious personal injury.

POWER CORD

Periodically check the condition of the power cord. If the cord becomes damaged, it must be replaced by a specially prepared supply cord available through SawStop Technical Support. The cord must be replaced by SawStop or an authorized service agent. Contact SawStop Technical Support for details (seeSawStop.eu/support).

BLADE GUARD

Keep the blade guard free of accumulated saw dust, wood chips, and other debris. Vacuum out any dust as needed. Check that you have a clear view of the saw blade from all angles; make sure no abrasions or materials on the blade guard obscure your view. Before each use, check that the blade guard pivots up and down freely. It should rest completely on the table when not in use, and the side plate should contact the table when the blade is tilted to 45 degrees.

ELEVATION AND TILT MECHANISMS

The elevation shafts and the tilt and elevation gearing should be kept clean and well lubricated. Periodically check the condition of the elevation worm gear, the elevation threaded rod and the tilt sector gear as well as the front and rear trunnion brackets. If necessary, clean off any dust, dirt, pitch, or other debris using a wire brush, and then re-apply a good quality, non-hardening grease. The bushings for the tilt and elevation handwheel shafts should also be kept lubricated with a lightweight penetrating oil. Lubrication points are shown in the illustrations on the next page.

CABINET

The interior of the cabinet should be kept free of accumulated saw dust, wood chips, and other debris. Although most of the dust is collected by the dust collection system, it is normal to have some dust collect in the cabinet. Periodically check the dust inside the bottom of the cabinet and trunnion assembly. Vacuum out the dust as needed to prevent any buildup.

WARNING:
Maintenance shall only be performed on your saw when it is isolated from power. Always turn off the main power switch and unplug the power cord before working on or maintaining your saw.

There are multiple ways to access the interior of the cabinet for cleaning and other maintenance: On the left side of the cabinet, open the motor door (19). On the top of the saw table, remove the red table insert (29). On the back and left sides of the cabinet, two small access doors (shown in blue below) can also be opened using a 4mm hex wrench.

A hex wrench is required to loosen a retaining associated with each of these points of access. After accessing the interior of the saw, be sure to use the hex wrench to re-tighten the retaining screw in order to secure the opening.

WARNING:
When working beneath the saw table, be mindful of low head clearance and sharp edges.

TABLE AND EXTENSION WINGS

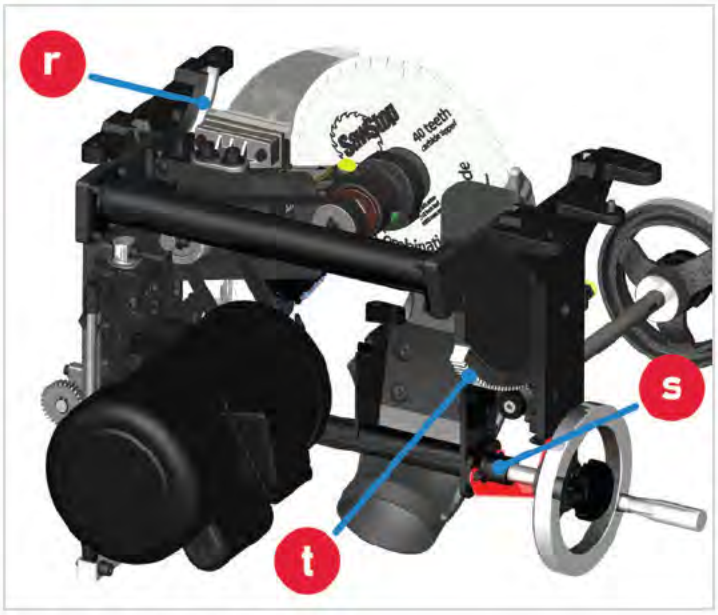
The surface of the table and extension wings should be kept clean and free of rust. If rust develops on the surface, you can remove it by spraying the surface with a light coat of WD 40® and scrubbing with a fine abrasive pad such as Scotch-Brite® 7448 hand pads. To prevent the table from rusting, coat it with a surface protectant such as Boeshield® T-9, GlideCote® or TopSaver™, available in many woodworking stores. If you do not plan to use the saw for an extended period of time, you can protect the table by applying a light coating of oil and then covering the table with wax paper.

BELTS

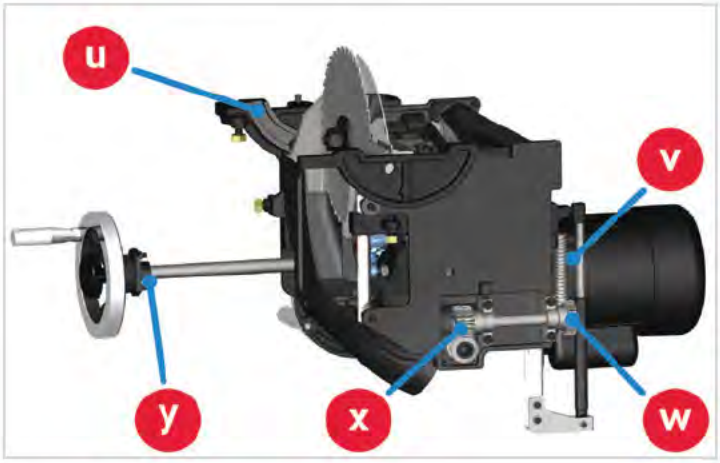
The arbor belt and motor belt should be checked periodically for wear or damage. Replace a worn or damaged belt. In addition, check the tension of the motor belt. If light finger pressure on one side of the belt causes more than about 1/4 inch deflection, the belt should be tightened by adjusting the position of the motor as described on page 65. The arbor belt cannot be tightened, and therefore must be replaced if it does not have sufficient tension to prevent slipping under load.

LUBRICATION POINTS

Points that need to be kept lubricated are shown in the following illustrations. The front trunnion, rear trunnion, and sector gear are most easily accessed through the motor cover opening with the blade tilted to 45°. The sector gear should be lubricated on both sides that run along the teeth as well as the teeth. The worm gear and threaded rod can be accessed through the rear access panel with the blade tilted to 45°.



r. Rear trunnion bracket
s. Elevation Handwheel shaft bushing
t. Sector gear



u. Front trunnion bracket
v. Tilt handwheeel shaft bushing
w. Worm gear
x. Pinion gear
y. Threaded rod

HOW TO CHANGE THE BLADE

WARNING:
Wear gloves when handling the blade.

The SawStop Professional Cabinet Saw is designed to be used with a 10" (254 mm) or 9.84" (250mm) saw blade or an 8" (203mm) dado set (optional accessory). A dado set is made up of two circular saw blades on either side of a set of removable knives or chippers. You can use a dado set to cut a groove or slot in a workpiece.

After completion of grooving cuts, before returning to normal sawing operations, be sure to mount and adjust the riving knife or spreader-mounted blade guard.

WARNING:
Only install 10" (254 mm) or 9.84" (250mm) saw blade or an 8" (203mm) dado sets designed in accordance with EN 847-1:2017. A 30mm or 5/8" (16mm) bore is required for standard saw blades, and a 5/8" (16mm) bore is required for dado blades. Always use the appropriate blade washer for the saw blade bore. The maximum dado groove width is 20mm. The workpiece shall be manually fed only.

Learn more about blade requirements and blade compatibility with the SawStop safety system. Refer to the **Safety and General Use Instructions for Table Saws** manual that was included with your saw.

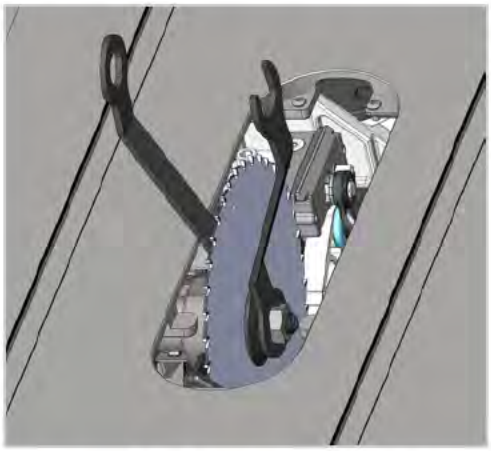
If you attempt to use an incompatible blade, the safety system will display an error code and prevent the motor from starting.

The Professional Cabinet Saw comes with a 40 tooth, 10 inch (254mm) combination saw blade. The blade may be lightly coated in oil to prevent rusting. Clean the blade thoroughly before you use it for the first time.

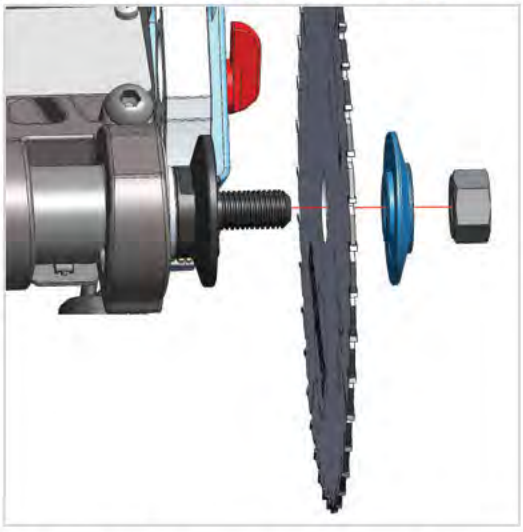
WARNING:
Maintenance shall only be performed on your saw when it is isolated from power. Always turn off the main power switch and unplug the power cord before working on or maintaining your saw.

Procedure:

1. After removing the table insert, use the open end of one of the blade wrenches included with the saw to hold the arbor behind the arbor flange, and use the closed end of the other blade wrench to loosen the arbor nut. The arbor nut is right-hand threaded so turn the nut counter-clockwise to loosen it.



2. Set the arbor nut and washer aside for later re-installation. Remove the existing blade from the arbor and put it away.
3. If installing a standard 10" (254mm) blade, use the included arbor washer with shoulder (shown in blue) for blades with a 30mm arbor hole.



Confirm that the shoulder of the inner washer is seated properly into the arbor hole of the blade.

Make sure direction of blade rotation matches direction of teeth as indicated by the arrow printed on the blade.

4. Reinstall the outer arbor washer and arbor nut. Confirm again that the shoulder of the outer washer is seated properly into the arbor hole of the blade.
5. Apply the included blade wrenches to the arbor and arbor nut as described in step 1. The arbor nut is right-hand threaded so turn the nut clockwise to tighten it. Do not over-tighten.

IMPORTANT:

If installing a dado stack, use the included arbor washer without shoulder. A dado stack with 5/8" (15.8mm) arbor hole is required. Dado stacks with a 30mm arbor hole are not supported.

You will also need to install an optional dado brake cartridge and an optional dado table insert (72). A dado set cannot be used with the standard SawStop brake cartridge or table insert.

Brake Position Adjustment

Following every blade change, it is important to accurately adjust the spacing between the brake cartridge and the blade. This is key to the operation of the SawStop safety system. For the complete procedure see **BRAKE POSITION ADJUSTMENT** on page 75.

WARNING:

Always make sure the motor is off, the power cord is unplugged, and the blade is completely stopped before making any adjustments.

WHAT TO DO IF THE SAFETY SYSTEM ACTIVATES

When the SawStop safety system is activated, the brake pawl will be pushed into the blade to stop its rotation. If the blade is spinning at a significant speed, the arbor block will retract to lower the blade below the table. Both of these actions will occur within just a few milliseconds. In addition, the safety system will turn off the motor and display the "Replace Cartridge" system status code on the LEDs on the Switch Box (see **USING YOUR SAW** on page 39).

Once the safety brake is activated, you will need to carry out the 3 steps described below to reset the safety system and the saw before continuing to use the saw.

WARNING:
Maintenance shall only be performed on your saw when it is isolated from power. Always turn off the main power switch and unplug the power cord before working on or maintaining your saw.

1. Reset the Retraction of the Arbor Block: During normal use, the arbor block is held in place by a spring-loaded support mechanism called the retraction bracket. When the brake is activated, the angular momentum of the spinning blade is transferred to the arbor block, causing it to drop out of the retraction bracket.

   To reset the arbor block into the retraction bracket, turn the Elevation Handwheel counter-clockwise until the lower elevation limit stop is reached. The arbor block will automatically engage the retraction bracket. Now turn the Elevation Handwheel clockwise to raise the arbor block and blade.

2. Replace the Brake Cartridge: The SawStop Brake Cartridge must be replaced in the event the brake is activated. See **HOW TO REMOVE AN ACTIVATED BRAKE CARTRIDGE** on page 73. The brake pawl and components inside the sealed housing are expended when the brake is activated. Therefore, the Brake Cartridge cannot be reused after the brake is activated and it may be discarded. Once the activated cartridge has been removed, obtain another Brake Cartridge that has not been activated and follow the instructions in this manual to install it. See **INSTALLING A REPLACEMENT BRAKE CARTRIDGE** on page 74.

   If the brake activated due to accidental contact between the blade and an operator, please return the cartridge to SawStop. During use the cartridge is constantly measuring data about the operation of the saw and the signal received from the blade. When the brake is activated, the most recent data is stored into memory and SawStop can download the data from the activated cartridge. This data is very important to our continuing research and development program. Therefore, contact SawStop to arrange shipment of the cartridge back to SawStop. Once SawStop's engineers verify the brake activated due to accidental skin contact, you will receive a replacement cartridge free of charge.

   If you are unsure why the cartridge activated, you can return the cartridge to SawStop for analysis by SawStop's service engineers. When the cartridge data is downloaded, it is usually possible to determine what caused the brake to activate so that unintended activations can be prevented.

3. Change the Blade: When the brake is activated, the aluminum brake pawl will pivot into the teeth of the saw blade with great force and speed. This usually causes the brake pawl to lock-up on the blade. If you remove the brake pawl from the blade, one or more of the carbide teeth on the blade will usually be pulled off. Therefore, it is almost always necessary to replace or repair the blade after the safety system has been activated. See **HOW TO CHANGE THE BLADE** on page 69.

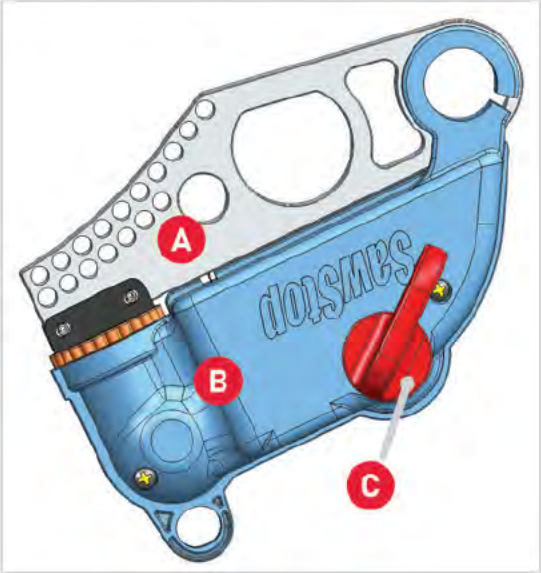
Once the retraction of the arbor block has been reset and the Brake Cartridge and blade have been replaced, the saw is ready for operation.

IMPORTANT:
Please read the important supplemental information about the SawStop safety system in the **Safety and General Use Instructions for Table Saws** manual included with your saw.

BRAKE CARTRIDGE

WARNING:
Never attempt to activate the safety system intentionally.

The SawStop Brake Cartridge includes a sealed housing containing the SawStop system electronics, and an aluminum block called a brake pawl (A). The sealed housing (B) also includes a high-speed actuator that pushes the brake pawl into the teeth of the saw blade in the event accidental contact is detected. The Cartridge Key (C) helps to lock the cartridge into place once it is seated. (See detailed installation instructions later in this chapter.)

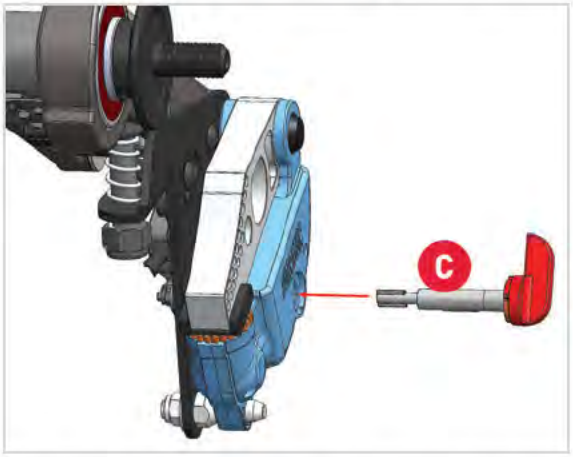


IMPORTANT:
Please read the important supplemental information about the SawStop safety system in the **Safety and General Use Instructions for Table Saws** manual included with your saw.

Like any electronic component, Brake Cartridges should be handled with care. Store Brake Cartridges in a safe, dry place when not in use.

The Brake Cartridge must be changed in the event the brake is activated. The Brake Cartridge must also be changed whenever swapping between 10" (254mm or 250mm) standard blades and dado sets. For dado cuts, the optional dado Brake Cartridge must be installed. The SawStop dado cartridge is identical to the standard Brake Cartridge with the exception of the brake pawl. The dado brake pawl is larger than the standard brake pawl to accommodate the width and diameter of 8" (203mm) dado sets. Other size dado sets or standard 10" (254mm or 250mm) blades are not compatible with the dado cartridge.

Changing the Brake Cartridge is a simple process. The safety system will not allow the motor to start unless the Brake Cartridge is correctly installed. The Brake Cartridge is mounted beneath the table and behind the blade. Alignment holes in the cartridge chassis straddle a large pivot pin (D) and a smaller positioning pin (E). Both the pivot pin and positioning pin extend outward from a cartridge mounting bracket that sets the position of the cartridge. The cartridge mounting bracket also holds a data cable that self-aligns to the connector in the side of the cartridge. A Cartridge Key (C) is used to lock the Brake Cartridge in place against the cartridge mounting bracket.



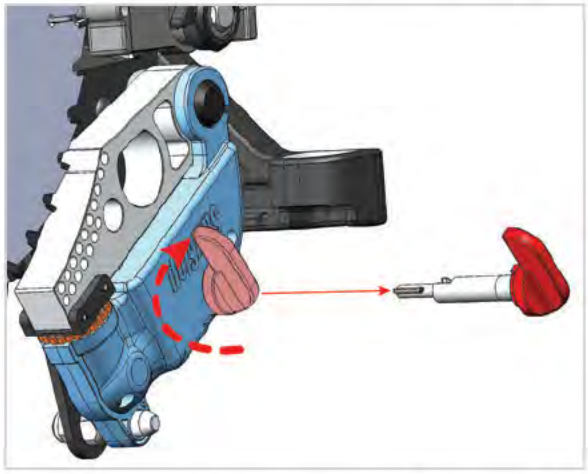
HOW TO CHANGE BRAKE CARTRIDGE

WARNING:
Maintenance shall only be performed on your saw when it is isolated from power. Always turn off the main power switch and unplug the power cord before working on or maintaining your saw.

1. To change the cartridge, begin by setting the tilt angle to 0° and raising the blade elevation to the maximum height. This allows the easiest access to the Brake Cartridge.
2. Remove the table insert from the table.

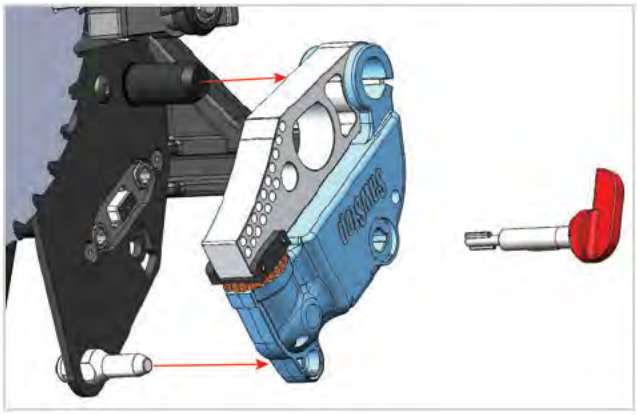
3. Rotate the blade guard clamping handle fully upward to provide clearance for removing the Brake Cartridge.

4. Remove the Cartridge Key by turning it 90° clockwise and then pulling it away from the cartridge. Set the Cartridge Key aside for use with the new cartridge.



It may take a small amount of force to turn the key and pull it out. Make sure you turn the key a full 90°, as the key cannot be pulled out unless it has been fully rotated.

5. If the Brake Cartridge has not been activated, slide the Brake Cartridge to the right until it clears both pins.



⚠ WARNING:

Do not drop, hit, or otherwise subject brake cartridges to abuse as this may damage the cartridge. In addition, the high speed actuator could be unexpectedly triggered due to damage, thereby causing the brake pawl to be pushed away from the housing at very high speed and with great force. This could result in serious injury.

HOW TO REMOVE AN ACTIVATED BRAKE CARTRIDGE

⚠ WARNING:

Maintenance shall only be performed on your saw when it is isolated from power. Always turn off the main power switch and unplug the power cord before working on or maintaining your saw.

Upon brake activation, the blade will stop spinning and may drop below table. You must replace the brake and blade to reset your saw. When Brake Cartridge activates, the brake pawl typically will be locked onto the blade or dado set. As a result, it is usually easiest to remove the blade and the Brake Cartridge together.

1. To remove the cartridge and blade together, first remove the blade nut and the Cartridge Key as described in the previous section.
2. You can remove the blade and Brake Cartridge simultaneously by alternately moving the blade and then the cartridge to the right to "walk" them off the arbor and cartridge mounting pins.

3. Often you can "walk" them to the right by hand. If more force is needed, use a blade wrench as a lever. To do this, place one end of the wrench between the blade and the side of the arbor block, being careful to maneuver around the dust shroud. Now push the blade a short distance away from the arbor flange.

> **IMPORTANT:**
> Do not place the wrench against the dust shroud because the dust shroud could break.

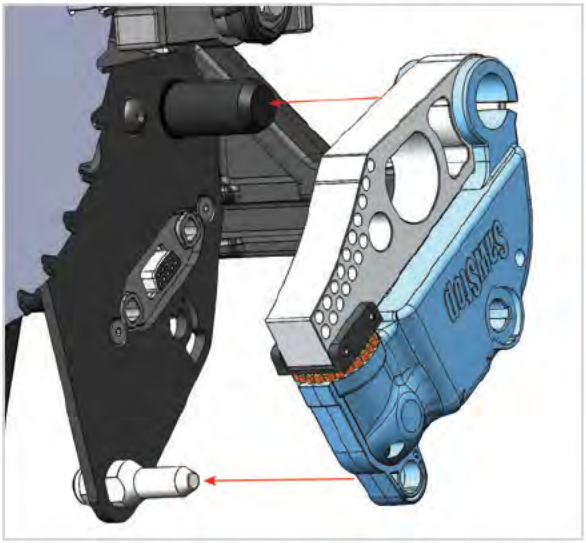
4. Remove blade wrench from the blade are and place the end of the wrench between the brake pawl and the cartridge mounting bracket. Gently pry the cartridge away from the arbor block a short distance.
5. Only move the blade and cartridge a short distance each step to avoid binding. Each step should be no greater than the distance equal to one or two threads on the arbor.
6. Repeat these alternating steps (step 3 and 4) to walk the cartridge and blade off. A significant force may be needed to pry the cartridge off the mounting pin if the brake pawl deformed and pinched the pivot pin when it stopped the blade.

INSTALLING A REPLACEMENT BRAKE CARTRIDGE

> **IMPORTANT:**
> Please read the important supplemental information about the SawStop safety system in the **Safety and General Use Instructions for Table Saws** manual included with your saw.

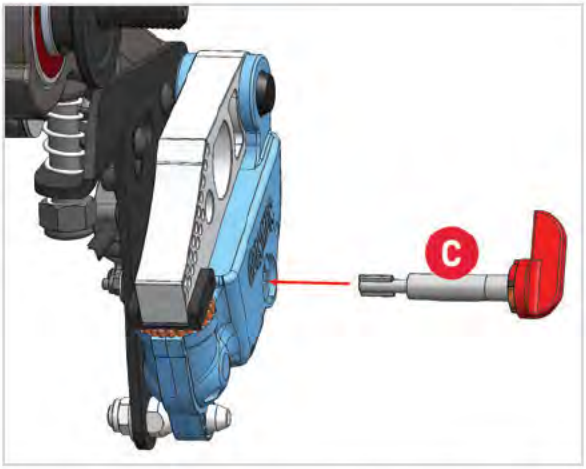
To install a Brake Cartridge, follow the steps below.

1. Align the mounting holes in the cartridge with the pivot pin and positioning pin in the saw.

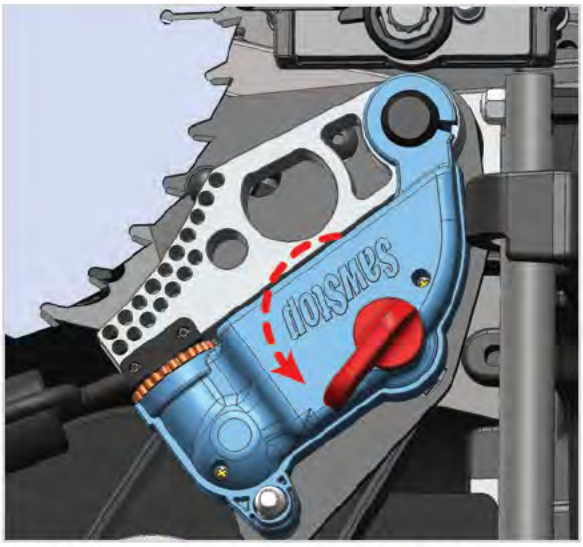


2. Slide the cartridge onto the pins until the cartridge rests against the mounting bracket. The cartridge will automatically align with a data cable mounted in the saw.

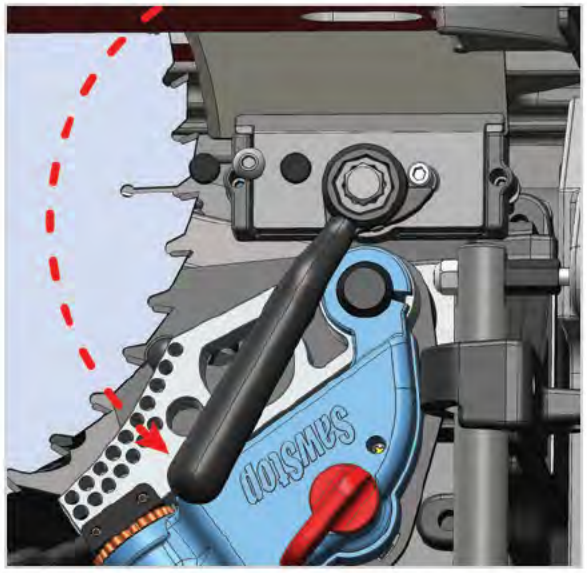
3. Insert the Cartridge Key into the hole in the cartridge housing. The key shaft has a ridge that must be aligned with a channel in the hole. As a result, the key can only be inserted into the hole when the red handle is pointing toward the brake pawl.



Rotate the key 90° counter-clockwise to lock the cartridge in place. The key will not rotate unless it is fully seated against the side of the cartridge housing and the cartridge housing is pressed against the cartridge mounting bracket.



4. Once the key is rotated to its locked position, it cannot be removed and the cartridge will be locked in place. Rotating the key to the locked position also actuates a switch inside the cartridge that signals to the safety system that the cartridge is correctly installed and locked in place. The system will not allow the saw to start if the switch is not actuated. If you attempt to turn on the saw when the key is not in the locked position, the LED lights on the Switch Box will flash a status code indicating the key should be turned to ON. Turning the key to ON means turning the key to the locked position.
5. Fully rotate the blade guard clamping handle counter-clockwise to lock the spreader or Riving Knife in place.



6. Install the blade or dado set as described on page 69, and adjust the brake position as described in the next section.

⚠ WARNING:
Always check, and if necessary, adjust the position of the brake after changing the Brake Cartridge or the blade. An improperly positioned brake could increase the time required to stop the blade in the event of accidental contact, or cause the brake to actuate unexpectedly if the blade comes into contact with the brake.

BRAKE POSITION ADJUSTMENT

⚠ WARNING:
Never adjust the position of the Brake Cartridge while the blade is spinning.

It is important to accurately adjust the spacing between the Brake Cartridge and the blade. If the brake is too far from the blade, the safety system will take longer than necessary to stop the blade. On the other hand, if the brake is too close

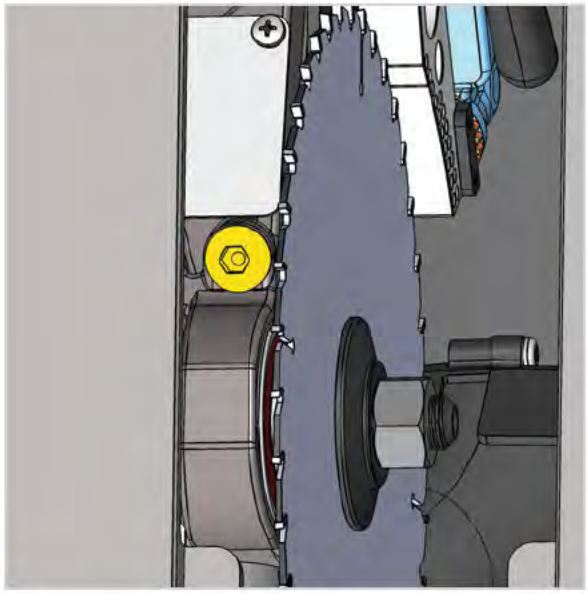
to the blade, a portion of the blade might contact the brake and cause it to activate.

WARNING:
Maintenance shall only be performed on your saw when it is isolated from power. Always turn off the main power switch and unplug the power cord before working on or maintaining your saw.

The exact diameters of saw blades will vary. In addition, blades that have been resharpened one or more times will usually be under the manufacturers stated size. Therefore, always check the spacing between the blade and the brake when installing a different blade or Brake Cartridge.

The spacing between the Brake Cartridge and the blade is adjusted by the yellow brake positioning bolt mounted in the top of the arbor block.

1. To access the brake positioning bolt, set the tilt angle to 0° and adjust the blade elevation to approximately 1½ inches (38mm) above the table top. The bolt will be accessible through the opening in the table top. The head of the bolt is painted yellow for easy visibility.



2. Using the 8mm hex wrench included with the saw, turn the brake-positioning bolt clockwise to decrease the spacing between the Brake Cartridge and the edge of the blade, or counterclockwise to increase the spacing. Adjust the brake position as needed to set the spacing between the teeth of the blade and the closest point on the Brake Cartridge to between 1/16 and 1/8 inch.

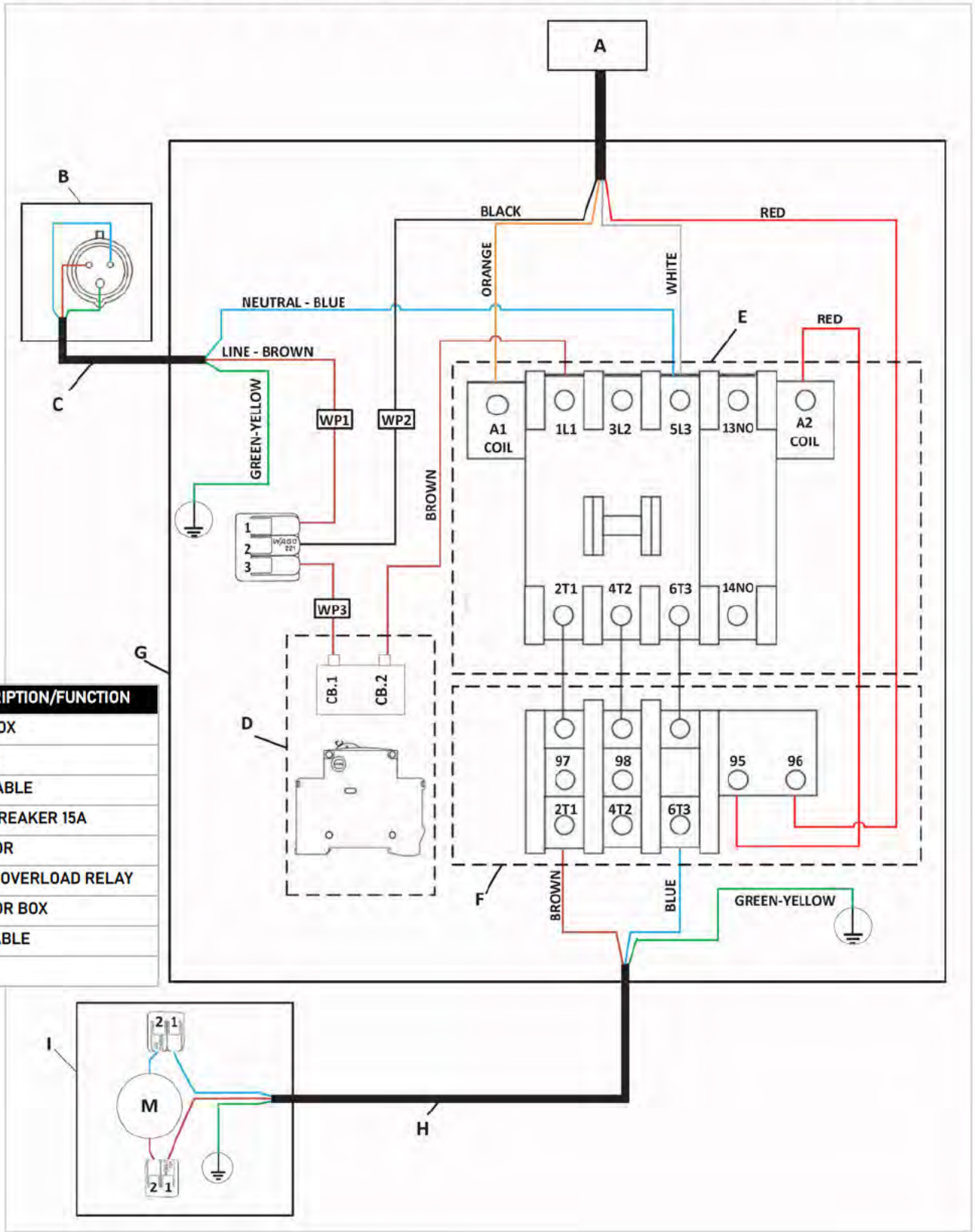
3. A blade spacing adjustment gauge is included with the tools in the Table Saw Hardware Pack. Place the tip of the spacing gauge between the closest points on the blade and Brake Cartridge to set the appropriate spacing.

The two slots on the blade spacing adjustment gauge are for storing the 8mm hex wrench that is used to adjust the brake position (described in step 2). The blade spacing adjustment gauge also contains magnets so it can be attached to the side of the Professional Cabinet Saw housing.

4. After adjusting the brake position and before starting the saw, spin the blade by hand at least one full revolution. During rotation, watch the gap between brake pawl and blade to verify that no part of the blade comes into contact with the brake pawl.

ELECTRICAL DIAGRAM

Repairs of the machine's control box must be carried out by the original manufacturer or an authorized service provider.



LABEL	DESCRIPTION/FUNCTION
A	SWITCH BOX
B	16A PLUG
C	POWER CABLE
D	CIRCUIT BREAKER 15A
E	CONTACTOR
F	THERMAL OVERLOAD RELAY
G	CONTACTOR BOX
H	MOTOR CABLE
I	MOTOR

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE(S)	SOLUTION
The motor will not start and both status lights on the Switch Box are off.	There is no power to the saw.	Make sure the electrical supply to the saw is on and that the correct voltage is being supplied.
	There is no Brake Cartridge installed in the saw.	Install the Brake Cartridge (see page 72).
	The Brake Cartridge is defective.	Replace the Brake Cartridge with a new cartridge (see page 72).
The motor will not start: the power switch is on, the white status light on solid, the green status light is off (see page 1).	The Brake Cartridge is defective.	Replace the Brake Cartridge with a new cartridge (see page 72).
The motor starts slowly and/or fails to reach full operating speed.	The electrical supply voltage is too low.	Make sure the correct voltage is being supplied to the saw.
	The belt is worn or slipping.	Replace the belt.
The motor stopped unexpectedly during use but the brake did not activate.	The Start/Stop paddle was bumped.	Ensure the Start/Stop paddle is in the OFF position, and then restart the saw.
	The material being cut is overloading the safety detection system (e.g., green or wet wood).	Use a different wood or cut in Bypass Mode (see page 45).
	Electrical power to the system was lost, at least temporarily.	Ensure that the electrical supply to the saw is on and you are using the correct voltage.
	The Brake Cartridge is defective.	Replace the Brake Cartridge with a new cartridge (see page 72).
Cannot turn the saw on in Bypass Mode.	The sequence for starting the saw in Bypass Mode was not completed.	Follow the steps for starting the saw in Bypass Mode (see page 45).
	The Bypass Lockout Key is not fully seated.	Insert the Bypass Key fully.

PROBLEM	POSSIBLE CAUSE(S)	SOLUTION
The brake activated, even though there was no accidental contact.	An electrically conductive material contacted the blade, arbor or arbor pulley.	Make sure no metal or other conductive material is touching the blade, arbor or pulley. Use Bypass Mode to cut conductive materials (see page 45).
	The spreader or Riving Knife came into contact with the blade.	Ensure that the spreader or Riving Knife is aligned and securely clamped in place. There should be a gap of 4-8mm between the blade and the spreader or Riving Knife (see page 1, illustration G).
	The blade made contact with the brake pawl.	Make sure there is a gap of 1.5mm to 3mm between the teeth of the blade and closest point on the Brake Cartridge. Use only a 10" blade with a standard Brake Cartridge.
The blade hits the brake pawl during installation.	The blade is the wrong size.	Use only a 10" blade with a standard Brake Cartridge.
Cannot install the Cartridge Key.	The key is not rotated properly to align with the keyhole in the cartridge.	Rotate the key so that the handle is pointing directly toward the brake pawl.
	The shaft of the Cartridge Key is binding in the cartridge or on the cartridge bracket.	Try installing the key while pressing upward or downward on the key or cartridge.
Raising or lowering the blade feels or sounds rough.	The alignment block is worn, damaged or needs lubrication. The elevation rail is dirty and needs lubrication.	Clean components and re-grease.
	The backdrive prevention assembly is worn.	Contact SawStop Service.
The saw does not make accurate bevel cuts.	The tilt limit stops are not adjusted properly.	Adjust the tilt limit stops.
	The tilt angle indicator is not adjusted properly.	Adjust the tilt angle indicator.
Cannot remove the Brake Cartridge.	The Cartridge Key is still installed.	Remove the Cartridge Key.
	The cartridge is bound up on the pivot pin and the positioning pin.	Pry the cartridge off the pins with a blade wrench (see page 72).

PROBLEM	POSSIBLE CAUSE(S)	SOLUTION
Cannot install the Brake Cartridge.	The holes in the Brake Cartridge shell are not aligned with the pivot pin and positioning pin.	Make sure the mounting holes in the Brake Cartridge are aligned with the pivot and positioning pins.
	There is debris on the pivot or positioning pins, or in the cartridge mounting holes.	Make sure the pins and mounting holes are clean and free of obstructions.
	The blade is interfering with the brake pawl.	Use only a 10" blade with a standard Brake Cartridge.
Cannot remove the Cartridge Key.	The Cartridge Key is not turned to the UNLOCKED position.	Turn the key clockwise until it stops.
	The shaft of the Cartridge Key is binding in the cartridge or on the cartridge mounting bracket.	Try turning and removing the key while pressing upward or downward on the key or cartridge.

NOTES

USA/CANADA

SawStop, LLC
11555 SW Myslony St,
Tualatin, OR 97062 USA

SawStop.com/support
Service@SawStop.com
(503) 582-9934

Parts available for purchase at SawStop.com

EUROPE/UK

TTS Europe SE
Wertstrasse 20
73240 Wendlingen a.N., DE

UK Regulatory
Authorised Rep Compliance Ltd., ARC House,
Thurnham, Lancaster, LA2 0DT, UK.

SawStop.eu/support
SupportEurope@SawStop.com

AUSTRALIA

Carbatec.com.au/contact
customercare@carbatec.com.au

85-007951-00
Rev B - 11102025