

SECTION B

TABLESAW

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ADD-ON SLIDING TABLE KIT

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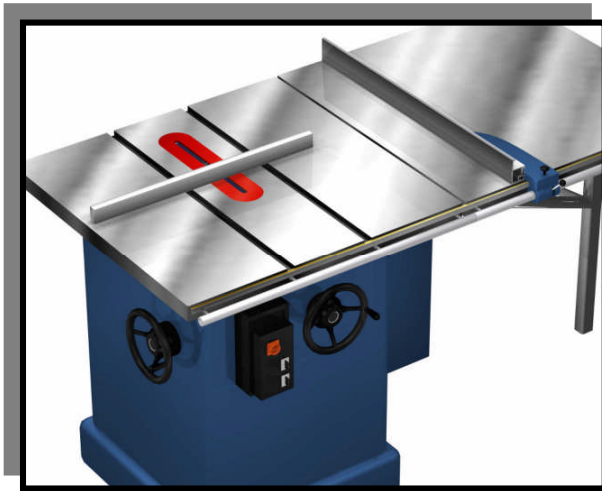
SLIDING TABLE PANEL SAW

TABLE SAW

– OVERVIEW OF TABLESAW ALIGNMENT –

Here are a few facts that become very obvious, once explained. A standard tablesaw has a miter slot machined into the table top. Obviously it is a fixed reference feature that cannot be adjusted. The manufacturers have built in adjustments into: A/ saw blade trunnion B/, the rip fence assembly and C/ the miter gauge assembly. They all need to be adjusted and aligned **relative to the machined miter slot**.

Adjusting the saw blade parallel to the miter slot: In the Contractors [motor outside of frame] type saw, the trunnion is adjustable. On the Cabinet saw, [saw is totally enclosed] the table top can be loosened for adjustability.



Using an accurate straight edge steel rule, check the flatness of the table top. TIP #1: Sprinkle talcum powder on the table and drag the straight edge across the surface carefully. Much like a concrete mason dragging his top leveler across the cement to get it flat. This method will give you a visual indication of the high and low spots of the table top. When finished rub the talcum powder into the table top. It will absorb any moisture within the pores of the table top. The talcum will not harm the tablesaw
TIP #2: Use feeler gauges with the straight edge.

Use the 2.0 inch dial indicator extension with ¼ inch dial indicator flat tip. Contact arbor shaft on smooth surface [not threads]. Rotate arbor by hand. Readings should be in the 0.001 inch range.



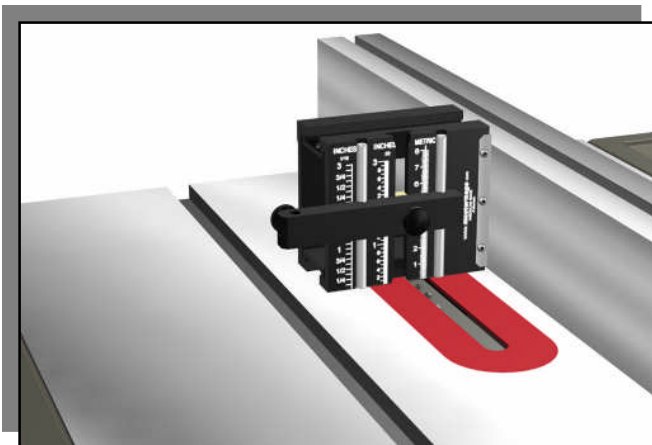
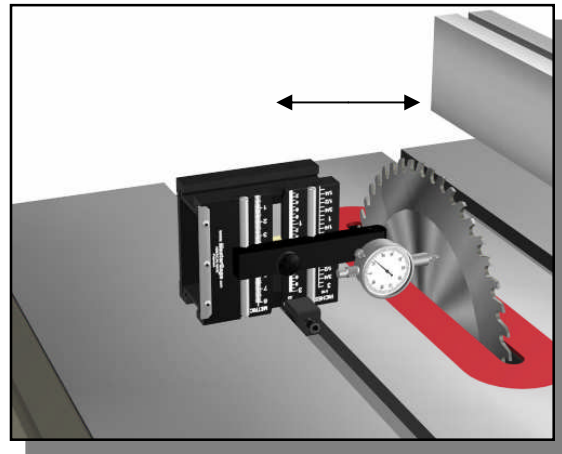
TABLE SAW



Wipe face flange clean and run fingers across flange to insure there are no burrs. If there are – carefully remove them with a file.

HINT: Rotate the saw motor assembly 45 degree so that the face of the flange is directly 90 degrees to the Dial Indicator stem for the most accurate readings. Rotate the flange by hand and read the run out. It should be within 0.001 inches

Using the round tip on the dial indicator, make contact with the saw blade near the top of blade. Rock the blade gently side to side to check bearing wear. Check with the saw manufacturer for bearing wear allowances.

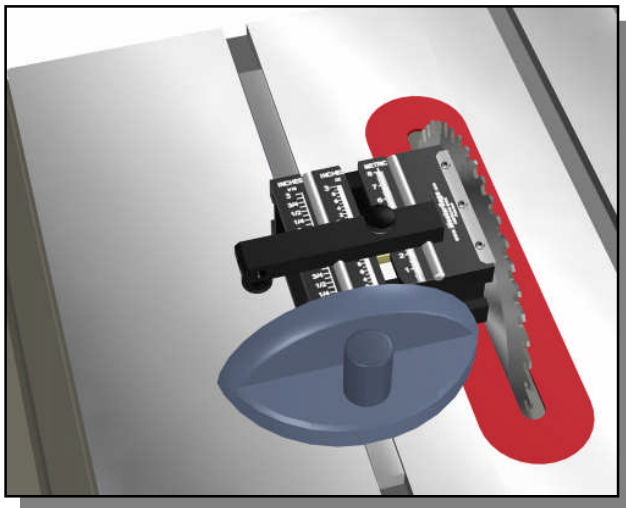
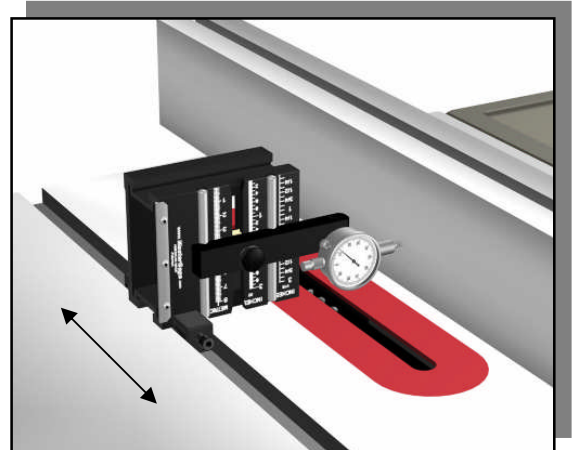


Square the rip fence with the **MasterGage/Classic** knife edge.

TABLE SAW

FENCE ALIGNMENT: Attach the Miter Slot Cradle Bar to the **MasterGage/Classic**. Traverse the length of the fence and adjust parallel to the miter slot. Check for any fence distortion or warpage. Also, use a straight edge for checking for any fence warpage

TIP: Adjust the fence so that the fence is 0.004 to 0.006 further away from the back of the fully extended blade, relative to the front of the blade.



Square the miter protractor gauge to the saw blade using the **MasterGage/Classic** "KNIFE EDGE". Set and lock the miter gauge indicator arrow on zero. Adjust and lock the stop screw to zero position.

TIP #1: Use the **MasterPlate** for this calibration. It will give you a precision flat surface to accurately establish squareness and set any desired angle very accurately.

With the Miter Slot Cradle Bar attached to the **MasterGage/Classic**, traverse the length of the blade to check and adjust the saw blade parallel to the miter slot.

Suggestion: Use the **MasterPlate** to accomplish this task

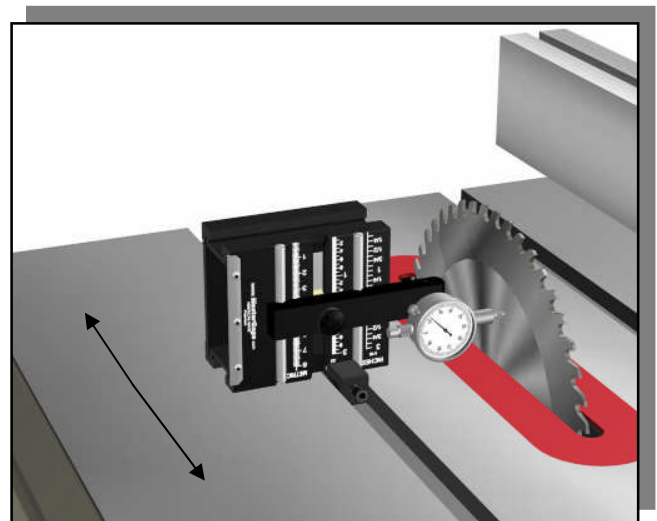
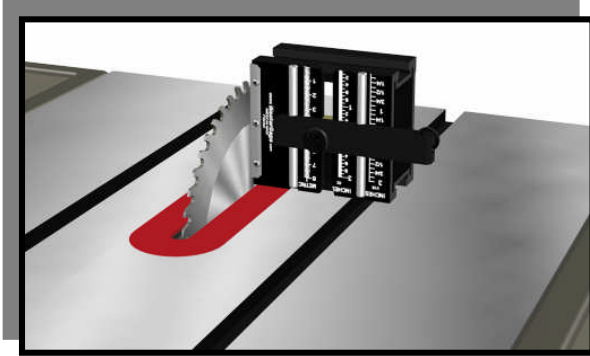


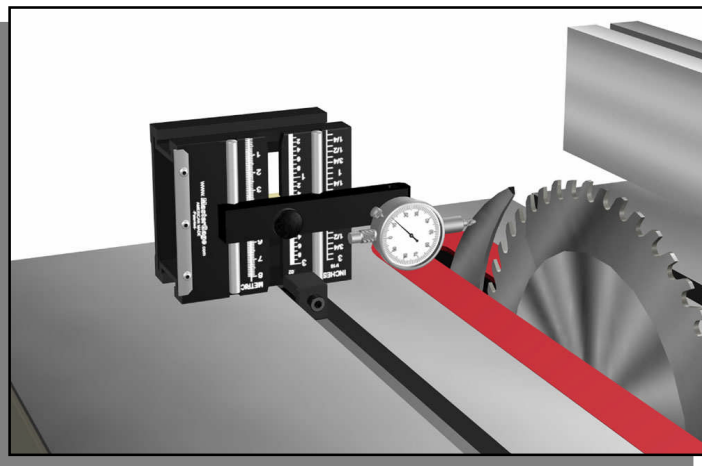
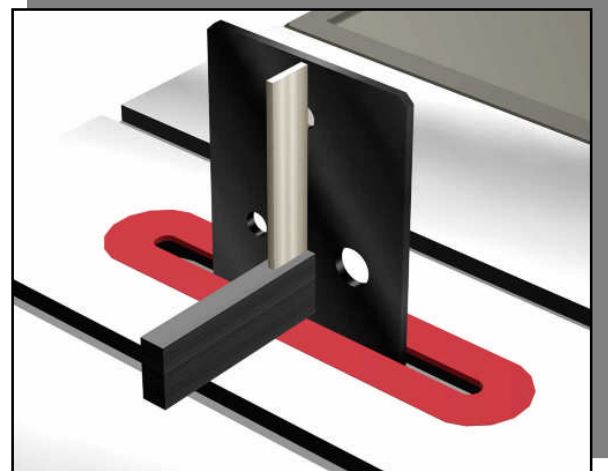
TABLE SAW



check/set the blade 90 degrees perpendicular to the table top.

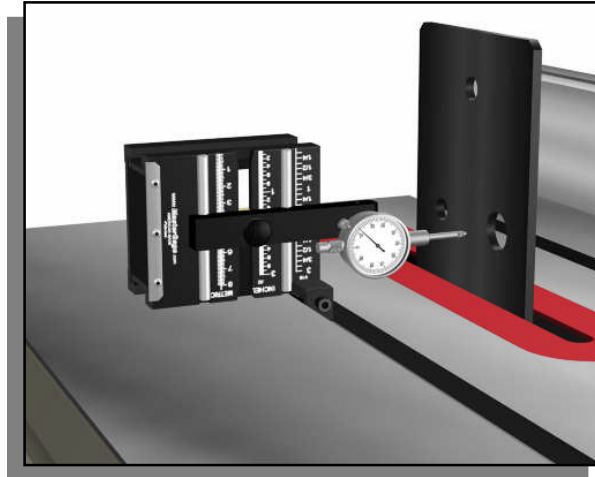
OPTIONAL: Use a precision machinist square to verify **MasterPlate** perpendicularity to the table top

Once perpendicularity is established, set the pointer to zero on the bevel (tilt) protractor. Next, set and lock the stop screw.



Align the splitter unit both parallel and center to the saw blade

TABLE SAW



If your saw is equipped with a scoring blade, we suggest the following procedure:

1. Mount the **MasterPlate** to the scoring blade arbor. You may find that the **MasterPlate** will have to be rotated slightly, to clear the table slot opening. This is due to the fact that the scoring blade may be located lower and behind the insert plate opening.
2. Using the **MasterGage/Classic**, with the Magnetic Miter Slot Cradle Bar, you can now set the scoring blade parallel to the miter slot and the **MasterPlate**.
3. Finally, mount the main cutting blade and adjust the scoring blade parallel and centered to the main cutting blade using the **MasterGage/Classic**

CHECKING THE SAW BLADE MECHANISM FOR TRACKING ACCURACY

Once the tablesaw has been aligned, it is important to verify that both the vertical motion and tilting motion mechanisms tracks accurately. Below are illustrations on verifying these motions.

After your align the **MasterPlate** is 90 degrees perpendicular to the table top, perform the following. With the dial indicator stem registered against the **MasterPlate**, move the saw blade mechanism to the maximum up and maximum down position. This will tell you if the mechanism is tracking true through the full vertical motion.

This calibration is also shown in all SawStop® Manuals

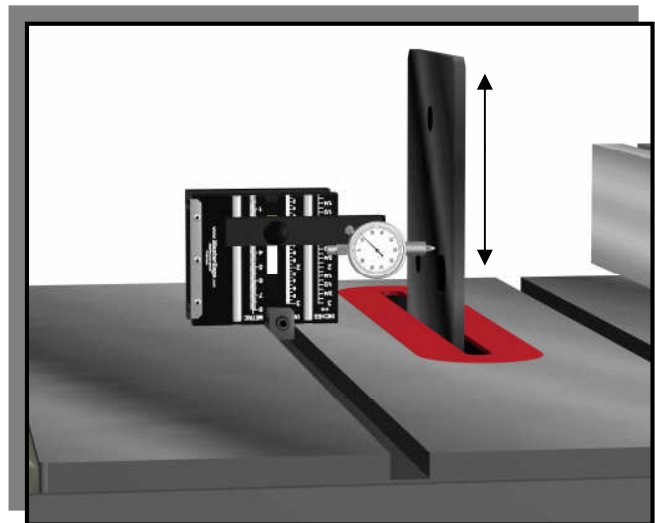
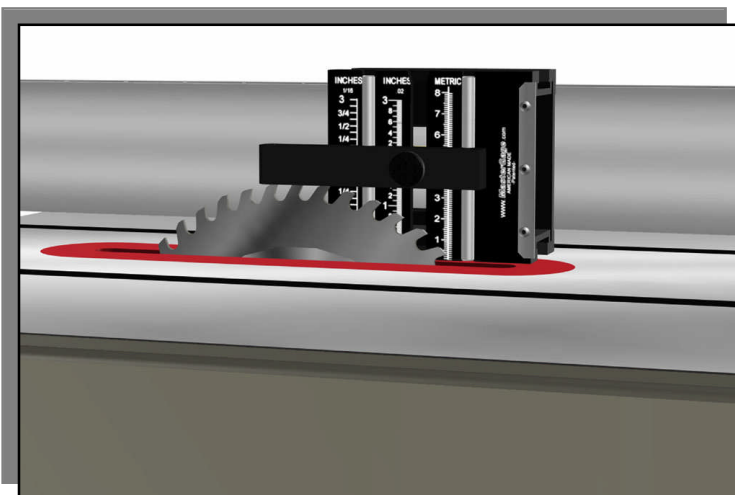
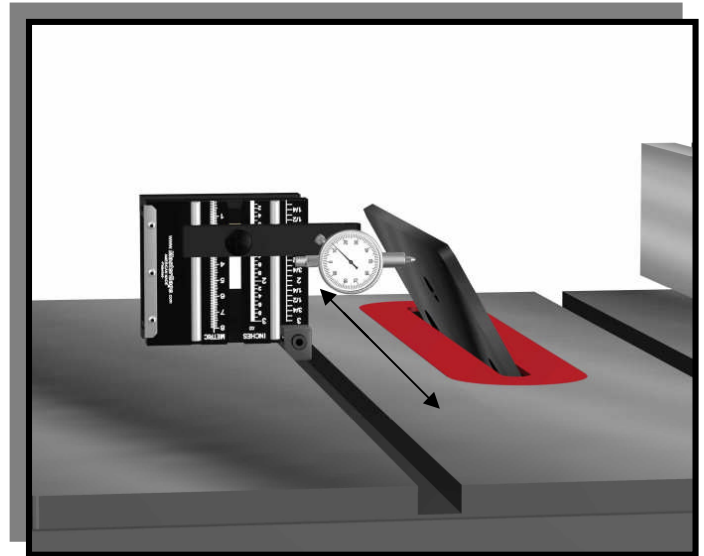


TABLE SAW

CHECKING THE ACCURACY OF THE TILT (TRUNNION) MECHANISM. Once the **MasterPlate** is aligned parallel to the miter slot, the following procedure should be performed to verify the accuracy of the blade tilt mechanism. The measurement is to be taken over the full length of the **MasterPlate**. Measure across the **MasterPlate** as shown approximately every 15 degrees, from 0 to 45 degrees. This exercise will verify that the tilting mechanism is tracking true, through the full tilt cycle of 0 to 45 degrees.

This calibration is also shown in all SawStop® Manuals



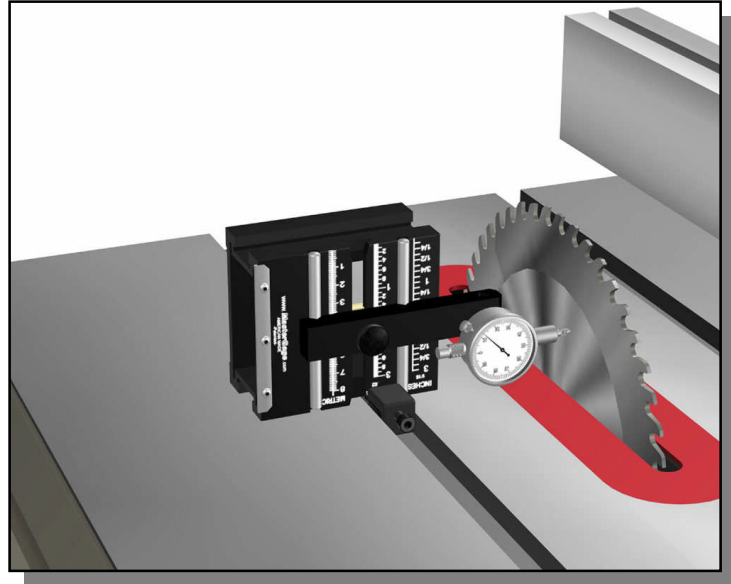
SET ANY HEIGHT:

1. Set the Level Arm at the desired height [do not lock the locking knob]
2. Raise the blade till it almost touches the Level Arm.
3. Carefully rotate the blade toward the back of the saw [this keeps the cutting edge of the blade from damaging the level Arm]. Allow the blade tip to glance the Level Arm to establish height desired.

TABLE SAW

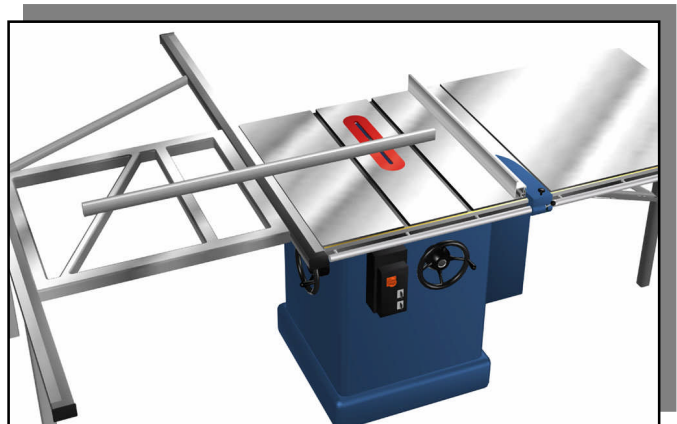
Lastly, after all of the elements of your tablesaw are aligned and calibrated, install your saw blade and check it for run out by rotating the blade by hand and reading the run out. Now you know with confidence that you can check the accuracy of your saw blade

TIP: When changing saw blades, be sure to clean the saw flange thoroughly. Check for burrs by passing your fingers over the flange surface. Dirt, sawdust and burrs could cause the blade to wobble.

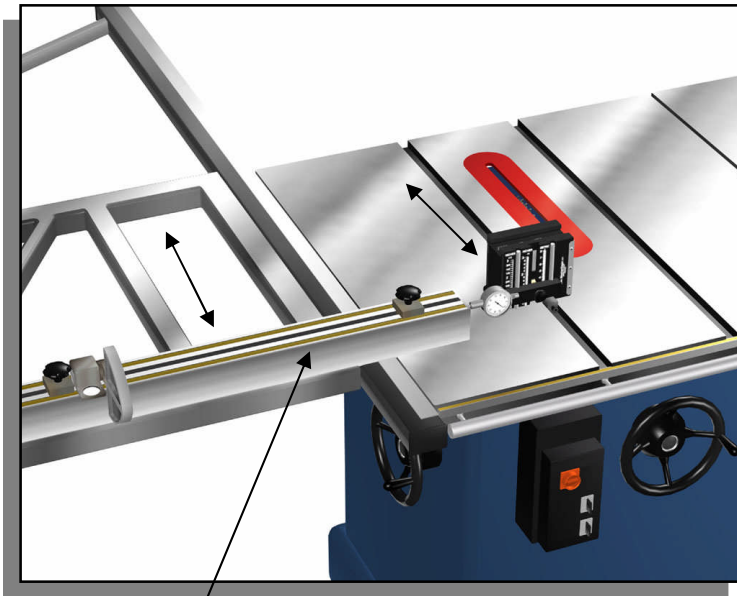


ADD-ON SLIDING TABLE SAW

Adjust the sliding table parallel to the saw table top using an accurate straight edge. The sliding table should be slightly higher than the tablesaw table surface. Fold a crisp dollar bill once [approx .010 inches thick] and use it as a feeler gauge and adjust the sliding table so that it is approximately .010 inches higher than the tablesaw table surface, along its total travel distance.



ADD-ON SLIDING TABLE SAW



Cross Cut Fence

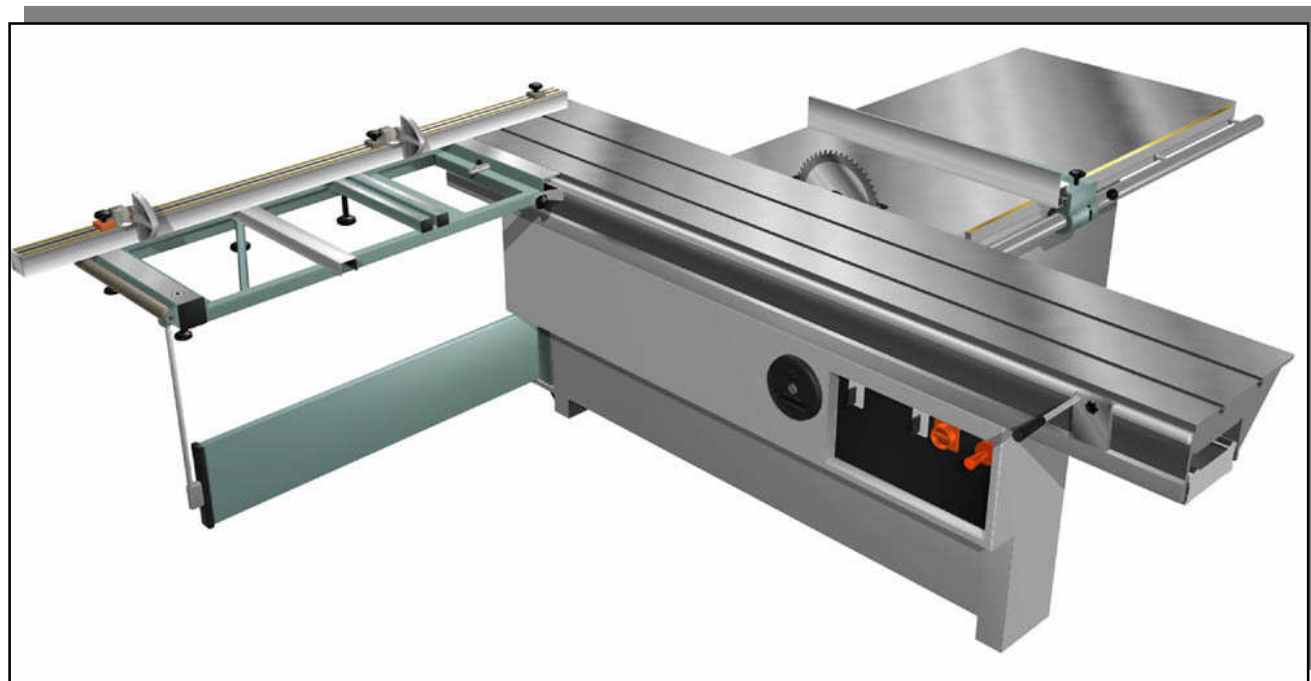
Align all elements of the tablesaw with the **MasterGage/Classic** as shown in the tablesaw section

The sliding table must be parallel to the miter slot [along with the saw blade and rip fence]. Once completed, position the **Classic** as shown. Bring the Cross Cut Fence in contact with the Dial Indicator tip. Move the **Classic** and Fence together along the length of the miter slot. Adjust the sliding table to bring it parallel to the miter slot. Now you can be assured of clean 90 degree cuts using either the miter gauge or the sliding table

The **MasterGage/Classic** can also set up and align special equipment such as the Incra fence system and the Saw Train fence system very easily.

- The Incra fence system is a registered trademark of the Taylor Design Company.
- The Saw Train fence system is a registered trademark of JOINTECH.

SLIDING TABLE PANEL SAW



A little background on sliding table saws. They were originally developed by European saw manufacturers for the 32 mm system for construction of cabinets and case goods. The 32 mm system requires precision machining of sheet goods such as MDF (medium density fiberboard) and melamine for the fabrication of case goods.

Many of the *MasterGage/Classic* calibration techniques used on the tablesaw can be performed on the sliding table saw. See the Tablesaw section for the following procedures.

1. Checking arbor shaft run out – page B1
2. Checking face flange run out – page B1
3. Setting saw blade height - page B5
4. Checking bearing wear – page B1
6. Squaring blade to table top – page B2
7. Checking blade run out – page B5

Generally, there is no miter slot in the main table of sliding table saws, as in standard tablesaws. Therefore, different alignment and calibration techniques are required.

NOTE: We recommend that alignment of the sliding table itself to the main table be performed by manufacturer/dealer qualified technicians.

SLIDING TABLE PANEL SAW

Sliding Table Panel Saws were designed to cut large sheet goods such as 4 ft x 8 ft (1,219 mm x 2,438 mm) materials. The sliding table is used for both cross cuts and ripping operations. Calibrating the cross cut fence to square to the saw blade is critical. We call this calibration technique the “Five Sided Cut”. The illustrations below, numbered 1, 2, 3, 4 and 5 demonstrate this method.

Use a piece of MDF or melamine – approximately 24 x 24 inches (609mm x 609mm) - the larger piece, the more accurate the readings. Preferably ½ inch (13 mm) thick material.

Mark one edge “A” for orientation. Perform the following steps.

Step 1 – Make a clean cut (dust cut) along side “A”

Step 2 – Rotate the stock counterclockwise (to the left) so side “A” is against the cross cut fence and make a full length clean cut

Step 3 – Repeat Step 2

Step 4 – Repeat Step 3

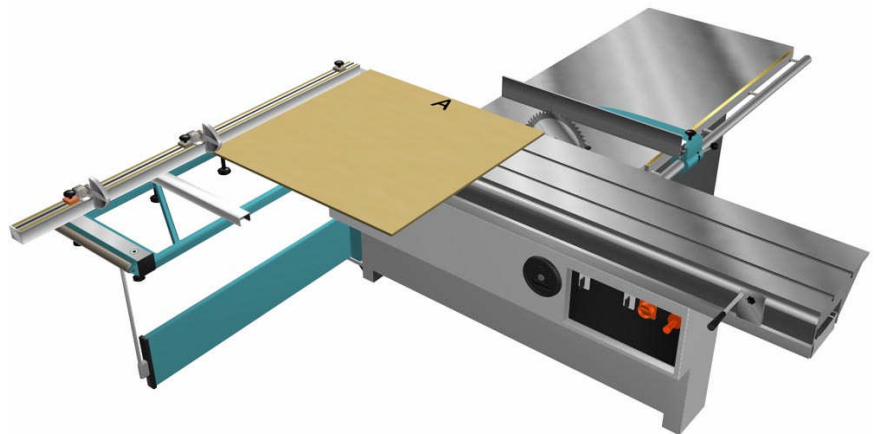
Step 5 – The panel is back with side “A” next to the saw blade. Make a cut approximately ½ inch (12,7 mm)

Step 6 - Measure the width at both ends of the strip. Subtract the difference and divide by four. This will give you the amount of adjustment to make in the cross cut fence to bring it into square.

Once your saw is aligned, repeat this procedure occasionally to verify your saws squareness.

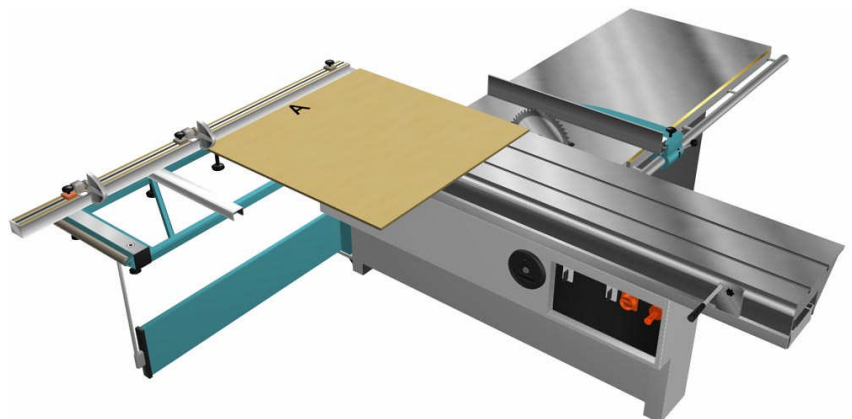
STEP 1

Make a clean full cut along edge “A”



STEP 2

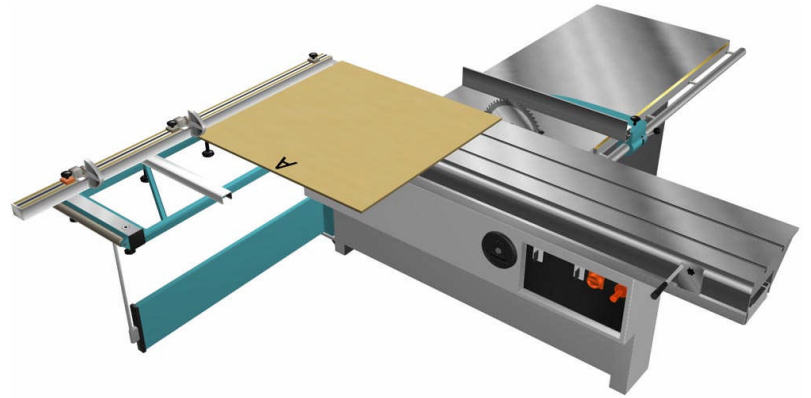
Rotate stock counterclockwise, with edge “A” against cross cut fence and make a clean cut, full length.



SLIDING TABLE PANEL SAW

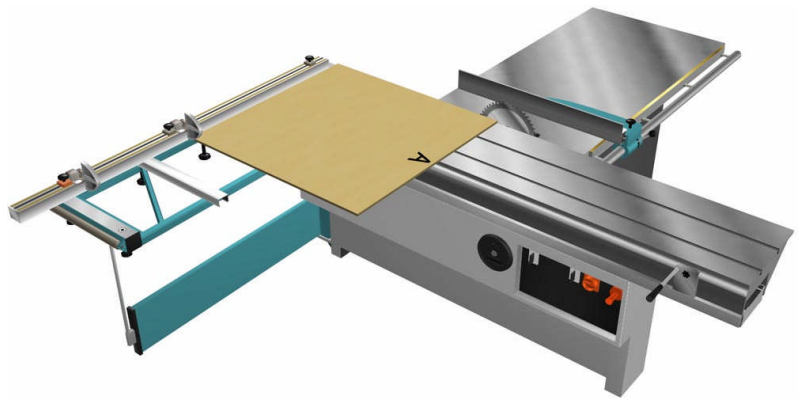
STEP 3

Repeat Step #2



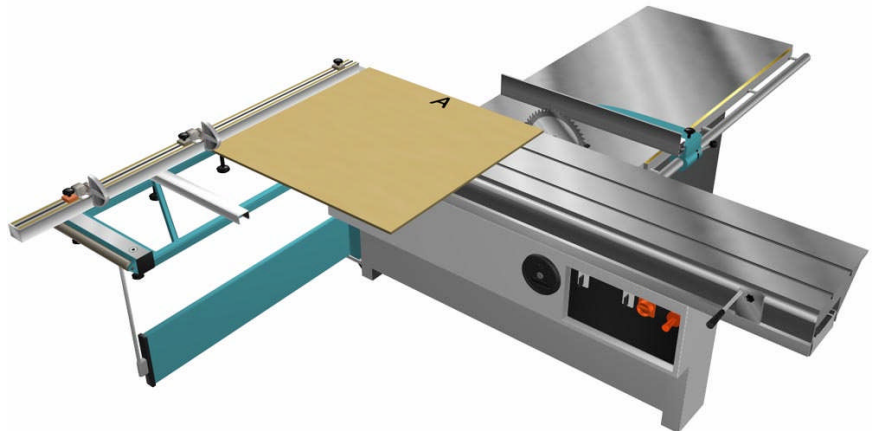
STEP 4

Repeat Step #2



STEP 5

With edge "A" back to original position, make a cut approximately $\frac{1}{2}$ inch (13mm)



STEP 6 Lastly, measure the width of each end of cut strip, subtract the difference and divide by 4. This is the required adjustment needed on the cross cut fence to bring it in square.

SLIDING TABLE PANEL SAW

Rip Fence Alignment

The rip fence alignment is achieved with the **MasterGage/Classic** and **MasterPlate**. We offer a special **Euro-MasterPlate** with 30mm mounting holes and clearance holes for the anti-rotation pins found on most European sliding table saws. It is the same price as the standard **MasterPlate**.

First, replace the saw blade with the **Euro-MasterPlate**. Position the **Classic** with its back on the tabletop and the top against the **Euro-MasterPlate**, with the dial indicator indexed against the rip fence. Slide the **Classic** fore and aft to set rip fence parallel or to any toe out dimension desired.

Euro-MasterPlate

