

Safety:

General Safety Guidelines

The procedures recommended and described in this forum are effective methods of performing service and repair. Some of these procedures require the use of tools specially designed for this purpose.

Properly trained personnel should be present whenever maintenance is being performed on a pinspotter.

No unauthorized personnel should be allowed in the pit area.

Keep in mind that the pinspotter performs a series of mechanical motions and electrical actions during each cycle, and the bodily injury could result should personnel enter the machine when power is on. When working on a pinspotter, it is recommended that the power also be turned off on adjacent machines.

Remember that safety must remain your first priority at all times.

Safety goggles, ear protection, and steel-toed shoes are recommended whenever any work is being performed on a pinspotter.

Wearing loose clothing or jewelry is **NOT RECOMMENDED** when operating or maintaining the machinery.

All safety guards must be in place before operating the machine. When maintenance is required, the following steps **must be followed:**

Disconnect the power plug before working on the pinspotter.



Remove guards only as required to perform maintenance.

Once maintenance is complete, replace all guards.

From the front of the machine disconnect the table power plug from the motor.

Using a hand crank insert it onto the top of the stator shaft underneath the dust cover.



Holding down your spot latch as you crank the table in the correct direction that the table drive assembly is moving towards you. Crank the table down until your table drive assembly is fully extended.



Machine height should be #1 priority when starting table adjustments. Over the years Table height as I knew it was 19-1/8" then it was 19" and now 18-7/8" Due to natural wood lanes being sanded and synthetic layovers, The machine height has to be moved to accommodate the ever increasing lack of adjustment due to this. Always measure your machine height prior and after any sanding or major renovation of the lanes in order to keep your machines adjustments in check.

Table Cross level is very important in order to maintain the correct table clearance from the pin deck. There are 3 points to check from.

In front of the #1 pin on bottom side of table frame.



On the bottom outside of the #4 pin table frame.



On the bottom outside of the #6 pin table frame.

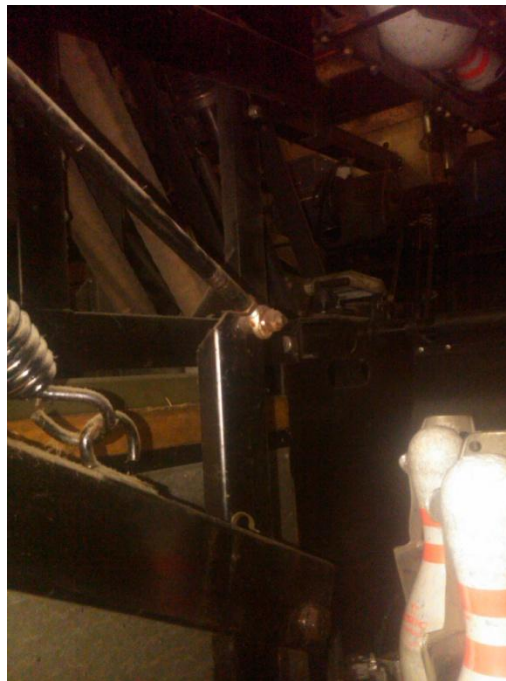


Note: The cross level is only beneficial as long as the pindeck is leveled correctly also first.

To correct the Cross Level Use spacer washers or Pac-man washers between the table frame and support weldment (foot). Do this one side at a time.

After checking Cross tilt you can check the front and rear level. Equal distance between the front of the bottom side table frame (#1) and the rear bottom side table frame (behind 7-10 row) should show equal distance. Don't worry about the height at this time unless the table is already touching the pindeck in which it needs raised before this adjustment can be done correctly. To correct the front to rear level, you must lengthen or shorten the 1558 tie rods. If you Lengthen the 1558 rods the front of the table will rise and the rear of the table will lower. If you shorten the 1558 rods the rear of the table will rise and the front will lower.

When turning these tie rods they both must be turned the same amount on both in the same direction on each side.



Adjusting the table height is made by your clevis that is mounted on your table drive assembly. Your clevis also is pinned to your table torque tube arm. Correct height adjustment should be 5/16" or a little higher. Never let your height be less than 5/16" off the pin deck or you are risking damage to your pin deck and or table assembly. 1 full turn of the clevis results in 1/4" of movement. 1/2 turn will result in 1/8" of movement. Lengthening the clevis will lower the table assembly and shortening the clevis will raise the table assembly.

Note: In order to release the pressure off of the clevis your must raise the table with something. The quickest and easiest thing to use is a bowling pin. Lift the table up with your hand and wedge the pin sideways underneath in order to release the weight of the table from the clevis pin and bearings.

Now we can move on to the toe-in adjustment.

Over the years the height has varied quite a bit on where you need to crank the table to in order to do this adjustment. Original specs say 6" off the pin deck. Other manufacturers say 8" now. I feel 7" is a happy medium for all and it seems to work well for me. So by cranking the table in the correct direction so the table cams are now turning away from you. Crank the bottom of the table frame up until you have 7" of clearance off of the pin deck.



Loosen the collar on the front left side of the front yoke shaft and slide it left out of your way.



Using a Tri-Square with a good level on it (Combination Square). Hold it against the shaft where the collar is and the #2701 pin bolt directly below it.



Loosen the Jam Nut and adjust the stop screw until the level on your Tri-Square reads somewhere between center and a 1/2 bubble to the rear of the machine.



Now you can tighten the Jam nut back up and reposition the collar.



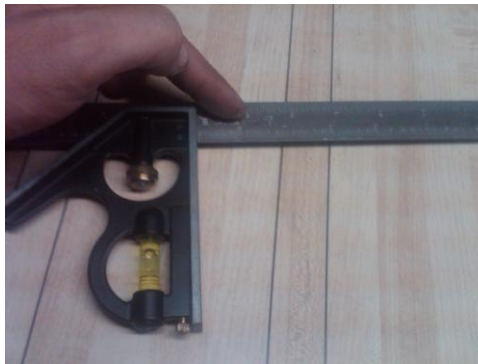
Note: Don't forget to check that the large tension spring on the front leg by the stop screw that you just adjusted is tightened down all the way.

FORWARD MOTION ADJUSTMENT

Now crank the table in the correct direction so the table cams are moving towards you again. By setting your special tool (ST-6519 gauge) on the #1 pin you can crank the table down until the bottom of the pin just touches the top of the gauge.



You must obtain 1/16" clearance in between the stop screw and the stop. Using your Tri- Square (Combination Square) you can use the thickness of the rule to use for the clearance as it is 1/16" thick. In order to obtain this clearance you must adjust the spotting rod (inner rod). By loosening the jam nuts on both ends of the rod you can lengthen or shorten the rod to obtain the correct clearance adjustment. Don't forget to lock the jam nuts back down after it is adjusted.



The next step would be to adjust your spotting cups. This is referenced in another thread on this forum called [\(Spotting cup Adjustments\)](#)

One last step I like to check and adjust if necessary after table adjustments are finished is the adjustment of the Pawl to the shifter cam link. If you have adjusted the table more than 1 full turn on your clevis then you should adjust this. By moving your cam link down until the high or middle crown of the shifter cam link is in line with the pawl. Make sure that you have a matchbook cover clearance or less to just clear the high part of the crown.



Now you can crank the table back up to the home position, plug the machine back in and check to make sure all the pins are spotting properly now.