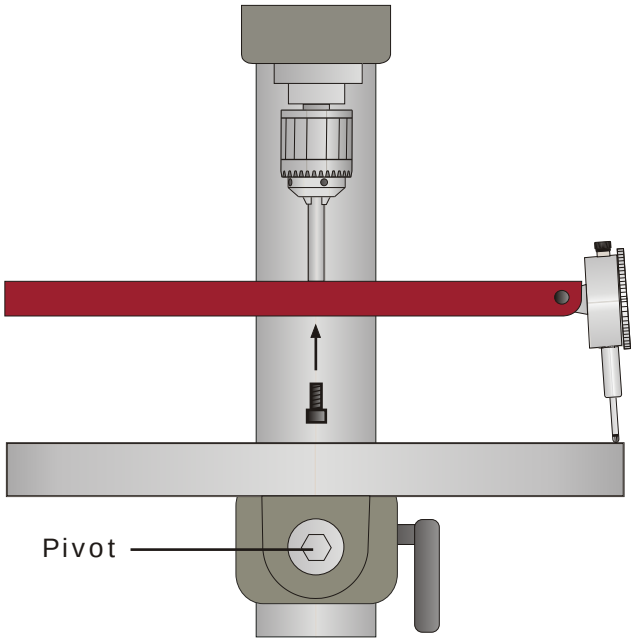
A-LINE-IT™ Drill Press Test # 1 Checking Table to Spindle Squaring

In the Illustration to the right, you can see the A-Line-It™ configured to check the "table to spindle" squaring on a drill press.

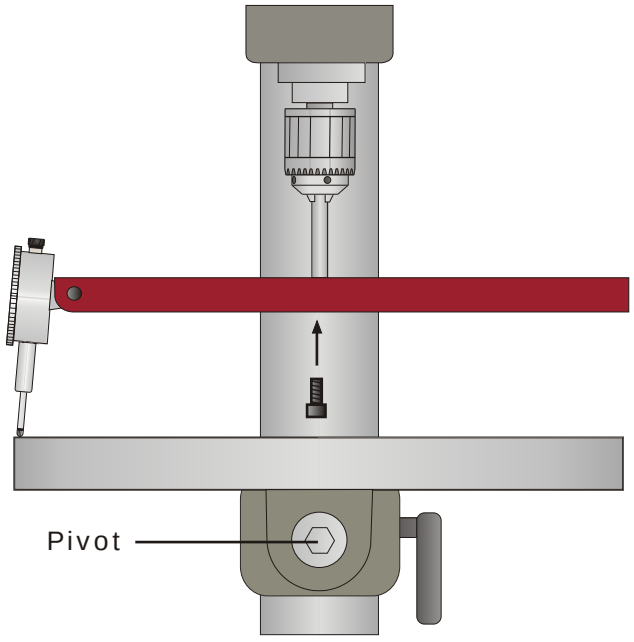
Though it may seem like "over-kill" to be using a dial indicator to make this test, it is the easiest way I know of to make sure the table and spindle are *perfectly square* to one another. By using the following method, your settings aren't just close... they will be perfect because you aren't depending on a drill bit that may be bent when you make the test and adjustment of the table.

In the Illustration to the right, the precision pin (included with the Deluxe A-Line-It™) has been installed in the drill chuck *with the tapped end facing down, toward the table*. *Note that the mounting bar is upside down*, with the countersunk holes for the screw also facing down toward the table. The table should be centered on the spindle, and locked in position.



Install the dial indicator on the mounting bar, *as shown in the Illustration to the right*. When you attach the mounting bar to the pin, try to place it in the hole that places the tip of the indicator as close to the table edge as you can, and insert (and tighten) the screw. *Note* that the indicator has been slightly pivoted. This will allow you to increase the distance over which the readings are made. "Zero" the indicator.

Lift the plunger of the indicator, and rotate the A-Line-It 180° to the other side of the table, *as shown in the Illustration to the right*. Note the reading on the indicator. *If the reading os not "zero"*, the table is not square to the spindle. *Divide the difference between this reading and "zero" by 2*, to give you 1/2 of the total change. This would be amount the table will need to be moved to be square with the spindle. Loosen the table-tilt locking bolt, and move the table as follows:



If the second reading is above "zero" lower that side of the table 1/2 of the reading change.

If the second reading is below "zero" raise that side of the table 1/2 of the reading change.

Since the table has a center-pivot, raising one side of the table lowers the other side, and vice-versa. Re-tighten the table-tilt locking bolt.