



Maximize no-till drill performance:

A few tips from the folks at Exapta:

1) For firm seedbeds, make sure the down-pressure is sufficient to keep the opener at the proper depth (this is especially important for crops such as winter wheat). For JD 50/60/90-series drills, this usually requires that **the rockshaft be sloped downward in the rear** (see photo) by 5 – 15 degrees, occasionally 20. (The JD Owner's Manual is incorrect in specifying it be horizontal all the time, which is the appropriate setting only on mellow glaciated soils.)

Note, however, that the **drill frame shouldn't lift** when the openers are lowered and the down-pressure engaged. This often requires additional frame weight to be added, and sometimes quite a lot (often many dozens of suitcase weights on air drills, and note that you need weight on the wings, not just the center section).

The key to understanding this adjustment is that the torque on the rockshaft simply is compressing the huge coil spring on each opener, *but only if the drill frame isn't allowed to lift*. In fact, the easiest way to compare down-pressure in different scenarios (or with your neighbor's 50/60/90-series) is to measure how much compression of the big coil spring you've achieved, and the large rod going thru the middle of the spring allows you to do just that (it protrudes out the bottom of the casting when the spring is compressed). In mellow conditions, you might only need 1.0 inch of compression. In tough conditions, 1.75 – 2.5 inches become necessary.

2) Make sure the opener blades are sharp with a deep bevel (compare to new), and this is especially important for slicing thru tough stalks such as soybeans. When installing 50/60/90 blades, be sure to put the bevel away from the gauge wheel (i.e., towards the boot). In other words, the bevel is towards the furrow being cut (this is the opposite of how double-disc planters are set up). **The JD drill blades don't cut well at all if they're installed backwards.**

3) Make sure the seed bounce flaps are intact on the back of the boot. On air drills, keep the air velocity low to minimize seeds being blown and/or bouncing out of the furrow.

For more info on drill setup and adjustment, see the [Sept. '08 newsletter](#) from a year ago, and also the [Tech Tips for Drills](#) page.



Rockshaft should slope rearward, as shown by the white lines. (Drill is traveling towards the right.)



No-Till Seeding Explained™ DVD



Also, our DVD '[No-Till Seeding Explained](#)' contains in-depth discussions and visuals for these drill models

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