

Haybuster 107 C No-till Seed Drill Calibration Guide



About this manual...

This manual is made possible by the University of Vermont Center for Sustainable Agriculture, the White River Natural Resources Conservation District, the Connecticut River Watershed Farmers Alliance, the University of New Hampshire Cooperative Extension, and the Cheshire County Conservation District.

Our work is inspired by a video produced by Carl Majewski of University of New Hampshire Cooperative Extension and Amanda J.C. Littleton of the Cheshire County Natural Resources Conservation District.
<https://www.youtube.com/watch?v=3IJUvHLDaDE&feature=youtu.be>



CHESHIRE COUNTY
CONSERVATION DISTRICT



Extension



White River
Natural
Resources
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District



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Welcome to the Haybuster 107c No-Till Drill Calibration Guide

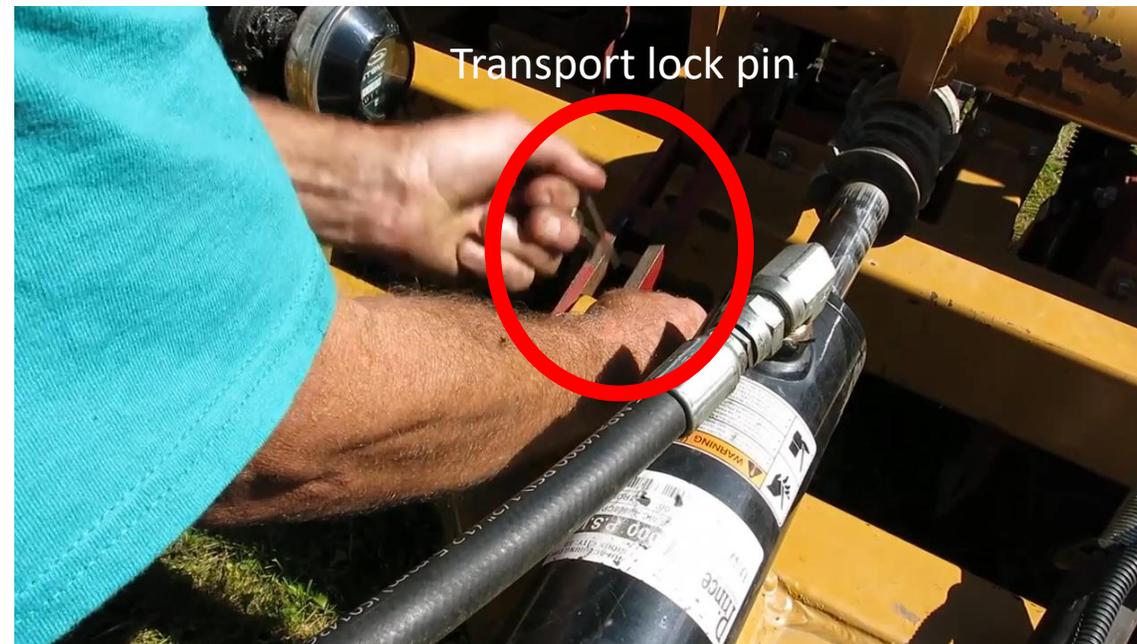
- This guide is intended for renters of the Cheshire County Conservation District No-Till Haybuster 107c No-Till Drill seeder.
- This guide is intended for those who have already reviewed the Cheshire County Conservation District website and No-Till drill information page, <http://cheshireconservation.org/farm-equipment-rentals>
- This guide includes
 - Calibration
 - Operation
 - Maintenance
- For more detailed instructions, please refer to the manufacturer's operator manual.
- **Disclaimer:** This guide is not intended to replace the operator manual or the verbal or written instructions of the equipment's maintenance technicians. The renter is bound by the rental contract and assumes all liability for any damage to the equipment.





Transport mode to field mode:

The drill features hydraulics that lift and lower the unit in the field.



Transport lock pin



Once the two hydraulic lines are hooked up, lift the unit to relieve tension and remove the transport lock pin in order to lower the drill and put it in field mode.



Calibration

Place seed in the appropriate seed box. The drill features three seed boxes:

- The **front** compartment (“Small box” in picture at right) is for small-seeded legume crops like clovers or alfalfa.
- The **middle** compartment (“Middle box” in picture at right) is for larger-seeded crops like small grains, sorghum, or soybeans.
- The **back** compartment is for bulkier grasses, or for seed mixes.



Calibration, cont.

You regulate the seed output for the **two larger seed boxes** (small grain seed and grass seed boxes) by opening or closing a gate at the bottom.

Turn the handle on the side to the recommended setting. Each box has its own handle.

For the **small seed box**, loosen the nut that keeps the adjustment lever in place. Move the lever to the desired setting, and tighten the nut to hold it there.



Calibration, cont.

With seed in the appropriate seed box(es), remove one hose from each seed box and attach a container (cloth or plastic bag) to collect seed.

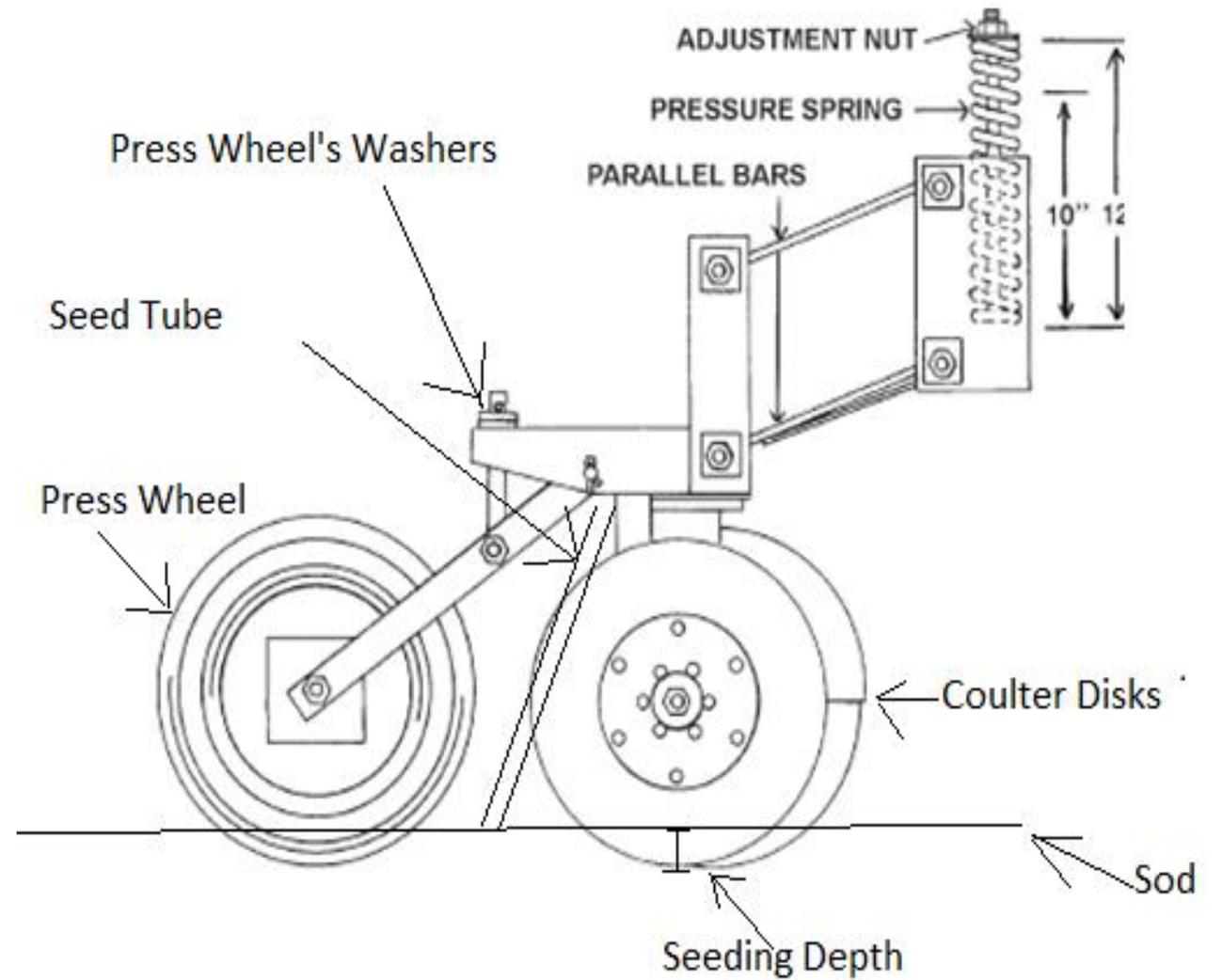
Turn seeder drive wheel at a steady, brisk rate and counting 79 full rotations. Collect seed in the attached bag(s).

Weigh the amount in ounces and multiply by 11.25 to get your pounds of seed per acre. (Seed in oz. x 11.25 = #s/acre.)



Operation

To help understand operating the drill, here is a profile diagram of a single seeding component that includes a pressure spring, press wheel, and drill opener parts.



Operation, cont.

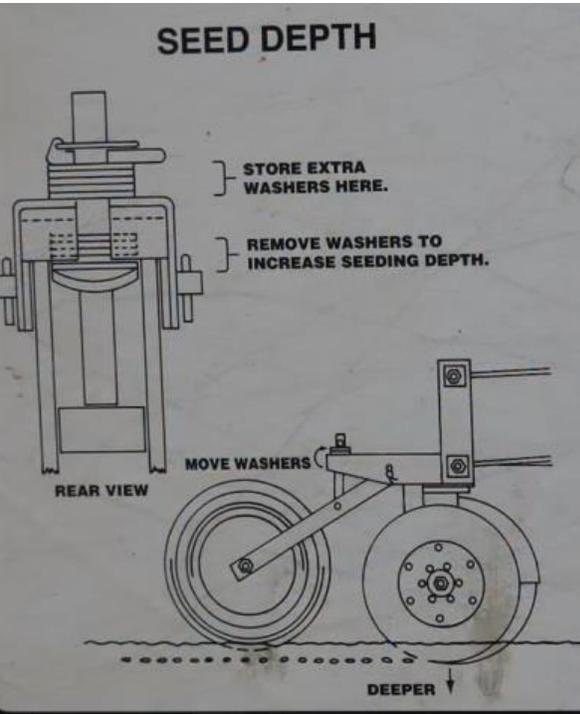
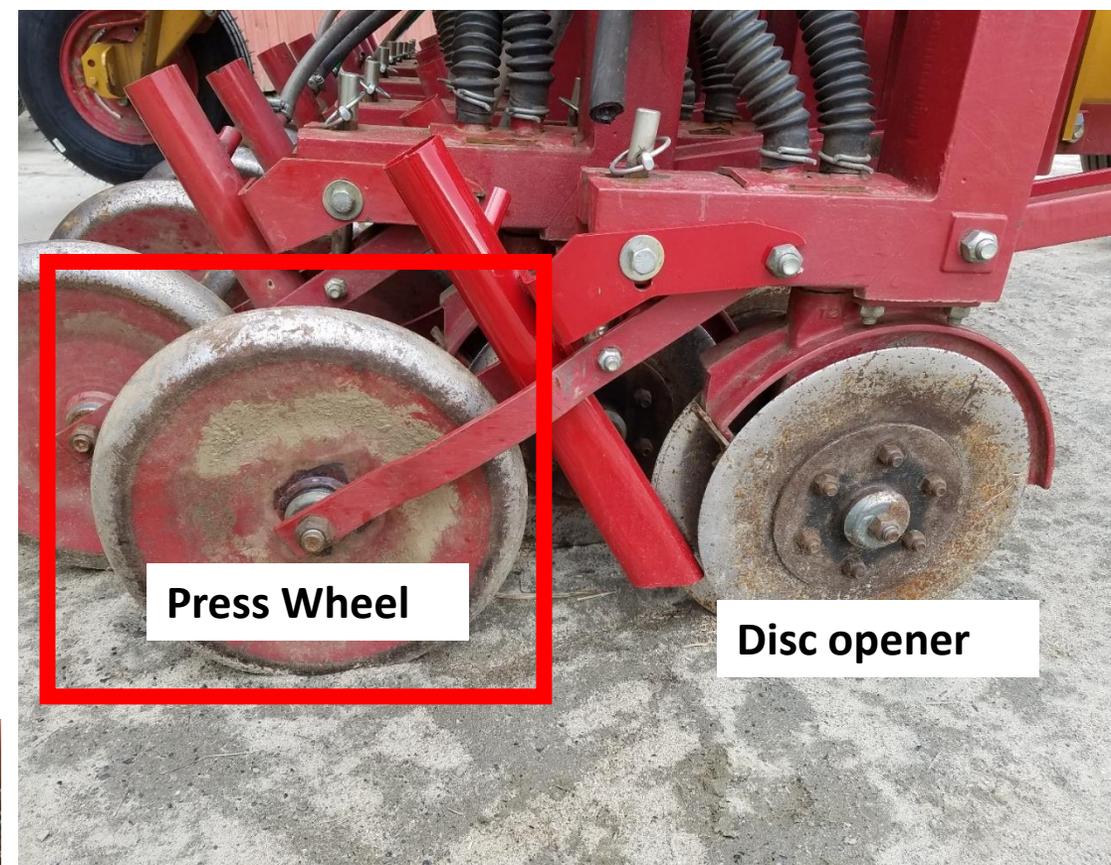
Once you have calibrated your seeding rate, it is time to adjust the drill to the appropriate seed depth. Plant a few feet and check the depth of the trench with a ruler.



Operation, cont.

First possible furrow and seed depth adjustment:

Press wheels firm the soil in the furrow, and they serve as a gauge for the disc openers: raising the press wheels will give you a deeper furrow; lower them if the seed is placed too deep.

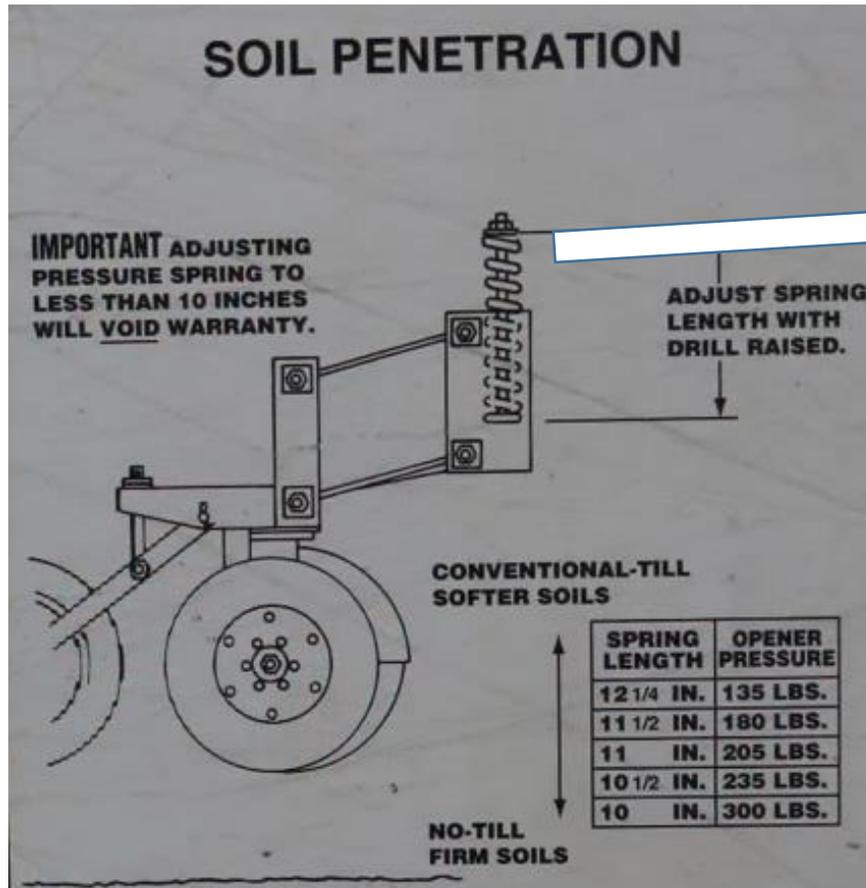


Raise the press wheels by moving washers from the bottom of the pin to the top; to lower them, move washers from top to bottom. Repeat for all press wheels.

Operation, cont.

Second possible furrow and seed depth adjustment:

Tighten or loosen the nuts at the top of the springs on each of the disc openers to increase or decrease tension.



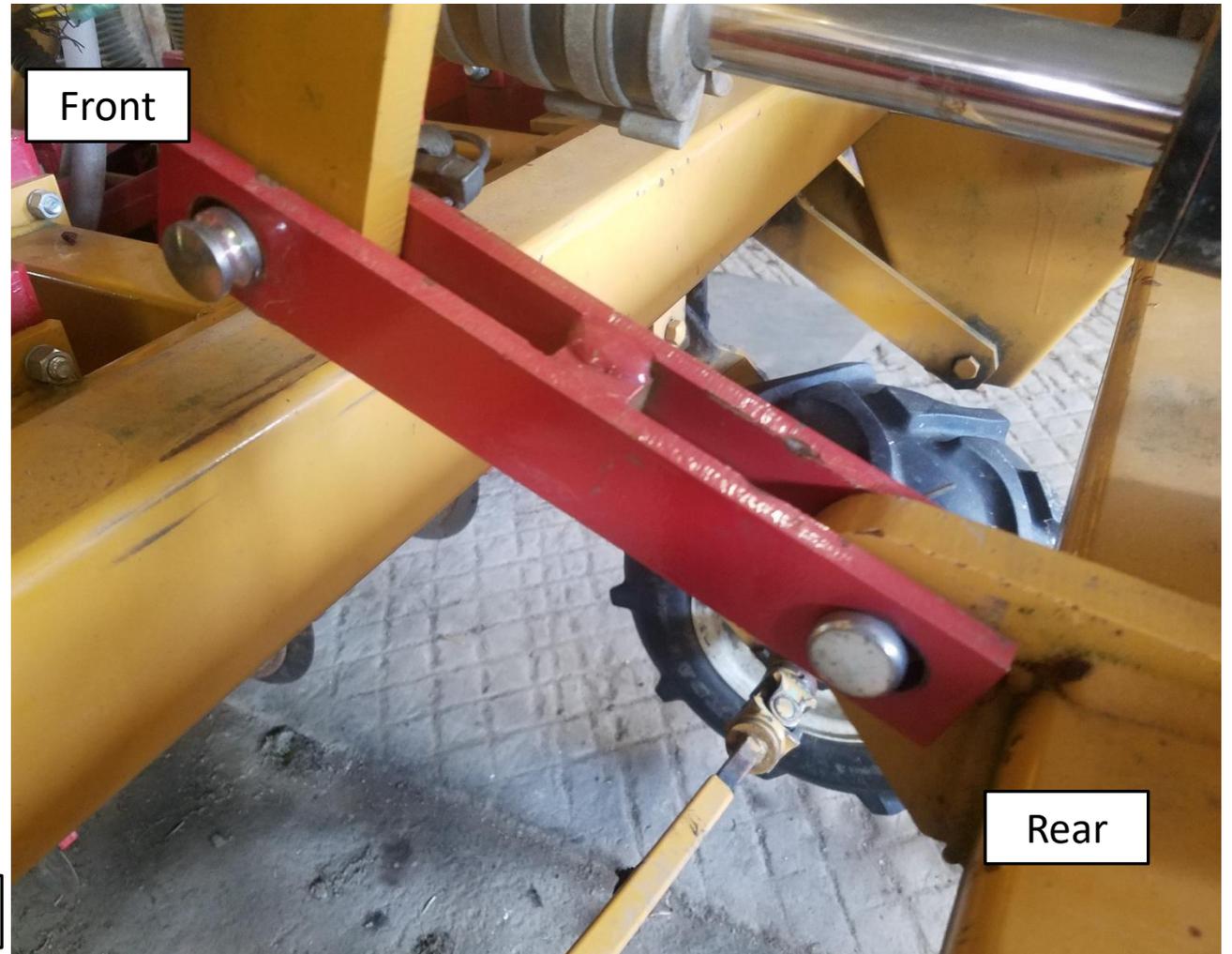
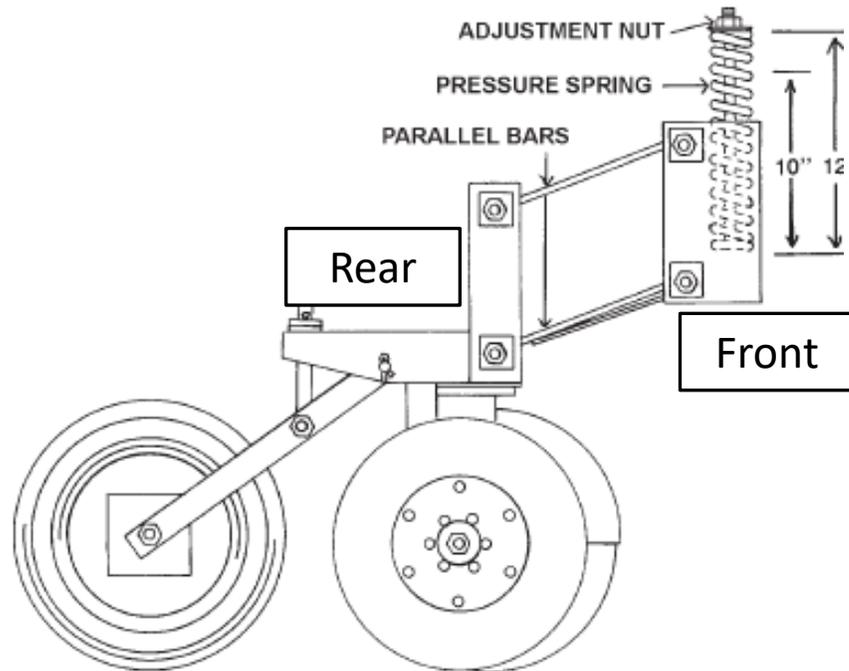
Operation, cont.

The springs should be compressed between 10 – 12 inches in length; do not tighten the nuts to compress the spring to less than 10 inches in length in order to avoid excessive tension that will damage the openers.



Operation, cont.

When the drill is properly adjusted, the parallel bars should be level with the ground surface, or slightly higher towards the front of the drill; they should not be higher in the rear. Drive a short distance with the drill lowered and check the depth of the furrow.



Operation, cont.

CAUTION: When operating the drill, making sharp turns while the unit is lowered will damage the disc openers.

Instead, drive in straight rows, lifting the unit up when you reach the end of each row, and lowering it down only after you have completed the turn.

Do not back up with the unit lowered, as it can cause extensive damage.



Maintenance

Clean out the drill thoroughly after using it. Empty the seed boxes by pulling on the cleanout lever on the side, which opens up the boxes completely. Then, vacuum the boxes clean. Remove the tubes from the small seed box and either vacuum them clean or blow them out with an air compressor in order to keep them from getting plugged up.



Photos of clogged seed tubes and seed box openings.

Maintenance, cont.

Check the disc openers and the bottoms of the seed tubes to see if they have become plugged – clean them out if necessary.



Check all the grease fittings on the unit, and grease if necessary.



Field mode to transport mode:

Before leaving the field, replace the transport lock and pin by raising the unit and to put it back into transport mode. Remove the hydraulic lines from the tractor and then it is road ready.



Questions?

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