

N500C Series Drills with SeedMetering

Field Quick Guide



Field Quick Check

N500C Series Drills with SeedMetering

CAUTION: Avoid serious injury or death. Always close the opener lock-up valve before performing any adjustment or maintenance on the machine.

This reference card is intended as a guide. Refer to the implement Operator's Manual for detailed information. Reference the tractor Operator's Manual for specific tractor operation.

A combination of adjustments determines seed placement.

Adjustment of one component affects performance of other components. For best seed placement, inspect all other component adjustments after any change.

To determine if additional ballast is needed and to ensure drill performance, make opener adjustments with minimal product in the tanks.

A	Depth Gauge Wheel: Firms the furrow wall, scrapes soil from the disk, and controls furrow depth. Set the depth with the handle (E).
B	Press Wheel: Presses seed into the furrow to promote germination. Set the wheel force with the adjustment spring (see the other side of this guide).
C	Closing Wheel: Crumbles the furrow wall to bury the seed. To adjust proximity of wheel to furrow (closer for loose soil - farther for dense soil), reposition the shim washers. Set the wheel force with the adjustment spring (see the other side of this guide).
D	Seed Boot: Delivers seed to the furrow. Adjust the height for varying conditions. Set the wheel force with the adjustment handle (see the other side of this guide).

Depth Gauge Wheel Adjustment: Depth adjustment handle (E) adjusts the furrow depth in 6 mm (1/4 in) increments. Changes in soil condition, field residue, and disk wear can alter disk penetration. Verify adjustment with a field check.

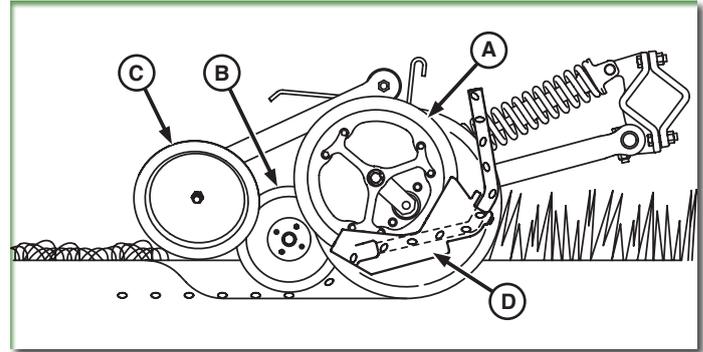
Active Hydraulic Downforce

IMPORTANT: Active downforce requires a tractor with closed center hydraulics.

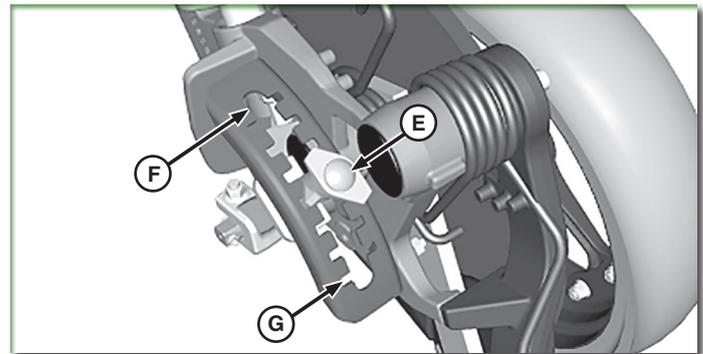
Adjust pressure to maintain depth gauge wheel contact with soil. Do not use more pressure than necessary.

1. Open the lock-up valve, activate the continuous hydraulics, and lower the openers.
2. Enable active downforce using the toggle button (H) on the monitor.

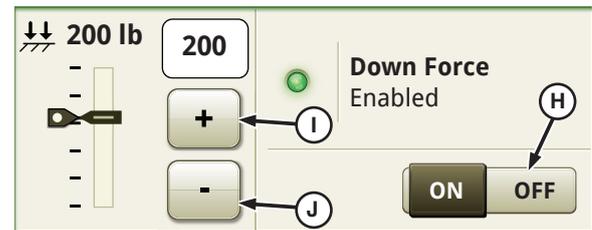
Quick Reference Guide



A—Depth Gauge Wheel
B—Press Wheel
C—Closing Wheel
D—Seed Boot



E—Depth Adjustment Handle
F—Deep Setting
G—Shallow Setting



H—Toggle Button
I—Button, Increase Force
J—Button, Decrease Force

3. Adjust the target force of the openers using buttons (I and J).

NOTE: Verify that the target force is within the acceptable range of 75—181 kg (165—400 lb).

When applying a higher downforce, ballast may need to be added to the wings.

Field Quick Check

Quick Reference Guide

N500C Series Drills with SeedMetering

Adjust the seed boot for the conditions given in the table. Ensure that the leaf spring, behind the boot, remains in position during adjustment.

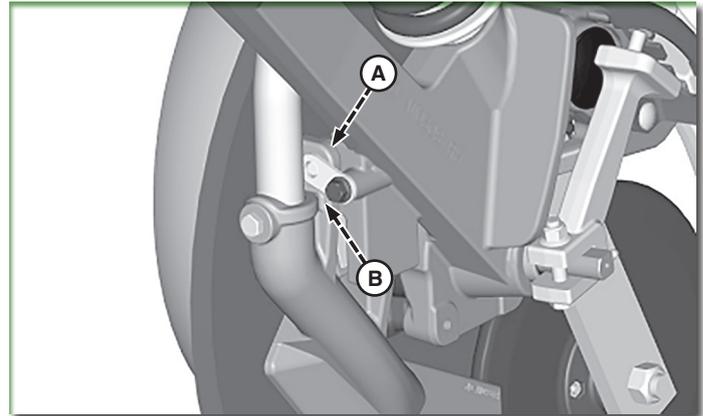
Seed Boot Position	
A	Top Hole: Factory setting. This position works in most conditions.
B	Bottom Hole: <ul style="list-style-type: none"> • Use when depth is 25 mm (1 in) or less. • Use in heavy residue conditions. • Use if high ground speed causes inconsistent seed depth. • Use if a worn boot is used with new disk openers.

Adjust the press wheel force based on soil conditions and seed depth. Place press wheel spring (C) in one of three positions:

Press Wheel Force	
D	Maximum Force: Use this position when seeding shallow due to the opener arm angle.
E	Medium Force: Use this position when seeding at moderate depth.
F	Minimum Force: Use this position when seeding deep due to the opener arm angle.

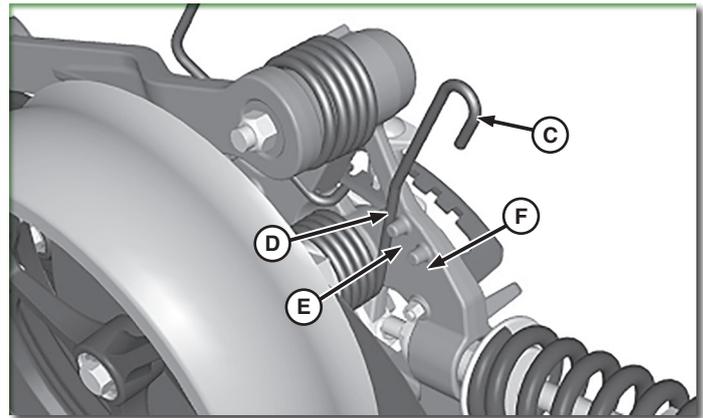
Adjust the closing wheel force on the seed opener so the seed furrow crumbles over the seed without compacting the seed zone. Place closing wheel spring (G) in one of four positions according to the soil type:

Closing Wheel Force	
H	Heaviest Force: Use in the heaviest soil conditions.
I	Heavy Force: Use in heavy, moist soil.
J	Medium Force: Use in most common soil types.
K	Light Force: Use in light, loose, or sandy soil.



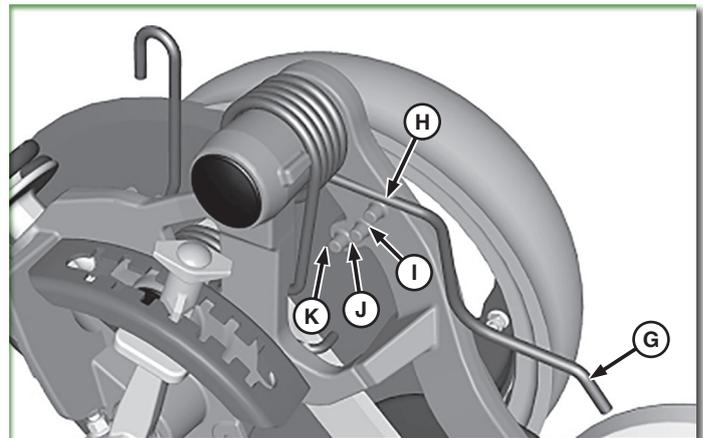
A—Top Hole

B—Bottom Hole



C—Press Wheel Spring
D—Maximum Force

E—Medium Force
F—Minimum Force



G—Closing Wheel Spring
H—Heaviest Force
I—Heavy Force

J—Medium Force
K—Light Force

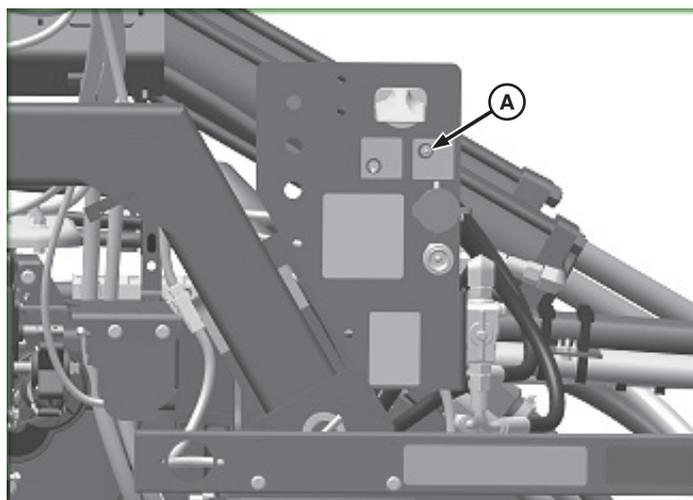
Field Quick Check

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This reference card is intended as a guide. Refer to the Operator's Manual for detailed information. Reference the tractor Operator's Manual for specific tractor operation.

Pre-Operational Checklist

- Verify proper drawbar and implement hitch compatibility.
- Connect the case drain hose before other hydraulic hoses.
- Connect the hydraulic hoses and electrical harnesses.
- Remove any obstructions from the meter inlet openings inside the tank before filling.
- Clean the blower screen.
- Engage the blower to warm the hydraulic oil to operating temperature and remove moisture from the product delivery system.
- Adjust the plenum pressure for desired application rate.
- Adjust the tires to the proper air pressure.
- Thoroughly clean any product residue from the meter roller segment flutes and check for any damage or wear.
- Verify that the meter rollers selected match the product in the tank.
- Verify that the metering gates are properly set for the product to be used.
- Perform the meter calibration and verification procedures on the monitor.
- After each fill, raise the openers to verify product flow to all openers by using the calibration switch (A) to activate the meters for a few seconds.

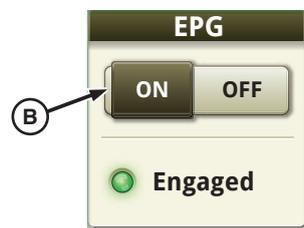


A—Calibration Switch

Quick Reference Guide

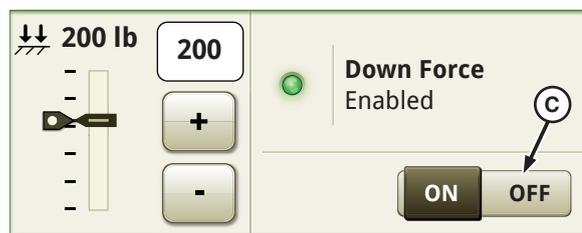
Operational Checklist

1. Engage the blower using the corresponding selective control valve (SCV).
2. Engage the tractor power take off (PTO) if equipped with tractor power generation.
3. Engage the electric power generation (EPG) using the toggle button (B) on the monitor.



B—Toggle Button

4. Enable active downforce using the toggle button (C) on the monitor.



C—Toggle Button

5. Lower the openers and drive the tractor forward to start seeding.

NOTE: When turning off EPG, disengage using the toggle button (B) on the monitor before disengaging the tractor power take off (PTO) if equipped with tractor power generation.

Field Quick Check

Manual Meter Calibration

Perform the meter calibration procedure in the SeedStar™ application. On the display, select Menu > SeedStar > Diagnostics and Calibrations > Calibrations > Meter Calibration > Manual. The following is an outline of the calibration, including the procedures outside of the tractor cab. View the Onscreen Help for additional information.

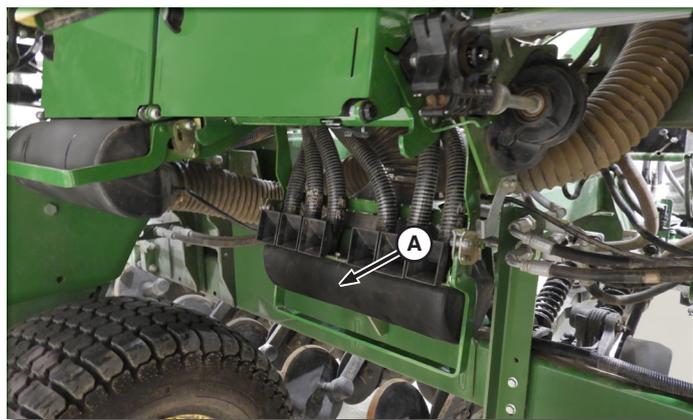
To proceed with on-screen commands using a mobile device, select the Mobile Device icon.



1. Attach the drill to the tractor.
2. Shut off the CCS™ blower.
3. Park the tractor with the engine running.
4. Engage and enable the power generation.
5. Initiate the calibration procedure on the screen.
6. Select a meter to calibrate.

NOTE: The default 50 meter rpm works for most conditions.

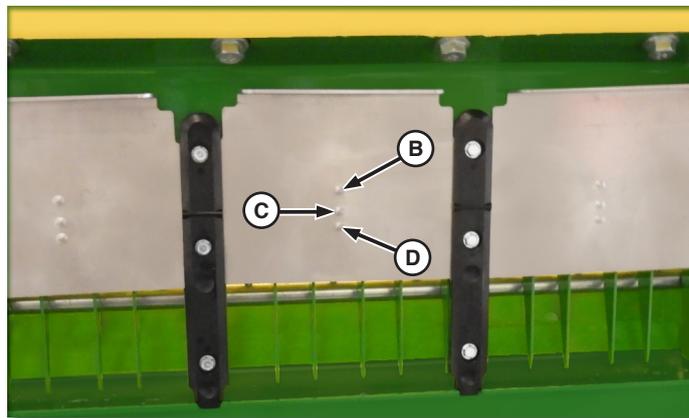
7. Select the meter rpm.
8. Release the handle and lower the plenum (A) on the meter that is being calibrated.



A—Plenum

Quick Reference Guide

9. Set the gate position (B, C, or D) for the seed used. (Refer to Meter Settings or Position the Metering Gates in the Operator's Manual.)



B—Gate Position (1/3 open)
C—Gate Position (2/3 open)

D—Gate Position (open)

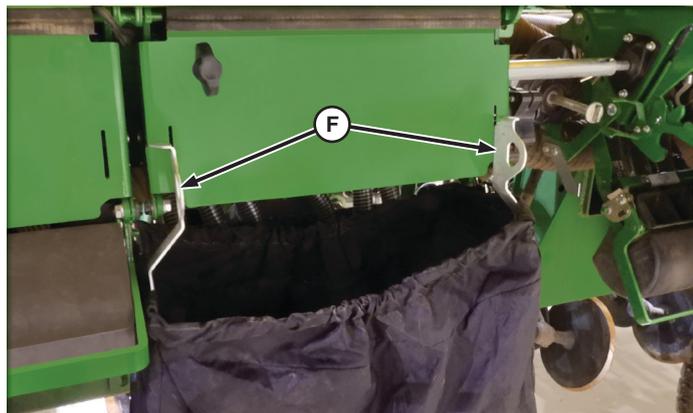


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Field Quick Check

Manual Meter Calibration

Quick Reference Guide



F—Bag Hooks

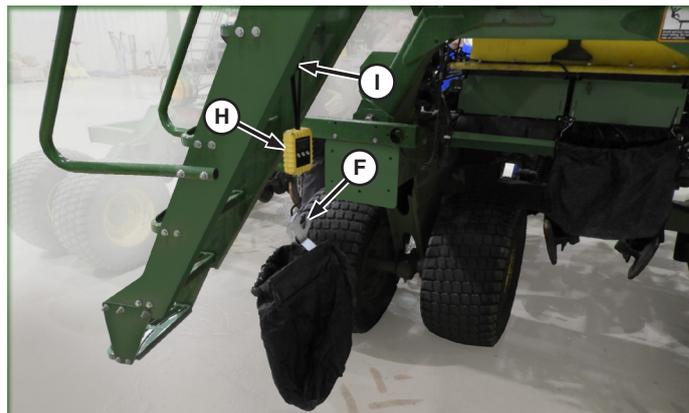
NOTE: The toolbox (E) contains the collection bag and scale.

10. Insert the bag hooks (F) in the meter door slots.
11. To fill the meter rollers, hold the calibration switch (G) until the meter turns two revolutions.



E—Toolbox

G—Calibration Switch



F—Bag Hooks
H—Scale

I—Ladder Hook

12. Empty the bag, hang it from the scale (H) on the ladder hook (I), and zero the scale.
 13. Return the bag to the meter.
Select Next on-screen and hold the calibration switch until the meter stops.
 14. Weigh the bag, note the value, and empty the bag.
 15. Return the scale and bag to the toolbox and close the plenum.
- NOTE:** If using a single bag and meter, either apply one value to all meters or repeat the calibration for each meter.
If using multiple bags and meters, weigh and enter the value of each bag for the corresponding meter.
16. Enter the weight on-screen and apply the new value to the meters.
 17. Select the Diagnostics Procedure tab and perform a meter verification.



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