PRECISION SEEDING SYSTEM
THREE POINT 1525P, 2025P, & 2525P

DRILL MAINTENANCE
Proper servicing and adjustment is the key to the long life of any farm implement. With careful and systematic inspection of your grain drill, you can avoid costly downtime and repair.

1) After using your drill for several hours, check all bolts to be sure they are tight. Refer to the torque value chart in your operator’s manual.

2) A. Lubricate all chains with chain lube.
   B. Grease the gauge wheel arm pivot castings every 6 to 8 hours.

3) Disk scrapers should be properly adjusted. Check for the proper air pressure in the implement tires. 32 P.S.I. for the 9.5L 15" 6 ply tire and 36 P.S.I. for the 11L 15" 8 ply tire.

4) Check all chain idlers for proper adjustment. Check that each idler is taking up excess chain slack. DO NOT OVER TIGHTEN CHAINS. Adjust until the pull side of chain has no more than a ¼ inch of movement from the centerline of the pull.

5) The seed meter drive has a spring loaded idler, which requires no adjustment.
METER MAINTENANCE

SEED AND THE USE OF INOCULANTS AND TREATMENTS

Finger-Pickup Meters:

1) Use only approved graphite powder available from Great Plains (EZ-Slide) to ensure proper lubrication of finger-pickup corn seed meters.

2) Recommended usage:
   a) For finger-pickup meters, add one teaspoon of graphite for each 4 units of seed corn (320,000 kernels).
   b) In high humidity conditions, or if you are using seed box seed treatments, or seed corn treated with any insecticides or polymers (Poncho, Prescribe, Cruiser, etc.) Add one teaspoon of graphite for each unit of seed corn (80,000 kernels).

NOTE: The use of talc is PROHIBITED in finger-pickup meters.

Precision Meters:

1) Talc lubricant is mandatory for all seeds, especially treated or inoculated seed. Recommended usage:
   a) For clean seeds, sprinkle one cup of talc per 3 bushels of seed.
   b) For seed with excessive treatment, or for humid planting environments, double or triple the talc rate as needed.

2) For Milo Planting Only – Note: Powder graphite must be mixed with the milo seed in combination with talc for proper seed singulation. Recommended usages: Sprinkle one cup of graphite per 9 bushels of seed.

NOTE: DO NOT use liquid, inoculants or seed treatments of any kind in this planter.

The meters of the precision drill require routine maintenance and care to insure that they operate at their maximum performance.
3.) Use the correct meter wheel. All singulated crop meter wheels have two markings, seed type and seeds per pound that the meter wheel will plant. Do not plant seed that falls out of this range. This seed will not plant correctly.

EXAMPLE: CORN ROUND; 1400-1900 seeds per pound.
(This meter wheel will plant size graded round corn that has a stated seed size between 1400 and 1900 seeds per pound).

CORN NOTE: Plant only size graded seed. Do not plant plateless "average seed per pound seed" even if the average seed per pound falls in the range of the meter wheel.

4.) Inspect the meter slides for wear. If the grooves are over 1/8" deep, the meter slides need to be replaced. This is especially critical in the planting of small kernel seeds such as grain sorghum, as these grooves can let additional seeds by the pockets therefore increasing the seed rate. Grooves in the meter slide do not normally have an affect on large kernel seeds such as soybeans or corn.

ADJUSTMENTS BEFORE GOING TO THE FIELD

1) Hitching precision seeder to the tractor.
   A) Attach the tractors lower three point arms to the drill.
   B) Pin the top link arm to drill. For category II, III, and III-N tractors, install the top link pin in lower hole. For category IV-N tractors install pin in upper hole.
   C) Raise drill and check for any interference on the tractor.
   D) With drill in planting position check the top edge of drill box. It should be parallel with the ground, if not adjust the top three point link on the tractor.

2) Hitching the precision seeder to a Great Plains Implement hitch (SSH)
   A) With the hitch lock in the forward position, back up until quick hitch is under the lower hitch pins of the three point drill. Raise the hitch, once the lower pins are securely attached, slide the latch plate back and install the retainer pin.
2) Attach the top link to the drill to complete the attachment.

3) The gaugewheel drives have a turnbuckle to adjust frame height. The top clevis must be in the top hole of the gauge-wheel mount. Initially set the length of the turnbuckle to 17 ½ inches between the center of the mounting holes.

4) Two heavy duty down pressure springs are standard equipment on each opener. Each opener down pressure spring has a six-position cam to adjust down pressure. This will allow more pressure to the rows running in tire tracks. The adjustment tool for the cam is mounted under the walk board. NOTE: If the spring cams are adjusted to the maximum setting on all the openers, poor penetration may result because it will raise the drill. Start with all the opener springs in minimum setting.
6) The “25” series opener seed depth is controlled by the side depth gauge-wheels. Moving the “T” handle towards the front of the drill decreases the depth of the opener. A good starting point is 4 holes from the rear.

7) The "25" series opener also is equipped with your choice of double closing wheels. The closing wheels are staggered from the factory for optimum residue flow. The tension of the closing wheels is changed with the closing wheel adjustment handle. Start by placing all closing wheel handles in the front slot (minimum setting). NOTE: Increasing the tension on the closing wheels to the maximum setting may raise the opener causing poor seed placement.

8) Adjusting the cam bolts on the bottom of the press wheel pivot aligns the closing wheels. Loosen both cap screws (1) and use the cam nut (2) to align the closing wheels.
9) The seed rate is controlled by two sets of sprockets. The drive speed range sprockets and the transmission sprockets. Start by selecting the correct drive speed range. Install the DRIVER and DRIVEN sprockets in the correct locations on both gauge wheels.

10) The transmission sets the seed rate within the chosen range sprocket setting. Refer to the seed rate chart and find the desired seed rate for type of seed. Adjust the transmission to the desired seed rate.

NOTE: Make sure the correct sprockets have been installed in the DRIVER and DRIVEN locations. Set both gauge wheel transmission sprockets the same.

11) Check all meter tubes for the open/closed position. When pin with retaining clip is located in the slot, seed tube is open.

   A). If skip rows are desired, shut off these rows by removing retaining clip, pull pin, and slide seed tube to closed position. When pin with retaining clip is located in hole, sliding seed tube is closed.

   B). Select the correct seed meter wheel for type and size of seed to be planted. Remove meter wheel retainer and spring. Start the meter wheel in at the 5:00 o’clock position, as this pushes back the slide and helps with the installation of the wheel. Pushing the meter slide retaining clip forward while installing the seed wheel may also help. Make sure that the seed meter wheel slots are aligned with the wheel drive pin on meter shaft. Reinstall spring and lock retainer.

   C). Place seed in the grain box and calibrate seeding rate as outlined in the owners manual.
FIELD ADJUSTMENTS

1) LEVELING DRILL: Lower the precision seeder to the planting position as it is being pulled forward. Inspect the front to rear levelness. Adjust the tractor top link so that the top of the drill box is level front to rear.

2) Measure from the bottom of the opener mounting tube to the soil. This measurement should be 24 inches. This is adjusted by changing the length of the gauge-wheel turnbuckles.

3) If the drill is level and the 24” measurement is set correctly, the front pivot of the parallel arms should be approximately 1 inch higher than the rear pivot.

4) Inspect the actual depth of seed in several places along the drill.
   Check 1: Behind the gauge wheels.
   Check 2: Towards the outer end of the drill but not behind the gauge wheel tracks.
   Check 3: Behind the wheel tracks of the tractor.
   Check 4: Towards the center of the drill but not behind the tractor tracks.

INDIVIDUAL COMPONENT ADJUSTMENTS

1) OPENER SPRING TENSION: To adjust down pressure use the adjustment tool under the walkboard. Place the tool on the spring mounting plate and pull down to move cam. Move the cam one notch at a time and only in the wheel tracks if penetration is not adequate.
Start with all the opener springs in minimum setting.

2) SEED DEPTH: To start, all of the opener “T” handles should be set in the same hole. Check for the actual depth of seed. Adjust for wheel tracks as necessary. The openers in the wheel tracks may need to be one hole deeper because of soil compaction.

3) CLOSING WHEELS: If the seed trench is not closing move the closing wheel handle to the next slot rearward. Move one position at a time.
OPTIONS

1) COIL TINE HARROW: The coil tine is available as optional equipment that will pull residue over the seed and help in reducing soil crusting. Adjust the harrow for no-till by raising the front bar to run 1 inch to 1 ½ inches higher than the rear bar. The front set of teeth should be set to run flatter than the rear bar.

2) SEED-LOK: The Seed-Lok allows the drill to provide unmatched seed to soil contact. In extremely wet conditions Seed-Lok may need to be locked up to minimize opener plugging. In these conditions seed to soil contact is easy achieve and Seed-Lok is not needed.

3) KEETON SEED FIRMER: This is also a seed firming device. It is less sensitive to wet conditions. The Keeton seed firmer will allow for the application of starter fertilizer down the row.