

### Six-Foot No-Till Drills

Document # **DRUS100C-0001A**

Date: December 1, 2014

**Models Affected:** 605NT, 606NT, 3P605NT, 3P606NT

#### General Information

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Proper servicing and adjustment is the key to the long life of all farm equipment. With careful and systematic inspection of equipment, costly maintenance, time and repair can be avoided. The following information will assist with recommended servicing and adjustments per the following:



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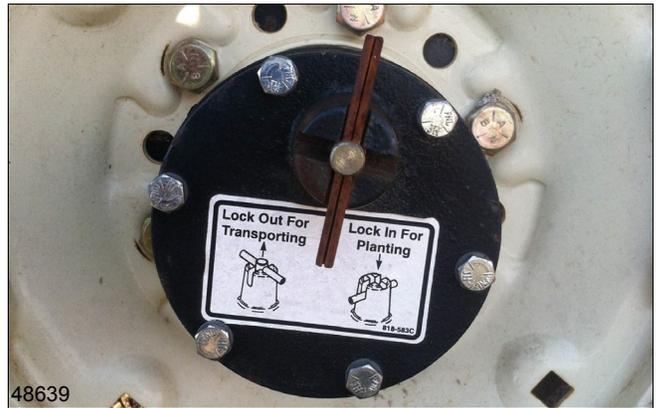
## Transporting The Drill:

When transporting the drill, the transport locks should always be used. This will prevent damage to the drill and possible personal injury should hydraulic failure occur.

1) To install the transport locks, place the transport locks over the cylinder rods and install the pin with a retainer clip. Both cylinders need the transport locks installed.



2) Always disengage the lockout hub before transporting the drill.



## Hitching the drill to the tractor:

1) **Note: Remove the tractor draw bar before hitching to avoid damage to the drive wheel of the drill.** When hitching a 3P605NT to the tractor, make sure that the tractor has enough front weight to accommodate the drill. Lower the tractor's three point arms and buck up to the drill. Pin the upper arm to the center link of the drill. Pin the lower arms to the drill and slowly raise the drill up. Watch for any signs of interference. If the front of the tractor is light, add additional front weights.

2) Hitching a 605NT to the tractor. With the drill lowered and tongue jack in the parking position, level the tongue, then back the tractor to the drill hitch and adjust to match the draw bar height. Adjust the hitch height as needed with the implement jack to match the draw bar.



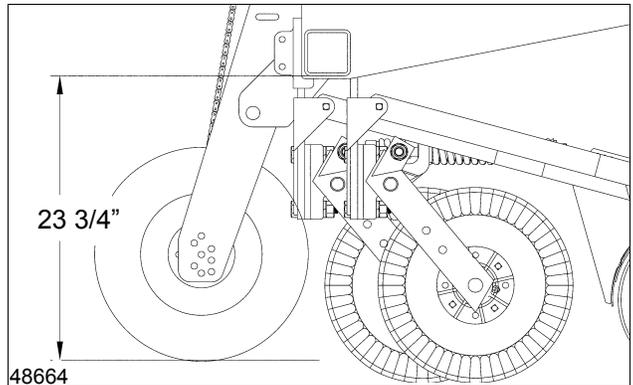
2) After hooking the drill to the tractor and attaching the hydraulic hoses, raise the drill up to the maximum height and hold the hydraulic lever in the detent position for 30 seconds to re-phase the cylinders. This procedure will remove any air in the system, allowing the drill to raise and lower evenly. The re-phasing procedure should be repeated several times a day to ensure that the drill continues to lift evenly. Remove the transport lock.

### Leveling the Drill:

1) Lower the 605NT drill to the ground and hold the hydraulic lever until the wheel cylinders are completely retracted. At this point, walk to the side of drill and visually check to see if the drill box lid and frame are parallel to the ground, if not adjust the turnbuckle on the tongue until the drill lid or frame is level.



2) Lower the 3P605NT and pull ahead at operating speed. The bench setting is 24 3/4 inches from the opener mount tube to the ground. This is a bench setting and will change as the coulters are raised and lowered. Changing this measurement is normal and necessary to maintain proper coulter depth. The drive wheel may need adjusting due to ground condition. Check to see if the top of the grain box is level with the ground, if not, adjust the center link on the tractor.



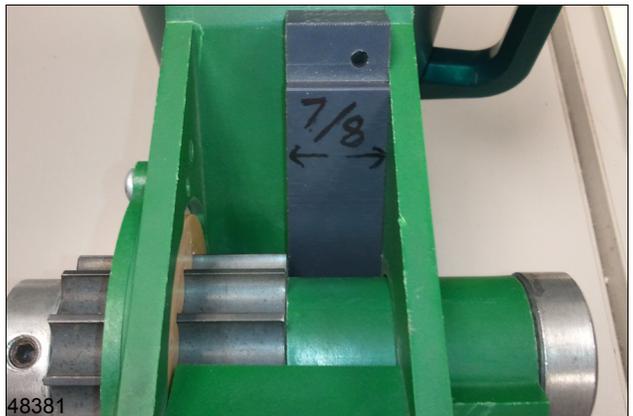
**Seed Cup Adjustment:** Check all seed cups to insure that they are clean and free of obstructions. The seed rate handle should move freely and not have excessive play in it.

To check seed cups for accuracy, loosen the seed adjustment handle by unscrewing the wing nut located on the underside of the handle and sliding the seed box rate handle to 100.

Place a seed calibration tool (817-459C) into the seed cup from the top (use the 7/8" side).

Once the tool has been placed into the seed cup, slide the seed adjustment handle until the feed wheel presses up against the block tightly.

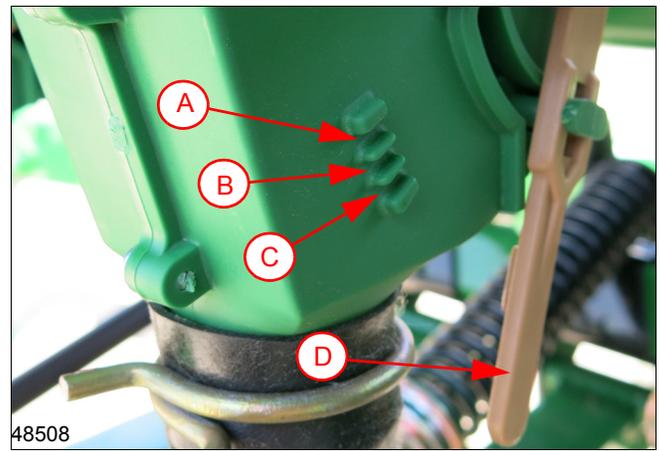
With the feed wheel pressed tightly against the calibration tool, the seed cups are set at exactly 50%. The brass gauge should read 50%. If the seed adjustment handle is not lined up on 50%, loosen the 2 screws holding the gauge and adjust the brass plate until it reads 50% then tighten the screws.



Each feed cup is equipped with a four-position adjustment handle.

- a) The highest position is for wheat and other small grains
- b) The second is for soybeans and other large grains
- c) The third is used if the seed is cracking in the second position
- d) The bottom position is for clean out of seed cup and will drain any grain left in the seed box

**Note:** Do not open the seed cup handle to the bottom position with seed in the box unless complete clean out is desired. Changing this handle will not change the seeding rate. When storing after drilling season, it is best to place the handle in the bottom position to prevent damage from mice.



**Drive-Type Adjustment:** Locate the desired seeding rate for the seed being used in the Owner's Manual or on the lid of the drill. The drill uses a four-position gear box.

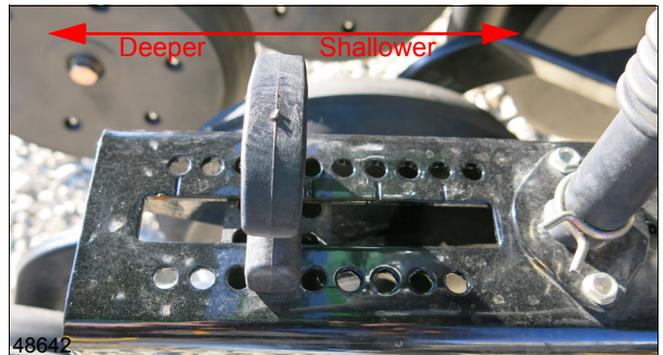
- a) Set the drive type for the seed and rate desired
- b) Loosen the wing nut on the seed rate adjustment handle and move it past the required number and then bring it back to the correct number on the brass plate
- c) Check seeding rate by running the calibration procedure outlined in the Owner's Manual or on the seed rate chart of the drill lid

**Note:** The gear box has four different drives. If the chart does not have the desired rate for that drive type, follow the drive ratios in the following chart.

MAIN SEEDBOX DRIVE TYPE RATIOS
Drive Type 2 is 2.01 times faster than drive 1
Drive Type 3 is 3.01 times faster than drive 1
Drive Type 4 is 5.01 times faster than drive 1

**Adjusting Down Pressure:** Heavy duty down pressure springs are standard equipment. The "W" clips are shipped from the factory in the bottom hole and should be left there in all applications. The "W" clip can be raised one hole in the wheel tracks in extreme conditions. **Note:** If the "W" clips are raised too high, spring pressure increases accordingly. This will take away weight available to penetrate the coulters.

**T-Handle Adjustment:** The depth of each opener is controlled by the height of the press wheel. Varying the height of the press wheel changes the seeding depth of the opener. Moving the "T" handle to the front of the opener shallows the depth; moving the "T" handle towards the rear of the opener increases the depth. For a starting point, place the "T" handle in the center.



**Adjusting Drive Clutches:** With the 605NT drill in the raised position, adjust the drive clutch (the clutch should be fully disengaged). The cam plates will be on top of each other, and the jaws of the clutch will be fully separated. When the drill is lowered to the planting position, the jaws of the clutch should be fully engaged. To adjust, loosen the bolts on the clutch tab, slide the tab forward or rearward to change and re-tighten bolts.

### Set Coulters Depth (605NT):

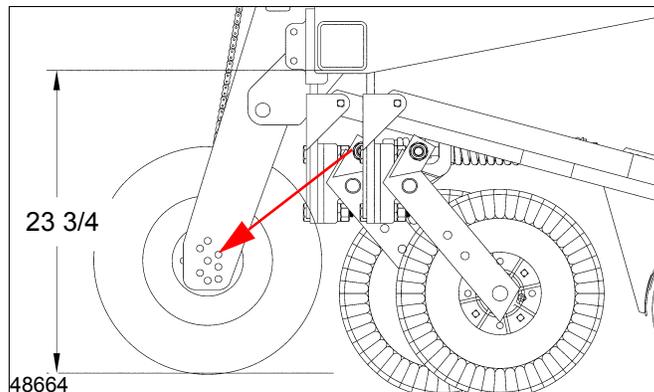
Lower the drill until the desired depth is achieved and set the cylinder stop on the master cylinder (the cylinder on the left side of drill). Raise the drill up and drive forward while lowering the drill as it's moving. Recheck the coulters depth and adjust, by doing this the coulters depth will always return to the same depth.



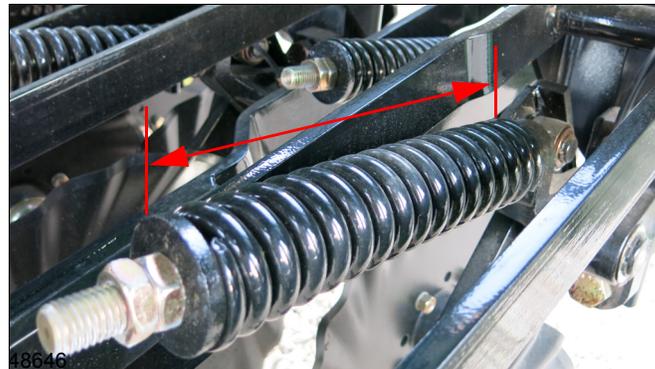
### Set Coulters Depth (3P605NT):

1) The coulters depth is controlled by raising and lowering the front drill wheel. Do not use the tractor's three point to raise the drill without adjusting the drive wheel. The front drive wheel must always make contact with the ground or seed skipping will occur.

a) If the cylinders are completely retracted and the coulters are not penetrating and the drill is level front to back, add weight to the drill. **Note: Do not re-adjust the coulters shanks, as lowering the coulters shanks will not increase coulters penetration.**



b) Coulters springs are preset at the factory giving the coulters an initial operation force of 400+ lbs. This setting is adequate for most field conditions. Re-setting the coulters spring shorter than 9 3/4 inches can cause premature failure of parts.



### Spring Tension On the Openers:

The "W" clips on the opener spring rods should be in the lowest hole. This is the correct location in all conditions. The "W" clips can be raised one hole in the wheel tracks only if penetration is not adequate.

