

**NATIVE GRASS and/or BROME:** Your seed will go in the **MIDDLE box**. 6 bushel max capacity

- **Do NOT transport with seed loaded in the native/brome grass box.** Only load seed once you are in the field to be seeded. Transport with seed loaded compacts the seed at the meter inlets and can easily clog agitators and meters.
- Follow directions on pages 23-31 of the seed rate charts to calibrate the drill for your specific seed if you choose to; otherwise you can use the **provided charts for approximate seeding rates**. Locate your desired pounds per acres to be seeded in the chart of page 31. *All native seed mixes vary in weight, seed type and density. You should calibrate each mix! Factors that affect seeding rates are: weight of seed, size of seed, relative humidity and moisture content of seed, ratio of inert material to seed, different proportions of seed types affecting density, tire configuration, tire pressure, and tire slippage. The charts in the manual are based on factory tires at recommended inflation.*
- The drill has a seed rate reducer installed on it; the chart of page 31 shows the correct “recalculated rates” this drill can be set for; there is no need to do any additional recalculations. *If you have less than 7.3#/acre of seed you will need to add a seed bulker to your mix to reach the minimum seeding rate of 7.3#. Bulker is available to order for \$1.15/#; you can also use cracked corn or kitty litter as a bulker. Do NOT add fertilizer as bulker!*

- Move gearbox selector handle on front left side of drill to Drive Type 1, 2, 3 or 4 to match the pounds per acre/sprocket setting you have chosen.
- Determine which sprocket is needed to correspond with your desired pounds per acre rate. Sprocket numbers are listed along the top of the chart. The sprockets have corresponding number engraved on them and are stored on the “passenger side” of the drill. Do NOT attempt to change any sprockets on this side of the drill near the sprocket storage!



- Remove the black box on the left side of the drill to access the location where the sprockets can be changed. Loosen the chain idlers to loosen the tension on the chain and change the sprocket; **you will need an allen wrench to release the set screw to change the sprocket**. Align the chain and retighten the idlers.



Loosed tension here

Change THIS sprocket!



- In field conditions, lower the drill into soil, pull forward to put openers in ground to desired depth. Shut off tractor, loosen the nut and bolt that secure the stop weldment to the cylinder (on the left cylinder

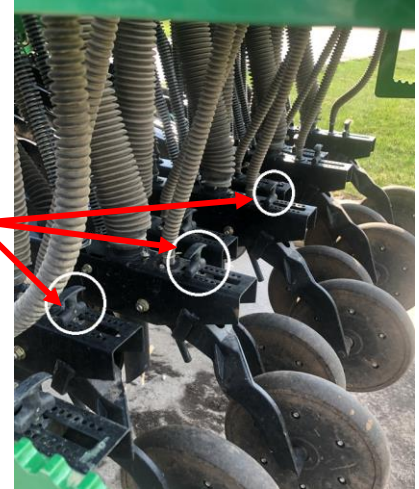
only) Slide the weldment up the cylinder until it contacts the valve actuator, then slide it another 1/8" and tighten bolts. (See figures 11 & 12 on page 18 of the operator's manual)



- The red piece in photo is safety lock for transporting drill; there is one on each side of the drill. Remove before seeding.
- The stop weldment that is on the left cylinder is raised and lowered (by GENTLY loosening/tightening bolt) to adjust the cut depth of the coulters.
- The weldment **must be near the middle of the cylinder, and pointing up, as shown in photo while in use and before attempting to replace the safety locks.** The safety lock will not go on if the stop weldment is not between the two pins of the safety lock.
- DO NOT turn the stop weldment around, it should NOT point down towards the drill frame or it will cause the lift mechanism to malfunction.

• If you are having trouble with the depth control (ie: stop weldment is sliding down the cylinder) you are using too much force lowering the drill! Make sure hydraulic connections are set on LOW FLOW and the drill is GENTLY lowered. High Flow or excessive force lowering drill will cause damage to the hydraulic valve & depth stop.

- See page 38 of the operator's manual for information on **setting press wheels for seed depth.** *T handles* should be closer to implement for shallower seeding and further away from implement for deeper seeding. Each increment adjusts depth by approx. 1/8th of an inch. Depth range is from 0 to 3 1/2 inches
- **Add your seed to the MIDDLE box.** *It is recommended that you add graphite seed lubricant after loading seed in the native grass box. Use 1/3 cup across the top of your seed mix; for humid planting environments double or triple the graphite amount as needed. Graphite is NOT provided with the drill rental.*



- Engage the left wheel and begin drilling.

*If you suspect you are drilling more or less seed than desired, and you have accurately calibrated the drill to your seed, change the sprocket arrangement to compensate for your field conditions.*

When you are finished- disengage the left wheel, and record the acreage meter reading. >>Snap a photo of acreage meter reading before you begin seeding and again after you are finished. Push the \* button to wake meter up, and also to rotate through readings the field/total acres is the reading you want.

- Complete the steps under "Before Returning Drill" on back of the rental agreement.

Seed type: \_\_\_\_\_ Pounds per acre: \_\_\_\_\_ Drive type: \_\_\_\_\_ Sprocket Number: \_\_\_\_\_

15. If the calibration sample is more than a few percent different than the desired *FieldRate*, pick a new chart rate based on the difference factor.

$$NewChart = \frac{TargetRate}{MeasuredRate} \times PreviousChart$$

16. Find the chart rate closest to *NewChart*. Change the Final Drive sprocket and Drive Type as needed. If the correction went off the Standard chart to the low side, consider installing the Rate Reduction kit.

17. You may want to repeat calibration procedure at the new setting if your results varied greatly from the Seed Rate Chart.

Example:

TargetRate = 50  
 PreviousChart = 49.6  
 MeasuredRate = 57

The new chart rate is:  
 NewChart = 43.5

$$43.5 = \frac{50}{57} \times 49.6$$

The nearest chart rate to 4.35 is 42.5, or  
 Drive Type: 3  
 Final Sprocket: 21T

*\* Green Pages*

**Brome Rate Charts**

For metric charts, see page 46.

**3P605NT and 606NT Standard Brome Rates**

Transmission	Standard: 16 T Driving, 17 T Driven									
Final Sprocket	23 T	22 T	21 T	20 T	19 T	18 T	17 T	16 T	15 T	14 T
Drive Type	Seed Rate in Pounds Per Acre (7.5in Row Spacing)									
1	12.6	13.2	13.8	14.5	15.2	16.1	17.0	18.1	19.3	20.7
2	25.9	27.1	28.3	29.8	31.3	33.1	35.0	37.2	39.7	42.5
3	38.8	40.6	42.5	44.6	47.0	49.6	52.5	55.8	59.5	63.8
4	63.3	66.2	69.3	72.8	76.6	80.9	85.6	91.0	97.0	104.0

*\* Reduction kit is installed!*

**3P605NT and 606NT Reduced Brome Rates AND Nativegrass (Middle Box)**

Transmission	Seed Rate Reduction: 12 T Driving, 22 T Driven									
Final Sprocket	23 T	22 T	21 T	20 T	19 T	18 T	17 T	16 T	15 T	14 T
Drive Type	Seed Rate in Pounds Per Acre (7.5in Row Spacing)									
1	7.3	7.7	8.0	8.4	8.8	9.3	9.9	10.5	11.2	12.0
2	15.0	15.7	16.4	17.3	18.1	19.2	20.3	21.6	23.0	24.6
3	22.5	23.5	24.6	25.8	27.2	28.7	30.4	32.3	34.5	37.0
4	36.7	38.4	40.2	42.2	44.4	46.9	49.6	52.7	56.2	60.3

Franklin County Conservation District No Till Drill Rental Agreement

\_\_\_\_\_ will rent the 606NT Drill from the Franklin County Conservation District

On \_\_\_\_\_ in accordance of the following rental conditions:

- **Renter assumes all risks** and will pay all costs and expenses arising out of the use, possession or maintenance thereof, and is to give immediate written notice to lesser stating damage to, or loss of possession of said equipment by any cause whatsoever.
- **Renter is responsible to pay the cost for any repairs** that are caused by negligence while the drill is rented to you, including flat tires, damaged/missing parts, etc. Report any malfunctions or damage immediately.
- **Scheduling allows for 20 acres per day.** We reserve the right to assess a charge of \$240 per day for everyday the drill rented to you, during acceptable weather conditions and is setting idle. **We reserve the right to charge additional fee if drill is not returned on time.**
- **All equipment remains the personal property of the Franklin County Conservation District.** The Franklin County Conservation District reserves the right to possession of equipment at any time. The drill is provided as a service to Franklin County landowners through the Fr Co Conservation District; we appreciate you caring for the drill while in use! **Returning it in as good OR better condition than you picked it up is appreciated!**
- **Fr Co Conservation District does not provide any type of guarantee for grass or crop stand.** The owner’s manual provided on the drill, and the attached information sheets, are to be used as informational guides and are in no way exact.
- **Always lift drill out of the ground when turning at row ends and for other short-radius turns.**
- The drill only needs hydraulics to lift, it does NOT need constant down force. Be cautious when lowering drill, it is NOT a heavy piece of equipment. **The depth stop weldment MUST remain in the middle of cylinder, pointing upward. SEE PHOTOS**
- **Do not transport the drill with seed in the boxes for any reason!** No fertilizer or “treated seed” is to be used in drill
- **Renter will be charged \$25.00 cleaning fee per box** if seed boxes have not been cleaned out when returned.
- **Make sure hydraulic hoses and light wiring are secure to tongue of drill so they do not drag on roadway.** Lights are wired to connect to tractor, if pulling after dark YOU need to provide adaptor for truck plug.
- **Please take the jack completely OFF the tongue when planting to avoid damaging/bending jack. You bend it, you buy it!**
- **Road speed should not exceed 20MPH FOR ANY REASON and drive must be disengaged; field speed should not exceed 3 or 4 MPH.**
- **Acreage meter readings will be used to calculate total rental fee.** You must RECORD ACREAGE METER READING. >>Snap a photo of acreage meter reading before you begin seeding and again after you are finished. Push the \* button to wake meter up, and also to rotate through readings the field/total acres is the reading you want.

Beginning # \_\_\_\_\_ Ending # \_\_\_\_\_ = Total Acres \_\_\_\_\_  
\$150 minimum fee allows for TEN Acres; anything over ten acres is additional \$12/acre.

**The drill will be returned to the USDA Service Center by (date/time)**\_\_\_\_\_

I acknowledge that I have read the above information and agree to all policies as listed.

Signature \_\_\_\_\_  
Phone # \_\_\_\_\_

## **Before leaving with the drill you should: Road speed should not exceed 20MPH**

- **Check to see that the tires are properly inflated**- if tire is low or flat call let us know so you are not charged for tire repair.
- **Check drill for damage, worn or missing parts**- report any damage or questionable damage so you are not charged for repairs.

## **Basic Field Operation**

1. Hitch drill to a suitable tractor. **40hp is minimum requirement.**
2. Raise drill. Hold at raised for several seconds to re-phase lift cylinders. Set circuit to Neutral. Shut off tractor.
3. Remove red transport locks from cylinders. Move them to secure storage location.
4. Engage drive with lock-out hub on the drive wheel. Pull pin away from hub. Rotate 90 degrees. Release into deeper notch pair. *Note: Pin may not set fully immediately but will at next drill movement.*
5. Set seed population per rate chart or calibration, from Seed Rate manual.
6. Set seed cup handle if using FRONT Seed Box. **If you skip this seed could end up on the ground where you are filling drill!**
7. Load appropriate box with clean seed.
8. Raise drill. Check that feed cups, seed tubes and drives are working properly and free from foreign material by looking for seed flow under each opener.
9. Lower drill. Pull forward. Stop. Check tool bar height and opener depth.
10. Begin seeding. **Do not exceed 3 to 4 mph in the field.**
11. Always lift drill out of the ground when turning at row ends and for other short-radius turns. Seeding stops automatically as drill is raised.

**There is a copy of both the Seed Rate Charts AND the Operators Manual in the manual box on the front of the drill; if you have any questions please refer to the appropriate manual.**

## **Before Returning the Drill:**

- **CLEAN OUT ALL SEED BOXES!** See page 3 of seed charts for information on adjusting seed cup doors for clean out on front box. Leaving seed in the drill is like leaving money in the drill. A shop-vac works well. We will assess a \$25.00 cleaning fee PER BOX if needed.
- Raise drill, re-install both transport locks on each side of the drill. **The transport locks should be placed on from the underside of the cylinders** (see page 22, figure 16 of operator manual).
- **On the left the cylinder, the stop weldment should be pointing upward, through the open portion of the transport lock. Do NOT remove the stop weldment.**
- Unhook hydraulic hoses from your tractor!
- **Disengage the driver side wheel!** If you do not disengage the wheel the acreage meter will keep rolling, remember you are charge based on the acreage meter reading.
- **Record ending reading from acreage meter on the front of this paper.**
- Check the drill for damage, worn or missing parts and that the tires are properly inflated. **If the drill has a flat or low tire that you did not reports as being flat or low before you started you are responsible for getting the tire repaired!**
- Also make sure drill is clean, inside and out. Empty seed boxes and if you get into excessive dirt or have hydraulic fluid on the drill- please clean it!
- Make sure you have 9 sprockets on the sprocket storage bars on the right side of the drill and both transport locks are securely in place.
- Make sure you returned the manual to the storage box if you used the manual.
- Report any problems to the Conservation District!
- You are now ready to return the drill to the Conservation District Office. **Do not travel any faster than 20 mph when pulling the drill!**

**Remember to return the drill on time, there are other people lined up to rent it after you.**

Park the drill in the northwest corner of the parking lot at the USDA Service Center in the designated "Drill Parking Only" area. Please park as close the grass on the west side of concrete as possible.