



# SET-UP & PREPARATION

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## LOADING/UNLOADING OTG DRILLS

Note: Before accepting shipment from the freight carrier, check for any damage to the drill. DO NOT accept freight without indicating on the bill of lading if there is damage. Document with photographs.

READ, UNDERSTAND, and FOLLOW all safety and set-up instructions.

**Never** lift a drill by the seed boxes, damage or injury can occur.

### **1) UNLOADING OTG DRILL FROM SEMI TRUCK - SKID LOADED**

**CAUTION: KEEP PEOPLE A SAFE DISTANCE FROM LOADING/UNLOADING AREA!**

- Place forklift on each side of load
- Place forklift forks under timber skid on back
- Place front forklift forks under no-till frame on front.
- Before starting to lift both forklifts, rotate the forklift masts back towards operator.
- Lift skid off deck, just to clear, and then move truck forward so that you can lower the drill to ground.

**CAUTION: IF THERE IS FREIGHT ON THE TRUCK BED BEHIND THE DRILL, NEVER RAISE THE DRILL HIGH ENOUGH TO CLEAR THIS FREIGHT. EITHER THE INTERFERING FREIGHT WILL HAVE TO BE REMOVED FIRST OR AN OVERHEAD CRANE WILL BE NEEDED TO LIFT THE OTG HIGH ENOUGH TO CLEAR THE INTERFERING FREIGHT.**

OTGs 7508 and 7512 will need two forklifts with at least 8,000 combined capacity  
OTGs 7516 and 7518 will need two forklifts with at least 10,000 combined capacity  
OTG 7522 will need two forklifts with at least 12,000 capacity.

ALL FORKLIFTS NEED AT LEAST 4 FOOT LONG FORKS - 5 OR 6 FOOT PREFERRED (OR APPROVED EXTENSIONS)

**WARNING: ALWAYS HAVE QUALIFIED CREWS LOAD AND SECURE EQUIPMENT TO TRAILER DECKS**



# SET-UP & PREPARATION

## LOADING/UNLOADING OTG DRILLS

### 2) UNLOADING OTG DRILL FROM SEMI TRUCK - ON WHEELS

**CAUTION: KEEP PEOPLE A SAFE DISTANCE AWAY FROM LOADING/UNLOADING AREA!**

**Never** lift a drill by the seed boxes, damage or injury can occur.

- Place forklift on each side of load
- Place forklift forks under drill frame on back.
- Place front forklift forks under no-till frame on front.
- Before starting to lift both forklifts, rotate the forklift masts back towards operator.
- Lift drill wheels off deck, just to clear and then move truck forward so that you can lower the drill to ground.

**CAUTION: IF THERE IS FREIGHT ON THE TRUCK BED BEHIND THE DRILL, NEVER RAISE THE DRILL HIGH ENOUGH TO CLEAR THIS FREIGHT. EITHER THE INTERFERRING FREIGHT WILL HAVE TO BE REMOVED FIRST OR A OVERHEAD CRANE WILL BE NEEDED TO LIFT THE OTG VERTICALLY TO CLEAR THE INTERFERRING FREIGHT.**

OTGs 7508 and 7512 will need two forklifts with at least 8,000 combined capacity  
OTGs 7516 and 7518 will need two forklifts with at least 10,000 combined capacity  
OTG 7522 will need two forklifts with at least 12,000 capacity.

ALL FORKLIFTS NEED AT LEAST 4 FOOT LONG FORKS - 5 OR 6 FOOT PREFERRED (OR APPROVED EXTENSIONS)

**WARNING: ALWAYS HAVE QUALIFIED CREWS LOAD AND SECURE EQUIPMENT TO TRAILER DECKS**

The OTG drills can be safely side loaded from docks which are long enough for trucks to be parked and have their wheels clocked. There must be adequate room for dock plates to be positioned for the drill wheels to roll off and onto a level area. It is not recommended that ditches and embankments be used for side-loading of drills.



# SET-UP & PREPARATION

## LOADING/UNLOADING OTG DRILLS

### **3) LOADING OTG DRILLS**

Once the OTG has been pulled to a site (position lockout pin in the drill drive wheel so chains don't turn) where there are two forklifts with the required capacity for the OTG model, the drill can be prepared for loading

- 1) Hydraulically lower no-tills all the way down.
- 2) Hydraulically raise planters 4 inches off the ground.
- 3) Turn both hydraulic valve handles 90 degrees.
- 4) Lower both front parking stands and lock into place.
- 5) Remove tongue struts so tongue can be turned and secured.
- 6) Rotate tongue and secure with 3/4" pin and safety chain. (1" after serial #55023-)
- 7) Remove bolts attaching walkboard to rear of drill, and take walkboard off and stow on truck for transport. Reinstall bolts back in to walkboard for transport.
- 8) Loosen at least four no-till assemblies, two from front rank and two from back rank and slide them left or right to provide enough clearance for forks to lift the front. Then re-tighten them for transport.
- 9) Position both forklifts so they don't pinch hydraulic hoses or interfere with sheet metal parts.
- 10) Lift only against structural frame tubes on back of drill and no-till frame on front.
- 11) Tilt or roll the forklift frame back before beginning the vertical lift. NEVER LIFT LOAD WITH FORKLIFT AND THEN ROLL OR TILT FORKS BACK.
- 12) Have truck driver position trailer under drill and lower to deck after drill has been raised.
- 13) Be sure trucker doesn't chain or strap down on drive hub - damage will result.
- 14) If trucker uses chains, he must protect paint from being scratched!
- 15) Cargo strapping only over drill frame - not over seed boxes or other sheet metal.
- 16) Stow walkboard on truck for shipping.



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## LOADING/UNLOADING OTG DRILLS

### **4) LOADING OTG DRILL ON TO FLATBED TRAILERS FOR TRANSPORT**

HIGH DECK TRAILERS, SUCH AS A SEMI COMBINATION, CAN'T BE SAFELY SIDE-LOADED BY PUSHING A DRILL FROM THE GROUND UP ON A DECK. LOWER DROP DECK TRAILERS SUCH AS THOSE USED BY CONTRACTORS CAN BE SIDE LOADED, IF CARE IS EXERCISED!

PLACING THE TRAILER RAMPS, CORRECTLY SPACED, ON THE TRAILER SIDES WILL ALLOW THE DRILL TO BE BACKED UP OR PUSHED ON TO THE TRAILER DECK.

**CAUTION: EXTREME BINDING WILL OCCUR BETWEEN THE DRILL TONGUE CLEVIS AND THE TRACTOR DRAWBAR WHEN THE TRACTOR BACKS THE DRILL UP THE RAMPS. THEREFORE, IT WILL REQUIRE A SWIVAL CLEVIS HITCH, CORRECTLY INSTALLED TO MAKE THIS WORK.**

A SECOND METHOD IS TO USE A TRACTOR WITH FRONT END LOADER THAT HAS HAD A "SHOP BUILT" PINTLE HITCH BUILD AND WHICH IS CLAMPED OR BOLTED TO THE BUCKET EDGE SO THAT THE TRACTOR CAN PICK UP THE DRILL TONGUE AND PUSH THE MACHINE UP THE TRAILER RAMPS. THIS METHOD ALLOWS THE OPERATOR TO RAISE OR LOWER THE DRILL TONGUE AND FINALLY RAISE THE TONGUE TO ALLOW THE PARKING STANDS TO BE LOWERED AND PINNED INTO PLACE.

**WARNING: ALWAYS HAVE QUALIFIED CREWS LOAD AND SECURE EQUIPMENT TO TRAILER DECKS**



# SET-UP & PREPARATION

## SETUP & PREPARATION OF OTG DRILLS

REMOVE PARTS AND PACKAGES FROM SEED BOXES before removing machine from the skid.  
Failure to do this may result in damage to the seed box agitator and/or shaft.

### **1) REMOVAL OF OTG DRILL FROM SHIPPING SKID**

- A tractor with hydraulic system must be available and compatible with hydraulic disconnects of OTG drill.
- Remove tongue transport pin
- Unlatch tongue safety chain
- Swing tongue in to position and install tongue struts
- Attach tractor to tongue and attach hydraulic disconnect assemblies
- Disengage lockout on drill drive wheel
- Open hydraulic safety valves and raise no-tills and planters to full up position
- Place timbers between 4" x 6" skid beams, under drill wheels.
- Remove steel support stands from under drill - the U bolts are reused to install walkboard
- Place several planks in front of skid for drill to roll down and off skid.



## SET-UP & PREPARATION

### SET-UP & PREPARATION OF OTG DRILLS

- 2) **Parking Jack:** Install the parking jack onto the welded mount and secure with the pin.
- 3) **Press Wheels:** During assembly, the press wheel(s) may be left off from the "h" brackets to accommodate the shipping skid. In these situations, the press wheel(s) are shipped in one of the seed boxes. Remove the press wheel(s) from the seed box and attach to the "h" frame with the bolt provided. The axle bolt has 2 nuts which must be tightened against the "h" frame and leave 1/8" of end play for the press wheel.
- 4) **Check planter assemblies** to be sure that they are aligned straight with the main frame and that press wheel assemblies are aligned behind each furrow opener.
- 5) **Grass drills utilizing picker wheels** in the fluffy seed box need to be checked for free movement. It may be necessary to remove chain guards and chains from sprockets to verify that the shaft is turning freely. If picker wheel shaft rubs on the transitions, it is possible to rotate the box slightly by loosening the box end bolts. This will allow more clearance at the transitions. Also, the center bearing support (part #10316) may be moved.
- 6) **Check the Chains:** Chain Alignment is important and may be checked by jacking up the drive wheel and turning it to verify if any chain tries to "walk off" a sprocket. A catch, click, or snap of the chain indicates that a chain is trying to "walk off" one of the sprockets. If the problem is with one of the keyed sprockets, loosen the set screw and move just the sprocket. If the problem is with one of the pinned sprockets, move the entire shaft (that it is attached to) and then move the keyed sprocket affected by moving the shaft to complete the alignment.
- 7) **Loose Bolts:** Top lock style of nuts are used extensively and many times have loctite added to assure the fastener doesn't loosen. Check nuts on all scrapers (inside and outside) daily or every 100 acres planted.
- 8) **Discs:** Check all discs to ensure that they turn freely, if tight; they might have a bent depth band; a jammed inside scraper; a bent outside scraper; bent bracket holding the white poly scraper (part #10995A) twisted or turned slightly to bind the disc blade. Refer to later discussion regarding the removal of scraper bracket when drilling loose or soft soils.



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## SET-UP & PREPARATION OF OTG DRILLS

### 9) No-Till:

**13 Wave** - Caster Style No-Till Assemblies (13 Wave, 18" is standard on OTG drills)

**24 Wave** - Caster Style No-Till Assemblies (24 wave, 18" Blade)

**Trash Plow Style** - Concave Blade with rigid, twisted shank (13-1/2" concave, notched blades)

**Trash Plow Style** - Concave Blade with rigid, half twist shank (18" concave, notched blades)  
(Half twist signified by weld mark on leg, see page 90- 59)

**Note:** Both Trash Plows are installed so as to throw out from center, half to right and half to left.

**Note:** If no-till assemblies do not align with the planters, adjust them as follows:

- Check the lift bracket (part # 10321) as it may be bent.
- Move no-till units to align with planting units. Park the drill on a clean concrete floor. Lower the planting units to the planting position. Mark the location of each planting unit with chalk or tape. Raise the planting units from the surface, back straight up until the notill units are over the chalk marks. Lower the drill to the planting position. Leave enough clearance to turn the no-till blades. Rotate each no-till blade until the lowest point is on the bottom and check to see if the blade is on the mark. Move no-till units right or left as needed.
- Check the rubber knuckles of the individual planter assemblies on a new drill. They may not be seated fully. Follow instructions for seating rubber torsion knuckles.
- Check the urethane torsion knuckles for the individual no-till units for proper seating. If the knuckles are not seated put the drill in planting mode on a hard surface to "seat" the torsion knuckles. In extreme cases, it may be necessary to loosen the bolts holding the knuckle before running on a hard surface. Loosen only one or two bolts at a time and retighten after knuckles have shifted.





# SET-UP & PREPARATION

## SET-UP & PREPARATION OF OTG DRILLS

### **10) INSTALLATION OPTIONS:**

#### **1) LEADING PRESS WHEELS:**

Leading press wheels can be installed on 13 or 24 wave style of no-tills. After adding a 1/2" spacer (or two 1/4" spacers), add leading press wheel, gaskets, bolts, and nuts. Leading press wheel should have 1-1/2" of preload on each wheel; therefore put a 2"x 6" under each end wheel and loosen U-bolts holding the vertical 1-1/2" shanks and lower units until they touch the ground. Re-tighten and try in typical field conditions. Readjust as needed. See page 40-15

#### **2) IMPRINTERS:**

Seeds requiring surface placement or very shallow placement are best seeded with the Truax optional Imprinters. To install, remove the double disc opener assembly from the lift bracket (Part# 10321) and reinstall an Imprinter assembly. Make sure the delivery hoses under the Imprinter are close or very close to the soil surface which will help direct the seed to the ground for imprinting before blowing away. In addition, adjust the mud scraper so as to clean the knobby steel wheels to prevent mud buildup. See page 40-24

#### **3) OUTPUT REDUCTION:**

The Output Reduction is a standard feature and is installed at the time of manufacture. A double, two step sprocket is attached to the clutch and is driven by a double sprocket (or a moveable single sprocket) on a corresponding shaft. See page 40-18 The acre meter is shipped programmed with the lowest output.



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## SET-UP & PREPARATION OF OTG DRILLS

### 11) The hydraulic system

Rephasing cylinders and hoses have been charged at the factory. Therefore, use care when changing the hose ends. Drills are shipped with hydraulic hoses only reaching to end of tongue; therefore, additional hose may be needed. When changing hose or hose ends avoid getting air into system. After changing hydraulic hoses or fittings it will be necessary to "work" air out of system by attaching to tractor and raising and lowering the drill planting units multiple times.

**Note: When adding hose, lower drill to planting position, shut off the safety hydraulic valve on tongue tower and move tractor levers back and forth to release hydraulic pressure before disconnecting fittings. This "neutrals out" the system for ease in disconnecting or reconnecting the hydraulics.**

#### **SAFETY REMINDER -Avoid Contact With High Pressure Fluids!**

Hydraulic systems operate under high pressure. Fluid leaking from around connections and pinholes may penetrate the skin, causing infection and serious injury. See a doctor immediately if hydraulic fluid penetrates the skin.

Be sure that all connections are tight and the hoses are not damaged. Be sure hose protector sleeve is in place and secure.

The two safety valves on tongue tower must be turned to "**OFF**" position when drill is in transport mode.

12) Check for damaged or missing safety decals, and replace as needed. If you need decals, please contact:

Truax Company, Inc.  
4300 Quebec Avenue North  
New Hope, MN 55428 Telephone:  
(763) 537-6639 Fax: (763)537-8353.  
Email: [Truax1@qwestoffice.net](mailto:Truax1@qwestoffice.net)



# SET-UP & PREPARATION

## SET-UP & PREPARATION OF OTG DRILLS

### 13) IDENTIFYING THE DRILL

After setting up the drill, it is highly recommended that you mark the drill with your name or an owner's brand for identification in case of stolen equipment.

For example, your initials could be engraved in the frame with a cold chisel or burned in with a welder. It is recommended that you identify your drill in several areas. It is also recommended that several photos be taken of the drill that show these identification marks clearly. Then, file them in a safe place with other important papers.

#### Record Identification Numbers






Help prevent crime by properly documenting ownership. Record the model and serial numbers of the drill on all documentation papers, including insurance, financial and warranty. Keep all documentation, photographs, etc. in a safe, secure location.



<b>TRUAX COMPANY</b>
4300 Quebec Avenue North New Hope, Minnesota 55428 Phone: (763) 537-6639
Model # _____ Serial # _____

**SEE PAGE 90-9 ITEM #63 FOR  
PLATE LOCATION & PART #**

### 14) TIRES

-  **CAUTION!** Never use the drill with under-inflated tires as excessive wear and tire failure may result. Inflate tires to manufacturers' specifications as stamped on the tire and check them on a regular basis (especially if the temperature has changed since the last tire inflation).
-  **WARNING!** Follow proper procedures when mounting or removing a tire on a rim or wheel. Failure to do so may result in a serious injury. If both tire beads are not seated when maximum inflation pressure is reached; deflate the tire, re-lubricate the bead, and re-inflate the tire.
-  **CAUTION!** Never exceed manufacturers' specification for tire inflation, as the tire may fail or explode causing personal injury.
-  **WARNING!** Drills with ribbed implement tires are not meant for highway speeds. Tire manufacturers' specify 20 m.p.h. or less for this type of tire.
-  **CAUTION!** Check lug nut torque before using the drill. Check again after 1st and 2nd day of use and after 50 and 100 acres of use. Check periodically to ensure lug nuts are tight. Torque should be 130-135 lbs. each. (9/16" Grade 5)

**Note:** Tire pressure affects tire circumference and thus can affect seeding rates. The Truax drills come with 255/70R22.5 140/137M Regroovable tires  
(CAUTION: RECOMMENDED 80 PSI TIRE PRESSURE)



# SET-UP & PREPARATION

## TRANSPORTING OTG DRILLS

### 1) PREPARING THE TRACTOR

- Make sure all tractor "power take-off" (PTO) guards are in place .
- Retain drawbar in a fixed position.
- Place tractor drawbar in a position so that the drill frame is nearly level.
- Attach safety chain from tractor to drill.
- Secure the tractor lift links.
- Install tractor "slow moving vehicle" (SMV) emblem.

### 2) ATTACHING THE DRILL

1) Secure the drill to the drawbar with a pin that has a cross-locking device to prevent the units from separating.

2) Tractor drawbar height may require the tongue clevis to be raised or lowered.

3) The drill tongue will generally slope down toward the tractor. An important consideration is to have approximately equal force or pressure exerted by the planter discs and the press wheels.

4) The drill frame should be nearly level when the drill openers are in the planting position. This can be checked by positioning the drill on a flat surface with a 2" x 6" under each wheel. Lower the drill planting units to the ground surface and check to see if the disk openers and no-till coulters are touching the ground surface equally.

If adjustment is needed proceed in the following sequence:

1. First, check the hitch clevis and adjust up or down if possible.
2. Second, check to insure the no till coulters are adjusted to the proper height.
3. Third, for hookup to some tractors, particularly smaller tractors, it may be necessary to position the drawbar in its reversed position to achieve adequate height.

5) Check hoses to the no-till parallelograms and the hoses to the planter rockshaft cylinders for binding and entanglement.

6) Check 5/8" x 3-1/2" bolts (models after serial# 55005- are 5/8" x 4-1/2") and nuts that retain axles to legs. Loctite should be applied after tightening the bolts or pean threads. Check these bolts periodically (every 100 acres) and tighten as necessary. Replace the nuts with a locking style nut if they frequently become loose.

7) Check the wheel lug nuts. Torque is 130-135 lbs. and should be checked after the 1st and 2nd day of use and again after 50 and 100 acres. After that, check periodically to ensure lug nuts are tight.



# SET-UP & PREPARATION

## TRANSPORTING OTG DRILLS

### **3) TRANSPORTING THE DRILL**

- 1) Raise drill planters and no-till units to their highest position and then turn both hydraulic valves on tongue tower to their "**off**" position.
- 2) Be sure that the drill's "slow moving vehicle" (**SMV**) emblem is clean and visible.
- 3) Attach safety chain between the drill and the towing vehicle.
- 4) When roading a drill for more that 1/4 mile, it is essential to disengage the lockout hub sprocket.
- 5) When starting out in the transport mode, insure that the clutch is disengaging the drive and the shafts are not turning.
- 6) Make sure that the drill reflectors are clean and in place.
- 7) **NEVER** transport the drill faster than **20 m.p.h.** unless the drill is on a trailer.
- 8) **DO NOT** transport or haul the drill with seed in boxes, as this will cause settling and packing, which is hard on drive chains when planting is resumed.
- 9) **DO NOT** leave seed sacks (empty or partially full) in seed boxes as they may become entangled in the agitators during transport.
- 10) Be extremely cautious when crossing narrow bridges.
- 11) When towing the drill on roadways, it is important to watch ground clearance (especially on a crowned road or one that has low shoulders). A towed drill should be secured to the towing vehicle with a safety chain.
- 12) Hydraulic valves on tongue tower must be closed before towing drill on roadway.
- 13) When transporting the drill on a trailer, the safety pin & chain must be installed to prevent the tongue from swinging down.
- 14) Transport on a trailer requires chaining or strapping the drill's main frame (not the seed boxes) to the trailer. Lower planters and no-till units so that they are on trailer deck. Fasten red flags to oversized units. Follow all state and local regulations when transporting a drill.
- 15) Drills having rubber lid retianers should have additional rope or ties used when transporting drills. Drills having over center metal latches do not need this requirement.