**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 maintenance, time and repair.

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

2.) Grease coulter hub bearings and wheel hub bearing before start of each planting season.

3.) Grease the coulter arm pivots every 6 to 8 hours.

4.) Grease the front tongue pivot, level link pivot tube and pivot tube at the rear of hitch every 6 to 8 hours.

5.) Check for the proper air pressure in the implement tires, 60 PSI for the 9.5 L x 15” 12-ply and 52 PSI for the 11 L x 15” 12-ply.

6.) Keep front slide blocks on telescoping transport axles adjusted with .015 to .025 inches of clearance from inner axle tubes.

**TRANSPORTING**

1.) When transporting the drill, transport locks should always be used. This will prevent damage to the drill and possible personal injury should hydraulic failure occur. The transport pins are located in the tall vertical tubes of the transport frame. The storage hole for the transport pins is next to the stabilizer shocks.

![Transport Lock Pins In Transport Position](image1)

![Transport Lock Pins In Storage Position](image2)
2.) For transport the front cylinder has a lock channel place on the cylinder rod and held on by a pin with a clip and the weight of the cylinder place of the lock. The storage positions for the lock channel is a tube above the coulter tool bar.

3.) The adjustable pivot lock tubes, located just in front of the transport pivot frame and next to the leaf spring rollers, restrict the pivot movement of the drill and allows for safer transport. They can be adjusted by loosening the jam nut and screwing the bolt in or out to the desired setting and tightening the jam nut. When the pivot frame is 90 degrees to the tongue, the bolt head should be about 1/16 of an inch away from the pivot frame. The pivot lock tubes should always be positioned horizontal against the transport frame when moving the drill down the road. The pivot lock tubes swivel and are spring loaded to keep them in position. They should not be forced into the transport position, as the normal pivot of the drill should allow them to drop into their horizontal position. When drilling, the lock tube should be turned up away from the transport frame. Spring tension on the pivot lock tube can be adjusted by moving the frame spring rod up or down.

ADJUSTMENT BEFORE GOING TO THE FIELD

1.) Place the hitch weldment over the ball swivel on the hitch tongue. Back the tractor until the drawbar hole lines up over the hitch weldment hole. Lower the hitch tongue and insert spacer tube through hitch weldment. Insert the 1 inch bolt through the hitch clevis and tractors drawbar and tighten nut. The ¾ inch bolt will go through the front hole in the hitch weldment and through
the tractor's drawbar. Always short side of hitch weldment on the drawbar. Tighten both bolts.

2.) After hooking the CPH to the tractor and before hooking to the grain drill, raise the hitch up to its maximum height and hold the hydraulic lever in the detent for 30 seconds, to allow the cylinders to rephase. This procedure will remove any air in the system allowing the CPH and drill to plant evenly. After finishing each field repeat this procedure to keep the CPH and drill running level in the planting position. Remove the transport locks, and attach drill to the CPH.

3.) With the drill on the hitch check to make sure the coulters line up with the openers on the drill. This can be done by lowering the hitch and the drill until they lightly touch the ground and then pulling straight ahead. If all the coulters are off the opener marks the same amount, loosen the coulter bar and slide the bar until the coulters line up. If an individual coulter does not line up, loosen that coulter and realign on the tool bar.

**FIELD ADJUSTMENTS**

1.) **SETTING COULTER DEPTH:**
   
   A) Lower the CPH as you are moving forward until the wheels of the hitch are off the ground.

   B) Retract the front tongue cylinder to lower the coulters until desired depth is achieved. Set the coulter depth approximately 1 inch deeper than desired seeding depth. Recheck the coulter depth and adjust.

   NOTE: The cylinder gauge on the front tongue cylinder is to be used only as a reference only, it does not designate the coulter depth.

   C) If the cylinders completely retracted and the coulters are too shallow and the drill is placing seed on top of the ground, add weight to the hitch. **DO NOT** readjust the coulter shanks, lowering the coulter shanks will not increase coulter penetration.

   D) In soft soils, the gauge wheel tires on the drill may sink, if so raise the CPH just enough to carry the drill. To help maintain the correct position use depth stops provided.
2.) CENTER LINK LOCK PLATE:

A) In standard no-till conditions where maximum front to back flexibility is desired, place the center link lock plate in the float position. This position is with the lock plate up and the top link pin is centered in the slot. This position is for the “00” series openers only.

B) In soft field conditions and conventional ground where planting too deep can be a problem place the center link lock plate in the limited float position. This position is with the lock plate up but with the top link pin to the back of the slot. This position can be used on all openers.

C) In hard to penetrate conditions where the maximum weight of the drill is needed on the coulters place the center link lock plate in the down position. This position is with the lock plate over the top link pin holding it back. This position can be used on all openers. This is the recommended position for most field conditions.