# **OPERATION OF THE ONE STEP<sup>TM</sup> SYSTEM**



## **One Step<sup>TM</sup> Field Operation**

On One Steps equipped with belly shanks, operate machine approximately 1" higher in the rear. This will prevent excessive wear to the lower front portion of the belly shanks. On all One Steps not equipped with belly shanks, operate machine level front to back, using the front and rear gauge wheels. Once the machine appears to be level, rod depth can mostly be controlled with the front gauge wheels. Feather the tractors 3 point up until the tractor is carrying a portion of the weight. This will help maintain consistent rod depth across the width of the rod. Always put the front divider system down in operating position before entering the bean rows. This will prevent vines from tangling around the rod support shanks, as the One Step enters the bean rows. Make sure top 3<sup>rd</sup> link and lower 3 pt. hitch arms have been properly adjusted allowing the machine to float. Float pins should be removed from the lower 3 pt. arms. Place the 3 pt. position control lever on your tractor in the lowest position. (Do Not engage machine at this time.) With the machine on the ground, drag it until the rod is under the dirt, then engage the power to the machine. This will prevent wrapping around the rod. Now raise the 3 pt. control lever to carry some of the weight. Move ahead very slowly (1/2 mph). In the bean row, the second rod or "kicker" should be halfway in the dirt. If the beans are hesitating on the rod, go 1/4" to 1/2" deeper using the turnbuckle located on the front gauge wheel, #1 flow control valve, located on the right side of the machine should never exceed 3 1/2 on the number guide. #2 flow control valve, controls the speed of the draper belt and should be turned wide open. Then from the hydraulic flow control valve on the tractor, turn the hydraulics down so the amount of flow going through the machine controls the speed of the draper belt. This will ensure that you are only using just enough oil to operate the machine and not using more oil than needed. Under normal conditions 8 to 10 gallons per minute (3000 psi maximum pressure), is required. Rule of thumb, the faster the ground travel the slower the rod should operate (100 to 270 RPM maximum). Also never operate the rod unless it is in the dirt. Always turn the machine off when turning or during transport. After you have checked the rod depth make sure all divider rods and all dividers are adjusted properly and bolts and nuts are all tight. Check the front gauge wheel divider and adjust divider rods in next to tire so beans & vines are smoothly flowing past the tires.

Now go through the following instructions to set your One Step unit up correctly.

## NOTE: NEVER BACK UP WITH DIVIDER SYSTEM IN DOWN POSITION

#### A. Divider System Setting

1. Using (2) 3/4" wrenches, loosen the bolt in the slotted end of the upper pivot arm and adjust divider tilt adjustment, the front of the divider shoe needs to be slightly higher than the rear. Tighten securely and check periodically.

2. Using 1/2" wrench, extend 3/4" rod so tip of rod is 1/2" to 3/4" under soil surface.

3. Form vine rods to gently separate and direct foliage around front tires. Bend the end of all rods slightly inward to prevent shatter as foliage moves past the end of the rods. Inspect periodically.

#### **B. Rear Tire Dividers**

1. Ensure that the rear tire divider is centered on the face of the rear tire.

2. The parallel linkage portion of the rear tire divider needs to be positioned slightly down in the back from parallel to the ground. Tractor height will determine setting.

3. To lower the front of the rear tire divider, turn angle iron mounts over by removing upper and lower bolts and bushings. Reassemble using 1/2"x 3" x 3" U-bolts. Reattach to 3" x 3" support tube.

4. Form rear tire divider vine rods to gently separate and direct foliage around rear tire. Check position of the divider rods periodically during harvest to prevent crop damage or loss.

## C. Optimum Rod Depth

1. Study soil and field conditions to determine optimum rod depth. *Precise rod depth control is essential.* In the center of the bean row, operate the front rod as shallow as possible. Rod will operate 1" to 2" underground, or halfway in the middle of the rear 2" or 1 1/4" kicker bar, 1/4" to 1/2" up or down. This will depend on field preparation and conditions present at harvest time.

2. For maximum dirt separation *always operate with the double rods*. Refer to opposite page for a variety of field conditions and recommended rod depths. In most cases rod speed should not exceed 270 RPM.

3. *Always operate the rod as shallow as possible with a smooth even flow of beans over the double rod.* View pages VI & VII in the One Step Operator's Manual for recommended farming procedures from planting to harvest in sequence for proper field conditions, to facilitate the best One Step results.

For more information and complete Operator's Manual visit www.pickettequipment.com

### **ONE STEP SETTINGS**

Field Conditions	Ground Speed - MPH	Rod Depth Inches	* Back Gauge Wheel - Inches	** P.U.H. Teeth Height	P.U.H. Speed Valve Setting	Draper Speed Valve Settings	P.U.H. to Rod Spacing	Front Gauge Wheel - Opt .
Light Soil	6 mph	1" - 2"	24" or operate level	1"	3 - 3 ½ on flow control #1	Full Open on flow control # 2. Regulate speed from tractor.	Standard	Set according to Rod Depth
Medium Soil	6 mph	1" - 2"	24" or operate level	1"	3 - 3 ½ on flow control #1	Full Open on flow control #2. Regulate speed from tractor.	Standard or 1" Back	Set according to Rod Depth
Heavy Soil	5 mph	1"	24" *see note below	1"	3 - 3 ½ on flow control #1	Full Open on flow control #2. Regulate speed from tractor.	Standard to 2" Back	Set according to Rod Depth
Hard Soil	4 mph	1"	24" *see note below	1"	3 - 3 ½ on flow control #1	Full Open on flow control # 2. Regulate speed from tractor.	Standard	Set according to Rod Depth
Mud	4 mph	1"	23"	2"	3 - 3 ½ on flow control #1	Full Open on flow control # 2. Regulate speed from tractor.	1" - 2" Back	Set according to Rod Depth
Rocky	4 mph	1"	24"	2"	3 - 3 ½ on flow control #1	Full Open on flow control # 2. Regulate speed from tractor.	Standard to 2" Back	Set according to Rod Depth
Weeds	4 mph	2" - 3"	24"	2"	3 - 3 ½ on flow control #1	Full Open on flow control # 2. Regulate speed from tractor.	2" - 4" Back	Set according to Rod Depth
Light Foliage	6 mph	1"	24"	¼ " under soil	3 - 3 ½ on flow control #1	Full Open on flow control #2. Regulate speed from tractor.	Standard or 1" Forward	Set according to Rod Depth
Heavy Foliage	4 ½ to 5 mph	1"	24"	2"	3 - 3 ½ on flow control #1	Full Open on flow control #2. Regulate speed from tractor.	2" - 3" Back	Set according to Rod Depth
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The settings that are recommended are always subject to change because of varying types of field conditions. It is best to make any adjustment in small increments in order to verify your results.

\*Measurement is from center pin to center pin on ratchet jack. When operating a machine with belly shanks, set ratchet jacks at 25" to 26" (center pin to center pin) so the machine will operate 1" higher in the rear.

\*\*Note that this measurement is in inches from the ground.

