



Inverter Harvest Tips

Pre-Field Operation Check Points.

1. Check the rattler bar chain for wear and tension. The distance from the bottom of the rattler frame to the top of the chain should be 2 ½ inches.

2. Set the knocker wheels. Adjust wheels such that they strike the bars with sufficient force to remove dirt. Avoid excess agitation, it causes premature chain wear.

3. Adjust rattler frame. It should be parallel to the 45-degree frame member.

4. Check PTO driveline. With driveline attached to tractor, raise and lower the inverter checking driveline travel. It should not separate in the up position or bottom-out in the lower position.

5. Check tractor tyre inflation to make sure they are the same.

6. Level the inverter with the tractor axle by sighting a frame member with the tractor axle. Adjust lift arms as needed.

7. Set inverter gauge wheels. Normal vertical position is with two holes showing above the mounting bracket for 8 X 10 tyre and one hole for 8x8 tyres. With the stem located to the outside of the 2 X 5 frame is the correct position for 36-inch rows.

If digging peanuts planted on beds or furrows, gauge wheels may have to be set lower to allow for bed height.

8. Shank placement. The center of the plow standard should be located 13 inches off the row centre for inverters built since 1991. Prior to 1991 the position should be 12 inches from the row centre. For twin row peanuts, use the center of the two rows as the measuring point.

9. Set the pitch of the blade. With the inverter on a concrete slab (or level surface) set the tractor top link so that the machine rests on the blade tips and gauge wheels. Adjust the frogs so that the rear cutting tip of the blade is ¾ inch lower than the front cutting tip. This is to allow for the flexing of the blade during operation.

10. Set the Vine Cutters. Coulters should be set as close to the row as possible without cutting off peanuts. The distance will normally be 1 to 2 inches outside the front tip of the blade. The height of the coulters should be 2 to 3 inches below the plow blades, but never so low that they drag when turning at row ends. Make sure the springs are tensioned properly to cut through the vines. Adjust the bottom collar to control spring pressure.

11. Set the inverter rods. All recently manufactured machines have a decal attached showing proper rod location. Operator's manuals have this information also. With the inverter on a level surface measure and set the inverter rods to their correct position. Twin row peanuts may require a slightly wider setting of the lower rods.

In Field Adjustments.

1. Set the plow depth. Field conditions often dictate the proper depth for the plow. You should always plow beneath all the peanuts; normally this will leave about 2 inches of taproot showing below the root crop of nuts. Terraces, washes and hard ground may require varying from this. To set the depth, put the tractor position control lever all the way down and lengthen or shorten the top link to achieve the desired plow depth. (Ensure that tractor 3pt linkage system is in position and not draft control).

2. Set the proper ground speed. First set the tractor PTO speed at 70 to 75 percent of full PTO speed. Then select a gear that will provide 3 to 3 ½ miles per hour of ground speed*. Proper synchronization of PTO and ground speed is important. Too much ground speed over-runs peanuts causing bunching. Too slow of a ground speed will pull vines apart and pull off peanuts.

***Note:** Australian industry recommendations are for slower ground speeds of 3.5 to 4.5km/hr (2.2-2.8mph).

3. Set the proper conveyor speed (Hydraulic Drive Models). The lower pickup and rear drive shaft of the conveyor should be adjusted between 110 and 118 RPM for normal operation. Approx. 15 gpm for 2,4, and 6 Rows. Approx. 30 gpm for 8 Row units.

Factors Effecting Peanut Loss.

1. Blade depth too shallow.

2. Dull Blades. Blades are dull when they do not cut cleanly through the taproot. If they push on the root, they will drag the plant.

Note: Blades may have to be changed frequently ie. more than once or twice per day depending upon conditions.

3. Vine cutter springs too loose or coulters too dull.

4. Conveyor pickup running too high above the lifter rods.

5. Tractor RPM or hydraulic flow too fast.

6. Vine flow not synchronized with ground speed and conveyor speed.

7. Inverter not precisely aligned with the row (indicated by tap roots leaning left or right).