

MODEL 5500

Assembly and Operators Manual

For Models 5500, 5500W, 5500H

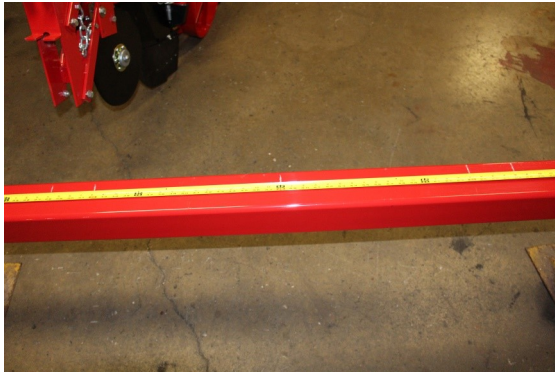


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- 1) Set up your toolbar by marking your center (ie: 8' bar would be 48" or 4' center) a) Mark your row centers. We are showing a standard 40" row center, by marking 20" off center of toolbar. b) Mark your drive centers, we are showing them at 80" by marking 40" off center.



- 2) Remove the unit clamps from the unit and mount by using a 15/16 wrench and socket and secure the clamps by using two hex head bolts, lock washers, nuts and two red securing plates. (1/2 x 2 x 6-1/2)
4x4 Toolbar - 5/8 x 6 1/2 Bolts
4x6 Toolbar - 5/8 x 8 1/2 Bolts
4x7 Toolbar - 5/8 x 9 1/2 Bolts
7x7 Toolbar - 5/8 x 9 1/2 Bolts



- 3) Install drive unit and gauge wheel on toolbar at desired tire centers. Secure with proper length bolts, lock washers and nuts.

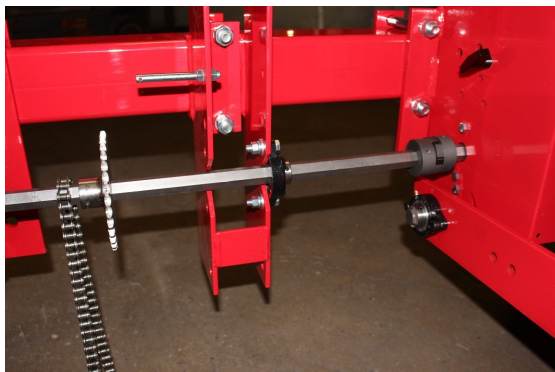


4) Install gauge wheel by using four hex head bolts, nuts and washers. Use two 1/2 x 2 x 6-1/2 red securing plates.

** Install the a-frame (see instruction sheet included in A-Frame box.)



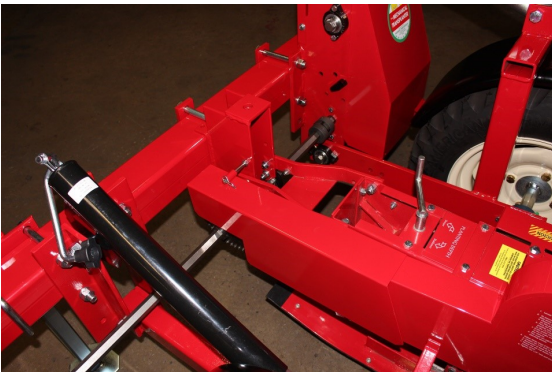
5) Load hex shaft with flange block bearings, 35 tooth sprockets, 138 link chain, one half 7/8' hex lovejoy coupler.



6) Insert rubber spacer onto coupler and line with the other half of coupler on drive. Secure flange block bearings onto clamp with two 3/8 x 1 1/2 hex head bolts, flat washers, lock washers and nuts. Tighten all set screws on bearings.



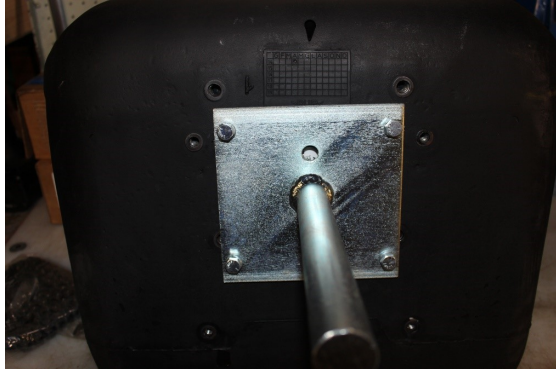
10) Reinstall chain guard.



11) Install the outside chain guard secure with one clip pin. There should be a spacer between guard and clamp.



12) Install red seat bracket with one 3/4 x 3 1/2 hex bolt, lock washer and flat washer.



13) For cushion seats only—install seat bracket to bottom of seat, using four 5/16 x 1 hex bolts. Slide seat post into red bracket and tighten set screws.



14) For Fiberglass seats only—Install green seat bracket to bottom of seat by using four 1/4 serrated flange nuts. Secure plated seat post to green bracket with one 1/2 x 1 1/4 carriage bolt and nut. Slide seat post into red bracket and tighten set screws.

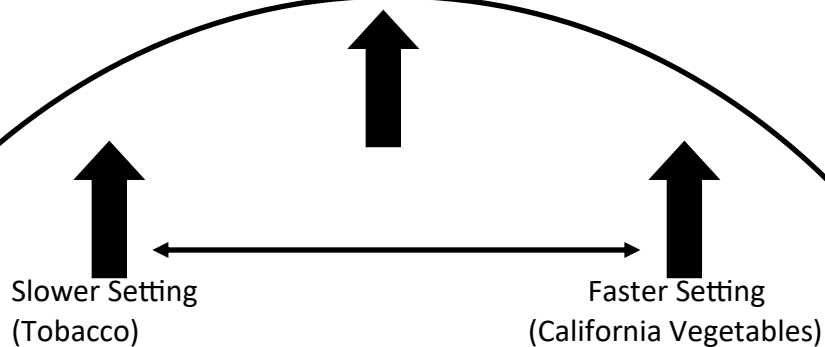


15) Install six cup top and windshield by using one 5/16 x 1/2 hex head bolt, flat washer and one 1/4 set screw.

Model 5500 Operation

A. Timing Instructions

- 1) The diagram below is on the side of your transplanter. The arrows signify the location of a tube with the lower keyway straight up.
- 2) Follow the instructions below carefully. This must be done with each transplanter.



Timing Instructions for the Model 5500

- 1) Locate the timing arrows on this guard.
- 2) To insure that each unit is in time, follow these steps. (This must be done for each unit separately.)
 - A. Observe the keyway on the shaft located on the open hole of this guard.
 - B. Turn the drive wheel slowly until the keyway is at the 12 o'clock position and the arrow is pointing at it. Keyway must remain at the 12 o'clock position while adjusting the cups.
 - C. If the center arrow is pointing at the center of the bottom of any of the 6 cups, your unit is in time for approximately 80-100 plants per minute.
 - D. The cups are adjustable from the center arrow for lower or faster planting speeds.
- 3) Follow these steps if the timing must be adjusted:
 - A. Loosen the 1/2" bolt at the top of the six cup feeder head.
 - B. Remember to keep the keyway at the 12 o'clock position.
 - C. Rotate the six cup feeder head to your desired position from the center arrow.
 - D. Tighten the 1/2" bolt and proceed.

Keyway in shaft

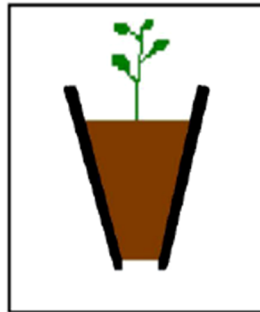


B. Sizing cell to shoe

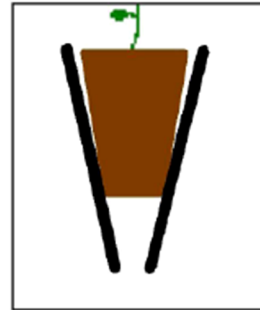
- 1) Take a cell and place into the rear of the shoe.
- 2) Using a 15/16" wrench, adjust the bolt on the outside of the shoe to widen or narrow the shoe. Cell must fit snugly, stopping near bottom of shoe.



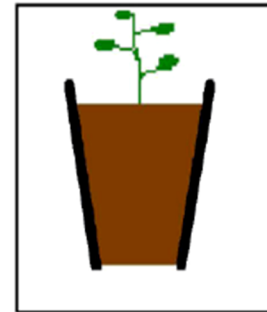
Incorrect
- Narrow the shoe
with adjustment
bolt.



Correct



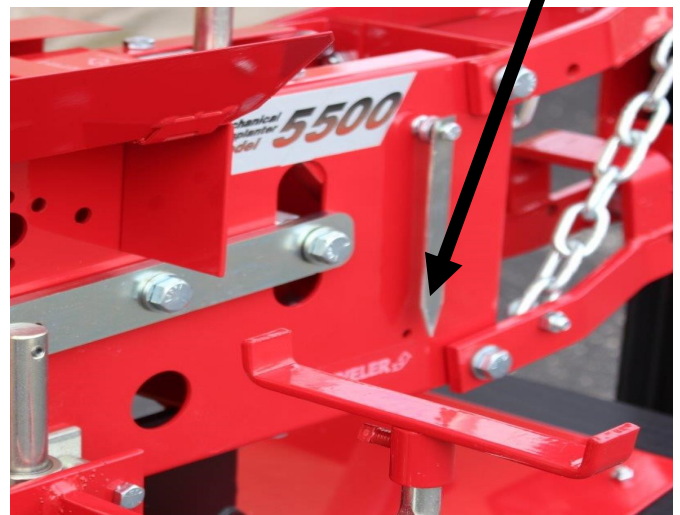
Incorrect
- Widen the shoe
with adjustment
bolt.



Correct

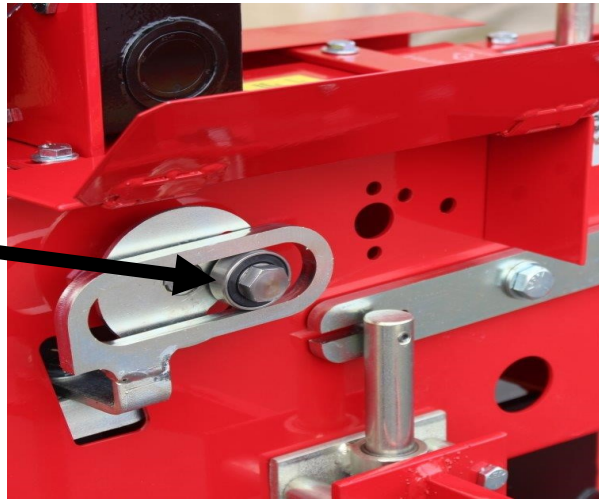
C. Level Planting

- 1) Lower the Model 5500 transplanter into the soil.
- 2) Set height of gauge wheels so parallel hitches are level with frame. Use the leveler on the side of the transplanter to insure level planting.
- 3) Toolbar Pitch—the toolbar can be pitched back to put extra pressure on the packing wheels or rear packer pads if ski model



D. Kicker Adjustment

- 1) Factory preset is at 1/4" out of shoe.
- 2) If kicker is not coming out of the shoot at 1/4", then adjust eccentric bolt with wrench.



E. Depth Control and Packing

- 1) If the depth of the cell planted is incorrect, turn the crank under seat to plant deeper or shallower.
- 2) For packing wheel models, the wheels can be adjusted in and out with the set screws on the hub. For ski model, use the 5/8" plastic bolts on the back of the ski to adjust soil flow. Turn down for more soil flow, and up for less.
- 3) Added packing pressure can be given to the back of the transplanter by lengthening the 3rd arm of the 3-point hitch.

F. Water Valve Adjustment

- 1) The water valve is set at the factory for maximum stroke. Set the ball valve on side of unit for desired amount of water to be released with each plant.
- 2) If a smaller stroke is desired, remove the inspection plate in front of the gearbox. Raise the #5199 channel on the pump rod to decrease the stroke.
*** Do not over-stroke valve or it will lock up and damage unit!**
- 3) Be sure to drain the water out of the valve at the end of the season or the valve will freeze.

Machine Improvements

Mechanical Transplanter Co. is always striving to make improvements on their line of equipment. Mechanical Transplanter Co. reserves the right to make improvements and changes at any time with-

G. Service

Attention: Care should be taken while servicing the unit because of the bolt together construction of the main frame. NEVER remove the unit top plate, backplate or shoe at the same time. Frame alignment could be jeopardized if this is done.

- 1) Resetting the transplanter to factory timing—Page 6
- 2) Removal of Ski
 - A. Lift the transplanter slightly off the ground.
 - B. Loosen and remove the four 3/8" nuts on the top of the ski.
 - C. Remove bolts and the ski will come off.
- 3) Replacing the Shoe
 - A. Follow the steps to remove the packing ski.
 - B. Loosen and remove the two 3/8" bolts going into the bottom of the framework.

H. Spacing Charts

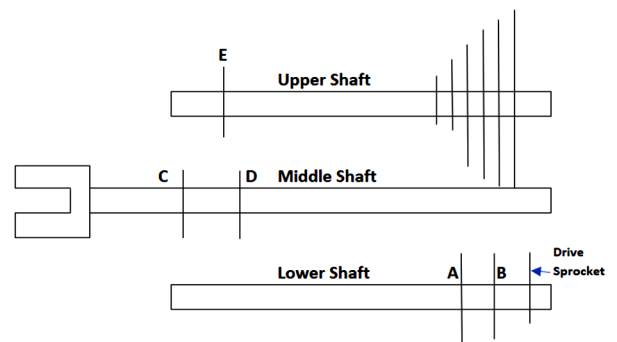
**35 Tooth on Jackshaft
10 tooth on transplanter**

Standard Spacing	Use Sprocket Arrangement:
5-1/2"	A1D
6-1/2"	A2D
7-1/2"	A3D
8-1/2"	A4D
9"	A2C
9-1/2"	A5D
10-1/2"	A3C
10-3/4"	A6D
11"	B2D
12"	A4C
14"	A5C
16"	A6C
17"	B3C
19"	B5D
20"	B6D
23"	B5C
26"	B6C

**22 Tooth on Jackshaft
12 Tooth on Transplanter**

Wide Spacing	Use Sprocket Arrangement:
9"	A1D
10-1/2"	A2D
13"	A3D
15"	A4D
16-1/2"	A5D
17-1/2"	A3C
18-1/2"	B2D
19-1/2"	A6D
20"	A4C
23"	B3D
24"	A5C
26"	A6C
30-1/2"	B5D
35"	B6D
40"	B5C
48"	B6C

Cluster Spacing



- * To change cluster spacings, slide cluster over to align desired sprocket shown on chart either sprocket A or B.
- * To change C or D spacing, move sprocket E over C or D

TROUBLE SHOOTING

Reminder: Cell-type setters, such as the Model 5000, require a firm, rootbound, and moist cell for consistent planting. A poor quality cell directly affects the performance of the transplanter.

PROBLEM	CAUSE	SOLUTION
Plants fall on kicker	Machine is out of time	Review decal on side of transplanter or see page 10 in the manual
	Poor cell quality and/or dry cells	Water cells lightly to help them drop faster
Plants are buried or lying top of the soil	The furrow opening shoe is not adjusted properly	See the diagram on page 11 of this manual
	Poor cell quality	Make sure the cells are fully intact when removing from the tray
Furrow is not filling in properly	Transplanter is not running level	Adjust the gauge wheels so the scissors hitch is running level. Toolbar should be about 14" off the ground.
	Packing pads are not properly adjusted	Adjust the plastic bolts in one turn increments until proper packing is achieved. Roto-till soil.
	Use as last resort →	Adjust toolbar pitch to put more pressure on the back of the unit: See page 12
Kicker is not moving	Drive wheel is not touching the ground or is slipping	Turn gauge wheel crank to lower tire
Plants are being flooded out of shoe	Ball valve on side of transplanter opened too much	Close ball valve until proper water flow is achieved

Safety Precautions

1. Make sure tractor is stopped and in neutral with the transplanter lowered to the ground before getting on /off the unit.
2. No operator is allowed to be on the unit as it is raised and lowered.
3. No operator is allowed on the transplanter as it is transported to or from the field.
4. All operators must be seated before movement begins and remain seated until the transplanter is completely stopped.
5. Never leave the transplanter in the raised position
6. Keep all shields and guards in place when operating the transplanter.
7. Never attempt repairs or maintenance while the transplanter is in motion.
8. Never put the tractor in reverse while the transplanter is on the ground.
9. Follow all safety instructions supplied by the tractor manufacturer to which the transplanter is mounted.

MACHINE IMPROVEMENTS

***MECHANICAL TRANSPLANTER CO. IS ALWAYS STRIVING TO MAKE IMPROVEMENTS ON THEIR LINE OF EQUIPMENT.
MECHANICAL TRANSPLANTERCO. RESERVES THE RIGHT TO MAKE IMPORVEMENTS AND CHANGES AT ANY TIME
WITHOUT INCURRING OBLIGATIONS TO MAKE SUCH CHANGES OR ADDTIONS TO EQUIPMENT PREVIOUSLY SOLD.***

Limited Warranty

Mechanical Transplanter Company, LLC warrants each item of new equipment manufactured by Mechanical to be free from defects in material and workmanship under normal use and service.

The obligation of Mechanical Transplanter Company, LLC under this LIMITED WARRENTY is limited to repairing or replacing as Mechanical may elect, any parts that prove, in Mechanical's judgement, to be defective in material and workmanship within the first season's use of 45 consecutive days after initially placing equipment in operation, whichever occurs first. Any outside work or alterations without Mechanical's written approval will render the LIMITED WARRANTY void.

Mechanical's obligation specifically excludes any liability for consequential damages, such as loss of profits, delays, expenses, damage to goods or property used in connection with or processed in or by the product sold, or damage to the product sold from whatsoever cause, whether or not such loss is due to negligence of selling dealer of Mechanical Transplanter Company, LLC.

This limited warranty shall not apply to any item or machine which shall have been operated in a manner not recommended by the Company nor which shall have been repaired, altered, misused, damaged in an accident, neglected, tampered with or used in any way which in the Company's opinion adversely affects its performance and results. No person is authorized to give any other warranties or to assume any other liability on behalf of Mechanical Transplanter Company, LLC unless made in writing by Mechanical Transplanter Company, LLC.

This limited warranty covers repair or replacement of Mechanical's equipment only and does not cover crop loss, downtime, labor, damage to other equipment, etc.

This limited warranty does not apply to exterior finishes, tires, chain links, bearings, or any other items sold by Mechanical Transplanter Company, LLC, but warranted by the original manufacturer except to the extent of their individual manufacturer's warranty.

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