

# **KNAPIK®**

## **Hand-Pulled Seeder**

### *Operating Instructions*



Single Row Hand-Pulled Seeder  
for Conventional Sowing

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# SUMMARY

<b>1. OPERATOR WARNINGS.....</b>	<b>3</b>
<b>2. RECEPTION AND INITIAL ASSEMBLY.....</b>	<b>4</b>
<b>3. SEEDS DISTRIBUTOR.....</b>	<b>5</b>
<b>3.1. Seeds Distributor by Rotor System.....</b>	<b>5</b>
<b>3.2. Seeds Distributor by Horizontal Seed Plate System.....</b>	<b>6</b>
<b>3.3. Removing out the Seeds Hopper.....</b>	<b>7</b>
<b>4. FINGER ROLLER BOX.....</b>	<b>8</b>
<b>4.1. Table for adjustment the amount of seeds to be distributed.....</b>	<b>9</b>
<b>5. CLUTCH MECHANISM.....</b>	<b>10</b>
<b>6. OFFSET DOUBLE-DISC OPENER.....</b>	<b>11</b>
<b>7. ANGLED CLOSING WHEEL.....</b>	<b>11</b>
<b>8. ADJUSTMENT OF DEPTH SEEDING.....</b>	<b>11</b>
<b>9. FINAL CONSIDERATIONS.....</b>	<b>12</b>

## 1. OPERATOR WARNINGS



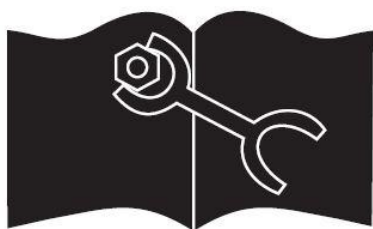
**Please, avoid the improper  
disposal of waste in the environment,  
the planet thank to you**

## SAFETY AT WORK



**Keep in mind that SAFETY requires CONTINUING WARNING,  
OBSERVATION and CAUTION during storage and handling, transport and  
maintenance of the planter.**

## PLEASE, READ THE INSTRUCTIONS MANUAL



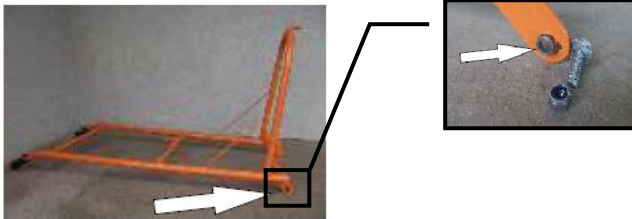
**Before mounting, adjusting or maintenance  
procedures, please consult the instructions  
manual.**

## 2. RECEPTION AND INITIAL ASSEMBLY

You will find the seeder inside the packing as shown in picture below.



The seeder handlebar and the support leg are disassembled in packing.



### ATTENTION!

Do not forget to put the metal sleeve as indicated to assembly the handlebar.



The seeder with the handlebar and the support leg assembled.

The extension spring of support leg has connected at two points.



To facilitate planting in certain types of soil, you need to add weights in the indicated places.

### 3. SEEDS DISTRIBUTORS

The Knapik Hand-Pulled Seeder can operate with two different seeds distributors:



#### Small Seeds

Seeds distributor by rotor system.



#### Large Seeds

Seeds distributor by horizontal seed plate system - grain universal standard.

### 3.1. Seeds Distributor by Rotor System

= Small Seeds =

The rotor system distribution works with 150mm diameter plastic holed drum. With the machine are sent 3 holed drums with different hole diameters.

Rotor seeds capacity: 200 ml



Disengage the extension spring of the strap



Loosen the thumbscrew of the rotor center and remove the cover



Change the plastic holed drum.



Put the cover back and screw it.

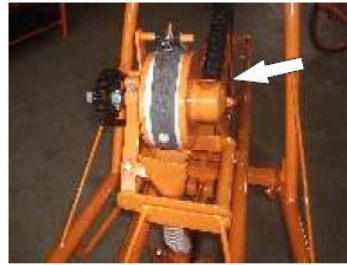
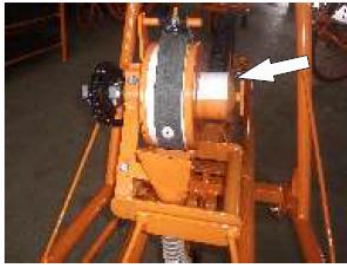


Fit the strap and engage the extension spring back.



Put the distributor on the seeder frame.





Indicated place where the seed is loaded.

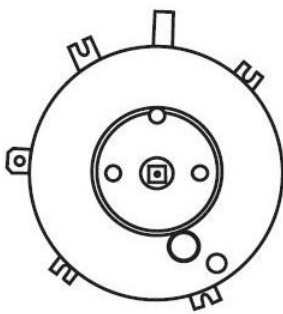


The picture shows how the roller chain is mounted to drive the rotor distribution system.

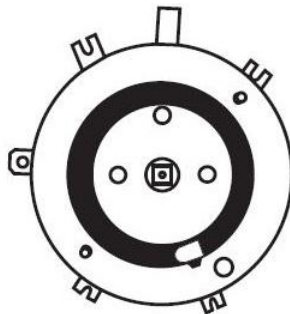
### 3.2. Seeds Distributor by Horizontal Seed Plate System

= Larger Seeds =

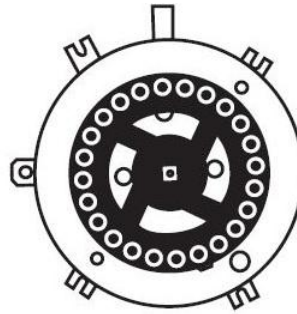
#### Seeds hopper steps of assembly:



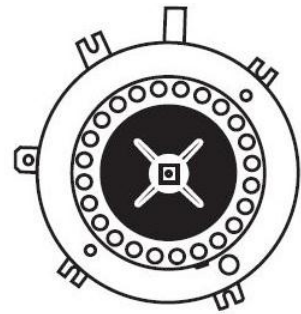
1 - Loosen the transmission chain.



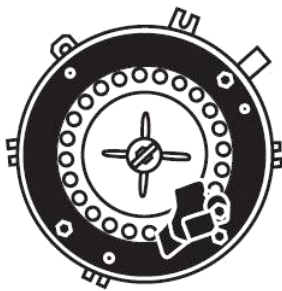
2 - Put the wedge of plate (ring). CAUTION: Put the flat side facing up.



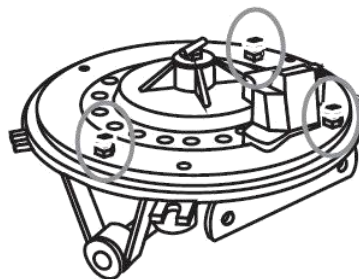
3 - Fit the seed plate, with the protruding portion downward.



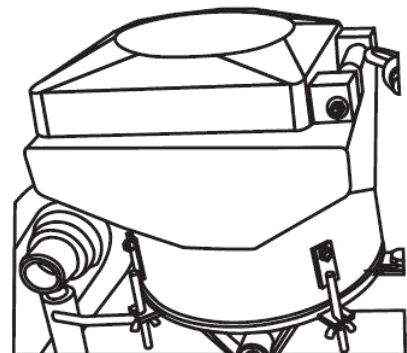
4 - Screw the pull tab of the plate.



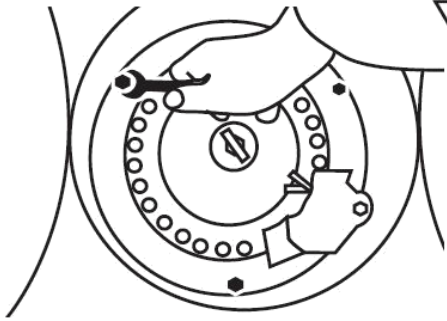
5 - Attach the aluminum ring with the tooth rolls box. Attention to the use of the roller in accordance with plate.



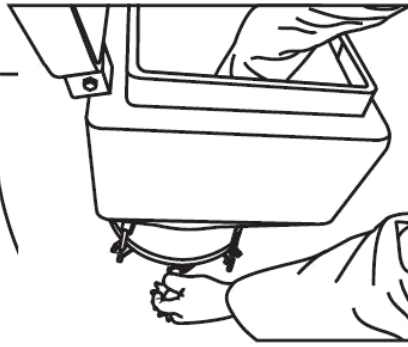
6 - Loosen the screws in accordance with the indicated in the drawing, but not remove it completely.



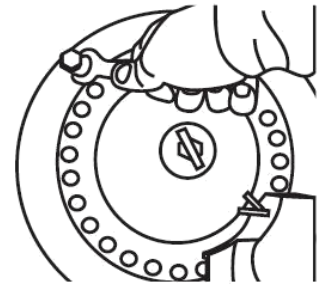
7 - Put the plastic hopper. Keep in mind that the attaching the hopper can push down the ring over the plate and it can lock it.



8 - To unlock the seeding plate, use a 9/16-inch wrench, and adjusting the screws evenly without leaving a part rises over the other until the plate spins freely with a minimum of clearance as possible.

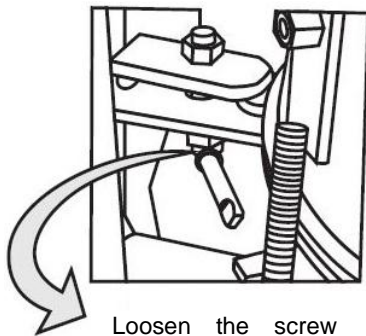


9 - Rotate by hand the seed hopper sprocket. The seed plate should spin freely.

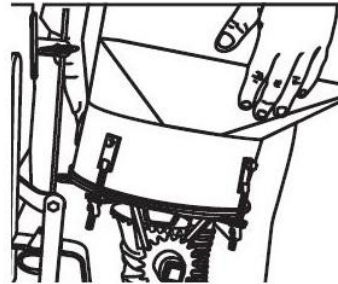


10 - To lock the adjustment, tighten it the nuts on the adjusting screw. Assemble

### 3.3. Removing out the Seeds Hopper



Loosen the screw located in front of the hopper



Remove out the hopper

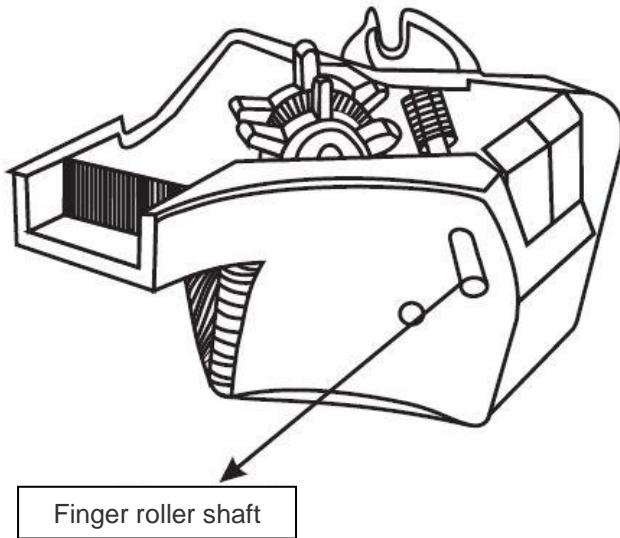
**WARNING:** It is recommended always using graphite powder mixed in seeds.



The picture shows how the roller chain is mounted to drive the distribution system for large seeds.

- ASA 40 Roller Chain.
- Sprockets with 15, 18, 21, 22, 24, and 33 teeth.

## 4. FINGER ROLLER BOX



**NOTE:** to distribute the seeds is very important choose the correct finger roller for each type of plate.



- Hopper capacity: Around 10 liters
- Hopper made in roto-molded plastic
- Seeds distribution system by horizontal seed plate - grain by grain universal standard.

Undersides of seed hopper are located three lubrication points.



## 4.1. Table for adjustment the amount of seeds to be distributed

Grains per meter traveled		Seeds Distribution Sprocket	Ground Wheel Sprocket
CORN SEEDS 28-Holes Plate	SOYBEAN AND BEAN SEEDS 68-Holes Plate		
6,75	16,8	15	24
5,75	14,5	18	24
4,75	12,2	21	24
4,6	11,5	22	24
4,0	10,4	24	24
3,0	7,5	33	24
9,25	22,5	15	33
8,0	19,5	18	33
6,75	16,5	21	33
6,5	15,7	22	33
6,0	14,3	24	33
4,0	10,4	33	33

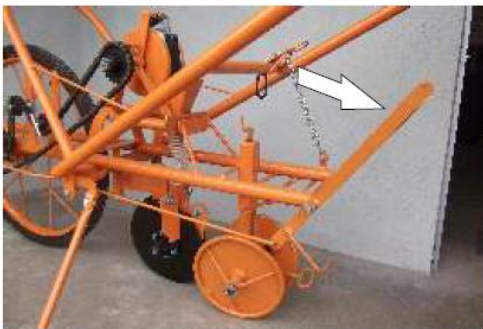


Each ground wheel complete revolution it is equal to 2 meters.

## 5. CLUTCH MECHANISM



When the lever is in vertical position, the seeder is with the clutch engaged, then the seeds distributor will not working.



Pull the lever according indicated direction to start planting.



When start seeding, disengage the chain to the sower mechanism making contact to the ground.

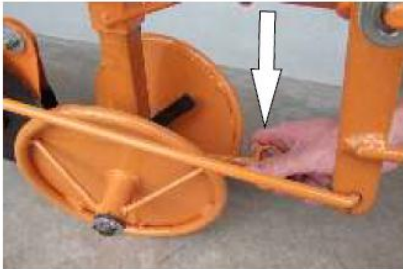
## 6. OFFSET DOUBLE-DISC OPENER



Articulated offset double-disc opener

## 7. ANGLED CLOSING WHEEL

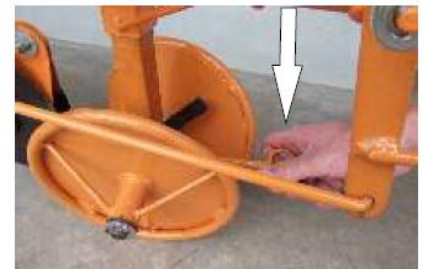
How to adjusting the closing wheel angle



Loosen the thumbscrew



Make the angle adjusting as needed



Turn back to fasten the thumbscrew

## 8. ADJUSTMENT OF DEPTH SEEDING



The seeding depth adjustment is made on the wheel angled support bar, where it finds the screw system that can adjust the depth wheel position.

## 9. FINAL CONSIDERATIONS

In this manual, some images and drawings are not appearing the safety devices (how to cover, guards, etc.) to be able to show clearly and give more detailed instructions. But do not forget; never operate the machine without these devices.

**Indústria Mecânica Knapik Ltda** reserves the right to improve and/or modify the technical characteristics of its products without prior notice and without obligation to extend the improvements and modifications to the machines already sold.



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