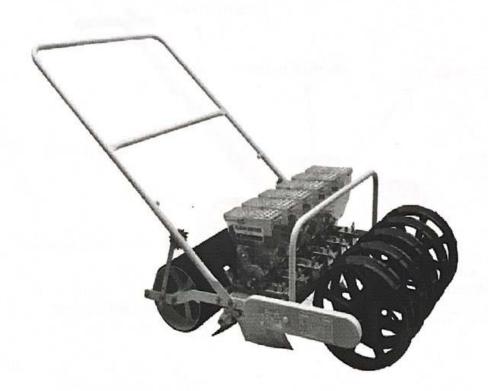
# Clean Seeder™ Instruction Manual for JP-1 / JP-2 / JP-3 / JP-6 The seeder planting your future

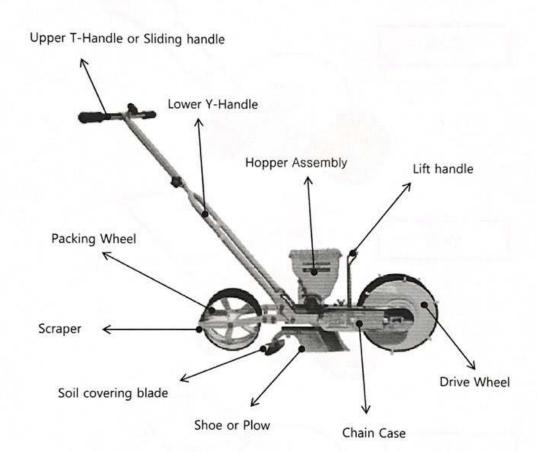


Please read this manual carefully before operating the seeder.

Keep this manual in a safe place as you may need to use it at a later date.

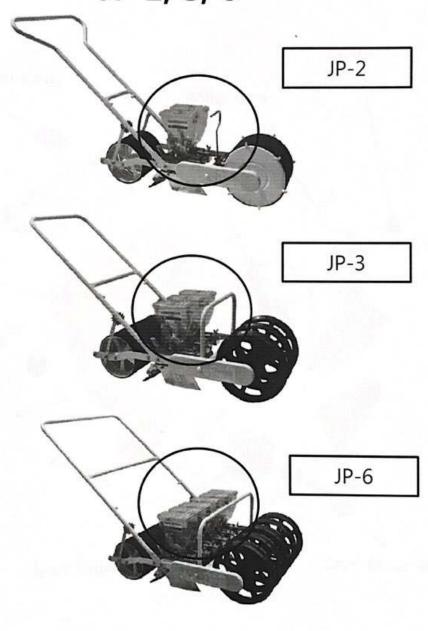
## Description of Seeder JP-1

J

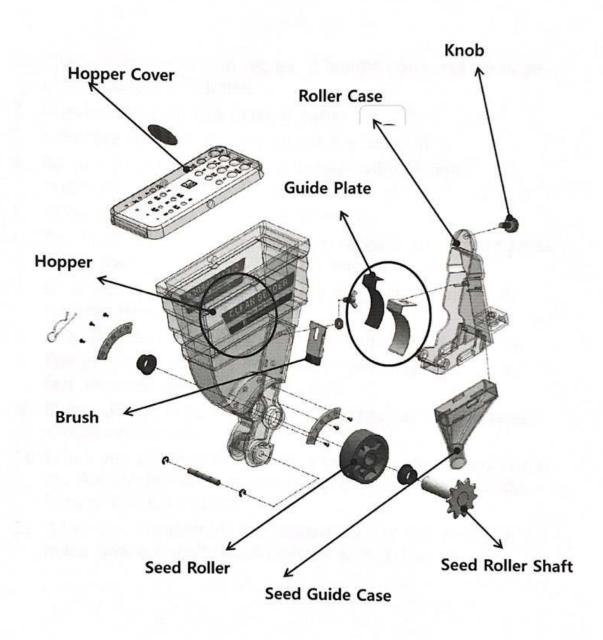


## Photos of Seeder JP-2, 3, 6

J



#### **Description of Hopper Assembly**



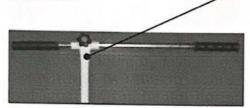
### Instructions before use

- Check your box for the seeder: 2 handle parts and package of sprockets are included.
- Check bolts, nuts and missing parts.

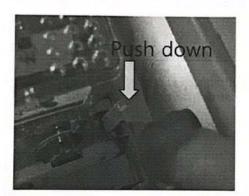
- Lubricate all rotating parts except the seed roll.
- Be sure to put seeds into the hopper without other materials such as stones or metals.
- 5. Occasionally check the seeds fall evenly.
- The brush, the guide plate, spongy rubbers are consumables. Check them regularly and replace them as necessary.
- 7. Occasionally check if the seed roll is blocked or not with wastes, chemicals or debris.
- 8. Prepare a seedbed by carefully crushing soil and leveling.
- 9. The precision becomes poor when operating speed is too fast: required speed is 0.5~0.7m/sec.
- 10. Please do not make the seeds wet. Especially coated seeds should not be wet.
- 11. When you sow beans or corns, a bypass or jam can occur in the hopper. In this case, gently tap the hopper and fill the hopper half full instead.
- 12. When you disassemble the hopper case or the seed guide make sure roll shaft is not covered with dirt or so.

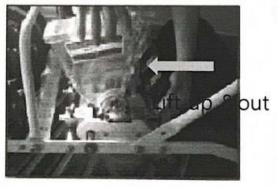
#### **Assembly & Operating Instructions**

 Assemble handle by fastening Y-handle into the lower arms and tighten with two thumbs screws. Adjust height and tighten knob. The T-handle can be moved to one side to prevent walking in or on seed bed.

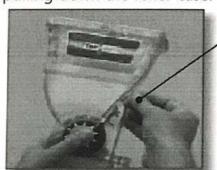


2. To remove the hopper: by pushing down on the quick release lever and lift the hopper out up and out with your other hand.



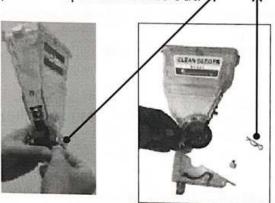


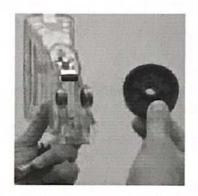
3. To open the roller case: by loosening the white thumb screw and pulling down the roller case.



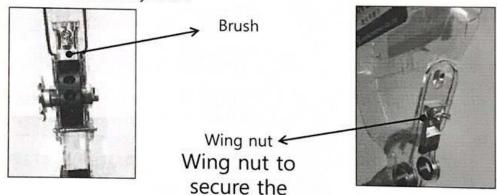


4. To change the roller: remove the R-pin from the sprocket shaft and pull the sprocket shaft out. 7





5. To adjust the brush: <a href="the-brush">the brush</a> is recommended to lightly touch the seed roller to knock off extra seeds. If you take out the brush, you release too much seeds. However, don't put it too tightly as this will cause unnecessary wear.



6.

7.



position
For seeds that may be too big for any seed roller such as larger corn, pea or bean, remove the seed guide plate. When using the spreading shoes remove the seed guide plate. This allow the seeds to fall more freely and also allow multiple seeds to drop.

seed guide plate

#### **Selecting Proper Seed Rollers**

 Following table lists recommended seed rollers to help you to select proper seed roller.

Each seed roller has precisely spaced and sized holes for the type of seeds to be used.

(Note) Seeds may vary in size from one variety from another. You may need bigger or smaller size hole of the seed roller than we recommend. Please send your sample seeds to a dealer or a distributor to find proper seed roller. We may make customized seed rollers by considering size and shape of the seed.

Roller Code	Hole Size	Seed Name or Name of similar size and shape of seeds															
A 13.5  AA 12  C 11  F 5  FJ 5  G 9		corn															
		Corn, Pea															
		Cotton  Spinach, Radish, Cilantro, Alfafa, Corn salad  Spinach, Corn salad  Chard															
									J		Cucumber Parsnip						
									L	7							
									M 5		Beet(large), Okra, Swiss Chard Pepper						
Green beans, Corn, Sweet corn,																	
U		Broad bean, Lingot bean,															
X 4 XY 2.5 XYY 2 Y 3.5 YX 2.5 YYJ 3		Tomato, Rocket salad, Carrot, Kale, Onion-Raw, Brassica, Fennel, Dill, Lettuce  Lettuce-Raw															
								Carrot, Endive, Chicory, Lettuce-Raw,									
		Broccoli, Collards, Flax, Leek, Cabbage, Califlower, Chicory Purslane, Chives, Arugula(Rocket), Mustard,, Basil, carrot, Basil, Turnip, Collard, Parsely, Cabbage, Broccoli, Pak Choi,															
								YYX	2	Camomile, Celery, Sorrel, Thyme, Mint							
								Z		Blank							

#### **Setting Seed Spacing on The Row**

- 1. There are two ways of adjusting seed spacing on the row:
  - 1 The number of holes in a seed roller.
  - ② Changing the gear ratio of sprockets by using 6 sprockets provided with the seeder.
- Remove the chain cover located on the right hand side of front drive wheel by loosening a thumb screw. The spacing look-up table is provided on the chain cover.
- Number of teeth of each sprocket is marked on the surface of sprocket Numbers in the box are the spacing available by arranging different gear ratio of the sprocket combination.
- The way to look at the chart

If you choose ① 3 holes of the seed roller ② 11 teeth of front sprocket ③ 11 teeth of rear sprocket, the seed space is 33cm.

If you choose ① 10 holes of the seed roller ② 10 teeth of front sprocket ③ 14 teeth of rear sprocket, the seed space is 14 cm.

				Number	of Teeth	in Each S	Sprocket					
	Rear Sprocket	14	14	13	13	11	11	10	11	10	10	9
	Front Sprocket	9	10	10	11	10	11	11	13	13	14	14
No. of holes in each seed roller	3 holes	51	46	43	39	30>	33	30	28	25	23	21
	4 holes	38	35	32	29	27	25	23	21	19	18	16
	6 holes	26	23	21	19	18	16	15	14	13	12	11
	8 holes	19	4	16	15	14	13	12	11	10	9	8
	10 holes	16	14	13	12	11	10	9	8	8	7	6
	12 holes	13	12	21	10	9	8	7	7	6	6	5
	20 holes	8	7	16	6	6	5	5	4	4	4	. 3
	24 holes	6.5	6	10.5	5	4.5	4	3.5	4	3	3	3
	30 holes	8	7	7	4	4	3	3	3	3	2	2
	36 holes	5	5	4	3.4	3	2.7	2.3	2.7	2	2	2

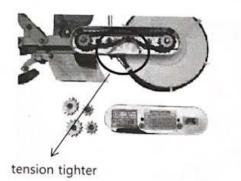
#### Note:

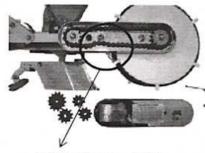
The drive wheel may slip depending on soil quality and operating speed. Therefore, the number of seeds is a guideline only.

If the drive wheel skids, seed spacing will be large. So make sure that the wheel does not slip.

6. Use the metal chain tension tighter when using the smaller sprockets in order to run the chain straight

If there is too much slack, run chain over stud for thumb screw without the chain tighter.

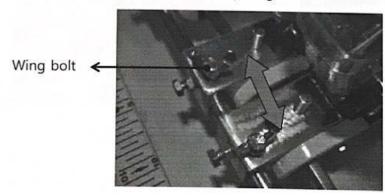




without tension tighter

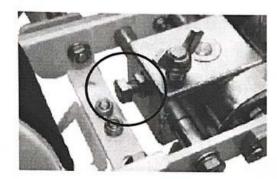
### **Adjusting Spacing Between Rows**

- 1. Loosen the wing bolt on the hopper block assembly.
- 2. Slide the hopper block left or right to get spacing between rows.
- 3. Fasten the wing bolt to secure the spacing between rows.

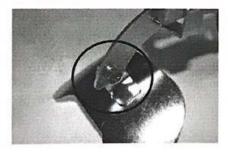


#### **Adjusting Depth of Each Soil-Opener**

- Loosen the bolt located at the front of hopper block assembly.
- Move soil-opener (called as furrower or shoes as well) up or down and tighten the bolt to lock the soil-opener in place.



3. Angle of soil covering blade can be adjusted by loosening the bolt, setting at a desired angle and fastening the bolt again.



Soil covering blade



