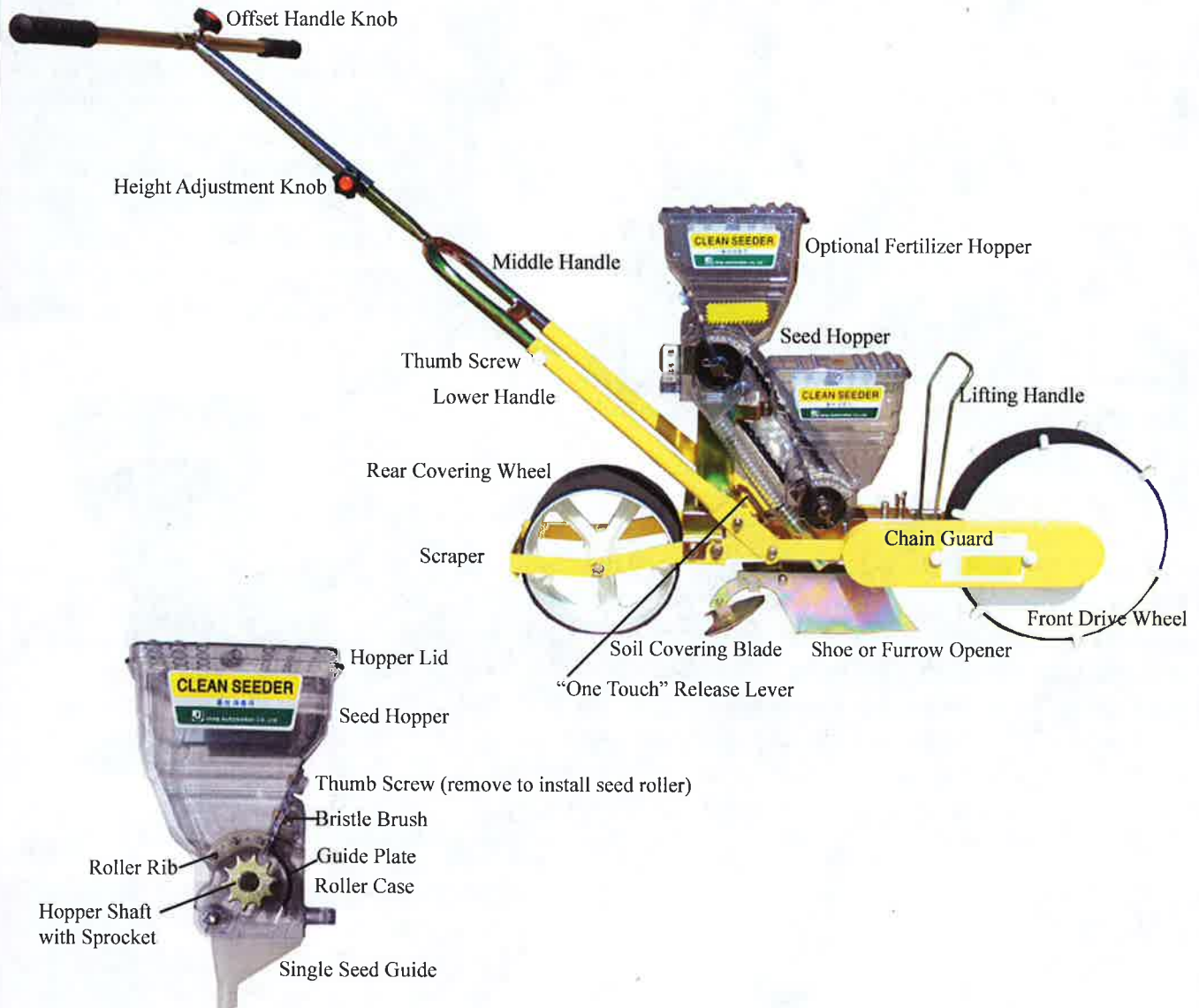


# CLEAN SEEDER OPERATION MANUAL

## MODEL JP-1

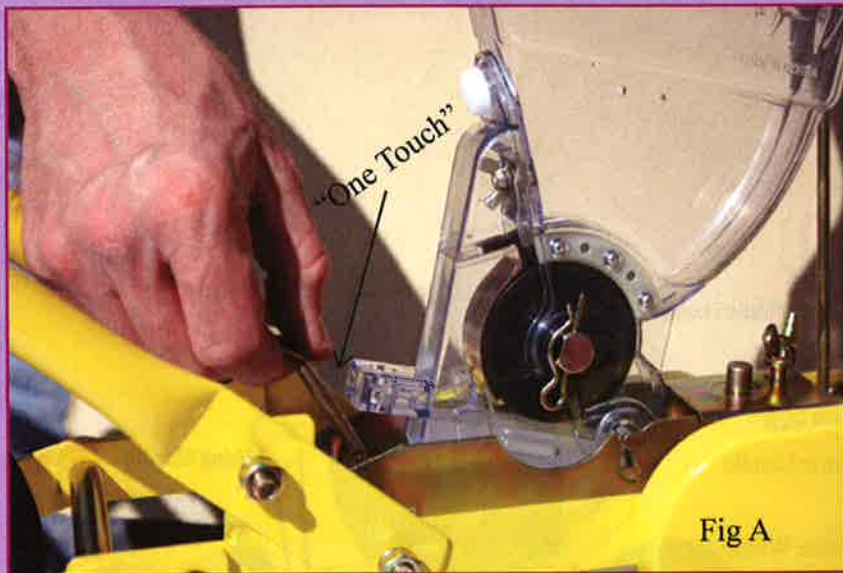
Please read this manual carefully before operating the seeder



distributed by: **MECHANICAL TRANSPLANTER CO.**  
1150 Central Avenue \* Holland, Michigan 49423  
Phone: 616-396-8738 \* Fax: 616-396-3619

# ASSEMBLY & OPERATING INSTRUCTIONS

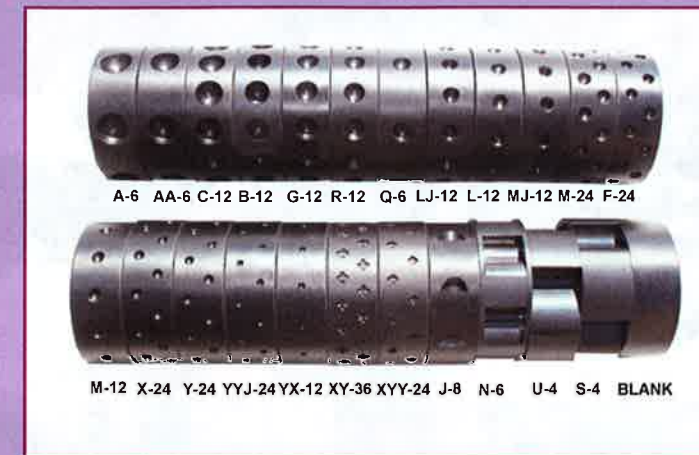
1. Check box for the seeder, 2 handle parts, and package of sprockets. Your selected seed rollers will typically also be in this box.
2. Assemble handle by fastening middle section into the lower arms and tighten with the two thumb screws. Now put the top offset handle on. Adjust height and tighten knob. (See front cover for handle image)The top of front handle can be moved to one side to prevent walking in or on seed bed.



3. To remove the hopper from the seeder frame, simply push down on the "one touch" lever on the back side of the hopper. Lift the hopper up and out with your other hand. (Fig A)



4. The seed rollers are easy to install after removing the hopper. Loosen the the white thumb screw and pull down on the roller case. Next remove the clip from the sprocket shaft and pull the sprocket shaft out. Slide your roller in the slot. Slip the sprocket shaft through the roller and re-install the clip pin. (Fig B) Adjust the brush so it lightly touches the seed roller to knock off extra seeds. Don't put it too tight as this will cause unnecessary wear. Swing the roller case back up and tighten thumb screw again. (Fig B1)



## Selecting Seed Rollers

5. Seeds should be flush with the top of the roller. If they are not flush, the seed could get knocked out by the brush, crack, or cause undo friction on the seed guide plate. It will also wear the guide plate quicker.
6. For seeds that may be too big for any seed roller, such as larger corn, pea, or bean seeds remove the seed guide plate. (Fig B-2) When using the spreading shoes remove the seed guide plate. This will allow the seeds to fall more freely and also allow multiple seed to drop.
7. Our seed list (Shown on last page) with the recommended roller letters helps to select rollers, however seeds can vary in size from one variety to another. In that case you may have to use a bigger or smaller roller. If your seed isn't on our list you can send us a sample and we will find a roller. We can custom make rollers by drilling deeper or larger holes.



Spacing Chart for Series JP Seeders (inch)												
* Subject to change upon speed of equipment or quality of soil												
		Number of Teeth in Each 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
# of Holes in Seed Roll	3 Hole	20	18	16	15	14	12	11	11	9	9	8
	4 Hole	14	13	12	11	10	9	9	8	7	7	6
	6 Hole	10	9	8	7	7	6	5	5	5	4	4
	12 Hole	5	4	4	3	3	3	2	2	2	2	1
	24 Hole	2.5	2	2	1.5	1.5	1.5	1	1	1	1	0.5

## Setting spacing

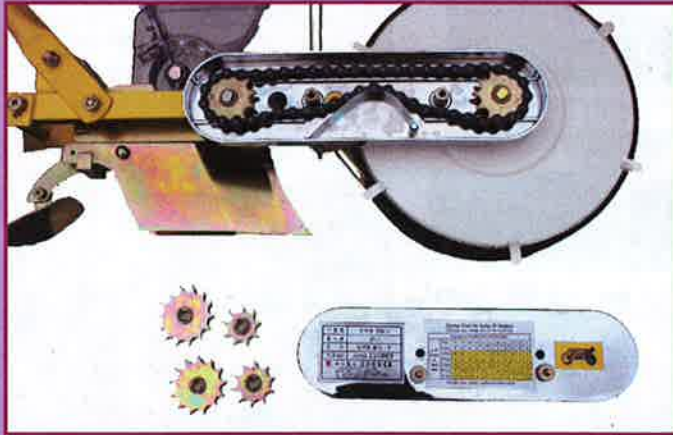


Fig C

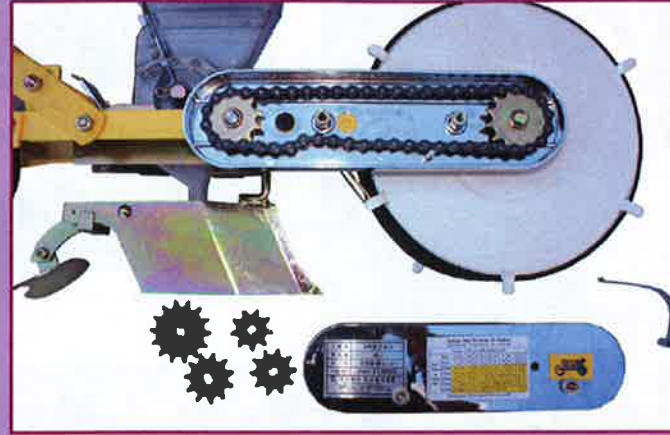


Fig D

8. Spacing is done two ways. First by the number of holes in the seed roller. Second, by using a combination of 6 sprockets that come with the seeder. (Chart is in this manual or on the side of seeder)
9. First, remove the chain guard that is by the front drive wheel, by loosening the two thumb screws. Look at the spacing chart on the chain guard. The top two lines are your sprocket sizes. The numbers on the side are the roller holes available. The shaded area is the spacings available by re-arranging the various sprockets. The sprocket just slides off. Use the metal chain tightener when using the smaller sprockets. (Fig C)
10. With the larger sprockets the chain tightener is not needed. Run the chain straight as in Fig D. If there is too much slack, run chain over stud for thumb screw, but without the chain tightener. Be sure to store chain tightener in safe place when not using. (Fig D)

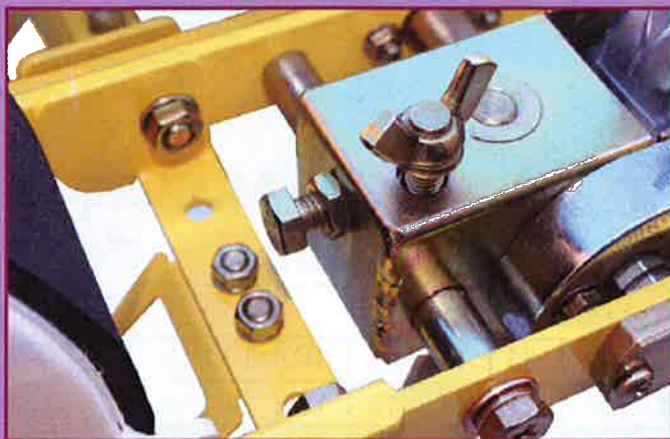


Fig E



Fig F

11. For shoe depth adjustment, loosen nut and then loosen bolt just ahead of hopper. Move shoe up or down and retighten bolt, then tighten nut against frame to lock shoe in place. (Fig E) The soil covering blade can be adjusted for more or less pressure by loosening the screw and resetting. (Fig F)

## Optional Shoes



Fig G

**TP-1000D**  
Double Disc Opener  
Used for trashy soil conditions



Fig H

**JPDS -**  
Double Shoe  
One row, two lines of seed at 2"

12. The optional double shoe comes with a double shoe guide which has a splitter in the middle. By using the 24 or 36 hole rollers you can have two rows of seeds 2" apart. (Fig H)



Fig I

**JSS5 - 4.72in**  
Spreading Shoe

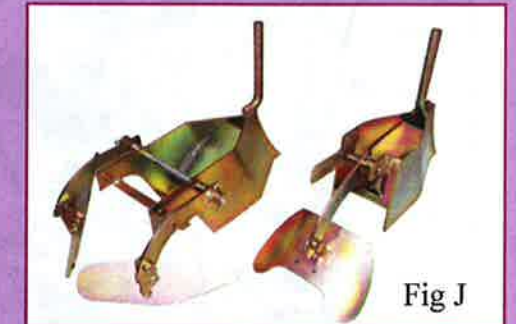


Fig J

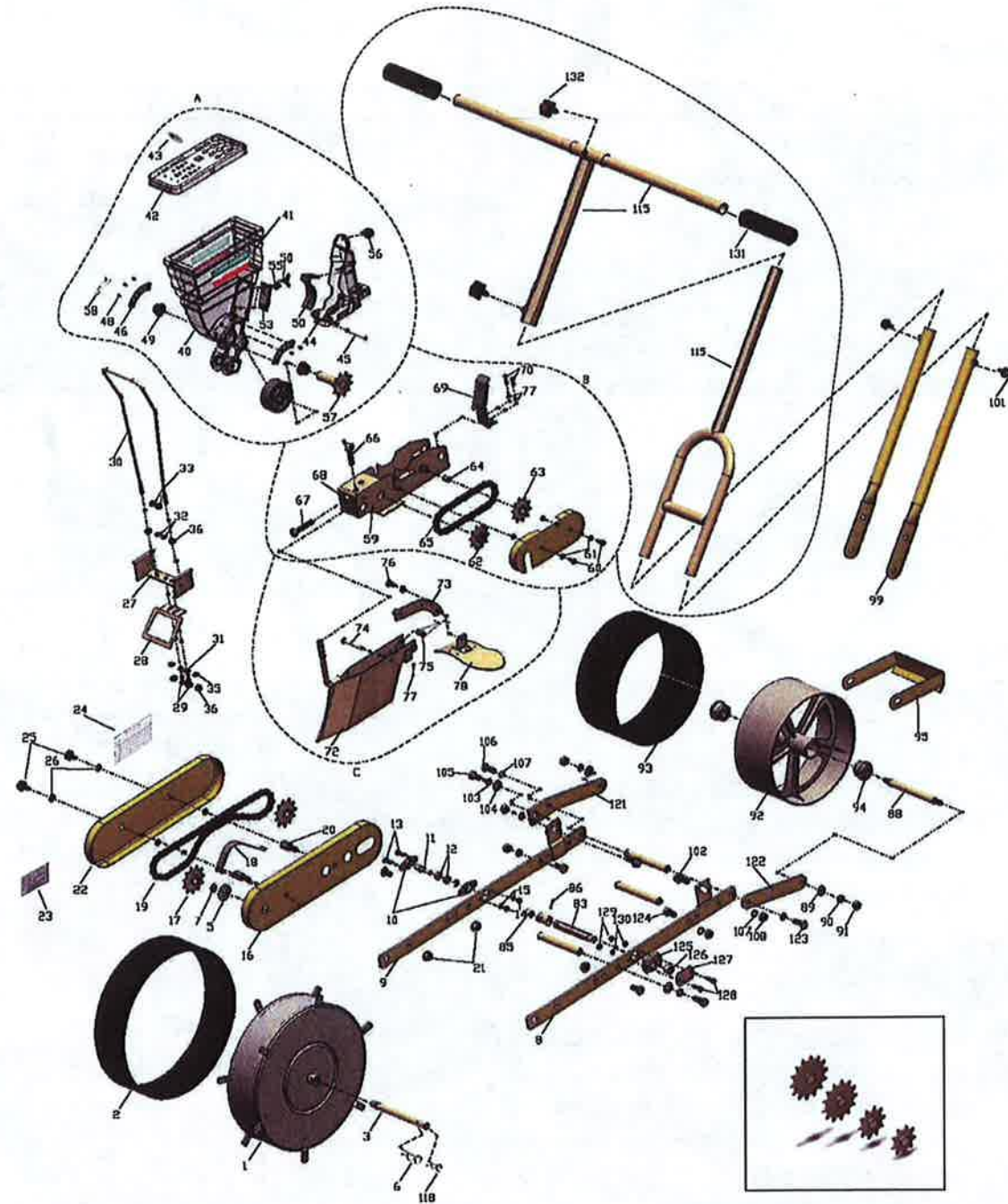
**JSS3 - 2.95in**     **JSS2 - 2.36in**  
Spreading Shoe

13. Three spreading shoes are available. 2.36", 2.95", and 4.72" wide. By using a 24 or 36" hole rollers or paddle rollers like the N, U or S many seeds can be spread over a wide area. Used for greens and other crops where a dense amount of seed is needed.

## General Tips

- \* Work soil so ground is loose and level. Roto-tilling is best.
- \* Optimal speed is about 1.5 MPH - Actual seed spacing may vary depending on soil condition and operating speed.
- \* Check seed rollers for waste or residue build up.
- \* Clean roller.
- \* Check seed depth
- \* Check for correct seed spacing in field when starting to seed. Seed should be dry.
- \* Lubricate chain and other moving parts (not the roller)
- \* Check brush and guide plate for wear. Larger seeds like corn or beans may bridge in hopper. Watch for it and tap hopper to keep seeds flowing.

# 1. JP-1 PARTS



Sprocket Gear  
(9,10,13,14T)

## JP-1 PARTS LIST

Part #	Part Name
JJPA	Hopper Assembly
JJPB	Hopper Mtg.& Drive Assembly
JJPC	Shoe Assembly
JJP1	Drive Wheel
JJP2	Drive Wheel Rubber
JJP3	Drive Wheel Shaft
JJP5	Flat Washer M12
JJP6	Snap Pin 63L
JJP7	E-Ring
JJP8	Frame(L)
JJP9	Frame (R)
JJP10	Bearing Case
JJP11	Clutch Shaft
JJP12	Bearing
JJP13	Bolt(+) M5 x 14
JJP14	Hex Nut M5
JJP15	Spring Washer M5
JJP16	Chain Cover
JJP17	Chain Gear 11T
JJP18	Chain Tension Spring
JJP19	Chain #410 x 50L
JJP20	Chain Cover Hex Nut 12x32L
JJP21	Flange Nut M8
JJP22	Chain Cover
JJP23	Profile Table
JJP24	Spacing Chart
JJP25	Knob M6 x 11L
JJP26	Flat Washer M6
JJP27	Scraper Stopper
JJP28	Drive Scraper
JJP29	Hex Bolt M6 x 12L
JJP30	Lift Handle
JJP31	Flat Washer M6 (JJP26)
JJP32	Spring Washer M6
JJP33	Hex Nut M6
JJP35	Spring Washer M6
JJP36	Hex Nut M6 (JJP33)
JJP40	Hopper
JJP41	CLEAN SEEDER Stickers
JJP42	Hopper Cover
JJP43	Spot Seeding Mark Sticker
JJP44	Hopper Case
JJP45	Hopper Case Shaft
JJP46	Roll Rib
JJP48	(+)Truss Bolt(SUS)M2 x 5
JJP49	Oilless Bushing
JJP50	Guide Plate
JJP51	Guide Plate Seed Protect Cover
JJP53	Brush
JJP54	Wing Bolt M5
JJP55	Flat Washer M5
JJP56	Knob M5
JJP57	Hopper Sprocket 10T
JJP58	Snap Pin 44L
JJP59	Hopper Block
JJP60	Hex Bolt M5
JJP61	Spring Washer M5(JJP15)
JJP62	Hex Sprocket 10T
JJP63	Idle Sprocket 10T
JJP64	DU Bushing

Part #	Part Name
JJP65	Chain
JJP66	Wing Bolt M6
JJP67	Hex Bolt M8
JJP68	Hex Nut M8 (JJP91)
JJP69	Grip
JJP70	Hex Bolt (SUS) M4
JJP71	Spring Washer (SUS) M4
JJP72	Shoe Lees Wing
JJP73	Shoe Arm
JJP74	Shoe Head Pin
JJP75	Torsion Spring
JJP76	Sem's Bolt M8 x 20L
JJP77	Sem's Bolt M8 x 15L
JJP78	Soil Recovering Wing
JJP79	Guide Shaft(Front)
JJP80	Sem's Bolt M8 x 15L
JJP81	Plate Hexagon Head Bolt
JJP82	Guide Shaft(Back)
JJP83	Hex Shaft 12 x 94.5L
JJP84	Clutch Bearing Collar
JJP85	One Way Clutch Bearing
JJP86	Spring Pin
JJP88	Packing Wheel Shaft
JJP89	Flange Nut M8
JJP90	Spring Washer M8
JJP91	Hex Nut M8
JJP92	Packing Wheel
JJP93	Packing Wheel Rubber
JJP94	Packing Wheel Spacer
JJP95	Scraper
JJP99	Lower T-Handle Assembly
JJP101	Knob M6 x 11L
JJP102	Flange Bolt M8
JJP103	Spring Washer M8 (JJP90)
JJP104	Flat Washer M8
JJP105	Hex Nut M8(JJP91)
JJP106	Hex Bolt M8
JJP107	Spring Washer M8(JJP90)
JJP108	Hex Nut M8(JJP91)
JJP110	Sprocket 9T
JJP111	Sprocket 10T
JJP112	Sprocket 13T
JJP113	Sprocket 14T
JJP115	T-Handle Bar Assembly
JJP118	Snap Pin 37L
JJP121	Packing Wheel Arm(L)
JJP122	Packing Wheel Arm@
JJP123	Sem's Bolt M8 x 20L
JJP124	Sem's Bolt M8 x 15L
JJP125	Bracket
JJP126	DU Bushing
JJP127	Bracket Cover
JJP128	Round Head Cross-Bolt
JJP129	Hex Nut M5 (JJP14)
JJP130	Spring Washer M5 (JJP15)
JJP131	T-Handle Grip
JJP132	Cap Knob
JJP133	Hex Bolt M8
JPSG	Double Seeding Guide
JPSG	Seed Guide

## JP SERIES ROLLER INFORMATION

ROLLER	HOLE SIZE *		HOLE DEPTH
	mm	inches	mm
A	13,5	17/32	6,0
AA	12	15/32	6,0
B	10	25/64	7,5
C	11	7/16	5,5
R	9	23/64	3,5
G	9	23/64	4,5
Q	8	5/16	3,0
LJ	7,5 (deeper)	19/64 (deeper)	3,7
L	7	17/64	2,5
MM	6	15/64	2,5
MJ	6 (deeper)	15/64 (deeper)	3,5
M	5	13/64	2,0
F	5	13/64	2,5
X	4	5/32	2,0
Y	3,5	9/64	1,5
YYJ	3	1/8	1,7
YX	2,5	7/64	1,5

\* Important: The choice of the seed roller will be determined by the size of your seed.

Seed Name & Seeds of Comparable Size *	Roller Hole Size
Arugula	YX
Basil	YYJ
Bean - Green	N
Beet	LJ
Broccoli	Y
Cabbage	Y
Carrot	Y
Carrot (coated)	MJ
Cauliflower	Y
Cilantro	MJ
Chia	YYJ
Collard	Y
Corn	A, AA, or N
Cotton	C
Cucumber	J
Cut Flower	Send Samples
Flax	L
Kale	X
Lettuce - Coated	MJ
Lettuce - Raw	XY
Mache	F
Mustard	YYJ
Okra	LJ
Onions - Coated	MJ
Onions - Raw	X
Pea	BL
Pepper	M
Radish	X
Rutabaga	Y
Sorghum	MJ
Sorghum (Coated)	LJ
Soy	BL
Spinach	F
Sunflower	Send Samples
Swiss Chard	LJ
Tree Seed	Send Samples
Turnip	YYJ
Blank Roller	Z

\* This information is for reference only. Please refer to the actual size of your seeds for more accuracy.

Seed Rollers Available
A-6
AA-6
B-12
BL-12
C-6
C-12
F-6
F-12
F-24
G-6
G-12
J-2
J-4
J-8
L-12
L-24
LJ-6
LJ-12
LJ-24
M-6
M-12
MJ-4
MJ-6
MJ-12
MJ-24
MM-12
MM-24
N-6
Q-6
Q-12
R-12
R-24
S-4
U-4
X-4
X-6
X-12
X-24
XY-4
XY-12
XY-24
XY-36
XXY-12
XXY-24
XXY-36
Y-4
Y-6
Y-12
Y-24
YX-4
YX-6
YX-12
YX-24
YYJ-6
YYJ-12
YYJ-24
YYX-12
YYX-24
YYX-36
Z- BLANK

**DUBOIS AGRINOVATION**  
**478 NOTRE-DAME \* SAINT-REMI, QC**  
**Telephone : 450-454-3961 \* 1-800-667-6279**  
**Fax : 450-454-6638**