

# **CLEAN SEEDER OPERATION MANUAL**

## **MODEL JP-1**

Please read this manual carefully before operating the seeder.

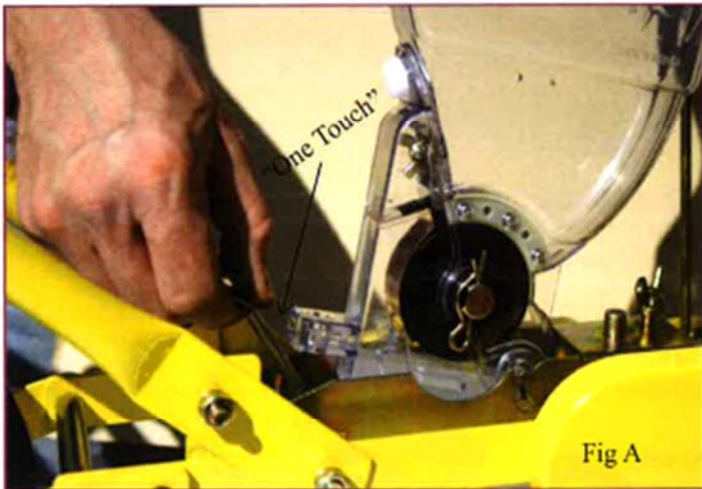


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**1150 Central Ave, Holland, Michigan 49423**

## 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 from cover for handle image) The top of front handle can be moved to one side to prevent walking in or on seed bed.

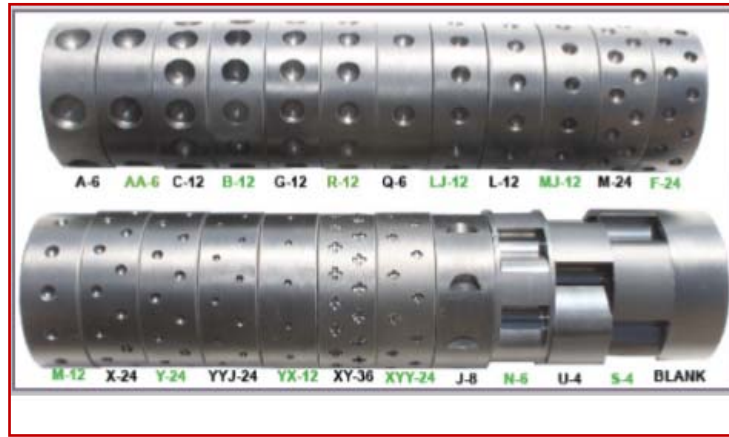


3. To remove the hopper from the seeder frame, simply push down on the "one touch" lever on the back side of the hopper. Lift the hopper up and out with our other hand (Fig A)



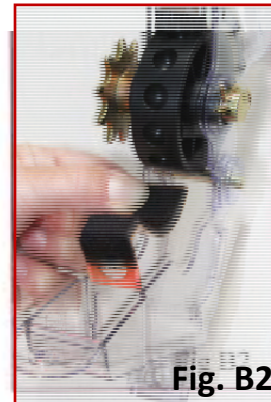
4. The seed rollers are easy to install after removing the hopper. Loosen the white thumb screw and pull down on the roller case. Next remove the clip from the sprocket shaft and pull the sprocket shaft and pull the sprocket through the roller and re-install the clip pin. (Fig B) Adjust the brush so 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. Individual seeds should be completely cradled within the hole of the roller, laying flush within the edge 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 larger seeds, such as larger corn, pea, or bean seeds remove the seed guide plate. (Fig. B2) When using the spreading shoes remove the seed guide plate. This will allow the seeds to fall more freely and also allow multiple seeds to drop.
7. Our seed list (shown on last page) with the recommended rollers helps to select rollers required, 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.



## Setting Spacing



Fig. C

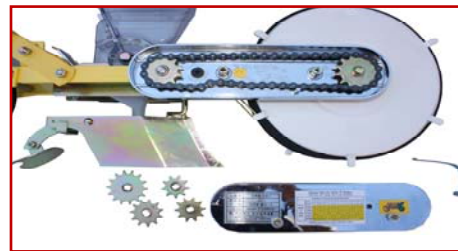


Fig. D

8. Spacing is determined by two factors. First, by the number of holes in the seed roller. Second, by using a combination of 6 sprockets that come with the seeder. By manipulating these sprocket combinations, the roller will spin faster or slower per ground speed, spacing the seeds closer or further apart. (Spacing Chart can be found in this manual or on the seeder chain guard)
9. First, remove the chain guard, (located by the front drive wheel) by loosening the two thumb screws. Look at the spacing chart on the chain guard.

| Spacing Chart for JP Series Seeders         |         |     |     |    |     |     |     |     |     |     |     |
|---|---------|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|
| * Spacing may change due to soil conditions |         |     |     |    |     |     |     |     |     |     |     |
| Number of Teeth in Each Sprocket            |         |     |     |    |     |     |     |     |     |     |     |
| Rear Sprocket                               | 14      | 14  | 13  | 13 | 11  | 11  | 11  | 10  | 10  | 9   |     |
| Front Sprocket                              | 9       | 10  | 10  | 11 | 10  | 11  | 13  | 13  | 14  | 14  |     |
| Number of Holes in Seed Roller              | 3 Hole  | 20  | 18  | 17 | 15  | 14  | 13  | 11  | 10  | 9   | 8   |
|   | 4 Hole  | 15  | 14  | 13 | 12  | 11  | 10  | 8   | 7.5 | 7   | 6   |
|   | 6 Hole  | 10  | 9   | 8  | 7.5 | 7   | 6.5 | 5.5 | 5   | 4.5 | 4   |
|   | 12 Hole | 5   | 4.8 | 5  | 4   | 3.5 | 3   | 2.8 | 2.5 | 2.5 | 2   |
|   | 24 Hole | 2.5 | 2.5 | 2  | 2   | 1.8 | 1.5 | 1.3 | 1   | 1   | 0.5 |

\* Shaded area shows inches between seeds

Example:  
(See black circles)

If desired seed spacing is 7", use a 6 hole roller with a 11 tooth sprocket in rear and 10 in front.

- The top two lines across are your sprocket combinations. ( blue arrows) The number of holes in the roller corresponds with the red circle. The shaded area are the spacings available (in inches) by re-arranging the various sprockets.
- Use the metal chain tightener when using the smaller sprockets. (Fig C - previous page ) With the larger sprockets the chain tightener is not needed. Run the chain straight as shown in (Fig D previous page). 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 a safe place when not using.
- 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. \* DO NOT OVER TIGHTEN (Fig E) The soil covering blade can be adjusted for more or less pressure by loosening the screw and resetting. (Fig F)

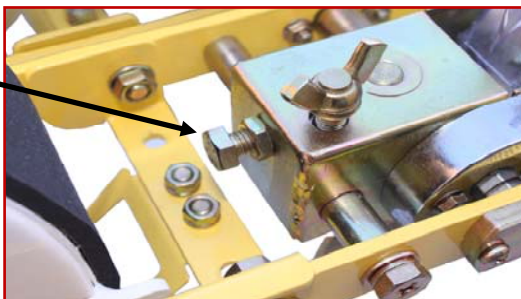


Fig. E



Fig. F



Fig. G

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

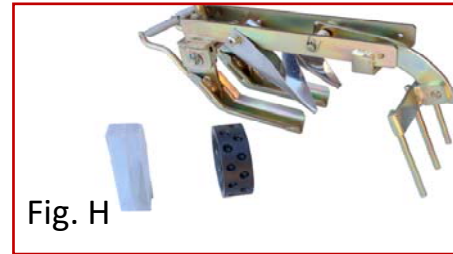


Fig. H

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



Fig. I

**JSS5—4.72in**  
Spreading Shoe



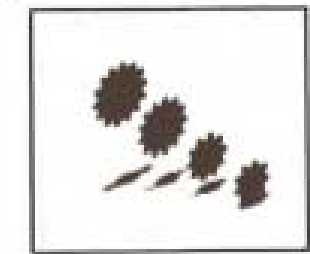
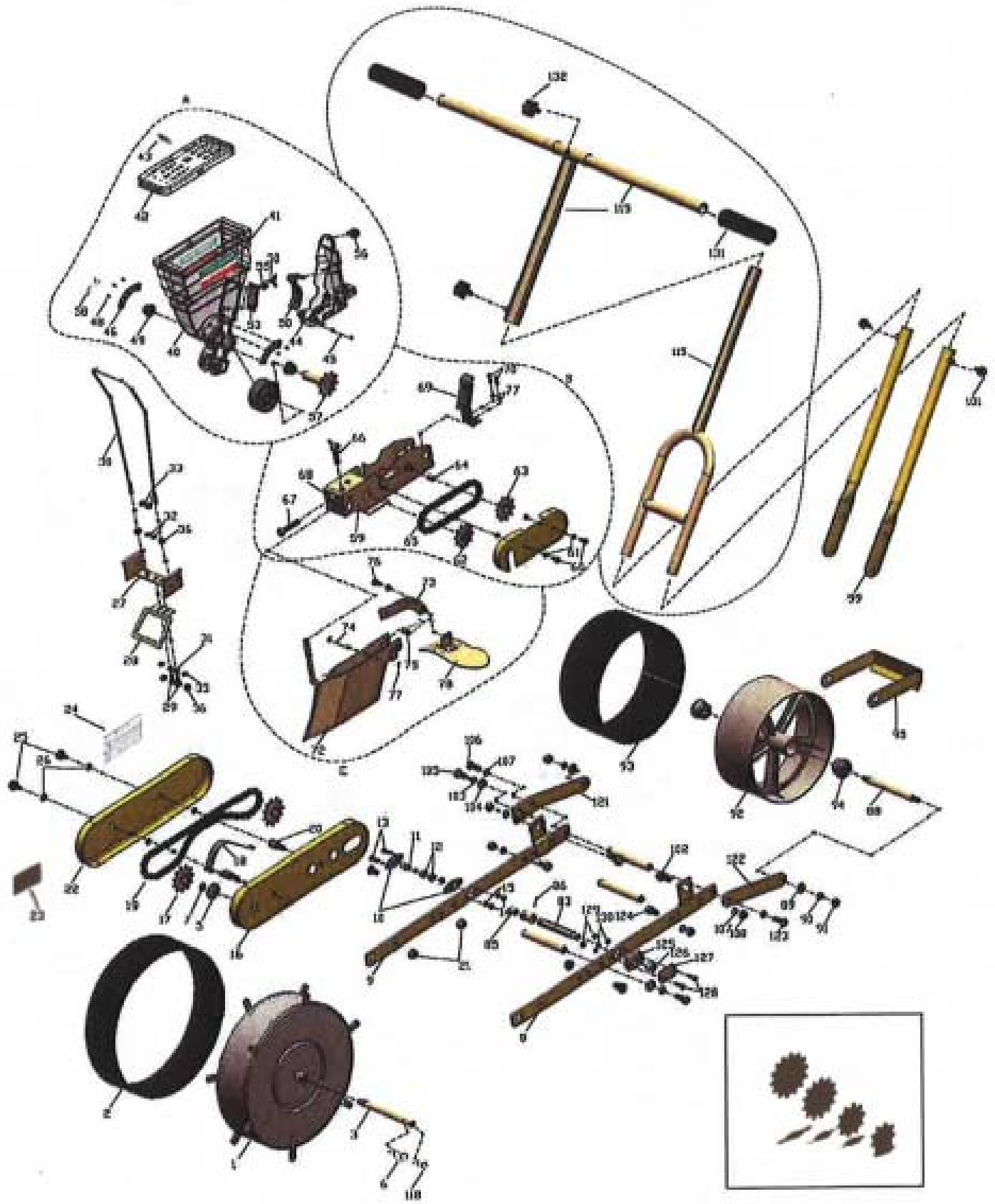
Fig. J

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

12. The optional double shoe comes with a double shoe guide which has splitter in the middle. By using the 24 or 36 hole rollers, you can have two rows of seeds 2" apart. (Fig H)
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 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 1.5MPH—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 ( never 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.



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



## Part 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 *                      |
| 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 12 x 32L |
| 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                   |
| 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  | Oil less Bushing             |
| JJP50  | Guide Plate                  |
| JJP51  | Guide Plate Protector 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 Less 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 | Flange Bolt M8           |
| JJP105 | Spring Washer M8 (JJP91) |
| JJP106 | Hex Bolt M8              |
| JJP107 | Spring Washer M8 (JJP90) |
| JJP108 | Hex Nut (JJP 91)         |
| JJP110 | Sprocket 9 T             |
| JJP111 | Sprocket 10 T            |
| JJP112 | Sprocket 13 T            |
| JJP113 | Sprocket 14 T            |
| JJP115 | T-Handle Bar Assembly    |
| JJP118 | Snap Pin 37L             |
| JJP121 | Packing Wheel Arm (L)    |
| JJP122 | Packing Wheel Arm ( R)   |
| 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              |
| JPD5G  | Double Seeding Guide     |
| JPSG   | Seed Guide               |

| Seed Name / Seed of Comparable Size: | Recommended Roller |
|--------------------------------------|--------------------|
| 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, N           |
| Cotton                               | C                  |
| Cucumber                             | J                  |
| Cut Flower                           | Send Samples       |
| Flax                                 | LJ                 |
| Kale                                 | X                  |
| Lettuce ( Coated)                    | MJ                 |
| Lettuce (Raw)                        | XY                 |
| Mache                                | F                  |
| Mustard                              | YYJ                |
| Okra                                 | LJ                 |
| Onion ( Coated)                      | MJ                 |
| Onion (Raw)                          | X                  |
| Pea                                  | BL                 |
| Pepper                               | MJ                 |
| 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                  |

| Seed Rollers Available |         |
|------------------------|---------|
| A - 6                  | \$21.00 |
| AA - 6                 | \$21.00 |
| BL-12                  | \$21.00 |
| C-6                    | \$31.00 |
| C-12                   | \$21.00 |
| F-6                    | \$21.00 |
| F-12                   | \$21.00 |
| F-24                   | \$21.00 |
| G-6                    | \$26.00 |
| G-12                   | \$21.00 |
| J-2                    | \$21.00 |
| J-4                    | \$21.00 |
| J-8                    | \$21.00 |
| L-12                   | \$21.00 |
| L-24                   | \$26.00 |
| LJ-6                   | \$21.00 |
| LJ-12                  | \$21.00 |
| LJ-24                  | \$26.00 |
| M-6                    | \$21.00 |
| M-12                   | \$21.00 |
| MJ-4                   | \$21.00 |
| MJ-6                   | \$21.00 |
| MJ-12                  | \$21.00 |
| MJ-24                  | \$26.00 |
| MM-12                  | \$21.00 |
| MM-24                  | \$26.00 |
| N-6                    | \$31.00 |
| Q-6                    | \$21.00 |
| Q-12                   | \$21.00 |
| R-12                   | \$21.00 |
| R-24                   | \$26.00 |
| S-4                    | \$31.00 |
| U-4                    | \$31.00 |
| X-4                    | \$21.00 |
| X-6                    | \$21.00 |
| X-12                   | \$21.00 |
| X-24                   | \$26.00 |
| XY-4                   | \$31.00 |
| XY-12                  | \$31.00 |
| XY-24                  | \$31.00 |
| XY-36                  | \$41.00 |
| XYX-12                 | \$31.00 |
| XYX-24                 | \$31.00 |
| XYX-36                 | \$41.00 |
| Y-4                    | \$21.00 |
| Y-6                    | \$21.00 |
| Y-12                   | \$21.00 |
| Y-24                   | \$26.00 |
| YX-4                   | \$21.00 |
| YX-6                   | \$21.00 |
| YX-12                  | \$21.00 |
| YX-24                  | \$26.00 |
| YYJ-6                  | \$21.00 |
| YYJ-12                 | \$21.00 |
| YYJ-24                 | \$26.00 |
| YYX-12                 | \$21.00 |
| YYX-24                 | \$26.00 |
| YYX-36                 | \$31.00 |
| Z-Blank                | \$21.00 |
| Custom                 | \$41.00 |

| Roller | Hole Size |        | Hole Depth |
|--------|-----------|--------|------------|
|        | mm        | Inches |            |
| A      | 13.5      | 17/32  | 6.0        |
| AA     | 12        | 15/32  | 6.0        |
| B      | 10        | 25/64  | 7.5        |
| C      | 11        | 16-Jul | 5.5        |
| R      | 9         | 23/64  | 3.5        |
| G      | 9         | 23/64  | 4.5        |
| Q      | 8         | 5/16   | 3.0        |
| LJ     | 7.5       | 19/64  | 3.7        |
| LJ     | 7         | 17/64  | 2.5        |
| MM     | 6         | 15/61  | 2.5        |
| MJ     | 6         | 15/64  | 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        |