

# The Hamilton 'Handy' Seeder Instruction Sheet

(Issue 2 – December 2011)

## Assembly

The Handy Seeder comes almost ready to go but is packaged to minimise the chance of damage in transit.

- 1) Remove all packaging materials and dispose of carefully.
- 2) Make sure the brass venturi in the front of the handle assembly is pushed in fully.
- 3) Connect the 8mm nylon tubing to your compressor.
- 4) The tray guide rails should be positioned to suit your trays as specified on your order. Should you be using two different tray widths, it may be necessary to reposition the guide rails.
- 5) Loosen the clamp screw on the handle to remove the pickup tube, and replace with the one you want to use. As a general guide use the table below to make your selection.

Hole Size	Seed Range	Seed Count
0.3mm	Lobelia to Pansy	(30,000 to 700 seeds/gram)
0.5mm	Pansy to Marigold	(700 to 200 seeds/gram)
0.7mm	Larger and coated seeds	(Under 200 seeds per gram)

Note that one end of the pickup tube is plugged, and this is at the opposite end to the handle. Do not overtighten the clamp screw when fitting pickup tubes.

- 6) After switching on your compressor you should now be ready to seed.

## Method of Use

- 1) Turn on air tap to the compressor connection to the seeder.
- 2) Place a quantity of seed into the stainless steel tray and set the vibration level (with the small adjusting screw regulator) so that the seeds flow along the pickup line, but are not jumping violently.
- 3) Level the platform with the adjustable foot (nearest the regulators) so that the seeds are spread evenly along the tray line.
- 4) Place the pickup tube and handle into the pickup position above the vibrating tray.
- 5) Adjust the seed tray eccentric to give a small clearance between the seed and pickup tube. The idea is to pick up the seeds as they vibrate above the plate, and not to trap the seed between tube and tray.

6) Slowly increase the venturi pressure (using the large pressure regulator and gauge) until seeds are picked up on each hole in the tube.

7) Lift the pickup tube from the seed, and examine pickup. If there are multiple pickups, gently tap the far end of the pickup tube on the far stand plate to remove the multiples, and allow them to fall back into the vibrating tray.

8) Once seeds have been singulated, place the pickup tube in the discharge position just above the plug tray, with the far end of the tube against the angled stop plate. Position the row of plugs under the pickup tube and cover the venturi exhaust hole in the handle to release the seed into the plug tray.

9) Move the pickup tube back to the pickup position and repeat the process.

A certain amount of trial and error adjustment will be required before best results are obtained. Until you become familiar with settings and adjustments, record all settings for future reference.

After sowing, the vibrating tray can be removed by removing the 'R' clips on the tray mounting pins, and any remaining seed tipped back into the seed packet.

An optional Vacuum Cleaner is available for seed collection without removing the seed tray. Insert the vacuum cleaner supply tube in to the push-in connector of the auxiliary air tap. Turn on the tap, and vacuum the seeds into the collection jar.

### **Other tips**

a) Store the seeder in a dry environment and cover with a polythene sheet when not in use.

b) After a while the vibrating tray can become coated with seed dressing and dust. This can be removed with some methylated spirit, applied with a paper towel.

c) The holes in the pickup tubes should be cleaned periodically to remove dust and seed dressing. Cleaning wires are supplied for this purpose, packaged in white tape strips. The larger of the two wires should be used for all hole sizes, Tear the tape about 6-8mm along the line of the wire and fold the corners over to expose the wire.

d) Note that if the vibration control is turned down so that the vibrator stops completely, it may be necessary to turn the mains air tap off and then on again to restart the vibrator.

e) After a period of time the brass venturi can become coated on the inside with dust and seed dressing, which will reduce its efficiency. To clean, soak overnight in soapy water and use an airline to dry inside and out.

f) If you experience difficulties picking up large or heavy seed it may be necessary to order a High Flow Venturi – Part Number S055L. This will create additional vacuum.

## Handy Seeder Parts Lists

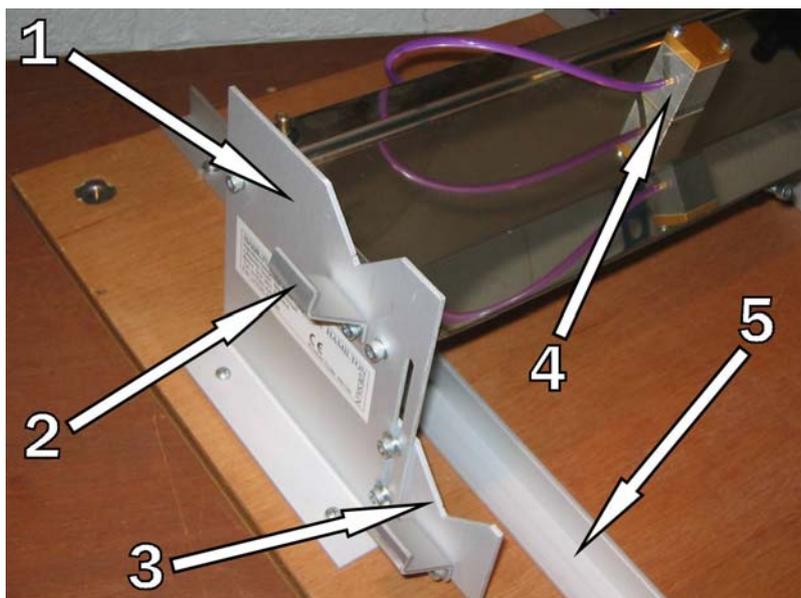


Figure 1

- |   |        |                          |
|---|--------|--------------------------|
| 1 | HS001L | Stand Plate - Left Hand  |
|   | HS001R | Stand Plate - Right Hand |
| 2 | HS003  | Stop Angle               |
| 3 | HS002  | Vee Plate                |
| 4 | S014XA | Tray Vibrator            |
| 5 | HS009  | Guide Rail               |

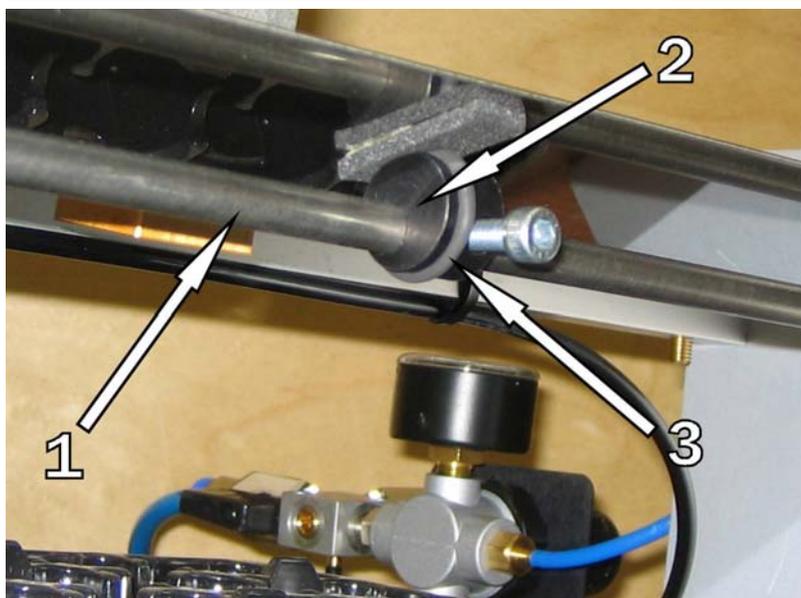


Figure 2

- |   |       |                          |
|---|-------|--------------------------|
| 1 | HS007 | Tie Rod                  |
| 2 | S035  | Seed Tray Tilt Eccentric |
| 3 | S035A | Tilt Eccentric 'O' Ring  |

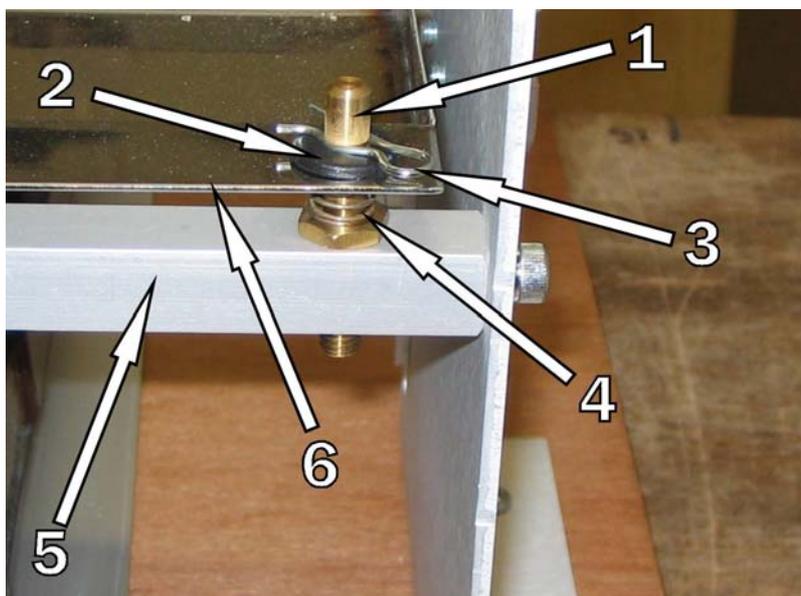


Figure 3

- |   |       |                      |
|---|-------|----------------------|
| 1 | HS021 | Tray Mounting Pin    |
| 2 | HS010 | Grommet              |
| 3 | DS826 | 'R' Clip             |
| 4 | HS024 | Spring               |
| 5 | HS008 | Tray Support Tie Bar |
| 6 | HS004 | Seed Tray            |

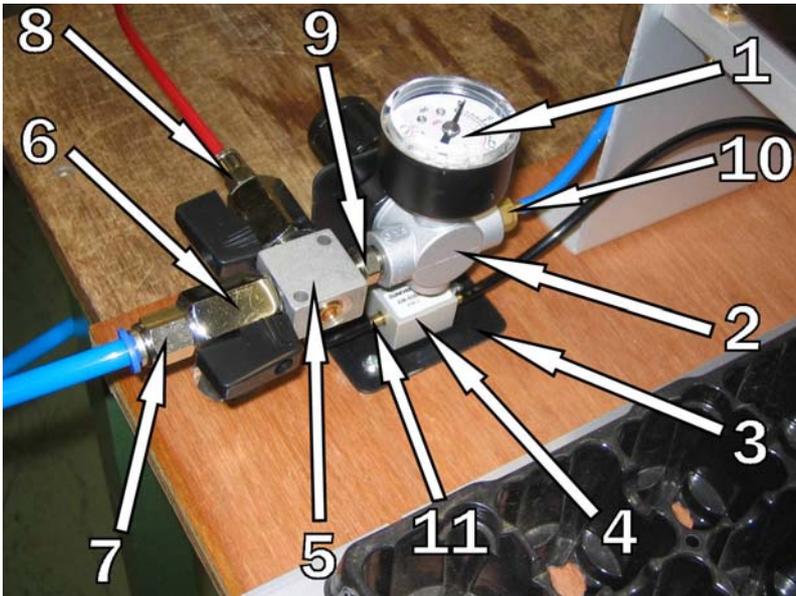


Figure 4

- |    |        |                          |
|----|--------|--------------------------|
| 1  | S047A  | Pressure Gauge           |
| 2  | S046   | Pressure Regulator       |
| 3  | HS006  | Regulator Mounting Plate |
| 3  | P183   | Flow Regulator           |
| 5  | HS026  | 4-way Manifold           |
| 6  | HS016  | Ball Valve               |
| 7  | HS017  | 8mm Push-in Connector    |
| 8  | S091   | 3/16" Push-in Connector  |
| 9  | C208   | Nipple Connector         |
| 10 | S084   | 1/8" BSP Barb Connector  |
| 11 | S080M5 | Barb Connector           |

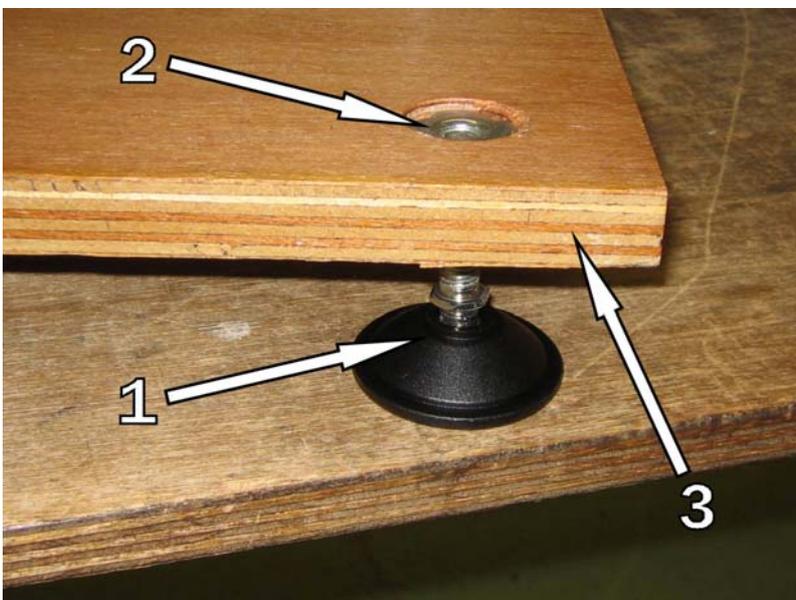


Figure 5

- |   |       |                 |
|---|-------|-----------------|
| 1 | HS011 | Adjustable Foot |
| 2 | HS022 | Tee Nut         |
| 3 | HS015 | Mounting Board  |

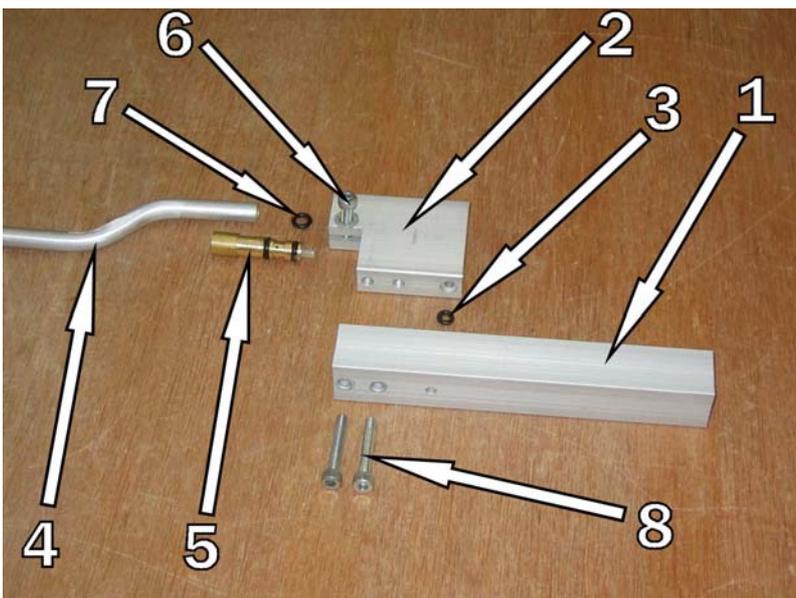


Figure 6

- |   |        |                      |
|---|--------|----------------------|
| 1 | HS019  | Handle               |
| 2 | HS020  | Venturi Block        |
| 3 | S022A  | 'O' Ring             |
| 4 | HS013  | Pickup Tube Assembly |
| 5 | S055S  | Venturi              |
| 6 | S118   | M4x16 Skt Cap Screw  |
|   | DS091  | M4 Washer            |
| 7 | S260   | 'O' Ring             |
| 8 | ECC044 | M4x25 Skt Cap Screw  |