

Mega Drum Kit Instructions

Vacuum Mounting

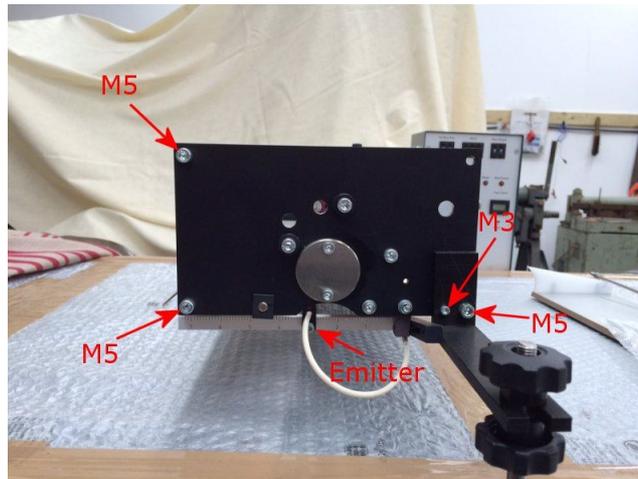
Fit the mounting bracket, and hang vacuum on the side of the conveyor:



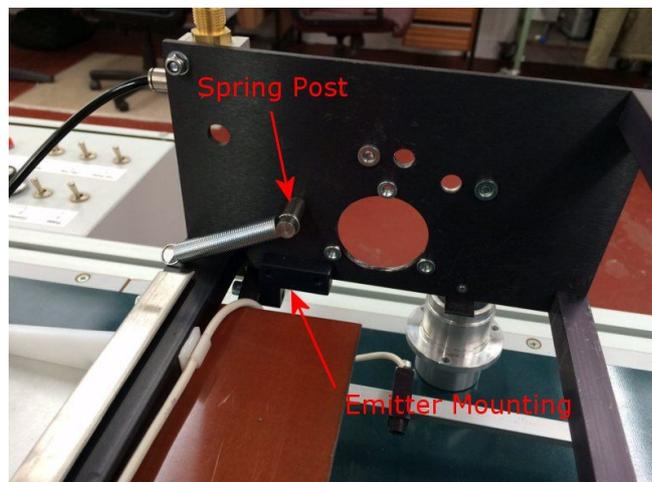
If you have the latest type drum seeder, disconnect the vacuum pump, and plug in the new vacuum. If you have the old drum seeder (green conveyor) remove the vacuum plug and connect to a separate electrical outlet with a suitable plug.

Replace Datum End Plate

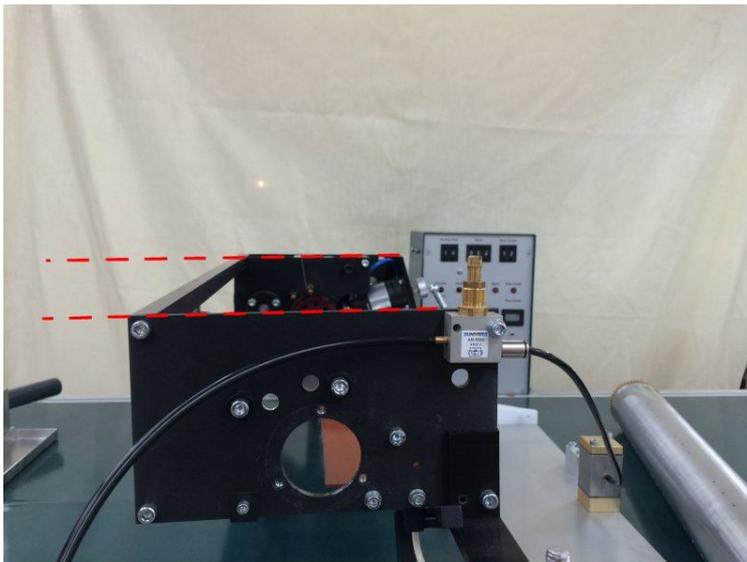
Remove the duplex drum. Remove the datum end plates – undo the M3 and M5 screws shown, and the emitter screw:



Remove the emitter mounting and the spring post from the old datum end plate, and refit to the new end plate:



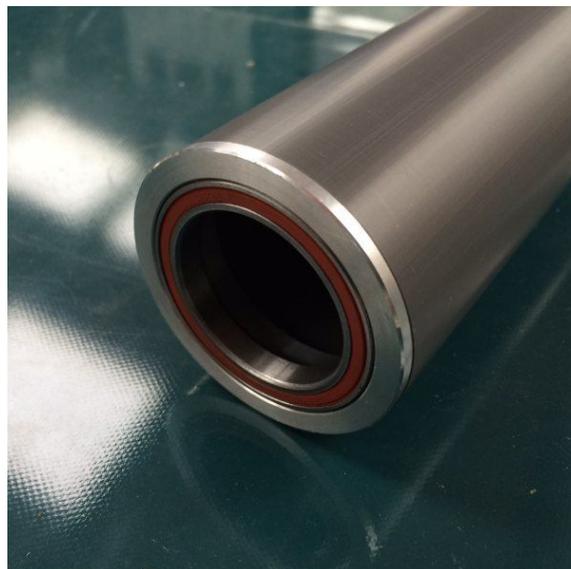
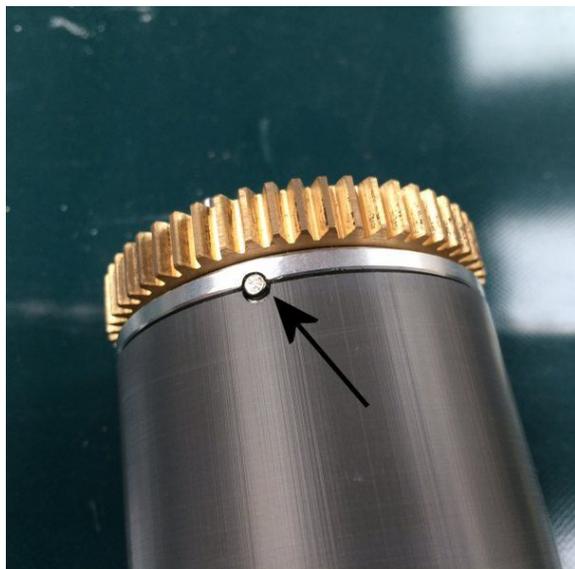
Fit the new plate to the tie rods, making sure that the top edge is parallel to the plates at the other end before tightening the M5 screws firmly:



Drum Preparation

Select the required drum sleeve and insert the gear end, locating the pin into the notch in the drum.

Fit the bearing end.



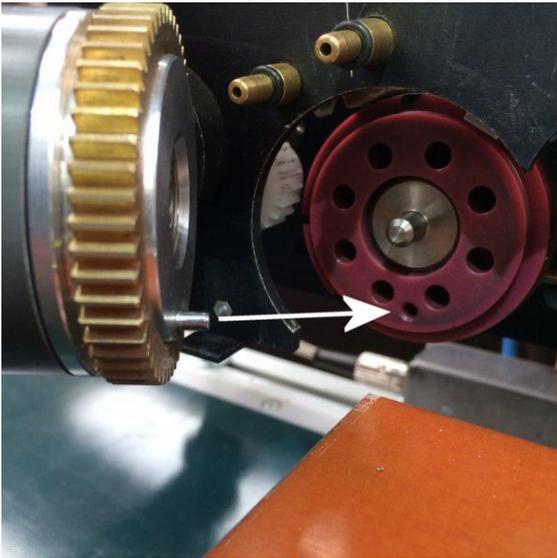
Both ends are a snug fit in the drum tube.

Catch Tray

A new catch tray is supplied with the kit, with a narrower trough to give more clearance between drum and tray for large seeds.

Drum Fitting

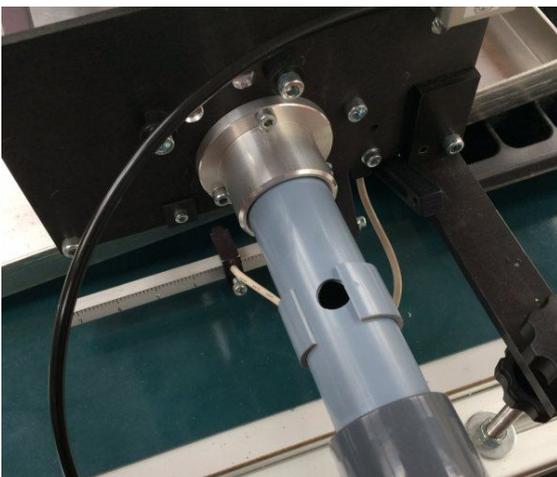
- i) Slide the drum into the front of the seeder (gear end first), making sure that the drum location peg engages with the correct hole in the rotary valve.



- ii) Line up the outer drum mounting post and engage in the outer end of the drum. Note that pressure is required to overcome spring forces before the drum mounting post will seat flush with the outer end plate. Fit the three screws to the mounting post and tighten.

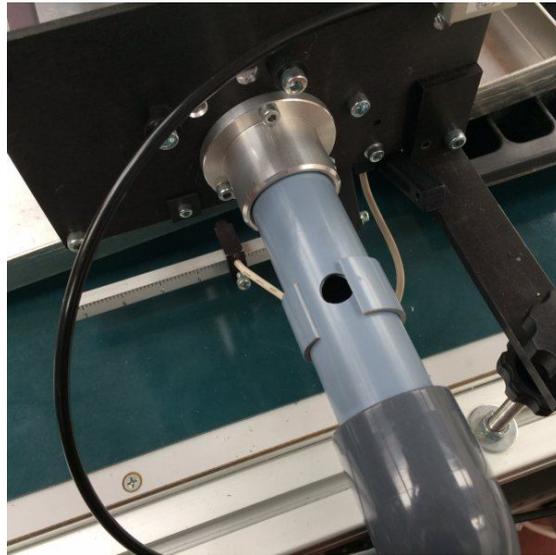


- iii) Fit the vacuum pipe



Vacuum Control

The vacuum is regulated mainly by the hole size in the drum, but there is some degree of adjustment (reduction) by opening the valve on the vacuum inlet tube.



Test Run

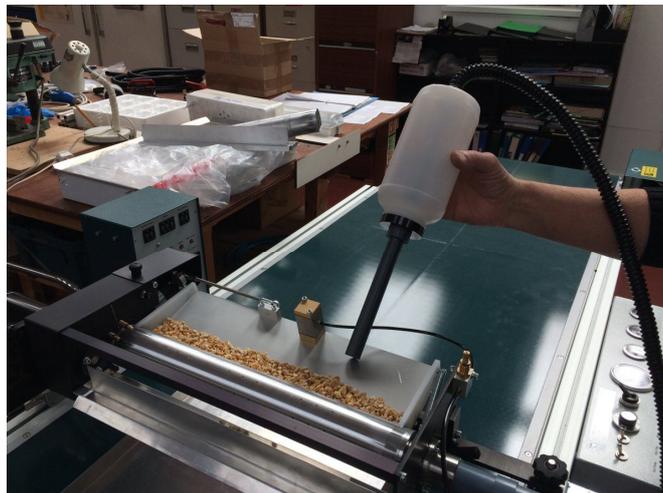
First, check the seed pickup:

- 1) Place seed in the oscillating tray. Place a tray or container on the conveyor belt, under the drum, to catch the seeds.
- 2) Switch the digital controls to Manual, and set the manual speed to a low setting.
- 3) Switch on the vacuum, tray vibration, and oscillating seed tray.
- 4) Press the Test button for 2-3 seconds and observe the seed pickup.
- 5) If there are seeds missing from many of the pickup holes, change to a drum with a larger hole size. If a lot of the holes are picking up multiple seeds, reduce the vacuum or fit a drum with smaller holes. Press the test button again, and make adjustments to the vacuum until all holes are picking up seeds.
- 6) Return the digital control to Auto.

When all the settings have been made, try a test run using a test tray without drainage holes if possible.

Vacuum Cleaner

This is connected to the main vacuum pipe, and is always operational. Seed can be vacuumed from the oscillating tray or catch tray into the vacuum cleaner bottle. Running the oscillating tray and tray vibration while vacuuming will help to remove the last remains of seed.



Drum Removal

- i) Remove the oscillating seed tray by releasing the two springs from the tray ends, and then unclip the ball joint where it connects to the tray (see 4.3.1).
- ii) Remove the vacuum connection.
- iii) Undo the three retaining screws and withdraw the outer drum mounting post, whilst supporting the drum with the other hand.
- iv) Carefully withdraw the drum from the front or top of the seeder.

Reverting to using standard drums:

Use the revised datum end post when using standard drums:



Disconnect the vacuum, and reconnect the standard vacuum pump.

Maintenance

Scraper Blade

The thin Tufnol plate has several purposes. One is to act as a scraper to prevent pieces of seed and other debris, which may become attached to the face of the drum, passing between the drum and tray and being crushed. Should the scraped debris contain pieces of grit which become embedded in the Tufnol, they may damage the thin hard surface of the drum if they are left in for a long time. Periodically the Tufnol plate should be removed and the leading edge cleaned. Check that any grit is removed.