CommVeg Seeder

User Guide

Before Transporting

1. Clean down the machine with a pressure cleaner to remove all dirt and weed seeds.

2. Put the jockey wheel in place before unpinning from the tractor, store in the toolbox once on transit vehicle.

3. Remove spring-tynes for transport. These are mounted on brackets on the frame of the machine, once unbolted store in the toolbox. Be sure to send the removed tynes and toolbox with the machine.

4. Lift up scalping blades as high as possible by mounting the winch onto the frame above. Attach to the top of the shaft that holds the scalping blade in place. Remove pin and winch the scalping blade up as high as possible to allow the pin to be inserted into lowest hole. Place pins in from the centre outwards to enable access to bolts holding on spring tynes, (these will be obscured if inserted from outside-in). Make sure codder pins are inserted.
   When moving between sites, put 2 pins on scalping blades.
   Tilt machine up at the front to lift scalpers high off the ground.

5. Lift floating arms and discs up as far as possible before transit.
   Ensure that all four valves are shut off when transporting (one for the hydraulic cylinder and three for operating levers).

6. 2 beacons are required for transport. One is mounted on top of the seed box. Farmer will need to supply one on the towing vehicle.

7. If scalpers are spaced wider than 1.7m, an over-width sign must be displayed, as the machine will be over 2.5m wide. (Standard setting is 1.7m between row centres).

8. Put ram locks on at all times for transporting and when working under the machine.

9. The speed limit when towing is 60km/hr on road.

10. Avoid potholes to reduce damage to the machine, as it has no suspension.

11. Only travel on roads in daylight hours. The machine has no lights so it's illegal to travel on the road after sunset.

General Operation

- The size of the tractor suitable for pulling the Commveg: 50 hp to <120 hp. If over 80 hp, use 2 wheel-drive to avoid damaging the machine. A smaller tractor is better and less likely to damage the machine when hitting roots etc.

- Floating wheels are set at 1.7 m from centre to centre of seeding points. If a wider spacing is required all attachments can be adjusted to match.

- Maximum speed for planting is around 3-4 km/hr. To avoid serious damage to the machine do not go any faster unless you are certain there are no roots or rocks at the site.

Operation of 3 Hydraulic Rams/Levers:

Knob next to levers – when pushed in, power pack operated hydraulics, when pulled out, tractor operated. Blue hydraulic hoses for raising and lowering, yellow hydraulic hoses for tilt.

- Front lever – lifts floating arms and then discs
- Middle lever – operates tilt (yellow hydraulic hose)
- Rear lever – operates lift (blue hydraulic hose)
- Lever on hydraulic cylinder – to increase pressure on discs, close front lever and open lever on hydraulic cylinder, pump to increase pressure and lock in by closing lever.
- Need valves turned on to drop/pump, lift or tilt and off to maintain pressure.

Battery: The battery should be charged before the CommVeg goes to the next person.

Scalpers: For planting of rows. This is currently set to plant only 2 rows. Scalpers pinned on 4th hole from top has been shown to work well.

Spring Tynes:

- Tynes are offset to the left and right, fitted with the most central alignment possible with the scalping blade. A metal plate located in the box is used to fix the tynes in place using the 24 mm socket spanner.

- Tynes rip to an approximate depth of 25cm. This is achieved by fixing the top of the tyne, so it is level with the frame on which it is being bolted. This is ideal for planting seedlings into rows using hand-held tree planters.

- There are two types of points that can be used; knife points when working with sand and winged tynes when working with heavier soils. Be sure they are the same, or the machine will dig in deeper on the side of the winged tyne than on the knife point. Also, heavier tynes can be used on heavier soils.

Seeder Box

1. Don't leave seed in machine overnight, as it will attract moisture.

2. Remove the seed, cover the mechanism with vermiculite if using corrosive fertiliser in mix.

3. This can then be emptied before refilling with seed next day (slow release does not require the vermiculite overnight).

4. Definitely never leave any uncoated fertiliser in machine overnight as it will chew out contact parts.

5. Seed box settings: ½ cog showing in the box seeds around 3 L/km assuming the flow rate is not impeded by large winged seeds or other appendages and assuming the little lever under the box is set between the top and bottom notch.

6. Check calibration by travelling 200m with a bag over the outlet from the seeding box which should deliver 600 ml of seed at the 3L/km rate. ***Please operate levers gently as they are easily broken.***

7. Open up cogs for large seeds and/or open the lever to the second notch. Beware as seed will flow out very quickly if both are opened, try the addition of extra bulking agent if there are lots of large seeds.

8. Put mixed seed into the seed boxes matching deeper/coarse and shallower/fine mixes. These were set at coarse on the outside boxes and fine for the two adjacent inside boxes. It is important to put the coarse mix into the box that is connected to the deepest opener or seeding point (10-15mm depth) and fine to the shallower opener (5-7mm depth) that is mounted on the floating arms. Make sure bolts are tight on openers.

9. To empty seed. Remove the seeding tube from the seed box, put jug/bucket under seed outlet, and gently put lever right down to the open position (perpendicular to the ground) and the seed will run out.

10. When taking off, gradually put the seeding arm down so it is seeding on scalped soil or will take a plug of dirt and block seed flow. Alternatively, scalp a little bit, reverse and put the seeder down on clean soil. Check regularly to make sure the seeding attachment is not blocked at the base. Planted seedlings will need to be checked to ensure root ball is well covered and pressed in to minimize air spaces.

Setting Seeding & Scaling Depth

- The optimum seeding depth for the fine seed mix is 5-7 mm. The coarse mix is 10-15 mm.
  A cut-off steel post accompanies the box which is ideal for measuring. Place the post under the floating wheels with the holes downwards and the floating wheels close enough to the ground that one wheel can be wedged still with a wooden block. The point of contact of the steel post with the tyre represents ground level. The distance that the point protrudes over edge of the post with the holes in is the depth that the seeding point/opener is set. This can be altered by loosening the 19 mm nuts with the ratchet spanner, tapping the point to the desired depth and tightening the nuts.

- If area being seeded is grassy, when taking off, tilt scalpers down at the front and scalp a few meters before lowering machine so clean soil for discs and seeding points (otherwise the seeding points will block up with grass)and then lift the scalpers up to desired scalping level. Alternatively stop and lift the machine out of ground and manually remove any vegetable matter blocking the seeding points.

- When happy with the scalping depth, place doughnuts on hydraulic rams to set the default depth. Experience so far has shown that 4 doughnuts per ram of the following dimensions works well (provided there isn't a lot of biomass to scalp off): 1 x 1", 2 x 1 ¼ ", 1 x 1 ½ ". Be sure to set both rams the same.

For more information on site design, species selection and weed/pest control please refer to Gillamii's Revegetation Guide which can be found online on our website and at our office.

Happy planting!