Groundnut Sheller/Aspirator User Manual

Make sure you have completed the First-Time Setup.steps.

Choosing the correct size sheller basket

It is important to use the correct sheller basket for the type and size of groundnuts you will shell.

- 1. Handpick approximately 100 grams of the largest groundnut pods that you will be shelling.
- 2. Shell these pods by hand carefully to obtain the kernels.
- 3. Holding a sheller basket, pour the shelled peanuts onto the basket and see if all the groundnuts EASILY fall through it. Find the smallest size that all the nuts will easily fall through.
- 4. Notice the size of that smallest basket and choose one TWO TO THREE SIZES LARGER.



Size 22 -- Too small, not all nuts fall through



Size 24 -- All nuts fall through easily



Size 26 -- Correct sheller basket for these nuts

Installing the sheller basket

NOTE: FOR SAFETY, PLEASE UNPLUG THE MACHINE.

- 5. Unfasten the clamp (a) and remove the hopper cover (b) from the unit.
- 6. Turn the basket bolt handle (c) counterclockwise to loosen the basket (d) currently installed in the unit (if any) and remove the basket.
- 7. Insert the new basket into the unit making sure the basket fits over the center raised section and the flange lines up with the bolt hole (d,e).
- 8. Insert the bolt and tighten so that the basket does not move.
- 9. Reinstall the hopper cover (f) making sure that the lower lip in placed INSIDE the shelling box.
- 10. Fasten the cover with the two hold-down clamps on both sides.













Shelling the groundnuts

- 11. Place a container under the sheller to catch the shelled nuts.
- 12. Start to turn the crank clockwise at approximately one revolution every 2-3 seconds. Turning too fast will result in more broken and damaged kernels.
- 13. Continue to turn the crank while beginning slowly to pour the groundnut pods into the hopper. (Please make sure to remove all foreign material such as sticks and stones before beginning to shell the pods.)
- 14. Once all the pods have been poured into the machine, continue to crank until the machine stops producing shelled groundnuts. The shelling basket will not be entirely empty, and some unshelled pods may remain in the basket. This is normal.

NOTE: If most of the pods pass through unshelled, choose a smaller basket size. If too many kernels are split or broken, choose a larger size basket.

15. Remove the container from below the sheller.



Separating the shelled nuts from the waste

- 16. Place a container under the outlet at the bottom of the aspirator to catch the cleaned nuts.
- 17. Start turning the crank clockwise at approximately one revolution ever 2-3 seconds. Only turn the crank clockwise and try and maintain a constant speed. Make sure the exhaust outlet is pointed away from anyone and towards an appropriate area to collect the waste hulls and debris.
- 18. While continuing to turn the crank, slowly pour the shelled groundnuts into the hopper.
- 19. The cleaned nuts should fall into the container at the bottom. If too much debris is ending up in the container, turn the crank faster. If cleaned nuts are exiting the waste exhaust outlet, turn the crank slower.
- 20. Once you have cleaned the batch, you can remove the container and separate out any unshelled pods.
- 21. If you have more pods of the same type to shell, you can repeat Steps 11-20.
- 22. Once you have shelled all the pods, you may need to shell the unshelled pods you sorted out using a smaller basket size. To do this, install a basket that is two to three sizes smaller than the one you just used following Steps 5-10. Then repeat Steps 11-20.
- 23. After two passes through both machines, around 90+% of the nuts should be shelled, with minimal breakage. If desired, you can shell any unshelled pods by hand.
- 24. You may want to remove any material in the shelling unit between variety types and at the end of the day. To do so, unfasten the hopper cover (Step 5) and clean out all nuts and pods. Replace the hopper and close the side clamps (Steps 9 and 10). The aspirator should not require any cleaning after use.

