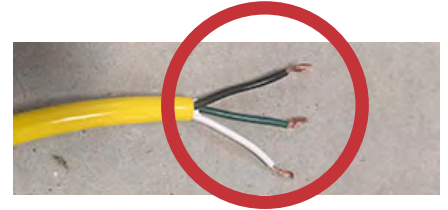


# Groundnut Sheller/Aspirator

## First-time set-up

Before you use the machine the first time, please complete the following setup steps.

1. **POWER CONNECTION:** The two motors are wired for 208-230 volt AC, 50/60 Hz, 2-phase electrical power. Both motors are powered by the single power cord. You will need to purchase and install the proper plug to connect the power cord to an electrical outlet/connection.



Line 1 - Black

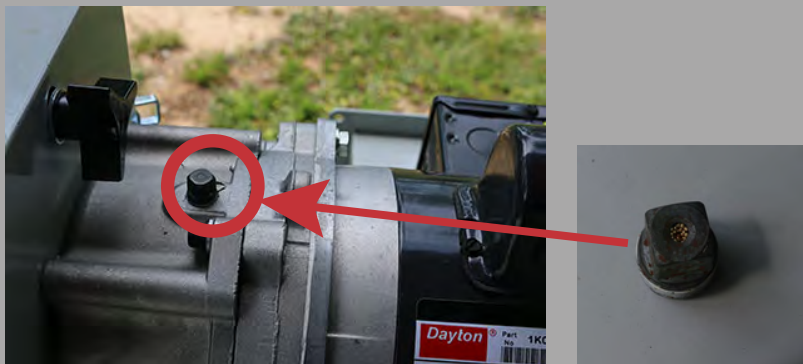
Line 2 - White

Ground - Green

*Replace the plug.*

2. **OIL FILTER:** The unit is shipped with the appropriate oil installed in the sheller gearbox (between the upper motor and shelling housing). You will need to replace the solid plug on the top of the gearbox with a vented plug before using. To do this, remove the solid plug and install the supplied vented plug (in a plastic bag taped to the machine).

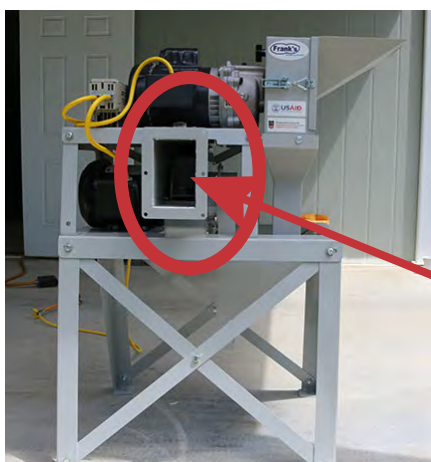
You should not have to check the oil level or change the oil for the life of the machine. However, if this is necessary, you can check the oil level by removing the side fill line plug and make sure the oil level is at the bottom of the hole. To add more oil, remove the top vented plug and add oil (SAE 30 or equivalent) until the oil level is at the bottom of the side filler plug. Replace all plugs before starting the unit.



Replace the top fill plug with the vented plug.



Oil level is to the bottom of plug.



Attach the exhaust adapter.

**EXHAUST ADAPTER:** The shells and other debris is exhausted through the side rectangular port. If you would like to extend the exhaust further from the unit, you can install a 4-inch (100 mm) round tube (not included). To do this, install the provided Exhaust Adapter to the exhaust port using the six bolts and nuts provided. Please keep the length of the tube as short as possible and avoid sharp bends to avoid clogging the tube with the waste material.

# Groundnut Sheller/Aspirator User Manual

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

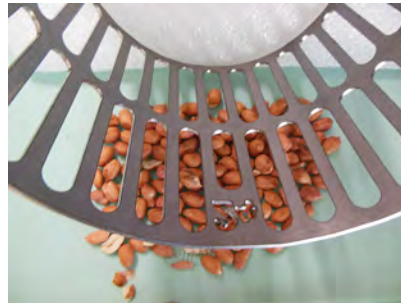
## ***Choosing the correct size sheller basket***

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

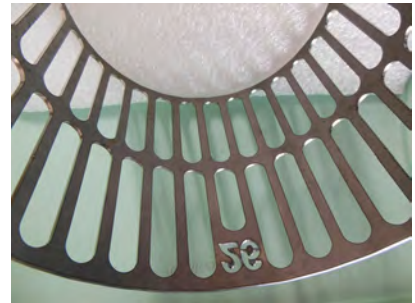
1. Handpick approximately 100 grams of the largest groundnut pods that you will be shelling.
2. Shell these pods by hand carefully to obtain the kernels.
3. Holding a sheller basket, pour the shelled peanuts onto the basket and see if all the groundnuts EASILY fall through it. Find the smallest size 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 is placed INSIDE the shelling box.
10. Fasten the cover with the two hold-down clamps on both sides.



### **Turning on the unit**

11. Connect the unit to the appropriate electrical power.
12. Turn on the aspirator motor by first pressing the Lo/Re button on the fan control box. A green light will turn on.
13. Press the Run button on the control box. You will hear the fan start running.
14. Wait about 10 seconds for the fan to come up to the proper preset speed.
15. If you have any problems, refer to the provided instruction guide for the control box (Section 4 of the guide discusses the startup operation).



Fan box controls aspirator to remove hulls.



Power switch turns on shelling mechanism.

### **Shelling the pods**

16. Place a container under the outlet at the bottom of the unit to catch the shelled nuts.
17. Flip the switch to turn on the shelling motor.



18. Slowly pour the groundnuts pods into the hopper. (Please make sure to remove all foreign material such as sticks and stones before shelling the pods).

19. Once all the pods have been poured into the machine, or the collecting container is full, allow the machine to run for a few more seconds until the machine stops producing shelled groundnuts.

NOTE: The shelling basket will not be entirely empty and there could still be some unshelled pods in the basket. This is normal.

20. Turn off the sheller and aspirator switches.

21. Remove the container from below the machine and sort the shelled nuts from the unshelled ones.

22. If you have more pods of the same type to shell, you can repeat Steps 11-21.

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.

23. 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 11-21.

24. After two passes through the machine, around 90+% of the nuts should be shelled, with minimal breakage. If desired, you can shell any unshelled pods by hand.

25. 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).



**Turn off the power switches and disconnect the machine from the power source when finished shelling.**