



## **DEPARTMENT OF AGRICULTURAL ENGINEERING**

### **AI3601 POST- HARVEST TECHNOLOGY**

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### **Groundnut decorticator: Manually operated**

Hand operated groundnut decorticator consists of curved 'L' angle frame and four legs. A perforated sieve in a semi circular shape is provided. Seven cast iron peg assemblies are fitted in an oscillating sector. The groundnut pods are shelled between the oscillating sector and the perforated concave sieve. The kernels and husk are collected at the bottom of the unit. The clearance between the concave and oscillating sector is adjustable to decorticate pods of different varieties of groundnut. The sieve is also replaceable according to the variety of groundnut pods.



**Fig. Groundnut decorticator: Manually operated**  
**Groundnut decorticator: Power operated**

The unit consists of a hopper, double crank lever mechanism, an oscillating sector with sieve bottom and blower assembly, all fixed on a frame. A number of cast iron peg assemblies are fitted on the oscillating sector unit. The groundnut pods are shelled between an oscillating sector and the fixed perforated concave screen. The decorticated shells and kernels fall down through the perforated concave sieve. The blower helps to separate the kernels from the husk and the kernel are collected through the spout at the bottom. The shells are thrown away from the machine.

**Castor seed sheller machine** is a device to help us work, so when we use it,  
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there will be some precautions to help us better to complete the operation, or help us regulate the mode of operation, so that is very important to us.

1, because the task environment is very bad, so in advance to participate in operation personnel to carry out safety operation instruction, to understand the operation rules and safety knowledge, such as the sleeve to be fastened, should wear masks and protective glasses etc..

2, before use, must carefully check whether change position sensitive bump, conditioning organizations can be normal, safety equipment can be completely useful; to ensure that no debris inside the machine, all parts should be smooth filling oil.

3, before starting the work place should be arranged, do not put some threshing unrelated debris; to prevent young people playing at the edge of the site, to avoid incidents.

4, to feed into uniform, guard against stones, sticks and other hard things into castor thresher.

5, the drive belt joints should be strong; prohibited in the machine task, pick up the belt or touch any part of the transmission parts.

6, matching power and threshing machine transmission ratio to meet the requirements, to avoid the threshing machine speed is too high, the oscillation is fierce, so that parts damage or fasteners loose and cause personal injury incidents.

7, can not work overtime is too long, the general task of about 8 hours to stop inspection, adjustment and smooth, otherwise there may be severe conflict lead to wear, fever or deformation.

8, castor sheller generally use diesel engine as the driving force, should wear fire hood on the exhaust pipe, to avoid fire.

9, in the operation process if there is a problem, to stop after repair and adjustment.

These are basically in the use of castor thresher may occur, if you don't know how to carry on the next step, according to us, so you don't have to worry about what happened.

between cussessive buckets without any mutual influence, 3) for centrifugal disrhagte the appropriate belt speed and diameter of drive pulley. In general, the spacing would be from 2.0 to 3.0 times the projected width of bucket.