

Basics of Power Weeder

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Basic Information Power Weeder

Power Weeder: Basically it means it is removing the weeds by using the power. Power weeder it means “power is the source from engine” & “weeds means the unwanted material in the farm”



Pic: Power Weeder- Petrol Engine

Pic: Power Weeder- Diesel Engine

Why the farmers buy the POWER WEEDER?

- i. Today's, mostly farmers have marginal farm land. They can't afford the tractor. Or no one can easily give them tractor on rent for this farm operation & also the tractor owner will not afford it for this land.
- ii. Sometimes, in season labors are not easily available. If labors are available then their wages demand is high. This thing can't afford the small marginal land farmer.
- iii. Power Weeder is affordable as compared to tractor & pair of bull.
- iv. Power Weeder operated implements also available which are same as tractor implements but only small in size such as M.B. Plough, Ridger, Furrow Opener, Seed

Drill, Cultivator, Potato Digger, Reaper Unit, Trailer, HTP, Water Pump, Alternator, Thresher, Cage Wheel, etc.

- v. Power weeder is specially designed for inter cultivation or inter crop weeding where Tractor or Power Tillers are easily not work.
- vi. There are three types of power weeder such as Center Rotary, Back Rotary & Front Rotary.
- vii. Low maintenance cost.
- viii. One person (either man or woman) can easily operate.
- ix. Power Weeder has government subsidies.

Power Weeder:

- i. Basically it means it is removing the weeds by using the power.
- ii. Power Weeder is a machine used for removing weeds, stirring (mixing) and pulverizing (grinding) the soil and for loosening the soil after the crop begins to grow.
- iii. Generally the power weeder power ranges from 1 hp to 8 hp (0.7 kW to 6kW).
- iv. But, in market many company's sold 9 hp, 10 hp power weeder.

Functions:

- 1) Before sowing operations such as tillage like ploughing.
- 2) Remove the weeds and inter cultivation between the growing crops.
- 3) Spraying of chemical fertilizers on crops.
- 4) Also we can attach the several types of implements such as:
M.B. Plough, Ridger, HTP, Water pump, Seed drill, Trailer, Different types of blades, Reaper unit.

Features:

- 1) Specially used in sugarcane, ginger & turmeric field where tractor is not easily working.
- 2) Anyone can easily operate (either man or woman).
- 3) Transportation from home to farm.
- 4) Handle rotate upto 180°.
- 5) Handle height adjustment for operators comfort.

Methods of Drive of Power Weeder:

Two methods of drive in power weeder such as Belt Drive & Gear Drive.



Pic: Belt Drive Power Weeder

Pic: Gear Drive Power Weeder

Types of Power Weeder:

1. Center rotary
2. Back rotary
3. Front rotary

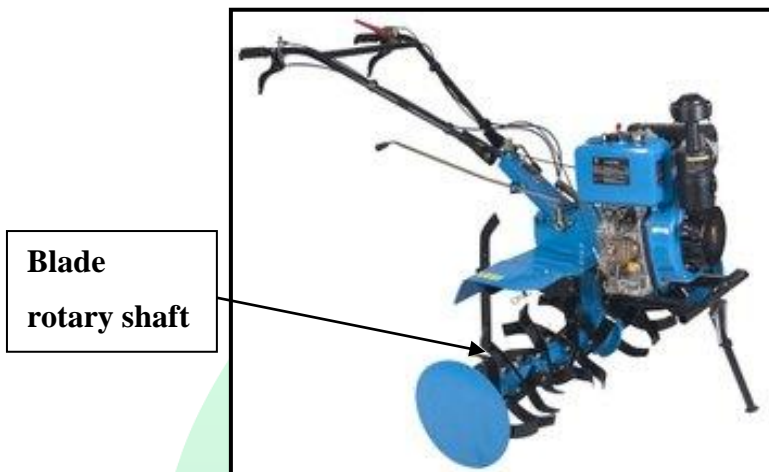
 **Center rotary:**



Pic: Center Rotary Power Weeder with drive wheels

- a) Center rotary means the drive wheel & blade rotary shaft is fix on a one shaft while working.
- b) While transportation (either home to farm or farm to home) on road there is drive wheel insert in the drive axle shaft.

- c) While field operation, the blade rotary (rotor) shaft fix to the drive axle shaft after removing the drive wheels.



Pic: Center Rotary Power Weeder with blade rotary shaft

- d) While works in the field, the drive wheel should be remove and insert the blade rotor shaft in the drive axle shaft & fix with cotter pin.
- e) The blade rotor shaft have 12, 16, 20, 24, 28, 32 blades as per manufacturer recommendations and also on machine power.

✚ **Back rotary:**



Pic: Back Rotary Power Weeder

- a) Back rotary power weeder means the power weeder have individual blade rotary shaft (back side) and drive wheel shaft.
- b) There is no need to remove drive wheel while field operation.

c) In wet land (puddling) operation, fix the cage wheel instead of drive wheel.

• **Features:**

a) Handle is rotate upto 180° and also handle height adjustment for operators comfort.

b) In this type of power weeder the rotary blade shaft is back side

c) Specially used in sugarcane, ginger & turmeric field where tractor is not easily working.

✚ **Front rotary:**

a) Front rotary power weeder means the power weeder have individual blade rotary shaft (front side) and drive wheel shaft.

b) There is no need to remove drive wheel while field operation.

c) In this type of power weeder the rotary blade shaft is front side and engine is back side.



Pic: Front Rotary Power Weeder

• **Features:**





a) Handle is rotate upto 180° and also handle height adjustment for operators comfort.

b) Specially used in sugarcane, ginger & turmeric field where tractor is not easily working and where is crop row spacing is 0.75 - 1 foot (9 - 12 inch).

c) Depth control mechanism provided.

Power Weeder Operated Implements/Attachments/Tools:

<p>Mb Plough</p>	
<p>Cultivator</p>	
<p>Ridger</p>	

	
Seed Drill	
Trailer	
Reaper	

Water Pump

