

# SUPER SEEDER: A SOLUTION FOR STUBBLE BURNING

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## INTRODUCTION

### SUPER SEEDER:

Super seeder is tractor mounted machine that cuts and lifts rice straw, sows wheat into the soil, deposit the straw over the sown area as mulch.

It also cultivates the paddy straw in the field. This technology is eco friendly with environment for the health of soil as well as it also save water. During the time of wheat sowing, farmer generally burn paddy residue which decrease the soil fertility and Produce harmful gases for human beings, animal and environment.

Therefore, to maintain soil nutrition value SUPER SEEDER is the most successful implement for sowing wheat in paddy residue without burning straw.



## MAJOR PART OF SUPER SEEDER:

- Seed and fertilizer box
- Seed and fertilizer pipes
- Three-point linkage
- Frame
- Gear box
- Drive wheel
- Seed and fertilizer adjustment lever
- LJF smart type blade
- Seed and fertilizer box cover
- Foot rest
- Roller
- Tyne
- Side disc
- Soil guard

## MAIN FEATURES:

- Possibility of sowing wheat crop just after rice harvesting i.e., option for long duration wheat and paddy varieties.
- Possibility of sowing wheat in the residual moisture i.e., is saving of irrigation.
- Timely sowing wheat even after long duration of basmati rice varieties.
- Less weed growth
- Improve soil health
- Environment friendly
- Single pass solution to current farming needs.
- No need to burn paddy stub, environment and health friendly.
- Higher yield as germination is much better in Soft soil if compared with other seedling solution.
- It has unique tine design can be used for tillage and fully functional as rotary tiller as per seasonal requirements of farmer.
- Huge cost saving to farmer in initial investment as compared to other solutions.
- Farmer has no need to buy a rotary tiller separately.

- Can be used as a multi crop planter.
- Safety cover on all the moving parts.
- Wire imbedded transparent PVC pipe.

## OPERATOR INSTRUCTIONS:

The super seeder is attached to the tractor through a three-point linkage system. After hitching with the tractor, the PTO shaft of tractor is attached to PTO shaft linkage of machine which gives drive to the super seeder rotor. As the drive wheel moves the fertilizer and seed metering device, the seed and fertilizer start dropping in furrow / slits opened by furrow Opener

## DURING OPERATION:

- Tractor with double clutch of 55-75 horse power should be used to operate the machine.
- Always operate with 540 RPM PTO shaft.
- Do not engage PTO at full throttle.
- Set engine to 180-240 RPM and operator tractor in 1st and 2nd gear depending upon straw load.
- Lift the super seeder while turning to avoid hindrance problem and bending of tines.

## AFTER OPERATION:

- Machine should be properly cleaned after Operation, seed and fertilizer box, metering system etc.
- Wash seed and fertilizer box and moving parts at the end of season.
- Store the machine on a solid surface in a cool and dry place.

## IMPORTANT INSTRUCTION:

- Please check the soil moisture before using the machine in the field.
- For harvesting of paddy, use combine harvester having super SMS system chop the paddy straw coming out from the combine into the small pieces before dropping on the ground and spread it evenly all over the field, which in turn lead to ease in operation of SUPER SEEDER as high moisture content in residue and due may vlog the super seeder.

## ADVANTAGE OF SUPER SEEDER:

- This technology is eco- friendly.
- Saves money as less time is needed to carry out field operation, which in turn reduces fuel and labor costs.
- Direct sowing also reduces soil disturbance
- We can stop burning of straw.

## DAILY OR EVEN 10 HOURS WORK:

- Tighten all bolts and nuts.
- Check the level of gear oil.
- Grease rotor bearing & PTO shaft.

## WEEKLY OR EVELY 50 HOURS WORK:

- Oil / grease all side belt drive.
- Check the oil level of gearbox.
- Grease to the side rotor hub & side discs.

## EVERY 400 HOURS WORK:

- Periodically change the gear oil and use recommend oil only.

## HOW TO USE

- These operator's manual describes how to use the super seeder correctly and safely and precaution for using it. Read this manual carefully before using the super seeder. Keep this manual close to your tractor, after you have read through it.
- Don't wear loose clothing or muffler to avoid from being caught in a controlled for rotating part.
- Children or people who have no knowledge of the operators manual and the safety labels on the super seeder are not allowed to operate the super seeder.
- People under 16 years of age are not allowed to use the super seeder.
- Please do not touch any rotating parts of machine while its working.
- Please check the main gear oil level before using the super seeder.
- Please check its all the bolt and nuts regularly.
- Before using the machine, please replace lost or damaged parts.
- After attaching the super seeder to the tractor, check the connection of topline, lower link and list link before lifting the SUPER SEEDER by the position control lever, Always use the lower gear of tractor to obtain find tilt of soil and good cutting of straw residue.
- Depth of fertilizer, seed boot of SUPER SEEDER can be adjusted by raising or lowering the depths skids position.
- For a very fine seedbed, drive tractor very slowly. Tractor working speed should not be more than 4-5 kilometer per hour.
- Don't allow anyone to remain between the tractor and the unit while it is being coupled or uncoupled.

## LIGHTS AND INDICATIONS:

- Before transporting the machine on public roads, ensure that all legally required lights and indicators are in place. Ensure that lights and indicators are clean and in good working order. Replace any missing or broken equipment.

## PROJECTION:

- Stones and other debris is projected by the moving part can travel long distance. Always stay at a safe distance from the machine.
- Keep away from the elements and from the machine all the time the engine is running the PTO is engaged and the rotors are running.

## PTO SHAFT:

- Use only PTO shafts supplied with the machine recommended by the manufacturer.
- Make sure that the PTO shaft guards and secured with the safety chains provided.
- Do not wear loose clothing that could be caught in the rotating PTO shaft.
- Before removing or attaching the PTO shaft, or before doing any work on the machine, disengage the PTO drive, turn off the engine, remove the ignition key and wait for all the moving part have come to a complete stop.
- Ensure that the PTO shaft is always correctly fitted and locked into place.
- Before connecting the PTO, please ensure that the PTO speed and direction of rotating are in the line with manufacturer's recommendations.

