



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35.



Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.

DEPARTMENT OF AUTOMOBILE ENGINEERING

COURSE NAME : 19AUE308 - SPECIAL VEHICLES

III YEAR /VI SEMESTER

Unit 3- Agricultural Vehicles

Topic : Working attachments of Tractors & Trailer and Tipping Mechanism



NEED FOR WORKING ATTACHMENTS



- Agriculture process involves different works in the field.
- With the aid of man power it is difficult to get job done.
- So, by the use of working attachments we can perform work easier.





WORKING ATTACHMENTS



DISC PLOUGH



- A disc harrow is a harrow whose cutting edges are a row of concave metal discs, which may be scalloped, set at an oblique angle.
- It is used to till the soil where crops are to be planted.
- It is also used to chop up unwanted weeds or crop remainders.





ROTAVATOR



➤ Rotavator is a tractor-drawn implement which is mainly used for seed bed preparation within one or two passes and is suitable in removing & mixing residual of maize, wheat, sugarcane etc





CULTIVATOR



- A cultivator is any of several types of farm implement used for secondary tillage.
- One sense of the name refers to frames with teeth that pierce the soil as they are dragged through it linearly.





POST HOLE DIGGER



- Post hole digger is used to drill the holes in the field.
- It uses PTO for the operation.





MULCHER



- Mulcher implement is primarily for paddy residue management.
- Best suited for turning cut paddy straw into natural manure.





FERTILIZER BROADCASTER



- GreenSystem Fertilizer Broadcaster ensures the fertilizer spreads evenly in the field.
- It works through PTO.





SUBSOILER



➤ Sub-soiler is best suitable for deep tillage to loosen and break up the hard pan in the soil.





MANUFACTURING COMPANIES



- kubota
- John Deere
- Sakthiman

Kubota



JOHN DEERE



Trailer and Tipping Mechanism





Trailer and Tipping Mechanism



- A trailer is an unpowered vehicle towed by a powered vehicle. It is commonly used for the transport of goods and materials.
- The trailer is connected to the tractor by the aid of drawbar.
- The power from the engine is transferred to the hydraulic cylinder in the trailer for lifting the body to drop the materials at the required place.



Types of Tipping Mechanism





REFERENCE



- ❖ <https://www.deere.co.in/en/implements/>
- ❖ <https://www.youtube.com/watch?v=aUL-Fqb0sak>



THANK YOU !!!