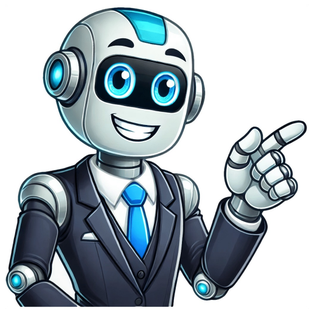
I'm not a bot



Tractors commonly function as the primary source of power for field machines. A connection point (hitch) is attached to the tractor, which transfers force to move the implement through the field. This chapter covers tractor hitching and traction systems. #### Hitching Systems Most agricultural tasks involve attaching an implement to a tractor via a hitch. The forces transmitted through a hitch can impact both the tractor and the implement's performance. Modern hitches include features for automated control of pull and/or depth of tillage implements. In addition to transmitting forces, the hitch may also need to support the transport of the implement. #### Types of Hitches Early tractors used only drawbar hitches, which allowed pulling but not carrying an attached implement. The three-point hitch has become a standard equipment on most tractors. Tractor Figure 7.1 features both a drawbar and a three-point hitch. Three-point hitch terminology is illustrated in Figures 7.2 and 7.3. #### Terminology The link points of attachment on the tractor are called "link points," while links attached to the implement are referred to as "hitch points." Quick-attaching couplers (Figure 7.4) facilitate faster attachment of three-point hitches to implements. The hitch dimensions have been standardized by ASAE since 1959, with Table 7.1 showing four categories for different sized tractors. #### Hitch Standards ASAE Standard S217 outlines standardized hitch dimensions, including hitch pin diameters, mast height, and lower hitch point spread. Additional standards relate to the drawbar, such as Standard S207 specifying minimum vertical loads and Standard S203 detailing the location of the drawbar hitch point relative to the PTO shaft. #### Hitch Types Tractors can carry implements in three main configurations: towed (drawbar), semi-mounted (two lower links), or fully mounted (entirely supported by the tractor). • The three-point hitch system is a widely used device in farming tractors, offering a simple and statically determinate way to join two bodies. • When preparing an implement for use, ensure that Category II implements have the top hole of the mast located 610 mm above the lower pins, and drill additional holes if necessary. • To secure the hitch, always attach it to the drawbar and maintain a three-point connection between the tractor and the implement. • The rockshaft control levers play a crucial role in controlling the hitch's position and movement, with two levers (A and B) regulating its action. • When setting the position control lever, loosen the stop and slide it against the lever to achieve repeated depth or height adjustments. • Before attaching an implement, ensure that the drawbar is secure and will not interfere with the hitch's movement, and engage the brakes before leaving the tractor seat. • To attach an implement, slip the draft links over the hitch pins, retain them with quick-lock pins, and adjust as necessary. • Using the rockshaft position control lever (E), slowly lower and raise the implement to check for any points of interference. Three-point hitch setup and leveling: 1. Lower the implement to remove weight from the hitch. 2. Level the front-to-rear with the center link by unlatching the locking clip, rotating the center link body clockwise or counterclockwise as needed, then re-latch the clip. 3. Level side-to-side with the right-hand link by lifting and turning the locking handle to engage the slot onto the roll-pin, then adjust the draft link up or down using the crank handle.

Hitching system of tractor ppt. Tractor hitching system diagram. Tractor hitching system pdf. How does a tractor 3 point hitch work. Types of hitching system in tractor. System tractor. What is hitching in tractor. How does a tractor quick hitch work.