# Hitching - Drawbar Connection Meeting Kit



The two most common tractor-hitching methods use the **drawbar or the 3-point hitch assembly**. In either case, there can be multiple elements involved in the process including connecting the implement using a hitch pin, adjusting a jack stand, attaching safety chains, connecting the PTO shaft, connecting hydraulic couplings, or plugging in electrical connections

## DRIVING TIPS FOR DRIVER, TOW VEHICLE AND TRAILER

Towing involves the interaction of a number of components: **the driver, tow vehicle and trailer**. Each of these contributes to the towing experience and safety of the combination. The driver is responsible for selecting the right tow vehicle and trailer for the load, hitching the unit, loading, steering, speed, and braking. All components of the tow vehicle and trailer affect towing. Safe and proper driving is a critical piece of trailer safety. Drivers should be focused and limit or eradicate distractions.

#### Hitching IQ

No matter which type of hitch system used, the hitch needs to have a strength rating equal to or greater than the GVWR of your trailer. Your trailer's maximum capacity is never greater than the lowest rated part in the trailer/towing system. You also want to ensure your hitch system is in good working condition and matches the type of tongue on the trailer.

### FIRST LINE OF DEFENSE: SAFETY CHAINS

Safety chains are your first line of defense if the trailer detaches.

- Crisscross the chains to form an X beneath the trailer tongue so that it would catch the tongue should the trailer disconnect from the tow vehicle. Only enough slack to allow turning should exist.
- If possible, the chains should be looped back to hook onto themselves
- Do not hang an S hook on the opening of the receiver hitch, it might bounce off while driving, but loop it through the opening and connect it to the chain.

#### HITCHING OVERVIEW

- Try to do hitching and unhitching on level ground. If there is a risk of rolling, block wheels before unhitching.
- Hitch trailed equipment only to the tractor drawbar. Hitching elsewhere may displace the centre of gravity on the tractor and can cause a backward overturn.
- Connect each farm wagon or piece of equipment to the towing vehicle by two

separate means of attachment. Most commonly this will be a draw pin and chains. It may also include a ball-hitch or three-point hitch. Use safety hitch pins (draw pins with cotter pins or other locking system) in every application.

- Use properly rated safety chains with pins and balls of the proper size. The strength of a safety chain must be equal to the gross weight of the load being towed. Be sure no loose chains are dangling either from the drawbar or the implement.
- Use locking pins on hydraulics.
- Shut off the engine and wait for all moving parts to stop before un/hitching implements or when making adjustments or performing maintenance.
- Make sure all shields and guards are in good condition and properly installed.

#### HAULING OVERVIEW

- When towing equipment without brakes, keep speeds under 40 km/hr.
- Stopping distance increases with speed and with increased weight of towed loads. Reduce speed when hauling a load.
- Make sure the tractor is properly counterweighted.
- Before hauling, ensure your load is well secured. Avoid sudden starts / stops and excessive speed, especially when operating on a hillside or rough ground as it may cause your load to fall.
- Check clearance before operating under overhead electric lines or before entering a building.
- Always travel with the front-end loader or bucket in the lowest position possible.
- Avoid operating attachments during road travel and keep the PTO disengaged unless absolutely necessary.
- Transport winged and folding implements in their narrowest configuration.

#### FINAL WORD

Hitching and Hauling are common almost everyday occurrences on farms. Most of the time, they proceed without a "hitch". The hitching process is fraught with dangers and risk if safety procedures are not followed with precision.