Jump-Starting Your Farm Vehicles Meeting Kit

What’s At Stake

Farm equipment may have been parked for several months without use. When you try to start the vehicle, the battery is dead. How should the vehicle be jump-started safely?

THE BASICS:

- Make sure all battery connections are tight and the posts are clean.
- Make sure the machinery is out of gear and blocked to avoid movement in case it jumps into gear.
- Attach the positive (red) jumper cable to the good battery first and then to the dead one.
- Attach the ground (black) jumper cable to the good battery and then to an engine ground rather than the dead battery. This is done to avoid sparks at the negative post which could ignite an old leaky battery.
- Start the machine from the operator’s seat. Do not bypass start. (This means starting the machine by jumping across the terminals of the starter rather than using the key or start button.)
- Once the equipment starts, let the battery run for a few moments and then disconnect the cables in the reverse order.

What’s the Danger

JUMP START A TRACTOR

Tips. Check the voltage in your tractor battery before attempting to jump start it. If the voltage has drained too far, you will not be able to jump start it and the battery must be replaced.

Warnings. The tractor may lurch forward or backwards when it is

jump started. Do not stand behind or in front of the tractor when attempting to jump start it or you will be run over.

After a long winter, or a long spell between using your tractor, you may find that when you go to start it, the battery is dead, and the engine won't catch. You can jump start a tractor much in the same way as you jump start a car. There are certain important considerations to remember before you attempt this. Many tractors, farm, or lawn, use a 6-volt battery system and not a 12-volt; you cannot jump start these types with a regular car. Once you have a power source that will not overwhelm your tractor system, you can jump start a tractor easily.

HOW TO PROTECT YOURSELF

Push the clutch in on your tractor and lock it into position. Connect the jumper cables to your power source. For instance, if your tractor has a 12-volt battery, you can use a small car as a power source. Turn the engine on and connect the red lead of the one of the ends to the jumper cables to the post of your battery. Connect the black lead (on the same end as the one you just connected) to the frame of the car to ground it.

Standing on the side of the tractor, connect the red lead of the jumper cable to the positive post of the battery. Then connect the black lead to the negative post of the battery. Let the battery charge for 15 minutes and then try to start the engine. If the engine turns but does not start, let it sit for another 15 minutes before trying again.

If the engine will still not turn, use the metal shank of your long handle screwdriver to form a bridge between the post on the starter that the battery connects to (this typically has a red wire from the battery connected to it) and the top screw on the starter. Your tractor should start; if it does not, then there is a problem with your starter.

How to Jump Start a Double Battery on a Diesel Tractor. Many diesel tractors require the use of two batteries to help start the large lumbering engines. Often during the beginning of the farming

season, a diesel tractor will require a jump start if the tractor was not used during the winter months.

Many diesel tractors require the use of two batteries to help start the large lumbering engines. Often during the beginning of the farming season, a diesel tractor will require a jump start if the tractor was not used during the winter months. The batteries on a diesel tractor are wired parallel to each other, meaning that the battery's negative terminals connect together, and the positive terminals connect together. This doubles the amperage of the batteries but maintains a 12-volt output. This makes jump-starting two batteries straightforward.

MOUNT THE TRACTOR

Before mounting the tractor, make sure guards and shields are in place and in good working condition. Use provided handrails for mounting and dismounting. Adjust the operator's seat for fit and easy access to controls.

START THE TRACTOR

Before starting the engine remember to:

- Place the gearshift lever in neutral or park.
- Place all hydraulic controls in neutral.
- Disengage the power-take-off (PTO).
- Apply the brakes.

CONTROL MEASURES TO PREVENT INJURIES ATTEMPTING TO JUMP STARTING A TRACTOR:

- Never use a vehicle to jump start another vehicle unless both vehicles are in park (automatic gearbox) or neutral (manual gearbox) with park brakes applied.
- Consider using a mobile battery pack (i.e. secured to a hand trolley) to jump start vehicles.
- Only operate a vehicle from the designated operator's position (i.e. in the case of a car or truck, sitting in the driver's seat).
- If possible, operate the vehicle on flat level ground.

- Do not drive or operate the vehicle on excessive slopes, or on ground that is too slippery or too soft to safely support it.

FINAL WORD

Control measures in jump starting farm vehicles including administrative measures should be reviewed on a regular and predictable basis to make sure they work as planned.