

# Planter prep easier with small electric motor

## Key Points

- A simple device helps calibrate the planter while still in the barn lot.
- A small electric motor is the key component of this calibration system.
- Calibration in the barn lot saves time on the first day of planting.

By JENNIFER CAMPBELL

**S**PRING fever will hit before you know it, and planter maintenance is key to that next crop. There are many components to a planter. Seeing them operate before actually getting in the field can be a bonus. Planters have lots of chains, bearings and other moving parts, and if all aren't working properly, the downtime can be costly.

A few years ago, Chris Campbell, Franklin, Ind., was looking for a way to test his planter before actually taking it to the field. By the time the fields are dry enough to calibrate and check moving parts on the machine, he needs to be ready to roll.

The objective was to be able to watch the mechanisms of the planter move like they do in the field while the planter sat in the barn lot. An electric motor powering the drivelines would allow preseason identification of problems and simplify lubricating the moving parts. Campbell had seen similar setups for calibrating insecticide meters. Company reps would come out, hook up a small motor, simulate planting speed and check the flow of granular insecticides.

### Homework first

Campbell spent the winter researching motors on the Internet and talking to people who had been around them, such as crop chemical suppliers and sales reps. Eventually he ordered a 60-rpm gear reduction motor and arbor that would hold a half-inch socket extension.

Like most motors, the one he chose could be wired either clockwise or counterclockwise, depending on the wiring configuration. While this is normally done inside the motor, by adding pigtails to these wires, Campbell was able to extend them outside the motor to a junction box.

He was then able to utilize a double-throw, double-throw switch that lets the



**PLANTER TEST:** Chris Campbell uses a small electric motor to help calibrate and grease planter units before field conditions are ideal to save time during planting.

motor run either direction by simply flipping a switch. This allows the one motor to be used on either end of the planter to run both transmissions.

### Barn lot ready!

Campbell built a stand using an old disk blade and scrap steel that allows for adjustable height. It always needs to be parallel to the planter drive shafts for

operation. Equipped with a 7/8 six-point socket, the stand enables him to connect the motor to the planter shafts on his Kinze 16-split-row planter.

Now each spring the system is hooked up to the planter with the planter boxes removed so the drive chains can be oiled and the bearings checked. Being able to see them move and oil them while the units are turning, as if planting, is one less

step required once the ground is ready. Campbell can move from row to row, listening and watching moving parts for any trouble that might arise.

Total cost for the project was about \$600, but it pays for itself when the weather is right and it's time to put seed in the ground.

*Campbell writes from Franklin, Ind.; Chris Campbell is her husband.*

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