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## UPGRADE YOUR PLANTER FOR BETTER NO-TILL PERFORMANCE

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### **Why Does it matter?**

It has been well documented that including a winter cover crop such as cereal rye to a no-till cropping system has a number of benefits including:

- Increasing soil organic matter over time
- Increasing the water use efficiency of the crop
- Reducing or eliminating run-off from irrigation and rainfall.

One challenge associated with this practice is the need to cut through large amounts of residue to ensure good seed to soil contact at planting time.

### **What was done?**

At a cost of app. \$750 per row unit we added the following products allowing us to overcome these challenges:

- Heavy-duty springs
- Coulter with trash wheels
- Notched disc openers
- Seed firmers
- Spiked closing wheels



### **What was found?**

- The coulter/trash wheel combo in front of the disc opener cuts the residue and moves it out of the immediate row area.
- Heavy duty springs allow the coulter to cut through the residue.
- Notched disc openers cut through any remaining residue as they form the seed trench or "V slice".
- Seed firmers ensure that the seed is placed firmly in the bottom of the "V slice".
- Spiked closing wheels close the seed bed without compacting the surface or the sidewalls of the seed furrow.

### **What is the impact?**

Many producers who have resisted using a cover crop in the past due to the amount of residue present will find that these upgrades make the residue manageable. Producers who install these upgrades will be able to reap the benefits of including cover crops in their systems. There is also an opportunity for land managers making wildlife plantings to utilize these upgrades allowing them to opt for no-till strategies in food plots, etc... Please see the JPC web page for a video demonstration of these upgrades.

### **Research Team and Contact information**

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