

Header Height Control For Deere Cornheads Uses Existing Controls

"I've worked for a Deere dealership for seven years, always trying to solve problems for our customers. As we sold more and more 12-row cornheads we found out that farmers liked the big heads but wanted some way to automatically control cornhead height," says Chris Steidinger, of Rupiper Equipment Co., Lacon, Ill.

Steidinger started working on the problem with his friend, Rich Gramm, and came up with a system they call "Head Sight".

"There are other header controls on the market but they didn't do what our customers wanted. They wanted something that would be simple to install and easy to operate because there's already enough to do when operating a combine.

"We started with a new Deere 90 Series poly cornhead and made a sensor that fits directly under the front point using two existing bolts. The spring-loaded arm follows the ground contour and is wired to a control box that also mounts on the head. We just run one wire to the cab and use the existing Dial-A-Matic controls to select from three different height settings.

"Another thing our customers wanted was for this sensor to control their Deere Contour Master feederhouse that tips the head to follow the ground. Deere offers sonar sensors to do this but they are mounted too far back on the head and are sensitive to grass and trash. We designed our system so it controls both the Contour Master and the Dial-A-Matic functions at the same time. A cornhead with our Head Sight installed will operate exactly like a soybean platform in the field.

"Head Sight lets the cornhead return to operating height with one touch of the down button versus having to hold the button until the head is down.

"The first customers who tested our Head Sight system liked it but wanted even better height control. In dry conditions, you could run the metal points right along the ground but in evening or early in the morning, trash would build up on the points. They could switch to position two, which raises the head about 2 in. But in downed corn, customers said this was not enough. We solved the problem by adding a variable trim switch that gives us infinite control in each of the three operating positions. Now in trashy conditions, you can raise the header just enough to go over the trash but still pick up down crops.

"One other neat feature of our Head Sight is that you can use 1, 2, 3 or 4 sensors, depending on your needs. The more uneven ground you have, the more sensors you might want to install. All sensors are the same so they're easy to install or repair.

"After operating this system for three seasons we've tested it with a number of customers so we're ready to put the system on the market.

"We sell the basic unit including control box, indicator, and two sensors with all hardware needed for \$1,100. Fits any 90 Series cornhead and we're also working to fit 40 Series heads."

Contact: FARM SHOW Followup, Rupiper Equipment Co., RR1, Box 143A, Lacon, Ill. 61540 (ph 800-693-4960 or 309-246-2645).



Sensor fits directly under the front point and consists of a spring-loaded arm that follows the ground contour. It's wired to a control box that also mounts on the head.



Shown above are the components of Rupiper's "Head Sight" kit. System controls both Contour Master feederhouse and Dial-A-Matic functions at the same time.

Heavy-Duty Camera System Mounts On Spray Booms, Combine Augers

An Iowa farmer's frustration at not being able to see the nozzle at the end of his spray boom led to development of the "Spray-Cam" - a heavy-duty closed circuit camera system that he says out-performs any other ag camera system on the market.

Leonard Tranbarger had been living with skips and overlaps in fields for years. "No matter how good a spray marker you use, when you get booms up to 80 or 100 ft. wide it's a challenge to follow the marks exactly," he says.

In addition to farming, Tranbarger is in the business of selling and installing security systems so he already knew a lot about closed circuit camera systems. He and his son-in-law, Steve Gus, designed a system with two cameras and a 5-in. monitor in the cab. They also came up with a switching system to turn off the camera on one end and turn the other one on.

The boom-mounted cameras mount inside of a protective housings made from specially-shaped PVC tubes.

After developing the camera system for sprayers, the men also started testing the cameras on combines, auger carts and even on a fertilizer applicator rig. On combines they use cameras to view grain tanks and the unloading auger. They can also set up a transmitter to send video from the combine to a grain truck or tractor loading grain alongside.

On sprayers, Tranbarger figures the system has reduced overspraying in his operation to 1 percent or less. The savings in chemi-



Boom-mounted cameras mount inside protective housings made from specially-shaped PVC Tubes.

icals may be more than enough to pay for the system in a couple seasons or less, he notes.

"This is a rugged, efficient system. We've sprayed more than 7,000 acres with it and have never even had to clean the lenses on the cameras."

The camera system includes a power supply. Tranbarger explains that other systems wire directly to the tractor's 12-volt system but frequently have problems with shorting out. He says he's solved the problem with an independent power supply. "We won't



Tranbarger and his son-in-law, Steve Gus, designed a system that includes two boom-mounted cameras and a 5-in. color monitor in the cab.

sell our system without our power supply unit," he says.

The system includes two camera units, a color monitor, and an AB switch for switching between cameras and wiring for 15, 50, 75 or 100-ft. booms. Sells for \$3,995. You can use it on both a sprayer and combine (or other equipment) by wiring each piece of equipment and just moving the cameras between machines.

Contact: FARM SHOW Followup, ATS Enterprises, 33361 K. Ave., Beaman, Iowa 50609 (ph 515-366-9123).



Cameras mount over spray markers at each end of boom. System comes with its own power supply unit.