



Receiver hitch, including electric winch, is welded to applicator frame.

Anhydrous Tank Winch Makes Hookup Easy

"My brother Dale and I farm together, raising approximately 1,800 acres of corn and beans near Wellington, Ill. We're both more than 55 years old so we can't rely on pure strength anymore to accomplish some of our daily chores. That's why we can up with this winch on our anhydrous applicator," says Delmar Graham, whose invention recently won Farm Bureau's national inventor contest.

"Aligning and hitching up anhydrous tanks was becoming difficult. It takes only one person to hitch up with the help of our electric tank winch. Here's how it works: You back the applicator up to within 5 to 10 ft. of the tank. Then pull the winch cable out through the receiver hitch, hook up to the drawbar and pull it in. Then you just insert the locking pin into the receiver hitch. The hitching attachment can be simply unpinned from wagon tongues, but the receiver hitch is welded to the applicator frame.

"To set up this winch system we had to place it at the correct angle to receive the wagon tongue. We used a 9,000-lb. winch, shortening up the cable to 25 feet for maxi-

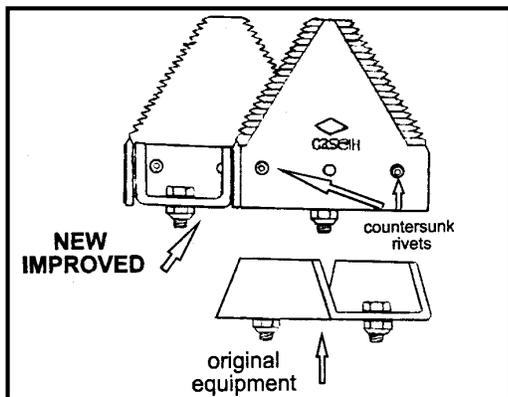


To hook up applicator to tank you pull the winch cable out through the receiver hitch, hook up to the drawbar, and pull it in.

mum pull. We ran heavy-duty electrical cable from the winch to the tractor battery.

"This hitching system saves 8 to 10 min. on each hookup. That's significant when you figure we use up about 60 tanks each fall. The time saved is enough to cover an additional 200 acres and it makes the job a lot more pleasant with less chance for injury or back strain."

Contact: FARM SHOW Followup, Delmar & Dale Graham, 372 N. 2400 E. Road, Wellington, Ill. 60973 (ph 815 984-4908).



Sickle sections are riveted to original equipment so they can be reversed as they wear or replaced if they're broken.

Sickle Section Chopper Blades For Case-IH Combines

Newer soybean varieties often ripen on green stems, resulting in extra tough residue. Clever Tech of Jesup, Iowa, has just introduced new replacement chopper blades for Case-IH combines that are much more aggressive.

"We use conventional sickle sections that are riveted into place so you can easily replace them if they break off and also reverse them as they wear," says Robert Rottinghaus of Clever Tech, noting that a Canadian company also uses sickle sections to beef up Case-IH choppers but welds the sections in place.

Rottinghaus feels they must be riveted in place to be practical.

You simply rivet the sickle sections to the original U-shaped cutter blades. The new add-on sections come assembled ready to bolt to the chopper bar.

Sells for \$119 plus S&H. Fits all Axial Flow combines built since 1977.

Contact: FARM SHOW Followup, Clever Tech Inc., 4121 S. Canfield Rd., Jesup, Iowa 50648 (ph 319-827-1311; fax 319-827-2425).

New-Style Harrow Arm Acts As Shock Absorber

You can reduce wear and tear to harrows with this new-style harrow arm that acts as a shock absorber when lifting or turning with the implement.

Introduced at the recent Spokane Ag Expo in Spokane, Wash., Coombs Manufacturing's bolt-on harrow arm is designed to fit all 3-bar mounted harrows. It features a top-mounted spring, instead of a bottom-mounted spring, and is fitted with a polyurethane washer on back. The combination acts as a shock absorber to reduce wear and tear on the implement and it permits easier in and out-of-ground adjustment from field to transport, the company says.

A 4 1/2-ft. harrow section sells for \$337 with arm; a 6-ft. harrow section sells for \$381



Bolt-on harrow arm is designed to fit all 3-bar mounted harrows.

with arm. Contact: FARM SHOW Followup, Coombs Manufacturing, 7106 West Warehouse Avenue, Spokane, Wash. 99224 (ph 509 456-8552; fax 8559).

"One-Touch" Push Button Marker Control

This new one-touch push button marker control lets you extend or retract implement markers at the end of the field by simply pushing a button.

The "Marker Master" simply automates the hydraulics on your existing markers. It consists of a 3-button lighted control box. An amber diode lights up when the left marker is extended, and a red diode lights up when the right marker is extended. When either diode is flashing it tells you that the marker is moving in or out to that position. Green diodes indicate when the markers are retracted.

"It makes turning at the end of the field a lot easier because you already have enough to do then, especially if you're planting," says Stewart Peterson. "It eliminates the need to look back and forth to make sure your markers are working properly. It works great at night because the lighted display lets you know for sure that your markers are working properly."

The unit's manifold can be plugged directly



"Marker Master" is a 3-button lighted control box that automates the hydraulics on your existing markers.

to the tractor remote hydraulic outlets or used in parallel with the hydraulic fan motor, or hooked up to the tractor's "power beyond" port. If the markers start to sag you can set the unit to give a shot of oil every 15 seconds to 2 minutes to keep the marker working at full capacity.

Sells for \$835 (U.S.) plus S&H.

Contact: FARM SHOW Followup, Agri-Business Associates, Inc., 1740 West Main Ave., West Fargo, N. Dak. 58078 (ph 701 277-1022).

Weed Scientist Works To Identify "Mystery Weed"

A Canadian weed scientist has been working diligently to identify a "mystery weed" discovered last summer in canola fields south-east of Winnipeg.

Gary Martens of the University of Manitoba received calls about the purple weed mostly from southern Manitoba but also from as far away as Alberta. Farmers were worried that the tough-to-kill new weed might spread rapidly.

The weed has some characteristics of wild mustard and some of canola, which made identification difficult.

"By comparing chromosome counts, we've determined it's a species of wild mustard," Martens told FARM SHOW. "It has nine pair of chromosomes, which indicates it's wild mustard and not a species of canola. It also appears to be resistant to some herbicides."

Here are some of the characteristics that contributed to solving the riddle of the "mystery weed".

It has some hairs on its stem but not as many as wild mustard. It stands upright, like hairless-stemmed canola, and does not have the wide spreading branches of wild mustard.

Unlike canola, which sometimes gets a purple "suntan" on its south side, the weed is purple on both sides. With pods smaller than canola, its seeds look more like wild mustard.

The weeds appear to have come from fields

where canola is grown continuously and where farmers use the same herbicide continuously, he says.

It does not appear to be affected by common herbicides used to kill wild mustard in canola, such as DuPont's Muster.

Because of that, Martens recommends using an integrated approach to controlling the weed.

"Rely less on herbicides and more on cultural practices," he says. "For example, use a heavier seeding rate than you normally do. In the case of wheat, which you might seed at less than 2 bu. per acre normally, use approximately 3 bu. per acre in areas with adequate moisture.

"Make sure fertilizer is placed so that it feeds the crop rather than the weeds. In other words, band fertilizers at seeding whenever and wherever possible.

"Always start with clean seed and pick a variety that's competitive. Plant a taller variety rather than a semi-dwarf variety wheat, for example.

"Tank mix herbicides such as 2,4-D, MCPA or dicamba.

"If possible, collect chaff at harvest time and feed it."

Contact: FARM SHOW Followup, Gary Martens, Room 222, Agricultural Building, University of Manitoba, Winnipeg, Canada R3T 2N2 (ph 204 474-8227; fax 7528).