



Front-mount sprayer for zero-turn mowers comes with a 100-in. boom and a spray wand. A foot-operated switch is used to turn sprayer on or off.

Front-Mount Sprayer Fits Zero-Turn Riding Mowers

You can convert your zero-turn riding mower into a self-propelled mini spray rig, complete with a 100-in. boom and spray wand with 8 ft. of hose. Tide Industries' new front-mounted sprayer has a compact boom fold design that allows you to leave the sprayer on the mower while cutting grass.

The sprayer is designed for various models of Deere, Kubota, Cub Cadet, and Toro zero-turn mowers. The sprayer comes fully assembled and pressure-tested and quickly bolts onto the mower frame. It comes with a 25-gal. tank and a 12-volt pump that operates off the mower's battery. A foot-operated switch is used to turn the sprayer on or off, allowing you to keep both hands on the mower's control arms at all times.

"It works better than a rear-mount boom because you don't get a sore neck from having to turn around all the time," says co-inventor Nolan Tide. "It also works better than a tow-behind sprayer because you can turn on a dime, which is the purpose of a zero-turn mower. It uses air induction nozzles which produce large droplets that confine the spray to keep it from drifting. We design and build frames specific to your mower brand and model."

A marker system is available for reducing overspray and underspray. It includes a can



Marker system makes use of a can of water-based marking paint. System is turned on or off by a foot-operated switch.

of water-based marking paint and a separate foot-operated switch to turn it on or off.

The spray tank and boom sell for \$989 including S&H in the U.S.; \$1,089 including S&H in Canada. The marking system sells for \$98 in the U.S.; \$139 in Canada.

Contact: FARM SHOW Followup, Tide Industries, P.O. Box 549, Estevan, Sask. Canada S4A 2A5 (ph 306 634-1257 or 306 421-2565; nolantide@outlook.com; www.tideindustries.com).



"Lump Buster" uses an 18-in. long steel blade to break up chunks of grain before they reach bin's auger.

"Lump Buster" Keeps Grain Moving

"It breaks up chunks of grain before they reach the auger," says the inventor of a new "lump-buster" for grain bins that stands over the unloading auger sump.

Donald Perrion, Ipswich, S. Dak., says he invented the lump-buster to solve his own problems with plugged augers in big bins. Now he is solving other people's problems as well.

The unit consists of an 18-in. long, 2-in. wide by 1/4-in. thick steel blade bolted to a round steel plate that's attached to an orbit motor. The blade and motor mount inside a heavy-duty steel frame that stands on legs 24

in. above the auger sump.

Hydraulic hoses lie on the floor of the bin and run to a fitting on the bin side. When grain flow slows or a plug occurs, the operator connects the exterior hoses to tractor hydraulics.

"It eliminates the need to climb into the grain bin to break up plug-ups. It keeps grain flowing freely," says Perrion. "Over the years I've made several for others in my area."

Contact: FARM SHOW Followup, Donald Perrion, P.O. Box 457, Ipswich, S. Dak. 57451 (ph 605 426-6276 or 605 216-5763).



Backhoe-mounted mower can reach out up to 25 ft., allowing Lyle to safely mow grass and weeds in hard-to-reach areas around ponds and creek banks.

Backhoe-Mounted Mower Trims Steep Creek Banks

"My father Marvin Lyle, Pendergrass, Georgia, recently mounted an old Swisher 44-in. pull-type ATV mower on his backhoe. He uses it to mow grass and weeds in hard-to-reach areas around our ponds and creek banks. It's safe to use and has a lot of advantages over a tractor and bush hog," says Robert Lyle.

Marvin removed the wheels and axle from the electric-start mower, then used 2-in. steel tubing to weld together a U-shaped frame that bolts onto both sides of the mower and through holes drilled into the sides of the backhoe's bucket.

"My dad came up with the idea because our cattle farm has creeks running through it where we constantly have to clear grass and weeds from the banks," says Robert. "We had tried using a tractor and bush hog, but backing the mower up to the bank wasn't very safe.

Also, we still had to use a weedeater to cut weeds hanging down over the bank.

"The backhoe-mounted mower saves all that work. The backhoe can reach out up to 25 ft., so the operator can park the backhoe a safe distance away and still cut grass right up to the edge of the bank. By tilting the backhoe he can closely follow the bank contour. To use the backhoe to dig, he just unbolts the mower."

The holes drilled into the bucket provide an added bonus, says Robert. "We sometimes use the backhoe in ponds and creeks to dredge out sand to keep it from plugging a drainage pipe. The holes allow the water to drain out of the bucket."

Contact: FARM SHOW Followup, Robert Lyle, 876 Nichols Road, Pendergrass, Ga. 30567 (ph 706 870-0157; ralyle@windstream.net).

New Clutch Facing Triples Wear Life

Kevlar clutch facing increases clutch wear life by 3 to 4 times, according to the manufacturer, Protec Friction Group. Not only does it outlast conventional facing, it reduces wear to the flywheel. According to Roy Landesberg at ProTec, it actually polishes the flywheel instead of wearing, grooving or scoring it.

"Our Kevlar facing is specially treated to create a compact surface structure that spreads heat more evenly across the lining surface," says Landesberg. "The entire surface runs cooler with fewer hot spots. This contributes to the increase in durability of both the facing and the mating member or flywheel."

Other advantages claimed for the new facing include high friction levels, low dust, quiet operation and the ability to withstand high pressure. It eliminates the need for backing plates.

ProTec direct-markets the product to individuals and mechanics who are comfortable installing clutch facing. The new facing is also available on clutch kits through retailers like KY Clutch and Performance.

"Owner Chris Harmon tells us the upcharge for a single clutch kit with our Optimum Kevlar is \$100, and a 2-plate clutch kit upcharge is \$200," says Landesberg.

He notes that getting clutch replacement providers to consider the new material has been difficult. One problem is the sheer number of different clutches out there.



Kevlar clutch facing is specially treated to spread heat more evenly across the lining surface.

"The other problem is that unlike Kentucky Clutch, many companies selling replacement clutches are 'allergic' to parts that last too long," says Landesberg. "It kills the flywheel repair and replacement business."

Individuals wanting to install their own Kevlar clutch facing can contact ProTec Friction Group directly. "Give us the make and model, and we can sell you the facing," says Landesberg. "Simply clean up the clutch and rivet the facing in place. If you prefer, KY Clutch and Performance sells the complete kit with a clutch disc lined on both sides with a cover assembly."

Contact: FARM SHOW Followup, ProTec Friction Group, 45 Kensico Dr., Mt. Kisco, N.Y. 10549 (ph 914 244-3600; Answers@ProTecFriction.com; www.protecfriiction.com); or KY Clutch and Performance, 250 Gun Club Rd., Brooks, Ky. 40109 (ph 502 955-9173; www.kyclutch.com; www.tractorclutches.com).