TAKES ONE PERSON 20 MIN. TO REBUILD A 5-FT. HARROW SECTION

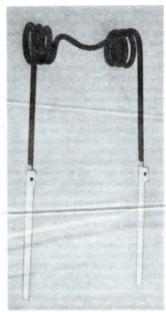
Bolt-On Harrow Replacement Tips

"It's easy, quick and a lot less money that buying new harrow sections or weld-on replacement tips," says Garth Delyen, inventor and manufacturer of new replacement tips for harrows that simply slip over the worn tines and fasten down with a set screw.

Delyen says you don't have to remove the tines from the harrow bar or cultivator and all you need for installation is a set screwwrench. "One man can rebuild a 5-ft., 3-bar harrow section in 20 min. or less," he says. "You can buy weld-on tips but they're a lot more work and you have to measure to get them the right length. With my tines you just slip them on as far as they go and tighten them down."

At\$1.85 apiece (Canadian), it costs\$3.70 to rebuild the teeth on a 2-tine section. "New ones cost anywhere from \$4.25 to \$7.00 and they're more work to install than these replacement tips," claims Delyen, noting that there is about a 1% loss of his screw-on replacements due to vibration in the field.

For more information, contact: FARM SHOW Followup, Garth Delyen, Prairie-View Farm Equipment Ltd., Junction 2 & 13, Assiniboia, Sask. Canada (ph 306 642-5148 or 642-3889).



Replacement tips slip over worn tines and fasten down with set screws.

=0000

To build their pull-type tank spreader, Earl and Daryl Martin used the tank that mounts in their dump truck spreader (see photo below).

HUGE 5,000 GAL. CAPACITY

2-In-1 Spreader Mounts On Dump Truck, Trailer

When Earl and Daryl Martin needed an over-the-road truck spreader to carry manure to distant farms, they decided to make use of a tri-axle dump truck they already owned.

The Ephrata, Penn., farmers bought a 24ft. long, 5,000-gal. tanker fitted with inside baffles. They equipped the tank with a 24in, spreader fan, an 8-in, gate valve, and a 24-in. top fill lid. Rails attach to the bottom of the tank so it sits upright on the floor of the dump truck. They put two 2-way hydraulic valves on the truck, one for the truck hoist and one for operation of the tank. Oil is pumped to three electric solenoids on the tank, activated by toggle switches in the cab, to control the fan, lid and outlet valve. Since there's no vacuum pressure in the tank, the operator just raises the bed a couple feet for fast clean-out when the tank's 2/3's empty. The tank is held in place by three chains wrapped over the top of the tank and chained to the inside of the bed. The Martins also weld 1-in. lengths of 1-in. sq. rod to the bed of the truck on either side of the tank to keep it from sliding sideways.

"Two years ago our pull-type tank spreader, which we used around the farm, wore out and we wanted to replace it with a large tank spreader. Since we already had this manure tank on our truck spreader, we decided to make a pull-type chassis for it so we could use it both ways," says Daryl.

They needed a strong chassis since, when full, the spreader weighs 20 tons. "We mounted a 5th wheel on a pair of truck axles and then bought an old dump trailer, minus the bed, and hooked it up to the 5th wheel 'dolly'. We then took the 5,000 gal. spreader tank off our dump truck and mounted it on the new chassis. We've got a chain hoist in our shop that lets us make the switch from truck-mounted to pull-type in about 15 min. using three hydraulic connections and four



Liquid manure tank mounts in bed of triaxle dump truck, held in place by chains

spring-loaded pins.

"We pull the spreader with a Decre 4450 or 4840, hooking the tractor hydraulics up to the tank. We modified the air brakes on the trailer chassis, installing two hydraulic cylinders for each axle. They work so well we don't even use the brakes on the tractor. After we started using the rig we realized it could get tipsy on hills because it's 12 ft. tall and pivots on the 5th wheel, so we welded 4-in. spacers to the outside wheels so we could mount a third wheel on each, making a total of 24 wheels altogether.

"The big spreader floats over wet and rough terrain like a Cadillac on the highway. About the only problem we've had has been some breakage on the frame where it hooks up to the 5th wheel, but we finally got it strong enough.

"The 2-in-1 spreader lets us handle all our manure spreading chores, both close in and far away. We wouldn't do anything different if we built another one," says Daryl.

Contact: FARM SHOW Followup, Earl and Daryl Martin, 626 Millway Rd., Lititz, Penn. 17543 (ph 717 733-4516).

LETS YOU SWITCH FILTERS IN SECONDS

Screw-On Filter Kit For Deere Combines

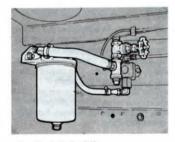
Changing fuel filters on a Deere combine takes only a few seconds with a new screwon filter kit from Air Design.

on filter kit from Air Design.

The add-on kit includes a fuel filter, mounting base, on-off valve, hoses, brass fittings, and hose clamps.

"The problem with the filter on Deere combines is that it plugs up. This filter replaces the fuel sediment bowl and tank screen and allows easy clean-out without draining the tank. It uses the same filter used on Deere 4020 and 5020 tractors. Deere has put a similar style filter on their latest new combine," says a company representative.

The kit is designed to fit 66, 77 and 88 series combines and takes about a half hour



to install. Sells for \$69.

For more information, contact: FARM SHOW Followup, Air Design, Box 248, Scobey, Mont. 59263 (ph 800 433-9655 or 406 487-2238).

POWERED BY A GARAGE DOOR OPENER

New "Robot" Gate Opener

"It bolts on any swinging gate and works great on rough or uneven terrain," says Gene Asay, manufacturer of a new "robot wheel" gate opener that uses a standard electric-powered garage door opener as its power source.

The remote-controlled opener consists of a waterproof metal box that houses the electric opener, and a chain-driven rubber wheel. The unit simply bolts into place and is connected up to 110-volt AC power. Asay says you can run a wire from up to 300 ft. away without using any kind of power

booster. It'll handle gates from 15 up to 450 lbs. When the unit is shut off the wheel locks into position.

You can buy the gate opener for \$129 and equip it with your own garage door opener (any chain-drive unit will work) or it's available for \$347 with a 1/2-hp. heavy duty opener already inside along with two remotes and a wall control unit for the house.

For more information, contact: FARM SHOW Followup, AC Automatic Gate Openers, Rt. 5, Box 236E, Ennis, Tex. 75119 (ph 214 666-2187).



Robot opener mounts on any swinging gate. When you shut it off it locks the gate.