

ADJUSTS TO ANY PIT DEPTH

Multi-Level Manure Pump

New "multi-level" manure pump removes manure from pits of varying depths, says John Spanjer, Tavistock, Ontario.

The rig's hydraulically adjustable frame and extended 4 1/2 ft. long driveline lets you set the pump at pit depths ranging from 8 to 12 1/2 ft. "Other manure pumps are designed to work at only one pit depth, and have short 1 ft. drivelines," says Spanjer. "This adjustable rig lets farmers use one manure pump on any pit. It's especially useful to farmers who, over the years, have made their pits deeper or acquired other farms with manure pits of different depths."

The manure pump is equipped with two hydraulic cylinders. One cylinder, attached to the trailer frame, regulates driveline depth. Another cylinder lines up the extended driveline and holds the pump upright.

Cost ranges from \$5,750 to \$6,400



One cylinder regulates driveline depth and another lines up the extended driveline and holds the pump upright.

(Canadian) depending on size.

For more information, contact: J. Spanjer Manure Equipment, Tavistock, Ontario, Canada NOB 2R0 (ph 519 655-2678).

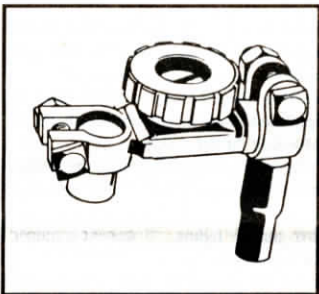
STOPS THIEVES

Shut-Down Battery Switch

You'll like this "shut-down" battery switch that eliminates battery drain in idled equipment and makes it more difficult for thieves to steal vehicles and equipment.

The new battery master switch replaces the terminal on the negative battery post. A screw-down knob between the battery cable and post must be tightened down to complete the electrical circuit. When the knob is screwed out, the circuit is broken and the battery is disconnected. A thief will not be able to start the machine unless he puts a new terminal on the battery cable. And if there's a short anywhere on an idled machine it won't drain current from the battery.

The shut-down switch sells for \$12.95. Add \$1 for special adapter post for batteries



with side-mounted terminals.

For more information, contact: FARM SHOW Followup, Bathurst Inc., Box 27, Tyrone, Penn. 16686 (ph 814 684-2603).

THEY GIVE DRIVER DIRECT VIEW OF REAR TRAFFIC

"See Through" Windows For Large Grain Carts

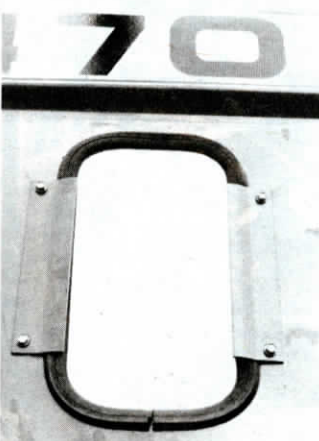
Equipping your grain cart with new "see through" glass windows front and rear will make it easier for the tractor driver to monitor rear traffic when going down the road empty.

"We had so many farmers ask for these windows we decided to make them available as a kit," says Dan Fanger, sales manager for Unverferth Mfg., Kalida, Ohio.

Designed for do-it-yourself installation, the kit comes with templates to show how and where to cut the window openings. The front window is 7 1/4 in. wide and 15 3/4 in. long. The smaller rear window (7 1/4 in. wide and 12 3/4 in. long) is positioned slightly lower than the front window. Both windows come with rubber gaskets to provide a water-tight seal.

The kit sells for \$59.

For more information, contact: Unverferth Mfg., Dan Fanger, sales manager, Kalida, Ohio 45853 (ph 419 532-3121).



Rear window is reinforced with gussets to withstand pressure of grain.

MAINTAINS A CONSTANT WORKING DEPTH INDEPENDENT OF CULTIVATOR DEPTH

Ground-Driven Rod Weeder

A new ground-driven rod weeder from Haukaas Mfg., Mortlach, Sask., offers "near perfect" depth control when used with a cultivator or air seeder, according to company officials.

The new rod weeder is built in sections ranging from 6 ft. to 11 ft., 6 in. wide which bolt to the rear frame of your cultivator or air seeder. Each section consists of a framework supported by, depending on section length, one or two 20 by 8.00 drive wheels. The wheels drive an enclosed chain that turns the 1 1/4-in. dia. rod. A reverser gear, located inside the chain's sprocket housing, causes the rod to rotate in the opposite direction of the drive wheel. A 3/4-in. bolt on the drive wheel controls rod depth.

A ground-driven rod weeder offers several advantages over a "dead", or non-powered, rod. Precise depth control is the biggest benefit, says Greg Haukaas, who along with father Duane designed the unit. "You can preset this rod weeder at a constant working depth independent of your cultivator. For example, by setting the rod at a shallow depth, you can uproot shallow-rooted, hard-to-kill weeds resulting in nearly 100% control. A 'dead' rod without depth control might slide underneath weeds. A driven rod also penetrates better and works in heavier trash than a non-driven rod. As you lower the cultivator, the drive wheel begins to rotate the rod before it comes into contact with the soil. The constant turning motion actually pulls the ground over the rod for better soil penetration even in standing stubble and heavy trash. It also keeps the rod clean, eliminates soil buildup, and makes the rod easier to pull."

In addition, Haukaas says the ground-driven rod weeder works great with air seeders. "It levels and packs seed without disturbing it and keeps it from drying out. In some cases, the rod replaces the need for packers because it packs soil above the seed. And, because of the rod's leveling



Support wheels drive an enclosed chain that turns the rod. A reverser gear can be used to turn the rod in the opposite direction of the wheels.

The ground-driven rod is positioned further behind field cultivator shanks than a non-driven rod, giving dirt and straw time to "settle down" before the rod weeder passes through. "Conventional non-driven rod weeders connect to shanks and are positioned 4 to 5 in. behind them. The rod's resistance affects shank depth and sometimes even bends the shanks. This rod is bolted 43 in. behind the frame, or about 12 in. behind the shanks, so dirt and trash won't interfere."

The number of rod sections required for each implement depends on its width and folding pattern. A 40-ft. field cultivator, for example, with a 13 ft., 6 in. center section, would require two 7-ft. sections in the middle and two 6 1/2 ft. sections on each side.

According to Haukaas, the units allow normal folding and transporting. A built-in trip mechanism allows the rod to jump up and over stationary objects.

Sells for \$150 to \$175 per foot.

For more information, contact: FARM SHOW Followup, Haukaas Mfg. Ltd., Box 8, Mortlach, Sask., Canada SOH 3E0 (ph 306 355-2718).

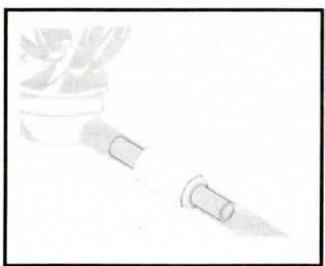
HELPS REDUCE STRESS, STRAIN ON COW'S TEATS AND UDDERS

"Swivel" Insert Prevents Twisted Milker Hoses

New for most makes of milking machines is "Milky Sway," a 6 in. long swivel insert that eliminates twisted milker hoses.

"Even a small twist in the milker hose can unbalance the milker, causing one side to overmilk to finish the other," explains Minnesota dairyman Jerry Huneke, of Zumbrot, inventor of the device. "It helps extend lactations, and reduce somatic cell counts, because of less stress and damage to the teat and sphincter valve caused by over-milking. It also eliminates the time-wasting hassle of putting on milkers with twisted hoses. It doesn't reduce the rate of milk flow through the hose," Huneke points out.

Made of a plastic type material called Delrin acetone, the Milky Sway is fully Grade A approved and is easily spliced into 5/8 dia. milker hose. Four replaceable rubber



"O" rings inside the device make it leakproof and allow it to swivel.

Sells for \$24.95.

For more information, contact: FARM SHOW Followup, Milky Sway, The Jerrine Co., 404 Main St., Zumbrot, Minn. 55992 (ph 507 732-7838).