

Clutch-operating switches mount on floor and on hand-operated gearshift levers.

Push-Button Control For Tractor Clutches

If the force required to depress the clutch pedal on your tractor is giving you knee, hip or back problems, you'll be interested in a new electric-hydraulic switch that makes clutching as simple and easy as ringing a doorbell.

Developed in Sweden, the new Trima Comfort Clutch (TCC) is an electrically operated hydraulic valve and actuator which, at the push of a switch, automatically controls operation of the clutch pedal, solving the "heavy clutch" problem.

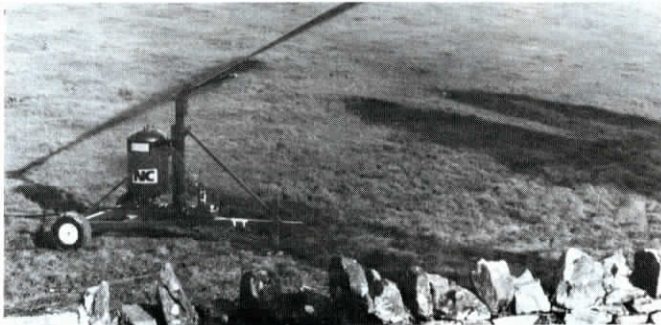
A typical tractor TCC hookup involves installation of a standard foot-operated switch on the floor, and optional hand-operated switches mounted on hand-operated levers that require clutching.

Once one of the electrical switches is depressed, the clutch pedal immediately disengages. When the switch is released, the pedal rises to the "bite" position, then at a controlled rate to full engagement. You can immediately change from push-button control to normal foot clutching for maneu-

vers requiring precise "inching movement" —hooking up to an implement or trailer, for example. When stopping for road traffic, you can use the switch rather than your foot to hold down the clutch.

A typical system retails for right at \$2,400. "Spread over 10 or 15 years, the cost is minimal, especially for tractor operators who have knee, hip or other physical problems that make normal clutching difficult if not impossible," the manufacturer points out. Just-introduced in Europe, the new TCC system is slated for marketing in the U.S. and Canada in the near future. "Meanwhile, we'd be happy to deal direct with interested FARM SHOW readers. Currently we can equip about a dozen makes of tractors, including Deere, Case-IH, Ford and Massey Ferguson."

Contact: FARM SHOW Follow-up, Trima Ltd., 33 Tatton Court, Kingsland Grange, Warrington, WA 14RR England (ph 0925 821181).



Pulse Jet Irrigator

The revolutionary Pulse Jet "stationary gun" irrigator from NC Engineering has a built-in booster tank that gives it top-notch efficiency with amazingly low horsepower.

From a given point in the field, its single rotating nozzle dispenses liquid manure or water over 2.5 acres at rates as high as 3,000 gal. per hour — with only a 1.5 or 2 hp motor pumping material to the unit through a 1 or 1.5 in. dia. pipe. Rate of application can be as low as 200 gal. per hour. "It's much cheaper to apply 1/20 in. over 10 hours than to apply 1/4 in. over 20 minutes," the manufacturer points out.

The "secret" to the new irrigator's high efficiency with low pump horsepower is the revolutionary Pulse Jet tank mounted on the irrigator that, instead of shooting a steady stream, dispenses water or liquid manure in pulses.

The pressure vessel contains a rubber bag surrounded by air. As liquid is pumped into the vessel, the bag expands, which com-

presses surrounding air. When the pressure builds to about 100 psi, a relief valve opens, allowing pressurized air to enter the diaphragm chamber and open a poppet valve. When the valve opens, air surrounding the rubber bag expands, forcing liquid out of the bag. Each time the machine pulses, it discharges about 20 gals. of liquid.

An ATV can be used to tow the machine from one setting to the next. In addition to irrigation, the Pulse Jet is being used as a water applicator to keep livestock cool and comfortable in hot weather. The original Pulse Jet remains stationary during application. It has no cables to drag out, or trailing hoses to snag during operation. Just introduced is a Pulse Jet irrigator that moves as it applies.

Contact: FARM SHOW Followup, NC Agricultural Engineering Ltd, Hamiltontsbawn, Richill, Co. Armagh, N. Ireland (ph 0762 871970).

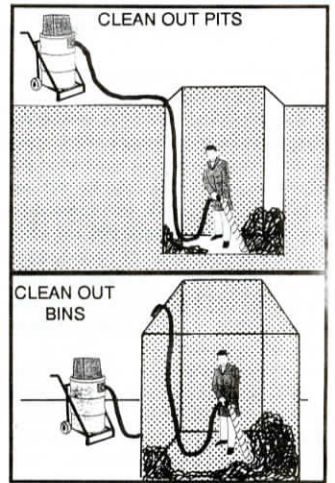
Farm-Size Vacuum Cleaner

Why can't anyone supply a farm-size vacuum cleaner with a big diameter hose to handle big lumps? A go-anywhere vacuum with some real power behind it for fast cleaning of grain bins or unloading pits? A machine with a large container which doesn't need to be emptied every five minutes and, when full, is easy to empty? A vacuum that's reasonably priced and sucks up both water and dry materials?

"You get all this and more in our new Big Brute vacuum cleaner," says Michael Williams, manufacturer. "Farmers who've seen it work tell us it's exactly what they've wanted in a farm-size vacuum cleaner. It's the first of its kind and the best-selling new model we've ever introduced."

The basic "wet and dry" Big Brute comes with 50 ft. of kink-proof 2.5 in. dia. hose (an extra 50 ft. can be added, if required). It will suck up water at the rate of 1 gallon per second, and dry material at the rate of up to 3 tons per hour. Available in a "dry material only" model, it comes with a 3 ft. long steel scraper tool for sucking materials from inaccessible areas.

The Big Brute has its own built-in wheelbarrow-style transport with 8 in. dia. wheels. It's equipped with 3 independent 1000 watt electric motors and a 50-gal. collection drum. One person working alone can easily empty the drum in a matter of seconds and



cart the machine from job to job, Williams points out. "It's especially popular for fast cleaning of grain bins, water and debris-logged grain unloading pits, and grain drills."

The basic Big Brute sells for about \$1,000 in England.

Contact: FARM SHOW Followup, Michael Williams and Son Ltd., Unit 2, Hall Farm, Little Walden, Essex, England CB10 1XA (ph 0799 524642).

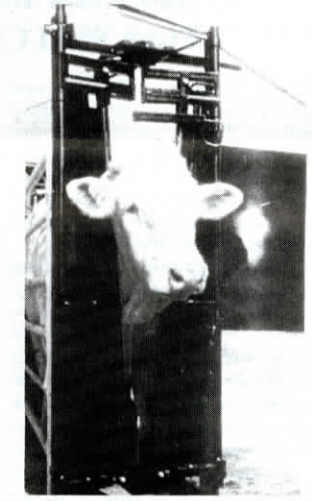
New "Automatic Catch" Headgate

New from Scotland is the Unistock headgate that automatically catches the animal and automatically resets itself when the animal is released.

Designed for one person operation, the Unistock can be used on most makes of chutes. "It's designed to eliminate the panic situation when an animal goes down with its head still held in the yoke," the manufacturer points out. "Pressure is automatically released around the animal's throat and neck, greatly reducing the risk of choking."

The new-style Unistock can handle cattle of all sizes without alteration and can be manually operated to capture problem animals, such as those with long horns, or mature bulls with necks wider than their heads.

Contact: FARM SHOW Followup, Premier Livestock Handling, Crocketford Road, Dumfries, Scotland DG28QN (ph 0556 66449).



Dust Extractor For Hay, Straw Bales

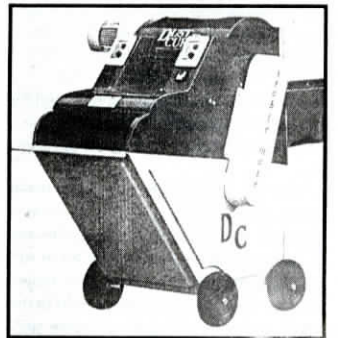
"It's a horse's best friend," says the manufacturer of Dust Cure Stablemate, a completely new technique for removing bacterial and fungal dust spores from conventional rectangular hay and straw bales.

The portable machine, powered by a single phase electric motor, takes in hay and straw, combs and vacuums it, then delivers a loose, clean material that's virtually dust free, says the manufacturer. "Our tests show hay containing 65,000 milligrams of dust was reduced to 242 milligrams after being treated with Dust Cure, a 99.6% dust-removal rate."

Hay or straw bales are processed at the rate of 2.5 to 3 min. per bale. Dust is ducted away from the machine, blown through a fine water spray and deposited at a convenient disposal point.

Dust Cure sells for approximately \$2,800 in England.

Contact: FARM SHOW Followup, New



Metford Farm, East Bower Road, N. Bridgwater, Somerset, England TA8 5HT (ph 0278 450404).