

## On-Board Combine Computer

"It's the most sophisticated combine monitoring system in the world," says John Hansen, director of marketing, for the Dronningborg combine that's fitted with the "Daniavision", which displays a variety of data on a TV-sized monitor mounted in cab.

"It has its own built-in trouble-shooting system that tells you when and where maintenance is necessary. For example, it shows you which cutterbar knives need to be oiled," says Hansen.

The system automatically regulates reel speed relative to the combine's forward speed. For example, if you increase the combine's forward speed 20% it automatically increases reel speed accordingly. It continually monitors the percent of material being returned to the threshing cylinder so you can change forward speed, sieve, fan speed, or any other setting as needed to optimize combine capacity. It monitors the number of vibrations on the straw chopper to help avoid expensive repairs. The system



also monitors fan and cylinder speed, grain loss, rpm's on each axle, and several engine functions and lets you adjust and control them right on the screen.

Contact: FARM SHOW Followup, Dronningborg Maskinfabrik A/S, P.O. Box 80, DK-8900 Randers, Denmark (ph 45 86 42 58 55).



Photo courtesy Power Farming

## High-Speed (40 Mph) Tractor

You've never seen anything like this new high-speed tractor from Britain that does everything from slow-speed subsoiling to high-speed hauling - at speeds up to 40 mph.

A revolutionary new suspension system is the key to success of the new JCB "High Mobility Vehicle" (HMV). The tractor is equipped with coil springs on the front axle and a first-of-its-kind self-leveling "hydro-pneumatic" oil-and-air spring at the rear which provides for a soft, smooth ride in the field and on the road.

In addition to providing outstanding suspension of the rear end, the hydro-pneumatic springs also make the tractor self-leveling, so it always returns to the same height whatever the weight of the implement mounted on the 3-pt. It lets you boost speeds on jobs like spraying, spreading, and mowing. Implements such as sprayers and fertilizer spreaders always stay at the same height, even though their weight drops as their tanks empty. Another benefit of the soft ride is that you can increase forward speeds in the field without being jolted so much. And the suspension system doesn't have to be locked out for heavy draft work.

To allow for high road speeds, the HMV is fitted with air-operated disc brakes on all wheels, powered by a compressor and air reservoirs under one side of the cab. The parking brake is air-operated, too, from a small lever on the left hand side of the steering wheel. Legally, the tractor can haul a 14-ton trailer at 40 mph, but the trailer

must also be fitted with air brakes. The HMV's conventional draft-work tires are rated at speeds up to 30 mph on the road, but for full-speed work you need to install a set of road tires. Michelin tire company is said to be working on a dual-purpose tire that can do both jobs.

The tractor is powered by a Perkins 4-cylinder diesel engine available as either naturally aspirated (125 hp) or turbocharged (145 hp). The transmission has 18 forward speeds and 6 reverse. The tractor has four equal-sized tires and is equipped with front wheel drive. A front hitch and pto is available. A platform behind the cab has a capacity of up to 2 1/2 tons and is used for carrying bales, tools, seed, and fertilizer. The cab is fitted with two seats side by side.

Several European countries are reportedly considering highway speed limits for tractors due to introduction of the new speedy work horse. And other tractor manufacturers have reportedly approached JCB to license its new suspension system for their own machines.

According to the company, there are no plans to introduce the tractor to the North American market at this time.

For more information, contact: FARM SHOW Followup, JCB Inc., 10939 Philadelphia Road, P.O. Box 209, White Marsh, Md. 21162 (ph 301 335-2800).

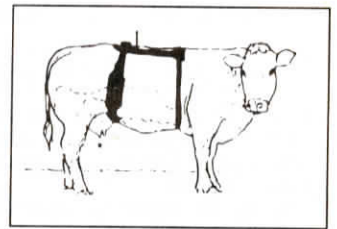
## Alarm Signals When Cow Ready To Calf

This first-of-its-kind alarm detects muscular contractions by cow just before birth. It straps onto its back with a rubber belt.

The "Agrimonitor" detects and analyses muscular activity not visible even to the experienced eye. It first warns you that labor has commenced before there's any apparent sign, then warns you as calving begins.

The alarm works by comparing the muscular activity before and during birth to muscular activity when the animal is at rest. The unit automatically adjusts to each animal it's used on. It takes one to two hours after it's strapped onto each new animal for it to get an average reading of the cows normal "at rest" level of muscular activity.

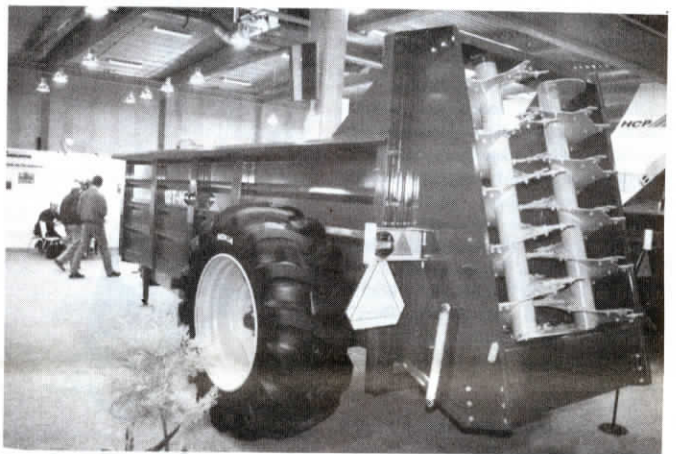
"It causes no discomfort to the animal. The unit is completely waterproof and shock-proof. Will transmit the alarm up to 2,500 ft. away to the receiving unit," says manufacturer Morag Watt, of Agrimonitor UK. The monitors have a self-maintenance fea-



ture that constantly checks condition of batteries, position of belt on cow, and other function. If there is a problem, a warning will be sounded.

The monitor and remote receiving unit sell for about \$1,500. A receiver that can handle up to 8 cow monitors at once is also available.

Contact: FARM SHOW Followup, Agrimonitor UK, Swordale Farm, Bonar Bridge, Sutherland IV24 3AP England (ph 08632-308).



## Spreader Handles Solid, Liquid Manure

New-style spreader is designed to handle either solid or liquid manure, spreading both in precisely controlled thin layers up to 20 ft. wide.

The Samson 12T-HM spreader is equipped with a pair of large vertical rear-mounted spreading beaters driven by tractor pto. A standard apron chain drags manure back to the big beaters.

To haul liquid manure, two doors clamp over the spreading drums, sealing up the

rear of the spreader, and a hydraulic slurry gate mounts ahead of the beaters. Two spinner discs mount below the rear beaters. Manure runs out onto the discs and is spread evenly across the field.

Rate of spread is easily adjusted in either solid or liquid configuration.

Contact: FARM SHOW Followup, Maskinfabriken Samson, Tange A/S, Bjerringbrovej 10, DK-8850 Bjerringbro, Denmark (ph 45 86 65 85 33).

## Powered Tooth Grinder, Tail Clipper For Pigs

"It's much safer and less painful than using clippers," says Svend Aage Jensen, manufacturer of a new grinder that uses a high-speed rotating diamond stone to gently and safely grind needle teeth on newborn suckling pigs without damaging gum tissue.

The battery-powered Pigmatic 110 tooth grinder has a high-speed, diamond-coated, round grinding head enclosed inside a slotted cylinder. You simply slip it over both of the pig's needle teeth and press gently.

"It's less painful to the pig than clippers and eliminates problems with damaged gums and broken teeth," says Jensen.

A fully charged battery provides about 45 minutes of operating time which is enough for about 100 pigs. The grindstone is replaceable. Sells for \$400.

Dumatic also introduced a new-style heated-knife tail clipper for docking tails. The Pigmatic 120 both cuts and cauterizes



the tail, resulting in a clean cut without bleeding. Reduces the risk of tail biting and infection. The knife on instrument is heated to about 670 degrees by a cigarette-lighter butane-gas canister. Each refill provides 90 minutes of tail clipping. Sells for \$200.

Contact: FARM SHOW Followup, Svend Aage Jensen, Director, Dumatic Ltd., 15 Selma Lagerlofsalle, DK-2860 Soborg, Denmark (ph 45 31 67 15 27; fax 45 31 67 15 27).