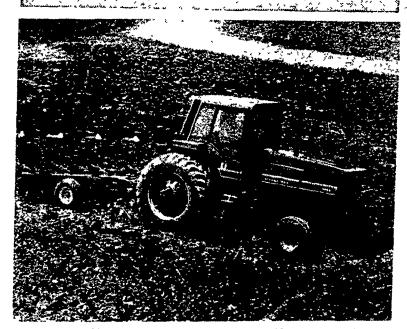
IH unveils new 2W-drive tractor line

Farm Business News



The new IH 5088 tractor delivers 135 PTO hp. through the power of its 6-cylinder, 436 cu. in. diesel engine. It is equipped with the advanced design IH power train and revolutionary new fully synchronized transmission for smooth, easy shifting into a wide range of working speeds.

CHICAGO, IL. — International Harvester has introduced a totally new line of advanced design twowheel drive tractors from 90 to 185 PTO hp. offering farmers increased productivity, fuel efficiency, and operating ease and comfort.

Improved transmissions for easier shifting and improved fuel efficiency, an exclusive forward air flow cooling system, sophisticated electronics, comfortable new control centers, and other features for added operator convenience and comfort are among the major advancements in these new IH tractors.

Under development for nearly seven years, the new 50 Series models include the 185 hp. 5488, 160 hp. 5288, and 135 hp. 5088. The 30 Series tractors include the 110 hp. 3688 and the 3288 at 90 hp.

The new models represent an IH investment of more than \$200 million, the largest engineering and capital outlay the 150-year-old company has ever devoted to an advanced line of new products. The bulk of capital investments was allocated to the Farmall Plant in Rock Island, Ill. where the five models are built and to the Louisville, Ky. plant, which supplies major component parts.

A significant portion of the \$200 million went into developing the microprocessor controlled, monitored and safeguarded transmission in the 50 Series tractors. The whole drive train of these three models is new from the flywheel to the rear axle, and the complete drive train is backed by a three-year or 2,500 hour warranty.
50 SERIES

Power Train

The sophisticated new transmission of the 50 Series is a fully synchronized, constant mesh transmission for smooth, easy shifting and fuel efficiency. It has 18 forward speeds and six in reverse. The brain of the transmission is a microprocessor that monitors, controls and safeguards the transmission, allowing smooth shifts and ensuring that one clutch pack is released before another engages.

The transmission has three synchronized forward ranges (high/medium/low) and a reverse gear. The speed transmission is a combination synchromesh and power shift unit with six sequential speeds in each range. These six speeds are spaced at nearly equal

17 percent intervals providing 18 forward speeds up to 18.4 mph. This closely spaced, uniform sequence of speeds gives the operator a near-optimum speed for virtually all operations.

The operator can power shift up or down between 1st and 2nd, 3rd and 4th, and 5th and 6th. All other shifts are fully synchronized for shift on the go ease and convenience.

The entire power train is a modular design packaging the speed transmission, range transmission and final drives in a strong, utilized, bolted-together design for longer life and easier serviceability. A differential lock that prevents one-wheel spin-outs to keep the tractor moving through soft and muddy fields is standard equipment. IH's new mid-mounted wet master clutch, which requires less than 15 lb. pedal effort, is mounted between the range and speed transmissions to allow the operator to make the smoothest possible shifts.

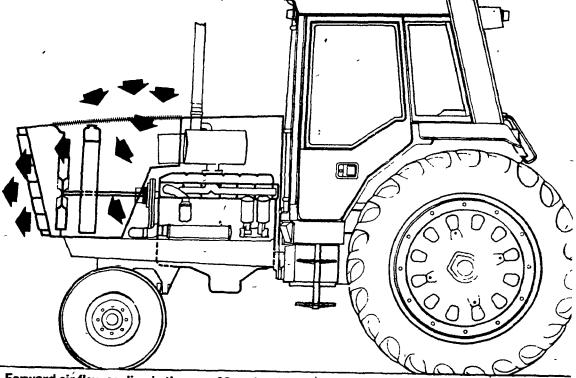
Forward Air Flow

A new IH exclusive is forward air flow cooling in both the 50 and 30 Series that blows dusty air away from the front of the tractor for improved operator comfort and visibility, as well as improved sound control. With this system, cooling air is pulled in through a top grille across the radiator and is expelled through the front grille across louvers that direct it downward and outward from the tractor and operator. This air flow pattern also results in minimum chaff buildup and dust agitation. **Engines**

Each of the three 50 Series tractors is powered by a fieldproven, high torque rise, turbocharged six-cylinder IH diesel engine. The 185 hp. 5488 and 160 hp. 5288 are powered by a 466 cu. in. engine, the largest six-cylinder engine IH has ever used in a twowheel drive farm tractor. In the 5488 the engine also is intercooled. the first time IH has incorporated this in two-wheel drive tractors. The 5088 is powered by a 436 cu. in. IH diesel with the same bore as the larger engine, but with a slightly shorter stroke. All three engines are of wet sleeve design with balanced pressure pistons for long life and better oil control, and have fully counterbalanced, forged steel crankshafts.

Hydraulic System All three 50 Series tractors have

IH's exclusive Power Priority



Forward air flow cooling in the new 88 series two-wheel drive IH tractors is designed to improve performance and reliability. Cooling air is pulled through the top grille and

dispersed out the front grille for more uniform cooling and less susceptibility to wind direction. Heat and dust are blown away from the operator.

hydraulic system that provides flow only on demand, so it does not impose a constant power drain on the engine. A variable displacment piston pump senses load demand and automatically delivers only the flow and pressure required. The system also incorporates a motor priority valve that monitors power and always give priority to the first auxiliary valve. This feature is especially important when using equipment with a hydraulic motor requiring a constant operating speed, such as IH's Cyclo Air planter.

The hydraulic system has three pumps. One is for the Power Priority system, delivering 25 gpm to the hitch and remote cylinders upon demand. Another 12 gpm pump serves hydraulic functions such as steering, brakes, seat adjustment, master clutch and PTO actuation and the transmission oil cooler. The third pump puts out 30 gpm for power train lubrication and for keeping the Power Priority system fully charged. All valves for rear outlets have flow controls located inside the control center within easy reach in the operator's right hand console. All controls levers and hydraulic outlets are color-coded to make hook-up and adjustments easier.

The 50 Series offers farmers choice of a regular three-point hitch or a new claw hitch, whichever fits their operation best. The new claw hitch permits the farmer easier hook-ups on uneven ground, of if he is working alone. The claw hitch has the ball mounted to the implement instead of using the ball in an arm assembly. The claw hooks are placed under the ball on the implement and as the hitch is raised, the ball slides into place. Once seated, a clasp automatically fastens over the top to complete the hook-up. Both hitches feature lower link sensing and a cam sway limiter for better control of mounted and semi-mounted implements. **Control Center**

The control center on these three tractors are designed for comfort and excellent visibility. Right and left side doors also provide easy and convenient entry and exit. All controls for shifting, hitching, hydraulics and power take-off are conveniently located in a seatside console at the operators' right hand, leaving the left hand free for steering. An IH exclusive electronic data center provides digital readouts of engine RPM, travel speed, exhaust gas temperature and PTO speed. A computer sensor

warning light monitors tran- device switches to a fail-safe smission hydraulic pressure. If a fault should occur, an instrument panel light is activated and the

operation, automatically shutting down the clutch packs.

(Turn to Page B3)

BioGuard lists new udder wash

DECATUR, Ga. - Bio-Lab, Inc., chemical specialties manufacturer, introduces 'BioGuard Blue Udder Wash." The especially formulated udder wash is an effective dairy sanitation chemical utilizing the superior sanitizing action of quaternary ammonium compounds.

"BioGuard Blue Udder Wash" is a liquid, instantly and easily dilutable with water. At the ratio of one ounce wash to four gallons of water, the user gets 200 ppm of quaternary sanitizer, according to

the developers. The blue color provides product visibility in automatic dispensers.

Alkalinity is added to provide a mild pH - complementing the 'quat'' action and is gentle to the milker's hands. Addition to chelating agents makes the product effective in hard water. It is freeze-thaw stable and compatible with both quaternary ammonium compound and idophor based teat dips.

For more information, contact Mr. Don Miller, "AG" Products Market Manager, Bio-Lab, Inc., P.O. Box 1489, Decatur, GA 30031.

Chore-Time designs small confinement fan

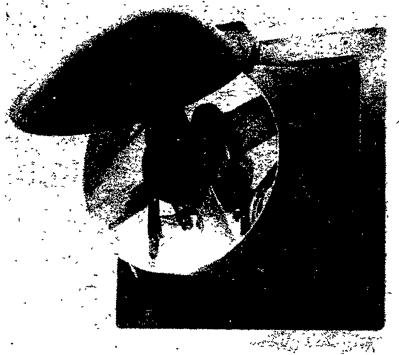
LEOLA - Named for the tough, corrosion-proof material it is made from, Chore-Time's new 14RLX Fan is ideal for use in smaller confinement areas, like farrowing and nursery chambers for hogs and smaller veal calf barns.

The variable speed fan features a 150 to 1,660 cubic feet per minute (CFM) range, both measured at inches static pressure. The

14RLX holds its operating efficiency as its CFM is reduced.

The Chore-Time 14 RLX fan housing is made of a durable material that will not corrode or splinter. The fan blade is die-cast aluminum, and the motor mounts are stainless steel for corrosion resistance.

It's marketed locally by Agri-Equipment, Inc., 2754 Creek Hill Road, Leola, Pa.



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