Deere's new 9400 series 4-WD tractors are powered by Deere designed and built PowerTech diesels.

The new MaxEmerge planter features more than a dozen new improvements, including the ability to stagger closing wheels for better trash clearance.

FIRST MAJOR MANUFACTURER TO OFFER ROW-CROP TRACTORS WITH CHOICE OF TRACKS OR TIRES

By Harold Johnson, Publisher Emeritus

Deere Launches "Biggest Ever" New Product Introduction

Your local Deere dealer can hardly wait to tell you about the company's "biggest ever" new-product introduction previewed last month in Albuquerque, New Mexico, by Deere's 1,700 ag equipment dealers throughout North America.

Leading the lineup of latest new additions to the long green line are four new 9000 Series 4-WD tractors, offering more power, comfort and convenience than the 70 Series models they replace. Powered by Deere-designed and built PowerTech diesel engines, Model 9100 is rated at 260 hp, the 9200 at 310, the 9300 at 360, and the 9400 at 425 hp.

Here, according to Deere engineers, are key features of the powerful new 4-wheelers: They're "tailor made" for narrow rows, thanks to a tight turn angle (42 degrees), good crop visibility front and rear, and the ability to set wheel treads to match your row spacings.

The new engines comply with all 1996 EPA and CARB emission regulations, and provide up to 8% better fuel economy than previous models. The 8.1-liter PowerTech engine, introduced in the Deere 8400 tractor in 1994, powers the Model 9100.

Two new PowerTechs provide power for the other 9000's. Model 9200 is equipped with a 10.5-liter engine, and the 9300 and 9400 with a 12.5-liter engine. Both use 23% fewer parts than Deere's previous 10.1-liter engine, yet can develop substantially more power with less fuel. Both feature electronically controlled unit injectors, a high-capacity turbocharger, and a cam-in-head design which eliminates push rods and lifters.

The air-to-air after-cooled engines feature a 35% torque rise for extra lugging to pull through tough spots without downshifting. They also produce additional horsepower — called a power bulge — over a wide rpm range with up to a 7% peak at 1,900 rpm's. This means that the 425 hp Model 9400 will deliver nearly 30 additional horsepower when the engine lugs down to 1,900 rpm's. The engines also provide up to 135% of rated-speed torque to as low as 900 rpm's for starting a load with the implement in the ground, or accelerating under load from a reduced throttle setting.

A 12-speed Syncro transmission is standard, and a 24 speed PowerSync optional, on all four 9000 Series tractors. A 12 speed Power Shift transmission is optional on all models except 9100.

The 9000 series tractors feature the same CommandView cab used on 8000 Series tractors. It's equipped with a CommandARM armrest control module which puts controls for the hitch, hydraulics, throttle, and transmission at the operator's fingertips.

New halogen infrared headlamps cast light up to 35% farther than regular halogens. An electronic decelerator enables the operator to decrease speed by as much as 30% with a foot-activated switch. Field Cruise allows the operator to maintain consistent ground speed in light load operations, such as cultivating and spraying, with the turn of a knob. Options include electro-hydraulic 3-pt. hitch, independent pto, and electro-hydraulic differential lock which can be engaged on-the-go for increased performance in soft conditions or on hillsides.

Exclusive inboard planetary final drives provide strength and durability and, unlike outboard planetaries, make it easy to use recommended cast weights on the wheels. Wet-disk power brakes on all models are self-adjusting and self-equalizing. Axles (120 in.) have a machined rack which, in conjunction with a special pinion attachment, permits a wide variety of tread adjustments, including a true 60-in. setting for 30-in. rows. The tractors can be fueled from either side, and all daily engine service can be done from the left side of the tractor without raising the hood.

Shipments of the new 9000 Series tractors are slated to begin in late September.

Rubber Tracked Row Crop Tractors: Deere becomes the first major tractor manufacturer to offer a choice of either tires or tracks for the 160 to 225 hp row-crop tractor market. Four track models, all based on Deere's 8000 series, are in production: 8100T(160 hp); 8200T(180 hp); 8300 T(200 hp); and the 8400T (225 hp).

The new tracked models (identified by the letter "T") are essentially the same tractor as their conventional tire-equipped 8000 Series counterpart - except for a new and different power train from the rear of the transmission through the final drives on tracked models. "This prohibits interchanging tires and tracks so farmers will need to carefully consider which configuration is best for their conditions," says Terry Mosier, marketing manager. "Both tires and tracks have their respective advantages and limitations in a given set of conditions."

Like the 8000 Series, all 8000T Series tracked tractors use 8.1-liter engines with electronically controlled governors for fuel-efficient, high-torque performance and up to 10% additional power (power bulge) within a wide rpm range. Deere's exclusive Field Cruise control maintains a constant field speed in light-load operations, such as cultivating and spraying.

The Deere designed friction drive track system features a 60.6-in. rear drive wheel, 27.6-in. front idler, and three mid-rollers on each side. The design puts 89 in. of track per side on the ground. Deere's standard 16-in. rubber track, made by Goodyear, provides 19.8 sq. ft. of total ground-contact area. Options include a 24-in. wide track with 29.7 sq. ft. of contact area. A hydraulic cylinder mounted on each track frame provides track tension. Track alignment can be adjusted by two capscrews on each track frame.

An electronic control senses travel speed and adjusts steering response accordingly for smooth steering performance regardless of ground speed. The system prevents track movement if the steering wheel is turned with the transmission in park.

Deere plans to begin shipping tracked 8000T tractors to dealers in June, 1997.

New "MaxEmerge Plus" Planter: The next generation of MaxEmerge planting technology - MaxEmerge Plus - is ready to take to the field. The new row unit features more than a dozen new improvements.

A new welded mounting bracket helps the mounting U-bolts stay torqued to maintain row-unit position on the frame. For tough no-till and minimum tillage conditions, a new pneumatic down-force system is infinitely adjustable to 400 lbs. It's available as an attachment for field conversion on all planter models, and factory installed on new 1780 front-fold planters.

New row-unit shanks, said to be four times stronger than those used previously, are reinforced with a welded spline to minimize side deflection on rolling ground and tough soils. A new centering tab holds the seed tube in place for improved seed spacing and better depth control. A heavier and wider seed-tube guard protects the seed tube from wear. In-furrow press wheels can be moved up and out of the way when soil is wet and sticky. Closing wheels can be staggered for better trash flow in heavy residue conditions. Two bolts, one on each side of the cast closing-wheel arm, make for easy centering of closing wheels over the furrow. New T-shaped handles provide an easy way to adjust seed depth and down-force on the closing wheels.

Three new front folding, in-line planter

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Caterpillar Files Suit Against Deere Over Rubber Tracks

In the wake of Deere & Co.'s introduction of its own rubber-tracked tractors, Caterpillar Inc. has filed suit charging Deere with infringing on its rubber track technology. Caterpillar is challenging the design of Deere's new rubber track system, saying it infringes on the patented belt system it developed for its own rubber-tracked Challenger tractor.

"It's ironic that after years of telling customers that tires are better than rubber tracks, Deere designers have now decided to adopt the successful and patented rubber-track design," says Dick Benson, Caterpillar's vice president of diversified products.

The lawsuit comes in the wake of Caterpillar's recent announcement that it is creating a separate agricultural products division to focus on the development of new farm equipment.

Case-IH also recently announced availability of its new Quadtrac tractor which is fitted with rubber tracks. Designed new from the ground up, the 360-hp. articulated tractor has four separate track units fitted with 30-in. wide rubber belts. **(Wall Street Journal)**