

Deere Expands 4WD Tractor Line

MOLINE, Ill. — John Deere has expanded its 4-wheel-drive tractor line with the introduction of four 70 Series models to replace the 3-model 60 Series introduced in 1988.

The new line includes the 250-hp 8570, 300-hp 8770, 350-hp 8870, and 400-hp 8970. This latest evolution of John Deere 4-wheel-drive tractors features increased engine performance and several changes that enhance operator comfort and productivity.

The 70-Series tractors, like the 14 new or revised tractor models John Deere has introduced since announcing its customer-driven tractor strategy in the fall of '91, are the product of extensive customer input.

"John Deere and competitive 4-wheel-drive tractor owners told us they wanted more responsive engine performance and convenient operation," said Johnny Dickinson, division manager of 4-wheel-drive tractor marketing at the John Deere tractor factory in Waterloo, Ia. "Farmers who have run these new 70 Series tractors are impressed with the pulling power and responsiveness of the engines. They like the new air suspension seat, the improved comfort of the cab, the improved serviceability, and other design changes we put into these new tractors."

The 7.6 L engine in the 8570 and the 10.1 L in the 8770 and 8870 feature the latest John Deere engine technology, including the company's electronic engine control. The Cummins 14 L ADVANTAGE™ engine in the 8970 features CENTRY™ electronic engine control with Step Timing Control (STC).

The electronic engine controls on the 70 Series machines provide several performance benefits. All of the engines deliver full rated power over a 450 to 500 rpm range for consistent power to pull through the tough spots.

In addition, the 10.1 L and 14 L engines provide up to a 7 percent "power bulge" (5 percent in the 7.6 L) within the constant power range. The power bulge is produced automatically as the electronic controller senses engine load and responds with as much as

13 to 28 extra horsepower above rated power to handle the load. The added power helps maintain high productivity and reduces the need to downshift.

The engines feature high torque rise for good lugging ability and quick recovery under load. Low-speed torque provides responsive load-starting and maneuvering performance.

An exclusive John Deere Field Cruise Control feature works much like cruise control on an automobile. The operator can adjust full-throttle engine speed anywhere from 2,100 to 1,300 rpm with a rotary knob on the shift console. Any setting below 2,100 rpm triggers a constant-speed governor curve that provides instant engine response as loads increase and decrease to produce a ground speed with little or no fluctuation.

Field Cruise, standard on all four models, is particularly beneficial in work like seeding or chemical application where constant ground speed is important. Field Cruise also permits the operator to match engine speed to the load requirements for improved fuel efficiency.

A new floor-mounted, push-bottom decelerator provides a convenient way to reduce engine speed at the end of a row. By stepping on the bottom, the operator can instantly reduce engine speed to 1,500 rpm if Field Cruise is set at the "rabbit" (highest speed) setting. If Field Cruise is set lower, the decelerator immediately reduces engine speed proportionally. When the operator releases the button, engine speed instantly begins returning to the Field Cruise setting.

The electronic engine control on the 8570, 8770, and 8870 adjusts fuel delivery to compensate for changing temperatures for improved starting performance and consistent power all day long. On all models, electronic control also provides a constant low-idle speed regardless of load for increased performance when maneuvering in close quarters and starting loads.

On the 8970, STC automatically advances engine timing for easier starting and less start-up smoke. Timing also advances at low idle and with light loads for

improved fuel efficiency.

Directed cooling on the 10.1 L engine in the 8870 helps ensure long-term, reliable performance at the 350-hp rating. This exclusive feature circulates coolant around the top flange of the wet cylinder liners to lower liner and piston ring temperatures for improved wear characteristics. This, together with the high-capacity cooling system, helps maintain appropriate operating temperatures for peak engine performance and long life.

The 7.6 L and 10.1 L engines' large intake and exhaust ports, piston spray cooling, wet cylinder liners, high efficiency turbochargers matched to engine power rating, and air-to-air aftercooling contribute to fuel efficient, reliable performance. A viscous fan drive adjusts to the cooling requirements of the engine for improved fuel efficiency.

The 14 L engine in the 8970 uses liquid-to-air aftercooling to lower intake air temperature for increased fuel efficiency and power capability. It also features a viscous fan drive.

To meet a wider range of job requirements, the 8870 can be equipped with standard 100-mm-diameter axles or optional heavy-duty 110-mm-diameter axles that are also used on the 8970.

An optional power differential lock is available on all models for improved traction in marginal conditions and better side-draft control and traction on sidehills. A new control system enables the operator to engage the lock with one push on the floor-mounted switch and disengage it by touching the brake pedal or decelerator button.

The Sound-Gard® body features improved air flow from the air quality system to keep the



The 250-HP John Deere 8570 is one of four new 70 Series 4-wheel-drive tractors which also include the 300-hp 8770, 350-hp 8870, and 400-hp 8970. The tractors feature increased engine performance, enhanced operator comfort, and improved ease of service.

operator comfortable. Environmentally friendly R134A refrigerant is used in the air conditioning system. The new air suspension seat provides both fore-and-aft and side-to-side attenuation to smooth out the ride. The seat swivels 20 degrees left and right and can be locked at 10- and 20-degree angles to suit the needs of the job and operator preference.

Exclusive Ride Zone Protection (RZP) prevents the operator from overinflating or underinflating the air suspension seat, thus ensuring a comfortable ride. For added convenience, RZP also retains the height adjustment as the operator leaves the seat. A storage drawer under the seat provides a convenient place to keep tools and supplies.

Additional sound adsorbing material in the cab improves sound quality for increased operator comfort.

Serviceability improvements on the 70 Series include a longer fuel

filler neck that's angled for easier fueling from ground level, front and rear engine hoods that open independently for ease of service, and a convenient sight glass for the hydraulic reservoir to complement the transmission reservoir sight glass.

The 70 Series retains the proven closed-center, pressure compensated hydraulic system used on the 60 Series. Likewise, transmission choices remain the same. The 12-speed Syncro™ transmission with three reverse speeds is standard. A 24-speed PowrSync™ transmission is optional. For the top three models, a 12-speed full powershift transmission is also available.

Some of the attachments available as options include an independent 1,000 rpm pto, an electrohydraulic 3-pt. hitch with draft sensing, dual lift cylinders, and Quick-Coupler (for the 8570, 8770, and 8870), and a performance monitor.

NAVIGATOR II

STRESS-FREE ROW CROP GUIDANCE

IN STOCK!

IN STOCK!

- Unique design keeps the implement parallel with the rows even when the tractor moves laterally as it drifts off course. Most other systems oversteer the toolbar which adds damaging side pressure to the stabilizing coulters
- Automatically compensates for sidehill drift
- Eliminates excessive pull and stress on hydraulic components associated with other guidance systems
- Very few moving parts provide smooth, friction-free lateral movement
- Works effectively on all conventional and ridge-till cultivators, planters and 4-wheel drive articulated tractors.

Automatic

CALL FOR DEALER LOCATED NEAREST YOU

RYDER SUPPLY CO.

539 Falling Spring Road
P.O. Box 219
Chambersburg, PA 17201-0219
Phone 717-263-9111

Get the CHARGE Advantage for...

- ALFALFA
- POTATOES
- TOBACCO
- VEGETABLE CROPS

The CHARGE Advantage

CHARGE Liquid Plant Food is a scientifically balanced NPK liquid foliar nutrient, rich in phosphate and containing humus for increased uptake of nutrients.

The 3 Elements of CHARGE + an Added Benefit

- ✓ NITROGEN to promote fast growth and abundant foliage
- ✓ PHOSPHATE to encourage seed and root development
- ✓ POTASH which is essential for sugar and starch formation and to increase size and quality of fruit

plus HUMUS, the added benefit for increased nutrient uptake

ALFALFA

Independent research and growers alike have attested to the benefits of CHARGE in increasing the yield on alfalfa. Growers who use CHARGE on their alfalfa have come to expect significant increases in protein level and decreases in Acid

Detergent Fiber. CHARGE has been shown to make a difference in the healthy growth of alfalfa, especially during stressful conditions from weather and pests. CHARGE should be applied at 2 to 4 qts. per acre after dormancy and after each cutting when the crop shows 5 to 6 inches of growth. Get the CHARGE advantage!

POTATOES

Optimum time for applying CHARGE is at tuber initiation, followed by applications at mid and late season. Late applications should be combined with NUTRA-K Liquid Potassium to achieve bulking and increase specific gravity before har-

vest. CHARGE users have achieved bonus payments for potato crops with more potatoes in the desired premium size and for increased weight and yield. Apply 2 to 3 qts. of CHARGE per acre when plants are 4 to 6 inches high. Get the CHARGE advantage!

P.L. ROHRER & BRO., INC.

Smoketown, PA
717-299-2571