

450H



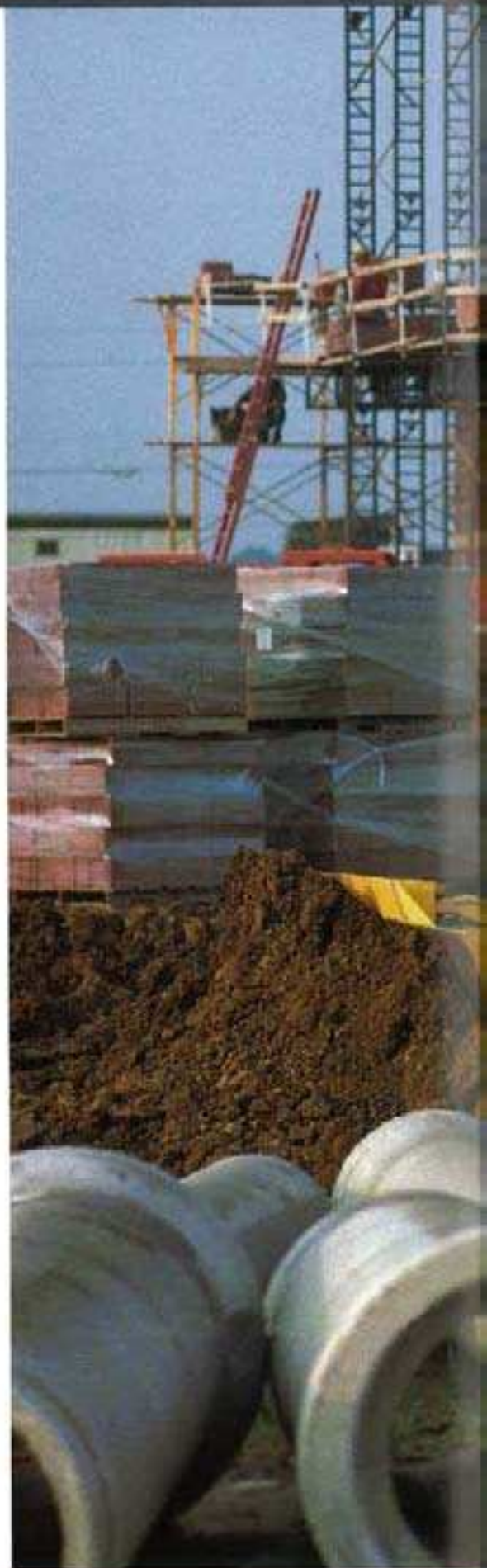
Some day, other dozers may be this good

The all-new 450H looks and performs like no other dozer because it is like no other. Its streamlined exterior is as functional as it is appealing, providing unsurpassed, unobstructed, all-around visibility. A single lever puts low-effort control of both direction and steering in one hand. Blade response is also exceptionally smooth. Equipped with a noticeably quiet, state-of-the-art, air-conditioned cab and fully adjustable high-back suspension seat, the 450H offers everything an operator needs to be his best.

But it's not just the one in the seat who benefits from H-Series advances. Your service personnel will also appreciate the extended service intervals, sight gauges, vertical spin-on filters, and lockable ground-level service doors that provide quick, convenient, wide-open access.

Add to that, the 450's reputation for rock-solid reliability and traditionally high resale value, and you've got a machine even your accountant will love.

This new 70-hp dozer does so much so well, you'll want to set aside some significant time to get to know it. So read through this brochure. Then ask your John Deere dealer to arrange a demo, and experience for yourself, the H-Series difference.






THE ALL-NEW 450H

I t may be your job, but it doesn't have to be work


The 450H is a welcome addition for anyone wanting to reduce their workload while increasing their opportunities. That's because its full-featured drivetrain introduces a new level of operating ease and control – providing power turns, counterrotation, infinitely variable speed control, and plenty of other production-enhancing advantages.

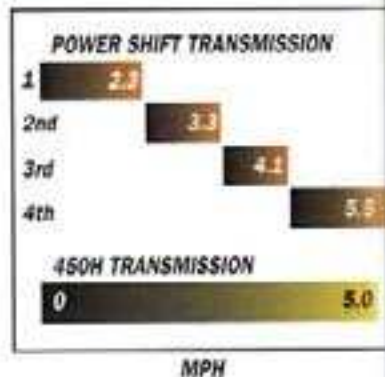
Others may offer hydrostatic drivetrains in their dozers. But none come close to offering the combination of flexibility, ease of operation, and proven performance you get in the 450H. Read on and you'll see what we mean.



 A single lever controls forward/reverse travel and steering. Detented so it doesn't require an operator's constant touch or attention, this lever allows smooth, low-effort modulation, even on rough terrain. What's more, steering, transmission, and decelerator response rates are adjustable, enabling this dozer to adapt to the operator.

Travel speed is controlled by a separate lever that's unaffected by direction changes. Simply set maximum desired speed and forget it – and let the power management system do the "shifting".

No preset gears here.  Instead, an infinitely variable range from standstill to 5 mph gives a 450H operator total flexibility to choose the right speed for the job. If desired, forward or reverse travel speed can be limited, to help extend undercarriage life.





Exclusive Auto-Trac system automatically keeps the 450H on the straight and narrow in forward or reverse. Makes turning easier, too.

Power management system takes both the guess and work out of efficient operation. Just set the ground speed lever to the maximum desired speed and the dozer does the rest. As loads change, the drivetrain responds, powering up or down to maintain peak engine rpm and efficiency without stalling. It's fully functional at any engine speed, always letting an operator concentrate on doing his best bladework.

The 450H steers the same and maintains its preset speed whether it's on level ground or a 2-to-1 slope. What's more, fully depressing the decelerator brings this crawler to a stop.

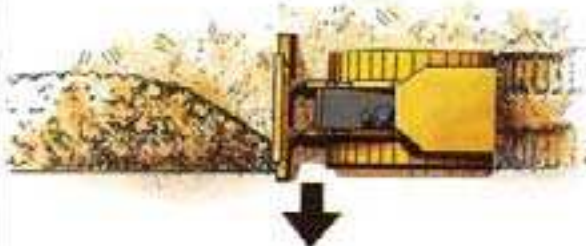


Fully functional counterrotation is another distinct Deere advantage. It's especially helpful for overcoming corner-loaded side drafts and for quickly repositioning the blade on-the-go. Or use it for space-saving spot turns regardless of ground conditions.



Infinitely variable track control lets you speed-up or slow power to each track. For smooth, full-power turns that don't tear up soft terrain like conventional clutch/brake systems.

With some dozers, turning radius is determined by engine speed – the faster, the wider the turn. Not so with the 450H. Precise, predictable, pivot-turns are possible at any speed, for unlimited maneuverability.





Microprocessor-controlled electronic monitor keeps a vigilant watch on 7 vital machine functions with warnings you can see and hear. Gauges are optional.

Floor-to-ceiling tinted glass doors allow easy entry into the roomy operator station. This modular ROPS enclosure is isolation-mounted for quietness, and fully pressurized to keep out dust. When the weather permits, rattle-free sliding side windows and latchable doors open wide.



Directional automotive-type vents deliver warm or cool air with quiet efficiency (air conditioning available) and help keep the view clear. For non-cab crawlers, an optional under-seat 30,000 Btu/hr. heater helps keep your operator's mind off his feet – and on his work. Mirror is standard, AM/FM weatherband radio is optional.

Decelerator gives low-effort toe-tip control of engine and ground speed for close-quarters confidence and agility around trenches, footings, and other obstacles. Fully engaging it brings the dozer to a stop.

Far more than just another cab, it's a comfortable work environment

Looking for a way to keep your operators comfortable and help make them more productive? Or perhaps an edge to recruit new ones? Order your 450H with this world-class modular enclosure.


Venture inside and you'll agree this is one well-appointed, efficient, work environment. Visibility is virtually unrestricted. The cab-forward design places the operator closer to the front for a commanding view of the blade. And the narrow dash, tapered hood lines, and large expanse of tinted glass further open up the work area.

An ergonomically correct single lever gives intuitive control of both direction and steering. Programed modulation ensures smooth starts and direction changes, virtually eliminating jerky and abrupt movements. There's also a decelerator that slows both engine and ground speed for close-up work such as backfilling around footings.

Standard ROPS-equipped tractors also come equipped with many of these and other efficiency-enhancing features. For specifics, see the back cover of this brochure or your John Deere dealer.



Operator station and seat are set low to enhance confidence on slopes without sacrificing visibility. As you can see, the area behind, below, and beyond the blade is virtually unrestricted, even with cab.



Optional side-console storage compartment keeps lunch box, beverages, or even a Thermos™ bottle close at hand.

Cloth or vinyl deluxe-suspension high-back armchair seat adjusts seven ways for day-long support and comfort. Standard suspension seat provides the same deep sculpting. Adjustable armrests and footrests are standard. Side knee cushions and under-seat storage box are available.

Retractable seat belt, slip-resistant floor mat, ergonomically positioned grab bars, neutral-start safety lever, and automatic park brake all help keep your operator out of harm's way.

OPERATOR STATION

The 450H makes the fine art of grading easier to master

All dozers push dirt. But if you want one that also has the finesse for finish work, you need a 450H.

Superior grade work begins with good balance, and this dozer has it. Whether you choose a standard 5-roller 450H or a long-track, blade ratio and center of gravity are optimized, resulting in a stable machine you've simply got to grade with to appreciate.

Visibility is excellent and unrestricted. An operator can clearly see both corners of the cutting edge, as well as the area behind, below, and beyond the blade.

An ergonomically correct T-bar lever puts low-effort control of the all-hydraulic blade in the palm of your right hand. Blade response is quick, powerful, and uncompromising. On-the-go tilt and angle adjustments are as easy as twisting your wrist.

Up front, the double-bevel cutting edge penetrates easily, and the moldboard curvature sheds even sticky material, keeping the load rolling for easier cut-and-fill work. Blade pitch is 3-position adjustable, and, four blade choices from 90 to 124 inches are available.



What a view! The narrow dash, tapered sheet-metal, small-diameter front idlers, center-section spillsheet, high blade heel, and angled blade end plates all contribute to unsurpassed visibility, with or without cab.



Generous hydraulic flow and precise metering deliver a natural "feel" that will enhance any operator's grading skills.



The working end of this dozer is all-business. Its closed-cell blade design and robot-welded, fabricated, box-section C-frame are strong and durable. A heavy-duty C-frame is also available for use with root rakes and for other severe-duty tasks.

Center-section spill sheet protects blade pivot points and cylinders from material spill-over while allowing good visibility over the corners. Angle cylinders are powerful, responsive, and positioned out of the dirt to resist material buildup. Cordura-covered hoses are well-protected, yet easily replaced.

When jobsites or terrain conditions change, so can the three-pitch-adjustable blade. Change over takes about 15 minutes.

Cutting edge is close to the idlers for smooth grading. High heel clearance gives superior visibility, penetration, and back-dragging ability.

A heavy-duty, hardened ball-and-socket joint and line-bored mounting pins retain their tightness for long-term grading precision.

We did our level-best to position the 450H center of gravity as close to the optimum point as possible. The bottom-line benefit? Superior balance you've got to blade-with to believe.

Nothing runs like this Deere, because nothing's built like it.

The all-new 450H is the product of literally hundreds of thousands of hours of research, development, and testing. Before even a single component took shape, high-tech tools such as virtual-reality electronic modeling helped mold the design.

Proven on computer screens and in rigorous factory tests, the 450H was also refined and reaffirmed in the field by more than 150 dozer owners and operators on jobsites throughout North America.

Designed and built with state-of-the-art tools and techniques by a quality-conscious workforce at our world-class facility in Dubuque, Iowa, the H-Series is simply our best 450 ever.

But don't just take our word for it. Perhaps the best way to get an idea of what to expect out of the 450H is to see what goes into it. The closer you look, the more you'll like.

Fan drive is mounted low and independent of the water pump, for longer pump life and maximum cooling efficiency. Serpentine drive belt self-adjusts.



Deep-summ oil pan maintains adequate engine lubrication on steep slopes. Jet-spray nozzles bathe the bottom sides of pistons with cooled oil, increasing life.



Axial-piston hydrostatic motors are mounted directly to the final drives at the back of the mainframe. A rear access panel makes removal easy. Heavy-duty high-pressure hoses connect the pumps and motors that form the drivetrain. O-ring face seal (ORFS) couplings virtually eliminate leaks.

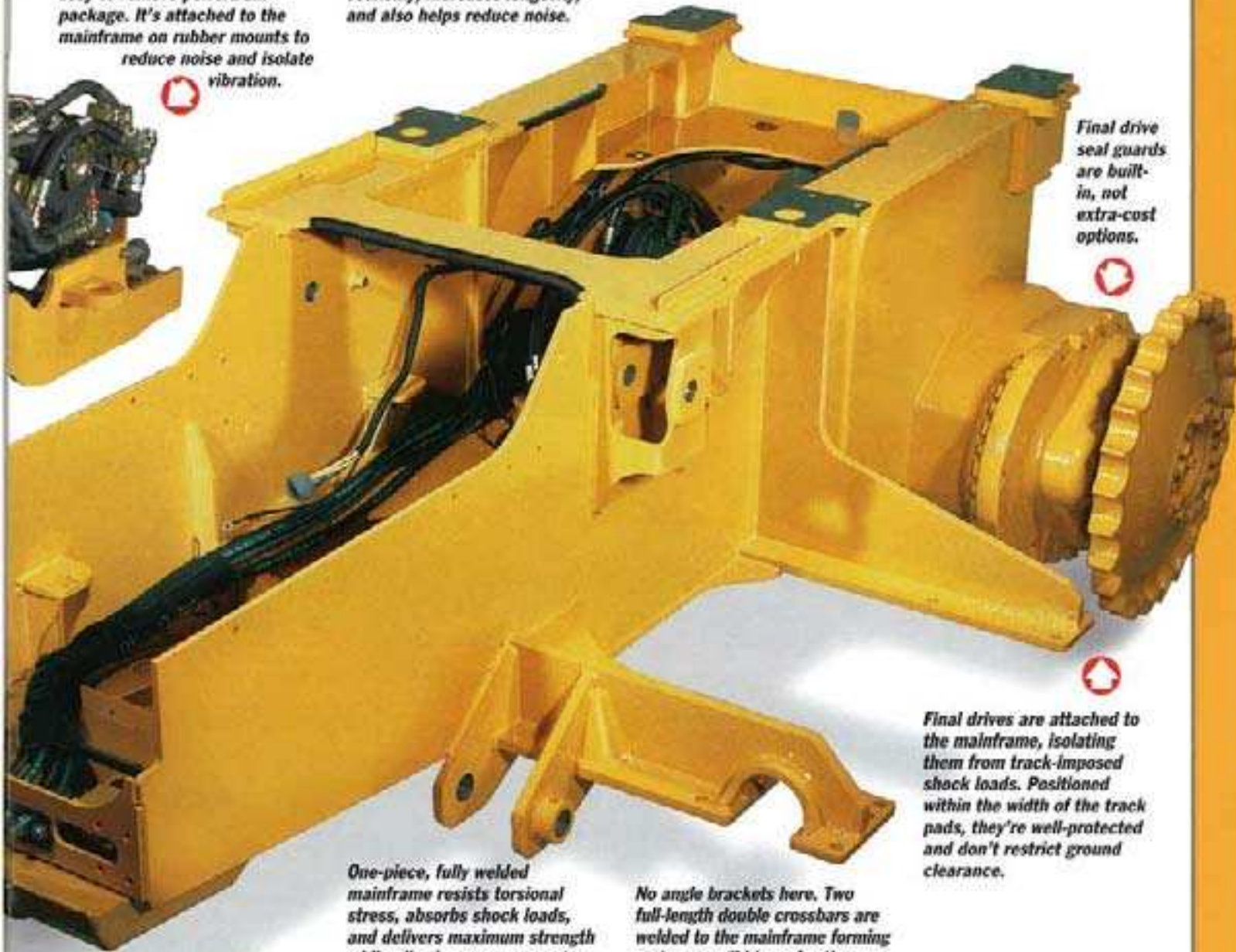
Individually replaceable, spin-cast, wet-type cylinder liners dissipate heat for reduced ring wear and oil breakdown. High-ring pistons provide high compression, three low-friction rings deliver superior oil control.

Engine, hydrostatic-drive pumps, and hydraulic pump are bolted to this subframe, forming an easy-to-remove powertrain package. It's attached to the mainframe on rubber mounts to reduce noise and isolate vibration.

Free-breathing, cross-flow cylinder head, specially shaped pistons, and contoured valves increase intake and exhaust flows for maximum power output and top fuel efficiency.

Deere diesels deliver maximum power at a low 2,200 rpm. The slower speed yields good fuel economy, increases longevity, and also helps reduce noise.

Advanced POWERTECH® diesel meets all worldwide emission standards for off-road engines – so the 450H can go to work anywhere these standards exist.



Final drive seal guards are built-in, not extra-cost options.

Final drives are attached to the mainframe, isolating them from track-imposed shock loads. Positioned within the width of the track pads, they're well-protected and don't restrict ground clearance.

One-piece, fully welded mainframe resists torsional stress, absorbs shock loads, and delivers maximum strength while allowing easy access to major drivetrain components. Robotic welding helps ensure consistent weld quality. Compared to the bolt-together frames found on other dozers, there's no comparison.

No angle brackets here. Two full-length double crossbars are welded to the mainframe forming a strong, solid base for the undercarriage.



Spring-steel washers in sealed chain keep abrasives out of the precision-machined, induction-hardened, counterbored pins and bushings. Stepped bushings in the optional sealed-and-lubricated chain also help extend life.

Idlers are lifetime lubricated and sealed with metal face seals. Stainless steel shims provide vertical adjustment to help keep these dozers grading like new.

Through-hardened boron-steel overlapping shoes are bolted to the chain with the grousers nearly in-line with pin/bushing joints. This virtually eliminates backbending and scrubbing, lengthens grouser shoe life.

Deep-hardened, lifetime-lubricated, cast-steel carrier roller delivers durable, maintenance-free operation. Curved roller support resists packing and aids in clean-out.

450H Dozers put plenty of track on the ground for solid stability on slopes, ground-gripping traction, and balanced bladework.

Heavy-duty steel-channel track frames form a strong, solid working base. Two large recoil springs absorb impacts. Steeply sloped covers resist material buildup, aid in clean-out.

How the H-Series' bottom-line helps enhance yours

Cast steel-alloy sprockets have deep-hardened wear surfaces for long life. Unique tooth profile also helps extend sprocket and bushing life.

When you consider that more than 50 percent of crawler upkeep costs go into maintaining an undercarriage, it pays to run a 450H.

Compare its Dura-Trax™ pins, bushings, links, and rollers to those found on other dozers. You don't need a tape measure to know that the John Deere components are bigger. But they're also better. Because it's what we do with that extra metal that enables the 450H undercarriage to last so long. Read on to learn why it's the best on any dozer.

Track links are forged from boron-steel alloys; deep-hardened, quenched, and tempered. Induction-hardening further increases rail-surface wear resistance. Boron steel permits heat-treating beyond normal wear limits, for long and consistent wear.

Cross-section illustrates heat-treating in H-Series track links and rollers. Red indicates depth of hardness – Rc45 through the 100 percent wear limit in track links and rollers.

Large boron-steel track rollers are hardened through the wear limit inside and out for long life. Irregular spacing causes bottom rollers to contact links at varying points for a smoother, quieter ride.



E

asy to work with, simpler to live with— that's the all-new 450H

To be sure, the all-new 450H is loaded with features that make it one of the smoothest operating dozers you can run. But that's only part of the H-Series story. This new crawler is also chock-full of convenience and safety enhancements that make it simpler to own.

Thoughtful details such as an easy-to-clean undercarriage, quick-to-replace hydraulic hoses, designed-in diagnostics, and extended service intervals all minimize maintenance and keep these machines up-and-running.

Perhaps best of all, the 450H is backed by an extensive John Deere dealer network providing Counterparts™, Secure™, and OilscanPlus®, as well as numerous other product support programs that help you control costs and stay profitable. To learn more about John Deere's comprehensive Total Repair Cost Management line-up, turn the page.





Open wide and be awed. Hinged sideshields provide ground-level access to the batteries, hydraulic-fluid sight gauge, electrical disconnect switch, window washer fluid reservoir, cold weather starting aid, and vertical spin-on transmission, hydraulic, and fuel filters.



36-gallon fuel tank capacity is enough to take you through a full day's work. Lockable cap is part of the standard vandal-protection package.

Check or add to the engine oil and coolant levels or change the air filter through this large door atop the hood.



Neutral-start lever and automatic park brake help keep your people out of harm's way. Numerous other safety features come standard, too.

No more crawling under the dozer to grease the C-frame pivots. Lube bank puts these difficult-to-service zerks within easy reach.

Nobody backs you better

Other dealerships may be bigger, but nobody knows 450-size crawlers like John Deere dealers. Regardless of whether you run one dozer or dozens, we support your efforts with a comprehensive line-up of ongoing programs that help control costs, increase profits, and reduce stress.

Total Repair Cost Management is part of John Deere's proactive, fix-before-fail machine maintenance strategy that gives you the tools to avoid downtime and help protect your cash flow. It covers the full life-span of your new dozer and can be applied to other non-Deere equipment, as well.



Preventive maintenance (PM) contracts take a messy job off your hands and let you lock-in maintenance costs for a specific period of time. They help avoid downtime by ensuring that critical maintenance work gets done on schedule, and at your convenience.

MaintainIt™ software helps you start your own computerized maintenance program. It includes a library of John Deere machines, outlines maintenance tasks, and provides a spare-parts inventory list. The program lets you track equipment by hourmeter or date, and can print, fax, or e-mail purchase or work orders.



Certified Customer Support Advisers (CSAs) know the total repair cost management concept inside and out, and can help you implement a machine maintenance and repair strategy that's just right for your business.

Your new 450H comes standard-equipped with a 12-month Secure warranty. Secure-Extended[®] lets you lengthen your coverage to custom-fit your operation. It's a great way to guard your cash flow. Travels well, too, because it's backed by John Deere and honored at all Deere construction equipment dealerships.



Time is money. And the Counterparts[™] promise ensures that the 450H parts you need will be at participating Counterparts dealers when you need them, or they're free (ask your dealer for details).

Your John Deere dealer is your one stop for all makes of parts. For example, Mastertrax[®] undercarriage offers quality track parts and service for virtually any crawler make or model. John Deere dealerships also offer full lines of edges, teeth, fluids, filters, hoses, batteries, and remanufactured components, to list just a few.

More than just engine oil sampling, OilscanPlus[®] fluid analysis tells you what's going on inside your machine's transmission and hydraulic pump, as well. It's an excellent tool for pre-empting catastrophic downtime.





Optional extreme-duty grille screen, hose guarding, limb risers, and front, side, and rear brush screens help protect both ROPS- and cab-equipped machines in severe-duty environments.

TOOLS AND ATTACHMENTS

Clearing rake



Slopeboard



Landfill blade



Pin-on blade rake



Hinged dozer



Laser



Clearing blade



U-blade



Cable plow



Here's how to make the most of your investment

It's probably obvious to you by now that the John Deere 450H isn't just another dozer. Its highly adaptable drivetrain not only provides unparalleled ease of operation and maneuverability, but seemingly endless flexibility, too.

Available in a number of configurations with a wide variety of creature-comforts, this new dozer can also be equipped with an impressive array of other options and attachments. Additions that can open-up new job opportunities by putting more work within your reach.

Choose from fire-line plows, slopeboards, root rakes, rippers, and a host of other attachments. If you have a special need, get to your John Deere dealership. They have the resources, know-how, and equipment to help you make the most of your investment.

Frequently work on slopes? Equip a 450H LGP with 16-inch grousers and you're off and running. Its 65-inch gauge provides the stability you need for steep gradework.



BLADE CHOICES

	90 inches	97 inches	115 inches	124 inches
450H	X	X		
450H LT	X	X	X	X
450H LGP			X	X

GROUSER SHOE CHOICES

	14 inches	16 inches	24 inches
450H	X	X	
450H LT	X	X	
450H LGP		X	X

Check these charts for the blade and undercarriage options you have in mind. Heavy-duty C-frames and special-duty shoes are also available. Ask your dealer for details.

Scraper



Ripper



Fireline plow



Blade ripper teeth



Winch



Bedding plow



3-point hitch



Blade back-ripper



Disk harrow



ENGINE	450H	450H LT	450H LGP
Type	John Deere 4045D naturally aspirated	John Deere 4045D naturally aspirated	John Deere 4045T with turbo-charger
Rated power	70 SAE net hp (52 kW) / 73 SAE gross hp (54.5 kW) @ 2,200 rpm	70 SAE net hp (52 kW) / 73 SAE gross hp (54.5 kW) @ 2,200 rpm	74 SAE net hp (55 kW) / 79 SAE gross hp (59.0 kW) @ 2,200 rpm
Cylinders, wet sleeve	4	4	4
Displacement	276 cu. in. (4.52 L)	276 cu. in. (4.52 L)	276 cu. in. (4.52 L)
Fuel consumption, typical	1.5 to 2.3 gal./hr. (4.9 to 8.7 l/h)	1.5 to 2.3 gal./hr. (4.9 to 8.7 l/h)	1.5 to 2.3 gal./hr. (4.9 to 8.7 l/h)
Maximum net torque	223 lb.-ft. (302 Nm) @ 1,200 rpm	223 lb.-ft. (302 Nm) @ 1,300 rpm	254 lb.-ft. (345 Nm) @ 1,300 rpm
Lubrication	pressure system with full-flow spin-on filter and oil-to-water cooler		
Air cleaner	dual stage dry type with safety element, precleaner, and dash-mounted restriction indicator		
Electrical system	12 volt with 65-amp alternator		
Cooling fan	blower		

450H / 450H LT / 450H LGP

TRANSMISSION dual-path, electronic-controlled, hydrostatic drive
load-sensing feature automatically adjusts speed and power to match changing load conditions
each individual track is powered by a variable-displacement piston pump and two-speed motor combination
decelerator controls speed from holding to 5.0 mph (8.0 km/h)

Travel speeds (infinitely variable)
Forward and reverse 0 to 5.0 mph (0 to 8.0 km/h)

FINAL DRIVES heavy-duty triple-reduction final drives attach directly to the mainframe and are isolated from track frame and dozer frame loads

STEERING single-lever steering, direction control, and counterrotation
full power turns and infinitely variable track speeds provide unlimited maneuverability and optimum control
hydrostatic steering eliminates steering clutches and brakes

BRAKES hydrostatic (dynamic) braking stops the machine whenever the direction-control lever is moved to neutral, whenever the decelerator is depressed to the end of travel, or whenever the brake pedal is depressed

AUTOMATIC PARK BRAKE exclusive safety feature engages wet, multiple-disk brakes automatically whenever the engine stops, whenever the operator applies the brake pedal, or whenever the neutral start lever lock is in stop position
machine cannot be driven with brake applied, reducing wear out or need for adjustment

HYDRAULIC SYSTEM

System open center
Pressure, main relief 3,000 psi (20 685 kPa)
Pump gear
Flow 15 gpm (56.8 L/min.) @ 2,200 rpm
Filter, return oil 10 micron
Control T-bar three-function
Cylinders heat-treated, chrome-plated, polished cylinder rods with hardened steel (replaceable bushings) pivot pins

CAPACITIES (U.S.)

Fuel tank with lockable cap 36 gal. (136 L)
Cooling system with coolant recovery tank 17 qt. (16 L)
Engine oil including spin-on filter 15 qt. (14 L)
Transmission reservoir refill with filter change 11.3 gal. (42.7 L)
Final drive (each) 7 qt. (6.6 L)
Hydraulic reservoir refill with filter change 8.5 gal. (32.2 L)
All power train and hydraulic systems allow 45-degree maximum operation.

UNDERCARRIAGE
450H
450H LT
450H LDP

John Deere Dura-Trax™ features large deep-heat-treated components. pins and bushings are sealed for life. rollers and idlers are permanently sealed and lubricated. full-length track frame covers reduce material buildup and ease cleaning.

Chain

	450H	450H LT	450H LDP
Standard	sealed	sealed	sealed and lubricated
Optional	sealed and lubricated	sealed and lubricated	
Grouser width (closed center, single bar)	16 in. (406 mm)	16 in. (406 mm)	24 in. (610 mm)
Track shoes, each side	37	40	40
Ground contact area	2,464 sq. in. (15,897 cm ²)	2,752 sq. in. (17,755 cm ²)	4,128 sq. in. (26,632 cm ²)
Ground pressure	6.1 psi (42.1 kPa)	5.6 psi (38.6 kPa)	4.0 psi (27.6 kPa)
Ground clearance with single-bar grouser (excluding grouser height)	13.6 in. (346 mm)	13.6 in. (346 mm)	13.6 in. (346 mm)
Length of track on ground	77 in. (1956 mm)	86 in. (2184 mm)	86 in. (2184 mm)
Track gauge, standard	57 in. (1450 mm)	57 in. (1450 mm)	65 in. (1650 mm)
Track rollers, each side	5	6	6
Track pitch	6.29 in. (159.8 mm)	6.29 in. (159.8 mm)	6.29 in. (159.8 mm)

SAE OPERATING WEIGHTS

Base weights were computed for units with standard equipment, rollover protective structures, full fuel tanks, and 175-lb. (79 kg) operators.

With 97-in. (2464 mm) blade and 16-in.

(406 mm) track shoes	15,000 lb. (6818 kg)	15,500 lb. (7045 kg)	
With 124-in. (3150 mm) blade and 24-in.			
(610 mm) track shoes			16,500 lb. (7500 kg)

OPTIONAL OR SPECIAL EQUIPMENT

Add (+) or deduct (-) lb. (kg) as indicated to base weight for units with

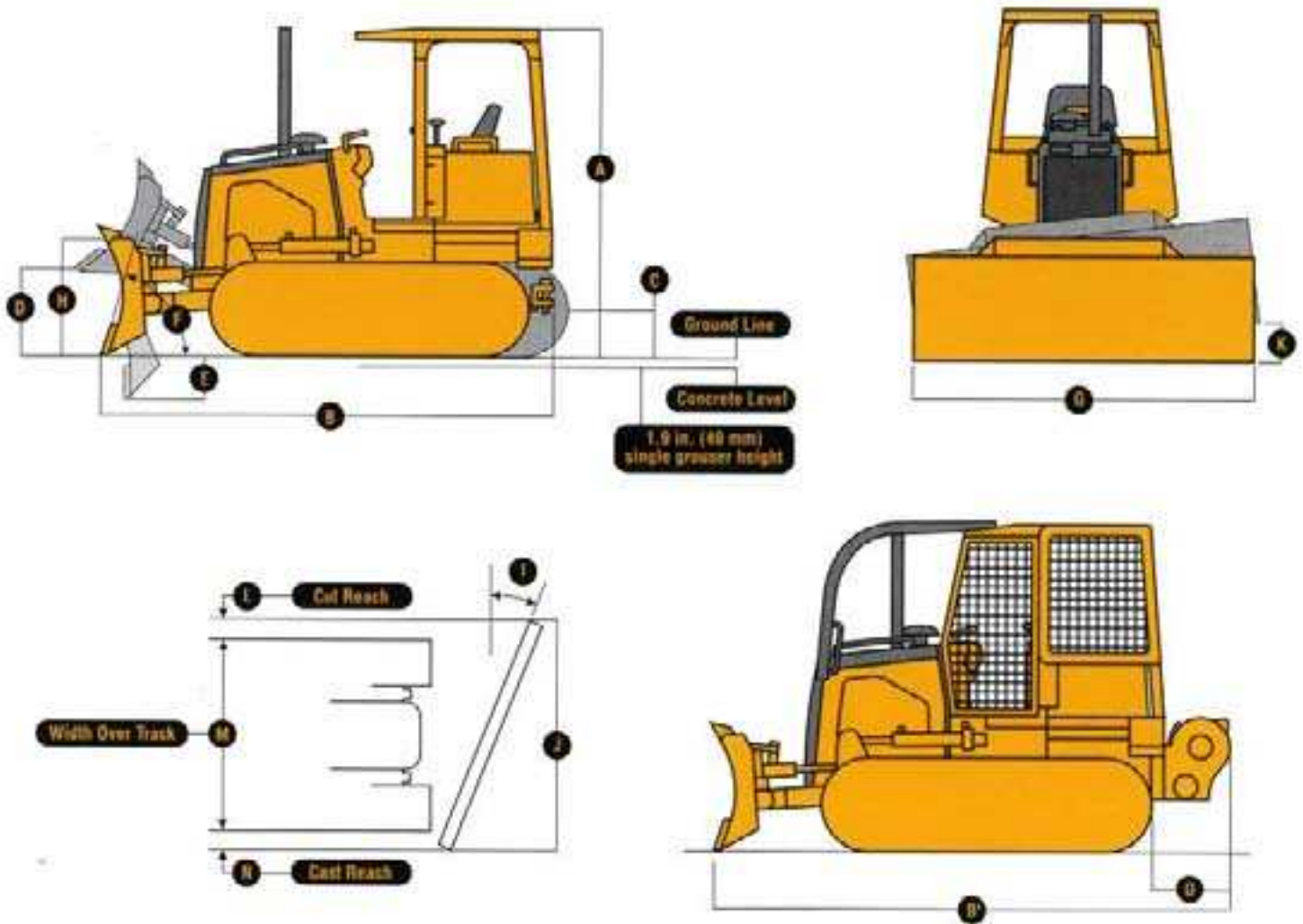
Rock guards (4)	257 lb. (117 kg)	288 lb. (131 kg)	288 lb. (131 kg)
14-in. (343 mm) track shoes	- 148 lb. (- 67 kg)		
Swamp shoes			160 lb. (72 kg)
Deluxe seat group	20 lb. (9 kg)	20 lb. (9 kg)	20 lb. (9 kg)
Cab with heater	590 lb. (268 kg)	590 lb. (268 kg)	590 lb. (268 kg)
Cab with air conditioning	675 lb. (306 kg)	675 lb. (306 kg)	675 lb. (306 kg)
Under-seat ROPS heater	26 lb. (12 kg)	26 lb. (12 kg)	26 lb. (12 kg)
Counterweight, rear (each)	330 lb. (150 kg)	330 lb. (150 kg)	330 lb. (150 kg)
Counterweight, front (each)	240 lb. (109 kg)	240 lb. (109 kg)	240 lb. (109 kg)
Lights, driving	3 lb. (1 kg)	3 lb. (1 kg)	3 lb. (1 kg)
Work lights, high intensity	9 lb. (4 kg)	9 lb. (4 kg)	9 lb. (4 kg)
Front tow hook	33 lb. (15 kg)	33 lb. (15 kg)	33 lb. (15 kg)
Retrieval hitch	50 lb. (23 kg)	50 lb. (23 kg)	50 lb. (23 kg)
Extended drawbar	72 lb. (33 kg)	72 lb. (33 kg)	72 lb. (33 kg)
Limb risers	229 lb. (104 kg)	229 lb. (104 kg)	229 lb. (104 kg)
Rear screen	76 lb. (35 kg)	76 lb. (35 kg)	76 lb. (35 kg)
Side screens	94 lb. (43 kg)	94 lb. (43 kg)	94 lb. (43 kg)
Screens, front and doors	179 lb. (81 kg)	179 lb. (81 kg)	179 lb. (81 kg)
4000S Winch	1,437 lb. (653 kg)	1,437 lb. (653 kg)	1,437 lb. (653 kg)
Winch Fairlead, four roller	187 lb. (85 kg)	187 lb. (85 kg)	187 lb. (85 kg)
Parallelogram tipper	1,306 lb. (594 kg)	1,306 lb. (594 kg)	1,306 lb. (594 kg)
90-in. (2286 mm) blade with all-hydraulic heavy-duty C frame	38 lb. (17 kg)	38 lb. (17 kg)	
90-in. (2286 mm) blade with all-hydraulic standard C frame	- 58 lb. (- 26 kg)	- 58 lb. (- 26 kg)	
97-in. (2464 mm) blade with all-hydraulic heavy-duty C frame	96 lb. (43 kg)	96 lb. (43 kg)	
115-in. (2921 mm) blade with all-hydraulic heavy-duty C frame		370 lb. (168 kg)	5 lb. (2 kg)
All-hydraulic heavy-duty C frame (loss blade)	- 1,063 lb. (- 482 kg)	- 1,063 lb. (- 482 kg)	- 1,063 lb. (- 482 kg)

DIMENSIONS	450H	450H LT	450H LGP
A Overall height with ROPS or cab.....	102 in. (2590 mm)	102 in. (2590 mm)	102 in. (2590 mm)
B Overall length*	155 in. (3937 mm)	158 in. (4013 mm)	158 in. (4013 mm)
C Overall length with winch**.....	177 in. (4496 mm)	177 in. (4496 mm)	177 in. (4496 mm)
D Ground clearance, minimum			
With single-bar grouser.....	13.6 in. (345 mm)	13.6 in. (345 mm)	13.6 in. (345 mm)
With swamp shoes.....	14.4 in. (366 mm)	14.4 in. (366 mm)	14.4 in. (366 mm)
E Blade lift height.....	30.4 in. (773 mm)	30.4 in. (773 mm)	30.4 in. (773 mm)
F Blade digging depth.....	20.8 in. (528 mm)	20.8 in. (528 mm)	20.8 in. (528 mm)
G Blade cutting edge angle, three position adjustable.....	52, 56, or 60 degrees	52, 56, or 60 degrees	52, 56, or 60 degrees

*For the 450H, add 1.3 in. (33.5 mm) to overall length with retrieval hitch and 6.5 in. (166.5 mm) to overall length with extended drawbar.
For the 450H LT and 450H LGP, add 1.8 in. (46 mm) to overall length with extended drawbar.
**See page 23 for forestry application.

H-SERIES BLADE SPECS

A Width.....	90 in. (2286 mm)	90 in. (2286 mm)	
B Height.....	32.5 in. (826 mm)	32.5 in. (826 mm)	
SAE capacity.....	1.9 cu. yd. (1.4 m ³)	1.9 cu. yd. (1.4 m ³)	
C Blade angle.....	25.4 degrees	25.4 degrees	
D Angled width.....	82.9 in. (2106 mm)	82.9 in. (2106 mm)	
E Tilt.....	12.3 in. (313 mm)	12.3 in. (313 mm)	
F Cut reach.....	0	0	
G Width over track.....	73 in. (1854 mm)	73 in. (1854 mm)	
H Cast reach.....	10 in. (255 mm)	10 in. (255 mm)	
A Width.....	97 in. (2464 mm)	97 in. (2464 mm)	
B Height.....	32.5 in. (826 mm)	32.5 in. (826 mm)	
SAE capacity.....	2.0 cu. yd. (1.5 m ³)	2.0 cu. yd. (1.5 m ³)	
C Blade angle.....	25.4 degrees	25.4 degrees	
D Angled width.....	89.3 in. (2267 mm)	89.3 in. (2267 mm)	
E Tilt.....	13.3 in. (337 mm)	13.3 in. (337 mm)	
F Cut reach.....	3.1 in. (78 mm)	3.1 in. (78 mm)	
G Width over track.....	73 in. (1854 mm)	73 in. (1854 mm)	
H Cast reach.....	13.2 in. (335 mm)	13.2 in. (335 mm)	
A Width.....	115 in. (2921 mm)	115 in. (2921 mm)	
B Height.....	32.5 in. (826 mm)	32.5 in. (826 mm)	
SAE capacity.....	2.29 cu. yd. (1.75 m ³)	2.29 cu. yd. (1.75 m ³)	
C Blade angle.....	25.4 degrees	25.4 degrees	
D Angled width.....	105.5 in. (2680 mm)	105.5 in. (2680 mm)	
E Tilt.....	15.8 in. (400 mm)	15.8 in. (400 mm)	
F Cut reach.....	10.6 in. (268 mm)	2.6 in. (65 mm)	
G Width over track.....	73 in. (1854 mm)	89 in. (2260 mm)	
H Cast reach.....	22 in. (558 mm)	14 in. (355 mm)	
A Width.....	124 in. (3150 mm)		
B Height.....	30.2 in. (767 mm)		
SAE capacity.....	2.15 cu. yd. (1.64 m ³)		
C Blade angle.....	25.4 degrees		
D Angled width.....	113.7 in. (2887 mm)		
E Tilt.....	17.0 in. (432 mm)		
F Cut reach.....	6.8 in. (173 mm)		
G Width over track.....	89 in. (2260 mm)		
H Cast reach.....	17.9 in. (454 mm)		



450H / 450H LT / 450H LDP

FORESTRY APPLICATION

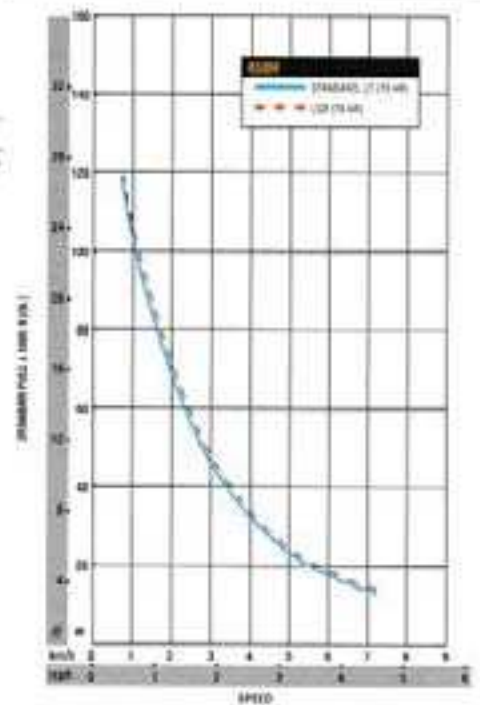
available limb risers and screens for the rollover protective structure, John Deere-built, self-contained 4000S Winch* for versatile skidding and clearing operations

- Ⓕ Overall length with winch* 177 in. (4496 mm)
- Ⓖ 4000S Winch length 29.6 in. (752 mm)

*Reference 4000S Winch spec sheet.

DRAWBAR PULL

Crawler speed vs ground pull usable pull will depend on traction and weight of tractor



	450R		450R		450R	450R	
ENGINE		Blade, 50-in. (1270 mm), with standard C-frame		37-in. (937 mm) track gauge for LT (60-in. [2107 mm] track on ground)		Seat belt, 2 in. (76 mm), retractable with CRS - Conforms to SAE J346	
70-hp natural aspiration (standard and LT)	●	Blade, 50-in. (1270 mm), with heavy-duty C-frame	●	65-in. (1651 mm) track gauge for LPG (80-in. [2107 mm] track on ground)	●	Convex interior rearview mirror	
70-hp turbocharger (standard and LT)	●	Blade, 57-in. (1444 mm), with standard C-frame	●	Single-flange rollers	●	Accessories	
74-hp turbocharger (LGP)	●	Blade, 57-in. (1444 mm), with heavy-duty C-frame	●	Double-flange rollers*	●	Convex wide-angle interior rearview mirror / Knee cushions (2) / Seat-side lockable storage box/cup holder	
Isolation mounted	●	Blade, 87-in. (2214 mm), with heavy-duty C-frame	●	Full-length smooth-surface track blade covers	●	Rear window wiper and wiper for cab	
Electric fuel shutoff with key start switch	●	Blade, 105-in. (2667 mm), with heavy-duty C-frame	●	Chain guides, front and rear (both on)	●	Radio, AM/FM weatherband	
Chlorowater engine oil cooler	●	Blade, 115-in. (2921 mm), with heavy-duty C-frame	●	Fully protected track-tension adjusters	●	Complete enclosure ROPS to cab conversion panels	
Vertical spines of filter	●	Blade, 124-in. (3150 mm), with heavy-duty C-frame	●	Claw adjustable	●	Rear and side-entry enclosure panels	
Vertical spines primary fuel filter with water separator	●	Blade, 128-in. (3254 mm), with heavy-duty C-frame	●	Solid sprockets	●	Front windshield and door enclosure panel	
Vertical spines final fuel filter	●	Special Blade*	●	Sprocket lock guard (bolt-on)	●	For extinguisher*	
Dual-element dry-air cleaner with built-in pre-filter and evacuator valve	●	Full-length spill sheet*	●	Robson full-length track roller track guide	●	OVERALL VEHICLE	
Stone-head pre-inlet return/clean-up	●	Blade filter*	●	Sealed track chains	●	One-piece unitized construction	
External primary pre-cleaner*	●	ELECTRICAL	●	Sealed and lubricated track chains	●	Front yaw loop (bolt-on)	
Enclosed safety fan guard - Conforms to SAE J1308	●	12-volt system	●	Grosser shoes, 16-in. (406 mm) single bar closed center	●	Reinforced engine and mid-base bottom guard	
Coolant recovery tank	●	Fuse panel with blade-style multi-fused circuit breakers	●	Grosser shoes, 14-in. (356 mm) single bar closed center	●	Innovative transmission guard	
Engine coolant to -34°F (-37°C)	●	Horn, electric - Conforms to SAE J994, J1449	●	Grosser shoes, 24-in. (610 mm) single bar closed center	●	Heavy-duty lowered grille	
Blower-type cooling fan	●	Reverse warning alarm - Conforms to SAE J994, J1446	●	Swamp shoes, self-cleaning pyramid-stage*	●	Perforated engine side shields	
Flush-returner system for line radiator	●	Fuel gauge, electric, illuminated	●	Roller in polyurethane track shoe pads*	●	Vandal protection lock provisions for:	
Battery and screen - steel	●	Hourmeter, electric	●	Special track shoes*	●	Engine service access cover / Fuel fill / Hydraulic reservoir fill/check / Transmission reservoir fill/check / Instrument panel	
Underhood muffler with vertical exhaust stack	●	Transmission oil pressure gauge, electric, illuminated	●	Heavy-duty track roller springs*	●	Solid front painted pay for reduced glare	
Up-wind for ether start aid	●	Master electrical disconnect	●	LIGHTS	●	Lockable grease gun/multi storage compartment in right access door	
Electric ether start aid	●	Positive battery terminal covers	●	Low lights	●	Environmental drains	
Engine coolant heater, 1,000-watt, 120 volts	●	By-pass start safety cover at starter	●	Grille-mounted driving lights (2), with rear light (1), halogen - 2,000-candle-power each	●	Chrome exhaust stack	
Engine coolant heater, fuel-fired	●	Electronic monitor with visual and audible warning	●	High-intensity work lights, front (2) and rear (2), with steel guards, 65 watts each	●	Trademarks/labels, French or Spanish	
Steel-strap fuel lines*	●	Alternator / Hydraulic filter restrictor / Transmission filter restriction / Transmission oil temperature / Coolant temperature (optional) / Engine oil pressure (audible) / Air cleaner restriction / Turret seat belt / Park brake	●	OPERATOR'S STATION	●	Transport lift and tie-down strap*	
POWER TRAIN AND CONTROLS		Electronic monitor with additional gauges	●	Modular ROPS/LOPS canopy, isolation mounted - Conforms to SAE J1080	●	PROTECTION PACKAGES	
Dual-path hydraulic transmission	●	Engine oil pressure / Engine coolant temperature	●	Under-seat ROPS heater, 30,000 Btu/hr	●	Extreme-duty inverted grille and hose protection	
Single-lever steering, E.N.R. situation control, and counterrotation	●	Single 12-volt low-maintenance battery, 150-min. reserve capacity, 950 CCA	●	Modular ROPS/LOPS cab, isolation mounted - Conforms to SAE J1040	●	Limb users, arched or point-to-point (bolt-on)	
Decelerator pedal with automatic retardation	●	Dual 12-volt low-maintenance batteries, 280 min. reserve capacity, 1,900 CCA total	●	Fresh air intake-cab heater/defroster/pressurizer, 18,000 Btu/hr with air pre-heater / Dome light / Deluxe facilities with molded air ducts for heater, defroster, and air conditioning / 30,000 Btu/hr under-seat heater / Turret windshield and door, wipers and washers / Turret safety glass / Antenna for radio / 95-amp alternator	●	Operator protective rear screen (ROPS or cab)	
Engine-speed selection lever	●	65-amp sealed alternator with ROPS	●	Right and left access	●	Operator protective side screen (ROPS or cab)	
Infinite ground speed selection lever	●	Power port, 20 amps, for phone and radio	●	Superdurable front-mounting steps	●	Operator protective full-screen package (ROPS or cab)	
Automatic straight-ahead tracking	●	Tachometer*	●	Ergonomically located handholds	●	Heavy-duty engine air-intake guard	
Dynamic braking (anti-lay wheel)	●	HYDRAULIC SYSTEM	●	Reverser	●	Air conditioning module guard	
Counterrotation	●	15-gpm food-displacement hydraulic gear pump	●	Adjustable footrests	●	ATTACHMENTS	
Service-brake pedal	●	Hydraulic pump with straight-drive for winch or auxiliary pump	●	Adjustable full-length armrests	●	Counterweight, rear, 130 lb. (130 kg) each	
Transmission neutral lock with safety start switch	●	Low-effort T-bar blade control	●	Built-in Operator's Manual storage	●	Counterweight, front, 240 lb. (109 kg) each	
Automatic spring-applied, hydraulic-released parking brake	●	Independent hydraulic reservoir with sight gauge	●	Superior vinyl seat - Conforms to SAE J809	●	Retrieval hitch with pin	
Independent transmission oil reservoir with sight gauge	●	Vertical spin-on hydraulic filter	●	Fore and aft/weight and height combined adjustment / Adjustable leg support / Seat belt, 2 in. (51 mm), retractable with CRS - Conforms to SAE J386	●	Extended rigid drawbar with pin for pull-type implements	
Cyboard diagnostics with visual code display	●	O-ring face seal hydraulic connectors	●	Fine and alt/weight and height combined adjustment / Adjustable leg support / Adjustable backrest angle / Aggressive lumbar support / Adjustable seatback extension / Seat belt, 2 in. (76 mm), retractable with CRS - Conforms to SAE J386	●	Driveline, extended for winch (with or without fairlead)	
Oil-to-air transmission oil cooler	●	Three function hydraulic valve	●	Four and alt/weight and height combined adjustment / Adjustable leg support / Adjustable backrest angle / Aggressive lumbar support / Adjustable seatback extension / Seat belt, 2 in. (76 mm), retractable with CRS - Conforms to SAE J386	●	Wipper, parallelogram with five shafts, pockets and three joints	
Independent transmission oil reservoir with sight gauge	●	Four- and five-function valves with levers, without float*	●	Four- and five-function valves with levers, with float*	●	Wash, standard or low speed	
Oil-to-air transmission oil cooler	●	Power beyond section for front/rear attachments*	●	Rear auxiliary plumbing	●	Wash, power in/power out low speed	
Back-in final drive seal guard	●	UNDERCARRIAGE	●	UNDERCARRIAGE	●	Log arch for winch	
Triple-rod-con final drives with wet multi-disk brakes	●	37-in. (937 mm) track gauge for standard-length track frame (77 in. [1967 mm] track on ground)	●	37-in. (937 mm) track gauge for standard-length track frame (77 in. [1967 mm] track on ground)	●	Automatic blade control*	
Rear/rear diagnostic test points	●					Grappler, washing*	
Maximum forward/reverse speed 3.1 mph (5.0 km/hr)	●					Roll-over blade attachment*	
Automatic 15% increase in reverse speed from set forward speed	●					Roller idlers in place of blade*	
Reverse speed set to 3.1 mph (5.2 km/hr) maximum*	●					Freeline plow*	
Forward and reverse speed set to 3.1 mph (5.2 km/hr) maximum*	●					Front- or rear-mounted hydraulic winch*	
Maximum forward/reverse speed increased to 6.1 mph (9.8 km/hr)*	●					Water tanks for line suppression*	
C-FRAMES AND BLADES						Pull-type choppers*	
No-vari-til hydraulic C-frame with adjustable blade pitch	●					Cable plow*	
Removable C-frame pivot grease tanks	●					Pull-type scrapers*	
Carbon-covered hoses with convenient replaceable lengths	●					Side boots*	
Straight and 90°	●					Roller compactor*	
Pitch link, pitched mid-range	●						
Alternate pitch link, pitched forward	●						
Alternate pitch link, pitched back	●						

KEY: ● Standard equipment ■ Optional or special equipment

*See your John Deere dealer for further information.



Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 62708, using No. 2-D fuel at 20 RPM gravity. No derating is required up to 3,000 ft. (1800 m) altitude. Gross power is without cooling fan.

Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Labels where otherwise noted. Specifications are based on units with standard equipment, rollover protective structures, full fuel tanks, and 175-lb. (79 kg) operators. 450R standard LT only with 37-in. (937 mm) blade and 16-in. (406 mm) track shoes and 450R LPG unit with 52-in. (1320 mm) blade and 24-in. (610 mm) track shoes.

