JOHN DEERE

450G DOZER

SAE Net Horsepower	Drive System	Operating Weight SAE
70 hp (52 kW)	Power Shift Torque Converter or Direct Drive	15,900 lb. (7228 kg) Standard Track

Model shown may include options

ENGINE

John Deere engineered and manufactured 4-cylinder turbocharged diesel engine. Replaceable wet-type cylinder liners help ensure superior heat dissipation and longer engine life. High-strength alloy heads include replaceable valve seat inserts. High engine torque rise helps provide fast engine recovery when working in tough operating conditions.

Engine: John Deere 4045T, 4045D

Rated power at 2100 rpm	70 SAE net hp (52 kW)
	73 SAE gross hp (54.5 kW)
Drawbar	51 hp (38 kW)
Cylinders	4
Displacement	276 cu. in. (4.524 L)
Fuel consumption, typical	1.5 to 2.3 gal./hr. (4.9 to 8.7 L/h)
Maximum net torque at 1300 rpm	228 lb.-ft. (309 Nm)
Lubrication	pressure system with full-flow filter
Air cleaner	dry type with restriction indicator
Electrical system	12 volt with 95 amp alternator
Cooling fan	blower

TRANSMISSION

Full power shift, Dura-Shift with torque converter or direct drive transmission is designed and built by John Deere. Four speeds forward and reverse allow the operator to match speeds to all working conditions. Operator can use the engine decelerator and power shift to easily change from one gear to another without stopping the machine or using a clutch.

MAXIMUM TRAVEL SPEEDS

	450G TC		450G DD	
	mph	(km/h)	mph	(km/h)
1st Forward	2.30	3.70	1.45	2.33
2nd Forward	3.31	5.33	2.41	3.88
3rd Forward	4.11	6.61	3.29	5.29
4th Forward	5.91	9.51	5.51	8.87
1st Reverse	2.50	4.02	1.60	2.57
2nd Reverse	3.58	5.76	2.67	4.30
3rd Reverse	4.47	7.19	3.63	5.84
4th Reverse	5.93	9.54	6.09	9.80

FINAL DRIVES

Large heavy-duty final drive assemblies help ensure long service life. To keep final drives from being adversely affected by shock loads, they are attached directly to the transverse case, and are isolated from the track frame.

STEERING/BRAKES

Oil-cooled and modulated steering system provides excellent durability and steering control. Multiple wet-disk steering clutches and wet-band steering brakes are pressure lubricated and provide long-term service life. They are located at the rear of the machine and can be serviced easily.

AUTOMATIC PARK BRAKE

This exclusive safety feature engages whenever the engine stops. The operator cannot drive the machine with the park brake engaged, which eliminates brake damage.

HYDRAULICS

Control	T-bar (dual lever optional) three function
Pressure	2750 psi (18 961 kPa)
Pump	gear
Flow	17 gpm (64 L/min.)
Cylinders	Ground, heat-treated, chrome-plated, polished cylinder rods with hardened steel (replaceable bushings) pivot pins

	Bore	Stroke
Lift, two	3.15 in. (80 mm)	x 18.0 in. (457 mm)
Angle, two	2.76 in. (70 mm)	x 17.4 in. (442 mm) standard
	3.15 in. (80 mm)	x 17.4 in. (442 mm) wide-track
Tilt, one	3.5 in. (90 mm)	x 4.0 in. (102 mm)

TRACKS

John Deere Dura-Trax™ undercarriage features large deep-heat-treated components for exceptional wear. Pins and bushings are sealed for life. Rollers and idlers are permanently sealed and lubricated. Long track option has 6-roller frame and more than 85 inches (2160 mm) of track on the ground. All 450G Crawlers have track frame covers that substantially reduce dirt buildup and make cleanout easier.

Chain pitch	6.29 in. (159.8 mm)
Bushing diameter, sealed	2.01 in. (51.0 mm)
Bushing diameter, sealed and lubed	2.12 in. (53.8 mm)
Link height	3.54 in. (90.0 mm)
Track roller diameter	7.19 in. (182.6 mm)
Carrier roller diameter	6.00 in. (152.5 mm)

CAPACITIES

	U.S.
Fuel tank	41 gal. (155.2 L)
Cooling system	18 qt. (17.0 L)
Crankcase, including filter	9 qt. (8.5 L)
Transmission	22.5 gal. (85.2 L)
Final drive (each)	7 qt. (6.6 L)
Hydraulic reservoir	10 gal. (37.8 L)
Hydraulic system	14.6 gal. (55.3 L)

OPERATING WEIGHT

450G (with ROPS)

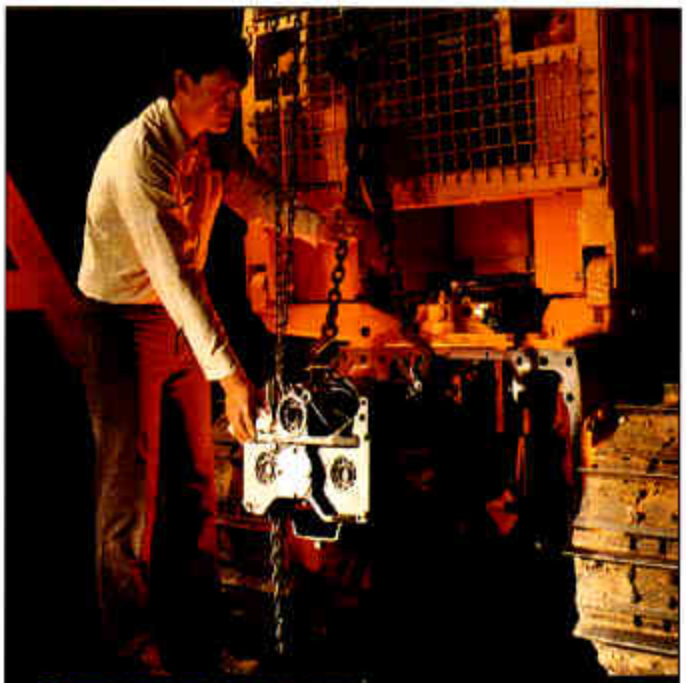
	450G TC	450G DD
Standard track	15,900 lb. (7228 kg)	15,700 lb. (7137 kg)
Wide track	16,856 lb. (7662 kg)	16,656 lb. (7571 kg)
Long track	16,478 lb. (7490 kg)	16,278 lb. (7400 kg)
Low ground pressure (LGP)	17,400 lb. (7909 kg)	17,200 lb. (7818 kg)

UNDERCARRIAGE

Dura-Trax undercarriage adds long-term value to every 450G-TC or 450G Dozer. Compare our bushings, pins, links and rollers to the competition — you don't need a ruler to see that they're bigger. But a lot of the reasons behind the extraordinary durability of Dura-Trax are things you can't see. Dura-Trax components are made of the best materials and then hardened deeper for longer wear cycles. State-of-the-art manufacturing processes are also used to ensure that every bolt is tightened to the right torque and every pin joint has the right oil-fill.

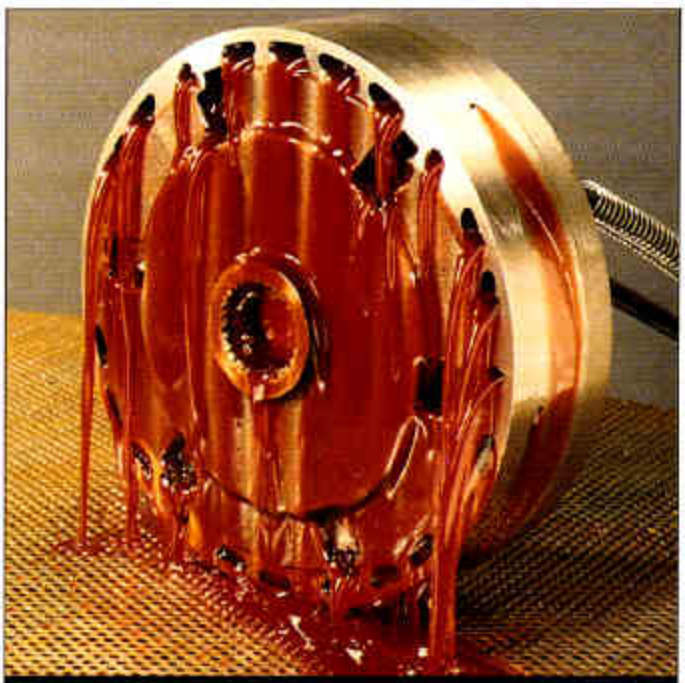
BLADE

There are a lot of things you'll like about the G-Series blade. First, it's easily the strongest, tightest blade on any dozer under 100 hp. But the feature you'll notice first is how well you can see the blade from the seat. The operator sees the blade working without craning his neck. A two-position blade pitch adjustment lets you change blade aggressiveness for different soil conditions. This adjustment can be done in minutes with simple tools.



SERVICEABILITY

True componentization has been achieved on the 450G-TC and 450G. The engine, transmission, final drives, steering system and track frames can all be removed and serviced independently. Major components are fastened to a rugged, one-piece mainframe which provides unequaled structural integrity.



STEERING CLUTCHES/BRAKES

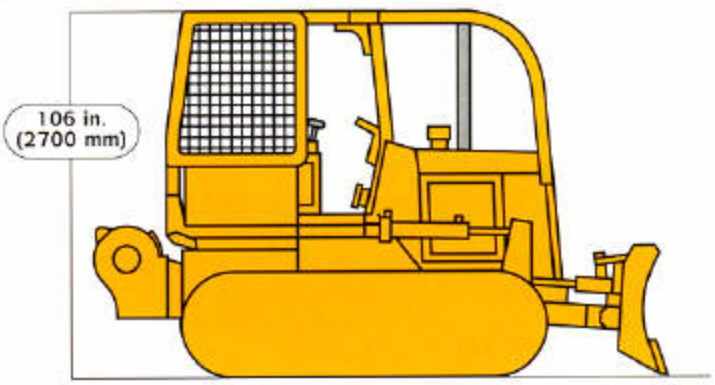
The pressurized cooling and lubrication system gives you smoother steering action and longer brake band life. You also can make smooth, "feathered" turns instead of the jerky, neck-snapping movements you get with other steering systems.

UNDERCARRIAGE

	Standard Track	Wide Track	Long Track	LGP
Grouser, closed center	16 in. (406 mm)	24 in. (610 mm)	16 in. (406 mm)	24 in. (610 mm)
Track shoes, each side	37	37	40	40
Ground contact area	2432 sq. in. (15 690 cm²)	3648 sq. in. (23 535 cm²)	2733 sq. in. (17 632 cm²)	4099 sq. in. (26 445 cm²)
Torque converter ground pressure	6.54 psi (45.1 kPa)	4.62 psi (31.9 kPa)	6.03 psi (41.6 kPa)	4.24 psi (29.2 kPa)
Direct drive ground pressure	6.46 psi (44.5 kPa)	4.57 psi (31.5 kPa)	5.96 psi (41.1 kPa)	4.20 psi (29.0 kPa)
Length of track on ground	76 in. (1930 mm)	76 in. (1930 mm)	85.0 in. (2160 mm)	85.0 in. (2160 mm)
Track gauge	57 in. (1450 mm)	69 in. (1750 mm)	57 in. (1450 mm)	69 in. (1750 mm)
Carrier roller	1	1	1	1
No. of track rollers	5	5	6	6
Adjustment	hydraulic	hydraulic	hydraulic	hydraulic
Ground clearance	14.25 in. (362 mm)	14.25 in. (362)	14.25 in. (362 mm)	14.25 in. (362 mm)

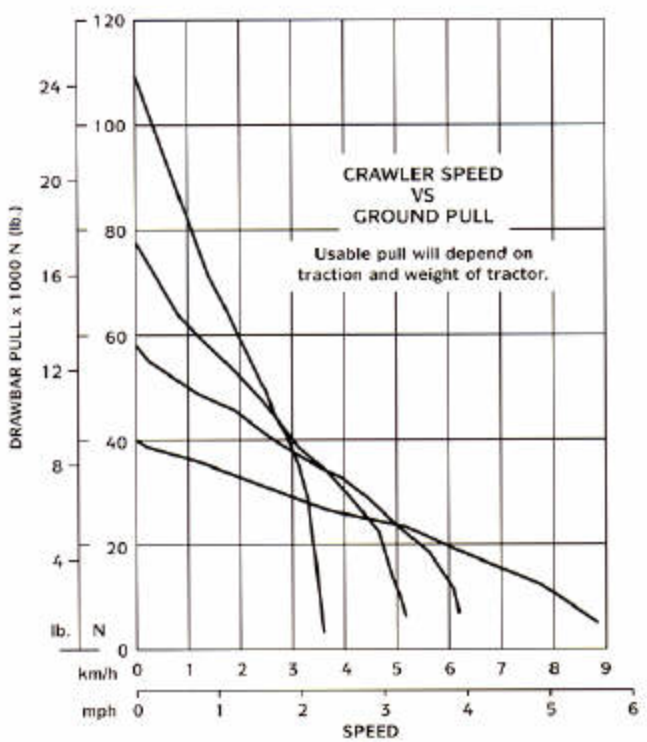
FORESTRY APPLICATION

The 450G Crawler can be equipped for forestry applications with the addition of limb risers and screens for the rollover protective structure. John Deere-built 4000 Winch adds versatility for skidding and clearing operations.

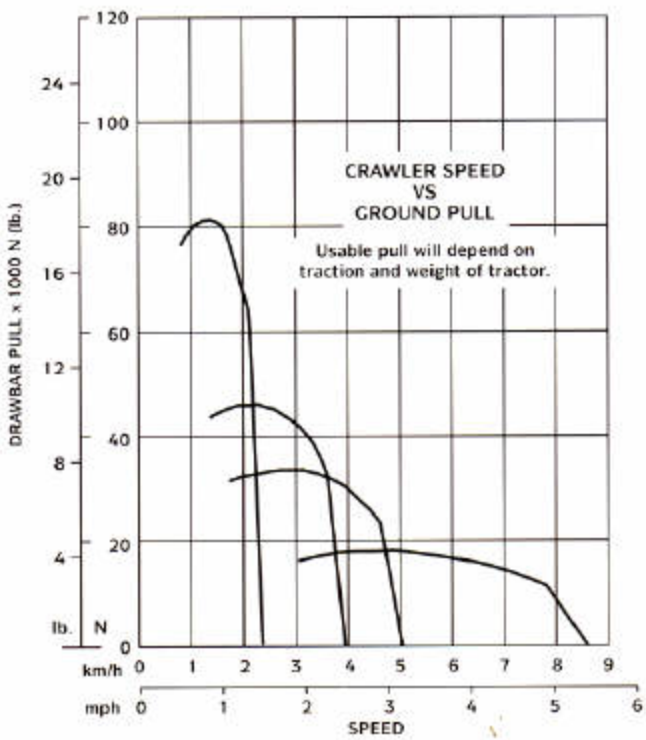


DRAWBAR PULL

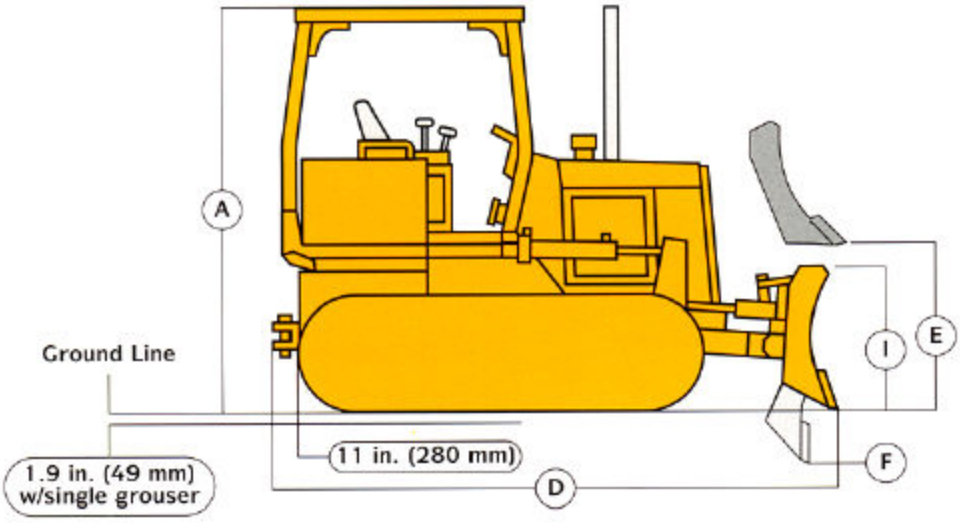
Torque Converter Transmission

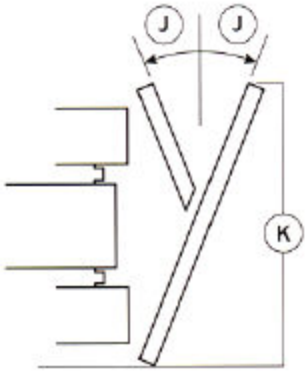


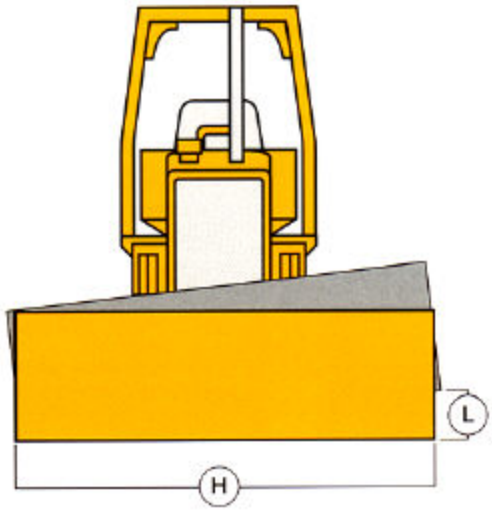
Direct Drive Transmission

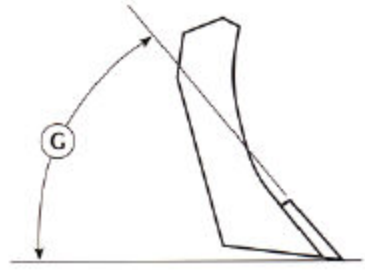


DIMENSIONS









Key:

A Overall height with ROPS ..... 106 in. (2700 mm)
B Overall height with cab ..... 107.2 in. (2720 mm)
C Overall height with low profile ROPS ..... 101.3 in. (2570 mm)
D Overall length ..... 160 in. (4070 mm)
E Blade lift height ..... 32.1 in. (815 mm)
F Digging depth ..... 19.9 in. (504 mm)
G Blade cutting edge angle ..... 50 or 55 degrees

G-Series Blade Specs*

	(H) Width		(I) Height		SAE Capacity		(J) Blade Angle	(K) Angled Width		(L) Tilt	
	in.	mm	in.	mm	yd^3	m^3	deg.	in.	mm	in.	mm
Standard Blade	96.9	2461	32.6	827	1.6	1.3	25	87.8	2230	13.0	330
Narrow Blade**	90.9	2309	32.6	827	1.5	1.2	25	82.4	2093	12.2	309
Wide Track	114.9	2918	32.6	827	2.0	1.5	23	105.7	2686	15.4	391
Wide Track	120.9	3071	32.6	827	2.1	1.6	23	111.3	2827	16.2	411

*All dimensions are with blade in forward pitch position.
**Blade will not fully cover standard tracks when fully angled.

ADDITIONAL STANDARD EQUIPMENT

Engine:
Dual stage dry air cleaner with restriction indicator
Precleaner
Altitude compensating turbocharger
Enclosed safety fan guard Conforms to SAE J1308
Coolant recovery bottle
Engine coolant to -34°F (-37°C)
Blower fan; trash-resistant radiator
Oil-to-water engine oil cooler
Underhood muffler with vertical exhaust stack
Power Train:
Four-speed power-shift transmission with torque converter
Winch drive
Automatic engaged park brake
Electrical System:
Horn
95-amp alternator, sealed
Electronic monitor system with audible and visual warning:
Alternator
Hydraulic filter restriction
Transmission filter restriction
Coolant temperature
Engine oil pressure
Transmission temperature
Transmission pressure
Reverse warning alarm
Hourmeter
Positive battery terminal covers
Bypass safety start cover at starter
One 12-volt low maintenance battery
Hydraulics:
Three-spool hydraulic valve
T-bar control
17 gpm (64 L/min.) hydraulic pump
Operator's Station:
ROPS canopy, isolation mounted Conforms to SAE J1040
Adjustable suspension seat Conforms to SAE J899
2 in. (51 mm) seat belt with retractors Conforms to SAE J386
Adjustable armrests
Decelerator
Slip-resistant safety steps and ergonomically-located handrails Conforms to SAE J185
Pedal steering
Interior-mounted rearview mirror
Overall Vehicle:
Bottom guards, front and rear
Adjustable blade pitch
Chain guides, front and rear
Remote dozer pivot grease bank
Perforated engine side shields
Track frame covers
Vandal protection
57 in. (1448 mm) Gauge standard track frame
16 in. (406 mm) closed center single bar shoes - sealed chain

OPTIONAL OR SPECIAL EQUIPMENT

Auxiliary starting receptacle
Ether starting aid
Headliner for ROPS canopy
Lights, halogen, 2 front, 1 rear 33,000 candlepower (375 737 lux each)
Master electrical disconnect switch
Radiator sand screen
Engine coolant heater, 1000 watts
Sealed and lubricated chain
3-in. (76 mm) seat belt
Two-lever dozer control

(Add these weights to SAE standard equipment operating weights to obtain total operating weights.)

	lb.	kg
Direct drive transmission with decelerator declutch and suspended power control inching pedal	-200	-91
Less altitude compensating turbocharger (direct drive)	-30	-13
Backhoe with 24-in. (610 mm) standard bucket	3350	1522
Blade, 90 in. (2287 mm)[1]	-51	-23
Blade, 96 in. (2438 mm)	0	0
Blade, 114 in. (2896 mm)[2]	-55	-25
Blade, 120 in. (3048 mm)[2]	0	0
Cab, ROPS with 40,000 BTU/hr (11.7 kW) heater, 400 cfm pressurizer and windshield washers	680	309
Counterweights, front and rear (each)	300	136
Front idler weights	350	159
Decelerator without declutch for use with direct drive transmission	-15	-7
SAE drawbar	65	30
Retrieval hitch	45	20
Front tow hook	33	15
Full-length rock guards	105	47
Fourth function valve for auxiliary equipment	12	5
Lever steering	59	26
Low profile ROPS[3]	240	109
Operator protection screens		
Rear	85	38
Side	270	122
Heavy-duty radiator	10	5
Power beyond rear hydraulics	36	16
Limb risers	215	98
Heavy-duty grille screen	44	20
Reversible fan	11	5
Ripper, rear	742	336
Ripper, parallelogram	1380	626
Two low-maintenance batteries	63	28
23 gpm (87 L/min.) pump with cooler for use with backhoe	24	11
Winch, John Deere 4000	1190	540
Wide track gauge 69 in. (1753 mm)	See vehicle weight chart	
16 in. (406 mm) closed center grouser shoes	-642	-292
18 in. (457 mm) closed center grouser shoes	-492	-224
LGP track gauge 69 in. (1753 mm)	See vehicle weight chart	
16 in. (406 mm) closed center grouser shoes	-694	-315
18 in. (457 mm) closed center grouser shoes	-532	-242
Long track	See vehicle weight chart	

Note: When adding optional front and rear equipment, add appropriate counterweights.

[1] Weight difference vs. 96 in. blade.
[2] Weight difference vs. 120 in. blade. The blades available for wide gauge machines only.
[3] Overall height reduced 4.71 in. (120 mm).

THE JDAdvantEDGE

JDAdvantEdge is a wealth of support programs, parts systems and dealer resources, all designed to give you the edge. This package of special benefits is a major reason why John Deere offers the "best value" for your equipment dollar.

Best parts support - Twelve regional parts depots in North America and others around the world put parts support near your job no matter where in the world it is.

A computerized FLASH™ parts locating system linking these depots to dealerships can find out-of-stock parts in a hurry and get them into your hands fast. Usually within 24 hours.

Best service backup - Dealer service technicians are regularly schooled, at our modern facility in Davenport, Iowa, or by professionals in the field, to diagnose quickly and repair efficiently.

If they're stumped, a phone call to DTAC (Dealer Technical Assistance Center) puts them in touch with a staff of pros at the factory who help them find a solution quickly.

Best dealers - Your John Deere dealer is an important contributor to the JDAdvantEdge. He or she is committed to being the best equipment supplier you can work with.

This is a dollars-and-cents commitment in parts inventory, in service facilities, in field service trucks. It's a sweat-and-blood commitment in dedicated, skilled and highly trained and motivated personnel in each and every department at the dealership.

But what sets John Deere dealers apart from all the rest is something more, a factor somewhat difficult to measure ... a caring attitude, and a sincere desire to be the best at meeting the needs of each individual customer.

John Deere Finance Plans - Whether you rent, lease or buy John Deere equipment, your dealer can explain the John Deere options available. One-stop options that let you free up operating capital, keep other lines of credit open. More solid benefits of the JDAdvantEdge.

Best protection - In addition to the new equipment warranty that meets or exceeds the competition, SECURE® extended coverage, an optional service product for John Deere equipment, is available for repair coverage after the warranty concludes. Full machine or power train coverage is available for a variety of time periods to meet your needs. Consult your dealer for availability and details.

Quality manufacturing - This machine was manufactured at the John Deere Dubuque Works, Dubuque, Iowa, which has been registered to the International Organization for Standardization (ISO) standard 9001. The Dubuque Works has been audited and recognized for its excellence in quality systems by the Quality Management Institute (QMI) and the Japanese Machinery & Metal Inspection Institute (JMI).

JOHN DEERE

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 6270B, using No. 2-D fuel at 35 API gravity. No derating is required up to 5,000 feet (1500 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. Except where otherwise noted, these specifications are based on a unit with rollover protective structure, full fuel tank, 175-lb. (79 kg) operator, standard equipment, and 96 in. PAT Blade for standard gauge or 120 in. PAT Blade for wide gauge.

SAFETY live with it