

7 0 - 7 4 S A E N E T H O R S E P O W E R



**JOHN DEERE**

**J**

**DOZER**

**450J**



**DOZERS**

*Courtesy of Machine.Market*

# Specifications

Engine	450J LT	450J LGP
Type .....	John Deere 4045T with altitude-compensating turbo-charger; meets EPA Tier II non-road emissions regu-lations	John Deere 4045T with altitude-compensating turbo-charger; meets EPA Tier II non-road emissions regu-lations
Rated Power @ 2,200 rpm .....	70 SAE net hp (52 kW)	74 SAE net hp (55 kW)
Cylinders (wet sleeve) .....	4	4
Displacement .....	276 cu. in. (4.52 L)	276 cu. in. (4.52 L)
Bore and Stroke .....	4.19 x 5.00 in. (106.5 x 127 mm)	4.19 x 5.00 in. (106.5 x 127 mm)
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)
Peak Torque .....	234 lb.-ft. (317 Nm) @ 1,200 rpm	251 lb.-ft. (340 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	

Transmission	450J LT / 450J LGP
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 or whenever the decelerator is depressed to the detent

**Automatic Park Brake**  
Exclusive safety feature engages wet, multiple-disc brakes automatically whenever the engine stops, whenever the operator depresses the decelerator pedal to the brake position, whenever the unit is in neutral for three seconds (with detected motion), or whenever the park lock lever is in the park position; machine cannot be driven with brake applied, reducing wear-out or need for adjustment

Hydraulic System	
System Type .....	open center
System Pressure Relief .....	3,000 psi (20 685 kPa)
Pump Type .....	gear
Pump Flow .....	15 gpm (56.8 L/min.) @ 2,200 rpm
Oil Return Filter .....	10 micron
Control .....	T-bar three function
Cylinders .....	heat-treated, chrome-plated, polished cylinder rods, hardened steel (replaceable bushings) pivot pins
Reservoir Capacity .....	8.5 gal. (32.2 L)

Capacities (U.S.)	
Fuel Tank with Lockable Cap .....	47 gal. (178 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 for up to 45-degree maximum slope operation.*

**Undercarriage****450J LT****450J LGP**

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

Grouser Width (closed center, single bar).....	16 in. (406 mm)	24 in. (610 mm)
Track Shoes (each side) .....	40	40
Ground Contact Area .....	2,752 sq. in. (17 775 cm <sup>2</sup> )	4,128 sq. in. (26 632 cm <sup>2</sup> )
Ground Pressure.....	5.9 psi (40.6 kPa)	4.25 psi (29.3 kPa)
Ground Clearance with Single-Bar Grouser (excluding grouser height).....	13.6 in. (346 mm)	13.6 in. (346 mm)
Length of Track on Ground .....	86 in. (2184 mm)	86 in. (2184 mm)
Track Gauge (with standard equipment) .....	57 in. (1450 mm)	65 in. (1650 mm)
Track Rollers (each side) .....	6	6
Track Pitch .....	6.29 in. (159.8 mm)	6.29 in. (159.8 mm)

**SAE Operating Weights**

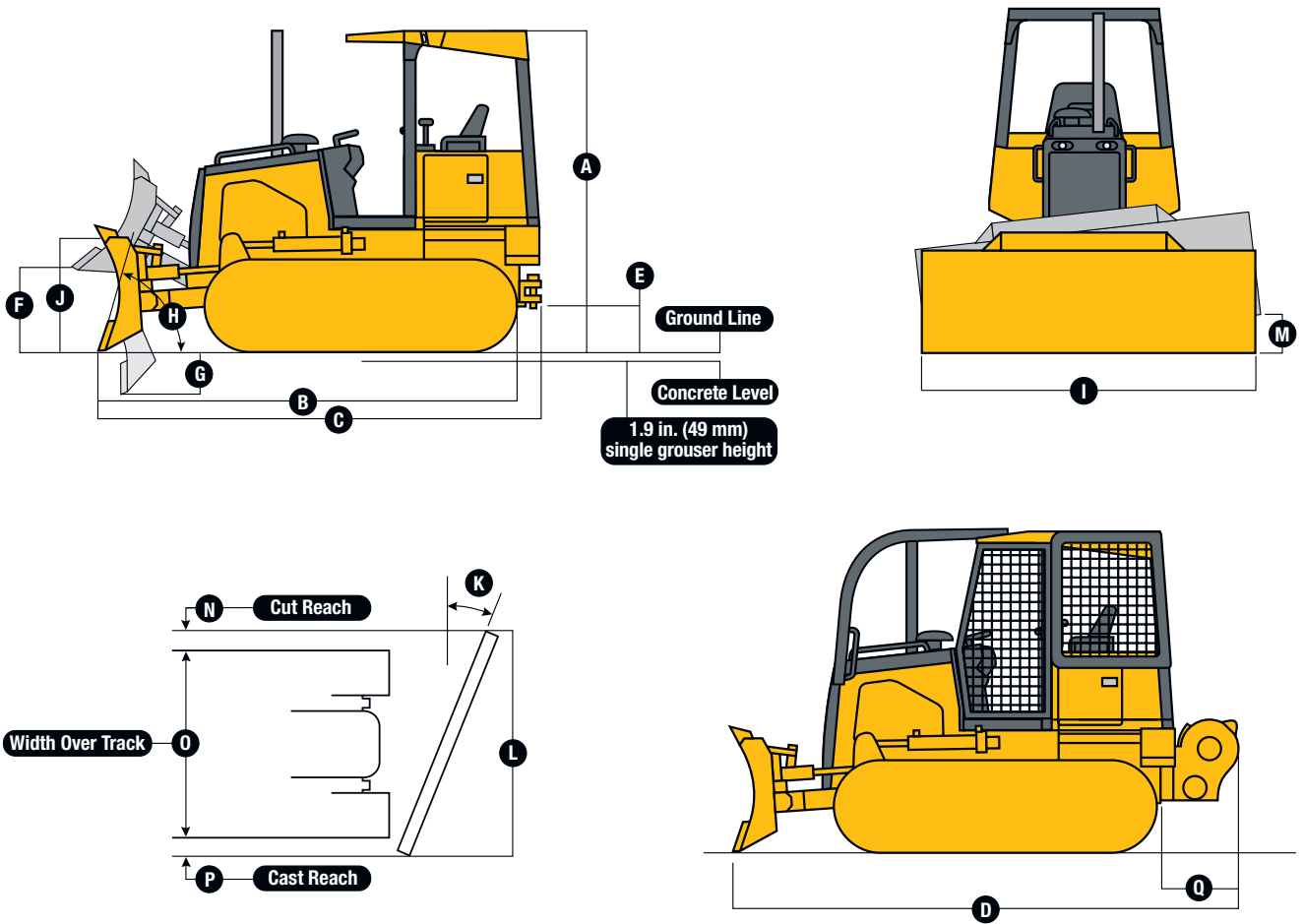
Base weights were computed for units with standard equipment, rollover protective structures, full fuel tanks, and 175-lb. (79 kg) operators.

97-in. (2464 mm) Blade and 16-in. (406 mm) Track Shoes .....	16,283 lb. (7401 kg)
124-in. (3150 mm) Blade and 24-in. (610 mm) Track Shoes .....	17,525 lb. (7966 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)
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)
Cab with Heater and Air Conditioner .....	675 lb. (306 kg)	675 lb. (306 kg)
Under-Seat ROPS Heater .....	26 lb. (12 kg)	26 lb. (12 kg)
Counterweight, Rear (each) .....	330 lb. (150 kg)	330 lb. (150 kg)
Counterweight, Front (each).....	240 lb. (109 kg)	240 lb. (109 kg)
Lights, Driving .....	3 lb. (1 kg)	3 lb. (1 kg)
Work Lights, High Intensity .....	9 lb. (4 kg)	9 lb. (4 kg)
Front Tow Hook .....	33 lb. (15 kg)	33 lb. (15 kg)
Retrieval Hitch.....	50 lb. (23 kg)	50 lb. (23 kg)
Extended Drawbar .....	72 lb. (33 kg)	72 lb. (33 kg)
Limb Risers .....	229 lb. (104 kg)	229 lb. (104 kg)
Rear Screen .....	76 lb. (35 kg)	76 lb. (35 kg)
Side Screens .....	94 lb. (43 kg)	94 lb. (43 kg)
Screens, Front and Doors .....	179 lb. (81 kg)	179 lb. (81 kg)
4000S Winch.....	1,437 lb. (653 kg)	1,437 lb. (653 kg)
Winch Fairlead, Four Roller.....	187 lb. (85 kg)	187 lb. (85 kg)
Parallelogram Ripper .....	1,306 lb. (594 kg)	1,306 lb. (594 kg)
90-in. (2286 mm) Blade, All-Hydraulic Heavy- Duty C Frame .....	38 lb. (17 kg)	
90-in. (2286 mm) Blade, All-Hydraulic Standard C Frame .....	- 58 lb. (- 26 kg)	
97-in. (2464 mm) Blade, All-Hydraulic Heavy- Duty C Frame .....	96 lb. (43 kg)	
115-in. (2921 mm) Blade, All-Hydraulic Heavy- Duty C Frame .....		5 lb. (2 kg)
All-Hydraulic Heavy-Duty C Frame (less blade) .....	- 1,063 lb. (- 482 kg)	- 1,063 lb. (- 482 kg)



**Dimensions**

**450J LT**

**450J LGP**

<b>A</b> Overall Height with ROPS or Cab .....	108 in. (2743 mm)	108 in. (2743 mm)
<b>B</b> Overall Length* .....	155 in. (3937 mm)	158 in. (4013 mm)
<b>C</b> Overall Length with Extended Drawbar .....	162 in. (4114 mm)	160 in. (4064 mm)
<b>D</b> Overall Length with Winch** .....	177 in. (4496 mm)	177 in. (4496 mm)
<b>E</b> Ground Clearance, Minimum		
Single-Bar Grouser .....	13.6 in. (345 mm)	13.6 in. (345 mm)
Swamp Shoes .....	14.4 in. (366 mm)	14.4 in. (366 mm)
<b>F</b> Blade Lift Height .....	30.4 in. (773 mm)	30.4 in. (773 mm)
<b>G</b> Blade Digging Depth .....	20.8 in. (528 mm)	20.8 in. (528 mm)
<b>H</b> Blade Cutting Edge Angle, Adjustable .....	52 to 60 degrees	52 to 60 degrees
*There is no change to overall length with retrieval hitch.		
**See page 5 for forestry application.		

**Blade Specs**

<b>I</b> Width .....	<b>90 in. (2286 mm)</b>
<b>J</b> Height .....	32.5 in. (826 mm)
SAE Capacity .....	1.9 cu. yd. (1.4 m <sup>3</sup> )
<b>K</b> Blade Angle .....	25.4 degrees
<b>L</b> Angled Width .....	82.9 in. (2106 mm)
<b>M</b> Tilt .....	12.3 in. (313 mm)
<b>N</b> Cut Reach .....	0 in. (0 mm)
<b>O</b> Width Over Track .....	73 in. (1854 mm)
<b>P</b> Cast Reach .....	10 in. (255 mm)

**Blade Specs (continued)**

**450J LT**

**450J LGP**

<b>I</b> Width.....	<b>97 in. (2464 mm)</b>
<b>J</b> Height.....	32.5 in. (826 mm)
SAE Capacity .....	2.0 cu. yd. (1.5 m <sup>3</sup> )
<b>K</b> Blade Angle .....	25.4 degrees
<b>L</b> Angled Width .....	89.3 in. (2267 mm)
<b>M</b> Tilt.....	13.3 in. (337 mm)
<b>N</b> Cut Reach.....	3.1 in. (78 mm)
<b>O</b> Width Over Track .....	73 in. (1854 mm)
<b>P</b> Cast Reach .....	13.2 in. (335 mm)

<b>97 in. (2464 mm)</b>
32.5 in. (826 mm)
2.0 cu. yd. (1.5 m <sup>3</sup> )
22.2 degrees
91.2 in. (2318 mm)
13.3 in. (337 mm)
1.6 in. (41 mm)
79 in. (2006 mm)
10.6 in. (269 mm)

<b>I</b> Width.....	<b>115 in. (2921 mm)</b>
<b>J</b> Height.....	32.5 in. (826 mm)
SAE Capacity .....	2.29 cu. yd. (1.75 m <sup>3</sup> )
<b>K</b> Blade Angle .....	25.4 degrees
<b>L</b> Angled Width .....	105.5 in. (2680 mm)
<b>M</b> Tilt.....	15.8 in. (400 mm)
<b>N</b> Cut Reach.....	10.6 in. (268 mm)
<b>O</b> Width Over Track .....	73 in. (1854 mm)
<b>P</b> Cast Reach .....	22 in. (558 mm)

<b>115 in. (2921 mm)</b>
32.5 in. (826 mm)
2.29 cu. yd. (1.75 m <sup>3</sup> )
25.4 degrees
105.5 in. (2680 mm)
15.8 in. (400 mm)
2.6 in. (65 mm)
89 in. (2260 mm)
14 in. (355 mm)

<b>I</b> Width.....	<b>124 in. (3150 mm)</b>
<b>J</b> Height.....	30.2 in. (767 mm)
SAE Capacity .....	2.15 cu. yd. (1.64 m <sup>3</sup> )
<b>K</b> Blade Angle .....	25.4 degrees
<b>L</b> Angled Width .....	113.7 in. (2887 mm)
<b>M</b> Tilt.....	17 in. (432 mm)
<b>N</b> Cut Reach.....	6.8 in. (173 mm)
<b>O</b> Width Over Track .....	89 in. (2260 mm)
<b>P</b> Cast Reach .....	17.9 in. (454 mm)

**Forestry Application**

**450J LT / 450J LGP**

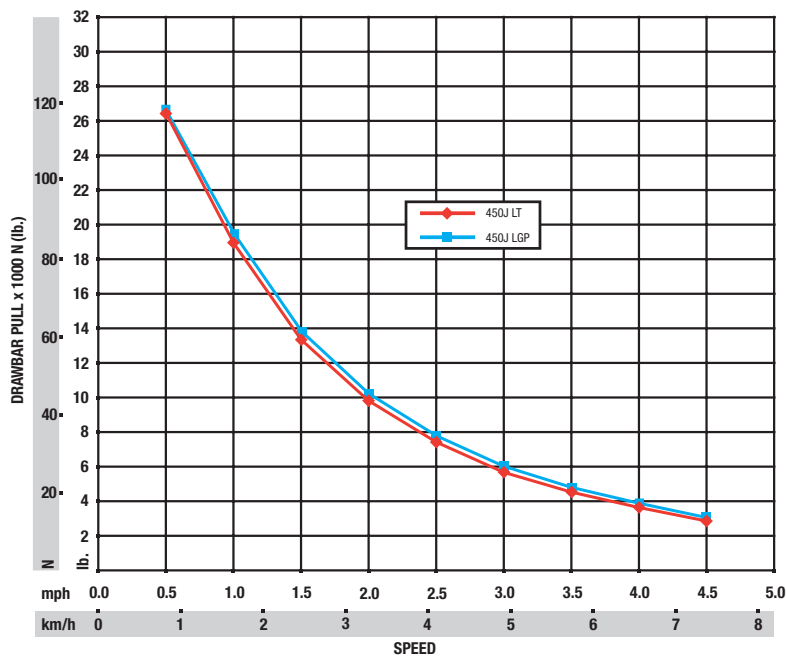
Available limb risers and screens for the rollover protective structure, John Deere-built, self-contained 4000S Winch\* for versatile skidding and clearing operations

<b>D</b> Overall Length with Winch** .....	177 in. (4496 mm)
<b>Q</b> 4000S Winch Length .....	29.6 in. (752 mm)

\*Reference 4000S Winch spec sheet.  
\*\*See page 4 for related dimensions.

**Drawbar Pull**

Crawler Speed vs Ground Pull .....usable pull will depend on traction and weight of tractor



## 450J CRAWLER DOZER

**Key:** ● Standard equipment ▲ Optional or special equipment

\*See your John Deere dealer for further information.

### 450J Engine

- Meets EPA Tier II non-road emissions regulations
- Electric fuel shutoff, key start switch
- Oil-to-water engine oil cooler
- Vertical spin-on oil filter
- Vertical spin-on primary fuel filter with water separator
- Vertical spin-on final fuel filter
- Dual-element dry air cleaner, built-in pre-cleaner, and evacuator valve
- Above-hood pre-screener/raincap
- ▲ External primary precleaner\*
- Enclosed safety fan guard
- Coolant recovery tank
- Engine coolant to -34°F (-37°C)
- Blower-type cooling fan
- Trash-resistant ten-fin-per-inch in-line radiator
- ▲ Radiator sand screen (steel)
- Under-hood muffler, vertical exhaust stack
- Pre-wired for ether start aid
- ▲ Electric ether start aid
- ▲ Coolant heater, 1,000 watts, 110 volts
- ▲ Coolant heater, fuel fired

### Powertrain and Controls

- Dual-path hydrostatic transmission
- Single-lever steering, F-N-R direction control
- Decelerator/brake pedal, automatic retardation
- Engine-speed selection lever
- Ground speed in grip with speed ratio
- Automatic straight-ahead tracking
- Dynamic braking (anti-free wheel)
- Counterrotation
- Transmission neutral lock, safety start switch
- Automatic spring-applied, hydraulic-released parking brake
- Independent transmission oil reservoir with sight gauge
- Onboard diagnostics with visual display
- Oil-to-air transmission oil cooler
- Built-in final drive seal guards
- Triple-reduction final drives with wet multi-disc brakes
- Remote diagnostic test ports
- Maximum forward/reverse speed 5.0 mph (8.0 km/h)
- Selectable reverse speed from set forward speed

### C-Frames and Blades

- Six-way all-hydraulic C-frame with adjustable blade pitch
- Remote C-frame pivot grease banks
- Cordura-covered hoses, conveniently replaceable lengths
- Straight end bits
- Adjustable pitch link

### Electrical

- 12-volt system
- Fuse panel, blade-style multi-fused circuit breakers
- Electric horn
- Reverse warning alarm
- Master electrical disconnect
- Positive battery terminal covers

### 450J Electrical (continued)

- By-pass start safety cover at starter
- Electronic monitor, visual and audible warning
- Ground-speed selection display
- Single 12-volt low-maintenance battery, 190-min. reserve capacity, 950 CCA
- ▲ Dual 12-volt low-maintenance batteries, 380 min. reserve capacity, 1,900 CCA
- 65-amp sealed alternator with ROPS
- 20-amp power port, for phone and radio

### Hydraulic System

- 15-gpm fixed-displacement gear pump
- ▲ Pump, through-drive for winch or auxiliary pump
- Low-effort T-bar blade control
- Independent reservoir with sight gauge
- Vertical spin-on filter
- O-ring face seal connectors
- Three-function valve
- ▲ Four- and five-function valves with levers, with or without float\*
- ▲ Rear auxiliary plumbing

### Undercarriage

- Single-flange rollers
- ▲ Double-flange rollers\*
- Full-length track frame covers
- Chain guides, front and rear
- Fully protected track-tension adjusters
- Solid sprockets
- Sprocket rock guards (bolt-on)
- ▲ Bolt-on full-length track-roller rock guards
- ▲ Sealed track chains
- ▲ Sealed and lubricated track chains
- ▲ Self-cleaning pyramid swamp shoes\*

### Lights

- Grille-mounted driving lights (2), rear light (1), halogen, 2,000 candlepower each
- ▲ High-intensity work lights, front (2) and rear (2), with steel guards, 65 watts each

### Operator's Station

- Modular ROPS/FOPS canopy, isolation mounted (conforms to SAE J1040)
- ▲ Under-seat ROPS heater, 30,000 Btu/hr
- ▲ Modular ROPS/FOPS cab, isolation mounted (conforms to SAE J1040): Air conditioner, 24,000 Btu/hr / Fresh air intake cab heater/defroster/pressurizer, 18,000 Btu/hr with air precleaner / Dome light / Deluxe headliner with molded air ducts for heater, defroster, and air conditioner / 30,000 Btu/hr under-seat heater / Front windshield and doors, wipers and washers / Tinted safety glass / Antenna for radio / 95-amp alternator
- Right and left access
- Slip-resistant front-mounting steps
- Ergonomically located handholds
- Headliner
- Floormat
- Adjustable footrests
- Adjustable full-length armrests
- Built-in Operator's Manual storage
- Suspension vinyl seat (conforms to SAE J899): Fore and aft/weight and height combined adjustment / Adjustable leg support / Seat

### 450J Operator's Station (continued)

- belt, 2 in. (51 mm), retractable with CRS (conforms to SAE J386)
- ▲ Deluxe suspension vinyl or cloth seat (conforms to SAE J899): Fore and aft/weight and height combined adjustment / Adjustable leg support / Adjustable backrest angle / Adjustable lumbar support / Adjustable seatback extension / Seat belt, 3 in. (76 mm), retractable with CRS (conforms to SAE J386)
- ▲ Seat belt, 3 in. (76 mm), retractable with CRS (conforms to SAE J386)
- Convex interior rearview mirror
- ▲ Accessories: Convex wide-angle interior rearview mirror / Knee cushions (2) / Seat-side lockable storage box/lunch box/cup holder
- ▲ Rear window wiper and washer for cab
- ▲ AM/FM weatherband radio
- ▲ Complete enclosure ROPS-to-cab conversion panels
- ▲ Rear-and-side-only enclosures
- ▲ Front windshield and doors enclosure

### Overall Vehicle

- One-piece unitized construction mainframe
- Front tow loop (bolt-on)
- Reinforced engine and mid-frame bottom guards
- Integral transmission guard
- Heavy-duty louvered grille
- Perforated engine side shields
- Vandal protection lock provisions for: Engine service access cover / Fuel fill / Hydraulic reservoir fill/check / Transmission reservoir fill/check / Instrument panel
- Lockable grease gun/tool storage compartment in right access door
- ▲ Environmental drains
- ▲ Chrome exhaust stack
- ▲ Trademarks/decals, French or Spanish
- ▲ Transport lift and tie-down rings\*

### Protection Packages

- ▲ Extreme-duty louvered grille and hose protection
- ▲ Limb risers, arched or point-to-point
- ▲ Operator-protective rear screen
- ▲ Operator-protective side screens (ROPS)
- ▲ Operator-protective full-screen package
- ▲ Heavy-duty engine air-intake guard
- ▲ Air-conditioning module guard

### Attachments

- ▲ Counterweight, rear, 330 lb. (150 kg) each
- ▲ Counterweight, front, 240 lb. (109 kg) each
- ▲ Retrieval hitch with pin
- ▲ Extended rigid drawbar with pin for pull-type implements
- ▲ Extended drawbar for winch
- ▲ Parallelogram ripper with five shank pockets and three teeth
- ▲ Standard or low-speed winch
- ▲ Power-in/out standard-speed winch
- ▲ Power-in/out low-speed winch
- ▲ Four-roller fairlead for winch
- ▲ Log arch for winch



JOHN DEERE

DKA450J Litho in U.S.A. (04-06)

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. 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 standard equipment, rollover protective structure, full fuel tank, and 175-lb. (79 kg) operator.



Courtesy of Machine.Market