JOHN DEERE

CONSTRUCTION EQUIPMENT | TRUCKS

MODEL NO.

250D 300D

ADT's

Whoever hauls the most FOR THE LEAST

Don't let their good looks fool you. John Deere's sleek new 250D and 300D articulated dump trucks have the durability, strength, and speed to help you win big at the mass excavation game.

Worried about losing ground to foul weather? The oscillating frame design, articulated steering, and high-flotation tires help these hard-charging off-road haulers plow through deep mud with ease. Troubled by long haul roads and steep grades? Each unit has a max speed of 31 mph for quick cycle times and high productivity. There's also ample lugging power to pull heavy loads to the top of any jobsite.

Turn the page to know more about how 250D and 300D Trucks will move you ahead of the competition.

MODEL NO.

250D 300D

material MONEY WINS.

StructurAll™ Warranty covers articulated joints and major structures for 10,000 hours or three years – free of charge.

Extensive use of light-weight, high-strength materials give the 250D and 300D the best payload-to-weight ratios in their class.

The oscillating frame joint provides unmatched traction and stability. By permitting the front and rear chassis to move independently, it keeps all six wheels firmly planted on the ground – even in hilly or muddy conditions.

Rainy days got you down? With their light weight and high-flotation tires, these trucks won't leave you stuck in the mud.

250D 300D

Get more bang for your truck.

Finding that competitive edge means moving more material for less money. Easier said than done, right? Getting the most out of your truck (and buck) means the difference between leading the way or getting left behind.

Fortunately, if you're serious about moving more for your dollar, you need look no further. With their faster cycle times and superior fuel efficiency, the new 250D and 300D articulated dump trucks (ADTs) haul at a lower cost per ton than any equivalent-sized truck. And when it comes to haulage efficiency, it's no contest. These trucks boast the highest payload-to-weight ratio in their class. With more power to haul the load, you'll maximize payload and productivity – and profitability.

Wouldn't dream of putting a scraper in waist-deep mud or rough terrain? ADTs thrive in extreme conditions where scrapers or rigid trucks fear to tread. The oscillating frame joint, articulated steering and high-floatation tires make it possible to claw right out of deep mud and ruts. This means you can keep a job moving even when it's raining – something you simply can't do with a scraper. You'll experience less downtime and more profitable, cost-effective operation – while leaving your competitors stuck in the mud.

The quiet, temperature-controlled operator station ensures that operators are safe, comfortable, and more productive. Every feature – from the oversized air-suspension seat to the heavy duty heater and AC unit – is designed to help operators focus on the job at hand while keeping out of harm's way.

The main load-sensing hydraulic system has fewer components and only a single pump, so it's easy to maintain. Flow rates have been increased for faster dump cycle times.

The spacious, tiltable cab is center-mounted with the seat optimally positioned behind the front axle. This provides unmatched stability by reducing the rolling and pitching often experienced in off-road conditions.

The short-sloped front end provides a better approach angle for getting through rough terrain, which means less bottoming out in ditches or swales.

Automatic retardation slows the vehicle to a safe operating speed by automatically down shifting the transmission. This reduces service brake wear while giving the operator the confidence to safely maintain higher speeds on steep grades and in poor ground conditions.

There's no place like home, but amenities like the deluxe AM-FM radio and in-dash beverage cooler make this office space a pretty comfortable place to do business.

The 250D and 300D are operator friendly, so you can put a new operator into one with a minimum of training. Controls wrap around the operator and are logically and conveniently placed, while instruments and display units are easy to understand and use.

Built to take a beating... So your bottom line won't.

Safety and productivity are enhanced by superior braking capability. The fully hydraulic, dry disc brakes deliver dependable stopping power, while the simplicity of their design improves reliability and ease of service. Both models come with spring applied, air-released park brakes.

Structural components – including chassis, articulation and oscillation joint, axles, and suspension – are fabricated from high-strength steel and are larger than most competitors, ensuring longer life.

MODEL NO.

250D 300D

The turbo charged, intercooled John Deere Powertech in-line 8.1 L engine weighs less than its in-line six or V-8 competitors – which translates into better fuel efficiency and higher power-to-weight ratio. It also delivers lower emissions, so you'll be compliant with future emission standards.

The easy-to-operate Ecomat automatic planetary powershift transmission provides the smoothest shift possible.

We all want to haul more for less.

And when it comes to keeping costs down,

uptime is the name of the game.

Which is why each of the new D-series machines comes equipped with proven power train components that have been designed to deliver years of reliable service. Major structural components are ruggedly designed to endure heavy cycles in the most extreme conditions. Trying to contain maintenance costs? Service intervals have been increased on the engine and hydraulics to 500 and 2000 hours respectively.

Construction equipment owners know that Deere dealer support, in-field service, and parts availability set the industry standard. Plus our technicians are the best trained and best equipped in the country. You can count on them to provide the right solution and get you up and running in no time.

250D 300D

Engine

	250D	300D
Type	John Deere 6081H; meets EPA Tier II non-road emissions regulations	John Deere 6081H; meets EPA Tier II non-road emissions regulations
Configuration	inline six cylinder	inline six cylinder
Aspiration	turbocharged and intercooled	turbocharged and intercooled
Cooling system	liquid cooled with single-pass radiator and charge air cooler	liquid cooled with single-pass radiator and charge air cooler
Rated power (conforms to SAE J1349)	265 SAE net hp (198 kW) / 268 SAE gross hp (200 kW) @ 2,000 rpm	285 SAE net hp (212 kW) / 288 SAE gross hp (215 kW) @ 2,200 rpm
With full-fan engagement	258 SAE net hp (192 kW)	279 SAE net hp (208 kW)
Maximum net torque (conforms to SAE J1349)	789 lb.-ft. (1070 Nm) @ 1,200–1,400 rpm	789 lb.-ft. (1070 Nm) @ 1,200–1,600 rpm
Displacement	494 cu. in. (8.1 L)	494 cu. in. (8.1 L)

Transmission

	250D / 300D	
Configuration	ZF 6HP592C engine-mounted constant-meshing planetary, hydraulically operated multiple-disc clutches, electronic control, hydrodynamic torque converter with lock-up, built-in PTO drive	
Retarder	input retarder	
Stall torque ratio	2.4 to 1	
Vehicle speeds (full load, 2% rolling resistance)	*Forward*	*Reverse*
Gear 1	4.2 mph (6.7 km/h)	4.9 mph (7.9 km/h)
Gear 2	6.7 mph (10.8 km/h)	
Gear 3	11.5 mph (18.5 km/h)	
Gear 4	16.3 mph (26.2 km/h)	
Gear 5	23.1 mph (37.2 km/h)	
Gear 6	31.3 mph (50.4 km/h)	

Transfer Box

Configuration	three inline helical gears with 50/50 lockable torque-proportioning interaxle differential
Output torque split	33 front / 67 rear (normal operation)

Axles

Differential type	spiral bevel gear with 25% limited slip
Final drive type	outboard heavy-duty planetary reduction hub

Braking System

Service brake	dual-circuit hydraulic-actuating dry-disc calipers on all axles
Park and secondary	spring-applied, air-released, automatic slack-adjusting mechanical caliper, driveline-mounted, dry disc
Auxiliary brake	variable hydraulic transmission retarder
Maximum retardation with full brakes	570 hp (425 kW)

Pneumatic System

Type	air drier, heater, and integral unloader valve
System pressure	123 psi (850 kPa)

Electrical System

Voltage	24 volt
Battery type	twin maintenance-free
Battery capacity	2 x 105 A.h.
Alternator rating	28 volt, 80 amp

Steering System

Type	hydrostatically actuated two double-acting hydraulic cylinders
Angle	45 degrees side to side
Lock-to-lock turns	4.1

Hydraulic System — 250D / 300D

Type	closed-center, load-sensing system
Main pump	axial piston, variable displacement
Application	steering, bin tipping, hydraulic brake charging
Flow	48.7 gpm (184 L/min.) @ governed engine speed
Pressure	3,481 psi (24 000 kPa)
Secondary steering pump	axial piston, variable displacement
Application	secondary steering, assist main steering
Flow	32 gpm (122 L/min.) @ full ground speed

Tires/Wheels

	250D	300D
Type	radial earthmover	radial earthmover
Size	23.5R25	23.5R25
Maximum ground pressure (loaded)	19.6 psi (135 kPa) middle	23 psi (157 kPa) middle

Suspension — 250D / 300D

Front type	semi-independent axle movement, supported on oil/nitrogen suspension struts
Rear type	load-equalizing pivoting walking beams on each axle with laminated suspension blocks

Body

	250D	300D
Capacity		
Struck	13.7 cu. yd. (10.5 m^3)	16.5 cu. yd. (12.6 m^3)
Heaped	18.0 cu. yd. (13.8 m^3) @ 2-to-1 SAE ratio / 22.1 cu. yd. (16.9 m^3) @ 1-to-1 SAE ratio	21.6 cu. yd. (16.5 m^3) @ 2-to-1 SAE ratio /26.6 cu. yd. (20.3 m^3) @ 1-to-1 SAE ratio
With optional tailgate	19.0 cu. yd. (14.5 m^3)	23.0 cu. yd. (17.6 m^3)
Rated payload	51,147 lb. (23 200 kg)	60,186 lb. (27 300 kg)
Power-down time	6 sec.	6 sec.
Raise time	11.9 sec.	11.9 sec.
Tipping angle	70 degrees	70 degrees

Service Capacities — 250D / 300D

Fuel tank	90 gal. (340 L)
Engine oil	6.7 gal. (25.5 L)
Engine coolant	7 gal. (26.5 L)
Transmission fluid (refill)	5.8 gal. (21.8 L)
Transfer case oil	5 qt. (4.7 L)
Hydraulic reservoir	20.8 gal. (78.8 L)
Axle oil (front)	5.8 gal. (21.9 L)
Axle oil (middle)	5.8 gal. (21.9 L)
Axle oil (rear)	5.8 gal. (21.9 L)
Final drive	4.2 qt. (4 L)

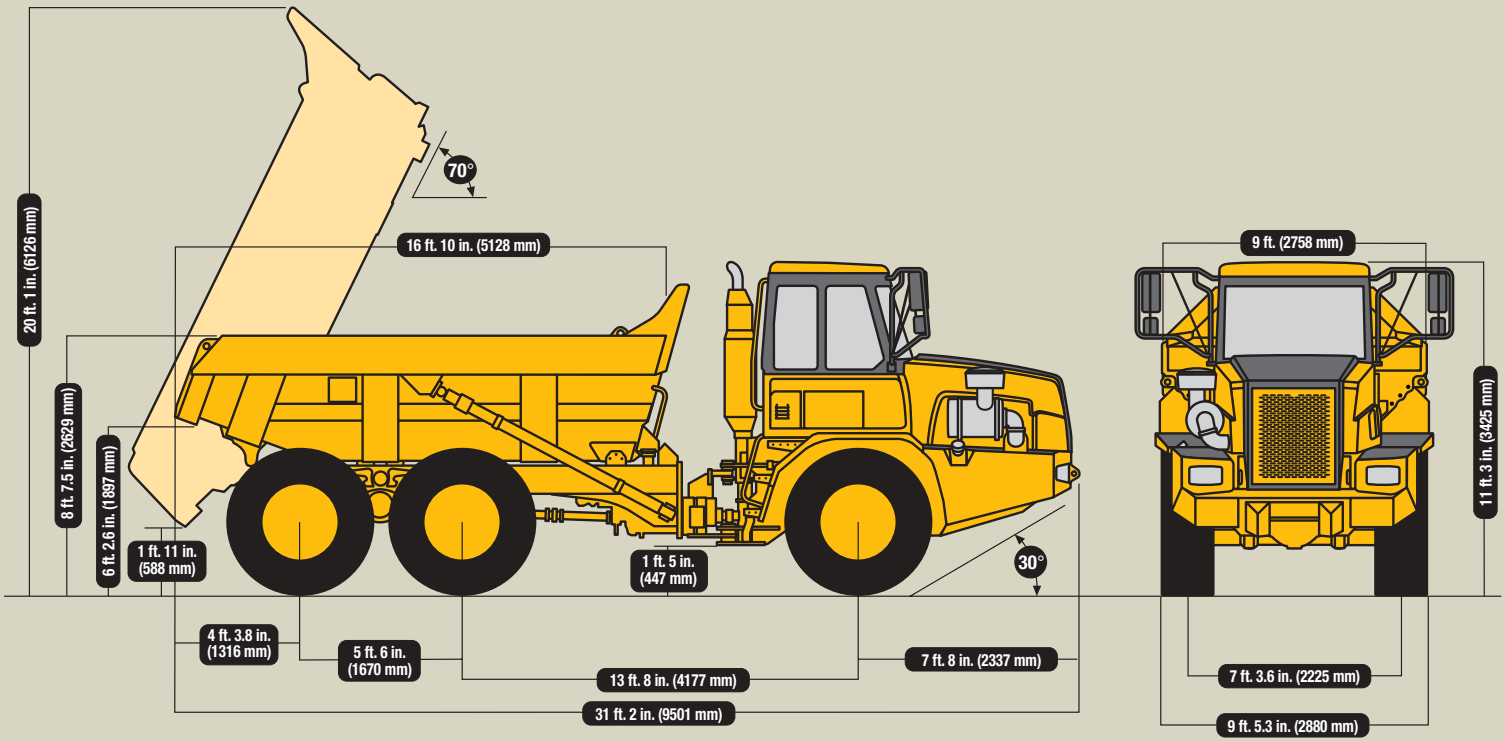
Operating Weights

	250D	300D
Empty		
Front	21,054 lb. (9550 kg)	21,495 lb. (9750 kg)
Middle	9,149 lb. (4150 kg)	9,480 lb. (4300 kg)
Rear	8,818 lb. (4000 kg)	9,149 lb. (4150 kg)
Total	39,021 lb. (17 700 kg)	40,124 lb. (18 200 kg)
Loaded		
Front	27,778 lb. (12 600 kg)	29,542 lb. (13 400 kg)
Middle	31,361 lb. (14 225 kg)	35,550 lb. (16 125 kg)
Rear	31,030 lb. (14 075 kg)	35,218 lb. (15 975 kg)
Total	90,169 lb. (40 900 kg)	100,310 lb. (45 500 kg)

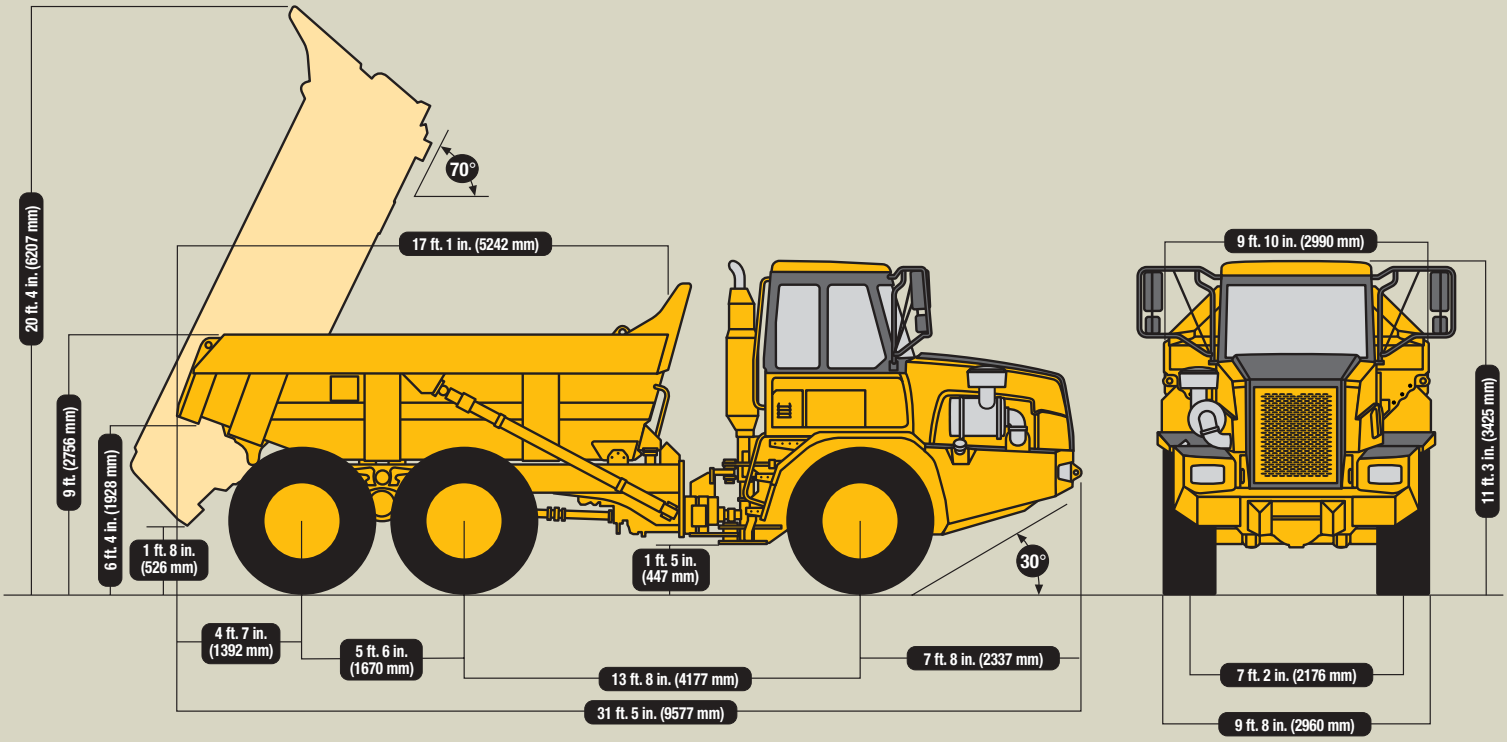
SAE Turning Radius Dimensions

Inside turning circle radius	13 ft. 8 in. (4167 mm)	13 ft. 6 in. (4122 mm)
Outside turning circle radius	26 ft. (7935 mm)	26 ft. 2 in. (7980 mm)

250D Dimensions



300D Dimensions



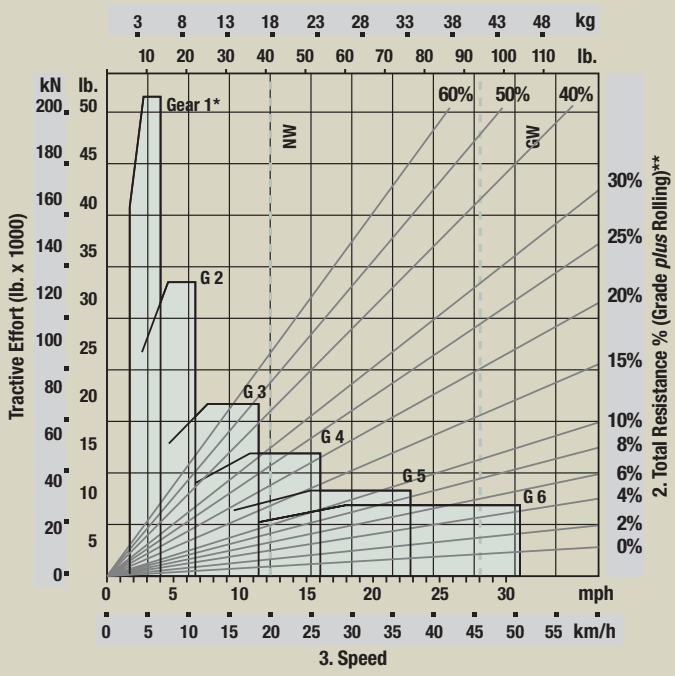
Retardation and Gradeability

1. Read from total weight down to % total resistance (diagonal line).
2. From that point, read horizontally to curve with highest attainable speed range.
3. Read down to maximum descent speed.

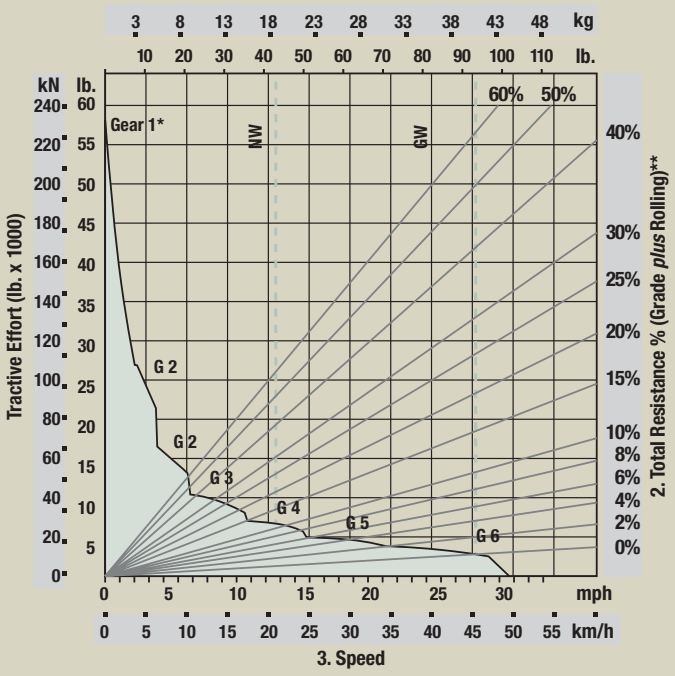
*Gear 1 lock-up not engaged automatically, engaged only when Gear 1 selected manually.

**2% rolling resistance assumed in chart.

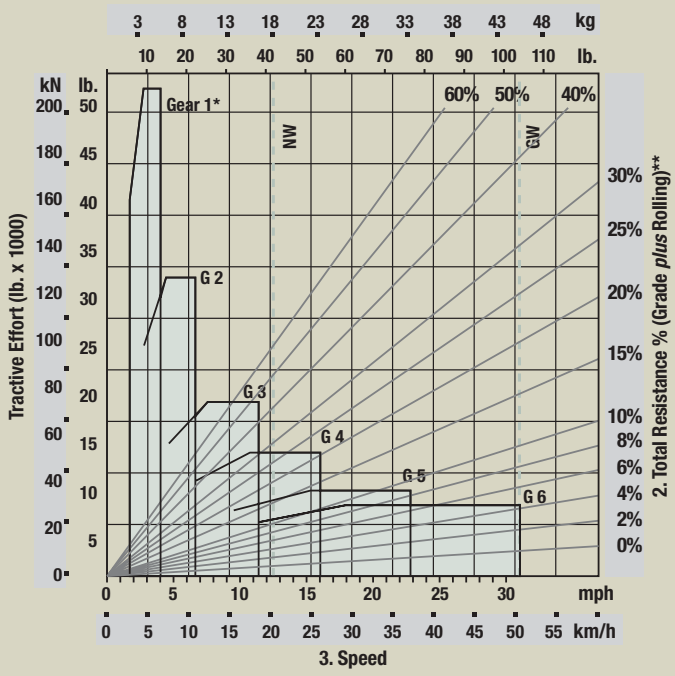
250D Retardation



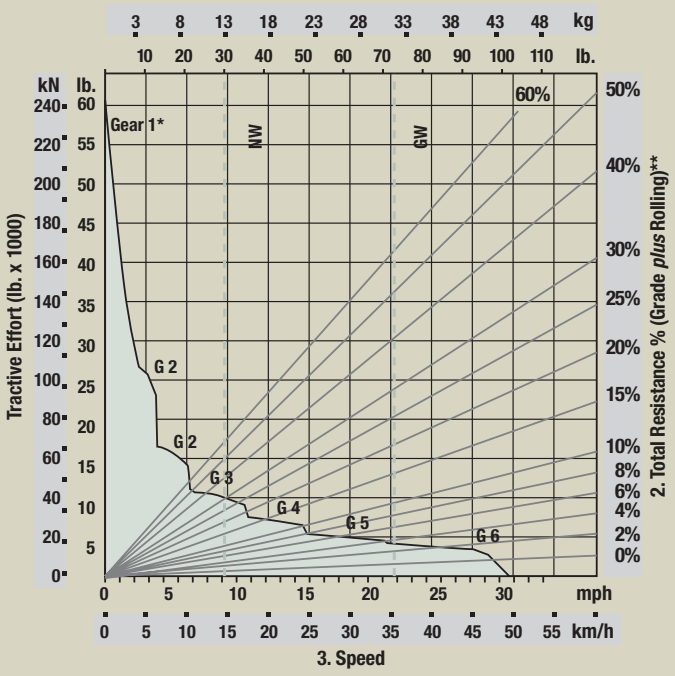
250D Gradeability



300D Retardation



300D Gradeability



250D / 300D Articulated Dump Trucks

Key: ● Standard equipment ▲ Optional or special equipment

*See your John Deere dealer for further information.

250D 300D Engine

- ● ● Meets EPA Tier II non-road emissions regulations
- ● John Deere 6081H – inline six-cylinder, 265 SAE net hp (198 kW)
- ● John Deere 6081H – inline six-cylinder, 285 SAE net hp (212 kW)
- ● ● Crankshaft-driven fan
- ▲ ▲ Ether start aid*
- ▲ ▲ Block heater*
- ● ● Turbocharged and intercooled

Power Train

- ● ● Automatic exhaust brake
- ● ● Automatic planetary transmission – hydrodynamic torque converter with lock-up
- ● ● Automatic transmission retarder
- ● ● Limited-slip differentials on all drive axles
- ● ● Dual-circuit, dry-disc brakes on all six wheels
- ● ● Interaxle differential splits torque – 33% to front, 67% to rear
- ● ● Lockable proportion differential transfer box
- ● ● Lever-activated drive – neutral/reverse controls
- ● ● Rocker switch range holds to prevent gear hunting

Tipping Body

- ● ● 70-degree tip angle
- ● ● Body ducted for heating
- ▲ ▲ Mechanical/automatic tailgate

250D 300D Tipping Body *(cont.)*

- ● ● Single-stage cylinders
- ▲ ▲ Body heater exhaust connection kit
- ▲ ▲ Bin liner ($^{5}/_{16}$ in. [8 mm])

Hydraulic System

- ● ● Closed-center, load-sensing system

Electrical System

- ● ● 24-volt system
- ● ● 80-amp alternator
- ● ● Twin maintenance-free batteries
- ▲ ▲ Additional batteries (2)*
- ▲ ▲ Flashing beacon*
- ▲ ▲ Work lights and arctic lights*

Operator Station

- ● ● ROPS cab – conforms to SAE J1040/ISO 3471/1
- ● ● FOPS cab – conforms to SAE J231/ISO 3449
- ● ● Air conditioner
- ● ● Air-suspension seat
- ● ● AM/FM radio
- ● ● Compact sloped hood
- ● ● Full rearview mirror package
- ● ● Heater
- ● ● Hydrostatically articulated steering with two double-acting hydraulic cylinders
- ● ● Instrument panel functions:
  - – Cold start indicator
  - – Coolant level indicator
  - – Engine service indicator (marked “Engine Fault”)
  - – Secondary steering indicator (marked “Emergency Steering”)

250D 300D Operator Station *(cont.)*

- ● ● Instrument panel functions *(continued)*:
  - – Battery charge indicator
  - – Transmission retarder indicator
  - – Transmission service indicator (marked “Transmission Fault”)
  - – Engine overspeed indicator
  - – Park brake indicator
  - – Hydraulic oil temperature indicator
  - – Dump body raised indicator (marked “Bin Up”)
  - – High beam indicator
  - – Turn signals
- ● ● Seat belt with retractors
- ● ● Trainer’s seat
- ● ● Windshield washer and wiper
- ▲ ▲ Electric adjustable and heated mirrors
- ▲ ▲ Fire extinguisher*

Overall Vehicle

- ● ● 23.5R25 radial, earthmover tires
- ● ● Center-mounted cab
- ● ● High-density polyethylene bearing in oscillation joint
- ● ● Independent front and rear chassis
- ● ● Semi-independent axle movement supported on oil/nitrogen suspension struts
- ● ● Mud covers (brake calipers)
- ● ● Tri-link rear suspension with 18 degrees of travel
- ▲ ▲ Headlight grille*

Control Owning and Operating Costs

Customer Personal Service (CPS) is part of John Deere’s proactive, fix-before-fail strategy on machine maintenance that will help control costs, increase profits, and reduce stress. Included in this comprehensive lineup of ongoing programs and services are:

Fluid analysis program – tells you what’s going on inside *all* of your machine’s major components so you’ll know if there’s a problem *before* you see a decline in performance. Fluid analysis is included in most extended coverage and preventive-maintenance agreements.

Component life-cycle data – gives you vital information on the projected life span of components and lets you make informed decisions on machine maintenance by telling you approximately how many hours of use you can expect from an engine, transmission, or hydraulic pump. This information can be used to preempt catastrophic downtime by servicing major components at about 80 percent of their life cycle.

Preventive Maintenance (PM) agreements – give you a fixed cost for maintaining a machine for a given period of time. They also help you avoid downtime by ensuring that critical maintenance work gets done right and on schedule. On-site preventive maintenance service performed where and when you need it helps protect you from the expense of catastrophic failures and lets you avoid waste-disposal hassles.

Extended coverage – gives you a fixed cost for machine repairs for a given period of time so you can effectively manage costs. Whether you work in a severe-service setting or just want to spread the risk of doing business, this is a great way to custom-fit coverage for your operation. And an extended coverage contract also travels well because it’s backed by John Deere and is honored by *all* Deere construction dealers.

Customer Support Advisors (CSAs) – Deere believes the CSA program lends a *personal* quality to Customer Personal Service (CPS). Certified CSAs have the knowledge and skills for helping make important decisions on machine maintenance and repair. Their mission is to help you implement a plan that’s right for *your* business and take the burden of machine maintenance off your shoulders.

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Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 70 020, 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 units with standard equipment, ROPS cabs, 23.5R25, radial earthmover tires, full fuel tanks, and 175-lb. (79 kg) operators. Capacity and loaded weights are based on 2,800-lb./cu. yd. (1660 kg/m^3) material.

SAFETY live with it

DKA250D Litho in U.S.A. (04-08)