



**JOHN DEERE**

CONSTRUCTION EQUIPMENT

TRUCKS



MODEL NO.

**350D 400D**



**ADTs**



If you're looking to reduce operating costs without cramping productivity, take a hard look at – and a hard drive in – a new 350D or 400D Articulated Dump Truck from John Deere.

Built to haul more for less, both these heavy-duty off-road haulers deliver a better payload-to-weight ratio, improved fuel efficiency, and faster cycle times than ever before.

What it all adds up to is more material moved for less money.

Turn the page to learn more about the exciting new 350D and 400D trucks and how they will haul bigger numbers to your bottom line.



MODEL NO.

**350D 400D**

Best-in-class payload-to-weight ratio gives you more power to haul the load. This minimizes cycle times while maximizing payload and productivity – and profitability.

# FOR LESS

The increased flow rate to the hydraulic system results in faster dump cycle times. With fewer components and only a single pump, the system is easy to maintain.

The oscillating frame joint, articulated steering, and high-floatation tires provide unbeatable performance in mud, tough terrain, and steep grades.

**350D 400D**

# Makes quite a haul—when it co

There's no secret to becoming more profitable. Improving your bottom line means being able to haul more dirt, while keeping operator costs down. That's why the new 350D and 400D Articulated Dump Trucks (ADTs) make sense—or should we say, dollars and cents. These machines were designed from the ground up to haul the lowest cost per ton of any truck on the market. Extensive use of lightweight, high-strength materials give them the highest payload-to-weight ratios—and the best hauling efficiency—in their class. Having more power available means being able to handle bigger payloads with faster cycle times, so you can move more material for your dollar.

What really sets these ADTs apart is their ability to keep the job moving, no matter what the weather or underfoot conditions. With tight deadlines and even tighter margins, you simply can't afford to send the crew home on a rainy day. These machines thrive in tough terrain, steep grades, and mud—the kind of conditions where it just isn't cost-effective to run scrapers or rigid trucks. And while this kind of versatility is impressive, you'll be even more impressed the next time you look at your bottom line.



Family sedan or dirt-haulin', mud-crawlin' ADT? When confronted with its automotive styling, deluxe AM-FM radio, and in-dash beverage cooler, your operators will have trouble telling the difference.

Keeping your operators safe and comfortable also makes them 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.

# mes to your bottom line.

The center-mounted cab provides outstanding visibility and comes complete with a comprehensive mirror package (electronic control is optional). The seat is optimally positioned behind the front axle to improve 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.



The oscillating frame joint provides unmatched traction and stability. Front and rear chassis move independently, keeping all six wheels in constant contact with the ground.

These ADTs 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. Instruments and display units are easy to understand and use.

# When the going gets tough, these trucks keep going.



Automatic retardation provides superior braking power while reducing service brake wear.

Rainy days might get you down, but not a new D-Series truck. The high-flotation tires and the incredibly strong steering force let you “duck walk” out of the muck and mire.

Safety and profitability depend on being able to consistently stop “on the mark,” which is why both trucks come with fully hydraulic, simple-to-service dry-disc brakes. The 450D also has wet-disc brakes on the front and middle axles, for 20 percent more stopping power. Both models are equipped with automatic engine brakes and spring-applied, air-released park brakes.



StructurAll™ warranty covers articulated joints and major structures for unlimited hours for three years – free of charge!



MODEL NO.

**350D 400D**

Both 350D and 400D trucks are powered by the turbocharged, intercooled V-6, 12.0-L diesel engines. Their lightweight design maximizes fuel efficiency, plus their low emission output complies with future emission standards.

Planetary powershift transmission optimizes each shift point and puts more power on the ground, while preventing damage due to faulty shifting.



When it comes to superior reliability, lower maintenance requirements, and unsurpassed dealer support, the buck (and the truck) stop here.

Limiting downtime is the best way to reduce operating costs, and no trucks are more reliable or easier to maintain than the new 350D and 400D. Structural components – including chassis, articulation and oscillation joints, axles, and suspension – are fabricated from high-strength steel and are larger than most competitors. Plus, service intervals have been increased on the engine and hydraulics to 500 and 2,000 hours, respectively.

And when it comes to dealer support, in-field service, and parts availability, John Deere sets the industry standard. Our technicians have the training and the tools to keep you going when the going gets tough.

# 350D 400D

TRUCKS

SPECIFICATIONS



## Engine

### 350D

### 400D

Type .....	Mercedes Benz OM501LA	Mercedes Benz OM501LA
Configuration .....	V6 with integral exhaust brake and engine valve brake	V6 with integral exhaust brake and engine valve brake
Aspiration .....	turbocharged and intercooled	turbocharged and intercooled
Cooling system .....	liquid cooled with single-pass radiator and charged air cooler	liquid cooled with single-pass radiator and charged air cooler
Rated power (conforms to SAE J1349) .....	380 SAE net hp (283 kW) / 389 SAE gross hp (290 kW) @ 1,800 rpm	413 SAE net hp (308 kW) / 422 SAE gross hp (315 kW) @ 1,800 rpm
Maximum net torque .....	1,365 lb.-ft. (1850 Nm) @ 1,080 rpm	1,476 lb.-ft. (2000 Nm) @ 1,080 rpm
Displacement .....	729 cu. in. (11.95 L)	729 cu. in. (11.95 L)

## Transmission

Configuration .....	Allison HD 4560R engine-mounted automatic planetary, hydraulically actuated multiple-disc clutches, electronic control, hydrodynamic torque converter with lock-up		Allison HD 4560R engine-mounted automatic planetary, hydraulically actuated multiple-disc clutches, electronic control, hydrodynamic torque converter with lock-up	
Retarder .....	variable hydraulic transmission		variable hydraulic transmission	
Stall torque ratio .....	1.9 to 1		1.9 to 1	
Vehicle speeds (full load, 2% rolling resistance) .....	<i>Forward</i>	<i>Reverse</i>	<i>Forward</i>	<i>Reverse</i>
Gear 1 .....	5 mph (8 km/h)	4 mph (7 km/h)	5 mph (8 km/h)	4 mph (7 km/h)
Gear 2 .....	10 mph (16 km/h)		10 mph (16 km/h)	
Gear 3 .....	15 mph (24 km/h)		14 mph (23 km/h)	
Gear 4 .....	23 mph (37 km/h)		22 mph (35 km/h)	
Gear 5 .....	30 mph (48 km/h)		29 mph (46 km/h)	
Gear 6 .....	34 mph (54 km/h)		32 mph (52 km/h)	

## Transfer Box

### 350D / 400D

Configuration .....	single-speed, helical geared with lockable torque-proportioning interaxle differential
Output torque split .....	33 front / 67 rear

## Axles

Differential type .....	spiral bevel gear with controlled traction
Final drive type .....	outboard heavy-duty planetary reduction hub

## Braking System

### 350D

### 400D

Service brake .....	dual-circuit, full-hydraulic, dry-disc brakes on all six wheels	dual-circuit, oil-immersed, multi-disc brakes on front and mid axles
Park and secondary .....	spring-applied, air-released, automatic slack-adjusting mechanical caliper, driveline-mounted, dry disc	spring-applied, air-released, automatic slack-adjusting mechanical caliper, driveline-mounted, dry disc
Auxiliary brake .....	automatic engine valve brake actuation and variable hydraulic transmission retarder	automatic engine valve brake actuation and variable hydraulic transmission retarder
Maximum retardation .....	1,106 hp (825 kW)	1,130 hp (830 kW)

## Pneumatic System

### 350D / 400D

Type .....	four-way pressure protected with air drier, heater, and integral unloader valve
System pressure .....	135 psi (930 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 articulated with two double-acting hydraulic cylinders
Angle .....	42 degrees side to side
Lock-to-lock turns .....	4.7



**Hydraulic System****350D**

Type .....	closed-center, load-sensing system
Main pump .....	axial piston, variable displacement
Application .....	steering, bin tipping, cooling fan drive
Flow .....	79 gpm (330 L/min.) @ governed engine speed
Pressure .....	3,625 psi (25 000 kPa)
Secondary pump .....	axial piston, variable displacement
Application .....	secondary steering, assist main steering
Flow .....	32 gpm (122 L/min.) @ full ground speed

**400D**

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Main pump .....	axial piston, variable displacement
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**Tires/Wheels**

Type .....	radial earthmover
Size .....	26.5R25
Maximum ground pressure (loaded) .....	23 psi (156 kPa) middle

Type .....	radial earthmover
Size .....	29.5R25
Maximum ground pressure (loaded) .....	23 psi (156 kPa) middle

**Suspension****350D / 400D**

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

**Body****350D**

Capacity	
Struck .....	19.9 cu. yd. (15.2 m <sup>3</sup> )
Heaped .....	26.1 cu. yd. (20.0 m <sup>3</sup> ) @ 2-to-1 SAE ratio
With optional tailgate .....	27.5 cu. yd. (21.0 m <sup>3</sup> )
Rated payload .....	71,650 lb. (32 500 kg)
Power-down time .....	7.6 sec.
Raise time .....	14 sec.
Tipping angle .....	70 degrees

**400D**

Capacity	
Struck .....	22.1 cu. yd. (16.9 m <sup>3</sup> )
Heaped .....	29.4 cu. yd. (22.5 m <sup>3</sup> ) @ 2 to 1 SAE ratio
With optional tailgate .....	30.9 cu. yd. (23.6 m <sup>3</sup> )
Rated payload .....	81,571 lb. (37 000 kg)
Power-down time .....	7.6 sec.
Raise time .....	14 sec.
Tipping angle .....	70 degrees

**Service Capacities**

Fuel tank .....	128 gal. (485 L)
Engine oil .....	8 gal. (30 L)
Engine coolant .....	9 gal. (33.6 L)
Transmission fluid (refill) .....	9 gal. (34 L)
Transfer case oil .....	5 qt. (4.5 L)
Hydraulic reservoir .....	47 gal. (178 L)
Axle oil (front) .....	12 gal. (45 L)
Axle oil (middle) .....	12 gal. (45 L)
Axle oil (rear) .....	12 gal. (45 L)
Final drive .....	6.7 qt. (6.3 L)

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Axle oil (rear) .....	12 gal. (45 L)
Final drive .....	6.7 qt. (6.3 L)

**Wet disc brake**

Reservoir oil .....	12 gal. (45.3 L)
Front wheels .....	7 gal. (27 L)
Middle wheels .....	7 gal. (27 L)

**Operating Weights****Empty**

Front .....	29,982 lb. (13 600 kg)	32,221 lb. (14 615 kg)
Middle .....	14,473 lb. (6565 kg)	16,050 lb. (7280 kg)
Rear .....	14,462 lb. (6560 kg)	15,333 lb. (6955 kg)
Total .....	58,919 lb. (26 725 kg)	63,603 lb. (28 850 kg)

**Loaded**

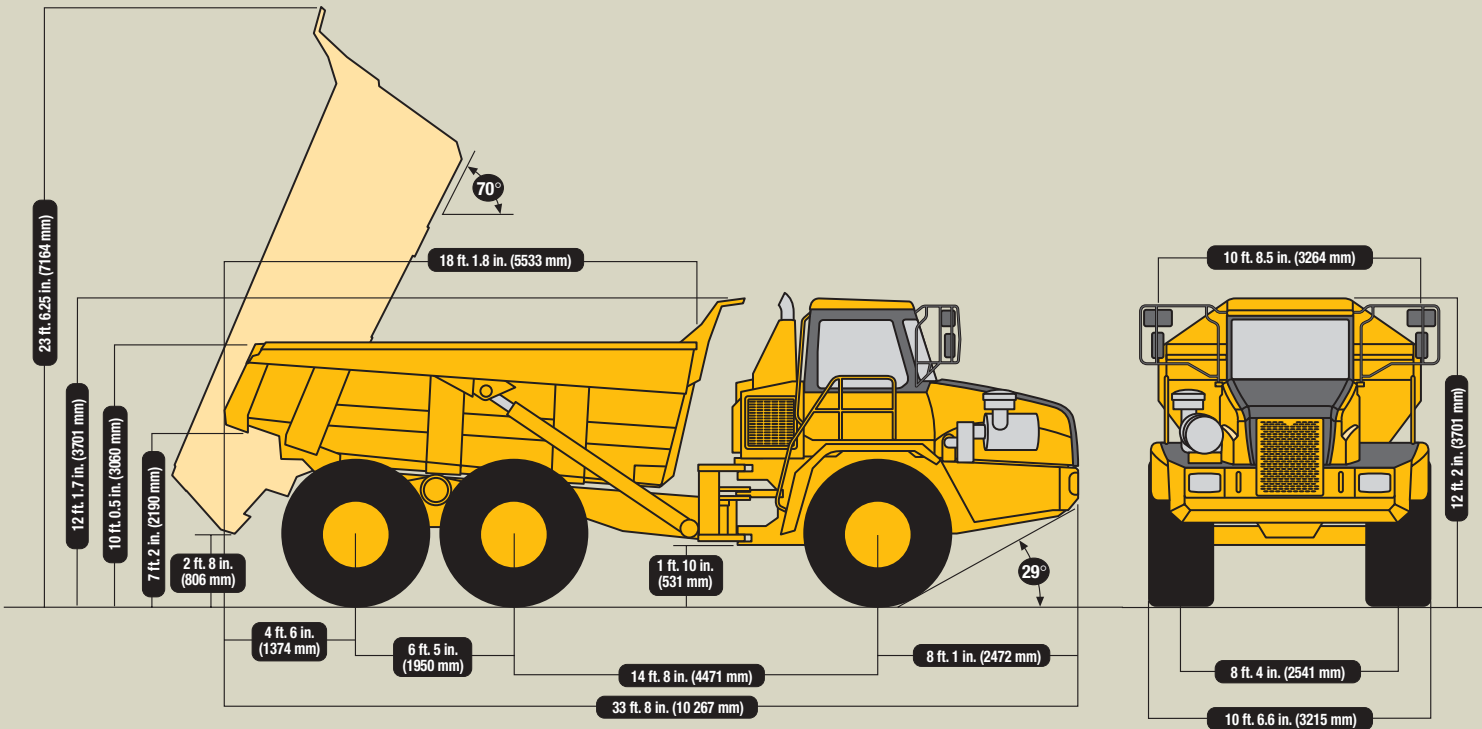
Front .....	40,808 lb. (18 510 kg)	42,759 lb. (19 395 kg)
Middle .....	44,886 lb. (20 360 kg)	51,566 lb. (23 390 kg)
Rear .....	44,875 lb. (20 355 kg)	50,850 lb. (23 065 kg)
Total .....	130,569 lb. (59 225 kg)	145,174 lb. (65 850 kg)

**SAE Turning Radius Dimensions**

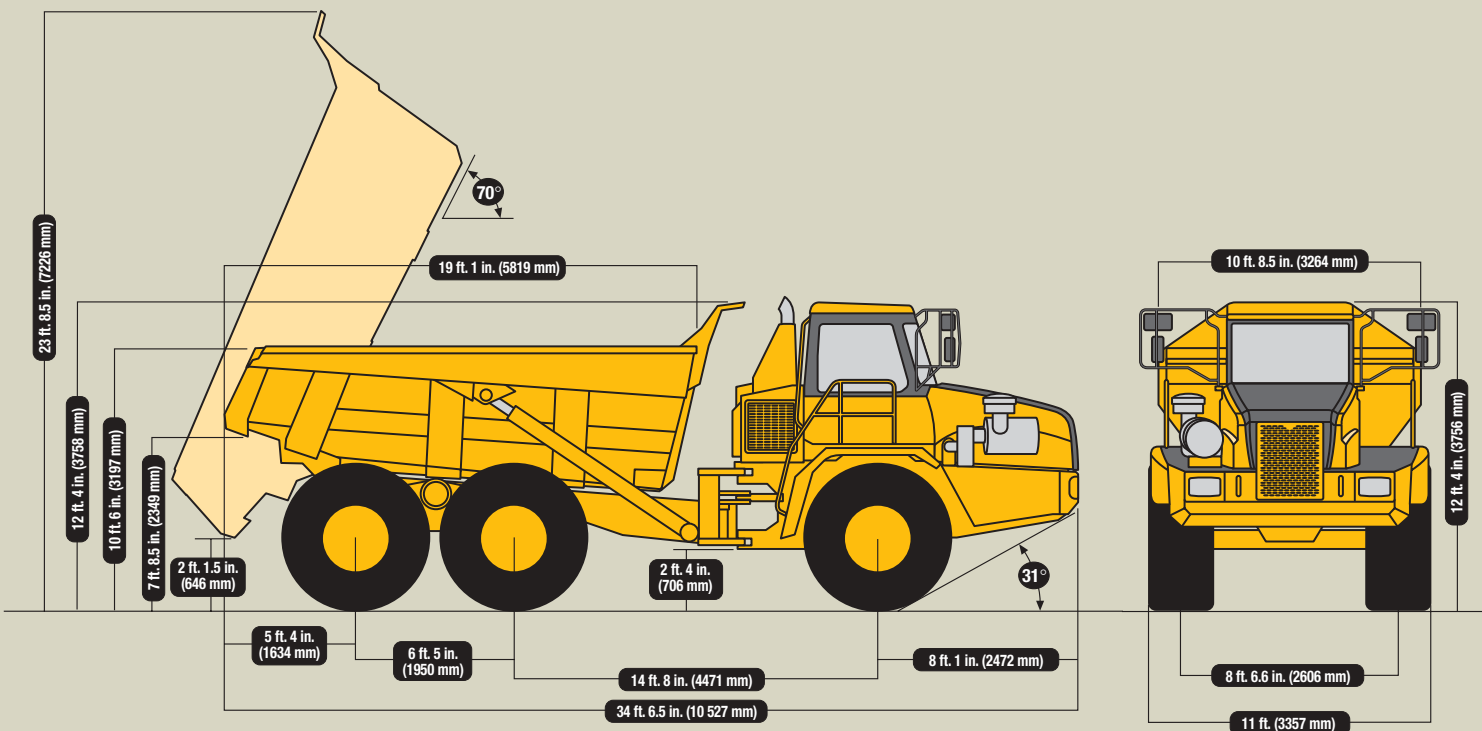
Inside turning circle radius .....	16 ft. 7 in. (5055 mm)
Outside turning circle radius .....	29 ft. 11.5 in. (9132 mm)

Inside turning circle radius .....	16 ft. (4894 mm)
Outside turning circle radius .....	30 ft. 2 in. (9203 mm)

## 350D Dimensions



## 400D Dimensions



## Retardation and Gradeability

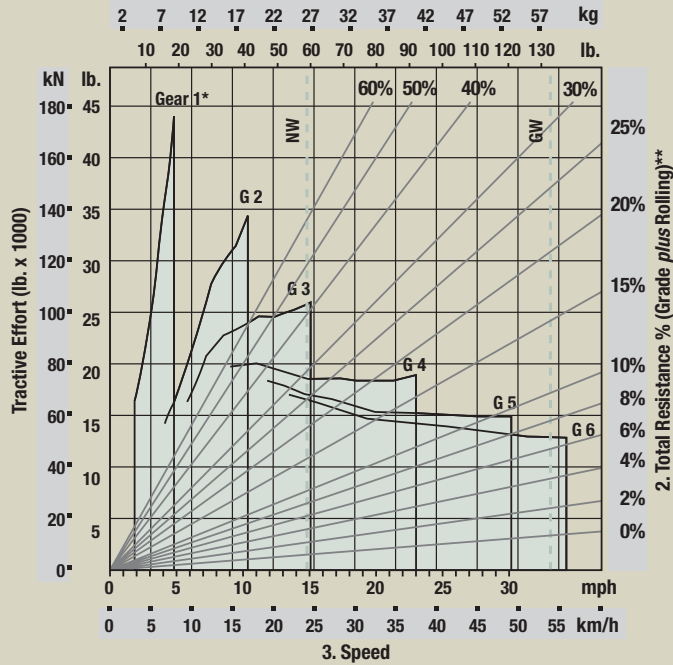
1. Read from total weight down to % total resistance (diagonal line).
2. From that point, read horizontally to curve with highest attainable speed range.
3. Read down to maximum descent speed.

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

\*\*2% rolling resistance assumed in chart.

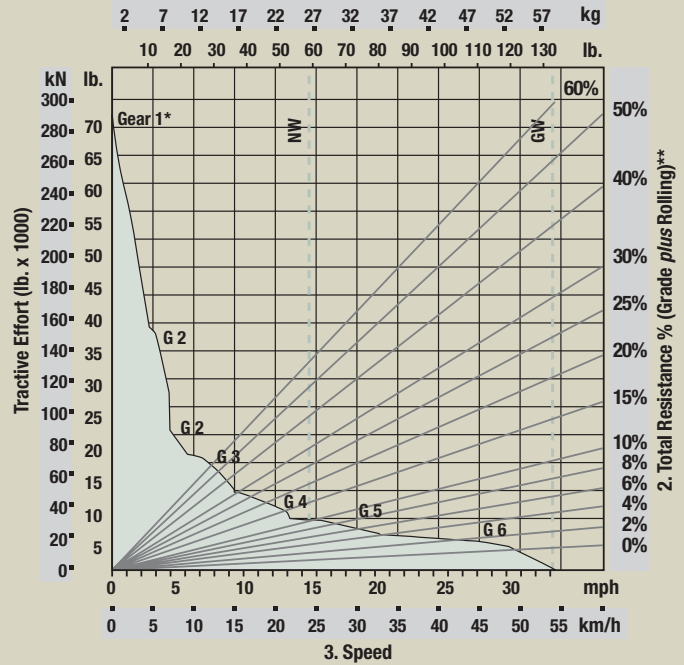
### 350D Retardation

1. Machine Weight x 1000



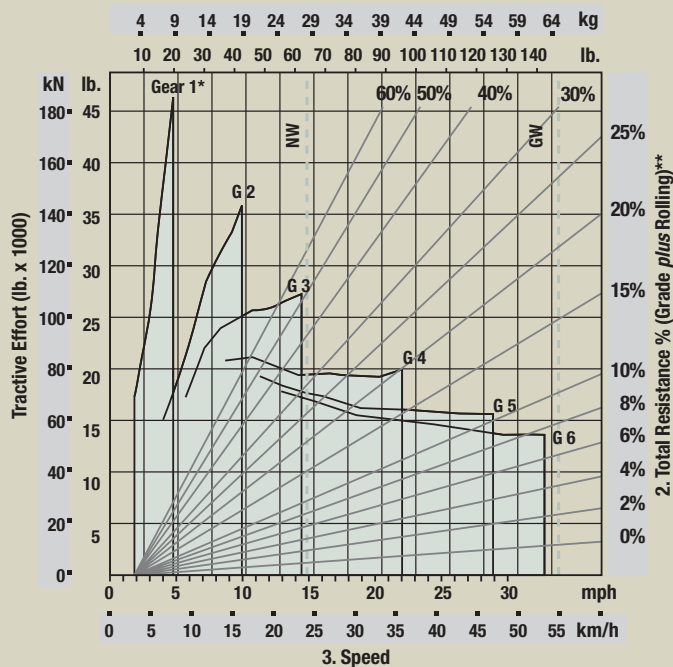
### 350D Gradeability

1. Machine Weight x 1000



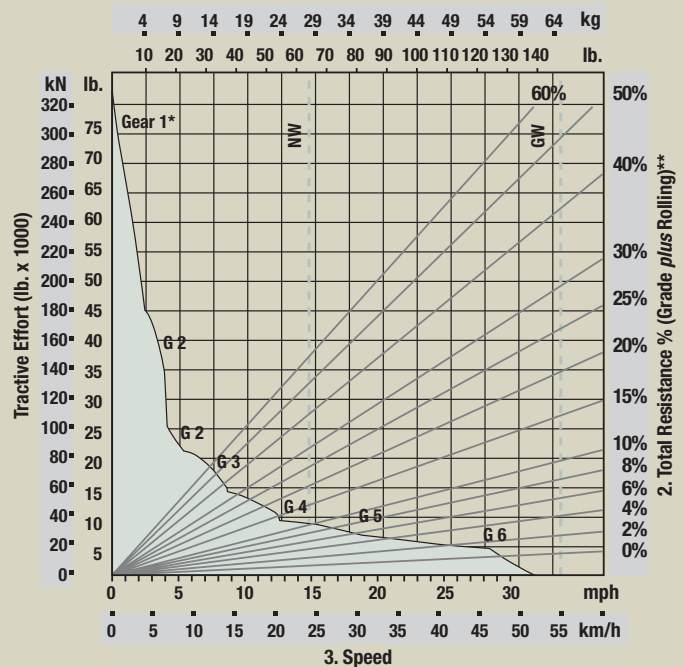
### 400D Retardation

1. Machine Weight x 1000



### 400D Gradeability

1. Machine Weight x 1000



## 350D / 400D Articulated Dump Trucks

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

See your John Deere dealer for further information.

### 350D 400D Engine

- Mercedes Benz OM501LA – V6, 380 SAE net hp (283 kW)
- Mercedes Benz OM501LA – V6, 413 SAE net hp (308 kW)
- Crankshaft-driven fan
- Electric start aid
- Integral engine valve brake
- Turbocharged and intercooled

### Power Train

- Automatic exhaust brake
- Automatic planetary transmission – hydrodynamic torque converter with lock-up
- Automatic transmission retarder
- Computer controlled for adaptive shifts
- Control traction differentials on all drive axles
- Dual-circuit, air-over-hydraulic, dry-disc brakes on all six wheels
- Dual-circuit, oil-immersed, multi-disc brakes on front and middle
- Interaxle differential splits torque – 33% to front, 67% to rear
- Lockable proportion differential transfer box
- Push-button drive – neutral/reverse controls
- Rocker switch range holds to prevent gear hunting

### Tipping Body

- 70-degree tip angle
- Body ducted for heating

### 350D 400D Tipping Body (continued)

- ▲▲ Mechanical/automatic tailgate
- ▲▲ Hydraulic/automatic tailgate
- Single-stage cylinders
- ▲▲ Body heater exhaust connection kit
- ▲▲ Bin liner (<sup>5</sup>/<sub>16</sub> in. [8 mm])

### Hydraulic System

- Closed-center, load-sensing system

### Electrical System

- 24-volt system
- 80-amp alternator
- Twin maintenance-free batteries

### 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
- Hydromechanically 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”)
  - Battery charge indicator

### 350D 400D Operator Station (continued)

- Instrument panel functions (continued):
  - Transmission retarder indicator
  - Transmission service indicator (marked “Transmission Fault”)
  - Service required indicator
  - Engine overspeed indicator
  - Park brake indicator
  - Brake oil pressure indicator (400D only)
  - Brake temperature indicator (400D only)
  - 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 and heated mirrors

### Overall Vehicle

- 26.5R25 radial, earthmover tires
- 29.5R25 radial, earthmover tires
- Center-mounted cab
- High-density polyethylene bearing in oscillation joint
- Independent front and rear chassis
- Leading A frame supported on oil/nitrogen suspension struts
- Mud covers (brake calipers)
- Tri-link rear suspension with 18 degrees of travel

## 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, full fuel tanks, 175-lb. (79 kg) operators, and radial earthmover tires (350D with 26.5R25 and 400D with 29.5R25). Capacity and loaded weights are based on 2,800-lb./cu. yd. (1660 kg/m<sup>3</sup>) material.

