

# 300C

TRUCKS

SPECIFICATIONS



## Engine

### 300C

Type.....	DaimlerChrysler OM442
Configuration .....	V8, exhaust brake
Aspiration .....	naturally aspirated
Cooling system .....	liquid cooled, with a crankshaft-driven viscous fan
Rated power (conforms to SAE J1349) .....	251 SAE net hp (187 kW) / 261 SAE gross hp (195 kW) @ 2,100 rpm
Maximum net torque.....	723 lb.-ft. (980 Nm) @ 1,300 rpm
Displacement.....	920 cu. in. (15.1 L)

## Transmission

Configuration .....	ZF 6WG 210 countershaft design with integral drop box, constantly meshing gears, hydraulically actuated multiple-disc clutch, electronic control, hydrodynamic torque converter with lock-up, built-in PTO drive	
Output torque split .....	33 front / 67 rear	
Stall torque ratio .....	1.771 to 1	
Vehicle speeds (full load, 2% rolling resistance)	<i>Forward</i>	<i>Reverse</i>
Gear 1 .....	3 mph (5 km/h)	3 mph (5 km/h)
Gear 2 .....	5 mph (8 km/h)	5 mph (8 km/h)
Gear 3 .....	8 mph (13 km/h)	8 mph (13 km/h)
Gear 4 .....	12 mph (20 km/h)	
Gear 5 .....	19 mph (31 km/h)	
Gear 6 .....	29 mph (47 km/h)	

## Axles

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

## Braking System

Service brake.....	dual-circuit, fully hydraulic-applied dry-disc brakes on all six wheels
Park and secondary .....	spring-applied, air-released, automatic slack-adjusting mechanical caliper, driveline-mounted, dry disc
Auxiliary brake.....	automatic exhaust brake actuation, supplemented with foot-operated hydraulic valve retarder
Maximum retardation .....	271 hp (202 kW)

## Pneumatic System

Type.....	air drier with heater and integral unloader valve, servicing the park brake and auxiliary functions
System pressure.....	117 psi (810 kPa)

## Electrical System

Voltage .....	24 volt
Battery type .....	maintenance free
Battery capacity.....	2 x 100 A.h.
Alternator rating.....	28 volt, 55 amp

## Steering System

Type.....	hydromechanically articulated with two double-acting hydraulic cylinders
Angle .....	40 degrees side to side
Lock-to-lock turns .....	4

## Hydraulic System

Type.....	closed-center, load-sensing system
Main pump .....	axial piston, variable displacement
Application .....	steering, body-tipping, and hydraulic brake charging
Flow .....	41 gpm (156 L/min.) @ governed engine speed
Pressure.....	3770 psi (26 000 kPa)
Secondary pump.....	axial piston, variable displacement, ground driven
Application .....	secondary steering, assist main steering
Flow .....	22.0 gpm (85 L/min.) @ full ground speed

## Tires/Wheels

Type.....	radial earthmover
Size .....	23.5R25
Maximum ground pressure (loaded).....	23 psi (157 kPa) middle

## Body

Capacity	
Struck .....	17 cu. yd. (13.0 m <sup>3</sup> )
Heaped .....	22 cu. yd. (16.2 m <sup>3</sup> ) @ 2 to 1 SAE ratio
Rated payload.....	59,524 lb. (27 000 kg)
Power-down time .....	7 sec.
Raise time .....	14 sec.
Tipping angle.....	65 degrees

## Service Capacities

## 300C

Fuel tank .....	71 gal. (269 L)
Engine oil .....	8 gal. (30 L)
Engine coolant .....	10 gal. (38 L)
Transmission fluid (refill) .....	4.2 gal. (16 L)
Hydraulic reservoir .....	21 gal. (80 L)

Axle oil (front) .....	10.5 gal. (40 L)
Axle oil (middle) .....	10.5 gal. (40 L)
Axle oil (rear) .....	10.5 gal. (40 L)
Final drive oil .....	0.5 gal. (2 L)

## Operating Weights

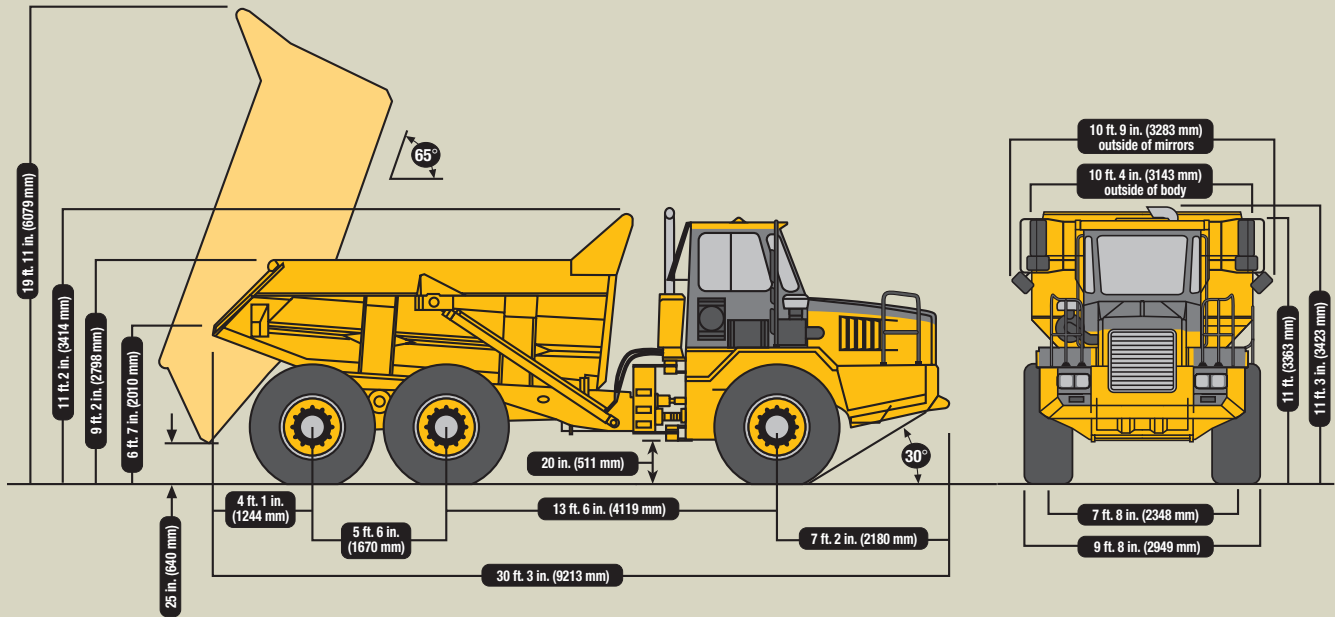
Empty	
Front .....	20,150 lb. (9140 kg)
Middle .....	11,442 lb. (5190 kg)
Rear .....	11,001 lb. (4990 kg)
Total .....	42,593 lb. (19 320 kg)

Loaded	
Front .....	32,165 lb. (14 590 kg)
Middle .....	35,197 lb. (15 965 kg)
Rear .....	34,756 lb. (15 765 kg)
Total .....	102,118 lb. (46 320 kg)

## SAE Turning Radius Dimensions

Inside turning circle radius.....17 ft. 5 in. (5313 mm)

Outside turning circle radius.....29 ft. 10 in. (9092 mm)

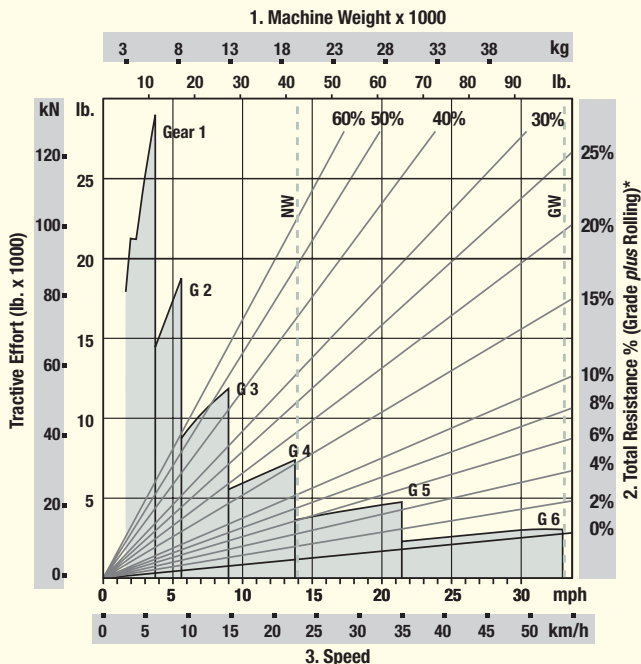


## Retardation

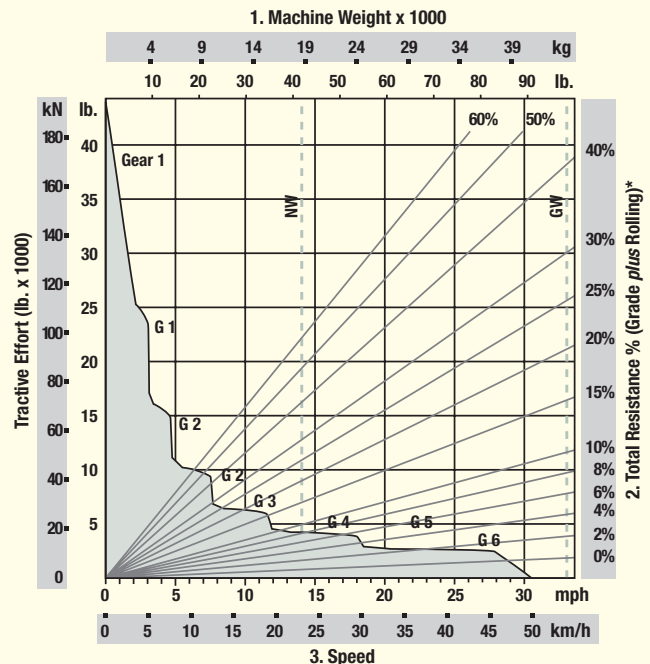
1. Read from total weight down to % total resistance (diagonal line). 2. From that point, read horizontally to curve with highest attainable speed range. 3. Read down to maximum descent speed.

## 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 speed.



\*2% rolling resistance assumed in chart.



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## Additional Equipment

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

See your John Deere dealer for further information.

### Engine

- DaimlerChrysler OM442 – V8, 251 SAE net hp (187 kW)
- Crankshaft-driven fan
- Electric start aid
- Naturally aspirated

### Power Train

- Automatic countershaft transmission with integral drop box, hydrodynamic torque converter with lock-up
- Automatic exhaust brake
- Automatically activated limited-slip differentials
- Dual-circuit, fully hydraulic-applied dry-disc brakes on all six wheels
- Electronically controlled
- Interaxle differential splits torque – 33% to front, 67% to rear
- Lever-activated drive-neutral-reverse
- Lockable torque-proportioning inter-axle differential

### Tipping Body

- 65-degree tip angle
- Body ducted for heating
- ▲ Mechanical/automatic tailgate
- ▲ Hydraulic/automatic tailgate
- Single-stage cylinders
- ▲ Body heater exhaust connection kit
- ▲ Body liners ( $\frac{3}{8}$  in. [10 mm])

### Hydraulic System

- Closed-center, load-sensing system
- Hydraulic retarder

### Electrical System

- 24-volt system
- 55-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
- Compact sloped hood
- Full rearview mirror package
- Heater
- Hydromechanically articulated steering with two double-acting hydraulic cylinders
- Left cab door
- Machine systems master display unit:
  - Engine coolant temperature with audible alarm
  - Engine oil pressure with audible warning
  - Percent of fuel in tank with audible low-fuel warning
  - System air pressure with audible warning
  - System voltage
  - Transmission oil temperature with audible alarm
  - Trip odometer
- Monitor system with visual and/or audible warnings:
  - Battery charge indicator
  - Body-raised indicator
  - Brake system low-pressure indicator with audible alarm
  - Cold-start indicator
  - Do Not Shift indicator

### Operator Station (continued)

- Engine over-speed indicator with audible alarm
- Exhaust brake/retarder indicator
- High-beam indicator
- High hydraulic oil temperature indicator with audible alarm
- Interaxle lock indicator
- Low engine coolant level indicator with audible alarm
- Low pneumatic pressure indicator
- Park brake indicator
- Secondary steering indicator with audible alarm
- Turn signals
- Seat belt with retractors
- Tilt and height-adjustable steering
- Trainer's seat
- Windshield washer and wiper

### Overall Vehicle

- 23.5R25 radial, earthmover tires
- Center-mounted cab
- Front suspension: two self-leveling air bags
- High-density polyethylene bearing in oscillation joint
- Independent front and rear chassis
- Mud covers (brake calipers)
- Power equally distributed to all three axles
- Tri-link rear suspension with 18% of travel
- ▲ 6,000-gal. water wagon
- ▲ Extended chassis



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 a unit with ROPS cab; 23.5R25, radial earthmover tires; full fuel tank; 175-lb. (79 kg) operator; and standard equipment. Capacity and loaded weights are based on 2,800-lb./cu. yd. (1660 kg/m<sup>3</sup>) material.

