

250C

TRUCKS

SPECIFICATIONS



Engine

250C

Type.....	DaimlerChrysler OM366LA
Configuration	6 cylinder, in-line, exhaust brake
Aspiration	turbocharged and aftercooled
Cooling system	liquid cooled, with a crankshaft-driven viscous fan and air-to-air aftercooler
Rated power (conforms to SAE J1349)	237 SAE net hp (177 kW) / 247 SAE gross hp (185 kW) @ 2,500 rpm
Maximum net torque.....	592 lb.-ft. (800 Nm) @ 1,600 rpm
Displacement.....	363 cu. in. (6.0 liters)

Transmission

Configuration	Allison MD3560P automatic planetary, hydraulically actuated multiple-disc clutches, electronic control, hydrodynamic torque converter with lock-up, built-in PTO drive	
Stall torque ratio	2.44 to 1	
Vehicle speeds (full load, 2% rolling resistance)	<i>Forward</i>	<i>Reverse</i>
Gear 1	4 mph (7 km/h)	4 mph (7 km/h)
Gear 2	9 mph (14 km/h)	
Gear 3	13 mph (21 km/h)	
Gear 4	20 mph (32 km/h)	
Gear 5	26 mph (42 km/h)	
Gear 6	30 mph (48 km/h)	

Transfer Box

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

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	237 hp (177 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	43 degrees side to side
Lock-to-lock turns	4.3

Hydraulic System

Type.....	closed-center, load-sensing system
Main pump	axial piston, variable displacement
Application	steering, body-tipping, and hydraulic brake charging
Flow	39.6 gpm (150 liters/min.) @ governed engine speed
Pressure.....	3625 psi (25 000 kPa)
Secondary pump.....	axial piston, variable displacement, ground driven
Application	secondary steering, assist main steering
Flow	22.0 gpm (85 liters/min.) @ full ground speed

Tires/Wheels

Type.....	radial earthmover
Size	23.5R25
Maximum ground pressure (loaded).....	19.6 psi (135 kPa) middle

Body

Capacity	
Struck	15 cu. yd. (11.2 m ³)
Heaped	18 cu. yd. (13.9 m ³) @ 2 to 1 SAE ratio
Rated payload.....	50,706 lb. (23 000 kg)
Power-down time	7 sec.
Raise time	14 sec.
Tipping angle.....	70 degrees

Service Capacities

250C

Fuel tank	57 gal. (215 liters)
Engine oil	5.3 gal. (20 liters)
Engine coolant	12.4 gal. (47 liters)
Transmission fluid (refill)	4.75 gal. (18 liters)
Transfer case oil	1.2 gal. (4.5 liters)

Hydraulic reservoir	21 gal. (80 liters)
Axle oil (front)	10.5 gal. (40 liters)
Axle oil (middle)	10.5 gal. (40 liters)
Axle oil (rear)	10.5 gal. (40 liters)
Final drive oil	0.5 gal. (2 liters)

Operating Weights

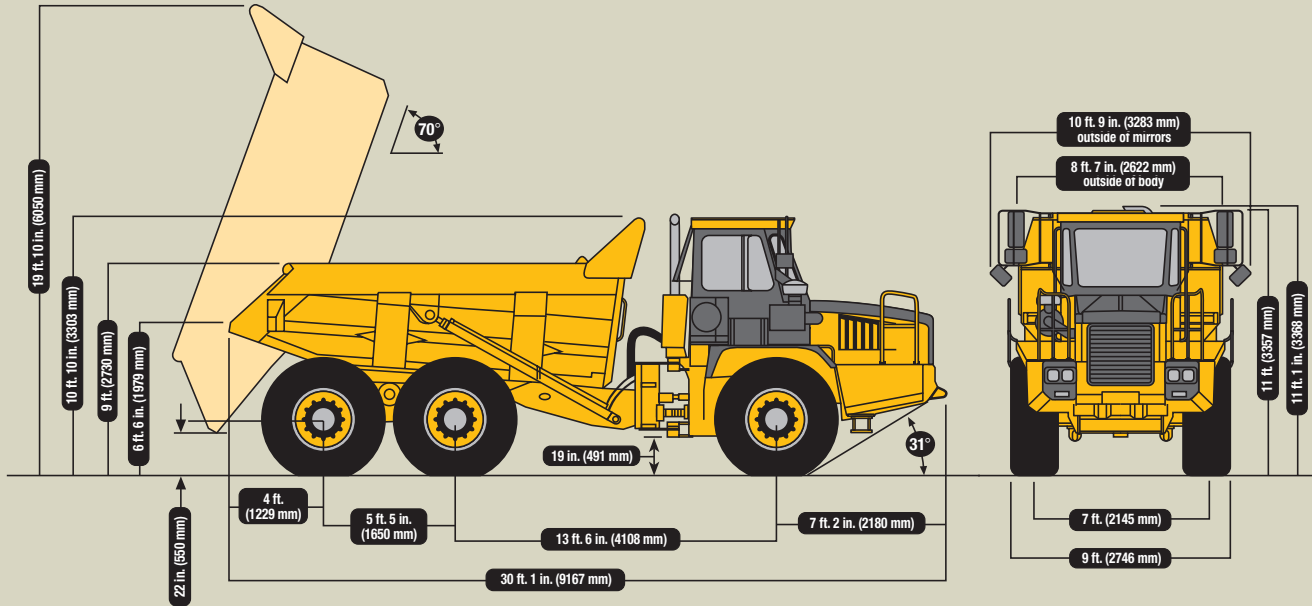
Empty	
Front	18,232 lb. (8270 kg)
Middle	9,224 lb. (4184 kg)
Rear	8,893 lb. (4034 kg)
Total	36,350 lb. (16 488 kg)

Loaded	
Front	28,462 lb. (12 910 kg)
Middle	29,463 lb. (13 364 kg)
Rear	29,132 lb. (13 214 kg)
Total	87,056 lb. (39 488 kg)

SAE Turning Radius Dimensions

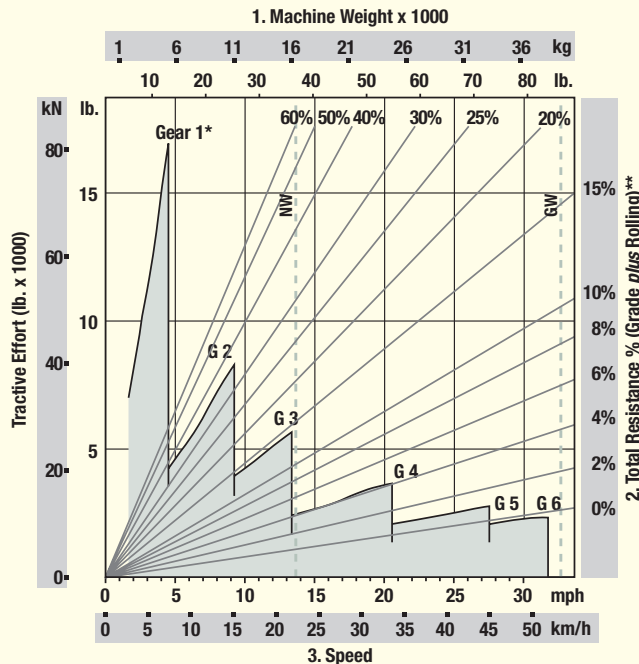
Inside turning circle radius.....13 ft. 5 in. (4092 mm)

Outside turning circle radius.....25 ft. 9 in. (7858 mm)



Retardation

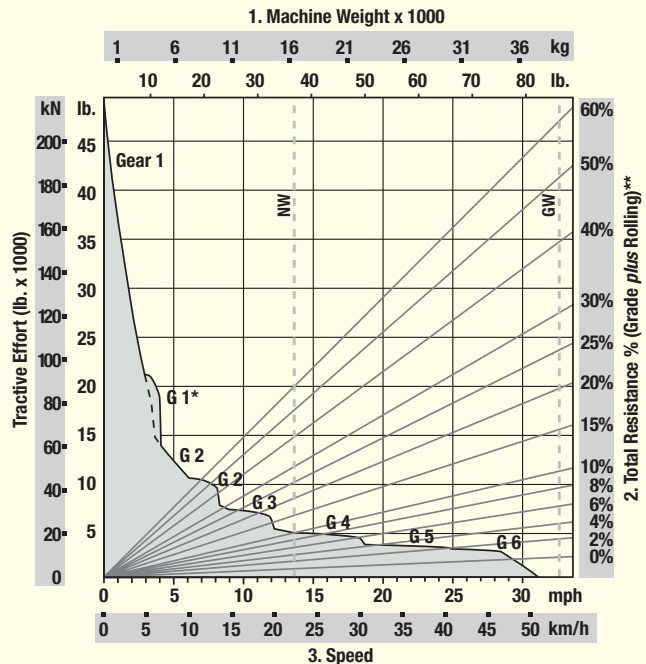
1. Read from total weight down to % total resistance (diagonal line). 2. From that point, read horizontally to curve with highest attainable speed range. 3. Read down to maximum descent speed.



*Gear 1 lock-up not engaged automatically, engages only when Gear 1 selected manually.
 **2% rolling resistance assumed in chart.

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.



*Gear 1 lock-up not engaged automatically, engages only when Gear 1 selected manually.
 **2% rolling resistance assumed in chart.

Additional Equipment

Key: ● Standard equipment ▲ Optional or special equipment

See your John Deere dealer for further information.

Engine

- DaimlerChrysler OM366LA – 6.0 liters, 237 SAE net hp
- Turbocharged and aftercooled
- Air-to-air aftercooler
- Crankshaft-driven fan
- Electric start aid

Power Train

- Automatic planetary transmission – hydrodynamic torque converter with lock-up
- Computer-controlled transmission for adaptive shifts
- Automatically activated limited-slip differential
- Automatic exhaust brake
- Dual-circuit, fully hydraulic dry-disc brakes on all six wheels
- Interaxle differential splits torque – 33% to front, 67% to rear
- Lockable proportional differential in transfer box
- Push-button drive – neutral/reverse controls
- Gear-hold switch to prevent gear hunting

Tippling Body

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

Hydraulic System

- Closed-center, load-sensing system – 39.6 gpm (150 liters/min.)
- Hydraulic retarder

Electrical System

- 24-volt system
- 55-amp alternator
- Maintenance-free battery

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 condition master display unit:
 - Engine coolant temperature
 - 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
 - Trip odometer

- Monitor system with audible and visual warnings:

- Battery charge indicator
- Body-raised indicator
- Brake system low-pressure indicator
- Cold-start indicator
- Do Not Shift indicator
- 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 degrees 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/m³) material.

