

PRODUCT SPECIFICATIONS FOR 777 (05)



ENGINE

Engine Model	Cat® C32B
Engine Speed	1800 r/min
Gross Power - SAE J1995	765 kW
Net Power - SAE J1349	711 kW
Net Torque	5130 N·m
Net Torque Rise	36%
Cylinders	12
Bore	145 mm
Stroke	162 mm
Displacement	32.1 l
Emissions (1)	Meets U.S. EPA Tier 2 Equivalent emission standards.
Emissions (2)	Certified for China Nonroad Stage III emission standards.
Note (1)	Net power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator with engine speed at 1,800 rpm. Power rating applies at 1,800 rpm when tested under the specified condition for the specified standard.
Note (2)	Ratings based on SAE J1995 standard air conditions of 25° C (77° F) and 100 kPa (29.61 Hg) barometer. Power based on fuel having API gravity of 35 at 16° C (60° F) and an LHV of 42 780 kJ/kg (18,390 BTU/lb) when engine used at 30° C (86° F).

Note (3)

No engine derating required up to 3048 m (10,000 ft) altitude.

OPERATING SPECIFICATIONS

Target Payload (100%)	98.2 t
Top Speed - Loaded	67.1 km/h
Maximum Working Payload (110%)	108032 kg
Not to Exceed Payload (120%)	117853 kg
Note	Empty Operating weights may vary based on the machine configuration
Note (1)	Capacity with Dual slope body without liner
Note (2)	Refer to Caterpillar 10/10/20 Payload Policy for maximum gross vehicle weight limitations

APPROXIMATE WEIGHTS - DUAL SLOPE

Body	16070 kg
Empty Vehicle	65149 kg
Gross Vehicle	163360 kg
Chassis	49079 kg
Body with Standard Liner	21665 kg

WEIGHT DISTRIBUTIONS - APPROXIMATE

Front Axle - Empty/Loaded	46% / 30%
Rear Axle - Empty/Loaded	54% / 70%

BODY HOISTS

Body Raise Time - High Idle	15 s
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Body Lower Time - Float	13 s
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Body Lower Time - High Idle	13 s
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CAPACITY - DUAL SLOPE - 100% FILL FACTOR

Struck	41.9 m ³
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Heaped 2:1 (SAE)	60.1 m ³
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Note (1)	Contact your local Cat dealer for body recommendation
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CAPACITY - FLAT FLOOR - 100% FILL FACTOR

Struck	43.1 m ³
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Heaped 2:1 (SAE)	64.1 m ³
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Note (1)	Contact your local Cat dealer for body recommendation.
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TRANSMISSION

Forward - 1	10.9 km/h
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Forward - 2	14.8 km/h
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Forward - 3	20.1 km/h
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Forward - 4	27.1 km/h
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Forward - 5	36.8 km/h
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Forward - 6	49.4 km/h
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Forward - 7	67.1 km/h
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Reverse - 1	12.1 km/h
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Note

Maximum travel speeds with standard 27.00R49 (E4) tires.

SERVICE REFILL CAPACITIES

Fuel Tank	1140 l
Cooling System	212 l
Crankcase	115 l
Differentials	222 l
Final Drive - Each	42 l
Steering System - Includes Tank	60 l
Brake Hoist System	420 l
Torque Converter - Transmission System	125 l

TIRES

Standard Tire	27.00R49 (E4)
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Note (1)

Productive capabilities of the 777 truck are such that, under certain job conditions, TKPH (TMPH) capabilities of standard or optional tires could be exceeded and, therefore, limit production.

Note (2)

Caterpillar recommends the customer evaluate all job conditions and consult the tire manufacturer for proper tire selection.

SUSPENSION

Effective Cylinder Stroke - Front	318 mm
Effective Cylinder Stroke - Rear	165 mm
Rear axle - Oscillation	5.4°

FINAL DRIVES

Differential Ratio	2.74:1
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Planetary Ratio	7.00:1
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Total Reduction Ratio	19.16:1
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BRAKES

Brake Surface Area - Front Caliper	2787 cm ²
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Brake Surface Area - Front OCDB	40225 cm ²
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Brake Surface Area - Rear	102116 cm ²
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Brake Standards	ISO 3450:2011
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ROPS

ROPS	ROPS (Rollover Protective Structure) cab offered by Caterpillar meets ISO 3471:2008 for Operator and ISO 13459:2012 for Trainer.
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FOPS	FOPS (Falling Objects Protective Structure) meets ISO 3449:2005 for Operator and ISO 13459:2012 Level II FOPS criteria for Trainer.
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SOUND

Sound Standards	ISO 6396:2008
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Note (1)	The dynamic operator sound pressure level is 80 dB(A) as per ISO 6396:2008 for cab offered by Caterpillar. The cab was properly installed and maintained. The test was conducted with the cab doors and the cab windows closed.
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STEERING

Steering Standards	ISO 5010:2007
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Steer Angle	30.5°
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Turning Diameter - Front	25.3 m
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Turning Circle - Clearance Diameter	28.4 m
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DIMENSIONS (APPROXIMATE) - DUAL SLOPE

Wheel Base	4570 mm
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Overall Length	10004 mm
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Dump Clearance	890 mm
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Overall Tire Width	5262 mm
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Rear Axle - Tail	3045 mm
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Loading Height - Empty	4380 mm
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Operating Width - Extended Catwalk	6545 mm
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Ground Clearance	896 mm
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Operating Width	6545 mm
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Front Canopy Height - Loaded	5177 mm
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Overall Body Length	9555 mm
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Overall Height - Body Raised	9953 mm
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Overall Canopy Width	6200 mm
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Inside Body Depth - Maximum	1895 mm
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Centerline of Rear Dual Tire Width	3576 mm
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Rear Axle - Clearance	902 mm
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Height - Top of ROPS - Loaded	4730 mm
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Outside Body Width	5524 mm
Inside Body Length	6920 mm
Centerline Front Tire Width	4163 mm
Inside Body Width	5197 mm
Engine Guard Clearance	864 mm
Overall Front Tire Width	4961 mm

777 (05) STANDARD EQUIPMENT

NOTE

Standard and optional equipment may vary. Consult your Cat dealer for details.

POWER TRAIN

Engine idle shutdown
 Air-to-air aftercooler (ATAAC)
 Air cleaner with precleaner (2)
 Automatic cold mode idle control
 Electric priming pump
 Two starters and four batteries
 Fuel filter/water separator
 Turbocharger (2)
 Braking system
 Oil cooled, multiple disc (rear)
 Parking
 Secondary
 Caliper disc (front)
 Manual retarder (utilizes rear oil cooled, multiple disc brakes)
 Brake release motor (towing)
 Body up shift inhibitor
 Controlled throttle shifting
 Directional shift management
 Downshift inhibitor
 Neutral start switch
 Neutral coast inhibitor
 Reverse shift inhibitor
 Reverse neutralizer during dumping
 Programmable top gear selection

SUSPENSION SYSTEMS

Hydro pneumatic suspension

Front and rear

ELECTRICAL

Alarm, backup

Alternator, 145 amp

Auxiliary jump start receptacle

Batteries, maintenance-free, 12V (4), 190 amp-hour

Electrical system, 10 amp, 24V to 12V converter

MineStar™ ready

Backup light, halogen

Directional signals/hazard warning

Front and rear, LED

Headlights, halogen, with dimmer

Operator access courtesy lights

Stop/tail lights, LED

OPERATOR ENVIRONMENT

HVAC

Ashtray and cigarette lighter

Coat hook

Diagnostic connection port

Entertainment radio ready

Speakers, antenna, wiring harness

Air cleaner service indicator

Transmission oil temperature gauge

Air system pressure gauge

Brake oil temperature gauge

Coolant temperature gauge

Hour meter

Tachometer

Engine overspeed indicator

Fuel level, gauge

Speedometer with odometer

Transmission gear indicator

Hoist lever

Horn

Load counter, automatic

Mirrors, left and right

ROPS cab, insulated/sound suppressed

Seat, Caterpillar comfort, full air suspension and retractable four point seat belt with shoulder harness

Seat, trainer with lap belt

Steering wheel, padded/tilt/telescopic

Storage compartment

Sun visor

Throttle lock
Right side access door
Left side power window
Windshield wiper, intermittent, and washer
Tinted, laminated glass

GUARDS

Engine crankcase
Driveline, operator safety vandalism protection lock

FLUIDS

Extended life coolant to -35° C (-30° F)

OTHER STANDARD EQUIPMENT

Airline dryer
Body mounting group
Body safety pin (secures body in up position)
Body down indicator
CD ROM parts book
Center mounted rims
Ground level battery disconnect
Ground level engine shutdown
Ground level grease fittings
Reservoirs
Transmission
Steering
Brake, converter and hoist
Rims 19.5 × 49
Rock ejectors
Supplemental steering, automatic
Tie down eyes
Tow hooks (front)/tow pin (rear)