

PRODUCT SPECIFICATIONS FOR 777 (07)



OPERATING SPECIFICATIONS

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| Target Payload (100%) | 91.7 t |
| Top Speed - Loaded | 65.9 km/h |
| Maximum Working Payload (110%) | 100.9 t |
| Maximum Allowable Payload (120%)* | 110.1 t |
| Body Capacity - SAE 2:1 | 63.5 m ³ |
| Note (1) | Capacity with flat floor X Body with liner. |
| Note (2) | * Refer to the Caterpillar 10/10/20 Payload Policy for maximum gross vehicle weight limitations. |

ENGINE

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|--------------------------------|------------|
| Engine Model | Cat® C32B |
| Gross Power - SAE J1995 | 765 kW |
| Net Power - SAE J1349 | 683 kW |
| Bore | 145 mm |
| Stroke | 162 mm |
| Displacement | 32.1 l |
| Peak Torque - Speed | 1200 r/min |

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| Engine Speed | 1800 r/min |
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| Cylinders | 12 |
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| Engine Power - ISO 14396 | 752 kW |
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| Net Torque Rise | Tier 4: 39%. Tier 2: 37% |
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| Note (1) | Power rating applies at 1,800 rpm when tested under the specified condition for the specified standard. |
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| 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). |
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| Note (3) | Available as Tier 4 Final/Stage V equivalent, Tier 3/Stage IIIA equivalent, or Tier 2/Stage II equivalent emission standards. |
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| Note (4) | Meets China Nonroad Stage III emission standards equivalent to U.S. EPA Tier 3 or U.S. EPA Tier 2. |
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CAPACITY - X BODY - 100% FILL FACTOR

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| Struck | 43.1 m ³ |
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| Heaped (SAE 2:1)* | 64.1 m ³ |
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| Note (1) | Contact your local Cat dealer for body recommendation. |
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| Note (2) | *ISO 6483:1980 |
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CAPACITY - COAL BODIES - 100% FILL FACTOR

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| SAE 2:1 - For use with material densities of 1160 kg/m³ (1,950 lb/yd³) | 89.3 m ³ |
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| SAE 2:1 - For use with material densities of 1040-1160 kg/m³ (1,750-1,950 lb/yd³) | 106 m ³ |
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| SAE 2:1 - For use with material densities of 950-1040 kg/m³ (1,600-1,750 lb/yd³) | 110 m ³ |
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SAE 2:1 - For use with material densities less than 950 kg/m³ (1,600 lb/yd³)

125.9 m³

CAPACITY - DUAL SLOPE - 100% FILL FACTOR

Struck 41.9 m³

Heaped (SAE 2:1)* 60.1 m³

Note (1) Contact your local Cat dealer for body recommendation.

Note (2) *ISO 6483:1980

WEIGHT DISTRIBUTIONS - APPROXIMATE

Front Axle - Empty 42 %

Front Axle - Loaded 33 %

Rear Axle - Empty 58 %

Rear Axle - Loaded 67 %

TRANSMISSION

Forward - 1 10.7 km/h

Forward - 2 14.6 km/h

Forward - 3 19.2 km/h

Forward - 4 26.7 km/h

Forward - 5 36.2 km/h

Forward - 6 48.6 km/h

Forward - 7 65.9 km/h

Reverse 12.1 km/h

Note

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

FINAL DRIVES

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|-----------------------|-----------|
| Differential Ratio | 2.736:1 |
| Planetary Ratio | 7.0:1 |
| Total Reduction Ratio | 19.1576:1 |

BRAKES

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| Brake Standards | ISO 3450-2011 |
| Brake Surface Area - Front | 40846 cm ² |
| Brake Surface Area - Rear | 102116 cm ² |

SERVICE REFILL CAPACITIES

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| Fuel Tank (1) | 1136 l |
| Fuel Tank (2) | 1325 l |
| Cooling System | 231 l |
| Crankcase | 109 l |
| Differentials | 227 l |
| Final Drive - Each | 76 l |
| Steering System - Including Tank | 53.6 l |
| Brake Hoist System | 444 l |
| Torque Converter - Transmission System | 138.5 l |

BODY HOISTS

Pump Flow - High Idle 458 l/min

Relief Valve Setting - Raise 18950 kPa

Relief Valve Setting - Lower 3450 kPa

Body Raise Time - High Idle 15 s

Body Lower Time - Float 13 s

Body Lower Time - High Idle 13 s

SUSPENSION

Rear axle - Oscillation 5.4 °

Empty Loaded Cylinder Stroke Front 74.7 mm

Empty Loaded Cylinder Stroke Rear 66 mm

TIRES

Standard Tire 27.00R49 (E4)

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.

WEIGHTS - APPROXIMATE

Target Gross Machine Weight 164654 kg

ROPS

ROPS Standards Rollover Protective Structure (ROPS) for cab offered by Caterpillar meets ISO 3471:2008 ROPS criteria.

FOPS Standards Falling Objects Protective Structure (FOPS) meets ISO 3449:2005 Level II FOPS criteria.

STEERING

Turning Diameter - Front 25.3 m

Steering Standards ISO 5010:2007

Steer Angle 30.5 °

Turning Circle - Clearance Diameter 28.4 m

SOUND

Sound Standards (1) The operator Equivalent Sound Pressure Level (Leq) is 73 dB(A) when SAE J1166 FEB2008 is used to measure the value for an enclosed cab. This is a work cycle sound exposure level. The cab was properly installed and maintained. The test was conducted with the cab doors and the cab windows closed.

Sound Standards (2) The exterior sound pressure level for the standard machine measured at a distance of 15 m (49 ft) according to the test procedures specified in SAE J88:2008, mid-gear moving operation is 83 dB(A).

Sound Standards (3) Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.

777 (07) STANDARD EQUIPMENT

NOTE

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

POWER TRAIN

Autostall

Engine idle shutdown

Air-To-Air Aftercooler (ATAAC)

Air cleaner with precleaner (2)

Automatic cold mode idle control

Electric priming pump

Electric cold weather start (two starters and four batteries)

Ether starting aid

Exhaust, muffler

Fuel filter/water separator

Turbocharger (2)

Braking system:

- Extended Life Brakes
- Brake wear indicator
- Automatic Retarder Control (ARC) (utilizes oil-cooled, multiple disc brakes)
- Brake release motor (towing)
- Manual retarder (utilizes oil-cooled, multiple disc brakes)
- Oil-cooled, multiple disc (front/rear)
- Parking
- Secondary
- Service

Transmission

- Auto neutral idle
- APECS Software
- ECPC

Part Throttle Shifting

- 7-speed automatic powershift with Torque Shift Management Electronic Clutch Pressure Control
- Body up-shift inhibitor
- Directional shift management
- Downshift inhibitor
- Neutral start switch
- Neutral coast inhibitor
- Reverse shift inhibitor
- Reverse neutralizer during dumping
- Programmable top gear selection

SUSPENSION SYSTEMS

Suspension, rear

ELECTRICAL

Alarm, backup

Alternator, 115 ampere

Auxiliary jump start receptacle

Batteries, maintenance-free, 12V (4), 200 amp-hour

Electrical system, 25 AMP, 24V to 12V converter

Lighting system (LED)

- Backup light
- Directional signals/hazard warning, (front and rear)
- Headlights with dimmer
- Payload, indicator lights
- Operator access courtesy lights
- Side profile lights
- Stop/tail lights
- Service lights

OPERATOR ENVIRONMENT

Air conditioning
Ashtray and cigarette lighter
Coat hook
Cup holders (4)
Diagnostic connection port, 24V
Entertainment Radio Ready
- 5 amp converter
- Speakers
- Antenna
- Wiring harness
Gauges/indicators
- Brake oil temperature gauge
- Coolant temperature gauge
- Hour meter
- Tachometer
- Engine overspeed indicator
- Fuel level
- Speedometer with odometer
- Transmission gear indicator
Heater/defroster (11 070 kCal/43,930 BTU)
Auto temp control
Hoist lever
Horn, electric
Light - dome
Light - courtesy
Load counter, automatic
Touchscreen Advisor display
VIMS
Foot rest
Mirrors - heated
Power port, 24V and 12V (2)
ROPS cab, insulated/sound suppressed
Cat Comfort Series III
- Full air suspension
- Retractable 3-point seat belt with shoulder harness
Steering wheel, padded, tilt and telescopic
Storage compartment
Sun visor
Throttle lock
Window, right side, hinged access/egress
Electric left side window control
Windshield wiper (intermittent) and washer
Tinted, laminated glass

TECHNOLOGY PRODUCTS

Product Link Ready (Level 1)
Adaptive economy mode

GUARDS

Engine crankcase
Driveline
Fan and A/C

FLUIDS

Extended Life Coolant to -35° C (-30° F)

OTHER STANDARD EQUIPMENT

Clustered grease fittings
Body mounting group
Body safety pin (secures body in up position)
Body down indicator
CD-ROM parts book
Center-mounted rims
Fuel tank (1136 L/300 gal)
Ground level battery disconnect
Ground level engine shutdown
Ground level grease fittings
Reservoirs (separate)
- Brake/hoist
- Steering
- Transmission/torque converter
Rims 19.5 × 49
Rock ejectors
Supplemental steering (automatic)
Tie down eyes
Tow hooks (front)/Tow pin (rear)
Vandalism protection locks
Wiggins fast fuel
Attachment Zone

777 (07) OPTIONAL EQUIPMENT

NOTE

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

OPTIONAL EQUIPMENT

Body heat
Body liners
Body sideboards
Cab precleaner
Cat Engine Brake
Cold weather packages

Fluid fill service center
HID lights
Mirrors, convex
Spare rim
Visibility package (meets ISO 5006 requirements)
Wheel chocks
Work Area Vision System (WAVS)

OPERATOR ENVIRONMENT

Fluid level monitoring
TPMS

TECHNOLOGY PRODUCTS

TKPH/TMPH (Tons Kilometer Per Hour/Tons Mile Per Hour)
Object Detection (4 cameras, 4 radars)

OTHER OPTIONAL EQUIPMENT

Traction Control System (TCS)