

PRODUCT SPECIFICATIONS FOR 777 (07B)



Engine Model	Cat® C32B
Gross Power - SAE J1995	1025 HP
Net Power - SAE J1349	916 HP
Bore	5.7 in
Stroke	6.4 in
Displacement	1959 in ³
Peak Torque - Speed	1200 r/min
Engine Speed	1800 r/min
Cylinders	12
Engine Power - ISO 14396	1008 HP
Net Torque Rise	Tier 4: 39%. Tier 2: 37%

Note (1) 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) Available as Tier 4 Final/Stage V equivalent, Tier 3/Stage IIIA equivalent, or Tier 2/Stage II equivalent emission standards.

Note (4) Meets China Nonroad Stage III emission standards equivalent to U.S. EPA Tier 3 or U.S. EPA Tier 2.

Target Gross Machine Weight 363000 lb

Target Payload (100%) 101.1 ton (US)

Top Speed - Loaded 40.9 mile/h

Maximum Working Payload (110%) 111.2 ton (US)

Maximum Allowable Payload (120%)* 121.3 ton (US)

Body Capacity - SAE 2:1 83.1 yd³

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.

Forward - 1 6.6 mile/h

Forward - 2 9.1 mile/h

Forward - 3 11.9 mile/h

Forward - 4 16.6 mile/h

Forward - 5	22.5 mile/h
Forward - 6	30.2 mile/h
Forward - 7	40.9 mile/h
Reverse	7.5 mile/h
Note	Maximum travel speeds with standard 27.00R49 (E4) tires.
Differential Ratio	2.736:1
Planetary Ratio	7.0:1
Total Reduction Ratio	19.1576:1
Brake Standards	ISO 3450-2011
Brake Surface Area - Front	6331 in ²
Brake Surface Area - Rear	15828 in ²
Pump Flow - High Idle	120.9 gal/min
Relief Valve Setting - Raise	2750 psi
Relief Valve Setting - Lower	500 psi
Body Raise Time - High Idle	15 s
Body Lower Time - Float	13 s

Body Lower Time - High Idle

13 s

Struck 54.8 yd³**Heaped (SAE 2:1)*** 78.6 yd³**Note (1)** Contact your local Cat dealer for body recommendation.**Note (2)** *ISO 6483:1980**Front Axle - Empty** 42 %**Front Axle - Loaded** 33 %**Rear Axle - Empty** 58 %**Rear Axle - Loaded** 67 %**Rear axle - Oscillation** 5.4 °**Empty Loaded Cylinder Stroke Front** 2.9 in**Empty Loaded Cylinder Stroke Rear** 2.5 in**Fuel Tank (1)** 300 gal (US)**Fuel Tank (2)** 350 gal (US)**Cooling System** 61 gal (US)**Crankcase** 28.7 gal (US)

Differentials	59.9 gal (US)
Final Drive - Each	20 gal (US)
Steering System - Including Tank	14.1 gal (US)
Brake Hoist System	117 gal (US)
Torque Converter - Transmission System	36.5 gal (US)

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.

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.

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 Hearing protection may be needed when operating with an open operator

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.

Turning Diameter - Front 83 ft

Steering Standards ISO 5010:2007

Steer Angle 30.5 °

Turning Circle - Clearance Diameter 93 ft

Struck 56.3 yd³

Heaped (SAE 2:1)* 83.8 yd³

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

Note (2) *ISO 6483:1980

SAE 2:1 - For use with material densities of 1160 kg/m³ (1,950 lb/yd³) 116.8 yd³

SAE 2:1 - For use with material densities of 1040-1160 kg/m³ (1,750-1,950 lb/yd³) 139 yd³

SAE 2:1 - For use with material densities of 950-1040 kg/m³ (1,600-1,750 lb/yd³) 144 yd³

SAE 2:1 - For use with material densities less than 950 kg/m³ (1,600 lb/yd³) 164.6 yd³

777 (07B) 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 (07B) 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

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)