

PRODUCT SPECIFICATIONS FOR 770 (07)



ENGINE

| | |
|---------------------------------|---|
| Engine Model | Cat® C15 ACERT™ |
| Rated Engine Speed | 1800 r/min |
| Gross Power - SAE J1995 | 381 kW |
| Net Power - SAE J1349 | 360 kW |
| Net Power - ISO 9249 | 365 kW |
| Net Power - 80/1269/EEC | 365 kW |
| Engine Power - ISO 14396 | 377 kW |
| Net Torque - SAE J1349 | 2280 N·m |
| Number of Cylinders | 6 |
| Bore | 137 mm |
| Stroke | 171 mm |
| Displacement | 15.2 l |
| 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) No engine derating required up to 3000 m (9,843 ft) altitude.

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

WEIGHTS - APPROXIMATE

**Target Gross Machine
Operating Weight** 71214 kg

Chassis Weight 24900 kg

Body Weight 7665 kg

Note (1) Chassis weight with 100% fuel, hoist, body mounting group, rims and tires.

Note (2) Body weight is the standard dual slope body with no liner and will vary depending on configuration.

OPERATING SPECIFICATIONS

**Nominal Payload Class
(100%)** 38.6 t

Top Speed - Loaded 73.5 km/h

Target Payload (100%) 38.6 ton (US)

Body Capacity - SAE 2:1 25.2 m³

Top Speed - Loaded* 73.5 km/h

Note Refer to the Caterpillar 10/10/20 Overload Policy for maximum gross machine weight limitations.

Note (1) Capacity with dual slope body with no liner.

Note (2) *ISO 6483:1980

TRANSMISSION

Forward - 1 11.9 km/h

Forward - 2 16.3 km/h

Forward - 3 22.1 km/h

Forward - 4 29.6 km/h

Forward - 5 40.2 km/h

Forward - 6 54.2 km/h

Forward - 7 73.5 km/h

Reverse 15.6 km/h

Note Maximum travel speeds with standard 18.00R33 (E4) tires.

FINAL DRIVES

Differential Ratio 2.12:1

Planetary Ratio 4.80:1

Total Reduction Ratio 10.18:1

BRAKES

Brake Surface - Front 1395 cm²

Brake Surface - Rear 40225 cm²

Brake Standards ISO 3450:1996

BODY HOISTS

| | |
|------------------------------|-----------------------|
| Pump Flow - High Idle | 448 l/min |
| Relief Valve Setting - Raise | 18950 kPa |
| Relief Valve Setting - Lower | 3450 kPa |
| Body Power Down - High Idle | 10 seconds (approx.) |
| Body Lower Time - Float | 10 seconds (approx.) |
| Body Raise Time - High Idle | 7.5 seconds (approx.) |

CAPACITY - DUAL SLOPE - 100% FILL FACTOR

| | |
|-------------------|---------------------|
| Struck | 17.6 m ³ |
| Heaped (SAE 2:1)* | 25.2 m ³ |
| Note (1) | *ISO 6483:1980 |

CAPACITY - FLAT FLOOR - 100% FILL FACTOR

| | |
|-------------------|---------------------|
| Struck | 17.6 m ³ |
| Heaped (SAE 2:1)* | 25.2 m ³ |
| Note (1) | *ISO 6483:1980 |

WEIGHT DISTRIBUTIONS - APPROXIMATE

| | |
|---------------------|--------|
| Front Axle - Empty | 51.9 % |
| Front Axle - Loaded | 34.5 % |
| Rear Axle - Empty | 48.1 % |
| Rear Axle - Loaded | 65.5 % |

SUSPENSION

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|------------------------------------|--------|
| Empty Loaded Cylinder Stroke Front | 234 mm |
|------------------------------------|--------|

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|-----------------------------------|--------|
| Empty Loaded Cylinder Stroke Rear | 149 mm |
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|-------------------------|-------|
| Rear axle - Oscillation | 8.9 ° |
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SERVICE REFILL CAPACITIES

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|-----------|-------|
| Fuel Tank | 530 l |
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|----------------|-------|
| Cooling System | 125 l |
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|-----------|------|
| Crankcase | 38 l |
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| Differential - Final Drives | 180 l |
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| Steering Tank | 55 l |
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| Steering System - Including Tank | 87 l |
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| Brake/Hoist Hydraulic Tank | 145 l |
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|--------------------|-------|
| Brake Hoist System | 227 l |
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| Torque Converter - Transmission System | 64 l |
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TIRES

| | |
|---------------|---------------|
| Standard Tire | 18.00R33 (E4) |
|---------------|---------------|

Note (1) Productive capabilities of the 770G 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 evaluates all job conditions and consults the tire manufacturer for proper tire selection.

ROPS

ROPS/FOPS Standards Standards

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

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

SOUND

Sound Standards Standards

Note (1) The dynamic operator sound pressure level is 79 dB(A) when “ISO R396:2008” is used to measure the value for an enclosed cab. The cab was properly installed and maintained. The test was conducted with the cab doors and the cab windows closed.

Note (2) 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.

STEERING

Steering Standards ISO 5010:2007

Steer Angle 40.5 °

Turning Diameter - Front 17.6 m

Turning Circle - Clearance Diameter 20.3 m

770 (07) STANDARD EQUIPMENT

NOTE

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

ELECTRICAL

Alarm, backup

Alternator, 115 ampere

Auxiliary jump start receptacle

Batteries, maintenance-free, 12V (2), 190 amp-hour

Electrical system, 24V

Lighting system: - Backup light (halogen) - Directional signals/hazard warning (front and rear LED) - Headlights (halogen), with dimmer - Operator access courtesy lights (Developing Market Only)

PRODUCT LINK COMMUNICATIONS

Product Link Ready

GUARDS

Engine crankcase

OPERATOR ENVIRONMENT

Air conditioning (Developing Market Only)

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: - Air cleaner service indicator - electronic - Brake oil temperature gauge - Coolant temperature gauge - Hour meter - Tachometer - Engine overspeed indicator - Fuel level - Speedometer with odometer - Transmission gear indicator

Heater/defroster (Developing Market Only) (11 070 kCal/43,930 BTU)

Hoist lever

Horn, electric

Light - dome

Light - courtesy

Messenger, display unit

Mirrors

Power port, 12V

ROPS cab, insulated/sound suppressed

Seat, Cat Comfort: - full air suspension - retractable 3 point seat belt with shoulder harness

Seat, training with lap belt

Steering wheel, padded, tilt and telescopic

Storage compartment

Sun visor, tinted glass

Throttle lock

Windshield wiper (intermittent) and washer

POWER TRAIN

Air-To-Air Aftercooler (ATAAC)

Air cleaner with precleaner (1)

Automatic cold mode idle control

Electric start

Turbocharger

Braking system, hydraulic actuated: - Automatic Retarder Control (ARC) (utilizes rear oil-cooled, multiple disc brakes) - Brake release motor (towing) - Caliper-disc (front) - Oil-cooled, multiple disc (rear) - Parking - Secondary - Service

Transmission: - 7 speed automatic powershift - 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

Suspension, front and rear

OTHER STANDARD EQUIPMENT

Body safety pin (secures body in up position)

Body down indicator

CD ROM parts book

Fan, hydraulic demand

Fuel tank (530 L/140 gal)

Guard, engine compartment

Guard, mud

Ground level battery disconnect

Ground level engine shutdown

Ground level grease fittings

Reservoirs (separate): - Brake/converter/hoist - Steering - Transmission/torque converter

Rims 13 × 33

Rock ejectors

Service platform, left and right side

Supplemental steering (automatic)

Tie down eyes

Tow hooks (front)/Tow pin (rear)

Vandalism protection locks

ANTIFREEZE

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

770 (07) OPTIONAL EQUIPMENT

NOTE

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

WEATHER PACKAGES

PKG, WEATHER STANDARD: - Includes the standard weather package with no heated mirrors

PKG COLD WEATHER PLUS: - Includes heated mirrors and fuel heater

PKG, WEATHER PREMIUM: - Includes fuel heater, ether aid and heated mirrors

PKG COLD WEATHER MAX: - 240V package, coolant heater, ether aid, heated mirrors

SERVICE PACKAGES

SERVICEABILITY STANDARD - SERVICEABILITY PLUS: - Centralized grease fittings

SERVICEABILITY STANDARD - SERVICEABILITY SUPERIOR: - Auto lube option

PERFORMANCE PACKAGES

PERFORMANCE PACKAGE - STANDARD: - Standard brakes front dry brakes and rear oil-cooled, multiple disc brakes. - Includes front brake disconnect switch. Utilizes rear-oil cooled, multiple disc brakes.

PERFORMANCE PACKAGE - PLUS: - Standard Performance Package + Traction Control System

PERFORMANCE PACKAGE - SUPERIOR: - Standard Performance Package + Traction Control System + Extended life brakes

ENGINE ARRANGEMENTS

Tier 2 Equivalent C15 ACERT diesel engine

Tier 3 Equivalent C15 ACERT diesel engine

Cat Engine Brake

EXHAUST PACKAGES

Muffler

Body heat/diverter

BODY OPTIONS

Flat floor

Quarry body

Dual slope

Steel liner option (not available on Quarry body)

Rubber liner option

Sideboards

BATTERY OPTIONS

Two batteries

Four batteries

LIGHTING PACKAGES

HID option

DISPLAYS

Messenger display

Languages for messenger display

TPMS System

OPERATOR ENVIRONMENT

Heat

Air conditioning

FILTERS

Precleaner

PRODUCT LINK

Product Link GSM

Product Link GPS

No Product Link

OTHER OPTIONAL EQUIPMENT

WAVS cameras

Spare rims

Wheel chocks

Sound Suppression Package

Fast fill fuel