385C FS
Front Shovel

Cat® C18 Diesel Engine with ACERT® Technology

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Power (ISO 9249) at 1800 rpm</td>
<td>390 kW/530 hp</td>
</tr>
<tr>
<td>Operating Weight with</td>
<td></td>
</tr>
<tr>
<td>5.7 m³ rock bucket, 650 mm shoes</td>
<td>90 600 kg</td>
</tr>
<tr>
<td>Maximum Travel Speed</td>
<td>4.5 km/h</td>
</tr>
<tr>
<td>Maximum Drawbar Pull</td>
<td>592 kN</td>
</tr>
<tr>
<td>Maximum Reach</td>
<td>10 350 mm</td>
</tr>
<tr>
<td>Maximum Height</td>
<td>11 260 mm</td>
</tr>
</tbody>
</table>
385C FS Front Shovel

Designed for aggressive digging and fast cycle times, this high performance loading tool delivers the dependability you need to maximize your productivity.

Engine
✔ The Cat® C18 engine has state-of-the-art ACERT® technology to meet emission regulations with exceptional performance capabilities, fuel efficiency and proven reliability. pg. 4

Undercarriage and Structures
✔ The undercarriage supports the swing bearing and upper structure of the 385C FS. It must transmit the reaction forces of digging operations from the upper structure to the ground; therefore, the strength of the undercarriage is a major factor in machine durability. pg. 5

Hydraulics
Proportional Priority Pressure Compensated (PPPC) system with state-of-the-art electronic control ensures hydraulic system efficiency and excellent productivity. pg. 6

Environmentally Responsible Design
✔ Quieter operation, lower engine emissions, less fluid disposal and cleaner service can help you meet or exceed worldwide regulations and protect the environment. pg. 4

Developed specifically for high production mining applications, the 385C Front Shovel delivers high bucket fill factors and fast cycle times to maximize your productivity. Designed and built to meet the performance and reliability expectations of Cat customers, this machine delivers dependability.
Front Linkage
The 385C FS is equipped with a standard boom, stick and several bucket options, offering excellent reach and digging forces. Parallelogram linkage keeps the bucket parallel to the ground during material penetration and the master cylinder maintains a level bucket while raising the boom. pg. 7

Operator Station
✓ An all-new cab provides improved visibility and comfort. The new monitor is a full-color graphical display with enhanced functionality to provide simple, comprehensive machine interface. pg. 8

Service and Maintenance
✓ Fast, easy service has been designed in with extended service intervals, advanced filtration, convenient filter access and user-friendly electronic diagnostics for increased productivity and reduced maintenance costs. pg. 10

Complete Customer Support
Your Cat dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment. The dealer will help you choose a plan that can cover everything from machine and attachment selection to replacement. pg. 10
Environmentally Responsible Design

Caterpillar machines not only help you build a better world, they help maintain and preserve the fragile environment.

**Outstanding performance.** Many features designed to provide outstanding performance which can mean more work done in a day, less fuel consumption and minimal impact on our environment.

**Low exhaust emissions.** The Cat C18 diesel engine utilizes unique ACERT technology to meet exhaust emissions regulations while assuring optimum fuel efficiency.

**Fewer leaks and spills.** Engine oil and encapsulated hydraulic oil filters are positioned vertically and are easy to reach to minimize spillage. Service intervals are extended to reduce the times fluids are changed and handled. The new hydraulic oil fine filtration system attachment extends the service interval from 2000 to 5000 hours. Compatible with Cat HEES hydraulic bio-oil for ecologically sensitive applications. Finally, the new Cat Extended Life Coolant extends service (up to 6000 h) so there is less need for fluid disposal.

**Quiet operation.** The hydraulically driven cooling fan is thermostatically controlled, so the fan only runs at the speed necessary to maintain correct system operating temperatures. The result is cool quiet operation with less disturbance to the surrounding environment.

**Ozone protection.** To help preserve the earth’s ozone layer, the air conditioning unit uses only R-134a refrigerant which does not contain harmful chlorofluorocarbons (CFC’s).

**Engine**

A combination of innovations working at the point of combustion, ACERT technology optimizes engine performance while meeting EU Stage II and Stage IIIA emission regulations.

**Turbocharger.** The C18 engine uses a water-cooled, center-section waste gated turbocharger for improved performance. This turbocharger controls the air volume to the cylinders and works efficiently during low and high load conditions.

**Emissions.** ACERT Technology is a differentiated technology that reduces emissions at the point of combustion. The technology capitalizes on proven Caterpillar leadership in three core engine systems: fuel, air and electronics.

**Cold Weather Starting Kit.**
The kit consists of two additional batteries, heavy-duty harness, large capacity starting motor, and the ether starting aid. With this kit, the excavator has the capability to start at -32°C.

**Diesel Engine.** The Caterpillar C18, with ACERT technology, is a 18.1 liter, six-cylinder, 390 kW (530 hp) engine with mechanically actuated electronic fuel injection (MEUI) and overhead camshaft. ACERT technology provides outstanding engine performance through advanced electronic control, precision fuel delivery, and refined air management.

**Fuel System.** C18 engine uses a mechanically actuated electronically controlled unit injection (MEUI) system. The MEUI system combines high-pressure injection and electronic control in a single compact unit. The electronic unit injector is an integral part of the C18 fuel system. Computerized electronic control provides precise metering and timing of fuel injection.

**Cooling System.** High capacity, side-by-side cooling system allows operation in ambient temperatures up to 52°C. The Electric Power Control (EPC) controls the fan speed based on coolant temperature and hydraulic oil temperature for optimized cooling.

**Fuel Consumption.** The Advanced Diesel Engine Management (A4) controller uses sensors throughout the engine to manage engine load and performance. The A4 controller is the muscle behind engine responsiveness, self-diagnostics, controlling emissions, and fuel economy.

**Turbocharger.** The C18 engine uses a water-cooled, center-section waste gated turbocharger for improved performance. This turbocharger controls the air volume to the cylinders and works efficiently during low and high load conditions.

**Emissions.** ACERT Technology is a differentiated technology that reduces emissions at the point of combustion. The technology capitalizes on proven Caterpillar leadership in three core engine systems: fuel, air and electronics.

**Cold Weather Starting Kit.**
The kit consists of two additional batteries, heavy-duty harness, large capacity starting motor, and the ether starting aid. With this kit, the excavator has the capability to start at -32°C.
Undercarriage and Structures
Durable undercarriage absorbs stresses and provides excellent stability.

Track. The 385C comes standard with the new grease lubricated track called GLT4. The track links are assembled and sealed with grease to decrease internal bushing wear, reduce travel noise and extend service life lowering operating costs.

Track Rollers. Track rollers are a heavy-duty type with increased strength for longer life. They also use solid pins for retention of the collars and a more secure design.

Idler Guards and Track Guides. Idler guards and center track guides used to maintain track alignment are standard. Optional two-piece full-length track guiding guards are available for additional protection on steep side slopes.

Final Drives. The final drives are the three-stage reduction planetary type. This design results in a complete drive/brake unit that is compact and delivers excellent performance and reliability.

Carbody Design. The advanced carbody design stands up to the toughest applications.
- Modified X-shaped, box-section carbody provides excellent resistance to torsional bending.
- Upper structure weight and stresses are distributed evenly across the full length of the track roller frame.
- Robot welding ensures consistent, high-quality welds throughout the manufacturing process.

Travel Motors. Two-speed axial piston hydraulic motors provide the 385C FS drive power. Speed selection is automatic when the high-speed position is selected. Travel motors have internal disk brakes to hold the machine when stationary. The travel motors are protected from damage by rigid covers.

Upper Frame. Rugged main frame is designed for maximum durability and efficient use of materials.
- Robot welding for consistent, high-quality welds.
- Outer frame utilizes curved side rails, which are die-formed, for excellent uniformity and strength throughout the length.
- Box section channels improve upper frame rigidity under the cab.
- Boom tower and one piece main rails.
- New boom foot design transfers load more efficiently with less stress in critical areas.
- Reinforced lift cylinder and swing drive mounts increase structure durability in rock and quarry applications.
Hydraulics

Caterpillar hydraulics deliver power and control to keep material moving at high volume.

Hydraulic System. The 385C FS hydraulic system includes a three-pump system with an independent swing circuit and a hydraulic circuit utilizing the proven Proportional Priority Pressure Compensated (PPPC) system. It features Caterpillar-developed electronic control and activation to ensure high hydraulic system efficiency and excellent productivity.

PPPC System. The load sensing PPC system provides the following features:
- Cylinder speed is directly related to operator’s movement of the joystick from feathering to full speed.
- Flow to cylinders during multi-functional operation is directly controlled by the operator and is not dependent on loads.
- Controller reduces pump output to minimum to save power when joysticks are in neutral position.

Power Management Control. The pump-valve electronic controller is central to power management control and provides highly efficient control for the pumps, valves and engine.

Swing Performance. The three-pump system with independent swing gives priority to the swing circuit for strong swing acceleration and easily controlled multi-function operation.

Biodegradable Hydraulic Oil. Biodegradable hydraulic oil is available as an option.

Component Layout. The hydraulic pumps, control valve and hydraulic tank are located close together to minimize the length of piping. The swing control valve is mounted directly on the swing motor. Main and swing pump suction and discharge lines have large diameters. These large diameters, combined with the component layout, guarantee high efficiency.

Auxiliary Hydraulics. An auxiliary valve is standard on the 385C FS and is used for the bottom dump circuit. It is driven electrically based on commands from the pump-valve controller.

Front Linkage Hydraulic System. The hydraulic system for the implement consists of two boom cylinders, a stick cylinder, two bucket cylinders, two bottom dump cylinders and a master cylinder.

Hydraulic Oil Filtration System. The 385C FS hydraulic system features six standard filters in four types. These filters improve reliability, extend the life of hydraulic equipment and hydraulic oil, boost performance and reduce running costs. A fine filtration system is available as an attachment.

Third Pedal for Straight Travel (attachment). A third pedal for straight travel is available as an attachment. This pedal allows straight machine travel using only a single pedal.
Front Linkage
The 385C FS delivers higher production and efficiency to all jobs.

Parallelogram Linkage. The Cat 385C FS Front Shovel features parallelogram-type front linkage with a master cylinder. The parallelogram linkage automatically keeps the bucket parallel to the ground. This allows excellent penetration, fast loading and a smooth floor clean-up. The operator can concentrate on the boom and stick rather than bucket adjustments. The master cylinder circuit automatically maintains a level bucket while raising the boom. It aids in bucket positioning both above and below grade, eliminating constant adjustment during the work cycle. The master cylinder arrangement also uses bucket cylinder circuit pressure to increase the boom lifting force.

Boom. The boom is 4.6 m long and features a rigid structure with a number of steel castings. The cast steel portions are structured into a box to reduce the weight of the boom nose and boom foot.

Stick. The 385C FS offers a 3.4 m long stick. The stick nose and stick foot are made of cast steel. The middle portion has a box structure fabricated with steel plates. The stick cylinder-mounting bracket is reinforced from the inside.

Bottom Dump Bucket.
The recommended bucket for the 385C FS is a bottom dump bucket. It is designed for strength, performance and long service life.

Linkage Pin. All pins used in the 385C FS front linkage have thick chrome plating, giving them high wear and corrosion resistance. The diameter of each pin is made as large as possible to smoothly distribute the shear and bending loads associated with the digging and lifting forces.
Operator Station
Designed for simple, easy operation and comfort, the 385C FS allows the operator to focus on production.

Cab Design. The workstation has been designed to be spacious, quiet and comfortable for the operator, assuring high productivity throughout the entire workday. Switches are conveniently located for easy access. The new monitor is located to provide excellent visibility and access.

Seat. The seat provides a variety of adjustments, including fore/aft, height and weight to suit the operator. Also included are adjustable armrests and a retractable seat belt. For additional comfort, a new heated air suspension seat is available as an attachment.

Skylight. An enlarged skylight with sunshade provides excellent visibility and good ventilation.

Hydraulic Activation Control Lever. The hydraulic activation control lever deactivates hydraulic functions during engine start-up, and prevents unintentional machine operation.

Climate Control. Positive filtered ventilation with a pressurized cab comes standard. Fresh air or re-circulated air can be selected with a switch on the left console.

Windows. To maximize visibility, all glass is affixed directly to the cab eliminating the use of window frames. Choice of fixed or easy-to-open split front windshield meet operator preference and application conditions.
- 50/50 split front windshield allows both upper and lower portions to be stored in an overhead position.
- 70/30 split front windshield stores the upper portion above the operator. The lower front windshield features a rounded design to maximize downward visibility and improves wiper coverage.
- Both openable versions feature a one-touch action release system.
- The fixed front windshield is available in standard duty laminated glass or high impact resistant laminated glass.

Wipers. Parallelogram wiper, including a washer nozzle is mounted below the cab windshield, optimizes the operator’s viewing area and offers continuous and intermittent modes.

Monitor. The compact, full-color, graphical display monitor is new. The monitor has functions to display machine, maintenance, diagnostic and prognostic information. The angle of the monitor can be adjusted to face the operator and prevent sun glare.

Cab Exterior. The exterior design uses thick steel tubing along the bottom perimeter of the cab, improving the resistance of fatigue and vibration. This design allows the FOGS to be bolted directly to the cab, at the factory or as an attachment later, enabling the machine to meet specifications and job site requirements.

Cab Mounts. The cab shell is attached to the frame with viscous rubber cab mounts, which dampen vibrations and sound levels while enhancing operator comfort.

Cab Riser. To provide excellent forward visibility for truck loading and other applications, an 870 mm cab riser is standard on the 385C Front Shovel.
Electronic Control System

Manages the engine and hydraulics for maximum performance.

Monitor Display Screen. The monitor is a full color 400x234 pixels Liquid Crystal Display (LCD) graphic display. The Master Caution Lamp blinks ON and OFF when one of the critical conditions below occurs:
- Engine oil pressure low
- Coolant temperature high
- Hydraulic oil temperature high
Under normal conditions or the default condition, the monitor display screen is divided into four areas: clock and throttle dial, gauge, event display and multi-information display.

Clock and Throttle Dial Display. The clock, throttle dial and gas-station icon with green color are displayed in this area.

Gauge Display. Three analog gauges, fuel level, hydraulic oil temperature and coolant temperature, are displayed in this area.

Event Display. Machine event information is displayed in this area along with the icon and language.

Multi-information Display. This area is reserved for displaying information that is convenient for the operator. The “CAT” logo mark is displayed when no information is available to display.

Operator Gain/Response. This is used to suit the operators preference or application.
- Quicker, for fast response and more production
- Slower, for more precision
- Three preset settings with 21 available settings

Consoles. Redesigned consoles feature a simple, functional design to reduce operator fatigue, ease of switch operation and excellent visibility. Both consoles have attached armrests and allow the height of the armrests to be adjusted.

Standard Cab Equipment. To enhance operator comfort and productivity, the cab includes a lighter, drink holder, coat hook, service meter, literature holder, magazine rack and storage compartment. The cab can be equipped with optional 12 volt converter and up to two 12V-7 amp electrical sockets to provide additional electrical resources.

Machine Security. An optional Machine Security System (MSS) is available from the factory. MSS uses a special Caterpillar key with an embedded electronic chip for controlling unauthorized machine operation.

Product Link. “Product Link Ready” from the factory.

Electronic Joysticks. Electronic joysticks provide features not possible with hydraulic pilot valves:
- Eliminate pilot lines in cab for quieter operation
- Adjustable gain/response
Service and Maintenance

Fast, easy service has been designed in with extended service intervals, advanced filtration, convenient filter access and user-friendly electronic diagnostics.

Service Intervals. Service intervals are extended to reduce maintenance costs. Engine oil, oil filter and fuel filters at 500 hours.

Hydraulic Capsule Filters. The return filters or capsule filters for the hydraulic system are located beside the hydraulic tank. The filter elements are removable without spilling hydraulic oil.

Service Points. Service points are centrally located with easy access to facilitate routine maintenance.

Pilot Hydraulic System Filter. Pilot hydraulic system filter keeps contaminants from the pilot system and is located in the pump compartment.

Remote Greasing Block. A concentrated remote greasing block on the boom delivers grease to hard-to-reach locations.

Radial Seal Cleaner. Radial seal main air cleaner with precleaner has a double-layered filter element for more efficient filtration. No tools are required to change the element.

Fuel-Water Separator. The water separator removes water from fuel, even when under pressure, and water level can be monitored in the cab.

Complete Customer Support

Cat dealer services help you operate longer with lower costs.

Machine Selection. Make detailed comparisons of the machines you are considering before you buy. What are the job requirements, machine attachments and operating hours? What production is needed? Your Cat dealer can provide recommendations.

Purchase. Consider the financing options available as well as day-to-day operating costs. This is also the time to look at dealer services that can be included in the cost of the machine to yield lower equipment owning and operating costs over the long run.

Customer Support Agreements. Cat dealers offer a variety of product support agreements, and work with customers to develop a plan the best meets specific needs. These plans can cover the entire machine, including attachments, to help protect the customer’s investment.

Operation. Improving operating techniques can boost your profits. Your cat dealer has videotapes, literature and other ideas to help you increase productivity, and Caterpillar offers certified operator training classes to help maximize the return on your investment.

Product Support. You will find nearly all parts at our dealer parts counter. Cat dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime. You can save money with Cat remanufactured components.

Maintenance Services. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as Scheduled Oil Sampling, Coolant Sampling and Technical Analysis help you avoid unscheduled repairs.

Replacement. Repair, rebuild or replace? Your Cat dealer can help you evaluate the cost involved so you can make the right choice.


**Engine**

C18 with ACERT Technology  
Net Power at 1800 rpm  
- ISO 9249: 390 kW/530 hp  
- EEC 80/1269: 390 kW/530 hp

- Bore: 145 mm  
- Stroke: 183 mm  
- Displacement: 18.1 liters

- All engine horsepower (hp) are metric including front page.  
- The C18 engine meets EU directive 97/68/EC Stage II and from January 2006 it will meet Stage IIIA emission requirements.  
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator.  
- No engine derating required below 2300 m altitude.

**Weights**

Operating Weight with 5.7 m³ rock bucket, 650 mm shoes: 90,600 kg

**Hydraulic System**

**Main/Travel**  
- Circuit: Closed center, load sensing  
- Pump: Piston, variable  
- Maximum Flow at rated speed: 2x490 l/min  
- Relief Valve Setting  
  - Main: 320 bar  
  - Travel: 350 bar  
- Number of Main Pumps: 2

**Swing**  
- Circuit: Open center, load sensing  
- Pump: Piston, variable  
- Maximum Flow at rated speed (total): 450 l/min  
- Relief Valve Setting  
  - Accelerating: 260 bar  
- Number of Swing Pumps: 2

**Pilot**  
- Circuit: Open center  
- Pump: Gear  
- Maximum Flow at rated speed: 90 l/min  
- Relief Valve Setting  
  - Controls: 41 bar  
- Number of Pilot Pumps: 1

**Cylinders**

- **Boom**  
  - Bore: 180 mm  
  - Stroke: 1415 mm

- **Master**  
  - Bore: 152 mm  
  - Stroke: 1953 mm

- **Stick**  
  - Bore: 220 mm  
  - Stroke: 1855 mm

- **Bucket**  
  - Bore: 178 mm  
  - Stroke: 1810 mm

- **Bottom Dump**  
  - Bore: 160 mm  
  - Stroke: 275 mm

**Service Refill Capacities**

- Fuel Tank: 1240 liters  
- Cooling System: 101 liters  
- Engine Oil: 65 liters  
- Swing Drive (each): 19 liters  
- Final Drive (each): 21 liters  
- Hydraulic system (including tank): 995 liters  
- Hydraulic tank: 810 liters

**Cab/FOGS**

- Standard air conditioning system contains environmentally friendly R134a refrigerant.

**Sound**

**Operator Sound**

- The operator sound level measured according to the procedures specified in ISO 6394:1998 is 76 dB(A), for cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.  
- 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 noisy environment.

**Exterior Sound**

- The labeled spectator sound power level measured according to the test procedures and conditions specified in 200/14/EC is 109 dB(A).
### Dimensions

All dimensions are approximate.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Unit</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom</td>
<td>mm</td>
<td>4600</td>
</tr>
<tr>
<td>Stick</td>
<td>mm</td>
<td>3480</td>
</tr>
<tr>
<td>A Boom top height</td>
<td>mm</td>
<td>4500</td>
</tr>
<tr>
<td>Cab top height</td>
<td>mm</td>
<td>4660 (with FOPS)</td>
</tr>
<tr>
<td>B Engine hood height</td>
<td>mm</td>
<td>3460 (without handrail)</td>
</tr>
<tr>
<td>C Overall width (retracted)</td>
<td>mm</td>
<td>650 mm shoes 3400</td>
</tr>
<tr>
<td>C Overall width (extended)</td>
<td>mm</td>
<td>650 mm shoes 4160</td>
</tr>
<tr>
<td>D Upperstructure width</td>
<td>mm</td>
<td>3470</td>
</tr>
<tr>
<td>E Tail swing radius</td>
<td>mm</td>
<td>4590</td>
</tr>
<tr>
<td>F Minimum ground clearance</td>
<td>mm</td>
<td>850</td>
</tr>
<tr>
<td>G Overall length</td>
<td>mm</td>
<td>14520</td>
</tr>
<tr>
<td>Counterweight removed</td>
<td>mm</td>
<td>13790</td>
</tr>
<tr>
<td>Bucket and stick removed</td>
<td>mm</td>
<td>8600</td>
</tr>
<tr>
<td>Boom, bucket and stick removed</td>
<td>mm</td>
<td>7460</td>
</tr>
<tr>
<td>H Track length</td>
<td>mm</td>
<td>5840</td>
</tr>
<tr>
<td>J Track gauge width</td>
<td>mm</td>
<td>3510 (Extended position)</td>
</tr>
<tr>
<td>K Width over walkways</td>
<td>mm</td>
<td>4390</td>
</tr>
<tr>
<td>L Counterweight clearance</td>
<td>mm</td>
<td>1630</td>
</tr>
</tbody>
</table>

### Buckets for K Series™ Tooth System

<table>
<thead>
<tr>
<th>Bucket Type</th>
<th>Capacity (m³)</th>
<th>Width (mm)</th>
<th>Tip Radius (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Rock</td>
<td>5.7</td>
<td>2760</td>
<td>2684</td>
<td>10400</td>
</tr>
<tr>
<td>2 Rock with spill plate</td>
<td>5.7</td>
<td>2760</td>
<td>2881</td>
<td>10765</td>
</tr>
<tr>
<td>3 Heavy Duty Rock</td>
<td>5.2</td>
<td>2760</td>
<td>2684</td>
<td>10600</td>
</tr>
<tr>
<td>Heavy Duty Rock reinforced</td>
<td>5.7</td>
<td>2760</td>
<td>2684</td>
<td>11050</td>
</tr>
</tbody>
</table>
Working Ranges

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stick Length</td>
<td>mm</td>
<td>3480</td>
</tr>
<tr>
<td>Boom Length</td>
<td>mm</td>
<td>4600</td>
</tr>
<tr>
<td>Rock Bucket</td>
<td>m³</td>
<td>5.2</td>
</tr>
<tr>
<td>A Maximum Reach</td>
<td>mm</td>
<td>10 350</td>
</tr>
<tr>
<td>B Maximum Reach at Ground Level</td>
<td>mm</td>
<td>9900</td>
</tr>
<tr>
<td>C Maximum Level Crowd Distance</td>
<td>mm</td>
<td>3920</td>
</tr>
<tr>
<td>D Maximum Digging Depth</td>
<td>mm</td>
<td>2850</td>
</tr>
<tr>
<td>E Maximum Digging Height</td>
<td>mm</td>
<td>11 260</td>
</tr>
<tr>
<td>F Maximum Dump Height</td>
<td>mm</td>
<td>7430</td>
</tr>
<tr>
<td>G Reach at Maximum Dump Height</td>
<td>mm</td>
<td>5690</td>
</tr>
<tr>
<td>Bucket Breakout Force* (ISO)</td>
<td>kN</td>
<td>538</td>
</tr>
<tr>
<td>Stick Breakout Force* (ISO)</td>
<td>kN</td>
<td>429</td>
</tr>
</tbody>
</table>

* Forces shown are for 5.2 m³ rock bucket
**Standard Equipment**

Standard equipment may vary. Consult your Caterpillar dealer for specifics.

### Electrical
- Alternator – 75 amp
- Lights working
  - Cab interior
  - Cab mounted, two
  - Frame mounted
  - Storage box mounted, one
  - Signal/warning horn
- **Cab interior**
  - Cab mounted, two
  - Frame mounted
  - Storage box mounted, one
- **Cab mounted, two**
- **Frame mounted**
- **Storage box mounted, one**
- **Signal/warning horn**

### Engine/Powertrain
- Air filter with pre-cleaner
- Automatic engine speed control
- Automatic swing parking brake
- Automatic travel parking brakes
- Caterpillar C18 ATAAC with ACERT technology, altitude capability to 2300 m without derating
- Fuel filter
  - High ambient cooling, 52°C capability
  - Side-by-side cooling system with separately mounted AC condenser and variable speed fan
  - Two speed travel
  - Water separator, with level indicator, for fuel line

### Guards
- FOGS (Falling Object Guard System)
  - including overhead and windshield guards
- Heavy duty bottom guards on upper frame
- Heavy duty swivel guard on undercarriage
- Heavy duty travel motor guards on undercarriage
- Idler and center section track guiding guards
- Quarry application (cylinder guard, swing motor and drive guard)

### Operator Station
- Adjustable armrest
- Air conditioner, heater and defroster
  - with automatic climate control
- Ashtray and 24 volt lighter
- Beverage/cup holder
- Cab riser 870 mm
- Capability to install 2 additional pedals
- Coat hook
- Console mounted electronic type joysticks with adjustable gain and response
- Electrical provision for seat heater
- EU sound criteria package
- Floor mat, washable
- High resistant cab window
- Instrument panel and gauges with full color graphical display, start up level checks
- Joystick, thumb wheel modulation joystick for use with front shovel bottom dump bucket
- Literature compartment
- Neutral lever (lock out) for all controls
- Positive filtered ventilation, pressurized cab
- Rear window, emergency exit
- Retractable seat belt 51 mm width
- Sliding upper door window
- Stationary skylight (polycarbonate)
- Storage compartment suitable for lunch box
- Sunshade for windshield and skylight
- 24V radio ready (harness, 2 speakers, flexible type antenna)
- Travel control pedals with removable hand levers
- Utility space for magazines
- Windshield wipers and washers
  - (upper and lower)
- Windshield One-piece high impact resistant

### Undercarriage
- 650 mm clipped double grouser shoes, standard length, variable gauge
- Grease lubricated track GLT 4
- Hydraulic track adjusters
- Steps – four

### Other Standard Equipment
- Boom and stick reducing valve
- Cat branded XT hoses
- Cat batteries
- Caterpillar one key security system with locks for doors, cab and fuel cap
- Cat walks – left side and right side
- Cross-roller type swing bearing
- Heavy lift mode
- High pressure cut off
- Hydraulic circuit for bottom dump bucket
- Mirrors – left and right
- S•O•SS™ quick sampling valves for engine oil and hydraulic oil
- Steel firewall between engine and hydraulic pumps
- Wiring provisions for Product Link, Auto-lube System and lighted beacon
## Optional Equipment
Optional equipment may vary. Consult your Caterpillar dealer for specifics.

### Front Linkage
- Boom 4600 mm
- Stick 3480 mm
- Buckets (see chart on pg.12)
- Tips, cutting edge protection segments, and sidebar protector

### Track
- Double grouser shoes 750 mm

### Guards
- Track guiding guards
- Two piece full length

### Miscellaneous Options
- Auto-lubrication device including boom and stick (not bucket)
- Bio-degradable hydraulic oil (saturated, synthetic ester, 5000 hours change interval)
- Converters, 7 amp-12V
  - One
  - Two
- Counterweight removed device
- Electric refueling pump without shut off
- Fast fill engine oil system
- Fast fill fuel system
- Fine filtration filter
- Hydraulic tank shut-off valve
- Jump start terminals
- Oil quick change system
- Radiator screen
- Reversible cooling fan including protective screen
- Starting aid for cold weather with ether
- Stick lowering control device
- Travel alarm with cut off switch

### Operator Compartment
- Lunch box storage with lid
- Machine security system with programmable keys
- Radio
  - AM/FM radio mounted in right hand console with antenna and two speakers
  - Radio ready mounting at rear location including 24V to 12V converter speakers, antenna
- Seat
  - Adjustable high-back seat with mechanical suspension
  - Adjustable high-back seat with air suspension
  - Adjustable high-back heated seat with air suspension
- Straight travel pedal