### Engine

<table>
<thead>
<tr>
<th>Engine Model</th>
<th>Power (kW)</th>
<th>HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat® C11</td>
<td>263</td>
<td>353</td>
</tr>
</tbody>
</table>

### Operating Specifications

<table>
<thead>
<tr>
<th>Nominal Payload Capacity – Tramming</th>
<th>14 000 kg</th>
<th>30,865 lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>– Truck Loading</td>
<td>12 500 kg</td>
<td>27,558 lb</td>
</tr>
<tr>
<td>Gross Machine Mass – Tramming</td>
<td>54 500 kg</td>
<td>120,151 lb</td>
</tr>
<tr>
<td>– Truck Loading</td>
<td>53 000 kg</td>
<td>116,845 lb</td>
</tr>
</tbody>
</table>

### Bucket Capacities

| Bucket Capacity | 4.6-8.8 m³ | 6.0-11.5 yd³ |
R1700G Features

One Supplier
Caterpillar designed and manufactured major power and drive train components for reliability and performance.

Reliable and Durable Engine
The Cat C11 engine offers the perfect balance between power, robust design and economy.

Power Shift Transmission
Reliable and rugged design to deliver power and efficiency for peak power train performance.

Hydraulics
Perfect balance between low effort controls and powerful hydraulics for smooth and fast cycle time.

Durable Structures
The heavy duty frame is designed and built to absorb twisting, impact and high loading forces for maximum durability and reliability.

Comfortable Cab
Ergonomically designed for all-day comfort, control and productivity.

Enhanced Serviceability
Designed with improved service points and grouped service locations to simplify maintenance and repair.

Built in Safety
Safety is not an after thought, but an integral part of all machine and system design.

Contents
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The R1700G underground loader is designed for high production, low cost-per-ton loading and tramming in underground mining applications. Compact design with agile performance, rugged construction and simplified maintenance ensures excellent productivity, long life and low operating costs.

Engineered for performance, designed for comfort, built to last.
Power Train – Engine
The Cat C11 engine is designed for power, reliability and efficiency.

The Cat C11 engine provides unequalled lugging force while digging, tramming and traversing steep grades. Torque rise effectively matches transmission shift points for maximum efficiency and fast cycle times. Mechanically Actuated, Electronic Unit Injection (MEUI™) high-pressure, direct injection fuel system electronically monitors operator demands and sensor inputs to optimize engine performance. Air-to-air aftercooling provides improved fuel economy by packing cooler, denser air into cylinders for more complete combustion of fuel and lower emissions. Oil coiled pistons increase heat dissipation and promote longer piston life. The crankshaft is forged and induction hardened for long-term durability.

The Cat C11 engine features the optional Ventilation Reduction (VR) Package. The VR Package incorporates selective engine hardware and software to minimize diesel particulate matter in the engine exhaust. Engines equipped with the VR Package feature a significant ventilation rate reduction, maintains fuel consumption, and maintained or improved product performance. VR Package availability is subject to regional regulatory compliance. Engines that emit equivalent to U.S. EPA Tier 3 and EU Stage IIIA are also available.

A Cat Diesel Particulate Filter can be used with the VR engine package. This filter compliments the VR engine by further reducing particulate matter in the exhaust. Requires the use of 15 PPM ultra low sulfur diesel and CJ-4 low ash engine oil.
Power Shift Transmission
The Cat four-speed planetary power shift transmission is matched with the Cat C11 engine to deliver constant power over a wide range of operating speeds.

Robust Design
Designed for rugged underground mining conditions, the proven planetary power shift transmission is built for long life between overhauls.

Torque Converter
High capacity torque converter delivers more power to the wheels for superior power train efficiency.

Electronic Auto Shift Transmission
The electronic auto shift transmission increases operator efficiency and optimizes machine performance. The operator can choose between manual or auto shift modes.

Transmission Neutralizer
Using the left brake pedal, the operator can engage the service brakes and neutralize the transmission, maintaining high engine rpm for full hydraulic flow, enhancing digging and loading functions.

Final Drives
Cat final drives work as a system with the planetary power shift transmission to deliver maximum power to the ground. Built to withstand the forces of high torque and impact loads, double reduction final drives provide high torque multiplication to further reduce drive train stress.

Oscillating Rear Axle
Oscillating rear axle ensures four-wheel ground contact for maximum traction and stability at all times.

Brakes
Fully enclosed oil immersed disc brakes incorporate independent service and parking brake pistons. Hydraulic actuated independent circuits provide improved performance and reliability.
Hydraulics
Cat hydraulics deliver the power and control to keep material moving.

Hydraulic System
Powerful Cat hydraulics deliver exceptional digging and lifting forces and fast cycle times.

Lift and Tilt System
High hydraulic flow rates provide fast hydraulic cylinder response and powerful lift forces. Large-bore tilt and lift cylinders deliver exceptional strength, performance and durability.

Pilot Controls
Low effort, pilot operated joystick implement control with simultaneous lift and tilt functions optimizes operating efficiency. Optional hydraulic controls enable an ejector bucket to be controlled from a switch on the bucket control joystick.

Steering System
STIC™ control system integrates steering and transmission functions into a single controller for maximum responsiveness and smooth control.

Optional Ride Control
The optional ride control system uses a nitrogen filled oil accumulator in the hydraulic lift circuit to act as a shock absorber for the bucket and lift arms. The lift arm and bucket response to movement is dampened over rough ground, reducing fore and aft pitch, improving cycle times and load retention. A smoother, more comfortable ride gives operators the confidence to travel at higher speeds during load and carry operations.

Cat Hydraulic Hose
Field proven Cat high pressure XT hydraulic hoses are exceptionally strong and flexible for maximum system reliability and long life in the most demanding conditions. Reusable couplings with O-ring face seals provide superior, leak free performance and prolong hose assembly life.
Structures
Rugged Cat structures – the backbone of the R1700G’s durability.

Frame Design
The frame is engineered to withstand extreme forces generated during loading and tramming cycles. Precision manufacturing process ensures all structures are consistently built to high quality. Deep penetration and consistent welds throughout the frame ensures structures are solidly fused to provide sturdy platform for the linkage and the axles. The design and manufacturing quality of Cat LHD frames have been proven by our customers, many of whom reuse frames during machine rebuilds to get 2nd and 3rd lives out of their LHD’s.

Hitch
Spread hitch design widens the distance between upper and lower hitch plates to distribute forces and increase bearing life. Thicker hitch plates reduce deflection. The wide opening provides easy service access. Upper and lower hitch pins pivot on roller bearings to distribute horizontal and vertical loads over a greater surface area. Shim adjusted preload reduces maintenance time. An on-board steering frame lock pin is fitted to prevent articulation during maintenance and service.

Sealed Pins
Sealed colleted pins are fitted to all major bucket and lift arm hinge points for longer pin and bushing life. This reduces maintenance costs and extends service intervals. The sealed joints retain lubrication and prevent contaminant entry.

Z-bar Loader Linkage
Proven Z-bar loader linkage geometry generates powerful breakout force and an increased rack back angle for better bucket loading and material retention. Heavy duty steel lift arms with cast steel cross tube ensures extreme loads encountered during loading and tramming are efficiently dissipated for long service life.
The operator station is ergonomically designed for total machine control in a comfortable, productive and safe environment. All controls, levers, switches and gauges are positioned to maximize productivity and minimize operator fatigue.

**Protective Structure**
Integral to the cab and frame, the Rollover Protective Structure (ROPS) and the Falling Objects Protective Structure (FOPS), are resiliently mounted to the frame to isolate the operator from vibration for a more comfortable ride.

**Optional Enclosed Cab**
Optional sound-suppressed ROPS cab provides a quiet, secure working environment. Large window openings offer excellent visibility in all directions. Enclosed design provides fresh, pressurized, temperature-controlled air circulation for a more comfortable working environment.

**STIC Steering and Transmission Integrated Control**
STIC provides effortless control of the machine by a single controller. Simple side-to-side motion articulates the machine. Directional shifting (forward/neutral/reverse) is controlled using a three position rocker switch. The thumb operated buttons control gear selection.

**Monitoring System**
Cat Electronic Monitoring System (Cat EMS) continuously provides critical machine data to keep the machine performing at top production levels.

**Pilot Controls**
Low-effort pilot operated joystick controls integrate steering, transmission and implement functions for smoother, faster cycles with less operator fatigue.
Buckets
Rugged performance and reliability in tough underground mining applications.

Buckets
Cat LHD buckets deliver unmatched productivity and structural reliability to help lower your cost-per-ton. Buckets are available in a range of sizes to suit most material types and densities.

Optional Wear Packages
Weld-on wear plates in high wear areas are standard. Additional wear packages, including sacrificial wear strips and Cat heel shrouds protect the edges from damage and reduce the need for costly bucket rebuilds.

Bucket Selection
Cat underground loader buckets are available in two styles to meet a range of loading, hauling and dumping conditions.
- Dump buckets
- Ejector buckets

Optional Cutting Edges
Cat half arrow and cast half arrow cutting edges extend bucket life in high wear applications.

An additional weld-on GET option is the Cat weld-on GET. Available weld-on GET offers more wear material to maximize system wear life and bucket protection. Downtime is also reduced by an even wear rate between corners and edge segments, allowing both to be replaced at the same time.

The Cat Bolt-On Half Arrow (BOHA) GET System allows a step up over the Cat Weld On (CWO) offering. With an industry recognized bolt-on retention system, this GET is designed for extreme conditions in abrasive environments where traditional Weld-on GET is subject to high wear rates.

Cat Mechanically Attached Shrouds (MAS) are also available on the R1700G buckets to provide non weld-on option for hardware selection to better suit application.

The MAS can be further protected with the installation of the Cat Mechanically Attached Wear Plates (MAWPS) to protect the bucket base and cutting edge.
Serviceability
More time for production.

Service Access
Easy access to daily service points simplifies servicing and reduces time spent on regular maintenance procedures.

Ground-Level Access
Allows convenient servicing to all tanks, filters, lubrication points and compartment drains. Electric fuel priming. Engine oil and fuel filters installed on cold side of engine.

Air Filters
Radial seal air filters are easy to change, reducing time required for air filter maintenance.

Sight Gauges
Fluid level checks are made easier with sight gauges.

Diagnostics
Cat Electronic Technician (Cat ET) service tool enables quick electronic diagnosis of machine performance and key diagnostic data for effective maintenance and repairs.

Sealed Electrical Connectors
Electrical connectors are sealed to lock out dust and moisture. Harnesses are covered for protection. Wires are color and number coded for easy diagnosis and repair.

Scheduled Oil Sampling
S·O·S® helps avoid minor repairs becoming major ones. Sample point adapters fitted standard to machine.
Customer Support
Cat dealer services keep underground mining equipment productive.

Cat dealers offer solutions, services and products that help lower costs, enhance productivity and manage your operation efficiently. From the selection of Cat equipment until the day you rebuild, trade or sell it, the support you get from your Cat dealer makes the difference that counts.

Dealer Capability
Cat dealers will provide the level of support you need, on a global scale. Dealer expert technicians have the knowledge, experience, training and tooling to handle your repair and maintenance needs, when and where you need them.

Product Support
When Cat products reach the field, they are supported 24/7 by a worldwide network of reliable and prompt parts distribution facilities, dealer service centers, and technical training facilities to keep your equipment up and running.

Service Support
Cat equipment is designed and built to provide maximum productivity and operating economy throughout its working life. Cat dealers offer a wide range of service plans that will maximize return on your investment, including:

- Preventive Maintenance Programs
- Diagnostic Programs, such as Scheduled Oil Sampling and Technical Analysis
- Rebuild and Reman Options
- Customer Support Agreements

Technology Products
Cat dealers offer a range of advanced technology products designed to improve efficiency, productivity and lower costs. VIMS™ Gen 3 and Command for Underground options available from factory.

Operator Training
Today’s complex products require operators have a thorough understanding of machine systems and operating techniques to maximize efficiency and profitability. Your Cat dealer can arrange training to improve productivity, decrease downtime, reduce operating costs, enhance safety, and improve your return on investment.

Application Awareness
Application and site-specific factors, such as: material density, loading position, grades, speeds, and haul road design influence operating and maintenance costs. Your Cat dealer can provide you with the understanding to optimize productivity and the total cost of ownership.

www.cat.com
For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com.
Safety
Designed with safety as the first priority.

Product Safety
Caterpillar has been and continues to be proactive in developing mining machines that meet or exceed safety standards. Safety is an integral part of all machine and systems designs.

Engine Shut Off Switch
A secondary engine shutoff switch is located at ground level.

Integral ROPS Cab
Integral to the cab and frame, the ROPS is resiliently mounted to the frame to isolate the operator from vibration for a more comfortable ride.

Brake Systems
Four corner oil-cooled braking system provides excellent control. The service brake system is actuated by modulated hydraulic pressure, while the parking brake function is spring applied and hydraulic released. This system assures braking in the event of loss of hydraulic pressure.

Standard Safety Features
Anti-skid upper deck surfaces, ground level compartment sight gauges, increased visibility, 3-point access to cab and machine, push out safety glass, suspension seat, inertia reel retractable seat belt, lift arm support pins, hot and cold side of engine, steering frame lock, hinged belly guards.

SAFETY.CAT.COM™
For more complete information on safety, please visit www.cat.com/safety.
### Engine

<table>
<thead>
<tr>
<th>Engine Model</th>
<th>Cat C11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore</td>
<td>130 mm 5.1 in</td>
</tr>
<tr>
<td>Stroke</td>
<td>140 mm 5.5 in</td>
</tr>
<tr>
<td>Displacement</td>
<td>11.1 L 680 in³</td>
</tr>
</tbody>
</table>

- Power ratings apply at a rated speed of 1,800 rpm when tested under the reference conditions for the specified standard.
- Ratings based on SAE J1995 standard air conditions of 25° C (77° F) and 100 kPa (29.61 inHg) 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).
- Engine derate will commence at an altitude of 3050 m (10,006 ft).
- Optional Ventilation Reduction package available.
- Optional engine with emissions equivalent to U.S. EPA Tier 3 and EU stage IIIA is also available.

### Operating Specifications

<table>
<thead>
<tr>
<th>Gross Machine Mass (Tramming)</th>
<th>54,500 kg 120,151 lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Machine Mass (Truck Loading)</td>
<td>53,000 kg 116,845 lb</td>
</tr>
<tr>
<td>Static Tipping Load Straight Ahead Lift Arms Horizontal</td>
<td>31,781 kg 70,065 lb</td>
</tr>
<tr>
<td>Static Tipping Load Full Turn Lift Arms Horizontal</td>
<td>26,306 kg 57,995 lb</td>
</tr>
<tr>
<td>Breakout Force (SAE)</td>
<td>20,885 kg 46,051 lb</td>
</tr>
</tbody>
</table>

### Weights

<table>
<thead>
<tr>
<th>Empty</th>
<th>38,500 kg 84,878 lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Axle</td>
<td>16,940 kg 37,346 lb</td>
</tr>
<tr>
<td>Rear Axle</td>
<td>21,560 kg 47,532 lb</td>
</tr>
<tr>
<td>Loaded</td>
<td>51,000 kg 112,436 lb</td>
</tr>
<tr>
<td>Front Axle</td>
<td>37,077 kg 81,741 lb</td>
</tr>
<tr>
<td>Rear Axle</td>
<td>13,923 kg 30,695 lb</td>
</tr>
<tr>
<td>Loaded – Tramming</td>
<td>52,500 kg 115,743 lb</td>
</tr>
</tbody>
</table>

### Transmission

| Forward 1 | 4.7 km/h 2.9 mph |
| Forward 2 | 8.3 km/h 5.2 mph |
| Forward 3 | 14.3 km/h 8.9 mph |
| Forward 4 | 24.1 km/h 15 mph |
| Reverse 1 | 5.4 km/h 3.4 mph |
| Reverse 2 | 9.4 km/h 5.8 mph |
| Reverse 3 | 16.4 km/h 10.2 mph |
| Reverse 4 | 25.3 km/h 15.7 mph |

### Hydraulic Cycle Time

| Raise | 6.8 Seconds |
| Dump | 2.9 Seconds |
| Lower, empty, float down | 2.4 Seconds |
| Total Cycle Time | 12.1 Seconds |

### Bucket Capacities

| Dump Bucket – 1 | 4.6 m³ 6 yd³ |
| Dump Bucket – 2 | 5 m³ 6.5 yd³ |
| Dump Bucket – 3 (Standard Bucket) | 5.7 m³ 7.5 yd³ |
| Dump Bucket – 4 | 6.6 m³ 8.6 yd³ |
| Dump Bucket – 5 | 7.3 m³ 9.5 yd³ |
| Dump Bucket – 6 | 8.8 m³ 11.5 yd³ |
| Ejector Bucket | 5.7 m³ 7.5 yd³ |
# R1700G Underground Mining Loader Specifications

## Turning Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Outside Clearance Radius**</th>
<th>Inner Clearance Radius**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside Clearance Radius**</td>
<td>6878 mm</td>
<td>270.8 in</td>
</tr>
<tr>
<td>Inner Clearance Radius**</td>
<td>3229 mm</td>
<td>127.1 in</td>
</tr>
<tr>
<td>Axle Oscillation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Articulation Angle</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note: Clear

## Service Refill Capacities

<table>
<thead>
<tr>
<th>Service Component</th>
<th>Capacity</th>
<th>Refill Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Crankcase with Filter</td>
<td>34 L</td>
<td>8.98 gal</td>
</tr>
<tr>
<td>Transmission</td>
<td>47 L</td>
<td>12.4 gal</td>
</tr>
<tr>
<td>Hydraulic Tank</td>
<td>125 L</td>
<td>33 gal</td>
</tr>
<tr>
<td>Cooling System</td>
<td>63 L</td>
<td>16.6 gal</td>
</tr>
<tr>
<td>Front Differential and Final Drives</td>
<td>90 L</td>
<td>23.8 gal</td>
</tr>
<tr>
<td>Rear Differential and Final Drives</td>
<td>90 L</td>
<td>23.8 gal</td>
</tr>
<tr>
<td>Fuel Tank</td>
<td>569 L</td>
<td>150.3 gal</td>
</tr>
<tr>
<td>Secondary Fuel Tank (If Equipped)</td>
<td>446 L</td>
<td>117.8 gal</td>
</tr>
</tbody>
</table>

## Standards

- ROPS/FOPS Certified Cab

### Tires

<table>
<thead>
<tr>
<th>Tire Size</th>
<th>26.5 × 25</th>
</tr>
</thead>
</table>
### Dimensions

All dimensions are approximate.

---

#### R1700G Underground Mining Loader Specifications

<table>
<thead>
<tr>
<th>Bucket Capacity</th>
<th>256-0862 (4.6 m³ 6.0 yd³)</th>
<th>255-9970 (5.0 m³ 6.5 yd³)</th>
<th>252-7194 (5.7 m³ 7.5 yd³)</th>
<th>226-5404 (6.6 m³ 8.6 yd³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>in</td>
<td>mm</td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td>Bucket Width over Cutting Edge</td>
<td>2672 105.2</td>
<td>2672 105.2</td>
<td>2772 109.1</td>
<td>2932 115.4</td>
</tr>
<tr>
<td>1 Height – Bucket Raised</td>
<td>5511 217.0</td>
<td>5511 217.0</td>
<td>5606 220.7</td>
<td>5680 223.6</td>
</tr>
<tr>
<td>2 Height – Max Dump</td>
<td>4899 192.9</td>
<td>4899 192.9</td>
<td>4899 192.9</td>
<td>4899 192.9</td>
</tr>
<tr>
<td>3 Height – Max Lift Bucket Pin</td>
<td>4104 161.6</td>
<td>4104 161.6</td>
<td>4104 161.6</td>
<td>4104 161.6</td>
</tr>
<tr>
<td>4 Height – Dump Clearance at Max Lift</td>
<td>2648 104.3</td>
<td>2524 99.4</td>
<td>2443 96.2</td>
<td>2392 94.2</td>
</tr>
<tr>
<td>5 Height – Digging Depth</td>
<td>5 0.2</td>
<td>15 0.6</td>
<td>20 0.8</td>
<td>26 1.0</td>
</tr>
<tr>
<td>6 Height – Ground Clearance</td>
<td>429 16.9</td>
<td>429 16.9</td>
<td>429 16.9</td>
<td>429 16.9</td>
</tr>
<tr>
<td>7 Height – Top of Hood</td>
<td>1968 77.5</td>
<td>1968 77.5</td>
<td>1968 77.5</td>
<td>1968 77.5</td>
</tr>
<tr>
<td>8 Height – Top of ROPS</td>
<td>2557 100.7</td>
<td>2557 100.7</td>
<td>2557 100.7</td>
<td>2557 100.7</td>
</tr>
<tr>
<td>9 Length – Overall (Digging)</td>
<td>10 746 423.1</td>
<td>10 973 432.0</td>
<td>11 105 437.2</td>
<td></td>
</tr>
<tr>
<td>10 Length – Overall (Tramming)</td>
<td>10 447 411.3</td>
<td>10 589 416.9</td>
<td>10 663 419.8</td>
<td></td>
</tr>
<tr>
<td>11 Length – Wheelbase</td>
<td>3680 144.9</td>
<td>3680 144.9</td>
<td>3680 144.9</td>
<td>3680 144.9</td>
</tr>
<tr>
<td>12 Length – Front Axle to Hitch</td>
<td>1840 72.4</td>
<td>1840 72.4</td>
<td>1840 72.4</td>
<td>1840 72.4</td>
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<tr>
<td>13 Length – Rear Axle to Bumper</td>
<td>3439 135.4</td>
<td>3439 135.4</td>
<td>3439 135.4</td>
<td>3439 135.4</td>
</tr>
<tr>
<td>14 Length – Reach</td>
<td>1526 60.1</td>
<td>1639 64.5</td>
<td>1741 68.5</td>
<td>1768 69.6</td>
</tr>
<tr>
<td>15 Width – Overall Tire</td>
<td>2650 104.3</td>
<td>2650 104.3</td>
<td>2650 104.3</td>
<td>2650 104.3</td>
</tr>
<tr>
<td>16 Width – Machine without Bucket</td>
<td>2689 105.9</td>
<td>2689 105.9</td>
<td>2689 105.9</td>
<td>2689 105.9</td>
</tr>
<tr>
<td>17 Width – Machine with Bucket</td>
<td>2790 109.8</td>
<td>2790 109.8</td>
<td>2894 113.9</td>
<td>3050 120.1</td>
</tr>
<tr>
<td>18 Recommended Clearance Width</td>
<td>4000 157.5</td>
<td>4000 157.5</td>
<td>4000 157.5</td>
<td>4000 157.5</td>
</tr>
<tr>
<td>19 Recommended Clearance Height</td>
<td>4000 157.5</td>
<td>4000 157.5</td>
<td>4000 157.5</td>
<td>4000 157.5</td>
</tr>
</tbody>
</table>
## Dimensions

All dimensions are approximate.

![Diagram of R1700G Underground Mining Loader](image)

<table>
<thead>
<tr>
<th>Bucket Capacity</th>
<th>256-0356</th>
<th>256-0386</th>
<th>281-1125</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>in</td>
<td>mm</td>
<td>in</td>
</tr>
<tr>
<td>Bucket Width over Cutting Edge</td>
<td>2982</td>
<td>117.4</td>
<td>3492</td>
</tr>
<tr>
<td>Height – Bucket Raised</td>
<td>5751</td>
<td>226.4</td>
<td>5751</td>
</tr>
<tr>
<td>Height – Max Dump</td>
<td>4899</td>
<td>192.9</td>
<td>4899</td>
</tr>
<tr>
<td>Height – Max Lift Bucket Pin</td>
<td>4104</td>
<td>161.6</td>
<td>4104</td>
</tr>
<tr>
<td>Height – Dump Clearance at Max Lift</td>
<td>2320</td>
<td>91.3</td>
<td>2320</td>
</tr>
<tr>
<td>Height – Digging Depth</td>
<td>33</td>
<td>1.3</td>
<td>33</td>
</tr>
<tr>
<td>Height – Ground Clearance</td>
<td>429</td>
<td>16.9</td>
<td>429</td>
</tr>
<tr>
<td>Height – Top of Hood</td>
<td>1968</td>
<td>77.5</td>
<td>1968</td>
</tr>
<tr>
<td>Height – Top of ROPS</td>
<td>2557</td>
<td>100.7</td>
<td>2557</td>
</tr>
<tr>
<td>Length – Overall (Digging)</td>
<td>11 207</td>
<td>441.2</td>
<td>11 207</td>
</tr>
<tr>
<td>Length – Overall (Tramming)</td>
<td>10 724</td>
<td>422.2</td>
<td>10 724</td>
</tr>
<tr>
<td>Length – Wheelbase</td>
<td>3680</td>
<td>144.9</td>
<td>3680</td>
</tr>
<tr>
<td>Length – Front Axle to Hitch</td>
<td>1840</td>
<td>72.4</td>
<td>1840</td>
</tr>
<tr>
<td>Length – Rear Axle to Bumper</td>
<td>3439</td>
<td>135.4</td>
<td>3439</td>
</tr>
<tr>
<td>Length – Reach</td>
<td>1836</td>
<td>72.3</td>
<td>1836</td>
</tr>
<tr>
<td>Width – Overall Tire</td>
<td>2650</td>
<td>104.3</td>
<td>2650</td>
</tr>
<tr>
<td>Width – Machine without Bucket</td>
<td>3104</td>
<td>122.2</td>
<td>3610</td>
</tr>
<tr>
<td>Width – Machine with Bucket</td>
<td>2689</td>
<td>105.9</td>
<td>2689</td>
</tr>
<tr>
<td>Recommended Clearance Width</td>
<td>4000</td>
<td>157.5</td>
<td>4000</td>
</tr>
<tr>
<td>Recommended Clearance Height</td>
<td>4000</td>
<td>157.5</td>
<td>4000</td>
</tr>
</tbody>
</table>
To determine gradeability performance: Read from gross weight down to the percent of total resistance. Total resistance equals actual percent grade plus rolling resistance. As a general guide use 2% for rolling resistance in underground application or refer to the Caterpillar Performance Handbook. From the total resistance point, read horizontally to the curve with the highest obtainable gear, then down to maximum speed. Usable rimpull will depend upon traction available and weight on drive wheels.

E – Empty 38 500 kg (84,878 lb)
L – Loaded 51 000 kg (112,436 lb)
R1700G Standard Equipment

Standard Equipment

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

ELECTRICAL
• 12V Power Supply in Cab
• Alternator, 95-amp
• Auxiliary Start Receptacle
• Battery Disconnect Switch, Ground Level
• Circuit Breaker, 80-amp
• Corrosive Protection Spray
• Diagnostic Connector
• Electric Starting, 24-volt
• Engine Shutdown Switches
  – Rear Right Hand Side
• External Lighting System, Front, Rear, Halogen Work Lights
• Low Maintenance Batteries
• Reversing Alarm
• Starting and Charging System

POWER TRAIN
• Cat C11 Diesel Engine, ATAAC, 6 Cylinder
• Brake Axle Cooling
• Electric Fuel Priming Pump
• Engine Air Intake Precleaner
• Engine Oil Filter, Remote Mounted
• Fuel System Manual Shut Off Tap
• Heat Shields
• Long Life Coolant
• Planetary Powershift Transmission with Automatic Shift Control, 4 Speed Forward/4 Speed Reverse
• Radiator, Cross Flow
• Radiator Cap Manual Release
• Rims, 5-Piece, Tubeless
• SAFRT™ Full Hydraulic Enclosed Wet Multiple-Disc Brakes
• Torque Converter
• Transmission Neutralizer
• Transmission Filter Drain Tap

OPERATOR ENVIRONMENT
• Cat Electronic Monitoring System (Cat EMS)
• Electric Horns
• Gauges
  – Engine Coolant Temperature
  – Transmission Coolant Temperature
  – Hydraulic Oil Temperature
  – Fuel Level
  – Speedometer
  – Tachometer
• Indicator Lights
  – Alert Warning Light
  – Residual Brake Pressure
• Low Hydraulic Level Warning
• Open Operator Station
• Operator Presence System (Auto Park Brake)
• Pilot Hydraulic Implement Controls, Single Joystick
• Push Button Panel for Lights
• Suspension Seat with Retractable Seat Belt
• STIC Steering

OTHER STANDARD EQUIPMENT
• Brake Light
• Bucket Control Group, Standard
• Bucket, Dump
• Bucket Lip
• Bucket Positioner, Return To Dig
• Catalytic Exhaust Purifier/Muffler Group
• Decals, International Picto Graphics
• Engine and Transmission Belly Guards
• Fenders, Front, Rear
• Firewall
• Fuel Lines Double Braided (Stainless Sleeveing)
• Hand Hold (Access On/Off Top Deck)
• Hydraulic Oil Cooler – Swing Out Rear Frame
• Operation and Maintenance Manual – English and other applicable local languages to select
• Protection Wear Bars 100 × 50 mm (4 × 2 in)
• Rims, 5-Piece, Tubeless
• Semi Centralized Lubrication Points
• S-O-S Port
  – Coolant
  – Engine Oil
  – Hydraulic Oil
  – Transmission Oil
• Swing Out Radiator Grill
• Tires and Rims: A tire must be selected from the mandatory attachments section of the machine price list. Base machine price includes a standard tubeless rim allowance only.
Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

- Battery and Engine Shutdown Switch
  - Ground Level Isolation, In Cab Isolation Switch
- Brake Pressure Gauges
- Brake Release Arrangements, (Requires Lines Steering Release)
  - Recovery Hook
  - Recovery Bar
- Buckets
  - Bucket, Light Weight Material (8.8 m³/11.5 yd³) (Requires Control Group, Heavy Duty)
  - Ejector Bucket Installed
  - Various Sizes, Dump (4.2 m³/5.5 yd³ to 7.3 m³/9.5 yd³), Ejector (5.7 m³/7.5 yd³)
- Bucket, Control Group, Heavy Duty (Required for Light Weight Buckets)
- Bucket Hardware
  - Cutting Edge, Bolt-On Half-Arrow (BOHA)
  - Cutting Edge, Cat Weld-on
  - Cutting Edge, Half Arrow, Flat
  - Heel Shrouds, Ejector and Dump Buckets
  - Mechanically Attached Shrouds (MAS)
  - Mechanically Attached Wear Plate System, Cutting Edge Protection (MAWPS)
  - Mechanically Attached Wear Plate System, Bottom Protection (MAWPS)
  - Protector Pads (Bottom of Bucket)
  - Wear Bars, Ejector and Dump Buckets
  - Wear Liner (5.7 m³/7.5 yd³ Dump Bucket)
- Bucket Lip
  - Lip Fully Welded or Tack Welded
  - Lip Bare (No Hardware)
  - Bolt-On Ready
  - MAS Ready (Mechanically Attached Shrouds)
- Camera, Color Rear Facing
- Cover, Anti Vandalism for Shipping
- Draw Bar Attachment, Bolt-on
- Engine Options
  - Engine, Ventilation Reduction (VR)
  - Equivalent to Tier 3
  - After-treatment options (for use with VR Engine only)
  - DPF (Flow Through) Filter
- Fast Fill System
  - Coolant
  - Engine Oil
  - Fuel (Single or Dual Tanks)
  - Hydraulic Oil
  - Transmission Oil
- Fire Suppression System
  - Ansul, Dry Powder
  - Foam, Water Based
- Front Light Protectors
- Fuel System
  - Dual Fuel Tanks
- Guards
  - Guard, Rear Side Quarter Window
  - Guard Duo Cone Seal
- Handrails
  - Fold Down
- Hydraulic System
  - Ejector Bucket Ready
  - Alternate Implement/Pilot Control Configuration
- Lubrication System
  - Automatic
  - Centralized
- Lighting
  - External Lighting System, Front, Rear, LED Work Lights
- Mine Transfer
  - Mine Transfer Ready Rear Frame (Tack Welded)
  - Lifting Group, Mine Transfer
- Operators Station ROPS/FOPS Enclosed
  - Air Conditioning
  - Cab Pressurizer and Filter
  - Duct, Window Demister
  - Dome Light
  - Heater
  - Radio Ready Compartment for Radio and Speakers
  - Strut, Cab Door
- Operators Station FOPS Open
  - Removable Canopy
- Park Brake Switch Engagement
  - Push to Apply
  - Pull to Apply
- Payload Control System
  - Loadrite L2180
- Remote Control Interface
  - (excludes Transmitter and Receiver)
  - Cattron
  - RCT
- Reversible Steering
- Reflective Tape
- Ride Control System
- Rim
  - Rim Identification Numbering
  - Spare (Tube or Tubeless)
  - Tube Type
- Seats
  - Seat Covers, Tee, Air and Standard
  - Suspension Seat Tee, Vinyl
  - Suspension Seat Tee, Air
  - Suspension Seat Air Vinyl
- Secondary Steering System
- Service Tools
  - Recovery Bar (for use with Brake Release, Recovery Bar System)
  - Reference Parts Manual for Additional Tooling Available
- Switches
  - Additional Engine Shutdown, Mounted LHS
  - Engine Shutdown, Fire Suppression Activation
  - Idle Timer
  - Engine Shutdown/Idle Timer
  - Transmission Neutralizer Override Switch
- Technology
  - Command for Underground
  - Vital Information Management System (VIMS) Gen 3
- Tire Arrangements
  - Tire, 26.5 × R25, VSMS2 L5 Bridgestone
  - Tire, 26.5 × 25, VSDL, Bridgestone
  - Tire, 26.5 × 25, 32 Ply, Goodyear
- Wear Protection Bars
  - Cab/ROPS
  - Hydraulic Tank
  - Radiator
  - Wear Plate, Rear Underneath
- NOTE: Not all features are available in all regions. See your Cat dealer for more information.