980K
Wheel Loader

Engine		
Engine Model	Cat® C13 ACERT™	
Max Net Power (1,600 rpm) – ISO 9249	274 kW	369 hp
Max Net Power (1,600 rpm) – SAE J1349	274 kW	369 hp

Buckets		
Bucket Capacities	4.00 to 12.20 m^3	5.25 to 16.00 yd^3
Weights		
Operating Weight	31 244 kg	68,862 lb

- For 5.4 m^3 (7.1 yd^3) general purpose buckets with BOCE.

980K Key Features and Benefits

Performance Series Buckets
With standard Performance Series Buckets, operators benefit from reduced dig times and better material retention; ultimately translating into significant productivity and fuel efficiency improvements.

Load Sensing Hydraulics
Load sensing hydraulics produce flow and pressure for the implement system upon demand and only in amounts necessary to perform the needed work functions, enhancing machine productivity and fuel efficiency.

Operator Environment
The new four post ROPS cab provides enhanced comfort, visibility, and productivity resulting in a more efficient operator.

Cat® C13 ACERT™ Engine
The innovative Cat C13 ACERT engine is optimized for maximum fuel efficiency and increased power density while meeting Tier 4 Interim/Stage IIIB emission standards.

Lockup Torque Converter
The optional lockup torque converter on the 980K significantly enhances productivity and fuel efficiency while performing load and carry applications, especially on grades.

Powershift Transmission
The K Series™ transmissions incorporate a new shifting strategy that delivers smoother shifts, faster acceleration, and increased travel speed when climbing a grade.

Fuel Efficiency
The 980K wheel loaders have been integrated as a system; from the linkage and work tool carrying the payload, to the engine, transmission and torque converter moving the machine, the system has been optimized to achieve the lowest cost per ton.

Contents

Reliability 3
Durability 4
Productivity 5
Versatility 6
Operator Environment 8
Serviceability 10
Sustainability 11
Customer Support 11
Owning Costs 12
Operating Costs 13
Wheel Loader Specifications 14
Standard and Optional Equipment 22

The Cat® 980K was designed to improve operator comfort, performance, and productivity, all while meeting Tier 4 Interim/Stage IIIB emission standards. The Performance Series Buckets enhance visibility and decrease cycle times. The unmatched, revolutionary world-class cab creates a comfortable, efficient, safe, and productive operator environment. The innovative Cat C13 ACERT™ engine is optimized for maximum fuel efficiency and increased power density while meeting Tier 4 Interim/Stage IIIB emission standards. The reliability, durability, and versatility of the 980K result in a machine that is better built to meet your needs. All day. Every day.

Reliability

Tested and Proven. Ready to Work.

Structures

The K Series™ features many of the components designed and proven reliable over generations of product design.

Strata Precleaner

The system removes 93% of the dust particles before the air has reached the primary engine air filter. As air enters the precleaner, stationary vanes cause the incoming air to spin. The resulting centrifugal force spins dust and dirt to the outer walls where they are ejected out into the exhaust stream, while the clean air flows down the center of the tube and continues into the primary air filter. The primary benefit is extended filter life.

Cold Start/High Altitude Package

A new optional cold start package includes a fan pump bypass, transmission pump bypass, additional battery capacity, and an engine heater plug/cord. The bypass systems reduce the parasitic load on the engine, while the additional battery capacity increases the cold cranking revolutions during startup. With the new optional cold start package available on K Series™, starting capability has been dramatically improved in cold weather conditions. The system also improves starting capability at high altitudes.

Monitoring Programs

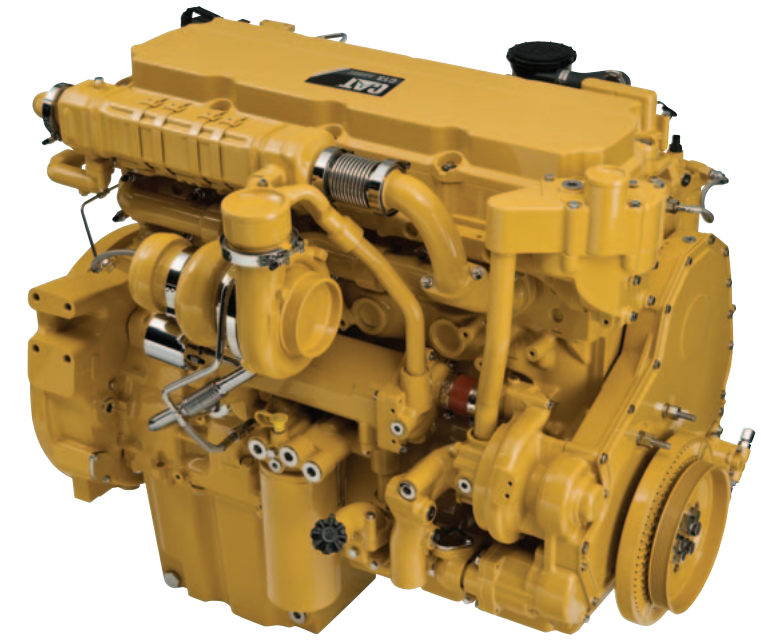
Monitoring product health is key to maintaining reliability of any equipment. Many programs offered by Caterpillar make the tracking of the customer's machine health quick and easy. These programs include Product Link, VisionLink™, and S·O·S℠ Services.

Renowned Cat Dealer Support

From helping you choose the right machine to knowledgeable support, Cat dealers provide the best when it comes to sales and service. Manage costs with preventive maintenance programs like Scheduled Oil Sampling (S·O·S℠) analysis or elaborate Customer Support Agreements. Stay productive with best-in-class parts availability. Cat dealers can even help you with operator training to help boost your profits. And when it's time for machine rebuild, your Cat dealer can help you save even more with Genuine Cat Reman parts. Receive the same warranty and reliability as new products at cost savings of 40 to 70 percent for power train and hydraulic components.

Durability

Better Built to Meet Your Needs



Frames

The robotically welded two-piece structural frame design provides a rugged and reliable foundation for the machine that improves stability, performance, and serviceability. A robust articulating hitch system joins the front and rear frames improving durability. Enhanced lines routings across the hitch joint streamline the manufacturing process and improve reliability and durability.

Engine

The new Cat C13 ACERT engine was designed to optimize power density. It uses a combination of technologies to reduce regulated emissions while ensuring high performance and excellent fuel efficiency. An upgraded ADEM™ 4 electronic control module manages the combustion process and a new high-pressure Mechanical Electronic Unit Injector (MEUI-C) fuel system allows precise injection timing for a clean, efficient fuel burn. The rugged Cat Clean Emissions Module is securely rubber mounted on its own platform above the engine and contains a Diesel Oxidation Catalyst, Diesel Particulate Filter and Cat Regeneration System. Regeneration, the process by which soot is removed from the Diesel Particulate Filter, is completely automatic and does not interrupt the machine's work cycle.

Emissions

The 980K features a Cat C13 ACERT engine and a Cat Clean Emissions Module to deliver the performance and efficiency that customers demand, while meeting Tier 4 Interim/Stage IIIB emission standards. The six-cylinder electronic engine is turbocharged and aftercooled. ACERT™ Technology is a combination of building blocks that includes electronics, fuel systems, air management systems and aftertreatment components. The system is optimized based on engine size, the type of application and the geographic location in which it will work. The technologies are applied systematically and strategically to meet high customer expectations for productivity, fuel efficiency, reliability and service life.

Axles

The axles are designed to handle extreme applications resulting in reliable performance and extended life. The front axle is rigidly mounted to the frame in order to withstand internal torque loads and still maintain support for the wheel loader. The rear axle can oscillate to ±13 degrees helping to ensure all four wheels stay on the ground providing stability even in the roughest terrain.

Productivity

Move More. All Day. Every Day.

Z-bar Linkage

The proven Z-bar linkage with Performance Series Buckets offer excellent penetration into the pile, high breakout forces, good roll back angles, and faster dig times. The results are improved tire life, superior fuel efficiency, and exceptional production capabilities; all helping to enable a sustainable solution for your business.

Load Sensing Hydraulics

New load sensing hydraulics produce flow and pressure for the implement system upon demand and only in amounts necessary to perform the needed work functions, enhancing machine productivity and fuel efficiency. Implement controllability is improved through simultaneous implement operation and repeatable fine modulation, enabling greater operator comfort through ease of operation.

Ride Control

Ride control provides the operator with a smoother ride over rough terrain, enabling a more comfortable ride at higher speeds. The benefit is reduced cycle times, higher productivity and better fuel efficiency while performing load and carry applications. The system works by using an accumulator to dampen the linkage motion, acting as a shock absorber.

Lockup Torque Converter

The optional lockup torque converter on the 980K significantly enhances productivity and fuel efficiency while performing load and carry applications, especially on grades. The lockup clutch eliminates torque converter losses, ultimately resulting in lower fuel consumption while achieving higher travel speeds up a grade.

Transmission

The K Series™ transmissions incorporate a new shifting strategy that delivers smoother shifts, faster acceleration, and better performance climbing a grade. When placing the transmission into forward gear, the machine will automatically start in second gear. With the further enhancement of a torque based 2 to 1 downshift, the downshift will only occur based on machine load. Owners and operators will fully benefit from utilizing the automatic 1-4 transmission mode, which results in lower fuel consumption and optimal machine performance.

Versatility

Work Tool Options to Meet Your Needs

Work Tools for Many Job Site Requirements

An extensive range of work tools and bucket styles are available to customize the machine for your operation. The list includes: Performance Series Buckets; Specialty Buckets (Multipurpose, Side Dump, Waste Handling, Woodchip); Pallet Forks, Millyard and Logging Forks, Rakes (with or without top clamps); and Plows (angle or V-style). Each is available either with pin on or quick coupler interface.

Performance Series Buckets: Load Easy, Fuel Efficient, Carry More

Performance Series Buckets utilize a system-based approach to balance bucket shape with the machine's linkage, weight, lift and tilt capacities. Operators benefit from reduced dig times and better material retention; ultimately translating into significant productivity and fuel efficiency improvements.

Lower Operating Costs

Performance Series Buckets feature a longer floor that easily digs through the pile and provides excellent visibility for the operators to see when the bucket is full. Less time digging in the pile results in lower fuel consumption and improved tire life. A unique spill guard protects the cab and linkage components from material overflow.

Higher Productivity

Performance Series Buckets achieve higher fill factors – ranging from 100% to 115% depending on the machine application and material type. The buckets feature optimized geometry with a bucket opening matched to the machine's linkage and incorporate a curved side profile to maximize material retention. The optimized design results in unsurpassed production capabilities.

Performance Series Bucket Styles

Performance Series Buckets are available for General Purpose, Material Handling, Rock, Heavy Duty Rock and Coal style buckets.

Specialty Buckets

Heavy Duty Quarry Rock Buckets are designed for bank or face loading material where high impact/high abrasion is encountered. Buckets include thicker base edge, liner package and addition wear plates.

Slag Buckets are designed for use in steel mills and slag processing centers. They feature increased material thickness in critical structural components to provide maximum durability for hot or cold slag handling.

Waste Handling Buckets are designed to move large volumes of low-density waste in transfer stations, landfills and recycling yards. Large capacities give maximum production when loading conveyors, trucks or hoppers.

Woodchip Buckets are optimized for moving large volumes of wood chips in forestry and millyard settings. They feature a flat floor and straight edge designed to scoop the bucket full and help heap the load high.

Quick Couplers and Work Tool Attachments

A Wheel Loader equipped with a quick coupler is a much more versatile machine. Buckets and work tools can be changed without leaving the cab – allowing the machine to quickly move from task to task.

Pallet Forks are available for material handling.

Millyard and Logging Forks are available for forestry applications.

Specialty Work Tool Attachments such as plows for snow removal are available for the 980K. Contact your local Cat dealer for more details on tools available for your application.

Operator Environment

Safe. Comfortable. Efficient.

Electro-Hydraulic (EH) Joystick Steering with Force Feedback (Speed Sensitive)

The industry leading EH joystick steering system combines operator comfort and precision control to provide a sustainable work environment for the operator. The system incorporates a force feedback motor that automatically adjusts the effort needed to tilt the ergonomic joystick based on ground speed, resulting in superior control in all applications and climates. For customers who prefer a steering wheel, an electro-hydraulic steering wheel is available as an option.

Implement Controls (EH)

Seat mounted single axis implement control levers provide the operator with precise control of the work tool, all while moving with the seat for maximum comfort. In cab programmable kick-outs and automatic cylinder snubbing maximize operator comfort and productivity throughout their shift. Optional implement joysticks are available for 2V and 3V hydraulics.

Seat

The Cat Optimized Seating System is 6-way adjustable to accommodate operators of all sizes. The seat has a one piece high back that supports the lumbar area of the back up through the shoulders. Both armrests are large and can be adjusted up, down, fore, and aft to enhance comfort and convenience. An optional feature for the cab seat is a heated backrest and cushion.

Sound and Vibration

New viscous cab mounts connect the cab to the frame of the machine, decreasing noise and vibration the operator is subjected to. This contributes to a well-rested operator who remains efficient and productive. All Day. Every Day.

Information Display

The central display panel has a large text box, five analog like gauges, and LED warning indicators. The large text box provides in-language information about machine operation, feature activation and system troubleshooting and calibration. With the 5 large analog-type gauges the operator can easily identify if key systems are within normal operating range. A resettable trip totals function has been incorporated to display information for average fuel consumed, total fuel consumed, idle fuel, idle time, operating hours, odometer, etc. The navigation buttons are located on the side of the screen and help assist with set up and other various functions.

Automatic Climate Control and Air Quality

The new climate control system automatically adjusts the air temperature and fan speed to maintain the operator's preferred climate setting. The cab air filtration system recirculates 90% of the cab air and is now serviced from outside the cab, enabling maximum air quality and cab cleanliness. The new air conditioning sealing system keeps refrigerant contained preventing system shutdown. Combined together these systems help the operator to remain efficient and productive all shift long.

Entry and Exit

Well-placed grab bars and a ladder inclination angle of 10-degrees forward makes the walk into the cab feel more like a staircase than a ladder. The new wider front hinged door can be opened and closed while seated, greatly improving ingress and egress. Two new left-hand and right-hand sliding windows can also be opened and closed with one hand while seated for comfortable communication to personnel on the ground.

Visibility

Visibility has been enhanced by removing the steering wheel, adding a convex windshield, and eliminating two cab posts. The cab has a clean and clear panoramic view for safe operation of the machine. External rearview mirrors are mounted on the cab to provide all around visibility. The external mirrors fold horizontally to provide fast, safe access to clean the window from the front platform. Optional heated and powered mirrors are available to further improve visibility in cold climates.

Rearview Camera

With the new standard rearview camera, visibility is greatly enhanced. The camera is located in a pocket on the grill to protect it from damage and the elements. The camera can be set to activate only when the transmission is in reverse to help eliminate distractions in the cab, especially when in dark environments. Two rear work lights are located in the rear grill and can be activated to illuminate the area behind the machine in low light conditions.

Control Panels and Park Brake Switch

Two control panels located on the front right ROPS post consist of large membrane switches making them easy to activate while wearing gloves. The membrane switches contain LED's to denote activation/mode and have a positive feel and "click" to signal activation. The ISO symbols located on each membrane switch are molded all the way through to ensure the image will not wear off over time. A new "help" feature explains the function of each membrane switch. A two position rocker switch activates the electro-hydraulic park brake and is automatically applied upon machine shutdown.

Serviceability

Easy to Maintain. Easy to Service.

Electrical Service Center

The electrical service center provides grouped ground level access to numerous electrical features, enhancing safety and convenience for operators and service technicians. It is conveniently located towards the rear of the machine and contains the maintenance free batteries, a fuse relay panel, main disconnect switch, hood tilt switch, and the jump start receptacle. The ground level engine shutdown switch is located near the cab access ladder.

Engine Access

The K Series™ retains the Cat sloped "one-piece" tilting hood, which has become one of our brand's hallmarks and provides industry-leading access to the engine, Cat Clean Emissions Module (CEM) and other components but with fresh new styling clearly distinct from the H Series. New to the loaders is a rear clamshell hood design that allows quick access to the engine oil dipstick and fill, fuel fill port, and cooler cores.

Cooling System

The cooling system is readily accessible for clean out and maintenance. With six cooling fins per inch and a perforated grill, most airborne debris entering the system passes through the cooler cores. The cooler cores swing out providing easy access for cleaning; an option variable pitch fan is available to automatically purge the cooler cores by periodically reversing the airflow.

Hydraulic Service Center

The hydraulic components are all conveniently located behind the hinged right side access ladder at a new single ground level service center improving safety and reducing service time. Accessible from the service center are the transmission and hydraulic oil filters, brake accumulators, pressure test ports, etc.

Sustainability

Conserving Resources

The 980K is designed to compliment your business plan, reduce emissions and minimize the consumption of natural resources.

- Improved fuel efficiency – less fuel consumed results in lower emissions.
- Engine air filter life doubled to reduce cost and waste.
- Machine is built with a 96% recyclability rate (ISO 16714) to conserve valuable natural resources and further enhance machine end of life value.
- Improved operator efficiency through enhanced visibility and reduced noise/vibration levels.
- Product Link family of products and solutions that collect, communicate, store and deliver product and job-site information to maximize productivity and reduce costs.
- Major components are rebuildable, eliminating waste and saving money by giving the machine and/or major components a second – and even third – life.

Customer Support

Ready to Help. Anytime. Anywhere.

Machine Selection

Cat dealers are ready to help evaluate machine options; from new or used machine sales, to rental or rebuild options, Cat dealers can provide an optimal solution to meet customer business needs.

Product Support

Cat dealers are with customers every step of the way to maximize machine uptime by providing unsurpassed worldwide parts support, trained technicians and customer support agreements.

Operation

To help maximize the return on your investment, Cat dealers offer various training resources to improve operating techniques.

Financing

Cat dealers offer financing options to meet a variety of customer needs.

Owning Costs

Proven Best Investment

Customer Support Agreements

A Customer Support Agreement (CSA) is an arrangement between you and your Cat dealer that helps you lower your total cost per ton. CSAs are flexible, allowing them to be tailored to your business needs. They can range from simple Preventive Maintenance Kits to elaborate Total Cost Performance Guarantees. Having a CSA with your Cat dealer enables more time for you to do what you do best – run your business.

Monitoring Systems

Monitoring product health is key to optimizing the life of an investment into a Cat Wheel Loader.

- **Cat Product Link** – Cat Product Link allows remote monitoring of equipment to improve overall fleet management effectiveness. Product Link is deeply integrated into machine systems. Events and diagnostic codes, as well as hours, fuel, idle time and other detailed information are transmitted to a secure web based application, VisionLink™. VisionLink includes powerful tools to convey information to users and dealers, including mapping, working and idle time, fuel level and more.
- **S·O·S℠ Services** – Helps manage component life and decrease machine downtime, increasing productivity and efficiency. Regular fluid sampling can help track what is going on inside your machine. Wear related problems are predictable and easily repairable. Maintenance can be done to accommodate your schedule, resulting in increased uptime and flexibility in maintenance repairs before failure.

Parts Availability

Caterpillar provides an unsurpassed level of personalized service to help you work more cost effective and efficient. By utilizing a worldwide parts network Cat dealers help minimize machine downtime and save money by delivering replacement parts within 24 hours.

Resale Value

Owning quality equipment is an important factor in maintaining resale value. Caterpillar is not only known for machines that are better built, but provides product and dealer support to maintain the reliability and durability of your machine.

Operating Costs

Save Time and Money by Working Smart

Data from customer machines show Cat wheel loaders are among the most fuel efficient machines in the industry. Several features contribute to this excellent fuel efficiency:

- **Performance Series Buckets** – Deliver faster fill times and better material retention, ultimately reducing cycle times while improving productivity and fuel efficiency.
- **Load-Sensing Hydraulics** – Provides only the hydraulic flow required by the implement and steering systems for improved fuel efficiency and greater rimpull.
- **ACERT™ Engine** – Power dense engine enables a more fuel-efficient method to meet emissions regulations.
- **Fuel Management System (FMS)** – Optimizes power for maximum fuel savings with minimal impact on production.
- **Engine Idle Shutdown** – Automatic engine and electrical system shutdown conserves fuel.
- **Lockup Torque Converter** – Transfers more power to the ground and optimizes fuel efficiency in all applications.
- **Shift Strategy** – Reduced torque interruption increases driveline efficiency, conserving fuel. Auto 1-4 transmission mode keeps engine rpm low, reducing fuel consumption while delivering optimal machine performance.

Machine configuration, operator technique, and job site layout can impact fuel consumption by as much as 30 percent.

- **Machine Configuration** – Select the correct work tool and tire type based on machine application. Radial tires are preferred; ensure proper inflation pressures. Heavier tires burn more fuel. Keep engine rpm low by using auto 1-4 transmission mode.
- **Job Site Layout** – Spot loading targets in the right position. Avoid traveling more than twice the machine length during short cycle loading. Reduce transport distance for load and carry cycles by optimizing job site layout.
- **Loading Bucket** – Load in first gear and keep engine rpm low. Raise and tilt bucket smoothly and do not use a “pumping” motion. Avoid lift lever detent and use transmission neutralizer.
- **Loading Truck or Hopper** – Do not raise the work tool any higher than necessary. Keep engine rpm low and unload in controlled manner.
- **Idle** – Set the parking brake to engage Engine Idle Management System.

980K Wheel Loader Specifications

Engine

Engine Model	Cat® C13 ACERT™	
Max Gross Power (1,600 rpm) – SAE J1995	303 kW	406 hp
Max Net Power (1,600 rpm) – ISO 9249	274 kW	369 hp
Max Net Power (1,600 rpm) – SAE J1349	274 kW	369 hp
Max Net Power (1,800 rpm) – EEC 80/1269	274 kW	369 hp
Peak Gross Torque (1,300 rpm) – SAE J1995	2089 N·m	1,541 ft-lb
Peak Net Torque (1,200 rpm) – SAE J1349	1959 N·m	1,445 ft-lb
Bore	130 mm	5.1 in
Stroke	157 mm	6.2 in
Displacement	12.5 L	762.8 in^3

- Cat engine with ACERT Technology – meets Tier 4 Interim/Stage IIIB emission standards.

Weights

Operating Weight	31 244 kg	68,862 lb

- For 5.4 m^3 (7.1 yd^3) general purpose buckets with BOCE.

Buckets

Bucket Capacities	4.00 to 12.20 m^3	5.25 to 16.00 yd^3

- Refer to bucket selection chart.

Operating Specifications

Static Tipping Load Full 37° Turn – ISO 14397-1*	19 267 kg	42,464 lb
Static Tipping Load Full 37° Turn – Rigid Tires**	20 484 kg	45,148 lb
Breakout Force	238 kN	53,548 lb

- For 5.4 m^3 (7.1 yd^3) general purpose buckets with BOCE.

* Full compliance to ISO (2007) 14397-1 Sections 1 thru 6, which requires 2% verification between calculations and testing.

** Compliance to ISO (2007) 14397-1 Sections 1 thru 5.

Transmission

Standard Torque Converter		
Forward 1	6.8 km/h	4.2 mph
Forward 2	12.1 km/h	7.5 mph
Forward 3	21.5 km/h	13.4 mph
Forward 4	37.8 km/h	23.5 mph
Reverse 1	7.8 km/h	4.8 mph
Reverse 2	13.9 km/h	8.6 mph
Reverse 3	24.5 km/h	15.2 mph
Reverse 4	42.8 km/h	26.6 mph
Lockup Torque Converter		
Forward 1	6.9 km/h	4.3 mph
Forward 2	13 km/h	8.1 mph
Forward 3	23 km/h	14.3 mph
Forward 4	40.7 km/h	25.3 mph
Reverse 1	7.9 km/h	4.9 mph
Reverse 2	14.8 km/h	9.2 mph
Reverse 3	26.1 km/h	16.2 mph
Reverse 4	40.0 km/h	24.9 mph

- Maximum travel speed in standard vehicle with empty bucket and standard L4 tires with 930 mm (37 in) roll radius.

Hydraulic System

Steering System Pump Type	Piston	
Implement System – Maximum Pump Output (2,200 rpm)	460 L/min	121.5 gal/min
Implement System – Maximum Operating Pressure	31 000 kPa	4,496 psi
Implement System – Optional 3rd Function Maximum Flow	300 L/min	79.3 gal/min
Implement System – Optional 3rd Function Maximum Pressure	20 700 kPa	3,000 psi
Hydraulic Cycle Time – Raise from Carry Position	6.4 Seconds	
Hydraulic Cycle Time – Dump, at Maximum Raise	1.7 Seconds	
Hydraulic Cycle Time – Lower, Empty, Float Down	3.3 Seconds	
Hydraulic Cycle Time – Total	11.4 Seconds	

- Cycle time with rated payload.

Brakes

Brakes	Meet OSHA, SAE J1473 OCT90 and ISO 3450-1985 required standards

Axles

Front	Fixed	
Rear	Oscillating ± 13 degrees	
Maximum Single-Wheel Rise and Fall	548 mm	21.6 in

Tires

- Choose from a variety of tires to match your application.
- Choices include:
  29.5R25 VMT BS L3 Radial
  29.5-25 SRG LD FS E3/L3 Bias
  29.5R25 XHA2 MX L3 Radial
  29.5R25 XLDD1 MX L4 Radial
  29.5R25 VSNT BS L4 Radial
  29.6-25 SDT LD FS L5 Bias
  29.5R25 VSDL BS L5 Radial
  29.5R25 XLDD2 MX L5 Radial
  29.5R25 X MINE D2 MX L5 Radial
- NOTE: In certain applications (such as load and carry), the loader's productive capabilities might exceed the tires' tonnes-km/h (ton-mph) capabilities. Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model. Other special tires are available on request.

Cab

ROPS/FOPS	Meets SAE and ISO standards

- Cat cab with a four post integrated Rollover Protective Structure (ROPS) are standard in North America and Europe.
- ROPS meets SAE J1040 APR88 and ISO 3471:1994 criteria.
- Falling Objects Protective Structure (FOPS) meets SAE J231 JAN81 and ISO:1992 Level II criteria.

Sound

- The sound values indicated below are for specific operating conditions only. Machine and operator sound levels will vary at different engine and/or cooling fan speeds. Hearing protection may be needed when the machine is operated with a cabin that is not properly maintained, or when the doors and/or windows are open for extended periods or in a noisy environment.
- The operator sound pressure level for a standard machine configuration, measured according to the procedures specified in ISO 6396:2008, is 72 dB(A) with the cooling fan speed set at maximum value.
- The machine sound power level for a standard machine configuration, measured according to the procedures specified in ISO 6395:2008, is 112 dB(A) with the cooling fan speed set at maximum value.
- The machine sound pressure level for a standard machine configuration, measured according to the procedures specified in SAE J88:2006, is 78 dB(A). The measurement was conducted under the following conditions: distance of 15 m (49.2 ft), moving forward in an intermediate gear ratio, static hydraulic cycle (with no payload) and with the cooling fan speed set at maximum value.
- The operator sound pressure level for a machine installed with a Low Sound package, measured according to the procedures specified in ISO 6396:2008, is 72 dB(A) with the cooling fan speed set at maximum value.
- The machine sound power level for a machine installed with a Low Sound package, measured according to the procedures specified in ISO 6396:2008, is 109 dB(A) with the cooling fan speed set at maximum value.

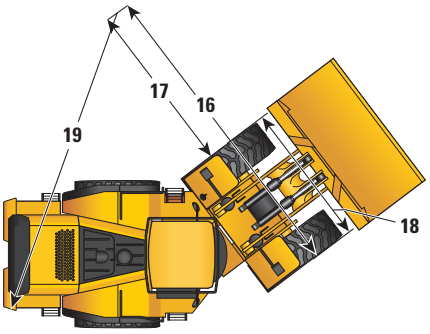
Service Refill Capacities

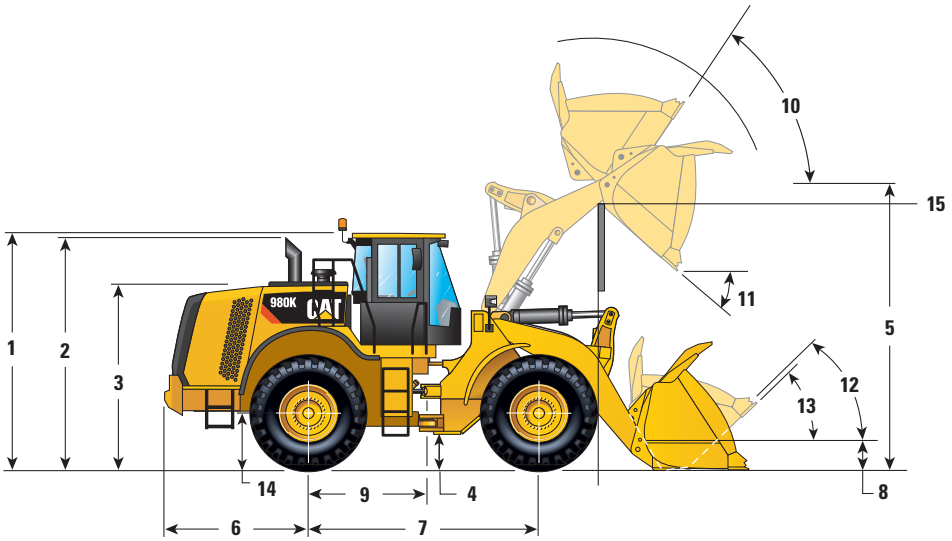
Fuel Tank – Standard	447 L	118.1 gal
Cooling System	63 L	16.6 gal
Crankcase	37 L	9.8 gal
Transmission	66 L	17.4 gal
Differentials and Final Drives – Front	84 L	22.2 gal
Differentials and Final Drives – Rear	84 L	22.2 gal
Hydraulic Tank	170 L	44.9 gal

980K Wheel Loader Specifications

Dimensions

All dimensions are approximate and based on L4 Michelin 29.5R25 XLDD1 Radial tires.





1	Height to Top of Rops	3809 mm	12'6"
2	Height to Top of Exhaust Pipe	3737 mm	12'4"
3	Height to Top of Hood	3109 mm	10'2"
4	Ground Clearance With 29.5R25 (See Tire Option Chart for Other Tires)	460 mm	1'6"
5	B-Pin Height – Standard	4539 mm	14'11"
	B-Pin Height – High-Lift	4760 mm	15'7"
6	Center Line of Rear Axle to Edge of Counterweight	2510 mm	8'2"
7	Wheelbase	3700 mm	12'1"
8	B-Pin Height @ Carry – Standard	673 mm	2'
9	Center Line of Rear Axle to Hitch	1850 mm	6'1"
10	Rack Back @ Maximum Lift	61 degrees	
11	Dump Angle @ Maximum Lift	52 degrees	
12	Rack Back @ Carry	49 degrees	
13	Rack Back @ Ground	41 degrees	
14	Height to Center Line of Axle	885 mm	2'11"
15	Lift Arm Clearance	3795 mm	12'6"
	Lift Arm Clearance @ High Lift	4041 mm	13'4"

Turning Radius

All dimensions are approximate and based on L4 Michelin 29.5R25 XLDD1 Radial tires.

16	Clearance Circle to Outside of Tires	7183 mm	23'6"
17	Clearance Circle to Inside of Tires	3875 mm	12'8"
18	Width Over Tires	3307 mm	10'9"
19	Clearance Circle to Outside Edge of Counterweight	7160 mm	23'6"

Operating Specifications

Bucket Type		General Purpose – Pin On			Rock – Pin On***		
Edge Type		Bolt-On Edges	Teeth and Segments	Teeth	Bolt-On Edges	Teeth and Segments	Teeth
Capacity – Rated (§)	m^3	5.40	5.40	5.00	4.40	4.40	4.30
	yd^3	7.06	7.06	6.54	5.75	5.75	5.62
Capacity – Struck (§)	m^3	5.00	5.00	4.60	3.21	3.20	3.10
	yd^3	6.54	6.54	6.02	4.20	4.19	4.05
Width (§)	mm	3447	3535	3535	3504	3504	3504
	ft/in	11'3"	11'7"	11'7"	11'5"	11'5"	11'5"
Dump Clearance at Maximum Lift and 45° Discharge (§)	mm	3273	3107	3107	3101	3101	3101
	ft/in	10'8"	10'2"	10'2"	10'2"	10'2"	10'2"
Reach at Maximum Lift and 45° Discharge (§)	mm	1556	1693	1693	1844	1844	1844
	ft/in	5'1"	5'6"	5'6"	6'0"	6'0"	6'0"
Reach at Level Lift Arm and Bucket Level (§)	mm	3040	3252	3252	3360	3360	3360
	ft/in	9'11"	10'8"	10'8"	11'0"	11'0"	11'0"
Digging Depth (§)	mm	103	103	68	106	106	71
	in	4"	4"	2.6"	4.1"	4.1"	2.8"
Overall Length	mm	9509	9750	9750	9844	9844	9844
	ft/in	31'3"	32'0"	32'0"	32'4"	32'4"	32'4"
Overall Height with Bucket at Maximum Lift	mm	6421	6421	6421	6184	6184	6184
	ft/in	21'1"	21'1"	21'1"	20'4"	20'4"	20'4"
Loader Clearance Circle with Bucket at Carry Position (§)	mm	15 853	16 076	16 076	16 094	16 093	16 093
	ft/in	52'1"	52'9"	52'9"	52'10"	52'10"	52'10"
Static Tipping Load, Straight (ISO)*	kg	21 822	21 637	22 066	22 141	22 178	22 640
	lb	48,096	47,689	48,635	48,799	48,880	49,900
Static Tipping Load, Straight (Rigid Tire)*	kg	23 185	22 999	23 445	23 508	23 554	24 027
	lb	51,101	50,691	51,673	51,812	51,915	52,955
Static Tipping Load, Articulated (ISO)*	kg	19 267	19 082	19 489	19 536	19 555	20 010
	lb	42,464	42,058	42,953	43,057	43,100	44,103
Static Tipping Load, Articulated (Rigid Tire)*	kg	20 484	20 298	20 719	20 754	20 782	21 246
	lb	45,148	44,738	45,666	45,742	45,804	46,826
Breakout Force** (§)	kN	238	235	254	223	222	241
	lb	53,548	52,996	57,101	50,282	50,093	54,147
Operating Weight*	kg	31 244	31 383	31 207	31 767	31 842	31 547
	lb	68,862	69,167	68,780	70,013	70,178	69,528

* Static tipping loads and operating weights shown are based on a machine configuration with Michelin 29.5R25 XLDD1 L4 Radial tires, full fluids, operator, standard counterweight, standard transmission, cold start, roading fenders, Product Link, open differential axles (front/rear), power train guard, secondary steering, and sound suppression.

** Measured 102 mm (4") behind tip of cutting edge with bucket hinge pin as pivot point in accordance with SAE J732C.

*** Rock bucket specifications are given on Michelin 29.5R25 XLDD2 L5 Radial tires.

(§) Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

(ISO) Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculations and testing.

(Rigid Tire) Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

980K Wheel Loader Specifications

Operating Specifications

Bucket Type		Coal – Pin On	High Lift Change in Specs
Edge Type		Bolt-On Edges	
Capacity – Rated (§)	m^3	8.20	
	yd^3	10.73	
Capacity – Struck (§)	m^3	6.47	
	yd^3	8.46	
Width (§)	mm	3638	
	ft/in	11'11"	
Dump Clearance at Maximum Lift and 45° Discharge (§)	mm	2917	220
	ft/in	9'6"	8"
Reach at Maximum Lift and 45° Discharge (§)	mm	1700	
	ft/in	5'6"	
Reach at Level Lift Arm and Bucket Level (§)	mm	3411	160
	ft/in	11'2"	6"
Digging Depth (§)	mm	108	
	in	4.2"	
Overall Length	mm	9883	201
	ft/in	32'6"	8"
Overall Height with Bucket at Maximum Lift	mm	6536	221
	ft/in	21'6"	9"
Loader Clearance Circle with Bucket at Carry Position (§)	mm	16 234	175
	ft/in	53'4"	7"
Static Tipping Load, Straight (ISO)*	kg	20 819	–1831
	lb	45,887	–4,036
Static Tipping Load, Straight (Rigid Tire)*	kg	22 238	–2026
	lb	49,012	–4,467
Static Tipping Load, Articulated (ISO)*	kg	18 293	–1656
	lb	40,318	–3,651
Static Tipping Load, Articulated (Rigid Tire)*	kg	19 567	–1836
	lb	43,125	–4,048
Breakout Force** (§)	kN	186	3
	lb	41,956	813
Operating Weight*	kg	31 831	115
	lb	70,156	253

* Static tipping loads and operating weights shown are based on a machine configuration with Michelin 29.5R25 XLDD1 L4 Radial tires, full fluids, operator, standard counterweight, standard transmission, cold start, roading fenders, Product Link, open differential axles (front/rear), power train guard, secondary steering, and sound suppression.

** Measured 102 mm (4") behind tip of cutting edge with bucket hinge pin as pivot point in accordance with SAE J732C.

*** Rock bucket specifications are given on Michelin 29.5R25 XLDD2 L5 Radial tires.

(§) Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

(ISO) Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculations and testing.

(Rigid Tire) Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

Aggregate Package Operating Specifications

Bucket Type		General Purpose – Pin On					
Edge Type		Bolt-On Edges	Teeth and Segments	Teeth	Bolt-On Edges	Teeth and Segments	Teeth
Capacity – Rated (§)	m^3	5.70	5.70	5.30	6.00	6.00	5.80
	yd^3	7.46	7.46	6.93	7.85	7.85	7.59
Capacity – Struck (§)	m^3	4.50	4.50	4.30	5.30	5.30	5.10
	yd^3	5.89	5.89	5.62	6.93	6.93	6.67
Width (§)	mm	3447	3535	3535	3447	3535	3535
	ft/in	11'3"	11'7"	11'7"	11'3"	11'7"	11'7"
Dump Clearance at Maximum Lift and 45° Discharge (§)	mm	3204	3037	3037	3187	3019	3019
	ft/in	10'6"	9'11"	9'11"	10'5"	9'10"	9'10"
Reach at Maximum Lift and 45° Discharge (§)	mm	1604	1738	1738	1625	1760	1760
	ft/in	5'3"	5'8"	5'8"	5'4"	5'9"	5'9"
Reach at Level Lift Arm and Bucket Level (§)	mm	3124	3336	3336	3152	3364	3364
	ft/in	10'3"	10'11"	10'11"	10'4"	11'0"	11'0"
Digging Depth (§)	mm	103	103	68	103	103	68
	in	4"	4"	2.6"	4"	4"	2.6"
Overall Length	mm	9593	9834	9834	9621	9862	9862
	ft/in	31'6"	32'4"	32'4"	31'7"	32'5"	32'5"
Overall Height with Bucket at Maximum Lift	mm	6243	6243	6243	6269	6269	6269
	ft/in	20'6"	20'6"	20'6"	20'7"	20'7"	20'7"
Loader Clearance Circle with Bucket at Carry Position (§)	mm	15 898	16 123	16 123	15 913	16 138	16 138
	ft/in	52'2"	52'11"	52'11"	52'3"	53'0"	53'0"
Static Tipping Load, Straight (ISO)*	kg	23 011	22 826	23 262	22 869	22 683	23 116
	lb	50,717	50,308	51,271	50,404	49,994	50,949
Static Tipping Load, Straight (Rigid Tire)*	kg	24 485	24 298	24 753	24 346	24 158	24 609
	lb	53,967	53,554	54,557	53,659	53,245	54,239
Static Tipping Load, Articulated (ISO)*	kg	20 261	20 075	20 489	20 123	19 937	20 347
	lb	44,656	44,247	45,158	44,353	43,943	44,846
Static Tipping Load, Articulated (Rigid Tire)*	kg	21 597	21 409	21 839	21 462	21 274	21 700
	lb	47,600	47,186	48,133	47,302	46,888	47,827
Breakout Force** (§)	kN	224	222	239	220	218	234
	lb	50,542	50,003	53,707	49,551	49,016	52,596
Operating Weight*	kg	32 020	32 159	31 983	32 116	32 255	32 079
	lb	70,572	70,877	70,490	70,784	71,089	70,702

* Static tipping loads and operating weights shown are based on a machine configuration with Michelin 29.5R25 XLDD1 L4 Radial tires, full fluids, operator, standard counterweight, standard transmission, cold start, roading fenders, Product Link, open differential axles (front/rear), power train guard, secondary steering, and sound suppression.

** Measured 102 mm (4") behind tip of cutting edge with bucket hinge pin as pivot point in accordance with SAE J732C.

*** Rock bucket specifications are given on Michelin 29.5R25 XLDD2 L5 Radial tires.

(§) Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

(ISO) Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculations and testing.

(Rigid Tire) Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

980K Wheel Loader Specifications

Aggregate Package Operating Specifications

Bucket Type		Material Handling – Pin On		
Edge Type		Bolt-On Edges	Teeth and Segments	Teeth
Capacity – Rated (§)	m^3	5.70	5.70	5.50
	yd^3	7.46	7.46	7.19
Capacity – Struck (§)	m^3	5.06	5.06	4.86
	yd^3	6.62	6.62	6.36
Width (§)	mm	3447	3535	3535
	ft/in	11'3"	11'7"	11'7"
Dump Clearance at Maximum Lift and 45° Discharge (§)	mm	3105	2928	2928
	ft/in	10'2"	9'7"	9'7"
Reach at Maximum Lift and 45° Discharge (§)	mm	1519	1641	1641
	ft/in	4'11"	5'4"	5'4"
Reach at Level Lift Arm and Bucket Level (§)	mm	3149	3361	3361
	ft/in	10'4"	11'0"	11'0"
Digging Depth (§)	mm	103	103	68
	in	4"	4"	2.6"
Overall Length	mm	9618	9859	9859
	ft/in	31'7"	32'5"	32'5"
Overall Height with Bucket at Maximum Lift	mm	6242	6242	6242
	ft/in	20'6"	20'6"	20'6"
Loader Clearance Circle with Bucket at Carry Position (§)	mm	15 911	16 137	16 137
	ft/in	52'3"	53'0"	53'0"
Static Tipping Load, Straight (ISO)*	kg	22 514	22 331	22 749
	lb	49,621	49,217	50,139
Static Tipping Load, Straight (Rigid Tire)*	kg	23 945	23 760	24 194
	lb	52,774	52,367	53,325
Static Tipping Load, Articulated (ISO)*	kg	19 810	19 627	20 024
	lb	43,662	43,258	44,132
Static Tipping Load, Articulated (Rigid Tire)*	kg	21 106	20 921	21 332
	lb	46,519	46,111	47,017
Breakout Force** (§)	kN	221	218	234
	lb	49,662	49,126	52,720
Operating Weight*	kg	32 145	32 284	32 108
	lb	70,848	71,153	70,766

* Static tipping loads and operating weights shown are based on a machine configuration with Michelin 29.5R25 XLDD1 L4 Radial tires, full fluids, operator, standard counterweight, standard transmission, cold start, roading fenders, Product Link, open differential axles (front/rear), power train guard, secondary steering, and sound suppression.

** Measured 102 mm (4") behind tip of cutting edge with bucket hinge pin as pivot point in accordance with SAE J732C.

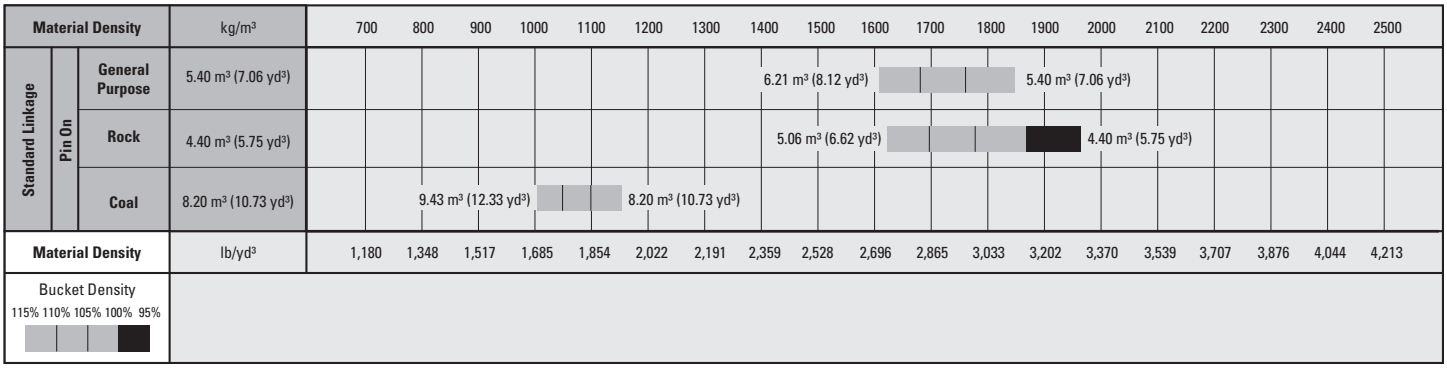
*** Rock bucket specifications are given on Michelin 29.5R25 XLDD2 L5 Radial tires.

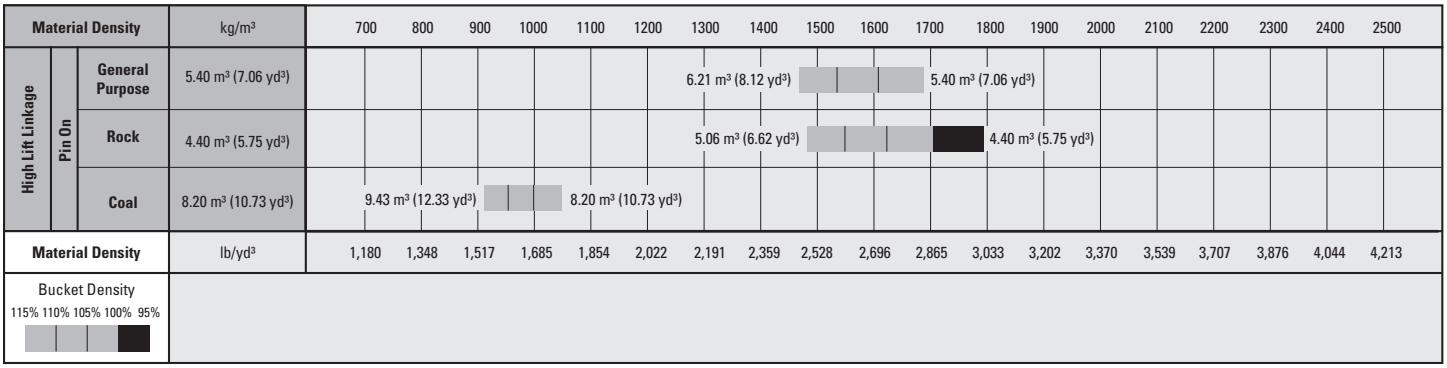
(§) Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

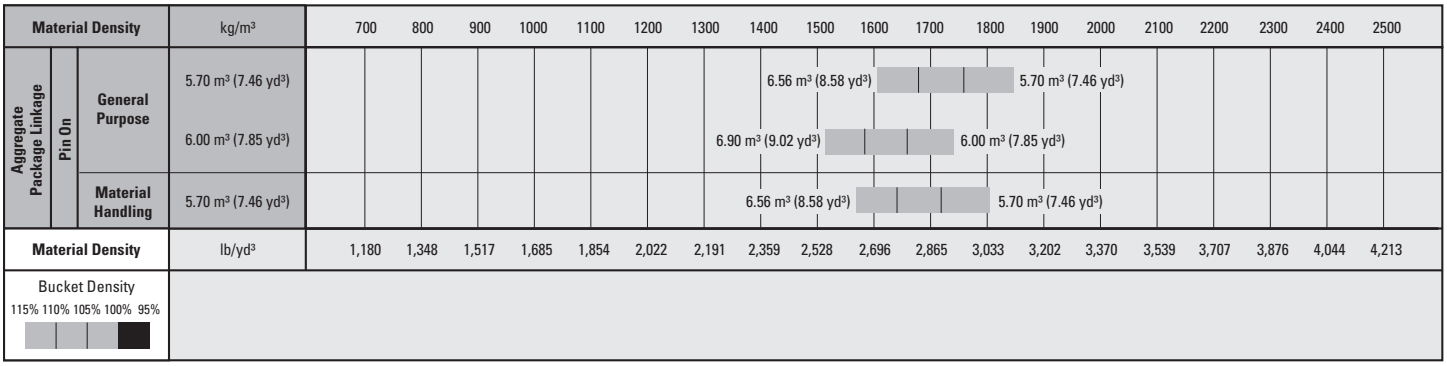
(ISO) Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculations and testing.

(Rigid Tire) Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

Bucket Selection Charts







All buckets are showing Bolt-On Edges.
Material Handling buckets are flat floor buckets.

Bucket Fill Factors

(as a % of ISO Rated Capacity)

Loose Material		Performance Series Bucket
Earth/Clay		115
Sand and Gravel		115
Aggregate:	25-76 mm (1 to 3 in)	110
	19 mm (0.75 in) and smaller	105
Rock		100

980K Standard Equipment

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

POWER TRAIN

- Brakes, full hydraulic enclosed wet-disc with Integrated Braking System (IBS)
- Brake wear indicators
- Diesel Particulate Filter (DPF)
- Engine, Cat C13 that meets Tier 4 Interim/ Stage IIIB emission standards
- Fast fuel system ready
- Fan, radiator, electronically controlled, hydraulically driven, temperature sensing, on demand
- Fuel Management System (FMS)
- Fuel priming pump (electric)
- Fuel/water separator
- Guard, vandalism
- Power train guard
- Precleaner, engine air intake
- Radiator, unit core (6 fpi) with ATAAC
- Switch, transmission neutralizer lockout
- Torque converter (free wheel stator)
- Transmission, automatic planetary power shift (4F/4R)
- Variable Shift Control (VSC)

ELECTRICAL

- Alarm, back-up
- Alternator, 150-amp brushless
- Batteries, (4) maintenance free 1,000 CCA
- Ignition key; start/stop switch
- Lighting system:
  - Four halogen work lights
  - Two halogen roading lights (with signals)
  - Two halogen rear vision lights (hood mounted)
- Main disconnect switch
- Receptacle start (cables not included)
- Starter, electric, heavy duty
- Starting and charging system (24-volt)

OPERATOR ENVIRONMENT

- Air conditioner, heater, and defroster (auto temp and fan)
- Beverage holders (2) with storage compartment for cell phone/MP3 player
- Bucket/Work tool function lockout
- Cab, pressurized and sound suppressed, (ROPS/FOPS) radio ready (entertainment) includes antenna, speakers and converter (12-volt 10-amp)
- Camera, rearview
- Coat hook (2)
- EH controls, lift and tilt function
- EH parking brake
- Computerized Monitoring System
- Instrumentation, gauges:
  - Digital gear range indicator
  - DPF soot loading percent
  - Engine coolant temperature
  - Fuel level
  - Hydraulic oil temperature
  - Speedometer/tachometer
  - Transmission oil temperature
- Instrumentation, warning indicators:
  - Axle oil temperature
  - Battery voltage hi/low
  - Engine air filter restriction
  - Engine intake manifold temperature
  - Engine oil pressure
  - Fuel level and pressure hi/low
  - Hydraulic oil filter restriction
  - Hydraulic oil low
  - Parking brake
  - Primary steering oil pressure
  - Service brake oil pressure
  - Transmission filter bypass
- Horn, electric
- Light, two dome (cab)
- Mirrors, rearview external (includes spot mirrors)
- Post mounted membrane switch keypads
- Receptacle, 12-Volt
- Seat, Cat Comfort (cloth) air suspension
- Seat belt, retractable, 51 mm (2") wide
- Steering, EH joystick, speed sensing with force feedback
- Sun visor, front
- Wet-arm wipers/washers (front and rear)
  - Intermittent front wiper
- Window, sliding (left and right side)
- Viscous mounts

TIRES

A tire must be selected from the mandatory attachments section. Base machine price includes a tire allowance

FLUIDS

Premixed 50% concentration of Extended Life Coolant with freeze protection to –34° C (–29° F)

OTHER STANDARD EQUIPMENT

- Auto idle shutdown
- Couplings, Cat O-ring face seals
- Ecology drains for engine, transmission, and hydraulics
- Ether aid
- Fenders, steel front with mud-flap/rear with extension
- Filters:
  - Fuel, primary/secondary
  - Engine air, primary/secondary
  - Engine oil
  - Hydraulic oil
  - Transmission
- Fuel cooler
- Grease zerks
- Grill, airborne debris
- Guard, crankcase
- Hitch, drawbar with pin
- Hood, non-metallic power tilting with rear clamshell
- Hoses, Cat XT
- Hydraulic oil cooler (swing out)
- Hydraulic system, load sensing
- Kickout, lift and tilt, automatic (adjustable in cab)
- Linkage, Z-bar, cast crosstube/tilt lever
- Oil sampling valves
- Platform, window washing
- Product Link
- Remote diagnostic pressure taps
- Ride control, 2V
- Service center (electrical and hydraulic)
- Sight gauges: engine coolant, hydraulic oil, and transmission oil level
- Steering, load sensing
- Toolbox
- Vandalism protection caplocks

980K Optional Equipment

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

Power Train
- – Differentials
  - – Open, front or rear
  - – Limited slip, front or rear
- – Extreme temperature seals
- – Seal guards
- – Axle oil cooler
- – Axle oil cooler ready

Hydraulics arrangement, 3V
Standard transmission with lockup torque converter
Heavy duty transmission
Heavy duty transmission with lockup torque converter
Cold start/high altitude package (120V)
Comfort package
Work lighting package, halogen
Work lighting package, HID
Aggregate loader package
12 ton yard loader package
Forestry package
Industrial package
Cab protection package
Steel mill package
High lift, 2 valve
High lift, 3 valve
Quick coupler (contact Cat Work Tools)
Bucket and work tool options (contact Cat Work Tools)
Lights, signal LED
Product Link, satellite
Control, aggregate autodig
Joystick, 2 valve
Joystick, 3 valve
Payload control system
Printer, payload CNTL system
Radio, AM/FM CD/MP3 player
Radio, CB (ready)
Radio, Satellite-XM (Bluetooth capable)
Radio, Satellite-Sirus (Bluetooth capable)
Steering secondary
Filter, carbon fresh air
Seat belt, 76 mm (3") wide
Sun visor, rear
Security system, machine
Cooling, high ambient
Guard, power train
Guard, front window
Guard, complete cab
Guard, front window (Logger)
Autolube
Fenders, roading with fender extensions front/rear
Precleaner, HVAC
Precleaner, turbine
Precleaner, turbine/trash
Oil change system, high speed
Sound suppression (low) NACD
Fan, variable pitch
Antifreeze, –50° C (–58° F)
EH steering wheel (availability TBD)

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com**

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

AEHQ6233-02 (11-2013)
Replaces AEHQ6233-01
(North America)

CAT®