

992K

Wheel Loader



Engine

Engine Model	Caterpillar® C32 with ACERT™ Technology	
Gross Power – SAE J1995	674 kW	904 hp
Net Power	597 kW	801 hp
• Caterpillar engine with ACERT™ Technology – EPA Tier 2, EU Stage II Compliant		

Buckets

Bucket Capacities	10.7-12.3 m³	14-16 yd³
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Operating Specifications

Operating Weight	97 295 kg	214,948 lb
Breakout Force*	573.3 kN	128,851 lb
Static Tipping Load, @ 35° articulation*	51 328 kg	113,159 lb

*Specifications with 10.7 m³ (14 yd³)

Cat® 992K Wheel Loader

K Series Wheel Loaders – Bring It to the Bottom Line

RELIABILITY/DURABILITY

- Proven components and high hour rebuild and machine life standards provide unmatched reliability.
- Machine systems work together in the harshest environments.
- Diagnostic programs are available to monitor machine health and maintain uptime.
pg. 4-5

PERFORMANCE

- Improved system and component design gives the 992K optimum productivity.
- Pass match the 992K with the right truck for improved job site efficiencies.
pg. 6-7

SAFETY

- The 992K design optimizes visibility for a safe work environment.
- Daily and routine maintenance features allow your service technician to safely service the machine.
- Enhance operator comfort and safety through a safe working environment.
pg. 8-9

OWNING AND OPERATING COSTS

- Machine design features extend machine life and minimize downtime.
- Ease of serviceability includes centralized service centers and ground level access.
- Machine monitoring allows for key or standard maintenance to be scheduled around your production schedule.
- Your Cat dealer offers total customer support unmatched in the industry.
pg. 16-17

SPECIFICATIONS/EQUIPMENT

pg. 18-23

You're focused on the basics: cost per ton, fuel economy, productivity, safety. The new Cat® 992K Wheel Loader delivers – with increased bucket fill, improved fuel efficiency, a cab designed for all-day comfort, and safety features to protect your most valuable asset – people.



SERVICEABILITY

- Minimize service time and maximize production through key ground level access points and grouped service centers.
- Monitoring the machine and forewarning of machine trouble allows you to schedule downtime and ensure jobsite productivity continues without interruption.
pg. 10-11

OPERATOR COMFORT

- Best-in-class working environment for this wheel loader size class.
- Greater control and ease of operation for your operator.
- Ergonomically designed for the health and safety of your operator.
pg. 12-13

BUCKETS AND WORKTOOL SYSTEMS

- Cat® buckets and ground engaging tools provide versatility on any job site.
- Proper bucket and application match delivers maximum productivity.
pg. 14-15



Reliability/Durability

Maximize uptime, long life – it's what you expect for your bottom line.

- Proven components and high hour rebuild and machine life standards provide proven reliability.
- Machine systems work together in the harshest environments.
- Diagnostic programs are available to monitor machine health and maintain uptime.

MACHINE LIFE

The 992K is designed to meet customer's multiple rebuild requirements and this is accomplished through design emphasis put on key components.



Caterpillar Designed Components.

Components used to build Cat Wheel Loaders are designed and manufactured to Caterpillar quality standards to ensure maximum performance even in extreme operating conditions.

- **Linkage.** The 992K features the revolutionary box boom linkage design with new maintenance-free sleeve bearing (SB) pins. Enhancements have been made to the linkage to improve durability. Improvements include high strength castings in pin joint areas that resist twisting and minimize stress, a new forked B pin bucket mount for better stress distribution from bucket to boom, and a four-hinge plate bucket design to increase linkage/ bucket durability.

- **Sleeve Bearing Pins.** The new SB pins eliminate the need for daily greasing on select pins. Another key benefit of the SB pins is that customers can schedule change-out of pins on a planned maintenance day. The design of the SB pins allows this planned downtime due to its low risk of consequential damage.



- **Front Frame and Rear Frame.**

Highly engineered and field-proven, combination use of high-strength plates and castings distributes loads and increases structure robustness. A key differentiator from competitive machines is the box section rear frame (1) and box-shaped loader tower (2). The box section absorbs torsional forces generated in a loading cycle, maintaining alignment for hitch pins and driveline. The box-shaped loader tower resists shock and torsional loads, maintaining hitch and loader linkage pin alignment, maximizing pin life.

- **Cat Planetary Power Shift Transmission.** The 992K transmission utilizes a planetary gear group similar to the one used in the 993K and 994F, which has proven strength and reliability.



- **Next Generation Modular Radiator (NGMR).** Utilizing 14 parallel flow system modular cores, the NGMR increases cooling performance by only drawing cooler ambient air through the radiator system. Copper fins allow higher heat transfer for improved cooling performance.



PROVEN ENGINE TECHNOLOGY

The 992K utilizes the Cat C32 engine certified to meet EPA Tier 2/EU Stage II emissions. This Mechanically actuated Electronically controlled Unit Injection (MEUI) diesel engine shares a common platform with the 777F, 993K, 854K, and D11. The 992K produces the same net power as the 992G, but has increased power density with the C32 engine. The increase in power density yields improved engine response and fuel efficiency.



DIAGNOSTIC PROGRAMS

Monitoring product health is key to maintaining the reliability of any equipment. Many programs are available on the 992K – both as standard and optional features – to help you track machine condition.

Vital Information Management

System (VIMS®). Monitoring over 100 machine parameters, VIMS records these parameters for maintaining and optimizing the machine. VIMS features System Events and Data Events, giving notification from machine malfunction to changes in preprogrammed machine settings.

Product Link. A state-of-the-art satellite technology-based product that provides information flow between machine on-board systems and the Caterpillar network operations center. Multiple types of information can be collected and tracked – from machine location and service meter hours, to health and productivity information.

Equipment Manager. With a subscription to Equipment Manager through the Cat Dealer Storefront, the information collected through Product Link can be transmitted to a computer. With fast, easy-to-access machine information, you can optimize asset utilization, reduce security risks, improve maintenance management and implement before-failure repair strategies.

S•O•SSM Services. Keep minor repairs from becoming major ones and help prevent complete failures. By regularly taking samples from the ports provided, your Cat dealer tracks component wear, oil performance, and oil condition and uses that data to predict wear-related issues.

Performance

Delivery of performance is critical to your bottom line.

- Improved system and component design gives the 992K optimum productivity.
- Pass match the 992K with the right truck for improved job site efficiencies.



OPTIMUM PRODUCTIVITY

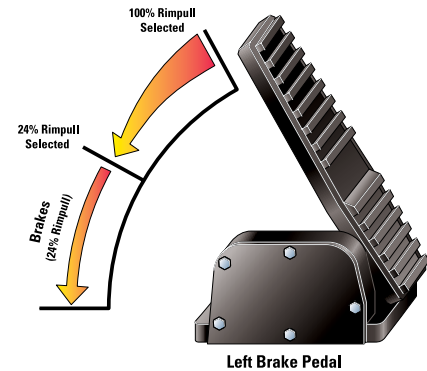
Building off the legacy of the 992G, the 992K utilizes a number of key features from the 992G while making system enhancements to further improve customer productivity.

Positive Flow Control (PFC). The Positive Flow Control hydraulic system is setting a new standard for hydraulic response, performance, and efficiency. The implement system is equipped with two electronically controlled, fully variable piston pumps for fast, productive cycles. The PFC system improves hydraulic response, giving the operator better feel and control of the bucket.

Benefits of the 992K Positive Flow Control Hydraulic System include:

- Two fully variable displacement pumps allow for improved fuel efficiency.
- Integrated solenoid has force feedback system, which keeps the displacement where it is required for optimized pump control.
- By optimizing the pump control, hydraulic oil flow is proportionate to implement lever stroke. This eliminates wasted energy and allows for improved power efficiency and lower system heat.

Steering System. Load-sensing steering reduces the demand on the engine when steering is not activated. By delivering only the power draw that is needed, engine power is reserved for productive work.



Impeller Clutch Torque Converter (ICTC)/Rimpull Control System.

ICTC maintains hydraulic balance while digging and loading, enabling the operator to finely modulate rimpull by depressing the left pedal, thus reducing the impeller clutch pressure. The further the pedal is depressed, the more the impeller clutch pressure is reduced, effectively reducing output torque to to 24 percent of maximum.

Final Drives. The 992K features planetary reduction in each wheel. Torque is developed at the wheel, putting less stress on the axle shafts. The planetary units can be removed independently from the wheels and brakes.

Linkage Pins. The 992K features durable, service-free, oil filled and sealed-for-life, Cat exclusive Sleeve Bearing (SB) pins. The SB pins eliminate the need for daily greasing of select pins and require no routine maintenance for continued uptime.

Linkage Regen Valve. The 992K features a linkage regen valve for improved bucket response and control. The valve creates a closed loop system to ensure proper flow to the linkage cylinder during the digging cycle.



Cat Planetary Power Shift Transmission.

The 992K planetary powershift transmission is electronically controlled and features three forward and three reverse speeds.

Transmission features include:

- Integrated shifting/steering control with F/N/R rocker switch and upshift/downshift switches
- Transmission clutch control for improved shift quality, component life and operator comfort
- ICTC for improved rimpull control and transmission clutch durability

TRUCK PASS MATCH

Don't work harder, work smarter – optimize the wheel loader to the trucks. This is accomplished through even passes when loading and optimizing operation for efficiencies. The 992K wheel loader was developed to optimize pass match with key trucks in this size class and job site requirements.

992K	PassMatch
775	3 Pass
777	4-5 Pass

Safety

People are the backbone of your business, and keeping them safe and productive is the number one priority.

- The 992K design optimizes visibility for a safe work environment.
- Daily and routine maintenance features allow your service technician to safely service the machine.
- Enhance operator comfort and safety through a safe working environment.



IMPROVED VISIBILITY

Good visibility, whether it's front visibility for positioning to a truck or side visibility for vehicles or people in the work area, is key to a safe work environment. The 992K offers the best visibility for this size wheel loader class. Additional standard visibility features that enhance safety include:

- Long-life LED taillights
- Articulated wiper/washer system with intermittent feature on front and rear windows



Optional Rear Vision Camera with In-Cab Monitor. An optional rear vision camera with seven inch in-cab color display monitor is available to give a close view to the rear of the wheel loader.



Working 24 Hours a Day. Any time of the day and in all types of weather, the 992K has a number of features to ensure safe visibility. Rear heated mirrors are available for quick defrost and good visibility in winter conditions. The optional High Intensity Discharge (HID) lights provide exceptional lighting for night work. HID lights are a new generation of 35-watt lights featuring a special flood lens and reflector which provides brighter output that can open up the floor in quarry and aggregate or mining operations.

Optional roading fenders help prevent mud and debris build-up on the stairs for safety in getting on and off the machine. Optional warning beacons are also available as a safety feature.



SAFETY IN OPERATOR ENVIRONMENT

Cab comfort and operator safety go hand in hand. Features which decrease repetitive motion enhance operator comfort while contributing to operator safety. Key features that aid operator safety include low effort implement controls floor mounted for ease of adjustment, a seat-belted trainer's seat to facilitate operator training on the jobsite, and a cab filtration system that removes dust and debris from the cab air. Optional for extremely dusty applications is a cab pre-cleaner that reduces the amount of dust that reaches the cab air filter.

MAINTENANCE SAFETY

Daily and routine maintenance should not pose a safety hazard to your operator or service technician. With the 992K, design effort was taken to group service points with convenient access. One key service center that is focused on operator and service technician safety is the Bumper Service Center

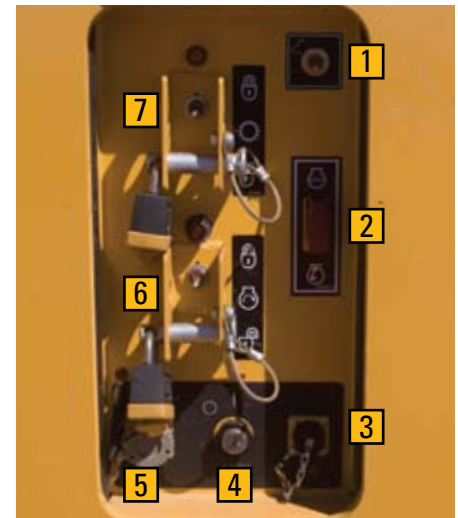
Bumper Service Center. This centralized service center, located at ground level on the left hand rear side of the 992K, includes a stairway light (1), auxiliary emergency shutdown switch (2), VIMS port (3), power-on switch (4) and electronic technician “ET” com-II port (5). It also contains lockout switches allowing your service technician to perform routine maintenance while ensuring the machine stays static.

Starter Lockout Switch (6). Another key safety feature on the bumper service center is a starter lockout that disables machine start-up, which is often needed during service procedures. The machine will still have electrical power; however, the engine cannot be cranked.

Transmission Lockout Switch (7). The transmission lockout switch does not allow the transmission to shift out of neutral, even if running. This feature is designed for service procedures that require the machine to be running but need the transmission disabled for added safety.

In-Cab Steering Lockouts. The steering lockout feature in the cab locks the steering handle in the neutral position and disables the transmission controls, ensuring the machine will not be moved until the lock is disabled.

Maintenance-Free Sleeve Bearing (SB) Linkage Pins. With the new SB pins, front linkage pin greasing is eliminated for select pins, keeping the operator from having to access high or hard to reach grease points.

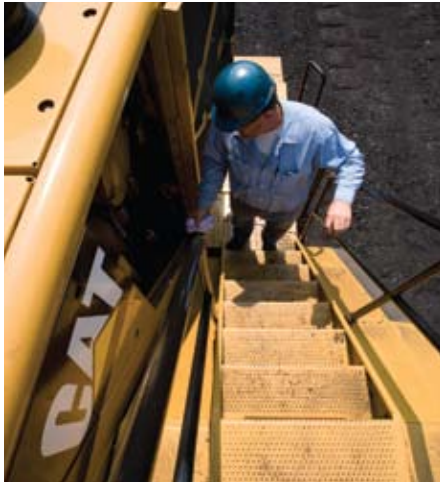


VISIBILITY SAFETY	
Standard Features	Optional Features
Long-life LED taillights	Rear-vision camera with in cab monitor
Articulated wiper/washer system with intermittent feature on the front and rear windows	High Intensity Discharge (HID) lighting package
	Rear-view heated mirrors
	Warning light beacons
OPERATOR SAFETY	
Standard Features	Optional Features
Floor mounted easily adjusted implement controls	Roading fenders
Low effort implement controls	Powered cab air pre-cleaner removes airborne dust before it reaches the cab air filter, increasing filter service interval
In-cab trainer seat with seat belt	
Cab filtration system	
Full perimeter railings on upper platform	
Punched stamped tread plates	
Stairway light	
MAINTENANCE SAFETY	
Standard Features	Optional Features
Complete electrical system lockout	Optional ground level service center
Starter lockout	
Hydraulic system lockout	
Transmission lockout (both in cab and at ground level)	
Ground level viewable site gauges on all major systems	
Maintenance-free Sleeve Bearing (SB) linkage pins	

Serviceability

The 992K is designed to ensure minimal downtime through ground level access, grouped service points, and attention to key serviceable areas on the machine.

- Minimize service time and maximize production through key ground level access points and grouped service centers.
- Monitoring the machine and forewarning of machine trouble allows you to schedule downtime and ensure jobsite productivity continues without interruption.



SERVICE ACCESS

Ground level access service points and grouped service points lead to easier service, minimizing service time and maximizing production. The 992K offers seven centralized service centers located throughout the machine. This allows a service technician to perform a variety of service procedures, often from ground level or platform, ranging from access to VIMS to grease fittings for the frame.

Optional Service Center. The 992K offers an optional service center for one point of service. This includes oil renewal system (if equipped) tank fill and full light, radiator fill, implement fill, steering tank fill, transmission fill, engine oil fill, and Autolube (if equipped) fill and full light. The full lights allows the service technician to ensure the system is full while filling it at ground level.



Bumper Service Center. The bumper service center features safety service controls including starter and transmission lockouts, emergency engine shutdown, and VIMS and ET Connections. The bumper service center also features a power-on switch and a stairway light switch.



REMOTE AND GROUPED DIAGNOSTIC PRESSURE PORTS

Front Frame Hydraulic Center. The front frame hydraulic center is accessible from the ground level right side and provides one location to monitor key front frame pressures such as lift and lower circuits, dump and rackback circuits, pilot supply and implement pumps. Additionally, a manual lower hitch valve is located in this center.

Rear Frame Hydraulic Center. The rear frame service center is accessible from the cab platform and provides one location to monitor rear frame pressures like fan pump, steering pump, brake accumulator, Impeller Clutch Torque Converter, lock-up clutch and transmission pressures.

Engine Service Area. In the left-hand side engine access door are grouped service points for the engine including oil and fuel filters, oil fill, and oil check. The compartment also includes a light for service at night.

Hydraulic Service Area. On top of the platform behind the cab are access panels for the the hydraulic implement filters and hydraulic pumps.



Electronic Service Center. A centralized electronic service center is located on the right side of the cab platform and provides one service point for transmission, implement, VIMS and ECMs, breakers, and fuses. It is sealed against weather elements.

Cat Autolube Systems Option. The Autolube system provides precise, automatic lubrication of all grease joints while the machine is in operation. Automatic lubrication reduces time spent on daily maintenance and downtime for unplanned repairs due to insufficient greasing.



DIAGNOSTICS

The 992K offers customers the ability to troubleshoot and monitor machine information, customize operator settings for continuity of operation, and set machine configuration. A number of these tasks are accomplished through the VIMS which monitors over 100 machine parameters.

S•O•SSM Services. Keep minor repairs from becoming major ones and help prevent complete failures. By regularly taking samples from the ports provided, your Cat dealer tracks component wear, oil performance, and oil condition and uses that data to predict wear-related issues.

ADDITIONAL SERVICE SUPPORT

Product Link. Product Link is a state-of-the-art satellite technology based product that provides two-way information flow between machine on-board systems and the Caterpillar network operations center.

Equipment Manager. With a subscription to Equipment Manager through the Cat Dealer Storefront, the information collected through Product Link can be transmitted to a remote computer.

DEALER SUPPORT

The Caterpillar global network of independently owned dealers is the best in the world at providing support to keep your loader up and running. Known for parts availability and technical expertise, Cat dealers are partners in your business.

1 Optional Service Center

- Ground level
- Oil renewal system (if equipped) tank fill port
- Oil renewal system full light
- Radiator fill port
- Implement fill port
- Steering tank fill port
- Transmission fill port
- Engine oil fill port
- Autolube (if equipped) fill port
- Autolube tank full light

2 Hydraulic Service Center

- Hydraulic pilot filters
- Hydraulic pumps
- Hydraulic case drain filters

3 Bumper Service Center (left side bumper)

- Auxiliary emergency shutdown switch
- VIMS port
- Power on switch
- Electronic Technician "ET" Com-II port
- Stairway light switch
- Starter lockout switch
- Transmission lockout switch

4 Remote Diagnostic Pressure Ports Front Frame

- Lift and lower circuit
- Dump and rackback circuit
- Right and center implement pump relief pressures
- Ride control (optional)
- Pilot supply
- Manual lower valve

5 Remote Diagnostic Pressure Ports Rear Frame

- Steering left
- Steering right
- Steering pump discharge
- Fan drive
- Brake accumulator – front and rear
- Impeller clutch
- Lock-up clutch
- Transmission lube
- Brake pump discharge
- Axle oil cooler motor supply
- Axle oil cooler pump – front and rear
- Service brakes – front and rear

6 Electrical Service Center

- Breakers
- ECMS
- Fuse

7 Engine Service Area

- Primary fuel filter
- Engine oil filter
- Water separator
- Air filters
- Secondary fuel filter

Operator Comfort

The new 992K has been ergonomically designed to enhance operator comfort – allowing for a more productive jobsite.



- Best-in-class working environment for this wheel loader size class
- Greater control and ease of operation for your operator
- Ergonomically designed for the health and safety of your operator

OPERATING ENVIRONMENT

The 992K maintains the distinction of offering the largest, most ergonomic cab in its class.

Seat. The Cat Comfort air suspension seat, standard in the 992K, is built strong and durable and is six-way adjustable to accommodate all-sized operators. The cast one-piece back and seat pan prevent protrusions under the cushions. The seat features an automotive-style lumbar support for maximum comfort. A heated seat option is available for additional comfort.

VISIBILITY

The 992K provides excellent visibility to both the front and rear of the machine. Wipers with intermittent feature on both front and back keep the windows clean in any condition.

Rear-Vision Camera. An optional rear-vision camera is available to clearly monitor movement behind the wheel loader. Additional optional features that enhance visibility include a high intensity discharge (HID) lighting package and warning beacons.





EASE OF OPERATION

The main control panel on the 992K is located to the right of the operator's seat, keeping everything within reach of the operator. Keeping all switches and controls conveniently placed allows better efficiency and improved productivity while minimizing operator fatigue.

Special attention was paid to implement control effort and location of the implement controls. The implement controls are fully adjustable to allow the operator to set the controls to their size. The STIC steer controller uses a single lever for steering and transmission control. Left-hand operation enables the operator to shift or change directions without letting go of the steering controls. Repetitive motion fatigue is minimized through low-effort implement controls and effortless steering.

OPERATOR TRAINING

A slight increase in cab size allows room for a trainer seat with three-inch seat belt. This provides a safe method to properly train the operator.

ERGONOMICS

Caterpillar understands that wheel loaders work in some of the harshest environments. By controlling machine vibrations, operator efficiency and productivity are improved.

- Ride control is an option designed to reduce jolting and bouncing during load and carry operations. Accumulators act as shock absorbers to reduce machine pitching and provide a smoother ride over rough terrain
- Electronically controlled automatic kickouts provide a smooth, modulated cylinder stop throughout the loading cycle

All these features minimize operator fatigue, resulting in operator comfort and productivity.

Buckets and Work Tools

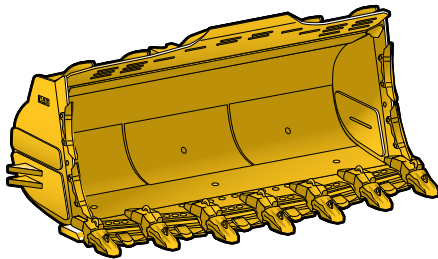
CAT BUCKETS

Cat buckets and ground engaging tools provide versatility on any job site. Proper bucket and application match delivers increased stability and maximum productivity. The combination of right bucket with the right machine will provide the best possible performance in your application.

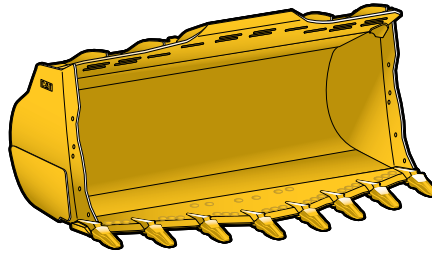
To better match your 992K to material conditions, contact your Caterpillar dealer for speciality bucket needs.

Buckets. For the 992K, bucket capacity ranges in size from 10.7 to 12.2 m³ (14-16 yd³). The following information highlights bucket specifications and available buckets.

Heavy Duty Rock Bucket. For use in extremely aggressive applications such as face loading tightly compacted pit material. Intended for use in materials where moderate abrasion and high impact is encountered.



High Abrasion Bucket. For use in extremely aggressive applications such as face loading iron ore. Intended for use in materials where high abrasion and moderate impact is encountered and a smooth floor is desired.



Custom Buckets. Caterpillar Work Tools can design a bucket for your customer's specific needs and material densities. Contact your Cat dealer for more information.

The following chart highlights bucket selection information for 100% fill factor, payload, and material density:

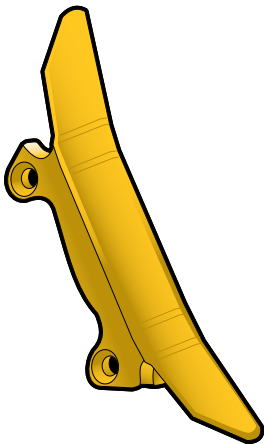
Material Density				Bucket Volume	
lb/yd ³	tons/yd ³	kg/m ³	tonnes/m ³	yd ³	m ³
2500 - 2800	1.25 - 1.40	1483 - 1661	1.48 - 1.66	16	12.2
2700 - 3000	1.35 - 1.50	1602 - 1780	1.60 - 1.78	15	11.5
2900 - 3200	1.45 - 1.60	1720 - 1898	1.72 - 1.90	14	10.7

The material density bucket chart is a guideline intended to maximize wheel loader structural and component integrity. According to SAE J818, the rated operating load, in kilograms (pounds), will not exceed 50 percent of the tipping capacity for wheel loaders as defined in SAE rating J732C.

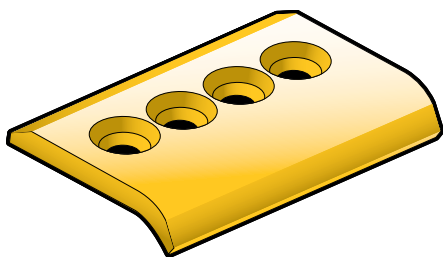
Bucket Systems and K Series Work Tools



Bucket Wings



Sidebar Protectors



Top Mounted Wear Plates

GROUND ENGAGING TOOLS

Caterpillar Ground Engaging Tools (GET) increase machine productivity and protect the expensive structural components of your bucket. The following highlights GET recommendations for specific applications.

Moderate and Abrasive. Key GET utilized for these types of applications include:

- Bucket tips
- Bolt-on segments
 - Top wear plates
- Sidebar protectors (2 or 4)
- Base edge wear plates
- Bucket wings
- Mechanically Attached Wear Plates (MAWPS)
- Weld-on heel shrouds

Bucket Wings (optional). Bucket wings provide additional tire protection by deflecting rocks away from the path of the tine. Bucket wings can be added to all buckets.

Extreme Applications. For use in extreme applications such as face loading granite, GET recommendations include:

- Half-arrow segments
- Adapter covers
- Top wear plates
- Dual (4) sidebar protectors
- Base edge wear plates
- Bucket wings
- Inner and outer liners
- Bucket wings

CAT K SERIES TIPS

The newest generation of GET works harder and lasts longer. K Series GET offers:

- Hammerless installation and removal
- Tips are then held in place with a one-piece, vertical retainer
- Sleeker, sharper digging profile provides better penetration



The following highlights types of K Series Tips available for your application:

Heavy Penetration

- Recommended for high abrasive and impact conditions, especially shot rock
- Excellent penetration and wear material, stays sharp



Heavy Abrasion

- Recommended for high abrasive, low-to-moderate impact, easier-to-penetrate materials
- Excellent wear material, less penetration



General Duty

- Recommended for general applications with up to moderate impact and abrasive conditions
- Good penetration, self-sharpening cavities



Extra Duty

- Recommended for general applications requiring more wear material in moderate-to-high impact conditions
- Good wear material, good penetration

Penetration

- Recommended for harder-to-penetrate, moderate-to-high impact, lower abrasive materials
- Very good penetration, less wear material, stays sharp



Owning and Operating Costs

The 992K is engineered to provide durability, reliability, ease of serviceability, and maximum productivity for minimal downtime and machine life – bringing more to your bottom line.



- Machine design features extend machine life and minimize downtime to keep the 992K in production.
- Ease of serviceability includes centralized service centers and ground level access. Less service time means more working time.
- Machine monitoring allows for key or standard maintenance to be scheduled around your production schedule.
- Your Cat dealer offers total customer support unmatched in the industry.

MACHINE AND COMPONENT LIFE

High hour structure life and long life of major components makes the 992K a leader in durability and structural life. Additionally, similarity of components with other Cat machines such as the 993K and 994F transmission or the Cat C32 engine being utilized on the D11, 993K, and 777E, ensure proven, field tested components that give maximum life.

NEW Sleeve Bearing Linkage Pins.

The new sleeve bearing linkage pins feature an innovative design that virtually eliminates any gauling that can occur. Additionally, with any pin failures, an early predictor allows the customer to maintain machine production and schedule downtime on a regular maintenance day. Longer life and predictable wear mean you get maximum performance at the lowest possible operating cost.



EASE OF SERVICEABILITY

Less downtime means more working time. Centralized service centers were designed for ease of access which leads to easier serviceability.

Key Service Centers. Service points are clustered in seven centralized service centers, most of which can be accessed safely from ground level. The seven key service centers include:

- Optional Service Center offering one point of service for a number of key systems
- Bumper Service Center with a number of safety service controls
- Remote Diagnostic Ports Front Frame
- Remote Diagnostic Ports Rear Frame
- Hydraulic Service Center
- Electronic Service Center
- Engine Service Area

MACHINE MONITORING

Monitoring the machine and forewarning of machine trouble allows you to schedule downtime and ensure jobsite productivity.

VIMS. Allows you to monitor over 100 machine parameters and alerts the operator to malfunction in machine systems or a change in machine settings.

CAT DEALER

Your Cat dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment.

Selection. Make detailed comparisons of the machines you are considering before you buy. How long do components last? What is the cost of preventive maintenance? What is the true cost of lost production? Your Cat Dealer can give you precise answers to these questions.

Purchase. Look past initial price.

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.

Operation. Improving operating techniques can boost your profits. Your Cat dealer has training videotapes, literature, and other ideas to help you increase production.

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. Save money with remanufactured parts. You receive the same warranty and reliability as new products at a cost savings of 40 to 70 percent.



Engine

Engine Model	Caterpillar C32 with ACERT™ Technology	
Gross Power – SAE J1995	674 kW	904 hp
Net Power	597 kW	801 hp
Bore	145 mm	5.7 in
Stroke	162 mm	6.4 in
Displacement	32.1 L	8.5 gal

- Caterpillar engine with ACERT™ Technology – EPA Tier 2, EU Stage II Compliant
- These ratings apply at 1750 rpm when tested under the specified standard conditions.
- Rating for net power advertised is based on power available when the engine is equipped with alternator, air cleaner, muffler, and on-demand hydraulic fan drive at maximum fan speed.

Weights

Operating Weight	97 295 kg	214,948 lb
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- For 10.7 m³ (14.0 yd³) bucket

Buckets

Bucket Capacities	10.7-12.3 m ³	14-16 yd ³
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Operating Specifications

Breakout Force	573.3 kN	128,895 lb
Static Tipping Load, at 35° articulation	51 328 kg	113,159 lb

- For 10.7 m³ (14.0 yd³) bucket

Transmission

Converter Drive – Forward 1	7.1 km/hr (4.4 mph)
Converter Drive – Forward 2	12.2 km/hr (7.6 mph)
Converter Drive – Forward 3	20.6 km/hr (12.8 mph)
Converter Drive – Reverse 1	7.4 km/hr (4.6 mph)
Converter Drive – Reverse 2	13.0 km/hr (8.1 mph)
Converter Drive – Reverse 3	22.4 km/hr (13.9 mph)
Direct Drive – Forward 1	Lock-up Disabled
Direct Drive – Forward 2	12.9 km/hr (8.0 mph)
Direct Drive – Forward 3	22.8 km/hr (14.2 mph)
Direct Drive – Reverse 1	7.9 km/hr (4.9 mph)
Direct Drive – Reverse 2	14.2 km/hr (8.8 mph)
Direct Drive – Reverse 3	24.8 km/hr (15.4 mph)

- With 45/65-45 L-5 46 Ply Tires

Loader Hydraulic System

Relief Valve Setting	31 000 kPa	4,500 psi
Cylinders, Double Acting: Lift, Bore and Stroke	279.4 mm	11 in
	1148 mm	45.2 in
Cylinder, Double Acting: Tilt, Bore and Stroke	266.7 mm	10.5 in
	2055 mm	80.9 in

- Pumps (2), fully variable E/H displacement control – 250cc

Hydraulic Cycle Times

Raise*	9.4 seconds
Dump*	1.8 seconds
Lower Float Down (Empty)	3.7 seconds
Total Hydraulic Cycle Time	14.9 seconds

*With rate load

Brakes

Brakes	Meets SAE, J1473, OCT90 and ISO 3450:1992
--------	----------------------------------------------

Tires

Tires Choose from a variety of tires to match your application.

- Choice of:
 - 45 / 65-R45, L-4 I STAR Michelin
 - 45 / 65-R45, L-5 I STAR Michelin
 - 45 / 65-R45, L-5 58 PR Goodyear
 - 45 / 65-R45, L-5 58 PR Bridgestone
 - 1150 / 65-R45, RL-5K 2 STAR Goodyear
- 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.

Cab

ROPS/FOPS Meets SAE, and ISO standards.

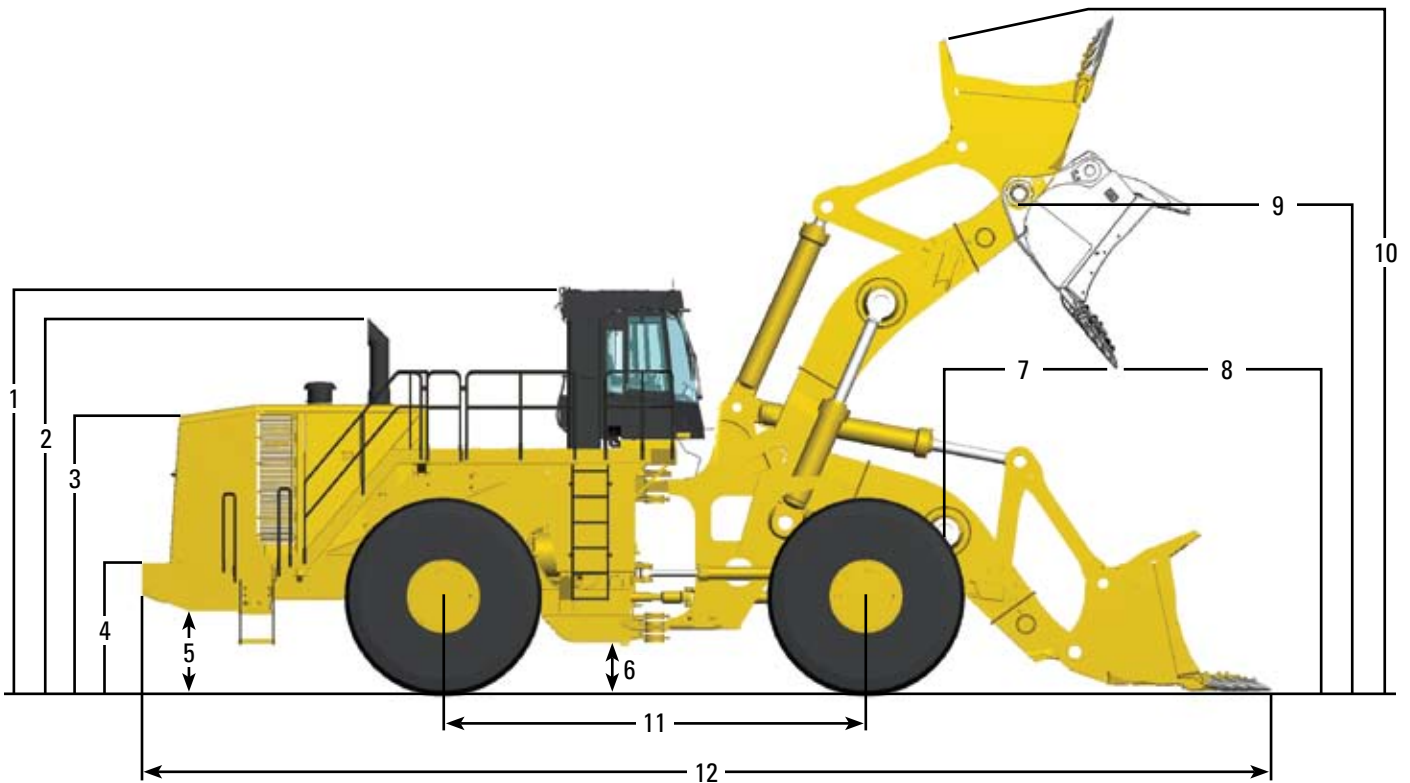
- ROPS meets SAE J1040 APR88 and ISO 3471:1994 criteria.
- Falling Objects Protective Structure (FOPS) meets SAE J231 JAN81 and ISO 3449:1992 Level II criteria.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environments.

Service Refill Capacities

Fuel Tank – Standard	1562 L	413 gal
Cooling System	290 L	77 gal
Crankcase	120 L	32 gal
Transmission	169 L	45 gal
Differentials and Final Drives – Front	360 L	95 gal
Differentials and Final Drives – Rear	345 L	91 gal
Hydraulic Tank		
Implement	326 L	86 gal
Steering / Brake	159 L	42 gal

Dimensions

All dimensions are approximate



992K* Standard Lift 45/65-45 58

(1) Height to top of ROPS	5678 mm (18' 7")
(2) Height to top of stack	5248 mm (17' 2")
(3) Height to top of hood	4043 mm (13' 4")
(4) Height to top of bumper	1830 mm (6' 0")
(5) Bumper clearance	1176 mm (3' 11")
(6) Ground clearance**	682 mm (2' 2")
(7) Reach at 50° dump (tooth tip)	2118 mm (6' 11")
(8) Clearance at 50° dump (tooth tip)	4480 mm (14' 8")
(9) Bucket pin height at full lift	6927 mm (22' 8")
(10) Maximum overall height – bucket raised	9313 mm (30' 6")
(11) Wheel base	5890 mm (19' 4")
(12) Maximum overall length	15 736 mm (52' 0")

*Dimensions are based on the 45 /65-45 58 Tire (Free State)

**Measured to lowest point in hitch area

Operation / Bucket Specifications

Bucket Type		Rock	Rock	Rock	Rock	Rock	Rock	Rock
Ground Engaging Tools		Teeth & Segments	Teeth & Segments	Teeth & Segments	Teeth & Segments	Teeth & Segments	Teeth & Segments	Teeth & Segments
Cutting Edge Type		Spade	Spade	Spade	Spade	Spade	Spade	Spade
Bucket Part No. (Group Level)		305-5790	305-5720	294-8980	307-9440	307-9430	294-9010	307-9450
Heaped capacity (§)	m ³ yd ³	10.7 (14)	11.5 (15)	12.3 (16)	10.7 (14)	11.5 (15)	10.7 (14)	10.7 (14)
Struck capacity (§)	m ³ yd ³	8.9 (11.6)	9.5 (12.4)	10.2 (13.3)	8.9 (11.6)	9.5 (12.4)	8.9 (11.6)	8.9 (11.6)
Width (§)	mm (ft/in)	4824 (15' 10")	4884 (16' 0")	4824 (15' 10")	5068 (16' 7")	4824 (15' 10")	5165 (16' 11")	5068 (16' 7")
Dump Clearance at Full Lift SAE 45° discharge (§)	mm (ft/in)	4849 (15' 11")	4785 (15' 8")	4741 (15' 7")	4849 (15' 11")	4788 (15' 8")	4935 (16' 2")	4935 (16' 2")
Tooth tip	mm (ft/in)	4607 (15' 1")	4548 (14' 11")	4495 (14' 8")	4612 (15' 1")	4545 (14' 11")	4699 (15' 5")	4699 (15' 5")
Reach at Full Lift 45° SAE discharge (§)	mm (ft/in)	2092 (6' 11")	2149 (7' 0")	2194 (7' 2")	2092 (6' 11")	2151 (7' 1")	2036 (6' 10")	2036 (6' 10")
Tooth tip	mm (ft/in)	2326 (7' 7")	2378 (7' 10")	2427 (8' 0")	2322 (7' 7")	2385 (7' 10")	2292 (7' 6")	2292 (7' 6")
Reach with lift arms horizontal and bucket level	mm (ft/in)	5114 (16' 10")	5193 (17' 0")	5265 (17' 4")	5108 (16' 10")	5200 (17' 1")	5025 (16' 6")	5025 (16' 6")
Digging depth (segment) (§)	mm (in)	196 (7.7)	201 (7.9)	201 (7.9)	196 (7.7)	198 (7.8)	175 (6.9)	175 (6.9)
Overall length – bucket level ground (§)	mm (ft/in)	15 729 (51' 7")	15818 (51' 11")	15 890 (52' 1")	15 736 (51' 7")	15 823 (51' 11")	15 632 (51' 4")	15632 (51' 4")
Overall height with bucket at full raise (§)	mm (ft/in)	9313 (30' 7")	9313 (30' 7")	9492 (31' 1")	9313 (30' 7")	9313 (30' 7")	9392 (30' 10")	9313 (30' 7")
Loader clearance circle with bucket in carry position (§)	mm (ft/in)	11 097 (36' 5")	11 121 (36' 6")	11 131 (36' 6")	11 096 (36' 5")	11 122 (36' 6")	11 085 (36' 5")	11 085 (36' 5")
Tipping load straight (§)	kg (lb)	57 096 (125,896)	56 402 (124,366)	56 093 (123,684)	55 615 (122,631)	56 662 (124,939)	53 564 (118,109)	55 194 (121,702)
Static tipping load at full 43° turn (§) †	kg (lb)	48 527 (107,003)	47 863 (105,537)	47 544 (104,835)	47 047 (103,738)	48 123 (106,110)	44 996 (99,216)	46 625 (102,809)
Static tipping load at full 40° turn (§) †	kg (lb)	49 634 (109,443)	48 965 (107,968)	48 648 (107,269)	48 153 (106 177)	49 225 (108,542)	46 102 (101,655)	47 732 (105,249)
Static tipping load at full 35° turn (§) †	kg (lb)	51 328 (113,178)	50 653 (111,691)	50 338 (110,995)	49,847 (109,912)	50 913 (112,264)	47 796 (105,390)	49 426 (108,984)
Breakout force (§) †	kg (lb)	58 466 (128,917)	55 998 (123,475)	54 249 (119,619)	57 842 (127,541)	56 147 (123,803)	59 381 (130,935)	60 218 (132,781)
Operating weight (§) †	kg (lb)	97 295 (214,535)	97 688 (215,402)	98 068 (216,240)	98 674 (217,576)	97 469 (214,919)	100 844 (222,361)	99 050 (218,405)

(§)Specifications and ratings conform to all applicable standards recommended by the Society for Automotive Engineers. SAE Standards J732C govern loader ratings and are denoted in the text by (§)

†Static tipping load and operating weight shown are based on standard machine configurations with a full fuel tank, coolant, lubricants, and operator

Standard Equipment

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

ELECTRICAL

- Alarm, back-up
- Alternator, (150-amp)
- Batteries, low maintenance
- Deutsch & Amp Seal terminal connectors
- ECM diagnostic connector
- Lighting system, halogen (front & rear)
- Lighting, access stairway
- Starter, electric (heavy duty)
- Starting and charging system (24-volt)
- Starting receptacle for emergency start

OPERATOR ENVIRONMENT

- Action alert system, three category
- Air conditioner
- Cab, sound suppressed, pressurized, rollover protective structure (ROPS/ FOPS) Radio ready for (entertainment) includes antenna, speakers, and 1 x 12V converters (24-volt, 10 amp) for use with laptop/cell phone
- Cigar lighter and ashtray
- Coat hook
- Electro-hydraulic tilt and lift control system locks
- Heater and defroster
- Horn, electric
- Instrumentation, gauges:
 - Engine coolant temperature
 - Fuel level
 - Hydraulic oil temperature
 - Tachometer
 - Transmission oil temperature
- Intermittent front wipers
- Light, dome (cab)
- Lunchbox and beverage holders
- Mirrors, rearview (externally mounted)
- Monitoring system (VIMS) w/gauges
- Seat belt, retractable, 76 mm (3") wide
- Seat, Cat Comfort (cloth) air suspension
- STIC control system
- Tinted glass
- Trainer seat with lap belt
- Transmission gear indicator
- Wet-arm wipers/washer (front, rear, and corners)

POWERTRAIN

- Axle oil coolers (front and rear)
- Brakes, full hyd, enclosed, wet multiple disc service brakes and dry parking/secondary brake
- Demand fan
- Electric fuel priming pump
- Engine Cat C32 ACERT
- Ground level engine shutdown
- Ground level transmission lockout
- Ground level starter lockout
- Implement and steering lockouts
- Precleaner, engine air intake
- Next Generation Modular Radiator (NGMR)
- Starting aid (ether) automatic
- Throttle lock
- Transmission, 533 mm (21 in) planetary, powershift with 3F/3R, electronic control

OTHER STANDARD EQUIPMENT

- Autolube
- Automatic bucket lift/tilt kickouts, electronically adjustable from cab
- Bumper service center
- Couplings, Caterpillar O-ring face seals
- Doors, service access (locking)
- Fenders, steel (front and rear)
- Grouped hydraulic pressure ports
- Guards, powertrain and crankcase
- Hitch, drawbar with pin
- Hoses, Caterpillar XT and XT-ES
- Hydraulic oil cooler
- Impeller clutch
- Implement and steering ecology drains
- Mufflers, under hood
- Oil sampling valves
- Piston pump case drain filters
- Positive Flow Control implement valve and pumps
- Sight gauges:
 - Steering oil level
 - Implement oil level
 - Transmission oil level
 - Coolant level
- Starter lockout, bumper
- Stairway, left rear access
- Steering and transmission lock lever, cab
- Steering, load sensing
- Transmission lockout, bumper
- Vandalism protection caplocks
- Venturi stack

TIRES, RIMS, & WHEELS

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

ANTIFREEZE

Premixed 50 percent concentration of extended life coolant with freeze protection to 34C (-29F)

Optional Equipment

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

ELECTRICAL

- 10A converter
- HID lights
- Rear vision camera – WAVES
- Warning beacon light

OPERATOR ENVIRONMENT

- AM/FM, CD basic radio
- Cab precleaner
- Heated seat
- Satellite radio ready
- Satellite Sirius radio
- Satellite XM radio

POWERTRAIN

- No spin rear differential

STARTING AIDS

- Engine coolant 120V heater
- Engine coolant 240V heater

MACHINE CONTROL AND GUIDANCE

- CAES attachment ready option

MISCELLANEOUS ATTACHMENTS

- Hydraulic expansion tank
- Oil renewal system
- Service center

Mandatory Equipment

Must choose from each category. Consult your Caterpillar dealer for more information.

LUBE ARRANGEMENTS

- Centromatic AutoLube arrangement
- Line, grease, standard lubrication
- Quicklube AutoLube arrangement

ELECTRONICS

- VIMS display software (select language group)

OPERATOR SEAT

- Seat, heated
- Seat, standard

MIRROR ARRANGEMENT

- Mirror, heated
- Mirror, standard

TORQUE CONVERTER

- ICTC with housing and lock-up clutch
- Standard ICTC with housing

ENGINE ARRANGEMENTS

- Engine, standard
- Engine, standard, sound suppression

FUEL ARRANGEMENTS

- Fuel arrangement, fast fill
- Fuel arrangement, fast fill, heated (fuel heater)
- Fuel arrangement, heated (fuel heater)
- Fuel arrangement, standard

COOLING ARRANGEMENTS

- High Ambient – for ambient temperatures 55°C (131°F), standard filtration
- Standard – for ambient temperatures 43°C (109°F), standard filtration

ACCESS STAIRS

- Stairway, left and right
- Stairway, left and right with roading fenders
- Standard left-hand stairway

STEERING AND FILTRATION SYSTEMS

- Secondary steering, deluxe filtration
- Secondary steering, standard filtration
- Standard steering, deluxe filtration
- Standard steering, standard filtration

OPERATION AND MAINTENANCE MANUAL

- English version
- Spanish version

TIRES

- Consult your Cat dealer for current options

PRODUCT LINK

- Required for NACD, LACD, Europe, Turkey, Australia, and New Zealand.

992K Wheel Loader

For more complete information on Cat products, dealer services, and industry solutions,
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See your Caterpillar dealer for available options.

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