# 992K Wheel Loader





Engine		
Engine Model	Cat® C32 A	CERT™
Emissions	U.S. EPA Ti	er 4 Final
Gross Power – SAE J1995	671 kW	900 hp
Net Power – SAE J1349	607 kW	814 hp
Gross Power – ISO 14396	659 kW	884 hp
Emissions	Tier 2 Equiv	/alent
Gross Power – SAE J1995	676 kW	907 hp
Net Power – SAE J1349	607 kW	814 hp
Gross Power – ISO 14396	659 kW	884 hp

Buckets		
Bucket Capacities	10.7-12.3 m <sup>3</sup>	14-16 yd <sup>3</sup>
Operating Specifications		
Rated Payload – Standard (face material)	21.7 tonnes	24 tons
Rated Payload – High Lift (face material)	19.1 tonnes	21 tons
Operating Weight – Standard	99 831 kg	220,089 lb
Operating Weight – High Lift	100 628 kg	221,847 lb

# **Efficient** and **Reliable**

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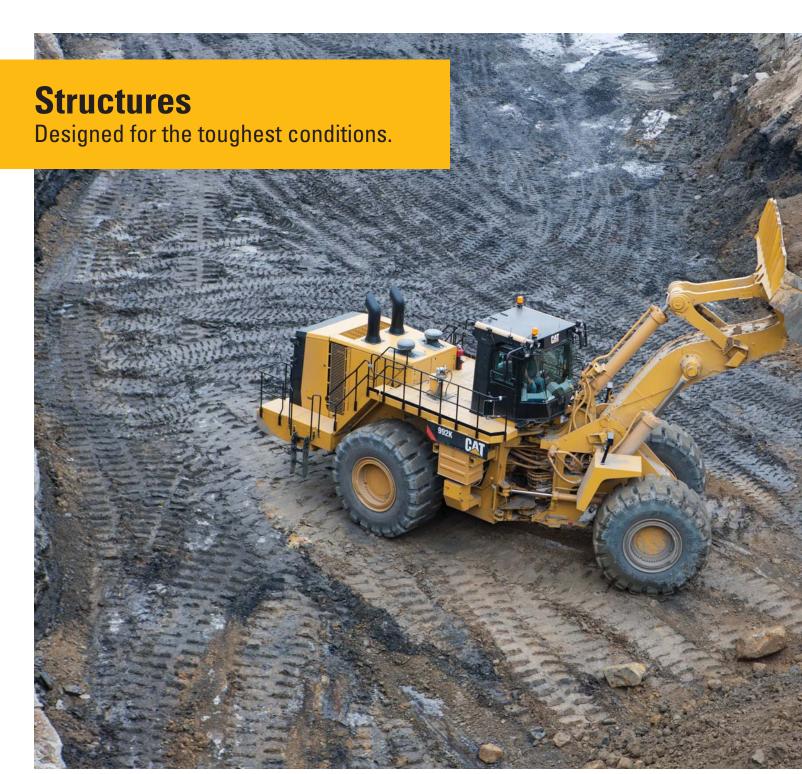




Caterpillar first introduced the 992 in 1968. This large wheel loader has been a global leader ever since, building a reputation as a face loader that's both safe to operate, productive and durable. With the introduction of the K Series, we've enhanced the operator's experience and the safety of those working on and around the machine.

With both standard and high lift configurations, this machine will pass match with fleets of 775, 777, and 785 trucks.

If your operations revolve around the 992 as a loading tool, you'll find everything that's important to your business in the 992K; safety, productivity, cost control and comfort for your people.





# **Lift Arm**

Your key to maximum uptime and productivity is our field-proven lift arm.

- Excellent visibility to the bucket edges and work area.
- Enhanced strength in key pin areas through the use of one piece castings.
- Stress relieved lift arm increases durability.



# **Robust Structures**

Your bottom line is improved by highly durable structures that achieve multiple life cycles and withstand the toughest loading conditions.

- Full box-section rear frame resists torsional shock and twisting forces to maximize life of mounted components.
- Frames utilize castings in key areas to maximize frame durability and optimize efficiency.
- Rear axle mounting to frame optimized to better disperse loads for increased structural integrity.



# **Front Linkage**

To ensure long life and reliability, sleeve bearing pins in the linkage are more predictable in their wear and limit daily greasing.

# **Power Train**

Move material more efficiently with improved power and control.

# Impeller Clutch Torque Converter (ICTC) and Rimpull Control System (RCS)

Lower your cost per ton utilizing advanced ICTC and RCS for modulated rimpull.

- Reduce tire slippage and wear by modulating rimpull from 100 to 25 percent while depressing left pedal. After 25 percent rimpull is achieved the left pedal applies the brake.
- Reduce the potential for wheel slippage without reducing hydraulic efficiency with RCS.
- Improve fuel efficiency in certain applications with lock-up clutch torque converter providing direct drive.



# **Economy Mode**



Enabling maximum productivity and efficiency, all day every day.

The 992K systems work hard to save you fuel through advanced technologies. Utilizing On Demand Throttle, operators maintain normal operation with the left pedal and implements while the 992K manages the engine speed.

- Provides similar control and feel to our traditional throttle lock feature.
- Efficiency of manual throttle and the ergonomics of throttle lock.

# Steering and Transmission Integrated Control System (STIC™)

Experience maximum responsiveness and control with STIC that combines directional selection, gear selection and steering into a single lever.

- Simple side-to-side motion turns machine right or left, minimizing operator movements.
- Easy to operate finger controlled gear selection.
- Smoother, faster cycles and less operator fatigue through the use of low effort integrated controls.

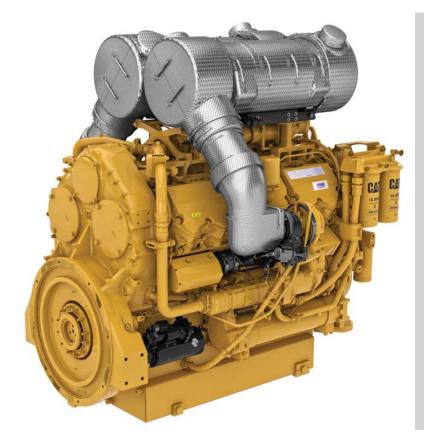
# **Cat Planetary Powershift Transmission**

Building your success begins with a best-in-class transmission designed specifically for your application.

- Consistent, smooth shifting and efficiency through integrated electronic controls.
- Long life and reliability through heat treated gears and metallurgy.
- Three forward and three reverse speeds to match your application.







# **Cat C32 ACERT Engine**

The 992K retains the durability and reliability of the proven Cat C32 diesel with ACERT Technology.

- Like all Cat machines, this engine has been completely integrated into all machine systems resulting in power curves, fuel maps and ratings that are unique to this machine and applications.
- The solid foundation of this engine starts from our legendary foundries delivering the highest quality engine block.
- The mechanically actuated, electronically controlled unit injection (MEUI<sup>TM</sup>) ensures that fuel is metered out in optimal quantities for both power and efficiency.

# Hydraulics Productivity enabling you to move more and make more.



# **Positive Flow Control Hydraulics**

Increase efficiency through our Positive Flow Control (PFC) Hydraulic System. PFC has concurrent pump and valve control. By optimizing pump control, hydraulic oil flow is proportionate to implement lever movement.

- Fast, productive cycles enabled by four electronically controlled, fully variable piston pumps.
- Increased bucket feel and control.
- Consistent performance and efficiency with lower system heat.

# **Electro Hydraulic Controls**

Increase operator productivity with these implement features.

- Operate comfortably through electronically controlled hydraulic cylinder stops.
- Handle easy-to-use soft detent controls.
- Conveniently set automatic implement kickouts from inside the cab.

# **Steering System**

Confident loader operation starts with precise machine control enabled by the 992K's load sensing hydraulic steering system.

- Efficient variable displacement piston pumps.
- Achieve precise positioning for easy loading in tight areas.
- Enhance operator comfort with integrated steering and transmission control functions.

# **Filtration System**

Benefit from extended performance and reliability of your hydraulic system with our advanced filtration system.

- Lift/tilt case drain filters.
- Lift/tilt high pressure screens.
- Steering case drain filters.
- Steering high pressure screens.
- Hydraulic case drain filters.
- Power train filters for transmission, torque converter, and pump drives.
- Front and rear brake oil screens.

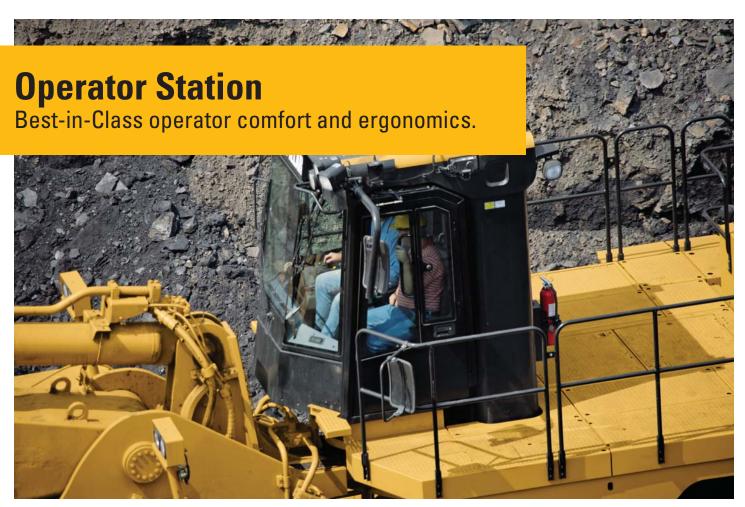
# **Cooling System**

- A standard demand fan to improve efficiency and cooling performance.
- Optional high ambient package for hot climate conditions.













# **Environment**

Your operator's productivity is enhanced with our clean, comfortable cab environment.

- Experience reduced vibrations from viscous cab mounts and air seat suspension.
- Maintain desired cab temperature with automatic temperature controls.
- Pressurized cab with pressure indicator.
- Low operator sound levels.
- Available heated and ventilated seats featuring leather covered seat bolster and headrest.



Your operators can work more efficiently and stay comfortable with our customer-inspired cab features.

# **Deluxe Operator Seat**

Enhance comfort and reduce operator fatigue.

- Available heated and ventilated seat featuring leather seat bolster surfaces.
- High back design and extra thick, contoured cushions.
- Air suspension system.
- Easy-to-reach seat levers and controls for six way adjustments.
- Seat-mounted implement pod and STIC steer that moves with the seat.
- 76 mm (3 in) wide retractable seat belt.
- Fold up STIC steer/armrest.

# **Trainer Seat**

Train other operators in comfort with our standard training seat.

- 76 mm (3 in) wide, retractable seat belt.
- Fold-down design with molded drink tray and storage.



# **Technology Solutions**

Greater productivity through integrated electronic systems.

Integrated electronics provide flexible levels of information to both the site and the operator. This integration creates a smart machine and more informed operator, maximizing the productivity of both.

# **Information Display**

We have worked hard to help our customers and operators perform at their best through our newly upgraded touch screen information display.

- Intuitive operation and easy navigation with our enhanced user interface.
- Decrease service time by keeping operators informed about machine systems.
- Quick on-the-go weighing with the Cat Production Measurement (CPM).

# Cat Product Link™

Take the guesswork out of asset management with Product Link remote monitoring.

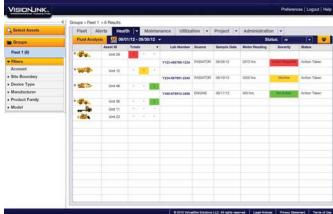
- Remote access to information through the easy-to-use VisionLink® interface.
- Maximize uptime by staying informed on machine systems and diagnostic codes.
- Track machine with utilization, fuel usage, and payload summaries.
- Stay up to date on machine location, service meter hours, and reporting status.

# Vital Information Management System (VIMS™)

Connect directly to the machine for access to a wide range of sensor information and enhanced machine data.

- Create productivity reports with payload and work cycle segmentation.
- Identify operator training needs through productivity data.
- Detailed data logging of machine parameters and diagnostic codes.
- Track machine sensor information with trend analysis and histograms to monitor machine health.









# Cat® MineStar System

Work more productively.



Cat MineStar System is the industry's broadest suite of integrated mine operations and mobile equipment management technologies, configurable to suite your operation's needs. Its capability sets – Fleet, Terrain, Detect, Health and Command – contain a range of technologies that let you manage everything from fleet assignment and condition monitoring to remote and autonomous control. The 992K can take advantage of many of these advanced technologies, some of which are standard out of the factory.

# **Fleet**

Fleet provides comprehensive, real-time machine tracking, assignment and productivity management, giving you a comprehensive overview of all operations from anywhere in the world.

# **Terrain for Loading**

Terrain with your 992K enables high-precision management of loading operations through the use of guidance technology. It increases 992K's productivity and provides you real-time feedback for improved efficiency.

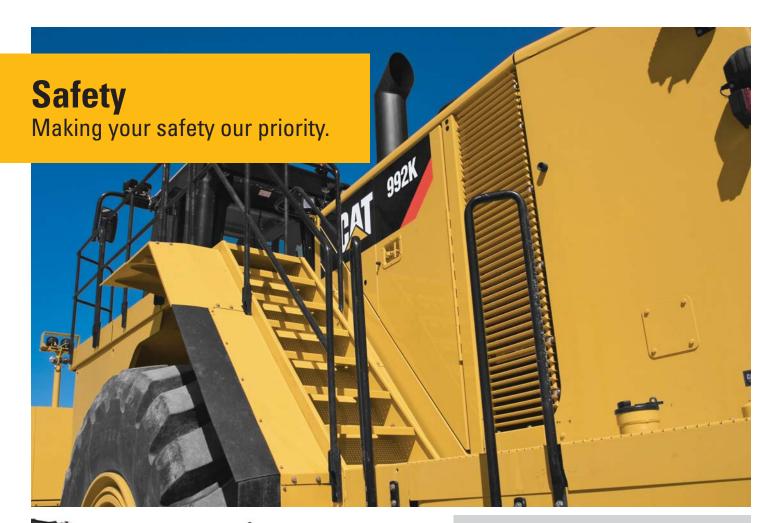


Detect helps increase operator awareness, enhancing safety at your operation. It includes a range of capabilities designed to assist the operator with areas of limited visibility around fixed and mobile equipment.

# Health

Health delivers critical event-based machine condition and operating data for your entire fleet. It includes comprehensive equipment health and asset monitoring capabilities, with a wide range of diagnostic, analytic and reporting tools.







# **Powered Access System**

The Cat powered access system allows easier access to the primary stairs by improving access and egress to and from the rear platform.

- Safe, ergonomic access system.
- All operators have adequate space when using the wide stairway.
- Operators maintain three-point contact when using full handrails on each side.
- Raise and lower stairs from cab level or ground.

We are constantly improving our products in an effort to provide a safe work environment for the operator and those who work on your job site.

### **Machine Access**

- Wider stairs with 45 degree angles provide easy access for operators getting on and off the 992K.
- Wide walkways with non-skid surfaces and integrated lock out/tag out points are designed into the service areas.
- Windshield cleaning platforms provide safe and convenient access for the operator.
- Maintain three points of contact at all times through ground level or platform accessible service areas.
- Emergency egress ladder provides a third exit, if needed.

# **Visibility**

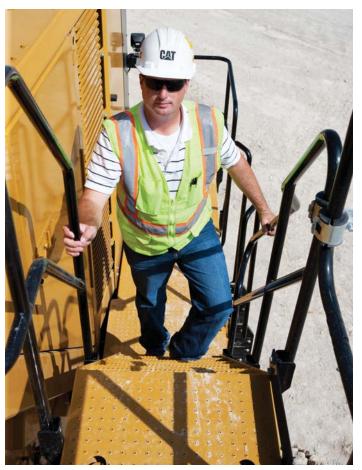
- Cat Detect, which includes Cat Vision plus an optional object detection radar system, enhances operator awareness around the machine.
- LED warning lights, programmable for site-specific signaling.
- A mirror system improves operator line of sight to the side and rear of the machine. Heated option also available.
- Pull down window shade.

# **Operator Environment**

- Viscous cab mounts and seat air suspension reduce vibrations from the machine to the operator.
- · Low interior sound levels.
- Standard 76 mm (3 in) seat belt with minder.
- Optional 4 point harness with minder.
- Operator training seat with standard 76 mm (3 in) seat belt facilitates safe new operator training.

# Fire Suppression Ready System

- Provides required provisions to mount a fire suppression system.
- Allows the customer to install a fire suppression system quickly without compromising other components.

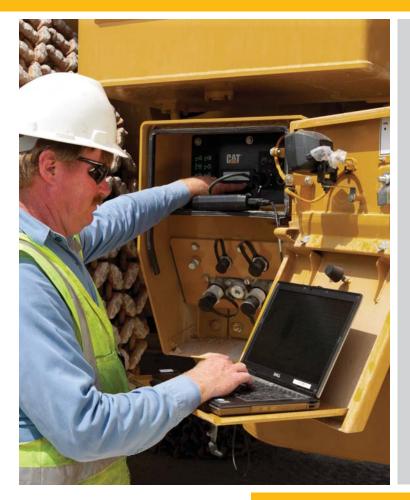






# **Serviceability**

Enabling high uptime by reducing your service time.



# We help you succeed by ensuring your 992K has design features to increase uptime.

- The standard, comprehensive filtration system maintains clean fluids to enable high component reliability.
- Safe and convenient service with ground level or platform access and grouped service points.
- Swing-out doors on both sides of the engine compartment provide easy access to important daily service checks.
- Ecology drains for ease of service and prevention of spills.
- Centralized remote pressure taps.
- Reduce downtime with VIMS system notifications so your operators and technicians can resolve any problems before failure.
- Powered fresh air filter extends cab filter life.

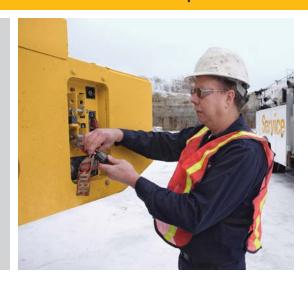
# **Customer Support**

Your Cat dealers know how to keep your mining machines productive.

# **Superior Cat Dealer Support**

A valued partner, your Cat dealer is available whenever you need them.

- Preventive maintenance programs and guaranteed maintenance contracts.
- · Best-in-class parts availability.
- Improve your efficiency with operator training.
- Genuine Cat Remanufactured parts.





# **Protecting the Environment**

Environmental responsibility is designed and built into our 992K's features.

- Increased fuel efficiency to minimize your carbon footprint.
- Engine Idle Shutdown can help you save fuel by avoiding unnecessary idling.
- To assist with maximizing machine life, Caterpillar provides a number of sustainable options such as our Reman and Certified Rebuild
  programs. In these programs, reused or remanufactured components can deliver cost savings of 40 to 70 percent, which lowers
  operating cost while benefiting the environment.
- Caterpillar offers retrofit packages to bring new features to older machines, maximizing your resource. When you go through the Cat Certified Rebuild program, these retrofit kits are part of the rebuild process.
- Fluids are better controlled through use of Cat anti-drain filter housings and component ecology drains.

# **Buckets and Ground Engaging Tools**

It's all about performance.

# **Increase Productivity and Fuel Efficiency**

Cat buckets are designed for superior performance in a variety of materials. They are engineered to dig into piles quickly and load efficiently. Optimized fill factors enable you to get the job done and move on to other tasks. Fast load cycles and fewer trips mean less wear and tear on your machine and keep you working.

The buckets below are part of the 992K bucket line. They come in different capacities and widths to fit your loading and carrying needs.



# 1 - Rock Buckets

Designed for use in bank or face loading of limestone and other unprocessed rock. Application also includes truck and hopper loading for a wide range of quarry materials. GET includes spade nose cutting edge with adapters, half arrow segments, floor liner, bottom wear plates, wings, and side bar protectors.

# 2 – Heavy Duty Rock Buckets

Designed for use in applications like face loading tightly compacted pit materials or handling materials of moderate abrasion and high impacts. GET are similar to the rock bucket with the addition of half radius liners and bolt-on bottom edge wear plates. Base edge end protection, ski plates, additional side wear plates, and an extra set of side bar protectors are also included.

### Iron Ore Buckets

Designed for use in extremely aggressive applications like face loading. Built for high abrasion and moderate impact. GET are similar to heavy duty rock buckets with the addition of flush mount adapter covers, edge segment top covers and side heel shrouds. Iron ore buckets are smaller in bucket capacity to accommodate for higher material density applications.

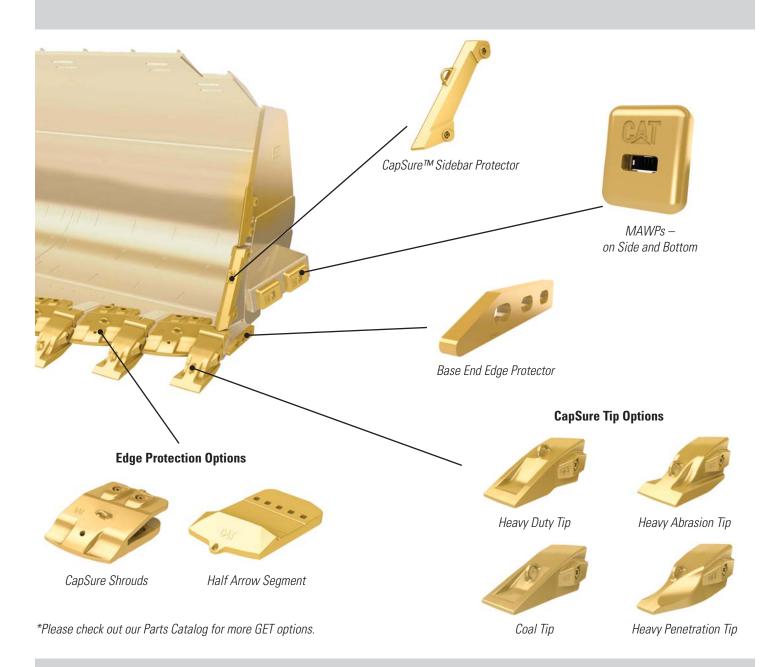
# 3 – Coal Buckets

Designed for use in applications with light density and non-abrasive materials. GET includes a straight base edge with a bolt-on cutting edge system.



# **Cat Advansys™ Ground Engaging Tools**

Protect expensive components. Reduce your operating costs. Get the most out of your machine's performance. Choose from a variety of performance-built Advansys GET like these to meet your application requirements.



# **CapSure™ Retention Technology**

Simplify GET component replacement with hammerless CapSure retention for fast, easy and safe installation. CapSure tips, shrouds and sidebar protectors are easily locked and unlocked with a 180 degree turn of a  $\frac{3}{4}$  inch ratchet.

# **System Match Efficiency**

Efficient loading/hauling system starts with a perfect match.



Cat Truck Pass Match	775	777	785
Standard Lift	3	4	
High Lift		5	7

# **Application Match**

The standard 992K is sized to load the 68 tonnes (70 ton) 775 in three passes, and the 91 tonnes (100 ton) 777 in four passes. The 992K high light configuration loads the 777 in five passes, and the 145 tonnes (160 ton) 785 in seven passes.

# **Efficient Combination**

For full truck payloads with minimum loading time, an efficient loading/hauling system starts with a perfect match. Cat wheel loaders are matched with Cat mining trucks to maximize volume of material moved at the lowest operating cost per ton.

# **Bucket Selection**

Selection of the right bucket depends on penetration requirements, material densities, abrasion, and the loading target. Bucket sizes are matched to truck bed capacities and material densities for optimum loading efficiency and greater productivity.

Engine		
Engine Model	Cat C32 A	CERT
Emissions	Tier 4 Fina	1
Rated Speed	1,750 rpm	
Gross Power – SAE J1995	671 kW	900 hp
Gross Power – ISO 14396	659 kW	884 hp
Net Power – SAE J1995	607 kW	814 hp
Peak Torque @ 1,200 rpm – SAE J1995	4,765 N·m	
Emissions	Tier 2 Equ	ivalent
Rated Speed	1,750 rpm	
Gross Power – SAE J1995	676 kW	907 hp
Gross Power – ISO 14396	659 kW	884 hp
Net Power – SAE J1995	607 kW	814 hp
Peak Torque @ 1,200 rpm – SAE J1995	4,796 N·m	
Bore	145 mm	5.7 in
Stroke	162 mm	6.4 in
Displacement	32.1 L	1963.5 in <sup>3</sup>
Torque Rise	30%	

# **Tier 4 Final**

- These ratings apply at 1,750 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.

# **Tier 2 Equivalent**

- These ratings apply at 1,750 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.

Operating Specifications		
Operating Weight	99 831 kg	220,089 lb
Rated Payload		
Standard (face material)	21.7 tonnes	24 tons
High Lift (face material)	19.1 tonnes	21 tons
Bucket Capacity Range	10.7-12.3 m	<sup>3</sup> 14-16 yd <sup>3</sup>
Transmission		
Transmission Type	Cat Planetary	Power Shift
Forward 1	6.9 km/h	4.3 mph
Forward 2	11.9 km/h	7.4 mph
Forward 3	20.3 km/h	12.6 mph
Direct Drive – Forward 1	Disabled	
Direct Drive – Forward 2	12.9 km/h	8.0 mph
Direct Drive – Forward 3	22.8 km/h	14.2 mph
Reverse 1	7.6 km/h	4.7 mph
Reverse 2	13.1 km/h	8.1 mph
Reverse 3	22.2 km/h	13.8 mph
Direct Drive – Reverse 1	7.9 km/h	4.9 mph
Direct Drive – Reverse 2	14.2 km/h	8.8 mph
Direct Drive – Reverse 3	24.8 km/h	15.4 mph

Hydraulic System – Lift/Tilt		
Lift/Tilt System – Circuit	Positive Flor	w Control
Lift/Tilt System – Pumps	Variable Dis Piston	placement
Maximum Flow at 1,850 rpm	960 L/min	254 gal/min
Relief Valve Setting – Lift/Tilt	31 000 kPa	4,500 psi
Lift Cylinder – Bore	279.4 mm	11 in
Lift Cylinder – Stroke	1148 mm	45.2 in
Tilt Cylinder – Bore	266.7 mm	10.5 in
Tilt Cylinder – Stroke	2055 mm	80.9 in

Rack Back	4.4 second	ls
Raise	9.4 second	ls
Dump	1.8 second	ls
Lower Float Down	3.7 seconds	
Total Hydraulic Cycle Time	19.3 seconds	
Service Refill Capacities		
Fuel Tank	1562 L	413 gal
Cooling Systems	290 L	77 gal
Engine 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 System – Implement	326 L	86 gal
Hydraulic System – Steering	159 L	42 gal
Air Conditioner Refrigerant	2.72 kg	6.00 lb
Air Conditioner Oil	0.268 L	0.071 gal

Axles	
Front	Fixed
Rear	Oscillating
Oscillation Angle	10° ±, 8° ± with Stops

Brakes	
Brakes	Meet ISO 3450:2011

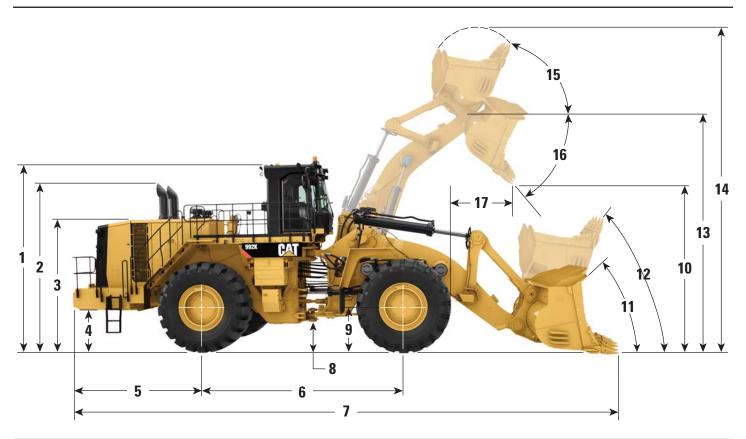
# **Sound Performance**

- The operator sound pressure level is 70 dB(A), measured according to the test procedures and conditions specified in ISO 6396:2008 for the standard machine configuration. The measurement was conducted at 70 percent of the maximum engine cooling fan speed.
- Hearing protection may be needed when the machine is operated with a cab that is not properly maintained or when the doors or windows are open for extended periods or in a noisy environment.
- The machine sound power level is 116 dB(A), measured according to the test procedures and conditions specified in ISO 6395:2008 for the standard machine configuration. The measurement was conducted at 70 percent of the maximum engine cooling fan speed.
- The machine sound power level is 113 dB(A), measured according to the test procedures and conditions specified in ISO 6395:2008 for the sound suppressed machine configuration. The measurement was conducted at 70 percent of the maximum engine cooling fan speed.

Hydraulic System – Steering		
Steering System – Circuit	Pilot, Load S	ensing
Steering System – Pump	Piston, Variable Displacement	
Maximum Flow @ 1,350 rpm	360 L/min	95 gal/min
Steering Cut Off Pressure	31 000 kPa	4,500 psi
Total Steering Angle	86°	
Steering Cycle Time (low idle)	6.4 seconds	
Steering Cycle Time (high idle)	4.4 seconds	

# **Dimensions**

All dimensions are approximate.



	Standar	d Lift	High I	Lift
1 Ground to Top of ROPS	5678 mm	18'7"	5678 mm	18'7"
<b>2</b> Ground to Top of Exhaust Stacks	5248 mm	17'2"	5248 mm	17'2"
<b>3</b> Ground to Top of Hood	4043 mm	13'4"	4043 mm	13'4"
4 Ground to Bumper Clearance	1176 mm	3'11"	1176 mm	3'11"
5 Rear Axle Center Line to Bumper	4195 mm	13'8"	4195 mm	13'8"
<b>6</b> Wheel Base	5890 mm	19'4"	5890 mm	19'4"
7 Maximum Overall Length	15 736 mm	52'0"	16 095 mm	52'8"
8 Ground to Lower Hitch Clearance	682 mm	2'2"	682 mm	2'2"
<b>9</b> Ground to Center of Axles	1352 mm	4'4"	1352 mm	4'4"
10 Clearance at 50 degrees (Standard) 45 degrees (High Lift) Dump (tooth tip)	4480 mm	14'8"	4574 mm	15'1"
11 Rack Back Angle at Ground Level	43.4 degrees		42.8 degrees	
12 Rack Back Angle at Carry	52.7 degrees		52.5 degrees	
13 B-Pin Height at Maximum Lift	6927 mm	22'8"	7544 mm	24'7"
14 Maximum Overall Height – bucket raised	9313 mm	30'6"	10 109 mm	33'1"
15 Rack Back Angle at Maximum Lift	65 degrees		65 deg	grees
<b>16</b> Dump Angle at Maximum Lift	50 deg	grees	50 deg	grees
17 Reach at Maximum Lift	2118 mm	6'11"	2092 mm	6'9"
Tread Width	3302 mm	10'8"	3302 mm	10'8"

# **Bucket Capacity/Material Density: Face**

	Bucket Capacity		GET	Standard Lift N	Naterial Density	<b>High Lift Material Density</b>		
<b>Bucket Type</b>	m³	yd³	No. of Tips	kg/m³	lb/yd³	kg/m³	lb/yd³	
Rock	10.7	14.0	8	2035	3,430	1780	3,000	
	11.5	15.0	8	1893	3,191	1657	2,792	
	11.5	15.0	8	1893	3,191	1657	2,792	
	12.2	16.0	8	1785	3,008	1562	2,632	
Coal	19.1	25.0	BOCE	1100	1,850	950	1,600	
Iron Ore	9.0	11.8	8	2419	4,078	2117	3,568	

Custom buckets are available upon request. Please work with your dealer for more information.

# **Operating Specifications – Standard Lift (Tier 4 Final)**

For machines equipped with 45/58-R45 L-5 58 ply tires (SLR: 1308 mm/4'3").

Bucket Type				Coal					
Ground Engaging Tools				Te	eth & Segm	ent			Segment
Cutting Edge Type					Spade				Straight
Bucket Part No. (Group Level)		490-1840	484-6620	490-1860	490-1870	490-1850	490-1890	490-1880	294-9020
Bucket Load at Rated Capacity	kg	21 772	21 772	21 772	21 772	21 772	21 772	21 772	_
	1b	48,000	48,000	48,000	48,000	48,000	48,000	48,000	
Rated Capacity	$m^3$	10.7	11.5	12.3	10.7	11.5	10.7	10.7	_
	$yd^3$	14.0	15.0	16.0	14.0	15.0	14.0	14.0	_
Struck Capacity – ISO	m <sup>3</sup>	8.9	9.5	10.2	8.9	9.5	8.9	8.9	
	$yd^3$	11.6	12.4	13.3	11.6	12.4	11.6	11.6	_
Heaped Capacity – ISO	$m^3$	10.7	11.5	12.3	10.7	11.5	10.7	10.7	_
	$yd^3$	14.0	15.0	16.0	14.0	15.0	14.0	14.0	_
Bucket Width – Overall	mm	4824	4884	4824	4884	4824	4900	4900	6090
	ft	15'10"	16'0"	15'10"	16'0"	15'10"	16'1"	16'1"	20'0"
Clearance at 50° Dump (Edge)	mm	4742	4673	4625	4742	4675	4832	4832	4772
	ft	15'7"	15'4"	15'2"	15'7"	15'4"	15'10"	15'10"	15'8"
Clearance at 50° Dump (Tooth Tip)	mm	4480	4417	4360	4486	4413	4574	4574	4772
	ft	14'8"	14'6"	14'4"	14'9"	14'6"	15'0"	15'0"	15'8"
Reach at 50° Dump (Edge)	mm	1906	1957	1998	1906	1960	1858	1858	1925
	ft	6'3"	6'5"	6'7"	6'3"	6'5"	6'1"	6'1"	6'4"
Reach at 50° Dump (Tooth Tip)	mm	2118	2165	2209	2114	2171	2092	2092	1925
	ft	6'11"	7'1"	7'3"	6'11"	7'1"	6'10"	6'10"	6'4"
Clearance at 45° Dump (Edge)	mm	4849	4785	4741	4849	4788	4935	4935	4881
	ft	15'11"	15'8"	15'7"	15'11"	15'9"	16'2"	16'2"	16'0"
Clearance at 45° Dump (Tooth Tip)	mm	4607	4548	4495	4612	4545	4699	4699	4881
	ft	15'1"	14'11"	14'9"	15'2"	14'11"	15'5"	15'5"	16'0"
Reach at 45° Dump (Edge)	mm	2092	2149	2194	2092	2151	2036	2036	2109
	ft	6'10"	7'1"	7'2"	6'10"	7'1"	6'8"	6'8"	6'11"
Reach at 45° Dump (Tooth Tip)	mm	2326	2378	2427	2322	2385	2292	2292	2109
	ft	7'8"	7'10"	8'0"	7'7"	7'10"	7'6"	7'6"	6'11"
Bucket Pin at Maximum Lift	mm	6927	6927	6927	6927	6927	6927	6927	6927
	ft	22'9"	22'9"	22'9"	22'9"	22'9"	22'9"	22'9"	22'9"
Horizontal Arm and Level Bucket Reach	mm	5114	5193	5265	5108	5200	5025	5025	4767
	ft	16'9"	17'0"	17'3"	16'9"	17'1"	16'6"	16'6"	15'8"
Digging Depth (Segment)	mm	196	201	201	196	198	175	175	162
	in	8"	8"	8"	8"	8"	7"	7"	6"
Overall Length – Bucket Level Ground	mm	15 736	15 818	15 890	15 729	15 823	15 632	15 632	15 366
(Tooth)	ft	51'8"	51'11"	52'2"	51'7"	51'11"	51'3"	51'3"	50'5"
Overall Height	mm	9313	9313	9492	9313	9313	9392	9313	9489
	ft	30'7"	30'7"	31'2"	30'7"	30'7"	30'10"	30'7"	31'2"
Turning Radius – Corner SAE Carry	mm	11 097	11 121	11 131	11 096	11 122	11 085	11 085	11 742
(Tooth)	ft	36'5"	36'6"	36'6"	36'5"	36'6"	36'4"	36'4"	38'6"
Clearance at 45° Dump and 2.13 m (7 ft)	mm	2130	2130	2130	2130	2130	2130	2130	2130
Height (Tooth)	ft	7'0"	7'0"	7'0"	7'0"	7'0"	7'0"	7'0"	7'0"
Reach at 45° Dump and 2.13 m (7 ft)	mm	3790	3828	3863	3787	3834	3777	3777	3631
Height (Tooth)	ft	12'5"	12'7"	12'8"	12'5"	12'7"	12'5"	12'5"	11'11"
Rack Back Angle at SAE Carry	degree	52.7	52.8	52.8	52.7	52.7	52.5	52.5	52.4
Full Dump at Maximum Lift	degree	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
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(chart continued on next page)

# **Operating Specifications – Standard Lift (Tier 4 Final)** *(continued)*

For machines equipped with 45/58-R45 L-5 58 ply tires (SLR: 1308 mm/4'3").

Bucket Type	Rock								
Ground Engaging Tools				Ted	eth & Segm	ent			Segment
Cutting Edge Type					Spade				Straight
Bucket Part No. (Group Level)		490-1840	484-6620	490-1860	490-1870	490-1850	490-1890	490-1880	294-9020
Bucket Load at Rated Capacity	kg	21 772	21 772	21 772	21 772	21 772	21 772	21 772	_
	1b	48,000	48,000	48,000	48,000	48,000	48,000	48,000	
Rated Capacity	m³	10.7	11.5	12.3	10.7	11.5	10.7	10.7	_
	$yd^3$	14.0	15.0	16.0	14.0	15.0	14.0	14.0	_
Struck Capacity – ISO	$m^3$	8.9	9.5	10.2	8.9	9.5	8.9	8.9	_
	yd³	11.6	12.4	13.3	11.6	12.4	11.6	11.6	
Heaped Capacity – ISO	$m^3$	10.7	11.5	12.3	10.7	11.5	10.7	10.7	_
	yd³	14.0	15.0	16.0	14.0	15.0	14.0	14.0	
Tipping Load at Operating Weight	kg	62 567	61 854	61 551	61 086	62 114	59 035	60 665	60 809
- Straight	lb	137,936	136,365	135,697	134,672	136,939	130,150	133,743	134,061
Tipping Load at Operating Weight	kg	52 861	52 182	51 868	51 380	52 442	49 330	50 959	51 098
– Articulated 43°	1b	116,539	115,041	114,349	113,275	115,614	108,753	112,346	112,651
Tipping Load at Operating Weight	kg	54 115	53 431	53 118	52 634	53 691	50 583	52 213	52 352
– Articulated 40°	lb	119,302	117,795	117,106	116,038	118,368	111,516	115,109	115,416
Tipping Load at Operating Weight	kg	56 033	55 343	55 033	54 552	55 603	52 502	54 131	54 272
– Articulated 35°	lb	123,532	122,010	121,326	120,268	122,583	115,746	119,339	119,649
Tipping Load at Operating Weight	kg	49 848	48 613	47 699	48 803	48 832	48 250	49 630	48 416
- Bucket Level Ground	lb	109,897	107,174	105,159	107,593	107,656	106,373	109,416	106,740
Tipping Load with Squash at	kg	60 483	59 774	59 434	59 012	60 033	56 960	58 593	58 602
Operating Weight – Straight	lb	133,343	131,780	131,030	130,099	132,350	125,574	129,175	129,195
Tipping Load with Squash at Operating Weight – Articulated 43°	kg lb	49 053 108,144	48 383 106,667	48 021 105,868	47 587 104,912	48 641 107,234	45 534	47 169	47 126 103,895
				· ·			100,385	103,990	
Tipping Load with Squash at Operating Weight – Articulated 40°	kg lb	50 451 111,226	49 777 109,739	49 417 108,946	48 984 107,992	50 034 110,306	46 931 103,465	48 566 107,070	48 530 106,989
Tipping Load with Squash at		52 625	51 943	51 588	51 157	52 201	49 104	50 738	50 714
Operating Weight – Articulated 35°	kg lb	116,018	114,515	113,733	112,782	115,083	108,255	111,859	111,804
Tipping Load with Squash at Operating	kg	47 978	46 805	45 930	46 921	47 021	46 256	47 652	46 491
Weight – Bucket Level Ground	lb	105,774	103,188	101,257	103,443	103,665	101,977	105,054	102,495
Lift Capacity – Bucket Level Ground	kg	52 038	51 178	50 489	50 839	51 391	49 521	51 094	50 219
Ent Capacity Bucket Level Glound	lb	114,724	112,828	111,310	112,080	113,297	109,176	112,643	110,715
Breakout Force – SAE Rated	kgf	58 459	55 991	54 243	57 835	56 140	59 374	60 210	57 297
District Still Items	lbf	128,879	123,439		127,504	123,767		132,741	126,318
Operating Weight	kg	99 438	99 831	100 211	100 817	99 612	102 987	101 193	101 595
	lb	219,224	220,091	220,928	222,264	219,608	227,049	223,093	223,980
Weight Distribution at SAE Carry	kg	54 994	55 729	56 359	57 333	55 335	60 822	57 971	58 322
– Front	lb	121,241	122,862	124,251	126,398	121,993	134,091	127,804	128,578
Weight Distribution at SAE Carry	kg	44 444	44 102	43 852	43 484	44 277	42 165	43 223	43 273
– Rear	1b	97,983	97,229	96,678	95,867	97,615	92,958	95,289	95,402
Loaded Machine Weight	kg	118 489	118 882	119 262	119 868	118 663	122 038	120 244	101 595
	1b	261,225	262,091	262,929	264,265	261,608	269,049	265,094	223,980
Weight Distribution at SAE Carry	kg	86 587	87 383	88 029	88 929	86 987	92 413	89 556	58 322
- Front	1b	190,892	192,647	194,070	196,056	191,773	203,736	197,438	128,578
Weight Distribution at SAE Carry	kg	31 902	31 499	31 234	30 939	31 677	29 626	30 688	43 273
– Rear	1b	70,333	69,444	68,859	68,209	69,835	65,313	67,656	95,402
Shipping Weight	kg	95 511	95 905	96 284	97 678	95 686	99 849	99 849	
	1b	210,566	211,434	212,270	215,343	95,686	99,849	220,129	_

# **Operating Specifications – Standard Lift (Tier 2 Equivalent)**

For machines equipped with 45/58-R45 L-5 58 ply tires (SLR: 1308 mm/4'3").

Bucket Type		Rock								
Ground Engaging Tools				Te	eth & Segm	ent			Segment	
Cutting Edge Type					Spade				Straight	
Bucket Part No. (Group Level)		490-1840	484-6620	490-1860	490-1870	490-1850	490-1890	490-1880	294-9020	
Bucket Load at Rated Capacity	kg	21 772	21 772	21 772	21 772	21 772	21 772	21 772	_	
	1b	48,000	48,000	48,000	48,000	48,000	48,000	48,000		
Rated Capacity	$m^3$	10.7	11.5	12.3	10.7	11.5	10.7	10.7	_	
	$yd^3$	14.0	15.0	16.0	14.0	15.0	14.0	14.0	_	
Struck Capacity – ISO	m <sup>3</sup>	8.9	9.5	10.2	8.9	9.5	8.9	8.9		
	$yd^3$	11.6	12.4	13.3	11.6	12.4	11.6	11.6	_	
Heaped Capacity – ISO	$m^3$	10.7	11.5	12.3	10.7	11.5	10.7	10.7		
	$yd^3$	14.0	15.0	16.0	14.0	15.0	14.0	14.0	_	
Bucket Width – Overall	mm	4824	4884	4824	4884	4824	4900	4900	6090	
	ft	15'1"	16'0"	15'10"	16'0"	15'10"	16'1"	16'1"	20'0"	
Clearance at 50° Dump (Edge)	mm	4742	4673	4625	4742	4675	4832	4832	4772	
	ft	15'7"	15'4"	15'2"	15'7"	15'4"	15'10"	15'10"	15'8"	
Clearance at 50° Dump (Tooth Tip)	mm	4480	4417	4360	4486	4413	4574	4574	4772	
	ft	14'8"	14'6"	14'4"	14'9"	14'6"	15'0"	15'0"	15'8"	
Reach at 50° Dump (Edge)	mm	1906	1957	1998	1906	1960	1858	1858	1925	
	ft	6'3"	6'5"	6'7"	6'3"	6'5"	6'1"	6'1"	6'4"	
Reach at 50° Dump (Tooth Tip)	mm	2118	2165	2209	2114	2171	2092	2092	1925	
	ft	6'11"	7'1"	7'3"	6'11"	7'1"	6'10"	6'10"	6'4"	
Clearance at 45° Dump (Edge)	mm	4849	4785	4741	4849	4788	4935	4935	4881	
	ft	15'11"	15'8"	15'7"	15'11"	15'9"	16'2"	16'2"	16'0"	
Clearance at 45° Dump (Tooth Tip)	mm	4607	4548	4495	4612	4545	4699	4699	4881	
	ft	15'1"	14'11"	14'9"	15'2"	14'11"	15'5"	15'5"	16'0"	
Reach at 45° Dump (Edge)	mm	2092	2149	2194	2092	2151	2036	2036	2109	
	ft	6'10"	7'1"	7'2"	6'10"	7'1"	6'8"	6'8"	6'11"	
Reach at 45° Dump (Tooth Tip)	mm	2326	2378	2427	2322	2385	2292	2292	2109	
	ft	7'8"	7'10"	8'0"	7'7"	7'10"	7'6"	7'6"	6'11"	
Bucket Pin at Maximum Lift	mm	6927	6927	6927	6927	6927	6927	6927	6927	
	ft	22'9"	22'9"	22'9"	22'9"	22'9"	22'9"	22'9"	22'9"	
Horizontal Arm and Level Bucket Reach	mm	5114	5193	5265	5108	5200	5025	5025	4767	
	ft	16'9"	17'0"	17'3"	16'9"	17'1"	16'6"	16'6"	15'8"	
Digging Depth (Segment)	mm	196	201	201	196	198	175	175	162	
	in	8"	8"	8"	8"	8"	7"	7"	6"	
Overall Length – Bucket Level Ground	mm	15 736	15 818	15 890	15 729	15 823	15 632	15 632	15 366	
(Tooth)	ft	51'8"	51'11"	52'2"	51'7"	51'11"	51'3"	51'3"	50'5"	
Overall Height	mm	9313	9313	9492	9313	9313	9392	9313	9489	
	ft	30'7"	30'7"	31'2"	30'7"	30'7"	30'10"	30'7"	31'2"	
Turning Radius – Corner SAE Carry	mm	11 097	11 121	11 131	11 096	11 122	11 085	11 085	11 742	
(Tooth)	ft	36'5"	36'6"	36'6"	36'5"	36'6"	36'4"	36'4"	38'6"	
Clearance at 45° Dump and 2.13 m (7 ft)	mm	2130	2130	2130	2130	2130	2130	2130	2130	
Height (Tooth)	ft	7'0"	7'0"	7'0"	7'0"	7'0"	7'0"	7'0"	7'0"	
Reach at 45° Dump and 2.13 m (7 ft)	mm	3790	3828	3863	3787	3834	3777	3777	3631	
Height (Tooth)	ft	12'5"	12'7"	12'8"	12'5"	12'7"	12'5"	12'5"	11'11"	
Rack Back Angle at SAE Carry	degree	52.7	52.8	52.8	52.7	52.7	52.5	52.5	52.4	
Full Dump at Maximum Lift	degree	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0	
		•	•	•	•		•	•	•	

(chart continued on next page)

# **Operating Specifications – Standard Lift (Tier 2 Equivalent)** *(continued)*

For machines equipped with 45/58-R45 L-5 58 ply tires (SLR: 1308 mm/4'3").

Bucket Type		Rock								
Ground Engaging Tools				Tec	eth & Segm	ent			Segment	
Cutting Edge Type					Spade				Straight	
Bucket Part No. (Group Level)		490-1840	484-6620	490-1860	490-1870	490-1850	490-1890	490-1880	294-9020	
Bucket Load at Rated Capacity	kg	21 772	21 772	21 772	21 772	21 772	21 772	21 772	_	
	1b	48,000	48,000	48,000	48,000	48,000	48,000	48,000		
Rated Capacity	m <sup>3</sup>	10.7	11.5	12.3	10.7	11.5	10.7	10.7		
•	$yd^3$	14.0	15.0	16.0	14.0	15.0	14.0	14.0		
Struck Capacity – ISO	$m^3$	8.9	9.5	10.2	8.9	9.5	8.9	8.9	_	
	$yd^3$	11.6	12.4	13.3	11.6	12.4	11.6	11.6		
Heaped Capacity – ISO	$m^3$	10.7	11.5	12.3	10.7	11.5	10.7	10.7		
	$yd^3$	14.0	15.0	16.0	14.0	15.0	14.0	14.0	_	
Tipping Load at Operating Weight	kg	62 261	61 550	61 246	60 780	61 810	58 730	60 359	60 503	
- Straight	1b	137,263	135,694	135,024	133,998	136,267	129,477	133,070	133,387	
Tipping Load at Operating Weight	kg	52 531	51 852	51 538	51 050	52 112	48 999	50 629	50 767	
– Articulated 43°	1b	115,811	114,315	113,622	112,546	114,888	108,025	111,618	111,923	
Tipping Load at Operating Weight	kg	53 787	53 105	52 792	52 307	53 365	50 256	51 885	52 024	
– Articulated 40°	lb	118,581	117,076	116,386	115,316	117,649	110,795	114,388	114,694	
Tipping Load at Operating Weight	kg	55 711	55 022	54 711	54 230	55 282	52 179	53 809	53 949	
– Articulated 35°	1b	122,822	121,302	120,617	119,557	121,875	115,035	118,629	118,937	
Tipping Load at Operating Weight	kg	49 607	48 376	47 465	48 562	48 595	48 003	49 384	48 174	
- Bucket Level Ground	1b	109,365	106,651	104,642	107,061	107,133	105,829	108,872	106,205	
Tipping Load with Squash at	kg	60 183	59 475	59 135	58 712	59 733	56 659	58 292	58 302	
Operating Weight – Straight	1b	132,681	131,120	130,370	129,437	131,690	124,912	128,513	128,534	
Tipping Load with Squash at	kg	48 716	48 048	47 685	47 250	48 305	45 197	46 832	46 790	
Operating Weight – Articulated 43°	lb	107,401	105,927	105,128	104,169	106,494	99,642	103,247	103,154	
Tipping Load with Squash at	kg	50 118	49 445	49 085	48 651	49 702	46 598	48 233	48 197	
Operating Weight – Articulated 40°	lb	110,492	109,007	108,214	107,258	109,575	102,731	106,336	106,257	
Tipping Load with Squash at	kg	52 298	51 618	51 263	50 830	51 875	48 777	50 412	50 387	
Operating Weight – Articulated 35°	1b	115,297	113,797	113,015	112,061	114,365	107,534	111,139	111,085	
Tipping Load with Squash at Operating	kg	47 744	46 575	45 702	46 687	46 791	46 017	47 413	46 256	
Weight – Bucket Level Ground	lb	105,258	102,680	100,755	102,927	103,157	101,451	104,527	101,977	
Lift Capacity – Bucket Level Ground	kg	52 038	51 178	50 489	50 839	51 391	49 521	51 094	50 219	
D 1 (F CAED ( 1	lb	114,724	112,828	111,310	112,080	113,297	109,176	112,643	110,715	
Breakout Force – SAE Rated	kgf lbf	58 459	55 991	54 243	57 835	56 140	59 374 130,896	60 210	57 297	
On and Water		128,879	123,439	119,584	127,504	123,767	-	132,741	126,318	
Operating Weight	kg lb	98 882 217,999	99 275 218,865	99 655 219,703	100 261 221,039	99 056 218,382	102 431 225,823	100 637 221,868	101 039 222,754	
Weight Distribution at SAE Carry		<b>.</b>	55 387	56 017	56 991	54 993	60 481	57 629	57 980	
- Front	kg lb	54 652 120,487	122,107	123,496	125,643	121,239	133,337	127,050	127,824	
Weight Distribution at SAE Carry		44 231	43 889	43 638	43 271	44 064	41 951	43 009	43 059	
- Rear	kg lb	97,512	96,758	96,206	95,395	97,143	92,486	94,818	94,930	
Loaded Machine Weight		117 933	118 326	118 706	119 312	118 107	121 482	119 688	101 039	
Loaded Machine Weight	kg lb	259,999	260,865	261,703	263,039	260,382	267,823	263,868	222,754	
Weight Distribution at SAE Carry	kg	86 247	87 043	87 689	88 590	86 647	92 073	89 217	57 980	
- Front	lb	190,142	191,898	193,321	195,307	191,024	202,987	196,689	127,824	
Weight Distribution at SAE Carry	kg	31 686	31 283	31 018	30 723	31 461	29 409	30 472	43 059	
- Rear	lb	69,856	68,967	68,382	67,732	69,359	64,836	67,179	94,930	
Shipping Weight	kg	95 511	95 905	96 284	97 678	95 686	99 849	99 849		
	lb	210,566	211,434	212,270	215,343	210,952	220,129	220,129	_	
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# **Operating Specifications – High Lift (Tier 4 Final)**

For machines equipped with 45/58-R45 L-5 46 ply tires (SLR: 1308 mm/4'3").

Bucket Type					Rock				Coal
Ground Engaging Tools				Te	eth & Segm	ent			Segment
Cutting Edge Type					Spade				Straight
Bucket Part No. (Group Level)		490-1840	484-6620	490-1860	490-1870	490-1850	490-1890	490-1880	294-9020
Bucket Load at Rated Capacity	kg	19 051	19 051	19 051	19 051	19 051	19 051	19 051	_
	lb	42,000	42,000	42,000	42,000	42,000	42,000	42,000	
Rated Capacity	$m^3$ $yd^3$	10.7 14.0	11.5 15.0	12.3 16.0	10.7 14.0	11.5 15.0	10.7 14.0	10.7 14.0	
Struck Capacity – ISO	$\frac{\text{ya}}{\text{m}^3}$	8.9	9.5	10.2	8.9	9.5	8.9	8.9	
Struck Capacity 150	yd <sup>3</sup>	11.6	12.4	13.3	11.6	12.4	11.6	11.6	_
Heaped Capacity – ISO	m <sup>3</sup>	10.7	11.5	12.3	10.7	11.5	10.7	10.7	
	yd³	14.0	15.0	16.0	14.0	15.0	14.0	14.0	
Bucket Width – Overall	mm	4824	4884	4824	4884	4824	4900	4900	6090
	ft	15'10"	16'0"	15'10"	16'0"	15'10"	16'1"	16'1"	20'0"
Clearance at 50° Dump (Edge)	mm	5359	5290	5242	5359	5293	5450	5450	5389
	ft	17'7"	17'4"	17'2"	17'7"	17'4"	17'11"	17'11"	17'8"
Clearance at 50° Dump (Tooth Tip)	mm	5097	5034	4977	5103	5030	5192	5192	5389
	ft	16'9"	16'6"	16'4"	16'9"	16'6"	17'0"	17'0"	17'8"
Reach at 50° Dump (Edge)	mm	1773	1824	1865	1773	1827	1725	1725	1792
	ft	5'10"	6'0"	6'1"	5'10"	6'0"	5'8"	5'8"	5'11"
Reach at 50° Dump (Tooth Tip)	mm	1985	2032	2076	1982	2038	1959	1959	1792
	ft	6'6"	6'8"	6'10"	6'6"	6'8"	6'5"	6'5"	5'11"
Clearance at 45° Dump (Edge)	mm	5466	5402	5358	5466	5405	5553	5553	5498
	ft	17'11"	17'9"	17'7"	17'11"	17'9"	18'3"	18'3"	18'0"
Clearance at 45° Dump (Tooth Tip)	mm	5224	5166	5112	5229	5162	5316	5316	5498
	ft	17'2"	16'11"	16'9"	17'2"	16'11"	17'5"	17'5"	18'0"
Reach at 45° Dump (Edge)	mm	1960	2016	2061	1960	2019	1903	1903	1976
	ft	6'5"	6'7"	6'9"	6'5"	6'7"	6'3"	6'3"	6'6"
Reach at 45° Dump (Tooth Tip)	mm	2193	2246	2294	2189	2252	2159	2159	1976
	ft	7'2"	7'4"	7'6"	7'2"	7'5"	7'1"	7'1"	6'6"
Bucket Pin at Maximum Lift	mm	7544	7544	7544	7544	7544	7544	7544	7544
	ft	24'9"	24'9"	24'9"	24'9"	24'9"	24'9"	24'9"	24'9"
Horizontal Arm and Level Bucket Reach	mm	5504	5583	5655	5498	5590	5415	5415	5157
	ft	18'1"	18'4"	18'7"	18'0"	18'4"	17'9"	17'9"	16'11"
Digging Depth (Segment)	mm	176	181	181	176	178	155	155	142
	in	7''	7"	7"	7"	7"	6"	6"	6"
Overall Length – Bucket Level Ground	mm	16 197	16 279	16 351	16 191	16 284	16 095	16 095	15 829
(Tooth)	ft	53'2"	53'5"	53'8"	53'1"	53'5"	52'10"	52'10"	51'11"
Overall Height	mm	9930	9930	10 109	9930	9930	10 009	9930	10 106
	ft	32'7"	32'7"	33'2"	32'7"	32'7"	32'10"	32'7"	33'2"
Turning Radius – Corner SAE Carry	mm	11 326	11 352	11 363	11 324	11 352	11 313	11 313	11 962
(Tooth)	ft	37'2"	37'3"	37'3"	37'2"	37'3"	37'1"	37'1"	39'3"
Clearance at 45° Dump and 2.13 m (7 ft) Height (Tooth)	mm	2130 7'0"	2130	2130	2130	2130 7'0"	2130	2130	2130 7'0"
	ft		7'0"	7'0"	7'0"		7'0"	7'0"	
Reach at 45° Dump and 2.13 m (7 ft) Height (Tooth)	mm	4190 13'9"	4230 13'11"	4265 14'0"	4188 13'9"	4235 13'11"	4176 13'8"	4176 13'8"	4027 13'3"
	ft	<b>!</b>	-						
Rack Back Angle at SAE Carry	degree	52.5	52.5	52.5	52.5	52.5	52.3	52.3	52.1
Full Dump at Maximum Lift	degree	-45.0	-45.0	-45.0	-45.0	-45.0	-45.0	-45.0	-45.0

(chart continued on next page)

# **Operating Specifications – High Lift (Tier 4 Final)** *(continued)*

For machines equipped with 45/58-R45 L-5 46 ply tires (SLR: 1308 mm/4'3").

Bucket Type	Rock								
Ground Engaging Tools				Ted	eth & Segm	ent			Segment
Cutting Edge Type					Spade				Straight
Bucket Part No. (Group Level)		490-1840	484-6620	490-1860	490-1870	490-1850	490-1890	490-1880	294-9020
Bucket Load at Rated Capacity	kg	19 051	19 051	19 051	19 051	19 051	19 051	19 051	
	lb	42,000	42,000	42,000	42,000	42,000	42,000	42,000	
Rated Capacity	$m^3$	10.7	11.5	12.3	10.7	11.5	10.7	10.7	_
	yd³	14.0	15.0	16.0	14.0	15.0	14.0	14.0	
Struck Capacity – ISO	$m^3$ $yd^3$	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	<u> </u>
Heaped Capacity – ISO	m <sup>3</sup>	10.7	11.5	12.3	10.7	11.5	10.7	10.7	
Heaped Capacity – 150	yd³	14.0	15.0	16.0	14.0	15.0	14.0	14.0	
Tipping Load at Operating Weight	kg	58 333	57 670	57 380	56 856	57 927	54 794	56 438	56 623
- Straight	lb	128,603	127,140	126,501	125,346	127,706	120,799	124,425	124,833
Tipping Load at Operating Weight	kg	49 006	48 370	48 068	47 529	48 627	45 466	47 111	47 279
- Articulated 43°	lb	108,039	106,638	105,971	104,782	107,204	100,236	103,861	104,232
Tipping Load at Operating Weight	kg	50 210	49 571	49 270	48 733	49 828	46 671	48 315	48 485
– Articulated 40°	lb	110,695	109,285	108,622	107,438	109,851	102,891	106,517	106,892
Tipping Load at Operating Weight	kg	52 054	51 409	51 111	50 577	51 666	48 515	50 159	50 333
– Articulated 35°	lb	114,760	113,338	112,681	111,503	113,905	106,956	110,582	110,965
Tipping Load at Operating Weight	kg	46 130	45 024	44 190	45 058	45 238	44 277	45 692	44 592
- Bucket Level Ground	1b	101,700	99,260	97,422	99,336	99,733	97,615	100,733	98,308
Tipping Load with Squash at	kg	56 533	55 871	55 550	55 064	56 127	53 001	54 648	54 717
Operating Weight – Straight	lb	124,635	123,175	122,467	121,395	123,739	116,847	120,478	120,630
Tipping Load with Squash at	kg	45 573	44 943	44 597	44 109	45 198	42 045	43 694	43 697
Operating Weight – Articulated 43°	1b	100,472	99,083	98,319	97,244	99,644	92,694	96,329	96,335
Tipping Load with Squash at	kg	46 913	46 279	45 936	45 449	46 534	43 385	45 033	45 044
Operating Weight – Articulated 40°	lb	103,426	102,028	101,271	100,197	102,590	95,647	99,281	99,305
Tipping Load with Squash at Operating Weight – Articulated 35°	kg lb	48 997 108,019	48 357	48 019	47 531 104,788	48 612	45 467	47 115	47 140 103,925
Tipping Load with Squash at Operating		44 589	106,609 43 528	105,863 42 723	43 507	107,171 43 741	100,237 42 644	103,871 44 071	43 011
Weight – Bucket Level Ground	kg lb	98,302	95,964	94,189	95,918	96,433	94,014	97,159	94,822
Lift Capacity – Bucket Level Ground	kg	47 125	46 348	45 716	45 909	46 561	44 460	46 053	45 263
Ent Capacity Bucket Level Ground	lb	103,893	102,180	100,786	101,213	102,649	98,017	101,530	99,787
Breakout Force – SAE Rated	kgf	57 975	55 521	53 785	57 351	55 673	58 884	59 721	56 836
	lbf	127,813	122,403		126,438	122,737	129,817		125,302
Operating Weight	kg	100 628	101 021	101 401	102 007	100 802	104 177	102 383	102 785
	1b	221,846	222,713	223,551	224,887	222,230	229,671	225,716	226,602
Weight Distribution at SAE Carry	kg	55 908	56 675	57 337	58 360	56 263	62 032	59 032	59 420
- Front	lb	123,256	124,947	126,406	128,662	124,039	136,758	130,143	130,998
Weight Distribution at SAE Carry	kg	44 720	44 346	44 064	43 647	44 539	42 145	43 351	43 365
– Rear	lb	98,591	97,766	97,145	96,224	98,191	92,913	95,572	95,604
Loaded Machine Weight	kg	119 679	120 072	120 452	121 058	119 853	123 228	121 434	102 785
	1b	263,847	264,713	265,551	266,887	264,230	271,671	267,716	226,602
Weight Distribution at SAE Carry	kg	89 082	89 911	90 589	91 539	89 497	95 209	92 202	59 420
- Front	lb	196,393	198,219	199,714	201,809	197,306	209,899	203,272	130,998
Weight Distribution at SAE Carry	kg	30 597	30 161	29 863	29 519	30 356	28 019	29 231	43 365
- Rear	lb	67,454	66,494	65,837	65,078	66,924	61,772	64,444	95,604
Shipping Weight	kg lb	_	_	_	_	_	_	_	_
	10	I —	_	_	—	_	_	—	-

# **Operating Specifications – High Lift (Tier 2 Equivalent)**

For machines equipped with 45/58-R45 L-5 46 ply tires (SLR: 1308 mm/4'3").

Bucket Type				Coal					
Ground Engaging Tools				Te	eth & Segm	ent			Segment
Cutting Edge Type					Spade				Straight
Bucket Part No. (Group Level)		490-1840	484-6620	490-1860	490-1870	490-1850	490-1890	490-1880	294-9020
Bucket Load at Rated Capacity	kg	19 051	19 051	19 051	19 051	19 051	19 051	19 051	
	1b	42,000	42,000	42,000	42,000	42,000	42,000	42,000	
Rated Capacity	$m^3$	10.7	11.5	12.3	10.7	11.5	10.7	10.7	_
	yd³	14.0	15.0	16.0	14.0	15.0	14.0	14.0	
Struck Capacity – ISO	$m^3$	8.9	9.5	10.2	8.9	9.5	8.9	8.9	_
H 10 '- 100	yd³	11.6	12.4	13.3	11.6	12.4	11.6	11.6	
Heaped Capacity – ISO	$m^3$ $yd^3$	10.7 14.0	11.5 15.0	12.3 16.0	10.7 14.0	11.5 15.0	10.7 14.0	10.7 14.0	_
Bucket Width – Overall		4824	4884	4824	4884	4824	4900	4900	6090
Bucket Width – Overan	mm ft	15'10"	16'0"	15'10"	16'0"	15'10"	16'1"	16'1"	20'0"
Clearance at 50° Dump (Edge)	mm	5359	5290	5242	5359	5293	5450	5450	5389
Cicarance at 50 Bamp (Eage)	ft	17'7"	17'4"	17'2"	17'7"	17'4"	17'11"	17'11"	17'8"
Clearance at 50° Dump (Tooth Tip)	mm	5097	5034	4977	5103	5030	5192	5192	5389
	ft	16'9"	16'6"	16'4"	16'9"	16'6"	17'0"	17'0"	17'8"
Reach at 50° Dump (Edge)	mm	1773	1824	1865	1773	1827	1725	1725	1792
1 ( 2 /	ft	5'10"	6'0"	6'1"	5'10"	6'0"	5'8"	5'8"	5'11"
Reach at 50° Dump (Tooth Tip)	mm	1985	2032	2076	1982	2038	1959	1959	1792
	ft	6'6"	6'8"	6'10"	6'6"	6'8"	6'5"	6'5"	5'11"
Clearance at 45° Dump (Edge)	mm	5466	5402	5358	5466	5405	5553	5553	5498
	ft	17'11"	17'9"	17'7"	17'11"	17'9"	18'3"	18'3"	18'0"
Clearance at 45° Dump (Tooth Tip)	mm	5224	5166	5112	5229	5162	5316	5316	5498
	ft	17'2"	16'11"	16'9"	17'2"	16'11"	17'5"	17'5"	18'0"
Reach at 45° Dump (Edge)	mm	1960	2016	2061	1960	2019	1903	1903	1976
	ft	6'5"	6'7"	6'9"	6'5"	6'7"	6'3"	6'3"	6'6"
Reach at 45° Dump (Tooth Tip)	mm	2193	2246	2294	2189	2252	2159	2159	1976
	ft	7'2"	7'4"	7'6"	7'2"	7'5"	7'1"	7'1"	6'6"
Bucket Pin at Maximum Lift	mm	7544	7544	7544	7544	7544	7544	7544	7544
	ft	24'9"	24'9"	24'9"	24'9"	24'9"	24'9"	24'9"	24'9"
Horizontal Arm and Level Bucket Reach	mm	5504	5583	5655	5498	5590	5415	5415	5157
7: 1 7 1 (0	ft	18'1"	18'4"	18'7"	18'0"	18'4"	17'9"	17'9"	16'11"
Digging Depth (Segment)	mm	176 7"	181 7"	181 7"	176 7"	178	155 6"	155 6"	142
Overell Leasth Ducket Level Count	in	<u> </u>				7"		<del> </del>	15 829
Overall Length – Bucket Level Ground (Tooth)	mm ft	16 197 53'2"	16 279 53'5"	16 351 53'8"	16 191 53'1"	16 284 53'5"	16 095 52'10"	16 095 52'10"	51'11"
Overall Height	mm	9930	9930	10 109	9930	9930	10 009	9930	10 106
Overall Height	ft	32'7"	32'7"	33'2"	32'7"	32'7"	32'10"	32'7"	33'2"
Turning Radius – Corner SAE Carry	mm	11 326	11 352	11 363	11 324	11 352	11 313	11 313	11 962
(Tooth)	ft	37'2"	37'3"	37'3"	37'2"	37'3"	37'1"	37'1"	39'3"
Clearance at 45° Dump and 2.13 m (7 ft)	mm	2130	2130	2130	2130	2130	2130	2130	2130
Height (Tooth)	ft	7'0"	7'0"	7'0"	7'0"	7'0"	7'0"	7'0"	7'0"
Reach at 45° Dump and 2.13 m (7 ft)	mm	4190	4230	4265	4188	4235	4176	4176	4027
Height (Tooth)	ft	13'9"	13'11"	14'0"	13'9"	13'11"	13'8"	13'8"	13'3"
Rack Back Angle at SAE Carry	degree	52.5	52.5	52.5	52.5	52.5	52.3	52.3	52.1
Full Dump at Maximum Lift	degree	-45.0	-45.0	-45.0	-45.0	-45.0	-45.0	-45.0	-45.0
	2	1	I	I	I	I	I	I	ı

(chart continued on next page)

# **Operating Specifications – High Lift (Tier 2 Equivalent)** *(continued)*

For machines equipped with 45/58-R45 L-5 46 ply tires (SLR: 1308 mm/4'3").

Bucket Type		Rock								
Ground Engaging Tools				Te	eth & Segm	ent			Segment	
Cutting Edge Type					Spade				Straight	
Bucket Part No. (Group Level)		490-1840	484-6620	490-1860	490-1870	490-1850	490-1890	490-1880	294-9020	
Bucket Load at Rated Capacity	kg lb	19 051 42,000								
Rated Capacity	$m^3$ $yd^3$	10.7 14.0	11.5 15.0	12.3 16.0	10.7 14.0	11.5 15.0	10.7 14.0	10.7 14.0		
Struck Capacity – ISO	$m^3$ $yd^3$	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		
Heaped Capacity – ISO	$m^3$ $yd^3$	10.7 14.0	11.5 15.0	12.3 16.0	10.7 14.0	11.5 15.0	10.7 14.0	10.7 14.0	_	
Tipping Load at Operating Weight  – Straight	kg	58 052	57 389	57 099	56 574	57 646	54 512	56 157	56 341	
	lb	127,982	125,690	125,882	124,725	127,087	120,179	123,804	124,211	
Tipping Load at Operating Weight  – Articulated 43°	kg	48 701	48 067	47 764	47 224	48 323	45 162	46 806	46 974	
	lb	107,368	105,272	105,301	104,111	106,535	99,565	103,190	103,559	
Tipping Load at Operating Weight  – Articulated 40°	kg	49 909	49 270	48 969	48 432	49 527	46 369	48 014	48 183	
	lb	110,030	107,909	107,959	106,773	109,189	102,227	105,852	106,226	
Tipping Load at Operating Weight  – Articulated 35°	kg	51 757	51 113	50 815	50 280	51 370	48 218	49 862	50 035	
	lb	114,105	111,945	112,027	110,848	113,252	106,302	109,927	110,309	
Tipping Load at Operating Weight  – Bucket Level Ground	kg	45 909	44 805	43 974	44 837	45 020	44 051	45 466	44 369	
	lb	101,212	98,130	96,946	98,848	99,252	97,116	100,235	97,817	
Tipping Load with Squash at	kg	56 256	55 594	55 273	54 786	55 850	52 723	54 370	54 440	
Operating Weight – Straight	lb	124,022	121,760	121,857	120,783	123,128	116,234	119,865	120,019	
Tipping Load with Squash at	kg	45 261	44 632	44 286	43 798	44 887	41 734	43 382	43 385	
Operating Weight – Articulated 43°	lb	99,784	97,751	97,634	96,557	98,959	92,007	95,642	95,649	
Tipping Load with Squash at	kg	46 605	45 972	45 629	45 140	46 227	43 076	44 725	44 736	
Operating Weight – Articulated 40°	lb	102,746	100,685	100,594	99,517	101,913	94,967	98,602	98,626	
Tipping Load with Squash at	kg	48 694	48 055	47 717	47 228	48 310	45 165	46 813	46 837	
Operating Weight – Articulated 35°	lb	107,352	105,248	105,198	104,121	106,506	99,571	103,205	103,259	
Tipping Load with Squash at Operating	kg	44 373	43 315	42 512	43 291	43 528	42 423	43 850	42 793	
Weight – Bucket Level Ground	lb	97,825	94,865	93,723	95,440	95,962	93,528	96,673	94,343	
Lift Capacity – Bucket Level Ground	kg	47 125	46 348	45 716	45 909	46 561	44 460	46 053	45 263	
	lb	103,893	101,508	100,786	101,213	102,649	98,017	101,530	99,787	
Breakout Force – SAE Rated	kgf	57 975	55 521	53 785	57 351	55 673	58 884	59 721	56 836	
	lbf	127,813	121,599	118,576	126,438	122,737	129,817	131,662	125,302	
Operating Weight	kg	100 072	100 465	100 845	101 451	100 246	103 621	101 827	102 229	
	lb	220,621	220,032	222,325	223,661	221,004	228,445	224,490	225,376	
Weight Distribution at SAE Carry  – Front	kg	55 566	56 333	56 995	58 018	55 921	61 690	58 690	59 078	
	lb	122,501	123,376	125,652	127,908	123,285	136,004	129,389	130,244	
Weight Distribution at SAE Carry  – Rear	kg	44 506	44 132	43 850	43 433	44 325	41 930	43 137	43 151	
	lb	98,120	96,656	96,673	95,753	97,719	92,441	95,100	95,132	
Loaded Machine Weight	kg	119 123	119 516	119 896	120 502	119 297	122 672	120 878	102 229	
	lb	262,621	261,756	264,325	265,661	263,005	270,445	266,490	225,376	
Weight Distribution at SAE Carry  – Front	kg	88 743	89 571	90 249	91 199	89 157	94 869	91 863	59 078	
	lb	195,644	196,172	198,965	201,060	196,557	209,151	202,523	130,244	
Weight Distribution at SAE Carry  – Rear	kg	30 380	29 945	29 647	29 303	30 140	27 803	29 015	43 151	
	1b	66,977	65,584	65,360	64,601	66,447	61,294	63,967	95,132	
Shipping Weight	kg lb		_	_			_	_		

# **Standard Equipment**

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

### **POWER TRAIN**

- Air-to-Air After Cooler (ATAAC)
- Axle oil coolers (front and rear)
- Brakes, full hydraulic, enclosed, wet multiple disc service brakes and dry parking/secondary brake
- Case drain filters
- · Demand fan
- Driveline, electro-hydraulic parking brake
- Electric fuel priming pump
- Engine Cat C32 ACERT
- Ground level engine shutdown
- · Ground level fast fill fuel
- · Ground level transmission lockout
- · Ground level starter lockout
- Precleaner, engine air intake
- Radiator, Aluminum Modular (AMR)
- Starting aid, ether, automatic
- · Throttle lock
- Transmission, 533 mm (21 in) planetary powershift with 3F/3R with electronic control

### **ELECTRICAL**

- · Alarm, back-up
- Alternator, 150-amp
- Batteries, low maintenance
- Converter, 10-amp, 24V to 12V
- Deutsch and amp seal terminal connectors
- Ground level electrical disconnect
- Ground level starting receptacle for emergency start
- Light, warning strobe
- Lights, front and rear, access stairway, turn signals/hazard lights
- Starter, electric (heavy duty)
- Starting and charging system, 24V, ECM diagnostic connector

### **OPERATOR ENVIRONMENT**

- Air conditioner and heater with automatic temperature control
- Cab, sound suppressed, pressurized, rollover protective structure (ROPS/FOPS), radio ready for (entertainment) includes antenna, speakers, and a 12V converter (24-volt, 10-amp) for use with laptop/cell phone use
- Camera, rear vision
- Cigar lighter
- · Coat hook
- Electro-hydraulic tilt and lift controls
- · Horn, electric
- Implement and steering lockouts
- Light, dome (cab)
- Lunchbox and beverage holders
- Mirrors, rearview (externally mounted)
- Seat, Cat Comfort with air suspension
- Seat belt, 2-point, 76 mm (3 in), minder
- · Steering and transmission lock lever
- STIC control system
- Tie-offs on ROPS
- · Tinted glass
- Trainer seat with 76 mm (3 in) wide lap belt
- Transmission gear indicator
- VIMS (Vital Info Management System):
- -3G with graphical information display
- -Cycle timer
- -External data port
- -Integral Cat Production Measurement (Cat PM)
- Wet-arm wipers/washer (front, rear, and corners), intermittent front wipers

# **SAFETY AND SECURITY**

• Fire suppression ready

# OTHER STANDARD EQUIPMENT

- Automatic lubrication system
- Bumper service center
- Couplings, Cat O-ring face seals
- Doors, service access (locking)
- · Economy mode
- Emergency platform egress
- Fenders, steel (front and rear)
- · Fuel, fast fill
- Grouped hydraulic pressure ports
- Guards, power train and crankcase
- Hitch, drawbar with pin
- Hoses, Cat XTTM and XT-ES
- · Hydraulic oil cooler
- Impeller clutch
- Implement and steering ecology drains
- · Mufflers, under hood
- · Oil sampling valves
- Piston pump case drain filters
- Service center with ground level electrical and fluids service center
- · Sight gauges:
- -Steering oil level
- -Implement oil level
- Transmission oil level
- -Coolant level
- · Stairway, left and right rear access
- Starter lockout, bumper
- Steering, load sensing
- Tie-offs on ROPS
- Toe kicks
- Transmission lockout, bumper
- Vandalism protection caplocks
- Venturi stacks (2)

# 992K Optional Equipment

# **Optional Equipment**

With approximate changes in operating weights. Optional equipment may vary. Consult your Cat dealer for specifics.

# **OPERATOR ENVIRONMENT**

- AM/FM/CD/MP3 radio
- AM/FM/CD/MP3 radio with Bluetooth and satellite ready
- Sun screen

# **STARTING AIDS**

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

# **MACHINE CONTROL AND GUIDANCE**

• Cat Terrain ready

# **MISCELLANEOUS ATTACHMENTS**

- Arctic antifreeze for protection to –50° C (–58° F)
- Diagnostic lines
- Roading fenders
- · Wheel chocks

# **992K Mandatory Attachments**

# **Mandatory Attachments**

Select one from each group. Mandatory and optional equipment may vary. Consult your Cat dealer for specifics.

# **CAB**

- Basic cab standard glass, standard seat
- Deluxe cab rubber mounted glass, heated seat

### LIFT

- Standard
- High

### **ELECTRONICS**

• Messenger display software (select language group)

### MIRROR ARRANGEMENT

- · Mirror, heated
- · Mirror, standard

# **TORQUE CONVERTER**

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

# **SUSPENSION SYSTEMS**

- Ride control
- No ride control

### **LIGHTS**

- · Halogen lights
- HID lights
- LED lights

# **INTEGRATED OBJECT DETECTION SYSTEM**

- · Rear vision camera
- Object detection (radar)

# **ACCESS SYSTEMS**

- · Standard access
- · Powered access

### **ENGINE ARRANGEMENTS**

- · Engine, standard
- Engine, standard, sound suppression
- Engine, brake
- Engine, brake, sound suppression

# **FUEL ARRANGEMENTS**

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

### **COOLING ARRANGEMENTS**

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

### STEERING AND FILTRATION SYSTEMS

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

### TIRES

• Consult your Cat dealer for current options

### PRODUCT LINK

· Where required

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