

# 980H

Wheel Loader



<b>Engine Model</b>	Cat® C15 ACERT™	
<b>Maximum Net Power (1,800 rpm)</b>		
ISO 9249/SAE J1349 (metric)	264 kW	359 hp
ISO 9249/SAE J1349 (imperial)	264 kW	354 hp
<b>Bucket Capacities</b>	4.31-8.20 m <sup>3</sup>	5.64-10.73 yd <sup>3</sup>

<b>Operating Weight</b>	29 945 kg	65,999 lb
• For 5.4 m <sup>3</sup> (7.0 yd <sup>3</sup> ) general purpose bucket with BOCE.		

## Key Features

### Performance Series Buckets

*The new Performance Series buckets are easier to load, achieve greater fill factors and retain more material for significantly greater productivity and fuel efficiency.*

### Cab and Controls

*The cab has been updated for unmatched comfort and efficiency. A new center display combines the Electronic Monitoring System with the gauge cluster. The analog-like gauges have green and red zone indicators so operators can easily see if machine systems are within operating range. The right hand door is replaced with a window which is vertically split for easy opening and closing. Command Control Steering is low effort keeping the operator comfortable during the work day.*

### Transmission Improvements

*The legendary Cat planetary power shift transmission is updated to provide faster acceleration, speed up ramps and greater operator comfort due to smoother shifting.*

### Constant Net Horsepower

*The Cat C15 engine is electronically configured to provide constant net horsepower at full parasitic load, enhancing productivity and improving fuel efficiency.*

### Proven Reliability/Durability

*Components are manufactured to Caterpillar quality standards to ensure maximum performance and reduce the risk of premature wear increasing uptime and reduce operating costs over the life of the machine.*

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**The 980H delivers performance you can feel in the most demanding applications. These machines offer unmatched operator comfort and efficiency in a world-class cab. New Performance Series buckets deliver decreased dig times, greater fill factors and superior material retention to increase productivity and reduce fuel consumption. Revolutionary electro-hydraulic (EH) provide low-effort fingertip operation of lift, tilt and auxiliary work tool controls. The reliability and durability of the 980H results in a machine that is better built to meet your needs.**

# Reliability

Tested and Proven – Ready to Work.



## 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. Heavy duty components reduce the risk of premature wear thereby increasing uptime and reduce operating costs over the life of the machine.

## Monitoring Programs

Monitoring product health is key to maintaining reliability of any equipment. Many programs offered by your Cat dealer make the tracking of your machine health quick and easy. These programs include Product Link™\*, VisionLink®, and S-O-S<sup>SM</sup> Services.

## Renowned Cat Dealer Support

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

## Structures

The H Series features many components which leverage product designs that have delivered reliable and durable machines for generations.

\* Not all programs are available in all areas. See your Cat dealer for details.



# Durability

## Better Built to Meet Your Needs.



### Z-Bar Linkage

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

### C15 ACERT Engine

The Cat C15 engine with ACERT Technology maintains engine performance, efficiency and durability while dramatically reducing emissions. Electronic fuel injection is provided through the well-proven Caterpillar mechanically actuated, electronically controlled unit injection (MEUI) system. A wastegate turbocharger, equipped with a titanium wheel for improved durability, combined with air-to-air aftercooling provides consistent high horsepower with increased altitude capability.

### Axles

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

# Productivity

Work Smart and Move More.





### **Transmission**

The legendary Cat planetary power shift transmission is updated with new shift logic. The downshift from 2 to 1 forward is now based upon torque requirements versus ground speed. This enables operators to use the fully automatic 1-4 mode which saves fuel and improves productivity and comfort. Speed shifts, both up shifts and downshifts have been dramatically improved for improved acceleration, speed on ramps and operator comfort.

### **Constant Net Horsepower**

The Cat C15 engine is electronically configured to provide constant net horsepower at full parasitic load, enhancing productivity and improving fuel efficiency.

### **On-Demand Fan**

With electronic control of the variable speed on-demand fan, temperature levels of the engine coolant, transmission oil, hydraulic oil and air inlet manifold are constantly monitored. This data is used to control and maintain fan speed at the level necessary to maintain normal system temperatures. Controlled fan speed improves fuel efficiency, lowers noise levels and reduces radiator plugging.

### **Ride Control**

The optional Ride Control System improves ride, performance and load retention when traveling over rough terrain. Operators gain confidence moving at higher speeds in load and carry operations decreasing cycle times and increasing productivity. Ride Control also reduces loads induced by travel over rough terrain and can extend the life of structures and drive line components.

### **Engine Idle Management System**

The Engine Idle Management System (EIMS) maximizes fuel efficiency by reducing engine rpm after a selected amount of time. This gives customers flexibility in managing idle speeds for specific application requirements. Four idle control rpm levels are available.

### **Engine Idle Shutdown**

The Engine Idle Shutdown feature automatically shuts down the engine after the machine has been idling for a predetermined amount of time. This saves you fuel and reduces hour accumulation on your machine.



# Operator Environment

Work Comfortably and Efficiently.



## Visibility

Visibility is excellent to both the front and rear of this machine. Distortion-free flat glass stretches to the floor of the cab for excellent visibility to the bucket. The cab roof has channels which direct rain off the corners of the cab keeping windows clear. An overhang on all sides of the cab protects the operator from glare. An optional rearview camera is available to clearly monitor movement behind the machine.

## Entry and Exit

A ladder with self-cleaning steps keeps debris build-up to a minimum. The ladder is inclined for easy entry and exit. Platforms are wide allowing ease of movement to the front or rear of the machine. The cab door opens a full 180° and latches in place to allow safe navigation to the rear of the machine. A vertically split window on the right-hand side of the cab is provided for easy opening and closing.



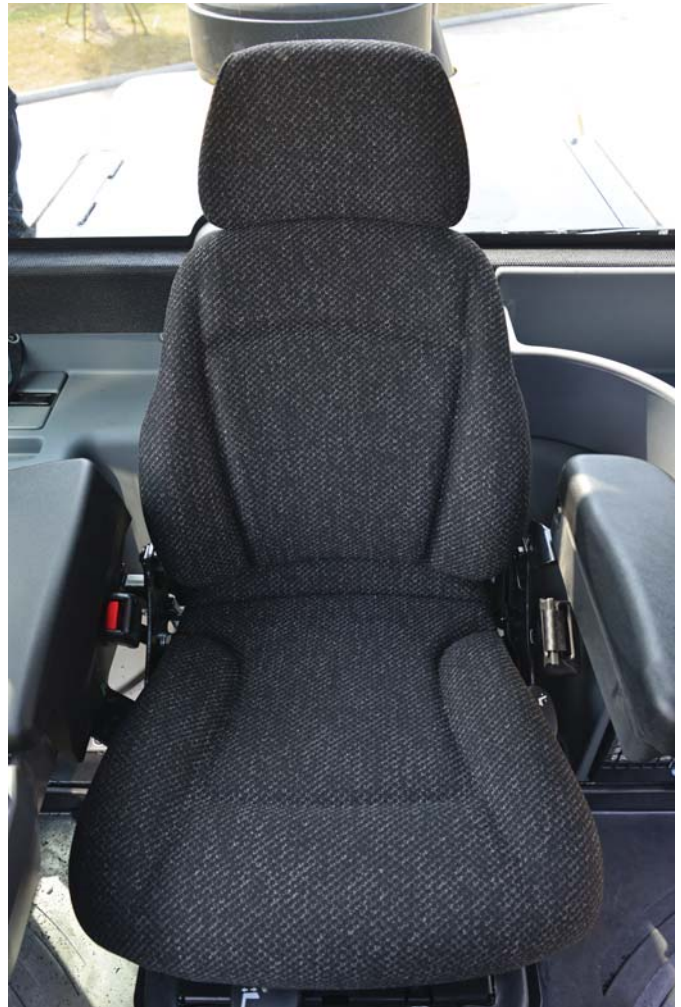


### **Cab and Controls**

The cab design has been updated for unmatched comfort and efficiency. A new center display combines the Electronic Monitoring System with the gauge cluster, giving the operator all machine operating information in one location. The analog-like gauges have green and red zone indicators so operators can easily see if machine systems are within operating range.

### **Seat and Armrest**

The new seat is wider and the headrest is now adjustable for improved operator comfort. It provides automotive-style lumbar support for maximum comfort. The right hand armrest has been optimized for easier adjustment.



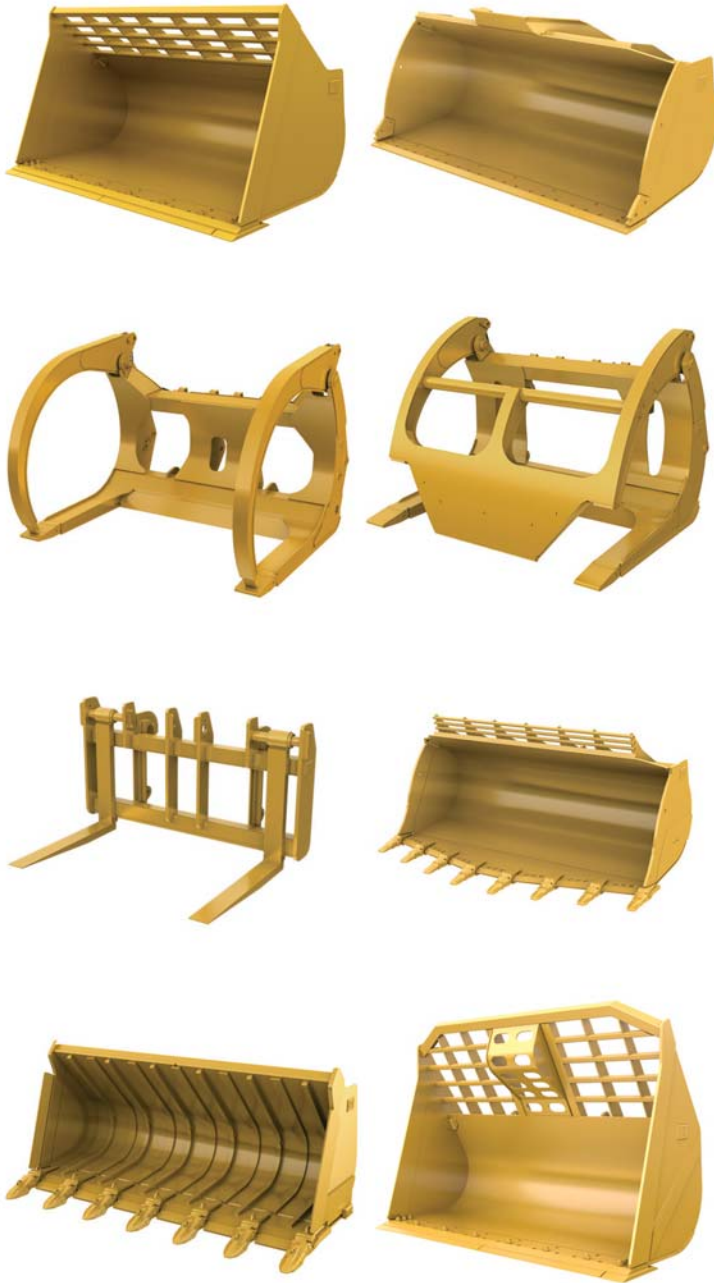
### **Command Control Steering**

Command Control Steering is a low effort load-sensing system. Full machine articulation is accomplished with a  $\pm 70^\circ$  turn of the wheel – versus two to three  $360^\circ$  turns of a conventional steering wheel greatly reducing operator fatigue. Steering grip contains the forward/neutral/reverse switch and the upshift/downshift button – allowing the left hand to remain on the steering grip at all times.



# Versatility

Work Tool Options to Meet Your Needs.



## Work Tools for Many Job Site Requirements

A range of work tools and bucket styles are available to customize the machine for your operation. The list includes: Performance Series Buckets; Specialty Buckets (Heavy Duty Quarry Rock, Slag, Waste Handling, Woodchip); Pallet Forks, Millyard and Logging Forks.

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

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

### Lower Operating Costs

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

### Higher Productivity

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

### Performance Series Bucket Styles

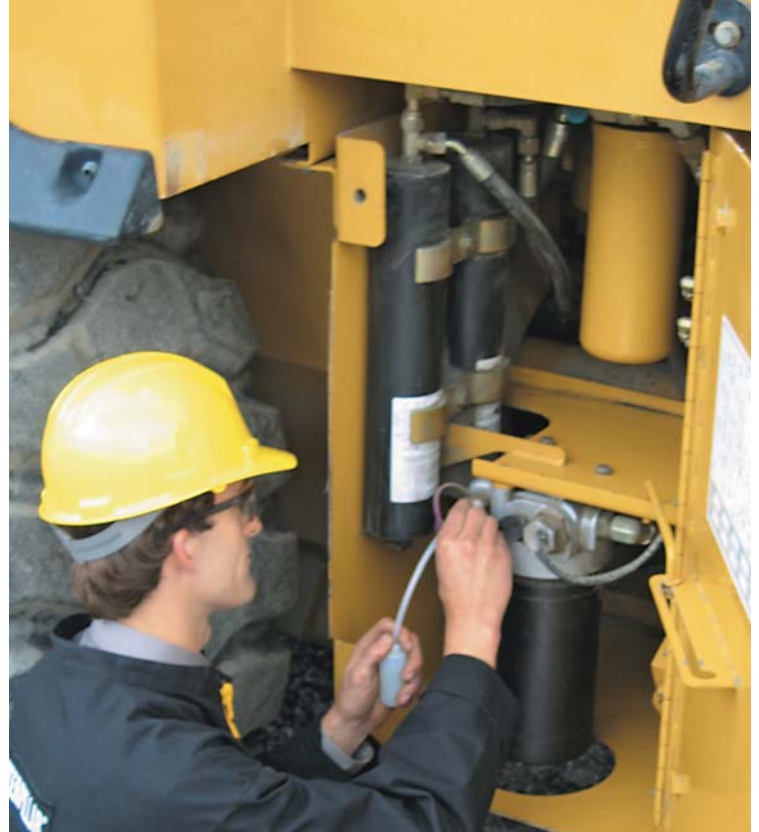
Performance Series Buckets are available for General Purpose, Heavy Duty General Purpose, Material Handling, Rock and Coal style buckets.

## Daily Maintenance

Sight gauges and ground level service points are easily accessible improving safety and reducing service time.

Ground level access to maintenance points reduces daily start-up time, ensures that daily maintenance gets done and reduces operator fatigue from climbing on the machine to do daily checks.

Service is simplified with brake wear indicators, ecology drains, grouped sampling ports and easily replaceable components.



# Serviceability

Easy to Maintain. Easy to Service.



## Cooling System

The cooling system is readily accessible for clean out and maintenance. With nine cooling fins per 25.4 mm (1.0 inch) and a perforated grill, most airborne debris entering the system passes through the cooler cores. The hydraulic and A/C cooler cores swing out providing easy access to both sides for cleaning. An access panel on the left side of the cooling package swings down to provide access to the back side of the engine coolant and Air-to-Air After Cooler (ATAAC) and jacket water cooler core.



## Engine Access

The Cat sloped "one-piece" tilting hood provides industry-leading access to the engine, and if necessary, the entire hood can be removed with the built-in lift points. With the hood closed, quick checks of engine oil levels and the coolant sight gauge can be completed through the side service doors. Panels located behind the tires lift up and can be removed for additional access.



## Customer Support

Unmatched Support Makes the Difference.

### Machine Selection

Your Cat dealer is ready to help you evaluate machine options. From new or used machine sales, to rental or rebuild options, your Cat dealer can provide an optimal solution to your business needs.

### Product Support

Your Cat dealer can help you maximize machine uptime with unsurpassed worldwide parts availability, trained technicians and customer support agreements.

### Operation

To help you get the most out of your machine investment, Cat dealers offer various training resources to improve operating techniques.

### Financing

Financing options are available to meet your needs.

## Sustainability

Conserving Resources.

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

- Improved fuel efficiency – less fuel consumed results in lower emissions.
- The 980H is built with a 98% recyclability rate (ISO 16714) to conserve valuable natural resources and further enhance machine end of life value.
- Improved operator efficiency through enhanced visibility and reduced noise/vibration levels.
- Product Link family of products and solutions that collect, communicate, store and deliver product and job site information to maximize productivity and reduce costs.
- Major components are rebuildable, eliminating waste and saving money by giving the machine and/or major components a second life – and even a third life.



# 980H Wheel Loader Specifications

## Engine

Engine Model	Cat C15 ACERT	
Net Power – ISO 9249/SAE J1349 (metric)	264 kW	359 hp
Net Power – ISO 9249/SAE J1349 (imperial)	264 kW	354 hp
Gross Power – ISO 14396	288 kW	387 hp
Gross Power – SAE J1995	293 kW	393 hp
Peak Net Torque – ISO 14396 @ 1,200 rpm	1779 N·m	1,312 lbf-ft
Bore	137 mm	5.4 in
Stroke	171 mm	6.7 in
Displacement	15.2 L	928 in <sup>3</sup>

- Caterpillar engine with ACERT Technology – EPA Tier 3, EU Stage III Compliant.
- These ratings apply at 1,800 rpm when tested under the specified standard conditions.
- Rating for net power advertised based on power available when the engine is equipped with alternator, air cleaner, muffler and on-demand hydraulic fan drive at maximum fan speed.
- The horsepower (hp) provided is imperial horsepower.

## Weights

Operating Weight	29 945 kg	65,999 lb
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- For 5.4 m<sup>3</sup> (7.0 yd<sup>3</sup>) general purpose bucket with BOCE.

## Buckets

Bucket Capacities	4.31-8.20 m <sup>3</sup>	5.64-10.73 yd <sup>3</sup>
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## Operating Specifications

Breakout Force	201 kN	45,379 lb
Static Tipping Load, Full Turn (ISO)	17 895 kg	39,441 lb
Static Tipping Load, Full Turn (No Tire Deflection)	19 764 kg	43,561 lb

- For 5.4 m<sup>3</sup> (7.0 yd<sup>3</sup>) general purpose bucket with BOCE.

## Transmission

Forward 1	6.6 km/h	4.1 mph
Forward 2	11.8 km/h	7.3 mph
Forward 3	20.7 km/h	12.9 mph
Forward 4	36.3 km/h	22.6 mph
Reverse 1	7.6 km/h	4.7 mph
Reverse 2	13.5 km/h	8.4 mph
Reverse 3	23.6 km/h	14.7 mph
Reverse 4	41.5 km/h	25.8 mph

- Maximum travel speeds (29.5-25 tires).

## Hydraulic System

Bucket/Work Tool System – Pump Output	464 L/min	123 gal/min
Steering System Pump Type	Piston	
Hydraulic Cycle Time – Raise	6.5 Seconds	
Hydraulic Cycle Time – Dump	2.5 Seconds	
Hydraulic Cycle Time – Lower	3.5 Seconds	
Hydraulic Cycle Time – Float	3 Seconds	
Hydraulic Cycle Time – Rack	3 Seconds	

- Implement System (Standard), Piston Pump – Rated at 2,100 rpm and 6900 kPa (1,000 psi).
- Cycle time with rated payload.

## Brakes

Brakes	Meets required standards.
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- Meet ISO 3450-2011 standards.

## Axles

Front	Fixed front	
Rear	Oscillating ± 13°	
Maximum Single-Wheel Rise and Fall	550 mm	21.7 in

## Tires

Tires	Choose from a variety of tires to match your application.
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- Choice of:  
29.5R25 TB516 TR L3  
29.5R25 22PR TR L3  
29.5R25 VMT BS L3  
29.5-25 28PR L3  
29.5R25 XHA2 MX L3  
29.5R25 VJT BS L3  
29.5-25 28PR BS L4  
29.5R25 VSDL BS L5  
29.5R25 XLDD2 MX L5
- NOTE: In certain applications (such as load and carry) the loader's productive capabilities might exceed the tires' tonnes-km/h (ton-mph) capabilities. Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model. Other special tires are available on request.

## Cab

ROPS/FOPS	Meets ISO Standards.
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- Caterpillar cab with integrated Rollover Protective Structure (ROPS) are standard.
- ROPS meets ISO 3471:2008 criteria.
- Falling Objects Protective Structure (FOPS) meets ISO 3449:2005 Level II.

# 980H Wheel Loader Specifications

## Sound

- The sound values indicated below are for specific operating conditions only. Machine and operator sound levels will vary at different engine and/or cooling fan speeds. The cab was properly installed and maintained. The tests were conducted with the cab doors and the cab windows closed. Hearing protection may be needed when the machine is operated with a cabin that is not properly maintained, or when the doors and/or windows are open for extended periods or in a noisy environment.
- The declared dynamic operator sound pressure level for a standard machine configuration, measured according to the procedure specified in “ISO 6396:2008” is 75 dB(A) with the cooling fan speed set at maximum value.
- The declared dynamic exterior sound power level for a standard machine configuration, measured according to the procedures specified in “ISO 6395:2008” is 113 dB(A) with the cooling fan speed set at maximum value.
- The declared average exterior sound pressure level for a standard machine configuration, measured according to the procedure specified in “SAE J88:2013 – Constant Speed Moving Test,” is 77 dB(A). The measurement was conducted under the following conditions: distance of 15 m (49.2 ft), moving forward in second gear ratio with the cooling fan speed set at maximum value.

### Sound Level Information for Machines in European Union Countries and in Countries that Adopt the “EU Directives”

- The declared dynamic operator sound pressure level for a standard machine configuration, measured according to the procedures specified in “ISO 6396:2008,” is 72 dB(A) with a cooling fan speed set at 70 percent of the maximum value.
- The sound power level that is labeled on the machine is 109 Lwa. The measurement was made according to the test procedures and conditions that are specified in the European Union Directive “2000/14/EC” as amended by “2005/88/EC.”

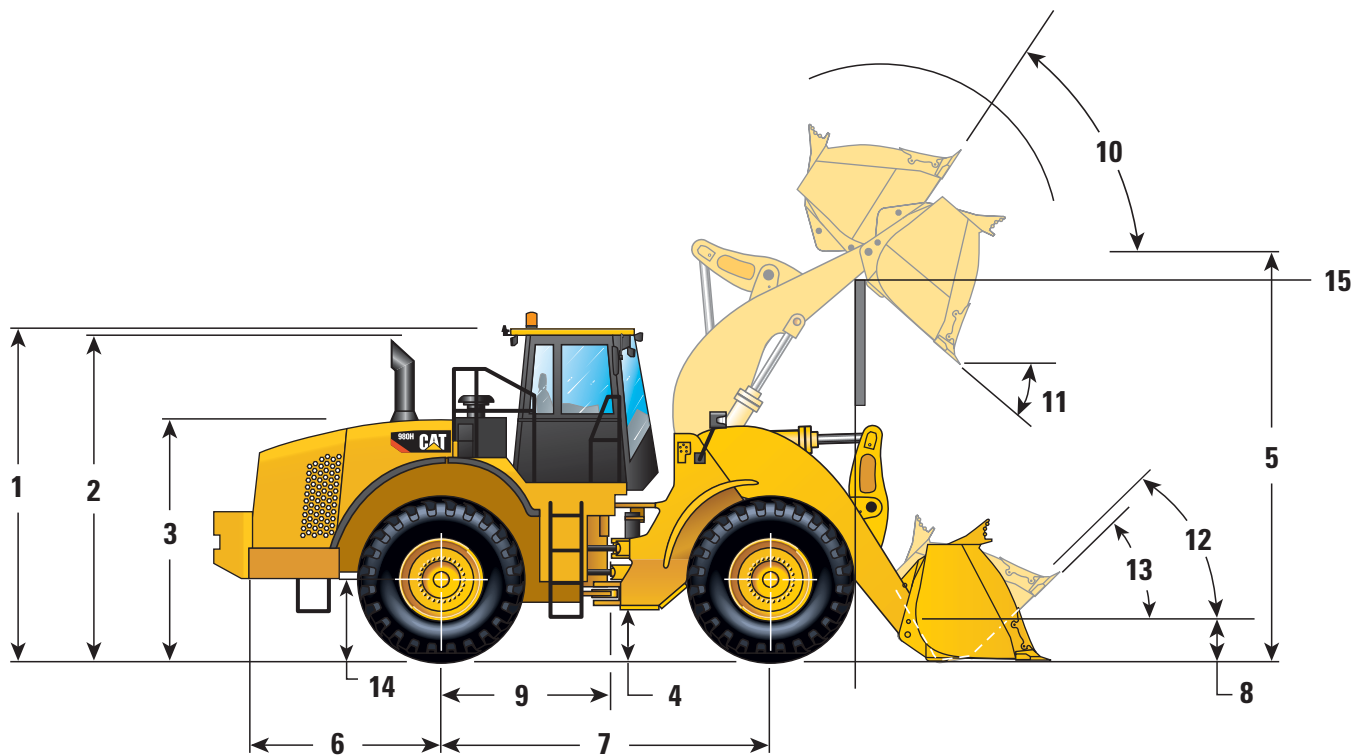
## Service Refill Capacities

Fuel Tank – Standard	453 L	120 gal
Cooling System	83 L	22 gal
Crankcase	64 L	17 gal
Transmission	62 L	16 gal
Differentials and Final Drives – Front	87 L	23 gal
Differentials and Final Drives – Rear	87 L	23 gal
Hydraulic Tank	125 L	33 gal

# 980H Wheel Loader Specifications

## 980H Dimensions

All dimensions are approximate and based on L3 Michelin XHA2 tires.



<b>1</b> Height to top of ROPS/FOPS	3776 mm	12'4"
<b>2</b> Height to top of exhaust pipe	3714 mm	12'2"
<b>3</b> Height to top of hood	2721 mm	8'9"
<b>4</b> Ground clearance with 29.5R25	430 mm	1'5"
<b>5</b> B-Pin height – standard	4509 mm	14'8"
B-Pin height – high-lift	4729 mm	15'6"
<b>6</b> Center line of rear axle to edge of counterweight	2615 mm	8'6"
<b>7</b> Wheelbase	3700 mm	12'2"
<b>8</b> B-Pin height @ carry – standard	644 mm	2'1"
B-Pin height @ carry – high lift	700 mm	2'3"
<b>9</b> Center line of rear axle to hitch	1850 mm	6'1"
<b>10</b> Rack back @ maximum lift	61 degrees	
<b>11</b> Dump angle @ maximum lift	48 degrees	
<b>12</b> Rack back @ carry	49 degrees	
<b>13</b> Rack back @ ground – standard	41 degrees	
Rack back @ ground – high lift	39 degrees	
<b>14</b> Height to center line of axle	855 mm	2'8"
<b>15</b> Lift arm clearance @ maximum lift	3764 mm	12'4"

# 980H Wheel Loader Specifications

## 980H Operating Specifications – Standard

Bucket Type		General Purpose – Pin On					
		Bolt-On Edges	Teeth and Segments	Bolt-On Edges	Teeth and Segments	Bolt-On Edges	Teeth and Segments
Capacity – Rated (§)	m <sup>3</sup>	5.40	5.40	5.70	5.70	6.00	6.00
	yd <sup>3</sup>	7.06	7.06	7.46	7.46	7.85	7.85
Capacity – Rated @ 110% Fill Factor	m <sup>3</sup>	5.94	5.94	6.27	6.27	6.60	6.60
	yd <sup>3</sup>	7.77	7.77	8.20	8.20	8.63	8.63
Width (§)	mm	3447	3535	3447	3535	3447	3535
	ft/in	11'3"	11'7"	11'3"	11'7"	11'3"	11'7"
Dump Clearance at Maximum Lift and 45° Discharge (§)	mm	3242	3077	3174	3007	3156	2989
	ft/in	10'7"	10'1"	10'4"	9'10"	10'4"	9'9"
Reach at Maximum Lift and 45° Discharge (§)	mm	1580	1717	1628	1762	1649	1784
	ft/in	5'2"	5'7"	5'4"	5'9"	5'4"	5'10"
Reach at Level Lift Arm and Bucket Level (§)	mm	3064	3276	3148	3360	3176	3388
	ft/in	10'0"	10'8"	10'3"	11'0"	10'5"	11'1"
Digging Depth (§)	mm	133	133	133	133	133	133
	in	5.2"	5.2"	5.2"	5.2"	5.2"	5.2"
Overall Length	mm	9637	9878	9721	9962	9749	9990
	ft/in	31'8"	32'5"	31'11"	32'9"	32'0"	32'10"
Overall Height with Bucket at Maximum Lift	mm	6391	6391	6213	6213	6239	6239
	ft/in	21'0"	21'0"	20'5"	20'5"	20'6"	20'6"
Loader Clearance Circle with Bucket at Carry Position (§)	mm	15 857	16 080	15 902	16 125	15 917	16 141
	ft/in	52'1"	52'10"	52'3"	52'11"	52'3"	53'0"
Static Tipping Load, Straight (ISO)*	kg	20 504	20 322	20 272	20 089	20 136	19 952
	lb	45,192	44,790	44,681	44,277	44,379	43,974
Static Tipping Load, Straight (Rigid Tire)*	kg	22 086	21 900	21 855	21 667	21 719	21 531
	lb	48,678	48,268	48,168	47,755	47,870	47,456
Static Tipping Load, Articulated (ISO)*	kg	17 895	17 710	17 677	17 492	17 544	17 358
	lb	39,441	39,035	38,961	38,552	38,667	38,257
Static Tipping Load, Articulated (Rigid Tire)*	kg	19 764	19 578	19 546	19 358	19 414	19 226
	lb	43,561	43,150	43,079	42,666	42,789	42,375
Breakout Force** (§)	kN	201	199	190	188	186	184
	lbf	45,379	44,838	42,792	42,264	41,931	41,407
Operating Weight*	kg	29 945	30 084	30 028	30 167	30 124	30 263
	lb	65,999	66,304	66,182	66,487	66,393	66,698

\* Static tipping loads and operating weights shown are based on a global machine configuration with Michelin 29.5R25 XHA2 L3 Radial tires, full fluids, operator, standard counterweight, standard (not Heavy Duty) transmission, standard linkage, cold start, roading fenders, Product Link, open differential axles (front/rear), power train guard, secondary steering, sound suppression and 5.4 m<sup>3</sup> GP bucket with BOCE.

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

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

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

(No Tire Deflection) Compliance to ISO 14397-1 (2007) Sections 1 thru 5.



# 980H Wheel Loader Specifications

## 980H Operating Specifications – Standard

Bucket Type		Material Handling – Pin On		Rock – Pin On		Coal – Pin On	General Purpose/ Heavy Duty – Pin On	
		Bolt-On Edges	Teeth and Segments	Bolt-On Edges	Teeth and Segments	Bolt-On Edges	Bolt-On Edges	Teeth and Segments
Capacity – Rated (§)	m <sup>3</sup>	5.70	5.70	4.40	4.40	8.20	5.70	5.70
	yd <sup>3</sup>	7.46	7.46	5.75	5.75	10.73	7.46	7.46
Capacity – Rated @ 110% Fill Factor	m <sup>3</sup>	6.27	6.27	4.84	4.84	9.02	6.27	6.27
	yd <sup>3</sup>	8.20	8.20	6.33	6.33	11.80	8.20	8.20
Width (§)	mm	3447	3535	3504	3504	3638	3447	3535
	ft/in	11'3"	11'7"	11'5"	11'5"	11'11"	11'3"	11'7"
Dump Clearance at Maximum Lift and 45° Discharge (§)	mm	3075	2898	3101	3101	2887	3174	3007
	ft/in	10'1"	9'6"	10'2"	10'2"	9'5"	10'4"	9'10"
Reach at Maximum Lift and 45° Discharge (§)	mm	1543	1665	1844	1844	1724	1628	1762
	ft/in	5'0"	5'5"	6'0"	6'0"	5'7"	5'4"	5'9"
Reach at Level Lift Arm and Bucket Level (§)	mm	3173	3385	3360	3360	3435	3148	3360
	ft/in	10'4"	11'1"	11'0"	11'0"	11'3"	10'3"	11'0"
Digging Depth (§)	mm	133	133	106	106	138	133	133
	in	5.2"	5.2"	4.1"	4.1"	5.4"	5.2"	5.2"
Overall Length	mm	9746	9987	9949	9949	10 011	9721	9962
	ft/in	32'0"	32'10"	32'8"	32'8"	32'11"	31'11"	32'9"
Overall Height with Bucket at Maximum Lift	mm	6212	6212	6184	6184	6506	6213	6213
	ft/in	20'5"	20'5"	20'4"	20'4"	21'5"	20'5"	20'5"
Loader Clearance Circle with Bucket at Carry Position (§)	mm	15 916	16 139	16 094	16 093	16 236	15 902	16 125
	ft/in	52'3"	53'0"	52'10"	52'10"	53'4"	52'3"	52'11"
Static Tipping Load, Straight (ISO)*	kg	19 825	19 643	21 253	21 285	19 512	20 116	19 932
	lb	43,694	43,295	46,843	46,913	43,006	44,336	43,932
Static Tipping Load, Straight (Rigid Tire)*	kg	21 360	21 175	22 897	22 940	21 151	21 694	21 507
	lb	47,078	46,670	50,466	50,560	46,616	47,815	47,402
Static Tipping Load, Articulated (ISO)*	kg	17 271	17 088	18 537	18 550	16 932	17 519	17 334
	lb	38,067	37,663	40,857	40,884	37,318	38,613	38,204
Static Tipping Load, Articulated (Rigid Tire)*	kg	19 091	18 906	20 482	20 509	18 854	19 385	19 198
	lb	42,078	41,670	45,144	45,202	41,556	42,726	42,313
Breakout Force** (§)	kN	187	184	190	189	157	189	187
	lbf	42,029	41,504	42,739	42,551	35,358	42,665	42,136
Operating Weight*	kg	30 153	30 292	31 109	31 184	30 532	30 175	30 313
	lb	66,457	66,762	68,564	68,730	67,293	66,504	66,809

\* Static tipping loads and operating weights shown are based on a global machine configuration with Michelin 29.5R25 XHA2 L3 Radial tires, full fluids, operator, standard counterweight, standard (not Heavy Duty) transmission, standard linkage, cold start, roading fenders, Product Link, open differential axles (front/rear), power train guard, secondary steering, sound suppression and 5.4 m<sup>3</sup> GP bucket with BOCE.

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

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

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

(No Tire Deflection) Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

# 980H Wheel Loader Specifications

## 980H Operating Specifications – Standard

Bucket Type		Rock – Pin On				
		Teeth and Segments + Side Protector	Teeth + Side Protector	Teeth and Segments + Side Protector	Teeth + Side Protector	Teeth + Side Protector
Edge Type						
Capacity – Rated (§)	m <sup>3</sup>	4.48	4.31	5.66	5.38	5.38
	yd <sup>3</sup>	5.86	5.64	7.40	7.03	7.03
Capacity – Rated @ 110% Fill Factor	m <sup>3</sup>	4.93	4.75	6.22	5.91	5.91
	yd <sup>3</sup>	6.45	6.21	8.14	7.74	7.74
Width (§)	mm	3504	3504	3504	3504	3510
	ft/in	11'5"	11'5"	11'5"	11'5"	11'6"
Dump Clearance at Maximum Lift and 45° Discharge (§)	mm	3051	3051	2890	2890	2983
	ft/in	10'0"	10'0"	9'5"	9'5"	9'9"
Reach at Maximum Lift and 45° Discharge (§)	mm	1788	1788	1979	1979	1930
	ft/in	5'10"	5'10"	6'5"	6'5"	6'4"
Reach at Level Lift Arm and Bucket Level (§)	mm	3359	3359	3608	3608	3512
	ft/in	11'0"	11'0"	11'10"	11'10"	11'6"
Digging Depth (§)	mm	106	71	106	71	77
	in	4.1"	2.8"	4.1"	2.8"	3"
Overall Length	mm	9948	9948	10 197	10 197	10 069
	ft/in	32'8"	32'8"	33'6"	33'6"	33'1"
Overall Height with Bucket at Maximum Lift	mm	6204	6204	6378	6378	6378
	ft/in	20'5"	20'5"	21'0"	21'0"	21'0"
Loader Clearance Circle with Bucket at Carry Position (§)	mm	16 093	16 093	16 235	16 235	16 156
	ft/in	52'10"	52'10"	53'4"	53'4"	53'1"
Static Tipping Load, Straight (ISO)*	kg	20 998	21 519	20 119	20 693	20 705
	lb	46,279	47,428	44,343	45,607	45,635
Static Tipping Load, Straight (Rigid Tire)*	kg	22 649	23 190	21 764	22 361	22 374
	lb	49,918	51,112	47,968	49,285	49,313
Static Tipping Load, Articulated (ISO)*	kg	18 265	18 775	17 439	17 995	18 008
	lb	40,257	41,381	38,436	39,663	39,690
Static Tipping Load, Articulated (Rigid Tire)*	kg	20 223	20 750	19 387	19 965	19 977
	lb	44,572	45,733	42,730	44,003	44,031
Breakout Force** (§)	kN	188	204	159	172	184
	lbf	42,289	45,879	35,932	38,725	41,402
Operating Weight*	kg	31 475	31 175	31 821	31 521	31 517
	lb	69,370	68,709	70,132	69,471	69,463

\* Static tipping loads and operating weights shown are based on a global machine configuration with Michelin 29.5R25 XHA2 L3 Radial tires, full fluids, operator, standard counterweight, standard (not Heavy Duty) transmission, standard linkage, cold start, roading fenders, Product Link, open differential axles (front/rear), power train guard, secondary steering, sound suppression and 5.4 m<sup>3</sup> GP bucket with BOCE.

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

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

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

(No Tire Deflection) Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

# 980H Wheel Loader Specifications

## 980H Operating Specifications – Standard

Bucket Type		Rock/Heavy Duty/Extra Wide Bucket – Pin On		High Lift Delta
Edge Type		Teeth and Segments + Side Protector		
Capacity – Rated (§)	m <sup>3</sup>	5.41		—
	yd <sup>3</sup>	7.07		—
Capacity – Rated @ 110% Fill Factor	m <sup>3</sup>	5.95		—
	yd <sup>3</sup>	7.78		—
Width (§)	mm	3645		—
	ft/in	11'11"		—
Dump Clearance at Maximum Lift and 45° Discharge (§)	mm	2941		220
	ft/in	9'7"		0'8"
Reach at Maximum Lift and 45° Discharge (§)	mm	1965		2
	ft/in	6'5"		0'0"
Reach at Level Lift Arm and Bucket Level (§)	mm	3561		160
	ft/in	11'8"		0'6"
Digging Depth (§)	mm	77		(1)
	in	3"		-0"
Overall Length	mm	10 156		200
	ft/in	33'4"		0'8"
Overall Height with Bucket at Maximum Lift	mm	6378		221
	ft/in	21'0"		0'9"
Loader Clearance Circle with Bucket at Carry Position (§)	mm	16 340		175
	ft/in	53'8"		0'7"
Static Tipping Load, Straight (ISO)*	kg	19 813		(1720)
	lb	43,669		(3,792)
Static Tipping Load, Straight (Rigid Tire)*	kg	21 461		(1950)
	lb	47,301		(4,299)
Static Tipping Load, Articulated (ISO)*	kg	17 091		(1550)
	lb	37,669		(3,416)
Static Tipping Load, Articulated (Rigid Tire)*	kg	19 053		(1787)
	lb	41,993		(3,939)
Breakout Force** (§)	kN	173		3
	lbf	38,896		719
Operating Weight*	kg	32 239		115
	lb	71,055		253

\* Static tipping loads and operating weights shown are based on a global machine configuration with Michelin 29.5R25 XHA2 L3 Radial tires, full fluids, operator, standard counterweight, standard (not Heavy Duty) transmission, standard linkage, cold start, roading fenders, Product Link, open differential axles (front/rear), power train guard, secondary steering, sound suppression and 5.4 m<sup>3</sup> GP bucket with BOCE.

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

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

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

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# 980H Wheel Loader Specifications

## 980H Bucket Selection Chart

Material Density		kg/m <sup>3</sup>	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400		
Standard Linkage Pin On	General Purpose	5.40 m <sup>3</sup> (7.06 yd <sup>3</sup> )																				
		5.70 m <sup>3</sup> (7.46 yd <sup>3</sup> )																				
		6.00 m <sup>3</sup> (7.85 yd <sup>3</sup> )																				
	Material Handling	5.70 m <sup>3</sup> (7.46 yd <sup>3</sup> )																				
	Rock	4.40 m <sup>3</sup> (5.75 yd <sup>3</sup> )																				
	Coal	8.20 m <sup>3</sup> (10.73 yd <sup>3</sup> )																				
General Purpose/ Heavy Duty	5.70 m <sup>3</sup> (7.46 yd <sup>3</sup> )																					
Material Density		lb/yd <sup>3</sup>	1,180	1,348	1,517	1,685	1,854	2,022	2,191	2,359	2,528	2,696	2,865	3,033	3,202	3,370	3,539	3,707	3,876	4,044		
Bucket Fill Factors																						
115% 110% 105% 100% 95%																						

Note: All buckets are showing Bolt-On Edges.

## Bucket Fill Factors

(as a % of ISO Rated Capacity)

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

Note: Fill Factors achieved will also depend on whether the product is washed or not washed.

## Standard Equipment

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

### ELECTRICAL

- Alarm, back-up
- Alternator, 105-amp brushed
- Batteries, maintenance free (4) 1,000 CCA
- Ignition key; start/stop switch
- Lighting system, halogen (6 total)
- Main disconnect switch
- Starter, electric, heavy-duty
- Starting and charging system (24-volt)
- Receptacle, starting, 24-volt

### OPERATOR ENVIRONMENT

- Air conditioner
- Bucket/work tool function lockout
- Cab, pressurized and sound-suppressed ROPS/FOPS
- Radio-ready (entertainment) includes antenna, speakers and converter (12-volt, 10-amp)
- Coat hook
- Computerized monitoring system
- Instrumentation, gauges:
  - Digital gear range indicator
  - Engine coolant temperature
  - Fuel level
  - Hydraulic oil temperature
  - Speedometer/tachometer
  - Transmission oil temperature
- Instrumentation, warning indicators:
  - Air inlet heater
  - Axle oil temperature
  - Electrical, voltage
  - Engine inlet manifold temperature
  - Engine oil pressure
  - Fuel level
  - Fuel pressure, hi/low
  - Parking brake
  - Primary steering oil pressure
  - Service brake oil pressure
  - Transmission filter bypass

- Controls, electro-hydraulic, lift and tilt function
- Heater and defroster
- Horn, electric (console)
- Light, dome (cab)
- Lunch box, beverage holders and personal tray
- Mirror, rearview (internally mounted)
- Mirrors, external
- Seat, Cat Comfort (cloth) with air suspension
- Seat belt, retractable, 51 mm (2 in)
- Steering column, adjustable angle
- Steering, Command Control System
- Wet-arm wipers and washers, front and rear
  - Intermittent front wiper
- Window, sliding (left and right side)

### POWER TRAIN

- Brakes, full hydraulic enclosed wet-disc with Integrated Braking System (IBS) and brake wear indicator
- Engine, Cat C15 with ACERT Technology and ATAAC
- Fan, radiator, electronically controlled, hydraulically driven, temperature sensing, on demand
- Filters, fuel, primary/secondary
- Filters, engine air
- Fuel priming pump (electric)
- Fuel/water separator
- Muffler, sound suppressed
- Radiator, unit core
- Starting aid, air inlet heater
- Single clutch speed shifting (SCSS)/torque based 2-1 shift
- Switch, transmission neutralizer lockout
- Torque converter
- Transmission, automatic, planetary powershift (4F/4R)

### OTHER

- Automatic bucket positioner
- Axle Ecology Drain
- Counterweight
- Couplings, Cat O-ring face seal
- Doors, service access (lockable)
- Ecology drains, engine, transmission and hydraulics
- Guard, airborne debris
- Hitch, drawbar with pin
- Hood, non-metallic, power tilting
- Hoses, Cat XT
- Hydraulic oil cooler
- Kickout, lift and tilt, automatic (in-cab adjustable)
- Linkage, Z-bar, cast cross tube/tilt lever
- Oil sampling valves
- Product Link
- Remote diagnostic pressure taps
- Remote FNR
- Sight gauges:
  - Engine coolant
  - Hydraulic oil
  - Transmission oil level
- Sun visor, front
- Steering, load sensing

### TIRES, RIMS, WHEELS

- A tire must be selected from the mandatory attachments section. Base machine price includes an allowance based on a premium radial tire.

### ANTIFREEZE

- Premixed 50% concentration of Extended Life Coolant with freeze protection to  $-34^{\circ}\text{C}$  ( $-29^{\circ}\text{F}$ )

# 980H Optional Equipment

## Optional Equipment

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

- Aggregate Autodig System
- Ashtray
- Autolube
- Buckets and work tools
- Bucket Ground Engaging Tools (GET) – see Cat dealer for details
- Camera, rear vision
- Cooler, axle oil
- Differentials
  - Limited slip, front or rear
- Fenders, roading
- Fender extensions
- Fenders, steel front with mud flaps
- Guard, axle seal
- Guard, front window, wide or small mesh
- Guard, power train
- Heater, engine coolant, 120- or 240-volt
- High Ambient Cooling Package
- Hydraulic arrangement, three-valve
- Joystick control, two- or three-valve
- Lights, high intensity discharge (HID)
- Light, warning beacon
- Lights, work, cab-mounted
- Mirrors, heated external, folding
- Payload Control System
  - Payload Control System Printer
- Platform, window cleaning
- Precleaner, turbine
- Precleaner, turbine/trash
- Product Link (GPS, GSM WW, GSM China)
- Radio, AM/FM Weatherband (CD)
- Radio, CB-ready
- Rear ladder, right
- Remote pressure taps, transmission
- Ride Control System, two- or three-valve
- Seat belt, 76 mm (3 in) wide
- Sound suppression, exterior
- Starting aid, ether
- Steering, secondary
- Special Machine Arrangements
  - High Lift Arrangement, two- and three-valve
  - Forest Machine Arrangement
  - Industrial Loader Arrangement
- Tool box
- Variable Pitch Fan (VPF)



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