



# Cat<sup>®</sup> 980K

## WHEEL LOADER

## PRELIMINARY

### FEATURES:

- **Performance Series Buckets** – With standard Performance Series Buckets, operators benefit from reduced dig times and better material retention; ultimately translating into significant productivity and fuel efficiency improvements.
- **Operator Environment** – The new four post ROPS cab provides enhanced comfort, visibility, and productivity resulting in a more efficient operator. New features include an ergonomic electro-hydraulic (EH) joystick steering system with force feedback (speed sensitive), automatic climate control, viscous mounts to reduce noise and vibration levels, post mounted membrane switches, and a curved windshield giving the operator a panoramic view.
- **Cat<sup>®</sup> C13 ACERT™ Engine** – The innovative Cat C13 ACERT engine is optimized for maximum fuel efficiency and increased power density while meeting all Tier 4 Interim and Stage IIIB emissions requirements.
- **Lockup Torque Converter** – The lockup torque converter on the 980K significantly enhances productivity and fuel efficiency while performing load and carry applications, especially on grades. The lockup clutch eliminates torque converter losses, ultimately resulting in lower fuel consumption while achieving higher travel speeds up a grade.
- **Powershift Transmission** – The K Series™ transmission incorporates a new shifting strategy that delivers smoother shifts and faster acceleration.
- **Fuel Efficiency** – The 980K wheel loader has been integrated as a system; from the linkage and work tool carrying the payload, to the engine, transmission and torque converter moving the machine, the system has been optimized to achieve the lowest cost per ton.
- **Customer Support** – Cat dealers are with customers every step of the way to provide unsurpassed worldwide parts support, trained technicians, training assistance, financing options, and customer support agreements.

## Specifications

### Engine

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

- Cat engine with ACERT™ Technology – meets EPA Tier 4 Interim/ EU Stage IIIB requirements.

### Weights

Operating Weight	30 319 kg	66,823 lb
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- For 5.3 m<sup>3</sup> (6.9 yd<sup>3</sup>) general purpose buckets with bolt-on cutting edges.

### Buckets

Bucket Capacities	4.00 m <sup>3</sup> -	5.25 yd <sup>3</sup> -
	12.20 m <sup>3</sup>	16.00 yd <sup>3</sup>

### Operating Specifications

Static Tipping Load Full 37° Turn – ISO 14397-1*	18 805 kg	41,447 lb
Static Tipping Load Full 37° Turn – Rigid Tires**	19 967 kg	44,008 lb
Breakout Force	238 kN	53,475 lb

- For 5.3 m<sup>3</sup> (6.9 yd<sup>3</sup>) general purpose buckets with bolt-on cutting edges.
- \* Full compliance to ISO 14397-1 (2007) Section 1 thru 6, which requires 2% verification between calculations and testing.
- \*\* Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

### Transmission

	Standard Torque Converter		Lockup Torque Converter	
Forward 1	6.6 km/h	4.1 mph	6.6 km/h	4.1 mph
Forward 2	11.7 km/h	7.3 mph	12.3 km/h	7.7 mph
Forward 3	20.5 km/h	12.9 mph	21.8 km/h	13.6 mph
Forward 4	35.8 km/h	22.4 mph	38.8 km/h	24.1 mph
Reverse 1	7.5 km/h	4.6 mph	7.5 km/h	4.7 mph
Reverse 2	13.3 km/h	8.3 mph	14.1 km/h	8.8 mph
Reverse 3	23.3 km/h	14.8 mph	24.9 km/h	15.5 mph
Reverse 4	40.8 km/h	26.3 mph	44.3 km/h	27.5 mph

- Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 887 mm (35 in) roll radius.



# 980K Wheel Loader

## Hydraulic System

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

- Cycle time with rated payload.

## Brakes

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

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

## Tires

- Choose from a variety of tires to match your application.
- Choices include:
  - 29.5R25 VMT BS L3 Radial
  - 29.5-25 SRG LD FS E3/L3 Bias
  - 29.5R25 XHA2 MX L3 Radial
  - 29.5R25 XLD D1 MX L4 Radial
  - 29.5R25 VSNT BS L4 Radial
  - 29.6-25 SDT LD FS L5 Bias
  - 29.5R25 VSDL BS L5 Radial
  - 29.5R25 XLDD2 MX L5 Radial
  - 29.5R25 X MINE D2 MX L5 Radial
- NOTE: In certain applications (such as load and carry), the loader's productive capabilities might exceed the tires' tonnes-km/h (ton-mph) capabilities. Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model. Other special tires are available on request.

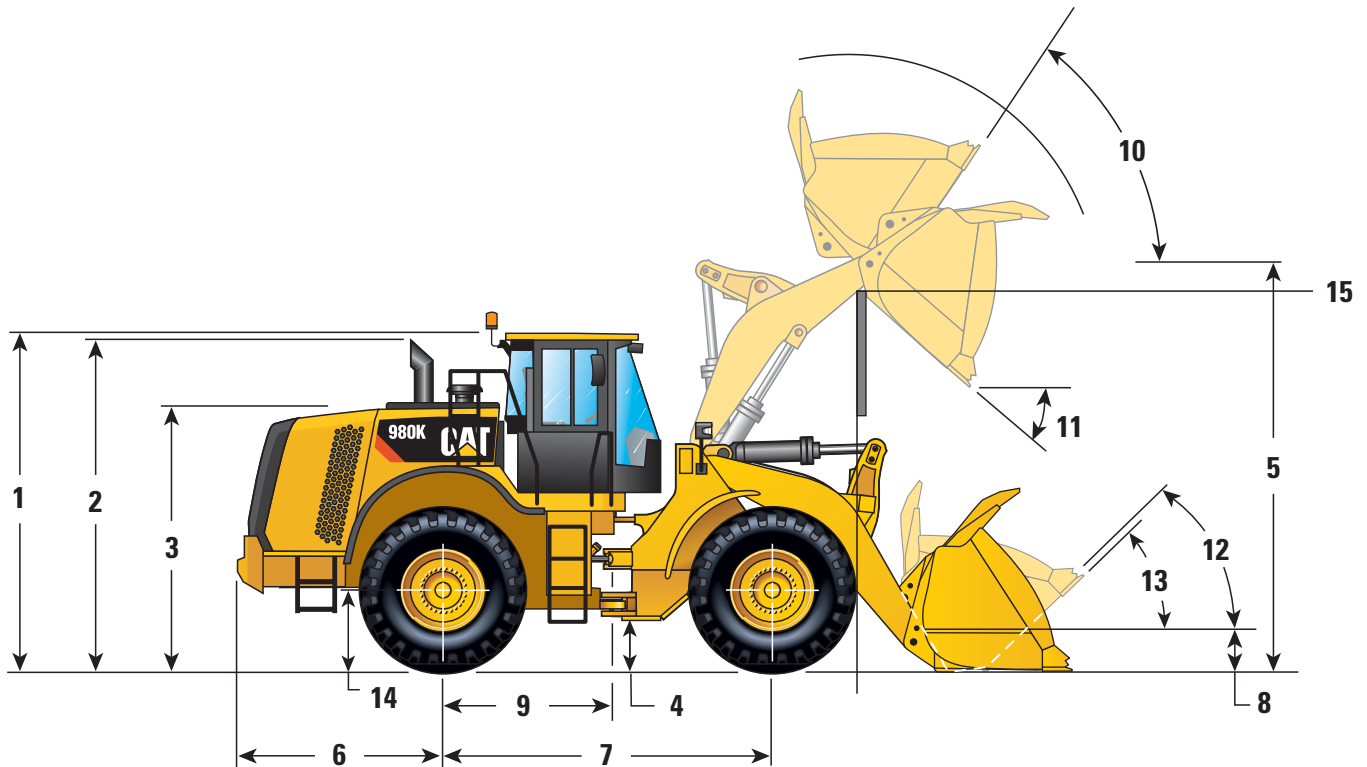
## Cab

ROPS/FOPS	Meets SAE and ISO standards	
<ul style="list-style-type: none"> <li>• Cat cab with a four post integrated Rollover Protective Structure (ROPS) are standard in North America and Europe.</li> <li>• ROPS meets SAE J1040 APR88 and ISO 3471:1994 criteria.</li> <li>• Falling Objects Protective Structure (FOPS) meets SAE J231 JAN81 and ISO:1992 Level II criteria.</li> <li>• The sound values indicated below are for specific operating conditions only. Machine and operator sound levels will vary at different engine and/or cooling fan speeds. Hearing protection may be needed when the machine is operated with a cabin that is not properly maintained, or when the doors and/or windows are open for extended periods or in a noisy environment.</li> <li>• The operator sound pressure level for a standard machine configuration, measured according to the procedures specified in ISO 6396:2008, is 73 dB(A) with the cooling fan speed set at maximum value.</li> <li>• The machine sound power level for a standard machine configuration, measured according to the procedures specified in ISO 6395:2008, is 112 dB(A) with the cooling fan speed set at maximum value.</li> <li>• The machine sound pressure level for a standard machine configuration, measured according to the procedures specified in SAE J88:2006, is 77 dB(A). The measurement was conducted under the following conditions: distance of 15 m (49.2 ft), moving forward in an intermediate gear ratio, static hydraulic cycle (with no payload) and with the cooling fan speed set at maximum value.</li> <li>• The operator sound pressure level for a machine installed with a Low Sound package, measured according to the procedures specified in ISO 6396:2008, is 72 dB(A) with the cooling fan speed set at maximum value.</li> <li>• The machine sound power level for a machine installed with a Low Sound package, measured according to the procedures specified in ISO 6396:2008, is 109 dB(A) with the cooling fan speed set at maximum value.</li> </ul>		

## Service Refill Capacities

Fuel Tank – Standard	447 L	118.1 gal
Cooling System	70 L	18.5 gal
Crankcase	37 L	9.8 gal
Transmission	73 L	19.3 gal
Differentials and Final Drives – Front	84 L	22.2 gal
Differentials and Final Drives – Rear	84 L	22.2 gal
Hydraulic Tank	280 L	74.0 gal

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## Dimensions (All dimensions are approximate and based on L3 Michelin XHA2 tires.)

1	Height to Top of ROPS	3547 mm	11'7"
2	Height to Top of Exhaust Pipe	3518 mm	11'6"
3	Height to Top of Hood	2828 mm	9'3"
4	Ground Clearance with 29.5R25 (See Tire Option Chart for Other Tires)	475 mm	1'6"
5	B-Pin Height – Standard	4508 mm	14'9"
	B-Pin Height – High Lift	4729 mm	15'6"
6	Center Line of Rear Axle to Edge of Counterweight	2510 mm	8'2"
7	Wheelbase	3700 mm	12'1"
8	B-Pin Height @ Carry – Standard	642 mm	2'1"
9	Center Line of Rear Axle to Hitch	1725 mm	5'7"
10	Rack Back @ Maximum Lift	61 degrees	
11	Dump Angle @ Maximum Lift	52 degrees	
12	Rack Back @ Carry	49 degrees	
13	Rack Back @ Ground	41 degrees	
14	Height to Center Line of Axle	798 mm	2'7"
15	Lift Arm Clearance – Standard Lift	3764 mm	12'4"
	Lift Arm Clearance – High Lift	4010 mm	13'3"

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