

# **Cat<sup>®</sup> 980** Wheel Loader

The Cat<sup>®</sup> 980 Wheel Loader brings premium performance with simple-to-use technologies as a standard offering, boosting operator efficiencies and delivering consistent high bucket fill factors resulting in up to 10% increased productivity.\* Extended service intervals lower maintenance costs by up to 20%.\* This machine is designed to meet emission standards without interrupting operation. Improved performance, reliability, durability, and versatility result in a machine that is better built to meet your needs.

\*Compared to previous Cat model

#### **Proven Reliability**

- Cat C13 engine<sup>+</sup> offers high power density with a combination of proven electronics, fuel, and air systems.
- Equipped with automatic Cat regeneration system, Cat Clean Emissions Module (CEM) with Diesel Particulate Filter (DPF), and Diesel Exhaust Fluid (DEF) tank and pump.
- Features an electric fuel priming pump, fuel-water separator, and secondary fuel filter.
- Thorough component design and machine validation processes result in unmatched reliability and uptime.

#### **Durability**

- Heavy-duty transmission and axles designed to handle extreme applications.
- Automatic planetary powershift (4F/4R) transmission features durable, long-lasting components.
- Full-flow hydraulic filtration system with additional kidney-loop filtration improves hydraulic system reliability and component life.

#### **Superior Fuel Efficiency & Productivity**

- New Autodig with Auto Set Tires for consistent high bucket fill factors deliver up to 10% more productivity compared to previous Cat model.
- Powershift transmission with lock-up clutch increases fuel efficiency while delivering optimal performance.
- Single clutch and lock-to-lock shifting for faster acceleration and speed on grades.
- Application Profiles optimize machine settings for different applications at one push of a button.
- Job Aids help operators improve and optimize their operating skills.
- Performance Series Buckets utilize a system-based approach to balance bucket shape against the machine's linkage, resulting in higher fill factors and better material retention when compared with other buckets of the same rated capacity.
- Automatic engine idle shutdown system significantly reduces idle time, overall operating hours, and fuel consumption.

- Optional limited slip differentials increase traction and reduce tire slip, lowering operating costs.
- Optional aggregate handler configuration offers higher payload capability for loose aggregate handling.\*\*
- Deeply integrated engine, power train, and hydraulic systems deliver unmatched productivity and fuel efficiency.

### **Smart Machine for Efficient Operation**

- Standard Cat technologies to monitor, manage, and enhance your jobsite operations.
- Cat Payload with Assist provides accurate weighing\*\*\* of the bucket payloads. Data is displayed in real time to improve productivity and loading accuracy with manual tip-off.
- Product Link<sup>™</sup> wirelessly connects the machine to the office, giving you access to production and essential health information needed to make timely, fact-based decisions to help you better run your business.
- New Autodig allows the operator to fully automate bucket loading to improve fill factors and loading time.
- Auto Set Tires promotes proper loading technique, significantly reducing tire slip and tire wear.
- Onboard Job Aids and Operator Controls Help to ease operation.
- Optional Cat Advanced Payload with Assist:
  - Tip Off Assist automatizes load of the final bucket to match hauling unit target.
  - Enhanced lists management, site integration, and extended scale features to help manage and improve productivity and profitability of operations.
- Optional Cat Productivity subscription provides detailed and comprehensive actionable information to help you manage and improve the productivity and profitability of your operations.
  - \*\*Optional configurations and equipment may vary from region to region and require conformance to Caterpillar payload policy. Consult your dealer or Caterpillar representative for details.
- \*\*\*Not legal for trade.



#### **Safety Features**

- Rear-vision camera enhances visibility behind the machine, helping you work safely and confidently.
- Optional 360° vision system helps the operator monitor the surroundings of the machine at all times.
- Optional Cat Detect radar technology enhances awareness by monitoring the working environment and alerts operators to hazards.
- Cab access with wide door, optional remote door opening, and stair-like steps add solid stability.
- Floor-to-ceiling windshield, large mirrors with integrated spot mirrors, and rear-vision camera provide industry leading all-around visibility.
- Computerized monitoring system includes several warning indicators.
- Monitored seat belt is standard and can be enhanced with an optional exterior indicator.
- Optional access light and under-hood service light system to provide illuminated access to the machine and daily checks even in the dark.

#### **Reduced Maintenance Time and Costs**

- Extended fluid and filter change intervals reduce maintenance costs by up to 20%.\*
- Convenient access to hydraulic and electrical service centers for easy and safe servicing.
- Remote Troubleshoot can connect the machine to the dealer service department to help diagnose problems quickly so you can get back to work.
- Remote Flash works around your schedule to ensure your machine's software is up to date for optimal performance.
- The Cat App helps you manage fleet location, hours, and maintenance schedules; it also alerts you for required maintenance and allows you to request service from your local Cat dealer.
- Integrated Autolube extends component and service life.
- One-piece tilting hood makes engine compartment access fast and easy.
- With Fusion<sup>™</sup> Quick Coupler, buckets can be changed without leaving the cab, allowing the machine to quickly move from task to task.

\*Parts and fluids only

#### Work in Comfort in the All New Cab

- Next-generation, easily adjustable seat and suspension for improved operator comfort. It comes in three trim levels and can be equipped with a 4-point harness.
- Increased legroom and adjustable seat controls for increased comfort and efficiency.
- Automatic air conditioning system keeps the cab cool as desired.
- New in-cab dashboard and high-resolution touch display(s) are easy to use, intuitive, and user friendly.
- Sound suppression, seals, and viscous cab mounts decrease noise and vibration for a quieter work environment.
- The seat-mounted electro-hydraulic joystick steering system provides precision control and dramatically reduces arm fatigue, resulting in excellent comfort and accuracy. An HMU steering wheel is also available.
- The next generation of ride control works as a shock absorber, improving ride quality over rough terrain.
- Inclined steps and convenient grab handles ease accessibility to the operating space.
- Extended windows enhance visibility, while convex and spot mirrors extend the driver's view on the sides and rear.

#### **Purpose-built Specialty Configurations**

- Application-specific arrangements direct from the factory for optimized performance and added durability in the toughest applications, including:
  - Industrial and waste models feature guarding and reinforcement necessary for work in transfer stations, recycling depots, scrap yards, and demolition sites.
  - Forestry model increases lift and tilt capacities for efficient and productive log and chip handling in paper, pellet, and sawmills.
  - Steel mill model is designed for the challenging work environment of steel mills and slag handling applications, incorporating an added level of safety.
  - Block handler model is built with the strength and stability to get the work done in block quarries.

## **Standard and Optional Equipment**

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

|   | Standard     | Optional     |
|---|--------------|--------------|
| OPERATOR ENVIRONMENT  |              |              |
| Cab, pressurized, sound suppression                         | $\checkmark$ |              |
| Door, remote opening system                                 |              | $\checkmark$ |
| EH implement controls, parking brake                        | $\checkmark$ |              |
| HMU steering wheel  |              | $\checkmark$ |
| Steering, joystick  | $\checkmark$ |              |
| Entertainment radio (FM, AM, USB, BT)                       |              | $\checkmark$ |
| Entertainment radio (DAB+)                                  |              | $\checkmark$ |
| CB radio ready  |              | $\checkmark$ |
| Seat, cloth, air suspension                                 | $\checkmark$ |              |
| Seat, suede/cloth, air suspension, heated                   |              | $\checkmark$ |
| Seat, leather/cloth, air suspension, heated/<br>cooled      |              | $\checkmark$ |
| Touchscreen display   | $\checkmark$ |              |
| Visibility: mirrors, rear-vision camera                     | $\checkmark$ |              |
| 360° vision system  |              | $\checkmark$ |
| Cat Detect rear radar system                                |              | $\checkmark$ |
| Dedicated rearview screen                                   |              | $\checkmark$ |
| Mirrors, heated   |              | $\checkmark$ |
| Air conditioner, heater, defroster (auto temp, fan)         | $\checkmark$ |              |
| Sun visor, front, retractable                               | $\checkmark$ |              |
| Sun visor, rear, retractable                                | $\checkmark$ |              |
| Window cleaning platform, front                             | $\checkmark$ |              |
| Windows, front, safety laminated rounded glass              | $\checkmark$ |              |
| Windows, front, heavy duty, or full guards                  |              | √            |
| ON-BOARD TECHNOLOGIES                                       |              |              |
| Cat Payload scale   | $\checkmark$ |              |
| Autodig with Auto Set Tires                                 | $\checkmark$ |              |
| Operator ID & machine security                              | $\checkmark$ |              |
| Application Profiles  | $\checkmark$ |              |
| Job Aids  | $\checkmark$ |              |
| Controls Help and eOMM                                      | $\checkmark$ |              |
| Cat Advanced Payload  |              | $\checkmark$ |
| Cat Payload Printer   |              | $\checkmark$ |
| POWER TRAIN   |              |              |
| Cat C13 engine  | $\checkmark$ |              |
| Electric fuel priming pump                                  | $\checkmark$ |              |
| Fuel-water separator and secondary fuel filter              | $\checkmark$ |              |
| Engine, air precleaner                                      | $\checkmark$ |              |
| Turbine, air precleaner                                     |              | $\checkmark$ |
| Radiator, high debris                                       |              | $\checkmark$ |
| Cooling fan, reversible                                     |              | $\checkmark$ |
| Axles, open differentials                                   | $\checkmark$ |              |
| Axles, limited slip differential(s)                         |              | √            |
| Axles, ecology drains, AOC ready, extreme temperature seals |              | $\checkmark$ |
| Axles, oil cooler   |              | $\checkmark$ |
| Transmission, planetary, automatic powershift               | $\checkmark$ |              |
| Torque converter with lock-up                               | $\checkmark$ |              |
| Heavy Duty transmission                                     |              | $\checkmark$ |

#### **Technical Specifications**

| Engine  |          |              |  |
|---|----------|--------------|--|
| Engine Model  | Cat      | Cat C13      |  |
| Engine Power @ 1,700 rpm –<br>ISO 14396:2002              | 313 kW   | 420 hp       |  |
| Gross Power @ 1,700 rpm –<br>SAE J1995:2014               | 317 kW   | 425 hp       |  |
| Net Power @ 1,700 rpm –<br>ISO 9249:2007, SAE J1349:2011  | 293 kW   | 393 hp       |  |
| Engine Torque @ 1,200 rpm –<br>ISO 14396:2002             | 2185 N∙m | 1,612 lbf-ft |  |
| Gross Torque @ 1,200 rpm –<br>SAE J1995:2014              | 2206 N⋅m | 1,627 lbf-ft |  |
| Net Torque @ 1,100 rpm –<br>ISO 9249:2007, SAE J1349:2011 | 2086 N·m | 1,539 lbf-ft |  |
| Displacement  | 12.      | 5 L          |  |

• Cat engine meets U.S. EPA Tier 4 Final, EU Stage V, Korea Tier 4 Final, and Japan 2014 emission standards.

• The net power advertised is the power available at the flywheel when the engine is equipped with fan, alternator, air cleaner, and aftertreatment.

Wainhte

| weigins   |   |  |
|---|---|--|
| Operating Weight  | 30 344 kg   | 66,877 lb  |
| • Weight based on a machine configuration with Brid     | gestone 29.5  | iR25   |
| VSNT L4 radial tires, full fluids, operator, standard o | ounterweigl   | nt, ride   |
| control cold start, roading fenders, Product Link, or   | oen different   | ial axles  |
| (front/rear), secondary steering, sound suppression     | n, and a 5.4 m  | 1 <sup>3</sup> (7.1 yd³)   |
| general purpose bucket with BOCE.                       |   |  |
|   | Operating Weight<br>• Weight based on a machine configuration with Brid<br>VSNT L4 radial tires, full fluids, operator, standard of<br>control cold start, roading fenders, Product Link, op<br>(front/rear), secondary steering, sound suppression | Operating Weight 30 344 kg<br>• Weight based on a machine configuration with Bridgestone 29.5<br>VSNT L4 radial tires, full fluids, operator, standard counterweigh<br>control cold start, roading fenders, Product Link, open different<br>(front/rear), secondary steering, sound suppression, and a 5.4 m |

| Transmission   |      |      |           |      |      |
|--|------|------|-----------|------|------|
| Speed  | km/h | mph  | Speed     | km/h | mph  |
| Forward 1  | 6.9  | 4.3  | Reverse 1 | 7.8  | 4.8  |
| Forward 2  | 13.3 | 8.3  | Reverse 2 | 15.2 | 9.4  |
| Forward 3  | 23.5 | 14.6 | Reverse 3 | 26.9 | 16.7 |
| Forward 4  | 39.5 | 24.5 | Reverse 4 | 39.5 | 24.5 |
| Maximum travel speed in standard vehicle with empty bucket and |      |      |           |      |      |

rei spe standard L4 tires with 935 mm (37 in) roll radius.

#### Sound

| With Cooling Fan Speed at Maximum Value:                                     |                     |
|--|---------------------|
| Operator Sound Pressure Level (ISO 6396:2008)                                | 72 dB(A)            |
| Exterior Sound Power Level (ISO 6395:2008)                                   | 112 dB(A)           |
| Exterior Sound Pressure Level (SAE J88:2013)                                 | 78 dB(A)*           |
| *Distance of 15 m (49.2 ft), moving forward in second                        | l gear ratio.       |
| With Cooling Fan Speed at 70% of Maximum Value:**                            |                     |
| Operator Sound Pressure Level (ISO 6396:2008)                                | 72 dB(A)            |
| Exterior Sound Power Level   | 109 dB(A)***        |
| **For machines in European Union countries and in co<br>the "EU Directives." | ountries that adopt |

\*\*\*European Union Directive "2000/14/EC" as amended by "2005/88/EC."

#### Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.9 kg (4.2 lb) of refrigerant which has a CO, equivalent 2.717 metric tonnes (2.995 tons).

| Bucket Capacities  |                         |             |  |  |  |
|--|-------------------------|-------------|--|--|--|
| Bucket Range   | 4.0-14.5 m <sup>3</sup> | 5.25-19 yd³ |  |  |  |
| Operating Specifications   |                         |             |  |  |  |
| Static Tipping Load – Full 40° Turn:   |                         |             |  |  |  |
| With Tire Deflection   | 19 706 kg               | 43,432 lb   |  |  |  |
| No Tire Deflection   | 20 965 kg               | 46,208 lb   |  |  |  |
| Breakout Force   | 227 kN                  | 51,008 lbf  |  |  |  |
| <ul> <li>For a machine configuration as defined under "Weight."</li> <li>Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2%</li> </ul> |                         |             |  |  |  |

verification between calculations and testing.

| Service Refill Capacities              |       |           |  |  |
|--|-------|-----------|--|--|
| Fuel Tank                              | 426 L | 112.5 gal |  |  |
| DEF Tank                               | 21 L  | 5.5 gal   |  |  |
| Cooling System                         | 52 L  | 13.7 gal  |  |  |
| Crankcase                              | 37 L  | 9.8 gal   |  |  |
| Transmission                           | 77 L  | 20.3 gal  |  |  |
| Differentials and Final Drives – Front | 84 L  | 22.2 gal  |  |  |
| Differentials and Final Drives – Rear  | 84 L  | 22.2 gal  |  |  |
| Hydraulic Tank                         | 153 L | 40.4 gal  |  |  |
|  |       |           |  |  |

| Hydraulic System                |                       |
|---------------------------------|-----------------------|
| Implement System:               |                       |
| Maximum Pump Output (2,250 rpm) | 449 L/min 119 gal/min |
| Maximum Operating Pressure      | 34 300 kPa 4,975 psi  |
| Hydraulic Cycle Time – Total    | 10.1 seconds          |

| Dimensions  |               |        |            |       |
|---|---------------|--------|------------|-------|
|   | Standard Lift |        | High Lift  |       |
| Height to Top of Hood                             | 3064 mm       | 10'1"  | 3064 mm    | 10'1" |
| Height to Top of Exhaust Pipe                     | 3764 mm       | 12'5"  | 3764 mm    | 12'5" |
| Height to Top of ROPS                             | 3829 mm       | 12'7"  | 3829 mm    | 12'7" |
| Ground Clearance                                  | 456 mm        | 1'5"   | 456 mm     | 1'5"  |
| Center Line of Rear Axle to Edge of Counterweight | 2661 mm       | 8'9"   | 2661 mm    | 8'9"  |
| Center Line of Rear Axle to Hitch                 | 1900 mm       | 6'3"   | 1900 mm    | 6'3"  |
| Wheelbase   | 3800 mm       | 12'6"  | 3800 mm    | 12'6" |
| Overall Length (without bucket)                   | 8155 mm       | 26'10" | 8355 mm    | 27'5" |
| Hinge-Pin Height at Maximum Lift                  | 4554 mm       | 14'11" | 4775 mm    | 15'7" |
| Hinge-Pin Height at Carry                         | 632 mm        | 2'0"   | 682 mm     | 2'2"  |
| Lift Arm Clearance at Maximum Lift                | 3881 mm       | 12'8"  | 4125 mm    | 13'6" |
| Rack Back at Maximum Lift                         | 61 degrees    |        | 61 degrees |       |
| Rack Back at Carry Height                         | 48 degrees    |        | 50 degrees |       |
| Rack Back at Ground                               | 40 degrees    |        | 40 degrees |       |
| Width over Tires (Loaded)                         | 3260 mm       | 10'9"  | 3260 mm    | 10'9" |
| Tread Width                                       | 2440 mm       | 8'0"   | 2440 mm    | 8'0"  |

• All dimensions are approximate and based on machine equipped with 5.4 m<sup>3</sup> (7.1 yd<sup>3</sup>) general purpose bucket with BOCE and Bridgestone 29.5R25 VSNT L4 radial tires.

> AEXQ3104-00 (11-2020) **Build Number 14A** (N Am, Eur, Jpn, Korea)



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