

950M

WHEEL LOADER



Engine Maximum Power
Operating Weight

TIER 3/STAGE IIIA EQUIVALENT¹

196 kW (263 hp)
19 213 kg (42,357 lb)

TIER 4 FINAL/STAGE V²

187 kW (250 hp)
19 213 kg (42,357 lb)

¹ Meets Brazil MAR-1 and UN ECE R96 Stage IIIA emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
² Meets U.S. EPA Tier 4 Final, either EU Stage V or EU Stage IV* emission standards.

*Stage IV engines comply with the transition provisions of the EU nonroad emission regulation



The Cat® 950M Wheel Loader offers significant fuel savings while lowering long-term costs. Cat wheel loaders meet emission standards and are designed to improve fuel economy without interrupting performance. The reliability, durability, and versatility result in machines that are better built to meet your needs.

CAT® 950M

GREATER EFFICIENCY



WHEEL LOADERS MADE FOR MORE

Cat wheel loaders were built with efficiency in mind, offering you the best in:

- + RELIABILITY
- + DURABILITY
- + PRODUCTIVITY
- + FUEL EFFICIENCY

Experience higher performance while reducing costs and fuel consumption with Cat wheel loaders.

GREATER PRODUCTIVITY

Applying proven technology and components means more dependable results for your work.

BETTER FUEL EFFICIENCY

Deep system integration results in lower fuel consumption on average as compared to previous generation machines.

EASIER TO MAINTAIN

Extended engine oil, engine oil filter, hydraulic filter, and transmission oil change intervals save you time, money, and energy.

All comparisons to previous generation.

FAST PAYBACK

How **CAT PAYLOAD WITH PRODUCTION MEASUREMENT** paid for itself in less than a week for one quarry customer.*



... **PAYBACK: 6 DAYS** ...

CALCULATE **YOUR** ESTIMATED PAYBACK TIME AT
MA-CATINFO.COM/PAYLOADCALCULATOR

*Your results will vary. Six-day payback and 17% productivity boost based on results from ma-catinfo.com/payloadcalculator

Not legal for trade.



COMPONENTS YOU CAN COUNT ON

Every machine is equipped with a combination of proven electronic, hydraulic, cooling, and power train systems. Our components save you time, money, and effort.



RELIABLE, PROVEN COMPONENTS & TECHNOLOGY

Staying ahead of the competition, Caterpillar offers a wide variety of cutting-edge technologies to get the job done quickly and easily with outstanding accuracy.

PRODUCTIVE RESULTS

WORK SMART AND MOVE MORE

PERFORMANCE SERIES BUCKETS

Easy-to-load Performance Series Buckets improve material retention and reduce dig times, significantly improving productivity and fuel efficiency, resulting in unsurpassed production capabilities with increased fill factors – ranging from 100% to 115%.

ADVANCED POWERSHIFT TRANSMISSION

With the addition of a 5-speed transmission including a lock-up clutch torque converter, our power trains deliver smooth shifting, fast acceleration, and speed on grade, amplifying your performance and fuel efficiency.

OPTIMIZED RIDE CONTROL SYSTEM

Dual accumulator system enables a wide payload range and a better ride. Improves ride quality and smoothness over rough terrain, increasing your confidence, comfort, and efficiency, ensuring excellent material retention.



BETTER TRACTION

Differential locks are activated on-the-go which improves traction resulting in increased productivity while also reducing tire scuffing for reduced operating costs.

AUXILIARY COUNTERWEIGHT

Equipped with an auxiliary counterweight, payloads can be increased by installing larger buckets in compliance with Caterpillar payload policy.

THE RIGHT TECHNOLOGIES

Fine-tuned for the right applications:

- + BETTER FUEL ECONOMY, MAXIMIZED UPTIME, AND LOWER MAINTENANCE COSTS
- + HIGH POWER AND PERFORMANCE ACROSS A VARIETY OF APPLICATIONS
- + ENHANCED RELIABILITY THROUGH COMMONALITY AND SIMPLICITY OF DESIGN
- + WORLD-CLASS SUPPORT FROM THE CAT DEALER NETWORK
- + DURABLE DESIGNS WITH LONG LIFE TO OVERHAUL



ENHANCED POWER TRAIN

Our power trains come standard with a lock-up clutch transmission, matching the engine power to increase fuel efficiency while delivering optimal performance.



DURABLE AXLES

M Series axles are designed to handle your extreme applications. The rear axle oscillates for excellent stability and traction on even the roughest terrain.



OPTIMIZED Z-BAR LINKAGE

Parallel lift capabilities, high breakout forces, and high tilt forces at maximum lift enhance performance and versatility.



OPTIMIZED HYDRAULICS

Our hydraulic systems come equipped with a mono-block main hydraulic valve. This design reduces weight while decreasing leak points by 40%.



DURABLE FRAMES

The robotically welded two-piece structural frame absorbs impact associated with excavation and loading, while the hitch system provides high bearing force capacity.



EXTENSIVE RANGE OF ATTACHMENTS

Do more jobs with one machine. An extensive range of work tools and bucket styles are available to customize these machines for your operation.



CAT FUSION™ COUPLER SYSTEM

Caterpillar patented, Fusion is a wheel loader coupler system performing virtually identical to pin-on, with all the flexibility of a quick coupler system.



INCREASE PRODUCTIVITY AND EFFICIENCY UP TO 15%

CAT® CONNECT TECHNOLOGY

Technology gives you the edge. Operators of all experience levels will dig and load with more confidence, speed, and accuracy. The result? Better productivity and lower costs.



PAYLOAD

Provides you accurate weighing* of the materials you are loading and hauling. Payload data is displayed in real-time to improve productivity and reduce overloading. Optional Advanced Productivity subscription provides comprehensive actionable information to help you manage and improve the productivity and profitability of your operations.



DETECT

Enhances awareness of the environment around working equipment and provides alerts to help keep people and assets safe on the jobsite.



LINK

Wirelessly connects you to your equipment, giving you access to essential information you need to know to run your business. Gain valuable insight into how your machine or fleet is performing, allowing you to make timely, fact-based decisions that can boost jobsite efficiency and productivity.

*Not legal for trade.

REAL-TIME INFORMATION FROM CAT LINK TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

Cat Link hardware (Product Link™) and software (VisionLink®) work together to put equipment information at your fingertips. Get real-time access to information on every machine in your fleet on any jobsite—no matter the size of the operation or the brands of equipment you run.



PRODUCT LINK

Track asset location, hours, fuel usage, diagnostic codes, idle time, and more to improve your productivity and lower your operating costs. Cellular connectivity comes standard. Satellite connectivity is available.



VISIONLINK

Using the online VisionLink interface, you can see a common, collective view of your information, making it easier to manage a mixed fleet and make informed decisions about your equipment.



MY.CAT.COM

You can also access Caterpillar and Cat dealer information at my.cat.com. My.cat.com gives you access to PM schedules, parts and service records, warranty coverage, and more—with a single login. Plus, you can link directly to your VisionLink account.

SUPERIOR FUEL EFFICIENCY



ENGINE AND EMISSIONS

High power density and fuel efficiency set our engines apart. Certified to meet emission standards, our engines feature Cat electronics, a fuel injection process, and air-management systems.

EFFICIENT ENGINE STRUCTURE

Significantly improved performance and fuel economy through engine speed and overall system heat load reduction.

ADVANCED SYSTEM INTEGRATION

Lower fuel consumption resulting from the system integration of the engine and emissions system, power train, hydraulic system, and cooling system.

PRODUCTIVE ECONOMY MODE

Automatically control engine torque and speed based on the machine's power train load, placing them in the most efficient operating range for fuel and performance.

NEXT GENERATION FUEL SYSTEMS

Cat injection timing regulates the fuel injection process through a series of timed microbursts, providing more control of combustion for the cleanest, most efficient fuel burn.

CAT NO_x REDUCTION SYSTEM

The Cat NO_x Reduction System (NRS) captures and cools a small quantity of exhaust gas, then routes it back into the combustion chamber where it reduces temperatures and emissions (Tier 4 Final, Stage V only).

AFTERTREATMENT TECHNOLOGIES

The Selective Catalytic Reduction (SCR) has been added to our demonstrated aftertreatment solution, fully meeting emission standards (Tier 4 Final, Stage V only).

EASY TO OPERATE

SAFE. COMFORTABLE. ACCESSIBLE.

A quiet operating environment and intuitive controls help to reduce the fatigue, stresses, sounds, and temperatures of a demanding job.



CAB ACCESS

Inclined steps and convenient grab handles ease accessibility to the operating space.



BETTER RIDE CONTROL

The next generation of ride control works as a shock absorber, improving ride quality over rough terrain.



GREATER VISIBILITY

Extended windows enhance visibility while convex and spot mirrors extend the driver's view on the sides and rear.



ADVANCED SEAT

The next generation of operator comfort includes an easily adjustable seat with updated styling and a revolutionary suspension system. It comes in three trim levels and can be equipped with a 4-point harness.



NOISE REDUCTION

Sound-suppression, seals, and viscous cab mounts decrease noise and vibration for a quieter work environment.



PRECISION STEERING

Choose the standard steering wheel configuration or the optional seat-mounted electro-hydraulic joystick steering system

TOUCHSCREEN DISPLAY

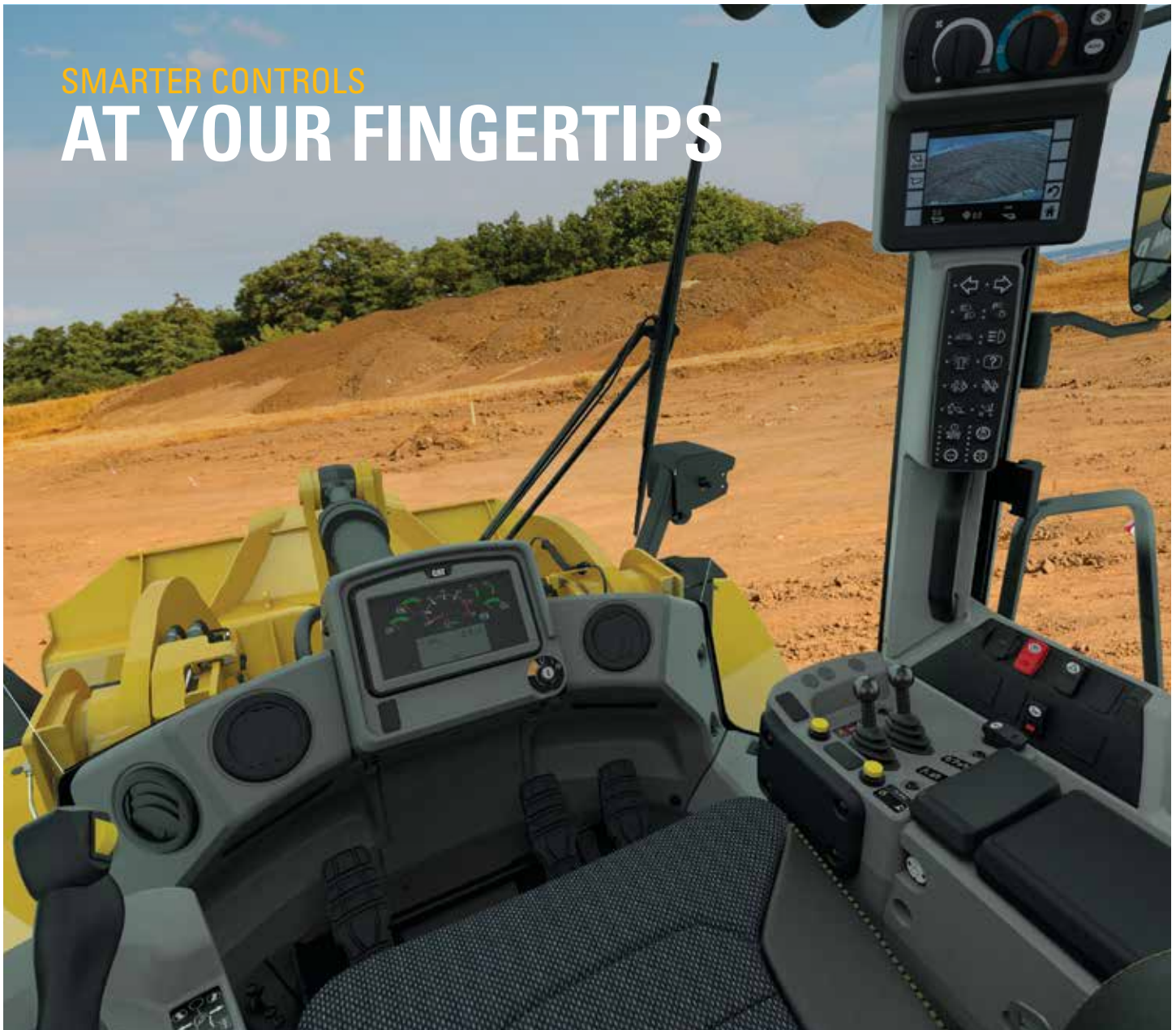
Easy interface, machine controls, rear vision camera, intuitive navigation, and integrated Cat Production Measurement payload system let operators modify and monitor their machines instantly.

CENTRAL DISPLAY

Featuring a large text box with information about machine operation, features, system troubleshooting, and calibration, the central display is equipped with LED indicators and analog gauges, allowing the operator to easily analyze key systems.

CONTROL PANEL

With easy-to-reach controls and touchscreen display, the LED switch panel provides immediate access to frequently required functions, even while wearing gloves.



EASIER MAINTENANCE MORE SAVINGS



Cat wheel loaders are easy to maintain and service, eliminating any potential waste of time or money. Major components are rebuildable, giving the machine a second life, and often a third life.

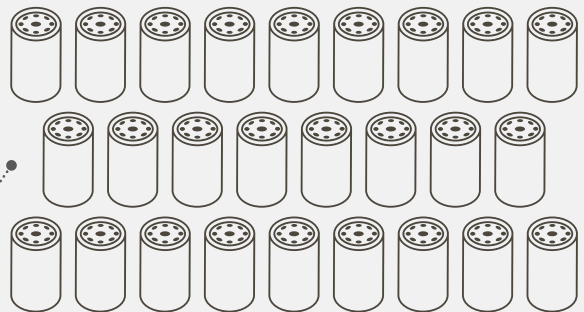
KEY FEATURES SAVING YOU TIME, MONEY, AND ENERGY:

- + Extended engine oil and engine oil filter change interval up to 1,000 hours (Tier 4 Final, Stage V only)
- + Extended hydraulic filter change interval up to 1,000 hours
- + Extended transmission oil change interval up to 2,000 hours
- + Optional integrated Cat autolube system
- + Remote flash support
- + Longer tire life with on-the-go traction aids
- + Safe and simple preventive maintenance



LOWER MAINTENANCE COSTS

SAVE ON MAINTENANCE
BY USING FEWER FILTERS



Extended filter change intervals mean using fewer filters over the machine's lifetime.

DO MORE JOBS

VERSATILE ATTACHMENTS AND COUPLERS

For worksites that demand more, you need a wheel loader that is purpose-built for the job. Cat work tools are engineered to handle all of your specific application needs.



OPTIMIZED Z-BAR LINKAGE

The optimized Z-bar linkage combines parallel lift capabilities with the Performance Series Buckets and the Fusion Coupler work tool range to enhance visibility, performance, and fuel efficiency.



FUSION QUICK COUPLER

The Fusion Coupler System allows machines to use a wide range of tools that can each be picked up by machines of varying sizes. Fusion is designed to integrate the work tool and the machine by pulling the coupler and tool closer to the loader, increasing overall lift capability.

- + Improved machine performance
- + Unsurpassed durability
- + Increased visibility

HIGH LIFT LINKAGE

The optional high lift linkage offers increased hinge pin height to load more easily in a variety of applications with any type of bucket or fork.



PERFORMANCE SERIES BUCKETS

Performance Series Buckets use a system-based approach to balance bucket shape with the machine's lift and tilt capacity, weight, and linkage. A variety of work tools and bucket styles let you customize these machines to meet your operation needs.

- + Easy loading
- + Fuel efficient
- + Carry more
- + Lower operating costs
- + Higher productivity



Industrial and Waste Handler

Industrial and waste packages offer integrated guards to protect your machine from the harsh environment of a scrap or waste handling application.

Forestry Arrangement

The forestry package includes a heavy-duty linkage, a larger tilt cylinder, and a heavier counterweight to handle the larger loads met in logging and mill yard applications.

TECHNICAL SPECIFICATIONS

See cat.com for complete specifications.

| ENGINE – TIER 3/STAGE IIIA EQUIVALENT | | | |
|---|----------|---------------------|--|
| Engine Model | Cat C7.1 | | |
| Maximum Power @ 2,000 rpm – SAE J1995 | 196 kW | 263 hp | |
| Maximum Power @ 2,000 rpm – ISO 14396 | 195 kW | 261 hp | |
| Maximum Power @ 2,000 rpm – ISO 14396 (metric) | 265 hp | | |
| Maximum Net Power @ 2,000 rpm – SAE J1349 | 185 kW | 248 hp | |
| Maximum Net Power @ 2,000 rpm – ISO 9249 | 185 kW | 248 hp | |
| Maximum Net Power @ 2,000 rpm – ISO 9249 (metric) | 252 hp | | |
| Peak Gross Torque (1,400 rpm) – SAE J1995 | 1053 N·m | 777 lbf·ft | |
| Peak Gross Torque (1,400 rpm) – ISO 14396 | 1050 N·m | 774 lbf·ft | |
| Maximum Net Torque (1,400 rpm) | 984 N·m | 726 lbf·ft | |
| Displacement | 7.01 L | 428 in ³ | |

| ENGINE – TIER 4 FINAL/STAGE V | | | |
|---|----------|---------------------|--|
| Engine Model | Cat C7.1 | | |
| Maximum Power @ 2,100 rpm – SAE J1995 | 187 kW | 250 hp | |
| Maximum Power @ 2,100 rpm – ISO 14396 | 186 kW | 249 hp | |
| Maximum Power @ 2,100 rpm – ISO 14396 (metric) | 253 hp | | |
| Maximum Net Power @ 2,100 rpm – SAE J1349 | 171 kW | 230 hp | |
| Maximum Net Power @ 2,100 rpm – ISO 9249 | 171 kW | 230 hp | |
| Maximum Net Power @ 2,100 rpm – ISO 9249 (metric) | 232 hp | | |
| Peak Gross Torque (1,300 rpm) – SAE J1995 | 1235 N·m | 911 lbf·ft | |
| Peak Gross Torque (1,300 rpm) – ISO 14396 | 1231 N·m | 908 lbf·ft | |
| Maximum Net Torque (1,300 rpm) | 1163 N·m | 858 lbf·ft | |
| Displacement | 7.01 L | 428 in ³ | |

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.6 kg of refrigerant which has a CO₂ equivalent of 2.288 metric tonnes.

| WEIGHTS | | | |
|------------------|-----------|-----------|--|
| Operating Weight | 19 213 kg | 42,357 lb | |

- Weight based on a machine configuration with Michelin 23.5R25 XHA2 L3 radial tires, full fluids, operator, standard counterweight, cold start, roading fenders, Product Link, manual diff lock/open axles (front/rear), power train guard, secondary steering, sound suppression, and a 3.1 m³ (4.1 yd³) general purpose bucket with BOCE.

| BUCKET CAPACITIES | | | |
|-------------------|------------------------|--------------------------|--|
| Bucket Range | 2.5-9.2 m ³ | 3.3-12.0 yd ³ | |

| TRANSMISSION | | | | | |
|--------------|-----------|----------|-----------|-----------|----------|
| Forward 1 | 6.9 km/h | 4.3 mph | Forward 5 | 39.5 km/h | 24.5 mph |
| Forward 2 | 12 km/h | 7.5 mph | Reverse 1 | 6.9 km/h | 4.3 mph |
| Forward 3 | 19.3 km/h | 12.0 mph | Reverse 2 | 12 km/h | 7.5 mph |
| Forward 4 | 25.7 km/h | 16.0 mph | Reverse 3 | 25.7 km/h | 16.0 mph |

- Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 787 mm (31 in) roll radius.

| SERVICE REFILL CAPACITIES | | | |
|--|-------|----------|--|
| Fuel Tank | 275 L | 72.6 gal | |
| DEF Tank | 16 L | 4.2 gal | |
| Cooling System | 59 L | 15.6 gal | |
| Crankcase | 22 L | 5.8 gal | |
| Transmission | 43 L | 11.4 gal | |
| Differentials and Final Drives – Front | 43 L | 11.4 gal | |
| Differentials and Final Drives – Rear | 43 L | 11.4 gal | |
| Hydraulic Tank | 125 L | 33.0 gal | |

| SOUND | | | |
|---|--|-----------|--|
| With Cooling Fan Speed at Maximum Value: | | | |
| Operator Sound Pressure Level (ISO 6396:2008) | | | |
| Tier 3/Stage IIIA Equivalent | | 72 dB(A) | |
| Tier 4 Final/Stage V | | 70 dB(A) | |
| Exterior Sound Power Level (ISO 6395:2008) | | 107 dB(A) | |
| Exterior Sound Pressure Level (SAE J88:2013) | | 75 dB(A)* | |

*Distance of 15 m (49.2 ft), moving forward in second gear ratio.

| | | | |
|---|--|--------------|--|
| With Cooling Fan Speed at 70% of Maximum Value:** | | | |
| Operator Sound Pressure Level (ISO 6396:2008) | | | |
| | | 69 dB(A) | |
| Exterior Sound Power Level | | 104 dB(A)*** | |

**For machines in European Union countries and in countries that adopt the "EU Directives."

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

| OPERATING SPECIFICATIONS | | | |
|---|-----------|------------|--|
| Static Tipping Load – Full 37° Turn – with Tire Deflection | 11 005 kg | 24,262 lb | |
| Static Tipping Load – Full 37° Turn – no Tire Deflection | 11 760 kg | 25,926 lb | |
| Breakout Force | 181 kN | 40,690 lbf | |

- For a machine configuration as defined under "Weight."
- Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

| HYDRAULIC SYSTEM | | | |
|---------------------------------|-----------------------|------------|--|
| Implement Pump Type | Variable Axial Piston | | |
| Implement System: | | | |
| Maximum Pump Output (2,150 rpm) | 286 L/min | 76 gal/min | |
| Maximum Operating Pressure | 29 300 kPa | 4,250 psi | |
| Hydraulic Cycle Time – Total | 9.1 Seconds | | |

| DIMENSIONS | | | | |
|---|---------------|-------|--------------|--------|
| | Standard Lift | | High Lift | |
| Height to Top of Hood | 2697 mm | 8'10" | 2697 mm | 8'10" |
| Height to Top of Exhaust Pipe | 3413 mm | 11'2" | 3413 mm | 11'2" |
| Height to Top of ROPS | 3446 mm | 11'4" | 3446 mm | 11'4" |
| Ground Clearance | 367 mm | 1'2" | 367 mm | 1'2" |
| Center Line of Rear Axle to Edge of Counterweight | 1942 mm | 6'4" | 2071 mm | 6'10" |
| Center Line of Rear Axle to Hitch | 1675 mm | 5'6" | 1675 mm | 5'6" |
| Wheelbase | 3350 mm | 11'0" | 3350 mm | 11'0" |
| Overall Length (without bucket) | 6906 mm | 22'8" | 7488 mm | 24'7" |
| Hinge Pin Height at Maximum Lift | 647 mm | 2'1" | 782 mm | 2'7" |
| Hinge Pin Height at Carry | 4027 mm | 13'3" | 4527 mm | 14'10" |
| Lift Arm Clearance at Maximum Lift | 3280 mm | 10'9" | 3634 mm | 11'11" |
| Rack Back at Maximum Lift | 59 degrees | | 56 degrees | |
| Rack Back at Carry Height | 46 degrees | | 49 degrees | |
| Rack Back at Ground | 38 degrees | | 42 degrees | |
| Maximum Width over Tires | 2822 mm 9'4" | | 2822 mm 9'4" | |
| Tread Width | 2140 mm 7'0" | | 2140 mm 7'0" | |

- All dimensions are approximate and based on Michelin 23.5R25 XHA2 L3 radial tires.

STANDARD & OPTIONAL EQUIPMENT

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

| OPERATOR ENVIRONMENT | STANDARD | OPTIONAL |
|--|----------|----------|
| Cab, pressurized, sound suppression | • | |
| Door, remote opening system | | • |
| Touchscreen display | • | |
| Steering | | |
| Steering wheel | • | |
| EH: Joystick steering | | • |
| EH: Controls, parking brake | • | |
| Seat, cloth, air suspension | • | |
| Seat, suede/cloth, air suspension, heated | | • |
| Seat, leather/cloth, air suspension, heated/cooled | | • |
| Radio, AM/FM, Bluetooth®, CD/USB/MP3/Sirius XM, CB ready | | • |
| Visibility: Mirrors, rear vision camera | • | |
| Air conditioner, heater, defroster (auto temp, fan) | • | |
| Windows, front, heavy duty, or full guards | | • |
| CAT CONNECT TECHNOLOGIES | STANDARD | OPTIONAL |
| Link: Product Link | • | |
| Link: VIMS™ | | • |
| Detect: Rear vision camera | • | |
| Detect: Cat Rear Object Detection | | • |
| Machine Security System | | • |
| Printer, Aggregate Autodig, Cat Production Measurement 2.0 | | • |
| POWER TRAIN | STANDARD | OPTIONAL |
| Cat C7.1 engine, meets emission standards | • | |
| Emissions: CEM, DPF, DEF (Tier 4 Final/Stage V) | • | |
| Fuel priming pump, fuel/water separator | • | |
| Radiator, high debris, wide fin spacing | | • |
| Fan, variable pitch fan, auto/manual control | | • |
| Torque converter, lock up clutch | • | |
| Precleaner, engine air intake | • | |
| Brakes, full hydraulic, Integrated Braking System, wear indicators | • | |
| Axles, manual differential locks, ecology drains | • | |
| Axles, automatic locks, oil cooler, temperature seals, guards | | • |

| HYDRAULICS | STANDARD | OPTIONAL |
|---|----------|----------|
| Hydraulic system, steering, load sensing | • | |
| Ride Control, 2V | • | |
| 3 rd and 4 th function w/ Ride Control | | • |
| Oil sampling valves, hoses, Cat XT™ | • | |
| ELECTRICAL | STANDARD | OPTIONAL |
| Starter, electric, heavy duty | • | |
| Starting and charging system, 24V | • | |
| Lights: Halogen, 4 work lights, 2 roading lights, 2 rear vision lights | • | |
| Lights: Additional 4 halogen work lights OR replace full lighting with LED packages | | • |
| Cold start, 120V, 240V | | • |
| MONITORING SYSTEM | STANDARD | OPTIONAL |
| Gauges: Speedometer, temperature, fuel level, DEF level | • | |
| Indicators: Regeneration, temperature, pressure, battery, oil, DEF | • | |
| ADDITIONAL EQUIPMENT | STANDARD | OPTIONAL |
| Cat Autolube System | | • |
| Fenders, roading | | • |
| Guard, power train | | • |
| Oil change, high speed engine | | • |
| Precleaner, turbine | | • |
| Precleaner, trash | | • |
| LINKAGE | STANDARD | OPTIONAL |
| High Lift | | • |
| Forestry | | • |
| Quick Coupler Ready | | • |
| Linkage, Z-bar, cast crosstube/tilt lever | • | |
| Kickout, lift and tilt, automatic | • | |
| OTHER OPTIONAL CONFIGURATIONS | STANDARD | OPTIONAL |
| Industrial and Waste Handler | | • |
| Forestry | | • |
| Steel Mill (T3 equivalent only) | | • |
| Auxiliary Counterweight | | • |

Not all features are available in all regions. Please check with your local Cat dealer for specific offering availability in your area.

For additional information, refer to the Technical Specifications brochures for the 966M model available at www.cat.com or your Cat dealer.



For more complete information on Cat products, dealer services and industry solutions, visit us on the web at www.cat.com

VisionLink® is a trademark of Trimble Navigation Limited, registered in the United States and in other countries.

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

© 2019 Caterpillar. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, VIMS, Fusion, XT, Cat Connect, Product Link, "Caterpillar Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

www.cat.com www.caterpillar.com

AEXQ2439-00
2019 Product Update

