

Cat[®] 966M Wheel Loader

The new 966M Wheel Loader has an ACERT[™] engine equipped with a combination of proven electronic, fuel, and air components. Applying proven technologies systematically and strategically lets us meet our customer's high expectations for productivity, fuel efficiency, reliability and service life. Deep system integration results in reduced emissions, improved performance and improved fuel economy without interrupting machine performance making it seamless to operators. Aggregate Handler and other optional configurations are available.**

RELIABILITY, PRODUCTIVITY AND FUEL EFFICIENCY

- 10% more fuel efficient than K Series*
- Up to 25% more efficient than H Series*

Linkage and Work Tools

- Performance Series buckets and range of work tools
- Fusion™ « zero-offset » coupler (option)

Engine and Aftertreatment Advancements

- Cat[®] C9.3 ACERT engine
- Meets U.S. EPA Tier 3/EU Stage IIIA equivalent emissions standards
- Productive economy mode

Transmission Advancements

- Powershift transmission with single clutch speed shifts and torque based down shifts
- Lock up clutch torque converter with lock-to-lock shifting
- Split flow oil system and multi-viscosity oil

Axle Advancements

- On-the-go disc-type front differential locks (front and rear fully automatic option)
- Caliper disc parking brake
- Bevel gear shrouds

Next Generation Hydraulic Systems

- Next generation main valve
- Next generation ride control system with dual accumulators
- Next generation implement pump with increased displacement
- Full flow and kidney loop filtration
- Load-sensing hydraulics with simultaneous hydraulic functions
- 3rd and 4th function (option)

EASE OF OPERATION

Best-in-class Operator Environment

- Optimized all-around visibility
- E-H joystick steering (steering wheel optional)
- Touch screen multifunction color display with integrated controls and rearview camera
- Stair-like ingress and egress
- New wider door and increased glass area
- Seat-mounted fingertip electro-hydraulic implement controls
- Large convex rearview mirrors with integrated spot mirror
- Remote door opening (option)
- Automatic climate control
- Viscous cab mounts
- Low operator sound levels

Advanced Technology with Cat Connect

- Link technologies, like Product Link™ to monitor equipment and manage production using online VisionLink® software
- Payload technologies, like Cat Production Measurement (option) to measure payloads and optimize productivity
- Detect technologies, like the rear vision camera to keep people safe and help the operator work more productively

SERVICE ACCESS

- One-piece tilting hood with side and rear doors
- Centralized service centers for hydraulic and electrical components
- Windshield cleaning platform and harness tie-off
- *Fuel efficiency is measured in mass of material moved per volume of fuel burned. Average efficiency improvement as tested and analyzed for an average composite cycle and stand configuration with variations per comparable model with and without economy mode active. Factors influence result variation such as, but not limited to, machine configuration, operator technique, machine application, climate, etc.
- **Optional configuration and equipment may vary from region to region. Consult your Caterpillar representative for further details.



Cat® 966M Wheel Loader

| Engine | | |
|--|----------|---------------------|
| Engine Model | Cat C9. | 3 ACERT |
| Max Gross Power @ 1,800 rpm – SAE J1995 | 230 kW | 308 hp |
| Max Gross Power @ 1,800 rpm – SAE J1995 (metric) | | 313 hp |
| Max Gross Power @ 1,800 rpm – ISO 14396 | 227 kW | 304 hp |
| Max Gross Power @ 1,800 rpm – ISO 14396 (metric) | | 309 hp |
| Max Net Power @ 1,700 rpm – SAE J1349 | 207 kW | 278 hp |
| Max Net Power @ 1,700 rpm – SAE J1349 (metric) | | 281 hp |
| Max Net Power @ 1,700 rpm – ISO 9249 | 207 kW | 278 hp |
| Max Net Power @ 1,700 rpm – ISO 9249 (metric) | | 281 hp |
| Peak Gross Torque (1,200 rpm) – SAE J1995 | 1600 N·m | 1,180 lbf-ft |
| Peak Gross Torque (1,200 rpm) – ISO 14396 | 1581 N∙m | 1,166 lbf-ft |
| Maximum Net Torque (1,000 rpm) | 1507 N∙m | 1,112 lbf-ft |
| Displacement | 9.3 L | 568 in ³ |

Operating Weight

23 220 kg 51,176 lb • Weight based on a machine configuration with Michelin 26.5R25 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 4.2 m³ (5.5 yd³) general purpose bucket with BOCE.

Weights

| Bucket Capacities | | | | | | |
|---|----------------------------|-------------------|--|--|--|--|
| Bucket Range | 2.5- 9.2 m ³ | 3.25- 12.0 yd³ | | | | |
| Operating Specifications | | | | | | |
| Static Tipping Load – Full 37° Turn – with Tire Deflection | 14 668 kg | 32,329 lb | | | | |
| Static Tipping Load – Full 37° Turn – No Tire Deflection | 15 822 kg | 34,873 lb | | | | |
| Breakout Force | 173 kN | 38,984 lbf | | | | |
| • For a machine configuration as defined under "Wei | ght." | | | | | |

• Full compliance to ISO 143971:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

Sound

| With Cooling Fan Speed at Maximum Value: | |
|--|-------------------------|
| Operator Sound Pressure Level (ISO 6396:2008) | 70 dB(A) |
| Exterior Sound Power Level (ISO 6395:2008) | 109 dB(A) |
| Exterior Sound Pressure Level (SAE J88:2013) | 76 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 (ISO 6395:2008) | 108 L _{WA} *** |
| **For machines in countries that adopt the "EU Directi | ves." |
| ***European Union Directive "2000/14/EC" as amended | l by "2005/88/EC." |

| Transmission | | | | | | | | | | | |
|--------------|--|--|--|--|--|--|--|-------|-----|-----------|----------|
| Forward 1 | | | | | | | | | | 6.5 km/h | 4.0 mph |
| Forward 2 | | | | | | | | | | 13.0 km/h | 8.1 mph |
| Forward 3 | | | | | | | | | | 23.5 km/h | 14.6 mph |
| Forward 4 | | | | | | | | | | 39.5 km/h | 24.5 mph |
| Reverse 1 | | | | | | | | | | 7.1 km/h | 4.4 mph |
| Reverse 2 | | | | | | | | | | 14.4 km/h | 8.9 mph |
| Reverse 3 | | | | | | | | | | 25.9 km/h | 16.1 mph |
| Reverse 4 | | | | | | | | | | 39.5 km/h | 24.5 mph |
| | | | | | | | | 1.1.1 | 1.1 | | |

• Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 826 mm (32.5 in) roll radius.

| Service Refill Capacities | | | | | | | |
|--|--------|----------|--|--|--|--|--|
| Fuel Tank | 313 L | 82.7 gal | | | | | |
| Cooling System | 71.6 L | 18.9 gal | | | | | |
| Crankcase | 24.5 L | 6.5 gal | | | | | |
| Transmission | 58.5 L | 15.5 gal | | | | | |
| Differentials and Final Drives – Front | 57 L | 15.1 gal | | | | | |
| Differentials and Final Drives – Rear | 57 L | 15.1 gal | | | | | |
| Hydraulic Tank | 125 L | 33 gal | | | | | |

| Hydraulic System | | | | | | |
|---------------------------------|---------------------------------|------------|--|--|--|--|
| Implement Pump Type | Variable Displacement Piston | | | | | |
| Implement System: | | | | | | |
| Maximum Pump Output (2,200 rpm) | 360 L/min | 95 gal/min | | | | |
| Maximum Operating Pressure | 31 000 kPa | 4,496 psi | | | | |
| Hydraulic Cycle Time – Total | 10.1 Se | econds | | | | |

| Dimensions | | | | | | |
|--|---------------|--------|------------|-------|--|--|
| | Standard Lift | | High Lift | | | |
| Height to Top of Hood | 2818 mm 9'3" | | 2818 mm | 9'3" | | |
| Height to Top of Exhaust Pipe | 3522 mm | 11'7" | 3522 mm | 11'7" | | |
| Height to Top of ROPS | 3587 mm | 11'9" | 3587 mm | 11'9" | | |
| Ground Clearance | 434 mm | 1'5" | 434 mm | 1'5" | | |
| Center Line of Rear Axle to Edge of Counterweight | 2180 mm | 7'2" | 2500 mm | 8'2" | | |
| Center Line of Rear Axle to Hitch | 1775 mm | 5'10" | 1775 mm | 5'10" | | |
| Wheelbase | 3550 mm | 11'8" | 3550 mm | 11'8" | | |
| Overall Length (without bucket) | 7289 mm | 23'11" | 8109 mm | 26'7" | | |
| Hinge Pin Height at Maximum Lift | 4235 mm | 13'11" | 4793 mm | 15'9" | | |
| Hinge Pin Height at Carry | 630 mm | 2'1" | 778 mm | 2'7" | | |
| Lift Arm Clearance at Maximum Lift | 3643 mm | 11'11" | 4140 mm | 13'6" | | |
| Rack Back at Maximum Lift | 62 degrees | | 71 degrees | | | |
| Rack Back at Carry Height | 50 degrees | | 49 degrees | | | |
| Rack Back at Ground | 42 degrees | | 39 degrees | | | |
| Maximum Width over Tires | 3009 mm | 9'11" | 3009 mm | 9'11" | | |
| Tread Width | 2230 mm | 7'4" | 2230 mm | 7'4" | | |

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

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