



Cat[®] 966M

Wheel Loader

The new 966M Wheel Loader has a U.S. EPA Tier 4 Final and E.U. Stage IV ACERT™ engine equipped with a combination of proven electronic, fuel, air and aftertreatment 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. M Series Loaders are 10% more fuel efficient than the K Series Loaders and up to 25% more efficient than the H Series Loaders they replace. 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[®] engine with ACERT™ Technology
- U.S. EPA Tier 4 Final and E.U. Stage IV emission standards
- Cat Clean Emissions Module with Selective Catalytic Reduction and automatic Cat Regeneration System
- 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 disk 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

- Legacy one-piece hood with clamshell design
- 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.

BUILT FOR IT.™



Cat 966M Wheel Loader

Engine

Engine Model	Cat C9.3 ACERT	
Max Gross Power @ 1,800 rpm – SAE J1995	232 kW	311 hp
Max Gross Power @ 1,800 rpm – SAE J1995 (metric)	315 hp	
Max Gross Power @ 1,800 rpm – ISO 14396	229 kW	307 hp
Max Gross Power @ 1,800 rpm – ISO 14396 (metric)	311 hp	
Max Net Power @ 1,700 rpm – SAE J1349	206 kW	276 hp
Max Net Power @ 1,700 rpm – SAE J1349 (metric)	280 hp	
Max Net Power @ 1,700 rpm – ISO 9249	206 kW	276 hp
Max Net Power @ 1,700 rpm – ISO 9249 (metric)	280 hp	
Peak Gross Torque (1,200 rpm) – SAE J1995	1599 N·m	1,179 lbf-ft
Peak Gross Torque (1,200 rpm) – ISO 14396	1581 N·m	1,166 lbf-ft
Maximum Net Torque (1,000 rpm)	1527 N·m	1,126 lbf-ft
Displacement	9.3 L	568 in ³

Weights

Operating Weight	23 220 kg	51,176 lb
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- 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.

Bucket Capacities

Bucket Range	2.5- 9.2 m ³	3.25- 12.0 yd ³
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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 “Weight.”
- Full compliance to ISO 143971:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

Transmission

Forward 1	6.5 km/h	4.0 mph
Forward 2	13.0 km/h	7.9 mph
Forward 3	23.5 km/h	14.3 mph
Forward 4	40.8 km/h	24.9 mph
Reverse 1	7.1 km/h	4.3 mph
Reverse 2	14.4 km/h	8.8 mph
Reverse 3	25.9 km/h	15.8 mph
Reverse 4	39.0 km/h	23.8 mph

- 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
DEF tank	16.8 L	4.4 gal
Cooling System	71.6 L	18.9 gal
Crankcase	24.5 L	6.5 gal
Transmission	54 L	14.3 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	10.3 Seconds	

Sound

With Cooling Fan Speed at Max Value:

Operator Sound Pressure Level (ISO 6396:2008)	70 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	110 dB(A)
Exterior Sound Power Level (SAE J88:2013)*	76 dB(A)

With Cooling Fan Speed at 70% of Max Value:

Operator Sound Pressure Level (ISO 6396:2008)	69 dB(A)
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European Union Directive 2000/14/EC as amended by 2005/88/EC:

Exterior Sound Power Level (ISO 6395:2008)	108 L _{WA}
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*Distance of 15 m (49.2 ft), moving forward in second gear ratio.

Dimensions

	Standard Lift		High Lift	
	mm	ft"	mm	ft"
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	3559 mm	11'8"	3559 mm	11'8"
Ground Clearance	476 mm	1'7"	476 mm	1'7"
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	13'7"
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	9'10"	3009 mm	9'10"
Tread Width	2230 mm	7'4"	2230 mm	7'4"

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

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