

Cat[®] 972M XE

Wheel Loader

Introducing a new model: The new 972M XE 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. The XE technology results in a 25% improvement in fuel efficiency over the M Series standard configuration and 35% over the K Series standard configuration.*

The 972M XE Wheel Loader, with an advanced power train, has been designed to deliver superior performance and fuel efficiency while simplifying the operator's interface and operating technique. The 972M XE excels at truck loading and is a 3-pass match for many on-highway trucks. Aggregate Handler and other optional configurations are available.**

RELIABILITY, PRODUCTIVITY AND FUEL EFFICIENCY

- 25% more fuel efficient than M Series standard configuration*
- 35% more fuel efficient than K Series standard configuration*

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

Transmission Advancements

- Next generation integrated continuously variable transmission with multi-viscosity oil
- · Power train control independent of engine speed with energy recovery

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 pumps
- 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
- Simplified 2-pedal propulsion controls

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.



Cat 972M XE Wheel Loader

Engine		
Engine Model	Cat C9.3 ACERT	
Max Net Power @ 1,600 rpm – SAE J1349	232 kW	311 hp
Max Net Power @ 1,600 rpm – SAE J1349 (metric)		315 hp
Max Net Power @ 1,600 rpm – ISO 9249	232 kW	311 hp
Max Net Power @ 1,600 rpm – ISO 9249 (metric)		315 hp
Peak Gross Torque (1,200 rpm) — SAE J1995	1728 N⋅m	1,275 lbf-ft
Peak Gross Torque (1,200 rpm) — ISO 14396	1708 N⋅m	1,260 lbf-ft
Maximum Net Torque (1,200 rpm)	1618 N⋅m	1,193 lbf-ft
Displacement	9.3 L	568 in ³

Weights		
Operating Weight	24 896 kg	54,871 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 4.8 m³ (6.28 yd³) general purpose bucket with BOCE.

	Bucket Capacities		
Punkat Panga		2.90-	3.75-
Bucket Range		9.90 m ³	13.0 yd ³

Operating Specifications			
Static Tipping Load – Full 37° Turn – with Tire Deflection	16 164 kg	35,626 lb	
Static Tipping Load – Full 37° Turn – No Tire Defletion	17 421 kg	38,396 lb	
Breakout Force	196 kN	44,075 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 – Virtual Gears				
Forward 1	6.7 km/h	4.1 mph		
Forward 2	12.6 km/h	7.7 mph		
Forward 3	22.1 km/h	13.5 mph		
Forward 4	40.0 km/h	24.4 mph		
Reverse 1	6.7 km/h	4.1 mph		
Reverse 2	12.6 km/h	7.7 mph		
Reverse 3	28.0 km/h	17.1 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	72 L	19 gal	
Crankcase	24.5 L	6.5 gal	
Transmission	60 L	15.9 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	Tandem Variable Displacement Piston		
Implement System:			
Maximum Pump Output (1,600 rpm)	389 L/min 103 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)	67 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	106 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)	67 dB(A)
European Union Directive 2000/14/EC as amended by 20	05/88/EC:
Exterior Sound Power Level (ISO 6395:2008)	105 L _{WA}
*Distance of 15 m /40 2 ft) maying forward in accord as	ar ratio

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

Dimensions				
	Standard Lift		High Lift	
Height to Top of Hood	2818 mm	9'2"	2818 mm	9'2"
Height to Top of Exhaust Pipe	3522 mm	11'6"	3522 mm	11'6"
Height to Top of ROPS	3559 mm	11'8"	3559 mm	11'8"
Ground Clearance	476 mm	1'6"	476 mm	1'6"
Center Line of Rear Axle to Edge of Counterweight	2500 mm	8'2"	2500 mm	8'2"
Center Line of Rear Axle to Hitch	1775 mm	5'9"	1775 mm	5'9"
Wheelbase	3550 mm	11'7"	3550 mm	11'7"
Overall Length (without bucket)	7774 mm	25'6"	8109 mm	26'7"
Hinge Pin Height at Maximum Lift	4458 mm	14'7"	4793 mm	15'8"
Hinge Pin Height at Carry	680 mm	2'2"	778 mm	2'6"
Lift Arm Clearance at Maximum Lift	3843 mm	12'7"	4140 mm	13'7"
Rack Back at Maximum Lift	56 degi	rees	71 degi	rees
Rack Back at Carry Height	50 degi	rees	49 degi	rees
Rack Back at Ground	41 degrees		39 degrees	
Maximum Width over Tires	3009 mm	9'10"	3009 mm	9'10"
Tread Width	2230 mm	7'3"	2230 mm	7'3"
• All dimensions are approximate and based on L3 XHA2 tires.				

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