

Cat® 966 GC Wheel Loader

The new Cat® 966 GC Wheel Loader is easy to own and operate. It offers low fuel consumption with an on-demand fan, load-sensing hydraulics, intuitive controls, and Performance Series Buckets. This machine is built to be just the right machine for a broad range of applications. Great machine performance combined with the low owning and operating costs makes the 966 GC the right choice for your business.

Proven Reliability

- Cat C9.3B engine offers high power density with a combination of proven and improved electronic, 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.
- Engine meets U.S. EPA Tier 4 Final, EU Stage V, Korea Tier 4 Final, China Nonroad Stage IV, and Japan 2014 emission standards.
- Thorough component choice, design, and in-machine validation processes result in excellent reliability and uptime.
- AdvansysTM ground engaging tools (GET) system features stronger adapters; tips with a new shape to better protect the adapter and an integrated retainer.

Achieve Greater Productivity

- The proven Cat Z-bar linkage geometry with Performance Series
 Buckets offer excellent penetration into the pile and high breakout
 forces. This results in low fuel consumption and exceptional
 production capabilities.
- Caterpillar designed, electronically controlled automatic powershift heavy-duty planetary transmission features shift protection and single clutch gear shifting for efficiency, durability, and smooth gear changes.
- The optional ride control system improves smoothness over rough terrain, increasing confidence and efficiency and ensuring excellent material retention.
- Optional Fusion™ quick-coupler and third hydraulic function can make the machine a versatile tool carrier for buckets, grapples or forks
- Increased traction in poor underfoot conditions with the optional limited slip differential (LSD). This traction aid is activated automatically, with no operator intervention required.
- An optional Axle Oil Cooler (AOC) is available for high energy applications.

Superior Fuel Efficiency

- Engine Idle Management System (EIMS) reduces idle RPM and fuel consumption. Engine Idle Shutdown will shut down engine after a preset time.
- Variable speed fan adjusts to meet the varying cooling requirements of the machine resulting in a reduced average fan speed and lowered fuel consumption, noise levels, and radiator plugging.
- Load sensing hydraulics produce flow and pressure for the implement system upon demand and only in amounts necessary to perform the needed work functions.

Easy, Comfortable Operator Environment

- The spacious cab features easy, intuitive controls and excellent visibility which provides a comfortable working environment for efficient operation.
- A comfortable cloth covered suspension (mechanical) seat is standard, an optional air suspended seat is available.
- Pilot-operated hydraulic implement controls deliver comfortable, low-effort operation. Two single-axis levers or one joystick are available. Both arrangements are equipped with remote transmission kick-down switches.
- Unmatched viewing area with a wide, flat, and distortion-free front windshield.
- The glass stretches to the floor of the cab for excellent visibility to the bucket and front tires.
- Sliding side windows on both sides allow natural ventilation and easy communication to ground staff.
- The cab roof has channels which direct rain off the corners of the cab, keeping windows clear.
- Air conditioning and heating systems are standard. Ten louvered vents allow the operator to direct the air flow to remain productive and efficient all shift long.
- Optional windshield guard to protect glass from impacts.



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Safety Features

- Ladders are standard on both sides of the machine; the main cab access features a 15-degree angle to easily access the operator environment.
- Steps are equipped with hand and/or guardrails to safely access the cab and maintenance points of the machine.
- The main cab door opens to the front and provides wide access to the operator environment.
- A front window cleaning platform kit is available for enhanced access to the windshield. Front and back wipers ensure that a clear view is maintained.
- External rearview mirrors with integrated spot mirrors are standard.
- A rear vision camera is standard to enhance visibility behind the machine. Reversing strobe light kits are an available option for enhanced jobsite visibility.*

Reduced Maintenance Time and Costs

- Grouped service points and sight gauges allow for easy daily maintenance.
- Convenient access to left, right, and rear of engine compartment provides excellent serviceability.
- Electrical service center, along with additional key serviceability features, helps make servicing and in-field component exchange quick, easy, and efficient.
- A rear swing-up grill gives easy cleaning access to the cooling cores.
- Hinged wheel guards are easy to remove/re-install providing wide access to all maintenance points and to the engine compartment.
- Optional power train bottom guard protects the machine against damage to reduce downtime.
- Optional Cat Autolube system provides an integrated lube system with monitoring function. One-button control, including fault flash function.
- Caterpillar design and manufacturing techniques assure outstanding service life.

Cat Payload Kit – Optional*

- On-the-go weighing** for precise load targets with proven accuracy, flexible installation, and easy calibration and setup.
- Brings payload weighing to the cab so operators can work more productively and deliver consistently accurate loads.
- Increases productivity, weighing while lifting with no interruptions in loading cycle.
- High efficiency: load to exact specification, load more trucks faster, and move more material for more revenue.
- Improve efficiency with less rework; save time, labor, fuel, and costs.
- · Simple installation.

^{*}Not compatible with roading arrangements

^{*}Not available in all markets

^{**}Not legal for trade

Standard and Optional Equipment

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

	Standard	Optional	
DPERATOR ENVIRONMENT			HYDRAULICS
Air conditioning (HVAC) with 10 vents	✓		Dedicated brake and fan pu
and filter unit located outside of cab			Dedicated load sensing ste
Bucket/work tool function lockout	✓		Load sensing implement sy
Switch, transmission neutralizer lockout	✓		Quick coupler control
Cab, pressurized and sound suppressed	✓		Ride control
Camera, rearview	✓		S O⋅S SM oil sampling valves
Cat® Payload (kit)		√	3 rd function with additional
Coat hook	√		single axis lever
Computerized monitoring system	√		ELECTRICAL
Cup holders and personal tray on right console and behind seat	✓		Alarm, back-up variable/ma Alternator (145-amp, brush
Horn	✓	_	Batteries, maintenance fre
Mirrors, rearview external with integrated spot mirror	✓		Ignition key; start/stop
Pilot hydraulic controls, lift and tilt function; two (2) single axis levers or joystick	✓		Lighting system: 4 halogen cab mounted
	✓		Lighting system: 8 halogen
12V power port (10A)	✓		cab mounted
Radio ready Radio	v	√	Lighting system: 4 LED wor
ROPS/FOPS structure			Lighting system: 8 LED wor
,	✓ ✓		Lights: warning beacon
Seat, Cat Comfort (cloth), mechanical suspension	V	√	Roading lights with high/lo
Seat, air suspended	√		and F and R turn signals
Steering column, adjustable angle	✓		Starter, electric (heavy dut
Window, sliding (left and right sides)	✓		Starting and charging system
Wipers/washers (front and rear) OWER TRAIN	~		ADDITIONAL EQUIPMENT
			Autolube system
Axles, Open/Open differentials	✓		Camera, front view (kit)**
Axles, limited slip differential(s)		<u>√</u>	Cold weather starting basic
Axles, oil cooler			Cold weather starting full (HD batteries 2×1,400 CCA,
Brakes, full hydraulic enclosed wet-disc	√		jacket water heater, cold w
Cat C9.3B engine	√		Counterweight, 605 kg (1,3
EIMS (Engine Idle Management System)	√		Fenders (front) steel
AIS (Auto Idle Shutdown)	√		Fender rear extensions or r
Fan, radiator, electronically controlled, hydraulically driven, temperature sensing,	✓		Grill, airborne debris
on demand			Hitch, drawbar with pin
Fan, reversing automatic and manual control		√	Hood, metallic on steel stru
Filter, fuel primary/secondary/tertiary	√		Doors, service access (lock
Filters, engine air, primary/secondary			L3 radial or bias ply tires
Fuel priming pump (electric)	<u> </u>		L5 traction tires
Fuel/water separator			Power train guard
Radiator, unit core (9.5 fpi) with ATAAC	→		Precleaner, strata tubes
Torque converter	→		Precleaner, strata tubes wi
	✓		Product Link™ ready
Transmission, powershift (4F/4R), automatic (2-4) with kick-down function, overspeed	v		Reverse Stobe (kit)***
protection			Roading Certification****
INKAGE			Secondary steering system
Fusion™ quick coupler control with dual kick outs		√	Toolbox
Lift and bucket return-to-dig kickouts		· · · · · · · · · · · · · · · · · · ·	Window cleaning (kit)
(electro-magnetic), mechanical adjustment	•		Windshield guard
Z-bar, cast tilt lever	✓		ŭ
L Dai, Gust tilt 16v6l	*		*Standard where mandated.

	Standard	Optional
HYDRAULICS		
Dedicated brake and fan pump	✓	
Dedicated load sensing steering pump	✓	
Load sensing implement system pilot operated	✓	
Quick coupler control		✓
Ride control		✓
S O·S SM oil sampling valves	✓	
3 rd function with additional dedicated		✓
single axis lever		
ELECTRICAL		
Alarm, back-up variable/main disconnect switch	✓	
Alternator (145-amp, brush type)	✓	
Batteries, maintenance free (2×1,125 CCA)	✓	
Ignition key; start/stop	✓	
Lighting system: 4 halogen work lights,	√	
cab mounted		
Lighting system: 8 halogen work lights,		✓
cab mounted		
Lighting system: 4 LED work lights, cab mounted		✓
Lighting system: 8 LED work lights, cab mounted		✓
Lights: warning beacon		✓
Roading lights with high/low beam	✓	
and F and R turn signals		
Starter, electric (heavy duty)	✓	
Starting and charging system, 24V	✓	
ADDITIONAL EQUIPMENT		
Autolube system		✓
Camera, front view (kit)**		✓
Cold weather starting basic (ether starting aid)	✓	
Cold weather starting full		✓
(HD batteries 2×1,400 CCA, ether system,		
jacket water heater, cold weather fluids)		
Counterweight, 605 kg (1,334 lb)	✓	
Fenders (front) steel	✓	
Fender rear extensions or roading		✓
Grill, airborne debris	✓	
Hitch, drawbar with pin	✓	
Hood, metallic on steel structure	✓	
Doors, service access (locking)	✓	
L3 radial or bias ply tires	✓	
L5 traction tires		✓
Power train guard		✓
Precleaner, strata tubes	✓	
Precleaner, strata tubes with screen		✓
Product Link™ ready	✓	
Reverse Stobe (kit)***		✓
Roading Certification****		<u>·</u>
Secondary steering system, electrical*		<u>·</u>
Toolbox		· ·
Window cleaning (kit)		
-		•
Windshield guard		✓

^{*}Standard where mandated.

^{**}Refer to M0106413 publication for usage reqiurements.

^{***}Not compatible with roading arrangements.

^{****}Offering depends on region.

Technical Specifications

Engine		
Engine Model	Cat C	9.3B
Engine Power @ 1,600 rpm – ISO 14396:2002	239 kW	321 hp
ISO 14396:2002 (DIN)	325 mhp (PS)	
Gross Power @ 1,600 rpm – SAE J1995:2014	242 kW	325 hp
SAE J1995:2014 (DIN)	329 mhp (PS)	
Net Power @ 1,600 rpm – ISO 9249:2007, SAE J1349:2011	218 kW	292 hp
ISO 9249:2007 (DIN)	296 mhp (PS)	
Engine Torque @ 1,200 rpm – ISO 14396:2002	1781 N⋅m	1,314 lbf-ft
Gross Torque @ 1,200 rpm – SAE J1995:2014	1799 N⋅m	1,327 lbf-ft
Net Torque @ 1,200 rpm – ISO 9249:2007, SAE J1349:2011	1673 N⋅m	1,234 lbf-ft
Bore – ISO 9249:2007	115 mm	4.53 in
Stroke	149 mm	5.87 in
Displacement	9.30 L	568 in ³

- Cat engine meets U.S. EPA Tier 4 Final, EU Stage V, Korea Tier 5, China Nonroad Stage IV, and Japan 2014 (Tier 4 Final) 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.
- Cat engines are compatible with the following renewable, alternative, and biodiesel* fuels that reduce greenhouse gases on a lifecycle basis:
- Up to B20 biodiesel (FAME) **
- Up to 100% HVO and GTL renewable fuels
- * Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.
- ** Engines with aftertreatment devices can use up to B20. Engines with no aftertreatment devices can use higher blends, up to B100.

Weights and Operating Specifications			
Operating Weight	21 781 kg	48,018 lb	
Static Tipping Load – Full 37° Turn			
With Tire Deflection	13 640 kg	30,072 lb	
No Tire Deflection	14 642 kg	32,233 lb	
Breakout Force	164 kN	36 974 lhf	

- For 4.0 m³ (5.2 yd³) general purpose bucket with BOCE.
- Full compliance to ISO 14397-1:2007 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)	75 dB(A)		
Exterior Sound Power Level (ISO 6395:2008)	110 dB(A)		
Exterior Sound Pressure Level (SAE J88:2013)	78 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)	73 dB(A)		
Exterior Sound Power Level	108 dB(A)***		
**For machines in European Union countries and in c the "EU Directives."	ountries that adopt		
***European Union Directive "2000/14/EC" as amende	ed by "2005/88/EC."		

Transmission					
Forward 1	6.4 km/h	4.0 mph	Reverse 1	7.0 km/h	4.3 mph
Forward 2	12.1 km/h	7.5 mph	Reverse 2	13.2 km/h	8.2 mph
Forward 3	21.0 km/h	13.0 mph	Reverse 3	23.0 km/h	14.3 mph
Forward 4	34.8 km/h	21.6 mph	Reverse 4	36.9 km/h	22.9 mph

 Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 826 mm (32 in) roll radius.

Service Refill Capacities			
Fuel Tank	320 L	84.5 gal	
DEF Tank	26 L	6.9 gal	
Cooling System	53 L	14.0 gal	
Crankcase	23 L	6.1 gal	
Transmission	23 L	6.1 gal	
Differentials and Final Drives – Front	57 L	15.1 gal	
Differentials and Final Drives – Rear	57 L	15.1 gal	
Hydraulic Tank	101 L	26.7 gal	

Hydraulic System			
Implement Pump Type	Variable Displacement Piston, Load Sensing		
Implement System			
Maximum Flow @ 2,275 rpm	327 L/min	86 gal/min	
Maximum Operating Pressure	27 900 kPa	4,047 psi	
Maximum Flow 3 rd Function	240 L/min	63 gal/min	
Maximum Operating Pressure 3 rd Function	22 780 kPa	3,304 psi	
Hydraulic Cycle Time			
Raise from Carry Position	5.7 se	conds	
Dump at Maximum Raise	1.8 seconds		
Lower, Empty, Float Down	2.6 seconds		
Total Cycle Time	10.1 se	econds	

	Cab
ROPS/FOPS	ROPS/FOPS meet ISO 3471:2008 and
NUF3/FUF3	ISO 3449:2005 Level II standards

Brakes	
Brakes meet ISO 3450:2011 standa	ards

Dimensions				
Height to Top of Hood	2804 mm	9'3"		
Height to Top of Exhaust Pipe	3539 mm	11'8"		
Height to Top of ROPS	3582 mm	11'10"		
Ground Clearance	455 mm	1'5"		
B-Pin Height	4256 mm	13'11"		
Center Line of Rear Axle to Edge of Counterweight	2453 mm	8'1"		
Wheelbase	3550 mm	11'8"		
Center Line of Rear Axle to Hitch	1775 mm	5'10"		
Rack Back @ Maximum Lift	62 degrees			
Rack Back @ Carry	50 degrees			
Rack Back @ Ground	42 degrees			
Lift Arm Clearance	3705 mm	12'1"		



Brakes

AEXQ3410-00 (2-2022) Build number: 01A (N Am, Europe, S Korea, China, Japan)

