

924Gz

Wheel Loader

CAT[®]



Cat[®] 3056E DIT ATAAC Engine

Rated Net Power at 2300 rpm 97 kW/130 hp

Maximum Net Power at 1900 rpm 103 kW/138 hp

Bucket capacities 1.7–2.1 m³

Machine weight 10 850 kg

924Gz Wheel Loader

Offering world class performance, value and reliability.

Caterpillar® Power Train

- ✓ The 924Gz uses a Caterpillar power train for reliable, long life. The Caterpillar 3056E DIT ATAAC six-cylinder engine and Cat power shift transmission are performance-matched to the torque converter and axles for smoother performance and greater operator comfort. **pg. 4**

Operator Station

- ✓ The 924Gz operator station is ergonomically designed to create a comfortable work area. Easy-to-use machine controls and a new gauge console reduce operator fatigue and increase efficiency and productivity. **pg. 6**

Hydraulic System

Modular hydraulic system offers fast loading cycles, easy reconfiguration and exceptional ride control. **pg. 8**

Owning and Operating Costs

Extended service intervals, an advanced electronic warning system, lower fuel consumption and faster cycle times save you time and money. **pg. 10**

Environmentally Responsible Design

- ✓ Quiet operation, low engine emissions, less fluid disposal and clean service help you meet worldwide regulations and protect the environment. **pg. 12**

The 924Gz is designed and built for maximum loader performance. The powerful Caterpillar power train, load-sensing hydraulic system and Z-bar linkage all combine to give more than ever before from a machine this size.

✓ *New feature*



Caterpillar Buckets

Caterpillar Buckets feature rugged construction, integral spill plates and replaceable heel wear plates.

pg. 9

Serviceability

Perform daily maintenance with easy ground-level access to all major service points. Gull-wing doors provide excellent engine access and a swing-out fan simplifies radiator service.

pg. 11

Complete Customer Support

Caterpillar dealers offer unmatched customer support, with excellent warranty programs and fast parts availability, resulting in maximum uptime and minimum repair costs.

pg. 12



Caterpillar Power Train

Rugged, dependable Cat components deliver maximum rimpull to the ground and full power to the loader hydraulics.

Caterpillar Engine. The six-cylinder, 3056E direct injection, turbocharged (DIT) engine with air-to-air after cooler (ATAAC) has a proven reputation for reliability, durability and performance. Fuel injection is electronically controlled for precise timing.

Torque Rise. The engine features a 48% torque rise for increased power during heavy-duty use.

Emission Standards. The 3056E DIT ATAAC engine meets worldwide emissions standards.

Cylinders. Low cylinder pressure rise and low peak pressure provide outstanding reliability and durability.

Cooling System. Engine and cooling system are in separate compartments for clean, quiet operation and easy service.

Air-to-Air After Cooling. Air-to-air after cooling reduces engine emissions.

Electronic Control Module.

The Caterpillar engine control module not only controls the timing needs of the engine but also monitors critical systems to maintain optimum performance and provide engine protection.

Service Intervals. The normal engine oil change requirement is every 500 hours of operation.

Axles. Heavy-duty design features strong gears and bearings for durable performance. Oscillating rear axle helps assure four-wheel ground contact for optimum traction and stability.

Brakes. Oil-disc brakes are adjustment free and fully enclosed.

Optional Heavy-Duty Brakes. Optional heavy-duty brakes provide additional brake discs and oil cooler for severe applications.



Limited Slip Differentials. Optional front and rear Limited Slip differentials provide improved traction in poor or uneven underfoot conditions.

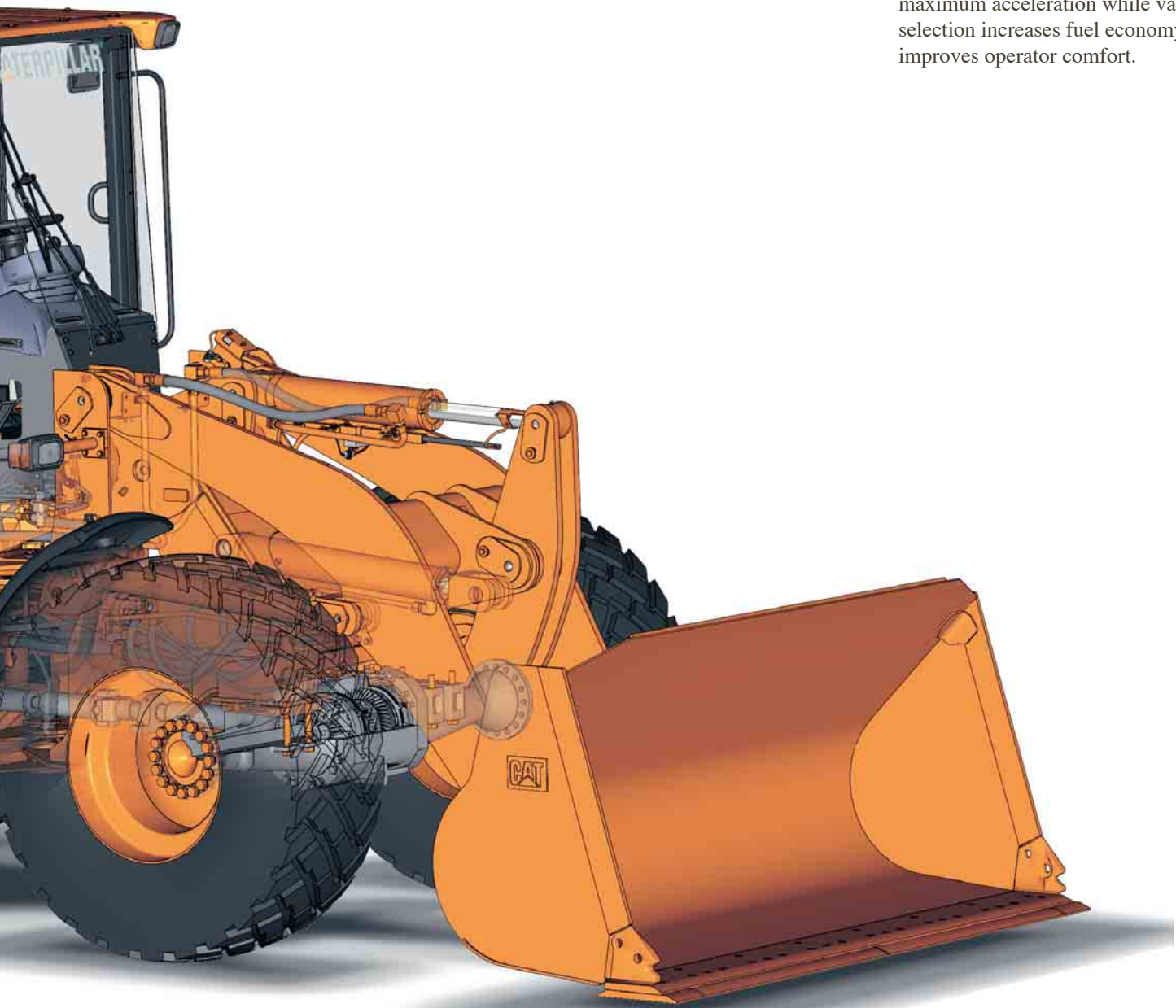
Duo-Cone Seals. Duo-Cone Seals keep oil in and contaminants out.

Transmission. Rugged, field-proven Caterpillar 4F/3R transmission uses heavy-duty components for durable and reliable operation. High-energy friction materials allow for better heat tolerance while thick reaction plates allow for better heat dissipation. The transmission is also designed for easy service and rebuild.

Electronic Clutch Pressure Control. Electronic Clutch Pressure Control (ECPC) manages shift torque providing exceptional smoothness.

Gears. High-contact ratio spur gears are precision ground and heat treated for quiet, durable operation.

Shifting Options. Operator can choose manual shift or two autoshift modes (full throttle or variable shift control). Full throttle selection provides maximum acceleration while variable selection increases fuel economy and improves operator comfort.



Operator Station

Ergonomic design emphasizes comfort, visibility and easy operation.



Cab. The ergonomic cab provides a comfortable work environment with large windows, spacious interior room, generous storage areas and low interior sound levels.

Access/Egress. Access/egress is through a two-door design. Both doors open fully and lock flush against the cab. Steps leading up to the cab are wide and angled out for secure footing.

Windows. Large windows improve visibility in all directions. The rear window features a standard electric defroster. Sliding glass is available as an option on the doors.

Visibility. Visibility to critical areas such as the bucket have been optimized. Lift arm spacing is wide and linkage geometry maximizes visibility throughout the production cycle.



Instrument Panel. Redesigned instrument panel is conveniently located with easy-to-read gauges and expanded warning/indicator and diagnostic functions.

Electronic Engine Speed Control.

A specific engine rpm can be set and maintained with a switch in the cab.

Steering System.

The load-sensing, closed-center steering system with flow amplification matches steering response to a wide variety of applications. The adjustable steering console tilts easily out of the way. Dual suspended brake pedals function as a brake and a transmission neutralizer so the operator can maintain high engine rpm for full hydraulic flow and fast cycle times.



Low Effort Operation. Joystick hydraulic controls provide ease of lift and tilt functions. A single joystick is standard. An integrated directional control switch on the joystick provides easy operation and enhanced productivity. A two lever control is optional.

Seat. The standard seat is available in cloth or vinyl with fully adjustable fore/aft position, seatback angle, bottom cushion height, armrest angle and suspension stiffness. Other seat options include:

- Cat Contour Seat which adds adjustable backrest and adjustable lumbar support.
- Cat Contour Series Seat with added air suspension, electrically adjustable.
- KAB fabric seat heated with an alarm feature for operator

Seat Belt. All seats include a comfortable 51 mm or 75 mm wide retractable seat belt.



Storage. Generous storage space includes a lockable compartment, coat hook and special molded compartments designed to hold a lunchbox/cooler, cup or can. A tool box is also provided.

Customize the Cab. The cab can be customized with:

- 12V converter for powering electronics such as cellular phones, two-way radios and music systems
- Radio installation package
- Sun visor for windshield
- Roll-down sun screen for rear window
- External mirror packages
- Auxiliary lighting packages

Hydraulic System

Modular system provides improved efficiency and greater control.



Precise Control. Designed by Caterpillar, the modular hydraulic system provides low effort operation and superior control.

Performance. Fast loader cycle times result in greater productivity. The hydraulic system is matched to the power train for outstanding performance.

Joystick Control. Low effort, joystick implement control improves efficiency with simultaneous lift and tilt functions.

Load-Sensing Steering. Load-sensing steering provides low effort operator control, making more power available for rimpull, breakout and lift forces.

Load-Sensing Implement Hydraulics. Load-sensing implement hydraulics provide exceptional second gear hydraulic-to-rimpull match for better material handling.

Pumps. Separate steering and implement pumps improve machine response.

Tilt Cylinder. A large tilt cylinder delivers exceptional backdrag performance.

Hoses. Caterpillar XT hoses and couplings provide rugged, reliable performance with significantly reduced risk of leaks and blown lines.

Modular Hydraulic Control Valves. Modular hydraulic control valves add a new dimension of versatility that greatly simplifies and lowers overall cost of reconfiguring the machine for additional functions.

Two-Section Control Valve. The 924Gz comes equipped with a two-section control valve for lift and tilt functions. One additional valve section can be stacked onto the existing ones.

Ground Level Access. The control valves feature convenient ground level access for easy modifications to the system.

Pressure Taps. Standard pressure taps allow quick diagnosis of the entire hydraulic system.

Diagnostics and Monitoring. The 924Gz is equipped with Scheduled Oil Sampling (S•O•SSM) ports for the hydraulic, transmission and engine oils.

Optional Ride Control System. The improved Ride Control system provides a comfortable ride at all speeds and improved hard bank digging. Three modes are available: auto, on and off.

Caterpillar Buckets

Caterpillar buckets are an integral part of a machine designed to optimize performance.

Choice of Buckets. Caterpillar offers a wide range of buckets. Careful match of the bucket design and machine operating characteristics provide the best digging, loading and carrying performance.

General Purpose Buckets. Caterpillar general purpose buckets, available in 1.7 m³ to 2.1 m³ capacities (with bolt-on cutting edge), are suitable for most general applications.

Features include:

- Improved bucket design with longer floor and a larger radius for easier flow of material into the bucket
- Patented Two-Bolt Corner Guard Cutting Edge System for superior wear resistance, better stability and a simple bolt-on system
- Built-in, replaceable heel wear plates for extended bucket life.

Penetration Bucket. The Caterpillar penetration bucket has a 1.7 m³ capacity. It provides best results in materials that require moderate impact and breakout forces.

Features include:

- Sharpened cutting edges and curved side bars for maximum penetration.
- Flush-mount weld-on teeth.
- Flat floor for easier loading.
- Full-width edge for backdragging.
- Fore/aft wear strips extend bucket life.



Ground Engaging Tools. Ground engaging tools include hardened steel cutting edges, choice of short or long teeth and a variety of tooth adapters. These tools optimize performance, improve load retention and extend the useful life of Caterpillar buckets.

Versatility. For expanded machine versatility, other special purpose buckets are also available. Contact your Caterpillar dealer for details.

Owning and Operating Costs

Cost saving features help improve your bottom line.



Low Fuel Consumption. The 3056E DIT ATAAC engine features low fuel consumption for more economical operation.

Increased Power, Faster Cycle Times. Higher horsepower and increased torque rise results in more power and faster cycle times, allowing the operator to get more work done in a day.

Extended Service Intervals. Service intervals have been extended to reduce machine service time and increase machine availability:

- 4000 hour hydraulic oil change
- 1000 hour hydraulic filter change
- 500 hour engine oil change

Smoother Transmission for Increased Productivity. A smoother shifting transmission provides a more comfortable work environment, allowing the operator to be more productive throughout the entire work shift.

Demand Fan. Demand fan changes speed to meet load requirements and save fuel.

Engine Derate Feature. Auto Derate monitors vital engine systems and will, if necessary, derate the engine horsepower up to 50% to protect the engine.

Product Link Option. Caterpillar's asset management or equipment management system called Product Link, enables dealers and their customers to track equipment for hours and location, and in some cases monitor machine health. This easy to use system provides information flow between a machine and the user through the internet based Dealer Storefront. This information helps lower operating costs through timely service/repairs and optimized machine use.

Machine Security System Option.

The Machine Security System (MSS) inhibits unauthorized machine use by immobilizing vital electrical circuits. Critical machine circuits are inhibited unless a valid key is used to start the machine.

Serviceability

Improved access and fewer maintenance requirements add up to unparalleled ease of service.

Easy Access. Gull-wing engine enclosure doors with gas struts lift for exceptional access to filters and service points. Radiator and oil coolers are easily accessible for cleaning.

Simplified Routine Service. All service points are accessible from the ground level. It is easy to check radiator coolant, hydraulic oil and transmission oil levels with sight gauges.

Swing-out Cooling Fan. A swing-out cooling fan allows quick, easy cleaning and service of the radiator. The fan is hydraulically driven and separate from the engine compartment for exceptional low noise operation.

Optional Reversing Fan. Optional reversing capability of the fan cleans screens without interrupting machine operation.

S•O•S Ports. Scheduled Oil Sampling (S•O•S) ports are factory installed for improved access to engine, transmission and hydraulic oils. S•O•S ports make oil sampling quicker, cleaner and provide the best oil sample for analysis.

Oil Filters. Spin-on filters for engine oil, transmission oil and hydraulic oil are vertically mounted for easier servicing.

Self-Diagnostics. Built in self diagnostics allow quick and easy troubleshooting by service personnel. Service codes are easily accessed through the gauge console.



Extended Life Coolant/Antifreeze. Cat Extended Life Coolant/Antifreeze allows extended operation (up to 6000 hours) between changes.

Other Service Features. Other service features include:

- Maintenance-free driveshaft
- Stationary radiator and coolant hoses
- Standard hydraulic oil cooler
- Adjustment-free brakes
- Adjustment-free engine fuel system
- Grouped grease fittings
- Positive torque hose clamps
- Braided, color coded wiring

Environmentally Responsible Design

Caterpillar machines not only help you build a better world, they help maintain and preserve the fragile environment.

Low Fuel Consumption. The 924Gz is the top performer in its size class. The result is more work done in a day, less fuel consumed and minimal impact on the environment.

Low Exhaust Emissions. The Cat 3056E DIT ATAAC is a low emission engine designed to meet current worldwide emission regulations and is Stage II compliant.

Quiet Operation. The engine cooling system allows the engine to be fully enclosed, allowing less engine noise to escape. With the optional sound suppression package, the 924Gz is even quieter.

Ozone Protection. To help protect the earth's ozone layer, the air conditioning unit uses only R-134a refrigerant which does not contain harmful chlorofluorocarbons (CFC's).

Fewer Leaks and Spills. Engine oil, transmission and hydraulic filters are positioned vertically and are easily removed without spillage. Cat O-ring face seals, XT hose and hydraulic cylinders are all designed to help prevent fluid leaks that can weaken the machine's performance and cause harm to the environment.

Rebuildable Components. All major components are designed for rebuildability.



Biodegradable Hydraulic Oil.

Caterpillar biodegradable hydraulic oil can be used in the 924Gz, providing an environmentally-sound alternative to mineral-based oils.

Complete Customer Support

Caterpillar dealer services ensure a longer machine operating life with lower costs.

Selection. Make detailed comparisons of machines before purchasing. What are the job requirements? What production is needed? What is the true cost of lost production? Your Cat dealer can give you precise answers to these questions.

Purchase. Look at the value the 924Gz offers. Consider the financing options your Cat dealer offers as well as day-to-day operating costs. Dealer support services can be included in the cost of the machine to yield lower equipment owning and operating costs over the life of the machine.

Operation. For the best operating techniques to increase productivity and your profit, turn to your Cat dealer for the latest training literature and knowledgeable staff.

Maintenance. Choose from a wide range of maintenance services at the time of machine purchase. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as S•O•S Oil Analysis and Technical Analysis help avoid unscheduled repairs that can cost unnecessary time and money.

Replacement. Repair, rebuild or replace? Your Cat dealer can help you evaluate the cost involved to make the right choice.



Product Support. You will find nearly all parts at our dealer parts counter. Cat dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime. Additionally, Caterpillar offers a line of genuine remanufactured components which can help lower repair costs.

Engine

Caterpillar four-stroke cycle, six cylinder 3056E DIT ATAAC diesel engine.

Rated Net Power		2300 rpm
ISO 9249	97 kW/130 hp	
EEC 80/1269	97 kW/130 hp	
Maximum Net Power		1900 rpm
ISO 9249	103 kW/138 hp	
EEC 80/1269	103 kW/138 hp	
Bore	100 mm	
Stroke	127 mm	
Displacement	6 liters	

- Net Power ratings are tested at the reference conditions for the specified standard.
- Net power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner, muffler and fan at minimum speed.
- No derating required up to 3000 m altitude. Auto Derate protects hydraulic and transmission systems.
- When the fan is at maximum speed rated net power is 86 kW (115 hp) and Maximum Net Power is 96 kW (129 hp) at the flywheel per the SAE reference conditions.
- The Caterpillar 3056E DIT ATAAC engine meets Stage II off highway emission regulations.

Features

- Electronically controlled rotary fuel pump
- Three-ring, controlled-expansion, lubricated pistons
- Gear-driven water and oil pumps
- One-piece cast iron cylinder heads with two valves per cylinder
- Fuel priming pump and fuel/water separator
- S•O•S sampling port for engine oil
- Replaceable dry liners
- Cast aluminum valve cover
- Radiator can be easily accessed for cleaning

Transmission

Standard Transmission and Optional Low Speed Transmission. Maximum travel speeds 550/65 R25 tires)

	Standard	Low Speed
Forward	km/h	km/h
1	7	4
2	12	8
3	22	20
4	39	39
Reverse		
1	7	4
2	12	8
3	22	21

- Electronically-controlled Caterpillar countershaft transmission with full on-the-go directional and speed change capability.
- High-energy friction materials and thick reaction plates for better tolerance of heat.
- High-contact ratio spur gears are precision ground and heat treated for quiet, reliable operation.
- Electronic autoshift is standard.
- Button on implement control lever allows downshifting on demand.
- Computer controlled modulation provides smoother transitions.
- Optional low speed transmission available for better match with attachments requiring high hydraulic flow.

Loader Hydraulic System

Output at 2300 engine rpm and 6900 kPa with

SAE 10W oil at 65°C 152 L/min

Maximum working pressure 25 900 kPa

Hydraulic cycle time

Raise 5.2 Seconds

Dump 1.1 Seconds

Lower, empty, float down 2.7 Seconds

Total 9 Seconds

Lift cylinders, double acting

Bore 107.95 mm

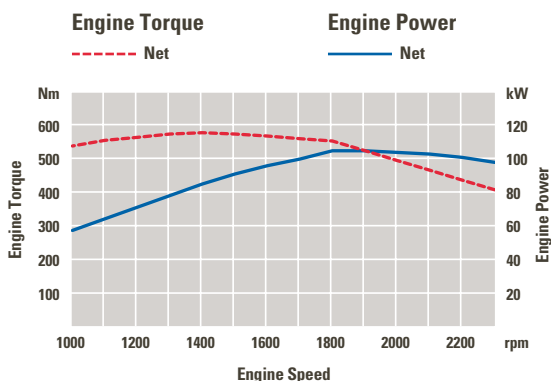
Stroke 755 mm

Tilt cylinders, double acting

Bore 120.6 mm

Stroke 520 mm

- Load-sensing system provides only the flow and pressure needed to move the load.
- Variable-displacement axial piston implement pump.
- Low effort, hydraulic joystick controls.
- Electronic pilot shut-off switch disables implement functions for added safety.
- Hydraulic couplings with O-ring face seals.
- Space around radiator for easy cleaning.
- Improved Ride Control system available to provide improved ride with less spillage from bucket during load & carry operations and better hard bank capability.



Tires

- 17.5 - 25
- 17.5 R25
- 550/65 R25
- 20.5 - 25
- 20.5 R25
- Other tire choices are available, contact your Cat Dealer for details.
- In certain applications, the loader's productive capabilities may exceed the tire's tonnes-km/h capabilities. Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model.

Steering

Minimum turning radius
(over tire) 5070 mm

Steering angle, each direction 40°

Steering cylinders, two, bore 70 mm

Hydraulic output at 2300 engine
rpm and 6900 kPa 106 L/min

Maximum working pressure 20 685 kPa

- Center-point frame articulation.
- Front and rear wheels track.
- Variable displacement piston pump provides steering power at all engine and ground speeds.
- Tilt steering console.
- High-impact rubber steering stops.
- Secondary steering system available to meet roading regulations in various countries and ISO 5010.

Bucket Controls

Lift circuit

- Four positions: raise, hold, lower and float.
- Adjustable automatic kickout from horizontal to full tilt.

Tilt circuit

- Three positions: tilt back, hold and dump.
- Adjustable automatic bucket positioner to desired loading angle.
- Does not require visual spotting.

Controls

- Choice of two low effort control systems: a joystick or a two-lever control of lift and tilt circuits.
- Optional third and fourth function hydraulic circuits available with individual lever controls for remote hydraulic functions.
- Controls can be disabled for roading.

Axles

- Fixed front, oscillating rear ($\pm 12^\circ$ with 17.5 - 25 L-2 tires).
- Caterpillar axle with fully-enclosed brakes and final drives.
- Patented Duo-Cone Seals between axle and housing.
- Rear wheel can raise or drop a total of: 423 mm with 17.5 tires, or 326 mm with 20.5 tires
- Limited Slip differentials are optional on front, rear or both axles.
- Rear axle trunnion has remote lubrication fitting.
- Planetary final drives are lubricated from the main oil sump.
- High contact gearset reduces noise levels during meshing.

Brakes

Service brake

- Inboard oil-immersed disc brakes on front and rear axles are standard.
- Completely enclosed and sealed.
- Adjustment-free.
- Separate circuits for front and rear.
- Dual pedal braking system.
- Fully integrated with hydraulic system, no air system required.

Secondary brake

- Indicator light alerts operator if brake pressure drops.
- Continually-charged nitrogen accumulators provide stopping power after loss of engine power.

Parking brake

- Mechanical, shoe-type brake.
- Mounted on drive line for positive manual operation.
- Application of parking brake neutralizes the transmission.

Heavy-duty brake

- Optional heavy-duty brakes with integrated oil cooler.

Weights

Operating Weight 10 850 kg

Specifications are for 924Gz with optional counterweight, standard lubricants, full fuel tank, cab with A/C, sliding glass, Cat contour seat, limited slip axles with dual disc rear, 4L 4V hydraulics, heavy duty cooler, supplemental steering, roading fenders, reversing fan, back-up alarm, guards, ride control, radio, 1.8 m³ bucket with bolt-on cutting edge, 80 kg operator and 20.5 R25 radial (L-3) XHA tires.

Service Refill Capacities

	Liters
Fuel tank	225
Cooling system	40
Crankcase	20
Transmission	23
Front axle	21
Rear axle	21
Hydraulic system (including tank)	125
Hydraulic tank	70

ROPS/FOPS

- Caterpillar cab with integrated Rollover Protective Structure (ROPS/FOPS) are standard.
- ROPS meets ISO 3471:1994.
- FOPS meets ISO 3449:1992 Level II.

Sound

Operator Sound

- The operator sound level measured according to the procedures specified in ISO 6394:1992 is 74 dB(A), for cab offered by Caterpillar, with doors and windows closed.

Exterior Sound

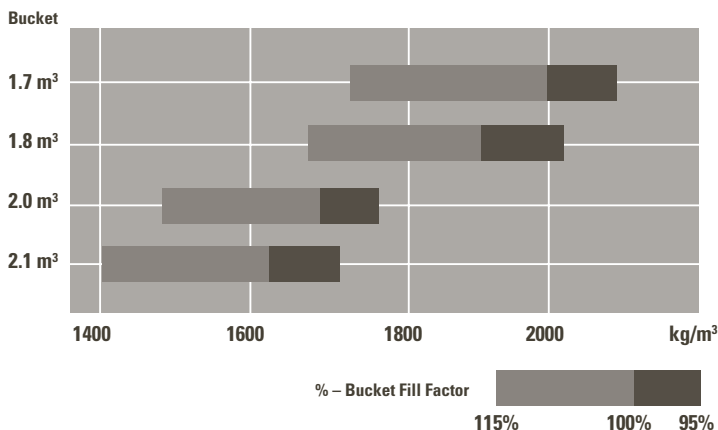
- As manufactured by Caterpillar, this machine's exterior sound power level meets the criteria spelled out in the European Directives noted on the certificate of conformance and the accompanying labeling.
 - standard version 107 dB(A)
 - low sound or Blue Angel version 101 dB(A)

Supplemental Specifications

	Change in Operating Weight	Change in Articulated Static Tipping Load
	kg	kg
Air conditioner	-32	-29
Canopy, ROPS (less cab)	-199	-182
Counterweight, 175 kg (removal)	-175	-300
Guard, crankcase	-15	-21
Guard, driveshaft	-43	-5
Guard, power train	-52	-51
Ride Control System	-40	-29
Secondary steering (removal)	-37	-33
Fenders, roading	-39	-50
Low sound package	104	116
Lighting AR, roading	12	11
Tires, 1 piece rims		
17.5-25, 12PR (L-2)	-652	-408
17.5-25, 12PR (L-3)	-580	-363
17.5-R25, radial (L-2)	-612	-383
17.5 R25, radial (L-3)	-512	-320
Tires, 3 piece rims		
17.5-25, 12PR (L-2)	-528	-330
17.5-25, 12PR (L-3)	-456	-285
17.5-25, radial (L-2)	-488	-305
17.5 R25, radial (L-3)	-388	-243
550/65 R25, radial (L-2)	-196	-123
550/65 R25, radial (L-3)	-136	-85
20.5-25, 12PR (L-2)	-240	-150
20.5-25, 12PR (L-3)	-36	-22
20.5-25, radial (L-2)	-172	-108
20.5-25, radial (L-3)	0	0

Bucket Size Selector

Material Density

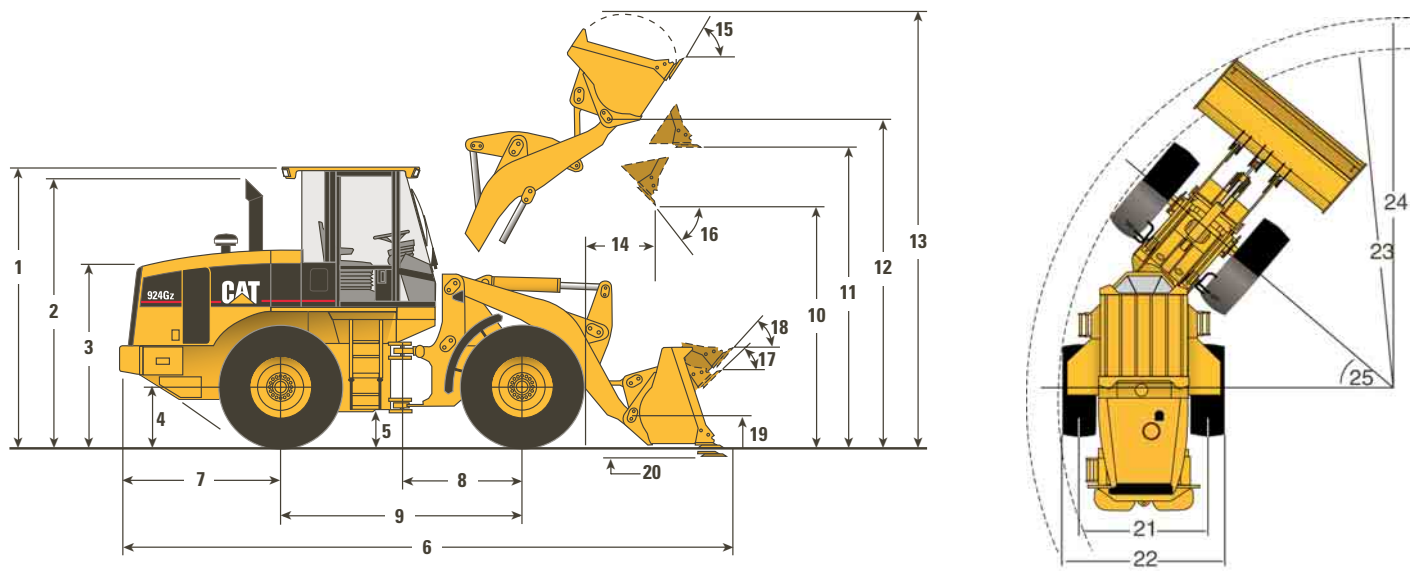


Typical Material Densities – Loose

	kg/m³
Basalt	1960
Bauxite, Kaolin	1420
Clay	
natural bed	1660
dry	1480
wet	1660
Clay and gravel	
dry	1420
wet	1540
Decomposed rock	
75% rock, 25% earth	1960
50% rock, 50% earth	1720
25% rock, 75% earth	1570
Earth	
dry, packed	1510
wet, excavated	1600
Granite	
broken	1660
Gravel	
pitrun	1930
dry	1510
dry, 6-50 mm	1690
wet, 6-50 mm	2020
Gypsum	
broken	1810
crushed	1600
Limestone	
broken	1540
crushed	1540
Sand	
dry, loose	1420
damp	1690
wet	1840
Sand and clay	
loose	1600
Sand and gravel	
dry	1720
wet	2020
Sandstone	1510
Shale	1250
Slag	
broken	1750
Stone	
crushed	1600

Dimensions with Bucket

All dimensions are approximate. Dimensions may vary with bucket.



1 Height to top of ROPS/FOPS		3228 mm
2 Height to top of exhaust stack		3211 mm
3 Height to top of hood		2219 mm
4 Height to centre of axle		692 mm
5 Ground clearance		438 mm
6 Overall length		7030 mm
7 Length - rear axle to bumper		1918 mm
8 Centre line of front axle to hitch		1400 mm
9 Wheel base length		2800 mm
10 Dump clearance at maximum lift and 45° dump		2828 mm
11 Bucket clearance at maximum lift and carry		3434 mm
12 Bucket pin height at maximum lift		3759 mm
13 Overall height - bucket raised		4811 mm
14 Reach at maximum lift and 45° dump		790 mm
15 Rack back angle at maximum lift and level		58°
16 Dump angle at maximum lift		45°
17 Rack back angle at ground		44°
18 Rack back angle at carry		48°
19 Carry height		435 mm
20 Digging depth		42 mm
	17.5-25 Tires	20.5-25 Tires
21 Width over tread center	1880 mm	1880 mm
22 Overall width over tires	2356 mm	2466 mm
23 Minimum turning radius over tires	5070 mm	5135 mm
24 Loader clearance radius with bucket in carry position	See Operation Specifications on pg 20+21	
25 Steering angle - left/right	40°	40°
Change in vertical dimension	-68 mm	0

Dimensions listed are for 924Gz with optional counterweight, standard lubricants, full fuel tank, cab with A/C, sliding glass, Cat contour seat, limited slip axles with dual disc rear, 4L 4V hydraulics, heavy duty cooler, supplemental steering, roading fenders, reversing fan, back-up alarm, guards, ride control, radio, 1.8 m³ bucket with bolt-on cutting edge, 80 kg operator and 20.5 R25 radial (L-3) XHA tires. Refer to Operating Specifications for bucket variations.

Z-Bar Linkage and Bucket

All dimensions are approximate. Dimensions vary with bucket.



Pin-on Buckets

		General Purpose Buckets						Penetration
		Bolt-On Cutting Edge		Bolt-On Teeth and Segments*		Bolt-On Teeth*		Flush Mounted Teeth*
Rated bucket capacity	m ³	1.8	2.1	1.8	2.1	1.7	2.0	1.7
Struck capacity	m ³	1.5	1.7	1.5	1.7	1.4	1.6	1.4
Bucket width	mm	2550	2550	2585	2585	2585	2585	2594
Dump clearance at full lift and 45° discharge	mm	2828	2759	2724	2655	2724	2655	2744
Reach at full lift and 45° discharge	mm	790	859	894	962	894	962	1110
Reach at 45° discharge and 2130 mm clearance	mm	1318	1347	1360	1385	1360	1385	1586
Reach with lift arms horizontal and bucket level	mm	2058	2155	2204	2301	2204	2301	2439
Digging depth	mm	42	50	42	50	17	25	37
Overall length	mm	6890	6993	7036	7138	7017	7120	7287
Overall height with bucket at full raise	mm	4811	4938	4811	4938	4811	4938	5178
Loader clearance radius with bucket in carry position	mm	5609	5638	5670	5700	5670	5700	5653
Static tipping load, straight	kg	8702	8619	8534	8448	8696	8626	8355
Static tipping load, full 40° turn	kg	7642	7562	7473	7391	7628	7568	7295
Breakout force	kN	97	87	96	86	105	94	104
Operating weight	kg	10 846	10 899	10 981	10 944	10 896	10 949	11 326

Specifications shown are for 924Gz with optional counterweight, standard lubricants, full fuel tank, cab with A/C, sliding glass, Cat contour seat, limited slip axles with dual disc rear, 4L 4V hydraulics, heavy duty cooler, supplemental steering, roading fenders, reversing fan, back-up alarm, guards, ride control, radio, 1.8 m³ bucket with bolt-on cutting edge, 80 kg operator and 20.5 R25 radial (L-3) XHA tires.

* Dimensions are measured to the tip of the bucket teeth to provide accurate clearance data. SAE standards specifies the cutting edge.

Standard Equipment

Standard equipment may vary. Consult your Caterpillar dealer for specifics.

Electrical

Alternator, 80-amp
Alarm, back-up
Batteries, maintenance-free,
950 CCA (2)
Directional signals, (front and rear)
Electrical system, 24V
Halogen working lights (front and rear)
Ignition key start/stop switch
Roading lights
Starting aid, thermal

Operator environment

Cab, ROPS (sound suppressed and
pressurized)
Gauges:
Engine coolant temperature
Hydraulic oil temperature
Torque converter oil temperature
Fuel level gauge
Speedometer
Digital tachometer
Digital hour meter/odometer
Warning indicators:
Primary steering malfunction
Electrical system voltage low
Coolant temperature
Engine oil pressure low
Parking brake applied
Brake charge pressure low
Transmission oil temperature
Transmission oil filter bypass
Hydraulic oil filter bypass
Adjustable tilt steering column
Coat Hook
Ground level door release
Heater/defroster
Horn, steering wheel mounted (electric)

Interior light
Interior and exterior auxiliary power
sockets
Lighter
Lunch box storage with cup holder
Pilot hydraulic implement controls
Rear window defroster, electric
Rear view mirrors (2 inside)
Seat, adjustable suspension, backrest,
armrest (fabric or vinyl)
Seatbelt, 51 mm or 75 mm, retractable
Tinted safety glass
Two door cab, fixed glass
Wet arm wiper/washer, intermittent,
front and rear

Power Train

Engine, Caterpillar 3056E DIT ATAAC
Low emission diesel engine
Turbocharged
Aftercooled
Electronically controlled
Air cleaner, dry type
Axle seal guards
Brakes, enclosed wet-disc full hydraulic
Differentials, conventional (front/rear)
Driveshaft, lubed for life
Engine fuel priming pump
Engine speed control
Fuel/water separator
Muffler
Radiator, unit serviceable
S•O•S oil sampling port:
engine oil
transmission oil
Torque converter
Transmission, 4F/3R, autoshift, single
lever control and kickdown button
Transmission neutralizer

Hydraulics

Hydraulic control, 2-valve, 1-lever,
with F/N/R
Hydraulic control lever lockout
Hydraulic diagnostic connectors
Hydraulic oil cooler
Load-sensing steering system
S•O•S oil sampling port, hydraulic oil

Other standard equipment

Antenna, for radio
Antifreeze/coolant, extended-life
protects to -36°C
Brakes, secondary and parking
Bucket positioner, automatic
Counterweight
Engine enclosure, lockable
Fenders, front
Hitch, recovery
Implement control lever locks
Loader linkage, Z-bar with sealed pins
Lift kickout, automatic
Machine Security System ready
Product Link ready
Remote grease lines
Steering stops, cushioned
Swing-out, hydraulically driven
demand fan
Vandalism protection,
lockable service points
Visual indicators:
air cleaner service
coolant level
hydraulic oil
transmission oil

Optional Equipment

Optional equipment may vary. Consult your Caterpillar dealer for specifics.

Electrical

Alternator, 95-amp
Electrical accessories package
(12V converter, accessory
plug outlet, wiring)
Working lights, auxiliary, cab-mounted

Operator environment

Air conditioner (R-134a refrigerant)
Canopy, ROPS
Mirrors, external (2 sizes)
Radio prep packages:
12V installation, includes speakers,
cable, mounting bracket, hardware,
converter and accessory plug.
Radio not included.
24V installation, same as above,
but without converter or
accessory plug.
Seats:
Caterpillar Contour Series, fabric
Caterpillar Contour Series, fabric,
with air suspension
KAB fabric seat heated with an alarm
feature for operator presence
Sliding door windows (left and right)
Sun screen, rear
Visor, sun (front)

Power Train

Differential, limited slip, front axle
and/or rear axle
Brakes, heavy duty
Fan, reversing
Low speed transmission
Radiator, wide fin spacing
Ride control system
Starting aid, engine coolant heater,
120V or 240V

Hydraulics

Hydraulic control, two lever
(lift/tilt)
Hydraulic control, 3rd valve
Hydraulic oil cooler, heavy-duty

Other optional equipment

Antifreeze/coolant, extended-life,
protects to -50°C
Beacon light, rotating, magnetic-mount
Buckets/ground engaging tools
Counterweight
Dust bowl precleaner
Fenders, roading, rear
Guards:
Crankcase
Power train
Waste guarding package
Machine Security System
Product Link
Sound suppression package
Steering, secondary
Tires:
Bias ply, 17.5 - 25 and 20.5 - 25
Radial, 17.5 - 25, 550/65 R25
and 20.5 - 25
Quick coupler

924Gz Wheel Loader

HEHL2834-2 (09/2004) hr

Featured photos of machines may not always include standard equipment.
See your Caterpillar Dealer for available options.
Materials and specifications are subject to change without notice.

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