924Gz

Wheel Loader

Engine		
Model	Caterpillar® 3056E DIT ATAAC	
Rated Net Power	96 kW	129 hp
Maximum Net Power	102 kW	137 hp
Buckets		
Bucket Capacities	1.7 m^3 - 2.1 m^3	2.2 yd^3 - 2.7 yd^3
Weights		
Maximum Weight	10 850 kg	23,920 lb

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 with 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 advanced load-sensing features, fast loading cycles, easy reconfiguration and exceptional ride control. **pg. 8**

Environmentally Responsible Design

✔ Quiet operation, low engine emissions, less fluid disposal and clean, easy servicing help you meet worldwide regulations and protect the environment. **pg. 12**

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. 13**

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.

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. 10**

Owning & Operating Costs

Extended service intervals, an advanced electronic warning system, lower fuel consumption and faster cycle times save you time and money. **pg. 11**

✔ *New Feature*

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 recommended 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 axle oil cooler for severe applications.

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

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

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. The 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.

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 lifts 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.

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.

Low Effort Operation. Hydraulic joystick 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, fabric, with adjustable backrest and lumbar support.
- Cat Contour Seat, fabric, electrically adjustable with air suspension.

Seat Belt. All seats include a comfortable 75 mm (3 inch) 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 package
- 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.

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

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

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 on the existing ones.

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

Pumps. Separate steering and implement pumps improve machine response.

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

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

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 1.8 m^3 (2.3 yd^3) and 2.1 m^3 (2.7 yd^3) 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

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.

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. Easily 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 fan cleans screens without interrupting machine operation.

S•O•S℠ Ports. Scheduled Oil Sampling 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. Self-diagnostic transmission and data link allow quick, 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 6,000 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 and numbered wiring

Owning & 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:

- 4,000 hours hydraulic oil change (S•O•S sampling required)
- 1,000 hour hydraulic filter change
- 500 hours 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 cooling requirements and save fuel.

Engine Derate Feature. Auto Derate monitors vital engine systems and will 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.

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 Tier 2 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

Cat 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 trained 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.

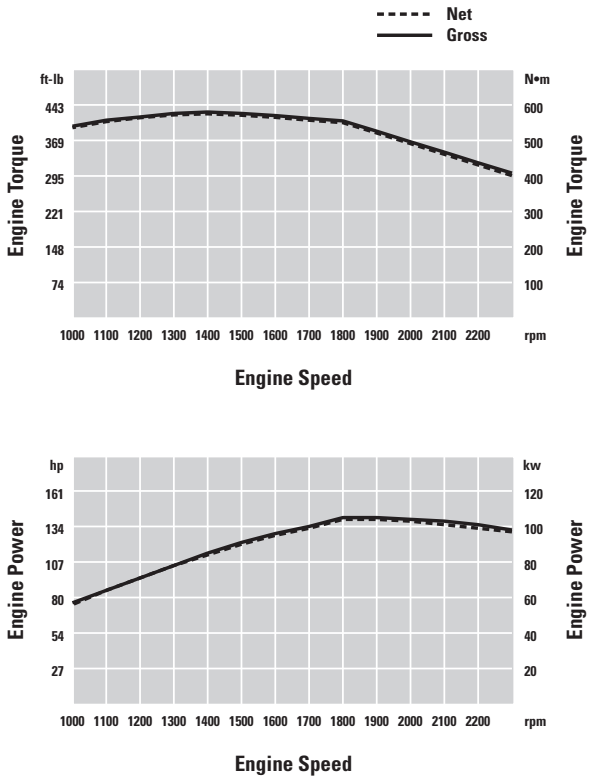
www.CAT.com. For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.CAT.com. Specializing in fast, accurate and up-to-date information, the Cat web site delivers the information you need to operate your business, 24-hours a day.

Engine

Model	Caterpillar 3056E DIT ATAAC	
Rated Net Power @ 2,300 rpm		
SAE J1349	96 kW	129 hp
ISO 9249	97 kW	130 hp
EEC 80/1269	97 kW	130 hp
Maximum Net Power @ 1,900 rpm		
SAE J1349	102 kW	137 hp
ISO 9249	103 kW	138 hp
EEC 80/1269	103 kW	138 hp
Bore	100 mm	3.94 in
Stroke	127 mm	5 in
Displacement	6 L	366 in^3

- 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 (9,843 ft) altitude. Auto derate protects the engine, 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 Tier 2 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

Engine Torque



Weights

Operating Weight	10 850 kg	23,920 lb

- 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 m^3 (2.3 yd^3) bucket with bolt-on cutting edge, 80 kg (176 lb) operator and 20.5 R25 radial (L-3) XHA tires.

Steering

Minimum turning radius (over tire)	5070 mm	200 in
Steering angle, each direction	40º	
Steering cylinders, two, bore	70 mm	2.75 in
Hydraulic output at 2,300 engine rpm and 6900 kPa (1000 psi)	106 L/min	27.7 gal/min
Maximum working pressure	20 685 kPa	3,000 psi

- 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 meets roading regulations in various countries and ISO 5010.

Loader Hydraulic System

Output at 2,300 engine rpm and 6900 kPa (1000 psi) with SAE 10W oil at 65°C (150°F)	152 L/min	39.5 gal/min
Maximum working pressure	25 900 kPa	3,755 psi
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	4.25 in
Stroke	755 mm	29.7 in
Tilt cylinder, double acting:		
Bore	120.6 mm	4.75 in
Stroke	520 mm	20.5 in

- Load-sensing system provides only the flow and pressure needed to move the load.
- Variable-displacement piston-type 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.
- Improved Ride Control system available to provide improved ride with less spillage from bucket during load & carry operations and better hard bank capability.

Service Refill Capacities

Fuel tank	225 L	59.4 gal
Cooling system	42 L	10.9 gal
Crankcase	16 L	4.2 gal
Transmission	23 L	6.1 gal
Differentials and final drives:		
Front	21 L	5.5 gal
Rear	21 L	5.5 gal
Hydraulic system (including tank)	125 L	33 gal
Hydraulic tank	70 L	18.5 gal

Transmission

Standard transmission, max travel speeds:		
Forward 1	6.7 kph	4.2 mph
Forward 2	12.2 kph	7.6 mph
Forward 3	21.8 kph	13.5 mph
Forward 4	38.5 kph	23.9 mph
Reverse 1	6.7 kph	4.2 mph
Reverse 2	12.2 kph	7.6 mph
Reverse 3	21.8 kph	13.5 mph
Optional low speed transmission, max travel speeds:		
Forward 1	3.7 kph	2.3 mph
Forward 2	7.5 kph	4.7 mph
Forward 3	19.6 kph	12.2 mph
Forward 4	39 kph	24.2 mph
Reverse 1	4.1 kph	2.5 mph
Reverse 2	8.1 kph	5 mph
Reverse 3	21.2 kph	13.2 mph

- 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.

Axles

Features:

- Fixed front, oscillating rear (±12° 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 (16.6 in) with 17.5 tires, or
  - — 326 mm (12.8 in) 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 ratio gearset reduces noise levels during meshing.

Tires

Choice of:

- 17.5 - 25, 12PR (L-2)
- 17.5 - 25, 12PR (L-3)
- 17.5 R25, radial (L-2)
- 17.5 R25, radial (L-3)
- 550/65 R25, radial (L-2)
- 550/65 R25, radial (L-3)
- 20.5 - 25, 12PR (L-2)
- 20.5 - 25, 12PR (L-3)
- 20.5 R25, radial (L-2)
- 20.5 R25, radial (L-3)
- 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 (ton-mph) capabilities. Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model.

Brakes

Features:

- 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 emergency stopping power in case of engine power loss.
- Parking brake:
  - Mechanical, shoe-type brake.
  - Mounted on drive line for positive manual operation.
  - Application of parking brake neutralizes the transmission.
- Optional heavy-duty brakes with integrated cooler.

Cab

ROPS	SAE J1040 MAY94, ISO 3471-1994
FOPS	SAE J231 JAN81, ISO 3449-1992 Level II

- Caterpillar cab and Rollover Protective Structure (ROPS) are standard in North America and Europe.
- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed as per work cycle procedures specified in ANSI/SAE J1166 May 90, results in operator sound exposure Leq (equivalent sound pressure level) of 74 dB(A).
- 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.

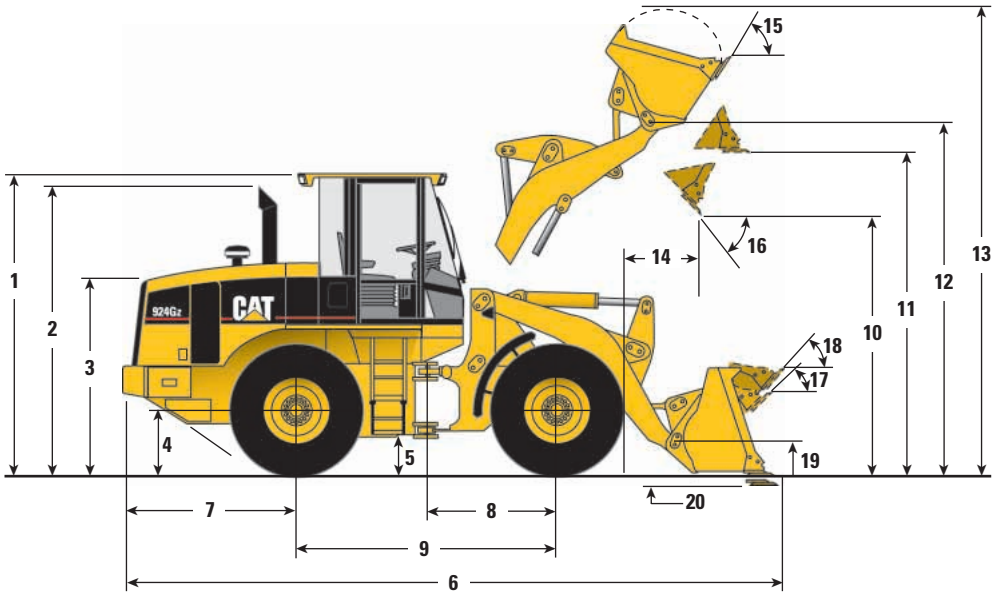
Bucket Controls

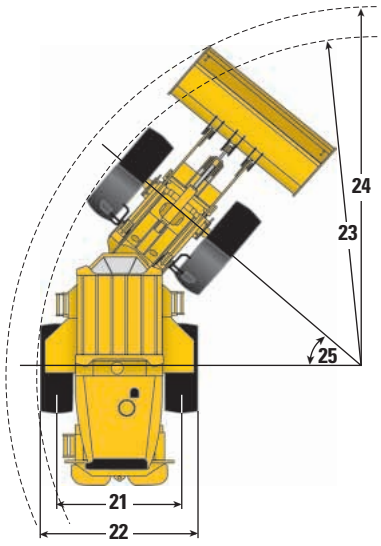
Features:

- Lift circuit:
  - Four positions: raise, hold, lower and float.
  - Adjustable automatic kickout from horizontal to full lift.
- Tilt circuit:
  - Three positions: tilt back, hold and dump.
  - Two-speed dump for quick dumping with bucket and precise load control with forks or other attachments.
  - 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 function hydraulic circuit available with individual lever controls for remote hydraulic functions.
  - Controls can be disabled for roading.

Dimensions with Bucket

All dimensions are approximate. Dimensions vary with bucket. Refer to Operating Specifications chart.





1	Height to top of ROPS/FOPS	3228 mm	(10 ft 8 in)
2	Height to top of exhaust stack	3211 mm	(10 ft 7 in)
3	Height to top of hood	2219 mm	(7 ft 4 in)
4	Height to center of axle	692 mm	(2 ft 4 in)
5	Ground clearance	438 mm	(1 ft 5 in)
6	Overall length	7030 mm	(23 ft 1 in)
7	Length – rear axle to bumper	1918 mm	(6 ft 4 in)
8	Center line of front axle to hitch	1400 mm	(4 ft 7 in)
9	Wheel base length	2800 mm	(9 ft 2 in)
10	Dump clearance at maximum lift and 45° dump	2828 mm	(9 ft 4 in)
11	Bucket clearance at maximum lift and level	3434 mm	(11 ft 4 in)
12	Bucket pin height at maximum lift	3759 mm	(12 ft 3 in)
13	Overall height – bucket raised	4811 mm	(15 ft 10 in)
14	Reach at maximum lift and 45° dump	790 mm	(2 ft 7 in)
15	Rack back angle at maximum lift	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	(1 ft 5 in)
20	Digging depth	42 mm	(1.7 in)

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 m^3 (2.3 yd^3) bucket with bolt-on cutting edge, 80 kg (176 lb) operator and 20.5 R25 radial (L-3) XHA tires. Refer to Operating Specifications for bucket variations.

		17.5-25 12PR (L-2) Tires		20.5-25, 12PR (L-2) Tires	
21	Width at tread center	1880 mm	(6 ft 2 in)	1880 mm	(6 ft 2 in)
22	Overall width over tires	2356 mm	(7 ft 8 in)	2466 mm	(8 ft 1 in)
23	Minimum turning radius over tire	5070 mm	(16 ft 7 in)	5135 mm	(16 ft 10 in)
24	Minimum turning radius over bucket	5609 mm	(18 ft 5 in)	–	–
25	Steering angle – left/right	40°		40°	
	Change in vertical dimension	–68 mm	(–3 in)	no change	no change

Operating Specifications with Bucket

			General Purpose					
			With Bolt-On Cutting Edge		With Bolt-On Teeth & Segments*		With Bolt-On Teeth*	
	Rated bucket capacity (§)	m^3	1.8	2.1	1.8	2.1	1.7	2.0
		yd^3	2.3	2.7	2.3	2.7	2.2	2.6
	Struck capacity (§)	m^3	1.5	1.7	1.5	1.7	1.4	1.6
		yd^3	2.0	2.2	2.0	2.2	1.8	2.1
	Bucket width	mm	2550	2550	2585	2585	2585	2585
		ft/in	8'4"	8'4"	8'6"	8'6"	8'6"	8'6"
10	Dump clearance at full	mm	2828	2759	2724	2655	2724	2655
	lift and 45° discharge (§)	ft/in	9'4"	9'1"	9'0"	8'9"	9'0"	8'9"
14	Reach at full lift	mm	790	859	894	962	894	962
	and 45° discharge (§)	ft/in	2'8"	2'10"	2'11"	3'2"	2'11"	3'2"
	Reach at 45° discharge and	mm	1318	1347	1360	1385	1360	1385
	2130 mm (7'0") clearance (§)	ft/in	4'4"	4'6"	4'6"	4'7"	4'6"	4'7"
	Reach with lift arms	mm	2058	2155	2204	2301	2204	2301
	horizontal and bucket level	ft/in	6'10"	7'1"	7'3"	7'7"	7'3"	7'7"
20	Digging depth (§)	mm	42	50	42	50	17	25
		in	1.7"	2"	1.7"	2"	0.7"	1"
6	Overall length	mm	6890	6993	7036	7138	7017	7120
		ft/in	22'7"	22'11"	23'1"	23'5"	23'0"	23'4"
13	Overall height with bucket	mm	4811	4938	4811	4938	4811	4938
	at full raise (§)	ft/in	15'9"	16'3"	15'10"	16'3"	15'10"	16'3"
24	Loader clearance radius with	mm	5609	5638	5670	5700	5670	5700
	bucket in carry position (§)	ft/in	18'5"	18'6"	18'8"	18'9"	18'8"	18'9"
	Static tipping load straight (§)	kg	8702	8619	8534	8448	8696	8636
		lb	19,184	19,001	18,814	18,624	19,171	19,039
	Static tipping load	kg	7642	7562	7473	7391	7628	7568
	full 40° turn (§)	lb	16,847	16,671	16,475	16,294	16,816	16,684
	Breakout force (§)	kg	9876	8902	9756	8782	10 660	9535
		lb	21,772	19,625	21,508	19,361	23,501	21,021
	Operating weight	kg	10 846	10 899	10 981	10 944	10 896	10 949
		lb	23,912	24,029	24,210	24,128	24,022	24,139

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 m^3 (2.3 yd^3) bucket with bolt-on cutting edge, 80 kg (176 lb) 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.

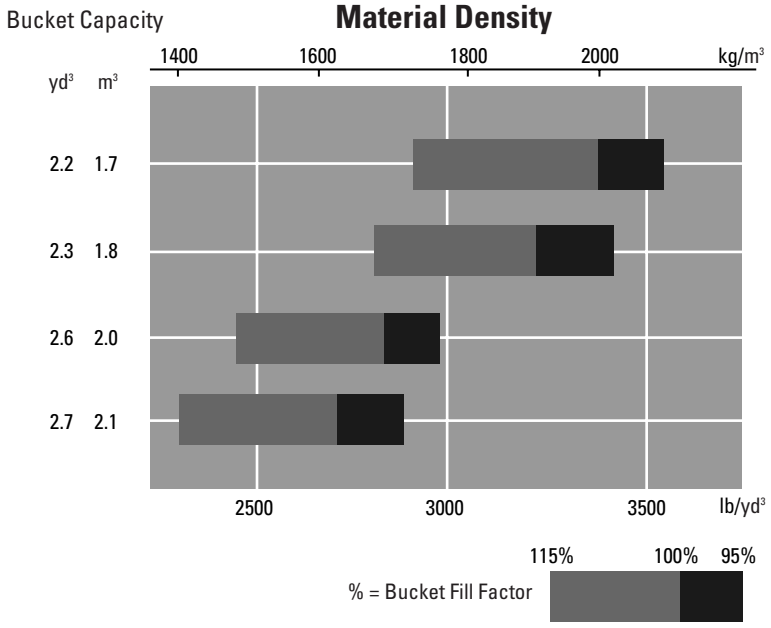
(§) Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers (SAE), including SAE Standards J732 JUN92 and J742 FEB85 governing loader ratings.

Typical Material Densities – Loose

	kg/m³	lb/yd³
Basalt	1960	3305
Bauxite, Kaolin	1420	2394
Clay		
natural bed	1660	2799
dry	1480	2495
wet	1660	2799
Clay and gravel		
dry	1420	2394
wet	1540	2596
Decomposed rock		
75% rock, 25% earth	1960	3305
50% rock, 50% earth	1720	2900
25% rock, 75% earth	1570	2647
Earth		
dry, packed	1510	2546
wet, excavated	1600	2698
Granite		
broken	1660	2799
Gravel		
pitrun	1930	3254
dry	1510	2546
dry, 6-50 mm (0.2-2")	1690	2849
wet, 6-50 mm (0.2-2")	2020	3406

	kg/m³	lb/yd³
Gypsum		
broken	1810	3052
crushed	1600	2698
Limestone		
broken	1540	2596
crushed	1540	2596
Sand		
dry, loose	1420	2394
damp	1690	2849
wet	1840	3102
Sand and clay		
loose	1600	2698
Sand and gravel		
dry	1720	2900
wet	2020	3416
Sandstone	1510	2546
Shale	1250	2107
Slag		
broken	1750	2950
Stone		
crushed	1600	2698

Bucket Size Selector



Supplemental Specifications

	Change in Operating Weight		Change in Articulated Static Tipping Load	
	kg	lb	kg	lb
W/O Air conditioner	–32	–70	–29	–64
Canopy, ROPS (less cab)	–199	–439	–182	–402
Counterweight, 175 kg/385 lb (removal)	–175	–386	–300	–662
W/O Guard, crankcase	–15	–33	–21	–47
W/O Guard, driveshaft	–43	–95	–5	–12
W/O Guard, power train	–52	–114	–51	–113
W/O Ride control system	–40	–88	–29	–64
W/O Secondary steering	–37	–81	–33	–73
Tires, 1-piece rims				
17.5-25, 12PR (L-2)	–652	–1437	–408	–900
17.5-25, 12PR (L-3)	–580	–1279	–363	–801
17.5-25, radial (L-2)	–612	–1349	–383	–845
17.5-25, radial (L-3)	–512	–1129	–320	–706
Tires, 3-piece rims				
17.5-25, 12PR (L-2)	–528	–1164	–330	–728
17.5-25, 12PR (L-3)	–456	–1005	–285	–629
17.5-25, radial (L-2)	–488	–1076	–305	–673
17.5-25, radial (L-3)	–388	–855	–243	–536
550/65 R25, radial (L-2)	–196	–432	–123	–272
550/65 R25, radial (L-3)	–136	–300	–85	–188
20.5-25, 12PR (L-2)	–240	–529	–150	–331
20.5-25, 12PR (L-3)	–36	–79	–22	–49
20.5 R25, radial (L-2)	–172	–379	–108	–239
20.5 R25, radial (L-3)	0	0	0	0

Standard Equipment

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

ELECTRICAL
- Alternator, 80-amp
- Alarm, back-up
- Batteries, maintenance-free, 750 CCA, (2)
- Directional signals (front & rear)
- Starting and charging system, 24V
- Halogen work lights (front & 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)
- Hydraulic control lever lockout
- Interior light
- Tool box
- 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, armrest (fabric or vinyl)
- Seat belt, 75 mm (3 in), retractable
- Tinted safety glass
- Two door cab, fixed glass
- Wiper/Washer, wet arm front/rear, intermittent front

POWER TRAIN
- Engine, Caterpillar 3056E DIT ATAAC
  - Low emission diesel engine
  - Turbocharged
  - After cooled
  - Electronically controlled engine
- 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
- S•O•S℠ oil sampling port, transmission oil
- Torque converter
- Transmission, 4F/3R, autoshift, single lever control with F/N/R and kickdown button
- Transmission neutralizer

HYDRAULICS
- Hydraulic diagnostic connectors
- Hydraulic oil cooler
- Hydraulic control, 2-valve, 1-lever with F/N/R
- 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 (-33°F)
- Automatic bucket positioner/fork positioner
- Brakes, secondary and parking
- Bucket positioner, automatic
- Counterweight
- Engine enclosure, lockable
- Fenders, front
- Hitch, recovery
- Loader linkage, Z-bar with sealed pins
- Lift kickout, automatic
- Machine Security System ready
- Product Link ready
- Quick Coupler
- 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 details. All weights approximate.

Air conditioner (R-134a refrigerant)
Alternator, 95-amp
Antifreeze/coolant, extended-life, protects to -50°C (-58°F)
Batteries, maintenance-free, 950 CCA
Beacon light, rotating, magnetic-mount
Brakes, heavy duty
Buckets/ground engaging tools
Canopy, ROPS
Counterweight, 175 kg (385 lb)
Differential, Limited Slip, front axle and/or rear axle
Differential, NoSpin, rear axle only (custom order)
Dust bowl precleaner
Electrical accessories package (12V converter, accessory plug outlet, wiring)
Fan, reversing
Fenders, roading, rear
Flood lights, auxiliary, cab-mounted
Guards:
- Crankcase
- Power train
- Waste guarding package

Hydraulic control, two lever (lift/tilt)
Hydraulic control, third valve
Hydraulic oil cooler, heavy-duty
Load check valves (dealer installed)
Low speed transmission
Machine Security System
Mirrors, external (two)
Product Link
Radiator, wide fin spacing
Radio prep package, 12V installation, includes speakers, cable, mounting bracket, hardware, converter and accessory plug. Radio not included.
Ride Control System
Seats:
- Cat Contour Seat, fabric, with adjustable backrest and lumbar support
- Cat Contour Seat, fabric, electrically adjustable with air suspension

Sliding door windows (left and right)
Sound suppression package
Starting aid, engine coolant heater, 120V
Steering, secondary
Sun screen, rear
Tires:
- Bias ply, 17.5 - 25 and 20.5 - 25
- Radial, 17.5 - 25, 550/65 R25 and 20.5 - 25

Visor, sun (front)

Notes

924Gz Wheel Loader

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.CAT.com**

Materials and specifications are subject to change without notice.
Featured machines in photos may include additional equipment.
See your Caterpillar dealer for available options.

AEHQ0546-03 (6-04)

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