

# 914G/IT14G

Wheel Loader/  
Integrated  
Toolcarrier



## Engine

Model	Cat <sup>®</sup> 3054C DIT	
Net Power (SAE J1349)	71 kW	95 hp

## Maximum Operating Weight

914G	7950 kg	17,530 lb
IT14G	8450 kg	18,632 lb

Bucket Capacities	1.2-1.4 m <sup>3</sup>	1.6-1.8 yd <sup>3</sup>
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# 914G/IT14G Wheel Loader/Integrated Toolcarrier

*The 914G/IT14G defines world-class performance, value and reliability.*

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## Performance

- ✓ The Cat® 3054C DIT engine meets the latest emissions criteria and is performance matched with a Cat hystat transmission for smoothness and operator comfort. **pg. 4**

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## Operator Station

Ergonomically designed for total machine control in a comfortable, spacious environment. All controls, levers, switches, and gauges are positioned to maximize productivity. **pg. 6**

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## Work Tools

Caterpillar's selection of general purpose and multi purpose buckets are designed to optimize performance. A quick coupler (optional on the 914G) maximizes productivity. **pg. 8**

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## Environmentally Responsible Design

Caterpillar® machines not only help you build a better world, they help maintain and preserve our fragile environment. **pg. 12**

*The 914G/IT14G sets the standard in its class for rugged, reliable performance, responsiveness and operating comfort.*



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### Brushcutter

- ✓ The IT14G is the platform for the T-121C Brushcutter, offering maximum visibility to the mower, superior machine balance, hystat transmission and versatility to provide greater operator confidence and higher productivity. **pg. 9**

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### Serviceability

- ✓ Improved access and fewer maintenance requirements provide unparalleled ease of service. **pg. 10**

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### Owning & Operating Costs

- ✓ Cost saving features help improve your bottom line. **pg. 11**

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### Complete Customer Support

Caterpillar dealer services ensure a longer machine operating life with lower costs. **pg. 13**



✓ *New Feature*

## Performance

*Exceptionally tough, the rugged performance and improved gradeability of the 914G/IT14G helps increase productivity.*



**Caterpillar® Engine.** The Caterpillar 3054C DIT (Direct Injection Turbocharged) engine has a proven reputation for rugged, reliable operation while providing peak performance in a wide range of operating conditions.

**Low Emission, Tier 2 Engine.**

The standard 3054C DIT is a very low emission engine designed to meet U.S. EPA Tier 2 and EU Stage II environmental emission standards.

**Cylinder Block.** The 3054C cylinder block features a deep skirted, internally stiffened cast iron block. Extra stock is used in the main bearing bulkheads for added rigidity.

**Steel Crankshaft.** The 3054C features a large diameter, hardened forged chrome-molybdenum steel crankshaft with wide main and rod bearings for long service life.

**Pistons.** The pistons are three-ring, controlled-expansion design.

**Oil Pump.** The 3054C uses a gear-driven oil pump located in the oil pan. Being mounted below the crankshaft centerline allows the pump to prime quicker and get up to pressure faster to help reduce wear and extend engine service life.

**Fuel Pump and Fuel Filter.** The 3054C uses a highly dependable rotary distributor-type fuel pump. The fuel filter is integrated with an electric lift pump located on the hystat cover for easy serviceability. The electric lift pump provides exceptional cold start performance and automatic priming during filter changes.

**Water Pump.** The gear-driven water pump provides reliable performance compared with belts that can break and disable the engine.

**Starting System.** The starting system for the 3054C is a 24V, 4.5 kW gear reduction starter that incorporates internal shielding to prevent inadvertent starts. A glow plug starting aid is standard for improved starting in extremely cold temperatures.

**Hystat Power Train.** The hystat power train delivers a broader range of power and performance with less operator input than converter-driven transmissions.



**Hydrostatic Transmission.** The high-pressure closed-loop hydrostatic transmission delivers high performance with a broader range of power and performance to the ground.

**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.

**Duo-Cone Seals on Axles.**

Patented Duo-Cone™ Seals on the axle and housing keep oil in and lock contaminants out.

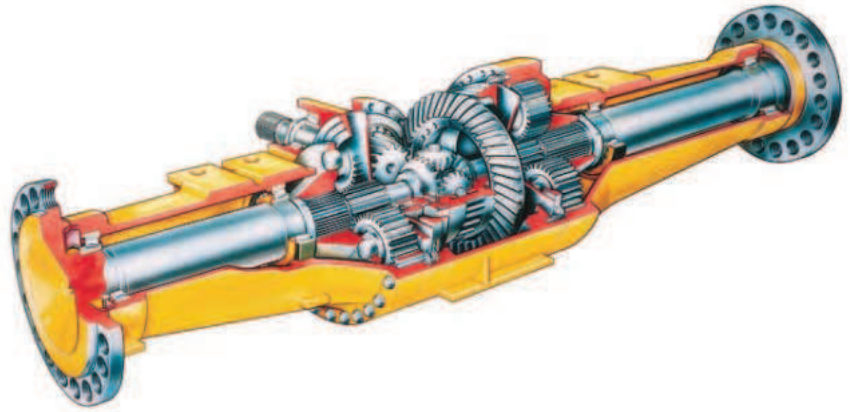
**Differentials.** A choice of standard conventional or Limited Slip Differentials adapts the machine to a wide range of operating conditions.

**Final Drives.** Planetary final drives consist of ring gears and planetary carrier assemblies.

**Fixed Front, Oscillating Rear Axle.**

The fixed front, oscillating rear axle ( $\pm 11$  degrees) ensures four-wheel ground contact for optimum traction and stability.

**Disc Brakes.** Hydraulically-actuated disc brakes are standard on both front and rear axles which provide improved performance and low-effort operation.



**Parking Brake.** Parking brake features include the following:

- Mechanical, shoe-type brake
- Mounted on drive line for positive manual operation
- Transmission is automatically neutralized when parking brake is applied

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

## 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.



**Low-Effort Operation.** Hydraulic pilot controls give the 914G/IT14G uncompromised ease of operation of lift and tilt functions. A remote transmission control option adds a forward/neutral/reverse control switch on the implement lever for easier operation and enhanced productivity. Third and fourth function controls are also available for use with special work tools. Hydrostatic, closed-center steering system with flow amplification provides fast or slow steering response, depending on the operational requirement.

**Steering System.** 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.



*Right Side Console*

**Optional Engine Speed Control (ESC).**

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

**Optional Creeper Control.** The creeper control option allows variable function of travel speeds with full engine RPM.



**Seating Options.** The Comfort Series Seat option is designed for maximum comfort and fully-adjustable support.

**Seat Belt.** All seats include a comfortable 75 mm (3 inch) wide retractable seat belt.

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

**Windows.** Large windows with full-length glass windshield featuring bonded, tinted glass with silicon joints and fewer obstructions allows expansive peripheral visibility.

**Wipers.** Front and rear wipers with washers are standard on the G-Series Cab. The front wiper is intermittent.

**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.



**Access/Egress.** A two-door design allows easy access/egress. Both doors open fully and lock flush against the cab. Steps leading up to the cab are wide and angled out for secure footing.

**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



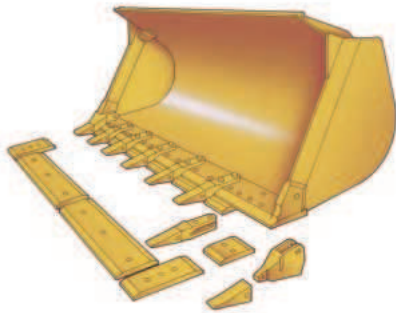
## Work Tools

*Caterpillar offers a wide range of work tools to match the 914G/IT14G to the job and your specific application.*



**Versatility.** With a variety of work tools offered by Caterpillar, the 914G/IT14G is ideal for a wide range of applications.

**Quick Coupler.** Work tools can be changed quickly and easily with the integral quick coupler system, standard on the IT14G and optional on the 914G. A switch in the IT14G cab activates a hydraulic cylinder for positive tool engagement or disengagement.



**Buckets.** With exceptional rimpull and high breakout and lift forces, the 914G/IT14G demonstrates strong performance as a bucket loading machine. A wide range of Caterpillar buckets are available including:

- General purpose
- Multi purpose
- Light material
- Side dump
- High dump
- Material handling

Buckets resist high load twisting and distortion and feature integral spill plates to help reduce spillage. Choice of ground engaging tools includes:

- Bolt-on cutting edges
- Bolt-on teeth
- Bolt-on segments
- Weld-on flush-mounted teeth



**Material Handling.** Exceptional visibility and heavy-lift capabilities enable you to work quickly and efficiently in material handling applications. A wide range of tools are available such as:

- Pallet, lumber and log forks (forks available for IT14G only)
- Material handling arm
- Tire loaders
- Specialty clamps



**Special Applications.** Some of the numerous specialty tools available include:

- Snow plows
- Hydraulic brooms
- Asphalt cutter
- Loader rakes



**Auxiliary Hydraulics.** Optional 3rd (standard on IT14G) and 4th function hydraulics are available for use with work tools that require hydraulic power, such as rotary brooms, augers, high dump and side dump buckets.

**Work Tool Controls.** Work tool controls feature pilot operated lift and tilt circuits with low effort single-lever control. Controls can be locked for roading.

**IT14G 8-bar Parallel Linkage.** 8-bar parallel linkage on the IT14G simplifies keeping forks level throughout the range of lift, without adjustment. Longer lift arms, taller front tower and higher pivot points offer more lift, height and reach than conventional loaders. Having more tilt capacity than lift in almost every position provides superior load control.



## Brushcutter

*The IT14G is the platform for the T-121C Little & Company Brushcutter offering maximum visibility to the mower; superior machine balance, hystat transmission and versatility to provide greater operator confidence and higher productivity.*



**Quick Attach Frame.** The fully welded quick-attach box frame incorporates top and bottom cross bracing and all components are installed with grade 8 hardware or better. All components are plated or fully primed and painted. The frame:

- Creates a rigid structure to protect loader and hydraulic components
- Provides built-in parking stands for a stable storage platform
- Designed for one-person attachment, installed without modification of wheel loader, enabling easy assembly
- Eliminates need for front-side hydraulic reservoir and over-the-hood framework, allowing optimum visibility and safety
- Enables easy access for maintenance



**DynamX Booms.** DynamX booms are fabricated from T1 steel. External and internal reinforcement plates add additional stability. High-strength pivot pins are machined for trueness and heat-treated for long life.



**Hydraulics.** PowerAxe cutting heads, cutting shafts and rotary cutting discs are fabricated with T1 steel for severe-duty reliability and performance, long life and safety. Drop-forged flail cutting knives and flame-cut rotary blades are heat-treated for extra long life.

## Serviceability

*Improved access and fewer maintenance requirements provide unparalleled ease of service.*



**Easy Access.** One-piece engine enclosure hood 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 and hydraulic oil levels with sight gauges.

**Swing-Out Oil Cooler.** A swing-out oil cooler allows quick, easy cleaning and service to the radiator.

**S-O-S<sup>SM</sup> 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 and hydraulic oil are vertically mounted for easier servicing.

**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
- Grouped grease fittings
- Positive torque hose clamps
- Braided, color coded and numbered wiring

**Electrical System.** The electrical system is a 24-volt system. Standard machines include two 12V (900 CCA) Caterpillar maintenance-free batteries, easily accessible inside the engine enclosure, and a charging system equipped with an 80-amp alternator.



## Owning & Operating Costs

*Cost saving features help improve your bottom line.*

**Low Fuel Consumption.** The 3054C DIT 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 speed-on-a-grade, 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 hour hydraulic oil change (S•O•S sampling required)
- 1,000 hour hydraulic filter change
- 500 hour engine oil change

**Machine Security System Option.**

The Machine Security System (MSS) option inhibits unauthorized machine use by immobilizing vital electrical circuits.



## Environmentally Responsible Design

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



**Low Fuel Consumption.** The 914G/IT14G gets more work done in a day resulting in less fuel consumed and minimal impact on the environment.

**Low Exhaust Emissions.** The Cat 3054C DIT is a low emission engine designed to meet current emission regulations and is U.S. EPA Tier 2 and EU Stage II compliant.

**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 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 machine 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 914G/IT14G, 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 necessary? What is the true cost of lost production? Your Cat dealer can give you precise answers to these and many more questions.

**Purchase.** Look at the value the 914G/IT14G 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<sup>SM</sup> 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](http://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	Cat 3054C DIT	
Gross Power (SAE J1995)	75 kW	101 hp
Net Power (SAE J1349)	71 kW	95 hp
Gross Power (ISO 14396)	75 kW	100 hp
Net Power (ISO 9249)	72 kW	96 hp
Net Power (EEC 80/1269)	72 kW	96 hp
Bore	105 mm	4.13 in
Stroke	127 mm	5 in
Displacement	4.4 L	268 in <sup>3</sup>

- Caterpillar four-stroke cycle, four cylinder 3054C DIT diesel engine.
- Ratings at 2300 RPM.
- Net power shown is the power available at the flywheel when the engine is equipped with alternator, air cleaner, muffler and fan at minimum speed.
- Power rating conditions based on standard air conditions of 25° C (77° F) and 99 kPa (29.32 Hg) dry barometer.
- No derating required up to 2268 m (7500 ft) altitude.
- Direct injection rotary fuel pump with individual adjustment-free injection valves.
- Cast iron block with internally stiffened deep skirt design.
- Field replaceable dry cylinder liners.
- Replaceable valve guides and seats.
- Large diameter, hardened chrome-molybdenum steel crankshaft.
- Three-ring controlled-expansion pistons lubricated from oil jets.
- Helical steel front gear train.
- Fuel priming pump and fuel/water separator are standard. Electronic fuel priming pump eliminates the need for manual priming.
- Gear-driven oil pump located in oil pan.
- Gear-driven water pump.
- Direct electric 24V starting and charging system with two 12V 900 CCA Caterpillar maintenance free batteries and 80A alternator.
- Glow plug starting aid is standard for improved starting in extremely cold temperatures.

## Weights

Max Operating Weight — 914G	7950 kg	17,530 lb
Max Operating Weight — IT14G	8450 kg	18,632 lb
Optional Counterweight*	150 kg	330 lb

\* Optional on 914G. Standard on IT14G.

- 914G with 1.4 m<sup>3</sup> (1.8 yd<sup>3</sup>) bucket with bolt-on cutting edge and optional 150 kg (330 lb) counterweight.
- IT14G with 1.4 m<sup>3</sup> (1.8 yd<sup>3</sup>) bucket with bolt-on cutting edge and standard 150 kg (330 lb) counterweight.

## Steering

Steering Articulation	40°	
Steering Angle, each direction	40°	
Steering Cylinders, two, bore	63.5 mm	2.5 in
Hydraulic Output at 2300 engine rpm and 6900 kPa (1,000 psi)	57 L/min	15.1 gal/min

- Fully hydraulic power steering features center-point frame articulation, front/rear wheel track and dedicated fixed displacement steering pump to provide flow at all engine and ground speeds.
- Adjustable steering column for operator comfort.
- High impact rubber steering stops.
- Optional secondary steering system available.

## Loader Hydraulic System

### 914G

Output at 2300 engine rpm and 6900 kPa (1,000 psi) with SAE 10W oil at 65° C (150° F)	90 L/min	23.8 gal/min
Hydraulic Cycle Time	10.9 Seconds	
Pump Flow — Implement pump	90 L/min	23.8 gal/min
Relief Pressure — Implement pump	245.5 bar	3,560 psi
Hydraulic Cycle Time:	10.9 Seconds	
Raise	5.6 Seconds	
Dump	2.1 Seconds	
Lower, empty, float down	3.2 Seconds	
Total	10.9 Seconds	
Relief Valve Setting	245.5 bar	3,560 psi
Lift Cylinders, double acting:	89 × 672 mm	3.5 × 26.5 in
Tilt Cylinder, double acting:	102 × 400 mm	4.0 × 15.8 in



## Loader Hydraulic System (continued)

### IT14G

Output at 2300 engine rpm and 6900 kPa (1,000 psi) with SAE 10W oil at 65° C (150° F)	90 L/min	23.8 gal/min
Hydraulic Cycle Time	12.5 Seconds	
Pump Flow — Implement pump	90 L/min	23.8 gal/min
Relief Pressure — Implement pump	245.5 bar	3,560 psi
Hydraulic Cycle Time:	12.5 Seconds	
Raise	6.9 Seconds	
Dump	2.5 Seconds	
Lower, empty, float down	3.1 Seconds	
Total	12.5 Seconds	
Relief Valve Setting	245.5 bar	3,560 psi
Lift Cylinders, double acting:	89 × 795 mm	3.5 × 31.3 in
Tilt Cylinder, double acting:	76 × 805 mm	3.0 × 31.7 in

- Open centered system with low effort pilot operated hydraulic controls.
- Fixed displacement implement, gear-type pump is directly connected to engine output.
- Features pilot safety valve to disable implement functions and standard hydraulic oil cooler that tilts out for easy cleaning of heat exchangers and full flow filtering.
- Optional Ride Control system for smooth operation in rough roading conditions.

## Service Refill Capacities

Fuel tank	150 L	39.6 gal
Cooling system	23 L	6.1 gal
Crankcase	7 L	1.8 gal
Front	15 L	4 gal
Rear	15 L	4 gal
Hydraulic system (including tank)	100 L	26.4 gal
Hydraulic tank	70 L	18.5 gal

- Transfer Gearbox:
  - Standard speed version — 2.5 L (0.7 gal)
  - High speed version — 4.0 L (1.1 gal)

## Transmission

### 914G

Standard Transmission Max Travel Speeds:

Forward 1 (turtle)	9 kph	5.6 mph
Forward 2 (rabbit)	35 kph	22 mph
Reverse 1 (turtle)	9 kph	5.6 mph
Reverse 2 (rabbit)	35 kph	22 mph

### IT14G

Standard Transmission Max Travel Speeds:

Forward 1 (turtle)	9 kph	5.6 mph
Forward 2 (rabbit)	32 kph	20 mph
Reverse 1 (turtle)	9 kph	5.6 mph
Reverse 2 (rabbit)	32 kph	20 mph

- Maximum travel speeds with 17.5-25 tires.
- Closed-loop hydrostatic system delivers high performance.
- Single-path, variable displacement pump (axial piston type) and two variable displacement motors (bent axis type) driving fixed ratio gear box on rear axle.
- Single lever control for precise, easy control for full power directional changes.
- Full power directional changes
- HIGH/LOW speed switch for roading or working transmission modes. Full rimpull is available in either mode.
- Inching function allows momentary travel speeds as low as zero with full engine rpm.
- Optional creeper control allows variable function of travel speeds with full engine rpm.
- Optional remote transmission control adds a forward/neutral/reverse switch on the implement lever and directional indicators on the instrument cluster.

## Final Drives

- Planetary final drives consist of ring gears pressed and doweled into axle housing and planetary carrier assemblies including planet gears with full-floating bronze sleeve bearings.
- High contact ratio gearset reduces noise levels during meshing.
- Planetary reduction gears are inboard mounted for optimal protection and durability.

## Axles

Axle Oscillation	11°
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- Fixed front, oscillating rear ( $\pm 11$  degrees)
- Caterpillar axle with fully-enclosed brakes and final drives.
- Patented Duo-Cone Seals between axle and housing.
- Rear wheel can raise or lower a total of 350 mm (13.8 in).
- Optional Limited Slip Differentials on front, rear or both axles. Conventional differentials are standard.
- Rear axle trunnion has remote lubrication fitting.

## Tires

Size	17.5-25	
Tread Width	1800 mm	5 ft 9 in
Choice of:	Tubeless, nylon loader-design tires	

## Brakes

- Service brake features completely closed and sealed standard inboard oil-immersed disc brakes on front and rear axles that are adjustment free.
- Dual pedal low-effort hydraulic braking system.
- Hydrostatic drive is variably neutralized during braking.
- Hydrostatic system provides additional hydraulic braking capacity.
- Parking brake is mechanical, shoe-type mounted on drive line for positive manual operation. The transmission is automatically neutralized when parking brake is applied.
- Meets SAE J1473 and ISO 3450 requirements.

## Cab Standards

ROPS	SAE J1040 MAY94, ISO 3471:1994
FOPS	SAE J/ISO 3449 APR98 LEVEL II, ISO 3449:1992 LEVEL II

- 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, typically results in an operator sound pressure exposure  $L_{eq}$  (equivalent sound pressure level) of 72 dB(A).

## Dimensions

### 914G

Overall Height	3100 mm	10 ft 2 in
Wheelbase	2600 mm	8 ft 5 in
Width Over Tires	2260 mm	7 ft 4 in
Bucket Width	2401 mm	7 ft 8 in
Overall Length	6229 mm	20 ft 5 in
Dump Clearance at Max Lift and 45° Dump	2659 mm	8 ft 9 in
Bucket Clearance at Max Lift and Carry	973 mm	3 ft 2 in
Overall Height — Bucket Raised	4390 mm	14 ft 5 in

### IT14G

Overall Height	3100 mm	10 ft 2 in
Wheelbase	2600 mm	8 ft 5 in
Width Over Tires	2260 mm	7 ft 4 in
Bucket Width	2401 mm	7 ft 8 in
Overall Length	6424 mm	21 ft 1 in
Dump Clearance at Max Lift and 45° Dump	2921 mm	9 ft 7 in
Bucket Clearance at Max Lift and Carry	787 mm	2 ft 7 in
Overall Height — Bucket Raised	4802 mm	15 ft 9 in

## Operating Specifications

### 914G

Breakout Force	62 kN	14,007 lb
Static Tipping Load/Full Turn	5323 kg	11,737 lb
Reach Full Lift/45° Dump Angle	973 mm	3 ft 2 in
Dump Clearance Full Lift/45° Dump Angle	2659 mm	8 ft 7 in
Articulation Angle	40°	
Bucket Capacity With Bolt-on Cutting Edge	1.3 m <sup>3</sup>	1.7 yd <sup>3</sup>

### IT14G

Breakout Force	77 kN	17,342 lb
Static Tipping Load/Full Turn	4792 kg	10,566 lb
Reach Full Lift/45° Dump Angle	787 mm	2 ft 7 in
Dump Clearance Full Lift/45° Dump Angle	2921 mm	9 ft 7 in
Articulation Angle	40°	
Bucket Capacity With Bolt-on Cutting Edge	1.3 m <sup>3</sup>	1.7 yd <sup>3</sup>



# 914G Operating Specifications

		General Purpose Buckets						Penetration Bucket	
		With Bolt-On Cutting Edge		With Bolt-On Teeth & Segments		With Bolt-On Teeth		With Flush Mounted Teeth	
Rated bucket capacity (§)	m <sup>3</sup>	1.3	1.4	1.3	1.4	1.2	1.3	1.3	1.4
	yd <sup>3</sup>	1.7	1.8	1.7	1.8	1.6	1.7	1.7	1.8
Struck capacity (§)	m <sup>3</sup>	1.1	1.2	1.1	1.2	1.0	1.1	1.1	1.2
	yd <sup>3</sup>	1.4	1.5	1.4	1.5	1.3	1.5	1.5	1.5
Width	mm	2401	2401	2424	2424	2424	2424	2434	2434
	ft/in	7' 10.5"	7' 10.5"	7' 11.4"	7' 11.4"	7' 11.4"	7' 11.4"	7' 11.8"	7' 11.8"
Dump clearance at full lift and 45° discharge (§)	mm	2659	2623	2667	2632	2715	2680	2680	2680
	ft/in	8' 9"	8' 7"	8' 9"	8' 7"	8' 11"	8' 10"	8' 10"	8' 10"
Reach at full lift and 45° discharge (§)	mm	973	1008	964	1000	944	979	979	979
	ft/in	3' 2"	3' 4"	3' 2"	3' 3"	3' 1"	3' 3"	3' 3"	3' 3"
Reach at 45° discharge and 2130 mm (7' 0") clearance (§)	mm	1331	1348	1282	1297	1259	1275	1287	1249
	ft/in	4' 4"	4' 5"	4' 2"	4' 3"	4' 2"	4' 2"	4' 3"	4' 1"
Reach with lift arms horizontal and bucket level	mm	1980	2030	1970	2020	1920	1970	1970	1970
	ft/in	6' 6"	6' 8"	6' 6"	6' 8"	6' 4"	6' 6"	6' 6"	6' 6"
Digging depth (§)	mm	89	89	89	89	70	70	70	70
	in	3.5"	3.5"	3.5"	3.5"	2.8"	2.8"	2.8"	2.8"
Overall length	mm	6229	6279	6328	6378	6310	6360	6358	6438
	ft/in	20' 5"	20' 7"	20' 9"	20' 11"	20' 8"	20' 10"	20' 10"	21' 1"
Overall height with bucket at full raise (§)	mm	4390	4442	4390	4442	4390	4442	4442	4442
	ft/in	14' 5"	14' 7"	14' 5"	14' 7"	14' 5"	14' 7"	14' 7"	14' 7"
Loader clearance circle with bucket in carry position	m	10.34	10.37	10.42	10.45	10.42	10.45	10.44	10.49
	ft/in	33' 11"	34' 0"	34' 2"	34' 4"	34' 2"	34' 4"	34' 3"	34' 5"
Static tipping load straight* (§)	kg	6098	6069	6059	6029	6169	6166	6183	6011
	lb	13,446	13,382	13,360	13,294	13,603	13,602	13,634	13,254
Static tipping load full 40° turn* (§)	kg	5323	5295	5284	5256	5415	5387	5404	5232
	lb	11,737	11,675	11,651	11,589	11,940	11,878	11,916	11,537
Breakout force (§)	kg	6367	5971	6415	6010	6929	6469	6484	6374
	lb	14,007	13,136	14,113	13,222	15,246	14,232	14,265	14,055
Operating weight*	kg	7378	7391	7409	7422	7336	7349	7336	7500
	lb	16,262	16,297	16,337	16,366	16,176	16,205	16,176	16,538

\* Static tipping and operating weights shown are for high-speed version 914G and include lubricants, full fuel tank, ROPS cab, 80 kg (176 lb) operator and 17.5 - R25 (L2 equivalent) tires.

**Note:** Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers (SAE). SAE Standards J732 and J742 govern loader rating, denoted in the text by (§).

All dimensions are approximate.

Dimensions vary with bucket. Refer to Operating specifications chart on page 17.

Diagram illustrating the dimensions of the CAT 914G wheel loader, showing the machine from the side with the bucket raised. Key dimensions are provided in millimeters (mm) and feet/inches (ft/in).

**Vertical Dimensions:**

- Overall height: 3100 mm (10' 2")
- Height to top of cab: 2255 mm (7' 5")
- Height to top of bucket: 3435 mm (11' 3")
- Height to top of chassis: 2080 mm (6' 10")
- Height to top of rear wheel: 620 mm (2' 0")
- Height to top of front wheel: 374 mm (1' 3")
- Height to top of bucket (when lowered): 3236 mm (10' 7")

**Horizontal Dimensions:**

- Wheelbase: 2600 mm (8' 6")
- Distance from front wheel to rear wheel: 1300 mm (4' 3")
- Distance from front wheel to rear wheel (including chassis): 1658 mm (5' 5")

**Angles:**

- Bucket angle: 60°
- Chassis angle: 48°
- Bucket angle (when lowered): 46°
- Chassis angle (when lowered): 41°
- Chassis angle (when lowered): 30°

## 914G Supplemental Specifications

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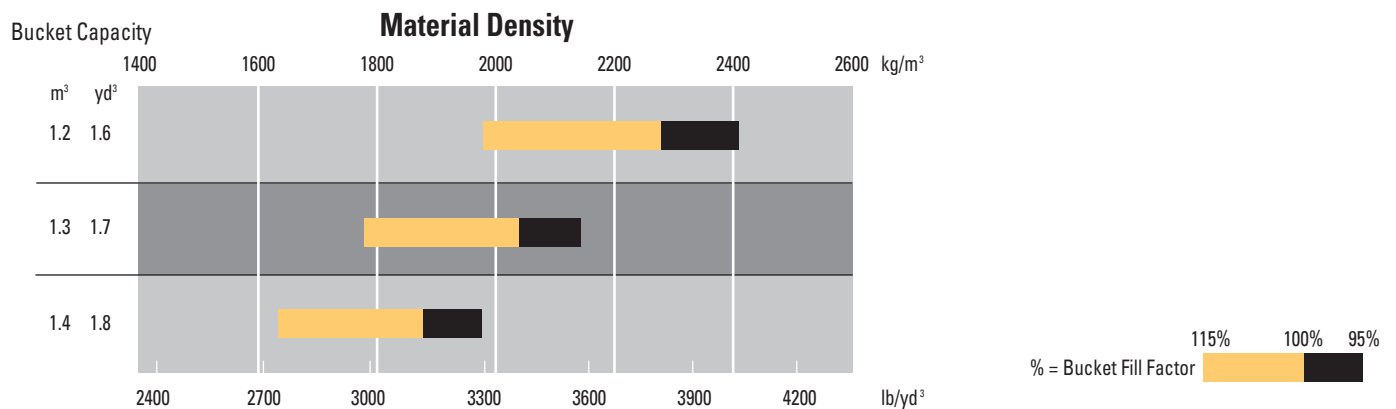


## Typical material densities — loose

	kg/m <sup>3</sup>	lb/yd <sup>3</sup>
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/m <sup>3</sup>	lb/yd <sup>3</sup>
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

## 914G Bucket Size Selector



# IT14G Operating Specifications

		General Purpose Buckets						Penetration Buckets
		With Bolt-On Cutting Edge		With Bolt-On Teeth		With Bolt-On Teeth, Segments		With Flush Mounted Teeth
Rated bucket capacity (§)	m³	1.3	1.4	1.2	1.3	1.3	1.4	1.3
	yd³	1.7	1.8	1.6	1.7	1.7	1.8	1.7
Struck capacity (§)	m³	1.1	1.2	1.0	1.1	1.1	1.2	1.1
	yd³	1.4	1.5	1.3	1.5	1.4	1.5	1.5
Width	mm	2401	2401	2424	2424	2424	2424	2434
	ft/in	7' 10.5"	7' 10.5"	7' 11.4"	7' 11.4"	7' 11.4"	7' 11.4"	7' 11.8"
Dump clearance at full lift and 45° discharge (§)	mm	2921	2886	2977	2942	2930	2895	2942
	ft/in	9' 7"	9' 6"	9' 9"	9' 8"	9' 7"	9' 6"	9' 8"
Reach at full lift and 45° discharge (§)	mm	787	823	757	792	779	814	792
	ft/in	2' 7"	2' 8"	2' 6"	2' 7"	2' 7"	2' 8"	2' 7"
Reach at 45° discharge and 2130 mm (7' 0") clearance (§)	mm	1426	1443	1351	1368	1375	1390	1380
	ft/in	4' 8"	4' 9"	4' 5"	4' 6"	4' 6"	4' 7"	4' 6"
Reach with lift arms horizontal and bucket level	mm	2151	2201	2090	2140	2139	2189	2140
	ft/in	7' 1"	7' 3"	6' 10"	7' 0"	7' 0"	7' 2"	7' 0"
Digging depth (§)	mm	174	174	155	155	174	174	155
	in	6.9"	6.9"	6.1"	6.1"	6.9"	6.9"	6.1"
Overall length	mm	6424	6474	6506	6556	6524	6574	6554
	ft/in	21' 1"	21' 3"	21' 4"	21' 6"	21' 5"	21' 7"	21' 6"
Overall height with bucket at full raise (§)	mm	4802	4855	4802	4855	4802	4855	4855
	ft/in	15' 9"	15' 11"	15' 9"	15' 11"	15' 9"	15' 11"	15' 11"
Loader clearance circle with bucket in carry position	m	10.40	10.42	10.47	10.50	10.47	10.50	10.49
	ft/in	34' 1"	34' 2"	34' 4"	34' 5"	34' 4"	34' 5"	34' 5"
Static tipping load straight* (§)	kg	5541	5495	5637	5589	5503	5456	5605
	lb	12,218	12,116	12,407	12,324	12,134	12,030	12,359
Static tipping load full 40° turn* (§)	kg	4792	4750	4882	4840	4754	4712	4855
	lb	10,566	10,474	10,765	10,672	10,483	10,390	10,705
Breakout force (§)	kg	7865	7435	8456	7965	7920	7481	7979
	lb	17,342	16,394	18,645	17,563	17,464	16,496	17,594
Operating weight*	kg	8032	8044	7990	8003	8063	8076	7990
	lb	17,771	17,737	17,618	17,647	17,779	17,808	17,618

\* Static tipping and operating weights shown are for high-speed version IT14G and include lubricants, full fuel tank, ROPS cab, 80 kg (176 lb) operator, standard 250 kg (550 lb) counterweight and 17.5 - R25 (L2 equivalent) tires.

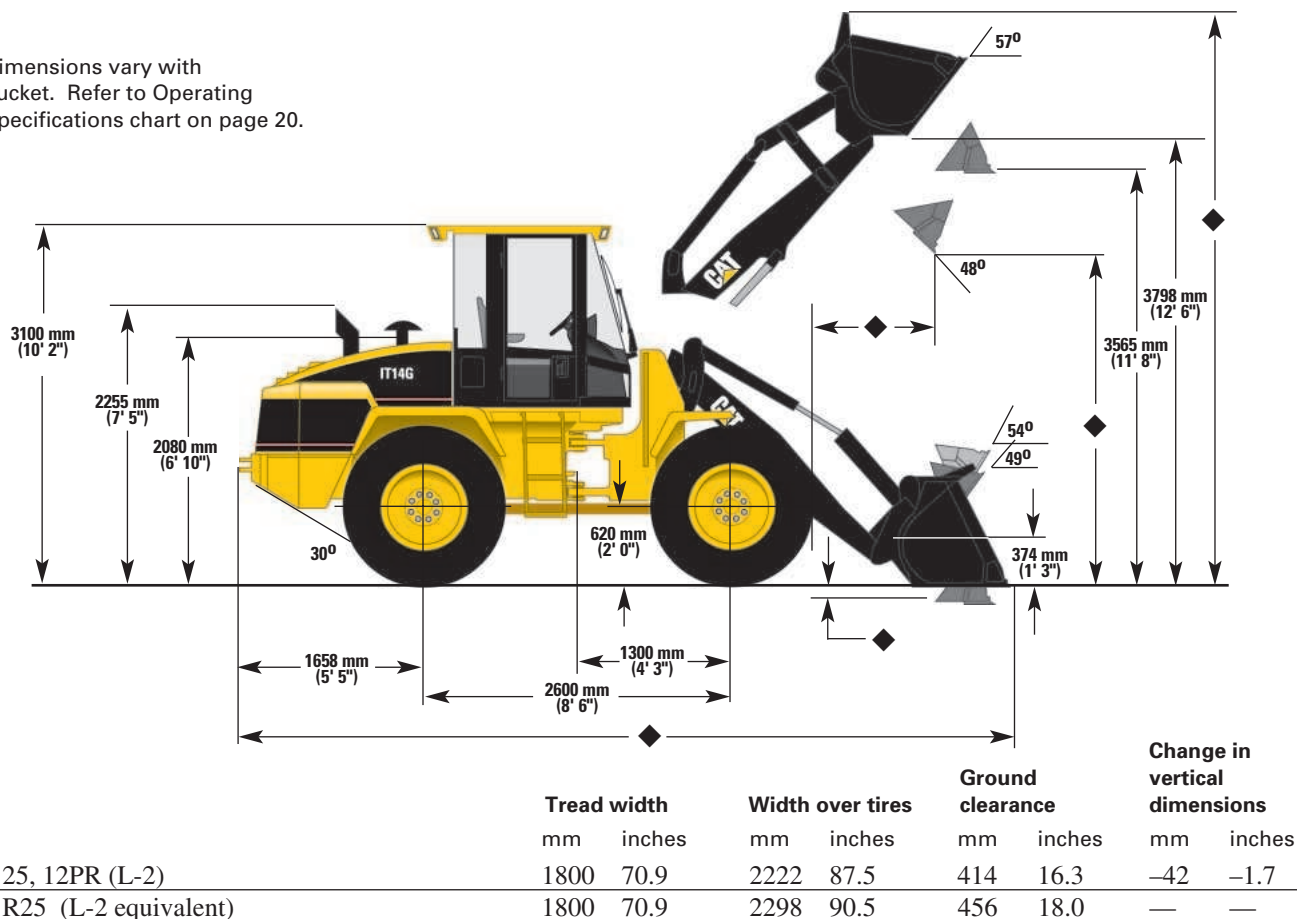
**Note:** Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers (SAE). SAE Standards J732 and J742 govern loader rating, denoted in the text by (§).



## IT14G Dimensions with Bucket

All dimensions are approximate.

◆ Dimensions vary with bucket. Refer to Operating Specifications chart on page 20.



## IT14G Supplemental Specifications

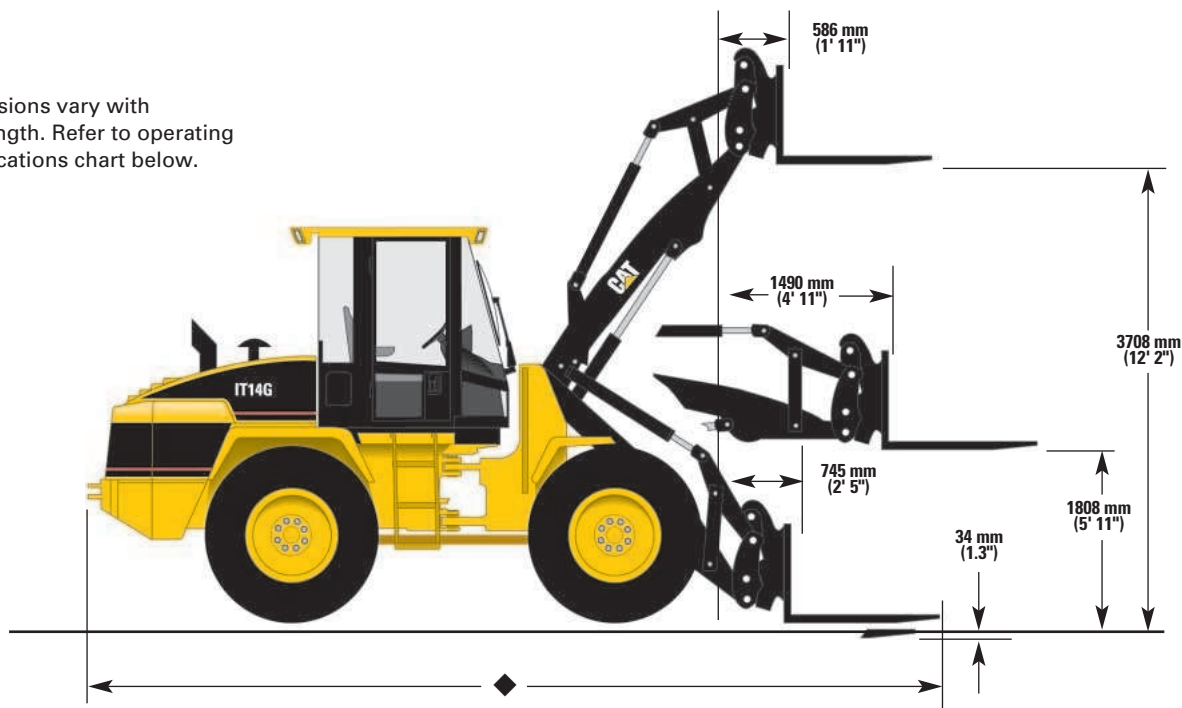
	Change in Operating Weight		Change in Articulated Static Tipping Load	
	kg	lb	kg	lb
Air conditioner	+55	+121	+62	+137
Canopy, ROPS (less cab)	-122	-269	-89	-196
Ride control	+28	+62	+5	+11
Powertrain guard	+17	+37	+15	+33
Secondary steering	+30	+66	+38	+84
Tires & rims, 15.5 - 25, 12PR (L-2)	-140	-309	-84	-185
Tires & rims, 15.5 - 25, 12PR (L-3)	-76	-168	-46	-101
Tires & rims, 15.5 - 25, R25 (L-2 equivalent)	-84	-185	-44	-97
Tires & rims, 15.5 - 25, R25 (L-3 equivalent)	-4	-9	-2	-4
Tires & rims, 17.5 - 25, 12PR (L-2)	-40	-88	-21	-46
Tires & rims, 17.5 - 25, 12PR (L-3)	+32	+71	+17	+37
Tires & rims, 17.5 - 25, R25 (L-3 equivalent)	+100	+220	+54	+119
Tires & rims, 17.5 - 25, R25 (L-2/L-3 equivalent)	+76	+168	+41	+90

Static tipping load changes are for an IT14G with lubricants, full fuel tank, ROPS cab, 80 kg (176 lb) operator, standard 250 kg (550 lb) counterweight, 17.5 R25 L-2 equivalent tires and a 1.3 cu. m (1.7 cu. yd.) general purpose bucket with bolt-on cutting edge.

## IT14G Dimensions with Forks

All dimensions are approximate.

- ◆ Dimensions vary with fork length. Refer to operating specifications chart below.



## IT14G Operating Specifications with Forks

Fork Tine Length	1050 mm (3' 5")	1200 mm (3' 11")	1350 mm (4' 5")
Operating load:			
Per SAE J1197 FEB91 (50% of full turn static tipping load)	1927 kg (4,249 lb)	1870 kg (4,123 lb)	1810 kg (3,991 lb)
Per CEN 474-3, rough terrain (60% of full turn static tipping load)	2312 kg (5,098 lb)	2244 kg (4,948 lb)	2172 kg (4,789 lb)
Per CEN 474-3, firm & level ground (80% of full turn static tipping load)	3082 kg (6,796 lb)	2992 kg (6,597 lb)	2896 kg (6,386 lb)
Overall length	6723 mm (22' 1")	6873 mm (22' 7")	7023 mm (23' 1")
Load center	525 mm (21")	600 mm (24")	675 mm (27")
Static tipping load with level arms and forks, 600 mm (23.6") load center, straight*	4447 kg (9,806 lb)	4309 kg (9,501 lb)	4179 kg (9,215 lb)
Static tipping load with level arms and forks, 600 mm (23.6") load center, full 40° turn*	3853 kg (8,496 lb)	3734 kg (8,233 lb)	3620 kg (7,982 lb)
Operating weight*	7898 kg (17,415 lb)	7915 kg (17,453 lb)	7928 kg (17,481 lb)

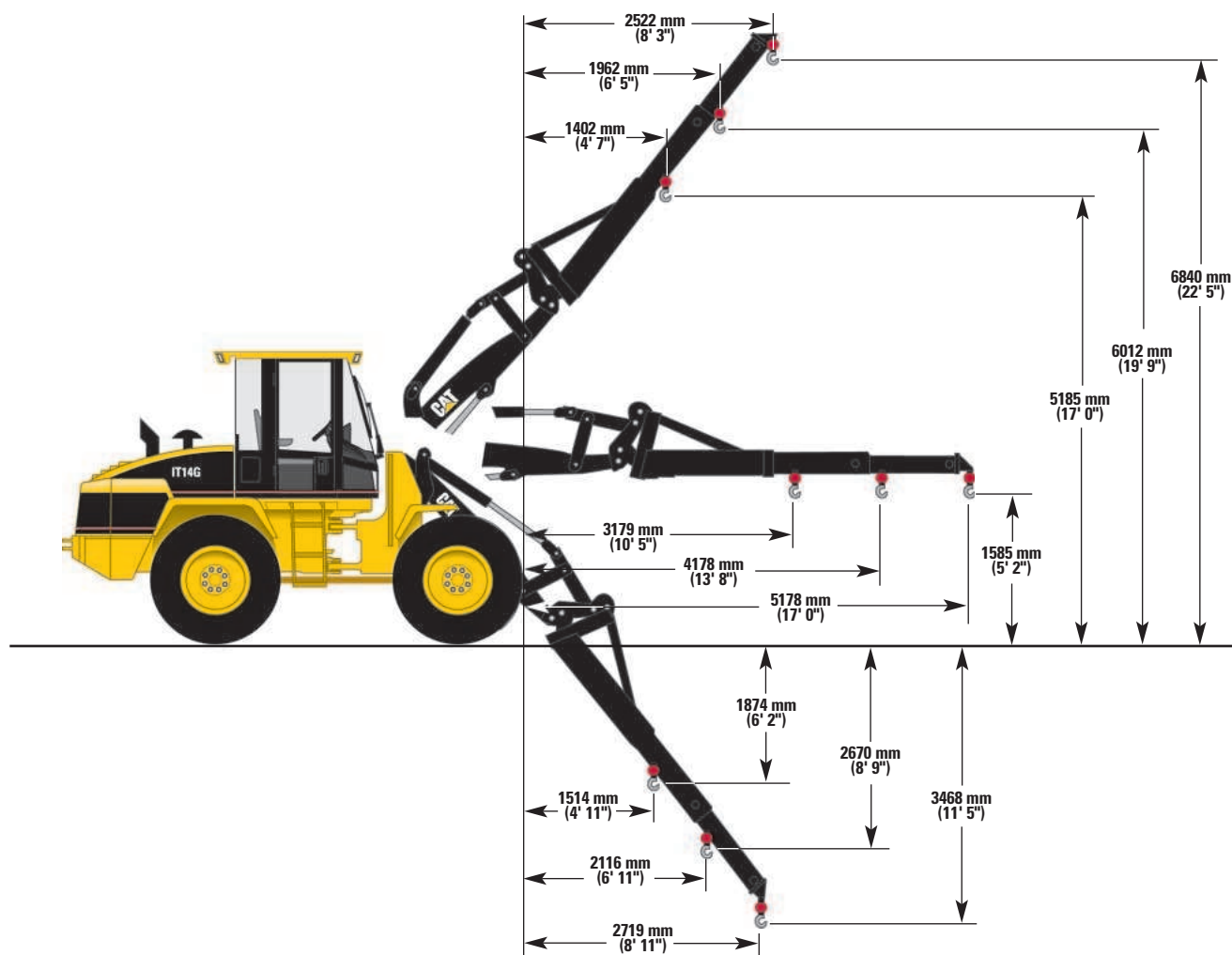
\* Static tipping and operating weights shown are for an IT14G with lubricants, full fuel tank, ROPS cab, 80 kg (176 lb) operator, standard 250 kg (550 lb) counterweight and 17.5 R25 (L2 equivalent) tires.

Tipping load is defined by SAE J732.



## IT14G Dimensions with Material Handling Arm

All dimensions are approximate.



## IT14G Operating Specifications with Material Handling Arm

Material Handling Arm Position	Retracted	Mid-Position	Extended
Operating load at 40° full turn	1370 kg (3,021 lb)	1076 kg (2,373 lb)	888 kg (1,958 lb)
Static tipping load, straight*	3158 kg (6,963 lb)	2484 kg (5,477 lb)	2051 kg (4,522 lb)
Static tipping load, full 40° full turn*	2740 kg (6,042 lb)	2153 kg (4,747 lb)	1777 kg (3,918 lb)
Operating weight*	7770 kg (17,133 lb)	7770 kg (17,133 lb)	7770 kg (17,133 lb)

\* Static tipping and operating weights shown include lubricants, full fuel tank, ROPS cab, 80 kg (176 lb) operator, standard 250 kg (550 lb) counterweight and 17.5 - R25 (L2 equivalent) tires.

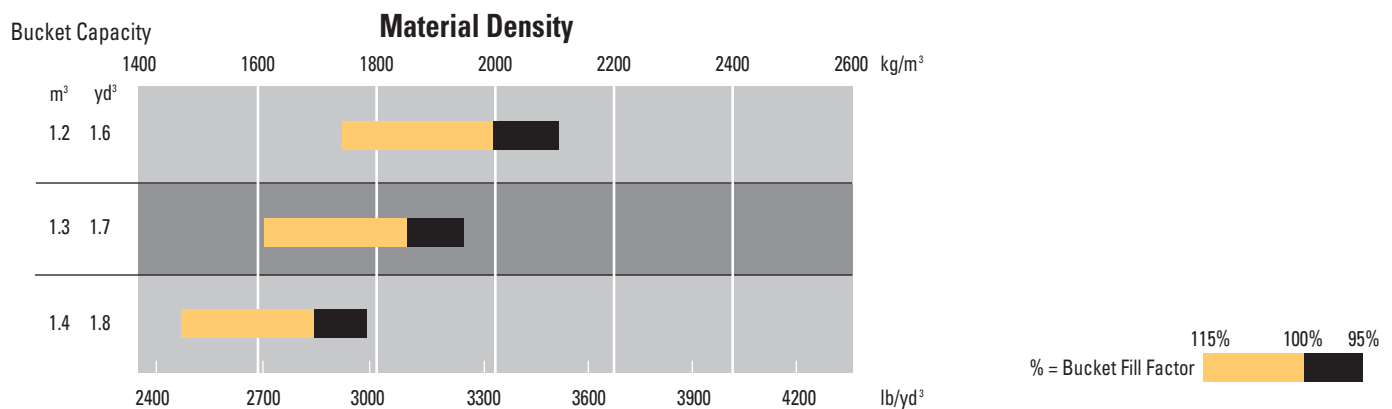
**Note:** Machine stability and operating weights are affected by tire size, tire ballast and other attachments.

## 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

## IT14G Bucket Size Selector





## Standard Equipment

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

24V direct electric starting  
Air cleaner, radial seal  
Alarm, back-up  
Alternator, 80-ampere  
Antifreeze (protected to  $-36^{\circ}\text{C}/-33^{\circ}\text{F}$ )  
    Extended life coolant antifreeze  
Batteries, two 900 CCA maintenance free  
Battery disconnect switch  
Brakes  
    Enclosed/sealed  
    Parking — mechanical on drive line, secondary  
    Service — inboard, oil-immersed, enclosed, wet-disc  
        full hydraulic  
Bucket control, single lever, pilot  
Bucket/fork positioner, automatic  
Cab, ROPS (sound suppressed and pressurized)  
    Adjustable steering column  
    Cigar lighter  
    Cup holder  
    Ground level door release  
    Heater/defroster  
    Rearview mirrors, inside (2)  
    Storage space, lockable  
    Seat, adjustable fabric suspension  
    Seat belt, 75 mm (3 in), retractable  
    Tinted front safety glass  
    Two doors, fixed glass  
    Wiper and washer (front & rear), front intermittent  
Counterweight (150 kg/330 lb); optional on 914G  
Defroster, rear window, wired glass  
Differentials, conventional (front & rear)  
Driveshaft; lubed for life  
Electric fuel pump  
Engine: Caterpillar 3054C DIT diesel  
    Low emission  
    Turbocharged  
Engine enclosure, lockable  
Fenders (front/rear)  
Glow plug starting aid  
Hitch, drawbar  
Horn, front, warning (electrical)  
Hydraulic control, pilot-operated, single lever, 2 valve  
    Third function hydraulics standard on IT14G only  
Pilot control detents  
    Float  
    Rackback  
    Raise  
    Third function hydraulics

Hydraulic oil cooler, tiltable  
Hydraulic diagnostic connectors  
Ignition key start/stop switch  
Indicators  
    Air cleaner  
    Air filter  
    Brake charge pressure  
    Engine oil pressure  
    Electrical system voltage  
    Hystat oil filter bypass  
    Parking brake  
    Primary steering  
Instrumentation  
    Battery voltage gauge  
    Engine coolant temperature gauge  
    Fuel level gauge  
    Hour meter, digital  
    Hydraulic oil level sight gauge  
    Hydraulic oil temperature gauge  
Lift kickout, automatic  
Lift/tilt kickout neutralizer  
Lighting system  
    Brake lights  
    Interior light  
    Turn signals (front and rear)  
    Working lights, halogen (front and rear)  
Linkage  
    Sealed Z-bar design loader linkage (914G only)  
    8 bar parallel lift linkage with sealed pins (IT14G only)  
Muffler  
Pilot hydraulic implement controls  
Power receptacles; internal and external  
Pressure test points  
Radiator, serviceable unit core  
Radiator expansion bottle  
Single lever transmission control  
S•O•S<sup>SM</sup> ports  
    Engine oil  
    Hydraulic oil  
Standard hydraulic oil cooler  
Steering, hydraulic  
Suction fan  
Transmission, hydrostatic  
Vandalism protection-locked service points

## Optional Equipment

*Optional equipment may vary. Consult your Caterpillar dealer for details.*

Air Conditioner, R-134a refrigerant  
Bottom guard, hystat  
Canopy, ROPS  
Counterweight, 150 kg/330 lb (optional 914G only)  
Creeper Control, transmission  
Differential, Limited Slip (front and/or rear axle)  
Drain valves, ecological  
Engine Speed Control (ESC)  
Electrical accessories package (12V converter, accessory plug outlet, wiring)  
Fenders, roading  
Forward/Neutral/Reverse (FNR) remote transmission control  
Guard, windshield (optional 914G only)  
Ground engaging tools, bucket  
Hydraulic third and fourth valves (Hydraulic third valve standard on IT14G)

- quick disconnects
- hydraulic lines and control

Lighting

- Auxiliary front: 2 cab-mounted halogen, working
- Beacon, magnetic rotating

Low sound package  
Machine Security System

- Includes 2 preprogrammed keys, additional keys are available through parts distribution (206-5162)
- Requires Caterpillar Service Tool, Electronic Technician (ET) to activate and modify programming of keys

Mirrors

- External (2)

Quick Coupler (Standard on IT14G)  
Radio prep package (12V)

- includes speakers, antenna, converter and mounts (Radio not included)

Remote Forward/Neutral/Reverse transmission control  
Ride Control system  
Rotating beacon, magnetic  
Seats:

- heated, fabric, with parking brake alarm
- Caterpillar Comfort Series, fabric, air suspension

Sliding door window  
Speedometer  
Starting aid

- Engine block heater (120V or 240V)

Steering, secondary  
Sun screen, rear window  
Sun visor  
Tires:

- bias ply, 15.5 × 25 and 17.5 × 25
- radial, 15.5 × R25 and 17.5 × R25

Tire rims, 1- and 3-piece  
Tool box, lockable  
Tool kit





# 914G/IT14G Wheel Loader/Integrated Toolcarrier

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Replaces AEHQ5560

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