

1.2 - 1.4 m³	1.6 - 1.8 yd³
7950 kg	17,530 lb
73 kW	98 HP
67 kW	90 HP
	7950 kg 73 kW

914G Wheel Loader

Sets the standard for performance, responsiveness and operating comfort for machines in this class.

Operator Station

Ergonomically designed for total machine control in a comfortable, spacious environment. All controls, levers, switches and gauges are positioned to maximize productivity. Pilot hydraulic controls provide low-

- Pilot hydraulic controls provide low effort, quiet operation.
- Full-length glass windshield with silicon joints enhances visibility. pg. 4-5

Cat Hystat Power Train

- Delivers a broader range of power and performance to the ground with less operator input than converter-driven
- transmissions, Cat 3054T diesel engine provides reliable power and very low exhaust emissions. pg. 6-7

Axles & Brakes

Caterpillar axles feature new enclosed, hydraulically-actuated disc brakes on both front and rear for better performance and easier operation. pg. 7

Totally New Design

One of the first Caterpillar machines completely designed using state-of-the-art three-dimensional modeling computer technology. The results include a highly responsive hydrostatic transmission, exceptional machine balance and easier serviceability than ever before.

Modern Operator's Environment

Engineered using advanced virtual reality technology to provide unparalleled visibility and operator comfort. Ergonomic controls and seating adjust to any operator. Implement controls are low-effort pilot hydraulic for smooth, precise operation.

Exceptional Performance

The 914G hydrostatic transmission provides continuously variable, uninterrupted torque throughout the entire speed range for a highly efficient, more productive machine.

✓ New feature



Standard Equipment

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

Air cleaner, Radial Seal Alarm, back-up Alternator, 60-amp Batteries, heavy-duty, 12V, two Battery disconnect switch Brakes:

Service - inboard, oil-immersed Parking - mechanical on drive line Bucket control, single lever, pilot Bucket positioner, automatic Cab, ROPS (sound suppressed and pressurized) with:

- ground level door release
- heater/defroster
- personal storage space
- rear view mirrors (2 inside)
- scat, adjustable suspension
- scat belt (75 mm/3 in. wide), retractable
- tinted safety glass
- two door cab
- wiper and washer (front/rear) with intermittent control

Defroster, rear window, wired glass Differentials, conventional (front/rear) Electrical system, 24V

Engine, Caterpillar 3054 DIT

(Low Emission Configuration)

Engine enclosure, lockable

Engine fuel priming pump

Fenders (front/rear)

Hitch, drawbar

Horn, front warning (electrical)

Hour meter, electric

Hydraulic oil cooler, tiltable Implement control lever locks

Indicators:

- air cleaner service
- hydraulic oil level sight gauge

Instrumentation:

- engine coolant temperature gauge
- hydraulic oil temperature gauge
- fuel level gauge
- battery voltage gauge

Lift kickout, automatic

Lift/tilt kickout neutralizer

Lighting system:

- brake lights
- working lights (halogen):
 - 2 on front tower
 - 2 on front roof
 - 2 on rear roof

Loader linkage, Z-Bar design

Muffler

Radiator, unit core, expansion bottle

Starting aid, thermal

Steering stops, cushioned

Suction fan

Switch, key start & stop

Tilt steering console

Transmission, hydrostatic drive, two speed modes (HIGH/LOW)

Turn signals

Warning indicators:

- parking brake
- service brake oil pressure
- hydraulic oil temperature
- engine oil pressure
- coolant temperature
- hydraulic filter bypass
- alternator

Optional Equipment

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

Air conditioner (R-134a refrigerant)
Bottom guard, hystat motors

Buckets/ground engaging tools

Canopy, ROPS

Counterweight, 150 kg (330 lb)

Creeper control, transmission

Differential, Limited Slip

- front axle and/or rear axle

Drain valves, ecological

Electrical accessories package (12V converter, accessory plug

outlet, wiring)

Fenders, roading

Hydraulic third valve

Hydraulic fourth valve

Lights, auxiliary working

Low sound package

Mirrors, external (two)

Radio prep packages (12V):

(speakers, antenna, converter, mounts)

Remote Forward/Neutral/Reverse

Transmission Control

Ride control system

Rotating beacon, magnetic

Scats

- heated, fabric, w/parking brake alarm
- Caterpillar Contour Series, fabric
- Caterpillar Contour Series, fabric, air suspension

Sliding door window Speedometer

Starting aid, engine coolant heater Steering, secondary

Sun screen, rear window

- bias ply, 15.5 - 25 and 17.5 - 25

- radial, 15.5 - 25 and 17.5 - 25

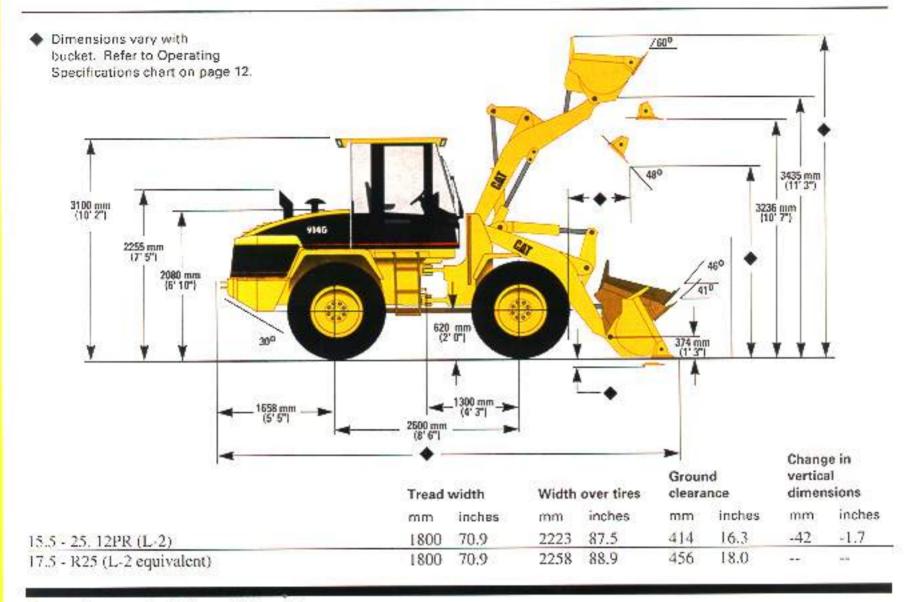
Tire rims, 1- and 3-piece Tool box, lockable

Tool kit

Visor, sun

Dimensions with Bucket

All dimensions are approximate.



Supplemental Specifications

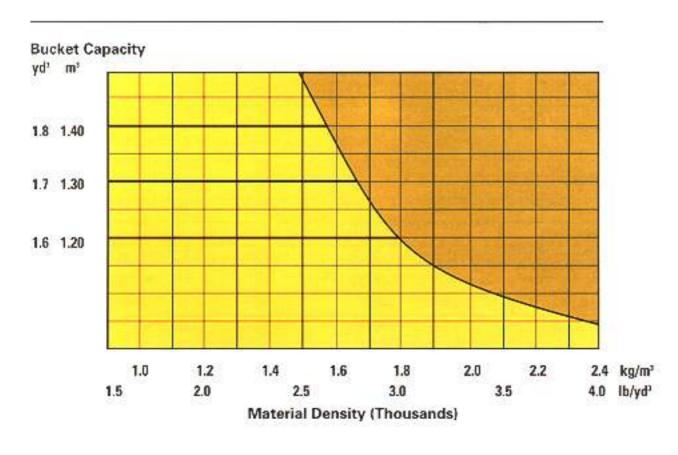
		hange in g Weight	Change in Al Static Tips	
	kg	lb	kg	lb
Air conditioner	+55	+121	+71	+156
Canopy, ROPS (less cab)	-199	-438	-174	-383
Counterweight, 150 kg/330 lb	+152	+334	+287	+631
Ride control	+32	+70	+6	+13
Secondary steering	+30	+66	+44	+97
Tires & rims, 15.5 - 25, 12PR (L-2)	-159	-350	-99	-218
Tires & rims, 15.5 - 25, 12PR (L-3)	-78	-172	-48	-106
Tires & rims, 15.5 - R25, radial (L-2 equivalent)	-84	-185	-52	-114
Tires & rims, 15.5 - R25, radial (L-3 equivalent)	-36	-79	-23	-51
Tires & rims, 17.5 - 25, 12 PR (L-2)	-126	-277	-78	-172
Tires & rims, 17.5 - 25, 12 PR (L-3)	+12	+26	+7	+15
Tires & rims, 17.5 - R25, radial (L-3 equivalent)	+156	+343	+96	+211
Tires & rims, 17.5 - R25, radial (L-2/L-3 equivalent)	+95	+209	+58	+128

Typical material densities-loose

	kg/m²	lb/yd*
Básalt	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		- 0
75% rock, 25% earth	1960	3305
50% rock, 50% earth	1720	2900
25% rock, 75% earth	1570	2647
Harth		
dry, packed	1510	2546
wet, excavated	1600	2698
Granite		- 1
broken	1660	2799
Gravel	(100/10)	
pitrun	1930	3254
dry	1510	2546
dry, 6-50 mm (.2-2")	1690	2849
wet, 6-50 mm (.2-2")	2020	3406

	kg/m*	lb/yd
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



Operating Specifications

K 11 12 2 26	
Rated bucket capacity (§)	m ²
e Paragraph	yd'
Struck capacity (§)	vď
Width	mm
	ft/in
Dump clearance at full	mm
lift and 45° discharge (§)	ft/in
Reach at full lift	mm
and 45° discharge (§)	ft/in
Reach at 45° discharge	mm
and 2130 mm (7 ft 0 in) clearance (§)	ft/in
Reach with lift arms	mm
horizontal and bucket level	fVin
Digging depth (§)	mm
1998 (SV 10) (MON)	in
Overall length	mm
Security Services	fVin
Overall height with bucket	mm
at full raise (§)	ft/in
Loader clearance circle with	M
bucket in carry position	ft/in
Static tipping load straight* (§)	kg
2	lb
Static tipping load	kg
full-40° turn* (§)	lb
Breakout force (\$)	kg
	lb
Operating weight*	kg

General Purpose Buckets				Penetrat	ion Buc		
	With Bolt-On Cutting Edge Teeth & Segments		With Bolt-On Teeth		With Flush Mounted Teeth		
1.3	1,4	1.3	1.4	1,2	1,3	1.3	1.4
1.7	1.8	1.7	1.8	1.6	1.7	1.7	1.8
1.1	1.2	1.1	1.2	1.0	1.1	1.1	1.2
1.4	1.5	1.4	1.5	1.3	1.5		1.5
2401	2401	2424	2424	2424	2424	2434	2434
710.5	7*10.5**	711.4"	711.47	711.4"	711.41	711.8"	711.8
2659	2623	2667	2632	2715	2680	2680	2680
81911	8171	8191	8171	8'11"	8'10"	8'10"	8'10"
973	1008	964	1000	944	979	979	979
3'2"	3'4"	3'2"		3°1"	31311	3°3"	3131
1331	1348	1282	1297	1259	1275	1287	1249
4141	4'5"	4°2"	4'3"	4'2"	4'2"	4'3''	411"
1980	2030	1970	2020	1920	1970	1970	1970
6'6"	6'8"	6'6"	6'8"	6'4"	6'6''	6'6''	6'6''
89	89	89	89	70	70	70	70
3.5"	3.5"	3.5"	3.5°	2.8"	2.8°	2.8"	2.8"
6229	6279	6328	6378	6310	6360	6358	6438
20'5"	20'7"	20'9"	20'11"	20'8"	20'10"	20'10"	21'1"
4390	4442	4390	4442	4390	4442	4442	4442
14'5"	14'7"	1415"	14'7"	14'5"	14'7"	14'7"	14'7"
10.34	10.37	10.42	10.45	10.42	10.45	10.44	10.49
33'11"	34'0"	34'2"	34'4"	34'2"	34'4"	34'3"	34'5"
6098	6069	6059	6029	6169	6166	6183	6011
13,446	13,382	13,360	13,294	13,603	13,602	13,634	13,254
5323	5295	5284	5256	5415	5387	5404	5232
11,737	11,675	11,651	11,589	11,940	11,878	11,916	11,537
6367	5971	6415	6010	6929	6469	6484	6374
14,007	13,136	14,113	13,222	15,246	14,232	14.265	14,055
7378	7391	7409	7422	7336	7349	7336	7500
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 JUN92 and J742 FEB85 govern loader rating, denoted in the text by (§).

Cab

Caterpillar cab and Rollover Protective Structure (ROPS) are standard in North America and Europe.

Features

- ROPS meets the following criteria:
 - SAE J394.
 - SAE J1040 MAY94.
 - ISO 3471-1994.
- also meets the following criteria for Falling Objects Protective Structure:
 - SAE J231 JAN81.
 - ISO 3449-1992.

Note

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 an operator sound exposure Leq (equivalent sound pressure level) of 73 dB(A). This A-weighted sound exposure level can be used in conjunction with OSHA, MSHA and EEC Occupational Noise Exposure Criteria. Also, when tested as per the dynamic specifications of 95/27EC, the respective operator sound pressure level is 72 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. The exterior sound pressure for the standard machine measured per the standard SAE J88 JUN86, mid-gear-moving mode, is 74 dB(A).

Tires

Tubeless, nylon, loader design tires.

Choice of

- 15.5 25, 12PR (L-2).
- 15.5 25, 12PR (L-3).
- 15.5 R25, radial (L-2 equivalent).
- 15.5 R25, radial (L-3 equivalent).
- 17.5 25, 12 PR (L-2).
- 17.5 25, 12 PR (L-3).
- 17.5 R25, radial (L-2 equivalent).
- 17.5 R25, radial (L-3 equivalent).
- 17.5 R25, radial (L-2/L-3 equivalent).

Note

In certain applications (such as load-andcarry work) the loader's productive capabilities might exceed the tires' tonnes-km/h (ton-MPH) capabilities. Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model.

Steering

Full hydraulic power steering. Meets ISO 5010-1992, SAE J1511-OCT90.

Ratings

Minimum turning radius (over tire) 4748 mm (15° 7") Steering angle, each direction 40°

Steering cylinders, two

bore 63.5 mm (2.5 in.)

Hydraulic output at 2200 RPM and 6900 kPa (1000 psi)

57 liters/min (15.1 gpm)

Relief valve setting

21 700 kPa (3147 psi)

Features

- center-point frame articulation.
- · front and rear wheels track.
- dedicated fixed displacement steering pump provides flow at all engine and ground speeds.
- adjustable steering column.
- high-impact rubber steering stops.
- secondary steering system available to meet roading regulations in various countries, and to meet ISO 5010.

Service Refill Capacities

	L	Gallons
Fuel tank	150	39.6
Cooling system	22	5.8
Crankcase	7	1.8
Transfer gearbox:		
std. speed version	2.5	.7
high speed version	4.0	1.1
Differentials and final	drives:	
front	15	4
rear	15	4
Hydraulic system	7-00937	17,000,000
(including tank)	100	26.4
Hydraulic tank	70	18.5

Engine Enclosure Hood

One-piece engine enclosure hood.

Provides open access to many service points. The hood is manufactured with a state-of-the-art material, Dicyclopentadiene (DCPD), which provides an excellent combination of impact resistance and durability.

The curved design of the engine enclosure provides unparalleled rear visibility as well as modern styling to the machine appearance.

Features

- · impact resistant, rustproof.
- · lockable latch.
- modern, stylish appearance.
- pneumatically-assisted struts.
- repairable.

Axles

Fixed front, oscillating rear (±11°).

Features

- · Caterpillar axle with fully-enclosed brakes and final drives.
- Patented Duo-Cone Seals between axle and housing.
- · heat-resistant triple lip seal on input
- rear wheel can raise or drop a total of 350 mm (13.8 in.).
- · conventional differentials standard.
- · Limited Slip differentials are optional on front, rear or both axles.
- rear axle trunnion has remote lubrication fitting.

Brakes

Meets the following standards: OSHA, SAE J1473 OCT 90, ISO 3450-1996.

Service brake features

- inhoard oil-immersed disc brakes on front and rear axles are standard.
- completely enclosed and sealed.
- 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 features

- mechanical, shoe-type brake.
- · mounted on drive line for positive manual operation.
- transmission is automatically neutralized when parking brake is applied.

Final Drives

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

Features

- ring gears are pressed in and doweled into axlc housing.
- carrier assemblies include 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.

Loader Hydraulic System

Open-centered system. Pilot-operated hydraulic implement controls.

Output at 2200 RPM and		
6900 kPa (1000 psi)		
with SAE 10W oil at 66°C (150°F)	90 liters/min	23.8 gpm
Relief valve setting	24 550 kPa	3,560 psi
Lift cylinders, double acting:	0001 8000	F204 32457404
bore and stroke	89 x 672 mm	3.5 x 26.5"
Tilt cylinder, double acting:		
bore and stroke	102 x 400 mm	4.0 x 15.8"

Hydraulic cycle time	Seconds
Raise	5.6
Dump	2.1
Lower, empty, float down	3.2

· four positions; raise, hold, lower and float.

Pilot-operated lift and tilt circuits.

Bucket Controls

 can adjust automatic kickout from horizontal to full lift.

Tilt circuit features

Lift circuit features

- three positions: tilt back, hold and dump.
- can adjust automatic bucket positioner to desired loading angle.
- does not require visual spotting.

Controls

- low effort single-lever control of lift and tilt circuits.
- third and fourth function hydraulic circuits available with individual lever controls.
- controls can be locked for roading.

Features

- fixed displacement implement pump (gear type) directly connected to engine output.
- low effort, pilot-operated controls.
- pilot shutoff valve disables implement functions for added safety.
- hydraulic couplings with O-Ring Face Seals.
- standard hydraulic oil cooler tilts out for easy cleaning of heat exchangers.
- Ride Control system available to reduce machine bounce when traveling.

Engine

Caterpillar four-stroke cycle, four cylinder 3054 (urbocharged diesel engine,

Ratings at 2200 RPM	kW	H
Gress power	73	98
Net power	67	90.

The following ratings apply at 22(0) rpm when tested under the specified standard conditions for the specified standard:

NET POWER	kW	HP	PS
Caterpillar	67	90	100
ISO 9249	67	90	55
1EC 80/1269	67	90	
SAE 11349	66	89	33
DIN 70020	2.25	44	93

Dimensions

Dimensions		
Bore	100 mm	3.94 in.
Stroke	127 mm	5.00 in.
Displacement	4.0 liters	244 cu in.

Exhaust Emissions

The Caterpillar 3054T meets the current European (EEC) and North American (EPA) emission regulations for offhighway construction equipment.

Power rating conditions

- based on standard air conditions of 25°C (77°F) and 99 kPa (29.33" Hg) dry barometer.
- used 35° API gravity fuel having an LHV of 42,780 kJ/kg (18,390 Bru/lb) when used at 30°C (86°F) [ref. a fuel density of 838,9 g/L (7,001 lb/gal)].
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- no derating required up to 2286 m (7,500 ft) altitude.

Features

- direct-injection rotary fuel pump with individual adjustment-free injection valves.
- east iron block with internally stiffened deep skirt design.
- · field replaceable dry cylinder liners.
- · replaceable valve guides and seats.
- large diameter, hardened chrome molybdenum steel erankshaft.
- three-ring controlled-expansion pistons lubricated from oil jets.
- · helical steel front gear train.
- fuel priming pump and fuel/waterseparator are standard
- gear-driven oil pump located in ail pan.
- · gear-driven water pump.
- direct electric 24-volt starting and charging system with two heavy-duty 12-volt 900 CCA Caterpillar batteries and 60-amp alternator.
- thermal starting aid is standard for improved starting in extremely cold temperatures.

Transmission

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.

Max travel speeds with 17.5-25 tires:

		km/h	MPH
Forward	Low	9	5.6
	High	35	21.7
Reverse	Low	9	5.6
	High	35	21.7

Features

- single lever control for easy and precise control of direction 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 function allows variable control of travel speeds (zero to 9 kph/5.6 mph) 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.

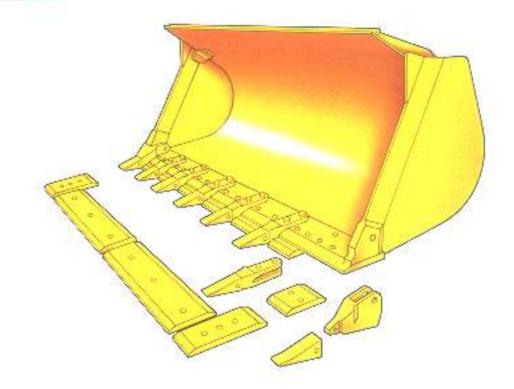
Buckets

Caterpillar's selection of general purpose and penetration buckets are an integral part of a machine designed to optimize performance.

Wide Choice of Buckets. Caterpillar offers a wide range of buckets to help match the machine to the job. General purpose and penetration buckets are available.

Reinforced construction that resists high load twisting and distortion. Integral spill plates help reduce spillage. Choice of ground engaging tools includes:

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



Serviceability

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

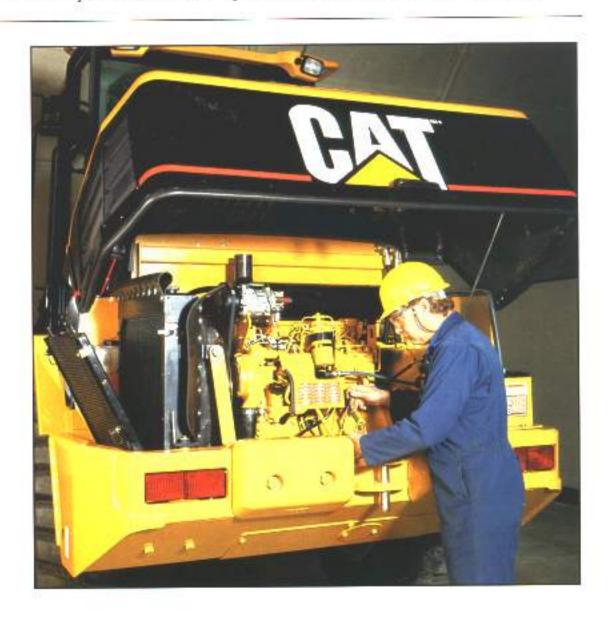
Duick Access. A tilt-up engine enclosure hood with dual pneumaticallyassisted lift cylinders provides exceptional access to major power traincomponents. All filters and service points are reachable from ground level.

Ease of Maintenance. The cooling system features a new trash-resistant radiator and a new oil cooler design:

- Oil cooler tilts out 35° for cooling system inspection and cleaning;
- Quick release hydraulic oil cooler for fast, easy uccess;
- Extended Life Coolant/Antifreeze with 6000 hour change intervals.

Service features:

- Radial Seal air cleaner with service indicator;
- Battery access (engine hood);
- Ecology drain valves available;
- Electrical fuse access (right door);
- Ground level filter changes:
- · Remote grease fittings:
- Visual fluid level checkst
 - hydraulic oil
 - coalant
 - windshield wiper fluid.





Caterpillar® Hystat Power Train

The Cat® hydrostatic power train provides dependable and smooth operation.

The 914G Hystat Power Train features a high-pressure closed-loop hydrostatic transmission. This transmission provides a broader range of power and performance to the ground, with less operator input, than conventional converter-driven transmissions. Advantages of the Cat Hystat Power Train include:

- Simple and smooth operation;
- · Direct change of speed and direction:
- Stepless low speed variation without loss of power;
- Exceptional inching function for precise control;
- Hydrostatic braking reduces wear on mechanical brakes;
- Less heat generated when pushing against a pile of material;
- Higher working productivity;
- Highly reliable ... fewer parts than a mechanical transmission.

1 - Caterpillar 3054T Diesel Engine.

This high-performance engine incorporates many of the same heavy-duty features that help make the larger Cat diesel engines the standard of the industry. It is designed for rugged, reliable operation while providing peak performance over a wide range of operating conditions. For added service life, the 3054T has many rebuild features such as field-replaceable eylinder liners and replaceable valve guides and seats.

Low Emission Engine. The standard 3054T is a very low emission engine designed not only to meet today's environmental standards, but also to meet future worldwide emission standards. It is one of the cleanest burning engines in its class-







Low-Effort Operation. New pilot hydraulic controls give the 914G uncompromised ease of operation of lift and tilt functions. A remote transmission control option adds a forward/neutral/reverse control switch (1) on the implement lever for easier operation and enhanced productivity. Third and fourth function controls are also available for use with special attachments.

Hydrostatic, closed-center steering system with flow amplification provides fast or slow steering response, depending on the operational requirement.

More Seating Options. There is a wide choice of seat options. The Contour Series Seat, right, is the premium seat option and is designed for maximum comfort and fully-adjustable support. Ergonomically shaped seat cushions reduce pressure on the lower back and thighs, while allowing unrestricted arm and leg movement. Even the arm rest angle is adjustable.

Heated and air-suspension seats are among the other options to further enhance operator comfort.



Operator Station

Ergonomical design emphasizes comfort, visibility and easy operation.



Operator Comfort. The G-Series call designers used a powerful supercomputer using virtual reality to simulate the ideal operator environment. The result is remarkable peripheral visibility coupled with operators' most requested features. The 914G cab is a spacious work environment that promotes productive operation. Exceptional sound insulation and low-noise components make the Cat 914G cab one of the quietest in the industry.

Operators can customize the cab to their individual needs through the vost range of adjustments. The seat, tilt steering console and climate controls are a few of the many areas of adjustments that make the 914G the new leader in operator preference.



- 1 Tilt Steering Console
- Warning Indicators and Light Controls
- 3 Multi-Port Ventilation
- Windshield Wiper Controls and Status Indicators
- 5 Implement Controls

Serviceability

The 914G is designed for quick, easy service and minimal maintenance.

- ✓ Lift-open engine hood with pneumatically-assisted struts provides uncompromised access to engine and components. New cooling system offers
- components. New cooling system offers improved cooling capacity, simplified service and extended service intervals.
 pg. 8





Your Cat Dealer

There is one very important component included with every Caterpillar 914G Wheel Loader that no one else can offer; your Cat Dealer.

Whether you have questions about performance, service or financing, your Cat Dealer has the answers. He is dedicated to helping you make the right equipment choice for your requirements.

Plus, your Cat Dealer has most parts you will ever need for your Cat equipment right on the shelf. If not, the Dealer's worldwide computerized network will immediately find the closest location of the part you need, minimizing your downtime.

When you need more details about the 914G, contact your Cat Dealer. You'll find he's easy to talk to. And he's genuinely interested in talking to you.

> © 1998 Caterpiller Printed in U.S.A.

Materials and specifications are subject to change without notice.

