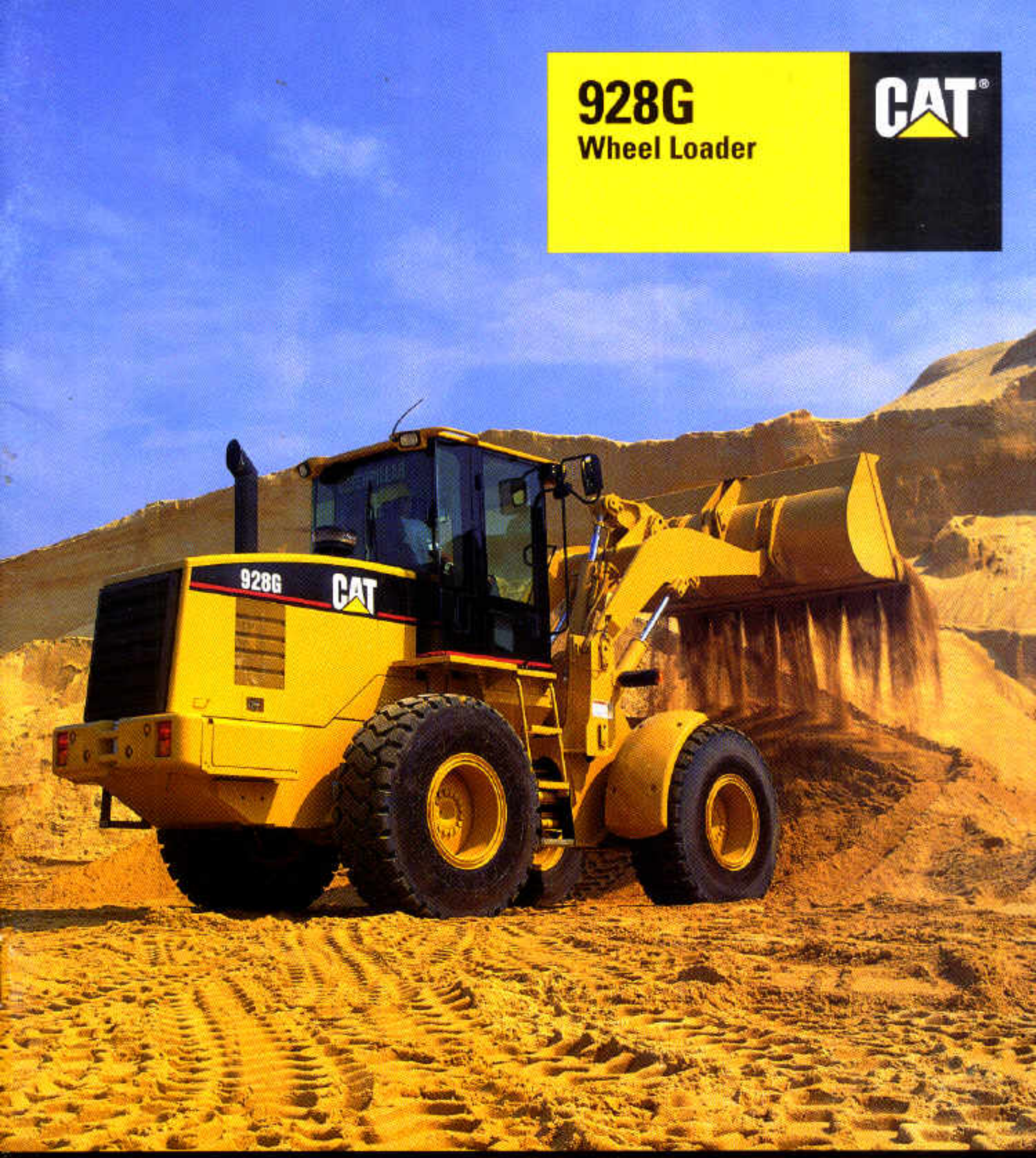
928G
Wheel Loader

CAT®



Bucket capacities	**2.0 - 2.2 m³**	**2.5 - 2.9 yd³**
Operating weight to	**12 287 kg**	**27,093 lb**
Cat 3116T Engine		
Gross power	**102 kW**	**137 HP**
Flywheel power	**93 kW**	**125 HP**

928G Wheel Loader

Offering world class performance, value and reliability.

Cat® Power Train

The 928G uses an all Caterpillar® power train to most effectively get maximum power to the ground. A Caterpillar ✔ 3116T *standard low-emission engine* and Cat® power shift transmission is performance-matched to the Cat torque converter and axles.

pg. 4-5

Operator Station

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

✔ Sound levels are greatly reduced. *Two-door cab offers exceptional ventilation*

✔ *and easy entry and exit. Full-length glass windshield with silicone joints enhances visibility.* **pg. 6-7**

Buckets and Ground Engaging Tools

Choose from two general purpose buckets or a penetration bucket. Designed and built by Caterpillar, these buckets feature rugged construction, integral spill plates and replaceable heel wear plates. Various ground engaging tools are available to match virtually all job conditions. **pg. 8**

Performance You Can Feel

More horsepower, higher torque rise, greater rimpull, larger and stronger hydraulics and a new bucket design make the 928G a solid performer. The best place you can evaluate this exceptional performance, of course, is from the operator's seat.

Value You Can See

A larger, intelligent-design operator station offers exceptional forward and peripheral visibility. Lower interior and exterior sound levels and larger fuel capacity make the 928G easier to operate. New, wider loader linkage enhances visibility to the bucket and provides increased reach and dump clearance for expanded applications. And unprecedented serviceability helps keep you working with the machine, rather than on it.

Reliability You Can Trust

Proven Cat power train and hydraulic components, exhaustive field testing and the world's best support system assure the 928G will provide maximum uptime.

✔ *New feature*

Standard Equipment

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

Air cleaner, dry type
Alarm, back-up
Alternator, 50-amp
Antenna, for radio
Antifreeze/coolant, extended-life, protects to minus 36C (33F)
Batteries, maintenance-free, 12V, (2)
Brakes: Service - enclosed, sealed
Parking - mechanical on drive line
Bucket positioner, automatic
Cab, ROPS (sound suppressed and pressurized) with:
- ground level door release
- heater/defroster
- rear window defroster, electric (North American-sourced machines only)
- personal storage space, cup holder
- lighter
- coat hook
- rear view mirrors (2 inside)
- tilt steering console
- seat, adjustable suspension (fabric or vinyl)
- seat belt, retractable
- tinted safety glass
- two door cab, fixed glass
- wiper and washer, 2-speed, front and rear

Counterweight
Differentials, conventional (front/rear)
Driveshaft, lubed for life
Electrical system, 24V
Engine, Caterpillar 3116T (Low Emission Diesel)
Engine enclosure, lockable
Engine fuel priming pump
Fenders (front/rear)
Hitch, drawbar
Horn, front warning (electrical)
Hour meter, electric
Hydraulic diagnostic connectors
Hydraulic oil cooler
Hydraulic system, 2-valve, 2-lever
Implement control lever locks
Indicators: - air cleaner service
- hydraulic oil level sight gauge
- transmission oil level gauge
- coolant level

Instrumentation:
- engine coolant temperature gauge
- hydraulic oil temperature gauge
- torque converter oil temp. gauge
- fuel level gauge

Lift kickout, automatic
Lift/tilt kickout neutralizer

Lighting system:
- brake lights
- working lights (halogen, flood):
  2 on front tower
  2 on front roof
  2 on rear roof

Loader linkage, sealed Z-Bar design
Load-sensing steering system
Muffler
Radiator, unit serviceable
Receptacle, for beacon light
Steering stops, cushioned
Swing-out, hydraulically-driven fan
Switch, key start & stop
Torque converter
Transmission, 4F/3R, autoshift, single lever control and kickdown button
Vandalism protection, lockable service points
Warning indicators:
- alternator
- coolant temperature
- engine oil pressure
- parking brake
- service brake oil pressure
- transmission oil temperature

Optional Equipment

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

Air conditioner (R-134a refrigerant)
Antifreeze/coolant, extended-life, protects to minus 50C (58F)
Batteries, 900 CCA, for cold weather starting (two)
Beacon light, rotating, magnetic-mount
Buckets/ground engaging tools
Canopy, ROPS
Counterweight, 250 kg (550 lb)
Differential, Limited Slip
- front axle and/or rear axle

Differential, NoSpin, rear axle only
Electrical accessories package (12V converter, accessory plug outlet, wiring)
Fenders, roading
Guards: - crankcase
- power train
- vandalism protection (for use with ROPS canopy)

Hydraulic control, single lever
Hydraulic oil cooler, heavy-duty
Hydraulic third valve
Lights:
- directional, front/rear
- flood (auxiliary, cab-mounted)

Load check valves (dealer-installed)
Mirrors, external (two)
Radio prep packages:
- for 12V installation, includes speakers, cable, mounting bracket, hardware, converter, and accessory plug. Radio not included.
- for 24V installation, same as above without converter or accessory plug.

Rear window defroster, electric (std. on North American machines)
Ride control system

Seats:
- Caterpillar Contour Series, fabric
- Caterpillar Contour Series, fabric, with air suspension

Sliding door windows, (left and right)
Sound suppression package
Starting aids:
- engine coolant heater, 120V
- air intake heater

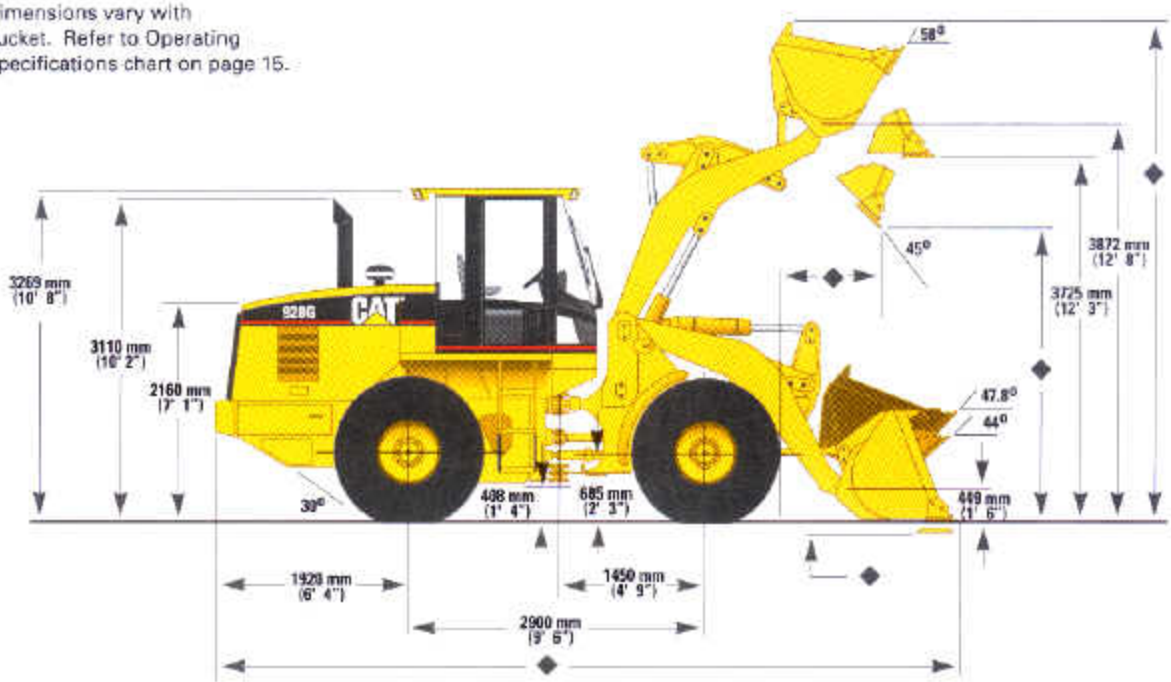
Steering, secondary
Sun screen, rear
Tires:
- bias ply, 17.5 - 25 and 20.5 - 25
- radial, 17.5 - 25 and 20.5 - 25

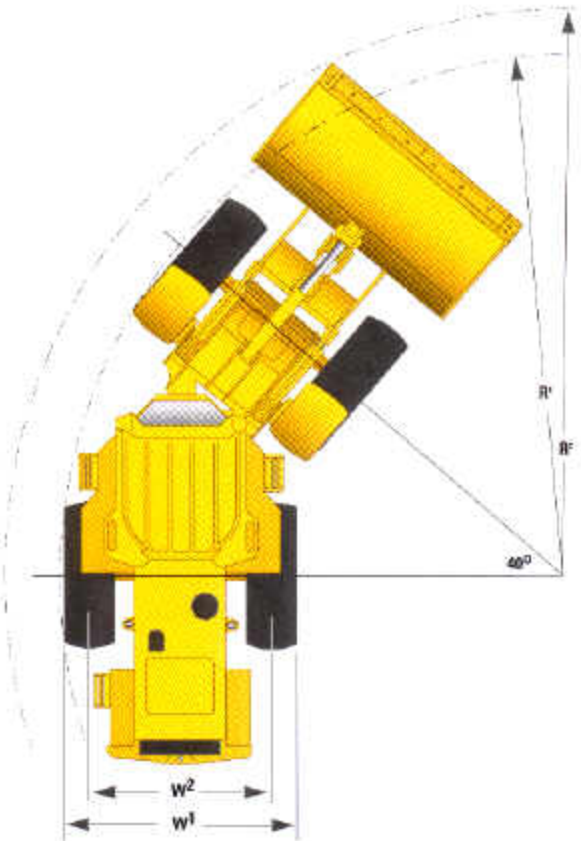
Visor, sun (front)
Wipers and washer with intermittent control, front and rear

Dimensions with Bucket

All dimensions are approximate.

◆ Dimensions vary with bucket. Refer to Operating Specifications chart on page 15.





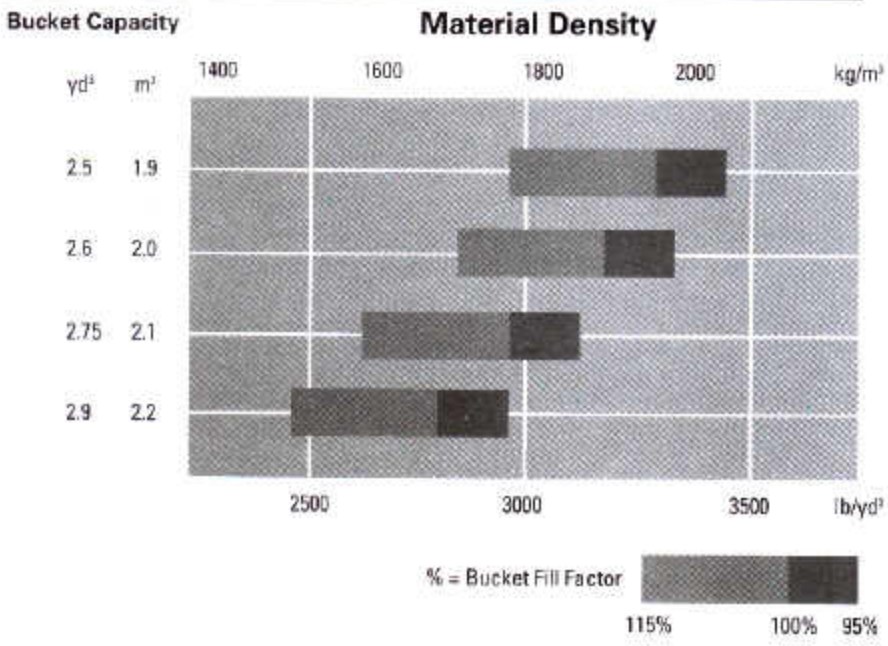
	17.5 - 25 12PR (L-2)		20.5 - 25 12PR (L-2)	
	mm	inches	mm	inches
Tread width over tires (W^1):	2427	96	2437	96
Tread width (W^2):	1950	77	1820	73
Change in vertical dim.:	-68	-2.7	--	--
Minimum turning radius:				
Over tire (R^1)	5228	17' 2"	5233	17'2
Over bucket (R^2)	see chart on page 15			
Steering angle, each direction	40°		40°	

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 (.2-2")	1690	2849
wet, 6-50 mm (.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



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 (§)	m³	2.0	2.2	2.0	2.2	1.9	2.1	2.1
	yd³	2.6	2.9	2.6	2.9	2.5	2.75	2.75
Struck capacity (§)	m³	1.7	1.9	1.7	1.9	1.6	1.8	1.8
	yd³	2.25	2.5	2.25	2.5	2.1	2.3	2.3
Bucket width	mm	2549	2549	2549	2549	2549	2549	2594
	ft/in	8'4"	8'4"	8'4"	8'4"	8'4"	8'4"	8'6"
Dump clearance at full lift and 45° discharge (§)	mm	2879	2842	2766	2730	2766	2729	2748
	ft/in	9'5"	9'4"	9'1"	8'11"	9'1"	8'11"	9'0"
Reach at full lift and 45° discharge (§)	mm	927	964	1021	1058	1021	1058	1074
	ft/in	3'0"	3'2"	3'4"	3'6"	3'4"	3'6	3'6"
Reach at 45° discharge and 2130 mm (7 ft 0 in) clearance (§)	mm	1455	1474	1492	1509	1492	1509	1535
	ft/in	4'9"	4'10"	4'11"	4'11"	4'11"	4'11"	5'0"
Reach with lift arms horizontal and bucket level	mm	2253	2305	2399	2451	2399	2451	2449
	ft/in	7'5"	7'7"	7'10"	8'0"	7'10"	8'0"	8'0"
Digging depth (§)	mm	86	86	99	99	99	99	74
	in	3.4	3.4	3.9	3.9	3.9	3.9	2.9
Overall length	mm	7255	7307	7401	7453	7416	7433	7432
	ft/in	23'10"	24'0"	24'3"	24'5"	24'4"	24'5"	24'5"
Overall height with bucket at full raise (§)	mm	4971	5070	4971	5070	4971	5070	5057
	ft/in	16'4"	16'8"	16'4"	16'8"	16'4"	16'8"	16'7"
Loader clearance circle with bucket in carry position	M	5781	5796	5845	5860	5845	5860	5851
	ft/in	19'0"	19'0"	19'2"	19'3"	19'2"	19'3"	19'2"
Static tipping load straight (§)	kg	9231	9074	9062	8909	9150	9083	9074
	lb	20,354	20,008	19,982	19,644	20,176	20,028	20,008
Static tipping load full 40° turn (§)	kg	8020	7877	7850	7709	7941	7877	7868
	lb	17,684	17,369	17,309	16,998	17,510	17,369	17,349
Breakout force (§)	kg	11 723	11 095	11 590	10 961	12 604	11 880	11 947
	lb	25,849	24,464	25,556	24,169	27,792	26,195	26,343
Operating weight	kg	11 657	11 707	11 791	11 841	11 706	11 756	11 778
	lb	25,704	25,814	25,999	26,109	25,812	25,922	25,970

Specifications shown are for 928G with optional counterweight, standard lubricants, full fuel tank, ROPS cab, 80 kg (176 lb) operator and 20.5 - 25 12PR (L2) 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 (§).

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

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 74 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 static specifications of 86/662/EEC and dynamic specifications of 95/27EC, the respective operator sound pressure levels are 73 and 73 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 level for the standard machine measured per the standard SAE J88 JUN86, mid-gear-moving mode, is 73 dB(A).

Tires

Tubeless, nylon, loader design 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)
- 17.5 - R25, radial (L-2/L-3)
- 20.5 - 25, 12 PR (L-2)
- 20.5 - 25, 12 PR (L-3)
- 20.5 - R25, radial (L-2)
- 20.5 - R25, radial (L-3)
- 20.5 - R25, radial (L-2/L-3)
- Other tire choices are available, contact your Cat Dealer for details.

Note

In certain applications (such as load and carry 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-FEB94.

Ratings	
Minimum turning radius: (over tire)	5233 mm (17' 2")
Steering angle, each direction:	40°
Steering cylinders, two: bore	69.9 mm (2.75 in.)
Hydraulic output at 2438 RPM and 7000 kPa (1005 psi)	104 liters/min (27 gpm)
Relief valve setting	20 700 kPa (3000 psi)

Features

- center-point frame articulation.
- front and rear wheels track.
- variable displacement piston pump provides steering power at all engine and ground speeds.
- tilt steering console.
- high-impact rubber steering stops.
- secondary steering system available to meet roading regulations in various countries, and to meet ISO 5010.

Bucket Controls

Pilot-operated lift and tilt circuits.

Lift circuit features

- four positions: raise, hold, lower and float.
- can adjust automatic kickout from horizontal to full lift.

Tilt circuit features

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

Controls

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

Service Refill Capacities

	L	Gallons
Fuel tank	230	60.8
Cooling system	40	10.6
Crankcase	20	5.3
Transmission	34	9.0
Differentials and final drives:		
front	26	6.7
rear	25	6.5
Hydraulic system (including tank)	125	33
Hydraulic tank	70	18.5

Axles

Fixed front, oscillating rear (±11°).

Features

- 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 480 mm (18.9 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

- 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.
- switch in cab allows operator to select automatic transmission neutralizer which activates during braking.
- brakes are fully integrated with hydraulic system, no air system required.

Secondary brake features

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

Parking brake features

- mechanical, shoe-type brake.
- mounted on drive line for positive manual operation.
- application of parking brake neutralizes the transmission.

Final Drives

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

Features

- ring gears are pressed in and doweled into axle 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.

Implement system, fixed displacement pump		
Output at 2438 RPM and 6900 kPa (1000 psi) with SAE 10W oil at 66°C (150°F)	151.5 liters/min	40.3 gpm
Relief valve setting	24 800 kPa	3,600 psi
Lift cylinders, double acting: bore and stroke	120.6 x 685 mm	4.75 x 27.0"
Tilt cylinder, double acting: bore and stroke	127 x 550 mm	5.0 x 21.7"

Hydraulic cycle time	Seconds
Raise	6.1
Dump	1.2
Lower, empty, float down	2.8
Total	10.1

Features

- fixed displacement vane-type implement pump.
- 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, six cylinder 3116T turbocharged diesel engine.

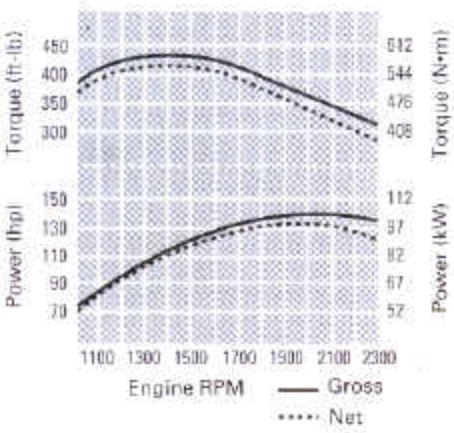
Ratings at 2300 RPM	kW	HP
Gross power	102	137
Net power	93	125

The following ratings apply at 2300 rpm when tested under the specified standard conditions for the specified standard:

NET POWER	kW	HP	PS
Caterpillar	93	125	--
ISO 9249 (1989)	93	125	--
EEC 80/1269	93	125	--
SAE J1349 (JUN95)	93	125	--
DIN 70020	--	--	129

Dimensions

Bore	105 mm	4.13 in.
Stroke	127 mm	5.00 in.
Displacement	6.6 liters	403 cu in.



Exhaust Emissions

The Caterpillar 3116T meets the current European and North American emission regulations, as well as the future proposed EU Off-Highway Construction Equipment regulations (ISO 8178).

Power rating conditions

- based on standard air conditions of 25°C (77°F) and 99 kPa (29.32" Hg) dry barometer.
- used 35° API gravity fuel having an LHV of 42,780 kJ/kg (18,390 Btu/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 air cleaner, fan, muffler and alternator.
- no derating required up to 2286 m (7,500 ft) altitude.

Features

- direct-injection fuel system with adjustment-free unit injection.
- three-ring aluminum-alloy pistons, cam-ground, tapered and lubricated by oil spray.
- two alloy-steel valves per cylinder.
- tapered connecting rods.
- uniflow cylinder head design with integrally-cast intake manifold.
- cast iron block with internally stiffened deep-skirt design.
- induction-hardened, forged crankshaft.
- internal fuel, oil and water passages instead of external lines.
- gear-driven water pump and power steering pump.
- direct electric 24-volt starting and charging system with two 12-volt 700 CCA Caterpillar maintenance-free batteries and 50-amp alternator.
- air intake heater and heavy-duty starting system are available.

Transmission

Caterpillar transmission with four forward, three reverse speed ranges and full power shift capability.

Electronically-controlled Caterpillar countershaft transmission with full on-the-go directional and speed change capability. Standard autoshift control provides either manual or automatic shift control.

Max travel speeds (20.5-25 L-2 tires):

		km/h	MPH
Forward	1	7.6	4.7
	2	12.0	7.5
	3	24.6	15.3
	4	36.7	22.8
Reverse	1	7.6	4.7
	2	12.0	7.5
	3	24.6	15.3

Features

- 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.
- dampened shifting provides smoother transitions.

Environmentally Responsible Design

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

More Performance Without More Machine. The 928G is designed to provide more performance than ever before in a machine this size. That means more work done in a day, less fuel consumed and minimal impact on our environment.

Low Exhaust Emissions. The Cat 3116T used in the 928G is a low emission engine designed to meet the world's toughest emission regulations. Refinements to the turbocharger, cylinder head and pistons improve fuel combustion so there are less emissions. Plus there is a new system that closely controls fuel-to-air ratio to help burn fuel efficiently and cleanly.

Quiet Operation. Not only does the operator notice a significant drop in machine sound levels inside the cab, but spectators outside hear less noise too. The 928G's new engine cooling system allows the engine to be fully enclosed so less engine noise escapes. The cooling fan, traditionally a major contributor to noise, is now hydraulically driven. The result is cool, quiet operation with less disturbance to the environment. With the optional sound suppression package, the 928G is even quieter.

Ozone Protection. To help protect the earth's ozone layer, the 928G's 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 easy to reach so they can be removed without spilling. Lubricant fillers and drains are also designed to minimize spills. Cat O-Ring Face Seals, XT Hose and hydraulic cylinders are all designed to help prevent fluid leaks that can rob machine performance and cause harm to the environment. Also, the new Cat Extended Life Coolant/Antifreeze provides extended service (up to 6,000 hours) so there is less need for fluid disposal.

Rebuildable Components. Many of the major components used in the 928G are designed for rebuildability. That means you have high-quality, certified rebuilt replacement parts available to you at a fraction of the cost of new. Plus there is less scrap for disposal.

Serviceability

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

Easy, Wide Open Access. Gull-wing engine enclosure doors with pneumatically-assisted lift cylinders effortlessly lift up for exceptional access to major power train components. All filters and service points are within easy reach.

Simplified Routine Service. All service points are accessible from ground level and are grouped in two locations. Sight gauges allow easy check of radiator coolant, hydraulic oil and transmission oil levels.

Swing-out Cooling Fan allows quick, easy cleaning and service of the radiator. The cooling fan is hydraulically driven and separate from the engine compartment. This innovative system features:

- Excellent access for cleaning radiator.
- High-efficiency fan and shroud.
- Very low-noise operation.
- Simple design for high reliability.
- Radiator and coolant hoses remain stationary.
- Standard hydraulic oil cooler.
- Uses new Cat Extended Life Coolant/ Antifreeze for extended operation (up to 6,000 hr.) between changes.

Scheduled Oil Sampling (S•O•S) Valves are factory installed for improved access to engine, transmission and hydraulic oils. S•O•S valves make oil sampling quicker, cleaner and provides the most representative oil sample for analysis.

Other service features include:

- Vertically-mounted spin-on filters for engine, transmission and hydraulic oil. Easy to reach and change without oil spill.
- Self-diagnostic transmission and data link allow quick, easy troubleshooting by service personnel.
- Driveshaft is permanently lubricated.
- Adjustment-free brakes.
- Adjustment-free engine fuel system.

Caterpillar Buckets

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

Choice of Buckets. Caterpillar offers two general purpose buckets and one penetration bucket that help maximize productivity of the 928G. Careful match of bucket design and machine operating characteristics provide the best digging, loading and carrying performance.

Caterpillar General Purpose Buckets, available in 2.0 m³ (2.5 yd³) and 2.2 m³ (2.9 yd³) capacities, are suitable for most general applications. Features include:

- New bucket design with longer, flatter floor and a larger radius ... provides easier flow of material into the bucket.
- Patented Two-Bolt Corner Guard Cutting Edge System delivers superior wear resistance with a simple bolt-on system.
- Built-in, replaceable heel wear plates extend bucket life.
- Integral spill deflectors keeps material away from linkage.

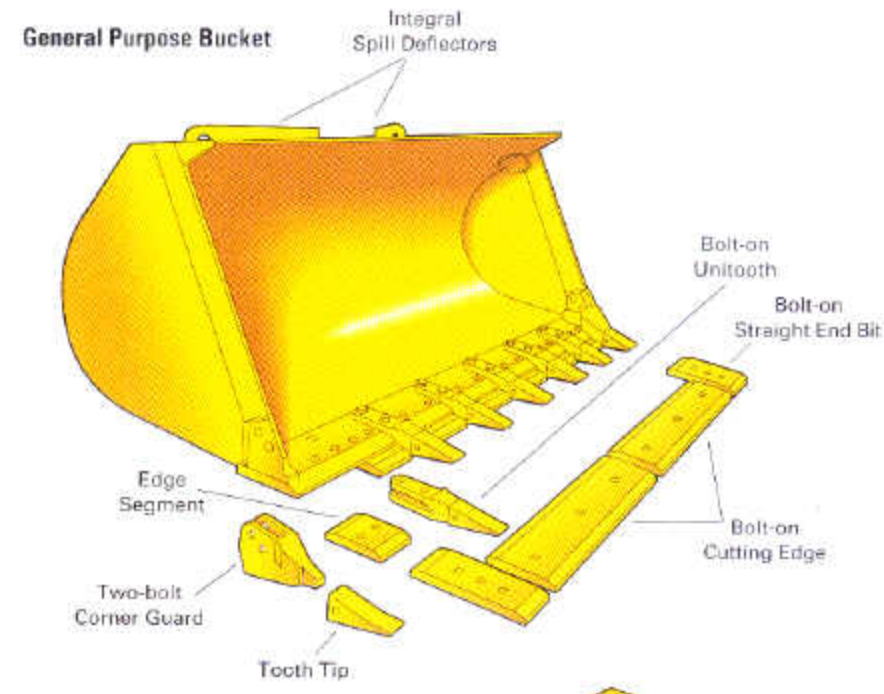
Ground Engaging Tools include hardened steel cutting edges, choice of short or long teeth and a variety of tooth adapters. Properly selected, these tools optimize performance, improve load retention and extend the useful life of Caterpillar buckets.

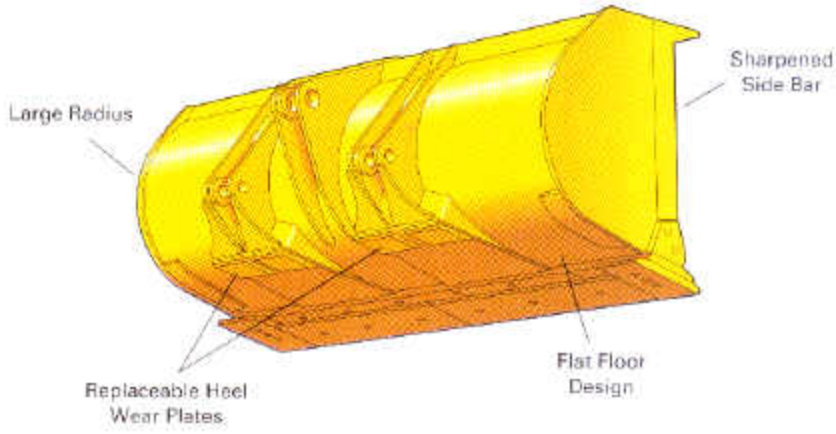
The Caterpillar Penetration Bucket has a 2.1 m³ (2.75 yd³) capacity. It provides best results in materials that require moderate impact and breakout forces. Features include:

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

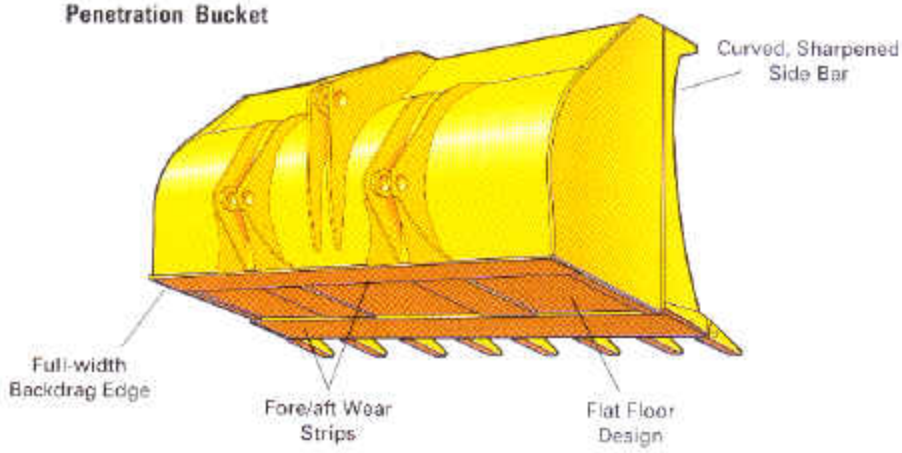
For expanded machine versatility, other special purpose buckets are also available. Contact your Caterpillar Dealer for details.

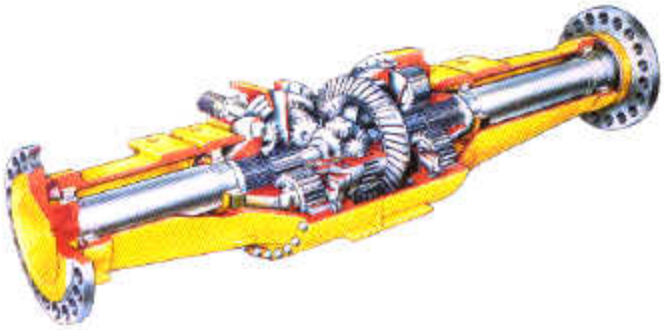
General Purpose Bucket





Penetration Bucket





3 - Caterpillar Axles and Brakes.
Enclosed design allows extended operation, even in harsh environments.

- Heavy-duty design features stronger gears and bearings for durable performance.
- Duo-Cone Seals keep oil in and contaminants out.
- Oil-disc brakes are adjustment-free and fully enclosed.
- Optional front and rear Limited Slip differentials provide maximum traction in poor underfoot or uneven floor conditions.
- Oscillating rear axle helps assure four-wheel ground contact for optimum traction and stability.

Caterpillar® Power Train

Rugged, dependable Cat components carefully matched to most efficiently get maximum rimpull to the ground and full power to the loader hydraulics.

The 928G delivers fast response and aggressive performance, even in tough applications. The Caterpillar power train makes it possible, featuring a Cat 3116T diesel engine and power shift transmission precision-matched to a Cat torque converter and rugged axles. The power train is carefully tested and balanced to provide optimum performance in actual operating conditions.

1 - Caterpillar Low Emission 3116T Diesel Engine.

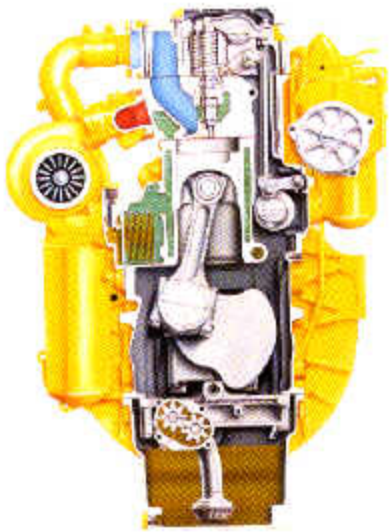
The six-cylinder, turbocharged 3116T is one of the most developed and proven engines offered by Caterpillar. It has a strong reputation for reliability, durability and performance. Thanks to refinements to the cylinder head, pistons and turbocharger it's now cleaner running, too.

- The 3116T delivers a full-rated net power of 93 kw (125 hp) @ 2300 RPM. Machine weight-to-power ratio has improved for more aggressive operation ... *performance you can feel.*
- Torque rise has increased to 46 percent @ 1400 RPM. The result is more rimpull, greater lift force and faster cycle times.
- Improved intake and combustion chambers, new piston design and a new turbocharger significantly reduce emissions.
- New fuel-to-air ratio control system lowers smoke level.
- Meets all known current worldwide engine emission standards.
- Engine and cooling system are in separate compartments for quieter operation and easier service.

2 - Power Shift Transmission with Standard Autoshift.

Rugged, field-proven Caterpillar 4F/3R transmission uses heavy-duty components for durable and reliable operation. Full power shift capability and electronically-controlled Autoshift simplify operation. Plus, it's designed for easy service and rebuild.

- Robust design includes high-energy friction materials for better heat tolerance and thick reaction plates for better heat dissipation.
- High-contact ratio spur gears are precision ground and heat treated for quiet, reliable operation.
- Electronic Autoshift transmission increases operator efficiencies and optimizes machine performance. Operator can choose auto or manual operation.
- Dampened shifting provides smoother transition and reduced operator fatigue.
- Designed with fewer, simpler parts for more reliable operation.
- Simplified removal, disassembly and reassembly for overhaul and rebuild, making it easier to give the 928G a second or third life.



Serviceability

Easily perform daily maintenance with ground-level access to all major service points. *New gull-wing doors provide excellent engine access and a swing-out fan simplifies radiator service. Fuel capacity has increased nearly 25 percent for fewer interruptions. And a new transmission sight gauge makes checking the fluid level easier.* **pg. 9**

Environmentally Responsible Design

Quieter operation, lower engine emissions, less fluid disposal and cleaner service help you meet worldwide regulations and protect the environment. **pg. 10**

Complete Customer Support

Your Cat Dealer offers a wide range of services that help you operate longer with lower costs. Select individual services or a comprehensive Customer Support Agreement. **pg. 11**

Supplemental Specifications

	Change in Operating Weight		Change in Articulated Static Tipping Load	
	kg	lb	kg	lb
Air conditioner	+48	+106	+56	+123
Canopy, ROPS (less cab)	-198	-437	-182	-401
Counterweight, 250 kg/550 lb (removal)	-252	-556	-421	-928
Guard, crankcase	+17	+37	+24	+53
Guard, power train	+58	+128	+56	+123
Ride control	+41	+90	+20	+44
Secondary steering	+42	+93	+57	+126
Tires & 1-piece rims, 17.5 - 25, 12PR (L-2)	-421	-928	-262	-578
Tires & 1-piece rims, 17.5 - 25, 12PR (L-3)	-342	-354	-213	-470
Tires & 1-piece rims, 17.5 - 25, 12 PR (L-2/L-3)	-279	-615	-174	-384
Tires & 1-piece rims, 17.5 - R25, radial (L-2)	-374	-825	-232	-512
Tires & 1-piece rims, 17.5 - R25, radial (L-3)	-218	-481	-136	-300
Tires & 3-piece rims, 17.5 - 25, 12PR (L-2)	-289	-367	-180	-370
Tires & 3-piece rims, 17.5 - 25, 12PR (L-3)	-217	-478	-147	-324
Tires & 3-piece rims, 17.5 - 25, 12PR(L-2/L-3)	-173	-381	-108	-238
Tires & 3-piece rims, 17.5 - R25, radial (L-2)	-249	-549	-155	-342
Tires & 3-piece rims, 17.5 - R25, radial (L-3)	-149	-329	-93	-205
Tires & 3-piece rims, 20.5 - 25, 12PR (L-3)	+204	+450	+126	+278
Tires & 3-piece rims, 20.5 - 25, 12PR (L-2/L-3)	+188	+415	+122	+269
Tires & 3-piece rims, 20.5 - R25, radial (L-2)	+68	+150	+42	+93
Tires & 3-piece rims, 20.5 - R25, radial (L-3)	+240	+529	+148	+326