

216B, 226B

Skid Steer Loaders



	216B	226B	226B*
Cat® Diesel Engine	3024C	3024C T	3024C T
Net Power	37 kW/50 hp	43 kW/57 hp	43 kW/57 hp
Gross Power	39 kW/52 hp	46 kW/62 hp	46 kW/62 hp
Operating Weight	2589 kg	2646 kg	2677 kg
Rated Operating Capacity	635 kg	680 kg	680 kg

* High Flow (HF) version

Caterpillar® 216B and 226B Skid Steer Loaders

Two versatile compact machines designed, built and backed by Caterpillar to deliver exceptional performance, ease of operation and simplified service.

World-class Operator Station

Operator comfort and ease of operation are designed into the operator's station from every aspect. Ergonomic features such as low-effort joystick controls, comfortable padded armrest and an adjustable contoured seat reduce operator fatigue. Excellent visibility to the work tools helps enhance productivity. **pg. 4-5**

High Performance Power Train

- ✓ The Cat® 3024C engine provides high engine horsepower and torque. Exclusive anti-stall feature maximizes power to the drive train and work tools without stalling the engine, allowing part-throttle operation for lower sound levels and lower fuel consumption. **pg. 6**

Advanced Hydraulic System

- ✓ The hydraulic system in the Cat Skid Steer Loaders is designed for maximum power and reliability. Increased hydraulic power enables better overall performance. Increased hydraulic power enables better overall performance. Reduced componentary translates to fewer hydraulic connections thus reducing potential leak points. High Flow hydraulics are optional on the 226B. **pg. 7**

Built for Versatility.

The Caterpillar 216B and 226B Skid Steer Loaders are ideal for multiple applications including: construction, landscaping and agriculture. They deliver traditional Cat reliability and durability with excellent productivity.

✓ *New feature*



Quick Coupler and Cat Work Tools

- ✓ A universal work tool interface and quick coupler make the Cat Skid Steer Loader the most versatile machine on the jobsite. The wide range of Caterpillar work tools optimise machine performance for maximum utility and production. **pg. 8-9**

Serviceability

- ✓ Cat Skid Steer Loaders offer quick and easy routine maintenance and service. The rear door opens 90 degrees and the cooling package raises to provide industry leading access to the engine compartment. The cab also tilts up for easy access. **pg. 10**

Customer Support

Caterpillar Dealers offer unmatched customer support, with excellent warranty programs and fast parts availability, resulting in maximum uptime and minimum repair costs. Equipment maintenance services help optimize machine performance and reliability. **pg. 11**



Operator Station

World-class operator station provides exceptional working comfort with excellent visibility, enhanced fingertip control and optimum instrumentation.



Ergonomic Design. Cat Skid Steer Loaders feature an updated ergonomic cab design that makes operation easier and more comfortable. A choice of contoured, adjustable seats offer increased operator comfort. Careful placement of machine controls make them feel like a natural extension of the operator hands. A new contoured armbar gives excellent support of arms and wrists for easier machine control. The cab features a removable floor mat which acts as a foot rest and offers excellent sound and heat insulation. The foot throttle control is an ergonomically-designed pedal that allows operation at variable engine speeds for optimum performance while minimizing fuel consumption. A standard hand throttle also allows operation at any set engine speed.

Cab Features. The ergonomically designed cab provides the operator with easy to use pilot controls in a comfortable working environment. The standard offerings of the Cat Skid Steer Loaders operator station include:

- 12 volt power socket
- Removable, sliding side windows
- Enclosed cabs feature an automatic lock-out switch which prevents accidental damage by disabling the loader functions when the door is open.

Low-Effort Machine Controls.

Ergonomic pilot-operated hydraulic controls give operators precision control of Cat Skid Steer Loaders with minimal effort. The left joystick controls forward and reverse travel speed plus direction and the right joystick controls loader up/down and tilt control. Both joysticks use an intuitive “S” control pattern. Joysticks provide additional auxiliary controls, using positive-action buttons to provide precision fingertip control of many machine functions, including:

- One-touch continuous auxiliary hydraulic flow
- Momentary auxiliary hydraulic flow
- Multiple auxiliary functions
- Horn
- Proportional auxiliary hydraulic functionality (optional)



High-efficiency Climate Controls.

Operating in extreme temperatures is now more comfortable with the optional cab air conditioner and heater installed. The air conditioner offers 14 250 kj cooling capacity and the heater output is 18 690 kj. Six adjustable vents provide excellent air flow throughout the cab and makes defrosting the optional front door and side windows easier. (Air conditioning available on the 226B only.)

Visibility. The Cat Skid Steer Loader has a wide cab opening providing exceptional view of the work tool enhancing ease of operation and productivity. The sloped angle of the engine compartment allows excellent visibility to the rear of the machine. A new convex rearview mirror option gives the operator a panoramic view of the rear and sides of the machine. For better visibility in low-light conditions, the standard forward lights are adjustable 10 degrees in any direction.

Instrumentation. Cat Skid Steer Loaders use instrument panels and gauges that are simple, easy-to-use and reliable. Bright indicator lights and audible warning, signals any critical system situation. An engine air cleaner restriction indicator is situated in the cab for easier reference.

Access/Egress. The Cat Skid Steer Loader cab is designed to make machine operation simple, productive and comfortable. Getting into and out of the cab is secure and easy through a wide opening with three-point grab handles and skid-resistant steps. Tilt cylinders are neatly located under the lift arms so not to interfere with operator access and egress.



Cab Packages. Several cab packages and options are available.

The standard cab includes:

- ROPS/FOPS cab
- Contoured cushion seat with fore/aft adjustment
- Retractable seat belt
- Cushioned, contoured armbar
- Dual throttle controls - hand and foot
- Dome light
- Horn
- Rear wall liner
- Windows, top and rear
- Two overhead instrument panels
- Pilot-hydraulic joystick and fingertip auxiliary controls
- 12 Volt power socket

The deluxe cab package includes items in the standard cab, plus

- Deluxe suspension seat
- Headliner
- Additional working lights

A cold-weather cab package includes items in the standard cab, plus:

- Removable, sliding side windows
- High-efficiency heater/defrost
- Engine coolant heater
- Heavy-duty 880 CCA starting battery
- Debris barrier

Other cab options include:

- Cab door (either glass or polycarbonate) with wiper/washer and loader arm lock-out
- Air conditioner with heater/defrost
- FOPS, Level II
- Insulated floor mat with foot rest
- Cup holder
- 76 mm seat belt
- Additional controls for
 - hydraulic quick coupler
 - proportional auxiliary hydraulics
 - work tool electrical requirements

Power Train

Caterpillar Hystat power train delivers aggressive performance and easy operation.



Cat Diesel Power.

The heart of the Cat Skid Steer Loader power train is the Caterpillar 3024C diesel engine, which is turbocharged in the 226B model. This rugged, reliable four-cylinder Stage II compliant Cat engine offers aggressive performance and a fast torque curve for quick response.

Throttle Control.

Dual engine throttle controls allow the operator to match engine speed to the task. The hand throttle is ideal for jobs requiring consistent engine speed - such as cold planing or trenching. The foot throttle enables the operator to vary engine speed and minimize fuel consumption for other tasks such as load and carry, truck loading, grading and dozing.

Anti-Stall System. An exclusive anti-stall system on the Cat Skid Steer Loaders allows maximum power to the wheels while minimizing engine stalling. This exclusive system helps maximize productivity for experienced operators and makes it easier for novice operators to become productive.

Axial Piston Pumps. Dual, variable-displacement axial piston pumps are driven directly off the engine and provide hydraulic flow to the drive motors via a closed loop system. Drive motors transfer mechanical power to the wheels via two high-strength, pre-stressed chains per machine side. Chains run in an oil bath for constant lubrication and long life. Chains are adjustable through slots in the axle housings.

Drive Axles. Drive axles are forged and induction hardened for maximum life. They include a unique labyrinth seal which consist of lip and outer seal to help prevent debris such as wire and twine from wrapping around the axle and destroying the seal. An inner seal is used for permanent lubrication of axle bearings - no daily axle service is required.

Hydraulic System

Hydraulic system has built-in reliability and provides exceptional wheel torque plus lift, breakout and auxiliary power to work tools.

High-Flow Hydraulics. Optional high-flow hydraulics provide increased hydraulic horse power for high-speed, high-power work tools such as cold planers, landscape rakes, stump grinders and trenchers. This system can be ordered on new Cat 226B machines or can be installed later by your local Cat Dealer.

Front Hydraulics. Standard ON/OFF front hydraulics are featured on the 216B and 226B. Optional proportional front auxiliary hydraulics are also available on these models.

Power and Reliability. Maximum power and reliability are built into the Cat Skid Steer Loader hydraulic system. In addition to providing power to drive the wheels, this system also provides the loader lift and tilt functions, powers the auxiliary circuit to drive work tools and drives the engine cooling fan.

Hydraulic Pumps. Hydraulic pumps are driven directly off the engine for maximum hydraulic performance and reliability - no belts are used. Pumps are open center, fixed-displacement and provide flow to the loader and auxiliary hydraulic circuits. Control of the loader lift and tilt functions by hydraulically-operated pilot controls enable low-effort and precise operation.

Auxiliary Hydraulics. Standard auxiliary hydraulics to power work tools is available through quick-connect hydraulic couplings that are rigidly mounted to the loader arm. Cat XT hose and O-Ring Face Seals help ensure a leak-free system.



Reliability and Cleanliness.

Reduced potential leak points improve reliability and result in a cleaner machine. In addition, hydraulic oil flows through a 4-micron spin-on filter. A filter restriction indicator is located at the operator station. A 74-micron screen in the hydraulic tank prevents larger debris from entering the system and causing damage to the hydraulic components.

Hydraulic Oil Cooler.

A high-efficiency hydraulic oil cooler enables the Cat Skid Steer Loader to work longer and harder in higher ambient temperatures, even when using continuous high flow work tools. The high-capacity hydraulic oil reservoir maintains lower operating temperatures.

Quick Coupler and Caterpillar Work Tools

Choose from a wide variety of tools that are performance matched to Cat Skid Steer Loaders.



Quick Coupler. Work tools can be changed quickly and easily with the Cat Skid Steer's quick coupler system. The universal coupler interface features:

- Low profile side plates are designed for the optimum match to work tools and minimal material packing
- Opposing wedges ensure a tight tool fit
- Rugged design and large contact area absorbs loads and minimizes stress
- Tool engagement and release are quick and easy
- Vertical pins are chrome-plated and lubricated for smooth engagement and prevention of corrosion
- Coupler allows excellent visibility to work tools and unobstructed entry and exit to the cab.

The standard quick coupler features manual engagement and disengagement of work tools using two high-leverage handles. An optional hydraulic quick coupler is also available and allows engagement and disengagement of work tools without the need for the operator to exit the machine. Control of the coupler by use of a rocker switch inside the cab, making work tool changes quicker and easier.

Cat Work Tools. They extend the versatility of the Cat Skid Steer Loaders. Designed and built for optimum performance and durability, these tools deliver high productivity, long service life and excellent value:

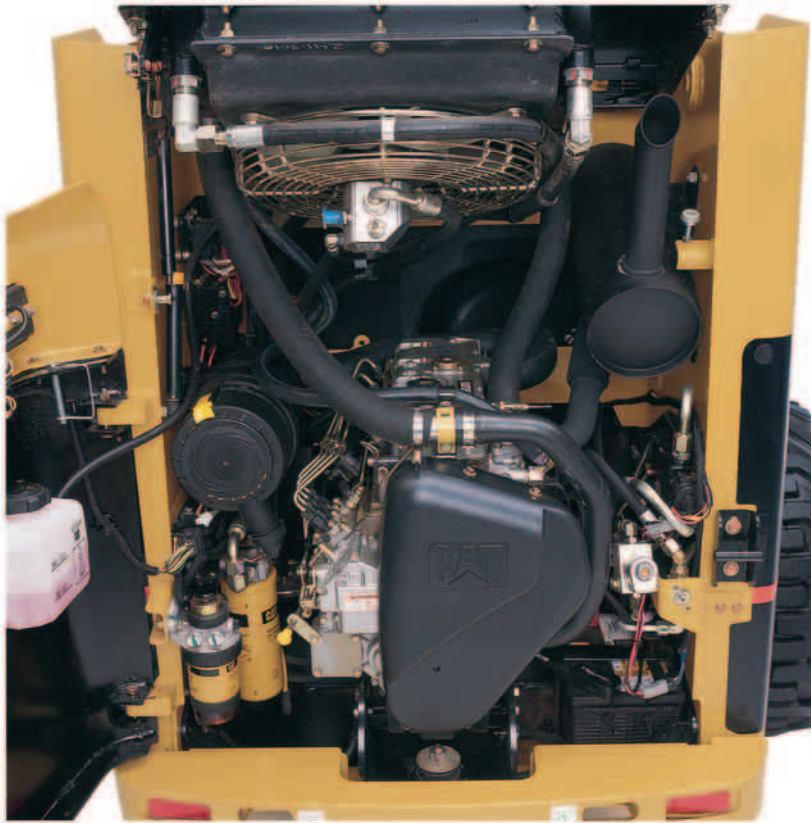
- Angle blades
- Augers
- Backhoes
- Brooms
- Buckets:
 - general purpose
 - grapple
 - light material
 - multi purpose
 - utility
- Cold planers
- Compactor vibratory
- Hammers
- Landscape rakes
- Landscape tillers
- Material handling arm
- Pallet forks
- Stump grinders
- Trenchers
- Wheel Saws

- **Augers.** Caterpillar Augers are designed for drilling holes for footings, fencing, signs, trees and shrubs in construction, agricultural and landscaping applications.
- **Backhoes.** The compact Caterpillar Backhoe transforms the Skid Steer Loader into a dedicated excavator for digging out trenches, hammer use or general excavating tasks.
- **Brooms.** Caterpillar Angle Brooms are ideal work tools for removing rock, dirt and other debris from streets, carparks, driveways, pavements and factory floors.
- **Buckets - multi purpose.** Caterpillar Multi Purpose Buckets are designed to optimize the versatility of Cat Skid Steer Loaders when digging, dozing, clamping, scraping, back dragging, grading and levelling in a wide range of applications.
- **Cold planers.** Caterpillar Cold Planers are designed for milling tarmac, asphalt, concrete surfaces, prior to repair and reinstatement.
- **Grapple Forks.** Caterpillar Industrial Grapple Forks are designed to easily handle a wide array of bulky, loose, objects encountered in demolition, industrial, construction and other aggressive applications.
- **Trenchers.** Caterpillar Trenchers are designed for cutting narrow straight trenches in soil prior to laying electrical, telephone lines, cable lines, water or gas pipes.
- **Wheel Saws.** Caterpillar Wheel Saws are used to cut trenches in tarmac, asphalt, concrete and permafrost surfaces prior to laying cable, electrical, gas and water pipes. (226B High Flow only)



Serviceability

Quick access and superior design make the Cat Skid Steer Loaders easy to maintain.



Service Access. The rear service door opens 90 degrees for easy access to both sides of the in-line mounted engine.

Filters. All filters are spin-on and easily accessible, which makes routine service quicker and virtually spill-free.

Cooling System. The radiator, hydraulic oil cooler and grill tilt up to increase access to the cooling system during maintenance and allows easier cleaning of debris from between the grill and cooling package. The cooling fan is hydraulically driven for quieter operation and to eliminate the service and maintenance that comes with belt-driven fans.

Easy Tilting Cab. The machine cab can now be tilted rearward by a single person using a single tool, and is held in place by a self-latching mechanism. When the cab is tilted back, all hydraulic pumps, motors, valves, lines and the fuel tank are accessible for quick, easier service.

Removable Belly Pan. A removable belly pan section on the floor of the machine's lower frame provides excellent access for periodic cleaning.

Electrical and Hydraulic Lines.

Clean routings of electrical and hydraulic lines improves reliability and simplifies service.

Maintenance Points. They are grouped in easily accessible locations.

S•O•SSM Valves. Scheduled Oil Sampling S•O•S valves are standard to allow regular monitoring of the engine and hydraulic oil quality.

Other Standard Service Features

- Easy access to battery, air filter and single engine belt
- Sight glass on hydraulic tank and radiator allow quick, easy level checks
- Air filter restriction indicators are located inside the operator station and at the air filter
- Ecology drains simplify changing engine and hydraulic oils
- Grease fittings are countersunk to prevent damage
- Extended life coolant and 250-hour engine oil change intervals

Complete Customer Support

Cat dealer services help you operate longer with lower costs.

Machine Selection. With nine different Cat Skid Steer Loader and four Cat Multi Terrain Loader to choose from, selecting the right machine is even easier when you consult your Caterpillar dealer. Your dealer helps you make detailed machine comparisons before you purchase.

Purchase Options. Available to let you look beyond just the initial machine price. With your Cat dealer, you can review available financing options plus look at day-to-day operating costs. You can also look at dealer services that can be included in the cost of the machine to yield lower equipment owning and operating costs over the life of the machine.

Customer Support Agreements.

These agreements offer you a variety of service and maintenance options that can be customized to best fit your specific requirements. These can cover the entire machine and include work tools to help protect your investment.

Machine Support. It is one of your Cat dealer's primary goals. You will find high availability of parts at our Dealer parts counter. Cat Dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime. Your Cat dealer can also save you money by suggesting Cat Remanufactured parts that carry the same warranty as new, but with savings of 40 to 70 percent.

Maintenance Service Plans.

Help manage machine maintenance, by choosing from a wide range of maintenance plans and services at the time you purchase a machine. Repair option plans guarantee the cost of repairs up front. Diagnostics programs such as Scheduled Oil Sampling, Coolant Sampling and Technical Analysis help you avoid downtime and unscheduled repairs.



Operator Training. Cat dealers can improve your operator's techniques and help boost your profits.

Cat Machine Security System.

Secure your investment with Caterpillar's Machine Security System (MSS), a programmable key system that provides maximum machine security for Cat Skid Steer Loader owners.

- MSS disables machine by interacting with the machine's Electronic Control Modules (ECM)
- Keys fit all existing Cat machines (including machines without MSS)
- Each machine can store up to 50 key identifications
- Each key can be configured to operate a certain range of machines or enable operation for a certain period of time

Repair, Rebuild or Replace.

Choices become even more evident when you consult your Caterpillar dealer. Your Cat dealer can help evaluate the costs involved so you can make the right choice every time.

Engine 3024C

	216B	226B
Ratings at 2600 rpm	kW/hp	kW/hp
Net power	37/50	43/57
Gross power	39/52	46/62

Dimensions

Bore	84 mm	84 mm
Stroke	100 mm	100 mm

- Caterpillar 3024C (216B) and 3024C T turbocharged (226B), water-cooled, four-stroke cycle, four-cylinder diesel
- Net power rating per ISO 9249 or EEC 80/1269
- Meets EU directive 97/68/EC Stage II emission requirements

Operating Specifications

The specification for the 216B and 226B Skid Steer Loaders are with 10 x 16.5 6 PR tires, 1525 mm dirt bucket, full fuel 65 kg and a 75 kg operator.

	216B	226B	*226B
	kg	kg	kg
Rated operating capacity**	635	680	680
Rated operating capacity with optional counterweight**	680	726	726
Operating weight	2589	2646	2677
Tipping load	1270	1360	1360
Breakout force			
lift cylinder	1386	1515	1499
tilt cylinder	1717	1852	1852

* High Flow (HF) version

** ISO 5998:1986

ROPS/FOPS

Rollover Protective Structure (ROPS) and Falling Objects Protective Structure (FOPS).

- ROPS meets ISO 3471:1994
- FOPS meets ISO 3449:1998 Level I
- FOPS Level II (optional) meets ISO 3449:1998 Level II

Hydraulic System

	216B	226B	*226B
Hydraulic Flow	Std	Std	HF
Loader			
Hydraulic pressure (kPa)	21 400	23 000	23 000
Hydraulic Flow (l/min)	60	60	100

Features

- Single, hydraulically-operated joystick controls lift, lower and tilt functions
- Open center, fixed displacement

* High Flow (HF) version

Power Train and Brakes

Dual, closed-loop, axial piston hydrostatic pumps driven directly off engine. Pumps provide pressure and flow to two fixed displacement motors.

	216B	226B	*226B
Travel speed	km/h	km/h	km/h
Forward	12.5	12.7	12.7
Reverse	12.5	12.7	12.7

Features

- Single hydraulically-operated joystick, controls speed and direction
- Hydrostatic service brakes
- Multi-disc, spring-applied hydraulically released parking brake
- Anti-stall system maximizes torque to the wheels without stalling engine

* High Flow (HF) version

Sound

Operator Sound

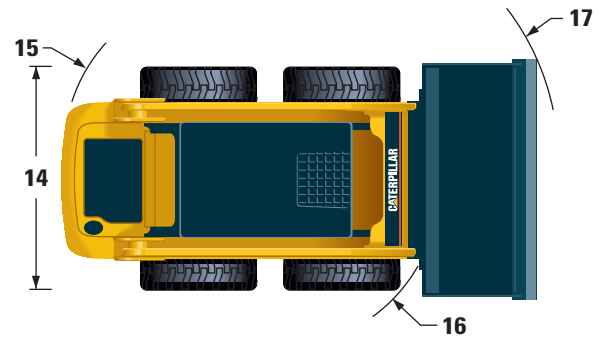
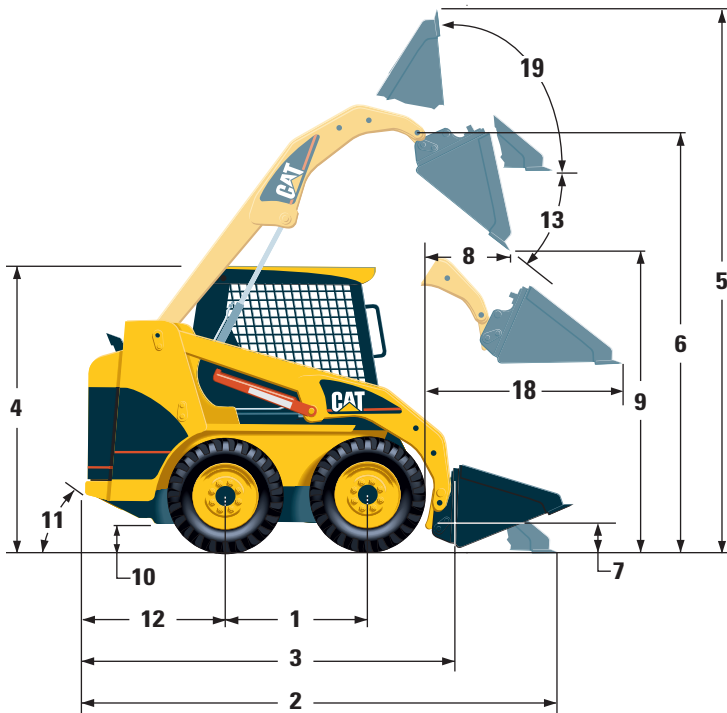
- The operator sound level measured according to the procedures specified in ISO 6396 is 89 dB(A).

Exterior Sound

- The labeled spectator sound power level measured according to the test procedures and conditions specified in 2000/14/EC is 104 dB(A).

Dimensions

Dimensions shown are based on standard machine equipped with optional 10 x 16.5 6 PR tires and 1525 mm dirt bucket. The specification for the 216B and 226B Skid Steer Loaders are static and conform to ISO 5998:1986. All dimensions are approximate.



	mm
1 Wheelbase	986
2 Length with bucket on ground	3233
3 Length without bucket	2519
4 Height to top of cab	1950
5 Max overall height	3709
6 Hinge pin height at max lift	2854
7 Hinge pin height at carry position	239
8 Reach at max lift and dump	505
9 Clearance at max lift and dump	2169

	mm
10 Ground clearance	195
11 Departure angle	26°
12 Bumper overhang behind rear axle	967
13 Maximum dump angle	40°
14 Maximum width over tires	1525
Turning radius from center	
15 left	1485
16 right	1199
17 full	1940
18 Reach with level arms and bucket	1280
19 Rack back angle at max height	97°

Service Refill Capacities

	Liters
Chain box, each side	6
Cooling system	10
Engine crankcase	8
Fuel tank	65
Hydraulic system	55
Hydraulic tank	35

Standard Equipment

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

Air cleaner, dual element, radial seal

Alternator

216B: 65-amp

226B: 85-amp

Armrest, pull down

Battery, 12-volt, 650 CCA

Brake, parking, SAHR

Cleanout, belly pan

Controls, pilot-operated, hydraulic

Coupler, mechanical, quick

Ecology drains: engine, hydraulic oil
and coolant

Electric Socket, 12-volt

Engine, diesel:

216B: Cat 3024C naturally-aspirated

226B: Cat 3024C T turbocharged

Falling Object Protective Structure, Level I

Fan, hydraulically-driven

Filter

fuel, bayonet-type

hydraulic, spin-on, 4 micron

Fuel/water separator, spin-on

Hydraulics, auxiliary, front, ON/OFF

Hydraulics, continuous flow

Instrumentation:

Audible:

– engine coolant temperature

– engine oil pressure

– hydraulic oil temperature

Gauges:

– fuel level

– hour meter, digital

Indicators:

– air filter restriction

– alternator output

– armrest raised/operator out of seat

– engine coolant temperature

– engine oil pressure

– hydraulic filter restriction

– hydraulic oil temperature

– parking brake engaged

Muffler

Precleaner, self-unloading

Pump, hydraulic implement

Pump, hystat charge and hydraulic fan

Rear view mirror, internal

Safety control interlock system

Scheduled Oil Sampling (S•O•S) valves

Seat, static

Seat belt, retractable, 50 mm

Sight gauge, coolant and hydraulic oil

Starting aid, glow plugs

Support, lift arm

Switch, ignition

Tail lights

Throttle controls, hand and foot

Tie-downs, front and rear

Valve, hydraulic, three-section

Windows, top and rear



Low Side Wall.

The Cat LSW offers exceptional puncture resistance and run-flat capability. Ideal for general construction and heavy-duty applications.



Premium Conventional.

The Cat Premium Conventional tyre are equipped with the industry's deepest tread depth, thickest sidewall and heaviest rim guard. Provides optimum performance in a variety of applications.

Optional Equipment

Optional equipment may vary. Consult your Caterpillar dealer for specifics

Air conditioning with heater/defrost (226B only)
Alarm, back up
Battery, 12-volt, 880 CCA
Control, work tool, electrical
Counterweight, adds 45 kg to ROC
Coupler, hydraulic
Cup holder
Debris barrier for cab
Door, front
 laminated glass with wiper/washer
 polycarbonate with wiper/washer, for demolition use
Falling Object Protective Structure, Level II,
 attaches to existing FOPS
Floor mat
Headliner
Heater/Defrost, cab
Heater, engine coolant
Horn
Hydraulics, auxiliary, front, proportional
Hydraulics, auxiliary, front, proportional,
 High Flow (226B only)
Hydraulics, self leveling, lift
Lifting provisions:
 – four-point, or
 – single-point

Lights, front and rear, working
Light, warning beacon
Machine Security System (MSS)
Seat, suspension
Seat belt, 76 mm
 for static seat
 for suspension seat
Synthetic hydraulic oil for cold weather operation
Windows, side, sliding, removable

Tires:

7 x 15 6 PR 1372 mm (54 in) Caterpillar (216B only)
10 x 16.5 8 PR 1524 mm (60 in)
 Caterpillar Premium Conventional*
265-521 8 PR 1524 mm (60 in) Caterpillar Low Side Wall*
10 x 16.5 6 PR 1524 mm (60 in) GY SGL
10 x 16.5 8 PR 1524 mm (60 in) GY IT323*
10 x 16.5 8 PR 1524 mm (60 in) GALAXY*
10 x 16.5 10 PR 1524 mm (60 in) MICHELIN
10 x 16.5 8 PR 1676 mm (66 in)
 Caterpillar Premium Conventional*
265-521 8 PR 1676 mm (66 in) Caterpillar Low Side Wall*
10 x 16.5 6 PR 1676 mm (66 in) GY SGL
10 x 16.5 8 PR 1676 mm (66 in) GY IT323
10 x 16.5 8 PR 1676 mm (66 in) GALAXY
10 x 16.5 10 PR 1676 mm (66 in) MICHELIN

* Denotes spare tire option available with supplement.



Premium Conventional Flotation.

The Cat Premium Conventional Flotation tyre is most efficient on soft terrain.



Extreme Duty Solid.

The Cat Solid tyre performs on the toughest applications. Profitability is improved through the elimination of downtime and repair costs. Ideal for foundry and demolition job-sites.

216B and 226B Skid Steer Loaders

HEHL3004 (5/2004) hr

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

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