535C

Wheel Skidder



Engine		
Engine Model	Cat® C7 ACERT™	
Gross Power – SAE J1995	162 kW	218 hp
Dimensions		
Wheelbase	3534 mm	139.2 in
Weights		
Est Operating Weight	18 044 kg	39,780 lb

- Operating weight includes enclosed cab, 30.5 tires, decking blade, arch, bunching grapple, winch

Grapple		
Bunching Capacity	1.34 m^2	14.4 ft^2
Thinning Capacity	1.54 m^2	16.6 ft^2

535C Wheel Skidder

Engine

✔ The Cat® C7 engine with ACERT™ technology is field proven and U.S. EPA Tier 3 compliant. The industry leading Caterpillar® lock up torque converter automatically engages/disengages direct drive for maximum efficiency, performance and productivity. **pg. 4**

Power Train

The field-proven Cat torque converter, heavy-duty transmission and high performance axles improve availability, performance and productivity, while minimizing fuel consumption. **pg. 5**

Hydraulics

The state-of-the-art closed-center, variable displacement, pressure compensating hydraulic system provides power for braking, steering, blade and grapple functions. **pg. 6**

Serviceability

✔ The 535C is designed to make regular maintenance easier, extend service intervals, and reduce the time required for maintenance. **pg. 11**

Customer Support

Your Cat dealer offers support you can count on, from purchase options to operator training, maintenance programs and unmatched parts availability … all to keep your Cat skidder up and running when you need it. **pg. 12**

Engineered to exceed customer expectations in the toughest applications. Caterpillar quality, improved serviceability and productivity provide maximum uptime and lower owning and operating costs.



Structures

✔ The 535C structures are Caterpillar designed and manufactured for the most demanding logging conditions. Durable box section mainframes and decking blade provide superior strength. **pg. 7**

Operator Station

✔ Finger tip gear selection, 1/4 turn steering, improved ergonomic control layout and reduced operator lever effort contribute to the most comfortable operator environment. **pg. 8**

Work Tools

✔ Large Cat grapples maximize production with a new tong profile and higher clamping forces. Raised edges and wear resistant cast tips provide added durability. The hydraulic winch is ideal for self-retrieval and log truck towing. **pg. 10**



✔ *New Feature*

Engine

The Cat power train delivers top performance, power, and durability.



Cat C7 Engine. The Cat C7 uses Caterpillar's breakthrough ACERT™ Technology to meet exhaust emission reduction standards. It features efficient air management, fuel delivery and electronic control for high productivity and exceptional service life.

Engine Design. This four-stroke engine provides efficient fuel combustion. Precise engineering and thorough testing assure durability, reliability and plenty of power. Built-in serviceability and excellent fuel economy lower operating costs.

ACERT™ Technology. Caterpillar optimizes engine performance while meeting EPA Tier 3 regulations. ACERT™ Technology reduces emissions during the combustion process by using advanced technology in the air and fuel systems, in conjunction with integrated electronics. Caterpillar meets emission regulations at the combustion source rather than recycling exhaust gases.

ADEM A4 Control Module. Controls the fuel injector solenoids to monitor fuel injection. This system provides automatic altitude compensation, and it will not allow the engine to fire until it has oil pressure, acting as cold start protection and a form of pre-lube.

Turbocharger. The C7 features a waste gate turbocharger that provides high boost over a wider range, improving engine response and peak torque, as well as providing outstanding low-end performance.

Maintenance. The C7 engine reduces costs and downtime with a 500-hour oil change interval. Extended service intervals can save thousands of dollars over the life of a machine. Machines are equipped with Caterpillar high efficiency oil filters, whose revolutionary design doubles efficiency without increasing the change interval.

Water Pump. A dual thermostat control improves coolant flow and heat dissipation, resulting in better durability.

Electronic Transfer Pump. The electric fuel transfer pump is self-priming, eliminating the need for a manual priming pump.

Reliability Features. The C7 offers maximum reliability and response thanks to a range of features:

- Improved fuel injectors and pump
- Leak-free design
- Higher cylinder pressures
- Reinforced cylinder block

Leak-Free Design. Improved joints throughout the engine reduce the chance of leaks. The oil pan seal, timing cover and block to flywheel housing incorporate a leak-free design proven in thousands of Cat on-highway truck engines in the field.

Power Train

The integrated Cat power train delivers dependable, relentless pulling power.



Five-Speed Transmission. The field proven Cat power shift countershaft transmission easily matches engine power to the load size and ground conditions. Electronic control makes fingertip controls possible, reducing operator fatigue and improving comfort.

Gear Application. Gear ratios are carefully designed to maximize productivity in specific cycle segments and under specific loads.

- Gear 1 provides highest rimpull capability for heavy load applications.
- Gears 2, 3 for normal loads and higher speed operations.
- Gears 4, 5 provide excellent empty return and roading speeds.

Electronic Clutch Pressure Control. The C-Series Skidders have an additional transmission feature for added performance and operator comfort – The Electronic Clutch Pressure Control (ECPC). This unique feature provides smoother shifting and increases skidding performance by regulating and modulating the individual clutches based on current operating conditions.

Torque Converter. The large, heavy-duty torque converter maximizes the productivity of the entire drive train. The torque converter is matched to the Cat C7 engine for excellent rimpull and skidding performance. This lock-up torque converter has proven its durability over thousands of hours of punishing loads.

Improved Productivity. The torque multiplication capability of the torque converter reduces the need for the operator to continually shift the transmission to maintain good skidder performance, as is required on competitive skidders. This reduces operator effort and improves machine productivity.

Lock-up Clutch. The integral lock-up clutch allows the machine to operate in converter drive for greater rimpull, or direct drive for high efficiency hauling and faster travel speeds. Direct drive capability allows up to 15% higher travel speeds when the lock-up clutch is engaged.

Auto Lock-up. The lock-up clutch automatically engages according to ground speed and engine speed conditions. This feature is handled electronically and allows for increased travel speeds in the same gear.

Reduced Operating Costs. Torque converter direct drive capability, combined with the lock-up differential, reduces wheel slip. This minimizes rutting and soil damage in straight-ahead pulls on weaker soil. In turn, it minimizes tire wear, component stress and fuel consumption, reducing total operating costs.

Differential Locks. Normal operation is with the differential locks in both axles disengaged, meaning the all four wheels are free to drive independently. Locking a differential forces both wheels on an axle to turn in sync with each other. Both front and rear differential locks are easily engaged and disengaged with a conveniently located switch on the right hand console. Hydraulically actuated differential locks allow for on-the-go engagement or disengagement.

Axles. Axles feature a full length oil sump with splash lubrication for excellent heat rejection and long component life. The 535C has Wide Axles as standard for use in all applications from moderate to severe, or when using dual tires, wide flotation tires or chains.



Front Axle. The front axle features a pinion-mounted design and a heavy-duty housing, eliminating the need for a front axle guard.

Pivot Design. The oscillation pivot design provides industry leading ride comfort.

- 15° oscillation absorbs minor shock loads caused by stumps and holes and helps isolate the cab from axle movement for a smoother, more comfortable ride.
- Front axle oscillation also provides excellent fore-aft stability for large capacity grapples and dual function arches.

Brake Components. Brake components are housed inside the axles, protecting them from dirt, dust and wet ground conditions. Inboard brakes allow for splash lubrication and cooling, are virtually maintenance free, and provide reliable brake performance in the most demanding logging applications.

Hydraulics

State-of-the-art hydraulic system provides dependable power and maximum efficiency.



Load Sensing Hydraulics. A load sensing variable displacement pump and pressure compensating system continually monitor hydraulic power requirements, then provides power based on demand.

Lower Power Consumption. The variable displacement hydraulic pump draws engine power only when braking, steering, dozer or grapple actuation demands flow or pressure. This conserves engine horsepower and increases fuel efficiency.

Cooling Demands. Load sensing hydraulics provide flow only when needed, saving fuel and generating less heat, allowing the cooling system to allocate more capacity to the engine, transmission and torque converter.

Oil Cooler. The oil cooler is located above the radiator for better hydraulic oil cooling performance and to make radiator cleanout easier.



Auto-Grab Feature. Auto-Grab, engineered by Caterpillar, constantly monitors tong pressure and adjusts as needed to securely hold grapple loads while skidding. It is easily activated on demand by a switch located on the right-hand control lever.



Cat ToughGuard™ Hoses. Caterpillar XT®-3 ToughGuard™ hoses improve hose life in the grapple, arch, boom and across the hitch. ToughGuard hoses have been very successful in reducing early hour hose failures. O-ring face seals assure rock-solid connections that maintain pressure and reduce oil leaks.

Steering. Fully hydraulic control. Meets the following standards: SAE J1511 OCT90, ISO 5010-1992.

Structures

The 535C mainframe, hitch and decking blade are designed and built to surpass the expectations of the logging industry.



Box-Section Construction. Caterpillar designed and manufactured box section structures set the industry standard for reliable, durable main frames. Extensive computer analysis and field-testing resulted in the design of the 535C.

Absorbs Twisting and Shock Loads. Frames can absorb twisting and impact forces to provide a sound foundation and well-balanced system for the entire structure.

Superior Balance. Low center of mass and weight forward design create excellent skidder balance.

Maneuverability. The 535C skidder provides the tightest turning radius for superior maneuverability while still maintaining the excellent balance required for high capacity skidding.

Caterpillar Manufacturing. The front and rear frames are robotically welded and manufactured by Caterpillar to ensure the highest level of quality and durability.



Hitch. A heavy-duty center section features oversized plates and bosses to disperse forces. A large double-tapered roller bearing is used on the lower hitch for reduced flexing stress and maintaining tight joints.

Hitch Pins. The wide hitch pin spread significantly reduces horizontal loading on hitch pins and bearings for greater durability and extended pin and bearing life. The extra room also increases hydraulic hose clearance and makes hose routing easier.

Fenders. Rear frame fender options are available for both grapple and cable arrangements.

Arches and Booms. All Caterpillar arches use box-section construction, and are thoroughly tested to exceed durability requirements.

Dual-Function Arch. The 535C is available with a multiple position, dual-function arch. It accommodates large capacity grapples, well suited for large bundles of small stems, and difficult-to-reach pre-bunched stems. The dual-function arch offers variable reach, which minimizes machine maneuvering to pinpoint a load with the grapple. In addition, it offers the ability to push the skidder forward if necessary.

Cable Arch. Allows outstanding line skidding performance with a two-position adjustable height fairlead to match site conditions.

Operator Station

Easy to operate, fingertip controls, less fatigue



Comfortable Work Station. The work station incorporates years of cab design innovations to maximize operator comfort and productivity.

Air Suspension Seat. Standard air suspension seat swivels 30° to the right for maximum comfort, while allowing the operator to observe skidder and grapple operations to the rear.

Sealed Cab. The pressurized cab is sealed from exterior air (with windows closed) for efficient heating and cooling. Tight door and window casings also keep out dust, fumes and insects.

Air Conditioning. Standard with the enclosed, pressurized cab, air conditioning helps the operator concentrate on work rather than environmental distractions. A dedicated cab filter assures clean air.

Windows. Tough polycarbonate windows protect the operator, and are large enough for an excellent side and rear view, increasing operator confidence and productivity. Sliding glass windows protected by metal screens in both doors provide fresh air and communication outside the machine.

Sound Insulation. With the optional enclosed cab, ample sound insulation keeps interior sound levels low. Reduced sound levels meet operator environment regulations and significantly boost operator comfort, especially on long shifts.

Cab Mounting. The modular ROPS/FOPS cab is resiliently mounted to the skidder frame, reducing vibration for greater comfort and a quieter ride.



Machine Controls. The comfortable operator environment uses ergonomically designed and placed machine controls to reduce fatigue and increase productivity.

Steering. Column tilts and telescopes to fit any size operator. The quarter-turn steering wheel quickly and accurately controls 90 degrees of machine articulation delivering excellent maneuverability and productivity.

Transmission Controls. Transmission controls for forward, reverse and gear range are located on the steering wheel for easy fingertip control. The operator can control machine functions with minimal effort, allowing greater concentration on skidding operations. The result is higher productivity and reduced operator fatigue.

Governor Pedal. The governor pedal is located to the right for more clearance between the brake pedal, and for improved operator comfort.

Single-lever Grapple Control. A single four-function joystick control has top mounted switches for grapple open and close, tong rotate, and Auto-Grab System activation. The control is simple, convenient and easy to use.

Decking Blade Control. The decking blade control is located on the right side console. This location provides for precise control for various decking and clearing functions while reducing operator fatigue.

Auto-Grab Switch. The Auto-Grab system monitors and adjusts tong pressure as needed to maintain a secure grip on grapple loads.

Lock-up Torque Converter Drive. When activated by a switch on the main dashboard, the machine will automatically switch between operation in fuel efficient direct drive mode or torque converter drive for maximum rimpull in tough skidding applications.

Differential Lock Switch. Ergonomically located rocker switch allows quick engagement of differential locks when needed.





Monitoring Controls. Conveniently located and easy-to-see gauges and displays make monitoring machine systems as simple as possible.

Gauges. Four gauges indicate engine coolant temperature, hydraulic oil temperature, torque converter oil temperature, engine rpm and fuel level.

Caterpillar Monitoring System. Monitors fuel, temperatures, vital electrical systems, gear speed and direction. A three-level warning system alerts the operator of potential problems.

Additional. The right hand console has a standard 12V outlet for powering auxiliary equipment. The cab is pre-wired and fitted for an entertainment radio, and a CB type 2-way radio.

ROPS/FOPS. FOPS (Falling Object Protection) and ROPS (Roll-Over Protection) guards offer protection to the operator and the machine.

Work Tools

Move more wood with powerful, flexible Cat grapples and winches.



Reliable, Productive Grapples. Caterpillar designed and manufactured grapples use box section construction for ultimate durability. The tong curvature reduces the time it takes to bundle the load, and higher clamp forces deliver excellent load retention for secure hauls to the landing.

Bunching Grapples. Bunching grapples are designed for harvesting mid-to-large diameter trees, usually felled by a mechanical feller buncher. Its large tong opening is designed to gather a large number of these stems per cycle for maximum loading. It is heavier than the sorting grapple, but its large capacity holds more stems for improved production in smaller trees and large loads.

Thinning Grapples. Thinning grapples are designed for harvesting small diameter trees, usually felled by a mechanical feller buncher. Its large tong opening is designed to gather a large number of these small stems per cycle for maximum loading. Cat grapples offer large capacity for maximum performance and productivity.

Grapple Snubber. Reduces grapple swing, hydraulic hose stress and improves component life.

Flow Divider. The high capacity flow-divider delivers reliable operation and maintains consistent tong sequencing.



Hydraulic Winch. The 535C features an electronically controlled hydraulic winch for grapple applications, replacing the mechanical winch. The hydraulic winch improves application flexibility by allowing the tractive effort to be used while winching, and eliminating the continuously rotating driveshaft.

The high capacity winch has four function controls: reel-in, reel-out, brake-on, and free-spool. This winch is driven and controlled by the main implement hydraulic system.

Cable Winch. An electro-hydraulic lever controls the winch hydraulic control valve, located on the winch case. The integrated software electronically protects free-spool clutches.

The C-500 mechanical winch is available on cable skidders where higher line speeds and max drum pull are important. Winch sump oil is used for hydraulic control and lubrication.



Decking Blade. The decking blade efficiently clears landings and roads, and maintains log decks. It features box section steel arms for superior strength and durability. Decking blade pusharms are mounted directly to the mainframe for excellent strength, and set lower and forward for efficient clearing of slash and debris as well as log deck maintenance. The electro-hydraulic control improves operator comfort and control of the decking blade.

- Heat-treated bolt-on edge and maintenance-free pivot joints for outstanding durability.
- The 535 C is available with four blade options to allow it to be customized to many different types of operating conditions:
  - No Blade – for industrial applications.
  - Narrow Decking – 85" width for general purpose applications.
  - Wide Decking – 105.4" width with bolt-on cutting edges – for improved coverage of tires and high decking blade usage.
  - Extended Decking – 123.5" width with bolt-on cutting edges – for the fullest coverage of tires and high decking blade usage.

Serviceability

Ease of service increases productivity.



Quick-Access Engine Doors. Large, hinged engine enclosure doors make regular maintenance as easy and fast as possible. Easy access to daily service points increases the likelihood that maintenance will be done, and increases machine service life. In addition, less maintenance time means more working time and greater productivity.

Ground Level Access. Most filters and lube points are accessible from the ground without special tools. Remote lubrication points make daily attention to hard-to-reach joints easy.

Rear Frame Access. Steps and grab irons are located on the rear frame and cab for easier access to the rear frame, arch and boom.

Bolt-on Guards. Bolt-on guards offer protection to critical components, and are easily removable for servicing. Removable floor plates and side plates allow access to components under the cab.

Radial Seal Air Filters. Hand access makes them easy to change, reducing air filter maintenance times.

Extended Oil Service Intervals. A 500-hour oil change interval reduces downtime for service and lowers maintenance costs.

S•O•S℠ Fluid Sampling Valves. Provides a fast, convenient way to gather uncontaminated fluid samples, which improves analysis reliability.

Pressure Taps. Conveniently located for easy access to hydraulic system pressure measurements.

Spin-on Oil Filters. Simplify maintenance processes and shorten downtime.

Electronic Transfer Pump. Delivers the proper fuel flow to the fuel system and eliminates manual priming.

Ecology Drains. All major fluid compartments (hydraulic tank, engine oil pan, radiator, axles and transmission) incorporate ecology drains to make regular maintenance easier, and protect the environment from accidental oil spills.



Hitch Hoses. The grapple pilot lines, pressure line and load-sense lines are routed above the hitch and are bulkheaded for easy hose replacement and fastest service. The hitch hoses use the Cat ToughGuard™ technology and have excellent wear characteristics.



Electrical System. The 24V electrical system delivers dependable electrical power for engine cranking, additional lighting, and engine diagnostics. Wiring circuits are color coded, numbered and protected by circuit breakers.

On-Board Diagnostic Systems. The Caterpillar Monitoring System continuously checks all critical machine functions and components, and helps locate faults quickly for faster repair. Extremes are recorded, including fluid temperatures, engine speed and electrical system events.

Radiator. Cleanout access doors located on both sides of the radiator help make radiator cleanout faster. The radiator features an all aluminum construction with 8 fins per inch for easy cleanout.

Matched Set Hitch Bearings. Matched set bearings come pre-assembled with the correct pre-load from the supplier to streamline the assembly process and ensure a quality hitch joint every time. No rolling torque measurement is required, so the assembly process is simplified. Matched set bearings also reduce service time in the field.

Customer Support

Cat dealer services help you operate longer with lower costs.



Product Support. You will find nearly all parts at our dealer parts counter. Cat dealers use a worldwide computer network to find in-stock parts to minimize machine down time. Save money with genuine Cat Reman parts. You receive the same warranty and reliability as new products at substantial cost savings.

Product Link. Product Link enables convenient monitoring of important equipment information remotely to help increase productivity and reduce owning and operating costs.

This state-of-the-art satellite technology-based Product Link system enables Caterpillar dealers and customers to keep in touch with their machines. The system provides a two-way information flow between machine on-board systems and Caterpillar dealers/customers via the Cat Dealer Website and EquipmentManager. Through the subscriptions to Asset Watch (hours, location, time and geo-fence), Maintenance Watch (preventative maintenance, repair scheduling, parts ordering), and Health Watch (event and diagnostic codes, fuel consumption) the customer can manage their entire fleet.

Machine Selection. Make detailed comparisons of the machines under consideration before purchase. Cat dealers can estimate component life, preventive maintenance cost, and the true cost of lost production.

Purchase. Look past initial price. Consider the financing options available as well as day-to-day operating costs. Look at dealer services that can be included in the cost of the machine to yield lower equipment owning and operating costs over the long run.

Customer Support Agreements. Cat dealers offer a variety of product support agreements, and work with customers to develop a plan that best meets specific needs. These plans can cover the entire machine, including attachments, to help protect the customer's investment.

Operation. Improving operating techniques can boost your profits. Your Cat dealer has videotapes, literature and other ideas to help you increase productivity, and Caterpillar offers certified operator training classes to help maximize the return on your machine investment.

Maintenance Services. Talk to your dealer about the range of available maintenance services. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as S•O•S℠ Analysis and Coolant Sampling and Technical Analysis help avoid unscheduled repairs.

Replacement. Repair, rebuild or replace? Your Cat dealer can help you evaluate the cost involved so you can make the right choice.

SAFETY.CAT.COM™.

Engine

Engine Model	Cat C7 ACERT™	
Net Flywheel Power	152 kW	204 hp
Net Power – ISO 9249	152 kW	204 hp
Net Power – SAE J1349	152 kW	204 hp
Gross Power – SAE J1995	162 kW	218 hp
Displacement	7.2 L	439 in^3
Bore	110 mm	4.33 in
Stroke	127 mm	5 in
Number of Cylinders	6	
Max Torque @ Rated Speed	956 N-m at 1,400 rpm	
Derating Altitude	1500 m	5,000 ft
Air Cleaner	Dry precleaner	
Alternator	80 amp	
Fan Speed	1,620 rpm	
Fan Type	Blower	
Electrical System	24V	
Battery – Quantity	2	
Battery – Volts	12V	
Battery – Capacity	950 CCA	
Starting System	Direct electric	

- These ratings apply at 1,800 rpm when tested under the specified standard conditions.
- 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 1500 m (5,000 ft) altitude.
- Based on standard air conditions of 25° C (77° F) and 99 kPa (29.32 in 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)].

Power Train

Travel Speed – Fwd. 1st	6.4 km/h	4 mph
Travel Speed – Fwd. 2nd	9 km/h	5.6 mph
Travel Speed – Fwd. 3rd	10.9 km/h	6.8 mph
Travel Speed – Fwd. 4th	15.3 km/h	9.5 mph
Travel Speed – Fwd. 5th	27.5 km/h	17.1 mph
Travel Speed – Rev. 1st	6.2 km/h	3.9 mph
Travel Speed – Rev. 2nd	10.5 km/h	6.5 mph
Travel Speed – Rev. 3rd	18.6 km/h	11.6 mph
Torque Converter – Type	Lock-up clutch	
Transmission	5 fwd/3 rev countershaft, powershift	
Transmission Cooler Type	Plate	
Brakes – Service Type	Enclosed wet disc each wheel, full hydraulic	
Brakes – Parking Type	Spring applied, hydraulic released, Electro-hydraulic controlled	

Hydraulic System

Circuit Type	Closed center, variable flow	
Pump Type	Axial piston	
Pump Output	174 L/min	46 gal/min
Relief Valve Setting	21 000 kPa	3,045 psi
Steering Valve	Direct link, non-follow	
Steering Cylinder – Bore	88.9 mm	3.5 in
Steering Cylinder – Stroke	437.5 mm	17.22 in
Steering Cylinder – Rod Diameter	50.8 mm	2 in
Dozer Valve	Electro-hydraulic	
Dozer Cylinder – Bore	101.6 mm	4 in
Dozer Cylinder – Stroke	470 mm	18.5 in
Dozer Cylinder – Rod Diameter	57.15 mm	2.25 in
Grapple Valve	4 or 5 stack, pilot	

- Measured at 2,200 rpm

Grapple

Bunching Capacity	1.34 m^2	14.4 ft^2
Thinning Capacity	1.54 m^2	16.6 ft^2

Winch – Grapple Skidder

Max Line Pull – Bare Drum	175 kN	39,342 lb
Max Line Speed	40.2 m/min	132 ft/min
Drum Capacity 19.0 mm (3/4 in)	47 m	154 ft
Drum Capacity 22.2 mm (7/8 in)	30 m	97 ft
Drum capacity 25.4 mm (1 in)	28 m	91 ft
Drum Diameter	229 mm	9 in
Drum Width	279 mm	11 in

Winch – Cable Skidder

Max Line Pull – Bare Drum	197.5 kN	44,400 lb
Max Line Speed	110 m/min	360 ft/min
Drum Capacity 19.0mm (3/4in)	45 m	148 ft
Drum Capacity 22.2mm (7/8in)	32 m	105 ft
Drum capacity 25.4mm (1in)	25 m	82 ft
Drum Diameter	254 mm	10 in
Drum Width	279 mm	11 in

Service Refill

Fuel Tank	315 L	83.2 gal
Cooling System	56.7 L	15 gal
Differential, Final Drive – Front	52 L	13.7 gal
Differential, Final Drive – Rear	52 L	13.7 gal
Engine Oil	27 L	7.1 gal
Transmission, Torque Converter	54 L	14.2 gal
Mechanical Winch	24.5 L	6.5 gal
Hydraulic System – Tank	54 L	14.3 gal
Hydraulic System – Total	112 L	29.6 gal

Weights

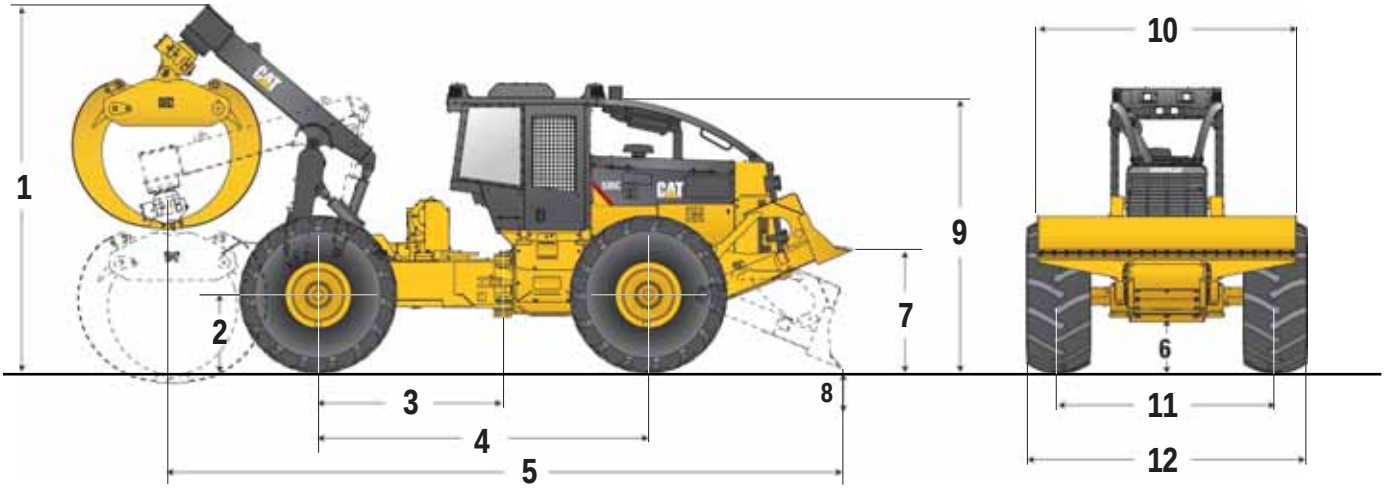
Est Operating Weight	18 044 kg	39,780 lb

- Operating weight includes enclosed cab, 30.5 tires, decking blade, arch, bunching grapple, winch

Dimensions

All dimensions are approximate

Grapple

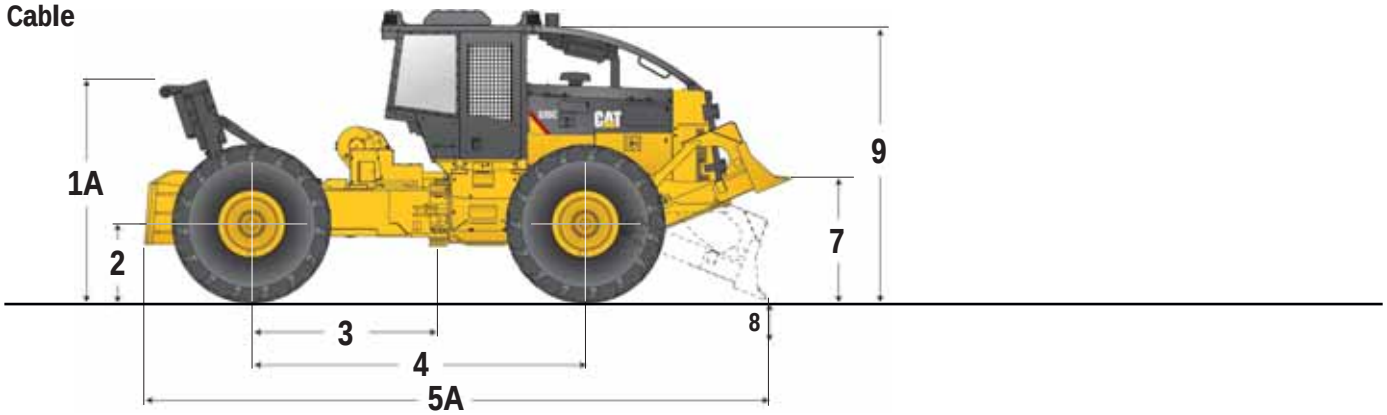


Dimension	
1 Ground level to top boom (grapple)	
standard boom	4103 mm (161.5 in)
extended boom	4304 mm (169.4 in)
1A Ground level to top roller (cable)	2794 mm (110 in)
2 Ground level to axle center line*	843 mm (33.2 in)
3 Rear axle center line to pin	1798 mm (70.8 in)
4 Wheel base	3534 mm (139.2 in)
5 Overall length (grapple)	
standard boom	7626 mm (300.2 in)
extended boom	7514 mm (295.8 in)
5A Overall length (cable)	6945 mm (273.4 in)
6 Ground clearance	533 mm (21 in)
7 Decking blade lift height	1381 mm (54.4 in)
8 Decking blade dig depth	456 mm (17.9 in)
9 Height to top of cab†	3184 mm (125.4 in)
10 Decking blade width	3138 mm (123.5 in)
11 Tread width	2622 mm (103.2 in)
12 Overall width	3398 mm (133.8 in)
Turning radius over tires*	6000 mm (236.2 in)

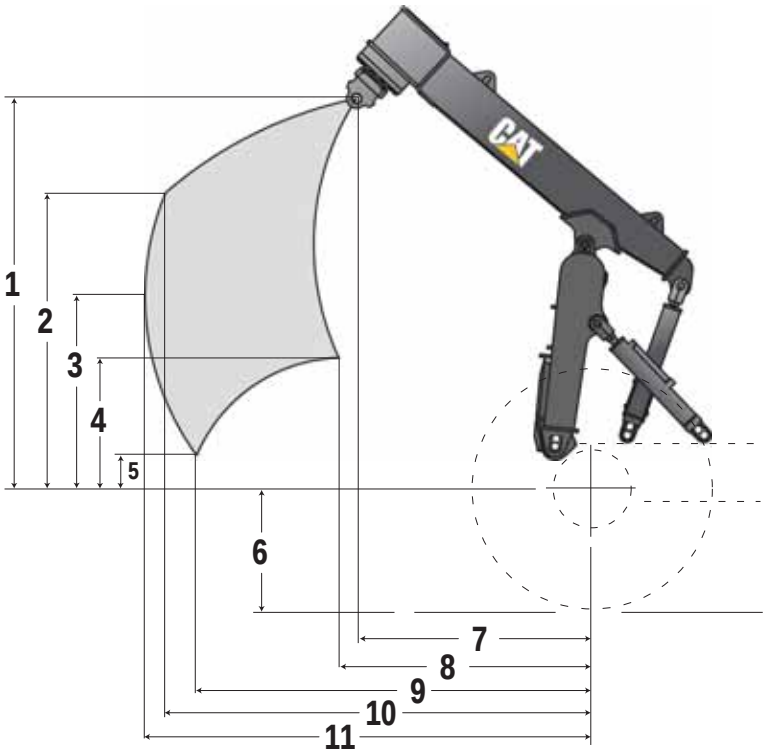
*With 30.5 x 32 tires

†Add 188 mm (7.4 in) if equipped with optional lights or water tank

Cable



535C Arches

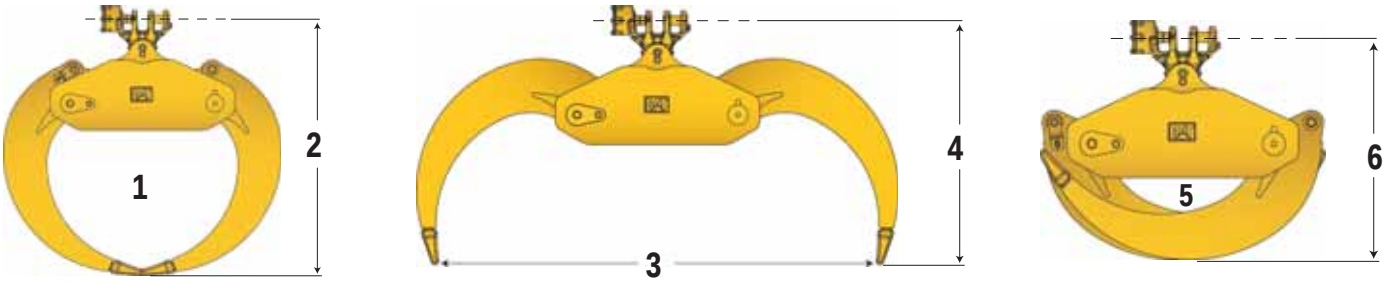


Dual Function

	Standard Boom	Extended Boom
1 Lift highest, retracted	2623 mm (103.3 in)	2847 mm (112.1 in)
2 Lift highest, farthest	1944 mm (76.5 in)	2192 mm (86.3 in)
3 Lift maximum reach	1336 mm (52.6 in)	1336 mm (52.6 in)
4 Lift lowest, retracted	752 mm (29.6 in)	764 mm (30.1 in)
5 Lift lowest, farthest	259 mm (10.2 in)	286 mm (11.3 in)
6 Loaded tire radius*	843 mm (33.2 in)	843 mm (33.2 in)
7 Reach highest, retracted	1513 mm (59.6 in)	1546 mm (60.9 in)
8 Reach lowest, retracted	1469 mm (57.8 in)	1666 mm (65.6 in)
9 Reach lowest, farthest	2488 mm (98 in)	2706 mm (106.5 in)
10 Reach highest, farthest	2765 mm (108.9 in)	2825 mm (111.2 in)
11 Reach maximum	2880 mm (113.4 in)	3037 mm (119.6 in)

*With 30.5 x 32 tires

535C Grapple — Continuous Rotation



	Bunching	Thinning*
1 Grapple capacity	1.34 m^2 (14.4 ft^2)	1.54 m^2 (16.6 ft^2)
2 Tip to tip height	1981 mm (78 in)	2108 mm (83 in)
3 Tong opening	3124 mm (123 in)	3226 mm (127 in)
4 Full open height	1832 mm (72.1 in)	1905 mm (75 in)
5 Minimum stem diameter	190 mm (7.5 in)	183 mm (7.2 in)
6 Fully closed height	1371 mm (54 in)	1371 mm (54 in)

*Thinning grapple is intended only for use in thinning applications

Standard Equipment

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

- Electrical
  - 24V electrical system
  - Alarm, back-up
  - Alternator, 80 amp
  - Batteries, maintenance free (2-1000 CCA)
  - Lighting system, exterior lights (4 total)
  - Main disconnect switch
  - Starter, electric, heavy duty
  - Starting and charging system
  - Diagnostic connector
  - Horn, warning
- Operator Environment
  - 12V accessory power port
  - Seat, air suspension
    - 30° swivel, 3 position locking
    - Seat belt
  - Beverage holder
  - Cab, ROPS/FOPS certified
  - Computerized Monitoring System
    - Instrumentation, Gauges:
      - Engine coolant temperature
      - Fuel level
      - Hydraulic oil temperature
      - Tachometer
      - Torque converter oil temperature
    - Instrumentation, Warning Indicators:
      - Autograb
      - Brake oil pressure
      - Differential locks
      - Engine
      - Engine oil pressure
      - Lockup clutch
      - Parking brake
      - Primary steer pressure
      - Secondary steer pressure (if equipped)
      - Starting aid
      - System voltage
      - Transmission filter bypass
      - Winch freespool (if equipped)
      - Work lights
    - Instrumentation, Digital Data
      - Computerized diagnostics and monitoring
      - Engine rpm
      - Gear and direction
      - Odometer
      - Service hour meter
    - Product Link
      - PL321 with AssetWatch
    - Headliner, Floormat, and Domelight
    - Mirror, rear view
    - Steering wheel, tilt and telescoping
    - Electronic transmission mounted controls
- Power Train
  - Air cleaner, 2-stage with precleaner
  - Brakes
    - Parking
    - Service, four-wheel enclosed disc
  - Differential locks (front, rear)
  - Driveline slipjoint, lubed for life
  - Engine, Cat C7, ACERT™ Technology, ATAAC
  - Fan, blower
  - Filters, fuel/engine air, primary/secondary
  - Final drives, inboard planetary
  - Fuel transfer pump (electric)
  - Fuel tank, high capacity
  - Lock-up torque converter
  - Muffler
  - Radiator with clean-out doors
  - Steering, variable flow-modulated 1/4 turn
  - Transmission, countershaft powershift (5F/3R)
  - Universal joints, lubed for life
- Hydraulics
  - Closed center-load sensing system
  - Hitch hoses, Caterpillar ToughGuard™
  - Line filter, full flow return
  - Hydraulic oil cooler, Spin-on filters
  - Variable displacement piston pump, 46 gal/min (174.1 L/min)
- Other standard equipment
  - Articulation lock link
  - Axle, high performance heavy-duty
  - Debris baffles
  - Brush sweeps, front
  - Ecology drains (engine, hyd tank, axles, transmission)
  - Engine enclosures, hinged
  - Guards, hinged – bottom and radiator
  - S•O•S℠ sampling ports
  - Vandalism protection, lockable doors and cap locks

Optional Equipment

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

Arch
- Dual function
- Single function
- Cable skidding
- Industrial arrangement

Axles
- Heavy duty (wide tire/chains)

Blade
- Narrow decking
- Wide decking
- Extended Decking

Cab, enclosed, with window screens
- ROPS, open
- ROPS, enclosed with heat/AC
- Window screens
- Wipers, front and rear

Electrical
- Converter, high capacity 12V, 10A continuous, 15A peak
- Jump start receptacle

Fenders, heavy duty

Grapples – Cat Continuous Rotation
- Bunching
- Sorting
- Thinning

Lights
- Additional 8 (2 front, 2 rear, 2 per side)

Pre-cleaner, turbine

Starting aid package, cold weather

Steering, secondary

Tires and Tubes, set of four, logger (LS-2)
- 30.5L-32, 20PR
- 30.5L-32, 26PR
- 35.5L-32, 20PR
- 35.5L-32, 26PR
- Dual ring capable
- Narrow overall width options

Water tank

Winch
- Grapple
- Cable skidding

535C Wheel Skidder

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

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

AEHQ5671-01 (02-10)

Replaces AEHQ5671

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