535B Skidder





| Cat [®] 3126 DITA diesel | |
|-----------------------------------|--|
| 149 kW | 200 hp |
| | |
| 3533 mm | 139.1 in |
| | |
| 1.34 m² | 14.4 ft ² |
| | |
| 16 919 kg | 37,300 lb |
| | 149 kW 3533 mm 1.34 m ² |

535B Skidder

The 535B Skidder is built to exceed all expectations for skidding performance, reliability and comfort, while maximizing productivity.

Performance - Power Train

The field-proven Cat 3126 DITA diesel engine, heavy-duty torque converter with lock-up, five speed transmission and re-engineered differential lock system provide higher horsepower to the ground to maximize performance and productivity, and minimize fuel consumption. **pg. 4**

Performance - Hydraulics

The state-of-the-art closed-center, variable displacement, pressure compensating hydraulic system provides power for braking, steering, blade and grapple functions. **pg. 5**

Durability - Undercarriage

The exclusive front axle design, expanded tire options, and larger footprint provide outstanding skidding performance and a comfortable ride for the operator. **pg. 6**

Serviceability

Regular maintenance is simple with easy access to daily service points. Access to less frequent service points is also simplified. Major components are modular and most can be removed without disturbing or removing others. On-board diagnostic systems help prevent problems, and electronic analysis shortens analysis and repair time for higher productivity. pg. 10

Customer Support

Your Cat dealer offers a wide range of services that help you operate longer with lower costs. **pg. 11**



Engineered for demanding work.
This skidder is a state-of-the-art
machine that represents the
Caterpillar® commitment to the
logging industry.
Reliable, durable operation.
Rugged construction and easy
maintenance provide long hours of
service with the low operating costs
you expect from Cat machines.

Durability - Structures

The 535B mainframe, hitch and decking blade are designed and built to surpass the expectations of the logging industry. **pg. 7**

Application Flexibility

The 535B Wheel Skidder provides unsurpassed performance and application flexibility due to superior fore-aft stability, torque converter with lock-up power train, ground clearance and an extended wheelbase. **pg. 8**

Operator Comfort

The 535B operator environment uses an ergonomic design that creates a comfortable work area with easy-to-use machine controls to reduce fatigue and increase efficiency and productivity.

pg. 9



Performance - Power Train

The 535B Skidder combines the Cat 3126 DITA engine and torque converter/direct drive for relentless pulling power.



3126 DITA Engine. The Cat 3126 delivers reliable power with low emissions, excellent fuel economy, and traditional Caterpillar durability.

Engine Design. Precise engineering and four-stroke cycle provide power, reliability, serviceability and fuel economy.

Direct-Injection Fuel System. Individual unit fuel injectors deliver efficient, accurate fuel metering, reduced emissions, reliable power, high torque rise and responsive performance.

Turbocharger. Enhances performance and engine efficiency, especially at high altitudes, by increasing air supply to the cylinders for excellent combustion.

Aftercooler. Jacket water aftercooler reduces smoke and emissions by providing cooler, more efficient combustion. This also extends the life of the piston rings and bore.

Fuel Pre-filter. Two high-efficiency fuel filters in series with a water separator element ensure excellent fuel cleanliness for extended injector and fuel system life.

Torque Converter. The large, heavyduty torque converter with a lockup clutch is matched to the Cat 3126 engine for excellent rimpull and improved skidding performance.

High Breakout Loads. The 535B torque converter is also well suited for the high breakout loads required in grapple skidding.

Travel Speeds. Direct drive capability allows high travel speeds and minimal power train component wear.

Reduced Wheel Slip. Direct drive capability reduces wheel slip, which minimizes tire wear, component stress and fuel consumption.

Lock-Up Clutch. The integral lock-up clutch allows operation in converter drive or direct drive for high efficiency hauling, faster travel speeds, and reduced shock loads to the drive train.

• Auto Lock-up locks the converter clutch whenever the torque converter is in direct drive, maximizing travel speed and rimpull for fast, fuel-efficient hauling.

Five-Speed Transmission. The Caterpillar powershift countershaft transmission easily matches engine power to the load size and ground conditions. Gear 1 provides industry leading rimpull capability for heavy load applications, gears 2, 3 and 4 are for lighter loads and higher speed operations, while gear 5 provides excellent empty return speeds.

Differential Locks. Hydraulically engaged differential locks in both axles significantly expand the operating range of the 535B. They reduce tire slip during turns, improve flotation, and reduce tire wear. In addition, they enhance maneuverability by improving traction and allowing a tighter turning radius.

Performance - Hydraulics

State-of-the-art hydraulic system contributes to system efficiency and operational ease and productivity.



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

Less Hydraulic Pump Demand. The hydraulic pump doesn't run continuously under load, but operates only when needed. This lowers horsepower consumption, maximizes power to the ground as well as loading and grapple forces. It also increases fuel efficiency, extends hydraulic component life, and reduces system heat.

Auto-Grab Feature. Constantly monitors tong pressure and adjusts as needed to securely hold grapple loads. Like the load sensing hydraulic system, Auto-Grab places demand on engine horsepower only when the system senses a change in the load that requires an increase or decrease in tong pressure. It is easily activated on demand by the tong close switch located on the righthand control lever. Tractor operation is much easier, constant tong pressure is maintained, and operating costs are reduced through greater fuel efficiency and less time spent re-gripping slipped loads.

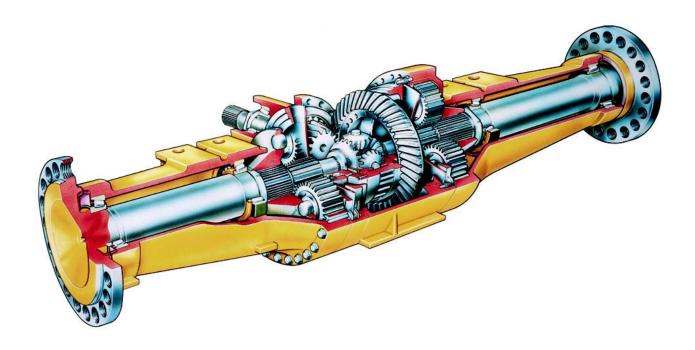
Winch. The 535B uses a high capacity winch with four-function control. This self-contained unit has a separate oil pump using winch sump oil for control, and to cool and lubricate the winch.

Cat Hoses. Caterpillar hose technology allows high pressures for maximum power and reduced downtime, and intelligent routing minimizes exposure to damage.

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

Durability - Undercarriage

State-of-the-art engineering of rugged undercarriage components and systems for the 535B wheel skidder sets the industry standard for reliability and durability.



Cradled Front Axle. Exclusive to Caterpillar wheel skidders, the cradled front axle with a high pivot center acts as a working counterweight, and delivers enhanced performance and operator comfort. It provides excellent fore-aft stability for large grapples and the dual-function arch. Heavy-duty trunnion bearings assure durable, reliable operation. The 15 degree oscillation absorbs minor shock loads, isolating the cab from axle movement for a smoother ride.

Final Drives. Heavy-duty inboard final drives are protected from the harsh logging environment, and use splash oil lubrication and cooling. This configuration makes wheel and tire removal and installation easier.

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.

Oil Sump. Full axle-length oil sump provides excellent lubrication and heat rejection for long component life. All components housed in the axle are splash lubricated, and outboard bearings are maintenance free.

 Large oil capacity delivers excellent heat rejection, ensuring proper lubrication **Differential Locks.** Differential locks provide added traction in poor ground conditions. On-the-go engagement / disengagement allows operator to maintain production without stopping.

Wheel Options. The 535B axle is capable of single or dual wheels. Dual or flotation tires (using 30.5 x 32 inner and 24.5 outer) increase flotation in wet, sloppy underfoot conditions, and improve stability on grades with large loads.

Durability - Structures

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

Box-Section Construction. The 535B frames use resilient box section construction that sets the industry standard for reliability and durability.

Front Frame. The front frame is designed with higher clearance to accommodate the front axle cradle mounts, and lower blade pivot mounting position.

Rear Frame. Tough rear frame provides the platform to support the grapple arch or cable arch configurations.

Ground Clearance. Maximized ground clearance improves maneuverability and avoids damage. Full belly guards protect all undercarriage components.

Decking Blade. Fabricated, box-section steel arms mount directly to the mainframe for superior strength.

Hitch. The bottom hitch is double-tapered for improved weight distribution, which reduces flexing stress and maintains tight joints.

Hitch Pin. Wide hitch pin spread significantly reduces horizontal loading on hinge pins and hinge pin bearings for improved pin and bearing life.

Arches. The 535B dual-function arch and the cable arch are designed and tested to exceed durability requirements.





Grapples. Durable, high capacity sorting or bunching grapples are matched to machine size and horsepower for optimum performance.

Sorting Grapples. Sorting grapples are best for quickly selecting a few stems from a pile of logs.

Bunching Grapples. The strong bunching grapples offer large capacity for improved production in harvesting smaller trees and large loads.

Grapple Snubbers. Grapple snubber life has been improved, reducing grapple swing, hydraulic hose stresses and increasing component life.

Winch. The 535B winch attachment delivers the power and durability ideal for log truck towing, self-retrieval and log skidding.

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

Application Flexibility

The 535B Wheel Skidder can easily handle the variety of tasks for today's loggers.



Balance. Long front and rear frames and a low center of mass create excellent skidder balance. The powerful mechanically driven, heavy-duty winch provides outstanding grapple or cable skidder performance.

Torque Converter. The heavy duty lock-up torque converter offers two drive options: direct drive, the only option in many skidders, delivers excellent skidding power and speed; while torque converter drive provides torque multiplication and speed control, which reduces the need for frequent transmission gear changes.

Wheelbase. The 535B skidder has a wider, longer wheelbase to handle dual-function arch and large capacity bunching grapples.

Tire Options. Expanded tire options allow the 535B to maintain outstanding skidding performance in a wide range of ground conditions.

Dual-Capable. The standard axle on the 535B is capable of using dual or flotation tires. Dual wheels increase flotation in poor underfoot conditions, and improve stability, especially when hauling large loads on a grade.

Arches and Blade. The 535B is available with either a dual-function arch for grapples, or the cable arch, and a decking blade to match the machine to the application.

Dual-Function Arch. Offers variable reach and large grapple capacities, well suited for large bundles of small stems.

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

Decking Blade. Efficiently clears landings and roads, and maintains stockpiles.

Operator Comfort

The 535B cab is designed for ease of operation, to maximize efficiency and productivity.

Comfortable Work Station. The 535B work station incorporates years of design innovations to reduce operator fatigue and increase productivity.

Air Suspension Seat. Standard air suspension seat swivels 30 degrees to the right for maximum comfort.

Sealed Cab. Sealed and pressurized for efficient heating and cooling, and for keeping out dust, fumes and insects.

Air-Conditioning. Standard with enclosed cab attachment.

Windows. Large polycarbonate windows protect the operator and allow an excellent side and rear view. Sliding glass windows protected by metal screens in both doors provide fresh air and communication outside the machine.

Cab Mounting. The modular ROPS/FOPS cab is resiliently mounted to the skidder frame to reduce vibration. The lowest entrance step has been lowered for easier cab access, and designed for greater durability.

Sound Insulation. Ample sound insulation reduces sound levels and boosts operator comfort.

Machine Controls. The comfortable 535B operator environment uses ergonomically designed and placed machine controls to reduce fatigue and increase productivity.

Steering Control. Tilts and telescopes, and incorporates controls for transmission direction and range selection for maximum convenience and productivity.

Transmission Controls. Transmission controls for forward, reverse and gear range are located on the steering wheel for easy fingertip control.



Single-lever Grapple Control. A single four-function lever controls all grapple and tong functions for simplified operation and reduced operator effort.

Decking Blade Control. Excellent modulation and precise control for various decking and clearing functions.

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

Lock-up Torque Converter Drive.

Selection switch and engagement indicator light helps operator match transmission speed range to skidding requirements.

Differential Lock Switch.

Ergonomically located rocker switch allows quick engagement of differential locks when needed. **Analog Gauges.** Four gauges indicate engine coolant temperature, hydraulic oil temperature, transmission oil temperature and fuel level.

Caterpillar Monitoring System.

Monitors key fluid levels and temperatures, gear speed and direction, and vital electrical systems. A threelevel warning system alerts the operator of potential problems.

Additional. Pre-wired for an entertainment radio, with two speakers, an antenna and standard built-in 24-to-12-volt converter. The machine is fitted with on-off key switch engine operation.

Serviceability

The most serviceable machines from the most committed dealers.



Built-in Servicing Ease. Caterpillar uses intelligent engineering to make regular maintenance procedures quick and simple. Easy access to daily service points increases the likelihood that maintenance will be done, extending machine service life and lowering overall operating costs. In addition, less service time means more working time and greater productivity.

Ground Level Access. Most filters and lube points are accessible from the ground. Remote lubrication points make daily attention to hard-to-reach joints easy.

Centrifugal Pre-Cleaner. Centrifugal pre-cleaner removes large debris before it reaches the internal air cleaner to provide significant engine protection.

S•O•SSM and Coolant Sampling Valves.

Provide a fast, convenient means of obtaining uncontaminated fluid samples, which improves analysis reliability.

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

Bolt-on Guards. Offer protection to critical components, but are easily removable for fast service access. Removable floor plates and side plate allow access to components under the cab.

Turbocharger Location. The relocated turbocharger provides easy access to the air cleaner and allows the cab compartment to be sealed from dust and debris.

Spin-on Oil Filters. Spin-on filters for fuel and oil systems reduce changing time, and help assure clean, tight seals.

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

Ecology Drains. Located on the axle and transmission to make regular maintenance easier, and protect the environment from accidental oil spills.

Electrical System. 24-volt electrical system delivers plenty of electrical power for engine cranking, lights, 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.

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 world-wide computer network to find in-stock parts to minimize machine down time. Save money with Cat Reman parts. You receive the same warranty and reliability as new products at cost savings of 40 to 70 percent.

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. This is also the time to look at dealer services that can be included in the cost of the machine to 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 training videotapes, literature and other ideas to help you increase productivity.

Maintenance Services. Choose from your dealer's range of maintenance services when you purchase your machine. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as S•O•SSM and Coolant Sampling and Technical analysis help you 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.

Engine

| Engine Model | Cat 3126 DITA | A diesel |
|-------------------------------|----------------|------------------------|
| Gross Power | 149 kW | 200 hp |
| Torque Rise | 61% | |
| Max Torque @ Rated Speed | 937.4 Nm @ 1 | 400rpm |
| Number of Cylinders | 6 | |
| Net Flywheel Power | 134 kW | 180 hp |
| Net Power - ISO 9249 | 134 kW | 180 hp |
| Net Power - SAE J1349 | 134 kW | 180 hp |
| Net Power - EEC 80/1269 | 134 kW | 180 hp |
| Governed Speed at Rated Power | 2,200 RPM | |
| Displacement | 7.24 L | 441.78 in ³ |
| Bore | 110 mm | 4.33 in |
| Stroke | 127 mm | 5 in |
| Derating Altitude | 3250 m | 10,663 ft |
| Air Cleaner | dry centrifug | al precleaner |
| Alternator | 75 Amp | |
| Fan Speed | 1,909 RPM | |
| Fan Type | blower | |
| Electrical System | 24 V | |
| Battery - Quantity | 2 | |
| Battery - Volts | 12 V | _ |
| Battery - Capacity | 950 CCA | |
| Starting System | direct electri | С |

- 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 3250 m (10,663 ft) altitude.
- 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 (7.001lb/gal)].
- The Caterpillar 3126DITA meets the current European and North American emission regulations (ISO 8178).

Power Train

| Travel Speed - Fwd. 1st | 6.36 kph | 3.95 mph |
|------------------------------|---------------|--------------|
| Travel Speed - Fwd. 2nd | 8.94 kph | 5.55 mph |
| Travel Speed - Fwd. 3rd | 10.87 kph | 6.75 mph |
| Travel Speed - Fwd. 4th | 15.28 kph | 9.49 mph |
| Travel Speed - Forward 5th | 27.53 kph | 17.1 mph |
| Travel Speed - Rev. 1st | 6.18 kph | 3.84 mph |
| Travel Speed - Rev. 2nd | 10.46 kph | 6.5 mph |
| Travel Speed - Rev. 3rd | 18.6 kph | 11.55 mph |
| Max Drawbar Pull | 184 kN | 41,350 lb |
| Torque Converter - Model | 3310 Lock-up |) |
| Torque Converter - Type | Lock-up, sing | gle stage |
| Transmission | Countershaft | :-5 fw/3 rev |
| Steering | hydraulic | |
| Brakes - Service Type | hydraulic, en | cl. wet disc |
| Brakes - Parking Type | drum | |
| Transmission Cooler Location | Lower tank r | adiator |
| Transmission Cooler Type | plate | |
| | | |

Hydraulic System

| Circuit Type | Closed cntr l | oad sensing |
|-------------------------------|----------------|---------------|
| Pump Type | Axial piston | |
| Pump Output @ 2200 RPM | 190 L/min | 50 gal/min |
| Reservoir Tank Capacity | 62.5 L | 16.5 Gal |
| Relief Valve Setting | 21 000 kPa | 3,045 PSI |
| Steering Valve | dir. linkage, | non follow-up |
| Steering Cylinder - Bore | 76.2 mm | 2.97 in |
| Steering Cylinder - Stroke | 436.4 mm | 17.02 in |
| Steering Cylinder - Rod | | |
| Diameter | 44.45 mm | 1.73 in |
| Steering Relief Valve | | _ |
| Settings | 21 000 kPa | 3,045 PSI |
| Dozer Valve | direct linkag | е |
| Dozer Cylinder - Bore | 101.6 mm | 3.96 in |
| Dozer Cylinder - Stroke | 470 mm | 18.33 in |
| Dozer Cylinder - Rod Diameter | 57.1 mm | 2.23 in |
| Grapple Valve | 3-4 stack, pil | ot control |
| Grapple System Relief Valve | | |
| Settings | 21 000 kPa | 3,045 psi |

| Grapple | | |
|-------------------------------|------------|----------------------|
| | 2 | |
| Bunching Capacity | 1.34 m² | 14.4 ft ² |
| Sorting Capacity | 1.23 m² | 13.2 ft ² |
| Bunching - Full Open Height | 1983.7 mm | 78.1 in |
| Bunching - Fully Closed | | |
| Height | 1577.3 mm | 62.1 in |
| Bunching - Minimum Stem | | |
| Diameter | 147.32 mm | 5.8 in |
| Bunching - Reach @ Full Open | 797.56 mm | 31.4 in |
| Bunching - Tip to Tip Height | 2385.06 mm | 93.9 in |
| Bunching - Tong Opening | 3124.2 mm | 123 in |
| Sorting - Full Open Height | 1588 mm | 62.5 in |
| Sorting - Fully Closed Height | 1880 mm | 74 in |
| Sorting - Minimum Stem | | |
| Diameter | 76.2 mm | 3 in |
| Sorting - Tip to Tip Height | 2324.1 mm | 91.5 in |
| Sorting - Tong Opening | 2641.6 mm | 104 in |
| | | |

| Arch | | |
|-------------------------------|--------------|----------|
| Arch Types | Dual Functio | on/Cable |
| Dual Function - Reach Max | 2890.5 mm | 113.8 in |
| Dual Function - Lift Max | | |
| Reach | 1049.2 mm | 41.31 in |
| Dual Function - Lift Highest, | | |
| Farthest | 1727.2 mm | 68 in |
| Dual Function - Lift Highest, | | |
| Retracted | 2644.1 mm | 104.1 in |
| Dual Function - Lift Lowest, | | |
| Farthest | 2814.3 mm | 110.8 in |
| Dual Function - Lift Lowest, | | |
| Retracted | 1023.6 mm | 40.3 in |
| Dual Function - Reach | | |
| Highest, Farthest | 2743.2 mm | 108 in |
| Dual Function - Reach | | |
| Highest, Retracted | 1331 mm | 52.4 in |
| Dual Function - Reach Lowest, | | |
| Farthest | 2814.3 mm | 110.8 in |
| Dual Function - Reach Lowest, | | |
| Retracted | 1579.9 mm | 62.2 in |

| Winch | | |
|------------------------------|-------------|------------|
| Line Pull - Std Drum | 194 kN | 43,600 lb |
| Line Speed | 103.6 m/min | 340 ft/min |
| Drum Capacity 19.0mm (3/4in) | 45 m | 148 ft |
| Drum Capacity 22.2mm (7/8in) | 32 m | 106 ft |
| Drum capacity 25.4mm (1in) | 25 m | 82 ft |
| Drum Diameter | 254 mm | 10 in |
| Drum Width | 171.5 mm | 6.69 in |

| Service Refill | | |
|-------------------------------|--------|-----------|
| Fuel Tank | 315 L | 83.16 Gal |
| Cooling System | 50 L | 13.2 Gal |
| Differential & Final Drives - | | |
| Front | 52 L | 13.73 Gal |
| Differential & Final Drives - | | |
| Rear | 52 L | 13.73 Gal |
| Engine Oil | 27 L | 7.13 Gal |
| Transmission & Torque | | |
| Converter | 54 L | 14.26 Gal |
| Mechanical Winch | 24.5 L | 6.47 Gal |
| Hydraulic System - Tank | 62.5 L | 16.5 Gal |
| Hydraulic System - Total | 123 L | 32.47 Gal |

| Dimensions | | |
|------------------|-----------|-----------|
| Wheelbase | 3533 mm | 139.1 in |
| Length | 6195.4 mm | 241.62 in |
| Width | 3385 mm | 133.3 in |
| Height | 3233.5 mm | 127.3 in |
| Ground Clearance | 581.7 mm | 22.9 in |

Weights

| Est Operating Weight | 16 919 kg | 37,300 lb |
|--|-----------|-----------|
| Arch - Dual Function | 1121 kg | 2,472 lb |
| Arch - Cable Skidding | 769 kg | 1,696 lb |
| Decking Blade | 796 kg | 1,755 lb |
| Dozer, Extended Width | 1015 kg | 2,238 lb |
| Enclosed Cab | 63 kg | 138 lb |
| Enclosed ROPS + AC | 1205 kg | 2,657 lb |
| Frame - Cable Fenders | 1320 kg | 2,911 lb |
| Frame - No Fenders | 1018 kg | 2,245 lb |
| Grapple - Bunching 1.38 m ² / | | |
| 14.4 ft ² | 1080 kg | 2,380 lb |
| Grapple - Sorting 1.23 m ² / | | |
| 13.2 ft ² | 1044 kg | 2,300 lb |
| Instrument Panel Guard | 1 kg | 2 lb |
| Lights - 4 Standard | 67 kg | 148 lb |
| Lights - 8 Optional | 163 kg | 359 lb |
| Open ROPS | 1073 kg | 2,366 lb |
| Operating Weight - Cable | 769 kg | 1,695 lb |
| Starting Aid, Ether | 5 kg | 11 lb |
| Tires - 30.5L x 32, 16 PR | 2353 kg | 5,188 lb |
| Tires - 35.5L x 32, 16 PR | 2955 kg | 6,510 lb |
| Winch | 785 kg | 1,731 lb |
| | | |

 Operating weight includes enclosed cab, 30.5 tires, blade, dual-function arch, 1.38 m²/14.4 ft² bunching grapple, standard lights, full fuel tank.

Standards

Cab

- Enclosed cab with or without screens and open canopy with screens meet operator protective structure criteria for forestry equipment SAE J1084 APR80
- When properly installed and maintained, the enclosed cab
 offered by Caterpillar when tested with doors and windows
 closed according to ANSI/SAE J1166 MAY90, meets OSHA
 and MSHA requirements for operator sound exposure limits
 in effect at the time of manufacture.

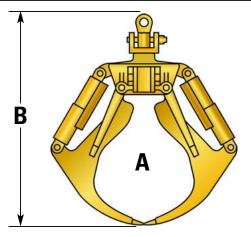
ROPS

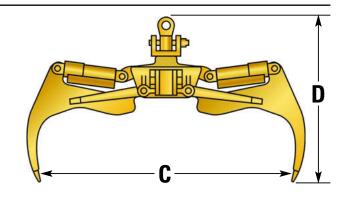
 ROPS (Rollover Protective Structure) offered by Caterpillar for the machine meets ROPS criteria SAE J1040 APR88 and ISO 3471-1994. FOPS (Falling Object Protective Structure) meets FOPS criteria SAE J231 JAN81 and ISO 3449-1984.

Brakes

 Brakes meet the following standards: OSHA, SAE J1473 OCT90, ISO 3450-1985

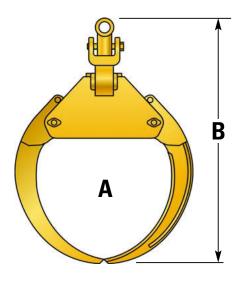
535B Grapples



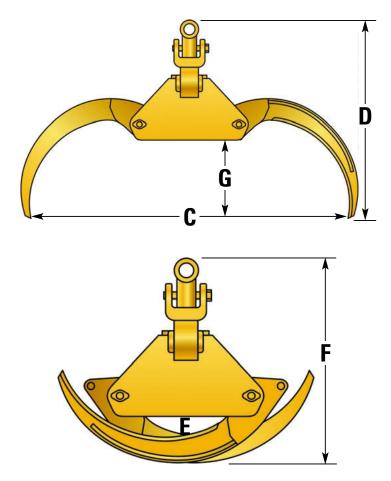


Sorting Grapple

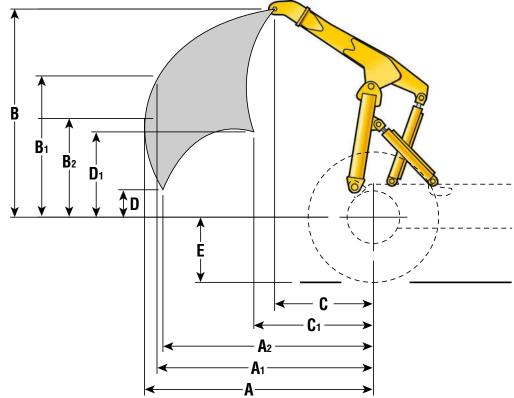
| Dimension | Sorting | Bunching |
|------------------------------------|---|---|
| A Grapple capacity | 1.23 m ² (13.2 ft ²) | 1.34 m ² (14.4 ft ²) |
| B Tip to tip height | 2324 mm (91.5 in) | 2385 mm (93.9 in) |
| C Tong opening | 2642 mm (104 in) | 3124 mm (123 in) |
| D Full open height | 1588 mm (62.5 in) | 1984 mm (78.1 in) |
| E Minimum stem diameter | 76.2 mm (3 in) | 147 mm (5.8 in) |
| F Fully closed height | 1880 mm (74 in) | 1577 mm (62.1 in) |
| G Reach @ full tong opening | _ | 797 mm (31.4 in) |







Arch Configuration



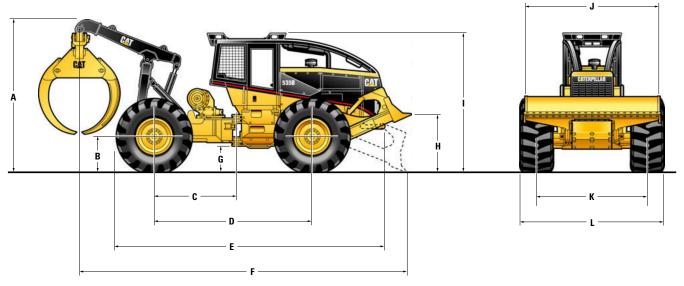
| Dual F | unction | n |
|--------|---------|---|

| Dimension | | Dual Function |
|------------|-------------------------|--------------------|
| Α | Reach maximum | 2890 mm (113.8 in) |
| A1 | Reach, highest farthest | 2743 mm (108.0 in) |
| A2 | Reach, lowest farthest | 2814 mm (110.8 in) |
| В | Lift maximum | 2644 mm (104.1 in) |
| B 1 | Lift, highest farthest | 1727 mm (68.0 in) |
| B2 | Lift at maximum reach | 1049 mm (41.3 in) |
| C | Reach minimum | 1331 mm (52.4 in) |
| C1 | Reach, nearest lowest | 1580 mm (62.2 in) |
| D | Lift minimum | 2814 mm (110.8 in) |
| D1 | Lift, lowest nearest | 1024 mm (40.3 in) |
| E | Loaded tire radius | 724 mm (28.4 in) |

Dimensions

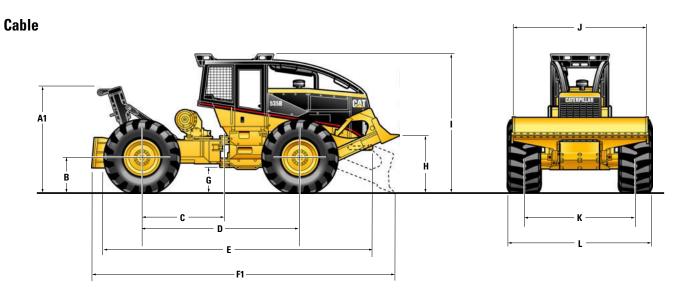
All dimensions are approximate.

Grapple



| Dimension | | 535B |
|-----------|--|--------------------|
| Α | Ground level to center line of top roller — dual function (grapple)* | 3419 mm (134.6 in) |
| A1 | Ground level to center line of top roller (cable)* | 2694 mm (106.1 in) |
| В | Ground level to axle center line* | 724 mm (28.5 in) |
| C | Rear axle center line to pin | 1798 mm (70.8 in) |
| D | Wheel base | 3533 mm (139.1 in) |
| E | Length without dozer or arch | 6195 mm (243.9 in) |
| F | Overall length — dual function (grapple) | 6487 mm (255.4 in) |
| F1 | Overall length (cable) | 6945 mm (273.4 in) |
| G | Ground clearance* | 463 mm (18.2 in) |
| Н | Decking blade lift height* | 1226 mm (48.3 in) |
| I | Height to top of cab* | 3233 mm (127.3 in) |
| J | Decking blade width | 2678 mm (105.4 in) |
| K | Tread width | 2260 mm (88.0 in) |
| L | Overall width | 3385 mm (133.3 in) |

^{*}With 30.5 x 32 tires



Standard Equipment

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

Electrical

- 24-volt system
- 75 Amp alternator
- 2) 12-volt maintenance free, high CCA batteries
- alarm, back-up
- warning horn
- sealed electrical connectors
- color coded and numbered wires

Guards

- engine enclosures
- ground access for daily service
- engine fan guard
- hinged radiator grill
- integral underguards
- front brush sweeps

Operator Environment

- air suspension seat
 - 30 degree swivel
 - 3 position locking
 - retractable seat belt
- two pedal operation
- rearview mirrors
- tilt and telescoping steering wheel
- cup holder
- computer diagnostics and monitoring with three level information system
- controls and gauge package
 - electronic transmission control on steering wheel locking differential selector and indicator light lock-up torque converter selector and indicator light

Power Train

- Cat 3126 turbocharged and aftercooled engine
- electric pre-heat for cold starting
- multi-stage, dry centrifugal precleaner
- two-stage radial seal filter air cleaner
- radiator
- blower radiator fan
- coolant- 50% extended life antifreeze 50% anti-boil protection
- lock-up torque converter
- five speed forward countershaft transmission
- brakes: service, secondary, parking
- four-wheel enclosed wet disc hydraulic service brakes
- inboard planetary final drives
- front and rear differential locks, with isolated control system
- high capacity fuel tank
- lubed for life driveline slipjoint and universal joints
- variable flow-modulated 1/4 turn steering
- muffler

Hydraulics

- closed center-load sensing system
- variable displacement piston pump
- full flow return line filter

Other Standard Equipment

- ecology drains on axles and engine
- vandalism protection
- cap locks fuel tank, hydraulic tank, oil dipstick, oil filler

Optional Equipment

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

Alternator - 100 Amp

Arch

- dual function
- cable skidding

Cold weather starting aid package

Decking blade

- narrow
- wide with bolt on edge

Enclosed cab window screens

Frame

- no fenders
- grapple fenders
- cable fenders

Winch arrangement

Grapples

- 14.4 ft²/1.34 m² bunching
- 13.2 ft²/1.23 m² sorting

Lights

- four standard
- eight optional (twelve total)

Operator environment

- open ROPS
- enclosed ROPS + AC

Tires

- 30.5L x 32, 16 PR
- 35.5L x 32, 16 PR
- duals
- 30.5 x 32 inner
- 24.5 x 32 outer

Cab screens

Secondary steering

Ether starting aid

535B Skidder

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.

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