

# 558 / 558 LL

## Forest Machine



### Engine

Engine Model	Cat® C7.1 ACERT™	
Gross Power	178 kW	239 hp

### Weights

558 (General Forestry, Reach, Side Entry Cab)	38 664 kg	85,239 lb
558 LL (Log Loader, Under/Under, Side Entry Cab)	42 264 kg	93,176 lb
558 LL (Log Loader, Over/Under, Side Entry Cab)	42 186 kg	93,004 lb
Estimated operating weight w/o attachment		



Cat 558 / 558 LL Forest Machine Features

Performance

Enhanced by dramatically improved swing torque and increased engine and hydraulic horsepower, the 558 and 558 LL deliver strong all-around performance, stability, and work tool capability.

Efficiency

Machine design, a new engine, and optimized components and parameters provide exceptional fuel savings with maximum productivity. Fuel economy is improved compared to previous model.

Application Versatility

Purpose-built hydraulics and new boom and stick configurations are capable of operating a wide range of work tools. A new grouser option and purpose-built rear entry or processor cab increase machine applicability on the job site.

Operator Comfort

New rear entry cab and enhanced side entry cab increase overall efficiency through premium features that improve the overall operator experience. LED lights and heated/cooled seats are standard equipment on both cab arrangements.

Operating Costs

Proven Cat® components continue to provide excellent reliability. Thick plating, box frame structures, and forestry duty undercarriages provide longer life, reducing downtime and operating costs per hour.

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Cat Forest Machines (FM) are versatile, purpose-built machines that can be customized to perform a complete range of tasks for forestry operations. First introduced in the 1990s, this family of machines has become the industry standard in many logging applications. The 500 series forest machines will continue to set trends in the industry.

This is the second model in the 500 series to meet today’s U.S. EPA Tier 4 Final emission standards. The 558 and 558 LL feature outstanding performance through increased horsepower and

swing torque, while delivering excellent fuel efficiency and low operating costs. A premium rear entry cab is available on the 558 LL platform, which maximizes operator experience.

The Cat 558 is available in a general forestry (558) version for road building, grapple applications, site preparation, and processing. It is also available in a log loader (558 LL) version for log loading, shovel logging, roadside processing, butt-n-top loading, power clam applications, and millyard activities.



# Power Train

Power you need, fuel economy you deserve



**Engine**  
Cat C7.1 ACERT Tier 4 Final engine with increased gross power, 178 kW (239 hp), provides maximum performance under load and boasts strong fuel efficiency. The C7.1 engine and emissions system meets U.S. EPA emissions standards.

**Performance**  
Engine horsepower increase translates to the power you need for strong multi-functioning, improved implement performance, and more production.

**Efficiency**  
The 558 and 558 LL feature isochronous speed control to maintain a constant engine speed, in most applications, to improve fuel consumption. A new level of fuel economy has been achieved with these settings, while power is maintained with a larger pump that produces more hydraulic oil flow.

**Electronic Control Module**  
The Electronic Control Module (ECM) works as the ‘brain’ of the engine’s control system, responding quickly to operating variables to maximize engine efficiency. Fully integrated with sensors on the engine, the ECM stores and relays data on conditions such as RPM, fuel consumption, and diagnostic information. It provides sophisticated control of fueling for maximum fuel economy and reduced emissions.

**Advanced Fuel Systems**  
The high pressure common rail fuel system with full electronic injection further improves precision, which helps to reduce soot and boosts engine performance. Highly regulated timing controls the fuel injection process, for a cleaner, more efficient fuel reaction.

**Air Management**  
The Tier 4 engine features innovative air management systems that optimize airflow and enhance power, efficiency, and reliability. Dual, fixed geometry turbochargers allow maximum turbo performance to help improve productivity, fuel efficiency, long life, and low operating costs.

**Cat NOx Reduction System**  
The Cat nitrogen oxide (NOx) reduction system captures a small quantity of exhaust gas and routes it back into the combustion chamber to help reduce temperature and reduce nitrogen oxide emissions. This system is the result of more than a decade of Caterpillar research to develop reliable, proven technology.



**An Emissions Solution that Works**  
The C7.1 ACERT engine meets U.S. EPA Tier 4 Final and EU Stage IV emission standards using a blend of technologies to optimize performance, whatever the conditions. The Selective Catalytic Reduction (SCR), Diesel Oxidation Catalyst (DOC), and Ammonia Oxidation Catalyst (AMOX) systems effectively remove nitrogen oxide gases from the exhaust, while a service-free Diesel Particulate Filter (DPF) removes soot and other particulates. All Cat C7.1 ACERT emissions technologies are designed to be transparent, so you are free to simply start the machine and be productive.



**Diesel Exhaust Fluid**  
Cat engines equipped with a SCR system, inject Diesel Exhaust Fluid (DEF) into the exhaust to reduce nitrogen oxide emissions. Diesel exhaust fluid is a precise solution of high purity chemical grade urea and de-ionized water. The DEF used in Cat SCR systems must meet requirements of the International Organization for Standardization (ISO), requirements that are met by many brands of DEF, including those that carry AdBlue or API certifications.



**Cooling System**  
The Cat C7.1 ACERT engine features an improved side-by-side cooling system, and cooling capacity increase of 33 percent over the previous machine. The radiator package has been updated, and fin spacing has increased 25 percent to improve airflow and cooling capability. Service access has improved with the ability to lift the air-to-air after-cooler out of the way.

A standard auto-reversing fan increases service intervals and maintains proper engine operating temperature. This belt driven fan is programmable and can be operated manually as well. During operation, the fan blade pitch is optimized based on intake temperature, coolant temperature, and hydraulic oil temperature. This helps to attain operating temperature quicker and reduces fuel consumption, therefore maximizing efficiency.

**Automatic Engine Speed Control**  
With automatic engine speed control, the machine will revert automatically to a lower idle speed when there is a pause or lull in operations, reducing fuel consumption. When the operator begins using the joysticks again, the engine automatically resumes normal operating rpm. This functionality can also be activated manually through the one-touch idle control located on the joystick handle.

There is also a choice of three power modes depending on the demands of the work tasks or application. They include high power, standard power, and eco mode. Modes can be easily changed on the console switch pad. These energy saving features maximize engine life and fuel efficiency, reduce sound levels, and reduce repair and maintenance costs.

**Air Filter**  
The radial seal air filter features a double-layer core for better filtration and extending service intervals. If debris plugs the filter above a pre-set level, the monitor displays a warning.

**Compatible with Biodiesel**  
The engine and common rail fuel system can operate on biodiesel fuel (B20) that meets ASTM 6751 standards, flexibility that allows for potential fuel savings.





# Hydraulics

Maximum efficiency for your application



### Maximum Power and Efficiency

The hydraulic system has been designed for a high level of efficiency and power, while delivering needed performance to implements and work tools. The pumps have been upsized to allow the engine to run at a lower rpm, reducing fuel consumption. This translates into processing more material while reducing your bottom line.

### System Design

The main pumps, control valves, and hydraulic oil tank are located close together to allow for shorter tubes and lines between components, which reduces friction and pressure drops.

### Main Control Valve Efficiency

One-piece, cast-block, back-to-back control valves are standard and help to further minimize power losses and increase efficiency through carefully designed ports and passageways. The control valve design also leads to increased reliability and serviceability, minimizing downtime. Auxiliary valves are mounted on top of the main valve.

### Operator Experience

Controllability is one of the main attributes of Cat Forest Machines, and a key contributor to this is the Negative Flow Control (NFC) system and the main control valve. The valve opens slowly when the range of joystick movement is small and opens rapidly when movement is faster. The system improves productivity with quick pump response and provides flow where it is needed. The result is faster implement speeds, smoother operation, and greater efficiency and performance.

### Integrated and Efficient Work Tools

Key work tool parameters and specific hydraulic components have been integrated into the machine and have been finely tuned for Cat work tools. The optimized machine package has proven to save fuel.

### Swing System

Validated and proven Cat swing drive system provides 17 percent higher swing torque on the 558 (GF) and 35 percent higher swing torque on the 558 LL. Better swing performance improves productivity and operator efficiency.



### Boom Regeneration Circuits

An electronic boom regeneration valve minimizes pump flow when the boom lowers by regenerating oil from one end of the boom cylinder to the other. This saves energy and improves fuel efficiency. It is optimized for any dial speed setting, which reduces pressure loss for better controllability, more productivity, and lower operating costs.

### Stick Regeneration Circuits

The 558 and 558 LL regenerate hydraulic oil flow from one end of the stick cylinder to the other end of the stick cylinder during stick-in operations – an approach that reduces expenses and saves money.



### Swing Priority Circuit

The swing priority circuit on the 558 and 558 LL uses an electric valve that is operated by the machine's Electronic Control Module (ECM). Compared to using a hydraulic valve, the electric valve enables more finely tuned control, which is critical in some operations.

### Hydraulic Snubbers

Boom and stick cylinders are equipped with snubbers to cushion shocks, increase cylinder life, and reduce sound, increasing uptime and productivity.

### Fine Swing Control

Standard fine swing control cushions start and stop of swing function for better implement control.



### Heavy Lift Mode

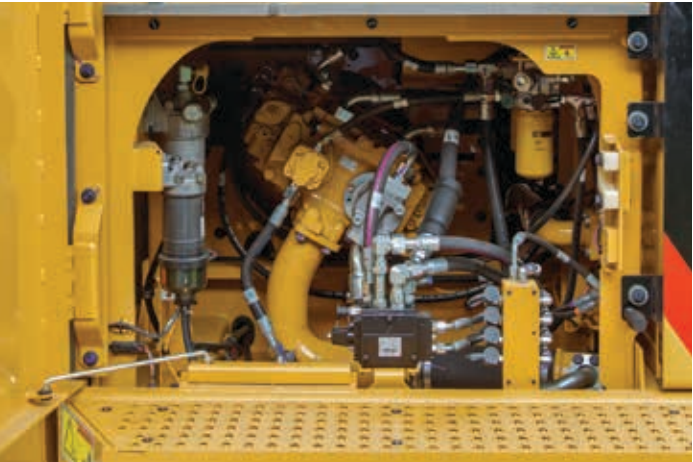
The heavy lift mode capacity increases 6 percent – an important benefit in some work conditions. Heavy lift mode reduces engine speed and pump flow to improve controllability in these situations.

### Auxiliary Hydraulics

The auxiliary valve is standard and various control circuits are available as attachments, allowing for operation of a large variety of work tools. One machine can be utilized in diverse applications, minimizing operating costs.

### Pilot System

The pilot pump is independent from the main pump group and provides pilot oil to control the boom and stick, swing, and travel valve functions.





# Work in Comfort

## Operator station reduces fatigue



### Cab

The workstation is spacious, quiet, and comfortable, ensuring high productivity all day. Controls, joysticks, and an ergonomically designed seat are placed strategically in order to reduce operator fatigue. A standard side entry cab, a side entry processor cab, and a rear entry cab are available to match all applications.

### Seat Comfort

Comfortable air suspension seat has varying adjustments for operator's height and weight. Adjustments include a reclining back, upper and lower seat slide, and height and tilt angle to keep the operator comfortable and productive. Wide adjustable armrests also are incorporated in the seat.

New heated and cooled seat functionality maintains operator comfort in all climates during long work days. A four-point seat belt is available on side entry cabs and is standard on rear entry cabs. For safety, a hydraulic activation lever located on the side of the seat must be in the "operate" position to allow machine control functions.



### Climate Control

A pressurized cab with updated bi-level air conditioner, heater, and defroster keeps the operator comfortable in all types of weather conditions. Other features include positive ventilation, forced air fan, and fresh air window with screen.



### Visibility

Cab design optimizes post location and placement of scratch-resistant polycarbonate windows to provide excellent visibility to the front, sides, and rear. Large skylight with sunshade provides excellent upward visibility. LED lights are included for increased visibility in night operations and windshield wipers are standard.



### Processor Cab

Optional side entry processor cab has 19 mm (0.75 in) front windows and other features needed for a processing application such as mounting bosses and electrical connections for processing computers.

### Monitor, Gauges

The monitor is a full-color Liquid Crystal Display (LCD) and is easy to see and navigate. It is 40 percent larger and has four times the screen resolution than the previous model. The keypad has been designed for increased durability. Four gauges display coolant temperature, hydraulic oil temperature, fuel level, and



DEF fluid level. It is equipped with warning lamp and buzzer for critical warnings, such as issues with engine oil pressure, coolant temperature, and oil temperature. Filters and fluid change intervals are available in the main menu. Machine information is displayed in the form of both text and icon and the monitor is capable of exhibiting various information in up to 42 different languages.

### Pre-Start Check

Prior to starting the machine, the system will check critical machine systems and warn the operator through the monitor in the event display area.

### Controls

Joystick controls have low lever effort and are designed to match natural wrist and arm position. The controls can be operated with an arm on the armrest, and the horizontal and vertical strokes have been optimized to lessen operator fatigue. Proportional control and push buttons are utilized, allowing maximum productivity.



### Consoles

Consoles are a simple, functional design to make it easy to operate switches, reducing fatigue, and maximizing visibility. Storage space is provided within the consoles to hold small items.

### Satellite Radio

Satellite radio and auxiliary audio port for MP3 players are standard. Two 12-volt power supply sockets are located near storage areas for charging.

### Certified Protection

The cab is designed and purpose-built for the toughest forestry applications. Certifications include ROPS, FOPS, OPS, OR-OSHA, and WCB. Windows are made of impact-resistant polycarbonate.

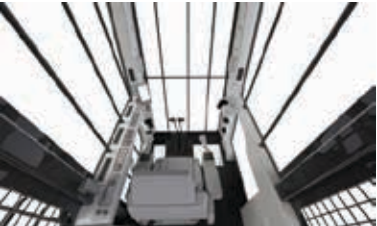
### Escape Hatch

An escape hatch at the rear of the cab roof allows exit from the cab or entry from the outside in case of an emergency.



### Rear Entry Cab

Optional rear entry cab, available in a 1.219 m (48 in) straight or cab-forward riser or a 1.829 m (72 in) cab-forward riser configuration, delivers spacious operator comfort and right side access to the machine on log loader models. Standard key FOB provides efficient night time access allowing the operator to illuminate their path onto and off the machine. Visibility is improved for shovel logging applications, through the use of floor windows.



High quality interior finishes, combined with important accessories help maximize the operator experience. The cab includes a cell phone booster, bluetooth, large cup

holder, cargo netting, and plenty of storage in addition to all standard cab features. A dual HVAC system ensures comfortable operating temperatures.

The rear entry cab features an innovative cab lock down system, that helps maximizes machine uptime before and after transport. Only one tool is required to simply loosen or tighten two lock downs, which are accessible from the outside of the riser. Visual indicators inside the riser assure the hold down system is secure for operation.





# Designed for the Work You Do

Purpose-built linkage, upper frame, and carbody

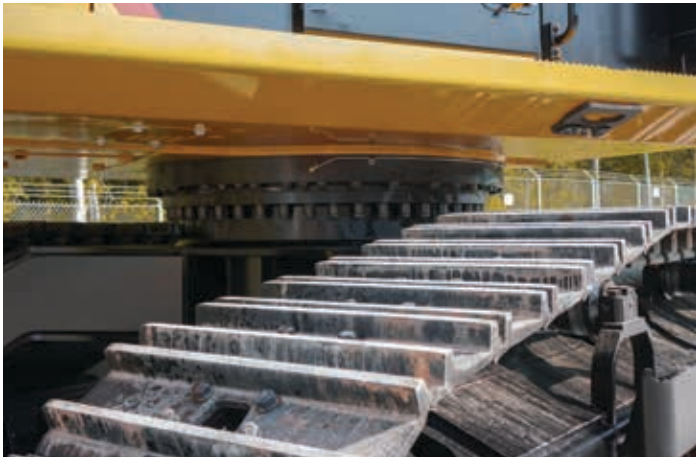


### Rugged Main Frame for Maximum Durability

- Outer frame utilizes curved side rails, which are die-formed for uniformity and strength
- Inverted U-channels span the width of the main frame and are formed – not fabricated – for superior strength and reduced weight
- Box section channels, certified for roll over protection, improve upper frame rigidity under the cab
- Boom tower and main rails are constructed of solid, high tensile strength steel, and reinforced at boom foot
- Swing drive area is reinforced into the main frame rails to support high stress loads, such as those found in shovel logging
- The boom foot and engine mount areas have multiple reinforcements, such as doubler plates and box sections, for additional strength
- The sheet metal supporting structure is integrated into the upper frame for additional durability

### Heavy-Duty, Purpose-Built Carbody

- Advanced, reinforced, purpose-built carbody design stands up in the toughest forestry applications
- Heavy-duty carbody structure provides stability and durability while improving operating effectiveness
- The high, wide design provides maximum ground clearance for forestry applications and maneuvering over large obstacles
- Long track length and wide gauge contribute to excellent overall stability, especially in applications requiring work over the side



- Upper structure weight and stresses are distributed evenly across the full length of the long track roller frame
- Smooth transitions and long robotic welds help reduce stresses at the carbody-to-roller frame junctions for excellent durability and maintain high quality and consistency during the welding process

### Boom and Stick

- Large internal baffle plates are integrated into both the boom and stick internal structures for increased durability
- Durable box section design that includes thicker plating provides for maximum boom and stick life

### Counterweight Fuel Tank

New 989 L (261 gal) counterweight fuel tank maximizes fuel capacity, without compromising storage space on the right side of the machine. Fuel tank incorporates integrated lifting links for safe, efficient removal.

### Storage

A new 0.71 m<sup>3</sup> (25 ft<sup>3</sup>) storage compartment allows for easy ground level access to bars, chains, tools, and other supplies that are needed on a daily basis for machine and work tool maintenance.



# Guarding

Protection for your forestry machine investment



### Shoe Support Guards

Standard full length track shoe support guards help protect rollers and provide increased rigidity that enables track link alignment in rough underfoot conditions.

### Undercarriage Protection

Heavy-duty final drive and hydraulic swivel guards keep debris out and protect components for increased uptime.

### Right Front Corner Guard

Right front corner guard has an added tree deflector arm to provide increased protection from debris and falling trees and limbs. The arm can be rotated into a vertical position for transport.



### Heavy-Duty Access Doors

Heavy-duty access doors are made from 5 mm (0.20 in) high strength, low alloy steel. Positive locking latch stays closed in forestry applications, and hinges have larger diameters than standard doors.

### Engine Hood

New single piece steel hood design exposes entire engine and cooling compartment.

### Stick Cylinder Guard

Standard heavy-duty stick cylinder guard protects hydraulic lines, fittings, and cylinder components from trees and debris.





# A Firm Foundation

Stable, durable undercarriage



### Heavy-Duty Grease Lubricated Track

The 349 HEX HD track links are 216 mm (8.5 in) in pitch, and are greased for added durability and reliability. Grease lubricated track allows more usable horsepower because of reduced internal friction; it also extends internal bushing and system wear life, reduces noise, and reduces the chance for frozen track joints.

### Heavy-Duty Rolling Components

Heavy-duty top carrier rollers with dual supports provide superior endurance. Nine heavy-duty bottom rollers stand up to the toughest forestry applications. Features include greater sealability, higher resistance to deformation, and greater load carrying capacity.

### Heavy-Duty Final Drives

Durable, final drives provide maximum drawbar and appropriate travel speeds that increase productivity in the toughest logging applications.

# Pick Your Application

Versatile workhorse for forestry tasks



The 558 is available in two main machine configurations to meet the requirements of a wide range of forestry applications. The machines are optimized for each application with purpose-built hydraulics and customized boom and stick sets. The general forestry (558) configuration is available to complete work as a road builder, grapple carrier, or processor. The log loader (558 LL) configuration is the right choice for shovel logging, log loading, processor, butt-n-top, power clam, and millyard applications.

### 558 - General Forestry

#### Reach

The reach configuration utilizes a reach boom, is quick coupler ready from the factory, and can be configured with buckets, thumbs, and other attachments for road building applications.

#### Reach with Rotate

The reach with rotate configuration allows for the use of buckets and thumbs as well as clamshells and clearing grapples through additional hydraulic lines and an auxiliary pump circuit. The reach with rotate configuration can also be converted to be used in processor applications.

#### Front Omission

The 558 is available from the factory without a boom and stick for certain AEM work tools. The front omission configurations are available with or without boom cylinders.

### 558 LL - Log Loader

#### Under/Under

The under/under configuration is best suited for shovel logging and loading applications. The under-mounted heel cylinder provides maximum heeling force for shovel logging operations.

#### Over/Under

This configuration is optimized for loading and millyard applications by increasing lift height. The over-mounted heel cylinder provides maximum clearance to load and stack.

#### Processor

Hydraulics and optional heel allow the 558 LL to work efficiently and productively as a roadside processor. Integration of work tool and machine maximizes profit potential.

#### Butt-n-Top / Power Clam

The butt-n-top / power clam configuration, which includes an auxiliary piston pump, can be re-configured for use with AEM butt-n-top or power clam style attachments.



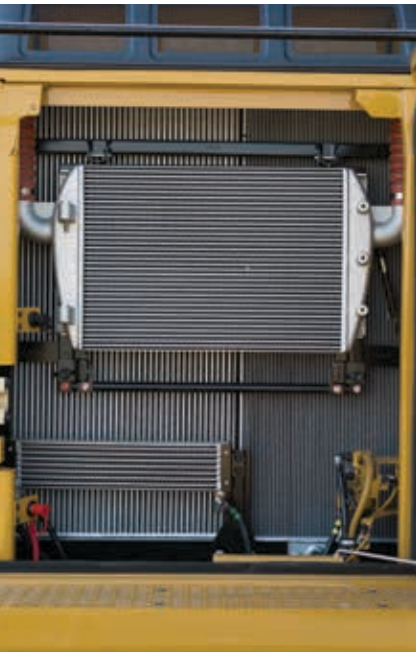
# Serviceability

Easy to access, easy to maintain, saving you time and money

## Ground Level Service

The 558 and 558 LL were designed to be easy to maintain and with the customer and service technician in mind. Many service locations are readily accessible at ground level, so critical maintenance can be completed quickly and efficiently. Wider and taller service doors enable better access to components.

## Radiator Compartment



The left rear service door allows convenient access to the engine radiator, oil cooler, and air-to-air after-cooler for easy service and cleaning. The after-cooler lifts out of the way for easy service of the coolant and hydraulic coolers. A drain cock is provided on the radiator for simplified maintenance. A new shunt tank for constant system pressure is located in the engine compartment. This compartment also houses the secondary fuel filter.

## Battery Compartment

The compartment located directly behind the cab contains the air filter, AC condensor, four standard batteries, ECMs, and the disconnect switch, all within easy access. The air filter features double element construction for superior cleaning efficiency. When the air filter plugs, a warning light is displayed on the monitor in the cab.



## Pump Compartment

A service door on the right side of the upper structure allows ground level access to the pump, case drain filter, pilot filter, remote engine oil filter, and fuel filter. The machine is equipped with an electronic priming pump, that is more reliable and easier to service than traditional hand pumps.

## Diagnostics and Monitoring

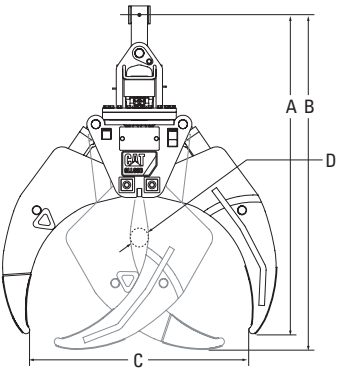
Prior to starting the machine, a system checks critical machine components, and if there is an issue, the operator is warned through the monitor in the event display area. The 558 and 558 LL are also equipped with S-O-S<sup>SM</sup> sampling and test ports for the hydraulic system, engine oil, and coolant. A test connection for the Cat Electronic Technician (Cat ET) service tool is located in the cab, which allows downloads and diagnostic capability of all machine parameters.

# Work Tools

The right tools, for maximum productivity

## Cat GLL Log Loader Grapples

Cat 360-degree continuous rotation log loading grapples for forestry machines are high capacity tools. They are built for endurance in high-volume logging applications. GLL grapple legs are made of high strength alloy steel with unique leg profiles for maximum performance in picking/sorting, bunching/loading, or shoveling applications. Cat grapples have bolt-on access panels for easy serviceability and are backed by the world-class Cat dealer network.



## GLL Specifications / Dimensions

	GLL52B		GLL55B		GLL60B	
Weight	1255 kg	2,767 lb	1291 kg	2,846 lb	1344 kg	2,963 lb
Width	1725 mm	67.9 in	1765 mm	69.5 in	1935 mm	76.2 in
A Height, Open	2134 mm	84.0 in	2184 mm	86.0 in	2261 mm	89.0 in
B Height, Closed	2159 mm	85.0 in	2210 mm	87.0 in	2286 mm	90.0 in
C Maximum Opening	1321 mm	52.0 in	1397 mm	55.0 in	1524 mm	60.0 in
D Minimum Opening	127 mm	5.0 in	127 mm	5.0 in	127 mm	5.0 in
Rotation	360°		360°		360°	
Rotational Torque at 8274 kPa (1,200 psi)	1153 N-m	850.4 lbf-ft	1153 N-m	850.4 lbf-ft	1153 N-m	850.4 lbf-ft

## Cat Live Heels

Heels are available in under/under and over/under configurations to match the requirements of log loader applications. Cat GLL grapples can pin directly to a Cat live heel for easy installation and maintenance.

## Buckets

Cat buckets are designed for better performance. The leading edge has been pushed forward, for more efficient filling and better operator

control, which greatly improves productivity. Wear coverage in the corners and side cutter and sidebar protector coverage are improved. The lift eye design accepts a wide range of shackle sizes.

## Couplers

Quick couplers allow one person to change work tools in seconds for maximum performance and flexibility on a job site. One machine can move rapidly from task to task, and a fleet of similarly equipped machines can share a common work tool inventory.



# Integrated Technology

Work smarter

## Easy to Service

Cat Product Link™, Caterpillar’s machine monitoring system, is standard. When installed at the factory, the system comes with a free subscription to VisionLink®, an easy-to-use user interface.

Product Link is an advanced – but user friendly – remote monitoring technology for equipment. You know where the machine is, what it is doing, and how it is performing. Using this information you can maximize efficiency and lower operating costs.

Product Link is integrated with the Electronic Control Module to collect and deliver valuable data. The information is transmitted via satellite, and you have access to it via the internet at anytime and anyplace. With Product Link and the VisionLink user interface you can:

- Know the location and status of your 558 or 558 LL, including alerts if it is moved without your knowledge
- Track fuel use and idle time
- Monitor efficiency and performance, including fault codes
- Access fluid analysis results and online parts ordering
- Access model-specific daily maintenance inspection checklists



Visit [www.cat.com/itpaystoknow](http://www.cat.com/itpaystoknow) for more information on Cat Product Link.

# Safety

Safely home. Everyone. Every day.™

Safety is critical in the woods, and a number of unique safety features have been designed into the 558 and 558 LL Forest Machines, including:

- Certified forestry cab with tough polycarbonate windows
- Sealing and cab roof liner help to lower noise levels
- Pressurized operator station for a clean, quiet environment
- 19 mm (0.75 in) front windows available for processing applications
- Guarding on fresh air side windows
- Standard LED work lights and windshield wipers
- Rear entry cab offers ingress and egress from the right side of the machine

- Key FOB on rear entry cab option allows for efficient night time access
- Reinforced upper frame to accommodate the ROPS cab
- Ground level emergency shut-off switch
- Ground level daily maintenance
- Wide track gauge that maximizes stability
- Secure access to engine enclosure with steps, hand rails, and guardrails
- Anti-skid plate is utilized on all walking surfaces on the upper structure, steps, and catwalks
- Integrated lifting links on the fuel tank to provide easy removal
- Forestry-duty cooling packages with reversible fan
- Compartmentalization of engine and hydraulic areas

# Focus on the Customer

Cat dealer services keep you running longer at less cost

Caterpillar is known the world over for the quality of customer support from its dealer network – the industry’s best. No matter where you are, the expertise of a Cat dealer is always nearby. Your local Cat dealer is your forestry consultant who can recommend the machines, work tools, and services to maximize your operation and provide the support to keep you at top productivity.



- Unsurpassed worldwide parts network
- 24-hour parts availability, where and when you need them, to minimize expensive downtime
- Remanufactured parts that carry the same warranty as new parts at reduced cost
- Operator training to get the most out of your Cat equipment through literature and classes

- Field service technicians to provide on-site help when needed
- Timely repair and replacement services
- Customer Support Agreements to lower your operating costs; can be applied to the entire machine, including attachments
- State-of-the-art diagnostic programs, such as S-O-S oil analysis, inspections, and trend reporting to help avoid unscheduled repairs
- Financing programs for buying, renting, or leasing Cat equipment
- Cat Financial Commercial Account provides a fast, convenient way to buy or rent anything offered at any Cat dealer or The Cat Rental Store
- Cat Insurance to cover equipment losses from theft, collision, flood, upset or overturn, fire, vandalism, and more
- Product Link to manage your fleet through remote monitoring
- Cat Certified Rebuild to get a second life from your equipment
- Job site and machine consulting to ensure you get the right product and work tools

For more information on Cat products, dealer services, and industry solutions, visit us at [www.cat.com](http://www.cat.com).

# Sustainability

Generations ahead in every way

- The C7.1 ACERT engine, along with the Cat Clean Emissions Module (CEM), meets U.S. EPA Tier 4 Final emissions standards
- The 558 and 558 LL Forest Machines were designed and optimized to generate more horsepower, lift more payload, and consume less fuel than the previous series machine, which means more efficiency and productivity with less resource consumption and fewer CO2 emissions
- The machine has the flexibility of running on either ultra-low-sulfur diesel (ULSD) fuel with 15 ppm of sulfur or less or biodiesel (B20) fuel blended with ULSD

- Automatic engine speed control and one-touch idle reduce engine speed quickly and conveniently, conserving fuel
- Three different operating modes, including an eco mode, allow the operator to tailor the machines performance to application needs, helping to increase fuel efficiency
- The durability of the major structures and ability to use re-manufactured components reduces waste and replacement costs
- An efficient, productive machine that is designed to conserve natural resources for generations ahead



558 / 558 LL Forest Machine Specifications

Engine

Engine Model	Cat C7.1 ACERT	
Gross Power at 2,200 rpm	178 kW	239 hp
Engine Speed		
Operation	1,750 rpm	
Travel	1,800 rpm	
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7.01 L	428 in³
Peak Torque	1039 N-m	766 lbf-ft
Peak Torque Speed	1,400 rpm	
Number of Cylinders	6	

Weights

Estimated Operating Weight w/o Attachment		
558 (General Forestry, Reach, Side Entry Cab)	38 664 kg	85,239 lb
558 LL (Log Loader, Under/Under, Side Entry Cab)	42 264 kg	93,176 lb
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Operating Specifications

Max. Speed (turtle)	2.4 km/h	1.5 mph
Max. Speed (rabbit)	3.7 km/h	2.3 mph
Max. Drawbar Pull	321 kN	72,230 lbf
Maximum Swing Speed - 558 (GF)	7.5 rpm	
Maximum Swing Speed - 558 LL	7.5 rpm	
Swing Torque - 558 (GF)	101.3 kN-m	74,700 lbf-ft
Swing Torque - 558 LL	116.6 kN-m	86,000 lbf-ft
Operator Height from Ground (eye level)		
0.457 m (18 in) Side Entry Cab/Riser	3.54 m	11.6 ft
1.219 m (48 in) Side Entry Cab/Riser	4.30 m	14.1 ft

Hydraulic System

Main Pumps	240 L/min	63.4 gal/min
Max. Flow (per pump)		
Main Pumps	480 L/min	126.8 gal/min
Max. Flow (both pumps)		
Max. System Pressure		
Implements	35 000 kPa	5,076 psi
Travel	35 000 kPa	5,076 psi
Swing - 558 (GF)	28 000 kPa	4,061 psi
Swing - 558 LL	32 000 kPa	4,641 psi
Heavy Lift Mode	38 000 kPa	5,511 psi
Auxiliary Pump - U/U (558 LL) and O/U (558 LL)		
Max. Flow	53 L/min	14.0 gal/min
Max. Pressure	10 335 kPa	1,499 psi

Auxiliary Pump - Reach with Rotate (558) / BnT/Power Clam (558 LL)		
Pump Drive Gear Ratio	1.28:1	
Max. Flow - Factory	141 L/min	37.3 gal/min
Max. Flow - Capable To	145 L/min	38 gal/min
Max. Pressure	10 335 kPa	1,499 psi

Service Refill Capacities

Fuel Tank - CWT	989.3 L	261.4 gal
DEF Tank	46.0 L	12.2 gal
Engine Crankcase	24.0 L	6.3 gal
Cooling System	30.0 L	7.9 gal
Final Drive - Each	11.0 L	2.9 gal
Hydraulic Tank	175.0 L	46.2 gal
Hydraulic System - Total	310.0 L	81.9 gal
Swing Drive	11.0 L	2.9 gal

Undercarriage

Undercarriage Pitch	215.9 mm	8.5 in
Track Gauge	2921 mm	115.0 in
Track Length	5072 mm	199.7 in
Ground Clearance	749 mm	29.5 in
Number of Track Rollers (per side)	9	
Number of Carrier Rollers (per side)	2	

Standards

Brakes	ISO 10265:1998 ISO 11512:1995
Cab	ISO 8082:1994 ISO 3471:1997 (TABLE 1, SECTION 1) ISO 8083:1989 LEVEL 1 ISO 8083:1989 LEVEL II ISO 8084:1993 SAE J1084:1978 SAE J1356:1988 WCB G602, G603, G604, G608 OR-OSHA 437-007-0775 (14)

558 - General Forestry Cylinders

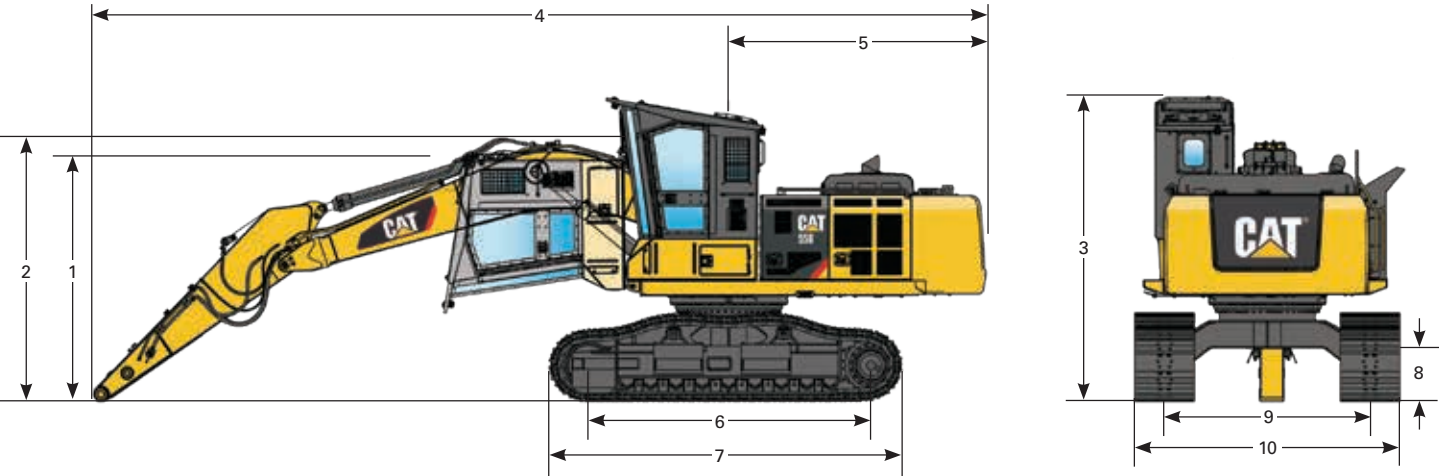
Boom Cylinder - Bore	140 mm	5.5 in
Boom Cylinder - Rod	100 mm	3.9 in
Boom Cylinder - Stroke	1407 mm	55.4 in
Stick Cylinder - Bore	150 mm	5.9 in
Stick Cylinder - Rod	105 mm	4.1 in
Stick Cylinder - Stroke	1646 mm	64.8 in
Bucket Cylinder - Bore	135 mm	5.3 in
Bucket Cylinder - Rod	95 mm	3.7 in
Bucket Cylinder - Stroke	1156 mm	45.5 in

558 LL - Log Loader Cylinders

Boom Cylinder - Bore	150 mm	5.9 in
Boom Cylinder - Rod	105 mm	4.1 in
Boom Cylinder - Stroke	1400 mm	55.1 in
Stick Cylinder - Bore	180 mm	7.1 in
Stick Cylinder - Rod	130 mm	5.1 in
Stick Cylinder - Stroke	1651 mm	65.0 in
Heel Cylinder - Bore (U/U)	150 mm	5.9 in
Heel Cylinder - Rod (U/U)	105 mm	4.1 in
Heel Cylinder - Stroke (U/U)	1156 mm	45.5 in
Heel Cylinder - Bore (O/U)	160 mm	6.3 in
Heel Cylinder - Rod (O/U)	110 mm	4.3 mm
Heel Cylinder - Stroke (O/U)	1467 mm	57.8 in

Dimensions

All dimensions are approximate



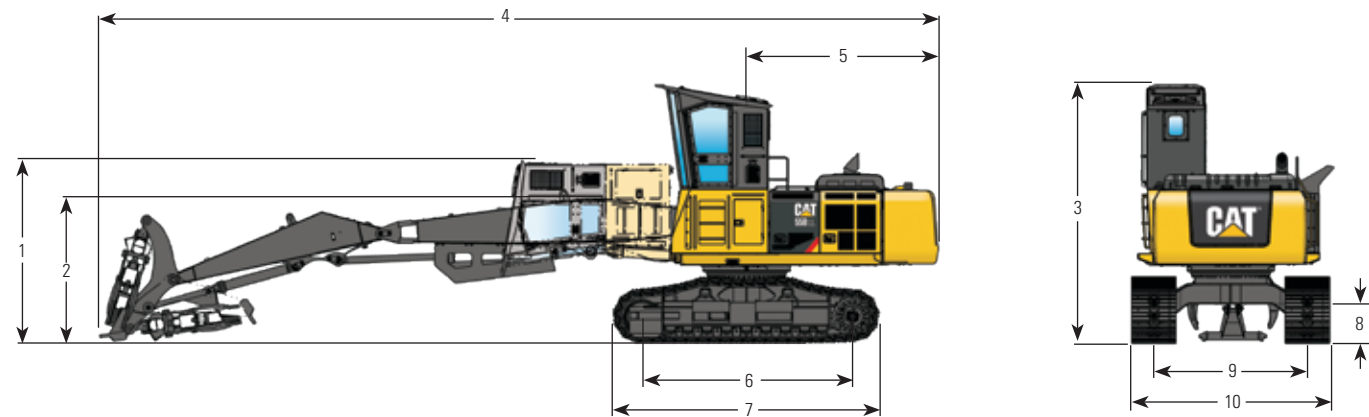
558 General Forestry - Reach with Rotate (0.457 m (18 in) riser side entry cab, boom stretched out away from the machine)

1	Height of Tilted Side Entry Cab	3 498 mm	137.7 in
2	Boom Height	3 720 mm	146.5 in
3	Overall Height	4 178 mm	164.5 in
4	Overall Length (Reach with Rotate)	12 680 mm	499.2 in
5	Tail Swing Length	3 653 mm	143.8 in
6	Distance Between Idler and Sprocket Centerline	4 019 mm	158.2 in
7	Track Length	5 072 mm	199.7 in
8	Ground Clearance	749 mm	29.5 in
9	Track Gauge	2 921 mm	115.0 in
10	Width with 700 mm (28 in) Shoes	3 621 mm	142.6 in



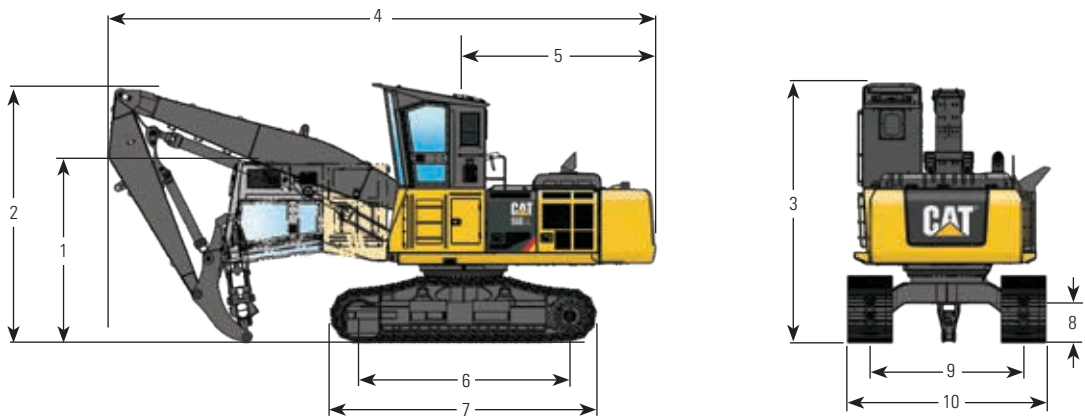
Dimensions

All dimensions are approximate



558 LL Log Loader - Under/Under (1.219 m (48 in) riser side entry cab, boom stretched out away from the machine)

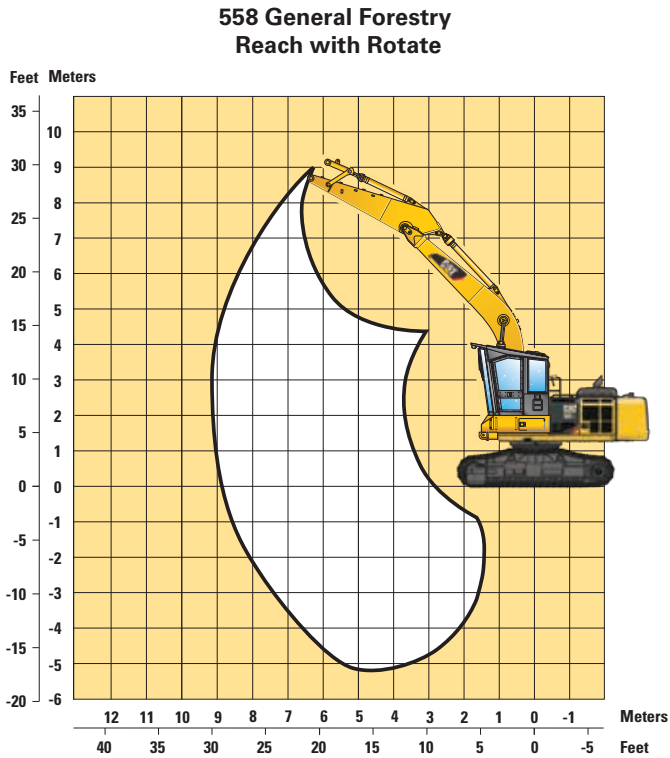
1	Height of Tilted Side Entry Cab	3498 mm	137.7 in
2	Boom Height	2921 mm	115.0 in
3	Overall Height	4932 mm	194.2 in
4	Overall Length (U/U)	15 967 mm	628.6 in
5	Tail Swing Radius	3653 mm	143.8 in
6	Distance Between Idler and Sprocket Centerline	4019 mm	158.2 in
7	Track Length	5072 mm	199.7 in
8	Ground Clearance	749 mm	29.5 in
9	Track Gauge	2921 mm	115.0 in
10	Width with 700 mm (28 in) Shoes	3621 mm	142.6 in



558 LL Log Loader - Under/Under (1.219 m (48 in) riser side entry cab, boom tucked towards the machine)

1	Height of Tilted Side Entry Cab	3498 mm	137.7 in
2	Boom Height	4829 mm	190.1 in
3	Overall Height	4932 mm	194.2 in
4	Overall Length (U/U)	10 423 mm	410.4 in
5	Tail Swing Radius	3653 mm	143.8 in
6	Distance Between Idler and Sprocket Centerline	4019 mm	158.2 in
7	Track Length	5072 mm	199.7 in
8	Ground Clearance	749 mm	29.5 in
9	Track Gauge	2921 mm	115.0 in
10	Width with 700 mm (28 in) Shoes	3621 mm	142.6 in

558 (GF) Reach with Rotate Working Envelope



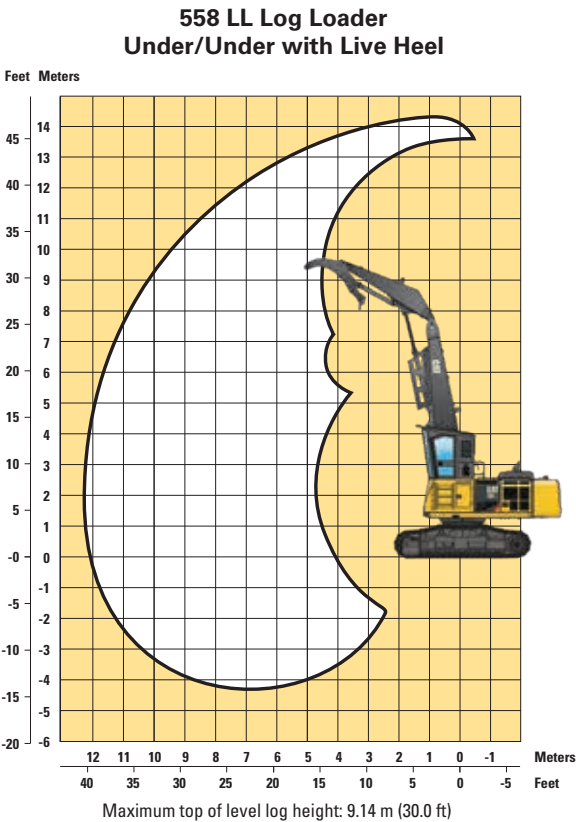
558 (GF) Reach with Rotate Lift Capacities

Lift Point Height			1.5 m/5 ft		3.0 m/10 ft		4.6 m/15 ft		6.1 m/20 ft		7.6 m/25 ft		9.1 m/30 ft		Maximum Reach		
			Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	m ft
7.6 m	kg														*5684	*5684	7.45
25.0 ft	lb														*12,530	*12,530	24.44
6.1 m	kg										*8135	*8135			*5475	*5475	8.35
20.0 ft	lb										*17,934	*17,934			*12,070	*12,070	27.40
4.6 m	kg								*9682	*9682	*8714	*8714			*5481	*5481	8.90
15.0 ft	lb								*21,345	*21,345	*19,211	*19,211			*12,084	*12,084	29.21
3.0 m	kg						*14 850	*14 850	*11 213	*11 213	*9479	*9479	*5849	*5849	*5665	*5665	9.17
10.0 ft	lb						*32,738	*32,738	*24,721	*24,721	*20,898	*20,898	*12,894	*12,894	*12,488	*12,488	30.07
1.5 m	kg						*17 299	*17 299	*12 584	*12 584	*10 221	8424	*6268	*6268	*6044	*6044	9.17
5.0 ft	lb						*38,139	*38,139	*27,744	*27,744	*22,533	18,571	*13,819	*13,819	*13,325	*13,325	30.07
0.0 m	kg								*13 410	11 183	*10 690	8307			*6701	*6701	8.91
0.0 ft	lb						*7655	*7655	*40,311	*29,565	*23,568	18,314			*14,774	*14,774	29.22
-1.5 m	kg		*9132	*9132	*13 629	*13 629	*18 044	*18 044	*13 494	11 107	*10 626	8268			*7846	*7846	8.36
-5.0 ft	lb		*20,134	*20,134	*30,046	*30,046	*39,780	*39,780	*29,750	24,486	*23,426	18,228			*17,297	*17,297	27.42
-3.0 m	kg				*21 524	*21 524	*16 659	*16 659	*12 601	*12 601					*9717	*9717	7.46
-10.0 ft	lb				*47,452	*47,452	*36,727	*36,727	*27,781	*27,781					*21,422	*21,422	24.47
-4.6 m	kg				*18 354	*18 354	*13 555	*13 555							*9714	*9714	6.05
-15.0 ft	lb				*40,463	*40,463	*29,844	*29,844							*21,417	*21,417	19.85

Numbers marked with “\*” are limited by hydraulic capacity  
Follows ISO 10567: Does not exceed 87% of hydraulic lifting capacity or 75% of tipping load  
Heavy lift mode is activated  
Machine is equipped with 700 mm (28 in) grousers  
Fuel level is at 100%, other fluids are at recommended levels  
Weight of all lifting accessories must be deducted from the above lifting capacities



558 LL Under/Under Working Envelope

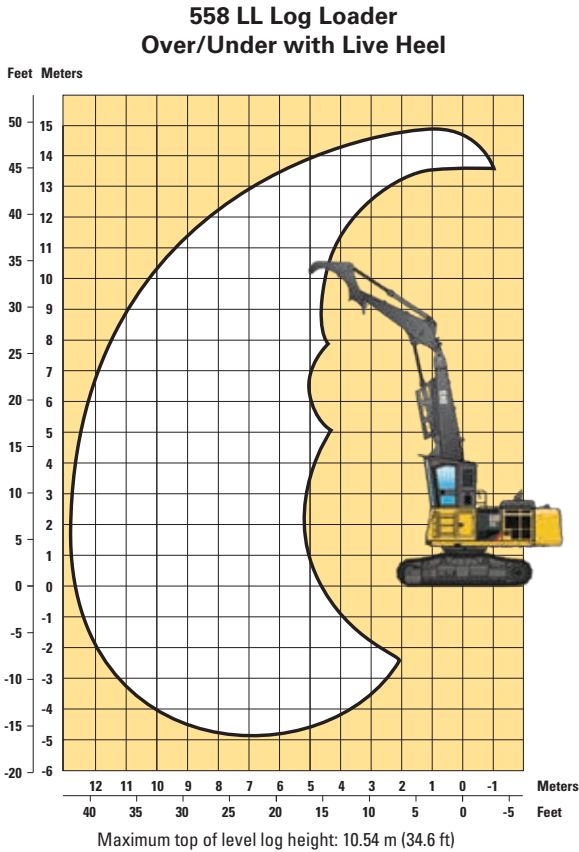


558 LL Under/Under Lift Capacities

Lift Point Height		3.0 m/10.0 ft		4.6 m/15.0 ft		6.1 m/20.0 ft		7.6 m/25.0 ft		9.1 m/30.0 ft		10.7 m/35.0 ft		Maximum Reach		
		Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	m ft
13.7 m 45.0 ft	kg lb													*19 056 *42,012	*19 056 *42,012	3.91 12.84
12.2 m 40.0 ft	kg lb			*14 857 *32,755	*14 857 *32,755	*12 705 *28,011	*12 705 *28,011							*11 508 *25,371	9805 21,616	6.99 22.94
10.7 m 35.0 ft	kg lb					*11 633 *25,646	*11 633 *25,646	*10 395 *22,918	*10 395 *22,918					*9331 *20,572	6857 15,117	8.80 28.86
9.1 m 30.0 ft	kg lb					*11 319 *24,954	*11 319 *24,954	*10 060 *22,178	*10 060 *22,178	*9054 *19,960	6702 14,776			*8263 *18,217	5545 12,225	10.05 32.98
7.6 m 25.0 ft	kg lb					*11 515 *25,387	*11 515 *25,387	*10 107 *22,283	*10 107 *22,283	*8972 *19,779	6748 14,877			*7511 *16,559	4820 10,626	10.95 35.93
6.1 m 20.0 ft	kg lb			*14 639 *32,274	*14 639 *32,274	*12 162 *26,813	*12 162 *26,813	*10 415 *22,962	8969 19,773	*9064 *19,982	6672 14,709	*7848 *17,302	5134 11,319	*6824 *15,044	4390 9,679	11.58 37.99
4.6 m 15.0 ft	kg lb			*16 662 *36,734	*16 662 *36,734	*13 126 *28,937	*13 126 *28,937	*10 864 *23,952	8693 19,164	*9221 *20,328	6523 14,382	*7824 *17,249	5077 11,194	*6193 *13,653	4143 9,133	11.98 39.30
3.0 m 10.0 ft	kg lb					*14 083 *31,047	11 709 25,813	*11 268 *24,842	8360 18,430	*9316 *20,539	6339 13,976	*7707 *16,990	4987 10,994	*5554 *12,245	4028 8,879	12.18 39.95
1.5 m 5.0 ft	kg lb					*14 547 *32,071	11 114 24,503	*11 385 *25,100	8036 17,716	*9198 *20,278	6157 13,575	*7377 *16,264	4894 10,790	*4853 *10,699	4025 8,874	12.18 39.95
0.0 m 0.0 ft	kg lb			*11 214 *24,723	*11 214 *24,723	*14 114 *31,116	10 685 23,557	*10 977 *24,201	7783 17,159	*8695 *19,170	6013 13,257	*6669 *14,703	4827 10,642	*4032 *8,888	*4032 *8,888	11.98 39.31
-1.5 m -5.0 ft	kg lb	*4701 *10,363	*4701 *10,363	*11 566 *25,499	*11 566 *25,499	*12 624 *27,832	10 463 23,068	*9859 *21,736	7638 16,838	*7621 *16,802	5934 13,082	*5312 *11,710	*5312 *11,710	*3630 *8,004	*3630 *8,004	11.48 37.66
-3.0 m -10.0 ft	kg lb			*12 372 *27,276	*12 372 *27,276	*10 055 *22,167	*10 055 *22,167	*7869 *17,348	*7869 *17,348	*5724 *12,620	*5724 *12,620			*4207 *9,276	*4207 *9,276	10.24 33.59

Numbers marked with “\*” are limited by hydraulic capacity  
Follows ISO 10567: Does not exceed 87% of hydraulic lifting capacity or 75% of tipping load  
Heavy lift mode is activated  
Machine is equipped with 700 mm (28 in) grousers  
Fuel level is at 100%, other fluids are at recommended levels  
Weight of all lifting accessories must be deducted from the above lifting capacities

558 LL Over/Under Working Envelope



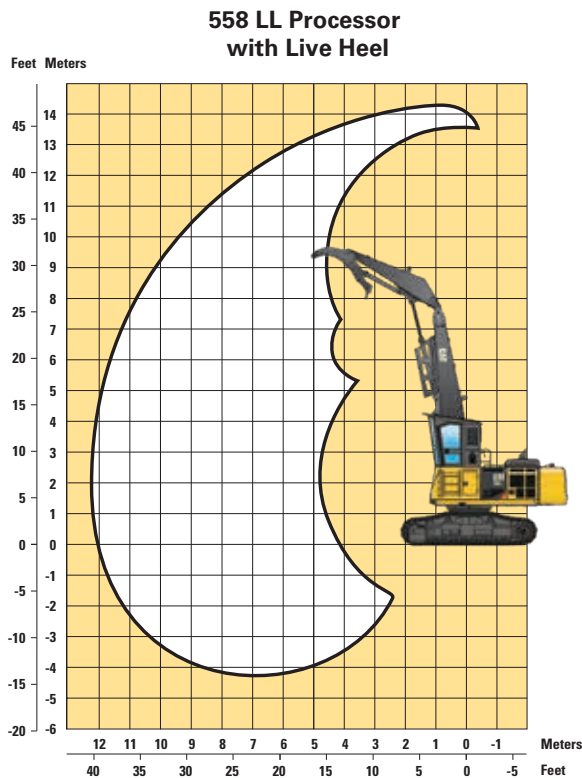
558 LL Over/Under Lift Capacities

Lift Point Height		3.0 m/10.0 ft		4.6 m/15.0 ft		6.1 m/20.0 ft		7.6 m/25.0 ft		9.1 m/30.0 ft		10.7 m/35.0 ft		12.2 m/40.0 ft		Maximum Reach		
		Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	m ft
13.7 m 45.0 ft	kg lb			*15 362 *33,867	*15 362 *33,867											*13 628 *30,045	*13 628 *30,045	5.52 18.12
12.2 m 40.0 ft	kg lb					*11 565 *25,497	*11 565 *25,497	*10 506 *23,161	8926 19,678							*9685 *21,352	8067 17,786	7.99 26.21
10.7 m 35.0 ft	kg lb					*10 734 *23,665	*10 734 *23,665	*9699 *21,382	*9699 *21,382	*8923 *19,671	6729 14,835					*8124 *17,910	6033 13,300	9.61 31.51
9.1 m 30.0 ft	kg lb					*10 451 *23,040	*10 451 *23,040	*9446 *20,826	*9446 *20,826	*8611 *18,984	6892 15,193					*7284 *16,058	5010 11,045	10.77 35.32
7.6 m 25.0 ft	kg lb					*10 640 *23,457	*10 640 *23,457	*9525 *20,999	*9525 *20,999	*8582 *18,919	6882 15,172	*7708 *16,992	5246 11,565			*6786 *14,960	4411 9,726	11.61 38.09
6.1 m 20.0 ft	kg lb					*11 290 *24,889	*11 290 *24,889	*9869 *21,758	*9869 *21,758	*8721 *19,227	6775 14,936	*7710 *16,997	5213 11,494			*6341 *13,979	4044 8,916	12.20 40.04
4.6 m 15.0 ft	kg lb					*12 318 *27,158	*12 318 *27,158	*10 389 *22,903	8830 19,467	*8947 *19,725	6598 14,546	*7745 *17,074	5122 11,292	*6430 *14,176	4063 8,957	*5762 *12,703	3827 8,436	12.58 41.29
3.0 m 10.0 ft	kg lb					*13 462 *29,678	*13 462 *29,678	*10 923 *24,081	8458 18,647	*9149 *20,171	6382 14,070	*7729 *17,041	5001 11,025	*6252 *13,784	4017 8,857	*5173 *11,405	3721 8,203	12.77 41.90
1.5 m 5.0 ft	kg lb					*14 263 *31,445	11 243 24,786	*11 244 *24,790	8081 17,816	*9188 *20,256	6163 13,586	*7558 *16,663	4877 10,752	*5835 *12,863	3966 8,743	*4530 *9,987	3712 8,183	12.77 41.90
0.0 m 0.0 ft	kg lb					*14 281 *31,485	10 704 23,598	*11 116 *24,506	7767 17,124	*8906 *19,634	5977 13,176	*7098 *15,647	4774 10,526	*4981 *10,980	3936 8,678	*3784 *8,342	*3784 *8,342	12.59 41.29
-1.5 m -5.0 ft	kg lb			*11 049 *24,359	*11 049 *24,359	*13 291 *29,302	10 379 22,882	*10 346 *22,809	7560 16,666	*8138 *17,940	5853 12,903	*6169 *13,600	4717 10,398			*3286 *7,245	*3286 *7,245	12.14 39.84
-3.0 m -10.0 ft	kg lb			*6270 *13,822	*6270 *13,822	*12 644 *27,876	*12 644 *27,876	*11 240 *24,779	*11 240 *24,779	*8783 *19,364	7473 16,475	*6691 *14,751	*6691 *14,751	*4460 *9,833	*4460 *9,833			11.10 36.41
-4.6 m -15.0 ft	kg lb					*8084 *17,821	*8084 *17,821	*6253 *13,786	*6253 *13,786							*4970 *10,956	*4970 *10,956	8.71 28.58

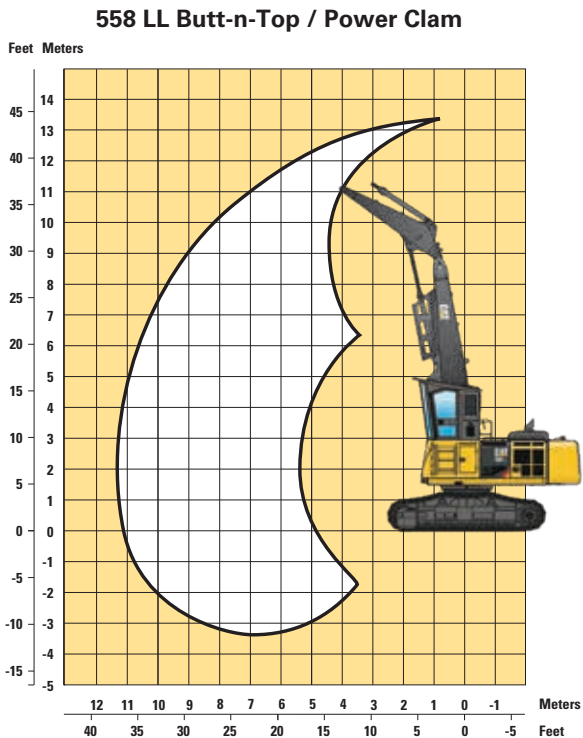
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Follows ISO 10567: Does not exceed 87% of hydraulic lifting capacity or 75% of tipping load  
Heavy lift mode is activated  
Machine is equipped with 700 mm (28 in) grousers  
Fuel level is at 100%, other fluids are at recommended levels  
Weight of all lifting accessories must be deducted from the above lifting capacities



558 LL Processor Working Envelope



558 LL Butt-n-Top / Power Clam Working Envelope



558 LL Processor Lift Capacities

Lift point height		3.0 m/10.0 ft		4.6 m/15.0 ft		6.1 m/20.0 ft		7.6 m/25.0 ft		9.1 m/30.0 ft		10.7 m/35.0 ft		Maximum Reach		
		Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	m ft
13.7 m	kg													*19 065	*19 065	3.91
45.0 ft	lb													*42,031	*42,031	12.84
12.2 m	kg			*14 858	*14 858	*12 706	*12 706							*11 510	9807	6.99
40.0 ft	lb			*32,756	*32,756	*28,012	*28,012							*25,376	21,621	22.93
10.7 m	kg					*11 633	*11 633	*10 396	*10 396					*9332	6858	8.79
35.0 ft	lb					*25,646	*25,646	*22,919	*22,919					*20,574	15,119	28.85
9.1 m	kg					*11 319	*11 319	*10 060	*10 060	*9054	6702			*8264	5546	10.05
30.0 ft	lb					*24,954	*24,954	*22,178	*22,178	*19,960	14,776			*18,219	12,226	32.97
7.6 m	kg					*11 516	*11 516	*10 107	*10 107	*8972	6748			*7511	4820	10.95
25.0 ft	lb					*25,388	*25,388	*22,283	*22,283	*19,779	14,877			*16,560	10,627	35.93
6.1 m	kg			*14 640	*14 640	*12 162	*12 162	*10 416	8969	*9064	6672	*7848	5134	*6824	4391	11.58
20.0 ft	lb			*32,275	*32,275	*26,813	*26,813	*22,962	19,773	*19,982	14,708	*17,302	11,319	*15,045	9,680	37.99
4.6 m	kg			*16 663	*16 663	*13 126	*13 126	*10 864	8693	*9221	6523	*7824	5077	*6193	4143	11.98
15.0 ft	lb			*36,736	*36,736	*28,938	*28,938	*23,952	19,164	*20,328	14,382	*17,248	11,193	*13,654	9,134	39.30
3.0 m	kg					*14 083	11 708	*11 268	8360	*9316	6339	*7706	4987	*5554	4028	12.18
10.0 ft	lb					*31,047	25,813	*24,842	18,430	*20,539	13,976	*16,990	10,994	*12,245	8,880	39.95
1.5 m	kg					*14 547	11 114	*11 385	8036	*9198	6157	*7377	4894	*4853	4026	12.18
5.0 ft	lb					*32,071	24,503	*25,100	17,716	*20,278	13,575	*16,263	10,790	*10,699	8,875	39.95
0.0 m	kg			*11 210	*11 210	*14 114	10 685	*10 977	7783	*8695	6013	*6669	4827	*4032	*4032	11.98
0.0 ft	lb			*24,715	*24,715	*31,115	23,557	*24,201	17,159	*19,170	13,257	*14,703	10,642	*8,889	*8,889	39.31
-1.5 m	kg	*4699	*4699	*11 564	*11 564	*12 624	10 464	*9859	7638	*7621	5934	*5311	*5311	*3631	*3631	11.48
-5.0 ft	lb	*10,360	*10,360	*25,495	*25,495	*27,831	23,068	*21,735	16,838	*16,801	13,082	*11,709	*11,709	*8,004	*8,004	37.66
-3.0 m	kg			*12 371	*12 371	*10 054	*10 054	*7868	*7868	*5724		*5724		*4208	*4208	10.24
-10.0 ft	lb			*27,273	*27,273	*22,166	*22,166	*17,346	*17,346	*12,618		*12,618		*9,277	*9,277	33.58

Numbers marked with “\*” are limited by hydraulic capacity  
Follows ISO 10567: Does not exceed 87% of hydraulic lifting capacity or 75% of tipping load  
Heavy lift mode is activated  
Machine is equipped with 700 mm (28 in) grousers  
Fuel level is at 100%, other fluids are at recommended levels  
Weight of all lifting accessories must be deducted from the above lifting capacities

558 LL Butt-n-Top / Power Clam Lift Capacities

Lift Point Height		4.6 m/15.0 ft		6.1 m/20.0 ft		7.6 m/25.0 ft		9.1 m/30.0 ft		10.7 m/35.0 ft		Maximum Reach		
		Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	m ft
12.2 m	kg	*17 093	*17 093									*16 213	*16 213	5.17
40.0 ft	lb	*37,684	*37,684									*35,744	*35,744	16.95
10.7 m	kg	*15 260	*15 260	*13 023	*13 023							*11 910	9284	7.44
35.0 ft	lb	*33,643	*33,643	*28,711	*28,711							*26,257	20,467	24.41
9.1 m	kg	*14 757	*14 757	*12 584	*12 584	*11 103	9265					*10 135	7107	8.89
30.0 ft	lb	*32,535	*32,535	*27,744	*27,744	*24,478	20,426					*22,344	15,669	29.17
7.6 m	kg	*15 163	*15 163	*12 757	*12 757	*11 080	9273	*9749	6947			*9030	6040	9.90
25.0 ft	lb	*33,429	*33,429	*28,125	*28,125	*24,426	20,443	*21,493	15,316			*19,907	13,316	32.48
6.1 m	kg	*16 472	*16 472	*13 389	*13 389	*11 335	9139	*9777	6918			*8183	5442	10.59
20.0 ft	lb	*36,315	*36,315	*29,518	*29,518	*24,990	20,148	*21,554	15,251			*18,041	11,998	34.75
4.6 m	kg			*14 279	*14 279	*11 703	8913	*9850	6811	*8127	5393	*7432	5106	11.03
15.0 ft	lb			*31,480	*31,480	*25,801	19,650	*21,717	15,017	*17,917	11,890	*16,385	11,257	36.18
3.0 m	kg			*15 028	11 895	*11 962	8646	*9821	6674	*7895	5347	*6681	4949	11.24
10.0 ft	lb			*33,131	26,224	*26,371	19,062	*21,652	14,714	*17,405	11,788	*14,729	10,911	36.88
1.5 m	kg			*15 112	11 442	*11 848	8402	*9514	6544	*7331	5297	*5854	4939	11.24
5.0 ft	lb			*33,315	25,225	*26,120	18,522	*20,975	14,427	*16,161	11,678	*12,905	10,890	36.88
0.0 m	kg			*14 174	11 155	*11 120	8229	*8734	6453	*6165	5278	*4870	*4870	11.03
0.0 ft	lb			*31,248	24,592	*24,515	18,142	*19,255	14,226	*13,592	11,635	*10,738	*10,738	36.19
-1.5 m	kg	*10 282	*10 282	*12 132	*12 132	*9590	8155	*7244	*7244			*4638	*4638	10.39
-5.0 ft	lb	*22,668	*22,668	*26,747	*26,747	*21,142	17,979	*15,970	*15,970			*10,224	*10,224	34.10
-3.0 m	kg			*8988	*8988	*7065	*7065					*5833	*5833	8.46
-10.0 ft	lb			*19,816	*19,816	*15,575	*15,575					*12,861	*12,861	27.76

Numbers marked with “\*” are limited by hydraulic capacity  
Follows ISO 10567: Does not exceed 87% of hydraulic lifting capacity or 75% of tipping load  
Heavy lift mode is activated  
Machine is equipped with 700 mm (28 in) grousers  
Fuel level is at 100%, other fluids are at recommended levels  
Weight of all lifting accessories must be deducted from the above lifting capacities



558 / 558 LL Forest Machine Standard Equipment

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

POWERTRAIN

Cat C7.1 ACERT™ engine certified to EPA Tier 4 Final, EU Stage IV emissions  
Clean emissions module (DOC, DPF, SCR, AMOX, DEF tank, and DEF lines)  
Water separator in fuel line  
Primary and secondary fuel filters  
Easy clean cooling system  
Side-by-side cores with full screens  
Air cleaner  
Reversing fan  
High ambient capability, 48 degrees C (118 degrees F)  
Cold weather starting with two additional batteries, HD starter, and ether aid

UNDERCARRIAGE

High-wide undercarriage  
Heavy-duty track roller frames  
Straddle mounted carrier rollers  
Heavy-duty track rollers (9 per side)  
Heavy-duty recoil mechanisms  
Idler track guiding guards  
Heavy-duty travel motor guards  
Full length track shoe support  
High drawbar final drives  
Heavy-duty hydraulic swivel  
Heavy-duty hydraulic swivel guard  
Towing eyes on base frame

HYDRAULICS

Main hydraulic pumps  
Capability to add auxiliary pumps  
Back-to-back control valve  
Regeneration circuits for boom and stick

Boom and stick drift reduction valves  
High performance hydraulic return filter  
High torque swing drive  
Swing cushion valve  
Automatic swing parking brake  
Fully pressurized hydraulic system  
Fine swing control  
Two speed auto-shift travel motors

ELECTRICAL

115 ampere alternator  
24-volt electric starting  
Circuit breakers  
4 front working lights  
1 left side working light, cab mounted  
2 riser mounted lights  
1 rear working light, cab mounted  
2 right front working lights  
LED lights  
Horn and travel alarm  
Pre-start monitoring system  
Tool control software  
Automatic engine speed control  
One touch low idle  
Three power modes (HP, STD, and ECO)  
Secondary engine shut off switch  
Wait to disconnect lamp  
Product Link PL631E

OPERATOR ENVIRONMENT

Purpose-built forestry cab  
Scratch resistant polycarbonate windows  
FOPS/ROPS/OPS/OR-OSHA/WCB certified  
Seat with air suspension, integrated joysticks, heated and cooled functionality, retractable seatbelt, and head rest

Display monitor for operator information  
Full time clock on monitor  
Retractable sun shade  
Interior lighting  
Windshield wiper and washer  
Filtered ventilation, pressurized cab  
Forced air fan  
Behind seat storage tray  
CB radio mounts  
Fire extinguisher mount  
Secondary roof exit  
Literature holder  
Cup holder and two coat hooks  
Neutral lever (lockout) for all controls  
Travel control pedals  
Noise dampening, washable floor mat  
Radio/CD player  
Two sockets for 12V power supply

FLUIDS

50% concentration of extended life coolant with protection to -34 degrees C (-30 degrees F)  
989.3 L (261.4 gal) fuel tank  
175 L (46.2 gal) hydraulic tank

OTHER STANDARD EQUIPMENT

Heavy-duty upper frame with catwalks  
Heavy-duty doors and covers  
Heavy-duty bottom guards  
Door and cover locks with Caterpillar one key security system  
Right front corner guard  
Right front corner storage box  
Counterweight fuel tank w/lifting eyes

558 / 558 LL Forest Machine Optional Equipment

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

MANDATORY ATTACHMENTS

Linkages

Reach (road builder) linkage - 558 (GF)  
Reach with rotate linkage - 558 (GF)  
Linkage omission with main boom cylinders - 558 (GF)  
Linkage omission without main boom cylinders - 558 (GF)  
Under/under log loader linkage - 558 LL  
Over/under log loader linkage - 558 LL  
Processor linkage - 558 LL  
Butt-n-Top / Power Clam linkage - 558 LL  
Linkage omission with main boom cylinders - 558 LL

Tracks

710 mm (28 in) heavy-duty track, SG w/trap holes  
700 mm (28 in) heavy-duty track, DG w/trap holes  
850 mm (33 in) heavy-duty track, TG w/slot holes

Cabs

Side entry standard cab  
Side entry processor cab  
Rear entry cab with 1.219 m (48 in) straight riser  
Rear entry cab with 1.219 m (48 in) cab-forward riser  
Rear entry cab with 1.829 m (72 in) cab-forward riser

Risers (side entry cab only)

0.457 m (18 in) riser for side entry cab  
1.219 m (48 in) riser for side entry cab

Pedals (side entry cab only)

Standard pedals for 0.457 m (18 in) riser  
Standard pedals with straight travel pedal for 0.457 m (18 in) riser  
Standard pedals for 1.219 m (48 in) riser  
Standard pedals with straight travel pedal for 1.219 m (48 in) riser

Decals

ANSI decals  
ISO decals

OPTIONAL ATTACHMENTS

Front Linkage

CB2-family bucket linkage

Grapples

GLL52B, Log loading grapple  
GLL55B, Log loading grapple  
GLL60B, Log loading grapple

Heels

Under/under heel  
Over/under heel

Fluids

Antifreeze, –50 degrees C (–58 degrees F)

Matching Guide			
	GLL52B	GLL55B	GLL60B
538 LL	●	○	
548 LL	●	●	
558 LL	○	●	●
568 LL	○	○	●
● Provides optimum machine match			
○ Provides acceptable machine match			



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