

FM548 GF/FM548 LL

FOREST MACHINE



Engine Model
Net Power – ISO 9249
Engine Power – ISO 14396

Cat® C7.1
202.4 kW (271 hp)
205 kW (275 hp)



FM548 GF/ FM548 LL

FOREST MACHINE

The Cat® FM548 is simply the best choice in its size class for doing roadbuilding, processing, and log-loading work. With 205 kW (275 hp) and significant hydraulic flow and swing torque increases, the superior performance and exceptional operator comfort and safety of the FM548 will help you produce day in and day out.



GENERAL FORESTRY



LOG LOADER

BEST-IN-CLASS SAFETY

The Certified Forestry cab's 25% greater cab volume and 50% improved visibility confidently supports and secures the operator when taking on tough tree-moving work.

IMPROVED PRODUCTION

Move heavy logs confidently with 30% more engine and swing power. Heavy lift mode gives you a boost for big timber while larger boom cylinders on the Log Loader give you even more lifting power. 10% more travel speed gets you to work faster.

LOWER MAINTENANCE COSTS

Experience increased uptime and up to 15% lower costs with longer-life fuel and hydraulic oil filters. Cat fuel filters have double the life of the previous filters, and the hydraulic oil return filter provides 50% more service life.

LATEST FEATURES



Cab Monitor Improvements

- Continuously improved user interface allows intuitive navigation, minimizing performance interruption with the easy-to-use touchscreen menu.
 1. Identify apps quickly with a grid list view, abbreviated app names, and categorized menu options.
 2. A notification center keeps important information visible to the operator and displays messages without shrinking the camera view.
 3. Color-coded notifications set critical messages apart from the rest.
 4. Use the in-monitor QR code to learn about machine and technology features through a full suite of “how-to” videos.
 5. Enhance visibility to make service work easier and safer with optional inspection lighting.
- Standard integrated vehicle health management system alerts operators with service guidance and parts needed to enhance uptime.

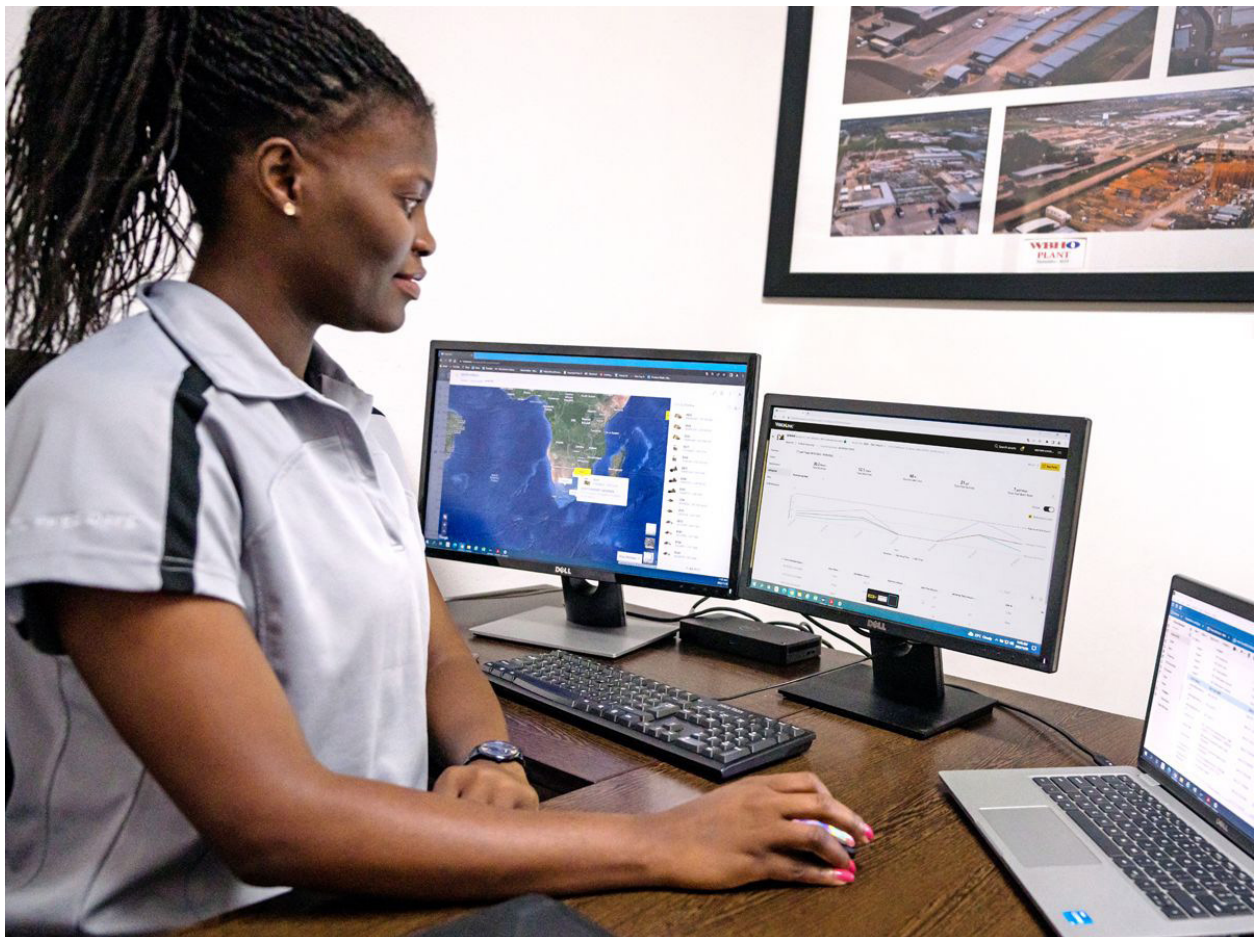
Build Number: 07B



TAKE THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

- VisionLink® provides actionable data insights for all assets – regardless of fleet size or equipment manufacturer.* Review equipment data from your desktop or mobile device to maximize uptime and optimize assets. Dashboards provide information such as hours, miles, location, idle time, and fuel utilization. Make informed decisions that lower costs, simplify maintenance, and improve safety and security on your jobsite.
- VisionLink Productivity gathers and summarizes machine telematics and jobsite data from all your equipment – regardless of the manufacture.* View actionable information such as idle time, fuel burn, location, payload, load counts, total cycles, and more to improve machine efficiency, productivity, and utilization. Access data anywhere via a mobile, tablet, or desktop device – on or off the jobsite.
- Cat® Inspect is a mobile application that allows you to easily perform digital preventative maintenance (PM) checks, inspections, and daily walkarounds. Inspections can easily be integrated with other Cat data systems like VisionLink so you can keep a close eye on your fleet.
- Remote Troubleshoot is a mobile application that allows your Cat dealer to perform diagnostic testing on your connected machine remotely to help resolve issues quickly and with less downtime.
- Remote Flash is a mobile application that allows you to update onboard software without a technician being present, allowing you to initiate software updates when convenient, increasing your overall operating efficiency.
- The Cat PL161 attachment locator allows you to track attachments across all worksites, reduce the number of lost attachments, and plan for attachment maintenance and replacement. The work tool recognition** feature automatically adjusts machine settings based on the selected tool.

**Data field availability can vary by equipment manufacturer.
**Recognition feature available on select excavator models.
Consult your Cat dealer for details.*



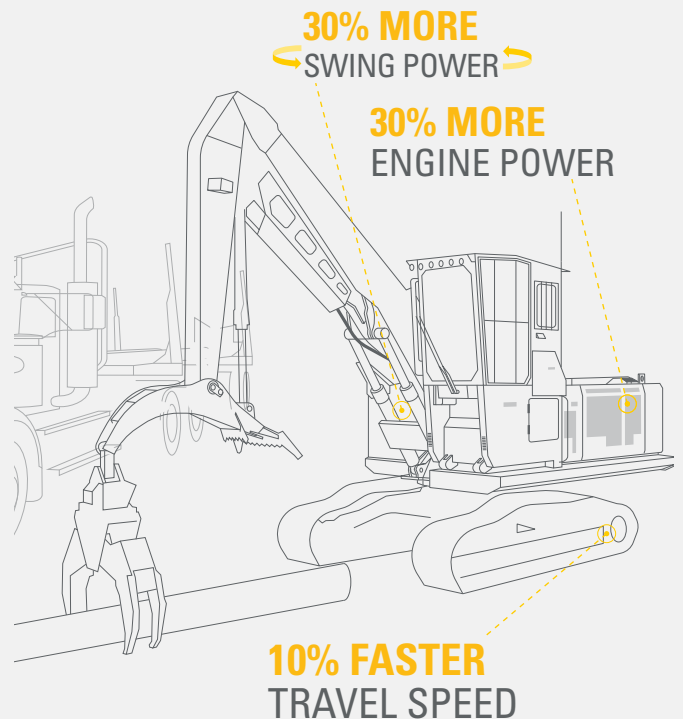
SUPERIOR PERFORMANCE



- The Cat C7.1 TTA engine offers up to 30% more power* and can run on biodiesel and renewable fuels.
- Smart mode helps reduce fuel consumption by automatically matching engine and hydraulic power to working conditions.
- Pick and place logs with precision and power with the electrohydraulic control system.
- Heavy lift mode with up to 30% greater swing torque* helps you confidently move big logs.
- Bigger boom cylinders boost Log Loader lift capability by up to 7%.*
- Get to work faster with an up to 10% increase in travel speed.*
- Auxiliary hydraulic options let you use Cat grapples and various other attachments.
- Work in extreme environments with standard high-ambient capability of 52° C (126° F) and cold start capability of -32° C (-25° F).

***All percentages are compared to the 2021 model year 548.**

GET MORE WORK DONE



UNMATCHED OPERATOR COMFORT

- Operators can choose the rear or side cab entry with up to 25% more space with a tilt-up console.*
- The dual HVAC system keeps operators comfortable in cold and warm weather.
- A wider heated and cooled air-suspension seat makes year-round work more pleasant.
- All controls are within easy reach to reduce twisting and turning and keep you focused on the work area.
- Cab risers – 165 mm (6.5”) fixed or 1219 mm (48”) hydraulic tilt – are available to meet your work needs.
- Special roof lining and window and door sealing reduce noise, making the interior as quiet as today’s top work trucks.
- Stow your gear with in-cab storage beneath, behind the seat, and in the consoles.
- Use the standard radio’s USB ports and Bluetooth® technology to connect personal devices and make hands-free calls.

***All percentages compared to 2021 model year 548.**



SIMPLE OPERATION



- Cat continues to improve user interface functionality for operators of all skill levels. The touchscreen monitor is an easy-to-use operating tool that presents the jobsite dashboard with an intuitive format.
- The Cat PL161 attachment locator is a Bluetooth device designed to let users know where their attachments are across all worksites, reduce the number of lost attachments, and plan for attachment maintenance and replacement. The PL161 integrates easily into VisionLink for full fleet management of machines and attachments from one smartphone or tablet dashboard to view location and tracking details.
- The keyless push-button engine start adds security by using operator ID codes to limit and track machine access. Codes can be entered manually or via an optional Bluetooth key fob.
- Navigate quickly on the standard high-resolution 254 mm (10 in) touchscreen monitor.
- Make moving the excavator much easier with optional Cat Stick Steer. Push a button and use one hand to travel and turn instead of both hands or feet on levers or pedals.
- Not sure how a function works or how to maintain the machine? Always have the operator's manual at your fingertips in the touchscreen monitor.
- Optional auxiliary relay powers on and turns off CB radios and other attachments without you taking your hands off the joysticks.

VERSATILE CONFIGURATIONS



General Forestry

1. The General Forestry model is ideal for road work, grappling, processing, and delimiting.
2. With a reach boom and quick coupler, you can equip the FM548 with a processor, bucket, thumb, mulcher, and other attachments to get work done quickly and efficiently.
3. A frontless option allows you to customize the machine to fit your applications.

Log Loader

1. The log loader configuration is ideal for truck loading, Butt-n-Top loading, power clam applications and millyard work.
 2. An under-mounted heel cylinder provides maximum force for shovel logging with a Cat grapple. A variable displacement pump delivers high-flow rotating capability for heel and log grapples and Power Clam and Butt-n-Top grapples.
 3. An overmounted heel cylinder provides maximum clearance to load trucks and increases lift height for millyard applications.
- Rugged, reliable, simple-to-service Cat forestry grapples range in size from 1322 mm (52") to 1524 mm (60").
 - Special Tri Link shoes are available for lower ground pressure and extra flotation in soft, wet, underfoot conditions.



EASY MAINTENANCE

- Boost productivity with proactive service reminders. The Integrated Vehicle Health Management system alerts the operator with step-by-step service guidance and the parts needed so you don't experience unnecessary downtime.
- Expect up to 15%* less maintenance cost than the previous model. (Savings calculated over 12,000 machine hours.)
- The engine's regeneration system functions automatically with no operator input or interruption to work.
- Using Cat genuine oil and filters and doing typical Scheduled Oil Sampling (S-O-SSM) monitoring will double the current service interval to 1,000 hours, giving you greater uptime to do more work.
- S-O-S ports simplify maintenance and allow for quick, easy extraction of fluid samples for analysis.
- The diesel particulate filter requires no maintenance.
- Replace fuel filters at 1,000 hours – twice the interval from the previous filters.
- The latest hydraulic oil filter provides improved filtration performance, anti-drain valves to keep oil clean when the filter is replaced, and longer life with a 3,000-hour replacement interval – 50% longer than previous filter designs.
- The high-efficiency cooling fan runs only when needed; program intervals so the fan automatically reverses to keep cores clean without interrupting your work.
- Standard Product LinkTM provides location, machine hours, fuel usage, productivity, idle time, diagnostic codes, and other machine data on demand through VisionLink online interface, helping you improve jobsite efficiency with lower operating costs.
- Remote Troubleshoot^{**} connects you to a dealer service pro to help solve your problem and quickly get you to work.
- Remote Flash^{**} works around your schedule to ensure your machine's software is up to date for optimal performance.

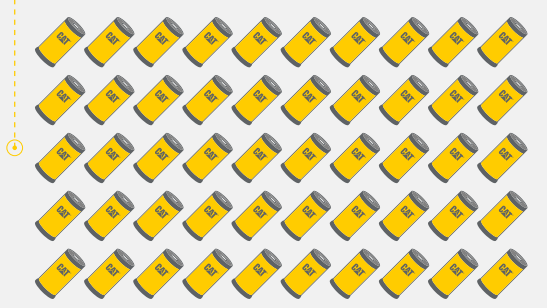
**All percentages compared to 2021 model year 548.*

***Requires cell coverage.*



SAVE MONEY

THE NEXT GENERATION 548
CONSUMES **50 FEWER FILTERS***



FEWER FILTERS,
LONGER INTERVALS,
LESS COST,
MORE PRODUCTIVITY

***COMPARED TO PREVIOUS 548 OVER 12,000 HOURS**

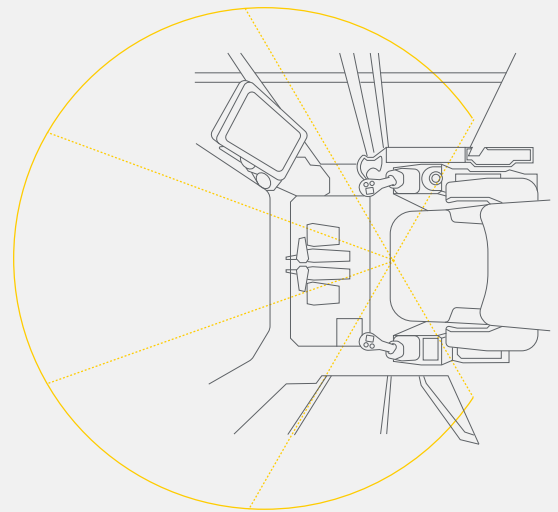


ENHANCED SAFETY



- The cab meets applicable industry standards for Rollover Protective Structure (ROPS)/Falling Object Protective Structure (FOPS)/Operator Protective Guards (OPG) and protects the operator inside the cab.
- Access most routine maintenance points at ground level.
- The right-hand service platform design provides easy, safe, and quick access to the upper service platform; the service platform steps use an anti-skid punch plate to prevent slipping. The handrails are provided for easy access.
- Larger 32 mm (1.25") polycarbonate front window, smaller cab pillars, and a flat engine hood improve visibility by up to 50%.
- Standard rearview camera enhances jobsite visibility; right-hand-sideview cameras are optional.
- The monitor's slope and grade indicator tell you the machine's position to help optimize its performance.
- A signaling/warning horn and travel alarm enhance jobsite safety.
- Make service work easier and safer with optional inspection lighting. With the flip of a switch, lights will illuminate the engine, pump, battery, and radiator compartments to enhance visibility.

50% GREATER VISIBILITY*



*CAT NEXT GENERATION 548 COMPARED TO PREVIOUS 548

- The Cat® C7.1 engine meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels** up to: 20% biodiesel FAME (fatty acid methyl ester)* or 100% renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuels. Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.
- Auto Engine Speed Control reduces unnecessary fuel burn and greenhouse gas emissions by allowing the engine to automatically go into idle mode when the machine is not working.
- Extended maintenance intervals reduce downtime and decrease the amount of fluid and filters that are replaced over the machine life.
- Cat VisionLink displays the CO₂ emissions for monitored assets, calculated by fuel type for the Runtime Fuel Burned each day in a selected date range.
- Remote Flash minimizes downtime and maintenance time while keeping your asset running at maximum efficiency. Alerts for machine updates are sent virtually from your Cat dealer, and updates can be deployed without a dealer technician needing to be onsite.
- Remote Troubleshoot decreases maintenance time and keeps your machine running with maximum efficiency by allowing your Cat dealer to virtually test the machine while working. Once a problem is identified, a technician can fix it the first time, saving time and money.
****Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).***
*****Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.***



INCREASE YOUR PRODUCTIVITY AND PROFIT

WITH CAT ATTACHMENTS

Easily expand the performance of your machine by utilizing any of the variety of Cat attachments. Each Cat attachment is designed to fit the weight and horsepower of the Cat machine for improved performance, safety, and stability.



GRAPPLES

Cat log loading grapples are made with high-strength steel for maximum performance. They are ideal for picking and sorting, bunching and loading, and shoveling applications. Bolt-on access panels make them easier to service.



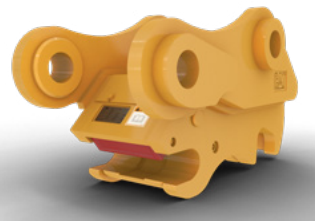
MULCHERS

Cat forestry mulchers make land clearing fast and safe. Staggered teeth quickly turn trees into mulch; a hydraulically controlled door lets the operator direct mulch flow to enhance jobsite safety.



BUCKETS

Cat buckets move material quickly and efficiently. Their unique design enables more efficient filling and better operator control, which improves overall productivity.



COUPLERS

Cat quick couplers allow you to change between tools in minutes, making the machine capable of doing a variety of money-making tasks.



ATTACHMENT TRACKING MADE EASY

The Cat PL161 attachment locator is a Bluetooth device that makes finding grapples, buckets, and other gear quick and easy. The excavator's onboard Bluetooth reader will locate the device automatically.

TECHNICAL SPECIFICATIONS

Engine

Engine Model	Cat C7.1	
Net Power – ISO 9249	202.4 kW	271 hp
Engine Power – ISO 14396	205 kW	275 hp
Net Power – ISO 9249 (DIN)	275 hp (metric)	
Engine Power – ISO 14396 (DIN)	279 hp (metric)	
Bore	105 mm	4.13 in
Stroke	135 mm	5.31 in
Displacement	7.1 r/min	433.3 r/min
Biodiesel Capability	B20 ¹	
Emissions	Meets U.S. EPA Tier 4 Final, EU Stage V emission standards.	

Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system, and alternator with engine speed at 1,800 rpm. Advertised power is tested per the specified standard in effect at time of manufacture.

¹Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels** up to: 20% biodiesel FAME (fatty acid methyl ester)* or 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels. Refer to guidelines for successful application. Please consult your Cat dealer or Caterpillar Machine Fluids Recommendations (SEBU6250) for details.

*Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).

**Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

Hydraulic System

Main System – Maximum Flow	502 L/min	132.6 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,076 psi
Maximum Pressure – Equipment – Lift Mode	38 000 kPa	5,511 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	28 000 kPa	4,061 psi

Drive

Maximum Travel Speed	4.8 km/h	3 mile/h
Maximum Drawbar Pull	295 kN	66,319 lbf

Swing Mechanism

Swing Speed	8.1 r/min	
Maximum Swing Torque	136 kN-m	100,308 lb/ft

Weights

Operating Weight – General Forestry	37 800 kg	83,300 lb
• High Wide undercarriage, Reach boom, R2.95 m (9'8") Reach stick, 700 mm (28") double grouser shoes, no bucket.		
Operating Weight – Log Loader, Under/Under	40 500 kg	89,290 lb
• High Wide undercarriage, Log Loader boom, 4.05 m (13'3") Over/Under stick with live heel, 700 mm (28") double grouser shoes, no grapple.		

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system on the 22"/48" Riser Cab contains 2.1 kg of refrigerant, which has a CO₂ equivalent of 3.003 metric tonnes. The system on the 72" Riser Cab contains 2.2 kg of refrigerant, which has a CO₂ equivalent of 3.146 metric tonnes.

Service Refill Capacities

Fuel Tank	990 L	262 gal
Cooling System	38 L	10 gal
Engine Oil	25 L	7 gal
Swing Drive	13.5 L	4 gal
Final Drive – Each	9.5 L	3 gal
Hydraulic System – Including Tank	348 L	92 gal
Hydraulic Tank	185 L	49 gal
Diesel Exhaust Fluid (DEF) Tank	41 L	11 gal

Dimensions

	General Forestry	Log Loader
Boom	Reach 5.9 m (19'4")	6.55 m (21'6")
Stick	Reach 2.95 m (9'8")	Over/Under 4.05 m (13'3")
Stick	Drop Nose 3.71 m (12'2")	Under/Under 3.76 m (12'4")
Stick	—	Power Clam 4.05 m (13'3")
Shipping Height (cab tilted)	3500 mm (11'6")	3480 mm (11'5")
Handrail Height	3500 mm (11'6")	3500 mm (11'6")
Shipping Length*	10 470 mm (34'4")	15 210 mm (49'11")
Processor – no attachment	12 570 mm (41'3")	—
Road Builder – with bucket	11 920 mm (39'1")	—
Under/Under – no grapple	—	15 120 mm (49'7")
Over/Under – no grapple	—	15 210 mm (49'11")
Power Clam – no grapple	—	14 060 mm (46'2")
Tail Swing Radius	3530 mm (11'7")	3530 mm (11'7")
Counterweight Clearance	1500 mm (4'11")	1500 mm (4'11")
Ground Clearance	780 mm (2'7")	780 mm (2'7")
Track Length	5050 mm (16'7")	5050 mm (16'7")
Length to Center of Rollers	4020 mm (13'2")	4020 mm (13'2")
Track Gauge	2790 mm (9'2")	2790 mm (9'2")

Working Ranges

General Forestry

Processor

Reach 5.9 m (19'4") boom, drop nose 3.71 m (12'2") processor stick		
Maximum Reach at Ground Level	8980 mm	29'6"

Road Builder

Reach 5.9 m (19'4") boom, Reach 2.95 m (9'8") stick, 1.54 m ³ (2.01 yd ³) HD bucket		
Maximum Reach at Ground Level	10 040 mm	32'11"

Log Loader

Under/Under

Log Loader 6.55 m (21'6") boom, under/under 3.76 m (12'4") stick		
Maximum reach at ground level	11 440 mm	37'6"

Over/Under

Log Loader 6.55 m (21'6") boom, over/under 4.05 m (13'3") stick		
Maximum reach at ground level	12 350 mm	40'6"

Power Clam

Log Loader 6.55 m (21'6") boom, power clam 4.05 m (13'3") stick		
Maximum reach at ground level	10 480 mm	34'5"

STANDARD & OPTIONAL EQUIPMENT

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

	Standard	Optional
UNDERCARRIAGE AND STRUCTURES		
High Wide undercarriage	✓	
8.5" pitch Cat grease lubricated track chain with pressed fit pin	✓	
Catwalks	✓	
Tie down points	✓	
Counterweight fuel tank	✓	
Heavy-duty track rollers and frames	✓	
Heavy-duty travel motor guards	✓	
Heavy-duty bottom guards	✓	
Track guiding guards	✓	
High drawbar final drives	✓	
Heavy-duty recoil springs	✓	
Heavy-duty hydraulic swivel	✓	
Heavy-duty hydraulic swivel guard	✓	
900 mm (36") triple grouser Tri Link shoes		✓
850 mm (33") triple grouser shoes		✓
700 mm (28") double or single grouser shoes		✓
ELECTRICAL SYSTEM		
Maintenance-free 1000 CCA batteries (x4)	✓	
Centralized electrical disconnect switch	✓	
LED chassis, boom (GF), stick (LL) and cab lights	✓	
115-amp alternator	✓	
24-volt electric starting	✓	
Horn and travel alarm	✓	
Pre-start monitoring system	✓	
Tool control software	✓	
Secondary engine shutoff switch	✓	
Cold start package with block heaters	✓	
Premium General Forestry lighting package		✓
Premium Log Loader lighting package		✓
BOOM AND STICKS		
5.9 m (19'6") Reach boom – General Forestry		✓
6.55 m (21'6") boom – Log Loader		✓
2.95 m (9'8") Reach stick		✓
3.71 m (12'2") goose neck stick		✓
3.76 m (12'4") under/under stick		✓
4.05 m (13'3") over/under stick		✓
4.05 m (13'3") power clam		✓
CB2 family bucket linkage		✓

	Standard	Optional
CAB		
ROPS Forestry cab with polycarbonate windows	✓	
4-point harness seat belt	✓	
Heated and cooled seat with air-adjustable suspension	✓	
Integrated joysticks	✓	
Tilt-up left-side console (side-entry cab only)	✓	
High-resolution touchscreen monitor	✓	
Bluetooth integrated radio (including USB, auxiliary port and microphone)	✓	
12V DC outlets	✓	
Keyless push-to-start engine control	✓	
Automatic bi-level air conditioner	✓	
LED dome and floor lights	✓	
Windshield wiper and washer	✓	
Behind seat storage	✓	
Retractable sunshade	✓	
Side entry with 559 mm (22") tilting riser		✓
Rear entry with 1219 mm (48") tilting riser		✓
Rear entry with 1829 mm (72") tilting riser		✓
CAT TECHNOLOGIES		
VisionLink	✓	
Remote Services Capability	✓	

(continued on next page)

STANDARD & OPTIONAL EQUIPMENT *(continued)*

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

	Standard	Optional
ENGINE		
Electric fuel priming pump	✓	
Three selectable modes: Power, Smart, Eco	✓	
Automatic engine speed control	✓	
Automatic engine idle shutdown	✓	
Up to 4600 m (15,092 ft) altitude capability	✓	
52° C (126° F) high-ambient cooling capacity	✓	
-32° C (-25° F) cold start capability	✓	
Hydraulic reverse fan	✓	
Two-stage fuel filter system	✓	
Double element air filter with integrated pre-cleaner	✓	
Cold start package with block heaters and ether assist		✓
SAFETY AND SECURITY		
Caterpillar One Key security system	✓	
Lockable service doors	✓	
Lockable external tool/storage box	✓	
Lockable disconnect switch	✓	
Lockable fuel cap and hydraulic tank	✓	
Service platforms with anti-skid plate and countersunk bolts	✓	
Right-hand rail and hand hold	✓	
Signaling/warning horn	✓	
Ground-level secondary engine shutoff switch	✓	
Rearview camera	✓	
Travel alarm	✓	
Right-hand-sideview cameras		✓
Inspection lighting		✓

	Standard	Optional
HYDRAULIC SYSTEM		
Boom and stick regeneration circuits	✓	
Boom and stick drift reduction valve	✓	
Electronic main control valve	✓	
Automatic hydraulic oil warmup	✓	
Automatic swing parking brake	✓	
High performance hydraulic return filter	✓	
Automatic two speed travel	✓	
Bio hydraulic oil capability	✓	
High torque swing drive	✓	
Swing cushion valve	✓	
Tool control software	✓	
Medium pressure circuit		✓
SERVICE AND MAINTENANCE		
Side-entry to service platforms	✓	
Grouped location for engine oil and fuel filters	✓	
S-O-S ports	✓	
Integrated vehicle health management system	✓	

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

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AEXQ3534-02
Replaces AEXQ3534-01
Build Number: 07B
(Aus-NZ, Chile, N Am)

