

350

HYDRAULIC EXCAVATOR



Net Power – ISO 9249
Operating Weight
Maximum Digging Depth

309 kW (414 hp)
47 600 kg (104,900 lb)
7690 mm (25.3 ft)



350

HYDRAULIC EXCAVATOR

The Cat® 350 is at the top of its class for productivity. With low owning and operating costs and easy-to-use Cat technology, the excavator will help you get tons of work done on grade and on time. Not all features available in all regions. Consult your Cat dealer for specific configurations available in your region.



CLASS-LEADING PRODUCTIVITY

Dig, swing, and load tons of material with power and precision.

EASY-TO-USE CAT TECHNOLOGY

Make your work simpler and more efficient.

LOW OWNING AND OPERATING COSTS

Spend less money with industry-leading fuel efficiency and long life filters with extended service intervals.

LATEST FEATURES



Cab Monitor Improvements

1. Continuously improved user interface allows for intuitive navigation, minimizing performance interruption with the easy-to-use touchscreen menu.
2. Identify apps quickly with a grid list view, abbreviated app names, and categorized menu options.
3. A new notification center keeps important information visible to the operator, and displays messages without shrinking the camera view.
4. Color coded notifications set critical messages apart from the rest.
5. Use the in-monitor QR code to learn about machine technology and features through a full suite of “how-to” videos.

Operator Coaching

1. Operator Coaching is an in-cab system that recognizes specific opportunities for operators to be more productive and prevent unnecessary machine wear and tear.
 2. After detecting inefficient or restricted actions, the system alerts the operator and provides insight into the inefficiency and steps to improve.
 3. Paired with a VisionLink® Productivity subscription, this information and other Operator Coaching insights can be viewed from anywhere.
- Standard integrated vehicle health management system alerts the operator with service guidance and parts needed to enhance uptime.
 - Cat Detect – People Detection helps protect the most valuable asset on any jobsite – people. The system uses smart cameras with depth sensors to provide the operator with visual and auditory alerts so he or she can take immediate action when a person is too close to the excavator.
 - Enhance visibility to make service work easier and safer with optional inspection lighting.

Not all features are available in all regions. Please check with your local Cat dealer for specific offering availability in your area. Build Number: 06C



HIGH PERFORMANCE, LOW FUEL CONSUMPTION

- Powerful digging force and strong swing torque enable the use of large buckets up to 3.2 m³ (4.2 yd³) for class-leading productivity.
- Compared to the Cat 349-07, the 350 consumes up to 13 percent less fuel for lower operating costs and greater profit potential.
- Match the excavator to the job with three power modes – Smart, Power, and Eco. Smart mode automatically matches engine and hydraulic power to digging conditions, providing maximum power when needed and reducing power when it isn't to help save fuel. Power mode is maximum power all the time. Eco mode reduces engine speed and keeps it constant to reduce fuel consumption.
- Valve priority puts hydraulic pressure and flow where you command it to go for fast light- to medium-load cycle times.



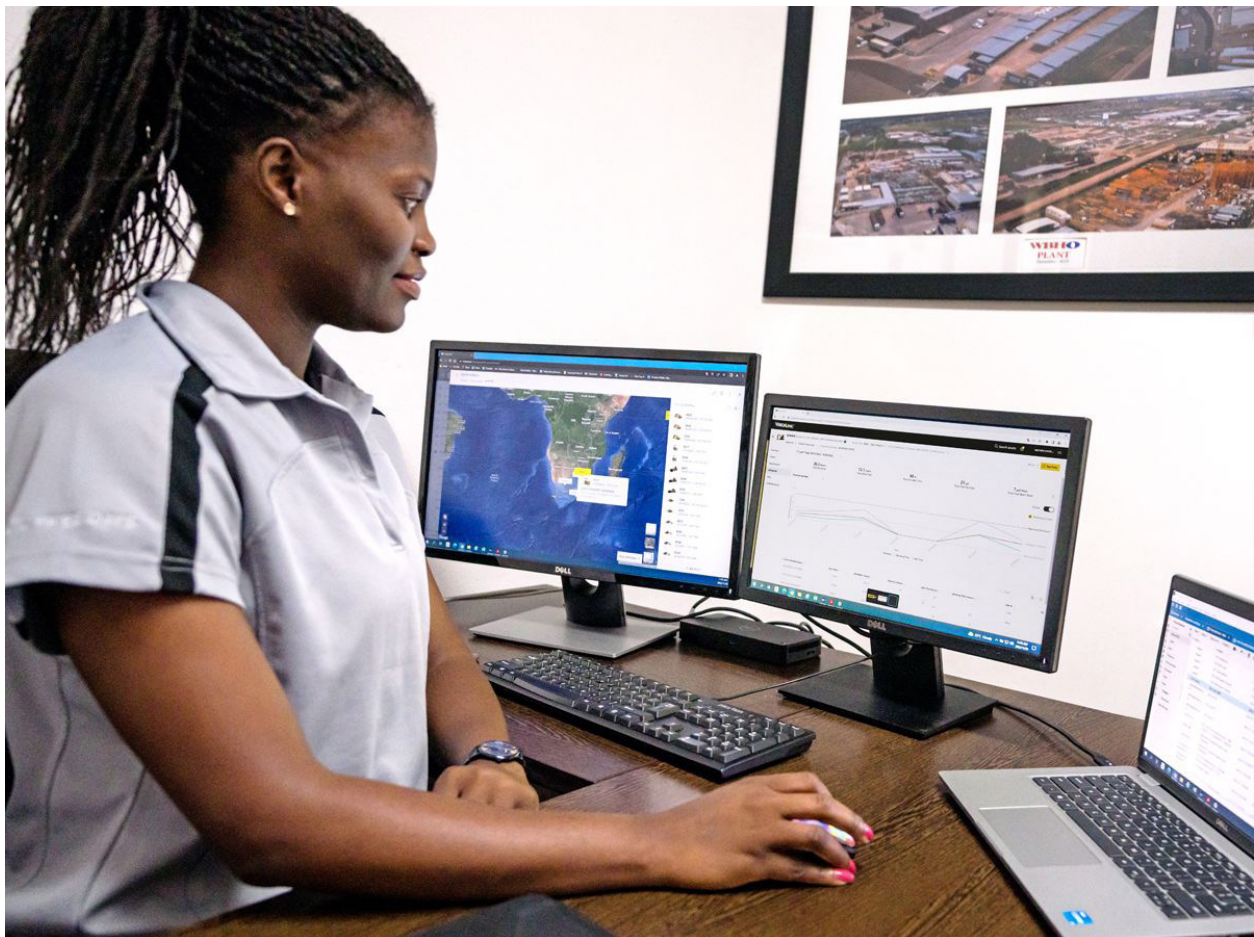
BOOST EFFICIENCY AND PRODUCTIVITY



- Boost productivity up to 45 percent with optional Cat Grade technology.
- 2D Grade indicates depth and slope on the monitor with auditory alerts.
- Grade Assist helps you stay on grade – simply and effortlessly – with single-lever digging.
- Automatically stop excavator swing at operator-defined setpoints in truck loading and trenching applications with Swing Assist, which will help you use less effort and consume less fuel.
- Cat Payload helps you achieve precise load targets to improve your operating efficiency. Pick up a load of material and get a real-time weight estimate without swinging.
- Combine Payload with VisionLink and remotely manage your production targets. The monitor's USB port lets you download results from one shift all the way up to 30 days of work so you can manage your progress without needing an internet connection or VisionLink subscription.
- Upgrade to Cat Grade with Advanced 2D and create and edit grade designs with ease on a second high-resolution 254 mm (10 in) touchscreen monitor.
- Want a 3D system to improve your digging results? Caterpillar single antenna global navigation satellite system (GNSS) makes it easy by giving you visual and auditory guidance to grade. Plus you can create and edit designs on the touchscreen monitor while you're on the job. If your application calls for a dual antenna system, it's easy to upgrade.
- Upgrade to our dual antenna GNSS for maximum grading efficiency. The system lets you create and edit designs on the touchscreen monitor while you're on the job, or you can have the plan design sent to the excavator to make your work easier. Plus you get added benefits of avoidance zones, cut and fill mapping, lane guidance, and augmented reality along with advanced positioning capability.
- Know the excavator's exact position relative to GPS and GLONASS systems. The machine automatically compensates for excavator pitch and roll caused by sloping ground conditions.
- All Cat Grade systems are compatible with radios and base stations from Trimble, Topcon, and Leica.
- Already invested in a grade infrastructure? You can install grade systems from Trimble, Topcon, and Leica onto the machine.
- 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.
- Standard VisionLink 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.

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 ensure that issues are resolved 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.**



BUILT FOR RUGGED CONDITIONS



- The reinforced swing bearing, along with stress-relieved boom and stick, enables the 350 to take on tough work over and over again.
- Work up to 4500 m (14,764 ft) above sea level.
- Automatic hydraulic oil warmup gets you to work faster in cold temperatures and helps prolong the life of components.
- Three levels of filtration protect the engine from contaminated diesel fuel.
- Grease sealed between track pins and bushings reduces travel noise and prevents debris from entering to increase undercarriage life.
- Standard built-in protection includes bottom, travel motor, and swivel guards.
- The sloped track frame prevents mud and debris accumulation, helping reduce risk of track damage.

WORK IN COMFORT

- Choose between Essential and Deluxe cabs – both with automatic climate control.
- Deluxe cab comes with heated seat to keep you warm and tilt-up console to enable easy entry and exit.
- Control the excavator with easy-to-reach controls all located in front of you.
- Stow your gear with plenty of in-cab storage beneath and behind the seat, overhead, and in the consoles.
- Use the standard radio's USB ports and Bluetooth® technology to connect to personal devices and make hands-free calls.



SIMPLE TO OPERATE



- Start the engine with a push button; use a Bluetooth key fob or Operator ID passcode.
- Program each joystick button – including power mode, response, and pattern – using Operator ID; the machine will remember what you set each time you go to work.
- Make operating easier with the touch of a joystick button. An auxiliary relay allows you to power on or turn off a CB radio, beacon light, and even a dust suppression watering system without taking your hands off the joysticks.
- 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. Productivity applications are displayed in grid-view to read on-the-go, and touchscreen navigation is programmed to make sure job performance continues without any hold ups.
- Protect your hammer from overworking. Auto hammer stop warns you after 15 seconds of continuous firing and then automatically shuts it off after 30 seconds – all to prevent the tool from overheating and rapid wear.
- Not sure how a function works or how to maintain the excavator? Always have the operator's manual at your fingertips in the touchscreen monitor.

EASY MAINTENANCE

- Boost productivity with proactive service reminders. Our Integrated Vehicle Health Management System alerts the operator with step-by-step service guidance along with parts needed so you don't experience any unnecessary downtime.
- Expect less maintenance cost due to extended and synchronized service intervals.
- Check hydraulic system oil and easily drain fuel system water from ground level.
- Track your excavator's filter life and maintenance intervals via the in-cab monitor.
- Oil and fuel filters are grouped and located on right-hand side of machine for easy maintenance.
- The air intake filter with pre-cleaner has high dust holding capacity.
- The hydraulic oil filter provides improved filtration performance; anti-drain valves keep oil clean when the filter is replaced.
- Scheduled Oil Sampling (S-O-SSM) ports are on ground level, simplifying maintenance and allowing for quick, easy extraction of fluid samples for analysis.



ENHANCED SAFETY

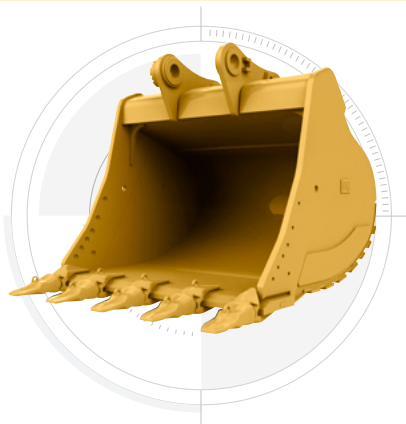


- Enhance jobsite safety by adding Cat Command to your fleet. The remote control system comes with everything you need like WIFI radio, cameras, and microphone so you can work outside of the cab and avoid potential hazards.
- Cat Detect – People Detection helps protect the most valuable asset on any jobsite – people. The system uses smart cameras with depth sensors to provide the operator with visual and auditory alerts so he or she can take immediate action when a person is too close to the excavator.
- Keep your excavator secure with Operator ID. Use your PIN code on the monitor to enable the push button starting feature.
- A travel direction indicator helps operators know which way to activate the travel levers.
- Enhance jobsite safety by adding an optional swing alarm to alert people when you're rotating from trench to stockpile and back again.
- A ground-level shutoff switch stops all fuel to the engine when activated and shuts down the machine.
- Enjoy great visibility into the trench, in each swing direction, and behind you with the help of smaller cab posts and larger windows.
- Serrated steps and anti-skid punch plate on the service platform help prevent slipping.
- A rearview camera is standard.
- Make service work easier and safer with inspection lighting. With the flip of a switch, lights will illuminate the engine, pump, battery, and radiator compartments to enhance visibility.
- The Rollover Protective Structure (ROPS) cab meets industry standards and protects the operator in the event of a rollover.

INCREASE YOUR PRODUCTIVITY AND PROFIT WITH CAT ATTACHMENTS

You can easily expand the performance of your excavator by utilizing any Cat attachment. Each Cat tool is designed to fit the weight and horsepower of the excavator for improved performance, safety, and stability.

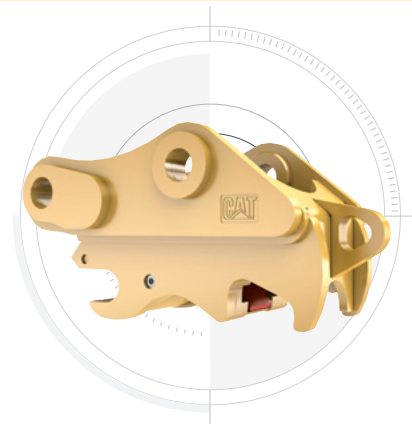
BUCKETS



MAKE EVERY PASS COUNT

Did you know that most fuel is burned during digging? The right Cat bucket tailored to your specific application can deliver up to 15% more efficiency with better penetration and loading.

COUPLERS



CHANGE TOOLS QUICKLY

Cat quick couplers let you change between tools in minutes, making the machine more versatile for greater money-making opportunities.

HYDRAULIC HAMMERS



BREAK BIG ROCKS FAST

The 350 can handle hammers up to 200 mm (7.87 in) in size, which will help you make quick work of big rocks.

AUTO HAMMER STOP PREVENTS WEAR

Protect your hammer tool from overheating and rapid wear. Auto hammer stop warns you after 15 seconds of continuous firing and then automatically shuts it off after 30 seconds – all to extend the tool's service life.

TECHNICAL SPECIFICATIONS

Engine

Net Power – ISO 9249	309 kW	414 hp
Net Power – ISO 9249 (DIN)	420 hp	420 hp
Engine Model	C9.3 B	
Engine Power – ISO 14396	416 hp	310 kW
Engine Power - ISO 14396 (DIN)	421 hp	
Bore	115 mm	5 in
Stroke	149 mm	6 in
Displacement	9.3 L	568 in ³
Biodiesel Capability	Up to B20 ¹	
Emissions	Emits equivalent to U.S. EPA Tier 3 and EU Stage IIIA.	

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 2,000 rpm. Advertised power is tested per the specified standard in effect at the time of manufacture.

¹Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels** up to 100% 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.

*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	779 L/min	206 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	25 700 kPa	3,727 psi

Swing Mechanism

Swing Speed	7.94 r/min	
Maximum Swing Torque	189 kN-m	139,275 ft-lbf

Weights

Operating Weight	47 600 kg	104,900 lb
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Service Refill Capacities

Fuel Tank Capacity	680 L	179.6 gal
Cooling System	48 L	12.7 gal
Engine Oil	32 L	8.5 gal
Swing Drive – Each	15 L	4 gal
Final Drive – Each	11 L	2.9 gal
Hydraulic System – Including Tank	550 L	145.3 gal
Hydraulic Tank	217 L	57.3 gal

Dimensions

Boom	Reach 6.9 m (22'8")	
Stick	R3.35 m (11')	
Bucket	SD 2.70 m ³ (3.60 yd ³)	
Shipping Height – Top of Cab	3260 mm	10.8 ft
Handrail Height	3400 mm	11.2 ft
Shipping Length	11 950 mm	39.1 ft
Tail Swing Radius	3760 mm	12.4 ft
Counterweight Clearance	1340 mm	4.5 ft
Ground Clearance	520 mm	1.8 ft
Track Length	5400 mm	17.9 ft
Track Length to Center of Rollers	4360 mm	14.4 ft
Track Gauge	2740 mm	9 ft
Transport Width – 600 mm (24") Shoes	3340 mm	10.11 ft

Working Ranges & Forces

Boom	Reach 6.9 m (22'8")	
Stick	R3.35 m (11')	
Bucket	SD 2.70 m ³ (3.60 yd ³)	
Maximum Digging Depth	7690 mm	25.3 ft
Maximum Reach at Ground Level	11 760 mm	38.7 ft
Maximum Cutting Height	10 700 mm	35.1 ft
Maximum Loading Height	7380 mm	24.3 ft
Minimum Loading Height	2710 mm	8.9 ft
Maximum Depth Cut for 2440 mm (8 ft) Level Bottom	7550 mm	24.8 ft
Maximum Vertical Wall Digging Depth	5630 mm	18.5 ft
Bucket Digging Force – ISO	266 kN	59,820 lbf
Stick Digging Force – ISO	200 kN	45,070 lbf

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.00 kg of refrigerant, which has a CO₂ equivalent of 1.430 metric tonnes.

STANDARD & OPTIONAL EQUIPMENT

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

	Standard	Optional		Standard	Optional
CAT TECHNOLOGY			ENGINE		
VisionLink	✓		Three selectable modes: Power, Smart, Eco	✓	
Remote Flash	✓		Auto engine speed control	✓	
Remote Troubleshoot	✓		52° C (126° F) high-ambient cooling capacity	✓	
Compatibility with radios and base stations from Trimble, Topcon, and Leica	✓		-18° C (0° F) cold start capability	✓	
Capability to install 3D grade systems from Trimble, Topcon, and Leica	✓		Double element air filter with integrated pre-cleaner	✓	
Auto hammer stop	✓		Cold start block heaters		✓
VisionLink Productivity		✓	Hydraulic reverse fan		✓
Cat Grade 2D		✓	-32° C (-25° F) cold start capability		✓
Cat Grade 3D single GNSS		✓	HYDRAULIC SYSTEM		
Cat Grade 3D dual GNSS		✓	Boom and stick regeneration circuit	✓	
Cat Grade Assist		✓	Electronic main control valve	✓	
Cat Payload		✓	Auto hydraulic oil warmup	✓	
Laser catcher		✓	Auto heavy lift	✓	
Work tool recognition		✓	Reverse swing damping valve	✓	
Work tool tracking (requires PL161 attachment locator)		✓	Auto swing parking brake	✓	
Operator Coaching		✓	High performance hydraulic return filter	✓	
BOOMS AND STICKS			Two speed travel	✓	
6.55 m (21'6") Mass boom		✓	Bio hydraulic oil capability	✓	
6.9 m (22'8") Reach boom		✓	Auto dig boost		✓
2.5 m (8'2") Mass stick		✓	Combined two-way auxiliary circuit		✓
2.9 m (9'6") Reach stick		✓	Hydraulic efficiency monitoring		✓
3.0 m (9'10") Mass stick		✓	ELECTRICAL SYSTEM		
3.35 m (11') Reach stick		✓	Maintenance-free 1,000 CCA batteries (x2)	✓	
3.9 m (12'10") Reach stick		✓	Centralized electrical disconnect switch	✓	
ELECTRICAL SYSTEM			LED exterior chassis and boom lights	✓	
SERVICE AND MAINTENANCE			SERVICE AND MAINTENANCE		
Integrated vehicle health management system		✓	Integrated vehicle health management system		✓
Grouped location of engine oil & fuel filters		✓	Electric refueling pump with auto shutoff		✓
S.O.S ports		✓			

STANDARD & OPTIONAL EQUIPMENT

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

	Standard	Optional		Standard	Optional
DELUXE CAB			ESSENTIAL CAB		
ROPS	✓		High-resolution 203 mm (8") LCD touchscreen monitor	✓	
High-resolution 203 mm (8") LCD touchscreen monitor	✓		Auto bi-level air conditioner	✓	
Auto bi-level air conditioner	✓		Keyless push-to-start engine control	✓	
Jog dial and shortcut keys for monitor control	✓		Air-suspension seat	✓	
Keyless push-to-start engine control	✓		Bluetooth radio with USB/Auxiliary ports	✓	
Height-adjustable console	✓		24V DC outlet	✓	
Tilt-up left-side console	✓		Beverage holder	✓	
Heated air-suspension seat	✓		Openable two-piece front window	✓	
Monitor integrated Bluetooth radio with USB/Auxiliary ports	✓		Rear window emergency exit	✓	
12V DC outlets	✓		Radial wiper with washer	✓	
Document storage	✓		Openable steel hatch	✓	
Overhead storage and rear storage with nets	✓		LED dome light	✓	
Beverage holder	✓		Roller front sunscreen	✓	
Cup holder	✓		Washable floor mat	✓	
Openable two-piece front window	✓		ROPS		✓
Rear window emergency exit	✓		High-resolution 254 mm (10") LCD touchscreen monitor		✓
Radial wiper with washer	✓		Roller rear sunscreen		✓
Openable polycarbonate skylight hatch	✓		SAFETY AND SECURITY		
LED dome light	✓		Caterpillar One Key security system	✓	
Floor welcome light	✓		Lockable external tool/storage box	✓	
Roof sunscreen	✓		Lockable door, fuel, and hydraulic tank locks	✓	
Roller front sunscreen	✓		Lockable fuel drain compartment	✓	
Washable floor mat	✓		Service platform with anti-skid plate and recessed bolts	✓	
Beacon ready	✓		Right Hand (RH) handrail and handhold	✓	
High-resolution 254 mm (10") LCD touchscreen monitor		✓	Signaling / warning horn	✓	
Roller rear sunscreen		✓	Ground-level secondary engine shutoff switch	✓	
Cat Stick Steer		✓	Rearview camera	✓	
Auxiliary relay		✓	Lockable disconnect switch	✓	
UNDERCARRIAGE AND STRUCTURES			Inspection Lighting	✓	
Towing eye on base frame	✓		Cat E-Fence		✓
9 mt (19,842 lb) counterweight	✓		Swing alarm		✓
600 mm (24") double grouser, HD double grouser track shoes		✓			
750 mm (30") double grouser track shoes		✓			
900 mm (35") triple grouser track shoes		✓			

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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AEXQ3504-02
Replaces AEXQ3504-01
Build Number: 06C
(Afr-ME, Aus-NZ, Eurasia,
S Am, SE Asia, Turkey)

