

330

HYDRAULIC EXCAVATOR



Net Power – ISO 9249
Operating Weight
Maximum Digging Depth

193.8 kW (260 hp)
31 400 kg (69,200 lb)
7250 mm (23.7 ft)

CAT[®]

330

HYDRAULIC EXCAVATOR

The Cat® 330 excavator has the speed, efficiency, and power for your heavy-duty applications requiring maximum productivity. You get built-in Cat Grade with 2D, Grade Assist, and Payload as standard equipment right from the factory – boosting your operational efficiency by up to 45%. Combine these features with an ergonomic cab, longer maintenance intervals, and increased fuel efficiency, and you have a low-cost-per-unit-of-production excavator built for your heavy-duty applications. Not all features are available in all regions. Consult your Cat dealer for specific configurations available in your region.



UP TO 20% MORE FUEL EFFICIENCY

With larger hydraulic pumps, a new electro-hydraulic system, and increased bucket capacity, this machine delivers more work per unit of fuel.

UP TO 25% LOWER MAINTENANCE COSTS

Fewer maintenance items paired with extended and more synchronized maintenance intervals increases uptime and reduces costs.

UP TO 45% MORE OPERATING EFFICIENCY

Offering the industry's highest level of standard factory-equipped technology, including Cat Grade with 2D, Grade with Assist and Payload.

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 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 and technology features through a full suite of “how-to” videos.
- Operator Coaching – Empower Operators. Exceed Targets.
 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.

Not all features are available in all regions. Please check with your local Cat dealer for specific offering availability in your area. Build Number: 07F



POWERFUL EFFICIENCY



- Increase fuel efficiency up to 20% over the 330D2 excavator.
- Lift more with up to 15% improved lift capacity and increased bucket size over the 330D2 excavator.
- Make working on slopes easier with 5% improved swing torque over the 330D2 excavator.
- Increase operating efficiency up to 45% with standard Cat technologies that lower operator fatigue and your operating costs, including fuel consumption and daily maintenance.
- The C7.1 engine can run on biodiesel up to B20 and emits equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
- The advanced hydraulic system provides the optimum balance of power and efficiency while giving you the control you need for precise digging requirements.
- Match the excavator to the job with power modes; let Smart mode automatically match engine and hydraulic power to digging conditions.
- Advansys™ bucket tips increase penetration and improve cycle times. Tip changes can be done quickly with a simple lug wrench instead of a hammer or special tool, improving safety and uptime.
- Auxiliary hydraulic options give you the versatility to use a wide range of Cat attachments.
- Don't let the temperature stop you from working. The excavator has a standard high-ambient temperature capability of 50° C (122° F) with de-rate and cold start capability of -18° C (0° F). An optional -32° C (-25° F) cold start package is available.

PRODUCTIVITY WITH TECHNOLOGY

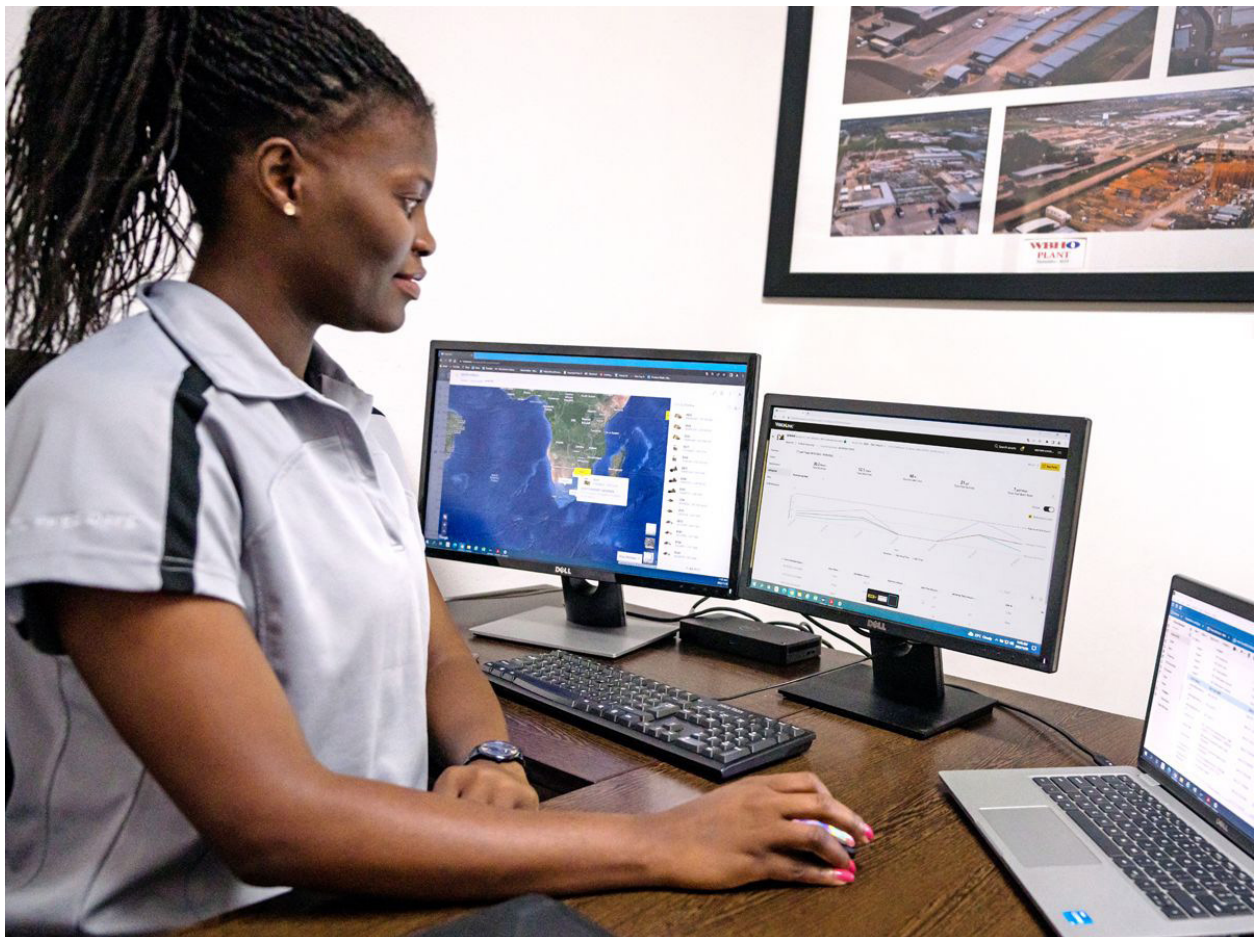
- Boost productivity up to 45% versus traditional grading with standard Cat Grade with 2D system – includes indicate-only and laser capability.
- Dig with guidance to depth, slope, and horizontal distance to grade. You can set up to four different depth and slope targets to help save time and money.
- Cat Payload helps you achieve precise load targets to improve your operating efficiency. Pick up a load of material – with a bucket and thumb combination or grapple and clamshell attachments – and get a real-time weight estimate without swinging.
- Combine Payload with VisionLink and remotely manage your production targets.
- 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.
- Already invested in another brand's 3D system? No problem. Standard Cat technology like Grade with 2D can readily integrate with that system to give you the precise results you need.
- Standard Grade Assist helps you stay on grade – simply and effortlessly – with single-lever digging.
- Set your desired bucket angle and let Bucket Assist automatically maintain the angle in sloping, leveling, fine grading, and trenching applications.
- Keep the tracks on ground in lifting and hard digging with Boom Assist.
- Automatically stop excavator swing at operator-defined set points in truck loading and trenching applications with Swing Assist, which will help you use less effort and consume less fuel.
- 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.
- Operator Coaching is an in-cab system that recognizes specific opportunities for operators to be more productive and prevent unnecessary machine wear and tear.



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.**



BETTER COMFORT AND CONTROL

- Two cab options – Comfort and Deluxe – let you choose the level of comfort you need.
- Sit in wide seats that adjust for operators of all sizes (heated option available).
- Get in and out of the cab easier using the tilt-up left console.
- Advanced viscous mounts reduce cab vibration up to 50% over previous excavator models.
- Control the excavator comfortably 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. A cup holder, document holder, bottle holder, and coat hook are also provided.
- Use the standard radio's USB ports and Bluetooth® technology to connect personal devices and make hands-free calls.



SIMPLE TO OPERATE

- Start the engine with a push button; use a Bluetooth key fob, or the unique Operator ID function.
- Program your power mode and joystick preferences using Operator ID; the excavator will remember what you set each time you go to work.
- Trouble cutting through tough material? Auto dig boost gives you an automatic power increase of 8% when you need it for better bucket penetration, shorter cycle times, and greater payloads.
- Need more lift during your shift? Auto heavy lift gives you 8% more power exactly when you need it for as long as you need it.
- Make moving the excavator much easier with Cat Stick Steer. Simply push a button and use one hand to travel and turn instead of both hands or feet on levers or pedals.
- Make operating easier with the touch of a joystick button. Additional auxiliary relays allow 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.
- Tilt rotator attachments – ours or other brands – work seamlessly with Cat 2D Grade, Assist, Payload, and E-Fence . With no additional hardware required, all you have to do is simply select “Third Party Tiltrotator System Installation” in the monitor, do the calibration, and get to work.
- Navigate quickly on the high-resolution monitor.
- 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 tools service life.
- 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.
- Save more time and energy with the available work tool recognition feature. A simple shake of the attached tool confirms its identity and ensures all the attachment settings (pressure, flow, and dimensions) are correct so you can work quickly and efficiently.
- 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.



LOWER MAINTENANCE COSTS



- Expect up to 25% less maintenance cost than the 330D2 (savings calculated over 12,000 machine hours).
- 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 tools service life.
- Do all daily maintenance at ground level.
- Check engine oil level quickly and safely with the ground-level engine oil dipstick; fill and check engine oil on top of the machine with a conveniently located second dipstick.
- Track your excavator's filter life and maintenance intervals via the in-cab monitor.
- Do no required maintenance on the Cat Clean Emissions Module.
- Expect the latest air intake filter with pre-cleaner to last up to 1,000 hours – a 100% increase over the previous filter.
- 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.
- High-efficiency cooling fans run only when needed; you can program intervals so they automatically reverse to keep cores clean without interrupting your work
- Scheduled Oil Sampling (S-O-SSM) ports are on ground level, simplifying maintenance and allowing for quick, easy extraction of fluid samples for analysis.

BUILT-IN SAFETY FEATURES

- 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.
- Cat Command remote control enables equipment operators to work safely outside the machine when working in hazardous environments. Command offers the choice of handheld Consoles (line-of-sight) or long-distance virtual Stations (non-line-of-sight). Deep integration with machine systems enables efficiency and productivity by maintaining the use of in-cab technology* features (Grade, Payload, Assist, etc.).
- 2D E-Fence prevents the excavator from moving outside of operator-defined set points; the system works with thumb and bucket combinations along with hammer, grapple, and clamshell attachments.
- Lift Assist helps you avoid tipping. With visual and auditory alerts, you'll know if your load is within the excavator's safe working range limits.
- Access 100% of daily maintenance points from ground level – no need for you to climb on top of the excavator.
- The standard Rollover Protective Structure (ROPS) cab meets ISO 12117-2:2008 requirements.
- Enjoy great visibility into the trench, in each swing direction, and behind you with the help of smaller cab pillars, larger windows, and a flat engine hood design.
- The standard hydraulic lockout lever isolates all hydraulic and travel functions in the lowered position.
- Ground-level shut-off switch stops all fuel to the engine when activated and shuts down the machine.
- A rearview camera and a right-side-view camera are standard. Upgrade to 360° visibility and you'll easily visualize objects and personnel around the excavator in a single view.
- Right service platform design provides easy, safe, and quick access to upper service platform; the service platform steps use anti-skid punch plate to prevent slipping.
- 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.
- Enhance jobsite safety. Add a swing alarm to alert people when you're rotating from trench to stockpile and back again.

***Not all technology features are available on the Command Console and vary by model. Consult your Cat dealer for details.**



MORE THAN MACHINES

BUILT AROUND YOUR SUCCESS

When you buy Cat equipment, you get so much more than the machine. You also get the support of a best-in-class dealer network, backed by a range of flexible solutions, technology, tools, and more.



CUSTOMER VALUE AGREEMENTS

A Customer Value Agreement (CVA) from your Cat dealer helps you do more and worry less. A CVA simplifies machine ownership and maintenance, adds the security of expert dealer support, and gives you the peace of mind from effective equipment health management.

GENUINE CAT PARTS

Genuine Cat parts deliver the highest level of reliability and productivity. Order direct from your Cat dealer or shop online at parts.cat.com.

REPAIR OPTIONS

A broad range of repair options gives you choices that work with your needs, budget, and timeline. Every repair is performed by expert Cat technicians. You'll receive smart repair advice, a timely, accurate quote, and service that gets your machine back into action quickly.

FINANCIAL SERVICES

Count on Cat Financial to provide the best finance and extended protection solutions for your business. For more than 30 years, we have helped our customers succeed through financial service excellence.



DOZERS



SKID STEERS



MATERIAL HANDLERS



EXCAVATORS



WHEEL LOADERS



TRACK LOADERS

INCREASE YOUR PRODUCTIVITY AND PROFIT

WITH CAT ATTACHMENTS

You can 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 Cat excavators for improved performance, safety, and stability.

BUCKETS



HYDRAULIC HAMMERS



PREVENT HAMMER WEAR AND TEAR

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.

GRAPPLES



TILTROTATOR



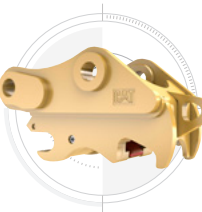
DO HARD-TO-REACH WORK

With 360° rotation and 40° side-to-side tilting action, a Cat tiltrotator will help you get complex work done faster. A new system upgrade from the factory allows the tool to work with Cat 2D Grade, Assist, Payload, and E-Fence. It includes factory-fit joysticks, but uses the standard cab monitor to display the tool and engage its SecureLock™ so you don't need to spend money on an extra monitor. It also works seamlessly with other brands with no additional hardware required. All you have to do is simply select "Third Party Tiltrotator System Installation" in the monitor, do the calibration, and get to work.

SECONDARY PULVERIZERS



QUICK COUPLERS



MULTI-PROCESSORS



VIBRATORY PLATE COMPACTORS



FIND YOUR ATTACHMENTS FAST

The Cat PL161 Attachment Locator is a Bluetooth device that makes finding your attachments and other gear quick and easy. The excavator's onboard Bluetooth reader or Cat app on your phone will locate the device automatically.



Save more time and energy with the available work tool recognition feature. A simple shake of the attached tool confirms its identity; it also ensures all the attachment settings are correct so you can get to work quickly and efficiently.

TECHNICAL SPECIFICATIONS

Engine

Net Power – ISO 9249	193.8 kW	260 hp
Net Power – ISO 9249 (DIN)	263 hp (metric)	
Engine Model	Cat C7.1	
Engine Power – ISO 14396	195 kW	261 hp
Engine Power – ISO 14396 (DIN)	265 hp (metric)	
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.01 L	428 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 (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.

*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	560 L/min (148 gal/min)	
Maximum Pressure – Equipment	35 000 kPa	5,075 psi
Maximum Pressure – Equipment – Lift Mode	38 000 kPa	5,510 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	29 800 kPa	4,320 psi

Swing Mechanism

Swing Speed	11.5 r/min	
Maximum Swing Torque	110 kN-m	81,132 ft-lbf

Weights

Operating Weight	31 400 kg	69,200 lb
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Heavy Duty (HD) Long undercarriage, HD Reach boom, HD R3.2 m (10'6") stick, HD 1.80 m³ (2.35 yd³) bucket, 800 mm (31") triple grouser shoes and 6700 kg (14,770 lb) counterweight.

Service Refill Capacities

Fuel Tank Capacity	474 L	125.2 gal
Cooling System	25 L	6.6 gal
Engine Oil	25 L	6.6 gal
Swing Drive – Each	10 L	2.6 gal
Final Drive – Each	5.5 L	1.5 gal
Hydraulic System – Including Tank	310 L	81.9 gal
Hydraulic Tank	147 L	38.8 gal

Dimensions

Boom	HD Reach 6.15m (20'2")	
Stick	HD Reach 3.2 m (10'6")	
Bucket	HD 1.80 m ³ (2.35 yd ³)	
Shipping Height – Top of Cab	3060 mm	10 ft
Handrail Height	3060 mm	10 ft
Shipping Length	10 420 mm	34.2 ft
Tail Swing Radius	3130 mm	10.3 ft
Counterweight Clearance	1120 mm	3.7 ft
Ground Clearance	490 mm	1.6 ft
Track Length	4860 mm	15.9 ft
Length to Center of Rollers	3990 mm	13.1 ft
Track Gauge	2590 mm	8.5 ft
Transport Width	3390 mm	11.1 ft

Working Ranges & Forces

Boom	HD Reach 6.15m (20'2")	
Stick	HD Reach 3.2 m (10'6")	
Bucket	HD 1.80 m ³ (2.35 yd ³)	
Maximum Digging Depth	7250 mm	23.7 ft
Maximum Reach at Ground Level	10 690 mm	35.1 ft
Maximum Cutting Height	10 000 mm	32.8 ft
Maximum Loading Height	6940 mm	22.8 ft
Minimum Loading Height	2290 mm	7.5 ft
Maximum Depth Cut for 2440 mm (8 ft) Level Bottom	7090 mm	23.3 ft
Maximum Vertical Wall Digging Depth	5790 mm	19 ft
Bucket Digging Force – ISO	179 kN	40,200 lbf
Stick Digging Force – ISO	126 kN	28,300 lbf

STANDARD & OPTIONAL EQUIPMENT

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

	Standard	Optional
UNDERCARRIAGE AND STRUCTURES		
Tie-down points on base frame	✓	
6700 kg (14,770 lb) counterweight	✓	
Tie-down points on base frame		✓
BOOMS AND STICKS		
6.15 m (20'2") HD Reach boom		✓
6.15 m (20'2") Reach boom		✓
5.55 m (18'2") Mass boom		✓
3.75 m (12'2") Reach stick		✓
3.2 m (10'6") Reach stick		✓
3.2 m (10'6") HD Reach stick		✓
2.65 m (8'8") Reach stick		✓
2.65 m (8'8") HD Reach stick		✓
2.5 m (8'2") Mass stick		✓
CAT TECHNOLOGY		
VisionLink	✓	
Remote Flash	✓	
Remote Troubleshoot	✓	
Cat Grade 2D	✓	
Cat Assist	✓	
Cat Payload	✓	
VisionLink Productivity		✓
Cat Grade 2D with Attachment Ready Option (ARO)		✓
Cat Grade 3D single GNSS		✓
Cat Grade 3D dual GNSS		✓
Cat Tilt Rotator (TRS) Integration		✓
Operator Coaching		✓
CAB		
ROPS	✓	
Mechanical-suspension seat (Comfort only)	✓	
Heated air-suspension seat (Deluxe only)	✓	
High-resolution 203 mm (8 in) LCD touchscreen monitor	✓	
High-resolution 254 mm (10 in) LCD touchscreen monitor		✓
Cat Stick Steer		✓
Auxiliary relay		✓
ELECTRICAL SYSTEM		
Two 1,000 CCA maintenance free batteries	✓	
Programmable time-delay LED working lights	✓	
LED chassis light, left-hand/right-hand boom lights, cab lights	✓	

	Standard	Optional
ENGINE		
Cat 7.1 single turbo diesel engine	✓	
Three selectable power modes	✓	
Auto engine speed control	✓	
Auto engine idle shutdown	✓	
50° C (122° F) high-ambient cooling capacity with de-rate	✓	
-18° C (0° F) cold start capability	✓	
Double element air filter with integrated precleaner	✓	
Reversing electric cooling fans	✓	
-32° C (-25° F) cold start capability		✓
SERVICE AND MAINTENANCE		
S-O-S ports	✓	
Ground-level and platform-level engine oil dipsticks	✓	
Integrated vehicle health management system	✓	
Electric refueling pump with auto shutoff		✓
HYDRAULIC SYSTEM		
Boom and stick regeneration circuits	✓	
Auto hydraulic warm up	✓	
Auto two-speed travel	✓	
Boom and stick drift reduction valve	✓	
Auto heavy lift	✓	
Auto dig boost	✓	
Boom and stick lowering check valves		✓
Hammer return filter circuit		✓
Hydraulic efficiency monitoring		✓
Tool Control (two pump, one/two way high-pressure flow)		✓
Basic Tool Control (one pump, one way high-pressure flow)		✓
Quick coupler circuit		✓
SAFETY AND SECURITY		
2D E-Fence	✓	
Auto hammer stop	✓	
Rearview camera and right-hand mirror	✓	
Ground-level engine shutoff switch	✓	
Lockable disconnect switch	✓	
Right-hand handrail and hand hold	✓	
Signaling/warning horn	✓	
Cat Command (remote control)		✓
Rear and right-hand side-view camera		✓
Right-hand side-view camera (Mandatory for Kingdom of Saudi Arabia)		✓
360° visibility		✓
Inspection lighting		✓

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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www.cat.com www.caterpillar.com

AEXQ2461-05
Replaces AEXQ2461-04
Build Number: 07F
(Afr-Me, Eurasia, Indonesia,
Pacific Islands, S Am [except
Brazil, Chile], SE Asia, Taiwan)

