

320 GC

HYDRAULIC EXCAVATOR



Net Power – ISO 9249
Operating Weight
Maximum Digging Depth

109 kW (146 hp)
22 000 kg (48,500 lb)
6720 mm (22 ft)



320 GC

HYDRAULIC EXCAVATOR

The Cat® 320 GC excavator balances productivity with easy-to-use technology features, a comfortable cab, reduced fuel consumption by up to 20%, and longer maintenance intervals reducing maintenance costs by up to 25% to bring you a durable, low-cost-per-hour excavator for light- to medium-duty applications.



UP TO 20% LESS FUEL CONSUMPTION

A precise combination of lower engine speed and a large hydraulic pump delivers top performance while burning less fuel.

IMPROVED RELIABILITY AND EFFICIENCY

An advanced electro-hydraulic system provides the optimum balance of power and efficiency while giving you the control you need for precise digging requirements.

UP TO 25% LOWER MAINTENANCE COSTS

With extended and more synchronized maintenance intervals, you get more done at a lower cost compared to the previous model.

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.

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

PERFORMANCE WITH LESS FUEL



- The excavator uses up to 20% less fuel than the 320F in similar applications.
- Match the excavator to the job with power modes; let Smart mode automatically match engine and hydraulic power to digging conditions.
- The advanced hydraulic system provides the optimum balance of power and efficiency while giving you the control you need for precise digging requirements.
- Valve priority puts hydraulic pressure and flow where you command it to go for fast light to medium load cycle times.
- The engine meets U.S. EPA Tier 4 Final and EU Stage IV emission standards with an aftertreatment system that requires no operator input or downtime.
- Add auxiliary hydraulics to do more work with a range of Cat attachments.
- Don't let the temperature stop you from working. The excavator has a standard high ambient temperature capability of 52° C (125° F) and cold start capability of -32° C (-25° F).

LOWER MAINTENANCE COSTS

- Expect up to 25% less maintenance cost than the 320F (savings calculated over 12,000 machine hours).
- 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.
- No required maintenance on the Cat Clean Emissions Module.
- Using Cat genuine oil and filters and doing your 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.
- 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 electric cooling fans only run when needed and reverse to keep cores free from debris.
- Boost productivity with proactive service reminders. The 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.
- S-O-S ports simplify maintenance and allow for quick, easy extraction of samples for fluid analysis.



RELIABILITY YOU CAN COUNT ON



- Work up to 3000 m (9,840 ft) above sea level without de-rating.
- Standard high-ambient temperature capability is 52° C (125° F) with cold start capability at -32° C (-25° F).
- Auto warm up speeds up hydraulic oil warming in cold temperatures and helps prolong the life of components.
- Three levels of fuel filtration protect the engine from dirty diesel fuel.
- Grease sealed between track pins and bushings reduces travel noise and prevents debris from entering to increase undercarriage life.
- The center track guiding guard helps keep the excavator track aligned when traveling and working on slopes.
- The sloped track frame prevents mud and debris accumulation, helping reduce risk of track damage.

SAFELY HOME EVERY DAY

- Access 100% of daily maintenance points from ground level – no need for you to climb on top of the excavator.
- Keep your excavator secure with Operator ID. Use your PIN code on the monitor to enable the push-button starting feature.
- 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 posts and larger windows.
- A rearview camera is standard, and a right-side-view camera is optional.
- The latest right-hand 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.
- The handrails comply with ISO 2867:2011 requirements.
- The lower frame meets ISO 15818:2017 lifting and tie-down requirements.
- Enhance jobsite safety. Add a swing alarm to alert people when you're rotating from trench to stockpile and back again.
- 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.



SIMPLE TO OPERATE



- Start the engine with a push button; use a Bluetooth® key fob, or the unique Operator ID function.
- Program each joystick button, including response and pattern, using Operator ID; it will also remember climate control fan and radio settings.
- Navigate quickly on the standard high-resolution 203 mm (8 in) touchscreen monitor or with the aid of the jog dial control.
- 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.
- 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.
- The Cat PL161 Attachment Locator is a Bluetooth device that makes finding your attachments and other gear quick and easy.

DESIGNED FOR OPERATORS



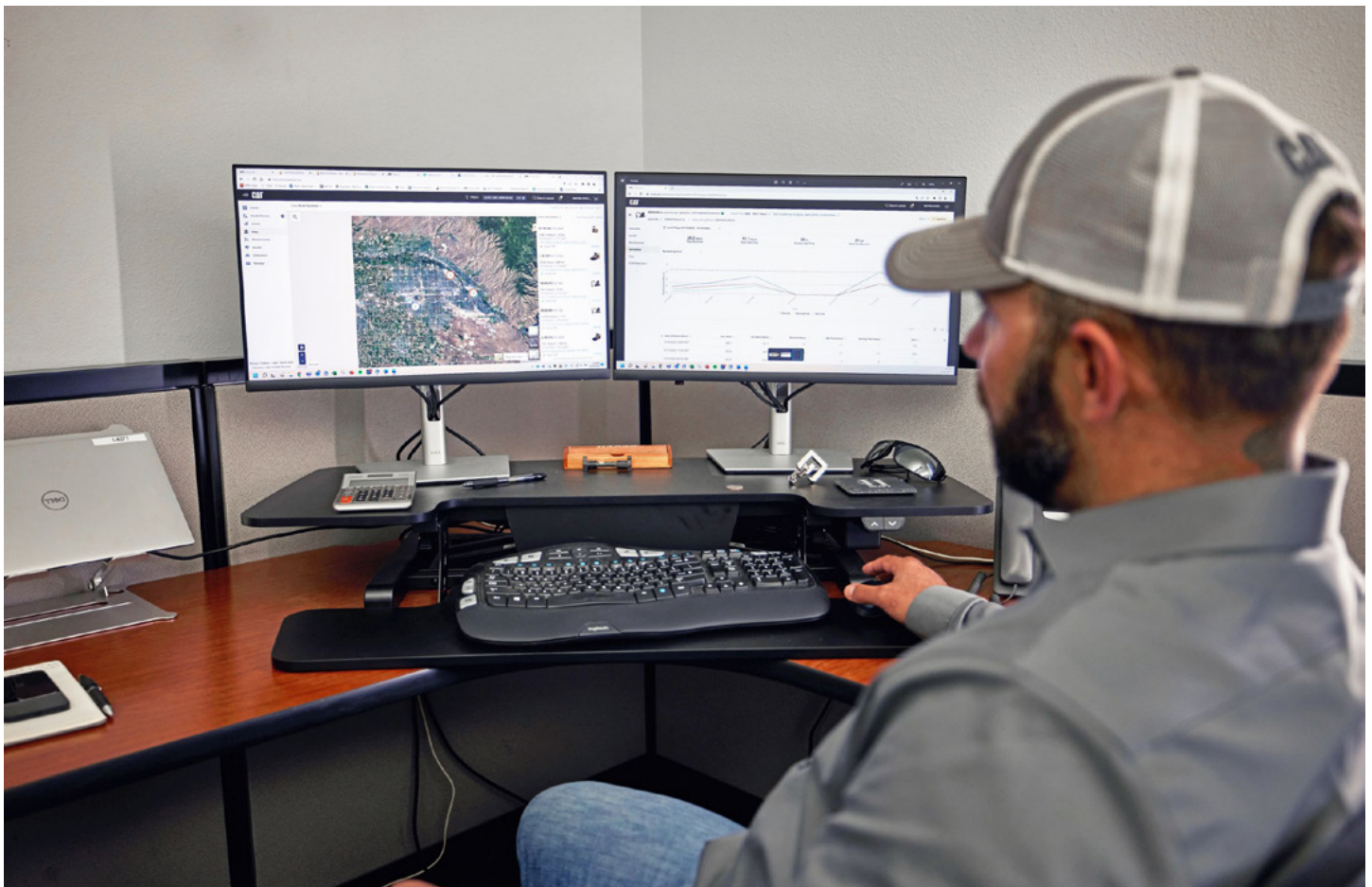
- The Comfort cab has a wide seat that adjusts for operators of all sizes.
- Control the excavator comfortably with easy-to-reach controls all located in front of you.
- Standard automatic climate control keeps you at the right temperature all shift long.
- Advanced viscous mounts reduce cab vibration by up to 50% over previous excavator models.
- 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 to personal devices.



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.
- 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.

****Data field availability can vary by equipment manufacturer.***



- The Cat® C4.4 engine meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards.
- The 320 GC emits up to 21% less CO₂ than the previous 320F ECO*.
- 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.
- 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 with 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.
- Auto Engine Speed Control helps reduce unnecessary fuel burn and greenhouse gas emissions by allowing the engine to automatically go into idle mode when the machine is not working.
- When engaged, one-touch idle helps operators conserve fuel and reduce greenhouse gas emissions by lowering engine speed when the machine is under no load and return to normal operating speed when desired.
- Engine Idle Shutdown Timer reduces fuel burn, greenhouse gas emissions and unnecessary idle time by shutting down the machine after a pre-set idling period.

- Cat S-O-S Services helps reveal excessive wear, contaminated fluids or other “unseen” issues that can shorten component life. In many cases, you can extend oil and coolant change intervals by using fluid monitoring. Consult your Cat dealer or the machine’s operation and maintenance manual for more information.
- Extended maintenance intervals not only reduce downtime but decrease the amount of fluid and filters that are replaced over the life of the machine.
- A well-trained operator is worth the investment. Skilled operators benefit your bottom line by maximizing productivity, avoiding costly downtime, and maintaining jobsite safety – which can help to improve fuel efficiency and reduce greenhouse gas.

****All comparisons to 320F ECO. Productivity, fuel and CO₂ emissions vary by application. CO₂ emissions calculations based on a reference work cycle using 2.2 U.S. gallons per hour of #2 U.S. diesel fuel based. Applies IPCC2006 methodology using U.S. EPA Emissions Hub emission factors. Includes DEF (diesel exhaust fluid) related CO₂. Fuel measurements are at 15° C. Estimated average fuel consumption improvements are based on tests or Product Link™ data where available. Productivity improvements are based on test data.***

*****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.***



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

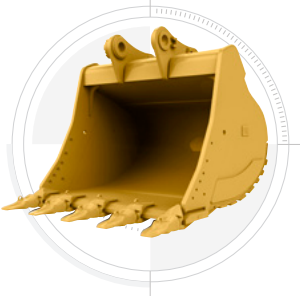


TRACK LOADERS

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



GRAPPLES



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.

MULTI-PROCESSORS



QUICK COUPLERS



RIPPERS

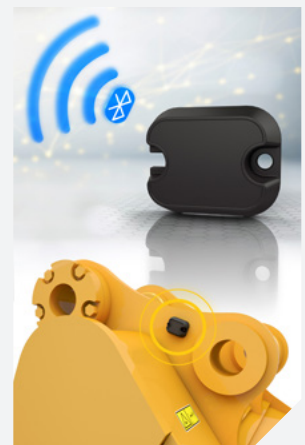


VIBRATORY PLATE COMPACTORS



ATTACHMENT TRACKING MADE EASY

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



TECHNICAL SPECIFICATIONS

Engine

Net Power – ISO 9249	109 kW	146 hp
Net Power – ISO 9249 (DIN)	148 hp (metric)	
Engine Model	Cat C4.4	
Engine Power – ISO 14396	110 kW	148 hp
Engine Power – ISO 14396 (DIN)	150 hp (metric)	
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in ³
Biodiesel Capability	Up to B20 ¹	
Emissions	Meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 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 2,000 rpm. Advertised power is tested per the specified standard in effect at the 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	442 L/min (117 gal/min)	
Maximum Pressure – Equipment	35 000 kPa	5,075 psi
Maximum Pressure – Travel	34 300 kPa	4,974 psi
Maximum Pressure – Swing	25 000 kPa	3,625 psi

Swing Mechanism

Swing Speed	11.6 r/min	
Maximum Swing Torque	74.4 kN-m	54,900 ft-lbf

Weights

Operating Weight	22 000 kg	48,500 lb
Long undercarriage, Reach boom, R2.9 (9'6") stick, General Duty (GD) 1.0 m ³ (1.31 yd ³) bucket, 700 mm (28 in) triple grouser shoes and 4200 kg (9,300 lb) counterweight.		

Service Refill Capacities

Fuel Tank Capacity	345 L	86.6 gal
Cooling System	25 L	6.6 gal
Engine Oil	15 L	4 gal
Swing Drive – Each	12 L	3.2 gal
Final Drive – Each	4 L	1.1 gal
Hydraulic System – Including Tank	234 L	61.8 gal
Hydraulic Tank	115 L	30.4 gal
DEF Tank	39 L	10.3 gal

Dimensions

Boom	Reach 5.7 m (18'8")	
Stick	Reach 2.9 m (9'6")	
Bucket	GD 1.0 m ³ (1.31 yd ³)	
Shipping Height – Top of Cab	2960 mm	9.7 ft
Handrail Height	2950 mm	9.8 ft
Shipping Length	9530 mm	31.3 ft
Tail Swing Radius	2830 mm	9.3 ft
Counterweight Clearance	1050 mm	3.4 ft
Ground Clearance	470 mm	1.5 ft
Track Length	4450 mm	14.7 ft
Length to Center of Rollers	3650 mm	11.11 ft
Track Gauge	2380 mm	7.9 ft
Transport Width	3170 mm	10.4 ft

Working Ranges & Forces

Boom	Reach 5.7 m (18.8)	
Stick	Reach 2.9 m (9'6")	
Bucket	GD 1.0 m ³ (1.31 yd ³)	
Maximum Digging Depth	6720 mm	22 ft
Maximum Reach at Ground Level	9860 mm	32.3 ft
Maximum Cutting Height	9450 mm	31 ft
Maximum Loading Height	6490 mm	21.3 ft
Minimum Loading Height	2170 mm	7.1 ft
Maximum Depth Cut for 2440 mm (8 ft) Level Bottom	6550 mm	21.6 ft
Maximum Vertical Wall Digging Depth	5690 mm	18.7 ft
Bucket Digging Force – ISO	129 kN	28,935 lbf
Stick Digging Force – ISO	99 kN	22,281 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 0.85 kg (1.9 lb) of refrigerant which has a CO₂ equivalent of 1.216 metric tonnes (1.340 tons).

Sustainability

Recyclability	97%
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STANDARD & OPTIONAL EQUIPMENT

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

	Standard	Optional
BOOM AND STICKS		
5.7 m (18'8") Reach boom	✓	
2.9 m (9'6") Reach stick		✓
2.5 m (8'2") Reach stick		✓
2.9 m (9'6") Reach Bare stick		✓
UNDERCARRIAGE AND STRUCTURES		
Tie-down points on base frame	✓	
3700 kg (8,160 lb) counterweight (Chile, Turkey only)	✓	
4200 kg (9,300 lb) counterweight	✓	
600 mm (24") triple grouser shoes		✓
700 mm (28") triple grouser shoes		✓
790 mm (31") triple grouser shoes		✓
900 mm (35") triple grouser shoes		✓
ELECTRICAL		
Two 1,000 CCA maintenance-free batteries	✓	
Centralized electrical disconnect switch	✓	
Programmable time-delay LED working lights	✓	
LED chassis light, boom lights, cab lights	✓	
CAT TECHNOLOGY		
VisionLink	✓	
Remote Flash	✓	
VisionLink Productivity		✓
CAB		
ROPS	✓	
Mechanical-suspension seat	✓	
High-resolution 203 mm (8 inch) LCD touchscreen monitor	✓	
OTHER OPTIONAL CONFIGURATIONS		
Narrow (Europe only)		✓
ENGINE		
Cat C4.4 single turbo engine	✓	
Two selectable power modes	✓	
Auto engine speed control	✓	
Auto engine idle shutdown	✓	
52° C (125° F) high-ambient cooling capacity	✓	
-32° C (-25° F) cold start capability	✓	
Double element air filter with integrated pre-cleaner	✓	
Reversible electric cooling fans	✓	

	Standard	Optional
SERVICE AND MAINTENANCE		
S-O-S ports	✓	
Ground-level and platform-level engine oil dipsticks	✓	
Integrated vehicle health management system	✓	
HYDRAULIC SYSTEM		
Boom and stick regeneration circuits	✓	
Boom and stick lowering check valves	✓	
Auto warm up	✓	
Auto two-speed travel	✓	
Boom and stick drift reduction valve	✓	
Slider joysticks	✓	
Tool control (two pumps, one/two way high-pressure flow)	✓	
SmartBoom™ (Europe only)		✓
SAFETY AND SECURITY		
Auto hammer stop	✓	
Rearview and right-hand-sideview cameras	✓	
Ground-level engine shutoff switch	✓	
Lockable disconnect switch	✓	
Right-hand handrail and hand hold	✓	
Signaling/warning horn	✓	
Swing alarm		✓
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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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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www.cat.com www.caterpillar.com

AEXQ2330-08
Replaces AEXQ2330-07
Build Number: 07G
(Europe, N Am, Turkey,
Chile, Colombia)

