349

HYDRAULIC EXCAVATOR



Engine Power	316 kW (424 hp)
Operating Weight	47 700 kg (105,200 lb)

Cat® C13 Engine meets meets U.S. EPA Tier 4 Final, Japan 2014, and Korea Tier 4 Final emission standards.

NEXT GENERATION EXCAVATORS

The new line of Cat excavators was designed with a new approach to equipment families that gives you:

+ MORE MODEL OPTIONS
+ MORE STANDARD TECHNOLOGIES
+ MORE PRICE POINTS

Ready to help you make your business stronger, Cat excavators give you new ways to get the most work done at the lowest cost – so you put more money in your pocket.



THE NEW CAT® 349

MOVING THE STANDARD HIGHER

The **CAT 349** gives you more operating efficiency with factory-installed Cat GRADE and PAYLOAD technologies, more fuel efficiency with a new electrohydraulic system, less maintenance cost with fewer filters and extended intervals, enhanced safety with standard E-Fence and Lift Assist, and greater comfort with new cab options. Ton for ton, the 349 is the clear-cut winner for you and your business.



INCREASE OPERATING EFFICIENCY **UP TO 45%**[1]

The Cat 349 offers the industry's highest level of standard factory-equipped technology, including Cat GRADE with 2D, GRADE with Assist, and PAYLOAD.

INCREASE FUEL EFFICIENCY **UP TO 10%**[2]

The new electrohydraulic system's main control valve and large hydraulic pump allow the engine to run at a lower engine speed without impacting production, ensuring you get more work per unit of fuel.

LOWER MAINTENANCE COSTS **UP TO 15%**[3]

Extended maintenance intervals increase uptime and reduce costs compared to the 349F.

[1] Operator efficiency gains compared to traditional grading methods.
[2] Compared to the 349F.
[3] Cost reduction based on 12,000 hours of operation.



STANDARD CAT TECHNOLOGIES

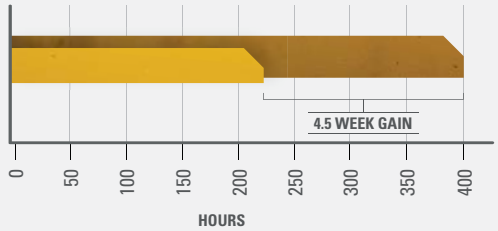
GETS JOBS DONE FASTER WITH LESS REWORK

Cat Technology gives you the edge. Operators of all experience levels will dig, load, and grade with more confidence, speed, and accuracy. The result?

Better productivity and lower costs.

WHAT WOULD YOU DO WITH 4.5 MORE WEEKS?

45% GAIN WITH TECHNOLOGY
means same amount of work done faster



PREVIOUS YEAR:
USING TRADITIONAL GRADING METHODS

400 hours/year, grading with stakes and checkers

CURRENT YEAR:
USING NEW CAT 349 WITH CAT TECHNOLOGY

220 hours/year, with standard Cat GRADE



STANDARD, SIMPLE-TO-USE TECHNOLOGIES INCLUDE:

STANDARD CAT GRADE WITH 2D

Cat GRADE with 2D helps operators reach grade faster. Operators cut and fill to exact specifications without overcutting. You can program up to four of your most commonly used target depth and slope offsets so you can get to grade with ease – a real time saver on the job. Best of all, no grade checkers are needed so the work area is safer.

STANDARD CAT GRADE WITH ASSIST

AUTO

Automated boom, stick, and bucket movements deliver more accurate cuts with less effort. The operator simply sets the depth and slope in the monitor and activates single-lever digging.

STANDARD LIFT ASSIST

Lift Assist quickly calculates the actual load you are lifting and compares it to the rated load the excavator is capable of handling. Visual and auditory alerts tell you if you are within safe working range or need to take immediate action to avoid tipping.

STANDARD CAT PAYLOAD

Cat PAYLOAD technology delivers precise load targets with on-the-go weighing, which helps prevent overloading and underloading and maximizes efficiency. Automated tracking helps manage production and lower cost.

AVAILABLE OPTIONAL UPGRADES

Cat GRADE with Advanced 2D and Cat GRADE with 3D increase productivity and expand grading capabilities. GRADE with Advanced 2D adds in-field design capabilities through an additional 254 mm (10 inch) high-resolution touchscreen monitor. GRADE with 3D adds GPS and GLONASS positioning for pinpoint accuracy.

CAT LINK TECHNOLOGY
TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

CAT LINK telematics technology helps take the complexity out of managing your jobsites – by gathering data generated by your equipment, materials, and people and serving it up to you in customizable formats.



PRODUCT LINK™

Product Link™ collects data automatically and accurately from your assets – any type and any brand. Information such as location, hours, fuel usage, productivity, idle time, maintenance alerts, diagnostic codes, and machine health can be viewed online through web and mobile applications.

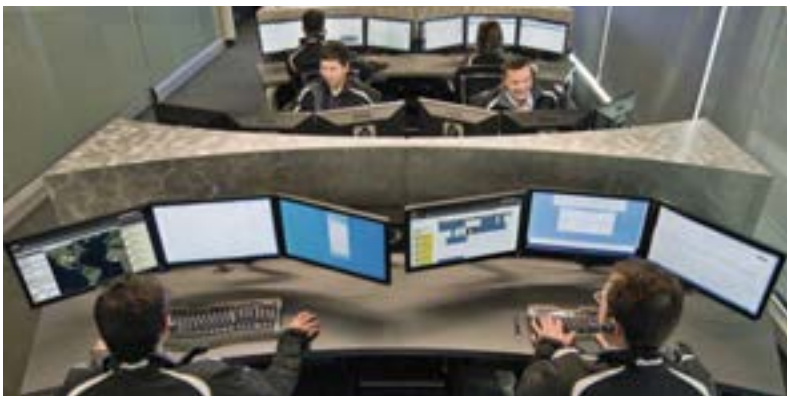
VISIONLINK®

Access information anytime, anywhere with VisionLink® – and use it to make informed decisions that boost productivity, lower costs, simplify maintenance, and improve safety and security on your jobsite. With different subscription level options, your Cat dealer can help you configure exactly what you need to connect your fleet and manage your business without paying for extras you don't want. Subscriptions are available with cellular or satellite reporting (or both).

Remote Services is a suite of technologies that improve your jobsite efficiency.

Remote Troubleshoot allows your Cat dealer to perform diagnostic testing on your connected machine remotely, pinpointing potential issues while the machine is in operation. Remote Troubleshoot ensures the technician arrives with the correct parts and tools the first time, eliminating additional trips to save you time and money.

Remote Flash updates on-board software without a technician being present, potentially reducing update time by as much as 50%. You can initiate the update when convenient, increasing your overall operating efficiency.



The **Cat App** helps you manage your assets – at any time – right from your smartphone. You can see your fleet location, hours, and other information you need to see. You will get critical alerts for required maintenance, and you can even request service from your local Cat dealer.

NEW CAB TAKES THE HARD OUT OF WORK

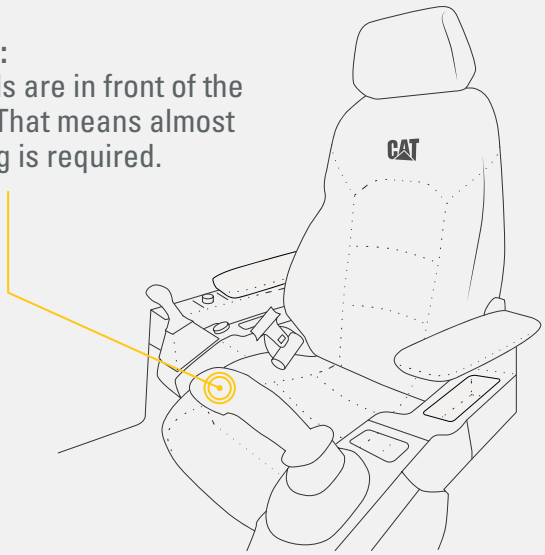
Sites where excavators typically work are rugged and challenging. That's why it's important that the 349 cab protects the operator as much as possible from the fatigue, stresses, sounds, and temperatures of the job.



WE'VE GOT **YOUR BACK.**

BACK PAIN IS ONE OF THE MOST COMMON REASONS PEOPLE MISS WORK.*

NEW CAB:
All controls are in front of the operator. That means almost no twisting is required.



OLD CAB: 2,000+ twists a year to reach controls in back of cab that can strain your back.

ASSUME 1 TWIST PER HOUR
1 TWIST × 8-HOUR WORKDAY = 8 TWISTS PER DAY
8 TWISTS × 5 WORKDAYS PER WEEK = 40 TWISTS PER WEEK
40 TWISTS × 52 WEEKS PER YEAR = **2,080 TWISTS PER YEAR**

*SOURCE: HTTPS://WWW.NINDS.NIH.GOV/DISORDERS/PATIENT-CAREGIVER-EDUCATION/FACT-SHEETS/LOW-BACK-PAIN-FACT-SHEET

NEW SEAT AND JOYSTICK CONSOLE REDUCE FATIGUE

Comfort and efficiency of movement keep operators productive and alert all shift long. The new standard seat is wide and adjustable for operators of virtually any size. The Deluxe cab package includes a heated air suspension seat; the Premium seat is both heated and cooled.



TOUCHSCREEN MONITOR

Most machine settings can be controlled through the high-resolution touchscreen monitor. It offers 42 languages and is easy to reach from the seat – no twisting or turning.

NEW SMART MODE

The new Smart Mode (one of three power mode settings) automatically adjusts engine and hydraulic power for the highest fuel efficiency – less power for tasks such as swinging and more power for digging.

CUSTOMIZABLE JOYSTICKS

Joystick function can be customized through the monitor. Joystick pattern as well as response can be set to match operator preference. All preferences are saved with the operator ID and restored at log in.

KEYLESS PUSH START

The 349 uses a keyless push-button engine start. This adds security for the machine by using Operator ID codes to limit and track machine access. Codes can be entered manually, via an optional Bluetooth® key fob, or smartphone app.



A QUIET, SAFE WORKSPACE

BUILDS OPERATOR CONFIDENCE

ISO-CERTIFIED ROPS CAB

The ISO-certified ROPS cab is sound-suppressed and sealed. The windows and lower front profile of the machine give outstanding visibility to the work area without the strain of constantly leaning forward.

ALL-AROUND VISIBILITY

A standard rearview camera keeps operators aware of their surroundings at all times. An optional 360° visibility feature is also available.

EASY ACCESS, CONNECTIVITY AND STORAGE

Convenience features include Bluetooth integrated radio, USB ports for charging and phone connectivity, 12V DC outlets and AUX port, storage in rear, overhead and console compartments, and cup and bottle holders.



SAFETY FEATURES

LOOK OUT FOR YOUR PEOPLE AND YOUR EQUIPMENT

Routine maintenance checks can be performed faster, easier, and safer with ground-level access to the fresh air filter, the fuel water separator, fuel tank water and sediment drains, and cooling system coolant level check.

When you do have to go up top, serrated steps, anti-skid plating, and handrails help ensure you avoid slips and trips – a major contributor to workplace injuries.

KEEP YOUR EXCAVATOR SECURE

Use your PIN code on the monitor, the optional Bluetooth key fob, or your smartphone to enable the push-button starting feature.



PROTECTION IN
ALL DIRECTIONS



E-WALL SWING



E-WALL FORWARD



E-WALL CAB PROTECTION



E-WALL CEILING



E-WALL FLOOR

STANDARD 2D E-FENCE TECHNOLOGY

The standard 2D E-Fence feature automatically stops excavator motion using boundaries you set in the monitor for the entire working envelope – above, below, sides, and front. E-Fence features protect equipment from damage and reduce fines related to zoning or underground utility damage. Automatic boundaries even help prevent operator fatigue by reducing overswinging and digging.



LOWER MAINTENANCE COSTS

UP TO 15%

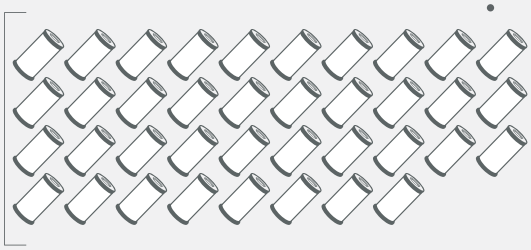
With extended maintenance intervals, you get more done at a lower cost compared to the 349F. Consolidated filter locations make service faster. Hydraulic, air, and fuel tank filters have increased capacity and longer life.

KEY MAINTENANCE COST REDUCTIONS INCLUDE:

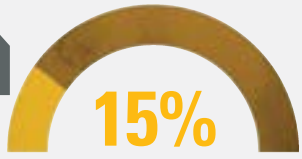
+ Consolidated filter locations to reduce service time.
+ Oil and fuel filters with extended maintenance intervals.
+ New hydraulic filter with higher dirt holding capacity.
+ New Cat air filter with double the dust holding capacity of the previous filter.

WHAT WILL YOU DO WITH **YOUR SAVINGS?**

REPLACE **38 FEWER FILTERS**
OVER 12,000 HOURS OF OPERATION.



THAT SAVES YOU **UP TO 15%**
IN MAINTENANCE COSTS*



*SOURCE: INTERNAL NEXT GENERATION PRODUCT SUPPORT MAINTENANCE COST COMPARISON

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



MULTI-PROCESSORS



QUICK COUPLERS



RAKES



RIPPERS



SECONDARY PULVERIZERS



SHEARS



THUMBS



TECHNICAL SPECIFICATIONS

See *cat.com* for complete specifications.

ENGINE		
Engine Model		C13
Net Power	316 kW	424 hp
Gross Power	317 kW	425 hp
Engine RPM		
Operation		1,650 rpm
Travel		1,800 rpm
Bore	130 mm	5 in
Stroke	157 mm	6 in
Displacement	12.5 L	763 in³

HYDRAULIC SYSTEM		
Main System – Maximum Flow	779 L/min (389 × 2 pumps) 206 gal/min (103 × 2 pumps)	
Maximum Pressure – Equipment	35 000 kPa	5,076 psi
Maximum Pressure – Equipment – Lift Mode	38 000 kPa	5,511 psi
Maximum Pressure – Travel	26 000 kPa	3,771 psi
Maximum Pressure – Swing	35 000 kPa	5,076 psi

SWING MECHANISM		
Swing Speed		8.44 rpm
Maximum Swing Torque	187 kN·m	138,000 lbf-ft

WEIGHTS		
Operating Weight	47 700 kg	105,200 lb
Long undercarriage, Reach boom, R3.35TB (11'0") stick, GDC 3.08 m³ (4.03 yd³) bucket, 600 mm (24") triple grouser shoes, 9.0 mt (19,842 lb) counterweight.		

SERVICE REFILL CAPACITIES		
Fuel Tank Capacity	715 L	188.9 gal
Cooling System	52 L	13.7 gal
Engine Oil	40 L	10.6 gal
Swing Drive	40 L	10.6 gal
Final Drive (each)	15 L	4.0 gal
Hydraulic System (including tank)	550 L	145.3 gal
Hydraulic Tank	217 L	57.3 gal
DEF Tank	46 L	12.2 gal

DIMENSIONS		
Boom		**Reach Boom 6.9 m (22'8")**
Stick		**Reach Stick 3.35 m (11'0")**
Bucket		**GDC 3.08 m³ (4.03 yd³)**
Shipping Height (top of cab)	3230 mm	10.6 ft
Handrail Height	3370 mm	11.1 ft
Shipping Length (boom, stick, and bucket installed)	11 920 mm	39.1 ft
Tail Swing Radius	3760 mm	12.3 ft
Counterweight Clearance	1280 mm	4.2 ft
Ground Clearance	475 mm	1.6 ft
Track Length	5370 mm	17.6 ft
Length to Center of Rollers	4360 mm	14.3 ft
Track Gauge – Long Undercarriage	2740 mm	9.0 ft
Transport Width – 900 mm (35") Shoes	3640 mm	11.9 ft

WORKING RANGES AND FORCES		
Boom		**Reach Boom 6.9 m (22'8")**
Stick		**Reach Stick 3.35 m (11'0")**
Bucket		**GDC 3.08 m³ (4.03 yd³)**
Maximum Digging Depth	7660 mm	25.1 ft
Maximum Reach at Ground Level	11 730 mm	38.5 ft
Maximum Cutting Height	10 820 mm	35.5 ft
Maximum Loading Height	7430 mm	24.4 ft
Minimum Loading Height	2750 mm	9.0 ft
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	7520 mm	24.7 ft
Maximum Vertical Wall Digging Depth	5830 mm	19.1 ft
Bucket Digging Force (SAE)	236 kN	53,050 lbf
Bucket Digging Force (ISO)	268 kN	60,250 lbf
Stick Digging Force (SAE)	193 kN	43,390 lbf
Stick Digging Force (ISO)	199 kN	44,740 lbf

STANDARD & OPTIONAL EQUIPMENT

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

CAB	STANDARD	OPTIONAL
ROPS, sound suppression	•	
High-resolution touchscreen monitor	•	
Heated seat with air-adjustable suspension (Deluxe only)	•	
Heated and cooled seat with automatic adjustable suspension (Premium only)	•	

ENGINE	STANDARD	OPTIONAL
Cold start block heaters		•
Three selectable modes: Power, Smart, Eco	•	
Automatic engine speed control	•	
Up to 4500 m (14,760 ft) altitude capability	•	
52° C (126° F) high-ambient cooling capacity	•	
Hydraulic reverse fan	•[1]	•[2]
–18° C (0° F) cold start capability	•	
–32° C (–25° F) cold start capability		•
Double element air filter with integrated precleaner	•	
Remote disable	•	
Biodiesel capability up to B20	•	

HYDRAULIC SYSTEM	STANDARD	OPTIONAL
SmartBoom™		•
Boom and stick regeneration circuit	•	
Electronic main control valve	•	
Heavy lift mode	•[3]	
Automatic hydraulic oil warm up	•	
Automatic swing parking brake	•	
High performance hydraulic return filter	•	
Two speed travel	•	
Bio hydraulic oil capability	•	
Combined two-way auxiliary circuit		•
Medium-pressure auxiliary circuit		•
Quick coupler circuit		•

UNDERCARRIAGE AND STRUCTURES	STANDARD	OPTIONAL
Long undercarriage	•	
Towing eye on base frame	•	
8.6 mt (18,960 lb) counterweight with removal device		•[4]
9.0 mt (19,842 lb) counterweight		•
600 mm (24") double grouser, HD double grouser, triple grouser track shoes		•
750 mm (30") single grouser, triple grouser track shoes		•
900 mm (35") triple grouser track shoes		•

BOOMS AND STICKS	STANDARD	OPTIONAL
7.4 m (24'2") Long Reach boom		•
6.9 m (22'8") Reach boom		•
6.55 m (21'6") Mass boom		•
4.3 m (14'1") stick		•
3.9 m (12'10") stick		•
3.35 m (11'0") stick		•
3.0 m (9'10") stick		•
2.9 m (9'6") stick		•
2.5 m (8'2") stick		•

ELECTRICAL SYSTEM	STANDARD	OPTIONAL
Maintenance-free 1,000 CCA batteries (×4)	•	
Centralized electrical disconnect switch	•	
LED lights	•	

CAT TECHNOLOGY	STANDARD	OPTIONAL
Cat Product Link	•	
Cat GRADE with 2D	•	
Cat GRADE with Advanced 2D		•
Cat GRADE with 3D		•
Cat GRADE with Assist	•	
Cat PAYLOAD	•	
E-Fence	•	
Lift Assist	•	
Remote Services capability		•

SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
Grouped location of engine oil and fuel filters	•	
Scheduled Oil Sampling (S·O·S℠) ports	•	
QuickEvac™ maintenance ready	•[5]	•[6]
Electric refueling pump with auto shutoff		•

SAFETY AND SECURITY	STANDARD	OPTIONAL
Caterpillar One Key security system	•	
Lockable external tool/storage box	•	
Lockable door, fuel, and hydraulic tank locks	•	
Lockable fuel drain compartment	•	
Service platform with anti-skid plate and recessed bolts	•	
Rear and right-hand-side cameras	•	
360° visibility		•

[1] *Standard in North America.*
[2] *Optional in Australia and New Zealand, Japan, and South Korea.*
[3] *Standard in Australia and New Zealand, North America, and South Korea. Not available in Japan.*
[4] *North America only.*
[5] *Standard in Australia and New Zealand.*
[6] *Optional in North America. Not available in Japan and South Korea.*

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

For additional information, refer to the Technical Specifications brochure for the 349 model available at *www.cat.com* or your Cat dealer.

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

AEXQ2493
Build Number: 07A

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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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