

# 349

## HYDRAULIC EXCAVATOR



<b>Engine Power</b>	302 kW (405 hp)
<b>Operating Weight</b>	48 100 kg (106,000 lb)

Cat® C13 engine meets China Nonroad Stage III and Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.





## 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<sup>®</sup> 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.



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## INCREASE OPERATING EFFICIENCY UP TO 45%<sup>1</sup>

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

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## INCREASE FUEL EFFICIENCY UP TO 25%<sup>2</sup>

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.

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## LOWER MAINTENANCE COSTS UP TO 15%<sup>3</sup>

Extended maintenance intervals increase uptime and reduce costs.

<sup>1</sup> Operator efficiency gains compared to traditional grading methods.

<sup>2</sup> Compared to the 349D2.

<sup>3</sup> Compared to the 349D2; cost reduction based on 12,000 hours of operation.





# STANDARD CAT TECHNOLOGIES

GETS JOBS DONE FASTER  
WITH LESS REWORK

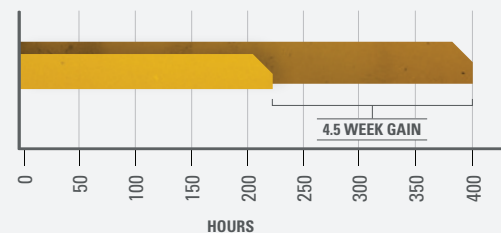
**Cat Technology** gives you the edge. Operators of all experience levels will dig, load, and grade with more confidence, speed, and accuracy. The result?

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

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

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**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.

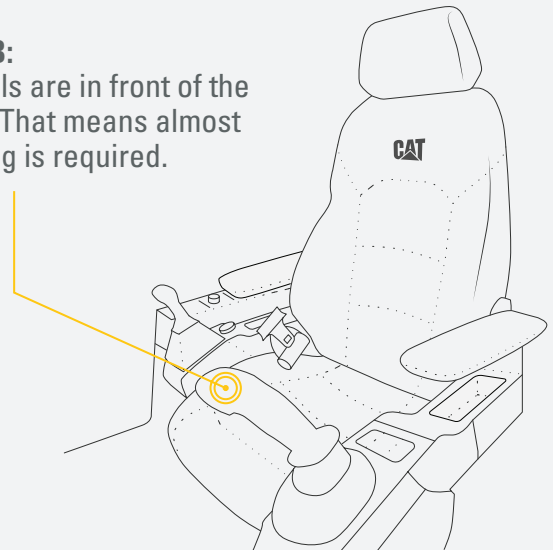


## WE'VE GOT YOUR BACK.

**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](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.





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## 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.

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## ALL-AROUND VISIBILITY

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

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## 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

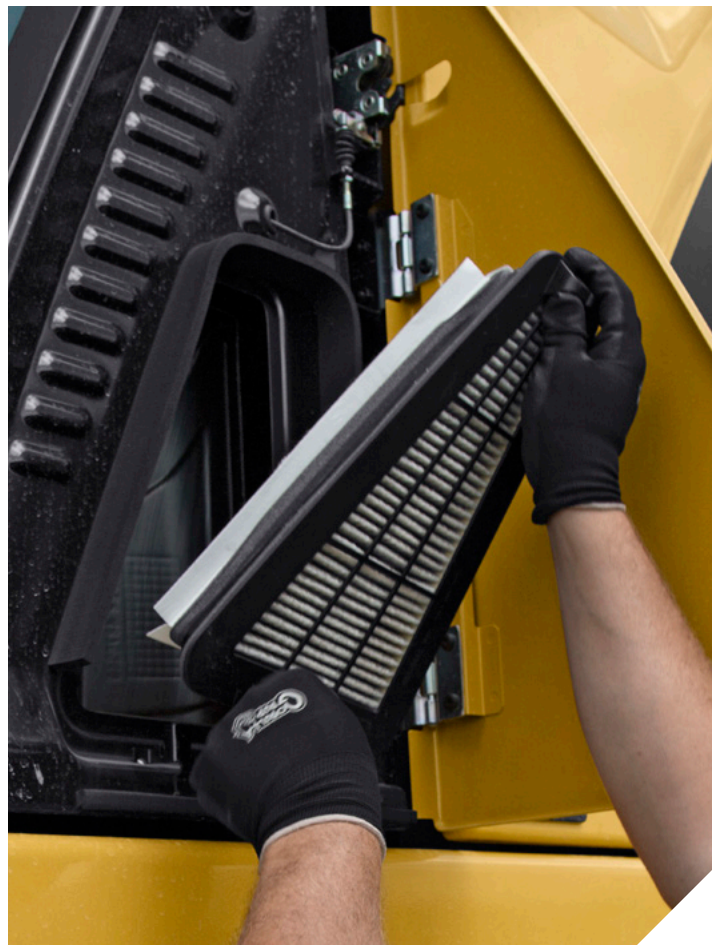
## LOOK OUT FOR YOUR PEOPLE AND YOUR EQUIPMENT

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 349D2. Consolidated filter locations make service faster. Hydraulic, air, and fuel tank filters have increased capacity and longer life.

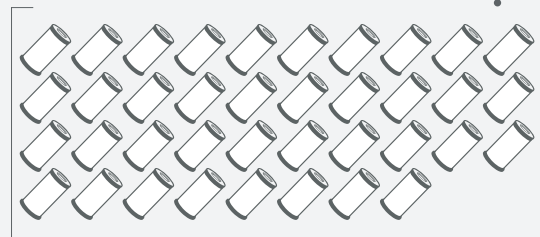
### KEY MAINTENANCE COST REDUCTIONS INCLUDE:

- + 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.

Attachments may vary. Consult your Cat dealer for details.

BUCKETS



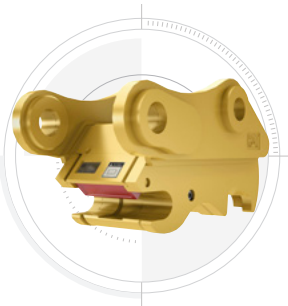
GRAPPLES



HYDRAULIC HAMMERS



QUICK COUPLERS



RAKES



RIPPERS



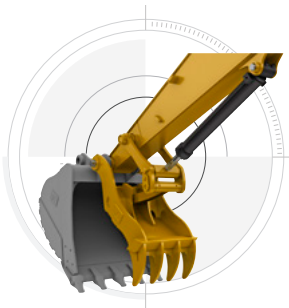
SECONDARY PULVERIZERS



SHEARS



THUMBS



## ATTACHMENT TRACKING MADE EASY

The **Cat Product Link PL161** makes finding your attachments and other gear quick and easy. Just use the excavator's onboard Bluetooth reader or Cat App to find.



# TECHNICAL SPECIFICATIONS

See *cat.com* for complete specifications.

ENGINE			
Engine Model	C13		
Net Power – ISO 9249/SAE J1349	302 kW	405 hp	
Gross Power – ISO 14396	303 kW	406 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 in <sup>3</sup>	
HYDRAULIC SYSTEM			
Main System – Maximum Flow – Implement	779 L/min (389 × 2 pumps) 206 gal/min (103 × 2 pumps)		
Maximum Pressure – Equipment – Implement	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	48 100 kg	106,000 lb	
Reach boom, R3.35TB (11'0") stick, SD 2.41 m <sup>3</sup> (3.15 yd <sup>3</sup> ) bucket, 600 mm (24") double 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 (with filter)	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	

DIMENSIONS			
<b>Boom</b>	<b>Reach Boom 6.9 m (22'8")</b>		
<b>Stick</b>	<b>Reach Stick 3.35 m (11'0")</b>		
<b>Bucket</b>	<b>SD 2.41 m<sup>3</sup> (3.15 yd<sup>3</sup>)</b>		
Shipping Height (top of cab)	3230 mm	10'7"	
Handrail Height	3370 mm	11'0"	
Shipping Length (boom, stick, and bucket installed)	11 920 mm	39'1"	
Tail Swing Radius	3760 mm	12'4"	
Counterweight Clearance	1280 mm	4'2"	
Ground Clearance	475 mm	1'6"	
Track Length	5370 mm	17'7"	
Length to Center of Rollers	4360 mm	14'3"	
Track Gauge	2740 mm	8'11"	
Transport Width (with steps) – 600 mm (24") Shoes	3530 mm	11'6"	
WORKING RANGES AND FORCES			
<b>Boom</b>	<b>Reach Boom 6.9 m (22'8")</b>		
<b>Stick</b>	<b>Reach Stick 3.35 m (11'0")</b>		
<b>Bucket</b>	<b>SD 2.41 m<sup>3</sup> (3.15 yd<sup>3</sup>)</b>		
Maximum Digging Depth	7700 mm	25'3"	
Maximum Reach at Ground Level	11 770 mm	38'7"	
Maximum Cutting Height	10 730 mm	35'2"	
Maximum Loading Height	7390 mm	24'2"	
Minimum Loading Height	2710 mm	8'10"	
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6950 mm	22'9"	
Maximum Vertical Wall Digging Depth	5440 mm	17'10"	
Bucket Digging Force (SAE)	229 kN	51,480 lbf	
Bucket Digging Force (ISO)	271 kN	60,850 lbf	
Stick Digging Force (SAE)	193 kN	43,480 lbf	
Stick Digging Force (ISO)	202 kN	45,350 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		•
–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
Boom and stick regeneration circuit	•	
Electronic main control valve	•	
Heavy lift mode	•*	
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
Towing eye on base frame	•	
9.0 mt (19,842 lb) counterweight	•	
600 mm (24") double grouser, HD double grouser, triple grouser track shoes		•
750 mm (30") double grouser, triple grouser track shoes		•
900 mm (35") triple grouser track shoes		•

\*Except Turkey.

BOOMS AND STICKS	STANDARD	OPTIONAL
6.9 m (22'8") Reach boom		•
6.55 m (21'6") Mass boom		•
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 (x4)	•	
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 <sup>SM</sup> ) ports	•	
QuickEvac <sup>TM</sup> maintenance ready		•
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	•	
Rearview camera	•	
360° visibility		•

**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](http://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](http://www.cat.com)

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AEXQ2528-01  
Replaces AEXQ2528  
Build Number: 07A

