

# 349F L XE

Hydraulic Excavator



## Engine

Engine Model	Cat® C13 ACERT™	
Net Power – SAE J1349	311 kW	417 hp

## Drive

Maximum Travel Speed	4.7 km/h	2.9 mph
Maximum Drawbar Pull	335 kN	75,300 lbf

## Weights

Minimum Weight	49 110 kg	108,300 lb
Maximum Weight	51 530 kg	113,600 lb



## Introduction

*The 349F L XE is built to keep your production numbers up and your owning and operating costs down. Not only does the machine's C13 ACERT engine meet U.S. EPA Tier 4 Final emission standards, but it does so while giving you all the power, fuel efficiency, and reliability you need to succeed.*

*Where the real power comes in is through the hydraulic system. With the Caterpillar exclusive Adaptive Control System (ACS) valve, you can smartly move tons of material all day long with a great deal of speed, precision, and efficiency. When you add in a quiet operator environment that keeps you comfortable and productive, ground-level service points that make your routine maintenance easy, and multiple Cat work tools that help you take on a variety of jobs, you simply won't find a better 49-ton machine.*

*If maximum productivity, comfort, versatility, and fuel efficiency are what you want, the 349F L XE excavator is what you need.*

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**CAT**  
349F  
LXE



# Equipping Every Customer For Success

Building products just for you and your type of work

Understanding your needs and requirements leads us to developing innovative products – products that help you win in a competitive environment.

The 349F L XE is the latest example of such an innovative product. This excavator is built for those of you looking for the highest level of productivity because you get paid by the job (or unit of work). When you see XE on a Cat machine, you can count on it being the most technologically advanced, fuel-efficient machine capable of working in all applications and material types.

Caterpillar also offers a traditional 349F model. This machine is built for those of you who also get paid by the job (or unit of work) and are looking for a high level of productivity. Even though it isn't equipped with all the technology of the 349F L XE, it still provides excellent fuel efficiency and productivity as compared to competitive offerings.

So when you think of XE, think of the following attributes:

- Reliable, durable, and rebuildable
- Low cost per unit of work
- Breakthrough and innovative
- Maximum efficiency

When you think of our traditional model, think of these attributes:

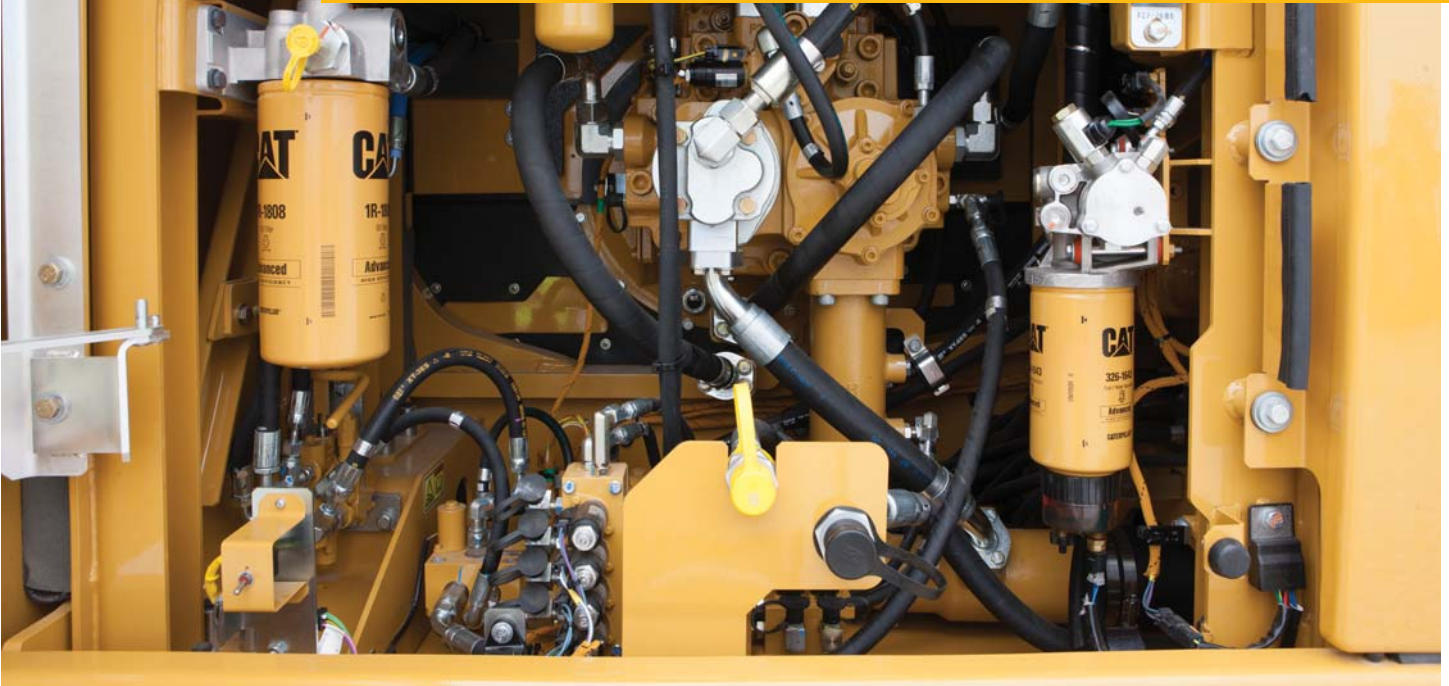
- Reliable, durable, and rebuildable
- Low cost per unit of work
- Proven
- Highly efficient

Bottom line: No matter which Cat model you choose, you can depend on it being a quality-made machine backed by the world's finest product support.



# Hydraulics

Power to move your material quickly and efficiently



## A Powerful, Efficient Design

When it comes to moving heavy material quickly and efficiently, you need hydraulic horsepower – the type of ground-breaking power the 349F L XE can deliver. Major hydraulic components like pumps and valves are located close together so shorter tubes and lines can be used. This design leads to less friction loss, reduced pressure drops, and more power to the ground for the work you need to get done.

## A Smart Valve That's Smart For You

The 349F L XE's hydraulic system is unlike any other available from any competitive equipment manufacturer in business today. The key ingredient is the ACS valve, which you can find only on the Cat brand. Think of the ACS valve as the "brain" of the system – one that independently controls machine functions and directs hydraulic energy where you need it precisely when you need it. Because the ACS valve is fully integrated with the pump, you will experience the same extraordinary control, hydraulic power, and lift capacity that you get from our traditional valve machines with the added benefit of dramatically reduced fuel consumption. That's why we offer the valve on our large machines like the 336E H and 336F XE hybrids, the 374F, and the 390F. Smart valve. Smart machine. Simply a smart investment for your business.

## Auxiliary Hydraulics For Added Versatility

Auxiliary hydraulics give you greater tool versatility so you can take on more work with just one machine, and there are several options from which you can choose. A quick coupler circuit is just one example. When paired with our optional tool control system that remembers the pressures and flows for up to 10 attachments, the quick coupler allows you to switch from one tool to another to get back to making money in a matter of minutes.



# Integrated Technologies

Monitor, manage, and enhance your job site operations

Cat Connect makes smart use of technology and services to improve your job site efficiency. Using the data from technology-equipped machines, you'll get more information and insight into your equipment and operations than ever before.

## PAYLOAD Technologies

Payload technologies accurately measure material being loaded or hauled. Payload data is shared with operators in real time to improve productivity, reduce overloading, and record progress.

## Cat Production Measurement

Cat Production Measurement brings payload weighing to the cab, enabling operators to weigh loads "on the go." Loads are weighed as the boom swings. Operators can view load weights on the integrated display and know precisely how much material is in the bucket and when trucks are filled to target payload. Instant feedback gives operators the confidence to work more effectively, maximizing the potential of the entire fleet. Site managers can wirelessly access data via the VisionLink® web portal to measure production and monitor efficiency.



## LINK Technologies

LINK technologies like Product Link™ are deeply integrated into your machine and wirelessly communicate key information, including location, hours, fuel usage, idle time, and event codes.

## Product Link/VisionLink

Easy access to Product Link data via the online VisionLink user interface can help you see how your machine or fleet is performing. You can use this information to make timely, fact-based decisions that can boost job site efficiency and productivity and lower costs.

## GRADE Technologies

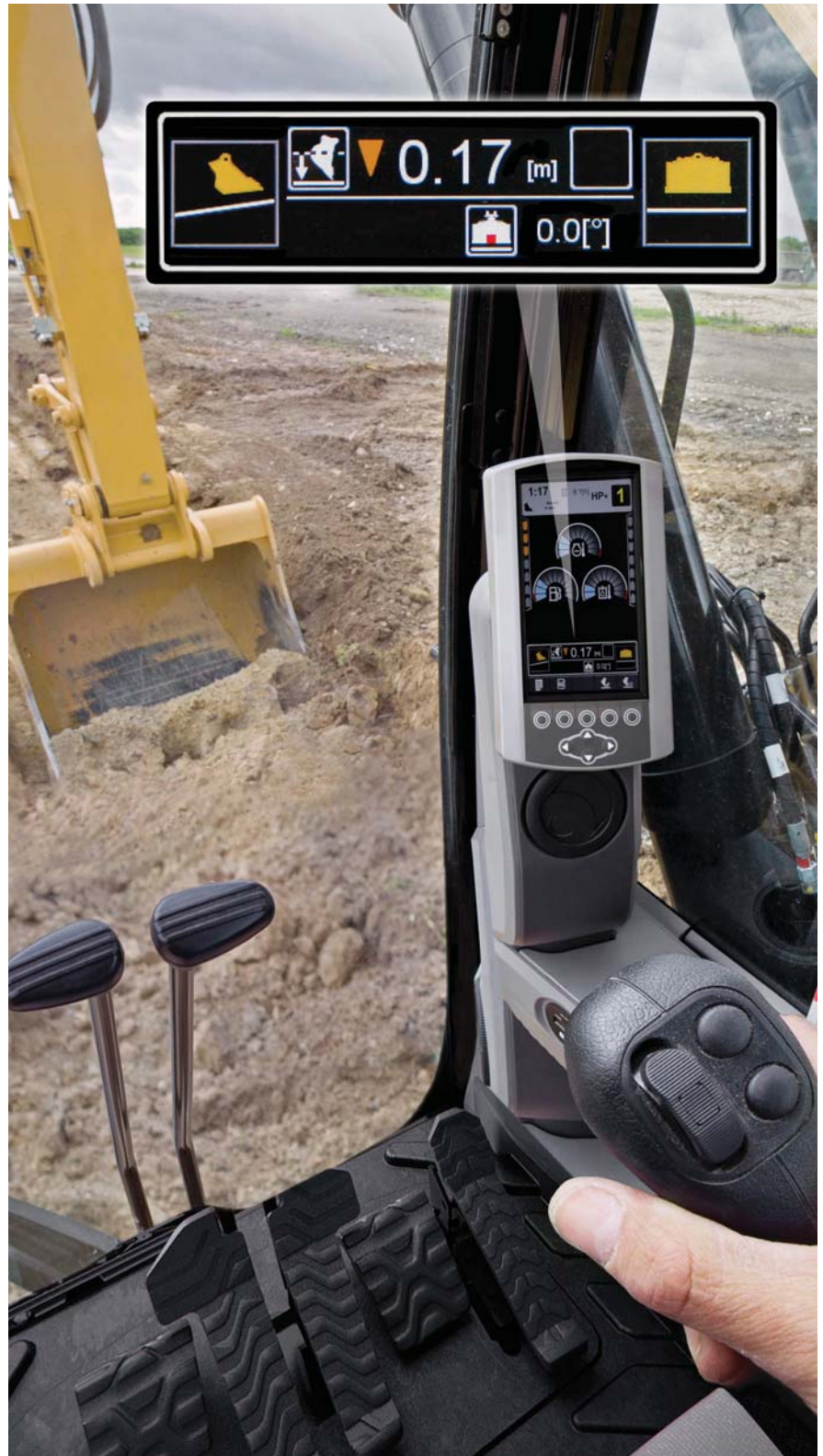
Grade technologies combine digital design data and in-cab guidance to help you reach target grade quickly and accurately with minimal staking and checking. That means you'll be more productive, complete jobs faster in fewer passes, and use less fuel for a lower cost.

### Cat Grade Control Depth And Slope

The factory-integrated Cat Grade Control system delivers 2D bucket tip elevation guidance to the cab to help operators create precise planes and slopes with ease. Real-time bucket tip elevation guidance on the easy-to-read standard cab monitor indicates how much to cut or fill. Fast response sensors deliver immediate feedback. Integrated joystick buttons help operators make quick adjustments to maintain consistent, high-quality grades. Built-in alerts can be set to warn the operator if the linkage or bucket approaches a predefined elevation or depth like when working in areas with low ceilings or digging near water lines. Staking and checking is minimized, which reduces ground crews and enhances job site safety. The system works best in simple 2D applications such as digging basements or grading steep embankments. You can easily upgrade to AccuGrade™ when 3D control is required.

### Cat AccuGrade

The dealer-installed AccuGrade system provides 3D guidance for making complex cuts and contours, eliminating the need for staking and checking. A dedicated monitor displays a digital design plan with 3D bucket tip positioning and elevation guidance, indicating precisely where to work and how much to cut or fill. The plug-and-play capability on the 349F L XE simplifies upgrading. Choose from satellite (GNSS) control for large projects with complex designs or total station (UTS) systems in areas with limited reception.





# Engine

Powerful and fuel efficient to meet your expectations

## A Unique Emissions Solution

The Cat C13 ACERT engine meets today's Tier 4 Final emission standards. It provides plenty of power for the work you do consuming only the necessary amount of fuel to do it – all to help keep your owning and operating costs to an absolute minimum.



## Fuel-Saving Features

Two built-in fuel-saving features are on-demand engine power and engine idle shutdown. On-demand engine power keeps engine speed low during light loading and adjusts speed up when it senses something heavier out front. Engine idle shutdown automatically shuts the engine off when it's been idling for more than a specified amount of time that you set. Both will help you save fuel, reduce emissions, and extend your service intervals.

Three power modes – high power, standard power, and eco mode – help you more actively manage fuel consumption. Simply change between modes through the console switch panel to meet the needs for the job in front of you.

## Proven Technology

Every Tier 4 Final ACERT engine is equipped with a combination of proven electronic, fuel, air, and aftertreatment components. Applying these time-tested technologies lets us meet your high expectations for productivity, fuel efficiency, reliability, and service life. Following are the results you can expect:

- **Up to 5% improved fluid efficiency** over Tier 4 Interim products, including diesel exhaust fluid consumption.
- **High performance** across a variety of applications.
- **Enhanced reliability** through commonality and simplicity of design.
- **Maximized uptime and reduced cost** with world-class Cat dealer support.
- **Minimized impact** on emission systems – with no operator interaction required.
- **Durability** with long service life.
- **Better fuel economy** with minimized maintenance costs.
- **Same great power** and response.



# Operator Station

Designed to keep you productive and comfortable all shift long

## A Helpful Monitor

The LCD monitor is easy to see and navigate. Programmable in up to 42 languages to meet today's diverse workforce, the monitor clearly displays critical information you need to operate efficiently and effectively. Plus it projects the image from the standard rearview camera to help you see what's going on around you so you can stay safely focused on the job at hand.



## A Safe, Quiet Cab

The roll-over protective structure (ROPS) cab provides you with a safe working environment. It also contributes to your comfort because it's attached to a reinforced frame with special viscous mounts that limit vibration and unnecessary sound. Add in special roof lining and sealing and you have a cab that's as quiet inside as any of today's top pickup trucks.

## Comfortable Seat Options

The seat range includes air suspension, heated, and air cooled options. All seats include a reclining back, upper and lower slide adjustments, and height and tilt angle adjustments to meet your needs for maximum comfort.

## A Cool & Warm Environment

The automatic climate control system features multiple air outlets with filtered ventilation. Air flows to the floor, behind the seat, and in front of you to make you comfortable and productive in either hot or cold weather.

## Controls Just For You

The right and left joystick consoles can be adjusted to improve your comfort and productivity during the course of a day. Optional joysticks let you control the tools out front with a simple roll of the thumb.

## Ample Storage & Auxiliary Power

Storage spaces are located in the front, rear, and side of the cab. A drink holder accommodates a large mug with handle, and a shelf behind the seat stores a large lunch or tool box. Two 12-volt power supply sockets are conveniently located near key storage areas for charging your electronic devices.





## Structures & Undercarriage

Built to work in your tough, heavy-duty applications

### Robust Frames

The 349F LXE is a well-built machine designed to give you a very long service life. The upper frame has mountings made specifically to support the heavy-duty cab; it's also reinforced around areas that take on a lot of stress like the boom foot, skirt, and counterweight removal system. Massive bolts are used to attach the track frames to the body, and additional bolts are used to increase the machine's digging force, which leads to more productivity for you.

### Durable Undercarriage

The 349F LXE's undercarriage contributes significantly to its outstanding stability and durability. Track shoes, links, rollers, idlers, and final drives are all built with long-lasting, high-tensile-strength steel. Cat Grease Lubricated Track 4 (GLT4) track link protects moving parts by keeping water, debris, and dust out and grease sealed in, which delivers longer wear life and reduced noise when traveling. Cat Positive Pin Retention 2 (PPR2) prevents looseness of the track pin in the track link, reduces stress concentrations, and eliminates pin walking for increased service life. Optional guide guards help maintain track alignment to improve the machine's overall performance – whether you're traveling on a flat, heavy bed of rock or a steep, wet field of mud.

### Counterweight Options

Two counterweights – one with and one without a removal system – are available to balance your work needs. Both are built with thick steel plates and reinforced fabrications to make them less susceptible to damage, and both have curved surfaces that match the machine's sleek, smooth appearance along with integrated housings to help protect the standard rearview camera.



# Front Linkage

Options to take on your up-close and far-out work



## Booms & Sticks

The 349F LXE is offered with a range of boom and stick options. Each is built with internal baffle plates and stress relieved for added durability, and each undergoes ultrasound inspection to ensure quality and reliability. Large box-section structures with thick, multi-plate fabrications, castings, and forgings are used in high-stress areas such as the boom nose, boom foot, and boom cylinders to improve durability. Also, the boom nose pin retention method is a captured flag design for enhanced durability.

## Lengths For Every Job

Heavy-duty (HD) reach booms and sticks offer you excellent all-around versatility for general excavation work like multipurpose digging and loading. Sticks are matched to the boom. Longer sticks are better for when you need to dig deep or load trucks. Shorter sticks provide greater breakout force and increase your productivity when using hydromechanical work tools.

Talk to your Cat dealer to pick the best front linkage for your applications.



# Attachments

Tools to make you productive and profitable



## Get The Most Out Of One Machine

You can easily expand the performance of your machine by utilizing any of the variety of attachments offered by Cat Work Tools.

## Change Jobs Quickly

A quick coupler brings the ability to quickly change attachments and switch from job to job. The Cat Pin Grabber coupler is the secure way to decrease downtime and increase job site flexibility and overall productivity.

## Dig & Load

A wide range of buckets dig everything from top soil to harsh, abrasive material. High-capacity buckets load trucks in a minimum number of passes for ultimate productivity.

## Mining, Demolition & Scrap

A hydraulic hammer equips your machine for breaking rock in quarries and preparing trenches on construction sites. Taking down bridge pillars and heavily reinforced concrete is no problem. Multi-processor, pulverizer, and shear attachments take your machine into structure demolition jobs and process the debris for reuse and recycle.

## Move & Handle

Add a thumb and you have the ability to move and handle brush, rocks, and debris. For constant material handling, a grapple is your solution. Choose from three different styles for picking, sorting, and loading trash, demolition debris, or recyclables.

## Set Up Your Machine For Profitability

Your Cat dealer can install hydraulic kits to properly operate all Cat Work Tool attachments – maximizing the machine's uptime and your profits. All Cat Work Tool attachments are supported by the same Cat dealer network as your Cat machine.



**GRAB, SORT, LOAD**



**Pro Series Hydraulic Thumbs**



**Stiff Link Thumbs**



**Demolition & Sorting Grapple**



**Contractors' Grapples**



**Trash Grapples**

**SWAP TOOLS**



**Pin Grabber Coupler**

**DIG & PACK**



**General Duty Buckets**



**Heavy Duty Buckets**



**Severe Duty Buckets**



**Extreme Duty Buckets**

**CUT, CRUSH, BREAK & RIP**



**Multi-Processors**



**Scrap & Demolition Shears**



**Secondary Pulverizers**



**Hydraulic Hammers**



**Rippers**



### Ground-Level Access

You can reach most routine maintenance items like fuel and oil filters, fluid taps, and grease points from the safety and convenience of ground level. Not only do compartments feature wide service doors designed to help prevent debris entry, but they also securely latch in place to help make your service work simpler.

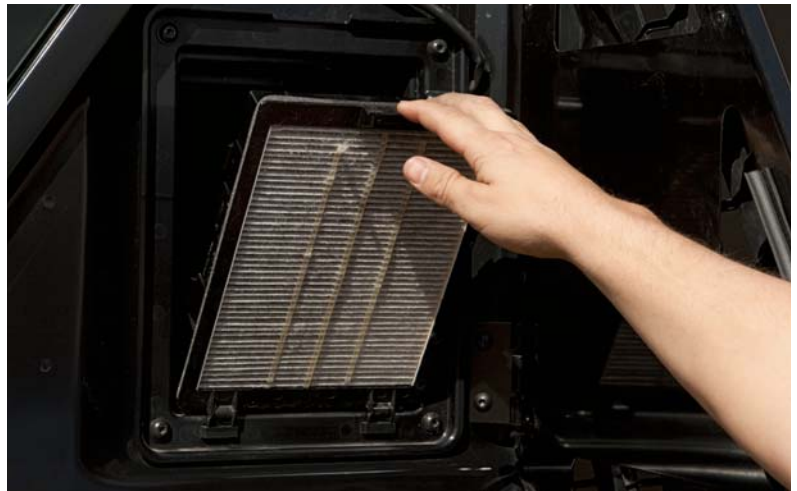


## Serviceability

Designed to make your maintenance quick and easy

### A Unique Cooling Design

The unique cooling package includes a fuel-saving variable-speed fan and a radiator and AC condenser mounted side by side to help prevent plugging. Wider clearance between the two make blowing off debris easy for you, which can help improve your machine's reliability and performance.



### A Fresh Idea

When you select ventilation inside the cab, outside air enters through the fresh air filter. The filter is conveniently located on the side of the cab to make it easy to reach and replace, and it is protected by a lockable door that can be opened with the engine key.

### Other Service Benefits

The fuel tank's drain tube makes it easy and simple for you to remove water and sediment during routine maintenance. Plus an integrated fuel level indicator pops up to help you reduce the possibility of fuel tank overfilling.



# Safety

## Features to help protect you day in and day out



### **A Safe, Quiet Cab**

The ROPS cab provides you with a safe working environment. It also contributes to your comfort because it's attached to a reinforced frame with special viscous mounts that limit vibration and unnecessary sound. Add in special roof lining and sealing and you have a cab that's as quiet inside as any of today's top pickup trucks.

### **Secure Contact Points**

Multiple large steps get you into the cab as well as a leg up to the compartments. Extended hand and guard rails allow you to safely climb to the upper deck. Anti-skid plates reduce your slipping hazards in all types of weather conditions, and they can be removed for cleaning.

### **Great Views**

Ample glass gives you excellent visibility out front and to the side, and the standard rearview camera gives you a clear field of view behind the machine through the cab monitor. The available split-configuration windshield features an upper window with handles that make it easy to slide and store above you and a lower window that can be removed and stored on the inside wall of the cab. An available one-piece windshield comes with a safety hammer to break it in case of an emergency. The large skylight also serves as an emergency exit and provides you with enhanced overhead visibility.

### **Smart Lighting**

High Intensity Discharge lights provide plenty of illumination, and the cab and boom lights can be programmed to stay on for up to 90 seconds after the engine has been turned off to help you safely exit the machine.





## Complete Customer Care

Support you can count on

### **Parts Near You**

Cat dealers utilize a worldwide parts network to maximize your machines' uptime. Plus they can help you save money with Cat remanufactured components.

### **Advice You Can Trust**

What are the job requirements and machine attachments? What production is needed? Your Cat dealer can provide recommendations to help you make the right machine choices.

### **Financial Options Just For You**

Consider financing options and day-to-day operating costs. Look at dealer services that can be included in the machine's cost to yield lower owning and operating costs over time.

### **Support Agreements To Fit Your Needs**

Cat dealers offer a variety of customer support agreements and work with you to develop a plan to meet your specific needs. These plans can cover the entire machine, including attachments, to help protect your investment.

### **Operating Techniques To Boost Your Profits**

Improving operating techniques can boost your profits. Your Cat dealer has videos, literature, and other ideas to help you increase productivity. Caterpillar also offers simulators and certified operator training to help maximize the return on your investment.

### **What's Best For You Today... And Tomorrow**

Repair, rebuild, or replace? Your Cat dealer can help you evaluate the cost involved so you can make the best choice for your business.





## Sustainability

Generations ahead in every way

- The C13 ACERT engine meets Tier 4 Final emission standards, resulting in fewer CO<sub>2</sub> emissions than the C13 ACERT Tier 4 Interim engine.
- The engine can run on either ultra-low-sulfur diesel (ULSD) fuel with 15 ppm of sulfur or less or biodiesel up to B20 fuel blended with ULSD.
- An overfill indicator rises when the tank is full to help the operator avoid spilling.
- Quick fill ports with connectors ensure fast, easy, and secure changing of hydraulic oil.
- The machine is built to be rebuilt with major structures and components remanufactured to reduce waste and replacement costs.
- The 349F LXE is an efficient, productive machine that's designed to conserve our natural resources for generations ahead.

# 349F L XE Hydraulic Excavator Specifications

## Engine

Engine Model	Cat C13 ACERT	
Net Power – SAE J1349	311 kW	417 hp
Gross Power – SAE J1995	322 kW	432 hp
Bore	130 mm	5.12 in
Stroke	157 mm	6.18 in
Displacement	12.5 L	763 in <sup>3</sup>

## Weights

Minimum Weight	49 110 kg	108,300 lb
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- Long FIX undercarriage, 6.9 m (22'8") reach boom, R3.35TB HD (11'0") HD stick, 9.0 mt (9.9 t) counterweight, Long FIX undercarriage, 3.1 m<sup>3</sup> (4.1 yd<sup>3</sup>) bucket, 600 mm (24") double grouser shoes.

## Hydraulic System

Main System – Maximum Flow (Total)	750 L/min	198 gal/min
Swing System – Maximum Flow	375 L/min	99 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,080 psi
Maximum Pressure – Equipment (Lift mode)	38 000 kPa	5,510 psi
Maximum Pressure – Travel	35 000 kPa	5,080 psi
Maximum Pressure – Swing	27 500 kPa	3,990 psi
Pilot System – Maximum Flow	26 L/min	6.9 gal/min
Pilot System – Maximum Pressure	4120 kPa	598 psi
Boom Cylinder – Bore	170 mm	6.69 in
Boom Cylinder – Stroke	1524 mm	60.00 in
Stick Cylinder – Bore	190 mm	7.48 in
Stick Cylinder – Stroke	1758 mm	69.21 in
TB Family Bucket Cylinder – Bore	160 mm	6.30 in
TB Family Bucket Cylinder – Stroke	1356 mm	53.39 in

## Drive

Maximum Travel Speed	4.7 km/h	2.9 mph
Maximum Drawbar Pull	335 kN	75,300 lbf

## Swing Mechanism

Swing Speed	8.5 rpm	
Swing Torque	148.5 kN·m	109,500 lbf·ft

## Service Refill Capacities

Fuel Tank Capacity	720 L	190 gal
Cooling System	50 L	13.2 gal
Engine Oil (with filter)	38 L	10 gal
Swing Drive (each)	10 L	2.6 gal
Final Drive (each)	15 L	4.0 gal
Hydraulic System (including tank)	570 L	151 gal
Hydraulic Tank	407 L	108 gal
DEF Tank	41 L	10.8 gal

- Diesel exhaust fluid (DEF) must meet requirements outlined in ISO 22241.

## Track

Number of Shoes (each side)	
Long Fix Undercarriage	52
Number of Track Rollers (each side)	
Long Fix Undercarriage	9
Number of Carrier Rollers (each side)	
Long Fix Undercarriage	2

## Sound Performance

Operator Noise (Closed) – ISO 6396	69 dB(A)
Spectator Noise – ISO 6395	106 dB(A)

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environment.

## Standards

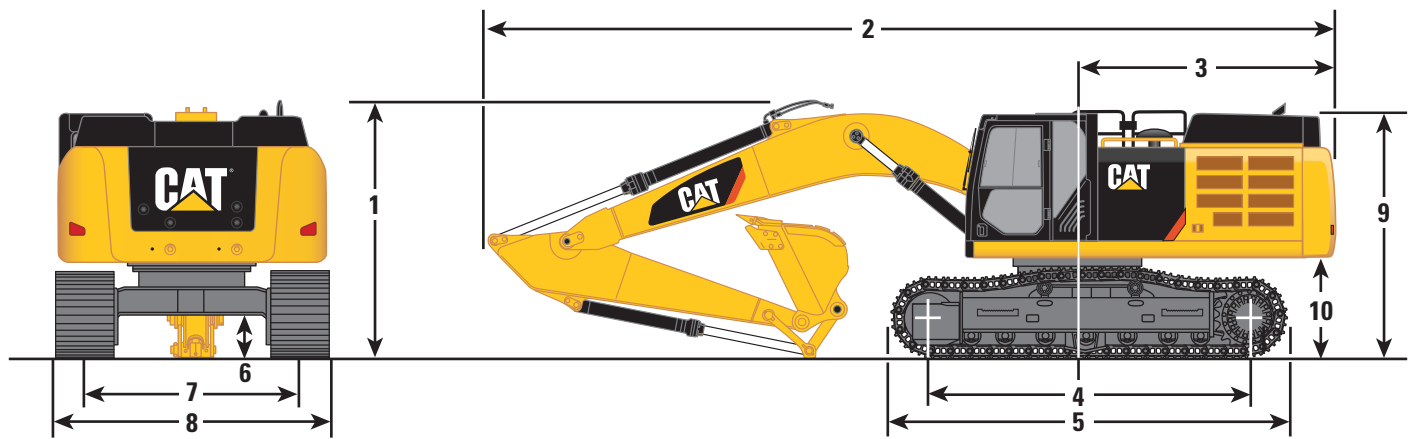
Brakes	ISO 10265
Cab/FOGS	SAE J1356
Cab/ROPS	ISO 12117-2



# 349F L XE Hydraulic Excavator Specifications

## Dimensions – Long FIX Undercarriage

All dimensions are approximate.



### Boom Option

Reach Boom  
6.9 m (22'8")

### Stick Options

R3.9TB HD  
(12'10")

R3.35TB HD  
(11'0")

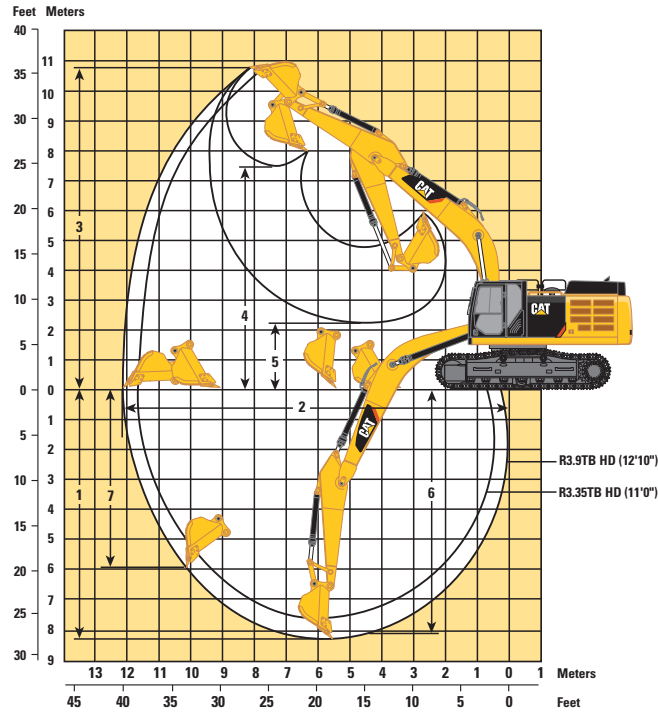
	R3.9TB HD (12'10")	R3.35TB HD (11'0")
<b>1</b> Shipping Height to Boom	3670 mm	3730 mm
Shipping Height with Handrail	3370 mm	3370 mm
<b>2</b> Shipping Length	11 930 mm	11 920 mm
<b>3</b> Tail Swing Radius	3760 mm	3760 mm
<b>4</b> Length to Center of Rollers	4360 mm	4360 mm
<b>5</b> Track Length	5370 mm	5370 mm
<b>6</b> Ground Clearance		
Including Shoe Lug Height	480 mm	480 mm
Not Including Shoe Lug Height	510 mm	510 mm
<b>7</b> Track Gauge	2740 mm	2740 mm
<b>8</b> Transport Width		
600 mm (24") Shoes	3340 mm	3340 mm
750 mm (28") Shoes	3490 mm	3490 mm
900 mm (35") Shoes	3640 mm	3640 mm
<b>9</b> Cab Height	3220 mm	3220 mm
Cab Height with Top Guard	3390 mm	3390 mm
<b>10</b> Counterweight Clearance*	1280 mm	1280 mm

\*Without shoe lug height.

# 349F L XE Hydraulic Excavator Specifications

## Working Ranges – Long FIX Undercarriage

All dimensions are approximate.



### Boom Option

**Reach Boom**  
6.9 m (22'8")

### Stick Options

**R3.9TB HD**  
**(12'10")**

**R3.35TB HD**  
**(11'0")**

	R3.9TB HD (12'10")	R3.35TB HD (11'0")
<b>1</b> Maximum Digging Depth	8210 mm	7660 mm
<b>2</b> Maximum Reach at Ground Level	12 150 mm	11 730 mm
<b>3</b> Maximum Cutting Height	10 730 mm	10 820 mm
<b>4</b> Maximum Loading Height	7420 mm	7430 mm
<b>5</b> Minimum Loading Height	2200 mm	2750 mm
<b>6</b> Maximum Depth Cut for 2440 mm (8'0") Level Bottom	8080 mm	7520 mm
<b>7</b> Maximum Vertical Wall Digging Depth	5960 mm	5830 mm



# 349F L XE Hydraulic Excavator Specifications

## Operating Weights and Ground Pressures

	900 mm (35") Triple Grouser Shoes		750 mm (28") Triple Grouser Shoes		600 mm (24") Double Grouser Shoes	
	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)
<b>Long FIX Undercarriage</b>						
Reach Boom – 6.9 m (22'8")						
R3.9TB HD (12'10")	50 730 (111,800)	59 (8.6)	49 980 (109,700)	69 (10.0)	49 330 (108,800)	86 (12.5)
R3.35TB HD (11'0")	50 510 (111,400)	58 (8.4)	49 760 (109,700)	69 (10.0)	49 110 (108,300)	85 (12.3)

## Major Component Weights

	kg	lb
Base Machine (with boom cylinder, without counterweight, front linkage and track)		
Long FIX Undercarriage	25 260	55,700
Counterweight		
9.0 mt (9.9 t)	9000	19,800
Boom (includes lines, pins and stick cylinder)		
Reach Boom – 6.9 m (22'8")	4630	10,200
Stick (includes lines, pins, bucket linkage and bucket cylinder)		
R3.9TB HD (12'10")	2760	6,100
R3.35TB HD (11'0")	2540	5,600
Track Shoes (Long FIX/per two tracks)		
600 mm (24") double grouser	5240	11,600
750 mm (28") single grouser	5950	13,100
750 mm (28") triple grouser	5890	13,000
900 mm (35") triple grouser	6640	14,600
Buckets		
TB1880GD – 3.10 m <sup>3</sup> (4.05 yd <sup>3</sup> )	2440	5,400

All weights are rounded up to nearest 10 kg and lb except for buckets. Kg and lb were rounded up separately so some of the kg and lb do not match.

Base machine includes 75 kg (165 lb) operator weight, 90% fuel weight, and undercarriage with center guard.

# 349F L XE Hydraulic Excavator Specifications

## Bucket and Stick Forces

Boom Option	Reach Boom 6.9 m (22'8")			
Stick Options	R3.9TB HD (12'10")		R3.35TB HD (11'0")	
TB Linkage				
Heavy Duty				
Bucket Digging Force (SAE)	235 kN	52,830 lbf	235 kN	52,830 lbf
Stick Digging Force (SAE)	179 kN	40,240 lbf	195 kN	43,840 lbf
Severe Duty				
Bucket Digging Force (SAE)	229 kN	51,480 lbf	229 kN	51,480 lbf
Stick Digging Force (SAE)	178 kN	40,020 lbf	193 kN	43,390 lbf
Extreme Duty				
Bucket Digging Force (SAE)	229 kN	51,480 lbf	229 kN	51,480 lbf
Stick Digging Force (SAE)	178 kN	40,020 lbf	193 kN	43,390 lbf

## 349F L XE Work Tool Offering Guide\*

Boom Type	Reach Boom HD		Mass Boom	
Stick Size	R3.9 HD (12'10")	R3.35 HD (11'0")	M3.0 (9'10")	M2.5 (8'2")
Hydraulic Hammer	H160E s H180E s **	H160E s H180E s	H160E s H180E s	H160E s H180E s
Multi-Processor	MP30 CC Jaw MP30 CR Jaw MP30 PP Jaw ** MP30 PS Jaw MP30 S Jaw MP30 TS Jaw **	MP30 CC Jaw MP30 CR Jaw MP30 PP Jaw MP30 PS Jaw MP30 S Jaw MP30 TS Jaw **	MP30 CC Jaw MP30 CR Jaw MP30 PP Jaw MP30 PS Jaw MP30 S Jaw MP30 TS Jaw	MP30 CC Jaw MP30 CR Jaw MP30 PP Jaw MP30 PS Jaw MP30 S Jaw MP30 TS Jaw MP40 CC Jaw *** MP40 CR Jaw *** MP40 PS Jaw *** #
Pulverizer	P235	P235	P235	P235
Demolition and Sorting Grapple	G330	G330	G330	G330
Mobile Scrap and Demolition Shear	S340B *** S365C ## S385C ##	S340B ** S365C ## S385C ##	S340B *** S365C ## S385C ##	S340B S365C ## S385C ##
Orange Peel Grapple	These work tools are available for the 349F L XE. Consult your Cat dealer for proper match.			
Rippers				
Center-Lock Pin Grabber Coupler				
Dedicated Quick Coupler				

\*Matches are dependent on excavator configurations. Consult your Cat dealer for proper work tool match.

\*\*Pin-on or dedicated coupler

\*\*\*Pin-on only

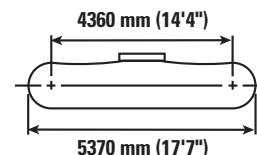
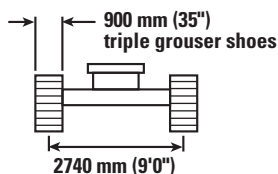
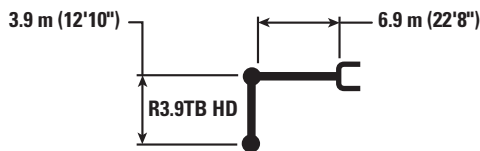
#Over the front only

##Boom mount



# 349F L XE Hydraulic Excavator Specifications

## Reach Boom (Long FIX Undercarriage) Lift Capacities – Counterweight: 9.0 mt (9.9 t) – Heavy Lift: On



		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft		m ft		
9.0 m 30.0 ft	kg lb									<b>*18,700</b>	<b>*18,700</b>			<b>*7900</b> <b>*17,500</b>	<b>*7900</b> <b>*17,500</b>	7.86 25.83
7.5 m 25.0 ft	kg lb													<b>*7550</b> <b>*16,600</b>	<b>*7550</b> <b>*16,600</b>	8.97 29.17
6.0 m 20.0 ft	kg lb									<b>*11 650</b> <b>*25,350</b>	<b>11 350</b> <b>24,450</b>	<b>*11 050</b> <b>22,950</b>	<b>8450</b> <b>18,100</b>	<b>*7450</b> <b>*16,400</b>	<b>7400</b> <b>16,350</b>	9.72 31.67
4.5 m 15.0 ft	kg lb							<b>*14 800</b> <b>*32,050</b>	<b>*14 800</b> <b>*32,050</b>	<b>*12 800</b> <b>*27,750</b>	<b>10 950</b> <b>23,550</b>	<b>*11 550</b> <b>*25,250</b>	<b>8200</b> <b>17,650</b>	<b>*7600</b> <b>*16,650</b>	<b>6700</b> <b>14,750</b>	10.19 33.33
3.0 m 10.0 ft	kg lb					<b>*23 750</b> <b>*51,000</b>	<b>22 000</b> <b>47,450</b>	<b>*17 300</b> <b>*37,400</b>	<b>14 450</b> <b>31,150</b>	<b>*14 150</b> <b>*30,650</b>	<b>10 450</b> <b>22,500</b>	<b>*12 300</b> <b>*26,750</b>	<b>7950</b> <b>17,100</b>	<b>*7900</b> <b>*17,400</b>	<b>6300</b> <b>13,900</b>	10.42 34.17
1.5 m 5.0 ft	kg lb					<b>*25 800</b> <b>*59,100</b>	<b>20 450</b> <b>44,050</b>	<b>*19 450</b> <b>*42,050</b>	<b>13 600</b> <b>29,350</b>	<b>*15 400</b> <b>*33,350</b>	<b>9950</b> <b>21,450</b>	<b>12 400</b> <b>26,650</b>	<b>7650</b> <b>16,500</b>	<b>*8500</b> <b>*18,700</b>	<b>6150</b> <b>13,550</b>	10.43 34.17
0.0 m 0.0 ft	kg lb					<b>*23 800</b> <b>*55,050</b>	<b>19 700</b> <b>42,450</b>	<b>*20 700</b> <b>*44,850</b>	<b>13 050</b> <b>28,150</b>	<b>15 900</b> <b>34,250</b>	<b>9600</b> <b>20,700</b>	<b>12 150</b> <b>26,150</b>	<b>7450</b> <b>16,050</b>	<b>*9400</b> <b>*20,700</b>	<b>6250</b> <b>13,700</b>	10.22 34.17
-1.5 m -5.0 ft	kg lb			<b>*15 300</b> <b>*34,450</b>	<b>*15 300</b> <b>*34,450</b>	<b>*28 150</b> <b>*61,050</b>	<b>19 500</b> <b>41,950</b>	<b>*20 950</b> <b>*45,350</b>	<b>12 800</b> <b>27,550</b>	<b>15 700</b> <b>33,750</b>	<b>9400</b> <b>20,250</b>	<b>12 050</b> <b>25,900</b>	<b>7350</b> <b>15,800</b>	<b>10 750</b> <b>23,650</b>	<b>6600</b> <b>14,500</b>	9.77 32.50
-3.0 m -10.0 ft	kg lb	<b>*38,550</b>	<b>*38,550</b>	<b>*22 300</b> <b>*50,350</b>	<b>*22 300</b> <b>*50,350</b>	<b>*26 350</b> <b>*57,100</b>	<b>19 600</b> <b>42,100</b>	<b>*20 050</b> <b>*43,400</b>	<b>12 750</b> <b>27,450</b>	<b>15 650</b> <b>33,650</b>	<b>9350</b> <b>20,150</b>	<b>12 050</b> <b>7350</b>	<b>7350</b>	<b>12 000</b> <b>26,500</b>	<b>7300</b> <b>16,200</b>	9.05 30.00
-4.5 m -15.0 ft	kg lb			<b>*30 900</b> <b>*66,650</b>	<b>*30 900</b> <b>*66,650</b>	<b>*23 050</b> <b>*49,700</b>	<b>19 900</b> <b>42,850</b>	<b>*17 800</b> <b>*38,300</b>	<b>12 950</b> <b>27,850</b>	<b>*13 750</b> <b>*29,250</b>	<b>9500</b> <b>20,550</b>			<b>*12 450</b> <b>*27,450</b>	<b>8800</b> <b>19,600</b>	7.98 26.67
-6.0 m -20.0 ft	kg lb					<b>*17 400</b> <b>*36,750</b>	<b>*17 400</b> <b>*36,750</b>	<b>*13 100</b> <b>*27,200</b>	<b>*13 100</b> <b>*27,200</b>					<b>*11 950</b> <b>*26,150</b>	<b>*11 950</b> <b>*26,150</b>	6.38 20.83



ISO 10567



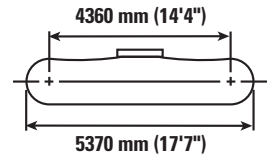
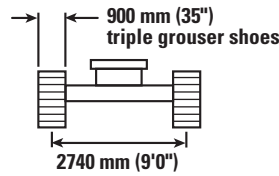
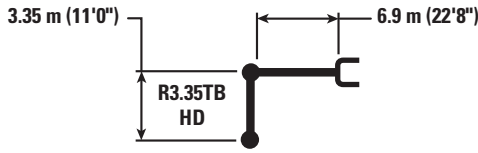
\*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.
















Lift capacity stays with ±5% for all available track shoes.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

# 349F L XE Hydraulic Excavator Specifications

## Reach Boom (Long FIX Undercarriage) Lift Capacities – Counterweight: 9.0 mt (9.9 t) – Heavy Lift: On



		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft				
																m ft
9.0 m 30.0 ft	kg lb													*9050 *20,050	*9050 *20,050	7.30 24.17
7.5 m 25.0 ft	kg lb									*11 950 *26,250	11 500 24,650			*8500 *18,750	*8500 *18,750	8.48 27.50
6.0 m 20.0 ft	kg lb									*12 500 *27,300	11 250 24,200	*10 750 *20,250	8350 17,900	*8350 *18,350	7950 17,600	9.27 30.83
4.5 m 15.0 ft	kg lb					*20 750 *44,500	*20 750 *44,500	*16 000 *34,600	15 150 32,700	*13 600 *29,550	10 850 23,400	*12 250 *26,700	8200 17,600	*8450 *18,550	7150 15,800	9.77 32.50
3.0 m 10.0 ft	kg lb					*25 750 *55,300	21 500 46,450	*18 400 *39,700	14 300 30,850	*14 850 *32,250	10 400 22,400	12 700 27,300	7950 17,100	*8800 *19,300	6750 14,850	10.01 33.33
1.5 m 5.0 ft	kg lb					*18 600 *44,500	*18 600 43,700	*20 250 *43,800	13 550 29,250	*15 950 *34,600	10 000 21,500	12 450 26,750	7700 16,600	*9400 *20,700	6600 14,550	10.02 33.33
0.0 m 0.0 ft	kg lb					*20 950 *48,650	19 850 42,700	*21 150 *45,800	13 150 28,300	16 000 34,400	9700 20,850	12 250 26,350	7550 16,250	*10 400 *22,900	6700 14,800	9.80 32.50
-1.5 m -5.0 ft	kg lb			*14 900 *33,650	*14 900 *33,650	*27 700 *60,150	19 800 42,600	*20 950 *45,400	12 950 27,900	15 850 34,050	9550 20,550	12 200 26,250	7500 16,150	11 600 25,600	7150 15,750	9.33 30.83
-3.0 m -10.0 ft	kg lb			*23 850 *53,850	*23 850 *53,850	*25 350 *55,000	20 000 42,950	*19 650 *42,450	13 000 28,000	*15 450 *33,250	9550 20,650			*12 800 *28,150	8050 17,850	8.57 28.33
-4.5 m -15.0 ft	kg lb			*27 400 *59,150	*27 400 *59,150	*21 400 *46,100	20 400 43,850	*16 700 *35,800	13 250 28,600					*12 600 *27,650	9950 22,250	7.43 24.17



ISO 10567



\*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity stays with ±5% for all available track shoes.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.



# 349F L XE Hydraulic Excavator Specifications

## Bucket Specifications and Compatibility (Long FIX Undercarriage)

Track									900 mm (35") Triple Grouser Shoes	
Counterweight									9.0 mt (9.9 t)	
	Linkage	Width		Capacity		Weight		Fill	Reach Boom	
		mm	in	m <sup>3</sup>	yd <sup>3</sup>	kg	lb	%	R3.9 HD (12'10")	R3.35 HD (11'0")
<b>Without Pin Grabber Coupler</b>										
General Duty (GDC)	TB	750	30	0.95	1.24	1311	2,889	100	●	●
	TB	900	36	1.23	1.60	1441	3,176	100	●	●
	TB	1050	42	1.51	1.98	1525	3,361	100	●	●
	TB	1200	48	1.80	2.36	1676	3,694	100	●	●
	TB	1350	54	2.10	2.74	1792	3,950	100	●	●
	TB	1500	60	2.39	3.13	1943	4,282	100	⊙	⊙
	TB	1700	68	2.78	3.64	2128	4,690	100	⊖	⊖
	TB	1850	74	3.08	4.04	2254	4,968	100	○	○
General Duty XL (GDXL)	TB	2000	80	3.82	5.00	2457	5,415	100	◇	◇
Heavy Duty (HD)	TB	900	36	1.08	1.41	1594	3,513	100	●	●
	TB	1050	42	1.34	1.75	1684	3,712	100	●	●
	TB	1200	48	1.60	2.09	1834	4,043	100	●	●
	TB	1350	54	1.87	2.44	1962	4,324	100	●	●
	TB	1500	60	2.14	2.80	2125	4,684	100	⊙	●
	TB	1650	66	2.41	3.15	2286	5,039	100	⊖	⊙
	TB	1800	72	2.69	3.52	2423	5,340	100	○	⊖
Severe Duty (SD)	TB	750	30	0.88	1.15	1446	3,187	90	●	●
	TB	900	36	1.08	1.41	1677	3,696	90	●	●
	TB	1050	42	1.34	1.75	1779	3,921	90	●	●
	TB	1200	48	1.60	2.09	1952	4,302	90	●	●
	TB	1400	55	1.87	2.44	2180	4,805	90	●	●
	TB	1550	61	2.14	2.80	2381	5,248	90	⊙	●
	TB	1700	67	2.41	3.16	2524	5,563	90	⊖	⊙
	TB	1850	74	2.69	3.52	2726	6,008	90	○	⊖
Extreme Duty (XD)	TB	1250	49	1.60	2.09	2224	4,902	90	●	●
	TB	1400	55	1.87	2.44	2366	5,215	90	●	●

### Maximum Material Density:

- 2100 kg/m<sup>3</sup> (3,500 lb/yd<sup>3</sup>)
- ⊙ 1800 kg/m<sup>3</sup> (3,000 lb/yd<sup>3</sup>)
- ⊖ 1500 kg/m<sup>3</sup> (2,500 lb/yd<sup>3</sup>)
- 1200 kg/m<sup>3</sup> (2,000 lb/yd<sup>3</sup>)
- ◇ 900 kg/m<sup>3</sup> (1,500 lb/yd<sup>3</sup>)

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with Long tips.

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

# 349F L XE Hydraulic Excavator Specifications

## Bucket Specifications and Compatibility (Long FIX Undercarriage)

Track									900 mm (35") Triple Grouser Shoes	
Counterweight									9.0 mt (9.9 t)	
	Linkage	Width		Capacity		Weight		Fill	Reach Boom	
		mm	in	m <sup>3</sup>	yd <sup>3</sup>	kg	lb	%	R3.9 HD (12'10")	R3.35 HD (11'0")
<b>With Pin Grabber Coupler</b>										
General Duty (GDC)	TB	750	30	0.95	1.24	1311	2,889	100	●	●
	TB	900	36	1.23	1.60	1441	3,176	100	●	●
	TB	1050	42	1.51	1.98	1525	3,361	100	●	●
	TB	1200	48	1.80	2.36	1676	3,694	100	●	●
	TB	1350	54	2.10	2.74	1792	3,950	100	●	●
	TB	1500	60	2.39	3.13	1943	4,282	100	⊙	⊙
	TB	1700	68	2.78	3.64	2128	4,690	100	⊖	⊖
	TB	1850	74	3.08	4.04	2254	4,968	100	○	○
General Duty XL (GDXL)	TB	2000	80	3.82	5.00	2457	5,415	100	◇	◇
Heavy Duty (HD)	TB	900	36	1.08	1.41	1594	3,513	100	●	●
	TB	1050	42	1.34	1.75	1684	3,712	100	●	●
	TB	1200	48	1.60	2.09	1834	4,043	100	●	●
	TB	1350	54	1.87	2.44	1962	4,324	100	●	●
	TB	1500	60	2.14	2.80	2125	4,684	100	⊙	●
	TB	1650	66	2.41	3.15	2286	5,039	100	⊖	⊙
	TB	1800	72	2.69	3.52	2423	5,340	100	○	⊖
Severe Duty (SD)	TB	750	30	0.88	1.15	1446	3,187	90	●	●
	TB	900	36	1.08	1.41	1677	3,696	90	●	●
	TB	1050	42	1.34	1.75	1779	3,921	90	●	●
	TB	1200	48	1.60	2.09	1952	4,302	90	●	●
	TB	1400	55	1.87	2.44	2180	4,805	90	●	●
	TB	1550	61	2.14	2.80	2381	5,248	90	⊙	●
	TB	1700	67	2.41	3.16	2524	5,563	90	⊖	⊙
	TB	1850	74	2.69	3.52	2726	6,008	90	○	⊖
Extreme Duty (XD)	TB	1250	49	1.60	2.09	2224	4,902	90	●	●
	TB	1400	55	1.87	2.44	2366	5,215	90	●	●

### Maximum Material Density:

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- ⊖ 1500 kg/m<sup>3</sup> (2,500 lb/yd<sup>3</sup>)
- 1200 kg/m<sup>3</sup> (2,000 lb/yd<sup>3</sup>)
- ◇ 900 kg/m<sup>3</sup> (1,500 lb/yd<sup>3</sup>)

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with Long tips.

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## Standard Equipment

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

### ENGINE

- Cat C13 ACERT diesel engine
- Biodiesel up to B20
- Meets Tier 4 Final emission standards
- 2300 m (7,500 ft) altitude capability
- Electric priming pump
- Automatic engine speed control
- Standard, economy and high power modes
- Two-speed travel
- Side-by-side cooling system
- Radial seal air filter
- Primary filter with water separator and water separator indicator switch
- Fuel differential indicator switch in fuel line
- 2×6 micron main filters
- 1×10 micron primary fuel line filter

### HYDRAULIC SYSTEM

- Regeneration circuit for boom and stick
- Reverse swing dampening valve
- Automatic swing parking brake
- High-performance hydraulic return filter
- Joystick control pattern change through monitor

### CAB

- Pressurized operator station with positive filtration
- Mirror package
- Sliding upper door window (left-hand cab door)
- Glass-breaking safety hammer
- Removable lower windshield within cab storage bracket
- Coat hook
- Beverage holder
- Literature holder
- Radio with MP3 auxiliary audio port
- Two stereo speakers
- Storage shelf suitable for lunch or toolbox
- Color LCD display with warning, filter/fluid change, and working hour information
- Adjustable armrest
- Height adjustable joystick consoles
- Neutral lever (lock out) for all controls
- Travel control pedals with removable hand levers
- Two power outlets, 10 amp (total)
- Laminated glass front upper window and tempered other windows
- Cab hatch emergency exit
- AM/FM radio
- Air pre-filter
- Travel alarm
- Straight travel pedal
- Seat, high-back air suspension with heater and cooling

### UNDERCARRIAGE

- Grease Lubricated Track GLT4
- Towing eye on base frame
- Heavy-duty track rollers
- Track motor guards
- Heavy-duty bottom guard

### ELECTRICAL

- 80 amp alternator
- Circuit breaker

### LIGHTS

- HID boom light
- HID cab lights with time delay
- Exterior lights integrated into storage box

### SECURITY

- Cat one key security system
- Door locks
- Cap locks on fuel and hydraulic tanks
- Lockable external tool/storage box
- Signaling/warning horn
- Secondary engine shutoff switch
- Openable skylight for emergency exit
- Rearview camera

### TECHNOLOGY

- Cat Grade Control Depth and Slope
- Product Link
- Cat Production Measurement

# 349F L XE Optional Equipment

## Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

### ENGINE

- Starting kit, cold weather, -32° C (-26° F)
- Jump start receptacle
- Quick drains, engine and hydraulic oil

### HYDRAULIC SYSTEM

- Additional circuit
- Boom and stick lines
- High-pressure line
- Medium-pressure line
- Cat quick coupler line – high- and medium-pressure capable
- Quick coupler for high pressure
- Tool control system

### CAB

- Sunscreen
- Windshield wiper, lower with washer

### UNDERCARRIAGE

- Long FIX undercarriage:
  - 600 mm (24") double grouser shoes, PPR2
  - 750 mm (28") single grouser shoes
  - 750 mm (28") triple grouser shoes, PPR2
  - 900 mm (35") triple grouser shoes, PPR2
- Full-length track guiding guard
- Center track guiding guard
- Segmented (3 piece) track guiding guard
- Fabricating idler
- Casting idler

### COUNTERWEIGHT

- 8.6 mt (9.4 t) with counterweight removal device
- 9.0 mt (9.9 t)

### FRONT LINKAGE

- Bucket linkage
  - UB family without lifting eye
- Reach boom
  - 6.9 m (22'8") boom
  - R3.9TB (12'10") stick
  - R3.35TB (11'0") stick

### SECURITY

- FOGS, bolt-on











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