

# 349E L

Hydraulic Excavator



## Engine

Engine Model	Cat® C13 ACERT™	
Engine Power (ISO 14396)	317 kW	425 hp
Net Power (SAE J1349/ISO 9249)	295 kW	396 hp

## Drive

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

## Weight

Minimum Weight	47 500 kg	104,800 lb
Maximum Weight	52 600 kg	115,900 lb

Introduction

*If you are looking for more productivity and comfort, less fuel consumption, and easier and more sensible serviceability, you will find it in the all-new 349E L and the E Series family of excavators.*

*The 349E L meets U.S. Environmental Protection Agency (EPA) Tier 4 Interim emission standards, European Union Stage IIIB emission standards, and Japan MLIT Step 4 emission standards. It is also built with several new fuel-saving and comfort-enabling features and benefits that will delight owners and operators.*

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**Since its introduction in the 1990s, the 300 Series family of excavators has become the industry standard for production and performance. The all-new E Series and the 349E L continue that trend-setting standard.**

# Engine

You can count on economical and reliable performance.



## Cat C13 ACERT Engine

The Cat C13 ACERT engine is built to meet your demanding needs all day long. ACERT Technology – a combination of electronics, fuel systems, air management systems, and aftertreatment components – is key to meeting customer expectations for productivity, fuel efficiency, reliability, and service life.

## Power Modes

The 349E L features three power modes to help manage fuel consumption: High power, standard power, and economy. Two additional fuel-saving features are automatic engine speed control and engine idle shutdown. Automatic engine speed control adjusts to the load, keeping speed low during light loading and idling and adjusting up for heavier loads. Engine idle shutdown automatically turns the engine off when idling for more than a specified amount of time that you set, which can save significant amounts of fuel and reduce emissions.

## Biodiesel-Ready Fuel System

The 349E L runs on ultra-low-sulfur diesel fuel, but you have added flexibility with the C13 ACERT engine because it's equipped to run on biodiesel (meeting ASTM 6751 or EN 14214) fuel up to B20. Just fill it up and go.



# Hydraulics

You can move dirt, rock, and debris with speed, precision, and efficiency.



## Hydraulic Horsepower

Hydraulic horsepower is the actual machine power available to do work through implements and work tools. It's much more than just the engine power under the hood – it's a core strength that differentiates Cat machines from other brands.

## Main Control Valve and Auxiliary Valves

The 349E L uses a high-pressure system to tackle the toughest of work in short order. The 349E L uses a redesigned side-by-side main control valve, which allows for auxiliary hydraulic lines and valve configurations to be simplified for greater reliability.

## Return Filter

The return filter is a capsule-type design with a cartridge inside. Unlike many competitors' offerings, the Cat cartridge features a handle to help remove and change oil without spillage or contamination. A sensor attached to the filter warns the operator if it is full or exceeds a certain pressure level.

## Swing Priority Circuit

The swing priority circuit on the 349E L uses a new electric valve that's operated by the machine's improved Electronic Control Module (ECM). Compared to using a hydraulic valve, an electric valve allows for more finely tuned control, which is critical during material loading.

## Electric Boom Regeneration Valve

A new electric boom regeneration valve minimizes pump flow when the boom lowers down, which improves fuel economy. It is optimized for any dial speed setting being used by the operator, which in turn aids controllability and enhances component durability.

## Stick Regeneration Circuit

The 349E L regenerates the flow of oil from the rod end of the stick cylinder to the head end of the stick cylinder during low-load, stick-in operation – an approach that saves energy and expense.

# Operator Station

Your operators will enjoy the incredibly quiet and comfortable cab.

## Seats

A new seat includes air suspension, heated, and air cooled options. Each option includes a reclining back, upper and lower seat slide adjustments, and height and tilt angle adjustments to meet operator needs for comfort and productivity.

## Controls

Your operators can adjust the height of the joysticks (1) for a wide range of operator sizes to become more comfortable, more productive, and more alert.

With the touch of the button, one-touch idle reduces engine speed to help save fuel; touch it again or move the joystick and the machine returns to normal operating level.

The optional heavy lift mode increases machine system pressure to improve lift – a nice benefit in certain situations. Heavy lift mode also reduces engine speed and pump flow in order to improve controllability.

## Monitor

The 349E L is equipped with a new LCD (Liquid Crystal Display) monitor (2) that's 40% bigger than the previous model's with higher resolution for better visibility. In addition to an improved keypad and added functionality, it's programmable to provide information in a choice of 42 languages to support today's diverse workforce.

A new "Engine Shutdown Setting" accessible through the monitor allows owners and operators to specify how long the machine should idle before shutting down the engine, which can save significant amounts of fuel.

In addition, the monitor serves as a display for the optional rearview camera. Up to two different camera images can be displayed on the screen.

## Storage

Your operators can store their gear in storage spaces located in the front, rear, and side consoles. A dedicated space near the auxiliary power supply will hold an MP3 player and cell phone. The drink holder accommodates large mugs and a shelf behind the seat stores large lunch or toolboxes.

## Automatic Climate Control

The climate control system features five air outlets with positive filtered ventilation, which makes working in the heat and cold much more pleasant.





## Structures and Undercarriage

You can take on a variety of tough tasks with this built-to-last machine.

### Frame

The upper frame includes new reinforced mountings to support a new Roll-Over Protective Structure (ROPS) cab; the lower frame is reinforced to increase component durability.

### Undercarriage

Fixed and variable gauge long undercarriage systems are available to support various work applications.

Heavy-duty track rollers, precision-forged carrier rollers, press-fit pin master joints, and enhanced track shoe bolts improve durability and reduce the risk of machine downtime and the need and cost to replace components.

A new segmented three-piece guiding guard is now offered to maintain track alignment and improve performance in multiple applications.

A redesigned motor housing prevents mud packing and debris buildup around seals.

### Counterweights

The standard 9.0 mt (9.9 t) counterweight maintains large lifting capacity and excellent stability. The counterweight bolts directly to the main frame for added rigidity and feature an integrated housing for the new rearview camera option.



# Front Linkage

You'll experience a long service life even in the harshest of conditions.

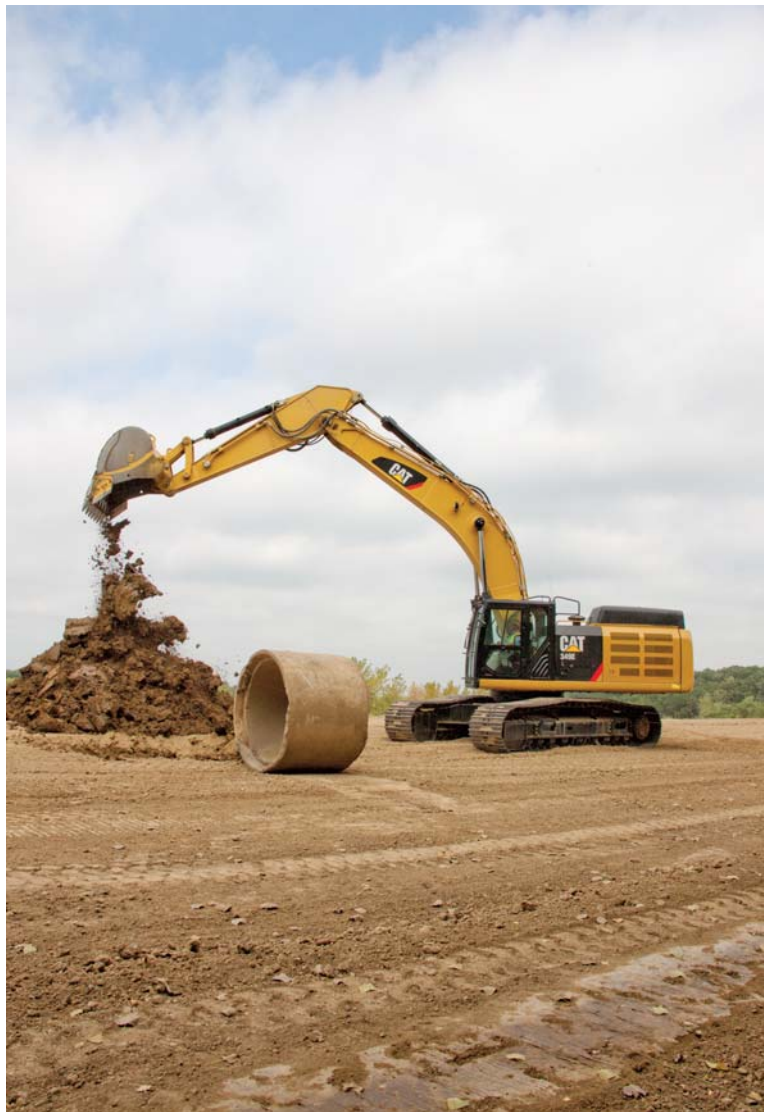
## Booms and Sticks

The 349E L is offered with a range of booms and sticks. 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, boom cylinder, and stick foot to improve durability. Also, the boom nose pin retention method is a captured flag design for enhanced durability.

## Selections

Two boom types are offered:

- **HD = Heavy Duty Reach.** HD is designed for general excavator applications such as multipurpose digging and loading, and it includes additional steel to make it more durable and better suited for more demanding applications like moving rock or using a hammer.
- **ME = Mass Excavation.** ME is best used for quarry, high-volume loading, and other demanding applications. The ME front provides higher digging forces due to the geometry of the boom and stick relationship. Bucket linkage and cylinders are also built for greater durability.





# Work Tools

You can dig, hammer, rip, and cut with confidence.



## Cat Center-Lock™ Pin Grabber Coupler

Center-Lock is the pin grabber style of coupler featuring a patented locking system. A highly visible lock clearly shows the operator when the coupler is engaged or disengaged from the bucket or work tool.

## Work Tools: Cut, Crush, Pulverize and Load

No matter your specialty, Caterpillar provides tools that are perfectly matched to get the most out of your Cat machine – quickly and efficiently. Auxiliary hydraulic circuits are available to integrate any Cat work tool with your 349E L.

## Buckets: Dig, Move, Load

Cat buckets are designed to fill efficiently so you notice a fast, smooth cycle, which means high productivity each time you dig. Wear characteristics of general-duty, heavy-duty, and severe-duty buckets give you solid performance in a wide variety of material abrasions. Ditch cleaning and other specialty buckets are available when needed.

## Couplers: Quick Tool Changes

Imagine the productivity you'll achieve with a quick coupler. Combine a robust coupler with a common work tool inventory that can be shared between same size machines and you'll get performance and flexibility on every job. The Cat Center-Lock pin grabber coupler features a patented locking system and highly visible lock. You can clearly see when the coupler is engaged or disengaged from the attachment.



## Integrated Technologies

You can make your team's work much easier and more efficient.

### Cat Grade Control Depth and Slope

This optional system (1) combines traditional machine control and guidance with standard factory-installed and calibrated components, making the system ready to go to work the moment it leaves the factory. The system utilizes internal front linkage sensors – well protected from the harsh working environment – to give operators real-time bucket tip position information, which minimizes the need and cost for traditional grade checking and improves job site safety. It also helps the operator complete jobs in fewer cycles, which means less fuel use. Cat dealers can upgrade the system to full three-dimensional control by adding proven Cat AccuGrade™ positioning technologies, including GPS and Universal Total Station (UTS).

### Cat Product Link™\*

This deeply integrated machine monitoring system is designed to help customers improve their overall fleet management effectiveness. Events and diagnostic codes as well as hours, fuel consumption, idle time, machine location, and other detailed information are transmitted to a secure web application called VisionLink®, which uses powerful tools to communicate to users and dealers.



①

*\*Product Link licensing not available in all areas. Please consult your Cat dealer for availability.*



# Serviceability

You can depend on safe, fast, and easy access.

## Service Doors

Wider service doors (1) feature sturdier hinges and latches and a new screen design to help prevent debris entry; a new two-piece hood provides easier access to the engine and cooling compartments.



## Compartments

The radiator, pump, and air cleaner compartments provide easy access to major components. The fresh air filter (2) is located on the side of the cab to make it easier to reach and replace as needed.



## Other Service Improvements

The water separator with water level sensor has a primary fuel filter element located in the pump compartment near ground level; the electric priming pump is mounted on the primary filter base and is easier to service than traditional hand-priming pumps.

The fuel tank features a remote drain cock located in the pump compartment to make it easy to remove water and sediment during maintenance.

The engine oil check gauge is situated in front of the engine compartment and is easy to remove. The engine oil filter is situated in the pump compartment for easy access. Changing engine oil is simple due to a unique drain cock designed to prevent spills.

The Fast Fill Hydraulic Oil System and Fast Fill Engine Oil System make what typically takes hours achievable in minutes.

# Safety

Several built-in features will help protect your people.



## Reinforced Frame

The upper frame is reinforced to accommodate the installation of a new ROPS cab with redesigned overhead guarding to protect operators.

## Sound Proofing

Improved sealing and cab roof lining lower noise levels significantly during machine operation.

## Anti-Skid Plates

The surface of the upper structure and the top of the storage box area are covered with removable anti-skid plates to help prevent service personnel and operators from slipping during maintenance.

## Steps, Hand and Guard Rails

Steps (1) on the track frame and storage box along with extended hand and guard rails to the upper deck enable operators to more securely work on the machine.

## High Intensity Discharge (HID) Lights

Cab lights can be upgraded to HID for greater night time visibility.

## Visibility – Windows

Increased glass coverage provides excellent visibility while meeting the latest ROPS standards. The 70/30 split configuration features an upper window equipped with handles on the top and both sides so the operator can slide it to store in the ceiling. The lower window is removable and can be stored on the left wall of the cab shell. An available one-piece front windshield comes with a glass-breaking safety hammer.

The newly designed skylight is larger than the previous series' and provides greater overhead visibility, excellent natural lighting, and good ventilation. The skylight can be opened completely to become an emergency exit.



## Monitor Warning System

The monitor is equipped with a buzzer that can warn an operator of critical events like "Engine Oil Pressure Decrease," "Coolant Temperature High," or "Hydraulic Oil Temperature High," allowing for immediate action to take place.

## Rearview Camera (ISO 9006)

A rearview camera (2) is housed in the counterweight area. The image projects through the cab monitor to give the operator a clear picture of what's behind the machine.





### **Product Support**

You can maximize your machines' uptime with the Cat worldwide dealer network. You can also decrease your repair costs by utilizing Cat remanufactured components while contributing to sustainable development.

### **Machine Selection**

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.

### **Purchase**

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.

### **Customer Support Agreements**

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.

### **Operation**

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

### **Replacement**

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

Conserve natural resources for generations ahead.

- The C13 ACERT engine meets U.S. Environmental Protection Agency (EPA) Tier 4 Interim emission standards, European Union Stage IIIB emission standards, and Japan MLIT Step 4 emission standards.
- The 349E L performs the same amount of work while burning up to 5 percent less fuel than the previous D Series model, which means more efficiency, less resources, and fewer CO<sub>2</sub> emissions.
- The 349E L has the flexibility of running on either ultra-low-sulfur diesel (ULSD) fuel with 15 ppm of sulfur or less or biodiesel (meeting ASTM 6751 or EN 14214) (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 349E L is an efficient, productive machine that's designed to conserve our natural resources for generations ahead.





# 349E L Hydraulic Excavator Specifications

## Engine

Engine Model	Cat C13 ACERT	
Engine Power (ISO 14396)	317 kW	425 hp
Net Power (SAE J1349/ISO 9249)	295 kW	396 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*	47 500 kg	104,800 lb
Maximum Weight**	52 600 kg	115,900 lb

\*6.9 m (22'8") HD Reach boom, R2.9TB (9'6") HD stick, 9.0 mt (9.9 t) counterweight, Long FIX undercarriage, 2.41 m<sup>3</sup> (3.15 yd<sup>3</sup>) HD bucket, 600 mm (24") DG shoes.

\*\*6.55 m (21'6") Mass boom, M3.0UB (9'10") HD stick, 9.0 mt (9.9 t) counterweight, Long VG undercarriage, 2.61 m<sup>3</sup> (3.41 yd<sup>3</sup>) SD bucket, 900 mm (35") TG shoes.

## Hydraulic System

Main System – Maximum Flow (Total)	770 L/min	203 gal/min
Swing System – Maximum Flow	385 L/min	102 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,076 psi
Maximum Pressure – Equipment (Lift mode)	38 000 kPa	5,512 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	27 500 kPa	3,989 psi
Pilot System – Maximum Flow	27 L/min	7.1 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
UB Family Bucket Cylinder – Bore	170 mm	6.69 in
UB Family Bucket Cylinder – Stroke	1396 mm	54.96 in

## Drive

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

## Swing Mechanism

Swing Speed	8.7 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)	43 L	11.4 gal
Swing Drive (each)	10 L	2.6 gal
Final Drive (each)	15 L	4.0 gal
Hydraulic System (including tank)	570 L	150.6 gal
Hydraulic Tank	407 L	107.5 gal

## Track

Number of Shoes (each side)	
Long Fix Undercarriage	52
Long Variable Gauge Undercarriage	52
Number of Track Rollers (each side)	
Long Fix Undercarriage	9
Long Variable Gauge Undercarriage	9
Number of Carrier Rollers (each side)	
Long Fix Undercarriage	2
Long Variable Gauge Undercarriage	3

## Sound Performance

Operator Noise (Closed) – ISO 6396	73 dB(A)
Spectator Noise – ISO 6395	108 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.

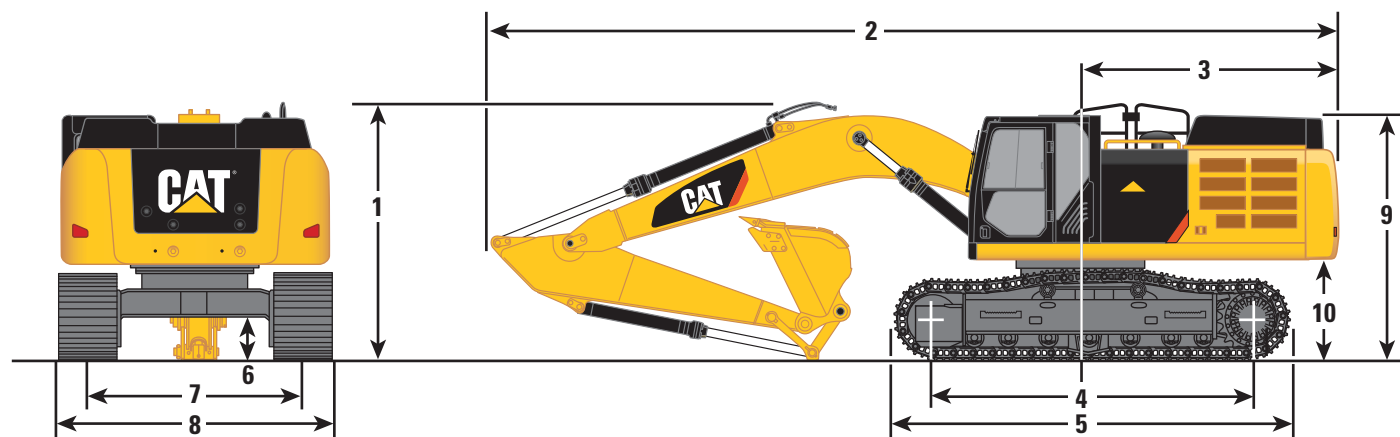
## Standards

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

# 349E L Hydraulic Excavator Specifications

## Dimensions – Long FIX Undercarriage

All dimensions are approximate.

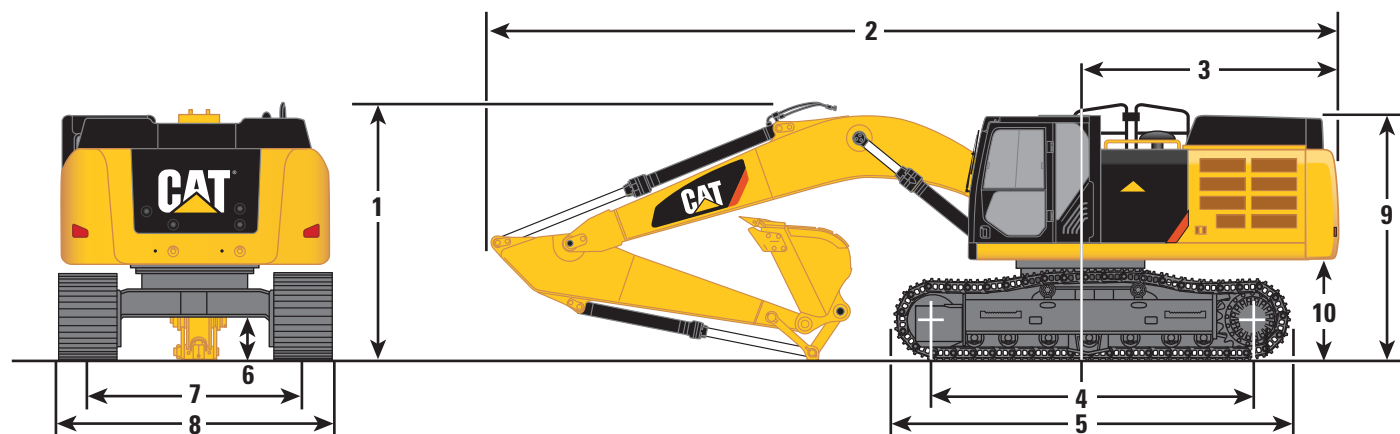


Stick	HD Reach Boom 6.9 m (22'8")			Mass Boom 6.55 m (21'6")	
	HD R3.9TB (12'10")	HD R3.35TB (11'0")	HD R2.9TB (9'6")	M3.0UB (9'10")	M2.5UB (8'2")
	mm (ft)	mm (ft)	mm (ft)	mm (ft)	mm (ft)
1 Shipping Height to Boom	3670 (12'1")	3730 (12'3")	3660 (12'0")	4020 (13'2")	3980 (13'1")
Shipping Height with Guard Rail	3610 (11'10")	3610 (11'10")	3610 (11'10")	3610 (11'10")	3610 (11'10")
2 Shipping Length	11 930 (39'2")	11 920 (39'1")	11 910 (39'1")	11 590 (38'0")	11 680 (38'4")
3 Tail Swing Radius	3760 (12'4")	3760 (12'4")	3760 (12'4")	3760 (12'4")	3760 (12'4")
4 Length to Center of Rollers	4360 (14'4")	4360 (14'4")	4360 (14'4")	4360 (14'4")	4360 (14'4")
5 Track Length	5370 (17'7")	5370 (17'7")	5370 (17'7")	5370 (17'7")	5370 (17'7")
6 Ground Clearance (including Shoe Lug Height)	510 (1'8")	510 (1'8")	510 (1'8")	510 (1'8")	510 (1'8")
7 Track Gauge	2740 (9'0")	2740 (9'0")	2740 (9'0")	2740 (9'0")	2740 (9'0")
8 Transport Width					
600 mm (24") Shoes	3340 (11'0")	3340 (11'0")	3340 (11'0")	3340 (11'0")	3340 (11'0")
750 mm (30") Shoes	3490 (11'5")	3490 (11'5")	3490 (11'5")	3490 (11'5")	3490 (11'5")
900 mm (35") Shoes	3640 (11'11")	3640 (11'11")	3640 (11'11")	3640 (11'11")	3640 (11'11")
9 Cab Height	3220 (10'7")	3220 (10'7")	3220 (10'7")	3220 (10'7")	3220 (10'7")
Cab Height with Top Guard	3390 (11'1")	3390 (11'1")	3390 (11'1")	3390 (11'1")	3390 (11'1")
10 Counterweight Clearance	1280 (4'2")	1280 (4'2")	1280 (4'2")	1280 (4'2")	1280 (4'2")



## Dimensions – Long VG Undercarriage

All dimensions are approximate.

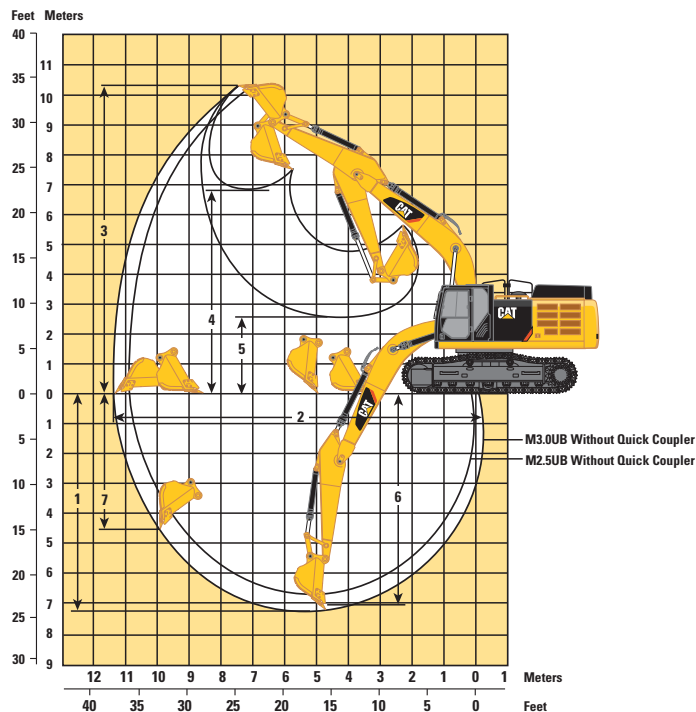
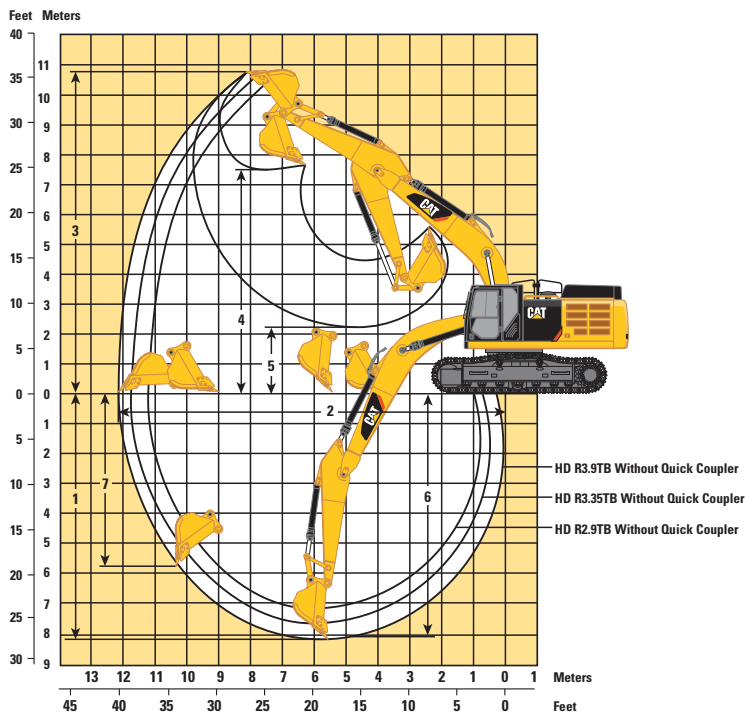


Stick	HD Reach Boom 6.9 m (22'8")			Mass Boom 6.55 m (21'6")	
	HD R3.9TB (12'10")	HD R3.35TB (11'0")	HD R2.9TB (9'6")	M3.0UB (9'10")	M2.5UB (8'2")
	mm (ft)	mm (ft)	mm (ft)	mm (ft)	mm (ft)
<b>1</b> Shipping Height to Boom	3650 (12'0")	3550 (11'8")	3700 (12'2")	4020 (13'2")	4010 (13'2")
Shipping Height with Guard Rail	3760 (12'4")	3760 (12'4")	3760 (12'4")	3760 (12'4")	3760 (12'4")
<b>2</b> Shipping Length	11 890 (39'0")	11 820 (38'9")	11 820 (38'9")	11 560 (37'11")	11 640 (38'2")
<b>3</b> Tail Swing Radius	3760 (12'4")	3760 (12'4")	3760 (12'4")	3760 (12'4")	3760 (12'4")
<b>4</b> Length to Center of Rollers	4340 (14'3")	4340 (14'3")	4340 (14'3")	4340 (14'3")	4340 (14'3")
<b>5</b> Track Length	5380 (17'8")	5380 (17'8")	5380 (17'8")	5380 (17'8")	5380 (17'8")
<b>6</b> Ground Clearance (including Shoe Lug Height)	740 (2'5")	740 (2'5")	740 (2'5")	740 (2'5")	740 (2'5")
<b>7</b> Track Gauge (Expanded)	2890 (9'6")	2890 (9'6")	2740 (9'0")	2890 (9'6")	2890 (9'6")
Track Gauge (Retracted)	2390 (7'10")	2390 (7'10")	2390 (7'10")	2390 (7'10")	2390 (7'10")
<b>8</b> Transport Width (Expanded)					
600 mm (24") Shoes	3490 (11'5")	3490 (11'5")	3490 (11'5")	3490 (11'5")	3490 (11'5")
750 mm (30") Shoes	3640 (11'11")	3640 (11'11")	3640 (11'11")	3640 (11'11")	3640 (11'11")
900 mm (35") Shoes	3790 (12'5")	3790 (12'5")	3790 (12'5")	3790 (12'5")	3790 (12'5")
Transport Width (Retracted)					
600 mm (24") Shoes	3000 (9'10")	3000 (9'10")	3000 (9'10")	3000 (9'10")	3000 (9'10")
750 mm (30") Shoes	3140 (10'4")	3140 (10'4")	3140 (10'4")	3140 (10'4")	3140 (10'4")
900 mm (35") Shoes	3290 (10'10")	3290 (10'10")	3290 (10'10")	3290 (10'10")	3290 (10'10")
<b>9</b> Cab Height	3370 (11'1")	3370 (11'1")	3370 (11'1")	3370 (11'1")	3370 (11'1")
Cab Height with Top Guard	3540 (11'7")	3540 (11'7")	3540 (11'7")	3540 (11'7")	3540 (11'7")
<b>10</b> Counterweight Clearance	1430 (4'8")	1430 (4'8")	1430 (4'8")	1430 (4'8")	1430 (4'8")

# 349E L Hydraulic Excavator Specifications

## Working Ranges

All dimensions are approximate.

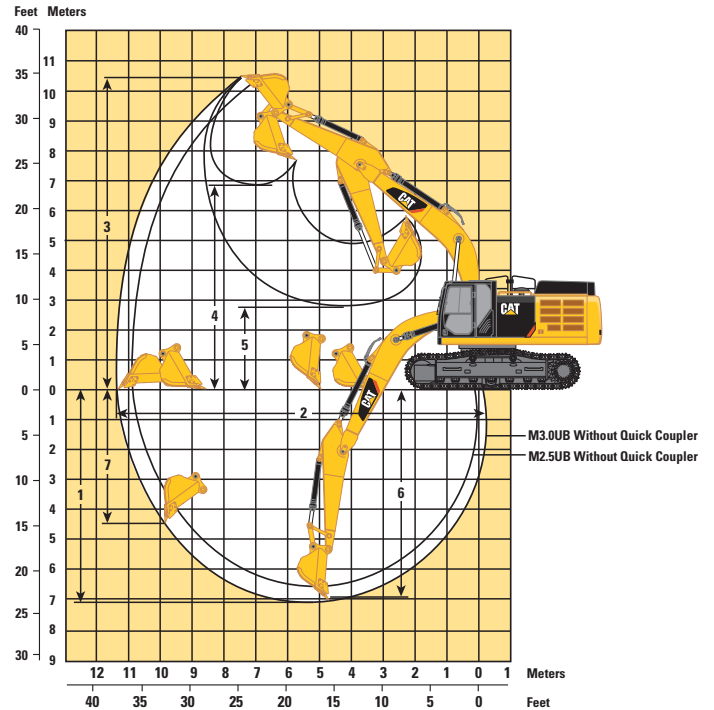
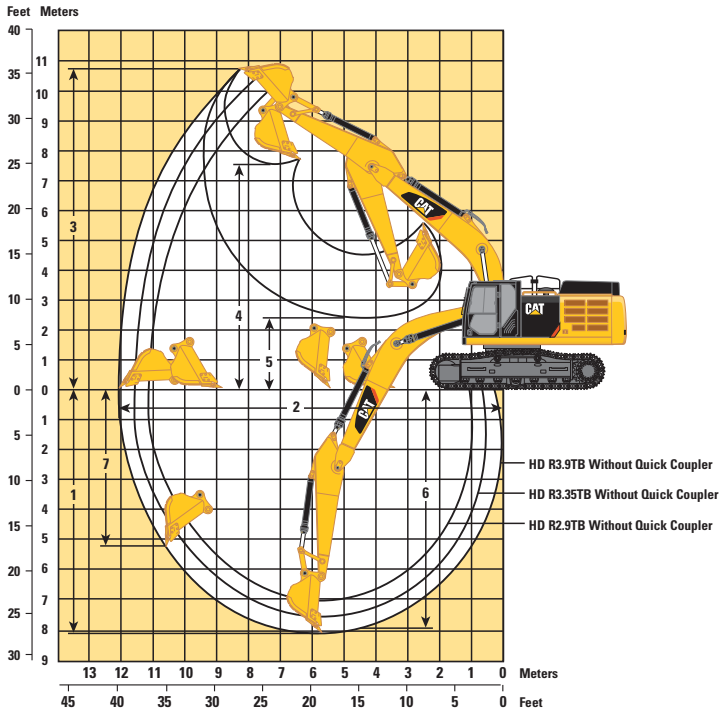


Stick	HD Reach Boom 6.9 m (22'8")			Mass Boom 6.55 m (21'6")	
	HD R3.9TB (12'10")	HD R3.35TB (11'0")	HD R2.9TB (9'6")	M3.0UB (9'10")	M2.5UB (8'2")
	mm (ft)	mm (ft)	mm (ft)	mm (ft)	mm (ft)
<b>Long FIX Undercarriage</b>					
1 Maximum Digging Depth	8180 (26'10")	7630 (25'0")	7180 (23'7")	7230 (23'9")	6730 (23'1")
2 Maximum Reach at Ground Level	12 120 (39'9")	11 710 (38'5")	11 290 (37'0")	11 200 (36'9")	10 740 (35'3")
3 Maximum Cutting Height	10 730 (35'2")	10 810 (35'6")	10 640 (34'11")	10 300 (33'10")	10 110 (33'2")
4 Maximum Loading Height	7450 (24'5")	7460 (25'6")	7280 (23'11")	6820 (22'5")	6620 (21'9")
5 Minimum Loading Height	2230 (7'4")	2780 (9'1")	3230 (10'7")	2650 (8'8")	3150 (10'4")
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	8050 (26'5")	7490 (24'7")	7020 (23'0")	7080 (23'3")	6560 (21'6")
7 Maximum Vertical Wall Digging Depth	5890 (19'4")	5760 (18'11")	5350 (17'7")	4570 (15'0")	4140 (13'7")



## Working Ranges

All dimensions are approximate.



Stick	HD Reach Boom 6.9 m (22'8")			Mass Boom 6.55 m (21'6")	
	HD R3.9TB (12'10")	HD R3.35TB (11'0")	HD R2.9TB (9'6")	M3.0UB (9'10")	M2.5UB (8'2")
	mm (ft)	mm (ft)	mm (ft)	mm (ft)	mm (ft)
<b>Long VG Undercarriage</b>					
1 Maximum Digging Depth	8040 (26'5")	7490 (24'7")	7040 (23'1")	7140 (23'5")	6640 (21'9")
2 Maximum Reach at Ground Level	12 090 (39'8")	11 680 (38'4")	11 260 (36'11")	11 220 (36'10")	10 760 (35'4")
3 Maximum Cutting Height	10 780 (35'4")	10 870 (35'8")	10 690 (35'1")	11 440 (37'6")	10 240 (33'7")
4 Maximum Loading Height	7590 (24'11")	7610 (25'0")	7430 (24'5")	6910 (22'8")	6720 (22'1")
5 Minimum Loading Height	2370 (7'9")	2920 (9'7")	3370 (11'1")	2740 (9'0")	3240 (10'8")
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	7900 (25'11")	7340 (24'1")	6880 (22'7")	6990 (22'11")	6740 (22'1")
7 Maximum Vertical Wall Digging Depth	5270 (18'3")	5170 (17'0")	4770 (15'8")	4340 (14'3")	3910 (12'10")

# 349E L Hydraulic Excavator Specifications

## Operating Weight and Ground Pressure

	900 mm (35") Triple Grouser Shoes		750 mm (30") 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>						
HD Reach Boom – 6.9 m (22'8")						
R3.9TB HD (12'10")	49 500 (109,100)	57.0 (8.3)	48 800 (107,600)	68.0 (9.9)	48 100 (106,000)	83.0 (12.0)
R3.35TB HD (11'0")	49 200 (108,500)	57.0 (8.3)	48 500 (106,900)	67.0 (9.7)	47 800 (105,400)	83.0 (12.0)
R2.9TB HD (9'6")	49 100 (108,200)	57.0 (8.3)	48 300 (106,500)	67.0 (9.7)	47 700 (105,200)	83.0 (12.0)
Mass Boom – 6.55 m (21'6")						
M3.0UB HD (9'10")	50 500 (111,300)	58.0 (8.4)	49 700 (109,600)	69.0 (10.0)	49 100 (108,200)	85.0 (12.3)
M2.5UB HD (8'2")	50 200 (110,700)	58.0 (8.4)	49 500 (109,100)	69.0 (10.0)	48 800 (107,600)	85.0 (12.3)
<b>Long VG Undercarriage</b>						
HD Reach Boom – 6.9 m (22'8")						
R3.9TB HD (12'10")	52 200 (115,100)	61.0 (8.8)	51 500 (113,500)	72.0 (10.4)	50 700 (111,800)	88.0 (12.8)
R3.35TB HD (11'0")	52 000 (114,600)	60.0 (8.7)	51 200 (112,900)	71.0 (10.3)	50 500 (111,300)	88.0 (12.8)
Mass Boom – 6.55 m (21'6")						
M3.0UB HD (9'10")	53 300 (117,500)	62.0 (9.0)	52 500 (115,700)	73.0 (10.6)	51 800 (114,200)	90.0 (13.1)
M2.5UB HD (8'2")	53 000 (116,800)	62.0 (9.0)	52 300 (115,300)	73.0 (10.6)	51 500 (113,500)	90.0 (13.1)



## Major Component Weights\*

	kg	lb
Base machine (with boom cylinder, without counterweight, front linkage and track)		
Long FIX Undercarriage	24 200	53,400
Long VG Undercarriage	26 800	59,100
Counterweight		
9.0 mt (9.9 t)	9000	19,800
Boom (includes lines, pins and stick cylinder)		
HD Reach Boom – 6.9 m (22'8")	4510	9,940
Mass Boom – 6.55 m (21'6")	4750	10,470
Stick (includes lines, pins and bucket cylinder)		
R3.9TB HD (12'10")	2750	6,060
R3.35TB HD (11'0")	2480	5,470
R2.9TB HD (9'6")	2290	5,050
M3.0UB (9'10")	2930	6,460
M2.5UB (8'2")	2700	5,950
Track Shoes (Long FIX/per two tracks)		
600 mm (24") double grouser	5240	11,560
750 mm (30") triple grouser	5890	12,990
900 mm (35") triple grouser	6640	14,640
Track Shoes (Long VG/per two tracks)		
600 mm (24") double grouser	5300	11,680
600 mm (24") triple grouser	5190	11,440
750 mm (30") triple grouser	5940	13,100
900 mm (35") triple grouser	6700	14,780

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

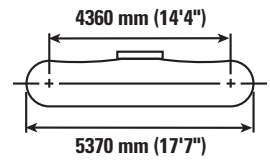
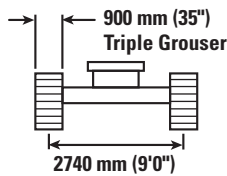
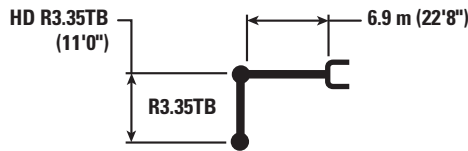
# 349E L Hydraulic Excavator Specifications

## Bucket and Stick Forces

Stick	HD Reach Boom 6.9 m (22'8")			Mass Boom 6.55 m (21'6")	
	HD R3.9TB (12'10")	HD R3.35TB (11'0")	HD R2.9TB (9'6")	M3.0UB (9'10")	M2.5UB (8'2")
	kN (lbf)	kN (lbf)	kN (lbf)	kN (lbf)	kN (lbf)
<b>TB Linkage</b>					
General Duty					
Bucket Digging Force (SAE)	237 (53,300)	237 (53,300)	237 (53,300)	260 (58,500)	260 (58,500)
Stick Digging Force (SAE)	180 (40,500)	195 (43,800)	214 (48,100)	205 (46,100)	231 (51,900)
Heavy Duty					
Bucket Digging Force (SAE)	237 (53,300)	237 (53,300)	237 (53,300)	260 (58,500)	260 (58,500)
Stick Digging Force (SAE)	180 (40,500)	195 (43,800)	214 (48,100)	205 (46,100)	231 (51,900)
Severe Duty					
Bucket Digging Force (SAE)	237 (53,300)	237 (53,300)	237 (53,300)	255 (57,300)	255 (57,300)
Stick Digging Force (SAE)	180 (40,500)	195 (43,800)	214 (48,100)	204 (45,900)	230 (51,700)
Extreme Duty					
Bucket Digging Force (SAE)	237 (53,300)	237 (53,300)	237 (53,300)	–	–
Stick Digging Force (SAE)	180 (40,500)	195 (43,800)	214 (48,100)	–	–
<b>CW-55 Linkage</b>					
General Duty					
Bucket Digging Force (SAE)	204 (45,900)	204 (45,900)	204 (45,900)	–	–
Stick Digging Force (SAE)	169 (38,000)	182 (40,900)	198 (44,500)	–	–
Heavy Duty					
Bucket Digging Force (SAE)	212 (47,700)	212 (47,700)	212 (47,700)	238 (53,500)	238 (53,500)
Stick Digging Force (SAE)	173 (38,900)	204 (45,900)	204 (45,900)	197 (44,300)	221 (49,700)
Severe Duty					
Bucket Digging Force (SAE)	205 (46,100)	205 (46,100)	205 (46,100)	233 (52,400)	234 (52,400)
Stick Digging Force (SAE)	170 (38,200)	184 (41,400)	201 (45,200)	196 (44,100)	219 (49,200)



## 349E L (LG-FIX) HD Reach Boom Lift Capacities – Counterweight: 9.0 mt (9.9 t)



		3000 mm/120 in		4500 mm/180 in		6000 mm/240 in		7500 mm/300 in		9000 mm/360 in				mm in
9000 mm 360 in	kg lb											*9050 *20,050	*9050 *20,050	7300 290
7500 mm 300 in	kg lb							*12 000 *26,350	11 500 24,650			*8500 *18,750	*8500 *18,750	8480 330
6000 mm 240 in	kg lb							*12 550 *27,400	11 250 24,250	*10 750 *20,250	8400 17,950	*8350 *18,350	7950 17,650	9270 370
4500 mm 180 in	kg lb			*20 850 *44,650	*20 850 *44,650	*16 100 *34,750	15 200 32,750	*13 650 *29,650	10 850 23,400	*12 300 *26,850	8200 17,650	*8450 *18,600	7200 15,850	9770 390
3000 mm 120 in	kg lb			*25 850 *55,500	21 550 46,550	*18 500 *39,900	14 300 30,900	*14 950 *32,400	10 400 22,450	12 700 27,300	8000 17,150	*8800 *19,350	6750 14,900	10 010 400
1500 mm 60 in	kg lb			*18 600 *44,550	*18 600 43,850	*20 350 *44,000	13 600 29,350	*16 050 *34,750	10 000 21,600	12 450 26,750	7750 16,700	*9400 *20,700	6650 14,600	10 020 400
0 mm 0 in	kg lb			*20 950 *48,650	19 950 42,900	*21 250 *46,050	13 200 28,400	16 000 34,400	9750 20,950	12 250 26,350	7600 16,350	*10 400 *22,950	6750 14,850	9800 390
-1500 mm -60 in	kg lb	*14 900 *33,650	*14 900 *33,650	*27 850 *60,450	19 900 42,750	*21 050 *45,650	13 000 28,000	15 850 34,050	9600 20,650	12 200 26,250	7500 16,200	11 600 25,600	7200 15,850	9330 370
-3000 mm -120 in	kg lb	*23 850 *53,900	*23 850 *53,900	*25 500 *55,250	20 050 43,100	*19 750 *42,650	13 050 28,100	*15 550 *33,450	9600 20,700			*12 850 *28,300	8100 17,900	8570 340
-4500 mm -180 in	kg lb	*27 550 *59,450	*27 550 *59,450	*21 500 *46,350	20 450 43,950	*16 800 *36,000	13 300 28,650					*12 650 *27,800	10 000 22,300	7430 290



ISO 10567



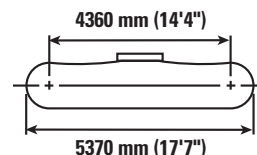
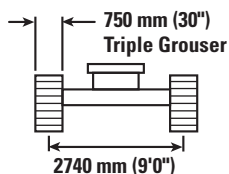
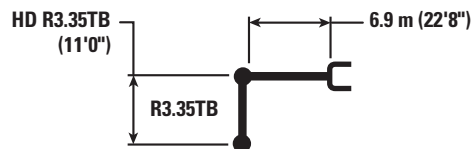
\*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories 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.

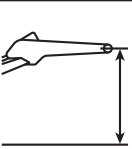













Lift capacity stays with  $\pm 5\%$  for all available track shoes.

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

# 349E L Hydraulic Excavator Specifications

## 349E L (LG-FIX) HD Reach Boom Lift Capacities – Counterweight: 9.0 mt (9.9 t)



		3000 mm/120 in		4500 mm/180 in		6000 mm/240 in		7500 mm/300 in		9000 mm/360 in				
														mm in
9000 mm 360 in	kg lb											*9050 *20,050	*9050 *20,050	7300 290
7500 mm 300 in	kg lb							*12 000 *26,350	11 350 24,350			*8500 *18,750	*8500 *18,750	8480 330
6000 mm 240 in	kg lb							*12 550 *27,400	11 100 23,950	*10 750 *20,250	8250 17,700	*8350 *18,350	7850 17,400	9270 370
4500 mm 180 in	kg lb			*20 850 *44,650	*20 850 *44,650	*16 100 *34,750	15 000 32,350	*13 650 *29,650	10 750 23,100	*12 300 *26,850	8100 17,400	*8450 *18,600	7100 15,650	9770 390
3000 mm 120 in	kg lb			*25 850 *55,500	21 300 45,950	*18 500 *39,900	14 150 30,500	*14 950 *32,400	10 300 22,150	12 500 26,900	7850 16,950	*8800 *19,350	6700 14,700	10 010 400
1500 mm 60 in	kg lb			*18 600 *44,550	*18 600 43,300	*20 350 *44,000	13 450 28,950	*16 050 34,600	9900 21,300	12 250 26,350	7650 16,450	*9400 *20,700	6550 14,400	10 020 400
0 mm 0 in	kg lb			*20 950 *48,650	19 650 42,300	*21 250 *46,050	13 000 28,000	15 750 33,900	9600 20,650	12 050 26,000	7450 16,100	*10 400 *22,950	6650 14,650	9800 390
–1500 mm –60 in	kg lb	*14 900 *33,650	*14 900 *33,650	*27 850 *60,450	19 600 42,150	*21 050 *45,650	12 850 27,650	15 600 33,550	9450 20,350	12 000 25,850	7400 15,950	11 450 25,200	7100 15,600	9330 370
–3000 mm –120 in	kg lb	*23 850 *53,900	*23 850 *53,900	*25 500 *55,250	19 750 42,500	*19 750 *42,650	12 850 27,700	*15 550 *33,450	9450 20,400			*12 850 *28,300	8000 17,650	8570 340
–4500 mm –180 in	kg lb	*27 550 *59,450	*27 550 *59,450	*21 500 *46,350	20 150 43,350	*16 800 *36,000	13 100 28,250					*12 650 *27,800	9850 22,000	7430 290



ISO 10567

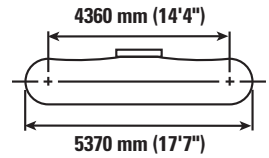
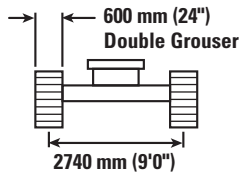
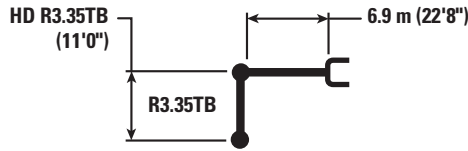


\*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories 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  $\pm 5\%$  for all available track shoes.

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

## 349E L (LG-FIX) HD Reach Boom Lift Capacities – Counterweight: 9.0 mt (9.9 t)



		3000 mm/120 in		4500 mm/180 in		6000 mm/240 in		7500 mm/300 in		9000 mm/360 in				mm in
9000 mm 360 in	kg lb											*9050 *20,050	*9050 *20,050	7300 290
7500 mm 300 in	kg lb							*12 000 *26,350	11 250 24,100			*8500 *18,750	*8500 *18,750	8480 330
6000 mm 240 in	kg lb							*12 550 *27,400	11 000 23,700	*10 750 *20,250	8150 17,500	*8350 *18,350	7750 17,200	9270 370
4500 mm 180 in	kg lb			*20 850 *44,650	*20 850 *44,650	*16 100 *34,750	14 850 32,000	*13 650 *29,650	10 600 22,850	*12 300 *26,850	8000 17,200	*8450 *18,600	7000 15,450	9770 390
3000 mm 120 in	kg lb			*25 850 *55,500	21 050 45,450	*18 500 *39,900	14 000 30,150	*14 950 *32,400	10 150 21,900	12 350 26,550	7800 16,700	*8800 *19,350	6600 14,550	10 010 400
1500 mm 60 in	kg lb			*18 600 *44,550	*18 600 42,800	*20 350 *44,000	13 300 28,650	15 900 34,200	9750 21,050	12 100 26,050	7550 16,250	*9400 *20,700	6450 14,200	10 020 400
0 mm 0 in	kg lb			*20 950 *48,650	19 450 41,800	*21 250 *46,050	12 850 27,700	15 550 33,500	9450 20,400	11 900 25,650	7400 15,900	*10 400 *22,950	6550 14,450	9800 390
-1500 mm -60 in	kg lb	*14 900 *33,650	*14 900 *33,650	*27 850 *60,450	19 400 41,650	*21 050 *45,650	12 650 27,300	15 400 33,150	9350 20,100	11 850 25,500	7300 15,750	11 300 24,900	7000 15,400	9330 370
-3000 mm -120 in	kg lb	*23 850 *53,900	*23 850 *53,900	*25 500 *55,250	19 550 42,000	*19 750 *42,650	12 700 27,350	15 400 33,200	9350 20,150			12 800 28,300	7900 17,450	8570 340
-4500 mm -180 in	kg lb	*27 550 *59,450	*27 550 *59,450	*21 500 *46,350	19 900 42,850	*16 800 *36,000	12 950 27,950					*12 650 *27,800	9750 21,750	7430 290



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.

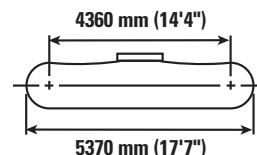
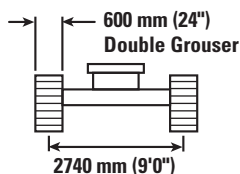
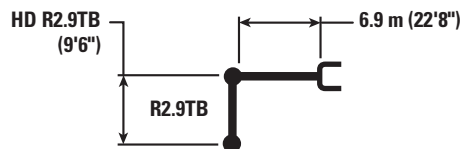
Lift capacity stays with  $\pm 5\%$  for all available track shoes.

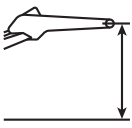













Always refer to the appropriate Operation and Maintenance Manual for specific product information.



# 349E L Hydraulic Excavator Specifications

## 349E L (LG-FIX) HD Reach Boom Lift Capacities – Counterweight: 9.0 mt (9.9 t)



		3000 mm/120 in		4500 mm/180 in		6000 mm/240 in		7500 mm/300 in		9000 mm/360 in				mm in
														
9000 mm 360 in	kg lb											*10 750 *23,950	*10 750 *23,950	6720 260
7500 mm 300 in	kg lb							*12 850 *27,950	11 100 23,800			*10 050 *22,250	9950 *22,250	7990 320
6000 mm 240 in	kg lb					*14 850 *32,150	*14 850 *32,150	*13 250 *28,950	10 900 23,450			*9900 *21,750	8350 18,600	8830 350
4500 mm 180 in	kg lb			*22 550 *48,250	22 500 *48,250	*16 950 *36,650	14 650 *31,000	*14 300 *31,000	10 550 22,700	12 550 26,950	7950 17,100	*10 000 *22,000	7500 16,550	9340 370
3000 mm 120 in	kg lb			*19 200 *50,050	*19 200 44,550	*19 250 *41,550	13 850 29,900	*15 450 *33,500	10 150 21,800	12 350 26,550	7750 16,700	*10 450 *23,000	7050 15,550	9600 380
1500 mm 60 in	kg lb			*13 700 *33,600	*13 700 *33,600	*20 900 *45,150	13 200 28,500	15 900 34,150	9750 21,050	12 100 26,100	7550 16,300	11 000 24,250	6900 15,200	9610 380
0 mm 0 in	kg lb			*19 450 *45,450	*19 450 41,950	*21 450 *46,450	12 850 27,750	15 600 33,550	9500 20,500	11 950 25,800	7450 16,050	11 300 24,900	7050 15,500	9380 370
-1500 mm -60 in	kg lb	*15 050 *34,150	*15 050 *34,150	*27 100 *58,900	19 550 42,050	*20 900 *45,300	12 750 27,500	15 500 33,350	9400 20,300			12 200 26,850	7550 16,650	8880 350
-3000 mm -120 in	kg lb	*26 450 *59,850	*26 450 *59,850	*24 350 *52,800	19 800 42,500	*19 150 *41,400	12 850 27,700	*15 000 *32,150	9500 20,500			*13 400 *29,450	8650 19,150	8080 320
-4500 mm -180 in	kg lb			*19 800 *42,550	*19 800 *42,550	*15 550 *33,050	13 200 28,450					*12 900 *28,250	11 050 24,700	6860 270



ISO 10567

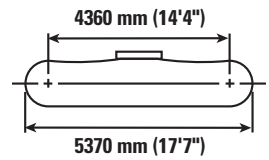
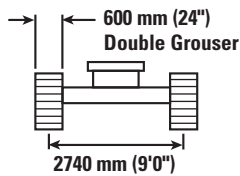
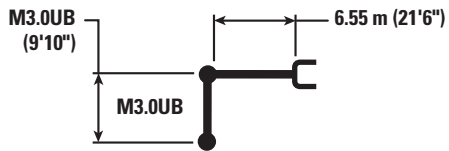


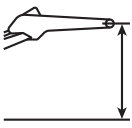













\*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories 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.

## 349E L (LG-FIX) Mass Boom Lift Capacities – Counterweight: 9.0 mt (9.9 t)



		3000 mm/120 in		4500 mm/180 in		6000 mm/240 in		7500 mm/300 in		9000 mm/360 in				mm in
														
7500 mm 300 in	kg lb							*11 550 28 350	10 800 22 900			*10 000 22 100	*10 000 22 100	7670 300
6000 mm 240 in	kg lb							*12 950 28 350	10 650 22 900			*9750 21 400	8550 19 000	8540 340
4500 mm 180 in	kg lb			*20 850 44 750	*20 850 44 750	*16 200 35 000	14 550 31 350	*13 850 30 100	10 300 22 150	*10 750 7650		*9850 21 600	7550 16 700	9070 360
3000 mm 120 in	kg lb			*25 650 55 050	20 700 44 650	*18 400 39 800	13 650 29 450	*14 950 32 450	9850 21 200	12 050 25 850	7450 16 000	*10 250 22 500	7050 15 500	9330 370
1500 mm 60 in	kg lb			*22 900 55 100	19 450 41 900	*20 150 43 600	12 950 27 850	15 600 33 550	9450 20 350	11 800 25 400	7250 15 550	*11 050 24 250	6850 15 100	9340 370
0 mm 0 in	kg lb			*25 950 60 550	19 000 40 850	*20 900 45 250	12 500 26 900	15 250 32 850	9150 19 700	11 650 7100		11 500 25 300	7000 15 400	9110 360
-1500 mm -60 in	kg lb	*17 850 40 450	*17 850 40 450	*27 050 58 750	18 950 40 750	*20 500 44 350	12 350 26 550	15 150 32 550	9050 19 450			12 450 27 450	7550 16 650	8600 340
-3000 mm -120 in	kg lb	*29 450 66 700	*29 450 66 700	*24 250 52 500	19 200 41 200	*18 700 40 300	12 400 26 750	*14 250 30 400	9150 19 750			*13 450 29 600	8750 19 400	7760 310
-4500 mm -180 in	kg lb			*19 250 41 250	*19 250 41 250	*14 550 30 700	12 800 27 650					*12 900 28 250	11 550 25 950	6480 260



ISO 10567



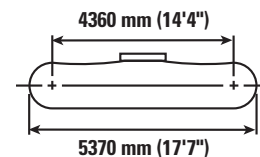
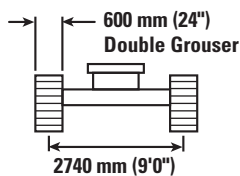
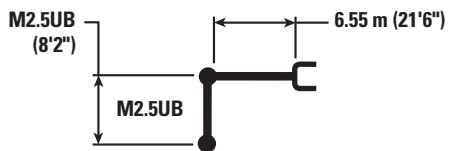
\*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories 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  $\pm 5\%$  for all available track shoes.

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

# 349E L Hydraulic Excavator Specifications

## 349E L (LG-FIX) Mass Boom Lift Capacities – Counterweight: 9.0 mt (9.9 t)



		3000 mm/120 in		4500 mm/180 in		6000 mm/240 in		7500 mm/300 in				
												mm in
7500 mm 300 in	kg lb									*13 050 *28,900	11 700 26,350	7110 280
6000 mm 240 in	kg lb					*15 300 *33,250	15 150 32,600	*13 850 *30,300	10 600 22,700	*12 700 *28,000	9400 20,950	8030 320
4500 mm 180 in	kg lb			*22 750 *48,700	22 200 47,900	*17 200 *37,200	14 400 31,000	*14 600 *31,700	10 250 22,050	*12 850 *28,300	8250 18,250	8600 340
3000 mm 120 in	kg lb			*58,400	43,800	*19 300 *41,650	13 550 29,250	*15 550 *33,800	9850 21,200	12 350 27,200	7650 16,850	8880 350
1500 mm 60 in	kg lb					*20 750 *44,850	12 950 27,850	15 650 33,600	9500 20,450	12 100 26,700	7450 16,450	8890 350
0 mm 0 in	kg lb			*24 000 *56,400	19 200 41,250	*21 100 *45,700	12 600 27,100	15 350 33,050	9250 19,950	12 500 27,600	7650 16,850	8640 340
-1500 mm -60 in	kg lb	*18 050 *41,150	*18 050 *41,150	*26 200 *56,900	19 250 41,400	*20 250 *43,850	12 500 26,950	15 300 32,950	9200 19,850	13 750 30,300	8350 18,400	8100 320
-3000 mm -120 in	kg lb	*27 900 *60,850	*27 900 *60,850	*22 850 *49,450	19 550 42,000	*17 900 *38,500	12 700 27,350			*14 050 *30,950	9900 22,000	7210 290
-4500 mm -180 in	kg lb			*16 900 *35,950	*16 900 *35,950					*12 850 *28,000	*12 850 *28,000	5800 230



ISO 10567



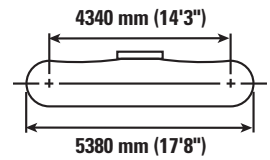
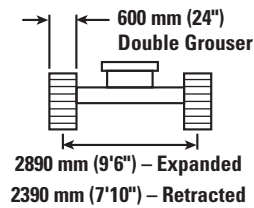
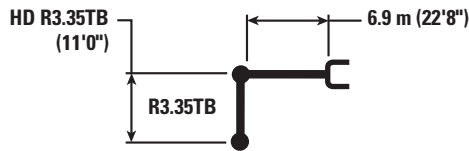
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Lift capacity stays with  $\pm 5\%$  for all available track shoes.

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



## 349E L (LG-VG) HD Reach Boom Lift Capacities – Counterweight: 9.0 mt (9.9 t)



		3000 mm/120 in		4500 mm/180 in		6000 mm/240 in		7500 mm/300 in		9000 mm/360 in				mm in
9000 mm 360 in	kg lb											*8950 *19,850	*8950 *19,850	7440 290
7500 mm 300 in	kg lb							*12 000 *26,400	*12 000 26,200			*8450 *18,700	*8450 *18,700	8580 340
6000 mm 240 in	kg lb							*12 650 *27,600	11 950 25,700	*11 200 *21,550	8900 19,100	*8350 *18,350	*8350 *18,350	9330 370
4500 mm 180 in	kg lb			*21 350 *45,750	*21 350 *45,750	*16 300 *35,200	16 150 34,750	*13 800 *29,900	11 550 24,850	*12 350 *26,950	8750 18,800	*8450 *18,650	7600 16,800	9800 390
3000 mm 120 in	kg lb			*26 250 *56,400	23 100 49,850	*18 700 *40,350	15 250 32,900	*15 050 *32,650	11 100 23,900	12 750 27,450	8500 18,300	*8850 *19,450	7200 15,900	10 020 400
1500 mm 60 in	kg lb			*18 500 *44,050	*18 500 *44,050	*20 500 *44,300	14 550 31,400	*16 150 *34,950	10 700 23,050	12 500 26,900	8250 17,800	*9500 *20,850	7100 15,650	10 010 400
0 mm 0 in	kg lb			*21 500 *49,800	*21 500 46,400	*21 300 *46,100	14 150 30,500	16 100 34,600	10 400 22,400	12 350 26,550	8100 17,450	*10 550 *23,200	7250 16,000	9760 390
-1500 mm -60 in	kg lb	*15 750 *35,500	*15 750 *35,500	*27 700 *60,100	21 550 46,350	*21 000 *45,450	14 000 30,150	15 950 34,300	10 300 22,150	12 300 26,450	8050 17,400	11 800 26,000	7750 17,100	9270 370
-3000 mm -120 in	kg lb	*24 800 *56,050	*24 800 *56,050	*25 200 *54,600	21 750 46,750	*19 550 *42,200	14 050 30,250	*15 350 *33,000	10 300 22,250			*12 850 *28,300	8800 19,500	8480 340
-4500 mm -180 in	kg lb	*26 800 *57,800	*26 800 *57,800	*21 000 *45,200	*21 000 *45,200	*16 400 *35,050	14 350 30,900					*12 600 *27,650	11 000 24,600	7290 290



ISO 10567



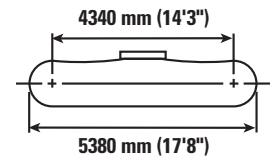
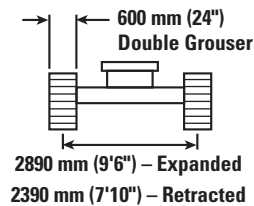
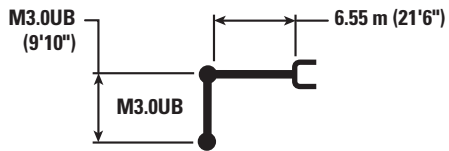
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Lift capacity stays with  $\pm 5\%$  for all available track shoes.

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

# 349E L Hydraulic Excavator Specifications

## 349E L (LG-VG) Mass Boom Lift Capacities – Counterweight: 9.0 mt (9.9 t)



		3000 mm/120 in		4500 mm/180 in		6000 mm/240 in		7500 mm/300 in		9000 mm/360 in				
														mm in
9000 mm	kg											*10 750	*10 750	6490
7500 mm	kg							*12 300	11 800			*9950	*9950	7770
300 in	lb							*23,450	*23,450			*22,000	*22,000	310
6000 mm	kg							*13 050	11 600			*9700	9200	8600
240 in	lb					*31,250	*31,250	*28,450	24,950			*21,400	20,500	340
4500 mm	kg			*21 350	*21 350	*16 400	15 800	*13 950	11 250	*11 300	8400	*9850	8200	9110
180 in	lb			*45,750	*45,750	*35,450	34,100	*30,300	24,150			*21,650	18,150	360
3000 mm	kg			*26 000	22 750	*18 600	14 950	*15 050	10 800	12 450	8200	*10 300	7700	9340
120 in	lb			*55,900	49,100	*40,200	32,200	*32,700	23,200	26,750	17,550	*22,650	17,000	370
1500 mm	kg			*22 750	21 550	*20 300	14 200	*16 000	10 350	12 250	7950	*11 150	7550	9330
60 in	lb			*54,500	46,450	*43,850	30,650	34,650	22,350	26,300	17,150	*24,500	16,650	370
0 mm	kg			*26 650	21 200	*20 900	13 800	15 800	10 100	12 100	7850	11 950	7750	9070
0 in	lb			*61,550	45,500	*45,250	29,750	33,950	21,750			26,350	17,100	360
-1500 mm	kg	*18 900	*18 900	*26 850	21 150	*20 350	13 650	15 700	10 000			13 050	8450	8530
-60 in	lb	*42,750	*42,750	*58,300	45,450	*44,100	29,400	33,750	21,550			28,800	18,600	340
-3000 mm	kg	*30 750	*30 750	*23 850	21 400	*18 400	13 800	*13 950	10 150			*13 450	9850	7660
-120 in	lb	*67,400	*67,400	*51,650	46,000	*39,700	29,650	*29,600	21,900			*29,600	21,850	300
-4500 mm	kg			*18 600	*18 600	*13 900	*13 900					*12 750	*12 750	6320
-180 in	lb			*39,700	*39,700	*29,100	*29,100					*27,950	*27,950	250



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  $\pm 5\%$  for all available track shoes.

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

## 349E L (LG-FIX) Work Tool Offering Guide\*

Boom Type	HD Reach Boom			Mass Boom	
Stick Size	HD R3.9 (12'10")	HD R3.35 (11'0")	HD R2.9 (9'6")	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	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**	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***# MP40 S Jaw***#
Crusher	P335**	P335	P335	P335 P360***	P335 P360***
Pulverizer	P235**	P235	P235	P235	P235
Demolition and Sorting Grapple	G330	G330	G330	G330	G330
Mobile Scrap and Demolition Shear	S365C## S385C##	S340B*** S365C## S385C##	S340B** S365C## S385C##	S340B*** S365C## S385C##	S340B S365C## S385C##
Orange Peel Grapple	These work tools are available for the 349E L (LG-FIX). Consult your Cat dealer for proper match.				
Clamshells					
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 CW coupler.

\*\*\*Pin-on only.

#Over the front only.

##Boom mount.

^Over the front only with CW coupler.

^^Over the front only with CL coupler.



# 349E L Hydraulic Excavator Specifications

## 349E L (LG-VG) Work Tool Offering Guide\*

Boom Type	HD Reach Boom			Mass Boom	
Stick Size	HD R3.9 (12'10")	HD R3.35 (11'0")	HD R2.9 (9'6")	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	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**	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*** MP40 S Jaw***
Crusher	P335**	P335	P335	P335 P360***	P335 P360**
Pulverizer	P235**	P235	P235	P235	P235
Demolition and Sorting Grapple	G330	G330	G330	G330	G330
Mobile Scrap and Demolition Shear	S365C## S385C##	S340B*** S365C## S385C##	S340B** S365C## S385C##	S340B*** S365C## S385C##	S340B S365C## S385C##
Orange Peel Grapple	These work tools are available for the 349E L (LG-VG). Consult your Cat dealer for proper match.				
Clamshells					
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 CW coupler.

\*\*\*Pin-on only.

#Over the front only.

##Boom mount.

^Over the front only with CW coupler.

^^Over the front only with CL coupler.

## 349E L (LG-FIX) Bucket Specifications and Compatibility

	Linkage	Width		Capacity		Weight		Fill	HD Reach Boom			Mass Boom	
		mm	in	m³	yd³	kg	lb	%	HD R3.9 (12'10")	HD R3.35 (11'0")	HD R2.9 (9'6")	M3.0 (9'10")	M2.5 (8'2")
Without Quick Coupler													
Severe Duty (SD)	UB	1550	62	2.61	3.41	2610	5,752	90%				⊙	●
	UB	1850	73	3.21	4.20	2987	6,583	90%				○	⊖
Maximum load pin-on (payload + bucket)								kg				7100	7885
								lb				15,648	17,379
With Center-Lock Quick Coupler													
Heavy Duty (HD)	TB	900	36	1.08	1.41	1563	3,445	100%	●	●	●		
	TB	1050	42	1.34	1.75	1655	3,648	100%	●	●	●		
	TB	1200	48	1.60	2.09	1814	3,998	100%	●	●	●		
	TB	1350	54	1.87	2.44	1941	4,278	100%	⊙	●	●		
	TB	1500	60	2.14	2.80	2104	4,637	100%	⊖	⊙	⊙		
	TB	1650	66	2.41	3.16	2266	4,994	100%	○	⊖	⊖		
	TB	1800	72	2.69	3.52	2395	5,279	100%	◇	○	⊖		
Severe Duty (SD)	TB	1400	55	1.87	2.44	2157	4,754	90%	⊙	●	●		
Maximum load with coupler (payload + bucket)								kg	5217	5862	6352		
								lb	11,498	12,920	14,000		

## 349E L (LG-VG) Bucket Specifications and Compatibility

	Linkage	Width		Capacity		Weight		Fill	HD Reach Boom			Mass Boom	
		mm	in	m³	yd³	kg	lb	%	HD R3.9 (12'10")	HD R3.35 (11'0")	HD R2.9 (9'6")	M3.0 (9'10")	M2.5 (8'2")
Without Quick Coupler													
Severe Duty (SD)	UB	1550	62	2.61	3.41	2610	5,752	90%				●	●
	UB	1850	73	3.21	4.20	2987	6,583	90%				⊖	⊙
Maximum load pin-on (payload + bucket)								kg				7855	8690
								lb				17,312	19,153
With Center-Lock Quick Coupler													
Heavy Duty (HD)	TB	900	36	1.08	1.41	1563	3,445	100%	●	●	●		
	TB	1050	42	1.34	1.75	1655	3,648	100%	●	●	●		
	TB	1200	48	1.60	2.09	1814	3,998	100%	●	●	●		
	TB	1350	54	1.87	2.44	1941	4,278	100%	●	●	●		
	TB	1500	60	2.14	2.80	2104	4,637	100%	⊙	●	●		
	TB	1650	66	2.41	3.16	2266	4,994	100%	⊖	⊙	●		
	TB	1800	72	2.69	3.52	2395	5,279	100%	○	⊖	⊙		
Severe Duty (SD)	TB	1400	55	1.87	2.44	2157	4,754	90%	●	●	●		
Maximum load with coupler (payload + bucket)								kg	6102	6817	7367		
								lb	13,449	15,025	16,237		

### Maximum Material Density:

- 2100 kg/m³ (3,500 lb/yd³)
- ⊙ 1800 kg/m³ (3,000 lb/yd³)
- ⊖ 1500 kg/m³ (2,500 lb/yd³)
- 1200 kg/m³ (2,000 lb/yd³)
- ◇ 900 kg/m³ (1,500 lb/yd³)

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 General Duty 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.

# 349E L Standard Equipment

## Standard Equipment

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

### ENGINE

- C13 ACERT diesel engine
- Biodiesel capable
- Meets U.S. Environmental Protection Agency (EPA) Tier 4 Interim emission standards, European Union Stage IIIB emission standards, and Japan MLIT Step 4 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
- 2×4 micron main filters
- 1×10 micron primary fuel line filter
- Air cleaner with external precleaner

### HYDRAULIC SYSTEM

- Regeneration circuit for boom and stick
- Reverse swing dampening valve
- Automatic swing parking brake
- High-performance hydraulic return filter
- Capability of installing HP stackable valve and medium and QC valve
- Capability of installing additional auxiliary pump (up to 80 L/min [21 gal/min]) and circuit
- Capability of installing boom lowering control device and stick lowering check valve
- Capability of installing Cat Bio hydraulic oil

### 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
- 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
- Seat, high-back air suspension with heater and cooling
- Seat belt (76.2 mm [3"])
- Bi-level air conditioner (auto) with defroster (pressurized function)
- Joysticks with three (3) on/off switches and one (1) modulation switch

### UNDERCARRIAGE

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

### COUNTERWEIGHT

- 9.0 mt (9.9 t)

### ELECTRICAL

- 80 amp alternator
- Circuit breaker
- Capability to electrically connect a beacon

### LIGHTS

- Boom light
- Cab lights with time delay
- Exterior lights integrated into storage box

### SECURITY

- Cat MSS (anti-theft device)
- 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

- Product Link



## Optional Equipment

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

### ENGINE

- Electric refueling pump with auto shut off
- Starting kit, cold weather, -32° C (-26° F)
- Jump start receptacle
- Quick drains, engine and hydraulic oil
- Cold start, ether aid

### HYDRAULIC SYSTEM

- Control pattern quick-changer, two way
- 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

### UNDERCARRIAGE

- Long FIX undercarriage:
  - 600 mm (24") double grouser shoes
  - 750 mm (28") triple grouser shoes
  - 600 mm (24") double grouser shoes, PPR2
  - 750 mm (28") triple grouser shoes, PPR2
  - 900 mm (35") triple grouser shoes, PPR2
- Long VG undercarriage:
  - 600 mm (24") double grouser shoes, PPR2
  - 600 mm (24") triple grouser shoes, PPR2
  - 750 mm (28") triple grouser shoes, PPR2
  - 900 mm (35") triple grouser shoes, PPR2
- Guard, full length for long FIX and VG undercarriage
- Guard, heavy-duty bottom
- Center track guiding guard
- Segmented (3 piece) track guiding guard for long FIX and VG undercarriage
- Fabricating idler
- Casting idler

### FRONT LINKAGE

- Bucket linkage, UB family without lifting eye
- Bucket linkage, TB family with lifting eye
- Heavy Duty 6.9 m (22'8") reach boom
- Heavy Duty R3.9TB (12'10") stick
- Heavy Duty R3.35TB (11'0") stick
- Heavy Duty R2.9TB (9'6") stick
- Mass 6.55 m (21'6") boom
- Mass M3.0UB (9'10") stick
- Mass M2.5UB (8'2") stick

### LIGHTS

- Working lights, cab mounted with time delay
- HID lights, cab mounted with time delay
- Halogen boom lights
- HID boom lights

### SECURITY

- FOGS, bolt-on
- Guard, vandalism

### TECHNOLOGY

- Cat Grade Control Depth and Slope

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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