

349E L

Hydraulic Excavator



Engine

Engine Model

Cat® C13 ACERT™

Net Power – ISO 9249 (metric)

295 kW (401 hp)

Drive

Maximum Travel Speed

4.7 km/h

Maximum Drawbar Pull

335 kN

Weight

Minimum Weight

47 700 kg

Maximum Weight

53 300 kg

Introduction

Since its introduction in the 1990s, the 300 Series family of excavators has become the industry standard in general, quarry, and heavy construction applications. The all-new E Series and the 349E will continue that trend-setting standard.

The 349E meets today's European Union emission standards. It is also built with several new fuel-saving and comfort-enabling features and benefits that will delight owners and operators.

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

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Hydraulics

Power to move more dirt, rock, and debris with speed and precision

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 uses a high-pressure system to tackle the toughest of work in short order. The 349E 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 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.

SmartBoom™

SmartBoom reduces stress and vibrations transmitted to the machine and provides a more comfortable environment for the operator. It is particularly well suited for certain applications like rock scraping and hammer work.

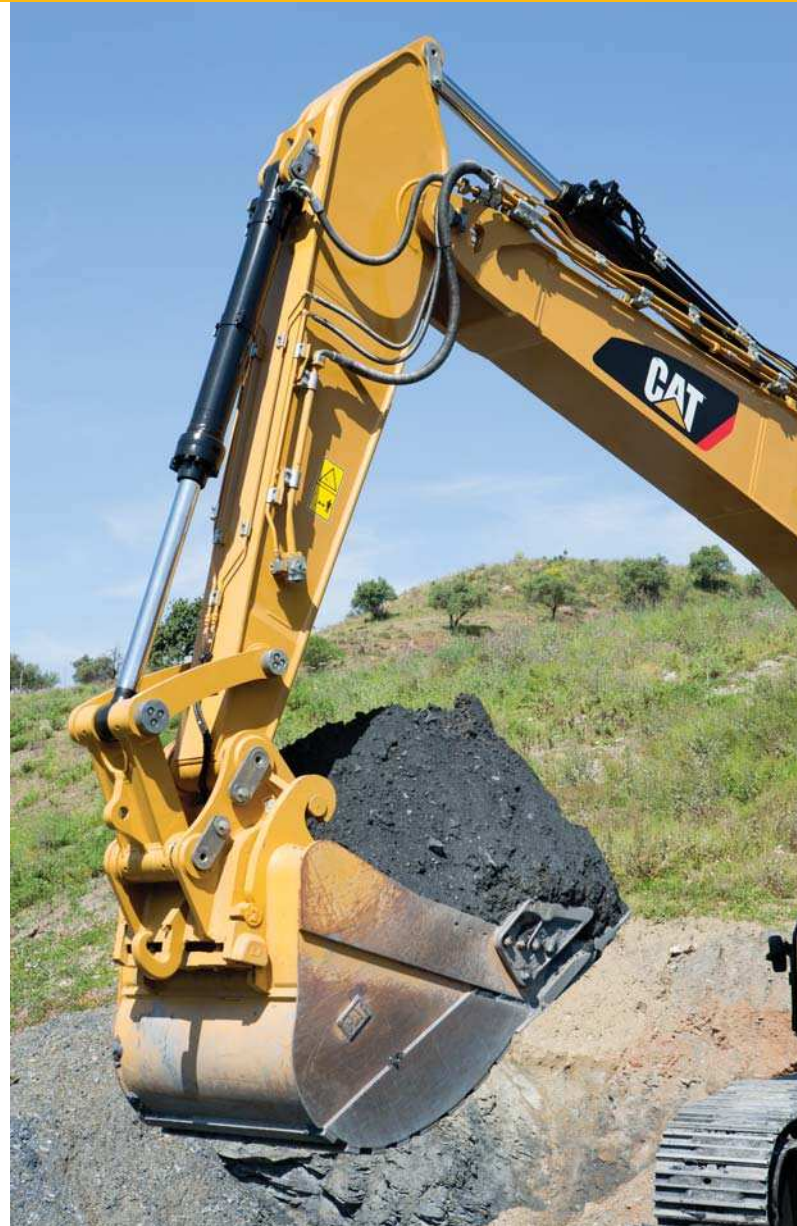
For rock scraping, SmartBoom simplifies the task and allows the operator to concentrate on the stick and bucket while the boom freely goes up and down without using pump flow. For hammer work, the front parts automatically follow the hammer while penetrating the rock. Blank shots or excessive force on the hammer are avoided, resulting in longer life for the hammer and the machine. There are similar advantages with vibratory plates.

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 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

Comfort and convenience to keep people productive



Seats

The standard air suspension heated seat includes an air cooled option (1). All seats include a reclining back, upper and lower seat slide adjustments, and height and tilt angle adjustments to meet operator needs for comfort and productivity.

Controls

The right and left joystick consoles (1) can be adjusted to meet individual preferences, improving operator comfort and productivity during the course of a day.

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 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 is equipped with a new 7" LCD (Liquid Crystal Display) monitor (2) that's 40% bigger than the previous model's with higher resolution for enhanced visibility.

In addition to an improved keypad and added functionality, it is 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.

Power Supply

Two 12-volt power supply sockets are located near key storage areas for charging cell phones, MP3 players, and other electronic devices.

Storage

Storage spaces are located in the front, rear, and side consoles. New space near the auxiliary power supply holds MP3 players and cell phones. The drink holder accommodates large mugs with handles, and a new 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.





1



Engine

Reduced emissions, economical and reliable performance

Cat® C13 ACERT™ Engine

The Cat® C13 ACERT engine delivers performance and efficiency while meeting EU Stage IIIB emission standards. 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.

Emissions Solution

The Cat NO_x Reduction System captures and cools a small quantity of exhaust gas and then routes it into the combustion chamber where it drives down temperatures to reduce emissions. System components include a Diesel Oxidation Catalyst (DOC), which uses a chemical process to convert regulated emissions in the exhaust system, and a Diesel Particulate Filter (DPF) that traps particulate matter carried into the exhaust stream. The DOC, DPF, and Cat Regeneration System are contained in a Caterpillar designed Clean Emissions Module that protects the components, minimizes aftertreatment, and simplifies maintenance.

The Cat Regeneration System is designed to work transparently without any operator interaction needed. Under most operating conditions, engine exhaust oxidizes soot through passive regeneration. If supplemental regeneration is needed, the Cat Regeneration System elevates exhaust gas temperatures to burn off soot in the DPF. This process happens automatically, but the operator can initiate the cycle if needed with a switch on the dash panel.

Cooling System

The high-ambient cooling system features a side-by-side-mounted radiator and oil and air coolers for easy cleaning.

Speed and Power Control

The new E Series features isochronous speed control to maintain a constant speed – regardless of load – to improve fuel economy. Three different power modes are offered: high power, standard power, and economy power. The operator can easily change between modes through the monitor or console switch to meet the needs for the job at hand – all to help manage and conserve fuel.

Structures and Undercarriage

Built to work in rugged environments



Frame

The upper frame includes reinforced mountings to support a 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.

Cast idler, 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.

Counterweight

A 9.0 mt counterweight maintains large lifting capacity and excellent stability. Bolted directly to the main frame for added rigidity, the counterweight features an integrated housing for the rearview camera.



Front Linkage

Made for high stress and long service life

Booms and Sticks

The 349E is offered with a range of booms and sticks. Each is built with internal baffle plates 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

Dig, hammer, rip, and cut with confidence



Work Tools

An extensive range of Cat Work Tools for the 349E includes buckets, hydraulic hammers, multi-processors, scrap and demolition shears, grapples, and rippers. Each is designed to optimize the versatility and performance of your machine.

CW Quick Couplers

Quick couplers allow one person to change work tools in seconds for maximum performance and flexibility on a job site. One machine can move rapidly from task to task, and a fleet of similarly equipped machines can share a common work tool inventory.

The CW quick coupler can pick up any work tool and is equipped with a wedge-style locking system that fits the quick coupler tight to the tool hinges. Due to the tapered wedge design, there won't be any play during its entire life. Also, it is interchangeable with different machine classes. The CW is highly suitable for harsh applications such as demolition and quarries.

Buckets

Cat buckets are designed as an integral part of the 349E system and feature new geometry for better performance. The leading edge has been pushed forward, resulting in more efficient filling and better operator control for greatly improved productivity.

Wear coverage in the corners and side cutter and sidebar protector coverage are improved; a new lift eye design accepts a wide range of shackle sizes.

All benefits are captured in a new bucket line with a new bucket naming convention. Following are the types offered:

General Duty (GD)

GD buckets are for digging in low-impact, low-abrasion material such as dirt, loam, and mixed compositions of dirt and fine gravel.

Heavy Duty (HD)

The most popular bucket style, HD buckets are a good starting point when digging conditions are not well known like a wide range of impact and abrasion conditions that include mixed dirt, clay, and rock.

Severe Duty (SD)

SD buckets are for higher abrasion conditions such as well shot granite and caliche.

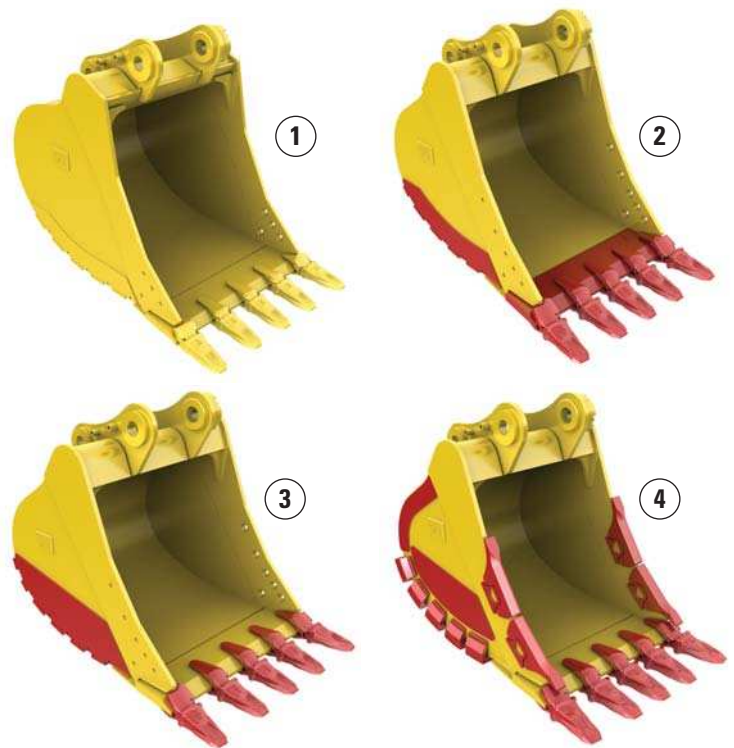
Extreme Duty (XD)

XD buckets are the new standard for high-abrasion conditions, including high quartzite granite.

Specialty Buckets

In addition to the four levels of bucket durability categories, several specialty buckets are available for the 349E, each with a different purpose:

- **Ditch cleaning** for cleaning ditches, slope grading, and other finish work
- **Power** for use in abrasive applications where breakout force and cycle times are critical
- **Wide tip** for low-impact material where leaving a smoother floor and minimal spillage are necessary



1) General Duty 2) Heavy Duty 3) Severe Duty 4) Extreme Duty



Integrated Technologies

Solutions that make work easier and more efficient

Cat® Grade Control Depth and Slope

This optional system 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 through the cab monitor (1), which minimizes the need and cost for traditional grade checking and enhances 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.

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



1

Serviceability

Fast, easy and safe access built in

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.



Safety

Features to help protect people



Reinforced Frame

The upper frame is reinforced to accommodate the installation of a 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

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. A one-piece front windshield is available as well.

A large skylight provides great 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

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



Complete Customer Care

Service you can count on

Product Support

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

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

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.

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

Generations ahead in every way

- The C13 ACERT engine, along with the Cat Clean Emissions Module (CEM), meets EU Stage IIIB emission standards.
- The 349E performs the same amount of work while burning 5% less fuel than the previous D Series model. This means more efficiency and less of our precious resources consumed, and fewer CO₂ emissions.
- The 349E 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.
- The 349E features an overfill indicator that rises when the tank is full to help the operator avoid spilling.
- The 349E's quick fill ports with connectors ensure fast, easy, and secure changing of hydraulic oil.
- The 349E is built to be rebuilt with major structures and components remanufactured to reduce waste and replacement costs.
- The 349E 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™
Net Power – ISO 9249	295 kW
Net Power – ISO 9249	401 hp (metric)
Net Power – ISO 9249	396 hp (imperial)
Power – ISO 14396	317 kW
Power – ISO 14396	431 hp (metric)
Power – ISO 14396	425 hp (imperial)
Bore	130 mm
Stroke	157 mm
Displacement	12.5 L

Weights

Minimum Weight*	47 700 kg
Maximum Weight**	53 300 kg
*6.9 m HD Reach boom, R2.9TB HD stick, 9.0 mt counterweight, Long FIX undercarriage, 3.1 m³ bucket, 600 mm DG shoes.	
**6.55 m Mass boom, M3.0UB HD stick, 9.0 mt counterweight, Long VG undercarriage, 3.2 m³ bucket, 900 mm TG shoes.	

Hydraulic System

Main System – Maximum Flow (Total)	770 L/min
Swing System – Maximum Flow	385 L/min
Maximum Pressure – Equipment	35 000 kPa
Maximum Pressure – Equipment (Lift mode)	38 000 kPa
Maximum Pressure – Travel	35 000 kPa
Maximum Pressure – Swing	27 500 kPa
Pilot System – Maximum Flow	27 L/min
Pilot System – Maximum Pressure	4120 kPa
Boom Cylinder – Bore	170 mm
Boom Cylinder – Stroke	1524 mm
Stick Cylinder – Bore	190 mm
Stick Cylinder – Stroke	1758 mm
DB Family Bucket Cylinder – Bore	160 mm
DB Family Bucket Cylinder – Stroke	1356 mm
TB Family Bucket Cylinder – Bore	170 mm
TB Family Bucket Cylinder – Stroke	1396 mm

Drive

Maximum Travel Speed	4.7 km/h
Maximum Drawbar Pull	335 kN

Swing Mechanism

Swing Speed	8.7 rpm
Swing Torque	148.5 kN·m

Service Refill Capacities

Fuel Tank Capacity	720 L
Cooling System	50 L
Engine Oil (with filter)	43 L
Swing Drive (each)	10 L
Final Drive (each)	15 L
Hydraulic System (including tank)	570 L
Hydraulic Tank	407 L

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 Sound	73 dB(A)
Exterior Sound	106 dB(A)
<ul style="list-style-type: none"> Operator Sound – The operator sound level is measured according to the procedures specified in ISO 6394:1998, for cab offered by Caterpillar, when properly installed and maintained and tested with doors and windows closed. Exterior Sound – The labeled spectator sound power level is measured according to the test procedures and conditions specified in 2000/14/EC. Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained for doors/windows open) for extended periods or in a noisy environment. 	

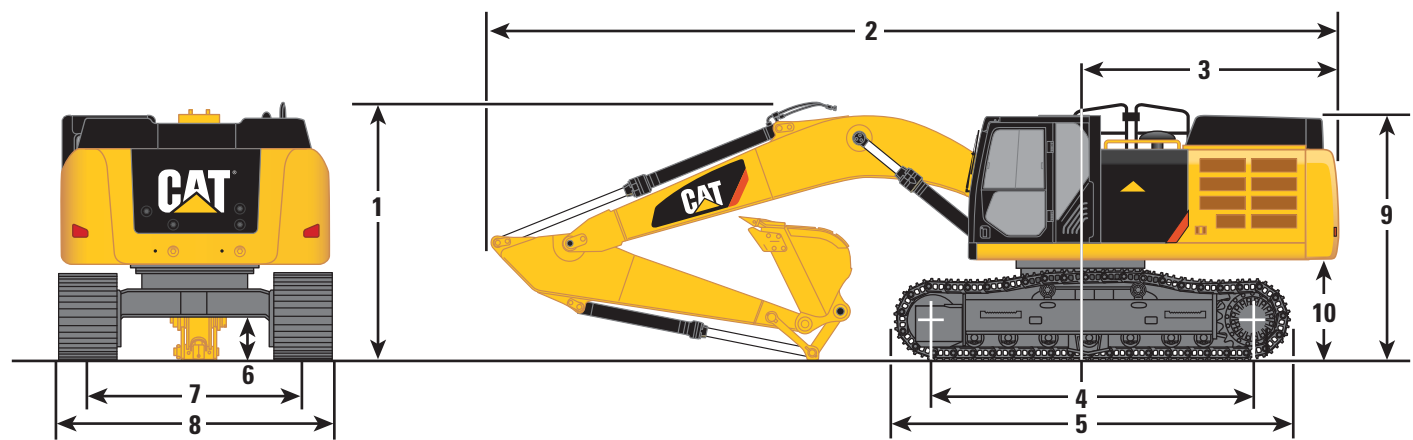
Standards

Brakes	ISO 10265:1998
Cab/OPG (Operator Protective Guards)	ISO 10262
Cab/ROPS	ISO 12117-2:2008

349E L Hydraulic Excavator Specifications

Dimensions – Long FIX Undercarriage

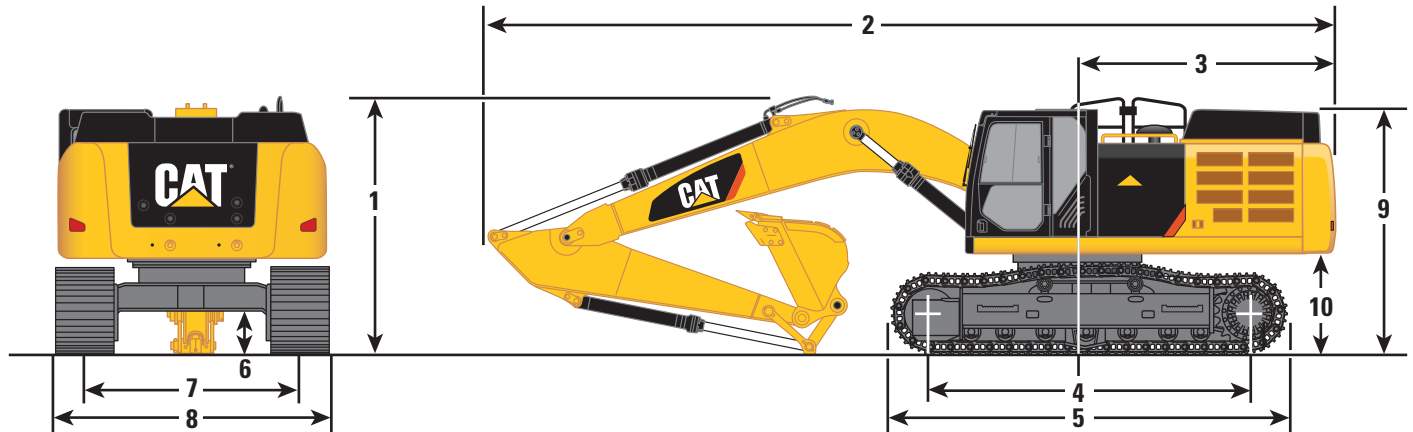
All dimensions are approximate.



	HD Reach Boom 6.9 m		Mass Boom 6.55 m	
Stick	R3.35TB	R2.9TB	M3.0UB	M2.5UB
1 Shipping Height at Boom Top	3730 mm	3660 mm	4020 mm	3980 mm
Shipping Height with Guard Rail	3610 mm	3610 mm	3610 mm	3610 mm
2 Shipping Length	11 920 mm	11 910 mm	11 590 mm	11 680 mm
3 Tail Swing Radius	3760 mm	3760 mm	3760 mm	3760 mm
4 Length to Center of Rollers	4360 mm	4360 mm	4360 mm	4360 mm
5 Track Length	5370 mm	5370 mm	5370 mm	5370 mm
6 Ground Clearance (including Shoe Lug Height)	510 mm	510 mm	510 mm	510 mm
7 Track Gauge	2740 mm	2740 mm	2740 mm	2740 mm
8 Transport Width				
600 mm Shoes	3340 mm	3340 mm	3340 mm	3340 mm
9 Cab Height	3220 mm	3220 mm	3220 mm	3220 mm
Cab Height with Top Guard	3390 mm	3390 mm	3390 mm	3390 mm
10 Counterweight Clearance	1280 mm	1280 mm	1280 mm	1280 mm
Bucket Capacity	3.1 m³	3.1 m³	3.2 m³	3.2 m³
Bucket Tip Radius	1866 mm	1866 mm	2046 mm	2046 mm

Dimensions – Long VG Undercarriage

All dimensions are approximate.

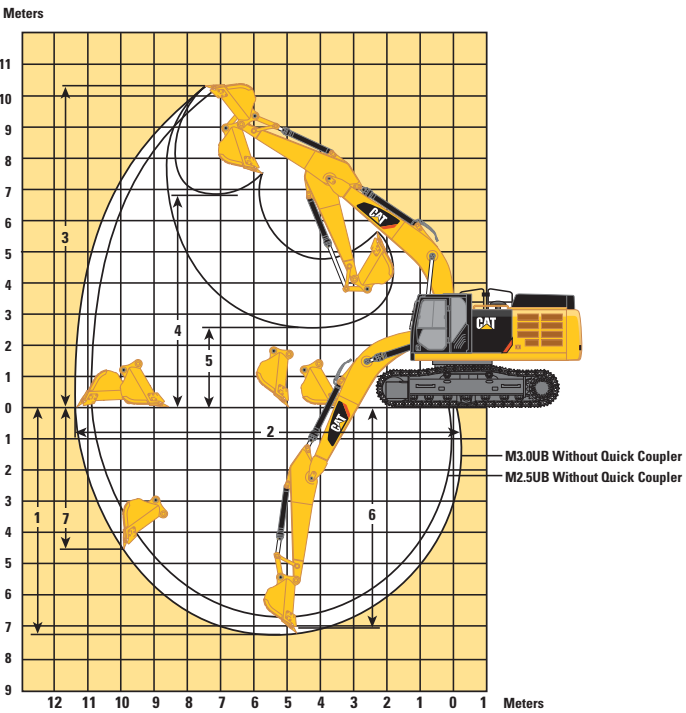
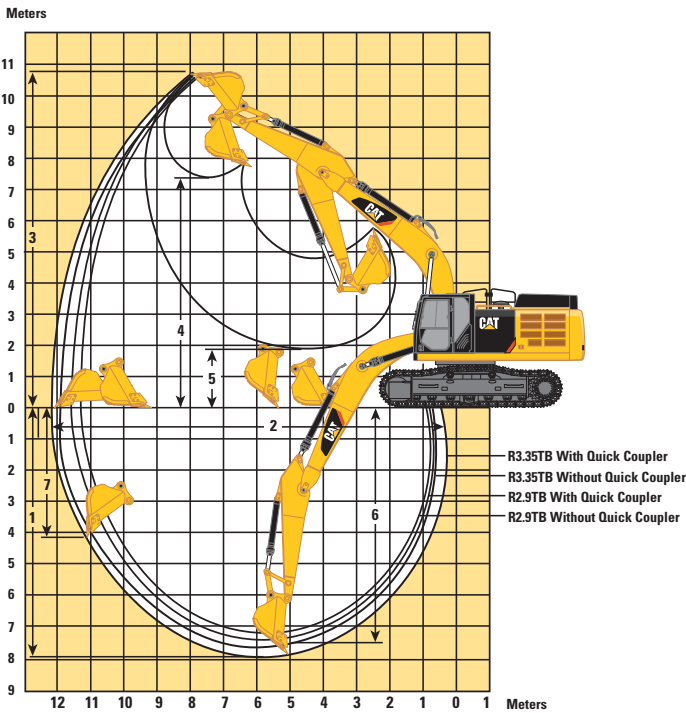


	HD Reach Boom 6.9 m		Mass Boom 6.55 m	
Stick	R3.35TB	R2.9TB	M3.0UB	M2.5UB
1 Shipping Height at Boom Top	3550 mm	3700 mm	4020 mm	4010 mm
Shipping Height with Guard Rail	3760 mm	3760 mm	3760 mm	3760 mm
2 Shipping Length	11 820 mm	11 890 mm	11 560 mm	11 640 mm
3 Tail Swing Radius	3760 mm	3760 mm	3760 mm	3760 mm
4 Length to Center of Rollers	4340 mm	4340 mm	4340 mm	4340 mm
5 Track Length	5380 mm	5380 mm	5380 mm	5380 mm
6 Ground Clearance (including Shoe Lug Height)	740 mm	740 mm	740 mm	740 mm
7 Track Gauge (Expanded)	2890 mm	2890 mm	2890 mm	2890 mm
Track Gauge (Retracted)	2390 mm	2390 mm	2390 mm	2390 mm
8 Transport Width (Expanded)				
600 mm Shoes	3490 mm	3490 mm	3490 mm	3490 mm
750 mm Shoes	3640 mm	3640 mm	3640 mm	3640 mm
900 mm Shoes	3790 mm	3790 mm	3790 mm	3790 mm
Transport Width (Retracted)				
600 mm Shoes	3000 mm	3000 mm	3000 mm	3000 mm
750 mm Shoes	3140 mm	3140 mm	3140 mm	3140 mm
900 mm Shoes	3290 mm	3290 mm	3290 mm	3290 mm
9 Cab Height	3370 mm	3370 mm	3370 mm	3370 mm
Cab Height with Top Guard	3540 mm	3540 mm	3540 mm	3540 mm
10 Counterweight Clearance	1430 mm	1430 mm	1430 mm	1430 mm
Bucket Capacity	2.1 m ³	2.1 m ³	2.4 m ³	2.6 m ³
Bucket Tip Radius	1863 mm	1863 mm	2021 mm	2020 mm

349E L Hydraulic Excavator Specifications

Working Ranges

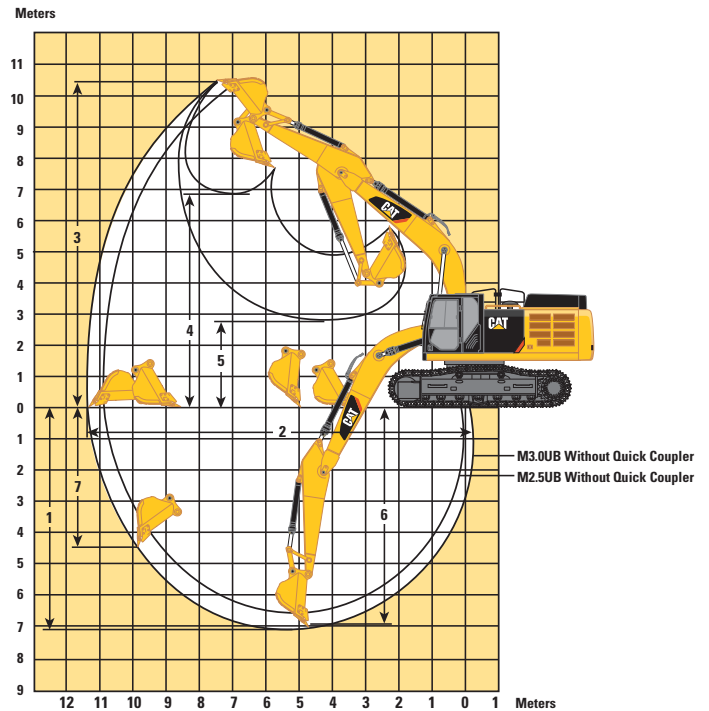
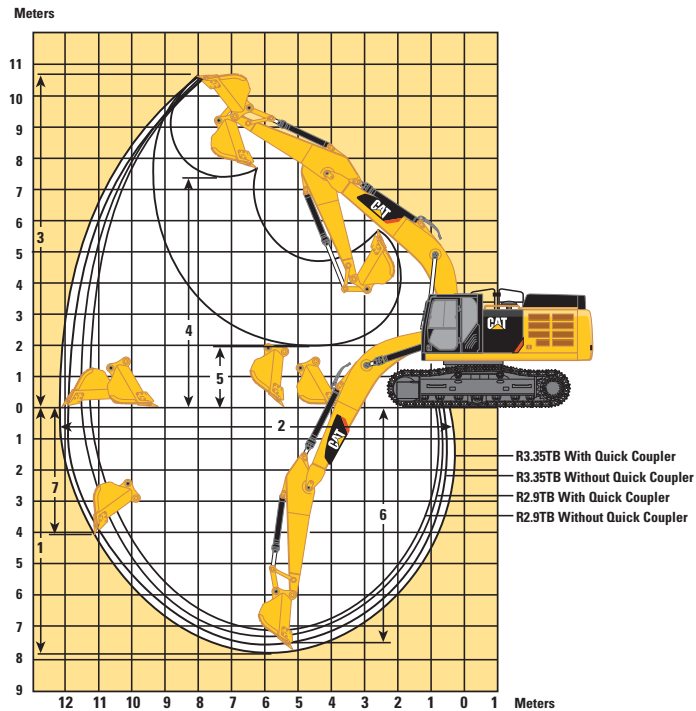
All dimensions are approximate.



	HD Reach Boom 6.9 m		Mass Boom 6.55 m	
Stick	R3.35TB	R2.9TB	M3.0UB	M2.5UB
Long FIX Undercarriage				
Maximum Slope	35°/70%	35°/70%	35°/70%	35°/70%
1 Maximum Digging Depth	7630 mm	7180 mm	7230 mm	6730 mm
2 Maximum Reach at Ground Level	11 710 mm	11 290 mm	11 200 mm	10 740 mm
3 Maximum Cutting Height	10 810 mm	10 640 mm	10 300 mm	10 110 mm
4 Maximum Loading Height	7460 mm	7280 mm	6820 mm	6620 mm
5 Minimum Loading Height	2780 mm	3230 mm	2650 mm	3150 mm
6 Maximum Depth Cut for 2440 mm Level Bottom	7490 mm	7020 mm	7080 mm	6560 mm
7 Maximum Vertical Wall Digging Depth	5760 mm	5350 mm	4570 mm	4140 mm
Bucket Capacity	3.1 m ³	3.1 m ³	3.2 m ³	3.2 m ³
Bucket Tip Radius	1866 mm	1866 mm	2046 mm	2046 mm

Working Ranges

All dimensions are approximate.



HD Reach Boom
6.9 m

Mass Boom
6.55 m

Stick	R3.35TB	R2.9TB	M3.0UB	M2.5UB
Long VG Undercarriage				
Maximum Slope	35°/70%	35°/70%	35°/70%	35°/70%
1 Maximum Digging Depth	7490 mm	7040 mm	7140 mm	6640 mm
2 Maximum Reach at Ground Level	11 680 mm	11 260 mm	11 220 mm	10 760 mm
3 Maximum Cutting Height	10 870 mm	10 690 mm	11 440 mm	10 240 mm
4 Maximum Loading Height	7610 mm	7430 mm	6910 mm	6720 mm
5 Minimum Loading Height	2920 mm	3370 mm	2740 mm	3240 mm
6 Maximum Depth Cut for 2440 mm Level Bottom	7340 mm	6880 mm	6990 mm	6740 mm
7 Maximum Vertical Wall Digging Depth	5170 mm	5350 mm	4340 mm	3910 mm
Bucket Capacity	2.4 m ³	2.4 m ³	2.8 m ³	2.8 m ³
Bucket Tip Radius	1865 mm	1865 mm	2099 mm	2099 mm

349E L Hydraulic Excavator Specifications

Operating Weight and Ground Pressure

	900 mm Triple Grouser Shoes		750 mm Triple Grouser Shoes		600 mm Double Grouser Shoes	
	kg	kPa	kg	kPa	kg	kPa
Long FIX Undercarriage						
HD Reach Boom – 6.9 m						
R3.35TB HD	–	–	–	–	47 800	83.0
R2.9TB HD	–	–	–	–	47 700	83.0
Mass Boom – 6.55 m						
M3.0UB HD	–	–	–	–	49 100	85.0
M2.5UB HD	–	–	–	–	48 800	85.0
Long VG Undercarriage						
HD Reach Boom – 6.9 m						
R3.35TB HD	52 000	60.0	51 200	71.0	50 500	88.0
R2.9TB HD	51 800	60.0	51 000	71.0	50 300	88.0
Mass Boom – 6.55 m						
M3.0UB HD	53 300	62.0	52,500	73.0	51 800	90.0
M2.5UB HD	53 000	62.0	52,300	73.0	51 500	90.0

Major Component Weights*

	kg
Base machine (with boom cylinder, without counterweight, front linkage and track)	
Long FIX Undercarriage	24 200
Long VG Undercarriage	26 800
Counterweight	
9.0 mt	9000
Boom (includes lines, pins and stick cylinder)	
Reach Boom – 6.9 m	4510
Mass Boom – 6.55 m	4750
Stick (includes lines, pins and bucket cylinder)	
R3.35TB HD	2480
R2.9TB HD	2290
M3.0UB	2930
M2.5UB	2700
Track shoe (Long FIX/per two tracks)	
600 mm double grouser	5240
Track shoe (Long VG/per two tracks)	
600 mm double grouser	5300
750 mm triple grouser	5940
900 mm triple grouser	6700
Buckets	
TB1880GD – 3.10 m ³	2440
UB1850HD – 3.20 m ³	2970

*Base machine includes 75 kg operator weight, 90% fuel weight, and undercarriage with center guard.

Bucket and Stick Forces

	HD Reach Boom 6.9 m		Mass Boom 6.55 m		
Stick	R3.35TB	R2.9TB	M3.0UB	M2.5UB	Tip Radius
	kN	kN	kN	kN	mm
TB-Family Bucket					
Heavy Duty					1865
Bucket Digging Force (ISO)	268	268	–	–	
Stick Digging Force (ISO)	201	221	–	–	
TB-Family Bucket for CW-55					
Heavy Duty					2059
Bucket Digging Force (ISO)	231	231	–	–	
Stick Digging Force (ISO)	191	209	–	–	
UB-Family Bucket					
Heavy Duty					2057
Bucket Digging Force (ISO)	–	–	296	296	
Stick Digging Force (ISO)	–	–	212	241	
UB-Family Bucket for CW-55					
Heavy Duty					2230
Bucket Digging Force (ISO)	–	–	262	262	
Stick Digging Force (ISO)	–	–	202	228	

349E L Work Tool Offering Guide*

Boom Type	Reach Boom (HD)		Mass Boom	
Stick Size	R3.35 (HD)	R2.9 (HD)	M3.0	M2.5
Hydraulic Hammer	H160D S H180D S	H160D S H180D S	H160D S H180D S	H160D S H180D S
Multi-Processor	MP30	MP30	MP30	MP30 MP40
Crusher	P335	P335 P360	P335 P360	P335 P360
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				
Clamshell				
Rippers				
Rakes				
Dedicated Quick Coupler				

These work tools are available for the 349E.
Consult your Cat dealer for proper match.

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

**Boom Mount

349E L Hydraulic Excavator Specifications

349E L (LC-FIX) HD Reach Boom Lift Capacities – EAME



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 6.9 m

Stick – R3.35TB

Counterweight – 9.0 mt

Shoes – 600 mm double grouser

Bucket – None

Heavy Lift – Off

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
9.0 m	kg													*8250	*8250	7.30
7.5 m	kg									*10 850	*10 850			*7750	*7750	8.48
6.0 m	kg									*11 400	10 850	*9800	8050	*7600	*7600	9.27
4.5 m	kg					*18 900	*18 900	*14 550	*14 550	*12 350	10 500	*11 100	7900	*7700	6900	9.76
3.0 m	kg					*23 450	20 800	*16 700	13 800	*13 500	10 050	*11 650	7650	*8050	6500	10.01
1.5 m	kg					*17 550	*17 550	*18 400	13 100	*14 500	9650	11 900	7450	*8600	6350	10.02
Ground Line	kg					*19 800	19 200	*19 200	12 700	*15 050	9350	11 700	7250	*9500	6450	9.80
–1.5 m	kg			*14 050	*14 050	*25 150	19 150	*19 050	12 500	*15 000	9200	11 650	7200	*11 000	6900	9.33
–3.0 m	kg			*22 500	*22 500	*23 000	19 300	*17 800	12 550	*14 000	9200			*11 550	7750	8.57
–4.5 m	kg			*24 800	*24 800	*19 400	*19 400	*15 150	12 800					*11 350	9600	7.43

Boom – 6.9 m

Stick – R3.35TB

Counterweight – 9.0 mt

Shoes – 600 mm double grouser

Bucket – None

Heavy Lift – On

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
9.0 m	kg													*9000	*9000	7.30
7.5 m	kg									*12 000	11 100			*8500	*8500	8.48
6.0 m	kg									*12 600	10 850	*10 750	8050	*8350	7650	9.27
4.5 m	kg					*20 850	*20 850	*16 100	14 650	*13 700	10 500	*12 300	7900	*8450	6900	9.76
3.0 m	kg					*25 900	20 800	*18 500	13 800	*14 950	10 050	12 150	7650	*8800	6500	10.01
1.5 m	kg					*18 600	*18 600	*20 400	13 100	15 600	9650	11 900	7450	*9400	6350	10.02
Ground Line	kg					*20 950	19 200	*21 300	12 700	15 300	9350	11 700	7250	10 350	6450	9.80
–1.5 m	kg			*14 900	*14 900	*27 900	19 150	*21 100	12 500	15 150	9200	11 650	7200	11 100	6900	9.33
–3.0 m	kg			*23 850	*23 850	*25 550	19 300	*19 750	12 550	15 150	9200			12 550	7750	8.57
–4.5 m	kg			*27 650	*27 650	*21 550	19 700	*16 850	12 800					*12 650	9600	7.43

*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.

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

349E L (LC-FIX) HD Reach Boom Lift Capacities – EAME



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 6.9 m

Stick – R2.9TB

Counterweight – 9.0 mt

Shoes – 600 mm double grouser

Bucket – None

Heavy Lift – Off

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
9.0 m	kg													*9850	*9850	6.72
7.5 m	kg									*11 650	10 950			*9200	*9200	7.99
6.0 m	kg							*13 500	*13 500	*12 050	10 800			*9050	8250	8.82
4.5 m	kg					*20 500	*20 500	*15 400	14 500	*12 950	10 400	*11 600	7850	*9150	7400	9.34
3.0 m	kg					*18 150	*18 150	*17 450	13 700	*14 000	10 000	*12 050	7650	*9550	6950	9.59
1.5 m	kg					*12 900	*12 900	*18 900	13 050	*14 850	9650	11 900	7500	*10 300	6800	9.60
Ground Line	kg					*18 400	*18 400	*19 400	12 750	*15 250	9400	11 800	7350	11 100	6950	9.37
–1.5 m	kg			*14 200	*14 200	*24 500	19 350	*18 900	12 600	*14 950	9300			12 000	7450	8.88
–3.0 m	kg			*25 000	*25 000	*22 000	19 600	*17 300	12 700	*13 550	9400			*12 050	8550	8.08
–4.5 m	kg					*17 850	*17 850	*14 000	13 050					*11 600	10 900	6.85

Boom – 6.9 m

Stick – R2.9TB

Counterweight – 9.0 mt

Shoes – 600 mm double grouser

Bucket – None

Heavy Lift – On

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
9.0 m	kg													*10 750	*10 750	6.72
7.5 m	kg									*12 850	10 950			*10 050	9850	7.99
6.0 m	kg							*14 850	*14 850	*13 300	10 800			*9900	8250	8.82
4.5 m	kg					*22 550	22 250	*17 000	14 500	*14 300	10 400	12 350	7850	*10 000	7400	9.34
3.0 m	kg					*19 200	*19 200	*19 300	13 700	*15 500	10 000	12 150	7650	*10 450	6950	9.59
1.5 m	kg					*13 700	*13 700	*20 900	13 050	15 600	9650	11 900	7500	10 850	6800	9.60
Ground Line	kg					*19 450	19 300	*21 500	12 750	15 350	9400	11 800	7350	11 100	6950	9.37
–1.5 m	kg			*15 050	*15 050	*27 150	19 350	*20 950	12 600	15 250	9300			12 000	7450	8.88
–3.0 m	kg			*26 450	*26 450	*24 400	19 600	*19 200	12 700	*15 050	9400			*13 400	8550	8.08
–4.5 m	kg					*19 850	*19 850	*15 600	13 050					*12 900	10 900	6.85

*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.

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

349E L Hydraulic Excavator Specifications

349E L (LC-FIX) Mass Boom Lift Capacities – EAME



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 6.55 m

Stick – M3.0UB

Counterweight – 9.0 mt

Shoes – 600 mm double grouser

Bucket – None

Heavy Lift – Off

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
7.5 m	kg									*10 550	*10 550			*9100	*9100	7.67
6.0 m	kg									*11 700	10 500			*8850	8400	8.53
4.5 m	kg					*18 900	*18 900	*14 650	14 350	*12 500	10 150	*9850	7500	*8950	7400	9.07
3.0 m	kg					*23 200	20 400	*16 650	13 450	*13 500	9700	*11 700	7300	*9350	6900	9.33
1.5 m	kg					*21 600	19 150	*18 200	12 700	*14 350	9300	11 550	7100	*10 050	6750	9.34
Ground Line	kg					*24 500	18 750	*18 850	12 300	*14 750	9000	11 400	7000	11 250	6850	9.10
–1.5 m	kg			*16 850	*16 850	*24 400	18 700	*18 450	12 150	*14 450	8900			*12 050	7400	8.59
–3.0 m	kg			*27 800	*27 800	*21 800	18 900	*16 800	12 200	*12 800	9000			*12 050	8600	7.76
–4.5 m	kg					*17 250	*17 250	*13 050	12 600					*11 500	11 350	6.48

Boom – 6.55 m

Stick – M3.0UB

Counterweight – 9.0 mt

Shoes – 600 mm double grouser

Bucket – None

Heavy Lift – On

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
7.5 m	kg									*11 550	10 650			*10 000	*10 000	7.67
6.0 m	kg									*13 000	10 500			*9700	8400	8.53
4.5 m	kg					*20 900	*20 900	*16 200	14 350	*13 850	10 150	*10 750	7500	*9800	7400	9.07
3.0 m	kg					*25 650	20 400	*18 450	13 450	*15 000	9700	11 800	7300	*10 250	6900	9.33
1.5 m	kg					*22 900	19 150	*20 200	12 700	15 300	9300	11 550	7100	10 950	6750	9.34
Ground Line	kg					*25 950	18 750	*20 900	12 300	14 950	9000	11 400	7000	11 250	6850	9.10
–1.5 m	kg			*17 850	*17 850	*27 100	18 700	*20 500	12 150	14 800	8900			12 150	7400	8.59
–3.0 m	kg			*29 400	*29 400	*24 300	18 900	*18 700	12 200	*14 300	9000			*13 450	8600	7.76
–4.5 m	kg					*19 300	*19 300	*14 600	12 600					*12 900	11 350	6.48

*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.

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

349E L (LC-FIX) Mass Boom Lift Capacities – EAME



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 6.55 m

Stick – M2.5UB

Counterweight – 9.0 mt

Shoes – 600 mm double grouser

Bucket – None

Heavy Lift – Off

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				m
7.5 m	kg											*11 950	11 550	7.10
6.0 m	kg							*13 900	*13 900	*12 500	10 450	*11 600	9300	8.03
4.5 m	kg					*20 600	*20 600	*15 600	14 200	*13 200	10 150	*11 750	8150	8.60
3.0 m	kg							*17 450	13 400	*14 050	9750	12 100	7550	8.87
1.5 m	kg							*18 750	12 800	*14 750	9350	11 900	7350	8.88
Ground Line	kg					*22 600	19 000	*19 050	12 450	*14 950	9150	12 300	7550	8.63
–1.5 m	kg			*17 000	*17 000	*23 650	19 050	*18 250	12 350	*14 250	9100	*12 800	8250	8.10
–3.0 m	kg			*25 100	*25 100	*20 600	19 350	*16 100	12 550			*12 650	9800	7.20
–4.5 m	kg					*15 150	*15 150					*11 500	*11 500	5.79

Boom – 6.55 m

Stick – M2.5UB

Counterweight – 9.0 mt

Shoes – 600 mm double grouser

Bucket – None

Heavy Lift – On

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				m
7.5 m	kg											*13 050	11 550	7.10
6.0 m	kg							*15 350	15 000	*13 850	10 450	*12 700	9300	8.03
4.5 m	kg					*22 750	21 950	*17 250	14 200	*14 600	10 150	*12 850	8150	8.60
3.0 m	kg							*19 300	13 400	*15 600	9750	12 100	7550	8.87
1.5 m	kg							*20 750	12 800	15 350	9350	11 900	7350	8.88
Ground Line	kg					*23 950	19 000	*21 150	12 450	15 100	9150	12 300	7550	8.63
–1.5 m	kg			*18 000	*18 000	*26 250	19 050	*20 300	12 350	15 050	9100	13 500	8250	8.10
–3.0 m	kg			*28 000	*28 000	*22 900	19 350	*17 900	12 550			*14 100	9800	7.20
–4.5 m	kg					*16 950	*16 950					*12 850	*12 850	5.79

*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.

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

349E L Hydraulic Excavator Specifications

349E L (LC-VG) HD Reach Boom Lift Capacities – EAME



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 6.9 m

Stick – R3.35TB

Counterweight – 9.0 mt

Shoes – 600 mm triple grouser

Bucket – None

Heavy Lift – Off

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
9.0 m	kg													*8200	*8200	7.44
7.5 m	kg									*11 000	*11 000			*7750	*7750	8.57
6.0 m	kg									*11 550	*11 550	*10 300	8950	*7650	*7650	9.33
4.5 m	kg					*19 550	*19 550	*14 900	*14 900	*12 600	11 600	*11 250	8800	*7800	7650	9.80
3.0 m	kg					*24 000	23 200	*17 050	15 300	*13 750	11 150	*11 850	8550	*8100	7250	10.02
1.5 m	kg					*17 500	*17 500	*18 700	14 650	*14 700	10 750	*12 350	8350	*8700	7150	10.01
Ground Line	kg					*20 350	*20 350	*19 400	14 250	*15 250	10 500	12 250	8150	*9700	7300	9.76
–1.5 m	kg			*14 900	*14 900	*25 200	21 700	*19 150	14 100	*15 100	10 350	*12 100	8100	*11 250	7850	9.27
–3.0 m	kg			*23 450	*23 450	*22 950	21 900	*17 800	14 150	*13 950	10 400			*11 700	8850	8.47
–4.5 m	kg			*24 350	*24 350	*19 100	*19 100	*14 900	14 400					*11 450	11 050	7.29

Boom – 6.9 m

Stick – R3.35TB

Counterweight – 9.0 mt

Shoes – 600 mm triple grouser

Bucket – None

Heavy Lift – On

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
9.0 m	kg													*9000	*9000	7.44
7.5 m	kg									*12 150	*12 150			*8500	*8500	8.57
6.0 m	kg									*12 800	11 950	*11 250	8950	*8400	*8400	9.33
4.5 m	kg					*21 500	*21 500	*16 450	16 150	*13 900	11 600	*12 500	8800	*8500	7650	9.80
3.0 m	kg					*26 500	23 200	*18 850	15 300	*15 200	11 150	12 650	8550	*8900	7250	10.02
1.5 m	kg					*18 550	*18 550	*20 700	14 650	16 300	10 750	12 450	8350	*9550	7150	10.01
Ground Line	kg					*21 550	*21 550	*21 500	14 250	16 000	10 500	12 250	8150	*10 600	7300	9.76
–1.5 m	kg			*15 800	*15 800	*27 900	21 700	*21 200	14 100	15 850	10 350	12 200	8100	11 750	7850	9.27
–3.0 m	kg			*24 850	*24 850	*25 450	21 900	*19 750	14 150	*15 500	10 400			*13 000	8850	8.47
–4.5 m	kg			*27 100	*27 100	*21 250	*21 250	*16 600	14 400					*12 750	11 050	7.29

*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.

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

349E L (LC-VG) HD Reach Boom Lift Capacities – EAME



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 6.9 m

Counterweight – 9.0 mt

Bucket – None

Stick – R2.9TB

Shoes – 600 mm triple grouser

Heavy Lift – Off

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
9.0 m	kg													*9800	*9800	6.87
7.5 m	kg									*11 700	*11 700			*9200	*9200	8.09
6.0 m	kg							*13 700	*13 700	*12 150	11 850			*9050	9000	8.89
4.5 m	kg					*21 050	*21 050	*15 650	*15 650	*13 100	11 450	*11 700	8700	*9200	8150	9.38
3.0 m	kg					*16 600	*16 600	*17 700	15 150	*14 150	11 050	*12 150	8500	*9650	7700	9.60
1.5 m	kg					*13 200	*13 200	*19 100	14 550	*15 000	10 700	12 400	8300	*10 400	7600	9.59
Ground Line	kg					*19 150	*19 150	*19 500	14 200	*15 300	10 450	12 300	8200	11 650	7800	9.34
–1.5 m	kg			*15 250	*15 250	*24 400	21 800	*18 900	14 150	*14 900	10 400			*12 100	8400	8.82
–3.0 m	kg			*26 150	*26 150	*21 800	*21 800	*17 150	14 250	*13 350	10 500			*12 100	9700	7.98
–4.5 m	kg					*17 400	*17 400	*13 600	*13 600					*11 550	*11 550	6.70

Boom – 6.9 m

Counterweight – 9.0 mt

Bucket – None

Stick – R2.9TB

Shoes – 600 mm triple grouser

Heavy Lift – On

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
9.0 m	kg													*10 700	*10 700	6.87
7.5 m	kg									*12 900	12 050			*10 050	*10 050	8.09
6.0 m	kg							*15 100	*15 100	*13 450	11 850			*9900	9000	8.89
4.5 m	kg					*23 200	*23 200	*17 300	15 950	*14 500	11 450	12 850	8700	*10 050	8150	9.38
3.0 m	kg					*17 600	*17 600	*19 550	15 150	*15 650	11 050	12 600	8500	*10 550	7700	9.60
1.5 m	kg					*14 000	*14 000	*21 100	14 550	16 200	10 700	12 400	8300	11 300	7600	9.59
Ground Line	kg					*20 300	*20 300	*21 550	14 200	15 950	10 450	12 300	8200	11 650	7800	9.34
–1.5 m	kg			*16 200	*16 200	*27 050	21 800	*20 900	14 150	15 850	10 400			12 650	8400	8.82
–3.0 m	kg			*27 700	*27 700	*24 150	22 050	*19 050	14 250	*14 850	10 500			*13 450	9700	7.98
–4.5 m	kg					*19 350	*19 350	*15 100	14 600					*12 850	12 550	6.70

*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.

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

349E L Hydraulic Excavator Specifications

349E L (LC-VG) HD Reach Boom Lift Capacities – EAME



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 6.9 m

Stick – R3.35TB

Counterweight – 9.0 mt

Shoes – 750 mm triple grouser

Bucket – None

Heavy Lift – Off

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
9.0 m	kg													*8200	*8200	7.44
7.5 m	kg									*11 000	*11 000			*7750	*7750	8.57
6.0 m	kg									*11 550	*11 550	*10 300	9050	*7650	*7650	9.33
4.5 m	kg					*19 550	*19 550	*14 900	*14 900	*12 600	11 750	*11 250	8900	*7800	7750	9.80
3.0 m	kg					*24 000	23 500	*17 050	15 500	*13 750	11 300	*11 850	8650	*8100	7350	10.02
1.5 m	kg					*17 500	*17 500	*18 700	14 850	*14 700	10 900	*12 350	8450	*8700	7250	10.01
Ground Line	kg					*20 350	*20 350	*19 400	14 450	*15 250	10 650	12 450	8300	*9700	7450	9.76
–1.5 m	kg			*14 900	*14 900	*25 200	22 000	*19 150	14 300	*15 100	10 500	*12 100	8250	*11 250	7950	9.27
–3.0 m	kg			*23 450	*23 450	*22 950	22 200	*17 800	14 350	*13 950	10 550			*11 700	9000	8.47
–4.5 m	kg			*24 350	*24 350	*19 100	*19 100	*14 900	14 600					*11 450	11 250	7.29

Boom – 6.9 m

Stick – R3.35TB

Counterweight – 9.0 mt

Shoes – 750 mm triple grouser

Bucket – None

Heavy Lift – On

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
9.0 m	kg													*9000	*9000	7.44
7.5 m	kg									*12 150	*12 150			*8500	*8500	8.57
6.0 m	kg									*12 800	12 100	*11 250	9050	*8400	*8400	9.33
4.5 m	kg					*21 500	*21 500	*16 450	16 350	*13 900	11 750	*12 500	8900	*8500	7750	9.80
3.0 m	kg					*26 500	23 500	*18 850	15 500	*15 200	11 300	12 850	8650	*8900	7350	10.02
1.5 m	kg					*18 550	*18 550	*20 700	14 850	*16 300	10 900	12 600	8450	*9550	7250	10.01
Ground Line	kg					*21 550	*21 550	*21 500	14 450	16 200	10 650	12 450	8300	*10 600	7450	9.76
–1.5 m	kg			*15 800	*15 800	*27 900	22 000	*21 200	14 300	16 050	10 500	12 400	8250	11 900	7950	9.27
–3.0 m	kg			*24 850	*24 850	*25 450	22 200	*19 750	14 350	*15 500	10 550			*13 000	9000	8.47
–4.5 m	kg			*27 100	*27 100	*21 250	*21 250	*16 600	14 600					*12 750	11 250	7.29

*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.

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

349E L (LC-VG) HD Reach Boom Lift Capacities – EAME



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 6.9 m

Stick – R2.9TB

Counterweight – 9.0 mt

Shoes – 750 mm triple grouser

Bucket – None

Heavy Lift – Off

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
9.0 m	kg													*9800	*9800	6.87
7.5 m	kg									*11 700	*11 700			*9200	*9200	8.09
6.0 m	kg							*13 700	*13 700	*12 150	12 000			*9050	*9050	8.89
4.5 m	kg					*21 050	*21 050	*15 650	*15 650	*13 100	11 600	*11 700	8800	*9200	8250	9.38
3.0 m	kg					*16 600	*16 600	*17 700	15 350	*14 150	11 200	*12 150	8600	*9650	7800	9.60
1.5 m	kg					*13 200	*13 200	*19 100	14 750	*15 000	10 850	*12 500	8450	*10 400	7700	9.59
Ground Line	kg					*19 150	*19 150	*19 500	14 400	*15 300	10 600	12 450	8300	*11 650	7900	9.34
–1.5 m	kg			*15 250	*15 250	*24 400	22 100	*18 900	14 350	*14 900	10 550			*12 100	8550	8.82
–3.0 m	kg			*26 150	*26 150	*21 800	*21 800	*17 150	14 450	*13 350	10 650			*12 100	9850	7.98
–4.5 m	kg					*17 400	*17 400	*13 600	*13 600					*11 550	*11 550	6.70

Boom – 6.9 m

Stick – R2.9TB

Counterweight – 9.0 mt

Shoes – 750 mm triple grouser

Bucket – None

Heavy Lift – On

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
9.0 m	kg													*10 700	*10 700	6.87
7.5 m	kg									*12 900	12 200			*10 050	*10 050	8.09
6.0 m	kg							*15 100	*15 100	*13 450	12 000			*9900	9150	8.89
4.5 m	kg					*23 200	*23 200	*17 300	16 150	*14 500	11 600	*12 950	8800	*10 050	8250	9.38
3.0 m	kg					*17 600	*17 600	*19 550	15 350	*15 650	11 200	12 800	8600	*10 550	7800	9.60
1.5 m	kg					*14 000	*14 000	*21 100	14 750	16 450	10 850	12 600	8450	*11 400	7700	9.59
Ground Line	kg					*20 300	*20 300	*21 550	14 400	16 200	10 600	12 450	8300	11 850	7900	9.34
–1.5 m	kg			*16 200	*16 200	*27 050	22 100	*20 900	14 350	16 100	10 550			12 800	8550	8.82
–3.0 m	kg			*27 700	*27 700	*24 150	22 350	*19 050	14 450	*14 850	10 650			*13 450	9850	7.98
–4.5 m	kg					*19 350	*19 350	*15 100	14 800					*12 850	12 750	6.70

*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.

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

349E L Hydraulic Excavator Specifications

349E L (LC-VG) HD Mass Boom Lift Capacities – EAME



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 6.55 m

Stick – M3.0UB

Counterweight – 9.0 mt

Shoes – 600 mm double grouser

Bucket – None

Heavy Lift – Off

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
9.0 m	kg													*9800	*9800	6.49
7.5 m	kg									*11 200	*11 200			*9050	*9050	7.77
6.0 m	kg									*11 750	11 550			*8850	*8850	8.60
4.5 m	kg					*19 350	*19 350	*14 850	*14 850	*12 600	11 200	*10 300	8350	*8950	8200	9.10
3.0 m	kg					*23 550	22 700	*16 800	14 900	*13 600	10 750	*11 750	8150	*9400	7650	9.34
1.5 m	kg					*21 450	*21 450	*18 300	14 200	*14 400	10 350	*12 050	7950	*10 150	7550	9.33
Ground Line	kg					*25 150	21 150	*18 850	13 750	*14 750	10 050	11 900	7800	*11 450	7750	9.06
–1.5 m	kg			*17 800	*17 800	*24 200	21 150	*18 350	13 650	*14 350	9950			*12 050	8400	8.53
–3.0 m	kg			*27 900	*27 900	*21 450	21 350	*16 550	13 750	*12 500	10 100			*12 050	9850	7.66
–4.5 m	kg					*16 650	*16 650	*12 450	*12 450					*11 400	*11 400	6.32

Boom – 6.55 m

Stick – M3.0UB

Counterweight – 9.0 mt

Shoes – 600 mm double grouser

Bucket – None

Heavy Lift – On

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m
9.0 m	kg													*10 700	*10 700	6.49
7.5 m	kg									*12 250	11 750			*9900	*9900	7.77
6.0 m	kg									*13 050	11 550			*9700	9150	8.60
4.5 m	kg					*21 350	*21 350	*16 400	15 800	*13 950	11 200	*11 300	8350	*9850	8200	9.10
3.0 m	kg					*26 050	22 700	*18 650	14 900	*15 100	10 750	12 300	8150	*10 300	7650	9.34
1.5 m	kg					*22 700	21 550	*20 300	14 200	15 900	10 350	12 050	7950	*11 150	7550	9.33
Ground Line	kg					*26 650	21 150	*20 900	13 750	15 600	10 050	11 900	7800	11 800	7750	9.06
–1.5 m	kg			*18 900	*18 900	*26 900	21 150	*20 400	13 650	15 500	9950			12 850	8400	8.53
–3.0 m	kg			*30 700	*30 700	*23 900	21 350	*18 450	13 750	*13 950	10 100			*13 450	9850	7.66
–4.5 m	kg					*18 600	*18 600	*13 950	*13 950					*12 750	*12 750	6.32

*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.

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

349E L (LC-VG) HD Mass Boom Lift Capacities – EAME



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 6.55 m

Stick – M2.5UB

Counterweight – 9.0 mt

Shoes – 600 mm double grouser

Bucket – None

Heavy Lift – Off

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				m
7.5 m	kg											*11 900	*11 900	7.21
6.0 m	kg							*14 000	*14 000	*12 550	11 500	*11 600	10 100	8.10
4.5 m	kg					*21 050	*21 050	*15 750	15 650	*13 250	11 150	*11 800	8900	8.64
3.0 m	kg							*17 600	14 800	*14 150	10 750	*12 350	8350	8.89
1.5 m	kg							*18 800	14 200	*14 800	10 400	12 400	8200	8.87
Ground Line	kg					*23 700	21 350	*19 000	13 900	*14 900	10 200	*12 650	8450	8.59
–1.5 m	kg			*18 450	*18 450	*23 400	21 450	*18 100	13 850	*14 100	10 150	*12 800	9300	8.03
–3.0 m	kg			*24 600	*24 600	*20 200	*20 200	*15 750	14 000			*12 600	11 150	7.09
–4.5 m	kg											*12 400	*12 400	5.26

Boom – 6.55 m

Stick – M2.5UB

Counterweight – 9.0 mt

Shoes – 600 mm double grouser

Bucket – None

Heavy Lift – On

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				m
7.5 m	kg											*13 000	12 400	7.21
6.0 m	kg							*15 500	*15 500	*13 900	11 500	*12 700	10 100	8.10
4.5 m	kg					*23 250	*23 250	*17 450	15 650	*14 700	11 150	*12 900	8900	8.64
3.0 m	kg							*19 500	14 800	*15 700	10 750	12 550	8350	8.89
1.5 m	kg							*20 850	14 200	15 950	10 400	12 400	8200	8.87
Ground Line	kg					*25 100	21 350	*21 100	13 900	15 700	10 200	12 900	8450	8.59
–1.5 m	kg			*19 550	*19 550	*26 000	21 450	*20 150	13 850	15 650	10 150	*14 250	9300	8.03
–3.0 m	kg			*27 450	*27 450	*22 450	21 750	*17 550	14 000			*14 050	11 150	7.09
–4.5 m	kg											*13 900	*13 900	5.26

*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.

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

349E L Hydraulic Excavator Specifications

349E L (FIX) Bucket Specifications and Compatibility

	Linkage	Width	Capacity	Weight	Fill	Reach Boom (HD)		Mass Boom	
		mm	m³	kg	%	R3.35 HD	R2.9 HD	M3.0	M2.5
Without Quick Coupler									
General Duty (GD)	TB	1370	1.87	1755	100%	●	●		
	UB	1450	2.39	2324	100%			●	●
	UB	1550	2.61	2418	100%			⊙	●
	UB	2000	3.60	2900	100%			○	○
Heavy Duty (HD)	TB	1350	1.87	1974	100%	●	●		
	TB	1500	2.41	2065	100%	⊙	●		
	TB	1650	2.41	2210	100%	⊙	●		
	TB	1800	2.69	2423	100%	⊖	⊙		
	TB	1850	2.78	2420	100%	⊖	⊙		
	UB	1650	2.77	2581	100%			⊖	⊙
	UB	1850	3.19	2741	100%			○	⊖
	UB	1950	3.43	2898	100%			○	⊖
Severe Duty (SD)	TB	1400	1.87	2180	90%	●	●		
	TB	1550	2.14	2340	90%	●	●		
	TB	1700	2.41	2513	90%	⊙	●		
	TB	1850	2.69	2726	90%	⊖	⊙		
	TB	1900	2.78	2716	90%	⊖	⊙		
	UB	1450	2.39	2540	90%			●	●
	UB	1550	2.61	2648	90%			⊙	●
	UB	1650	2.77	2729	90%			⊙	●
	UB	1850	3.21	2987	90%			○	⊖
	UB	1950	3.43	3058	90%			○	⊖
Extreme Duty (XD)	UB	1550	2.61	3091	90%			⊖	●
	UB	1650	2.77	3192	90%			⊖	⊙
Maximum load pin-on (payload + bucket)					kg	6710	7200	7090	7880
With Quick Coupler (CW55)									
Heavy Duty (HD)	TB	1650	2.41	2196	100%	⊖	⊙		
	UB	1650	2.77	2479	100%			○	⊖
	UB	1850	3.19	2663	100%			◇	○
Severe Duty (SD)	UB	1550	2.61	2570	90%			⊖	⊙
	UB	1650	2.77	2655	90%			⊖	⊙
Extreme Duty (XD)	UB	1550	2.61	3087	90%			○	⊖
Maximum load with coupler (payload + bucket)					kg	5950	6440	6250	7040

Maximum Material Density:

- 2100 kg/m³
- ⊙ 1800 kg/m³
- ⊖ 1500 kg/m³
- 1200 kg/m³
- ◇ 900 kg/m³

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 over the side 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 (VG) Bucket Specifications and Compatibility

	Linkage	Width	Capacity	Weight	Fill	Reach Boom (HD)		Mass Boom	
		mm	m³	kg	%	R3.35 HD	R2.9 HD	M3.0	M2.5
Without Quick Coupler									
General Duty (GD)	TB	1370	1.87	1755	100%	●	●		
	UB	1450	2.39	2324	100%			●	●
	UB	1550	2.61	2418	100%			●	●
	UB	2000	3.60	2900	100%			○	⊖
Heavy Duty (HD)	TB	1350	1.87	1974	100%	●	●		
	TB	1500	2.41	2065	100%	●	●		
	TB	1650	2.41	2210	100%	●	●		
	TB	1800	2.69	2423	100%	⊙	●		
	TB	1850	2.78	2420	100%	⊙	●		
	UB	1650	2.77	2581	100%			⊙	●
	UB	1850	3.19	2741	100%			⊖	⊙
	UB	1950	3.43	2898	100%			⊖	⊙
	Severe Duty (SD)	TB	1400	1.87	2180	90%	●	●	
TB		1550	2.14	2340	90%	●	●		
TB		1700	2.41	2513	90%	●	●		
TB		1850	2.69	2726	90%	●	●		
TB		1900	2.78	2716	90%	⊙	●		
UB		1450	2.39	2540	90%			●	●
UB		1550	2.61	2648	90%			●	●
UB		1650	2.77	2729	90%			●	●
UB		1850	3.21	2987	90%			⊙	●
UB		1950	3.43	3058	90%			⊖	⊙
Extreme Duty (XD)	UB	1550	2.61	3091	90%			●	●
	UB	1650	2.77	3192	90%			⊙	●
	Maximum load pin-on (payload + bucket)				kg	7625	8250	7960	8810
With Quick Coupler (CW55)									
Heavy Duty (HD)	TB	1650	2.41	2196	100%	⊙	●		
	UB	1650	2.77	2479	100%			⊖	⊙
	UB	1850	3.19	2663	100%			○	⊖
Severe Duty (SD)	UB	1550	2.61	2570	90%			⊙	●
	UB	1650	2.77	2655	90%			⊙	●
Extreme Duty (XD)	UB	1550	2.61	3087	90%			⊙	●
Maximum load with coupler (payload + bucket)					kg	6865	7490	7120	7970

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 over the side with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with General Duty tips.

Maximum Material Density:

- 2100 kg/m³
- ⊙ 1800 kg/m³
- ⊖ 1500 kg/m³
- 1200 kg/m³

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 may vary. Consult your Cat dealer for details.

ENGINE

- C13 diesel engine
- Biodiesel capable
(meeting ASTM 6751 or EN 14214)
- Meets EU Stage IIIB emission standards
- 2300 m 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
- Cold start, ether aid
- Quick drains, engine and hydraulic oil

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) and circuit
- Boom lowering control device with
SmartBoom 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
- 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 window and tempered
other windows
- Air seat with backrest and heater
- Parallel wiper
- Engine 43/48 ambient cooling capability for
noise regulated territories (variable fan)
- Seat belt, retractable (2" width)
- Bi-level air conditioner (auto) with defroster
(pressurized function)
- ROPS cab
- Joysticks with 3 on/off switches and
1 modulation switch
- 12-Volt radio ready
- Sunscreen

UNDERCARRIAGE

- Grease Lubricated Track GLT4
- Towing eye on base frame
- Heavy-duty track rollers
- Track motor guards
- Cast idler
- Guard, HD bottom

ELECTRICAL

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

LIGHTS

- Boom lights with time delay
- 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
- ISO guard rails
(for vertical mount counterweight)

TECHNOLOGY

- Product Link

COUNTERWEIGHT

- 9.0 mt

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

ENGINE

Electric refueling pump with auto shut off
Starting kit, cold weather, -32° C
Jump start receptacle

HYDRAULIC SYSTEM

High-pressure line
Medium-pressure line
Cat quick coupler line
Tool control system
Tool 20, Electronic Control device,
(common), 1/2P, common circuit
Tool 21, Electronic Control device, 1/2P,
one-way circuit

CAB

Cab hatch emergency exit
Seat, high-back air suspension
with heater and cooling
Travel alarm
Straight travel pedal

UNDERCARRIAGE

Long FIX undercarriage:
600 mm double grouser shoes, PPR2
Long VG undercarriage:
600 mm triple grouser shoes
750 mm triple grouser shoes
900 mm triple grouser shoes
600 mm double grouser shoes
600 mm double grouser shoes, PPR2
750 mm triple grouser shoes, PPR2
600 mm triple grouser shoes, PPR2
Guard, full length for long FIX and
VG undercarriage
Center track guiding guard
Segmented (3 piece) track guiding guard
for long FIX and VG undercarriage

FRONT LINKAGE

Bucket linkage, UB family with lifting eye
Bucket linkage, UB family without lifting eye
Bucket linkage, TB family with lifting eye
Heavy Duty 6.9 m reach boom
Heavy Duty R3.35TB 3350 mm stick
Heavy Duty R2.9TB 2900 mm stick
Mass 6.55 m boom
Mass M3.0UB 3000 mm stick
Mass M2.5UB 2500 mm stick

LIGHTS

Halogen lights, cab mounted
HID lights, cab mounted
Halogen boom lights
HID boom lights

SECURITY

OPG, bolt-on
Guard, cab front, mesh
Cat MSS (anti-theft device)

TECHNOLOGY

Cat Grade Control Depth and Slope

349E L Hydraulic Excavator

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

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AEHQ6272-01 (09-2012)
Replaces AEHQ6272
(EU)



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