

349E L

Hydraulic Excavator



Engine

Engine Model	Cat® C13 ACERT™	
Net Power – ISO 14396	317 kW	425 hp
Net Power – SAE J1349	301 kW	404 hp

Drive

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

Weight

Minimum Weight	47 800 kg	105,400 lb
Maximum Weight	53 300 kg	117,500 lb

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 U.S. emissions 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.

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

A new seat range includes mechanical, 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

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 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 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.

MP3-Ready Radio and Power Supply

The standard radio is equipped with a new auxiliary audio port for MP3 players. Two 12-volt power supply sockets are located near key storage areas for charging.

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.





Engine

Reduced emissions, economical and reliable performance

Cat® C13 ACERT™ Engine

The Cat C13 ACERT engine delivers more horsepower using less fuel than the previous series engine.

Emissions Solution

The C13 ACERT engine is equipped to meet current U.S. Tier 4 Interim regulations. Driven by customer input, Cat's aftertreatment regeneration solution ensures the machine works as normal with no operator intervention needed.

The machine comes with two programmable modes of operation: automatic and manual regeneration.

In automatic mode, the machine starts the regeneration process once the filtering system reaches a certain level and conditions are optimal. The system will not interrupt the work process and can regenerate during machine operation.

Manual mode enables the operator to override the automatic mode. With a touch of a button (1) inside the cab, this mode allows the operator to move the machine from flammable or heat-restricted areas before initiating the regeneration process.

Bio Diesel-Ready Fuel System

The Cat C13 ACERT engine is equipped with a mechanically actuated, electronically controlled unit injector (MEUI) fuel system that includes a new electric priming pump and three-layer fuel hose to allow the use of bio fuel up to B20 (bio fuel 20% mixture).

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 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. A counterweight with removal device is available as an attachment to reduce the time required in preparation for transport. Both counterweights bolt directly to the main frame for added rigidity and feature an integrated housing for the new rearview camera option.

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 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

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, contractors' grapples, trash grapples, rippers, and thumbs. Each is designed to optimize the versatility and performance of your machine.

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.

Cat Center-Lock™ Pin Grabber Coupler

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

Hydraulic Kits

Caterpillar offers field-installed hydraulic kits that are uniquely designed to integrate Cat Work Tools with Cat excavators. Hoses and tubes are pre-made, pre-shaped, and pre-painted to make installation quick and easy.

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.

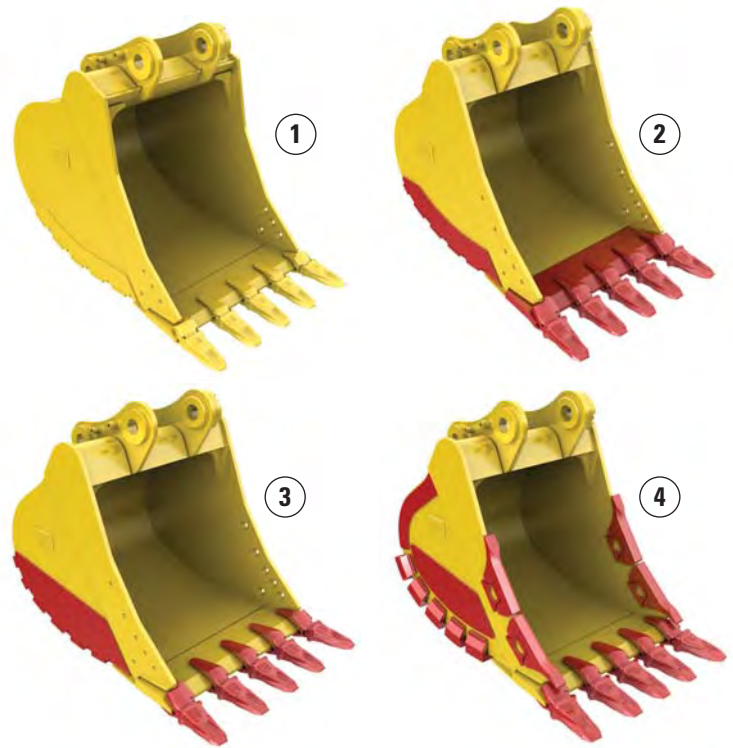
Extreme Duty (XD)

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
- **Center-Lock Pin Grabber Performance** for maximum digging performance while keeping the versatility and convenience of a coupler
- **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 (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.

**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.

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



Safety

Features to help protect 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 improves visibility while meeting the latest ROPS regulations. 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

A rearview camera (2) housed in the counterweight area is available as an attachment. 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 U.S. EPA Tier 4 Interim emissions regulations.
- The 349E performs the same amount of work while burning 3% less fuel than the previous D Series model, which means more efficiency, less resources, 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 bio diesel (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 Flywheel Power	295 kW	396 hp
Net Power – ISO 14396	317 kW	425 hp
Net Power – SAE J1349	301 kW	404 hp
Gross Power – SAE J1995	322 kW	432 hp
Bore	130 mm	5.12 in
Stroke	157 mm	6.18 in
Displacement	12.5 L	568 in ³

Weights

Minimum Weight*	47 800 kg	105,400 lb
Maximum Weight**	53 300 kg	117,500 lb

*6.9 m (22'8") HD Reach boom, R3.35TB (11'0") HD stick, 9.0 mt (9.9 t) counterweight, Long FIX undercarriage, 3.1 m³ (4.1 yd³) 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, 3.2 m³ (4.2 yd³) 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
DB Family Bucket Cylinder – Bore	160 mm	6.30 in
DB Family Bucket Cylinder – Stroke	1356 mm	53.39 in
TB Family Bucket Cylinder – Bore	170 mm	6.69 in
TB 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 lb-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

SAE J1166

- 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.

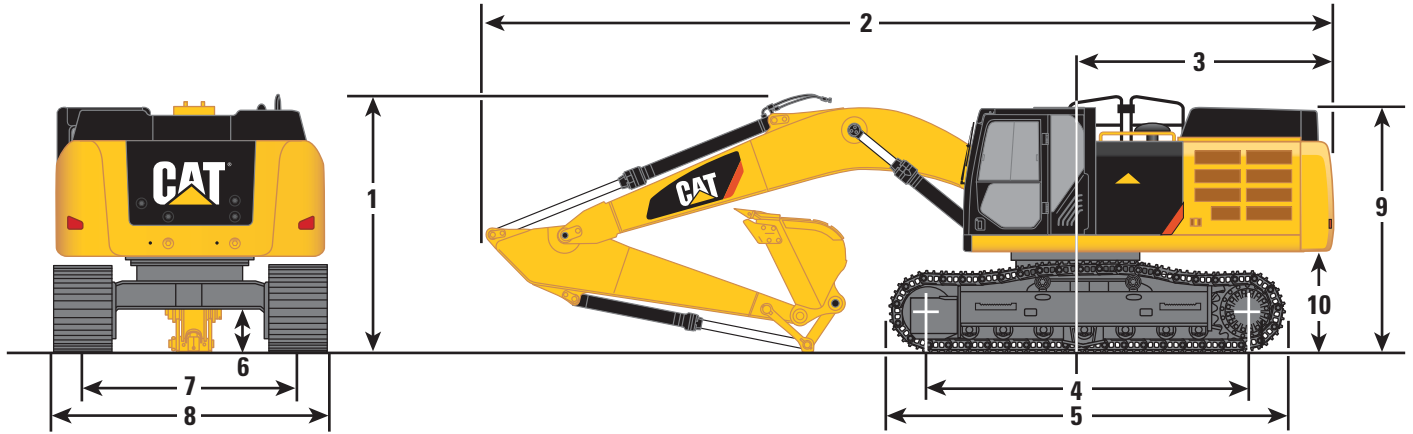
Standards

Brakes	ISO and SAE
Cab/FOGS	ISO and SAE

349E L Hydraulic Excavator Specifications

Dimensions – Long FIX Undercarriage

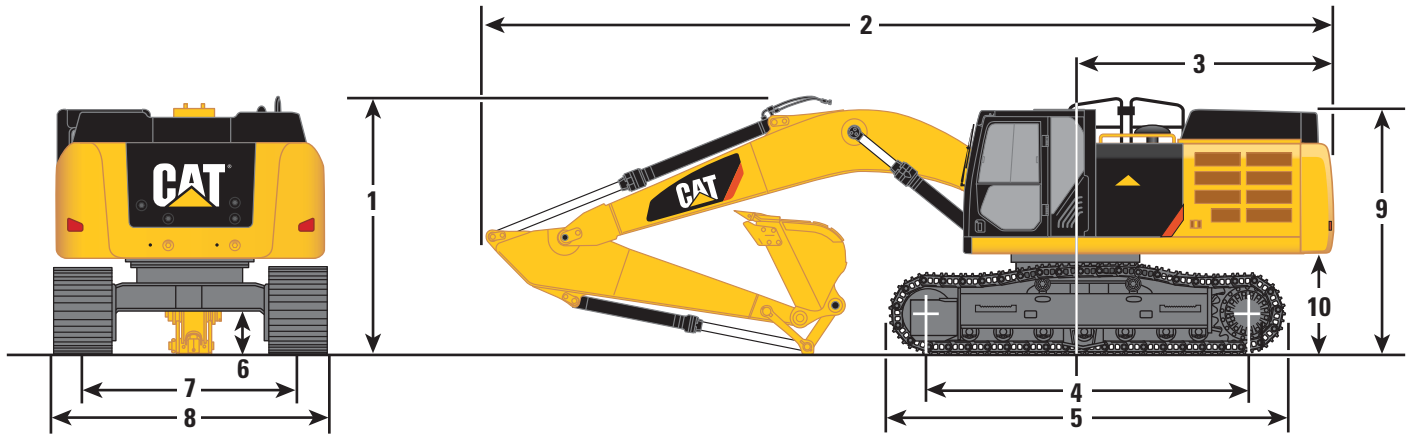
All dimensions are approximate.



Stick	HD Reach Boom 6.9 m (22'8")		Mass Boom 6.55 m (21'6")	
	R3.9TB (12'10")	R3.35TB (11'0")	M3.0UB (9'10")	M2.5UB (8'2")
	mm (ft)	mm (ft)	mm (ft)	mm (ft)
1 Shipping Height	3670 (12'1")	3730 (12'3")	4020 (13'2")	3980 (13'1")
Shipping Height with Top Guard	3670 (12'1")	3730 (12'3")	4020 (13'2")	3980 (13'1")
2 Shipping Length	11 930 (39'2")	11 920 (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")
4 Length to Center of Rollers	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")
6 Ground Clearance (including Shoe Lug Height)	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")
8 Transport Width				
600 mm (24") Shoes	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")
900 mm (36") Shoes	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")
Cab Height with Top Guard	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")

Dimensions – Long VG Undercarriage

All dimensions are approximate.

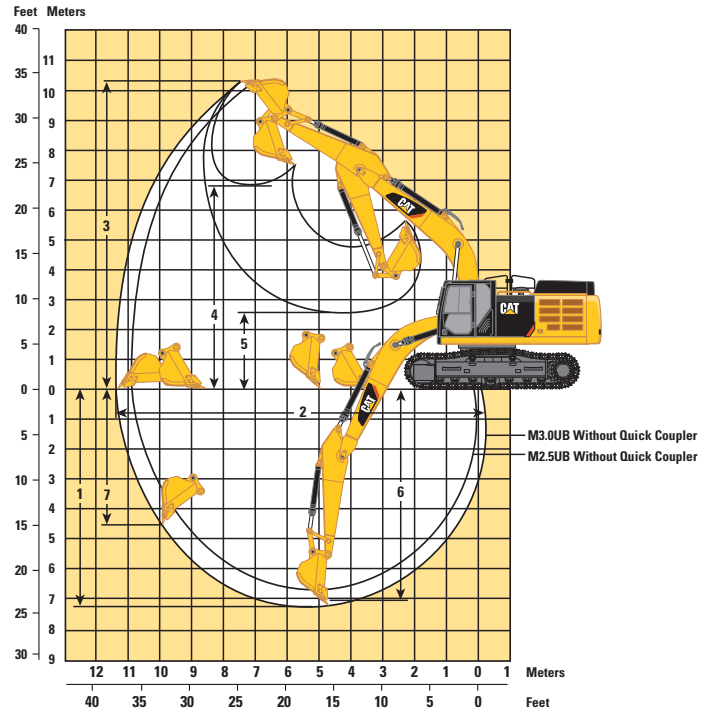
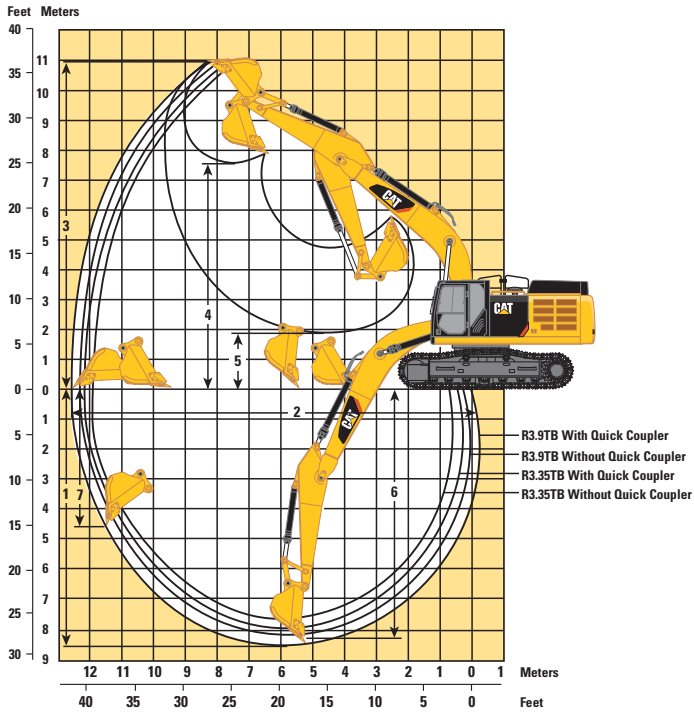


Stick	HD Reach Boom 6.9 m (22'8")		Mass Boom 6.55 m (21'6")	
	R3.9TB (12'10") mm (ft)	R3.35TB (11'0") mm (ft)	M3.0UB (9'10") mm (ft)	M2.5UB (8'2") mm (ft)
1 Shipping Height	3650 (12'0")	3550 (11'8")	4020 (13'2")	4010 (13'2")
Shipping Height with Top Guard	3650 (12'0")	3550 (11'8")	4020 (13'2")	4010 (13'2")
2 Shipping Length	11 890 (39'0")	11 820 (38'9")	11 560 (37'11")	11 640 (38'2")
3 Tail Swing Radius	3760 (12'4")	3760 (12'4")	3760 (12'4")	3760 (12'4")
4 Length to Center of Rollers	4340 (14'3")	4340 (14'3")	4340 (14'3")	4340 (14'3")
5 Track Length	5380 (17'8")	5380 (17'8")	5380 (17'8")	5380 (17'8")
6 Ground Clearance (including Shoe Lug Height)	740 (2'5")	740 (2'5")	740 (2'5")	740 (2'5")
7 Track Gauge (Expanded)	2890 (9'6")	2890 (9'6")	2890 (9'6")	2890 (9'6")
Track Gauge (Retracted)	2390 (7'10")	2390 (7'10")	2390 (7'10")	2390 (7'10")
8 Transport Width (Expanded)				
600 mm (24") Shoes	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")
900 mm (36") Shoes	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")
750 mm (30") Shoes	3140 (10'4")	3140 (10'4")	3140 (10'4")	3140 (10'4")
900 mm (36") Shoes	3290 (10'10")	3290 (10'10")	3290 (10'10")	3290 (10'10")
9 Cab Height	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")
10 Counterweight Clearance	1430 (4'8")	1430 (4'8")	1430 (4'8")	1430 (4'8")

349E L Hydraulic Excavator Specifications

Working Ranges

All dimensions are approximate.



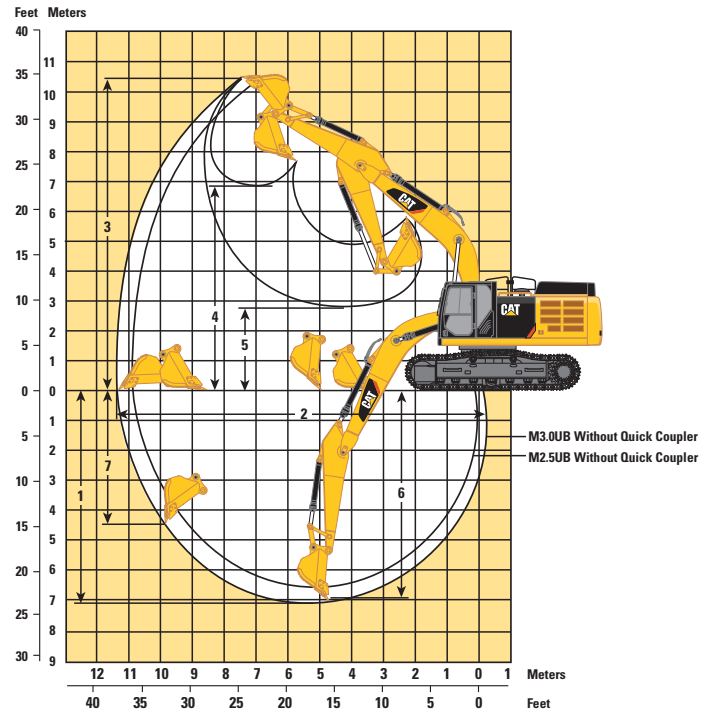
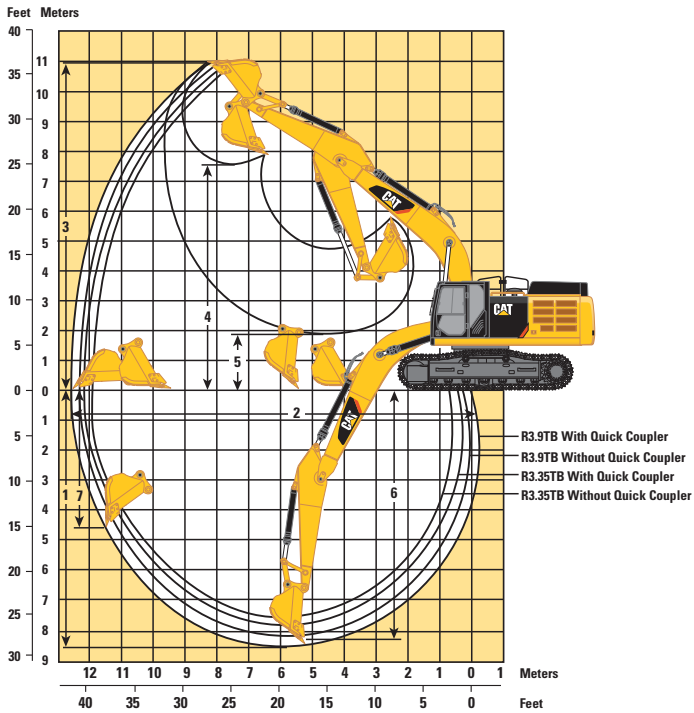
HD Reach Boom
6.9 m (22'8")

Mass Boom
6.55 m (21'6")

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

Working Ranges

All dimensions are approximate.



HD Reach Boom 6.9 m (22'8")

Mass Boom 6.55 m (21'6")

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

349E L Hydraulic Excavator Specifications

Operating Weight and Ground Pressure

	900 mm (36") 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)
Long FIX Undercarriage						
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)
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)
Long VG Undercarriage						
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)		
Reach Boom – 6.9 m (22'8")	4510	9,900
Mass Boom – 6.55 m (21'6")	4750	10,500
Stick (includes lines, pins and bucket cylinder)		
R3.9TB HD (12'10")	2750	6,100
R3.35TB HD (11'0")	2480	5,500
M3.0UB (9'10")	2930	6,500
M2.5UB (8'2")	2700	6,000
Track shoe (Long FIX/per two tracks)		
600 mm (24") double grouser	5240	11,560
750 mm (30") triple grouser	5880	12,960
900 mm (36") triple grouser	6640	14,640
Track shoe (Long VG/per two tracks)		
600 mm (24") double grouser	5300	11,680
750 mm (30") triple grouser	5940	13,100
900 mm (36") triple grouser	6700	14,780
Buckets		
TB1880GD – 3.10 m ³ (4.05 yd ³)	2440	5,400
TB1555EX – 1.9 m ³ (2.49 yd ³)	2340	5,200

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

Bucket and Stick Forces

Stick	HD Reach Boom 6.9 m (22'8")		Mass Boom 6.55 m (21'6")	
	R3.9TB (12'10")	R3.35TB (11'0")	M3.0UB (9'10")	M2.5UB (8'2")
	kN (lbf)	kN (lbf)	kN (lbf)	kN (lbf)
General Duty				
Bucket Digging Force (ISO)	268 (60,200)	268 (60,200)	296 (66,500)	296 (66,500)
Stick Digging Force (ISO)	184 (41,400)	201 (45,200)	212 (47,700)	241 (54,200)
Bucket Digging Force (SAE)	237 (53,300)	237 (53,300)	260 (58,500)	260 (58,500)
Stick Digging Force (SAE)	180 (40,500)	195 (43,800)	205 (46,100)	231 (51,900)
General Duty Capacity				
Bucket Digging Force (ISO)	268 (60,200)	268 (60,200)	–	–
Stick Digging Force (ISO)	183 (41,100)	199 (44,700)	–	–
Bucket Digging Force (SAE)	239 (53,700)	239 (53,700)	–	–
Stick Digging Force (SAE)	178 (40,000)	193 (43,400)	–	–
Heavy Duty				
Bucket Digging Force (ISO)	268 (60,200)	268 (60,200)	296 (66,500)	296 (66,500)
Stick Digging Force (ISO)	184 (41,400)	201 (45,200)	212 (47,700)	241 (54,200)
Bucket Digging Force (SAE)	237 (53,300)	237 (53,300)	260 (58,500)	260 (58,500)
Stick Digging Force (SAE)	180 (40,500)	195 (43,800)	205 (46,100)	231 (51,900)
Severe Duty				
Bucket Digging Force (ISO)	268 (60,200)	268 (60,200)	292 (65,600)	292 (65,600)
Stick Digging Force (ISO)	184 (41,400)	201 (45,200)	211 (47,400)	240 (54,000)
Bucket Digging Force (SAE)	237 (53,300)	237 (53,300)	255 (57,300)	255 (57,300)
Stick Digging Force (SAE)	180 (40,500)	195 (43,800)	204 (45,900)	230 (51,700)
Extreme Duty				
Bucket Digging Force (ISO)	262 (58,900)	262 (58,900)	–	–
Stick Digging Force (ISO)	183 (41,100)	199 (44,700)	–	–
Bucket Digging Force (SAE)	237 (53,300)	237 (53,300)	–	–
Stick Digging Force (SAE)	180 (40,500)	195 (43,800)	–	–

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")	
	R3.9TB (12'10")	R3.35TB (11'0")	M3.0UB (9'10")	M2.5UB (8'2")
	kN (lbf)	kN (lbf)	kN (lbf)	kN (lbf)
For CW-55				
General Duty				
Bucket Digging Force (ISO)	220 (49,500)	220 (49,500)	–	–
Stick Digging Force (ISO)	172 (38,700)	186 (41,800)	–	–
Bucket Digging Force (SAE)	204 (45,900)	204 (45,900)	–	–
Stick Digging Force (SAE)	169 (38,000)	182 (40,900)	–	–
Heavy Duty				
Bucket Digging Force (ISO)	–	–	262 (58,900)	262 (58,900)
Stick Digging Force (ISO)	–	–	202 (45,400)	228 (51,300)
Bucket Digging Force (SAE)	–	–	237 (53,300)	237 (53,300)
Stick Digging Force (SAE)	–	–	197 (44,300)	221 (49,700)
Heavy Duty – Power				
Bucket Digging Force (ISO)	223 (50,100)	223 (50,100)	–	–
Stick Digging Force (ISO)	173 (38,900)	188 (42,300)	–	–
Bucket Digging Force (SAE)	205 (46,100)	205 (46,100)	–	–
Stick Digging Force (SAE)	170 (38,200)	184 (41,400)	–	–
Severe Duty				
Bucket Digging Force (ISO)	223 (50,100)	223 (50,100)	259 (58,200)	259 (58,200)
Stick Digging Force (ISO)	173 (38,900)	188 (42,300)	202 (45,400)	227 (51,000)
Bucket Digging Force (SAE)	205 (46,100)	205 (46,100)	234 (52,600)	234 (52,600)
Stick Digging Force (SAE)	170 (38,200)	184 (41,400)	196 (44,100)	220 (49,500)

349E L Work Tool Offering Guide*

Boom Type	Reach Boom (HD)		Mass Boom	
	R3.9 (HD) (12'10")	R3.35 (HD) (11'0")	M3.0 (9'10")	M2.5 (8'2")
Stick Size				
Hydraulic Hammer	H160Ds H180Ds	H160Ds H180Ds	H160Ds H180Ds	H160Ds H180Ds
Multi-Processor	MP30	MP30	MP30	MP30
Mobile Scrap and Demolition Shear	S340B S365C** S385C**	S340B S365C** S385C**	S340B S365C** S385C**	S340B S365C** S385C**
Contractors' Grapple	G330	G330	G330	G330
Trash Grapple				
Thumbs				
Rippers				
Center-Lock Pin Grabber Coupler				
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 (LC-FIX) HD Reach Boom Lift Capacities – Americas



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

















Boom – 6.9 m (22'8")

Counterweight – 9.0 mt (9.9 t)

Bucket – None

Stick – R3.9TB (12'10")

Shoes – 900 mm (35") triple grouser

	1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft				m ft	
																
9.0 m 30.0 ft	kg lb													*7950 *17,650	*7950 *17,650	7.86 25.34
7.5 m 25.0 ft	kg lb													*7600 *16,800	*7600 *16,800	8.96 29.16
6.0 m 20.0 ft	kg lb								*11 850 *25,850	11 350 24,400	*11 250 *23,150	8450 18,150	*7550 *16,600	7400 16,450	9.71 31.74	
4.5 m 15.0 ft	kg lb						*15 100 *32,600	*15 100 *32,600	*13 050 *28,300	10 950 23,550	*11 800 *25,750	8250 17,750	*7650 *16,850	6750 14,900	10.18 33.36	
3.0 m 10.0 ft	kg lb				*24 150 *51,850	21 950 47,400	*17 650 *38,100	14 450 31,150	*14 400 *31,250	10 450 22,550	*12 550 *27,050	8000 17,200	*8000 *17,600	6350 14,000	10.42 34.16	
1.5 m 5.0 ft	kg lb				*25 850 *60,100	20 500 44,200	*19 800 *42,850	13 650 29,450	*15 700 *34,000	10 000 21,550	12 300 26,450	7750 16,650	*8600 *18,900	6250 13,700	10.43 34.21	
Ground Line	kg lb				*23 850 *55,200	19 850 42,650	*21 100 *45,650	13 150 28,300	15 800 33,950	9650 20,850	12 100 26,000	7550 16,200	*9500 *20,950	6300 13,900	10.21 33.51	
-1.5 m -5.0 ft	kg lb			*15 350 *34,600	*15 350 *34,600	*28 450 *62,150	19 600 42,200	*21 350 *46,200	12 850 27,700	15 550 33,500	9450 20,400	11 950 25,750	7400 15,950	10 650 23,500	6650 14,650	9.77 32.01
-3.0 m -10.0 ft	kg lb	*38,700	*38,700	*22 400 *50,500	*22 400 *50,500	*26 850 *58,150	19 700 42,300	*20 450 *44,250	12 850 27,650	15 500 33,400	9450 20,350	11 950 26,300	7400 16,350	11 900 26,300	7400 16,350	9.04 29.58
-4.5 m -15.0 ft	kg lb			*31 400 *68,000	*31 400 *68,000	*23 500 *50,700	20 000 43,000	*18 200 *39,100	13 000 28,000	*14 050 *29,900	9600 20,700			*12 750 *28,100	8850 19,750	7.97 25.95
-6.0 m -20.0 ft	kg lb					*17 800 *37,650	*17 800 *37,650	*13 450 *27,900	13 450 27,900					*12 300 *26,850	*12 300 *26,850	6.38 20.50

















Boom – 6.9 m (22'8")

Counterweight – 9.0 mt (9.9 t)

Bucket – None

Stick – R3.35TB (11'0")

Shoes – 900 mm (35") triple grouser

	1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft				m ft	
																
9.0 m 30.0 ft	kg lb													*9050 *20,150	*9050 *20,150	7.30 23.48
7.5 m 25.0 ft	kg lb								*12 100 *26,600	11 400 24,450				*8550 *18,850	*8550 *18,850	8.48 27.57
6.0 m 20.0 ft	kg lb								*12 700 *27,650	11 200 24,050	*10 800 *20,350	8350 17,850	*8400 *18,450	7900 17,550	9.27 30.28	
4.5 m 15.0 ft	kg lb				*21 000 *45,000	*21 000 *45,000	*16 200 *35,050	15 050 32,500	*13 800 *29,950	10 800 23,250	*12 450 *27,100	8150 17,550	*8500 *18,700	7150 15,800	9.76 31.97	
3.0 m 10.0 ft	kg lb				*26 050 *56,000	21 450 46,300	*18 650 *40,250	14 250 30,700	*15 100 *32,700	10 350 22,350	12 550 26,950	7950 17,100	*8850 *19,450	6750 14,900	10.01 32.81	
1.5 m 5.0 ft	kg lb				*18 650 *44,600	*18 650 *43,650	*20 550 *44,450	13 550 29,200	16 100 34,700	9950 21,500	12 300 26,450	7750 16,650	*9450 *20,800	6600 14,550	10.02 32.87	
Ground Line	kg lb				*21 000 *48,750	19 850 42,700	*21 450 *46,450	13 150 28,300	15 800 34,000	9700 20,900	12 100 26,050	7550 16,300	*10 450 *23,050	6750 14,800	9.80 32.14	
-1.5 m -5.0 ft	kg lb			*14 950 *33,750	*14 950 *33,750	*28 100 *61,000	19 800 42,550	*21 250 *46,050	12 950 27,900	15 650 33,650	9550 20,600	12 050 25,950	7500 16,150	11 450 25,300	7150 15,800	9.33 30.56
-3.0 m -10.0 ft	kg lb			*23 900 *53,950	*23 900 *53,950	*25 750 *55,800	19 950 42,900	*19 950 *43,100	13 000 28,000	15 650 33,700	9550 20,650			13 000 *28,650	8050 17,850	8.57 28.01
-4.5 m -15.0 ft	kg lb			*27 850 *60,100	*27 850 *60,100	*21 750 *46,800	20 350 43,750	*17 000 *36,400	13 250 28,550					*12 800 *28,150	9950 22,200	7.43 24.14

*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 – Americas



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

















Boom – 6.9 m (22'8")

Counterweight – 9.0 mt (9.9 t)

Bucket – None

Stick – R3.9TB (12'10")

Shoes – 900 mm (35") triple grouser

	1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft				m ft	
																
9.0 m 30.0 ft	kg lb													*7900 *17,550	*7900 *17,550	7.98 25.78
7.5 m 25.0 ft	kg lb											*7950 *16,750	*7950 *16,750	*7600 *16,750	*7600 *16,750	9.05 29.46
6.0 m 20.0 ft	kg lb								*11 950 *26,050	*11 950 *26,050	*11 300 *23,800	9300 20,000	*7550 *16,600	*7550 *16,600	9.77 31.93	
4.5 m 15.0 ft	kg lb						*15 350 *33,100	*15 350 *33,100	*13 150 *28,550	*13 150 *28,550	*11 900 *25,900	9100 19,550	*7700 *16,900	*7700 *16,900	10.22 33.47	
3.0 m 10.0 ft	kg lb				*24 600 *52,850	24 350 52,450	*17 850 *38,600	15 900 34,300	*14 550 *31,550	11 500 24,850	*12 650 *27,450	8850 19,000	*8050 *17,700	*8050 *17,700	10.43 34.20	
1.5 m 5.0 ft	kg lb				*25 100 *59,550	22 900 49,350	*20 000 *43,200	15 150 32,600	*15 800 *34,250	11 100 23,900	12 800 27,550	8550 18,450	*8650 *19,050	*8650 *19,050	10.42 34.18	
Ground Line	kg lb		*9700 *22,000	*9700 *22,000	*24 100 *55,700	22 300 47,900	*21 150 *45,850	14 650 31,500	16 400 35,350	10 750 23,150	12 600 27,100	8350 18,050	*9600 *21,200	*9600 *21,200	10.18 33.40	
-1.5 m -5.0 ft	kg lb		*16 000 *36,000	*16 000 *36,000	*28 550 *61,900	22 100 47,500	*21 300 *46,100	14 400 31,000	16 200 34,900	10 550 22,750	12 450 26,850	8250 17,800	*11 150 *24,650	*11 150 *24,650	9.71 31.82	
-3.0 m -10.0 ft	kg lb		*23 150 *52,250	*23 150 *52,250	*26 600 *57,600	22 200 47,700	*20 300 *43,900	14 350 30,950	*16 000 *34,500	10 550 22,700			12 600 27,850	8350 18,500	8.96 29.29	
-4.5 m -15.0 ft	kg lb		*30 850 *66,500	*30 850 *66,500	*23 100 *49,750	22 500 48,400	*17 900 *38,400	14 550 31,350	*13 750 *29,100	10 700 23,150			*12 750 *28,100	*10 100 22,550	7.84 25.52	
-6.0 m -20.0 ft	kg lb				*17 050 *37,550	*17 050 *37,550	*12 700 *27,950	*12 700 *27,950					*12 150 *27,300	*12 150 *27,300	6.18 19.45	

















Boom – 6.9 m (22'8")

Counterweight – 9.0 mt (9.9 t)

Bucket – None

Stick – R3.35TB (11'0")

Shoes – 900 mm (35") triple grouser

	1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft				m ft	
																
9.0 m 30.0 ft	kg lb													*9000 *19,950	*9000 *19,950	7.44 23.95
7.5 m 25.0 ft	kg lb								*12 150 *26,650	*12 150 *26,650			*8500 *18,800	*8500 *18,800	8.57 27.88	
6.0 m 20.0 ft	kg lb								*12 800 *27,850	12 250 26,400	*11 250 *21,650	9200 19,700	*8400 *18,450	*8400 *18,450	9.33 30.48	
4.5 m 15.0 ft	kg lb				*21 500 *46,100	*21 500 *46,100	*16 450 *35,550	*16 450 *35,550	*13 900 *30,200	11 900 25,600	*12 500 *27,200	9000 19,400	*8500 *18,750	*7900 *17,400	9.80 32.09	
3.0 m 10.0 ft	kg lb				*26 500 *56,850	23 800 51,350	*18 850 *40,700	15 700 33,900	*15 200 *32,950	11 450 24,650	13 050 28,050	8800 18,900	*8900 *19,550	*7500 *16,450	10.02 32.85	
1.5 m 5.0 ft	kg lb				*18 550 *44,150	*18 550 *44,150	*20 700 *44,700	15 050 32,400	*16 300 *35,300	11 050 23,800	12 800 27,500	8550 18,450	*9550 *21,000	*7350 *16,200	10.01 32.83	
Ground Line	kg lb				*21 550 *49,900	*21 550 *48,000	*21 500 *46,500	14 650 31,550	16 450 35,350	10 750 23,200	12 600 27,150	8400 18,100	*10 600 *23,350	*7550 *16,600	9.76 32.02	
-1.5 m -5.0 ft	kg lb		*15 800 *35,600	*15 800 *35,600	*27 900 *60,600	22 300 47,900	*21 200 *45,900	14 500 31,200	16 300 35,050	10 650 22,950	12 550 27,050	8350 18,050	12 050 26,650	*8050 *17,750	9.27 30.36	
-3.0 m -10.0 ft	kg lb		*24 850 *56,150	*24 850 *56,150	*25 450 *55,100	22 450 48,300	*19 750 *42,650	14 550 31,300	*15 500 *33,350	10 700 23,050			*13 000 *28,650	*9150 *20,200	8.47 27.70	
-4.5 m -15.0 ft	kg lb		*27 100 *58,450	*27 100 *58,450	*21 250 *45,700	*21 250 *45,700	*16 600 *35,450	14 800 31,900					*12 750 *28,000	11 400 25,400	7.29 23.68	

*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 – Americas



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side


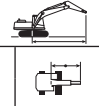














Boom – 6.55 m (21'6")

Counterweight – 9.0 mt (9.9 t)

Bucket – None

Stick – M3.0UB (9'10")

Shoes – 900 mm (35") triple grouser

	1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft				m ft
															
9.0 m 30.0 ft	kg lb														
7.5 m 25.0 ft	kg lb								*11 550	10 900			*10 000 *22,050	*10 000 *22,050	7.67 24.87
6.0 m 20.0 ft	kg lb								*13 000 *28,350	10 750 23,100			*9700 *21,400	8600 19,150	8.53 27.85
4.5 m 15.0 ft	kg lb				*20 900 *44,800	*20 900 *44,800	*16 200 *35,050	14 650 31,600	*13 850 *30,150	10 400 22,350	*10 750 7700		*9800 *21,600	7600 16,850	9.07 29.69
3.0 m 10.0 ft	kg lb				*25 650 *55,100	20 900 45,150	*18 450 *39,850	13 800 29,750	*15 000 *32,500	9950 21,400	12 150 26,050	7500 16,150	*10 250 *22,500	7100 15,650	9.33 30.59
1.5 m 5.0 ft	kg lb				*22 900 *55,050	19 700 42,400	*20 200 *43,650	13 050 28,150	15 700 33,800	9550 20,550	11 900 25,600	7300 15,750	*11 050 *24,250	6900 15,250	9.34 30.65
Ground Line	kg lb				*25 950 *60,500	19 250 41,350	*20 900 *45,300	12 650 27,200	15 400 33,100	9250 19,950	11 750 7200		11 550 25,450	7050 15,550	9.10 29.86
-1.5 m -5.0 ft	kg lb			*17 850 *40,400	*17 850 *40,400	*27 100 *58,800	19 200 41,250	*20 500 *44,400	12 450 26,850	15 250 32,800	9150 19,700		12 550 27,650	7600 16,800	8.59 28.16
-3.0 m -10.0 ft	kg lb			*29 400 *66,650	*29 400 *66,650	*24 300 *52,550	19 400 41,700	*18 700 *40,400	12 550 27,050	*14 300 *30,450	9250 19,950		*13 450 *29,650	8850 19,600	7.76 25.35
-4.5 m -15.0 ft	kg lb					*19 300 *41,300	*19 300 *41,300	*14 600 *30,750	12 950 27,950				*12 900 *28,300	11 700 26,200	6.48 20.99


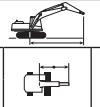












Boom – 6.55 m (21'6")

Counterweight – 9.0 mt (9.9 t)

Bucket – None

Stick – M2.5UB (8'2")

Shoes – 900 mm (35") triple grouser

	1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				m ft		
															
9.0 m 30.0 ft	kg lb														
7.5 m 25.0 ft	kg lb											*13 050 *28,900	11 800 26,600	7.10 22.99	
6.0 m 20.0 ft	kg lb							*15 350 *33,300	15 300 32,900	*13 850 *30,350	10 700 22,950	*12 700 *27,950	9500 21,150	8.03 26.19	
4.5 m 15.0 ft	kg lb				*22 750 *48,800	22 400 48,450	*17 250 *37,250	14 550 31,350	*14 600 *31,800	10 350 22,300	*12 850 *28,250	8350 18,400	*12 850 *28,250	8350 18,400	8.60 28.14
3.0 m 10.0 ft	kg lb					*58,350	44,300	*19 300 *41,750	13 700 29,550	*15 600 *33,850	9950 21,450	12 450 27,400	7750 17,050	8.87 29.09	
1.5 m 5.0 ft	kg lb							*20 800 *44,950	13 100 28,200	15 750 33,900	9600 20,700	12 200 26,900	7550 16,600	8.88 29.15	
Ground Line	kg lb				*23 950 *56,350	19 450 41,800	*21 150 *45,800	12 750 27,450	15 500 33,350	9350 20,200	12 600 27,800	7750 17,050	12 600 27,800	7750 17,050	8.63 28.33
-1.5 m -5.0 ft	kg lb			*18 050 *41,150	*18 050 *41,150	*26 250 *57,050	19 500 41,900	*20 300 *43,950	12 650 27,300	15 450 33,250	9300 20,100	13 850 30,550	8450 18,650	8.10 26.52	
-3.0 m -10.0 ft	kg lb			*28 000 *61,000	*28 000 *61,000	*22 900 *49,600	19 800 42,550	*17 900 *38,600	12 850 27,650			*14 100 *31,000	10 050 22,250	7.20 23.52	
-4.5 m -15.0 ft	kg lb					*16 950 *36,050	*16 950 *36,050					*12 900 *28,100	*12 900 *28,100	5.79 18.72	

*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 – Americas



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side



Boom – 6.55 m (21'6")

Counterweight – 9.0 mt (9.9 t)

Bucket – None

Stick – M3.0UB (9'10")

Shoes – 600 mm (24") double grouser

	1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft				m ft
	kg lb	kg lb	kg lb	kg lb	kg lb	kg lb	kg lb	kg lb	kg lb	kg lb	kg lb	kg lb	kg lb		
9.0 m 30.0 ft															
7.5 m 25.0 ft									*11 550	10 650			*10 000 *22,050	*10 000 *22,050	7.67 24.87
6.0 m 20.0 ft									*13 000 *28,350	10 500 22,550			*9700 *21,400	8400 18,650	8.53 27.85
4.5 m 15.0 ft					*20 900 *44,800	*20 900 *44,800	*16 200 *35,050	14 350 30,900	*13 850 *30,150	10 150 21,800	*10 750	7500	*9800 *21,600	7400 16,400	9.07 29.69
3.0 m 10.0 ft					*25 650 *55,100	20 400 44,050	*18 450 *39,850	13 450 29,000	*15 000 *32,500	9700 20,850	11 800 25,350	7300 15,700	*10 250 *22,500	6900 15,200	9.33 30.59
1.5 m 5.0 ft					*22 900 *55,050	19 150 41,300	*20 200 *43,650	12 700 27,450	15 300 32,850	9300 20,000	11 550 24,850	7100 15,300	10 950 24,050	6750 14,800	9.34 30.65
Ground Line					*25 950 *60,500	18 750 40,250	*20 900 *45,300	12 300 26,450	14 950 32,150	9000 19,350	11 400	7000	11 250 24,750	6850 15,100	9.10 29.86
-1.5 m -5.0 ft			*17 850 *40,400	*17 850 *40,400	*27 100 *58,800	18 700 40,150	*20 500 *44,400	12 150 26,100	14 800 *31,900	8900 19,150			12 150 26,850	7400 16,350	8.59 28.16
-3.0 m -10.0 ft			*29 400 *66,650	*29 400 *66,650	*24 300 *52,550	18 900 40,600	*18 700 *40,400	12 200 26,300	*14 300 *30,450	9000 19,400			*13 450 *29,650	8600 19,050	7.76 25.35
-4.5 m -15.0 ft					*19 300 *41,300	*19 300 *41,300	*14 600 *30,750	12 600 27,250					*12 900 *28,300	11 350 25,550	6.48 20.99



Boom – 6.55 m (21'6")

Counterweight – 9.0 mt (9.9 t)

Bucket – None

Stick – M2.5UB (8'2")

Shoes – 600 mm (24") double grouser

	1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				m ft	
	kg lb	kg lb	kg lb	kg lb	kg lb	kg lb	kg lb	kg lb	kg lb	kg lb	kg lb			
9.0 m 30.0 ft														
7.5 m 25.0 ft												*13 050 *28,900	11 550 26,000	7.10 22.99
6.0 m 20.0 ft							*15 350 *33,300	14 950 32,150	*13 850 *30,350	10 400 22,350	*12 700 *27,950	9250 20,600	8.03 26.19	
4.5 m 15.0 ft					*22 750 *48,800	21 900 47,300	*17 250 *37,250	14 200 30,600	*14 600 *31,800	10 100 21,750	*12 850 *28,250	8100 17,950	8.60 28.14	
3.0 m 10.0 ft					*58,350	43,200	*19 300 *41,750	13 350 28,850	*15 600 *33,800	9700 20,900	12 100 26,650	7500 16,600	8.87 29.09	
1.5 m 5.0 ft							*20 800 *44,950	12 750 27,450	15 300 32,950	9350 20,150	11 900 26,150	7350 16,150	8.88 29.15	
Ground Line					*23 950 *56,350	18 950 40,650	*21 150 45,700	12 400 26,700	15 050 32,400	9100 19,650	12 250 27,000	7550 16,600	8.63 28.33	
-1.5 m -5.0 ft			*18 050 *41,150	*18 050 *41,150	*26 250 *57,050	19 000 40,800	*20 300 *43,950	12 300 26,550	15 000 32,300	9050 19,550	13 450 29,700	8200 18,100	8.10 26.52	
-3.0 m -10.0 ft			*28 000 *61,000	*28 000 *61,000	*22 900 *49,600	19 300 41,450	*17 900 *38,600	12 500 26,900			*14 100 *31,000	9750 21,650	7.20 23.52	
-4.5 m -15.0 ft					*16 950 *36,050	*16 950 *36,050					*12 900 *28,100	*12 900 *28,100	5.79 18.72	

*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 Bucket Specifications and Compatibility

	Linkage	Width		Capacity		Weight		Fill	Mass Boom		Reach Boom (HD)	
		mm	in	m ³	yd ³	kg	lb		%	M2.5 (8'2")	M3.0 (9'10")	R3.35 HD (11'0")
Without Quick Coupler												
General Duty (GDC)	TB	750	30	0.95	1.24	1311	2,889	100%			●	●
	TB	900	36	1.23	1.60	1441	3,176	100%			●	●
	TB	1050	42	1.51	1.98	1525	3,361	100%			●	●
	TB	1200	48	1.80	2.36	1676	3,694	100%			●	●
	TB	1350	54	2.10	2.74	1792	3,950	100%			●	●
	TB	1500	60	2.39	3.13	1943	4,282	100%			●	⊙
	TB	1700	68	2.78	3.64	2128	4,690	100%			⊖	⊖
	TB	1850	74	3.08	4.04	2254	4,968	100%			⊖	○
General Duty XL (GDXL)	TB	2043	80	3.82	5.00	2373	5,230	100%			○	◇
Heavy Duty (HD)	TB	900	36	1.08	1.41	1594	3,513	100%			●	●
	TB	1050	42	1.34	1.75	1684	3,712	100%			●	●
	TB	1200	48	1.60	2.09	1834	4,043	100%			●	●
	TB	1350	54	1.87	2.44	1974	4,350	100%			●	●
	TB	1500	60	2.14	2.80	2125	4,684	100%			●	⊙
	TB	1650	66	2.41	3.15	2286	5,039	100%			⊙	⊖
	TB	1800	71	2.69	3.52	2423	5,340	100%			⊖	○
	UB	1650	65	2.77	3.62	2581	5,689	100%	⊙	⊖		
	UB	1850	73	3.19	4.16	2741	6,041	100%	⊖	○		
UB	1950	77	3.43	4.48	2898	6,387	100%	⊖	○			
Severe Duty (SD)	TB	760	30	0.88	1.15	1446	3,187	90%			●	●
	TB	900	36	1.08	1.41	1677	3,696	90%			●	●
	TB	1050	42	1.34	1.75	1779	3,921	90%			●	●
	TB	1200	48	1.60	2.09	1952	4,302	90%			●	●
	TB	1400	55	1.87	2.44	2180	4,805	90%			●	●
	TB	1550	61	2.14	2.80	2381	5,248	90%			●	⊙
	TB	1700	67	2.41	3.16	2524	5,563	90%			⊙	⊖
	TB	1850	74	2.69	3.52	2726	6,008	90%			⊖	⊖
	UB	1450	58	2.39	3.13	2540	5,598	90%	●	●		
	UB	1850	73	3.21	4.20	2987	6,583	90%	⊙	⊖		
Extreme Duty (XD)	TB	1250	49	1.60	2.09	2224	4,902	90%			●	●
	TB	1400	55	1.87	2.44	2366	5,215	90%			●	●
Maximum load pin-on (payload + bucket)								kg	7995	7200	6730	6210
								lb	17,621	15,869	14,833	13,687

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)
- X Not Recommended

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 Hydraulic Excavator Specifications

349E L Bucket Specifications and Compatibility

	Linkage	Width		Capacity		Weight		Fill	Mass Boom		Reach Boom (HD)		
		mm	in	m ³	yd ³	kg	lb		%	M2.5 (8'2")	M3.0 (9'10")	R3.35 HD (11'0")	R3.9 HD (12'10")
With Center-Lock Quick Coupler													
General Duty (GDC)	TB	750	30	0.95	1.24	1311	2,889	100%			●	●	
	TB	900	36	1.23	1.60	1441	3,176	100%			●	●	
	TB	1050	42	1.51	1.98	1525	3,361	100%			●	●	
	TB	1200	48	1.80	2.36	1676	3,694	100%			●	●	
	TB	1350	54	2.10	2.74	1792	3,950	100%			⊙	⊖	
	TB	1500	60	2.39	3.13	1943	4,282	100%			⊖	⊖	
	TB	1700	68	2.78	3.64	2128	4,690	100%			○	○	
	TB	1850	74	3.08	4.04	2254	4,968	100%			○	◇	
General Duty XL (GDXL)	TB	2043	80	3.82	5.00	2373	5,230	100%			◇	X	
Heavy Duty (HD)	TB	900	36	1.08	1.41	1594	3,513	100%			●	●	
	TB	1050	42	1.34	1.75	1684	3,712	100%			●	●	
	TB	1200	48	1.60	2.09	1834	4,043	100%			●	●	
	TB	1350	54	1.87	2.44	1974	4,350	100%			●	⊙	
	TB	1500	60	2.14	2.80	2125	4,684	100%			⊙	⊖	
	TB	1650	66	2.41	3.15	2286	5,039	100%			⊖	○	
	TB	1800	71	2.69	3.52	2423	5,340	100%			○	◇	
Severe Duty (SD)	TB	760	30	0.88	1.15	1446	3,187	90%			●	●	
	TB	900	36	1.08	1.41	1677	3,696	90%			●	●	
	TB	1050	42	1.34	1.75	1779	3,921	90%			●	●	
	TB	1200	48	1.60	2.09	1952	4,302	90%			●	●	
	TB	1400	55	1.87	2.44	2180	4,805	90%			●	⊙	
	TB	1550	61	2.14	2.80	2381	5,248	90%			⊙	⊖	
	TB	1700	67	2.41	3.16	2524	5,563	90%			⊖	○	
	TB	1850	74	2.69	3.52	2726	6,008	90%			○	◇	
Extreme Duty (XD)	TB	1250	49	1.60	2.09	2224	4,902	90%			●	●	
	TB	1400	55	1.87	2.44	2366	5,215	90%			●	⊙	
Maximum load with coupler (payload + bucket)									kg			5897	5377
									lb			12,997	11,851

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)
- X Not Recommended

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.

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

ENGINE

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

HYDRAULIC SYSTEM

- Regeneration circuit for boom and stick
- Reverse swing dampening valve
- Automatic swing parking brake
- High-performance hydraulic return filter
- 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
- Radio with MP3 auxiliary audio port
- Two stereo speakers
- Storage shelf suitable for lunch or toolbox
- Color LCD display with warning, filter/fluid change, and working hour information
- Adjustable armrest
- Height adjustable joystick consoles
- Neutral lever (lock out) for all controls
- Travel control pedals with removable hand levers
- Capability of installing two additional pedals
- Two power outlets, 10 amp (total)
- Laminated glass front upper window and tempered other windows

UNDERCARRIAGE

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

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 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-ready

349E L 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

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
Tool 20, Electronic Control device,
(common), 1/2P, common circuit
Tool 21, Electronic Control device, 1/2P,
one-way circuit
Tool 25, Electronic Control device, 1P,
two-way circuit

CAB

Cab hatch emergency exit
Seat, high-back air suspension
with heater and cooling
Seat, high-back air suspension with heater
Seat, high-back mechanical suspension
Sunscreen
Windshield wiper, lower with washer
AM/FM radio
Air pre-filter
Travel alarm
Left foot switch
Left pedal
Straight travel pedal

UNDERCARRIAGE

Long FIX undercarriage:
600 mm (24") double grouser shoes
750 mm (28") triple grouser shoes
900 mm (35") 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
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

COUNTERWEIGHT

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

FRONT LINKAGE

Bucket linkage, UB family without lifting eye
Bucket linkage, TB family with lifting eye
Heavy Duty 6.9 m (22'8") reach boom
Heavy Duty R3.9TB 3900 mm (12'10") stick
Heavy Duty R3.35TB 3350 mm (11'0") stick
Mass 6.55 m (21'6") boom
Mass M3.0UB 3000 mm (9'10") stick
Mass M2.5UB 2500 mm (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, cab front, mesh
Guard, vandalism
Cat MSS (anti-theft device)
Rearview camera

TECHNOLOGY

Cat Grade Control Depth and Slope
Product Link

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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