





Engine

Engine Model Net Power – SAE J1349
 Cat[®] C13 ACERT™

 295 kW
 396 hp

Drive		
Maximum Travel Speed	4.7 km/h	2.9 mph
Maximum Drawbar Pull	335 kN	75,300 lbf
Weight		
Minimum Weight	47 800 kg	105,400 lb
Maximum Weight	53 300 kg	117,500 lb

Courtesy of Machine.Market

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-byside 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.



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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 Tier 4 Interim engine is built to meet your demanding needs all day long. There is no interruption to your job process because the Cat regeneration system works automatically with no operator intervention required. If your operators are working in heat-restricted areas, they can use a manual override button (1) to move the machine before the regeneration process begins.

Power Modes

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

Biodiesel-Ready Fuel System

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



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, highvolume loading, and other demanding applications. The ME front provides higher digging forces due to the geometry of the boom and stick relationship. Bucket linkage and cylinders are also built for greater durability.



Work Tools

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



Couplers: Quick Tool Changes

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

Work Tools: Cut, Crush, Pulverize and Load

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

Buckets: Dig, Move, Load

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

SWAP TOOLS

Center-Lock Pin Grabber Coupler
DIG & PACK

CUT, CRUSH, BREAK & RIP



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Multi-Processors

Pro Series Hydraulic Thumbs



Stiff Link Thumbs



Demolition & Sorting Grapple



Contractors' Grapples

Trash Grapples

Ditch Cleaning and Tilt Buckets

General Duty Buckets

Heavy Duty Buckets

Severe Duty Buckets

Extreme Duty Buckets



Vibratory Plate Compactors

Scrap & Demolition Shears

Secondary Pulverizers

CAT

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Hydraulic Hammers

Rippers



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 factoryinstalled 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 VisionLinkTM, 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.



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 meets U.S. EPA Tier 4 Interim emissions regulations.
- The 349E performs the same amount of work while burning up to 5 percent less fuel than the previous D Series model, which means more efficiency, less resources, and fewer 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.
- An overfill indicator rises when the tank is full to help the operator avoid spilling.
- Quick fill ports with connectors ensure fast, easy, and secure changing of hydraulic oil.
- The machine is built to be rebuilt with major structures and components remanufactured to reduce waste and replacement costs.
- The 349E 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 – SAE J1349	295 kW	396 hp	
Gross Power – SAE J1995	322 kW	432 hp	
Bore	130 mm	5.12 in	
Stroke	157 mm	6.18 in	
Displacement	12.5 L	763 in 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

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

Swing Mechanism

Swing Speed	8.7 rpm	
Swing Torque	148.5 kN·m	109,500 lbf-ft

Service Refill Capacities

•		
Fuel Tank Capacity	720 L	190 gal
Cooling System	50 L	13.2 gal
Engine Oil (with filter)	43 L	11.4 gal
Swing Drive (each)	10 L	2.6 gal
Final Drive (each)	15 L	4.0 gal
Hydraulic System (including tank)	570 L	150.6 gal
Hydraulic Tank	407 L	107.5 gal

Track

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

Sound Performance

Operator Noise (Closed) – ISO 6396	71 dB(A)
Spectator Noise – ISO 6395	106 dB(A)

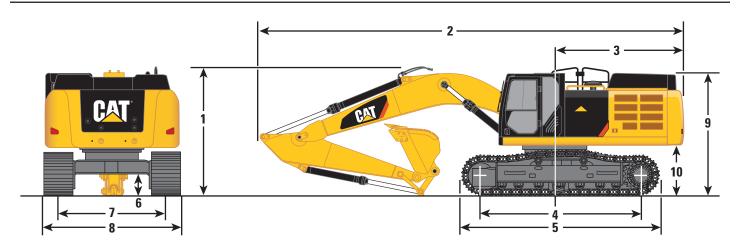
- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- Hearing protection may be needed when operating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

Standards

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

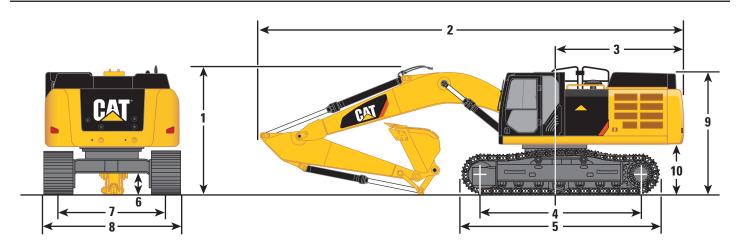
349E L Hydraulic Excavator Specifications

Dimensions – Long FIX Undercarriage



	J		0				Mass Boom 6.55 m (21'6")	
Stick	LR4.3TB (14'1")	R3.9TB (12'10")	R3.35TB (11'0")	M3.0UB (9'10")	M2.5UB (8'2")			
	mm (ft)	mm (ft)	mm (ft)	mm (ft)	mm (ft)			
1 Shipping Height to Boom	3690 (12'1")	3670 (12'1")	3730 (12'3")	4020 (13'2")	3980 (13'1")			
Shipping Height with Guard Rail	3610 (11'10")	3610 (11'10")	3610 (11'10")	3610 (11'10")	3610 (11'10")			
2 Shipping Length	12 420 (40'9")	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")	3760 (12'4")			
4 Length to Center of Rollers	4360 (14'4")	4360 (14'4")	4360 (14'4")	4360 (14'4")	4360 (14'4")			
5 Track Length	5370 (17'7")	5370 (17'7")	5370 (17'7")	5370 (17'7")	5370 (17'7")			
6 Ground Clearance (including Shoe Lug Height)	510 (1'8")	510 (1'8")	510 (1'8")	510 (1'8")	510 (1'8")			
7 Track Gauge	2740 (9'0")	2740 (9'0")	2740 (9'0")	2740 (9'0")	2740 (9'0")			
8 Transport Width								
600 mm (24") Shoes	3340 (11'0")	3340 (11'0")	3340 (11'0")	3340 (11'0")	3340 (11'0")			
750 mm (30") Shoes	3490 (11'5")	3490 (11'5")	3490 (11'5")	3490 (11'5")	3490 (11'5")			
900 mm (35") Shoes	3640 (11'11")	3640 (11'11")	3640 (11'11")	3640 (11'11")	3640 (11'11")			
9 Cab Height	3220 (10'7")	3220 (10'7")	3220 (10'7")	3220 (10'7")	3220 (10'7")			
Cab Height with Top Guard	3390 (11'1")	3390 (11'1")	3390 (11'1")	3390 (11'1")	3390 (11'1")			
10 Counterweight Clearance	1280 (4'2")	1280 (4'2")	1280 (4'2")	1280 (4'2")	1280 (4'2")			

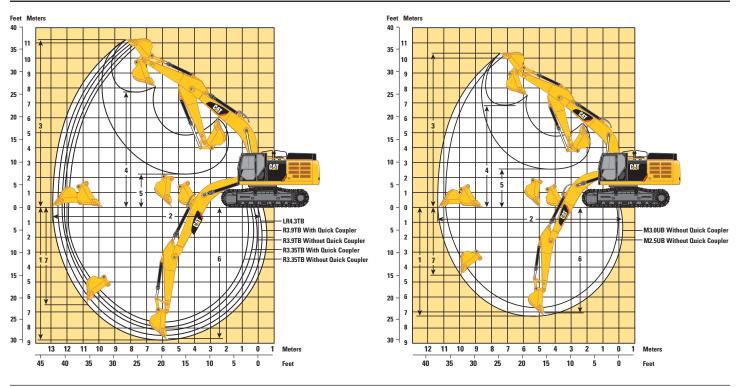
Dimensions – Long VG Undercarriage



	Long Reach Boom 7.4 m (24'3")	HD Read 6.9 m	ch Boom (22'8")	Mass Boom 6.55 m (21'6")		
Stick	LR4.3TB (14'1")	R3.9TB (12'10")	R3.35TB (11'0")	M3.0UB (9'10")	M2.5UB (8'2")	
	mm (ft)	mm (ft)	mm (ft)	mm (ft)	mm (ft)	
1 Shipping Height to Boom	3650 (12'0")	3650 (12'0")	3550 (11'8")	4020 (13'2")	4010 (13'2")	
Shipping Height with Guard Rail	3760 (12'4")	3760 (12'4")	3760 (12'4")	3760 (12'4")	3760 (12'4")	
2 Shipping Length	12 379 (40'7")	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")	3760 (12'4")	
4 Length to Center of Rollers	4340 (14'3")	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")	5380 (17'8'')	
6 Ground Clearance (including Shoe Lug Height)	740 (2'5")	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")	2890 (9'6")	
Track Gauge (Retracted)	2390 (7'10")	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")	3490 (11'5")	
750 mm (30") Shoes	3640 (12'0")	3640 (11'11")	3640 (11'11")	3640 (11'11")	3640 (11'11")	
900 mm (35") Shoes	3790 (12'5")	3790 (12'5")	3790 (12'5")	3790 (12'5")	3790 (12'5")	
Transport Width (Retracted)						
600 mm (24") Shoes	3000 (9'10")	3000 (9'10")	3000 (9'10")	3000 (9'10")	3000 (9'10")	
750 mm (30") Shoes	3140 (10'4")	3140 (10'4")	3140 (10'4")	3140 (10'4")	3140 (10'4")	
900 mm (35") Shoes	3290 (10'10")	3290 (10'10")	3290 (10'10")	3290 (10'10")	3290 (10'10")	
9 Cab Height	3370 (11'1")	3370 (11'1")	3370 (11'1")	3370 (11'1")	3370 (11'1")	
Cab Height with Top Guard	3540 (11'7")	3540 (11'7")	3540 (11'7")	3540 (11'7")	3540 (11'7")	
10 Counterweight Clearance	1430 (4'8")	1430 (4'8")	1430 (4'8")	1430 (4'8")	1430 (4'8")	

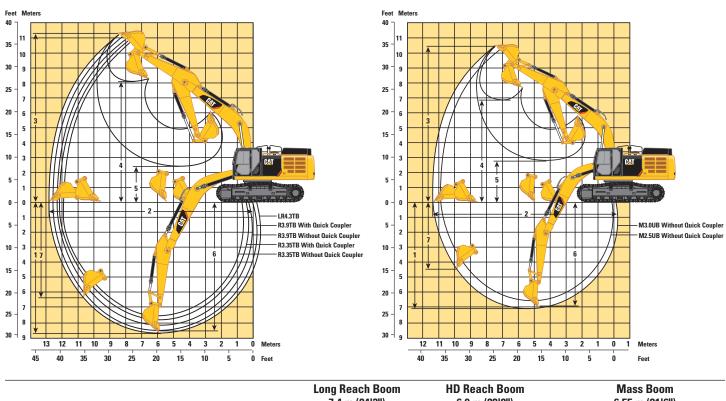
349E L Hydraulic Excavator Specifications

Working Ranges



	Long Reach Boom 7.4 m (24'3")		ch Boom (22'8")	Mass Boom 6.55 m (21'6")		
Stick	LR4.3TB (14'1")	R3.9TB (12'10")	R3.35TB (11'0")	M3.0UB (9'10")	M2.5UB (8'2")	
	mm (ft)	mm (ft)	mm (ft)	mm (ft)	mm (ft)	
Long FIX Undercarriage						
1 Maximum Digging Depth	8910 (29'3")	8180 (26'10")	7630 (25'0")	7230 (23'9")	6730 (23'1")	
2 Maximum Reach at Ground Level	12 940 (42'5")	12 120 (39'9")	11 710 (38'5")	11 200 (36'9")	10 740 (35'3")	
3 Maximum Cutting Height	11 160 (36'7")	10 730 (35'2")	10 810 (35'6")	10 300 (33'10")	10 110 (33'2")	
4 Maximum Loading Height	7890 (25'11")	7450 (24'5")	7460 (25'6")	6820 (22'5")	6620 (21'9")	
5 Minimum Loading Height	2250 (7'5")	2230 (7'4")	2780 (9'1")	2650 (8'8")	3150 (10'4")	
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	8790 (28'10")	8050 (26'5")	7490 (24'7")	7080 (23'3")	6560 (21'6")	
7 Maximum Vertical Wall Digging Depth	6480 (21'3")	5890 (19'4")	5760 (18'11")	4570 (15'0")	4140 (13'7")	

Working Ranges



	Long Reach Boom 7.4 m (24'3")		ch Boom (22'8")	Mass Boom 6.55 m (21'6")		
Stick	LR4.3TB (14'1")	R3.9TB (12'10")	R3.35TB (11'0")	M3.0UB (9'10")	M2.5UB (8'2")	
	mm (ft)	mm (ft)	mm (ft)	mm (ft)	mm (ft)	
Long VG Undercarriage						
1 Maximum Digging Depth	8770 (28'9")	8040 (26'5")	7490 (24'7")	7140 (23'5")	6640 (21'9")	
2 Maximum Reach at Ground Level	12 910 (42'4")	12 090 (39'8")	11 680 (38'4")	11 220 (36'10")	10 760 (35'4")	
3 Maximum Cutting Height	11 310 (37'1")	10 780 (35'4")	10 870 (35'8")	11 440 (37'6")	10 240 (33'7")	
4 Maximum Loading Height	8040 (26'5")	7590 (24'11")	7610 (25'0")	6910 (22'8")	6720 (22'1")	
5 Minimum Loading Height	2400 (7'11")	2370 (7'9")	2920 (9'7")	2740 (9'0")	3240 (10'8")	
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	8640 (28'4")	7900 (25'11")	7340 (24'1")	6990 (22'11")	6740 (22'1")	
7 Maximum Vertical Wall Digging Depth	6340 (20'10")	5270 (18'3")	5170 (17'0'')	4340 (14'3")	3910 (12'10")	

Operating Weight and Ground Pressure

	900 mm (3 Triple Grouser		750 mm (3 Triple Grouse		600 mm (24") Double Grouser Shoes		
	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	
Long FIX Undercarriage							
Long Reach Boom – 7.4 m (24'3")							
LR4.3TB HD (14'1")	50 000 (110,200)	58.0 (8.4)	49 300 (108,700)	68.0 (9.9)	48 600 (107,100)	84.0 (12.2)	
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							
Long Reach Boom – 7.4 m (24'3")							
LR4.3TB HD (14'1")	52 700 (116,200)	61.0 (8.8)	52 000 (114,600)	72.0 (10.4)	51 200 (112,900)	89.0 (12.9)	
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)		
Long Reach Boom – 7.4 m (24'3")	4810	10,600
Reach Boom – 6.9 m (22'8")	4510	9,940
Mass Boom – 6.55 m (21'6")	4750	10,470
Stick (includes lines, pins and bucket cylinder)		
LR4.3TB HD (14'1")	2960	6,530
R3.9TB HD (12'10")	2750	6,060
R3.35TB HD (11'0")	2480	5,470
M3.0UB (9'10")	2930	6,460
M2.5UB (8'2")	2700	5,950
Track Shoes (Long FIX/per two tracks)		
600 mm (24") double grouser	5240	11,560
750 mm (30") triple grouser	5890	12,990
900 mm (35") triple grouser	6640	14,640
Track Shoes (Long VG/per two tracks)		
600 mm (24") double grouser	5300	11,680
600 mm (24") triple grouser	5190	11,440
750 mm (30") triple grouser	5940	13,100
900 mm (35") triple grouser	6700	14,780
Buckets		
TB1880GD - 3.10 m ³ (4.05 yd ³)	2440	5,400
UB1850HD – 3.2 m ³ (4.19 yd ³)	2740	6,040

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

Bucket and Stick Forces

	Long Reach Boom 7.4 m (24'3")		ch Boom (22'8")	Mass Boom 6.55 m (21'6")		
Stick	LR4.3TB (14'1")	R3.9TB (12'10")	R3.35TB (11'0")	M3.0UB (9'10")	M2.5UB (8'2")	
	kN (lbf)	kN (lbf)	kN (lbf)	kN (lbf)	kN (lbf)	
TB Linkage						
General Duty						
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)	
Heavy Duty						
Bucket Digging Force (SAE)	238 (53,500)	237 (53,300)	237 (53,300)	260 (58,500)	260 (58,500)	
Stick Digging Force (SAE)	168 (37,800)	180 (40,500)	195 (43,800)	205 (46,100)	231 (51,900)	
Severe Duty						
Bucket Digging Force (SAE)	236 (53,100)	237 (53,300)	237 (53,300)	255 (57,300)	255 (57,300)	
Stick Digging Force (SAE)	168 (37,800)	180 (40,500)	195 (43,800)	204 (45,900)	230 (51,700)	
Extreme Duty						
Bucket Digging Force (SAE)	236 (53,100)	237 (53,300)	237 (53,300)	_	_	
Stick Digging Force (SAE)	165 (37,100)	180 (40,500)	195 (43,800)	_	_	
CW-55 Linkage						
General Duty						
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 (SAE)	_	212 (47,700)	212 (47,700)	238 (53,500)	238 (53,500)	
Stick Digging Force (SAE)	_	173 (38,900)	204 (45,900)	197 (44,300)	221 (49,700)	
Severe Duty						
Bucket Digging Force (SAE)	204 (45,900)	205 (46,100)	205 (46,100)	233 (52,400)	234 (52,400)	
Stick Digging Force (SAE)	157 (35,300)	170 (38,200)	184 (41,400)	196 (44,100)	219 (49,200)	

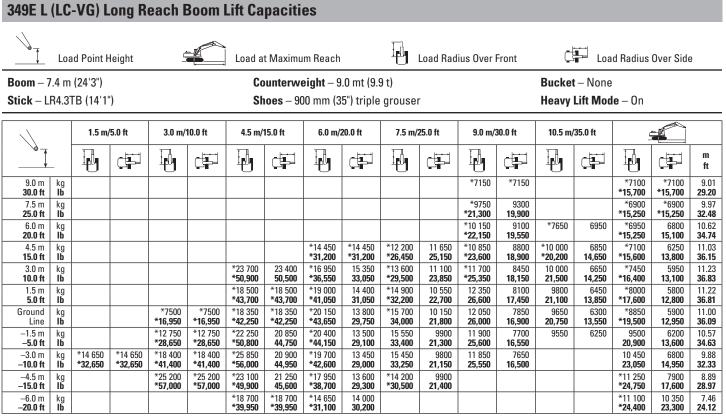
349E L (LC-FIX) Long Reach Boom Lift Capacities ±₽Ŷ. Load at Maximum Reach Load Radius Over Front Load Radius Over Side Load Point Height Boom - 7.4 m (24'3") Counterweight - 9.0 mt (9.9 t) Bucket - None Stick - LR4.3TB (14'1") Shoes – 900 mm (35") triple grouser Heavy Lift Mode - On 3.0 m/10.0 ft 4.5 m/15.0 ft 6.0 m/20.0 ft 7.5 m/25.0 ft 9.0 m/30.0 ft 10.5 m/35.0 ft 1.5 m/5.0 ft <u>i</u>pů, m Įψ Įψ Įφľη d H ţΔ d i d T di i d de la calenda <u>t p</u>Ng ţЛ ±₽Л¶ d P ft 9.0 m *7150 *7150 8.90 kg Ib *15,800 30.0 ft *15,800 28.81 7.5 m *9700 8450 *6950 *6950 9.89 kg **Ib** 25.0 ft *20,800 18,050 *15,250 *15,250 32.22 6.0 m *10 100 8250 *7350 6250 *6900 6200 10.57 kg **Ib** 20.0 ft *22,050 17,700 *15,200 13,700 34.56 4.5 m *14 200 *14 200 *12 100 10 600 *10 800 7950 9800 6150 *7100 5650 11.00 kg Ib 15.0 ft *30,650 *30,650 *26,200 22,850 *23,450 17,100 *19,750 *15,550 12,450 13,150 36.05 *16 700 *7400 30 m *23 300 21 050 13 850 *13 500 10 000 *11 600 7600 9600 5950 5300 11 22 kg Ib *49,950 10.0 ft 45,500 *36,050 29,950 *29,200 21,600 *25,200 16,350 20,600 12,750 *16,300 11,700 36.80 1.5 m **5.0 ft** kg Ib *18 950 *18 950 *18 850 12 950 *14 750 9450 11 850 7300 9400 5750 *7950 5200 11.23 *40,700 *44,950 41,750 27,900 *31,950 20,400 15,650 20,200 12,350 *17,450 11,400 25,550 36.84 Ground kg Ib *18 150 *18 150 *20 100 12 300 15 150 9050 11 550 7000 9250 5600 8600 5200 11.03 *41,800 *43,500 19.500 15,100 12,050 18.900 11.450 40.050 26.550 32.650 24.900 19.850 36.19 Line –1.5 m –**5.0 ft** *21 750 ***49.700** *20 400 ***44.200** kg Ib *12 200 *12 200 18 400 12 000 14 900 8800 11 400 6850 9150 5550 9000 5450 10.62 *27,500 *27,500 18,950 24,500 14,750 19,850 12.000 39,500 25.850 32,000 34.81 *14 150 ***31,600** *14 150 ***31,600** *26 050 ***56,450** –3.0 m kg Ib *17 800 *17 800 18 450 *19 800 11 950 14 800 8700 11 350 6800 9850 5950 9.96 *42,850 -10.0 ft *40,050 *40,050 21,750 13<u>,150</u> 39,600 25,700 31,800 18,750 24,400 14,650 32.59 –4.5 m –**15.0 ft** *24 500 ***55,300** *23 450 ***50,650** *18 150 ***39,200** *14 400 ***30,900** *11 200 kg Ib *24 500 18 700 12 050 8800 *11 250 6900 6900 9.00 *24,750 *55,300 40,250 25,950 18,950 15,350 29.35 *19 250 ***41,100** *19 250 ***41,100** *15 050 ***32,100** *11 150 ***24,500** –6.0 m –**20.0 ft** *25 050 *25 050 12 400 *11 500 9100 8900 7.63 kg Ib 24.68 26,750 20,050

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

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

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

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

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

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



9.0 m 30.0 ft	kg Ib									*18,900	*18,900			*7950 * 17,650	*7950 * 17,650	7.86 25.34
7.5 m 25.0 ft	kg Ib													*7600 * 16,800	*7600 * 16,800	8.96 29.16
6.0 m 20.0 ft	kg Ib									*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 Ib							*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 Ib					*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 Ib					*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 Ib					*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 Ib			*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 Ib	*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	7450	11 900 26,300	7400 16,350	9.04 29.58
-4.5 m - 15.0 ft	kg Ib			*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 Ib					*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")

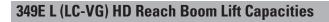
Shoes – 900 mm (35") triple grouser

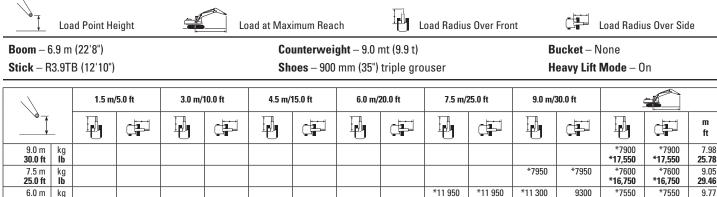
Heavy Lift Mode – On

															~	
		1.5 m/	′5.0 ft	3.0 m/	10.0 ft	4.5 m/	15.0 ft	6.0 m/2	20.0 ft	7.5 m/2	25.0 ft	9.0 m/3	30.0 ft			
				Ð		Ð				Į.		Ð				m ft
9.0 m 30.0 ft	kg Ib													*9050 *20,150	*9050 *20,150	7.30 23.48
7.5 m 25.0 ft	kg Ib									*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 Ib									*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 Ib					*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 Ib					*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 Ib					*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 Ib					*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 Ib			*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 Ib			*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 Ib			*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

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





25.0 ft	lb												*16,750	*16,750	
6.0 m 20.0 ft	kg Ib								*11 950 * 26,050	*11 950 * 26,050	*11 300 * 23,800	9300 20,000	*7550 *16,600	*7550 * 16,600	
4.5 m 15.0 ft	kg Ib						*15 350 * 33,100	*15 350 * 33,100	*13 150 * 28,550	12 000 25,850	*11 900 * 25,900	9100 19,550	*7700 *16,900	7400 16,400	
3.0 m 10.0 ft	kg Ib				*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	7050 15,550	
1.5 m 5.0 ft	kg Ib				*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	6950 15,250	
Ground Line	kg Ib		*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	7050 15,550	
–1.5 m –5.0 ft	kg Ib		*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	7500 16,500	
–3.0 m –10.0 ft	kg Ib		*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	
–4.5 m – 15.0 ft	kg Ib		*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	
–6.0 m – 20.0 ft	kg Ib				*17 050	*17 050	*12 700	*12 700					*12 150 *27,300	*12 150 * 27,300	

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

Heavy Lift Mode - On

31.93

10.22 33.47

10.43

34.20

10.42 34.18 10.18 33.40

9.71 **31.82**

8.96 29.29

7.84 **25.52**

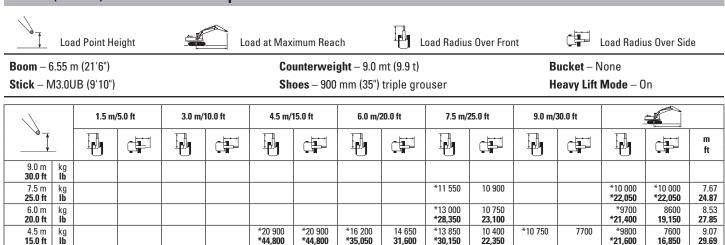
6.18 **19.45**

		1.5 m/	/5.0 ft	3.0 m/1	10.0 ft	4.5 m/	15.0 ft	6.0 m/2	20.0 ft	7.5 m/2	25.0 ft	9.0 m/3	30.0 ft	-		
	_	I.		I		I		I.		Ð		Į.		I.		m ft
9.0 m 30.0 ft	kg Ib													*9000 *19,950	*9000 *19,950	7.44 23.95
7.5 m 25.0 ft	kg Ib									*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 Ib									*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 Ib					*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 Ib					*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 Ib					*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 Ib					*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 Ib			*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 Ib			*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 Ib			*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.

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

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



*35,050

*18 450

*39,850

*20 200

*43,650

*20 900

*45,300

*20 500 ***44,400**

*18 700

*40,400

*14 600 *30,750

31,600

13 800

29,750

13 050

28,150

12 650

27.200

12 450

26.850

12 550

27,050

12 950

27,950

12 850

27,650

*30,150

*15 000

*32,500

15 700

33,800

15 400

33.100

15 250

32,800

*14 300 ***30,450**

22,350

9950

9550

9250

9150

19,700

9250 **19,950**

19.950

20,550

21,400

12 150

26,050

11 900

25,600

11 750

Boom - 6.55 m (21'6")

15.0 ft

30 m

1.5 m **5.0 ft** kg Ib

Line –1.5 m –**5.0 ft**

–3.0 m

–10.0 ft

–4.5 m –**15.0 ft**

-30 m

-10.0 ft

–4.5 m **–15.0 ft**

kg Ib

kg Ib

Ground

kg Ib 10.0 ft

kg Ib

kg Ib

kg Ib

kg Ib

Counterweight - 9.0 mt (9.9 t)

Bucket - None Heavy Lift Mode - On

10 050

22,250

*12 900 *28,100

7500

16,150

7300

15,750

7200

*21,600

*10 250

*22,500

*11 050

*24,250

11 550

25.450

12 550

27.650

*13 450

*29,650

*12 900 ***28.300**

m

ft

7.10 **22.99**

8.03 26.19

8.60

28.14

8.87

29.09

8.88

29.15

8.63

28.33

8.10

7 20

23.52

5.79

18.72

26.52

29.69

9.33

30.59

9.34

30.65

9.10

29.86

8 59

28.16

7.76

25.35

6.48

20.99

16,850

7100

15,650

6900

7050

7600

16.800

8850

19,600

11 700

26,200

15.550

15,250

Stick – M2.5UB (8'2")	
-----------------------	--

1.5 m/5.0 ft

t I

Shoes – 900 mm (35") triple grouser

6.0 m/20.0 ft 7.5 m/25.0 ft _____ † I T_0

*14 100

*31,000

*12 900 *28,100

\$	_	i ella	¢ F		¢ F								
9.0 m 30.0 ft	kg Ib												
7.5 m 25.0 ft	kg Ib											*13 050 * 28,900	11 800 26,600
6.0 m 20.0 ft	kg Ib							*15 350 * 33,300	15 300 32,900	*13 850 * 30,350	10 700 22,950	*12 700 * 27,950	9500 21,150
4.5 m 15.0 ft	kg Ib					*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
3.0 m 10.0 ft	kg Ib					*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
1.5 m 5.0 ft	kg Ib							*20 800 * 44,950	13 100 28,200	15 750 33,900	9600 20,700	12 200 26,900	7550 16,600
Ground Line	kg Ib					*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
–1.5 m – 5.0 ft	kg Ib			*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

19 800

42,550

*16 950 ***36,050**

4.5 m/15.0 ft

*44,800

*25 650

*55,100

*22 900

*55,050

*25 950

*60,500

*27 100

*58,800

*24 300

*52,550

*19 300 ***41,300**

† I

*22 900

*49,600

*16 950 ***36,050**

*17 850

*40.400

*29 400 *66,650

3.0 m/10.0 ft

10

*28 000

*61,000

*17 850

*40,400

*29 400

*66.650

*44,800

20,900

45,150

19700

42,400

19 250

41,350

19 200

41.250

19 400

41,700

*19 300 ***41,300**

*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.

*17 900

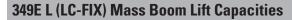
*38,600

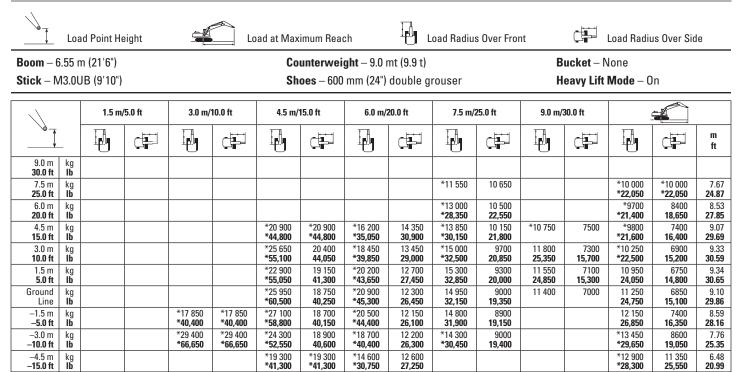
Lift capacity stays with ±5% for all available track shoes.

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

*28 000

*61,000





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

Heavy Lift Mode - On

			′5.0 ft	3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/2	25.0 ft			
	_													m ft
9.0 m 30.0 ft	kg Ib													
7.5 m 25.0 ft	kg Ib											*13 050 *28,900	11 550 26,000	7.10 22.99
6.0 m 20.0 ft	kg Ib							*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	kg Ib					*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	kg Ib					*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	kg Ib							*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	kg Ib					*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	kg Ib			*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	kg Ib			*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	kg Ib					*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.

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

349E L Work Tool Offering Guide*

Boom Type	Reach B	oom (HD)	Mass Boom		
Stick Size	R3.9 (HD) (12'10")	R3.35 (HD) (11'0")	M3.0 (9'10")	M2.5 (8'2")	
Hydraulic Hammer	H160Ds H180Ds	H160Ds H180Ds	H160Ds H180Ds	H160Ds H180Ds	
Multi-Processor	MP30	MP30	MP30	MP30	
Mobile Scrap and Demolition Shear	S340B S365C** S385C**	\$340B \$365C** \$385C**	\$340B \$365C** \$385C**	S340B S365C** S385C**	
Contractors' Grapple	G330	G330	G330	G330	
Trash Grapple					
Thumbs					
Rippers		These work tools are a Consult your Cat deal			
Center-Lock Pin Grabber Coupler		Consult your Cat deal	ter for proper materi.		
P_{1}^{1} + 10 1 C 1					

Dedicated Quick Coupler

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

**Boom Mount

349E L Bucket Specifications and Compatibility

		Wi	dth	Capa	acity	We	ight	Fill	HD Long Reach Boom	Reach B	loom (HD)	Mass	Boom
									LR4.3	R3.9 HD	R3.35 HD	M3.0	M2.5
	Linkage	mm	in	m ³	yd ³	kg	lb	%	(14'1")	(12'10")	(11'0")	(9'10")	(8'2")
Without Quick Coupler													
General Duty (GDC)	ТВ	750	30	0.95	1.24	1311	2,889	100%					
	ТВ	900	36	1.23	1.60	1441	3,176	100%	•				
	ТВ	1050	42	1.51	1.98	1525	3,361	100%					
	ТВ	1200	48	1.80	2.36	1676	3,694	100%					
	ТВ	1350	54	2.10	2.74	1792	3,950	100%	۲				
	ТВ	1500	60	2.39	3.13	1943	4,282	100%	θ	۲			
	ТВ	1700	68	2.78	3.64	2128	4,690	100%	0	θ	θ		
	ТВ	1850	74	3.08	4.04	2254	4,968	100%	0	0	θ		
General Duty XL (GDXL)	ТВ	2043	80	3.82	5.00	2373	5,230	100%	\diamond	\diamond	0		
Heavy Duty (HD)	ТВ	900	36	1.08	1.41	1594	3,513	100%					
	ТВ	1050	42	1.34	1.75	1684	3,712	100%					
	ТВ	1200	48	1.60	2.09	1834	4,043	100%					
	ТВ	1350	54	1.87	2.44	1974	4,350	100%					
	ТВ	1500	60	2.14	2.80	2125	4,684	100%	۲	۲			
	ТВ	1650	66	2.41	3.15	2286	5,039	100%	θ	θ	۲		
	ТВ	1800	71	2.69	3.52	2423	5,340	100%	0	0	θ		
	UB	1650	65	2.77	3.62	2581	5,689	100%				θ	۲
	UB	1850	73	3.19	4.16	2741	6,041	100%				0	θ
	UB	1950	77	3.43	4.48	2898	6,387	100%				0	Ð
Severe Duty (SD)	ТВ	760	30	0.88	1.15	1446	3,187	90%					
	ТВ	900	36	1.08	1.41	1677	3,696	90%		•			
	ТВ	1050	42	1.34	1.75	1779	3,921	90%		•			
	ТВ	1200	48	1.60	2.09	1952	4,302	90%		•			
	ТВ	1400	55	1.87	2.44	2180	4,805	90%		•			
	TB	1550	61	2.14	2.80	2381	5,248	90%	•	•			
	TB	1700	67	2.14	3.16	2524	5,563	90%	0 0	0	0		
	TB	1850	74	2.69	3.52	2726	6,008	90%	0		Θ		
	UB	1450	58	2.03	3.13	2540	5,598	90%		0			
	UB	1450	73	3.21	4.20	2987	6,583	90%				θ	•
Extreme Duty (XD)	TB	1250	49	1.60	2.09	2907	4,902	90%		•	•	0	
			-										
	TB	1400	55	1.87	2.44	2366	5,215	90%	-	6210	6720	7000	7005
		IVIAX	imum lo	oad pin-	оп (рау	ivad + b	ucket)	kg	5880	6210	6730	7200	7995
								lb	12,960	13,687	14,833	15,869	17,621

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.

Maximum Material Density:

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

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 Bucket Specifications and Compatibility

		Wi	dth	Capa	acity	We	ight	Fill	HD Long Reach Boom	Reach Boom (HD)		Mass Boom	
	Linkage	mm	in	m ³	yd ³	kg	lb	%	LR4.3 (14'1")	R3.9 HD (12'10")	R3.35 HD (11'0")	M3.0 (9'10")	M2.5 (8'2")
With Center-Lock Quick Coup	oler												
General Duty (GDC)	TB	750	30	0.95	1.24	1311	2,889	100%					
	ТВ	900	36	1.23	1.60	1441	3,176	100%					
	ТВ	1050	42	1.51	1.98	1525	3,361	100%					
	ТВ	1200	48	1.80	2.36	1676	3,694	100%	۲				
	ТВ	1350	54	2.10	2.74	1792	3,950	100%	θ	θ	۲		
	ТВ	1500	60	2.39	3.13	1943	4,282	100%	0	Φ	θ		
	ТВ	1700	68	2.78	3.64	2128	4,690	100%	\diamond	0	0		
	ТВ	1850	74	3.08	4.04	2254	4,968	100%	\diamond	\diamond	0		
General Duty XL (GDXL)	ТВ	2043	80	3.82	5.00	2373	5,230	100%	Х	Х	\diamond		
Heavy Duty (HD)	ТВ	900	36	1.08	1.41	1594	3,513	100%					
	ТВ	1050	42	1.34	1.75	1684	3,712	100%					
	ТВ	1200	48	1.60	2.09	1834	4,043	100%					
	ТВ	1350	54	1.87	2.44	1974	4,350	100%	θ	۲			
	ТВ	1500	60	2.14	2.80	2125	4,684	100%	0	Φ	۲		
	ТВ	1650	66	2.41	3.15	2286	5,039	100%	0	0	θ		
	ТВ	1800	71	2.69	3.52	2423	5,340	100%	\diamond	\diamond	0		
Severe Duty (SD)	ТВ	760	30	0.88	1.15	1446	3,187	90%					
	ТВ	900	36	1.08	1.41	1677	3,696	90%					
	ТВ	1050	42	1.34	1.75	1779	3,921	90%					
	ТВ	1200	48	1.60	2.09	1952	4,302	90%					
	ТВ	1400	55	1.87	2.44	2180	4,805	90%	θ	۲			
	ТВ	1550	61	2.14	2.80	2381	5,248	90%	0	Φ	۲		
	ТВ	1700	67	2.41	3.16	2524	5,563	90%	0	0	θ		
	ТВ	1850	74	2.69	3.52	2726	6,008	90%	\diamond	\diamond	0		
Extreme Duty (XD)	ТВ	1250	49	1.60	2.09	2224	4,902	90%	۲				
	ТВ	1400	55	1.87	2.44	2366	5,215	90%	θ	۲			
	M	aximum	load wi	th coup	ler (pay	load + b	ucket)	kg	5047	5377	5897		
								lb	11,124	11,851	12,997		

Maximum Material Density:

- 2100 kg/m3 (3,500 lb/yd3)
- ۲ 1800 kg/m³ (3,000 lb/yd³)
- θ 1500 kg/m3 (2,500 lb/yd3)
- Ο 1200 kg/m3 (2,000 lb/yd3)
- \diamond
- 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

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

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

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
- Long Reach 7.4 m (24'3") boom
- Long Reach 4.3 m (14'1") stick
- Heavy Duty 6.9 m (22'8") reach boom
- Heavy Duty R3.9TB (12'10") stick
- Heavy Duty R3.35TB (11'0") stick
- Mass 6.55 m (21'6") boom
- Mass M3.0UB (9'10") stick
- Mass M2.5UB (8'2") stick

LIGHTS

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

SECURITY

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

TECHNOLOGY

- Cat Grade Control Depth and Slope
- Product Link

Notes

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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