336E L Hydraulic Excavator





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Engine Model Cat® C9.3 ACERT™ Net Power - ISO 14396 236 kW (321 hp)

Drive

Maximum Travel Speed	4.9 km/h
•	•
Maximum Drawbar Pull	295 kN
Weight	
Minimum Weight	35 600 kg
Maximum Weight	38 100 kg

Introduction

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

The 336E L, meets today's U.S. EPA Tier 4 Interim, European Union Stage IIIB and Japan MLTI Step 4 emission standards. It is also built with several new fuel-saving and comfort-enabling features and benefits that will delight owners and operators.

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 336E L 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. In fact, hydraulic horsepower for the 336E L increased from the previous series' output due to pump and other system improvements. This translates into the new E Series moving more material in less time.

Main Control Valve and Auxiliary Valves

The 336E L uses a high-pressure system to tackle the toughest of work in short order. A new one-piece, cast-block, back-to-back main control valve features resized and reshaped oil passages to improve efficiency and serviceability; stackable auxiliary valve attachments mount on top of the main valve, which allows for auxiliary hydraulic lines and valve configurations to be simplified for greater reliability.

Hydraulic Return Filter

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

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 336E L regenerates the flow of oil from the rod end of the stick cylinder to the head end of the stick cylinder during low-load, stick-in operation – an approach that saves energy and expense.





Operator Station

Comfort and convenience to keep people productive





Seats

All seats include air suspension, heat, air cooling, 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 can be adjusted to meet individual preferences, improving operator comfort and productivity during the course of a day. With the touch of a button, one-touch idle reduces engine speed to help save fuel; touch it again or move the joystick and the machine returns to normal operating level. The heavy lift mode increases machine system pressure to improve lift – a nice benefit in certain situations. Heavy lift mode also reduces engine speed and pump flow in order to improve controllability.

Monitor

The 336E L is equipped with a 7" LCD (Liquid Crystal Display) monitor 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.

An "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.

The image of the rearview camera is displayed directly on the monitor. Up to two different camera images can be displayed on the screen at the same time.

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. A specific space near the auxiliary power supply holds MP3 players and cell phones. The drink holder accommodates large mugs with handles, and a shelf behind the seat stores large lunch or toolboxes.

Automatic Climate Control

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





Engine

Reduced emissions, economical and reliable performance

Cat C9.3 ACERT Engine

The Cat C9.3 ACERT engine delivers performance and efficiency while meeting U.S. EPA Tier 4 Interim, European Union Stage IIIB and Japan MLTI Step 4 emission standards. ACERT Technology – a combination of electronics, fuel systems, air management systems, and aftertreatment components – is key to meeting customer expectations for productivity, fuel efficiency, reliability, and service life.

Emissions Solution

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

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

Cooling System

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

Speed and Power Control

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



Structures and Undercarriage

Built to work in rugged environments

Frame

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

Undercarriage

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

Two counterweight options are available: 6.0 mt and 7.0 mt. Each is designed to match the height of the machine. Regardless of choice, counterweights are bolted directly to the main frame using four M36 bolts for 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 336E L is offered with a range of booms and sticks. Each is built with internal baffle plates and stress-relieved for added durability, and each undergoes ultrasound inspection to ensure quality and reliability. Large box-section structures with thick, multi-plate fabrications, castings, and forgings are used in high-stress areas such as the boom nose, boom foot, boom cylinder, and stick foot to improve durability. Also, the boom nose pin retention method is a captured flag design for enhanced durability.

Selections

There are two boom and stick options: HD and ME. Sticks match the HD and ME boom descriptions and applications below.

HD = Heavy Duty. This boom is designed to balance reach, digging force, and bucket capacity. It covers the vast majority of applications such as digging, loading, trenching, and working with hydraulic tools.

ME = Mass Excavation. This type of boom is best used for quarry and other demanding applications. Used for high-volume production and loading, the ME front provides higher digging forces due to the geometry of the boom and stick. Bucket linkage and cylinders are more durable for excellent productivity in harsh applications.



Work Tools

Dig, hammer, rip, and cut with confidence







An extensive range of Cat Work Tools for the 336E L includes buckets, hydraulic hammers, multi-processors, scrap and demolition shears, grapples, and rippers. Each is designed to optimize machine versatility and performance.

Quick Couplers

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

Cat Center-Lock™ Pin Grabber Coupler

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

Buckets

Cat buckets are designed as an integral part of the 336E L excavator 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.

Caterpillar offers standard bucket categories for excavators. Each category is based on intended bucket durability when used in recommended application and material. Buckets are available as pin-on or can be used with a quick coupler.

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. Red area on bucket image illustrates additional protection against wear as compared to a GD bucket.

Specialty Buckets

In addition to the standard four bucket categories, specialty bucket styles are available for the 320E, each with a different purpose:

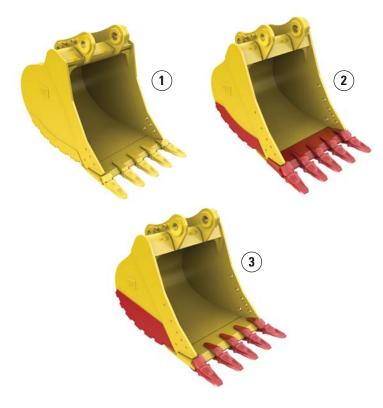
- Ditch Cleaning buckets for cleaning ditches, slope grading, and other finish work.
- Center-Lock Pin Grabber Performance buckets for maximum digging performance while keeping the versatility and convenience of a coupler.
- Wide Tip buckets for low impact material where leaving a smoother floor and minimal spillage are necessary.

Hydraulic Kits

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

Comprehensive Product Support

All Cat Work Tools are backed up by a world-wide network of well-stocked parts depots and highly experienced service and support personnel.



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



Integrated Technologies

Solutions that make work easier and more efficient

Electric Boom and Stick Regeneration Valve

The 336E L features unique electric boom and stick regeneration valves. The valves use gravity during typical "boom down" or "stick in" operations to regenerate flow of oil from the head end of the cylinder to the rod end of the cylinder instead of sending it all the way back to the hydraulic tank. This distinct Caterpillar solution increases efficiency and reduces cycle times and pressure loss for higher productivity and lower fuel costs.

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 based application called VisionLink®, which uses powerful tools to communicate to users and dealers.

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





Serviceability

Fast, easy and safe access built in

Ground-Level Maintenance

The machine is designed to accommodate servicing most maintenance items from the safety and comfort of ground level.

Service Doors

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

Compartments

The radiator, pump, and air cleaner (1) compartments provide easy access to major components. When an air cleaner plugs, a warning is displayed on the monitor inside the cab. Also, the fresh air filter (2) is located on the side of the cab to make it easier to reach and replace as needed.

Other Service Improvements

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

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

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





Safety

Features to help protect people





ROPS Cab

The ROPS-certified cab allows a Falling Object Guard Structure (FOGS) to be bolted directly to it.

Sound Proofing

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

Anti-Skid Plates

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

Steps, Hand and Guard Rails

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

Time Delay Cab and Boom Lights

After the engine start key has been turned to the "OFF" position, lights will be illuminated to enhance visibility. The time delay can vary from 0 to 90 seconds, which can be set through the monitor.

High Intensity Discharge (HID) Lights

Cab lights can be upgraded to HID for greater visibility.

Visibility – Windows

The 70/30 split configuration features an upper window equipped with handles on the top and both sides so the operator can slide it to store in the ceiling. The lower window is removable and can be stored on the left wall of the cab shell.

The large skylight provides great overhead visibility, excellent natural lighting, and good ventilation. The skylight can be opened completely to become an emergency exit.

Monitor Warning System

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

Rearview Camera

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



Complete Customer Care

Service you can count on

Product Support

Cat dealers utilize a worldwide parts network to minimize machine downtime. Plus you can save money with Cat remanufactured components.

Machine Selection

Make detailed comparisons of machines you are considering. What are the job requirements and machine attachments? What production is needed? Your Cat dealer can provide recommendations.

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 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 right choice.









Sustainability

Generations ahead in every way

- The C9.3 ACERT engine, with the Cat Clean Emission Module (CEM), meets U.S. EPA Tier 4 Interim, European Union Stage IIIB and Japan MLTI Step 4 emission standards.
- The 336E L generates 11% more horsepower, moves more material with no increase in fuel consumption over the 336D. This means higher efficiency, less resources consumed and fewer CO₂ emissions to finish the same job.
- The 336E L has the flexibility of running on either ultra-low-sulfur diesel (ULSD) fuel with 15 ppm of sulfur or use of biodiesel (B20) fuel, up to 20% mixture, blended with ULSD.
- The 336E L features an overfill indicator that rises when the tank is full to help the operator avoid spilling.
- The 336E L's quick fill ports with connectors ensure fast, easy, and secure changing of engine and hydraulic oil.
- The 336E L is built to be rebuilt with major structures and components remanufactured to reduce waste and replacement costs.

Engine	
Engine Model	Cat C9.3 ACERT
Net Power – ISO 14396	236 kW
Net Power – ISO 14396	316 hp (Imperial)
Net Power – ISO 14396	321 hp (Metric)
Bore	115 mm
Stroke	149 mm
Displacement	9.3 L

Weights	
Minimum Weight*	35 600 kg
Maximum Weight**	38 100 kg

^{*}HD Reach boom, R2.8DB stick, 2.28 m³ GP bucket, 600 mm TG shoes.

^{**}Mass boom, M2.55TB stick, 2.41 m³ SD bucket, 850 mm TG shoes.

Hydraulic System	
Main System – Maximum Flow (Total)	578 L/min
Swing System – Maximum Flow	275 L/min
Maximum Pressure – Equipment	35 000 kPa
Maximum Pressure – Equipment (Heavy Lift)	38 000 kPa
Maximum Pressure – Travel	35 000 kPa
Maximum Pressure – Swing	28 000 kPa
Pilot System – Maximum Flow	26 L/min
Pilot System – Maximum Pressure	4100 kPa
Boom Cylinder – Bore	150 mm
Boom Cylinder – Stroke	1440 mm
Stick Cylinder – Bore	170 mm
Stick Cylinder – Stroke	1738 mm
DB Family Bucket Cylinder – Bore	150 mm
DB Family Bucket Cylinder – Stroke	1151 mm

Drive Maximum Travel Speed 4.9 km/h Maximum Drawbar Pull 295 kN Swing Mechanism Swing Speed 9.2 rpm

109 kN·m

Swing Torque

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Service Refill Capacities			
Fuel Tank Capacity	620 L		
Cooling System	56 L		
Engine Oil (with filter)	30.5 L		
Swing Drive (each)	19 L		
Final Drive (each)	8 L		
Hydraulic System (including tank)	380 L		
Hydraulic Tank	175 L		

Track		
Number of Shoes (each side)		
Long Undercarriage	49	
Number of Track Rollers (each side)	,	
Long Undercarriage	9	
Number of Carrier Rollers (each side)		
Long Undercarriage	2	

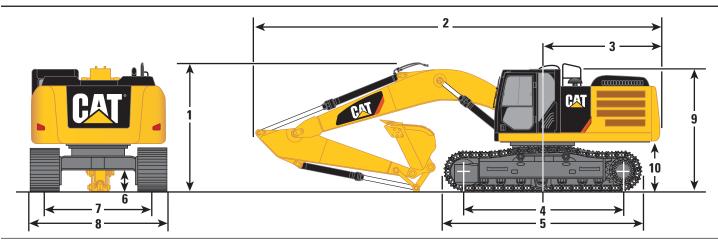
Sound Performance	
Operator Noise ISO 6396	72 dB(A)
Exterior Sound	106 dB(A)

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166, 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 2008
Cab/FOGS	ISO 10262 1998
Cab/ROPS	ISO 12117 2008

Dimensions

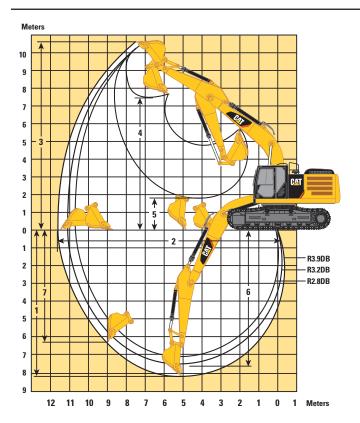
All dimensions are approximate.

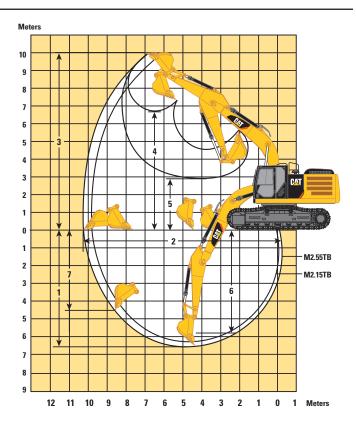


	Heav	Heavy Duty Reach Booms 6.50 m (21'4")			Mass Boom 6.18 m (20'3")	
Stick	R3.9DB (12'10")	R3.2DB (10'6")	R2.8DB (9'2")	M2.55TB (8'4")	M2.15TB (7'1")	
	mm	mm	mm	mm	mm	
1 Shipping Height (with Shoe Lug Height)	3660	3510	3650	3600	3660	
Shipping Height with Top Guard	3660	3510	3510	3510	3660	
2 Shipping Length	11 170	11 160	11 190	10 890	11 170	
3 Tail Swing Radius	3500	3500	3500	3500	3500	
4 Length to Center of Rollers						
Long Undercarriage	4040	4040	4040	4040	4040	
5 Track Length						
Long Undercarriage	5020	5020	5020	5020	5020	
6 Ground Clearance						
With Shoe Lug Height	510	510	510	510	510	
Without Shoe Lug Height	480	480	480	480	480	
7 Track Gauge						
Long Undercarriage	2590	2590	2590	2590	2590	
8 Transport Width						
Long Undercarriage – 600 mm (24") Shoes	3190	3190	3190	3190	3190	
Long Undercarriage – 700 mm (28") Shoes	3290	3290	3290	3290	3290	
Long Undercarriage – 800 mm (32") Shoes	3390	3390	3390	3390	3390	
Long Undercarriage – 850 mm (34") Shoes	3440	3440	3440	3440	3440	
9 Cab Height	3150	3150	3150	3150	3150	
Cab Height with Top Guard	3360	3360	3360	3360	3360	
10 Counterweight Clearance (without Shoe Lug Height)	1220	1220	1220	1220	1220	

Working Ranges

All dimensions are approximate.





	Heav	eavy Duty Reach Booms 6.50 m (21'4")		Mass Boom 6.18 m (20'3")	
Stick	R3.9DB (12'10")	R3.2DB (10'6")	R2.8DB (9'2")	M2.55TB (8'4")	M2.15TB (7'1")
	mm	mm	mm	mm	mm
1 Maximum Digging Depth	8190	7490	7090	6650	6250
2 Maximum Reach at Ground Level	11 720	11 020	10 710	10 260	9830
3 Maximum Cutting Height	10 740	10 320	10 370	9970	9630
4 Maximum Loading Height	7500	7110	7110	6620	6340
5 Minimum Loading Height	1910	2610	3010	2920	3330
6 Maximum Depth Cut for 2440 mm Level Bottom	7610	6820	6390	5810	5280
7 Maximum Vertical Wall Digging Depth	6310	5500	5470	4450	3810

Operating Weight and Ground Pressure

	850 mm (34") Triple Grouser Shoes		800 mm (32") Triple Grouser Shoes		700 mm (28") Triple Grouser Shoes		600 mm (24") Triple Grouser Shoes	
	kg	kPa	kg	kPa	kg	kPa	kg	kPa
Long Undercarriage								
HD Reach Boom – 6.50 m (21'4")								
R3.9DB (12'10")	37 300	49.0	37 000	51.7	36 300	58.0	36 000	67.1
R3.2DB (10'6")	37 000	48.7	36 700	51.3	36 100	57.7	35 700	66.5
R2.8DB (9'2")	36 900	48.5	36 600	51.1	35 900	57.3	35 600	66.3
Mass Boom – 6.18 m (20'3")								
M2.55TB (8'4")	38 100	50.1	37 800	52.8	37 100	59.3	36 800	68.6
M2.15TB (7'1")	38 000	50.0	37 700	52.7	37 000	59.1	36 700	68.4

Major Component Weights*

	kg
Lower Structure (without counterweight and track)	
Long Undercarriage	8700
Upper Structure (without front linkage)	
For 6.0 mt (6.6 t) Counterweight	9000
For 7.0 mt (7.7 t) Counterweight	9200
Counterweight	
6.0 mt (6.6 t)	6000
7.0 mt (7.7 t)	7000
Boom (includes lines, pins and stick cylinder)	
HD Reach Boom – 6.50 m (21'4")	4100
Mass Boom – 6.18 m (20'3")	4000
Stick (includes lines, pins and bucket cylinder)	
R3.9DB HD (12'10")	2100
R3.2DB HD (10'6")	1800
R2.8DB HD (9'2")	1700
M2.55TB (8'4")	2000
M2.15TB (7'1")	1900
Track Shoe (Long)	
850 mm (34") Triple Grouser	5400
800 mm (32") Triple Grouser	5100
700 mm (28") Triple Grouser	4400
600 mm (24") Triple Grouser	4100
600 mm (24") Double Grouser	4900
Quick Coupler	540
Buckets	
DB1536GP-C 342-2192 SAE 2.28 m³ (2.98 yd³)	1500
TB1676SD 339-3748 SAE 2.41 m ³ (3.15 yd ³)	2500

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

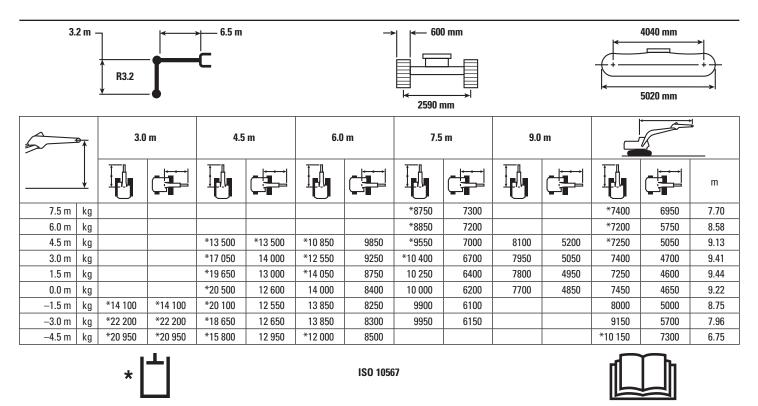
Bucket and Stick Forces

	Hea	Mass Boom 6.18 m (20'3")				
Stick	R3.9DB (12'10")	R3.2DB (10'6")	R2.8DB (9'2")	M2.55TB (8'4")	M2.15TB (7'1")	
	kN	kN	kN	kN	kN	
General Duty						
Bucket Digging Force (ISO)	211.8	211.8	211.8	264.9	264.9	
Stick Digging Force (ISO)	144.9	166.7	185.5	190.8	222.2	
Bucket Digging Force (SAE)				234.7	234.7	
Stick Digging Force (SAE)				184.6	214.0	
General Duty Capacity						
Bucket Digging Force (ISO)	209.7	209.7	209.7			
Stick Digging Force (ISO)	144.3	165.9	184.6			
Heavy Duty						
Bucket Digging Force (ISO)	209.9	209.9	209.9	264.9	264.9	
Stick Digging Force (ISO)	144.5	166.1	184.8	190.8	222.2	
Bucket Digging Force (SAE)				234.7	234.7	
Stick Digging Force (SAE)				184.6	214.0	
Heavy Duty – Power						
Bucket Digging Force (ISO)	234.2	234.2	234.2			
Stick Digging Force (ISO)	146.6	169.0	188.3			
Severe Duty						
Bucket Digging Force (ISO)	209.9	209.9	209.9	261.4	261.4	
Stick Digging Force (ISO)	144.5	166.1	184.8	190.2	221.4	
Bucket Digging Force (SAE)				231.0	231.0	
Stick Digging Force (SAE)				183.9	213.0	
Extreme Duty						
Bucket Digging Force (ISO)	209.9	209.9	209.9			
Stick Digging Force (ISO)	144.5	166.1	184.8			

Tip Radius

	Heavy Duty Reach Booms	Mass Boom
General Duty	1745 mm	1865 mm
Heavy Duty	1779 mm	1865 mm
Severe Duty	1779 mm	1865 mm

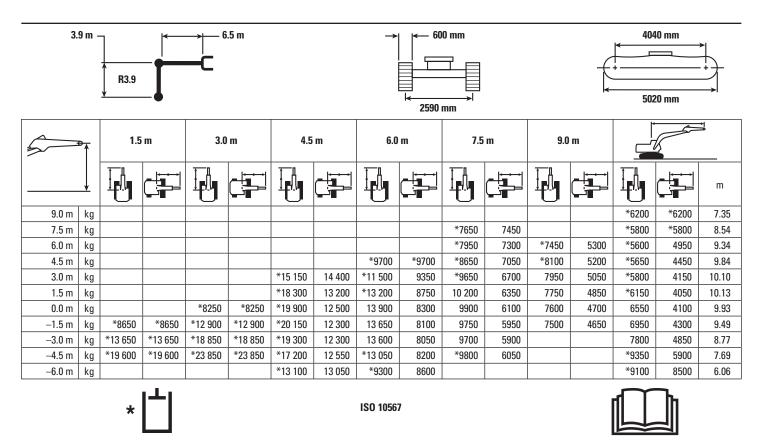
Reach Boom Lift Capacities - Counterweight: 6.0 mt



^{*}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.

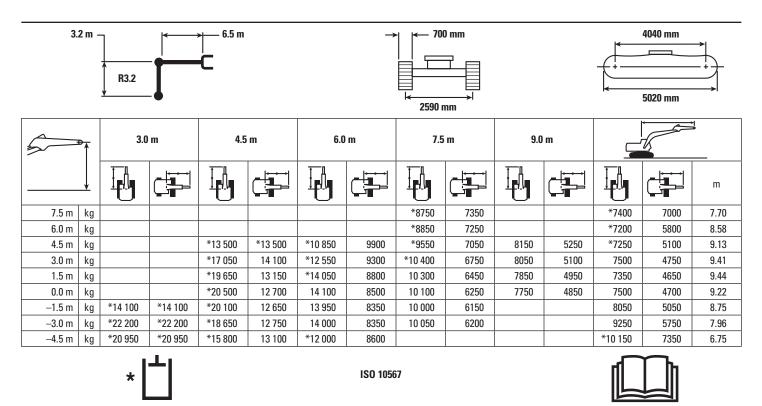
Reach Boom Lift Capacities – Counterweight: 6.0 mt



^{*}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.

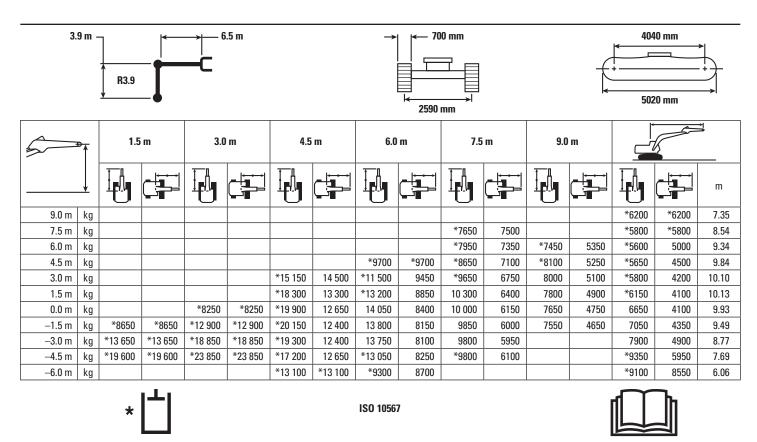
Reach Boom Lift Capacities - Counterweight: 6.0 mt



^{*}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.

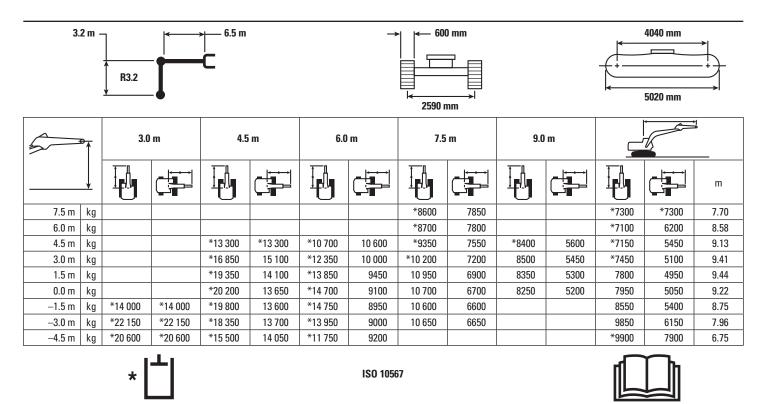
Reach Boom Lift Capacities – Counterweight: 6.0 mt



^{*}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.

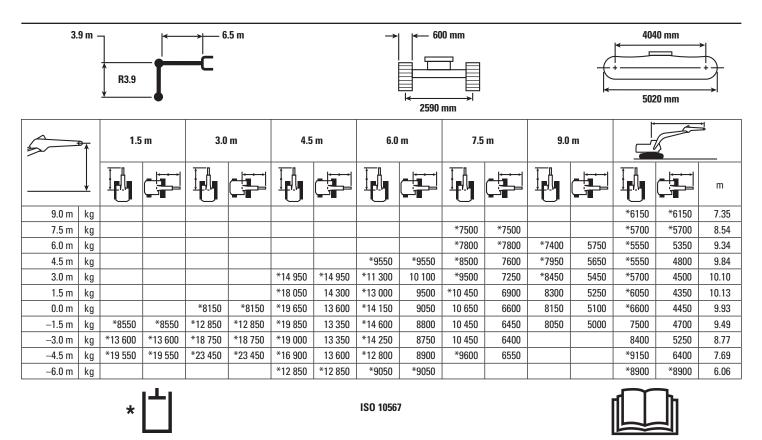
Reach Boom Lift Capacities - Counterweight: 7.0 mt



^{*}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.

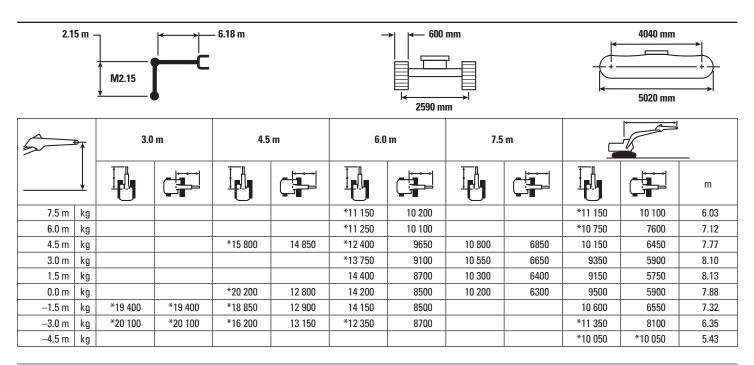
Reach Boom Lift Capacities – Counterweight: 7.0 mt



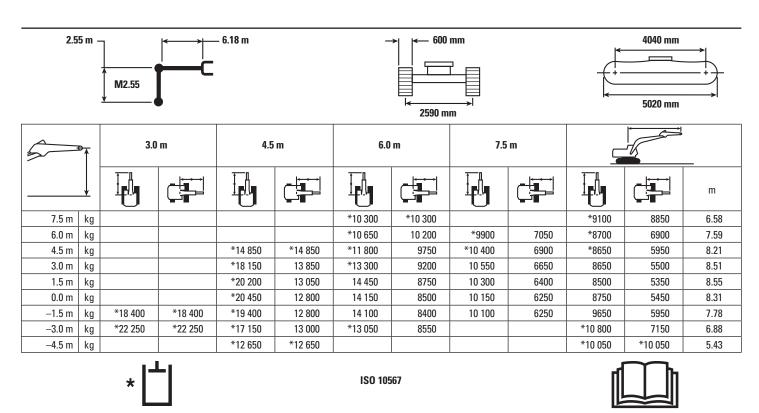
^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories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

Mass Boom Lift Capacities – Counterweight: 6.0 mt



Mass Boom Lift Capacities – Counterweight: 6.0 mt



^{*}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.

336E L Work Tool Offering Guide*

Boom Option		Reach Boom (HD))	Mass	Mass Boom		
Stick Option	R3.9 (HD) R3.2 (HD)		R2.8 (HD)	M2.55	M2.15	R3.2 (ES)	
Hammer	H140Es H160Es ***	H140Es H160Es	H140Es H160Es	H140Es H160Es	H140Es H160Es	H140Es H160Es	
Multi-Processor	MP20	MP20 MP30 with CC Jaw ** ## MP30 with CR Jaw ** ## MP30 with PP Jaw *** # MP30 with PS Jaw ** ## MP30 with S Jaw *** MP30 with S Jaw ***	MP20 MP30 with CC Jaw ** ## MP30 with CR Jaw ** ## MP30 with PP Jaw *** MP30 with PS Jaw ** ## MP30 with S Jaw ** ## MP30 with S Jaw ** ##	MP30 with CC Jaw ** MP30 with CR Jaw ** MP30 with PP Jaw ** ## MP30 with PS Jaw ** MP30 with PS Jaw ** MP30 with S Jaw ** MP30 with S Jaw **	MP30 with CC Jaw ** MP30 with CR Jaw ** MP30 with PP Jaw ** MP30 with PS Jaw ** MP30 with S Jaw ** MP30 with S Jaw ** MP30 with TS Jaw ** ##	MP20 MP30 with CC Jaw *** MP30 with CR Jaw *** MP30 with PP Jaw *** # MP30 with PS Jaw *** MP30 with S Jaw ***	
Mobile Scrap and Demolition Shear	S325B *** S365C ###	S325B S365C ###	S325B S340B *** # S365C ###	S365C ###	S340B ** ## S365C ###	S325B S365C ###	
Pulverizer	P225	P225 P235 ** ##	P225 P235 **	P235 **	P235 **	P225 P235 ** ##	
Demo and Sorting Grapple	G325B *** G330B ***	G325B G330B ** ##	G325B G330B **	G330B **	G330B	G325B G330B ** ##	
Compactor (Vibratory Plate)	CVP110	CVP110	CVP110	CVP110	CVP110	CVP110	
Orange Peel Grapple Clamshells Thumbs Rippers Rakes Center-Lock Pin Grabber	Thes	e work tools are av	ailable for the 336E	E L. Consult your C	at dealer for prope	er match.	
Coupler Dedicated Quick Coupler							

^{*}Offerings are not available in all regions. Matches are dependent on excavator configurations. Consult your Cat dealer for proper work tool match.

##Over the front only with CW coupler

###Boom Mount

^{**}Pin-on or CW coupler

^{***}Pin-on only

[#]Over the front only

336E L Bucket Specifications and Compatibility

		Width Capacity Weig		Weight	ht Fill	Mass Boom		Heavy Duty Boom		
	Linkage	mm	m³	kg	%	M2.15	M2.55	R2.8HD	R3.2HD	R3.9HD
336E L With Centerlock Quick Coupl	er									
Heavy Duty (HD)	DB	750	0.73	1006	100%			•	•	•
	DB	900	0.95	1152	100%			•	•	•
	DB	1050	1.17	1242	100%			•	•	•
	DB	1200	1.40	1372	100%			•	•	θ
	DB	1350	1.64	1468	100%			•	Θ	0
	DB	1500	1.88	1598	100%			Θ	0	\Diamond
	DB	1650	2.12	1729	100%			0	0	Х
	DB	1800	2.36	1826	100%			\Diamond	\Diamond	Х
	TB	1650	2.41	2266	100%	0	\Diamond			
Severe Duty (SD)	DB	1200	1.40	1468	90%			•	•	Θ
Maximum load pin-on (payload + bucket)		kg	5542	4997	4457	4152	3487			

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

1800 kg/m³

→ 1500 kg/m³

O 1200 kg/m³

 \diamondsuit 900 kg/m 3

X Not Recommended

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.

336E L Standard Equipment

Standard Equipment

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

ENGINE

C9.3 ACERT

Biodiesel capable

Meets U.S. EPA Tier 4 Interim, European Union Stage IIIB and Japan MLTI Step 4 emission standards

2300 m altitude capability

Electric priming pump

Automatic engine speed control

Standard, economy and high power modes

Two-speed travel

Side-by-side cooling system

Radial seal air filter

Primary filter with water separator and water separator indicator switch

Fuel differential indicator switch in fuel line 2×4 micron main filters and 1×10 micron

primary filter in fuel line

Water level indicator for water separator Air cleaner with external precleaner

Quick drains, engine and hydraulic oil

HYDRAULIC SYSTEM

Electric regeneration circuit for boom and stick

Reverse swing dampening valve

Automatic swing parking brake

High performance hydraulic return filter

Capability of installing HP stackable valve and medium and QC valve

Capability of installing additional auxiliary pump (up to 80 L/min) and circuit

Boom lowering control device and stick lowering check valve

Capability of installing Cat Bio hydraulic oil

CAB

ROPS

Pressurized operator station with positive filtration

Mirror package

Sliding upper door window

(left-hand cab door)

Glass-breaking safety hammer Coat hook

Beverage holder

Literature holder

MP3-Ready Radio

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 window and tempered other windows

Seat, high-back air suspension with heater and cooling

Travel alarm

Bi-level air conditioner (auto)

with defroster (pressurized function)

Joysticks with three on/off switches

and one modulation switch

Sunscreen

Vandal Guard Bosses

UNDERCARRIAGE

Grease Lubricated Track GLT2, resin seal

Towing eye on base frame

Guard, heavy-duty bottom, 5 mm,

with swivel guard

Heavy-duty travel motor protection

Heavy-duty rollers

ELECTRICAL

80 amp alternator

Circuit breaker

Capability to electrically connect a beacon

LIGHTS

Boom lights with time delay

Cab lights with time delay

Exterior lights integrated into storage box

SECURITY

Cat one key security system

Door locks

Cap locks on fuel and hydraulic tanks

Lockable external tool/storage box

Signaling/warning horn

Secondary engine shutoff switch

Openable skylight for emergency exit

Rearview camera

COUNTERWEIGHT

6.0 mt

TECHNOLOGY

Product Link

Optional Equipment

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

ENGINE

Bio hydraulic oil package with compatible travel motors, fine filtration and bio oil

HYDRAULIC SYSTEM

High-pressure line Medium-pressure line Cat quick coupler line Tool control system

CAB

Ashtray

UNDERCARRIAGE

Long undercarriage:

600 mm (24") double grouser shoes 600 mm (24") triple grouser shoes 700 mm (28") triple grouser shoes 800 mm (32") triple grouser shoes 850 mm (34") triple grouser shoes Guard, full length for long undercarriage

Segmented (3 Piece) track guiding guard

COUNTERWEIGHT

7.0 mt

FRONT LINKAGE

Bucket linkage, DB family with lifting eye Bucket linkage, TB family with lifting eye Heavy Duty 6.5 m (21'4") reach boom with left- and right-side light Heavy Duty

R2.8DB (9'2") 2800 mm (9'2") stick

R3.2DB (10'6") 3200 mm (10'6") stick

R3.9DB (12'10") 3900 mm (12'10") stick

Mass boom 6.18 m (20'3") with left- and right-side light

M2.55TB (8'4") 2550 mm (8'4") stick

M2.15TB (7'1") 2150 mm (7'1") stick

LIGHTS

Halogen lights, cab mounted HID lights, cab mounted

SECURITY

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

TECHNOLOGY

Cat Grade Control Depth and Slope

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

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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