

315F L

Hydraulic Excavator

2017



Engine

Engine Model	Cat® C4.4 ACERT™
Net Power – SAE J1349/ISO 9249	72 kW (98 PS)
Engine Power – ISO 14396	74 kW (101 PS)

Drive

Maximum Travel Speed	5.5 km/h
Maximum Drawbar Pull	112 kN

Weight

Minimum Operating Weight	15 040 kg
Maximum Operating Weight	17 140 kg

Introduction

The new Cat 315F compact radius excavator features a C4.4 ACERT engine that meets U.S. EPA Tier 4 Final/EU Stage IV emission standards and is miserly on fuel, paired with a state-of-the-art hydraulic system that's responsive to your every command. Each pull of the joysticks will feel like a natural extension of yourself, providing you with smooth, controlled power to take on the work in front of you with speed, precision, and confidence.

When you add in robust structures that keep you grounded and balanced, an operator environment that enhances your comfort and productivity, service points that make your routine maintenance fast and simple, available Cat Grade Control to help you create precise planes and slopes with ease, and multiple Cat work tools and tool control system that enable you to quickly take on a variety of tasks, you simply won't find a better built, more reliable, more versatile, or more rewarding excavator in its size class – from any company, anywhere.

Bottom line: If your work takes you in to tight spaces and you need the absolute best performance at the lowest cost per unit of work that you can possibly get from a 15-ton excavator, take along a Cat 315F. You will be glad you did.

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Key Performance Stats & Facts

Maximum Lift without Limitation*

4050 kg without bucket

*Ground level, 4.5 m to the side

Maximum Bucket Size

0.76 m³ 1200 mm

Maximum Reach

8680 mm

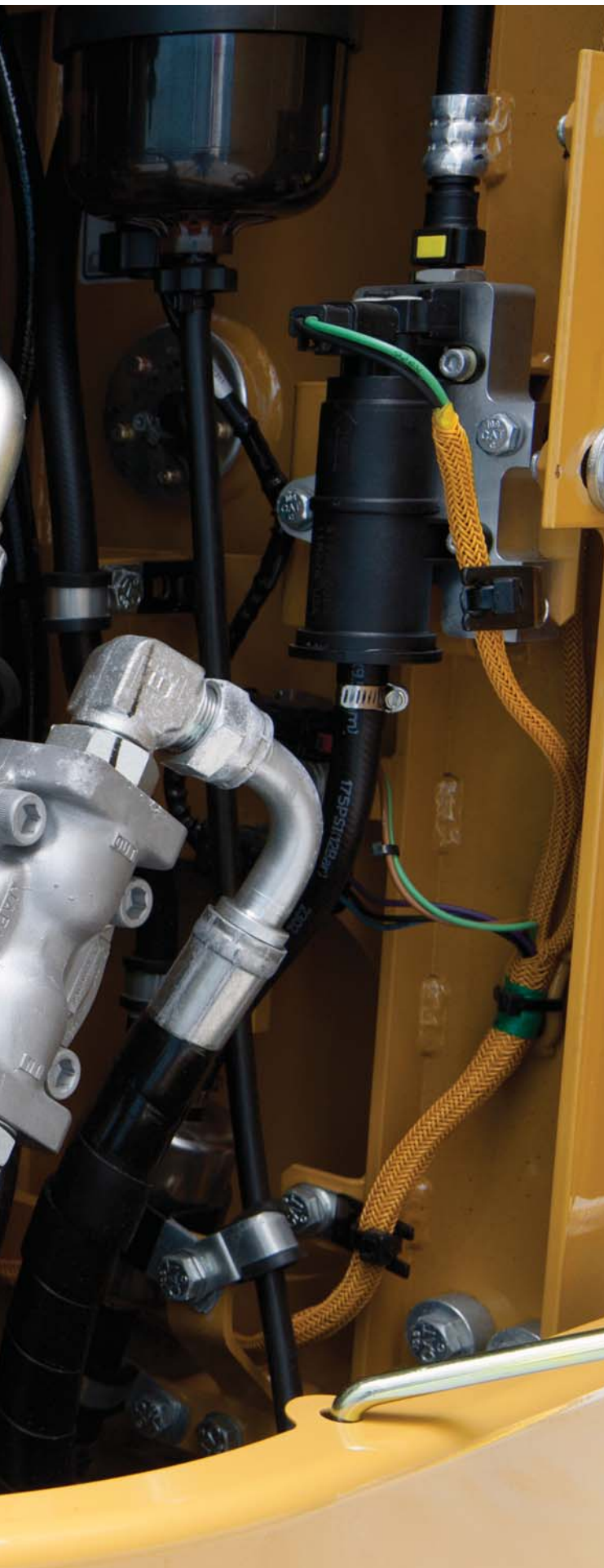
Maximum Dig Depth

5950 mm

Hydraulics

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





A Forceful, Responsive Design

The 315F features a negative flow control hydraulic system that gives you the feel and response of an open center valve system with the efficiency of a closed center valve system. In layman's terms, negative flow control decreases pump flow when oil pressure in the center bypass increases and vice versa. The net result is the pump and valve operate in harmony with less energy and less wear and tear.

A Logical Layout

All major hydraulic components are strategically located close together. This positioning leads to reduced friction loss and pressure drops, and the result is more hydraulic horsepower for the heavy-lifting, ground-breaking work you need to get done.

Valves For Added Efficiency

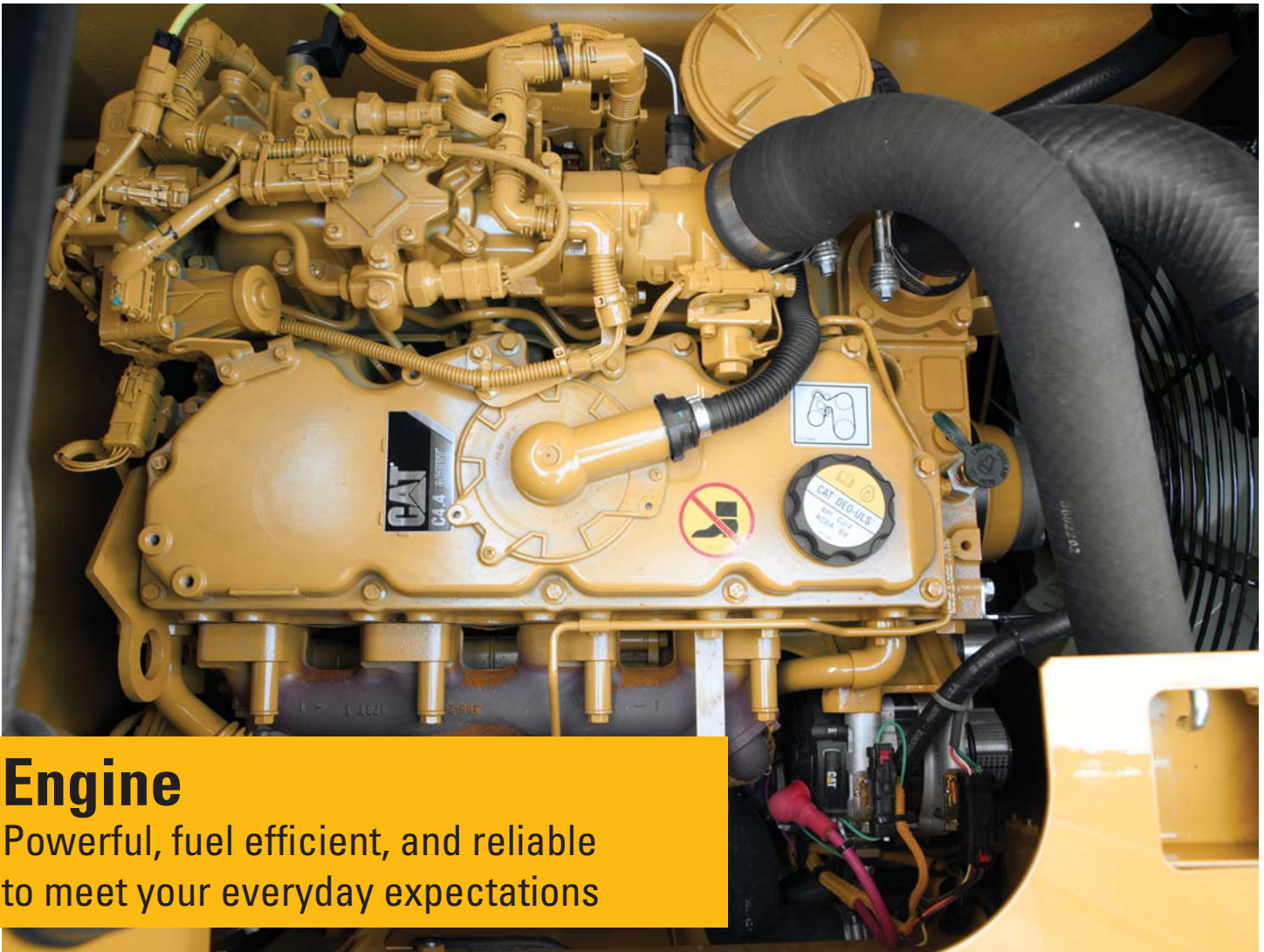
The 315F is built with a back-to-back main control valve, and the benefit to you is reduced pressure loss and fuel consumption due to the shorter distance oil has to travel. The machine also features special boom and stick valves that recirculate oil flow in the cylinders during work instead of going all the way back to the tank. The valves contribute to energy savings, but their primary benefit is allowing more oil to flow to other functions so you can experience faster cycle times and more production.

Filter For Added Protection & Performance

The capsule filter is designed to take out impurities and help you avoid system contamination and accidental spilling. The self-contained, maintenance-friendly filter is easy to remove with a simple wrench. It can take out impurities as small as beta 10 – particles so tiny you cannot see them with the eye. A sensor lets you know if there is a clog or if pressure exceeds a certain level so you can take action.

Drain Filter

A drain filter is one extra level of contamination prevention the 315F offers. Located in the pump compartment behind the pilot filter, the drain filter purifies the case drain from the main pumps, swing motor, and travel motors – all to enhance the life of the pumps and motors and uptime for you.



Engine

Powerful, fuel efficient, and reliable to meet your everyday expectations

Proven Technology

Every Tier 4 Final and Stage IV ACERT engine is equipped with a combination of proven electronic, fuel, air, and aftertreatment components. Applying these time-tested technologies lets us meet your high expectations for productivity, fuel efficiency, reliability, and service life.

Following are the results you can expect:

- High performance across a variety of applications.
- Enhanced reliability through commonality and simplicity of design.
- Maximized uptime and reduced cost with world-class Cat dealer support.
- Minimized impact on emission systems – with no operator interaction required.
- Durability with long service life.
- Same great power and response.
- Biodiesel capability to give you more potential fuel-saving flexibility.

Compact Radius

Sized right for tight quarters work



Work With Confidence

The 315F L's compact radius design makes it ideal for working confidently in space-restricted areas like road jobs with lane closures and next to buildings or other structures you'd like to keep from harm's way. With a front swing radius of 2.27 m and a tail swing radius of 1530 mm, the machine can dig, swing, and dump within a working space of 3.8 m. When rotated 90 degrees and working over the side, just 135 mm of counterweight extends beyond the track width, which allows trucks and jersey barriers to be positioned closer to the machine.

Work With Power

Unlike a standard radius machine, the 315F's boom is positioned toward the center of the machine. Not only does this help reduce the front swing radius, but it also supports more lift capacity over the front due to greater stability.

Work With Comfort

The machine features a full-size ROPS-certified cab. With low sound levels, high visibility, convenient access to switches and controls, and a fully adjustable seat, you will find it comfortable to work in all day long.

Operator Station

Your operators will enjoy the incredibly quiet and comfortable cab



A Safe, Quiet Cab

The Roll-Over Protective Structure (ROPS) cab provides you with a safe working environment. It also contributes to your comfort because it's attached to a reinforced frame with special viscous mounts that limit vibration and unnecessary sound. Add in special roof lining and sealing and you have a cab that's as quiet inside as today's top pickup trucks.

Comfortable Seat

The seat is an air suspension type with heat. It features a reclining back, upper and lower slide adjustments, and height and tilt angle adjustments to meet your needs for maximum comfort.

A Cool & Warm Environment

The automatic climate control system features multiple air outlets with filtered ventilation. Air flows on the floor, behind the seat, and in front of you to make your work in either hot or cold weather much more pleasant and productive.

Controls Just For You

The joystick consoles adjust to improve your comfort and productivity during the course of a day. The armrests telescope up and down just like a bicycle seat. Joysticks for tool control have buttons to make working with a two-way-flow grapple, thumb, and shear simple. The right joystick features a button that will reduce engine speed when you are not working to help save fuel. Touch it once and speed reduces; touch it again and speed increases for normal operation.

A Helpful Monitor

The LCD monitor is easy to see and navigate. Programmable in up to 44 languages to meet today's diverse workforce, the monitor clearly displays critical information you need to operate efficiently and effectively. Plus it projects the image from the standard rearview camera to help you see what's going on around you so you can stay safely focused on the job at hand.

Ample Storage & Auxiliary Power

Storage spaces are located in the front, rear, and side consoles of the cab. A drink holder accommodates a large mug, and a shelf behind the seat stores large lunch or toolboxes. Two 12-volt power supply sockets are conveniently located near the key storage areas for charging your electronic devices like an MP3 player, a cell phone, or a tablet.



Integrated Technologies

Monitor, manage, and enhance your job site operations



Cat Connect

The smart use of technology and services will improve your job site efficiency. In fact, using data from technology-equipped machines give you more information and insight into your equipment and operations than ever before.

Cat Connect technologies offer improvements in these key areas:

- **GRADE Technologies**

GRADE technologies like Cat Grade Control Depth and Slope combine digital design data and in-cab guidance to help you work more productively and accurately with less rework. Real-time bucket tip positioning and cut and fill data on the standard cab monitor guide you to grade, saving money on fuel and materials.

- **LINK Technologies**

LINK technologies like Product Link™ wirelessly connect you to your equipment, giving you valuable insight into how your machine or fleet is performing. The system tracks location, hours, fuel usage, productivity, idle time, and diagnostic codes through the online VisionLink® interface so you can make timely, fact-based decisions to maximize efficiency, improve productivity, and lower operating costs.



Front Linkage

Options to take on your far-reaching and up-close tasks

Link & Pins

The power link between the stick and bucket is designed for heavy-duty lifting over the long haul. With an integrated lifting eye, the power link helps enhance lifting capability by lowering your load point and maximizing the power built into the boom cylinders. All pins used in the front linkage have thick chrome plating to give them high wear and corrosion resistance. The large pins distribute load weight to ensure long pin, boom, and stick life.

Booms

Two types of booms are available to meet a variety of tasks. A reach boom offers you excellent all-around versatility and a large working envelope; a power offset boom allows you to stay in the same position to load and dump, which increases productivity when your team is working in narrow, restricted space. A unique bucket-to-cab avoidance feature is also included to ensure safe operation.

Sticks

The R3.0 m stick is best for when you need deep trenching, longer reach, and top truck loading capabilities. The R2.5 m stick provides greater breakout force and increases productivity when you primarily plan on using hydro-mechanical work tools. The 2.13 m stick combines with the power offset boom to deliver excellent breakout force and cycle speed in those tough-to-reach places.

Made To Last

Each boom and stick is built with internal baffle plates for additional 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, and boom and stick cylinders to enhance durability for the tough work you do. Your Cat dealer can help you pick the best combination for your business.

Structures & Undercarriage

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



The 315F L is a well-built machine designed to give you a very long service life. The upper frame has mountings made specifically to support the heavy-duty cab; it's also reinforced around key areas that take on stress like the boom foot and skirt. Massive bolts are used to attach the track frames to the body, and additional bolts are used throughout to increase the machine's digging force, which leads to more productivity for you.



Durable Undercarriage

The 315F L undercarriage contributes significantly to its outstanding stability and durability. Track shoes, links, rollers, idlers, and final drives are all built with long-lasting, high-tensile-strength steel. Cat Grease Lubricated Track 2 (GLT2) track link protects moving parts by keeping water, debris, and dust out and grease sealed in, which delivers longer wear life and reduced noise when traveling. Optional guide guards help maintain track alignment to improve the machine's overall performance – whether you're traveling on a flat, heavy bed of rock or a steep, wet field of mud.



Great Weight

The 315F L has one counterweight option. Rounded to minimize the amount of overhang, the 3.56 mt weight is mounted directly to the main frame using massive bolts to ensure maximum rigidity. Plus it has an integrated housing to help protect the machine's standard rearview camera.

Attachments

Tools to make you productive and profitable



Change Jobs Quickly

Cat quick coupler brings the ability to quickly change attachments and switch from job to job.

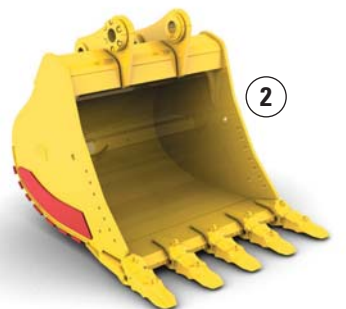
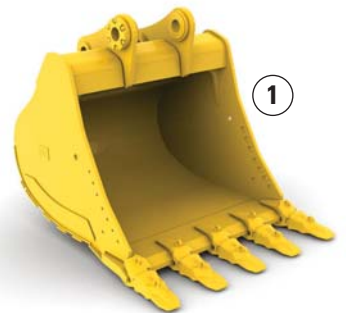
Dig, Finish, or Break

A range of buckets dig everything from top soil to abrasive material. For finishing and grading work, compact and shallow ditch cleaning buckets fit the need.

A hydraulic hammer equips the machine for breaking sidewalks, driveways, and pavement.

Set Up Your Machine For Profitability

Your Cat dealer can install hydraulic kits to properly operate all Cat Work Tool attachments – maximizing the machine's uptime and your profits. All Cat Work Tool attachments are supported by the same Cat dealer network as your Cat machine.



1) General Duty (GD) 2) Heavy Duty (HD)

Serviceability

Designed to make your maintenance quick and easy



On-Board Monitoring

The 315F has a pre-start monitoring system that allows you to check coolant, hydraulic oil, and engine oil levels right inside the cab. The monitor also tells you fluid and filter change intervals to ensure you keep the machine in top-performing condition.

Safe, Convenient Access

You can see the service hour meter inside the cab and reach most routine maintenance items like fluid taps and grease points from the safety and convenience of ground level. Filters are banked together for higher service efficiency. Compartments feature wide service doors and heavy-duty hardware to keep them open – all to make service work simpler and more secure.

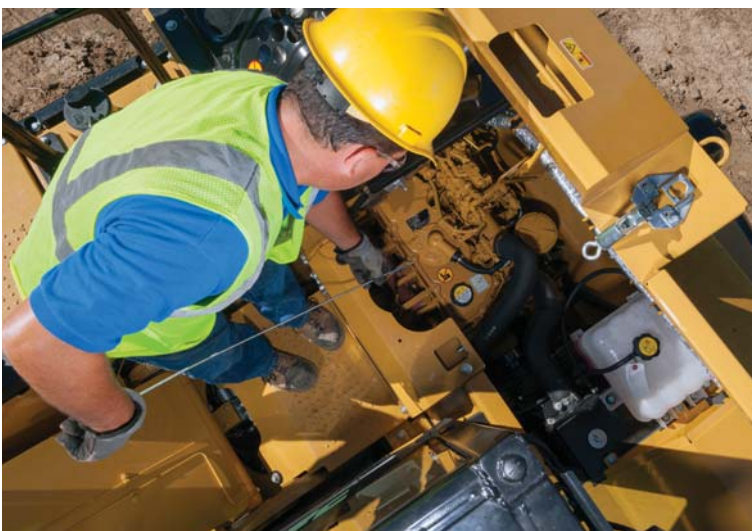


A Fresh Idea

The fresh air filter is conveniently located on the side of the cab to make it easy for you to reach and replace. It's protected by a lockable door that can only be opened with the engine key.

A Priming Solution

Located in the pump compartment, an electric fuel priming pump eliminates the need for you to manually prime after filter changes. It also eliminates the risk of fuel contamination by preventing unfiltered fuel from being backfilled during filter changes.



More Service Benefits

Drain tubes beneath the machine make it easy and simple for you to remove water and sediment during routine maintenance. They also make it easy to change oil without special tools or the risk of spilling. Same goes for an integrated fuel level indicator that pops up to help you reduce the possibility of fuel tank overfilling.

Safety

Features to help protect you day in and day out

A Safe, Quiet Cab

The roll-over protective structure (ROPS) cab provides you with a safe working environment when properly seated and belted. It also contributes to your comfort because it's attached to a reinforced frame with special viscous mounts that limit vibration and unnecessary sound, and it includes special roof lining and sealing to make it as quiet as any of today's top pickup trucks.

Secure Contact Points

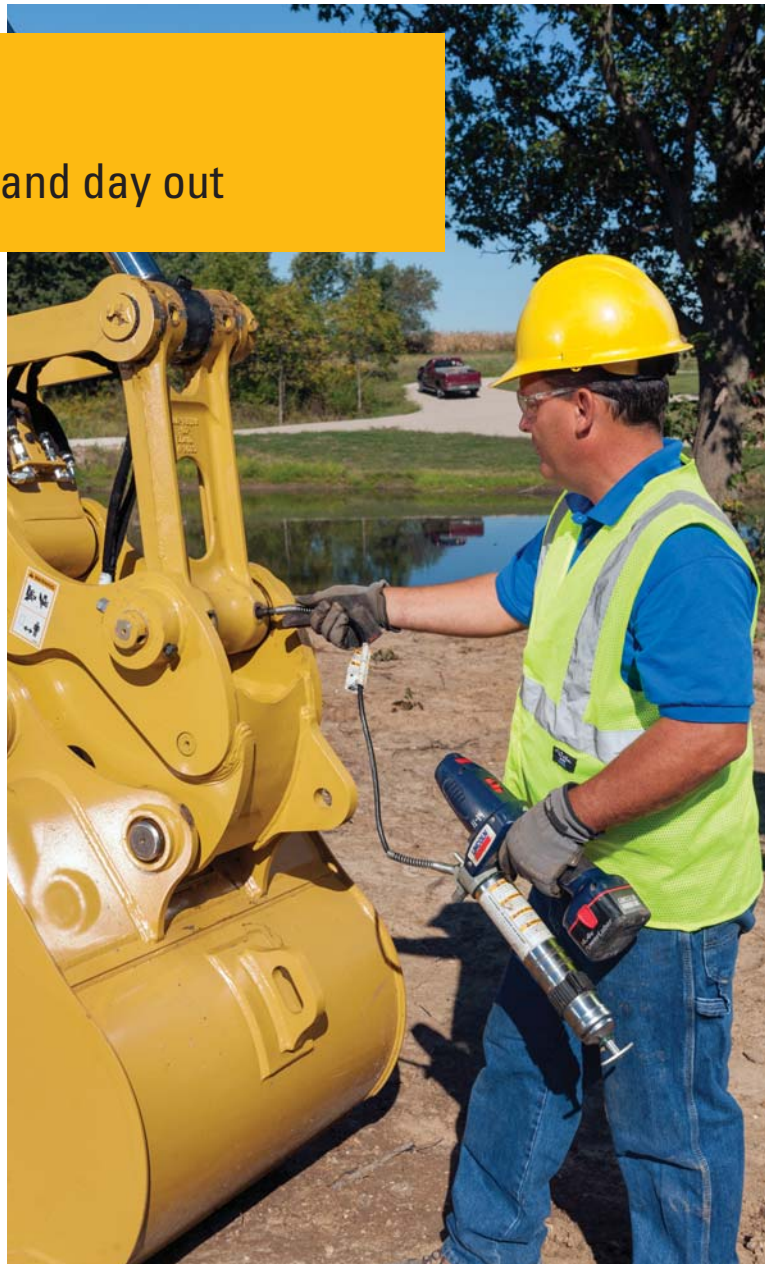
Multiple large steps get you into the cab as well as a leg up to the compartments. Extended hand rails allow you to safely climb to the upper deck and removable anti-skid plates. Anti-skid plates reduce your slipping hazards in all types of weather conditions.

Great Views

Ample glass gives you excellent visibility out front and to the side, and the standard rearview camera gives you a clear field of view behind the machine through the cab monitor. The available split-configuration windshield features an upper window with handles that make it easy to slide and store above you and a lower window that can be removed and stored on the inside wall of the cab. The large skylight serves as an emergency exit and provides you with enhanced visibility.

Smart Lighting

Halogen lights provide plenty of illumination, and the cab and boom lights can be programmed to stay on for up to 90 seconds after the engine's been turned off to help you safely exit the machine.



Guard Options

The 315F can be equipped with several guarding options. Following are just a few:

- Falling Object Guarding System (FOGS)
- Vandal guards
- Full-length wire mesh
- Heavy-duty bottom guards
- Track guiding guards

Complete Customer Care

Support you can count on



Expert Advice You Can Trust

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.

Support Agreements To Fit Your Needs

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.

Parts When & Where You Need Them

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

Operating Techniques To Boost Your Profits

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.

Financial Options Just For You

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.

What's Best For You Today...& Tomorrow

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 C4.4 ACERT engine meets Tier 4 Final and Stage IV emission standards.
- The 315F L has the flexibility of running on either ultra-low-sulfur diesel (ULSD) fuel with 15 ppm for the EPA, 10 ppm for the EU of sulfur or less, or biodiesel (up to B20) fuel blended with ULSD that meets ASTM 6751 standards.
- An overfill indicator rises when the fuel tank is full to help your service technicians avoid spilling.
- An unique engine oil filter eliminates the need for painted metal cans and aluminum top plates. The cartridge-style spin-on housing enables the internal filter to be separated and replaced; the used internal element can be incinerated to help reduce waste.
- The machine is built to be rebuilt with major structures and components capable of being remanufactured to reduce waste and replacement costs.
- The 315F L is an efficient, productive machine that reduces impact on natural resources for future generations.

315F L Hydraulic Excavator Specifications

Engine

Engine Model	Cat C4.4 ACERT
Engine Power – ISO 14396	74 kW (101 PS)
Net Power – SAE J1349/ISO 9249	72 kW (98 PS)
Bore	105 mm
Stroke	127 mm
Displacement	4.4 L

Weight

Minimum Operating Weight*	15 040 kg
Maximum Operating Weight**	17 140 kg

*4.65 m reach boom, 2.5 m stick, 500 mm shoes, no blade

**4.37 m power offset boom, 2.13 m stick, 700 mm shoes, blade.

Hydraulic System

Main System – Maximum Flow (Total)	256 L/min
Maximum Pressure – Equipment	30 500 kPa
Maximum Pressure – Power Offset Boom (optional)	29 900 kPa
Maximum Pressure – Travel	35 000 kPa
Maximum Pressure – Swing	23 000 kPa
Pilot System – Maximum Flow	21.9 L/min
Pilot System – Maximum Pressure	4120 kPa
Boom Cylinder – Bore	110 mm
Boom Cylinder – Stroke	1000 mm
Stick Cylinder – Bore	120 mm
Stick Cylinder – Stroke	1197 mm
Bucket Cylinder – Bore	100 mm
Bucket Cylinder – Stroke	939 mm

Drive

Maximum Travel Speed	5.5 km/h
Maximum Drawbar Pull	112 kN

Swing Mechanism

Swing Speed	11 rpm
Swing Torque	30.9 kN·m

Service Refill Capacities

Fuel Tank Capacity	178 L
DEF Tank Capacity	19 L
Cooling System	28 L
Engine Oil (with filter)	13.5 L
Swing Drive (each)	3 L
Final Drive (each)	3 L
Hydraulic System (including tank)	160 L
Hydraulic Tank	84 L

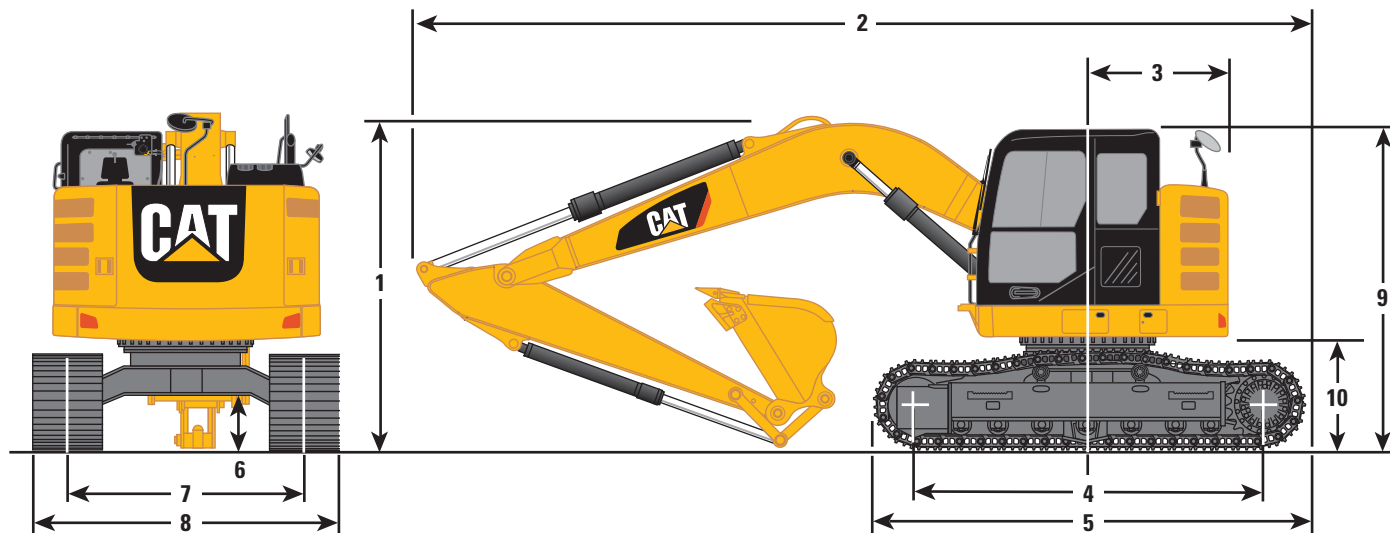
Track

Long Undercarriage	
Number of Shoes (each side)	46 pieces
Number of Track Rollers (each side)	7 pieces
Number of Carrier Rollers (each side)	2 pieces

315F L Hydraulic Excavator Specifications

Dimensions

All dimensions are approximate.



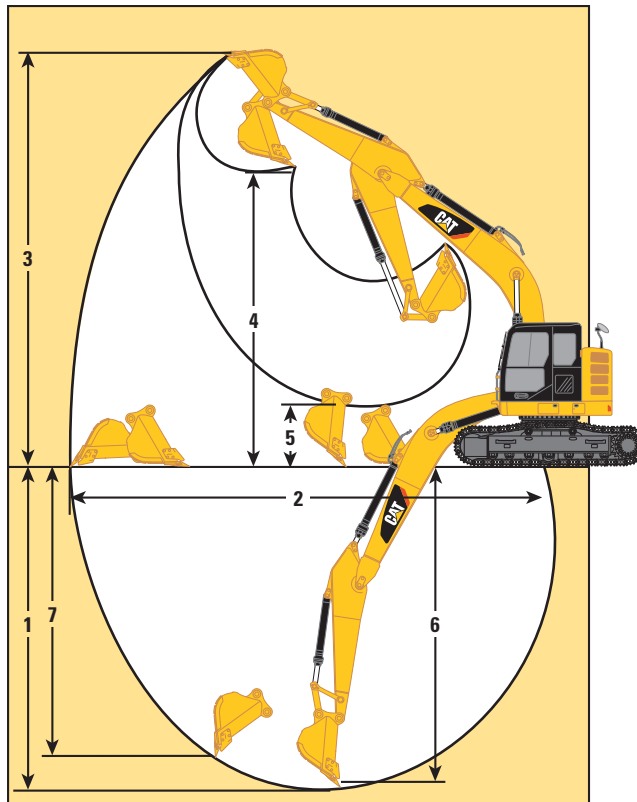
Boom Type	Reach Boom 4.65 m		Power Offset Boom 4.37 m
	R3.0	R2.5	R2.13
Stick Size			
1 Shipping Height	3000 mm	3000 mm	3000 mm
2 Shipping Length			
Long Undercarriage	7450 mm	7450 mm	7560 mm
Long Undercarriage with Blade	8010 mm	8010 mm	8010 mm
3 Tail Swing Radius			
Heavy Counterweight	1530 mm	1530 mm	1530 mm
4 Length to Center of Rollers – Long Undercarriage	3040 mm	3040 mm	3040 mm
5 Track Length – Long Undercarriage	3750 mm	3750 mm	3750 mm
6 Ground Clearance	440 mm	440 mm	440 mm
7 Track Gauge – Long Undercarriage (shipping)*	1990 mm	1990 mm	1990 mm
8 Transport Width – Long Undercarriage			
500 mm Shoes	2490 mm	2490 mm	2490 mm
600 mm Shoes	2590 mm	2590 mm	2590 mm
700 mm Shoes	2690 mm	2690 mm	2690 mm
9 Cab Height	2810 mm	2810 mm	2810 mm
Cab Height with Top Guard	2950 mm	2950 mm	2950 mm
10 Counterweight Clearance	860 mm	860 mm	860 mm

*With GD 0.53 m³ bucket.

315F L Hydraulic Excavator Specifications

Working Ranges

All dimensions are approximate.



Boom Type

Reach Boom 4.65 m

Stick Size

R3.0

R2.5

Bucket

0.53 m³

0.53 m³

1 Maximum Digging Depth

5950 mm

5450 mm

2 Maximum Reach at Ground Level

8680 mm

8230 mm

3 Maximum Cutting Height

9640 mm

9310 mm

4 Maximum Loading Height

7190 mm

6860 mm

5 Minimum Loading Height

2060 mm

2500 mm

6 Maximum Depth Cut for 2440 mm Level Bottom

5770 mm

5240 mm

7 Maximum Vertical Wall Digging Depth

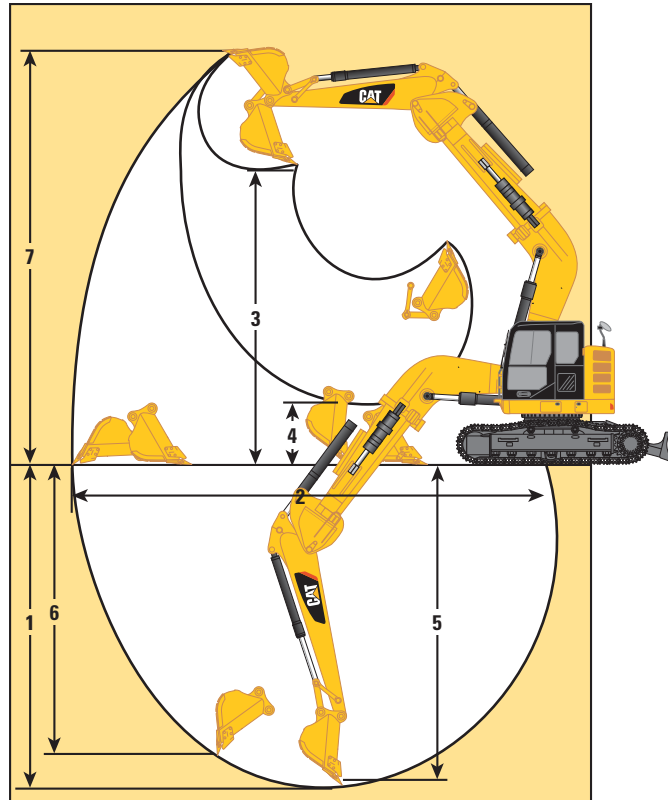
5280 mm

4880 mm

315F L Hydraulic Excavator Specifications

Working Ranges

All dimensions are approximate.



Boom Type	Power Offset Boom 4.37 m
Stick Size	R2.13
Bucket	0.53 m ³
1 Maximum Digging Depth	4840 mm
2 Maximum Reach at Ground Level	7270 mm
3 Maximum Cutting Height	8450 mm
4 Maximum Loading Height	6020 mm
5 Minimum Loading Height	2330 mm
6 Maximum Depth Cut for 2440 mm Level Bottom	4480 mm
7 Maximum Vertical Wall Digging Depth	3550 mm

315F L Hydraulic Excavator Specifications

Major Component Weights

Base Machine with Boom Cylinder without Counterweight, Front Linkage and Track	5100 kg
Long Undercarriage	2650 kg
Counterweight	3560 kg
Boom (includes lines, pins and stick cylinder)	
Reach Boom – 4.65 m	1030 kg
Power Offset Boom	1740 kg
Stick (includes lines, pins, bucket cylinder and bucket linkage)	
R3.0	670 kg
R2.5	590 kg
R2.13	520 kg
Track Shoe (Long/per two tracks)	
500 mm Triple Grouser	1570 kg
600 mm Triple Grouser	1820 kg
700 mm Triple Grouser	2090 kg
Quick Coupler (NEW PIN grabber coupler) with PIN	212 kg
Blade	
2500 mm	830 kg
2600 mm	830 kg
Bucket with Sidecutter and Tip	
GD 0.53 m ³	440 kg

All weights are rounded up to nearest 10 kg.

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

315F L Hydraulic Excavator Specifications

Operating Weight and Ground Pressure

	700 mm Triple Grouser Shoes		600 mm Triple Grouser Shoes		500 mm Triple Grouser Shoes	
	kg	kPa	kg	kPa	kg	kPa
Long Undercarriage without Blade – 3.56 mt Counterweight						
Reach Boom – 4.65 m						
R3.0 m	15 640	33.3	15 370	38.2	15 120	45.1
R2.5 m	15 560	33.1	15 290	38.0	15 040	44.9
Power Offset Boom – 4.37 m						
R2.13 m	16 300	34.7	16 050	39.9	15 800	47.1
Long Undercarriage with Blade – 3.56 mt Counterweight						
Reach Boom – 4.65 m						
R3.0 m	16 480	35.1	16 200	40.3	15 950	47.6
R2.5 m	16 400	34.9	16 120	40.1	15 860	47.3
Power Offset Boom – 4.37 m						
R2.13 m	17 140	36.5	16 860	41.9	16 600	49.5

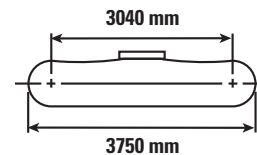
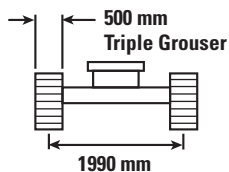
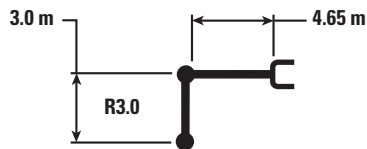
Bucket and Stick Forces

Boom Type	Reach Boom 4.65 m		Power Offset Boom 4.37 m
	R3.0	R2.5	R2.13
Bucket	0.53 m ³	0.53 m ³	0.53 m ³
Bucket Digging Force (SAE)	85.2 kN	85 kN	78.1 kN
Bucket Digging Force (ISO)	95.3 kN	95 kN	87.3 kN
Stick Digging Force (SAE)	57 kN	63.6 kN	61.1 kN
Stick Digging Force (ISO)	58.4 kN	65.3 kN	63 kN

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.

315F L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 3.56 mt – Blade Down



Reach (m)	Unit	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		m		
		ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	
7.5 m	kg					*2600	*2600					*2500	*2500	4.5
6.0 m	kg					*3400	*3400	*2300	*2300			*2100	*2100	6.1
4.5 m	kg					*3650	*3650	*3350	3050			*1950	*1950	7.0
3.0 m	kg			*5900	*5900	*4300	*4300	*3600	2950			*1950	*1950	7.4
1.5 m	kg			*7950	7850	*5050	4250	*3900	2800	*2450	2000	*2050	1950	7.6
0.0 m	kg			*7350	7350	*5500	4000	*4000	2700			*2300	2000	7.4
-1.5 m	kg	*4500	*4500	*7900	7200	*5300	3900	*3800	2600			*2700	2150	6.9
-3.0 m	kg	*7550	*7550	*6300	*6300	*4400	3900	*2850	2650			*2800	2650	6.1
-4.5 m	kg			*3400	*3400							*2050	*2050	4.5



ISO 10567



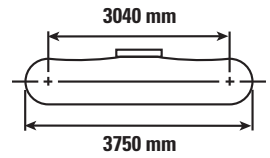
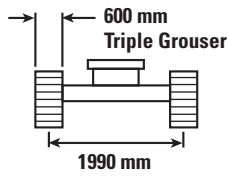
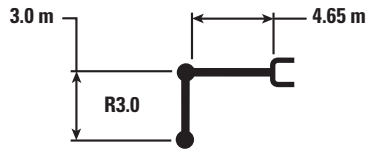
*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories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

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

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

315F L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 3.56 mt – Blade Down



Reach (m)	Unit	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		m		
		ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	ISO 10567	
7.5 m	kg					*2600	*2600					*2500	*2500	4.5
6.0 m	kg					*3400	*3400	*2300	*2300			*2100	*2100	6.1
4.5 m	kg					*3650	*3650	*3350	3100			*1950	*1950	7.0
3.0 m	kg			*5900	*5900	*4300	*4300	*3600	3000			*1950	*1950	7.4
1.5 m	kg			*7950	*7950	*5050	4300	*3900	2850	*2450	2050	*2050	2000	7.6
0.0 m	kg			*7350	*7350	*5500	4050	*4000	2750			*2300	2050	7.4
-1.5 m	kg	*4500	*4500	*7900	7300	*5300	3950	*3800	2650			*2700	2200	6.9
-3.0 m	kg	*7550	*7550	*6300	*6300	*4400	3950	*2850	2700			*2800	2650	6.1
-4.5 m	kg			*3400	*3400							*2050	*2050	4.5



ISO 10567



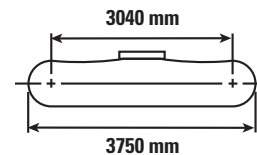
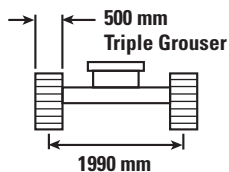
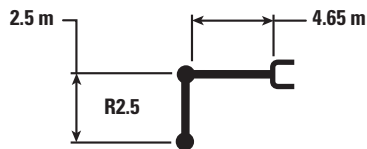
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Lift capacity stays with $\pm 5\%$ for all available track shoes.

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

315F L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 3.56 mt – Blade Down



Reach (m)	Unit	1.5 m		3.0 m		4.5 m		6.0 m		Attachment		m
		Hydraulic	Tipping	Hydraulic	Tipping	Hydraulic	Tipping	Hydraulic	Tipping	Hydraulic	Tipping	
7.5	kg			*4400	*4400					*3050	*3050	3.7
6.0	kg					*3850	*3850			*2400	*2400	5.5
4.5	kg			*4550	*4550	*4050	*4050	*3650	3000	*2250	*2250	6.5
3.0	kg			*6700	*6700	*4700	4500	*3800	2900	*2200	*2200	7.0
1.5	kg			*7250	*7250	*5350	4200	*4050	2800	*2350	2150	7.2
0.0	kg			*6500	*6500	*5550	4000	*4050	2700	*2600	2200	7.0
-1.5	kg	*4950	*4950	*7450	7300	*5150	3950	*3650	2700	*3100	2450	6.5
-3.0	kg	*7300	*7300	*5550	*5550	*3950	*3950			*2800	*2800	5.5



ISO 10567



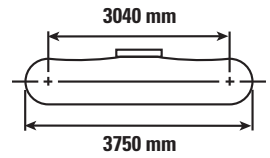
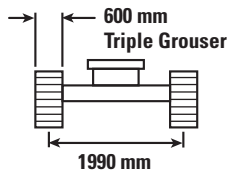
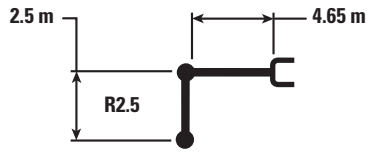
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Lift capacity stays with $\pm 5\%$ for all available track shoes.

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

315F L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 3.56 mt – Blade Down



Reach (m)	Unit	1.5 m		3.0 m		4.5 m		6.0 m				m
		Hydraulic	Tipping	Hydraulic	Tipping	Hydraulic	Tipping	Hydraulic	Tipping	Hydraulic	Tipping	
7.5 m	kg			*4400	*4400					*3050	*3050	3.7
6.0 m	kg					*3850	*3850			*2400	*2400	5.5
4.5 m	kg			*4550	*4550	*4050	*4050	*3650	3050	*2250	*2250	6.5
3.0 m	kg			*6700	*6700	*4700	4550	*3800	2950	*2200	*2200	7.0
1.5 m	kg			*7250	*7250	*5350	4300	*4050	2850	*2350	2200	7.2
0.0 m	kg			*6500	*6500	*5550	4100	*4050	2750	*2600	2250	7.0
-1.5 m	kg	*4950	*4950	*7450	7450	*5150	4000	*3650	2700	*3100	2500	6.5
-3.0 m	kg	*7300	*7300	*5550	*5550	*3950	*3950			*2800	*2800	5.5



ISO 10567



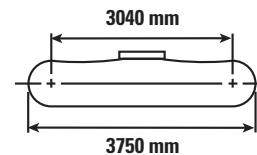
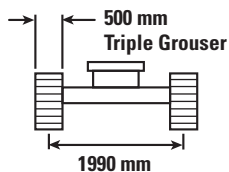
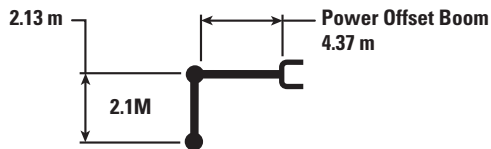
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








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

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

315F L Hydraulic Excavator Specifications

Power Offset Boom Lift Capacities – Counterweight: 3.56 mt – Blade Down



		1.5 m		3.0 m		4.5 m		6.0 m				m
												
6.0 m	kg			*4550	*4550					*2750	*2750	4.2
4.5 m	kg			*5000	*5000	*4150	*4150			*2650	*2650	5.4
3.0 m	kg			*6600	*6600	*4600	4450	*3000	2850	*2750	*2750	6.0
1.5 m	kg			*8050	7450	*5150	4100	*3850	2700	*3100	2600	6.2
0.0 m	kg			*7850	7050	*5250	3900	*3750	2600	*3750	2600	6.0
-1.5 m	kg	*6300	*6300	*6700	*6700	*4650	3800			*3700	3000	5.4
-3.0 m	kg			*4450	*4450					*3300	*3300	4.2



ISO 10567



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

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

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

315F L Hydraulic Excavator Specifications

Work Tool Offering Guide*

Boom Type	Reach Boom	
Stick Size	R2.5	R3.0
Hydraulic Hammer	H110E s H115E s	H110E s H115E s
Demolition and Sorting Grapple	G310B-D/R^ G310 GC G310 GC fixed CAN G313 GC**	G310B-D/R*** G310 GC^^ G310 GC fixed CAN G313 GC***
Scrap and Demolition Shear	S320B#	S320B#
Compactor (Vibratory Plate)	CVP75	CVP75
Orange Peel Grapple		
Rippers		
Pin Grabber Coupler	Cat-PG	These work tools are available for the 315F L. Consult your Cat dealer for proper match.
Dedicated Quick Coupler	CW-20	
	CW20s	

* Offerings not available in all areas. Matches are dependent on excavator configurations. Consult your Cat dealer to determine what is offered in your area and for proper work tool match.

** Pin-on or CW

*** Pin-on only

Boom mount

^ Work over the front only with CW (pin-on and CW)

^^ Work over the front only with Cat-PG (pin-on, CW and Cat-PG)

Note: Demolition and Sorting Grapple: D – Demolition shells, R – Recycling shells, fixed CAN – fixed hinge plates for CW quick coupler usage.

315F L Hydraulic Excavator Specifications

Bucket Specifications and Compatibility

	Width	Capacity	Weight	Fill	Reach Booms		POB
	mm	m ³	kg	%	R3.0	R2.5	R2.13
With Centerlock Quick Coupler							
General Duty (GD)	450	0.20	235	100	●	●	●
	500	0.24	285	100	●	●	●
	600	0.31	308	100	●	●	●
	750	0.41	355	100	●	●	●
	900	0.53	404	100	●	●	●
	1050	0.65	452	100	⊖	⊕	●
	1200	0.76	492	100	○	⊖	⊕
Maximum load pin-on (payload + bucket)				kg	1479	1699	1974

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 Long tips.

Maximum Material Density:

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

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

315F L Standard Equipment

Standard Equipment

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

CAB

- Pressurized operator station with positive filtration
- Sliding upper door window (left-hand cab door)
- Removable lower windshield with in cab storage bracket
- Coat hook
- Beverage holder
- Literature holder
- AM/FM radio
- Radio with MP3 auxiliary audio port
- Two stereo speakers
- Storage shelf suitable for lunch or toolbox
- Color LCD display with indicators, 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 additional pedal
- Power outlets, 5 amp
- Travel alarm
- Laminated glass front upper window and tempered other windows

ELECTRICAL

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

ENGINE

- C4.4 ACERT diesel engine
- Biodiesel capable
- Meets Tier 4 Final and Stage IV emission standards
- 2300 m altitude capability
- Electric priming pump
- Automatic engine speed control
- 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
- Secondary filter
- Screen filter in fuel line
- Variable speed fan with viscous clutch

HYDRAULIC SYSTEM

- Boom drift reduction valve
- Regeneration circuit for boom and stick
- Reverse swing dampening valve
- Automatic swing parking brake
- High-performance hydraulic return filter
- Fine swing control

LIGHTS

- Halogen boom light (left side)
- Time delay function for boom light and cab light
- Exterior light

UNDERCARRIAGE

- Center track guiding guard
- Grease Lubricated Track GLT2, resin seal
- Towing eye on base frame

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
- Rear window for emergency exit
- Guard, travel motor protection
- Rearview camera

TECHNOLOGY

- Product Link

Optional Equipment

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

CAB

- Seat, high-back air suspension with heater and cooling
- Seat, high-back air suspension with heater
- Seat, high-back mechanical suspension
- Right pedal
- Rain protector
- Cab mirror
- Ashtray

COUNTERWEIGHT

- 3.56 mt without lifting eye

ELECTRICAL

- Cold weather battery -25° C
- Jump start receptacle

ENGINE

- Quick drains, engine and hydraulic oil

FRONT LINKAGE

- Quick coupler
- Bucket linkage
- 4.65 m Reach Boom
- Power Offset Boom
- 2.13 m stick for Power Offset Boom
- 2.5 m stick
- 2.5 m stick with Cat Grade Control
- 3.0 m stick

HYDRAULIC SYSTEM

- Control pattern quick-changer, two way
- Auxiliary hydraulics
- Boom and stick lines
- High-pressure line
- Medium-pressure line
- Quick coupler line
- Boom lowering and stick lowering control device
- Cat Bio hydraulic oil

LIGHTS

- Working light, cab mounted with time delay
- HID light, cab mounted with time delay
- Halogen boom lights (right side)

UNDERCARRIAGE

- 500 mm triple grouser shoes
- 600 mm triple grouser shoes
- Rubber pad for 500 mm triple grouser shoes
- 2500 mm blade with replaceable cutting edge
- 2600 mm blade with replaceable cutting edge
- Swivel guard

SECURITY

- FOGS, bolt-on
- Guard, cab front, mesh
- Guard, vandalism
- Security system fitted (MSS)
- Bottom guards, heavy duty
- Rearview camera

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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(ANZ)

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