

318F L

Hydraulic Excavator

2017



Engine

Engine Model	Cat® C4.4 ACERT™	
Net Power – SAE J1349	88 kW	117 hp
Engine Power – ISO 14396	91 kW	122 hp

Drive

Maximum Travel Speed	4.0 km/h	2.5 mph
Maximum Drawbar Pull	207.5 kN	46,648 lbf

Weights

Minimum Operating Weight	18 800 kg	41,454 lb
Maximum Operating Weight	19 300 kg	42,557 lb

If you are looking for a productive, fuel-efficient, easy-to-operate-and-transport 18 metric ton machine, you will find it in the new 318F L. Built to meet today's U.S. EPA Tier 4 Final emission standards, the machine makes an excellent choice for people who need a well-balanced utility machine that delivers power and fuel economy in an easy-to-transport package. In fact, the 318F L comes equipped with several new features and benefits that will delight both you and your operators.

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Engine

Powerful yet efficient to meet your expectations for low fuel consumption





Proven Technology

The Cat C4.4 ACERT engine, like every Cat Tier 4 Final 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; they work together “behind the scenes” so they won’t interrupt the job or the operator.

Following are just some of the results you can expect out of a Cat Tier 4 Final engine:

- **Improved fluid efficiency of up to 5%** over Tier 4 Interim products, including Diesel Exhaust Fluid (DEF) consumption.
- **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.
- **Better fuel economy** with minimized maintenance costs.
- **Same great power** and response.

The Cat C4.4 ACERT engine is built to meet your demanding needs all day every day. There is no interruption to your job process as our regeneration system works automatically with no operator intervention required.

Power Modes

The 318F L features two power modes: High power mode is when you need maximum production; economy mode is when you need to balance performance with fuel economy. Two additional fuel-saving features are on demand engine power and engine idle shutdown. On demand engine power keeps engine speed low during light loading and automatically adjusts speed up when it senses a heavier load; engine idle shutdown automatically shuts the engine off when it’s been idling for more than a specified amount of time that you set, which can save you significant amounts of fuel, reduce your emissions, and even reduce your accumulated service hours, which will extend service intervals and improve resale value.

Biodiesel-Ready Fuel System

You have added flexibility with the C4.4 ACERT engine because it’s equipped to run on up to B20 biodiesel fuel that meets ASTM 6751 standards. Just fill it up and go.

Hydraulics

Power to move your material with speed and precision





A Powerful, Efficient Design

When it comes to moving material quickly and efficiently, you need hydraulic horsepower – the type of ground-breaking power the 318F L can deliver. Major hydraulic components like pumps and valves are located close together so shorter tubes and lines can be used. This design leads to less friction loss, reduced pressure drops, and more power to the ground for the work you need to get done.

Control Like No Other

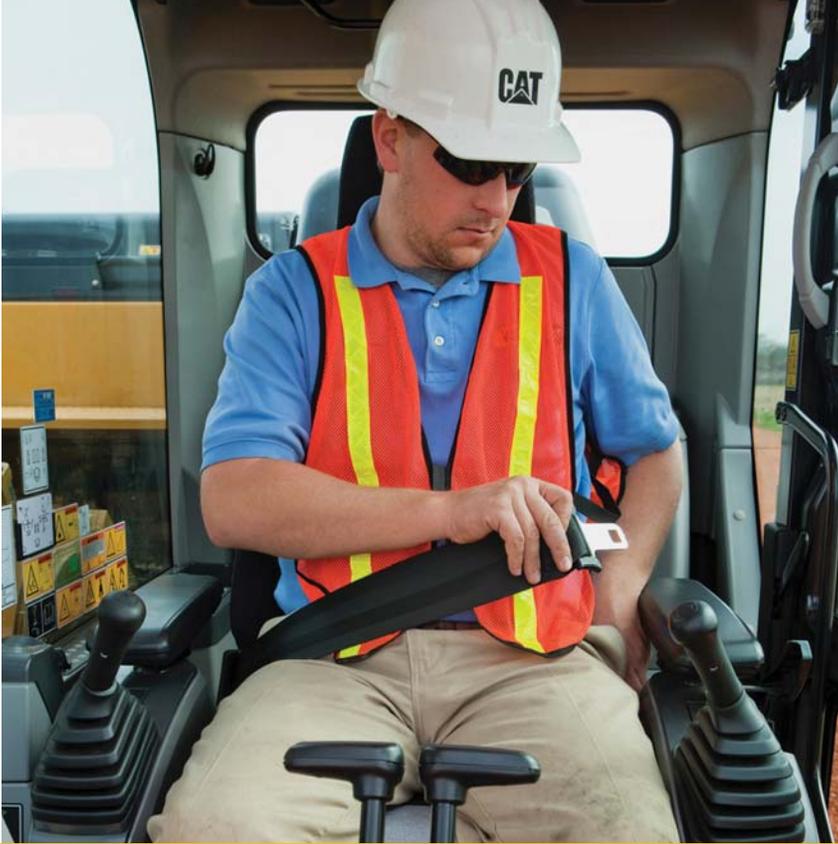
Controllability is one of the main attributes of Cat excavators, and one of the key contributors to this is the main control valve. The valve opens slowly when your range of joystick lever movement is small and opens rapidly when movement is high. It puts flow where you need it when you need it, which leads to smoother operation, greater efficiency, and lower fuel consumption.

Auxiliary Hydraulics For Added Versatility

Auxiliary hydraulics give you greater tool versatility so you can take on more work with just one machine, and there are several options from which you can choose. A quick coupler circuit, for example, will allow you to switch from one tool to another in a matter of minutes – all from the comfort and convenience of the cab.

Boom & Stick Oil Re-Circulation For Added Efficiency

The 318F regenerates the flow of oil from the head end of the boom and stick cylinders to the rod end of the boom and stick cylinders during the work cycle to save energy and improve fuel efficiency. It's optimized for any dial speed setting you select, which results in less pressure loss for higher controllability, more productivity, and lower operating costs for you.



Controls Just For You

The right and left joystick consoles can be adjusted to improve your comfort and productivity during the course of a day. Also, 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.

Operator Station

Comfort and convenience to keep you productive

A Safe, Quiet Cab

The 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 Options

The seat range includes air suspension, heated, and air cooled options. All seats include 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.

A Helpful Monitor

The LCD monitor is easy to see and navigate. Programmable in up to 42 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.

Structures & Undercarriage

Built to work in your rugged applications

Robust Frame

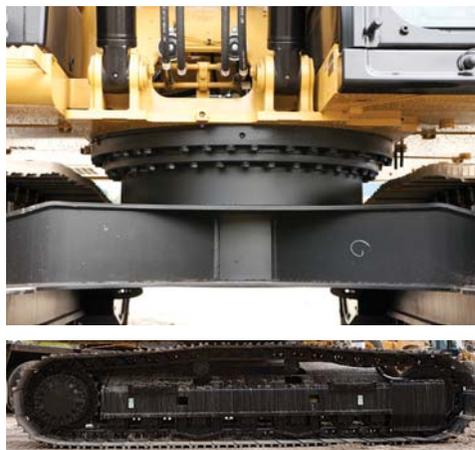
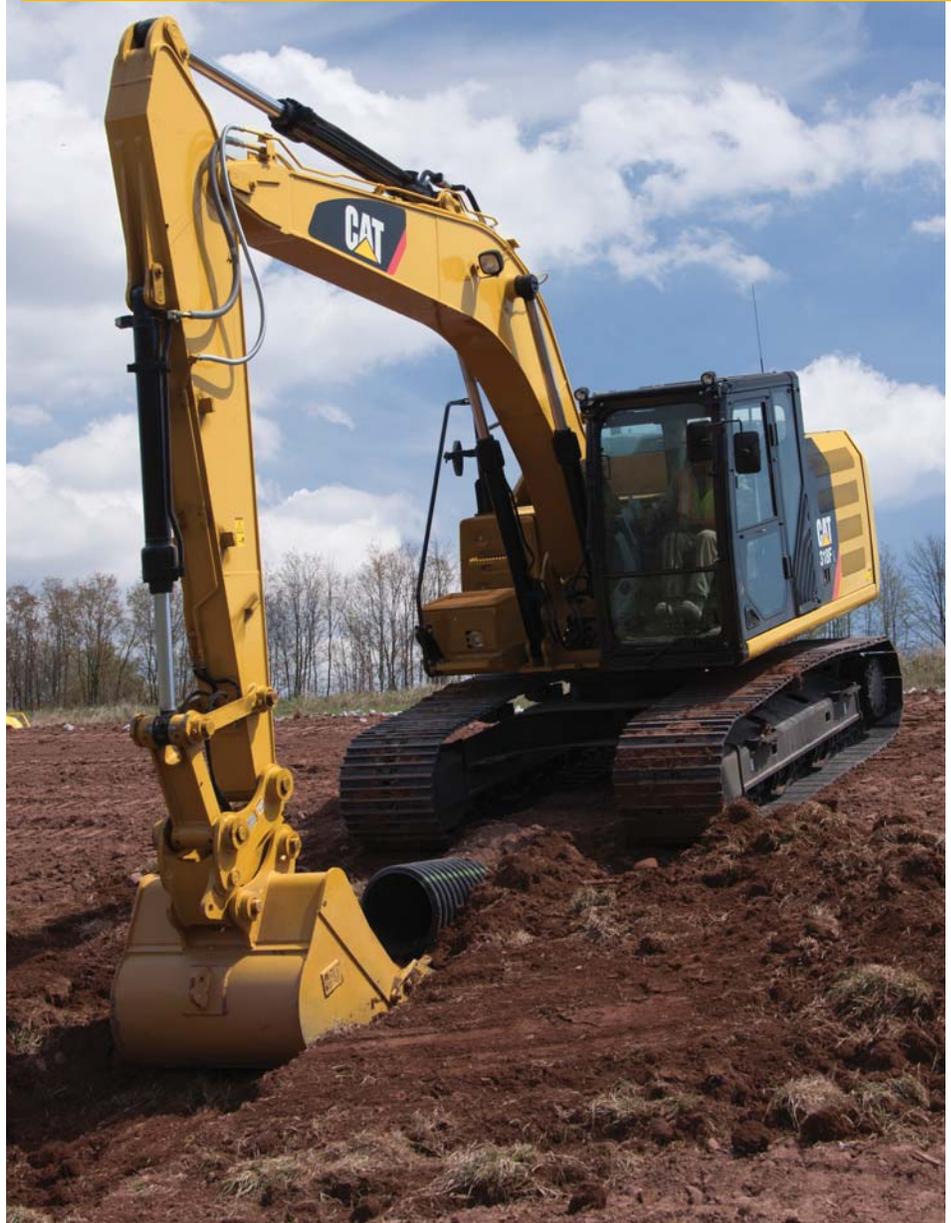
The 318F L is a well-built machine designed to give you a very long service life. The upper frame has mountings made specifically to support the heavy-duty cab; it is also reinforced around key areas that take on stress like the boom foot and skirt. Massive bolts are used to attach the track frames to the body, and additional bolts are used to increase the machine's digging force, which leads to more productivity for you.

Durable Undercarriage

The 318F 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 3.4 mt (7,500 lb) counterweight is built with thick steel plates and reinforced fabrications to make it less susceptible to damage, and it has curved surfaces that match the machine's sleek, smooth appearance along with an integrated housing to help protect the available rearview camera.



Work Tools

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



Get The Most Out Of One Machine

You can easily expand the performance of your machine by utilizing any of the variety of attachments offered by Cat Work Tools.

Change Jobs Quickly

A quick coupler brings the ability to quickly change attachments and switch from job to job. The Cat Pin Grabber coupler is the secure way to decrease downtime and increase job site flexibility and overall productivity.

Dig, Finish, Load & Compact

A wide range of buckets digs everything from top soil to harsh, abrasive material. For finishing and grading work, compact and shallow ditch cleaning buckets fit the need. A Cat compactor prepares the area for the next phase of construction.

Break, Demolish & Scrap

A hydraulic hammer equips your machine for breaking rock and preparing trenches on construction sites. Taking down reinforced concrete is no problem. Multi-processor, pulverizer, and shear attachments take your machine into demolition jobs and process the debris for reuse and recycle.

Move & Handle

Add a thumb and you have the ability to move and handle brush, rocks, and debris. For constant material handling, a grapple is your solution. Choose from three different styles for picking, sorting, and loading trash, demolition debris, or recyclables.

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.

GRAB, SORT, LOAD



Pro Series Hydraulic Thumbs



Stiff Link Thumbs



Contractors' Grapples



Trash Grapples

SWAP TOOLS



Pin Grabber Coupler

DIG & PACK



Ditch Cleaning and Tilt Buckets



General Duty Buckets



Heavy Duty Buckets



Severe Duty Buckets



Vibratory Plate Compactors

CUT, CRUSH, BREAK & RIP



Multi-Processors



Scrap & Demolition Shears



Secondary Pulverizers



Hydraulic Hammers



Rippers

Front Linkage

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



Your uptime and service intervals are increased with high quality, durable, and reliable booms, sticks, and linkage pins. Each boom and stick is built with internal baffle plates for additional durability, and each undergoes ultrasound inspection to ensure the expected Cat durability and reliability for any tough application you might take on.

A reach boom and a choice of two stick configurations provide all the utility you need. The R3.1 m (10'2") stick is best for when you need deep trenching, longer reach, and excellent truck loading capabilities. The R2.6 m (8'6") stick provides greater breakout force and increases productivity when you primarily plan on using hydro-mechanical work tools.

Consult with your Cat dealer to select the right linkage for your line of work.

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 gives 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. You can also easily upgrade to AccuGrade™ when 3D control is required.

- **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.



Serviceability

Designed to make your maintenance quick and easy

Safe, Convenient Access

You can reach most routine maintenance items like fluid taps and grease points from the safety and convenience of ground level. You will also find filters banked together for higher service efficiency. Compartments feature wide service doors designed to help prevent debris entry, and they also securely latch in place to help make your service work simpler.

A Smart Design

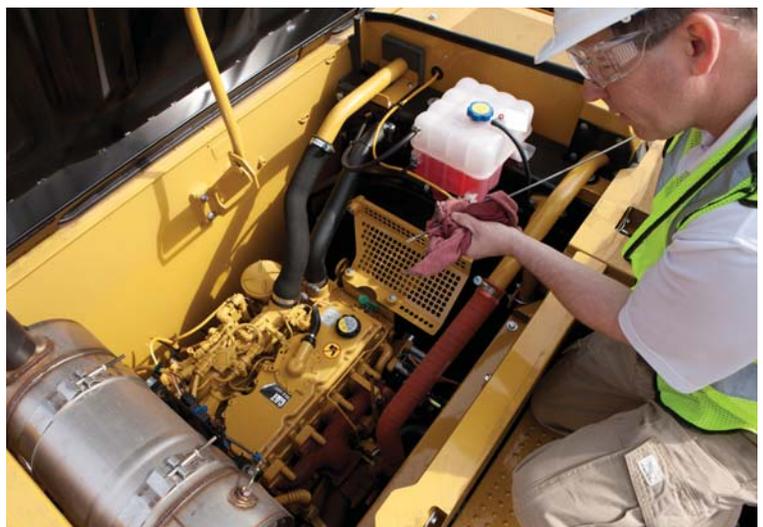
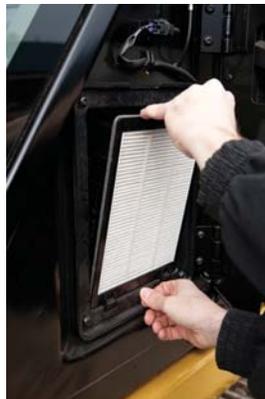
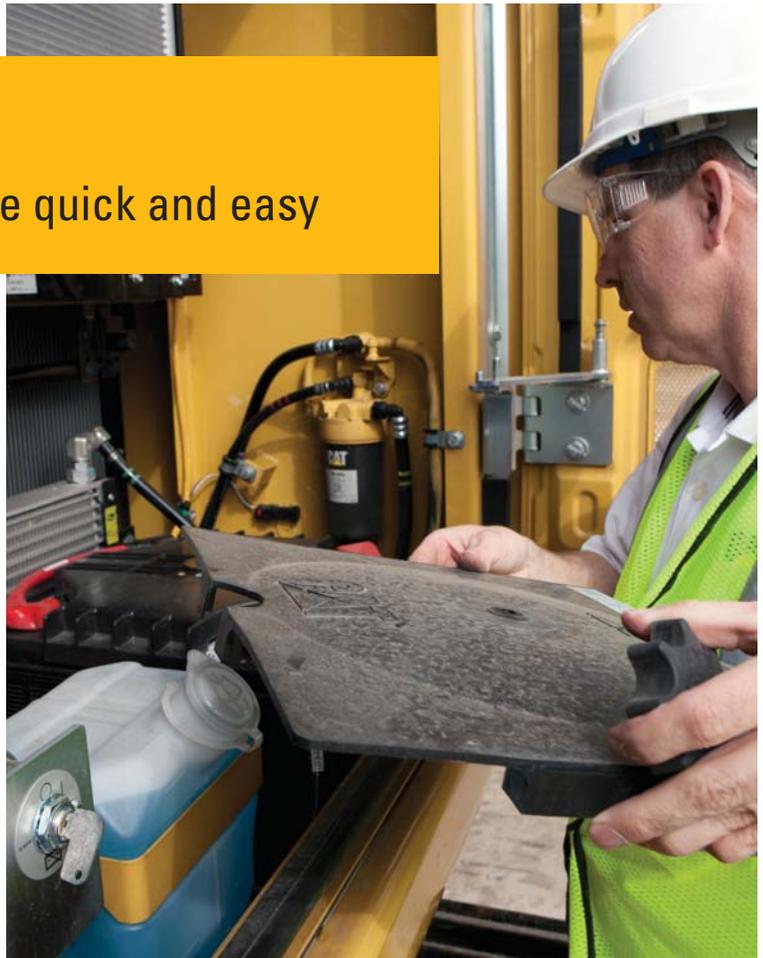
The cooling system features a side-by-side-mounted radiator and oil and air coolers for easy cleaning. Wider clearance between the two makes blowing off debris easy, which can help improve your machine's reliability and performance.

A Fresh Idea

When you select ventilation inside the cab, outside air enters through the fresh air filter. The filter is conveniently located on the side of the cab to make it easy to reach and replace, and it is protected by a lockable door that can be opened with the engine key.

More Service Benefits

Filters are banked together to enhance service efficiency. The fuel tank's drain cock makes it easy and simple for you to remove water and sediment during routine maintenance. Plus an integrated fuel level indicator 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 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. Add in special roof lining and sealing and you have a cab that's as quiet inside 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. Anti-skid plates reduce your slipping hazards in all types of weather conditions, and they can be removed for cleaning.

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 also serves as an emergency exit and provides you with enhanced overhead 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 has been turned off to help you safely exit the machine.



Complete Customer Care

Your Cat dealer will support you like no other



Parts Where You Are

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

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.

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.

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.

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.

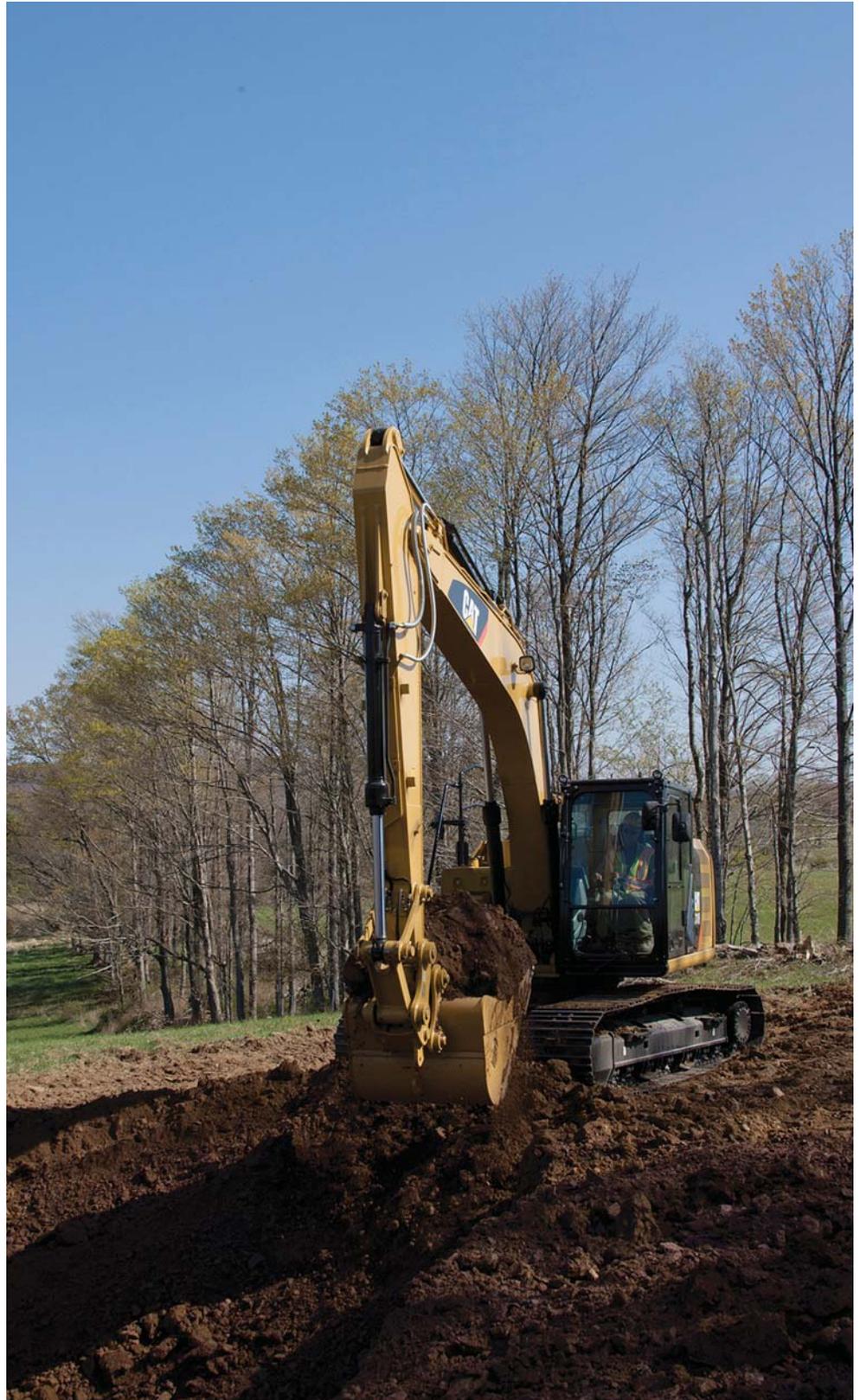
What's Best For You Today... And Tomorrow

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

Your machine is designed to benefit generations ahead

- The 318F L is an efficient, productive machine that's designed to conserve our natural and your financial resources for generations ahead.
- The C4.4 ACERT engine meets Tier 4 Final emission standards.
- The machine has the flexibility of running on either ultra-low-sulfur diesel (ULSD) fuel with 15 ppm 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.
- A 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.



318F L Hydraulic Excavator Specifications

Engine

Engine Model	Cat C4.4 ACERT	
Net Power – SAE J1349	88 kW	117 hp
Engine Power – ISO 14396	91 kW	122 hp
Bore	105 mm	4.13 in
Stroke	127 mm	5.00 in
Displacement	4.4 L	269 in ³

Weights

Minimum Operating Weight*	18 800 kg	41,454 lb
Maximum Operating Weight**	19 300 kg	42,557 lb

*5.1 m (16'9") reach boom, 2.6 m (8'6") stick, 3.4 mt (3.8 t) counterweight, GD 0.91 m³ (1.19 yd³), 1200 mm (48") wide bucket with 1380 mm (4'5") tip radius, and 600 mm (24") shoes.

**5.1 m (16'9") reach boom, 3.1 m (10'2") stick, 3.4 mt (3.8 t) counterweight, GD 0.91 m³ (1.19 yd³), 1200 mm (48") wide bucket with 1380 mm (4'5") tip radius, and 700 mm (28") shoes.

Hydraulic System

Main System – Maximum Flow (Total)	300 L/min	79 gal
Maximum Pressure – Equipment	35 000 kPa	5,080 psi
Maximum Pressure – Travel	35 000 kPa	5,080 psi
Maximum Pressure – Swing	25 000 kPa	3,626 psi
Pilot System – Maximum Flow	25 L/min	6.6 gal/min
Pilot System – Maximum Pressure	4120 kPa	600 psi
Boom Cylinder – Bore	110 mm	4 in
Boom Cylinder – Stroke	1193 mm	47 in
Stick Cylinder – Bore	130 mm	5 in
Stick Cylinder – Stroke	1331 mm	52 in
Bucket Cylinder – Bore	110 mm	4 in
Bucket Cylinder – Stroke	1039 mm	41 in

Drive

Maximum Travel Speed	4.0 km/h	2.5 mph
Maximum Drawbar Pull	207.5 kN	46,648 lbf

Swing Mechanism

Swing Speed	8.5 rpm	
Swing Torque	50.7 kN·m	37,390 lbf·ft

Service Refill Capacities

Fuel Tank Capacity	290 L	76 gal
DEF Tank Capacity	20.5 L	5.41 gal
Cooling System	26 L	6.9 gal
Engine Oil (with filter)	13.5 L	3.6 gal
Swing Drive (each)	8 L	2.1 gal
Final Drive (each)	8 L	2.1 gal
Hydraulic System (including tank)	190 L	50 gal
Hydraulic Tank	121 L	32 gal

Track

Number of Shoes (each side)	45 pieces
Number of Track Rollers (each side)	7 pieces
Number of Carrier Rollers (each side)	2 pieces

Sound

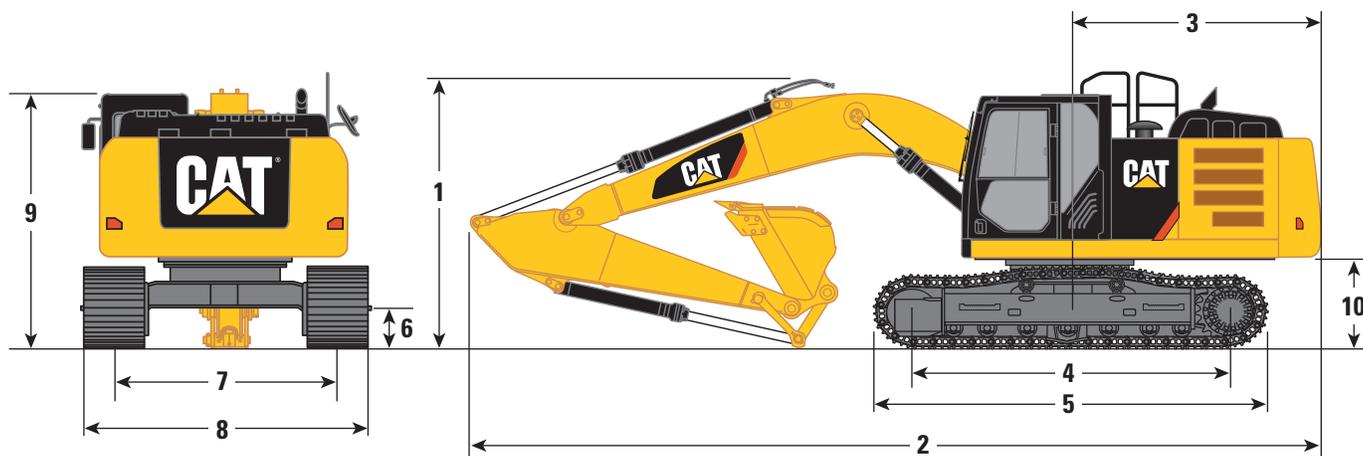
Operator – ISO 6396	71 dB(A)
Spectator – ISO 6395	102 dB(A)

- 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 the 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 a noisy environment.

318F L Hydraulic Excavator Specifications

Dimensions

All dimensions are approximate.



Boom Option

Reach Boom 5.1 m (16'9")

Stick Options

R3.1 m (10'2")

R2.6 m (8'6")

	R3.1 m (10'2")	R2.6 m (8'6")
1 Shipping Height*	3190 mm	3050 mm
Shipping Height at Boom Top	3190 mm	3050 mm
Shipping Height with Hand Rail	2940 mm	2940 mm
2 Shipping Length	8610 mm	8570 mm
3 Tail Swing Radius	2520 mm	2520 mm
4 Length to Center of Rollers	3270 mm	3270 mm
5 Track Length	4070 mm	4070 mm
6 Ground Clearance	440 mm	440 mm
7 Track Gauge	1990 mm	1990 mm
8 Transport Width		
600 mm (24") Shoes	2590 mm	2590 mm
700 mm (28") Shoes	2690 mm	2690 mm
9 Cab Height	2890 mm	2890 mm
Cab Height with Top Guard	3100 mm	3100 mm
10 Counterweight Clearance**	1010 mm	1010 mm

*Including shoe lug height.

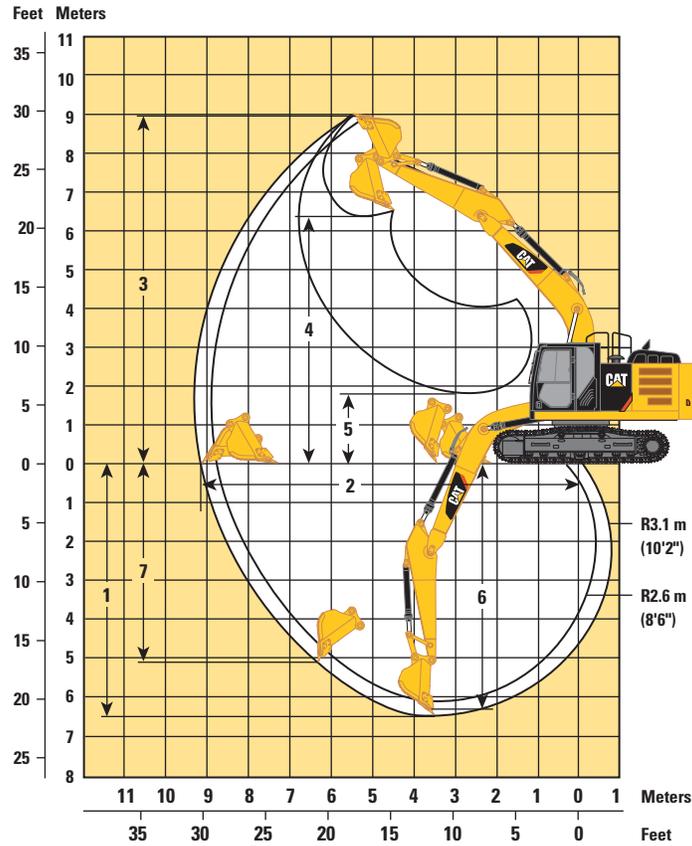
**Without shoe lug height.

Reach boom dimensions were calculated with 1200 mm (48") width, GD 0.91 m³ (1.19 yd³ bucket) with 1380 mm (4'5") tip radius.

318F L Hydraulic Excavator Specifications

Working Ranges

All dimensions are approximate.



Boom Option

Reach Boom 5.1 m (16'9")

Stick Options

R3.1 m (10'2")

R2.6 m (8'6")

Stick Options	R3.1 m (10'2")	R2.6 m (8'6")
1 Maximum Digging Depth	6580 mm 21'6"	6090 mm 20'0"
2 Maximum Reach at Ground Level	9160 mm 30'1"	8780 mm 28'8"
3 Maximum Cutting Height	9000 mm 29'5"	8920 mm 29'3"
4 Maximum Loading Height	6330 mm 20'8"	6280 mm 20'6"
5 Minimum Loading Height	1830 mm 6'0"	2300 mm 7'5"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6400 mm 21'0"	5870 mm 19'3"
7 Maximum Vertical Wall Digging Depth	5130 mm 16'8"	4950 mm 16'2"

Reach boom dimensions were calculated with 1200 mm (48") width, GD 0.91 m³ (1.19 yd³ bucket) with 1380 mm (4'5") tip radius.

318F L Hydraulic Excavator Specifications

Major Component Weights

Base Machine (with boom cylinder, without counterweight, front linkage and track)	5970 kg	13,164 lb
Long Undercarriage	3970 kg	8,754 lb
Counterweight	3430 kg	7,563 lb
Boom (includes lines, pins and stick cylinder)		
Reach Boom – 5.1 m (16'9")	1500 kg	3,310 lb
Reach Boom for CGC – 5.1 m (16'9")	1500 kg	3,310 lb
Stick (includes lines, pins and bucket cylinder)		
R3.1 m (10'2")	900 kg	1,985 lb
R2.6 m (8'6")	800 kg	1,764 lb
R3.1 m (10'2") for CGC	900 kg	1,985 lb
Track Shoe (Long/per two tracks)		
600 mm (24") Triple Grouser	2470 kg	5,446 lb
700 mm (28") Triple Grouser	2870 kg	6,328 lb

All weights are rounded up to nearest 10 kg and lb except for buckets. Kg and lb were rounded up separately so some of the kg and lb do not match.

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

Operating Weight and Ground Pressure

	700 mm (28") Triple Grouser Shoes				600 mm (24") Triple Grouser Shoes			
	kg	lb	kPa	psi	kg	lb	kPa	psi
Reach Boom – 5.1 m (16'9")								
R3.1 m (10'2")	19 300	42,557	38.1	5.5	18 900	41,675	43.5	6.3
R2.6 m (8'6")	19 200	42,336	37.9	5.5	18 800	41,454	43.3	6.3

318F L Hydraulic Excavator Specifications

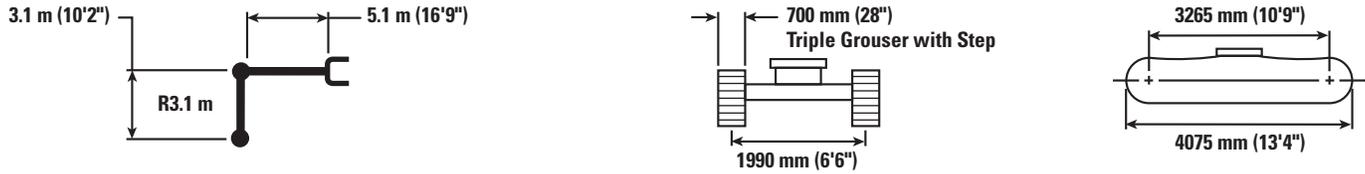
Bucket and Stick Forces

Boom Option	Reach Boom 5.1 m (16'9")			
Stick Options	R3.1 m (10'2")		R2.6 m (8'6")	
General Duty				
Bucket Digging Force (SAE)	109 kN	24,400 lbf	109 kN	24,400 lbf
Stick Digging Force (SAE)	74 kN	16,700 lbf	83 kN	18,600 lbf
Severe Duty				
Bucket Digging Force (SAE)	108 kN	24,300 lbf	108 kN	24,300 lbf
Stick Digging Force (SAE)	74 kN	16,700 lbf	83 kN	18,600 lbf

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.

318F L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 3.4 mt (3.8 t) – without Bucket



		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		m ft		
7.5 m 25.0 ft	kg lb											*2650 *5,850	*2650 *5,850	5.38 17.43
6.0 m 20.0 ft	kg lb							*3550 *7,400	*3550 *7,400			*2400 *5,250	*2400 *5,250	6.67 21.58
4.5 m 15.0 ft	kg lb							*3800 *8,300	3750 8,050			*2350 *5,100	*2350 *5,100	7.44 24.90
3.0 m 10.0 ft	kg lb			*7350 *15,700	*7350 *15,700	*5200 *11,250	*5200 *11,250	*4350 *9,500	3600 7,700	*3500 *6,900	2550 5,400	*2400 *5,200	2350 5,150	7.85 25.73
1.5 m 5.0 ft	kg lb			*9000 *21,550	*9000 *19,600	*6600 *14,250	5100 10,950	*5050 *10,900	3400 7,300	4100 *8,500	2450 5,250	*2550 *5,600	2250 4,900	7.95 26.56
0 m 0 ft	kg lb			*7800 *17,900	*7800 *17,900	*7600 *16,400	4800 10,300	5550 11,900	3250 6,950	4000 *8,100	2400 5,100	*2900 *6,350	2250 4,950	7.77 25.73
-1.5 m -5.0 ft	kg lb	*5900 *13,150	*5900 *13,150	*10 550 *24,000	8550 18,300	*7900 *17,150	4650 10,050	5450 11,700	3150 6,800			*3500 *7,750	2450 5,400	7.27 24.07
-3.0 m -10.0 ft	kg lb	*9400 *21,050	*9400 *21,050	*11 100 *24,050	8650 18,550	*7550 *16,250	4700 10,050	*5450 *11,650	3150 6,850			*4850 *10,850	2950 6,500	6.39 20.75
-4.5 m -15.0 ft	kg lb			*8800 *18,800	*8800 *18,800	*5950 *12,550	4850 10,450					*5300 *11,650	4350 9,800	4.90 15.77



ISO 10567



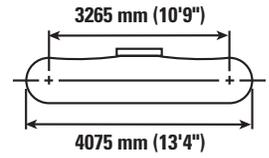
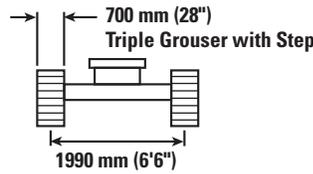
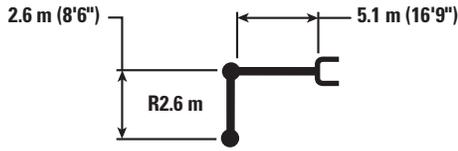
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Lift capacity stays with ±5% for all available track shoes.

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

318F L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 3.4 mt (3.8 t) – without Bucket



		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		m ft		
7.5 m 25.0 ft	kg lb					*7,500	*7,500					*3250 *7,250	*3250 *7,250	4.76 15.12
6.0 m 20.0 ft	kg lb							*3500 *6,450	*3500 *6,450			*2850 *6,300	*2850 *6,300	6.19 20.06
4.5 m 15.0 ft	kg lb					*4550 *9,850	*4550 *9,850	*4200 *9,200	3700 7,950			*2750 *6,050	*2750 *6,050	7.01 22.90
3.0 m 10.0 ft	kg lb			*8750 *18,550	*8750 *18,550	*5800 *12,450	5400 11,650	*4750 *10,250	3550 7,650			*2800 *6,150	2550 5,600	7.44 24.40
1.5 m 5.0 ft	kg lb					*7050 *15,250	5050 10,850	*5350 *11,550	3400 7,300	*3400 2450		*3000 *6,550	2450 5,350	7.56 24.80
0 m 0 ft	kg lb			*6750 *15,550	*6750 *15,550	*7850 *16,950	4800 10,300	5550 11,950	3250 7,000			*3350 *7,400	2450 5,400	7.36 24.16
-1.5 m -5.0 ft	kg lb	*6200 *13,800	*6200 *13,800	*10 950 *24,950	8650 18,550	*7950 *17,200	4700 10,150	5500 11,800	3200 6,900			*4100 *9,100	2700 5,950	6.84 22.39
-3.0 m -10.0 ft	kg lb	*10 750 *24,150	*10 750 *24,150	*10 500 *22,650	8800 18,850	*7250 *15,650	4750 10,250					*5250 *11,500	3350 7,450	5.88 19.18
-4.5 m -15.0 ft	kg lb			7500 15,850	7500 15,850							5250 11,550	5250 11,550	4.22 13.48



ISO 10567



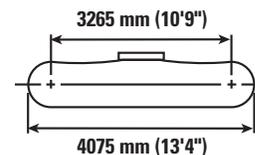
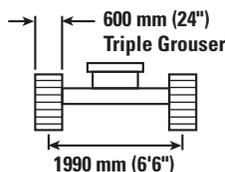
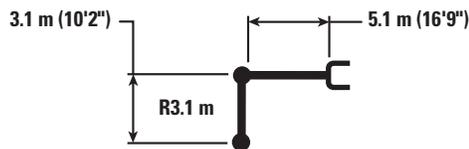
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Lift capacity stays with ±5% for all available track shoes.

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

318F L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 3.4 mt (3.8 t) – without Bucket



		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		m ft		
7.5 m 25.0 ft	kg lb											*2650 *5,850	*2650 *5,850	5.38 17.43
6.0 m 20.0 ft	kg lb							*3550 *7,400	*3550 *7,400			*2400 *5,250	*2400 *5,250	6.67 21.58
4.5 m 15.0 ft	kg lb							*3800 *8,300	3700 7,900			*2350 *5,100	*2350 *5,100	7.44 24.90
3.0 m 10.0 ft	kg lb			*7350 *15,700	*7350 *15,700	*5200 *11,250	*5200 *11,250	*4350 *9,500	3500 7,550	*3500 *6,900	2500 5,300	*2400 *5,200	2300 5,050	7.85 25.73
1.5 m 5.0 ft	kg lb			*9000 *21,550	8950 19,300	*6600 *14,250	5000 10,750	*5050 *10,900	3350 7,150	4000 *8,500	2400 5,150	*2550 *5,600	2200 4,800	7.95 26.56
0 m 0 ft	kg lb			*7800 *17,900	*7800 *17,900	*7600 *16,400	4700 10,150	5450 11,650	3200 6,850	3950 *8,100	2350 5,000	*2900 *6,350	2200 4,850	7.77 25.73
-1.5 m -5.0 ft	kg lb	*5900 *13,150	*5900 *13,150	*10 550 *24,000	8400 18,000	*7900 *17,150	4600 9,850	5350 11,500	3100 6,650			*3500 *7,750	2400 5,300	7.27 24.07
-3.0 m -10.0 ft	kg lb	*9400 *21,050	*9400 *21,050	*11 100 *24,050	8500 18,200	*7550 *16,250	4600 9,900	5350 11,550	3100 6,700			*4850 *10,850	2900 6,350	6.39 20.75
-4.5 m -15.0 ft	kg lb			*8800 *18,800	8750 *18,800	*5950 *12,550	4750 10,300					*5300 *11,650	4250 9,650	4.90 15.77



ISO 10567



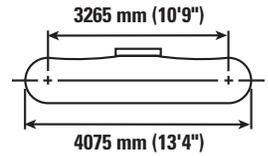
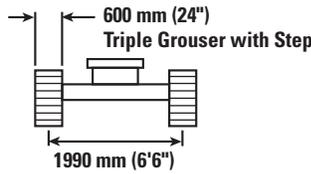
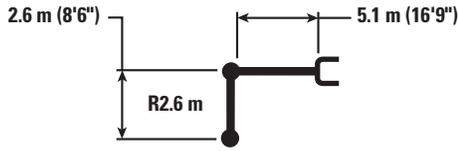
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Lift capacity stays with ±5% for all available track shoes.

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

318F L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 3.4 mt (3.8 t) – without Bucket



		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		m ft		
7.5 m 25.0 ft	kg lb					*7,500	*7,500					*3250 *7,250	*3250 *7,250	4.76 15.12
6.0 m 20.0 ft	kg lb							*3500 *6,450	*3500 *6,450			*2850 *6,300	*2850 *6,300	6.19 20.06
4.5 m 15.0 ft	kg lb					*4550 *9,850	*4550 *9,850	*4200 *9,200	3650 7,850			*2750 *6,050	*2750 *6,050	7.01 22.90
3.0 m 10.0 ft	kg lb			*8750 *18,550	*8750 *18,550	*5800 *12,450	5350 11,500	*4750 *10,250	3500 7,550			*2800 *6,150	2500 5,550	7.44 24.40
1.5 m 5.0 ft	kg lb					*7050 *15,250	4950 10,700	*5350 *11,550	3350 7,200	*3400 2450		*3000 *6,550	2400 5,250	7.56 24.80
0 m 0 ft	kg lb			*6750 *15,550	*6750 *15,550	*7850 *16,950	4750 10,200	5500 11,800	3200 6,900			*3350 *7,400	2450 5,350	7.36 24.16
-1.5 m -5.0 ft	kg lb	*6200 *13,800	*6200 *13,800	*10 950 *24,950	8550 18,300	*7950 *17,200	4650 10,000	5400 11,650	3150 6,800			*4100 *9,100	2700 5,900	6.84 22.39
-3.0 m -10.0 ft	kg lb	*10 750 *24,150	*10 750 *24,150	*10 500 *22,650	8700 18,650	*7250 *15,650	4700 10,150					*5250 *11,500	3300 7,350	5.88 19.18
-4.5 m -15.0 ft	kg lb			*7500 *15,850	*7500 *15,850							*5250 *11,550	*5250 *11,550	4.22 13.48



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.

318F L Hydraulic Excavator Specifications

Work Tool Offering Guide*

Boom Option	Reach Boom 5.1 m (16'9")	
	R3.1 m (10'2")	R2.6 m (8'6")
Stick Options		
Hydraulic Hammer	H115Es H120Es**	H115Es H120Es H130Es**
Multi-Processor		MP15 CC Jaw** MP15 CR Jaw** MP15 S Jaw**
Pulverizer		P215**
Mobile Scrap and Demolition Shear	S325B***	S325B***
Compactor (Vibratory Plate)	CVP75	CVP75
Contractors' Grapple	G315B	G315B
Trash Grapple		
Thumbs		
Rakes		
Pin Grabber Coupler		
Dedicated Quick Coupler		

These work tools are available for the 318F L.
Consult your Cat dealer for proper match.

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

**Pin-on only.

***Boom Mount.

318F L Hydraulic Excavator Specifications

Bucket Specifications and Compatibility

	Width		Capacity		Weight		Fill	Reach Booms	
	mm	in	m ³	yd ³	kg	lb	%	R2.6 m (8'6")	R3.1 m (10'2")
Without Quick Coupler									
General Duty (GD)	1200	48	0.91	1.19	693	1,526	100%	⊙	⊖
Heavy Duty (HD)	600	24	0.35	0.46	449	990	100%	●	●
	750	30	0.49	0.64	505	1,113	100%	●	●
	900	36	0.62	0.81	566	1,248	100%	●	●
	1050	42	0.76	1.00	618	1,362	100%	●	●
	1200	48	0.91	1.19	679	1,497	100%	⊙	⊖
Severe Duty (SD)	900	36	0.62	0.81	651	1,435	90%	●	●
	1050	42	0.76	1.00	710	1,564	90%	●	●
Maximum load pin-on (payload + bucket)							kg	2485	2205
							lb	5,477	4,860

	Width		Capacity		Weight		Fill	Reach Booms	
	mm	in	m ³	yd ³	kg	lb	%	R2.6 m (8'6")	R3.1 m (10'2")
With Center-Lock Quick Coupler									
General Duty (GD)	1200	48	0.91	1.19	693	1,526	100%	⊖	○
Heavy Duty (HD)	600	24	0.35	0.46	449	990	100%	●	●
	750	30	0.49	0.64	505	1,113	100%	●	●
	900	36	0.62	0.81	566	1,248	100%	●	●
	1050	42	0.76	1.00	618	1,362	100%	⊙	⊖
	1200	48	0.91	1.19	679	1,497	100%	⊖	○
Severe Duty (SD)	900	36	0.62	0.81	651	1,435	90%	●	●
	1050	42	0.76	1.00	710	1,564	90%	●	⊖
Maximum load with coupler (payload + bucket)							kg	2095	1815
							lb	4,617	4,000

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)
- 1200 kg/m³ (2,000 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.

Standard Equipment

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

ENGINE

- C4.4 ACERT diesel engine
- Biodiesel capable up to B20
- Meets Tier 4 Final emission standards
- 2300 m (7,500 ft) 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
- Cold weather battery –25° C (–13° F)
- Jump start receptacle

HYDRAULIC SYSTEM

- Regeneration circuit for boom and stick
- Reverse swing damping 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 and circuit
- Capability of installing boom lowering control device and stick lowering check valve
- Fine swing control

CAB

- Pressurized operator station with positive filtration
- Sliding upper door window (left-hand cab door)
- Glass-breaking safety hammer
- Removable lower windshield with in cab storage bracket
- Coat hook
- Beverage holder
- Literature holder
- AM/FM radio
- Radio with MP3 auxiliary audio port
- Two 12V 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 two additional pedals
- Two power outlets, 10 amp (total)
- Travel alarm
- Laminated glass front upper window and tempered other windows
- Sunscreen

UNDERCARRIAGE

- 600 mm (24") triple grouser shoes
- Grease Lubricated Track GLT2, resin seal
- Towing eye on base frame swivel guard
- Center track guiding guard

FRONT LINKAGE

- 5.1 m (16'9") reach boom
- 3.1 m (10'2") stick

COUNTERWEIGHT

- 3.4 mt (3.8 t)

ELECTRICAL

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

LIGHTS

- Working lights, cab mounted with time delay
- Halogen boom lights (left and right)
- Time delay function for boom light and cab light
- Exterior lights

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
- Rearview camera-ready

TECHNOLOGY

- Product Link

318F L Optional Equipment

Optional Equipment

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

ENGINE

- Quick drains, engine and hydraulic oil

HYDRAULIC SYSTEM

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

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
- Windshield wiper, lower with washer
- Air pre-filter
- Left pedal
- Straight travel pedal
- Rain protector
- Cab mirror
- Ashtray

UNDERCARRIAGE

- 700 mm (28") triple grouser shoes
- Full-length track guiding guard
- Guard, heavy-duty bottom
- Segmented (2 piece) track guiding guard

FRONT LINKAGE

- Quick coupler
- Bucket linkage, without lifting eye
- 2.6 m (8'6") stick

LIGHTS

- HID lights, cab mounted with time delay

SECURITY

- FOGS, bolt-on
- Side steel bumper
- Guard, cab front, mesh
- 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

AEHQ7941
(NACD)

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