M318F

Wheeled Excavator

Engine		
Engine Model	Cat® C7.1 ACERT™	
Emissions	U.S. EPA Tier 4 Final	
Net Power (maximum)		
ISO 9249 at 1,750 rpm	126 kW	169 hp
ISO 9249/SAE J1349 (metric)		171 hp (PS)
ISO 13496 at 1,750 rpm (gross)	129.4 kW	174 hp
Weights		
Operating Weight	16 900 kg-19 700 kg	36,817 lb-42,549 lb

Bucket Specifications		
Bucket Capacities	0.35 m^3-1.09 m^3	0.46 yd^3-1.43 yd^3
Working Ranges		
Maximum Reach at Ground Level	9230 mm	30'3"
Maximum Digging Depth	5920 mm	19'5"
Drive		
Maximum Travel Speed	35 km/h	22 mph

M318F Features

Made to keep your costs down.
Not only does the machine give you all the versatility you need, but it does so while providing a great deal of precision, and speed with an absolute minimum fuel consumption – and zero impact on your efficiency.

Made to make operation easy and pleasant.
Have a seat, you will be impressed by the quietness and comfort of the cab. Feel relaxed, we help you make sure you're safe.

Enjoy integrated technologies; they act transparently.

When you add the ground level grouped service points that make your maintenance quick and easy, and multiple Cat work tools that help you do all kinds of jobs, you simply won't find a better machine.

Contents

The new F Series generation is here to help you take on the wide variety of challenges you face every day, more easily and with more pleasure.

F Series – Easier Than Ever.

Sustainability

Generations Ahead in Every Way

Fuel Efficiency and Reduced Exhaust Emissions

The engine meets Tier 4 Final emission standards, performs the same amount of work, while burning significantly less fuel than the previous model, which means more efficiency, less resources, and fewer CO_2 emissions.

Quiet Operation

Outstandingly low sound levels, you won't believe your machine is running.

Transparent Technologies and Longer Service Intervals

- The new Eco Modes, Auto Engine Speed Control and Engine Idle Shutdown help further reduce your overall fuel consumption.
- Product Link™ allows remote monitoring of the machine and helps improve overall efficiency.
- Your Cat dealer can help extend service intervals, meaning fewer fluids and disposals, all adding up to lower costs.

Biodiesel and Biodegradable Hydraulic Oil

- The M318F has the flexibility of running on either ultra-low-sulfur diesel (ULSD) fuel with 15 ppm of sulfur or less or up to B20 biodiesel fuel blended with ULSD.
- Cat BIO HYDO™ Advanced HEES™ reduces the impact on the environment.

Cat Certified Used

This program is a key element in the range of solutions offered by Caterpillar and Cat dealers to help customers achieve growth at the lowest cost while eliminating waste. Used equipment is inspected, guaranteed and ready for work and customers will benefit from a Caterpillar warranty.

Engine
Power, Reliability, and Fuel Economy

The Power and Performance You Need

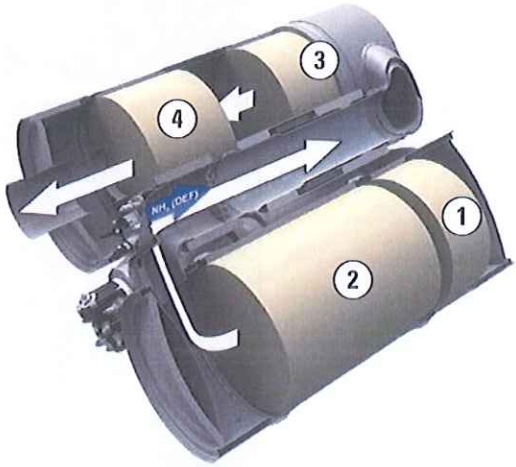
Constant Power Strategy
Provides a quick response to changing loads, while delivering the same amount of power regardless of operating conditions.

A Transparent Emission Solution That Works.
The Cat C7.1 ACERT engine meets today's Tier 4 Final emission standards, and it does so without interrupting your job process. It is designed to be:

- **Transparent:** no operator intervention
- **Durable:** fit for life Diesel Particulate Filter
- **Efficient:** no work interruption, even in case of extended idling time
- **Simple:** minimum maintenance. Longitudinal engine installation, which further simplifies maintenance.

Biodiesel Not a Problem
The engine can run on up to B20 biodiesel fuel that meets ASTM 6751 standards – all to give you more potential fuel-saving flexibility.

Proven Technology
To assure that our technology will meet your expectations for reliable trouble-free service, we subjected these engines and technologies to extensive operating hours of test and validation.



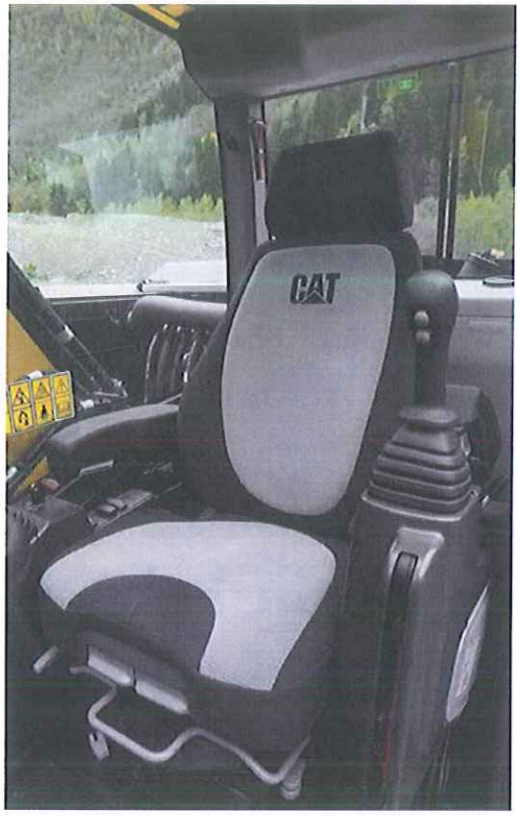
1) DOC 2) DPF 3) SCR Catalyst 4) AMOX

Built-in Fuel Savers That Add Up

- Automatic Engine Speed Control: lowers engine speed when it is not needed.
- NEW Engine Idle Shutdown (when activated): turns the engine off when it's been idling for more than a pre-set amount of time.
- NEW Cooling System: variable speed and on-demand fan optimizing consumption.
- NEW enhanced Eco Mode: reduces engine speed while delivering the same power.
- Automatic shift to Travel Mode when you start riding: optimizes driveline performance while preserving fuel.

Premium Comfort

Keeps Operators Productive All Shift Long



Legacy from the Renowned Cat Wheeled Excavators

Designed for the operator, our cabs are unique.

Ergonomic Layout

- Frequently used switches are centralized, kept to the minimum and ideally located close to the joysticks.
- Storage compartments are useful... when well designed. The lunch box provides sufficient room to store a hard hat. Several other areas include drink, phone, or key holders.

Comfortable Seat Options

Our seats provide all the comfort needed for a long day of work, including FULL adjustment. All seats are heated and air suspended. Automatic weight adjustment and air cooled seats are available.

Safety – Not an Option

ROPS/FOGS compatible cabs, seat belt alarm, safety bar, sideview camera ... among others.

Details That Make the Difference

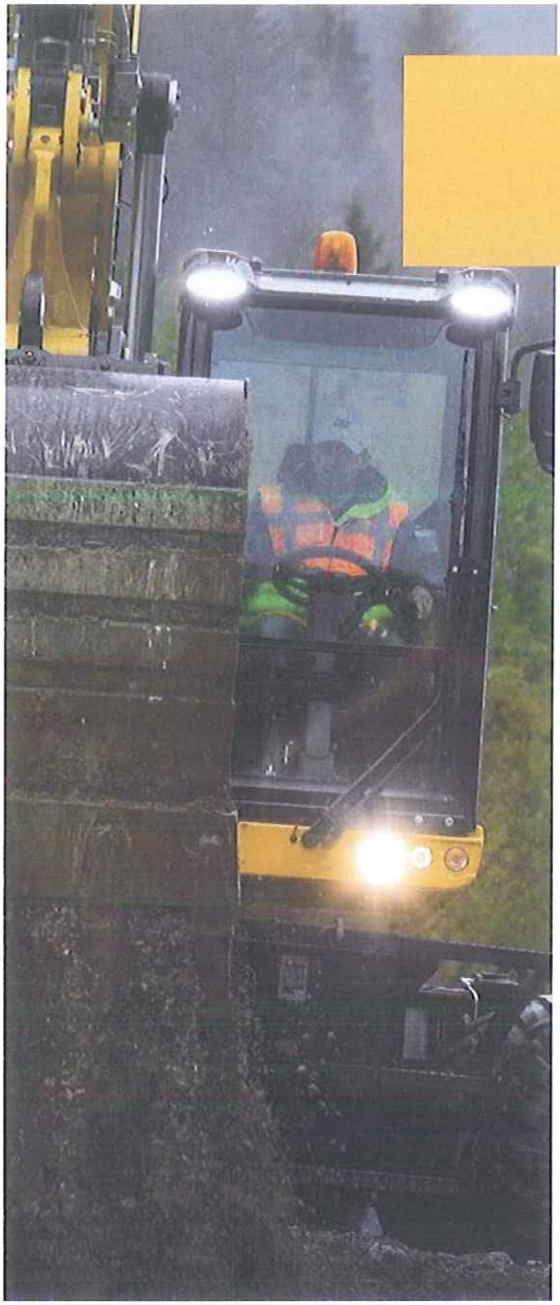
Have a look at the cab; you will see it is through details that we improve pleasure of operating.

Smart Controls to Reduce Fatigue

- Features like ride control, SmartBoom or Joystick Steering will be precious to increase your productivity.
- New technologies that work transparently like the swing and auto travel lock or the automatic brake and axle lock, reduce the number of tasks you need to do.

Plug, Charge and Play Your Devices

- The 12V 10A power supply socket is conveniently located for charging your laptop, or a tablet.
- A CD/MP3 Radio with speakers and USB port is available.



Simplicity and Functionality
For Ease of Operation

A Cab Just for You – Fully Adjustable

- Joystick consoles, in height and angle
- Steering column adjustment, not only tilting fore/aft but also in height
- Hydraulic sensitivity of the machine to make it more or less aggressive
- Joystick controls, buttons and thumb wheels
- Automatic air conditioning

Incredibly Low Sound Levels, Less Fatigue

Increased cab pressure, preventing from dust entry, combined with the new design contributes to reducing sound. Add in new hydro mounts to fix the cab on the frame and you have a cab that's as quiet as any of today's pickup trucks.

Outstanding Visibility: See the Difference!

- Standard LED working lights and halogen roading lights
- LED dome light
- All glass areas have been drastically increased
- Choice of 70/30 front windshield or one-piece windshield
- New wide angle mirrors including a lower mirror for better visibility to the ground
- Parallel intermittent (four speeds) wipers covering the whole windshield

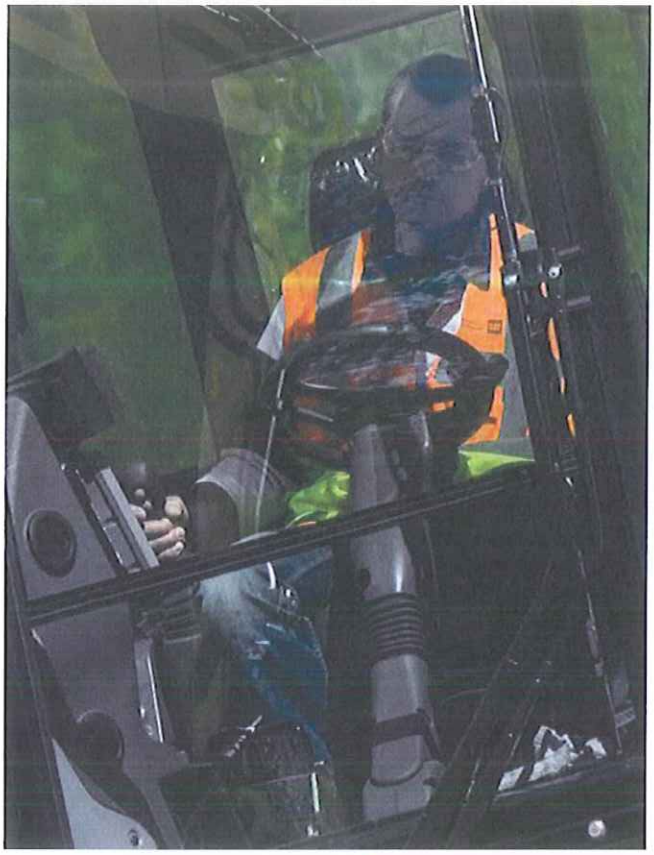
Standard Rear and Side Wide Angle Cameras

Cameras let you see what's going on around. The image from the side camera is displayed on an additional wide color screen, offering the full view from the front to the rear of the machine. The rear camera is integrated into the counterweight for enhanced protection.

Large Color Monitor

Easy to read and in local language, the high resolution LCD monitor will keep you aware of any important information. "Quick Access" buttons allow a quick selection of favorite functions. The tool select function lets you preset up to ten different hydraulic attachments for quick tool changes.

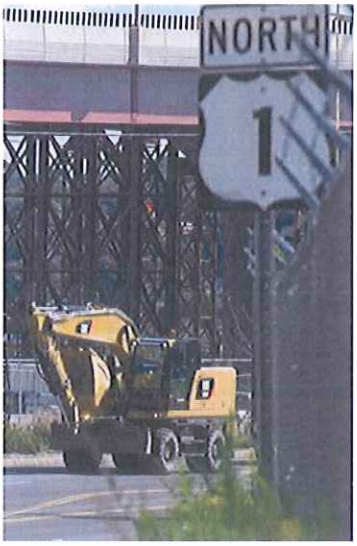
The Next Generation
Easier Than Ever



Make the Move to the Next Generation
Refinements. From the whole design to the smallest details. Convenient features, new advanced and transparent technologies, not only to reduce emissions but to further improve your daily experience when working with our products.

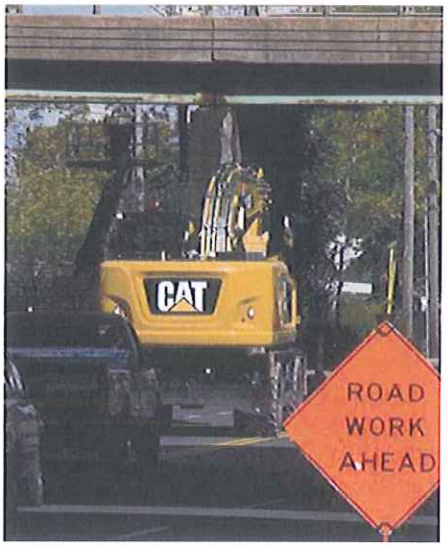
Easier Than Ever
Work like no other with our wheeled excavators. The F Series generation is made to help you take on the wide variety of the challenges you face every day, more easily and with more pleasure, to keep you on the road to your success.

Cruise Control
Focus on the Road, Not on Your Foot



Cruise Control
No need to press the pedal all the time.
- Choose the very speed you wish
- Press the quick access button on the monitor
- Enjoy the ride

It's as Easy as That.



Smart Technologies

Press Go and Relax

Swing and Auto Travel Lock: As Fast, As Easy, As Safe

No need for the operator to bend to engage the swing lock pin.

- Just press a button,
- Align the upper to the lower frame,
- Enjoy the ride: a green indicator confirms the swing and the implements have been automatically locked.

It's As Easy As That.

Integrated Pin Code – Switch Off and Relax

No need to buy an optional security system to protect your equipment against theft.

- The pin code is integrated into the monitor (standard)
- Entering the right code allows the engine to start

The Machine Security System (MSS – optional) adds even more protection when needed.

It's as Easy as That.

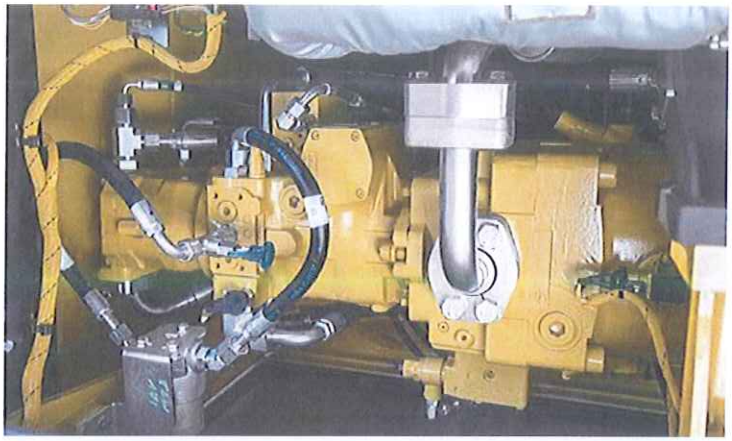
Dig and Go Auto Axle Lock

Presses the pedal for you, reducing the number of actions you need to do

The machine automatically detects when the service brake and axle need to be locked (like when digging), or unlocked (roading), hence removing the need for the operator to systematically press the pedal.

Brake and axle are released automatically by pressing the travel pedal again.

Hydraulics
Fast, Precise, Flexible



When it comes to moving material quickly, you need efficient hydraulics – the type the F Series can deliver.

Efficient Design, Smart and Fast

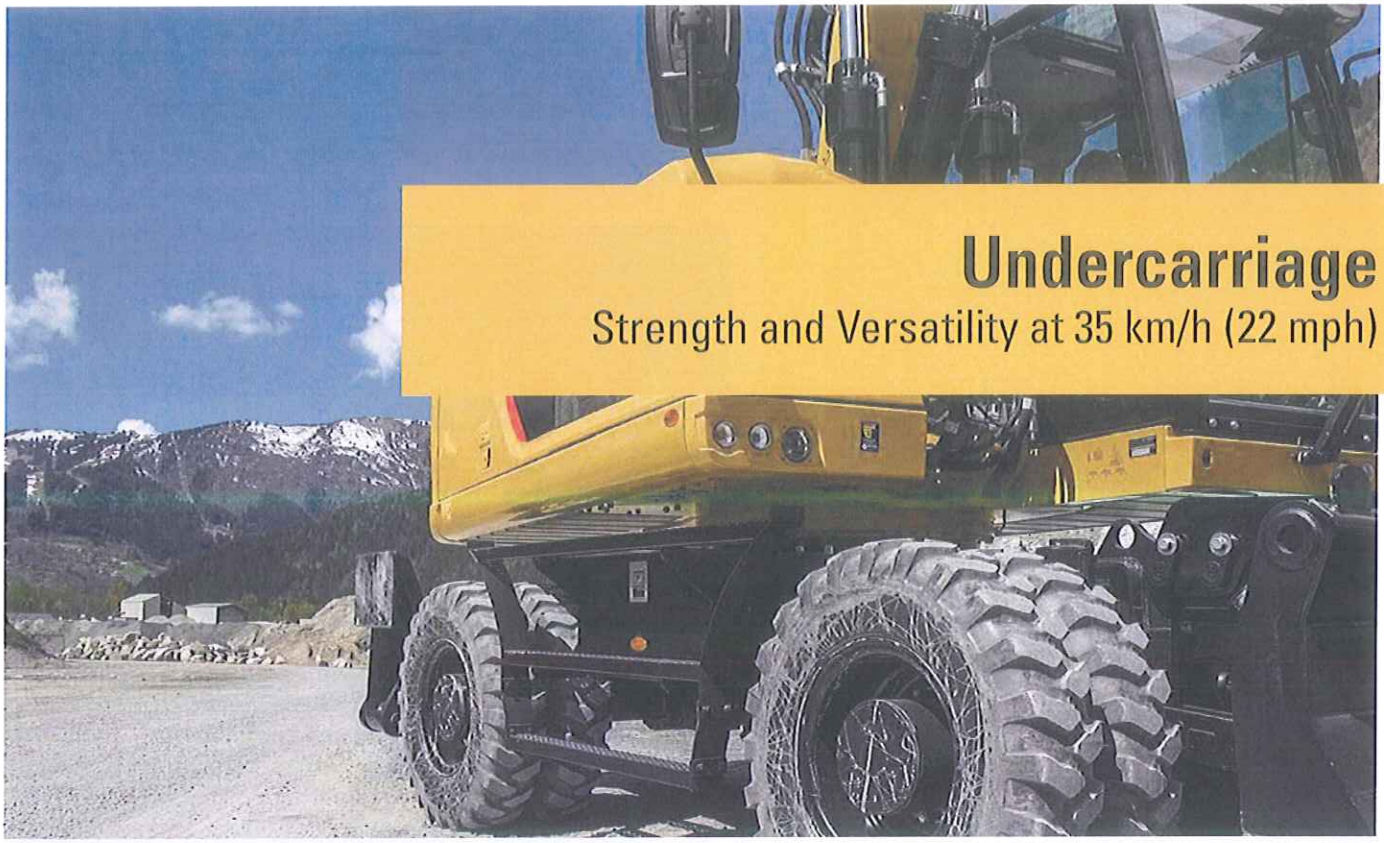
- **Simple Design:** The new hydraulic valve compartment and routings offer a simple and clean design to help ensure durability. Everything is reachable from ground level.
- **Smart Main Hydraulics:** The system allows reducing the load on the engine when not needed, which translates into lower fuel consumption.
- **Dedicated Secondary Hydraulics:** A closed hydraulic circuit is dedicated to the swing only. Having two separate pumps, one for the swing and the other for the other functions allows faster and smoother combined movements.

Control Like No Other

- **Electronic Pump Control** – Controllability is one of the main attributes of Cat excavators, and one of the key contributors to this is the Electronic Pump Control (EPC) that's designed to improve response time and precision. It puts flow exactly where you need it, when you need it, which means a much smoother operation and greater efficiency.
- **Adjustable Hydraulic Sensitivity** – Allows you to adjust the aggressiveness of the machine according to the application.
- **Stick Regeneration Circuit** – Increases efficiency and helps enhance controllability for higher productivity.

Proportional Auxiliary Hydraulics, Tremendous Versatility

Medium pressure function (for tilting buckets or rotating tools), high pressure lines (for tilting/rotating work tools requiring a third auxiliary hydraulic function), hydraulic quick coupler circuit: they all come standard, which allows you to switch from one work tool to another, without the need to add lines and hydraulic circuits.



Undercarriage

Strength and Versatility at 35 km/h (22 mph)

Heavy Duty Axles

Long life with effective heavy duty axles. The transmission is mounted directly on the rear axle for protection and optimum ground clearance. The front axle offers wide oscillating and steering angles.

Advanced Disc Brake System

Minimizes the rocking effect when working free on wheels. The disc brake system acts directly on the hub instead of the drive shaft to avoid planetary gear backlash.

Fenders (optional)

Fenders provide excellent coverage of all tires, protecting the machine and surroundings from mud and stones being thrown up.

Joystick Steering

Keep both hands on the joysticks even when simultaneously moving the implements and repositioning the machine, by the use of the slider switch on the right joystick.

New Blade Design

- Parallel kinematic to keep the blade parallel to the ground, in every height position
- A profile that allows material to roll better and minimizes material packing

Booms and Sticks

Options To Take on Your Far-reaching or Up-close Tasks

Rugged Performance

Booms and sticks are welded, box section structures with thick, multi-plate fabrications in high stress areas for the tough work you do.

Flexibility

The choice of various booms and sticks provides the right balance of reach and digging forces for all applications.

Sticks

- **Short stick – 2100 mm (6'11")** for maximum breakout force and lifting capability
- **Medium stick – 2400 mm (7'10")** for greater crowd force and lift capacity
- **Long stick – 2600 mm (8'6")** for greater depth and reach

Booms

- **Variable Adjustable (VA)** – improved right side visibility and roading balance. When working in tight quarters or lifting heavy loads, the VA boom offers the best flexibility.
- **One-Piece Boom** – Fits best for all standard applications such as truck loading and digging. A unique straight section in the curve of the side plate reduces stress flow and helps increase boom life.
- **Offset Boom** – The large offset dimensions allow you to dig along walls, over obstacles, to grade while driving, and to dig under laid tubes without damaging them. The combination with a tiltable ditch cleaning bucket lets you operate a highly versatile system.

SmartBoom
Reduces Stress and Vibration

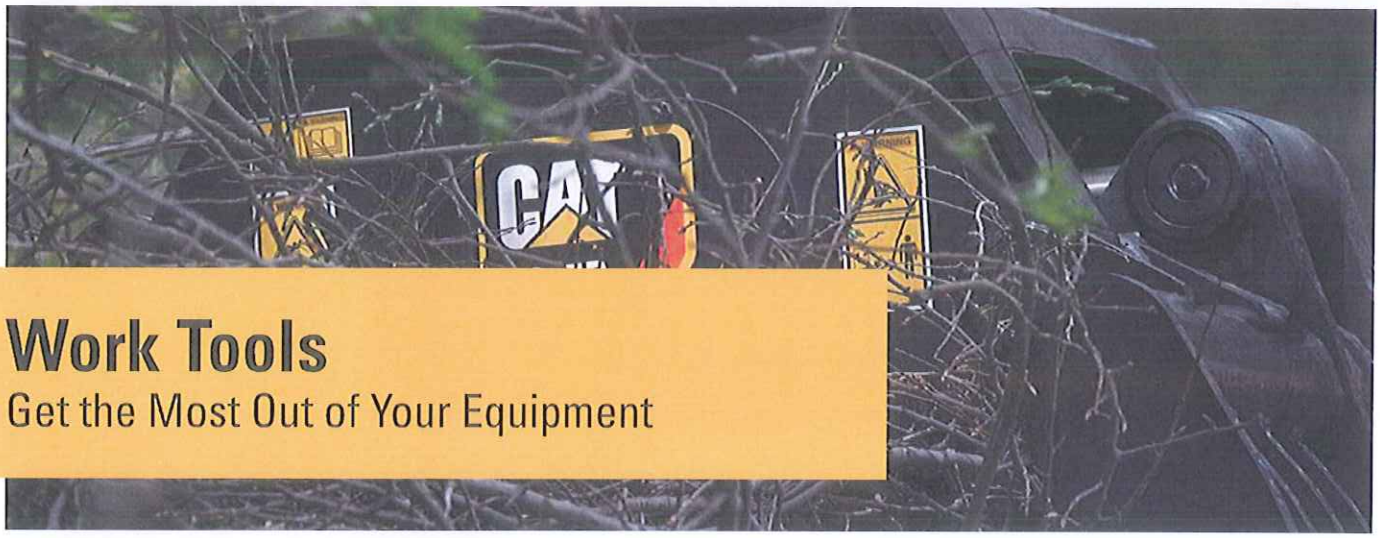
Rock Scraping
Scraping rock and finishing work is easy and fast. SmartBoom simplifies the task and allows more focus on stick and bucket, while the boom freely goes up and down without using pump flow.

Hammer Work
The front parts automatically follow the hammer while penetrating the rock. Blank shots or excessive force on the hammer are avoided resulting in longer life for the hammer and the machine. Similar advantages with vibratory plate compactors.

Truck Loading
Loading trucks from a bench is more productive and fuel efficient as the return cycle is reduced while the boom down function does not require pump flow.

Ride Control
Fast Travel Speed with More Comfort

The ride control system lets you travel faster over rough terrain with improved ride quality for the operator. Accumulators are acting as shock absorbers to dampen the front part motion. It can be activated through a button located on the soft switch panel in the cab.



Work Tools

Get the Most Out of Your Equipment

Save Time with Tool Changes

Job Site Confidence ... From the operator's seat, visual and audible indicators help assure that the attachment is coupled. Your Cat excavator hydraulics, mechanisms inside the coupler, and digging forces all work together to assure the attachment stays engaged. The Cat Pin Grabber coupler is the secure way to decrease downtime by allowing quick attachment change, and increase job site flexibility.

Power Match

Match your Cat hydraulic work tools attachment to your Cat machine, and get the most out of the standard, built-in software. Work tool changes have never been easier!

Get the Most from Your Machine

If you have multiple tasks to get done, the M318F can help. And you can easily expand all the possibilities it offers by utilizing any of the variety of Cat attachments.

Dig, Load, Finish and Compact

A wide range of buckets offers solutions for digging, trenching, loading and finishing works. The addition of a Cat Compactor will introduce your machine to utility work, site prep, road repair and pipeline work.

Move and Handle Material

Choose from one of three different thumb styles to work with your bucket and you have the instant ability to move and handle brush, rocks and debris.

Demolish and Break

Our hammer includes a buffer to improve your comfort and protect your machine from vibration. Fully enclosed, it is ideal when working in noise regulated areas.

Sort and Load

Demolition and Sorting Grapples bring your machine into demolition and waste handling opportunities. Jaws open wide to move volumes, yet are nimble enough to pull a single copper wire out of a pile. Their 360° rotation capability allows you to place the grapple where you want it without moving the machine.

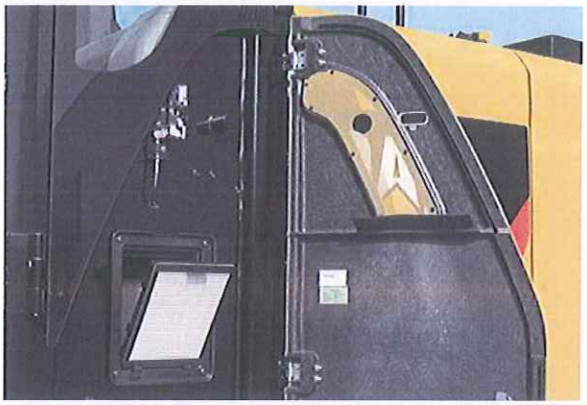
Scrap and Recycle

Shears also have the ability to rotate 360°. A pulverizer allows you to crush and reduce concrete.

Serviceability
When Uptime Counts

Convenient Access Built In
You can reach routine maintenance items like fuel and engine oil filters and fluid taps at ground level while fuel and DEF tank with engine air filter are accessible from the safety of the slip-resistant new service platform. Compartments feature wide composite service doors, designed to be more resistant to shocks, which all include gas struts to facilitate the opening. Components are now gathered in specific dedicated compartments, like the special electrical compartments.

A Cool Design for Any Temperature
The side-by-side and radial fan design allows greater cooling performance. The system is completely separated from the engine compartment to reduce noise and heat and all radiators are gathered in the same compartment while featuring easy-to-clean cores with a tilting device that requires no tool to unlock.

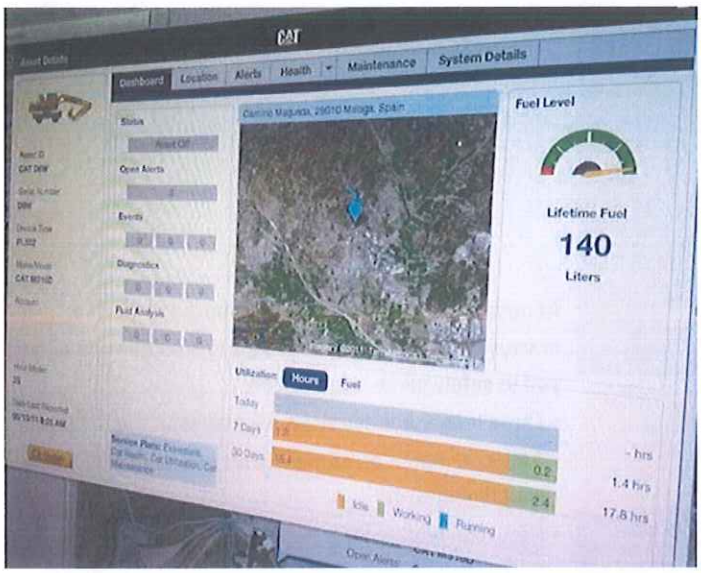


A Fresh Idea
Ventilation inside the cab allows outside air to enter through a fresh air filter. The filter is located on the side of the cab to make it easy to reach, and it is protected by a lockable door that can be opened with the engine key.

Lube and Fuel Options
An electric lubricator system is an available time-saving standard feature for greasing the whole upper carriage. Greasing points for the undercarriage are kept to a minimum and grouped. An electric refueling pump is also standard. The hose is stored in a dedicated tray, for more cleanliness. Add in the new electric lift pump removing the need to prime the system manually, the standard fuel and water separator and you get a machine that does the fastidious works for you.

Keep it simple.

Integrated Technologies
It Pays to Know



CAT® CONNECT

EQUIPMENT MANAGEMENT | PRODUCTIVITY | SAFETY | SUSTAINABILITY

Cat Connect makes smart use of technology and services to improve your job site efficiency. Using the data from technology-equipped machines, you'll get more information and insight into your equipment and operations than ever before.

Cat Connect technologies offer improvements in these key areas:

EQUIPMENT MANAGEMENT

Equipment Management – increase uptime and reduce operating costs.

PRODUCTIVITY

Productivity – monitor production and manage job site efficiency.

SAFETY

Safety – enhance job site awareness to keep your people and equipment safe.

Featured Cat Connect technologies include the following:

Link

Link technologies provide wireless capability to machines to enable two-way transfer of information collected by on-board sensors, control modules, and other Cat Connect technologies.

Manage Your Machine Remotely

Cat Product Link is a system that is deeply integrated into the machine monitoring system to take the guesswork out of managing your equipment. The system tracks location, hours, fuel usage, productivity, idle time, and diagnostic codes and shares it with you through VisionLink® to help you maximize efficiency, improve productivity, and lower operating costs.

Safety

Your Safety Is NOT An Option

Embedded Features

Smart devices are embedded to offer as much safety as possible for your operators and help enforce safe behavior:

- Safety seat belt and warning indicators (monitor)
- Automatic swing lock
- Automatic brake and axle lock
- Safety Lever, preventing exit when the implements are not locked out
- Emergency shut off switch and battery switch disconnect
- Adjustable travel alarm
- Lowering check valves

Safe and Quiet Cab

The all-new cab provides you with a safe environment. It also contributes to your comfort with limited vibrations and drastically reduced sound levels.

Access into the cab of a wheeled excavator has always been a challenge. We bring a solution to allow you to safely climb into the cab:

- Three longer access steps, aligned with the cab entry
- Anti-skid plates on all walkways and steps reducing slipping hazards
- New, convenient door handrail
- Safety lever built into the tiltable console to make sure the way in and out is free of obstacle

1) *Laminated windshield and skylight window*
2) *Lowering check valves*
3) *Safety seat belt indicator*
4) *Safety lever*
5) *Emergency shut-off switch*
6) *Automatic brake and axle lock*
7) *Punched, anti-slippery walking surfaces*
8) *Battery switch disconnect*
9) *Swing and implement electronic lock*
10) *Adjustable travel alarm*
11) *All doors equipped with spring gas cylinders*
12) *Emergency hammer and exit*
13) *ROPS/FOGS compatible cab*
14) *Sound proofing*
15) *Beacon available*
16) *Falling Object Guard compatibility*

Smart Lighting

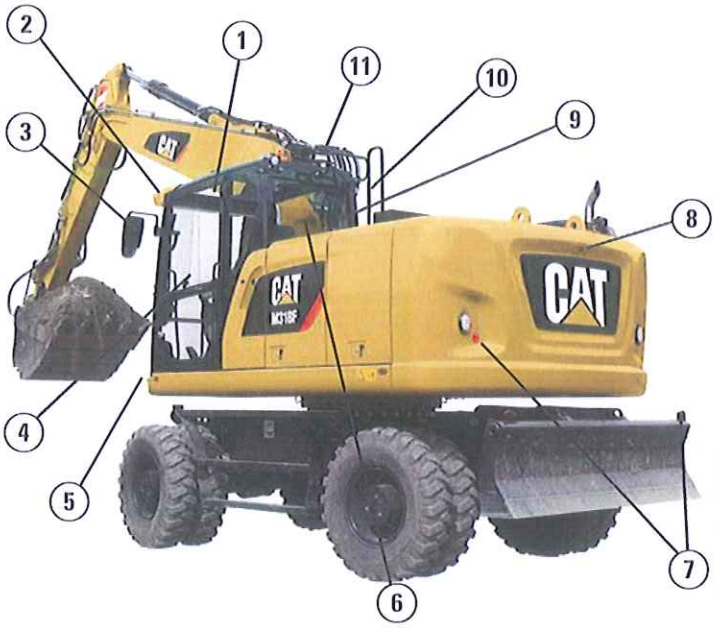
- LED lights for all working lights for enhanced night-time visibility
- Halogen lights for all roading lights
- LED dome light for better illumination inside the cab

Great Views

- Enlarged glass gives you excellent visibility to the front, top, rear, and sides, even to the right
- Standard rearview camera gives you a clear field of view behind the machine through the monitor. Camera is integrated into the counterweight.
- Standard sideview camera, to check nothing is hidden to you from the front right hand side to the rear of the machine
- Lenses of all the cameras are wide angle and heated
- All mirrors are wide angle and allow view not only around the machine but also to the ground

Unmatched Visibility

Make Sure Nothing Is Hidden to You



Visibility all around is critical, especially for machines which go on public roads.

1) Increased skylight and windshield glass area
2) Improved lighting with standard LED lights for all working lights
3) Optional heated mirrors
4) Great left hand side visibility with the new all glass door
5) Halogen roading lights
6) Wide rear window
7) Reflecting red lights on rear and blade/outriggers
8) Standard wide rearview camera
9) Standard side camera and dedicated monitor
10) Large right hand side window
11) Mirrors, wide angle, with additional lower mirror for ground visibility

Complete Customer Care

Your Cat Dealer Will Support You Like No Other

Support You Can Count On

From helping you to choose the right machine to knowledgeable on-going support, Cat dealers provide the best-in-sales and services.

- **Best long-term investment** with financing options and services
- **Productive operation** with training programs
- **Preventive maintenance** and guaranteed maintenance contracts
- **Uptime,** with best-in-class parts availability
- **Repair, rebuild, or replace?** Your dealer can help evaluate the best option.

M318F Wheeled Excavator Specifications

Engine

Engine Model	Cat C7.1 ACERT [1]	
Ratings	1,750 rpm	
Engine Gross Power (maximum)		
ISO 14396	129.4 kW	174 hp
ISO 14396 (metric)		176 hp (PS)
Net Power (Rated) [2]		
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ISO 9249/SAE J1349 (metric)		171 hp (PS)
80/1269/EEC	126 kW	169 hp
Net Power (maximum)		
ISO 9249/SAE J1349	126 kW	169 hp
ISO 9249/SAE J1349 (metric)		171 hp (PS)
80/1269/EEC	126 kW	169 hp
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7.01 L	427.8 in³
Maximum Torque at 1,400 rpm	783 N·m	578 lbf-ft
Number of Cylinders	6	

[1] Meets Tier 4 Final emission standards.
[2] Rated speed 1,750 rpm. Constant power from 1,500-1,750 rpm.

- Net power advertised is the power available at the flywheel when engine is equipped with air cleaner, CEM exhaust gas aftertreatment, alternator, and cooling fan running at intermediate speed.
- No deratings required up to 3000 m (9,842 ft) altitude. Automatic derating occurs after 3000 m (9,842 ft).

Transmission

Forward/Reverse		
1st Gear	10 km/h	6.2 mph
2nd Gear	35 km/h	21.7 mph
Creeper Speed		
1st Gear	3 km/h	1.9 mph
2nd Gear	12 km/h	7.5 mph
Drawbar Pull	103 kN	23,155 lbf
Maximum Gradeability	64%	

Service Refill Capacities

Fuel Tank (total capacity)	330 L	87.2 gal
Diesel Exhaust Fluid Tank	34.5 L	9.1 gal
Cooling System	46.9 L	12.4 gal
Engine Crankcase	18.5 L	4.9 gal
Rear Axle Housing (differential)	14 L	3.7 gal
Front Steering Axle (differential)	10.5 L	2.8 gal
Final Drive	2.5 L	0.7 gal
Powershift Transmission	2.5 L	0.7 gal

Swing Mechanism

Swing Speed	10 rpm	
Swing Torque	38 kN·m	28,027 lbf-ft

Undercarriage

Ground Clearance	370 mm	14.6 in
Maximum Steering Angle	35°	
Oscillation Axle Angle	±9°	
Minimum Turning Radius		
Standard Axle		
Outside of Tire	6400 mm	21.0 ft
End of VA Boom	7000 mm	23.0 ft
End of One-Piece Boom	8300 mm	27.2 ft
End of Offset Boom	7000 mm	23.0 ft
Wide Axle		
Outside of Tire	6550 mm	21.5 ft
End of VA Boom	7100 mm	23.3 ft
End of One-Piece Boom	8500 mm	27.9 ft
End of Offset Boom	7100 mm	23.3 ft

Weights

Operating Weights*	16 900 kg-19 700 kg	37,258 lb-43,431 lb
Weights		
VA Boom		
Rear Dozer Only	17 400 kg	38,360 lb
Rear Dozer, Front Outriggers	18 410 kg	40,587 lb
Front and Rear Outriggers	18 670 kg	41,160 lb
One-Piece Boom		
Rear Dozer, Front Outriggers	17 920 kg	39,507 lb
Front and Rear Outriggers	18 180 kg	40,080 lb
Offset Boom		
Rear Dozer Only	17 950 kg	39,573 lb
Rear Dozer, Front Outriggers	18 950 kg	41,778 lb
Front and Rear Outriggers	19 210 kg	42,351 lb
Sticks**		
Short, 2100 mm (6'11")	700 kg	1,543 lb
Medium, 2400 mm (7'10")	730 kg	1,609 lb
Long, 2600 mm (8'6")	750 kg	1,653 lb
Industrial, 3100 mm (10'2")	410 kg	904 lb
Counterweight		
Standard	3400 kg	7,496 lb
Optional	3900 kg	8,598 lb

*Operating weight includes medium stick, 3400 kg (7,496 lb) counterweight, full fuel tank, operator, 200 kg (441 lb) quick coupler, 600 kg (1,323 lb) bucket and dual pneumatic tires. Weight varies depending on configuration.

**Includes cylinder, bucket linkage, pins and standard hydraulic lines.

M318F Wheeled Excavator Specifications

Hydraulic System

Tank Capacity	122 L	32.2 gal
System	210 L	55.5 gal
Maximum Pressure		
Implement Circuit		
Normal	350 bar	5,076 psi
Heavy Lift	370 bar	5,366 psi
Travel Circuit	350 bar	5,076 psi
Auxiliary Circuit		
High Pressure	350 bar	5,076 psi
Medium Pressure	210 bar	3,046 psi
Swing Mechanism	370 bar	5,366 psi
Maximum Flow		
Implement/Travel Circuit	252 L/min	67 gal/min
Auxiliary Circuit		
High Pressure	252 L/min	66.6 gal/min
Medium Pressure	49 L/min	12.9 gal/min
Swing Mechanism	85 L/min	22.5 gal/min

Tires

Standard	10.00-20 (Dual Pneumatic)
Optional	11.00-20 (Dual Pneumatic) 445/70/R19.5 TL XF (Single Pneumatic) 10.00-20 (Dual Solid Rubber)

Blade

Blade Type	Parallel	
Blade Roll-Over Height	576 mm	22.7 in
Width (standard axles)	2550 mm	100.4 in
Width (wide axles)	2750 mm	108.3 in

Sustainability

Engine Emissions	Tier 4 Final	
Fluids (Optional)		
Cat Bio HYDO Advanced	Readily biodegradable EU Flower eco-label certified	
Biodiesel up to B20	Meets EN 14214 or ASTM D6751 with EN590 or ASTM D975 Standard Mineral diesel fuels	
Vibration Levels		
Maximum Hand/Arm		
ISO 5349:2001	<2.5 m/s²	<8.2 ft/s²
Maximum Whole Body		
ISO/TR 25398:2006	<0.5 m/s²	<1.6 ft/s²
Seat Transmissibility Factor		
ISO 7096:2000-spectral class EM5	<0.7	

Standards

ROPS	ROPS (Rollover Protective Structure) offered by Caterpillar meets ROPS criteria ISO 12117-2:2008
FOPS	FOPS (Falling Object Protective Structure) meets FOPS criteria ISO 10262:1998 and SAE J1356:2008
Cab/Sound Levels	Meets appropriate standards as listed

Sound Performance

Operator Sound	
2000/14/EC	71 dB(A)
Spectator Sound	
2000/14/EC	100 dB(A)

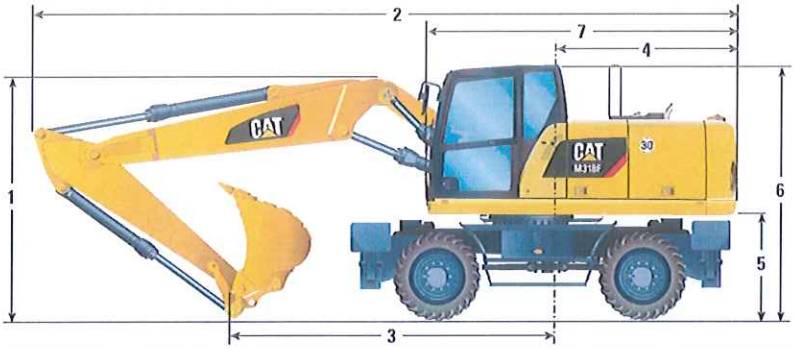
- Operator Sound – The operator sound level is measured according to the procedures specified in 2000/14/EC, for a cab offered by Caterpillar, when properly installed and maintained and tested with the door and windows closed.
- Exterior Sound – The labeled spectator sound power level is measured according to the test procedures and conditions specified in 2000/14/EC.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained for doors/windows open) for extended periods or in noisy environment(s).

Blade

Blade Type	Parallel	
Blade Options – Width	2550 mm, 2750 mm	100.4 in, 108.3 in
Blade Total Height	680 mm	2'3"
Maximum Lowering Depth from Ground	131 mm	5"
Maximum Raising Height above Ground	496 mm	1'7"

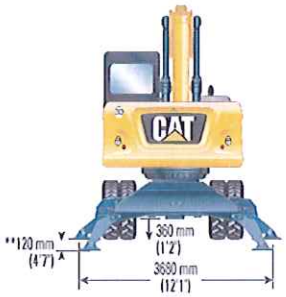
Dimensions

All dimensions are approximate.



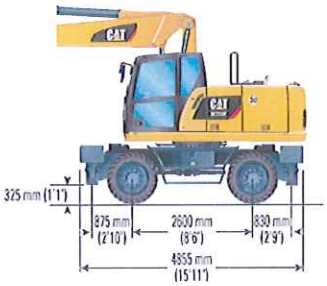
		VA Boom				One-Piece Boom				Offset Boom	
Stick Length	mm (ft/in)	**2100 (6'11")**	**2400 (7'10")**	**2600 (8'6")**	**3100* (10'2")**	**2100 (6'11")**	**2400 (7'10")**	**2600 (8'6")**	**3100* (10'2")**	**2100 (6'11")**	**2400 (7'10")**
1 Shipping Height with Falling Object Guard and Handrails Lowered (highest point between boom and cab)	mm (ft/in)		3305 (10'10")		3330 (10'11")		3305 (10'10")		3330 (10'11")		3305 (10'10")
2 Shipping Length	mm (ft/in)	8610 (28'3")	8610 (28'3")	8600 (28'3")	8580 (28'2")	8450 (27'9")	8460 (27'9")	8460 (27'9")	8480 (27'10")	8600 (28'3")	8560 (28'1")
3 Support Point	mm (ft/in)	3910 (12'10")	3650 (12'0")	3550 (11'8")	3640 (11'11")	3560 (11'8")	3270 (10'9")	3150 (10'4")	3220 (10'7")	4010 (13'2")	3770 (12'4")
4 Tail Swing Radius	mm (ft/in)	2300 (7'6")									
5 Counterweight Clearance	mm (ft/in)	1280 (4'2")									
6 Cab Height – No Falling Object Guard, Handrails Lowered	mm (ft/in)	3190 (10'6")									
With Handrails not Lowered	mm (ft/in)	3270 (10'9")									
With Falling Object Guard	mm (ft/in)	3305 (10'10")									
7 Overall Machine Width											
Standard Axle	mm (ft/in)	2550 (8'4")									
Wide Gauge Axle	mm (ft/in)	2750 (9'0")									

*3100 mm (10'2") industrial stick will be available in 2015.

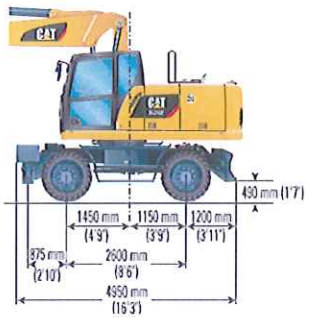


** Maximum tire clearance with outrigger fully down

Undercarriage with 2 sets of outriggers

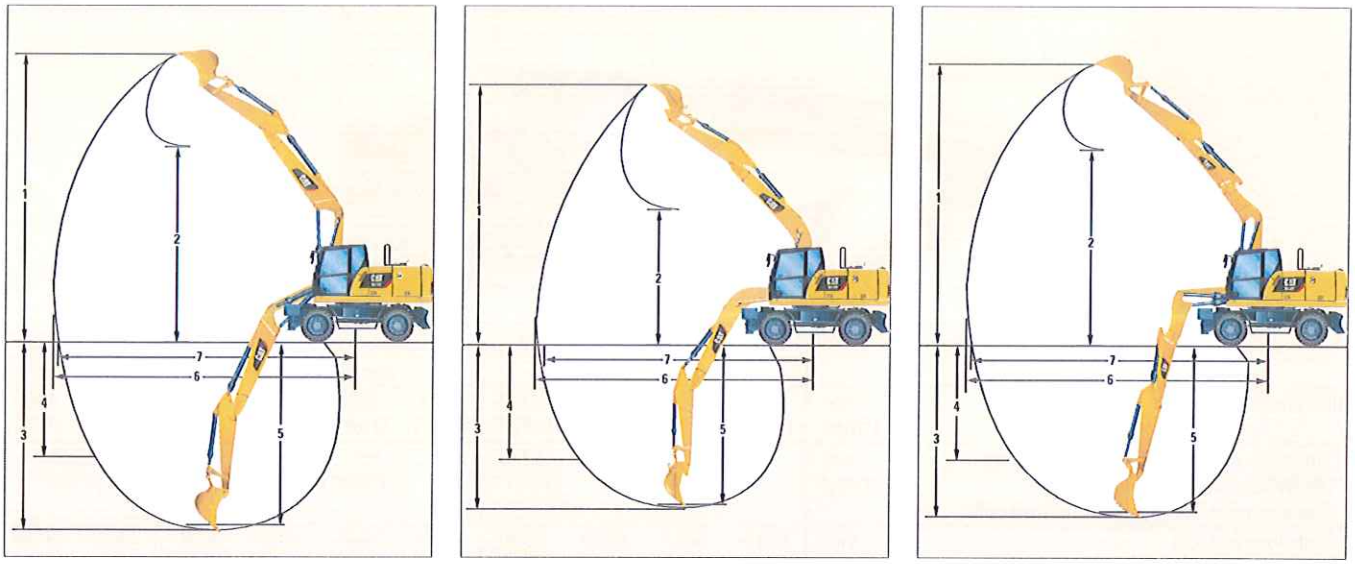


Undercarriage with 1 set of outriggers and dozer



M318F Wheeled Excavator Specifications

Working Ranges



		VA Boom				One-Piece Boom				Offset Boom	
Stick Length	mm (ft/in)	**2100 (6'11")**	**2400 (7'10")**	**2600 (8'6")**	**3100* (10'2")**	**2100 (6'11")**	**2400 (7'10")**	**2600 (8'6")**	**3100* (10'2")**	**2100 (6'11")**	**2400 (7'10")**
1 Digging Height	mm	10 090	10 275	10 435	8970	9045	9140	9255	7720	10 125	10 320
	(ft/in)	(33'1")	(33'9")	(34'3")	(29'5")	(29'8")	(30'0")	(30'4")	(25'4")	(33'3")	(33'10")
2 Dump Height	mm	6945	7135	7265	3980	6000	6110	6225	3200	6980	7175
	(ft/in)	(22'9")	(23'5")	(23'10")	(13'1")	(19'8")	(20'1")	(20'5")	(10'6")	(22'11")	(23'6")
3 Digging Depth	mm	5595	5890	6090	5030	5390	5690	5890	4820	5600	5895
	(ft/in)	(18'4")	(19'4")	(20'0")	(16'6")	(17'8")	(18'8")	(19'4")	(15'10")	(18'4")	(19'4")
4 Vertical Wall Digging Depth	mm	4365	4600	4780	—	4490	4665	4845	—	4410	4650
	(ft/in)	(14'4")	(15'1")	(15'8")	—	(14'9")	(15'4")	(15'11")	—	(14'6")	(15'3")
5 Depth 2.5 m (8'2") in Straight Clean-Up	mm	5485	5785	5985	—	5170	5490	5700	—	5490	5790
	(ft/in)	(18'0")	(19'0")	(19'8")	—	(17'0")	(18'0")	(18'8")	—	(18'0")	(19'0")
6 Reach	mm	9120	9385	9580	8370	8920	9175	9365	8130	9135	9405
	(ft/in)	(29'11")	(30'9")	(31'5")	(27'6")	(29'3")	(30'1")	(30'9")	(26'8")	(30'0")	(30'10")
7 Reach at Ground Level	mm	8935	9210	9405	8170	8730	8995	9190	7920	8950	9225
	(ft/in)	(29'4")	(30'3")	(30'10")	(26'10")	(28'8")	(29'6")	(30'2")	(26'0")	(29'4")	(30'3")
Bucket Forces (ISO 6015)	kN	101			—	101			—	101	
	(lbf)	(22,705)			—	(22,705)			—	(22,705)	
Stick Forces (ISO 6015)	kN	81	74	71	—	81	74	71	—	81	74
	(lbf)	(8,209)	(16,635)	(15,961)	—	(8,209)	(16,635)	(15,961)	—	(8,209)	(16,635)

Range values are calculated with GD Bucket, 1200 mm (48 in), 0.91 m³ (1.19 yd³) with tips K080 and CW-20-H.4.N. quick coupler with a tip radius of 1574 mm (5'2").

Bucket and Stick force values are calculated with heavy lift on (no quick coupler) and a tip radius of 1404 mm (4'7").

*3100 mm (10'2") industrial stick will be available in 2015. Industrial stick has no bucket linkage. All dimensions refer to stick nose.

Bucket Specifications and Compatibility

Contact your Cat dealer for special bucket requirements.

Without Quick Coupler				Variable Adjustable Boom												One-Piece Boom								Offset Boom							
Counterweight				3.4 mt (7,496 lb)												3.4 mt (7,496 lb)								3.9 mt (8,598 lb)							
Stick Length				2100 mm (6'11")				2400 mm (7'10")				2600 mm (8'6")				2400 mm (7'10")				2600 mm (8'6")				2100 mm (6'11")				2400 mm (7'10")			
	Width	Capacity	Weight	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized
	mm (in)	m^3 (yd^3)	kg (lb)																												
General Duty (GD)	750 (30)	0.49 (0.64)	464 (1,022)																												
	1100 (43)	0.79 (1.03)	583 (1,285)																												
	1200 (48)	0.91 (1.19)	651 (1,435)																												
	1300 (51)	1.00 (1.31)	663 (1,462)																												
	1400 (55)	1.09 (1.43)	712 (1,570)																												
Heavy Duty (HD)	1300 (51)	1.00 (1.31)	699 (1,541)																												
Ditch Cleaning (DC)	2000 (78)	0.54 (0.71)	431 (950)																												
Ditch Cleaning Tilt (DCT)	1800 (71)	0.48 (0.63)	567 (1,250)																												
	2000 (78)	0.53 (0.69)	597 (1,316)																												

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)
- Maximum material density 1800 kg/m³ (3,000 lb/yd³)
- Maximum material density 1500 kg/m³ (2,500 lb/yd³)
- Maximum material density 1200 kg/m³ (2,000 lb/yd³)
- Maximum material density 900 kg/m³ (1,500 lb/yd³)
- 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.

M318F Wheeled Excavator Specifications

Bucket Specifications and Compatibility

Contact your Cat dealer for special bucket requirements.

With Pin Grabber Coupler				Variable Adjustable Boom												One-Piece Boom								Offset Boom							
Counterweight				3.4 mt (7,496 lb)												3.4 mt (7,496 lb)								3.9 mt (8,598 lb)							
Stick Length				2100 mm (6'11")				2400 mm (7'10")				2600 mm (8'6")				2400 mm (7'10")				2600 mm (8'6")				2100 mm (6'11")				2400 mm (7'10")			
	Width	Capacity	Weight	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized
	mm (in)	m^3 (yd^3)	kg (lb)																												
General Duty (GD)	750 (30)	0.49 (0.64)	464 (1,022)																												
	1100 (43)	0.79 (1.03)	583 (1,285)																												
	1200 (48)	0.91 (1.19)	651 (1,435)																												
	1300 (51)	1.00 (1.31)	663 (1,462)																												
	1400 (55)	1.09 (1.43)	712 (1,570)																												
Heavy Duty (HD)	1300 (51)	1.00 (1.31)	699 (1,541)																												
Ditch Cleaning (DC)	2000 (78)	0.54 (0.71)	431 (950)																												
Ditch Cleaning Tilt (DCT)	1800 (71)	0.48 (0.63)	567 (1,250)																												
	2000 (78)	0.53 (0.69)	597 (1,316)																												

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)
- Maximum material density 1800 kg/m³ (3,000 lb/yd³)
- Maximum material density 1500 kg/m³ (2,500 lb/yd³)
- Maximum material density 1200 kg/m³ (2,000 lb/yd³)
- Maximum material density 900 kg/m³ (1,500 lb/yd³)
- 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.

Work Tools Matching Guide

When choosing between various work tool models that can be installed onto the same machine configuration, consider work tool application, productivity requirements, and durability. Refer to work tool specifications for application recommendations and productivity information.

		Variable Adjustable Boom																							
Counterweight		3.4 mt (7,496 lb)												3.9 mt (8,598 lb)											
		(1)				(2)				(3)				(1)				(2)				(3)			
Stick Length		2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")
Hydraulic Hammer	H110Es																								
	H115Es																								
	H120Es																								
Demolition and Sorting Grapple (D-Demolition shells, R-Recycling shells)	G310B-D/R																								
	G315B-D/R																								
Scrap and Demolition Shear	S320B																								
	S325B																								
Compactor Plate	CVP75																								
Orange Peel Grapple (4 or 5 Tines)	GSH15B 400 L (½ yd³)	These work tools are available for the M318F. Consult your Cat dealer for proper match.																							
	GSH15B 500 L (⅝ yd³)																								
	GSH15B 600 L (¾ yd³)																								
	GSH15B 800 L (1 yd³)																								
Trash Grapple																									
Thumbs																									
Rakes																									
Pin Grabber Coupler	CL-QC																								
Dedicated Quick Coupler	CW-20																								
	CW-20S																								

(1) Dozer lowered
(2) 2 sets outriggers lowered
(3) Dozer and outrigger lowered

- Work Tool is a match
- Pin-on or dedicated coupler
- Pin-on only
- Over the front only
- Boom Mount
- Over the front only with dedicated coupler
- Over the front only with CL coupler
- Not recommended

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

M318F Wheeled Excavator Specifications

Work Tools Matching Guide

When choosing between various work tool models that can be installed onto the same machine configuration, consider work tool application, productivity requirements, and durability. Refer to work tool specifications for application recommendations and productivity information.

		One-Piece Boom																							
Counterweight		3.4 mt (7,496 lb)												3.9 mt (8,598 lb)											
		(1)				(2)				(3)				(1)				(2)				(3)			
Stick Length		2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")
Hydraulic Hammer	H110Es																								
	H115Es																								
	H120Es																								
Multi-Processor	MP318 CC Jaw																								
	MP318 D Jaw																								
	MP318 S Jaw																								
Crusher	P315																								
Pulverizer	P215																								
Demolition and Sorting Grapple (D-Demolition shells, R-Recycling shells)	G310B-D/R																								
	G315B-D/R																								
Scrap and Demolition Shear	S320B																								
	S325B																								
Compactor Plate	CVP75																								

(1) Dozer lowered
(2) 2 sets outriggers lowered
(3) Dozer and outrigger lowered

Work Tool is a match
Pin-on or dedicated coupler
Pin-on only
Over the front only

Boom Mount
Over the front only with dedicated coupler
Over the front only with CL coupler
Not recommended

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

Lift Capacities – Variable Adjustable Boom

All values are in kg, bucket cylinder and bucket linkage installed, work tool: none, with counterweight (3900 kg), heavy lift on.

Load at maximum reach (stick nose/bucket pin) | Load over front | Load over rear | Load over side | Load point height

Long Stick 2600 mm

Load point height	Undercarriage configuration	3000 mm			4500 mm			6000 mm			7500 mm						mm
6000 mm	Rear dozer up				*4900	*4900	4800	*4750	3450	3000				*3000	2800	2450	6740
	Rear dozer down					*4900	*4900		*4750	3400					*3000	2800	
	Dozer and stabilizer down					*4900	*4900		*4750	*4750					*3000	*3000	
	2 sets of stabilizers down				*4900	*4900	*4900	*4750	*4750	*4750				*3000	*3000	*3000	
4500 mm	Rear dozer up				*5800	5250	4550	4750	3350	2950	*2900	2300	2000	*2800	2300	2000	7510
	Rear dozer down					*5800	5250		*4900	3350		*2900	2300		*2800	2300	
	Dozer and stabilizer down					*5800	*5800		*4900	*4900		*2900	*2900		*2800	*2800	
	2 sets of stabilizers down				*5800	*5800	*5800	*4900	*4900	*4900	*2900	*2900	*2900	*2800	*2800	*2800	
3000 mm	Rear dozer up				*7150	4900	4200	4600	3200	2800	3250	2250	1950	*2800	2050	1800	7910
	Rear dozer down					*7150	4850		*5200	3200		*4150	2250		*2800	2050	
	Dozer and stabilizer down					*7150	*7150		*5200	4800		*4150	3400		*2800	*2800	
	2 sets of stabilizers down				*7150	*7150	*7150	*5200	*5200	*5200	*4150	*4150	3950	*2800	*2800	*2800	
1500 mm	Rear dozer up				6750	4550	3850	4400	3050	2600	3200	2200	1900	2900	2000	1700	8000
	Rear dozer down					*8550	4500		*5650	3050		*4350	2200		*2900	2000	
	Dozer and stabilizer down					*8550	7100		*5650	4650		*4350	3350		*2900	*2900	
	2 sets of stabilizers down				*8550	*8550	8450	*5650	*5650	5400	*4350	*4350	3900	*2900	*2900	*2900	
0 mm	Rear dozer up				6550	4350	3700	4300	2900	2500	3150	2150	1850	3000	2050	1750	7800
	Rear dozer down					*8650	4300		*6200	2900		*4650	2150		*3200	2050	
	Dozer and stabilizer down					*8650	6900		*6200	4500		*4650	3300		*3200	3100	
	2 sets of stabilizers down				*8650	*8650	8200	*6200	*6200	5300	*4650	*4650	3850	*3200	*3200	*3200	
-1500 mm	Rear dozer up	*6850	*6850	6600	6500	4300	3650	4250	2850	2450				3300	2250	1950	7270
	Rear dozer down		*6850	*6850		*7850	4250		*5750	2850					*3700	2250	
	Dozer and stabilizer down		*6850	*6850		*7850	6850		*5750	4450					*3700	3450	
	2 sets of stabilizers down	*6850	*6850	*6850	*7850	*7850	*7850	*5750	*5750	5250				*3700	*3700	*3700	
-3000 mm	Rear dozer up				*6100	4350	3700	*4200	2950	2500				*3550	2750	2350	6330
	Rear dozer down					*6100	4300		*4200	2950					*3550	2750	
	Dozer and stabilizer down					*6100	*6100		*4200	*4200					*3550	*3550	
	2 sets of stabilizers down				*6100	*6100	*6100	*4200	*4200	*4200				*3550	*3550	*3550	

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface and the Variable Boom Cylinder adjusted to the maximum length. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

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

M318F Wheeled Excavator Specifications

Lift Capacities – Variable Adjustable Boom

All values are in lb, bucket cylinder and bucket linkage installed, work tool: none, with counterweight (8,598 lb), heavy lift on.

Load at maximum reach (stick nose/bucket pin) | Load over front | Load over rear | Load over side | Load point height

Long Stick 8'6"

Load point height	Undercarriage configuration	10 ft			15 ft			20 ft			25 ft						ft
25 ft	Rear dozer up				*10,900	*10,900	10,300							*7,700	*7,700	*7,700	17.42
	Rear dozer down				*10,900	*10,900	*10,900							*7,700	*7,700	*7,700	
	Dozer and stabilizer down				*10,900	*10,900	*10,900							*7,700	*7,700	*7,700	
	2 sets of stabilizers down				*10,900	*10,900	*10,900							*7,700	*7,700	*7,700	
20 ft	Rear dozer up				*10,800	*10,800	10,300	*10,100	7,400	6,500				*6,600	6,200	5,400	21.92
	Rear dozer down				*10,800	*10,800	*10,800	*10,100	*10,100	7,200				*6,600	*6,600	6,100	
	Dozer and stabilizer down				*10,800	*10,800	*10,800	*10,100	*10,100	*10,100				*6,600	*6,600	*6,600	
	2 sets of stabilizers down				*10,800	*10,800	*10,800	*10,100	*10,100	*10,100				*6,600	*6,600	*6,600	
15 ft	Rear dozer up				*12,600	11,400	9,900	10,300	7,200	6,300				*6,200	5,100	4,400	24.54
	Rear dozer down				*12,600	*12,600	11,000	10,200	*10,600	7,000				*6,200	*6,200	5,000	
	Dozer and stabilizer down				*12,600	*12,600	*12,600	*10,600	*10,600	10,500				*6,200	*6,200	*6,200	
	2 sets of stabilizers down				*12,600	*12,600	*12,600	*10,600	*10,600	*10,600				*6,200	*6,200	*6,200	
10 ft	Rear dozer up				*15,300	10,600	9,100	9,900	6,900	6,000	7,000	4,900	4,200	*6,200	4,600	4,000	25.92
	Rear dozer down				15,300	*15,300	10,200	9,900	*11,200	6,700	7,000	*9,100	4,700	*6,200	*6,200	4,400	
	Dozer and stabilizer down				*15,300	*15,300	*15,300	*11,200	*11,200	10,100	*9,100	*9,100	7,200	*6,200	*6,200	*6,200	
	2 sets of stabilizers down				*15,300	*15,300	*15,300	*11,200	*11,200	*11,200	*9,100	*9,100	8,500	*6,200	*6,200	*6,200	
5 ft	Rear dozer up				14,600	9,800	8,400	9,500	6,500	5,700	6,900	4,700	4,100	6,400	4,400	3,800	26.25
	Rear dozer down				14,500	*18,300	9,400	9,500	*12,200	6,300	6,900	*9,500	4,600	6,400	*6,400	4,300	
	Dozer and stabilizer down				*18,300	*18,300	14,900	*12,200	*12,200	9,800	*9,500	*9,500	7,000	*6,400	*6,400	*6,400	
	2 sets of stabilizers down				*18,300	*18,300	18,200	*12,200	*12,200	11,700	*9,500	*9,500	8,400	*6,400	*6,400	*6,400	
0 ft	Rear dozer up				14,100	9,300	8,000	9,300	6,300	5,400	6,800	4,600	4,000	6,600	4,500	3,900	25.59
	Rear dozer down				14,000	*18,700	9,000	9,200	*13,400	6,100	6,700	*10,000	4,500	6,500	*7,000	4,400	
	Dozer and stabilizer down				*18,700	*18,700	14,400	*13,400	*13,400	9,500	*10,000	*10,000	6,900	*7,000	*7,000	6,700	
	2 sets of stabilizers down				*18,700	*18,700	17,700	*13,400	*13,400	11,400	*10,000	*10,000	8,300	*7,000	*7,000	*7,000	
–5 ft	Rear dozer up	*15,700	*15,700	14,200	13,900	9,200	7,800	9,200	6,200	5,300				7,300	4,900	4,300	23.82
	Rear dozer down	*15,700	*15,700	*15,700	13,900	*17,000	8,900	9,100	*12,400	6,000				7,200	*8,200	4,800	
	Dozer and stabilizer down	*15,700	*15,700	*15,700	*17,000	*17,000	14,300	*12,400	*12,400	9,400				*8,200	*8,200	7,400	
	2 sets of stabilizers down	*15,700	*15,700	*15,700	*17,000	*17,000	*17,000	*12,400	*12,400	11,300				*8,200	*8,200	*8,200	
–10 ft	Rear dozer up				*13,100	9,400	8,000	*8,700	6,300	5,500							
	Rear dozer down				*13,100	*13,100	9,000	*8,700	*8,700	6,200							
	Dozer and stabilizer down				*13,100	*13,100	*13,100	*8,700	*8,700	*8,700							
	2 sets of stabilizers down				*13,100	*13,100	*13,100	*8,700	*8,700	*8,700							

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface and the Variable Boom Cylinder adjusted to the maximum length. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

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

Lift Capacities – One-Piece Boom

All values are in kg, bucket cylinder and bucket linkage installed, work tool: none, with counterweight (3900 kg), heavy lift on.

Load at maximum reach (stick nose/bucket pin) | Load over front | Load over rear | Load over side | Load point height

Long Stick 2600 mm

Load point height	Undercarriage configuration	3000 mm			4500 mm			6000 mm			7500 mm						mm
6000 mm	Rear dozer up							*4350	3400	3000				*2950	*2950	2600	6490
	Rear dozer down								*4350	3400					*2950	*2950	
	Dozer and stabilizer down								*4350	*4350					*2950	*2950	
	2 sets of stabilizers down							*4350	*4350	*4350				*2950	*2950	*2950	
4500 mm	Rear dozer up							4750	3350	2950				*2800	2450	2150	7280
	Rear dozer down								*5250	3350					*2800	2450	
	Dozer and stabilizer down								*5250	4950					*2800	*2800	
	2 sets of stabilizers down							*5250	*5250	*5250				*2800	*2800	*2800	
3000 mm	Rear dozer up				7150	4950	4300	4600	3250	2850	3300	2300	2000	*2800	2200	1900	7690
	Rear dozer down					*7350	4900		*5750	3250		*3900	2300		*2800	2200	
	Dozer and stabilizer down					*7350	*7350		*5750	4850		*3900	3450		*2800	*2800	
	2 sets of stabilizers down				*7350	*7350	*7350	*5750	*5750	5600	*3900	*3900	*3900	*2800	*2800	*2800	
1500 mm	Rear dozer up				6800	4600	4000	4450	3100	2700	3200	2250	1950	*2950	2100	1850	7790
	Rear dozer down					*8500	4600		*6250	3100		*4800	2250		*2950	2100	
	Dozer and stabilizer down					*8500	7200		*6250	4650		*4800	3350		*2950	*2950	
	2 sets of stabilizers down				*8500	*8500	8500	*6250	*6250	5450	*4800	*4800	3900	*2950	*2950	*2950	
0 mm	Rear dozer up	*4400	*4400	*4400	6600	4450	3800	4350	3000	2600	3200	2200	1900	3150	2150	1900	7580
	Rear dozer down		*4400	*4400		*8850	4400		*6450	3000		*4000	2200		*3300	2150	
	Dozer and stabilizer down		*4400	*4400		*8850	6950		*6450	4550		*4000	3350		*3300	3300	
	2 sets of stabilizers down	*4400	*4400	*4400	*8850	*8850	8250	*6450	*6450	5300	*4000	*4000	3850	*3300	*3300	*3300	
-1500 mm	Rear dozer up	*8200	*8200	6750	6550	4400	3750	4300	2950	2550				3450	2400	2100	7030
	Rear dozer down		*8200	8100		*8300	4350		*6050	2950					*3950	2400	
	Dozer and stabilizer down		*8200	*8200		*8300	6900		*6050	4500					*3950	3650	
	2 sets of stabilizers down	*8200	*8200	*8200	*8300	*8300	8200	*6050	*6050	5250				*3950	*3950	*3950	
-3000 mm	Rear dozer up	*9200	8350	6900	6600	4450	3800	4350	3000	2600				4300	2950	2550	6060
	Rear dozer down		*9200	8250		*6750	4400		*4450	3000					*4300	2950	
	Dozer and stabilizer down		*9200	*9200		*6750	*6750		*4450	*4450					*4300	*4300	
	2 sets of stabilizers down	*9200	*9200	*9200	*6750	*6750	*6750	*4450	*4450	*4450				*4300	*4300	*4300	

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

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

M318F Wheeled Excavator Specifications

Lift Capacities – One-Piece Boom

All values are in lb, bucket cylinder and bucket linkage installed, work tool: none, with counterweight (8,598 lb), heavy lift on.

Load at maximum reach (stick nose/bucket pin) | Load over front | Load over rear | Load over side | Load point height

Long Stick 8'6"

Load point height	Undercarriage configuration	5 ft			10 ft			15 ft			20 ft			25 ft						Load at maximum reach
																				ft
25 ft	Rear dozer up																*7,600	*7,600	*7,600	16.34
	Rear dozer down																*7,600	*7,600	*7,600	
	Dozer and stabilizer down																*7,600	*7,600	*7,600	
	2 sets of stabilizers down																*7,600	*7,600	*7,600	
20 ft	Rear dozer up										*9,000	7,300	6,500				*6,500	*6,500	5,900	21.06
	Rear dozer down										*9,000	*9,000	7,200				*6,500	*6,500	*6,500	
	Dozer and stabilizer down										*9,000	*9,000	*9,000				*6,500	*6,500	*6,500	
	2 sets of stabilizers down										*9,000	*9,000	*9,000				*6,500	*6,500	*6,500	
15 ft	Rear dozer up										10,200	7,200	6,400				*6,200	5,400	4,800	23.79
	Rear dozer down										10,200	*11,400	7,100				*6,200	*6,200	5,300	
	Dozer and stabilizer down										*11,400	*11,400	10,500				*6,200	*6,200	*6,200	
	2 sets of stabilizers down										*11,400	*11,400	*11,400				*6,200	*6,200	*6,200	
10 ft	Rear dozer up							15,500	10,700	9,300	9,900	7,000	6,100	7,100	4,900	4,300	*6,200	4,900	4,200	25.20
	Rear dozer down							15,400	*15,900	10,300	9,900	*12,500	6,800	7,000	*7,200	4,800	*6,200	*6,200	4,700	
	Dozer and stabilizer down							*15,900	*15,900	15,800	*12,500	*12,500	10,200	*7,200	*7,200	*7,200	*6,200	*6,200	*6,200	
	2 sets of stabilizers down							*15,900	*15,900	*15,900	*12,500	*12,500	12,100	*7,200	*7,200	*7,200	*6,200	*6,200	*6,200	
5 ft	Rear dozer up							14,700	10,000	8,600	9,600	6,700	5,800	6,900	4,800	4,200	*6,500	4,700	4,100	25.56
	Rear dozer down							14,600	*18,400	9,600	9,600	*13,600	6,500	6,900	*9,100	4,700	*6,500	*6,500	4,500	
	Dozer and stabilizer down							*18,400	*18,400	15,100	*13,600	*13,600	9,800	*9,100	*9,100	7,100	*6,500	*6,500	*6,500	
	2 sets of stabilizers down							*18,400	*18,400	18,300	*13,600	*13,600	11,700	*9,100	*9,100	8,400	*6,500	*6,500	*6,500	
0 ft	Rear dozer up				*10,200	*10,200	*10,200	14,200	9,600	8,200	9,400	6,400	5,600				6,900	4,800	4,200	24.87
	Rear dozer down				*10,200	*10,200	*10,200	14,200	*19,200	9,200	9,300	*13,900	6,300				6,900	*7,300	4,600	
	Dozer and stabilizer down				*10,200	*10,200	*10,200	*19,200	*19,200	14,600	*13,900	*13,900	9,600				*7,300	*7,300	7,100	
	2 sets of stabilizers down				*10,200	*10,200	*10,200	*19,200	*19,200	17,800	*13,900	*13,900	11,500				*7,300	*7,300	*7,300	
–5 ft	Rear dozer up	*10,500	*10,500	*10,500	*18,700	17,600	14,600	14,100	9,400	8,100	9,300	6,300	5,500				7,700	5,300	4,600	23.03
	Rear dozer down	*10,500	*10,500	*10,500	*18,700	*18,700	16,800	14,000	*18,000	9,100	9,200	*13,000	6,200				7,600	*8,700	5,100	
	Dozer and stabilizer down	*10,500	*10,500	*10,500	*18,700	*18,700	*18,700	*18,000	*18,000	14,500	*13,000	*13,000	9,500				*8,700	*8,700	7,800	
	2 sets of stabilizers down	*10,500	*10,500	*10,500	*18,700	*18,700	*18,700	*18,000	*18,000	17,600	*13,000	*13,000	11,400				*8,700	*8,700	*8,700	
–10 ft	Rear dozer up				*19,900	17,900	14,900	14,200	9,600	8,200							*9,500	6,600	5,700	19.75
	Rear dozer down				*19,900	*19,900	17,000	14,200	*14,500	9,200							*9,500	*9,500	6,400	
	Dozer and stabilizer down				*19,900	*19,900	*19,900	*14,500	*14,500	*14,500							*9,500	*9,500	*9,500	
	2 sets of stabilizers down				*19,900	*19,900	*19,900	*14,500	*14,500	*14,500							*9,500	*9,500	*9,500	

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

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

M318F Wheeled Excavator Standard Equipment

Standard Equipment

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

ELECTRICAL

- Alternator, 115 A
- Lighting
  - LED light package, including all working lights (compatible with falling object guard)
  - Boom working light
  - Cab interior LED Light
  - Roading lights two front
  - Roading lights two LED modules rear
  - Working lights, cab mounted (two front, one rear, and one counterweight for the rear camera)
- Main shut-off switch
- Maintenance free batteries, heavy duty
- Signal/warning horn
- Electrical refueling pump

ENGINE

- Cat C7.1 engine with ACERT Technology Tier 4 Final compliant
- Aftertreatment technologies including the Cat Emission Module package (CEM)
- Automatic Engine Speed Control (AESC), including one touch low idle
- Engine Idle Shutdown (EIS)
- Power mode selector
- Altitude 3000 m (9,842 ft)
- Automatic starting aid
- Fuel/water separator with water in fuel switch

HYDRAULICS

- Adjustable hydraulic sensitivity
- All Cat XT™-6 ES hoses
- Anti-drift valves for bucket, and tool control/multi-function circuits
- Basic control circuits:
  - Medium pressure
    - Two-way, medium pressure circuit, for rotating or tilting of work tools
  - Tool control/multi function
    - One/two-way high pressure for hammer application or opening and closing of a work tool
  - Programmable flow and pressure for up to 10 work tools – selection via monitor
  - Quick coupler circuit and lines for hydraulic quick coupler
- BLCV including overload warning device
- Heavy lift mode
- Load-sensing hydraulic system
- Separate swing pump
- SLCV
- Stick regeneration circuit

OPERATOR STATION

- ROPS cab structure compliant with 2006/42/EC and tested according to ISO 12117-2:2008
- Adjustable armrests
- Air conditioner, heater and defroster with automatic climate control
- Cigarette lighter (24 volt)
- Beverage cup/can holder
- Bolt-on FOGS capability
- Bottle holder
- Bottom mounted intermittent (four speeds) wiping system that covers the upper and lower windshield glass
- Cameras
  - Rear mounted wide angle camera (integrated into the counterweight) display through the cab monitor
  - Right side wide angle camera, mounted on the cooling hood, displayed on a dedicated color large monitor
- Coat hook
- Cruise Control System
- Fastened seat belt warning signal
- Floor mat, washable, with storage compartment
- FM Radio with CD player, speakers and USB port
- Fully adjustable suspension seat
- Instrument panel and gauges
  - Information and warning messages in local language
  - Gauges for fuel level, engine coolant, Diesel Exhaust Fluid (DEF) and hydraulic oil temperature
  - Filters/fluids change intervals
  - Indicators for headlights, turning signal, low fuel, engine dial setting
  - Clock with 10-day backup battery
- Interior LED lighting with door switch
- Joystick pilot operated
- Laminated upper front windshield
- Left side console, tiltable, with lock out for all controls
- Literature holder in right hand side panel
- Mobile phone holder
- Parking brake
- Pin-code, engine start prevention
- Power supply, 12V-10A
- Rain protector*
- Rear window, emergency, tempered glass, with hammer
- Retractable seat, integrated into the seat
- Safety lever, integrated into the left console
- Skylight, laminated glass
- Sealed cab with positive filtered ventilation
- Sliding door windows
- Steering column, adjustable height and angle
- Storage area suitable for a lunch box
- Sunshade for windshield and skylight

UNDERCARRIAGE

- All wheel drive
- Automatic axle/break lock
- Creeper speed
- Electronic swing and travel lock
- Heavy-duty axles, advanced disc brake system and travel motor, adjustable braking force
- Oscillating front axle, lockable, with remote greasing point
- Tires, 10.00-20 16 PR, dual
- Steps with box in undercarriage (left and right)
- Two-piece drive shaft
- Two speed hydrostatic transmission

OTHER EQUIPMENT

- Auto-lube, centralized greasing (implement and swing gear)
- Automatic swing brake
- Counterweight, 3400 kg (7,496 lb)
- Engine emergency shutoff switch
- Mirrors, wide angle, frame and cab
- Product Link
- S•O•S℠ sampling valves for engine oil, hydraulic oil and coolant

*Not compatible with the falling objects guards

M318F Wheeled Excavator Optional Equipment

Optional Equipment

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

AUXILIARY CONTROLS AND LINES

- Basic control circuits:
  - Second high pressure
    - Additional two-way, high pressure circuit, for tools requiring a second high or medium pressure function
- Cat BIO HYDO Advanced HEES biodegradable hydraulic oil
- SmartBoom

FRONT LINKAGE

- Booms
  - One-piece boom, 5050 mm (16'6")
  - VA boom (two piece), 5200 mm (17'1")
  - Offset boom, 5200 mm (17'1")
- Sticks
  - 2100 mm (6'11")
  - 2400 mm (7'10")
  - 2600 mm (8'6")
  - 3100 mm (10'2") Industrial Stick*

ELECTRICAL

- Back-up alarm with three selectable modes
- Rotating beacon on cab

OPERATOR STATION

- Joystick steering
- Seat, adjustable high-back
  - Comfort, air-suspension, heated (vertical)
  - Deluxe with headrest, air suspension, heated and ventilated
  - Headrest, on all seats
- Windshield
  - One-piece high impact resistant
  - 70/30 split, openable
- Mirrors heated, frame and cab

UNDERCARRIAGE

- Rear blade only
- Front blade/rear outriggers
- Front outriggers/rear blade
- Front and rear outriggers
- Spacer rings for tires
- Travel restraint
- Wide axles
- Wide rear blade
- Wide blade rear/outriggers front

OTHER EQUIPMENT

- Cat Machine Security System (MSS)
- Cooling protection package for dusty applications*
- Counterweight, 3900 kg (8,598 lb)
- Fenders, front and rear
- Ride Control
- Tires (see pg. 22)
- Attachments (see pg. 25-28)

*Available in 2015

Notes

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

AEHQ7375 (01-2015)
(North America)

CAT®

Cat®
308E2 CR

Mini Hydraulic Excavator with Swing Boom

FEATURES:

The Cat® 308E2 CR Mini Hydraulic Excavator delivers high performance, durability and versatility in a compact design to help you work in a variety of applications. The 308E2 CR features the following:

QUALITY

- The durable hoods and frame and the compact radius design of the 308E2 CR let you work comfortably and confidently in confined areas.
- The operator environment includes a high quality suspension seat, easy to adjust armrests and 100% pilot controls which offer consistent and long-lasting controllability.

EFFICIENCY

- High Definition Hydraulic System provides a load sensing and flow sharing capability leading to operational precision, efficient performance and greater controllability.
- Power on Demand provides optimal efficiency and performance the moment you need it. This automatic system ensures fuel efficiency through appropriate engine rating to meet all operational needs as required.

VERSATILITY

- Broad range of Cat Work Tools make the Cat Mini Excavator a versatile machine, able to meet the requirements of any job site.
- 180 degrees of bucket rotation provides greater material retention during truck loading and easier flat wall digging without having to reposition the machine.

PERFORMANCE

- Front shovel bucket orientation provides the operator with more ways to get the job done faster.
- COMPASS Control Panel is a standard feature that allows the operator to easily adjust auxiliary flows to achieve the optimal work tool performance, activate auto idle for improved fuel efficiency and utilize the security system to ensure protection of valuable assets with the simple touch of a button.
- The Site Reference System included in the COMPASS monitor provides output from pitch and roll sensors to aid in grading and level trenching. This impacts accuracy and productivity for job site finishing.
- Rearview camera improves operator productivity and efficiency through increased visibility, making work easier to complete.

SERVICEABILITY

- Convenient service and maintenance requirements include ease of access to daily check points, 500 hour engine oil and filter change period, 500 hour grease interval on front implement, S·O·S℠ oil sampling valve and overall long term durability.

SAFETY

- All Cat Mini Excavators from 3.5 metric tons to 8 metric tons are ROPS, TOPS and Top Guard Level II certified and include the Cat Interlock (hydraulic lockout) System, a certified accumulator which allows for auxiliary pressure to be released, making connecting and disconnecting work tools safer and easier, and a travel alarm. All of these safety features are standard on the E2 model lineup (travel alarm optional in Europe).

Specifications

Engine

Engine Model	Cat C3.3B*	
Rated Net Power @ 2,400 rpm		
ISO 9249/EEC 80/1269	48.5 kW	65 hp
Gross Power		
ISO 14396	49.7 kW	66.6 hp
Bore	94 mm	3.7 in
Stroke	120 mm	4.7 in
Displacement	3.33 L	203.2 in^3

*Meets U.S. EPA Tier 4 Final and EU Stage IIIB emission standards.

Weights

Operating Weight with Cab	8400 kg	18,519 lb

- Weight with rubber tracks, bucket, operator (75 kg/165 lb), full fuel and auxiliary lines.
- Weight varies depending on machine configuration.

CAT®

308E2 CR Mini Hydraulic Excavator with Swing Boom

Swing System

Machine Swing Speed	11 rpm
Boom Swing – Left	60°
Boom Swing – Right	50°

- Automatic swing break, spring applied, hydraulic release.

Travel System

Travel Speed		
High	5.1 km/h	3.17 mph
Low	2.8 km/h	1.74 mph
Maximum Traction Force		
High Speed	37.4 kN	8,408 lb
Low Speed	64.5 kN	14,500 lb
Gradeability (maximum)	30°	
Ground Pressure	36.3 kPa	5.26 psi

- Each track is driven by one independent 2-speed motor.
- Drive modules are integrated into the roller frame for total protection.
- Straight line travel when tracking and operating the front linkage simultaneously.

Service Refill Capacities

Fuel Tank	125 L	33 gal
Cooling System	14 L	3.7 gal
Engine Oil	11.2 L	3.0 gal
Hydraulic Tank	82 L	21.7 gal
Hydraulic System	94 L	24.8 gal

Hydraulic System

Pump Flow at 2,000 rpm	150 L/min	39.6 gal/min
Operating Pressure – Equipment	28 000 kPa	4,061 psi
Operating Pressure – Travel	28 000 kPa	4,061 psi
Operating Pressure – Swing	24 000 kPa	3,481 psi
Auxiliary Circuit – Primary (186 bar/2,734 psi)	128 L/min	33.8 gal/min
Auxiliary Circuit – Secondary (174 bar/2,524 psi)	64 L/min	16.9 gal/min
Digging Force – Stick (standard)	40.1 kN	9,015 lb
Digging Force – Stick (long)	35.1 kN	7,891 lb
Digging Force – Bucket	60.2 kN	13,534 lb

- Load sensing hydraulics with variable displacement piston pump.

Blade

Width	2320 mm	91.3 in
Height	450 mm	17.7 in
Dig Depth	360 mm	14.2 in
Lift Height	380 mm	15.0 in

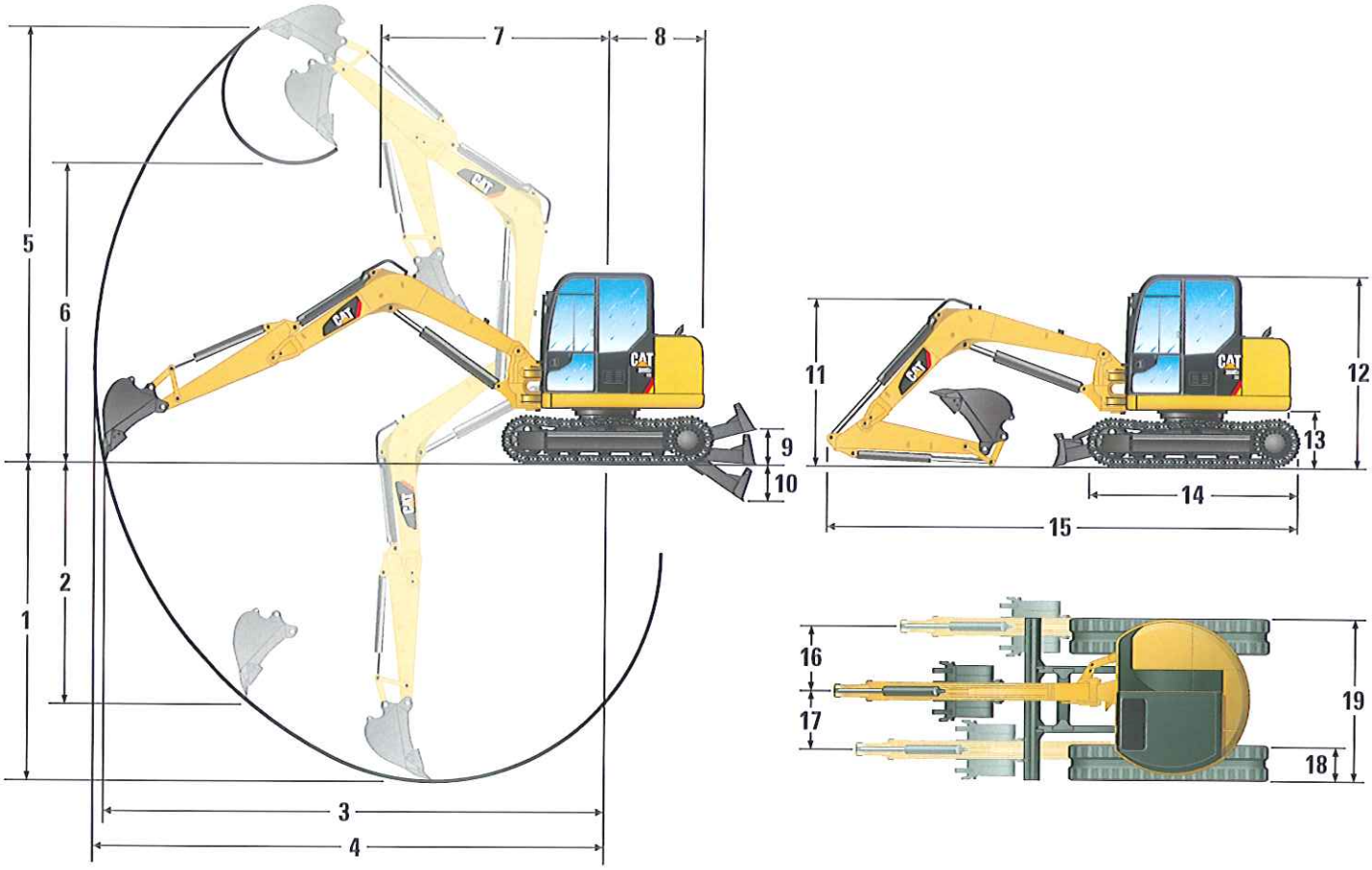
Cab

Dynamic Operator Sound Pressure	70 dB(A) ISO 6396
Average Exterior Sound Pressure	99 dB(A) ISO 6395 – Dynamic Test

Operating Specifications

Stick Length – Standard	1670 mm	5 ft 6 in
Stick Length – Long	2210 mm	7 ft 3 in
Machine Overhang	279.4 mm	11 in
Machine Overhang with Counterweight	406 mm	16 in
Counterweight	251 kg	551 lb

308E2 CR Mini Hydraulic Excavator with Swing Boom



Dimensions

	Standard Stick		Long Stick	
1	4150 mm	13'7"	4690 mm	15'5"
2	2980 mm	9'9"	3550 mm	11'8"
3	6820 mm	22'9"	7350 mm	24'1"
4	7020 mm	23'0"	7540 mm	24'9"
5	6640 mm	21'9"	6990 mm	22'11"
6	4670 mm	15'4"	5010 mm	16'5"
7	2800 mm	9'2"	3280 mm	10'9"
8	1450 mm	4'9"	1450 mm	4'9"
9	420 mm	1'5"	420 mm	1'5"
10	320 mm	1'1"	320 mm	1'1"

	Standard Stick		Long Stick	
11	2280 mm	7'6"	2230 mm	7'4"
12	2550 mm	8'4"	2550 mm	8'4"
13	735 mm	2'5"	735 mm	2'5"
14	2903 mm	9'6"	2903 mm	9'6"
15	6380 mm	20'11"	6340 mm	20'10"
16	1010 mm	3'4"	1010 mm	3'4"
17	635 mm	2'1"	635 mm	2'1"
18	450 mm	1'6"	450 mm	1'6"
19	2320 mm	7'7"	2320 mm	7'7"

Lift Capacities at Ground Level*

Lift Point Radius		4000 mm (13'1")		6050 mm (19'10")	
		Front	Side	Front	Side
Blade Down	kg	3650	1710	1880	920
	lb	8,046	3,770	4,144	2,028
Blade Up	kg	1840	1530	970	820
	lb	4,056	3,373	2,138	1,808

* The above loads are consistent with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart. Lifting capacities are for standard stick.

308E2 CR Mini Hydraulic Excavator with Swing Boom

STANDARD EQUIPMENT

ENGINE
- Cat C3.3B diesel engine (meets U.S. EPA Tier 4 Final/EU Stage IIIB emission standards)
- Automatic engine idle
- Automatic engine shut-off
- Automatic two speed travel
- Diesel Particulate Filter (North America only)
- Diesel Oxidation Catalyst (North America only)
- Fuel and water separator
- Power on demand

HYDRAULIC SYSTEM
- 1-way and 2-way (combined function)
- Accumulator
- Automatic swing parking brake
- Auxiliary hydraulic lines
- Adjustable auxiliary relief
- Auxiliary line quick disconnects
- Cat interlock system: hydraulic lockout
- Continuous auxiliary flow
- Ecology drain
- Hydraulic oil cooler
- High definition hydraulics
- Load sensing/flow sharing

OPERATOR ENVIRONMENT
- 100% pilot control ergonomic joysticks
- Adjustable armrests
- Air conditioning/heat
- COMPASS: complete, operation, maintenance, performance and security system
  - Multiple languages
- Cup holder
- High back suspension seat, heated
- Hydraulic neutral lockout bar
- Interior light
- Literature holder
- Pattern changer (optional in Europe)
- Radio (optional in Europe)
- Site reference system: leveling
- Tool storage area
- Travel control pedals with hand levers
- Washable floor mat
- Windshield wiper

UNDERCARRIAGE
- Dozer blade with float function
- Track, rubber belt, 450 mm (18 in) width
- Tie down eyes on track frame
- Towing eye on base frame

FRONT LINKAGE
- 180 degree bucket rotation
- Certified lifting eye on bucket linkage (optional in Europe)
- Front shovel capable
- Thumb ready stick

ELECTRICAL
- 12 volt electrical system
- 60 ampere alternator
- 650 CCA maintenance free battery
- Fuse box
- Ignition key start/stop switch
- Slow blow fuse
- Warning horn

LIGHTS AND MIRRORS
- Cab and boom light with time delay capability
- Mirror, rear view, cab left

SAFETY AND SECURITY
- Anti-theft system (COMPASS)
- Caterpillar Corporate "One Key" System
- Door locks
- Lockable fuel cap
- Rearview camera
- Retractable seat belt
- Roll Over Protective Structure (ROPS) (ISO 12117-2)
- Tip Over Protective Structure (TOPS) (ISO 12117)
- Top guard – ISO 10262 (Level II)
- Travel alarm (optional in Europe)

OPTIONAL EQUIPMENT

ENGINE
- Engine block heater

HYDRAULIC SYSTEM
- Quick coupler lines
- Boom lowering check valve*
- Stick lowering check valve*
- Secondary auxiliary hydraulic lines*

UNDERCARRIAGE
- Blade, weld on
- Track, triple grouser (steel), 450 mm (18 in)
- Track, triple grouser (steel) with rubber pad, 450 mm (18 in)
- Track, triple grouser (steel), 600 mm (24 in)

FRONT LINKAGE
- Quick coupler: manual or hydraulic
- Thumb
- Buckets
- Full range of performance matched work tools
  - Auger, hammer, shear, ripper

LIGHTS AND MIRRORS
- Mirror, cab rear

SAFETY AND SECURITY
- Battery disconnect
- Front wire mesh guard
- Front steel plate guard
- Rain guard

TECHNOLOGY
- Product Link™

OTHER ATTACHMENTS
- Counterweight, extra, 1121 kg (2,493 lb)*

*Standard on VAB configuration.

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

AEHQ7043-01 (05-2016)
Replaces AEHQ7043

303.5E2 CR, 304E2 CR, 305E2 CR, 305.5E2 CR

Mini Hydraulic Excavators

	303.5E2 CR	304E2 CR	305E2 CR	305.5E2 CR
Engine				
Engine Model	Cat® C1.7	Cat C2.4	Cat C2.4	Cat C2.4
Net Power (ISO 9249)	17.5 kW (23.5 hp)	30 kW (40.2 hp)	30 kW (40.2 hp)	32.9 kW (44.2 hp)
Weights				
Operating Weight with Canopy	3539 kg (7,803 lb)	3884 kg (8,564 lb)	5020 kg (11,069 lb)	5259 kg (11,596 lb)
Operating Weight with Cab	3723 kg (8,209 lb)	4039 kg (8,906 lb)	5185 kg (11,433 lb)	5423 kg (11,958 lb)
Operating Specifications				
Maximum Dig Depth	3180 mm (125 in)	3430 mm (135 in)	3670 mm (144 in)	3870 mm (152 in)

The right machine with the right power, versatility and ease of operation required for your application.

Contents

The Cat E2 Series Mini Hydraulic Excavators are designed to carry on the solid performance of their E Series predecessors, while adding even greater value for the customer. The new High Definition Hydraulic (HDH) System, redesigned operator station and enhanced digital control panel specially designed for Cat Mini Excavators – COMPASS (Complete, Operation, Maintenance, Performance And Security System) – are all standard features that improve performance and increase value.

Operator Station

Productivity with Comfort and Quality

Comfortable Working Environment

The high quality suspension seat, 76 mm (3 in) retractable seat belt, easy to adjust armrests, and ergonomic layout provide superior comfort and reduce operator fatigue. The new interlocking front window system, updated operator interface and 100% pilot controls provide a best-in-class operator station and customer value.

Joystick Controls

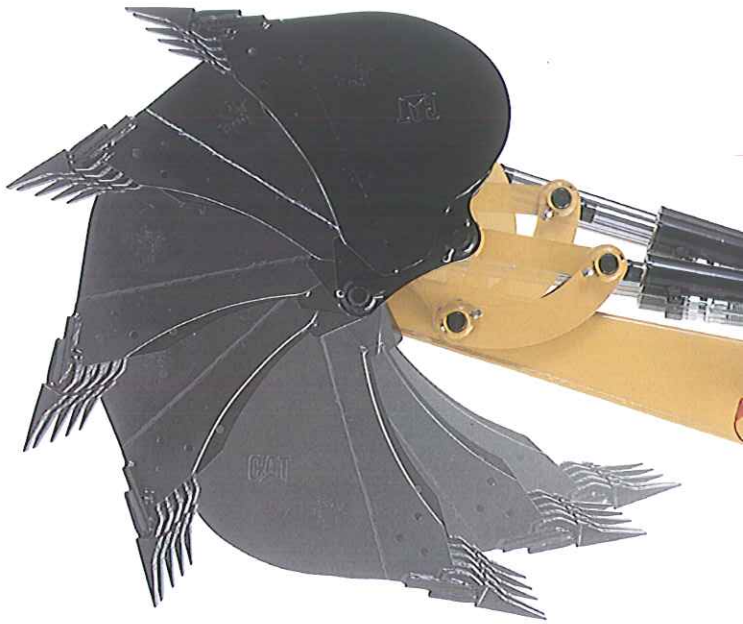
The boom swing and auxiliary hydraulic functions are located at your fingertips providing smooth, easy operation. They also eliminate foot pedals and free up the floor for more room for the operator's feet. 100% pilot controls provide consistent flow and pressure throughout the life of the machine. This allows all controls to be locked out while starting the machine.

Operation and Hydraulic Control
Pushing Performance to the Limit

Powerful Digging, Precise Control
The new High Definition Hydraulic (HDH) System in the E2 machines provides a load sensing and flow sharing capability leading to operational precision, efficient performance and greater control. By combining variable pump efficiency, open center valve simplicity, and a simple architecture the valve achieves controllability. The simple valve architecture reduces heat which leads to a reduction in hydraulic instability and improved overall efficiency.

200 Degree Bucket Rotation
Industry leading bucket rotation of over 200 degrees provides greater material retention during truck loading.

It also allows for easier vertical wall digging without repositioning the machine.



Engine
Intelligent Operation

Engine
Each of the E2 models is equipped with the engine solution to best support the power and performance required based on the weight class and application. Also, standard features like auto idle offer consistent lower engine speeds to increase engine life and offer fuel savings.

Smart Technology is a new feature of the 303.5E2. Through the integration of this technology with the U.S. EPA Tier 4 Final 23.5 hp (17.6 kW) engine, the machine is able to meet and exceed performance of the previous generation 303.5E. Additionally, testing on the 303.5E2 revealed an 8% fuel economy improvement and 7% greater efficiency over the E Series.

Automatic Two Speed
With the standard automatic two speed feature, the machine will automatically balance high speed and torque travel requirements based on job site conditions to give the operator the optimum speed and control. The machine can be put in low gear if slower travel is desired while in tight conditions.

COMPASS Control Panel

Complete, Operation, Maintenance, Performance and Security System

The COMPASS control panel on the Cat E2 Series mini hydraulic excavators was specifically designed by Caterpillar for compact excavators. It adds several new features to the machines increasing the amount of customer value. All of the following features are now standard on all E2 Series models.

Complete – All of the control panel features are standard

Operation – Simple operation of the pattern changer, hydraulic quick coupler and fuel gauge visibility all at the push of a button

Maintenance – Maintenance intervals, diagnostics and work hours

Performance – Save up to 20% fuel while maintaining optimum performance levels

And

Security – Anti-theft device with individual user and master passwords

System – Ergonomically designed control panel

Passcode Protected Security System

A standard anti-theft device now comes on every E2 Series compact excavator. A five digit alphanumeric password is required to start the machine when the anti-theft feature is enabled. There is a master password and up to five user passwords can be created by the owner if desired.

Keep your machine safe on a busy job site by locking it when you are not around

Adjustable Auxiliary Work Tool Flow Control

The E2 Series machines now have simple adjustability of the flow going down the boom and stick to the work tool. Both the standard main line and optional secondary auxiliary hydraulics can be adjusted on a scale of 1–15 through a few buttons on the control panel.

Adjust the flow to your different tools with a simple push of a button

UNLOCK the new features and experience the value of the exclusive COMPASS control panel on the E2 Series compact excavators

Continuous Flow

Once this feature is enabled through a button on the monitor, the E2 Series machines can run in continuous flow mode. With the auxiliary hydraulics on the right hand joystick, just hold the roller switch at the desired flow rate and direction for 2.5 seconds and the machine will maintain that flow rate until it is turned off.

Maintain hydraulic flow to your tools at any flow and in any direction with the simple push of a button

Pattern Changer

Change the operating pattern between excavator and backhoe with a simple press of a button from the comfort of the cab.

Exclusive push button pattern changer is safe and easy

Maintenance and Performance Information

Easily keep track of various maintenance and performance parameters of your machine.

Reset the maintenance intervals and ensure the machine is receiving proper care maximizing the life of the machine

Compact Radius Design

Ease of Transport, Access and Operation

Compact Radius

The compact radius design gives greater machine versatility and the capability to work within confined areas. This allows the operator to concentrate on the work being done without having to worry about damaging the back of the machine or other job site obstacles. On the 305E2 CR and the 305.5E2 CR, the upper body stays within 140 mm (5.5 in) of the undercarriage.

Zero Tail Swing

The 303.5E2 CR and the 304E2 CR models feature a zero tail swing design. On these models, the radius of the upper body stays entirely within the width of the undercarriage.

Rubber Track – The standard rubber track lets you work on multiple surfaces such as grass, pavement or stone without damaging the surface or machine.

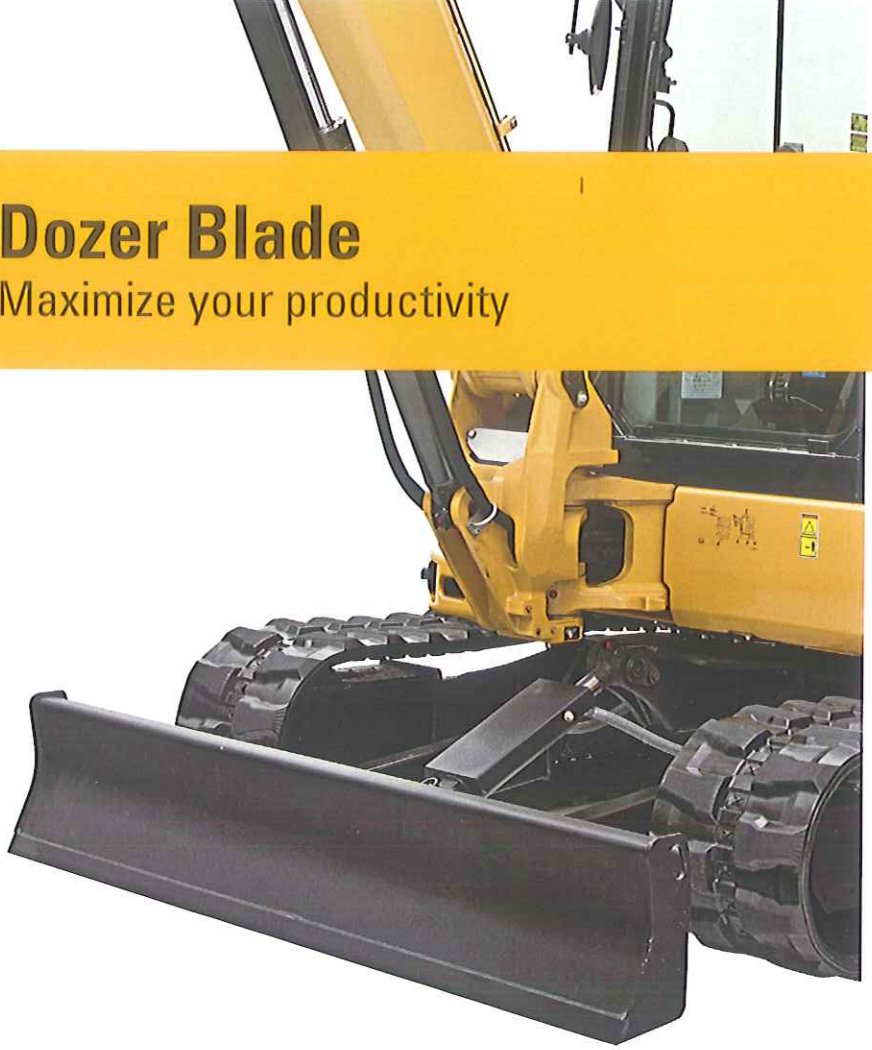
Steel Track Option – Optional steel track is available for harsh conditions such as demolition. The extra weight of the steel tracks generally provides better stability when digging over the side of the machine.

Rubber Pads – Optional rubber pads can be attached to the steel track to prevent damage to paved surfaces and minimize noise and vibration during travel with the steel track system. This option provides the maximum overall stability. (Not available on the 303.5E2 CR and 304E2 CR.)

Undercarriage
A Strong Foundation

Dozer Blade

Maximize your productivity



Simple Dozer Control with Float Function

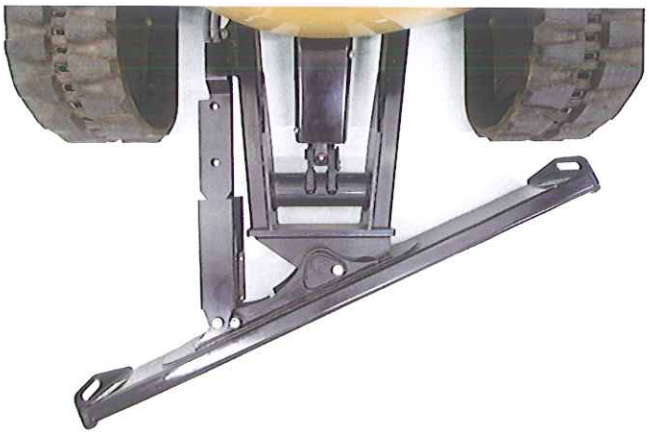
The dozer function is pilot controlled from inside the cab, providing smooth, proportional operation. The standard float function is enabled by pushing the lever fully forward into the detent position. Cleanup and backfilling is easier since the operator does not have to adjust the blade height during travel.

Excellent Blade Visibility

Visibility to the blade is excellent in any position, allowing the blade to be positioned behind the operator and away from the front linkage for better access when back dragging and finishing in tight areas.

Angle Blade Option

Increase machine versatility with the Cat angle dozer blade. Built for strength and durability, the hydraulic angle blade features a hardened steel wear edge and good protection to cylinders and hydraulic lines. The angle blade can be positioned straight ahead or angled up to 25 degrees to the left or right. This reduces the number of times required to back up and reposition when backfilling so you can finish the job faster. All functions of the blade are controlled with one joystick using a proportional roller switch for the angle function.



Coupler and Work Tool Options

Versatility for Any Application

Couplers

The E2 Series is available with a mechanical pin-grabber or a hydraulic pin-grabber quick coupler option. The coupler design uses a wedge to keep the tool secure to the coupler, reducing wear and maintaining a tight fit through the life of the coupler.

The hydraulic coupler allows the operator to change tools without leaving the comfort of the cab.

Wide Range of Work Tools

A wide range of Cat Work Tools have been designed specifically for the Cat Mini Hydraulic Excavators to maximize machine performance. Available work tools include:

- Buckets (heavy duty and heavy duty capacity)
- Tilting, Ditch Cleaning Buckets
- Hydraulic Hammers
- Augers
- Thumbs (not available in all regions)
- Vibratory Compactors
- Shears (boom mounted on 305E2 CR/305.5E2 CR only)
- Quick Coupler

Standard Thumb Ready Sticks

Machines come standard with stick mounted brackets, ready to fit a hydraulic thumb for even greater machine versatility.

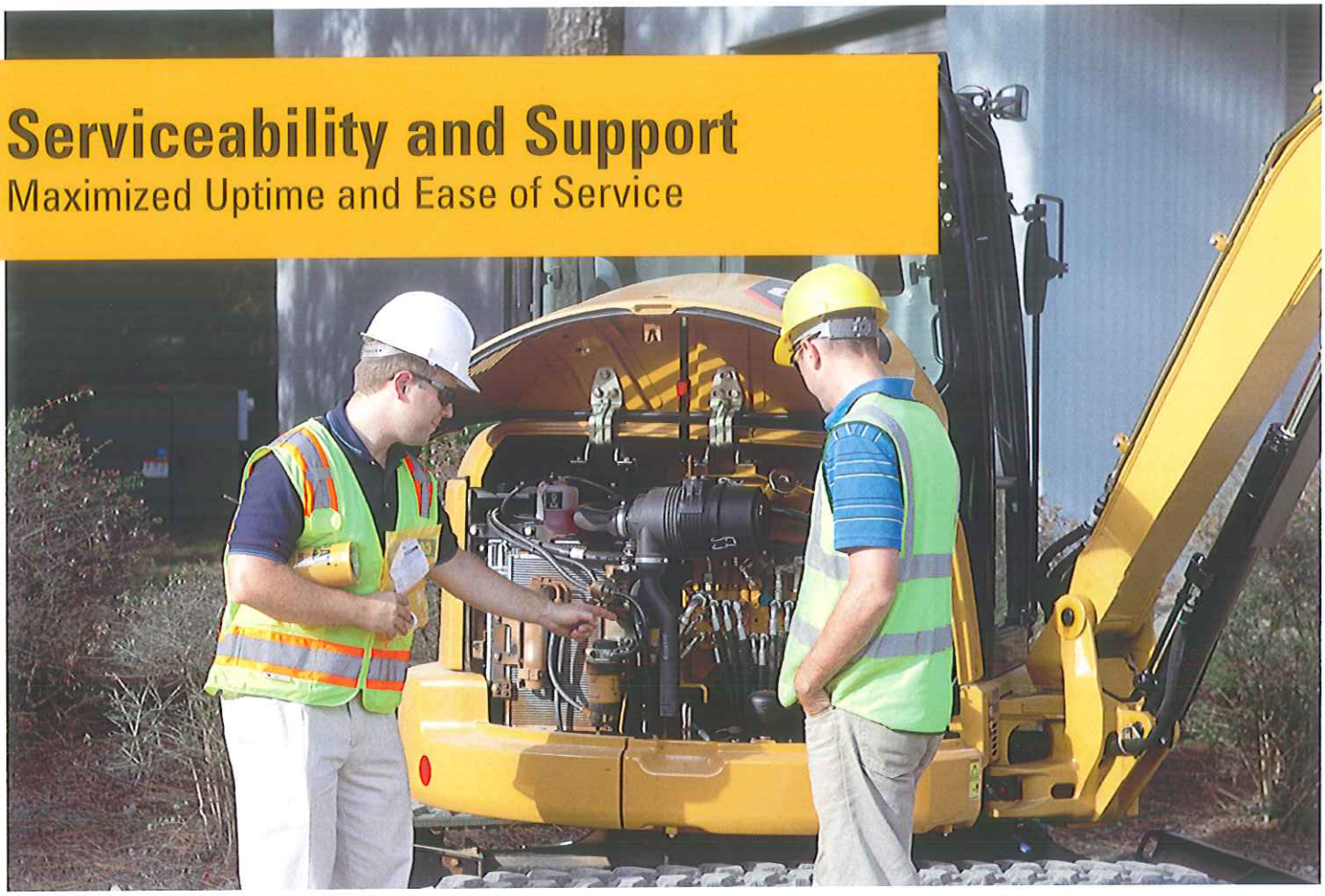
A factory installed bracket and relief valve make hydraulic thumb installation simple and cost-effective.

Standard Auxiliary Lines and Accumulator

One-way and two-way auxiliary lines (combined function), including quick connections, are fitted as standard equipment so the machine comes ready to work. A standard accumulator allows for auxiliary pressure to be released, making connecting and disconnecting work tools safer and easier.

Serviceability and Support

Maximized Uptime and Ease of Service



Easy Service

Extended service intervals, durable components, and ease of service access points decrease your owning and operating costs while increasing your long-term value.

- Lifting side hood allows access to air filter, main implement valve, 1-way/2-way auxiliary flow selector, accumulator, fuel filter and hydraulic tank. This eliminates the need to lift the cab when maintaining and servicing the machine.
- Swing open door provides access to major components and service points including engine oil check and fill, vertically mounted engine oil filter, starter motor and alternator.
- Easy access to the radiator and oil cooler results in simplified cleaning and reduced maintenance times.
- S·O·S℠ oil sampling valve allows easy sampling of the hydraulic fluid for preventative maintenance.
- 500 hour engine oil and filter change period reduces operating costs and machine downtime.

Customer Support You Can Count On

Your Cat dealer is ready to assist you with your purchase decision and everything after.

- Financing packages are flexible to meet your needs.
- Unmatched parts availability keeps you working.
- Make comparisons of machines, with estimates of component life, preventative maintenance and cost of production.
- Your Cat dealer can evaluate the cost to repair, rebuild and replace your machine.
- For more information on Cat products, dealer services and industry solutions, visit *www.cat.com*.

Engine

Engine Model		
303.5E2 CR	Cat C1.7*	
304E2 CR/305E2 CR/305.5E2 CR	Cat C2.4**	
Rated Net Power (ISO 9249)		
303.5E2 CR	17.5 kW	23.5 hp
304E2 CR/305E2 CR	30 kW	40.2 hp
305.5E2 CR	32.9 kW	44.1 hp
Gross Power		
303.5E2 CR	18.5 kW	24.8 hp
304E2 CR/305E2 CR	31.2 kW	41.8 hp
305.5E2 CR	34.1 kW	45.7 hp
Bore	87 mm	3.4 in
Stroke		
303.5E2 CR	92.4 mm	3.6 in
304E2 CR/305E2 CR/305.5E2 CR	102.4 mm	4 in
Displacement		
303.5E2 CR	1.7 L	104 in^3
304E2 CR/305E2 CR/305.5E2 CR	2.4 L	146 in^3

* Cat C1.7 engine meets U.S. EPA Tier 4 Final/EU Stage IIIB emission standards.

** Cat C2.4 engine meets U.S. EPA Tier 4 Interim/EU Stage IIIA emission standards.

Weights*

Operating Weight with Canopy		
303.5E2 CR	3539 kg	7,803 lb
304E2 CR	3884 kg	8,564 lb
305E2 CR	5020 kg	11,069 lb
305E2 CR	5259 kg	11,596 lb
Operating Weight with Cab		
303.5E2 CR	3723 kg	8,209 lb
304E2 CR	4039 kg	8,906 lb
305E2 CR	5185 kg	11,433 lb
305E2 CR	5423 kg	11,958 lb

* Weight includes rubber tracks, bucket, operator, full fuel and auxiliary lines.

Travel System

Travel Speed – High		
303.5E2 CR	4.6 km/h	2.9 mph
304E2 CR	5.2 km/h	3.2 mph
305E2 CR	4.4 km/h	2.7 mph
305.5E2 CR	4.5 km/h	2.8 mph
Travel Speed – Low		
303.5E2 CR	3.2 km/h	2.0 mph
304E2 CR	3.3 km/h	2.1 mph
305E2 CR/305.5E2 CR	2.8 km/h	1.7 mph
Maximum Traction Force – High Speed		
303.5E2 CR	17.0 kN	3,822 lbf
304E2 CR	16.9 kN	3,799 lbf
305E2 CR	24.1 kN	5,418 lbf
305.5E2 CR	26.8 kN	6,025 lbf
Maximum Traction Force – Low Speed		
303.5E2 CR	31.1 kN	6,992 lbf
304E2 CR	31.0 kN	6,969 lbf
305E2 CR	45.2 kN	10,161 lbf
305.5E2 CR	47.8 kN	10,745 lbf
Ground Pressure		
303.5E2 CR	31.7 kPa	4.6 psi
304E2 CR	29.5 kPa	4.3 psi
305E2 CR	30.8 kPa	4.5 psi
305.5E2 CR	32.2 kPa	4.7 psi

Service Refill Capacities

Cooling System		
303.5E2 CR/304E2 CR	5.5 L	1.5 gal
305E2 CR/305.5E2 CR	10.5 L	2.8 gal
Engine Oil		
303.5E2 CR/304E2 CR	7.0 L	1.8 gal
305E2 CR/305.5E2 CR	9.5 L	2.5 gal
Fuel Tank		
303.5E2 CR/304E2 CR	46 L	12.2 gal
305E2 CR/305.5E2 CR	63 L	16.6 gal
Hydraulic Tank		
303.5E2 CR/304E2 CR	42.3 L	11.2 gal
305E2 CR/305.5E2 CR	68.3 L	18 gal
Hydraulic System		
303.5E2 CR/304E2 CR	65 L	17.2 gal
305E2 CR/305.5E2 CR	78 L	20.6 gal

303.5E2 CR, 304E2 CR, 305E2 CR, 305.5E2 CR Specifications

Hydraulic System*

Pump Flow		
303.5E2 CR/304E2 CR	100 L/min	26.4 gal/min
305E2 CR	150 L/min	39.6 gal/min
305.5E2 CR	163 L/min	43.1 gal/min
Operating Pressure – Equipment	245 bar	3,553 psi
Operating Pressure – Travel	245 bar	3,553 psi
Operating Pressure – Swing	216 bar	3,132 psi
Auxiliary Circuit – Primary		
303.5E2 CR/304E2 CR	70 L/min	18.5 gal/min
305E2 CR/305.5E2 CR	80 L/min	21.1 gal/min
Auxiliary Circuit – Secondary	25 L/min	6.6 gal/min
Digging Force = Stick (standard)		
303.5E2 CR	18.9 kN	4,249 lbf
304E2 CR	21.6 kN	4,856 lbf
305E2 CR	24.7 kN	5,553 lbf
305.5E2 CR	28.9 kN	6,497 lbf
Digging Force = Stick (long)		
303.5E2 CR	16.9 kN	3,799 lbf
304E2 CR	19.5 kN	4,384 lbf
305E2 CR	21.3 kN	4,788 lbf
305.5E2 CR	24.8 kN	5,575 lbf
Digging Force = Bucket		
303.5E2 CR	33.0 kN	7,419 lbf
304E2 CR	37.8 kN	8,498 lbf
305E2 CR	44.7 kN	10,049 lbf
305.5E2 CR	50.9 kN	11,443 lbf

* Load sensing hydraulics with variable displacement piston pump.

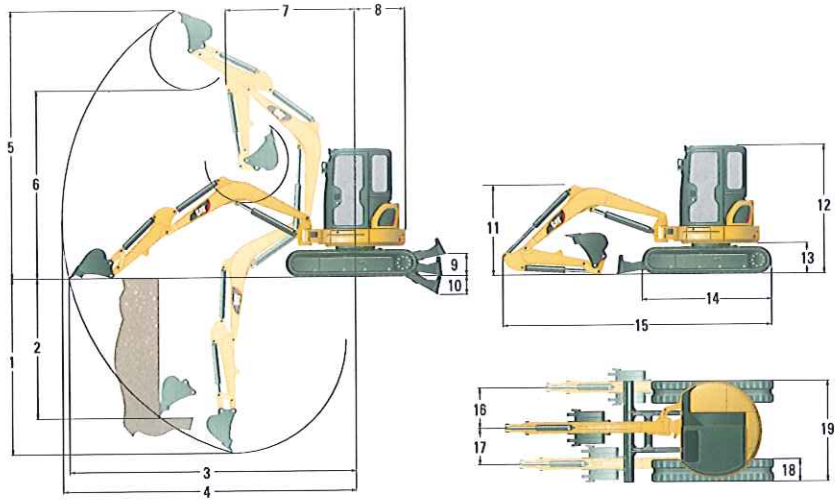
Swing System

Machine Swing Speed	10 rpm
Boom Swing – Left (without stop)	
303.5E2 CR/305E2 CR/305.5E2 CR	80°
304E2 CR	70°
Boom Swing – Left (with stop)	
303.5E2 CR/304E2 CR	55°
305E2 CR/305.5E2 CR	60°
Swing – Right	50°

Blade

Width		
303.5E2 CR	1780 mm	70 in
304E2 CR	1950 mm	77 in
305E2 CR/305.5E2 CR	1980 mm	78 in
Height		
303.5E2 CR/304E2 CR	325 mm	13 in
305E2 CR/305.5E2 CR	375 mm	14.8 in
Dig Depth		
303.5E2 CR/304E2 CR	470 mm	19 in
305E2 CR/305.5E2 CR	555 mm	21.9 in
Lift Height		
303.5E2 CR/304E2 CR	400 mm	16 in
305E2 CR/305.5E2 CR	405 mm	15.9 in

303.5E2 CR Dimensions



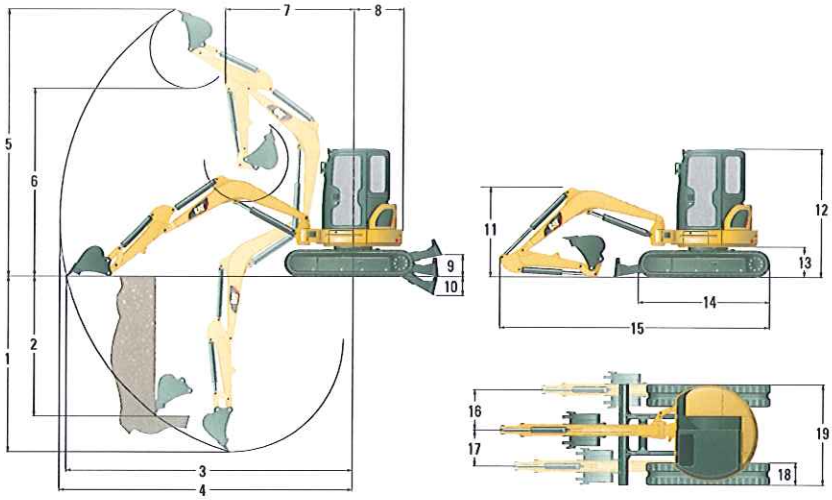
	Standard Stick		Long Stick	
1 Dig Depth	2880 mm	113 in	3180 mm	125 in
2 Vertical Wall	2320 mm	91 in	2470 mm	97 in
3 Maximum Reach at Ground Level	5060 mm	199 in	5320 mm	209 in
4 Maximum Reach	5200 mm	205 in	5440 mm	214 in
5 Maximum Dig Height	4920 mm	194 in	5030 mm	198 in
6 Maximum Dump Clearance	3520 mm	139 in	3640 mm	143 in
7 Boom In Reach	2060 mm	81 in	2180 mm	86 in
8 Tail Swing	890 mm	35 in	890 mm	35 in
9 Maximum Blade Height	400 mm	16 in	400 mm	16 in
10 Maximum Blade Depth	470 mm	19 in	470 mm	19 in
11 Boom Height in Shipping Position	1420 mm	56 in	1650 mm	65 in
12 O/A Shipping Height	2500 mm	98 in	2500 mm	98 in
13 Swing Bearing Height	565 mm	22 in	565 mm	22 in
14 O/A Undercarriage Length	2220 mm	87 in	2220 mm	87 in
15 O/A Shipping Length	4730 mm	186 in	4790 mm	189 in
16 Boom Swing Right	765 mm	30 in	765 mm	30 in
17 Boom Swing Left	670 mm	26 in	670 mm	26 in
18 Track Belt/Shoe Width	300 mm	12 in	300 mm	12 in
19 O/A Track Width	1780 mm	70 in	1780 mm	70 in

303.5E2 CR Lift Capacities at Ground Level*

Lift Point Radius		3000 mm (9'8")		4000 mm (13'1")	
		Front	Side	Front	Side
Blade Down	kg	1340	720	850	460
	lb	2,955	1,588	1,874	1,014
Blade Up	kg	750	660	470	420
	lb	1,654	1,455	1,036	926

* The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart. Lifting capacities are for long stick.

304E2 CR Dimensions



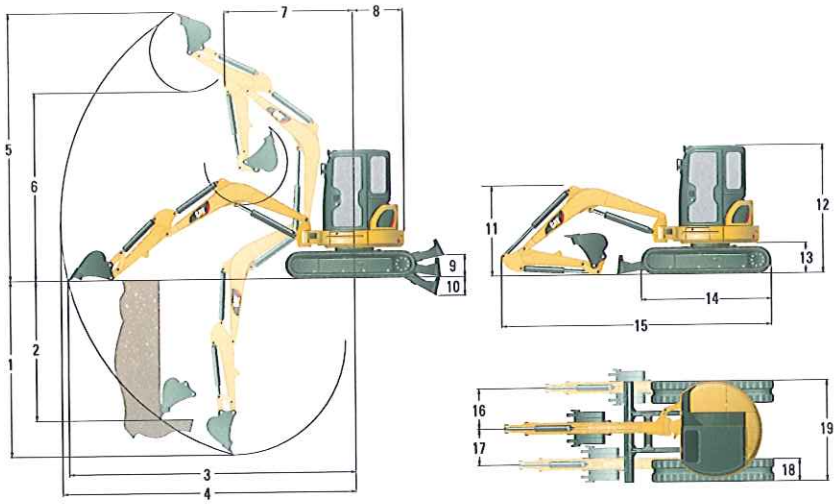
		Standard Stick		Long Stick	
1	Dig Depth	3130 mm	123 in	3430 mm	135 in
2	Vertical Wall	2420 mm	95 in	2560 mm	101 in
3	Maximum Reach at Ground Level	5220 mm	206 in	5470 mm	215 in
4	Maximum Reach	5350 mm	211 in	5590 mm	220 in
5	Maximum Dig Height	4980 mm	196 in	5070 mm	200 in
6	Maximum Dump Clearance	3590 mm	141 in	3690 mm	145 in
7	Boom In Reach	2110 mm	83 in	2220 mm	87 in
8	Tail Swing	975 mm	38 in	975 mm	38 in
9	Maximum Blade Height	400 mm	16 in	400 mm	16 in
10	Maximum Blade Depth	470 mm	19 in	470 mm	19 in
11	Boom Height in Shipping Position	1480 mm	58 in	1770 mm	70 in
12	O/A Shipping Height	2500 mm	98 in	2500 mm	98 in
13	Swing Bearing Height	565 mm	22 in	565 mm	22 in
14	O/A Undercarriage Length	2220 mm	87 in	2220 mm	87 in
15	O/A Shipping Length	4820 mm	190 in	4930 mm	194 in
16	Boom Swing Right	735 mm	29 in	735 mm	29 in
17	Boom Swing Left	670 mm	26 in	670 mm	26 in
18	Track Belt/Shoe Width	350 mm	14 in	350 mm	14 in
19	O/A Track Width	1950 mm	77 in	1950 mm	77 in

304E2 CR Lift Capacities at Ground Level*

Lift Point Radius		3000 mm (9'8")		4500 mm (14'9")	
		Front	Side	Front	Side
Blade Down	kg	1570	910	860	480
	lb	3,462	2,007	1,896	1,058
Blade Up	kg	820	820	430	430
	lb	1,808	1,808	948	948

* The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart. Lifting capacities are for long stick.

305E2 CR Dimensions



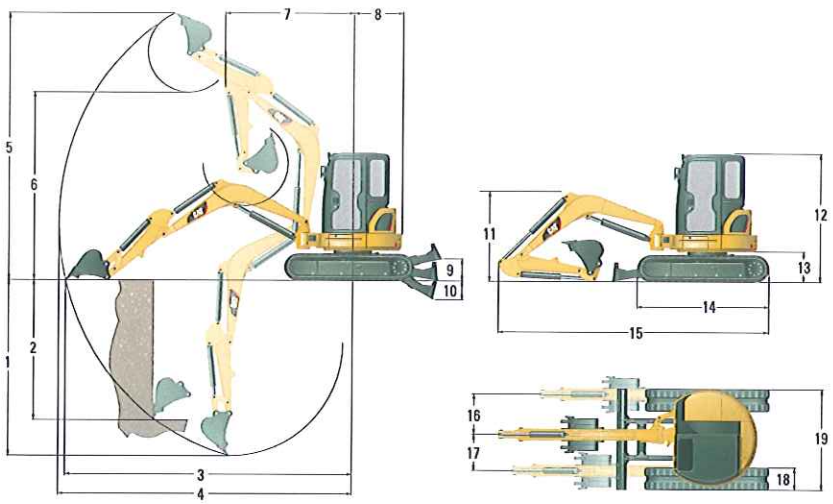
	Standard Stick		Long Stick	
1 Dig Depth	3280 mm	129 in	3670 mm	144 in
2 Vertical Wall	2320 mm	91 in	2630 mm	104 in
3 Maximum Reach at Ground Level	5430 mm	210 in	5810 mm	229 in
4 Maximum Reach	5600 mm	220 in	5960 mm	235 in
5 Maximum Dig Height	5250 mm	207 in	5440 mm	214 in
6 Maximum Dump Clearance	3720 mm	129 in	3920 mm	154 in
7 Boom In Reach	2350 mm	93 in	2530 mm	100 in
8 Tail Swing	1100 mm	43 in	1100 mm	43 in
9 Maximum Blade Height	405 mm	16 in	405 mm	16 in
10 Maximum Blade Depth	555 mm	22 in	555 mm	22 in
11 Boom Height in Shipping Position	1750 mm	69 in	2150 mm	85 in
12 O/A Shipping Height	2550 mm	100 in	2550 mm	100 in
13 Swing Bearing Height	615 mm	24 in	615 mm	24 in
14 O/A Undercarriage Length	2580 mm	102 in	2580 mm	102 in
15 O/A Shipping Length	5180 mm	204 in	5290 mm	208 in
16 Boom Swing Right	785 mm	31 in	785 mm	31 in
17 Boom Swing Left	695 mm	27 in	695 mm	27 in
18 Track Belt/Shoe Width	400 mm	16 in	400 mm	16 in
19 O/A Track Width	1980 mm	78 in	1980 mm	78 in

305E2 CR Lift Capacities at Ground Level*

Lift Point Radius		3000 mm (9'8")		4500 mm (14'9")	
		Front	Side	Front	Side
Blade Down	kg	2340	1200	1260	640
	lb	5,159	2,646	2,778	1,411
Blade Up	kg	1450	1070	760	570
	lb	3,197	2,359	1,676	1,257

* The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart. Lifting capacities are for standard stick.

305.5E2 CR Dimensions



	Standard Stick		Long Stick	
1 Dig Depth	3470 mm	137 in	3870 mm	152 in
2 Vertical Wall	2330 mm	92 in	2730 mm	107 in
3 Maximum Reach at Ground Level	5630 mm	222 in	6020 mm	237 in
4 Maximum Reach	5790 mm	228 in	6170 mm	243 in
5 Maximum Dig Height	5330 mm	210 in	5590 mm	220 in
6 Maximum Dump Clearance	3820 mm	150 in	4080 mm	161 in
7 Boom In Reach	2400 mm	94 in	2530 mm	100 in
8 Tail Swing	1130 mm	44 in	1130 mm	44 in
9 Maximum Blade Height	405 mm	16 in	405 mm	16 in
10 Maximum Blade Depth	555 mm	22 in	555 mm	22 in
11 Boom Height in Shipping Position	1740 mm	69 in	2150 mm	85 in
12 O/A Shipping Height	2550 mm	100 in	2550 mm	100 in
13 Swing Bearing Height	615 mm	24 in	615 mm	24 in
14 O/A Undercarriage Length	2580 mm	102 in	2580 mm	102 in
15 O/A Shipping Length	5330 mm	210 in	5460 mm	215 in
16 Boom Swing Right	785 mm	31 in	785 mm	31 in
17 Boom Swing Left	695 mm	27 in	695 mm	27 in
18 Track Belt/Shoe Width	400 mm	16 in	400 mm	16 in
19 O/A Track Width	1980 mm	78 in	1980 mm	78 in

305.5E2 CR Lift Capacities at Ground Level*

Lift Point Radius		3000 mm (9'8")		4500 mm (14'9")	
		Front	Side	Front	Side
Blade Down	kg	2590	1290	1380	690
	lb	5,710	2,844	3,042	1,521
Blade Up	kg	1550	1150	820	620
	lb	3,417	2,535	1,808	1,367

* The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart. Lifting capacities are for standard stick.

303.5E2 CR, 304E2 CR, 305E2 CR, 305.5E2 CR Standard Equipment

Standard Equipment

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

- 1-way and 2-way (combined function) auxiliary hydraulic lines
- Adjustable auxiliary flow control for work tools
- Adjustable wrist rests
- Alternator
- Anti-theft security system
- Automatic engine idle
- Automatic swing park brake
- Automatic two speed travel
- Auxiliary line quick disconnects
- Boom cylinder guard
- Cab mounted work light
- Canopy with Top Guard ISO 10262 (Level 1), ROPS ISO 12117-2 and TOPS ISO 12117
- Coat hook
- COMPASS display panel
- Cup holder
- Continuous flow
- Control pattern changer (not available in Europe)
- Dozer blade with float function
- Floor mat
- Foot travel pedals
- Horn
- Hydraulic oil cooler
- Lifting eye on bucket linkage (standard equipment for all regions except Europe)
- Lockable storage box
- Low maintenance linkage pin joints
- Maintenance free battery
- Rubber track
- Retractable seatbelt
- Stick
  - 303.5E2 CR/304E2 CR – Long stick (optional in Europe)
  - 305E2 CR/305.5E2 CR – Standard stick
- Suspension seat, vinyl covered
- Thumb Ready sticks (standard equipment for all regions except Europe)
- Travel alarm (optional in Europe)

303.5E2 CR, 304E2 CR, 305E2 CR, 305.5E2 CR Optional Equipment

Optional Equipment

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

- Air conditioning
- Angle dozer blade with float function
- Beacon socket for canopy machines
- Boom check valve (Europe only)
- Boom mounted light
- Cab, radio ready with Top Guard ISO 10262 (Level 1), ROPS ISO 12117-2 and TOPS ISO 12117 with heater/defroster, interior light and windshield wiper/washer
- Ecology drain valve for hydraulic tank
- High back suspension seat, fabric covered
- Hydraulic quick coupler lines
- Lifting eye on bucket linkage (optional in Europe, standard for all other regions)
- Stick
  - 303.5E2 CR/304E2 CR – Standard stick (Europe only)
  - 305E2 CR/305.5E2 CR – Long stick
- Mechanical quick coupler
- Mirrors for cab and canopy
- Seatbelt, 75 mm (3 in) wide (optional in Europe, standard in all other regions)
- Secondary auxiliary hydraulic lines
- Steel track and steel track with rubber pads

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

AEHQ7365 (12-2014)

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

CAT®

316F L

Hydraulic Excavator

Engine		
Engine Model	Cat® C4.4 ACERT™	
Net Power – SAE J1349	88 kW	117 hp
Gross Power – SAE J1995	91 kW	122 hp

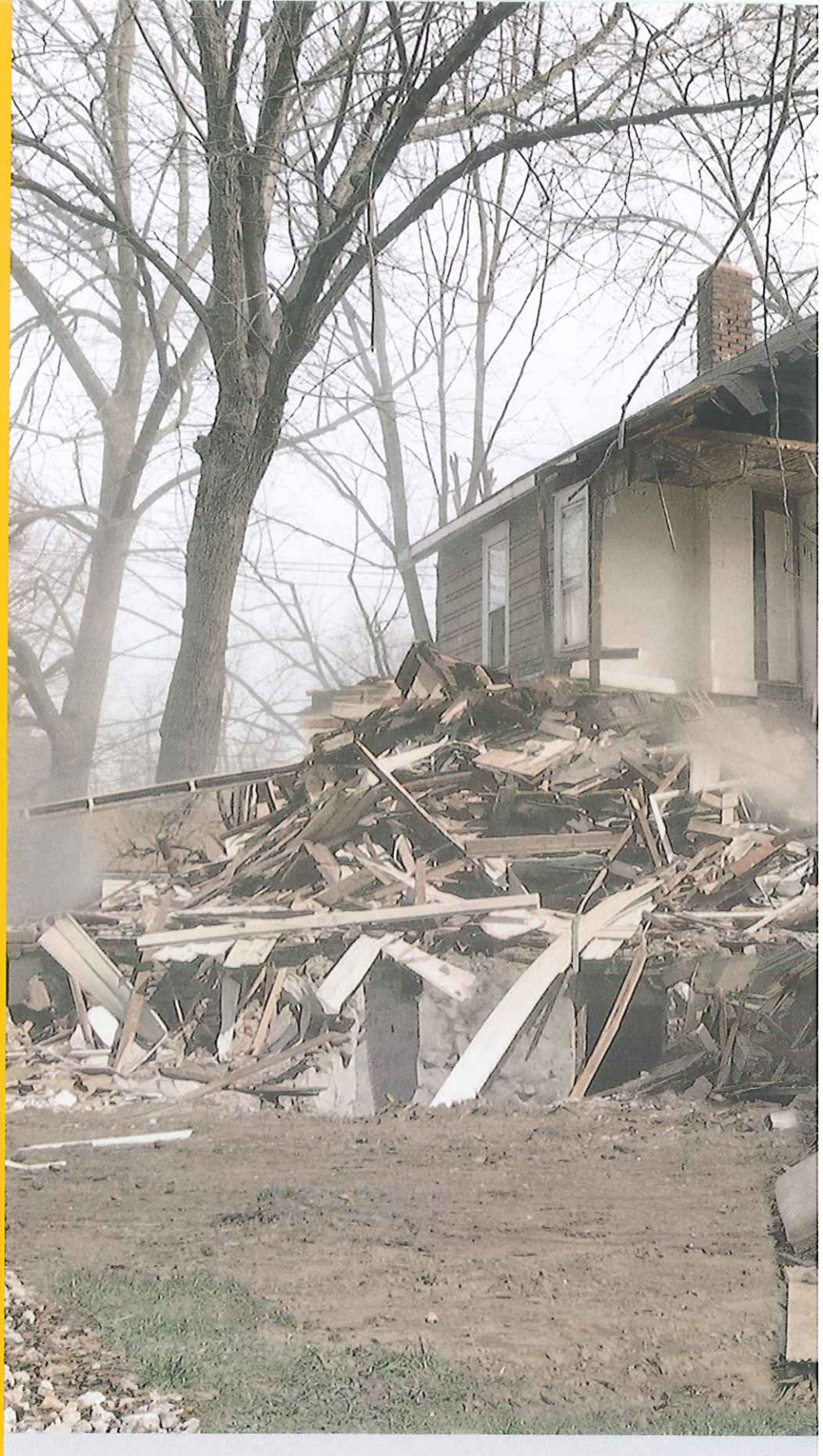
Drive		
Maximum Travel Speed	5.2 km/h	3.2 mph
Maximum Drawbar Pull	156 kN	35,115 lbf

Weight		
Minimum Operating Weight	17 500 kg	38,580 lb
Maximum Operating Weight	18 010 kg	39,680 lb

Introduction

The new Cat® 316F L is a perfect choice for customers who value reliable, economical performance. Powered by a fuel-efficient U.S. EPA Tier 4 Final C4.4 ACERT engine, the machine features a state-of-the-art hydraulic system that enables you to move material all day long with tremendous speed and precision.

When you add in a quiet operator environment that keeps you comfortable and productive, robust structures that keep you grounded and balanced, easy-to-reach service points that make your routine maintenance fast and simple, and multiple Cat work tools that help you take on a variety of tasks, you just won't find a better, more efficient excavator in its size class – any place, anywhere.



Contents

A Cat bucket and Pro Series thumb make the 316F L a formidable demolition machine.

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 316F 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

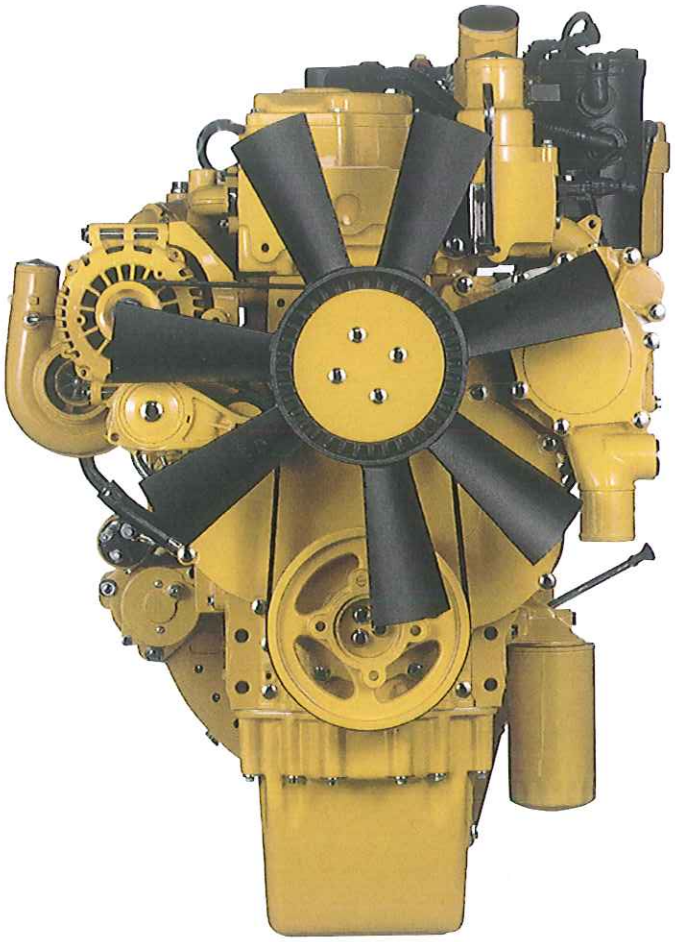
Auxiliary hydraulics give you greater tool versatility so you can take on more work with just one machine, and there are several options from which you can choose. A quick coupler circuit, for example, will allow you to switch from one tool to another in a matter of minutes – all from the comfort and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

Boom & Stick Oil Recirculation For Added Efficiency

The 316F L recirculates 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.

Engine

Powerful and fuel efficient to meet your expectations



Proven Technology

The Cat C4.4 ACERT engine meets Tier 4 Final emission standards, and it does so without interrupting your job process. Simply turn the engine on and go to work. It will look for opportunities in your work cycle to regenerate itself, and it will give you plenty of power for the task at hand – all to help keep your owning and operating costs to an absolute minimum.

Like every Cat Tier 4 Final engine, the C4.4 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:

- **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.

Operator Station

Comfort and convenience to keep you productive

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 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 today's top pickup trucks.

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 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.

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

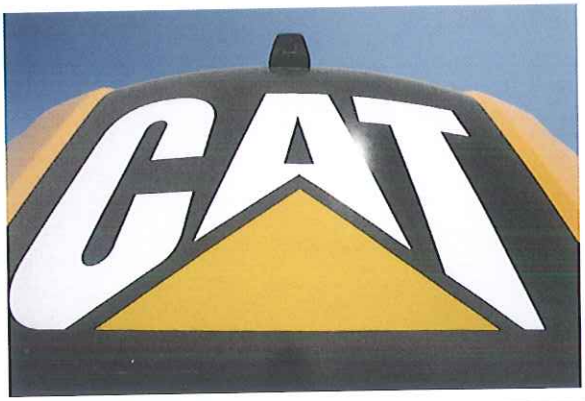
Designed to work in your rugged applications

Robust Frame

The 316F 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 316F 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.



Counterweight Options

Two counterweight options – standard and heavy – are available. Both are built with thick steel plates and reinforced fabrications to make them less susceptible to damage, and both have curved surfaces that match the machine's sleek, smooth appearance along with integrated housings to help protect the standard rearview camera.

Front Linkage

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

Designed For Range

The 316F L is offered with a reach boom and two stick configurations: R3.1 m (10'2") and R2.9 m (9'6"). Also, a thumb-ready stick with brackets to attach a Cat thumb on the machine is an available option. Reach configurations balance digging force and bucket capacity, covering all applications this size of machine was designed to take on such as trenching, loading, and doing demolition work with hydraulic tools.

Made To Last

Each boom and stick is built with internal baffle plates for maximum durability, and each undergoes ultrasound inspection to ensure quality and reliability for the tough work you do.

Talk to your Cat dealer to pick the best front linkage for your specific applications.

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:

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.

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.

Attachments

Tools to make you productive and profitable

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

Multiple buckets dig 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 in quarries and preparing trenches on construction sites. Taking down bridge pillars and heavily reinforced concrete is no problem. Multi-processor, pulverizer, and shear attachments take your machine into structure 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

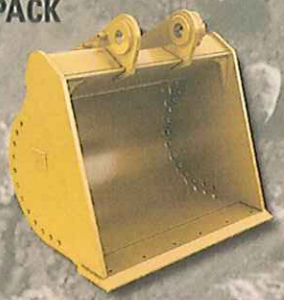
Contractors' Grapples

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

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

A Fresh Idea

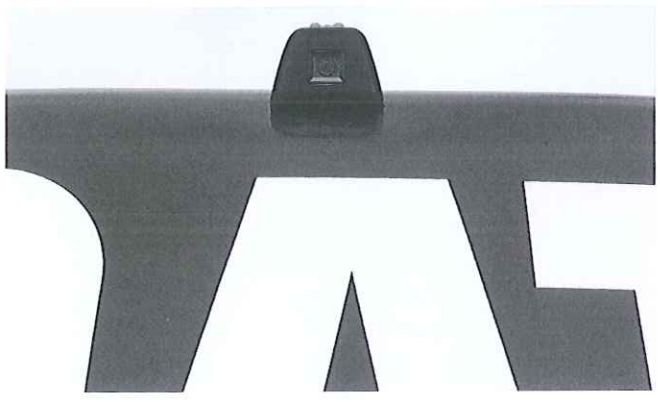
When you select ventilation inside the cab, outside air enters through the fresh air filter. The filter is conveniently located on the side of the cab to make it easy to reach and replace, and it is protected by a lockable door that can be opened with the engine key.

More Service Benefits

Filters are banked together to enhance service efficiency. The fuel tank's drain tube 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

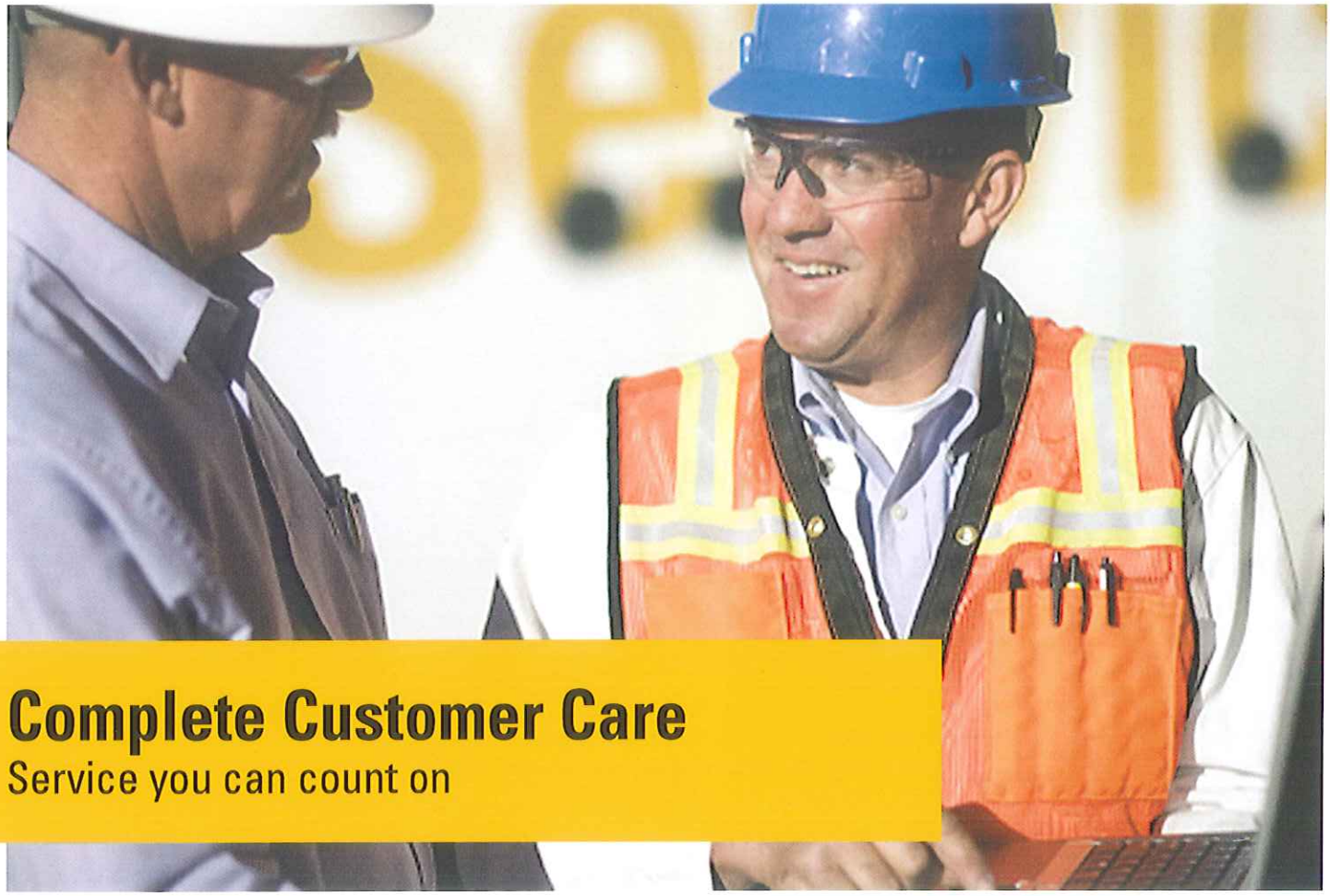
Multiple large steps get you into the cab as well as a leg up to the compartments. Extended hand and guard rails allow you to safely climb to the upper deck. Anti-skid plates reduce your slipping hazards in all types of weather conditions, and they can be removed for cleaning.

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

Service you can count on

Parts Where You Work

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.

Sustainability

Generations ahead in every way

- The C4.4 ACERT engine meets Tier 4 Final emission standards.
- The engine can run 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 service technicians avoid spilling.
- The QuickEvac™ option ensures fast, easy, and secure changing of engine and hydraulic oil.
- The machine is built to be rebuilt with major structures and components capable of being remanufactured to reduce waste and replacement costs.
- An efficient 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 316F L is an efficient, productive machine that's designed to conserve our natural resources for generations ahead.

316F L Hydraulic Excavator Specifications

Engine

Engine Model	Cat C4.4 ACERT	
Net Power – SAE J1349	88 kW	117 hp
Gross Power – SAE J1995	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*	17 500 kg	38,580 lb
Maximum Operating Weight**	18 010 kg	39,680 lb

*5.1 m (16'9") boom, 2.9 m (9'6") stick, 2.8 mt (3.08 t) counterweight, 0.76 m^3 (1.00 yd^3) GD bucket, and 600 mm (24") shoes.
**5.1 m (16'9") boom, 3.1 m (10'2") stick, 3.05 mt (3.36 t) counterweight, 0.76 m^3 (1.00 yd^3) GD bucket, 700 mm (28") shoes.

Hydraulic System

Main System – Maximum Flow (Total)	300 L/min	79 gal
Swing System – Maximum Flow	150 L/min	40 gal
Maximum Pressure – Equipment	35 000 kPa	5,076 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	23 000 kPa	3,340 psi
Pilot System – Maximum Flow	25.8 L/min	1,574 in^3/min
Pilot System – Maximum Pressure	4120 kPa	598 psi
Boom Cylinder – Bore	110 mm	4 in
Boom Cylinder – Stroke	1193 mm	47 in
Stick Cylinder – Bore	120 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	5.2 km/h	3.2 mph
Maximum Drawbar Pull	156.2 kN	35,115 lbf

Swing Mechanism

Swing Speed	8.9 rpm	
Swing Torque	49.6 kN·m	36,580 lb-ft

Service Refill Capacities

Fuel Tank Capacity	290 L	76.61 gal
Cooling System	24 L	6.34 gal
Engine Oil (with filter)	13.5 L	3.57 gal
Swing Drive	2.4 L	0.63 gal
Final Drive (each)	5 L	1.32 gal
Hydraulic System (including tank)	190 L	50.19 gal
Hydraulic Tank	106 L	28.00 gal
DEF Tank Capacity	44 L	11.62 gal

Track

Number of Shoes (each side)	44 pieces
Number of Track Rollers (each side)	7 pieces
Number of Carrier Rollers (each side)	2 pieces

Sound Performance

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

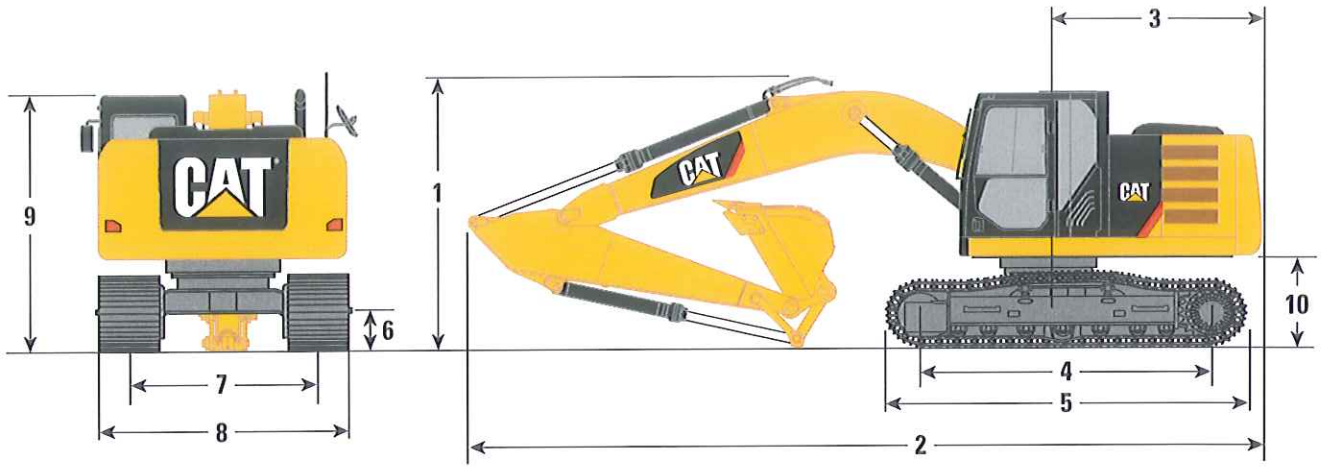
- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- Hearing protection may be needed when operating 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
ROPS cab	ISO 12117-2
Cab/OPG	ISO 10262 1998

Dimensions

All dimensions are approximate.



		Reach Booms 5.1 m (16'9")	
	Stick	R3.1 (10'2")	R2.9 (9'6")
		mm (ft)	mm (ft)
1	Shipping Height*	3190 (10'5")	3090 (10'2")
	Shipping Height at Boom Top	3190 (10'5")	3080 (10'1")
	Shipping Height with Guard Rail	2940 (9'7")	2940 (9'7")
	Shipping Height with Top Guard	3100 (10'2")	3100 (10'2")
2	Shipping Length	8580 (28'2")	8580 (28'2")
3	Tail Swing Radius	2500 (8'2")	2500 (8'2")
4	Length to Center of Rollers	3170 (10'5")	3170 (10'5")
5	Track Length	3970 (13'0")	3970 (13'0")
6	Ground Clearance	440 (1'5")	440 (1'5")
7	Track Gauge	1990 (6'6")	1990 (6'6")
8	Transport Width		
	600 mm (24") Shoes	2590 (8'6")	2590 (8'6")
	700 mm (28") Shoes	2690 (8'10")	2690 (8'10")
9	Cab Height	2890 (9'6")	2890 (9'6")
	Cab Height with Top Guard	3100 (10'2")	3100 (10'2")
10	Counterweight Clearance**	1010 (3'4")	1010 (3'4")

All dimensions were calculated with a 0.76 m^3 (1.00 yd^3), 900 mm (41 in) bucket.

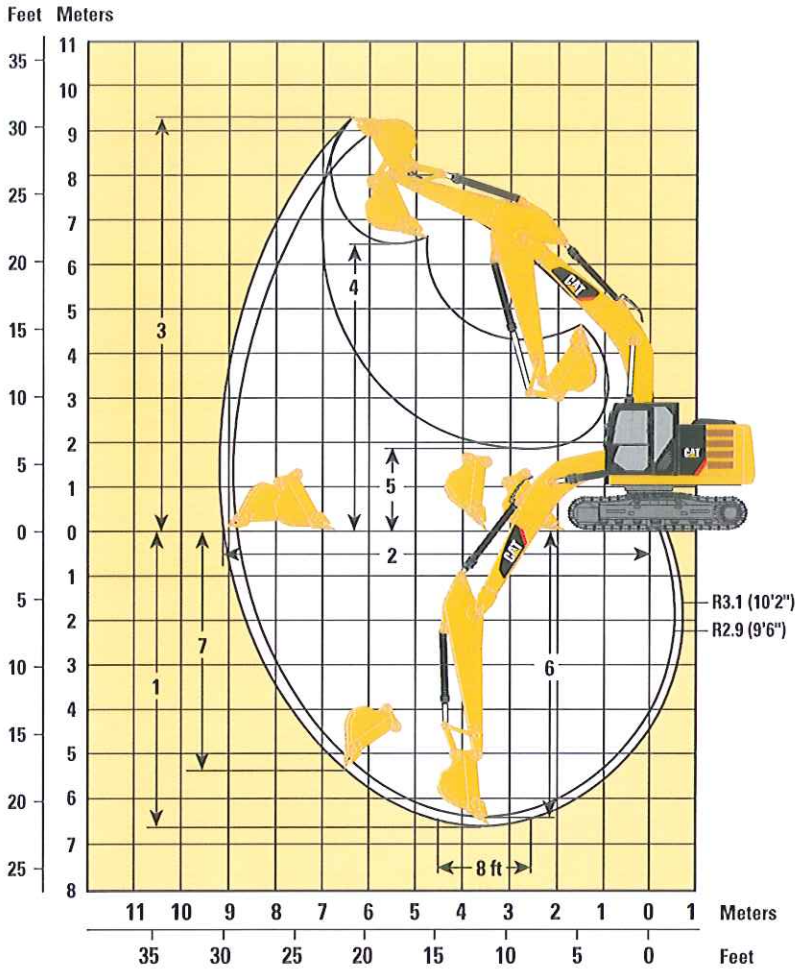
*Including shoe lug height.

**Without shoe lug height.

316F L Hydraulic Excavator Specifications

Working Ranges

All dimensions are approximate.



	Reach Booms 5.1 m (16'9")	
Stick	**R3.1 (10'2")**	**R2.9 (9'6")**
	mm (ft)	**mm (ft)**
1 Maximum Digging Depth	6590 (21'7")	6390 (21'0")
2 Maximum Reach at Ground Level	9260 (30'5")	8990 (29'6")
3 Maximum Cutting Height	9210 (30'3")	8880 (29'2")
4 Maximum Loading Height	6570 (21'7")	6270 (20'7")
5 Minimum Loading Height	1810 (5'11")	2000 (6'7")
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6400 (21'0")	6160 (20'3")
7 Maximum Vertical Wall Digging Depth	5400 (17'9")	4910 (16'1")

All dimensions were calculated with a 0.76 m^3 (1.00 yd^3), 900 mm (41 in) bucket.

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 (10'2")	17 760 (39,150)	36 (5.20)	17 510 (38,600)	42 (6.06)
R2.9 (9'6")	17 740 (39,110)	36 (5.20)	17 500 (38,580)	42 (6.05)
Heavy Counterweight – 3.1 mt (3.4 t)				
R3.1 (10'2")	18 010 (39,710)	37 (5.31)	17 760 (39,160)	42 (6.11)

Major Component Weights

	kg	lb
Base Machine (with boom cylinder, without counterweight, front linkage and track)	5720	12,610
Long Undercarriage	3770	8,310
Counterweight 2.8 mt (3.1 t)	2800	6,170
Heavy Counterweight 3.05 mt (3.36 t)	3050	6,730
Boom (includes lines, pins and stick cylinder)		
Reach Boom – 5.1 m (16'9")	1320	2,910
Reach Boom – 5.1 m (16'9") for CGC	1330	2,930
Stick (includes lines, pins, bucket cylinder, and bucket linkage)		
R3.1 (10'2")	930	2,050
R2.9 (9'6")	910	2,010
Track Shoe (Long/per two tracks)		
600 mm (24") Triple Grouser	2420	5,340
700 mm (28") Triple Grouser	2650	5,840

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.

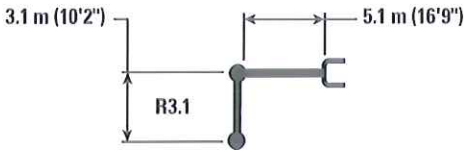
Base machine includes 75 kg (165 lb) operator weight, 90% fuel weight, and undercarriage with center guard.

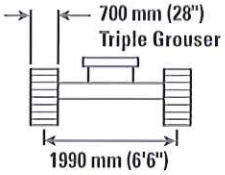
316F L Hydraulic Excavator Specifications

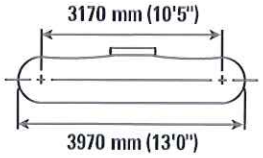
Bucket and Stick Forces

	Reach Booms 5.1 m (16'9")	
Stick	**R3.1 (10'2")**	**R2.9 (9'6")**
	kN (lbf)	**kN (lbf)**
General Duty		
Bucket Digging Force (SAE)	98 (22,000)	98 (22,000)
Stick Digging Force (SAE)	69 (15,500)	73 (16,400)
Severe Duty		
Bucket Digging Force (SAE)	96 (21,600)	96 (21,600)
Stick Digging Force (SAE)	69 (15,500)	72 (16,200)

Reach Boom Lift Capacities – Counterweight: 2.8 mt (3.1 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**											*2700 ***6,050**	*2700 ***6,050**	5.49 **17.57**
6.0 m **20.0 ft**	kg **lb**							*3650 ***7,850**	3450 **7,400**			*2450 ***5,350**	*2450 ***5,350**	6.76 **21.96**
4.5 m **15.0 ft**	kg **lb**							*3850 ***8,450**	3400 **7,250**	*2450	2350	*2350 ***5,150**	2300 **5,100**	7.52 **24.58**
3.0 m **10.0 ft**	kg **lb**			*7450 ***15,850**	*7450 ***15,850**	*5300 ***11,400**	4950 **10,700**	*4450 ***9,650**	3250 **6,950**	3650 ***7,500**	2300 **4,850**	*2400 ***5,250**	2050 **4,550**	7.93 **25.98**
1.5 m **5.0 ft**	kg **lb**			*7550 ***18,100**	*7550 **17,700**	*6700 ***14,450**	4600 **9,900**	5000 **10,750**	3050 **6,550**	3600 **7,700**	2200 **4,700**	*2550 ***5,550**	2000 **4,350**	8.03 **26.36**
0.0 m **0.0 ft**	kg **lb**			*6650 ***15,300**	*6650 ***15,300**	7500 **16,100**	4350 **9,300**	4850 **10,400**	2900 **6,250**	3500 **7,550**	2150 **4,600**	*2800 ***6,150**	2000 **4,400**	7.85 **25.77**
–1.5 m **–5.0 ft**	kg **lb**	*5050 ***11,250**	*5050 ***11,250**	*9300 ***21,150**	7700 **16,550**	7350 **15,800**	4200 **9,050**	4750 **10,250**	2850 **6,100**			*3350 ***7,350**	2150 **4,750**	7.36 **24.12**
–3.0 m **–10.0 ft**	kg **lb**	*8400 ***18,850**	*8400 ***18,850**	*11 350 ***24,500**	7800 **16,750**	7350 **15,800**	4200 **9,050**	4800 **10,300**	2850 **6,150**			4300 **9,500**	2600 **5,700**	6.49 **21.18**
–4.5 m **–15.0 ft**	kg **lb**			*9000 ***19,200**	8050 **17,300**	*6100 ***12,850**	4350 **9,450**					*5150 ***11,400**	3750 **8,500**	5.04 **16.24**

* ISO 10567

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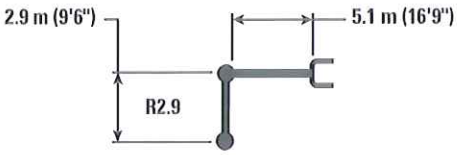
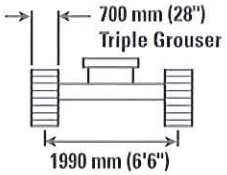
Lift capacity stays with ±5% for all available track shoes.

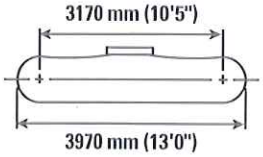
Always refer to the appropriate Operation and Maintenance Manual for specific product information.

316F L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 2.8 mt (3.1 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**											*2950 ***6,500**	*2950 ***6,500**	5.08 **16.21**
6.0 m **20.0 ft**	kg **lb**							*3650 ***7,350**	3450 **7,350**			*2650 ***5,800**	*2650 ***5,800**	6.43 **20.89**
4.5 m **15.0 ft**	kg **lb**							*4050 ***8,850**	3350 **7,250**			*2550 ***5,650**	2500 **5,450**	7.23 **23.63**
3.0 m **10.0 ft**	kg **lb**			*8000 ***17,000**	*8000 ***17,000**	*5500 ***11,900**	4950 **10,600**	*4600 ***10,000**	3200 **6,900**	*3300 ***6,050**	2300 **4,850**	*2650 ***5,800**	2200 **4,850**	7.66 **25.09**
1.5 m **5.0 ft**	kg **lb**			*7100 ***17,000**	*7100 ***17,000**	*6900 ***14,900**	4550 **9,850**	5000 **10,750**	3050 **6,550**	3600 **7,700**	2200 **4,750**	*2850 ***6,250**	2100 **4,600**	7.77 **25.48**
0.0 m **0.0 ft**	kg **lb**			*7050 ***16,150**	*7050 ***16,150**	7500 **16,050**	4300 **9,300**	4850 **10,450**	2950 **6,300**	3500	2150	*3200 ***7,050**	2100 **4,650**	7.58 **24.87**
–1.5 m **–5.0 ft**	kg **lb**	*5700 ***12,750**	*5700 ***12,750**	*10 100 ***22,900**	7750 **16,600**	7350 **15,800**	4200 **9,100**	4800 **10,300**	2850 **6,150**			3800 **8,400**	2300 **5,100**	7.07 **23.16**
–3.0 m **–10.0 ft**	kg **lb**	*9300 ***20,850**	*9300 ***20,850**	*11 100 ***23,950**	7850 **16,800**	7400 **15,900**	4250 **9,150**	4800 **10,350**	2900 **6,250**			4650 **10,300**	2800 **6,200**	6.16 **20.07**
–4.5 m **–15.0 ft**	kg **lb**			*8550 ***18,150**	8100 **17,450**	*5700	4450					*5550 ***12,150**	4300 **9,800**	4.60 **14.75**

* ISO 10567

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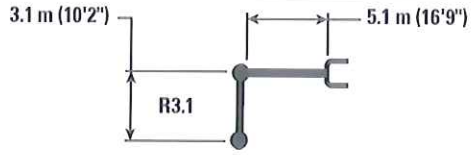
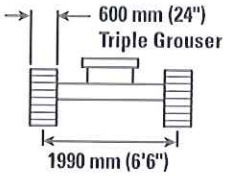
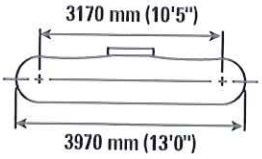
Lift capacity stays with ±5% for all available track shoes.

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

Reach Boom Lift Capacities – Counterweight: 2.8 mt (3.1 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**											*2700 ***6,050**	*2700 ***6,050**	5.49 **17.57**
6.0 m **20.0 ft**	kg **lb**							*3650 ***7,850**	3400 **7,300**			*2450 ***5,350**	*2450 ***5,350**	6.76 **21.96**
4.5 m **15.0 ft**	kg **lb**							*3850 ***8,450**	3350 **7,150**	*2450	2300	*2350 ***5,150**	2300 **5,050**	7.52 **24.58**
3.0 m **10.0 ft**	kg **lb**			*7450 ***15,850**	*7450 ***15,850**	*5300 ***11,400**	4900 **10,550**	*4450 ***9,650**	3200 **6,850**	3600 ***7,500**	2250 **4,800**	*2400 ***5,250**	2050 **4,500**	7.93 **25.98**
1.5 m **5.0 ft**	kg **lb**			*7550 ***18,100**	*7550 **17,500**	*6700 ***14,450**	4550 **9,750**	4950 **10,600**	3000 **6,500**	3550 **7,550**	2150 **4,650**	*2550 ***5,550**	1950 **4,250**	8.03 **26.36**
0.0 m **0.0 ft**	kg **lb**			*6650 ***15,300**	*6650 ***15,300**	7400 **15,850**	4250 **9,200**	4800 **10,250**	2900 **6,200**	3450 **7,450**	2100 **4,500**	*2800 ***6,150**	1950 **4,300**	7.85 **25.77**
–1.5 m **–5.0 ft**	kg **lb**	*5050 ***11,250**	*5050 ***11,250**	*9300 ***21,150**	7600 **16,300**	7250 **15,550**	4150 **8,950**	4700 **10,100**	2800 **6,000**			*3350 ***7,350**	2150 **4,700**	7.36 **24.12**
–3.0 m **–10.0 ft**	kg **lb**	*8400 ***18,850**	*8400 ***18,850**	*11 350 ***24,500**	7700 **16,500**	7250 **15,600**	4150 **8,950**	4700 **10,150**	2800 **6,050**			4250 **9,350**	2550 **5,650**	6.49 **21.18**
–4.5 m **–15.0 ft**	kg **lb**			*9000 ***19,200**	7950 **17,100**	*6100 ***12,850**	4300 **9,300**					*5150 ***11,400**	3700 **8,400**	5.04 **16.24**

* ISO 10567

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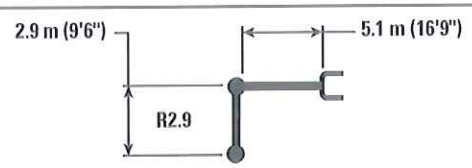
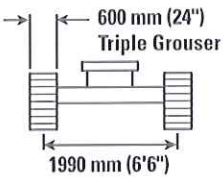
Lift capacity stays with ±5% for all available track shoes.

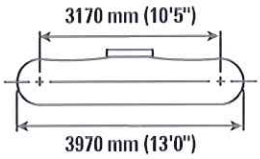
Always refer to the appropriate Operation and Maintenance Manual for specific product information.

316F L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 2.8 mt (3.1 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**											*2950 ***6,500**	*2950 ***6,500**	5.08 **16.21**
6.0 m **20.0 ft**	kg **lb**							*3650 ***7,350**	3400 **7,250**			*2650 ***5,800**	*2650 ***5,800**	6.43 **20.89**
4.5 m **15.0 ft**	kg **lb**							*4050 ***8,850**	3350 **7,150**			*2550 ***5,650**	2450 **5,400**	7.23 **23.63**
3.0 m **10.0 ft**	kg **lb**			*8000 ***17,000**	*8000 ***17,000**	*5500 ***11,900**	4900 **10,500**	*4600 ***10,000**	3200 **6,850**	*3300 ***6,050**	2250 **4,800**	*2650 ***5,800**	2150 **4,800**	7.66 **25.09**
1.5 m **5.0 ft**	kg **lb**			*7100 ***17,000**	*7100 ***17,000**	*6900 ***14,900**	4500 **9,700**	4950 **10,600**	3000 **6,500**	3550 **7,600**	2200 **4,650**	*2850 ***6,250**	2050 **4,550**	7.77 **25.48**
0.0 m **0.0 ft**	kg **lb**			*7050 ***16,150**	*7050 ***16,150**	7400 **15,850**	4250 **9,150**	4800 **10,300**	2900 **6,200**	3500	2100	*3200 ***7,050**	2100 **4,600**	7.58 **24.87**
–1.5 m **–5.0 ft**	kg **lb**	*5700 ***12,750**	*5700 ***12,750**	*10 100 ***22,900**	7650 **16,350**	7250 **15,600**	4150 **8,950**	4700 **10,150**	2800 **6,050**			3750 **8,250**	2300 **5,000**	7.07 **23.16**
–3.0 m **–10.0 ft**	kg **lb**	*9300 ***20,850**	*9300 ***20,850**	*11 100 ***23,950**	7750 **16,600**	7300 **15,650**	4200 **9,000**	4750 **10,250**	2850 **6,150**			4600 **10,200**	2750 **6,100**	6.16 **20.07**
–4.5 m **–15.0 ft**	kg **lb**			*8550 ***18,150**	8000 **17,250**	*5700	4400					*5550 ***12,150**	4250 **9,650**	4.60 **14.75**

* ISO 10567

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

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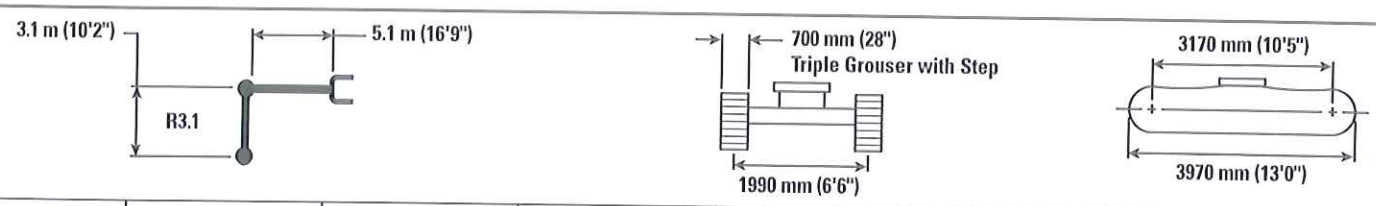
Reach Boom Lift Capacities – Counterweight: 3.05 mt (3.36 t) – without Bucket



		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 *5,900	*2650 *5,900	5.37 17.43
6.0 m 20.0 ft	kg lb							*3600 *7,500	3600 *7,500			*2400 *5,300	*2400 *5,300	6.66 21.58
4.5 m 15.0 ft	kg lb							*3900 *8,500	3500 7,550			*2350 *5,200	*2350 *5,200	7.43 24.90
3.0 m 10.0 ft	kg lb			*7450 *15,900	*7450 *15,900	*5300 *11,450	5150 11,100	*4450 *9,700	3350 7,250	*3550 *6,950	2400 5,100	*2400 *5,300	2200 4,850	7.85 25.73
1.5 m 5.0 ft	kg lb			*8400 *20,100	*8400 18,450	*6750 *14,550	4800 10,300	*5150 11,150	3200 6,850	3700 8,000	2300 4,950	*2600 *5,700	2100 4,650	7.95 26.56
0.0 m 0.0 ft	kg lb			*7250 *16,650	*7250 *16,650	*7750 16,700	4550 9,750	5050 10,800	3050 6,550	3650 7,850	2250 4,800	*2950 *6,450	2150 4,700	7.77 25.73
–1.5 m –5.0 ft	kg lb	*5450 *12,200	*5450 *12,200	*9800 *22,250	8050 17,300	7650 16,400	4400 9,500	4950 10,650	3000 6,400			*3550 *7,850	2300 5,100	7.28 24.07
–3.0 m –10.0 ft	kg lb	*8700 *19,550	*8700 *19,550	*11400 *24,600	8150 17,500	7650 16,450	4400 9,500	4950 10,700	3000 6,450			4550 10,100	2750 6,150	6.39 20.75
–4.5 m –15.0 ft	kg lb			*9050 *19,350	8400 18,050	*6150 *12,950	4550 9,850					*5450 *12,000	4050 9,200	4.91 15.77

* ISO 10567

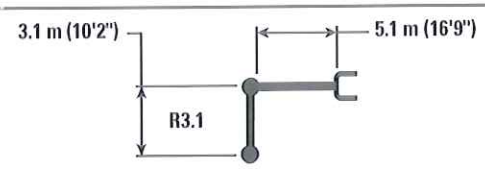
*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories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

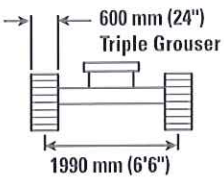
Lift capacity stays with ±5% for all available track shoes.

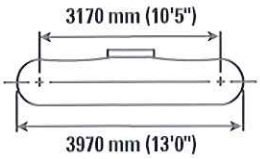
Always refer to the appropriate Operation and Maintenance Manual for specific product information.

316F L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 3.05 mt (3.36 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 ***5,900**	*2650 ***5,900**	5.37 **17.43**
6.0 m **20.0 ft**	kg **lb**							*3600 ***7,500**	3550 ***7,500**			*2400 ***5,300**	*2400 ***5,300**	6.66 **21.58**
4.5 m **15.0 ft**	kg **lb**							*3900 ***8,500**	3450 **7,450**			*2350 ***5,200**	*2350 ***5,200**	7.43 **24.90**
3.0 m **10.0 ft**	kg **lb**			*7450 ***15,900**	*7450 ***15,900**	*5300 ***11,450**	5100 **10,950**	*4450 ***9,700**	3300 **7,150**	*3550 ***6,950**	2350 **5,050**	*2400 ***5,300**	2200 **4,800**	7.85 **25.73**
1.5 m **5.0 ft**	kg **lb**			*8400 ***20,100**	*8400 **18,200**	*6750 ***14,550**	4750 **10,200**	5150 **11,000**	3150 **6,800**	3700 **7,900**	2300 **4,900**	*2600 ***5,700**	2100 **4,550**	7.95 **26.56**
0.0 m **0.0 ft**	kg **lb**			*7250 ***16,650**	*7250 ***16,650**	7700 **16,500**	4450 **9,600**	4950 **10,700**	3000 **6,500**	3600 **7,750**	2200 **4,750**	*2950 ***6,450**	2100 **4,650**	7.77 **25.73**
–1.5 m **–5.0 ft**	kg **lb**	*5450 ***12,200**	*5450 ***12,200**	*9800 ***22,250**	7950 **17,100**	7550 **16,200**	4350 **9,350**	4900 **10,500**	2950 **6,350**			*3550 ***7,850**	2300 **5,000**	7.28 **24.07**
–3.0 m **–10.0 ft**	kg **lb**	*8700 ***19,550**	*8700 ***19,550**	*11400 ***24,600**	8050 **17,250**	7550 **16,200**	4350 **9,400**	4900 **10,550**	2950 **6,400**			4500 **10,000**	2750 **6,050**	6.39 **20.75**
–4.5 m **–15.0 ft**	kg **lb**			*9050 ***19,350**	8300 **17,850**	*6150 ***12,950**	4500 **9,750**					*5450 ***12,000**	4000 **9,100**	4.91 **15.77**

* 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.

Work Tool Offering Guide*

Boom Type	Reach Boom	
Stick Size	**R3.1 (10'2")**	**R2.9 (9'6")**
Hydraulic Hammer	H110Es H115Es H120Es	H110Es H115Es H120Es
Pulverizer	P215	P215
Mobile Scrap and Demolition Shear	S325B**	S325B**
Compactor (Vibratory Plate)	CVP75	CVP75
Contractors' Grapple	G115B	G115B
Demolition & Sorting Grapple	G310B	G310B
Trash Grapple	These work tools are available for the 316F L. Consult your Cat dealer for proper match.	
Thumbs		
Pin Grabber Coupler		

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

**Boom-mount.

316F L Hydraulic Excavator Specifications

Bucket Specifications and Compatibility

	Width		Capacity		Weight		Fill	Reach Booms		
	mm	in	m^3	yd^3	kg	lb	%	R2.9 (9'6")	R3.1 (10'2")	R3.1 (10'2") Thumb*
Without Quick Coupler										
General Duty (GD)	600	24	0.35	0.46	445	980	100%	●	●	●
	750	30	0.49	0.64	502	1,106	100%	●	●	●
	900	36	0.62	0.81	548	1,208	100%	●	●	●
	1050	42	0.76	1.00	595	1,312	100%	◉	◉	⊖
	1200	48	0.91	1.19	672	1,480	100%	⊖	X	○
Severe Duty (SD)	600	24	0.35	0.46	496	1,093	90%	●	●	●
	750	30	0.49	0.64	564	1,243	90%	●	●	●
	900	36	0.62	0.81	644	1,420	90%	●	●	●
	1050	42	0.76	1.00	689	1,519	90%	●	◉	◉
	1200	48	0.91	1.19	762	1,678	90%	⊖	X	○
						Maximum load pin-on (payload + bucket)	kg	2095	1945	1875
							lb	4,617	4,287	4,133
With Center Lock Quick Coupler										
General Duty (GD)	600	24	0.35	0.46	445	980	100%	●	●	●
	750	30	0.49	0.64	502	1,106	100%	●	●	●
	900	36	0.62	0.81	548	1,208	100%	◉	⊖	⊖
	1050	42	0.76	1.00	595	1,312	100%	⊖	○	○
	1200	48	0.91	1.19	672	1,480	100%	◇	◇	◇
Severe Duty (SD)	600	24	0.35	0.46	496	1,093	90%	●	●	●
	750	30	0.49	0.64	564	1,243	90%	●	●	●
	900	36	0.62	0.81	644	1,420	90%	◉	⊖	⊖
	1050	42	0.76	1.00	689	1,519	90%	⊖	○	○
	1200	48	0.91	1.19	762	1,678	90%	○	◇	◇
						Maximum load with coupler (payload + bucket)	kg	1705	1555	1485
							lb	3,758	3,427	3,273

Maximum Material Density:

- ● 2100 kg/m³ (3,500 lb/yd³)
- ◉ 1800 kg/m³ (3,000 lb/yd³)
- ⊖ 1500 kg/m³ (2,500 lb/yd³)
- ○ 1200 kg/m³ (2,000 lb/yd³)
- ◇ 900 kg/m³ (1,500 lb/yd³)
- X Not recommended

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with General Duty tips.

* Densities with 3.1 m (10'2") thumb stick does not consider thumb weight.

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
- 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 dampening valve
- Automatic swing parking brake
- High-performance hydraulic return filter
- Fine swing control

CAB

- Pressurized operator station with positive filtration
- Sliding upper door window
- 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
- Two power outlets, 10 amp (total)
- Travel alarm
- Laminated glass front upper window and tempered other windows
- Sunscreen

UNDERCARRIAGE

- Grease Lubricated Track GLT2, resin seal
- Towing eye on base frame
- Swivel guard

ELECTRICAL

- 80 amp alternator
- Circuit breaker

LIGHTS

- Halogen boom light
- Time delay function for boom light and cab light
- 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

TECHNOLOGY

- Product Link

316F 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 foot switch
- Left pedal
- Straight travel pedal
- Rain protector
- Cab mirror
- Ashtray

UNDERCARRIAGE
- 600 mm (24") triple grouser shoes
- 700 mm (28") triple grouser shoes
- Full-length track guiding guard
- Guard, heavy-duty bottom
- Center track guiding guard
- Segmented (2 piece) track guiding guard

COUNTERWEIGHT
- 2.8 mt (3.1 t)
- 3.05 mt (3.36 t)

FRONT LINKAGE
- Quick coupler
- Bucket linkage, without lifting eye
- 5.1 m (16'9") reach boom
- 2.9 m (9'6") stick
- 3.1 m (10'2") stick
- 3.1 m (10'2") thumb-ready stick

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

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