

# Engine

Engine Model Engine Power – ISO 14396 Net Power – SAE J1349 Cat<sup>®</sup> C4.4 ACERT<sup>™</sup> 122 kW/164 hp/166 ps 120 kW/161 hp/163 ps

5.6 km/h	
205 kN	
22 300 kg	
23 600 kg	
	205 kN 22 300 kg

### Introduction

The Cat 323F LN is the perfect choice for contractors who need maximum production coupled with best-in-class fuel efficiency. Powered by a C4.4 ACERT engine, the machine features a state-of-the-art hydraulic system and standard Cat Grade Control to do all your accurate digging. With 50+ Cat Work Tool options, there really isn't any work you can't take on with 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, and easy-to-reach service points that make your routine maintenance fast and simple, you just won't find a better 23-ton excavator.



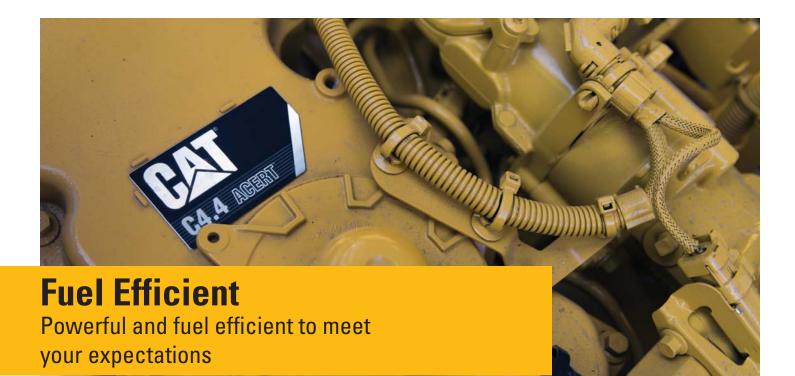
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# Less Fuel, More Power

The 323F LN consumes 5% less fuel than the EU Stage IIIB model (323E LN) with integrated electronics, fuel, air and aftertreatment components. Isochronous control, for example, permits the engine to run at a constant lower speed but at an optimum point in the power curve for maximum efficiency. Automatic engine speed control also contributes by lowering rpm when the machine isn't calling for it. Automatic engine idle shutdown turns the engine off when it's been idling for more than a specified amount of time, which you can easily set through the monitor. Plus you have a choice of three power modes – high power, standard power, and eco mode. Simply change between modes through the switch panel to meet the work needs in front of you. Collectively, all of these benefits result in reduced fuel consumption, reduced repair and maintenance costs, and increased engine life for you.



# **Biodiesel Not a Problem**

The C4.4 ACERT engine can run on up to B20 biodiesel that meets ASTM 6751 standards – all to give you more potential fuel-saving flexibility.

# **Automatic Engine Speed Control**

Automatic engine speed control is activated during no-load or light-load conditions to minimize fuel consumption.

# **Variable Fan Speed Control with Viscous Cluth**

A variable speed fan reduces fuel consumption and noise.

# **Air Cleaner and Air Precleaner**

The radial seal air filter features a double-layered filter core for more efficient filtration and is located in a compartment behind the cab.

A warning is displayed on the monitor when dust accumulates above a preset level. Air precleaner reduces the amount of dust and debris that enter the air intake system which can help maximize engine performance by extending air filter life.

# **Filtration System**

The C4.4 ACERT engine features three stage fuel filtration system with water separator and indicator to ensure good reliability to fuel injection system components.

# **Proven Technology**

Every Stage IV ACERT engine is equipped with a combination of proven electronic, fuel, air, and aftertreatment components. Applying these timetested technologies lets us meet your high expectations for productivity, fuel efficiency, reliability, and service life. Following are the results you can expect:

- Improved fuel efficiency over previous model 323E LN.
- High performance across a variety of applications.
- Enhanced reliability through commonality and simplicity of design.
- Maximized uptime and reduced cost with worldclass 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.

# **Easy to Operate**

# Comfort and convenience to keep you productive all day long







# Safe and Quiet Cab

The ROPS certified cab contributes to your comfort thanks to special viscous mounts and special roof lining and sealing that limit vibration and unnecessary sound. Operators will enjoy the quietness and comfort of the cab.

# **Excellent Ergonomics**

Wide high seats with air suspension, heater, and head rest, include a reclining back, upper and lower slide adjustments, and height and tilt angle adjustments, armrest to meet your needs for maximum comfort. The fully automatic climate control system keeps operators comfortable and productive all day long in either hot or cold weather. Storage spaces are located in the front, rear, and side consoles of the cab. There are coat hook beverage holder, literature holder, rear storage compartment etc.

# **A Helpful Monitor**

A 233 mm × 130 mm (7 inch) LCD monitor is easy to see and navigate. Not only can it memorize up to 10 different work tools, it's also programmable in up to 44 languages to meet today's diverse workforce. The monitor clearly displays critical information you need to operate efficiently and effectively. Plus it projects the image from the standard rearview and side-view cameras to help you see what's going on around you so you can stay safely focused on the job at hand.

# <image>

# **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.

# **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.

# **Boom and Stick Oil Re-Circulation for Added Efficiency**

The 323F LN regenerates the flow of oil from the head end of the boom and stick cylinders to the rod end of the boom and stick cylinders during the work cycle to save energy and improve fuel efficiency. It's optimized for any dial speed setting you select, which results in less pressure loss for higher controllability, more productivity, and lower operating costs for you.

# SmartBoom™

SmartBoom reduces stress and vibrations transmitted to the machine and provides a more comfortable environment. It is particularly well suited for certain applications:

- Rock scraping. SmartBoom simplifies the task and allows the operator to concentrate 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.



# **Robust Frame**

The 323F LN is a well-built machine designed to give you a very long service life. The upper frame includes reinforced mountings to support the Roll-Over Protective Structure (ROPS) cab; it's also reinforced around key areas that take on stress like the boom foot and skirt. Massive bolts are used to attach the track frames to the body, and additional bolts are used throughout to increase the machine's digging force, which leads to more productivity for you.

# **Stable Long Narrow Undercarriage**

The 323F Long narrow undercarriage enhances maneuverability and makes it ideal for working confidently in space-restricted areas like road jobs with lane closures and next to buildings or other structures you'd like to not damage. 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. Segmented two pieces track guiding 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**

The counterweight weighs 4550 kg to help enhance lift capability – out front and over the side. Rounded to minimize the amount of overhang, the weight is bolted directly to the main frame using massive bolts to ensure maximum rigidity. Plus the counterweight has an integrated housing to help protect the machine's standard rearview camera.



# **Booms and Sticks**

The 323F LN is offered with a range of booms and sticks. Each is built with internal baffle plates for added durability, and each undergoes ultrasound inspection to ensure weld quality and reliability. Large box-section structures with thick, multi-plate fabrications, castings, and forgings are used in high-stress areas such as the boom nose, boom foot, boom cylinder, and stick foot to improve durability. The boom nose pin is a captured flag design for enhanced durability.

# **Selections**

There are two basic boom options: Reach and VA. Sticks match the boom descriptions and applications below:

- The Reach boom and stick combination provides excellent all-around versatility whether you are picking and placing underground utilities or top loading trucks.
- The Variable Angle (VA) boom configuration offers superb flexibility and versatility in the working envelope. Boom position can be adjusted from 90° when fully retracted to 180° and fully extended. With full extension, the working range gives maximum dig depth, reach, and working height. Equally, when retracted, it can work closer to its tracks, increase lifting capacity, and work in confined areas.

Talk to your Cat dealer to pick the best front linkage for your specific line of work.

# **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 Cool Design

The high-ambient cooling system features a fuel-saving variablespeed 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 cock makes it easy and simple for you to remove water and sediment during routine maintenance. Plus an integrated fuel level indicator pops up to help you reduce the possibility of fuel tank overfilling.

# **Smart Refuel**

Smart refuel is an on-board pump system that lets you fill the machine quickly from an external source like a fuel drum. What's smart about it is that it automatically stops when the fuel tank is full or the fuel source is empty, eliminating guess work and premature pump wear.



# **Attachment**

Do more jobs with one machine



# Get the Most from One Machine

The 323F LN is a versatile machine that packs a lot of performance into a small package. You can easily expand that performance by utilizing a variety of attachments offered by Cat Work Tools.

# **Change Jobs Quickly**

Cat quick couplers bring the ability to quickly change attachments and switch from job to job. The Cat CW dedicated Quick Coupler is the secure way to decrease downtime and increase job site flexibility and overall productivity.

# Dig, Rip and Load

A wide range of buckets dig everything from basic top soil to extreme, harsh material like ore and high quartzite granite. Rip through rock as an alternative to blasting in quarries. High-capacity buckets load trucks in a minimum number of passes for maximum productivity.

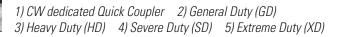
# Break, Demolish and Scrap

A hydraulic hammer ably equips your machine for breaking rock in quarries. It will also make taking down bridge pillars and heavily reinforced concrete on road demolition jobs no problem.

Multi-processor and pulverizer attachments make your machine ideal for demolition jobs and processing the resulting debris. Shears with 360° rotation mount to the machine for processing scrap steel and metal.

# 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 profit.







# **Cat Connect Technologies**

Monitor, manage, and enhance your job site operations

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 - monitor production and manage job site efficiency.



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



# **LINK Technologies**

LINK technologies like Product Link<sup>™</sup> are deeply integrated into your machine and wirelessly communicate key information, including location, hours, fuel usage, idle time, and event codes.

# **Product Link/VisionLink®**

Easy access to Product Link data via the online VisionLink user interface can help you see how your machine or fleet is performing. You can use this information to make timely, fact-based decisions that can boost job site efficiency and productivity and lower costs.

# Cat Grade Control Depth and Slope

The factory integrated Cat Grade Control system delivers 2D bucket tip elevation guidance to the cab to help operators create precise planes and slopes with ease. Real-time bucket tip elevation guidance on the easy-to-read standard cab monitor indicates how much to cut or fill. Fast response sensors deliver immediate feedback, while optional integrated joystick buttons help operators make quick adjustments to maintain consistent, quality grades, Built-in alerts can be set to warn the operator if the linkage or bucket approaches a predefined elevation or depth, such as when working in areas with low ceilings, or digging near water lines. Staking and checking is minimized, which reduces ground crews and enhances job site safety.

Works best in simple 2D applications, such as digging basements or grading steep embankments. Easily upgrade to AccuGrade™ when 3D control is required.



# **Safety** Features to help protect people



# A Safe, Quiet Cab

The ROPS cab (ISO 12117-2) 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**

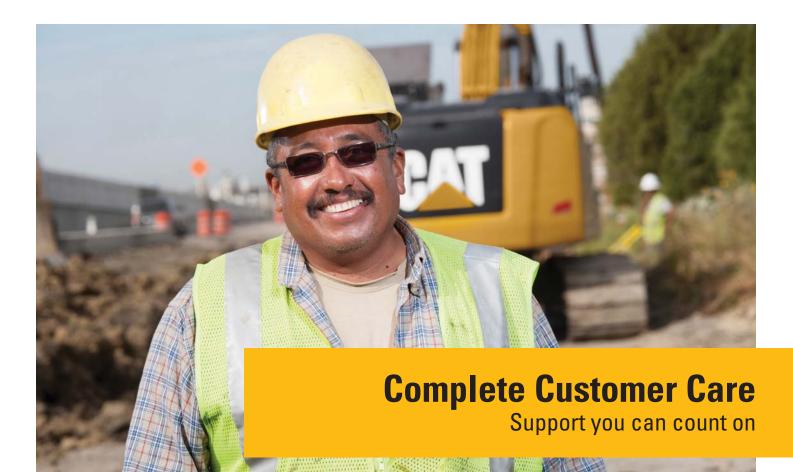
Multiple large steps get you into the cab as well as a leg up to the compartments. Extended right hand rails (ISO 2867) allow you to safely climb to the upper deck. Anti-skid plates reduce your slipping hazards in all types of weather conditions, and they can be removed for cleaning.

# Great Views with Cameras (ISO 5006)

Ample glass gives you excellent visibility out front and to the side, and the standard rearview camera and right hand side-view camera give you a clear field of view behind and side of 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.



# **Worldwide Parts Availability**

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 dayto-day operating costs. Look at dealer services that can be included in the machine's cost to yield lower owning and operating costs over time.

# Support Agreements to Fit Your Needs

Cat dealers offer a variety of customer support agreements and work with you to develop a plan to meet your specific needs. These plans can cover the entire machine, including attachments, to help protect your investment.

# Operating Techniques to Boost Your Profits

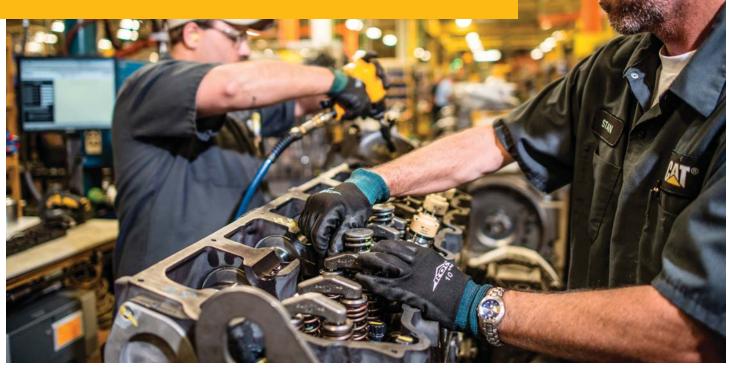
Improving operating techniques can boost your profits. Your Cat dealer has videos, literature, and other ideas to help you increase productivity. Caterpillar also offers simulators and certified operator training to help maximize the return on your investment.

# What's Best for You Today... and Tomorrow

Repair, rebuild, or replace? Your Cat dealer can help you evaluate the cost involved so you can make the best choice for your business.

# Sustainability

Generations ahead in every way



- The C4.4 ACERT engine meets Stage IV emission standards.
- The machine burns up to 5% less fuel than the model it replaces, which means less emissions.
- The engine can run on either ultra-low-sulfur diesel (ULSD) fuel with 10 ppm of sulfur or less or biodiesel (up to B20) fuel blended with ULSD.
- A ground-level overfill indicator rises when the tank is full to help the operator avoid spilling.
- The machine is built to be rebuilt with major structures and components capable of being remanufactured to reduce waste and replacement costs.
- The 323F LN is an efficient, productive machine that's designed to conserve our natural resources for generations ahead.





Engine	
Engine Model	Cat C4.4 ACERT
Engine Power – ISO 14396	122 kW/164 hp/166 ps
Net Power – SAE J1349	120 kW/161 hp/163 ps
Engine rpm	
Operation	1,800 rpm
Travel	1,800 rpm
Bore	105 mm
Stroke	127 mm
Displacement	4.4 L

# Weights

323F LN:	
Minimum Weight	22 300 kg
Maximum Weight	23 600 kg

- Minimum Operating Weight: Long narrow undercarriage, Reach boom 5.7 m, R 2.5 m stick, GD 1.3 m<sup>3</sup> bucket and 500 mm triple grouser shoes.
- Maximum Operating Weight: Long narrow undercarriage, VA boom, R 2.9 m stick, GD 1.3 m<sup>3</sup> bucket and 500 mm triple grouser shoes.

# **Hydraulic System**

Main System – Maximum Flow (Total)	428 L/min
Swing System – Maximum Flow	214 L/min
Maximum Pressure – Equipment	35 000/38 000 kPa
Maximum Pressure – Travel	35 000 kPa
Maximum Pressure – Swing	25 000 kPa
Pilot System – Maximum Flow	24.3 L/min
Pilot System – Maximum Pressure	3920 kPa
Boom Cylinder – Bore	120 mm
Boom Cylinder – Stroke	1260 mm
Stick Cylinder – Bore	140 mm
Stick Cylinder – Stroke	1504 mm
B1 Bucket Cylinder – Bore	120 mm
B1 Bucket Cylinder – Stroke	1104 mm

Drive	
Maximum Travel Speed	5.6 km/h
Maximum Drawbar Pull	205 kN
Gradeability	35°/70%

Swing Mechanism	
Swing Speed	11.2 rpm
Maximum Swing Torque	72 kN·m

# **Service Refill Capacities**

Fuel Tank Capacity	310 L
DEF Tank Capacity	21 L
Cooling System	30 L
Engine Oil (with filter)	25 L
Swing Drive	8 L
Final Drive (each)	8 L
Hydraulic System Oil Capacity (including tank)	260 L
Hydraulic Tank Oil	153 L
Track	
Number of Shoes (each side)	
Long/Long Narrow Undercarriage	49 pieces
Number of Track Rollers (each side)	
Long/Long Narrow Undercarriage	8 pieces
Number of Carrier Rollers (each side)	
Long/Long Narrow Undercarriage	2 pieces

# **Sound Performance**

ISO 6396	
Operator Sound	68 dB(A)
ISO 6395	
Spectator Sound	99 dB(A)

• Operator Sound – The operator sound level is measured according to the procedures specified in ISO 6394:1998, for cab offered by Caterpillar, when properly installed and maintained and tested with doors and windows closed.

• Exterior Sound – The labeled spectator sound power level is measured according to the test procedures and conditions specified in 2004/14/EC.

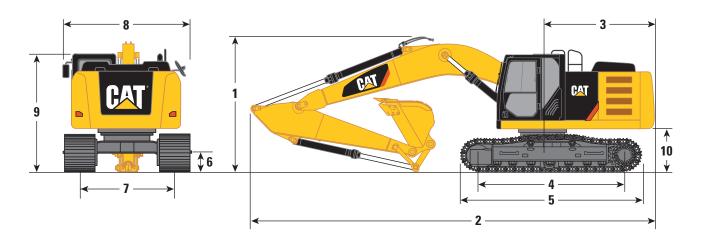
• Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained for doors/ windows open) for extended periods or in a noisy environment.

### **Standards**

Brakes	ISO 10265 2008
Cab/FOGS	ISO 10262 1998
Cab/ROPS	ISO 12117-2 2008

# **323F LN Dimensions**

All dimensions are approximate.

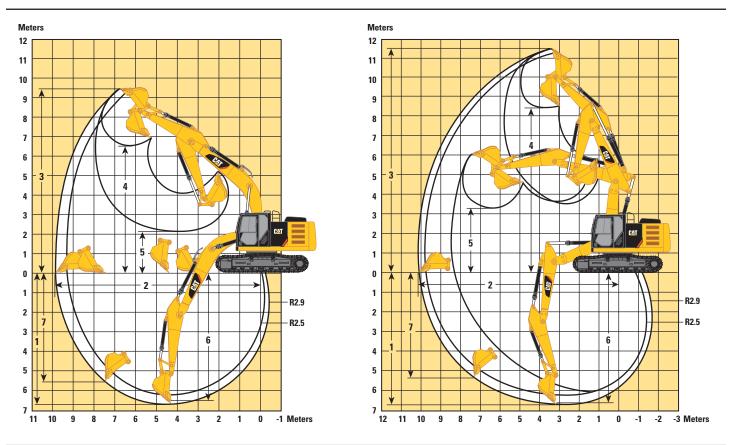


		Reach Boom 5.7 m		VA Boom	
Stick	R2.9*	R2.5*	R2.9*	R2.5*	
1 Shipping Height	3020 mm	3080 mm	3000 mm	3020 mm	
2 Shipping Length	9560 mm	9570 mm	9820 mm	9820 mm	
<b>3</b> Tail Swing Radius	2830 mm	2830 mm	2830 mm	2830 mm	
<b>4</b> Length to Center of Rollers	3650 mm	3650 mm	3650 mm	3650 mm	
<b>5</b> Track Length	4450 mm	4450 mm	4450 mm	4450 mm	
<b>6</b> Ground Clearance	450 mm	450 mm	450 mm	450 mm	
7 Track Gauge	2000 mm	2000 mm	2000 mm	2000 mm	
8 Transport Width					
500 mm Shoes	2550 mm	2550 mm	2550 mm	2550 mm	
9 Handrail Height	3010 mm	3010 mm	3010 mm	3010 mm	
<b>10</b> Counterweight Clearance	1020 mm	1020 mm	1020 mm	1020 mm	

\*With 1.3 m<sup>3</sup> bucket and 500 mm shoes.

# **323F LN Working Ranges**

All dimensions are approximate.



	Reach Boom 5.7 m		VA Boom	
Stick	R2.9	R2.5	R2.9	R2.5
1 Maximum Digging Depth	6710 mm	6290 mm	6680 mm	6270 mm
2 Maximum Reach at Ground Line	9850 mm	9450 mm	10 200 mm	9800 mm
3 Maximum Cutting Height	9450 mm	9240 mm	11 520 mm	11 180 mm
4 Maximum Loading Height	6500 mm	6300 mm	8410 mm	8070 mm
5 Minimum Loading Height	2180 mm	2600 mm	3270 mm	3670 mm
6 Maximum Depth Cut for 2440 mm Level Bottom	6540 mm	6100 mm	6580 mm	6170 mm
7 Maximum Vertical Wall Digging Depth	5690 mm	5290 mm	5340 mm	4940 mm

# 323F LN Operating Weight and Ground Pressure\*

	500 Triple Grou	
	kg	kPa
Reach Boom HD – 5.7 m		
R2.9 m Stick, 1.3 m <sup>3</sup> GD Bucket	22 300	55.7
R2.5 m Stick, 1.3 m <sup>3</sup> GD Bucket	22 300	55.7
VA Boom – 5.7 m		
R2.9 m Stick, 1.3 m <sup>3</sup> GD Bucket	23 600	58.9
R2.5 m Stick, 1.3 m <sup>3</sup> GD Bucket	23 600	58.9

\*Actual weights will depend on final configuration.

# **323F LN Major Component Weights**

	kg
Base Machine (with boom cylinder without counterweight, front linkage and track shoe)	7230
Long Narrow Undercarriage	4440
Counterweight	4550
Boom	
Reach Boom – 5.7 m (includes lines, pins and stick cylinder)	1740
Variable Angle Boom (includes lines, pins, stick cylinder and VAB cylinder)	3050
Stick (includes lines, pins, bucket cylinder and bucket linkage)	
R2.9	970
R2.5	970
Track Shoe (long/per two tracks)	
500 mm Triple Grouser	2440
1.3 m <sup>3</sup> GD Bucket	920

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

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

# **323F LN Bucket and Stick Forces**

	Reach 5.7	VA Boom		
Stick	R2.9	R2.5	R2.9	R2.5
	kN	kN	kN	kN
Bucket Digging Force (SAE)	126	126	126	126
Bucket Digging Force (ISO)	140	140	140	140
Stick Digging Force (SAE)	104	115	108	116
Stick Digging Force (ISO)	107	118	108	115

# 323F LN Reach Boom Lift Capacities – Counterweight: 4.55 mt – without Bucket, Heavy Lift: Off

2	.9 m -			•  5.7 m - <b>C</b>			<b>→</b>		0 mm iple Grouser	Shoes			3650 mm 4450 mm	
5	₽	1500	) mm	3000	mm	4500	) mm	6000	) mm	7500	) mm			번 19
	<u> </u>													mm
7500 mm	kg							*4550	*4550			*3900	*3900	6150
6000 mm	kg							*4900	*4900			*3650	3650	7290
4500 mm	kg							*5400	4850	*5050	3450	*3550	3100	7990
3000 mm	kg					*7850	6900	*6200	4600	*5400	3350	*3650	2800	8360
1500 mm	kg					*9500	6400	*7000	4350	*5800	3200	*3850	2700	8450
0 mm	kg			*6250	*6250	*10 450	6150	*7600	4200	5750	3150	*4250	2750	8260
-1500 mm	kg	*6650	*6650	*10 750	*10 750	*10 550	6050	*7800	4150	5700	3100	*5000	3000	7780
-3000 mm	kg	*11 400	*11 400	*14 000	11 300	*9850	6150	*7300	4150			*6000	3500	6950
-4500 mm	kg			*11 150	*11 150	*8000	6350					*6050	4750	5600
		*	±1				ISO 1056	57				ſ	$\square$	

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

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

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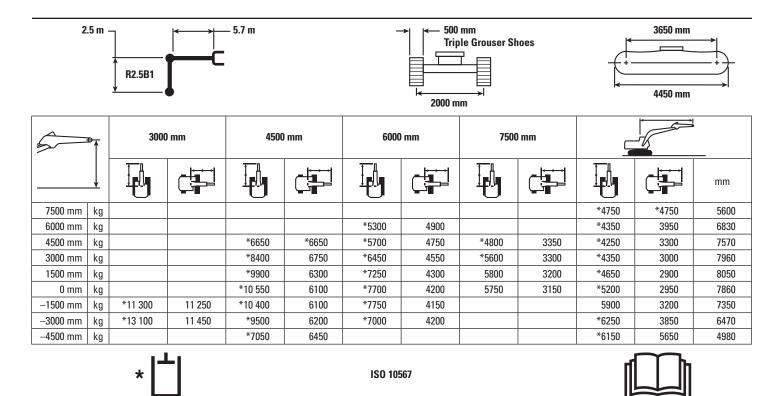
# 323F LN Reach Boom Lift Capacities – Counterweight: 4.55 mt – without Bucket, Heavy Lift: On

2	.9 m -	R2.9B1		• <u> </u>					0 mm iple Grouser	Shoes			3650 mm	
5	₽	1500	) mm	3000	mm	4500	) mm	6000	) mm	7500	) mm			치 과
														mm
7500 mm	kg							*4950	*4950			*4300	*4300	6150
6000 mm	kg							*5400	5000			*3950	3650	7290
4500 mm	kg							*5950	4850	*5600	3450	*3900	3100	7990
3000 mm	kg					*8650	6900	*6800	4600	*5950	3350	*4000	2800	8360
1500 mm	kg					*10 500	6400	*7750	4350	5850	3200	*4200	2700	8450
0 mm	kg			*6600	*6600	*11 500	6150	7950	4200	5750	3150	*4650	2750	8260
-1500 mm	kg	*7050	*7050	*11 400	11 150	*11 650	6050	7850	4150	5700	3100	5450	3000	7780
-3000 mm	kg	*12 100	*12 100	*15 450	11 300	*10 900	6150	7900	4150			6450	3500	6950
-4500 mm	kg			*12 350	11 650	*8850	6350					*6700	4750	5600
		*	±1				ISO 1056	57				ſ	$\square$	

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

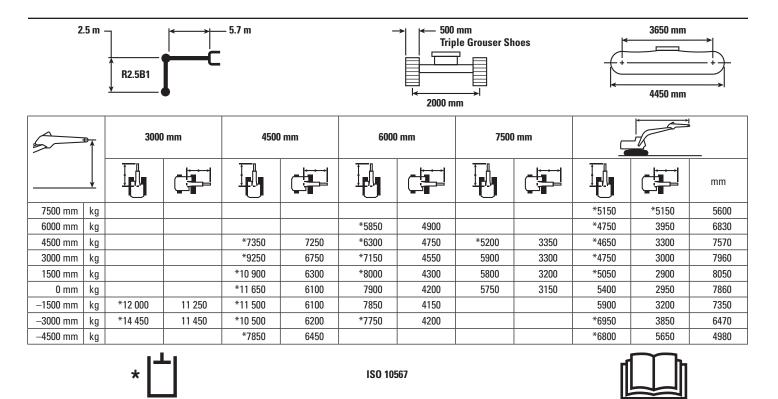
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Lift capacity stays with ±5% for all available track shoes.

# 323F LN Reach Boom Lift Capacities – Counterweight: 4.55 mt – without Bucket, Heavy Lift: On



\*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.

# 323F LN Variable Angle Boom Lift Capacities - Counterweight: 4.55 mt - without Bucket, Heavy Lift: Off

2	.9 m ·	R2.9B1		► VAB			→		0 mm iple Grouser	Shoes			3650 mm 4450 mm	
5	₽	1500	) mm	3000	mm	4500	) mm	6000	) mm	7500	) mm		i de la constante de la consta	1 2
	<u> </u>													mm
9000 mm	kg					*4650	*4650					*4750	*4750	4880
7500 mm	kg					*6450	*6450	*3900	*3900			*3950	*3950	6620
6000 mm	kg					*6650	*6650	*4750	*4750	*3700	3350	*3650	3200	7690
4500 mm	kg			*10 550	*10 550	*6600	*6600	*4700	4700	*3750	3300	*3550	2700	8350
3000 mm	kg			*9950	*9950	*6350	*6350	*4050	*4050	*3950	3150	*3600	2450	8710
1500 mm	kg			*5950	*5950	*5950	5950	*4550	4050	*4450	3000	*3800	2350	8790
0 mm	kg	*6600	*6600	*5350	*5350	*7800	5600	*5400	3850	*5050	2850	*4100	2400	8610
-1500 mm	kg	*8200	*8200	*8500	*8500	*8300	5550	*6450	3750	*4800	2850	*3900	2550	8160
-3000 mm	kg	*13 200	*13 200	*8850	*8850	*6200	5650	*4900	3800			*3250	3000	7340
-4500 mm	kg	*20 650	*20 650	*9150	*9150	*5750	*5750					*4800	4700	5350
		*	<u>+</u>				ISO 1056	57						

\*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.

# 323F LN Variable Angle Boom Lift Capacities – Counterweight: 4.55 mt – without Bucket, Heavy Lift: On

2	.9 m ·	R2.9B1		→  VAB • <b>C</b>			<b>→</b>		0 mm iple Grouser	Shoes			3650 mm	
5	₽	1500	) mm	3000	) mm	4500	) mm	6000	) mm	7500	) mm			1 2
	•			Ī										mm
9000 mm	kg					*5100	*5100					*5150	*5150	4880
7500 mm	kg					*7050	*7050	*4300	*4300			*4300	4150	6620
6000 mm	kg					*7250	*7250	*5200	4900	*4050	3350	*4000	3200	7690
4500 mm	kg			*11 550	*11 550	*7250	*7250	*5150	4700	*4100	3300	*3900	2700	8350
3000 mm	kg			*10 950	*10 950	*7000	6550	*4350	*4350	*4300	3150	*3950	2450	8710
1500 mm	kg			*6300	*6300	*6350	5950	*4900	4050	*4850	3000	*4150	2350	8790
0 mm	kg	*7000	*7000	*5700	*5700	*8350	5600	*5750	3850	*5500	2850	*4500	2400	8610
-1500 mm	kg	*8700	*8700	*9000	*9000	*9300	5550	*7200	3750	*5400	2850	*4400	2550	8160
-3000 mm	kg	*14 000	*14 000	*9950	*9950	*6950	5650	*5500	3800			*3650	3000	7340
-4500 mm	kg	*22 100	*22 100	*10 250	*10 250	*6500	5900					*5400	4700	5350
		*	<b>-</b>				ISO 1056	7						

\*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.

# 323F LN Variable Angle Boom Lift Capacities - Counterweight: 4.55 mt - without Bucket, Heavy Lift: Off

2	.5 m ∙	R2.5B1		► VAB			→		0 mm iple Grouser	Shoes			3650 mm 4450 mm	
	₽	1500	) mm	3000	mm	4500	) mm	6000	) mm	7500	) mm		in the second se	1 2
	<u> </u>													mm
9000 mm	kg											*5950	*5950	4110
7500 mm	kg					*6850	*6850	*4900	4800			*4750	4700	6080
6000 mm	kg					*6800	*6800	*4450	*4450			*4350	3450	7230
4500 mm	kg			*10 350	*10 350	*6600	*6600	*4300	*4300	*4350	3200	*4250	2900	7930
3000 mm	kg			*9450	*9450	*6100	*6100	*4250	*4250	*4550	3100	*4300	2600	8300
1500 mm	kg			*6800	*6800	*6400	5800	*4850	4000	*5250	2950	*4500	2500	8390
0 mm	kg	*9250	*9250	*6000	*6000	*8500	5600	*5750	3850	*5450	2850	*4550	2550	8210
-1500 mm	kg	*10 400	*10 400	*8800	*8800	*7700	5600	*6100	3800	*4350	2850	*4000	2750	7720
–3000 mm	kg	*16 350	*16 350	*9050	*9050	*5700	*5700	*4250	3850			*3650	3350	6770
-4500 mm	kg	*21 100	*21 100	*9400	*9400							*6550	*6550	4140
		*	<u>_</u>				ISO 1056	57						

\*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.

# 323F LN Variable Angle Boom Lift Capacities – Counterweight: 4.55 mt – without Bucket, Heavy Lift: On

2	.5 m ·	R2.5B1		→  VAB • <b>C</b>			$\rightarrow$		0 mm iple Grouser	Shoes			3650 mm 4450 mm	
5	₽	1500	) mm	3000	) mm	4500	) mm	6000	) mm	7500	) mm			1 2
	•													mm
9000 mm	kg											*6450	*6450	4110
7500 mm	kg					*7500	*7500	*5350	4800			*5200	4700	6080
6000 mm	kg					*7450	*7450	*4850	4800			*4750	3450	7230
4500 mm	kg			*11 350	*11 350	*7250	7100	*4600	*4600	*4750	3200	*4650	2900	7930
3000 mm	kg			*9950	*9950	*6550	6350	*4550	4300	*5000	3100	*4700	2600	8300
1500 mm	kg			*7200	*7200	*6850	5800	*5150	4000	5650	2950	4800	2500	8390
0 mm	kg	*9800	*9800	*6400	*6400	*9100	5600	*6150	3850	5550	2850	4900	2550	8210
-1500 mm	kg	*11 000	*11 000	*9900	*9900	*8650	5600	*6850	3800	*4900	2850	*4500	2750	7720
3000 mm	kg	*17 250	*17 250	*10 150	*10 150	*6400	5700	*4800	3850			*4150	3350	6770
-4500 mm	kg	*23 400	*23 400	*10 500	*10 500							*7350	6900	4140
		*	<u>+</u>				ISO 1056	57						

\*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.

# 323F LN Work Tool Offering Guide\*

Boom Type		Reac	h Boom	VA	Boom
Stick Size		HD R2.5	HD R2.92	HD R2.5	HD R2.92
Undercarriage/Counterweight	t		LN/Standard	Counterweight	
Hydraulic Hammer		H120Es H130Es	H120Es H130Es	H120Es H130Es^^	H120Es H130Es^
Multi-Processor		MP318 CC Jaw MP318 D Jaw MP318 P Jaw^^ MP318 U Jaw MP318 S Jaw	MP318 CC Jaw^^ MP318 D Jaw^^ MP318 P Jaw^ MP318 U Jaw^^ MP318 S Jaw	MP318 CC Jaw*** MP318 D Jaw^ MP318 P Jaw*** # MP318 U Jaw*** MP318 S Jaw^	MP318 CC Jaw*** # MP318 D Jaw*** # MP318 P Jaw MP318 U Jaw*** # MP318 S Jaw***
Crusher		P315	P315^^	P315^	P315*** #
Pulverizer		P215	P215	P215^^	P215^
Demolition and Sorting Gra	pple	G315B-D/R G315B-WH G315B-D/R fixed CAN	G315B-D/R^^ G315B-WH G315B-D/R fixed CAN	G315B-D/R^ G315B-WH** G315B-D/R fixed CAN#	G315B-D/R*** # G315B-WH^ G315B-D/R fixed CAN
Scrap and Demolition Shear		S320B^^ S325B##	S320B^ S325B##	S320B*** # S325B##	S320B*** # S325B##
Compactor (Vibratory Plate)	)	CVP110	CVP110	CVP110	CVP110
Orange Peel Grapple					
Rippers		-			
Pin Grabber Coupler	Cat-PG	-	These work tools are av	vailable for the 202E L	NT.
Dedicated Quick Coupler	CW-40	-		aler for proper match.	Ν.
	CW-40s	-		r r m	
	CWAC-40 (autoconnect)	-			

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

\*\*Pin-on or CW.

\*\*\*Pin-on only.

#Work over the front only.

##Boom mount.

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

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

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

# **323F LN Bucket Specifications and Compatibility**

		Width	Capacity	Weight	Fill	Reach	Boom	VA E	loom
	Linkage	mm	m <sup>3</sup>	kg	%	R2.5	R2.9	R2.5	R2.9
Without Quick Coupler									
General Duty (GD)	В	600	0.46	549	100%				
	В	750	0.64	620	100%				
	В	900	0.81	666	100%				
	В	1200	1.19	800	100%	۲	θ	0	0
	В	1300	1.30	832	100%	θ	θ	0	$\diamond$
	В	1400	1.43	867	100%	θ	0	$\diamond$	$\diamond$
Heavy Duty (HD)	В	1050	1.00	879	100%		۲	θ	0
	В	1200	1.19	906	100%	۲	θ	0	0
	В	1200	1.19	917	100%	۲	θ	0	0
	В	1200	1.19	970	100%	θ	θ	0	$\diamond$
	В	1300	1.30	960	100%	θ	0	0	$\diamond$
Severe Duty (SD)	В	1050	1.00	962	90%			θ	θ
	М	aximum load	pin-on (paylo	ad + bucket)	kg	2997	2790	2475	2303
With Pin Grabber Coupler								·	
General Duty (GD)	В	600	0.46	549	100%	4401	3954	3274	2903
	В	750	0.64	620	100%				۲
	В	900	0.81	666	100%			۲	θ
	В	1200	1.19	800	100%	θ	0	$\diamond$	$\diamond$
	В	1300	1.30	832	100%	0	0	$\diamond$	Х
	В	1400	1.43	867	100%	0	$\diamond$	Х	Х
	В	1500	1.58	906	100%	$\diamond$	$\diamond$	Х	Х
Heavy Duty (HD)	В	1050	1.00	879	100%	θ	θ	0	$\diamond$
	В	1200	1.19	906	100%	0	0	$\diamond$	Х
	В	1200	1.19	917	100%	0	0	$\diamond$	Х
	В	1200	1.19	970	100%	0	0	$\diamond$	Х
	В	1300	1.30	960	100%	0	$\diamond$	Х	Х
Severe Duty (SD)	В	1050	1.00	962	90%	۲	θ	0	$\diamond$
	М	aximum load	pin-on (paylo	ad + bucket)	kg	2587	2380	2065	1893
With Quick Coupler (CW40, CW40	s)								
General Duty (GD)	В	600	0.46	502	100%				
	В	750	0.64	587	100%				
	В	900	0.81	653	100%			۲	۲
	В	1200	1.19	767	100%	θ	θ	0	$\diamond$
	B	1300	1.30	798	100%	Ð	0	$\diamond$	$\diamond$
	B	1400	1.43	834	100%	0	0	$\diamond$	X
Heavy Duty (HD)	B	600	0.46	584	100%			Ě	
	B	1200	1.19	873	100%	θ	0	$\diamond$	$\diamond$
	B	1200	1.19	927		0	0	$\diamond$	$\diamond$
				-	100%		1	1	
	Maximu	m load with c	oupler (paylo	ad + bucket)	kg	2745	2538	2223	2051

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/m<sup>3</sup>
- 1800 kg/m<sup>3</sup>
- ⊖ 1500 kg/m<sup>3</sup>
- O 1200 kg/m<sup>3</sup>
- ♦ 900 kg/m³
- X Not Recommended

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

# **Standard Equipment**

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

### ENGINE

- C4.4 ACERT meets Stage IV emission standards
- Three selectable power modes
- HP, STD and ECO
- Variable-speed fan with viscous clutch
- One-touch low idle with automatic engine speed control
- Automatic engine idle shutdown
- Three-stage fuel filtration system with water separator and indicator
- 3000 m altitude capability without derate
- 52° C high-ambient cooling capacity with derate from 48° C
- -18° C cold start capability
- 85 amp alternator
- Radial seal air filter with double filter element
- Electric fuel lifting pump
- Capability of using biodiesel fuel (up to B20)
- Air precleaner
- Electric refueling pump with auto shut off

### HYDRAULICS

- Tool control
- Quick coupler control
- Smart boom
- Electric boom regeneration circuit
- Stick regeneration circuit
- One-touch lifting mode
- Automatic two-speed travel
- Reverse swing damping valve
- High-performance hydraulic return filter
- CRN compliant accumulator

### CAB

- Sound suppressed ROPS cab with viscous mount
- Openable skylight as emergency exit
- Openable laminated front upper windshield with assist device
- Removable tempered lower windshield with in-cab storage bracket
- High back seat with air suspension, seat heater and head rest
- Fully adjustable seat, console and armrest
- 51 mm width seat belt
- Full graphic 233 mm × 130 mm (7 inch) LCD monitor with distortion-free rearview camera picture
- Automatic bi-level air conditioner with pressurized function
- · Radial wiper with lower wiper
- 12V radio ready with stereo speakers and flexible antenna
- 12V × 2 power supply with sockets (maximum 10 amp)
- Washable floor mat
- Interior utilities
- -Interior lighting
- -Coat hook
- Beverage holder
- Literature holder
- Document holding space
- -Cab rear storage compartment
- Sun screen roll type for 70/30 window

### UNDERCARRIAGE AND STRUCTURES

- 4550 kg standard counterweight
- 500 mm triple grouser
- HD track rollers
- Segmented (two-piece) track guiding guard
- Grease lubricated track link
- Tie down points on base frame
- HD bottom guard
- Swivel guard
- HD travel motor guard
- Bucket linkage, B1 family with lifting eye

### ELECTRICAL

- Maintenance-free battery
- · Centralized electrical disconnect switch
- Programmable time-delay halogen working lights
- -Storage box mounted (one)
- -Cab mounted (two)
- -Boom mounted LH and RH (two)

### SERVICE AND MAINTENANCE

- Engine oil, fuel, and hydraulic oil filters grouped for ease of maintenance
- Sampling ports for Scheduled Oil Sampling  $(S{\cdot}O{\cdot}S^{\text{SM}})$
- Three side by side cooling package for easy maintenance

### **SAFETY AND SECURITY**

- Rearview camera, right hand side-view camera with two mounted on cab
- RH hand rail and hand hold
- Bolt-free service platform with antiskid plate
- Neutral lever (lock out) for all controls
- Ground-level accessible secondary engine shutoff switch in cab
- Signaling/warning horn
- Safety hammer for cab evacuation
- Boom lowering control device and stick lowering check valve

### TECHNOLOGY

Cat Product Link

# **323F LN Optional Equipment**

# **Optional Equipment**

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

# ENGINE

- Cold weather battery,  $-32^{\circ}\ C$ 

# HYDRAULICS

• Medium-pressure circuit

# CAB

• Straight travel pedal

# UNDERCARRIAGE AND STRUCTURES

- Standard Reach 5.7 m boom with
- -2.9 m stick -2.5 m stick
- VA boom with
- -2.9 m stick
- -2.5 m stick

# **SAFETY AND SECURITY**

• Two RH side mirrors

# TECHNOLOGY

• Cat Grade Control Depth and Slope

# DEALER INSTALLED KITS AND ATTACHMENTS

- FOGS (bolt-on)
- 76 mm width seat belt
- FOGS Retrofit Kit PKG
- Mesh for front guard Retrofit Kit PKG
- Security systems (MSS)
- Rain protector for front windshield

# Notes

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

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AEHQ7924 (10-2016) (EU)

