CAT®

320D2
Hydraulic Excavator 2017



Engine		Weights			
Engine Model	Cat® C7.1	Operating Weight – Std. Undercarriage	21 200 kg-	46,700 lb-	
Engine Power (ISO 14396)	112 kW 150 hp		21 700 kg	47,800 lb	
Net Power (SAE J1349)	109 kW 146 hp				

320D2 Differentiating Features

Engine and Hydraulics

A powerful Cat C7.1 engine meets U.S. EPA Tier 3, EU Stage IIIA equivalent, and China Nonroad Stage III emission standards combined with mechanical governed fuel system which is well suited for local fuels in your regions. The 320D2 maintains the same extraordinary performance.

Structures

Caterpillar design and manufacturing techniques assure you get outstanding durability and service life in the toughest applications.

Operator Station

The spacious cab features excellent visibility and easy-to-access switches. The monitor features a full-color graphical display that is user intuitive and highly visual. Overall, the new cab provides you with a comfortable working environment for maximum production and efficiency.

Reduced Service and Maintenance Cost

Routine service and maintenance can be completed quickly and easily to help you reduce ownership costs. Convenient access points, extended service intervals, and advanced filtration help keep downtime to a minimum.

Complete Customer Support

Your Cat dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment.

Cat 320D2 Total Solutions

Caterpillar and its extensive dealer network offer a wide variety of solutions designed to meet the unique needs of your business.

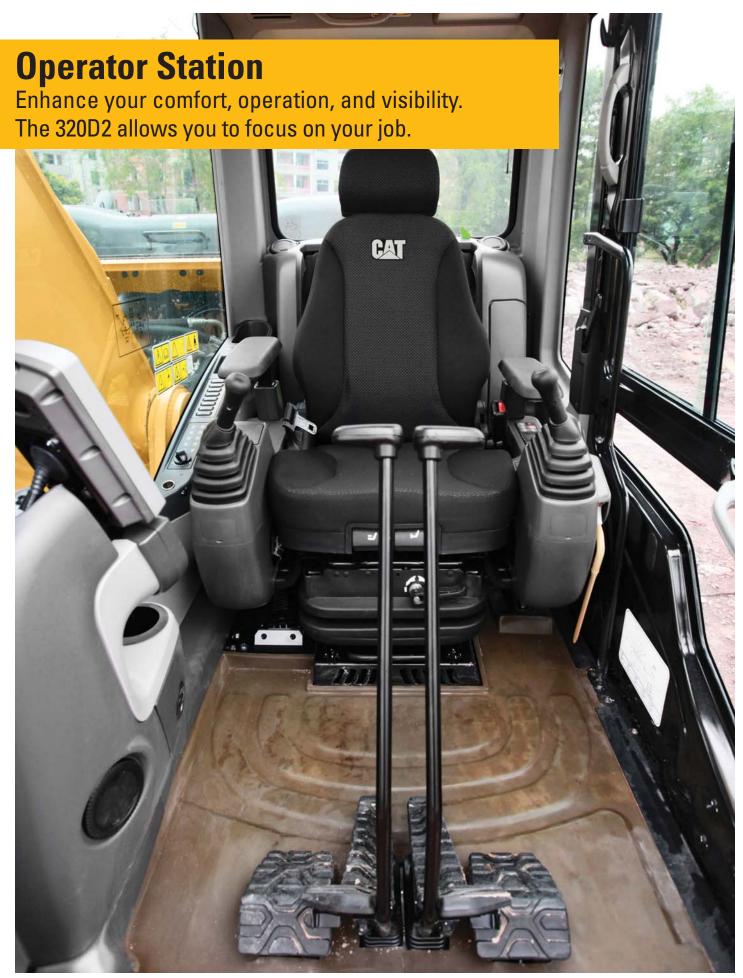
Contents

Operator Station	4
Engine	6
Hydraulics	7
Undercarriage and Structures	8
Front Linkage	g
Service and Maintenance	10
Complete Customer Support	11
Attachments	
Safety	
Specifications	15
Standard Equipment	27
Optional Equipment	28
Notes	20





The 320D2 carries long time proven features and is configured for heavy construction, to improve your job site efficiency through low owning and operating costs, excellent performance, and high versatility. It will deliver great fuel savings and productivity in truck loading, trenching and lifting.



Operator Station

The ergonomically designed operator station is spacious, quiet, and comfortable, assuring high productivity during a long work day. All switches are located in front of the operator for convenient access.

Monitor

The monitor is a full-color Liquid Crystal Display (LCD) that has the capability of displaying information in 42 languages.

Joystick Control

Low-effort pilot-operated joystick controls are designed to match your natural wrist and arm position for maximum comfort and minimum fatigue.

Seat

The suspension seat provides a variety of adjustments to accommodate a wide range of operators. All seats include a reclining back, upper and lower seat slide adjustments, and height and tilt adjustments, to meet operator needs for comfort and productivity.

Console

The right and left joystick console can be adjusted to meet individual preferences, improving operator comfort and productivity during the course of a day.

Climate Control

Positive filtered ventilation with a pressurized cab is standard. Fresh air or re-circulated air can be selected with a switch on the left console.

Cab Structure and Mounts

The cab shell features a thick steel tubing. This improves resistance to fatigue and vibration. The cab is attached to the frame with viscous rubber cab mounts, which dampen vibrations and sound levels while enhancing operator comfort.

Windows

To maximize visibility, all glass is affixed directly to the cab, eliminating window frames. The upper front windshield opens, closes, and stores on the roof above the operator with a one-touch action release system.

Wipers

Pillar-mounted wipers increase your operator's viewing area and offer continuous and intermittent modes.







Engine

A powerful engine with excellent reliability and low fuel consumption delivering more while boosting your bottom line.



The Cat C7.1 engine has been designed to meet Tier 3, Stage IIIA equivalent, and China Stage III Nonroad emission standards with mechanical governed fuel system. The engine is powerful, strong, and durable to meet all of your application needs. An ECO-mode feature helps reduce fuel consumption by up to 15 percent for fuel-conscious customers. The C7.1 engines incorporate proven, robust components and precision manufacturing you can count on for reliable and efficient operation. This engine is less sensitive to low quality fuel and also delivers better fuel consumption.

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. Optional 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 C7.1 engine features an improved filtration system to ensure good reliability to fuel injection system components. Intervals have been extended and the number of filters reduced to maximize your profit potential.

Variable Speed Fan

Variable speed fan controlled by ECM reduces fuel consumption and noise.

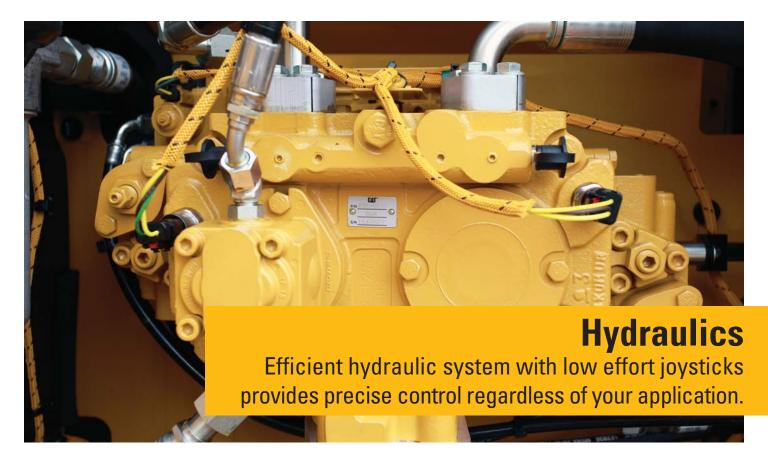


Electric Priming Pump

Eliminate the need for manual priming of fuel after filter changes. This pump reduces the risk of fuel contamination by preventing unfiltered fuel from being backfilled during filter changes as was possible with a manual hand priming pump.

Automatic Engine Speed Control

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



Hydraulic System

Hydraulic system pressure is 35 000 kPa (5,076 psi) with 202 L/min (53.36 gal/min) flow from each of the two hydraulic pumps for increased digging performance and productivity.

Pilot System

An independent pilot pump enables smooth precise control for the front linkage, swing, and travel operations.

Component Layout

The 320D2 hydraulic system and component locations have been designed to provide a high level of system efficiency. The main pumps, control valves, and hydraulic tank are located close together to allow for shorter tubes and lines between components, which reduce friction loss and pressure drops.

Hydraulic Cross-Sensing System

The hydraulic cross-sensing system utilizes each of two hydraulic pumps to 100 percent of engine power under all operating conditions. This improves productivity with faster implement speeds and quicker, stronger pivot turns.

Auxiliary Hydraulic Valve

Control circuits are available as attachments to improve versatility. They allow operation of high- and medium-pressure tools such as shears, grapples, hammers, pulverizers, multiprocessors, and vibratory plate compactors.

Boom and Stick Regeneration Circuit

Boom and stick regeneration circuits save energy during boom-down and stick-in operation which increases efficiency, reduces cycle times and pressure loss for higher productivity, lower operating costs, and increased fuel efficiency.

Hydraulic Cylinder Snubbers

Snubbers are located at the rod-end of the boom cylinders and both ends of the stick cylinders to cushion shocks while reducing sound levels and extending component life.

Hydraulic Return Capsule Filter

Capsule filter with a cartridge inside to avoid contamination when accessing the filter and enable changing cleanly without oil spillage. The capable filter with fine mesh size filtering out impurities has a sensor that indicates to the operator if the filter is clogged.

Undercarriage and Structures

Strong and durable, all you expect from Cat excavators.





Carbody Design and Track Roller Frames

The X-shaped, box-section carbody provides excellent resistance to torsional bending. Robot-welded track roller frames are press-formed, pentagonal units to deliver exceptional strength and service life.

Main Frame

The upper frame is designed using inverse "T" shaped beams made out of high-tensile-strength steel providing excellent durability whatever your application. The 320D2 incorporates a one-piece upper frame table which improves strength and reliability. Both the boom tower and the main frame are constructed of solid plates and the areas adjacent to the boom foot are reinforced, adding to overall durability.

Lower Structure

The 320D2 carbody features a box section "X" structure which is designed with the carbody welded close to the ends of the track roller frame. As a result, overall rigidity is high and resistance to torsional rigidity between the track roller frames and the carbody is also high. The standard undercarriage is well suited for applications that require frequent repositioning of the machine, restricted work space, or uneven rocky terrain. The standard undercarriage maintains great stability, lift capacity and offers a very stable work platform.

Rollers and Idlers

Sealed and lubricated track rollers, carrier rollers, and idlers provide excellent service life to keep your machine in the field and working longer.

Undercarriage

The 320D2 uses a grease-lubricated type track link with grease being sealed between the pin and the bushing.

These seals deliver longer wear life by preventing dirt and debris from entering into the space between the pin and the bushing. The master link incorporates a split type pin which helps make routine service and maintenance quick and easy.

Front Linkage

Reliable, durable, and versatile to meet all your application needs.



Cat front linkages are designed for maximum versatility, productivity, and high efficiency whatever the application.

Heavy Duty Front Linkage

The 5.7 m (18'8") heavy duty (HD) reach boom is reinforced to be used in the severest applications and provide maximum digging capability. They are made of high-tensile-strength steel using a large box-section design with interior baffle plates and an additional bottom guard for long life and durability. The HD reach boom has three stick options available to meet all your application requirements.

The 2.9 m (9'6") heavy duty (HD) stick is the most versatile option and a very good fit for truck loading and trenching applications where you need additional working range.

The 2.9 m (9'6") heavy duty (HD) stick with rebars provides excellent protection in applications such as rocky material handling, greatly extending the life of sticks.

The 2.5 m (8'2") heavy duty (HD) stick is ideally suited to applications requiring larger bucket sizes. It maximizes digging forces and enables you to get your jobs completed faster.



Service and Maintenance

Simplified service and maintenance features save you time and money.

Ground-Level Service

The design and layout of the 320D2 was made with the service technician in mind. Most service locations are easily accessible at ground level to allow service and maintenance to get completed quickly and efficiently.

Air Filter Compartment

The air filters feature a double-element construction for superior cleaning efficiency. When the air filter plugs, a warning is displayed on the cab monitor. Maintenance free batteries are standard along with a battery disconnect switch.



Pump Compartment

A service door on the right side of the upper structure allows ground-level access to the hydraulic pumps, hydraulic filters, engine oil filter, and fuel filters.

Radiator Compartment

The left rear service door allows easy access to the engine radiator, hydraulic oil cooler, air-to-air aftercooler, and AC condenser. A reserve tank and drain cock are attached to the radiator for ground level maintenance.

Greasing Points

A concentrated remote greasing block on the boom allows the greasing of hard-to-reach locations. A remote mounted greasing point on the swing bearing allows ease of service.

Diagnostics and Monitoring

The 320D2 is equipped with Scheduled Oil Sampling ($S \cdot O \cdot S^{SM}$) ports for the hydraulic system, engine oil, and coolant. Standard hydraulic test ports enable a service technician to quickly and easily fault find in the event of service issue.





Product Support

Cat dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime. You can also save money with our line of remanufactured components.

Machine Selection

Your Cat dealers can provide specific recommendations with detailed comparisons of the Cat machines you are considering before you buy. This ensures you get the right size machine and appropriate work tools to meet all of your application needs.

Maintenance Services

Repair option programs guarantee the cost of repairs up front. Condition monitoring services and diagnostic programs such as scheduled oil sampling, coolant sampling, and technical analysis help you avoid unscheduled repairs.

Customer Support Agreements

Cat dealers offer a variety of product support agreements which can be tailored to meet your specific needs. These plans can cover the entire machine – including attachments – to help protect your investment.

Replacement

Repair, rebuild, or replace? Your Cat dealers can help you evaluate the costs involved so you can make the right choice.

Attachments

Dig, hammer, rip, and cut with confidence.



Each Cat work tool is designed to optimize the versatility and performance of your machine. An extensive range of buckets, compactors, grapples, multi-processors, rippers, crushers, pulverizers, hammers, and shears is available for your 320D2.

General Duty Buckets (GD)

These buckets are designed for digging in low-impact, moderately abrasive materials such as dirt, loam, gravel, and clay.

Heavy Duty Buckets (HD)

HD buckets are a good starting point when application conditions vary. Especially when conditions include mixed dirt, clay, sand, and gravel.

Severe Duty Buckets (SD)

These buckets are best suited to highly abrasive applications such as shot rock, sand stone, and granite.

1) General Duty Buckets (GD) 2) Heavy Duty Buckets (HD) 3) Severe Duty Buckets (SD)

Couplers

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

Cat Pin Grabber Couplers

The Cat Pin Grabber Coupler is easy to activate, easy to engage, easy to disengage. Operating procedures are simple and easy to learn. It's the easiest way to improve productivity on every job site.

One excavator can share buckets and a variety of attachments with similar size excavators. Managing your assets just got easier.

E Series Hammers

E Series hammers bring together customer expectations of performance, quality, and serviceability along with Caterpillar manufacturing and logistics experience.

E Series hammers are quiet, and noise suppression is valuable in urban and restricted work areas.

Pin-on Rippers, Rip and Load Package

Constructed from high-strength steels and built to last, Cat rippers endure in the toughest conditions. The box-section structure is reinforced for maximum rigidity, transmitting the full machine power to the material being ripped. Rippers feature a replaceable wear tip, and most models also come equipped with a replaceable shank protector.

Grapples

Cat grapples replace the bucket on Cat excavators, converting them to the ideal machine for handling loose material, sorting trash, and demolition site cleanup. An array of styles and sizes are available to match excavators to the task at hand.

Multi-Processors

Multi-processors do the work of many types of demolition tools by use of interchangeable jaw sets. Changing jaws allows a single unit to crush, pulverize, and perform a variety of specialized cutting tasks such as cutting steel rebar and tanks.

Shear

Cat shears are designed for Cat machines – taking full advantage of the hydraulic flows and pressures to enhance productivity without compromising safety or causing premature wear of the shear and carrier.

Pulverizer

The excavator mounted mechanical pulverizer is a cost-effective tool for recycling demolished concrete debris. The bucket cylinder on the excavator powers the mechanical pulverizer. This eliminates the need for a dedicated cylinder and associated hydraulics and additional installation cost.

Vibratory Plate Compactor

Compactors enhance the versatility of your excavator and makes compacting faster, more efficient, and cost-effective. Cat compactors are the superior choice for any job site's compaction tasks.

Crusher

The hydraulic concrete crusher has taken modern demolition technology a step further. It is well suited for concrete demolition in residential areas. The hydraulic concrete crusher combines several concrete demolition operations in one piece of equipment:

- breaking out concrete from fixed structures
- · pulverizing concrete
- cutting reinforcement rods and small steel profiles













Anti-skid plating with countersunk bolts reduces the potential for slippage and trip hazards, providing a **safe platform** for all routine service and maintenance needs.

The standard **hydraulic lockout lever** isolates all hydraulic and travel functions in the lowered position. It is specifically designed to not allow the operator to leave the cab without first lowering it.

Three circuit breakers protect critical electrical components to increase machine uptime.

A **battery disconnect switch** helps to deter theft by isolating the battery and enhances safety when servicing the machine.

A full length **firewall** separates the engine from the hydraulic pump and offers protection in the event of an incident.

Ground level **shut-off switch** stops all fuel to the engine when activated and shuts down the machine.

The engine radiator fan is enclosed by a steel **fan guard** that provides maximum protection when carrying out routine service and maintenance.







Engine		
Engine Model	Cat C7.1	
Engine Power – ISO 14396	112 kW	150 hp
Net Power – SAE J1349	109 kW	146 hp
Engine RPM	1,800 rpm	
Bore	105 mm	4.13 in
Stroke	135 mm	5.31 in
Displacement	7.01 mm	428 in ³

- The 320D2 meets Tier 3, Stage IIIA equivalent, and China Stage III Nonroad emission standards.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- The altitude capability (without aid) of 320D2 is up to 4000 m (13,120 ft) with natural power de-rate above sea level.
- Rating at 1,800 rpm.

Weights		
Minimum Operating Weight*	21 200 kg	46,700 lb
Maximum Operating Weight**	21 700 kg	47,800 lb

- *R5.7 (18'8") HD Reach Boom, R2.5B1 (8'2") Reach stick, HD 1.00 m³ (1.3 yd³) bucket and 600 mm (24") shoes.
- **R5.7 (18'8") HD Reach Boom, R2.9B1 (9'6") HD Reach stick, HD 1.00 m³ (1.3 yd³) bucket and 790 mm (31") TG shoes.

45 pieces
7 pieces
2 pieces

Swing Mechanism		
Swing Speed	10.9 rpm	
Swing Torque	61.8 kN·m	45,581 lbf-ft

Drive		
Maximum Travel Speed – High	5.4 km/h	3.4 mph
Maximum Drawbar Pull	205 kN	46,086 lb

Hydraulic System		
Main System – Maximum Flow (Total)	404 L/min	106.7 gal/min
Maximum Pressure – Equipment	35 MPa	5,076 psi
Maximum Pressure – Travel	35 MPa	5,076 psi
Maximum Pressure – Swing	25 MPa	3,626 psi
Pilot System – Maximum Flow (Total)	32.4 L/min	8.6 gal/min
Pilot System – Maximum Pressure	3900 kPa	566 psi
Boom Cylinder – Bore	120 mm	4.7 in
Boom Cylinder – Stroke	1260 mm	49.6 in
Stick Cylinder – Bore	140 mm	5.5 in
Stick Cylinder – Stroke	1504 mm	59.2 in
Bucket Cylinder – Bore	120 mm	4.7 in
Bucket Cylinder – Stroke	1104 mm	43.5 in

Service Refill Capacities		
Fuel Tank Capacity	410 L	108.3 gal
Cooling System	25 L	6.6 gal
Engine Oil	22 L	5.8 gal
Swing Drive	8 L	2.1 gal
Final Drive	8 L	2.1 gal
Hydraulic System (including tank)	260 L	68.7 gal
Hydraulic Tank	138 L	36.5 gal

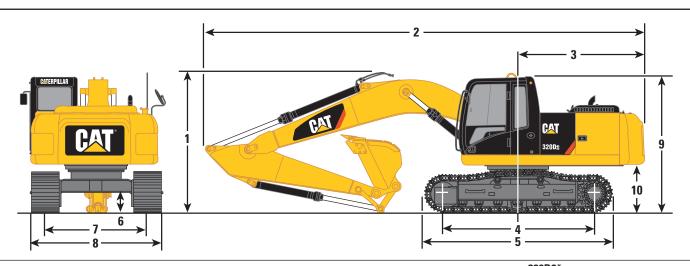
Sound Performance	
ISO 6395 (external)	102 dB(A)
ISO 6396 (inside cab)	72 dB(A)

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets the 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 a noisy environment.

Standards	
Brakes	ISO 10265:2008
Cab/FOGS	ISO 10262:1998

Dimensions

All dimensions are approximate.



	320	320D2*		
Boom Option	HD Reach Boom 5.7 m (18'8")			
Stick Options	HD R2.9B1 (9'6")	HD R2.5B1 (8'2")		
1 Shipping Height**	3030 mm (9'11")	3050 mm (10'0")		
2 Shipping Length	9460 mm (31'0")	9460 mm (31'0")		
3 Tail Swing Radius	2750 mm (9'0")	2750 mm (9'0")		
4 Length to Center of Rollers	3270 mm (10'9")	3270 mm (10'9")		
5 Track Length	4080 mm (13'5")	4080 mm (13'5")		
6 Ground Clearance***	450 mm (1'6")	450 mm (1'6")		
7 Track Gauge	2200 mm (7'3")	2200 mm (7'3")		
8 Transport Width				
600 mm (24") Shoes	2800 mm (9'2")	2800 mm (9'2")		
790 mm (31") Shoes	2990 mm (9'10")	2990 mm (9'10")		
9 Cab Height***	2950 mm (9'8")	2950 mm (9'8")		
10 Counterweight Clearance***	1020 mm (3'4")	1020 mm (3'4")		

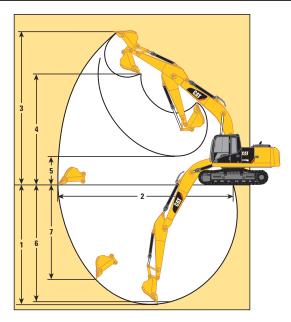
^{*}With HD 1.00 m^3 (1.3 yd 3) Bucket.

^{**}Including shoe lug height.

^{***}Without shoe lug height.

Working Ranges

All dimensions are approximate.



Boom Option		HD Reach Boom 5.7 m (18'8")				
Stick Options	S	HD R2.9B1 (9'6")	HD R2.5B1 (8'2")			
1 Maximu	m Digging Depth	6720 mm (22'1")	6300 mm (20'8")			
2 Maximu	m Reach at Ground Line	9890 mm (32'5")	9470 mm (31'1")			
3 Maximu	m Cutting Height	9490 mm (31'2")	9250 mm (30'4")			
4 Maximu	m Loading Height	6490 mm (21'4")	6290 mm (20'8")			
5 Minimur	m Loading Height	2170 mm (7'1")	2590 mm (8'6")			
6 Maximu	m Depth Cut for 2240 mm (8 ft) Level Bottom	6380 mm (20'11")	5960 mm (19'7")			
7 Maximum Vertical Wall Digging Depth		5690 mm (18'8")	5290 mm (17'4")			
Bucket	Туре	HD	HD			
	Capacity	1.0 m ³ (1.3 yd ³)	1.0 m ³ (1.3 yd ³)			
	Tip Radius	1487 mm (4'11")	1487 mm (4'11")			
Bucket Digging Force (SAE)		125 kN (28,100 lbf)	125 kN (28,100 lbf)			
Bucket Digging Force (ISO)		140 kN (31,500 lbf)	140 kN (31,500 lbf)			
Stick Digging Force (SAE)		104 kN (23,300 lbf)	114 kN (25,700 lbf)			
Stick Digging Force (ISO)		107 kN (24,000 lbf)	118 kN (26,600 lbf)			

Operating Weight* and Ground Pressure

The standard and optional equipment availability vary by region. Please contact your local Cat dealer for more information about the work tools available in your region.

	600 mm (24")		790 mm (31")		600 mm (24")		600 mm (24")	
	Triple Grouser Shoes		Triple Grouser Shoes		HD Triple Grouser Shoes		Double Grouser Shoes	
HD Reach Boom – 5.7 m (18'8")								
HD R2.9 (9'6") Stick,	21 200 kg	48.8 kPa	21 700 kg	37.9 kPa	21 300 kg	49.0 kPa	21 500 kg	49.5 kPa
HD 1.0 m ³ (1.3 yd ³) Bucket	(46,700 lb)	(7.1 psi)	(47,800 lb)	(5.5 psi)	(47,000 lb)	(7.1 psi)	(47,400 lb)	(7.2 psi)
HD R2.9 (9'6") Stick Rebar,	21 200 kg	48.8 kPa	21 700 kg	37.9 kPa	21 300 kg	49.0 kPa	21 500 kg	49.5 kPa
HD 1.0 m ³ (1.3 yd ³) Bucket	(46,700 lb)	(7.1 psi)	(47,800 lb)	(5.5 psi)	(47,000 lb)	(7.1 psi)	(47,400 lb)	(7.2 psi)
HD R2.5 (8'2") Stick,	21 200 kg	48.8 kPa	21 700 kg	37.9 kPa	21 200 kg	48.8 kPa	21 400 kg	49.3 kPa
HD 1.0 m ³ (1.3 yd ³) Bucket	(46,700 lb)	(7.1 psi)	(47,800 lb)	(5.5 psi)	(46,700 lb)	(7.1 psi)	(47,200 lb)	(7.1 psi)

Major Component Weights

Base Machine (including boom cylinders, pins, fluids, operator)	6640 kg (14,640 lb)
Undercarriage	
Standard Undercarriage	4180 kg (9,220 lb)
Counterweight	3700 kg (8,160 lb)
Boom (including lines, pins and stick cylinder)	
HD Reach Boom – 5.7 m (18'8")	2020 kg (4,450 lb)
Stick (including lines, pins, bucket cylinder and bucket linkage)	
HD R2.9B1 (9'6") Stick (including lines, pins, bucket cylinder and bucket linkage)	1110 kg (2,450 lb)
HD R2.9B2 (9'6") Stick Rebar (including lines, pins, bucket cylinder and bucket linkage)	1120 kg (2,470 lb)
HD R2.5B3 (8'2") Stick (including lines, pins, bucket cylinder and bucket linkage)	1080 kg (2,380 lb)
Track Shoe (Standard/per two track)	
600 mm (24") Triple Grouser Shoes	2600 kg (5,730 lb)
790 mm (31") Triple Grouser Shoes	3060 kg (6,750 lb)
600 mm (24") Double Grouser Shoes	2650 kg (5,840 lb)
600 mm (24") HD Triple Grouser Shoes	2850 kg (6,280 lb)
GD 1.0 m³ (1.3 yd³) Bucket with Sidecutter and Tip	760 kg (1,680 lb)
HD 1.0 m ³ (1.3 yd ³) Bucket with Sidecutter and Tip	970 kg (2,140 lb)

Note: Kg and lb were rounded up separately so some of the kg and lb do not match.

ISO 6016 Operating Weight Criteria: Base Machine with fronts, bucket, full fuel tank (and fluids), 75 kg (165 lb) operator. This standard excludes optional attachments.

320D2 Bucket Specifications and Compatibility

		Width		Capacity		Weight		Fill	Reach Boom 5.7 m (18'8")			
									R2.5B1HD	R2.5B1HD	R2.9B1HD	R2.9B1HD
	Linkage	mm	in	m ³	yd³	kg	lb	%	600 mm (24") Track Shoes	790 mm (31") Track Shoes	600 mm (24") Track Shoes	790 mm (31") Track Shoes
Without Quick Coupler												
General Duty – CCL	В	1150	46	0.90	1.18	719	1,585	100%	•	•	•	•
	В	1250	50	1.00	1.31	751	1,656	100%	•	•	Θ	•
	В	1150	46	0.90	1.18	762	1,680	100%	•	•	•	•
	В	1250	50	1.00	1.31	797	1,756	100%	•	•	Θ	θ
	В	1400	56	1.14	1.49	863	1,902	100%	Θ	Θ	0	0
Heavy Duty (HD) – China	В	1050	43	1.00	1.31	879	1,937	100%	•	•	Θ	θ
	В	1200	49	1.19	1.56	942	2,076	100%	0	Θ	0	0
	В	1350	54	1.38	1.81	1003	2,210	100%	0	0	\Diamond	\Diamond
Severe Duty (SD) – China	В	1100	43	1.00	1.31	969	2,136	90%	•	•	Θ	θ
	В	1250	49	1.19	1.56	1068	2,355	90%	θ	θ	0	0
	•			Maximum	load pin-o	n (payload	+ bucket)	kg	2625	2710	2405	2485
								lb	5,786	5,973	5,301	5,477

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

Capacity based on ISO 7451.

Bucket weight with General Duty tips.

Maximum Material Density:

- 2100 kg/m³ (3,500 lb/yd³)
- 1800 kg/m³ (3,000 lb/yd³)
- 1500 kg/m³ (2,500 lb/yd³)
- 1200 kg/m³ (2,000 lb/yd³)
- 900 kg/m³ (1,500 lb/yd³)

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

320D2 Work Tool Offering Guide*

Boom Type		HD Reach				
Stick Size		2.5 HD	2.9 HD			
Undercarriage		Standard				
Hydraulic Hammer		H115E s H120E s	H115E s H120E s			
		H130E s^^ B20	H130E s^ B20^^			
Multi-Processor		MP318 CC Jaw^ MP318 D Jaw^	MP318 CC Jaw** # MP318 D Jaw**			
		MP318 P Jaw** MP318 S Jaw^ MP318 U Jaw**	MP318 P Jaw** # MP318 S Jaw** MP318 U Jaw** #			
Pulverizer		P215^^	P215^			
Crusher		P315^	P315**			
Demolition and Sorting Grapple		G315B-D/R^ G315B-D/R fixed CAN	G315B-D/R** # G315B-D/R fixed CAN			
Scrap and Demolition Shear		S320B** S325B##	S320B** # S325B##			
Compactor (Vibratory Plate)		CVP110	CVP110			
Contractors' Grapple		G120B – G130B	G120B - G130B			
Orange Peel Grapple						
Clamshell Grapple						
Rippers		These work tools are available for the 320D2.				
Pin Grabber Coupler	Cat-PG	Consult your Cat dea	aler for proper match.			
Dedicated Quick Coupler	CW-40					
	CW-40s					

^{*} 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.

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

^{**} Pin-on only

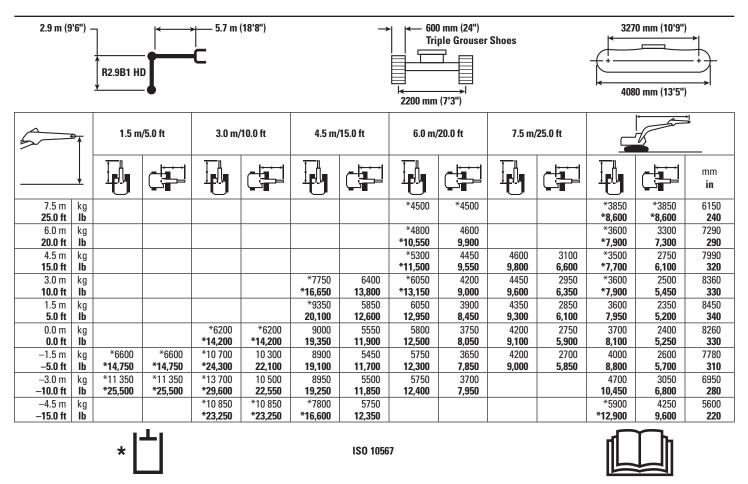
[#] Work over the front only

^{##} Boom Mount

[^] Work over the front only with CW (Pin-on and CW)

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

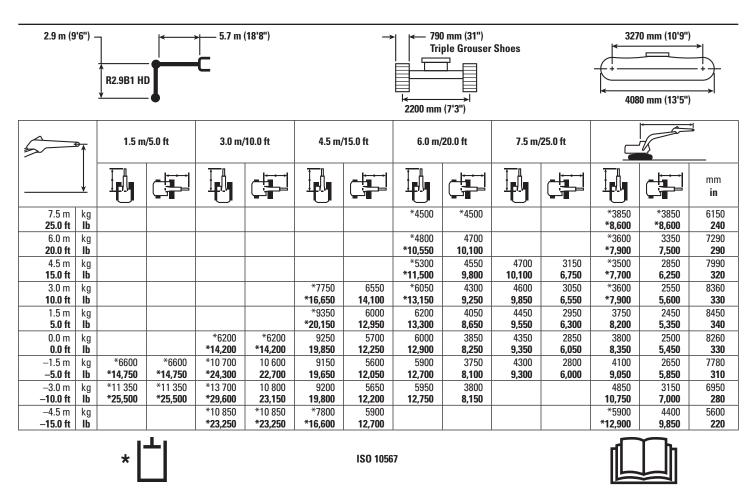
320D2 Heavy Duty Reach Boom Lift Capacities



^{*}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.

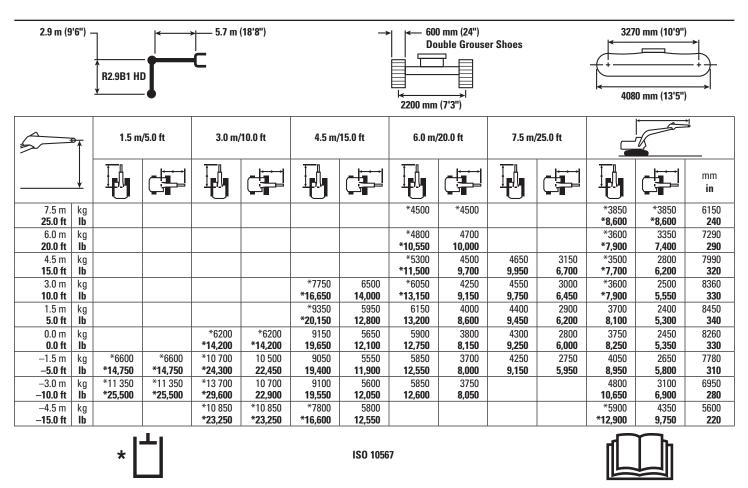
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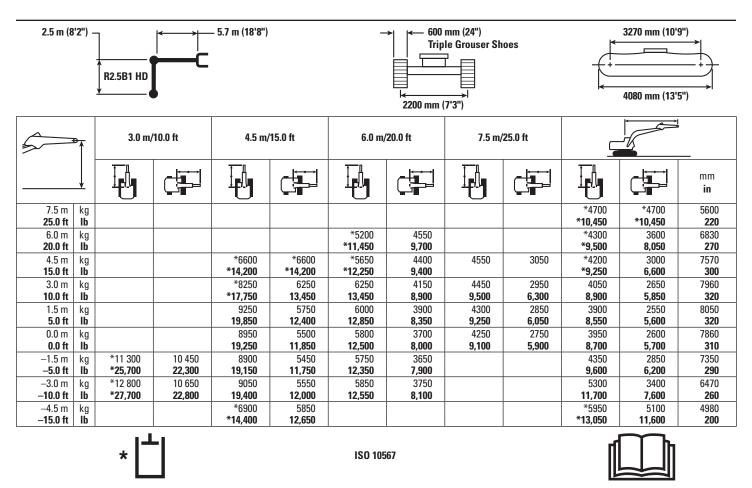
320D2 Heavy Duty Reach Boom Lift Capacities



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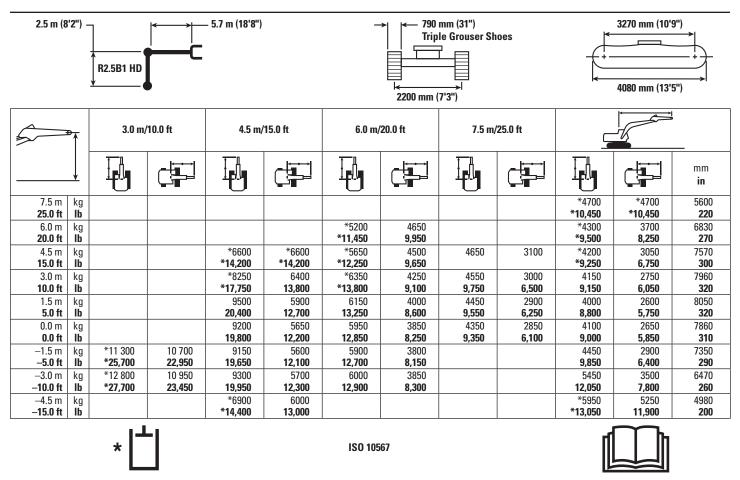
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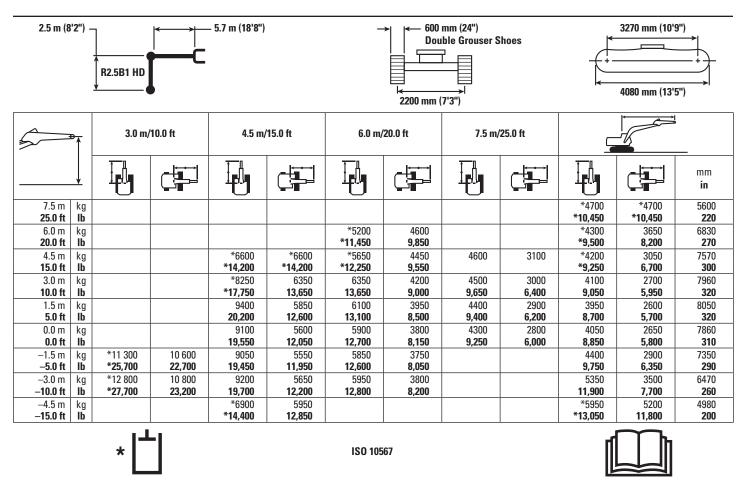
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Lift capacity stays with ±5% for all available track shoes.

320D2 Heavy Duty Reach Boom Lift Capacities



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

Standard Equipment

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

ENGINE

- C7.1 Mechanical engine
- Meets China Stage III Nonroad emission standards
- 4000 m (13,120 ft) altitude capability
- Radial seal air filters (primary and secondary filter)
- Glow plugs (for cold weather start)
- Automatic engine speed control with one touch low idle
- High ambient cooling package 52° C (125° F)
- Water separator with water level indicator sensor
- Waved fin radiator with space for cleaning
- Two speed travel
- Electric priming pump
- Fuel pressure differential gauge
- Power modes (Eco and Standard)

HYDRAULIC SYSTEM

- · Regeneration circuits for boom and stick
- · Auxiliary hydraulic valve
- Reverse swing damping valve
- Automatic swing parking brake
- Boom drift reducing valve
- Boom lowering device for back-up
- Stick drift reducing valve
- Straight travel hydraulic circuit
- High performance hydraulic return filters

CAB

- · Pressurized cab
- Fully adjustable mechanical suspension seat
- · Adjustable armrest
- Seat belt, retractable (51 mm [2 in] width)
- 70/30 split front windshield
- Laminated upper front windshield and tempered other windows
- · Sliding upper door window
- Openable front windshield with assist device
- Pillar mounted upper windshield wiper and washer
- Bi-level air conditioner (automatic) with defroster (pressurized function)
- Color LCD display with warning, filter/ fluid change, and working hour information
- Control lever joysticks
- Hydraulic activation control lever (lock out for all controls)
- Travel control pedals with removable hand levers
- Radio mounting (DIN size)
- · Radio ready
- 12V 2× maximum 10A power supply
- Two stereo speakers
- · Beverage holder
- Coat hook
- · Openable roof hatch
- · Washable floor mat
- · Rolldown sunscreen

UNDERCARRIAGE

- Idler and center section track guiding guard
- · Towing eye on base frame
- · Grease lubricated track

ELECTRICAL

• Batteries $(2 \times 750 \text{ CCA})$

LIGHTS

- · Left boom working light
- Right working light mounted in the storage box
- Interior lighting

SAFETY & SECURITY

- Cat one key security system
- Door and compartment locks
- Signaling/warning horn
- · Rearview mirrors
- Fire wall between engine and pump compartment
- Emergency engine shutoff switch
- Rear window, emergency exit
- · Battery disconnect switch

COUNTERWEIGHT

• 3.7 mt (8,160 lb) counterweight

TECHNOLOGY

- Product LinkTM
- · Cat data link receptacle

320D2 Optional Equipment

Optional Equipment

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

ENGINE

- Starting kit, cold weather, –32° C (–25.6° F)
- Air prefilter

HYDRAULIC SYSTEM

- · Hammer circuit, foot pedal operated
- Auxiliary hydraulic lines for booms and sticks

UNDERCARRIAGE AND GUARDS

- 600 mm (24") double grouser shoes
- 600 mm (24") triple grouser shoes
- 600 mm (24") HD triple grouser shoes
- 790 mm (31") triple grouser shoes
- Full length track guiding guard (2 pieces)

LIGHTS

- Right mounted boom light for reach boom
- · Cab lights

FRONT LINKAGE

- Heavy Duty 5.7 m (18'8") reach boom with left side light
- -R2.9B1 (9'6") HD stick
- -R2.5B1 (8'2") HD stick
- -R2.9B1 (9'6") HD stick with rebars

BUCKETS

- General duty buckets from 0.46 m³ (0.60 yd³) to 1.43 m³ (1.87 yd³)
- Heavy duty buckets from 1.00 m³ (1.3 yd³) to 1.40 m³ (1.8 yd³)
- Severe duty buckets from 1.00 m³ (1.3 yd³) to 1.20 m³ (1.6 yd³)
- Extreme duty buckets from 1.00 m³ (1.3 yd³) to 1.20 m³ (1.6 yd³)
- Ditch cleaning 0.9 m³ (1.2 yd³) for super long reach arrangement
- Ditch cleaning 0.45 m³ (0.6 yd³) for super long reach arrangement

Notes

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