

Cat® C6.4 Engine with ACERT™ Technology	
Net Power (ISO 9249) at 1800 rpm	103 kW/140 hp
Operating Weight	23 500 to 24 200 kg
Maximum Travel Speed	5.5 km/h
Maximum Reach at Ground Level	9830 mm
Maximum Digging Depth	6690 mm
Tail Swing Radius	2000 mm

## **320D LRR Hydraulic Excavator**

The D Series incorporates innovations for improved performance and versatility.

#### **Reduced Radius**

The 320D LRR features a reduced tail swing design that allows it to work well in space restricted areas, while providing maximum comfort. **pg. 4** 

#### **C6.4 Engine with ACERT™ Technology**

✓ ACERT™ Technology works at the point of combustion to optimize engine performance and provide low exhaust emissions to meet EU Stage IIIA emission regulations, with exceptional performance capabilities and proven reliability. pg. 5

#### **Operator Comfort**

✔ Provides maximum space, wider visibility and easy access to switches. The monitor is a full-color graphical display that allows the operator to understand the machine information easily. Overall, the new cab provides a comfortable environment for the operator. pg. 6

#### **Hydraulics**

The hydraulic system has been designed to provide reliability and outstanding controllability. **pg. 8** 

#### **Structures**

Caterpillar® design and manufacturing techniques assure outstanding durability and service life from these important components. pg. 8

The Caterpillar 320D LRR excavator provide all the elements to give you the lowest cost to own and operate. At the end of the day, it all comes down to how much work you got done and how much did it cost you.

Caterpillar and the 320D LRR offer you the tools to help lower your owning and operating costs.



✓ New Feature

#### **Versatility – Electronic Control Systems**

Caterpillar offers a wide variety of factory-installed attachments that enhance performance and job site management. pg. 7

#### **Boom, Sticks and Linkage**

One boom and two reach sticks are available to suit a variety of application conditions. **pg. 10** 

#### **Work Tools**

Caterpillar buckets, multi-processors, sorting and demolition grapples, hammers and quick couplers provide a total solution package to the end-user. **pg. 11** 

#### **Service and Maintenance**

✓ Fast, easy service has been designed in with extended service intervals, advanced filtration, convenient filter access and user-friendly electronic diagnostics for increased productivity and reduced maintenance costs. pg. 9

#### **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. The dealer will help you choose a plan that can cover everything from machine configuration to eventual replacement. pg. 9



### **Reduced Radius**

The Caterpillar 320D LRR is designed for high maneuverability in confined spaces.



Reduced Radius. The tail swing of this machine has been reduced where the back end of the machine won't extend beyond the length of the tracks. The tail swing is just 2000 mm as compared to the 2750 mm on the 320D. When rotated 90 degrees and working over the side, just 600 mm hangs over the side. This allows the 320D LRR to work well in road construction applications and other space restricted areas.

**Stability.** The 320D LRR offers a very stable platform providing great stability for all applications. When compared to 320D L, the 320D LRR delivers 6% more lift over the side. One of the main contributors is the additional counterweight used on the 320D LRR. This allows for the balance of the machine to be comparable to a standard machine with a longer tail swing.

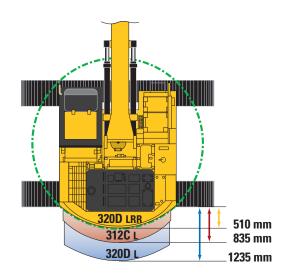


**Comfort.** The cab of the 320D LRR is the same full-sized cab with all the amenities and attachments found on the cab of the 320D L.

#### 320D LRR versus 312C L and 320D L

Compare minimum front swing radius and tail swing radius:

	320D LRR	312C L	320D L
Tail swing radius (mm)	2000	2130	2750
Overhang (mm)			
with 600 mm shoes	510	835	1235
with 800 mm shoes	410	735	1110



### **Engine**

The Cat® C6.4 gives the 320D LRR exceptional power and fuel efficiency unmatched in the industry for consistently high performance in all applications.



Cat C6.4 Engine. The Cat C6.4 with ACERT Technology introduces a series of evolutionary, incremental improvements that provide breakthrough engine technology. The building blocks of ACERT Technology are fuel delivery, air management and electronic control. ACERT Technology optimizes engine performance while meeting EU Stage IIIA emission regulations. With its proven technology, robust components and precision manufacturing, you can count on this engine to power up at start time and keep working productively all shift long.

**Performance.** The 320D LRR, equipped with the C6.4 engine with ACERT Technology, provides 7% more power as compared to the 3066 TA in the 320C LU. The additional power delivers a speed and efficiency advantage in high production applications.

#### **Automatic Engine Speed Control.**

The two-stage, one-touch control maximizes fuel efficiency and reduces sound levels.



#### **ADEM™ A4 Engine Controller.**

The ADEM A4 electronic control module manages fuel delivery to get the best performance per liter of fuel used. The engine management system provides flexible fuel mapping, allowing the engine to respond quickly to varying application needs. It tracks engine and machine conditions while keeping the engine operating at peak efficiency.

#### **Electronic Control Module.**

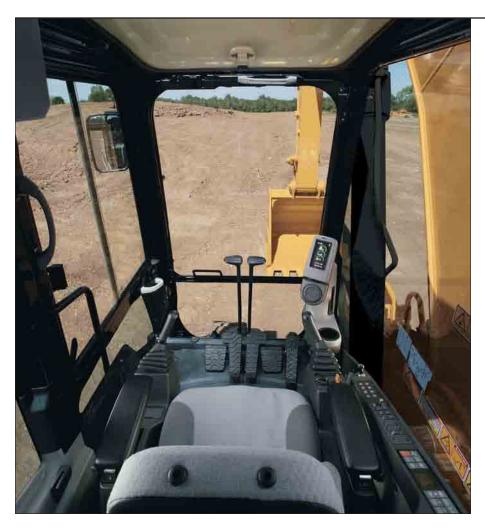
The Electronic Control Module (ECM) works as the "brain" of the engine's control system, responding quickly to operating variables to maximize engine efficiency. Fully integrated with sensors in the engine's fuel, air, coolant, and exhaust systems, the ECM stores and relays information on conditions such as rpm, fuel consumption, and diagnostic information.

Fuel Delivery. The Cat C6.4 features electronic controls that govern the fuel injection system. Multiple injection fuel delivery involves a high degree of precision. Precisely shaping the combustion cycle lowers combustion chamber temperatures, generating fewer emissions and optimizing fuel combustion. This translates into more work output for your fuel cost.

**Cooling System.** The cooling fan is directly driven from the engine. An electrically controlled viscous clutch fan is available as an attachment to reduce fan noise. The optimum fan speed is calculated based on the target engine speed, coolant temperature, hydraulic oil temperature and actual fan speed. When fan speed is reduced, there's more power available for other functions – and less fuel is burned.

### **Operator Comfort**

Caterpillar offers the most intuitive and easy to operate excavators while providing great all around visibility and exceptional operator comfort.



**Operator Station.** The layout of the interior has been redesigned to maximize operator comfort and reduce operator fatigue.

- Frequently used switches have been relocated for easier access.
- Consoles and armrests have been redesigned for better comfort and adjustability.
- More seat options choose from the standard mechanical suspension seat, or the optional air suspension seat with heater. Both provide excellent comfort.

**Standard Cab Equipment.** To enhance operator comfort and productivity, the cab includes a lighter, drink holder, coat hook, service meter, literature holder, magazine rack and storage compartment.

**Joystick Control.** Joystick controls have low lever effort and are designed to match the operator's natural wrist and arm position.

#### **Hydraulic Activation Control Lever.**

For added safety, this lever must be in the operate position to activate the machine control functions.

#### **Automatic Climate Control.**

Fully automatic climate control adjusts temperature and flow, and determines which air outlet is best in each situation with a touch of a button.

**Cab Exterior.** The exterior design uses thick steel tubing along the bottom perimeter of the cab, improving the resistance of fatigue and vibration.

**Cab Mounts.** The cab shell is attached to the frame with viscous rubber cab mounts, which dampen vibrations and sound levels while enhancing operator comfort.

**Windows.** All glass is affixed directly to the cab for excellent visibility eliminating window frames.

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

**Skylight.** An enlarged skylight with sunshade provides excellent visibility and ventilation.

## **Versatility – Electronic Control Systems**

Manages the engine and hydraulics for maximum performance and safety.





**Monitor.** The monitor is a full color Liquid Crystal Display that gives you vital operating and performance information, alerts in text, all in a simple, east to navigate format.

**Default Display.** Three analog gauges, fuel level, hydraulic oil temperature and coolant temperature, are displayed in this area.

Main Menu. Four menu options to choose from:

- Settings Adjust monitor settings, select work tool or choose video mode (when equipped with a camera).
- Maintenance Displays service intervals and hours accumulated since last serviced.
- Performance Displays machine performance attributes such as Engine Speed, Coolant and Hydraulic Oil Temperature.
- Service Allows access to machine parameters for service intervals, diagnostic information and information related to the machines software.

**Event Display.** Machine information is displayed in this area with the icon and language.

**Multi-information Display.** This area is reserved for displaying various information which is convenient for the operator. The "CAT" logo is displayed when no information is available to be displayed.



**Auxiliary Hydraulic Options.** Allows you to configure your 320D LRR to meet your work tools needs, while increasing its versatility.

Tool Control System

- Stores pressure and flow information for up to 10 tools
- Cat tools selectable that have preset flows and pressures
- Shortcut button on right hand console, making tool selection easier.

**Product Link.** The PL321 is available as factory installed attachment. It includes the following features:

- Engine hours
- Machine location
- Time based fences (when the machines can operate)
- Geo-based fences (boundaries that the machine can operate)
- · Health Watch
  - Codes from on-board EDM's/Sensors
  - Estimated Fuel Consumption
  - Fuel Watch
- Maintenance Watch
  - Preventative Maintenance Planning
  - Preventative Maintenance Checklists
  - Overdue PM Notification
  - PM History Recording

**Machine Security.** An optional Machine Security System is available from the factory on the 320D LRR. This system controls when the machine can be operated and utilizes specific keys to prevent unauthorized machine use, a significant theft deterrent.

**More Attachments.** The 320D LRR offers the most options available to equip your machine to best match your application and work environment requirements. From track shoe size to guarding packages to operator comfort options, the 320D LRR offers more options.

## **Hydraulics**

Cat® hydraulics deliver power and precise control to keep material moving.



**Component Layout.** To optimize efficiency of hydraulic performance, the hydraulic components are located close together, which reduces friction loss and pressure drops in the lines.

**System Pressure.** System pressure has been increased to 350 bar, which attributes to improved performance:

- Increased stick and bucket forces (up 7% higher than the 320C LU) to better handle those tight digging conditions
- More drawbar pull (206 kN) to provide more ability to climb slopes, easier spot turns and improved travel in poor underfoot conditions

 More lift capacity, generally over the front where you are generally hydraulically limited

**Pilot System.** The pilot pump is independent from the main pumps and controls the front linkage, swing and travel operations.

**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.

**Boom and Stick Regeneration Circuit.** Boom and stick regeneration circuit saves 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.

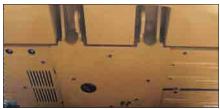
**Auxiliary Hydraulic Valve.** The auxiliary valve is standard on the 320D LRR. Control Circuits are available as attachments, allowing for operation of high and medium pressure tools such as shears, grapples, hammers, pulverizers, multi-processors and vibratory plate compactors.

**Hydraulic Cylinder Snubbers.** Snubbers are located at the rodend of the boom cylinders and both ends of the stick cylinder to cushion shocks while reducing sound levels and extending component life.

#### **Structures**

320D LRR is designed to handle the most rugged operating conditions, while providing long life and value.





**Robust Undercarriage.** A solid foundation built tough to absorb the stresses of everyday work.

- Rollers and idlers are sealed and lubricated to extend service life.
- Track links are assembled and sealed with grease to decrease internal bushing wear and increase life by as much as 25%, when compared to dry seal undercarriages.
- Spring recoil system stroke has been increased to better relieve excess track tension, which can occur when material builds up between the track and sprocket.

**Rugged Structures.** Structural components and the undercarriage are the backbone of the machine's durability. Caterpillar places a lot of emphasis on the machine's durability

during the designing and manufacturing of its excavators.

- Up to 95% of the structural welds are welded by robots, which achieve up to three times the penetration of a manual weld and improving overall durability of the machine.
- The 320D LRR's main frame utilizes high-tensile strength steel and a onepiece swing table, which improves strength and reliability.
- The carbody has a X-shaped, box section design to resist bending and twisting forces.
- Track roller frames are press-formed in a pentagonal shape for additional strength.

### **Service and Maintenance**

Simplified service and maintenance save you time and money.





**Extended Service Intervals.** 320D LRR service and maintenance intervals have been extended to reduce machine service time and increase machine availability.

**Air Filter Compartment.** The air filter features a double-element construction for superior cleaning efficiency. When the air cleaner plugs, a warning is displayed on the monitor screen inside the cab.

**Ground Level Service.** The design and layout of the 320D was made with the service technician in mind. Many service locations are easily accessible at ground level allowing critical maintenance to get done quickly and efficiently.

**Pump Compartment.** A service door on the right side of the upper structure allows ground-level access to the pump and pilot filter.

**Capsule Filter.** The hydraulic return filter, a capsule filter, is situated outside the hydraulic tank. This filter prevents contaminants from entering the system when hydraulic oil is changed and keeps the operation clean.

**Diagnostics and Monitoring.** The 320D is equipped with S•O•S<sup>SM</sup> sampling ports and hydraulic test ports for the hydraulic system, engine oil, and for coolant. A test connection for the Electronic Technician (ET) service tool is located behind the cab.

**Anti-Skid Plate.** Anti-skid plate covers top of storage box and upper structure to prevent slipping during maintenance.

**Fan Guard.** Engine radiator fan is completely enclosed by fine wire mesh, reducing the risk of an accident.

**Greasing Points.** A concentrated remote greasing block on the boom delivers grease to hard-to-reach locations on the front.

Radiator Compartment. The left rear service door allows easy access to the engine radiator, oil cooler and air-to-air aftercooler. Reserve tank and drain cock are attached to the radiator for simplified maintenance.

## **Complete Customer Support**

Cat dealer services help you operate longer with lower costs.

Machine Selection. Make detailed comparisons of the machines you are considering before you buy. What are the job requirements, machine attachments and operating hours?

What production is needed? Your Cat dealer can provide recommendations.

**Purchase.** Consider the financing options available as well as day-to-day operating costs. This is also the time to look at dealer services that can be included in the cost of the machine to yield lower equipment owning and operating costs over the long run.

#### **Customer Support Agreements.**

Cat dealers offer a variety of product support agreements, and work with customers to develop a plan the best meets specific needs. These plans can cover the entire machine, including attachments, to help protect the customer's investment.

**Operation.** Improving operating techniques can boost your profits. Your cat dealer has videotapes, literature and other ideas to help you increase productivity, and Caterpillar offers certified operator training classes to help maximize the return on your investment.

Product Support. You will find nearly all parts at our dealer parts counter. Cat dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime. You can save money with Cat remanufactured components.

Maintenance Services. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as Scheduled Oil Sampling, Coolant Sampling and Technical Analysis help you avoid unscheduled repairs.

**Replacement.** Repair, rebuild or replace? Your Cat dealer can help you evaluate the cost involved so you can make the right choice.

### **Boom, Sticks and Bucket Linkage**

Built for Performance and long service life, Caterpillar® booms and sticks are large, welded, box-section structures with thick, multi-plate fabrications in high stress areas.



**Bucket Linkage.** The power link improves durability, increases machine-lifting capability in key lifting positions and with the integrated lift-eye it is easier to use than compared to the previous power link. The lift eye also gives you the optimum lift performance. It allows you to lower the load point, which maximizes the use of the boom cylinders.

#### **Boom, Sticks and Attachments.**

Designed for maximum flexibility, productivity and high efficiency on all jobs, the 320D LRR offers a wide range of configurations suitable for a variety of applications.

**Reach Boom.** The boom has large cross-sections and internal baffle plates to provide long life durability. The reach boom features an optimum design that maximizes digging envelopes with two stick choices: R2.9B1 and R2.9B1 HD.

**Sticks.** The sticks are made of hightensile strength steel using a large box section design with interior baffle plates and an additional bottom guard. The B1-family bucket associated with these sticks have enough capacity for excellent reach and depth in trenching and general construction applications.

- R2.9B1. This stick provides the most versatile front linkage, with regard to reach and bucket capacity and delivers good stability for hammer work.
- R2.9B1 HD. This heavy duty stick provides more strength for extremely heavy applications.

### **Work Tools**

A wide variety of Work Tools help optimize machine performance. Purpose designed and built to Caterpillar's high durability standards.



- 1 Excavation (X)
- 2 Extreme Excavation (EX)
- 3 Ditch Cleaning
- 4 Quick Coupler

**Work Tools.** Caterpillar work tools are designed to function as an integral part of your excavator and to provide the best possible performance in your particular application. All work tools are performance-matched to Cat machines.

**Quick Couplers.** Quick couplers enable the operator to simply release one work tool and connect to another, making your hydraulic excavator highly versatile. Productivity also increases, as a carrier no longer needs to be idle between jobs. Caterpillar offers hydraulic and spindle quick coupler versions.

**Buckets.** Caterpillar offers a wide range of specialized buckets, each designed and tested to function as an integral part of your excavator. Buckets feature the new Caterpillar K Series™ Ground Engaging Tools.









**Hammers.** Cat hammer series deliver very high blow rates, increasing the productivity of your tool carriers in demolition and construction applications. Wide oil flow acceptance ranges make the Caterpillar hammers suitable for a wide range of carriers and provide a system solution from one safe source.

**Orange Peel Grapples.** The orange peel grapple is constructed of high-strength, wear-resistant steel, with a low and compact design that makes it ideal for dump clearance. There are several choices of time and shell versions.

**Multi-Grapples.** The multi-grapple with unlimited left and right rotation is the ideal tool for stripping, sorting, handling and loading. The powerful closing force of the grab shells combined with fast opening/closing time ensures rapid cycle time which translates to more tons per hour.

**Multi-Processors.** Thanks to its single basic housing design, the multi-processor series of hydraulic demolition equipment makes it possible to use a range of jaw sets that can handle any demolition job. The multi-processor is the most versatile demolition tool on the market.

#### Vibratory Plate Compactors.

Cat compactors are performancematched to Cat machines, and integrate perfectly with the Cat hammer line – brackets and hydraulic kits are fully interchangeable between hammers and compactors.

**Shears.** Cat shears provide superior and effective scrap processing, and are highly productive in demolition environments. Shears are compatible with a matching Cat excavator, and bolt-on brackets are available for either stick or boom-mounted options.

## **Engine**

Cat C6.4 engine with ACERT Technology						
Net Power at 1800 rpm	Net Power at 1800 rpm					
ISO 9249	103 kW/140 hp					
80/1269/EEC	103 kW/140 hp					
Bore	102 mm					
Stroke	130 mm					
Displacement	6.4 L					

- All engine horsepower (hp) are metric including front page.
- The C6.4 engine meets EU Stage IIIA emission requirements.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator.
- Full engine net power up to 2300 m altitude (engine derating required above 2300 m).

### **Drive**

Maximum Travel Speed	5.5 km/h
Maximum Drawbar Pull	206 kN

# **Swing Mechanism**

Swing Speed	11.5 rpm
Swing Torque	62 kNm

### Sound

The dynamic exterior sound power level meets EU Directive 2005/88/EC.

# Cab/FOGS

Cab/FOGS meets ISO 10262.

## **Hydraulic System**

Main System	
Maximum flow	2 x 205 L/min
Maximum pressure	
Normal	350 bar
Travel	350 bar
Swing	250 bar
Pilot System	
Maximum flow	32 L/min
Maximum pressure	39 bar
Boom Cylinders	
Bore	120 mm
Stroke	1260 mm
Stick Cylinder	
Bore	140 mm
Stroke	1518 mm
B1 Family Bucket Cylind	er
Bore	120 mm
Stroke	1104 mm

## **Machine and Major Component Weights**

Actual weights and ground pressures will depend on final machine configuration.

		Reach boom 5680 mm
Stick type		R2.9B1
Stick length	mm	2920
Bucket weight	kg	700
Bucket capacity	m³	0.9
Bucket width/type	mm	1000/TL
Operating weight*		
600 mm shoes	kg	23 530
800 mm shoes	kg	24 200
Ground pressure		
600 mm shoes	bar	0.46
800 mm shoes	bar	0.36
Stick weight (with bucket cylinder)	kg	690
Boom weight (with stick cylinder)	kg	1370
Upperstructure (without counterweight)	kg	5880
Undercarriage		
600 mm shoes	kg	7190
800 mm shoes	kg	7860
Counterweight	kg	6500

<sup>\*</sup> With counterweight, quick coupler, bucket, operator and full fuel.

# **Service Refill Capacities**

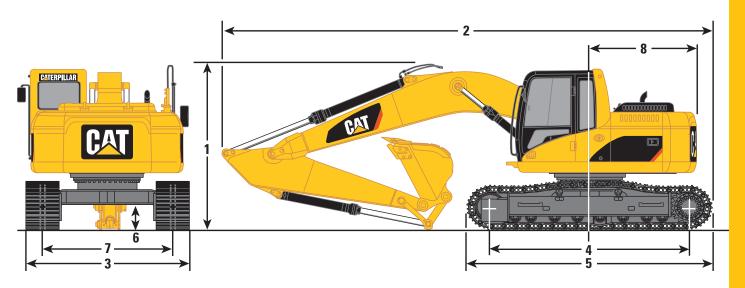
	Liters
Fuel Tank	410
Cooling System	25
Diesel Engine	30
Swing Drive (each)	8
Final Drive (each)	8
Hydraulic system	
(including tank)	260
Hydraulic tank	120

## **Track Shoes**

Triple grouser 600, 700, 800 mm

# **Dimensions**

All dimensions are approximate.



		mm
1	Shipping height (with bucket)	
	2920 mm stick	3120
2	Shipping length	
	2920 mm stick	8960

		mm
3	Transport width	
	600 mm shoes	2980
	800 mm shoes	3180
Δ	I enoth to centers of rollers	3650

		mm
5	Track length	4455
6	Ground clearance	450
7	Track gauge	2380
8	Tail swing radius	2000
	Cab height	2950

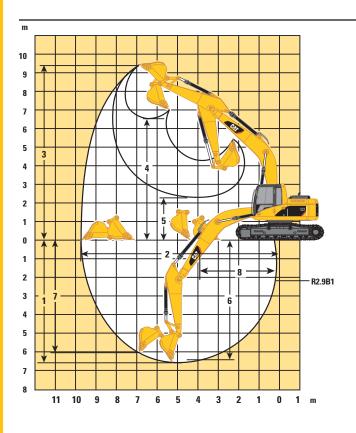
# **Bucket Specifications**

Contact your Caterpillar dealer for special bucket requirements. All buckets are available to fit the Cat quick coupler.

					Reach Boom 5680 mm		
					Without Quick Coupler	With Quick Coupler	
	Linkage	Width	Capacity (ISO)	Weight*	320D LRR	Weight*	320D LRR
		mm	m³	kg	2920 mm stick	kg	2920 mm stick
	В	600	0.44	564		529	
	В	750	0.59	593		557	
	В	1000	0.86	698		663	
Excavation (X)	В	1200	1.08	784		748	
Excavation (X)	В	1250	1.13	801		765	
	В	1300	1.19	819		783	
	В	1400	1.30	854		818	
	В	1500	1.41	889		853	
	В	600	0.44	589		558	
	В	750	0.59	620		584	
ExtremeExcavation (EX)	В	1250	1.13	827		792	
	В	1300	1.18	864		829	
	В	1400	1.30	901		866	
Maximum load in kg (payload plus bucket)				2820		2590	
* Including tips							

Max. Material density 1200 kg/m³ Max. Material density 1500 kg/m<sup>3</sup> Material density 1800 kg/m³ and more

# **Working Ranges – Reach Boom**



R2.9B1
2920 mm
6690 mm
9830 mm
9520 mm
6520 mm
2200 mm
6520 mm
6180 mm
3660 mm
1554 mm
141 kN
106 kN

# **Lift Capacities – Reach Boom**

All weights are in kg, without bucket, with quick coupler, heavy lift on.

Stick 2920 mm **Shoes** 600 mm

	1.5 m		1.5 m 3.0 m		m 4.5 m		6.0 m		7.5 m		9.0 m				
															m
7.5 m													*3300	*3300	6.6
6.0 m									*3750	3100			*3050	3000	7.67
4.5 m							*5150	4450	4550	3100			*3000	2550	8.33
3.0 m			*11700	*11700	*7550	6500	*6000	4200	4450	2950			*3100	2300	8.69
1.5 m					*9400	6000	6050	3950	4300	2850			*3250	2200	8.77
0 m			*6900	*6900	9150	5650	5850	3800	4200	2750			3450	2250	8.59
−1.5 m	*6350	*6350	*10500	*10500	9000	5550	5750	3700	4150	2700			3700	2400	8.14
−3.0 m	*10450	*10450	*15150	10650	9000	5550	5750	3700					4350	2800	7.34
–4.5 m			*12600	11000	*8900	5750	5900	3850					5800	3750	6.09

Stick 2920 mm **Shoes** 800 mm

	1.5 m		1.5 m 3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				
															m
7.5 m													*3300	*3300	6.60
6.0 m									*3750	*3750			*3050	*3050	7.67
4.5 m							*5150	*5150	*4850	3800			*3000	*3000	8.33
3.0 m			*11700	*11700	*7550	*7550	*6000	5200	*5250	3700			3100	2900	8.69
1.5 m					*9450	7500	*6950	4950	*5750	3600			3250	2800	8.77
0 m			*6900	*6900	*10600	7150	*7700	4750	5650	3500			3650	2850	8.59
−1.5 m	*6350	*6350	*10500	*10500	*10950	7050	7750	4650	5600	3450			4250	3050	8.14
−3.0 m	*10450	*10450	*15200	13700	*10450	7050	*7700	4650					5400	3550	7.34
−4.5 m			*12600	*12600	*8900	7200	*6250	4800					6050	4700	6.09





Load Radius Over Front



Load Radius Over Side



Load at Maximum Reach

Limited by hydraulic rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity ratings standard ISO 10567, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

### **Standard Equipment**

Standard equipment may vary. Consult your Caterpillar dealer for specifics.

**Electrical** 

Alternator, 50 A

Base machine light (frame)

Electric start, 24 volt

Horn

Pre-start monitoring system -

checks for low fluids

(engine oil, coolant, hydraulic oil) prior to

starting machine

**Operator Environment** 

Air conditioner, heater, defroster with automatic climate control

AM/FM Radio with antenna and

2 speakers

Ashtray with 24 volt lighter

Beverage/cup holder

Bolt-on Falling object Guarding System

(FOGS) capability

Cab Glass

Openable and retractable two-piece front

windshield

Skylight, pop-up, polycarbonate

Coat hook

Floor mat

Instrument panel and gauges

Joysticks, console mounted,

pilot operated

Light, interior

Literature compartment

Monitor, full graphic color display

Neutral lever (lock out) for all controls

Positive filtered ventilation

Pressurized cab

Seat, suspension, with high back and head rest

Seat belt, retractable - 75 mm

Storage compartment suitable for

lunch box cooler

Sun shade (for skylight)

Travel control pedals with removable

hand levers

Windshield wiper and washer

(upper and lower)

**Engine/Power Train** 

C6.4 with ACERT<sup>TM</sup> Technology

Air intake heater

Air-to-air aftercooler (ATAAC)

HEUI™ injectors

2300 m altitude capability

without derate

Automatic engine speed control

with one touch low idle

Cooling

Protection of 43°C to -18°C

at 50% concentration

Viscous clutch demand fan

Straight line travel

Two-speed auto-shift travel

Water separator in fuel line

**Undercarriage** 

Grease lubricated track

Hydraulic track adjusters

Idler and center section track guards

Long undercarriage

**Other Standard Equipment** 

Automatic swing parking brake

Auxiliary hydraulic valve

Capability of stackable valves

(max of 3) for main valve

Capability of auxiliary circuit

Counterweight with lifting eyes

Door locks, cap locks and Caterpillar® one

key security system

Fine swing control

Fully pressurized hydraulic system

Heavy lift

Mirrors (frame-right, cab left)

Side rubber bumpers

S•O•S quick sampling valves for engine and

hydraulic oil

Vehicle gradability, 35°

Wave fin radiator

Wiring provision for Product Link

# **Optional Equipment**

Optional equipment may vary. Consult your Caterpillar dealer for specifics.

#### Front Linkage

Boom

Reach 5680 mm

Stick

R2.9B1 (2920 mm)

R2.9B1 HD (2920 mm)

Bucket Linkage

B1 Family

Boom Lowering Control Device

#### Electrical

Light, Boom – Right side

Lights, Cab mounted (2) Machine Security System (MSS)

Power supply (12 V/5 A)

Product Link

Travel Alarm

#### Guarding

Falling Object Guarding System (FOGS)

Front windshield guard

Full length, wire mesh

Heavy-duty bottom guards

Track guiding guards

Sprocket end, idler end guard

Two-piece full length (center guard removed)

Vandalism guards

#### **Operator Environment**

Sunscreen – roller type

Third pedal, straight travel

Wiper, Lower windshield

Washer, windshield

#### **Engine/Power Train**

High ambient cooling

for conditions up to 52°C Prefilter, air

Starting, Cold weather package

Two additional maintenance free batteries

High capacity starter motor

Heavy-duty cable

Water level indicator (fuel)

#### Undercarriage

600, 700, 800 mm triple grouser shoes

Heavy-duty rollers

#### **Auxiliary Hydraulics**

Hammer Circuit

For single function (1 way/2 pump)

hydraulic tools

Hydraulic pin grabber quick coupler and

controller

Lines for booms and sticks

Thumb Circuit

For double function (2 way/1 pump)

hydraulic tools

Tool Control System

Capability of adding medium pressure

For single or double function

(1 or 2 way, 1 or 2 pump)

hydraulic tools

Joysticks with additional switches

Medium pressure circuit

(added to Tool Control only) for tools

requiring medium pressure
Program up to 10 tools in memory

# **320D LRR Hydraulic Excavator**

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

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

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