320D/ 320D L

Hydraulic Excavator

Engine		
Engine Model	Cat® C6.4 ACERT™	
Net Flywheel Power	103 kW	138 hp
Weights		
Operating Weight – Std. Undercarriage	20 330 kg	44,820 lb

- Reach boom, R2.9B1 (9 ft 7 in) Stick, 0.9 m^3 (1.18 yd^3) Bucket, 600 mm (24 in) Shoes

Operating Weight – Long Undercarriage	21 570 kg	47,554 lb

- Reach boom, R2.9B1 (9 ft 7 in) Stick, 0.9 m^3 (1.18 yd^3) Bucket, 800 mm (32 in) Shoes

320D/320D L Hydraulic Excavator

The D Series incorporates innovations for improved performance and versatility.

C6.4 with ACERT™ Technology

✔ ACERT™ Technology works at the point of combustion to optimize engine performance and provide low exhaust emissions to meet emission regulations, with exceptional performance capabilities and proven reliability. **pg. 4**

Hydraulics

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

Versatility

Caterpillar offers a wide variety of factory-installed attachments that enhance performance and job site management. **pg. 11**

Service and Maintenance

✔ Fast, easy service has been designed with extended service intervals, advanced filtration, convenient filter access and user-friendly electronic diagnostics for increased productivity and reduced maintenance costs. **pg. 12**

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

Structures

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

Booms, Sticks and Bucket Linkages

✔ The bucket linkage pins on the mass excavation configuration have been enlarged to improve reliability and durability. **pg. 9**

Work Tools – Attachments

✔ A variety of work tools, including buckets, couplers, hammers, and shears are available through Cat® Work Tools. **pg. 10**

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. 13**

✔ *New Feature*

C6.4 with ACERT™ Technology

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

Cat C6.4. 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 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, equipped with the C6.4 engine with ACERT™ Technology, provides 103 kW (138 hp). The engine features long-stroke piston movement for high torque at medium to low speeds, which provides excellent productivity in the toughest working environments.

Economy Mode. Available as standard, Economy Mode allows you to balance the demands of performance and fuel economy. It offers the best fuel economy while maintaining the breakout forces and lift capacity enjoyed while in standard power.

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. A high ambient cooling package is available which will increase cooling capacity from 43° C to 52° C (109° F to 125° F).

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 35 000 kPa (5,076 psi), which attributes to improved performance:

- Increased stick and bucket forces (up to 7% higher than the 320C) to better handle those tight digging conditions
- More drawbar pull (206 kN – 46,322 lb) provides better ability to climb slopes, easier spot turns and improved travel in poor underfoot conditions
- More lift capacity, generally over the front where you are typically hydraulically limited

Heavy Lift. The 320D features the addition of a Heavy Lift, which increases system pressure to 36 000 kPa (5,221 psi), giving even more lift capacity over the front. Heavy Lift, if equipped, is activated by depressing the soft switch on the right hand console. While Heavy Lift is engaged, the engine speed is reduced, which allows better control while lifting objects.

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

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.

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.

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, change language, 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.

Structures

320D 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 percent, 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.

Undercarriage Options. Choose the undercarriage option that best matches your application.

- Standard undercarriage – Works well in restricted work spaces and on uneven, rocky terrain. It's also preferred on jobs that require frequent repositioning of the machine.
- Long undercarriage – Allows for maximum stability and lift capacity.

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.

- Many 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's main frame utilizes high-tensile strength steel and a one-piece 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.

Booms, Sticks and Bucket Linkages

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.

Front Linkage Options. The Reach Boom allows excellent all-around versatility and a large working envelope. It can be equipped with the following three sticks:

- R3.9B1 – offers maximum reach and digging depth
- R2.9B1 – performs well in a mid-range working envelope
- R2.5B1 – a good match when the job requires a larger bucket or a hammer

Mass Excavation Boom is designed for heavy-duty, high production earthmoving applications and has a single system-matched stick

- M2.4CB2 – delivers significantly higher digging forces and allows the use of large buckets.

Super Long Reach Front – with reaches up to 15.6 m (51 ft 2 in), this configuration is designed for light duty applications requiring an extra large working envelope.

Heavy-Duty Boom and Sticks.

- Heavy-Duty Reach Boom provides additional strength recommended for extreme applications.
- R2.9B1 and R2.5B1 Heavy-Duty Sticks have thicker plates, stress relieved and are best used for extreme applications.

Linkage Pins. The bucket linkage pins for the Mass Excavator configuration have been enlarged to improve reliability and durability. All the pins in the front linkages have thick chrome plating, giving them high wear and corrosion resistance.

Bucket Linkage. The power link has been redesigned to be more robust and improve durability of the bucket linkage. An integrated lift eye has been added, which makes it easier to use than the prior series, especially when lifting objects. Lifting from the lift eye optimizes the lift capacity as it lowers the load point and maximizes the use of the boom cylinders.

Work Tools – Attachments

The 320D has an extensive selection of work tools to optimize machine performance.

Wide Variety of Work Tools. Caterpillar offers a complete line of work tools to match all of your application needs:

- Hammers – the ideal choice for concrete demolition, demolishing oversize rock, breaking frozen or hard ground, and trenching. Matched to Cat machines for optimum performance.
- Thumbs, Stiff Link, Full Rotation – transforms your 320D into a versatile material handling machine.
- Grapples – for handling loose material, sorting trash, and demolition site cleanup. An array of styles and sizes are available to match the task at hand.
- Multi-processors – does the work of many types of demolition tools by use of interchangeable jaws.
- Shears – features 360 degree rotation and high force to weight ratio.
- Pulverizers – ideally suited for rapid, non-explosive demolition applications.
- Vibratory Plate Compactors – provide superior compaction force in a reliable, low maintenance package.
- Rippers – perfectly suited for trenching and pipeline applications where conditions aren't favorable to traditional ripping methods.

Caterpillar Buckets. The industry's broadest selection of buckets that help optimize machine performance and match your application needs.

- General Purpose Buckets – for digging in low impact, moderately abrasive materials such as dirt, loam, gravel and clay.
- Heavy-Duty Buckets – for use in abrasive applications such as mixed dirt, clay and rock.
- Heavy-Duty Power Buckets – for use in abrasive applications where breakout force and cycle times are critical – good for materials such as mixed dirt, clay and rock.
- Ditch Cleaning Buckets – wide and shallow for ditch cleaning, bank forming and finishing.

Caterpillar Ground Engaging Tools (GET). Choose from a wide variety of tips that maximize bucket and machine performance. Sidecutters and sidebar protectors are also available.

Pin Grabber Plus Hydraulic Pin Grabber

Couplers. Multiply the versatility and utility of 320D.

- Hydraulic Pin Grabber Plus – allows quick and easy tool changes without having to leave the cab. Picks up a large variety of tools equipped with standard pins.
- Dedicated Coupler – no loss of tip radius, maximizing the breakout forces on your 320D.

Versatility

A wide variety of optional factory-installed attachments are available to enhance performance and improve job site management.

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

- Single Function Circuit – suited for tools that require one-way flow with both pumps, such as hammers, vibratory plate compactors.
- Tool Control System – accommodates single or double function tools, as well as rotating tools when equipped with medium pressure.
  - — Stores pressure and flow information for up to 10 tools
  - — Cat tools are selectable with preset flows and pressures

Product Link. Both the PL121 and PL321 are available as factory installed attachments. PL121 gives you Asset Watch, which 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).

PL321 gives you all of the features listed for PL121, plus the ability to include Health and Maintenance Watch.

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

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

Service and Maintenance

Simplified service and maintenance features save you time and money.

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.

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.

Pump Compartment. A service door on the right side allows for ground level access to the hydraulic pump, engine oil filter, case drain and pilot filters.

Radiator Compartment. The side-by-side placement of the radiator and oil cooler makes core cleaning easy. The aftercooler is located in front of the radiator/oil cooler. The condenser for the air conditioning system is mounted in front of the radiator/oil cooler and under the aftercooler. A radiator screen is provided between the radiator/oil cooler and aftercooler to prevent plugging by debris. In addition, there is wider clearance between the radiator/oil cooler and aftercooler, so debris can be easily blown off by a wand, or air nozzle. A cooling fan is connected directly to the engine.

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

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.

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

Diagnostics and Monitoring. The 320D is equipped with S•O•S^{SM} sampling ports and hydraulic test ports for the hydraulic system, engine oil, and coolant. A test connection for the Cat Electronic Technician (Cat ET) service tool is located in the cab.

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

Complete Customer Support

Cat® dealer services help you operate longer with lower costs.

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 down time. Save money with remanufactured components.

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.

Customer Support Agreements. Cat dealers offer a variety of product support agreements, and work with you to develop a plan the best meets your specific needs. These plans can cover the entire machine, including attachments, to help protect your 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.

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.

Engine

Engine Model	Cat® C6.4 ACERT™	
Net Flywheel Power	103 kW	138 hp
Net Power – ISO 9249	103 kW	138 hp
Net Power – SAE J1349	103 kW	138 hp
Net Power – EEC 80/1269	103 kW	138 hp
Bore	102 mm	4.02 in
Stroke	130 mm	5.12 in
Displacement	6.4 L	389 in^3

- Net flywheel power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- No engine power derated below 2300 m (7,500 ft).

Weights

Operating Weight – Std. Undercarriage	20 330 kg	44,820 lb

- Reach boom, R2.9B1 (9 ft 7 in) Stick, 0.9 m^3 (1.18 yd^3) Bucket, 600 mm (24 in) Shoes

Operating Weight – Long Undercarriage	21 570 kg	47,554 lb

- Reach boom, R2.9B1 (9 ft 7 in) Stick, 0.9 m^3 (1.18 yd^3) Bucket, 800 mm (32 in) Shoes

Service Refill Capacities

Fuel Tank Capacity	410 L	108 gal
Cooling System	25 L	6.6 gal
Engine Oil	30 L	8 gal
Swing Drive	8 L	2.1 gal
Final Drive (each)	8 L	2.1 gal
Hydraulic System (including tank)	260 L	69 gal
Hydraulic Tank	120 L	32 gal
Hydraulic Tank (Including suction pipe)	138 L	36 gal

Swing Mechanism

Swing Speed	11.5 rpm	
Swing Torque	61.8 kN·m	45,612 lb ft

Drive

Maximum Drawbar Pull	206 kN	46,311 lb
Maximum Travel Speed	5.5 km/h	3.4 mph

Hydraulic System

Main Implement System – Maximum Flow (2x)	205 L/min	54 gal/min
Max. Pressure – Equipment	35 000 kPa	5,076 psi
Max. Pressure – Equipment – Heavy	36 000 kPa	5,221 psi
Max. Pressure – Travel	35 000 kPa	5,076 psi
Max. Pressure – Swing	25 000 kPa	3,626 psi
Pilot System – Maximum flow	32.4 L/min	9 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
Reach Stick Cylinder – Bore	140 mm	5.5 in
Mass Stick Cylinder – Bore	140 mm	5.5 in
Reach Stick Cylinder – Stroke	1518 mm	59.8 in
Mass Stick Cylinder – Stroke	1504 mm	59.2 in
B1 Family Bucket Cylinder – Bore	120 mm	4.7 in
B1 Family Bucket Cylinder – Stroke	1104 mm	43.5 in
CB2 Family Bucket Cylinder – Bore	135 mm	5.3 in
CB2 Family Bucket Cylinder – Stroke	1156 mm	45.5 in

Sound Performance

Performance	ANSI/SAE J1166 APR 90

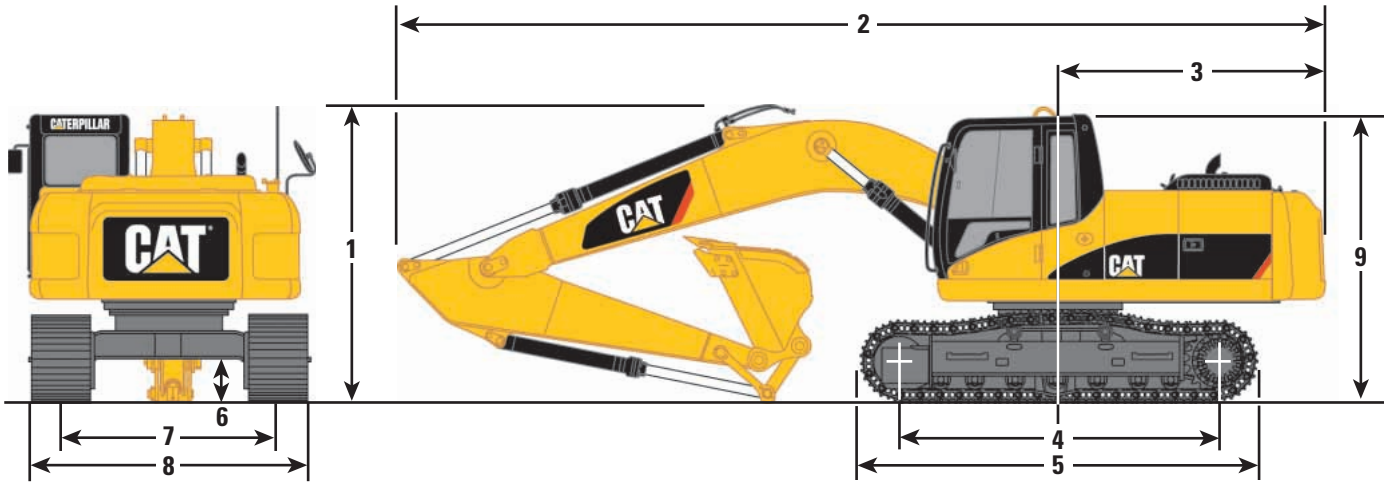
- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT 98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environment.

Standards

Brakes	SAE J1026 APR90
Cab/FOGS	SAE J1356 FEB88

Dimensions

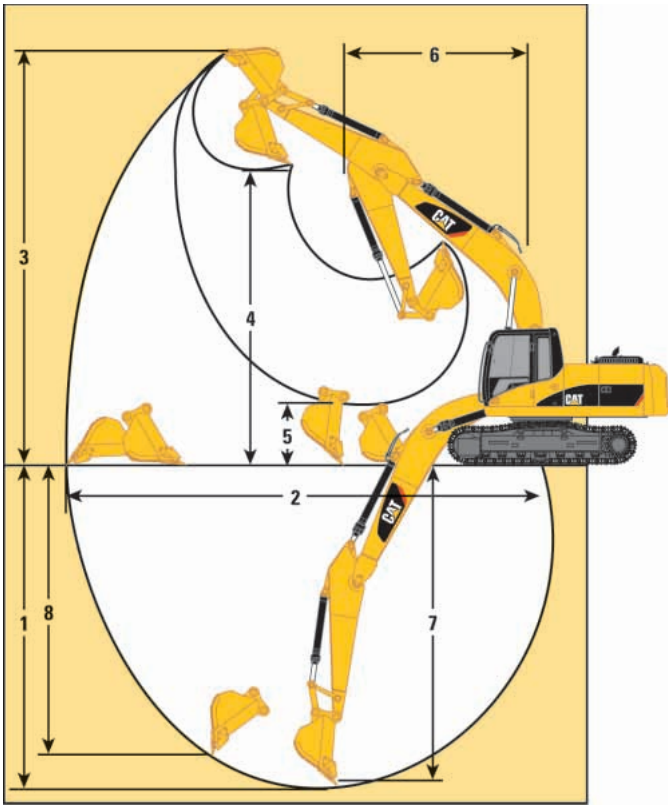
All dimensions are approximate.



Boom Options		Reach 5.68 m (18'8")	Reach 5.68 m (18'8")	Reach 5.68 m (18'8")	Mass 5.2 m (17'1")	Super Long Reach 8.85 m (29'0")
Stick Options		**R3.9B1 m (12'10")**	**R2.9B1 m (9'7") Std/SA**	**R2.5B1 m (8'2") Std/SA**	**M2.4CB2 m (7'10")**	**6.28 m (20'7")**
1	Shipping Height	3440 mm (11'3")	3030 mm (9'11")	3050 mm (10'0")	3280 mm (10'9")	3190 mm (10'6")
2	Shipping Length	9440 mm (31'0")	9460 mm (31'0")	9460 mm (31'0")	9050 mm (29'8")	12 680 mm (41'7")
3	Tail Swing Radius	2750 mm (9'0")	2750 mm (9'0")	2750 mm (9'0")	2750 mm (9'0")	2750 mm (9'0")
4	Length to Center of Rollers					
	Standard	3265 mm (10'9")	3265 mm (10'9")	3265 mm (10'9")	3265 mm (10'9")	n/a
	Long	3650 mm (12'0")	3650 mm (12'0")	3650 mm (12'0")	3650 mm (12'0")	3650 mm (12'0")
5	Track Length					
	Standard	4075 mm (13'4")	4075 mm (13'4")	4075 mm (13'4")	4075 mm (13'4")	n/a
	Long	4455 mm (14'7")	4455 mm (14'7")	4455 mm (14'7")	4455 mm (14'7")	4455 mm (14'7")
6	Ground Clearance	450 mm (1'6")	450 mm (1'6")	450 mm (1'6")	450 mm (1'6")	450 mm (1'6")
7	Track Gauge					
	Standard	2200 mm (7'3")	2200 mm (7'3")	2200 mm (7'3")	2200 mm (7'3")	n/a
	Long	2380 mm (7'10")	2380 mm (7'10")	2380 mm (7'10")	2380 mm (7'10")	2380 mm (7'10")
8	Transport Width	800 mm Shoes	700 mm Shoes	600 mm Shoes		800 mm Shoes
	Standard	3000 mm (9'10")	2900 mm (9'6")	2800 mm (9'2")	2800 mm (9'2")	2800 mm (9'2")
	Long	3180 mm (10'5")	3080 mm (10'1")	2980 mm (9'9")	2980 mm (9'9")	2980 mm (9'9")
9	Cab Height	2950 mm (9'8")	2950 mm (9'8")	2950 mm (9'8")	2950 mm (9'8")	2950 mm (9'8")

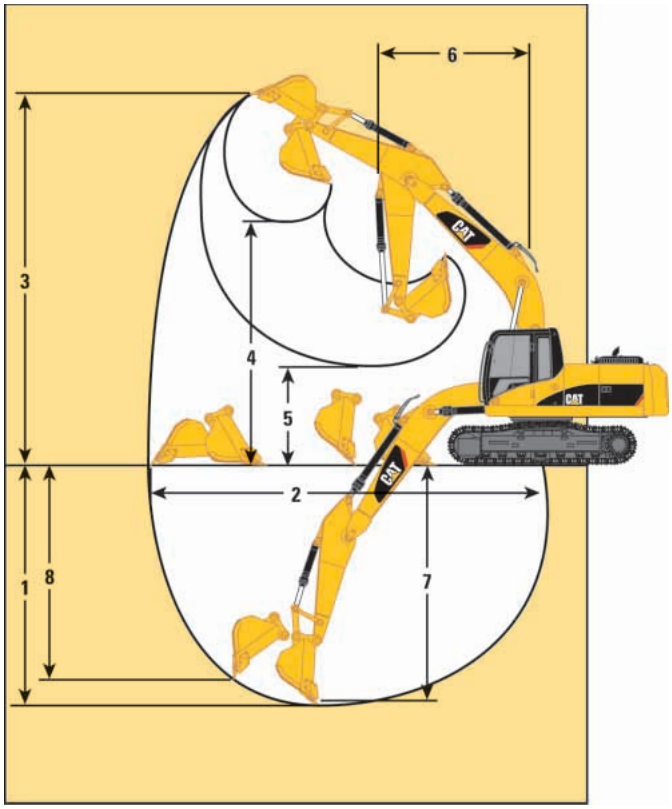
Reach Excavator Working Ranges

Reach (R) boom configuration



Mass Excavator Working Ranges

Mass (M) boom configuration

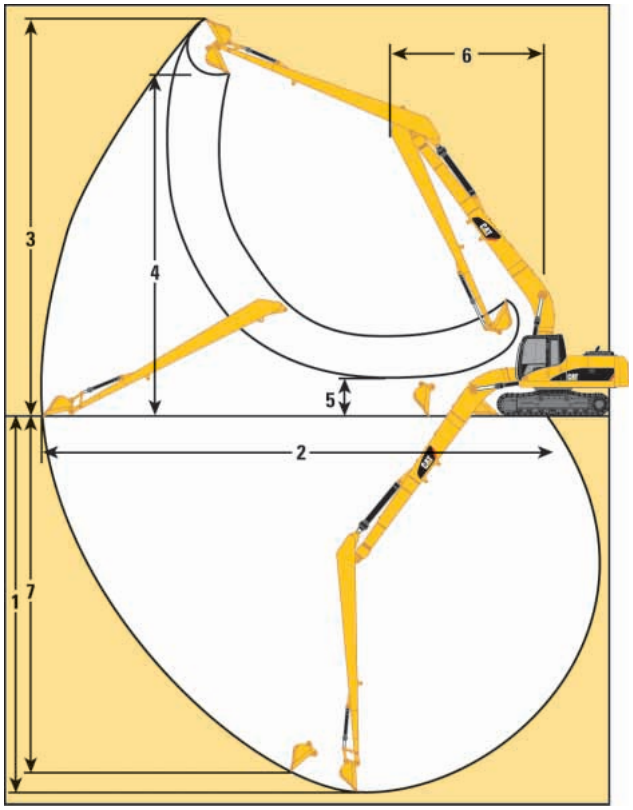


Boom Options		Reach 5.68 m (18'8")	Reach 5.68 m (18'8")	Reach 5.68 m (18'8")	Mass 5.2 m (17'1")
Stick Options		**R3.9B1 m (12'10")**	**R2.9B1 m (9'7")**	**R2.5B1 m (8'2")**	**M2.4CB2 m (7'10")**
Bucket		**1.0 m^3 (1.31 yd^3)**	**1.0 m^3 (1.31 yd^3)**	**1.0 m^3 (1.31 yd^3)**	**1.35 m^3 (1.77 yd^3)**
1	Maximum Digging Depth	7660 mm (25'2")	6720 mm (22'1")	6300 mm (20'8")	5890 mm (19'4")
2	Maximum Reach at Ground Level	10 760 mm (35'4")	9860 mm (32'4")	9460 mm (31'0")	8960 mm (29'5")
3	Maximum Cutting Height	9940 mm (32'7")	9490 mm (31'2")	9290 mm (30'6")	8930 mm (29'4")
4	Maximum Loading Height	6940 mm (22'9")	6490 mm (21'4")	6290 mm (20'8")	5720 mm (18'9")
5	Minimum Loading Height	1230 mm (4'0")	2170 mm (7'1")	2590 mm (8'6")	2230 mm (7'4")
6	Minimum Front Swing Radius	3790 mm (12'5")	3660 mm (12'0")	3710 mm (12'2")	3410 mm (11'2")
7	Maximum Depth Cut for 2440 mm (8') Level Bottom	7270 mm (23'10")	6370 mm (20'11")	5950 mm (19'6")	5660 mm (18'7")
8	Maximum Vertical Wall Digging Depth	6970 mm (22'10")	6060 mm (19'11")	5650 mm (18'6")	5360 mm (17'7")

All measurements are approximate

Super Long Reach Working Ranges

Reach (R) boom configuration



Boom Options	Super Long Reach 8.85 m (29'0")
Stick Options	**6.28 m (20'7")**
Bucket	**0.46 m³ (0.80 yd³)**
1 Maximum Digging Depth	11 740 mm (38'6")
2 Maximum Reach at Ground Level	15 590 mm (51'2")
3 Maximum Cutting Height	13 240 mm (43'5")
4 Maximum Loading Height	11 150 mm (36'7")
5 Minimum Loading Height	2100 mm (6'11")
6 Minimum Front Swing Radius	5280 mm (17'4")
7 Maximum Vertical Wall Digging Depth	11 300 mm (37'1")

All measurements are approximate

320D Bucket and Stick Forces

General Purpose Buckets

Stick	R3.9B1		R2.9B1		R2.5B1		M2.4CB2	
	kN	lb	kN	lb	kN	lb	kN	lb
Bucket Digging Force (ISO)	140	31,361	140	31,361	140	31,361	175	39,319
Stick Digging Force (ISO)	89	20,098	106	23,897	118	26,460	127	28,438
Bucket Digging Force (SAE)	125	28,079	125	28,079	125	28,079	158	35,452
Stick Digging Force (SAE)	87	19,648	103	23,223	114	25,628	123	27,539

Power Buckets

Stick	R3.9B1		R2.9B1		R2.5B1		M2.4CB2	
	kN	lb	kN	lb	kN	lb	kN	lb
Bucket Digging Force (ISO)	163	36,711	163	36,711	163	36,711	196	44,040
Stick Digging Force (ISO)	91	20,503	109	24,482	121	27,202	130	29,180
Bucket Digging Force (SAE)	144	32,417	144	32,417	144	32,417	172	38,645
Stick Digging Force (SAE)	89	19,963	106	23,717	117	26,235	125	28,034

Heavy Duty/Rock Buckets

Stick	R3.9B1		R2.9B1		R2.5B1		M2.4CB2	
	kN	lb	kN	lb	kN	lb	kN	lb
Bucket Digging Force (ISO)	140	31,563	140	31,563	140	31,563	175	39,319
Stick Digging Force (ISO)	90	20,120	106	23,920	118	26,505	127	28,438
Bucket Digging Force (SAE)	125	28,079	125	28,079	125	28,079	155	34,800
Stick Digging Force (SAE)	87	19,626	103	23,200	114	25,606	122	27,359

Major Component Weights

		kg	lb
Base machine with counterweight (without front linkage)	STD undercarriage with 600 mm shoe	16 260	35,847
	L undercarriage with 800 mm shoe	17 470	38,515
Two boom cylinders (Each)		182	401
Counterweight			
Standard		3860	8,510
Super Long Reach		4830	10,648
Boom (includes lines, pins and stick cylinder)			
Reach boom 5.7 m (18'5")		1640	3,616
Mass boom 5.2 m (17'1")		1670	3,682
Super Long Reach Boom – 8.85 m (29'1")		2180	4,806
Stick (includes lines, pins, bucket cylinder and linkage)			
R3.9 (12'8")		1063	2,344
R2.9 (9'7")		818	1,803
R2.5 (8'2")		779	1,717
M2.4 (7'10")		985	2,172
Super Long Reach Stick – 6.82 m (20'7")		1600	3,527
Undercarriage [includes Carbody, Swing bearing, Track frame, Rollers, Idlers, Steps, Guards, Final drive]	STD undercarriage with 600 mm shoe	6670	14,705
	L undercarriage with 800 mm shoe	7880	17,372

320D L Bucket Specifications and Compatibility

	Adapter	Capacity*		Width		Tip Radius		Weight (w/o tips)		Teeth	Reach Boom Stick			Mass Boom Stick
		m^3	yd^3	mm	in	mm	in	kg	lb	Qty	R3.9B1	R2.9B1	R2.5B1	M2.4CB2
B Family														
General	K80	0.55	0.72	610	24	1565	61.6	629	1,387	3	●	●	●	—
Purpose –	K80	0.75	0.98	762	30	1565	61.6	718	1,583	4	●	●	●	—
Capacity	K80	0.95	1.24	914	36	1565	61.6	790	1,742	5	◒	●	●	—
	K80	1.17	1.53	1067	42	1565	61.6	852	1,878	5	○	◒	●	—
	K80	1.39	1.82	1219	48	1565	61.6	926	2,041	6	◓	○	◒	—
	K80	1.57	2.05	1372	54	1565	61.6	1000	2,205	6	∴	◓	○	—
Heavy	K90	0.47	0.61	610	24	1578	62.1	650	1,433	3	●	●	●	—
Duty	K90	0.64	0.84	762	30	1578	62.1	743	1,638	4	●	●	●	—
	K90	0.82	1.07	914	36	1578	62.1	813	1,792	5	●	●	●	—
	K90	1.00	1.31	1067	42	1578	62.1	866	1,909	5	○	●	●	—
	K90	1.19	1.56	1219	48	1578	62.1	956	2,108	6	◓	◒	●	—
	K90	1.38	1.80	1372	54	1578	62.1	1030	2,271	6	∴	○	◒	—
Heavy	K90	0.54	0.70	610	24	1578	62.1	696	1,534	3	●	●	●	—
Duty	K90	0.77	1.00	762	30	1578	62.1	781	1,722	4	●	●	●	—
Rock	K90	0.84	1.10	914	36	1578	62.1	863	1,903	5	●	●	●	—
	K90	1.07	1.40	1067	42	1578	62.1	933	2,057	5	○	●	●	—
Heavy	K90	0.79	1.03	914	36	1458	57.4	811	1,788	5	●	●	●	—
Duty	K90	0.96	1.26	1067	42	1458	57.4	875	1,929	5	◒	●	●	—
Power	K90	1.14	1.49	1219	48	1458	57.4	954	2,103	6	◓	◒	●	—
Ditch	n/a	1.02	1.33	1524	60	1139	44.8	726	1,601	0	◒	●	●	—
Cleaning	n/a	1.24	1.62	1830	72	1139	44.8	823	1,814	0	○	◒	●	—
CB Family														
General	K90	0.63	0.82	610	24	1656	65.2	700	1,543	3	—	—	—	●
Purpose –	K90	0.86	1.12	762	30	1656	65.2	809	1,784	4	—	—	—	●
Capacity	K90	1.09	1.43	914	36	1656	65.2	903	1,992	5	—	—	—	●
	K90	1.34	1.75	1067	42	1656	65.2	977	2,153	5	—	—	—	●
	K90	1.58	2.07	1219	48	1656	65.2	1064	2,345	6	—	—	—	○
	K90	1.83	2.39	1372	54	1656	65.2	1151	2,537	7	—	—	—	◓
Heavy	K100	0.53	0.69	610	24	1686	66.4	751	1,657	3	—	—	—	●
Duty	K100	0.73	0.95	762	30	1686	66.4	829	1,828	3	—	—	—	●
	K100	0.93	1.22	914	36	1686	66.4	944	2,080	4	—	—	—	●
	K100	1.14	1.49	1067	42	1686	66.4	1025	2,259	5	—	—	—	●
	K100	1.35	1.77	1219	48	1686	66.4	1095	2,414	5	—	—	—	◒
	K100	1.57	2.05	1372	54	1686	66.4	1181	2,604	6	—	—	—	○
	K100	1.78	2.33	1524	60	1686	66.4	1268	2,794	7	—	—	—	◓
	K100	1.99	2.60	1676	66	1686	66.4	1340	2,954	7	—	—	—	◓
Heavy	K100	0.73	0.95	762	30	1686	66.4	936	2,064	3	—	—	—	●
Duty	K100	0.93	1.22	914	36	1686	66.4	1035	2,281	4	—	—	—	●
Rock	K100	1.14	1.49	1067	42	1686	66.4	1126	2,483	5	—	—	—	●
	K100	1.35	1.77	1219	48	1686	66.4	1211	2,670	5	—	—	—	◒
Heavy	K100	1.12	1.46	1067	42	1592	62.7	1013	2,232	5	—	—	—	●
Duty	K100	1.33	1.74	1219	48	1592	62.7	1089	2,401	5	—	—	—	●
Power	K100	1.53	2.00	1372	54	1592	62.7	1180	2,601	6	—	—	—	○
Ditch	n/a	1.25	1.63	1524	60	1262	49.7	739	1,629	—	—	—	—	●
Cleaning	n/a	1.53	2.00	1830	72	1262	49.7	837	1,845	—	—	—	—	◒

Assumptions for maximum material density rating:
1. Front linkage fully extended at ground line
2. Machine positioned 90 degrees over the side
3. Bucket curled
4. 100% Bucket Fill Factor

Please consult with your Caterpillar dealer personnel for optimum selection of buckets and work tools that best match your application.

* Based on SAE J296, some calculations of capacity specs fall on borderlines. Rounding may allow two buckets to have the same English rating, but different metric ratings.

- ● 2100 kg/m^3 (3,500 lb/yd^3) max material density
- ◒ 1800 kg/m^3 (3,000 lb/yd^3) max material density
- ○ 1500 kg/m^3 (2,500 lb/yd^3) max material density
- ◓ 1200 kg/m^3 (2,000 lb/yd^3) max material density
- ∴ Not Recommended
- — Not Available/Recommended

320D Bucket Specifications and Compatibility

	Adapter	Capacity*		Width		Tip Radius		Weight (w/o tips)		Teeth	Reach Boom Stick			Mass Boom Stick
		m^3	yd^3	mm	in	mm	in	kg	lb	Qty	R3.9B1	R2.9B1	R2.5B1	M2.4CB2
B Family														
General Purpose –	K80	0.55	0.72	610	24	1565	61.6	629	1387	3	●	●	●	—
Capacity	K80	0.75	0.98	762	30	1565	61.6	718	1583	4	◒	●	●	—
	K80	0.95	1.24	914	36	1565	61.6	790	1742	5	○	●	●	—
	K80	1.17	1.53	1067	42	1565	61.6	852	1878	5	○	○	◒	—
	K80	1.39	1.82	1219	48	1565	61.6	926	2041	6	∴	◒	○	—
	K80	1.57	2.05	1372	54	1565	61.6	1000	2205	6	∴	∴	◒	—
Heavy Duty	K90	0.47	0.61	610	24	1578	62.1	650	1433	3	●	●	●	—
	K90	0.64	0.84	762	30	1578	62.1	743	1638	4	●	●	●	—
	K90	0.82	1.07	914	36	1578	62.1	813	1792	5	○	●	●	—
	K90	1.00	1.31	1067	42	1578	62.1	866	1909	5	◒	◒	●	—
	K90	1.19	1.56	1219	48	1578	62.1	956	2108	6	∴	○	○	—
	K90	1.38	1.80	1372	54	1578	62.1	1030	2271	6	∴	◒	◒	—
Heavy Duty Rock	K90	0.54	0.70	610	24	1578	62.1	696	1534	3	●	●	●	—
	K90	0.77	1.00	762	30	1578	62.1	781	1722	4	◒	●	●	—
	K90	0.84	1.10	914	36	1578	62.1	863	1903	5	○	●	●	—
	K90	1.07	1.40	1067	42	1578	62.1	933	2057	5	◒	○	◒	—
Heavy Duty Power	K90	0.79	1.03	914	36	1458	57.4	811	1788	5	◒	●	●	—
	K90	0.96	1.26	1067	42	1458	57.4	875	1929	5	○	◒	●	—
	K90	1.14	1.49	1219	48	1458	57.4	954	2103	6	∴	○	◒	—
Ditch Cleaning	n/a	1.02	1.33	1524	60	1139	44.8	726	1601	0	○	●	●	—
	n/a	1.24	1.62	1830	72	1139	44.8	823	1814	0	◒	○	◒	—
CB Family														
General Purpose –	K90	0.63	0.82	610	24	1656	65.2	700	1543	3	—	—	—	●
Capacity	K90	0.86	1.12	762	30	1656	65.2	809	1784	4	—	—	—	●
	K90	1.09	1.43	914	36	1656	65.2	903	1992	5	—	—	—	●
	K90	1.34	1.75	1067	42	1656	65.2	977	2153	5	—	—	—	○
	K90	1.58	2.07	1219	48	1656	65.2	1064	2345	6	—	—	—	◒
	K90	1.83	2.39	1372	54	1656	65.2	1151	2537	7	—	—	—	∴
Heavy Duty	K100	0.53	0.69	610	24	1686	66.4	751	1657	3	—	—	—	●
	K100	0.73	0.95	762	30	1686	66.4	829	1828	3	—	—	—	●
	K100	0.93	1.22	914	36	1686	66.4	944	2080	4	—	—	—	●
	K100	1.14	1.49	1067	42	1686	66.4	1025	2259	5	—	—	—	◒
	K100	1.35	1.77	1219	48	1686	66.4	1095	2414	5	—	—	—	○
	K100	1.57	2.05	1372	54	1686	66.4	1181	2604	6	—	—	—	◒
	K100	1.78	2.33	1524	60	1686	66.4	1268	2794	7	—	—	—	∴
	K100	1.99	2.60	1676	66	1686	66.4	1340	2954	7	—	—	—	∴
Heavy Duty Rock	K100	0.73	0.95	762	30	1686	66.4	936	2064	3	—	—	—	●
	K100	0.93	1.22	914	36	1686	66.4	1035	2281	4	—	—	—	●
	K100	1.14	1.49	1067	42	1686	66.4	1126	2483	5	—	—	—	◒
	K100	1.35	1.77	1219	48	1686	66.4	1211	2670	5	—	—	—	○
Heavy Duty Power	K100	1.12	1.46	1067	42	1592	62.7	1013	2232	5	—	—	—	◒
	K100	1.33	1.74	1219	48	1592	62.7	1089	2401	5	—	—	—	○
	K100	1.53	2.00	1372	54	1592	62.7	1180	2601	6	—	—	—	◒
Ditch Cleaning	n/a	1.25	1.63	1524	60	1262	49.7	739	1629	—	—	—	—	●
	n/a	1.53	2.00	1830	72	1262	49.7	837	1845	—	—	—	—	○

Assumptions for maximum material density rating:
1. Front linkage fully extended at ground line
2. Machine positioned 90 degrees over the side
3. Bucket curled
4. 100% Bucket Fill Factor

Please consult with your Caterpillar dealer personnel for optimum selection of buckets and work tools that best match your application.

* Based on SAE J296, some calculations of capacity specs fall on borderlines. Rounding may allow two buckets to have the same English rating, but different metric ratings.

- ● 2100 kg/m^3 (3,500 lb/yd^3) max material density
- ◒ 1800 kg/m^3 (3,000 lb/yd^3) max material density
- ○ 1500 kg/m^3 (2,500 lb/yd^3) max material density
- ◒ 1200 kg/m^3 (2,000 lb/yd^3) max material density
- ∴ Not Recommended
- — Not Available/Recommended

320D/320D L Work Tool Matching Guide

Boom Options		Reach Boom 5.7 m (18'5")		Mass Boom 5.2 m (17'1")
Stick Options	**R3.9B1 (12'8")**	**R2.9B1 (9'7")**	**R2.5B1 (8'2")**	**M2.4CB2 (7'10")**
Hydraulic Hammer	H115s/ H120Cs/ H130s	H115s/ H120Cs/ H130s	H115s/ H120Cs/ H130s	H115s/ H120Cs/ H130s
Vibratory Plate Compactor	CVP110	CVP110	CVP110	CVP110
Multi-Processor	MP15	MP15	MP15	MP15
360 Scrap Shear	S320	S320	S320	S320
Trash Grapple	2.7 m^3 (3.5 yd^3)	2.7 m^3 (3.5 yd^3)	2.7 m^3 (3.5 yd^3)	2.7 m^3 (3.5 yd^3)
Contractor's Grapple	yes	yes	yes	n/a
Hydraulic Thumb	yes	yes	yes	n/a
Dedicated Quick Coupler	yes	yes	yes	yes
Pin-Grabber Quick Coupler	yes	yes	yes	yes

Reach Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach

R3.9B1 STICK – 3.9 m (12'10")
BUCKET – 0.8 m³ (1.05 yd³)

UNDERCARRIAGE – Long
SHOES – 800 mm (32") triple grouser

BOOM – 5.68 m (18'8")
COUNTERWEIGHT – 3.87 ton (8,532 lb)

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)				
																m ft
7.5 m **25.0 ft**	kg **lb**									*2750 ***5,250**	*2750 ***5,250**			*1550 ***3,400**	*1550 ***3,400**	8.86 **28.78**
6.0 m **20.0 ft**	kg **lb**									*3500 ***7,700**	3350 **7,150**			*1500 ***3,250**	*1500 ***3,250**	9.70 **31.68**
4.5 m **15.0 ft**	kg **lb**									*3800 ***8,250**	3300 **7,000**	*2650 ***4,750**	2250 ***4,750**	*1450 ***3,200**	*1450 ***3,200**	10.21 **33.44**
3.0 m **10.0 ft**	kg **lb**							*4800 ***10,350**	4650 **9,950**	*4300 ***9,300**	3150 **6,750**	*3550 ***7,100**	2200 **4,700**	*1500 ***3,300**	*1500 ***3,300**	10.44 **34.25**
1.5 m **5.0 ft**	kg **lb**			*12 650 ***27,600**	*12 650 ***27,600**	*7800 ***16,850**	6800 **14,650**	*5850 ***12,650**	4350 **9,300**	*4850 ***10,550**	3000 **6,400**	3650 **7,800**	2150 **4,550**	*1650 ***3,550**	*1650 ***3,550**	10.42 **34.19**
Ground Line	kg **lb**			*7900 ***18,100**	*7900 ***18,100**	*9450 ***20,350**	6300 **13,550**	*6800 ***14,650**	4050 **8,700**	4850 **10,350**	2850 **6,100**	3600 **7,650**	2100 **4,400**	*1800 ***3,950**	1700 **3,700**	10.14 **33.28**
–1.5 m **–5.0 ft**	kg **lb**	*5100 ***11,400**	*5100 ***11,400**	*9400 ***21,300**	*9400 ***21,300**	*10 250 ***22,200**	6050 **13,000**	6750 **14,400**	3900 **8,350**	4700 **10,100**	2750 **5,900**	*3100	2050	*2100 ***4,650**	1850 **4,100**	9.59 **31.43**
–3.0 m **–10.0 ft**	kg **lb**	*7950 ***17,800**	*7950 ***17,800**	*12 600 ***28,600**	11 900 **25,450**	*10 300 ***22,300**	6000 **12,850**	6650 **14,300**	3850 **8,250**	4700 **10,050**	2700 **5,850**			*2650 ***5,800**	2200 **4,900**	8.70 **28.43**
–4.5 m **–15.0 ft**	kg **lb**	*11 500 ***25,900**	*11 500 ***25,900**	*14 150 ***30,450**	12 150 **26,000**	*9550 ***20,500**	6050 **13,050**	6700 **14,450**	3900 **8,350**					*3650 ***8,200**	3000 **6,750**	7.34 **23.80**
–6.0 m **–20.0 ft**	kg **lb**			*10800 ***22,750**	*10800 ***22,750**	*7350 ***15,350**	6350 **13,650**							*5250 ***11,500**	4500 **10,300**	5.66 **18.11**

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. 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.

Heavy Lift – On

R2.9B1 STICK – 2.9 m (9'7")
BUCKET – 0.9 m³ (1.18 yd³)

UNDERCARRIAGE – Long
SHOES – 800 mm (32") triple grouser

BOOM – 5.68 m (18'8")
COUNTERWEIGHT – 3.87 ton (8,532 lb)

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				
														m ft
7.5 m **25.0 ft**	kg **lb**											*2200 ***4,900**	*2200 ***4,900**	7.75 **25.10**
6.0 m **20.0 ft**	kg **lb**									*3450	3250	*2100 ***4,600**	*2100 ***4,600**	8.73 **28.47**
4.5 m **15.0 ft**	kg **lb**							*4850 ***10,500**	4800 **10,300**	*4550 ***9,950**	3250 **6,900**	*2100 ***4,600**	*2100 ***4,600**	9.30 **30.44**
3.0 m **10.0 ft**	kg **lb**			*11 450 ***24,300**	*11 450 ***24,300**	*7300 ***15,650**	7200 **15,550**	*5750 ***12,400**	4550 **9,800**	*4950 ***10,800**	3150 **6,700**	*2150 ***4,750**	2050 **4,500**	9.56 **31.34**
1.5 m **5.0 ft**	kg **lb**					*9150 ***19,700**	6650 **14,350**	*6650 ***14,400**	4300 **9,250**	5000 **10,750**	3000 **6,450**	*2350 ***5,100**	2000 **4,400**	9.53 **31.28**
Ground Line	kg **lb**			*6550 ***15,000**	*6550 ***15,000**	*10 300 ***22,250**	6350 **13,600**	6950 **14,950**	4100 **8,850**	4900 **10,500**	2900 **6,250**	*2600 ***5,700**	2100 **4,600**	9.22 **30.26**
–1.5 m **–5.0 ft**	kg **lb**	*6050 ***13,500**	*6050 ***13,500**	*10 150 ***23,000**	*10 150 ***23,000**	*10 600 ***22,950**	6200 **13,300**	6850 **14,700**	4000 **8,650**	4850 **10,400**	2900 **6,150**	*3050 ***6,700**	2350 **5,150**	8.60 **28.17**
–3.0 m **–10.0 ft**	kg **lb**	*10 100 ***22,650**	*10 100 ***22,650**	*14 850 ***32,150**	12 350 **26,450**	*10 150 ***21,900**	6250 **13,400**	6850 **14,700**	4050 **8,650**			*3850 ***8,600**	2900 **6,500**	7.58 **24.72**
–4.5 m **–15.0 ft**	kg **lb**			*12 300 ***26,400**	*12 300 ***26,400**	*8600 ***18,400**	6400 **13,800**					*4500 ***9,900**	4400 **9,900**	5.93 **19.24**

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. 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.

Heavy Lift – On

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

Reach Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach

R2.5B1 STICK – 2.5 m (8'2")
BUCKET – 0.9 m³ (1.18 yd³)

UNDERCARRIAGE – Long
SHOES – 800 mm (32") triple grouser

BOOM – 5.68 m (18'8")
COcounterweight – 3.87 ton (8,532 lb)

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				
														m ft
7.5 m **25.0 ft**	kg **lb**							*4300 	*4300 			*2600 ***5,750**	*2600 ***5,750**	7.24 **23.39**
6.0 m **20.0 ft**	kg **lb**							*4700 ***10,300**	*4700 ***10,300**			*2500 ***5,450**	*2500 ***5,450**	8.29 **27.02**
4.5 m **15.0 ft**	kg **lb**							*5250 ***11,350**	4750 **10,150**	*4850 ***10,500**	3200 **6,800**	*2450 ***5,400**	2400 **5,250**	8.89 **29.11**
3.0 m **10.0 ft**	kg **lb**					*7850 ***16,900**	7100 **15,250**	*6050 ***13,150**	4500 **9,700**	5100 **10,950**	3100 **6,650**	*2550 ***5,600**	2200 **4,850**	9.16 **30.05**
1.5 m **5.0 ft**	kg **lb**					*9600 ***20,650**	6550 **14,100**	*6950 ***15,000**	4300 **9,200**	5000 **10,700**	3000 **6,450**	*2750 ***6,000**	2150 **4,750**	9.14 **29.99**
Ground Line	kg **lb**			*5850 ***13,450**	*5850 ***13,450**	*10 500 ***22,700**	6300 **13,500**	6950 **14,900**	4100 **8,800**	4900 **10,500**	2950 **6,250**	*3050 ***6,750**	2250 **5,000**	8.81 **28.92**
–1.5 m **–5.0 ft**	kg **lb**	*6550 ***14,650**	*6550 ***14,650**	*10 650 ***24,250**	*10 650 ***24,250**	*10 550 ***22,900**	6200 **13,300**	6850 **14,700**	4050 **8,650**	4850 **10,450**	2900 **6,250**	*3600 ***7,950**	2600 **5,700**	8.15 **26.71**
–3.0 m **–10.0 ft**	kg **lb**	*11 500 ***25,800**	*11 500 ***25,800**	*14 050 ***30,450**	12 450 **26,650**	*9850 ***21,250**	6300 **13,500**	6900 **14,850**	4100 **8,750**			*4650 ***10,300**	3300 **7,350**	7.05 **22.99**
–4.5 m **–15.0 ft**	kg **lb**			*11 100 ***23,700**	*11 100 ***23,700**	*7850 ***16,700**	6500 **14,050**					*6000 ***13,150**	4850 **10,950**	5.50 **17.76**

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. 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.

Heavy Lift – On

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

Mass Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach

M2.4CB2 – 2.4 m (7'10")
BUCKET – 1.2 m³ (1.57 yd³)

UNDERCARRIAGE – Long
SHOES – 800 mm (32") triple grouser

BOOM – 5.2 m (17'1")
COUNTERWEIGHT – 3.87 ton (8,532 lb)

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				
														m ft
7.5 m **25.0 ft**	kg **lb**											*3350	*3350	6.51
6.0 m **20.0 ft**	kg **lb**							*4800 ***10,650**	4550 **9,650**			*3150 ***6,900**	2900 **6,450**	7.69 **25.03**
4.5 m **15.0 ft**	kg **lb**							*5150 ***11,200**	4450 **9,500**			*3150 ***6,900**	2350 **5,200**	8.34 **27.30**
3.0 m **10.0 ft**	kg **lb**			***24,850**	***24,850**	*7450 ***16,050**	6900 **14,850**	*5900 ***12,700**	4250 **9,050**	4800 **10,200**	2800 **5,900**	*3250 ***7,200**	2150 **4,650**	8.63 **28.29**
1.5 m **5.0 ft**	kg **lb**					*9100 ***19,650**	6350 **13,600**	*6650 ***14,450**	4000 **8,550**	4700 **10,050**	2700 **5,750**	*3550 ***7,800**	2100 **4,550**	8.58 **28.17**
Ground Line	kg **lb**			*8800 ***20,300**	*8800 ***20,300**	*10 050 ***21,750**	6000 **12,850**	6700 **14,300**	3800 **8,150**	4600	2600	3950 **8,700**	2250 **4,900**	8.22 **26.96**
–1.5 m **–5.0 ft**	kg **lb**	*8050 ***17,950**	*8050 ***17,950**	*14 450 ***33,000**	11 800 **25,200**	*10 100 ***21,850**	5900 **12,650**	6600 **14,150**	3750 **8,000**			4650 **10,300**	2650 **5,850**	7.48 **24.47**
–3.0 m **–10.0 ft**	kg **lb**	*14 300 ***32,150**	*14 300 ***32,150**	*13 250 ***28,650**	12 100 **25,900**	*9100 ***19,600**	6000 **12,900**	*6300	3850			*4750 ***10,400**	3750 **8,400**	6.20 **20.18**
–4.5 m **–15.0 ft**	kg **lb**											*6050	*6050	4.47

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. 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.

Heavy Lift – On

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

Reach Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach

R3.9B1 STICK – 3.9 m (12'10")
BUCKET – 0.8 m³ (1.05 yd³)

UNDERCARRIAGE – STD
SHOES – 600 mm (24") triple grouser

BOOM – 5.68 m (18'8")
COUNTERWEIGHT – 3.87 ton (8,532 lb)

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)				
																m ft
7.5 m **25.0 ft**	kg **lb**									*2700 ***5,250**	*2700 ***5,250**			*1550 ***3,400**	*1550 ***3,400**	8.86 **28.78**
6.0 m **20.0 ft**	kg **lb**									*3500 ***7,650**	2900 **6,200**			*1450 ***3,200**	*1450 ***3,200**	9.70 **31.68**
4.5 m **15.0 ft**	kg **lb**									*3750 ***8,200**	2850 **6,050**	*2650 ***4,750**	1900 **4,050**	*1450 ***3,200**	*1450 ***3,200**	10.21 **33.44**
3.0 m **10.0 ft**	kg **lb**							*4750 ***10,300**	4050 **8,650**	4200 **9,000**	2700 **5,750**	3000 **6,400**	1850 **3,950**	*1500 ***3,300**	1400 **3,000**	10.44 **34.25**
1.5 m **5.0 ft**	kg **lb**			*12 650 ***27,500**	11 200 **24,050**	*7800 ***16,750**	5900 **12,650**	*5800 **12,550**	3700 **8,000**	4050 **8,650**	2550 **5,400**	2950 **6,250**	1800 **3,800**	*1600 ***3,550**	1350 **2,950**	10.42 **34.19**
Ground Line	kg **lb**			*7900 ***18,100**	*7900 ***18,100**	8850 **19,000**	5400 **11,550**	5550 **11,900**	3450 **7,400**	3900 **8,300**	2400 **5,100**	2850 **6,100**	1700 **3,650**	*1800 ***3,950**	1400 **3,050**	10.14 **33.28**
–1.5 m **–5.0 ft**	kg **lb**	*5100 ***11,400**	*5100 ***11,400**	*9350 ***21,250**	*9350 **21,100**	8550 **18,350**	5100 **10,950**	5350 **11,500**	3300 **7,050**	3750 **8,100**	2300 **4,900**	2800	1700	*2100 ***4,600**	1550 **3,350**	9.59 **31.43**
–3.0 m **–10.0 ft**	kg **lb**	*7950 ***17,800**	*7950 ***17,800**	*12 600 ***28,600**	9900 **21,200**	8500 **18,200**	5050 **10,800**	5300 **11,350**	3250 **6,900**	3750 **8,050**	2300 **4,850**			*2600 ***5,800**	1850 **4,100**	8.70 **28.43**
–4.5 m **–15.0 ft**	kg **lb**	*11 500 ***25,850**	*11 500 ***25,850**	*14 050 ***30,300**	10 150 **21,700**	8600 **18,400**	5150 **11,000**	5350 **11,500**	3300 **7,050**					*3650 ***8,200**	2550 **5,700**	7.34 **23.80**
–6.0 m **–20.0 ft**	kg **lb**			*10 750 ***22,650**	10 600 ***22,650**	*7300 ***15,250**	5400 **11,650**							*5200 ***11,450**	3850 **8,800**	5.66 **18.11**

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. 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.

Heavy Lift – On

R2.9B1 STICK – 2.92 m (9'7")
BUCKET – 0.8 m³ (1.05 yd³)

UNDERCARRIAGE – STD
SHOES – 600 mm (24") triple grouser

BOOM – 5.68 m (18'8")
COUNTERWEIGHT – 3.87 ton (8,532 lb)

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				
														m ft
7.5 m **25.0 ft**	kg **lb**											*2250 ***4,950**	*2250 ***4,950**	7.75 **25.10**
6.0 m **20.0 ft**	kg **lb**									*3500	2850	*2150 ***4,650**	*2150 ***4,650**	8.73 **28.47**
4.5 m **15.0 ft**	kg **lb**							*4850 ***10,500**	4200 **9,050**	4300 **9,250**	2800 **6,000**	*2100 ***4,650**	1900 **4,200**	9.30 **30.44**
3.0 m **10.0 ft**	kg **lb**			*11 450 ***24,300**	*11 450 ***24,300**	*7300 ***15,650**	6300 **13,550**	*5750 ***12,400**	4000 **8,550**	4200 **9,000**	2700 **5,800**	*2200 ***4,800**	1750 **3,800**	9.56 **31.34**
1.5 m **5.0 ft**	kg **lb**					*9150 ***19,650**	5750 **12,350**	5850 **12,500**	3750 **8,000**	4100 **8,750**	2600 **5,550**	*2350 ***5,150**	1700 **3,750**	9.53 **31.28**
Ground Line	kg **lb**			*6600 ***15,050**	*6600 ***15,050**	8900 **19,050**	5400 **11,600**	5600 **12,050**	3550 **7,600**	3950 **8,500**	2500 **5,350**	*2650 ***5,750**	1800 **3,900**	9.22 **30.26**
–1.5 m **–5.0 ft**	kg **lb**	*6050 ***13,550**	*6050 ***13,550**	*10 150 ***23,050**	*10 150 **21,800**	8750 **18,700**	5300 **11,350**	5500 **11,800**	3450 **7,350**	3900 **8,400**	2450 **5,250**	*3100 ***6,800**	2000 **4,400**	8.60 **28.18**
–3.0 m **–10.0 ft**	kg **lb**	*10 150 ***22,700**	*10 150 ***22,700**	*14 800 ***32,050**	10 350 **22,200**	8750 **18,800**	5300 **11,400**	5500 **11,850**	3450 **7,400**			*3900 ***8,650**	2500 **5,550**	7.58 **24.72**
–4.5 m **–15.0 ft**	kg **lb**			*12 250 ***26,350**	10 700 **23,000**	*8600 ***18,350**	5500 **11,800**					*4500 ***9,900**	3850 **8,550**	5.93 **19.24**

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. 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.

Heavy Lift – On

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

Reach Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach

R2.5B1 STICK – 2.5 m (8'2")
BUCKET – 0.9 m³ (1.18 yd³)

UNDERCARRIAGE – STD
SHOES – 600 mm (24") triple grouser

BOOM – 5.68 m (18'8")
COcounterweight – 3.87 ton (8,532 lb)

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				
														m ft
7.5 m **25.0 ft**	kg **lb**							*4300	*4300			*2600 ***5,750**	*2600 ***5,750**	7.24 **23.39**
6.0 m **20.0 ft**	kg **lb**							*4700 ***10,250**	4250 **9,100**			*2450 ***5,450**	2400 **5,300**	8.29 **27.02**
4.5 m **15.0 ft**	kg **lb**							*5200 ***11,300**	4150 **8,850**	4250 **9,050**	2750 **5,850**	*2450 ***5,400**	2050 **4,450**	8.89 **29.11**
3.0 m **10.0 ft**	kg **lb**					*7850 ***16,850**	6150 **13,200**	6050 **12,950**	3900 **8,350**	4150 **8,900**	2650 **5,700**	*2550 ***5,600**	1850 **4,050**	9.16 **30.05**
1.5 m **5.0 ft**	kg **lb**					9100 **19,600**	5600 **12,100**	5750 **12,350**	3650 **7,850**	4050 **8,650**	2550 **5,450**	*2750 ***6,000**	1800 **3,950**	9.14 **29.99**
Ground Line	kg **lb**			*5850 ***13,450**	*5850 ***13,450**	8800 **18,850**	5350 **11,450**	5600 **11,950**	3500 **7,500**	3950 **8,450**	2500 **5,300**	*3050 ***6,700**	1900 **4,150**	8.81 **28.92**
–1.5 m **–5.0 ft**	kg **lb**	*6550 ***14,600**	*6550 ***14,600**	*10 650 ***24,250**	10 200 **21,800**	8700 **18,650**	5250 **11,300**	5500 **11,800**	3400 **7,350**	3900 **8,400**	2450 **5,250**	3500 **7,650**	2200 **4,800**	8.15 **26.71**
–3.0 m **–10.0 ft**	kg **lb**	*11 500 ***25,800**	*11 500 ***25,800**	*14 000 ***30,300**	10 450 **22,350**	8800 **18,850**	5350 **11,450**	5550 **11,900**	3450 **7,450**			4450 **9,850**	2800 **6,250**	7.05 **22.99**
–4.5 m **–15.0 ft**	kg **lb**			*11 050 ***23,600**	10 850 **23,300**	*7850 ***16,600**	5550 **12,000**					*5950 ***13,050**	4150 **9,400**	5.50 **17.76**

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. 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.

Heavy Lift – On

Mass Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach

M2.4CB2 – 2.4 m (7'10")
BUCKET – 1.1 m³ (1.44 yd³)

UNDERCARRIAGE – STD
SHOES – 600 mm (24") triple grouser

BOOM – 5.2 m (17'1")
COUNTERWEIGHT – 3.87 ton (8,532 lb)

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				
														m ft
7.5 m **25.0 ft**	kg **lb**											*3400	*3400	6.51
6.0 m **20.0 ft**	kg **lb**							*4850 ***10,750**	3950 **8,350**			*3200 ***7,000**	2500 **5,550**	7.69 **25.03**
4.5 m **15.0 ft**	kg **lb**							*5200 ***11,300**	3850 **8,250**			*3150 ***6,950**	2000 **4,450**	8.34 **27.30**
3.0 m **10.0 ft**	kg **lb**			***25,000**	***25,000**	*7550 ***16,200**	6000 **12,850**	5800 **12,400**	3650 **7,800**	3850 **8,200**	2350 **5,000**	3000 **6,600**	1800 **3,950**	8.63 **28.29**
1.5 m **5.0 ft**	kg **lb**					8950 **19,250**	5450 **11,700**	5550 **11,850**	3400 **7,350**	3750 **8,050**	2300 **4,850**	2950 **6,500**	1750 **3,850**	8.58 **28.17**
Ground Line	kg **lb**			*8850 ***20,350**	*8850 ***20,350**	8600 **18,400**	5100 **10,950**	5350 **11,450**	3250 **6,950**	3700	2200	3150 **6,950**	1850 **4,100**	8.22 **26.96**
–1.5 m **–5.0 ft**	kg **lb**	*8050 ***18,050**	*8050 ***18,050**	*14 500 ***33,100**	9900 **21,150**	8450 **18,150**	5000 **10,750**	5250 **11,300**	3200 **6,800**			3750 **8,250**	2250 **4,950**	7.48 **24.47**
–3.0 m **–10.0 ft**	kg **lb**	*14 350 ***32,250**	*14 350 ***32,250**	*13 350 ***28,900**	10 150 **21,750**	8600 **18,400**	5100 **10,950**	5350	3250			*4850 ***10,550**	3200 **7,200**	6.20 **20.18**
–4.5 m **–15.0 ft**	kg **lb**											*6150	5550	4.47

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. 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.

Heavy Lift – On

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

Super Long Reach Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach

SUPER LONG REACH STICK – 6.28 m (20'7")
BUCKET – 1142 mm (45") Ditch Cleaning Bucket
UNDERCARRIAGE – Long
SHOES – 800 mm (32") triple grouser
BOOM – 8.85 m (29'0")
COUNTERWEIGHT – 4.82 ton (10,624 lb)

		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		10.5 m (35.0 ft)		12.0 m (40.0 ft)		13.5 m (45.0 ft)				
																		m ft
12.0 m **40.0 ft**	kg **lb**															*800 ***1,800**	*800 ***1,800**	11.54 **37.25**
10.5 m **35.0 ft**	kg **lb**															*750 ***1,650**	*750 ***1,650**	12.78 **41.52**
9.0 m **30.0 ft**	kg **lb**											*1850 ***3,550**	1800 ***3,550**			*700 ***1,550**	*700 ***1,550**	13.72 **44.74**
7.5 m **25.0 ft**	kg **lb**									***4,050**	***4,050**	*1850 ***4,050**	1800 **3,750**	*1000	*1000	*700 ***1,550**	*700 ***1,550**	14.42 **47.15**
6.0 m **20.0 ft**	kg **lb**									*2000 ***4,350**	*2000 ***4,350**	*1950 ***4,250**	1750 **3,650**	*1750 ***3,200**	1300 **2,700**	*700 ***1,550**	*700 ***1,550**	14.92 **48.87**
4.5 m **15.0 ft**	kg **lb**							*2400 ***5,150**	*2400 ***5,150**	*2200 ***4,800**	2150 **4,600**	*2050 ***4,500**	1650 **3,500**	*2000 ***4,350**	1250 **2,650**	*750 ***1,550**	*750 ***1,550**	15.24 **49.98**
3.0 m **10.0 ft**	kg **lb**			*3950 ***8,450**	*3950 ***8,450**	*3200 ***6,850**	*3200 ***6,850**	*2750 ***5,900**	2650 **5,700**	*2450 ***5,250**	2000 **4,300**	*2250 ***4,850**	1550 **3,300**	*2100 **4,550**	1200 **2,550**	*750 ***1,650**	*750 ***1,650**	15.40 **50.52**
1.5 m **5.0 ft**	kg **lb**	*6950 ***14,850**	6550 **14,100**	*4800 ***10,300**	4450 **9,550**	*3700 ***8,000**	3200 **6,900**	*3100 ***6,650**	2450 **5,200**	*2650 ***5,800**	1850 **4,000**	*2400 ***5,200**	1450 **3,100**	2050 **4,400**	1150 **2,400**	*800 ***1,750**	*800 ***1,750**	15.40 **50.53**
Ground Line	kg **lb**	*4650 ***10,650**	*4650 ***10,650**	*5500 ***11,900**	3950 **8,500**	*4200 ***9,050**	2900 **6,250**	*3400 ***7,350**	2250 **4,750**	*2900 ***6,250**	1750 **3,700**	2450 **5,250**	1350 **2,900**	2000 **4,300**	1100 **2,300**	*850 ***1,900**	850 **1,850**	15.24 **49.99**
–1.5 m **–5.0 ft**	kg **lb**	*4450 ***10,050**	*4450 ***10,050**	*6000 ***12,950**	3650 **7,850**	*4550 ***9,850**	2700 **5,800**	3650 **7,850**	2100 **4,450**	*2900 ***6,250**	1650 **3,450**	2350 **5,050**	1300 **2,750**	1950 **4,200**	1050 **2,200**	*950 ***2,100**	850 **1,900**	14.91 **48.89**
–3.0 m **–10.0 ft**	kg **lb**	*4900 ***11,050**	*4900 ***11,050**	*6250 ***13,500**	3500 **7,550**	4600 **9,900**	2550 **5,500**	3550 **7,600**	1950 **4,200**	2850 **6,050**	1550 **3,300**	2300 **4,950**	1250 **2,650**	1950 **4,150**	1000 **2,150**	*1100 ***2,350**	900 **2,000**	14.40 **47.19**
–4.5 m **–15.0 ft**	kg **lb**	*5700 ***12,850**	5350 **11,450**	*6300 ***13,600**	3450 **7,450**	4550 **9,750**	2500 **5,350**	3500 **7,500**	1900 **4,100**	2800 **6,000**	1500 **3,250**	2300 **4,900**	1250 **2,600**			*1250 ***2,750**	1000 **2,250**	13.70 **44.81**
–6.0 m **–20.0 ft**	kg **lb**	*6750 ***15,300**	5450 **11,700**	*6150 ***13,250**	3500 **7,500**	4550 **9,750**	2500 **5,400**	3500 **7,500**	1900 **4,100**	2800 **6,000**	1500 **3,250**	2300 **5,000**	1250 **2,650**			*1500 ***3,400**	1200 **2,600**	12.76 **41.64**
–7.5 m **–25.0 ft**	kg **lb**	*7600 ***16,300**	5600 **12,100**	*5750 ***12,400**	3600 **7,700**	*4550 ***9,800**	2550 **5,500**	3550 **7,600**	1950 **4,200**	2850 **6,150**	1600 **3,400**					*1950 ***4,400**	1450 **3,200**	11.53 **37.46**
–9.0 m **–30.0 ft**	kg **lb**	*6600 ***14,100**	5900 **12,700**	*5100 ***10,850**	3750 **8,100**	*4050 ***8,600**	2700 **5,850**	*3200 ***6,750**	2100 **4,500**							*2400 ***5,300**	1950 **4,400**	9.89 **31.84**
–10.5 m **–35.0 ft**	kg **lb**	*5100	*5100	*3950 ***8,200**	*3950 ***8,200**	*3050 ***6,150**	2950 ***6,150**									*2650 ***5,750**	2600 ***5,750**	8.18 **25.98**

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. 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.

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

Standard Equipment

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

Electrical
- 50 Ampere alternator
- Base machine light (frame)
- 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
  - Sky-light, 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
- Polycarbonate side windows
- Positive filtered ventilation
- Pressurized cab
- Seat, suspension
- Seat belt, retractable – 76 mm (3 in)
- Storage compartment suitable for lunch box cooler
- Sun shade (for skylight)
- Travel control pedals with removable hand levers
- Windshield wiper and washer

Engine/Power Train
- C6.4 with ACERT™ Technology
  - Air intake heater
  - Air-to-air aftercooler (ATAAC)
  - 24 volt electric start
  - HEUI™ injectors
  - 2300 m (7,500 ft) altitude capability without derate
- Automatic engine speed control with one touch low idle
- Cooling
  - Protection of 43° C (110° F) to –18° C (0° F) at 50% concentration
- Priming pump
- 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

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
- Mirrors (frame-right, cab left)
- S•O•S℠ quick sampling valves for engine and hydraulic oil
- Wave fin radiator
- Wiring provision for Product Link

Optional Equipment

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

- Track Motor Guard, Heavy-Duty
- Swivel Guard
- Front Linkage
  - Booms
    - Reach/H.D. 5.68 m (18 ft 8 in)
    - Mass 5.2 m (17 ft 1 in)
    - Super Long Reach 8.85 m (29 ft 0 in)
  - Sticks
    - Reach 3.9 m (12 ft 10 in)
    - Reach/H.D. 2.9 m (9 ft 7 in)
    - Reach/H.D. 2.5 m (8 ft 2 in)
    - Mass 2.4 m (7 ft 10 in)
    - Super long reach 6.28 m (20 ft 7 in)
  - Bucket Linkage
    - B1 Family
    - CB2 Family
  - Boom Lowering Control Device
- Electrical
  - Light, Boom – Right side
  - Lights, Cab mounted (2)
  - Power supply (12V-7 AMP)
  - Product Link (PL121SR/PL321SR
  - Pump, Electric refueling
  - Travel Alarm
- Guarding
  - Falling Object Guarding System (FOGS)
  - Front windshield guard
    - Full length, wire mesh
  - Heavy-duty bottom guards
  - Rubber bumpers (Side)
  - Track guiding guards
    - Sprocket end, idler end guard
    - Two-piece full length (center guard removed)
  - Vandalism guards
- Operator Environment
  - Heavy Lift Circuit
  - Rain Protector
  - Rear window, secondary exit
  - Sun shade, tiltable
  - Third pedal, straight travel
  - Wiper, Lower windshield
  - Washer, windshield
- Engine/Power Train
  - High ambient cooling
    - For conditions up to 52° C (125° F)
  - Prefilter, air
  - Starting, Cold weather package
    - Two additional maintenance free batteries
    - High capacity starter motor
    - Heavy-duty cable
  - Water level indicator (Fuel)
- Undercarriage
  - Standard undercarriage
  - Long undercarriage
  - Track shoes
    - 600 mm (24 in) double or triple grouser
    - 700 mm (28 in) double or triple grouser
    - 800 mm (32 in) triple grouser
- Auxiliary Hydraulics
  - Hammer Circuit
    - For single function (1 way/2 pump) hydraulic tools
  - Tool Control System
    - Capability of adding medium pressure
    - Foot Pedal Control
    - For single or double function, (1 or 2 way, 1 or 2 pump) hydraulic tools
    - Medium pressure circuit for tools requiring medium pressure
    - Program up to 10 tools in memory
  - Hydraulic pin grabber quick coupler and controller
  - Lines for booms and sticks
- Work Tools
  - Wide offering of buckets, tips and sidecutters

Notes

Notes

320D/320D L 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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