

320D 320D L

Hydraulic Excavators



Cat® 3066 ATAAC Diesel Engine

| | |
|----------------------------------|---------------------|
| Net Power (ISO 9249) at 1800 rpm | 103 kW/140 hp |
| Operating Weight | 20 500 to 21 750 kg |
| Maximum Travel Speed | 5.5 km/h |
| Maximum Reach | 9780 mm |
| Maximum Digging Depth | 6640 mm |

320D and 320D L Hydraulic Excavators

The D Series incorporates innovations for improved performance, controllability and versatility.

Engine and Hydraulics

- ✓ Cat 3066 ATAAC engine and hydraulics give the 320D and 320D L exceptional power, efficiency and controllability unmatched in the industry. **pg. 4**

Structures

Caterpillar® design and manufacturing techniques assure outstanding durability and service life from these important components. **pg. 5**

Boom and Sticks

A reach boom and two sticks are available to suit a variety of application conditions. **pg. 5**



- ✓ *New feature*

Operator Station

- ✓ 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**

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. 7**

Work Tools and GET

- ✓ A variety of work tools, including buckets, couplers, hammers, crushers, pulverizers, multiprocessors, shears and grapples are available. **pg. 8**

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. 7**



Engine and Hydraulics

The Cat® 3066 ATAAC engine and hydraulics give the 320D exceptional power, fuel efficiency, controllability unmatched in the industry for consistently high performance in all applications.



3066 ATAAC Engine. The Cat 3066 is a six-cylinder turbocharged and aftercooled engine. The engine features long-stroke piston movement for high torque at medium to low speeds, which provides excellent productivity in the toughest working environments. With the new Economy Mode, customers can balance the demands of performance and fuel economy to suit their requirements and application.

Automatic Engine Speed Control. Automatic Engine Control with convenient one-touch command. During no-load or light-load conditions, the Automatic Engine Speed reduces engine speed. This maximizes fuel efficiency and reduces sound levels.

Air Cleaner. The radial seal air filter features a double-layered filter core for more efficient filtration and is located in a compartment behind the cab. A warning is displayed on the monitor when dust accumulates above a preset level.

Low sound, low vibration. By design, the 3066 ATAAC improves operator comfort by reducing sound and vibration.

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

The layout further provides greater operator comfort by placing the radiator on the cab side of the upper structure. This allows incoming air to enter the engine compartment from the operator side and hot air and corresponding engine sound to exit on the opposite side away from the operator. This reduces engine compartment heat and sound being transmitted to the operator.

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.

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.

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.

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.

Structures

320D structural components and undercarriage are the backbone of the machine's durability.

Robotic Welding. Up to 95% of the structural welds on a Caterpillar® Excavator are completed by robots. Robotic welds achieve over three times the penetration of manual welds.

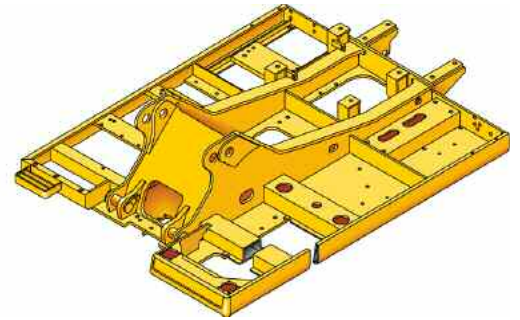
Carbody Design and Track Roller Frames. X-shaped, box-section carbody provides excellent resistance to torsional bending. Robot-welded track roller frames are press-formed, pentagonal units to deliver exceptional strength and service life.

Main Frame. Rugged main frame is designed for maximum durability and efficient use of materials.

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



Undercarriage. Durable Cat undercarriage absorbs stresses and provides excellent stability.



Long Undercarriage. The long (L) undercarriage maximizes stability and lift capacity. This long, wide, and sturdy undercarriage offers a very stable work platform.

Reach Boom and Sticks

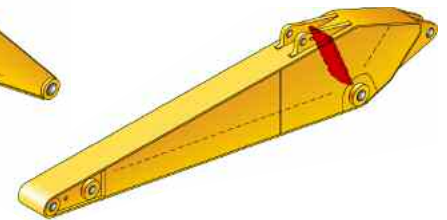
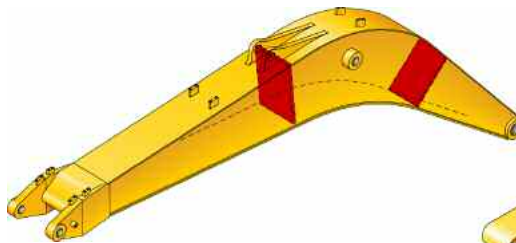
Designed-in flexibility to help bring higher production and efficiency to all jobs.

Boom, Sticks and Attachments. Designed for maximum flexibility, productivity and high efficiency on all jobs, the 320D 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 R2.5B1 sticks.

Sticks. The sticks are made of high-tensile 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.
- **R2.5B1.** Provides an excellent digging envelope with larger bucket sizes and provides more stability than the R2.9B2 stick for hammer work.

Linkage Pins. The bucket linkage pins 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 improves durability, increases machine-lifting capability in key lifting positions.

Operator Station

Designed for comfort, simple and easy operation, the 320D allows the operator to focus on production.



Operator Station. The workstation is spacious, quiet and comfortable, assuring high productivity during a long work day. The air conditioner and attachment switches are conveniently located on the right-hand wall, and the key switch and throttle dial are on the right-hand console. The monitor is easy to see and maximizes visibility.

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.

Monitor Display Screen. The monitor is a full color 400x234 pixels Liquid Crystal Display (LCD) graphic display. The Master Caution Lamp blinks ON and OFF when one of the critical conditions below occurs:

- Engine oil pressure low
- Coolant temperature high
- Hydraulic oil temperature high

Under normal conditions or the default condition, the monitor display screen is divided into four areas; clock and throttle dial, gauge, event display and multi-information display.

Clock and Throttle Dial Display. The clock and throttle dial position are displayed in this area. When Economy mode/Power management system is activated, the icon of the gas station icon will be indicated at the side of the throttle dial.

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

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 that is convenient for the operator. The "CAT" logo mark is displayed when no information is available to be displayed.

Joystick Control. Joystick controls have low lever effort and are designed to match the operator's natural wrist and arm position. The operator can operate joystick controls with an arm on the armrest and the horizontal and vertical strokes have been designed to reduce operator fatigue.

Seat. A new optional air suspension seat is available in the 320D. The standard and optional seats provide a variety of adjustments to suit the operator's size and weight including fore/aft, height and weight. Wide adjustable armrests and a retractable seat belt are also included.

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

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

Console. Redesigned consoles feature a simple, functional design to reduce operator fatigue, ease of switch operation and excellent visibility. Both consoles have attached armrests with height adjustments.

Cab Exterior. The exterior design uses thick steel tubing along the bottom perimeter of the cab, improving the resistance of fatigue and vibration. This design allows the FOGS to be bolted directly to the cab, at the factory or as an attachment later, enabling the machine to meet specifications and job site requirements.

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

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

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

Service and Maintenance

Simplified service and maintenance save you time and money.



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.



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

Diagnostics and Monitoring. The 320D is equipped with S•O•SSM 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.

Work Tools and GET

A wide variety of Work Tools help optimize machine performance.

Purpose designed and built to Caterpillar's high durability standards.



New Caterpillar K Series™ Tooth System



Rationalized Bucket Line. Optimized design matches machine configuration perfectly. Improved balance between performance and durability. Buckets feature the new Caterpillar K Series Tooth System.

1 Excavation (X). Digs and loads soft to medium materials such as clay and earth. Features weld on tip adapters, wear resistant steel alloy cutting edge and wear plates, and high grade steel side bars.

2 Extreme Excavation (EX). Digs and loads compact/abrasive materials like earth/rock, sand/clay, sand/gravel, coal, chalk and low abrasion ores. Features bigger ground engaging tools, plus all wear resistant steel alloy cutting edge, wear plates and side bars.

K Series Tip Selection. The new Caterpillar K Series Tooth System holds tighter, changes easier and stays sharper.

- 10 General Duty
- 11 Extra Duty
- 12 Penetration
- 13 Penetration Plus
- 14 Heavy Penetration
- 15 Heavy Abrasion
- 16 Wide
- 17 Spike
- 18 Double Spike

3 Buckets for Special Applications.

Choose from a variety of buckets such as ditch cleaning buckets (tiltable), skeleton buckets (heavy duty) and trapezoidal buckets. Each of these buckets enhances the performance in special applications. Ask your dealer representative to recommend the optimum solution for your material and operation.

4 Quick Coupler. Caterpillar quick couplers enable the operator to simply release one work tool and pick up another. Your hydraulic excavator becomes highly versatile. The dedicated CW-Series quick coupler enables a quick tool exchange while maintaining top machine performance. A lifting hook is added for maximum lift capacity.



Work Tools. Choose from a variety of work tools such as hammers, crushers, pulverizers, shears, multi-processors and grapples.

Tool Control. Ten hydraulic pump flow and pressure settings can be preset on the monitor (Electronic Control System), eliminating the need to adjust the hydraulics each time a tool is changed. Selecting the proper setting from the monitor's menu instantly provides the operator with the correct amount of flow and pressure for the tool. The unique Cat proportional sliding switches provide modulation to the tool and make precision work easy.

Bucket Specifications

| | | | | | Reach Boom 5700 mm | | | | | | | | | |
|--|---------|-------------|-------------------------------------|------------------|-----------------------|---------|---------|---------|--------------------|---------------|---------|---------|---------|---------|
| | | | | | Without Quick Coupler | | | | With Quick Coupler | | | | | |
| | Linkage | Width mm | Capacity (ISO) m ³ | Fill Factor % | Weight* kg | 320D | | 320D L | | Weight* kg | 320D | | 320D L | |
| | | | | | | 2500 mm | 2920 mm | 2500 mm | 2920 mm | | 2500 mm | 2920 mm | 2500 mm | 2920 mm |
| Excavation | B1 | 600 | 0.44 | 100 | 564 | | | | | 529 | | | | |
| | B1 | 750 | 0.59 | 100 | 593 | | | | | 557 | | | | |
| | B1 | 1000 | 0.86 | 100 | 698 | | | | | 663 | | | | |
| | B1 | 1200 | 1.08 | 100 | 784 | | | | | 748 | | | | |
| | B1 | 1250 | 1.13 | 100 | 801 | | | | | 765 | | | | |
| | B1 | 1300 | 1.19 | 100 | 819 | | | | | 783 | N | N | N | N |
| Extreme Excavation | B1 | 600 | 0.44 | 100 | 589 | | | | | 558 | | | | |
| | B1 | 750 | 0.59 | 100 | 620 | | | | | 584 | | | | |
| | B1 | 1250 | 1.13 | 100 | 827 | | | | | 792 | | | | |
| | B1 | 1300 | 1.18 | 100 | 864 | | | | | 829 | N | N | N | N |
| Maximum load in kg (payload plus bucket) | | | | | | 2750 | 2530 | 3210 | 2970 | | 2520 | 2300 | 2980 | 2740 |

* Bucket weight including penetration plus tips

- Max. Material Density 1200 kg/m³
- Max. Material Density 1500 kg/m³
- Material Density 1800 kg/m³ and more

Work Tools Matching Guide

| | | | Reach Boom 5700 mm | | | | | | | | |
|-----------------------------------|----------------------|----------------------|-----------------------|---------|---------|---------|-------------------------------------|---------|---------|---------|---|
| | | | Without Quick Coupler | | | | With Quick Coupler CW-40, CW-40S | | | | |
| | | | 320D | | 320D L | | 320D | | 320D L | | |
| | | | 2500 mm | 2920 mm | 2500 mm | 2920 mm | 2500 mm | 2920 mm | 2500 mm | 2920 mm | |
| Hammers | H115 s, H120C s | | | | | | | | | | |
| | H130 s | | | | | | | | | | |
| Multiprocessors | MP15 CC, CR, PS, S | | | | | | | | | | |
| | MP15 PP | | | | | | | N | | N | |
| | MP20 CC, CR, S | | N | N | | N | N | N | N | N | |
| | MP20 PS, TS | | N | N | | N | N | N | N | N | |
| Crushers and Pulverizers | VHC-30, VHP-30 | | | | | | | | | | |
| | VHC-40 | | N | N | | N | N | N | N | N | |
| Hydraulic Shears | S320 | | | | | | | N | | N | |
| Mechanical Grapples | G112 | | | | | | | | | | |
| | G115 | | N | N | | | N | N | N | N | |
| Multi Grapples | G315B-D, G315B-R | | | | | | | | | | |
| | G320B-D, G320B-R | | N | N | | N | N | N | N | N | |
| Vibratory Plate Compactor | CVP110 | | | | | | | | | | |
| Clamshell Buckets (rehandling) | GOS-25 460, 520, 580 | | | | | | | × | × | × | × |
| | GOS-25 750, 900 | | | | | | | × | × | × | × |
| | GOS-25 980, 1140 | | | N | | | | × | × | × | × |
| | GOS-35 620, 700 | | | | | | | × | × | × | × |
| | GOS-35 780, 1050 | | | | | | | × | × | × | × |
| Orange Peel Grapples | 5 tines | GSH15B 400, 500, 600 | | | | | | × | × | × | × |
| | 4 tines | GSH15B 400, 500, 600 | | | | | | × | × | × | × |

* Boom mounted

- 360° Working range
- Over the front only
- N Not recommended
- × Not compatible
- Max. Material Density 1200 kg/m³
- Max. Material Density 1800 kg/m³
- Max. Material Density 3000 kg/m³

Engine

| | |
|------------------------------|---------------|
| Cat 3066 ATAAC diesel engine | |
| Net Power at 1800 rpm | |
| ISO 9249 | 103 kW/140 hp |
| EEC 80/1269 | 103 kW/140 hp |
| Bore | 102 mm |
| Stroke | 130 mm |
| Displacement | 6.37 liters |

- All engine horsepower (hp) are metric including front page.
- The 3066 ATAAC engine meets EU directive 97/68/EC Stage II 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 | 32.4 L/min |
| Maximum pressure | 39 bar |
| Boom Cylinder | |
| Bore | 120 mm |
| Stroke | 1260 mm |
| Stick Cylinder | |
| Bore | 140 mm |
| Stroke | 1518 mm |
| B1 Family Bucket Cylinder | |
| Bore | 120 mm |
| Stroke | 1104 mm |

Machine and Major Component Weights

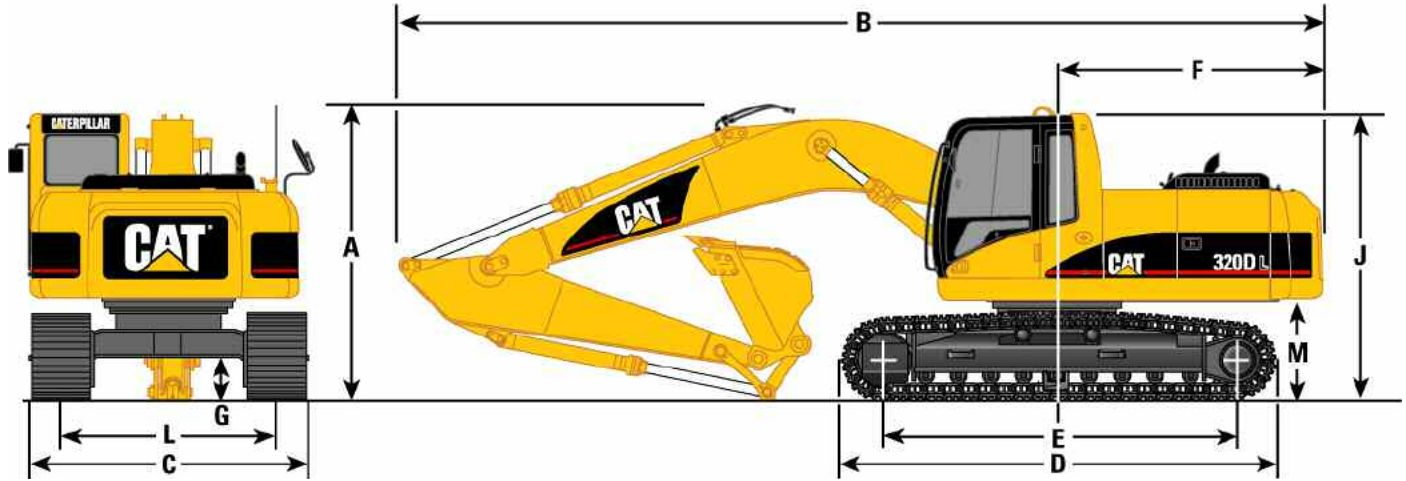
Actual weights and ground pressures will depend on final machine configuration.

| | | Reach boom 5700 mm | |
|--|----------------|-----------------------|--------|
| | | R2.5B1 | R2.9B1 |
| Stick type | | | |
| Stick length | mm | 2500 | 2920 |
| Bucket weight | kg | 784 | 700 |
| Bucket capacity | m ³ | 1.08 | 0.86 |
| Bucket width/type | mm | 1200/X | 1000/X |
| Operating weight* | | | |
| 320D (600 mm shoes) | kg | 20 520 | 20 510 |
| 320D L (800 mm shoes) | kg | 21 720 | 21 750 |
| Ground pressure | | | |
| 320D (600 mm shoes) | bar | 0.47 | 0.47 |
| 320D L (800 mm shoes) | bar | 0.34 | 0.34 |
| Stick weight (with bucket cylinder) | kg | 798 | 824 |
| Boom weight (with stick cylinder) | kg | 1630 | |
| Upperstructure (without counterweight) | kg | 6111 | |
| Undercarriage | | | |
| 320D (600 mm shoes) | kg | 6674 | |
| 320D L (800 mm shoes) | kg | 7881 | |
| Counterweight | kg | 3859 | |

* With counterweight, quick coupler, bucket, operator and full fuel.

Dimensions

All dimensions are approximate.



| | mm | | mm | | mm |
|--|------|--------------------------|------|---------------------------------------|------|
| A Shipping height (with bucket) | | B Shipping length | | C Track width (800 mm shoes) | 3180 |
| 2500 mm stick | 3050 | 2500 mm stick | 9460 | D Track length | 4455 |
| 2920 mm stick | 3030 | 2920 mm stick | 9460 | E Length to centers of rollers | 3650 |
| | | | | F Tail swing radius | 2750 |
| | | | | G Ground clearance | 450 |
| | | | | J Cab height | 2950 |
| | | | | L Track gauge | 2380 |
| | | | | M Counterweight clearance | 1020 |

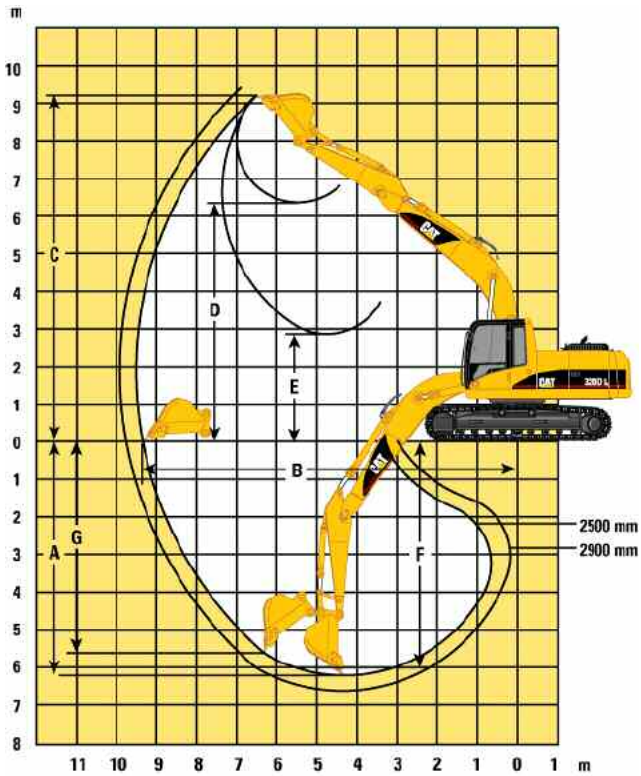
Track Width

| With standard (320D) undercarriage | |
|------------------------------------|--------|
| Standard | 600 mm |
| Optional | 800 mm |
| With long (320D L) undercarriage | |
| Standard | 800 mm |
| Optional | 600 mm |

Service Refill Capacities

| | Liters |
|-----------------------------------|--------|
| Fuel Tank | 410 |
| Cooling System | 25 |
| Engine Oil | 30 |
| Swing Drive (each) | 8 |
| Final Drive (each) | 10 |
| Hydraulic system (including tank) | 260 |
| Hydraulic tank | 120 |

Working Ranges – Reach Boom (5700 mm)



| | | R2.5B1 | R2.9B1 |
|--|----|--------|--------|
| Stick Length | mm | 2500 | 2920 |
| A Maximum Digging Depth | mm | 6200 | 6650 |
| B Maximum Reach at Ground Level | mm | 9440 | 9860 |
| C Maximum Cutting Height | mm | 9380 | 9580 |
| D Maximum Loading Height | mm | 6590 | 6770 |
| E Minimum Loading Height | mm | 2830 | 2410 |
| F Maximum Digging Depth 2500 mm Level Bottom | mm | 5990 | 6470 |
| G Maximum Vertical Wall Digging Depth | mm | 5090 | 5520 |
| Bucket Tip Radius | mm | 1554 | 1554 |
| Bucket Forces (ISO 6015) | kN | 131 | 126 |
| Stick Forces (ISO 6015) | kN | 124 | 115 |

Lift Capacities – Reach Boom (5700 mm)

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

















| 320D Short Stick 2500 mm Shoes 600 mm | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | m | | |
|---|--------|--------|--------|-------|-------|------|-------|------|-------|------|-------|--|-------|-------|------|
| 7.5 m | | | | | | | | | | | | | *2250 | *2250 | 7.46 |
| 6.0 m | | | | | | | *4450 | 4100 | | | | | *2150 | *2150 | 8.52 |
| 4.5 m | | | | | | | *5000 | 4000 | 4050 | 2600 | | | *2150 | 1800 | 9.12 |
| 3.0 m | | | | | *7700 | 6000 | *5850 | 3750 | 4000 | 2500 | | | *2200 | 1650 | 9.4 |
| 1.5 m | | | | | 9000 | 5500 | 5650 | 3550 | 3900 | 2400 | | | *2350 | 1600 | 9.37 |
| 0 m | | | *5600 | *5600 | 8700 | 5200 | 5450 | 3350 | 3800 | 2350 | | | *2650 | 1700 | 9.05 |
| -1.5 m | *6300 | *6300 | *10350 | 10050 | 8600 | 5150 | 5350 | 3300 | 3750 | 2300 | | | *3150 | 1950 | 8.4 |
| -3.0 m | *11150 | *11150 | *13950 | 10350 | 8700 | 5200 | 5400 | 3350 | | | | | *4000 | 2550 | 7.3 |
| -4.5 m | | | *11050 | 10750 | *7750 | 5450 | | | | | | | *5800 | 4000 | 5.55 |

| 320D Medium Stick 2920 mm Shoes 600 mm | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | | m | | |
|--|-------|-------|--------|--------|-------|------|-------|------|-------|------|-------|--|-------|-------|------|
| 7.5 m | | | | | | | | | | | | | *1900 | *1900 | 7.98 |
| 6.0 m | | | | | | | | | *3450 | 2700 | | | *1800 | *1800 | 8.95 |
| 4.5 m | | | | | | | *4650 | 4050 | 4150 | 2650 | | | *1800 | 1650 | 9.53 |
| 3.0 m | | | *11250 | *11250 | *7100 | 6150 | *5550 | 3850 | 4050 | 2550 | | | *1900 | 1550 | 9.79 |
| 1.5 m | | | | | *8950 | 5650 | 5700 | 3600 | 3900 | 2450 | | | *2050 | 1500 | 9.77 |
| 0 m | | | *6350 | *6350 | 8750 | 5300 | 5500 | 3400 | 3800 | 2350 | | | *2250 | 1550 | 9.46 |
| -1.5 m | *5800 | *5800 | *9850 | *9850 | 8600 | 5150 | 5350 | 3300 | 3750 | 2300 | | | *2650 | 1750 | 8.84 |
| -3.0 m | *9800 | *9800 | *14750 | 10250 | 8650 | 5200 | 5400 | 3300 | | | | | *3400 | 2250 | 7.82 |
| -4.5 m | | | *12250 | 10600 | *8500 | 5350 | 5550 | 3450 | | | | | *4150 | 3500 | 6.16 |

















Lift Capacities – Reach Boom (5700 mm)

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

















320D L
Short Stick
 2500 mm
Shoes
 800 mm

| | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | |  | | |
|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|------------------|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | m |
| 7.5 m | | | | | | | | | | | | | | | *2250 *2250 7.46 |
| 6.0 m | | | | | | | *4450 | *4450 | | | | | | | *2150 *2150 8.52 |
| 4.5 m | | | | | | | *5000 | 4600 | *4650 | 3050 | | | | | *2150 *2150 9.12 |
| 3.0 m | | | | | *7700 | 6950 | *5850 | 4350 | 4950 | 2950 | | | | | *2200 1950 9.4 |
| 1.5 m | | | | | 9400 | 6450 | *6750 | 4150 | 4850 | 2850 | | | | | *2350 1900 9.37 |
| 0 m | | | *5600 | *5600 | *10300 | 6150 | 6800 | 3950 | 4750 | 2750 | | | | | *2650 2000 9.05 |
| -1.5 m | *6300 | *6300 | *10350 | *10350 | *10400 | 6050 | 6700 | 3900 | 4700 | 2750 | | | | | *3150 2300 8.4 |
| -3.0 m | *11150 | *11150 | *13950 | 12350 | *9700 | 6150 | 6750 | 3950 | | | | | | | *4000 3000 7.3 |
| -4.5 m | | | *11050 | *11050 | *7750 | 6400 | | | | | | | | | *5800 4650 5.55 |

320D L
Medium Stick
 2920 mm
Shoes
 800 mm

| | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | |  | | |
|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|------------------|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | m |
| 7.5 m | | | | | | | | | | | | | | | *1900 *1900 7.98 |
| 6.0 m | | | | | | | | | *3400 | 3100 | | | | | *1800 *1800 8.95 |
| 4.5 m | | | | | | | *4650 | *4650 | *4350 | 3100 | | | | | *1800 *1800 9.53 |
| 3.0 m | | | *11200 | *11200 | *7100 | *7100 | *5550 | 4450 | *4750 | 3000 | | | | | *1850 1800 9.79 |
| 1.5 m | | | | | *8950 | 6550 | *6500 | 4200 | 4850 | 2850 | | | | | *2000 1750 9.77 |
| 0 m | | | *6300 | *6300 | *10100 | 6200 | 6850 | 4000 | 4750 | 2750 | | | | | *2250 1850 9.46 |
| -1.5 m | *5750 | *5750 | *9800 | *9800 | *10450 | 6050 | 6700 | 3900 | 4700 | 2700 | | | | | *2650 2100 8.84 |
| -3.0 m | *9750 | *9750 | *14750 | 12250 | *10000 | 6100 | 6700 | 3900 | | | | | | | *3350 2650 7.82 |
| -4.5 m | | | *12200 | *12200 | *8500 | 6300 | *5850 | 4050 | | | | | | | *4100 4050 6.16 |

320D L
Medium Stick
 2920 mm
Shoes
 700 mm

| | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | 9.0 m | |  | | |
|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|------------------|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | m |
| 7.5 m | | | | | | | | | | | | | | | *1900 *1900 7.98 |
| 6.0 m | | | | | | | | | *3400 | 3050 | | | | | *1800 *1800 8.95 |
| 4.5 m | | | | | | | *4650 | 4600 | *4350 | 3050 | | | | | *1800 *1800 9.53 |
| 3.0 m | | | *11200 | *11200 | *7100 | 7050 | *5550 | 4350 | *4750 | 2950 | | | | | *1850 1800 9.79 |
| 1.5 m | | | | | *8950 | 6450 | *6500 | 4100 | 4800 | 2800 | | | | | *2000 1750 9.77 |
| 0 m | | | *6300 | *6300 | *10100 | 6100 | 6750 | 3900 | 4650 | 2750 | | | | | *2250 1800 9.46 |
| -1.5 m | *5750 | *5750 | *9800 | *9800 | *10450 | 6000 | 6600 | 3800 | 4600 | 2700 | | | | | *2650 2050 8.84 |
| -3.0 m | *9750 | *9750 | *14750 | 12050 | *10000 | 6000 | 6600 | 3850 | | | | | | | *3350 2600 7.82 |
| -4.5 m | | | *12200 | *12200 | *8500 | 6200 | *5850 | 4000 | | | | | | | *4100 4000 6.16 |



Load Point Height



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.

Upper Structure

Electrical

Alternator, 80A
Light, storage box mounted (one)
Signaling/Warning horn

Engine

Cat 3066 ATAAC, 2300 m altitude capability with no deration
Air intake heater
Automatic engine speed control
Radial seal air filter
Water separator in fuel line
Waved fin radiator with space for cleaning
2 micron fuel filter
Automatic swing parking brake
Boom drift reducing valve
Boom lowering device for back-up
Caterpillar one key security system
Counterweight
Door locks and cap locks
Mirrors, rearview (frame-right, cab-left)
Regeneration circuit for boom and stick
Reverse swing damping valve
Stick drift reducing valve
Two speed travel

Operator Station

Cab

Adjustable armrest
Ashtray with lighter
Beverage holder
Bolt-on FOGS capability
Capability of installing two additional pedals
Coat hook
Front windshield glass split 70/30
Interior lighting
Literature holder
Mounting for two stereo speakers (two locations)
Neutral lever (lock out) for all controls
Openable front windshield with assist device
Openable skylight
Pillar mounted upper windshield wiper and washer
Pressurized cab (positive filtered ventilation)
Radio mounting (DIN size)
Rear window, emergency exit
Removable lower windshield with in-cab storage bracket

Seat with integrated, adjustable console

Seat belt, retractable (two inch width)
Sliding upper door window
Storage compartment suitable for lunch box
Travel control pedals with removable hand levers
Utility space for magazine
Washable floor mat

Monitor

Economy mode
Full time clock
Language display – Full color and graphical display
Machine condition, error code and tool mode setting
Start-up level check for hydraulic oil, engine oil and coolant
Warning information, filter/fluid change information and working hour

Undercarriage

Grease lubricated GLT1, resin seal
Idler and center section track guiding

Optional Equipment

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

Front Linkage

Bucket linkage, B1-family
Reach boom 5700 mm with left side
light
R2.9B1 2900 mm stick
R2.5B1 2500 mm stick

Track

Triple grouser
320D L – 600 mm
320D – 800 mm

Guards

FOGS, bolt-on
Guard, full length for long
undercarriage (two piece)
Swivel protection, 6 mm,
swivel guard only

Auxiliary Hydraulics and Lines

Boom and stick lines
Cat quick coupler line (high and
medium pressure capable)
High pressure line
Medium pressure line
Quick coupler
Quick coupler for high pressure
Pin grabber quick coupler control
Hammer circuit (single action,
1 way/2 pumps)
Combined circuit
Combined circuit with MP

Operator Station

Air conditioner with heater
Bi-Level air conditioner (automatic)
with defroster
Heater and defroster
Power supply, 12V-7A (1)
Power supply, 12V-7A (2)
Lunch box with cover

Other Optional Equipment

Boom lowering check valve
Overload warning device

320D and 320D L Hydraulic Excavators

HEHH3325 (01/2006) hr

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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