321C LCR

Hydraulic Excavator

Engine		
Engine Model	3066T ATAAC	
ISO 9249	103 kW	138 hp

Weights		
Operating Weight – Minimum	22 868 kg	50,416 lb

- Base Machine, Reach Boom, R2.9 (9 ft 6 in) Stick, Bucket Linkage, 1067 mm (42 in) GP Bucket, 600 mm (24 in) TG Shoes

Operating Weight	23 525 kg	51,864 lb

- Base Machine, Reach Boom, R2.9 (9 ft 6 in) Stick Bucket Linkage, 1067 mm (42 in) GP Bucket, 800 mm (32 in) TG Shoes

Drive		
Maximum Drawbar Pull	196 kN	44,063 lb
Maximum Travel Speed	5.5 kph	3.4 mph

321C LCR Hydraulic Excavator

The C Series incorporates innovations for improved performance and versatility.

Compact Radius

The 321C LCR features a compact radius, making it ideal for working in urban construction where space is often restricted. **pg. 4**

Engine and Hydraulics

The Cat® 3066T engine combines with proven hydraulics to give the 321C LCR consistently high power and control in a variety of applications. **pg. 5**

Structures

Rugged Caterpillar® undercarriage design and proven structural manufacturing techniques assure outstanding durability in the toughest applications. **pg. 6**

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 or lease your equipment. The dealer can help you choose a plan that can cover everything from machine configuration to eventual replacement. **pg. 12**

The 321C LCR offers a compact radius and improved performance, versatility and styling.

Serviceability

Longer service intervals and easier maintenance result in better machine availability and lower owning and operating costs. **pg. 7**

Operator Station

An enlarged cab and new right window design enhance visibility and operator comfort. The 321C LCR offers a sliding door system that allows easy operator access, even in tight quarters. All operator controls are designed for smooth, low-effort operation and easy reach. **pg. 8**

Work Tools – Attachments

The 321C LCR provides greater versatility by offering factory installed hydraulics, couplers, and a variety of bucket types and sizes. **pg. 10**

✔ *New Feature*

Compact Radius

Compact radius design delivers top performance in tight quarters.

Working Envelope. The 321C LCR has been designed to rotate with little to none of the counterweight extending beyond its tracks, and working within its width. To further minimize the working envelope, the 321C LCR's boom is positioned further back in the upper frame as compared to a standard excavator. This reduces the front swing radius when the boom is pulled all the way up and the stick is brought back.

Compact Radius Design. The 321C LCR features a compact radius, making it ideal for working in tight areas such as: next to buildings, highway construction – limiting lane closures, logging roads and other tight areas where space is restricted.

Operator Confidence. Due to the 321C LCR's compact working envelope, operators can work in confidence that the counterweight will not swing into any object behind them, which allows the operator to concentrate on the task at hand.

Engine and Hydraulics

The Cat 3066T engine and hydraulics give the 321C LCR exceptional power, efficiency, and controllability unmatched in the industry for consistently high performance in all applications.

Engine. Six cylinder turbocharged engine built for power, reliability, economy and low emissions will keep the machine up and running. The Cat 3066T engine meets Tier 2 worldwide emissions requirements.

Automatic Engine Speed Control. The two-stage one touch control maximizes fuel efficiency and reduces sound levels.

Low Sound, Low Vibration. The Cat 3066T design improves operator comfort by reducing sound and vibration.

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.

Hydraulic Cross Sensing System. Improves productivity with faster implement speeds and quicker, stronger pivot turns.

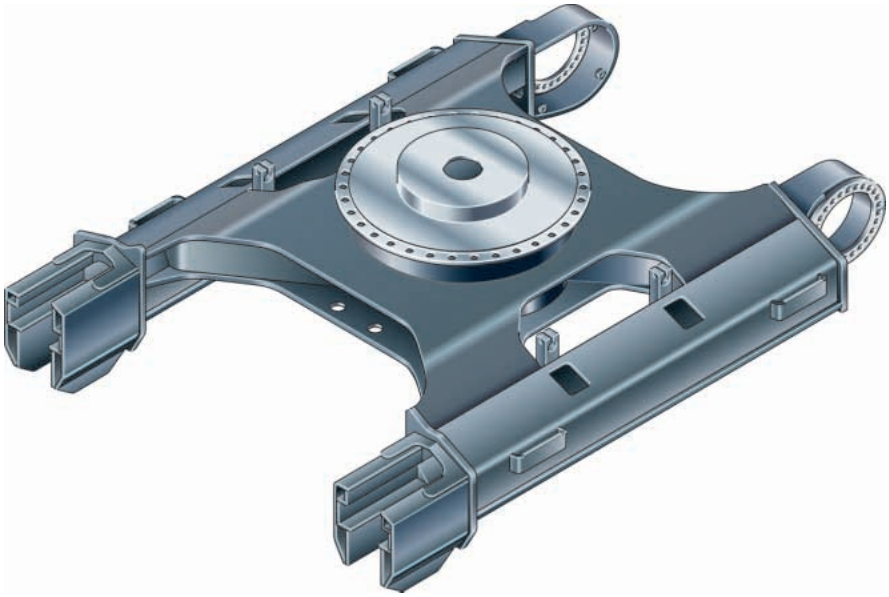
Fine Swing Control. Fine swing control cushions swing start and stop for better implement control.

Hydraulic Cylinder Snubbers. The hydraulic cylinder snubbers at rod-end of boom cylinders and both ends of stick cylinder cushion shocks, reduce sound, and increase cylinder life, keeping the machine working longer.

Controllability. The hydraulic system offers precise control to the 321C LCR, reducing operator fatigue, improving operator effectiveness and efficiency, which ultimately translates into enhanced performance.

Structures

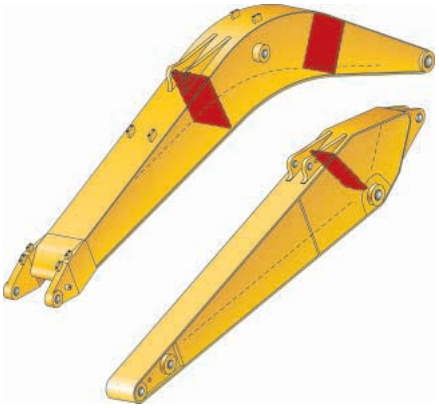
321C LCR structural components and undercarriage are the backbone of the machine's durability.



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

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

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



Booms and Sticks. 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.

Reach Boom. The reach boom features an optimum design that maximizes digging envelopes.

R2.9B Stick. The R2.9B stick is versatile and used in a variety of applications.

Robotic Welding. Up to 95% of the structural welds on a Caterpillar hydraulic excavator are completed by robots. Robotic welds achieve up to 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 that deliver exceptional strength and service life.

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

Serviceability

Simplified service and maintenance save you time and money.

Extended Service Intervals. Extended service and maintenance intervals reduce service time and machine availability. Use of oil-free bearing extends front linkage greasing interval to 1000 hours, except in the bucket area, which has been extended to 100 hours.

Ground-Level Maintenance. For operator convenience, daily maintenance areas can be easily reached from ground level.

Pre-Start Monitoring System. This system allows the operator to check coolant, hydraulic oil and engine oil levels from the monitor inside the cab.

Anti-Skid "Pressed-Star" Plate. The top of the storage box and surface of the upper structure are covered with "pressed-star" plate to prevent the service person or operator from slipping during maintenance.

Handrail and Steps. Larger handrails and steps make it easier for the operator to climb on and off the machine.

Fan Guard. Engine radiator fan and oil cooler are completely enclosed by fine wire mesh, reducing the risk of injury.

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

Service Doors. Service doors are located on both sides of the upper structure. The doors make it easy to reach maintenance items such as the engine radiator or any hydraulic components from ground level. Openings are large and service doors latch in the full open position.

Air Filter. 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.

Fuel-Water Separator. The water separator has a primary fuel filter element and is located in the radiator compartment for easy access from the ground.

Operator Station

The 321C LCR operator workstation is quiet with ergonomic control placement and convenient adjustments, low lever and pedal effort, ergonomic seat design and highly efficient ventilation.

Cab Design. An enlarged cab with curved styling gives the operator a comfortable, spacious working environment and excellent visibility.

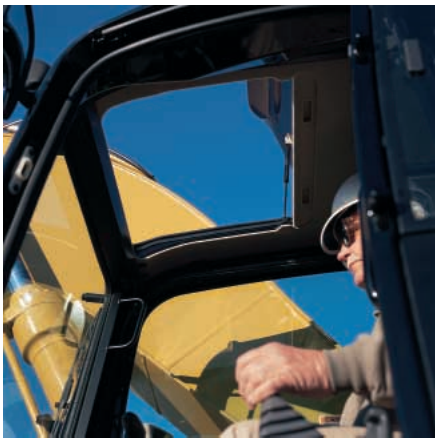
Sliding Door. The cab door slides alongside the cab and takes less space to open and close than a hinged door. This unique design allows the operator to easily get in and out of the cab when working against walls on job sites, even when attachments are added.

Monitor. New, compact monitor enhances viewing while displaying a variety of easy to read and understand language-based information.

Climate Control. The 321C LCR features a semi-automatic climate control with air intake system. The air conditioner is standard and adjusts temperature and flow.

Windshields. The upper front windshield opens, closes, and stores below the roof of the operator with a one-touch action release system. Grips on the mid-lower portion of the front windshield assist in easy opening.

Windows. The enlarged right-side window provides excellent visibility and isolates the operator from the hydraulic lines. The upper cab door window slides open, providing ventilation and allowing the operator to easily communicate with people on the work site.



Skylight. The pop-up skylight provides improved upward visibility and opens easily with the assistance of a gas cylinder.

Work Tools – Attachments

The 321C LCR provides greater versatility by offering factory installed auxiliary hydraulics, couplers and a variety of bucket types and sizes.

Heavy-Duty (HD) Buckets. Heavy-duty buckets are for digging in moderate to hard material and feature large ground engaging tools, thick cutting edges and thick bottom and side wear plates to improve performance in demanding conditions.

Heavy-Duty Power (HDP) Buckets. Designed to improve breakout force and machine cycle times, the Heavy Duty Power Bucket (HDP) compliments the General Purpose, Heavy Duty, and Heavy Duty Rock bucket lines.

Quick Couplers. The Pin Grabber Plus and the Dedicated Hydraulic Quick Coupler enhances machine versatility by enabling the rapid change over of a wide range of work tools in the field.

General Purpose (GP) Buckets. General Purpose Buckets are best for digging in soft to hard ground with low to moderately abrasive materials.

Ditch Cleaning (DC) Buckets. These wide shallow buckets are best for bank forming, ditch cleaning, and finishing.

Heavy-Duty Rock (HDR) Buckets. Heavy-Duty Rock Buckets perform best when digging fragmented rock, frozen ground, caliche, and highly abrasive materials.

Monitor. With the optional Tool Control System, up to five different tool settings may be pre-programmed and selected from the electronic controller through the monitor.

Vibratory Plate Compactor

Work Tools. Choose from a variety of work tools such as hammers, shears, thumbs, rotators, grapples, or crushers. Ask your Cat dealer for information on attachments or special configurations.


Hammer

Tool Control System. The optional Tool Control System maximizes work tool productivity by configuring hydraulic flow, pressure and operator controls to match a specific work tool. System versatility enables a wide range of tools to be used. Factory installed hammer and thumb circuits are also available as attachments.


Thumb

Complete Customer Support

Cat dealer services help you operate longer with lower costs.

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? What is the true cost of lost production? Your Cat dealer can give precise answers to these questions.

Operation. For the best operating techniques to increase productivity and your profit, turn to your Cat dealer for the latest training literature and trained staff.

Maintenance. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as Scheduled Oil 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.

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.

Warranty. Your local Cat dealer is there to support and protect you. Extended warranty options are also available.

Engine

Engine Model	3066T ATAAC	
ISO 9249	103 kW	138 hp
SAE J1349	102 kW	137 hp
EEC 80/1269	103 kW	138 hp
Bore	102 mm	4.02 in
Stroke	130 mm	5.12 in
Displacement	6.37 L	389 in^3

- The 321C LCR meets worldwide Tier 2 emission requirements.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator.
- No engine derating required below 2300 m (7,500 ft) altitude.

Weights

Operating Weight – Minimum	22 868 kg	50,416 lb

- Base Machine, Reach Boom, R2.9 (9 ft 6 in) Stick, Bucket Linkage, 1067 mm (42 in) GP Bucket, 600 mm (24 in) TG Shoes

Operating Weight	23 525 kg	51,864 lb

- Base machine, Reach Boom, R2.9 (9 ft 6 in) Stick, Bucket Linkage, 1067 mm (42 in) GP Bucket, 800 mm (32 in) TG Shoes

Service Refill Capacities

Fuel Tank Capacity	330 L	87 gal
Cooling System	32 L	8.5 gal
Engine Oil	30 L	7.9 gal
Swing Drive	8 L	2.1 gal
Final Drive (each)	10 L	2.6 gal
Hydraulic System (including tank)	260 L	69 gal
Hydraulic Tank	133 L	35 gal

- Standard hydraulic oil capacity

Hydraulic System

Main Implement System – Maximum Flow (2x)	205 L/min	54 gal/min
Max. pressure – Implements (Full Time)	34 300 kPa	4,974 psi
Max. pressure – Travel	34 300 kPa	4,974 psi
Max. pressure – Swing	25 000 kPa	3,625 psi
Pilot System – Maximum flow	41 L/min	11 gal/min
Pilot System – Maximum pressure	3900 kPa	566 psi
Boom Cylinder – Bore	125 mm	4.92 in
Boom Cylinder – Stroke	1403 mm	55 in
Stick Cylinder – Bore	140 mm	5.51 in
Stick Cylinder – Stroke	1430 mm	56 in
B Family Bucket Cylinder – Bore	120 mm	4.72 in
B Family Bucket Cylinder – Stroke	1030 mm	41 in

Drive

Maximum Drawbar Pull	196 kN	44,063 lb
Maximum Travel Speed	5.5 kph	3.4 mph

Swing Mechanism

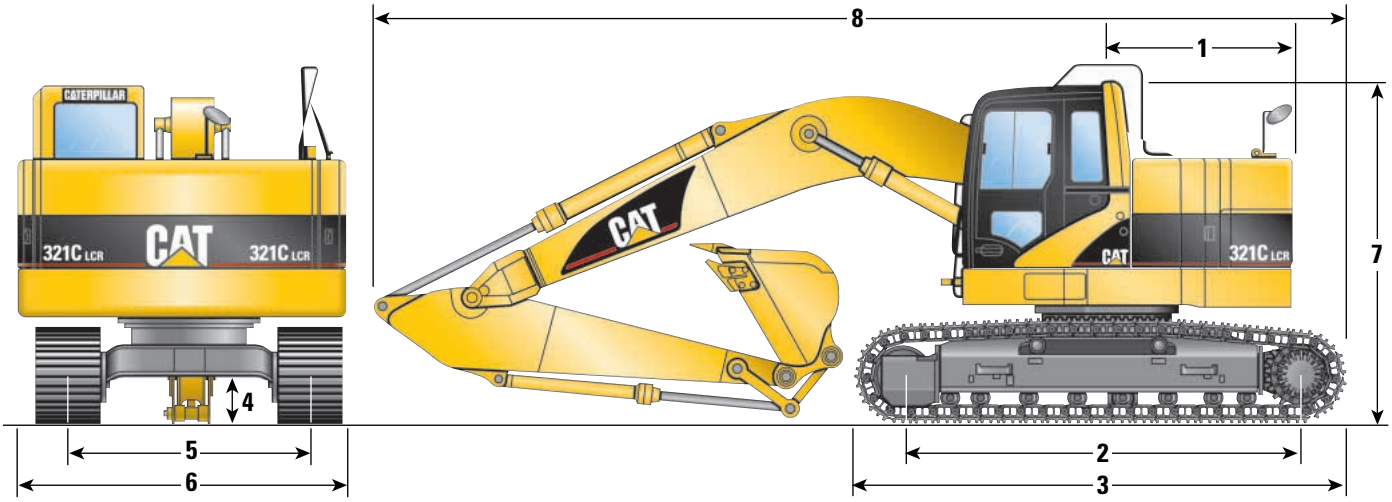
Swing Speed	10.6 RPM	
Swing Torque	61.8 kN.m	45,582 lb ft

Track

Standard w/Long Undercarriage	800 mm	32 in
Optional	600 mm	24 in
Optional	700 mm	28 in

Dimensions

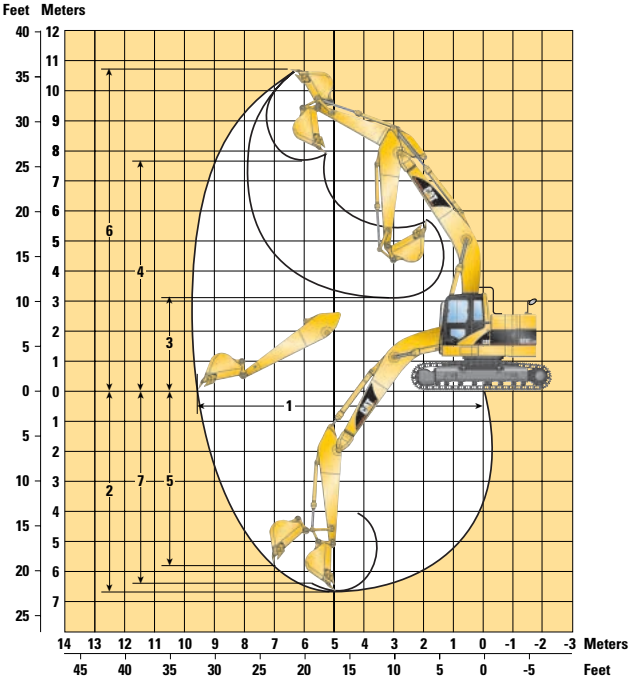
All dimensions are approximate.



1	Tail Swing Radius	1676 mm (5'6")
2	Length to Centers of Rollers – Long Undercarriage	3650 mm (12'0")
3	Track Length – Long Undercarriage	4455 mm (14'7")
4	Ground Clearance	475 mm (1'7")
5	Track Gauge – Long Undercarriage	2380 mm (7'10")

6	Shipping Width – Long Undercarriage	
	800 mm	3180 mm (10'5")
	700 mm	3080 mm (10'1")
	600 mm	2980 mm (9'9")
7	Shipping Height	3170 mm (10'5")
8	Shipping Length	8830 mm (29'0")

Working Ranges



		Reach Boom R2.9B
Stick Length		**2900 mm (9'6")**
Bucket		**1 m³ (1.3 yd³)**
1	Maximum Reach at Ground Level	9690 mm (31'9")
2	Maximum Digging Depth	6620 mm (21'9")
3	Minimum Loading Height	3060 mm (10'0")
4	Maximum Loading Height	7980 mm (26'2")
5	Maximum Vertical Wall Digging Depth	5930 mm (19'5")
6	Maximum Cutting Height	10 920 mm (35'10")
7	Maximum Depth for Cut for 8' Level Bottom	6370 mm (20'11")
Bucket Digging Force (ISO)		141 kN (31,700 lb)
	(SAE)	125 kN (28,100)
Stick Digging Force (ISO)		101 kN (22,700 lb)
	(SAE)	98 kN (22,000)

321C LCR Bucket Options

	Part #	Capacity*		Width		Tip Radius		Weight (w/o tips)		Teeth	Tip Weight	Total Weight	Reach
		m^3	yd^3	mm	in	mm	in	kg	lb	Qty	lb	lb	R2.9B
B Buckets													
General Purpose	151-9856	0.70	0.88	775	30	1626	64.0	665	1463	4	16	1527	●
Buckets (GP)	151-9858	0.90	1.12	932	36	1626	64.0	741	1630	5	16	1710	●
	151-9860	1.10	1.50	1082	42	1626	64.0	777	1710	5	16	1790	◓
	151-9862	1.30	1.75	1230	48	1626	64.0	907	1995	6	16	2091	○
Heavy Duty	142-2540	0.45	0.62	625	24	1563	61.5	639	1405	3	16	1453	●
Buckets (HD)	142-2541	0.60	0.75	775	30	1563	61.5	691	1520	4	16	1584	●
	142-2543	0.80	1.00	932	36	1563	61.5	765	1683	5	16	1763	●
	142-2545	1.00	1.25	1082	42	1563	61.5	814	1790	5	16	1870	●
	163-5473	1.10	1.50	1230	48	1563	61.5	942	2072	6	16	2168	◒
	148-8828	1.10	1.50	1230	48	1563	61.5	912	2007	6	16	2103	◒
Heavy Duty	198-2710	0.75	1.00	932	36	1406	55.0	834	1839	5	16	1919	●
Power (HDP)	198-2711	1.00	1.30	1082	42	1406	55.0	901	1986	5	16	2066	◓
	198-2712	1.20	1.57	1230	48	1406	55.0	977	2154	6	16	2250	◒
Heavy Duty	162-2950	0.45	0.62	625	24	1563	61.5	727	1600	3	16	1648	●
Rock Buckets	142-2542	0.60	0.75	775	30	1563	61.5	845	1860	4	16	1924	●
(HDR)	142-2544	0.80	1.00	932	36	1563	61.5	864	1900	5	16	1980	●
	142-2546	1.00	1.25	1082	42	1563	61.5	912	2006	5	16	2086	◓
Ditch Cleaning	132-5063	0.90	1.12	1422	56	1143	45.0	707	1555	0		1555	●
Buckets (DC)	132-5064	1.1	1.50	1727	68	1143	45.0	786	1730	0		1730	◓

Assumptions for maximum material density rating:
1. Front linkage fully extended at ground line
2. Bucket curled
3. 100% bucket fill factor

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

● 2100 kg/m^3 (3500 lbs/yd^3)
◓ 1800 kg/m^3 (3000 lbs/yd^3)
◒ 1500 kg/m^3 (2500 lbs/yd^3)
○ 1200 kg/m^3 (2000 lbs/yd^3)

321C LCR Bucket and Stick Forces

Power Buckets		
Stick	**R2.9B (9'6")**	
Bucket Digging Force (ISO)	159 kN	35,800 lb
Stick Digging Force (ISO)	103 kN	23,100 lb
Bucket Digging Force (SAE)	142 kN	31,800 lb
Stick Digging Force (SAE)	100 kN	22,400 lb

HD and HDR Buckets		
Stick	**R2.9B (9'6")**	
Bucket Digging Force (ISO)	145 kN	32,500 lb
Stick Digging Force (ISO)	100 kN	22,500 lb
Bucket Digging Force (SAE)	128 kN	28,900 lb
Stick Digging Force (SAE)	97 kN	21,800 lb

Reach Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach

R2.9B STICK – 2900 mm (9'6")
BUCKET – 0.9 m³ (1.2 yd³)

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

BOOM – Reach

		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
9.0 m **30.0 ft**	kg **lb**											*1450 ***3100**	*1450 ***3100**	5.75 **18.23**
7.5 m **25.0 ft**	kg **lb**							*2700 ***5450**	*2700 ***5450**			*1950 ***4150**	*1950 ***4150**	7.22 **23.39**
6.0 m **20.0 ft**	kg **lb**					*5200 ***11,350**	*5200 ***11,350**	*4950 ***10,800**	4950 **10,550**	*3400 ***6750**	3350 ***6750**	*2300 ***5000**	*2300 ***5000**	8.06 **26.29**
4.5 m **15.0 ft**	kg **lb**			*8100 ***16,700**	*8100 ***16,700**	*6600 ***14,150**	*6600 ***14,150**	*5650 ***12,250**	4750 **10,200**	*5000 ***10,300**	3200 **6850**	*2400 ***5250**	*2400 ***5250**	8.51 **27.88**
3.0 m **10.0 ft**	kg **lb**			*11 550 ***29,150**	*11 550 ***29,150**	*8500 ***18,250**	7100 **15,300**	*6550 ***14,150**	4500 **9650**	5300 **11,300**	3100 **6600**	*2600 ***5700**	2400 **5200**	8.67 **28.45**
1.5 m **5.0 ft**	kg **lb**					*10 150 ***21,900**	6600 **14,150**	7400 **15,850**	4250 **9150**	5150 **11,050**	3000 **6350**	*2950 ***6450**	2350 **5100**	8.60 **28.22**
Ground Line	kg **lb**			*5950 ***13,600**	*5950 ***13,600**	*11 000 ***23,750**	6250 **13,450**	7150 **15,400**	4050 **8750**	5050 **10,850**	2900 **6150**	*3350 ***7350**	2400 **5250**	8.39 **27.52**
–1.5 m **–5.0 ft**	kg **lb**	*5850 ***13,000**	*5850 ***13,000**	*9700 ***22,050**	*9700 ***22,050**	*10 900 ***23,600**	6150 **13,200**	7050 **15,200**	4000 **8550**	5000 **10,750**	2850 **6100**	*4050 ***8950**	2650 **5800**	7.89 **25.84**
–3.0 m **–10.0 ft**	kg **lb**	*9900 ***22,200**	*9900 ***22,200**	*14 150 ***30,550**	12 300 **26,300**	*9950 ***21,500**	6200 **13,300**	7100 **15,250**	4000 **8600**			*5400 ***12,050**	3200 **7050**	7.03 **22.95**
–4.5 m **–15.0 ft**	kg **lb**			*10 850 ***23,100**	*10 850 ***23,100**	*7750 ***16,350**	6400 **13,800**					*5550 ***12,200**	4550 **10,250**	5.66 **18.30**

* 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.

R2.9B STICK – 2900 mm (9'6")
BUCKET – 0.9 m³ (1.2 yd³)

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

BOOM – Reach

		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
9.0 m **30.0 ft**	kg **lb**											*1450 ***3100**	*1450 ***3100**	5.75 **18.23**
7.5 m **25.0 ft**	kg **lb**							*2700 ***5450**	*2700 ***5450**			*1950 ***4150**	*1950 ***4150**	7.22 **23.39**
6.0 m **20.0 ft**	kg **lb**					*5200 ***11,350**	*5200 ***11,350**	*4950 ***10,800**	4800 **10,300**	*3400 ***6750**	3250 ***6750**	*2300 ***5000**	*2300 ***5000**	8.06 **26.29**
4.5 m **15.0 ft**	kg **lb**			*8100 ***16,700**	*8100 ***16,700**	*6600 ***14,150**	*6600 ***14,150**	*5650 ***12,250**	4600 **9900**	*5000 ***10,300**	3100 **6650**	*2400 ***5250**	*2400 ***5250**	8.51 **27.88**
3.0 m **10.0 ft**	kg **lb**			*11 550 ***29,150**	*11 550 **28,800**	*8500 ***18,250**	6950 **14,900**	*6550 ***14,150**	4400 **9400**	5150 **11,000**	3000 **6400**	*2600 ***5700**	2300 **5050**	8.67 **28.45**
1.5 m **5.0 ft**	kg **lb**					*10,150 ***21,900**	6400 **13,750**	7150 **15,400**	4150 **8850**	5000 **10,700**	2900 **6150**	*2950 ***6450**	2250 **4950**	8.60 **28.22**
Ground Line	kg **lb**			*5950 ***13,600**	*5950 ***13,600**	*11 000 ***23,750**	6050 **13,000**	6950 **14,950**	3950 **8450**	4900 **10,500**	2800 **5950**	*3350 ***7350**	2300 **5050**	8.39 **27.52**
–1.5 m **–5.0 ft**	kg **lb**	*5850 ***13,000**	*5850 ***13,000**	*9700 ***22,050**	*9700 ***22,050**	*10 900 ***23,600**	5950 **12,800**	6850 **14,700**	3850 **8250**	4850 **10,400**	2750 **5850**	*4050 ***8950**	2550 **5600**	7.89 **25.84**
–3.0 m **–10.0 ft**	kg **lb**	*9900 ***22,200**	*9900 ***22,200**	*14 150 ***30,550**	11 950 **25,550**	*9950 ***21,500**	6000 **12,900**	6900 **14,800**	3850 **8300**			5400 **12,000**	3100 **6800**	7.03 **22.95**
–4.5 m **–15.0 ft**	kg **lb**			*10 850 ***23,100**	*10 850 ***23,100**	*7750 ***16,350**	6200 **13,350**					*5550 ***12,200**	4400 **9950**	5.66 **18.30**

* 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.

Reach Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach

R2.9B STICK – 2900 mm (9'6")
BUCKET – 0.9 m³ (1.2 yd³)

UNDERCARRIAGE – Long
SHOES – 700 mm (28") triple grouser

BOOM – Reach

		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
9.0 m **30.0 ft**	kg **lb**											*1450 ***3100**	*1450 ***3100**	5.75 **18.23**
7.5 m **25.0 ft**	kg **lb**							*2700 ***5450**	*2700 ***5450**			*1950 ***4150**	*1950 ***4150**	7.22 **23.39**
6.0 m **20.0 ft**	kg **lb**					*5200 ***11,350**	*5200 ***11,350**	*4950 ***10,800**	4850 **10,450**	*3400 ***6750**	3300 ***6750**	*2300 ***5000**	*2300 ***5000**	8.06 **26.29**
4.5 m **15.0 ft**	kg **lb**			*8100 ***16,700**	*8100 ***16,700**	*6600 ***14,150**	*6600 ***14,150**	*5650 ***12,250**	4700 **10,050**	*5000 ***10,300**	3150 **6750**	*2400 ***5250**	*2400 ***5250**	8.51 **27.88**
3.0 m **10.0 ft**	kg **lb**			*11 550 ***29,150**	*11 550 ***29,150**	*8500 ***18,250**	7050 **15,150**	*6550 ***14,150**	4450 **9550**	5200 **11,200**	3050 **6550**	*2600 ***5700**	2350 **5150**	8.67 **28.45**
1.5 m **5.0 ft**	kg **lb**					*10 150 ***21,900**	6500 **14,000**	7300 **15,650**	4200 **9000**	5100 **10,900**	2950 **6300**	*2950 ***6450**	2300 **5050**	8.60 **28.22**
Ground Line	kg **lb**			*5950 ***13,600**	*5950 ***13,600**	*11 000 ***23,750**	6200 **13,250**	7100 **15,200**	4000 **8600**	5000 **10,700**	2850 **6100**	*3350 ***7350**	2350 **5200**	8.39 **27.52**
–1.5 m **–5.0 ft**	kg **lb**	*5850 ***13,000**	*5850 ***13,000**	*9700 ***22,050**	*9700 ***22,050**	*10 900 ***23,600**	6050 **13,050**	7000 **15,000**	3950 **8450**	4950 **10,600**	2800 **6000**	*4050 ***8950**	2600 **5700**	7.89 **25.84**
–3.0 m **–10.0 ft**	kg **lb**	*9900 ***22,200**	*9900 ***22,200**	*14 150 ***30,550**	12 150 **26,000**	*9950 ***21,500**	6100 **13,150**	7000 **15,050**	3950 **8500**			*5400 ***12,050**	3150 **6950**	7.03 **22.95**
–4.5 m **–15.0 ft**	kg **lb**			*10 850 ***23,100**	*10 850 ***23,100**	*7750 ***16,350**	6350 **13,600**					*5550 ***12,200**	4500 **10,150**	5.66 **18.30**

* 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.

Standard Equipment

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

Electrical
- Alternator, 50 Ampere
- Working Light
- Horn

Operator Environment
- AM/FM Radio with Speakers
- Ashtray
- Beverage Holder
- Air Conditioner, Semi-automatic
- Coat Hook
- Door, Sliding
- Floor Mat, Washable
- Hydraulic Neutralizer Lever for All Controls
- Joystick Type Controls, Pilot Operated
- Language Display Monitor with Gauges
  - Warning Messages
  - Filter/Fluid Change Information
  - Start-up Fluid Level Check for:
    - Hydraulic Oil
    - Engine Oil and Coolant
  - Working Hour Information
  - Machine Condition
  - Error Code and Tool Mode Setting Information
  - Full Time Clock
- Laminate Front Windshield
- Lighting, Interior
- Literature Holder
- Pop-up Skylight, Polycarbonate with Sun Shade
- Retractable Front Windshield with Assist Device
- Seat, Fixed Type
  - Adjustable Armrests
  - Retractable Seatbelt
- Storage Compartment
- Tempered Windows
- Travel Control Pedals with Footrests
- Windshield Wiper with Washer, Upper

Power Train
- Cat 3066T Diesel Engine
  - Air Intake Heater
  - 24V Electrical Starting
- 2300 m (7500 ft) Altitude Capability without Deration
- Air-to-Air Aftercooling (ATAAC)
- Automatic Engine Speed Control
  - With One Touch Low Idle
- Cooling
  - Protection of 43° C (109° F) to –18° C (0° F)
    - at 50% Concentration
- Straight Line Travel
- Two Speed Auto-shift Travel
- Water Separator in Fuel Line

Undercarriage
- Hydraulic Track Adjusters
- Idler and Center Section Track Guiding Guards
- Track-type Undercarriage with Grease Lubricated Seals
  - 800 mm (32 in) Triple Grouser Shoes

Other Standard Equipment
- Automatic Swing Brake
- Automatic Work Modes
- Auxiliary Hydraulic Valve (1)
- Capability of Stackable Valve for Main Valve
  - Maximum of Two Valves
- Capability of Auxiliary Circuit
  - Auxiliary Pump and Valves
- Counterweight 6100 kg (13,448 lb)
- Door Locks and Cap Locks with One-key Security System
- Pre-wired for Product Link Capability
- System Mirrors
  - Frame-rear, Cab-left
- Wave Fin Radiator

Optional Equipment

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

Electrical
- Alarm, Travel
- Light, Working, Cab Mounted
- Light, Boom, Right Side
- Power Supply, 12V-5A (1 socket)

Operator Environment
- Cab with Polycarbonate Windows
  - Right Side, Rear, Lower Left Door Windows
- Hand Control Pattern Changer
- Seat, Suspension Type

Power Train
- Cold Weather Starting Aid
  - Two Heavy Duty Batteries for Starting
    - Above –25° C (–13° F)

Undercarriage
- Guard, Track Guiding
  - Sprocket End (Center Guard Removed)
- Guard, Track Guiding
  - Full Length, Sprocket End and Idler End Track Guides
- Track Shoes
  - 600 mm (24 in) Triple Grouser Shoes
  - 700 mm (28 in) Triple Grouser Shoes

Other Standard Equipment
- 3 Auxiliary Hydraulic Arrangement Options
  - (*Including Boom and Stick Lines)
- Hammer Circuit
  - For Single Function (1 Way/2 Pump) Hydraulic Tools
- Thumb Circuit
  - For Double Function (2 Way/1 Pump) Hydraulic Tools
- Tool Control Circuit
  - For Single or Double Function Hydraulic Tools
  - Attachment Controller
  - Joysticks with Additional Switches
- Boom, Reach 5.68 m (18 ft 7 in)
- Control, Fine Swing
- Coupler, Hydraulic Pin Grabber
- Linkage, Bucket, B-Family
- Drive, for Auxiliary Pump
- Guard, Swivel
- Guard, Vandalism
- Guard, Full Front Windshield
  - Wire Mesh Type
- Stick, 2.9 m (9 ft 6 in)

321C LCR 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.

AEHQ5523-03 (9-06)

Replaces AEHQ5523-02

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