

320C FM

Forest Machine



320C FM SA Reach Boom and Stick,
standard 700 mm (28") track and HP750 Processing Head

Weights

Operating Weight	28 000 kg	61,600 lb
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Drive

Std. Gauge Drawbar Pull	196 kN	44,040 lb
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Engine

Engine Model	Cat® 3066 T Diesel Engine	
Flywheel Power	103 kW	138 hp
Gross Power	107 kW	143 hp

320C LL Heel Boom Under/Under
11.0 m (36') Reach and standard 700 mm (28") track

Weights

Operating Weight	29 230 kg	64,300 lb
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Drive

High-Wide Drawbar Pull	236 kN	53,100 lb
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Engine

Engine Model	Cat 3066 T Diesel Engine	
Flywheel Power	103 kW	138 hp
Gross Power	107 kW	143 hp

320C FM Forest Machines

The C Series incorporates purpose-built forestry structures with improved performance and versatility to maximize your productivity.

Configurations

The 320C Forest Machine can be configured with purpose-built undercarriages, linkages, cab risers, guarding and work tools to best suit many applications. **pg. 4**

Engine and Hydraulics

The Cat 3066 T engine and proven hydraulics combine to give the 320C FM consistently high power and control in the field. **pg. 5**

Structures

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

The design, manufacture and support of the 320C Forest Machine utilizes Caterpillar quality to provide reliable, durable machine for demanding logging environments.



Operator Station

- ✓ Redesigned interior layout maximizes operator space, provides exceptional comfort, and reduces operator fatigue. **pg. 7**

Serviceability and Customer Support

Longer service intervals and easier maintenance results in better machine availability and lower owning and operating costs. **pg. 8**



✓ *New feature*

Configurations

The 320C Forest Machine can be configured for many demanding applications.



Log Loader. Purpose-built 36' live heel front, heavy counterweight and high-wide/high drawbar undercarriage combine to optimize log loading and shovel-logging operations.

Delimber. Increased flow and horsepower in the 320C FM make for powerful and efficient stroke delimber operation.

Silviculture. When configured with the Special Application reach boom and stick and a variety of work tools, the 320C FM shows its versatility, from building right of way to reforestation.



Processor. Factory ready packages with heavy-duty roadside processing heads provide maximum efficiency in long log processing. Choose from standard gauge roadside configurations or high-wide/high drawbar for at-the-stump work.

Engine and Hydraulics

Increased horsepower and flow maximize your productivity.

Engine. Six cylinder turbocharged engine built for power, reliability, economy and low emissions will keep the machine up and running.

Automatic Engine Speed Control. Automatic Engine Control with convenient one-touch command. Three-stage control maximizes fuel efficiency and reduces sound levels.

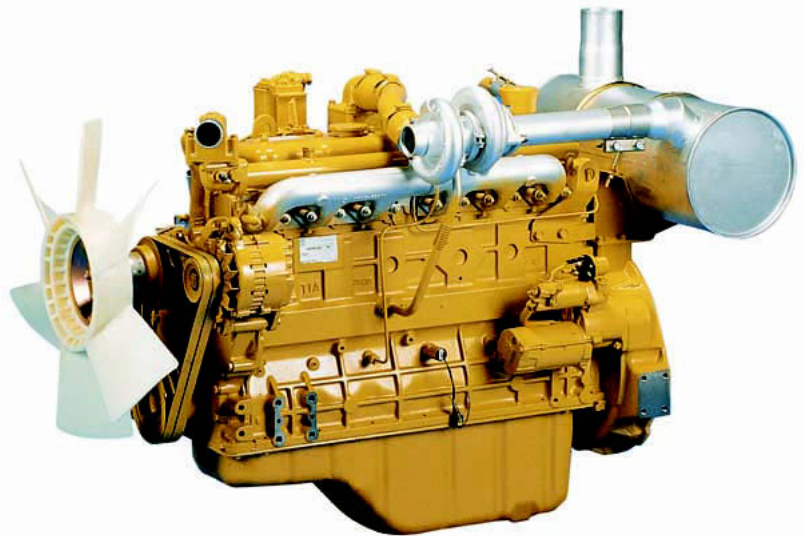
Low sound, low vibration. 3066 T design improves operator comfort by reducing sound and vibration.

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

Optional Fine Swing Control. Optional 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 cylinders cushion shocks, reduce sound and increase cylinder life, keeping the machine working longer.

Controllability. The hydraulic system offers precise control to the 320C FM, reducing operator fatigue, improving operator effectiveness and efficiency.

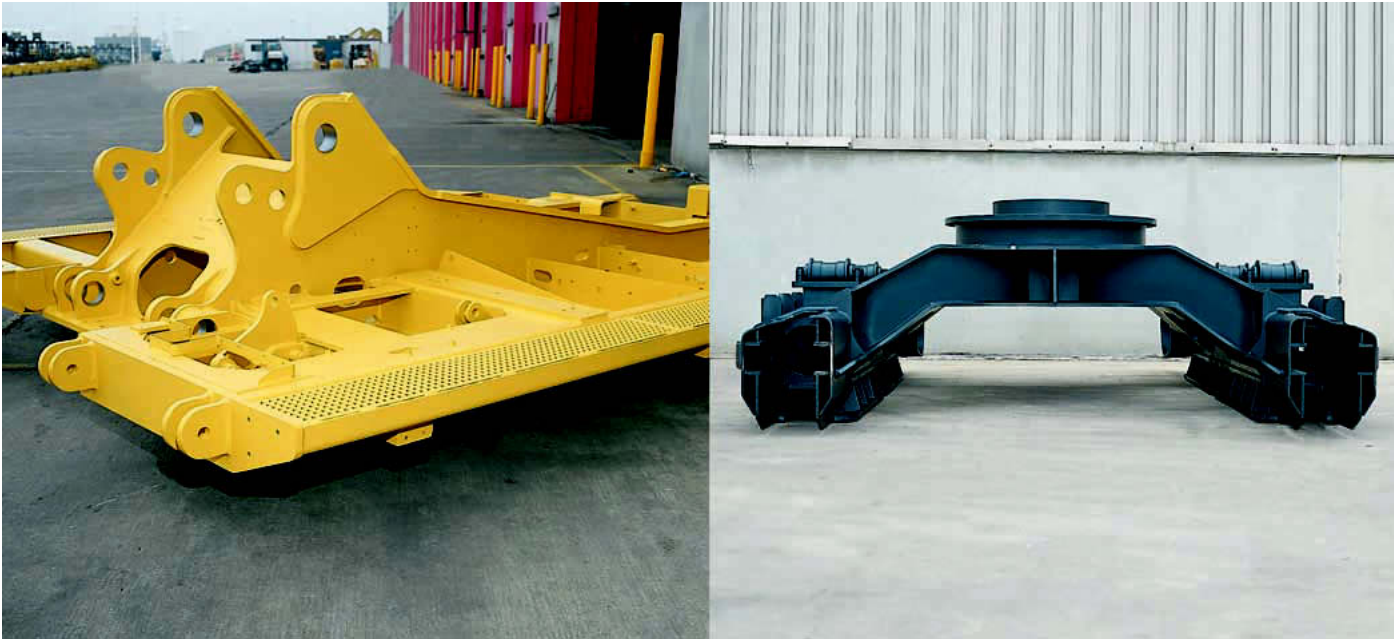


High Drawbar Final Drives. Standard on the high-wide undercarriage, high drawbar final drives offer increased mobility in demanding off-road

applications. The two-speed control can be manually shifted or set in automatic.

Structures

320C FM structural components and undercarriage are purpose-built for durability.



Linkages. Purpose-built forestry linkages include 11.0 m (36') reach, live heel boom and Special Application (SA) reach boom and stick.

Track Roller Frames. Robot-welded track roller frames are press-formed, pentagonal units to deliver exceptional strength and service life.

Heavy Duty Main Frame. Designed for maximum durability in forestry applications with reinforcements in the boom tower, boom cylinder pin and swing drive areas.

Undercarriage. Two forestry undercarriage options, standard gauge heavy-duty and high-wide/high drawbar, allow you to choose the right machine for your application. Both Cat undercarriages absorb stresses and provide excellent stability.

Standard Gauge/Heavy Duty Undercarriage. The standard gauge/heavy duty undercarriage is designed with heavy duty recoil springs, bottom and top rollers, idler reinforcements and track shoe supports to meet the demands of road side applications, such as processing and general silvacultural work.

High-wide/High Drawbar Undercarriage. Increased ground clearance and drawbar pull allow better off-road capabilities, while increased track gauge improves stability in over-the-side applications.

Robotic Welding. Precision robotic welding ensures quality, increases rigidity, reduces internal stresses and enhances durability.

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

Operator Station

Redesigned interior layout maximizes operator space, provides exceptional comfort, and reduces operator fatigue.

Interior Operator Station. The 320C FM operator work station is quiet with ergonomic control placement and convenient adjustments, low lever and pedal effort, ergonomic seat design and highly efficient ventilation.

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

Automatic Boom and Swing Priority Function. For simpler operation, work mode and power mode switches have been eliminated. Instead, the automatic boom and swing priority function selects the best mode, based on joystick movement.

Redesigned Layout. Redesigned cab layout emphasizes simplicity and ease of use. Right-hand wall and console provide easy access to all switches, dials and controls.

Travel Controls. A large rubber-covered footrest at the side of the travel pedals allows the foot to easily grip the pedal. The travel lever stroke and force have been enhanced to improve controllability, making the machine easier to operate.

Seat. A new seat with a two-tone color offers two types of cushions-soft and firm-for operator comfort. The reclining knob is located at the right-side of the seat for easier reclining adjustment.



Automatic Climate Control. Fully automatic climate control adjusts temperature and flow and determines which air outlet is best in each situation.

Skylight. A large polycarbonate skylight delivers excellent natural lighting and good ventilation. Standard sliding sunshade protects from direct sunlight.

Cab Exterior. Newly designed using asymmetrical steel tubing for improved resistance to fatigue and vibration.

Cab Mounts. The cab shell is attached to the frame with improved viscous mounts, reducing vibration and sound.

Serviceability and Customer Support

Simplified service and maintenance features save you time and money.



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

Radiator Compartment. The left rear service door allows easy access to the engine radiator and the oil cooler. A reserve tank and drain cock are attached to the radiator for simplified maintenance.

Integrated Catwalks. Designed to be integrated into the undercarriage house guards, the wide catwalks with “punched star” plate allow easy access to many service points.

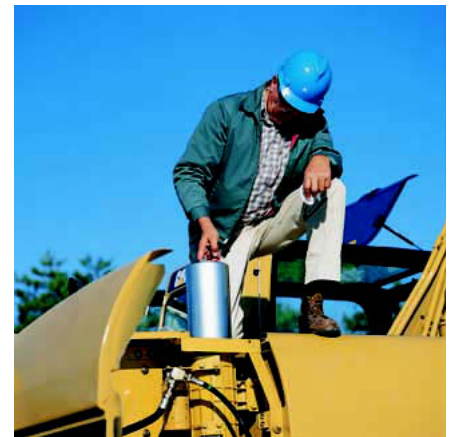


Air Filter Compartment. The air filter features a double-element construction for superior cleaning efficiency. When the air cleaner plugs, a warning is displayed on the monitor screen inside the cab.

Ground Level Service. The design and layout of the 320C FM 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.

Swing-Out Oil Cooler. The oil cooler swings out horizontally for excellent cleaning access.

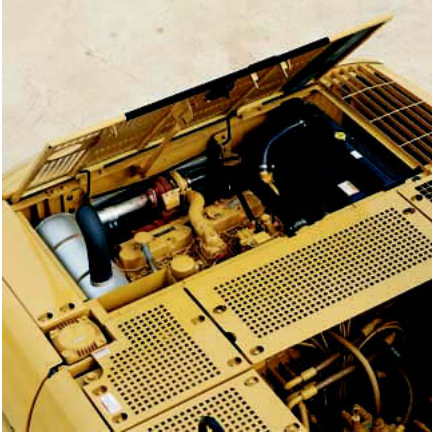
Pump Compartment. A service door on the right side of the upper structure allows ground-level access to the pump and pilot filter.



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

Diagnostics and Monitoring. The 320C FM 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) is located behind the cab.

Anti-Skid “Punched Star” Plate. Anti-skid punched-star plate covers top of storage box and upper structure to prevent slipping during maintenance. The plate can be removed for cleaning.



Engine Inspection. Engine can be accessed from the upper structure or from under the machine. The engine and pump compartment are separated by a steel wall.

Handrails and Steps. Larger handrails and steps assist operator in climbing on and off machine.

Grease Lubricated Track. Grease lubricated seals protect the track link and deliver long track link pin and bushing inner wear life.

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.

Selection. Make detailed comparisons of the machines you are considering before you buy. What are the job requirements? What production is needed? What is the true cost of lost production? Your Cat dealer can give you precise answers to these questions.

Purchase. Look past initial price, look at the value the 320C FM offers. Consider the financing options available as well as day-to-day operating costs.

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 down time. Save money with remanufactured components.

Operation. Improving operating techniques can boost your profits. Your Cat dealer has training literature and other ideas to help you increase productivity.

Weights

320C FM SA Reach Boom and Stick,
standard 700 mm (28") track and HP750 Processing Head

Weights

Operating Weight	28 000 kg	61,600 lb
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320C LL Heel Boom Under/Under

11.0 m (36') Reach and standard 700 mm (28") track

Weights

Operating Weight	29 230 kg	64,300 lb
------------------	-----------	-----------

Drive

Std. Gauge Drawbar Pull	196 kN	44,040 lb
Maximum Travel Speed	5.5 kph	3.4 mph
High - Wide / High Drawbar Pull	236 kN	53,100 lb

Engine

Engine Model	Cat 3066 T Diesel Engine	
Flywheel Power	103 kW	138 hp
Gross Power	107 kW	143 hp
ISO 9249	103 kW	138 hp
J1349	103 kW	138 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 320C FM meets worldwide 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.

Hydraulic System

Main Implement System -		
Maximum Flow (2x)	205 L/min	54.2 gal/min
Max. pressure - Implements	34 300 kPa	4,980 psi
Max. pressure - Travel	34 300 kPa	4,980 psi
Max. pressure - Swing	25 000 kPa	3,625 psi
Pilot System - Maximum flow	41 L/min	10.8 gal/min
Pilot System - Maximum pressure	4120 kPa	600 psi
Boom Cylinder - Bore	120 mm	5 in
Boom Cylinder - Stroke	1260 mm	52 in
Stick Cylinder - Bore	140 mm	5.5 in
Stick Cylinder - Stroke	1430 mm	56 in

Swing Mechanism

Swing Torque	61.8 kN.m	45,611 lb ft
Swing Speed	11.5 RPM	

Track

Standard (double grouser)	700 mm	28 in
Optional (double grouser)	600 mm	24 in
Optional (triple grouser)	700 mm	28 in
Optional (triple grouser)	800 mm	32 in

Service Refill Capacities

Fuel Tank	400 L	106 gal
Cooling System	30 L	7.9 gal
Engine Oil	30 L	7.9 gal
Swing Drive	8 L	2.1 gal
Final Drive (each) - Std. Gauge	10 L	2.6 gal
Final Drive (each) - High-Wide	13 L	3.4 gal
Hydraulic System (including tank)	240 L	63 gal
Hydraulic Tank	120 L	32 gal

Standards

Meets the following standards:

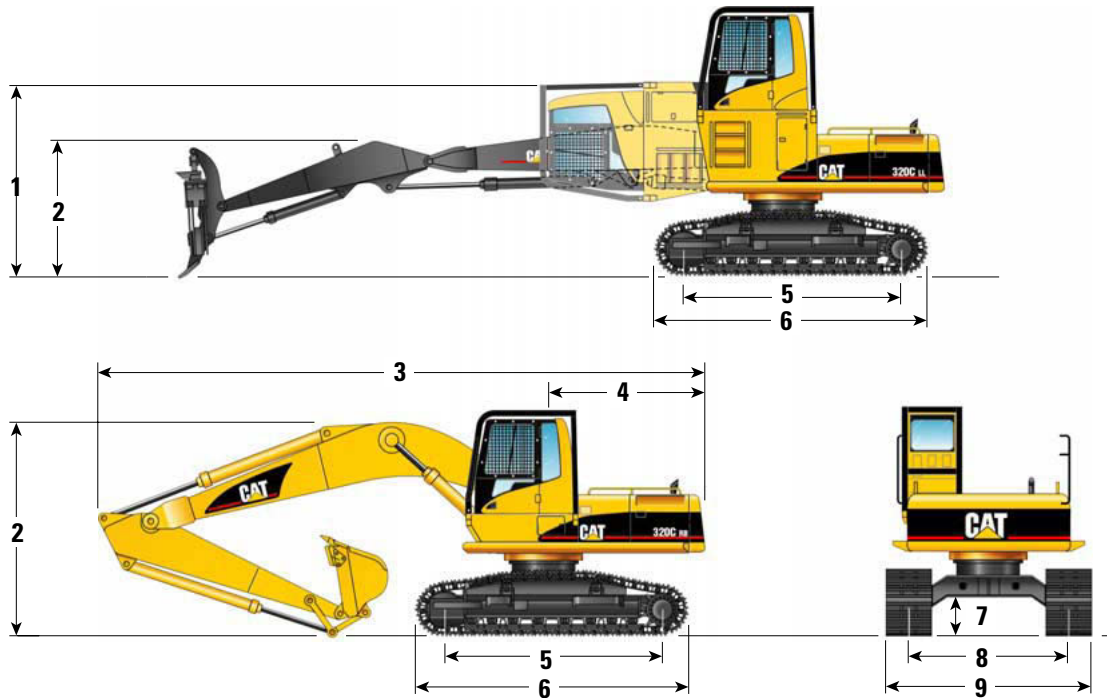
Brakes	SAE J1026 APR90
Cab/FOGS	SAE J1356 FEB88 ISO 10262

Sound Performance

The operator sound exposure Leq (equivalent sound pressure level) measured according to the work cycle procedures specified in ANSI/SAE J1166 OCT98 is 74 dB(A), for the cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.

Dimensions

All dimensions are approximate.



320C	Heel Boom Under/Under	Road Builder (Std. gauge)**
1 Shipping height. (All risers with cab tilted)	3099 mm (10' 2")	3482 mm (11' 5")
2 Boom height	2390 mm (7' 10")	2940 mm (9' 8")
3 Shipping length*	13 240 mm (43' 5")	9410 mm (30' 11")
4 Tail swing radius	2719 mm (8' 11")	2719 mm (8' 11")
5 Length to centers of rollers	3650 mm (12' 0")	3650 mm (12' 0")
6 Track length	4480 mm (14' 8")	4480 mm (14' 8")
7 Ground clearance	650 mm (2' 2")	475 mm (1' 7")
8 Track gauge	2590 mm (8' 6")	2380 mm (7' 10")
9 Transport width with 700 mm (28") shoes	3290 mm (10' 10")	3256 mm (10' 9")**

* Shipping length to pin on stick for Road Builder, to pin on grapple for Heel Boom configurations.

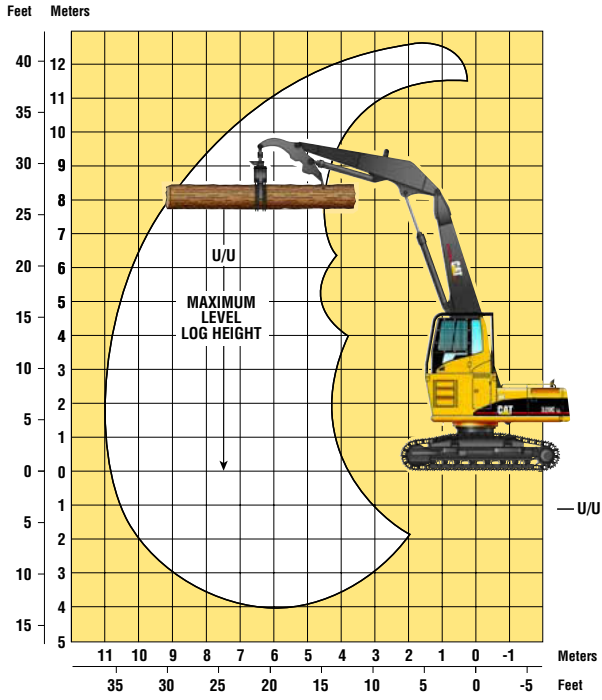
** Shipping width determined by width of upper structure and walkways.

*** Road Builder configured with the 5.7 m (18' 8") SA Boom and 2.9 m (9' 6") SA Stick.

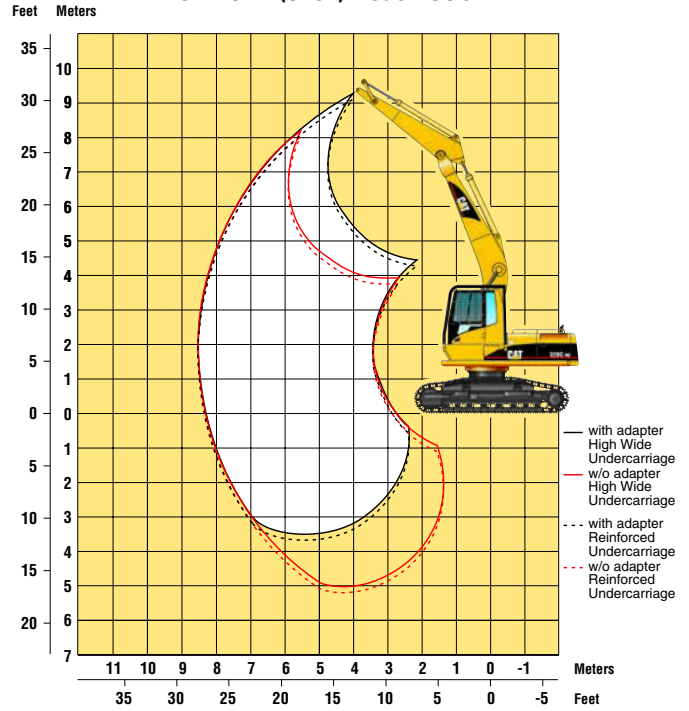
320C Working Ranges

Heel Boom (Under/Under) and Road Builder Reach Ranges

Heel Boom



5.7 m (18' 8") Reach Boom with 2.9 m (9' 6") Reach Stick



320C High-wide Special Application Boom and Stick

CONFIGURATION – 5.7 m (18' 8") SA Boom, 2.9 m (9' 6") SA Stick, with Hoist Cylinder Adapter and Heavy Counterweight

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

Load Point Height		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		Load at Maximum Reach		
		Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	m ft
9.0 m 30.0 ft	kg lb			5300* 11,650*	5300* 11,650*					5200* 11,750*	5200* 11,750*	4.53 14.06
7.5 m 25.0 ft	kg lb					5600* 10,850*	5600* 10,850*			4400* 9750*	4400* 9750*	6.32 20.36
6.0 m 20.0 ft	kg lb			7550* 16,500*	7550* 16,500*	7300* 15,800*	7300* 15,800*			4150* 9100*	4150* 9100*	7.39 24.07
4.5 m 15.0 ft	kg lb	13 000* 26,000*	13 000* 26,000*	10 150* 21,950*	10 150* 21,950*	8350* 18,150*	8350* 18,150*	6550* 13,400*	6550* 13,400*	4100* 8950*	4100* 8950*	8.04 26.31
3.0 m 10.0 ft	kg lb			11 850* 25,550*	11 850* 25,550*	9050* 19,650*	9050* 19,650*	7550* 16,400*	7100* 15,300*	4200* 9200*	4200* 9200*	8.38 27.47
1.5 m 5.0 ft	kg lb			13 000* 28,100*	13 000* 28,100*	9600* 20,800*	9350* 20,150*	7700* 16,700*	6950* 15,000*	4450* 9800*	4450* 9800*	8.43 27.67
†0.0 m †0.0 ft	kg lb	7250* 16,550*	7250* 16,550*	12 950* 28,100*	12 950* 28,100*	9650* 20,950*	9150* 19,700*	7550* 16,300*	6850* 14,800*	4950* 10,900*	4950* 10,900*	8.21 26.95
-1.5 m -5.0 ft	kg lb	12 250* 27,800*	12 250* 27,800*	11 800* 25,600*	11 800* 25,600*	8950* 19,350*	8950* 19,350*	6650* 14,150*	6650* 14,150*	5850* 12,900*	5850* 12,900*	7.70 25.22
-3.0 m -10.0 ft	kg lb			9500* 20,400*	9500* 20,400*	7150* 15,200*	7150* 15,200*			5650* 12,300*	5650* 12,300*	6.81 22.23

* Indicates that the load is limited by hydraulic capacity rather than tipping capacity. Lift capacity ratings are based on SAE standard J1097. Rated loads are at 100% of hydraulic lifting capacity or 100% of tipping capacity.

† Ground line.

320C High-wide Special Application Boom and Stick

CONFIGURATION – 5.7 m (18' 8") SA Boom, 2.9 m (9' 6") SA Stick, without Hoist Cylinder Adapter and with Standard Counterweight

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

Load Point Height		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		Load at Maximum Reach		
		Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	m ft
7.5 m 25.0 ft	kg lb							5600* 10,850*	5600* 10,850*			4400* 9750*	4400* 9750*	6.32 20.36
6.0 m 20.0 ft	kg lb							5900* 12,900*	5900* 12,900*			4150* 9100*	4150* 9100*	7.39 24.07
4.5 m 15.0 ft	kg lb							6550* 14,200*	6550* 14,200*	6100* 13,350*	6000* 12,900*	4100* 8950*	4100* 8950*	8.04 26.51
3.0 m 10.0 ft	kg lb					9550* 20,600*	9550* 20,600*	7500* 16,200*	7500* 16,200*	6500* 14,200*	5900* 12,650*	4200* 9200*	4200* 9200*	8.38 27.47
1.5 m 5.0 ft	kg lb					11 400* 24,650*	11 400* 24,650*	8450* 18,300*	7750* 16,650*	7000* 15,200*	5750* 12,350*	4450* 9800*	4450* 9800*	8.43 27.67
†0.0 m †0.0 ft	kg lb			7250* 16,550*	7250* 16,550*	12 350* 26,750*	11 150* 23,950*	9100* 19,700*	7550* 16,250*	7300* 15,850*	5650* 12,150*	4950* 10,900*	4950* 10,900*	8.21 26.95
-1.5 m -5.0 ft	kg lb	7800* 17,400*	7800* 17,400*	12 250* 27,800*	12 250* 27,800*	12 400* 26,850*	11 050* 23,800*	9200* 19,950*	7450* 16,050*	7200* 14,850*	5600* 12,100*	5850* 12,900*	5450* 12,000*	7.70 25.22
-3.0 m -10.0 ft	kg lb	13 000* 29,150*	13 000* 29,150*	16 150* 34,900*	16 150* 34,900*	11 500* 24,800*	11 150* 23,950*	8550* 18,400*	7500* 16,200*			7200* 15,850*	6400* 14,200*	6.81 22.23
-4.5 m -15.0 ft	kg lb			12 600* 26,950*	12 600* 26,950*	9100* 19,300*	9100* 19,300*					7250* 15,900*	7250* 15,900*	5.38 17.34

* Indicates that the load is limited by hydraulic capacity rather than tipping capacity. Lift capacity ratings are based on SAE standard J1097. Rated loads are at 100% of hydraulic lifting capacity or 100% of tipping capacity.

† Ground line.

320C Special Application Boom and Stick

CONFIGURATION – 5.7 m (18' 8") SA Boom, 2.9 m (9' 6") SA Stick, with Hoist Cylinder Adapter and Heavy Counterweight

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

Load Point Height		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		Load at Maximum Reach		
		Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	m ft
7.5 m 25.0 ft	kg lb							5100* 11,150*	5100* 11,150*			4450* 9900*	4450* 9900*	6.14 19.76
6.0 m 20.0 ft	kg lb							5900* 13,000*	5900* 13,000*			4150* 9150*	4150* 9150*	7.28 23.69
4.5 m 15.0 ft	kg lb							6500* 14,200*	6500* 14,200*	6150* 12,750*	6150* 12,750*	4100* 8950*	4100* 8950*	7.91 26.10
3.0 m 10.0 ft	kg lb					9450* 20,400*	9450* 20,400*	7500* 16,250*	7500* 16,250*	6600* 14,350*	6150* 13,250*	4150* 9150*	4150* 9150*	8.35 27.38
1.5 m 5.0 ft	kg lb					11 500* 24,750*	11 500* 24,750*	8500* 18,450*	8100* 17,450*	7100* 15,400*	6050* 13,000*	4400* 9700*	4400* 9700*	8.44 27.70
†0.0 m †0.0 ft	kg lb			6700* 15,350*	6700* 15,350*	12 600* 27,250*	11 700* 25,150*	9250* 20,000*	7950* 17,100*	7450* 16,150*	5950* 12,850*	4900* 10,750*	4900* 10,750*	8.26 27.09
-1.5 m -5.0 ft	kg lb	7150* 16,000*	7150* 16,000*	11 550* 26,200*	11 550* 26,200*	12 750* 27,600*	11 600* 25,000*	9450* 20,450*	7850* 16,950*	7400* 16,000*	5950* 12,800*	5700* 12,600*	5700* 12,600*	7.78 25.49
-3.0 m -10.0 ft	kg lb	12 300* 27,550*	12 300* 27,550*	16 850* 36,550*	16 850* 36,550*	11 950* 25,850*	11 650* 25,100*	8950* 19,200*	7900* 17,050*			7350* 16,200*	6600* 14,550*	6.95 22.69
-4.5 m -15.0 ft	kg lb			13 600* 29,100*	13 600* 29,100*	20,900* 20,900*	9800* 20,900*					7450* 16,400*	7450* 16,400*	5.60 16.11

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† Ground line.

320C Special Application Boom and Stick

CONFIGURATION – 5.7 m (18' 8") SA Boom, 2.9 m (9' 6") SA Stick, without Hoist Cylinder Adapter and with Standard Counterweight

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

Load Point Height		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		Load at Maximum Reach		
		Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	m ft
7.5 m 25.0 ft	kg lb							5100* 11,150*	5100* 11,150*			4450* 9900*	4450* 9900*	6.14 19.76
6.0 m 20.0 ft	kg lb							5900* 13,000*	5900* 13,000*			4150* 9150*	4150* 9150*	7.28 23.69
4.5 m 15.0 ft	kg lb							6500* 14,200*	6500* 14,200*	6150* 12,750*	5100* 10,950*	4100* 8950*	4100* 8950*	7.98 26.10
3.0 m 10.0 ft	kg lb					9450* 20,400*	9450* 20,400*	7500* 16,250*	6800* 14,650*	6600* 14,350*	5000* 10,750*	4150* 9150*	4150* 9150*	8.35 27.38
1.5 m 5.0 ft	kg lb					11 500* 24,750*	9750* 21,000*	8500* 18,450*	6600* 14,200*	7100* 15,400*	4900* 10,550*	4400* 9700*	4150* 9200*	8.44 27.70
†0.0 m †0.0 ft	kg lb			6700* 15,350*	6700* 15,350*	12 600* 27,250*	9500* 20,400*	9250* 20,000*	6450* 13,850*	7400* 15,950*	4800* 10,350*	4900* 10,750*	4250* 9350*	8.26 27.09
-1.5 m -5.0 ft	kg lb	7150* 16,000*	7150* 16,000*	11 550* 26,200*	11 550* 26,200*	12 750* 27,600*	9400* 20,250*	9450* 20,450*	6350* 13,700*	7350* 15,900*	4800* 10,350*	5700* 12,600*	4600* 10,100*	7.78 25.49
-3.0 m -10.0 ft	kg lb	12 300* 27,550*	12 300* 27,550*	16 850* 36,550*	16 850* 36,550*	11 950* 25,850*	9450* 20,350*	8950* 19,200*	6400* 13,800*			7350* 16,200*	5300* 11,800*	6.95 22.69
-4.5 m -15.0 ft	kg lb			13 600* 29,100*	13 600* 29,100*	20,900* 20,900*	9650* 20,800*					7450* 16,400*	7200* 16,150*	5.50 18.11

* Indicates that the load is limited by hydraulic capacity rather than tipping capacity. Lift capacity ratings are based on SAE standard J1097. Rated loads are at 100% of hydraulic lifting capacity or 100% of tipping capacity.

† Ground line.

320C Heel Boom Machines Under/Under Lift Capacities

CONFIGURATION – 11 m (36') UNDER/UNDER

UNDERCARRIAGE – Long

SHOES – 700 mm (28") double grouser

Load Point Height		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		Load at Maximum Reach		
		Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	m ft
10.5 m 35.0 ft	kg lb			9250* 19,250*	9250* 19,250*							6500* 14,750*	6500* 14,750*	6.70 21.52
9.0 m 30.0 ft	kg lb			9600* 21,100*	9600* 21,100*	8500* 17,750*	6900 14,700					5300* 11,800*	5300* 11,800*	8.36 27.01
7.5 m 25.0 ft	kg lb			9450* 20,650*	9450* 20,650*	8600* 18,800*	7000 15,000	7200* 14,150*	5100 10,800			4700* 10,400*	4600 10,200	9.44 30.72
6.0 m 20.0 ft	kg lb			9800* 21,350*	9800* 21,350*	8700* 19,000*	6950 14,950*	7500 16,100	5150 11,000			4400* 9650*	4050 8950	10.18 33.28
4.5 m 15.0 ft	kg lb	8150* 18,300*	8150* 18,300*	10 560* 22,900*	9700 20,850	9050* 19,700*	6800 14,650	7450 16,000	5100 10,900	5750 12,700	3850 8500	4200* 9250*	3750 8250	10.66 34.93
3.0 m 10.0 ft	kg lb			11 500* 24,950*	9250 19,950	9500* 20,600*	6600 14,200	7350 15,750	4950 10,650	5750 12,300	3850 8250	4150* 9150*	3600 7900	10.92 35.80
1.5 m 5.0 ft	kg lb			12 300* 26,600*	8800 18,900	9450 20,350	6350 13,650	7200 15,450	4850 10,400	5700 12,250	3800 8150	4200* 9200*	3550 7800	10.96 35.96
†0.0 m †0.0 ft	kg lb	16 550* 36,700*	12 650 27,250	12 450* 26,950*	8400 10,050	9250 19,050	6150 13,200	7050 15,200	4700 10,150	5400* 10,900*	3750 8100	4300* 9500*	3650 8000	10.79 35.41
-1.5 m -5.0 ft	kg lb	12 250* 29,000*	12 250* 26,350*	11 650* 25,200*	8150 17,550	8950* 19,250*	6000 12,900	6750* 14,350*	4650 10,000			4250* 9300*	3900 8600	10.26 33.60
-3.0 m -10.0 ft	kg lb	12 700* 27,350*	12 150 26,200	9750* 20,900*	8050 17,350	7350* 15,550*	5950 12,800					5000* 11,050*	4700 10,500	8.92 29.06

* Indicates that the load is limited by hydraulic capacity rather than tipping capacity. Lift capacity ratings are based on SAE standard J1097. Rated loads are at 100% of hydraulic lifting capacity or 100% of tipping capacity.

G round line.

Standard Equipment

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

Alternator, 50 amp

Automatic engine speed control

Automatic swing brake

Cab: forestry & cab guard with four lights, polycarbonate windows (lower window fixed and front windshield meeting

OSHA Logging regulation 29 CFR 1910-266)

- Ashtray with cigar lighter
- Coat hook
- Drink holder
- Floor mat
- Heater and defroster
- Horn
- Hydraulic neutralizer lever for all controls
- Language display monitor with gauges
 - Warning messages
 - Filter/fluid change information
 - Level check for hydraulic oil, engine oil and coolant
 - Working hour information
 - Clock
- Light, interior
- Literature holder
- Positive filtered ventilation
- Radio mounting
- Retractable seatbelt
- Openable skylight with sunshade
- Openable front windshield
- Storage compartment
- Suspension seat
- Travel control pedals with removable hand levers

Powertrain

- Cat 3066 T diesel engine with 24-volt electric starting and air intake heater
- One-touch low idle
- Straight line travel
- Swing-out oil cooler
- Two speed auto-shift travel
- Water separator in fuel line

Undercarriage

- Heavy-duty swivel guard
- 700 mm (28") double grouser shoes
- Hydraulic track adjusters
- Track-type undercarriage with grease lubricated seals

Other Standard Equipment

- Automatic swing parking brake
- Auxiliary hydraulic valve (one)
- Core hydraulic lines & controls with standard main valves on upper structures
- Door locks, cap locks and Caterpillar one-key security system
- Heavy-duty upper frame
 - Bottom guard with walkways
 - Heavy-duty side doors
 - Travel alarms

Optional Equipment

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

Booms and sticks:

- SA reach
- Log loader heel

Bucket linkage:

- 320C - B Family

Counterweight:

- Heavy
- Standard

Guards:

- Cab windshield:
 - LEXAN with 16 mm x 505 mm (5/8" x 4") bars
 - 51 mm x 51 mm (2" x 2") mesh
 - 152 mm x 203 mm (6" x 8") bars
- Cab side door:
 - 51 mm x 51 mm (2" x 2")
 - 152 mm x 203 mm (6" x 8")
- Corner guard, right front

Fine swing control

Full length track shoe support

Hoist cylinder adapter

Hydraulic arrangements:

- Rotating grapple
- Harvesting head

Starting aid, cold weather

Track:

- 600 mm (24") double grouser shoes
- 700 mm (28") triple grouser shoes
- 800 mm (32") triple grouser shoes

Notes

Notes

320C FM Forest Machines

AEHQ5423 (4-01)
(Replaces AEHQ5235)

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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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