325B L
Hydraulic Excavator

Operating weight		
6.15 m (20'2") boom 3.2 m (10'6") stick and std. 800 mm (32") track	**27 530 kg**	**60,600 lb**
Travel Speed (maximum)	**5.0 km/h**	**3.1 MPH**
Cat® 3116TA Diesel Engine (Gross)	**132 kW**	**177 HP**
(Flywheel power)	**125 kW**	**168 HP**

Hydraulics

Caterpillar hydraulics deliver power and control to keep material moving at high volume.

Dramatically increased control responsiveness aids operation and improves cycle time.

- Control movements better matched to hydraulic action for improved operator performance.
- Improved swing damping restrains drift and improves positioning during finishing and lifting applications reducing operator fatigue.

Sixteen percent larger boom cylinders and full-time nine percent increase in hydraulic relief pressure increases boom, stick, and bucket forces for better productivity, eighteen percent average higher lift capacity and wider range of workable material.

Hydraulic cross-sensing system improves productivity with faster implement speeds and quicker, stronger pivot turns.

- 100 percent of engine horsepower deliverable as hydraulic power.
- Full power to a single motor for strong, fast turns. Balanced power to two pumps for straight travel.

Boom regeneration circuit diverts oil within the cylinder to lower the boom, pumps have all pressure and flow available for other circuits.

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

Pump flow decreases when controls are in neutral for reduced fuel consumption and sound.

Auxiliary hydraulic valve is standard on the 325B for use with optional hydraulic circuits.

Auxiliary hydraulic flow control system option provides up to four programmable flow presets to precisely match hydraulic tool requirements (i.e., hammers, shears, processors, brush cutters, etc.).

Hydraulic cylinder snubbers at rod-end of boom cylinders and both ends of stick cylinders cushion shocks, reduce sound and increase cylinder life.

Cat's XT hose and reusable couplings meet the critical flexibility and strength demands of the 325B.

- O-ring face seal couplings provide positive sealing for reliable, leak-free connections.
- Hydraulic tank located closer to pumps for increased hydraulic efficiency.

Reach Boom Lift Capacities

 Load Point Height

 Load at Maximum Reach

 Load Radius Over Front

 Load Radius Over Side

3.20C STICK – 3200 mm (10'6")
BUCKET – 948 mm, 1.1 m³ (36", 1.5 yd³)

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

BOOM – 6150 mm (20'2")

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)				
																m / ft
9.0 m	kg													*2910	*2910	1.6
30.0 ft	lb															
7.5 m	kg									*3560	*3560			*2860	*2860	5.9
25.0 ft	lb													*6,000	*6,000	28.3
6.0 m	kg									*3910	3780			*2570	*2570	5.8
20.0 ft	lb									*12,700	10,200			*5,700	*5,700	31.4
4.5 m	kg							*3250	3060	*3550	3060	*3020	3260	*2560	*2560	10.3
15.0 ft	lb							*15,800	14,700	*14,300	10,000			*5,600	*5,600	33.3
3.0 m	kg					*11 930	10 280	*3850	3490	3880	3480	3010	3210	*2670	2470	10.5
10.0 ft	lb					*24,800	22,100	*18,800	14,000	14,800	9,000	10,700	6,800	*5,800	5,500	34.2
1.5 m	kg					*14 390	9490	9610	6110	3880	3290	3020	3120	*2860	2440	10.4
5.0 ft	lb					*30,400	20,400	20,600	13,200	14,300	9,200	10,600	6,700	*6,100	5,400	34.3
0.0 m	kg			*4210	*4210	15 120	8050	9380	5640	3810	3130	3050	3050	*3170	2550	10.1
0.0 ft	lb			*9700	*9700	32,400	19,400	20,000	12,600	14,000	8,900	10,400	6,500	*6,700	5,500	33.6
-1.5 m	kg	*4800	*4800	*8140	7810	14 950	8690	9340	5700	3820	3060			*3670	2840	9.5
-5.0 ft	lb	*11,000	*11,000	*18,500	*18,500	32,000	19,100	19,500	12,300	13,800	8,700			*7,800	6,000	31.9
-3.0 m	kg	*9100	*9100	*13 230	*13 230	*14 950	8950	9140	5700	3820	3080			*4550	3480	8.5
-10.0 ft	lb	*20,400	*20,400	*30,100	*30,100	32,100	19,200	19,600	12,300	13,800	8,700			*9,200	7,000	29.1
-4.5 m	kg			*13 010	*13 010	*12 880	9180	9250	5840					*3270	*3270	6.9
-15.0 ft	lb			*28,700	*28,700	*27,600	19,700	20,000	12,600					*6,100	*6,100	24.7

* Indicates that the load is limited by hydraulic capacity rather than tipping capacity. Lift capacity ratings are based on SAE standard J1097. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

† Ground line

2.7C STICK – 2650 mm (8'8")
BUCKET – 948 mm, 1.1 m³ (36", 1.5 yd³)

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

BOOM – 6150 mm (20'2")

		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				
												m / ft
7.5 m	kg									*7,600	*7,600	26.2
25.0 ft	lb											
6.0 m	kg							*6830	4870	*3400	*3400	8.3
20.0 ft	lb					*15,200	15,000	*13,300	10,000	*7,300	*7,300	29.5
4.5 m	kg			*9820	*9820	*7980	6750	7010	4690	*3290	2910	9.2
15.0 ft	lb					*17,300	14,500	15,000	9,800	*7,200	6,600	31.6
3.0 m	kg			*12 950	10 020	*8310	6490	6940	3440	*3400	2720	10.0
10.0 ft	lb			*27,200	21,600	*20,100	13,800	14,700	9,500	*7,400	6,100	32.6
1.5 m	kg			*14 880	9320	9590	6090	6860	3270	*3630	2690	9.3
5.0 ft	lb			*32,100	20,100	20,500	13,000	14,300	9,200	*7,800	5,900	32.7
0.0 m	kg			15 030	9010	9280	5830	6520	4150	*4010	2830	9.6
0.0 ft	lb			32,300	19,400	19,900	12,500	14,000	8,900	*8,500	6,100	31.9
-1.5 m	kg	*8290	*8290	15 010	8960	9190	5750	6460	4100	*4640	3200	8.9
-5.0 ft	lb	*18,900	*18,900	32,100	19,200	19,700	12,400	13,900	8,800	*9,700	6,700	30.1
-3.0 m	kg	*15 130	*15 130	*14 290	9070	9230	5790			*4450	4020	7.8
-10.0 ft	lb	*34,500	*34,500	*29,900	19,500	19,800	12,500			*11,200	8,000	27.1
-4.5 m	kg	*16 880	*16 880	*11 720	9350	*8290	6010					
-15.0 ft	lb	*34,100	*34,100	*25,000	20,100	*17,200	13,000			*6,600	*6,600	22.2

* Indicates that the load is limited by hydraulic capacity rather than tipping capacity. Lift capacity ratings are based on SAE standard J1097. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

† Ground line

Standard Equipment

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

- Alternator, 52-amp
- Alarm, travel
- Automatic engine speed control
- Automatic swing parking brake
- Auxiliary hydraulic valve and auxiliary pump drive location
- Cab
  - Air conditioner with automatic climate control
  - Ash tray with cigar lighter
  - Coat hook
  - Drink holder
  - Floor mat
  - Heater and defroster
  - Horn
  - Instrument panel with gauges
    - Gauges and indicator lights for fuel level, coolant temperature and hydraulic oil temperature
  - Light, interior
  - Literature compartment
  - Low fuel indicator light
  - Joysticks, adjustable pilot-operated
  - Prewired radio mounting
  - Positive filtered ventilation
  - Seat belt, retractable
  - Seat, suspension, fully adjustable
  - Stationary skylight
  - Storage compartment suitable for a lunch box cooler
  - Travel control pedals
    - Two-speed auto shift travel
  - Windshield wiper and washer
- Counterweight (5210 kg, 11,480 lb)
- Door locks and caps locks with Caterpillar one-key security system
- Fine swing control
- Fully pressurized hydraulic system
- Hydraulic neutralizer lever for all controls
- Lights, working
  - Frame mounted, one
  - Boom, both sides
  - Cab mounted, two
- Mirrors, frame and cab
- Muffler
- Pre-start monitoring system
- Polycarbonate and glass windows
- Power Mode Selector
- Power train
  - CAT 3116TA Diesel engine with 24-volt electric starting and air intake heater
- Water separator
- Work Mode Selector
- Undercarriage
  - Hydraulic track adjusters
  - Track-type sealed undercarriage
  - Idler and center section track guides
  - 800 mm (32") triple-grouser shoes

Optional Equipment

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

- Air conditioner, with automatic climate control, omission
- Alarm, travel (required in U.S.)
- Booms:
  - Reach 6.15 m (20'2")
  - Mass excavation 5.55 m (18'2")
- Buckets, see pages 13 and 20
- Bucket linkage:
  - C family
  - D family
- Bucket sidecutters and tips
- Check valves:
  - Boom lowering
- Cooling system, high ambient
- Easy Shift Control Pattern Changer
- Guards:
  - Falling Object, for cab
  - Full length track guiding
  - Sprocket guiding
  - Heavy duty, under house
  - Vandalism protection
- Hydraulic arrangements, basic auxiliary:
  - One-way/two-way, includes two-pump combined flow
- Hydraulic lines, auxiliary for Reach Boom and sticks
- Hydraulic tank suction line shut-off valve
- Quick Coupler
- Rubber bumper side impact protection
- Starting aid, cold weather
- Starting aid, ether
- Straight travel third pedal option
- Sticks:
  - Reach 6.15 m (20'2") Boom:
    - 3200 mm (10'6") R/M3.2C
    - 2650 mm (8'8") R2.7C
  - Mass excavation 5.55 m (18'2") Boom:
    - 3200 mm (10'6") R/M3.2C
    - 2500 mm (8'2") M2.5D
- Sun screen
- Track:
  - 600 mm (24") double-grouser shoes
  - 700 mm (28") double-grouser shoes

325B Bucket Specifications and Compatibility

	Capacity*		Width		Tip Radius		Weight		Teeth	Reach		Mass Ex.	
										3.2C (10'6")	2.7C (8'8")	3.2C (10'6")	2.5D (8'3")
	m^3	yd^3	mm	in	mm	in	kg	lb	Qty				
C Buckets for Reach Linkage													
Heavy Duty (HD)	0.7	0.88	775	30	1638	64.5	792	1,742	3	●	●	●	—
	0.9	1.25	948	36	1638	64.5	888	1,954	4	●	●	●	—
	1.1	1.5	1098	42	1638	64.5	962	2,116	5	●	●	●	—
	1.2	1.5	1378	54	1518	60	1082	2,380	5	●	●	●	—
	1.3	1.75	1248	48	1638	64.5	1037	2,281	5	●	●	●	—
	1.5	2.0	1395	54	1638	64.5	1119	2,462	6	◒	●	●	—
	1.7	2.25	1522	60	1638	64.5	1195	2,629	7	◒	◒	◒	—
	1.9	2.5	1680	66	1638	64.5	1281	2,818	7	○	○	◒	—
General Purpose (GP)	0.8	1.12	775	30	1778	70	803	1,767	3	●	●	●	—
	1.1	1.5	948	36	1778	70	890	1,958	5	●	●	●	—
	1.3	1.75	1098	42	1778	70	951	2,092	5	●	●	●	—
	1.6	2.12	1248	48	1778	70	1046	2,301	6	◒	●	●	—
	1.9	2.5	1395	54	1778	70	1116	2,455	7	○	◒	◒	—
Ditch Cleaning (DC)	1.1	1.5	1676	66	1132	45	813	1,789	—	●	●	●	—
	1.2	1.62	1829	72	1132	45	860	1,892	—	●	●	●	—
Heavy Duty Rock (HDR)	0.9	1.25	948	36	1638	64.5	1000	2,200	4	●	●	●	—
	1.1	1.5	1098	42	1638	64.5	1084	2,385	5	●	●	●	—
	1.3	1.75	1248	48	1638	64.5	1168	2,570	5	●	●	●	—
Rock Ripping (RR)	0.6	0.75	850	33	1660	65	1084	2,385	5	X	●	X	—
D Buckets for Mass Ex. Linkage													
Heavy Duty (HD)	0.7	1.0	775	30	1764	69	875	1,925	3	—	—	—	●
	0.9	1.25	925	36	1764	69	968	2,130	3	—	—	—	●
	1.2	1.5	1098	42	1764	69	1079	2,374	4	—	—	—	●
	1.4	1.88	1246	48	1764	69	1206	2,653	5	—	—	—	●
	1.5	2.0	1440	57	1695	67	1330	2,926	5	—	—	—	◒
	1.6	2.12	1400	55	1764	69	1306	2,873	5	—	—	—	●
	1.8	2.5	1540	60	1764	69	1407	3,095	6	—	—	—	◒
	2.0	2.75	1695	66	1764	69	1493	3,285	6	—	—	—	◒
	2.2	3.0	1820	72	1764	69	1620	3,564	7	—	—	—	○
General Purpose (GP)	0.8	1.12	775	30	1854	73	947	2,083	3	—	—	—	●
	1.1	1.5	925	36	1854	73	1024	2,253	3	—	—	—	●
	1.4	1.88	1098	42	1854	73	1116	2,455	5	—	—	—	●
	1.7	2.25	1246	48	1854	73	1146	2,521	5	—	—	—	●
	1.9	2.5	1400	55	1854	73	1192	2,622	5	—	—	—	●
	2.2	3.0	1540	60	1854	73	1400	3,080	6	—	—	—	◒
Ditch Cleaning (DC)	1.7	2.25	1676	66	1424	56	1192	2,622	—	—	—	—	●
	1.8	2.5	1829	72	1424	56	1239	2,726	—	—	—	—	●
Heavy Duty Rock (HDR)	1.2	1.5	1098	42	1764	69	1294	2,847	4	—	—	—	●
	1.4	1.88	1246	48	1764	69	1437	3,161	5	—	—	—	●
	1.6	2.12	1400	55	1764	69	1553	2,417	5	—	—	—	●
Rock Ripping (RR)	0.7	0.88	900	35	1746	69	1123	2,471	5	—	—	—	●

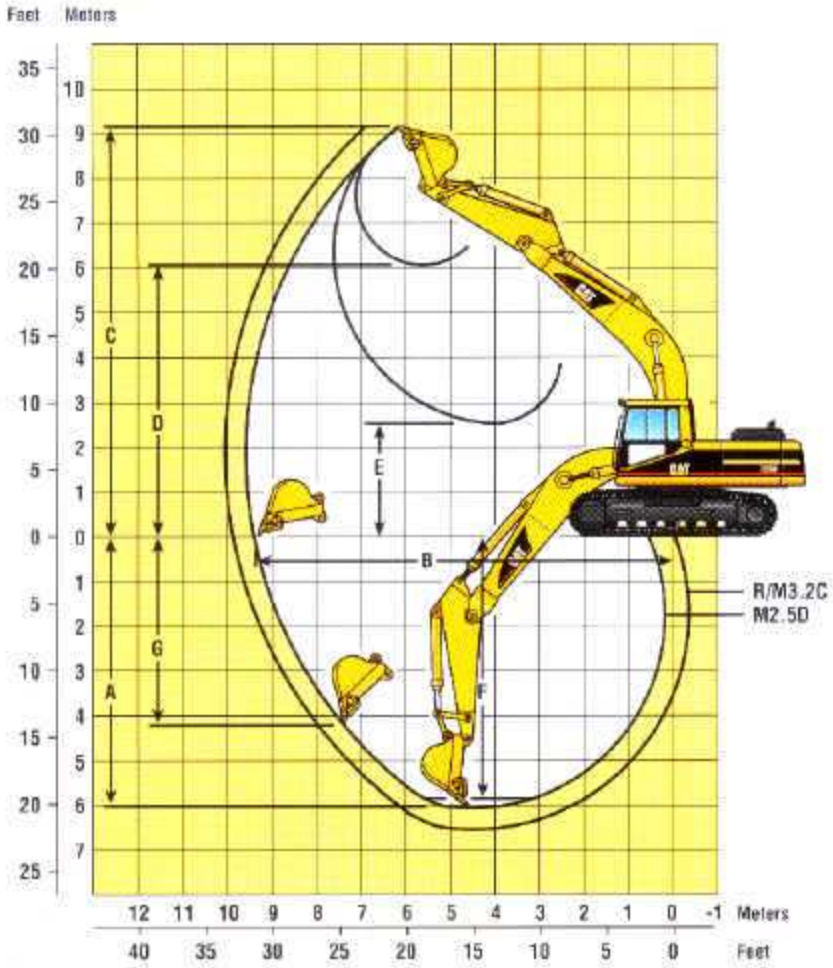
Assumptions for maximum material density rating:
1. Front linkage fully extended at ground line
2. Bucket curled
3. 100% bucket fill factor

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

- ● 2,000 kg/m³ (3,400 lbs/yd³) max material density
- ◒ 1,800 kg/m³ (3,000 lbs/yd³) max material density
- ○ 1,500 kg/m³ (2,500 lbs/yd³) max material density
- — Not Available
- X Not Recommended

Mass Excavator Working Ranges

Mass (M) boom configuration

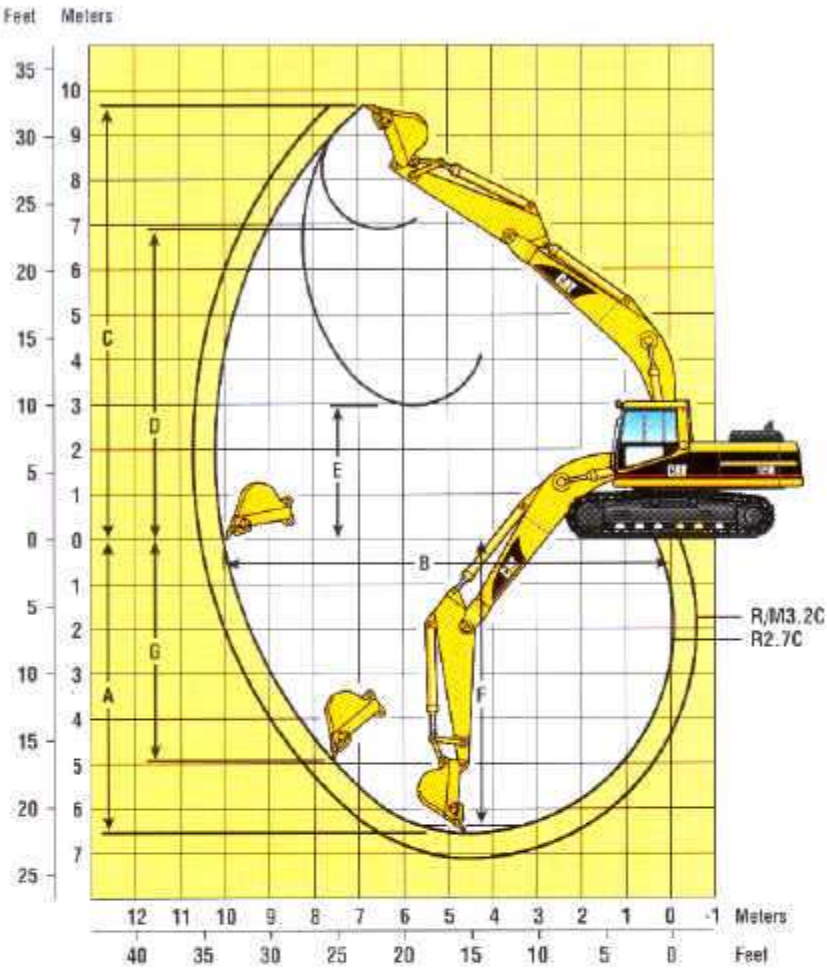


Stick Length	R/M3.2C m (10'6")**	M2.5D m (8'2")*
A Maximum Digging Depth	6.57 m (21'6")	6.04 m (19'10")
B Maximum Reach at Ground Level	9.91 m (32'6")	9.38 m (30'9")
C Maximum Cutting Height	9.47 m (31'1")	9.15 m (30'0")
D Maximum Loading Height	6.66 m (21'10")	6.06 m (19'11")
E Minimum Loading Height	2.00 m (6'7")	2.53 m (8'3")
F Maximum Depth Cut for 244 mm (8') Level Bottom	6.40 m (21'0")	5.85 m (19'2")
G Maximum Vertical Wall Digging Depth	4.87 m (16'0")	4.21 m (13'10")
Bucket Digging Force (SAE)	164 kN (37,000 lb)	195 kN (43,800 lb)
Stick Digging Force (SAE)	117 kN (26,400 lb)	139 kN (31,300 lb)

** All measurements shown are for machines equipped with the 1.2 m³ (1.5 yd³) bucket
* All measurements shown are for machines equipped with the 1.5 m³ (2.0 yd³) bucket

Reach Excavator Working Ranges

Reach (R) boom configuration

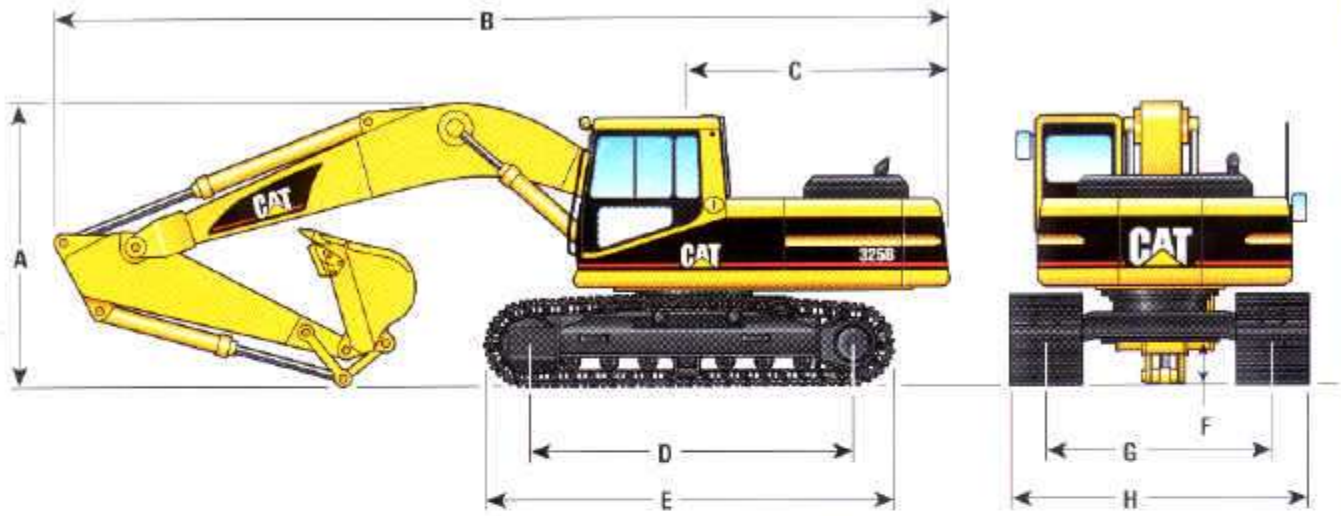


Stick Length	R/M3.2C m (10'6")*	R2.7C m (8'8")*
A Maximum Digging Depth	7.12 m (23'4")	6.57 m (21'7")
B Maximum Reach at Ground Level	10.55 m (34'7")	10.04 m (32'11")
C Maximum Cutting Height	9.88 m (32'5")	9.68 m (31'9")
D Maximum Loading Height	7.08 m (23'3")	6.87 m (22'6")
E Minimum Loading Height	2.42 m (7'11")	2.97 m (9'9")
F Maximum Depth Cut for 244 mm (8") Level Bottom	6.96 m (22'10")	6.38 m (20'11")
G Maximum Vertical Wall Digging Depth	5.36 m (17'7")	4.95 m (16'3")
Bucket Digging Force (SAE)	164 kN (37,000 lb)	163 kN (36,700 lb)
Stick Digging Force (SAE)	117 kN (26,400 lb)	135 kN (30,400 lb)

* All measurements shown are for machines equipped with the 1.2 m³ (1.5 yd³) bucket

Dimensions and Weights

All dimensions are approximate.



Reach Boom 6.15 m (20'2")	R/M3.2C m (10'6") Stick	R2.7C m (8'8") Stick
A Shipping height	3270 mm (10'9")	3270 mm (10'9")
B Shipping length	10 290 mm (33'9")	10 290 mm (33'9")
C Tail swing radius (Reach and Mass Boom)	3050 mm (10')	3050 mm (10')
D Length to centers of rollers (Reach and Mass Boom)	3795 mm (12'5")	3795 mm (12'5")
E Track length (Reach and Mass Boom)	4660 mm (15'3")	4660 mm (15'3")
F Ground clearance (Reach and Mass Boom)	480 mm (1'7")	480 mm (1'7")
G Track gauge (Reach and Mass Boom)	2590 mm (8'6")	2590 mm (8'6")
H Transport width (Reach and Mass Boom) with 800 mm (32") Shoes	3390 mm (11'1")	3390 mm (11'1")

Mass Boom 5.55 m (18'2")	R/M3.2C m (10'6") Stick	M2.5D m (8'2") Stick
A Shipping height	3190 mm (10'6")	3460 mm (11'4")
B Shipping length	9700 mm (31'10")	9710 mm (31'10")

Operating Weight	600 mm (24") Shoes		700 mm (28") Shoes		800 mm (32") Shoes	
Reach Boom 6.15 m (20'2")	kg	lb	kg	lb	kg	lb
Sticks:						
3.2 m (10'6")	26 940	59,300	27 320	60,200	27 530	60,600
2.7 m (8'8")	26 860	59,200	27 230	60,000	27 450	60,500
Mass Boom 5.55 m (18'2")						
Sticks:						
3.2 m (10'6")	27 010	60,800	27 390	60,300	27 600	60,800
2.5 m (8'3")	27 330	60,300	27 740	61,100	27 950	61,600
Ground Pressure: Reach Boom, 3.2 m (10'6") Stick						
	53.6 kPa	7.8 psi	46.6 kPa	6.8 psi	41.1 kPa	6.0 psi

Steering

Two rocker pedals with detachable hand levers control steering and travel functions.

Controls

- controls are pilot-operated for reduced efforts
- left pedal and lever control left track; right pedal and lever control right track
- when idlers are in front, pushing both pedals or levers forward moves the excavator straight ahead
- when the idlers are in front, rocking both pedals or pulling both levers backward moves the excavator straight back
- moving one pedal or lever more than the other, either forward or backward, results in a gradual turn
- moving one pedal or lever forward and the other pedal or lever backward counter-rotates the tracks for spot turns
- optional straight travel third pedal drives both tracks forward or reverse at the same speed. Steering adjustments can be made by simultaneously pressing right or left pedal.

Brakes

Meets the following standards:
SAE J1026 APR90

Service and parking brake features

- wet, multiple-disc brakes are used on the final drive input shafts
- spring-applied, hydraulically released
- actuating a travel control simultaneously releases the brakes
- when the controls are released, the brakes automatically apply

Track

Caterpillar designed and built track-type undercarriage.

Track width	
standard	800 mm (32") triple grouser
optional	600 mm (24") double grouser
	700 mm (28") double grouser
Ground clearance	480 mm (1'7")

Swing Mechanism

Hydrostatic with independent planetary reduction.

Ratings	
Swing Torque	76 kN·m (56,080 lb ft)
Maximum Swing Speed	10.0 rpm

Features

- the swing mechanism is driven by a pinion gear sealed in a grease bath through a double-reduction planetary gear set.

Service Refill Capacities

	L	Gallons
Fuel Tank	420	111
Cooling System	31.5	8.3
Engine Oil	20	5.3
Swing Drive	10	2.6
Final Drive (each)	8	2.1
Hydraulic system (including tank)	310	82
Hydraulic tank	175	46

Implement Controls

Two joystick hand levers actuate boom, stick, bucket and swing (SAE pattern).

Boom/Bucket Controls (Right Joystick)

- move forward and backward to lower and raise boom
- move left and right to control bucket curl and dump
- button on top is one-touch low idle

Stick/Swing Controls (Left Joystick)

- move forward and backward to move stick out and in
- move left and right to control direction of swing
- button on top controls horn

Other Features

- oblique movement of either lever operates two functions simultaneously
- manually applied lever on left console cuts off pilot pressure for joysticks and travel controls and electrical power for engine starting circuit
- optional hand control pattern changer allows easy change-over between SAE and backhoe loader patterns

Major Component Weights

Booms: includes lines, boom cylinders, stick cylinder

	kg	lb
Reach 6.15 m (20'2")	2740	6030
Mass 5.55 m (18'2")	2810	6190

Sticks: includes bucket cylinder and bucket linkage

	kg	lb
R3.2C	1320	2910
R2.7C	1240	2730
M2.5D	1430	3160
Counterweight	5210	11,480

Engine

Caterpillar four-cycle 3116TA quad turbo-charged and aftercooled, diesel engine.

Ratings at 2000 rpm*	kW	HP
Gross power	132	177
Net power	125	168

The following ratings apply at 2000 rpm when tested under the specified standard conditions for the specified standard:

Net power	kW	HP
Caterpillar	125	168
ISO 9249	125	168
SAE J1349	125	168
EEC 80/1269	125	168

Dimensions

Bore	105 mm	4.13 in
Stroke	127 mm	5.0 in
Displacement	6.6 liters	403 in³

***Power rating conditions**

- based on standard air conditions of 25°C (77°F) and 99 kPa (29.32 in Hg) dry barometer
- used 35° API gravity fuel having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 30°C (86°F) [ref. a fuel density of 838.9 g/L (7.001 lb/ U.S. gal)]
- net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator

Drive

Drive system is fully hydrostatic.

Ratings		
Maximum drawbar pull	215 kN	(48,350 lb)
Maximum travel speed	5.0 kph	(3.1 mph)
Maximum gradeability (based on engine operation)		70%

Features

- each track is driven by one independent, automatic shifting, two-speed bent-axis piston motor via integral planetary final drives
- multiple disc brakes have increased braking capacity, are spring-engaged and pressure released
- each drive module is well integrated into the roller frame for total protection

Hydraulic System

Two variable displacement, axial-piston pumps power the boom, stick, swing, bucket, auxiliary and travel circuits. One single-section, gear-type pump powers the pilot circuit.

Main Implement System	
Maximum flow	2 x 214 liters/min (2 x 56.5 gpm)
Maximum pressure	
Implements	34 300 kPa (4980 psi)
Travel	34 300 kPa (4980 psi)
Swing	29 400 kPa (4250 psi)

Pilot System	
Maximum flow	41 liters/min (10.8 gpm)
Maximum pressure	4100 kPa (595 psi)

Cylinders, Bore and Stroke	
Boom (2)	140 x 1407 mm (5.5" x 4'7")
Stick (1)	150 x 1569 mm (5.9" x 5'2")
Bucket (1)	
C family	130 x 1156 mm (5.1" x 3'10")
D family	150 x 1156 mm (5.9" x 3'10")

Features

- main hydraulic pumps are electronically controlled and dependent on engine speed
- power modes match hydraulic output to application severity

Cab/FOGS

Bolt-on Falling Object Guard System (FOGS) is available as an attachment.

Cab Certifications

- Optional Falling Object Guard System is designed to protect the operator from falling objects, and is certified under SAE J1356 Feb 88 and ISO 3449-1984 specifications.

Note

When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 MAY90, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.

Buckets

Increased offerings of buckets help optimize machine performance.

Caterpillar buckets provide increased service life with reduced repair costs. All buckets except ditch cleaning have the following features:

- Dual Radius design for increased heel clearance and reduced wear.
- Robot welding of hinge assembly (Cat and Balderson) and other critical areas (Cat only) for increased weld penetration and longer life.
- High strength and heat treated steel in high wear areas.

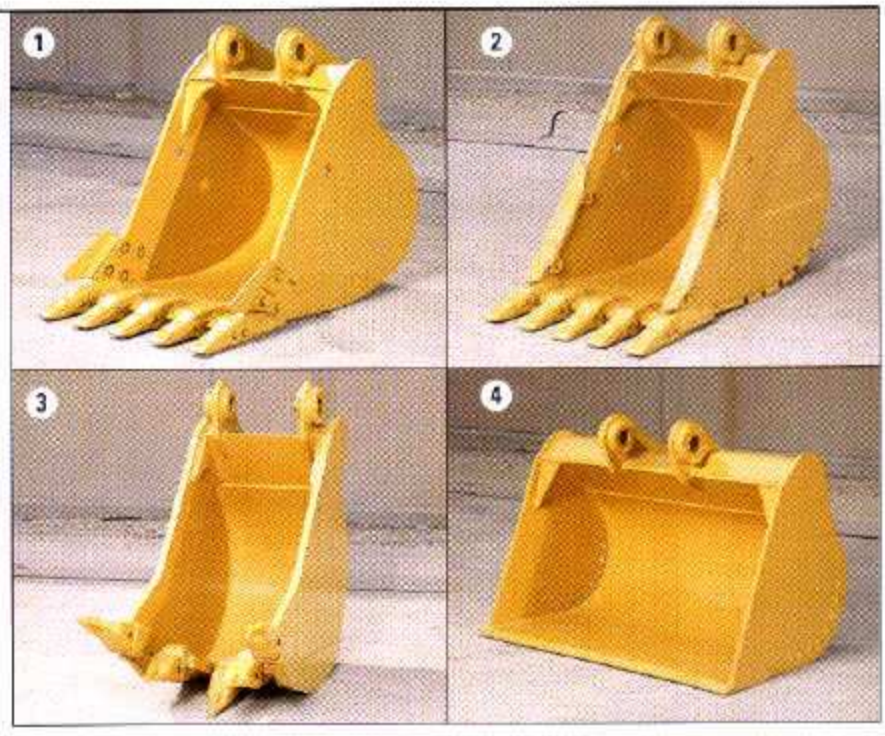
1 Heavy Duty (HD) Buckets for digging in moderate to hard abrasive materials. Differences from GP buckets are as follows:

- Larger Ground Engaging Tools (GET), thicker cutting edges and thicker bottom and side wear plates improve performance in demanding applications.

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

2 Heavy Duty Rock (HDR) Buckets perform best when digging fragmented rock, frozen ground, caliche and highly abrasive materials. Differences from HD buckets are as follows:

- Additional, thicker wear plates extend beyond side plates for corner and rear dent protection and improved durability.
- Larger side plates provide additional dent protection.
- Sidebar protectors decrease sidebar wear.



3 Heavy Duty Rock Ripping (RR) Buckets dig hard rock and work in areas where material is virgin or poorly prepared. Differences from HDR buckets are as follows:

- Stepped tooth design allows one or two tip penetration for higher break-out forces and keeps the trench floor flat.
- Thicker side wear plates, cutting edges and larger GET (C family only) mean additional wear life.

4 Ditch Cleaning (DC) Buckets (from Balderson) are wide shallow buckets for bank forming, ditch cleaning and finishing.

Mechanical quick coupler speeds attachment changes.

- Actuator mechanism is sealed, lubricated and has high strength, heat-treated steel wear surfaces for use in severe applications.
- The quick coupler allows buckets and attachments from the 320 through the 330 to be interchanged.

Booms, Sticks and Attachments

The 325B has designed-in flexibility to help bring higher production and efficiency to your jobs.

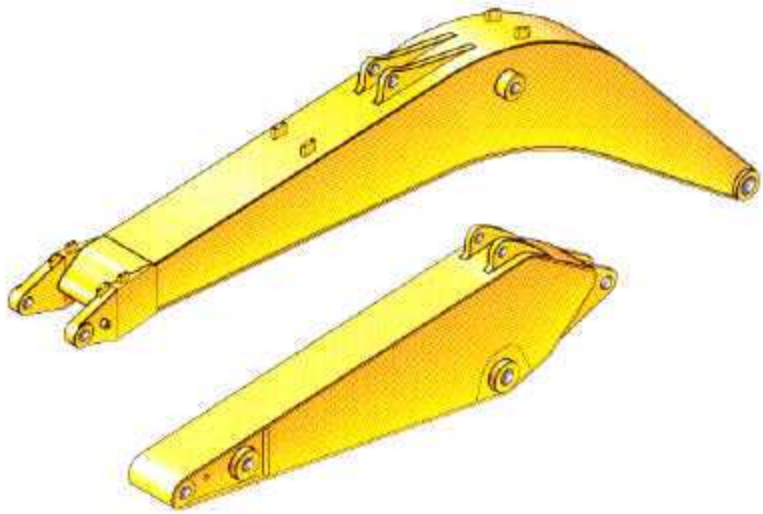
Select the right combination for the job with your Cat dealer and you'll help ensure top production from the start.

The choice of two booms and three sticks, plus a wide selection of buckets and attachments, means the 325B offers a large combination of reach and digging forces for optimum versatility.

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

The Reach Boom (R) 6.15 m (20'2") features an optimum design that maximizes digging envelopes with two stick choices.

- The R/M3.2C stick gives the largest working envelope with medium (C-sized) buckets.
- The R2.7C stick uses the higher capacity buckets and is best suited to trenching, excavation and general construction applications.



The Mass Excavator (M) Boom 5.55 m (18'0") maximizes productivity. The M version offers significantly higher digging forces to allow use of larger buckets.

- The R/M3.2C stick gives the largest working envelope with the Mass Excavator (M) Boom and C-sized buckets.
- The M2.5D stick has been specifically designed for large earth moving applications and uses D-sized buckets.

1 Caterpillar side impact protection (optional) bumpers help protect machines from damage, reducing repair and service time. Rubber is bonded to high-strength steel plates and bolted to the upper frame.

Undercarriage

Durable undercarriage absorbs stresses and provides excellent stability.

Precision robotic welding ensures a quality weld every time. These welds increase rigidity, reduce internal stresses and enhance durability for the chassis and track roller frames.

Heavy-duty, X-shaped chassis design. Cat undercarriage components are purposely oversized to offer heavy-duty performance and durability.

Strutted track links are sealed for longer life. Track rollers, carrier rollers and idlers are also sealed and lubricated for excellent service life.

Smoother autoshifting two-speed travel motors offer 11 percent increase in top travel speeds and plenty of pull on slopes or turns.

Long (L) undercarriage maximizes stability and lifting capacity. Long, wide and sturdy undercarriage offers a very stable work platform.

Steeper track roller frame design and the elimination of a ledge at carbody and roller frame juncture reduces material build-up and makes digging out easier.

Standard idler guards and center track guides maintain track alignment. Optional sprocket guiding guards or full length track guiding guards are available for additional protection on steep side slopes.

Structures

The 325B structural components are the backbone of the machine's durability.

1 Advanced carbody design stands up in the toughest applications.

- Modified X-shaped, box-section carbody provides excellent resistance to torsional bending.
- Upper structure weight and stresses are distributed evenly across the full length of the track roller frame.
- Smooth transitions and long welds reduce stresses at the carbody-to-roller frame junctions for excellent durability.
- Robot welding ensures consistent, high-quality welds throughout the manufacturing process.

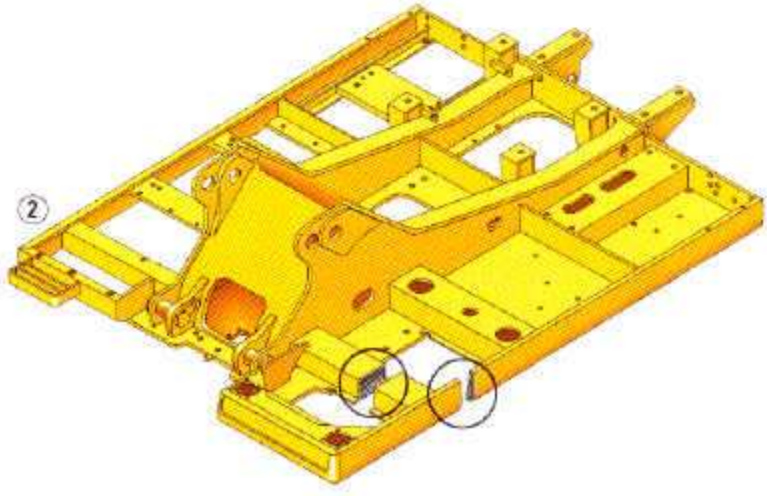
Robot-welded track roller frames are press-formed, pentagonal units to deliver exceptional strength and service life.

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

- Outer frame utilizes curved side rails, which are die-formed, for excellent uniformity and strength throughout the length.
- Box section channels improve upper frame rigidity under the cab.
- Inverted U-channels span the width of the main frame and are formed, rather than fabricated, for superior strength and reduced weight.
- Boom tower and main rails are constructed of solid, high-tensile strength steel plates.
- Boom foot and engine mount areas reinforced for additional strength.
- Sheet metal supporting structure is improved by integrating the mounting into upper frame structure.

Caterpillar excavator booms and sticks are built for performance and long service life.

- Castings and forgings are used at high stress areas such as boom nose, boom foot, boom cylinder and stick foot.
- Large, welded, box-section structures with thick, multi-plate fabrications in high-stress areas.
- Construction allows structures to flex and dissipate stresses.
- All booms and sticks are stress relieved to maximize material strength and durability, while minimizing weight for improved performance.



Cat 3116TA Engine

The six cylinder turbo-charged and aftercooled engine is built for power, reliability, economy and low emissions.

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

- When placed in the "OFF" mode, if a no-load condition or light-load condition continues more than three seconds, the automatic engine control reduces engine speed by 100 rpm.
- When placed in the "ON" mode, if a no-load condition or light-load condition continues more than three seconds, the automatic engine control reduces engine speed from high idle to 1300 rpm.
- At any time, the operator can activate a switch on the top of the right control lever to reduce the engine speed to 950 rpm. This feature, referred to as one-touch idle, can be used both to conserve fuel and to reduce engine sound levels. Activate switch again to return to previous level.

High displacement, low rpm rating and conservative HP rating mean longer service hours with less downtime for maintenance and repair.

Turbo-charged and aftercooled to increase engine power by burning fuel with greater efficiency.

Two-piece pistons are used for high durability, good fuel efficiency and low vibration. These pistons better withstand higher internal cylinder pressure.

Meets all current and proposed worldwide emissions standards up to the year 2001.

Air intake heating is standard on the 325B for easier cold starts. When coolant temperature is above 10° C (50° F) the air intake heater does not operate, below that temperature the length of the heating period automatically adjusts to the temperature.

Fuel tank capacity has been increased to allow 15 hours of continuous operation under normal load.

Mass Excavation Boom Lift Capacities

 Load Point Height

 Load at Maximum Reach

 Load Radius Over Front

 Load Radius Over Side

3.20C STICK – 3200 mm (10'6")
BUCKET – 948 mm, 1.1 m³ (36", 1.5 yd³)

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

BOOM – 5500 mm (18'2")

		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)				
														
7.5 m	kg											*2630	*2630	8.2
25.0 ft	lb											*5,900	*5,900	25.6
6.0 m	kg									*4560	*4560	*2510	*2510	9.1
20.0 ft	lb									*8,800	*8,800	*5,600	*5,600	29.1
4.5 m	kg							*7930	6980	*6270	4710	*2510	*2510	9.6
15.0 ft	lb							*16,300	15,000	*13,200	10,100	*5,500	*5,500	31.1
3.0 m	kg			*12 320	*12 320	*11 250	10 700	*9890	6670	6960	4570	*2610	*2610	9.8
10.0 ft	lb			*36,900	*36,500	*24,200	23,000	*19,200	14,300	15,000	9,800	*5,700	*5,700	32.2
1.5 m	kg			*7050	*7050	*13 950	9930	9850	6320	6810	4400	*2820	2820	9.8
5.0 ft	lb			*16,800	*16,800	*30,100	21,400	21,100	13,600	14,600	9,400	*6,000	*6,000	32.3
10.0 m	kg			*7920	*7920	*15 670	9420	9540	6060	6650	4080	*3170	2980	9.4
16.0 ft	lb			*18,200	*18,200	33,400	20,300	20,500	13,000	14,300	9,100	*6,700	6,400	31.8
-1.5 m	kg	*6810	*6810	*11 850	*11 850	15 340	9220	9390	5910	6580	4190	*3780	3340	8.7
-5.0 ft	lb	*15,200	*15,800	*26,900	*26,900	32,800	19,800	20,100	12,700	14,100	9,000	*7,700	7,000	29.6
-3.0 m	kg	*11 480	*11 480	*18 900	*18 900	*14 930	9240	9370	5960			*4830	4220	7.8
-10.0 ft	lb	*25,800	*25,800	*41,000	40,400	*32,200	18,800	20,100	12,700			*9,700	8,400	26.8
-4.5 m	kg			*17 330	*17 330	*12 170	9470	*8200	6140					
-15.0 ft	lb			*37,100	*37,100	*25,900	20,400					*7,400	*7,400	21.5

* Indicates that the load is limited by hydraulic capacity rather than tipping capacity. Lift capacity ratings are based on SAE standard J1097. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

† Ground line

2.50D STICK – 2500 mm (8'2")
BUCKET – 1098 mm, 1.4 m³ (42", 1.88 yd³)

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

BOOM – 5500 mm (18'2")

		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)				
7.5 m	kg											*3740	*3740	7.3
25.0 ft	lb											*8,400	*8,400	22.8
6.0 m	kg							*7400	6750			*3580	*3580	8.4
20.0 ft	lb							*16,200	14,400			*7,900	*7,900	26.7
4.5 m	kg					*9690	7980	*8180	6590	6450	4320	*3800	3200	8.6
15.0 ft	lb							*17,700	14,100	*12,400	9,200	*7,900	7,300	29.0
3.0 m	kg					*13 310	10 110	*9340	6280	6640	4230	*3770	2940	8.2
10.0 ft	lb					*26,500	21,800	*20,200	13,500	14,200	9,000	*9,200	6,600	30.1
1.5 m	kg					*14 580	9480	9480	5980	6600	4060	*4100	2910	8.2
5.0 ft	lb					*31,400	20,200	20,300	12,800	13,900	8,800	*8,700	6,400	30.2
10.6 m	kg					15 150	9610	9020	5740	6380	3990	*4660	3100	8.8
10.0 ft	lb					32,400	19,400	19,800	12,300	12,700	8,600	*9,800	6,600	29.3
-1.5 m	kg	*7880	*7880	*13 330	*13 330	15 050	8930	9130	5660			5580	3040	8.6
-5.0 ft	lb	*17,700	*17,700	*30,400	*30,400	32,200	19,200	19,600	12,200			*11,500	7,500	27.3
-3.0 m	kg			*15 150	14 800	*13 620	9470	8930	5740			*4120	*4120	9.7
-10.0 ft	lb			*41,400	40,100	*29,300	19,500	19,800	12,400			*11,300	9,600	23.8
-4.5 m	kg					*9480	9480							
-15.0 ft	lb					*19,700	*19,700							

* Indicates that the load is limited by hydraulic capacity rather than tipping capacity. Lift capacity ratings are based on SAE standard J1097. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

† Ground line