

420D/420D IT Backhoe Loader

Standard Duty Buckets

With weld-on adapters and pin-on teeth.

Width (mm/in)	Capacities SAE (liters/ft ³)	Weight (kg/lb)	No. of Teeth
305/12	78/2.8	97/213	3
457/18	118/4.2	115/253	4
610/24	175/6.2	132/290	5
762/30	233/8.2	147/323	5
914/36	292/10.3	165/363	6

Heavy Duty Buckets

With weld-on adapters and pin-on teeth.

Width (mm/in)	Capacities SAE (liters/ft ³)	Weight (kg/lb)	No. of Teeth
305/12	78/2.8	105/231	3
406/16	105/3.7	127/279	3
457/18	118/4.2	129/284	4
610/24	175/6.2	151/332	5
762/30	233/8.2	167/367	5
914/36	292/10.3	189/416	6

High Capacity Buckets

With weld-on adapters and pin-on teeth.

Width (mm/in)	Capacities SAE (liters/ft ³)	Weight (kg/lb)	No. of Teeth
457/18	180/6.4	146/321	4
610/24	240/8.5	171/376	5
762/30	320/11.3	195/429	5
914/36	380/13.4	214/471	6

Heavy Duty Rock Buckets

With weld-on adapters and pin-on teeth.

Width (mm/in)	Capacities SAE (liters/ft ³)	Weight (kg/lb)	No. of Teeth
305/12	70/2.5	120/265	3
457/18	127/4.5	150/331	4
610/24	198/7.0	175/386	5
762/30	255/9.5	195/430	5
914/36	311/11.5	210/463	6

Counterweights

Minimum Counterweight Recommendations — Standard Stick

Loader Bucket	Power Train	Single-Tilt		IT Loader w/QC	
		kg	lb	kg	lb
GP	2WD	355	780	bumper	bumper
GP	AWD	250	550	bumper	bumper
MP	2WD/AWD	bumper	bumper	bumper	bumper
MP with fold-over forks	2WD/AWD	bumper	bumper	N/A	N/A
Forks	2WD/AWD	N/A	N/A	bumper	bumper
Material handling arm	2WD/AWD	N/A	N/A	145	320

Minimum Counterweight Recommendations — Extendible Stick

Loader Bucket	Power Train	Single-Tilt		IT Loader w/QC	
		kg	lb	kg	lb
GP	2WD	570	1,250	354	780
GP	AWD	570	1,250	250	550
MP	2WD	250	550	bumper	bumper
MP	AWD	145	320	bumper	bumper
MP with fold-over forks	2WD	bumper	bumper	N/A	N/A
MP with fold-over forks	AWD	bumper	bumper	N/A	N/A
Forks	2WD	N/A	N/A	250	550
Forks	AWD	N/A	N/A	145	320
Material handling arm	2WD	N/A	N/A	570	1,250
Material handling arm	AWD	N/A	N/A	460	1,010

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Machine Dimensions

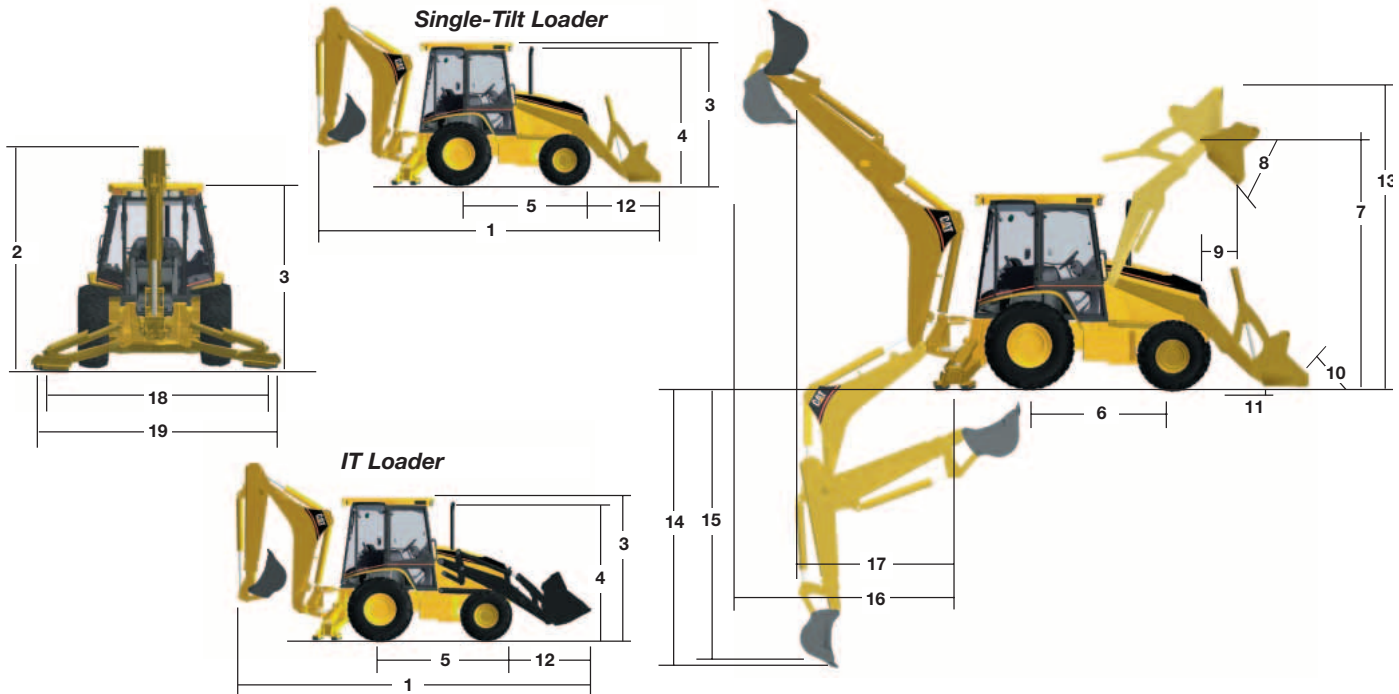
		Single-Tilt Loader		
		General Purpose (0.96 m ³ /1.25 yd ³)	General Purpose (1.00 m ³ /1.31 yd ³)	General Purpose (1.07 m ³ /1.40 yd ³)
(1)	Overall transport length	7019 mm/23 ft 0 in	6989 mm/22 ft 11 in	7052 mm/23 ft 2 in
	Overall length (loader on ground)	6999 mm/23 ft 0 in	6954 mm/22 ft 10 in	7015 mm/23 ft 0 in
(2)	Overall transport height (standard stick)	3585 mm/11 ft 9 in	3585 mm/11 ft 9 in	3585 mm/11 ft 9 in
	Overall transport height (extendible stick)	3590 mm/11 ft 9 in	3590 mm/11 ft 9 in	3590 mm/11 ft 9 in
	Overall width	2352 mm/7 ft 9 in	2352 mm/7 ft 9 in	2352 mm/7 ft 9 in
(3)	Height to top of cab/canopy	2770 mm/9 ft 1 in	2770 mm/9 ft 1 in	2770 mm/9 ft 1 in
(4)	Height to top of exhaust stack	2670 mm/8 ft 9 in	2670 mm/8 ft 9 in	2670 mm/8 ft 9 in
	Height to loader hinge pin (transport)	510 mm/1 ft 8 in	510 mm/1 ft 8 in	510 mm/1 ft 8 in
	Ground clearance (minimum)	297 mm/1 ft 0 in	297 mm/1 ft 0 in	297 mm/1 ft 0 in
(5)	Rear axle centerline to front grill	2660 mm/8 ft 9 in	2660 mm/8 ft 9 in	2660 mm/8 ft 9 in
	Front wheel tread gauge	1871 mm/6 ft 2 in	1871 mm/6 ft 2 in	1871 mm/6 ft 2 in
	Rear wheel tread gauge	1714 mm/5 ft 8 in	1714 mm/5 ft 8 in	1714 mm/5 ft 8 in
(6)	Wheelbase 2WD/AWD	2100 mm/6 ft 11 in	2100 mm/6 ft 11 in	2100 mm/6 ft 11 in

		Single-Tilt Loader	
		Multi Purpose (0.96 m ³ /1.25 yd ³)	Multi Purpose (1.03 m ³ /1.35 yd ³)
(1)	Overall transport length	6974 mm/22 ft 11 in	6974 mm/22 ft 11 in
	Overall length (loader on ground)	6954 mm/22 ft 10 in	6954 mm/22 ft 10 in
(2)	Overall transport height (standard stick)	3585 mm/11 ft 9 in	3585 mm/11 ft 9 in
	Overall transport height (extendible stick)	3590 mm/11 ft 9 in	3590 mm/11 ft 9 in
	Overall width	2352 mm/7 ft 9 in	2352 mm/7 ft 9 in
(3)	Height to top of cab/canopy	2770 mm/9 ft 1 in	2770 mm/9 ft 1 in
(4)	Height to top of exhaust stack	2670 mm/8 ft 9 in	2670 mm/8 ft 9 in
	Height to loader hinge pin (transport)	510 mm/1 ft 8 in	510 mm/1 ft 8 in
	Ground clearance (minimum)	297 mm/1 ft 0 in	297 mm/1 ft 0 in
(5)	Rear axle centerline to front grill	2660 mm/8 ft 9 in	2660 mm/8 ft 9 in
	Front wheel tread gauge	1871 mm/6 ft 2 in	1871 mm/6 ft 2 in
	Rear wheel tread gauge	1714 mm/5 ft 8 in	1714 mm/5 ft 8 in
(6)	Wheelbase 2WD/AWD	2100 mm/6 ft 11 in	2100 mm/6 ft 11 in

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IT Loader with Quick Coupler

	General Purpose (0.96 m ³ /1.25 yd ³)	General Purpose (1.00 m ³ /1.31 yd ³)	Multi Purpose (0.96 m ³ /1.25 yd ³)	Multi Purpose (1.03 m ³ /1.35 yd ³)
(1) Overall transport length	7064 mm/23 ft 2 in	7034 mm/23 ft 1 in	7014 mm/23 ft 0 in	7014 mm/23 ft 0 in
Overall length (loader on ground)	7044 mm/23 ft 1 in	6998 mm/23 ft 0 in	6994 mm/22 ft 11 in	6994 mm/22 ft 11 in
(2) Overall transport height (standard stick)	3585 mm/11 ft 9 in	3585 mm/11 ft 9 in	3585 mm/11 ft 9 in	3585 mm/11 ft 9 in
Overall transport height (extendible stick)	3590 mm/11 ft 9 in	3590 mm/11 ft 9 in	3590 mm/11 ft 9 in	3590 mm/11 ft 9 in
Overall width	2352 mm/7 ft 9 in	2352 mm/7 ft 9 in	2352 mm/7 ft 9 in	2352 mm/7 ft 9 in
(3) Height to top of cab/canopy	2770 mm/9 ft 1 in	2770 mm/9 ft 1 in	2770 mm/9 ft 1 in	2770 mm/9 ft 1 in
(4) Height to top of exhaust stack	2670 mm/8 ft 9 in	2670 mm/8 ft 9 in	2670 mm/8 ft 9 in	2670 mm/8 ft 9 in
Height to loader hinge pin (transport)	510 mm/1 ft 8 in	510 mm/1 ft 8 in	510 mm/1 ft 8 in	510 mm/1 ft 8 in
Ground clearance (minimum)	297 mm/1 ft 0 in	297 mm/1 ft 0 in	297 mm/1 ft 0 in	297 mm/1 ft 0 in
(5) Rear axle centerline to front grill	2660 mm/8 ft 9 in	2660 mm/8 ft 9 in	2660 mm/8 ft 9 in	2660 mm/8 ft 9 in
Front wheel tread gauge	1871 mm/6 ft 2 in	1871 mm/6 ft 2 in	1871 mm/6 ft 2 in	1871 mm/6 ft 2 in
Rear wheel tread gauge	1714 mm/5 ft 8 in	1714 mm/5 ft 8 in	1714 mm/5 ft 8 in	1714 mm/5 ft 8 in
(6) Wheelbase 2WD/AWD	2100 mm/6 ft 11 in	2100 mm/6 ft 11 in	2100 mm/6 ft 11 in	2100 mm/6 ft 11 in



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Loader Bucket Dimensions and Performance

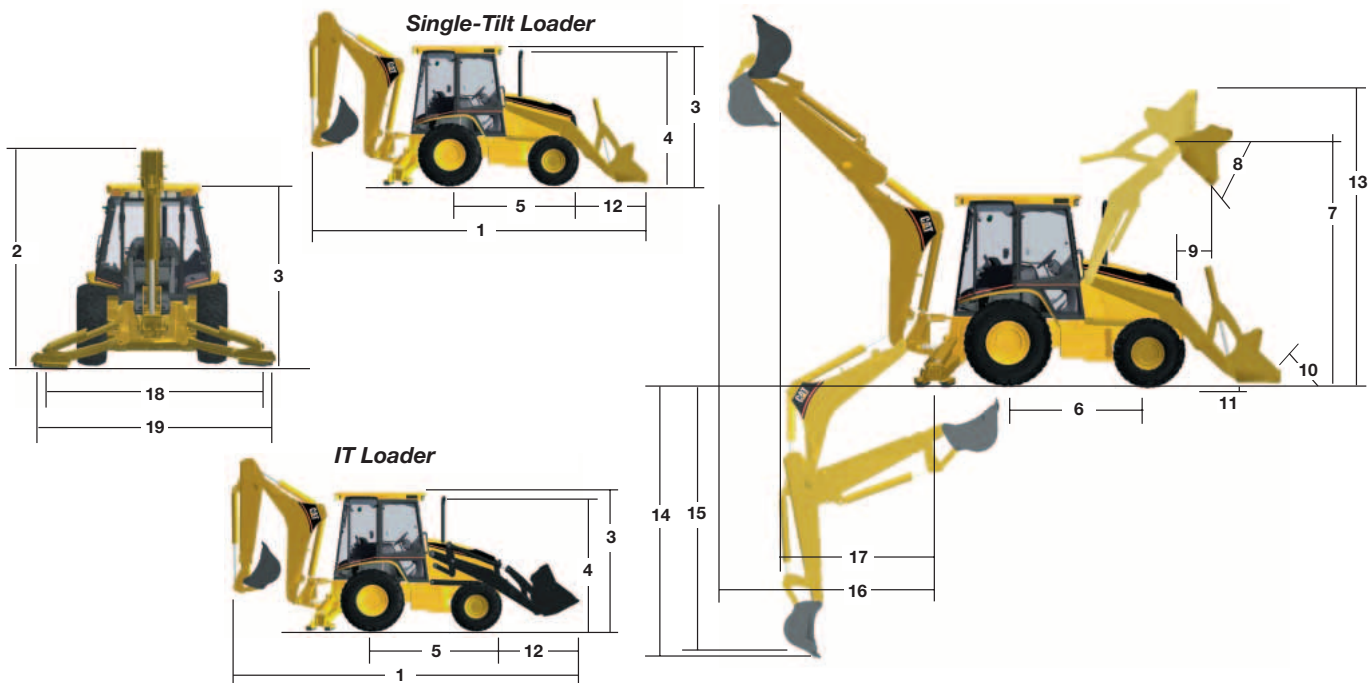
	Single-Tilt Loader		
	General Purpose (0.96 m ³ /1.25 yd ³)	General Purpose (1.00 m ³ /1.31 yd ³)	General Purpose (1.07 m ³ /1.40 yd ³)
Capacity (SAE) rated	0.96 m ³ /1.25 yd ³	1.00 m ³ /1.31 yd ³	1.07 m ³ /1.40 yd ³
Width	2262 mm/7 ft 5 in	2406 mm/7 ft 11 in	2262 mm/7 ft 5 in
Lift capacity at maximum height	2896 kg/6,385 lb	2898 kg/6,391 lb	2837 kg/6,254 lb
Breakout force	45.1 kN/10,131 lb	45.7 kN/10,269 lb	44.6 kN/10,026 lb
(7) Maximum hinge pin height	3266 mm/10 ft 9 in	3266 mm/10 ft 9 in	3266 mm/10 ft 9 in
(8) Dump angle at full height	43°	43°	43°
Dump height at maximum angle	2544 mm/8 ft 4 in	2575 mm/8 ft 5 in	2521 mm/8 ft 3 in
(9) Dump reach at maximum angle	835 mm/2 ft 9 in	802 mm/2 ft 8 in	801 mm/2 ft 8 in
(10) Maximum bucket rollback at ground level	40°	40°	40°
(11) Digging depth	135 mm/5 in	135 mm/5 in	174 mm/7 in
Maximum grading angle	106°	107°	107°
Width of dozer cutting edge	N/A	N/A	N/A
(12) Grill to bucket cutting edge, carry position	1548 mm/5 ft 1 in	1519 mm/5 ft 0 in	1581 mm/5 ft 2 in
(13) Maximum operating height	4146 mm/13 ft 7 in	4146 mm/13 ft 7 in	4188 mm/13 ft 9 in
Jaw opening maximum	N/A	N/A	N/A
Bucket jaw clamping force	N/A	N/A	N/A
Weight (does not include teeth or forks)	431 kg/950 lb	445 kg/980 lb	438 kg/965 lb

	Single-Tilt Loader	
	Multi Purpose (0.96 m ³ /1.25 yd ³)	Multi Purpose (1.03 m ³ /1.35 yd ³)
Capacity (SAE) rated	0.96 m ³ /1.25 yd ³	1.03 m ³ /1.35 yd ³
Width	2262 mm/7 ft 5 in	2406 mm/7 ft 11 in
Lift capacity at maximum height	2747 kg/6,056 lb	2707 kg/5,968 lb
Breakout force	44.9 kN/10,099 lb	44.6 kN/10,018 lb
(7) Maximum hinge pin height	3266 mm/10 ft 9 in	3266 mm/10 ft 9 in
(8) Dump angle at full height	43°	43°
Dump height at maximum angle	2609 mm/8 ft 7 in	2609 mm/8 ft 7 in
(9) Dump reach at maximum angle	721 mm/2 ft 4 in	721 mm/2 ft 4 in
(10) Maximum bucket rollback at ground level	40°	40°
(11) Digging depth	165 mm/6.5 in	165 mm/6.5 in
Maximum grading angle	110°	110°
Width of dozer cutting edge	2406 mm/7 ft 11 in	2406 mm/7 ft 11 in
(12) Grill to bucket cutting edge, carry position	1501 mm/4 ft 11 in	1501 mm/4 ft 11 in
(13) Maximum operating height	4174 mm/13 ft 8 in	4174 mm/13 ft 8 in
Jaw opening maximum	790 mm/2 ft 7 in	790 mm/2 ft 7 in
Bucket jaw clamping force	55.7 kN/12,524 lb	55.7 kN/12,524 lb
Weight (does not include teeth or forks)	662 kg/1,460 lb	685 kg/1,510 lb

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IT Loader with Quick Coupler

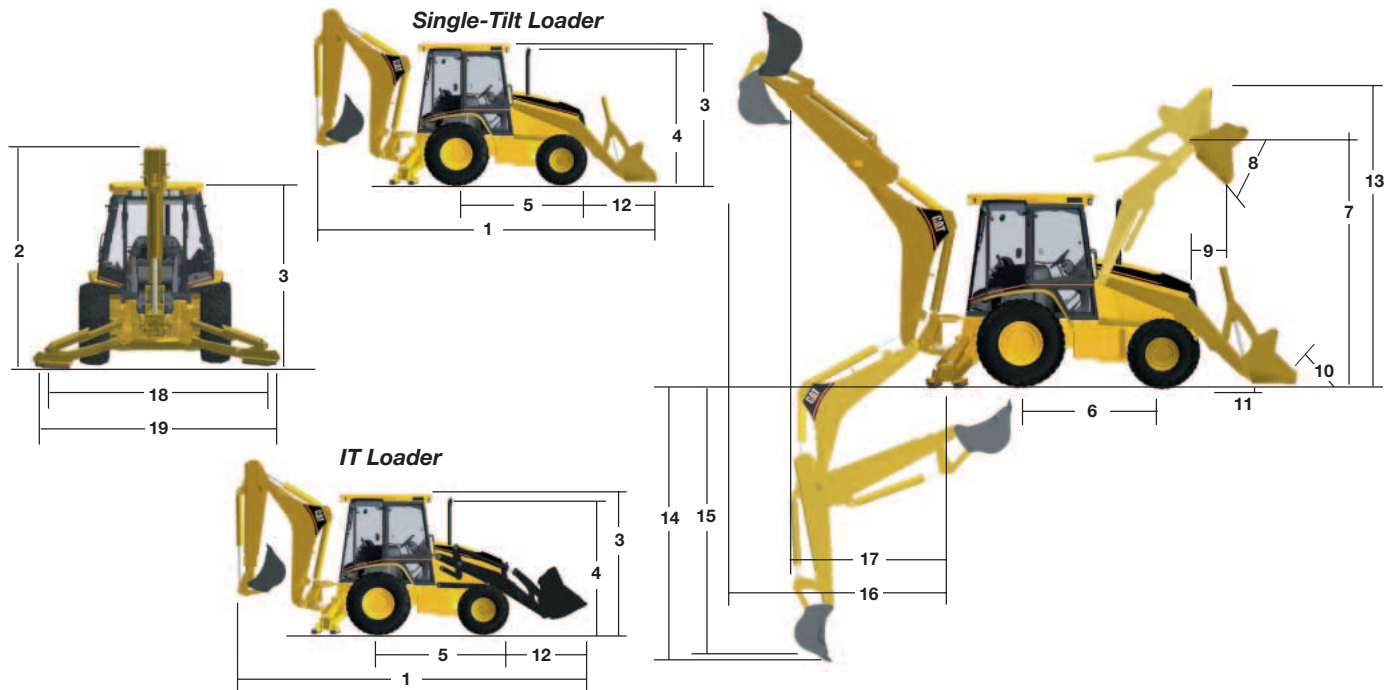
	General Purpose (0.96 m ³ /1.25 yd ³)	General Purpose (1.00 m ³ /1.31 yd ³)	Multi Purpose (0.96 m ³ /1.25 yd ³)	Multi Purpose (1.03 m ³ /1.35 yd ³)
Capacity (SAE) rated	0.96 m ³ /1.25 yd ³	1.00 m ³ /1.31 yd ³	0.96 m ³ /1.25 yd ³	1.03 m ³ /1.35 yd ³
Width	2262 mm/7 ft 5 in	2406 mm/7 ft 11 in	2262 mm/7 ft 5 in	2406 mm/7 ft 11 in
Lift capacity at maximum height	3162 kg/6,970 lb	3152 kg/6,949 lb	2958 kg/6,521 lb	2916 kg/6,428 lb
Breakout force	47.0 kN/10,564 lb	47.3 kN/10,628 lb	48.5 kN/10,897 lb	48.3 kN/10,853 lb
(7) Maximum hinge pin height	3266 mm/10 ft 9 in	3266 mm/10 ft 9 in	3266 mm/10 ft 9 in	3266 mm/10 ft 9 in
(8) Dump angle at full height	43°	43°	43°	43°
Dump height at maximum angle	2462 mm/8 ft 1 in	2494 mm/8 ft 2 in	2531 mm/8 ft 4 in	2531 mm/8 ft 4 in
(9) Dump reach at maximum angle	862 mm/2 ft 10 in	830 mm/2 ft 9 in	751 mm/2 ft 6 in	751 mm/2 ft 6 in
(10) Maximum bucket rollback at ground level	40°	40°	40°	40°
(11) Digging depth	135 mm/5 in	135 mm/5 in	165 mm/6.5 in	165 mm/6.5 in
Maximum grading angle	107°	108°	111°	111°
Width of dozer cutting edge	N/A	N/A	2406 mm/7 ft 11 in	2406 mm/7 ft 11 in
(12) Grill to bucket cutting edge, carry position	1592 mm/5 ft 3 in	1562 mm/5 ft 2 in	1543 mm/5 ft 1 in	1543 mm/5 ft 1 in
(13) Maximum operating height	4204 mm/13 ft 10 in	4204 mm/13 ft 10 in	4223 mm/13 ft 10 in	4223 mm/13 ft 10 in
Jaw opening maximum	N/A	N/A	790 mm/2 ft 7 in	790 mm/2 ft 7 in
Bucket jaw clamping force	N/A	N/A	55.7 kN/12,524 lb	55.7 kN/12,524 lb
Weight (does not include teeth or forks)	431 kg/950 lb	445 kg/980 lb	662 kg/1,460 lb	685 kg/1,510 lb



420D/420D IT Backhoe Loader

Backhoe Dimensions and Performance

	Standard Stick	Extendible Stick Retracted	Extendible Stick Extended
(14) Digging depth, SAE (max)	4390 mm/14 ft 5 in	4465 mm/14 ft 8 in	5510 mm/18 ft 1 in
(15) Digging depth, 2 ft flat bottom	4362 mm/14 ft 4 in	4432 mm/14 ft 7 in	5474 mm/18 ft 0 in
Reach from rear axle centerline at ground line	6740 mm/22 ft 1 in	6795 mm/22 ft 4 in	7765 mm/25 ft 6 in
(16) Reach from swing pivot at ground line	5650 mm/18 ft 6 in	5705 mm/18 ft 9 in	6675 mm/21 ft 11 in
Maximum operating height	5450 mm/17 ft 11 in	5470 mm/17 ft 11 in	6140 mm/20 ft 2 in
Loading height	3613 mm/11 ft 10 in	3630 mm/11 ft 11 in	4175 mm/13 ft 8 in
(17) Loading reach	1732 mm/5 ft 8 in	1819 mm/6 ft 0 in	2736 mm/9 ft 0 in
Swing arc	180°	180°	180°
Bucket rotation	205°	205°	205°
(18) Stabilizer spread, operating position (center of pad)	3219 mm/10 ft 7 in	3219 mm/10 ft 7 in	3219 mm/10 ft 7 in
(19) Stabilizer spread, operating position (outside edge of pad)	3689 mm/12 ft 1 in	3689 mm/12 ft 1 in	3689 mm/12 ft 1 in
Stabilizer spread, transport position	2352 mm/7 ft 9 in	2352 mm/7 ft 9 in	2352 mm/7 ft 9 in
Bucket dig force	65.4 kN/14,712 lb	64.8 kN/14,586 lb	64.8 kN/14,586 lb
Stick dig force	38.2 kN/8,593 lb	37.5 kN/8,421 lb	27.5 kN/6,188 lb



420D/420D IT Backhoe Loader

Dimensions with Forks/Material-Handling Arm

Cat 420D IT Operating Specifications with Forks

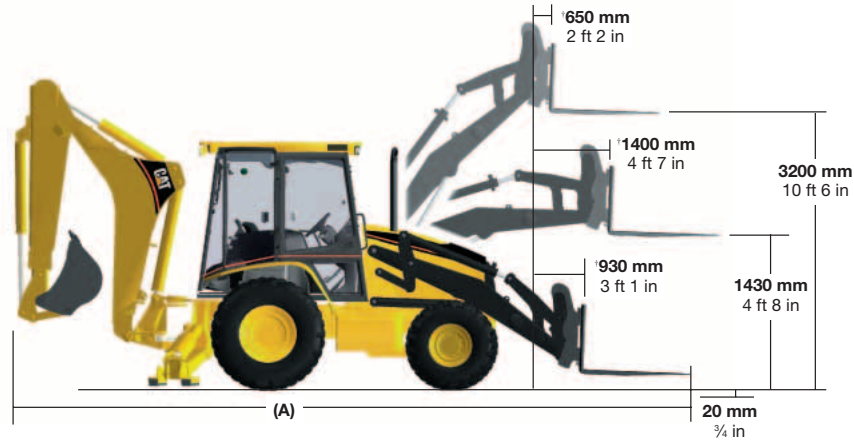
Fork Tine Length:	1050 mm/3 ft 5 in	1200 mm/3 ft 11 in	1350 mm/4 ft 5 in
Operating load (SAE J1197)	1885 kg/4,155 lb*	1808 kg/3,985 lb*	1737 kg/3,829 lb*
Operating load (CEN474-4)	2290 kg/5,049 lb*	2279 kg/5,025 lb*	2270 kg/5,003 lb*
Overall length (A)	7464 mm/24 ft 6 in	7614 mm/25 ft 0 in	7764 mm/25 ft 6 in
Load center	525 mm/1 ft 9 in	600 mm/2 ft 0 in	675 mm/2 ft 3 in

*Tip limited.

Specifications include lubricants, full fuel tank, ROPS cab, 80 kg (176 lb) operator, 355 kg (780 lb) counterweight, standard tires, standard stick, 24-inch standard-duty bucket, 2WD.

Machine stability is affected by machine options and backhoe attachments.

All dimensions are approximate.



[†]Measured from nose of machine.

Cat 420D IT Operating Specifications with Material-Handling Arm

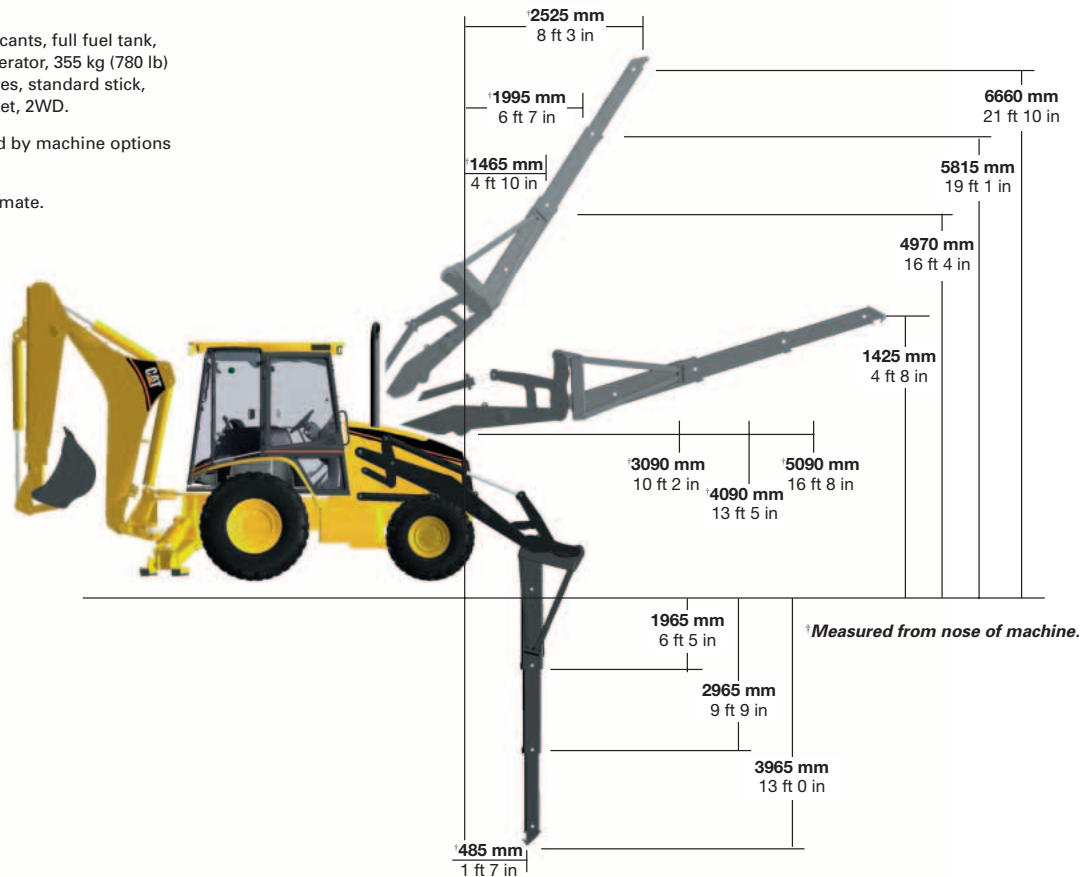
Material-Handling Arm Position:	Retracted	Mid-Position	Extended
Operating load (SAE J1197 & CEN474-4)	967 kg/2,131 lb**	612 kg/1,349 lb**	448 kg/988 lb**
Overall length, maximum	8574 mm/28 ft 2 in	9574 mm/31 ft 5 in	10574 mm/34 ft 8 in

Specifications include lubricants, full fuel tank, ROPS cab, 80 kg (176 lb) operator, 355 kg (780 lb) counterweight, standard tires, standard stick, 24-inch standard-duty bucket, 2WD.

Machine stability is affected by machine options and backhoe attachments.

All dimensions are approximate.

**Hydraulic limited.



[†]Measured from nose of machine.

420D/420D IT Backhoe Loader

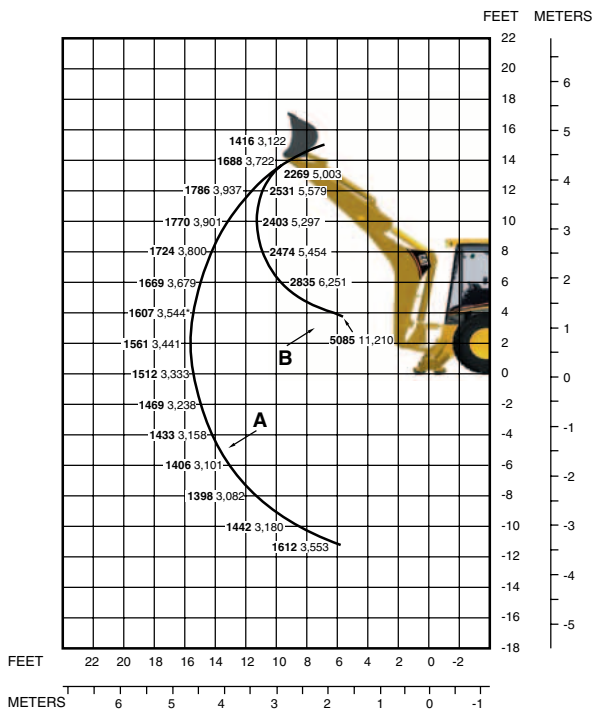
Backhoe Lift Capacity

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

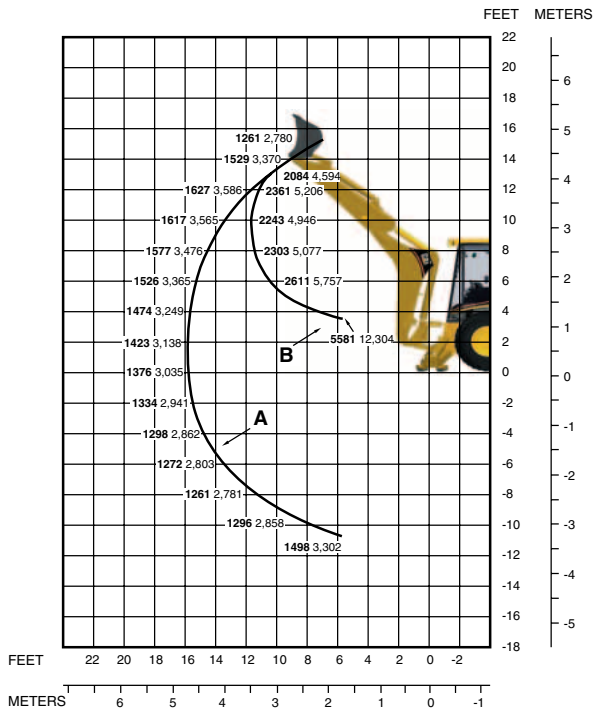
Cat 420D/420D IT Standard Stick

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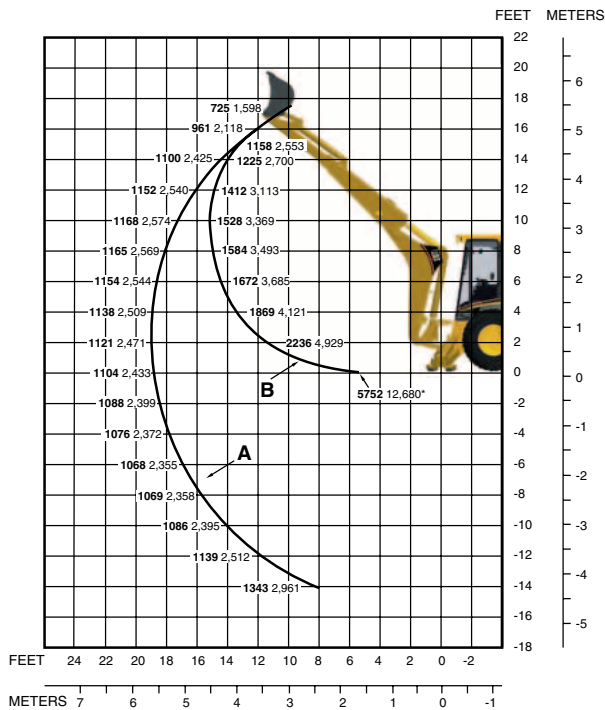
- A — Boom lift kg lb
- B — Stick lift kg lb



Cat 420D/420D IT Extendible Stick — Retracted



Cat 420D/420D IT Extendible Stick — Extended



Lift capacities are over-end values. Machine equipped with 2WD, OROPS, 0.96 m³ (1.25 yd³) general-purpose bucket, and 355 kg (780 lb) counterweight. Extendible stick includes 567 kg (1,250 lb) counterweight.

* Indicates lift capacity is stability limited.

420D/420D IT Backhoe Loader

Optional Equipment

With approximate change in operating weight (kg/lb).

Air conditioning	45/99	Axle, front:		Hydraulic lines:	
Attachments, front loader (single tilt)		All-wheel drive	106/234	Auxiliary, 2 - way lines	
General-purpose buckets:		Backhoe controls:		(to boom)	10/22
0.96 m ³ /1.25 yd ³ *		Excavator pattern with	2/4	Universal, 1 - way lines	
1.00 m ³ /1.31 yd ³	14/30	pattern changer		(to stick)	45/99
1.06 m ³ /1.40 yd ³	7/15	Battery, additional	27/60	Quick disconnects	2/4
Multi-purpose bucket:		Cab 2-door, ROPS/FOPS	260/573	Loader, IT with QC	
0.96 m ³ /1.25 yd ³	231/510	Cab Deluxe	260/573	and Pilot loader control	338/745
0.96 m ³ /1.25 yd ³ w/forks	402/885	Coolant, additional protection		Ride Control	25/55
1.03 m ³ /1.35 yd ³	254/560	(-50° C/-58° F)	0/0	Rotating beacon:	
1.03 m ³ /1.35 yd ³ w/forks	424/935	Counterweights:		Fixed mounted	5/11
Attachments, front loader (IT)		Base	145/320	Magnetic mounted	5/11
General-purpose bucket:		Stackable:		Seat belt, 75 mm/3 in	0/0
0.96 m ³ /1.25 yd ³ *		three (each)	105/230	Stabilizers:	
1.00 m ³ /1.31 yd ³	14/30	one	215/470	Street pads, rubber (set of 4)	37/82
Multi-purpose bucket:		Cutting edge, bolt-on:		Reversible pads	38/84
0.96 m ³ /1.25 yd ³	231/510	Two piece	70/154	Stick, extendible	245/540
1.03 m ³ /1.35 yd ³	254/560	Guards:		Teeth, loader bucket	45/99
Forks (for use with IT loader):		AWD driveshaft	29/64	Tires (see page 17)	
1041 mm/41 in	-267/-589	Stabilizer, rock	30/65	Transmission, Auto-shift	25/55
1220 mm/48 in	-250/-551	High ambient cooling package	2/4	Vandalism protection:	
1346 mm/53 in	-237/-523	Hydraulic valves, loader:		Gauge cover	1/2
Carriage, fork	-63/-139	3rd valve for GP, MP or		Padlocks	1/2
Material-handling arm	-65/-143	Quick Coupler	27/60	Hood lock	0/0
Attachments, backhoe:		Hydraulic valves, backhoe:			
Buckets (see page 17)		Auxiliary valve			
Mechanical Quick Coupler :		(standard stick)	5/11		
D - Series buckets	75/165	Auxiliary valve			
C - Series buckets	75/165	(extendible stick)	5/11		
D and Deere buckets	75/165				
D and Case buckets	80/176				

*Included in base machine weight

Cab, deluxe includes deluxe seat, auto-up stabilizers, voltmeter, and system monitors for plugged engine air filter, hydraulic filter and fuel/water separator.