

390D L

Hydraulic Excavator

The Cat® 390D L Hydraulic Excavator has excellent control, high stick and bucket forces, impressive lift capacity, simplified service and a comfortable operator station to increase your productivity and lower operating costs.



Performance

High level of sustained production, improved performance, reliability and durability increase your productivity and lower your operating costs.

Engine

The Cat® C18 engine uses ACERT™ Technology to meet U.S. EPA Tier 3 emission regulations with exceptional performance capabilities and proven reliability.

Operator Station

Superior cab comfort and visibility provide an excellent working environment. The full-color monitor with graphic display features enhanced functionality to provide a simple, comprehensive machine interface.

Maximum Versatility

A variety of work tools, including buckets, are available for applications such as demolition, site clean-up, scrap processing, breaking up road surfaces and bedrock through Cat® Work Tools.

Service and Maintenance

Fast, easy service has been designed in with long service intervals, advanced filtration, convenient filter access and user-friendly electronic diagnostics for increased productivity and reduced maintenance costs.



390D L Hydraulic Excavator Specifications

Engine

Engine Model	Cat® C18 ACERT™ (ATAAC)	
Net Power – ISO 9249	390 kW	523 hp
Net Power – SAE J1349	390 kW	523 hp
Net Power – EEC 80/1269	390 kW	523 hp
Bore	145 mm	5.71 in
Stroke	171 mm	6.73 in
Displacement	18.1 L	1,104.5 in ³

- The 390D L meets worldwide Tier 3 emission requirements.
- No engine power derating required below 2300 m (7,500 ft) altitude.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.

Weights

Operating Weight – Long Undercarriage	86 190 kg	190,016 lb
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- 8.4 m (27.5 ft) GP Boom, R4.4 m (14.4 ft) Stick, 4.6 m³ (6.0 yd³) HD Bucket and 650 mm (26 in) shoes.

Track

Number of Shoes Each Side – Long Undercarriage	51
Number of Track Rollers Each Side – Long Undercarriage	9
Number of Carrier Rollers Each Side	3

Swing Mechanism

Swing Speed	6.2 rpm
Swing Torque	260 kN·m 191,766 lb ft

Drive

Maximum Travel Speed	4.5 km/h	2.8 mph
Maximum Drawbar Pull	590 kN	132,637 lb

Hydraulic System

Main System – Maximum Flow (Total)	980 L/min	258.89 gal/min
Swing System – Maximum Flow	460 L/min	121.52 gal/min
Maximum Pressure – Equipment – Normal	35 000 kPa	5,076.3 psi
Maximum Pressure – Travel	35 000 kPa	5,076.3 psi
Maximum Pressure – Swing	26 000 kPa	3,770.9 psi
Pilot System – Maximum Flow	90 L/min	23.78 gal/min
Pilot System – Maximum Pressure	4120 kPa	597.56 psi
Boom Cylinder – Bore	210 mm	8.27 in
Boom Cylinder – Stroke	1967 mm	77.44 in
Stick Cylinder – Bore	220 mm	8.66 in
Stick Cylinder – Stroke	2262 mm	89.05 in
HB2 Family Bucket Cylinder – Bore	200 mm	7.87 in
HB2 Family Bucket Cylinder – Stroke	1451 mm	57.13 in
JC Family Bucket Cylinder – Bore	220 mm	8.66 in
JC Family Bucket Cylinder – Stroke	1586 mm	62.44 in

Service Refill Capacities

Fuel Tank Capacity	1240 L	327.57 gal
Cooling System	101 L	26.68 gal
Engine Oil	65 L	17.17 gal
Swing Drive (each)	19 L	5.02 gal
Final Drive (each)	21 L	5.55 gal
Hydraulic System (including tank)	995 L	262.85 gal

Sound Performance

Performance ANSI/SAE J1166 OCT98

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.

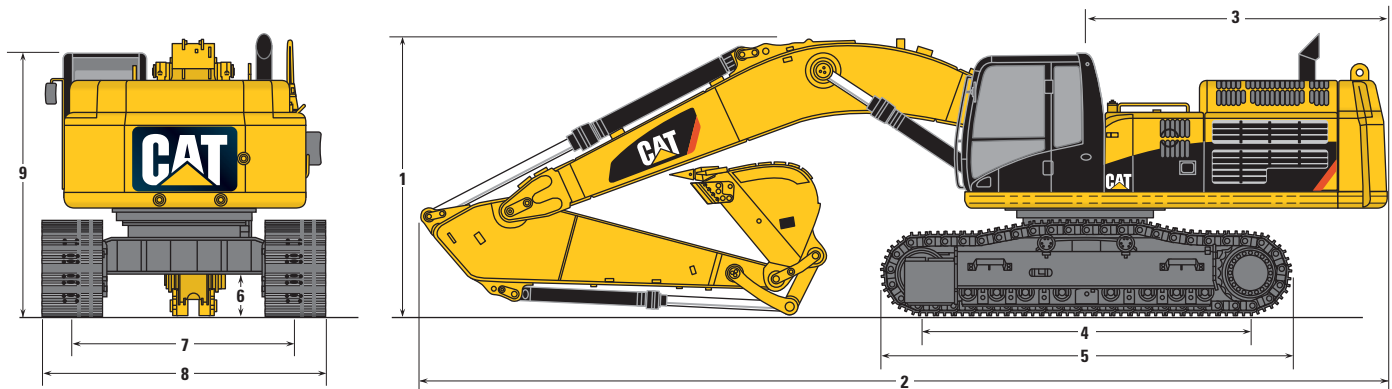
Standards

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

390D L Hydraulic Excavator Specifications

Dimensions

All dimensions are approximate



		Reach Boom 10.0 m (32'10")		General Purpose Boom 8.4 m (27'7")				Mass Boom 7.25 m (23'9")		
Stick		R5.5 m (18'1")	R4.4 m (14'5")	R5.5 m (18'1")	R4.4 m (14'5")	GP3.7 m (12'2")	GP3.4 m (11'2")	GP2.92 m (9'7")	M3.4 m (11'2")	M2.92 m (9'7")
Bucket		HB3.9 m ³ (5.1 yd ³)	HB3.9 m ³ (5.1 yd ³)	HB4.6 m ³ (6.0 yd ³)	HB4.6 m ³ (6.0 yd ³)	HB4.6 m ³ (6.0 yd ³)	JC4.6 m ³ (6.0 yd ³)	JC4.6 m ³ (6.0 yd ³)	JC6.0 m ³ (7.8 yd ³)	JC6.0 m ³ (7.8 yd ³)
1 Shipping Height	mm	5430	5030	5840	5290	5010	5160	4970	5310	4900
	ft	17.81	16.50	19.16	17.35	16.43	16.92	16.30	17.42	16.07
2 Shipping Length	mm	16 280	16 320	14 490	14 700	14 710	14 720	14 910	13 560	13 690
	ft	53.41	53.54	47.53	48.22	46.48	48.29	48.91	44.48	44.91
3 Tail Swing Radius	mm	4680	4680	4680	4680	4680	4680	4680	4680	4680
	ft	15.35	15.35	15.35	15.35	15.35	15.35	15.35	15.35	15.35
4 Length to Center of Rollers***	mm	5120	5120	5120	5120	5120	5120	5120	5120	5120
	ft	16.79	16.79	16.79	16.79	16.79	16.79	16.79	16.79	16.79
5 Track Length****	mm	6360	6360	6360	6360	6360	6360	6360	6360	6360
	ft	20.86	20.86	20.86	20.86	20.86	20.86	20.86	20.86	20.86
6 Ground Clearance	mm	900	900	900	900	900	900	900	900	900
	ft	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95
7 Track Gauge (Shipping)*	mm	2750	2750	2750	2750	2750	2750	2750	2750	2750
	ft	9.02	9.02	9.02	9.02	9.02	9.02	9.02	9.02	9.02
8 Transport Width**	mm	4260	4260	4260	4260	4260	4260	4260	4260	4260
	ft	13.97	13.97	13.97	13.97	13.97	13.97	13.97	13.97	13.97
		(LC)	(LC)	(LC)	(LC)	(LC)	(LC)	(LC)	(LC)	(LC)
9 Cab Height	mm	3760	3760	3760	3760	3760	3760	3760	3760	3760
	ft	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33

* Track gauge in extended (working) position: 3510 mm (11.51 ft).

** Transport width shown for 750 mm (30 in).

Add 150 mm (6 in) for 900 mm (36 in) shoes.

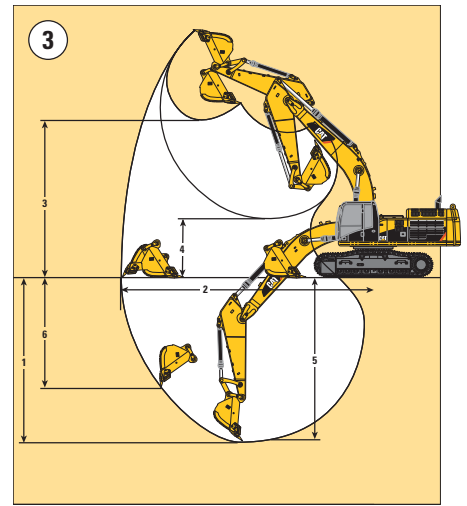
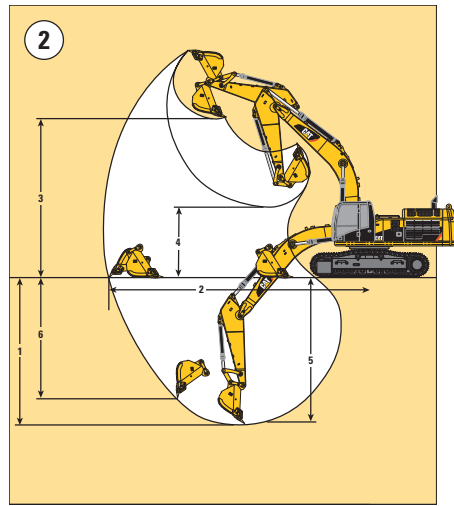
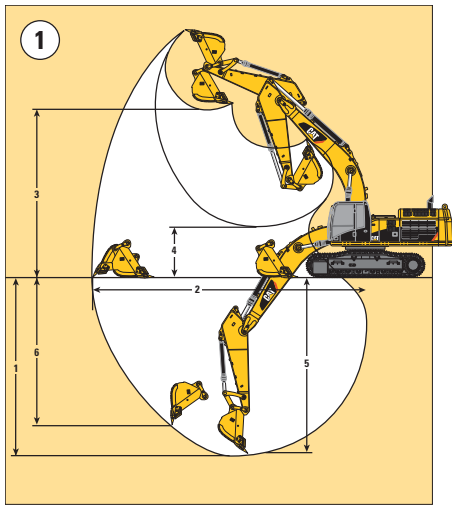
Subtract 100 mm (4 in) for 650 mm (26 in) shoes.

*** STD 4600 mm (15.09 ft) (STD), 5120 mm (16.79 ft) (LC).

**** STD 5840 mm (19.16 ft) (STD), 6360 mm (20.86 ft) (LC).

390D L Hydraulic Excavator Specifications

Working Ranges



		① Reach Boom 10.0 m (32'10")		② General Purpose Boom 8.4 m (27'7")			③ Mass Boom 7.25 m (23'9")			
Stick		R5.5 m (18'1")	R4.4 m (14'5")	R5.5 m (18'1")	R4.4 m (14'5")	GP3.7 m (12'2")	GP3.4 m (11'2")	GP2.92 m (9'7")	M3.4 m (11'2")	M2.92 m (9'7")
Bucket		HB3.9 m ³ (5.1 yd ³)	HB3.9 m ³ (5.1 yd ³)	HB4.6 m ³ (6.0 yd ³)	HB4.6 m ³ (6.0 yd ³)	HB4.6 m ³ (6.0 yd ³)	JC4.6 m ³ (6.0 yd ³)	JC4.6 m ³ (6.0 yd ³)	JC6.0 m ³ (7.8 yd ³)	JC6.0 m ³ (7.8 yd ³)
1 Maximum Digging Depth	mm	11 810	10 710	10 760	9660	8960	8690	8220	7650	7170
	ft	38.74	35.13	35.30	31.69	29.39	28.51	26.96	25.09	23.52
2 Maximum Reach at Ground Line	mm	17 250	16 230	15 730	14 690	14 040	13 910	13 480	12 690	12 240
	ft	56.59	53.24	51.60	48.19	46.06	45.63	44.22	41.63	40.15
3 Maximum Loading Height	mm	10 950	10 520	9720	9270	8980	9090	8910	8200	7980
	ft	35.92	34.51	31.88	30.41	29.46	29.82	29.23	26.90	26.18
4 Minimum Loading Height	mm	3310	4410	1940	3040	3740	4020	4480	3200	3670
	ft	10.85	14.46	6.36	9.97	12.27	13.18	14.69	10.49	12.04
5 Maximum Depth Cut for 2240 mm (8 ft) Level Bottom	mm	11 710	10 600	10 660	9550	8840	8560	8080	7520	7030
	ft	38.41	34.77	34.97	31.33	29.00	28.08	26.50	24.67	23.06
6 Maximum Vertical Wall Digging Depth	mm	8390	7380	7860	6850	5940	6190	5950	5100	4700
	ft	27.52	24.21	25.78	22.47	19.48	20.30	19.52	16.73	15.41
Bucket Digging Force										
(SAE)	kN	322	321	322	321	321	412	411	404	404
	lb	72,450	72,225	72,450	72,225	72,225	92,700	92,475	90,900	90,900
(ISO)	kN	365	363	365	363	363	471	470	471	470
	lb	82,125	81,675	82,125	81,675	81,675	105,975	105,750	105,975	105,750
Stick Digging Force										
(SAE)	kN	230	268	230	268	300	315	337	314	342
	lb	51,750	60,300	51,750	60,300	67,500	70,875	75,285	70,650	76,950
(ISO)	kN	236	276	236	276	310	325	350	325	356
	lb	53,100	62,100	53,100	62,100	69,750	73,125	78,750	73,125	80,100

390D L Hydraulic Excavator Specifications

Operating Weight* and Ground Pressure

	Track					
	900 mm (36 in) Shoes		750 mm (30 in) Shoes		650 mm (26 in) Shoes	
	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)
Reach Boom – 10.0 m (32'10")						
Bucket – 3.9 m ³ (5.1 yd ³)						
R5.5 m (18'1")	90 070 (198,604)	88.3 (12.8)	88 950 (196,135)	104.7 (15.2)	88 080 (194,216)	119.6 (17.3)
R4.4 m (14'5")	89 570 (197,502)	87.8 (12.7)	88 450 (195,032)	104.1 (15.1)	87 580 (193,114)	118.9 (17.2)
General Purpose Boom – 8.4 m (27'7")						
Bucket – 4.6 m ³ (6.0 yd ³)						
R5.5 m (18'1")	88 690 (195,561)	87.0 (12.6)	87 570 (193,092)	103.1 (14.9)	86 690 (191,151)	117.7 (17.1)
R4.4 m (14'5")	88 180 (194,437)	86.5 (12.5)	87 070 (191,989)	102.5 (14.9)	86 190 (190,049)	117.1 (16.9)
GP3.4 m (11'2")	91 050 (200,765)	89.3 (12.9)	89 930 (198,296)	105.8 (15.3)	89 060 (196,377)	120.9 (17.5)
GP2.92 m (9'7")	90 680 (199,949)	88.9 (12.9)	89 570 (197,502)	105.4 (15.3)	88 690 (195,561)	120.4 (17.5)
Mass Boom – 7.25 m (23'9")						
Bucket – 6.0 m ³ (7.8 yd ³)						
M3.4 m (11'2")	92 380 (203,698)	90.6 (13.1)	91 260 (201,228)	107.4 (15.6)	90 390 (199,310)	122.7 (17.8)
M2.92 m (9'7")	92 130 (203,147)	90.4 (13.1)	91 010 (200,677)	107.1 (15.5)	90 140 (198,759)	122.4 (17.7)

* Operating weight includes full fuel tank and 75 kg (165 lb) operator.

Major Component Weights

	kg	lb
Base machine with counterweight and 750 mm (30 in) shoes (without front linkage)	67 950	149,830
Two boom cylinders	1720	3,793
Counterweight – GP		
Removal type	12 410	27,364
Non-removal type	12 410	27,364
Boom (includes lines, pins, stick cylinder)		
Reach Boom – 10.0 m (32'10")	9750	21,499
General Purpose Boom – 8.4 m (27'7")	8310	18,324
Mass Boom – 7.25 m (23'9")	8480	18,698
Stick (includes lines, pins, bucket cylinder and linkage)		
R5.5 m (18'1")	5430	11,973
R4.4 m (14'5")	4930	10,871
GP3.4 m (11'2")	5270	11,620
GP2.92 m (9'7")	4910	10,827
M3.4 m (11'2")	5420	11,951
M2.92 m (9'7")	5170	11,399

390D L Hydraulic Excavator Specifications

390D L Reach Boom Lift Capacities – Americas



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side























Boom – 10.0 m (32 ft 10 in)

Coupler – N/A

Bucket – None

Stick – R5.5 m (18 ft 1 in)

Shoes – 900 mm (36 in) double grouser

	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		10.5 m/35.0 ft		12.0 m/40.0 ft		13.5 m/45.0 ft		15.0 m/50.0 ft				m ft		
																							
12.0 m 40.0 ft	kg lb																				*9750 *21,600	*9750 *21,600	11.82 38.26
10.5 m 35.0 ft	kg lb												*12 200 *25,350	*12 200 *25,350							*9400 *20,800	*9400 *20,800	12.87 41.87
9.0 m 30.0 ft	kg lb										*13 700 *29,850	*13 700 *29,850	*12 900 *26,800	12 500	*10 150	9950					*9250 *20,450	*9250 *20,450	13.67 44.63
7.5 m 25.0 ft	kg lb										*14 400 *31,250	*14 400 *31,250	*13 300 *28,950	12 200	*12 500	9800					*9250 *20,400	8750 19,450	14.27 46.68
6.0 m 20.0 ft	kg lb						*20 250 *43,650	*20 250 *43,650	*17 250 *37,350	*17 250 *37,350	*15 250 *33,100	14 700	*13 850 *30,050	11 800	*12 800	9600					*9400 *20,650	8150 18,000	14.69 48.12
4.5 m 15.0 ft	kg lb					*29 300 *62,850	*29 300 *62,850	*22 600 *48,750	*22 600 *48,750	*18 750 *40,500	17 700	*16 200 *35,100	14 000	*14 450 *30,200	11 350	*13 150	9300				*9650 *21,200	7700 17,000	14.94 49.00
3.0 m 10.0 ft	kg lb					*20 200 *49,750	*20 200 *49,750	*24 700 *53,300	21 550	*20 100 *43,450	16 700	*17 100 *37,050	13 350	*15 000 *32,550	10 900	*13 450	9000	*10 400	7500		*10 050 *22,100	7450 16,400	15.04 49.35
1.5 m 5.0 ft	kg lb					*15 750 *37,450	*15 750 *37,450	*26 100 *56,450	20 300	*21 150 *45,700	15 800	*17 850 *38,600	12 750	*15 500 *33,550	10 450	13 400	8700				*10 600 *23,300	7350 16,150	14.99 49.19
Ground Line	kg lb					*17 000 *39,600	*17 000 *39,600	*26 700 *57,800	19 500	*21 700 *47,000	15 200	*18 250 *39,550	12 250	15 650	10 100	13 150	8500				*11 350 *25,000	7350 16,200	14.78 48.51
-1.5 m -5.0 ft	kg lb			*11 350 *25,900	*11 350 *25,900	*20 750 *47,750	*20 750 *47,750	*26 550 *57,500	19 050	*21 800 *47,150	14 750	*18 350 *39,650	11 950	15 400	9900	13 000	8350				*11 850 *26,100	7600 16,700	14.42 47.28
-3.0 m -10.0 ft	kg lb	*12 300 *27,700	*12 300 *27,700	*16 800 *38,150	*16 800 *38,150	*26 150 *59,950	*26 150 *57,000	*25 700 *55,700	18 900	*21 300 *46,100	14 550	*17 950 *38,800	11 750	15 250	9750	12 950	8300				*12 350 *27,250	8000 17,600	13.88 45.46
-4.5 m -15.0 ft	kg lb	*17 900 *40,300	*17 900 *40,300	*23 000 *52,100	*23 000 *52,100	*29 200 *63,300	26 750	*24 150 *52,250	18 950	*20 200 *43,650	14 550	*17 050 *36,700	11 750	*14 350 *30,750	9750						*12 300 *27,050	8700 19,200	13.14 42.98
-6.0 m -20.0 ft	kg lb	*24 100 *54,400	*24 100 *54,400	*30 400 *67,350	*30 400 *67,350	*26 050 *56,200	*26 050 *56,200	*21 850 *47,050	19 200	*18 350 *39,450	14 750	*15 350 *32,800	11 900	*12 400	9950						*12 000 *26,400	9800 21,800	12.18 39.71
-7.5 m -25.0 ft	kg lb			*25 300 *54,200	*25 300 *54,200	*21 700 *46,450	*21 700 *46,450	*18 450 *39,350	*18 450 *39,350	*15 400 *32,650	15 100	*12 350 *25,600	12 300								*11 350 *24,850	*11 350 *24,850	10.91 35.43
-9.0 m -30.0 ft	kg lb					*15 650 *27,500	*15 650 *27,500	*13 300 *27,500	*13 300 *27,500	*10 400 *22,500											*9800 *21,100	*9800 *21,100	9.24 29.68

*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

390D L Hydraulic Excavator Specifications

390D L General Boom Lift Capacities – Americas



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 8.4 m (27 ft 7 in)

Coupler – N/A

Bucket – None

Stick – R5.5 m (18 ft 1 in)

Shoes – 900 mm (36 in) double 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		9.0 m/30.0 ft		10.5 m/35.0 ft		12.0 m/40.0 ft		13.5 m/45.0 ft		m ft		
	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	
12.0 m 40.0 ft																	*9050	*9050	9.83
																	*20,200	*20,200	31.62
10.5 m 35.0 ft											*10 950	*10 950					*8500	*8500	11.07
											*21,900	*21,900					*18,800	*18,800	35.92
9.0 m 30.0 ft											*13 000	*13 000					*8200	*8200	12.00
											*27,750	*27,750					*18,050	*18,050	39.10
7.5 m 25.0 ft											*14 450	*14 450	*11 500	*11 500			*8050	*8050	12.68
											*31,150	*31,150	*23,250	*23,250			*17,750	*17,750	41.43
6.0 m 20.0 ft									*17 550	*17 550	*16 200	15 450	*13 500	12 350			*8100	*8100	13.15
									*38,050	*38,050	*35,100	33,250	*28,200	26,450			*17,800	*17,800	43.05
4.5 m 15.0 ft					*27 100	*27 100	*22 200	*22 200	*19 200	19 050	*17 150	14 950	*15 400	12 050			*8250	*8250	13.43
					*58,300	*58,300	*48,000	*48,000	*41,600	41,000	*37,300	32,150	*32,400	25,850			*18,150	*18,150	44.03
3.0 m 10.0 ft					*31 500	*31 500	*24 800	23 850	*20 800	18 200	*18 200	14 400	*16 300	11 700	*9000	*9000	*8600	*8600	13.54
					*67,950	*67,950	*53,650	51,450	*45,100	39,250	*39,450	31,050	*35,450	25,150			*18,850	*18,850	44.43
1.5 m 5.0 ft					*34 800	31 350	*26 950	22 650	*22 200	17 450	*19 050	13 900	*16 800	11 400			*9050	*9050	13.48
					*75,200	67,550	*58,300	48,850	*48,100	37,550	*41,350	29,950	*36,400	24,450			*19,900	*19,900	44.25
Ground Line			*19 000	*19 000	*36 450	30 100	*28 300	21 800	*23 150	16 850	*19 650	13 500	16 650	11 100			*9750	9600	13.25
			*43,500	*43,500	*78,950	64,750	*61,300	46,900	*50,150	36,250	*42,550	29,050	35,800	23,900			*21,450	21,100	43.49
-1.5 m -5.0 ft	kg	*14 250	*14 250	*23 200	*23 200	*36 600	29 450	*28 750	21 200	*23 500	16 400	*19 750	13 200	16 450	10 950		*10 700	9950	12.84
	lb	*31,950	*31,950	*52,800	*52,800	*79,250	63,300	*62,200	45,700	*50,850	35,300	*42,750	28,450	35,400	23,550		*23,650	21,900	42.11
-3.0 m -10.0 ft	kg	*20 200	*20 200	*29 400	*29 400	*35 350	29 200	*28 150	20 950	*23 050	16 200	*19 250	13 050	*15 550	10 900		*12 200	10 650	12.23
	lb	*45,350	*45,350	*66,800	*66,800	*76,600	62,800	*60,900	45,100	*49,850	34,850	*41,500	28,150	*27,550	23,500		*26,950	23,450	40.06
-4.5 m -15.0 ft	kg	*27 050	*27 050	*37 750	*37 750	*32 850	29 300	*26 400	20 950	*21 650	16 150	*17 700	13 100				*14 500	11 800	11.39
	lb	*60,950	*60,950	*85,900	*85,900	*70,950	63,000	*57,000	45,100	*46,550	34,850	*37,750	28,250				*32,200	26,150	37.21
-6.0 m -20.0 ft	kg	*35 550	*35 550	*35 950	*35 950	*28 700	*28 700	*23 250	21 200	*18 750	16 400						*14 900	13 850	10.26
	lb	*80,450	*80,450	*77,350	*77,350	*61,650	*61,650	*49,750	45,700	*39,750	35,400						*32,650	30,850	33.37
-7.5 m -25.0 ft	kg			*27 300	*27 300	*22 250	*22 250	*17 700	*17 700								*13 650	*13 650	8.71
	lb			*57,700	*57,700	*46,900	*46,900	*36,800	*36,800								*29,750	*29,750	28.11

*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

390D L Hydraulic Excavator Specifications

390D L Mass Boom Lift Capacities – Americas



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 7.25 m (23 ft 9 in)

Coupler – N/A

Bucket – None

Stick – M3.4 m (11 ft 2 in)

Shoes – 900 mm (36 in) double grouser

Load Point Height	kg	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		
		Front	Side	Front	Side	Front	Side	Front	Side	Front	Side	kg	lb	
10.5 m 35.0 ft	lb											*17 400 *38,850	*17 400 *38,850	6.96 22.17
9.0 m 30.0 ft	kg							*21 650 *45,800	*21 650 *45,800			*15 900 *35,300	*15 900 *35,300	8.36 27.07
7.5 m 25.0 ft	kg							*23 500 *51,150	*23 500 *51,150	*18 950 *37,100	*18 950 *37,100	*15 350 *33,850	*15 350 *33,850	9.32 30.36
6.0 m 20.0 ft	kg					*29 350 *63,350	*29 350 *63,350	*24 900 *54,050	*24 900 *54,050	*22 200 *48,350	18 900 40,600	*15 250 *33,600	*15 250 *33,600	9.95 32.55
4.5 m 15.0 ft	kg			*45 600 *97,750	*45 600 *97,750	*33 050 *71,300	*33 050 *71,300	*26 800 *58,000	24 350 52,450	*23 000 *50,000	18 350 39,500	*15 600 *34,300	14 700 32,500	10.33 33.84
3.0 m 10.0 ft	kg					*36 200 *78,250	32 500 70,000	*28 500 *61,700	23 300 50,250	*23 850 *51,700	17 800 38,300	*16 350 *35,900	14 100 31,100	10.47 34.36
1.5 m 5.0 ft	kg					*37 700 *81,550	31 150 67,100	*29 500 *63,850	22 500 48,450	*24 250 *52,500	17 300 37,250	*17 600 *38,650	14 050 30,900	10.40 34.12
Ground Line	kg			*27 950 *64,650	*27 950 *64,650	*37 150 *80,500	30 500 65,650	*29 300 *63,500	22 000 47,350	*23 800 *51,450	17 000 36,550	*19 550 *43,100	14 500 31,900	10.10 33.12
-1.5 m -5.0 ft	kg	*23 550 *53,150	*23 550 *53,150	*41 700 *94,900	*41 700 *94,900	*34 700 *75,200	30 350 65,250	*27 650 *59,800	21 800 46,900	*22 000 *47,200	16 900 36,450	*19 800 *43,650	15 650 34,500	9.55 31.28
-3.0 m -10.0 ft	kg	*38 700 *87,400	*38 700 *87,400	*37 000 *80,250	*37 000 *80,250	*30 150 *65,150	*30 150 *65,150	*24 000 *51,450	21 950 47,300			*18 800 *41,300	17 950 39,750	8.70 28.44
-4.5 m -15.0 ft	kg			*27 250 *58,400	*27 250 *58,400	*22 550 *47,850	*22 550 *47,850					*16 350 *35,550	*16 350 *35,550	7.46 24.23

Boom – 7.25 m (23 ft 9 in)

Coupler – N/A

Bucket – None

Stick – M2.92 m (9 ft 7 in)

Shoes – 900 mm (36 in) double grouser

Load Point Height	kg	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		
		Front	Side	Front	Side	Front	Side	Front	Side	Front	Side	kg	lb	
10.5 m	kg											*20 950	*20 950	6.27
9.0 m 30.0 ft	kg							*22 600 *44,200	*22 600 *44,200			*18 950 *42,050	*18 950 *42,050	7.81 25.22
7.5 m 25.0 ft	kg							*24 400 *53,250	*24 400 *53,250			*18 200 *40,150	*18 200 *40,150	8.82 28.73
6.0 m 20.0 ft	kg			*39 800 *85,300	*39 800 *85,300	*30 550 *66,000	*30 550 *66,000	*25 700 *55,750	24 950 53,700	*22 750 *49,650	18 550 39,850	*18 100 *39,850	16 950 37,550	9.49 31.03
4.5 m 15.0 ft	kg					*34 100 *73,500	33 650 72,550	*27 400 *59,300	23 950 51,550	*23 400 *50,850	18 050 38,900	*18 550 *40,800	15 550 34,350	9.89 32.39
3.0 m 10.0 ft	kg					*36 800 *79,450	31 850 68,650	*28 850 *62,400	22 950 49,450	*24 000 *52,100	17 550 37,750	*19 500 *42,900	14 850 32,800	10.04 32.93
1.5 m 5.0 ft	kg					*37 550 *81,400	30 750 66,200	*29 450 *63,800	22 200 47,850	*24 150 *52,250	17 100 36,850	*21 150 *46,500	14 800 32,600	9.96 32.68
Ground Line	kg			*25 950 *60,500	*25 950 *60,500	*36 300 *78,850	30 250 65,100	*28 850 *62,500	21 800 46,950	*23 300 *50,250	16 850 36,350	*20 950 *46,200	15 350 33,800	9.64 31.64
-1.5 m -5.0 ft	kg	*54,600	*54,600	*40 350 *88,100	*40 350 *88,100	*33 250 *72,100	30 250 65,000	*26 650 *57,600	21 700 46,750	*20 650	16 900	*20 300 *44,750	16 750 36,950	9.07 29.70
-3.0 m -10.0 ft	kg			*33 300 *72,350	*33 300 *72,350	*27 950 *60,350	*27 950 *60,350	*22 050 *46,950	22 000 *46,950			*18 850 *41,400	*18 850 *41,400	8.17 26.69
-4.5 m -15.0 ft	kg					*18 900 *39,550	*18 900 *39,550					*15 600 *36,200	*15 600 *36,200	6.77 21.22

*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

390D L Hydraulic Excavator Specifications

390D L Bucket Specifications and Compatibility – Americas

	Linkage	Width		Capacity		Weight		Fill %	Reach Boom		General Purpose Boom					ME Boom	
		mm	in	m ³	yd ³	kg	lb		R4.4HB2	R5.5HB2	R4.4HB2	R5.5HB2	G3.7HB2	G2.9JC	G3.4JC	M2.9JC	M3.4JC
Without Quick Coupler																	
General Duty (GD)	HB2	1350	54	3.0	4.0	3406	7,507	100%	○	⊗	●	●	●	–	–	–	–
	HB2	1650	66	3.9	5.1	3794	8,362	100%	⊗	⊗	⊙	○	●	–	–	–	–
	HB2	1900	75	4.6	6.0	4155	9,158	100%	⊗	⊗	○	⊗	●	–	–	–	–
	HB2	1100	43	2.2	2.8	2856	6,295	100%	●	⊙	●	●	●	–	–	–	–
	HB2	1350	54	2.9	3.8	3187	7,024	100%	⊙	⊗	●	●	●	–	–	–	–
	HB2	1650	66	3.7	4.9	3650	8,045	100%	⊗	⊗	●	○	●	–	–	–	–
	HB2	1900	75	4.3	5.7	3923	8,646	100%	⊗	⊗	⊙	○	●	–	–	–	–
	HB2	2000	79	4.6	6.0	4032	8,887	100%	⊗	⊗	○	⊗	●	–	–	–	–
	JC	2300	91	5.7	7.4	5822	12,832	100%	–	–	–	–	–	○	⊗	●	⊙
	JC	2420	95	6.0	7.9	6004	13,233	100%	–	–	–	–	–	⊗	⊗	⊙	⊙
JC	2575	101	6.5	8.5	6238	13,749	100%	–	–	–	–	–	⊗	⊗	⊙	○	
General Duty XL (GDXL)	HB2	2000	79	5.3	7.0	4400	9,698	100%	⊗	⊗	⊗	⊗	⊙	–	–	–	–
	HB2	2250	89	6.0	8.0	4796	10,570	100%	⊗	⊗	⊗	⊗	○	–	–	–	–
Heavy Duty (HD)	JC	1750	69	4.1	5.3	4799	10,577	100%	–	–	–	–	–	●	⊙	●	●
	JC	2090	82	5.1	6.6	5441	11,992	100%	–	–	–	–	–	○	○	●	●
	JC	2300	91	5.7	7.4	5892	12,986	100%	–	–	–	–	–	○	⊗	●	⊙
Severe Duty (SD)	HB2	1100	43	2.3	3.0	3282	7,234	90%	●	⊙	●	●	●	–	–	–	–
	HB2	1350	54	3.0	4.0	3736	8,234	90%	○	⊗	●	●	●	–	–	–	–
	HB2	1650	66	3.9	5.1	4163	9,175	90%	⊗	⊗	●	○	●	–	–	–	–
	HB2	1900	75	4.6	6.0	4553	10,035	90%	⊗	⊗	○	⊗	●	–	–	–	–
	JC	1960	77	4.6	6.0	6229	13,729	90%	–	–	–	–	–	⊙	○	●	●
	JC	2240	88	5.4	7.1	6809	15,007	90%	–	–	–	–	–	○	⊗	●	⊙
	JC	2350	93	5.7	7.5	7015	15,462	90%	–	–	–	–	–	⊗	⊗	●	⊙
	JC	2440	96	6.0	7.9	7342	16,182	90%	–	–	–	–	–	⊗	⊗	⊙	○
Extreme Duty (XD)	JC	2090	82	5.0	6.5	6557	14,452	90%	–	–	–	–	–	○	⊗	●	●
	JC	2240	88	5.4	7.1	7733	17,044	90%	–	–	–	–	–	⊗	⊗	⊙	○
	JC	2350	93	5.7	7.5	7968	17,562	90%	–	–	–	–	–	⊗	⊗	⊙	○
Maximum dynamic load pin-on (payload + bucket)								kg	7535	6350	10 420	8850	12 530	12 420	11 430	15 850	14 600
								lb	16,607	13,995	22,966	19,505	27,616	27,374	25,192	34,933	32,178
With Quick Coupler (CW-70)																	
Severe Duty (SD)	JC	2240	88	5.4	7.1	6559	14,456	90%	–	–	–	–	–	⊗	⊗	⊙	○
	JC	2350	93	5.7	7.5	6765	14,911	90%	–	–	–	–	–	⊗	⊗	⊙	○
Maximum dynamic load with CW coupler (payload + bucket)								kg	6115	4930	9000	7430	11 110	11 000	10 010	14 430	13 180
								lb	13,477	10,866	19,836	16,376	24,486	24,244	22,062	31,804	29,049

The above figures are based on maximum recommended dynamic working weights with front linkage fully extended at ground line with bucket curled. They do not exceed a stability ratio of 1.25.

Capacity based on ISO 7451.

Bucket weights include HD Long tips.

- 1800 kg/m³ (3,000 lb/yd³) or greater
- ⊙ 1500 kg/m³ (2,500 lb/yd³) or less
- 1200 kg/m³ (2,000 lb/yd³) or less
- ⊗ Not Recommended

390D L Hydraulic Excavator Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

ELECTRICAL

- Alternator – 75 amp
- Lights: Cab interior
- Signal/warning horn
- Power supply at battery compartment – 24V

ENGINE/POWER TRAIN

- Automatic engine speed control
- Automatic swing parking brake
- Automatic travel parking brakes
- Cat® C18 engine with ACERT™ Technology
 - Altitude capability to 2300 m (7,500 ft) without derating
- High ambient cooling, 52° C (125° F) capability
- Side-by-side cooling system with separately mounted AC condenser and variable speed fan
- Two speed travel
- Water separator with level indicator for fuel line
- Electric fuel priming pump

GUARDS

- Heavy-duty travel motor guards on upper frame
- Heavy-duty swivel guard on undercarriage
- Heavy-duty travel motor guards on undercarriage

OPERATOR STATION

- Air conditioner, heater and defroster with automatic climate control
- Ashtray and 24V lighter
- Beverage/cup holder
- Coat hook
- Console-mounted, electronic-type joysticks with adjustable gain and response
- Floor mat
- Instrument panel and gauges with full color graphical display
- Literature compartment
- Neutral lever (lock-out) for all controls
- Positive filtered ventilation
- Pressurized cab
- Retractable seat belt, 75 mm (3 in) wide
- Stationary skylight (polycarbonate)
- Sunshade for windshield and skylight
- Travel control pedals with removable hand levers
- Windshield wipers and washers (upper and lower)

UNDERCARRIAGE

- Grease lubricated and positive pin retention track
- Hydraulic track adjusters
- Long, variable gauge
- Steps, four

OTHER STANDARD EQUIPMENT

- Auxiliary hydraulic valve for hydro-mechanical tools
- Cat® one key security system with locks for doors, cab and fuel cap
- Catwalks, left and right sides
- Crossroller-type swing bearing
- Drive for auxiliary pump
- Hand control pattern changer
- Mirrors, left and right
- S·O·SSM quick sampling valves for engine oil and hydraulic oil
- Steel firewall between engine and hydraulic pumps
- Wiring provisions for Cat® Product Link, AutoLube System and lighted beacon

390D L Hydraulic Excavator Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

FRONT LINKAGE

- Bucket linkages
 - VB family for VB sticks (available with or without lifting eye)
 - WB family for WB sticks (available with or without lifting eye)
- Buckets – see charts
- Booms (with two working lights)
 - Mass Excavation – 7250 mm (285 in)
 - Reach – 10 000 mm (394 in)
 - GP – 8400 mm (330 in)
- Sticks
 - For Mass Boom
 - M2.92JC
 - M3.4JC
 - For Reach Boom
 - R5.5HB2
 - R4.4HB2
 - For GP Boom
 - R5.5HB2
 - R4.4HB2
 - GP3.4JC
 - GP2.92JC
- Tips, sidecutters and edge protectors

TRACK

- Double grouser, heavy duty
 - 650 mm (26 in)
 - 750 mm (30 in)
 - 900 mm (35 in)

GUARDS

- FOGS (Falling Object Guard System) including overhead and windshield guards
- Track guiding guards
 - Full length
 - Center section
- Wire mesh screen for windshield
- Auxiliary controls and lines
 - Auxiliary boom lines (high pressure or reach and mass booms)
 - Auxiliary stick lines (high pressure for reach and mass booms)
- Basic control arrangements:
 - Single action – one way, high-pressure circuit for hammer application
 - Combined function – one way, high-pressure circuit for hammer application function for one-way or two-way high pressure

MISCELLANEOUS OPTIONS

- Boom lowering control device with SmartBoom™
- Cab front rain protector
- Converters, 7 amp-12V (two)
- Electric refueling pump
- Fine filtration filter
- Jump start terminals
- Reversible cooling fan including protective screen
- Starting aid with ether for cold weather
- Stick lowering control device
- Travel alarm with cut-off switch

OPERATOR COMPARTMENT

- Joysticks
 - Four button joystick for standard machine or single action auxiliary control
 - Thumb wheel modulation joystick for use with combined auxiliary control
- Lunch box storage with lid
- Machine Security System with programmable keys
- Radio
 - AM/FM radio-mounted in right console with antenna and two speakers
 - Radio-ready mounting at rear location including 24V to 12V converter, speakers, antenna
- Seat
 - Adjustable, high back with mechanical suspension
 - Adjustable, high back with air suspension
 - Adjustable, high back heated with air suspension
- Straight travel pedal
- Windshield
 - One-piece, standard duty
 - One-piece, high impact resistant
 - 70-30 split, sliding

390D L Hydraulic Excavator

Materials and specifications are subject to change without notice.

Featured machines in photos may include additional equipment.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com.

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