993
Wheel Loader

Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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993 Wheel Loader Specifications

Engine

Engine Model	Cat® C32B	
Emissions	U.S. EPA Tier 4 Final/ EU Stage V or U.S. EPA Tier 2 Equivalent	
Rated Speed	1800 rpm	
Gross Power – SAE J1995 @ 1800 rpm		
Tier 4/HRC	775 kW	1039 hp
Tier 2/LRC	767 kW	1029 hp
Net Power – ISO 14396 @ 1800 rpm		
Tier 4/HRC	764 kW	1024 hp
Tier 2/LRC	757 kW	1015 hp
Net Power – EEC 80/1269 @ 1800 rpm		
Tier 4/HRC	726 kW	974 hp
Tier 2/LRC	716 kW	960 hp
Net Power – ISO 9249 @ 1800 rpm		
Tier 4/HRC	726 kW	974 hp
Tier 2/LRC	716 kW	960 hp
Net Power – SAE J1349 @ 1800 rpm		
Tier 4/HRC	719 kW	964 hp
Tier 2/LRC	710 kW	952 hp
Peak Torque SAE J1995 @ 1250 rpm		
Tier 4/HRC	5470 N·m	4,034 lb ft
Tier 2/LRC	5470 N·m	4,034 lb ft
Bore	145 mm	5.7 in
Stroke	162 mm	6.4 in
Displacement	32.1 L	1,959 in^3
Torque Rise	33%	

• Standard ambient cooling.

Operating Specifications

Operating Weight (Tier 2 Equivalent)*	133 668 kg	294,687 lb
Operating Weight (Tier 4 Final)*	133 668 kg	294,687 lb
Rated Payload – Standard Lift	27.2 tonnes	30.0 tons
Rated Payload – High Lift	24.9 tonnes	27.5 tons
Bucket Range	12.2-23.7 m^3	16.0-31.0 yd^3
Cat Truck Match – Standard Lift	777	
Cat Truck Match – High Lift	777, 785	
Articulation Angle	43 degrees	

* High lift, 50/65-51 (364-6315) tires, standard cooling, 13.8 m^3 (18 yd^3) bucket (496-9912).

Transmission

Transmission Type	Cat Planetary Power Shift	
Forward 1	6.8 km/h	4.2 mph
Forward 2	11.9 km/h	7.4 mph
Forward 3	20.5 km/h	12.7 mph
Reverse 1	7.5 km/h	4.7 mph
Reverse 2	13.1 km/h	8.1 mph
Reverse 3	22.5 km/h	13.9 mph
Direct Drive – Forward 1	Lock-up disabled	
Direct Drive – Forward 2	13.0 km/h	8.0 mph
Direct Drive – Forward 3	22.8 km/h	14.1 mph
Direct Drive – Reverse 1	8.0 km/h	4.9 mph
Direct Drive – Reverse 2	14.2 km/h	8.8 mph
Direct Drive – Reverse 3	25.2 km/h	15.6 mph

• 50/65-51 (364-6315) calculated speeds.

Hydraulic System – Lift/Tilt

Lift/Tilt System – Circuit	Positive Flow Control	
Lift/Tilt System – Pump	Variable Piston	
Maximum Flow at 1,650 rpm	1180 L/min	311 gal/min
Relief Valve Setting – Lift/Tilt	29 500 kPa	4,200 psi
Cylinders – Lift/Tilt	Double-acting	
Lift Cylinder – Bore	267 mm	10.5 in
Lift Cylinder – Stroke	1682 mm	66.2 in
Tilt Cylinder – Bore	235 mm	9.3 in
Tilt Cylinder – Stroke	1040 mm	40.9 in

• High Lift configuration.

Hydraulic Cycle Time

Rackback	2.4 seconds
Raise	9.2 seconds
Dump	1.8 seconds
Lower	3.8 seconds
Lower Float Down	3.1 seconds
Total Hydraulic Cycle Time	17.2 seconds

• High Lift configuration, calculated speeds.

Hydraulic System – Steering

Steering System – Circuit	Closed	
Steering System – Pump	Piston, variable displacement	
Maximum Flow @ 1,985 rpm (6900 kPa/1,000 psi)	505 L/min	133 gal/min
Relief Valve Setting – Steering	34 500 kPa	5,000 psi
Total Steering Angle	86 degrees	

Complete System Fill

Fuel Tank	2045 L	540.2 gal
Cooling System	303.5 L	80.2 gal
Crankcase	120.0 L	31.7 gal
Transmission	170 L	44.9 gal
Differentials and Final Drives – Front	482.0 L	127.3 gal
Differentials and Final Drives – Rear	482.0 L	127.3 gal
Hydraulic System Factory Fill	873.0 L	230.0 gal
Hydraulic System (tank only)	553.0 L	146.0 gal

• High Lift configuration.

Cooling System

Ambient Capability Hydraulically Driven Demand Fan		
Standard	43° C	110° F
High	55° C	131° F

Axles

Front	Fixed
Rear	Trunnion
Oscillation Angle	10 degrees

Sound Performance

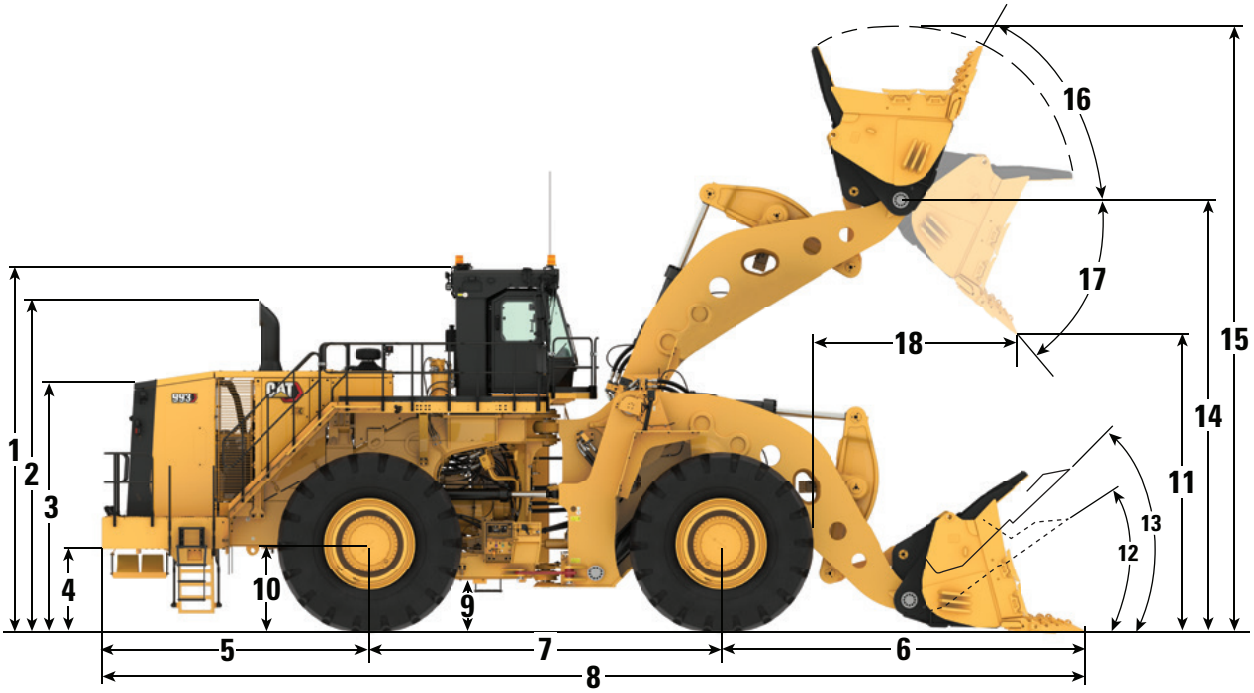
	Standard	Suppression
Operator Sound Level (ISO 6396:2008)	70 dB(A)	70 dB(A)
Machine Sound Level (ISO 6396:2008)	116 dB(A)	113 dB(A)

• The measurement was conducted at 70 percent of the maximum engine cooling fan speed. Hearing protection may be needed when the machine is operated with a cab that is not properly maintained or when the doors or windows are open for extended periods or in a noisy environment.

993 Wheel Loader Specifications

Dimensions

All dimensions are approximate.



		Standard Lift		High Lift	
1	Ground to Top of Rollover Protective Structure (ROPS)	6069 mm	19.9 ft	6069 mm	19.9 ft
2	Ground to Top of Exhaust Stacks	5555 mm	18.2 ft	5555 mm	18.2 ft
3	Ground to Top of Hood	4373 mm	14.3 ft	4373 mm	14.3 ft
4	Ground to Bumper Clearance	1389 mm	4.6 ft	1389 mm	4.6 ft
5	Rear Axle Center Line to Bumper	4475 mm	14.7 ft	4475 mm	14.7 ft
6	Front Axle Center Line to Bucket Tip	5445 mm	17.1 ft	6090 mm	19.2 ft
7	Wheel Base	5890 mm	19.3 ft	5890 mm	19.3 ft
8	Maximum Overall Length	15 810 mm	51.1 ft	16 455 mm	53.2 ft
9	Ground to Lower Hitch Clearance	721 mm	2.4 ft	721 mm	2.4 ft
10	Ground to Center of Axles	1415 mm	4.8 ft	1415 mm	4.8 ft
11	Clearance at Maximum Lift, at 45° dump	4669 mm	15.3 ft	5314 mm	17.4 ft
12	Rack Back Angle at Ground Level	44.6 degrees		44.5 degrees	
13	Rack Back Angle at Carry	52 degrees		53 degrees	
14	B-Pin Height at Maximum Lift	7116 mm	23.3 ft	7761 mm	25.5 ft
15	Maximum Overall Height, Bucket Raised	9903 mm	32.5 ft	10 547 mm	34.6 ft
16	Rack Angle at Maximum Lift	63.9 degrees		65.7 degrees	
17	Dump Angle at Maximum Lift	–50 degrees		–50 degrees	
18	Reach at Maximum Lift, at 45° dump	2602 mm	8.5 ft	2711 mm	8.9 ft
	Tread Width	3540 mm	11.6 ft	3540 mm	11.6 ft
	Width over Tires (with bulge)	4831 mm	15.8 ft	4831 mm	15.8 ft

Note: Assumes 50/65-51 Tires, at a static loaded radius of 1415 mm (4 ft 8 in), 496-9912 13.8 m^3 (18 yd^3) bucket, 368-3880 GD Tips.

Bucket Selection Guide

When sizing the bucket, it is important to consider the Maximum Swung Load. The Maximum Swung Load is defined as the maximum allowed combined weight of the bucket and payload. Large Wheel Loader Payload Policy is that the Maximum Swung Load should never be exceeded.

"Example Bucket Weight" includes spade edge, general duty tips, half arrow segments, and two sidebar protectors. Coal buckets include coal tips and half arrow segments.

If a bucket weight other than the weight specified in the table below is chosen, the bucket size can be evaluated using the following equations:

Maximum Payload = Maximum Swung Load – Bucket Weight

Maximum Density = (Maximum Swung Load – Bucket Weight)/Bucket Volume

The rated capacity of the tires should always be considered.

Moderate to High Digging Resistance

Standard Lift: Rated Payload 27.2 tonnes (30 tons), Maximum Swung Load 44.8 tonnes (49.4 tons)

Bucket Volume		Example Bucket Weight		Maximum Payload at Example Bucket Weight		Maximum Density at Example Bucket Weight	
m^3	yd^3	kg	lb	tonnes	tons	kg/m^3	lb/yd^3
9.9	13	15 582	34,352	29.2	32.2	2942	4,958
12.2	16	14 580	32,142	30.2	33.3	2472	4,167
13.0	17	15 003	33,075	29.8	32.9	2294	3,867
13.8	18	15 477	34,120	29.3	32.3	2132	3,594
14.5	19	15 662	34,528	29.2	32.1	2007	3,383
23.7	31	16 609	36,615	28.2	31.1	1190	2,006
28.3	37	17 856	39,366	27.0	29.7	953	1,607

High Lift: Rated Payload 24.9 tonnes (27.5 tons), Maximum Swung Load 40.8 tonnes (45 tons)

Bucket Volume		Example Bucket Weight		Maximum Payload at Example Bucket Weight		Maximum Density at Example Bucket Weight	
m^3	yd^3	kg	lb	tonnes	tons	kg/m^3	lb/yd^3
9.9	13	15 582	34,352	25.2	27.8	2535	4,273
12.2	16	14 580	32,142	26.2	28.9	2142	3,610
13.0	17	15 003	33,075	25.8	28.4	1983	3,343
13.8	18	15 477	34,120	25.3	27.9	1839	3,099
14.5	19	15 662	34,528	25.1	27.7	1729	2,914
22.2	29	16 135	35,570	24.6	27.2	1112	1,874
23.7	31	16 609	36,615	24.2	26.6	1020	1,719
28.3	37	17 856	39,366	22.9	25.3	810	1,366

993 Wheel Loader Specifications

Operating Specifications – Standard Lift

For machines equipped with 50/65-51 tires at a static loaded radius of 1415 mm (4 ft 8 in)

Bucket Type		Rock						Coal
Ground Engaging Tools		Teeth & Segment						Teeth & Segment
Cutting Edge Type		Spade						Straight
Bucket Part No.		496-9909	496-9914	496-9910	496-9916	496-9912	496-9913	496-9922
Bucket Weight as Configured	kg	14 227	15 513	14 884	15 992	15 364	15 550	16 542
	lb	31,371	34,206	32,819	35,262	33,878	34,288	36,475
Bucket Load at Rated Capacity	kg	27 216	27 216	27 216	27 216	27 216	27 216	27 216
	lb	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Rated Capacity	m^3	12.2	12.2	12.9	13	13.8	14.5	23.7
	yd^3	16	16	16.8	17	18	19	31
Struck Capacity – ISO*	m^3	10	10	10	10	11.5	12	20
	yd^3	13.1	13.1	13.1	13.1	15	15.7	26.2
Heaped Capacity – ISO*	m^3	12	12	13	13	14	14	24
	yd^3	15.7	15.7	17	17	18.3	18.3	31.4
Bucket Width – Overall	mm	5080	5160	5080	5160	5080	5080	6300
	in	200	203	200	203	200	200	248
Clearance at 45° Dump (Tooth Tip)	mm	4859	4842	4769	4794	4670	4670	4615
	in	191	191	188	189	184	184	182
Reach at 45° Dump (Tooth Tip)	mm	2407	2444	2498	2493	2597	2597	2600
	in	95	96	98	98	102	102	102
Bucket Pin at Maximum Lift	mm	7116	7116	7116	7116	7116	7116	7116
	in	280	280	280	280	280	280	280
Horizontal Arm and Level Bucket Reach	mm	4790	4828	4918	4896	5058	5058	5099
	in	189	190	194	193	199	199	201
Digging Depth (Segment)	mm	132	117	132	117	132	132	154
	in	5.2	4.6	5.2	4.6	5.2	5.2	6.1
Overall Length – Bucket Level Ground	mm	15 542	15 568	15 670	15 636	15 810	15 810	15 869
	in	612	613	617	616	622	622	625
Front Axle to Bucket Level Ground	mm	5177	5203	5305	5271	5445	5445	5504
	in	204	205	209	208	214	214	217
Overall Height	mm	9794	9794	9903	9876	9903	10 032	10 030
	in	386	386	390	389	390	395	395
Turing Radius - Corner at SAE Carry	mm	11 029	11 031	11 028	11 049	11 062	11 065	11 766
	in	434	434	434	435	436	436	463
Reach at 45° Dump and 2.13 m (7 ft) Height (with Teeth)	mm	3600	3635	3679	3677	3763	3763	3757
	in	142	143	145	145	148	148	148
Rack Back Angle at SAE Carry	deg	52	52	52	52	52	52	53
Full Dump at Maximum Lift	deg	–50	–50	–50	–50	–50	–50	–50

Operating Specifications – Standard Lift *(continued)*

For machines equipped with 50/65-51 tires at a static loaded radius of 1415 mm (4 ft 8 in)

Bucket Type		Rock						Coal
Ground Engaging Tools		Teeth & Segment						Teeth & Segment
Cutting Edge Type		Spade						Straight
Bucket Part No.		496-9909	496-9914	496-9910	496-9916	496-9912	496-9913	496-9922
Bucket Weight as Configured	kg	14 227	15 513	14 884	15 992	15 364	15 550	16 542
	lb	31,371	34,206	32,819	35,262	33,878	34,288	36,475
Bucket Load at Rated Capacity	kg	27 216	27 216	27 216	27 216	27 216	27 216	27 216
	lb	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Rated Capacity	m^3	12.2	12.2	12.9	13	13.8	14.5	23.7
	yd^3	16	16	16.8	17	18	19	31
Struck Capacity – ISO*	m^3	10	10	10	10	11.5	12	20
	yd^3	13.1	13.1	13.1	13.1	15	15.7	26.2
Heaped Capacity – ISO*	m^3	12	12	13	13	14	14	24
	yd^3	15.7	15.7	17	17	18.3	18.3	31.4
Tipping Load at Operating Weight – Straight	kg	82 149	80 580	81 488	79 943	80 307	80 507	78 642
	lb	181,139	177,679	179,681	176,274	177,077	177,518	173,406
Tipping Load at Operating Weight – Straight**	kg	78 311	76 751	77 616	76 094	76 456	76 594	74 649
	lb	172,676	169,236	171,143	167,787	168,585	168,890	164,601
Tipping Load at Operating Weight – Articulated 40°	kg	71 218	69 644	70 541	69 020	69 433	69 588	67 823
	lb	157,036	153,565	155,543	152,189	153,100	153,442	149,550
Tipping Load at Operating Weight – Articulated 40°**	kg	65 589	64 028	64 867	63 375	63 782	63 856	61 981
	lb	144,624	141,182	143,032	139,742	140,639	140,802	136,668
Tipping Load at Operating Weight – Articulated 43°	kg	69 597	68 023	68 918	67 400	67 821	67 969	66 219
	lb	153,461	149,991	151,964	148,617	149,545	149,872	146,013
Tipping Load at Operating Weight – Articulated 43°**	kg	63 788	62 226	63 065	61 577	61 994	62 061	60 198
	lb	140,653	137,208	139,058	135,777	136,697	136,845	132,737
Tipping Load at Operating Weight – Bucket Level Ground	kg	68 132	67 343	65 725	65 917	63 436	63 280	61 351
	lb	150,231	148,491	144,924	145,347	139,876	139,532	135,279
Tipping Load at Operating Weight – Bucket Level Ground**	kg	63 987	63 135	61 775	61 818	59 679	59 522	57 698
	lb	141,091	139,213	136,214	136,309	131,592	131,246	127,224
Breaktout Force – SAE Rated	kN	763	758	716	730	672	671	646
	lbf	171,522	170,398	160,957	164,104	151,066	150,841	145,221
Operating Weight	kg	131 838	133 124	132 495	133 603	132 975	133 161	134 153
	lb	290,703	293,538	292,151	294,595	293,210	293,620	295,807
Weight Distribution at SAE Carry – Front	kg	76 910	79 120	78 034	79 929	78 914	79 180	80 953
	lb	169,587	174,460	172,065	176,243	174,005	174,592	178,501
Weight Distribution at SAE Carry – Rear	kg	54 928	54 004	54 460	53 674	54 061	53 981	53 200
	lb	121,116	119,079	120,084	118,351	119,205	119,028	117,306
Loaded Machine Weight	kg	159 054	160 340	159 711	160 819	160 191	160 377	161 369
	lb	350,714	353,550	352,163	354,606	353,221	353,631	355,819
Weight Distribution at SAE Carry – Front	kg	119 843	122 029	120 988	122 909	122 038	122 280	124 476
	lb	264,254	269,074	266,779	271,014	269,094	269,627	274,470
Weight Distribution at SAE Carry – Rear	kg	39 211	38 311	38 723	37 910	38 153	38 097	36 893
	lb	86,460	84,476	85,384	83,592	84,127	84,004	81,349

993 Wheel Loader Specifications

Operating Specifications – High Lift

For machines equipped with 50/65-51 tires at a static loaded radius of 1415 mm (4 ft 8 in)

Bucket Type		Rock						Coal
Ground Engaging Tools		Teeth & Segment						Teeth & Segment
Cutting Edge Type		Spade						Straight
Bucket Part No. (Group Level)		496-9909	496-9914	496-9910	496-9916	496-9912	496-9913	496-9922
Bucket Weight as Configured	kg	14 227	15 513	14 884	15 992	15 364	15 550	16 542
	lb	31,371	34,206	32,819	35,262	33,878	34,288	36,475
Bucket Load at Rated Capacity	kg	27 216	27 216	27 216	27 216	27 216	27 216	27 216
	lb	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Rated Capacity	m^3	12.2	12.2	12.9	13	13.8	14.5	23.7
	yd^3	16	16	16.8	17	18	19	31
Struck Capacity – ISO*	m^3	10	10	10	10	11.5	12	20
	yd^3	13.1	13.1	13.1	13.1	15	15.7	26.2
Heaped Capacity – ISO*	m^3	12	12	13	13	14	14	24
	yd^3	15.7	15.7	17	17	18.3	18.3	31.4
Bucket Width – Overall	mm	5080	5160	5080	5160	5080	5080	6300
	in	200	203	200	203	200	200	248
Clearance at 45° Dump (Tooth Tip)	mm	5504	5487	5414	5439	5315	5315	5259
	in	217	216	213	214	209	209	207
Reach at 45° Dump (Tooth Tip)	mm	2516	2553	2607	2602	2706	2706	2709
	in	99	101	103	102	107	107	107
Bucket Pin at Maximum Lift	mm	7761	7761	7761	7761	7761	7761	7761
	in	306	306	306	306	306	306	306
Horizontal Arm and Level Bucket Reach	mm	5306	5344	5434	5412	5574	5574	5615
	in	209	210	214	213	219	219	221
Digging Depth (Segment)	mm	199	184	199	184	199	199	221
	in	7.8	7.2	7.8	7.2	7.8	7.8	8.7
Overall Length – Bucket Level Ground	mm	16 186	16 214	16 315	16 282	16 455	16 455	16 511
	in	637	638	642	641	648	648	650
Front Axle to Bucket Level Ground	mm	5821	5849	5950	5917	6090	6090	6146
	in	229	230	234	233	240	240	242
Overall Height	mm	10 439	10 439	10 547	10 521	10 547	10 677	10 675
	in	411	411	415	414	415	420	420
Turing Radius – Corner at SAE Carry	mm	11 326	11 329	11 325	11 349	11 362	11 365	12 065
	in	446	446	446	447	447	447	475
Reach at 45° Dump and 2.13 m (7 ft) Height (with Teeth)	mm	4120	4155	4200	4197	4285	4285	4280
	in	162	164	165	165	169	169	169
Rack Back Angle at SAE Carry	deg	53	53	53	53	53	53	54
Full Dump at Maximum Lift	deg	–50	–50	–50	–50	–50	–50	–50

Operating Specifications – High Lift *(continued)*

For machines equipped with 50/65-51 tires at a static loaded radius of 1415 mm (4 ft 8 in)

Bucket Type		Rock						Coal
Ground Engaging Tools		Teeth & Segment						Teeth & Segment
Cutting Edge Type		Spade						Straight
Bucket Part No. (Group Level)		496-9909	496-9914	496-9910	496-9916	496-9912	496-9913	496-9922
Bucket Weight as Configured	kg	14 227	15 513	14 884	15 992	15 364	15 550	16 542
	lb	31,371	34,206	32,819	35,262	33,878	34,288	36,475
Bucket Load at Rated Capacity	kg	27 216	27 216	27 216	27 216	27 216	27 216	27 216
	lb	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Rated Capacity	m^3	12.2	12.2	12.9	13	13.8	14.5	23.7
	yd^3	16	16	16.8	17	18	19	31
Struck Capacity – ISO*	m^3	10	10	10	10	11.5	12	20
	yd^3	13.1	13.1	13.1	13.1	15	15.7	26.2
Heaped Capacity – ISO*	m^3	12	12	13	13	14	14	24
	yd^3	15.7	15.7	17	17	18.3	18.3	31.4
Tipping Load at Operating Weight – Straight	kg	68 840	67 300	68 162	66 694	67 141	67 245	65 583
	lb	151,792	148,397	150,297	147,060	148,046	148,275	144,611
Tipping Load at Operating Weight – Straight**	kg	65 868	64 335	65 164	63 711	64 152	64 211	62 461
	lb	145,239	141,859	143,687	140,483	141,455	141,585	137,727
Tipping Load at Operating Weight – Articulated 40°	kg	59 217	57 674	58 526	57 077	57 562	57 632	56 048
	lb	130,573	127,171	129,050	125,855	126,924	127,079	123,586
Tipping Load at Operating Weight – Articulated 40°**	kg	54 758	53 224	54 033	52 604	53 080	53 090	51 410
	lb	120,741	117,359	119,143	115,992	117,041	117,063	113,359
Tipping Load at Operating Weight – Articulated 43°	kg	57 790	56 246	57 097	55 651	56 142	56 206	54 634
	lb	127,427	124,022	125,899	122,710	123,793	123,934	120,468
Tipping Load at Operating Weight – Articulated 43°**	kg	53 180	51 646	52 455	51 030	51 512	51 516	49 846
	lb	117,262	113,879	115,663	112,521	113,584	113,593	109,910
Tipping Load at Operating Weight – Bucket Level Ground	kg	56 680	55 757	54 742	54 590	52 922	52 763	51 068
	lb	124,979	122,944	120,706	120,371	116,693	116,342	112,605
Tipping Load at Operating Weight – Bucket Level Ground**	kg	53 726	52 765	51 907	51 665	50 206	50 046	48 414
	lb	118,466	116,347	114,455	113,921	110,704	110,351	106,753
Breaktout Force – SAE Rated	kN	762	756	715	729	671	670	645
	lbf	171,298	169,949	160,732	163,879	150,841	150,616	144,996
Operating Weight	kg	133 052	134 338	133 709	134 817	134 189	134 375	135 367
	lb	293,380	296,215	294,828	297,271	295,887	296,297	298,484
Weight Distribution at SAE Carry – Front	kg	81 298	83 661	82 497	84 524	83 430	83 717	85 589
	lb	179,262	184,473	181,906	186,375	183,963	184,596	188,724
Weight Distribution at SAE Carry – Rear	kg	51 753	50 677	51 211	50 293	50 758	50 658	49 778
	lb	114,115	111,743	112,920	110,896	111,921	111,701	109,760
Loaded Machine Weight	kg	160 268	161 554	160 925	162 033	161 405	161 591	162 583
	lb	353,391	356,227	354,840	357,283	355,898	356,308	358,496
Weight Distribution at SAE Carry – Front	kg	127 343	129 688	128 560	130 619	129 661	129 920	132 195
	lb	280,791	285,962	283,475	288,015	285,903	286,474	291,490
Weight Distribution at SAE Carry – Rear	kg	32 925	31 866	32 365	31 414	31 744	31 670	30 387
	lb	72,600	70,265	71,365	69,268	69,996	69,832	67,003

Standard and Optional Equipment

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

	Standard	Optional
POWERTRAIN		
Engine, C32B	✓	
Brakes, oil-cooled, multi-disc, service/secondary	✓	
Driveline parking brake	✓	
Fuel Priming Pump (electric)	✓	
Ground level engine shutoff	✓	
Precleaner, engine air intake (above hood)	✓	
Automatic, ether starting aid	✓	
Electronic throttle lock	✓	
Planetary powershift, 3F/3R electronic control transmission	✓	
Rimpull Control System	✓	
Standard Impeller Clutch Torque Converter (ICTC)	✓	
ICTC with lock up clutch		✓
Engine Brake		✓
SERVICE		
Case drain filters	✓	
VIMS download and Cat® Electronic Technician service port in bumper	✓	
Axle ecology drain	✓	
Front walkway around cab	✓	
Ground-level fast-fill fuel system	✓	
Grouped hydraulic pressure ports	✓	
Guards, crankcase and power train	✓	
Drawbar hitch with pin	✓	
Linkage pins, maintenance free	✓	
Oil sampling valves	✓	
Product Link™	✓	
Service center with ground level electrical and fluid connections	✓	
Sight gauges for steering, implement and transmission oil	✓	
Transmission lockout, bumper	✓	
Grease lines	✓	
Automatic Autolube		✓
COOLING		
Standard ambient package (recommended for site conditions that do not exceed 43° C [110° F])	✓	
High ambient package (recommended for site conditions that do not exceed 55° C [131° F])		✓

	Standard	Optional
ELECTRICAL AND LIGHTING		
150-amp alternator	✓	
Four 1400 CCA batteries	✓	
Deutsch terminal connectors	✓	
24V starting and charging system	✓	
Diagnostic connector starting and charging system	✓	
Electrical system, 24 volt	✓	
Electronic Service Center	✓	
Electronic Transmission Control	✓	
Lighting system, halogen (front and rear) lighting, access stairway	✓	
Starter receptacle for emergency start	✓	
Starter and transmission lockouts in bumper	✓	
Product Link (Cellular)		✓
Product Link (Satellite)		✓
COLD WEATHER		
120V or 240V coolant heating elements (recommended in conditions from –18° C to –30° C [0° F to –22° F])		✓
Fuel heater (heated by recirculation using engine heat and a heat exchanger) (recommended in conditions from –18° C to –30° C [0° F to –22° F])		✓
–50° C (–58° F) antifreeze		✓
Heated Mirrors		✓
Heated Seat	✓	
SAFETY		
Back-up alarm	✓	
Mirrors, rearview (externally mounted)	✓	
Seat, trainer with lap belt, 76 mm (3 in) wide	✓	
Seat belt, retractable, 76 mm (3 in) wide	✓	
Emergency platform egress	✓	
Implement lock switch	✓	
Stairway, left and right rear access	✓	
Steering and transmission lock lever, cab	✓	
Toe kicks	✓	
LED warning strobe		✓
Object detection (radar)		✓
Rear vision camera		✓
Egress, powered rear access		✓
Secondary Steering		✓
Wheel Chocks		✓

(continued on next page)

Standard and Optional Equipment *(continued)*

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

	Standard	Optional
OPERATOR ENVIRONMENT		
Premium seat with heated and actively cooled leather, adjustable lumbar support, air adjustable bolsters on the seat and backrest, seat cushion tilt adjustment, and adjustable-length seat cushion	✓	
Advisor Display, displays real time operating information, performs calibrations and customizes operator settings	✓	
Air conditioner	✓	
Air precleaner	✓	
Cab, sound suppressed and pressurized, separate external Rollover Protective Structure (ROPS)/Falling Object Protective Structure (FOPS) radio ready for entertainment, includes antenna, speakers and converter (12-volt 10-amp) and power port	✓	
Cigar lighter, ashtray	✓	
Coat hook	✓	
Dual lever lift and tilt function controls	✓	
Joystick lift and tilt function controls		✓
Digital display on center console: – Gear – Ground speed – Machine hours	✓	
Heater, defroster	✓	
Horn, electric	✓	
Instrumentation, gauges: – Coolant temperature – Fuel level – Hydraulic oil temperature – Power train oil temperature – Tachometer	✓	
Light, cab, dome	✓	
Lunchbox, beverage and manual holders	✓	
Wet-Arm wipers/washers (front and rear): – Intermittent front and rear wipers	✓	
AM/FM/CD/MP3 radio		✓
Cab precleaner		✓
Satellite Sirius radio with Bluetooth®		✓
Sun screen		✓
Bonded glass, tinted	✓	
Rubber-mounted, high-impact resistant solar control glass (Complies with AS/NZS 2080)		✓

	Standard	Optional
EFFICIENCY		
Automatic bucket leveler	✓	
Automatic lift and lower bucket kickout	✓	
Positive Flow Control implement system	✓	
ICTC with lock-up clutch		✓
Load-sensing steering	✓	
MACHINE CONTROL AND GUIDANCE		
Cat Terrain ready		✓
RIMS AND TIRES		
40.00×51 spare rim		✓
Tires – 50/65R51		✓
Tires – 50/65-51		✓
Axle oscillation limit stop		✓
LOAD AND CARRY OR EXTENSIVE TRAMMING		
Ride Control		✓
Rear Roading Fenders		✓
LINKAGE		
Standard lift (30 tons face)	✓	
High lift (27.5 tons face)		✓
SOUND SUPPRESSION		
Sound-suppression package		✓

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

AEXQ3500 (11-2022)
Build Number: 11A
(Global)

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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