980 GC

Wheel Loader

Technical Specifications

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

Table of Contents

980 GC Wheel Loader Specifications

Engine

Engine Model	Cat® C13A	
Engine Power @ 1,800 rpm ISO 14396	303 kW	406 hp
ISO 14396 (DIN)	412 mhp (PS)	
Gross Power @ 1,800 rpm SAE J1995	307 kW	412 hp
Net Power @ 1,800 rpm ISO 9249, SAE J1349	282 kW	378 hp
ISO 9249 (DIN)	383 mhp (PS)	
Engine Torque (1,300 rpm) ISO 14396	2172 N·m	1,602 lbf-ft
Gross Torque (1,300 rpm) SAE J1995	2192 N·m	1,617 lbf-ft
Net Torque (1,000 rpm) ISO 3294, SAE J1349, EEC 80/1269	2070 N·m	1,527 lbf-ft
Bore	130 mm	5.12 in
Stroke	157 mm	6.18 in
Displacement	12.5 L	763 in^3

- Cat engine meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3, EU Stage IIIA, and China Nonroad Stage III.
- Advertised power is tested per the specified standard in effect at the time of manufacture.
- The net power advertised is the power available at the flywheel when the engine is equipped with fan, alternator, air cleaner, and aftertreatment.
- Cat engines are compatible with* diesel fuel blended with following lower-carbon intensity fuels** up to:
  - 100% biodiesel FAME (fatty acid methyl ester)***
  - 100% renewable diesel, HVO (hydrotreated vegetable oil and GTL (gas-to- liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

* While Caterpillar engines are compatible with these alternative fuels, some regions may not allow their use.

** Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

*** For use of blends higher than 20% biodeisel, consult your Cat dealer.

Weights

Operating Weight	29 522 kg	65,085 lb

- Weight based on a machine configuration with standard ambient cooling, open differential axles, Triangle TB598S L4 tires, standard counterweight, full fluids, operator and 5.5 m^3 (7.2 yd^3) bucket with BOCE.

Operating Specifications

Static Tipping Load Full 40° Turn		
With Tire Deflection	18 966 kg	41,813 lb
Without Tire Deflection	20 126 kg	44,370 lb
Breakout Force	213 kN	47,884 lbf

- For a machine configuration as defined under "Weight."
- Full compliance to ISO 14397-1:2007 Sections 1 through 6, which requires 2% verification between calculations and testing.

Bucket Capacities

Bucket Range	4.3-5.8 m^3	5.75-7.5 yd^3

Transmission

Forward 1	6.6 km/h	4.1 mph
Forward 2	12.7 km/h	7.9 mph
Forward 3	22.5 km/h	14.0 mph
Forward 4	39.8 km/h	24.7 mph
Reverse 1	7.6 km/h	4.7 mph
Reverse 2	14.5 km/h	9.0 mph
Reverse 3	25.7 km/h	16.0 mph
Reverse 4	39.8 km/h	24.7 mph

- Maximum travel speed in standard vehicle with empty bucket and standard L4 tires with 913 mm (36 in) roll radius.

Service Refill Capacities

Fuel Tank Size	426 L	112.5 gal
Cooling System	52 L	13.7 gal
Crankcase	37 L	9.8 gal
Transmission	77 L	20.3 gal
Differentials and Final Drives – Front	84 L	22.2 gal
Differentials and Final Drives – Rear	84 L	22.2 gal
Hydraulic Tank	153 L	40.4 gal

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a. See the label or instruction manual for identification of the gas.

*If equipped with R134a (Global Warning Potential = 1430), the system contains 1.8 kg of refrigerant which has a CO_2 equivalent of 2.571 metric tonnes (2.834 tons).

Hydraulic System

Implement System Pump Type	Variable displacement piston, load sensing	
Implement System		
Maximum Flow @ 2,250 rpm	415 L/min	110 gal/min
Maximum Operating Pressure	28 200 kPa	4,090 psi
Maximum Flow 3rd Function	250 L/min	66 psi
Maximum Operating Pressure 3rd Function	28 680 kPa	3,000 psi
Hydraulic Cycle Time		
Raise from Carry Position	5.3 seconds	
Dump at Maximum Raise	1.7 seconds	
Lower, Empty, Float Down	3.1 seconds	
Total Cycle Time	10.1 seconds	

Tires*

Choices include:
- Triangle 29.5R25★★ L3 (TB598)
- Triangle 29.5-25 28PR L3 (TL612)
- Triangle 29.5R25★★ L4 (TB598S)
- Triangle 26.5R25★★ L5 (TB598S+)
- Maxam 29.5R25★★ L3 (MS302)
- Maxam 29.5R25★★ L4 (MS405 DUMPXTRA)
- Maxam 29.5R25★★ L5 (MS503)
- Bridgestone 29.5R25★ L3 (VJT)
- Bridgestone 29.5-25 28PR L3 (VL2)
- Bridgestone 29.5R25 ★/★★ L4 (VSNT)
- Bridgestone 29.5-25★ L5 (VSDT)

*Tire offerings vary by region. Consult your local Cat dealer for further details.

Sound

Operator Sound Pressure Level (ISO 6396:2008)	74 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	112 dB(A)
Operator Sound Pressure Level (ISO 6396:2008)	74 dB(A)*
Exterior Sound Power Level (ISO 6395:2008)	109 dB(A)**

*Including countries that adopt the EU and UK directives.
**EU Noise Directive 2000/14/EC and UK Noise Regulation 2001 No. 1701.

Cab

Rollover protective structure (ROPS)/ Falling object protective structure (FOPS)	ROPS/FOPS meet ISO 3471:2008 and ISO 3449:2005 Level II standards

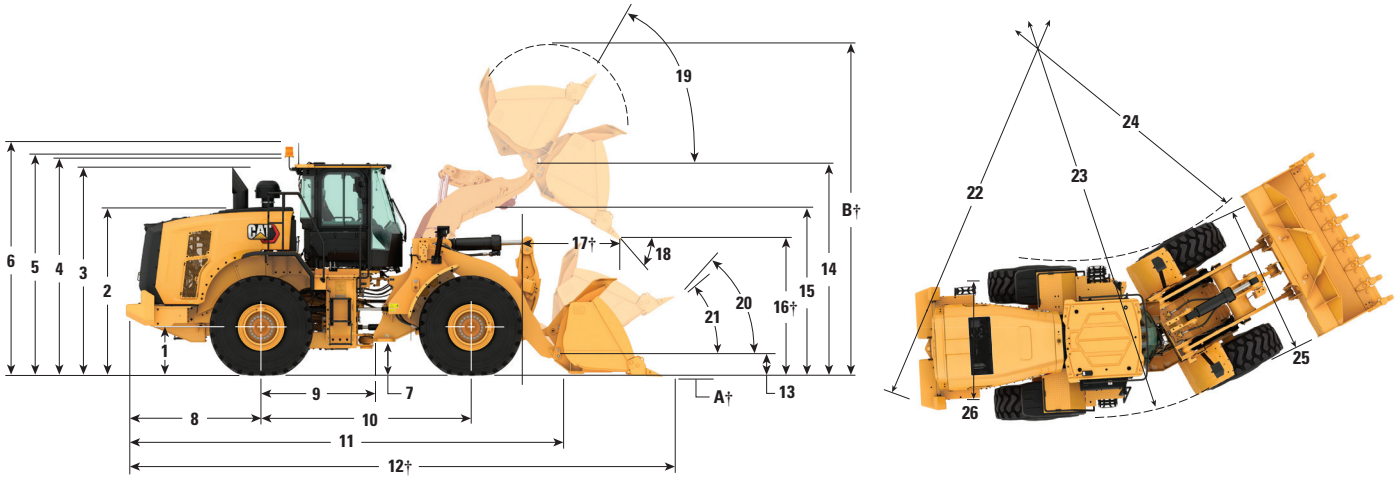
Brakes

Brakes	Brakes meet ISO 3450:2011 standards

980 GC Wheel Loader Specifications

Dimensions

All dimensions are approximate and based on Triangle TB598S L4 radial tires.



1	Height to Axle Centerline	864 mm	2'8"
2	Height to Top of Hood	3042 mm	9'10"
3	Height to Top of Exhaust Pipe	3742 mm	12'3"
4	Height to Top of ROPS	3807 mm	12'5"
5	Height to Top of Product Link Antenna	3813 mm	12'5"
6	Height to Top of Warning Beacon	4086 mm	13'4"
7	Ground Clearance	434 mm	1'4"
8	Center Line of Rear Axle to Edge of Counterweight	2606 mm	8'5"
9	Center Line of Rear Axle to Hitch	1900 mm	6'2"
10	Wheelbase	3800 mm	12'5"
11	Overall Length (without Bucket)	8093 mm	26'6"
12	Shipping Length (with Bucket level on ground)*†	9665 mm	31'7"
13	Hinge Pin Height at Carry Height	642 mm	2'1"
14	Hinge Pin Height at Maximum Lift	4532 mm	14'9"
15	Lift Arm Clearance at Maximum Lift	3843 mm	12'6"
16	Dump Clearance at Maximum Lift and 45° Discharge*†	3226 mm	10'6"
17	Reach at Maximum Lift and 45° Discharge*†	1494 mm	4'9"
18	Dump Angle at Maximum Lift & Dump (on stops)*	52°	
19	Rack Back at Maximum Lift*	61°	
20	Rack Back at Carry Height*	49°	
21	Rack Back at Ground*	41°	
22	Clearance Circle (dia) to Counterweight	13 459 mm	44'2"
23	Clearance Circle (dia) to Outside of Tires	13 503 mm	44'3"
24	Clearance Circle (dia) to Inside of Tires	7377 mm	24'2"
25	Width Over Tires (unloaded)	2817 mm	9'2"
	Width Over Tires (loaded)	3074 mm	10'1"
26	Tread Width	2230 mm	7'3"

*With 5.5 m^3 (7.25 yd^3) general purpose pin-on bucket with BOCE (see Operating Specifications for other Buckets).

†Dimensions are listed in Operating Specifications charts.

All height and tire related dimensions are with Triangle TB598S L4 radial tires (see Tire Option Chart for other tires). "Width Over Tires" dimensions are over the bulge and include growth.

Tire Options

Tire Brand	Triangle	Triangle	Triangle	Triangle	Maxam
Tire Size	**29.5R25**	**29.5-25**	**29.5R25**	**29.5R25**	**29.5R25**
Tread Type	**L–3**	**L–3**	**L–4**	**L–5**	**L–3**
Tread Pattern	**TB598**	**TL612**	**TB598S**	**TB538S+**	**MS302**
Width over Tires – Maximum (empty)*	3037 mm 9'10"	2807 mm 9'2"	2817 mm 9'2"	3045 mm 9'10"	3054 mm 10'0"
Width over Tires – Maximum (loaded)*	3094 mm 10'2"	2836 mm 9'3"	3074 mm 10'1"	3053 mm 10'0"	3079 mm 10'1"
Change in Vertical Dimensions (average of front and rear)		10 mm 0.40"	11 mm 0.43"	32 mm 1.26"	-6 mm -0.24"
Change in Horizontal Reach		-9.5 mm -0.38"	-6 mm -0.24"	-25.40 mm -1.0"	-19 mm -0.75"
Change in Clearance Circle to Outside of Tires		-129 mm -5.08"	-10 mm -0.40"	-20.50 mm -0.81"	-7.5 mm -0.30"
Change in Clearance Circle to Inside of Tires		129 mm 5.08"	10 mm 0.40"	20.5 mm 0.81"	8 mm 0.31"
Change in Operating Weight (without ballast)		-313 kg -690 lb	323 kg 712 lb	904 kg 1,993 lb	80 kg 176 lb
Change in Static Tipping Load – Straight		-238 kg -525 lb	245 kg 540 lb	687 kg 1,515 lb	61 kg 134 lb
Change in Static Tipping Load – Articulated		-208 kg -459 lb	215 kg 474 lb	601 kg 1,325 lb	53 kg 117 lb
Rear Axle Oscillation Angle	±13 degrees	±13 degrees	±13 degrees	±13 degrees	±13 degrees

NOTE: Tire offerings may vary by region. Consult your local Cat dealer for further details.
*Width over tire bulge and includes tire growth.

Tire Brand	Maxam	Maxam	Bridgestone	Bridgestone	Bridgestone	Bridgestone
Tire Size	**29.5R25**	**29.5R25**	**29.5R25**	**29.5-25**	**29.5R25**	**29.5R25**
Tread Type	**L–4**	**L–5**	**L–3**	**L–3**	**L-4**	**L–5**
Tread Pattern	**MS405 DUMPXTRA**	**MS503**	**VJT**	**VL2**	**VSNT**	**VSDT**
Width over Tires – Maximum (empty)*	2819 mm 9'2"	2819 mm 9'2"	2835 mm 9'3"	2782 mm 9'1"	2818 mm 9'2"	2818 mm 9'2"
Width over Tires – Maximum (loaded)*	2837 mm 9'3"	3086 mm 10'1"	3079 mm 10'1"	3028 mm 9'9"	2835 mm 9'3"	2835 mm 9'3"
Change in Vertical Dimensions (average of front and rear)	-24 mm -0.94"	7 mm 0.28"	-4 mm -0.16"	18 mm 0.71"	24 mm 0.08"	12 mm 0.47"
Change in Horizontal Reach	-6 mm -0.24"	-27 mm -1.06"	-4.5 mm -0.18"	3 mm 0.12"	-25 mm -0.08"	-24.5 mm -0.97"
Change in Clearance Circle to Outside of Tires	-128.5 mm -5.06"	-4 mm -0.16"	-7.5 mm -0.30"	-33 mm -1.30"	-129.5 mm -0.42"	-129.5 mm -5.10"
Change in Clearance Circle to Inside of Tires	128.5 mm 5.06"	4 mm 0.16"	7.5 mm 0.30"	33 mm 1.30"	129.5 mm 0.42"	129.5 mm 5.10"
Change in Operating Weight (without ballast)	220 kg 485 lb	1108 kg 2,443 lb	-76 kg -168 lb	-236 kg -520 lb	532 mm 1'7"	1108 kg 2,443 lb
Change in Static Tipping Load – Straight	167 kg 368 lb	842 kg 1,856 lb	-58 kg -128 lb	-179 kg -395 lb	404 mm 1'3"	842 kg 1,856 lb
Change in Static Tipping Load – Articulated	146 kg 322 lb	737 kg 1,625 lb	-51 kg -112 lb	-157 kg -346 lb	354 mm 1'2"	737 kg 1,625 lb
Rear Axle Oscillation Angle	±13 degrees	±13 degrees	±13 degrees	±13 degrees	±13 degrees	±13 degrees

NOTE: Tire offerings may vary by region. Consult your local Cat dealer for further details.
*Width over tire bulge and includes tire growth.

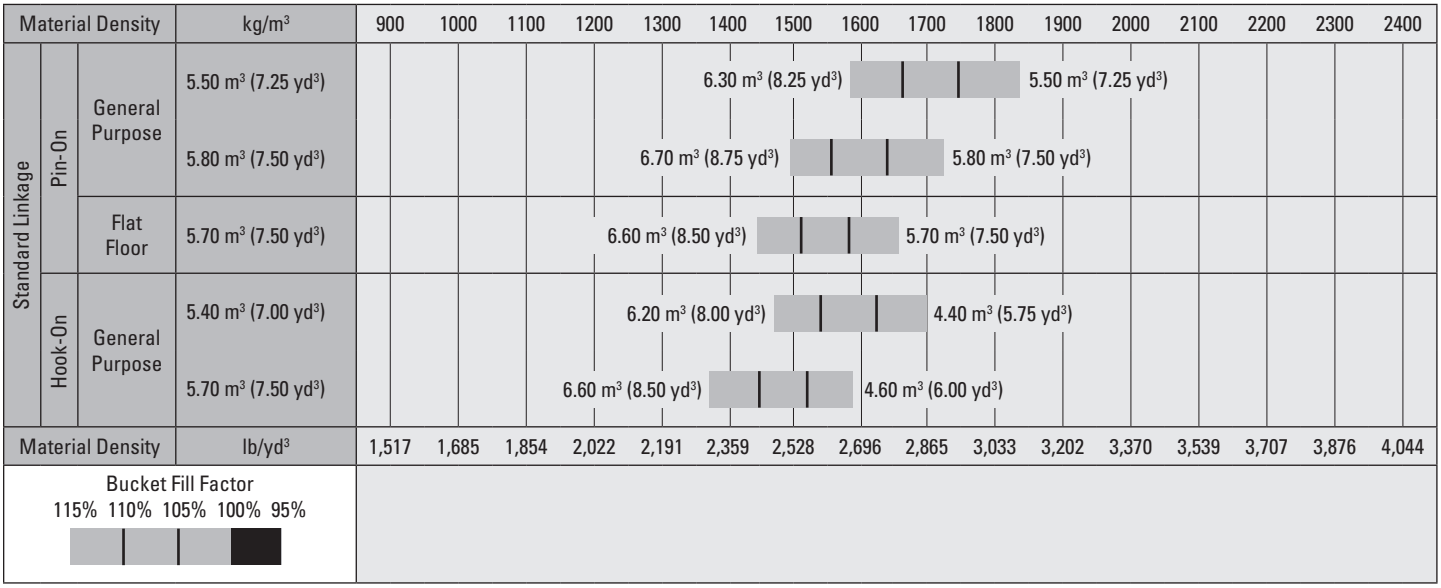
980 GC Wheel Loader Specifications

Bucket Fill Factors and Selection Guide

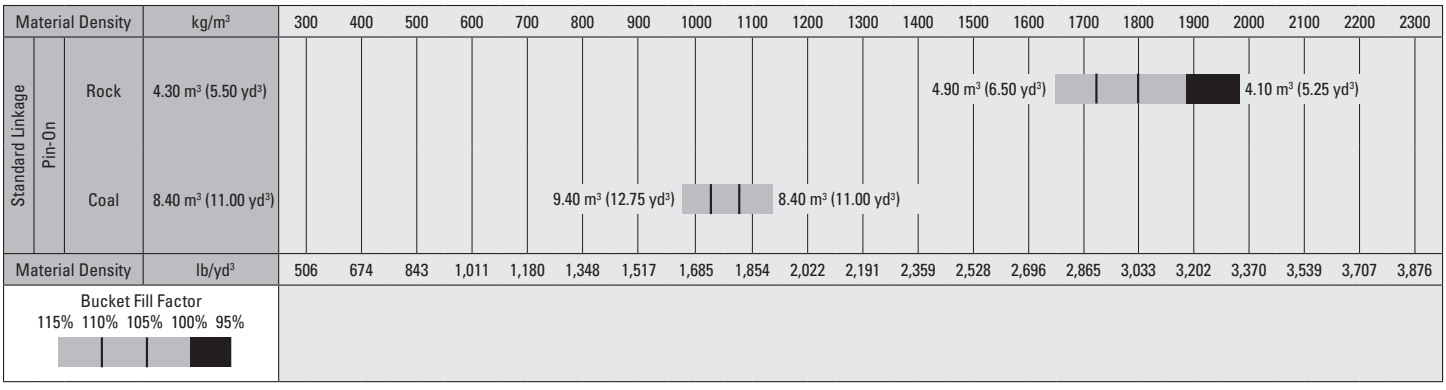
The bucket size must be chosen based on the density of the material and on the expected fill factor. The Cat Performance Series Buckets with longer floor, larger bucket opening, increased repository angle, rounded side boards and integrated spill guard demonstrate fill factors significantly higher than previous generation or non-Cat buckets. The actual volume handled by the machine is thus often larger than the rated capacity.

Loose Material		Fill Factor (%)*	Material Density
Earth/Clay		115	1.5-1.7
Sand and Gravel		115	1.5-1.7
Aggregate:	25-76 mm (1 to 3 in)	110	1.6-1.7
	19 mm (0.75 in) and smaller	105	1.8
Rock:	76 mm (3 in) and larger	100	1.6

*As a % of ISO 7546:1983 rated capacity.
Note: Fill Factors achieved will also depend on whether the product is washed or not washed.



Note: All buckets are showing Bolt-On Edges.
*Bucket availability may vary by region.



Note: All buckets are showing Bolt-On Edges.
*Bucket availability may vary by region.
** Data with Rock, Spade buckets equipped with Teeth and Segments and machine with L5 tires.

Operating Specifications – Buckets

Linkage			Standard Linkage			
Bucket Type			General Purpose – Pin-On			
	Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Bolt-On Cutting Edges	Teeth and Segments
	Capacity – Rated	m^3	5.50	5.50	5.80	5.80
		yd^3	7.25	7.25	7.50	7.50
	Capacity – Rated at 110% Fill Factor	m^3	6.10	6.10	6.40	6.40
		yd^3	8.00	8.00	8.25	8.25
	Width	mm	3468	3533	3468	3533
		ft/in	11'4"	11'7"	11'4"	11'7"
16†	Dump Clearance at Maximum Lift and 45° Discharge	mm	3263	3090	3226	3054
		ft/in	10'8"	10'1"	10'7"	10'0"
17†	Reach at Maximum Lift and 45° Discharge	mm	1478	1636	1511	1670
		ft/in	4'10"	5'4"	4'11"	5'5"
	Reach at Level Lift Arm and Bucket Level	mm	2961	3193	3011	3244
		ft/in	9'8"	10'5"	9'10"	10'7"
A†	Digging Depth	mm	129	119	129	119
		in	5"	4.6"	5"	4.6"
12†	Overall Length	mm	9627	9882	9677	9932
		ft/in	31'7"	32'6"	31'9"	32'7"
B†	Overall Height with Bucket at Maximum Lift	mm	6415	6415	6475	6475
		ft/in	21'1"	21'1"	21'3"	21'3"
	Loader Clearance Circle Radius with Bucket at Carry Position	mm	7619	7724	7633	7738
		ft/in	25'0"	25'5"	25'1"	25'5"
	Static Tipping Load, Straight (With tire deflection)	kg	22 383	22 087	22 247	21 949
		lb	49,346	48,693	49,048	48,390
	Static Tipping Load, Straight (No tire deflection)	kg	23 720	23 420	23 590	23 288
		lb	52,293	51,632	52,009	51,342
	Static Tipping Load, Articulated (With tire deflection)	kg	19 333	19 037	19 203	18 905
		lb	42,622	41,969	42,337	41,679
	Static Tipping Load, Articulated (No tire deflection)	kg	20 521	20 221	20 398	20 095
		lb	45,241	44,579	44,970	44,303
	Breakout Force (§)	kN	217	214	209	206
		lbf	48,820	48,165	47,099	46,458
	Operating Weight*	kg	29 285	29 503	29 361	29 579
		lb	64,562	65,042	64,729	65,210

*Static tipping loads and operating weights shown are based on a machine configuration with standard ambient cooling, open differential axles, Triangle TB598S L4 tires, standard counterweight, full fluids, operator and 5.5 m^3 (7.2 yd^3) bucket with BOCE.

**Rock bucket specifications are given on Triangle TB538S+ L5 Radial tires.

† Illustration shown with Dimension charts.

(§) Measured 100 mm (4") behind tip of cutting edge with bucket hinge pin as pivot point in accordance with ISO 14397-2:2007.

(With tire deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

(No tire deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

Bucket and work tool offerings vary by region. Consult your local Cat dealer for further details.

980 GC Wheel Loader Specifications

Operating Specifications – Buckets

Linkage		Standard Linkage			
Bucket Type		General Purpose – Hook-On – Fusion™			
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Bolt-On Cutting Edges	Teeth and Segments
Capacity – Rated	m^3	5.40	5.40	5.70	5.70
	yd^3	7.00	7.00	7.50	7.50
Capacity – Rated at 110% Fill Factor	m^3	5.90	5.90	6.30	6.30
	yd^3	7.75	7.75	8.25	8.25
Width	mm	3447	3546	3447	3447
	ft/in	11'3"	11'7"	11'3"	11'3"
16† Dump Clearance at Maximum Lift and 45° Discharge	mm	3148	2994	3081	2922
	ft/in	10'3"	9'9"	10'1"	9'7"
17† Reach at Maximum Lift and 45° Discharge	mm	1608	1751	1652	1788
	ft/in	5'3"	5'8"	5'5"	5'10"
Reach at Level Lift Arm and Bucket Level	mm	3134	3343	3214	3421
	ft/in	10'3"	10'11"	10'6"	11'2"
A† Digging Depth	mm	133	138	133	133
	in	5.2"	5.4"	5.2"	5.2"
12† Overall Length	mm	9803	10032	9884	10115
	ft/in	32'2"	32'11"	32'6"	33'3"
B† Overall Height with Bucket at Maximum Lift	mm	6490	6490	6558	6558
	ft/in	21'4"	21'4"	21'7"	21'7"
Loader Clearance Circle Radius with Bucket at Carry Position	mm	7698	7820	7724	7804
	ft/in	25'4"	25'8"	25'5"	25'8"
Static Tipping Load, Straight (With tire deflection)	kg	20 580	20 317	20 385	20 229
	lb	45,372	44,792	44,941	44,598
Static Tipping Load, Straight (No tire deflection)	kg	21 869	21 603	21 679	21 521
	lb	48,213	47,627	47,794	47,446
Static Tipping Load, Articulated (With tire deflection)	kg	17 625	17 362	17 443	17 287
	lb	38,857	38,277	38,456	38,112
Static Tipping Load, Articulated (No tire deflection)	kg	18 771	18 506	18 596	18 438
	lb	41,385	40,799	40,997	40,650
Breakout Force (§)	kN	190	192	180	178
	lbf	42,801	43,205	40,645	40,208
Operating Weight*	kg	30 351	30 546	30 428	30 543
	lb	66,912	67,342	67,082	67,335

*Static tipping loads and operating weights shown are based on a machine configuration with standard ambient cooling, open differential axles, Triangle TB598S L4 tires, standard counterweight, full fluids, operator and 5.5 m^3 (7.2 yd^3) bucket with BOCE.

**Rock bucket specifications are given on Triangle TB538S+ L5 Radial tires.

† Illustration shown with Dimension charts.

(§) Measured 100 mm (4") behind tip of cutting edge with bucket hinge pin as pivot point in accordance with ISO 14397-2:2007.

(With tire deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

(No tire deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

Bucket and work tool offerings vary by region. Consult your local Cat dealer for further details.

Operating Specifications – Buckets

Linkage		Standard Linkage	
Bucket Type		**General Purpose – Pin-On – Abrasion**	
Edge Type		**Bolt-On Cutting Edges**	**Teeth and Segments**
Capacity – Rated	m^3	5.70	5.70
	yd^3	7.50	7.50
Capacity – Rated at 110% Fill Factor	m^3	6.30	6.30
	yd^3	8.25	8.25
Width	mm	3481	3546
	ft/in	11'5"	11'7"
16† Dump Clearance at Maximum Lift and 45° Discharge	mm	3186	3031
	ft/in	10'5"	9'11"
17† Reach at Maximum Lift and 45° Discharge	mm	1552	1693
	ft/in	5'1"	5'6"
Reach at Level Lift Arm and Bucket Level	mm	3069	3277
	ft/in	10'0"	10'9"
A† Digging Depth	mm	129	134
	in	5"	5.2"
12† Overall Length	mm	9735	9962
	ft/in	32'0"	32'9"
B† Overall Height with Bucket at Maximum Lift	mm	6417	6417
	ft/in	21'1"	21'1"
Loader Clearance Circle Radius with Bucket at Carry Position	mm	7654	7752
	ft/in	25'2"	25'6"
Static Tipping Load, Straight (With tire deflection)	kg	21 416	21 306
	lb	47,215	46,973
Static Tipping Load, Straight (No tire deflection)	kg	22 734	22 623
	lb	50,121	49,876
Static Tipping Load, Articulated (With tire deflection)	kg	18 388	18 277
	lb	40,538	40,295
Static Tipping Load, Articulated (No tire deflection)	kg	19 558	19 447
	lb	43,118	42,873
Breakout Force (§)	kN	198	202
	lbf	44,634	45,397
Operating Weight*	kg	29 960	30 037
	lb	66,050	66,220

* Static tipping loads and operating weights shown are based on a machine configuration with standard ambient cooling, open differential axles, Triangle TB598S L4 tires, standard counterweight, full fluids, operator and 5.5 m^3 (7.2 yd^3) bucket with BOCE.

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980 GC Wheel Loader Specifications

Operating Specifications – Buckets

Linkage		Standard Linkage			
Bucket Type		Flat Floor – Pin-On		Flat Floor – Pin-On – Light Material (Coal)	Flat Floor – Pin-On – Abrasion (FMT)
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Bolt-On Cutting Edges	Tips
Capacity – Rated	m^3	5.70	5.70	8.40	5.60
	yd^3	7.50	7.50	11.00	7.25
Capacity – Rated at 110% Fill Factor	m^3	6.30	6.30	9.20	6.20
	yd^3	8.25	8.25	12.00	8.00
Width	mm	3481	3546	3638	3600
	ft/in	11'5"	11'7"	11'11"	11'9"
16† Dump Clearance at Maximum Lift and 45° Discharge	mm	3081	2915	2900	2928
	ft/in	10'1"	9'6"	9'6"	9'7"
17† Reach at Maximum Lift and 45° Discharge	mm	1459	1588	1647	1648
	ft/in	4'9"	5'2"	5'4"	5'4"
Reach at Level Lift Arm and Bucket Level	mm	3093	3302	3354	3335
	ft/in	10'1"	10'10"	11'0"	10'11"
A† Digging Depth	mm	129	134	124	94
	in	5"	5.2"	4.8"	3.7"
12† Overall Length	mm	9759	9987	10016	9981
	ft/in	32'1"	32'10"	32'11"	32'9"
B† Overall Height with Bucket at Maximum Lift	mm	6458	6458	6746	6458
	ft/in	21'3"	21'3"	22'2"	21'3"
Loader Clearance Circle Radius with Bucket at Carry Position	mm	7661	7759	7804	7774
	ft/in	25'2"	25'6"	25'8"	25'7"
Static Tipping Load, Straight (With tire deflection)	kg	21 250	21 066	21 125	20 544
	lb	46,849	46,444	46,573	45,293
Static Tipping Load, Straight (No tire deflection)	kg	22 537	22 351	22 509	21 833
	lb	49,686	49,276	49,625	48,133
Static Tipping Load, Articulated (With tire deflection)	kg	18 271	18 087	18 111	17 546
	lb	40,282	39,876	39,929	38,682
Static Tipping Load, Articulated (No tire deflection)	kg	19 415	19 229	19 348	18 688
	lb	42,803	42,393	42,656	41,202
Breakout Force (§)	kN	196	199	166	207
	lbf	44,147	44,737	37,450	46,701
Operating Weight*	kg	29 822	29 955	30 082	30 629
	lb	65,746	66,039	66,319	67,524

* Static tipping loads and operating weights shown are based on a machine configuration with standard ambient cooling, open differential axles, Triangle TB598S L4 tires, standard counterweight, full fluids, operator and 5.5 m^3 (7.2 yd^3) bucket with BOCE.

**Rock bucket specifications are given on Triangle TB538S+ L5 Radial tires.

† Illustration shown with Dimension charts.

(§) Measured 100 mm (4") behind tip of cutting edge with bucket hinge pin as pivot point in accordance with ISO 14397-2:2007.

(With tire deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

(No tire deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

Bucket and work tool offerings vary by region. Consult your local Cat dealer for further details.

Operating Specifications – Buckets

Linkage		Standard Linkage
Bucket Type		**Rock, Spade** – Pin-On**
Edge Type		**Teeth and Segments**
Capacity – Rated	m^3	4.30
	yd^3	5.50
Capacity – Rated at 110% Fill Factor	m^3	4.70
	yd^3	6.25
Width	mm	3525
	ft/in	11'6"
16† Dump Clearance at Maximum Lift and 45° Discharge	mm	3096
	ft/in	10'1"
17† Reach at Maximum Lift and 45° Discharge	mm	1767
	ft/in	5'9"
Reach at Level Lift Arm and Bucket Level	mm	3278
	ft/in	10'9"
A† Digging Depth	mm	124
	in	4.8"
12† Overall Length	mm	9968
	ft/in	32'9"
B† Overall Height with Bucket at Maximum Lift	mm	6132
	ft/in	20'2"
Loader Clearance Circle Radius with Bucket at Carry Position	mm	7745
	ft/in	25'5"
Static Tipping Load, Straight (With tire deflection)	kg	22 058
	lb	48,630
Static Tipping Load, Straight (No tire deflection)	kg	23 365
	lb	51,512
Static Tipping Load, Articulated (With tire deflection)	kg	18 968
	lb	41,817
Static Tipping Load, Articulated (No tire deflection)	kg	20 123
	lb	44,365
Breakout Force (§)	kN	201
	lbf	45,236
Operating Weight*	kg	29 804
	lb	65,705

* Static tipping loads and operating weights shown are based on a machine configuration with standard ambient cooling, open differential axles, Triangle TB598S L4 tires, standard counterweight, full fluids, operator and 5.5 m^3 (7.2 yd^3) bucket with BOCE.

**Rock bucket specifications are given on Triangle TB538S+ L5 Radial tires.

† Illustration shown with Dimension charts.

(§) Measured 100 mm (4") behind tip of cutting edge with bucket hinge pin as pivot point in accordance with ISO 14397-2:2007.

(With tire deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

(No tire deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

Bucket and work tool offerings vary by region. Consult your local Cat dealer for further details.

980 GC Wheel Loader Specifications

Fork Specifications

Fork Specifications

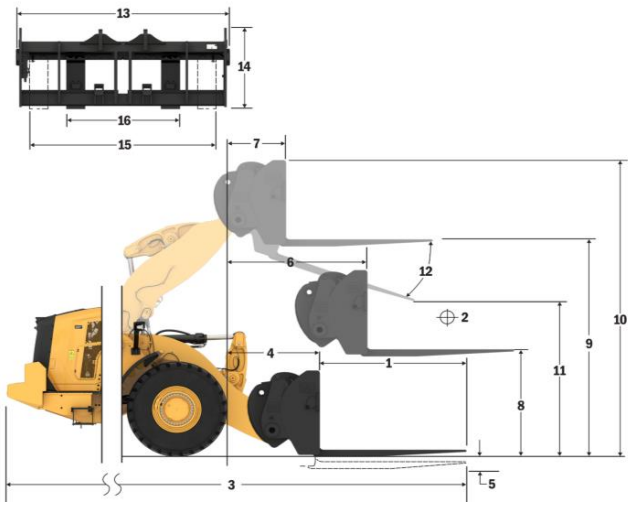
1	Tine Length	mm in	1829 72.0
2	Load Center	mm in	914 36.0
	Static Tipping Load - Straight (Forks Level)	kg lbs	14433 31811
	Static Tipping Load - Articulated (Forks Level)	kg lbs	12481 27509
	Rated Load (SAE J1197 - 50% FTSTL)	kg lbs	6241 13754
	Rated Load (CEN EN 474-3 Rough Terrain - 60% FTSTL)	kg lbs	7489 16505
	Rated Load (CEN EN 474-3 Firm and Level Ground - 80% FTSTL)	kg lbs	8364 18435
3	Maximum Overall Length	mm in	10376 408.5
4	Reach with Forks at Ground Level	mm in	1207 47.5
5	*Ground to Bottom of Tine at Minimum Height and Fork Level	mm in	-135 -5.3
6	Reach with Arms Horizontal and Forks Level	mm in	1815 71.4
7	Reach with Fork at Maximum Height	mm in	888 35.0
8	Ground to Top of Tine with Arms Horizontal and Fork Level	mm in	2060 81.1
9	Ground to Top of Tine at Maximum Height and Fork Level	mm in	4328 170.4
10	Overall Height of Fork at Full Lift (top of carriage to ground)	mm in	5372 211.5
11	Clearance at Full Lift and Max Dump	mm in	2462 96.9
12	Max Discharge Angle from Horizontal	deg	55
13	Overall Carriage Width	mm in	2821 111.1
14	Overall Carriage Height	mm in	1129 44.4
15	Outside Tine Width (max spread)	mm in	2627 103.4
16	Outside Tine Width (min spread)	mm in	747 29.4
	Tine Width (single tine)	mm in	250.0 9.8
	Tine Thickness	mm in	85.0 3.3
	Tine Capacity	kg lbs	18700 41215
	Operating Weight	kg lbs	29189 64332

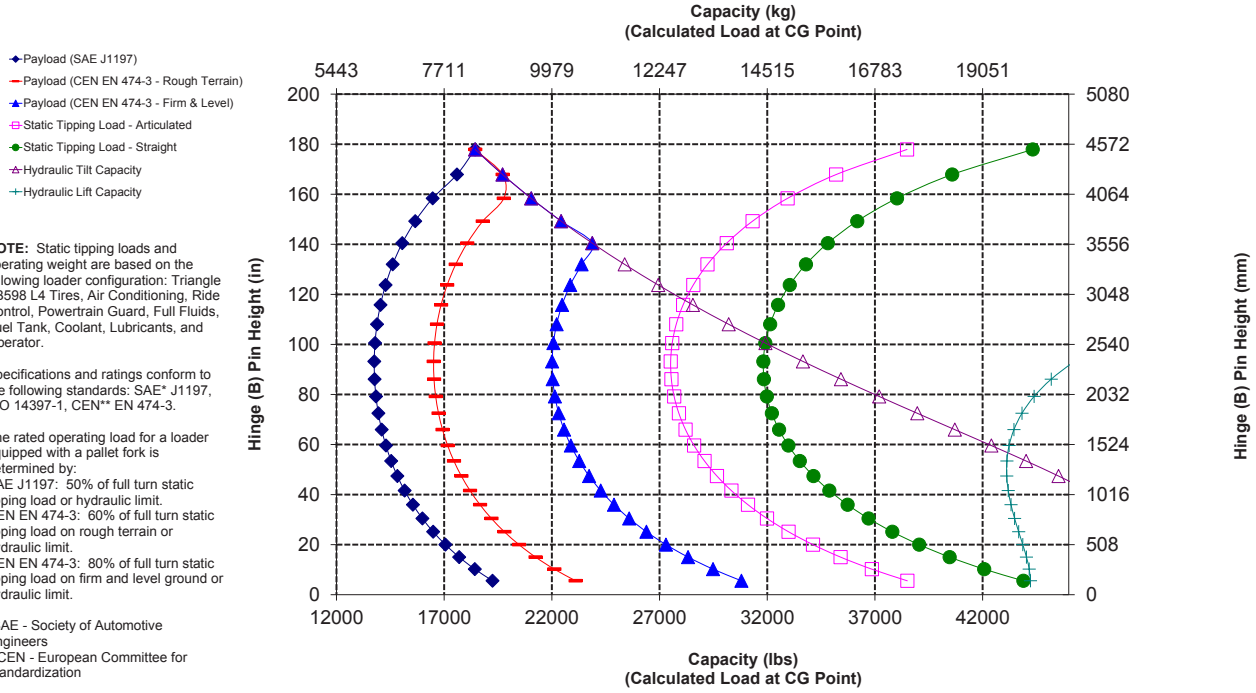
*Negative values indicate below grade

980 GC T3 STD

Construction Fork, FUSION	108" Carriage	72" Tine
	523-4199	523-4200

*Build GC 01B
*Parallel Z-Bar Linkage
*Standard Lift Configuration





NOTE: Static tipping loads and operating weight are based on the following loader configuration: Triangle TB598 L4 Tires, Air Conditioning, Ride Control, Powertrain Guard, Full Fluids, Fuel Tank, Coolant, Lubricants, and Operator.

Specifications and ratings conform to the following standards: SAE* J1197, ISO 14397-1, CEN** EN 474-3.

The rated operating load for a loader equipped with a pallet fork is determined by:
SAE J1197: 50% of full turn static tipping load or hydraulic limit.
CEN EN 474-3: 60% of full turn static tipping load on rough terrain or hydraulic limit.
CEN EN 474-3: 80% of full turn static tipping load on firm and level ground or hydraulic limit.

*SAE - Society of Automotive Engineers
**CEN - European Committee for Standardization

NOTICE: Do not exceed tine load capacity. Individual tine capacity is stamped on the side of each tine.

Fork Specifications

Fork Specifications

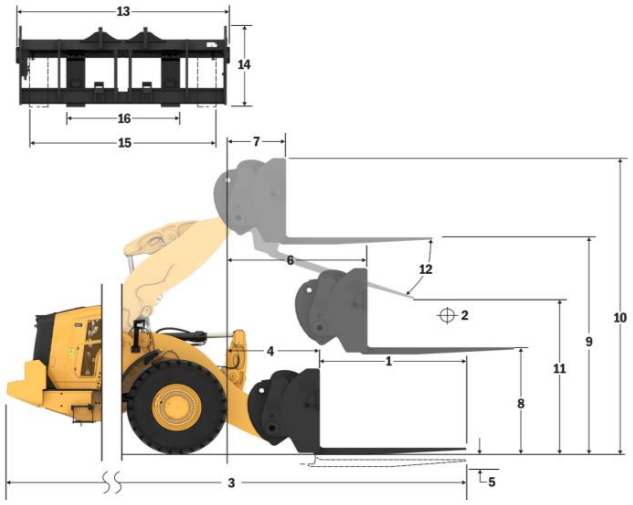
1	Tine Length	mm in	2134 84.0
2	Load Center	mm in	1067 42.0
	Static Tipping Load - Straight (Forks Level)	kg lbs	13755 30317
	Static Tipping Load - Articulated (Forks Level)	kg lbs	11881 26185
	Rated Load (SAE J1197 - 50% FTSTL)	kg lbs	5940 13093
	Rated Load (CEN EN 474-3 Rough Terrain - 60% FTSTL)	kg lbs	7129 15711
	Rated Load (CEN EN 474-3 Firm and Level Ground - 80% FTSTL)	kg lbs	7426 16367
3	Maximum Overall Length	mm in	10684 420.6
4	Reach with Forks at Ground Level	mm in	1210 47.6
5	*Ground to Bottom of Tine at Minimum Height and Fork Level	mm in	-135 -5.3
6	Reach with Arms Horizontal and Forks Level	mm in	1815 71.4
7	Reach with Fork at Maximum Height	mm in	888 35.0
8	Ground to Top of Tine with Arms Horizontal and Fork Level	mm in	2065 81.3
9	Ground to Top of Tine at Maximum Height and Fork Level	mm in	4333 170.6
10	Overall Height of Fork at Full Lift (top of carriage to ground)	mm in	5372 211.5
11	Clearance at Full Lift and Max Dump	mm in	2212 87.1
12	Max Discharge Angle from Horizontal	deg	55
13	Overall Carriage Width	mm in	2821 111.1
14	Overall Carriage Height	mm in	1129 44.4
15	Outside Tine Width (max spread)	mm in	2627 103.4
16	Outside Tine Width (min spread)	mm in	747 29.4
	Tine Width (single tine)	mm in	250.0 9.8
	Tine Thickness	mm in	90.0 3.5
	Tine Capacity	kg lbs	17729 39075
	Operating Weight	kg lbs	29291 64557

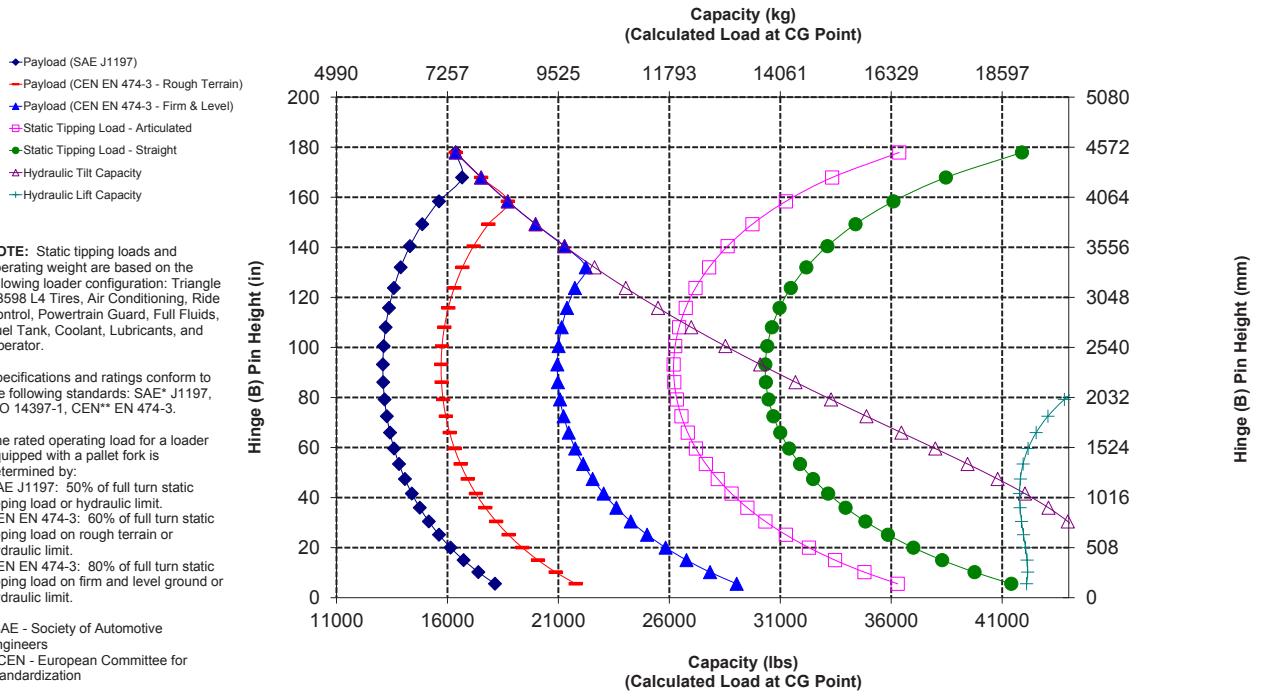
*Negative values indicate below grade

980 GC T3 STD

Construction Fork, FUSION	108" Carriage	84" Tine
	523-4199	523-4201

*Build GC 01B
*Parallel Z-Bar Linkage
*Standard Lift Configuration





NOTE: Static tipping loads and operating weight are based on the following loader configuration: Triangle TB598 L4 Tires, Air Conditioning, Ride Control, Powertrain Guard, Full Fluids, Fuel Tank, Coolant, Lubricants, and Operator.

Specifications and ratings conform to the following standards: SAE* J1197, ISO 14397-1, CEN** EN 474-3.

The rated operating load for a loader equipped with a pallet fork is determined by:
SAE J1197: 50% of full turn static tipping load or hydraulic limit.
CEN EN 474-3: 60% of full turn static tipping load on rough terrain or hydraulic limit.
CEN EN 474-3: 80% of full turn static tipping load on firm and level ground or hydraulic limit.

*SAE - Society of Automotive Engineers
**CEN - European Committee for Standardization

NOTICE: Do not exceed tine load capacity. Individual tine capacity is stamped on the side of each tine.

980 GC Wheel Loader Specifications

Fork Specifications

Fork Specifications

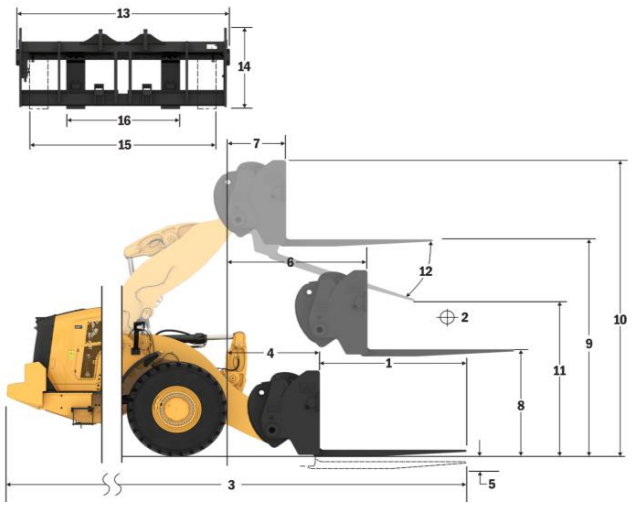
1	Tine Length	mm in	2438 96.0
2	Load Center	mm in	1219 48.0
	Static Tipping Load - Straight (Forks Level)	kg lbs	13069 28805
	Static Tipping Load - Articulated (Forks Level)	kg lbs	11267 24833
	Rated Load (SAE J1197 - 50% FTSTL)	kg lbs	5634 12417
	Rated Load (CEN EN 474-3 Rough Terrain - 60% FTSTL)	kg lbs	6597 14540
	Rated Load (CEN EN 474-3 Firm and Level Ground - 80% FTSTL)	kg lbs	6597 14540
3	Maximum Overall Length	mm in	10993 432.8
4	Reach with Forks at Ground Level	mm in	1214 47.8
5	*Ground to Bottom of Tine at Minimum Height and Fork Level	mm in	-133 -5.2
6	Reach with Arms Horizontal and Forks Level	mm in	1820 71.6
7	Reach with Fork at Maximum Height	mm in	893 35.2
8	Ground to Top of Tine with Arms Horizontal and Fork Level	mm in	2066 81.3
9	Ground to Top of Tine at Maximum Height and Fork Level	mm in	4335 170.7
10	Overall Height of Fork at Full Lift (top of carriage to ground)	mm in	5372 211.5
11	Clearance at Full Lift and Max Dump	mm in	1958 77.1
12	Max Discharge Angle from Horizontal	deg	55
13	Overall Carriage Width	mm in	2821 111.1
14	Overall Carriage Height	mm in	1127 44.4
15	Outside Tine Width (max spread)	mm in	2629 103.5
16	Outside Tine Width (min spread)	mm in	747 29.4
	Tine Width (single tine)	mm in	250.0 9.8
	Tine Thickness	mm in	90.0 3.5
	Tine Capacity	kg lbs	15750 34713
	Operating Weight	kg lbs	29442 64890

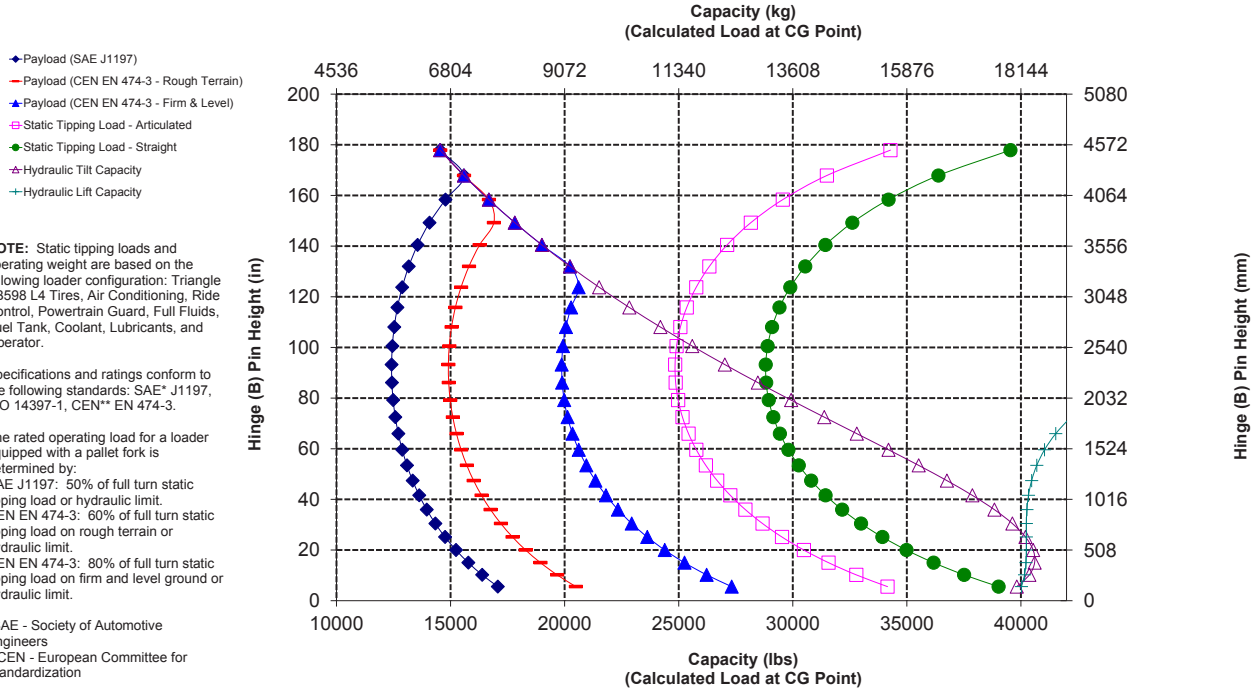
*Negative values indicate below grade

980 GC T3 STD

Construction Fork, FUSION	108" Carriage	96" Tine
	523-4199	523-4202

*Build GC 01B
*Parallel Z-Bar Linkage
*Standard Lift Configuration





NOTE: Static tipping loads and operating weight are based on the following loader configuration: Triangle TB598 L4 Tires, Air Conditioning, Ride Control, Powertrain Guard, Full Fluids, Fuel Tank, Coolant, Lubricants, and Operator.

Specifications and ratings conform to the following standards: SAE* J1197, ISO 14397-1, CEN** EN 474-3.

The rated operating load for a loader equipped with a pallet fork is determined by:
SAE J1197: 50% of full turn static tipping load or hydraulic limit.
CEN EN 474-3: 60% of full turn static tipping load on rough terrain or hydraulic limit.
CEN EN 474-3: 80% of full turn static tipping load on firm and level ground or hydraulic limit.

*SAE - Society of Automotive Engineers
**CEN - European Committee for Standardization

NOTICE: Do not exceed tine load capacity. Individual tine capacity is stamped on the side of each tine.

Standard and Optional Equipment

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

	Standard	Optional
OPERATOR ENVIRONMENT		
Air conditioning (HVAC) with 10 vents and filter unit located outside of cab	✓	
Bucket/work tool function lockout	✓	
Cab, pressurized and sound suppressed	✓	
Camera, rearview	✓	
Computerized monitoring system	✓	
Mirrors, rearview external	✓	
Pilot hydraulic controls, lift and tilt function; two (2) single axis levers or joystick	✓	
12V power port (10A)	✓	
Radio ready	✓	
Radio: DAB+/AM/FM/BT		✓
Rollover protective structure/falling objects protective structure (ROPS/FOPS)	✓	
Seat, Cat® Comfort (cloth), mechanical suspension	✓	
Seat, high-back, air suspended		✓
Seat, air suspended, heated		✓
Steering column, adjustable angle	✓	
Steering, dual mode		✓
Steering, secondary, electrical*		✓
Switch, transmission neutralizer (adjustable) lockout	✓	
Window, sliding (left and right sides)	✓	
Wipers/washers (front and rear)	✓	
POWERTRAIN		
Axles, Open/Open differentials	✓	
Axles, limited slip differential(s)		✓
Axles, oil cooler		✓
Brakes, full hydraulic enclosed wet-disc	✓	
Cat C13A engine	✓	
Engine Idle Management System (EIMS)	✓	
Auto Idle Shutdown (AIS)	✓	
Fan, radiator, electronically controlled, hydraulically driven, temperature sensing, on demand	✓	
Fan, reversing automatic and manual control		✓
Filter, fuel primary/secondary	✓	
Fuel priming pump (electric)	✓	
Fuel/water separator	✓	
Radiator, unit core (9 fpi) with ATAAC	✓	
Torque converter	✓	
Transmission, powershift (4F/4R), automatic (2-4) with kick-down 2-1 manual	✓	
LINKAGE		
Quick coupler control		✓
Lift and bucket return-to-dig kickouts (electro-magnetic), mechanical adjustment	✓	
Z-bar, cast tilt lever	✓	

	Standard	Optional
HYDRAULICS		
Dedicated brake and fan pump	✓	
Dedicated load sensing steering pump	✓	
Load sensing implement system pilot operated	✓	
Ride control		✓
S·O·S℠ oil sampling valves	✓	
3rd function with additional dedicated single axis lever		✓
ELECTRICAL		
Alarm, back-up variable	✓	
Alternator (115-amp, brush type)	✓	
Batteries, maintenance free (2×1,400 CCA)	✓	
Ignition key; start/stop	✓	
Lighting system: 4 halogen work lights, cab mounted	✓	
Lighting system: 8 halogen work lights, cab mounted		✓
Lighting system: 4 or 8 LED work lights, cab mounted		✓
Lights: LED taillights	✓	
Lights: warning beacon		✓
Main disconnect switch	✓	
Roading lights with high/low beam and F and R turn signals	✓	
Starter, electric (heavy duty)	✓	
Starting and charging system, 24V	✓	
ADDITIONAL EQUIPMENT		
Autolube system		✓
Camera, front view		✓
Cat Payload**		✓
Cold weather starting		✓
Fender rear extensions or roading		✓
Hood, engine enclosure tilting	✓	
L5 traction tires		✓
L3 radial or bias ply tires	✓	
Powertrain guard		✓
Precleaner, strata tubes with screen		✓
Product Link™ ready	✓	
Reverse Strobes		✓
Steering cylinder guard		✓
Tilt cylinder guard		✓
Toolbox		✓
Variable backup alarm (3dB above ambient noise)	✓	
Windshield guard		✓

** Standard where mandated.*
*** Not legal for trade.*

980 GC Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit https://www.caterpillar.com/en/company/sustainability.

Engine

- Cat® engine meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3, EU Stage IIIA, and China Nonroad Stage III.
- Advertised power is tested per the specified standard in effect at the time of manufacture.
- The net power advertised is the power available at the flywheel when the engine is equipped with fan, alternator, air cleaner, and aftertreatment.
- Cat engines are compatible with* diesel fuel blended with following lower-carbon intensity fuels** up to:
  - 100% biodiesel FAME (fatty acid methyl ester)***
  - 100% renewable diesel, HVO (hydrotreated vegetable oil and GTL (gas-to- liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

* While Caterpillar engines are compatible with these alternative fuels, some regions may not allow their use.

** Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

*** For use of blends higher than 20% biodeisel, consult your Cat dealer.

Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a. See the label or instruction manual for identification of the gas.

*If equipped with R134a (Global Warning Potential = 1430), the system contains 1.8 kg of refrigerant which has a CO_2 equivalent of 2.571 metric tonnes (2.834 tons).

Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
  – Barium < 0.01%
  – Cadmium < 0.01%
  – Chromium < 0.01%
  – Lead < 0.01%

Sound

Operator Sound Pressure Level (ISO 6396:2008)	74 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	112 dB(A)
Operator Sound Pressure Level (ISO 6396:2008)	74 dB(A)*
Exterior Sound Power Level (ISO 6395:2008)	109 dB(A)**

*Including countries that adopt the EU and UK directives.

**EU Noise Directive 2000/14/EC and UK Noise Regulation 2001 No. 1701.

Oils and Fluids

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

Features and Technology

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
  – Engine Idle Management System and Auto Engine Idle Shutdown reduces idle RPM and maximizes fuel efficiency
  – Variable speed fan adjusts to meet machine cooling requirements to help save fuel
  – Load-sensing hydraulics produce flow and pressure on-demand and only in amounts necessary to perform the needed functions

Recycling

- The materials included in machines are categorized as below with approximate weight percentage. Because of variations of product configurations, the following values in the table may vary.

Material Type	Weight Percentage
Steel	67.24%
Iron	14.77%
Nonferrous Metal	1.01%
Mixed Metal	0.31%
Mixed-Metal and Nonmetal	0.65%
Plastic	0.85%
Rubber	10.49%
Mixed Nonmetallic	0.00%
Fluid	2.62%
Other	1.63%
Uncategorized	0.43%
Total	100%

- A machine with higher recyclability rate will ensure more efficient usage of valuable natural resources and enhance End-of-Life value of the product. According to ISO 16714 (Earthmoving machinery – Recyclability and recoverability – Terminology and calculation method), recyclability rate is defined as percentage by mass (mass fraction in percent) of the new machine potentially able to be recycled, reused, or both.

  All parts in the bill of material are first evaluated by component type based on a list of components defined by the ISO 16714 and Japan CEMA (Construction Equipment Manufacturers Association) standards. Remaining parts are further evaluated for recyclability based on material type.

  Because of variations of product configurations, the following value in the table may vary.

Recyclability – 97%

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

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

AEXQ4387-00 (06-2025)
Build number: 01B
(Afr-ME, Eurasia, S Am [excluding Chile, Colombia, Brazil], Aus-NZ, Asia, India, Indonesia)

CAT®