

988K XE

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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Engine		
Engine Model	Cat® C18	
Rated Speed	1,700 rpm	
Peak Power Speed	1,500 rpm	
Engine (ISO 14396:2002)	432 kW	580 hp
Gross (SAE J1995:2014)	439 kW	588 hp
Net Power (SAE J1349:2011)	401 kW	538 hp
Bore	145 mm	5.7 in
Stroke	183 mm	7.2 in
Displacement	18.1 L	1,105 in ³
Peak Torque (1,200 rpm) (SAE J1995:2014)	3023 N·m	2,230 lbf-ft
Torque Rise	58%	

- Meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan at minimum speed, air intake system, exhaust system, and alternator.

Transmission		
Transmission Type	Cat switched electric drive	
Forward 1 (virtual)	7.0 km/h	4.3 mph
Forward 2 (virtual)	11.3 km/h	7.0 mph
Forward 3 (virtual)	22.2 km/h	13.8 mph
Forward 4 (virtual)	32.1 km/h	20.0 mph
Reverse 1 (virtual)	7.0 km/h	4.3 mph
Reverse 2 (virtual)	11.3 km/h	7.0 mph
Reverse 3 (virtual)	28.2 km/h	17.5 mph

52 781 kg	116,362 lb
11.3 tonnes	12.5 tons
14.5 tonnes	16.0 tons
4.7-13.0 m ³	6.2-17.0 yd ²
EH-Positive I	Flow Control,
Variable disp piston	lacement
580 L/min	153 gal/min
32 800 kpa	4,757 psi
210 mm	8.7 in
1050 mm	41.3 in
266 mm	8.7 in
685 mm	27.0 in
4.5 seconds	
8.0 seconds	
2.2 seconds	
3.5 seconds	
	11.3 tonnes 14.5 tonnes 4.7-13.0 m³ EH-Positive Flow Sharing Variable disp piston 580 L/min 32 800 kpa 210 mm 1050 mm 266 mm 685 mm 4.5 seconds 8.0 seconds 2.2 seconds

18.2 seconds

Total Hydraulic Cycle Time

Hydraulic System – Steering			
Steering System – Circuit	Pilot, load se	ensing	
Steering System – Pump	Variable displacement piston		
Maximum Flow @ × 1,400-1,600 rpm	270 L/min	71.3 gal/min	
Steering Cut Off Pressure	30,000 kPa	4,351 psi	
Total Steering Angle	86°		
Steering Cycle Time (high idle)	3.4 seconds		
Steering Cycle Time (low idle)	5.6 seconds		

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.8 kg of refrigerant which has a CO_2 equivalent of 2.574 metric tonnes.

Axles	
Front	Fixed
Rear	Trunnion
Oscillation Angle	13°
Brakes	
Brakes	ISO 3450:2011
Operator Cab	
ROPS/FOPS	ROPS/FOPS meet
	ISO 3471:2008 and
	ISO 3449:2005 Level II

standards

Service Refill Capacities		
Fuel Tank	555 L	147.0 gal
Cooling System (jacket water)	112 L	30.0 gal
Cooling Systems (power train)	30 L	8.0 gal
Engine Crankcase	60 L	16.0 gal
Diesel Exhaust Fluid Tank	33 L	8.7 gal
Transmission	60 L	16.0 gal
Differentials and Final Drives – front	186 L	49.0 gal
Differentials and Final Drives – rear	186 L	49.0 gal
Hydraulic System – implement/steering	475 L	126.0 gal

- All nonroad Tier 4 Final/Stage V diesel engines are required to use:
- The machine has the flexibillity to run on either ultra-low-sulfur diesel fuel (ULSD with 15 ppm of sulfur or less).
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
 - ✓ 20% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrogenated 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.

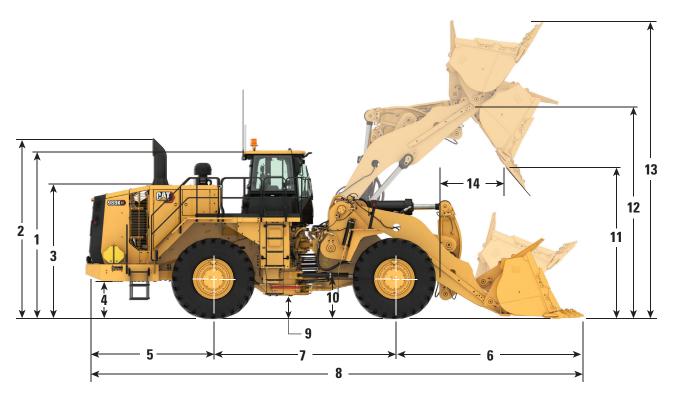
- *Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel.
- Cat DEO-ULS™ or oils that meet the Cat ECF-3, API CJ-4, and ACEA E9 specifications are required.
- Only use DEF that meets ISO 22241-1 standards.

Sound Performance – Tier 4 Final/Stage V Operator Sound Level (ISO 6396:2008) 72 dB(A) Machine Sound Level (ISO 6395:2008) 109 dB(A)*

- The operator sound pressure level was measured according to the test procedures and conditions specified in ISO 6396:2008.
 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.
- The machine sound power level was measured according to the test procedures and conditions specified in ISO 6395:2008.
 The measurement was conducted at 70 percent of the maximum engine cooling fan speed.
- * For machines in European Union countries and in countries that adopt the European Union Directive 2000/14/EC as amended by 2005/88/EC.

Dimensions

All dimensions are approximate.



	Standa	ard Lift	High	Lift
1 Ground to Top of ROPS	4202 mm	13.8 ft	4202 mm	13.8 ft
2 Ground to Top of Exhaust Stacks	4521 mm	14.8 ft	4521 mm	14.8 ft
3 Ground to Top of Hood	3334 mm	10.9 ft	3334 mm	10.9 ft
4 Ground to Bumper Clearance	933 mm	3.1 ft	933 mm	3.1 ft
5 Rear Axle Center Line to Bumper	3187 mm	10.5 ft	3187 mm	10.5 ft
6 Front Axle Center Line to Bucket Tip	4254 mm	14.0 ft	4661 mm	15.3 ft
7 Wheel Base	4550 mm	14.9 ft	4550 mm	14.9 ft
8 Maximum Overall Length	11 991 mm	39.3 ft	12 398 mm	40.7 ft
9 Ground to Lower Hitch Clearance	568 mm	1.9 ft	568 mm	1.9 ft
10 Ground to Center of Axles	978 mm	3.2 ft	978 mm	3.2 ft
11 Clearance at Maximum Lift (45° Dump)	3641 mm	11.9 ft	4043 mm	13.3 ft
12 B-Pin Height at Maximum Lift	5491 mm	18.0 ft	5887 mm	19.3 ft
13 Maximum Overall Height – Bucket Raised	7455 mm	24.5 ft	7849 mm	25.8 ft
14 Reach at Maximum Lift (45° Dump)	1981 mm	6.5 ft	2062 mm	6.8 ft

 $Note: Specifications \ are \ calculated \ with \ 6.9 \ m^3 \ (9.0 \ yd^3) \ rock \ bucket \ and \ Michelin \ XLDD2 \ with \ 978 \ mm \ (3.2 \ ft) \ centerline \ of \ rear \ axle \ height.$

Bucket Capacity/Material Density Selection Guide

Standard Lift/High Lift Rated Payload (Quarry Face) – 11.3 tonnes/12.5 tons

Material Density				Bucket	t Volume
kg/m³	lb/yd³	tonnes/m³	tons/yd³	m³	yd³
1468-1614	2,500-2,750	1.47-1.61	1.25-1.38	7.6	10.00
1638-1801	2,778-3,056	1.64-1.80	1.39-1.53	6.9	9.00
1766-1942	3,001-3,300	1.77-1.94	1.50-1.65	6.4	8.33

Standard Lift/High Lift

Rated Payload (Loose Material) – 14.5 tonnes/16 tons

	Material		Bucket	Volume	
kg/m³	lb/yd³	tonnes/m³	tons/yd³	m³	yd³
1510-1667	2,560-2,816	1.51-1.67	1.28-1.41	9.6	12.5
1726-1905	2,909-3,200	1.73-1.90	1.45-1.60	8.4	11.0
1908-2105	3,200-3,520	1.91-2.11	1.60-1.76	7.6	10.0

Note: Rated Payload is the material weight in the bucket that the loader is designed to carry, excluding the weight of the bucket, GET, and wear material. Rated Payloads are published at 100 percent, even though Caterpillar does allow 110 percent. These values are given in terms of mass. There is no consideration to loose density weights of various materials since they are so diverse. Refer to the Large Wheel Loader Payload Policy.

Aggregate Package Operating Specifications – Standard Lift

		988K X		j Tires: 35/65 R33 : 68 SLR: 978	XLDD2,
Bucket Type			General	Purpose	
Ground Engaging Tool			Segn	nents	
Cutting Edge Type				ight	
Bucket Part Number		472-0120	435-4029	347-4990	347-4980
Struck Capacity	m^3 yd^3	8.0 10.5	7.0 9.2	6.0 7.8	5.5 7.2
Heaped Capacity (Rated)	m^3 yd^3	9.6 12.5	8.4 11.0	7.6 10.0	6.9 9.0
Bucket Width	mm ft	3897 12.8	3897 12.8	3897	3897 12.8
Dump Clearance at Full Lift and 45° Discharge (Bare)	mm	3642	3741	12.8 3818	3902
Reach at Lift and 45° Discharge (Bare)	ft mm	11.9	12.3 1787	12.5 1722	12.8 1645
Reach with Lift Arms Horizontal and Bucket Level (Teeth)	ft	6.2	5.9	5.7	5.4
	mm	3917	3768	3668	3554
Digging Depth (Segment)	ft	12.9	12.4	12.0	11.7
	mm	200	208	200	195
Overall Length (Bucket Level Ground)	in	7.9	8.2	7.9	7.7
	mm	11 965	11 822	11 716	11 598
Overall Height with Bucket at Full Raise	ft	39.3	38.8	38.4	38.1
	mm	7830	7688	7591	7487
	ft	25.7	25.2	24.9	24.6
Loader Clearance Turning Circle (SAE Carry with Teeth)	mm	17 406	17 325	17 261	17 192
	ft	57.1	56.8	56.6	56.4
Full Dump Angle	degrees	50	50	50	50
Static Tipping Load Straight (Rigid Tire)*	kg	41 081	41 549	41 949	42 351
	lb	90,567	91,600	92,481	93,367
Static Tipping Load Straight (ISO) (Tire Squash)*	kg	38 427	38 947	39 358	39 783
	lb	84,718	85,863	86,769	87,707
Static Tipping Load – Full Turn (Articulated 35°) (Rigid Tire)*	kg	36 700	37 152	37 543	37 931
	lb	80,909	81,906	82,768	83,624
Static Tipping Load – Full Turn (Articulated 35°) (ISO) (Tire Squash)*	kg	32 635	33 158	33 565	33 987
	lb	71,948	73,100	73,998	74,928
Static Tipping Load – Full Turn (Articulated 43°) (Rigid Tire)*	kg	34 573	35 017	35 404	35 786
	lb	76,220	77,200	78,053	78,894
Static Tipping Load – Full Turn (Articulated 43°) (ISO) (Tire Squash)*	kg	30 105	30 624	31 026	31 441
	lb	66,370	67,514	68,401	69,316
Breakout Force**	kN	381	413	437	468
	lb	85,649	92,746	98,315	105,297
Operating Weight	kg	55 533	55 257	54 969	54 729
	lb	122,428	121,822	121,186	120,656
Weight Distribution at SAE Carry (Unloaded)	10	122,720	121,022	121,100	120,030
Front	kg	28 451	27 973	27 481	27 064
TOIL	lb	62,724	61,671	60,585	59,665
Rear	kg	27 081	27 284	27 488	27 665
	lb	59,704	60,151	60,602	60,992
Weight Distribution at SAE Carry (Loaded)			*	· · · · · · · · · · · · · · · · · · ·	
Front	kg	51 999	51 403	50 859	50 361
	lb	114,639	113,325	112,125	111,026
Rear	kg	18 048	18 369	18 625	18 883
	lb	39,790	40,497	41,062	41,631

^{*}Static tipping loads and operating weights include full fluids and 80 kg (176 lb) operator.

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

Full compliance to ISO 14397-1:2007.

Aggregate Package Operating Specifications – High Lift

Bucket Vipe Formula Engaing fool Segment Segmen			988K XE		g Tires: 35/65 R33 68 SLR: 978	XLDD2,
Cuting Edge Type 472-9120 435-4029 347-4980 347-4980 Struck Capacity m³ (10.5) 9.2 7.8 7.2 Heaped Capacity (Rated) m³ (10.5) 9.2 7.8 7.2 Bucket Width m³ (20.5) 11.0 10.0 9.0 Bucket Width mm 3897 3897 3897 Burp Clearance at Full Lift and 45° Discharge (Bare) mm 4035 4135 421 4296 Reach at Lift and 45° Discharge (Bare) mm 4055 4155 421 4296 Reach at Lift and 45° Discharge (Bare) mm 1876 1816 13.8 14.1 Reach at Lift and 45° Discharge (Bare) mm 1876 1816 13.8 14.1 Reach at Lift and 45° Discharge (Bare) mm 1876 1816 13.8 14.1 Reach at Lift and 45° Discharge (Bare) mm 1876 1811 1734 Reach with Lift Arms Horizontal and Bucket Level (Teeth) mm 4266 4107 407 307 5.7	Bucket Type			General	Purpose	
Bucket Part Number	Ground Engaging Tool			Segr	nents	
Bucket Part Number						
Heaped Capacity (Rated)			472-0120			347-4980
Heaped Capacity (Rated)	Struck Capacity	m^3	8.0	7.0	6.0	5.5
Bucket Width			10.5	9.2	7.8	7.2
Bucket Width	Heaped Capacity (Rated)					
Dump Clearance at Full Lift and 45° Discharge (Bare) mm 4035 4135 4211 4296 13.2 13.6 13.8 14.1 14.2 13.2 13.6 13.8 14.1 14.2 13.2 13.6 13.8 14.1 14.2 13.2 13.6 13.8 14.1 14.2 13.2 13.6 13.8 14.1 14.2 13.2 13.6 13.8 14.1 14.2 13.5 13.1 12.8 14.1 14.2 14.2 14.0 13.5 13.1 12.8 14.2 14.		yd³				
Dump Clearance at Full Lift and 45° Discharge (Bare) mm 4035 4135 4211 4296 13.2 13.6 13.8 14.1 13.2 13.6 13.8 14.1 13.4 13.2 13.6 13.8 14.1 13.4 13.5 13.6 13.8 14.1 17.34 13.6 13.8 14.1 17.34 13.6 13.8 14.1 17.34 13.6 13.8 14.1 17.34 14.0 13.5 13.1 17.34 14.0 13.5 13.1 12.8 13.6 13.8 13.1 12.8 13.6 13.8 13.1 12.8 13.6 13.8 13.1 12.8 13.5 13.1 13.5 13.1 12.8 13.5 13.1 13.5 13.1 12.8 13.5 13.1 13.5 13.1 13.5 13.5 13.1 13.5 13.5 13.1 13.5 13.5 13.1 13.5 13.5 13.1 13.5 13.5 13.1 13.5 13.5 13.1 13.5 13.5 13.1 13.5	Bucket Width					
Reach at Lift and 45° Discharge (Bare)						
Reach at Lift and 45° Discharge (Bare)	Dump Clearance at Full Lift and 45° Discharge (Bare)					
Reach with Lift Arms Horizontal and Bucket Level (Teeth) mm 4256 4107 4007 3893 14.0 13.5 13.1 12.8 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.8 14.0 13.5 13.1 12.2 12.005 14.0	D 1 +1'C 1450 D' 1 (D)	-				
Reach with Lift Arms Horizontal and Bucket Level (Teeth) mm 4256 4107 4007 3893	Reach at Lift and 45° Discharge (Bare)					
Digging Depth (Segment)	D 1'41. L'C. A II'					
Digging Depth (Segment) nmm 219 227 219 214	Reach with Lift Arms Horizontal and Bucket Level (Teeth)					
New Part Common	Digging Double (Sagmont)					
Overall Length (Bucket Level Ground) mm ft 12 371 12 227 12 122 12 005 Overall Height with Bucket at Full Raise mm 8224 8082 7985 7881 Loader Clearance Turning Circle (SAE Carry with Teeth) mm 17 741 17 660 17 595 17 525 Full Dump Angle degrees 50 50 50 50 Static Tipping Load Straight (Rigid Tire)* kg 41 325 41 734 42 110 42 474 Static Tipping Load Straight (ISO) (Tire Squash)* kg 32 825 39 289 39 678 40 068 Static Tipping Load - Full Turn (Articulated 35°) (Rigid Tire)* kg 36 750 37 149 37 518 37 871 Static Tipping Load - Full Turn (Articulated 35°) (ISO) kg 36 750 37 149 37 518 37 871 Static Tipping Load - Full Turn (Articulated 35°) (ISO) kg 34 529 34 93 35 289 39 678 40 068 Kg 34 529 34 943 35 289 39 678 40 068 40 068 40 068 40 068 40 068	Digging Depth (Segment)					
Overall Height with Bucket at Full Raise mm mm mm ft 227, 226,5 26,5 26,2 25,9 Loader Clearance Turning Circle (SAE Carry with Teeth) ft 58.2 mm mm ft 7,741 17,600 17,595 17,525 Full Dump Angle degrees 50 50 50 50 Static Tipping Load Straight (Rigid Tire)* kg 41,325 41,734 42,110 42,474 Static Tipping Load Straight (ISO) (Tire Squash)* kg 32,825 39,289 39,678 40,068 Static Tipping Load Straight (ISO) (Tire Squash)* kg 32,825 39,289 39,678 40,068 Static Tipping Load – Full Turn (Articulated 35°) (Rigid Tire)* kg 36,750 37,149 37,518 37,871 Static Tipping Load – Full Turn (Articulated 35°) (ISO) kg 32,691 33,166 33,554 33,944 (Tire Squash)* kg 34,529 34,949 37,518 37,713 37,483 Static Tipping Load – Full Turn (Articulated 43°) (Rigid Tire)* kg 34,529 34,949 32,713 38,349 Static Tipping Load – Full Turn (Articulated 43°) (Rigid Tire)* kg 34,529 34,949 37,973 74,833	Overall Length (Rucket Level Ground)					
Overall Height with Bucket at Full Raise mm ft 8224 ft 8082 26.5 7885 26.2 25.9 Loader Clearance Turning Circle (SAE Carry with Teeth) ft mm 17741 17660 17595 17.55 17.525 17.525 Full Dump Angle degrees 50 50 50 50 Static Tipping Load Straight (Rigid Tire)* kg 41.325 41.734 42.110 42.474 42.474 Static Tipping Load Straight (ISO) (Tire Squash)* kg 32.825 39.289 39.678 40.068 40.088 Static Tipping Load Frull Turn (Articulated 35°) (Rigid Tire)* kg 36.750 37.149 37.518 37.871 37.518 37.871 Static Tipping Load – Full Turn (Articulated 35°) (Rigid Tire)* kg 36.750 37.149 37.518 37.871 37.518 37.973 74.833 Static Tipping Load – Full Turn (Articulated 35°) (Rigid Tire)* kg 32.691 33.166 33.554 33.944 33.944 (Tire Squash)* lb 72.072 73.118 73.973 74.833 74.833 Static Tipping Load – Full Turn (Articulated 43°) (Rigid Tire)* kg 33.022 34.529 35.289 35.636 35.636 Static Tipping Load – Full Turn (Articulated 43°) (Rigid Tire)* kg 30.027 30.502 30.888 31.276 30.888 31.276 Gries Q	Overall Length (Bucket Level Glound)					
The color of the	Overall Height with Rucket at Full Raise	-				
Loader Clearance Turning Circle (SAE Carry with Teeth) mm ft ft 58.2 57.9 57.7 57.5	Overan Height with Ducket at I an Raise					
Full Dump Angle degres 50 50.0 50.0 50.0 Static Tipping Load Straight (Rigid Tire)* kg 41 325 41 734 42 110 42 474 Static Tipping Load Straight (ISO) (Tire Squash)* kg 31 825 39 289 39 678 40 068 Static Tipping Load Straight (ISO) (Tire Squash)* kg 32 825 39 289 39 678 40 068 Static Tipping Load - Full Turn (Articulated 35°) (Rigid Tire)* kg 36 750 37 149 37 518 37 871 Static Tipping Load - Full Turn (Articulated 35°) (ISO) kg 32 691 33 166 33 554 33 944 (Tire Squash)* lb 72,072 73,118 73,973 74,833 Static Tipping Load - Full Turn (Articulated 43°) (Rigid Tire)* kg 34 529 34 923 35 289 35 636 Static Tipping Load - Full Turn (Articulated 43°) (Rigid Tire)* kg 30 027 30 502 30 888 31 276 Static Tipping Load - Full Turn (Articulated 43°) (ISO) kg 30 027 30 502 30 888 31 276 Grire Squash)* <td< td=""><td>Loader Clearance Turning Circle (SAE Carry with Teeth)</td><td></td><td></td><td></td><td></td><td></td></td<>	Loader Clearance Turning Circle (SAE Carry with Teeth)					
Full Dump Angle	Zoudor crourumou rummig chiefe (criz curry with rectin)					
Static Tipping Load Straight (Rigid Tire)* kg 41 325 41 734 42 110 42 474	Full Dump Angle	degrees	50	50	50	
Static Tipping Load Straight (ISO) (Tire Squash)* kg 32 825 39 289 39 678 40 068 85.594 86,616 87,475 88,334 85 tatic Tipping Load – Full Turn (Articulated 35°) (Rigid Tire)* kg 36 750 37 149 37 518 37 871 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491 81,020 81,899 82,713 83,491				41 734	42 110	
Static Tipping Load - Full Turn (Articulated 35°) (Rigid Tire)* kg						
Static Tipping Load - Full Turn (Articulated 35°) (Rigid Tire)* kg	Static Tipping Load Straight (ISO) (Tire Squash)*	kg	32 825	39 289	39 678	40 068
Static Tipping Load - Full Turn (Articulated 35°) (ISO) kg 32 691 33 166 33 554 33 944 (Tire Squash)* 1b 72,072 73,118 73,973 74,833 Static Tipping Load - Full Turn (Articulated 43°) (Rigid Tire)* kg 34 529 34 923 35 289 35 636			85,594	86,616	87,475	88,334
Static Tipping Load - Full Turn (Articulated 35°) (ISO) kg 32 691 33 166 33 554 33 944 (Tire Squash)* 1b 72,072 73,118 73,973 74,833 Static Tipping Load - Full Turn (Articulated 43°) (Rigid Tire)* kg 34 529 34 923 35 289 35 636 Ib 76,124 76,991 77,798 78,565 Static Tipping Load - Full Turn (Articulated 43°) (ISO) kg 30 027 30 502 30 888 31 276 (Tire Squash)* 1b 66,198 67,245 68,096 68,951 Breakout Force** kN 350 380 403 431 Ib 78,782 85,375 90,534 97,000 Operating Weight kg 58 463 58 187 57 899 57 659 Ib 128,888 128,281 127,646 127,116 Weight Distribution at SAE Carry (Unloaded) Front kg 29 963 30 187 30 413 30 608 Rear kg 29 963 30 187 30 413 30 608 Bo 66,058 66,551 67,049 67,478 Weight Distribution at SAE Carry (Loaded) Front kg 53 223 52 622 52 063 51 558 Bo 117,335 116,013 114,779 113,665 Rear kg 19 755 20 080 20 351 20 616 Rear kg 19 755 20 080 20 351 20 616 Contact Co	Static Tipping Load – Full Turn (Articulated 35°) (Rigid Tire)*	kg				
(Tire Squash)* Ib 72,072 73,118 73,973 74,833 Static Tipping Load – Full Turn (Articulated 43°) (Rigid Tire)* kg 34 529 34 923 35 289 35 636 Static Tipping Load – Full Turn (Articulated 43°) (ISO) kg 30 027 30 502 30 888 31 276 (Tire Squash)* lb 66,198 67,245 68,096 68,951 Breakout Force** kN 350 380 403 431 lb 78,782 85,375 90,534 97,000 Operating Weight kg 58 463 58 187 57 899 57 659 lb 128,888 128,281 127,646 127,116 Weight Distribution at SAE Carry (Unloaded) Front kg 28 499 28 001 27 486 27 051 lb 62,830 61,731 60,597 59,638 Rear kg 29 963 30 187 30 413 30 608 Weight Distribution at SAE Carry (Loaded) kg 53 223 52 622		lb				83,491
Static Tipping Load – Full Turn (Articulated 43°) (Rigid Tire)* kg 34 529 34 923 35 289 35 636 Static Tipping Load – Full Turn (Articulated 43°) (ISO) kg 30 027 30 502 30 888 31 276 (Tire Squash)* lb 66,198 67,245 68,096 68,951 Breakout Force** kN 350 380 403 431 lb 78,782 85,375 90,534 97,000 Operating Weight kg 58 463 58 187 57 899 57 659 Weight Distribution at SAE Carry (Unloaded) kg 28 499 28 001 27 486 27 051 Rear kg 29 963 30 187 30 413 30 608 Weight Distribution at SAE Carry (Loaded) kg 29 963 30 187 30 413 30 608 Front kg 53 223 52 622 52 063 51 558 Beight Distribution at SAE Carry (Loaded) kg 53 223 52 622 52 063 51 558 Rear kg 117,335 116,0						
Static Tipping Load - Full Turn (Articulated 43°) (ISO) kg 30 027 30 502 30 888 31 276 (Tire Squash)* lb 66,198 67,245 68,096 68,951						
Static Tipping Load – Full Turn (Articulated 43°) (ISO) kg 30 027 30 502 30 888 31 276 (Tire Squash)* lb 66,198 67,245 68,096 68,951 Breakout Force** kN 350 380 403 431 lb 78,782 85,375 90,534 97,000 Operating Weight kg 58 463 58 187 57 899 57 659 lb 128,888 128,281 127,646 127,116 Weight Distribution at SAE Carry (Unloaded) Front kg 28 499 28 001 27 486 27 051 lb 62,830 61,731 60,597 59,638 Rear kg 29 963 30 187 30 413 30 608 lb 66,058 66,551 67,049 67,478 Weight Distribution at SAE Carry (Loaded) Front kg 53 223 52 622 52 063 51 558 lb 117,335 116,013 114,779 113,665 <	Static Tipping Load – Full Turn (Articulated 43°) (Rigid Tire)*					
(Tire Squash)* lb 66,198 67,245 68,096 68,951 Breakout Force** kN 350 380 403 431 Ib 78,782 85,375 90,534 97,000 Operating Weight kg 58 463 58 187 57 899 57 659 Ib 128,888 128,281 127,646 127,116 Weight Distribution at SAE Carry (Unloaded) kg 28 499 28 001 27 486 27 051 Ib 62,830 61,731 60,597 59,638 Rear kg 29 963 30 187 30 413 30 608 Ib 66,058 66,551 67,049 67,478 Weight Distribution at SAE Carry (Loaded) Exp 53 223 52 622 52 063 51 558 Ib 117,335 116,013 114,779 113,665 Rear kg 19 755 20 080 20 351 20 616						
Breakout Force** kN 350 380 403 431 Operating Weight kg 58 463 58 187 57 899 57 659 Operating Weight kg 58 463 58 187 57 899 57 659 Ib 128,888 128,281 127,646 127,116 Weight Distribution at SAE Carry (Unloaded) Rear kg 28 499 28 001 27 486 27 051 Ib 62,830 61,731 60,597 59,638 Rear kg 29 963 30 187 30 413 30 608 Weight Distribution at SAE Carry (Loaded) 8 53 223 52 622 52 063 51 558 Ib 117,335 116,013 114,779 113,665 Rear kg 19 755 20 080 20 351 20 616						
Departing Weight Reg S8 463 S8 187 57 899 57 659						
Operating Weight kg 58 463 58 187 57 899 57 659 Weight Distribution at SAE Carry (Unloaded) Front kg 28 499 28 001 27 486 27 051 Bear kg 29 963 30 187 30 413 30 608 Weight Distribution at SAE Carry (Loaded) b 66,058 66,551 67,049 67,478 Weight Distribution at SAE Carry (Loaded) kg 53 223 52 622 52 063 51 558 Ib 117,335 116,013 114,779 113,665 Rear kg 19 755 20 080 20 351 20 616	Breakout Force**					
No. No.	O d William					
Weight Distribution at SAE Carry (Unloaded) Front kg 28 499 28 001 27 486 27 051 Bear kg 29 963 30 187 30 413 30 608 Weight Distribution at SAE Carry (Loaded) b 66,058 66,551 67,049 67,478 Front kg 53 223 52 622 52 063 51 558 Bear kg 117,335 116,013 114,779 113,665 Rear kg 19 755 20 080 20 351 20 616	Operating Weight	kg		58 187		
Front kg 28 499 28 001 27 486 27 051 Ib 62,830 61,731 60,597 59,638 Rear kg 29 963 30 187 30 413 30 608 Ib 66,058 66,551 67,049 67,478 Weight Distribution at SAE Carry (Loaded) kg 53 223 52 622 52 063 51 558 Ib 117,335 116,013 114,779 113,665 Rear kg 19 755 20 080 20 351 20 616	Willed Distribution of CAT Comme (United 4.4)	10	120,000	120,201	127,040	127,110
Rear kg 29 963 30 187 30 413 30 608 Weight Distribution at SAE Carry (Loaded) kg 53 223 52 622 52 063 51 558 Rear kg 117,335 116,013 114,779 113,665 Rear kg 19 755 20 080 20 351 20 616		1	20, 400	20.001	27.406	27.051
Rear kg lb 29 963 20 963 20 963 20 963 20 963 20 963 20 20 963 20 963 20 963 20 20 20 20 20 20 20 20 20 20	FIONL	Kg 1h				
Weight Distribution at SAE Carry (Loaded) kg 53 223 52 622 52 063 51 558 Front lb 117,335 116,013 114,779 113,665 Rear kg 19 755 20 080 20 351 20 616	Door					
Weight Distribution at SAE Carry (Loaded) Front kg 53 223 52 622 52 063 51 558 lb 117,335 116,013 114,779 113,665 Rear kg 19 755 20 080 20 351 20 616	NC41					
Front kg 53 223 52 622 52 063 51 558 lb 117,335 116,013 114,779 113,665 Rear kg 19 755 20 080 20 351 20 616	Weight Distribution at SAE Carry (Loaded)	10	00,030	00,551	07,077	07,770
Ib 117,335 116,013 114,779 113,665 Rear kg 19 755 20 080 20 351 20 616		kα	52 222	52 622	52.062	51 550
Rear kg 19 755 20 080 20 351 20 616	I IUIIt					
	Rear					
	1000	lb	43,552	44,269	44,867	45,451

^{*}Static tipping loads and operating weights include full fluids and 80 kg (176 lb) operator.

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

Full compliance to ISO 14397-1:2007.

Operating Specifications – Standard Lift

		988K X	E Std Lift Ti	res: 35/65 F	33 XLDD2,	PN: 399-456	8 SLR: 978
Bucket Type			Purpose		Rock		HD Rock
Ground Engaging Tool		Adapters	or BOCE	X130	X130	X130	X130
Cutting Edge Type		Straight	Straight	Spade	Spade	Spade	Spade
Bucket Part Number		347-4990	347-4980	498-9992	498-9990	498-9988	498-9994
Struck Capacity	m³ yd³	6.0 7.8	5.5 7.2	6.5 8.5	5.5 7.2	5.0 6.5	5.0 6.5
Heaped Capacity (Rated)	m ³ yd ³	7.6 10.0	6.9 9.0	7.6 10.0	6.9 9.0	6.4 8.3	6.4 8.3
Bucket Width	mm	3897	3897	4020	4020	4020	4080
Dump Clearance at Full Lift and 45° Discharge (Bare)	ft mm	12.8 3818	12.8 3902	13.2 3603	13.2 3681	13.2 3736	13.4 3722
Dump Clearance at Full Lift and 45° Discharge (with Teeth)	ft mm	12.5	12.8	11.8 3414	12.1 3492	12.3 3547	12.2 3520
Reach at Lift and 45° Discharge (Bare)	ft	1722	1645	11.2	11.5 1858	11.6	11.5 1816
	mm ft	5.7	5.4	6.4	6.1	5.9	6.0
Reach at Lift and 45° Discharge (with Teeth)	mm ft	_	_	2117 6.9	2040 6.7	1984 6.5	1989 6.5
Reach with Lift Arms Horizontal and Bucket Level (Teeth)	mm ft	3668 12.0	3554 11.7	4233 13.9	4123 13.5	4045 13.3	4067 13.3
Digging Depth (Segment)	mm in	200 7.9	195 7.7	201 7.9	201 7.9	201 7.9	201 7.9
Overall Length (Bucket Level Ground)	mm	11 716	11 598	12 281	12 171	12 093	12 115
Overall Height with Bucket at Full Raise	ft mm	38.4 7591	38.1 7488	40.3 7557	39.9 7455	39.7 7381	39.7 7384
Loader Clearance Turning Circle (SAE Carry with Teeth)	ft mm	24.9 17 261	24.6 17 192	24.8 17 429	24.5 17 366	24.2 17 321	24.2 17 344
	ft	56.6	56.4	57.2	57.0	56.8	56.9
Full Dump Angle	degrees	49.8	49.8	49.8	49.8	49.8	50
Static Tipping Load Straight (Rigid Tire)*	kg lb	36 029 79,430	36 412 80,276	35 067 77,309	35 604 78,494	35 651 78,597	34 592 76,262
Static Tipping Load Straight (ISO) (Tire Squash)*	kg lb	33 859 74,646	34 261 75,533	32 922 72,580	33 477 73,804	33 543 73,949	32 494 71,636
Static Tipping Load – Full Turn (Articulated 35°) (Rigid Tire)*	kg lb	32 325 71,263	32 697 72,084	31 377 69,175	31 906 70,340	31 946 70,430	30 888 68,097
Static Tipping Load – Full Turn (Articulated 35°) (ISO)	kg	29 081	29 478	28 164	28 716	28 783	27 738
(Tire Squash)* Static Tipping Load – Full Turn (Articulated 43°) (Rigid Tire)*	lb kg	64,112 30 526	64,989 30 893	62,090 29 586	63,309 30 110	63,455 30 148	61,152 29 090
Static Tipping Load – Full Turn (Articulated 43°) (ISO)	lb kg	67,299 26 961	68,108 27 355	65,225 26 053	66,381 26 603	66,465 26 668	64,133 25 626
(Tire Squash)*	lb	59,439	60,308	57,437	58,650	58,793	56,495
Breakout Force**	kN lb	437 98,315	468 105,297	371 83,329	394 88,591	410 92,170	402 90,383
Operating Weight	kg lb	52 334 115,377	52 094 114,847	52 902 116,628	52 559 115,872	52 531 115,810	53 510 117,969
Weight Distribution at SAE Carry (Unloaded)		110,011	11.,017	110,020	110,072	110,010	11,,,,,,,,
Front	kg	28 687	28 270	29 779	29 144	29 118	30 717
Rear	lb kg	63,245 23 647	62,325 23 824	65,652 23 122	64,252 23 414	64,194 23 413	67,719 22 793
Weight Distribution at SAE Carry (Loaded)	lb	52,132	52,523	50,976	51,619	51,616	50,250
Front	kg lb	46 947 103,501	46 467 102,441	48 073 105,984	47 382 104,460	47 317 104,317	48 922 107,854
Rear	kg	16 727	16 967	16 168	16 516	16 553	15 928
	lb	36,877	37,406	35,645	36,412	36,493	35,115

^{*}Static tipping loads and operating weights include full fluids and 80 kg (176 lb) operator.

**Measured 100 mm (4") behind tip of cutting edge with bucket hinge pin as pivot point in accordance with ISO 14397-2:2007. Full compliance to ISO 14397-1:2007.

Operating Specifications – High Lift

Carbin Edge Type			988K XE	High Lift T	ires: 35/65	R33 XLDD2	, PN: 399-45	68 SLR: 978
Straight Straight Straight Spade Spa	Bucket Type			<u> </u>				
Struck Capacity	Ground Engaging Tool		Adapters	or BOCE	X130	X130	X130	X130
Struck Capacity	Cutting Edge Type		Straight	Straight	Spade	Spade	Spade	Spade
Map	Bucket Part Number		347-4990		498-9992	498-9990	498-9988	498-9994
Heaped Capacity (Rated)	Struck Capacity							
Bucket Width								
Bucket Width	Heaped Capacity (Rated)							
March Marc	Dualest Width							
Dump Clearance at Full Lift and 45° Discharge (Bare) mm ft 13.8 14.1 13.4 13.5	bucket width							
March Marc	Dump Clearance at Full Lift and 45° Discharge (Bare)							
Reach at Lift and 45° Discharge (Bare)	F							
Reach at Lift and 45° Discharge (Bare)	Dump Clearance at Full Lift and 45° Discharge (with Teeth)			_				
Reach at Lift and 45° Discharge (with Teeth)		ft						
Reach at Lift and 45° Discharge (with Teeth) mm mm mm mm mm mm mm	Reach at Lift and 45° Discharge (Bare)							
Reach with Lift Arms Horizontal and Bucket Level (Teeth) mm 4007 3893 4572 4462 4384 4406 14.4 14.5 15.0 14.6 14.4 14.5 15.0 14.6 14.4 14.5 15.0 14.6 14.4 14.5 15.0 14.6 14.4 14.5 15.0 14.6 14.4 14.5 15.0 14.6 14.4 14.5 15.0 14.6 14.4 14.5 15.0 14.6 14.4 14.5 15.0 14.6 14.4 14.5 15.0 14.6 14.4 14.5 15.0 14.6 14.4 14.5 15.0 14.6 14.3 14.0 14.1 14.5 15.0 14.6 14.3 14.0 14.1 14.5 14.1	D 1 (1'0 1470D' 1 (''1 T 4)							
Reach with Lift Arms Horizontal and Bucket Level (Teeth) ft 13.1 12.8 15.0 14.6 14.4 14.5	Reach at Lift and 45° Discharge (with Teeth)							
Properties Pro	Reach with Lift Arms Horizontal and Bucket Level (Teeth)		4007					
Digging Depth (Segment) mm 219 214 220 225	reach with Entrims Horizontal and Backet Ector (reeth)							
Overall Length (Bucket Level Ground) mm ft 12 122 12 12 005 12 688 12 678 12 578 12 500 12 521 41.0 41.3 41.0 41.3 41.0 41.1 41.1 41.0 41.1 41.1 41.0 41.1 41.1 41.0 41.1	Digging Depth (Segment)	mm	219					
Overall Height with Bucket at Full Raise ft mm mm mm ft color (a.g.) 39.8 mm year. 39.4 mm year. 41.6 year. 41.3 mm year. 41.0 year. 41.1 year. 41.2 ye		in		8.4	8.7	8.7	8.7	8.7
Overall Height with Bucket at Full Raise mm ft 7985 (2.2 25.9) 7881 (25.2 25.9) 7851 (25.7 25.5) 7775 (25.5 25.5) 25.5 25.5 Loader Clearance Turning Circle (SAE Carry with Teeth) mm ft 17.595 (17.525) 17.763 (17.699) 17.654 (17.69) 18.60 (17.69) <td< td=""><td>Overall Length (Bucket Level Ground)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Overall Length (Bucket Level Ground)							
The conder Clearance Turning Circle (SAE Carry with Teeth)								
Loader Clearance Turning Circle (SAE Carry with Teeth) mm ft 57.7 57.5 17.525 17.763 17.699 17.654 17.678 17.678 17.575 58.3 58.1 57.9 58.0 50 50 50 50 50 50 50	Overall Height with Bucket at Full Raise							
ft	Looder Cleanance Transics Circle (CAE Communistic Teeth)							
Full Dump Angle Static Tipping Load Straight (Rigid Tire)* kg 33 846 34 190 32 933 33 427 33 456 32 402 1b 74,617 75,377 72,605 73,695 73,757 71,434 18 15 15 15 15 18 18 19 18 18 19 18 18 18 18 18 18 18 18 18 18 18 18 18	Loader Clearance Turning Circle (SAE Carry with Teetn)							
Static Tipping Load Straight (Rigid Tire)* kg 33 846 34 190 32 933 33 427 33 456 32 402	Full Dumn Angle							
1b								
Static Tipping Load Straight (ISO) (Tire Squash)* kg 18 1957 32 321 31 063 31 576 31 622 30 577 70,453 71,256 68,482 69,613 69,715 67,411	State Tipping Load Straight (Tagle Tite)							
Static Tipping Load - Full Turn (Articulated 35°) (Rigid Tire)* kg 30 229 30 566 29 329 29 818 29 842 28 790 1b 66,644 67,386 64,660 65,737 65,790 63,470 63,470 64,660 65,737 65,790 63,470 63,470 64,660 65,737 65,790 63,470 63,470 64,660 65,737 65,790 63,470 63,470 64,660 65,737 65,790 63,470 63,470 60,121 60,923 58,187 59,323 59,432 57,139 60,121 60,923 58,187 59,323 59,432 57,139 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923 59,604 62,774 63,507 60,803 61,873 61,923	Static Tipping Load Straight (ISO) (Tire Squash)*	kg						
Static Tipping Load - Full Turn (Articulated 35°) (ISO) kg 27 271 27 634 26 393 26 908 26 958 25 918		1b						
Static Tipping Load – Full Turn (Articulated 35°) (ISO) kg 27 271 27 634 26 393 26 908 26 958 25 918 (Tire Squash)* Ib 60,121 60,923 58,187 59,323 59,432 57,139 Static Tipping Load – Full Turn (Articulated 43°) (Rigid Tire)* kg 28 474 28 806 27 580 28 065 28 088 27 036 Static Tipping Load – Full Turn (Articulated 43°) (ISO) kg 25 199 25 559 24 330 24 842 24 891 23 852 (Tire Squash)* lb 55,554 56,347 53,639 54,768 54,874 52,584 Breakout Force** kN 403 431 341 363 377 370 Operating Weight kg 53 806 53 566 54 374 54 031 54 003 54 982 Weight Distribution at SAE Carry (Unloaded) kg 29 321 28 886 30 458 29 797 29 770 31 454 Rear kg 24 485 24 680 23 916 24 234 24 233	Static Tipping Load – Full Turn (Articulated 35°) (Rigid Tire)*	kg						
(Tire Squash)* Ib 60,121 60,923 58,187 59,323 59,432 57,139 Static Tipping Load – Full Turn (Articulated 43°) (Rigid Tire)* kg 28 474 28 806 27 580 28 065 28 088 27 036 Static Tipping Load – Full Turn (Articulated 43°) (ISO) kg 25 199 25 559 24 330 24 842 24 891 23 852 (Tire Squash)* lb 55,554 56,347 53,639 54,768 54,874 52,584 Breakout Force** kN 403 431 341 363 377 370 Operating Weight kg 53 806 53 566 54 374 54 031 54 003 54 982 Weight Distribution at SAE Carry (Unloaded) kg 29 321 28 886 30 458 29 797 29 770 31 454 Rear kg 24 485 24 680 23 916 24 234 24 233 23 528 Weight Distribution at SAE Carry (Loaded) kg 48 518 48 028 49 689 48 979 48 919 50 609 <td>G</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	G							
Static Tipping Load – Full Turn (Articulated 43°) (Rigid Tire)* kg lb 28 474 28 806 27 580 28 065 28 088 27 036 Static Tipping Load – Full Turn (Articulated 43°) (ISO) kg 25 199 25 559 24 330 24 842 24 891 23 852 (Tire Squash)* lb 55,554 56,347 53,639 54,768 54,874 52,584 Breakout Force** kN 403 431 341 363 377 370 Operating Weight kg 53 806 53 566 54 374 54 031 54 003 54 982 Weight Distribution at SAE Carry (Unloaded) kg 29 321 28 886 30 458 29 797 29 770 31 454 Rear kg 24 485 24 680 23 916 24 234 24 233 23 528 Weight Distribution at SAE Carry (Loaded) kg 24 485 24 680 23 916 24 234 24 233 23 528 Weight Distribution at SAE Carry (Loaded) kg 48 518 48 028 49 689 48 979 48		kg 1h						
Static Tipping Load - Full Turn (Articulated 43°) (ISO) kg 25 199 25 559 24 330 24 842 24 891 23 852 (Tire Squash)* lb 55,554 56,347 53,639 54,768 54,874 52,584 Breakout Force** kN 403 431 341 363 377 370 Breakout Force** kg 53 806 53 566 54 374 54 031 54 003 54 982 Breakout Distribution at SAE Carry (Unloaded) Eront kg 29 321 28 886 30 458 29 797 29 770 31 454 Rear kg 24 485 24 680 23 916 24 234 24 233 23 528 Breakout Force** kg 48 518 48 028 49 689 48 979 48 919 50 609 Broakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** kg 16 628 16 878 16 025 16 391 16 423 15 712 Breakout Force** 48 028 49 689 48 979								
Static Tipping Load – Full Turn (Articulated 43°) (ISO) kg 25 199 25 559 24 330 24 842 24 891 23 852 (Tire Squash)* lb 55,554 56,347 53,639 54,768 54,874 52,584 Breakout Force** kN 403 431 341 363 377 370 lb 90,534 97,000 76,633 81,539 84,840 83,123 Operating Weight kg 53 806 53 566 54 374 54 031 54 003 54 982 Weight Distribution at SAE Carry (Unloaded) kg 29 321 28 886 30 458 29 797 29 770 31 454 Rear kg 24 485 24 680 23 916 24 234 24 233 23 528 lb 53,980 54,410 52,725 53,424 51,870 Weight Distribution at SAE Carry (Loaded) 8g 48 518 48 028 49 689 48 979 48 919 50 609 Front kg 48 518 48 028 49 689	Static Tipping Load – Full Turn (Articulated 45) (Rigid Tile)							
(Tire Squash)* lb 55,554 56,347 53,639 54,768 54,874 52,584 Breakout Force** kN 403 431 341 363 377 370 Operating Weight kg 53 806 53 566 54 374 54 031 54 003 54 982 Weight Distribution at SAE Carry (Unloaded) kg 29 321 28 886 30 458 29 797 29 770 31 454 Rear kg 24 485 24 680 23 916 24 234 24 233 23 528 Weight Distribution at SAE Carry (Loaded) kg 24 485 24 680 23 916 24 234 24 233 23 528 Weight Distribution at SAE Carry (Loaded) kg 48 518 48 028 49 689 48 979 48 919 50 609 Front kg 48 518 48 028 49 689 48 979 48 919 50 609 Brear kg 106,963 105,883 109,545 107,980 107,848 111,575 Rear kg <td< td=""><td>Static Tipping Load – Full Turn (Articulated 43°) (ISO)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Static Tipping Load – Full Turn (Articulated 43°) (ISO)							
Rear	(Tire Squash)*							
Operating Weight kg 53 806 53 566 54 374 54 031 54 003 54 982 Weight Distribution at SAE Carry (Unloaded) Front kg 29 321 28 886 30 458 29 797 29 770 31 454 Bear kg 24 485 24 680 23 916 24 234 24 233 23 528 Weight Distribution at SAE Carry (Loaded) kg 48 518 48 028 49 689 48 979 48 919 50 609 Front kg 48 518 48 028 49 689 48 979 48 919 50 609 Rear kg 16 628 16 878 16 025 16 391 16 423 15 712	Breakout Force**							
B								
Weight Distribution at SAE Carry (Unloaded) Front kg 29 321 28 886 30 458 29 797 29 770 31 454 lb 64,642 63,683 67,148 65,691 65,631 69,344 Rear kg 24 485 24 680 23 916 24 234 24 233 23 528 lb 53,980 54,410 52,725 53,426 53,424 51,870 Weight Distribution at SAE Carry (Loaded) kg 48 518 48 028 49 689 48 979 48 919 50 609 lb 106,963 105,883 109,545 107,980 107,848 111,575 Rear kg 16 628 16 878 16 025 16 391 16 423 15 712	Operating Weight	kg						
Front kg 29 321 28 886 30 458 29 797 29 770 31 454 Ib 64,642 63,683 67,148 65,691 65,631 69,344 Rear kg 24 485 24 680 23 916 24 234 24 233 23 528 Ib 53,980 54,410 52,725 53,426 53,424 51,870 Weight Distribution at SAE Carry (Loaded) 8g 48 518 48 028 49 689 48 979 48 919 50 609 Ib 106,963 105,883 109,545 107,980 107,848 111,575 Rear kg 16 628 16 878 16 025 16 391 16 423 15 712	W' 1 D' - ' CAE C - (U.1. 1.1)	Ib	118,622	118,092	119,873	119,117	119,055	121,214
Rear kg lb 64,642 63,683 67,148 65,691 65,631 69,344 Rear kg lb 24 485 24 680 23 916 24 234 24 233 23 528 24 51,870 Weight Distribution at SAE Carry (Loaded) Front kg lb 48 518 48 028 49 689 48 979 48 919 50 609 16 106,963 105,883 109,545 107,980 107,848 111,575 Rear kg lb 16 628 16 878 16 025 16 391 16 423 15 712	• • • • • • • • • • • • • • • • • • • •	1	20.221	20.007	20.450	20.707	20.770	21 454
Rear kg Ib 24 485 53,980 24 680 54,410 23 916 52,725 24 234 53,426 24 233 51,870 Weight Distribution at SAE Carry (Loaded) Front kg Ib 48 518 106,963 48 028 105,883 49 689 109,545 48 979 107,980 48 919 107,848 50 609 111,575 Rear kg 16 628 16 878 16 025 16 391 16 423 16 423 15 712	FIOIIL	кg lh						
Bit 53,980 54,410 52,725 53,426 53,424 51,870 Weight Distribution at SAE Carry (Loaded) kg 48 518 48 028 49 689 48 979 48 919 50 609 Ib 106,963 105,883 109,545 107,980 107,848 111,575 Rear kg 16 628 16 878 16 025 16 391 16 423 15 712	Rear							
Weight Distribution at SAE Carry (Loaded) kg 48 518 48 028 49 689 48 979 48 919 50 609 lb 106,963 105,883 109,545 107,980 107,848 111,575 Rear kg 16 628 16 878 16 025 16 391 16 423 15 712	Total	lb						
Front kg 48 518 48 028 49 689 48 979 48 919 50 609 lb 106,963 105,883 109,545 107,980 107,848 111,575 Rear kg 16 628 16 878 16 025 16 391 16 423 15 712	Weight Distribution at SAE Carry (Loaded)		<u> </u>	*			*	*
Ib 106,963 105,883 109,545 107,980 107,848 111,575 Rear kg 16 628 16 878 16 025 16 391 16 423 15 712		kg				48 979		
		lb	106,963			107,980	107,848	111,575
lb 36,659 37,210 35,328 36,137 36,207 34,640	Rear	kg						
		lb	36,659	37,210	35,328	36,137	36,207	34,640

^{*}Static tipping loads and operating weights include full fluids and 80 kg (176 lb) operator.

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

Full compliance to ISO 14397-1:2007.

988K XE Wheel Loader Standard and Optional Equipment

Standard and Optional Equipment

	Standard	Optional
ELECTRICAL		
Alarm, back-up	✓	
Alternator, single 150 amp	✓	
Batteries, dry	✓	
Converter, 10/15 amp, 24V to 12V	✓	
Hazardous voltage lamp	✓	
Lighting system (halogen, work lights, access and service platform lighting)	✓	
Starting and charging system, 24V	✓	
Starter emergency start receptacle	✓	
Starter lockout in bumper	✓	
Transmission lockout in bumper	✓	
OPERATOR ENVIRONMENT		
Air conditioner	✓	
Cat Detect, object detection system		✓
Cat Production Measurement		√
Cat Production Measurement ready	√	
Cat Vision, rear-vision camera system	√	
Cab precleaner		√
Cab, sound suppressed and pressurized, integrated rollover protective structure (ROPS/FOPS) radio ready for entertainment, includes antenna, speakers and converter (12-volt 5-amp) and power port	✓	
Controls, lift and tilt function	√	
Graphical information display, displays real time operating information, performs calibrations and customizes operator settings	✓	
Handrail mounted mirrors		✓
Heater, defroster	✓	
Horn, electric	✓	
Instrumentation, gauges: coolant temperature, engine hour meter, hydraulic oil temperature, power train oil temperature	✓	
LED warning strobe		✓
Light, cab, dome	√	
Lights, directional	✓	
Lights, HID or LED		✓
Lunchbox, beverage holders	✓	
Mirrors, heated		✓
Mirrors, rearview (externally mounted)	✓	
Radio, AM/FM/CD/MP3 Bluetooth® with Satellite Sirius		√

	Standard	Optional
OPERATOR ENVIRONMENT (CONTINUED)		
Radio, CB ready	✓	
Rimpull Control System (RCS)	✓	
Seat, Premium Plus containing forced air heating and cooling, 2-way thigh adjustment, power lumbar and back bolster adjustment, ride stiffness, dynamic end dampening and leather finish	√	
Seat belt minder	✓	
Seat belt, retractable, 76 mm (3 in) wide	✓	
Steering and Transmission Integrated Control (STICTM) System	✓	
UV glass	✓	
Virtual gear indicator	✓	
Vital Information Management System (VIMS TM) with graphical information display: external data port, customizable operator profiles, cycle timer, integrated payload control system	√	
Wet-arm wipers/washers (front and rear) – intermittent front and rear wipers	√	
Window pull-down visor		\checkmark
POWER TRAIN		
Antifreeze -50°C (-58°F)		✓
Automatic retarding controls	✓	
Brakes, oil-cooled, multi-disc, service/secondary	✓	
Case drain screens	✓	
Cat Integrated Powered Electronics	✓	
Cat SR drive motor	✓	
Cat SR generator/pump drive	✓	
Crankcase guard		✓
Electro hydraulic parking brake	✓	
Engine block heater 120V or 240V		✓
Engine brake, SEA		✓
Engine, C18 MEUI TM diesel, turbocharged/ aftercooled	√	
Engine oil change system, high speed, Wiggins		✓
Ground-level engine shutoff	✓	
High ambient cooling – software		✓
Turbine precleaner, engine air intake	✓	
Radiator, Aluminum Modular Radiator (AMR)	√	
Starting aid, ether, automatic	√	
Throttle lock, electronic	√	
Manual switch and automatic fuel priming	✓	

988K XE Wheel Loader Standard and Optional Equipment

Standard and Optional Equipment

	Standard	Optional
ADDITIONAL EQUIPMENT		
Autodig [™] feature, Tire Slip Prevention	✓	
Autodig features, Auto Set Tires & Lift Stall Prevention		✓
Autolube with Auto shutoff		✓
Automatic bucket lift kickout/positioner	✓	
Base machine price includes a rim allowance	✓	
Cat Clean Emission Module (CEM)	✓	
Cold weather starting (extra starter plus two batteries)		✓
Couplings, Cat O-ring face seals	✓	
Doors, service access (locking)	✓	
Ecology drains for engine, radiator, hydraulic tank	✓	
EZ Clean cooling system		✓
Fast fill fuel system (Shaw-Aero)		✓
Front and rear roading fenders		✓
Fuel tank, 555 L (147 gal)	✓	
Hitch, drawbar with pin	✓	
Hoses, Cat XT TM	✓	
Hydraulic, steering and brake filtration/ screening system	√	

	Standard	Optional
ADDITIONAL EQUIPMENT (CONTINUED)		
Hydraulically driven demand fan	✓	
Load and carry counterweight		✓
Oil sampling valves	✓	
Operator coaching		✓
Premixed 50% concentration of extended life coolant with freeze protection to -34°C (-29°F)	✓	
Rear access to cab and service platform	✓	
Steering, load sensing	✓	
Tire Pressure Monitoring System		✓
Toe kicks	✓	
Transmission brake	✓	
Vandalism protection caplocks	✓	
Wheel chocks		✓
OTHER OPTIONAL CONFIGURATIONS		
Aggregate Handler		✓
Load and Carry		✓
Millyard		✓

988K XE 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

- The Cat[®] C18 engine meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
 - ✓ 20% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrogenated 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.

*Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel.

Air Conditioning System

• The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.8 kg (3.9 lb) of refrigerant which has a CO2 equivalent of 2.574 metric tonnes (2.837 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 Performance

Operator Sound Level (ISO 6396:2008) 72 dB(A)

Machine Sound Level (ISO 6395:2008) 109 dB(A)*

- The measurements listed above were 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.
- * For machines in European Union countries and in countries that adopt the European Union Directive 2000/14/EC as amended by 2005/88/EC.

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.
- Up to 25% better fuel efficiency overall, up to 49% in truck loading applications
- ECO mode minimizes fuel consumption for light applications
- Increased hydraulic speed and faster cycle times for decreased idle, decreased fuel burn, and increased efficiency
- Reduce fuel burn while idling with engine idle shutdown
- Extended maintenance intervals reduce fluid and filter consumption
- Boost productivity with optional technologies like Operator Coaching and new AutoDig features including Tire Slip Prevention and Auto Set Tires

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	73.32%
Iron	3.21%
Nonferrous Metal	1.39%
Mixed Metal	0.00%
Mixed-Metal and Nonmetal	4.59%
Plastic	0.13%
Rubber	0.12%
Mixed Nonmetallic	0.00%
Fluid	0.25%
Other	2.35%
Uncategorized	14.64%
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 - 96%



988K XE

Millyard

Millyard applications demand the additional performance, productivity, and safety that Cat Forestry Wheel Loaders deliver.

Proven Reliability

- With 20 years of electric-drive experience, the 988K XE combines the simple and robust switched reluctance technology with proven machine design.
- More than 90 percent identical to the 988K Millyard.
- Fewer moving parts than traditional torque converter and mechanical transmission systems.
- Solid-state, fully sealed, and liquid-cooled powered electronics maximize durability in extreme conditions.
- Cat C18 engine is built and tested to meet your most demanding applications.
- Advanced filtration system for extended performance and reliability of the hydraulic system.

Durability

- Achieves longer engine life and improved fuel efficiency with reduced rated speed.
- · Automatic retarder controls maintain speed on grade.
- One-piece castings provide enhanced strength in key pin areas.
- Full box section rear frame resists torsional shock and twisting forces.
- Durable construction withstands the toughest loading conditions and multiple life cycles.

Achieve Greater Productivity

- Unload a typical full-length log truck in a single pass with the larger lift and tilt cylinders and a unique tilt lever to maximize linkage force. Up to 20% more lift capacity and 26% more tilt capacity over the standard 988K.
- Electric-drive system eliminates shifting and simplifies operator control, accelerating the learning curve of new operators.
- Superior acceleration, smoother directional shifts, and reduced travel times.
- Maximum responsiveness with Steering and Integrated Control (STIC™).
- Convenient, responsive electro-hydraulic controls increase operator productivity.
- Purpose-built lift arm with lowered cross member to increase visibility to the tips of the forks helping to increase the speed when lining up the load and reduce operator movements to see the forks.

Superior Fuel Efficiency

- Continuously variable speed control up to maximum ground speed.
- Positive Flow Control (PFC) hydraulic system increases efficiency and attachment responsiveness with consistent performance.
- Economy mode for reduced rated engine speed and reduced fuel consumption.
- Fully integrated electronic engine controls make your fuel go farther.
- Engine idle shutdown for less fuel used while idling.
- Flow sharing hydraulics for full-flow at reduced engine rpm.
- Increased hydraulic speed and faster cycle times for decreased idle, decreased fuel burn, and increased efficiency.

Safety Features

- Hazardous voltage lamp assures electric drive system is de-energized and machine is safe to work on.
- Achieve precise positioning for easy loading in tight areas with 43 degrees of steering articulation.
- · Precise machine control by load-sensing hydraulic steering system.
- Reduced stairway angles and standard stairway lighting provide reduced risk of slips, trips, and falls due to better visbility of the steps and stairway.
- · Left- and right-hand stairs with 45-degree angle.
- Computerized monitoring system with warning indicators.
- Standard Cat Vision enhances visibility behind the machine, helping you work safely and confidently.
- Pressurized cabin with filtered air and reduced sound levels.

Reduced Maintenance Time and Costs

- Electric-drive system maximizes consumable life, reducing oil and filter waste. Enables two times the life for power train oil and four times the life for filters.
- Longer life, rebuildability, and high resale value with 10 percent lower maintenance costs.
- Grouped service points and swing-out engine compartment service doors provide easy access to critical daily service checks.
- Ecology drains to prevent spilled contaminants.
- Reduced waste with maintenance-free batteries.
- Operators can now check tire pressure during operation with any change sending a fault code to VisionLink®, preventing premature tire failure.
- Swing out fan radiator design for easier service in high-debris millyard applications reducing maintenance and service down time. Auto reversing fan system to help dislodge debris and keep air flowing across the radiator cores.

Easy, Comfortable Operator Environment

- Best-in-class operator comfort and ergonomics.
- Comfort Series III seats with extra thick, contoured cushions provide total comfort throughout the workday.
- Easy-to-reach levers and seat-mounted implement pod to reduce fatigue.
- Reduced vibrations from isolated cab mounts and seat air suspension.

Engine		
Engine Model	Cat C18	
Rated Speed	1,700 rpm	
Peak Power Speed	1,500 rpm	
Engine (ISO 14396:2002)	432 kW	580 hp
Gross (SAE J1995:2014)	439 kW	588 hp
Net Power (SAE J1349:2011)	401 kW	538 hp
Bore	145 mm	5.7 in
Stroke	183 mm	7.2 in
Displacement	18.1 L	1,105 in ³
Peak Torque (1,200 rpm) (SAE J1995:2014)	3023 N·m	2,230 lbf-ft
Torque Rise	58%	

- Meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan at minimum speed, air intake system, exhaust system, and alternator.

Transmission		
Transmission Type	Cat switched electric drive	
Forward 1 (virtual)	7.0 km/h	4.3 mph
Forward 2 (virtual)	11.3 km/h	7.0 mph
Forward 3 (virtual)	22.2 km/h	13.8 mph
Forward 4 (virtual)	32.1 km/h	20.0 mph
Reverse 1 (virtual)	7.0 km/h	4.3 mph
Reverse 2 (virtual)	11.3 km/h	7.0 mph
Reverse 3 (virtual)	28.2 km/h	17.5 mph

Operating Specifications		
Operating Weight	52 781 kg	116,362 lb
Rated Payload – Quarry Face	11.3 tonnes	12.5 tons
Rated Payload – Loose Material	14.5 tonnes	16.0 tons
Bucket Capacity Range	4.7-13.0 m ³	6.2-17.0 yd ³
Hydraulic System – Lift/Tilt		
Lift/Tilt System – Circuit	EH-Positive l Flow Sharing	Flow Control,
Lift/Tilt System Pumps	Variable disp piston	lacement
Maximum Flow at 1,400-1,600 rpm	580 L/min	153 gal/min
Relief Valve Setting – Lift/Tilt	32 800 kpa	4,757 psi
Lift Cylinder – Bore	210 mm	8.7 in
Lift Cylinder – Stroke	1050 mm	41.3 in
Tilt Cylinder – Bore	266 mm	8.7 in
Tilt Cylinder – Stroke	685 mm	27.0 in
Hydraulic Cycle Time		
Rackback	4.5 seconds	
Raise	8.0 seconds	
Dump	2.2 seconds	
Lower Float Down	3.5 seconds	
Total Hydraulic Cycle Time	18.2 seconds	

Hydraulic System – Steering		
Steering System – Circuit	Pilot, load se	ensing
Steering System – Pump	Variable disp piston	olacement
Maximum Flow @ × 1,400-1,600 rpm	270 L/min	71.3 gal/min
Steering Cut Off Pressure	30,000 kPa	4,351 psi
Total Steering Angle	86°	
Steering Cycle Time (high idle)	3.4 seconds	
Steering Cycle Time (low idle)	5.6 seconds	

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.8 kg of refrigerant which has a $\rm CO_2$ equivalent of 2.574 metric tonnes.

Axles	
Front	Fixed
Rear	Trunnion
Oscillation Angle	13°
Brakes	
Brakes	ISO 3450:2011
Operator Cab	
ROPS/FOPS	ROPS/FOPS meet
	ISO 3471:2008 and
	ISO 3449:2005 Level II
	standards

Service Refill Capacities		
Fuel Tank	555 L	147.0 gal
Cooling System (jacket water)	112 L	30.0 gal
Cooling Systems (power train)	30 L	8.0 gal
Engine Crankcase	60 L	16.0 gal
Diesel Exhaust Fluid Tank	33 L	8.7 gal
Transmission	60 L	16.0 gal
Differentials and Final Drives – front	186 L	49.0 gal
Differentials and Final Drives – rear	186 L	49.0 gal
Hydraulic System – implement/steering	475 L	126.0 gal

- All nonroad Tier 4 Final/Stage V diesel engines are required to use:
- The machine has the flexibillity to run on either ultra-low-sulfur diesel fuel (ULSD with 15 ppm of sulfur or less).
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
 - ✓ 20% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrogenated 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.

- *Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel.
- Cat DEO-ULS or oils that meet the Cat ECF-3, API CJ-4, and ACEA E9 specifications are required.
- Only use DEF that meets ISO 22241-1 standards.

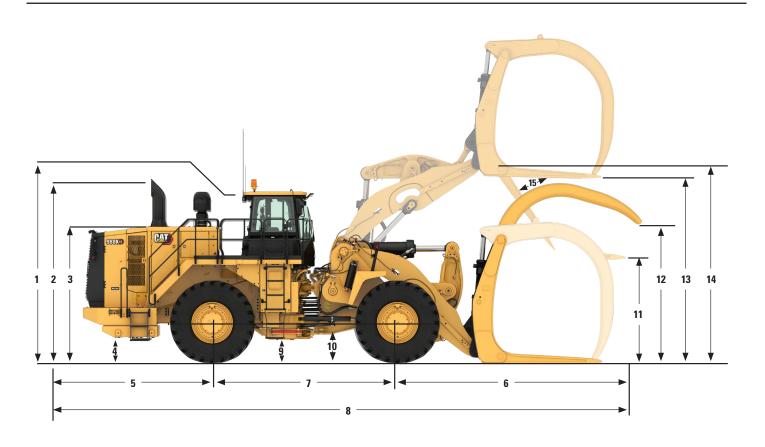
Sound Performance – Tier 4 Final/Stage V

Operator Sound Level (ISO 6396:2008)	72 dB(A)
Machine Sound Level (ISO 6395:2008)	109 dB(A)*

- The operator sound pressure level was measured according to the test procedures and conditions specified in ISO 6396:2008.
 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.
- The machine sound power level was measured according to the test procedures and conditions specified in ISO 6395:2008. The measurement was conducted at 70 percent of the maximum engine cooling fan speed.
 - * For machines in European Union countries and in countries that adopt the European Union Directive 2000/14/EC as amended by 2005/88/EC.

Dimensions

All dimensions are approximate.

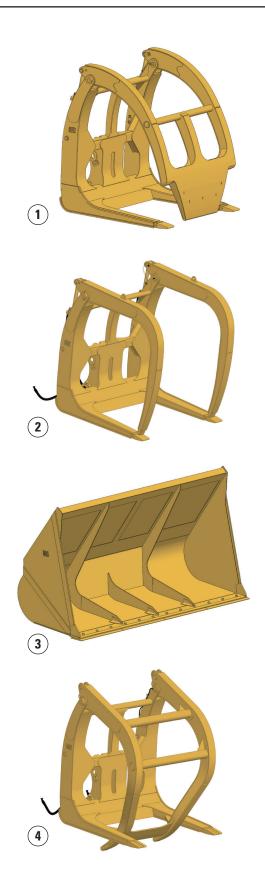


	Millyard L	inkage.
1 Ground to Top of ROPS	4221 mm	13.8 ft
2 Ground to Top of Exhaust Stack	4214 mm	13.8 ft
3 Ground to Top of Hood	3334 mm	10.9 ft
4 Ground to Bumper Clearance	933 mm	3.1 ft
5 Rear Axle Center Line to Bumper	3187 mm	10.5 ft
6 Front Axle Center Line to Fork Tip	5023 mm	16.5 ft
7 Wheelbase	4550 mm	14.9 ft
8 Maximum Overall Length	12 761 mm	41.9 ft
9 Ground to Lower Hitch Clearance	568 mm	1.9 ft
10 Ground to Center of Front Axle	978 mm	3.2 ft
11 Fork Height with Level Arms	2474 mm	8.1 ft
12 Fork Top Clamp Opening	4006 mm	13.1 ft
13 Fork Height at Maximum Lift	5242 mm	17.2 ft
14 Hinge Pin Height at Maximum Lift	4918 mm	16.1 ft

15 Dump Angle at Maximum Lift

-39.4 degrees

Forks and Buckets



Forks and Buckets

Millyard and Logging Forks are designed to move wood in the millyard. Woodchip Buckets are designed with performance characteristics to bring productivity and fuel efficiency to load-and-carry work in the yard.

- 1 Millyard Forks: A single top clamp closes down between the tines, allowing individual logs to be picked and placed with ease. An open, high-visibility design allows operators to see the job at hand and work faster and more efficiently.
- 2 Logging Forks: Dual top clamps close down to the tine tips; their curvature maximizes carry capacity. Built to match the task of unloading trucks. An open, high-visibility design allows operators to see the job at hand and work faster and more efficiently.
- Woodchip Buckets: Extra capacity and loading characteristics make this bucket style perfect for handling woodchips. Available in direct pin on models or for use with the Cat Quick Coupler System.
- **Cat Full Width Forks:** Dual top clamps are connected to allow maximum capacity while still closing between the tines allowing partial loads to be handled.

988K XE Millyard Standard and Optional Equipment

Standard and Optional Equipment

	Standard	Optional
ELECTRICAL		
Alarm, back-up	✓	
Alternator, single 150 amp	✓	
Batteries, dry	✓	
Converter, 10/15 amp, 24V to 12V	✓	
Hazardous voltage lamp	✓	
Lighting system (halogen, work lights, access and service platform lighting)	✓	
Starting and charging system, 24V	✓	
Starter emergency start receptacle	✓	
Starter lockout in bumper	✓	
Transmission lockout in bumper	✓	
OPERATOR ENVIRONMENT		
Air conditioner	✓	
Cat Detect, object detection system		
Cat Production Measurement		
Cat Production Measurement ready		
-		
Cat Vision, rear-vision camera system	· · · · · · · · · · · · · · · · · · ·	
Cab precleaner		
Cab, sound suppressed and pressurized, integrated rollover protective structure (ROPS/FOPS) radio ready for entertainment, includes antenna, speakers and converter (12-volt 5-amp) and power port	v	
Controls, lift and tilt function	✓	
Graphical information display, displays real time operating information, performs calibrations and customizes operator settings	✓	
Handrail mounted mirrors		✓
Heater, defroster	✓	
Horn, electric	✓	
Instrumentation, gauges: coolant temperature, engine hour meter, hydraulic oil temperature, power train oil temperature	✓	
LED warning strobe		√
Light, cab, dome	√	
Lights, directional	√	
Lights, HID or LED		✓
Lunchbox, beverage holders	✓	
Mirrors, heated		√
Mirrors, rearview (externally mounted)	✓	
Radio, AM/FM/CD/MP3 Bluetooth® with Satellite Sirius		✓

	Standard	Optional
OPERATOR ENVIRONMENT (CONTINUED)		
Radio, CB ready	✓	
Rimpull Control System (RCS)	✓	
Seat, Premium Plus containing forced air	✓	
heating and cooling, 2-way thigh adjustment,		
power lumbar and back bolster adjustment,		
ride stiffness, dynamic end dampening and		
leather finish		
Seat belt minder		
Seat belt, retractable, 76 mm (3 in) wide	· · · · · · · · · · · · · · · · · · ·	
STIC System	· · ·	
UV glass	_	
Virtual gear indicator	√	
Vital Information Management System (VIMS) with graphical information display: external data	✓	
port, customizable operator profiles, cycle timer,		
integrated payload control system		
Wet-arm wipers/washers (front and rear) –	√	
intermittent front and rear wipers		
Window pull-down visor		✓
POWER TRAIN		
Antifreeze -50°C (-58°F)		✓
Automatic retarding controls	✓	
Brakes, oil-cooled, multi-disc, service/secondary	✓	
Case drain screens	✓	
Cat Integrated Powered Electronics	✓	
Cat SR drive motor	✓	
Cat SR generator/pump drive	✓	
Crankcase guard		✓
Electro hydraulic parking brake	✓	
Engine block heater 120V or 240V		✓
Engine brake, SEA		✓
Engine, C18 MEUI diesel, turbocharged/	✓	
aftercooled		
Engine oil change system, high speed, Wiggins		✓
Ground-level engine shutoff	✓	
High ambient cooling – software		✓
Turbine precleaner, engine air intake	✓	
Radiator, Aluminum Modular	✓	
Radiator (AMR)		
Starting aid, ether, automatic	√	
Throttle lock, electronic	√	
Manual switch and automatic fuel priming	\checkmark	

988K XE Millyard Standard and Optional Equipment

Standard and Optional Equipment

	Standard	Optional
ADDITIONAL EQUIPMENT		
Autodig feature, Tire Slip Prevention	✓	
Autodig features, Auto Set Tires & Lift Stall Prevention		✓
Autolube with Auto shutoff		✓
Automatic bucket lift kickout/positioner	✓	
Base machine price includes a rim allowance	✓	
Cat Clean Emission Module (CEM)	✓	
Cold weather starting (extra starter plus two batteries)		✓
Couplings, Cat O-ring face seals	✓	
Doors, service access (locking)	✓	
Ecology drains for engine, radiator, hydraulic tank	✓	
EZ Clean cooling system		✓
Fast fill fuel system (Shaw-Aero)		✓
Front and rear roading fenders		✓
Fuel tank, 555 L (147 gal)	✓	
Hitch, drawbar with pin	✓	
Hoses, Cat XT	✓	

	Standard	Optional
ADDITIONAL EQUIPMENT (CONTINUED)		
Hydraulic, steering and brake filtration/	✓	
screening system		
Hydraulically driven demand fan	✓	
Load and carry counterweight		✓
Oil sampling valves	✓	
Premixed 50% concentration of extended	✓	
life coolant with freeze protection to		
-34°C (-29°F)		
Rear access to cab and service platform	√	
Steering, load sensing	✓	
Tire Pressure Monitoring System		✓
Toe kicks	✓	
Transmission brake	✓	
Vandalism protection caplocks	✓	
Wheel chocks	✓	✓
OTHER OPTIONAL CONFIGURATIONS		
Aggregate Handler		✓
Load and Carry		✓



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AEXO2599-02 (7-2022) Replaces AEXO2599-01 (Aus-NZ, Europe, Japan, N Am, S Am)

