

Barrer P

980H Wheel Loader

CAT

9991



Cat® C15 Diesel Engine with ACERT™ Technology						
Gross Power (SAE J1995)	261 kW/355 hp					
Net Power (ISO 9249) at 1800 rpm	237 kW/322 hp					
Bucket Capacity	4.5 to 6.1 m ³					
Operating Weight	31 000 to 33 300 kg					

Engine

Cat C15 with ACERT Technology								
Gross Power 261 kW/355 hp								
Net Power at 1800 rpm	1							
ISO 9249	237 kW/322 hp							
80/1269/EEC	237 kW/322 hp							
Peak Torque (net) at 12	00 rpm 1615 Nm							
Total Torque Rise	28%							
Bore	137 mm							
Stroke	172 mm							
Displacement	15.2 liter							

- All engine horsepower (hp) are metric including front page.
- EU Stage IIIA compliant
- Rating for net power advertised based on power available when the engine is equipped with alternator, air cleaner, muffler and on-demand hydraulic fan drive at maximum fan speed.

Operating Specifications

Operating Weight	31 170 kg
Static Tipping Load,	
Full Turn	20 780 kg
Breakout Force	212 kN
Bucket Capacities	4.5 to 6.1 m ³

 Operating weight with
5.7 m³ general excavation bucket and bolt-on cutting edge.

Sound

- The operator sound pressure level measured according to the procedures specified in ISO 6396:1998 is 75 dB(A) for the cab offered by Caterpillar, when properly installed, maintained and tested with the doors and windows closed.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environments.
- The European Union 2005/88/EC labeled spectator sound power level is 108 dB(A).

ROPS/FOPS

- Caterpillar cab with integrated Rollover Protective Structure (ROPS) is standard in Europe.
- Rollover Protective Structure ROPS meets ISO 3471:1994 criteria.
- Falling Objects Protective Structure (FOPS) meets ISO 3449:1992 Level II criteria.

Brakes

Meet ISO 3450:1996 standard.

Hydraulic System

Implement System	
Pump Output	464 l/min
Relief lift and tilt valve setting	; 207 bar
Hydraulic Cycle Times	seconds
Raise	6
Dump	2
Lower, Empty, Float Down	3
Total	11

- Implement system, gear-type pump (rated at 2100 rpm and 69 bar)
- Cycle times with rated payload

Transmission

Forward	km/h
1	7
2	12
3	21
4	36
Reverse	
1	8
2	14
3	24
4	41

Maximum travel speeds (29.5–25 tires)

Axles

Front	Fixed
Rear	Oscillating ± 13°
Maximum Single-	
Wheel Rise and Fall	550 mm

Service Refill Capacities

Liters
479
83
34
62
87
87
250
125

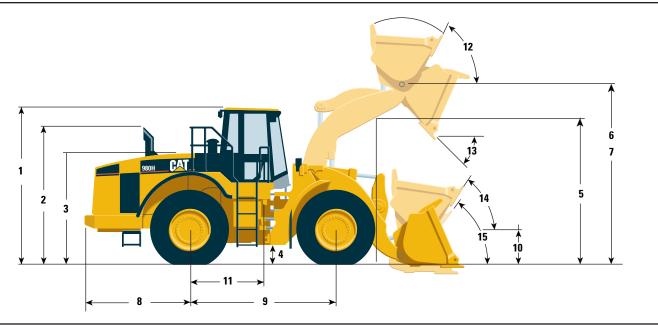
Tires

29.5 R 25, L-3 (XHA) 29.5 R 25, L-5 (XLDD2A) 29.5 R 25, L-5 (XMINED2) 29.5 R 25, L-3 (VMT BS) 29.5 R 25, L-4 (GB4B)

In certain applications (such as load and carry) the loader's productive capabilities might exceed the tires' tonnes-km/h capabilities. Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model. The 29.5-25 size range and other special tires are available on request.

Dimensions

All dimensions are approximate



	mm
Height to top of ROPS	3765
Height to top of exhaust pipe	3716
Height to top of hood	2716
Ground clearance with 29.5 R 25, L-3	442
Lift arm clearance and maximum lift	3764
Bucket hinge pin height (B-pin)	4505
Optional lift height	4726
Center line of rear axle to edge of counterweight	2493
Wheelbase	3700
	Height to top of exhaust pipeHeight to top of hoodGround clearance with 29.5 R 25, L-3Lift arm clearance and maximum liftBucket hinge pin height (B-pin)Optional lift heightCenter line of rear axle to edge of counterweight

10 Bucket hinge pin height at carry (B-pin)	867
11 Center line of rear axle to hitch	1850
12 Rack back at maximum lift	61°
13 Dump angle at maximum lift	47°
14 Rack back at carry	49°
15 Rack back at ground	41°

Tire Specifications

	Width over tires	Ground clearance	Change in vertical dimensions	Change in operating weight	Change in static tipping load
	mm	mm	mm	kg	kg
29.5 R 25, (L-3 STL2+), Continental	3264	452	10	71	509
29.5 R 25, (L-3 STL3), Continental	3264	450	8	-16	441
29.5 R 25, (L-3 VMT), Bridgestone	3211	469	27	93	-43
29.5 R 25, (L-3 VSDL), Bridgestone	3202	479	37	1311	1245
29.5 R 25, (L-2/L-3 GP2B), Goodyear	3269	463	21	-91	129
29.5–25, (L-3 RT3B), Goodyear	3253	444	2	-297	-206
29.5–25, (L-4 GP4B), Goodyear	3284	483	41	330	411
29.5–25, (L-5 RL5K), Goodyear	3266	488	46	942	943
29.5 R 25, (L-3 XHA), Michelin	3227	442	0	0	0
29.5 R 25, (L-5 XLDD), Michelin	3212	458	16	836	587
29.5 R 25, (L-5 XMINED2), Michelin	3231	467	25	1318	1058

Operation Specification	Universal B	Juckets			General Exe	General Excavation Buckets			
		Bolt-on Cutting Edge	Flush-Mounted Teeth	Bolt-on Cutting Edge	Flush-Mounted Teeth	Bolt-on Cutting Edge	Tips and Segments	Bolt-on Cutting Edge	Tips and Segments
Rated bucket capacity	m ³	6.1*	6.1*	5.6	5.6	6.1*	6.1*	5.7	5.7
Struck capacity	m ³	5.3	5.3	4.9	4.9	5.2	5.2	4.9	4.9
Width	mm	3602	3580	3602	3580	3447	3533	3447	3533
Dump clearance at full lift and 45° discharge ⁴	mm	3131	2909	3184	2961	3222	3059	3266	3108
Reach at full lift and 45° discharge ⁴	mm	1404	1664	1350	1611	1597	1732	1537	1678
Reach with lift arms horizontal and bucket level ⁴	mm	3032	3373	2957	3299	3086	3295	3013	3223
Digging depth	mm	193	153	193	153	141	141	141	141
Overall length ⁴	mm	9531	9852	9456	9778	9543	9781	9470	9702
Overall height with bucket at full raise	mm	6355	6355	6272	6272	6435	6435	6343	6344
Loader turning radius with bucket in carry position	mm	8012	8083	7993	8063	7934	8044	7915	8021
Static tipping load straight ¹	kg	20940	21102	21127	21288	22755	22724	23184	22966
Static tipping load at full articulation (37°) ¹	kg	18790	18948	18969	19128	20360	20323	20778	20575
Breakout force ²	kN	204	205	215	216	199	198	212	211
Bucket weight	kg	3401	3300	3296	3190	2981	3072	2828	2902
Operating weight 1	kg	31348	31247	31243	31137	31324	31415	31171	31245

* For Aggregate Arrangements

¹ Static tipping load and operating weight shown are based on average machine configuration with sound suppression cab and ROPS, secondary steering, air conditioning, ride control, limited slip rear, roading fenders, autolube, front access platform, back-up alarm, 29.5 R 25, L-3, tires for Universal buckets, L-4 tires for General Excavation buckets, L-5 tires for Rock buckets, full fuel tank, coolant, lubricants, lights, directional signals, CE plates and operator.

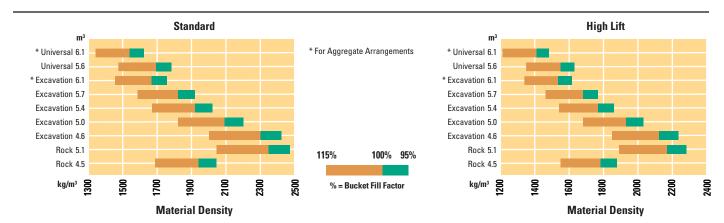
- ² For buckets with adapters, tips and segments, value is measured 100 mm behind the tip of the segment, with bucket hinge pin as pivot point, in accordance with SAE J732C.
- ³ All buckets shown can be used on the high lift arrangement. High lift column shows changes in specifications from standard lift to high lift. Add or subtract as indicated to or from specifications given for appropriate bucket to calculate high lift specifications.

Dimensions for dump clearance, reach and overall length:

⁴ Actual dimensions taken at the tip of the Ground Engaging Tools, either the tip of the bolt-on cutting edge or the tip of the teeth, general duty.

						Rock Buck	Rock Buckets				
						V-	Edge	dge Serrated V-Edge		-	
Bolt-on Cutting Edge	Tips and Segments	Bolt-on Cutting Edge	Tips and Segments	Bolt-on Cutting Edge	Tips and Segments						
5.4	5.4	5	5	4.6	4.6	5.1	4.5	5.1	4.5	same	
4.5	4.5	4.2	4.2	3.9	3.9	4.3	3.7	4.3	3.7	same	
3447	3533	3447	3533	3447	3533	3504	3504	3492	3645	same	
3306	3149	3369	3213	3442	3289	3038	3208	3103	3180	+221	
1508	1650	1460	1604	1410	1557	1903	1773	1912	1752	+2	
2963	3173	2883	3093	2793	3003	3445	3239	3413	3237	+159	
141	141	141	141	141	141	150	100	114	68	+99	
9420	9652	9340	9572	9250	9482	9948	9696	9871	9729	+201	
6271	6271	6201	6201	6125	6125	6290	6408	6290	6399	+221	
7902	8008	7881	7987	7859	7963	8153	8010	8123	8021	+72	
23142	23113	23364	23336	23621	23593	22272	23701	22940	23942	-1774	
20747	20714	20957	20925	21200	21168	19806	21177	20474	21418	-1620	
220	219	234	233	252	250	177	206	163	181	same	
2757	2830	2667	2741	2570	2643	3795	3084	3285	2907	same	
 31100	31173	31010	31084	30913	30986	33310	32599	32800	32422	+129	

Bucket Selection Guide



In accordance with SAE J818, these data consider the bucket load to be equal to half of the static tipping load at full turn.

Standard Equipment

Standard equipment may vary. Consult your Caterpillar dealer for specifics.

Electrical

Alarm, back-up Alternator (80 A, brushless) Batteries, maintenance-free (4) 1000 CCA Lighting system, halogen (6 total) Main disconnect switch Starter, electric, heavy-duty Starting and charging system (24 V) Starting receptacle for emergency start

Operator Environment

Bucket/Work Tool function lockout Cab, pressurized and sound suppressed ROPS/FOPS, radio ready (entertainment) includes antenna, speakers, converter (12 V, 10 A) and power port Cigar lighter and ashtray Coat hooks (2) with straps **Command Control Steering** Computerized Monitoring System Controls, bucket/work tool electro-hydraulic Heater and defroster Horns, electric Instrumentation, Gauges: Digital gear range indicator Engine coolant temperature Fuel level Hydraulic oil temperature Speedometer/Tachometer Transmission oil temperature Instrumentation, Warning Indicators: Axle oil temperature Electrical, alternator output Engine air filter restriction Engine oil pressure Fuel level and pressure Hydraulic oil filter bypass Hydraulic oil level Parking brake Service brake oil pressure Primary steering oil pressure Transmission oil filter bypass

Intermittent front wiper Lunchbox and beverage holders Mirrors, rearview (externally mounted) Seat, Cat Comfort (cloth) air suspension Seatbelt, retractable Steering column, adjustable, tilt and telescope Wet-arm, wipers/washers (front and rear) Window, sliding (left and right side)

Power Train

Brakes, full hydraulic enclosed wet-disc with Integrated Braking System (IBS) and brake wear indicator pin Engine, Cat C15 with ACERT Technology and ATAAC Fan, radiator, hydraulically driven, variable speed (temperature sensing) Filters, fuel/engine air, primary/secondary Fuel priming pump (electric) Fuel/water separator Muffler, sound suppressed Precleaner, engine air intake Radiator, modular Starting aid (ether) Switch, transmission neutralizer lockout Torque converter (free wheel stator) Transmission, automatic planetary power shift (4F/4R) Variable Shift Control (VSC)

Other

Antifreeze Premixed 50% concentration of Extended Life Coolant with freeze protection to -34° C Automatic bucket positioner, in-cab adjustable Counterweight Couplings, Caterpillar O-ring face seals Doors, service access (locking) Ecology drains for engine, transmission and hydraulics Fenders, steel front with mud flaps/rear with extensions Guard, power train and crankcase Hitch, drawbar with pin Hood, non-metallic power tilting Hoses, Caterpillar XT[™] Hydraulic oil cooler (swing-out) Kickout, lift and tilt, automatic (in-cab adjustable) Linkage, Z-bar, cast cross tube/tilt lever Oil sampling valves Hydraulic circuits Engine oil Transmission oil Coolant Product Link ready Remote diagnostic pressure taps Sight Gauges: Engine coolant Hydraulic oil level Transmission oil level Steering, load sensing Tires, Rims and Wheels (see pg.14-15) Vandalism protection caplocks

18 **980H Wheel Loader** specifications

Optional Equipment

Optional equipment may vary. Consult your Caterpillar dealer for specifics.

Aggregate Autodig Air conditioner/HVAC system Alternator, 95 A Autolube Axle ecology drain Axle oil cooler ready Axle oil cooler Buckets and work tools Bucket Ground Engaging Tools (GET) - see Cat dealer for details Camera, rear vision CB radio ready (20 A) Cooling package, high ambient 50°C Differentials, limited slip (front or rear), No-SPIN (rear axle only) Fast fill system, fuel Fenders, roading Fenders, narrow Guard, front window Guard, front window, forestry Guard, front window, waste Heater, engine coolant High lift arrangement, two- and threevalve Hydraulic arrangement, three-valve Joystick control (lift/tilt)

Lights, auxiliary (4) Lights, directional Lights, high intensity discharge (HID) Light, warning beacon Machine Security System Mirrors, heated, external Mirrors, rearview, interior Open canopy Payload Control System Platform, window cleaning Precleaner, turbine Precleaner, turbine/trash Radio, AM/FM WB (Cassette) Ride Control System, two- and threevalve Rubber-mounted cab glass Seat, heated Steering, secondary Sun visor, front Transmission, extreme service Special Machine Arrangements Forest Machine Scrap Handler Steel Mill Arrangement Waste Handler

Merchandising Arrangement 0

(not for EU regulated countries) Wheel Loader Air conditioner Precleaner, turbine

Merchandising Arrangement 1

Wheel Loader Conversion, CE mark Vandalism guard Air conditioner Power train guard Fast fill ready fuel system

Merchandising Arrangement 2

Wheel Loader Conversion, CE mark Fast fill ready fuel system Aggregate Autodig Deluxe seat Ride control, 2 valve

Merchandising Arrangement 3

Wheel Loader Conversion, CE mark Fast fill ready fuel system Hydraulics, 3 valve Ride control, 2 valve

Other Special Arrangements

High Lift Arm, provides +221 mm dump clearance Access package (15° inclined ladder and front access platform)