

# Product Specifications For 986



## Engine

Engine Model	C15 Cat®
Peak Power Speed	1600
Peak Power Speed - Gross - SAE J1995	456 hp
Engine Power - ISO 14396	449 hp
Net Power - SAE J1349	373 hp
Rated Speed	2000
Rated Speed - 2,000 rpm - EEC 80/1269	373 hp
Rated Speed - 2,000 rpm - EEC 80/1269 (DIN)	378 hp
Rated Speed - 2,000 rpm - ISO 9249	373 hp
Rated Speed - 2,000 rpm - ISO 9249 (DIN)	378 hp
Bore	5.4 in
Stroke	6.75 in
Displacement	927 in <sup>3</sup>
Peak Torque - 1,200 rpm - SAE J1995	1778 lb/ft
Torque Rise	16%

<b>Emissions</b>	U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards and Brazil MAR-1 emission standards, equivalent to China Nonroad Stage III, U.S. EPA Tier 3 and EU Stage IIIA
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## Transmission

<b>Transmission Type</b>	Cat planetary power shift
<b>Forward - 1</b>	5 mile/h
<b>Forward - 2</b>	8 mile/h
<b>Direct Drive - Forward 2</b>	8 mile/h
<b>Direct Drive - Forward 3</b>	14 mile/h
<b>Direct Drive - Forward 4</b>	24 mile/h
<b>Reverse - 1</b>	5 mile/h
<b>Reverse - 2</b>	8 mile/h
<b>Direct Drive - Reverse 2</b>	9 mile/h
<b>Direct Drive - Reverse 3</b>	16 mile/h
<b>Direct Drive - Reverse 4</b>	25.4 mile/h

## Operating Specifications

<b>Operating Weight - Standard</b>	97785 lb
<b>Operating Weight - High Lift</b>	104005 lb
<b>Rated Payload - Standard (Quarry Face)</b>	11 ton (US)
<b>Rated Payload - Loose Material (Standard)</b>	14 ton (US)
<b>Rated Payload - High Lift (Quarry Face)</b>	11 ton (US)

<b>Rated Payload - Loose Material (High Lift)</b>	12.1 ton (US)
<b>Bucket Capacity Range</b>	5-10,3 m <sup>3</sup> (6,5-13,5 yd. <sup>3</sup> )
<b>Cat Truck Match - Standard</b>	770/735/740/745
<b>Cat Truck Match - High Lift</b>	772/773

## Hydraulic System - Lift/Tilt

<b>Lift/Tilt System - Circuit</b>	Load Sense
<b>Lift/Tilt System - Pump</b>	2 × 110 cc variable displacement
<b>Maximum Flow at 2,165 rpm</b>	123 gal/min
<b>Relief Valve Setting - Lift/Tilt</b>	4050 psi
<b>Lift Cylinder - Bore</b>	7.5 in
<b>Lift Cylinder - Stroke</b>	45 in
<b>Tilt Cylinder - Bore</b>	6.7 in
<b>Tilt Cylinder - Stroke</b>	28.4 in

## Hydraulic Cycle Times

<b>Rack Back</b>	4.5 s
<b>Raise</b>	9 s
<b>Dump</b>	3.5 s
<b>Lower</b>	5.2 s
<b>Lower Float Down</b>	4.3 s
<b>Total Hydraulic Cycle Time</b>	21.3 s

## Hydraulic System - Steering

Steering System - Circuit	Load Sense
Steering System - Pump	Piston, variable displacement
Maximum Flow at 1,400 rpm	52 gal/min
Steering Cut Off Pressure	4000 psi
Total Steering Angle	70°

## Air Conditioning System

Air Conditioning	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 CO2 equivalent of 2.574 metric tonnes.
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## Axles

Front	Fixed
Rear	Trunnion
Oscillation Angle	±12.5°
Oscillation Angle - Chain Arrangement	±8.5°

## Brakes

Brakes	ISO 3450:2011
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## Operator's Cab

ROPS/FOPS	ROPS/FOPS meet ISO 3471:2008 (ROPS) and ISO 3449:2005 Level II (FOPS)
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## Service Refill Capacities

Fuel Tank	141 gal (US)
Fuel Tank - Short Lift	127 gal (US)

<b>Cooling Systems</b>	26 gal (US)
<b>Crankcase</b>	9 gal (US)
<b>Diesel Exhaust Fluid Tank</b>	6 gal (US)
<b>Transmission</b>	20 gal (US)
<b>Axle Oil - Differentials and Final Drives - Front</b>	49 gal (US)
<b>Axle Oil - Differentials and Final Drives - Rear</b>	45 gal (US)
<b>Hydraulic System Factory Fill</b>	87 gal (US)
<b>Hydraulic System - Tank Only</b>	34 gal (US)

## Sound Performance - Standard

<b>Operator Sound Level (ISO 6396)</b>	72 dB(A)
<b>Machine Sound Level (ISO 6395)</b>	112 dB(A)
<b>Note</b>	<p>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.</p> <p>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.</p>

## Sound Performance - Suppression

<b>Operator Sound Level (ISO 6396)</b>	72 dB(A)
<b>Machine Sound Level (ISO 6395)</b>	110 dB(A)

**Note**

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.

## Dimensions (Approximate) - Standard Lift Linkage

Ground to Top of ROPS	13.5 ft
Ground to Top of Exhaust Stacks	13.3 ft
Ground to Top of Hood	10.7 ft
Ground to Center of Front Axle	3.2 ft
Ground to Fuel Tank Clearance	2.3 ft
Ground to Lower Hitch Clearance	1.5 ft
Reach - Maximum Lift	7.1 ft
Clearance at Maximum Lift	10.1 ft
B-Pin Height - Maximum Lift	16.1 ft
Maximum Overall Height - Bucket Raised	22.4 ft
Rear Axle - Centerline to Bumper	10.3 ft
Wheel Base	12.5 ft
Maximum Overall Length	36.6 ft
Front Axle Centerline to Bucket Tip	13.8 ft

**Note**

All dimensions are approximate.  
Specs are calculated with a 6.1 m<sup>3</sup> (8 yd<sup>3</sup>) rock bucket.

## Dimensions (Approximate) - High Lift Linkage

Ground to Top of ROPS	13.5 ft
Ground to Top of Exhaust Stacks	13.3 ft
Ground to Top of Hood	10.7 ft
Ground to Center of Front Axle	3.2 ft
Ground to Fuel Tank Clearance	2.3 ft
Ground to Lower Hitch Clearance	1.5 ft
Reach - Maximum Lift	7.4 ft
Clearance at Maximum Lift	11.6 ft
B-Pin Height - Maximum Lift	17.6 ft
Maximum Overall Height - Bucket Raised	23.9 ft
Rear Axle - Centerline to Bumper	10.3 ft
Wheel Base	12.5 ft
Maximum Overall Length	38 ft
Front Axle Centerline to Bucket Tip	15.3 ft
Note	All dimensions are approximate. Specs are calculated with a 6.1 m <sup>3</sup> (8 yd <sup>3</sup> ) rock bucket.

## Dimensions (Approximate) - Quick Coupler And 6.1 M<sup>3</sup> (8.0 Yd<sup>3</sup>) Bucket

Ground to Top of ROPS	13.5 ft
Ground to Top of Exhaust Stacks	13.3 ft
Ground to Top of Hood	10.7 ft
Ground to Center of Rear Axle	3.2 ft
Ground to Fuel Tank Clearance	2.3 ft
Ground to Lower Hitch Clearance	1.5 ft
Reach at Maximum Lift	8 ft
Clearance at Maximum Lift	10.7 ft
B-Pin Height at Maximum Lift	15 ft
Maximum Overall Height, Bucket Raised	20.9 ft
Rear Axle Center Line to Bumper	10.3 ft
Wheel Base	12.5 ft
Maximum Overall Length	35 ft
Front Axle Centerline to Bucket Tip	12.2 ft

## Dimensions (Approximate) - Quick Coupler And Fork

Ground to Top of ROPS	13.5 ft
Ground to Top of Exhaust Stacks	13.3 ft
Ground to Top of Hood	10.7 ft
Ground to Center of Rear Axle	3.2 ft



<b>Ground to Fuel Tank Clearance</b>	2.3 ft
<b>Ground to Lower Hitch Clearance</b>	1.5 ft
<b>B-Pin Height at Maximum Lift</b>	15 ft
<b>Rear Axle Center Line to Bumper</b>	10.3 ft
<b>Wheel Base</b>	12.5 ft
<b>Maximum Overall Length</b>	35.4 ft
<b>Front Axle Centerline to Bucket Tip</b>	12.6 ft

## 986 Standard Equipment

### NOTE

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

### ELECTRICAL

Alarm, back-up

Alternator, single 145 amp

Batteries, dry

Converter, 10/15 amp, 24V to 12V

Lighting system (halogen, work lights, access and service platform lighting)

Starting and charging system, 24V

Starter emergency start receptacle

### OPERATOR ENVIRONMENT

Graphical Information Display, displays real time operating information, performs calibrations and customizes operator settings

Air conditioner

Rear vision camera system

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

Heater, defroster

Horn, electric

Instrumentation, gauges:

- Coolant temperature
- Fuel level
- DEF level
- Hydraulic oil temperature
- Power train oil temperature

Light, cab, dome

Lunchbox, beverage holders

Mirrors, rearview (externally mounted)

Seat, Cat Comfort (cloth), air suspension, six-way adjustable

Seat belt minder

Seat belt, retractable, 76 mm (3 in) wide

STIC Control System

UV glass

Transmission gear indicator

Wet-Arm wipers/washers (front and rear):

- Intermittent front and rear wipers

Lights, directional

## **POWER TRAIN**

Cat Production Measurement ready

Brakes, oil-cooled, multi-disc, service/secondary

Case drain screens

Crankcase guard

Electro hydraulic parking brake

Engine, C15 MEUI diesel, turbocharged/aftercooled

Ground level engine shutoff

Turbine precleaner, engine air intake

Starting aid, ether, automatic

Torque converter, Neutralizer

Transmission, planetary powershift, 4F/3R electronic control

Manual switch and automatic fuel priming

## **OTHER**

Automatic bucket lift kickout/positioner

Hydraulically driven demand fan

Couplings, Cat O-ring face seals

Doors, service access (locking)

Ecology drains for engine, radiator, hydraulic tank

Fuel tank, 535 L (141 gal)

Hitch, drawbar with pin

Hoses, Cat XT™

Hydraulic, steering and brake filtration/screening system

Cat Clean Emission Module

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  
Toe kicks  
Vandalism protection caplocks

## **986 Optional Equipment**

### **NOTE**

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

### **POWER TRAIN**

-50° C (-58° F) antifreeze  
Engine oil change system, high speed, Wiggins  
Engine block heater 120V or 240V  
High ambient cooling – software  
Cat Production Measurement

### **MISCELLANEOUS ATTACHMENTS**

Front and rear roading fenders  
Fast fill fuel system (Shaw-Aero)  
Cold Weather Starting (extra two batteries)

### **OTHER OPTIONAL CONFIGURATIONS**

Aggregate Handler  
Block Handler

### **OPERATOR ENVIRONMENT**

Cab powered precleaner  
Cat Detect Vision  
AM/FM/CD/MP3 radio  
Satellite Sirius radio with Bluetooth  
LED warning strobe  
CB radio ready  
Window pull down visor  
Handrail mounted mirrors