

Product Specifications For 986



Engine

Engine Power - ISO 14396:2002	335 kW
Engine Model	Cat® C15
Peak Power Speed	1600
Gross Power - SAE J1995:2014	340 kW
Net Power - SAE J1349:2011	278 kW
Rated Speed	2000
Rated Speed - 2,000 rpm - EEC 80/1269	278 kW
Rated Speed - 2,000 rpm - ISO 9249	278 kW
Bore	137 mm
Stroke	171.5 mm
Displacement	15.2 l
Peak Torque (1,200 rpm) - SAE J1995:2014	2411 N·m
Torque Rise	16%

Note (1)

Two engine emission options are available: 1. Meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards. 2. Meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.

Note (2)

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.

Operating Specifications

Operating Weight - Standard	44355 kg
Bucket Capacity Range	5.0-10.3 m ³ (6.5-13.5 yd ³)
Operating Weight - High Lift	47175 kg
Rated Payload - Standard (Quarry Face)	10 t
Rated Payload - Loose Material (Standard)	12.7 t
Rated Payload - High Lift (Quarry Face)	10 t
Rated Payload - Loose Material (High Lift)	11 t
Cat Truck Match - Standard	770/735/740/745
Cat Truck Match - High Lift	772/773

Transmission

Transmission Type	Cat planetary power shift
Forward - 1	7.3 km/h
Forward - 2	12.2 km/h
Direct Drive - Forward 2	12.7 km/h
Direct Drive - Forward 3	22 km/h
Direct Drive - Forward 4	39 km/h
Reverse - 1	7.6 km/h

Reverse - 2	13.6 km/h
Direct Drive - Reverse 2	14.1 km/h
Direct Drive - Reverse 3	25 km/h
Direct Drive - Reverse 4	40.8 km/h

Hydraulic System - Lift/Tilt

Lift/Tilt System - Circuit	Load Sense
Lift/Tilt System - Pump	2 × 110 cc variable displacement
Maximum Flow at 2,165 rpm	470 L/min
Relief Valve Setting - Lift/Tilt	27900 kPa
Lift Cylinder - Bore	190 mm
Lift Cylinder - Stroke	1138 mm
Tilt Cylinder - Bore	170 mm
Tilt Cylinder - Stroke	722 mm

Hydraulic Cycle Times

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

Hydraulic System - Steering

Steering System - Circuit	Load Sense
Steering System - Pump	Piston, variable displacement
Maximum Flow at 1,400 rpm	200 L/min
Steering Cut Off Pressure	27600 kPa
Total Steering Angle	70°

Air Conditioning System

Air Conditioning The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf. See the label or instruction manual for identification of the gas. - If equipped with 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).

Axles

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

Brakes

Brakes	ISO 3450:2011
--------	---------------

Operator's Cab

ROPS/FOPS ROPS/FOPS meet ISO 3471:2008 (ROPS) and ISO 3449:2005 Level II (FOPS)

Service Refill Capacities

Fuel Tank	535 l
-----------	-------

Fuel Tank - Short Lift	481 l
Cooling Systems	100 l
Crankcase	34 l
Diesel Exhaust Fluid Tank	23 l
Transmission	75 l
Axle Oil - Differentials and Final Drives - Front	186 l
Axle Oil - Differentials and Final Drives - Rear	170 l
Hydraulic System Factory Fill	330 l
Hydraulic System - Tank Only	130 l

Sound Performance - Tier 4 Final / Stage V

Operator Sound Pressure Level (ISO 6396:2008)	73 dB(A)
Machine Sound Power Level (ISO 6395:2008)	113 dB(A)
Operator Sound Pressure Level (ISO 6396:2008)*	72 dB(A)
Machine Sound Power Level (ISO 6395:2008)**	110 dB(A)
Note (1)	* For machines in European Union countries and in countries that adopt the "EU Directives" and "UK Directives."
Note (2)	** European Union Directive "2000/14/EC" as amended by "2005/88/EC" and UK Noise Regulation 2001 No. 1701.

Note (3) The machine sound power level was measured according to ISO 6395:2008. The measurement was conducted at 70% of the maximum engine cooling fan speed.

Note (4) The operator sound pressure level was measured according to ISO 6396:2008. The measurement was conducted at 70% of the maximum engine cooling fan speed.

Note (5) 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.

Sound Performance - Tier 3 / Stage IIIA

Operator Sound Pressure Level (ISO 6396:2008) 74 dB(A)

Machine Sound Power Level (ISO 6395:2008) 113 dB(A)

Operator Sound Pressure Level (ISO 6396:2008)* 73 dB(A)

Machine Sound Power Level (ISO 6395:2008)** 110 dB(A)

Note (1) * For machines in European Union countries and in countries that adopt the "EU Directives" and "UK Directives."

Note (2) ** European Union Directive "2000/14/EC" as amended by "2005/88/EC" and UK Noise Regulation 2001 No. 1701.

Note (3) The machine sound power level was measured according to ISO 6395:2008. The measurement was conducted at 70% of the maximum engine cooling fan speed.

Note (4) The operator sound pressure level was measured according to ISO 6396:2008. The measurement was conducted at 70% of the maximum engine cooling fan speed.

Note (5)

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.

Dimensions (Approximate) - Standard Lift Linkage

Ground to Top of ROPS	4100 mm
Ground to Top of Exhaust Stacks	4060 mm
Ground to Top of Hood	3270 mm
Ground to Center of Front Axle	978 mm
Ground to Fuel Tank Clearance	691 mm
Ground to Lower Hitch Clearance	459 mm
Reach - Maximum Lift	2175 mm
Clearance at Maximum Lift	3079 mm
B-Pin Height - Maximum Lift	4912 mm
Maximum Overall Height - Bucket Raised	6817 mm
Rear Axle - Centerline to Bumper	3132 mm
Wheel Base	3810 mm
Maximum Overall Length	11143 mm
Front Axle Centerline to Bucket Tip	4201 mm
Note	All dimensions are approximate. Specifications are calculated with a 6.1 m ³ (8 yd ³) rock bucket.

Dimensions (Approximate) - High Lift Linkage

Ground to Top of ROPS	4100 mm
Ground to Top of Exhaust Stacks	4060 mm
Ground to Top of Hood	3270 mm
Ground to Center of Front Axle	978 mm
Ground to Fuel Tank Clearance	691 mm
Ground to Lower Hitch Clearance	459 mm
Reach - Maximum Lift	2248 mm
Clearance at Maximum Lift	3538 mm
B-Pin Height - Maximum Lift	5371 mm
Maximum Overall Height - Bucket Raised	7276 mm
Rear Axle - Centerline to Bumper	3132 mm
Wheel Base	3810 mm
Maximum Overall Length	11591 mm
Front Axle Centerline to Bucket Tip	4649 mm

Note

All dimensions are approximate.
Specifications are calculated with a 6.1 m³ (8 yd³) rock bucket.

Dimensions (Approximate) - Quick Coupler And 6.1 M³ (8.0 Yd³) Bucket

Ground to Top of ROPS	4100 mm
Ground to Top of Exhaust Stacks	4060 mm

Ground to Top of Hood	3270 mm
Ground to Center of Rear Axle	978 mm
Ground to Fuel Tank Clearance	691 mm
Ground to Lower Hitch Clearance	459 mm
Reach at Maximum Lift	2437 mm
Clearance at Maximum Lift	3259 mm
B-Pin Height at Maximum Lift	4566 mm
Maximum Overall Height, Bucket Raised	6359 mm
Rear Axle Center Line to Bumper	3132 mm
Wheel Base	3810 mm
Maximum Overall Length	10671 mm
Front Axle Centerline to Bucket Tip	3729 mm

Dimensions (Approximate) - Quick Coupler And Fork

Ground to Top of ROPS	4100 mm
Ground to Top of Exhaust Stacks	4060 mm
Ground to Top of Hood	3270 mm
Ground to Center of Rear Axle	978 mm
Ground to Fuel Tank Clearance	691 mm
Ground to Lower Hitch Clearance	459 mm

B-Pin Height at Maximum Lift	4566 mm
Rear Axle Center Line to Bumper	3132 mm
Wheel Base	3810 mm
Maximum Overall Length	10776 mm
Front Axle Centerline to Bucket Tip	3834 mm

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, maintenance-free
 Converter, 10/15 amp, 24V to 12V
 Lighting system (LED, work lights, access and service platform lighting)
 Starting and charging system, 24V
 Auxiliary jump start receptacle

OPERATOR ENVIRONMENT

Graphical Information Display, displays real time operating information, performs calibrations and customizes operator settings
 Air conditioner
 Cat Vision, rear vision camera system
 Cat Production Measurement ready
 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
 Heater, defroster
 Horn, electric
 Instrumentation, gauges:
 – Coolant temperature
 – Fuel level
 – DEF level
 – Hydraulic oil temperature
 – Powertrain 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
Steering and Transmission Integrated Control (STIC™) System
UV glass
Transmission gear indicator
Wet-Arm wipers/washers (front and rear):
– Intermittent front and rear wipers
Lights, directional

POWERTRAIN

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 shutdown switch
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.

POWERTRAIN

-50° C (-58° F) antifreeze

Engine oil change system, high speed, Wiggins

Engine block heater 120V or 240V

High ambient cooling - software

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

Cat® Detect, object detection system

Cat Production Measurement

AM/FM/CD/MP3 radio

Satellite Sirius radio with Bluetooth

LED warning strobe

CB radio ready

Window pull down visor

Handrail mounted mirrors