

PRODUCT SPECIFICATIONS FOR 980



ENGINE

Net Power @ 1,700 rpm – ISO 9249:2007, SAE J1349:2011	393 HP
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Engine Model	Cat C13
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Note (1)	Cat engine meets U.S. EPA Tier 4 Final, EU Stage V, Korea Stage V, China Nonroad Stage IV and Japan 2014 emission standards.
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Note (2)	The net power advertised is the power available at the flywheel when the engine is equipped with fan, alternator, air cleaner, and aftertreatment.
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Note (3)	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.
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Gross Torque @ 1,200 rpm – SAE J1995:2014	1627 lb/ft
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Displacement	12.5 L
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Engine Torque @ 1,200 rpm – ISO 14396:2002	1612 lb/ft
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Gross Power @ 1,700 rpm – SAE J1995:2014	425 HP
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Net Torque @ 1,100 rpm – ISO 9249:2007, SAE J1349:2011	1539 lb/ft
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Engine Power @
1,700 rpm – ISO
14396:2002

429 HP

WEIGHTS

Operating
Weight

66877 lb

Note

Weight based on a machine configuration with Bridgestone 29.5R25 VSNT L4 radial tires, full fluids, operator, standard counterweight, ride control cold start, roading fenders, Product Link, open differential axles (front/rear), secondary steering, sound suppression, and a 5.4 m3 (7.1 yd3) general purpose bucket with BOCE.

TRANSMISSION

Forward - 1

4.3 mile/h

Forward - 2

8.3 mile/h

Forward - 3

14.6 mile/h

Forward - 4

24.5 mile/h

Note

Maximum travel speed in standard vehicle with empty bucket and standard L4 tires with 935 mm (37 in) roll radius.

Reverse - 1

4.8 mile/h

Reverse - 2

9.4 mile/h

Reverse - 3


16.7 mile/h

Reverse - 4

24.5 mile/h

SOUND

Note (1)

** For machines in European Union countries and in countries that adopt the  EU Directives. 

Note (2)

***European Union Directive 2000/14/EC as amended by 2005/88/EC.

With Cooling Fan Speed at 70% of Maximum Value - Exterior Sound Power Level*

109

With Cooling Fan Speed at 70% of Maximum Value - Operator Sound Pressure Level (ISO 6396:2008)

72 dB(A)

With Cooling Fan Speed at Maximum Speed - Exterior Sound Power Level (ISO 6395:2008)

112 dB(A)

With Cooling Fan Speed at Maximum Speed - Exterior Sound Pressure Level (SAE J88:2013)

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With Cooling Fan Speed at Maximum Speed - Operator Sound Pressure Level (ISO 6396:2008)

72 dB(A)

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 1.9 kg (4.2 lb) of refrigerant which has a CO2 equivalent 2.717 metric tonnes (2.995 tons).

OPERATING SPECIFICATIONS

Breakout Force

51008 lb

Note (1)

For a machine configuration as defined under Weight.

Note (2)

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

**Static Tipping Load - Full 40° Turn
- No Tire Deflection**

20965 kg

**Static Tipping Load - Full 40° Turn
- With Tire Deflection**

43432 lb

SERVICE REFILL CAPACITIES

Cooling System	13.7 gal (US)
Crankcase	9.8 gal (US)
DEF Tank	5.5 gal (US)
Differential - Final Drives - Front	22.2 gal (US)
Differential - Final Drives - Rear	22.4 gal (US)
Fuel Tank	112.5 gal (US)
Hydraulic Tank	40.4 gal (US)
Transmission	20.3 gal (US)

HYDRAULIC SYSTEM

Implement System - Maximum Operating Pressure	4975 psi
Implement System - Maximum Pump Output at 2,250 rpm	119 gal/min

DIMENSIONS

Note	All dimensions are approximate and based on machine equipped with 5.4 m3 (7.1 yd3) general purpose bucket with BOCE and Bridgestone 29.5R25 VSNT L4 radial tires.
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DIMENSIONS - HIGH LIFT

Centerline of Rear Axle to Edge of Counterweight	8.9 ft
Centerline of Rear Axle to Hitch	6.3 ft
Ground Clearance	1.5 ft
Height - Top of Exhaust Pipe	12.5 ft
Height - Top of Hood	10.1 ft

Height - Top of ROPS	12.7 ft
Hinge Pin Height at Carry	2.2 ft
Hinge Pin Height at Maximum Lift	15.7 ft
Lift Arm Clearance at Maximum Lift	13.6 ft
Overall Length - Without Bucket	27.5 ft
Tread Width	8 ft
Wheel Base	12.6 ft
Rack Back - Carry Height	50 degrees
Rack Back - Maximum Lift	61 degrees
Rack Back at Ground	40 degrees
Width over Tires (Loaded)	10.9 ft

DIMENSIONS - STANDARD LIFT

Centerline of Rear Axle to Hitch	6.3 ft
Ground Clearance	456 mm
Height - Top of Exhaust Pipe	3764 mm
Height - Top of Hood	3064 mm
Height - Top of ROPS	3829 mm
Hinge Pin Height at Carry	2.2 ft
Hinge Pin Height at Maximum Lift	4554 mm

Lift Arm Clearance at Maximum Lift	3881 mm
Overall Length - Without Bucket	8155 mm
Tread Width	8 ft
Wheel Base	3800 mm
Centerline of Rear Axle to Edge of Counterweight	2661 mm
Rack Back - Carry Height	50 degrees
Rack Back - Maximum Lift	61 degrees
Rack Back at Ground	40 degrees
Width over Tires (Loaded)	10.9 ft

BUCKET CAPACITIES

Bucket Range	4.0-14.5 m ³ 5.25-19 yd ³
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980 STANDARD EQUIPMENT

OPERATOR ENVIRONMENT

Cab, pressurized, sound suppression
 EH implement controls, parking brake
 Steering, joystick
 Seat, cloth, air suspension
 Touchscreen display
 Visibility: mirrors, rear-vision camera
 Air conditioner, heater, defroster (auto temp, fan)
 Sun visor, front, retractable
 Sun visor, rear, retractable
 Window cleaning platform, front
 Windows, front, safety laminated rounded glass

ON-BOARD TECHNOLOGIES

Cat Payload scale
 Autodig with Auto Set Tires
 Operator ID & machine security

Application Profiles
Job Aids
Controls Help and eOMM

POWER TRAIN

Cat C13 engine
Electric fuel priming pump
Fuel-water separator and secondary fuel filter
Engine, air precleaner
Axles, open differentials
Transmission, planetary, automatic powershift
Torque converter with lock-up
Service brakes, hydraulic, fully enclosed wet disc, wear indicators
Integrated Braking System (IBS)
Park brake, caliper on front axles, spring applied-pressure released

HYDRAULICS

Implement system, load sensing with variable displacement piston pump
Steering system, load sensing with dedicated variable displacement piston pump
Ride control, dual accumulators
Oil sampling valves, Cat XT™ hoses

ELECTRICAL

Starting and charging system, 24V
Starter, electric, heavy duty
Lights: halogen, 4 work lights, 2 front roading lights with turn signals, 2 rearvision lights

MONITORING SYSTEM

Front dash with analog gauges, LCD display, and warning lights
Primary touchscreen monitor (Cat Payload, quad screens, machine settings & messages)

LINKAGE

Standard lift, Z-bar
Kickouts: lift and tilt

980 OPTIONAL EQUIPMENT

OPERATOR ENVIRONMENT

Door, remote opening system
HMU steering wheel
Entertainment radio (FM, AM, USB, BT)
Entertainment radio (DAB+)
CB radio ready
Seat, suede/cloth, air suspension, heated
Seat, leather/cloth, air suspension, heated/ cooled

360° vision system
Cat Detect rear radar system
Dedicated rearview screen
Mirrors, heated
Windows, front, heavy duty, or full guards

ON-BOARD TECHNOLOGIES

Cat Advanced Payload
Cat Payload Printer

POWER TRAIN

Turbine, air precleaner
Radiator, high debris
Cooling fan, reversible
Axles, limited slip differential(s)
Axles, ecology drains, AOC ready, extreme temperature seals
Axles, oil cooler
Heavy Duty transmission

HYDRAULICS

3rd auxiliary function with ride control
Quick coupler control

ELECTRICAL

Cold start, 120V or 240V
Lights: LED
Warning beacon

MONITORING SYSTEM

Reversing strobe lights

LINKAGE

High lift, Z-bar

ADDITIONAL EQUIPMENT

Cat Autolube system
Fenders, extensions or roading
Guards: power train, crankcase, cab, cylinders, rear
Biodegradable hydraulic oil
High-speed oil change system
Rear cab access
Fast fill fuel tank
Toolbox
Wheel chocks
Secondary steering system, electrical

SPECIAL CONFIGURATIONS

Aggregate handler

Waste and industrial

Forestry, logger

Steel mill

Block handler