

PRODUCT SPECIFICATIONS FOR 980M

ENGINE

Maximum Power - 1,700 rpm - SAE J1995	425 HP
Net Power - ISO 9249	386 HP
Engine Model	Cat C13
Maximum Power - 1,700 rpm - SAE J1995 - Metric	431 HP
Peak Gross Torque - 1,200 rpm - ISO 14396	1609 ft·lbf
Peak Gross Torque - 1,200 rpm - SAE J1995	1627 ft·lbf
Maximum Net Power - 1,700 rpm - ISO 9249	386 HP
Maximum Net Power - 1,700 rpm - SAE J1349	386 HP
Maximum Net Power - 1,700 rpm - SAE J1349 - Metric	392 HP
Maximum Net Power - 1,700 rpm - ISO 9249 - Metric	392 HP
Maximum Net Torque - 1,100 rpm	1515 ft·lbf
Maximum Power - 1,700 rpm - ISO 14396 - Metric	426 HP
Displacement	763 in ³
Maximum Power - 1,700 rpm - ISO 14396	420 HP
Note	The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.6 kg of refrigerant which has a CO2 equivalent of 2.288 metric tonnes.

SOUND

With Cooling Fan Speed at Maximum Value - Operator Sound Pressure Level (ISO 6396:2008)	72 dB(A)
Note (1)	*Distance of 15 m (49.2 ft), moving forward in second gear ratio.

With Cooling Fan Speed at Maximum Value - Exterior Sound Power Level (ISO 6395:2008)	112 dB(A)
With Cooling Fan Speed at 70% of Maximum Value - Operator Sound Pressure Level (ISO 6396:2008)**	72 dB(A)
With Cooling Fan Speed at 70% of Maximum Value - Exterior Sound Power Level (ISO 6395:2008)**	109 LWA***
Note (2)	**For machines in European Union countries and in countries that adopt the ?EU Directives.?
With Cooling Fan Speed at Maximum Value - Exterior Sound Pressure Level (SAE J88:2013)	78 dB(A)*
Note (3)	***European Union Directive ?2000/14/EC? as amended by ?2005/88/EC.?

SERVICE REFILL CAPACITIES

Differential - Final Drives - Front	22 gal (US)
Crankcase	9.8 gal (US)
Differential - Final Drives - Rear	22 gal (US)
Cooling System	14 gal (US)
Hydraulic Tank	40 gal (US)
Transmission	20.3 gal (US)
Fuel Tank	112.5 gal (US)
DEF Tank	5.5 gal (US)

WEIGHTS

Operating Weight	66337 lb
Note	Weight based on a machine configuration with Michelin 29.5R25 XLDD1 L4 radial tires, full fluids, operator, standard counterweight, cold start, roading fenders, Product Link™, open differential axles, secondary steering, sound suppression, and a 5.4 m ³ (7.1 yd ³) GP bucket with BOCE.

BUCKETS

Bucket Capacities	4.2-12.2 m ³ (5.25-16 yd ³)
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TRANSMISSION

Forward - 4	24.5 mT/hr
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Forward - 3	14.6 mT/hr
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Forward - 2	8.3 mT/hr
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Forward - 1	4.3 mT/hr
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Reverse - 3	16.7 mT/hr
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Reverse - 2	9.4 mT/hr
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Reverse - 1	4.8 mT/hr
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Reverse - 4	24.5 mT/hr
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Note	Maximum travel speed in standard vehicle with empty bucket and standard L4 tires with 933 mm (37 in) roll radius.
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OPERATING SPECIFICATIONS

Breakout Force	50357 lbf
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Static Tipping Load - Full 40° Turn - With Tire Deflection	43133 lb
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Static Tipping Load - Full 40° Turn - No Tire Deflection	45847 lb
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Note (1)	For a machine configuration as defined under ? Weight.?
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Note (2)	Full compliance to ISO 143971:2007 Sections 1 thru 6.
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HYDRAULIC SYSTEM

Implement System - Maximum Pump Output at 2,250 rpm	119 gal/min
Implement System - Maximum Operating Pressure	4975 psi
Hydraulic Cycle Time - Total	10.1 s

DIMENSIONS - HIGH LIFT

Wheel Base	12.5 ft
Centerline of Rear Axle to Hitch	6.25 ft
Maximum Width over Tires	10.83 ft
Overall Length - Without Bucket	26.83 ft
Tread Width	8 ft
Lift Arm Clearance at Maximum Lift	13.08 ft
Height - Top of Hood	10.25 ft
Note	All dimensions are approximate and based on Michelin 29.5R25 XLDD1 L4 radial tires.
Height - Top of Exhaust Pipe	12.33 ft
Hinge Pin Height at Carry	2.25 ft
Rack Back - Maximum Lift	61 degrees
Rack Back - Carry Height	48 degrees
Centerline of Rear Axle to Edge of Counterweight	8.17 ft
Ground Clearance	1.42 ft
Hinge Pin Height at Maximum Lift	15.58 ft
Rack Back at Ground	39 degrees
Height - Top of ROPS	12.58 ft

DIMENSIONS - STANDARD LIFT

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Hinge Pin Height at Carry	2.08 ft
Rack Back - Maximum Lift	61 degrees
Note	All dimensions are approximate and based on Michelin 29.5R25 XLDD1 L4 radial tires.
Centerline of Rear Axle to Edge of Counterweight	8.17 ft
Height - Top of Exhaust Pipe	12.33 ft
Tread Width	8 ft
Rack Back - Carry Height	48 degrees
Rack Back at Ground	40 degrees

BUCKET CAPACITIES

Bucket Range	4.2-12.2 m ³ (5.25-16 yd ³)
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ENGINE - TIER 4 FINAL/STAGE IV

Emissions	Tier 4/Stage IV
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980M STANDARD EQUIPMENT

POWER TRAIN

Engine, Cat C13 meets Stage IV emission standards

Cat Clean Emissions Module (CEM) with Diesel Exhaust Fluid (DEF) tank and pump

Fuel priming pump (electric)

Fuel/water separator

Precleaner, engine air intake

Economy Mode (selectable)

Transmission, automatic planetary power shift (4F/4R)

Torque converter, locking clutch with free wheel stator

Switch, transmission neutralizer lockout

Axles, open differential, front and rear

Heavy duty transmission (982M)

Axles, ecology drains

Brakes, full hydraulic enclosed wet-disc with Integrated Braking System (IBS)

Brake wear indicators

Parking brake, disc and caliper

Fan, radiator, electronically controlled, hydraulically driven, temperature sensing, on demand

Radiator, high debris, 6 fins per inch, 43° C cooling capacity

OPERATOR ENVIRONMENT

Cab, pressurized and sound suppressed (ROPS/FOPS)

Viscous mounts

Multi-function 18 cm color LCD touch-screen display for rear vision camera image display (reverse travel activated) and machine status, setting and health parameters

EH controls, SAL (single axis levers) lift and tilt function

Steering, EH joystick, speed sensing with force feedback

Radio ready (entertainment) includes antenna, speakers and converter

Air conditioner, heater, and defroster (auto temp and fan)

EH parking brake

Beverage holders (2) with storage compartment for cell phone/MP3 player

Bucket/work tool function lockout

Coat hook (2)

Cab air filter

Ergonomic cab access ladders and handrails

Horn, electric

Light, two dome (cab)

Mirrors, rearview external with integrated spot mirrors

Post mounted membrane 16 switch keypad

3 receptacles, 12V

Seat, Cat Comfort (cloth) air suspension

Seat belt, 51 mm retractable, with indicator

Steering, secondary

Sun visor, front

Wet-arm wipers/washers front and rear, intermittent front wiper

Window, sliding (left and right sides)

Cab tie-off

COMPUTERIZED MONITORING SYSTEM

With following gauges: Speedometer/tachometer; Digital gear range indicator; Diesel Exhaust Fluid (DEF) level; Temperature: engine coolant, hydraulic oil, transmission oil; Fuel level

With following warning indicators: Regeneration; Temperature: axle oil, engine intake manifold; Pressure: engine oil, fuel pressure hi/low, primary steering oil, service brake oil; Battery voltage hi/low; Engine air filter restriction; Hydraulic oil filter restriction; Hydraulic oil low; Parking brake; DEF low level; Transmission filter bypass

ELECTRICAL AND LIGHTING

Batteries (2), maintenance free 1,400 CCA

Ignition key; start/stop switch

Starter, electric, heavy duty

Starting and charging system (24V)

Lighting system: Four halogen work lights (cab mounted); Two halogen reading lights (with signals); Two

Lighting system, four halogen work lights (cab mounted), two halogen reading lights (with signals), two halogen rear vision lights (hood mounted)

Alarm, back-up

Alternator, 145-amp brushed

Main disconnect switch

Receptacle start (cables not included)

CAT CONNECT TECHNOLOGIES

Link technologies: Product Link

Detect technologies: rear vision camera

LINKAGE

Linkage, Z-bar, cast crosstube/tilt levers

Kickout, lift and tilt, automatic (adjustable in cab)

HYDRAULICS

Hydraulic system, load sensing

Steering, load sensing

Ride control, 2V

Remote diagnostic pressure taps

Hoses, Cat XT™

Couplings, Cat O-ring face seal

Hydraulic oil cooler (swing out)

Oil sampling valves

FLUIDS

Premixed extended life coolant with freeze protection to -34° C

OTHER STANDARD EQUIPMENT

One-piece tilting hood with side and rear doors

Service centers (electrical and hydraulic)

Platform, window washing

Auto idle shutdown

Fenders, steel front with mud-flap/rear with extension

Guard, power train

Ecology drains for engine, transmission, and hydraulics

Ether aid ready

Grill, airborne debris

Filters: fuel, engine air, engine oil, hydraulic oil, transmission

Fuel cooler

Grease zerks

Hitch, drawbar with pin

Precleaner rain cap

Sight gauges: engine coolant, hydraulic oil, and transmission oil level

Toolbox

Vandalism protection caplocks

980M OPTIONAL EQUIPMENT

POWER TRAIN

Axles: Differentials: limited slip, front or rear; Axle oil cooler

Heavy duty transmission

Fan, VPF (variable pitch fan), automatic and manual control

Radiator, low debris, 9 fins per inch, high ambient 47° C cooling capacity

OPERATOR ENVIRONMENT

Door, remote opening system

Cover, HVAC metallic

EH controls, SAL 3rd function

EH controls, joystick lift and tilt - Additional integrated roller switches for 3rd function

Filter, carbon fresh air

Mirrors, heated rearview external with integrated spot mirrors

Precleaner, HVAC

Precleaner, HVAC (RESPA)

Radio. AM/FM/CD/USB/MP3 Bluetooth

Radio, CB ready

Seat, heated air suspension

Steering, EH wheel with direction FNR shifter and gear selector - Additional FNR with implement controls

Roof, metallic

Sun visor, rear

Windows, rubber mounted

Windows, with front guard

Windows, with heavy duty front guard

Windows, with full guards front, rear and sides

ELECTRICAL AND LIGHTING

Four additional auxiliary halogen cab mounted work lights or

Two additional auxiliary front HI LED and two additional auxiliary rear LED cab mounted work lights with two LED work lights in the radiator grill and LED front turn signals also includes replacement of the standard four halogen cab mounted work lights with four LED work lights (the standard offering and only roading light available is the halogen roading light)

Warning amber strobe beacon

Reversing strobes

External seat belt indicator light

Speed limiter - 20 km/h (Europe only)

STARTERS, BATTERIES, AND ALTERNATORS

Batteries (4), maintenance free 1,400 CCA with 240V Engine Coolant Heater

CAT CONNECT TECHNOLOGIES

Link technologies: VIMS™

Payload technologies: Aggregate Autodig; Cat Production Measurement 2.0; Printer

Detect technologies: Cat Rear Object Detection

Machine Security System

LINKAGE

High lift

Logger

Quick coupler ready

WORK TOOLS

Performance Series buckets

Forks, pallet

Forks, logging

HYDRAULICS

3rd function with Ride Control: Standard linkage; High lift linkage; Logging linkage

FLUIDS

Premixed extended life coolant with freeze protection to -50° C

OTHER OPTIONAL EQUIPMENT

Cat Autolube System

Wheel chocks

Fenders, roading

Oil change, high speed engine

Fuel tank, fast fill

Precleaner, turbine

Precleaner, trash

PURPOSE BUILT SPECIALTY MODELS

High Lift

Aggregate Handler

Industrial & Waste

Forestry

Steel Mill

Block Handler