

Product Specifications For 834



Engine

Engine Model	Cat® C18
Net Power - SAE J1349:2011	370 kW
Rated Speed	1900 r/min
Peak Power Speed	1500 r/min
Gross Power - SAE J1995:2014	419 kW
Bore	145 mm
Stroke	183 mm
Displacement	18.1 l
Peak Torque - 1,300 rpm	2836 N·m
Torque Rise	52 %
Note (1)	Net power advertised is the power available at the engine flywheel when the engine is equipped with a fan, air cleaner, clean emissions module and alternator.
Note (2)	The following engine configurations are available: – Meets U.S. EPA Tier 4 Final and EU Stage V emission standards. – Noncertified that emits equivalent to U.S. EPA Tier 3.

Operating Specifications

Operating Weight	47750 kg
Blade Capacities	7.9 – 22.2 m ³ (10.3 – 29.0 yd ³)

Transmission

Transmission Type	Cat planetary power shift
Forward - 1	6.8 km/h
Forward - 2	11.6 km/h
Forward - 3	20.3 km/h
Forward - 4	35.4 km/h
Reverse - 1	6.8 km/h
Reverse - 2	12.2 km/h
Reverse - 3	21.4 km/h
Direct Drive - Forward 1	Lock-up disabled
Direct Drive - Forward 2	12.4 km/h
Direct Drive - Forward 3	22.1 km/h
Direct Drive - Forward 4	38.5 km/h
Direct Drive - Reverse 1	7.2 km/h
Direct Drive - Reverse 2	13 km/h
Direct Drive - Reverse 3	23 km/h
Note	Travel speeds based on 35/65-R33 tire

Hydraulic System - Lift/Tilt

Lift/Tilt System - Circuit	Pilot operated LS valve with EH
Lift/Tilt System	Variable displacement piston

Maximum Flow at 1,900 rpm	582 L/min
Relief Valve Setting - Lift/Tilt	32000 kPa
Cylinders, Double Acting - Lift, Bore and Stroke	139.75 mm × 1021 mm (5.5 in × 40.2 in)
Cylinders, Double Acting - Left and Right Tilt, Bore and Stroke	140 mm × 230 mm (5.5 in × 9.1 in)
Pilot System	Variable displacement piston
Pilot Maximum Flow	52 L/min
Pilot Relief Valve Setting	4000 kPa

Hydraulic System - Steering

Steering System - Circuit	Pilot, load sensing
Steering System - Pump	Piston, variable displacement
Maximum Flow	250 L/min
Relief Valve Setting - Steering	24100 kPa
Total Steering Angle	86 °
Steering Cycle Times - High Idle	3.1 s
Steering Cycle Times - Low Idle	5.7 s

Service Refill Capacities

Fuel Tank	793 l
Cooling System	120 l
Crankcase	60 l

Diesel Exhaust Fluid Tank	33 l
Transmission	120 l
Hydraulic System Factory Fill	240 l
Differential - Final Drives - Front	186 l
Differential - Final Drives - Rear	186 l
Hydraulic System - Tank Only	140 l
Note (1)	All non-road Tier 4 Final/Stage V 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 (hydrotreated 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 (for use of blends higher than 20% biodiesel, consult your Cat dealer). ** Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels. • For pre-Tier 4 engines: Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels** up to: • 100% biodiesel FAME (fatty acid methyl ester)* • 100% renewable diesel, HVO (hydrotreated 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. * For use of blends higher than 20% biodiesel, consult your Cat dealer. ** Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

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).
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Axles

Front	Fixed
Rear	Trunnion
Oscillation Angle	±13°

Brakes

Brakes	ISO 3450: 2011
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Sound Performance - Tier 4 Final / Stage V

Operator Sound Pressure Level (ISO 6396:2008)	72 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)**	109 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 percent 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 percent 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)

72 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 percent 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 percent 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

Height - Top of Exhaust Stack	4835 mm
Height - Top of Air Cleaner	3895 mm
Height - Top of Hood	3334 mm
Ground Clearance - Bumper	933 mm
Centerline of Rear Axle to Edge of Bumper	3187 mm
Wheel Base	4550 mm
Length - Front of Tire	8715 mm
Length - Straight Blade on Ground	9927 mm
Length - Universal Blade on Ground	10470 mm
Centerline of Front Axle to Hitch	2275 mm
Ground Clearance	531 mm
Height - Top of Cab	4184 mm

834 Standard Equipment

NOTE

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

ELECTRICAL

Alarm, back-up

Alternator, single (100 amp)

Batteries, dry

Hazardous voltage lamp

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

Air conditioner

Starter lockout in bumper

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

Cat Vision, rear-vision camera system

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

CB radio ready

Tilt, tip controls

Heater and defroster

Horn, electric

Light, cab (dome)

Lights, directional

Lunchbox and beverage holders

Vital Information Management System (VIMS™) with graphical information display: external data port, customizable operator profiles, cycle timer, integrated payload control system

Radio, AM/FM/CD/MP3 Bluetooth®

Instrumentation, gauges: - coolant temperature, engine hour meter, hydraulic oil temperature, powertrain oil temperature

Mirrors, rearview (externally mounted)

Rimpull control system (RCS)

Seat, deluxe

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

Steering and transmission integrated control (STIC™) system

UV glass

Operator presence

Wet-arm wipers/washers (front and rear)

Intermittent front and rear wipers

POWERTRAIN

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

Automatic retarding controls

Case drain screens

Engine, Cat C18 MEUI™, diesel, turbocharged/aftercooled

Antifreeze, premixed 50% concentration of extended life coolant with freeze protection to -34°C (-29°F)

Electro hydraulic parking brake

Turbine precleaner, engine air intake

Radiator, Aluminum Modular Radiator (AMR)

Manual switch and automatic fuel priming

Starting aid (ether) automatic

Throttle lock, electronic

Torque converter, impeller clutch (ICTC) with lock-up clutch (LUC) and rimpull control system (switch and dial in cab)

Transmission, planetary, power shift (4F/3R) electronic control

ADDITIONAL EQUIPMENT

Doors, service access (locking)

Hitch, drawbar with pin
Oil sampling valves
Rear access to cab and service platform
Steering, load sensing
Vandalism protection caplocks

834 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 brake
High ambient cooling-software
Turbine precleaner, engine air intake dual stage
Axle oil cooler
Crankcase guards

OPERATOR ENVIRONMENT

Cab precleaner
Radio, AM/FM/CD/MP3 Bluetooth with Satellite SiriusXM
Seat, Premium Plus containing forced air heating and cooling, 2-way thigh adjustment, power lumbar and back bolster adjustment, ride stiffness, dynamic end dampening and leather finish
LED warning strobe
Window pull down visor
Cat Detect (object detection system)

ADDITIONAL EQUIPMENT

Front and rear roading fenders
Fast fill fuel system (Shaw-Aero)