



844

Wheel Dozer

Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

Table of Contents

Specifications	2
Engine	2
Operating Specifications	2
Transmission	2
Hydraulic System – Lift/Tilt	2
Hydraulic System – Steering	2
Service Refill Capacities	3
Air Conditioning System	3
Axles	3
Brakes	3
Sound Performance	3
Cab	3
Dimensions	4
Blade Specifications	5
Standard and Optional Equipment	6
844 Environmental Declaration	8

844 Wheel Dozer Specifications

Engine

Engine Model	Cat® C27	
Rated Speed	1,800 rpm	
Gross Power – ISO 14396:2002	561 kW	752 hp
Gross Power – SAE J1995:2014	571 kW	766 hp
Net Power – SAE J1349:2011 (Standard Ambient)	521 kW	699 hp
Net Power – SAE J1349:2011 (High Ambient)	483 kW	648 hp
Bore	137.2 mm	5.4 in
Stroke	152.4 mm	6.0 in
Displacement	27.03 L	1,649.5 in ³
Peak Torque (speed)	3557 N·m	2,624 lbf·ft
Torque Rise	18%	

- Two engine emissions options are available:
 1. Meets U.S. EPA Tier 4 Final and and EU Stage V emissions standards.
 2. Meets China Nonroad Stage III emission standards, equivalent to U.S. EPA Tier 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	74 883 kg	165,089 lb
Blade Capacities	15.9-30.7 m ³	20.7-40.2 yd ³

Transmission

Transmission Type	Cat planetary power shift	
Converter Drive Forward 1	7.3 km/h	4.5 mph
Converter Drive Forward 2	13.3 km/h	8.3 mph
Converter Drive Forward 3	22.9 km/h	14.2 mph
Converter Drive Reverse 1	7.9 km/h	4.9 mph
Converter Drive Reverse 2	14.7 km/h	9.1 mph
Converter Drive Reverse 3	24.9 km/h	15.5 mph
Direct Drive Forward 1	Lock-up disabled	
Direct Drive Forward 2	13.7 km/h	8.5 mph
Direct Drive Forward 3	24.5 km/h	15.2 mph
Direct Drive Reverse 1	8.7 km/h	5.4 mph
Direct Drive Reverse 2	15.4 km/h	9.6 mph
Direct Drive Reverse 3	26.4 km/h	16.4 mph

- Travel speeds based on 45/65-45 L-5 46 ply tires.

Hydraulic System – Lift/Tilt

Output at 2,000 rpm and 6900 kPa (1,000 psi)	311 L/min	82 gal/min
Cylinder, Double-acting: Lift, Bore and Stroke	133 mm × 1535 mm	5.25 in × 60.4 in
Cylinder, Double-acting: Tilt and Tip, Bore and Stroke	210 mm × 188 mm	8.25 in × 7.4 in
Relief Valve Setting – Bulldozer (Large Pump)	18 650 kPa	2,700 psi
Relief Valve Setting – Tilt Cylinders (Small Pump)	20 150 kPa	2,920 psi

Hydraulic System – Steering

Steering System – Circuit	Pilot, load sensing	
Steering System – Pump	Piston, variable displacement	
Minimum Turning Radius (over blade)	10 369 mm	34.0 ft
Total Steering Angle	35 degrees	
Maximum Flow	357 L/min	94.3 gal/min
Relief Valve Setting	31 000 kPa	4,500 psi

Service Refill Capacities

Fuel Tank – Standard	1085 L	286.6 gal
Cooling System	208 L	54.9 gal
Crankcase	76 L	20 gal
Transmission	110 L	29.1 gal
Differentials and Final Drives – Front	271 L	71.6 gal
Differentials and Final Drives – Rear	261 L	68.9 gal
Hydraulic System – Implement and Hydraulic Fan	261 L	68.9 gal
Hydraulic System – Steering and Braking	132 L	34.9 gal

Air Conditioning System

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.

Axles

Front	Fixed
Rear	Trunnion
Oscillation Angle	8.5 degrees

Brakes

Brakes	Meets ISO 3540:2011
--------	---------------------

Sound Performance

	Standard	Suppression
Operator Sound Level (ISO 6396:2008)	69 dB(A)	69 dB(A)
Machine Sound Level (ISO 6395:2008)	115 dB(A)	113 dB(A)

- 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.
- 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.
- 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.

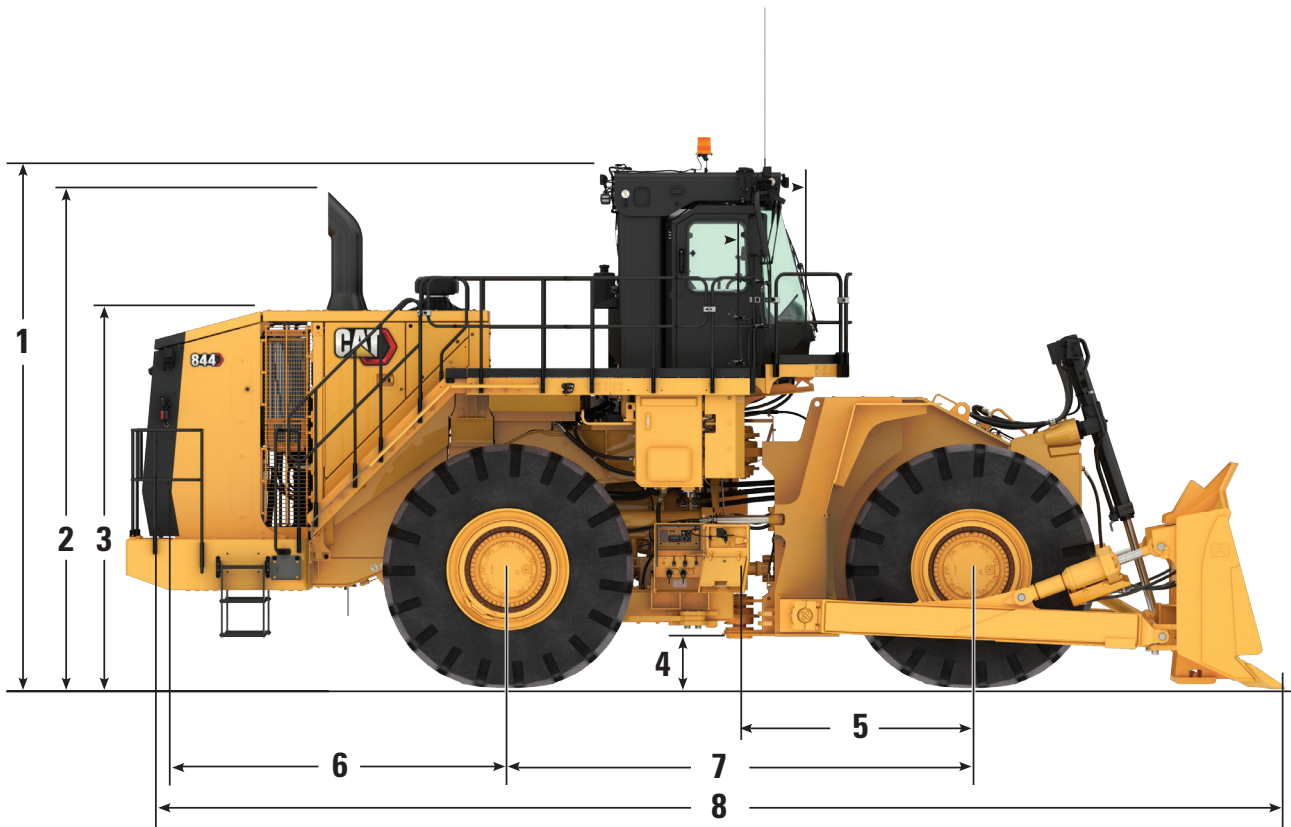
Cab

ROPS/FOPS	ISO 3471:2008 and ISO 3449:2005 Level II Standards
-----------	---

844 Wheel Dozer Specifications

Dimensions

All dimensions are approximate.



1	Height to Top of ROPS	5240 mm	17.2 ft
2	Height to Top of Exhaust Pipe	5049 mm	16.6 ft
3	Height to Top of Hood	3862 mm	12.7 ft
4	Ground Clearance	596 mm	2.0 ft
5	Center Line of Front Axle to Hitch	2300 mm	7.5 ft
6	Center Line of Rear Axle to Edge of Bumper	3795 mm	12.5 ft
7	Wheelbase	4600 mm	15.1 ft
8	Length with Blade on Ground	11 120 mm	36.5 ft

844 Wheel Dozer Specifications

Blade Specifications

Blade Type	Capacity	Overall Width	Height	Digging Depth	Ground Clearance	Maximum Tilt	Weight	Total Operating Weight
Semi-U	15.9 m3 20.7 yd3	5418 mm 213.3 in	2024 mm 79.7 in	465 mm 18.3 in	1459 mm 57.4 in	829 mm 32.6 in	7273 kg 16,034 lb	74 883 kg 165,089 lb
Heavy-duty Semi-U	15.9 m3 20.7 yd3	5419 mm 213.3 in	2223 mm 87.5 in	477 mm 18.8 in	1372 mm 54.0 in	940 mm 37.0 in	7763 kg 17,100 lb	75 366 kg 165,805 lb
Coal	30.7 m3 40.2 yd3	5846 mm 230.2 in	2024 mm 79.7 in	465 mm 18.3 in	1372 mm 54.0 in	940 mm 37.0 in	6273 kg 13,830 lb	73 883 kg 162,542 lb

844 Wheel Dozer Standard and Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
ELECTRICAL AND LIGHTING			OPERATOR ENVIRONMENT		
Alternator, 150 amp	✓		Advisor display, displays real time operating information, performs calibrations and customizes operator setting	✓	
Batteries, maintenance free (4 – 1,400 CCA)	✓		Air conditioner and heater with automatic temperature control	✓	
Battery disconnect and jump start receptacle, bumper	✓		Air precleaner, powered	✓	
Deutsch terminal connectors	✓		Cab, sound-suppressed pressurized, separate external rollover protective structure (ROPS/FOPS)	✓	
Electrical system, 24V	✓		Cigar lighter and ashtray	✓	
Electronic transmission control	✓		Coat hook	✓	
Lighting system, halogen (front and rear) lighting, access stairway, engine compartment	✓		Converter (12V, 10-15 amp) and power port	✓	
Lights, LED		✓	Digital display on center console: gear, ground speed, machine hours	✓	
Product Link (Cellular)		✓	Electro-hydraulic blade controls, joystick	✓	
Product Link (Satellite)		✓	Heater and defroster	✓	
Starter lockout in bumper	✓		Horn, electric	✓	
Starting and charging system, 24V	✓		Instrumentation, gauges: engine coolant temperature, fuel level, hydraulic oil temperature, powertrain oil temperature, tachometer	✓	
Transmission lockout in bumper	✓		Instrumentation, warning indicators: action alert system – three categories, automatic transmission model enable status, brake malfunction, bucket float status, delayed engine shutdown status, engine idle shutdown status, engine malfunction, fuel economy mode enable status, hydraulic lockout, lockup clutch enable status, low fuel level, parking brake status, rimpull control enable status, seat belt warning, secondary steering (if equipped), throttle lock status, transmission gear	✓	
POWERTRAIN			Light, cab, dome	✓	
Brakes, oil cooled, multi-disc, service/secondary	✓		Lunchbox and beverage holders	✓	
Driveline parking brake	✓		Premium seat with heated and actively cooled leather, adjustable lumbar support, air adjustable bolsters on the seat and backrest, seat cushion tilt adjustment, and adjustable-length seat cushion	✓	
Engine brake		✓	Radio, AM/FM with Bluetooth, USB Port, 3.5 mm AUX input	✓	
Engine, Cat C27	✓		Radio, Sirius XM/AM/FM radio with Bluetooth technology, USB Port, 3.5 mm AUX input		✓
Fuel priming pump (electric)	✓		Rubber mounted cab glass		✓
Ground level engine shutoff	✓		Tinted glass	✓	
No spin rear axle		✓	Wet-arm wipers/washers (front, rear, and corner) – intermittent front wiper	✓	
No spin rear axle and oil cooler		✓	Window sun screen		✓
Precleaner, engine air intake (above hood)	✓				
Precleaner, raised		✓			
Radiator, Aluminum Modular (AMR)	✓				
Starting aid, (ether) automatic	✓				
Throttle lock electronic	✓				
Torque converter, impeller clutch with lock-up clutch (ICTC) and rimpull control system	✓				
Transmission, 534 mm (21 in) planetary power shift (electronic) (3F/3R)	✓				

844 Wheel Dozer Standard and Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
SAFETY			BLADES		
Alarm, back-up	✓		Semi-U – 17.8 m ³ (23.3 yd ³), HD semi-U – 16.1 m ³ (21.1 yd ³), Coal – 30.7 m ³ (40.2 yd ³)		✓
Camera, rear vision	✓		Paint, black blade rear		✓
Egress, powered rear access		✓	COOLING		
Emergency platform egress	✓		Standard ambient package (recommended for site conditions that do not exceed 43° C [110° F])	✓	
Implement lockout switch	✓		High ambient cooling software (recommended for site conditions that do not exceed 49° C [121° F])		✓
LED warning strobe		✓	COLD WEATHER		
Mirrors, rearview (externally mounted)	✓		Antifreeze, -50° C (-58° F)		✓
Object detection (radar)		✓	120V or 240V coolant heating elements (recommended in conditions from -18° C to -30° C [0° F to -22° F])		✓
Seat belt, retractable, 76 mm (3 in) wide	✓		Fuel heater (heated by recirculation using engine heat and a heat exchanger) (recommended in conditions from -18° C to -30° C [0° F to -22° F])		✓
Separate external protective structure (ROPS/FOPS)	✓		-40° C (-40° F) Hydraulic Oil, Arctic		✓
Stairway, left and right rear access	✓		Heater Mirrors		✓
Steering and transmission lock lever, cab	✓		Heated Seat	✓	
Steering, secondary	✓		EFFICIENCY		
Seat, trainer with lap belt, 76 mm (3 in) wide	✓		Economy mode with on-demand throttle	✓	
Toe kicks	✓		Positive Flow Control implement system	✓	
Wheel Chocks		✓	Impeller Clutch Torque Converter (ICTC) with lock-up clutch	✓	
SERVICE			Load-sensing steering	✓	
Automatic Lubrication System greases the hitch, steering, and axle trunnion bearings		✓	Soft detent controls	✓	
Axle ecology drains	✓		Engine idle management features: Auto idle kickdown, Delayed engine shutdown, Engine idle shutdown	✓	
Battery disconnect and jump start receptacle, bumper	✓		MACHINE CONTROL AND GUIDANCE		
Case drain filters	✓		Cat Terrain ready		✓
Coupling, Cat O-ring face seals	✓		TIRES AND RIMS		
Engine, crankcase, 500 hour interval with CH4	✓		Tires - 45/65R39		✓
Front walkway around cab	✓		Rims only		✓
Guards, crankcase and power train	✓		Axle oscillation limit stop		✓
Ground-level fast fill fuel system		✓	TRAMMING		
Ground-level service center with Electronic Technician (ET) port, fast fill fluid ports, ecology drains		✓	Front Fenders	✓	
Grouped/Labeled lube points	✓		Fender extensions, roading, front and rear		✓
High pressure hydraulic oil screen		✓	SOUND SUPPRESSION		
High speed oil change system		✓	Sound-suppression package		✓
Hitch, drawbar with pin	✓				
Hoses, Cat XT™	✓				
Oil sampling valves	✓				
Product Link™		✓			
Starter and Transmission lockouts in bumper	✓				
Sight gauges for steering, implement and transmission oil	✓				
Tire pressure monitoring		✓			
Vital Information Management System (VIMSTM) 3G with graphical information display: external data port, customizable operator profiles	✓				

844 Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit <https://www.caterpillar.com/en/company/sustainability.html>.

Engine

- The Cat® C27 engine is available in configurations that meet U.S. EPA Tier 4 Final emission standards or equivalent to U.S. EPA Tier 2.
- Cat U.S. EPA Tier 4 Final 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
- Cat engines equivalent to U.S. EPA Tier 2, 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.

* Engines with no aftertreatment devices can use higher blends, up to 35% biodiesel where mandated.

** 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

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant 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).

Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
 - Barium < 0.01%
 - Cadmium < 0.01%
 - Chromium < 0.01%
 - Lead < 0.01%

Oils and Fluids

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO™ Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

Features and Technology

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
 - Engine Idle Management System and Auto Engine Idle Shutdown reduces idle RPM and maximize fuel efficiency
 - Autoshift mode to automatically upshift or downshift based on machine speed, optimizing performance and conserving fuel
 - Load sensing hydraulic steering system enables precise machine control for easier loading
 - Extended maintenance intervals reduce fluid and filter consumption
 - Cat torque converter with lock-up clutch improves travel speeds, optimizes fuel efficiency, and eliminates torque converter losses, while lowering system heat

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com.

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

© 2023 Caterpillar. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, VIMS, DEO-ULS, Product Link, XT, STIC, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEXQ2666-01 (10-2023)
Replaces: AEXQ2666-00
Build Number: 11A
(Global)

