844H

Wheel Dozer

Engine		
Engine Model	Cat® C27 ACERT®	
Gross Power	512 kW	687 hp
Net Power – ISO 14396	499 kW	669 hp
Net Power – EEC 80/1269	468 kW	627 hp

Operating Specifications		
Operating Weight	70 815 kg	156,120 lb
Blades		
Blade Capacities	16.1 m^3- 30.7 m^3	21.1 yd^3- 40.2 yd^3

844H Features

Productivity
Productivity is critical to your bottom line. The 844H offers features and systems that help to improve performance and lower your cost-per-ton.

Efficiency
From everyday production to daily maintenance, the 844H offers features to minimize cost.

Reliability
The 844H offers field proven components and systems, high hour machine life standards and multiple rebuild options for continued uptime and long machine life.

Operator Comfort
From low effort controls to reduced operator sound, the 844H has a number of features that minimize operator fatigue, resulting in a safe, productive work site.

Serviceability
Designed to ensure minimal downtime with attention to ground level access and grouped service points, the 844H maximizes production and minimizes service time.

Sustainability
With a number of features and options that lower customer cost and waste, the 844H can assist you in being an environmental steward.

Safety
The 844H offers a number of features that optimize visibility, allow for safe machine service and enhance operator health and well-being.

Contents

The Cat® 844H Wheel Dozer continues the Caterpillar tradition with its power, mobility, operator comfort and blade selection that allows you to get the job done quickly and economically. The 844H is ideally suited for the rugged duties associated with mining, quarries and utilities.

Productivity

Engine

The Cat® C27 engine with ACERT® Technology is U.S. EPA Tier 3 and EU Stage III compliant. It features increased horsepower and efficient fuel management for quick response, high productivity and exceptional service life. A sculpted cylinder block provides greater strength and is lighter weight.

Impeller Clutch Torque Converter (ICTC) Left Pedal Control

The ICTC allows the operator to modulate rimpull to the wheels and slow the machine down without reducing engine speed. This allows the machine to maintain full hydraulic power for blade and steering control which gives the 844H a hydrostatic feel while keeping the benefits of the world's most efficient and powerful drive train and powershift transmission with lock-up control system. A torque converter lock-up clutch provides direct drive efficiency in second and third forward gears and all three gears in reverse with higher speeds and improved fuel economy on long distance dozing.

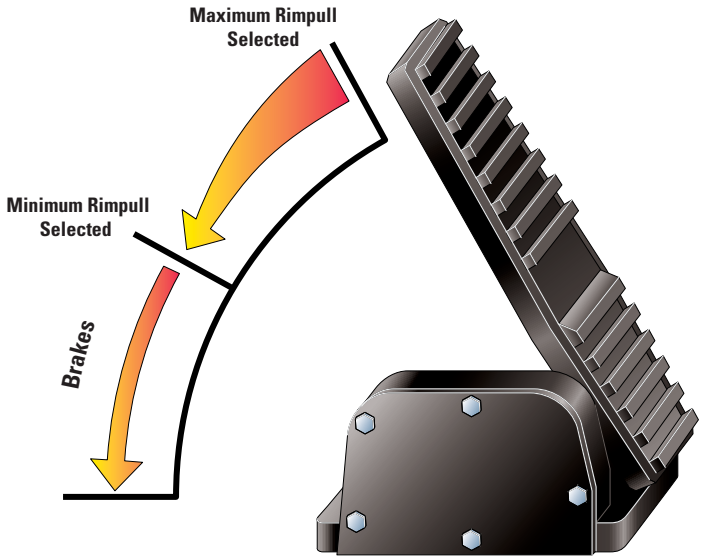
Automatic Blade Positioning

This patented system mimics manual operations by automatically lowering the blade when the machine is shifted forward and raising it in reverse. The set points to where the blade raises/lowers can be easily adjusted from the operator's seat.

Speed and Versatility

The speed and mobility of the 844H wheel dozer gives it the versatility needed to perform a variety of jobs on your job site:

- Haul road maintenance
- Dozing truck dumps
- Loading area clean up
- Blasting clean up
- Reclamation
- Stockpiling



Left Pedal

Fuel Efficiency

Fuel management

Engine Idle Shutdown

This new feature will automatically shutdown the engine after the machine has been in a safe idling state for an extended amount of time. The operator in the cab will be audibly and visually warned before the shutdown occurs.

Lock-up Clutch Torque Converter

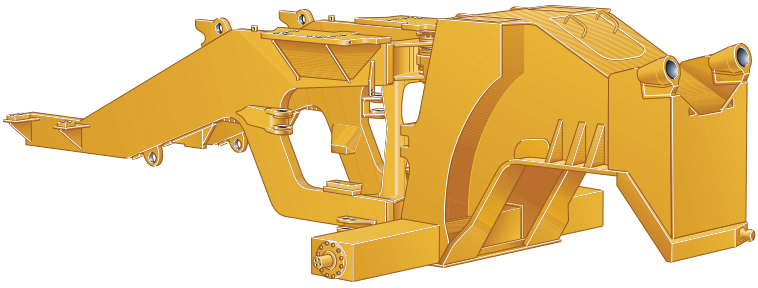
A torque converter lock-up clutch provides direct drive efficiency in second and third forward gears and all three gears in reverse with higher speeds and improved fuel economy on long distance dozing.

Reliability

Maximizing uptime, long life – it's what you expect from your Cat® Wheel Dozer

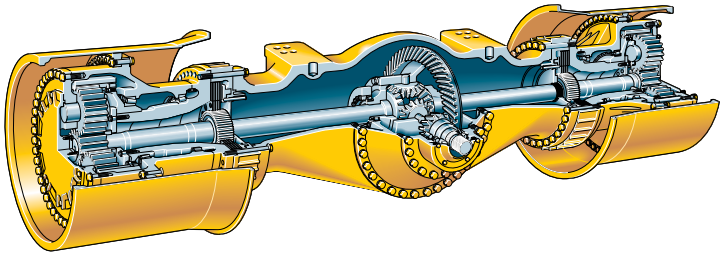
Structures

Combining the use of robotic welding and castings in critical high stress areas, more than 90 percent of the machine structure is robotically welded to provide highly consistent welds and increased strength. Castings are also used in several areas to increase strength by helping spread the loads and reduce the number of parts.



Cat Planetary, Power Shift Transmission

Electronic shifting provides smooth, consistent shifts. Large diameter clutches coupled with four planet gear trains provides added durability for extended, trouble free life.



Heavy Duty Axles

Optional axle oil coolers, permanently lubed universal joints and stronger axle components in both the differential and final drives are offered for increased performance, serviceability and durability.

Final Drives

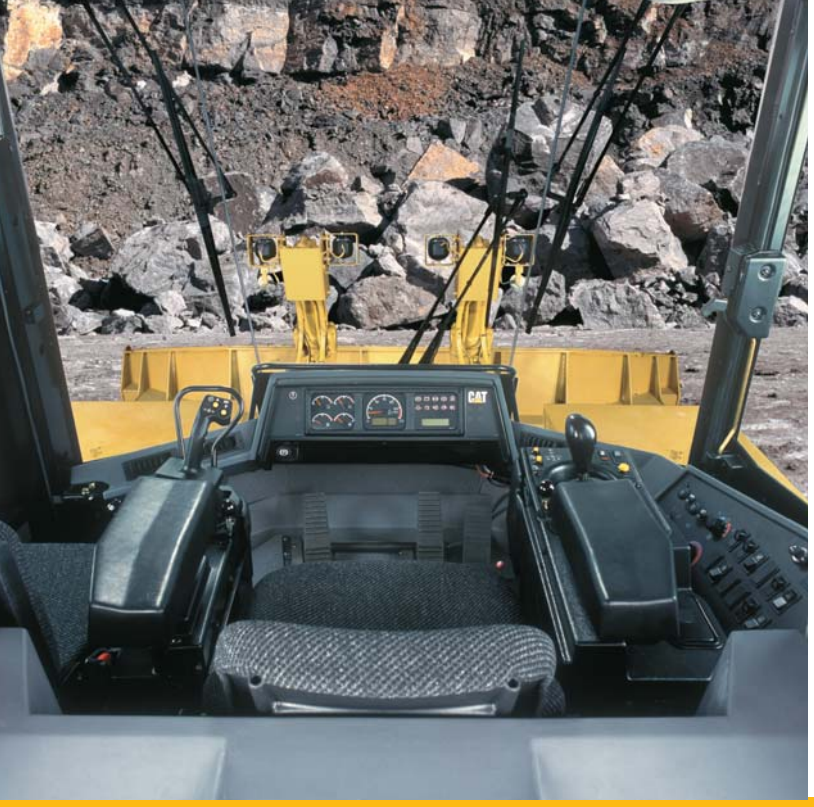
The final drives feature planetary reduction at each wheel. Torque is developed at the wheel which provides less stress at the axle shafts.

- Proprietary gear cutting and heat treating methods are used in the manufacturing to provide best in class reliability and durability.

Axle-Shaft, Oil Disc Brakes

These brakes are adjustment free, fully hydraulic and completely sealed. Disc face grooves provide cooling even when brakes are applied for a longer component life.

- Location of brakes allow for improved serviceability. The axle shaft brake design allows for brake service while leaving the final drive intact.
- Axle-shaft brakes require less force by operating on the low torque side of the axle. Combined with improved axle oil circulation for increased cooling, the oil-enclosed, multiple disc brake design improves durability.



Operator Comfort

Best-in-class working environment

Best-in-Class Working Environment

A comfortable operator is a productive operator, which is why Caterpillar has designed the 844H with a best-in-class working environment for this size wheel loader class.

- World class cab incorporates features for operator comfort and ergonomics, visibility and ease of operation.
- Ergonomic controls are fully adjustable and designed for low-effort comfort. Switches and controls for various systems are located within easy reach of the operator.
- Interior noise levels are reduced to a quiet 72 dB(A).
- Cat Monitoring System (EMS-III) provides information on machine's major components. This includes gauge displays for the fuel tank level; temperature gauges for the engine coolant, torque converter and hydraulic oil; tachometer analog gauge with digital readout for gear selection and ground speed and a monitoring system.
- Optional features are available for improved visibility. These options include a rear vision camera to clearly monitor movement behind the wheel loader and high intensity discharge (HID) lights for greater visibility at night.
- Standard trainers seat allows for a safe method to properly train your operator.

Serviceability

Increasing uptime by reducing service time

The 844H is designed to ensure minimal downtime through ground level or platform access, grouped service points, and attention to key serviceable areas on the machine.

- Maintain three points of contact at all times through ground level or platform accessible service areas.
- Ground level viewable site gauges on all major systems.
- Ground level engine shutdown, battery disconnect switch and steering hitch lock lever allow service technicians to perform maintenance while the machine stays static.
- Longer service intervals on fluids and filters.
- Swing-out doors on both sides of the engine compartment provide easy access to the engine oil dipstick and filler spout, S·O·S℠ ports, fuel filters, air conditioner compressor, engine oil filters, alternator, starting receptacle, air filter service indicator, cooler fill and ether starting aid.
- Maintenance-free batteries.
- Ecology drains for ease of service and prevention of spilling potential environmental contaminants. Ecology drains are standard on the hydraulic, engine, transmission and coolant systems.

Sustainability

Protecting the environment

Protecting the Environment

With the 844H having a long legacy, it is only fitting this machine has features and services that show environmental responsibility.

- Maintenance-free, ease of maintenance or extended maintenance, attention has been paid to lowering routine maintenance cost while eliminating waste to the environment.
- The Cat 844H is built for multiple lives. To assist with maximizing machine life, Caterpillar provides a number of sustainable options such as our Reman and Certified Rebuild programs. In these programs, reused or remanufactured components can deliver cost savings of 40 to 70 percent, which lowers operating cost while benefiting the environment.
- Caterpillar offers retrofit packages to bring new features to older machines, maximizing your resource. And, when you go through the Cat Certified Rebuild program, these retrofit kits are part of the rebuild process.

Safety

Built to protect you

At Caterpillar, we have designed the 844H with your most important asset in mind – People. Drawing from a history of technological advancements and practical wisdom, you can be assured that your people are protected while working in, on or around the 844H Wheel Dozer.

Visibility

The 844H offers a number of standard and optional features to enhance job site visibility.

Features include:

- Articulated wiper/washer system with intermittent features
- Optional high intensity discharge (HID) lights
- Optional warning beacons
- Optional rear vision camera

Access and Egress

Getting on and off the machine is one of the leading causes of injury on a job site. The 844H has a number of features to ensure your operator gets safely on and off the 844H.

- Primary and secondary stairwell exits
- Punch stamped tread plates
- Ground level night time stairwell lights
- Full perimeter railings and toe kicks on upper platform
- Side platform emergency egress
- Optional roading fenders

Maintenance Safety

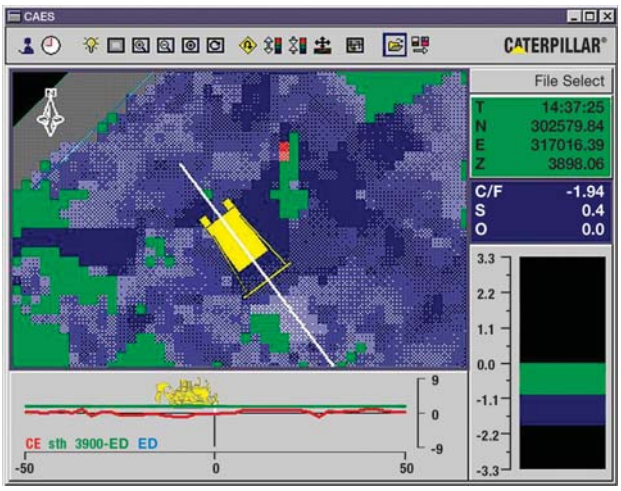
With the 844H, design efforts were taken to group service points with convenient access. As seen in the serviceability section, all service points are at ground level or platform access to maintain three points of contact, and a number of disconnect switches are available to ensure the 844H is static during service.

Operator Health and Well Being

The 844H offers many features that enhance operator comfort and aid in keeping the operator safe.

- Ergonomic cab controls designed for easy adjustment, low effort and minimal motion
- Cab air filtration system
- Laminated cab glass to minimize sound levels
- Optional secondary steering

Technology Solutions



Cat Product Link

Cat® Product Link enables convenient, remote monitoring of equipment. Get usable information to keep jobs on schedule, maintain machine health and reduce fleet owning and operating costs.

- Simplify fleet management and monitor machine use
- Link all machines, regardless of brand
- Three levels of insight to meet specific business requirements

Cat Terrain

Terrain for grading ensures accurate execution of the design plan and enables safe operating practices. It can be used on a variety of machines in numerous applications from production dozing to reclamation, all helping you mine more safely and productively. Using Global Navigation Satellite System (GNSS) technology, machine mounted components, a radio network and office software; it enables efficiency improvements in mines around the world. Terrain for grading is an ideal tool for mine planning, engineering, surveying and grade control, production monitoring and other applications, including haul road and bench construction and maintenance; production dozing; leach pad construction and maintenance; reclamation and coal load out terminals.

Customer Support

Count on Cat dealers for business solutions

Commitment to Meet Your Needs

Cat dealer 24/7 support offers solutions, services and products to help lower costs, enhance productivity and manage your fleet anywhere in the world. Expert technicians have the knowledge, experience, training, parts and tooling to keep your 844H when you need it most.

Product Support

Caterpillar supports the 844H with a worldwide network of parts distribution, dealer service centers and technical training facilities. Our global dealer network is ready to meet your support needs around the clock and around the world.

Service Support

Cat dealers offer a wide range of service plans to maximize uptime and return on your investment, including:

- Preventive Maintenance Programs
- Diagnostic Services such as Scheduled Oil Sampling and Technical Analysis
- Rebuild and Remanufactured Product Options
- Customer Support Agreements

Application Awareness

Application and site-specific factors such as material density, dozing techniques, speed, grade, blade selection and maintenance influence the cost to operate and maintain your fleet. Your Cat dealer can provide help in understanding the effects application factors and operating practices have on maintenance and operating costs. They also offer training to help operators improve productivity, decrease downtime, reduce operating costs and enhance safety.

Blades

Options to reduce your cost per ton

1

2

Cat Blades

Are designed with excellent dozing and rolling characteristics.

- Capacities and widths are set to achieve increased productivity
- Special design allows for spreading of cover material as well as dozing of heavier loads
- High-strength, pressed rib construction
- Bolt-on cutting edges and bottom wear plates common with Cat Large Track-Type Tractors
- Fitted with Cat standard hardware and Ground Engaging Tools (GET)
- Rebuildable for long blade life

Coal

Is designed for precise and productive dozing while helping to retain load control with increased capacity for lighter materials. Wing angles help retain the load while dozing.

Semi-U Blade

Combines the characteristics of the S and U blades into one package. Provides increased capacity with the addition of short wings which include only the dozer end bits without sacrificing spreading characteristics of straight blades.

Heavy-Duty Semi-U Blade

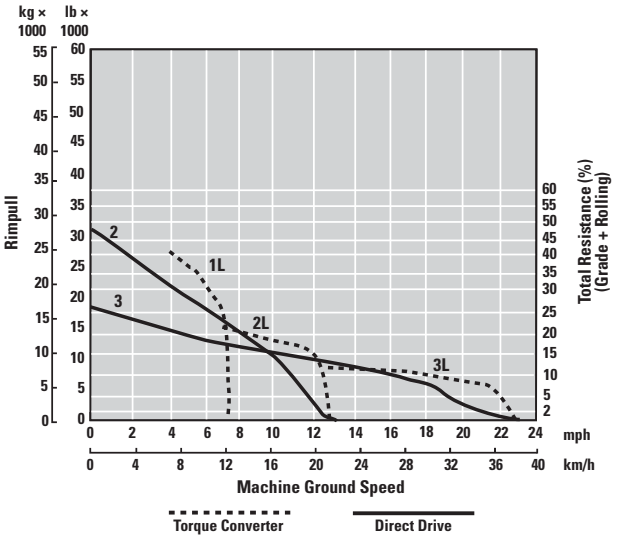
Has the same configuration as the Semi-U blade but is built with thicker plates for more severe applications.

1) Coal Blade 2) Semi-U Blade

Engine

Engine Model	Cat® C27 ACERT®	
Gross Power	512 kW	687 hp
Net Power	468 kW	627 hp
Net Power – ISO 14396	499 kW	669 hp
Net Power – EEC 80/1269	468 kW	627 hp
Net Power – ISO 9249	468 kW	627 hp
Net Power – SAE J1349 (JAN90)	463 kW	621 hp
Net Power – DIN 70020	650 PS	
Bore	137 mm	5.4 in
Stroke	152 mm	6 in
Displacement	27.1 L	1,666 in^3
Cylinders	12	
Torque Rise	31%	

- These engine ratings apply at 2,000 rpm when tested under the specific standard conditions for the specified standard.
- Power rating conditions are based on standard air conditions of 25° C (77° F) and 99 kPa (29.32 in Hg) dry barometer using 35° API gravity fuel having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 30° C (86° F) [ref. a fuel density of 838.9 g/L (7.001 lb/gal)].
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- No derating required up to 3350 m (11,000 ft) altitude.



Weights

Operating Weight	70 815 kg	156,120 lb

Transmission

Converter Drive – Forward 1	7 km/h	4.4 mph
Converter Drive – Forward 2	12.2 km/h	7.6 mph
Converter Drive – Forward 3	21 km/h	13 mph
Converter Drive – Reverse 1	7.7 km/h	4.8 mph
Converter Drive – Reverse 2	13.4 km/h	8.4 mph
Converter Drive – Reverse 3	23 km/h	14.3 mph
Direct Drive – Forward 1	7.2 km/h	4.5 mph
Direct Drive – Forward 2	12.8 km/h	7.9 mph
Direct Drive – Forward 3	22.5 km/h	14 mph
Direct Drive – Reverse 1	7.9 km/h	4.9 mph
Direct Drive – Reverse 2	14.1 km/h	8.8 mph
Direct Drive – Reverse 3	24.8 km/h	15.4 mph
Number of Forward Speeds	3	
Number of Reverse Speeds	3	

- With 45/65 R39 XLD D1 (L4) tires.
- Converter drive two percent rolling resistance.

Hydraulic System

Output at 2,040 rpm and 6900 kPa (1,000 psi)	311 L/min	82 gal/min
Cylinder, Double-Acting: Tilt and Tip, Bore and Stroke	209.5 mm × 188 mm	8.25 in × 7.5 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

- Blade control system with double-section vane pump with SAE No. 10 oil at 66° C (150° F).

Service Refill Capacities

Fuel Tank – Standard	1016 L	268.4 gal
Cooling System	150 L	39.6 gal
Crankcase	95 L	25 gal
Transmission	110 L	29 gal
Hydraulic Tank	717 L	189.4 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 Brakes (Tank Only)	197 L	52 gal
Hydraulic System – Steering and Engine Cooling Fan (Tank Only)	132 L	34.9 gal

Cab

Cab – ROPS/FOPS Meets SAE and ISO standards

- Cat cab Rollover Protective Structure (ROPS/FOPS) are standard.
- Standard air conditioning system contains environmentally friendly R134a refrigerant.
- ROPS meets SAE J1040 APR88 and ISO 3471:1994 criteria.
- FOPS meets SAE J231 JAN81 and ISO 3449:1992 Level II criteria.

Sound Performance Levels

Sound Performance Meets ANSI, SAE and ISO standards

- The operator sound exposure Leq (equivalent sound pressure level) measured according to the work cycle procedures specified in ANSI/SAE J1166 OCT98 is 72 dB(A), for the cab offered by Caterpillar, when properly installed, maintained and tested with the doors and windows closed.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environment.
- The exterior sound pressure level for the standard machine measured at a distance of 15 m (49.2 ft) according to the test procedures specified in SAE J88 JUN86 mid-gear-moving operation is 82 dB(A).
- The machine sound power level is 114 dBA, measured according to the test procedures and conditions specified in ISO 6395:2008 for a standard machine configuration. The measurement was conducted at 70% of the maximum engine cooling fan speed.
- The machine sound power level is 111 dB(A), measured according to the test procedures and conditions specified in ISO 6395:2008 for a sound suppression machine configuration. The measurement was conducted at 70% of the maximum engine cooling fan speed.
- The operator sound pressure level is 72 dB(A), measured according to the test procedures and conditions specified in ISO 6396:2008 for a sound suppression machine configuration. The measurement was conducted at 70% of the maximum engine cooling fan speed.

Steering

Minimum Turning Radius (over bucket)	10 337 mm	407 in
Steering Angle, each direction	35°	
Hydraulic Output at 2,128 rpm and 6900 kPa (1,000 psi)	410 L/min	108 gal/min
Relief Valve Setting	31 000 kPa	4,500 psi
Minimum Turning Radius (over bucket) – HL	10 757 mm	424 in

Brakes

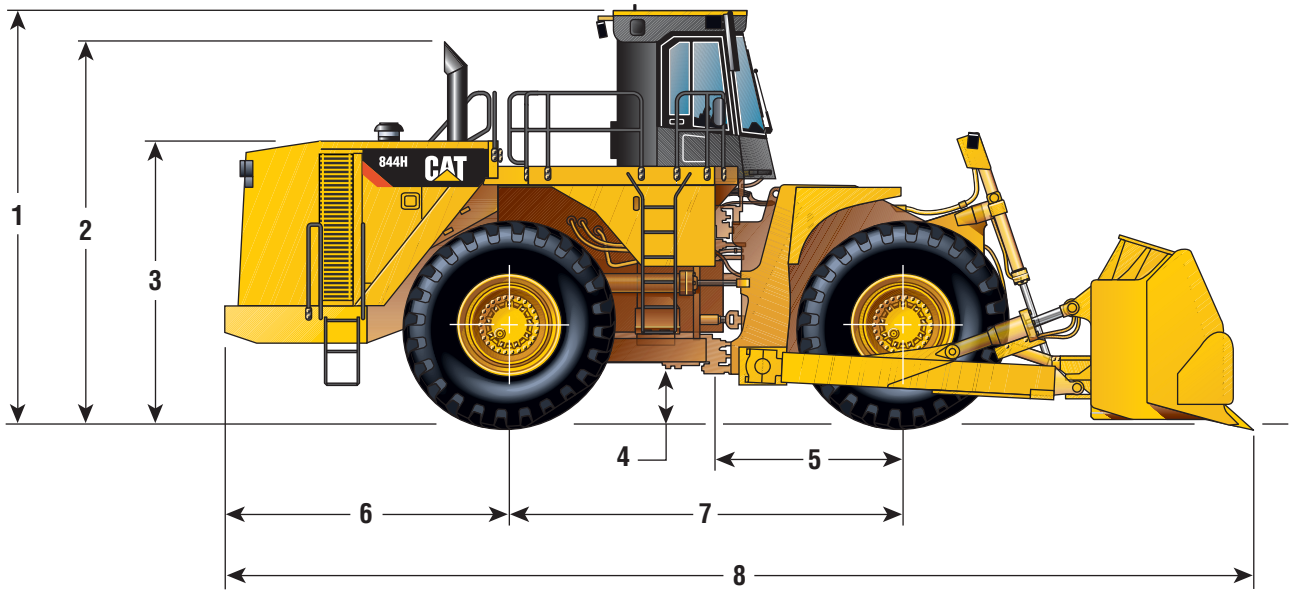
Brakes	Meets SAE/ ISO 3450 1996

Axles

Front	Fixed	
Rear	Oscillating ±11°	
Maximum Single-Wheel Rise and Fall	572 mm	22.5 in

Dimensions

All dimensions are approximate.



1	Height to Top of ROPS	5067 mm	16 ft 7 in
2	Height to Top of Exhaust Pipe	4723 mm	15 ft 6 in
3	Height to Top of Hood	3512 mm	11 ft 6 in
4	Ground Clearance	475 mm	19 in
5	Center Line of Front Axle to Hitch	2300 mm	7 ft 7 in
6	Center Line of Rear Axle to Edge of Bumper	3615 mm	11 ft 10 in
7	Wheelbase	4600 mm	15 ft 1 in
8	Length with Blade on Ground	10 940 mm	35 ft 11 in

Blade Specifications

Blade Type	Capacity	Overall Width	Height	Digging Depth	Ground Clearance	Maximum Tilt	Weight	Total Operating Weight
Semi-U	15.9 m^3 20.7 yd^3	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	70 815 kg 156,120 lb
Heavy-duty Semi-U	15.9 m^3 20.7 yd^3	5419 mm 213.3 in	2223 mm 87.5 in	477 mm 18.8 in	1372 mm 54 in	940 mm 37 in	7763 kg 17,100 lb	71 298 kg 157,186 lb
Coal	30.7 m^3 40.2 yd^3	5846 mm 230.2 in	2024 mm 79.7 in	465 mm 18.3 in	1372 mm 54 in	940 mm 37 in	6273 kg 13,830 lb	69 815 kg 153,916 lb

Semi-U Blade: This unit combines the characteristics of the S and U blades into one package. It has increased capacity by the addition of short wings which include only the dozer end bits.

844H Standard Equipment

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

ELECTRICAL
- Alternator, 95-ampere
- Converter, for 12-volt accessories
- Diagnostic connector for starting and charging systems
- Electric starter (heavy-duty)
- Electrical system, 24-volt
- External lighting system, front and rear
- Maintenance-free batteries
- Starting receptacle for emergency starting

OPERATOR ENVIRONMENT
- Air conditioner, R134a refrigerant
- Cab with sound suppression
- Comfort Series Seat with air suspension
- Cigar lighter and ashtray
- Coat hook
- Computerized Monitoring System
  - Action alert system, three-category
  - Gauges:
    - tachometer
    - fuel level
    - hydraulic oil temperature
    - transmission oil temperature
    - engine oil pressure
    - coolant temperature
- Dome light (cab)
- Electric horn
- External two-post ROPS structure
- Heater and defroster
- Integrated joystick blade control
- Load-sensing steering
- Quick-shift feature
- Radio-ready cab for entertainment or two-way radio (three-point mounting)
- Rearview mirrors
- Retractable seat belt 76 mm (3 in) wide
- Floor mounted hydraulic controls
- Sight gauges
  - Hydraulic oil, engine coolant and transmission
- STIC™ Control Steering System
- Storage for lunch box, cup
- Sunshade/visor, front and rear
- Throttle lock
- Tinted glass
- Trainer's seat with seatbelt
- Transmission gear indicator
- Wet-arm wiper/washers, front and rear

POWER TRAIN
- Cat C27 MEUI engine with ACERT® Technology
- Air-to-Air Aftercooling System (ATAAC)
- ADEM™ IV Controller
- Brakes
  - Parking: Dry, multi-disc brake; transmission mounted, Service/Secondary: enclosed, wet, multi-disc brake at each wheel
- Electric fuel priming aid
- Impeller Clutch Torque Converter with lockup clutch
- Precleaner/ejector
- Remote-mounted hydraulic engine fan
- Separated cooling system
- Sound suppressed muffler
- Supplemental steering
- Transmission
  - 533 mm (21 in) planetary power shift (electronic)
  - 3-speed forward/3-speed reverse

OTHER STANDARD EQUIPMENT
- Backup alarm
- Drawbar hitch with pin
- Fenders (front)
- Fuel cooler
- High speed oil change system
- Hydraulic oil cooler
- Locking engine enclosures
- Power train/guard
- Rear access stairs
- Vandalism protection and caplocks
- Venturi stacks

TIRES
- 45/65 R39 L-4 (XLDDIA), Michelin
- Contact your Cat dealer for more options.

Optional equipment may vary. Consult your Cat dealer for details.

Blades
- Semi-U
- HD Semi-U
- Coal U-Blade

Electrical
- Lights – Engine Compartment
- HID Lights
- Product Link
- Radio – AM/FM Cassette
- Rotating Beacon
- Rear Vision Camera

Starting Aids
- Diesel Fuel Heater
- Engine Coolant Heater – 120 volt
- Engine Coolant Heater – 240 volt
- Starting, Cold Weather

Fuel System
- Fast Fuel

Access
- Left Side Stairway
- Front Walkway
- Roading Fenders

Miscellaneous
- Sound Suppression
- Cab Precleaner
- Autolube System – Electric
- Case Drain Filtration
- Cooling – High Ambient

Tires
- Contact your Order Coordinator for current tire options and availability.

Notes

844H Wheel Dozer

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

AEHQ6696-01 (05-2012)
Replaces AEHQ6696