





| Engine | | |
|--------------------------|-----------------------------|------------------------------|
| Engine Model | Cat® 3412E dies | el |
| Gross Power | 503 kW | 675 hp |
| Flywheel Power | 463 kW | 620 hp |
| Weights | | |
| Operating Weight | 70 815 kg | 156,120 lb |
| Operating Specifications | | |
| Blade Capacities | 15.9 to 30.7 m ³ | 20.7 to 40.2 yd ³ |
| | | |

844 Wheel Dozer

A strong power train combined with a heavy-duty front frame provides long life and economical operation.

Power Train

✓ The Caterpillar® 3412E HEUI engine is Tier 2 compliant and combined with ADEM II (Advanced Diesel Engine Management II), axle-shaft brakes and impeller clutch torque converter with lock-up clutch provides smooth consistent shifting with direct drive efficiency. pg. 4

Cooling System

✓ The Advanced Modular Cooling System with Air-to-Air Aftercooling System has been added to the 844 to help meet emissions requirements and improve efficiency, serviceability, visibility and sound levels. pg. 6

Structures

The 844 features a box-section rear frame and four-plate front frame providing strength and stability. Together they provide resistance to dozing shocks and stresses while absorbing shock loads and twisting forces. **pg. 7**

Serviceability

Large engine doors, rear access stairs and convenient service platform with large doors enhance the serviceability of the 844. The Caterpillar dealer network provides World Class Customer Support. pg. 14

Complete Customer Support

Your Cat[®] dealer offers a wide range of services that help you operate longer with lower cost. **pg. 15**

Engineered for demanding work in large dozing applications, the Caterpillar 844 Wheel Dozer is an ideal match for power generating utilities, clean up, road maintenance and production dozing at mines and in the general contracting industry.



Hydraulics

Two, independent hydraulic systems and load-sensing steering are the invisible force behind the mobility and versatility of the 844. **pg. 8**

Blades and Blade Controls

Choose between semi-U, heavy-duty semi-U and coal blades. Replaceable bolt-on cutting edges and bottom wear plates help extend blade life. A single lever is used to hydraulically control all blade operations. **pg. 10**

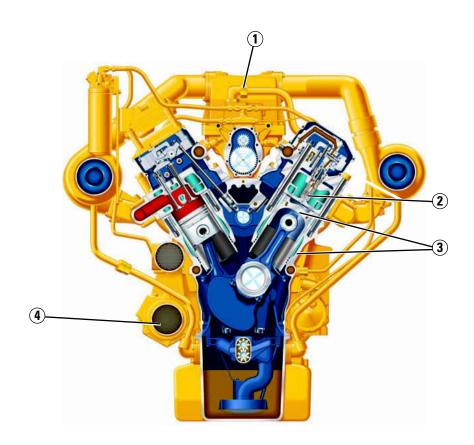
Operator Station

Experience a high level of efficiency and comfort with one-hand operation provided by the STIC controller and a state-of-the-art cab. Operator productivity is increased with improved range of viewing, reduced sound levels, improved ventilation and easy entry and exit. **pg. 12**



Power Train

844 power train components deliver dependable, reliable performance customers expect from Cat wheel dozers.



Caterpillar 3412E Hydraulic Electronic Unit Injection Engine. Is rated at 463 kW net (620 hp) at 2,000 rpm. The HEUI fuel system and Electronic Control Module (ECM) deliver power and efficiency in the most demanding applications. Electronic control provides many benefits:

- ADEMTM II (Advanced Diesel Engine Management II)
- Automatic altitude deration
- Elevated low idle
- Cold weather starting mode
- Acceleration delay on startup to reduce engine wear
- · Advanced diagnostic capabilities
- · Automatic control of ether aid
- 500 hour oil change interval with CH-4 oil and new larger oil pan

- Dry-type air cleaner with primary and secondary elements
- Engine/torque divider module is isolation mounted to the main frame to reduce machine vibration and structure radiated noise
- Monotherm pistons

Starting System. Is direct-electric 24-volt with a 100-amp alternator and two 12-volt 190-amp-hour batteries.

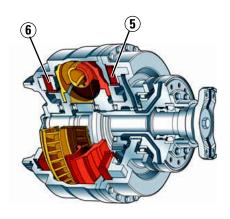
Injection Timing. Is controlled without concern for cam profile limitations. Complete control of engine speed provides advantages in lower emissions, quieter operation, reduced smoke, improved hot or cold starting, white smoke cleanup and high altitude operation.

Injection Duration. With the HEUI system will decrease proportionately with engine speed but can also electronically control the oil supply pressure. This complete control provides improved engine performance and decreased fuel consumption.

Injection Rate Shaping. Reduces nitrous oxide (NOx) emissions and reduces engine combustion noise.

- **1 Aftercooler.** Lowers inlet charge temperature. Reduces thermal stresses that can cause premature wear of pistons, rings and liners.
- **2 High Injection Pressures.** Independent of engine speed, decrease smoke and emissions while improving response.
- 3 Oil-Cooled Pistons and Full-Length, Water-Cooled Cylinder Liners. Provide maximum heat transfer for longer component life.
- **4 Engine Oil Cooler.** Maintains optimum oil temperature for proper cooling and pressure lubrication. Engine cooling provided is by the Multi-Row Modular radiator. Hydrostatic fan drive gives the standard cooling package 110° F ambient capability.

Impeller Clutch Torque Converter (ICTC). Allows the operator to modulate rimpull from 100 percent to 20 percent of maximum rimpull. After 20 percent of maximum rimpull is achieved, further pedal travel applies the brake. The torque converter is equipped with a lockup clutch for direct drive efficiency.

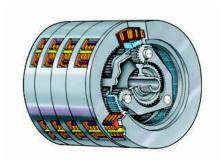


5 Impeller Clutch. Modulates the amount of engine power sent to the wheels.

6 Lockup Clutch. With Electronic Clutch Pressure Control 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.

ICTC Benefits.

- Improved calibration procedure
- · Improved left pedal modulation
- Compensates for wear and provides the ability to recalibrate for optimum left pedal modulation regardless of torque converter wear.



Planetary, Electronic, Power Shift Transmission. Is the same transmission found in the 990 Series II wheel loader. Electronic shifting provides smooth consistent shifts with finger tip controls housed in the STIC controller. The transmission is built around a center shaft with a gear set cluster stacked end-to-end to distribute load, conserve space

and transfer energy efficiently. Large diameter perimeter clutches coupled with high contact planetary gear sets provide high torque carrying capacity for long, trouble-free life.

Parking Brake. Is spring-applied, oil-released and dry disc. It is mounted on the transmission gear output shaft. The Caterpillar Monitoring System (EMS-III) alerts the operator if the transmission is engaged while the parking brake is applied as well as if pressure drops, in which case the brake will automatically apply. Manual override is possible to allow movement of the machine.

- Self-diagnostics accessible through Caterpillar Monitoring System
- · Ouick Shift

7 Final Drives. Are planetary consisting of a ring gear, three planet gears, a planet gear carrier and a sun gear.

- · Ring gears splined to reation hub
- Proprietary gear cutting and heat treat methods are used in the manufacturing of components
- Full-floating bronze sleeve bearings are used on planet gears
- · Oil-bath lubrication

8 Axle-Shaft, Oil-Disc Brakes. Are fully hydraulic, completely sealed and never need adjustment. Disc face grooves provide cooling even when brakes are applied for a long, fade resistant life.

Design. Provides a larger cooling oil reservoir and thicker separator plates than conventional brake designs. This gives the brake higher heat dissipation rates allowing higher capacity than conventional oil-disc brakes. Duo-cone seals are located between the wheel and the spindle.

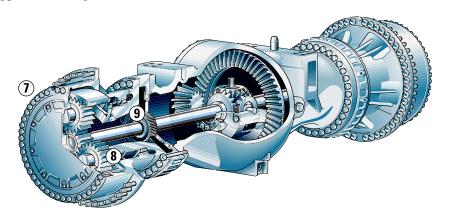
9 Brake Location. Reduces service time. Conventional brakes require final drive disassembly. The axle-shaft brake design allows brake service while leaving the final drive intact. Reduced service time and machine downtime keep operating costs low.

Bevel Gear Sets and Differentials. Are common with the Cat 990 Series I

Are common with the Cat 990 Series II Wheel Loader.

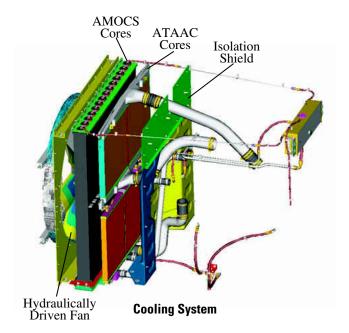
Service Brakes. Are four wheel, hydraulic, oil-dipped multiple disc brakes that are adjustment-free, completely enclosed and allow modulated engagement without slack adjusters.

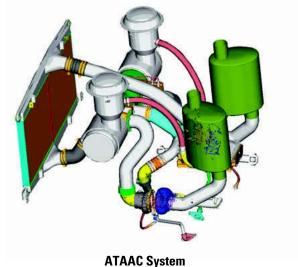
Secondary Brakes. Are fully modulated and the front and rear service brake circuits are isolated so one circuit can operate if pressure drops in the other circuit.



Cooling System

Works with the engine to meet emissions standards as well as improve serviceability and reduce downtime.





(Air-to-Air Aftercooler)

Advanced Modular Cooling System (AMOCS) with Air-to-Air Aftercooling System (ATAAC). In order to meet EPA Tier 2 and EU stage II emissions requirements for the Year 2002, the software for the Cat 3412 HEUI engine has been changed and the cooling system upgraded to an AMOCS that utilizes the ATAAC system to achieve lower particulate, NO_X and sound output. The proven AMOCS system is currently used on other Caterpillar models such as the 834G, 854G, 988G and 992G and with ATAAC technology effective with the 834G and 988G introduction.

ATAAC System. Provides a separate cooling system for the intake manifold air complementing the engine jacket water cooling system. The ATAAC system routes hot, compressed air from the turbo and cools it with a single pass, air-to-air aluminum heat exchanger. The cooled compressed air is then delivered to the engine intake manifold. Providing the engine with cool compressed air greatly reduces the emissions produced, meeting Tier 2 requirements for a cleaner environment.

Separated Cooling System. Isolates the AMOCS radiator and demand fan from the engine compartment with a shield allowing the radiator to receive outside ambient air through the side and top vents at a much lower temperature than the hot air from the engine compartment. This improves the system's efficiency and allows the radiator size to be decreased and the rear hood to be sloped, improving the rear viewing area. Also, sound levels are reduced due to the lower fan speed of a more efficient cooling system.

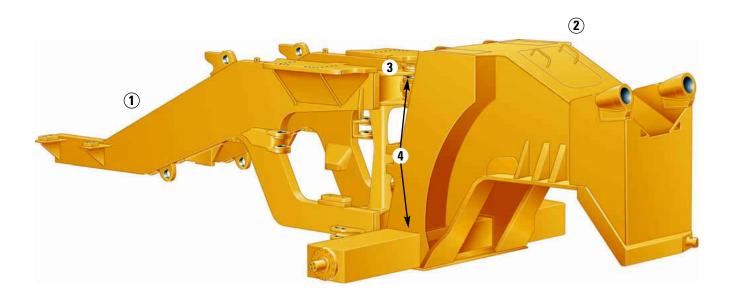
AMOCS. Is a Caterpillar exclusive technology that improves serviceability and increases cooling efficiency by 22 percent. Ambient working temperature for the standard 844 is 43° C (110° F). A high ambient cooling package with a 50° C (122° F) capacity is available as an attachment.

Serviceability. Is a key benefit. Tubes are welded to a large, thick header, providing the strength of the tube-to-header joint that reduces the possibility of coolant leaks. The AMOCS modular core design allows removal of a single core without removing the entire radiator – reducing downtime through ease of serviceability. Replacing the individual core also reduces repair costs.

Two Pass System. Offers increased cooling capacity. Coolant travels from the engine to the fan side of the bottom tank, up the fan side of each core, over the top, down the engine side of the core, into the engine side of the bottom tank and back to the engine. The improved flow pattern allows the coolant to pass through the radiator twice for better cooling. The AMOCS design improves serviceability, reduces downtime and increases cooling capability.

Structures

Advanced design and materials provide superior strength.



Structure Welds. Are more than 90 percent robotically welded. This provides highly consistent welds with deep plate penetration and excellent plate fusion. The benefit is greater fatigue strength and longer life than with conventional welding methods.

Castings. In the engine end-frame are used in critical high-stress areas to help spread the load and reduce the number of parts. The casting for the rear trunnion mount also serves as an engine mount, which provides a load path for the weight and torque of the engine to travel down to the trunnion and then on through to the axle. Other castings used in the engine-end frame include: front trunnion mounts, steering cylinder brackets, articulation stops and lock link.

- **1 Box-Section Rear Frame.** Absorbs shock loads and torsional forces, solidly maintaining alignment for hitch pins and driveline.
- **2 Four-Plate Front Frame.** Provides maximum structural strength to resist twisting loads during dozing applications.
- **3 Upper and Lower Hitch Pins.** Pivot on double-tapered roller bearings and are shaped to direct stress away from the end of the weld, resulting in a smoother transition of stress loads.

4 Spread-Hitch Design. Helps square up the frame and provides more clearance for hydraulic lines. Double tapered roller bearings and hardened pins resist both horizontal and vertical loads to increase life. The spread hitch also makes service access easier.

Engine and Transmission Mounts.

Are designed to use mushroom and cup-shaped ISO mounts, reducing component vibration and sound levels. The engine mounts directly to the rear cross member, simplifying and improving load transfer structure.

Hydraulics

Well-balanced hydraulics deliver precise low-effort control and trouble-free operation.



1 Two Separate, Hydraulic Systems.

One for lift/tilt/tip and brakes, while the other is for steering and the hydraulically-driven engine cooling fan. Benefits of two systems are increased cooling and elimination of cross-contamination. If one system runs hot or is contaminated, the other will be unaffected.



2 Blade Control. Low-effort control comes from the single lever lift/tilt/tip control that is floor-mounted and cable actuated with pressure compensation for tilt/tip.

- Caterpillar built tandem vane pumps provide hydraulic flow for the lift, tilt and tip functions. The circuit is well balanced to provide control when all functions are used simultaneously.
- Well-proven pumps, valves and cylinders are common with those used on Caterpillar large track-type tractors.
- For improved serviceability, all hydraulic pumps are mounted on a single pump drive.

3 Load Sensing Steering with STIC Control System. Is a revolutionary system that integrates steering and transmission into a single controller. The variable displacement pump maximizes machine performance by directing power through the steering system only when needed. More efficient use of power results in decreased fuel consumption and higher production.

- Simple side-to-side motions of the stick turn the machine right or left offering a 35 degree steering angle in both directions. Center-point frame articulation allows the front and rear wheels to track.
- Transmission shifting forward, neutral or reverse is controlled by the operator's fingers and gear selection is controlled by the operator's thumb.

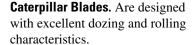
XT-3 and XT-5 Hose. O-ring face seals and large-bore lift and tilt cylinders top off the hydraulic system, delivering the performance and durability owners expect. Reliable components reduce leaks and help protect the environment.

Hydrostatic Cooling Fan. Is used for engine, transmission and hydraulic cooling. A variable displacement pump drives the fan's hydraulic motor so that fan speed varies with coolant temperature. The fan draws only the power needed for cooling, reducing fuel consumption and increasing efficiency.

Blades and Blade Controls

Caterpillar blades are built to handle tough applications and well-proven Cat components deliver dependable service and ease of operation.





- 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.
- Caterpillar large track-type tractor bolt-on cutting edges and bottom wear plates.
- Fitted with Caterpillar standard hardware and Ground Engaging Tools (GET).
- Rebuildable for long blade life.



Coal Blade. 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.

Heavy-Duty Blade Linkage. Is common with a Caterpillar D9 Track-Type Tractor. These well-proven components are designed for tough applications.

- Lift cylinders raise and lower blade for efficient dozing action.
- Two position tilt cylinder mounting for increased flexibility for various applications.
- Cutting edges are DH-2 steel. End bits are DH-3 to provide maximum service life in tough materials
- Trunnions, pusharms and tag link are sized for large dozing loads.

Single-Lever Blade Control. Hydraulically operates blade raise, lower, tilt and tip.

Lift Circuit. Features four positions: raise, hold, lower and float with detente hold on float.

Tilt/Tip Circuit. Offers operator selected single or dual-tilt and fingertip control for tip operation.

Low-Effort Control. Comes from the single-lever lift/tilt/tip control that is floor mounted and cable actuated with pressure compensation for tilt/tip.

Single or Dual-Tilt Operation. Can be selected by the operator by using a switch located on top of control lever. A generous range of tilt motion enables excellent control for dozing.



Operator Station

Comfort and control — a top quality operator station helps maximize productivity.



Cab Design. Is spacious and incorporates innovations for operator comfort and productivity, includes an excellent viewing area, interior sound levels below 75 dB(A), Caterpillar Comfort Series seat, standard coat hook, cup holder, storage bin, sun visor and intermittent wet-arm wipers. It is also radio-ready for two-way radios.

1 STIC Control System. Is a revolutionary system that integrates steering and transmission into a single controller. Simple side-to-side motions of the operator's left arm turn the machine right or left. Transmission shifting forward, neutral or reverse is controlled by the operator's fingers, and gear selection is controlled by the operator's thumb. These factors combine to produce a fluid motion that reduces effort and allows the operator to work the machine for long periods of time with little or no fatigue.

2 Left Pedal. Operates the Impeller Clutch Torque Converter for about the first inch of travel, then engages the brakes. Within the first inch of pedal travel, rimpull can be controlled from 100 percent to 20 percent.

- **3 Comfort Series Seat.** With air suspension and retractable seat belt is designed for comfort and support. Seat cushions reduce pressure on the lower back and thighs while allowing unrestricted arm and leg movement. The seat has three height levels. The retractable seat belt remains off the floor and is easy for the operator to reach.
- **4 Quick-Shift Feature.** Allows quicker cycle times by shifting from first forward to second reverse.
- **5 Throttle Lock.** Allows the operator to preset the engine speed and concentrate on productivity. The throttle lock can be deactivated by pressing the brake pedal.
- **(EMS-III).** Continually monitors various machine systems through three instrument clusters and provides a three-level warning system to alert the operator of immediate or pending problems.

6 Caterpillar Monitoring System

warning system to alert the operator of immediate or pending problems. It shares information with the engine, hydraulic and transmission controls that can be used during servicing to simplify service and troubleshooting.

Gauges

Display engine coolant, transmission oil and hydraulic oil temperatures, engine oil pressure and fuel tank level.

- Tachometer/Speedometer
 Display engine speed and gear indicator.
- Alert Indicators
 Include charging system, p

Include charging system, parking/ secondary brake, supplemental steering, brake oil pressure, engine coolant flow and transmission filter status.

7 Floor-Mounted Hydraulic Blade Controls. Are adjustable fore and aft, with a height-adjustable armrest so operators of any size can find a comfortable operating position. A single lever control allows operator to control blade functions: lift/lower, tip and tilt. The switch control on top of control lever allows option of single or dual-tilt operation.

8 Torque Converter Lock-up Clutch.

Is activated when the operator presses a switch on the console. The 844 automatically shifts from torque converter drive to direct drive when a set speed in second and third forward or all gears in reverse is reached, providing faster travel speeds and less fuel consumption.

Large Viewing Area. Enhances viewing in all directions. Bonded glass in the front window eliminates distracting metal frames with the best operator visibility to the blade.

Serviceability

Less time spent on maintenance means more time on the job.



Easy Maintenance. In addition to the servicing features built into the engine, the 844 includes:

- **Rear Access Stairs.** For easy, comfortable access for operators and service personnel.
- Large Engine Access Doors. Provide excellent access to service points, engine oil dipstick, diagnostic connector, engine oil and fuel filters, starting receptacle, air filter indicator, air filters, fuel/water separator and the ether starting aid cartridge.
- Large Service Platform. Provides passage to hydraulic filter, fuel fill and transmission filters through easy-to-open doors.
- Large Door. Provides entrance to transmission and pumps when service is required.
- Large Platform Door. Provides access to fuses and electronic control modules.
- **Batteries**. Are accessible through hinged doors in bumper.

- **Side Access Doors**. On the radiator guard provide easy access for radiator cleanout.
- Grouped and Labeled Lube Points. Accessible at ground level, make daily lube maintenance quick and easy.
- Sight Gauges. For the hydraulic tanks and radiator provide quick checks for fluid levels.

Complete Customer Support

Cat Dealer services help keep machines operating longer with lower costs.



Machine Selection. Make detailed comparisons of the machines under consideration before purchase. Cat dealers can estimate component life, preventative maintenance cost and the true cost of lost production.

Purchase. Look past initial price. Consider the financing options available as well as the day-to-day operating costs. Look at dealer services that can be included in the cost of the machine to yield lower equipment owning and operating costs over the long run.

Customer Support Agreements.

Cat dealers offer a variety of product support agreements and work with customers to develop a plan that best meets specific needs. These plans can cover the entire machine, including attachments, to help protect the customer's investment. Product Support. You will find nearly all parts at our dealer parts counter. Cat dealers use a worldwide computer network to find in-stock parts to minimize machine downtime. Save money with genuine Cat Reman parts. You receive the same warranty and reliability as new products at cost savings of 40 to 70 percent.

Operation. Improving operating techniques can boost your profits. Your Cat Dealer has training videotapes, literature and other ideas to help you increase productivity.

Maintenance Services. Choose from your dealer's range of maintenance services when you purchase your machine. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as S•O•SSM and Coolant Sampling and Technical Analysis help you avoid unscheduled repairs.

Replacement. Repair, rebuild or replace? Your Cat dealer can help you evaluate the cost involved so you can make the right choice.

Engine

| Engine Model | Cat® 3412E diesel | |
|---------------------------------------|-------------------|-----------------------|
| Gross Power | 503 kW | 675 hp |
| Flywheel Power | 463 kW | 620 hp |
| Flywheel Power - Caterpillar | 463 kW | 620 hp |
| Flywheel Power - EEC 80/1269 | 463 kW | 620 hp |
| Flywheel Power - ISO 9249 | 463 kW | 620 hp |
| Flywheel Power - SAE J1349 (JAN90) | 458 kW | 613 hp |
| Flywheel Power - DIN 70020 | 648 PS | |
| Bore | 137 mm | 5.4 in |
| Stroke | 152 mm | 6 in |
| Displacement | 27 mm | 1,649 in ³ |

- 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 2286 m (7,500 ft) altitude.

Weights

| Operating Weight | 70 815 kg | 156,120 lb |
|------------------|-----------|------------|
| | | |

Transmission Converter Drive - Forward 1 7 kph 4.4 mph Converter Drive - Forward 2 12.2 kph 7.6 mph Converter Drive - Forward 3 21 kph 13 mph Converter Drive - Reverse 1 7.7 kph 4.8 mph Converter Drive - Reverse 2 13.4 kph 8.4 mph Converter Drive - Reverse 3 23 kph 14.3 mph Direct Drive - Forward 1 7.2 kph 4.5 mph Direct Drive - Forward 2 12.8 kph 7.9 mph Direct Drive - Forward 3 22.5 kph 14 mph Direct Drive - Reverse 1 7.9 kph 4.9 mph

14.1 kph

24.8 kph

8.8 mph

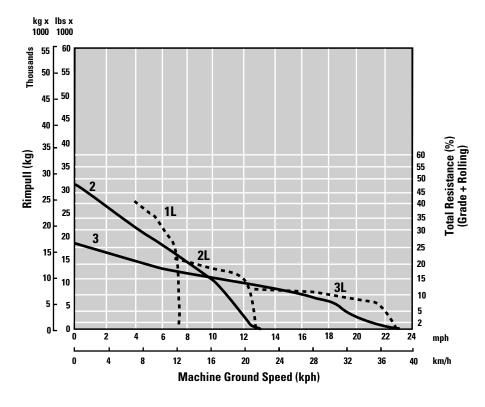
15.4 mph

• With 45/65 R39 XLD D1A - Type A (L4) tires.

Direct Drive - Reverse 2

Direct Drive - Reverse 3

· Converter drive 2 percent rolling resistance.



| Hydraulic System | | |
|---|-----------------------|----------------------|
| Output at 2,126 rpm and 6894 kPa (1,000 psi) | 342 L/min | 89 gal/min |
| Cylinder, double-acting: Lift, Bore and Stroke | 133.5 mm x 1535 mm | 5.25 in x 60.5 in |
| Cylinder, double-acting: Tilt and Tip, Bore and Stroke | 209.5 mm x 188 mm | 8.25 in x 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).

| Steering | | |
|---|------------|-------------|
| Minimum Turning Radius (Over Tires) | 9.9 m | 32.5 ft |
| Hydraulic output at 2,128 rpm and 6900 kPa (1,000 psi) | 410 L/min | 108 gal/min |
| Relief Valve Setting | 31 005 kPa | 4,500 psi |

Full hydraulic load sensing steering system meets SAE J1511
 FEB94 and ISO 5010: 1992 specified standards.

Service Refill Capacities

| Fuel Tank - Standard | 984 L | 260 gal |
|--|-------|----------|
| Cooling System | 190 L | 50.2 gal |
| Crankcase | 95 L | 25 gal |
| Transmission | 110 L | 29 gal |
| Hydraulic Tank | 541 L | 141 gal |
| Differentials and Final Drives - Front | 271 L | 71.6 gal |
| Differentials and Final Drives - Rear | 261 L | 68.9 gal |
| Hydraulic System - Blade and Brakes (Tank Only) | 174 L | 45 gal |
| Hydraulic System - Steering and Engine Cooling Fan (Tank Only) | 132 L | 34.9 gal |

Cab

| ROPS/FOPS | Meets SAE and ISO |
|--------------------------|-------------------------|
| | standards. |
| Sound Performance Levels | Meets ANSI, SAE and ISO |
| | standards. |

- Caterpillar cab with integrated Rollover Protective Structure/ Falling Object Protection System (ROPS/FOPS) are standard.
- Standard air conditioning system contains the environmentally friendly R134a refrigerant.

- ROPS meets SAE J1040 APR 88 SAE J394 and ISO 3471: 1994.
- FOPS meets SAE J231 JAN 81 and ISO 3449: 1992 Level II criteria.
- The operator sound exposure Leq (equivalent sound pressure level) measured according to the work cycle procedures specified in ANSI/ASAE J1166 OCT 98 is 72 dB(A), for the cab offered by Caterpillar, when properly installed and 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 JUN 86, mid-gear-moving operation, is 82 dB(A).
- The sound power level is 116 dB(A) measured according to the dynamic test procedure and conditions specified in ISO 6395:1988/Amd. 1:1996 for a standard machine configuration.
- For "CE" marked configurations, the labeled sound power level is 114 dB(A) measured according to the test procedures and conditions specified in 2000/14/EC.

Brakes

Brakes Meets SAE/ISO 3450 1996.

Axles

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

Tires

Tire Choices

Two choices available.

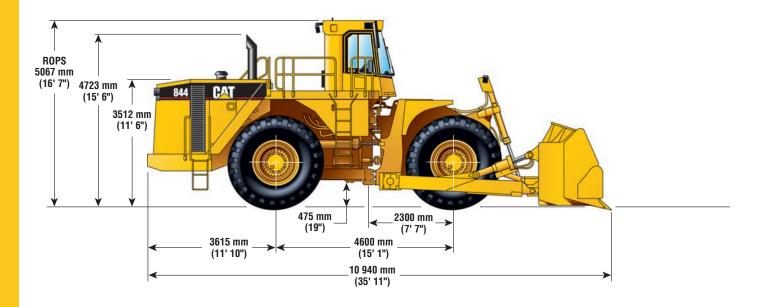
- 45/65 R39 L-4 (XLDDIA), Michelin
- 40.5/75 R39 1-Star, Goodyear
- Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model.
 Other special tires are available on request.
- Tubeless, low-aspect ratio. All steel radial construction for increased traction and stability, lower rolling resistance.

Operating Specifications

Blade Capacities 15.9 to 30.7 m³ 20.7 to 40.2 yd³

Dimensions

All dimensions are approximate.



Blade Specifications

| Blade Type | Capacity | Overall Width | Height | Digging Depth | Ground Clearance | Maximum Tilt | Weight | Total Operating Weight |
|---------------|----------------------|------------------|---------|------------------|---------------------|-----------------|------------|---------------------------|
| Semi-U | 15.9 m ³ | 5418 mm | 2024 mm | 465 mm | 1459 mm | 829 mm | 7273 kg | 70 815 kg |
| | 20.7 yd ³ | 213.3" | 79.7" | 18.3" | 57.4" | 32.6" | 16,034 lbs | 156,120 lbs |
| Heavy-duty | 15.9 m ³ | 5419 mm | 2223 mm | 477 mm | 1372 mm | 940 mm | 7763 kg | 71 298 kg |
| Semi-U | 20.7 yd ³ | 213.3" | 87.5" | 18.8" | 54" | 37" | 17,100 lbs | 157,186 lbs |
| Coal | 30.7 m ³ | 5846 mm | 2024 mm | 465 mm | 1372 mm | 940 mm | 6273 kg | 69 815 kg |
| | 40.2 yd ³ | 230.2" | 79.7" | 18.3" | 54" | 37" | 13,830 lbs | 153,916 lbs |

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.

Standard Equipment

Standard and optional equipment may vary. Consult your Caterpillar Dealer for specifics.

Electrical

Alternator, 100-ampere

Converter, for 12-volt accessories

Deutsch connectors

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 Comfort Series Seat with air suspension

Cigar lighter and ashtray

Coat hook

Caterpillar Monitoring System (EMS-III)

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 Load-sensing steering Quick-shift feature

Radio-ready cab for entertainment or two-way radio

(three-point mounting)

Rearview mirrors (interior and exterior mounted)

Retractable seat belt 76 mm (3 in) wide ROPS cab with sound suppression Floor mounted hydraulic controls

Sight gauges, hydraulic oil and engine coolant

Single-lever blade control STIC Control System

Storage for lunch box, cup

Sunshade/visor, front and rear

Throttle lock Tinted glass

Transmission gear indicator

Wet-arm wiper/washers, front and rear

Power Train

Cat 3412E HEUI engine

Fuel priming aid

Brakes: Parking: Dry, multi-disc brake; transmission mounted,

Service/Secondary; and enclosed, wet, multi-disc brake

at each wheel

Impeller Clutch Torque Converter with lockup clutch

Precleaner/ejector

Remote-mounted hydraulic engine fan

Separated cooling system Sound suppressed muffler Supplemental steering Swing-out cooler cores

Transmission,

533 mm (21 in) planetary power shift (electronic)

3-speed forward/3-speed reverse

Other standard equipment

Backup alarm

Cold weather starting system

Drawbar hitch with pin

Fenders (front)

High speed oil change system

Hydraulic oil cooler

Muffler

Lighting, general purpose (four)

Locking engine enclosures

Power train/guard Rear access stairs

Vandalism protection and caplocks

Venturi stacks

Tires

45/65 R39 L-4 (XLDDIA), Michelin

Optional Equipment

With approximate changes in operating weights.

| | kg | lb |
|----------------------------------|------|--------|
| Blades | | |
| Semi-U | 7273 | 16,034 |
| Heavy-duty Semi-U | 7763 | 17,100 |
| Coal | 6273 | 13,830 |
| Fuel system | 1 | 3 |
| High Ambient Cooling Arrangement | 12 | 26.5 |

| | kg | lb |
|-------------------------------------|-------|--------|
| Starting aids | | |
| Diesel fuel heater | 7 | 15 |
| Heater, engine coolant | 4 | 8 |
| Tires –40.5/75 R39 1-Star, Goodyear | -1030 | -2,272 |

844 Wheel Dozer

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

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AEHQ5307-01 (1-02) Replaces AEHQ5307 Materials and specifications are subject to change without notice.

Featured machines in photos may include additional equipment.

See your Caterpillar dealer for available options.

