

Cat <sup>®</sup> 3054C DIT Diesel Engine	
Gross Power (SAE J1995) at 2200 rpm	74.5 kW/101 hp
Net Power (ISO 9249) at 2200 rpm	71 kW/97 hp
Cat <sup>®</sup> C4.4 Turbocharged Aftercooled Engine	

Cat® C4.4 Turbocharged Aftercooled Engine	
Gross Power (SAE J1995) at 2200 rpm	74.5 kW/101 hp
Net Power (ISO 9249) at 2200 rpm	71 kW/97 hp

Operating Weight		8810-10 700 kg
Backhoe Digging Depth		
Stick	Standard	Extendable
SAE Maximum	4673 mm	5923 mm
Maximum	5264 mm	6465 mm

## Cat<sup>®</sup> 444E Backhoe Loader

The Caterpillar® E-Series Backhoe Loader – The Next Generation

## **Equal Size Tires**

The 444E is equipped with Equal Size Tires as standard, giving excellent performance in soft underfoot conditions common to many worksites, for example agriculture. EST offers many unique advantages over non-EST BHL's.

- Improved flotation on soft ground
- Greater loader lift capability
- 1.3 m<sup>3</sup> loader bucket
- More stable roading characteristics
- Less soil compaction
- More lift height
  pg. 5

**Caterpillar Work Tools** 

Caterpillar work tools have been designed around the performance and demands of the whole E-Series range.

- Provides maximum versatility for all jobsite applications.
- All Loader Tools fully compatible with previous generation machines. Hoe tools are compatible with D-Series.
   pg. 11

### **Operator Station**

The E-Series Cab offers an improved operator environment, with increased visibility, ergonomics and comfort. The pod-mounted joystick controls offer increased comfort, control and versatility.

- Pod mounted joystick controls
- Automotive style finish
- Stylish and functional curved glass maximizes space within the cab
- Excellent 360° visibility
- Improved HVAC performance
- Air Suspension seat
- Low effort well placed controls
- Plenty of personal storage space
- Exceptional operator comfort
- Delux Cab
  pg. 8

### **Backhoe Versatility and Performance**

- Excavator style backhoe reaches over obstacles, for easier, faster truck loading in confined spaces
- Industry leading 205° High Rotation Linkage gives excellent clamping and straight wall trenching
- New design extending outer section ensures maximum wear protection on the E-stick
- Optional Quick Coupler for maximum versatility pg. 10

## Caterpillar's 444E – The Next Generation

Developed with over 20 years in the Backhoe Loader industry, the 444E is designed to exceed customer expectations. More performance, versatility and comfort than ever before gives the 444E the edge needed in a harsh and competitive environment. Along with you, it's up to the challenge. See your Cat dealer and try out The Next Generation of Backhoe Loaders from Caterpillar.

#### **Power train**

The 444E has 40 kph roading speed as standard. The proven Cat engine delivers 99 hp net. Coupled with the Autoshift transmission, it provides all the performance needed.

- Standard 3054C DIT engine (74.5 kW) or Cat C4.4 engine (74.5 kW)
- Engines meet EU directive 97/68/EC Stage II emissions regulations or EU directive 2004/26/EC Stage IIIA emissions regulations
- Durable gear driven water pump
- Parts commonality with other Cat machines
- Single fuel filter/water separator for lower servicing costs
- Single location access to service refill points
- Standard All Wheel Steer
  pg. 7

### Load Sensing, Flow Sharing Hydraulic System

- Flow-sharing hydraulic valves give improved implement control exactly where it is needed
- Load sensing hydraulics provide full implement force, at any engine speed
- Cat exclusive high pressure XT hose
- O-ring face seals for reliability

pg. 12

#### Serviceability

- Improved fully opening hood provides greater access to engine compartment
- Wear Pad adjustment design on Stabilizers and E-Stick for quick, easy maintenance
   ng 13

pg. 13



#### **Pilot Hydraulic Joystick Controls**

Excavator style Pilot Hydraulic Joystick Controls are fitted as standard to both the Loader and Hoe controls on all 444E Backhoe Loaders. The low effort controls are easy to use, reduce operator fatigue, and greatly improve visibility to the rear. Benefits include:

- Pod mounted for multi-positioning
- Ergonomic, low effort joysticks
- E-Stick thumb control on hoe joystick (if option is fitted)
- In-cab Pattern Changer as standard
- MP/Auxiliary controls on Loader joystick

pg. 5

#### **Loader Versatility**

The Cat Parallel Lift Loader.

- Powerful loader breakout force
- 1.3 m<sup>3</sup> loader bucket
- Divergent lift arms and low profile hood for maximum visibility to the tool
- Robust design reduces torsional flex when lifting heavy objects
- Standard Return To Dig
- Excellent Work tool versatility
- Optional hydraulic quick coupler
- Standard self levelling
  pg. 6

#### **Complete Customer Service**

Your Caterpillar dealer offers a complete machine aftercare service, such as Customer Support Agreements, and can tailor your purchase to exactly suit your needs. Your dealer can also offer competitive finance packages to ensure that you can plan everything to enable the best return on your new asset. **pg. 13** 

## Features

Customer-driven improvements are designed into the 444E.

#### **Lower Operating Costs**

The 444E has improved Stabilizer and E-Stick wear pad adjustment. Exterior wear pad adjustment ensures easy maintenance of the stabilizer and E-Stick, lowering operating costs. This equates to less machine downtime and more convenience for the operator.

#### **All Wheel Braking**

All Wheel Braking is standard on all 444E Backhoe loaders. When driving in two wheel drive, applying the brakes engages four wheel drive, maximising brake effectiveness. Releasing the brakes returns the transmission to two wheel drive. This is particularly useful when roading. This effective system works well in hazardous, slippery or steep surfaces. Braking modes are controlled by the All Wheel Drive Switch.

#### **Improved Weight Distribution**

The 444E has been designed with improved weight distribution. The new design coupled with a slightly longer wheelbase ensures optimal balance and handling, particularly when roading. This is achieved with no loss in turning circle.

#### **Excavator Control Pattern Changer**

The 444E has as standard an in-cab pattern changer, allowing operators to choose between either Backhoe ISO or X patterns. This is now located within reach of the operator, ensuring the 434E will suit either type of backhoe operation.

#### **187 Liter Fuel Tank**

Responding to customers needs, the 444E is designed with a large 187 liter fuel tank. Along with the efficient Cat engine and hydraulic system, this ensures longer periods between fill ups and less inconvenience.

#### **Caterpillar Immobilizer System**

Machine theft has serious repercussions for your business, such as loss of business, higher insurance costs and inconvenience. The Cat Immobilizer System is a diesel engine immobilizer system, designed to provide theft protection. The system meets Thatcham accreditation and PTAG attack time requirements and a premium discount may be available from certain Insurance companies (see your Cat dealer for details). The system uses the same key but has a one touch pad for easy disarming.

#### **Electro-Deposition Coating**

Your 444E has been protected by an undercoat of electro-deposited (E-Coat) primer, which completely seals each metallic component and offers a superlative degree of protection from damage and corrosion. Coupled with the high solids polyurethane top coat, your 444E will stay looking good for longer, ensuring optimum resale value.





## **Equal Size Tires (EST)**

The 444E EST characteristics offer more jobsite opportunities for the operator

### **Improved Flotation**

The 444E can operate in work areas that push the limits of standard unequal size tire machines. The high flotation and lower ground pressure offered by the tires allows the machine to work in very poor underfoot conditions, such as greenfield construction sites, agricultural applications such as farm maintenance. This machine can get to areas which are off limits to a lot of other type of machine.

### **Increased Loader Performance**

The 444E has excellent lift height, which coupled with the larger bucket and powerful breakout forces, enable the 444E to perform high productivity loading duties, such as hopper charging, bulk material transfer, grading and loading.

## **Tire Options**

The 444E is equipped with 28" tires, in bias or radial ply variants. This allows the correct choice of tire to suit any application or budget.

## All Wheel Steer (AWS)

The machine is equipped with AWS, giving the machine an excellent turning circle and good manoeuvrability in tight spaces. AWS offers Circle Steer, Crab Steer and Independent Rear Manoeuvring modes.

## **Pilot Operated Joystick Controls**

Standard on the 444E, Pilot controls reduce fatigue, improve visibility and increase versatility.

## **Joystick Controls**

Excavator style joystick controls provide smooth modulation and are ergonomically designed for low effort control and operator comfort. The location of the controls naturally position the operator comfortably into the back of the seat. The loader joystick features optional multi function controls and the RH hoe joystick features a thumb operated extendable stick control, eliminating pedals on the floor.

### **Pattern Changer**

The 444E has a standard hoe pattern changer within the cab. This allows the operator to choose between backhoe and excavator patterns, with an easy push of a switch.

### **Stabilizer Controls**

Pilot operated, remote Stabilizer controls are available with optional Auto-Up feature, reducing cycle times and improving visibility to the rear.

### **Multi Position Joystick Pods**

The joysticks are pod-mounted, allowing multi positioning, fore and aft for the controls. This allows the operator to move forward when excavating close to the rear of the machine, and have a clear view to the trench.

### Visibility

With no rear console impeding vision, the operator has an unobstructed view to the working area.









## **Loader Versatility**

The 444E Loader has even greater performance.



#### **Powerful Loader Performance**

The 444E Parallel Lift Loader has very powerful bucket and loader breakout force, giving faster cycle times and less effort. It also offers self levelling as standard, ensuring faster loading cycles. Available with either a 1.3 m<sup>3</sup> General Purpose or Multi Purpose bucket, the 444E can be matched to your needs precisely. As ever, the work tool visibility is excellent with the narrow sloping hood and divergent loader arms allowing a clear line of site to the bucket edges. The large torque tube provides torsional stiffness, needed when picking up irregular shaped heavy objects, in the loader bucket, or when grading with the loader. The large front tires provide increased stability when heavy loading. The arms have been redesigned to further Loader performance.

#### **Joystick Control**

The loader joystick is ergonomically placed for operator comfort, and controls the multi-purpose bucket, auxiliary hydraulics, when these options are fitted.

#### **Ride Control**

Caterpillar's proven Ride Control system is an option designed to reduce machine pitching and bouncing giving operators a smooth ride in all applications, including load and carry, roading, or simply moving around the jobsite. An accumulator acts as a shock absorber to reduce machine pitching and provide a smoother ride over rough terrain. The system is engaged by a switch on the front console.

#### **Return to Dig**

Your 444E is equipped with a Return to Dig system. This system reduces loading cycle times by bringing the loader bucket back to the dig position with an easy pull of the lever. By the time the loader bucket is at ground level, the bucket is angled correctly for the next load or cut.

#### Hydraulic Quick Coupler Option

The 444E is available with an optional loader quick coupler, allowing greater loader versatility with a wide range of Caterpillar work tools.

## **Power Train**

444E has a 40 kph transmission as standard-less time on the road, more time on the jobsite.





#### **Auto-Shift Transmission**

Work faster with the Auto-Shift transmission. The Auto-Shift transmission provides automatic shifting between five forward and three reverse gears. There is no floor mounted shift lever, so the operator has more floor space and better access through the right hand door.

#### Larger Torque Converter

The 444E has a larger torque converter, which equates to more rimpull, improving loading performance considerably.

#### Standard All Wheel Steering (AWS)

The 444E is equipped with AWS, enabling 2WS, Circle Steer, Crab Steer and Independent Rear Steering for those tight situations. This makes the machine far more manoeuvrable in tight work areas. The unique Independent Rear Steering ensures even greater manoeuverability.

#### **Caterpillar Engine**

The 444E is available with either the 3054C turbocharged engine that meets Stage II emission regulation EU Directive 97/68/EC or the C4.4 turbocharged engine that meets Stage IIIA EU emission Directive 2004/26/EC. All engines are reliable 4 cylinder, 4 stroke direct injection diesel engines equipped with standard glow plug staring for optimum cold weather performance. This provides reliable starting performance down to -18 C. All engines feature a reliable gear driven water pump and a durable poly vee front end auxiliary drive belt that is automatically tensioned for longer life reducing operating costs.

#### **Axles and Brakes**

The Caterpillar rear axle is an enclosed design with a wet multi-plate Kevlar braking system. This system is oil immersed and self adjusting, and allows operation in the harshest environments. The system has dual brake pedals for split braking in tight corners.

#### **Air Filter**

A dry type axial seal air cleaner with internal pre cleaner and automatic integrated dust ejection provides more efficient pre-separation. Rolled air filters allow consistent linear air flow with reduced installation space.

## **Operator Station**

The E-Series cab. Comfort, Visibility, Style-Designed in!



**The 444E Cab is Designed with Today's Operator in Mind** The E-Series cab is designed to provide maximum comfort, ease of operation, and overall style for today's demanding operator. The new design incorporates curved glass for improved interior space and visibility, and the cab is widened for better performance when turning from one mode of operation to the other. Cab comfort is enhanced with the firstclass Cat air suspension seat designed to reduce fatigue.

An easy to open single rear piece window provides the operator with excellent ventilation and superb visibility.

The rear wash/wipe unit cleans a large area of the new screen to ensure visibility of the working area when working in wet or dusty conditions.

Excellent ergonomics ensure that all controls are within easy reach of the operator, and tinted glass is standard in all cabs.

Other features such as standard air-ride seat and remote Stabilizer controls, large adjustable vents throughout the cab, and clear gauges provide the operator with an operating environment designed to maximize comfort and productivity.





#### Vibration

Caterpillar understands that backhoe loaders work in some of the harshest environments. By controlling normal machine vibrations caused by these harsh conditions, operator efficiency and productivity are improved. The 444E has features, both standard and optional, that reduce vibration.

#### **HVAC System**

The 444E benefits from an, optional, more powerful air conditioning system, which, with it's improved ventilation flow to the operator, ensures the operator stays cool. The ventilation also provides plenty of demisting/defrosting/ heating capability.

#### **Work Lights**

The 444E has adjustable front and rear work lights. This allows the operator to direct the light wherever needed, providing maximum illumination to the work area.

#### **Cab Air Filter**

The 444E has an easy access cab air filter, situated within the RH rear fender. The cab air intake is positioned on the central post, high up to minimize dust intake into the air filter.

#### **Cab Mounts**

The cab shell is attached to the frame with resilient mounts, reducing vibration and sound.

#### **Cat Air Suspension Seat**

The major interface between the machine and the operator is optimal, and the Cat air suspension seat is an excellent asset to the E-Series cab design. The suspension seat is designed to meet the ISO 7096 specification to help maximize operator comfort.

## **Backhoe Performance**

The E-Series Backhoe improves performance and serviceability





#### **Excavator-style Backhoe**

The instantly recognizable Cat excavator boom has more than just good looks – it outperforms straight boom designs too. Whether close-up truck loading on a single road carriageway, or digging over obstacles such as walls, the excavator boom outperforms the rest. Combine this versatility with the powerful breakout forces, the controllability of the load-sensing, flow-sharing hydraulic system, and you have one of the best Backhoes' in the industry. The boom is a narrow design, ensuring maximum visibility to the work tool.

### **Extendable Stick**

The 444E is available with improved extendable stick. Redesigned with the sliding outer section, this design keeps the wear pads out of the dirt, extending adjustment intervals. When adjustment is necessary, the accessible wear pad design takes minutes to adjust, without the need to disassemble the E-Stick. The sliding outer design allows excellent material clamping abilities whereby the E-Stick can still be retracted with a full

#### **Slider Frame and Swing System**

The 444E is designed to make necessary maintenance easy to perform. The E-Series cast slider frame has exterior lock clamps, with no backhoe disassembly needed when servicing. The Swing Frame/Boom Foot pins have replaceable bushings in the bores.

#### **Caterpillar Cushion Swing System**

The 444E is equipped with Cat Cushion Swing System, which enables very fast trenching by damping the boom oscillation down when returning to trench with the hoe.

#### **Increased Dig Depth**

The 444E has an increased digging depth, further increasing the productivity and versatility of this machine.

#### **Increased Performance**

The boom and stick have redesigned geometry and higher stick forces, which equates to improved digging performance. Higher Bucket and Stick forces are designed to complement the new boom/stick geometry, making the 444E one of the best excavating BHL's in the industry.

## **Caterpillar Work Tools**

Enhance the versatility of your 444E with a wide choice of tools on offer to suit your needs.

### **Backhoe Buckets**

Cat offers a huge variety of hoe buckets to meet your requirements, including:

- Standard Duty Bucket. Used in easy to penetrate, low impact, moderately abrasive soils.
- Heavy Duty Bucket. Used for digging fragmented rock, frozen ground and highly abrasive materials.
- Extreme Service Bucket. Used in highly abrasive, high impact soil.
- High Capacity Bucket. Same durable construction as the HD bucket, but longer tip radius provides increased fill capacity.

### Durability

Caterpillar backhoe buckets offer superior durability with the following features:

- Thick cutting edges.
- DRS (Diagonal Retention System) means easier replacement of pin on teeth and greater strength.
- Thick wear material on the side plates for better reinforcement and less wear.
- ID plate on all buckets showing part number, GET sizes and machine compatibility.

### Sizes

The E-Series offers a full range of sizes, from a 9"/228 mm Cribbing bucket for cable trenching right up to large capacity 36"/914 mm buckets for mass excavation.

### **Quick Coupler – Loader and Hoe**

A hydraulic quick coupler is available for the Loader, and a mechanical quick coupler option is available for the Hoe. For operators who require fast tool changes, both quick coupler options can save a lot of time, money and effort.

### **Hydro-Mechanical Work Tools**

Caterpillar has designed a range of hydro-mechanical tools carefully matched to the machine for optimum performance, including:





## Hoe

- H70/90 Hydraulic Hammers
- Auger
- Vibratory Plate Compactor
- Cold Planer

## Loader

- Angle Broom
- Pickup Sweeper

Please see your Cat dealer for the full range of tools available for particular machine combination.



## **Hydraulics**

Load sensing, flow-sharing system matches power and flow supply to demand – where you need it, when you need it.



### **Hydraulic Performance**

It's rare that you'll be working at full production 100% of the time, so why should the machine be working flat out, using more fuel, making more noise, and increasing wear? The 444E has a load-sensing, closed center hydraulic system, which closely matches power and flow to the demand needed by the implements. So whether you're in full trenching mode, or delicately digging around services, you are in control. In applications such as loading and carrying, speed is important, and system will match the flow needed to get the job done quickly and efficiently.

As there is minimal demand on the system unless needed, there are less parasitic hp losses and more power available for rimpull – providing better loading and roading.

### **Flow Sharing Valves**

The 444E also features new flow-sharing hydraulic valves, ensuring the correct flow of oil reaches the implement cylinders, providing greater control and eliminating oil starvation when operating multiple functions, such as when grading with the backhoe.

#### Hardware

The 444E is equipped with a highly efficient variable displacement piston pump, Cat's XT hoses and O-ring face seal fittings, ensuring a robust system. XT hose is constructed from four over-lapping wire spiral wraps, ensuring excellent durability and resistance to damage from pressure spikes and hydraulic pulsing.

## **Serviceability**

Lower operating costs mean a better return on your bottom line.

### **Reduced Maintenance**

The 444E is equipped with a flip open hood, allowing access to all check/fill points, air cleaner, washer bottles, visual indicators etc. The E-Series carries on the tradition with sealed for life axle oscillation, driveshaft universal joints, trunnions etc. Daily maintenance, which can be a chore for the busy operator, is kept to a minimum on the 444E.

### **Boom and Stick Design**

The Boom and Stick design allows all wear adjustment to be done with Stick in-situ, using a simple wedge adjustment mechanism – no dismantling to shim the wear pads. The Stabilizer legs are also externally adjustable, reducing machine down time and inconvenience.

### **Cat Filters**

All Cat filters are vertically mounted for spill free servicing and reduced oil contamination. They are also low micron filters, filtering even tiny particles from the oil and keeping the engine, transmission and hydraulic system running smoothly for years.

## **Scheduled Oil Sampling**

Your Cat dealer will be able to provide the Caterpillar Scheduled Oil Sampling ( $S \bullet O \bullet S^{TM}$ ) service. This enables your dealer to analyze wear before problems arise, so that premature failure can be avoided, and corrective action can take place to reduce costs and downtime.





## **Complete Customer Support**

Lower operating costs with your dealer's excellent services and options.

## **Customer Support Agreements (CSA's)**

Your Cat dealer can offer a comprehensive range of CSA's which can be individually tailored to suit your finances and requirements. Dealers can offer a range of options from a full Preventative Maintenance with S•O•S<sup>TM</sup> package to a Parts Only CSA. Protect your valuable investment and know exactly what your monthly payments will be to help you run your business.

### Finance

Have you explored the range of options available from your dealer to finance your machine? They can offer a selection of attractive packages tailored exactly to your requirements.

### **Machine Selection**

Your dealer can help guide you with your machine purchase decision, based on your requirements and help keep operating costs to a minimum. Is the machine you have in mind exactly the best for your job, or could other attachments be more suitable?

### **Operating Techniques**

Your dealer can advise operating techniques for your machine which will minimize wear and tear, maximize productivity, and lower owning and operating costs.



### **Remanufactured components (Reman)**

Sometimes, the most cost effective way to repair the machine is with remanufactured components. Reman components are rebuilt to original specification at Cat's Reman facility, using genuine parts and skilled technicians. Reman parts are guaranteed for 1 year

## Engine

Caterpillar 3054C or C4.4 engine.

	Stage II EU Emission Directive 97/68/EC*	Stage IIIA EU Emission Directive 2004/26/EC**	
Engine	CAT 3054C Turbocharged	C4.4 Turbocharged after cooled	
Rated Power (standard)	2200 rpm	2200 rpm	
Gross – SAE J1995	74.5 kW/101 hp	74.5 kW/101 hp	
Net – ISO 9249	71 kW/97 hp	71 kW/97 hp	
Net - 80/1269/EEC	71 kW/97 hp	71 kW/97 hp	
Net Torque Rise at 1400 rpm	26%	23%	
Peak Torque Rise at 1400 rpm			
74.5 kW/101 hp	408 Nm	400 Nm	
Bore	105 mm	105 mm	
Stroke	127 mm	127 mm	
Displacement	4.4 liter	4.4 liter	

- All engine horsepower (hp) are metric including front page.
- Net power advertised is the power available at the fly wheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- Engine will operate up to a maximum altitude of 3000 m

#### Features

• Three ring pistons made of lightweight silicon/aluminium alloy for strength and maximum thermal conductivity.

- Forged, chrome/molybdenum-steel crankshaft with nitro-carbonized journals.
- Front and rear crankshaft oil seals are 'lip' type Viton and PTFE designs featuring an integral dust lip.
- Heat resistant silicon-chrome steel intake and STELLITE faced exhaust valves are used for long engine life.
- Cylinder block is high strength, cast iron alloy of deep-skirt, monobloc design for increased strength and long life.

- Cylinder head is high strength, cast iron alloy construction with extra duty wall and head thickness. Intake and exhaust ports are precision cast to promote optimum gas flow.
- Direct injection fuel system provides accurate fuel delivery. Self priming electric lift pump for improved cold start capability. One filter fuel system for reduced maintenance costs.
- High torque at low engine speeds for better machine performance.
- Dry type, axial seal air cleaner with automatic, integrated dust ejection providing more efficient preseparation.
- Direct electric 12 volt starting and charging system with 750 CCA group 31 maintenance free battery.
- Poly vee front end and auxiliary drive belt that is automatically tensioned for long life reducing operating costs.

\*\* For regulated countries

## **Hydraulic System**

Load-sensing, closed center system.

Variable flow, closed center, loadsensing system provides full hydraulic force to cutting edges at all engine speeds. Provides low fuel consumption and low effort controls.

Т	pe

Closed-center

### Pump type

Variable-flow, axial-piston

	*
Pump capacity	156 lpm at 2200 rpm
System pressure	249 bar

## **Brakes**

Fully enclosed, hydraulic, multiple discs.

#### Features

- Inboard oil immersed, hydraulically actuated multiple Kevlar discs on final drive input shaft.
- Completely enclosed and sealed.
- Self adjusting.
- Foot operated dual pedals can be interlocked for roading.
- Parking/secondary brakes are independent of the service brakes.
   Parking brake is mechanically applied through a hand lever in the right hand side console.

Meets ISO 3450:1996 requirements.

## **Operator Station**

ROPS/FOPS is standard.

ROPS (Roll Over Protective Structure) offered by Caterpillar for this machine meets ROPS criteria ISO 3471:1994 and FOPS (Falling Objects Protective Structure) criteria ISO 3449:1992.

<sup>\*</sup> For less regulated countries

## **All Wheel Steer**

Fully hydrostatic steering.

Full hydrostatic steering controlled by a hand metering unit. There are three operator-selected modes to maximize machine manoeuverabitity:

- Two wheel steer mode
- Circle-steer mode
- Independent rear-manoeuvring mode

Secondary steer system available to meet roading regulations in various countries and to meet ISO 5010.

Туре	Front wheel			
Power Steering	Hydrostatic			
Cylinder, one (1)	double-acting			
	Front	Rear		
Bore	85 mm 85 m			
Stroke	48 mm 63 m			
Rod diameter	42 mm 42 m			
Turning Circle				
Two wheel steer	19	9 370 mm		

•	
Two wheel steer	19 370 mm
Circle-steer	12 940 mm
Independent	
rear-manoeuvring	11 960 mm

## Transmission

Caterpillar Autoshift transmission.

The standard Autoshift transmission provides five speeds forward and three reverse, full synchromesh in all gears. Constant mesh gears on all ratios permit on the go shifting of all gears up or down. Neutral start provision prevent starting while shuttle is engaged. Torque converter free wheel clutch allows the converter stator free wheel during high speed, low load conditions such as roading.

#### **Transmission disconnect**

Hand operated power disconnect for easy, on the go shifting and full engine rpm when in the loading cycle.

#### Forward/Reverse electric power shuttle

Conveniently places, hand operated lever provides instant direction changes between forward and reverse through power hydraulic clutches.

#### **Torque converter**

Single stage 2.4 stall ratio.

#### **Travel Speeds**

Travel speeds of All Wheel Drive backhoe loader at full throttle, when equipped with 16.9 x 28 tires.

	Autoshift
Forward	kph
1st	6
2nd	9
3rd	20
4th	27
5th	41
Reverse	
1st	6
2nd	9
3rd	20

## Axles

Standard All Wheel Drive and All Wheel Steer.

#### Features

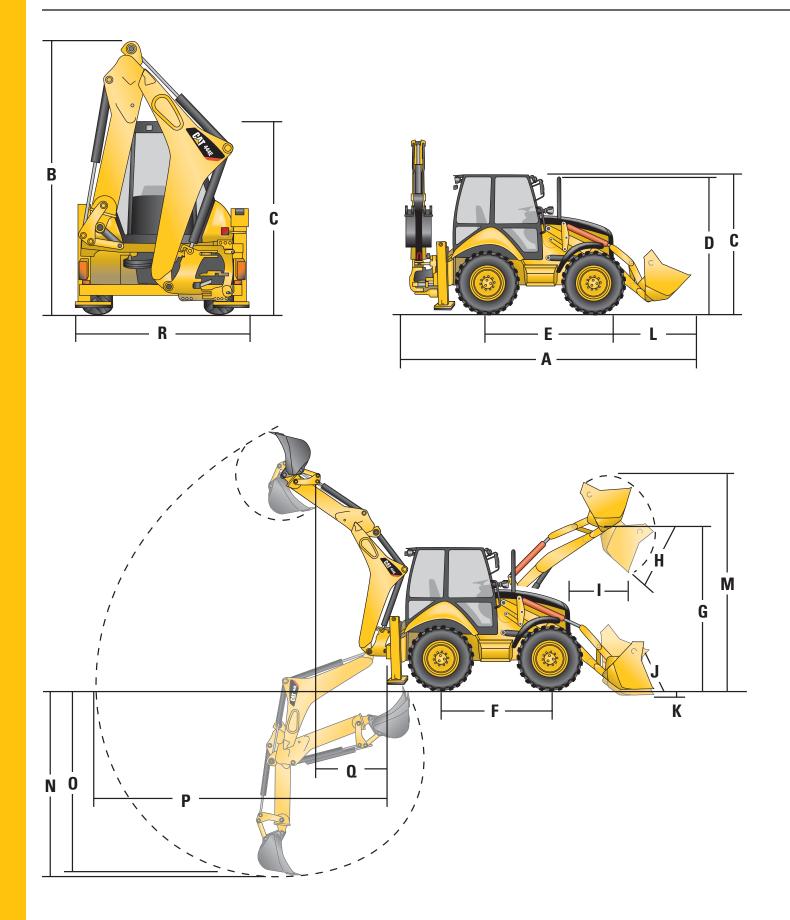
- Heavy duty rear axle with self adjusting inboard brakes, optional differential lock, and final drive.
- All Wheel Drive (AWD) is engaged by front console panel switch or by brake pedal during all wheel braking operation. AWD can be engaged on the go, under load, in any gear, forward or reverse. AWD has outer final drives for easy maintenance.
- AWD is pendulum mounted and permanently sealed and lubricated, requiring no daily maintenance. Also features double acting steering cylinder with 16° steering angle for increased maneuverability.
- All Wheel Steer.
- Equal Size Tires.

## **Service Refill Capacities**

	Liters
Cooling System	24.0
Fuel tank	187.0
Engine with oil filter	7.6
Transmission	
AWD	19.0

Liters
16.0
0.5
1.7
14.0
0.7
79/99
38

# Dimensions – Parallel Lift Loader



Machine Dimensions		General Purpose	Multi Purpose	Multi Purpose with forks
A Overall transport length	mm	6085	6115	6115
Overall length (loader on ground)	mm	6085	6115	6115
Overall transport length S-Stick	mm	6099	6119	6119
Overall transport length E-Stick	mm	6099	6119	6119
<b>B</b> Overall transport height (standard stick)	mm	3871	3871	3871
Overall transport height (extendible stick)	mm	3896	3896	3896
Overall width	mm	2368	2368	2368
<b>C</b> Height to top of canopy/cab	mm	2851	2851	2851
<b>D</b> Height to top of exhaust stack	mm	2783	2783	2783
Height to loader hinge pin (transport)	mm	397	393	393
Ground clearance (minimum)	mm	375	375	375
<b>E</b> Rear axle centerline to front grill	mm	2743	2743	2743
Front wheel tread gauge	mm	1914	1914	1914
Rear wheel tread gauge	mm	1914	1914	1914
F Wheel based (AWD)	mm	2200	2200	2200

Dimensions and Performance – Loader Bucket		General Purpose	Multi Purpose	Multi Purpose with forks
Capacity (SAE rated)	m <sup>3</sup>	1.3	1.3	1.3
Width	mm	2434	2434	2434
Lift capacity at maximum height	kg	3911	3607	3411
Breakout force	kN	64	60	58
Tipping load at bucket load point	kg	6475	6105	5914
<b>G</b> Maximum hinge pin height	mm	3496	3496	3496
H Dump angle at full height		45°	45°	45°
Dump height at maximum angle	mm	2720	2699	2699
Dump reach at maximum angle	mm	848	869	869
J Maximum bucket rollback at ground level		40°	40°	40°
K Digging depth	mm	175	175	175
Maximum grading angle		108°	107°	107°
Width of dozer cutting edge	mm	_	2434	2434
L Grill to bucket cutting edge, carry position	mm	1499	1519	1519
M Maximum operating height	mm	4528	4520	4943
Jaw open maximum	mm	_	913	913
Bucket jaw clamping force	kN	_	44	44
Weight (not including teeth)	kg	462	809	991

Dimensions and Performance – Backhoe			Extendible Stick	
		Standard Stick	Retracted	Extended
Digging depth, SAE maximum	mm	4673	4784	5923
Digging depth, maximum	mm	5264	5370	6465
Digging depth, 610 mm flat bottom, SAE maximum	mm	4641	4752	5891
Digging depth, 610 mm flat bottom, maximum	mm	5222	5331	6445
• Reach from swing pivot at ground line	mm	6063	6169	7263
Loading height	mm	4012	3968	4577
Loading reach	mm	1888	2062	3030
Swing arc		180°	180°	180°
Bucket rotation		205°	205°	205°
Stabilizer width	mm	2368	2368	2368
Bucket dig force	kN	71	70	70
Stick dig force	kN	44	43	32
Total side shift travel	mm	1258	1258	1258

## Weights

Standard parallel lift loader, with 1.3 m<sup>3</sup> general purpose loader bucket, 610 mm standard duty backhoe bucket, 80 kg operator and a full fuel tank.

	kg	
Operating weight (range)	8810-10700	
Standard machine weight	8898	
ROPS canopy	-260	
Autoshift	50	
Air conditioning	48	
Multi-purpose bucket 1.3 m <sup>3</sup>		
With fold-over forks	1018	
Without fold-over forks	858	
Extendible stick		
(excludes front counterweight	ght) 279	
Counterweights		
Base	115	
Stackables – One	235	
Stackables – Max	485	

#### Minimum Counterweight Recommendations

Recommendations:	
Standard Stick	
General Purpose	235
Multi Purpose	115
Multi purpose with	
fold-over forks	Base
Extendible Stick	
General Purpose	485
Multi Purpose	235
Multi Purpose with fold-over forks	115
Total gross vehicle weight not to exceed 10 700 kg.	

## **Cab Features**

RH opening door with opening window	$\checkmark$
LH opening door with opening window	$\checkmark$
2 rear side opening windows	$\checkmark$
Deluxe air suspension seat	$\checkmark$
8 working lights	$\checkmark$
Floor mat	✓
LH storage console	✓
Tilt steering column	$\checkmark$
Exterior rear view mirror	✓
Beacon socket (2)	✓
Internal power socket	✓
Radio ready headliner	✓
Individual display gauges	✓
Instrument cluster display gauge	✓
Sun visor	✓
Cat contravision	$\checkmark$
Steering wheel knob	✓
Vandal guard	✓
Cab heater	✓
Cab air conditioning	optional
Auto-up stabilizers	optional
Seat belt (50 mm)	✓

## **Standard Equipment**

Standard equipment may vary. Consult your Caterpillar dealer for specifics.

Air cleaner, dry type, axial seal with integral pre-cleaner and filter condition indicator All Wheel Drive All Wheel Steer Alternator, 120-amp, 12 volt Antifreeze (to -37°C) Audible system fault alarm Backhoe, 4673 mm dig depth, side-shift, excavator-style backhoe, 2 lever control Battery, maintenance free, 750 CCA Boom, transport lock Brace, lift cylinder Brakes, Kevlar disc, oil immersed Caterpillar 3054C\* (74.5 kW) engine or Caterpillar C4.4\*\* (74.5 kW) engine Coat hook Electro-hydraulic slide frame lock Engine enclosure Fan, cooling and fan guard Fast reversing shuttle, all gears Flashing hazard, signal lights Floor mat, rubber

Front axle, pendulum mount Front grill with bumpers Front headlights Front and rear windshield wipers Gauges: Coolant temperature, fuel level, tachometer, hour meter, torque convertor, oil temperature Ground line fuel fill with 187 liters capacity High Ambient coder Hydraulic oil cooler Indicators: Air cleaner service, brake on, engine coolant, hydraulic oil level sight gauge, oil pressure Instrument panel lights Intermittent front and rear wash/wipe Key start/stop with auxiliary position Left side doors with lock Lifting eye, backhoe Lights, working (2 front, 2 rear) Load sensing, variable flow system with axial piston pump Mirrors, external (2)

Mirror, exterior rear view - large Pilot stabilizer controls Power receptacle, 12 V (2) Power steering, hydrostatic ROPS cab with heater, defroster, pressurizer and cab recirculating fan Seat belt, retractable (50 mm) Seat, air suspension with fabric seat cover Self canceling directional indicator Spin-on fuel, engine, hydraulic and transmission oil filters Starting system, thermal aid Stop and tail lights (2) Swing transport lock Stabilizer Feet Tires (2 front, 2 rear) Torque convertor Throttles, hand and foot Transmission, four-speed synchromesh Transmission neutralizer switch Warning horn, front electric Water separator

\* Standard for less regulated countries, meets stage II EU Emission Directive 97/68/EC.

\*\* Standard for regulated countries, meets stage IIIA EU Emission Directive 2004/26/EC

## **Optional Equipment**

Optional equipment may vary. Consult your Caterpillar dealer for specifics.

A 1	Geografie	Detection have a
Air conditioning	Guards	Rotating beacon
Alarm, back up	AWD driveshaft	Seat belt 75 mm
Attachments, front loader	Teeth (GP/MP)	Stabilizer street pads
General purpose bucket 1.3 m <sup>3</sup>	Rear lights, roading	Stick, extendible
Multi purpose bucket 1.3 m <sup>3</sup>	Hydraulic valves, loader	Tool box, external
1.3 m <sup>3</sup> with forks	3rd valve for GP/MP	Transport locks
Attachments, backhoe buckets	Hydraulic valves (auxiliary)	
Quick Coupler (Mechanical)	Standard stick	
Counterweights	Extendible stick	
Bumper	Hydraulic lines	
Base	Hammer lines to stick	
Stackables	Quick disconnects	
Cutting edge, bolt on	Lights	
Single piece	Number plate, rear	
Two piece	Roading	
Fenders, front, All Wheel Drive	Operators station	
	Canopy	
	Ride control	

## 444E Backhoe Loader

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 Caterpillar dealer for available options.

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