

434

Backhoe Loader



C3.6 Stage V Engine

The Cat® C3.6 engine meets EU Stage V emissions standards while delivering up to a 10% fuel efficiency improvement compared to the previous model. The aftertreatment system is completely maintenance free with Selective Catalytic Reduction (SCR), Diesel Exhaust Fluid (DEF) and a fit for life Diesel Particulate Filter (DPF) system. This new engine delivers power and torque density as per the C4.4 engine installed in the previous model.

Improved Operator Comfort

Pilot hoe controls are an optional upgrade on your 434. These controls mounted on fully adjustable pods offer the operator finer controls while giving improved ergonomics and comfort.

Greater Lifting Performance

The option of a larger boom cylinder will give greater lifting performance on the back of the 434 machine.

Powershift Transmission Option

The four speed powershift transmission, improves operator comfort by utilizing the Power Shuttle Lever to shift gears. There is no floor-mounted gear shift lever, adding to the already spacious work environment.

Interactive Display Screens

The choice of either a soft key or touchscreen display screen gives the operator information at the touch of their fingertips. Machine Security Software is embedded into the display screen as well as notifications on service intervals.

Excavator Style Boom

The Excavator Style Boom is iconic to the Cat backhoe loader (BHL). This gives the operator more dig depth and reach when working around obstacles meaning less repositioning of the machine is required.

Powerful and Efficient Hydraulics

The load sensing hydraulic system coupled with a variable displacement piston pump deliver powerful hydraulics when the operator really requires it.

Power Management Modes

The operator can choose between Eco Mode, Standard Mode or Standard Plus dependent on job and site conditions. Eco Mode will save the operator fuel, lowering their owning and operating costs, where Standard Plus Mode will give more speed and power when time or tough ground conditions demand this.

Product Link™

Product Link™ comes as standard on the Cat BHL. Many features exist through Product Link including fuel burn and location allowing the owner to access all data to help increase productivity while reducing costs.

434 Backhoe Loader Specifications

Engine

	EU Stage V (Standard)
Engine	C3.6 74.5 kW Electronic Turbo Intercooled
Ratings at 2,200 rpm	
Gross Power SAE J1995	76 kW/103 hp
Gross Power ISO 14396	74 kW/101 hp
Net Power Rating at 2,200 rpm	
SAE J1349	68 kW/92 hp
ISO 9249	68 kW/92 hp
Torque Rise (net)	48% @ 1,500 rpm
Net Torque – SAE J1349	436 N·m
Bore	98 mm
Stroke	120 mm
Displacement	3.6 L

- 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 3048 m altitude. Auto derate protects hydraulic and transmission systems.
- Meets EU Stage V emission standards.

Transmission

Travel speeds of backhoe loader at full throttle, when equipped with 440/80-28 rear tires.

	Power Shuttle Transmission (Standard)	Powershift Transmission (Optional)	Auto-Shift Transmission with Lock-Up Torque Converter (Optional)
Forward			
1st	6 km/h	6 km/h	6 km/h
2nd	9 km/h	10 km/h	10 km/h
3rd	21 km/h	20 km/h	12 km/h
4th	36 km/h	40 km/h	20 km/h
5th	—	—	27 km/h
6th	—	—	40 km/h
Reverse			
1st	6 km/h	6 km/h	6 km/h
2nd	9 km/h	12 km/h	12 km/h
3rd	21 km/h	27 km/h	27 km/h
4th	36 km/h	—	—

Axle Ratings

Front Axle, 2WD	
Static	22 964 kg
Dynamic	9186 kg
Front Axle, AWD	
Static	22 964 kg
Dynamic	9186 kg
Rear Axle	
Static	22 964 kg
Dynamic	9186 kg

Weights*

Operating Weight*	9170 kg
Operating Weight (maximum) (ROPS capacity)	11 500 kg
Cab, ROPS/FOPS	Standard
Auto-Shift Transmission	109 kg
Ride Control	15 kg
Air Conditioning	32 kg
MP Bucket (1.15 m ³)	
with Fold-over Forks	975 kg
without Fold-over Forks	776 kg
Extendible Stick (excludes front counterweight)	203 kg
Counterweights	
Base	115 kg
Maximum	115 kg
Minimum Counterweight Recommendations – Standard Stick	
Loader Bucket	
GP	0 kg
MP	0 kg
Minimum Counterweight Recommendations – Extendible Stick	
Loader Bucket	
GP	0 kg
MP	0 kg
Total Gross Weight Not to Exceed	11 500 kg

*Machine Configuration – HRC 74.5 kW engine; standard stick hoe; standard cab with A/C; AWD standard shift transmission; 1.15 m³ MP loader bucket; 600 mm standard duty hoe bucket; 440/80R24 tires; no counterweight; 80 kg operator; full fuel tank.

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Hydraulic System

Type	Closed Center
Pump Type	Variable-Flow, Axial Piston
Pump Capacity @ 2,200 rpm	160 L/min
System Pressure	
Backhoe	250 bar
Loader	250 bar

Steering

Type	Front Wheel
Power Steering	Hydrostatic
AWD Cylinder, One (1) Double-acting	
Bore	85 mm
Stroke	117 mm
Rod Diameter	42 mm

Turning Circle (28" Tires)

2WD/AWD (inner wheel not braked)	
Outside Front Wheels	9.8 m
Outside Widest Loader Bucket	12.6 m

Service Refill Capacities

Cooling System with A/C	17.5 L
Fuel Tank	160 L
Engine Oil with Filter	9 L
Diesel Exhaust Fluid	19 L

Transmission (Power Shuttle)

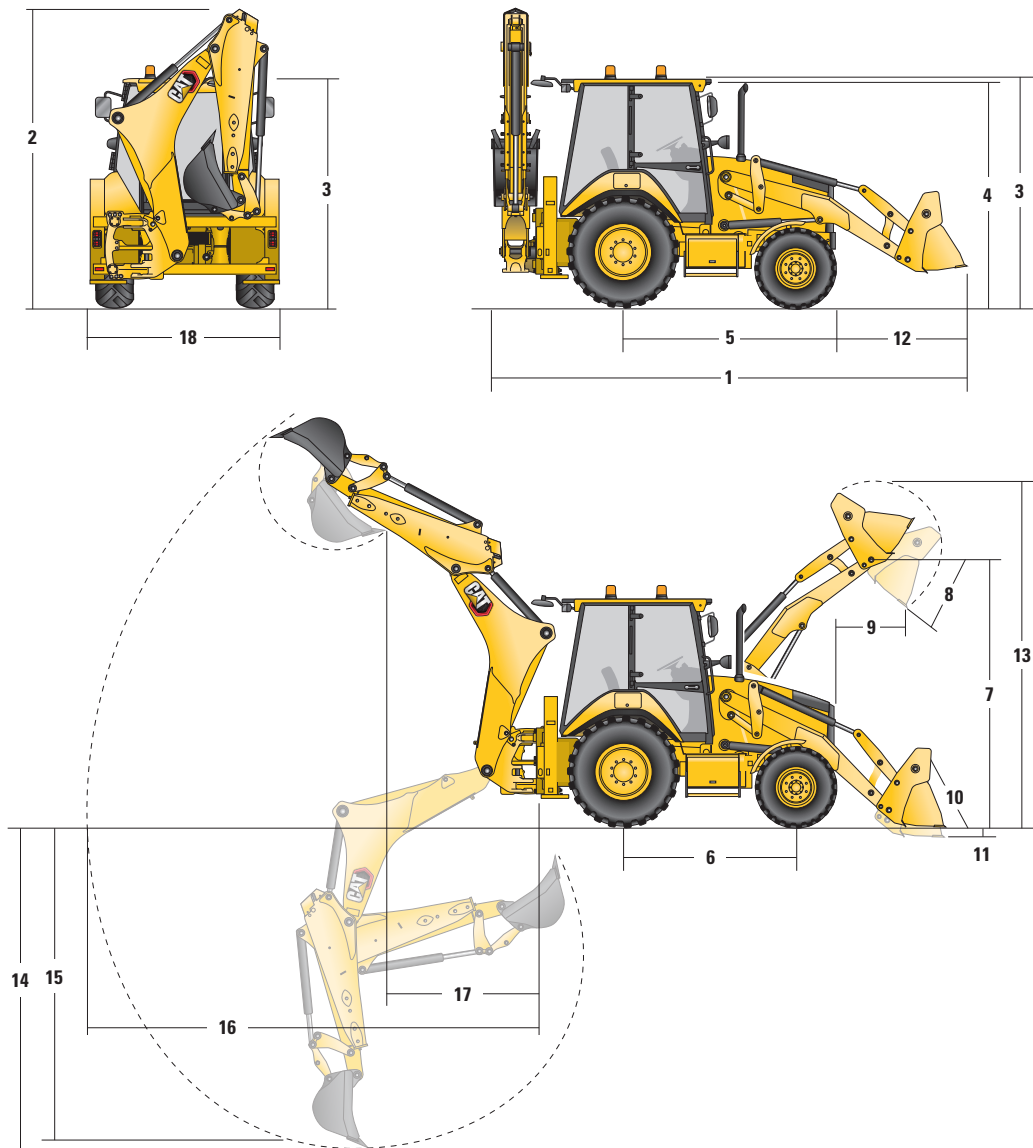
2WD	18 L
AWD	18 L

Transmission (Powershift)

AWD	19 L
Rear Axle	16 L
Planetaries	1.7 L
Front Axle (AWD)	14 L
Planetaries	1.7 L
Hydraulic System	95 L
Hydraulic Tank	42 L

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Machine Dimensions



1.15 m³ Buckets

	GP – 1.15 m ³	MP – 1.15 m ³	MP with Forks – 1.15 m ³
1 Overall Length in Rooding Position	5852 mm	5840 mm	5840 mm
Overall Transportation Length	5921 mm	5900 mm	5877 mm
2 Overall Transport Height	3780 mm	3780 mm	3780 mm
Overall Width	2322 mm	2322 mm	2322 mm
3 Height to Top of Cab/Canopy	2875 mm	2875 mm	2875 mm
4 Height to Top of Exhaust Stack	2783 mm	2783 mm	2783 mm
5 Rear Axle Centerline to Front Grill	2795 mm	2795 mm	2795 mm
6 Wheelbase AWD	2235 mm	2235 mm	2235 mm

Dimensions and performance specifications shown are for machines equipped with 440/80R24 tires, standard cab, standard stick with 600 mm standard duty bucket, no counterweight, 1.15 m³ MP loader bucket and standard equipment unless otherwise specified.

434 Backhoe Loader Specifications

Loader Bucket Dimensions and Performance

	1.15 m ³ Buckets		
	GP – 1.15 m ³	MP – 1.15 m ³	MP with Forks – 1.15 m ³
Capacity (SAE rated)	1.15 m ³	1.15 m ³	1.15 m ³
Width	2434 mm	2434 mm	2434 mm
Lift Capacity at Maximum Height	4626 kg	4303 kg	4118 kg
Lift Breakout Force	60 977 N	58 278 N	56 714 N
Tilt Breakout Force	63 092 N	63 334 N	62 809 N
Tipping Load at Breakout Point	6858 kg	6669 kg	6579 kg
7 Maximum Hinge Pin Height	3518 mm	3518 mm	3518 mm
8 Dump Angle at Full Height	45°	45°	45°
Dump Height at Maximum Angle	2745 mm	2760 mm	2779 mm
9 Dump Reach at Maximum Angle	923 mm	908 mm	907 mm
10 Maximum Bucket Rollback at Ground Level	44°	44°	44°
11 Digging Depth	154 mm	153 mm	142 mm
Maximum Grading Angle	109°	110°	110°
12 Grill to Bucket Cutting Edge, Carry Position	1491 mm	1479 mm	1459 mm
13 Maximum Operating Height	4397 mm	4463 mm	4463 mm
Weight (does not include teeth)	448 kg	776 kg	975 kg

Backhoe Dimensions and Performance

	Standard Stick –	E-Stick Retracted –	E-Stick Extended –
	4.3 m	4.3 m	4.3 m
14 Digging Depth, SAE Maximum	4349 mm	4353 mm	5330 mm
Digging Depth, Manufacturer's Maximum	4827 mm	4832 mm	5748 mm
15 Digging Depth, 2400 mm Flat Bottom	3974 mm	3978 mm	5040 mm
Digging Depth, 600 mm Flat Bottom	4306 mm	4309 mm	5296 mm
Digging Depth, 600 mm Flat Bottom, Manufacturer's	4817 mm	4822 mm	5746 mm
Reach from Rear Axle Centerline at Ground Line	6745 mm	6750 mm	7676 mm
16 Reach from Swing Pivot at Ground Line	5655 mm	5660 mm	6586 mm
Maximum Operating Height	5578 mm	5577 mm	6145 mm
Loading Height	3909 mm	3920 mm	4487 mm
17 Loading Reach	1808 mm	1758 mm	2641 mm
Swing Arc	180°	180°	180°
Bucket Rotation	205°	205°	205°
18 Stabilizer Overall Width	2352 mm	2352 mm	2352 mm
Bucket Dig Force	63 433 N	63 404 N	63 404 N
Stick Dig Force	36 168 N	36 818 N	26 879 N

434 Standard and Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
Cab ROPS and FOPS			Hydraulics		
Cab, Standard	✓		Variable Displacement Piston Pump	✓	
Cab, Deluxe		✓	Hydraulic Quick Disconnects		✓
Tires/Steering/Brakes			Side Shift Lock	✓	
All Wheel Drive	✓		Hydraulic Oil Cooler	✓	
100% Differential Lock	✓		Hydraulic Lines, One Way		✓
Hydraulic Boosted Brakes	✓		Hydraulic Lines, Two Way		✓
Tires 24 inch	✓		Loader Kickout, Float	✓	
Tires 28 inch		✓	Loader Kickout, Return to Dig	✓	
Engine/Transmission			Powered Side Shift		✓
Engine, C3.6 74.5 kW	✓		Ride Control		✓
Battery, 750 CCA, Standard	✓		Continuous Flow		✓
Battery, 750 CCA, Heavy Duty		✓	Programmable Auxiliary Flow		✓
Hinged Radiator Pack	✓		Booms, Sticks and Linkages		
Auto Idle	✓		Stick Standard, 4.3 m	✓	
Eco Mode		✓	Stick Extending, 4.3 m		✓
Standard Mode	✓		Hoe Quick Coupler, Mechanical		✓
Standard + Mode	✓		Hoe Quick Coupler, Hydraulic		✓
Engine Block Heater		✓	Loader Quick Coupler, Hydraulic		✓
Transmission Neutralizer	✓		Transport Lock, Swing	✓	
Transmission, Four Speed Manual	✓		Transport Lock, Boom	✓	
Transmission, Four Speed Powershift		✓	Other Attachments		
Transmission, Six Speed with Lock-Up Torque Converter		✓	Counterweight, 115 kg		✓
Controls			Front Fenders		✓
Controls, Mechanical	✓		Street Pads, Stabilizers		✓
Controls, Pilot		✓	External Tool Box	✓	
Pattern Selector (ISO/SAE)		✓	Transport Tie Downs	✓	
Power Steering, Hydrostatic	✓		Electrical		
			Display Screen, Soft Key	✓	
			Display Screen, Touchscreen		✓
			Product Link Cellular		✓
			Product Link Satellite		✓
			Reversing Alarm	✓	
			Stabilizer Alarm	✓	
			Beacon, Rotating		✓
			Beacon, Strobe		✓

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