

# 434

## Backhoe Loader



### **Machine Performance**

The Cat C3.6 engine delivers solid performance and meets U.S. EPA Tier 4 Final/EU Stage V emission standards by utilizing Selective Catalytic Reduction technology with a Diesel Oxidation Catalyst. The system allows the operator to disconnect the machine, even while the diesel exhaust fluid is being purged from the system.

### **Ergonomic Operator Station**

Ample legroom inside the cab makes rotating the seat simple. The air suspension seat provides comfort to the operator while roading. New backhoe control pods allow for unlimited adjustability.

### **Powershift Transmission**

A Four Speed Powershift Transmission is standard to make shifting gears smooth and as simple as twisting the Powershuttle Lever.

### **Load Sensing Hydraulics**

The Cat Backhoe Loader's load sensing piston pump provides full hydraulic lifting and digging forces at any engine speed. Variable flow pump matches hydraulic power to work demands.

### **Machine Versatility**

The Cat Backhoe Loader with Integrated Tool Carrier (IT Coupler) will be the most versatile machine on the job site providing quick connection to a variety of Cat Attachments.

### **Cat Attachments**

A large portfolio of Backhoe Loader Attachments, including but not limited to, Quick Couplers, assorted Buckets, and Brooms are available for field installation. Cat Backhoe Loaders will be "Dirt Ready" upon delivery.

# 434 Backhoe Loader Specifications

## Engine

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	322 lb-ft
Bore	98 mm	3.86 in
Stroke	120 mm	4.72 in
Displacement	3.6 L	220 in <sup>3</sup>

- 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.
- Engine meets Tier 4 Final/Stage V emission standards.

## Transmission

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

	Powershift Transmission	
Forward		
1st	6 km/h	3.7 mph
2nd	10 km/h	6.2 mph
3rd	20 km/h	12.4 mph
4th	40 km/h	24.8 mph
Reverse		
1st	6 km/h	3.7 mph
2nd	12 km/h	7.4 mph
3rd	27 km/h	16.7 mph

## Axle Ratings

Front Axle, AWD		
Static	22 964 kg	50,627 lbs
Dynamic	9186 kg	20,251 lbs
Rear Axle		
Static	22 964 kg	50,627 lbs
Dynamic	9186 kg	20,251 lbs

## Weights\*

Operating Weight* (estimated)	10 176 kg	22,435 lbs
Operating Weight (maximum) (ROPS capacity)	11 500 kg	25,353 lbs
Cab, ROPS/FOPS	Standard	
Powershift Transmission	Standard	
Ride Control	Standard	
Air Conditioning	Standard	
Extendible Stick	Standard	

\*Machine Configuration – HRC 74.5 kW engine; 4.3 m (14'0") extendable stick hoe; deluxe cab with A/C; AWD Powershift transmission; IT Loader Coupler, 1.3 m<sup>3</sup>/1.7 cyd MP loader bucket; 610 mm/24 in heavy duty hoe bucket; 440/80R28 tires; 115 kgs/250 lbs counterweight; power side shift; full fuel tank.

# 434 Backhoe Loader Specifications

## Hydraulic System

Type	Closed Center	
Pump Type	Variable-Flow, Axial Piston	
Pump Capacity @ 2,200 rpm	42 gal/min	
System Pressure		
Backhoe	25 000 kPa	3626 psi
Loader	25 000 kPa	3626 psi

## Steering

Type	Front Wheel	
Power Steering	Hydrostatic	
AWD Cylinder, One (1) Double-acting		
Bore	85 mm	3.3 in
Stroke	117 mm	4.6 in
Rod Diameter	42 mm	1.7 in

## Turning Circle (28" Tires)

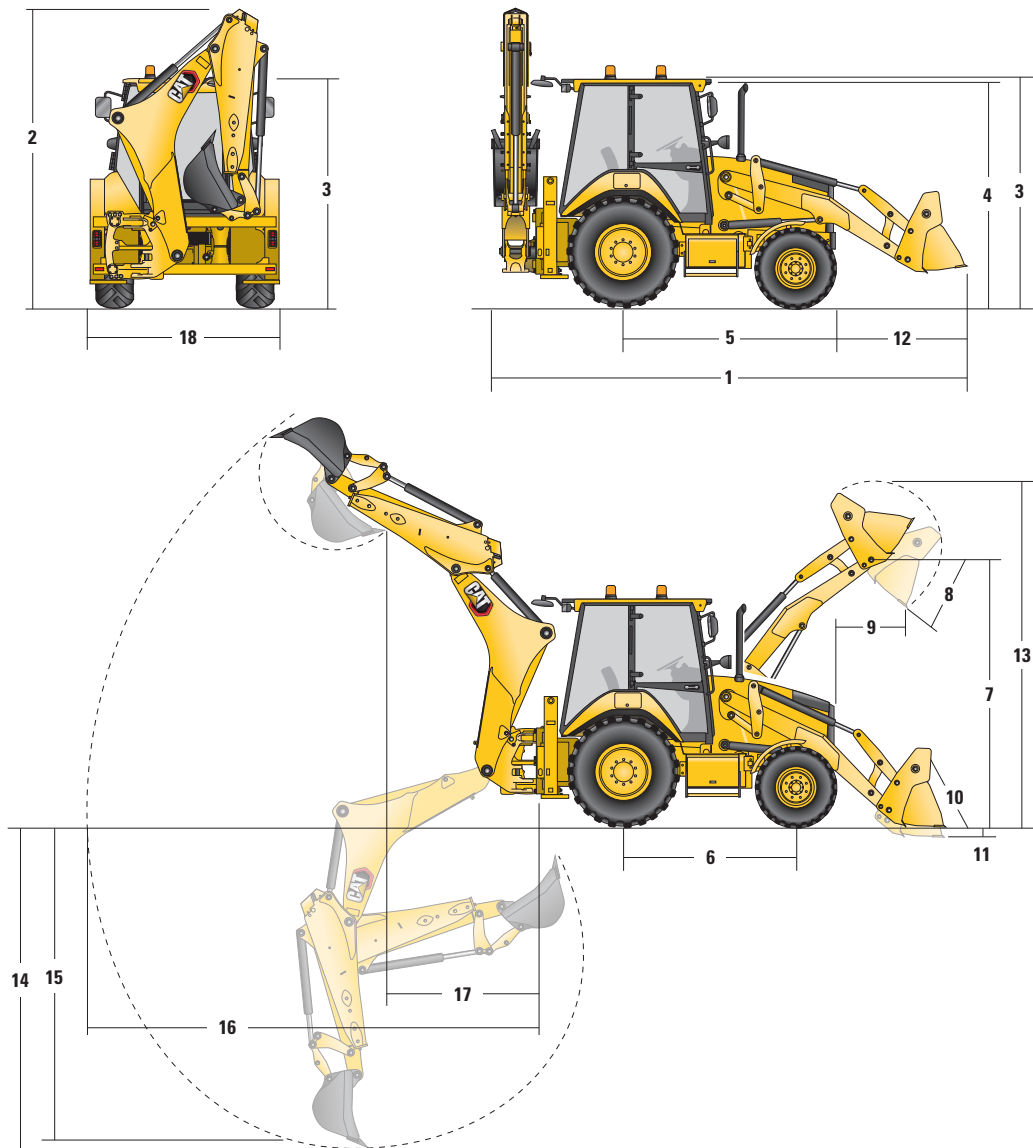
2WD/AWD (inner wheel not braked)		
Outside Front Wheels	9.8 m	32'2"
Outside Widest Loader Bucket	12.6 m	39'4"

## Service Refill Capacities

Cooling System with A/C	17.5 L	4.6 gal
Fuel Tank	160 L	42.3 gal
Engine Oil with Filter	9 L	2.4 gal
Diesel Exhaust Fluid	19 L	5.0 gal
<b>Transmission (Powershift)</b>		
AWD	19 L	5.0 gal
Rear Axle	16 L	4.2 gal
Planetaries	1.7 L	0.4 gal
Front Axle (AWD)	14 L	3.7 gal
Planetaries	1.7 L	0.4 gal
Hydraulic System	95 L	25.1 gal
Hydraulic Tank	42 L	11.1 gal

# 434 Backhoe Loader Specifications

## Machine Dimensions



	GP with QC - 1.3m <sup>3</sup> /1.7 cyd		MP with QC - 1.3m <sup>3</sup> /1.7 cyd	
	mm	in	mm	in
<b>1</b> Overall Length in Roading Position	5870	231	5906	233
Overall Transportation Length	5995	236	6039	238
<b>2</b> Overall Transport Height	3769	148	3769	148
Overall Width	2322	91	2322	91
<b>3</b> Height to Top of Cab/Canopy	2875	113	2875	113
<b>4</b> Height to Top of Exhaust Stack	2783	110	2783	110
<b>5</b> Rear Axle Centerline to Front Grill	2795	110	2795	110
<b>6</b> Wheelbase AWD	2235	88	2235	88

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 m<sup>3</sup> MP loader bucket and standard equipment unless otherwise specified.

# 434 Backhoe Loader Specifications

## Loader Bucket Dimensions and Performance

	GP with QC – 1.3 m <sup>3</sup>		MP with QC – 1.3 m <sup>3</sup>	
Capacity (SAE rated)	1.30 m <sup>3</sup>	1.70 yd <sup>3</sup>	1.30 m <sup>3</sup>	1.70 yd <sup>3</sup>
Width	2434 mm	96 in	2434 mm	96 in
Lift capacity at maximum height	4362 kg	9,617 lb	3992 kg	8,801 lb
Lift Breakout Force	57 913 N	13,019 lb	54 094 N	12,160 lb
Tilt Breakout Force	56 402 N	12,679 lb	51 359 N	11,545 lb
Tipping Load at Breakout Point	6418 kg	14,149 lb	5986 kg	13,198 lb
<b>7</b> Maximum hinge pin height	3518 mm	11'7"	3518 mm	11'7"
<b>8</b> Dump angle at full height		45°		45°
Dump height at maximum angle	2692 mm	8'10"	2661 mm	8'9"
<b>9</b> Dump reach at maximum angle	971 mm	3'2"	1008 mm	3'4"
<b>10</b> Maximum bucket rollback at ground level		44°		44°
<b>11</b> Digging Depth	157 mm	0'6"	153 mm	0'6"
Maximum grading angle		107°		106°
Width of dozer cutting edge	N/A	N/A	N/A	N/A
<b>12</b> Grill to bucket cutting edge, carry position	1510 mm	4'11"	1545 mm	5'1"
<b>13</b> Maximum operating height	4566 mm	15'0"	4588 mm	15'1"
Jaw opening maximum	N/A	N/A	N/A	N/A
Weight (does not include teeth or forks)	470 kg	1,036 lb	833 kg	1,836 lb

## Backhoe Dimensions and Performance

	E-stick retracted – 14'0"		E-stick extended – 14'0"	
<b>14</b> Digging Depth, SAE max	4353 mm	14'3"	5330 mm	17'6"
Digging Depth, Manufacturer's max	4832 mm	15'10"	5748 mm	18'10"
<b>15</b> Digging Depth, 8'0" flat bottom	3978 mm	13'1"	5040 mm	16'6"
Digging Depth, 2'0" flat bottom	4309 mm	14'2"	5296 mm	17'5"
Digging Depth, 2'0" flat bottom, Manufacturer's	4822 mm	15'10"	5746 mm	18'10"
Reach from rear axle centerline at ground line	6750 mm	22'2"	7676 mm	25'2"
<b>16</b> Reach from swing pivot at ground line	5660 mm	18'7"	6586 mm	21'7"
Maximum operating height	5577 mm	18'4"	6145 mm	20'2"
Loading height	3920 mm	12'10"	4487 mm	14'9"
<b>17</b> Loading Reach	1758 mm	5'9"	2641 mm	8'8"
Swing arc		180°		180°
Bucket rotation		205°		205°
<b>18</b> Stabilizer spread, operating position (outside)	2352 mm	11'7"	2352 mm	11'7"
Bucket dig force (lb/N)	63 404 N	14,254 lb	63 404 N	14,254 lb
Stick dig force (lb/N)	36 818 N	8,277 lb	26 879 N	6,043 lb

# 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
<b>Cab ROPS and FOPS</b>			<b>Booms, Sticks and Linkages</b>		
Cab, Deluxe	✓		Stick Extending, 14'0" (4.3 m)	✓	
<b>Tires/Steering/Brakes</b>			<b>Other Attachments</b>		
All Wheel Drive	✓		Loader Quick Coupler, Hydraulic	✓	
100% Differential Lock	✓		Transport Lock, Swing	✓	
Hydraulic Boosted Brakes	✓		Transport Lock, Boom	✓	
Tires 28 inch	✓		<b>Electrical</b>		
<b>Engine/Transmission</b>			Counterweight, 250 lbs (115 kg)	✓	
Engine, C3.6 74.5 kW	✓		Front Fenders	✓	
Battery, 750 CCA, Heavy Duty	✓		Street Pads, Stabilizers	✓	
Hinged Radiator Pack	✓		External Tool Box	✓	
Auto Idle	✓		Transport Tie Downs	✓	
Eco Mode	✓		<b>Electrical</b>		
Standard Mode	✓		Display Screen, Soft Key	✓	
Standard + Mode	✓		Product Link Cellular	✓	
Engine Block Heater	✓		Reversing Alarm	✓	
Transmission Neutralizer	✓		Stabilizer Alarm	✓	
Transmission, Four Speed Powershift	✓				
<b>Controls</b>					
Controls, Pilot	✓				
Pattern Selector (ISO/SAE)	✓				
Power Steering, Hydrostatic	✓				
<b>Hydraulics</b>					
Variable Displacement Piston Pump	✓				
Hydraulic Quick Disconnects	✓				
Side Shift Lock	✓				
Hydraulic Oil Cooler	✓				
Hydraulic Lines, Two Way	✓				
Loader Kickout, Float	✓				
Loader Kickout, Return to Dig	✓				
Powered Side Shift	✓				
Ride Control	✓				
Continuous Flow	✓				
Programmable Auxiliary Flow	✓				



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