

# 432F2

## Backhoe Loader



### **Cab**

The introduction of the new cab to the Cat® Backhoe Loader provides a comfortable and easy to use operator environment. With the ability to customize many of the machine's features, the all new cab allows the operator to perform in greater comfort and enjoy the latest technologies available on today's generation of backhoe loaders.

### **Cat Diesel Engines**

The F Series Cat engines remain in the new model of F2 Series backhoe loaders. These engines provide the power necessary to keep your machine running through the toughest conditions. Able to deliver unbeatable performance when roading, loading and using the backhoe. These engines also provide proven reliability to keep you working longer.

### **Easing Your Workload**

Here at Caterpillar we understand that the role of a modern day Backhoe Loader operator can be demanding. Therefore the F2 Series machines have been developed with this in mind and offer a number of functions and options to help reduce the load on the operator; helping to maintain high productivity, controllability and comfort during those longer days.

### **Fuel Reduction**

We know that the ever-increasing price of fuel is a concern to today's customer. That's why we developed a unique fuel saving ECO mode to keep running costs to a minimum without impacting on operating performance.

### **Intelligent Hydraulics**

The F2 Series continues to offer load sensing hydraulics combined with full flow sharing technology. With our intelligent hydraulics technology, you get the flow you need, when you need it, where you need it most.

### **Secure Your Investment**

Protect your Backhoe Loader with the latest security technology. Select from built-in keypads, vandal guards, and the latest version of Product Link™ so you always know your machine is secure.

### **Hydraulics**

The F Series hydraulics have been given a boost on the new F2 machine. Increasing the pump capacity to give a greater flow rate will now allow the operator more hydraulic performance at their fingertips. The hydraulic system has been designed to work in tandem with the new ECO mode, providing fuel savings while not hindering high hydraulic performance.

# 432F2 Backhoe Loader Specifications

## Engine

	<b>EU Stage II Standard Offering*</b>	<b>EU Stage IIIA Optional Offering**</b>
Engine	3054C 74.5 kW Mechanical – Turbo	C4.4 75 kW Mechanical – Turbo Intercooled
Rated Power (standard) @ 2,200 rpm		
Gross Power ISO 14396	74.5 kW/ 101 hp	74.5 kW/ 101 hp
Net Power Rating @ 2,200 rpm		
ISO 9249	70.1 kW/ 96 hp	70.1 kW/ 95 hp
EEC 80/1269	70.9 kW/ 96 hp	70.1 kW/ 95 hp
Torque Rise (net) @ 1,400 rpm	31%	46%
Maximum Torque @ 1,400 rpm	397 N·m	438 N·m
Bore	105 mm	105 mm
Stroke	127 mm	127 mm
Displacement	4.4 L	4.4 L

\*EU Stage II EU Emission Directive 97/68/EC.

\*\*EU Stage IIIA Emission Directive 2004/26/EC.

- 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 altitude. Auto derate protects hydraulic and transmission systems.
- Meets EU Stage IV emission standards.

## Transmission

Travel speeds of Two Wheel Drive backhoe loader at full throttle, when equipped with 16.9×8 rear tires.

	<b>Power Shuttle</b>	<b>Auto-Shift</b>	<b>Auto-Shift (Lock Up)</b>
Forward			
1st	6 km/h	6 km/h	6 km/h
2nd	9 km/h	10 km/h	10 km/h
3rd	22 km/h	13 km/h	13 km/h
4th	40 km/h	20 km/h	20 km/h
5th		27 km/h	26 km/h
6th		40 km/h	40 km/h
Reverse			
1st	6 km/h	6 km/h	6 km/h
2nd	9 km/h	13 km/h	13 km/h
3rd	22 km/h	28 km/h	28 km/h
4th	40 km/h		

## Service Refill Capacities

Cooling System	
Fuel Tank	160 L
Engine Oil with Filter	8.8 L
Diesel Exhaust Fluid	19 L
<b>Transmission (Power Shuttle)</b>	
AWD	15 L
<b>Transmission (Auto-Shift)</b>	
AWD	19 L
<b>Rear Axle</b>	
Center Housing	16.5 L
Planetaries	1.7 L
<b>Front Axle (AWD)</b>	
Center Housing	11 L
Planetaries	0.7 L
Hydraulic System	95 L
Hydraulic Tank	40 L

## Hydraulic System

Type	Closed Center
Pump Type	Variable-flow, Axial Piston
Maximum Pump Capacity	163 L/min
System Pressure	
Backhoe	250 Bar
Loader	250 Bar

## Noise Level\*

Inside Cab	74 dB(A)
Outside Cab	101 dB(A)

\*EU Stage IIIA with EN474 Prep. Pack.

# 432F2 Backhoe Loader Specifications

## Weights\*

Operating Weight	8399 kg
Operating Weight (Maximum) (ROPS Capacity)	11 086 kg
Ride Control	11 kg
Air Conditioning	34 kg
MP Bucket (1.31 yd <sup>3</sup> /1.00 m <sup>3</sup> )	
With Fold-over Forks	842 kg
Without Fold-over Forks	611 kg
Loader, IT with QC	
4.3 m (excludes ft. counterweight)	199 kg
Counterweights, Base	115 kg
Stackable, One	250 kg
Maximum	485 kg

	Pin On	Quick Coupler
Minimum Counterweight Recommendations – Standard Stick		
Loader Bucket		
GP	250 kg	485 kg
MP	0 kg	485 kg
Minimum Counterweight Recommendations – Extendible Stick		
Loader Bucket		
GP	485 kg	485 kg
MP	485 kg	485 kg
Total Gross Weight Not to Exceed	11 000 kg	

\*Machine Configuration – 74.5 kW engine, standard stick hoe, standard cab with A/C, AWD standard shift transmission, 1.03 m<sup>3</sup> MP loader bucket, 24" standard duty hoe bucket, 12.5/80-18 and 16.9-28 tires, no counterweight, 80 kg operator and full fuel tank.

## Axles

All Wheel Drive (AWD)

### Features

- Heavy-duty rear axle with self adjusting inboard brakes, differential lock and final drives.
- AWD is engaged by front console panel switch or by brake pedal during all-wheel-braking operation. AWD can be engaged on the move, under load, in any gear, forward or reverse. AWD has outer final drives for easy maintenance.
- AWD front axle is pendulum mounted and permanently sealed and lubricated, requiring no daily maintenance. Also features double-acting steering cylinder with 52° steering angle for increased maneuverability.

## Axle Ratings

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

## Steering

Type	Front Wheel
Power Steering	Hydrostatic
AWD Cylinder, One (1) Double-acting	
Bore	65 mm
Stroke	120 mm
Rod Diameter	36 mm
Axle Oscillation	11 mm

## Turning Circle

AWD (inner wheel not braked)	
Outside Front Wheels	9.8 m
Outside Widest Loader Bucket	12.59 m

## Brakes

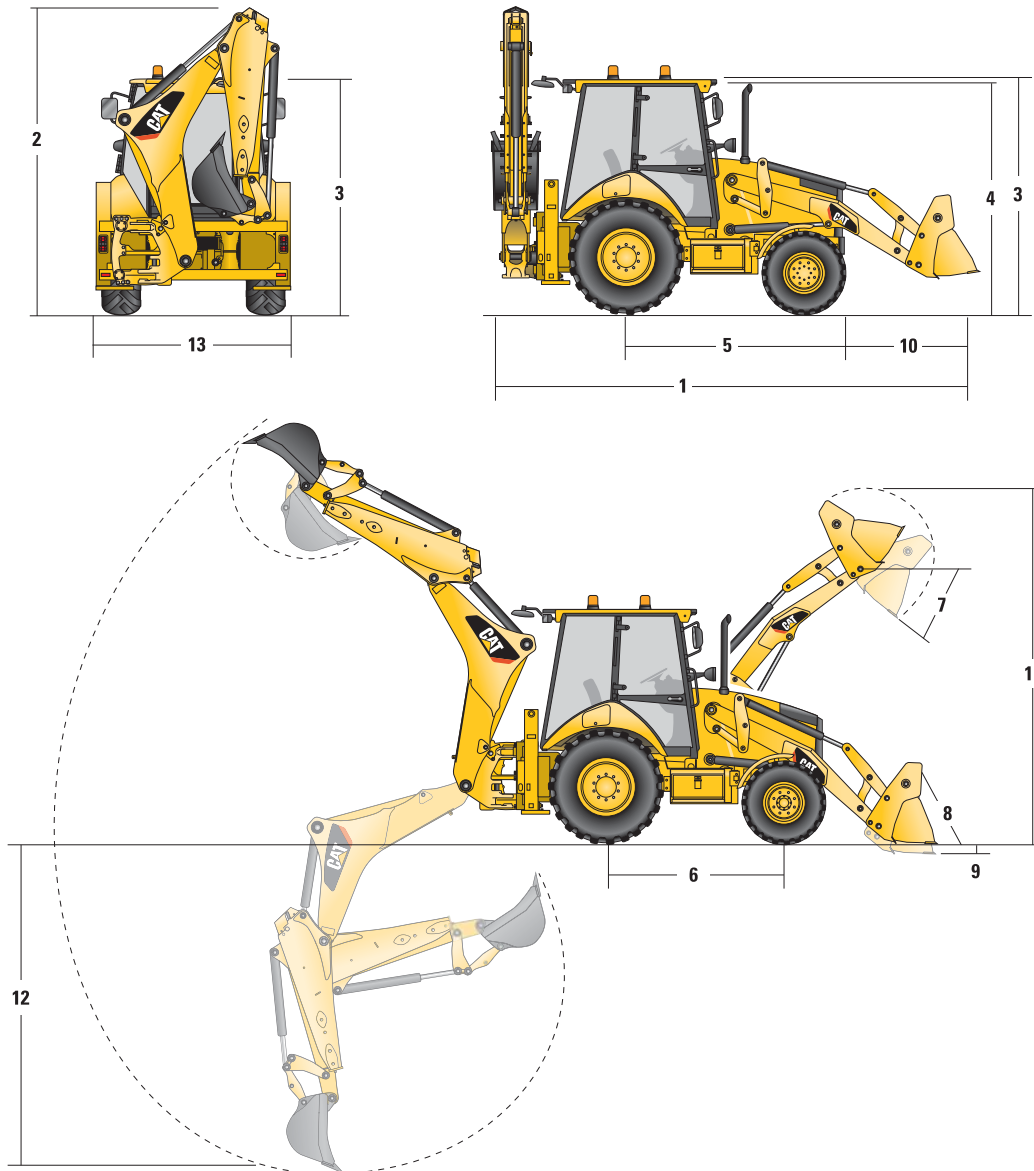
Fully enclosed boosted, hydraulic, multiple discs.

### Features

- Inboard oil-immersed, hydraulically actuated multiple Kevlar discs on final drive input shaft.
- Completely enclosed and sealed.
- Self-adjusting.
- Dual foot-operated boosted brake pedals can be interlocked for roading.
- Parking/secondary brakes are independent of the service brake system. Parking brake is mechanically applied through a hand lever located in the right side console.
- Meets ISO 3450:1996 requirements.

# 432F2 Backhoe Loader Specifications

## Machine Dimensions



	GP – 1.0 m <sup>3</sup>	MP – 1.03 m <sup>3</sup>	MP with forks – 1.03 m <sup>3</sup>
<b>1</b> Overall Length in Roading Position	5734 mm	5734 mm	5734 mm
Overall Transportation Length	5704 mm	5704 mm	5704 mm
<b>2</b> Overall Transportation Height – 4.3 m Stick	3779 mm	3779 mm	3779 mm
Overall Transportation Height – 4.9 m Stick	3771 mm	3771 mm	3771 mm
Overall Width	2352 mm	2352 mm	2352 mm
<b>3</b> Height to Top of Cab	2897 mm	2897 mm	2897 mm
<b>4</b> Height to Top of Exhaust Stack	2744 mm	2744 mm	2744 mm
<b>5</b> Rear Axle Centerline to Front Grill	2705 mm	2705 mm	2705 mm
<b>6</b> Wheelbase AWD	2200 mm	2200 mm	2200 mm

Dimensions and performance specifications shown are for machines equipped with 12.5/80-18 SGL front tires, 16.9-28 rear tires, standard cab, standard stick with 24 inch standard duty bucket, and 1.03 m<sup>3</sup> MP loader bucket and standard equipment unless otherwise specified.

# 432F2 Backhoe Loader Specifications

## Loader Bucket Dimensions and Performance

	GP – 1.0 m <sup>3</sup>	MP – 1.03 m <sup>3</sup>	MP with forks – 1.03 m <sup>3</sup>
Capacity	1.00 m <sup>3</sup>	1.03 m <sup>3</sup>	1.03 m <sup>3</sup>
Width	2406 mm	2406 mm	2406 mm
Lift Capacity at Maximum Height	3817 mm	3580 mm	3402 mm
Lift Breakout Force	54.8 kN	53.3 kN	51.7 kN
Tilt Breakout Force	54.8 kN	60.3 kN	59.4 kN
Tipping Load at Breakout Point	6627 kg	6608 kg	6459 kg
<b>7</b> Maximum Hinge Pin Height	3497 mm	3497 mm	3497 mm
<b>8</b> Dump Angle at Full Height	45°	45°	45°
Dump Height at Maximum Angle	2796 mm	2823 mm	2823 mm
<b>9</b> Dump Reach at Maximum Angle	805 mm	731 mm	731 mm
<b>10</b> Maximum Bucket Rollback at Ground Level	38°	39°	39°
<b>11</b> Digging Depth	61 mm	94 mm	94 mm
Maximum Grading Angle	114°	116°	116°
<b>12</b> Grill to Bucket Cutting Edge, Carry Position	1467 mm	1419 mm	1419 mm
<b>13</b> Maximum Operating Height	4394 mm	4427 mm	4883 mm
Bucket Weight (excluding teeth or forks)	427.5 kg	611.2 kg	705 kg

## Backhoe Dimensions and Performance

	Standard Stick – 4.3 m	E-stick Retracted – 4.3 m	E-stick Extended – 4.3 m	E-stick Retracted – 4.9 m	E-stick Extended – 4.9 m
<b>14</b> Digging Depth, SAE Maximum	4278 mm	4281 mm	5274 mm	4613 mm	5643 mm
Digging Depth, Manufacturer's Maximum	4775 mm	4778 mm	5696 mm	5196 mm	6164 mm
<b>15</b> Digging Depth, 2400 mm Flat Bottom	3893 mm	3897 mm	4966 mm	4271 mm	5352 mm
Digging Depth, 600 mm Flat Bottom	4235 mm	4239 mm	5235 mm	4589 mm	5611 mm
Digging Depth, 600 mm Flat Bottom, Manufacturer's	4748 mm	4753 mm	5696 mm	5159 mm	6145 mm
Reach from Rear Axle Centerline at Ground Line	6739 mm	6744 mm	7670 mm	7216 mm	8167 mm
<b>16</b> Reach from Swing Pivot at Ground Line	5649 mm	5654 mm	6580 mm	6126 mm	7077 mm
Maximum Operating Height	5691 mm	5692 mm	6297 mm	6254 mm	6984 mm
Loading Height	4016 mm	4025 mm	4630 mm	4579 mm	5309 mm
<b>17</b> Loading Reach	1669 mm	1617 mm	2475 mm	1535 mm	2289 mm
Swing Arc	180°	180°	180°	180°	180°
Bucket Rotation	205°	205°	205°	205°	205°
<b>18</b> Stabilizer Overall Width	2352 mm	2352 mm	2352 mm	2352 mm	2352 mm
Bucket Dig Force	63.44 kN	63.42 kN	63.42 kN	63.42 kN	63.42 kN
Stick Dig Force	42.8 kN	43.5 kN	31.7 kN	47.3 kN	35.2 kN

Dimensions and performance specifications shown are for machines equipped with 12.5/80-18 SGL front tires, 16.9-28 rear tires, standard cab, 14 foot standard stick with 24 inch standard duty bucket, and 1.03 m<sup>3</sup> MP loader bucket and standard equipment unless otherwise specified

# 432F2 Backhoe Loader 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</b>			<b>Field Installed Attachments</b>		
Cab, Deluxe	—	✓	Powered Side Shift (PSS)	—	✓
Cab, Standard	✓	—	<b>Boom Sticks and Linkages – Backhoe</b>		
*See Cab Options Page			Quick Coupler, Hydraulic (backhoe)	—	✓
<b>Tires/Steering/Brakes</b>			Quick Coupler, Mechanical (backhoe)	—	✓
All Wheel Drive	✓	—	Stick, Extending (4.3 m)	—	✓
100% Differential Lock	✓	—	Stick, Extending (4.9 m)	—	✓
Hydraulic Boosted Brakes (dual pedals)	✓	—	Stick, Standard (4.3 m)	✓	—
Tires 26 inch	✓	—	Transport Lock, Swing	✓	—
Tires 28 inch	—	✓	Transport Lock, Boom	✓	—
<b>Engine/Transmission</b>			<b>Boom Sticks and Linkages – Loader</b>		
Battery 750 CCA, Maintenance Free (standard)	✓	—	Loader Cutting Edge (2 pieces)	—	✓
Battery 750 CCA, Maintenance Free (heavy duty)	—	✓	Quick Coupler, Hydraulic	—	✓
ECO Mode	✓	—	<b>Hydraulics</b>		
Engine 74.5 kW (101 hp) Cat 3054C DIT	✓	—	Hydraulic Pump (163 L/min)	✓	—
Engine 74.5 kW (101 hp) Cat C4.4 Turbocharged	✓	—	Hydraulic Quick Disconnects (twist to connect)	—	✓
Engine Block Heater	—	✓	Side Shift Lock (electro-hydraulic)	✓	—
Jump Start Connector	—	✓	Hydraulic Oil Cooler	✓	—
Transmission Neutralizer	✓	—	<b>Hydraulics – Backhoe</b>		
Transmission, 4-Speed Manual	✓	—	Hydraulic Lines, 1-Way	—	✓
Transmission, 6-Speed Automatic	—	✓	Hydraulic Lines, 2-Way	—	✓
Transmission, 6-Speed Automatic (torque lock-up)	—	✓	Hydraulic Continuous Flow	—	✓
<b>Input</b>			<b>Hydraulics – Loader</b>		
Controls, Pilot (Servo) Joysticks	✓	—	Loader Kickout, Float	✓	—
Pattern Selector (ISO/SAE)	✓	—	Loader Kickout, Return to Dig	✓	—
Power Steering, Hydrostatic	✓	—	Auto Ride Control	—	✓
<b>Other Attachments</b>			Parallel Lift	✓	—
Counterweight, 115 kg	—	✓	<b>Electrical</b>		
Counterweight, 250 kg	—	✓	Product Link, Cellular	—	✓
Counterweight, 485 kg	—	✓	Product Link, Satellite	—	✓
Front Fenders	—	✓	Reversing Alarm	✓	—
Street Pads, Stabilizers	—	✓	Beacon, Strobe	—	✓
Tool Storage Box	✓	—	Beacon, Standard	—	✓
Transport Tie-downs	✓	—			
<b>Guards</b>					
Guard, Teeth (GP/MP)	—	✓			
Guard, Driveshaft	—	✓			
Guard, Tail Lights	—	✓			
Loader Safety Brace	✓	—			
Object Handling Kit	—	✓			

# 432F2 Backhoe Loader Standard and Optional Equipment

## Cab Options

	Standard	Deluxe
Air Recirculation Control	—	✓
Air Conditioning	Optional	Optional
Auto-Up Stabilizers	—	✓
Beacon Socket (×2)	✓	✓
Brake Pedals Operable Independently and Interlocked		
Entry Level Radio	Optional	Optional
Premium Radio	Optional	Optional
Cab Internal Light	✓	—
Cab Internal Light (with courtesy setting)	—	✓
Cup Holders (×2)	✓	✓
Differential Lock Button on Loader Control	✓	✓
F/N/R* Functions on Loader Control	✓	✓
Face Fan	Optional	Optional
Removable Floor Mat	✓	✓
Front and Rear Side Opening Windows	✓	✓
Front Headlights**	✓	✓
Full Width Perforated Sun Visor	✓	✓
Fully Adjustable Work Lights (×8)	✓	✓
Cab, Fully Glazed	✓	✓
Gauge Cluster	✓	✓

	Standard	Deluxe
Horn, Front	✓	✓
Horn, Joystick	✓	✓
Horn, Rear	✓	✓
Instrument Panel Vandal Guard	✓	✓
Internal Power Socket (×1)	✓	✓
Rear Tail Lights (LED)	✓	✓
Left Hand Storage Console	✓	✓
Multi-directional Backhoe Control Pods (infinitely adjustable)	✓	✓
Safety Lock, Hydraulics	✓	✓
Safety Lock, Transmission	✓	✓
Seat, Fabric	✓	—
Seat, Deluxe Fabric Heated	Optional	Optional
Seat, Deluxe Fabric	—	✓
Security Keypad	Optional	Optional
Self Cancelling Directional Indicator	✓	✓
Steering Wheel Column, Tilt and Telescopic Adjustment	—	✓
Steering Wheel Column, Tilt Adjustment	✓	—
Window Wipers, Front And Rear	✓	✓

\*F/N/R – Forward/Neutral/Reverse

\*\*May vary depending on region

# 432F2 Backhoe Loader

Materials and specifications are subject to change without notice.

Featured machines in photos may include additional equipment.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com).

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