

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)

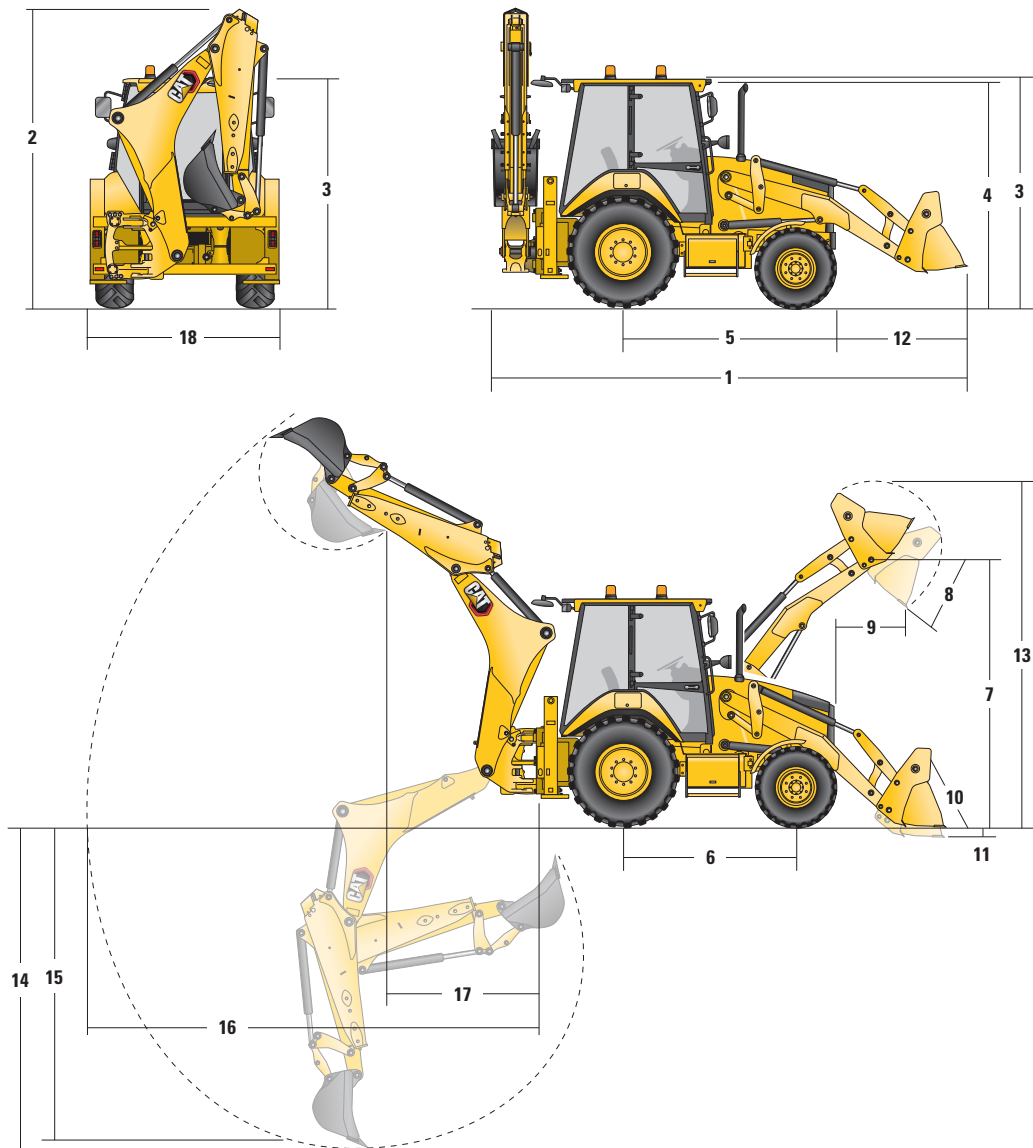
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|-----|------|
| 2WD | 18 L |
| AWD | 18 L |

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 Roading 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 – 4.3 m | E-Stick Retracted – 4.3 m | E-Stick Extended – 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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AEHQ8251 (01-2020)
Build Number: 07
(Europe)

