



Cat[®] M320F

Wheeled Excavator

2017

Working hard has never been easier with Cat[®] F Series Wheeled Excavators. Enjoy the versatility offered by integrated solutions and technologies that do repetitive tasks for you. These machines are designed to help you take on the wide variety of challenges you face every day, and at a lower cost.

Performance

- Cat C7.1 ACERT[™] engine meets U.S. EPA Tier 4 Final/EU Stage IV emission standards. Emissions technology is transparent – no action required from the operator and no stopping for regeneration.
- Up to a 10% fuel consumption reduction vs. previous model with the same productivity.
- Built-in fuel savers, eliminating waste with features like Auto Engine Speed Control, Engine Idle Shutdown and efficient Eco Mode.
- “On-Demand” Strategies, to consume just the right amount of fuel, with on-demand fan or new optimized demand-driven driveline.
- Dedicated swing pump, allowing faster, smoother combined movements.
- Highly mobile, the M320F can travel up to 35 km/h (22 mph).

Versatility

- Flexible configurations to meet all your needs with various booms/sticks, tires, undercarriages and counterweights.
- “Plug and Play” design, with complete integration of the whole portfolio of Cat attachments.
 - Auxiliary hydraulics, including high pressure.
 - Readiness for Cat Pin Grabber quick coupler (with lines and circuits).
 - The monitor can allow ten hydraulic pump flow and pressure settings at the same time.
 - Trailer-ready package option*. Just add your hitch and go.
- Joystick buttons/sliders can be set up per tool as desired.
- Utility and finishing work are fast and flawless with a Cat compactor, finishing bucket or tilt bucket.
- Demolition work is easy with a Cat hammer, grapple, shear, or multi-processor.
- Couplers let you swap between attachments in seconds without leaving the cab.

Ease of Operation

- A complete package of smart technologies with features like Cruise Control or automatic brake and axle lock. Optional boosters like Ride Control, SmartBoom[™], joystick steering are available.
- Everything can be adjusted in the cab from the steering column height to the electrically adjustable mirrors.
- Ergonomic cab with controls kept to a minimum and conveniently located.
- Split-screen monitor to allow quick view of both cameras on the same display.

Safety

- Integrated devices to help enforce safe behavior, like seat belt indicator, or the speed limit setting when roading in reverse with the upper frame rotated.
- Blue Angel certified machine, with low sound levels and vibrations.
- Visibility: large glass areas, rear/side cameras. LED lamps for all working lights and cameras.
- For added protection, the optional impact resistant windshield meets the EN356 P5A standard.
- Integrated pin code adds anti-theft security to your equipment.

Maintenance

- Ground level access to all routine maintenance (like fuel and engine oil filters).
- Easy access: clean, simple design. Radiators are all gathered together.
- Reduced maintenance: automatic features (like lubrication system) along with long greasing intervals. Fit for life Diesel Particulate Filter.

Cat Connect Technology

- Product Link[™] connects owners to their equipment, providing access to machine data such as location, hours, fuel consumption, idle time and events, and diagnostic codes.

*Not available in Australia/New Zealand.

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Engine

Engine Model	Cat C7.1 ACERT	
Ratings	1,550 rpm	
Engine Power		
Maximum Gross (ISO 14396)	129.4 kW	174 hp (176 hp)*
Maximum Net (ISO 9249/SAE J1349)	126 kW	169 hp (171 hp)*
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7.01 L	427.8 in ³
Maximum Torque at 1,400 rpm	830 N·m	612.0 lbf-ft
Number of Cylinders – In line	6	
• Meets Tier 4 Final/Stage IV emission standards.		
* Metric values.		

Transmission

Maximum Forward/Reverse – 2nd Gear	35 km/h	22 mph
Drawbar Pull	104 kN	23,380 lbf
Maximum Gradeability at 18 500 kg (40,785 lb)	70%	

Swing Mechanism

Swing Speed	10 rpm	
Maximum Swing Torque	48 kN·m	35,403 lbf-ft

Undercarriage

Ground Clearance	370 mm	14.6 in
Maximum Towable Trailer Mass*	8 t	17,637 lb
*For Optional Trailer Package – Not available in Australia/New Zealand.		

Service Refill Capacities

Fuel Tank (total capacity)	415 L	109.6 gal
Diesel Exhaust Fluid Tank	34.5 L	9.1 gal

Working Ranges

Boom Type	VA Boom				One-Piece Boom			
	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in
Stick Length	2500	8'2"	2800	9'2"	2500	8'2"	2800	9'2"
Digging Height	9950	32'8"	10 165	33'4"	8940	29'4"	9095	29'10"
Dump Height	6970	22'10"	7180	23'7"	6140	20'2"	6290	20'8"
Digging Depth	6035	19'10"	6330	20'9"	5980	19'7"	6280	20'7"
Reach at Ground Level	9270	30'5"	9565	31'5"	9295	30'6"	9580	31'5"

• Range values are calculated with GD bucket 1200 mm (48 in), 0.98 m³ (1.28 yd³) with tips K080 and quick coupler with a tip radius of 1535 mm (5'0").

Weights

Operating Weights*	18 750 to 20 650 kg	41,337 to 45,525 lb
VA Boom		
Rear Dozer, Front Outriggers	19 950 kg	43,982 lb
Front and Rear Outriggers	20 150 kg	44,423 lb
One-Piece Boom		
Rear Dozer, Front Outriggers	19 450 kg	42,880 lb
Front and Rear Outriggers	19 650 kg	43,321 lb
Counterweights	3700/4200 kg	8,157/9,259 lb

*Includes medium stick, 3700 kg (8,157 lb) counterweight, full fuel tank, operator, quick coupler (250 kg/551 lb), bucket (635 kg/1,400 lb), dual pneumatic tires. Weight varies depending on configuration.

Hydraulic System

System	270 L	71.3 gal
Maximum Pressure – Implement Circuit		
Normal and Travel Circuits	35 000 kPa	5,076 psi
Heavy Lift	37 000 kPa	5,366 psi
Maximum Pressure – Auxiliary Circuit		
High Pressure	35 000 kPa	5,076 psi
Medium Pressure	18 500 kPa	2,683 psi
Swing Mechanism	31 000 kPa	4,496 psi
Maximum Flow – Implement/Travel Circuits	288 L/min	76 gal/min
Maximum Flow – Auxiliary Circuit		
High Pressure	288 L/min	76 gal/min
Medium Pressure	49 L/min	12.9 gal/min
Maximum Flow – Swing Mechanism	108 L/min	28.5 gal/min

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