



Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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Engine		
Engine Model	Cat® C32B	
Rated Speed	1,750 rpm	
Emissions	U.S. EPA T	ier 4 Final
Gross Power – SAE J1995:2014	671 kW	900 hp
Net Power ISO – 9249:2007	607 kW	814 hp
Emissions	Tier 2 Equiv	valent
Gross Power – SAE J1995:2014	676 kW	907 hp
Net Power ISO – 9249:2007	614 kW	823 hp
Bore	145 mm	5.7 in
Stroke	162 mm	6.4 in
Displacement	32.1 L	1,958 in ³
Peak Torque @ 1,200 rpm	4242 N·m	3,139 lbf-ft
Torque Rise	30%	

• Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.

• Net torque rise meets SAE J139.

• No engine derating required up to 3050 m (10,000 ft) altitude.

Operating Specifications

Operating Weight	101 898 kg	224,647 lb
Blade Capacities	30.5 to 44.8 m ³	40 to 58.6 yd ³

Transmission

Transmission Type	Cat planetary	y power shift
Converter Drive Forward 1	7.1 km/h	4.4 mph
Converter Drive Forward 2	12.4 km/h	7.7 mph
Converter Drive Forward 3	21.2 km/h	13.2 mph
Converter Drive Reverse 1	7.7 km/h	4.8 mph
Converter Drive Reverse 2	13.5 km/h	8.4 mph
Converter Drive Reverse 3	23.5 km/h	14.6 mph
Direct Drive Forward 1	Lock-up disa	bled
Direct Drive Forward 2	13.0 km/h	8.1 mph
Direct Drive Forward 3	22.8 km/h	14.2 mph
Direct Drive Reverse 1	8.0 km/h	5.0 mph
Direct Drive Reverse 2	14.3 km/h	8.9 mph
Direct Drive Reverse 3	25.1 km/h	15.6 mph

• Travel speeds based on 45/65-45 L-5 46 ply tires.

Hydraulic System – Lift/Tilt

Output at 1,850 rpm and 6900 kPa (1,000 psi)	610 L/min	161 gal/min
Cylinder, Double-acting: Lift, Bore and Stroke	177 mm × 1760 mm	0.58 ft × 5.8 ft
Cylinder, Double-acting: Tilt and Tip, Bore and Stroke	267 mm × 286 mm	0.88 ft × 0.94 ft
Relief Valve Setting – Bulldozer (Large Pump)	22 675 kPa	3,289 psi
Relief Valve Setting – Tilt Cylinders (Small Pump)	24 560 kPa	3,560 psi

Hydraulic System – Steering

Steering System – Circuit	Pilot, load sensing		
Steering System – Pump	Piston, variable displacement		
Minimum Turning Radius (over blade)	9550 mm 31 ft		
Total Steering Angle	86 degrees		
Maximum Flow			
Relief Valve Setting	34 500 kPa 5,004 psi		

Service Refill Capacities		
Fuel Tank – Standard	1562 L	413 gal
Cooling System	200 L	53 gal
Crankcase	120 L	32 gal
Transmission	169 L	45 gal
Differentials and Final Drives – Front	369 L	98 gal
Differentials and Final Drives – Rear	342 L	90 gal
Hydraulic System – Implement and Brakes (tank only)	261 L	68.9 gal
Hydraulic System – Steering and Engine	290 L	77 gal

Cooling Fan (tank only)

- The Cat[®] C32B engine is available in configurations that meet U.S. EPA Tier 4 Final emission standards or equivalent to U.S. EPA Tier 2.
- Cat U.S. EPA Tier 4 Final diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels*** up to:
 - ✓ 20% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels
- Cat engines equivalent to U.S. EPA Tier 2, are compatible with diesel fuel blended with the following lower-carbon intensity fuels*** up to:
 - ✓ 100% biodiesel FAME (fatty acid methyl ester)**
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels
- Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.
- * Engines with no aftertreatment devices can use higher blends, up to 35% biodiesel where mandated.
- ** For use of blends higher than 20% biodiesel, consult your Cat dealer.
- *** Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). See the label or instruction manual for identification of the gas.

If equipped with 1234yf (Global Warming Potential = 0.501), the system contains 2.1 kg of refrigerant, which has a CO₂ equivalent of 0.001 metric tonnes (2.2 lbs).

If equipped with 134a (Global Warming Potential = 1430), the system contains 1.8 kg (4.6 lb) of refrigerant, which has a CO_2 equivalent of 3.003 metric tonnes (3.31 tons).

Axles	
Front	Fixed
Rear	Trunnion
Oscillation Angle	±10 degrees

Brakes

Brakes

Meets ISO 3540:2011

Sound Performance

	Standard	Suppression
Operator Sound Level (ISO 6396:2008)	71 dB(A)	70 dB(A)
Machine Sound Level (ISO 6395:2008)	116 dB(A)	113 dB(A)

- The machine sound power level was measured according to ISO 6395:2008. The measurement was conducted at 70 percent of the maximum engine cooling fan speed.
- The operator sound pressure level was measured according to ISO 6396:2008. The measurement was conducted at 70 percent of the maximum engine cooling fan speed.
- Hearing protection may be needed when the machine is operated with a cab that is not properly maintained or when the doors or windows are open for extended periods or in a noisy environment.

Cab

Rollover Protective Structure (ROPS)/ Falling Object Protective Structure (FOPS) ISO 3471:2008 and ISO 3449:2005 Level II Standards

Dimensions

All dimensions are approximate.



1 Height to Top of ROPS	5590 mm	18 ft 3 in
2 Height to Top of Exhaust Pipe	5234 mm	17 ft 2 in
3 Height to Top of Hood	3984 mm	13 ft 0 in
4 Ground Clearance	691 mm	27 in
5 Center Line of Front Axle to Hitch	2945 mm	9 ft 8 in
6 Center Line of Rear Axle to Edge of Bumper	4195 mm	13 ft 9 in
7 Wheelbase	5890 mm	19 ft 3 in
8 Length with Blade on Ground	13 405 mm	44 ft 0 in

Blade Specifications

Blade Type	Capacity	Overall Width	Height	Digging Depth	Ground Clearance	Maximum Tilt	Weight	Total Operating Weight
Heavy-duty	30.5 m ³	6321 mm	2179 mm	398 mm	1540 mm	1165 mm	10 750 kg	102 309 kg
Semi-U	40 yd^3	20.7 ft	7.1 ft	1.3 ft	5.1 ft	3.8 ft	23,698 lb	225,538 lb

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
ELECTRICAL AND LIGHTING			OPERATOR ENVIRONMENT		
Alternator, 150 amp	✓		Advisor display, displays real time operating	\checkmark	
Batteries, maintenance free (4 – 1,400 CCA)	\checkmark		information, performs calibrations and customizes operator setting		
Battery disconnect and jump start receptacle, bumper	√		Air conditioner and heater with automatic temperature control	\checkmark	
Deutsch terminal connectors	√		Air precleaner, powered	\checkmark	
Electrical system, 24V	√		Cab, sound-suppressed pressurized,	\checkmark	
Electronic transmission control	√		separate external rollover protective structure (ROPS/FOPS)		
Lighting system,	√		Cigar lighter and ashtray	✓	
halogen (front and rear) lighting,			Coat hook	 ✓	
access stairway, engine compartment			Converter (12V, 10-15 amp) and	· ✓	
Lights, HID		✓	power port	·	
Lights, LED		✓	Digital display on center console: gear,	√	
Product Link (Cellular)		✓	ground speed, machine hours		
Product Link (Satellite)		✓	Electro-hydraulic blade controls, joystick	\checkmark	
Starter lockout in bumper	√		Heater and defroster	\checkmark	
Starting and charging system, 24V	√		Horn, electric	\checkmark	
Transmission lockout in bumper	~		Instrumentation, gauges: engine coolant	\checkmark	
POWERTRAIN			temperature, fuel level, hydraulic oil		
Brakes, oil cooled, multi-disc, service/secondary	\checkmark		temperature, powertrain oil temperature, tachometer		
Driveline parking brake	✓		Instrumentation, warning indicators: action alert system – three categories,	\checkmark	
Engine brake		✓	automatic transmission model enable		
Engine, Cat C32B	\checkmark		status, brake malfunction, bucket float		
Fuel priming pump (electric)	\checkmark		status, delayed engine shutdown status,		
Ground level engine shutoff	\checkmark		engine idle shutdown status, engine malfunction, fuel economy mode enable		
No spin rear axle		\checkmark	status, hydraulic lockout, lockup clutch		
Axle oil coolers (front and rear)	\checkmark		enable status, low fuel level, parking		
Pre-cleaner, engine air intake (above hood)	\checkmark		brake status, rimpull control enable		
Pre-cleaner, raised		\checkmark	status, seat belt warning, secondary steering (if equipped), throttle lock status,		
Radiator, Aluminum Modular (AMR)	\checkmark		transmission gear		
Starting aid, (ether) automatic	\checkmark		Light, cab, dome	\checkmark	
Throttle lock electronic	\checkmark		Lunchbox and beverage holders	\checkmark	
Torque converter, impeller clutch with lock-up clutch (ICTC) and rimpull control system	✓		Premium seat with heated and actively cooled leather, adjustable lumbar support, air adjustable bolsters on the seat and	√	
Transmission, 534 mm (21 in) planetary power shift (electronic) (3F/3R)	\checkmark		backrest, seat cushion tilt adjustment, and adjustable-length seat cushion		
			Radio, AM/FM with Bluetooth [®] , USB Port, 3.5 mm (0.14 in) auxiliary (AUX) input	~	
			Radio, Sirius XM/AM/FM radio with Bluetooth technology, USB Port, 3.5 mm (0.14 in) AUX input		√
			Rubber mounted cab glass		\checkmark

and corner) – intermittent front wiper Window sun screen

Wet-arm wipers/washers (front, rear,

✓ ✓

 \checkmark

Tinted glass

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optiona
SAFETY			BLADES		
Alarm, back-up	\checkmark		Semi-U, 30.5 m ³ (40 yd ³)		\checkmark
Camera, rear vision	\checkmark		HD Semi-U, 30.5 m^3 (40 yd^3)		
Egress, powered rear access		\checkmark	Coal, 44.8 m ³ (58.6 yd ³)		
Emergency platform egress	\checkmark		Paint, black blade rear	_	~
Implement lock out switch	✓		COOLING		
LED warning strobe	√		Standard ambient package (recommended for site conditions	\checkmark	
Mirrors, rearview (externally mounted)	√		that do not exceed 43° C [110° F])		
Object detection (radar)			High ambient cooling system		
Seat belt, retractable, 76 mm (3 in) wide	✓		(recommended for ambient temperatures		
	 ✓		up to 50° C [122° F] for EPA Tier 4 Final		
Separate external protective structure (ROPS/FOPS)	v		emissions certified machines and 55 C [131 F]		
Stairway, left and right rear access	✓		for EPA Tier 2 equivalent machines)		
Steering and transmission lock lever, cab	· ✓		COLD WEATHER		
6	 ✓		Antifreeze, -50° C (-58° F)		✓
Steering, secondary			120V or 240V coolant heating elements		\checkmark
Seat, trainer with lap belt, 76 mm (3 in) wide	\checkmark		(recommended in conditions from -18° C to -20° C $(0^{\circ}$ E to -22° E))		
Toe kicks	✓		to -30° C [0° F to -22° F])		
	v	✓	Fuel heater (heated by recirculation using engine heat and a heat exchanger)		~
Wheel Chocks		V	(recommended in conditions from -18° C		
SERVICE	,		to -30° C [0° F to -22° F])		
Automatic Lubrication System greases the hitch, steering, and axle trunnion bearings	\checkmark		-40° C (-40° F) Hydraulic Oil, Arctic		√
Axle ecology drains	✓		Heater Mirrors		~
Battery disconnect and jump start	• ✓		Heated Seat	✓	
receptacle, bumper	·		EFFICIENCY		
Case drain filters	√		Economy mode with on-demand throttle	✓	
Coupling, Cat O-ring face seals	√		Positive Flow Control implement system	✓	
Engine, crankcase, 500 hour interval	√			 ✓	
with CH4			Impeller Clutch Torque Converter (ICTC) with lock-up clutch	v	
Front walkway around cab	\checkmark		Load-sensing steering	√	
Guards, crankcase and power train	\checkmark		Soft detent controls	 ✓	
Ground-level fast fill fuel system	\checkmark			▼ ✓	
Ground-level service center with Electronic	\checkmark		Engine idle management features: auto idle kickdown, delayed engine shutdown,	v	
Technician (ET) port, fast fill fluid ports,			engine idle shutdown		
ecology drains	1		MACHINE CONTROL AND GUIDANCE		
Grouped/Labeled lube points	\checkmark		Cat Terrain ready		✓
High pressure hydraulic oil screen	1	✓	TIRES AND RIMS		
Hitch, drawbar with pin	✓		Tires 45/65R45		✓
Hoses, Cat XT TM	✓ ✓		Tires 45/65-45		
Oil sampling valves	✓				•
Product Link TM		✓	Rims only		V
Starter and Transmission lockouts in bumper	✓		TRAMMING	, in the second s	
Sight gauges for steering, implement and transmission oil	\checkmark		Front Fenders	\checkmark	
Tire pressure monitoring		✓	Fender extensions, roading, front and rear		✓
Vital Information Management System	✓	•	SOUND SUPPRESSION		
(VIMS [™]) 3G with graphical information display: external data port, customizable operator profiles	÷		Sound-suppression package		~

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit https://www.caterpillar.com/en/company/sustainability.html.

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Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
- Barium < 0.01%
- Cadmium < 0.01%
- Chromium < 0.01%
- Lead < 0.01%

Oils and Fluids

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO[™] Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

Features and Technology

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
- Engine Idle Management System and Auto Engine Idle Shutdown reduces idle RPM and maximize fuel efficiency
- Autoshift mode to automatically upshift or downshift based on machine speed, optimizing performance and conserving fuel
- Load sensing hydraulic steering system enables precise machine control for easier loading
- Extended maintenance intervals reduce fluid and filter consumption
- Cat torque converter with lock-up clutch improves travel speeds, optimizes fuel efficiency, and eliminates torque converter losses, while lowering system heat



For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com**

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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