

320D3

HYDRAULIC EXCAVATOR



Engine Power
Operating Weight

100 kW (134 hp)
20 800 kg (45,860 lb)



NEXT GENERATION EXCAVATORS

The new line of Cat® Excavators was designed with a new approach to equipment families that gives you:

- + MORE MODEL OPTIONS
- + MORE PRICE POINTS

Ready to help you make your business stronger, Cat Excavators give you new ways to get the most work done at the lowest cost – so you put more money in your pocket.



THE NEW CAT® 320D3

LOWER YOUR COST PER HOUR.

The **Cat 320D3** Excavator balances productivity, efficiency and reliability to deliver you a reliable, highly efficient, low-cost-per-hour excavator for your work.



INCREASE EFFICIENCY WITH LOWER FUEL CONSUMPTION AND MORE HYDRAULIC POWER

Reduce fuel consumption up to 15%¹ on the new Cat 320D3 with an optimized power train and improve hydraulic power by 7%¹ with new tandem hydraulic pumps.

PROVEN RELIABILITY THAT DELIVERS PEACE OF MIND

The 320D3 excavator uses reinforced structures, a robust undercarriage, and a two-stage fuel filtration system with an anti-rust fuel tank – delivering a machine you can rely on.

LOWER MAINTENANCE COSTS UP TO 5%¹

Lower your maintenance costs up to 5% with 20% less refill oil volume than the 320D2, an extended first engine oil change interval (500 hours), and maintenance free batteries.

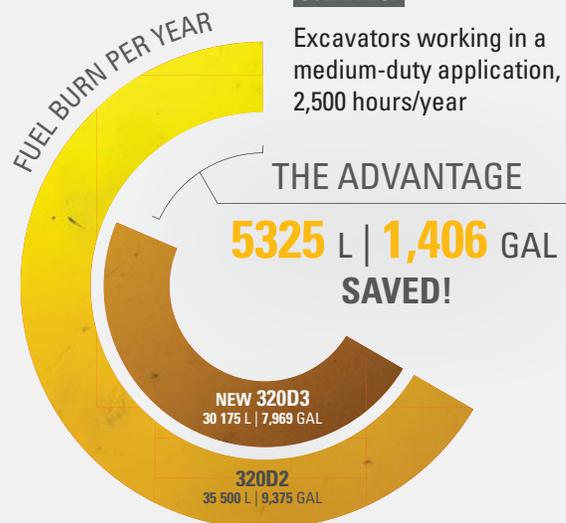
¹ Compared to the Cat 320D2.



FUEL EFFICIENCY SAVINGS ADD UP

SCENARIO:

Excavators working in a medium-duty application, 2,500 hours/year



CALCULATION:

320D2:

$$14.20 \text{ L/HR} \times 2,500 \text{ HR/YR} = 35,500 \text{ L/YR}$$

$$3.75 \text{ GAL/HR} \times 2,500 \text{ HR/YR} = 9,375 \text{ GAL/YR}$$

NEW 320D3:

$$(14.20 \text{ L/HR} \times 85\%) \times 2,500 \text{ HR/YR} = 30,175 \text{ L/YR}$$

$$(3.75 \text{ GAL/HR} \times 85\%) \times 2,500 \text{ HR/YR} = 7,969 \text{ GAL/YR}$$



INCREASE EFFICIENCY WITH **LOWER FUEL CONSUMPTION**

REDUCE YOUR DAILY FUEL USAGE



ECONOMY MODE

Reduce fuel consumption by 15% in Economy mode with no loss in lifting or digging forces.



BOOM AND STICK REGENERATION

Boom and stick regeneration circuits reduce fuel consumption by up to 2% while improving cycle times.



AUTO ENGINE SPEED CONTROL

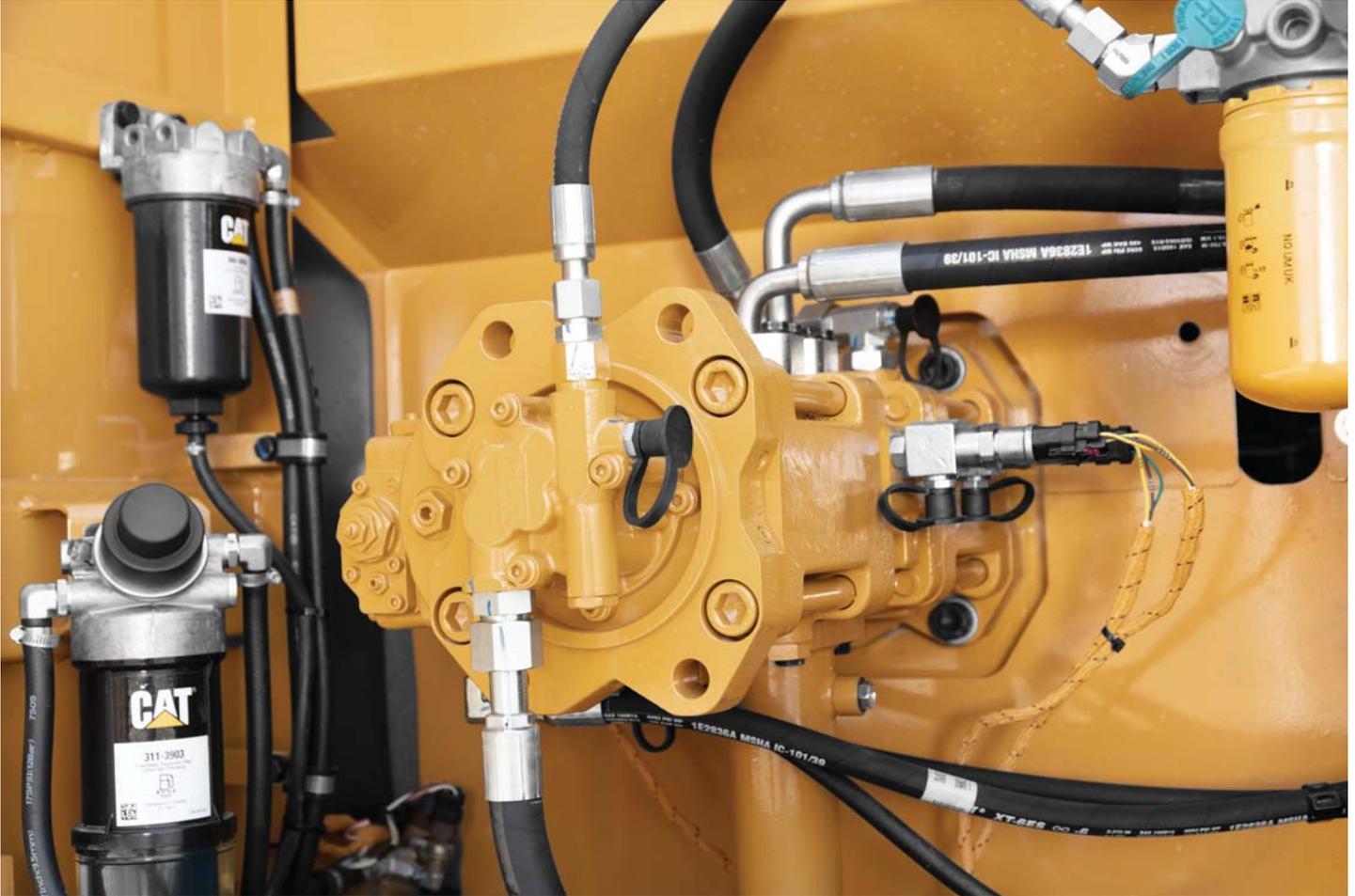
Use automatic engine speed control during no-load or light-load conditions to automatically reduce engine speed to minimize fuel consumption.



ONE-TOUCH LOW IDLE

Standard one-touch low idle saves fuel by instantly reducing engine speed to 1,100 rpm at the push of a button. Return the engine speed to the throttle position by hitting the button again or simply moving the joysticks.

INCREASE EFFICIENCY WITH MORE HYDRAULIC POWER



NEW HYDRAULIC PUMPS

New tandem hydraulic pumps provide 7% more hydraulic power with less internal friction to increase overall efficiency.

EFFICIENT HYDRAULIC SYSTEM

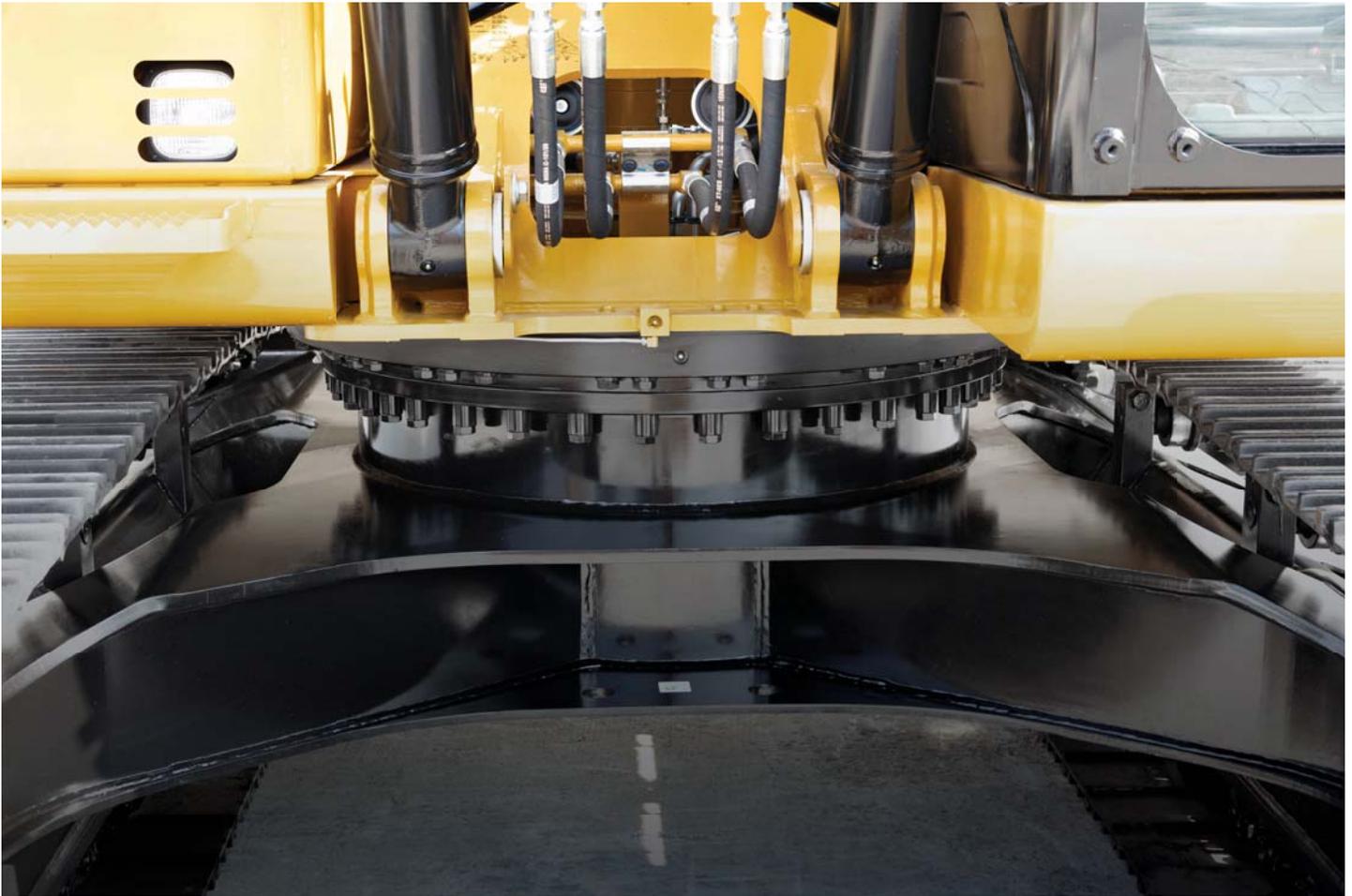
Balance power and efficiency using the open-center, negative flow control hydraulic system. Hydraulic cross-sensing makes full engine power always available from hydraulic pumps regardless of which function is used.

SMART LAYOUT

Put hydraulic power where you need it. Hydraulic system components are positioned close together for optimum efficiency.

PROVEN RELIABILITY THAT DELIVERS PEACE OF MIND

The 320D3 excavator uses reinforced structures, a robust undercarriage, and a two-stage fuel filtration system with an anti-rust fuel tank – delivering a machine you can rely on.



GREASE LUBRICATED UNDERCARRIAGE

Undercarriage rollers are rebuildable and sealed to prevent dirt and debris causing internal wear. Grease lubricated links minimize internal bushing wear, reducing noise and increasing life up to 25%.

DURABLE FRONT STRUCTURES

We designed the stick and boom structures using high-tensile steel fabricated into a large box section using internal baffles to absorb torsional stress.

TIME-PROVEN CARBODY

The X-shaped, box-section carbody provides excellent resistance to torsional bending, dissipating stress throughout the base of the machine.

ROBUST FUEL SYSTEM

Expect reliable performance from the double-filtered low-pressure fuel system and anti-rust fuel tank that protects the engine from lower quality fuel. The two-stage filtering system with integrated water separator protects the engine from particles larger than 4 microns.



HYDRAULIC CAPSULE FILTER

The capsule-type hydraulic return filter prevents contaminants from entering the system when hydraulic oil is changed. If the filter clogs, a warning is displayed on the monitor screen inside the cab.

GUARDS COME STANDARD

The standard, integrated idler guard helps maintain track alignment while traveling or working on the slopes.

Robust bottom guards protect machine components that might be damaged while swinging. A thicker bottom guard plate is used under the pump compartment to protect the suction hose.

DURABLE SWING SYSTEM

The swing system uses a ball bearing to help absorb stresses caused by swing torque.



**LOWER MAINTENANCE COSTS
UP TO 5%**

Stop less and spend less when servicing the 320D3 with easy-to-do maintenance throughout the machine.

LOWER MAINTENANCE COSTS WITH:

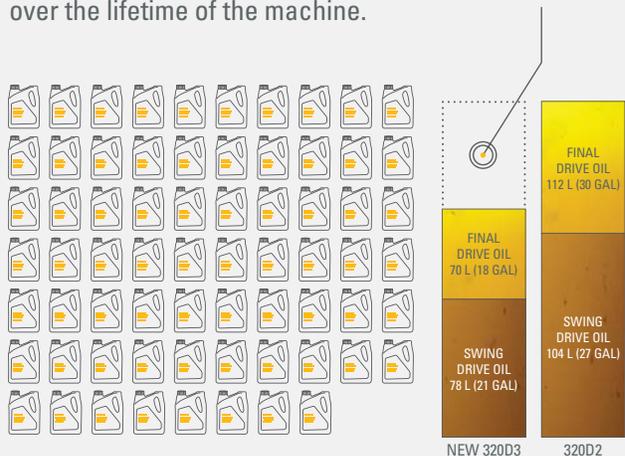
- + 20% reduced oil refill volume over the 320D2.
- + Extended first engine oil change interval (500 hours) compared to the 320D2 (250 hours).
- + Maintenance-free batteries.
- + Easily accessible maintenance locations to reduce service time.



**CUT COSTS
WHERE IT COUNTS.**

SAVE MONEY ON OIL COSTS.

The 320D3's reduced oil refill saves you **68 L (18 GAL) OF OIL** over the lifetime of the machine.



SCENARIO:

FINAL DRIVE OIL FOR 320D2 IS 16 L (4.2 GAL) REDUCED TO 10 L (2.6 GAL) FOR THE 320D3. SWING DRIVE OIL FOR 320D2 IS 8 L (2.1 GAL) REDUCED TO 6 L (1.6 GAL) FOR THE 320D3. CALCULATION BASED ON 12,000 HOUR LIFE, FOLLOWING MACHINE MAINTENANCE SCHEDULE.

EASY TO MAINTAIN

SPEND LESS TIME SERVICING AND MORE TIME WORKING

Most service locations are easily accessible at ground level to allow service and maintenance to get completed quickly and efficiently. A service door on the right side of the upper structure allows ground-level access to the hydraulic pumps, hydraulic filters, and fuel filters. The direct-mount engine oil filter is accessible from ground level.



ROBUST SERVICE DOORS

Robust service doors open wide for easy access to service points. Latches firmly hold the doors in the open position to prevent accidental closing. On the top of the machine, the large engine hood provides easy access to the engine and cooling compartments.

GREASING MADE EASY

A remote greasing block on the boom allows the greasing of hard-to-reach locations. A remote mounted greasing point on the swing bearing allows ease of service.

RADIAL SEAL ENGINE AIR FILTER

Easily access the proven, high-efficiency radial seal engine air filter behind the cab. The machine constantly monitors the engine air filter and will notify you, via the monitor, when service is required.

SINGLE PLANE DESIGN

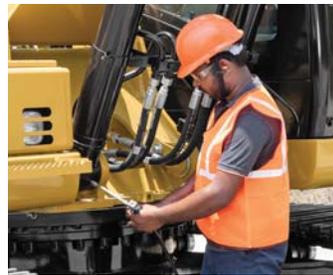
Routine cleaning is made easier with the single plane cooling package design.



LARGE ENGINE HOOD



RADIAL SEAL ENGINE AIR FILTER



REMOTE GREASING



SINGLE PLANE COOLING PACKAGE

WORK IN COMFORT ALL DAY

STAY PRODUCTIVE AND EFFICIENT FROM START TO FINISH

Sites where excavators typically work are rugged and challenging. That's why it's important that the 320D3 cab protects the operator as much as possible from fatigue, stresses, sounds and temperatures of the job.



VISIBILITY INSIDE AND OUT

INSIDE: Critical machine information is always visible in the new high-resolution 178 mm (7 in) monitor. Intuitive menus mean more time working and less time looking for information.

OUTSIDE: The spacious cab provides excellent visibility from the operator's seat to keep you aware of your surroundings – without bending or straining to see.



ADJUST TO SUIT YOUR NEEDS

Work a full day with less fatigue using the ergonomically-designed pilot-operated joysticks matched to operator's wrist and arm position. Joystick consoles and seat can be adjusted, further improving operator comfort and productivity for a variety of operator sizes and weights.



COMFORTABLE CLIMATE ALL YEAR ROUND

Automatic climate control helps maintain consistent cab temperature. Five outlets ensure proper air circulation to keep you comfortable regardless of outside temperatures.

FEEL SAFE AT WORK

EVERY DAY WITH CAT EXCAVATORS

Caterpillar builds safety into every machine, allowing operators and service technicians to work safely and get home safely every day.

EASY-TO-ISOLATE HYDRAULICS

The standard hydraulic lockout lever prevents operators from leaving the cab without first isolating all hydraulic functions. When necessary, you can activate the ground level shut-off switch to stop the fuel to the engine and shut down the machine.



SAFE WORK PLATFORM

The machine provides you a safe work platform for all routine service and maintenance needs. Anti-skid plating with countersunk bolts reduces the potential for slippage and trip hazards.

A battery disconnect switch enhances safety when servicing the machine by isolating the battery.



FULL-LENGTH FIRE WALL

A full-length firewall separates the engine from the hydraulic pump and offers protection in the event of an incident.



INCREASE YOUR PRODUCTIVITY AND PROFIT WITH CAT ATTACHMENTS

You can easily expand the performance of your machine by utilizing Cat Attachments. Each Cat Attachment is designed to fit the weight and horsepower of Cat Excavators for improved performance, safety and stability.



BUCKETS



HYDRAULIC HAMMERS



CAT LINK TECHNOLOGY TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

CAT LINK telematics technology helps take the complexity out of managing your job sites – by gathering data generated by your equipment, materials, and people – and serving it up to you in customizable formats.



PRODUCT LINK™

Product Link™ collects data automatically and accurately from your assets – any type and any brand. Information such as location, hours, idle time, and maintenance alerts can be viewed online through web and mobile applications.

VISIONLINK®

Access information anytime, anywhere with VisionLink® – and use it to make informed decisions that boost productivity, lower costs, simplify maintenance, and improve safety and security on your job site. With different subscription level options, your Cat dealer can help you configure exactly what you need to connect your fleet and manage your business, without paying for extras you don't want. Subscriptions are available with cellular or satellite reporting or both.

TECHNICAL SPECIFICATIONS

See *cat.com* for complete specifications.

ENGINE		
Engine Model	ALUW06DTI	
Gross Power – ISO 14396/SAE J1995	100 kW	134 hp
Net Power – ISO 9249/SAE J1349	85 kW	114 hp
Engine RPM		
Operation	1,700 rpm	
Travel	1,800 rpm	
Bore	104 mm	4 in
Stroke	113 mm	4 in
Displacement	5.76 L	351 in ³
HYDRAULIC SYSTEM		
Main System – Maximum Flow – Implement	400 L/min	106 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,075 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	25 000 kPa	3,625 psi
MACHINE WEIGHT		
Operating Weight	20 800 kg	45,860 lb
Standard undercarriage, 5.7 m (18'8") reach boom, 2.5 m (8'2") HD reach stick, 1.00 m ³ (1.31 yd ³) GD bucket, 600 mm (24") shoes.		
SERVICE REFILL CAPACITIES		
Fuel Tank	410 L	108.3 gal
Cooling System	28 L	7.4 gal
Engine Oil	18 L	4.8 gal
Swing Drive (each)	6 L	1.6 gal
Final Drive (each)	5 L	1.3 gal
Hydraulic System (including tank)	260 L	68.7 gal
Hydraulic Tank	138 L	36.5 gal

DIMENSIONS		
Boom	Reach 5.7 m (18'8")	
Stick	HD Reach 2.5 m (8'2")	
Bucket	GD 1.00 m³ (1.31 yd³)	
Shipping Height (top of cab)	3050 mm	10'0"
Shipping Length	9460 mm	31'0"
Tail Swing Radius	2750 mm	9'0"
Track Length to Center of Rollers	3270 mm	10'9"
Ground Clearance	450 mm	1'6"
Track Gauge	2200 mm	7'3"
Transport Width – 600 mm (24") Shoes	2800 mm	9'2"
Counterweight Clearance	1020 mm	3'4"
WORKING RANGES AND FORCES		
Boom	Reach 5.7 m (18'8")	
Stick	HD Reach 2.5 m (8'2")	
Bucket	GD 1.00 m³ (1.31 yd³)	
Maximum Digging Depth	6300 mm	20'8"
Maximum Reach at Ground Level	9470 mm	31'1"
Maximum Cutting Height	9250 mm	30'4"
Maximum Loading Height	6290 mm	20'8"
Minimum Loading Height	2590 mm	8'6"
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5960 mm	19'7"
Maximum Vertical Wall Digging Depth	5350 mm	17'7"
Bucket Digging Force (ISO)	140 kN	31,500 lbf
Stick Digging Force (ISO)	118 kN	26,600 lbf
Bucket Digging Force (SAE)	124 kN	27,900 lbf
Stick Digging Force (SAE)	114 kN	25,700 lbf

STANDARD & OPTIONAL EQUIPMENT

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

CAB	STANDARD	OPTIONAL
Sound suppressed cab with viscous mounts	•	
Full color 178 mm (7 in) LCD monitor	•	
Mechanically adjustable seat with seatbelt	•	
Openable skylight, openable upper windshield and removable bottom windshield	•	
Auto bi-level air conditioner	•	
Roll down sun screen		•
Control pattern changer		•
CAT CONNECT TECHNOLOGY	STANDARD	OPTIONAL
Cat Product Link	•	
ENGINE	STANDARD	OPTIONAL
Two selectable power modes	•	
One-touch low idle with auto engine speed control	•	
Two stage fuel filtration system with water separator and indicator	•	
52° C (125° F) high-ambient cooling capacity	•	
-32° C (-25° F) cold start capability		•
4000 m (13,120 ft) altitude capability	•	
Radial seal air filter with double filter element	•	
Engine air pre-filter		•
Biodiesel capability up to B20	•	
HYDRAULIC SYSTEM	STANDARD	OPTIONAL
Boom and stick regeneration circuit	•	
Boom and stick drift reduction valve	•	
Auto two-speed travel	•	
Reverse swing damping valve	•	
Fine swing control		•
Hammer return filter circuit		•
High performance hydraulic return filter	•	
Medium-pressure auxiliary circuit		•

BOOM AND STICK	STANDARD	OPTIONAL
5.7 m (18'8") reach boom	•	
2.5 m (8'2") heavy duty reach stick	•	
UNDERCARRIAGE AND STRUCTURES	STANDARD	OPTIONAL
600 mm (24") triple grouser shoes (10 mm/0.4" thick)	•	
600 mm (24") triple grouser shoes (8.5 mm/0.3" thick)		•
Grease lubricated track links	•	
Tie down points on base frame	•	
Center track guiding guard	•	
Segmented track guiding guard		•
3700 kg (8,160 lb) counterweight	•	
ELECTRICAL SYSTEM	STANDARD	OPTIONAL
Two 1,000 CCA maintenance free batteries	•	
Halogen chassis light, left-hand boom light, cab lights	•	
SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
Sampling ports for Scheduled Oil Sampling (S-O-S SM)	•	
Single plane cooling arrangement	•	
Radiator screen	•	
SAFETY AND SECURITY	STANDARD	OPTIONAL
Rear window emergency exit	•	
Two rearview mirrors	•	
Hydraulic lock out lever	•	
Ground level engine shutoff switch	•	
Right-hand handrail and hand hold	•	
Signaling/warning horn	•	

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