

### **GO THE DISTANCE WITH CAT® DOZERS**

Caterpillar has the industry's broadest lineup of dozers working in dozens of applications, climates and environments. They're made to go the distance, with a proven design and durable construction that deliver multiple lives. And when it comes to productivity, they'll help your operation go the distance. They're infused with performance-enhancing technologies, easy to operate and service, and supported by the world-class Cat® dealer network. The result? High reliability, maximum productivity, long life — and the lowest cost of ownership of any material mover in the industry.

These benefits, and many more, make Cat dozers the ideal choice for every site or application. And they deliver a better bottom line to the most important mine in the world: yours.



# CAT® D11

MAKING THE BEST BETTER

How do you make the industry's best large dozer even better?
By listening to your customers.
You asked us to keep everything you love about the D11, but to make it more productive and efficient to lower your overall costs. **So we did.**The D11 is safer, performs better, lasts even longer and delivers a more positive impact to your bottom line.

# INCREASE PRODUCTIVITY & EFFICIENCY BY ALMOST 8%

- + High Power in Reverse
- + Stator Clutch Torque Divider
- + Extended Tilt Cylinders

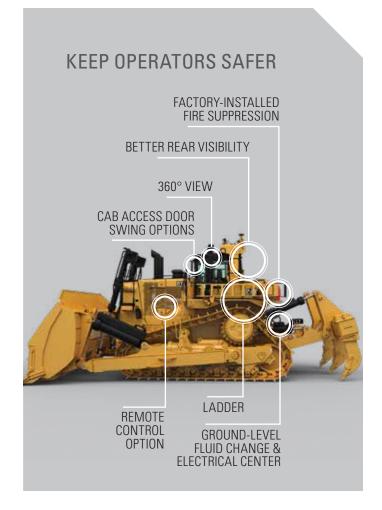
# BOOST FUEL EFFICIENCY **UP TO 8%**

Load-sensing hydraulics and a new torque divider boost performance while lowering fuel costs.

# LOWER MAINTENANCE & REPAIR COSTS **UP TO 5**%

Spend less time on maintenance thanks to a new case and frame design, improved bearings, redesigned pin joints, a 30% larger oil pan—and more.

# LOWER OVERALL COST/BANK CUBIC METER **UP TO 6%**









# A PROVEN DESIGN PHILOSOPHY

When it comes to making Cat large dozers, we follow a proven design philosophy that focuses around five main areas:

- 1. Keep operators safe, comfortable and in control
- 2. Ensure productivity in all applications
- 3. Take advantage of the latest technology
- 4. Make dozers that are easy to maintain and service
- 5. Make sure they are built to last

By following this philosophy—for every large dozer, every time—we ensure that our customers get what they expect from Caterpillar: the lowest cost of ownership of any material mover in the industry.



When it comes to productivity, the D11 will help your operation go the distance. Infused with performance-enhancing features, the D11 helps you improve the efficiency of your dozing operation.

### UP TO 6% LOWER COST PER TON

thanks to improved productivity and fuel efficiency, and reduced maintenance and repair costs

### **UP TO 8% HIGHER PRODUCTIVITY**

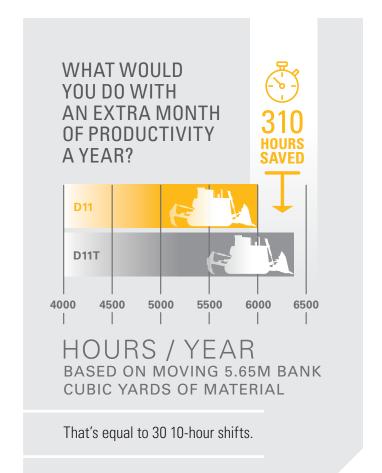


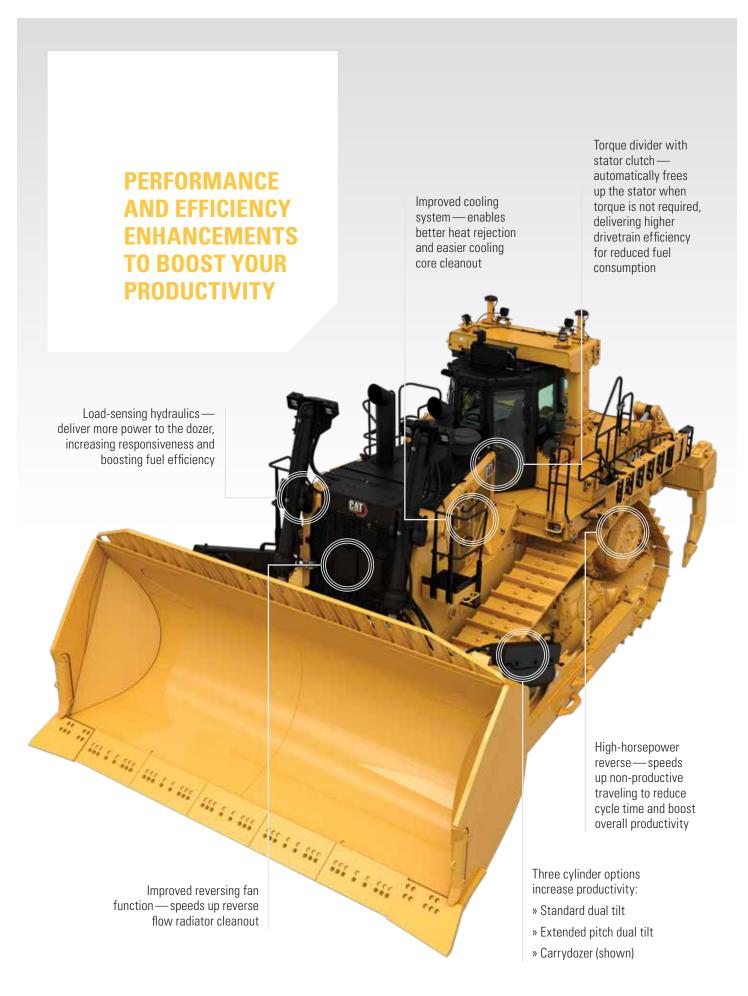
thanks to high-horsepower reverse

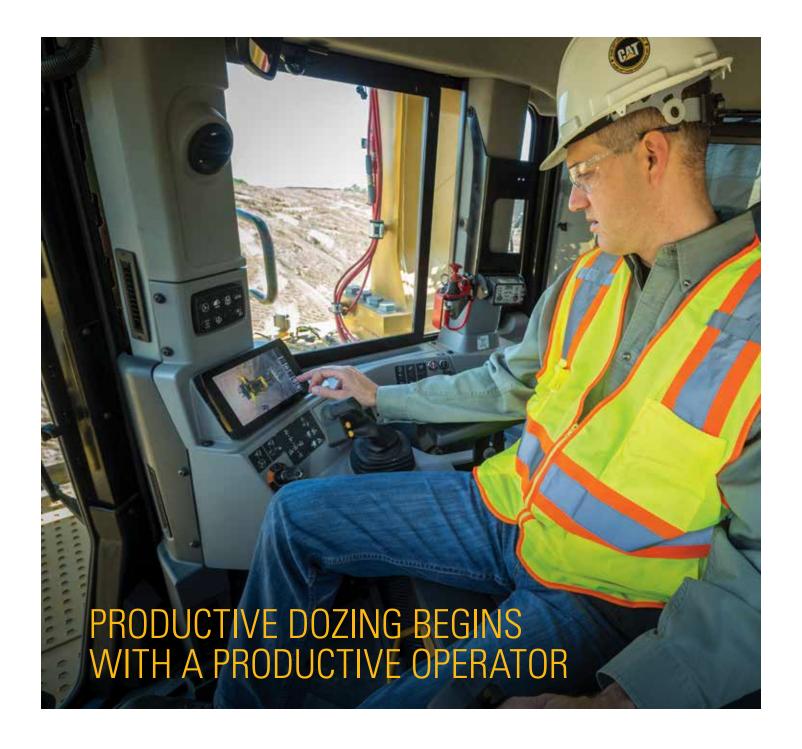
# UP TO 8% BETTER FUEL EFFICIENCY



with combined load-sensing hydraulics and stator clutch torque divider







### **SAFETY-INFUSED**

A confident operator is a productive operator. So we've infused the D11 with safety to help operators feel safe and confident on the job.

# DESIGNED FOR COMFORT

Noise, vibration, stress and fatigue all have an effect on operator performance — so we've designed an environment that helps minimize them.

### PRODUCTIVITY-ENHANCED

The operator environment in the D11 is more than a cab; it's an integrated electronic platform designed to maximize productivity.



# UNPARALLELED OPERATOR ENVIRONMENT

The operator station in the D11 is designed to reduce effort and exposure. The suspended undercarriage absorbs impact and reduces the shock loads transferred to the undercarriage by up to 50 percent — resulting in a smoother, more comfortable ride. The cab is unparalleled, with enhanced ergonomics, a fully adjustable air suspension seat, and controls that are easy to access and operate. Low-effort electronic steering, ripper and dozer controls are easily accessible and provide sure, precise maneuvering. The standard isolation-mounted cab reduces noise and vibration, and conveniently located air circulation vents evenly distribute airflow for maximum comfort.

### INTUITIVE TOUCHSCREEN DISPLAY

The operator's primary display screen is large, fast and powerful, with plenty of memory and an intuitive menu structure. The multifunction touchscreen display is the operator's gateway to monitoring machine performance and a convenient way to modify machine parameters to tailor performance to the current task. The Work Monitor menu screen collects machine data and provides real-time feedback on machine performance to optimize productivity.

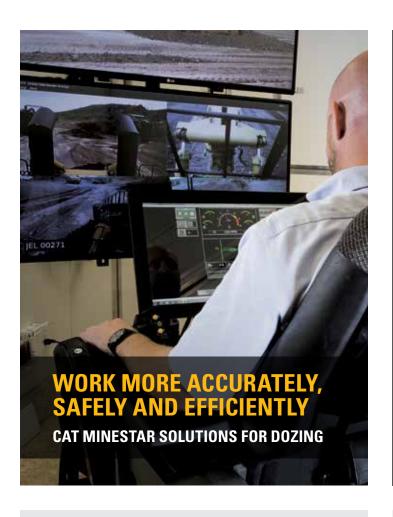
# KEEP OPERATORS SAFE, COMFORTABLE AND IN CONTROL



### SAFETY ENHANCEMENTS

- + Additional platforms, rails and handles
- + Clean line of sight to front and rear work areas
- + Optional 360° vision system for a bird's-eye view
- + Factory-installed fire suppression system
- + Third-generation powered ladder, which deploys and stores in seconds
- + Cab door swing option for easy ladder access
- + Various safety glass options
- + Automatic engtine shutoff if dozer is tipped or rolls over
- + Seat belt warning system
- + Operator Not Present monitoring system
- + Cat MineStar™ Detect and Command capabilities





# RUN YOUR DOZERS REMOTELY

COMMAND FOR DOZING

MineStar Command for dozing offers multiple levels of remote control and even semiautonomous operation, helping increase operator safety and comfort—as well as the productivity of your dozer fleet. Whether you choose the over-the-shoulder remote control console or the remote operator station, your operators can have full control of the dozer without being exposed to dust, noise, vibration or other hazards. With semiautonomous dozing, a single operator can manage up to four machines from a remote location—boosting productivity and safety.

### SPEED THE WORK

TERRAIN WITH AUTOMATIC BLADE CONTROL

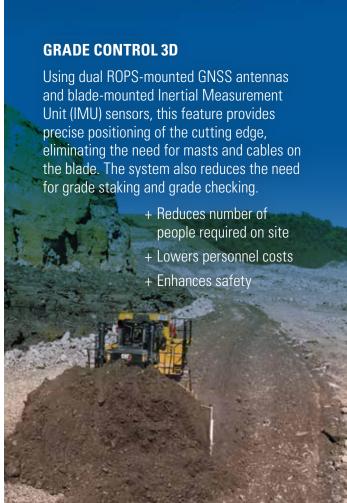


Terrain's Automatic Blade Control feature provides full automatics, full blade load and overcut protection integrated into the machine control system on D11 dozers. These tools speed the work, decrease fuel burn and minimize overcut, overfill and rehandling.

# INFORM YOUR OPERATORS TERRAIN FOR GRADING

With onboard guidance tools and realtime feedback, MineStar Terrain for grading gives operators the information to maximize machine efficiency by monitoring ore bodies, bench heights, cycle times and volume of material cut and filled. Inputs from the office tell operators where to dig or cut, how much material to move, when they've moved enough and even if they've moved too much.





# GET THE BENEFITS OF SEAMLESS INTEGRATION ONBOARD SOLUTIONS

# DUAL-TILT AUTOMATED BLADE ASSIST

Automated Blade Assist (ABA) comes standard with the dual-tilt feature. This feature automates the movement of the blade to several key preset pitch positions. The positions of each segment — load, carry and spread — can be set through the Information Display or the push-button keypad.

- + Increases efficiency
- + Reduces operator workload

#### **AUTOMATIC RIPPER CONTROL**

This optional feature monitors the dozer speed with the ROPS-mounted GNSS to automatically adjust engine speed and ripper depth to minimize track slip.

+ Decreases wear and tear on the machine



# REDUCE YOUR DOWNTIME. **REDUCE YOUR COSTS.**

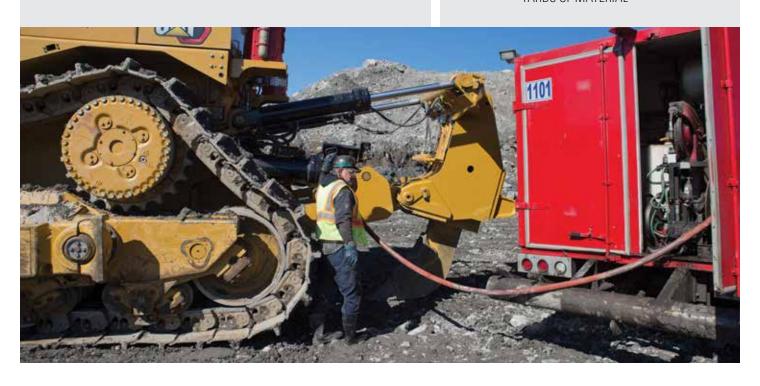
The Cat D11 is designed to be easy to service and maintain — so your machines spend less time in the maintenance shop and more time on the job. We've grouped maintenance points to minimize movement around the machine, and provided ground-level service access for all fluids and key electrical control.



# LESS MAINTENANCE = LESS COSTS

New D11: 856 hours of M&R D11T: 947 hours of M&R

TO MOVE 5.65M BANK CUBIC YARDS OF MATERIAL



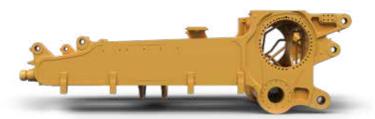
#### THE NEW D11 GOES EVEN FURTHER TO IMPROVE SERVICEABILITY.

- + 30% larger oil sump capacity, which extends 500-hour planned maintenance intervals.
- + Redesigned pin joints eliminate the need for line boring and simplify replacement of the bearing inserts on the blade ripper and push-arm trunnions.
- + AutoLube system, with ground-level fill and automatic shutoff capability.

- + Continuous fluid monitoring on all compartments, including direct fluid monitoring of the hydraulic tank and pivot shaft reservoir.
- + Ground-level service fluid change for coolant, hydraulic, engine and powertrain oil.
- + Single-plane cooling system for easy cleaning.



# THE MORE DURABLE D11



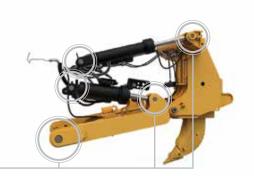
Redesigned case and frame to increase fatigue life



Larger equalizer bar with improved bearings



Replaceable push-arm trunnion bearing inserts



Ripper and blade pin bores with replaceable bearings



# DOZE. REBUILD. REPEAT.

The D11 frame, powertrain and major components are built to be rebuilt—using new, remanufactured or rebuilt parts and components—so you can take advantage of a costeffective second life of like-new performance at a fraction-of-new price.

The backbone of the machine is a heavy, strong and durable frame with high-strength steel castings and continuously rolled top and bottom frame rails. Frames provide durable support to the undercarriage, elevated final drives and other components.





# CAT BLADES: THE IDEAL MATCH FOR CAT DOZERS

Decades of dozer research and development have made Caterpillar the leader in blade technology. Cat blades are designed for loadability and constructed of high-tensile strength materials to produce big numbers over a long life.

- + Optimal heel clearance and sharp cutting edge angle, which make the blade more aggressive in tough material
- + Superior loadability due to heavy moldboard construction and bolt-on hardened cutting edges and end bits
- + Ability to resist torsional bending and distortion
- + Material thickness chosen specifically to increase wear resistance and dozing effectiveness without sacrificing machine balance or performance



Easier blade loading in hard-to-penetrate materials Cat blades are designed with the optimal heel clearance. The D11 features a 29.3° interior angle between the back bottom of the blade and the ground. This clearance angle allows the blade to better penetrate and load.

### BLADE OPTIONS for the D11



Universal (U)



Semi-Universal (SU)



Carrydozer (CD)

### SPECIALTY BLADES

Work-tool options are available for applications requiring high-capacity blades for light materials.

- + Coal Blades
- + Reclamation Blades

### **REAR ATTACHMENTS**



Single-shank Ripper



Multi-shank Ripper

### SPECIALTY ATTACHMENTS

- + Multi-shank Leach Pad Ripper
- + Multi-shank Coal Ripper (five shank)
- + Counterweight
- + Rear Drawbar with Counterweight

# **TECHNICAL SPECIFICATIONS**

See cat.com for complete specifications.

	ENGINE		
Engine Model	U.S. EPA Tier 2 E U.S. EPA Tier 4 Final/E		Cat C32 Cat C32
Bore		145 mm	5.7 in
Stroke		162 mm	6.4 in
Displacement		32.1 L	1,959 in <sup>3</sup>
Engine Power			
Gross SAE J1995	*		
Forward		670 kW	899 hp
Reverse		757 kW	1,015 hp
ISO 14396			
Forward		657 kW	882 hp
Reverse (U.S. I	EPA Tier 2 Equivalent)	744 kW	998 hp
Reverse (U.S. I	EPA Tier 4/EU Stage V)	745 kW	999 hp
Net SAE J1349/IS	309249		
Forward		634 kW	850 hp
Reverse		714 kW	957 hp
*Excludes all fan	losses.		
Engine ratings a	pply at 1,800 rpm.		
Net power advertised is the power available at the fly wheel when the engine is equipped with air cleaner, muffler, alternator, fan and engine emissions controls as required.			

SERVICE REFILL CAPACI	TIES	
Fuel Tank Cooling System – Tier 4 Cooling System – Tier 2 Engine Crankcase Sump Powertrain Final Drives (each) Track Roller Frames (each) Pivot Shaft Oil Hydraulic System Tank Only	1800 L 177 L 158 L 133 L 391 L 47 L 94 L 104 L	475 gal 46.8 gal 41.7 gal 35.1 gal 103.3 gal 12.4 gal 24.8 gal 27.5 gal 42.2 gal
WEIGHTS		
Operating Weight Single-shank ripper, U blade, 28" ES shoes	104 236 kg	229,800 lb
Operating Weight – Carrydozer Single-shank heavy ripper, carrydozer blade, 36″ ES shoes	113 700 kg	250,665 lb
TRANSMISSION		
1.0 Forward	4.0 km/h	2.5 mph
2.0 Forward	7.0 km/h	4.4 mph
3.0 Forward	12.2 km/h	7.6 mph
1.0 Reverse	4.8 km/h	3.0 mph
2.0 Reverse	8.5 km/h	5.3 mph
3.0 Reverse	14.7 km/h	9.1 mph

D11 BLADE	CAPACITY	WIDTH OVER ENDBITS	HEIGHT
Semi-Universal	27.2 m³   35.6 yd³	5567 mm   18.3 ft	2421 mm   7.9 ft
Universal	34.4 m³   45.0 yd³	6320 mm   20.7 ft	2421 mm   7.9 ft
Carrydozer	43.6 m³   57 yd³	6704 mm   22.0 ft	2517 mm   8.3 ft
Reclamation Universal	42 m³   55 yd³	6395 mm   21.0 ft	2725 mm   8.9 ft
Reclamation Universal	53.5 m³   70 yd³	7277 mm   23.9 ft	27.68 mm   9.1 ft
Coal Universal	75 m³   98.0 yd³	8155 mm   26.8 ftn	3064 mm   10.1 ft
Coal Universal	65 m³   85.5 yd³	7277 mm   23.9 ftn	3064 mm   10.1 ft

DIMENSIONS	D11	D11 CD
Ground Clearance*	798 mm   31.4 in	798 mm   31.4 in
Track Gauge	2896 mm   114 in	2896 mm   114 in
Width Without Trunnions (standard shoe)	3782 mm   148.9 in	3806 mm   149.8 in
Height (ROPS cab)*	4405 mm   173.4 in	4405 mm   173.4 in
Length of Track on Ground	4444 mm   175 in	4444 mm   175 in
Overall Length – Basic Dozer	6160 mm   242.5 in	6160 mm   242.5 in
Overall Length with SU Blade and SS Ripper**	10 525 mm   414.4 in	10 712 mm   421.7 in
*Includes grouser height for total dimensions on hard surfaces.		
**CD Blade on D11 CD		

## **STANDARD & OPTIONAL EQUIPMENT**

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

OPERATOR EQUIPMENT	STANDARD	OPTIONAL
ROPS/FOPS, Sound-Suppressed Cab	·	OFFICIAL
High-Definition Primary	•	
Touchscreen Display		
MineStar Terrain Display		•
Visibility – Rearview Mirrors	•	
Visibility – Dual Camera: Back-up & Ripper		•
Visibility – Four Cameras, 360 Degree View and Ripper Camera		•
Air Conditioner and Heater with Automatic Climate Control	•	
Seat – Cloth with Air Suspension	•	
Seat – Heated, Cooled, Adjustable Lumbar and Bolsters		•
Cab Glass – Single-Pane Tinted Safety	•	
Cab Glass – Dual-Pane Laminated Impact Safety		•
Cab Glass – High-Pressure Safety (4 0 psi / 275 kPa)		•
Cab Access – Blade Push-Arm Steps and Grab Handle	•	
Cab Access – Powered Ladder		•
CAT TECHNOLOGY PRODUCTS	STANDARD	OPTIONAL
VIMS <sup>SM</sup>	•	01 11011112
Automated Blade Assist (ABA)	•	
AutoCarry™		•
Auto Ripper Control		•
Cat Terrain with 3D Blade Control		•
Cat Terrain Ready		•
Cat Product Link™ Elite (cellular)	•	
Cat Product Link™ Elite Dual Mode (cellular + satellite)		•
Cat Command for Dozing Ready		•
MAINTENANCE AND SERVICE	STANDARD	OPTIONAL
Ecology Fluid Drains – All Compartments	٠	
Hinged Bottom Guards	•	
Sound-Reduction Sealed Bottom Guards		•
High-Speed Oil Change – Engine and Transmission	•	
Ground-Level Fast Fuel Fill	•	
Ground-Level Fluid Fill and Drain		•
Ground-Level Electrical Service Station	•	
$S \cdot O \cdot S^{\text{SM}}$ Fluid Sampling Ports	•	
Diagnostic Connector	•	
Ripper Lubrication – Autolube with Ground-Level Fill		•

ai	ls.		
	UNDERCARRIAGE	STANDARD	OPTIONAL
	Suspension-Type Undercarriage	•	
	Sleeve Bearing Track	•	
	Lifetime-Lubricated Rollers and Idlers	•	
	Track Shoe (ES): 710 mm (28 in) Width	•	
	Track Shoes (ES): 810 / 915 mm (32 / 36 in) Width (various configurations)		•
	Track Links – Heavy-Duty XL – Duralink		•
	Track Shoe – Abrasion Resistant		•
	Track Shoe – Anti-Packing Round Hole		•
	Abrasion Rollers and Idlers		•
	Cold-Weather Rollers and Idlers		•
	Sound-Suppression Undercarriage		•
	Carrier Roller		•
	ELECTRICAL	STANDARD	OPTIONAL
	24V Electric Start, Dual Starters	•	
	Batteries – 4x4, 200-Amp Hour, 12V	•	
	Battery Isolation	•	
	Battery Isolation – Dual Pole		•
	Lights – Halogen – 13 Positions	•	
	Lights – LED – 13 Positions	•	
	Lights – LED – Premium Package		•
	HYDRAULICS	STANDARD	OPTIONAL
	Electronically Controlled, Load-Sensing	•	OFTIONAL
	Dozer Lift and Tilt		
	Electronically Controlled, Load-Sensing Ripper Lift and Pitch	•	
	Dozer Blade – Dual Tilt	•	
	Dozer Extended Blade Pitch		•
	Electronically Enabled Blade – Quick Drop	•	
	Ripper Pin Puller		•
	OTHER	STANDARD	OPTIONAL
	Fire Suppression Ready		•
	Fire Suppression Installed		•
	CAT POWERTRAIN	STANDARD	OPTIONAL
	Cat C32 Engine – US EPA Tier 4 Final, US EPA Tier 2 Equivalent, EU Stage V	•	
	Enhanced Auto Shifting (EAS)	•	
	Auto Engine Idle Shutdown	•	
	Thermal Manifold and Turbo Shields	•	
	High-Performance Single-Plane Cooling Module	•	
	Stator Clutch Torque Divider – Electronic Control	•	
	Powershift Transmission — Three-Speed Electronic Shift	•	
	Hydraulic Cooling Fan – Automatic Reversing		•





For more complete information on Cat products, dealer services and industry solutions, visit us at www.cat.com ©2019 Caterpillar. All Rights Reserved.

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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