

D4

Track-Type Tractor



Engine

Engine Model	Cat® C7.1	
Emissions	Brazil MAR-1 and China Nonroad Stage III, equivalent to U.S. EPA Tier 3/EU Stage IIIA	

Engine Power – 2,000 rpm		
SAE J1995 (Gross)	119 kW	160 hp
ISO 14396	117 kW	157 hp

Engine (continued)

Net Power – 2,200 rpm		
SAE J1349	95 kW	128 hp
ISO 9249	97 kW	130 hp

Weights

Operating Weight		
D4	13 500 kg	29,800 lb
D4 LGP	14 350 kg	31,600 lb

New Names, Same World-Class Performance

The update from D6K to D4 is part of an effort to make all Cat dozer model names simpler. Over the next couple of years, the Cat dozer range will be renamed from smallest to largest – D1 to D11 – with one model per size class and no more letter modifiers like “N,” “K,” “T.”

While the number may be different, the D4 gives you all the advantages of the D6K. The D4 delivers optimal grading performance, excellent fuel efficiency and a choice of technology features to help you get jobs done faster and more accurately.

D4

»»

D6K



Contents

Operator Environment.....	3
Power and Efficiency	4
Fuel Economy.....	5
Forestry/Agriculture Arrangement	5
Cat Technologies.....	6
Equipped for the Job	8
Serviceability and Customer Support.....	9
Specifications.....	10
Standard Equipment.....	13
Mandatory Attachments.....	14
Notes.....	15

The Cat D4 dozer combines best-in-class fuel efficiency with the power and precision to excel in a wide range of jobs. This versatile bulldozer features a reliable power train and an overall design that is optimized for finish grading. And to boost your grading productivity even more, choose technology features like Cat GRADE with Slope Assist™ and Cat GRADE with 3D that help you get more quality work done in less time.



Power and Efficiency

Designed for performance

Powerful Drive Train

A Cat C7.1 engine delivers reliable power and best-in-class fuel efficiency.

The hydrostatic transmission automatically maintains engine speed to match application requirements. You experience prompt acceleration and directional changes, along with faster steering response and excellent maneuverability in tight areas. Power is maintained to both tracks when turning, giving you greater capability to utilize full blade loads. Counter-rotation provides quick steering corrections during side loading applications. Quick response to varying loads means shorter cycle times.

Traction Control

Automatic Traction Control option reduces track slip in poor underfoot conditions, improving productivity and finish surface quality.

Reduced Idling

Auto Engine Speed Control reduces engine speed when idling for added fuel savings. Selectable Engine Idle Shutdown Timer shuts down machine after specified idle time to help save fuel and meet idling regulations.

Effective Cooling

Cooling package allows more air flow, reducing fan speed for greater efficiency. Hydraulic demand fan automatically reduces fan speed in cooler conditions to help save fuel. An optional hydraulic reversing fan offers automatic or manual modes for changing direction to blow debris out of the radiator cores.

Operator Environment

Comfort and Productivity



Spacious, quiet cab offers all-day comfort with wide door openings and an air suspension seat. Ergonomic, seat-mounted joystick controls isolate vibration. Excellent visibility to the blade, curbs and tight spaces help you work more precisely.

Liquid Crystal Display (LCD) is glare resistant and easy to read day or night.

- Monitor machine operation.
- Menus for viewing machine/implement settings and machine health.
- Display screen for Slope Assist and Slope Indicate options.
- Display for rear vision camera so no additional monitor is needed.



Implement and Steering Controls

- Single joystick for speed, direction and steering; includes thumb wheel for speed adjustment and speed recall.
- Dozer/implement controls give you six-way control of the VPAT blade. Blade shake feature helps shed sticky material.
- Quick blade response.
- Intuitive, precise electro-hydraulic controls with sensitivity adjustment – fine, medium, coarse.
- Heating/ventilation/air conditioning system cools faster; circulates air closer to the operator for more comfort.
- Bi-directional control – dial preselected forward/reverse ground speeds for reduced effort and improved efficiency. Save the settings as operator profile for even more convenience.



Fuel Economy

Eco Modes

Eco Modes achieve significant fuel consumption reduction by allowing the engine to run at lower speed whenever possible, and rapidly increasing speed when power is needed. Designed to save fuel in light or medium duty applications, the extremely fast engine response allows these modes to be used even in power demanding applications and eliminates the need to constantly shift into and out of Eco Modes.

- Operators can either select the “Reverse only” or “Forward and Reverse” mode.
- Can help save from 5 percent up to 18 percent of fuel depending on the application.



Forestry/Agriculture Arrangement

Equipped for the job



Equip your dozer from the factory with added protection to work in harsh applications like agriculture, forestry and land clearing.

- Specialized guarding on the undercarriage, lift cylinders, fuel tank, winch, radiator grill and crank case.
- Heavy duty cab and overhead sweeps.
- LED lights for added visibility.
- Hydraulic demand fan adapts to engine heat load and reverses to help prevent plugging.
- Turbine air precleaner with screen to help improve filter life in high debris situations.

Please consult your Cat dealer for regional availability.

Cat Technologies

Monitor, manage and enhance job site operations



GRADE for Dozers

Cat GRADE technologies help you hit target grade faster and more accurately. Finish jobs in fewer passes, and with less operator effort, saving you time and helping you increase profit.

Cat GRADE with Slope Assist automatically maintains blade position without a GPS signal. Put it to work building pads, creating simple design plans on-the-go, or working where GPS is unavailable. Experienced operators can work more productively and less experienced operators can achieve better quality results more quickly.

Cat Slope Indicate displays machine cross-slope and fore/aft orientation on the primary monitor, helping operators work more accurately on slopes.

Cat Stable Blade complements the operator's blade-control input for attaining finish grades quicker with less effort.

Cat GRADE with 3D is updated for greater speed, accuracy and flexibility. Factory-integrated system eliminates position sensing cylinders and antennas integrated into the cab roof for better protection. A more intuitive 10-inch (254 mm) touchscreen display is easier to use. The Attachment Ready Option (ARO) is part of the package for added versatility, and AutoCarry™ is included to further boost productivity.

Attachment Ready Option (ARO) allows you to easily install or upgrade to 2D and 3D grade-control systems to add versatility and resale value to your machine.





REMOTE SERVICES

The Cat App helps you manage your assets – at any time – right from your smartphone. See fleet location and hours, get critical required maintenance alerts, and even request service from your local Cat dealer.



CAT LINK

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.

CAT PRODUCT LINK™

Product Link™ collects data automatically and accurately from your assets – any type and any brand. Information such as location, hours, fuel usage, productivity, idle time, maintenance alerts, diagnostic codes, and machine health 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.

Equipped for the Job

Optimize your machine

Blades

- Rugged Variable Pitch Angle Tilt (VPAT) blade allows you to hydraulically adjust lift, angle and tilt for precise results.
- Wide blade helps you get more work done in less time.
- Blade shake feature for easy removal of material.
- Easy to transport without blade removal.
- Foldable blade option helps limit transport width without blade removal.

Undercarriage

- Optimized undercarriage – eight bottom rollers/two carrier rollers for smoother ride and improved finish grading. Equalizer bar design supports faster fine grading speed.
- Choose Heavy Duty undercarriage for aggressive applications like land clearing, side-slopes or rocky terrain.
- Choose Cat Abrasion undercarriage that is designed to work and wear as a system for longer life and lower costs in abrasive or low/moderate impact applications.
- A broad choice of track shoe designs and widths help you further optimize your machine for performance and longer life.

Rear Implements

An aggressive multi-shank parallelogram ripper lets you do more productive work. The parallel linkage design provides better penetration and maneuverability in tight working areas.

A Ripper Ready package makes it easy to add a ripper in the future for more versatility or added resale value. Or, equip your dozer with a drawbar or winch. Ask your Cat dealer for available options to help you optimize your machine for the work you do.

Heavy Duty Protection Packages

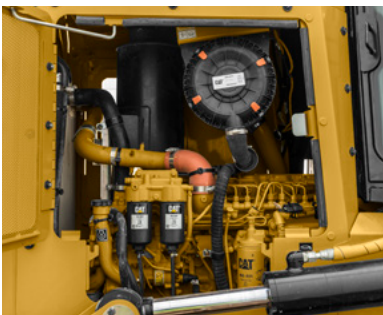
For work in severe environments, protect your dozer with optional rear/side window guarding, light guards, sweeps and advanced polycarbonate window material.





Serviceability and Customer Support

When uptime counts



Accessible, Quick and Easy Maintenance to Keep You Working

Long service intervals and easy maintenance keep the machine up and running to help lower your owning and operating costs.

- Large, hinged door on the engine compartment for easy access to all regular engine maintenance points.
- Grouped pressure taps for quick testing and troubleshooting of the hydraulic system.
- Lower service panel can be removed without tools providing quick access to inspect engine compartment and filters.
- Ground level access to hydraulic filters and primary fuel filter/water separator.
- Improved fuel filtration system.
- Tool box to keep your tools and grease gun at hand.
- Optional bracket mounts to rear of machine to keep a shovel handy.
- Monitoring system with automatic checks at start up.
- Robust and convenient modular design.

And when you do need service, your Cat dealer provides knowledgeable ongoing support, maintenance programs and best-in-class parts availability.

D4 Track-Type Tractor Specifications

Engine

Engine Model	Cat C7.1	
Emissions	Brazil MAR-1 and China Nonroad Stage III, equivalent to U.S. EPA Tier 3/EU Stage IIIA	
Engine Power – 2,000 rpm		
SAE J1995 (Gross)	119 kW	160 hp
ISO 14396	117 kW	157 hp
Net Power – 2,200 rpm		
SAE J1349	95 kW	128 hp
ISO 9249	97 kW	130 hp
Bore	105 mm	4.13 in
Stroke	135 mm	5.31 in
Displacement	7.01 L	428.77 in ³

- Net power advertised is the power available at the engine flywheel when the engine is equipped with the air cleaner, alternator, A/C compressor at full load and cooling fan at maximum speed.
- No engine derating required up to 3000 m (9,840 ft) altitude; beyond 3000 m (9,840 ft) automatic derating occurs.

Transmission – Travel Speed

Transmission Type	Hydrostatic	
Forward	0-10 km/h	0-6.2 mph
Reverse	0-10 km/h	0-6.2 mph

Service Refill Capacities

Fuel Tank	260 L	69 gal
Cooling System	30 L	7.9 gal
Engine Crankcase	18 L	4.8 gal
Final Drives	18.5 L	4.9 gal
Hydraulic Tank	64 L	16.9 gal

Weights

Operating Weight		
D4	13 500 kg	29,800 lb
D4 LGP	14 350 kg	31,600 lb
Shipping Weight		
D4	13 200 kg	29,100 lb
D4 LGP	14 050 kg	30,950 lb

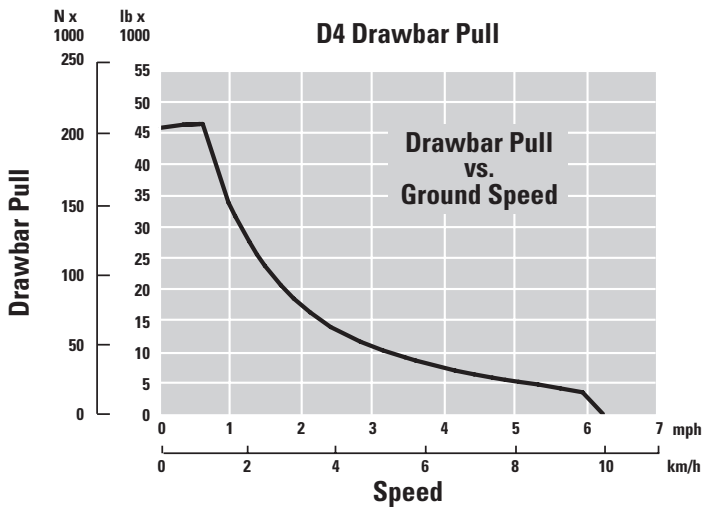
- Operating weights: includes external ROPS (EROPS), air conditioner, lights, VPAT dozer, transmission, drawbar, engine enclosure, three-valve hydraulics, 100% fuel, Cat Comfort Series air suspension seat and operator.
- Shipping weights: includes external ROPS (EROPS), air conditioner, lights, VPAT dozer, transmission, drawbar, engine enclosure, three-valve hydraulics, 10% fuel, Cat Comfort Series air suspension seat.

Undercarriage

Width of Standard Shoe		
D4	560 mm	22 in
D4 LGP	760 mm	30 in
Shoes/Side	40	
Grouser Height		
Moderate Service Shoe	48 mm	1.9 in
Extreme Service Shoe	57 mm	2.2 in
Track Gauge		
D4	1770 mm	70 in
D4 LGP	2000 mm	79 in
Track on Ground	2645 mm	104 in
Ground Contact Area (ISO 16754)		
D4	3.29 m ²	5100 in ²
D4 LGP	4.46 m ²	6920 in ²
Ground Pressure (ISO 16754)		
D4	40 kPa	5.8 psi
D4 LGP	31 kPa	4.5 psi
Track Rollers/Side	8	

D4 Track-Type Tractor Specifications

Drawbar Pull



Blades

Blade Type	VPAT, VPAT Foldable*	
Blade Capacity		
VPAT	3.26 m ³	4.26 yd ³
LGP, VPAT	3.81 m ³	4.98 yd ³
Blade Width Over End Bits		
VPAT	3196 mm	10.5 ft
LGP, VPAT	3682 mm	12.0 ft

*VPAT foldable blades have the same capacity and width as the VPAT blades.

Ripper

Type Fixed	Parallelogram	
Pocket Spacing	896 mm	35.3 in
Shank Gauge	1792 mm	70.6 in
Shank Section	58.5 × 138 mm	2.3 × 5.4 in
Number of Pockets	3	
Overall Beam Width	1951 mm	76.8 in
Beam Cross Section	165 × 211 mm	6.5 × 8.3 in
Maximum Penetration Force		
D4	42.2 kN	9,480 lb
D4 LGP	45.1 kN	10,138 lb
Maximum Pry-out Force		
D4	166.7 kN	37,480 lb
D4 LGP	166.7 kN	37,480 lb
Maximum Penetration	360 mm	14.2 in
Weight with One Shank	845 kg	1,863 lb
Each Additional Shank	34 kg	75 lb

Winch

Winch Model	PA50	
Winch Drive	Hydrostatic	
Weight*	907 kg	2,000 lb
Winch and Bracket Length	845 mm	33.2 in
Winch Case Width	740 mm	29.1 in
Drum Diameter	205 mm	8 in
Drum Width	274 mm	11 in
Flange Diameter	457 mm	18 in
Drum Capacity (recommended rope)	93 m	306 ft
Drum Capacity (optional rope)	67 m	220 ft
Rope Recommended Diameter	19 mm	0.75 in
Optional Cable Size	22 mm	0.87 in
Cable Ferrule Size (O.D.)	54 mm	2.13 in
Cable Ferrule Size (length)	67 mm	2.63 in
Maximum Bare Drum		
Line Pull	222.4 kN	50,000 lbf
Line Speed	38 m/min	124 ft/min
Maximum Full Drum		
Line Pull	115.7 kN	26,000 lbf
Line Speed	70 m/min	230 ft/min

*Weight includes: pump, operator controls, oil, mounting brackets and spacers.

Standards

ROPS/FOPS

- ROPS (Rollover Protective Structure) offered by Caterpillar for the machine meets ROPS criteria ISO 3471:2008.
- FOPS (Falling Object Protective Structure) meets ISO 3449-2005 Level II.

Brakes

- Brakes meet the standard ISO 10265:2008.

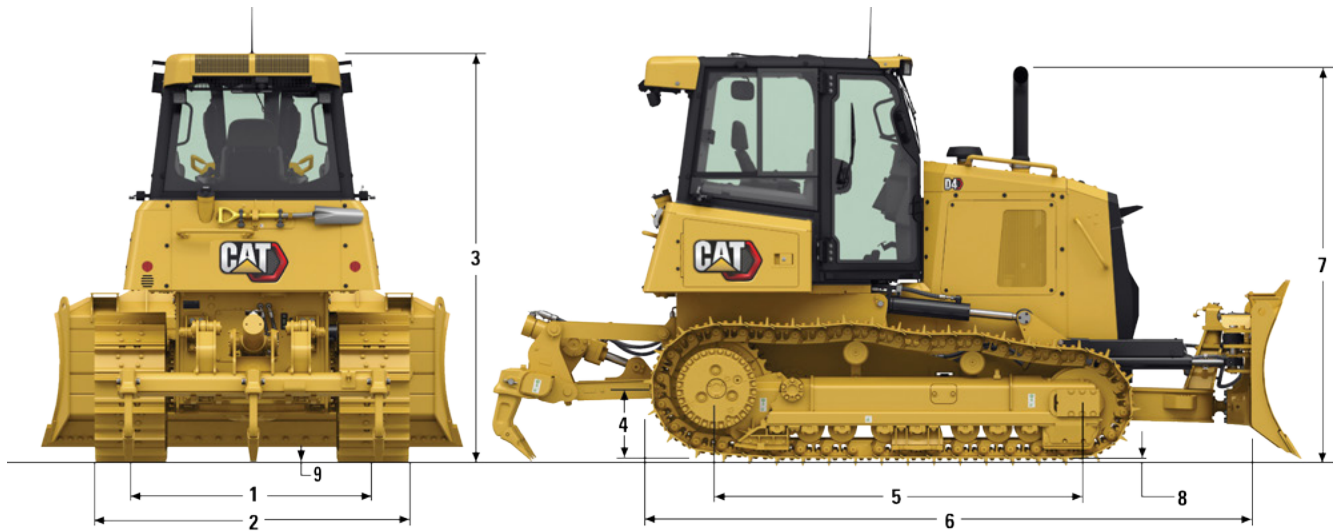
Sound and Vibration Information

- The declared dynamic operator sound pressure level is 78 dB(A) when "ISO 6396:2008" is used to measure the value for an enclosed cab. The cab was properly installed and maintained. The measurements were conducted with the cab doors and the cab windows closed.
- Hearing protection may be needed when the machine is operated with an open operator station, in a noisy environment, or with a cab that is not properly maintained.
- The declared exterior sound power level is 109 dB(A) when the value is measured according to the dynamic test procedures and the conditions that are specified in "ISO 6395:2008."

D4 Track-Type Tractor Specifications

Dimensions

All dimensions are approximate.



Tractor Dimensions

	D4		D4 LGP	
1 Track Gauge	1770 mm	70 in	2000 mm	79 in
2 Width of Tractor	With the Following Attachments:			
Standard Shoes without Blade	2330 mm	92 in	2760 mm	109 in
Standard Shoes with VPAT Blade Angled 25°	2896 mm	114 in	3337 mm	131 in
Standard Shoes with Foldable Blade in Transport Position	2364 mm	93 in	2850 mm	112 in
3 Machine Height from Tip of Grouser (ROPS cab)	2965 mm	117 in	2965 mm	117 in
4 Drawbar Height (center of clevis)	From Ground Face of Shoes			
	517 mm	20 in	517 mm	20 in
5 Length of Track on Ground	2645 mm	104 in	2645 mm	104 in
6 Length of Basic Tractor (with C-frame/drawbar)	4618 mm	181 in	4618 mm	181 in
With the Following Attachments, Add to Basic Tractor Length:				
Ripper	815 mm	32 in	815 mm	32 in
PA50 Winch	354 mm	14 in	354 mm	14 in
VPAT Blade, Straight	382 mm	15 in	382 mm	15 in
VPAT Blade, Angled 25° (standard and foldable)	1012 mm	40 in	1012 mm	40 in
7 Height Over Stack from Tip of Grouser (with Moderate Service shoes)	2895 mm	112 in	2895 mm	112 in
8 Height of Grouser	Moderate Service Shoes			
	48 mm	1.9 in	48 mm	1.9 in
				Extreme Service Shoes
	57 mm	2.2 in	57 mm	2.2 in
9 Ground Clearance from Ground Face of Shoe (per SAE J1234)	360 mm	14 in	360 mm	14 in

Standard Equipment

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

POWER TRAIN

- Cat C7.1 engine, turbocharged – meets Brazil MAR-1 and China Nonroad Stage III emission standards, equivalent to U.S. EPA Tier 3/EU Stage IIIA
- Air To Air AfterCooler (ATAAC)
- Glowplug starting aid
- 3000 meter altitude operation capability without de-rating
- Hydraulically driven, variable speed fan
- Aluminum bar plate cooling system (radiator, power train, aftercooler)
- Air cleaner with integrated precleaner, dust ejector and under hood air intake
- Dual path, electronic control, closed loop hydrostatic transmission
- Electric fuel priming pump
- Fuel/water separator
- Programmable/selectable bi-directional shifting
- Engine idle shutdown
- Auto engine speed control

UNDERCARRIAGE

- Heavy duty undercarriage
- Center tread, sprocketed idler with Cat Abrasion, standard idler with heavy duty lifetime lubricated track rollers (8) and idlers
- Carrier rollers (2)
- Hydraulic track adjusters
- Replaceable sprocket rim segments

HYDRAULICS

- Three-valve hydraulics
- Load sensing hydraulics

ELECTRICAL

- Horn
- Back-up alarm
- 12V converter, 10A
- Diagnostic connector
- Batteries, heavy duty, maintenance-free, 900 CCA
- Integrated lights (four front, two rear)
- 100A alternator (24 volt)
- 24V electric starter

OPERATOR ENVIRONMENT

- ROPS/FOPS cab
- Integrated air conditioning with automatic temperature control
- Seat, air suspended, cloth for cab
- Seat belt, retractable 76 mm (3 in)
- Foot pads, dash
- Color graphic 17.8 cm (7 in) display with gauge for: engine coolant temperature, hydraulic oil temperature, fuel level
- Travel speed limiter, electronic
- Engine RPM and gear display
- Hour meter, electronic
- Engine air cleaner service indicator, electronic
- Water-in-fuel indicator, electronic
- Throttle switch, rotary
- Eco Mode
- Controls, seat mounted, fore/aft adjustment
- Armrests, adjustable
- Mirror, rearview, inside
- Single pedal combining deceleration and braking functions
- Independent forward/reverse speed settings
- Power port, 12V
- Coat hook
- Storage compartment
- Cup holder
- Floor mat, rubber, heavy duty
- Intermittent wiper
- 12V radio ready (plug and play)

FLUIDS

- Antifreeze coolant (–37° C/–34.6° F)
- Extended life coolant

OTHER STANDARD EQUIPMENT

- C-frame, variable pitch link, hydraulic cylinder and lines
- Engine enclosures
- Hinged radiator louvered grill
- Swing-out radiator fan
- Front pull device
- Rigid drawbar
- Vandalism protection
- Ecology drains (engine, power train and implement oil, engine coolant)
- Scheduled Oil Sampling (S·O·SSM) ports (engine, power train, implement oil)
- Heavy duty crankcase guard

TECHNOLOGY PRODUCTS

- Cat GRADE with Slope Assist
- Cat Stable Blade
- Cat Slope Indicate
- Product Link ready

D4 Mandatory Attachments

Mandatory Attachments

Select one from each group. Mandatory attachments may vary. Consult your Cat dealer for specifics.

- D4 Tractor
- D4 LGP Tractor

OPERATOR ENVIRONMENT

- Cab, Standard Package
- Cab Package, Heavy Duty

TECHNOLOGY PRODUCTS

- Blade Guiding Systems
 - Control Basic
 - Control, Stable Blade, Traction Control, No ARO
 - Control, Stable Blade, Traction Control, Cat GRADE with Slope Assist, No ARO
 - Control, Stable Blade, Traction Control, Slope Assist, ARO
- Product Link
 - Product Link, Satellite PL631
 - Product Link, Cellular PL641
 - Product Link, Dual Mode (Elite)
 - No Product Link
 - Cat GRADE with 3D (optional)

UNDERCARRIAGE

- Roller Frame, 8/2 Cat Abrasion
- Roller Frame, 8/2 Heavy Duty

TRACKS

- Track Pairs, Heavy Duty
 - 510 mm (20 in) Moderate Service
 - 560 mm (22 in) Extreme Service
- Track Pairs, Cat Abrasion
 - 510 mm (20 in) Moderate Service
 - 510 mm (20 in) Extreme Service
 - 560 mm (22 in) Moderate Service
 - 560 mm (22 in) Extreme Service
- Track Pairs, LGP, Heavy Duty
 - 760 mm (30 in) Extreme Service
 - 760 mm (30 in) Self Cleaning
- Track Pairs, LGP, Cat Abrasion
 - 760 mm (30 in) Moderate Service
 - 760 mm (30 in) Extreme Service

TRACK GUIDING GUARDS

- Track Guiding Guards, Heavy Duty
 - Guard, Track Guiding, Center
 - Guard, Track Guiding, Front and Rear
 - Guard, Track Guiding, Full 8/2
- Track Guiding Guards, Cat Abrasion
 - Guard, Track Guiding, Center
 - Guard, Track Guiding, Front and Rear
 - Guard, Track Guiding, Full 8/2
- No Guiding Guard

ENGINE AIR CLEANER

- Air Cleaner, Standard
- Precleaner, Turbine with Screen

HYDRAULIC FAN

- Fan, Demand
- Fan, Demand, Reversing
- Fan, Demand, Winch
- Fan, Demand, Reversing, Winch

HYDRAULICS REAR CONTROL PACKAGES

- Ripper Ready Package
- Dual Control Package
- No Rear Hydraulic Package

BLADES

- Blade, 3196 mm (10.5 ft) ARO
- Blade, 3196 mm (10.5 ft) Foldable ARO
- Blade, 3682 mm (12 ft) ARO LGP
- Blade, 3682 mm (12 ft) Foldable ARO LGP
- No Blade

REAR ATTACHMENTS

- Package Ripper, Teeth Straight
- Package Ripper, Teeth Curved
- Winch Preparation
- Drawbar
- Counterweight, Rear
- No Rear Attachment

GUARDS

- Protection Packages
- Protection Package, Standard
- Protection Package, Front
- Protection Package, Heavy Duty

FLUIDS

- Hydraulic Oil
 - Hydraulic Oil, Standard
 - Hydraulic Oil, Bio

OPTIONAL EQUIPMENT

- Engine – Cold Weather
- Heater, Engine Coolant, 240V
- Insulated Breather

SAFETY/COMFORT

- Beacon, Rotating
- Kit Visibility, Single Camera
- Radio, AM/FM/Aux/USB/Bluetooth®

CAB PROTECTION PACKAGE

- Cab, Protection Package
- Cab, Protection Package, Heavy Duty
- Screen, Rear

COUNTERWEIGHT

- Counterweight, Rear Slab

MAINTENANCE

- Shovel Holder

FIELD INSTALLED ATTACHMENTS

- Winch/Fairlead
- Winch Arrangement – Towing
- Fairlead, Three Rollers
- Kit, Conversion, Fourth Roller
- Winch Step



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

© 2020 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.

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Yellow," the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

VisionLink is a trademark of Trimble Navigation Limited, registered in the United States and in other countries.

AEHQ8264 (03-2020)
(South America, Africa-Middle East,
Asia Pacific [excluding ANZ,
Japan, Korea], CIS)

