



D11

Dozer

Technical Specifications

Engine – U.S. EPA Tier 2 Equivalent

Engine Model	Cat® C32	
Bore	145 mm	5.7 in
Stroke	162 mm	6.4 in
Displacement	32.1 L	1,959 in ³
Engine Power		
Gross SAE J1995*		
Forward	670 kW	899 hp
Reverse	757 kW	1015 hp
ISO 14396		
Forward	657 kW	882 hp
Reverse	744 kW	998 hp
Net SAE J1349/ISO 9249		
Forward	634 kW	850 hp
Reverse	714 kW	957 hp

* Excludes all fan losses.

• Engine ratings apply at 1,800 rpm.

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

Engine – U.S. EPA Tier 4 Final/EU Stage V

Engine Model	Cat C32	
Bore	145 mm	5.7 in
Stroke	162 mm	6.4 in
Displacement	32.1 L	1,959 in ³
Engine Power		
Gross SAE J1995*		
Forward	670 kW	899 hp
Reverse	757 kW	1015 hp
ISO 14396		
Forward	658 kW	882 hp
Reverse	745 kW	999 hp
Net SAE J1349/ISO 9249		
Forward	634 kW	850 hp
Reverse	712 kW	955 hp

D11 Dozer Specifications

Fluid Capacities

Fuel Tank – Total Volume	1895 L	500 gal
Fuel Tank – Usable Volume	1800 L	475 gal
Cooling System Refill – Tier 4 Final Engine	177 L	46.8 gal
Cooling System Refill – Tier 2 Equivalent Engine	158 L	41.7 gal
Engine Crankcase Sump	133 L	35.1 gal
Power Train – Total Volume	454 L	120 gal
Power Train – Refill Volume	391 L	103.3 gal
Final Drives (each)	47 L	12.4 gal
Track Roller Frames (each)	94 L	24.8 gal
Pivot Shaft Oil	104 L	27.5 gal
Hydraulic System Tank Only	160 L	42.2 gal
Hydraulic System Tank and Chassis	245 L	64.7 gal
Hydraulic System Chassis + Blade and Ripper (Standard)	445 L	117.6 gal
Hydraulic System Chassis + Blade and Ripper (Carrydozer)	540 L	143.4 gal

Weights

Operating Weight	104 236 kg	229,800 lb
Shipping Weight	39 100 kg	86,200 lb
Operating Weight – CD	113 700 kg	250,665 lb
Shipping Weight – CD	39 200 kg	86,420 lb

- D11 Operating Weight: Includes blade tilt cylinders, coolant, lubricants, full fuel tank, ROPS, FOPS cab, 11U ABR bulldozer, single-shank ripper with pin-puller, fast fuel, 710 mm (28 in) ES shoes and operator.
- D11 Shipping Weight: Base machine chassis with cab and pivot shaft. Doesn't include ROPS, ripper, blade, track or roller frames.
- D11 CD Operating Weight: Includes lubricant, coolant, full fuel tank, 915 mm (36 in) extreme service shoes, D11 Carrydozer, single-shank ripper and operator.
- D11 CD Shipping Weight: Base machine chassis with cab and pivot shaft. Doesn't include ROPS, ripper, blade, track or roller frames.

Hydraulic Controls

Pump Type	Variable displacement piston pump	
Combined Pump Output (Implement)	670 L/min	177 gal/min
Tilt Flow	260 L/min	68 gal/min
Dozer Relief Valve Setting	28 500 kPa	4,130 psi
Tilt Cylinder Relief Valve Setting	26 700 kPa	3,870 psi
Ripper (Lift) Relief Valve Setting	28 500 kPa	4,130 psi
Ripper (Pitch) Relief Valve Setting	28 500 kPa	4,130 psi
Cylinder Sizing	Bore	
Blade Lift	170 mm	6.7 in
Blade Tilt (Standard)	254 mm	10 in
Blade Tilt (Extended Pitch) Left	279.6 mm	11 in
Blade Tilt (Extended Pitch) Right	254 mm	10 in
Blade Tilt (Carrydozer) Left	279.6 mm	11 in
Blade Tilt (Carrydozer) Right	254 mm	10 in
Ripper Shank Lift	235 mm	9.3 in
Ripper Shank Angle	180 mm	7.1 in
Cylinder Sizing	Stroke	
Blade Lift	1760 mm	69.3 in
Blade Tilt (Standard)	285.5 mm	11.2 in
Blade Tilt (Extended Pitch) Left	400 mm	15.7 in
Blade Tilt (Extended Pitch) Right	400 mm	15.7 in
Blade Tilt (Carrydozer) Left	1200 mm	47.2 in
Blade Tilt (Carrydozer) Right	1152 mm	45.4 in
Ripper Shank Lift	615 mm	24.2 in
Ripper Shank Angle	830 mm	32.7 in

- Pump output measured at 1,800 engine rpm and 6895 kPa (1,000 psi).
- Electro-hydraulic pilot valves assist operations of ripper and dozer controls.

Undercarriage

Shoe Type	Extreme Service	
Width of Shoe	710 mm	28 in
Width of Shoe – CD	915 mm	36 in
Shoes/Side	41	
Grouser Height	102 mm	4 in
Pitch	318 mm	12.5 in
Ground Clearance*	777 mm	30.6 in
Track Gauge	2896 mm	114 in
Length of Track on Ground	4444 mm	175 in
Ground Contact Area	6.3 m ²	9,781 in ²
Ground Contact Area – CD	8.1 m ²	12,605 in ²
Track Rollers/Side	8	
Number of Carrier Rollers	1 per side (optional)	

* Includes grouser height for total dimensions on hard surface.

- Sleeve Bearing Track with Positive Pin Retention.

Track Roller Frame

Oscillation	351 mm	13.8 in
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Steering and Brakes

Steering Controls	Fingertip Controls	
Steering Clutch Type	Pressure Applied Wet Disc	
Steering Clutch Disc Diameter	440 mm	17.3 in
Steering Clutch Disc Count	10	
Brake Type	Spring Applied Wet Disc	
Brake Disc Diameter	612 mm	24.1 in
Brake Disc Count	7	

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warning Potential = 1430). The system contains 2.1 kg of refrigerant which has a CO₂ equivalent of 3.003 metric tonnes.

Standards

ROPS/FOPS

- Rollover Protective Structure (ROPS) meets the following criteria: ISO 3471:2008.
- Falling Objects Protective Structure (FOPS) meets the following criteria: ISO 3449:2005 LEVEL II.

Sound

- The average dynamic spectator sound power level when “ISO 6395:2008” is used to measure the value for a machine is 116 dB(A). The measurement was conducted at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds. NOTE: The dynamic sound power level uncertainty is ± 2 dB(A).
- The average dynamic operator sound pressure level when “ISO 6396:2008” is used to measure the value for an enclosed cab is 78 dB(A). The measurement was conducted at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds. The cab was properly installed and maintained. The measurement was conducted with the cab doors and the cab windows closed. NOTE: The dynamic operator sound pressure level uncertainty is ± 2 dB(A).
- Hearing protection may be needed when the machine is operated with an open operator station for extended periods, in a noisy environment, or with a cab that is not properly maintained.

D11 Dozer Specifications

D11 Dozer

Tag link dozer coupling brings blade closer for better balance and control.

		Standard Pitch	Extended Pitch	Standard Pitch	Extended Pitch	Carrydozer
		11SU ABR	11SU ABR	11U ABR	11U ABR	11CD
Blade						
Blade Capacity (SAE J1265)	m ³ (yd ³)	27.2 (35.6)	27.2 (35.6)	34.4 (45.0)	34.4 (45.0)	43.6 (57.0)
Width with Blade (over end bits)	mm (in)	5584 (219.8)	5585 (219.9)	6340 (249.6)	6341 (249.6)	6704 (263.9)
Blade Height	mm (in)	2866 (112.8)	2867 (112.9)	2875 (113.2)	2876 (113.2)	3236 (127.4)
Digging Depth						
Blade Pitch – Full Racked Back (Carry)	mm (in)	566 (22.3)	438 (17.2)	566 (22.3)	438 (17.3)	708 (27.9)
Blade Pitch – Nominal	mm (in)	660 (26.0)	660 (26.0)	661 (26.0)	661 (26.0)	1394 (54.9)
Blade Pitch – Full Pitched Forward (Spread)	mm (in)	858 (33.8)	860 (33.8)	859 (33.8)	860 (33.9)	1756 (69.1)
Ground Clearance						
Blade Pitch – Full Racked Back (Carry)	mm (in)	1778 (70.0)	1921 (75.6)	1777 (70.0)	1920 (75.6)	1839 (72.4)
Blade Pitch – Nominal	mm (in)	1669 (65.7)	1669 (65.7)	1668 (65.7)	1668 (65.7)	990 (39.0)
Blade Pitch – Full Pitched Forward (Spread)	mm (in)	1424 (56.1)	1423 (56.0)	1423 (56.0)	1422 (56.0)	255 (10.0)
Maximum Tilt LH	mm (in)	1700 (66.9)	1587 (62.5)	1932 (76.1)	1806 (71.1)	1174 (46.2)
	Degrees	18.3	17.1	18.3	17.1	10.0
Maximum Tilt RH	mm (in)	1697 (66.8)	1607 (63.3)	1930 (76.0)	1829 (72.0)	1162 (45.7)
	Degrees	18.3	17.3	18.3	17.3	9.9
Cutting Edge Angle						
Blade Pitch – Full Racked Back (Carry)	Degrees	46.6	42.0	46.6	42.0	35.5
Blade Pitch – Nominal	Degrees	50.2	50.2	50.2	50.2	55.5
Blade Pitch – Full Pitched Forward (Spread)	Degrees	58.9	59.0	58.9	59.0	84.0
Blade Weight (Moldboard Only)	kg (lb)	10 210 (22,509)		12 960 (28,572)		17 401 (38,363)
Blade Weight*	kg (lb)	17 126 (37,756)	17 251 (38,032)	19 875 (43,817)	20 000 (44,092)	24 990 (55,093)
Total Operating Weight** (with blade and single-shank ripper)	kg (lb)	101 487 (223,740)	101 612 (224,016)	104 236 (229,801)	104 361 (230,076)	113 700 (250,665)

* Does not include hydraulic controls but includes blade cylinders, pusharms.

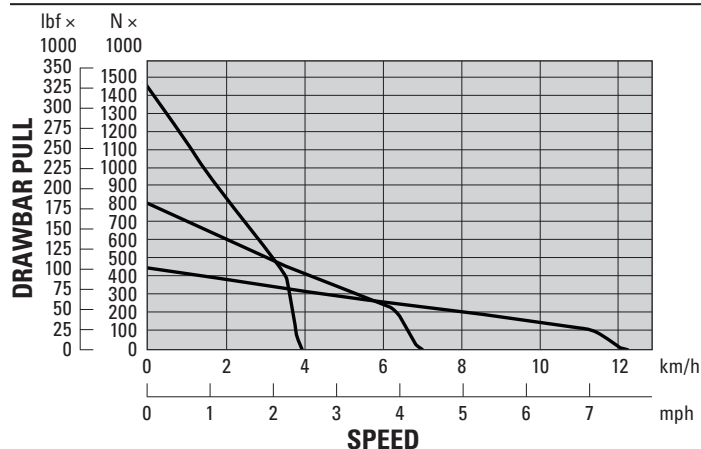
** D11 includes blade and single-shank ripper, hydraulic controls, blade cylinders, coolant, lubricants, full fuel tank, 710 mm (28 in) shoes, ROPS, FOPS cab, and operator. D11 CD includes blade and single-shank ripper, hydraulic controls, blade cylinders, coolant, lubricants, full fuel tank, 915 mm (36 in) shoes, ROPS, FOPS cab, and operator.

D11 Dozer Specifications

Transmission

1.0 Forward	4.0 km/h	2.5 mph
1.5 Forward	5.2 km/h	3.2 mph
2.0 Forward	7.0 km/h	4.4 mph
2.5 Forward	9.0 km/h	5.6 mph
3.0 Forward	12.2 km/h	7.6 mph
1.0 Reverse	4.8 km/h	3.0 mph
1.5 Reverse	6.2 km/h	3.9 mph
2.0 Reverse	8.5 km/h	5.3 mph
2.5 Reverse	10.9 km/h	6.8 mph
3.0 Reverse	14.7 km/h	9.1 mph
Type	Planetary powershift	
Transmission Clutch Diameter	533 mm	21 in

Drawbar Pull vs. Speed



Ripper

		D11			D11 CD	
		Single Shank	Single Shank	Multi Shank	Single Shank	Multi Shank
		Deep Ripping				
Overall Beam Width	mm (in)	— —	— —	3330 (131.1)	— —	3330 (131.1)
Maximum Penetration Force* (shank vertical)	kN (lb)	294 (66,000)	294 (66,110)	344 (77,350)	343 (77,130)	369 (82,875)
Maximum Penetration Depth (standard tip)	mm (in)	1612 (63.5)	2172 (85.5)	1100 (43.3)	1612 (63.5)	1100 (43.3)
Pryout Force (multi-shank ripper with one tooth)	kN (lb)	661 (148,510)	661 (148,510)	648 (145,640)	604 (135,760)	605 (136,080)
Maximum Clearance Raised (under tip, pinned in bottom hole)	mm (in)	1111 (43.7)	873 (34.4)	1090 (42.9)	1111 (43.7)	1090 (42.9)
Number of Shank Holes		4	3	2	4	2
Ripper Weight (no shank) (includes trans guard)	kg (lb)	8625 (19,015)	8625 (19,015)	9007 (19,857)	12 467 (27,485)	12 267 (27,044)
Tooth Gp Weight (each)	kg (lb)	1193 (2,630)	1403 (3,093)	697 (1,537)	1193 (2,630)	697 (1,537)
		With 11U ABR blade and ripper			With 11CD blade and ripper	
Total Operating Weight**	kg (lb)	104 236 (229,801)	104 446 (230,264)	105 516 (232,623)	113 700 (250,665)	114 398 (252,204)

*Shank pinned in deepest ripping position.

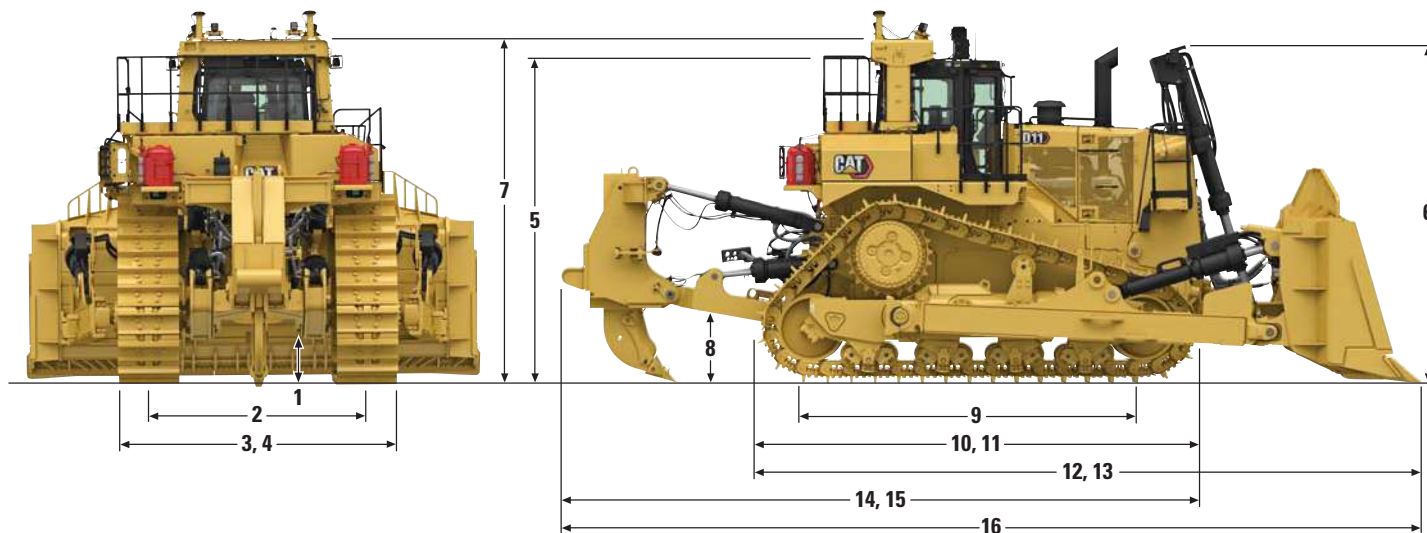
** D11 weight includes Abrasion U Blade and specified ripper with shank(s) installed, full fuel tank, 710 mm (28 in) shoes.

D11 CD weight includes Abrasion CD Blade and specified ripper with shank(s) installed, full fuel tank, 915 mm (36 in) shoes.

D11 Dozer Specifications

Dimensions

All dimensions are approximate.



	D11		D11 CD	
1 Ground Clearance*	798 mm	31.4 in	798 mm	31.4 in
2 Track Gauge	2896 mm	114 in	2896 mm	114 in
3 Width without Trunnions (standard shoe)	3782 mm	148.9 in	3806 mm	149.8 in
4 Width over Trunnions	4379 mm	172.4 in	4379 mm	172.4 in
5 Height (FOPS cab)*	4405 mm	173.4 in	4405 mm	173.4 in
6 Height (top of stack)*	4549 mm	179.1 in	4549 mm	179.1 in
7 Height (ROPS/canopy)*	4723 mm	185.9 in	4723 mm	185.9 in
8 Drawbar Height (center of clevis)*	942 mm	37.1 in	942 mm	37.1 in
9 Length of Track on Ground	4444 mm	175 in	4444 mm	175 in
10 Overall Length – Basic Tractor	6160 mm	242.5 in	6160 mm	242.5 in
11 Length – Basic Tractor with Drawbar	6160 mm	242.5 in	6160 mm	242.5 in
12 Length with SU-Blade**	8579 mm	337.8 in	8765 mm	345.1 in
13 Length with U-Blade	8641 mm	340.2 in	—	—
14 Length with Single-Shank Ripper	8107 mm	319.2 in	8107 mm	319.2 in
15 Length with Multi-Shank Ripper	8427 mm	331.8 in	8427 mm	331.8 in
16 Overall Length 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.

Note: D11 shown equipped with 710 mm (28 in) shoes.

D11 Standard and Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
OPERATOR ENVIRONMENT			Armrest – Adjustable	✓	
ROPS/FOPS, Sound-Suppressed Cab	✓		Interior LED Courtesy Lights	✓	
High-Definition Primary Touchscreen Display	✓		Interior Backlighting – Dimmable	✓	
MineStar™ Terrain Display		✓	Air Conditioning Condenser – Cab Mounted	✓	
Visibility – Rearview Mirrors	✓		Decelerator Pedal	✓	
Visibility – Dual Camera		✓	Controls – Blade – Electronic	✓	
Visibility – Four Cameras – 360-Degree View		✓	Controls – Ripper – Electronic	✓	
Visibility – Camera – Ripper Tip View		✓	Park Brake – Electronic	✓	
Air Conditioner and Heater with Automatic Climate Control	✓		Engine Speed Control Dial	✓	
Seat Belt, 76 mm (3 in) Retractable with Switch	✓		Cab Access – Blade Pusharm Steps and Grab Handle	✓	
Seat – Cloth with Air Suspension	✓		Cab Access – Powered Ladder		✓
Seat – Heated, Cooled, Adjustable Lumbar and Bolsters		✓	Fender Platform Guardrails	✓	
Window Wipers with Wash – Low, High, Intermittent	✓		Rear Cab Platform and Guardrails		✓
Adjustable Fingertip Steering Controls	✓		Site Communication Radio Mount	✓	
Entertainment Radio Ready (12V Power, Harness, Speakers)	✓		Cab Filter Precleaner		✓
Entertainment Radio – AM/FM, Aux Input and Bluetooth		✓	“OK to Start” Fluid Level Monitoring – Five Fluids	✓	
Cab Glass – Single-Pane Tinted Safety	✓		Machine Overspeed Protection	✓	
Cab Glass – Dual-Pane Laminated Impact Safety		✓	Fluid Level Monitoring Strategy	✓	
Cab Glass – High-Pressure Safety (40 psi/275 kPa)		✓	Slope and Side Slope Monitor	✓	
Window Sunscreen		✓	CAT TECHNOLOGY PRODUCTS		
Small Operator 5th Percentile Mounting Group		✓	VIMS	✓	
Cab Door – Right-Hand Swing	✓		Automated Blade Assist (ABA)	✓	
Cab Door – Left-Hand Swing		✓	AutoCarry™		✓
Access/Egress Lighting with Shutdown Timer	✓		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		✓

(continued on next page)

D11 Standard and Optional Equipment

Standard and Optional Equipment *(continued)*

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

	Standard	Optional		Standard	Optional
CAT POWER TRAIN			UNDERCARRIAGE		
Cat C32 Engine – U.S. EPA Tier 4 Final or Tier 2 Equivalent	✓		Suspension Type Undercarriage	✓	
Air to Air Aftercooler	✓		Track Guide	✓	
Air Filters – With Electronic Service Indicator	✓		Two-Piece Master Link	✓	
High-Performance Single-Plane Cooling Module	✓		Sleeve Bearing Track	✓	
Stator Clutch Torque Divider – Electronic Control	✓		Lifetime-Lubricated Rollers and Idlers	✓	
Powershift Transmission – Three-Speed Electronic Shift	✓		Hydraulic Track Adjusters	✓	
Enhanced Auto Shifting (EAS)	✓		Carrier Roller Ready	✓	
Clutch/Brake Steering – Electronic Control	✓		Equalizer Bar – Greased End Pin Bearings	✓	
Auto Engine Idle Shutdown	✓		Track Shoe (ES): 710/810/915 mm (28/32/36 inch) Width	✓	
Hydraulic Cooling Fan – Automatic Reversing		✓	Track Links – High Abrasion – Tall Link		✓
Controlled Throttle Shifting with Shift Management	✓		Track Links – Heavy Duty XL – Duralink		✓
Precleaner – Strata™ Tube Dust Ejector	✓		Track Shoe – Abrasion Resistant		✓
Precleaner – Turbine		✓	Track Shoe – Anti-Packing Round Hole		✓
Thermal Manifold and Turbo Shields	✓		Abrasion Rollers and Idlers		✓
Starting Aid – Engine Heater Group (120V or 240V)		✓	Cold Weather Rollers and Idlers		✓
Starting Aid – Automatic Ether		✓	Sound-Suppression Undercarriage		✓
Fuel Heater		✓	Carrier Roller		✓
Fuel Priming Pump – Automatic	✓		Carrier Roller – Cold Weather		✓
Fuel Water Separator	✓		HYDRAULICS		
Fuel Tank – 1895 liter (500 U.S. gal)	✓		Electronically Controlled, Load-Sensing Dozer Lift and Tilt	✓	
Final Drive Seal Guard – Open Labyrinth	✓		Electronically Controlled, Load-Sensing Ripper Lift and Pitch	✓	
Final Drive Seal Guard – Clamshell		✓	Carrydozer Hydraulics		✓
Radiator – High-Performance Copper Grommited Tube	✓		Dozer Blade Dual Tilt	✓	
Radiator – Aluminum Bar Plate (standard for Tier 2 Equivalent)		✓	Dozer Extended Blade Pitch		✓
Engine Oil Prelubrication System		✓	Electronically Enabled Blade, Quick Drop	✓	
FLUIDS			Ripper Pin Puller		✓
Coolant – Extended Life, Standard (–37° C/–25° F)	✓		Hydraulic Tank Return Screen	✓	
Coolant – Extended Life, Arctic (–51° C/–60° F)		✓	<i>(continued on next page)</i>		

D11 Standard and Optional Equipment

Standard and Optional Equipment (continued)

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

	Standard	Optional		Standard	Optional
ELECTRICAL			REAR ATTACHMENTS		
24V Electric Start, Dual Starters	✓		Ripper – Single Shank – with Pin Puller		✓
Alternator – 150-Amp	✓		Ripper – Single Shank – Pushblock with Pin Puller		✓
Batteries – 4 × 4,200-Amp Hour 12V	✓		Ripper – Single Shank – with Pin Puller – Heavy		✓
12V, 15-Amp Converter	✓		Ripper – Multi Shank (three shank)		✓
Battery Isolation	✓		Ripper – Multi Shank – Heavy (three shank)		✓
Battery Isolation – Dual Pole		✓	Ripper – Multi Shank – Leach Pad with Pin Puller		✓
Starter Control Isolation	✓		Ripper – Multi Shank – Coal (five shank)		✓
Starter Power Isolation		✓	Counterweight – Rear		✓
Backup Alarm	✓		Drawbar with Counterweight		✓
Lights, Engine Compartment	✓		BLADES		
Lights – Halogen – 13 Positions		✓	Semi-Universal (27.2 m ³ /35.6 yd ³)		✓
Lights – LED – 13 Positions	✓		Universal (34.4 m ³ /45.0 yd ³)		✓
Lights – Premium LED – 13 Positions		✓	Carrydozer (43.6 m ³ /57 yd ³)		✓
Light – Warning Strobe		✓	Reclamation Universal (42 m ³ /55 yd ³)		✓
SERVICE AND MAINTENANCE			Reclamation Universal (53.5 m ³ /70 yd ³)		✓
Ecology Fluid Drains – All Compartments	✓		Coal Universal (75 m ³ /98.0 yd ³)		✓
Hinged Bottom Guards	✓		Coal Universal (65 m ³ /85.5 yd ³)		✓
Sound Reduction Sealed Bottom Guards		✓	Black Blade Paint		✓
High-Speed Oil Change – Engine and Transmission	✓		Abrasion Liners and Guards		✓
Ground-Level Fast Fuel Fill	✓		OTHER		
Ground-Level Fluid Fill and Drain		✓	Fire Suppression Ready		✓
Ground-Level Electrical Service Station	✓		Fire Suppression Installed		✓
S·O·S SM Fluid Sampling Ports	✓				
Diagnostic Connector	✓				
Quick-Opening Cab Mounting Group		✓			
Sound Enclosure		✓			
Ripper Lubrication – Autolube with Ground-Level Fill		✓			
Ripper Lubrication – Grouped		✓			
CapSure™ Hammerless Ripper Tip and Shank Protectors	✓				
Anchorage Points	✓				



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