

C R A W L E R D O Z E R S

850C Series II



ENGINE	BOBC
Type	John Deere 601A with altitude-compensating turbocharger, after-cooled
Engine power	185 SAE net hp (138 kW) / 193 SAE gross hp (143 kW) @ 1,800 rpm
Cylinders	6
Displacement	499 cu. in. (8.1 L)
Fuel consumption, typical	4.4 to 3.8 gal./hr. (13.4 to 26.5 L/hr)
Maximum net torque	687 lb.-ft. (935 Nm) @ 1,300 rpm
Lubrication	pressure system with full-flow spin-on filter and oil-to-water cooler
Air cleaner	dual stage dry type with safety element, prefilter, and underhood restriction indicator
Electrical system	24 volt with 60-amp alternator
Cooling fan	blower

TRANSMISSION	automatic, dual-path, hydrostatic drive; load sensing feature automatically adjusts speed and power to match changing load conditions; each individually controlled track is powered by a variable displacement piston pump and motor combination; travel speeds (forward and reverse) infinite to 4.8 mph (8 to 77 km/hr); ground-speed selection buttons on single-lever steering and direction control; independently selectable reverse speed ratios 80%, 100%, 110%, or 120% of forward ground speed; decelerator pedal controls ground speed to dual stop double-reduction, planetary final drives transfer torque loads over three gear sets; mounted independent of track frames and lower track frames for isolation from shock loads
FINAL DRIVES	double-reduction, planetary final drives transfer torque loads over three gear sets; mounted independent of track frames and lower track frames for isolation from shock loads

STEERING	single-lever steering, direction, and ground speed control provides smooth material turns; full power brake, counterbalance, and infinitely variable track speeds provide unlimited maneuverability and optimal control; hydrostatic steering system eliminates steering clutches and brakes
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BRAKES	hydrostatic (dynamic) braking stops machine when the direction/steering control lever is moved to neutral, the decelerator is depressed to the end of travel, or the brake pedal is depressed
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AUTOMATIC PARKING BRAKE	this safety feature engages wet, multiple-disk brakes automatically whenever the engine stops; the operator applies the brake pedal, or the neutral start-lever lock is in stop position; machine cannot be operated with brake applied
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HYDRAULIC SYSTEM	open center
Pressure, system relief	2,250 psi (15.5 MPa)
Pump type	gear
Flow	44 gpm (166 L/min.) @ 2,100 rpm
Filter, return oil	18 micron
Control	standard - T-bar, two function / with 60-Hydraulic (PAT) dozer blade - T-bar, three function
Cylinders	heat treated, chrome plated, polished cylinder rods with hardened steel replaceable bushings/plungers
Cooling	oil-to-air heat exchanger

CAPACITIES (U.S.)	BOBC FT	BOBC WT	BOBC MSP
Fuel tank with lockable cap	52 gal. (240 L)	50 gal. (240 L)	52 gal. (240 L)
Cooling system with recovery tank	8 gal. (34 L)	9 gal. (34 L)	8 gal. (34 L)
Engine oil with spin-on filter	34 qt. (32.3 L)	34 qt. (32.3 L)	34 qt. (32.3 L)
Final drive (each)			
1st reduction	3.25 gal. (12.3 L) base / 4.25 gal. (16.0 L) PAT	4.25 gal. (16.0 L) base / 10.0 gal. (37.9 L) PAT	10.0 gal. (37.9 L) base / 10.0 gal. (37.9 L) PAT
2nd reduction	3.25 gal. (12.3 L)	3.25 gal. (12.3 L)	3.25 gal. (12.3 L)
Hydraulic system reservoir	21 gal. (80 L)	21 gal. (80 L)	21 gal. (80 L)
Hydrostatic transmission reservoir	27 gal. (102 L)	27 gal. (102 L)	27 gal. (102 L)

UNDERCARRIAGE	seven-roller track frame with front and rear track guides and sprocket guard; John Deere Dura-Trac™ features deep-heat-treated, sealed, and lubricated track links and through-hardened, sealed, and lubricated rollers for maximum wear resistance; sprockets are segmented, extreme-duty shoes are available for some models for severe applications
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	sealed and lubed	sealed and lubed	sealed and lubed
Chain	sealed and lubed	sealed and lubed	sealed and lubed
Grouser width	24 in. (610 mm)	30 in. (762 mm)	28 in. (695 mm) base / 34 in. (865 mm) PAT
Shoes, each side	40	40	40
Ground contact area	5,784 sq. in. (37,440 cm ²)	6,480 sq. in. (41,900 cm ²)	5,784 sq. in. (37,440 cm ²) base / 6,228 sq. in. (40,304 cm ²) PAT
Ground pressure	3.0 psi (20.8 kPa) base / 6.2 psi (43.2 kPa) PAT	5.2 psi (36.0 kPa) base / 6.8 psi (48.1 kPa) PAT	4.5 psi (31.4 kPa) base / 5.2 psi (38.1 kPa) PAT
Ground clearance, minimum			
With single-bar grouser (including grouser height)	16.9 in. (428 mm)	11.0 in. (280 mm)	16.0 in. (406 mm)
With swamp shoe (including grouser height)			10.0 in. (254 mm)
Length of track on ground	188 in. (4743 mm)	198 in. (5013 mm)	121 in. (3060 mm)
Track gauge, standard	24 in. (1880 mm) base / 62 in. (1580 mm) PAT	30 in. (2020 mm) base / 66 in. (2225 mm) PAT	28 in. (2225 mm) base / 30 in. (2225 mm) PAT
Oscillation at front roller	11.5 in. (292 mm)	11.5 in. (292 mm)	15.7 in. (398 mm)
Track rollers each side	7	7	7
Track pitch	8 in. (203 mm)	8 in. (203 mm)	8 in. (203 mm)

DIMENSIONS

	1 Overall height to roof	Overall height to exhaust stack	2 Tread depth with single bar grinders	Tread depth with ramp shoes	3 Ground clearance with grinders
			Moderate duty	Extreme duty	
850C LT	134.8 in. (3421 mm)	134.8 in. (3419 mm)	3.6 in. (91 mm)		10 in. (254 mm)
850C WT	134.8 in. (3421 mm)	134.8 in. (3419 mm)	3.6 in. (91 mm)		10 in. (254 mm)
850C LQP	134.8 in. (3421 mm)	134.8 in. (3419 mm)	3.6 in. (91 mm)	3.66 in. (93 mm)	10 in. (254 mm)

	4 Blade width	5 Blade height	6 Blade lift height	7 Blade dip ping depth	8 Blade lift (over 20 jack)	9 Overall length with blade	10 Overall width with blade angled
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850C LT

All-Hydraulic							
(PAT) Doser	148.0 in. (3750 mm)	48.3 in. (1227 mm)	36.0 in. (914 mm)	36.0 in. (914 mm)	16.5 in. (419 mm)	202.6 in. (5144 mm)**	100 in. (2578 mm)
Semi-U High Production	128.2 in. (3259 mm)	50.0 in. (1270 mm)	40.0 in. (1016 mm)	36.0 in. (914 mm)	26.7 in. (678 mm)	210.6 in. (5302 mm)*	N/A

*Optional extended drawbar adds 10.1 in. (257 mm).

**Optional extended drawbar adds 6.9 in. (225 mm).

850C WT

All-Hydraulic							
Doser (PAT)	150.0 in. (3813 mm)	48.3 in. (1227 mm)	36.0 in. (914 mm)	36.0 in. (914 mm)	16.5 in. (419 mm)	202.6 in. (5144 mm)**	144 in. (3658 mm)
Semi-U High Production	140.0 in. (3556 mm)	48.3 in. (1227 mm)	40.0 in. (1016 mm)	36.0 in. (914 mm)	24.8 in. (629 mm)	207.7 in. (5276 mm)***	N/A

**Optional extended drawbar adds 6.9 in. (225 mm).

***Optional extended drawbar adds 1 in. (25 mm).

850C LQP

Semi-U Low Profile and Straight blades available through Custom Engineering

All-Hydraulic							
(PAT) Doser	168.0 in. (4267 mm)	48.3 in. (1227 mm)	36.0 in. (914 mm)	36.0 in. (914 mm)	16.5 in. (419 mm)	216 in. (5491 mm)**	112 in. (2846 mm) / 144 in. (3658 mm)*
Semi-U High Production	136.0 in. (3454 mm)	48.3 in. (1227 mm)	43.0 in. (1093 mm)	19.0 in. (483 mm)	21.0 in. (533 mm)	202.0 in. (5142 mm)**	N/A

**Optional extended drawbar adds 6.9 in. (225 mm).

*With extended angle cylinder pin removed at blade

	11 Blade angle	12 Cut reach	13 Width over track	14 Cut reach	15 Cutting edge angle
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850C LT

All-Hydraulic (PAT) Doser	24 degrees	6.7 in. (170 mm)	106 in. (2692 mm)	17.0 in. (430 mm)	60 degrees
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850C WT

All-Hydraulic (PAT) Doser	24 degrees	6.5 in. (165 mm)	116 in. (2941 mm)	16.0 in. (407 mm)	60 degrees
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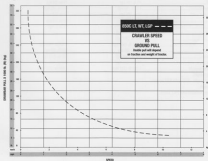
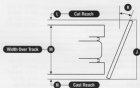
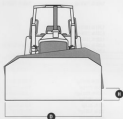
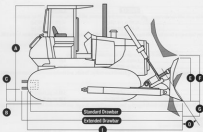
850C LQP

All-Hydraulic (PAT) Doser	26 degrees	6.7 in. (170 mm)	120 in. (3050 mm)	17.0 in. (430 mm)	60 degrees
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DRAWBAR PULL

850C

Maximum	70,000 lb. (318 kN)
At 1.2 mph (1.9 km/h)	35,200 lb. (158 kN)
At 2.0 mph (3.2 km/h)	25,200 lb. (112 kN)



SPECIFICATIONS

S&S OPERATING WEIGHTS

Base weights were compiled for units with standard equipment, rubber protective structures, fuel tank, and 175-lb (79-kg) operators.

	850C LT	850C MT	850C L&P
All-Hydraulic (PAT) Dozer	42,807 lb. (19,750 kg)	43,801 lb. (20,297 kg)	49,268 lb. (22,823 kg)
Semi-U (High Production)	48,485 lb. (21,922 kg)	47,870 lb. (21,899 kg)	43,048 lb. (19,561 kg)

Refer to Attachment and Custom Engineering Guide for details regarding Semi-U (Low Profile), Drift, and Mechanical Angle Blades for the 850C LT.

BLADE WEIGHTS

Includes push beams, trunnion mounts, straight-end bits, C-frames, angle and oil cylinders where applicable.

	850C LT	850C MT	850C L&P
All-Hydraulic (PAT) Dozer	6,622 lb. (3,009 kg)	6,838 lb. (3,093 kg)	7,208 lb. (3,270 kg)
Semi-U (High Production)	7,289 lb. (3,299 kg)	7,495 lb. (3,411 kg)	6,638 lb. (3,003 kg)

Refer to Attachment and Custom Engineering Guide for details regarding Semi-U (Low Profile), Drift, and Mechanical Angle Blades for the 850C LT.

BLADE CAPACITIES

	850C LT	850C MT	850C L&P
All-Hydraulic (PAT) Dozer	3.40 cu. yd. (4.13 m ³)	3.65 cu. yd. (4.48 m ³)	3.25 cu. yd. (3.78 m ³)
Semi-U (High Production)	7.44 cu. yd. (9.38 m ³)	8.15 cu. yd. (10.18 m ³)	7.18 cu. yd. (8.78 m ³)

Refer to Attachment and Custom Engineering Guide for details regarding Semi-U (Low Profile), Drift, and Mechanical Angle Blades for the 850C LT.

OPTIONAL OR SPECIAL EQUIPMENT

Complete push beam assemblies for straight or semi-U

blades, rakes, Stingers [®] , etc.	2,880 lb. (1,304 kg)*	2,792 lb. (1,264 kg)	2,298 lb. (1,042 kg)*
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Complete PAT dozer C-frame assembly

	3,468 lb. (1,573 kg)	2,468 lb. (1,117 kg)	3,688 lb. (1,684 kg)
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Tracks - Dura-Trac[™] lubricated chain with split main-

ter link

Single-bar sprockets			
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22-in. (560 mm) moderate duty	5,762 lb. (2,613 kg)	5,762 lb. (2,613 kg)	
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22-in. (560 mm) extreme duty	6,273 lb. (2,846 kg)	6,273 lb. (2,846 kg)	
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24-in. (610 mm) moderate duty	6,629 lb. (3,012 kg)	6,629 lb. (3,012 kg)	
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24-in. (610 mm) extreme duty	6,889 lb. (3,126 kg)*	6,889 lb. (3,126 kg)	7,944 lb. (3,599 kg)
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30-in. (762 mm) moderate duty		6,824 lb. (3,092 kg)*	
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30-in. (762 mm) moderate-duty			7,776 lb. (3,521 kg)**
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30-in. (762 mm) moderate-duty [†]			8,988 lb. (4,076 kg) [†]
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Swamp shoe - 36-in. (914 mm) [†]			11,482 lb. (5,208 kg) [†]
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Cab with pressurizer and heater

Without air conditioner	2,980 lb. (1,344 kg)	3,080 lb. (1,394 kg)	3,880 lb. (1,754 kg)
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With air conditioner	2,565 lb. (1,171 kg)	268 lb. (117 kg)	268 lb. (117 kg)
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ROPS	1,420 lb. (644 kg)**	1,420 lb. (644 kg)**	1,420 lb. (644 kg)**
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Rack guard, center section	442 lb. (201 kg)*	442 lb. (201 kg)*	442 lb. (201 kg)*
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Drawer, rigid	112 lb. (51 kg)	112 lb. (51 kg)	112 lb. (51 kg)
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Drawer, extended rigid	282 lb. (128 kg)*	282 lb. (128 kg)*	282 lb. (128 kg)*
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Umb floor (ROPS canopy and cab)	538 lb. (243 kg)	538 lb. (243 kg)	538 lb. (243 kg)
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Rear screen (ROPS canopy)	75 lb. (34 kg)	75 lb. (34 kg)	75 lb. (34 kg)
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Rear screen (cab with air conditioner)	118 lb. (53 kg)	118 lb. (53 kg)	118 lb. (53 kg)
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Side screens (ROPS canopy and cab)	76 lb. (33 kg)	76 lb. (33 kg)	76 lb. (33 kg)
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Cylinder base guards	85 lb. (38 kg)	85 lb. (38 kg)	85 lb. (38 kg)
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Pressurizer guards	15 lb. (7 kg)	15 lb. (7 kg)	15 lb. (7 kg)
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Track cleaner bars, front	273 lb. (123 kg)		
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Track cleaner bars, rear	490 lb. (224 kg)		
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Tank guard	1,100 lb. (500 kg)	1,100 lb. (500 kg)	1,100 lb. (500 kg)
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Lift cylinder guards	120 lb. (55 kg)	120 lb. (55 kg)	120 lb. (55 kg)
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Extreme-samba bottom guard	390 lb. (176 kg)	390 lb. (176 kg)	390 lb. (176 kg)
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Heavy-duty traverse case cover with doors	844 lb. (382 kg)**	844 lb. (382 kg)**	844 lb. (382 kg)**
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Soils housing mounted counterweights	1,882 lb. (852 kg)	1,882 lb. (852 kg)	1,882 lb. (852 kg)
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*Included in S&S operating weight.

**Included in S&S operating weight - ROPS with PAT option.

†Blat available with PAT option.

†Pyramid swamp shoes, not available with PAT option.

ADDITIONAL EQUIPMENT

	855C LT	855C MT	855C LSP		855C LT	855C MT	855C LSP
ENGINE				OPERATOR'S STATION			
Air cleaner, dual-stage separated type	●	●	●	Built-in diagnostics	●	●	●
Air cleaner restriction indicator	●	●	●	Quick cable retrieval / Release diagnostics for monitors, controller(s), wiring, gauges, sensors, etc.	●	●	●
Blower fan	●	●	●	Built-in Operator's Manual storage compartment and manual	●	●	●
Custom rearview/mir	●	●	●	Oil	●	●	●
Electric after start aid	●	●	●	Air conditioning, 32,000 BTU ¹ / Fresh air intake heater/pressure: 400 CFM, 45,000 BTU/hr ¹ (1.1) (30) conforms to SAE J1085, J1085D, Front window and low-clear windshield wipers/washers	●	●	●
Enclosed safety for guard (conforms to SAE J1088)	●	●	●	Deluxe suspension (coil) seat	●	●	●
Engine coolant - (84F) - (32°F)	●	●	●	Adjustable steering, high support, lumbar, height/weight, and low aft (conforms to SAE J1089)	●	●	●
Oil-to-water engine oil cooler	●	●	●	Deluxe suspension (coil) seat	●	●	●
Problems	●	●	●	Deluxe air suspension vinyl and cloth seat	●	●	●
Rear- or front filter	●	●	●	Electronic monitor system with audible and visual warning	●	●	●
Tractor restriction indicator	●	●	●	Air restriction / Coolant temperature / Engine oil pressure / Oil filter injection on / Fuel cut-off / Retards / Air restriction / Low alternator voltage / Transmission filter restriction / Transmission malfunctions / Transmission volume in neutral / Transmission temperature	●	●	●
Turbocharger	●	●	●	Engine rpm digital display (aftermarket)	●	●	●
Underhood muffler with vertical exhaust neck	●	●	●	Plasma	●	●	●
Water separator	●	●	●	Fuel gauge, electric, illuminated	●	●	●
Engine coolant heater, 1.500 watts, 120 volts	●	●	●	Ground-speed deceleration (brake and transmission) indicator for ROPS/ROPS	●	●	●
Pressure gauge	●	●	●	Hours, electric (conforms to SAE J954, J1440)	●	●	●
Radiator cool screen	●	●	●	Hourmeter, electric, illuminated (aftermarket)	●	●	●
Reverser fan	●	●	●	Interior-mounted rearview mirror (conforms to SAE J1089)	●	●	●
Chrome exhaust stack	●	●	●	Key start (with and without alarm) (aftermarket)	●	●	●
POWER TRAIN				OVERALL VEHICLE			
Automatic applied, hydraulic (pressure)-actuated park brake, pedal operated	●	●	●	Front-end hood	●	●	●
Oil-to-air transmission cooler	●	●	●	Heavy-duty, forged, bar-type grille	●	●	●
Dual-pump hydraulic transmission	●	●	●	Performance engine side shields	●	●	●
Heavy-duty front drive axle	●	●	●	Rear service door, lockable	●	●	●
Transmission neutral lock with starter safety switch	●	●	●	Reverser alarm	●	●	●
Transmission diagnostic test ports	●	●	●	Back-hitch to 87 (85A) or 111 (85A) (conforms to SAE J991, J1040)	●	●	●
Remote transmission diagnostic test ports	●	●	●	Vehicle protection	●	●	●
Witch drive	●	●	●	Engine access door / Fuel tank cap / Rear service doors / Storage panel / Copper-vent into battery (All-hydraulic (PNT) door blades) ¹	●	●	●
ELECTRICAL				STEERING			
Engine start safety-cutoff switch	●	●	●	Direct end-hitch	●	●	●
Dual battery, 36-amp, reserve capacity 520 CCA	●	●	●	AD-hydraulic (PNT)	●	●	●
Wash electrical disconnect switch, lockable	●	●	●	Direct AD (Single Production)	●	●	●
HYDRAULIC SYSTEM				WHEELS			
Oil-to-air hydraulic cooler	●	●	●	30-in. (762 mm) moderate-duty single-bar grouters (for 855C LT)	●	●	●
Left cylinders	●	●	●	30-in. (762 mm) moderate-duty single-bar grouters (5/8-in. for 855C LT PNT) (steak)	●	●	●
"T" ring face and fittings	●	●	●	30-in. (762 mm) moderate-duty single-bar grouters	●	●	●
Quick-dump hydraulic valve	●	●	●	34-in. (863 mm) moderate-duty single-bar grouters (with PNT) (steak)	●	●	●
With AD hydraulic (PNT) drive valve	●	●	●	36-in. (914 mm) moderate-duty single-bar grouters (for 855C LSP)	●	●	●
All-high axle (PNT) drive (steak) with grille "top-horn" plumbing	●	●	●	32-in. (813 mm) heavy-duty axle (PNT) with PNT (steak)	●	●	●
Hydraulic system	●	●	●	Both on full-height rear guards	●	●	●
Three-speed	●	●	●	LIGHTS			
With PNT (steak)	●	●	●	Low-beam driving/work and one rear working halogen, 55,000 candlepower (200/50 for each)	●	●	●
Four-speed (with PNT (steak))	●	●	●				
Auxiliary high axle (steak) to rear	●	●	●				
Oil sampling (steak)	●	●	●				
CHASSIS							
Chain guides	●	●	●				
Front idler and belt on sprocket chain guides	●	●	●				
Dashed and aluminum chain	●	●	●				
Oscillating track frame system	●	●	●				
Fixed/flip track-frame crossover system	●	●	●				
Tracks, Euro-Tac™ fabricated chain with split-master link	●	●	●				
32-in. (813 mm) steel moderate-duty single-bar grouters	●	●	●				
30-in. (762 mm) moderate-duty single-bar grouters (for 855C LT)	●	●	●				
30-in. (762 mm) moderate-duty single-bar grouters (5/8-in. for 855C LT PNT) (steak)	●	●	●				
30-in. (762 mm) moderate-duty single-bar grouters	●	●	●				
34-in. (863 mm) moderate-duty single-bar grouters (with PNT) (steak)	●	●	●				
36-in. (914 mm) moderate-duty single-bar grouters (for 855C LSP)	●	●	●				
32-in. (813 mm) heavy-duty axle (PNT) with PNT (steak)	●	●	●				
Both on full-height rear guards	●	●	●				

● Standard equipment ■ Optional or special equipment

¹See your John Deere dealer for further information.



See your dealer for a complete list of John Deere equipment. Some equipment is not available in all areas. Always use proper operation and maintenance procedures. Always use proper operation and maintenance procedures. Always use proper operation and maintenance procedures. Always use proper operation and maintenance procedures.

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