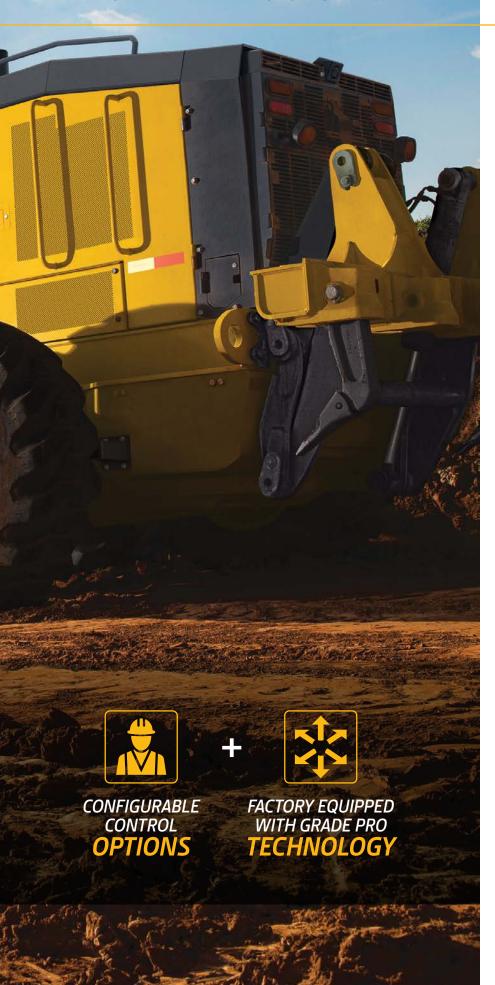








770 P-TIER 4WD MOTOR GRADER



Power that checks and balances

Balanced engine horsepower, torque, and blade pull produce generous power and lugging ability, to deliver more power to the ground, easily pull through tough spots, or tackle steep hills. John Deere motor graders are designed with optimal weight distribution over each axle, for outstanding balance and grading performance.

Freedom of choice

Our P-Tier Graders let you choose how work gets done. EH option provides fatigue-minimizing, armrest-mounted controls. Opt for state-of-the-art dual-joystick or fingertip controls that mimic the conventional control pattern. The best of both worlds is available with a field kit that allows you to easily swap between the two. Our P-Tier models also offer conventional lever-operated controls. And based on customer feedback, all models still have a steering wheel.

Count on cross slope

Standard on machines optioned with EH controls, cross slope maintains slopes by automatically adjusting one side of the blade while the operator controls the other. Cross slope can also be operated in "manual mode" as a slope meter. Automated cross slope simplifies holding a consistent slope by reducing operation to a single lever. Both dual-joystick and fingertip controls come equipped with cross slope.

Working in tandem

Operators will appreciate the outstanding visibility to the tandems on models optioned with EH controls while working around obstacles such as water mains and hubs. Crab steering positions the tandems on firm ground, reduces side drift, and increases side-slope stability.

Uptime is everything

All daily service points including fuel refill are grouped on the left side of the machine for convenient ground-level access. On the right, periodic-service points including the engine oil, hydraulic, transmission, differential, and fuel filter bank are within easy reach. Cooling package minus stacked coolers plus hinged swing-out fan simplifies core cleanout. Standard variable-speed hydraulically driven fan runs only as fast or as often as needed, to conserve power and fuel while reducing noise.

Premium productivity

Featuring a fully sealed bearing and pinion that run smoother and quieter, the industry-leading design of the optional premium circle reduces operating costs while delivering 40percent more torque and 15-percent more speed than a traditional circle. The premium circle eliminates having to compensate for wear in the circle and improves accuracy when using a grade-control system. And greasing intervals of only four zerks every 500 hours make the premium circle essentially maintenance free. Durable dual-input and proven single-input circles are also available.

Picture yourself here

All-around visibility is virtually unobstructed, with a clear view to the heel and toe as well as behind the moldboard. You can also see the area beneath the front axle, for increased awareness of oncoming obstacles. LCD hi-vis monitor provides intuitive, pushbutton access to vital machine data displayed via simple, easy-to-navigate icons and menus. High-resolution rearview camera with dedicated in-cab monitor comes standard.

Connected machines

John Deere construction equipment comes with in-base connectivity — free from subscriptions or annual renewals. Analyze critical machine data, track utilization, review diagnostic alerts, and more from **the**

John Deere Operations Center™.

The Operations Center also enables John Deere Connected Support™, which uses data from thousands of connected machines to proactively address issues before they arise. With your approval, your dealer can also remotely monitor machine health, diagnose problems, and even update machine software without a trip to the jobsite.*

*Availability varies by region and product. Options not available in every country.







PUT INTELLIGENCE TO WORK

With **Automation Suite** including industry-exclusive Auto-Pass, Blade Flip, and Auto-Shift PLUS, it's push-button easy to set yourself apart from your competition. Our automation advantages are available from the factory when the motor grader is equipped with electrohydraulic (EH) controls, or they can be added to the machine in the future:

- Available with any control configuration, Auto-Shift PLUS allows operators to work without using the inching pedal.
- Auto-Articulation lets the operator increase the maneuverability of coordinated steering and articulation while using only the joystick-steering function to steer and operate other necessary functions without manually articulating the machine.
- Machine-Damage Avoidance eliminates the risk of blade damage to machine structures during any operation.
- Auto-Pass makes grading easy by automatically placing the blade on the ground and activating the grade-control system (when equipped) at the start of the pass, then automatically raising and resetting the blade at the end of it.
- Use Blade Flip to automatically mirror the circle to a preset angle.
- Easily prepare the machine for transport with Machine Presets.
 Stow the blade and ripper, turn on the lights including the hazards, and enable Auto-Shift with one push-button press.

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770 P-TIER MOTOR GRADER SPECIFICATIONS



While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.

Engine	770 P-TIER			
Manufacturer and Model	John Deere PowerTech™ PSS 9.0L	John Deere PowerTech™ Plus 9.0L	John Deere PowerTech™ 9.0L	
Non-Road Emission Standard	EPA Final Tier 4 (FT4)/EU Stage V	EPA Tier 3/EU Stage IIIA	EPA Tier 2/EU Stage II	
Cylinders	6	6	6	
Displacement	9.0 L (548 cu. in.)	9.0L (548 cu. in.)	9.0L (548 cu. in.)	
Net Engine Power				
Gear 1	149 kW (200 hp)	149 kW (200 hp)	149 kW (200 hp)	
Gear 2	157 kW (210 hp)	157 kW (210 hp)	157 kW (210 hp)	
Gear 3	168 kW (225 hp)	164 kW (220 hp)	164 kW (220 hp)	
Gear 4	172 kW (230 hp)	168 kW (225 hp)	168 kW (225 hp)	
Gear 5	179 kW (240 hp)	172 kW (230 hp)	172 kW (230 hp)	
Gear 6	183 kW (245 hp)	179 kW (240 hp)	179 kW (240 hp)	
Gear 7	187 kW (250 hp)	183 kW (245 hp)	183 kW (245 hp)	
Gear 8	190 kW (255 hp)	187 kW (250 hp)	187 kW (250 hp)	
Net Peak Torque	1314 Nm (969 lbft.)	1288 Nm (950 lbft.)	1288 Nm (950 lbft.)	
Net Torque Rise	54%	55%	55%	
Aspiration	Series turbocharged, charge-air cooled	Turbocharged, charge-air cooled	Turbocharged, charge-air cooled	
Lubrication	Full-flow spin-on filter and integral	Full-flow spin-on filter and integral	Full-flow spin-on filter and integral	
	cooler	cooler	cooler	
Air Cleaner With Restriction Indicator	Dual element, dry	Dual element, dry	Dual element, dry	
Cooling		,,,,,	,,,,,	
Engine Coolant, Extended Life, Rating	-37 dea. C (-34 dea. F)			
Powertrain	2. 22g. 2 (2 : 22g. :)			
Transmission	Direct-drive John Deere PowerShift Plus	', modulated shift-on-the-go, Event-Base	d Shifting (EBS), inching pedal; independen	
		ation and cooling system with 117-L/min.		
Gears		<u>-</u>	12. 2b 2 bb	
Forward	8			
Reverse	8			
Maximum Travel Speeds	No tire slip at 2,180 rpm, 14.0-R24 tires	Maximum Travel Speeds (continued)	No tire slip at 2,180 rpm, 14.0-R24 tires	
Gear 1	4.0 km/h (2.5 mph)	Gear 5	16.4 km/h (10.2 mph)	
Gear 2	5.6 km/h (3.5 mph)	Gear 6	23.2 km/h (14.4 mph)	
Gear 3	7.7 km/h (4.8 mph)	Gear 7	32.3 km/h (20.1 mph)	
Gear 4	10.9 km/h (6.8 mph)	Gear 8	45.5 km/h (28.3 mph)	
Front Axle	Heavy-duty welded fabrication	1		
Oscillation (total)	32 deg.			
Wheel Lean Angle (each direction)	20 deg.			
Differentials		h type can be applied on-the-go; selectal	ble manual or automatic differential lock	
Steering (all models include				
steering wheel)	All-hydraulic power-frame articulation for maneuverability and productivity; crab steering reduces side drift, positions tandems on firm ground, and increases side-slope stability; return-to-straight control included in Grade Pro option			
Turning Radius (front steer and	7.21 m (284 in.) (23 ft. 8 in.)			
articulation)	72 · · · · (20 · · · · ·) (23 · · · · 0 · · · ·)			
Articulation (both right and left)	22 deg.			
Final Drives	Inboard-mounted planetary sealed in cooled, filtered oil			
Brakes			ized, cooled, filtered oil; both independent	
	systems effective on all 4 tandem wheels		.224, 200,24,2724 0, 201	
Primary and Secondary Brakes	Hydraulically actuated, inboard of tandem pivot, self-adjusting, sealed in cooled and filtered oil, multi-disc (ISO 3450)			
Parking Brake	Automatically spring applied, hydraulically released, oil cooled, self-adjusting (ISO 3450)			
Hydraulics	a.co.maticany spring applica, nyaradical			
Type	Closed-center pressure-compensated to	ad-sensing (PCLS), variable-displacement	t niston numn	
Maximum Pump Flow	212 L/min. (56 gpm)	ad sensing it cest, variable-displacement	r piston punip	
	18 961 kPa (2,750 psi)			
Maximum System Pressure	90 cm ³ (5.5 cu. in.)			
Pump Displacement	30 cm (3.3 cu. m.)			

770 P 770 P-TIER MOTOR GRADER SPECIFICATIONS



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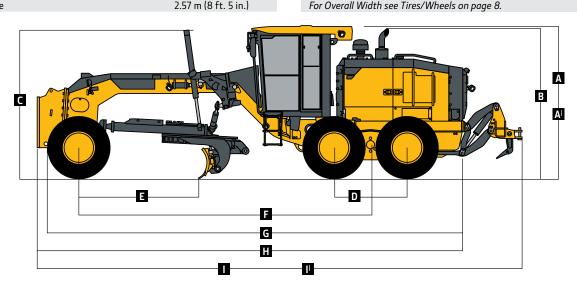
Blade Function	770 P-TIER			
All-hydraulic, industry-standard lever place	ement of blade-function controls; includes float position; 7	discrete saddle positions		
Blade Range				
Lift Above Ground	490 mm (19.3 in.)	490 mm (19.3 in.)		
Blade Side Shift (right or left)	683 mm (26.9 in.)			
Pitch at Ground Line	032 11111 (2012 1117)			
Forward	42 deg.			
Back	5 deg.			
Shoulder Reach Outside Wheels (frame	2083 mm (82.0 in.) (6 ft. 10 in.)			
straight, right or left)	2003 11111 (02.0 111.) (0 11. 10 111.)			
Bank Cut Angle (right or left)	90 deg.			
Blade Pull	50 deg.			
At Maximum Operating Weight	15 501 kg /2/, 172 lb \			
	15 501 kg (34,173 lb.)			
Electrical				
Solid-state load center and sealed-switch	EDA ET / /EU C	EDAT: 2/5U.S. WA LEDAT: 2/5U.S. W		
module	EPA FT4/EU Stage V	EPA Tier 3/EU Stage IIIA and EPA Tier 2/EU Stage II		
Voltage	24 volt	24 volt		
Number of Batteries	2	2		
Battery Capacity	1,400 CCA	1,010 CCA		
Reserve Capacity	440 min.	190 min.		
Amp-Hour Rating	224 amp-hour	110 amp-hour		
Alternator Rating				
Base	130 amp	100 amp		
Optional	200 amp	130 amp		
Lights	LED driving lights; 2 high- and 2 low-beam LED headlig	hts; front and rear LED turn signals and marker lights; LED brak		
•	and hazard warning lights	·		
Mainframe				
Type	Welded box construction			
Width (minimum)	307 mm (12.1 in.)			
Height (minimum)	307 mm (12.1 in.)			
Thickness	30,,			
Side	16 mm (0.63 in.)			
Top and Bottom Plate	23 mm (0.89 in.)			
Modulus	25 111111 (0.05 111.)			
	1770 3 (100)			
Minimum Vertical Section	1770 cm³ (108 cu. in.)			
Average Vertical Section at Saddle	2245 cm³ (137 cu. in.)			
Draft Frame (drawbar)				
	ness with double ball-and-socket pivot connection			
Circle				
Welded construction, heat-treated, machir	ned for flatness			
	Standard Circle	Premium Circle		
Circle Diameter	1524 mm (60 in.)	1524 mm (60 in.)		
Rotation	360 deg.	360 deg.		
Surface	Quick-change bronze or nylon wear inserts	Sealed and lubricated roller element slewing bearing		
Pinion/Ring-Gear Connection	Adjustable backlash and open for serviceability	No adjustment; fully sealed and lubricated		
Drive	Hydraulic motor and worm gear with positive lock	Hydraulic motor and worm gear with positive lock		
Slip Clutch	Option	Standard		
Circle Side Shift (right and left)	787 mm (31 in.)	787 mm (31 in.)		
Moldboard	, o, min ich mit	, o, ann (2) m.)		
	ength, wear-resistant, high-carbon steel and reversible end	hite: blade side shift wear system includes quick shapes		
		bits, biade side-sillit wear system includes quick-change		
replaceable wear inserts and quick-adjust j				
Base Length	3.66 m (144 in.) (12 ft. 0 in.)			
Height (measured along arc, including	610 mm (24 in.)			
cutting edge)				
Thickness	22 mm (0.88 in.)			

770 P-TIER

Cutting Edge	770 P-TIER			
Dura-Max™ through-hardened steel edge				
Thickness	16 mm (0.62 in.)			
Width	152 mm (6 in.)			
Scarifiers	132 11111 (0 111.)			
Scarniers	Fig. 1		N4: 4	
T	Front	. I b. J P. C	Mid-mount	N. C. M.
Туре	V-type toolbar with 2 pitch positions a	nd hydraulic float	3-pitch positions a	
Width of Cut	1.20 m (48 in.) (4 ft. 0 in.)		1.19 m (46.7 in.) (3 f	t. 11 in.)
Number of Shanks/Teeth	5 (maximum capacity 9)		11	
Lift Above Ground	589 mm (23.2 in.)		335 mm (13.2 in.)	
Maximum Depth	335 mm (13.2 in.)		325 mm (12.8 in.)	
Shank				
Spacing	146 mm (5.75 in.)		117 mm (4.6 in.)	
Size	25 x 76 mm (1 x 3 in.)		25 x 76 mm (1 x 3 ir	1.)
Front Lift Group (Balderson-style)				
Parallel linkage, mechanical pins, and hydrauli	ic float			
Lift	ic float			
Above Ground (top of tube)	1864 mm (73.4 in.)			
	988 mm (38.9 in.)			
Range	988 mm (38.9 in.)			
Rear Ripper/Scarifier				
Parallel linkage, with NeverGrease pin joints, l				
	Ripper		Scarifier	
Width of Cut	2.21 m (87.2 in.) (7 ft. 3 in.)		2.18 m (86 in.) (7 ft	
Number of Shanks/Teeth	3 (maximum capacity 5)		None standard (ma	aximum capacity 9)
Lift Above Ground	602 mm (23.7 in.)		810 mm (31.9 in.)	
Maximum Depth	426 mm (16.8 in.)		323 mm (12.7 in.)	
Force				
Penetration	9616 kg (21,200 lb.)		_	
Pry-Out	12 730 kg (28,066 lb.)		_	
Shank Size	61.5 x 133 mm (2.42 x 5.25 in.)		25 x 76 mm (1 x 3 ir	1)
Operator Station	01.5 x 155 11111 (2. 12 x 5.25 111.)		23 % 70 11111 (1 % 3 11	,
Low-profile cab with ROPS (ISO 3471-2008) as	nd FOPS (ISO 3449-2005)			
Tires/Wheels	110 1 3 (130 3443-2003)			
THES/ WHEELS	14R24 on 254-mm (10 in.) Rim	17.5R25 on 356-mm	/1/. in Dim	550/65R25 on 432-mm (17 in.) Rim
Wheel Tread on Ground	2.08 m (82.0 in.)	2.16 m (85.0 in.)	(14 111.) 1(1111	2.21 m (87.0 in.)
Overall Width	2.49 m (98.0 in.)	2.64 m (104.0 in.)		2.82 m (111.0 in.)
Ground Clearance (front axle)	587 mm (23.1 in.)	587 mm (23.1 in.)		612 mm (24.1 in.)
Serviceability				
Refill Capacities	EPA Final Tier 4 (FT4)/EU Stage V			e IIIA and EPA Tier 2/EU Stage II
Fuel Tank	416.5 L (110 gal.)		416.5 L (110 gal.)	
Diesel Exhaust Fluid (DEF) Tank	22.5 L (6 gal.)		_	
Cooling System	55.0 L (14.5 gal.)		48.5 L (12.8 gal.)	
Engine Oil With Filter	28.4 L (7.5 gal.)		20 0 1 /7/ 1 \	
Transmission Fluid			28.0 L (7.4 gal.)	
	28.4 L (7.5 gal.)		28.0 L (7.4 gal.) 28.4 L (7.5 gal.)	
Differential Housing	28.4 L (7.5 gal.) 38.0 L (10 gal.)			
	38.0 L (10 gal.)		28.4 L (7.5 gal.) 38.0 L (10 gal.)	
Differential Housing Tandem Housings (each) Circle Gearbox	38.0 L (10 gal.) 74.0 L (19.5 gal.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.)	
Tandem Housings (each) Circle Gearbox	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.)	
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir	38.0 L (10 gal.) 74.0 L (19.5 gal.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.)	
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir Operating Weights	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.)	
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir Operating Weights With Full Fuel Tank, 3.66-m x 610-mm x	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.)	
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir Operating Weights With Full Fuel Tank, 3.66-m x 610-mm x 22-mm (12 ft. x 24 in. x 0.88 in.) Moldboard	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.)	
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir Operating Weights With Full Fuel Tank, 3.66-m x 610-mm x 22-mm (12 ft. x 24 in. x 0.88 in.) Moldboard With 152-mm x 16-mm (6 in. x 1/2 in.) Cutting	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.)	
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir Operating Weights With Full Fuel Tank, 3.66-m x 610-mm x 22-mm (12 ft. x 24 in. x 0.88 in.) Moldboard With 152-mm x 16-mm (6 in. x ¾ in.) Cutting Edges, 14R24 L2 Tires, and 79-kg (175 lb.)	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 60.5 L (16 gal.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 53.0 L (14 gal.)	in IIIA and EDA Tion 2/EU Stars II
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir Operating Weights With Full Fuel Tank, 3.66-m x 610-mm x 22-mm (12 ft. x 24 in. x 0.88 in.) Moldboard With 152-mm x 16-mm (6 in. x 1/18 in.) Cutting Edges, 14R24 L2 Tires, and 79-kg (175 lb.) Operator	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 60.5 L (16 gal.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 53.0 L (14 gal.)	e IIIA and EPA Tier 2/EU Stage II
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir Operating Weights With Full Fuel Tank, 3.66-m x 610-mm x 22-mm (12 ft. x 24 in. x 0.88 in.) Moldboard With 152-mm x 16-mm (6 in. x 1/2 in.) Cutting Edges, 14R24 L2 Tires, and 79-kg (175 lb.) Operator Front	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 60.5 L (16 gal.) EPA FT4/EU Stage V 4320 kg (9,525 lb.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 53.0 L (14 gal.)	-
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir Operating Weights With Full Fuel Tank, 3.66-m x 610-mm x 22-mm (12 ft. x 24 in. x 0.88 in.) Moldboard With 152-mm x 16-mm (6 in. x 1/18 in.) Cutting Edges, 14R24 L2 Tires, and 79-kg (175 lb.) Operator Front Rear	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 60.5 L (16 gal.) EPA FT4/EU Stage V 4320 kg (9,525 lb.) 12 095 kg (26,665 lb.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 53.0 L (14 gal.) EPA Tier 3/EU Stag 4330 kg (9,545 lb.) 11 451 kg (25,245 lb	.)
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir Operating Weights With Full Fuel Tank, 3.66-m x 610-mm x 22-mm (12 ft. x 24 in. x 0.88 in.) Moldboard With 152-mm x 16-mm (6 in. x 1/18 in.) Cutting Edges, 14R24 L2 Tires, and 79-kg (175 lb.) Operator Front Rear Total	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 60.5 L (16 gal.) EPA FT4/EU Stage V 4320 kg (9,525 lb.) 12 095 kg (26,665 lb.) 16 416 kg (36,190 lb.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 53.0 L (14 gal.)	.)
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir Operating Weights With Full Fuel Tank, 3.66-m x 610-mm x 22-mm (12 ft. x 24 in. x 0.88 in.) Moldboard With 152-mm x 16-mm (6 in. x 1/18 in.) Cutting Edges, 14R24 L2 Tires, and 79-kg (175 lb.) Operator Front Rear Total Typical Operating Weight With Front Push Block	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 60.5 L (16 gal.) EPA FT4/EU Stage V 4320 kg (9,525 lb.) 12 095 kg (26,665 lb.) 16 416 kg (36,190 lb.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 53.0 L (14 gal.) EPA Tier 3/EU Stag 4330 kg (9,545 lb.) 11 451 kg (25,245 lb	.)
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir Operating Weights With Full Fuel Tank, 3.66-m x 610-mm x 22-mm (12 ft. x 24 in. x 0.88 in.) Moldboard With 152-mm x 16-mm (6 in. x 1/18 in.) Cutting Edges, 14R24 L2 Tires, and 79-kg (175 lb.) Operator Front Rear Total Typical Operating Weight With Front Push Block Rear Ripper/Scarifier, and Other Equipment	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 60.5 L (16 gal.) EPA FT4/EU Stage V 4320 kg (9,525 lb.) 12 095 kg (26,665 lb.) 16 416 kg (36,190 lb.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 53.0 L (14 gal.) EPA Tier 3/EU Stag 4330 kg (9,545 lb.) 11 451 kg (25,245 lb 15 780 kg (34,790 l	.) b.)
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir Operating Weights With Full Fuel Tank, 3.66-m x 610-mm x 22-mm (12 ft. x 24 in. x 0.88 in.) Moldboard With 152-mm x 16-mm (6 in. x 1/18 in.) Cutting Edges, 14R24 L2 Tires, and 79-kg (175 lb.) Operator Front Rear Total Typical Operating Weight With Front Push Block Rear Ripper/Scarifier, and Other Equipment Front	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 60.5 L (16 gal.) EPA FT4/EU Stage V 4320 kg (9,525 lb.) 12 095 kg (26,665 lb.) 16 416 kg (36,190 lb.) ck,		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 53.0 L (14 gal.) EPA Tier 3/EU Stag 4330 kg (9,545 lb.) 11 451 kg (25,245 lb 15 780 kg (34,790 l) b.)
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir Operating Weights With Full Fuel Tank, 3.66-m x 610-mm x 22-mm (12 ft. x 24 in. x 0.88 in.) Moldboard With 152-mm x 16-mm (6 in. x 1/18 in.) Cutting Edges, 14R24 L2 Tires, and 79-kg (175 lb.) Operator Front Rear Total Typical Operating Weight With Front Push Block Rear Ripper/Scarifier, and Other Equipment	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 60.5 L (16 gal.) EPA FT4/EU Stage V 4320 kg (9,525 lb.) 12 095 kg (26,665 lb.) 16 416 kg (36,190 lb.) ck, 5588 kg (12,320 lb.) 13 837 kg (30,505 lb.)		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 53.0 L (14 gal.) EPA Tier 3/EU Stag 4330 kg (9,545 lb.) 11 451 kg (25,245 lb 15 780 kg (34,790 lb.) 13 186 kg (29,070 lb.)) b.)) b.)
Tandem Housings (each) Circle Gearbox Hydraulic Reservoir Operating Weights With Full Fuel Tank, 3.66-m x 610-mm x 22-mm (12 ft. x 24 in. x 0.88 in.) Moldboard With 152-mm x 16-mm (6 in. x 1/18 in.) Cutting Edges, 14R24 L2 Tires, and 79-kg (175 lb.) Operator Front Rear Total Typical Operating Weight With Front Push Block Rear Ripper/Scarifier, and Other Equipment Front	38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 60.5 L (16 gal.) EPA FT4/EU Stage V 4320 kg (9,525 lb.) 12 095 kg (26,665 lb.) 16 416 kg (36,190 lb.) ck,		28.4 L (7.5 gal.) 38.0 L (10 gal.) 74.0 L (19.5 gal.) 5.7 L (1.5 gal.) 53.0 L (14 gal.) EPA Tier 3/EU Stag 4330 kg (9,545 lb.) 11 451 kg (25,245 lb 15 780 kg (34,790 l) b.)) b.)

Option Weights	770 P-TIER
Moldboards With Through-Hardened Dura-Max Cutti	ng Edge
3.66 m x 610 mm x 22 mm (12 ft. x 24 in. x % in.)	0 kg (0 lb.)
With 152-mm x 16-mm (6 in. x ¾ in.) Cutting Edge	-
and 16-mm (⅓ in.) Hardware	
3.66 m x 610 mm x 22 mm (12 ft. x 24 in. x 1/8 in.)	45 kg (99 lb.)
With 203-mm x 19-mm (8 in. x ¾ in.) Cutting Edge	_
and 16-mm (⅓ in.) Hardware	
3.96 m x 686 mm x 25 mm (13 ft. x 27 in. x 1 in.)	180 kg (396 lb.)
With 203-mm x 19-mm (8 in. x $\frac{3}{4}$ in.) Cutting Edge	
and 16-mm (⅓ in.) Hardware	
4.27 m x 610 mm x 22 mm (14 ft. x 24 in. x % in.)	105 kg (231 lb.)
With 152-mm x 16-mm (6 in. x % in.) Cutting Edge	
and 16-mm (% in.) Hardware	
4.27 m x 610 mm x 22 mm (14 ft. x 24 in. x % in.)	157.4 kg (347 lb.)
With 203-mm x 19-mm (8 in. x ¾ in.) Cutting Edge	
and 16-mm (% in.) Hardware	2511 /557 11 \
4.27 m x 686 mm x 25 mm (14 ft. x 27 in. x 1 in.)	251 kg (554 lb.)
With 203-mm x 19-mm (8 in. x ¾ in.) Cutting Edge	
and 16-mm (% in.) Hardware	261 kg (E7E lb.)
4.27 m x 686 mm x 25 mm (14 ft. x 27 in. x 1 in.)	261 kg (575 lb.)
With 203-mm x 19-mm (8 in. x $\frac{3}{4}$ in.) Cutting Edge and 19-mm ($\frac{3}{4}$ in.) Hardware	
Extensions, 610 mm (2 ft.) (right or left)	
For Use With 610-mm (24 in.) Moldboards	116 kg (255 lb.)
For Use With 686-mm (27 in.) Moldboards	120 kg (265 lb.)
Overlay End Bits, Reversible (one pair)	120 kg (203 lb.)
For 152-mm (6 in.) Cutting Edge	19.5 kg (43 lb.)
For 203-mm (8 in.) Cutting Edge	23 kg (51 lb.)
Heavy-Duty Dual-Input Circle-Drive Gearbox	14 kg (31 lb.)
Circle-Drive Slip Clutch	9 kg (20 lb.)
Circle	-
Standard	0 kg (0 lb.)
Premium	289 kg (638 lb.)
Moldboard Impact-Absorption System	43 kg (95 lb.)
Ripper/Scarifier, Rear Mounted With Hitch and	1139 kg (2,510 lb.)
Ripper Shanks (3)	
Scarifier Shanks With Teeth (9 for rear ripper/scarifier)	
Ripper Shanks and Teeth (2)	63 kg (139 lb.)
Rear Counterweight With Integral Rear Hitch	727 kg (1,603 lb.)
Rear Hitch	54.4 kg (120 lb.)
Push Block, Front	1338 kg (2,950 lb.)
Scarifier 1 1 (5)	0211 /1022 !! \
Front Mounted With Teeth (5)	831 kg (1,833 lb.)
Machine Dimensions	210 m /10 f+ F:n \
A Height to Top of Cab	3.18 m (10 ft. 5 in.)
A! Height to Top of Full-Height Cab B Height to Top of Exhaust	3.40 m (11 ft. 2 in.) 3.10 m (10 ft. 2 in.)
B Height to Top of Exhaust C Height to Top of Blade-Lift Cylinders	3.05 m (10 ft. 2 in.)
D Tandem Axle Spacing	1.54 m (5 ft. 1 in.)
E Blade Base	2.57 m (8 ft. 5 in.)
_ D.000 D000	2.57 111 (0 1 1. 5 111.)

Option Weights (continued)	770 P-TIER				
Scarifier (continued)					
Mid-Mount With Teeth (11)	1481 kg (3,265 lb.)				
Front Lift Group (Balderson-style)	763 kg (1,682 lb.)				
Tires					
14.00-24, 12 PR G2	-220.4 kg (-486 lb.)				
17.5-25, 12 PR G2/L2	–106 kg (–234 lb.)				
14.00-R24, Radial, G2/L2 General Purpose	0 kg (0 lb.)				
14.00-R24, Radial, G2/L2 Snow	40.8 kg (90 lb.)				
17.5-R25, Radial, L2 General Purpose	51.7 kg (114 lb.)				
17.5-R25, Radial, G2/L2 Snow	95.3 kg (210 lb.)				
17.5-R25, Radial, G3/L3 General Purpose	141.5 kg (312 lb.)				
550/65R25 XLD70 G3/L3 Radial, General Purpose	495.3 kg (1,092 lb.)				
1-Piece Rims	+55.5 kg (1,052 lb.)				
229 mm x 610 mm (9 in. x 24 in.)	0 kg (0 lb.)				
330 mm x 635 mm (13 in. x 25 in.)	65.3 kg (144 lb.)				
Multi-Piece Rims	03.3 kg (144 lb.)				
254 mm x 610 mm (10 in. x 24 in.)	179.6 kg (396 lb.)				
356 mm x 635 mm (14 in. x 25 in.)	266.7 kg (588 lb.)				
432 mm x 635 mm (17 in. x 25 in.)	321.1 kg (708 lb.)				
Fenders	321.1 kg (700 lb.)				
Front	99 kg (218 lb.)				
Rear	141 kg (310 lb.)				
Low Cab With Opening Front and Side Windows	14.5 kg (32 lb.)				
Tall Cab	14.5 kg (52 lb.)				
With Fixed Front and Side Windows	58.5 kg (129 lb.)				
With Opening Front and Side Windows	73 kg (161 lb.)				
Premium Air-Suspension, Heated Seat With Adjustable	-				
Arm- and Headrests	15 kg (20 lb.)				
Coolant Heater	4 kg (9 lb.)				
Quick Service	11 kg (24 lb.)				
Sound-Absorption Package (machines equipped with	14 kg (31 lb.)				
Tier 3/Stage IIIA and Tier 2/Stage II engines only)	17 kg (511b.)				
Secondary Steering	26 kg (58 lb.)				
Beacon Bracket	8 kg (18 lb.)				
Fire Extinguisher	14.5 kg (32 lb.)				
Lighting Packages	1 1.5 kg (52 15.)				
10 Halogen Lights	4.5 kg (10 lb.)				
18 Halogen Lights	8 kg (18 lb.)				
18 LED Lights	7 kg (16 lb.)				
Auxiliary Hydraulic Control Valve Section and Controls					
Hydraulics for Front-Mounted Equipment	9 kg (19 lb.)				
Machine Dimensions (continued)	J				
F Wheelbase	6.16 m (20 ft. 3 in.)				
G Overall Length	8.89 m (29 ft. 2 in.)				
H Overall Length With Scarifier	9.69 m (31 ft. 9 in.)				
I Overall Length With Push Block and Ripper	9.99 m (32 ft. 9 in.)				
I ^I Overall Length With Scarifier and Ripper	10.59 m (34 ft. 9 in.)				
For Overall Width see Tires/Wheels on page 8.					



Additional equipment

Key: ● Standard ▲ Optional or special

See your John Deere dealer for further information.

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P-TIER Operator's Station

- Low-profile ROPS/FOPS cab with HVAC (ROPS ISO 3471 / FOPS SAE 3449 Level II)
- ▲ Low-profile ROPS/FOPS cab utilizing laminated glass with fixed lower front and side opening windows
- ▲ Opening side windows (standard with Grade Pro)
- Keyless start with multiple security modes
- Fabric air-suspension seat with armrests
 and headrest
- Premium heated, leather/fabric, highwide-back, air-suspension seat with armrests (standard with Grade Pro)
- Sealed-switch module with function indicators
- Electric rear-window defroster
- Upper front windshield washers with intermittent wipers
- Upper rear windshield washers with intermittent wipers
- Powered cab precleaner
- ▲ Decelerator pedal
- ▲ Flip-down right-hand cab beacon bracket
- Front window sun visor
- ▲ Retractable rear sunshade
- Rearview mirrors, exterior (2) (SAE J985)
- ▲ Heated exterior mirrors (2) (SAE J985)
- ▲ Fire extinguisher

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P-TIER Operator's Station (continued)

- High-resolution rear camera with dedicated in-cab monitor (in some markets)
- ▲ High-resolution front/rear-camera combination with dedicated in-cab monitor
- Retractable seat belt, 76 mm (3 in.) (SAE 386)
- ▲ AM/FM radio with auxiliary and Weather Band (WB)
- Push-button-activated cruise control

Electrical

- 100-amp alternator (Tier 3/Stage IIIA and Tier 2/Stage II)
- 130-amp alternator (FT4/Stage V [optional for Tier 3/Stage IIIA and Tier 2/Stage II])
- ▲ 200-amp alternator (FT4/Stage V)
- Batteries (2), 1,010 CCA with 190-min. reserve capacity (Tier 3/Stage IIIA and Tier 2/Stage III)
- Batteries (2), 1,400 CCA with 440-min.
 reserve capacity (FT4/Stage V [optional for Tier 3/Stage IIIA and Tier 2/Stage II])
- Left-hand engine compartment servicecheck light
- Transporting lights (4 halogen)
- Grading lights (10 halogen)
- ▲ Deluxe grading lights (18 halogen)
- ▲ Premium grading lights (18 LED)

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P-TIER Electrical (continued)

- Multifunction/multi-language diagnostic LCD color monitor
- Reverse warning alarm (SAE J994)
- LED brake and turn lights

Moldboard

Patented pre-stressed, high strength, wear resistant:

- 3.66 m x 610 mm x 22 mm (12 ft. x 24 in. x % in.)
- ▲ 3.96 m x 686 mm x 25 mm (13 ft. x 27 in. x 1 in.)
- 4.27 m x 610 mm x 22 mm (14 ft. x 24 in.
- 4.27 m x 686 mm x 25 mm (14 ft. x 27 in.
- Quick-change and jackscrew-adjustable moldboard side-shift extreme-duty wear inserts
- ▲ 610-mm (24 in.) left- or right-hand extensions for 610-mm (24 in.) mold-board
- ▲ 610-mm (24 in.) left- or right-hand extensions for 686-mm (27 in.) mold-hoard
- ▲ Reversible overlay endbits

Overall Vehicle

 JDLink™ wireless communication system (available in specific countries; see your dealer for details)

Additional equipment (continued)

Key: ● Standard ▲ Optional or special

See your John Deere dealer for further information.

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P-TIER Overall Vehicle (continued)

- Diesel exhaust fluid (DEF) (FT4/Stage V only) and ground-level fuel filling
- Fluid-sampling ports for engine oil and coolant, hydraulic oil, and axle and transmission fluids
- Vandal-protection locking for: Cab doors / Top tank radiator-access door / Engine coolant surge tank / Hydraulic reservoir cap / Battery-disconnect switch / Ground-level electrical master disconnect switch / Fuel-tank door and cap / Toolbox
- Environmental drains with hoses for engine, transmission, hydraulic, differential fluids, and engine coolant
- Hydraulically driven cool-on-demand reversing fan
- Banked easy-access vertical spin-on filters for hydraulic, transmission, and axle fluids
- Engine rotary ejector precleaner
- Automatic differential lock
- Engine-stall prevention and auto shutdown
- ▲ Adjustable rotary engine precleaner (FT4/Stage V)
- Heavy-duty air cleaner (FT4/Stage V)
- Single-input circle drive with slip clutch
- ▲ Single-input circle drive

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P-TIER Overall Vehicle (continued)

- ▲ Heavy-duty dual-input circle drive with slip clutch
- ▲ Premium circle
- ▲ Auto-Shift transmission
- ▲ Auto-Shift PLUS transmission
- ▲ Blade-impact-absorption system
- ▲ Front and/or rear wheel fenders
- Quick-service bank for transmission, hydraulic, engine oil, and engine coolant fluid changes
- ▲ Sound-absorption package (Tier 3/ Stage IIIA and Tier 2/Stage II)
- ▲ Wheel chocks

Automation (optional with Grade Pro)

- ▲ Automation Suite
- ▲ Auto-Articulation
- ▲ Auto-Pass
- ▲ Blade Flip
- Machine Presets
- ▲ Machine-Damage Avoidance

Front Attachments

- Front push block
- ▲ V-type front scarifier with float position, 5 shanks
- Mid-mount scarifier with float position, 11 shanks
- ▲ Front Balderson-style lift group with float position

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P-TIER Front Attachments (continued)

- Front-mounted dozer blade, 2464 mm (97 in.)
- Front-mounted dozer blade, 2667 mm (105 in.)

Rear Attachments

- Full bottom guard with access panel and side guards for rear vehicle protection
- ▲ Rear-mounted ripper/scarifier combination with rear hitch and pin, 3 ripper shanks
- ▲ Rear counterweight with rear hitch and pin
- ▲ Scarifier shanks (9) with teeth for rear ripper scarifier
- Extra ripper shanks (2) with teeth for rear ripper/scarifier

Grade Pro Option

- Low-profile Grade Pro cab utilizing laminated glass with fixed lower front and side opening windows
- Premium heated, leather/fabric, highwide-back, air-suspension seat with armrests
- ▲ Dual-joystick controls
- ▲ Fingertip armrest-mounted controls including lever steering
- Steering wheel
- Cross slope
- Return to straight



