

# 622 P

6WD Motor Grader



JOHN DEERE







## **MAKE GRADE AND MOVE AHEAD IN A BIG WAY**

For almost six decades, John Deere motor graders have been building a reputation for outstanding control and effortless grading precision. Thanks to the best ideas of customers like you, we've achieved a legacy of industry firsts. Productivity boosters enabled with the electrohydraulic (EH) option like exclusive automation features, cross slope, return to straight, and lever steering. Plus your choice between dual-joystick or fingertip controls. And the smaller, budget-friendly 622 P-Tier. Its exceptional balance, optimized performance specs, and reliable capability can help you take grading performance to the next level and your operation in a reimagined new direction.



## 622 P-TIER 6WD MOTOR GRADER

## FEATURES

### Just your fit

Our competitively priced 622 P-Tier offers customers the grader they asked for, with just the right amount of power and fuel savings of up to 10 percent over our larger models. It's equipped — not stripped — with many of the same performance features found on our larger motor graders.

### 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.



+



CONFIGURABLE  
CONTROL  
OPTIONS

FACTORY EQUIPPED  
WITH GRADE PRO  
TECHNOLOGY



### 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, push-button 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.

### Driven to precision

On six-wheel-drive models precision mode allows the operator to manage a consistent speed via dial switch instead of inching pedal, maximizing productivity in all soil conditions. Six-wheel drive is adjustable on the fly to capably traverse difficult jobsites.

### 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 40-percent 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.

### 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.

### 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.



**INTUITIVE  
AUTOMATION SUITE**  
STREAMLINES MACHINE CONTROL





## 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.





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	622 P-TIER		
Manufacturer and Model	John Deere PowerTech™ PSS 6.8L	John Deere PowerTech™ Plus 6.8L	John Deere PowerTech™ 6.8L
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	6.8 L (414 cu. in.)	6.8L (414 cu. in.)	6.8L (414 cu. in.)
Net Engine Power			
Gear 1	127 kW (170 hp)	127 kW (170 hp)	127 kW (170 hp)
Gear 2	138 kW (185 hp)	138 kW (185 hp)	138 kW (185 hp)
Gear 3	149 kW (200 hp)	145 kW (195 hp)	138 kW (185 hp)
Gear 4	157 kW (210 hp)	149 kW (200 hp)	138 kW (185 hp)
Gear 5	157 kW (210 hp)*	149 kW (200 hp)*	138 kW (185 hp)*
Gear 6	160 kW (215 hp)*	153 kW (205 hp)*	138 kW (185 hp)*
Gear 7	164 kW (220 hp)*	157 kW (210 hp)*	138 kW (185 hp)*
Gear 8	168 kW (225 hp)*	157 kW (210 hp)*	138 kW (185 hp)*
Net Peak Torque	1035 Nm (763 lb.-ft.)	915 Nm (675 lb.-ft.)	831 Nm (613 lb.-ft.)
Net Torque Rise	38%	30%	44%
Aspiration	Series turbocharging and charge-air cooling	Turbocharged, charge-air cooled	Turbocharged, charge-air cooled
Lubrication	Full-flow spin-on filter and integral cooler	Full-flow spin-on filter and integral cooler	Full-flow spin-on filter and integral cooler
Air Cleaner With Restriction Indicator	Dual element, dry	Dual element, dry	Dual element, dry
*6WD not available.			
Cooling			
Engine Coolant, Extended Life, Rating	–37 deg. C (–34 deg. F)		
Powertrain			
6-Wheel Drive	Automatic dual-path hydrostatic drive; increases tractive effort and front-end control; includes separate left and right systems with variable-displacement pumps, axial-piston wheel motors, and freewheel at transport speeds; operator-selectable 15-position rotary aggressiveness control and inching capability down to 0 mph; precision mode (propelled by front wheels only)		
Effective Gears	1–4 forward and reverse		
Precision Mode			
Effective Gears	1–3 forward only		
Operating Speeds	0.4–8.0 km/h (0.25–5.0 mph)		
Hydrostatic Pumps (2 each)	53 cm³ (3.2 cu. in.)		
Wheel Motors	57 cm³ (3.5 cu. in.)		
Final Reduction	38.7:1		
Transmission	Direct-drive John Deere PowerShift Plus™, modulated shift-on-the-go, Event-Based Shifting (EBS), inching pedal; independent transmission reservoir with separate filtration and cooling system with 117-L/min. (31 gpm) gear pump		
Gears			
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		
Oscillation (total)	32 deg.		
Wheel Lean Angle (each direction)	20 deg.		
Differentials	Spiral bevel; hydraulically actuated, clutch type can be applied on-the-go; selectable 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 articulation)	7.21 m (284 in.) (23 ft. 8 in.)		
Articulation (both right and left)	22 deg.		
Final Drives	Inboard-mounted planetary sealed in cooled, filtered oil		
Brakes	Foot-controlled, hydraulically operated, multiple wet-disc brakes sealed in pressurized, cooled, filtered oil; both independent systems effective on all 4 tandem wheels		
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)		

## 622 P-TIER MOTOR GRADER SPECIFICATIONS

# 622

# P

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.

Hydraulics		622 P-TIER	
Type	Closed-center, pressure-compensated load-sensing (PCLS), variable-displacement piston pump		
Maximum Pump Flow	212 L/min. (56 gpm)		
Maximum System Pressure	18 961 kPa (2,750 psi)		
Pump Displacement	90 cm³ (5.5 cu. in.)		
Blade Function			
All-hydraulic, industry-standard lever placement of blade-function controls; includes float position; 7 discrete saddle positions			
Blade Range			
Lift Above Ground	490 mm (19.3 in.)		
Blade Side Shift (right or left)	683 mm (26.9 in.)		
Pitch at Ground Line			
Forward	42 deg.		
Back	5 deg.		
Shoulder Reach Outside Wheels (frame straight, right or left)	2083 mm (82.0 in.) (6 ft. 10 in.)		
Bank Cut Angle (right or left)	90 deg.		
Blade Pull			
At Maximum Operating Weight	20 412 kg (45,000 lb.)		
Electrical			
Solid-state load center and sealed-switch 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 headlights; front and rear LED turn signals and marker lights; LED brake and hazard warning lights		
Mainframe			
Type	Welded box construction		
Width (minimum)	307 mm (12.1 in.)		
Height (minimum)	307 mm (12.1 in.)		
Thickness			
Side	16 mm (0.63 in.)		
Top and Bottom Plate	23 mm (0.89 in.)		
Modulus			
Minimum Vertical Section	1445 cm³ (88 cu. in.)		
Average Vertical Section at Saddle	2245 cm³ (137 cu. in.)		
Draft Frame (drawbar)			
Welded box construction machined for flatness with double ball-and-socket pivot connection			
Circle			
Welded construction, heat-treated, machined 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			
High-strength, pre-stressed for higher strength; wear-resistant, high-carbon steel and reversible end bits; blade side-shift wear system includes quick-change replaceable wear inserts and quick-adjust jackscrew system			
Base Length	3.66 m (144 in.) (12 ft. 0 in.)		
Height (measured along arc, including cutting edge)	610 mm (24 in.)		
Thickness	22 mm (0.88 in.)		

## 622 P-TIER

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Cutting Edge		622 P-TIER	
Dura-Max™ through-hardened steel edge			
Thickness	16 mm (0.62 in.)		
Width	152 mm (6 in.)		
Scarifiers			
Type	Front V-type toolbar with 2 pitch positions and hydraulic float	Mid-mount Radial linkage, with NeverGrease™ pin joints; V-type manual 3-pitch positions and hydraulic float	
Width of Cut	1.20 m (48 in.) (4 ft. 0 in.)	1.19 m (46.7 in.) (3 ft. 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 in.)	
Front Lift Group (Balderson-style)			
Parallel linkage, mechanical pins, and hydraulic float			
Lift			
Above Ground (top of tube)	1864 mm (73.4 in.)		
Range	988 mm (38.9 in.)		
Rear Ripper/Scarifier			
Parallel linkage, with NeverGrease pin joints, hydraulic float, and integrated hitch			
	Ripper	Scarifier	
Width of Cut	2.21 m (87.2 in.) (7 ft. 3 in.)	2.18 m (86 in.) (7 ft. 2 in.)	
Number of Shanks/Teeth	3 (maximum capacity 5)	None standard (maximum 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	9494 kg (20,932 lb.)	—	
Pry-Out	12 387 kg (27,309 lb.)	—	
Shank Size	61.5 x 133 mm (2.42 x 5.25 in.)	25 x 76 mm (1 x 3 in.)	
Operator Station			
Low-profile cab with ROPS (ISO 3471-2008) and FOPS (ISO 3449-2005)			
Tires/Wheels			
	13x24 on 254-mm (10 in.) Rim	14R24 on 254-mm (10 in.) Rim	17.5R25 on 356-mm (14 in.) Rim
Wheel Tread on Ground	2.08 m (82.0 in.)	2.08 m (82.0 in.)	2.16 m (85.0 in.)
Overall Width	2.49 m (98.0 in.)	2.49 m (98.0 in.)	2.64 m (104.0 in.)
Ground Clearance (front axle)	557 mm (21.9 in.)	587 mm (23.1 in.)	587 mm (23.1 in.)
Serviceability			
Refill Capacities	EPA Final Tier 4 (FT4)/EU Stage V	EPA Tier 3/EU Stage IIIA and EPA Tier 2/EU Stage II	
Fuel Tank	416.5 L (110 gal.)	303 L (80 gal.)	
Diesel Exhaust Fluid (DEF) Tank	22.5 L (6 gal.)	—	
Cooling System	51.0 L (13.5 gal.)	44.0 L (11.6 gal.)	
Engine Oil With Filter	31.5 L (8.3 gal.)	26.0 L (6.9 gal.)	
Transmission Fluid	28.4 L (7.5 gal.)	28.4 L (7.5 gal.)	
Differential Housing	38.0 L (10 gal.)	38.0 L (10 gal.)	
Tandem Housings (each)	74.0 L (19.5 gal.)	74.0 L (19.5 gal.)	
Circle Gearbox	5.7 L (1.5 gal.)	5.7 L (1.5 gal.)	
Hydraulic Reservoir	60.5 L (16 gal.)	53.0 L (14 gal.)	
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 5⁄8 in.) Cutting Edges, 14R24 L2 Tires, and 79-kg (175 lb.)			
Operator	EPA FT4/EU Stage V	EPA Tier 3/EU Stage IIIA and EPA Tier 2/EU Stage II	
Front	4795 kg (10,572 lb.)	4860 kg (10,713 lb.)*	
Rear	11 995 kg (26,443 lb.)	11 178 kg (24,643 lb.)*	
Total	16 790 kg (37,015 lb.)	16 038 kg (35,357 lb.)*	
Typical Operating Weight With Front Push Block, Rear Ripper/Scarifier, and Other Equipment			
Front	5438 kg (11,988 lb.)	5591 kg (12,325 lb.)	
Rear	13 662 kg (30,120 lb.)	12 710 kg (28,020 lb.)	
Total	19 100 kg (42,108 lb.)	18 300 kg (40,345 lb.)	
Maximum Operating Weight	22 680 kg (50,000 lb.)	22 680 kg (50,000 lb.)	
*13-24 Bias L2 tires used			

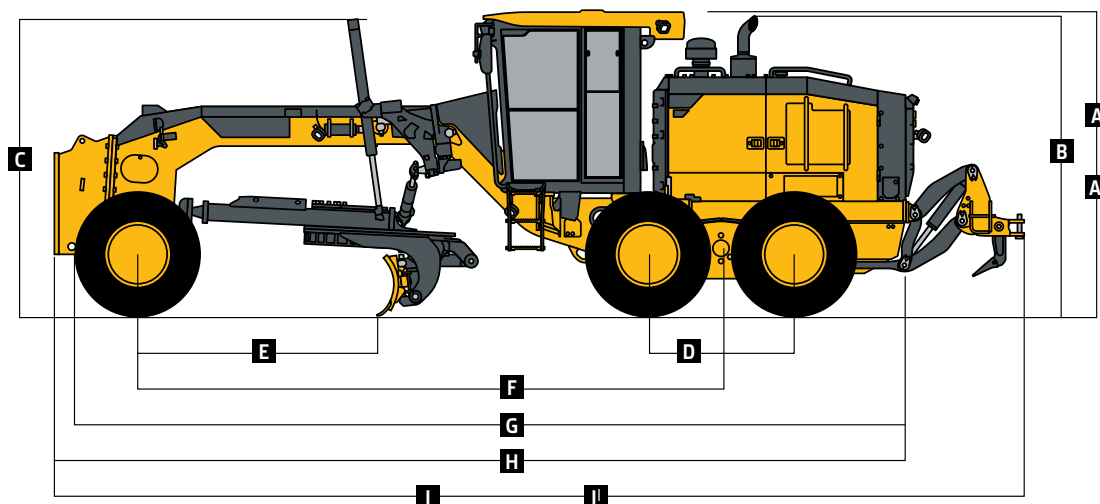


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## 622 P-TIER

Option Weights	622 P-TIER
Moldboards With Through-Hardened Dura-Max Cutting Edge	
3.66 m x 610 mm x 22 mm (12 ft. x 24 in. x 7/8 in.)	0 kg (0 lb.)
With 152-mm x 16-mm (6 in. x 5/8 in.) Cutting Edge and 16-mm (5/8 in.) Hardware	
3.66 m x 610 mm x 22 mm (12 ft. x 24 in. x 7/8 in.)	45 kg (99 lb.)
With 203-mm x 19-mm (8 in. x 3/4 in.) Cutting Edge and 16-mm (5/8 in.) Hardware	
4.27 m x 610 mm x 22 mm (14 ft. x 24 in. x 7/8 in.)	105 kg (231 lb.)
With 152-mm x 16-mm (6 in. x 5/8 in.) Cutting Edge and 16-mm (5/8 in.) Hardware	
4.27 m x 610 mm x 22 mm (14 ft. x 24 in. x 7/8 in.)	157.4 kg (347 lb.)
With 203-mm x 19-mm (8 in. x 3/4 in.) Cutting Edge and 16-mm (5/8 in.) Hardware	
Extensions, 610 mm (2 ft.) (right or left)	
For Use With 610-mm (24 in.) Moldboards	116 kg (255 lb.)
Overlay End Bits, Reversible (one pair)	
For 152-mm (6 in.) Cutting Edge	19.5 kg (43 lb.)
For 203-mm (8 in.) Cutting Edge	23 kg (51 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, 3 Shank, No Scarifier	1052 kg (2,319 lb.)
Ripper/Scarifier, Rear Mounted With Hitch and Ripper Shanks (3)	1139 kg (2,510 lb.)
Scarifier Shanks With Teeth (9 for rear ripper/scarifier)	68 kg (150 lb.)
Rear Counterweight With Integral Rear Hitch	727 kg (1,603 lb.)
Rear Hitch	54.4 kg (120 lb.)
Push Block, Front	907 kg (2,000 lb.)
Scarifier	
Front Mounted With Teeth (5)	831 kg (1,833 lb.)
Mid-Mount With Teeth (11)	1481 kg (3,265 lb.)
<b>Machine Dimensions</b>	
<b>A</b> Height to Top of Cab	3.18 m (10 ft. 5 in.)
<b>A'</b> Height to Top of Full-Height Cab	3.40 m (11 ft. 2 in.)
<b>B</b> Height to Top of Exhaust	3.10 m (10 ft. 2 in.)
<b>C</b> Height to Top of Blade-Lift Cylinders	3.05 m (10 ft. 0 in.)
<b>D</b> Tandem Axle Spacing	1.54 m (5 ft. 1 in.)
<b>E</b> Blade Base	2.57 m (8 ft. 5 in.)

Option Weights (continued)	622 P-TIER
Front Lift Group (Balderson-style)	763 kg (1,682 lb.)
Tires	
13.00-24, 12 PR G2	-306 kg (-675 lb.)
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.)
Multi-Piece Rims	
254 mm x 610 mm (10 in. x 24 in.)	0 kg (0 lb.)
356 mm x 635 mm (14 in. x 25 in.)	85.3 kg (188 lb.)
Fenders	
Front	99 kg (218 lb.)
Rear	141 kg (310 lb.)
Low Cab With Opening Front and Side Windows	14.5 kg (32 lb.)
Premium Air-Suspension, Heated Seat With Adjustable Arm- and Headrests	13 kg (28 lb.)
Coolant Heater	4 kg (9 lb.)
Quick Service	11 kg (24 lb.)
Sound-Absorption Package (machines equipped with Tier 3/Stage IIIA and Tier 2/Stage II engines only)	14 kg (31 lb.)
Secondary Steering	26 kg (58 lb.)
Beacon Bracket	8 kg (18 lb.)
Fire Extinguisher	14.5 kg (32 lb.)
Lighting Packages	
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	7 kg (15 lb.)
Hydraulics for Front-Mounted Equipment	9 kg (19 lb.)
<b>Machine Dimensions (continued)</b>	
<b>F</b> Wheelbase	6.16 m (20 ft. 3 in.)
<b>G</b> Overall Length	8.89 m (29 ft. 2 in.)
<b>H</b> Overall Length With Scarifier	9.69 m (31 ft. 9 in.)
<b>I</b> Overall Length With Push Block and Ripper	9.99 m (32 ft. 9 in.)
<b>II</b> 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.

622	
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, high-wide-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

622	
P-TIER	Operator's Station (continued)
▲	Retractable rear sunshade
●	Rearview mirrors, exterior (2) (SAE J985)
▲	Heated exterior mirrors (2) (SAE J985)
▲	Fire extinguisher
▲	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 II)
●	Batteries (2), 1,400 CCA with 440-min. reserve capacity (FT4/Stage V [optional for Tier 3/Stage IIIA and Tier 2/Stage II])

622	
P-TIER	Electrical (continued)
▲	Left-hand engine compartment service-check light
●	Transporting lights (4 halogen)
●	Grading lights (10 halogen)
▲	Deluxe grading lights (18 halogen)
▲	Premium grading lights (18 LED)
●	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 7/8 in.)
▲	4.27 m x 610 mm x 22 mm (14 ft. x 24 in. x 7/8 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.) moldboard
▲	Reversible overlay endbits
Overall Vehicle	
●	JDLink™ wireless communication system (available in specific countries; see your dealer for details)

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Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions specified per ISO 9249.

No derating is required up to 3050-m (10,000 ft.) altitude. Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on a unit with standard equipment;

14.0 x 610-mm (24 in.) 12 PR G2, Bias tires; and 3.66-m x 610-mm x 22-mm (12 ft. x 24 in. x 7/8 in.) high-strength, wear-resistant moldboards with 16-mm x 152-mm (0.63 in. x 6 in.) Dura-Max® through-hardened-steel cutting edges. Weights include lubricants, coolants, full fuel tank, and

79-kg (175 lb.) operator.



# Additional equipment *(continued)*

Key: ● Standard ▲ Optional or special

See your John Deere dealer for further information.

622	
P-TIER	Overall Vehicle <i>(continued)</i>
●	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)
●	Single-input circle drive with slip clutch

620	
P-TIER	Overall Vehicle <i>(continued)</i>
▲	Single-input circle drive
▲	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
	<b>Automation (optional with Grade Pro)</b>
▲	Automation Suite
▲	Auto-Articulation
▲	Auto-Pass
▲	Blade Flip
▲	Machine Presets
▲	Machine-Damage Avoidance
	<b>Front Attachments</b>
●	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

622	
P-TIER	Front Attachments <i>(continued)</i>
▲	Front-mounted dozer blade, 2464 mm (97 in.)
▲	Front-mounted dozer blade, 2667 mm (105 in.)
	<b>Rear Attachments</b>
●	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
	<b>Grade Pro Option</b>
●	Low-profile Grade Pro cab utilizing laminated glass with fixed lower front and side opening windows
●	Premium heated, leather/fabric, high-wide-back, air-suspension seat with armrests
▲	Dual-joystick controls
▲	Fingertip armrest-mounted controls including lever steering
●	Steering wheel
●	Cross slope
●	Return to straight

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.

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions specified per ISO 9249.

No derating is required up to 3050-m (10,000 ft.) altitude. Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on a unit with standard equipment; 14.0 x 610-mm (24 in.) 12 PR G2, Bias tires; and 3.66-m x 610-mm x 22-mm (12 ft. x 24 in. x 1 in.) high-strength, wear-resistant moldboard with 16-mm x 152-mm (0.63 in. x 6 in.) Dura-Max® through-hardened-steel cutting edges. Weights include lubricants, coolants, full fuel tank, and 79-kg (175 lb.) operator.





**JOHN DEERE**