



# 620G 4WD SPECIFICATIONS



## ENGINE

**Manufacturer and Model**  
John Deere PowerTech™ 6,8 L

**Non-Road Emission Standard**  
EPA Tier 2/EU Stage II

**Cylinders**  
6

**Displacement**  
6,8 L (414 cu. in.)

### Net Engine Power

Gear 1	108 kW (145 hp)
Gear 2	119 kW (160 hp)
Gear 3	131 kW (175 hp)
Gear 4	134 kW (180 hp)
Gear 5	138 kW (185 hp)
Gear 6	138 kW (185 hp)
Gear 7	138 kW (185 hp)
Gear 8	138 kW (185 hp)

**Net Peak Torque**  
831 Nm (613 lb.-ft.)

**Net Torque Rise**  
44%

**Aspiration**  
Turbocharged, charge-air cooled

**Lubrication**  
Full-flow spin-on filter and integral cooler

**Air Cleaner with Restriction Indicator**  
Dual element, dry

## COOLING

Engine Coolant, Extended Life, Rating:  
-37 deg. C (-34 deg. F)

## POWERTRAIN

**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 tyre slip at 2 180 rpm

Gear 1	4,0 km/h (2.5 mph)
Gear 2	5,6 km/h (3.5 mph)
Gear 3	7,7 km/h (4.8 mph)
Gear 4	10,9 km/h (6.8 mph)
Gear 5	16,4 km/h (10.2 mph)
Gear 6	23,2 km/h (14.4 mph)
Gear 7	32,3 km/h (20.1 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 (GP) 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)

## HYDRAULICS

### 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 cm<sup>3</sup> (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):  
2 083 mm (82 in.) (6 ft. 10 in.)

Bank Cut Angle (right or left):  
90 deg.

## BLADE PULL

At Maximum Operating Weight:  
14 091 kg (31 066 lb.)

## ELECTRICAL

Solid-state load center and sealed switch module

**Voltage**  
24 volt

**Number of Batteries**  
2

**Battery Capacity**  
950 CCA

**Reserve Capacity**  
190 min.

**Amp-Hour Rating**  
110 amp-hour

**Alternator Rating**  
Base: 100 amp  
Optional: 130 amp

### Lights

Driving lights; 2 high- and 2 low-beam halogen 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:  
1 445 cm<sup>3</sup> (88 cu. in.)

**Average Vertical Section at Saddle:**  
2 245 cm<sup>3</sup> (137 cu. in.)

## DRAFT FRAME (DRAWBAR)

Welded box construction machined for flatness with double ball-and-socket pivot connection equipped with quick-change replaceable wear inserts

## CIRCLE

Welded construction, heat-treated, machined for flatness, equipped with quick-change replaceable wear inserts.

**Circle Diameter:**

1 524 mm (60 in.)

**Rotation:**  
360 deg.

**Drive:**  
Hydraulic motor and worm gear with positive lock

**Circle Side Shift (right and left):**  
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:**  
4,27 (168 in.) (14 ft.)

**Height (measured along arc, including cutting edge):**  
610 mm (24 in.)

**Thickness:**  
22 mm (0.88 in.)

## CUTTING EDGE

Dura-Max™ through-hardened steel edge

**Thickness:**  
16 mm (0.62 in.)

**Width:**  
152 mm (6 in.)

## SCARIFIERS (620G 4WD)

### Type

Front: V-type toolbar with manual 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**  
Front: 1.20 m (48 in.) (4 ft. 0 in.)

Mid-Mount: 1.19 m (46.7 in.) (3 ft. 11 in.)

**Number of Shanks/Teeth**  
Front: 5 (maximum capacity 9)

Mid-Mount: 11

**Lift Above Ground**  
Front: 589 mm (23.2 in.)

Mid-Mount: 335 mm (13.2 in.)

**Maximum Depth**  
Front: 335 mm (13.2 in.)

Mid-Mount: 325 mm (12.8 in.)

**Shank: Spacing**  
Front: 146 mm (5.75 in.)  
Mid-Mount: 117 mm (54.6 in.)

**Shank: Size**  
Front: 25 x 76 mm (1 x 3 in.)  
Mid-Mount: 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):  
1 864 mm (73.4 in.)

#### Range:

988 mm (38.9 in.)

### REAR RIPPER/SCARIFIER

Parallel linkage, with NeverGrease pin joints, hydraulic float, and integrated hitch

#### Width of Cut

Ripper: 2,21 m (87.2 in.) (7 ft. 3 in.)

Scarifier: 2,18 m (86 in.) (7 ft. 2 in.)

#### Number of Shanks/Teeth

Ripper: 3 (maximum capacity 5)

Scarifier: None standard (maximum capacity 9)

#### Lift Above Ground

Ripper: 602 mm (23.7 in.)

Scarifier: 810 mm (31.9 in.)

#### Maximum Depth

Ripper: 426 mm (16.8 in.)

Scarifier: 323 mm (12.7 in.)

#### Force at Typical FT4 Weight Penetration

Ripper: 9 296 kg (20,494 lb.)

#### Pry-Out

Ripper: 11 222 kg (24,740 lb.)

#### Shank Size

Ripper: 61,5 x 133 mm (2.42 x 5.25 in.)

Scarifier: 25 x 76 mm (1 x 3 in.)

### OPERATOR STATION

Low-profile cab with ROPS (ISO 3471-2008) and FOPS (ISO 3449-2005)

### TYRES/WHEELS

#### Standard:

17.5x25 L4 12 Ply

• Wheel Tread on Ground:  
2,16 m (85.0 in.)

• Overall Width:  
2,64 m (104.0 in.)

• Ground Clearance (front axle):  
587 mm (23.1 in.)

### SERVICEABILITY

#### Refill Capacities:

##### Fuel Tank:

303 L (80 gal.)

##### Cooling System:

44,0 L (11.6 gal.)

##### Engine Oil with Filter:

26,0 L (6.9 gal.)

##### Transmission Fluid:

28,4 L (7.5 gal.)

#### Differential Housing:

38,0 L (10 gal.)

#### Tandem Housings (each):

74,0 L (19.5 gal.)

#### Circle Gearbox:

5,7 L (1.5 gal.)

#### Hydraulic Reservoir:

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, 13-24 Bias L2 Tyres, and 79-kg (175 lb.)

#### Operator:

Front: 4 207 kg (9,275 lb.)

Rear: 10 671 kg (23,525 lb.)

Total: 14 878 kg (32,800 lb.)

• Typical Operating Weight with Front Push Block, Rear Ripper/Scarifier, and Other Equipment

Front: 5 080 kg (11,200 lb.)

Rear: 12 428 kg (27,400 lb.)

Total: 17 509 kg (38,600 lb.)

#### Maximum Operating Weight:

22 680 kg (50,000 lb.)

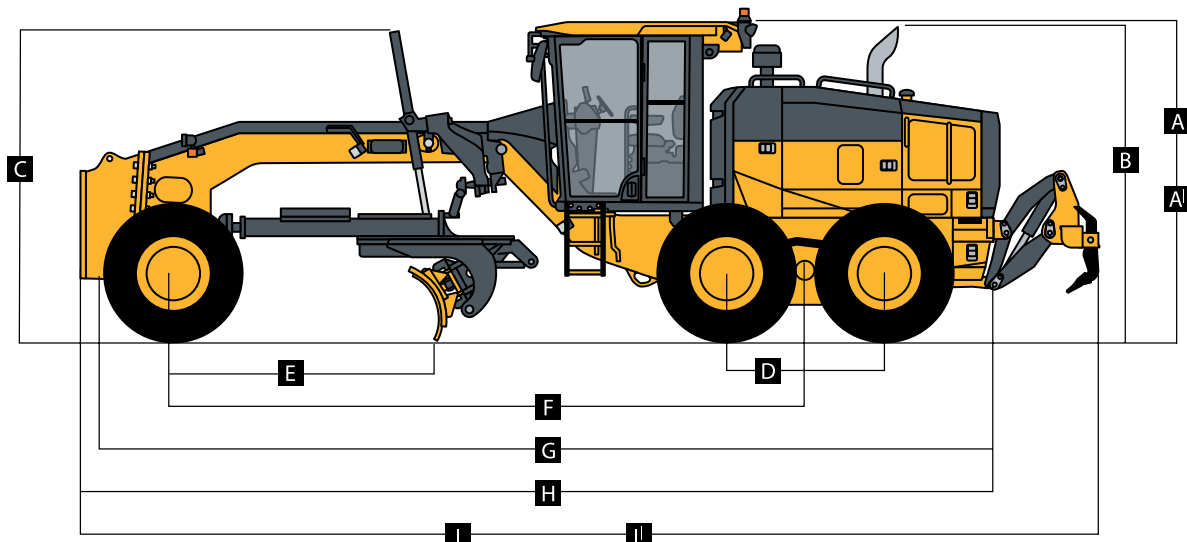
### MACHINE DIMENSIONS

<b>A</b>	Height to Top of Cab	3,18 m (10 ft. 5 in.)
<b>AI</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.)

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<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>I'</b>	Overall Length with Scarifier and Ripper	10,59 m (34 ft. 9 in.)

For Overall Width see Tyres/Wheels



Option Weights	670G 4WD
<b>Moldboards with Through-Hardened Dura-Max Cutting Edge</b>	
3,66 m x 610 mm x 22 mm (12 ft. x 24 in. x 7/8 in.) with 152 mm x 16 mm (6 in. x 5/8 in.) cutting edge and 16 mm (5/8 in.) hardware	0 kg (0 lb.)
3,66 m x 610 mm x 22 mm (12 ft. x 24 in. x 7/8 in.) with 203 mm x 19 mm (8 in. x 3/4 in.) cutting edge and 16 mm (5/8 in.) hardware	45 kg (99 lb.)
4,27 m x 610 mm x 22 mm (14 ft. x 24 in. x 7/8 in.) with 152 mm x 16 mm (6 in. x 5/8 in.) cutting edge and 16 mm (5/8 in.) hardware	105 kg (231 lb.)
4,27 m x 610 mm x 22 mm (14 ft. x 24 in. x 7/8 in.) with 203 mm x 19 mm (8 in. x 3/4 in.) cutting edge and 16 mm (5/8 in.) hardware	157,4 kg (347 lb.)
<b>Extensions, 610 mm (2 ft.) (right or left)</b>	
For Use with 610 mm (24 in.) Moldboards	116 kg (255 lb.)
<b>Overlay End Bits, Reversible (one pair)</b>	
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.)
Moldboard Impact-Absorption System	43 kg (95 lb.)
Ripper, 3 Shank, No Scarifier	1 052 kg (2,139 lb.)
Ripper/Scarifier, Rear Mounted with Hitch and Ripper Shanks (3)	1 139 kg (2,510 lb.)
Scarifier Shanks with Teeth (9 for rear ripper/scarifier)	68 kg (150 lb.)
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	907 kg (2,000 lb.)
<b>Scarifier</b>	
Teeth (5)	831 kg (1,833 lb.)
Mid-Mount with Teeth (11)	1481 kg (3,265 lb.)
Front Lift Group (Balderson-style)	763 kg (1,682 lb.)
<b>Tyres</b>	
13.00-24, 12 PR G2	-79 kg (1174 lb.)
14.00-24, 12 PR G2	0 kg (0 lb.)
17.5-25, 12 PR G2/L2	114 kg (252 lb.)
14.00-R24, Radial, G2/L2 General Purpose	220 kg (486 lb.)
14.00-R24, Radial, G2/L2 Snow	261 kg (576 lb.)
17.5-R25, Radial, L2 General Purpose	272 kg (600 lb.)
17.5-R25, Radial, G2/L2 Snow	316 kg (696 lb.)
17.5-R25, Radial, G3/L3 General Purpose	362 kg (798 lb.)
<b>1-Piece Rims</b>	
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 kg (144 lb.)
<b>Multi-Piece Rims</b>	
254 mm x 610 mm (10 in. x 24 in.)	180 kg (396 lb.)
356 mm x 635 mm (14 in. x 25 in.)	267 kg (588 lb.)
<b>Fenders</b>	
Front	77 kg (169 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.)
<b>Lighting Packages</b>	
10 Halogen Lights	4,5 kg (10 lb.)
16 Halogen Lights	7 kg (16 lb.)
18 Halogen Lights	8 kg (18 lb.)
High-Front Light Bar for Snowplowing	20 kg (44 lb.)
Auxiliary Hydraulic Control Valve Section and Controls	7 kg (15 lb.)
Hydraulics for Front-Mounted Equipment	9 kg (19 lb.)