

ENGINE

John Deere engineered and manufactured 6-cylinder diesel engine features replaceable wet-type cylinder liners that ensure superior heat dissipation and long engine life. A 20 percent increase in low-speed torque means more lugging power and quicker engine response under changing loads. Improved fuel efficiency combined with increased torque lets you do more work with less fuel. The dual horsepower feature provides an optimum engine to transmission match for superior grader performance and traction.

Engine: John Deere 6076A
 Rated power at 2200 rpm
 in gears 1-3155 SAE net hp (116 kW)
162 SAE gross hp (121 kW)
 Rated power at 2200 rpm
 in gears 4-8185 SAE net hp (138 kW)
192 SAE gross hp (143 kW)
 Turbochargedaftercooled
 Number of cylinders6
 Displacement466 cu. in. (7.638 L)
 Fuel consumption, typical
 (depending on duty cycle)4.0 to 6.8 gal./hr. (15 to 26 L/h)
 Net torque at 1100 rpm
 in gears 1-3 (42% torque rise)522 lb.-ft. (708 Nm)
 in gears 4-8 (42% torque rise)615 lb.-ft. (834 Nm)
 Lubricationpressure system w/full flow filter and cooler
 Aspirated air cleaner with restriction
 indicatordual element, dry
 Electrical system24 volt with 50-amp (1400 W) alternator
 Batteriestwo 12-volt with 180-minute reserve capacity

TRANSMISSION

Direct drive, planetary power shift transmission with modulated shift on-the-go speed selections in all eight forward and four reverse gears. There are five working speeds below 9 mph (15 km/h). Standard equipment also includes an inching pedal and tow disconnect.

TRAVEL SPEEDS

(At 2200 engine rpm with 14.00-24 tires and no tire slip)

Shift Lever Position	Forward		Reverse	
	mph	(km/h)	mph	(km/h)
1	2.3	3.7	3.0	4.8
2	3.3	5.3	4.3	6.9
3	5.2	8.4	6.7	10.8
4	6.7	10.8	8.6	13.8
5	8.9	14.3		
6	11.5	18.5		
7	14.7	23.7		
8	25.2	40.6		

FINAL DRIVE

Inboard-mounted planetary final drives are sealed in cool, filtered oil. The operator-controlled differential lock/unlock system allows the differential to easily be locked for maximum traction and unlocked for maneuverability in tight turns. Two-inch (51 mm) pitch tandem drive chains are sized for long life.

BRAKES

Foot-operated hydraulic wet-disk power brakes are sealed in cool, filtered oil. They're self-adjusting and maintenance free. Standard equipment also includes a hand-operated, mechanical dry-disk parking brake. Both independent braking systems are effective on all four tandem wheels.

FRONT AXLE

Heavy-duty, welded box construction.
 Front axle oscillation (total)32 degrees
 Wheel lean (each direction)20 degrees

STEERING

A John Deere innovation – all-hydraulic power frame articulation provides maximum maneuverability and productivity. Crab steering reduces side drift, positions the tandems on firm ground, and increases sideslope stability.

Frame articulation (both right and left)25 degrees
 Minimum turning radius22 ft. (6.7 m)

HYDRAULICS

The closed-center hydraulic system uses a pressure-controlled variable-displacement single hydraulic pump. Integral hydraulic control valve lockouts eliminate cylinder drift. O-ring face seal and fittings eliminate hydraulic leaks.

Hydraulic pump6.0 cu. in. (98 cm³)
 Rated flow at 2200 engine rpm52.4 gpm (198 L/min.)

TIRES AND RIMS

Tire Size	Wheel Tread		Overall Width		Ground Clearance
	Front	Rear	Front	Rear	(Front Axle)
13.00-24 9 in. rim (229 mm)	76.60 in. (1.94 m)	79.60 in. (2.02 m)	7 ft. 10 in. (2.39 m)	7 ft. 10 in. (2.39 m)	22 in. (559 mm)
14.00-24 10 in. rim (254 mm)	76.60 in. (1.94 m)	79.60 in. (2.02 m)	8 ft. (2.44 m)	8 ft. (2.44 m)	22.5 in. (572 mm)
17.5-25 14 in. rim (356 mm)	79.40 in. (2.02 m)	82.40 in. (2.09 m)	8 ft. 6 in. (2.59 m)	8 ft. 6 in. (2.59 m)	23.2 in. (589 mm)

CAPACITIES

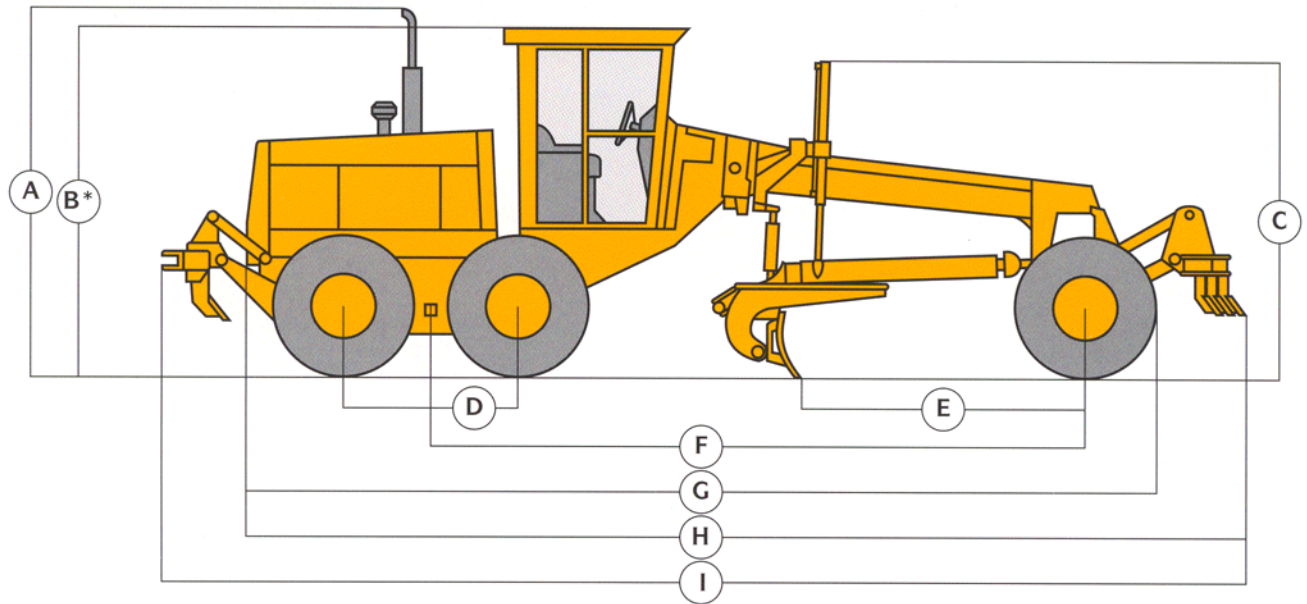
U.S.
 Fuel tank90 gal. (340 L)
 Cooling system10 gal. (38 L)
 Engine lubrication, including filter26 qt. (24.6 L)
 Transmission and hydraulic system (refill)23 gal. (87 L)
 Tandem housings (each)5 gal. (18.9 L)
 Circle gearbox4 qt. (3.8 L)

OPERATING WEIGHTS

SAE	On Front Wheels	On Rear Wheels	Total
With standard equipment	8,700 lb. (3946 kg)	22,600 lb. (10 249 kg)	31,300 lb. (14 195 kg)
With standard equipment and scarifier	10,640 lb. (4825 kg)	22,390 lb. (10 155 kg)	33,030 lb. (14 980 kg)
With standard equipment, scarifier and ripper	9,870 lb. (4476 kg)	25,630 lb. (11 624 kg)	35,500 lb. (16 100 kg)

Typically equipped operating weights range up to 38,520 lb. (17 470 kg).

DIMENSIONS



Key:

A	Height to top of exhaust.....	10 ft. 10 in. (3.30 m)
B	Height to top of cab.....	10 ft. 1.5 in. (3.09 m)
C	Height to top of blade lift cylinders.....	9 ft. 8 in. (2.95 m)
D	Tandem axle spacing.....	5 ft. 0.7 in. (1.54 m)
E	Bladebase.....	8 ft. 9 in. (2.67 m)
F	Wheelbase.....	19 ft. 7 in. (5.97 m)
G	Overall length.....	27 ft. 11 in. (8.51 m)
H	Overall length with scarifier.....	30 ft. 3 in. (9.22 m)
I	Overall length with scarifier and ripper.....	32 ft. 7 in. (9.93 m)

*Add 8.3 in. (210 mm) for full-height cab
 Add 1.0 in. (25.5 mm) for cab with air conditioning
 Add 0 in. (0 mm) for low profile canopy with ROPS

BLADE FUNCTION

All-hydraulic, industry-preferred hand-lever placement of blade function controls (standard equipment). Blade lift controls include a float position. Conversion from two-hand to one-hand control is easily accomplished. Seven blade lift arm positions provide excellent blade positioning capabilities.

BLADE RANGE

Lift above ground.....	18.5 in. (470 mm)
Blade side shift, right or left.....	26.9 in. (683 mm)
Shoulder reach outside wheels (frame straight):	
Right.....	83.0 in. (2.11 m)
Left.....	85.0 in. (2.16 m)
Pitch at ground line.....	49 deg. forward 5 deg. back

MAINFRAME

Welded box construction.	
Width, minimum.....	12.07 in. (306.5 mm)
Height, minimum.....	10.63 in. (270 mm)
Thickness, sides.....	0.63 in. (16 mm)
top and bottom.....	1.00 in. (25 mm)
Weight per ft., minimum.....	118 lb. (175.5 kg/m)
Minimum vertical section modulus.....	117 in. ³ (1917 cm ³)
Average vertical section modulus at saddle.....	149 in. ³ (2448 cm ³)

DRAWBAR

Welded box construction machined for flatness with double ball and socket pivot connection.

CIRCLE

Welded construction, heat-treated for strength and machined for flatness.

Circle diameter.....	60 in. (1.5 m)
Rotation.....	360 degrees
Drive.....	hydraulic motor and worm gear with positive position lock
Sideshift, right.....	28.5 in. (724 mm)
left.....	31.0 in. (787 mm)

MOLDBOARD

High-strength, wear-resistant, high-carbon steel.

Length.....	12 ft. (3.66 m)
Height.....	24 in. (610 mm)
Thickness.....	0.88 in. (22 mm)

CUTTING EDGE

Dura-Max® through-hardened steel.

Thickness and width.....	0.62 x 6.0 in. (16 x 152 mm)
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