

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 in. (6.86 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)	76.20 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)	76.20 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)	78.40 in. (1.99 m)	82.40 in. (2.09 m)	8 ft. 4 in. (2.54 m)	8 ft. 5 in. (2.57 m)	23.2 in. (589 mm)

CAPACITIES

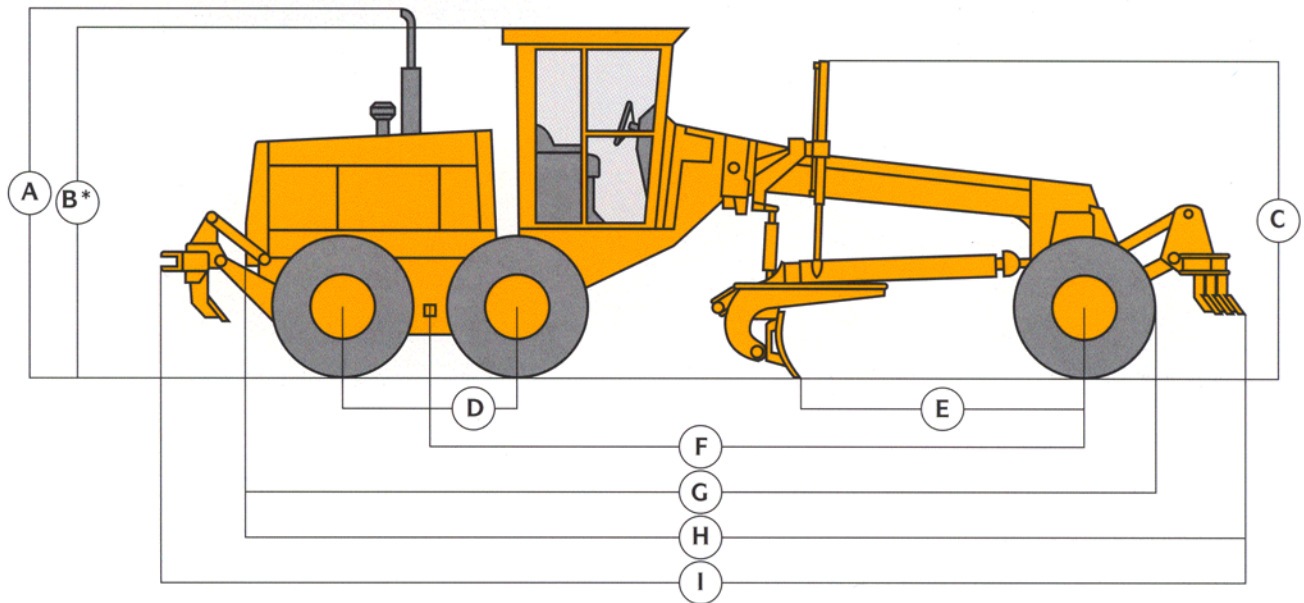
	U.S.
Fuel tank	90 gal. (340 L)
Cooling system	10 gal. (38 L)
Engine lubrication, including filter	26 qt. (24.6 L)
Transmission and hydraulic system (refill)	23 gal. (87 L)
Tandem housings (each)	5 gal. (18.9 L)
Circle gearbox	4 qt. (3.8 L)

OPERATING WEIGHTS

SAE	On Front Wheels	On Rear Wheels	Total
With standard equipment	9,400 lb. (4263 kg)	23,100 lb. (10 476 kg)	32,500 lb. (14 739 kg)
With standard equipment and scarifier	11,390 lb. (5166 kg)	22,840 lb. (10 358 kg)	34,230 lb. (15 524 kg)
With standard equipment, scarifier and ripper	10,650 lb. (4830 kg)	26,130 lb. (11 850 kg)	36,780 lb. (16 680 kg)

Typically equipped operating weights range up to 40,665 lb. (18 442 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 components are fully adjustable.

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.-ft. (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 and replaceable wear inserts.

CIRCLE

Welded construction, heat-treated for strength and machined for flatness with replaceable wear inserts.

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 with replaceable side shift wear inserts.

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)

FRONT-WHEEL DRIVE

Another John Deere innovation – automatic front-wheel drive increases tractive effort and front-end control in all working conditions. System includes a variable displacement pump, reversible wheel motors, flow divider, free-wheel at transport speeds, and operator-controlled, 15-position rotary aggressiveness switch.

Standard system: effective in gears 1–4

Hydraulic pump.....5.30 in.³ (83 cm³)
Wheel motors2.03 in.³ (33 cm³)

Optional high speed system: effective in gears 1–6

Hydraulic pump.....6.00 in.³ (98 cm³)
Wheel motors2.03 in.³ (33 cm³)

SCARIFIER

V-type manual three-pitch position with hydraulic float.

Width of cut.....4 ft. (1.22 m)
Number of teeth5 standard, 9 optional
Lift above ground.....21.8 in. (554 mm)
Maximum penetration13.3 in. (338 mm)
Shank size.....1 x 3 in. (25 x 76 mm)

ADDITIONAL STANDARD EQUIPMENT

Engine/Power Train:

Air precleaner
Antifreeze
Battery disconnect
Fan guard
Fuel filter and water separator
Radiator trash screen
Transmission tow disconnect
14.00-24, 12 PR, G2 tires

Electrical System:

50 amp (1400 watt) alternator
Batteries with 180 min. (625 CCA) reserve capacity
Battery voltage monitor
Horn
Lights
Driving (2)
Flashing and turn signals (4)
Stop and tail (2)

Reverse warning alarm

Hydraulics:

Controls
Blade lift with float

Blade pitch
Blade sideshift
Circle rotate
Circle sideshift
Frame articulate
Wheel lean
Hydraulic differential lock
Hydraulic oil cooler
Hydraulic pump, 6.0 cu. in. (98 cm³), 52.4 gpm (198 Lpm)
Hydrostatic front-wheel drive
Power brakes
Power steering

Operator's Station:

Adjustable front console
Cushioned vinyl seat
Front windshield wiper
Instrument lights
Interior light
Low profile cab with ROPS
Mirrors
Interior rearview
Outside rearview (2)

RIPPER

Parallelogram linkage with manual valve control.

Width of cut.....8 ft. (2.44 m)
Number of shanks.....3 standard, 5 optional
Lift above ground.....15.5 in. (394 mm)
Maximum penetration14 in. (356 mm)
Shank size.....2 x 5 in. (51 x 127 mm)

RIPPER/SCARIFIER

Parallelogram linkage with manual valve control and hydraulic float.

Ripper:

Width of cut.....8 ft. (2.44 m)
Number of shanks.....3 standard, 5 optional
Lift above ground.....15.5 in. (394 mm)
Maximum penetration14 in. (356 mm)
Shank size.....2 x 5 in. (51 x 127 mm)

Scarifier:

Width of cut6 ft. 10 in. (2.08 m)
Number of teeth9
Lift above ground.....17.5 in. (444 mm)
Maximum penetration12.0 in. (305 mm)
Shank size.....1.25 x 4.0 in. (32 x 102 mm)

Seat belt
Switch-operated differential lock control
Tilt steering
Tinted glass
Instruments and Indicators:
Dual level monitor system
Alternator voltage warning light
Brake pressure warning light with audible alarm
Engine air cleaner restriction warning light
Engine coolant temperature warning light with audible alarm
Engine oil pressure warning light with audible alarm
Front-wheel drive charge pressure warning light
Front-wheel drive oil filter restriction warning light
Hydraulic oil filter restriction warning light

Park brake engaged (in gear) warning light with audible alarm
Saddle locking pin disengaged warning light
Transmission oil filter restriction warning light
Transmission oil pressure warning light
Transmission oil temperature warning light with audible alarm

Indicator lights

Differential lock engaged
Turn signal and hazard warning

Gauges

Articulation indicator
Fuel
Hourmeter

Moldboard:

12 ft. x 24 in. (3.66 m x 610 mm) moldboard with .62 x 6 in. (16 x 152 mm) through hardened Dura-Max cutting edge

OPTIONAL OR SPECIAL EQUIPMENT WITH APPROXIMATE WEIGHTS

(Add these weights to SAE standard equipment operating weight to obtain total operating weight.)

	lb.	kg		lb.	kg
Engine/Power Train:			13 ft. x 24 in. (3.96 m x 610 mm) moldboard with .62 x 6 in. (16 x 152 mm) through hardened Dura-Max cutting edge	60	27
Cold weather ether starting aid	3	1	13 ft. x 24 in. (3.66 m x 610 mm) moldboard with .75 x 8 in. (19 x 203 mm) through hardened Dura-Max cutting edge	196	89
Coolant heater	2	1	14 ft. x 24 in. (4.27 m x 610 mm) moldboard with .62 x 6 in. (16 x 152 mm) through hardened Dura-Max cutting edge	119	54
Operator's Station:			14 ft. x 24 in. (4.27 m x 610 mm) moldboard with .75 x 8 in. (19 x 203 mm) through hardened Dura-Max cutting edge	265	120
Air conditioner with R134a refrigerant, pressurizer, and heavy-duty alternator	177	80	Extensions, 2 ft. (610 mm) right or left (less cutting edge)	220	100
Cab, full height with ROPS	82	37	Overlay end bits (1 pair)		
Canopy, low profile with ROPS	-226	-103	6 in. (152 mm)	62	28
Control conversion (moves LH blade control to RH side)	2	1	8 in. (203 mm)	77	35
Defroster fan	4	2	Attachments:		
Defroster fans (dual)	8	4	Bottom guard, general purpose	170	77
Floormat	9	4	Bottom guard, heavy duty with rear hitch	610	277
Heater - 20,000 Btu/hr (5.9 kW)	16	7	Dozer blade, front mounted - 106 x 31.6 in. (2.69 m x 803 mm)	1490	676
Heater - 40,000 Btu/hr (11.7 kW)	31	14	4.3 in. (109 mm) dig below ground		
Heater - 25,000 Btu/hr (7.3 kW), roof mounted for use with air conditioner	17	8	29.9 in. (759 mm) lift above ground	60	27
Seat belt, 3 in. (76 mm)	3	1	Engine side shields	550	250
Seat, deluxe suspension vinyl with armrests	90	41	Front weight	1750	793
Seat, deluxe suspension cloth with armrests	90	41	Pushblock, front	61	28
Windows, openable lower front	7	3	Rear hitch	2470	1120
Windshield washers, front and rear	15	7	Ripper, rear mounted with hitch and 3 shanks		
Wipers/washers, lower front windows	7	3	Ripper/scarifier, rear mounted with hitch, 3 ripper shanks and 9 scarifier teeth	3284	1489
Wiper, rear window	5	2	Scarifier, front mounted with 5 teeth	1730	785
Electrical System:			Toolbox	11	5
Batteries, heavy-duty with 320 min. (1100 CCA) reserve capacity	101	46	Tires:		
Beacon wiring and switch	2	1	13.00-24, 12 PR, G2 tires on 1-piece rims	-84	-38
Blade lights (2 mounted under cab)	4	2	14.00-24, 12 PR, G2 tires on 10 in. 3-piece rims	161	73
Work lights (2 front, 2 rear)	12	5	14.00-24 radial tires on 10 in. 3-piece rims	467	212
24 volt to 12 volt 5-amp converter	3	1	17.5-25, 12 PR, L2 tires on 1-piece rims	408	185
24 volt to 12 volt 20-amp battery balancer	3	1	17.5-25, 12 PR, L2 tires on 14 in. 3-piece rims	704	319
Hydraulics:			Other tire sizes available		
Auxiliary function valve for front-mounted equipment	3	1			
Auxiliary function valve for rear-mounted equipment	50	23			
High speed front-wheel drive	34	15			
Hydraulics for front-mounted equipment	19	9			
Moldboards:					
12 ft. x 24 in. (3.66 m x 610 mm) moldboard with .75 x 8 in. (19 x 203 mm) through hardened Dura-Max cutting edge	126	57			

ADDITIONAL AVAILABLE EQUIPMENT*

Automatic blade controls
Compactors
Dozer blades

Fenders
Grade and slope indicators
Push blocks

Slopers
Snowplows and wings
Tire chains

Windrow eliminators
* See your John Deere dealer for further information.

THE JDAdvantEDGE

JDAdvantEdge is a wealth of support programs, parts systems, and dealer resources, all designed to give you the edge. This package of special benefits is a major reason why John Deere offers the "best value" for your equipment dollar.

Best parts support - Twelve regional parts depots in North America and others around the world put parts support near your job no matter where in the world it is.

A computerized FLASH™ parts locating system linking these depots to dealerships can find out-of-stock parts in a hurry and get them into your hands fast. Usually within 24 hours.

Best service backup - Dealer service technicians are regularly schooled, at our modern facility in Davenport, Iowa, or by professionals in the field, to diagnose quickly and repair efficiently.

If they're stumped, a phone call to DTAC (Dealer Technical Assistance Center) puts them in touch with a staff of pros at the factory who help them find a solution quickly.

Best dealers - Your John Deere dealer is an important contributor to the JDAdvantEdge. He or she is committed to being the best equipment supplier you can work with.

This is a dollars-and-cents commitment in parts inventory, in service facilities, in field-service trucks. It's a sweat-and-blood commitment in

dedicated, skilled, and highly trained and motivated personnel in each and every department at the dealership.

But what sets John Deere dealers apart from all the rest is something more, a factor somewhat difficult to measure ... a caring attitude, and a sincere desire to be the best at meeting the needs of each individual customer.

John Deere Finance Plans - Whether you rent, lease, or buy John Deere equipment, your dealer can explain the John Deere options available. One-stop options that let you free up operating capital, keep other lines of credit open. More solid benefits of the JDAdvantEdge.

Best protection - In addition to the new equipment warranty that meets or exceeds the competition, SECURE® extended coverage, an optional service product for John Deere equipment, is available for repair coverage after the warranty concludes. Full machine or power train coverage is available for a variety of time periods to meet your needs. Consult your dealer for availability and details.

Quality manufacturing - This machine was manufactured at the John Deere Davenport Works, Davenport, Iowa, which has been registered to the International Organization for Standardization (ISO) standard 9001. The Davenport Works has been audited and recognized for its excellence in quality systems by the Quality Management Institute (QMI) and the Japanese Machinery & Metal Inspection Institute (JMI).



Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 70 020, using No. 2-D fuel at 35 API gravity. No derating is required up to 10,000 feet (3050 m) altitude. Gross power is without cooling fan.

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 14.00-24, 12 PR tubeless tires, 12-ft. (3.66 m) moldboard with .62 x 6-in. (16 x 152 mm) cutting edge, and standard equipment. Weights include lubricants, coolants, full fuel tank and 175-lb. (79 kg) operator.

