#### **ENGINE**

John Deere engineered and manufactured six-cylinder diesel engine. Replaceable wet-type cylinder liners ensure superior heat dissipation, longer engine life. High-strength alloy heads include replaceable valve seat inserts. John Deere engines are designed and manufactured with time-proven industry standard features that provide reliable service and long life.

## 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)

,	Forward		Reverse	
Shift Lever Position	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 drydisk parking brake. Both independent braking systems are effective on all four tandem wheels.

## **FRONT AXLE**

Heavy-duty, welded box co	nstruction	
Front axle oscillation (total)		
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 righ	t and left) .	
Minimum turning radius		22 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 pump	 6.0 cu. in. (98 cm <sup>3</sup> )
Rated flow at 2200 engine rpm	 52.4 gpm (198 L/min)

TIRES AND RIMS					
Tire	Tire Wheel Tread Overall Width		Ground Clearance		
Size	Front	Rear	Front	Rear	(Front Axle)
13.0-24 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)

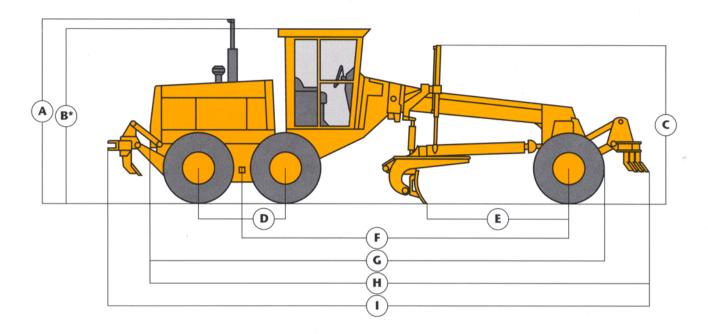
## CAPACITIES

U.S.
Fuel tank
Cooling system
Engine lubrication, including filter 26 qt. (24.6 L)
Transmission and hydraulic system (refill)23 gal. (87 L)
Tandem housings (each)
Circle gearbox

## **OPERATING WEIGHTS**

	On Front	On Rear	
SAE 772B	Wheels	Wheels	Total
With standard equipment.	.9,400 lb.	23,050 lb.	32,450 lb.
	(4263 kg)	(10 454 kg)	(14717 kg)
With standard equipment			
and scarifier	. 11,390 lb.	22,790 lb.	34,180 lb.
	(5166 kg)	(10 336 kg)	(15 502 kg)
With standard equipment,			
scarifier and ripper	. 10,650 lb.	26,080 lb.	36,730 lb.
	(4830 kg)	(11828 kg)	(16 658 kg)
Typically equipped operation	ng weights ra	nge up to 38,	925 lb.
(17 653 kg)	_		

## **DIMENSIONS**



K	ey	
Α	<b>ey</b> Height to top of exhaust	10 ft. 4.5 in. (3.16 m)
В	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)
Н	Overall length with scarifier	30 ft. 3 in. (9.22 m)
ı	Overall length with scarifier and ripper	32 ft. 7 in. (9.93 m)

<sup>\*</sup>Add 8.3 in. (210 mm) for full height cab Add 1.0 in. (25.5 mm) for cab with air conditioning

## **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**

Wolded how construction

Lift above ground	
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

vveided 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	
Weight per ft., minimum	
Minimum vertical section modulus	
Average vertical section modulus at saddle .	149 in <sup>3</sup> (2448 cm <sup>3</sup>

# **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
Rotation 360 degrees
Drive hydraulic motor and worm gear
with positive position lock
Sideshift, right
left

## **MOLDBOARD**

High strength, wear resistant high carbon steel with replaceable
side shift wear inserts.
Length
Height
Thickness

## **CUTTING EDGE**

Dura-Max® through h		
Thickness and width	 .0.62 x 6.0 in.	(16 x 150 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

## SCARIFIER

## RIPPER

Parallelogram linkage with electric valve control							
Width of cut							
Number of shanks 3 standard, 5 optional							
Lift above ground 14.5 in. (368 mm)							
Maximum penetration							
Shank size 2 x 5 in. (51 x 127 mm)							

#### **ADDITIONAL STANDARD EQUIPMENT**

Cab, low profile with ROPS, cushioned vinyl seat and seat belt.

Dual-level monitor system First level warning: (Red STOP light, audible alarm and white function indicator light)

Low engine oil pressure Very high engine coolant temperature

Articulation indicator

Low brake pressure
Very high transmission
temperature
Engaged park brake (in gear)
Second level warning:
(Yellow CAUTION light
and white function
indicator light)
Restricted engine air filter
Low electrical voltage
High transmission
temperature

Low transmission clutch pressure
Restricted transmission filter
Restricted hydraulic filter Disengaged lift arm lock
Function indicator only:
(Green function indicator light)
Engaged differential lock
Turn signals
Hazard warning signals

Engine air precleaner
Front windshield wiper
Fuel gauge
Horn
Hourmeter
Lights, driving
Lights, stop and tail
Mirror, rearview, inside
Mirrors, outside, rearview,
convex, both sides
Reverse warning alarm
Tow disconnect
Turn signals/hazard
warning lights

#### **OPTIONAL OR SPECIAL EQUIPMENT WITH APPROXIMATE WEIGHTS**

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

	lb.	<b>kg</b> 80		lb.	kg
Air conditioner with heavy-duty alternator	177	80	Mirrors, outside, rearview, convex,		
Alternator, 50-amp (1400 W)	17	8	both sides	12	5
Auxiliary function valve			Moldboard w/through hardened Dura-Max		
(rear mounted)	50	23	cutting edges:		
Batteries, heavy-duty with 320 min.			12-ft. (3.66 m) w/.88 x 8 in. (19 x 203 mm)		
(1000 CCA) reserve capacity	101	46	cutting edge	106	48
Beacon wiring and switch	2	1	14-ft. (4.27 m) w/.62 x 6 in. (16 x 152 mm)		
Blade, front dozer	1490	676	cutting edge	146	66
Bottom guard, general purpose	160	73	14-ft. (4.27 m) w/.88 x 8 in. (19 x 203 mm)		
Bottom guard, heavy-duty with rear hitch	510	231	cutting edge	155	70
Cab, full height with ROPS	82	37	Moldboard extensions, 2-ft. (610 mm),		
Canopy, low profile with ROPS	-226	- 103	right or left (less cutting edge)	220	100
Cold-weather starting aid	3	1	Overlay end bits (1 pair), 6 in. (152 mm)	62	28
Control conversion (moves LH blade control			Overlay end bits (1 pair), 8 in. (203 mm)	77	35
to RH side)	2	1	Rear hitch	61	28
Dura-Max through-hardened cutting edge,	0 5 15 /6	(171/)	Rims for 17.50-25 tires	674	306
<sup>3</sup> / <sub>4</sub> x 8 in. (19 x 203 mm)	3.5 ID/π	(13 kg/m)	Ripper, rear mounted with hitch		
Engine side shields	60	27	and 3 shanks	2470	1120
Fan, defroster	4	2	Scarifier with five teeth, 1 x 3 in.		
Fans, dual defroster	8	4	(25 x 76 mm)	1730	785
Heater, coolant	8	1	Seat belt, 3-in. (76 mm)	3	1
Heater, cab, 20,000 Btu/hr (5.9 kW)	16	7	Seat, deluxe suspension, cloth covered	90	41
Heater, cab, 40,000 Btu/hr (11.7 kW)	31	14	Seat, deluxe suspension, vinyl covered	90	41
Heater, roof-mounted, 25,000 Btu/hr			Tires:		
(7.3 kW) (add to air conditioner)	17	8	13.00-24, 12 PR, G2	-210	- 95
Lights, 2 blade	4	8 2 5	17.5-25, 12 PR, L2	+ 258	+117
Lights, work, 2 front/2 rear floods		5	Toolbox	11	5
Mat. floor	12 9	4	Washer, front and rear windshield	15	7
,			Weight, front	600	272
			Wiper, rear window	5	
			Wipers, lower front windows	7	2
					_

#### **ADDITIONAL AVAILABLE EQUIPMENT\***

Automatic blade controls Compactors Dozer blades Fenders Grade and slope indicators Push blocks Slopers Snow plows and wings Tire chains Windrow eliminators \*See your John Deere dealer for further information

#### **JOHN DEERE 'BEST VALUE' EXTRAS**

**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, lowa, 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 has made a significant commitment 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.

**Best warranty protection** — All John Deere construction equipment has a 6-month warranty on the entire machine and a full 24-month warranty on the power train. The SECURE® program, a John Deere service product, is offered for repair coverage after warranty concludes. Full machine or power train coverage is available for a variety of time periods to meet your needs. Your dealer will explain the details.



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. (3.65 m) moldboard with .62 x 6-in. (16 x 150 mm) cutting edge, and standard equipment. Weights incude lubricants, coolants, full fuel tank and 175 lb. (79 kg) operator.

