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 legging 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 grade performance and traction.

**Engine: John Deere 6076A**
- Rated power at 2200 rpm in gears 1-3 ................................................. 155 SAE net hp (116 kW)
- Rated power at 2200 rpm in gears 4-8 ................................................. 185 SAE net hp (138 kW)
- Turbocharged ................................................. aftercooled
- Number of cylinders .......................................... 6
- Displacement .................................................. 466 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)
- Lubrication ................................................. pressure system w/full flow filter and cooler
- Aspirated air cleaner with restriction indicator ................................................. dual element, dry electrical system
- 24 volt with 50-amp (1400 W) alternator
- Batteries .................................................. two 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)

<table>
<thead>
<tr>
<th>Shift Lever Position</th>
<th>Forward Speed (mph)</th>
<th>Reverse Speed (mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.3</td>
<td>3.0</td>
</tr>
<tr>
<td>2</td>
<td>3.3</td>
<td>4.3</td>
</tr>
<tr>
<td>3</td>
<td>5.2</td>
<td>6.7</td>
</tr>
<tr>
<td>4</td>
<td>6.7</td>
<td>8.6</td>
</tr>
<tr>
<td>5</td>
<td>8.9</td>
<td>10.8</td>
</tr>
<tr>
<td>6</td>
<td>11.5</td>
<td>13.8</td>
</tr>
<tr>
<td>7</td>
<td>14.7</td>
<td>16.5</td>
</tr>
<tr>
<td>8</td>
<td>25.2</td>
<td>28.6</td>
</tr>
</tbody>
</table>

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 radius ................................................. 22 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.

TIRE SIZES AND RIMS

<table>
<thead>
<tr>
<th>Tire Size</th>
<th>Front Tread</th>
<th>Overall Width</th>
<th>Ground Clearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.00-24</td>
<td>76.60 in. (1.94 m)</td>
<td>7 ft. 10 in. (2.39 m)</td>
<td>22 in. (559 mm)</td>
</tr>
<tr>
<td>14.00-24</td>
<td>82.40 in. (2.02 m)</td>
<td>8 ft. 8 in. (2.44 m)</td>
<td>26.5 in. (672 mm)</td>
</tr>
<tr>
<td>17.5x25</td>
<td>94.00 in. (2.38 m)</td>
<td>8 ft. 6 in. (2.59 m)</td>
<td>32.5 in. (826 mm)</td>
</tr>
</tbody>
</table>

CAPACITIES

- 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) ................................................. 25 gal. (87 L)
- Tandem housings (each) ................................................. 5 gal. (18.9 L)
- Circle gearbox ................................................. 4 qt. (3.8 L)

OPERATING WEIGHTS

<table>
<thead>
<tr>
<th>SAE</th>
<th>On Front Wheels</th>
<th>On Rear Wheels</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAE</td>
<td>8,700 lb. (3,946 kg)</td>
<td>22,600 lb. (10,249 kg)</td>
<td>31,300 lb. (14,195 kg)</td>
</tr>
<tr>
<td>SAE</td>
<td>10,640 lb. (4,825 kg)</td>
<td>22,390 lb. (10,155 kg)</td>
<td>33,030 lb. (14,900 kg)</td>
</tr>
<tr>
<td>SAE</td>
<td>9,870 lb. (4,476 kg)</td>
<td>25,630 lb. (11,624 kg)</td>
<td>35,500 lb. (16,100 kg)</td>
</tr>
</tbody>
</table>

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 one-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 .................................................................. 85.0 in. (211 m)
Left .................................................................. 85.0 in. (216 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)
Height at bottom ........................................ 1.00 in. (25 mm)
Weight per ft., minimum ............................. 118 lb. (175.5 kg/m)
Minimum vertical section modulus ........... 117 in.³ (1917 cm³)
Average vertical section modulus at saddle .... 149 in.³ (2448 cm³)

**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)