**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.

- **Engine:** John Deere 6059D
- **Rated power at 2300 rpm:** 90 SAE net hp (67 kW)
- **95 SAE gross hp (71 kW)**
- **Number of cylinders:** 6
- **Displacement:** 359 cu. in. (5.884 L)
- **Fuel consumption, typical:** 2.4 to 3.1 gal./hr. (9 to 11.7 L/h)
- **Net torque at 1300 rpm:** (22% torque rise) 250 lb.-ft. (339 Nm)
- **Lubrication:** pressure system w/full flow filter and cooler
- **Aspirated air cleaner with restriction indicator:** dual element, dry
- **Electrical system:** 24 volt with 42-amp (1120 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 2300 engine rpm with 13.00-24 tires and no tire slip)

<table>
<thead>
<tr>
<th>Shift Lever Position</th>
<th>Forward mph (km/h)</th>
<th>Reverse mph (km/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.0</td>
<td>2.5</td>
</tr>
<tr>
<td>2</td>
<td>2.9</td>
<td>3.5</td>
</tr>
<tr>
<td>3</td>
<td>4.5</td>
<td>5.5</td>
</tr>
<tr>
<td>4</td>
<td>5.8</td>
<td>7.1</td>
</tr>
<tr>
<td>5</td>
<td>7.6</td>
<td>8.9</td>
</tr>
<tr>
<td>6</td>
<td>9.8</td>
<td>5.5</td>
</tr>
<tr>
<td>7</td>
<td>12.8</td>
<td>11.4</td>
</tr>
<tr>
<td>8</td>
<td>21.6</td>
<td>14.8</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, or unlocked for maneuverability in tight turns. One and three quarter-inch (45 mm) pitch tandem drive chains are sized for long life.

**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.

**TIRES AND RIMS**

- **Tire Size:** 15.00-24
- **Wheel Tread:** 78.75 in. (200.3 mm)
- **Overall Width:** 81.125 in. (206.2 mm)
- **Ground Clearance:** 7 ft. 10.75 in. (2.32 m)
- **Total:** 9 ft. 10.5 in. (3.01 m)

**CAPACITIES**

- **Fuel tank:** 50 gal. (189 L)
- **Cooling system:** 5.6 gal. (21.1 L)
- **Engine lubrication, including filter:** 12 qt. (11 L)
- **Transmission and hydraulic system (refill):** 14 gal. (55 L)
- **Tandem housings (each):** 5 gal. (19 L)
- **Circle gearbox:** 1.5 qt. (1.4 L)

**OPERATING WEIGHTS**

<table>
<thead>
<tr>
<th>SAE</th>
<th>On Front</th>
<th>On Rear</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>With standard equipment... 5,725 lb. (2597 kg)</td>
<td>14,500 lb. (6577 kg)</td>
<td>20,225 lb. (9174 kg)</td>
<td></td>
</tr>
<tr>
<td>With standard equipment and scarifier... 6,775 lb. (3073 kg)</td>
<td>14,328 lb. (6449 kg)</td>
<td>21,103 lb. (9572 kg)</td>
<td></td>
</tr>
<tr>
<td>With standard equipment and wheel weights... 5,725 lb. (2597 kg)</td>
<td>15,100 lb. (6849 kg)</td>
<td>20,825 lb. (9446 kg)</td>
<td></td>
</tr>
<tr>
<td>With standard equipment, scarifier and wheel weights... 6,775 lb. (3073 kg)</td>
<td>14,928 lb. (6771 kg)</td>
<td>21,703 lb. (9844 kg)</td>
<td></td>
</tr>
</tbody>
</table>

Typically equipped operating weights range up to 22,528 lb. (10,219 kg)
**DIMENSIONS**

Key:
A Height to top of exhaust ........................................... 10 ft. 1.5 in. (3.09 m)
B Height to top of cab .................................................. 10 ft. 2 in. (3.09 m)
C Height to top of blade lift cylinders ......................... 8 ft. 3.5 in. (2.53 m)
D Tandem axle spacing ................................................... 4 ft. 8.75 in. (1.44 m)
E Bladebase ...................................................................... 7 ft. 8 in. (2.34 m)
F Wheelbase ...................................................................... 7 ft. 8 in. (2.34 m)
G Overall length ............................................................... 17 ft. 4 in. (5.28 m)
H Overall length with scarifier ....................................... 24 ft. 4.5 in. (7.43 m)

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

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**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. Five blade lift arm positions provide excellent blade positioning. Blade components are fully adjustable.

**BLADE RANGE**

Lift above ground ......................................................... 13 in. (330 mm)
Blade side shift, right ..................................................... 26.75 in. (679 mm)
                            left ....................................................... 31.25 in. (794 mm)
Shoulder reach outside wheels (frame straight):
Right ................................................................. 71.5 in. (1.82 m)
                             Left ....................................................... 77.25 in. (1.96 m)
Pitch at ground line ....................................................... 32 deg. forward

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**MAINFRAME**

Welded box construction.

Section size, maximum ................................... .16.5 x 8 in. (419 x 203 mm)
                        minimum .......................................... .12.5 x 8 in. (318 x 203 mm)
Weight per ft., maximum ....................................... .99 lb.-ft. (147.3 kg/m)
                        minimum .......................................... .91 lb.-ft. (135.4 kg/m)

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**DRAWBAR**

Welded box construction with universal swivel.

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**CIRCLE**

Welded construction, heat-treated for strength.

Circle diameter ............................................................ 54 in. (1.37 m)
Rotation ................................................................. 560 degrees
Drive ................................................................. hydraulic motor and worm gear
Sideshift, right .......................................................... 27.0 in. (686 mm)
                             left ....................................................... 28.5 in. (724 mm)

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**MOLDBOARD**

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

Length ................................................................. 12 ft. (3.66 m)
Height ................................................................. 22 in. (559 mm)
Thickness ............................................................. 0.62 in. (16 mm)

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**CUTTING EDGE**

Dura-Max® through-hardened steel edge.

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

V-type manual three-pitch position with hydraulic float.
Width of cut.................................................................46 in. (1.17 m)
Number of teeth..........................................................5 standard, 9 optional
Lift above ground.........................................................22.5 in. (575 mm)
Maximum penetration......................................................8.75 in. (222 mm)
Shank size......................................................................1 x 3 in. (25 x 76 mm)

BULLDOZER

Mounts on scarifier linkage; can be angled 22 degrees right or left by using frame articulation.
Length.........................................................................95 in. (2.36 m)
Height...........................................................................23.5 in. (597 mm)
Lift above ground.........................................................27 in. (686 mm)
Penetration.....................................................................4 in. (102 mm)

ADDITIONAL STANDARD EQUIPMENT

Engine/Power Train:
- Air precleaner
- Antifreeze
- Electric fuel shutoff
- Fan guard
- Fuel filter
- Transmission tow disconnect: 13.00-20, 8 PR, C2 tires

Electrical System:
- 40 amp (1120 watt) alternator
- Batteries with 180 min. (625 CCA) reserve capacity
- 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 side shift
- Frame articulate
- Wheel lean
- Hydraulic differential lock
- Hydraulic oil cooler
- Hydraulic pump, 3.0 cu. in. (50 cu. cm), 52.7 gpm (102 Lpm)
- 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)
- 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
- Park brake engaged (in gear) warning light with audible alarm
- 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 22 in. (3.66 m x 559 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.)

<table>
<thead>
<tr>
<th>Engine/Power Train:</th>
<th>lb.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altitude Compensating Turbocharger</td>
<td>42</td>
<td>19</td>
</tr>
<tr>
<td>Cold weather other starting aid</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Coolant heater</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operator's Station:</th>
<th>lb.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cab, full height with ROPS</td>
<td>82</td>
<td>37</td>
</tr>
<tr>
<td>Canopy, low profile with ROPS</td>
<td>-226</td>
<td>-103</td>
</tr>
<tr>
<td>Control conversion (moves LH blade control to RH side)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Defroster fan</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Defroster fans (dual)</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Floor mat</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Heater – 20,000 Btu/hr (5.9 kW)</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>Heater – 40,000 Btu/hr (11.7 kW)</td>
<td>51</td>
<td>14</td>
</tr>
<tr>
<td>Seat belt, 3 in. (76 mm)</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Seat, deluxe suspension vinyl with armrests</td>
<td>90</td>
<td>41</td>
</tr>
<tr>
<td>Seat, deluxe suspension cloth with armrests</td>
<td>90</td>
<td>41</td>
</tr>
<tr>
<td>Windshield washers, front and rear</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Wipers/washers, lower front windows</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Wiper, rear window</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electrical System:</th>
<th>lb.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beacon wiring and switch</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Blade lights (2 mounted under cab)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Work lights (2 front, 2 rear)</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>24 volt to 12 volt converter</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hydraulics:</th>
<th>lb.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auxiliary function valve for front-mounted equipment</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Hydraulics for front-mounted equipment</td>
<td>68</td>
<td>30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Moldboards:</th>
<th>lb.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 ft. x 22 in. (3.66 m x 559 mm) moldboard with .75 x 6 in. (19 x 152 mm) through hardened Dura-Max cutting edge</td>
<td>100</td>
<td>45</td>
</tr>
<tr>
<td>Extensions, 2 ft. (610 mm) right or left (less cutting edge)</td>
<td>185</td>
<td>100</td>
</tr>
<tr>
<td>Overlay end bits, 6 in. (152 mm), 1 pair</td>
<td>62</td>
<td>28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attachments:</th>
<th>lb.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom guard</td>
<td>160</td>
<td>73</td>
</tr>
<tr>
<td>Engine side shields</td>
<td>92</td>
<td>42</td>
</tr>
<tr>
<td>Front-mounted dozer blade – 93 x 23.5 in. (2.36 m x 597 mm)</td>
<td>40</td>
<td>0.75</td>
</tr>
<tr>
<td>4.0 in. (102 mm) dig below ground</td>
<td>650</td>
<td>295</td>
</tr>
<tr>
<td>27.0 in. (686 mm) lift above ground</td>
<td>1500</td>
<td>675</td>
</tr>
<tr>
<td>Front-mounted scarifier with 5 teeth</td>
<td>878</td>
<td>398</td>
</tr>
<tr>
<td>Toolbox</td>
<td>14</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tires:</th>
<th>lb.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.00-24, 10 PR, G2 tires on 8-in. 3-piece rims</td>
<td>35</td>
<td>16</td>
</tr>
<tr>
<td>15.5-25, 8 PR, L2 tires on 13-in. rims</td>
<td>323</td>
<td>146</td>
</tr>
</tbody>
</table>

ADDITIONAL AVAILABLE EQUIPMENT*

- Automatic blade controls
- Fenders
- Compactors
- Grade and slope indicators
- Dozer blades
- Push blocks
- Slopers
- Snowplows and wings
- Tire chains
- Windrow eliminators

* See your John Deere dealer for further information.