**ENGINE**

John Deere engineered and manufactured 7.6 liter diesel engine features a high-efficiency turbocharger for maximum performance. Replaceable wet-type cylinder liners help ensure superior heat dissipation, longer engine life. High-strength alloy cylinder heads include replaceable valve seat inserts. Cast aluminum pistons reduce rod bearing loads and provide vital heat transfer; pistons are sprayed with cooling oil for longer engine life.

**Engine:** John Deere 6076T  
Rated power at 2200 rpm: 165 net hp (123 kW)  
173 gross hp (129 kW)  
Turbocharger: standard  
Cylinders: 6  
Displacement: 666 cu. in. (10.758 L)  
Fuel consumption, typical: 3.4 to 5.0 gal./hr. (12.9 to 18.9 L/h)  
Max. net torque rise: 55% at 1350 rpm  
532 lb.-ft. (721 Nm)  
Lubrication: pressure system with full-flow filter  
Electrical system: 12 volt with 78-amp alternator  
Battery: reserve capacity 180 minutes

**TRANSMISSION**

The direct-drive power shift transmission is engineered and manufactured by John Deere specifically for skidders. Eight speeds in forward, four speeds in reverse. The transmission charge pump is externally mounted for easy servicing.

**TRAVEL SPEEDS**

At 2200 engine rpm, no tire slip, with 30.5-32 tires

<table>
<thead>
<tr>
<th>mph</th>
<th>km/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward</td>
<td>1.7-18.8</td>
</tr>
<tr>
<td>Reverse</td>
<td>2.4-6.8</td>
</tr>
</tbody>
</table>

**AXLES**

Heavy-duty, inboard-mounted planetary-type final drives distribute shock loads evenly. Hydraulically-applied differential lock is standard equipment in both front and rear axles. Differential can either be locked for exceptional traction, or unlocked for easy maneuvering with less tire wear.

**BRAKES**

Hydraulic, annular-style wet-disk brakes are mounted inboard on both axles as standard equipment. Completely sealed and running in a cooling oil bath, they are self-adjusting, self-equalizing and need no periodic service. A spring-applied, hydraulically-released wet multi-disk parking brake is mounted on the transmission, and is automatically applied when the engine is off. This brake can be manually applied by placing the transmission control lever in the park position.

**STEERING**

The load- and speed-sensing power steering system delivers quick response and power for easy maneuvering in the woods. Its 90 degrees of frame articulation (45 degrees each direction) provide exceptional maneuverability.

**HYDRAULICS**

The quick, responsive and powerful hydraulic system features an axial-piston, pressure-compensated pump and closed-center design. The hydraulic system is separate from the transmission, enhancing the overall reliability of both systems.

**TIRES**

24.5-32, 12 PR LS2  
30.5-32, 12 PR LS2  
30.5-32, 16 PR LS2

**WINCH**

The optional John Deere-engineered and manufactured direct-drive 6000 Winch includes wet multi-disk clutch and spring-applied, hydraulically-released brake. The adjustable free-spool feature and low-friction drum seals increase ease of operation. All winch functions are controlled by a single conveniently-located lever.

**CAPACITIES**

<table>
<thead>
<tr>
<th>U.S.</th>
</tr>
</thead>
</table>
| Fuel tank | 62 gal. (234.7 L)  
| Cooling system | 30 qt. (28.4 L)  
| Engine lubrication, including filter | 25 qt. (23.7 L)  
| Transmission | 7.75 gal. (29.3 L)  
| Front differential | 7.5 gal. (28.4 L)  
| Rear differential | 7.5 gal. (28.4 L)  
| Winch, 6000 | 12 gal. (45.4 L)  
| Hydraulic reservoir capacity | 11 gal. (41.6 L)  

**OPERATING WEIGHT**

<table>
<thead>
<tr>
<th>lbs.</th>
</tr>
</thead>
</table>
| 748E (single function) | 52,400 lb. (14,696 kg)  
| (dual function) | 53,400 lb. (15,150 kg)  
| with standard equipment |  
| without standard equipment |  

Outside clearance circle with blade: 42 ft. 0 in. (12.8 m)
DIMENSIONS

Sideview dimensions are for skidder equipped with 30.5-32, 12 PR LS2 tires.

Single Function Grapple

Key:
A Overall height .................................................. 10 ft. 3 in. (3.13 m)
B Maximum blade lift above ground .......................... 4 ft. 11 in. (1.50 m)
C Maximum blade dig below ground ......................... 14 in. (356 mm)
D Front axle to front of machine ............................... 70 in. (1778 mm)
E Front axle to blade cutting edge arc ...................... .97 in. (2464 mm)
F Front axle to articulation joint ............................. .68 in. (1727 mm)
G Wheelbase ....................................................... 145 in. (3683 mm)
H Height of grapple from ground level ..................... 2 ft. 10 in. (853 mm)
I Reach of grapple at ground level ......................... .7 ft. 4 in. (2.24 m)
J Reach of grapple at full reach ............................... 7 ft. 12 in. (2.44 m)
K Maximum height of boom .................................. 10 ft. 10 in. (3.30 m)
L Below ground reach of grapple at full reach ........... .38.9 in. (988 mm)
M Overall length .................................................. 25 ft. 7.9 in. (7.82 m)

Dual Function Grapple

Key:
A through G .......................................................... same as above
H Height of grapple from ground level ..................... 4 ft. 4 in. (1321 mm)
I Reach of grapple at ground level ......................... .5 ft. 1 in. (1.53 m)
J Reach of grapple at full reach ............................... .9 ft. 9 in. (2.91 m)
K Maximum height of boom .................................. 12 ft. 5 in. (3.78 m)
L Below ground reach of grapple at full reach ........... .44 in. (1117 mm)
M Overall length .................................................. 25 ft. 6 in. (7.77 m)
<table>
<thead>
<tr>
<th>Tire Size</th>
<th>N Ground Clearance</th>
<th>O Wheel Tread</th>
<th>P Overall Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.5-32</td>
<td>22.9 in. (582 mm)</td>
<td>8 ft. 2 in. (2.49 m)</td>
<td>10 ft. 2.5 in. (3.11 m)</td>
</tr>
<tr>
<td>30.5-32</td>
<td>23.6 in. (599 mm)</td>
<td>8 ft. 1 in. (2.46 m)</td>
<td>10 ft. 7.5 in. (3.24 m)</td>
</tr>
</tbody>
</table>

**Single and Dual Function Grapple**
- O Tong opening at tips ... 120 in. (3048 mm)
- R Enclosure area, tongs tip to tip .......... 11.5 sq. ft. (1.07 m²)
- S Minimum diameter of stem ................. 6 in. (152 mm)

**Dual Function Grapple (Optional)**
- O 125 in. (3175 mm)
- R 14.5 sq. ft. (1.35 m²)
- S 8 in. (203 m)