ENGINE

John Deere engineered and manufactured 4-cylinder turbocharged diesel engine. Replaceable wet-type cylinder liners help ensure superior heat dissipation, longer engine life. High-strength alloy head includes replaceable valve seat inserts. High torque rise helps provide fast engine recovery when working in tough operating conditions.

**Engine:** John Deere 4045T w/altitude compensating turbocharger
Rated power at 2,100 rpm ............... 70 SAE net hp (52 kW)
...75 SAE gross hp (54.5 kW)
Cylinders ........................................... 4
Displacement ........................................ 276 cu. in. (4,524 L)
Fuel consumption, typical ........... 1.5 to 2.3 gal./hr. (4.9 to 8.7 L/h)
Maximum net torque at 1,300 rpm ........... 228 lb.-ft. (309 Nm)
Lubrication .... pressure system with spin-on filter and cooler
Air cleaner ........... dual stage dry type with safety element and prefilter
Electrical system ........... 12 volt with 95-amp sealed alternator
Cooling fan .............. bower

TRANSMISSION

Full power shift, Dura-Shift with torque converter or direct drive transmission is designed and built by John Deere. Four speeds forward and reverse allow the operator to match speeds to all working conditions. Power shift design and decelerator allow smooth gear changes without stopping the machine or using a clutch.

MAXIMUM TRAVEL SPEEDS

<table>
<thead>
<tr>
<th></th>
<th>455G TC</th>
<th>455G DD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mph (km/h)</strong></td>
<td><strong>Mph (km/h)</strong></td>
<td><strong>Mph (km/h)</strong></td>
</tr>
<tr>
<td>1st Forward</td>
<td>2.3</td>
<td>1.1</td>
</tr>
<tr>
<td>2nd Forward</td>
<td>3.3</td>
<td>1.9</td>
</tr>
<tr>
<td>3rd Forward</td>
<td>4.1</td>
<td>2.9</td>
</tr>
<tr>
<td>4th Forward</td>
<td>5.9</td>
<td>4.9</td>
</tr>
<tr>
<td>1st Reverse</td>
<td>2.5</td>
<td>1.3</td>
</tr>
<tr>
<td>2nd Reverse</td>
<td>3.6</td>
<td>2.1</td>
</tr>
<tr>
<td>3rd Reverse</td>
<td>4.5</td>
<td>3.2</td>
</tr>
<tr>
<td>4th Reverse</td>
<td>6.4</td>
<td>5.4</td>
</tr>
</tbody>
</table>

FINAL DRIVES

Large heavy-duty single reduction final drive assemblies help ensure long service life. To keep final drives from being adversely affected by shock loads, they are attached directly to the transverse case, and are isolated from the track frame.

STEERING/Brakes

Oil-cooled and modulated steering system provides excellent durability and steering control. Multiple wet-disk steering clutches and wet-band steering brakes are pressure lubricated and provide long-term service life. They are located at the rear of the machine and can be serviced easily.

AUTOMATIC PARK BRAKE

This exclusive safety feature engages whenever the engine stops. The operator cannot drive the machine with the park brake engaged, which eliminates brake damage.

HYDRAULICS

System ........................................... open center
Control ....................................... single lever
Pressurized main relief .............. 2,800 psi (19.34 MPa)
Pump ........................................... gear
Flow at 2,100 rpm ...................... 31 gpm (118 L/min.)
Filter, return oil ........... 10 micron, spin-on enclosed replaceable element

CYLINDERS

Cylinders: ground, heat-treated, chrome-plated, polished cylinder rods with hardened steel (replaceable bushings) pivot pins

<table>
<thead>
<tr>
<th>Bore in. (mm)</th>
<th>Stroke in. (mm)</th>
<th>Rod in. (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.93</td>
<td>63</td>
<td>50</td>
</tr>
<tr>
<td>3.50</td>
<td>90</td>
<td>50</td>
</tr>
</tbody>
</table>

UNDERCARRIAGE

John Deere Dura-Trax™ undercarriage features large deep-treaded components for exceptional wear. Pins and bushings are sealed for life. Sealed and lubricated chain is available. Rollers and idlers are permanently lubricated. All 455G Loaders have track frame covers that substantially reduce dirt buildup and make cleanout easier.

Chain pitch ...................... 6.29 in. (159.8 mm)
Bushing diameter, sealed ......... 2.01 in. (51.0 mm)
Bushing diameter, sealed and lubed ... 2.12 in. (55.8 mm)
Link height ....................... 3.54 in. (90.0 mm)
Track roller diameter .......... 7.19 in. (182.6 mm)
Carrier roller diameter ....... 6 in. (152.5 mm)

Standard Track

Two-bar grouser, closed-center .......... 14 in. (356 mm)
Track shoes, each side .................. 37
Ground contact area .................. 2,126 sq. in. (13,729 cm²)
Ground pressure, 455G TC ............ 8.81 psi (60.7 KPa)
Ground pressure, 455G DD ........... 8.71 psi (60.1 KPa)
Length of track on ground .......... 76 in. (1,930 mm)
Track gauge .................. 57 in. (1,450 mm)
Carrier roller ................. 1
Track rollers .................... 5
Adjustment ................... hydraulic with hinged dirt cover
Overall track width .......... 71 in. (1,803 mm)

Wide Track

Two-bar grouser, closed-center ........ 21 in. (533 mm)
Track shoes, each side .................. 37
Ground contact area .................. 3,192 sq. in. (20,595 cm²)
Ground pressure, 455G TC ............ 6.12 psi (42.2 KPa)
Ground pressure, 455G DD ........... 6.06 psi (41.8 KPa)
Length of track on ground .......... 76 in. (1,930 mm)
Track gauge .................. 68 in. (1,727 mm)
Carrier roller ................. 1
Track rollers .................... 5
Adjustment ................... hydraulic with hinged dirt cover
Overall track width .......... 89 in. (2,261 mm)

CAPACITIES

Fuel tank with lockable cap ........... 41 gal. (155.2 l)
Cooling system with coolant recovery tank ........ 18 qt. (17.0 L)
Engine oil including spin-on filter .......... 9 qt. (8.5 L)
455GTC Transmission including spin-on filter .......... 27 gal. (102 L)
455GDD Transmission including spin-on filter .......... 27 gal. (102 L)
Final drive (each) .......... 7 qt. (6.6 L)
Hydraulic reservoir ........... 10 gal. (37.8 L)
Hydraulic system including spin-on filter .......... 18 gal. (68.1 l)

All capacities are for 455TC unless otherwise noted. All power train and hydraulic systems allow 45 degrees maximum fore-aft, side-to-side operation without modification.

OPERATING WEIGHT

455G with standard equipment:

<table>
<thead>
<tr>
<th></th>
<th>455G TC</th>
<th>455G DD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard track</td>
<td>18,745 lb. (8503 kg)</td>
<td>18,545 lb. (8412 kg)</td>
</tr>
<tr>
<td>Wide track</td>
<td>19,545 lb. (8866 kg)</td>
<td>19,345 lb. (8775 kg)</td>
</tr>
</tbody>
</table>
Key:

Bucket Type

<table>
<thead>
<tr>
<th>Standard</th>
<th>Wide-Track</th>
<th>Multipurpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>1.3 cu. yd.</td>
<td>1.3 cu. yd.</td>
</tr>
<tr>
<td></td>
<td>(1.0 m³)</td>
<td>(1.0 m³)</td>
</tr>
</tbody>
</table>

A. Overall height
- Standard height ROPS: 106.6 in. (2708 mm)
- Low profile ROPS: 101.9 in. (2588 mm)
- Cab: 109.0 in. (2769 mm)

B. Overall length: 179.7 in. (4564 mm)
- Standard: 175.1 in. (4448 mm)
- Wide-Track: 182.6 in. (4638 mm)
- Multipurpose: 182.6 in. (4638 mm)

C. Reach at maximum height (45° discharge): 34.3 in. (871 mm)
- Standard: 30.4 in. (773 mm)
- Wide-Track: 36.3 in. (916 mm)
- Multipurpose: 36.3 in. (916 mm)

D. Reach at 7 ft. (2.13 m) clearance (45° discharge): 49.8 in. (1265 mm)
- Standard: 46.3 in. (1176 mm)
- Wide-Track: 52.3 in. (1328 mm)
- Multipurpose: 52.3 in. (1328 mm)

E. Dump clearance, maximum height (45° discharge): 103.1 in. (2620 mm)
- Standard: 103.7 in. (2635 mm)
- Wide-Track: 110.7 in. (2863 mm)
- Multipurpose: 110.7 in. (2863 mm)

F. Maximum operating height: 168.7 in. (4285 mm)
- Standard: 164.1 in. (4169 mm)
- Wide-Track: 170.8 in. (4354 mm)
- Multipurpose: 170.8 in. (4354 mm)

G. Rollback angle
- Concrete level: 40 degrees
- Carry position: 47 degrees
- Full turn: 45 degrees

H. Height to hinge pin: 128 in. (3251 mm)
- Standard: 128 in. (3251 mm)
- Wide-Track: 128 in. (3251 mm)
- Multipurpose: 128 in. (3251 mm)

I. Digging depth: 5.3 in. (135 mm)
- Standard: 5.3 in. (135 mm)
- Wide-Track: 5.3 in. (135 mm)
- Multipurpose: 5.3 in. (135 mm)

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 torque converter transmission, standard height rollover protective structure (ROPS), full fuel tank, 1.30 yd. (1.0 m³) general purpose bucket with eight teeth, sprocket counterweights, two 500 lb. (165 kg) rear counterweights, 14 in. (356 mm) track shoes with standard track, 175 lb. (79 kg) operator, and standard equipment.
## 455G Loader Operating Information

<table>
<thead>
<tr>
<th>Bucket Type</th>
<th>General Purpose</th>
<th>Multipurpose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standard</td>
<td>Wide Track</td>
</tr>
<tr>
<td>Capacity, heaped, SAE</td>
<td>cu. yd. m³</td>
<td>1.30 1.00</td>
</tr>
<tr>
<td>Capacity, struck, SAE</td>
<td>cu. yd. m³</td>
<td>1.05 0.80</td>
</tr>
<tr>
<td>Bucket width</td>
<td>in. m</td>
<td>77.7 1.97</td>
</tr>
<tr>
<td>Bucket weight, including eight bolt-on teeth</td>
<td>lb. kg</td>
<td>1,053 477</td>
</tr>
<tr>
<td>Breakout force, SAE</td>
<td>lb. kN</td>
<td>15,735 70</td>
</tr>
<tr>
<td>Tipping load, SAE</td>
<td>lb. kg</td>
<td>11,800 5350</td>
</tr>
<tr>
<td>Raising time</td>
<td>sec.</td>
<td>6.5 6.5</td>
</tr>
<tr>
<td>Dumping time</td>
<td>sec.</td>
<td>1.5 1.5</td>
</tr>
<tr>
<td>Lowering time</td>
<td>sec.</td>
<td>2.7 2.7</td>
</tr>
<tr>
<td>SAE operating weight with standard height ROPS</td>
<td>lb. kg</td>
<td>18,745 8503</td>
</tr>
<tr>
<td>SAE operating weight with ROPS cab</td>
<td>lb. kg</td>
<td>19,415 8807</td>
</tr>
<tr>
<td>Minimum recommended rear counter-weight or attachments</td>
<td>lb. kg</td>
<td>600 272</td>
</tr>
<tr>
<td>Sprocket counterweights</td>
<td>lb. kg</td>
<td>564 256</td>
</tr>
<tr>
<td></td>
<td>Standard Equipment</td>
<td>Optional</td>
</tr>
</tbody>
</table>

Adjustments to operating weights and tipping load for 1.30 cu. yd. (1.00 m³) general purpose bucket

## Adjustments to Operating Weights

<table>
<thead>
<tr>
<th>Add (+) or deduct (-) lb. (kg) as indicated for loaders with:</th>
<th>Operating Weight</th>
<th>Tipping Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cab</td>
<td>lb. kg</td>
<td>+ 676 306</td>
</tr>
<tr>
<td>Low profile ROPS</td>
<td>lb. kg</td>
<td>+ 240 109</td>
</tr>
<tr>
<td>Bucket teeth, bolt-on (eight)</td>
<td>lb. kg</td>
<td>- 139 - 62</td>
</tr>
<tr>
<td>Radial ripper with three teeth (w/o drawbar or rear counterweights)</td>
<td>lb. kg</td>
<td>+ 742 336</td>
</tr>
<tr>
<td>Parallelogram ripper with three teeth (w/o drawbar or rear counterweights)</td>
<td>lb. kg</td>
<td>+ 708 321</td>
</tr>
<tr>
<td>Rear counterweights, five max., 300 lb. (136 kg) each</td>
<td>lb. kg</td>
<td>+ 300 136</td>
</tr>
</tbody>
</table>