

## 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)  
 .....73 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 precleaner

Electrical system .....12 volt with 95-amp sealed alternator  
 Cooling fan .....blower

## 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

	455G TC		455G DD	
	mph	(km/h)	mph	(km/h)
1st Forward	2.3	3.7	1.1	1.8
2nd Forward	3.3	5.3	1.9	3.1
3rd Forward	4.1	6.6	2.9	4.7
4th Forward	5.9	9.5	4.9	7.9
1st Reverse	2.5	4.0	1.3	2.1
2nd Reverse	3.6	5.8	2.1	3.4
3rd Reverse	4.5	7.2	3.2	5.2
4th Reverse	6.4	10.3	5.4	8.7

## 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  
 Pressure, main relief .....2,600 psi (17 927 kPa)  
 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

	Bore		Stroke		Rod	
	in.	(mm)	in.	(mm)	in.	(mm)
Boom, two	3.93	100	32.55	827	1.96	50
Bucket, two	3.50	90	29.30	744	1.96	50

## UNDERCARRIAGE

John Deere Dura-Trax™ undercarriage features large deep-heat-treated 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. (53.8 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 .....2,128 sq. in. (13 729 cm<sup>2</sup>)  
 Ground pressure, 455G TC .....8.81 psi (60.7 kPa)  
 455G DD .....8.71 psi (60.1 kPa)  
 Length of track on ground .....76 in. (1930 mm)  
 Track gauge .....57 in. (1450 mm)  
 Carrier roller .....1  
 Track rollers .....5  
 Adjustment .....hydraulic with hinged dirt cover  
 Overall track width .....71 in. (1803 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 cm<sup>2</sup>)  
 Ground pressure, 455G TC .....6.12 psi (42.2 kPa)  
 455G DD .....6.06 psi (41.8 kPa)  
 Length of track on ground .....76 in. (1930 mm)  
 Track gauge .....68 in. (1727 mm)  
 Carrier roller .....1  
 Track rollers .....5  
 Adjustment .....hydraulic with hinged dirt cover  
 Overall track width .....89 in. (2261 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)

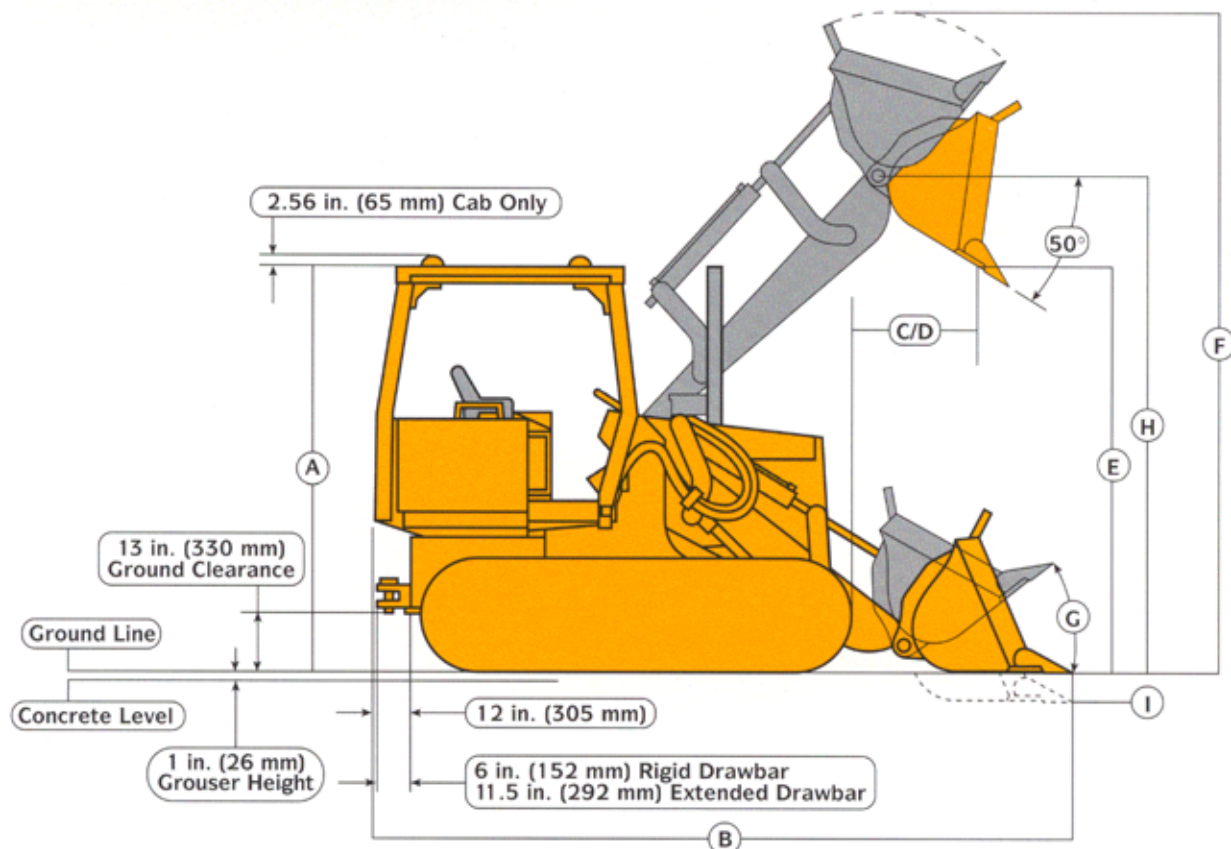
All capacities are for 455TC unless otherwise noted. All power train and hydraulic systems allow 45 degrees maximum fore-aft, side-to-side operation without modification.

## OPERATING WEIGHT

455G with standard equipment:

	455G TC	455G DD
Standard track	18,745 lb. (8503 kg)	18,545 lb. (8412 kg)
Wide track	19,545 lb. (8866 kg)	19,345 lb. (8775 kg)

## DIMENSIONS



### Key:

#### Bucket Type

	Standard	Wide-Track	Multipurpose
Capacity .....	1.3 cu. yd. (1.0 m <sup>3</sup> )	1.3 cu. yd. (1.0 m <sup>3</sup> )	1.3 cu. yd. (1.0 m <sup>3</sup> )
A. Overall height			
Standard height ROPS .....	106.6 in. (2708 mm)	106.6 in. (2708 mm)	106.6 in. (2708 mm)
Low profile ROPS .....	101.9 in. (2588 mm)	101.9 in. (2588 mm)	101.9 in. (2588 mm)
Cab .....	109.0 in. (2769 mm)	109.0 in. (2769 mm)	109.0 in. (2769 mm)
B. Overall length .....	179.7 in. (4564 mm)	175.1 in. (4448 mm)	182.6 in. (4638 mm)
C. Reach at maximum height (45° discharge) .....	34.3 in. (871 mm)	30.4 in. (773 mm)	34.6 in. (880 mm)
D. Reach at 7 ft. (2.13 m) clearance (45° discharge) .....	49.8 in. (1265 mm)	46.3 in. (1176 mm)	46.6 in. (1185 mm)
E. Dump clearance, maximum height (45° discharge) .....	103.1 in. (2620 mm)	103.7 in. (2635 mm)	97.8 in. (2485 mm)
F. Maximum operating height .....	168.7 in. (4285 mm)	164.1 in. (4169 mm)	169.4 in. (4304 mm)
G. Rollback angle			
Concrete level .....	40 degrees	36 degrees	40 degrees
Carry position .....	47 degrees	45 degrees	46 degrees
H. Height to hinge pin .....	128 in. (3251 mm)	128 in. (3251 mm)	128 in. (3251 mm)
I. Digging depth .....	5.3 in. (135 mm)	5.3 in. (135 mm)	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.<sup>3</sup> (1.0 m<sup>3</sup>) general purpose bucket with eight teeth, sprocket counterweights, two 300 lb. (136 kg) rear counterweights, 14 in. (356 mm) track shoes with standard track, 175 lb. (79 kg) operator, and standard equipment.

## 455G LOADER OPERATING INFORMATION

Bucket Type		General Purpose		Multipurpose	
		Standard	Wide Track	Standard	Wide Track
Capacity, heaped, SAE	cu. yd. m <sup>3</sup>	1.30 1.00	1.30 1.00	1.30 1.00	1.30 1.00
Capacity, struck, SAE	cu. yd. m <sup>3</sup>	1.05 0.80	1.03 0.79	1.05 0.80	1.05 0.80
Bucket width	in. m	77.7 1.97	94.4 2.40	77.7 1.97	96.0 2.44
Bucket weight, including eight bolt-on teeth	lb. kg	1,053 477	1,204 546	2,180 989	2,180 989
Breakout force, SAE	lb. kN	15,735 70	17,600 78.3	13,400 59.6	13,400 59.6
Tipping load, SAE	lb. kg	11,800 5350	12,350 5600	11,200 5075	11,200 5075
Raising time	sec.	6.5	6.5	6.6	6.6
Dumping time	sec.	1.5	1.5	1.5	1.5
Lowering time	sec.	2.7	2.7	2.3	2.3
SAE operating weight with standard height ROPS	lb. kg	18,745 8503	19,545 8866	20,475 9287	20,475 9287
SAE operating weight with ROPS cab	lb. kg	19,415 8807	20,245 9183	21,109 9575	21,109 9575
Minimum recommended rear counterweight or attachments	lb. kg	600 272	900 408	1,200 544	1,200 544
Sprocket counterweights	lb. kg	564 256 Standard Equipment	564 256 Optional	564 256 Standard Equipment	564 256 Optional

### Adjustments to operating weights and tipping load for 1.30 cu. yd. (1.00 m<sup>3</sup>) general purpose bucket

#### ADJUSTMENTS TO OPERATING WEIGHTS

Add (+) or deduct (-) lb. (kg) as indicated for loaders with:		Operating Weight	Tipping Load
Cab	lb. kg	+ 676 + 306	+ 500 + 227
Low profile ROPS	lb. kg	+ 240 + 109	+ 177 + 80
Bucket teeth, bolt-on (eight)	lb. kg	- 139 - 63	+ 185 + 84
Radial ripper with three teeth (w/o drawbar or rear counterweights)	lb. kg	+ 742 + 336	+ 1,020 + 463
Parallelogram ripper with three teeth (w/o drawbar or rear counterweights)	lb. kg	+ 708 + 321	+ 1,231 + 558
Rear counterweights, five max., 300 lb. (136 kg) each	lb. kg	+ 300 + 136	+ 500 + 226