



455G

LOADER



**SAE Net
Horsepower**

70 hp
(52 kW)

**Drive
System**

Power Shift
Direct Drive

**Operating
Weight SAE**

17,900 lb.
(8120 kg)

Model shown may include options

ENGINE

John Deere engineered and manufactured 4-cylinder diesel engine. Replaceable wet-type cylinder liners help ensure superior heat dissipation, longer engine life. High-strength alloy heads include replaceable valve seat inserts. Plasma coated piston rings are also included. High engine torque rise helps provide fast engine recovery when working in tough operating conditions.

| | |
|---------------------------------|---------------------------------------|
| Engine: John Deere 4045D | |
| Rated power at 2100 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 1300 rpm | 228 lb-ft (309 Nm) |
| Lubrication | pressure system with full-flow filter |
| Air cleaner | dry type with restriction indicator |
| Electrical system | 12 volt with 65 amp alternator |
| Cooling fan | blower |

TRANSMISSION

Full power shift, Dura-Shift direct drive transmission is designed and built by John Deere. Four speeds forward and reverse allow the operator to match speeds to the working conditions. You can power shift easily from one gear to another as conditions change, without stopping the machine or using a clutch. Power control inching pedal adds versatility.

TRAVEL SPEEDS

| Gear | Forward | | Reverse | |
|------|---------|--------|---------|--------|
| | mph | (km/h) | mph | (km/h) |
| 1 | 1.1 | 1.8 | 1.3 | 2.1 |
| 2 | 1.9 | 3.1 | 2.1 | 3.4 |
| 3 | 2.9 | 4.7 | 3.2 | 5.2 |
| 4 | 4.9 | 7.9 | 5.4 | 8.7 |

FINAL DRIVES

Large heavy-duty 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.

HYDRAULICS

| | |
|--|---|
| Control | Single lever |
| Pressure | 2600 psi (17 927 kPa) |
| Pump | gear |
| Flow at 2100 rpm | 30 gpm (114 L/min) |
| Cylinders | ground, heat-treated, chrome-plated, polished cylinder rods with hardened steel (replaceable bushings) pivot pins |
| | Bore Stroke |
| Boom, two | 3.93 in. (100 mm) x 32.55 in. (827 mm) |
| Bucket, two | 3.5 in. (90 mm) x 29.30 in. (744 mm) |
| Boom and bucket cylinder rods diameter | 1.96 in. (50 mm) |

TRACKS

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.

Undercarriage

| | |
|--------------------------------|--|
| Standard Track | |
| Two-bar grouser, closed-center | 14 in. (356 mm) |
| Track shoes, each side | 37 |
| Ground contact area | 2128 sq. in. (13 729 cm ²) |
| Ground pressure | 8.4 psi (58 kPa) |
| Length of track on ground | 76 in. (1930 mm) |
| Track gauge | 57 in. (1450 mm) |
| Carrier roller | 1 |
| No. of track rollers | 5 |
| Adjustment | hydraulic |
| Ground clearance | 13 in. (330 mm) |
| Wide Track | |
| Two-bar grouser, closed-center | 21 in. (533 mm) |
| Track shoes, each side | 37 |
| Ground contact area | 3192 sq. in. (20 595 cm ²) |
| Ground pressure | 5.8 psi (40 kPa) |
| Length of track on ground | 76 in. (1930 mm) |
| Track gauge | 68 in. (1727 mm) |
| Carrier roller | 1 |
| No. of track rollers | 5 |
| Adjustment | hydraulic |
| Ground clearance | 13 in. (330 mm) |

CAPACITIES

| | |
|-----------------------------|--------------------|
| Fuel tank | 41 gal. (155.2 L) |
| Cooling system | 18 qt. (17.0 L) |
| Crankcase, including filter | 9 qt. (8.5 L) |
| Transmission | 22.5 gal. (85.2 L) |
| Final drive (each) | 7 qt. (6.6 L) |
| Hydraulic reservoir | 10 gal. (37.8 L) |
| Hydraulic system | 18 gal. (68.1 L) |

OPERATING WEIGHT

| | |
|------------------|----------------------|
| 455G (with ROPS) | SAE |
| Standard track | 17,900 lb. (8120 kg) |
| Wide track | 18,700 lb. (8480 kg) |



MAINFRAME

All major components are attached to the rugged one-piece mainframe. True modularization has been achieved in the 455G to help ensure easy component servicing. Components such as the engine, transmission, final drives, steering system and track frames, for example, can be removed without disturbing other major components. The separate mainframe also provides for unequalled long-term structural integrity.



REPLACEABLE LINERS

Heavy-duty John Deere built engines have hardened, replaceable wet cylinder liners to help provide longer engine life. Major engine rebuilds become easier and less expensive. Liners feature uniform wall thickness. This, combined with oil spray cooling of the pistons, provides for excellent heat dissipation and elimination of cylinder "hot spots." All are features normally associated only with larger diesel engines.



STEERING CLUTCHES/BRAKES

Fully modulated steering valve allows for smooth, precise reengagement of steering clutches. Flow-through oil-cooled steering assemblies have pressurized, circulating oil internally to provide lubrication and cooling for extended life and smoother steering and brake action.



LOADER, LINKAGE

Four-bar in-line linkage design provides excellent loader breakout force, and automatic self-leveling regardless of bucket height. Ground level roll-back of 40 degrees helps ensure heaped bucket loads and retains the material better during transport. Automatic return-to-dig is standard, and the operator always has good visibility, regardless of bucket position.

455G LOADER OPERATING INFORMATION

| Bucket Type | | General Purpose | | Multipurpose** |
|--|---------------------------|-----------------|----------------|----------------|
| | | Wide Track* | Standard | |
| Capacity, heaped, SAE | cu. yd. m ³ | 1.25 0.96 | 1.25 0.96 | 1.25 0.96 |
| Capacity, struck, SAE | cu. yd. m ³ | 1.03 0.79 | 1.05 0.80 | 1.05 0.80 |
| Bucket width | in. m | 94.4 2.40 | 77.70 1.97 | 77.70 1.97 |
| Bucket weight, including teeth | lb. kg | 1204 546 | 1053 477 | 2180 989 |
| Breakout force, SAE | lb. kN | 17,600 78.3 | 15,735 70 | 13,400 59.6 |
| Tipping load, SAE, (with drawbar, two counterweights, two sprocket weights and ROPS) | lb. kg | 12,350 5600 | 11,800 5350 | 11,200 5075 |
| Raising time | sec. | 6.5 | 6.5 | 6.6 |
| Dumping time | sec. | 1.5 | 1.5 | 1.5 |
| Lowering time | sec. | 2.7 | 2.7 | 2.3 |
| SAE operating weight with ROPS canopy | lb. kg | 18,700 8480 | 17,900 8120 | 19,630 8902 |
| SAE operating weight with ROPS cab | lb. kg | 19,400 8800 | 18,570 8420 | 20,264 9190 |

*With three counterweights – “0” sprocket weight

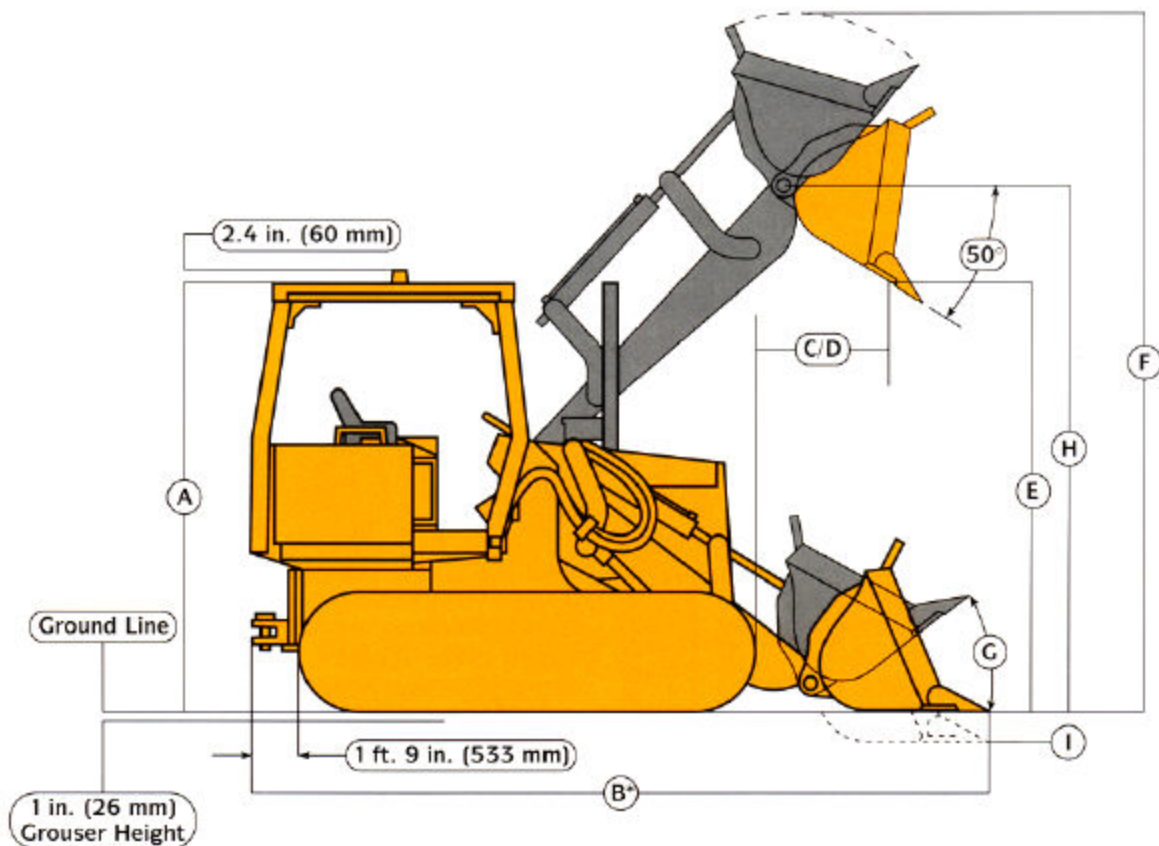
**With four counterweights and two sprocket weights

Adjustments to operating weights and tipping load for 1.25 cu. yd. (0.96 m³) standard bucket

ADJUSTMENTS TO OPERATING WEIGHTS

| Add (+) or deduct (–) lb. (kg) as indicated for loaders with: | | Operating Weight | | Tipping Load | |
|---|-----|------------------|--|--------------|--|
| | | | | | |
| Cab | lb. | + 676 | | + 500 | |
| | kg | + 306 | | + 227 | |
| Bucket teeth, bolt-on | lb. | – 139 | | + 185 | |
| | kg | – 63 | | + 84 | |
| Radial ripper with three shanks (w/o drawbar and rear counterweight) | lb. | + 70 | | + 200 | |
| | kg | + 32 | | + 90 | |
| Counterweight (each) | lb. | + 300 | | + 500 | |
| | kg | + 136 | | + 226 | |

DIMENSIONS



Key:

Bucket Type

| | General Purpose | Wide-Track | Multipurpose |
|---|--|--|--|
| Capacity | 1.25 cu. yd. (0.96 m ³) | 1.25 cu. yd. (0.96 m ³) | 1.25 cu. yd. (0.96 m ³) |
| A Overall height | 8 ft. 10.6 in. (2.71 m) | 8 ft. 10.6 in. (2.71 m) | 8 ft. 10.6 in. (2.71 m) |
| B Overall length | 14 ft. 7.7 in. (4.46 m) | 14 ft. 3.1 in. (4.35 m) | 14 ft. 10.6 in. (4.54 m) |
| 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) |

*With two counterweights

ADDITIONAL STANDARD EQUIPMENT

Engine:

Dual stage dry air cleaner with restriction indicator
Precleaner
Fan guard
Coolant recovery bottle
Blower fan, trash resistant radiator

Power Train:

Four-speed power shift transmission
Winch drive
Power control inching pedal
Automatic engaged park brake

Electrical System:

65-amp alternator, sealed
Reverse warning alarm

Hydraulics:

Three-spool hydraulic valve
T-bar control
Return to dig

Operator's Station:

ROPS canopy, isolation mounted, seat belt
Adjustable suspension seat
Adjustable armrests
Horn
Electronic monitor
Hourmeter
Decelerator
Decelerator with declutch
Interior mounted rearview mirror
Pedal steering

Overall Vehicle:

Bottom guards
Single lever bucket control
Boom safety lock
Bucket level indicator
Counterweights, two rear 600 lb. (181 kg)
Chain guide, front and rear
Track frame covers
Perforated engine side shields
Vandal protection

OPTIONAL OR SPECIAL EQUIPMENT

(Add these weights to SAE Standard Equipment operating weights to obtain total operating weights.)

| | lb. | kg | | lb. | kg |
|--|------|------|--|------|-----|
| Altitude compensating turbocharger | 30 | 13 | Operator protection screens, rear side | 85 | 38 |
| Auxiliary starting receptacle | 2 | 1 | Radiator sand screen | 270 | 122 |
| Backhoe with 24-in. (610 mm) standard bucket | 3350 | 1522 | Retrieval hitch | 2 | 1 |
| Buckets | | | Reversible fan | 45 | 20 |
| Multipurpose | 1130 | 513 | Ripper, rear | 11 | 5 |
| Wide Track | 150 | 68 | Ripper, parallelogram | 742 | 336 |
| Cab, ROPS with seat belt | 680 | 309 | Sealed and lubricated chain | 1380 | 626 |
| Counterweights, rear (each) | 300 | 145 | Third function valve for auxiliary equipment | -59 | -27 |
| Ether starting aid | 1 | 5 | 3-in. (76 mm) seat belt | 12 | 5 |
| Drawbar | 65 | 30 | Two batteries | 2 | 1 |
| Full length rock guards | 105 | 47 | Winch, John Deere 4000 | 63 | 28 |
| Headliner for ROPS canopy | 3 | 1 | | 1190 | 540 |
| Lever steering | 59 | 26 | | | |
| Lights, halogen | 5 | 2 | | | |
| Low profile ROPS* | 240 | 109 | | | |
| Master electrical disconnect switch | 2 | 1 | | | |

*Overall height reduced 4.71 in. (120 mm)
Note: When adding optional front and rear equipment, add appropriate counterweight.

THE JDAdvantEDGE

JDAdvantEdge is a wealth of support programs, parts systems and dealer resources, all designed to give you the edge. This package of special benefits is a major reason why John Deere offers the "best value" for your equipment dollar.

Best parts support – Twelve regional parts depots in North America and others around the world put parts support near your job no matter where in the world it is.

A computerized FLASH™ parts locating system linking these depots to dealerships can find out-of-stock parts in a hurry and get them into your hands fast. Usually within 24 hours.

Best service backup – Dealer service technicians are regularly schooled, at our modern facility in Davenport, Iowa, or by professionals in the field, to diagnose quickly and repair efficiently.

If they are stumped, a phone call to DTAC (Dealer Technical Assistance Center) puts them in touch with a staff of pros at the factory who help them find a solution quickly.

Best dealers – Your John Deere dealer is an important contributor to the JDAdvantEdge. He or she is committed to being the best equipment supplier you can work with.

This is a dollars-and-cents commitment in parts inventory, in service facilities, in field service trucks. It's a sweat and blood commitment in dedicated, skilled and highly trained and motivated personnel in each and every department at the dealership.

But what sets John Deere dealers apart from all the rest is something more, a factor somewhat difficult to measure . . . a caring attitude, and a sincere desire to be the best at meeting the needs of each individual customer.

John Deere Finance Plans – Whether you rent, lease or buy John Deere equipment, your dealer can explain the John Deere options available. One-stop options that let you free up operating capital, keep other lines of credit open. More solid benefits of the JDAdvantEdge.

Best protection – In addition to the new equipment warranty that meets or exceeds the competition, SECURE[®] extended coverage, an optional service product for John Deere equipment, is available for repair coverage after the warranty concludes. Full machine or power train coverage is available for a variety of time periods to meet your needs. Consult your dealer for availability and details.

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 62708, using No. 2-D fuel at 35 API gravity. No derating is required up to 5,000 feet (1500 m) altitude. Gross power is without cooling fan.

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 rollover protective structure, full fuel tank, and 175-lb. (79 kg) operator and standard equipment.

