

## ENGINE

John Deere engineered and manufactured. Replaceable wet type cylinder liners provide superior heat dissipation, longer life. High strength alloy heads have replaceable valve seat inserts. The forged steel, 5-main-bearing crankshaft is statically and dynamically balanced for smooth operation. Cast aluminum pistons provide good heat transfer and pistons are sprayed with cooling oil for longer life.

**Engine:** John Deere 4045D  
 Rated power @ 2200 rpm ..... 75 SAE net hp (56 kW)  
 ..... 80 SAE gross hp (60 kW)  
 Cylinders ..... 4  
 Displacement ..... 276 cu. in. (4.523 L)  
 Fuel consumption, typical ..... 1.3 to 2.8 gal/hr (4.9 to 8.7 L/h)  
 Maximum net torque at 1200 rpm ..... 215 lb-ft (291 Nm)  
 Air cleaner ..... dual stage dry type with restriction indicator  
 Electrical system ..... 12 volt with 105-amp alternator  
 Battery (one 12 volt)  
 25 amps at 80°F (27°C) ..... reserve capacity 166 min.  
 BCI group 27 cold cranking capacity  
 at 0°F (-18°C) ..... 625 amps

## TRANSMISSION

Features a hydrostatic (HST) transmission with variable speed drive. A two-speed (Hi-Lo) power shift transmission is coupled with the HST to provide a full range of operating speeds to 18.6 mph (30 km/h). Direction reversal control is to the left of the steering wheel. Two-speed switch is on the left side of the dash.

### TRAVEL SPEEDS

Gear	Forward and Reverse	
	mph	(km/h)
1	7.5	12.1
2	18.6	30.0

## FINAL DRIVES

Large, heavy-duty, planetary final drive gears are mounted inboard where size is not restricted by wheel diameter. They distribute axle shock loads evenly over three gears and run in a cooling oil bath for long life and trouble-free service.

## DIFFERENTIALS

Conventional front and rear differentials are standard equipment. When additional traction is desired the 344E can be ordered with NoSPIN front differential and standard rear. If application requires frequent driving on hard-surfaced roads, consider ordering the optional front axle disconnect.

## BRAKES

Hydraulic wet disk brakes are mounted inboard. They're self-adjusting, self-equalizing, and require no periodic service. The hand operated parking brake is a caliper disk that engages on the front drive line.

## STEERING

Smooth, low-effort steering is provided. High torque steering cylinder geometry and large cylinders permit full power steering at all speeds through the 80 degree steering arc (40 degrees each direction).

Turning radius ..... 14 ft. 5 in. (4.38 m)  
 (measured to centerline of outside tire)  
 Rear axle oscillation ..... 26 degrees, stop to stop  
 Vertical travel at center of tire ..... 15.75 in. (400 mm)

## HYDRAULICS

### Loader functions and steering:

A gear pump delivers 32.3 gpm (122 L/min) at 600 psi (4137 kPa) and 2200 engine rpm. The loader function relief valve pressure setting is 2987 psi (20 594 kPa). The maximum steering pressure is 2500 psi (17 238 kPa).

### Controls:

Dual hydraulic valves with single or two levers. An optional triple valve is available for forks and attachments.

### Brakes and pilot system:

The gear-type pump delivers 5.86 gpm (22 L/min) at 600 psi (4137 kPa) and 2200 engine rpm. Maximum system pressure is 500 psi (3432 kPa).

### Loader operating cycle times at full throttle with rated load in the bucket:

Raise ..... 5.3 sec.  
 Dump ..... 1.0 sec.  
 Lower ..... 3.0 sec. (float)  
 ..... 3.0 sec. (power)

### Maximum lift capacity with 1.63 cu. yd. (1.2 m<sup>3</sup>) excavating bucket:

Maximum height ..... 7846 lb. (3560 kg)  
 Ground level ..... 12,890 lb. (5850 kg)

## TIRES

### Choice of:

15.5-25, 8 PR L2  
 15.5-25, 10 PR L2

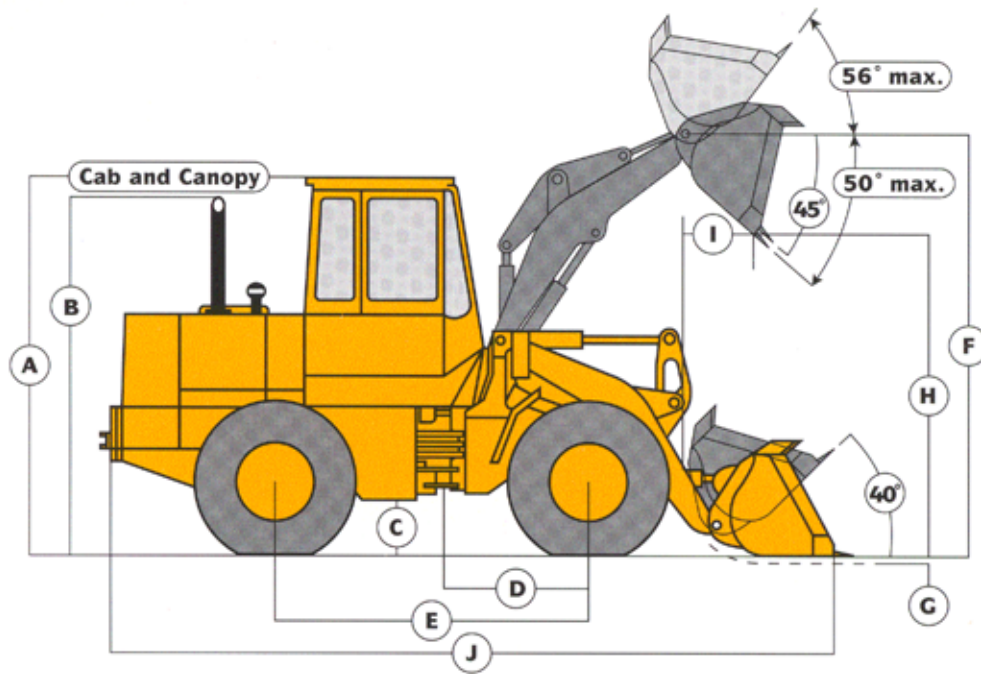
## CAPACITIES

	U.S.	
Fuel tank	32 gal.	(120 L)
Cooling system	36 qt.	(34 L)
Crankcase	13 qt.	(12 L)
Crankcase, including filter	14 qt.	(13 L)
Transmission case and filters	8.7 qt.	(7.8 L)
Front differential	17 qt.	(16 L)
Rear differential	17 qt.	(16 L)
Loader hydraulic sump	42 qt.	(40 L)
Hydrostatic transmission sump	21 qt.	(20 L)

## OPERATING WEIGHT

See 344E Loader Operating Information and various charts.

# DIMENSIONS



**Key:**

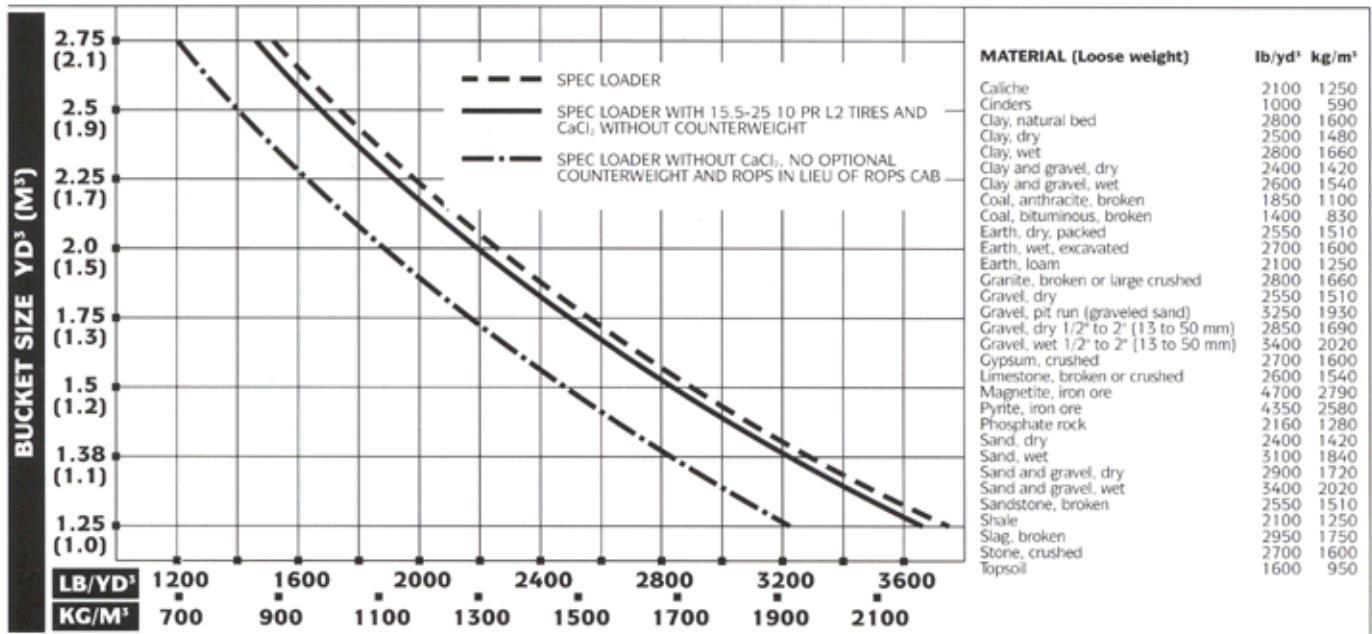
A	Height to top of cab and canopy	10 ft. 2 in. (3.10 m)
B	Height to top of exhaust	9 ft. 9 in. (2.97 m)
C	Ground clearance	15.35 in. (390 mm)
D	Length from centerline to front axle	50.2 in. (1275 mm)
E	Wheelbase	101 in. (3.55 m)
F	Height to hinge pin—fully raised	11 ft. 3 in. (3.43 m)
G	Digging depth	3 in. (75 mm)
H	Dump height	
I	Reach bucket fully raised	} See Operating Information
J	Overall length	

**TIRES**

**15.5-25**

Tread width	70.08 in. (1780 mm)
Width over tires	85.59 in. (2174 mm)

# BUCKET SELECTION GUIDE \*



\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help in selecting the proper bucket size for material density and loader configuration. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment.

### 344E LOADER OPERATING INFORMATION

OPERATING INFORMATION	Bucket Type/Size	Excavating	Excavating w/Bolt-on Edge	Stockpiling	Stockpiling w/ Bolt-on edge
Capacity, heaped SAE	cu. yd. m <sup>3</sup>	1.63 1.2	1.63 1.2	2.0 1.5	2.0 1.5
Capacity, struck, SAE	cu. yd. m <sup>3</sup>	1.3 1.0	1.3 1.0	1.7 1.3	1.7 1.3
Bucket width	in. m	92.5 2.35	92.5 2.35	92.5 2.35	92.5 2.35
Breakout force, SAE J732C	lb. kN	14,595 64.9	13,757 61.2	12,771 56.8	12,070 53.7
Tipping load, straight	lb. kg	11,356 5151	11,160 5062	11,135 5051	10,915 4951
Tipping load, 40-deg. full turn, SAE	lb. kg	9985 4529	9795 4443	9771 4432	9559 4336
Reach, 45 deg. dump, 7 ft. (2.13 m) clearance	in. mm	50.7 1288	50.5 1283	52.3 1328	52.0 1322
Reach, 45 deg. dump, full height	in. mm	32.2 819	33.0 839	35.4 900	36.2 920
Dump clearance, 45 deg., full height	in. mm	106.7 2711	105.1 2670	104.1 2644	102.5 2603
Overall length	ft.-in. m	19-8.8 6.01	19-10.4 6.06	20-1 6.12	20-2.6 6.16
Loader clearance circle, bucket carry position	ft.-in. m	33-4 10.16	33-5 10.20	33-6 10.22	33-8 10.26
Operating weight	lb. kg	16,014 7264	16,160 7330	16,169 7334	16,319 7402

Loader operating information is based on machine with all standard equipment, 15.5-25, 8 PR L2 tires, with 617-lb. (280 kg) optional counterweight, ROPS cab, 175-lb. (79 kg) operator and full fuel tank. Information is affected by tire size, ballast and attachments. For selected items, add or subtract the following:

#### Adjustments to operating weights and tipping load for 1.63 cu. yd. (1.2 m<sup>3</sup>) excavating bucket.

#### ADJUSTMENTS TO OPERATING WEIGHTS

Add (+) or deduct (-) lb. (kg) as indicated for loaders with:		Operating Weight	Tipping Load Straight	Tipping Load 40 Deg. Full Turn, SAE
15.5-25, 10 PR L2 tires	lb. kg	+18 +8	+13 +6	+9 +4
15.5-25, 8 PR L2 tires w/CaCl <sub>2</sub> *	lb. kg	+939 +426	+1261 +572	+1113 +505
15.5-25, 10 PR L2 tires w/CaCl <sub>2</sub> *	lb. kg	+957 +434	+1274 +578	+1124 +510
ROPS canopy in lieu of ROPS cab	lb. kg	-265 -120	-229 -104	-220 -100
Bucket teeth	lb. kg	+97 +44	-126 -57	-126 -57
Optional counterweight removed	lb. kg	-617 -280	-1268 -575	-1069 -485

\* Not to be used with optional counterweight