ENGINE

A 211 cu. in. (3.457 L) direct injection diesel engine powers the 244E. This naturally aspirated engine generates 55 hp (41 kW) at 2200 rpm and delivers an exceptional 39 percent torque rise for superior lugging ability and quick recovery.

Engine: Yanmar 4TN100
Rated power @ 2200 rpm ..... 55 net hp (41 kW)
..... 59 SAE gross hp (44 kW)
Cylinders 4
Displacement ..... 211 cu. in. (3.457 L)
Maximum net torque at 1300 rpm ..... 182 lb-ft (247 Nm)
Air cleaner ..... dual stage dry type with restriction indicator
Electrical system ..... 24 volt with 25-amp alternator
Battery (two 12 volt)
25 amps at 80°F (27°C) ..... reserve capacity 166 min. each
BCI group 27 cold cranking capacity
at 0°F (−18°C) ..... 320 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 up to 20.0 mph (32.2 km/h).

TRAVEL SPEEDS

Gear	Forward and Reverse mph	(km/h)
Low	6.2	10.0
High	20.0	32.2

FINAL DRIVES

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 that run in a cooling oil bath for long life and trouble-free service. Front axles are fixed to the frame and rear axles oscillate 11 degrees.

BRAKES

Hydraulic wet disk brakes are mounted inboard and run in a cooling oil bath. They're self-adjusting, self-equalizing, and require no periodic service. The parking brake mounted on the transmission output shaft is hand-operated and has a warning light. When applied, the transmission is automatically disconnected.

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 ..... 12 ft. 5 in. (3.79 m)
(measured to centerline of outside tire)
Rear axle oscillation ..... 11 degrees
Vertical travel at center of tire ..... 5.6 in. (142 mm)

HYDRAULICS

Loader functions and steering:
A gear pump delivers 20.6 gpm (78 L/min) at 2990 psi (20 784 kPa) and 2200 engine rpm. The loader function relief valve pressure setting is 2990 psi (20 784 kPa). The maximum steering pressure is 1990 psi (13 832 kPa).

Controls:
Dual hydraulic valves with single lever. An optional triple valve is available for forks and other attachments.

Loader operating cycle times at full throttle with rated load in the bucket:
Raise ..... 4.7 sec.
Dump ..... 0.9 sec.
Lower ..... 3.8 sec. (float)
3.0 sec. (power)

Maximum lift capacity with 1.3 cu. yd. (1.0 m³) bucket:
Maximum height ..... 7130 lb. (3235 kg)
Ground level ..... 9560 lb. (4336 kg)

TIRES

17.5/65-20, 10 PR L2

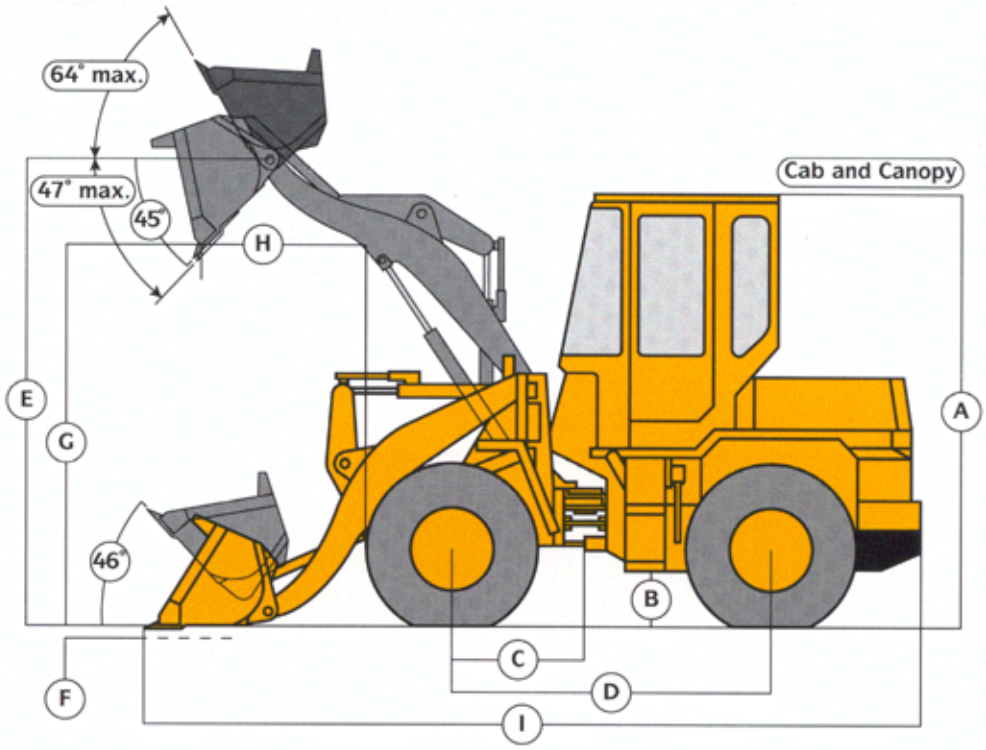
CAPACITIES

	U.S.	
Fuel tank	18.5 gal.	(70 L)
Cooling system	12.5 qt.	(13.2 L)
Crankcase	12.0 qt.	(12.7 L)
Transmission case and filters	9.5 qt.	(10 L)
Front differential	9.0 qt.	(9.5 L)
Rear differential	9.0 qt.	(9.5 L)
Loader hydrostatic transmission sump	15.9 gal.	(60 L)
Brake oil sump	0.70 qt.	(0.75 L)

OPERATING WEIGHT

See 244E Loader Operating Information and various charts.

DIMENSIONS

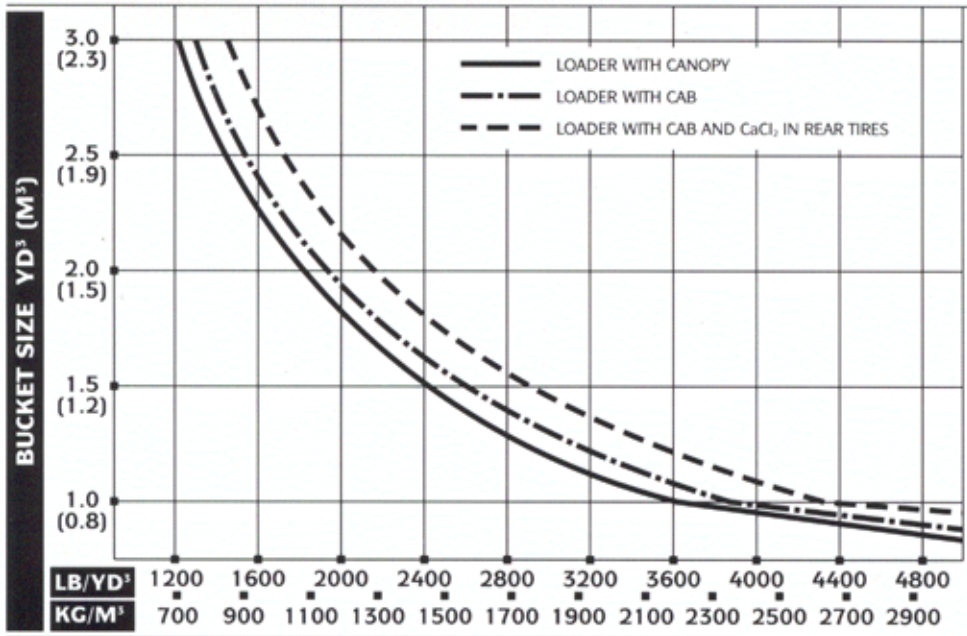


Key:

A	Height to top of cab and canopy	9 ft. 7 in. (2935 mm)
B	Ground clearance	13 in. (330 mm)
C	Length from centerline to front axle	43.3 in. (1100 mm)
D	Wheelbase	86.6 in. (2200 mm)
E	Height to hinge pin – fully raised	10 ft. 4 in. (3160 mm)
F	Digging depth	1 in. (27 mm)
G	Dump height	}
H	Reach bucket fully raised	} See Operating Information
I	Overall length	}

TIRES	**17.5/65-20**
Tread width	58 in. (1470 mm)
Width over tires	76 in. (1930 mm)

BUCKET SELECTION GUIDE*



MATERIAL (Loose weight)	lb/yd³	kg/m³
Caliche	2100	1250
Cinders	1000	590
Clay, natural bed	2800	1600
Clay, dry	2500	1480
Clay, wet	2800	1660
Clay and gravel, dry	2400	1420
Clay and gravel, wet	2600	1540
Coal, anthracite, broken	1850	1100
Coal, bituminous, broken	1400	830
Earth, dry, packed	2550	1510
Earth, wet, excavated	2700	1600
Earth, loam	2100	1250
Granite, broken or large crushed	2800	1660
Gravel, dry	2550	1510
Gravel, pit run (graveled sand)	3250	1930
Gravel, dry 1/2" to 2" (13 to 50 mm)	2850	1690
Gravel, wet 1/2" to 2" (13 to 50 mm)	3400	2020
Gypsum, crushed	2700	1600
Limestone, broken or crushed	2600	1540
Magnetite, iron ore	4700	2790
Pyrite, iron ore	4350	2580
Phosphate rock	2160	1280
Sand, dry	2400	1420
Sand, wet	3100	1840
Sand and gravel, dry	2900	1720
Sand and gravel, wet	3400	2020
Sandstone, broken	2550	1510
Shale	2100	1250
Slag, broken	2950	1750
Stone, crushed	2700	1600
Topsoil	1600	950

*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 the tipping load changes due to optional equipment.

244E LOADER OPERATING INFORMATION

OPERATING INFORMATION	Bucket Type/Size	General Purpose	Light Material	Multipurpose
Capacity, heaped, SAE	cu. yd. m^3	1 0.8	1.3 1	0.78 0.6
Capacity, struck, SAE	cu. yd. m^3	0.9 0.7	1.17 0.9	0.67 0.51
Bucket width	in. m	78.4 1.99	78.4 1.99	78.4 1.99
Breakout force, SAE J732C	lb. kN	10,143 45.1	8666 38.5	10,143 45.1
Tipping load, straight	lb. kg	8930 4050	8864 4020	8192 3715
Tipping load, 35-deg. turn	lb. kg	7740 3510	7684 3485	7100 3220
Tipping load, full turn, SAE	lb. kg	7497 3400	7453 3380	6880 3120
Reach, 45 deg. dump, 7 ft. (2.13 m) clearance	in. mm	46.7 1185	47.8 1215	46.9 1190
Reach, 45 deg. dump, full height	in. mm	33.3 845	36.6 930	33.3 845
Dump clearance, 45 deg. dump, full height	in. mm	100.6 2555	97.2 2470	100.8 2560
Overall length	ft.-in. m	16-3 4.95	17-3 5.25	16-3 4.95
Loader clearance circle, bucket in carry position	ft.-in. m	29-2 8.90	29-2 8.90	29-2 8.90
Operating weight	lb. kg	11,746 5327	11,775 5340	12,205 5535

Loader operating information is based on machine with all standard equipment, 17.5/65-20, 10 PR L2 (no fluid) tires, 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 loads for 1.3 cu. yd. (1.0 m^3) bucket.

ADJUSTMENTS TO OPERATING WEIGHTS

Add (+) or deduct (−) lb. (kg) as indicated for loaders with:		Operating Weight	Tipping Load Straight	Tipping Load 35-Deg. Turn	Tipping Load Full Turn, SAE
Adding BOC and skid shoes	lb. kg	143 65	−176 −80	−154 −70	−148 −67
Adding bolt-on bucket teeth	lb. kg	100 45	−121 −55	−106 −48	−103 −46.5
ROPS canopy in lieu of ROPS cab	lb. kg	−523 −237	−540 −245	−463 −210	−452 −205
17.5/65-20, 10 PR L2 tires with $CaCl_2$	lb. kg	750 340	1047 475	926 420	893 405