

ENGINE	244H
Type .....	Yanmar 4TNE98 – Naturally Aspirated Direct Injection Diesel, (meets EPA emissions regulations)
Rated power .....	58 SAE gross hp (43 kW) 55 SAE net hp (41 kW) @ 2,200 rpm
Cylinders .....	4
Displacement .....	202 cu. in. (3.318 L)
Maximum net torque .....	166 lb.-ft. (225 Nm) @ 1,300 rpm
Lubrication .....	pressure system with full-flow spin-on filter
Fuel consumption, typical.....	1.0 to 2.0 gal./hr. (3.8 to 7.6 L/h)
Cooling fan.....	blower
Electrical system .....	24 volt with 35-amp alternator
Batteries (two 12 volt) .....	reserve capacity: 332 min., 320 CCA
Air cleaner.....	dual safety element dry type; restriction indicator for service

TRANSMISSION	
Type .....	hydrostatic (HST) with infinitely-variable speed control; two-speed power-shift transmission coupled with the HST to provide full range of operating speeds and direction reversal
Controls .....	low-effort electric shift, single lever for direction and speed changes; HST inching pedal
Travel speeds .....	<i>Forward and Reverse</i>
Gear 1 .....	6.0 mph (9.6 km/h)
Gear 2 .....	20.0 mph (32.2 km/h)

AXLES/BRAKES	
Final drives .....	heavy-duty planetary, mounted inboard
Differentials .....	conventional front and rear
Rear axle oscillation.....	22 degrees, stop to stop
Maximum rise and fall, single wheel .....	11.2 in. (284 mm)
Brakes (conform to SAE J1473, ISO3450)	
Service brakes .....	inboard-mounted hydraulic wet disc, bathed in cooling oil, long life self-adjusting
Parking brake .....	automatically spring applied, hydraulically released, disc and caliper type, attached to transmission output shaft

HYDRAULIC SYSTEM/STEERING	
Pump (loader and steering) .....	gear-type, open-center system
Maximum flow.....	21.2 gpm (80 L/min.) @ 2,990 psi (20 615 kPa) and @ 2,200 engine rpm
Pressure .....	loader relief 2,990 psi (20 615 kPa) steering relief 1,990 psi (13 720 kPa)
Loader controls .....	two-function valve with single lever and control lever lockout optional three-function valve with auxiliary lever
Hydraulic cycle times	
Raise .....	4.3 sec.
Dump .....	0.8 sec.
Lower.....	3.8 sec. (float down) / 2.9 sec. (power down)
Maximum lift capacity .....	<i>with 1.3 cu. yd. (1.0 m<sup>3</sup>) light-material bucket</i>
Lift at ground level.....	9,560 lb. (4336 kg)
Lift at maximum height.....	4,409 lb. (2000 kg)
Steering (conforms to SAE J1511)	
Type.....	power, fully hydraulic
Relief valve setting .....	1,990 psi (13 720 kPa)
Articulation angle .....	80-degree arc (40 degrees each direction)
Turning radius (measured to center-line of outside tire) .....	12 ft. 5 in. (3.79 m)

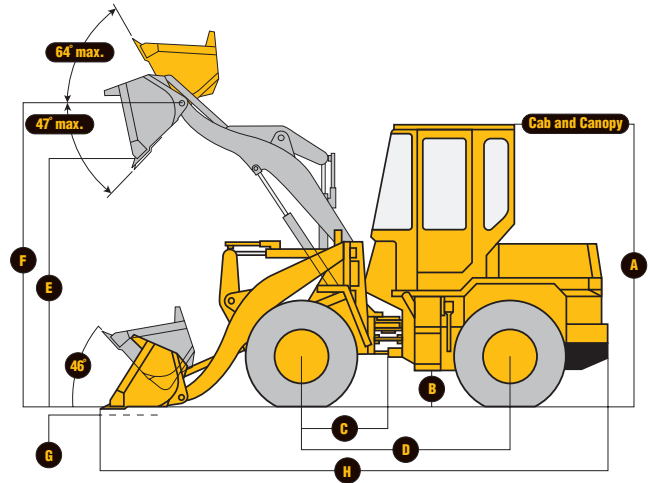
TIRES	
Standard.....	17.5/65-20, 10 PR L2
Tread width .....	58 in. (1470 mm)
Width over tires .....	76 in. (1930 mm)

CAPACITIES (U.S.)	
Fuel tank with ground level fueling.....	18.5 gal. (70.0 L)
Cooling system .....	11.5 qt. (10.9 L)
Engine lubrication, including full-flow spin-on filter .....	12.2 qt. (11.5 L)
Power shift transmission, including vertical cartridge filter.....	10.6 qt. (10.0 L)
Front or rear differential (each).....	10.0 qt. (9.5 L)
Loader-hydrostatic reservoir.....	19.3 gal. (73.0 L)
Brake oil reservoir .....	0.3 qt. (0.3 L)

**DIMENSIONS WITH BUCKET**

**244H**

- A** Height to top of cab and canopy .....9 ft. 10 in. (2995 mm)
  - B** Ground clearance .....13 in. (330 mm)
  - C** Length from centerline of front axle.....43.3 in. (1100 mm)
  - D** Wheelbase .....86.6 in. (2200 mm)
  - E** Dump height .....▲
  - F** Height to hinge pin, fully raised .....10 ft. 4 in. (3160 mm)
  - G** Digging depth.....1.8 in. (45 mm)
  - H** Overall length.....▲
- ▲ See Bucket Information below.



**BUCKET INFORMATION (PIN-ON)**

Bucket Type/Size	Light Material	General Purpose
Capacity, heaped SAE .....	1.3 cu. yd. (1.0 m <sup>3</sup> )	1.0 cu. yd. (0.8 m <sup>3</sup> )
Capacity, struck SAE .....	1.2 cu. yd. (0.9 m <sup>3</sup> )	0.9 cu. yd. (0.7 m <sup>3</sup> )
Bucket width .....	78.4 in. (1.99 m)	78.4 in. (1.99 m)
Breakout force, SAE J732C .....	8,666 lb. (38.5 kN)	10,143 lb. (45.1 kN)
Tipping load, straight.....	7,432 lb. (3371 kg)	7,474 lb. (3390 kg)
Tipping load, 35-degree turn, SAE.....	6,636 lb. (3010 kg)	6,680 lb. (3030 kg)
Tipping load, 40-degree full turn, SAE.....	6,429 lb. (2916 kg)	6,470 lb. (2935 kg)
Reach, 45-degree dump, 7-ft. (2.13 m) clearance .....	47.8 in. (1215 mm)	46.7 in. (1185 mm)
Reach, 45-degree dump, full height.....	36.7 in. (933 mm)	33.3 in. (845 mm)
▲ Dump clearance, 45 degree, full height.....	97.2 in. (2470 mm)	100.6 in. (2555 mm)
▲ Overall length .....	16 ft. 8 in. (5.07 m)	16 ft. 3 in. (4.95 m)
Loader clearance circle, bucket in carry position.....	29 ft. 4 in. (8.90 m)	29 ft. 2 in. (8.90 m)
Operating weight .....	11,400 lb. (5171 kg)	11,370 lb. (5157 kg)

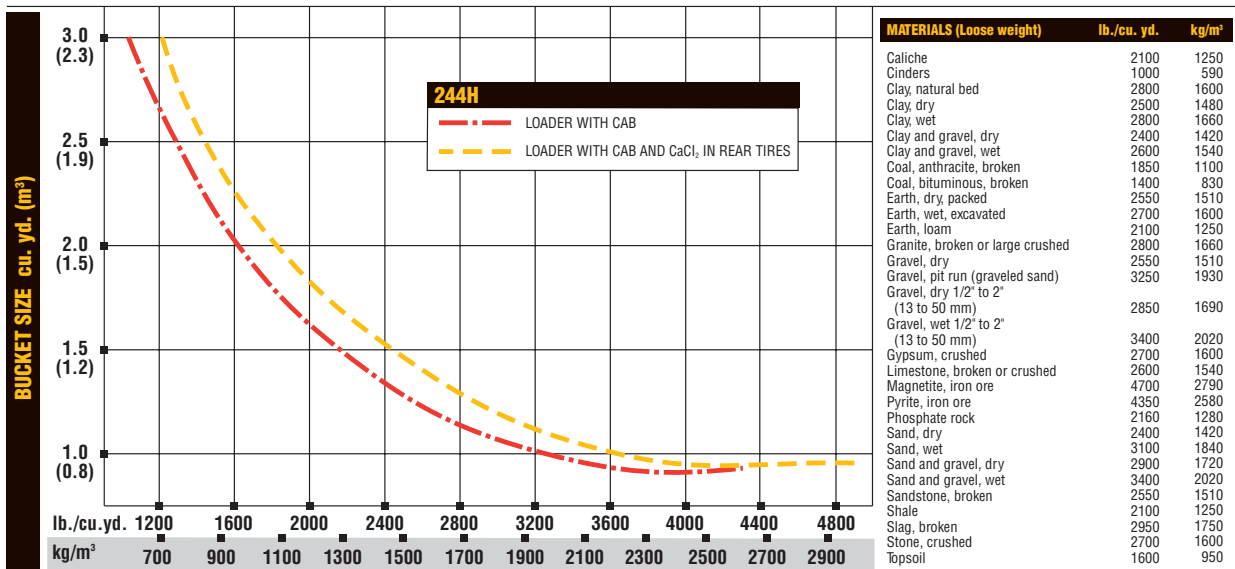
Loader operating information is based on machine with all standard equipment, 17.5/65-20, 10 PR L2 (no fluid) tires, ROPS cab, 175-lb. (79 kg) operator, and full fuel tank. This information is affected by tire size, ballast, and different attachments.

**ADJUSTMENTS TO OPERATING WEIGHTS FOR PIN-ON BUCKETS**

Adjustments to operating weights and tipping loads for 1.3 cu. yd. (1.0 m<sup>3</sup>) light-material bucket  
Add (+) or deduct (-) lb. (kg) as indicated

for loaders with	Operating Weight	Tipping Load, Straight	Tipping Load, 35-Degree Full Turn	Tipping Load, 40-Degree Full Turn
Bolt-on cutting edge and skid shoes.....	+ 143 lb. (+ 65 kg)	- 176 lb. (- 80 kg)	- 154 lb. (- 70 kg)	- 148 lb. (- 67 kg)
Bolt-on bucket teeth .....	+ 100 lb. (+ 45 kg)	- 121 lb. (- 55 kg)	- 106 lb. (- 48 kg)	- 103 lb. (- 47 kg)
17.5/65-20, 10 PR L2 tires with CaCl <sub>2</sub> .....	+ 750 lb. (+ 340 kg)	+ 922 lb. (+ 418 kg)	+ 835 lb. (+ 379 kg)	+ 805 lb. (+ 365 kg)

**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 the tipping load changes due to optional equipment.

	244H		244H		244H
<b>ENGINE</b>					
Meets EPA emissions regulations	●	Parking brake automatically neutralizes transmission / Conforms to SAE J1473, ISO3450	●	Mirrors	●
Antifreeze, -22°F (-30°C)	●	Wet-disc, self-adjusting primary service brakes	●	Interior-mounted convex rearview (1) / Outside convex rearview (2) / Conform to SAE J985	●
Blower-type cooling fan	●	Conform to SAE J1473, ISO3450		Seat belt, 2 in. (51 mm), with retractor	●
Dual-stage dry-type air cleaner with restriction indicator and under-hood air intake	●	<b>HYDRAULIC SYSTEM</b>		Conforms to SAE J388	●
Fuel filter	●	Hydraulic control lever lockout, mechanical	●	Seat belt, 3 in. (76 mm)*	■
Isolation mounted	●	Hydraulic oil cooler behind engine radiator	●	Conforms to SAE J388	●
Preheat-type starting aid	●	Return-to-dig feature	●	Slip-resistant steps and ergonomically located handholds	●
Safety fan guard	●	Three-spool valve, single-lever control with auxiliary control lever for third function	■	Conform to SAE J185	●
Under-hood muffler with rear exhaust	●	<b>STEERING</b>		Steering wheel with spinner	●
<b>ELECTRICAL</b>		Power steering (two cylinders) and 40-degree articulation each side, (80-degree total articulation)	●	Vandal protection (with same key as start switch)	●
Alternator, 35 amp	●	Conforms to SAE 1511 with emergency manual mode		Engine hood / Fuel cap	●
24-volt system	●	<b>TIRES</b>		Air conditioning (field installed)*	■
Batteries (2), 332-min. reserve	●	17.5/65-20, 10 PR L2	●	Sliding left-side window	■
Battery terminal safety covers	●	<b>OPERATOR'S STATION</b>		<b>LOADER</b>	
Blade-type multi-fused circuits	●	Cab	●	Loader boom service lock	●
By-pass starter safety cover on starter	●	Isolation mounted ROPS/FOPS / Conforms to SAE J1040C, J231, ISO3471, ISO3449	●	Conforms to SAE J38, ISO10533	●
Lights	●	Built-in Operator's Manual storage compartment and manual	●	Z-bar linkage with automatic return-to-dig, bucket level indicator, all shipped with bucket pins	●
Front and rear flashers / Front and rear turn signals / Rear stop and tail lamps / Two front driving/work / Conform to SAE J99	●	Dome light	●	<b>BUCKETS</b>	
Front and rear halogen work lights	■	Electronic monitor system and audible/visual warning	●	Full line of buckets, bolt-on cutting edges, wear plates and teeth	■
Conform to SAE J1029		Engine air filter restriction / Low alternator voltage / Engine oil pressure / Engine coolant temperature / Hydraulic filter restriction / HST transmission charge pressure / HST filter restriction / Park brake on indicator / Turn signal and hazard warning lights / High-beam indicator light / Gauges: Engine coolant - Fuel - Hourmeter	●	1.0 cu. yd. (0.8 m³) excavating bucket	■
<b>TRANSMISSION</b>		Front windshield wiper and washer	●	1.3 cu. yd. (1.0 m³) light-material bucket	■
Hydrostatic (HST) transmission	●	Heater - 16,000 Btu/hr. (4.7 kW)	●	<b>OTHER</b>	
Electric shift control / Hydrostatic oil cooler / Inching pedal	●	Horn, electric	●	Articulation transport lock	●
Reverse warning alarm	●	Conform to SAE J994, J1446	●	Conforms to SAE J276	●
Conforms to SAE J994, J1446	●	Key start switch with electric fuel shutoff	●	Drawbar	●
Transmission, two-speed (high-low) power shift	●			Engine hood with gas cylinder	●
Computer control downshift protection / Electric shift	●			Front and rear fenders	●
<b>AXLES</b>				Fuel tank inlet screen and drain cock	●
Differential, front and rear conventional	●			Lift and tie-down hooks	●
Heavy-duty planetary gear final reduction	●			Valve stem protection	●
Remote grease bank for rear axle oscillation	●			Bolt-on slow-moving-vehicle emblem	■
<b>BRAKES</b>				Illuminated license plate bracket	■
Automatically spring applied, hydraulically released, disc and caliper parking brake	●			Load guard	■

**KEY:** ● Standard equipment ■ Optional or special equipment

\*See your John Deere dealer for further information.

## CONTROL OWNING AND OPERATING COSTS

Total Repair Cost Management (TRCM) is part of John Deere's proactive, fix-before-fail strategy on machine maintenance that will help control costs, increase profits, and reduce stress. Included in this comprehensive lineup of ongoing programs and services are:

**OilScan® Plus program** – tells you what's going on inside all of your machine's major components so you'll see a decline in performance before the system fails. OilScan Plus oil analysis is included in most SECURE®-Extended warranty and preventive-maintenance contracts.

**MaintainIt™ program** – Flexible, easy-to-use MaintainIt software lets you start your own computerized maintenance program by putting complete machine histories at your fingertips. It features a library of John Deere equipment, a spare-parts inventory list, and a list of maintenance tasks. Compare costs; schedule maintenance procedures by hourmeter or date; or print, fax, or e-mail purchase and work orders with just a few quick keystrokes.

**Component life-cycle data** – gives you vital information on the projected life span of components and lets you make informed decisions on machine maintenance by telling you approximately how many hours of use you can expect from an engine, transmission, or hydraulic pump. This

information can be used to preempt catastrophic downtime by servicing major components at about 80 percent of their life cycle.

**Preventive Maintenance (PM) contracts** – give you a fixed cost for maintaining a machine for a given period of time. It also helps you avoid downtime by ensuring that critical maintenance work gets done right and on schedule. On-site preventive maintenance service performed where and when you need it helps protect you from the expense of catastrophic failures and lets you avoid waste-disposal hassles.

**SECURE-Extended warranty** – gives you a fixed cost for machine repairs for a given period of time so you can effectively manage costs. Whether you work in a severe-service setting or just want to spread the risk of doing business, this is a great way to custom-fit coverage for your operation. And a SECURE-Extended contract also travels well because it's backed by John Deere and is honored by all Deere construction dealers.

**Customer Support Advisors (CSAs)** – Deere believes the CSA program lends a personal quality to Total Repair Cost Management. Certified Customer Support Advisors have the knowledge and skills for helping make important decisions on machine maintenance and repair. Their mission is to help you implement a plan that's right for your business and take the burden of machine maintenance off your shoulders.



Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 70 020, 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 all standard equipment; 17.5/65-20, 10 PR L2 tires; ROPS cab; full fuel tank; and 175-lb. (79 kg) operator.

