

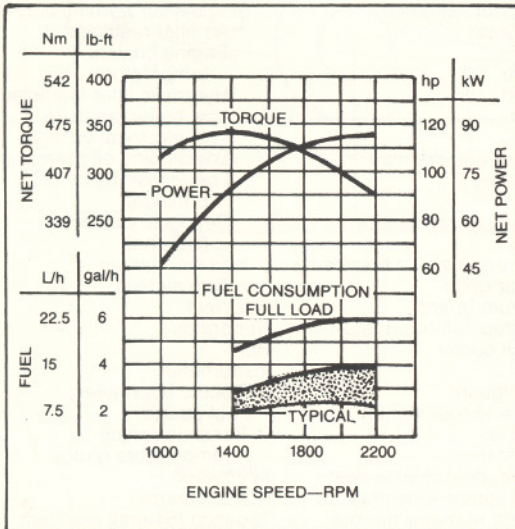


# 544E LL LOG LOADER



Model shown may include options

## ENGINE PERFORMANCE



\*Depending on operating variables

## FEATURES

115 SAE net hp (86 kW) John Deere turbocharged diesel engine

Four-wheel drive

Operating weights to 30,821 lb. (13 980 kg)

Single phase, single stage torque converter with countershaft power shift transmission, 4 speeds forward, 3 reverse

Power steering. Articulated frame

Four-wheel wet-disk power brakes and parking brake

Inboard planetary final drives

Optional front-axle hydraulic differential lock or NoSPIN front differential

Optional vandal protection

Rollover protective structure (ROPS) with canopy. Meets criteria of SAE J394a, SAE J1040 APR88, OSHA 1926.1001 and ISO 3471. Also meets FOPS (falling object protective structure) criteria SAE J231 JAN81 and ISO 3449

## ADD VERSATILITY WITH:

Lumber forks

Log forks

Grapples

Hydraulic log and lumber tines

Clearing rakes

Wood chip containers



# 544E LL LOG LOADER SPECIFICATIONS

Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE Standards. Except where otherwise noted, specifications are based on a machine with all standard equipment, 17.5-25, 12 PR, L3 tires, two rear counterweights, ROPS cab, full fuel tank, and 175-lb. (80 kg) operator.

<b>Rated Power @ 2200 engine rpm:</b>	<b>SAE</b>	<b>DIN 70 020</b>
Net .....	115 hp (86 kW)	86 kW
Gross .....	120 hp (90 kW)	

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 @ 35 API gravity. No derating is required up to 10,000 feet (3050 m) altitude. Gross power is without cooling fan.

**Engine:** John Deere 6-359T

Type .....	4-stroke cycle, turbocharged diesel
Bore and stroke .....	4.19 x 4.33 in. (106.5 x 110 mm)
No. of cylinders .....	6
Displacement .....	359 cu. in. (5.884 L)
Maximum net torque @ 1500 rpm .....	343 lb-ft (465 Nm) (47.4 kg-m)
Cooling fan .....	Blower
Air cleaner w/restriction indicator .....	Dry type
Electrical system .....	12 volt w/65 amp alternator
Batteries (one 12 volt)	
25 amps at 80°F (27°C) .....	Reserve capacity: 160 min. each
BCI group 31 cold cranking capacity at 0°F (-18°C) .....	625 amp

**Torque Converter:**

Type .....	Single phase, single stage
Torque multiplication .....	2.91 to 1

**Transmission:** Countershaft, Power Shift

<b>Forward Speeds:</b>	<b>mph (max.)</b>	<b>km/h (max.)</b>
1 .....	4.5	7.3
2 .....	7.6	12.2
3 .....	17.2	27.7
4 .....	24.6	39.5

<b>Reverse Speeds:</b>	<b>mph (max.)</b>	<b>km/h (max.)</b>
1 .....	4.5	7.3
2 .....	7.6	12.2
3 .....	17.2	27.7

**Differentials — choice of:**

- Front and rear conventional
- Front hydraulic differential lock and rear conventional
- Front NoSPIN and rear conventional

**Drive Axles** ..... Inboard-mounted planetary gears to each wheel. Front axle fixed. Rear axle oscillates 22 degrees total (28.6 in. [727 mm] vertical travel at center of tire).

**Steering** ..... Full power steering.  
 Frame articulated 80 degrees by two hydraulic cylinders.  
 Turning radius (measured to centerline of outside tire) ..... 16 ft. 3 in. (4.95 m)  
 Cylinder size: Stroke ..... 19.29 in. (490 mm)  
                   Bore ..... 2.76 in. (70 mm)  
                   Rod diameter ..... 1.57 in. (40 mm)

**Brakes:**  
 Service ..... Power-actuated, 4-wheel inboard-mounted, wet disk.  
 Foot-operated by either pedal.  
 Parking ..... 9.84 x 2.36 in. (250 x 60 mm) expanding shoe on transmission output shaft, foot-operated. Includes transmission disconnect with two-level monitor warning.

**Hydraulic Systems:**  
 Steering and loader functions ..... An engine-driven gear-type pump delivers 46.3 gpm (175 L/min) at 600 psi (4137 kPa) (42.2 kg/cm<sup>2</sup>) and 2400 engine rpm. Loader function relief valve pressure setting is 2750 psi (18 961 kPa) (193.4 kg/cm<sup>2</sup>). Maximum steering pressure is 2600 psi (17 927 kPa) (182.7 kg/cm<sup>2</sup>).  
 Control ..... Single-lever or optional two-lever for basic fork. Additional lever for fork with clamp.  
 Loader hydraulic operating cycle times at full throttle:

Raise .....	5.8 sec.
Dump .....	1.9 sec.
Lowering: float .....	3.2 sec.
power .....	3.9 sec.

**Brakes** ..... Engine-driven, axial piston pump delivers 8.1 gpm (31 L/min) at 2400 engine rpm and 600 psi (4137 kPa) (42.2 kg/cm<sup>2</sup>). Maximum system pressure is 2300 psi (15 859 kPa) (161.7 kg/cm<sup>2</sup>).

<b>Hydraulic Cylinders:</b>	<b>Bore</b>	<b>Stroke</b>
Boom, two .....	4.92 in. (125 mm)	30.71 in. (780 mm)
Rollback, one .....	5.51 in. (140 mm)	21.57 in. (548 mm)
Cylinder rods .....	Ground, heat-treated, chrome-nickel-plated, polished.	
Boom cylinder rods .....	2.48 in. (63 mm) dia.	
Rollback cylinder rods .....	2.48 in. (63 mm) dia.	

**Tires — choice of:**

- 17.5-25, 12 PR, loader tread, L2
- 17.5-25, 12 PR, rock tread, L3
- 17.5 R25, One Star, L2 equivalent
- 20.5-25, 12 PR, loader tread, L2
- 20.5-25, 12 PR, rock tread, L3
- 23.1-26, 10 PR, LS2
- 28L-26, 14 PR, LS2

<b>Capacities:</b>	<b>U.S.</b>	<b>Liters</b>
Fuel tank .....	55 gal.	208
Cooling system .....	25 qt.	24
Crankcase .....	18 qt.	17
Crankcase, including filter .....	20 qt.	19
Transmission case and filters .....	10 qt.	9.5
Front and rear differential .....	17 qt.	16
Loader hydraulic sump .....	80 qt.	76

**Operating Information:\***

Operating weight .....	26,497 lb. (12 019 kg)
Lift capacity maximum height:	
Fork level .....	10,827 lb. (4911 kg)
Fork rolled back .....	9789 lb. (4440 kg)
Lift capacity ground level:	
Fork level .....	19,215 lb. (8716 kg)
Fork rolled back .....	25,900 lb. (11 748 kg)
SAE tipping (40 deg. full turn) maximum reach:	
Fork level .....	9919 lb. (4499 kg)
Fork rolled back .....	13,470 lb. (6110 kg)
Straight tipping—maximum reach, fork rolled back .....	16,065 lb. (7287 kg)
Maximum rollback @ ground level .....	45°
Maximum rollback @ carry height .....	51.8°
Maximum grading level .....	62.5°
Fork weight .....	4054 lb. (1839 kg)
Length of tines .....	4 ft. 0 in. (1219 mm)
Tine spacing center to center .....	81.18 in. (2062 mm)
Minimum diameter clamp closing .....	8 in. (203 mm)
* Allied equipment log fork ordered through John Deere dealer.	

**Additional Standard Equipment:**

Differential, conventional, front and rear	Single-level warnings:
Engine:	Air filter restricted
Antifreeze	Engine coolant temperature
Fan guard	Hydraulic filter restricted
Fuel filter	Low brake pressure
Muffler	Low electrical voltage
Precleaner and dry type air cleaner	Low engine oil pressure
Frames:	Low transmission oil pressure
Articulation transport lock	Secondary steering (optional)
Drawbar	Indicator only:
Lockable engine side shields and rear grille	Turn signals
Rear bottom guard	Floormat
Service step, left-hand rear	Handgrips
Hydraulic oil cooler	Horn
Lights:	Instruments:
Driving w/guard	Electric hourmeter
Flashing and turn signal	Fuel gauge
Stop and tail	Transmission oil temperature gauge
Operator's station:	Key switch
Adjustable, deluxe vinyl seat	ROPS canopy
Cigarette lighter w/ashtray	Two-inch (51 mm) seat belt w/retractor
Dual inside rearview mirrors	Reverse warning alarm
Dual level monitor system:	Transmission clutch disconnect
Two level warnings:	Transmission oil cooler
Parking brake on	



**Optional or Special Equipment:**

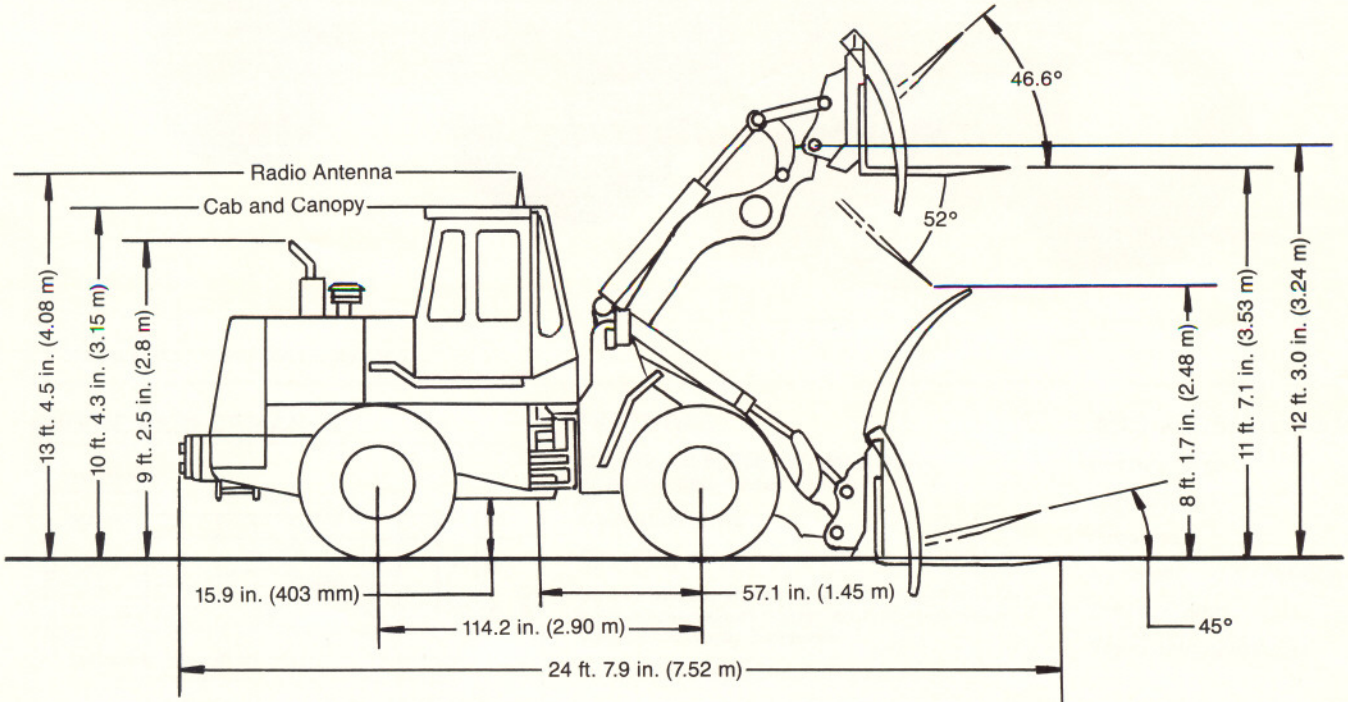
- Buckets:
  - Bolt-on cutting edges
  - Bucket teeth
- Differentials:
  - Front axle disconnect
  - Front hydraulic differential
  - Front NoSPIN differential
- Engine:
  - Additional battery
  - Alternator — 130 amp
  - Cold weather (ether) starting aid
  - Engine coolant heater
  - Radiator sand shield
  - Water separator, fuel
- Frames:

- Auxiliary bottom guards, transmission and front frame
- Fenders, front or rear
- Lift hooks
- License plate bracket
- Rear counterweights
- Steps, frame mounted
- SMV emblem
- Transmission side frame guards
- Hydraulics:
  - Two spool valve w/single-lever control
  - Two spool valve w/two-lever control

- Three spool valve, single-lever control w/auxiliary control lever for third function
- Three spool valve, two-lever control w/auxiliary control lever for third function
- Lights:
  - Front and rear work
- Loader:
  - Automatic boom height control
  - Automatic return-to-dig
- Operator's station:
  - Mirrors, outside
  - Radio - AM/FM for cab
  - ROPS cab w/heater-defroster-pressurizer, dome light, front and rear windshield wiper and washer, 90-amp alternator

- ROPS cab w/air conditioning, heater/defroster/pressurizer, dome light, front and rear windshield wiper and washer, 90-amp alternator
- Seats:
  - Adjustable deluxe suspension vinyl seat w/armrests
  - Adjustable deluxe suspension cloth seat w/armrests for cab
  - Secondary steering
  - Three-inch (76 mm) seat belt w/o retractor

**544E LL LOG LOADER DIMENSIONS**



	<b>TIRES</b>		
	<b>17.5-25</b>	<b>20.5-25</b>	<b>23.1-26</b>
Tread width .....	76.38 in. (1940 mm)	74.80 in. (1900 mm)	84.13 in. (2137 mm)
Overall width .....	95.28 in. (2420 mm)	96.93 in. (2462 mm)	109.09 in. (2771 mm)
Change in height .....	0	+ 2.40 in. (61 mm)	+ 4.09 in. (104 mm)