

L O G G L O A D E R S

544G LL 624G 644G



ENGINE	544G LL	624G	644G
Type	John Deere 6059T with altitude-compensating turbocharger	John Deere 6068T with altitude-compensating turbocharger	John Deere 6076A with altitude-compensating turbocharger; aftercooled
Rated power	120 SAE net hp (90 kW) 125 SAE gross hp (94 kW) @ 2,200 rpm	145 SAE net hp (108 kW) 150 SAE gross hp (112 kW) @ 2,200 rpm	170 SAE net hp (127 kW) 178 SAE gross hp (133 kW) @ 2,200 rpm
Cylinders	6	6	6
Displacement	359 cu. in. (5.884 L)	414 cu. in. (6.785 L)	466 cu. in. (7.636 L)
Maximum net torque	388 lb.-ft. (527 Nm) @ 1,400 rpm	465 lb.-ft. (630 Nm) @ 1,300 rpm	580 lb.-ft. (787 Nm) @ 1,300 rpm
Lubrication	pressure system with full-flow spin-on filter and cooler	pressure system with full-flow spin-on filter and cooler	pressure system with full-flow spin-on filter and cooler
Fuel consumption, typical	2.0 to 4.0 gal./hr. (7.6 to 15.2 L/h)	2.6 to 4.8 gal./hr. (9.8 to 18.2 L/h)	3.0 to 5.9 gal./hr. (11.3 to 22.3 L/h)
Cooling fan	blower	blower	blower
Electrical system	12 volt with 95-amp alternator	12 volt with 95-amp alternator	12 volt with 95-amp alternator
Battery (one 12 volt)	reserve capacity: 160 min., 625 CCA	reserve capacity: 160 min., 625 CCA	reserve capacity: 160 min., 925 CCA
Air cleaner	dual safety element dry type; restriction indicator for service	dual safety element dry type; restriction indicator for service	dual safety element dry type; restriction indicator for service

TRANSMISSION

Type	torque converter – power shift		torque converter – power shift		torque converter – power shift	
Controls	low-effort electronically controlled automatic shift and quick-shift button		low-effort electronically controlled automatic shift and quick-shift button		low-effort electronically controlled automatic shift and quick-shift button	
Travel speeds*	<i>Forward</i>		<i>Reverse</i>		<i>Forward</i>	
	<i>mph (km/h)</i>	<i>mph (km/h)</i>	<i>mph (km/h)</i>	<i>mph (km/h)</i>	<i>mph (km/h)</i>	<i>mph (km/h)</i>
Gear 1	4.6 (7.4)	4.6 (7.4)	4.5 (7.3)	4.5 (7.3)	4.4 (7.0)	4.4 (7.0)
Gear 2	7.7 (12.3)	7.7 (12.3)	7.2 (11.6)	7.2 (11.6)	7.0 (11.2)	7.0 (11.2)
Gear 3	16.9 (27.2)	16.9 (27.2)	15.2 (24.5)	15.2 (24.5)	13.7 (22.0)	13.7 (22.0)
Gear 4	23.8 (38.4)		23.0 (37.3)		21.5 (34.6)	

*544G LL and 624G are equipped with 20.5-25 tires; 644G is equipped with 23.5-25 tires.

AXLES/BRAKES

Final drives	heavy-duty planetary, mounted inboard	heavy-duty planetary, mounted inboard	heavy-duty planetary, mounted inboard
Differentials (choice of)	conventional front and rear – Standard; hydraulic lock front, conventional rear – Optional; NoSPIN front, conventional rear – Optional; hydraulic lock front and rear – Optional; front axle disconnect – Optional	conventional front and rear – Standard; hydraulic lock front, conventional rear – Optional; NoSPIN front, conventional rear – Optional; hydraulic lock front and rear – Optional; front axle disconnect – Optional	conventional front and rear – Standard; hydraulic lock front, conventional rear – Optional; NoSPIN front, conventional rear – Optional; hydraulic lock front and rear – Optional; front axle disconnect – Optional
Rear axle oscillation	22 degrees, stop to stop	26 degrees, stop to stop	26 degrees, stop to stop
Maximum rise and fall, single wheel	28.6 in. (727 mm)	32.8 in. (833 mm)	36.6 in. (929 mm)
Brakes (conform to SAE J1473, ISO3450)			
Service brakes	inboard-mounted hydraulic wet-disc, bathed in cooling oil, long life self-adjusting	inboard-mounted hydraulic wet-disc, bathed in cooling oil, long life self-adjusting	inboard-mounted hydraulic wet-disc, bathed in cooling oil, long life self-adjusting
Parking brake	automatically spring applied, hydraulically released, disc-type, located on the transmission output shaft	automatically spring applied, hydraulically released, disc-type, located on the transmission output shaft	automatically spring applied, hydraulically released, disc-type, located on the transmission output shaft

HYDRAULIC SYSTEM/STEERING

Pump (loader and steering)	gear-type, open-center system	gear-type, open-center system	gear-type, open-center system
Maximum flow	46.3 gpm (175 L/min.) @ 600 psi (4137 kPa) and 2,200 rpm	61.0 gpm (231 L/min.) @ 600 psi (4137 kPa) and 2,200 rpm	69.5 gpm (263 L/min.) @ 600 psi (4137 kPa) and 2,200 rpm
Pressure	loader relief 2,750 psi (18 961 kPa) steering relief 2,650 psi (18 270 kPa)	loader relief 2,800 psi (19 306 kPa) steering relief 2,650 psi (18 270 kPa)	loader relief 3,000 psi (20 685 kPa) steering relief 2,650 psi (18 270 kPa)
Loader controls	two-function valve with single lever and control lever lockout; optional three-function valve with auxiliary lever	two-function valve with single lever and control lever lockout; optional three-function valve with auxiliary lever	two-function valve with single lever and control lever lockout; optional three-function valve with auxiliary lever
Pump, brakes and pilot system	axial-piston system	axial-piston system	axial-piston system
Maximum flow	7.6 gpm (28 L/min.) @ 600 psi (4137 kPa) and 2,200 rpm	7.6 gpm (28 L/min.) @ 600 psi (4137 kPa) and 2,200 rpm	7.6 gpm (28 L/min.) @ 600 psi (4137 kPa) and 2,200 rpm
Pressure	2,450 psi (16 893 kPa)	2,450 psi (16 893 kPa)	2,450 psi (16 893 kPa)
Hydraulic cycle times			
Raise	5.8 sec.	5.8 sec.	6.2 sec.
Dump	1.9 sec.	1.7 sec.	1.8 sec.
Lower	3.2 sec. (float down) / 3.9 sec. (power down)	3.5 sec. (float down) / 3.5 sec. (power down)	3.5 sec. (float down) / 3.9 sec. (power down)
Steering (conforms to SAE J1511)			
Type	power, fully hydraulic	power, fully hydraulic	power, fully hydraulic
Relief valve setting	2,650 psi (18 270 kPa)	2,650 psi (18 270 kPa)	2,650 psi (18 270 kPa)
Articulation angle	80-degree arc (40 degrees each direction)	80-degree arc (40 degrees each direction)	80-degree arc (40 degrees each direction)
Turning radius (measured to center-line of outside tire)	16 ft. 3.0 in. (4.95 m)	16 ft. 10.5 in. (5.14 m)	17 ft. 11.0 in. (5.46 m)

SPECIFICATIONS

TIRES	544G LL	624G	644G
Choice of	15.5-25, 12 PR L2 / 17.5-25, 12 PR L2 / 17.5-25, 12 PR L3 / 20.5-25, 12 PR L2 / 20.5-25, 12 PR L3 / 20.5-25, 16 PR L3 / 17.5-25, Radial, One Star L2 equivalent / 17.5-25, Radial, One Star L3 equivalent / 23.1-26, 10 PR LS2 / 28L-26, 14 PR LS2	17.5-25, 12 PR L2 / 17.5-25, 12 PR L3 / 20.5-25, 12 PR L2 / 20.5-25, 12 PR L3 / 20.5-25, 16 PR L3 / 17.5-25, Radial, One Star L2 equivalent / 17.5-25, Radial, One Star L3 equivalent / 20.5-25, Radial, One Star L2 equivalent / 20.5-25, Radial, One Star L3 equivalent / 23.1-26, 10 PR LS2 / 28L-26, 14 PR LS2	20.5-25, 12 PR L2 / 20.5-25, 16 PR L2 / 20.5-25, 16 PR L3 / 23.5-25, 12 PR L2 / 23.5-25, 16 PR L3 / 23.5-25, 20 PR L3 / 20.5-25, Radial, One Star L2 equivalent / 20.5-25, Radial, One Star L3 equivalent / 23.5-25, Radial, One Star L3 equivalent
17.5-25 tires			
Tread width	76.38 in. (1940 mm)	81.10 in. (2060 mm)	
Width over tires	95.28 in. (2420 mm)	100.30 in. (2549 mm)	
Change in vertical height	0	-2.36 in. (-60 mm)	
20.5-25 tires			
Tread width	74.80 in. (1900 mm)	77.20 in. (1960 mm)	85.40 in. (2170 mm)
Width over tires	96.93 in. (2462 mm)	99.30 in. (2522 mm)	107.60 in. (2732 mm)
Change in vertical height	+2.60 in. (+66 mm)	0	-2.00 in. (-51 mm)
23.5-25 tires			
Tread width			83.50 in. (2120 mm)
Width over tires			108.90 in. (2765 mm)
Change in vertical height			0
23.1-26 tires			
Tread width	84.10 in. (2137 mm)	84.10 in. (2137 mm)	
Width over tires	109.10 in. (2771 mm)	109.10 in. (2771 mm)	
Change in vertical height	+4.09 in. (+104 mm)	+1.89 in. (+48 mm)	

CAPACITIES (U.S.)

Fuel tank with ground level fueling	57.6 gal. (218.0 L)	65.7 gal. (249.0 L)	75.0 gal. (284.0 L)
Cooling system	25.0 qt. (24.0 L)	26.0 qt. (25.0 L)	30.0 qt. (28.5 L)
Engine lubrication, including full-flow spin-on filter	20.0 qt. (19.0 L)	20.0 qt. (19.0 L)	25.0 qt. (24.0 L)
Power shift transmission, including vertical cartridge filter	10.0 qt. (9.5 L)	12.0 qt. (11.0 L)	15.0 qt. (14.0 L)
Differentials			
Front	20.0 qt. (19.0 L)	30.0 qt. (28.0 L)	24.0 qt. (23.0 L)
Rear	20.0 qt. (19.0 L)	20.0 qt. (19.0 L)	24.0 qt. (23.0 L)
Loader hydraulic reservoir	80.0 qt. (76.0 L)	108.0 qt. (102.0 L)	120.0 qt. (115.0 L)

OPERATING WEIGHTS

Operating weights with all standard equipment, log fork, ROPS cab, full fuel tank, and 175-lb. (79 kg) operator			
With 17.5-25, 12 PR L3 tires and two rear counterweights	26,497 lb. (12 019 kg)		
With 20.5-25, 12 PR L2 tires and one rear counterweight		30,537 lb. (13 849 kg)	
With 23.5-25, 12 PR L2 tires and one rear counterweight			37,972 lb. (17 221 kg)
Fork weight*	4,054 lb. (1839 kg)	3,851 lb. (1747 kg)	4,325 lb. (1962 kg)

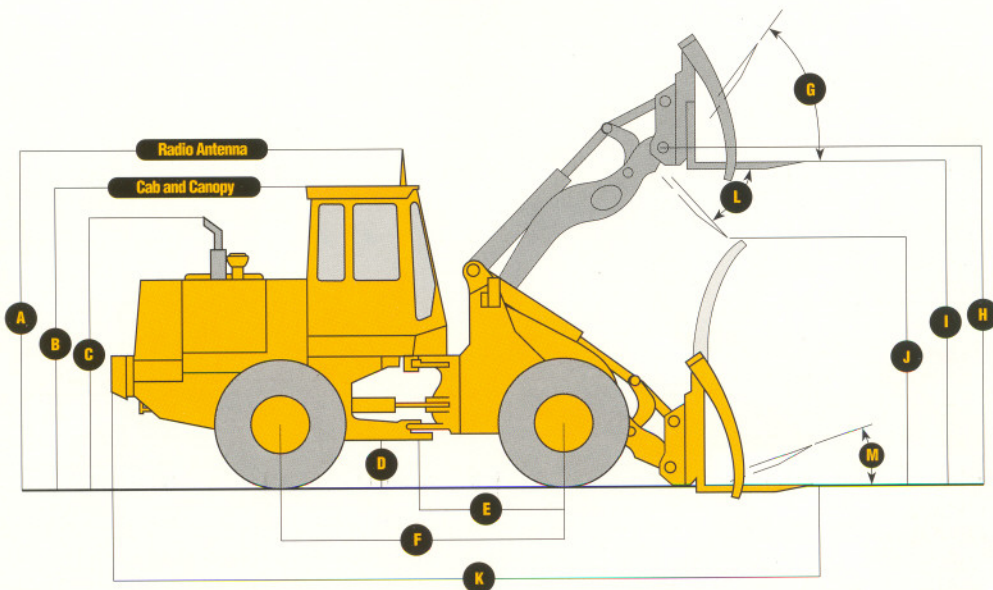
*Allied equipment log fork ordered through John Deere dealer.

OPERATING INFORMATION

Lift capacity maximum height			
Fork level	10,827 lb. (4911 kg)	16,530 lb. (7497 kg)	24,090 lb. (10 925 kg)
Fork rolled back	9,789 lb. (4440 kg)	12,161 lb. (5515 kg)	17,442 lb. (7910 kg)
Lift capacity ground level			
Fork level	19,215 lb. (8716 kg)	20,323 lb. (9217 kg)	26,231 lb. (11 896 kg)
Fork rolled back	25,900 lb. (11 748 kg)	21,631 lb. (9810 kg)	29,430 lb. (13 347 kg)
Tipping load, 40-degree full turn, SAE - maximum reach			
Fork level	9,919 lb. (4499 kg)	13,914 lb. (6310 kg)	18,480 lb. (8381 kg)
Fork rolled back	13,470 lb. (6110 kg)	18,901 lb. (8572 kg)	24,617 lb. (11 164 kg)
Tipping load, straight - maximum reach			
Fork rolled back	16,065 lb. (7287 kg)	22,579 lb. (10 240 kg)	29,265 lb. (13 272 kg)
Maximum rollback			
Ground level	45.0 degrees	33.6 degrees	30.5 degrees
Carry height	51.8 degrees	38.4 degrees	35.9 degrees
Full height	46.6 degrees	48.8 degrees	49.1 degrees
Length of tines	4 ft. 0 in. (1.22 m)	4 ft. 6 in. (1.37 m)	4 ft. 6 in. (1.37 m)
Tine spacing center to center	81.2 in. (2062 mm)	82.0 in. (2083 mm)	85.3 in. (2166 mm)
Minimum diameter clamp closing	8 in. (203 mm)	49 in. (1245 mm)	48 in. (1219 mm)

DIMENSIONS WITH LOG FORK	544G LL	624G	644G
A Overall height.....	11 ft. 5.3 in. (3.52 m)	13 ft. 9.0 in. (4.18 m)	14 ft. 2.0 in. (4.33 m)
B Height to top of cab and canopy.....	10 ft. 4.8 in. (3.17 m)	10 ft. 9.9 in. (3.30 m)	11 ft. 2.7 in. (3.42 m)
C Height to top of exhaust.....	9 ft. 2.0 in. (2.79 m)	9 ft. 7.9 in. (2.94 m)	10 ft. 4.4 in. (3.16 m)
D Ground clearance.....	14.7 in. (373 mm)	17.0 in. (433 mm)	19.0 in. (483 mm)
E Length from centerline of front axle.....	57.0 in. (1450 mm)	59.7 in. (1515 mm)	63.0 in. (1600 mm)
F Wheelbase.....	114.0 in. (2900 mm)	119.3 in. (3030 mm)	126.0 in. (3200 mm)
G Maximum fork angle.....	46.6 degrees	48.8 degrees	49.1 degrees
H Height to hinge pin, fully raised.....	12 ft. 3.7 in. (3.75 m)	12 ft. 10.0 in. (3.90 m)	13 ft. 2.5 in. (4.03 m)
I Height to fork, fully raised.....	11 ft. 7.1 in. (3.53 m)	11 ft. 9.0 in. (3.59 m)	12 ft. 3.0 in. (3.74 m)
J Dump height, fully raised.....	8 ft. 1.7 in. (2.48 m)	7 ft. 8.0 in. (2.36 m)	8 ft. 8.0 in. (2.65 m)
K Overall length.....	24 ft. 7.9 in. (7.52 m)	26 ft. 4.0 in. (8.03 m)	26 ft. 12.0 in. (8.22 m)
L Maximum dump, full height.....	52.0 degrees	56.0 degrees	50.0 degrees
M Maximum rollback, ground level.....	45.0 degrees	33.6 degrees	29.1 degrees

544G LL LOG LOADER



624G AND 644G LOG LOADERS

