

ENGINE	544G H	624G H
Type	John Deere 6059T with altitude-compensating turbocharger	John Deere 6068T with altitude-compensating turbocharger
Rated power	125 SAE net hp (93 kW) 130 SAE gross hp (97 kW) @ 2,200 rpm	150 SAE net hp (112 kW) 161 SAE gross hp (120 kW) @ 2,200 rpm
Cylinders.....	6	6
Displacement	359 cu. in. (5.884 L)	414 cu. in. (6.785 L)
Maximum net torque	373 lb.-ft. (506 Nm) @ 1,400 rpm	455 lb.-ft. (617 Nm) @ 1,350 rpm
Lubrication	pressure system with full-flow spin-on filter and cooler	pressure system with full-flow spin-on filter and cooler
Fuel consumption, typical.....	2.2 to 4.3 gal./hr. (8.3 to 16.5 L/h)	2.7 to 5.0 gal./hr. (10.1 to 18.8 L/h)
Cooling fan	blower	blower
Electrical system	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
Air cleaner.....	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	
Controls	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>Reverse</i>
Gear 1	4.6 mph (7.4 km/h)	4.6 mph (7.4 km/h)	4.5 mph (7.3 km/h)	4.5 mph (7.3 km/h)
Gear 2	7.7 mph (12.3 km/h)	7.7 mph (12.3 km/h)	7.2 mph (11.6 km/h)	7.2 mph (11.6 km/h)
Gear 3	16.9 mph (27.2 km/h)	16.9 mph (27.2 km/h)	15.2 mph (24.5 km/h)	15.2 mph (24.5 km/h)
Gear 4	23.8 mph (38.4 km/h)		23.0 mph (37.3 km/h)	

*Travel speeds are with 20.5-25 tires.

AXLES/BRAKES

Final drives.....	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
Rear axle oscillation.....	22 degrees, stop to stop	26 degrees, stop to stop
Maximum rise and fall, single wheel	28.0 in. (712 mm)	32.8 in. (833 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
Parking brake	automatically spring applied, hydraulically released, expanding shoe and drum on transmission	automatically spring applied, hydraulically released, expanding shoe and drum on transmission

HYDRAULIC SYSTEM/STEERING

Pump (loader and steering)	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 gpm (231 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 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
Hydraulic cycle times		
Raise	5.8 sec.	5.8 sec.
Dump	1.4 sec.	1.7 sec.
Lower.....	3.2 sec. (float down) / 3.5 sec. (power down)	3.5 sec. (float down) / 3.5 sec. (power down)
Maximum lift capacity	with 2.50 cu. yd. (1.9 m ³) stockpiling bucket	with 3.0 cu. yd. (2.3 m ³) stockpiling bucket
Lift at ground level	23,693 lb. (10 745 kg)	26,510 lb. (12 023 kg)
Lift at maximum height	11,792 lb. (5348 kg)	14,076 lb. (6384 kg)
Steering (conforms to SAE J1511)		
Type.....	power, fully hydraulic	power, fully hydraulic
Relief valve setting	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)
Turning radius (measured to center-line of outside tire).....	16 ft. 3 in. (4.95 m)	16 ft. 10.5 in. (5.14 m)

TIRES	544G H	624G H
Choice of.....	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	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
17.5-25 tires		
Tread width.....	76.38 in. (1940 mm)	81.1 in. (2060 mm)
Width over tires.....	95.28 in. (2420 mm)	100.3 in. (2549 mm)
Change in vertical height.....	- 2.60 in. (- 66 mm)	- 2.36 in. (- 60 mm)
20.5-25 tires		
Tread width.....	74.80 in. (1900 mm)	77.2 in. (1960 mm)
Width over tires.....	96.93 in. (2462 mm)	99.3 in. (2522 mm)
Change in vertical height.....	0	0

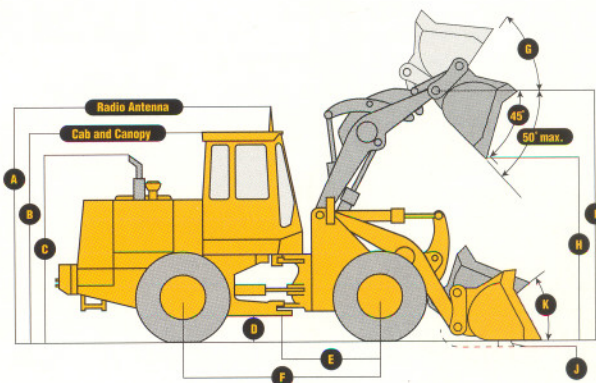
CAPACITIES (U.S.)

Fuel tank with ground level fueling.....	57.6 gal. (218 L)	65.7 gal. (249 L)
Cooling system.....	25 qt. (24 L)	26 qt. (25 L)
Engine lubrication, including full-flow spin-on filter.....	20 qt. (19 L)	20 qt. (19 L)
Power shift transmission, including vertical cartridge filter.....	10 qt. (9.5 L)	12 qt. (11 L)
Differentials		
Front.....	20 qt. (19 L)	30 qt. (28 L)
Rear.....	20 qt. (19 L)	20 qt. (19 L)
Loader hydraulic reservoir.....	80 qt. (76 L)	108 qt. (102 L)

DIMENSIONS WITH BUCKET

	544G H	624G H
A Overall height.....	11 ft. 7.9 in. (3.55 m)	11 ft. 10.4 in. (3.62 m)
B Height to top of cab and canopy.....	10 ft. 7.4 in. (3.23 m)	10 ft. 9.9 in. (3.30 m)
C Height to top of exhaust.....	9 ft. 4.6 in. (2.86 m)	9 ft. 7.9 in. (2.94 m)
D Ground clearance.....	17.3 in. (439 mm)	17 in. (433 mm)
E Length from centerline of front axle.....	57 in. (1450 mm)	59.65 in. (1515 mm)
F Wheelbase.....	114 in. (2900 mm)	119.3 in. (3030 mm)
G Maximum bucket angle.....	55.3 degrees	55.8 degrees
H Dump height.....	▲	▲
I Height to hinge pin, fully raised.....	12 ft. 5.2 in. (3.79 m)	12 ft. 9.3 in. (3.89 m)
J Digging depth.....	1.6 in. (40 mm)	2.3 in. (60 mm)
K Maximum bucket rollback, carry height.....	38.0 degrees	40.1 degrees

▲ See Bucket Information below and on page 6.



544G H BUCKET INFORMATION (PIN-ON)

Bucket Type/Size	Stockpiling w/o Bolt-on Edge	Stockpiling w/Bolt-on Edge + Spillguard*	Multipurpose**
Capacity, heaped SAE.....	2.50 cu. yd. (1.9 m ³)	2.88 cu. yd. (2.2 m ³)	2.12 cu. yd. (1.6 m ³)
Capacity, struck SAE.....	2.12 cu. yd. (1.62 m ³)	2.51 cu. yd. (1.92 m ³)	1.77 cu. yd. (1.35 m ³)
Bucket width.....	100.4 in. (2.55 m)	100.4 in. (2.55 m)	100.4 in. (2.55 m)
Breakout force, SAE J732C.....	22,207 lb. (98.8 kN)	20,430 lb. (90.9 kN)	20,750 lb. (92.3 kN)
Tipping load, straight.....	17,895 lb. (8116 kg)	17,265 lb. (7830 kg)	15,944 lb. (7231 kg)
Tipping load, 40-degree full turn, SAE.....	15,267 lb. (6924 kg)	14,663 lb. (6650 kg)	13,505 lb. (6125 kg)
Reach, 45-degree dump, 7-ft. (2.13 m) clearance.....	56.50 in. (1435 mm)	56.70 in. (1440 mm)	48.94 in. (1243 mm)
Reach, 45-degree dump, full height.....	36.30 in. (922 mm)	37.75 in. (959 mm)	31.85 in. (809 mm)
▲ Dump clearance, 45 degree, full height.....	112.3 in. (2853 mm)	109.8 in. (2790 mm)	106.4 in. (2702 mm)
Overall length.....	22 ft. 8.2 in. (6.91 m)	22 ft. 11.8 in. (7.01 m)	22 ft. 3.4 in. (6.79 m)
Loader clearance circle, bucket in carry position.....	37 ft. 6.4 in. (11.44 m)	37 ft. 8.5 in. (11.49 m)	37 ft. 9.3 in. (11.51 m)
Operating weight.....	23,677 lb. (10 738 kg)	24,159 lb. (10 958 kg)	24,449 lb. (11 088 kg)

*Auxiliary spillguard is dealer installed. The spillguard is primarily intended to prevent spillage of loose material. However, it does increase bucket capacity.

**Allied attachments ordered through John Deere dealers.

Loader operating information is based on machine with all standard equipment; 20.5-25, 12 PR L2 tires; ROPS cab; 175-lb. (79 kg) operator; and full fuel tank. This information is affected by tire size, ballast, and different attachments.

544G H ADJUSTMENTS TO OPERATING WEIGHTS FOR PIN-ON BUCKETS

Adjustments to operating weights and tipping loads for 2.50 cu. yd. (1.9 m³) stockpiling bucket

Add (+) or deduct (–) lb. (kg) as indicated for loaders with

	Operating Weight	Tipping Load, Straight	Tipping Load, 40-Degree Full Turn, SAE
17.5-25, 12 PR L2 tires without CaCl ₂	– 794 lb. (– 360 kg)	– 553 lb. (– 251 kg)	– 478 lb. (– 217 kg)
17.5-25, 12 PR L2 tires with CaCl ₂	+ 386 lb. (+ 175 kg)	+ 1,091 lb. (+ 495 kg)	+ 944 lb. (+ 428 kg)
17.5-25, 12 PR L3 tires without CaCl ₂	– 661 lb. (– 300 kg)	– 461 lb. (– 209 kg)	– 399 lb. (– 181 kg)
17.5-25, 12 PR L3 tires with CaCl ₂	+ 518 lb. (+ 235 kg)	+ 1,182 lb. (+ 536 kg)	+ 1,023 lb. (+ 464 kg)
17.5-25, Radial, One Star L2 equivalent tires without CaCl ₂	– 414 lb. (– 188 kg)	– 289 lb. (– 131 kg)	– 249 lb. (– 113 kg)
17.5-25, Radial, One Star L2 equivalent tires with CaCl ₂	+ 765 lb. (+ 347 kg)	+ 1,356 lb. (+ 615 kg)	+ 1,171 lb. (+ 531 kg)
20.5-25, 12 PR L2 tires with CaCl ₂	+ 1,820 lb. (+ 826 kg)	+ 2,538 lb. (+ 1151 kg)	+ 2,194 lb. (+ 995 kg)
20.5-25, 12 PR L3 tires without CaCl ₂	+ 291 lb. (+ 132 kg)	+ 203 lb. (+ 92 kg)	+ 176 lb. (+ 80 kg)
20.5-25, 12 PR L3 tires with CaCl ₂	+ 2,112 lb. (+ 958 kg)	+ 2,740 lb. (+ 1243 kg)	+ 2,368 lb. (+ 1074 kg)
ROPS canopy in lieu of ROPS cab	– 320 lb. (– 145 kg)	– 302 lb. (– 137 kg)	– 278 lb. (– 126 kg)
Bucket teeth	+ 240 lb. (+ 109 kg)	– 295 lb. (– 134 kg)	– 289 lb. (– 131 kg)
Add one rear counterweight*	+ 946 lb. (+ 429 kg)	+ 2,130 lb. (+ 966 kg)	+ 1,748 lb. (+ 793 kg)

*Optional counterweight not to be used when CaCl₂ ballast is used in the tires.

624G H BUCKET INFORMATION (PIN-ON)

Bucket Type/Size	Stockpiling w/o Bolt-on Edge	Stockpiling w/Bolt-on Edge + Spillguard*	Multipurpose**
Capacity, heaped SAE	3.00 cu. yd. (2.3 m ³)	3.38 cu. yd. (2.6 m ³)	2.50 cu. yd. (1.9 m ³)
Capacity, struck SAE	2.63 cu. yd. (2.0 m ³)	3.00 cu. yd. (2.3 m ³)	2.10 cu. yd. (1.6 m ³)
Bucket width	101.8 in. (2.58 m)	101.8 in. (2.58 m)	108.0 in. (2.74 m)
Breakout force, SAE J732C	29,404 lb. (130.8 kN)	26,494 lb. (117.8 kN)	28,521 lb. (126.8 kN)
Tipping load, straight	21,205 lb. (9617 kg)	20,401 lb. (9252 kg)	18,270 lb. (8490 kg)
Tipping load, 40-degree full turn, SAE	18,001 lb. (8164 kg)	17,241 lb. (7819 kg)	15,772 lb. (7153 kg)
Reach, 45-degree dump, 7-ft. (2.13 m) clearance	59.8 in. (1520 mm)	60.5 in. (1536 mm)	58.7 in. (1492 mm)
Reach, 45-degree dump, full height	38.0 in. (966 mm)	40.4 in. (1027 mm)	33.8 in. (860 mm)
▲ Dump clearance, 45 degree, full height	112.9 in. (2868 mm)	109.6 in. (2784 mm)	111.3 in. (2827 mm)
Overall length	24 ft. 3.7 in. (7.41 m)	24 ft. 8.3 in. (7.52 m)	24 ft. 6.8 in. (7.49 m)
Loader clearance circle, bucket in carry position	39 ft. 2.8 in. (11.96 m)	39 ft. 5.6 in. (12.03 m)	39 ft. 10.7 in. (12.16 m)
Operating weight	27,435 lb. (12 442 kg)	27,973 lb. (12 686 kg)	28,246 lb. (12 810 kg)

*Auxiliary spillguard is dealer installed. The spillguard is primarily intended to prevent spillage of loose material. However, it does increase bucket capacity.

**Allied attachments ordered through John Deere dealers.

Loader operating information is based on machine with all standard equipment; 20.5-25, 12 PR L2 tires; ROPS cab; 175-lb. (79 kg) operator; and full fuel tank. This information is affected by tire size, ballast, and different attachments.

624G H ADJUSTMENTS TO OPERATING WEIGHTS FOR PIN-ON BUCKETS

Adjustments to operating weights and tipping loads for 3.0 cu. yd. (2.3 m³) stockpiling bucket

Add (+) or deduct (–) lb. (kg) as indicated for loaders with

Operating Weight	
17.5-25, 12 PR L2 tires without CaCl ₂	– 794 lb. (– 360 kg)
17.5-25, 12 PR L2 tires with CaCl ₂	+ 386 lb. (+ 175 kg)
17.5-25, 12 PR L3 tires without CaCl ₂	– 661 lb. (– 300 kg)
17.5-25, 12 PR L3 tires with CaCl ₂	+ 518 lb. (+ 235 kg)
17.5-25, Radial, One Star L2 equivalent tires without CaCl ₂	– 414 lb. (– 188 kg)
17.5-25, Radial, One Star L2 equivalent tires with CaCl ₂	+ 765 lb. (+ 347 kg)
20.5-25, 12 PR L2 tires with CaCl ₂	+ 1,820 lb. (+ 826 kg)
20.5-25, 12 PR L3 tires without CaCl ₂	+ 291 lb. (+ 132 kg)
20.5-25, 12 PR L3 tires with CaCl ₂	+ 2,112 lb. (+ 958 kg)
20.5-25, Radial, One Star L2 equivalent tires without CaCl ₂	+ 467 lb. (+ 212 kg)
20.5-25, Radial, One Star L2 equivalent tires with CaCl ₂	+ 2,288 lb. (+ 1038 kg)
ROPS canopy in lieu of ROPS cab	– 320 lb. (– 145 kg)
Bucket teeth	+ 240 lb. (+ 109 kg)
Add one rear counterweight*	+ 1,169 lb. (+ 530 kg)

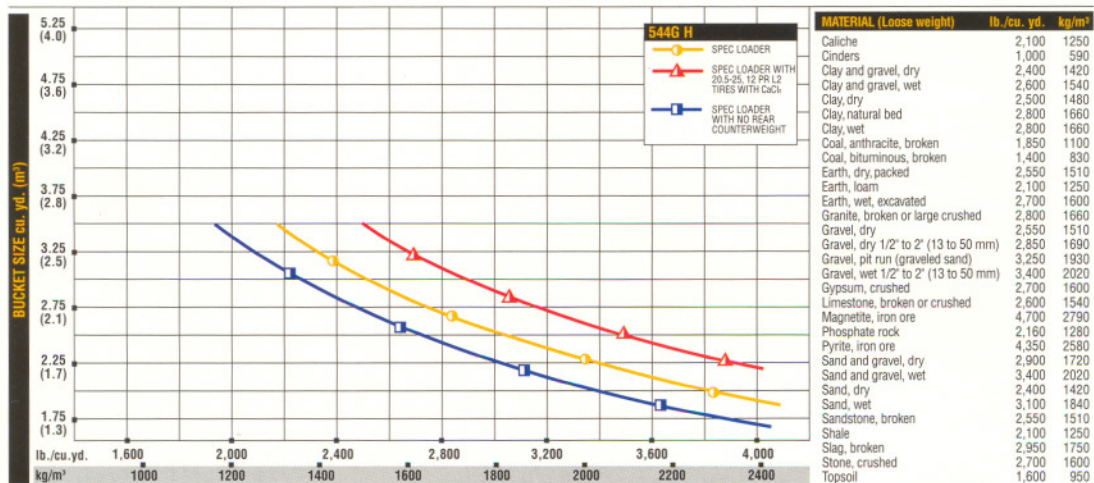
*Optional counterweight not to be used when CaCl₂ ballast is used in the tires.

Tipping Load, Straight

– 560 lb. (– 254 kg)	– 483 lb. (– 219 kg)
+ 1,100 lb. (+ 499 kg)	+ 950 lb. (+ 431 kg)
– 425 lb. (– 193 kg)	– 366 lb. (– 166 kg)
+ 1,193 lb. (+ 541 kg)	+ 1,030 lb. (+ 467 kg)
– 293 lb. (– 133 kg)	– 251 lb. (– 114 kg)
+ 1,367 lb. (+ 620 kg)	+ 1,179 lb. (+ 535 kg)
+ 2,560 lb. (+ 1161 kg)	+ 2,211 lb. (+ 1003 kg)
+ 205 lb. (+ 93 kg)	+ 179 lb. (+ 81 kg)
+ 2,765 lb. (+ 1254 kg)	+ 2,388 lb. (+ 1083 kg)
+ 331 lb. (+ 150 kg)	+ 287 lb. (+ 130 kg)
+ 2,888 lb. (+ 1310 kg)	+ 2,493 lb. (+ 1131 kg)
– 299 lb. (– 136 kg)	– 241 lb. (– 109 kg)
– 298 lb. (– 135 kg)	– 291 lb. (– 132 kg)
+ 2,677 lb. (+ 1214 kg)	+ 2,196 lb. (+ 996 kg)

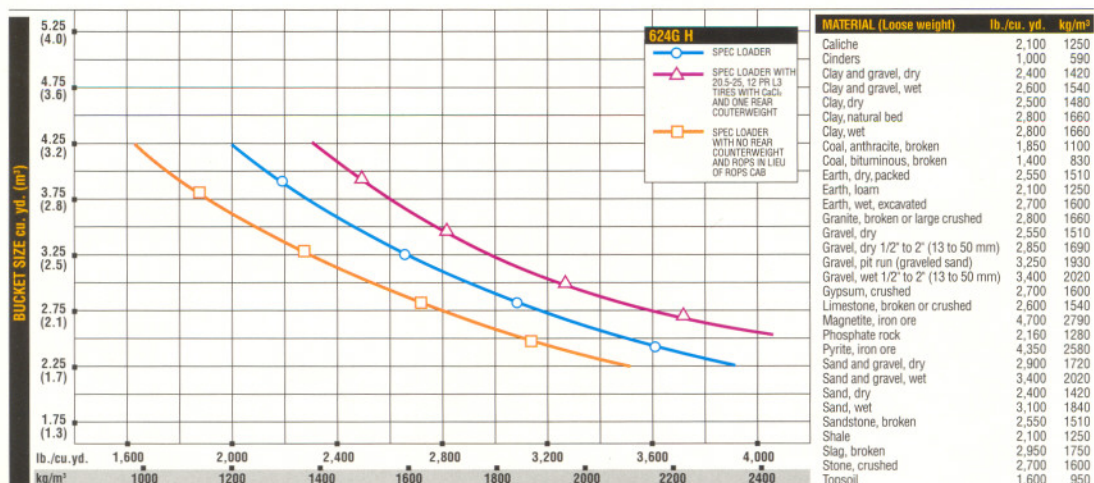
Tipping Load, 40-Degree Full Turn, SAE

544G H BUCKET SELECTION GUIDE*



*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting 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. Bucket size recommendations are based on SAE J818 and J1197, which specify rated bucket loads at 50 percent of SAE tipping loads.

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