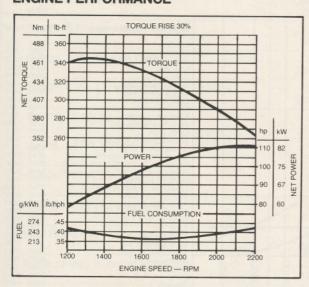


# **544C LOADER**



# **ENGINE PERFORMANCE**



Fuel consumption rate based on maximum power at each net torque requirement. Depending on operation variables, a typical duty cycle averages about one-half of maximum fuel usage.

### **FEATURES**

110 SAE net hp (82 kW) John Deere turbocharged diesel engine

4-wheel drive

2,  $2^{1}/4$ , or 3 cu. yd. (1.53, 1.72 or 2.29 m³) bucket or  $1^{3}/4$  cu. yd. (1.34 m³) multipurpose bucket

Twin-turbine torque converter with Power Shift transmission. 4 speeds forward, 2 reverse

Power steering. Articulated frame

4-wheel wet-disk power brakes and parking brake

Inboard planetary final drives

Single-lever loader control w/optional automatic return-to-dig and optional boom height control

Optional front-axle hydraulic differential lock or NoSPIN front differential

Optional vandal protection

Rollover protective structure (ROPS) with canopy. Meets criteria of SAE J394, SAE J1040A, and ISO 3471. Also meets FOPS (falling object protective structure) criteria SAE J231 and ISO 3449.

## ADD VERSATILITY WITH:

Backhoe

**Bucket teeth** 

Auxiliary skid shoes

Auxiliary spill guard

Auxiliary cutting edge

Side-dump bucket

**Quik-Tatch adapters** 

Snowplows

Forks

Special buckets

### **544C 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, L2 tires with 1180 lb. (535 kg) CaCl<sub>2</sub> solution in rear tires, ROPS cab, full fuel tank, and 175 lb. (79 kg) operator.)

based on a machine with all standard equipment, 17.	5-25, 12 PR, L2 1	tires with 1180 lb. (535
Rated Power @2200 engine rpm: Net	0 (82 kW) 0 (90 kW) ng air cleaner, ext J1349 and DIN 7	70 020, using No. 2-
Engine: John Deere 6-414T  Type	00 cu. in. (10 414 c 2 lb-ft (464 N  12 volt w/42- rve capacity:	16.4 x 127 mm)
Torque Converter:		Twin-turbine
Torque multiplication		
Transmission		
Forward Speeds:  1	mph 0-3.1 .1-7.3 )-11.7 .7-27.9	0-5.0 5.0-11.7 0-18.8 18.8-45.0
	.2-9.9 is automatic	6.8-16.0
Differentials - choice of: Front and rear conventional Front hydraulic differential lock and rear Front NoSPIN and rear conventional	conventional	
Drive Axles	ar axle oscilla	ites 22-degrees
Steering: articulated 80 degrees by two hydraulic of Turning radius (measured to centerline of outside tire) Cylinder size: Stroke Bore Rod diameter	cylinders. f 14 f	t. 7 in. (4.44 m) 75 in. (400 mm) . 3 in. (76 mm)
Brakes: Service inboard-mounted, wet disk. Foot-operate Parking expanding shoe on transmission ou Includes transmission disconnect with we	d by either p . 10 x 1.5 in. tput shaft, f	edal. (254 x 38 mm) foot-operated.
Hydraulic Systems:  Loader functions gear-type pump delivers 45.8 gpm (2.9 (42.2 kg/cm²) and 2200 engine rpm. 262: cm²) relief valve pressure setting. Control Single Optional triple hydraulic valve for fork or Steering and brakes: Engine-driven, 8-p pump delivers 20.6 gpm (1.30 L/s) at 18 (13 790 kPa) (140.6 kg/cm²). Maximum (16 548 kPa) (168.7 kg/cm²). Loader hydraulic operating cycle times a Raise Dump Lowering: float power	L/s) at 600 5 psi (18 099 e-lever, dual I multipurpose iston, variabl 00 engine rp system press at full throttle:	psi (4137 kPa) kPa) (184.6 kg/ hydraulic valve. e bucket. e-displacement m and 2000 psi sure is 2400 psi 
Maximum lift capacity with 2 cu. yd. bucket: Maximum height Ground level	(1.53 m³) ge	eneral purpose 20 lb. (4685 kg)

Hydraulic Cylinders:	Bore	Stroke
Boom, two	5.50 in. (140 mm)	24.3 in. (617 mm)
Bucket, one	5.50 in. (140 mm)	Ground heat-treated
	chrome-	nickel-plated, polished
Boom cylinder rods		2.50 in. (63.5 mm) dia.
Bucket cylinder rods		2.66 in. (67.5 mm) dia.

#### Tires - choice of:

14.00-24, 10 PR, grader tread, G2 17.5-25, 12 PR, loader tread, L2 w/or w/o valve stem protector 17.5-25, 12 PR, rock tread, L3 17.5-25 XRAT (L2 equivalent) 20.5-25, 12 PR, loader tread, L2

Capacities:	U.S.	Liters
Cooling system	27 qt.	26
Fuel tank	40 gal.	151.4
Crankcase	18 qt.	17
Crankcase, including filter	20 qt.	19
Transmission case and filters	39 qt.	37
Front differential	24 qt.	23
Rear differential	24 qt	23
Loader hydraulic sump	56 qt.	53

#### **Additional Standard Equipment:**

Adjustable, cushioned, vinyl seat Antifreeze
Articulation transport lock
Cigarette lighter
Differential, conventional front and rear
Engine sideshields
Fixed drawbar
Fuel filter
Gauges:
Coolant temperature
Electric hourmeter
Engine oil pressure
Fuel
Transmission oil temperature
Voltmeter

Hand grips
Horn
Instrument
Hydraulic
Parking Is
Key switch
Lights, driv
Lights, driv
Lights, stop
Loader hyd
indicator
Muffler
Precleaner
Pushbuttor
Rear botton
Reverse wa
ROPS, can

t Hand grips
Horn
Instrument panel warning lights:
Hydraulic filter bypass
Parking brake
Key switch
Lights, driving w/o guard
Lights, flashing and turn signal
Lights, stop and tail
Loader hydraulic system
indicator
Muffler
Precleaner
Pushbutton start
Rear bottom guard
Reverse warning alarm
ROPS, canopy w/seat belt
Toolbox

# Optional or Special Equipment:

Adjustable deluxe seat
Adjustable deluxe suspension
cloth seat for cab
Adjustable deluxe suspension
vinyl seat
Alternator, 62 amp
Automatic boom height control
Automatic return to dig
Auxiliary front bottom guard
Auxiliary cutting edges
Auxiliary spill guard
Bucket teeth
Emergency steering
Engine coolant
Ether starting aid
Floor mat
Front fenders

### Heater for canopy

Hydraulic front differential lock Hydraulic tube shield License plate bracket Lights, front and rear work Lights, driving w/guard Lockable engine sideshields w/front hood Lockable instrument panel covers NoSPIN front differential Pest covers (for canopy or cab w/o heater) Rear axle disconnect Rear canopy shield For ROPS cab: Mirrors Radio — AM Rear wiper and washer Windshield washer ROPS cab w/heater/defroster, pressurizer, dome light, front wiper and 62-amp alternator ROPS cab w/o heater/defroster, pressurizer, but with dome light, front wiper and 42-amp alternator ROPS cab w/air conditioner, heater/defroster, pressurizer,

dome light, front wiper and 62- amp alternator SMV emblem Side counterweights 3-in. (76 mm) seat belt Triple hydraulic valve for loader Transmission disconnect

### **544C LOADER OPERATING INFORMATION**

OPERATING INFORMATION	Bucket Type			
	General Purpose	**General Purpose	Light Material	*Multipurpose
Capacity, heaped, SAE	2 cu. yd.	2.25 cu. yd.	3 cu. yd.	1.75 cu. yd.
	(1.53 m³)	(1.72 m³)	(2.29 m³)	(1.34 m³)
Capacity, struck, SAE	1.64 cu. yd.	1.78 cu. yd.	2.53 cu. yd.	1.4 cu. yd.
	(1.25 m³)	(1.36 m³)	(1.93 m³)	(1.07 m³)
Bucket width	96 in.	101.75 in.	104.24 in.	94.5 in.
	(2.44 m)	(2.58 m)	(2.65 m)	(2.40 m)
Breakout force, SAE J732C	20,520 lb. (91 kN) (9310 kg)	17,790 lb. (79 kN) (8070 kg)	16,810 lb. (75 kN) (7630 kg)	18,440 lb. (82 kN) (8370 kg)
Tipping load, straight,	16,060 lb.	15,330 lb.	15,830 lb.	15,180 lb.
	(7285 kg)	(6955 kg)	(7180 kg)	(6885 kg)
Tipping load, 40-deg.	14,060 lb.	13,400 lb.	13,810 lb.	13,150 lb.
full turn, SAE	(6380 kg)	(6080 kg)	(6265 kg)	(5965 kg)
Tipping load, 35-deg. turn	14,520 lb.	13,835 lb.	14,270 lb.	13,610 lb.
	(6585 kg)	(6275 kg)	(6470 kg)	(6175 kg)
Reach at 45-deg. dump,	56.49 in.	57.1 in.	58.76 in.	53.65 in.
7 ft. (2.13 m) clearance	(1435 mm)	(1450 mm)	(1492 mm)	(1363 mm)
Reach at 45-deg. dump,	35.22 in.	37.35 in.	39.76 in.	35.96 in.
full height	(894 mm)	(949 mm)	(1010 mm)	(913 mm)
Dump clearance at 45-deg.	114.0 in.	110.9 in.	109.6 in.	109.2 in.
dump, full height	(2896 mm)	(2817 mm)	(2784 mm)	(2774 mm)
Overall length	20 ft. 3.1 in.	20 ft. 7.5 in.	20 ft. 9.3 in.	20 ft. 10 in.
	(6.18 m)	(6.29 m)	(6.33 m)	(6.35 m)
Loader clearance circle,	34 ft. 4 in.	34 ft. 11.9 in.	35 ft. 4 in.	34 ft. 8 in.
bucket in carry position	(10.46 m)	(10.67 m)	(10.77 m)	(10.57 m)
Operating weight	22,620 lb.	22,690 lb.	23,030 lb.	23,830 lb.
	(10 260 kg)	(10 290 kg)	(10 450 kg)	(10 810 kg)

Loader operating information is based on machine with all standard equipment, 17.5-25, 12 PR, L2 tires with 1180 lb. (535 kg) of CaCl<sub>2</sub> solution in rear tires, ROPS cab, full fuel tank and 175 lb. (79 kg) operator. Operating information is affected by tire size, ballast and attachments. For selected items, add and/or subtract the following:

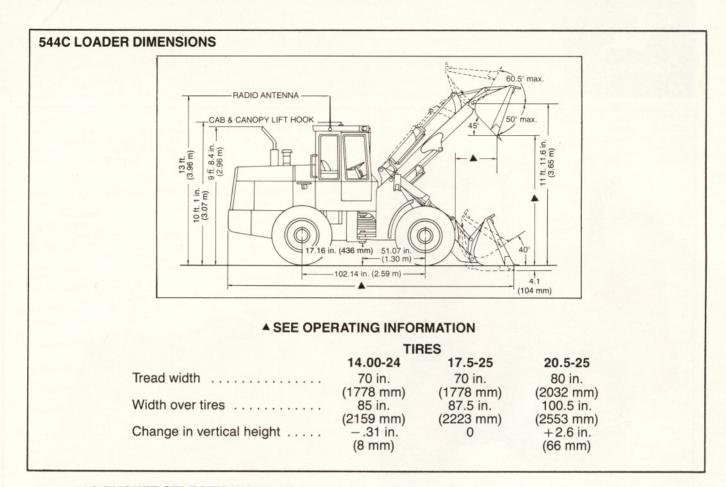
# Adjustments to operating weights and tipping loads for general purpose buckets

Add (+) or deduct (-) lb. (kg) as indicated for loaders with:	Loader	Tipping	Tipping	Tipping Load
	Operating	Load	Load 35°	40° Full Turn
	Weight	Straight	Turn	SAE
14.00-24, 10 PR, G2 without CaCl <sub>2</sub>	- 805 lb.	- 700 lb.	- 635 lb.	-615 lb.
	(365 kg)	(320 kg)	(290 kg)	(280 kg)
14.00-24, 10 PR, G2 without CaCl <sub>2</sub>	- 1755 lb.	- 1980 lb.	- 1800 lb.	- 1750 lb.
	(800 kg)	(900 kg)	(815 kg)	(790 kg)
17.5-25, 12 PR, L2, without CaCl <sub>2</sub>	- 1180 lb.	- 1590 lb.	- 1450 lb.	- 1400 lb.
	(535 kg)	(720 kg)	(650 kg)	(635 kg)
17.5-25, 12 PR, L3 with CaCl <sub>2</sub>	+ 185 lb.	+ 125 lb.	+ 115 lb.	+ 105 lb.
	(80 kg)	(55 kg)	(50 kg)	(50 kg)
17.5-25, 12 PR, L3 without CaCl <sub>2</sub>	- 995 lb.	- 1460 lb.	- 1335 lb.	- 1295 lb.
	(450 kg)	(660 kg)	(605 kg)	(590 kg)
20.5-25, 12 PR, L2 with CaCl <sub>2</sub>	+ 1130 lb.	+ 1195 lb.	+ 1085 lb.	+ 1050 lb.
	(515 kg)	(540 kg)	(490 kg)	(480 kg)
20.5-25, 12 PR, L2 without CaCl <sub>2</sub>	-690 lb.	- 1260 lb.	- 1145 lb.	- 1110 lb.
	(310 kg)	(570 kg)	(520 kg)	(505 kg)
Less ROPS cab	- 715 lb.	-655 lb.	-625 lb.	-615 lb.
	(325 kg)	(300 kg)	(280 kg)	(280 kg)
ROPS canopy in lieu of ROPS cab	- 280 lb.	- 250 lb.	-240 lb.	- 235 lb.
	(125 kg)	(115 kg)	(110 kg)	(105 kg)
1st set side counterweights	+ 460 lb.	+ 920 lb.	+810 lb.	+ 775 lb.
	(210 kg)	(415 kg)	(365 kg)	(350 kg)
*2nd set side counterweights	+ 420 lb.	+ 840 lb.	+740 lb.	+710 lb.
	(190 kg)	(380 kg)	(335 kg)	(320 kg)

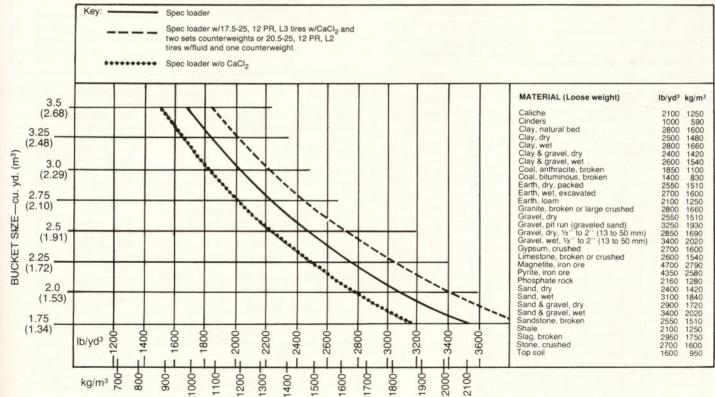
<sup>\*</sup>Not to be used with 20.5-25, 12 PR, L2 tires with CaCl<sub>2</sub>

<sup>\*</sup>Includes first set counterweights, 460 lb. (210 kg).

\*\*See your dealer for buckets meeting this operating information.



# **544C BUCKET SELECTION GUIDE\***



<sup>\*</sup>This guide, representing buckets not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density and loader configurations. However, specific bucket size should only be determined after adding or subtracting all the tipping load changes due to specifications.