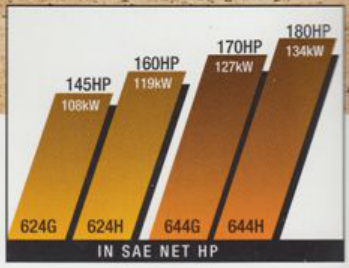
L O A D E R S

624H 644H

Compared with their G-Series counterparts, the 624H and 644H provide higher horsepower, greater tipping loads, larger bucket sizes, and faster hill-climbing speeds.

The loaders you need -



This chart illustrates the higher horsepower of the 624H and 644H compared to previous models. Both loaders use emissions-certified PowerTech® engines (see following pages).

– for the loads you need to get moved.

The John Deere H-Series is now an unbroken line of top-quality four-wheel-drive loaders. And with the introduction of the 624H and 644H, there's no longer a gap between the 544H and the 744H. Where one might be too small and the other too big, here are two machines that are "just right."

The all-new H-Series is not a new letter tacked onto some old model numbers. It's a dramatic expansion of the four-wheel-drive loader concept, with important additions in several key areas.

Just compare the 624H and 644H to their previous G-Series counterparts and you'll see what we mean. These loaders provide higher horsepower, greater tipping loads, larger bucket sizes, and faster hill-climbing speeds.

The 624H and 644H are American-made machines, designed and built at ISO 9001-certified John Deere facilities. We designed them by starting with a blank piece of paper (OK, it was actually a blank computer screen). We kept in mind your requests for loaders that use less fuel, cut emissions, and make less noise on the job.

And we put special emphasis on creating an operator station that gives the folks who run the machines extra energy and stamina by keeping them more comfortable all day long.

Both the 624H and 644H offer increased productivity over the G-Series by providing more breakout force, higher straight and full-turn tipping loads, greater lift capacities, and greater operating weight.

The Z-bar linkages on the 624H and 644H use a formed-and-welded, elliptical boom cross-tube, which gives you better visibility to the bucket.

When the return-to-carry feature is engaged, putting the boom into float detent allows the boom to drop and stop about a foot off the ground – or whatever distance the operator sets. When roading the machine, and in load-and-carry operations, the operator can concentrate on driving rather than on bucket positioning.

Load-sensing hydraulics make efficient use of power by matching overall hydraulic flow to each load, maximizing power to the wheels.

JAGZ CUTTING EDGES

The 624H is available with a 3.0 yd³ bucket or the larger 3.5 yd³ bucket. The 644H can be ordered with a 3.5 yd³ bucket or the larger 4.25 yd³ bucket. The range of Deere buckets includes loader buckets that are drilled to accept bolt-on edges, John Deere Jagz™ cutting edges or segmented edges with teeth.

Get behind the wheel of an H-Series Loader and drive your costs down.

It's a win-win proposition. The H-Series can either get more earth moved than competitive machines, or it might move the same amount of earth with greater day-in-day-out reliability. Either way, you'll hit pay dirt.

The torque-converter powershift transmission features electronically-controlled clutch engagement that automatically adjusts the shift to match engine power for the ultimate in smooth operation. The transmission controller uses *smart-shift* technology. It evaluates speed and load conditions, then matches them by adjusting the engagement speed and order of the clutch pack.

The 624H and 644H also feature an exclusive *multiple sensitivity clutch cutoff*. If you're loading a truck on level ground, set the clutch cutoff to 'level.' When you step on the brake, the transmission goes to neutral with very little braking force, so you can roll up to the truck.

But if you're on a slope, set the clutch cutoff to 'small slope' or 'steep slope.' Now, when you step on the brake, more braking force is applied before the transmission shifts to neutral, so you don't roll back down the hill or into a ditch.

Smart-Shift technology delivers smoother shifts with less delay under all load conditions. The automatic-shift feature gives you three choices:

- *Operator-select manual shift;*
- *Automatic, 1st through 4th;*
- *Automatic, 2nd through 4th.*

The operator's left foot governs braking and locks or unlocks the differential with the convenient foot switch (at left in photo above). The brake pedal is also used to activate the clutch cutoff, which has three convenient, computer-controlled adjustments that the operator can select.

John Deere inboard-mounted hydraulic wet-disk brakes self-adjust for wear. Planetary final drives are also mounted inboard. Gear size isn't limited by wheel hub diameter – so larger, more durable components can be used.

Look out through these cab windows and you'll be seeing into the future.

This is the standard by which operator's stations will be evaluated in the next century. The cab is wider, longer, quieter, and roomier than ever – and the windows are larger and cut lower. There's also an all-glass door, as well as a frameless front windshield. You get a clear view to the ground on both sides.

The 624H and 644H also offer improved air conditioning capacity. The system is designed to maintain a 49-degree difference between the outside and inside of the cab. So if it gets up to 110 degrees outside, the inside of the cab can still be cooled down to 61 degrees.

The deluxe, microprocessor-controlled dash monitor offers three modes:

The first, normal mode, displays the gear and direction the transmission is running in; whether automatic transmission is selected; and the engine speed (in rpm), hour meter, and voltage.

The second, accessory mode, lets the operator set up the machine to accommodate specific situations. Not everyone in this industry agrees whether automatic should shift from 1st through 4th or from 2nd through 4th. With the accessory mode on the 644H, it's up to the operator.

The third mode is diagnostic mode, which displays diagnostic codes at a glance. Passing this data along to your dealer's service people helps them determine the fastest way to get a downed machine up and running – so that the right parts are on the service truck the first time it goes to your jobsite.

Teledyne's Loadrite weighing system is available as an option on the 624H and 644H. The accuracy of plus or minus 1 percent lets you load each truck to its full legal payload.

The spring-applied, hydraulically released park brake automatically engages when the engine is shut off. It can be manually applied with the engine running by flipping a switch at the dash's lower right.

Six different hydraulic system configurations let you order your machine with the setup that's best for you – from a two-spool valve with single-lever control all the way up to a four-spool valve with four-lever control (shown here). The three- and four-spool valve options also include auxiliary hydraulic lines to the loader's crosstube.

The quick-shift button gives you two choices: 1. Press once to shift down one gear; then press it again to shift back up. 2. Press once to shift down, then press repeatedly to keep shifting down, all the way to first gear!

This right-hand control panel includes controls for windshield wipers, heater, air conditioner, lights, attachment pins, clutch cutoff, and ride control. The ride control option acts as a shock absorber to the boom, keeping material in your bucket and smoothing out your ride in roading applications and rough terrain.

The window on the right side swings open and latches into place, like the cab door. The deluxe suspension seat includes adjustments for operator weight, seat cushion angle, and backrest angle. The armrests are also fully adjustable.

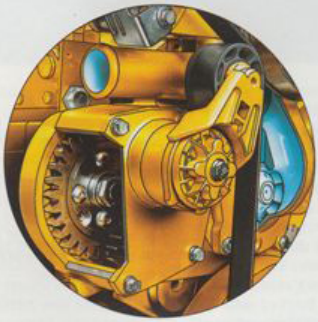
PowerTech® engines let you move earth and take care of the planet, too.

John Deere-built PowerTech® diesel engines comply with EPA and CARB emissions standards for off-road vehicles – and also conform to proposed E.U. (European Union) regulations as well.

The 624H is equipped with the PowerTech 6068H engine, while the 644H uses the PowerTech 6081H engine. Both are equipped with a standard auxiliary drive for engine-driven features such as the air compressor and hydraulic pump. They also include a poly-V front drive belt with automatic tensioner, as well as side-by-side engine and transmission coolers. The 7-fins-per-inch radiator includes a large, low-speed fan that helps cut overall noise levels.

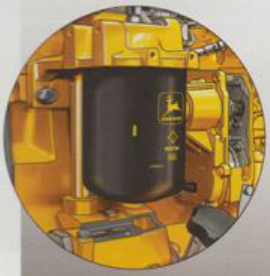
The standard torque curve includes a *power bulge* feature that helps adapt engine power to handle load variations. When the engine encounters an additional load, power is automatically boosted to compensate, reducing the need for downshifting. It gives the machine better low-speed driveability in mobile applications, and gets more earth moved with fewer cycles. That's the kind of power that translates into real productivity.

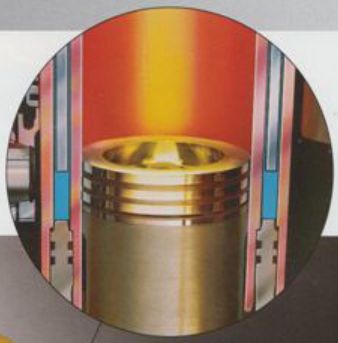
Directed top-liner cooling reduces head gasket and liner temperatures, makes cylinders last longer, and helps reduce emissions and oil consumption.



A gear-driven water pump runs independently of the fan drive, eliminating belts. The pump is side-mounted for easier removal and/or replacement.

Daily service can be performed on the left side by opening the engine door. Spin-on, vertically-mounted combination oil/fuel filters help minimize messy spills.





The one-piece, high-top-ring aluminum piston reduces smoke and other emissions. It also lowers heat transfer, giving the engine better fuel economy, durability, and power.

The cylinder head features two valves per cylinder with left-hand intake and right-hand exhaust manifolds. This "free-breathing" design improves intake and exhaust efficiency, enhancing fuel economy and lowering heat rejection.

Service doors on the left side of the machine let you get in to change fuel, air, and oil filters, and check fluid reservoirs.

No matter which door you open, you'll find easy servicing behind it.

There's no excuse for not performing daily servicing when it's this easy. Four side-shield doors – two on each side – swing open easily and latch into place. The left side shield door lets you get in to change fuel, air, and oil filters, and check fluid reservoirs. The right side shield door provides access to the engine. Transmission fluid is checked externally, without requiring you to unbolt or unscrew anything.

Pilot control valves, as well as major electrical components, are found behind this convenient swing-out door, located beneath the machine's right front window.

The articulation area puts plumbing and steering components within easy reach. Centralized grease banks help ensure that difficult lube points are serviced regularly.

The rear grill swings out, as shown on the facing page, to give you access to the radiator and fan. The radiator and oil cooler can each be removed without disturbing the other.

If servicing is important, it ought to be easy to do. That's why easy serviceability was designed into every H-Series Loader right from the beginning.

Service doors on the right side provide access to the engine compartment. Notice how the hydraulic fan drive opens up the compartment for access and air flow.

On the left side of the machine, just below the radiator fill, this convenient external sight glass provides an at-a-glance check of the hydraulic fluid level.

While standing on the ground, you can simply remove a couple of bolts, open a door and remove the cab air filter element for cleaning. What could be easier?

It only takes unscrewing one bolt to remove this panel at the right side of the machine for unrestricted access to the steering cylinders.

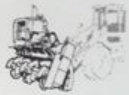
The H-Series quick-coupler makes it easy to get hooked on versatility.

A busy loader is a profitable loader. And the hydraulically-actuated *quick-coupler* option keeps your H-Series Loader busy by enabling it to perform all kinds of different tasks.

With the quick-coupler, you can hook into and release front-end attachments in just a few moments – usually without tools and without leaving the comfort of your cab. A convenient electronic rocker switch controls the release pins.

Choose from pallet forks, snow blowers, brush rakes, and much more. You'll find that versatility (and the additional income it generates) will be one easy concept to get attached to.

BUCKET



COMPOST TURNER

POST DRIVER

RAIL CAR COUPLER

REAR-MOUNTED RIPPER

WHEEL LOADER MOUNT

EXTENDIBLE JIB BOOM

AUTO FORK

LOADER-MOUNTED BLADE

SHOULDER SPREADER CONVEYOR

LOADER-MOUNTED SWEEPER

GRAPPLE

DEMOLITION/ROCK GRAPPLE

ROTARY ASPHALT CUTTER

REVERSIBLE PLOW

SNOW BLOWER
(2-STAGE HORIZONTAL AUGER; 1-STAGE ROTARY BLOWER, 1-STAGE AUGER; 2-STAGE RIBBON BLOWER)

SCOOP TRANS-PLANTER

QUICK-COUPLER

MULTIPURPOSE BUCKET

LOADER RAKE

CLAMP

ONE-WAY PLOW

CANE GRAPPLE

SIDE-DUMP BUCKET

ENGINE	624H	644H
Type	John Deere PowerTech® 6068H with altitude-compensating turbocharger and aftercooler; meets North American EPA and CARB non-road diesel engine emission regulations effective January 1, 1997; also is certifiable to proposed E.U. (European Union) regulations, which are not yet effective	John Deere PowerTech® 6081H with altitude-compensating turbocharger and aftercooler; meets North American EPA and CARB non-road diesel engine emission regulations effective January 1, 1997; also is certifiable to proposed E.U. (European Union) regulations, which are not yet effective
Rated power	160 SAE net hp (119 kW), 172 SAE gross hp (128 kW) @ 2,200 rpm	180 SAE net hp (134 kW), 205 SAE gross hp (153 kW) @ 2,200 rpm
Cylinders	6	6
Displacement	414 cu. in. (6.8 L)	496 cu. in. (8.1 L)
Maximum net torque	575 lb.-ft. (780 Nm) @ 1,400 rpm	745 lb.-ft. (1010 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
Fuel consumption, typical	2.9 to 5.0 gal./hr. (10.9 to 18.9 L/h)	2.9 to 5.0 gal./hr. (10.9 to 18.8 L/h)
Cooling fan	blower type, hydraulically driven	blower type, hydraulically driven
Electrical system	24 volt with 55-amp alternator	24 volt with 55-amp alternator
Batteries (two 12 volt)	625 CCA; reserve capacity: 160 min. – standard / 950 CCA; reserve capacity: 200 min. – optional	750 CCA; reserve capacity: 150 min. – standard / 950 CCA; reserve capacity: 200 min. – optional
Air cleaner	dual safety element dry type; restriction indicator for service	dual safety element dry type; restriction indicator for service

TRANSMISSION		
Type	single stage, single phase torque converter; countershaft-type power shift with computer control	single stage, single phase torque converter; countershaft-type power shift with computer control
Controls	smooth shifts under any power condition provided by computer-controlled electronic shift with individual electronic control over each clutch pack, one low-effort twist-grip shift lever, quick-shift button on hydraulic lever, automatic shift feature is selectable to shift between gears 1–4 or 2–4	smooth shifts under any power condition provided by computer-controlled electronic shift with individual electronic control over each clutch pack, one low-effort twist-grip shift lever, quick-shift button on hydraulic lever, automatic shift feature is selectable to shift between gears 1–4 or 2–4
Travel speeds*	*Forward* / *Reverse*	*Forward* / *Reverse*
Gear 1	4.8 mph (7.7 km/h) / 5.0 mph (8.1 km/h)	4.9 mph (7.9 km/h) / 5.1 mph (8.3 km/h)
Gear 2	7.5 mph (12.0 km/h) / 8.0 mph (12.7 km/h)	8.4 mph (13.6 km/h) / 8.8 mph (14.2 km/h)
Gear 3	14.0 mph (22.6 km/h) / 14.9 mph (23.9 km/h)	15.7 mph (25.4 km/h) / 16.4 mph (26.7 km/h)
Gear 4	24.5 mph (39.5 km/h)	24.0 mph (39.0 km/h)

*624H equipped with 20.5-25 tires, 644H equipped with 23.5-25 tires.

AXLES/BRAKES		
Final drives	heavy-duty planetary, mounted inboard	heavy-duty planetary, mounted inboard
Differentials	conventional front and rear – standard; hydraulic locking front, conventional rear – optional; dual locking front and rear – optional; limited slip front and rear – optional	conventional front and rear – standard; hydraulic locking front, conventional rear – optional; dual locking front and rear – optional; limited slip front and rear – optional
Rear axle oscillation, stop to stop	26 degrees	26 degrees
Maximum rise and fall, single wheel	18.2 in. (461 mm)	19.2 in. (488 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, wet disc bathed in cooling oil	automatically spring applied, hydraulically released, wet disc bathed in cooling oil

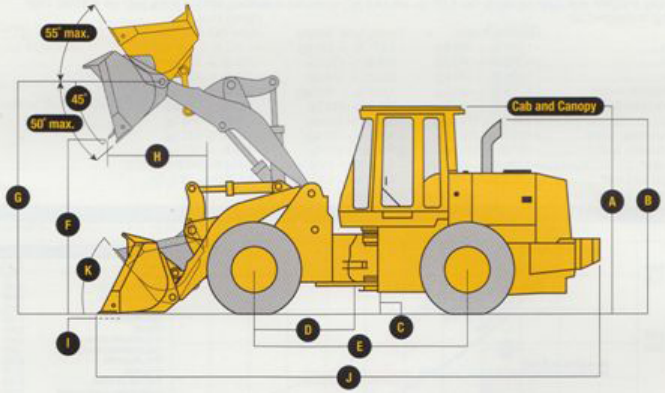
HYDRAULIC SYSTEM/STEERING		
Pump (loader and steering)	variable-displacement, axial piston pump; closed-center, pressure-compensating system	variable-displacement, axial piston pump; closed-center, pressure-compensating system
Maximum flow	55 gpm (200 L/m) @ 1,000 psi (6895 kPa) and 2,200 rpm	68 gpm (257 L/m) @ 1,000 psi (6895 kPa) and 2,200 rpm
Pressure	loader and steering relief 3,600 psi (24 850 kPa)	loader and steering relief 3,600 psi (24 850 kPa)
Loader controls	two-function valve; single or dual lever controls; control lever lockout feature; optional third- and fourth-function valve with auxiliary lever	two-function valve; single or dual lever controls; control lever lockout feature; optional third- and fourth-function valve with auxiliary lever
Hydraulic cycle times		
Raise	5.8 sec.	6.2 sec.
Dump	1.4 sec.	1.4 sec.
Lower	3.0 sec. (float down) / 3.5 sec. (power down)	3.0 sec. (float down) / 3.5 sec. (power down)
Total	10.2 sec.	10.6 sec.
Maximum lift capacity	*with 3.0 cu. yd. (2.3 m³) bucket with bolt-on edge*	*with 3.5 cu. yd. (2.7 m³) excavating bucket*
Lift at ground level	29,090 lb. (13 195 kg)	36,255 lb. (16 445 kg)
Lift at maximum height	17,290 lb. (7843 kg)	20,435 lb. (9269 kg)
Steering (conforms to SAE J1511)		
Type	power, fully hydraulic	power, fully hydraulic
Pressure	3,600 psi (24 850 kPa) relief	3,600 psi (24 850 kPa) relief
Articulation angle	80-degree arc (40 degrees each direction)	80-degree arc (40 degrees each direction)
Turning radius (measured to centerline of outside tire)	17 ft. 0 in. (5187 mm)	18 ft. 0 in. (5500 mm)

TIRES						
Choice of	*Tread Width*	*Width Over Tires*	*Change In Vertical Height*	*Tread Width*	*Width Over Tires*	*Change In Vertical Height*
17.5-25, 12 PR L2	80.7 in. (2050 mm)	99.6 in. (2530 mm)	– 2.4 in. (– 60 mm)			
17.5-25, 12 PR L3	80.7 in. (2050 mm)	99.6 in. (2530 mm)	– 2.4 in. (– 60 mm)			
17.5 R 25, GP-2B Goodyear Radial (L2 type)	80.7 in. (2050 mm)	99.4 in. (2525 mm)	– 2.1 in. (– 53 mm)			
17.5 R 25, XTLA Michelin Radial (L2 type)	80.7 in. (2050 mm)	99.4 in. (2525 mm)	– 3.0 in. (– 77 mm)			
17.5 R 25, XHAT Michelin Radial (L3 type)	80.7 in. (2050 mm)	99.4 in. (2525 mm)	– 2.7 in. (– 68 mm)			
20.5-25, 12 PR L2	80.7 in. (2050 mm)	103.3 in. (2625 mm)	0 in. (0 mm)	85.4 in. (2170 mm)	109.3 in. (2777 mm)	– 1.0 in. (– 25 mm)
20.5-25, 12 PR L3	80.7 in. (2050 mm)	103.3 in. (2625 mm)	0 in. (0 mm)	85.4 in. (2170 mm)	109.3 in. (2777 mm)	– 1.0 in. (– 25 mm)
20.5-25, 16 PR L3				85.4 in. (2170 mm)	109.3 in. (2777 mm)	– 1.0 in. (– 25 mm)
20.5 R 25, XTLA Michelin Radial (L2 type)	80.7 in. (2050 mm)	103.3 in. (2625 mm)	– 0.5 in. (– 14 mm)	85.4 in. (2170 mm)	106.4 in. (2702 mm)	– 2.7 in. (– 68 mm)
20.5 R 25, XHAT Michelin Radial (L3 type)	80.7 in. (2050 mm)	103.7 in. (2635 mm)	– 0.2 in. (– 5 mm)	85.4 in. (2170 mm)	106.2 in. (2697 mm)	– 2.3 in. (– 59 mm)
23.5-25, 12 PR L2				85.4 in. (2170 mm)	113.1 in. (2874 mm)	0 in. (0 mm)

TIRES *(continued)*	624H			644H		
Choice of	*Tread Width*	*Width Over Tires*	*Change In Vertical Height*	*Tread Width*	*Width Over Tires*	*Change In Vertical Height*
23.5-25, 20 PR L3				85.4 in. (2170 mm)	113.4 in. (2881 mm)	0.2 in. (5 mm)
23.5 R 25, GP-2B Goodyear Radial (L2 type)				85.4 in. (2170 mm)	113.2 in. (2875 mm)	0.5 in. (12 mm)
23.5 R 25, XHAT Michelin Radial (L3 type)				85.4 in. (2170 mm)	109.1 in. (2772 mm)	0.7 in. (18 mm)

CAPACITIES (U.S.)		
Fuel tank (with ground level fueling)	70 gal. (265 L)	90 gal. (341 L)
Cooling system	23 qt. (22 L)	31 qt. (29 L)
Engine lubrication, including full-flow spin-on filter	21 qt. (20 L)	26 qt. (25 L)
Power shift transmission, including vertical cartridge filter	29 qt. (27 L)	27 qt. (26 L)
Differential (each axle)		
Front	30 qt. (28 L)	29 qt. (27 L)
Rear	19 qt. (20 L)	29 qt. (27 L)
Loader hydraulic reservoir and filters	31 gal. (117 L)	31 gal. (117 L)
Parking brake	10 oz. (0.300 L)	20 oz. (0.600 L)

DIMENSIONS WITH PIN-ON TYPE BUCKET		
A Height to top of cab and canopy	10 ft. 10 in. (3300 mm)	11 ft. 2 in. (3400 mm)
B Height to top of exhaust	10 ft. 10 in. (3305 mm)	11 ft. 0 in. (3350 mm)
C Ground clearance	16.0 in. (406 mm)	18.1 in. (461 mm)
D Length from centerline to front axle	59.65 in. (1515 mm)	63.0 in. (1600 mm)
E Wheelbase	119.3 in. (3030 mm)	126.0 in. (3200 mm)
F Dump height	▲ (see below)	▲ (see page 16)
G Height to hinge pin, fully raised	13 ft. 0 in. (3961 mm)	13 ft. 7 in. (4144 mm)
H Dump reach	▲▲ (see below)	▲▲ (see page 16)
I Maximum digging depth	3.6 in. (92 mm)	2.7 in. (69 mm)
J Overall length	▲▲▲ (see below)	▲▲▲ (see page 16)
K Maximum rollback at ground level	40 degrees	40 degrees



624H PIN-ON TYPE BUCKET INFORMATION

Bucket Type/Size	*Stockpiling and General Purpose w//Bolt-on Edge*	*Stockpiling and General Purpose w/Teeth and Segments*	*Stockpiling and General Purpose w/JAGZ™*	*Excavating w/Bolt-on Edge*	*Excavating w/Teeth and Segments*
Capacity, heaped SAE	3.5 cu. yd. (2.7 m^3)	3.5 cu. yd. (2.7 m^3)	3.5 cu. yd. (2.7 m^3)	3.0 cu. yd. (2.3 m^3)	3.0 cu. yd. (2.3 m^3)
Capacity, struck SAE	3.0 cu. yd. (2.3 m^3)	3.0 cu. yd. (2.3 m^3)	3.0 cu. yd. (2.3 m^3)	2.5 cu. yd. (1.9 m^3)	2.5 cu. yd. (1.9 m^3)
Bucket width	105.9 in. (2690 mm)	105.9 in. (2690 mm)	105.9 in. (2690 mm)	105.9 in. (2690 mm)	105.9 in. (2690 mm)
Breakout force, SAE J732C	27,711 lb. (12 570 kg)	27,711 lb. (12 570 kg)	26,480 lb. (12 011 kg)	30,711 lb. (13 930 kg)	30,711 lb. (13 930 kg)
Tipping load, straight	23,647 lb. (10 726 kg)	23,483 lb. (10 652 kg)	23,265 lb. (10 553 kg)	24,083 lb. (10 924 kg)	23,922 lb. (10 851 kg)
Tipping load, 40-degree full turn, SAE	19,969 lb. (9058 kg)	19,811 lb. (8986 kg)	19,610 lb. (8895 kg)	20,362 lb. (9236 kg)	20,203 lb. (9164 kg)
Reach, 45-degree dump, 7-ft. (2.13 m) clearance	62.1 in. (1579 mm)	64.0 in. (1627 mm)	63.0 in. (1600 mm)	60.5 in. (1537 mm)	62.6 in. (1590 mm)
▲▲ Reach, 45-degree dump, full height	40.9 in. (1038 mm)	45.1 in. (1145 mm)	42.3 in. (1076 mm)	37.7 in. (957 mm)	41.9 in. (1064 mm)
▲ Dump clearance, 45 degree, full height	112.5 in. (2858 mm)	108.2 in. (2749 mm)	111.3 in. (2828 mm)	115.8 in. (2940 mm)	111.5 in. (2831 mm)
▲▲▲ Overall length, bucket on ground	25 ft. 0 in. (7610 mm)	25 ft. 6 in. (7774 mm)	25 ft. 1 in. (7658 mm)	24 ft. 7 in. (7486 mm)	25 ft. 1 in. (7651 mm)
Loader clearance circle, bucket in carry position	39 ft. 8 in. (12 091 mm)	40 ft. 0 in. (12 191 mm)	39 ft. 9 in. (12 119 mm)	39 ft. 5 in. (12 019 mm)	39 ft. 9 in. (12 116 mm)
Operating weight	29,894 lb. (13 560 kg)	30,022 lb. (13 618 kg)	30,128 lb. (13 666 kg)	29,738 lb. (13 489 kg)	29,868 lb. (13 548 kg)

Loader operating information is based on machine with all standard equipment; 20.5-25, 12 PR L2 tires; 1,045-lb. (474 kg) optional counterweight; ROPS cab; 175-lb. (79 kg) operator; and full fuel tank. This information is affected by tire size, ballast, and different attachments.

624H ADJUSTMENTS TO OPERATING WEIGHTS WITH PIN-ON BUCKETS

Adjustments to operating weights and tipping loads for 3.5 cu. yd. (2.7 m³) material-handling bucket with bolt-on cutting edge

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	– 547 lb. (– 248 kg)	– 377 lb. (– 171 kg)	– 324 lb. (– 147 kg)
17.5-25, 12 PR L3 tires	– 392 lb. (– 178 kg)	– 231 lb. (– 105 kg)	– 269 lb. (– 122 kg)
17.5 R 25, GP-2B L2 Goodyear Radial	– 291 lb. (– 132 kg)	– 201 lb. (– 91 kg)	– 172 lb. (– 78 kg)
17.5 R 25, XTLA L2 Michelin Radial	– 454 lb. (– 206 kg)	– 311 lb. (– 141 kg)	– 269 lb. (– 122 kg)
17.5 R 25, XHAT L3 Michelin Radial	– 280 lb. (– 127 kg)	– 192 lb. (– 87 kg)	– 165 lb. (– 75 kg)
20.5-25, 12 PR L3 tires	+ 384 lb. (+ 174 kg)	+ 265 lb. (+ 120 kg)	+ 227 lb. (+ 103 kg)
20.5 R 25, GP-2B L2 Goodyear Radial	+ 412 lb. (+ 187 kg)	+ 282 lb. (+ 128 kg)	+ 245 lb. (+ 111 kg)
20.5 R 25, XTLA L2 Michelin Radial	+ 152 lb. (+ 69 kg)	+ 104 lb. (+ 47 kg)	+ 90 lb. (+ 41 kg)
20.5 R 25, XHAT L3 Michelin Radial	+ 472 lb. (+ 214 kg)	+ 324 lb. (+ 147 kg)	+ 280 lb. (+ 127 kg)
$CaCl_2$ in 20.5-25 rear tires*	+ 1,821 lb. (+ 826 kg)	+ 2,502 lb. (+ 1135 kg)	+ 2,161 lb. (+ 980 kg)
Optional counterweight removed*	– 1,045 lb. (– 474 kg)	– 2,346 lb. (– 1064 kg)	– 1,922 lb. (– 872 kg)

*Optional counterweight not to be used when $CaCl_2$ or other ballast is used in rear tires.

644H PIN-ON TYPE BUCKET INFORMATION

Bucket Type/Size	*Stockpiling and General Purpose w//Bolt-on Edge*	*Stockpiling and General Purpose w/Teeth and Segments*	*Stockpiling and General Purpose w/JAGZ™*	*Excavating w/Bolt-on Edge*	*Excavating w/Teeth and Segments*
Capacity, heaped SAE	4.25 cu. yd. (3.3 m³)	4.25 cu. yd. (3.3 m³)	4.25 cu. yd. (3.3 m³)	3.5 cu. yd. (2.7 m³)	3.5 cu. yd. (2.7 m³)
Capacity, struck SAE	3.7 cu. yd. (2.8 m³)	3.7 cu. yd. (2.8 m³)	3.7 cu. yd. (2.8 m³)	3.0 cu. yd. (2.3 m³)	3.0 cu. yd. (2.3 m³)
Bucket width	114.2 in. (2900 mm)	114.2 in. (2900 mm)	114.2 in. (2900 mm)	114.2 in. (2900 mm)	114.2 in. (2900 mm)
Breakout force, SAE J732C	34,432 lb. (15 618 kg)	34,432 lb. (15 618 kg)	33,985 lb. (15 416 kg)	39,209 lb. (17 785 kg)	39,209 lb. (17 785 kg)
Tipping load, straight	30,840 lb. (13 989 kg)	30,677 lb. (13 915 kg)	30,783 lb. (13 963 kg)	31,572 lb. (14 321 kg)	31,409 lb. (14 247 kg)
Tipping load, 40-degree full turn, SAE	25,961 lb. (11 776 kg)	25,803 lb. (11 704 kg)	25,897 lb. (11 747 kg)	26,618 lb. (12 074 kg)	26,460 lb. (12 002 kg)
Reach, 45-degree dump, 7-ft. (2.13 m) clearance	65.3 in. (1658 mm)	67.2 in. (1708 mm)	65.8 in. (1671 mm)	62.9 in. (1599 mm)	65.1 in. (1655 mm)
▲▲ Reach, 45-degree dump, full height	41.6 in. (1058 mm)	45.7 in. (1160 mm)	42.2 in. (1073 mm)	37.3 in. (948 mm)	41.3 in. (1050 mm)
▲ Dump clearance, 45 degree, full height	116.1 in. (2950 mm)	112.1 in. (2848 mm)	116.0 in. (2945 mm)	120.5 in. (3060 mm)	116.5 in. (2958 mm)
▲▲▲ Overall length, bucket on ground	26 ft. 5 in. (8045 mm)	26 ft. 8 in. (8197 mm)	26 ft. 5 in. (8055 mm)	25 ft. 8 in. (7880 mm)	26 ft. 4 in. (8032 mm)
Loader clearance circle, bucket in carry position	42 ft. 3 in. (12 875 mm)	42 ft. 6 in. (12 971 mm)	42 ft. 3 in. (12 880 mm)	41 ft. 11 in. (12 775 mm)	42 ft. 3 in. (12 867 mm)
Operating weight	38,345 lb. (17 393 kg)	38,472 lb. (17 451 kg)	38,439 lb. (17 436 kg)	38,073 lb. (17 270 kg)	38,201 lb. (17 328 kg)

Loader operating information is based on machine with all standard equipment; 23.5-25, 12 PR L2 tires; 1,737-lb. (788 kg) optional counterweight; ROPS cab; 175-lb. (79 kg) operator; and full fuel tank. This information is affected by tire size, ballast, and different attachments.

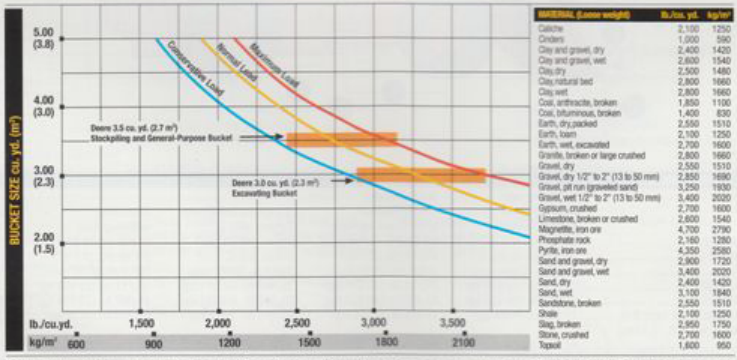
644H ADJUSTMENTS TO OPERATING WEIGHTS WITH PIN-ON BUCKETS

Adjustments to operating weights and tipping loads for 4.25 cu. yd. (3.3 m³) material-handling bucket with bolt-on cutting edge

Add (+) or deduct (–) lb. (kg) as indicated for loaders with	*Operating Weight*	*Tipping Load, Straight*	*Tipping Load, 40-Degree Full Turn, SAE*
20.5-25, 12 PR L2 tires	– 1,693 lb. (– 768 kg)	– 1,171 lb. (– 531 kg)	– 1,012 lb. (– 459 kg)
20.5-25, 12 PR L3 tires	– 1,307 lb. (– 593 kg)	– 904 lb. (– 410 kg)	– 783 lb. (– 355 kg)
20.5-25, 16 PR L3 tires	– 1,193 lb. (– 541 kg)	– 825 lb. (– 374 kg)	– 712 lb. (– 323 kg)
20.5 R 25, XTLA L2 Michelin Radial	– 1,539 lb. (– 698 kg)	– 1,065 lb. (– 483 kg)	– 922 lb. (– 418 kg)
20.5 R 25, XHAT L3 Michelin Radial	– 1,221 lb. (– 554 kg)	– 844 lb. (– 383 kg)	– 730 lb. (– 331 kg)
23.5-25, 20 PR L3 tires	+ 384 lb. (+ 174 kg)	+ 267 lb. (+ 121 kg)	+ 229 lb. (+ 104 kg)
23.5 R 25, GP-2B L2 Goodyear Radial	+ 525 lb. (+ 238 kg)	+ 364 lb. (+ 165 kg)	+ 313 lb. (+ 142 kg)
23.5 R 25, XHAT L3 Michelin Radial	+ 747 lb. (+ 339 kg)	+ 518 lb. (+ 235 kg)	+ 448 lb. (+ 203 kg)
$CaCl_2$ in 20.5-25 rear tires*	+ 2,396 lb. (+ 1087 kg)	+ 3,316 lb. (+ 1504 kg)	+ 2,864 lb. (+ 1299 kg)
Optional counterweight removed*	– 1,737 lb. (– 788 kg)	– 3,865 lb. (– 1753 kg)	– 3,172 lb. (– 1439 kg)

*Optional counterweight not to be used when $CaCl_2$ or other ballast is used in rear tires.

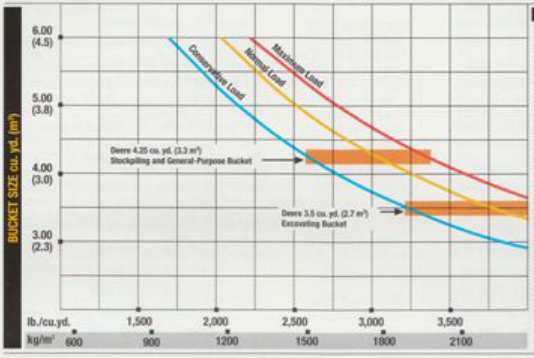
624H BUCKET SELECTION GUIDE*



MATERIAL (Loose weight)	lb./cu. yd.	kg/m³
Caliche	2,100	1250
Cinders	1,000	590
Clay and gravel, dry	2,400	1420
Clay and gravel, wet	2,600	1540
Clay, dry	2,500	1480
Clay, natural bed	2,800	1660
Clay, wet	2,800	1660
Coal, anthracite, broken	1,850	1100
Coal, bituminous, broken	1,400	830
Earth, dry, packed	2,550	1510
Earth, loam	2,100	1250
Earth, wet, excavated	2,700	1600
Granite, broken or large crushed	2,800	1660
Gravel, dry	2,550	1510
Gravel, dry 1/2" to 2" (13 to 50 mm)	2,850	1690
Gravel, pit run (graveled sand)	3,250	1930
Gravel, wet 1/2" to 2" (13 to 50 mm)	3,400	2020
Gypsum, crushed	2,700	1600
Limestone, broken or crushed	2,600	1540
Magnetite, iron ore	4,700	2790
Phosphate rock	2,160	1280
Pyrite, iron ore	4,350	2580
Sand and gravel, dry	2,900	1720
Sand and gravel, wet	3,400	2020
Sand, dry	2,400	1420
Sand, wet	3,100	1840
Sandstone, broken	2,550	1510
Shale	2,100	1250
Slag, broken	2,950	1750
Stone, crushed	2,700	1600
Topsoil	1,600	950

* This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

644H BUCKET SELECTION GUIDE*

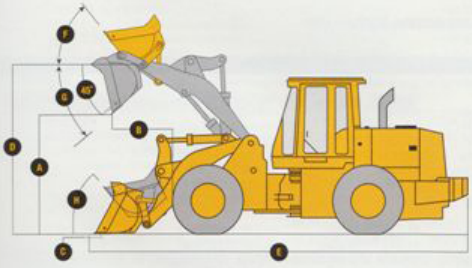


MATERIAL (Loose weight)	lb./cu. yd.	kg/m³
Caliche	2,100	1250
Cinders	1,000	590
Clay and gravel, dry	2,400	1420
Clay and gravel, wet	2,600	1540
Clay, dry	2,500	1480
Clay, natural bed	2,800	1660
Clay, wet	2,800	1660
Coal, anthracite, broken	1,850	1100
Coal, bituminous, broken	1,400	830
Earth, dry, packed	2,550	1510
Earth, loam	2,100	1250
Earth, wet, excavated	2,700	1600
Granite, broken or large crushed	2,800	1660
Gravel, dry	2,550	1510
Gravel, dry 1/2" to 2" (13 to 50 mm)	2,850	1690
Gravel, pit run (graveled sand)	3,250	1930
Gravel, wet 1/2" to 2" (13 to 50 mm)	3,400	2020
Gypsum, crushed	2,700	1600
Limestone, broken or crushed	2,600	1540
Magnetite, iron ore	4,700	2790
Phosphate rock	2,160	1280
Pyrite, iron ore	4,350	2580
Sand and gravel, dry	2,900	1720
Sand and gravel, wet	3,400	2020
Sand, dry	2,400	1420
Sand, wet	3,100	1840
Sandstone, broken	2,550	1510
Shale	2,100	1250
Slag, broken	2,950	1750
Stone, crushed	2,700	1600
Topsoil	1,600	950

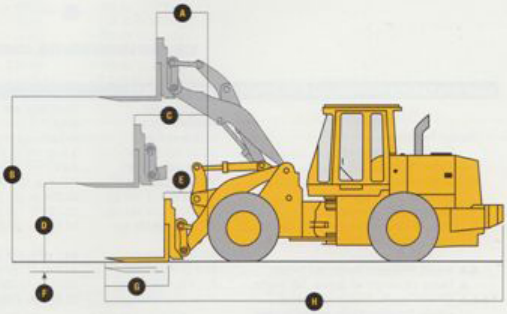
* This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

DIMENSIONS WITH TOOL CARRIER

	624H	644H
BUCKET*		
A Dump clearance	▲ (see page 18)	▲ (see page 19)
B Dump reach	▲▲ (see page 18)	▲▲ (see page 19)
C Maximum digging depth	3.6 in. (92 mm)	2.5 in. (63 mm)
D Height to hinge pin, fully raised	13 ft. 0 in. (3961 mm)	13 ft. 7 in. (4144 mm)
E Overall length	▲▲▲ (see page 18)	▲▲▲ (see page 19)
F Maximum rollback, boom fully raised	55 degrees	55 degrees
G Maximum bucket dump angle, fully raised	50 degrees	45 degrees
H Maximum rollback at ground level	40 degrees	39 degrees
*Allied attachments ordered through John Deere dealers.		
PALLET FORK*		
A Reach, fully raised	2 ft. 3 in. (675 mm)	2 ft. 1 in. (642 mm)
B Fork height, fully raised	12 ft. 3 in. (3732 mm)	12 ft. 11 in. (3929 mm)
C Maximum reach, fork level	5 ft. 0 in. (1512 mm)	5 ft. 1 in. (1537 mm)
D Fork height, maximum reach	5 ft. 10 in. (1775 mm)	6 ft. 1 in. (1848 mm)
E Reach, ground level	3 ft. 0 in. (901 mm)	3 ft. 0 in. (925 mm)
F Depth below ground	2.5 in. (64 mm)	2 in. (49 mm)
G Tine length	▲ (see page 19)	▲ (see page 19)
H Overall length	▲▲ (see page 19)	▲▲ (see page 19)



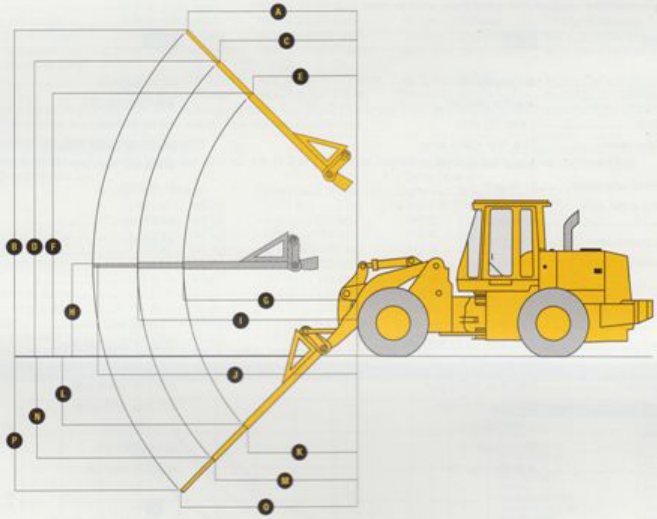
624H/644H LOADER WITH TOOL CARRIER AND BUCKET*



624H/644H LOADER WITH TOOL CARRIER AND PALLET FORK*

DIMENSIONS WITH TOOL CARRIER MATERIAL-HANDLING ARM*	624H	644H
A Reach, fully raised (extended)	10 ft. 11 in. (3327 mm)	7 ft. 3 in. (2200 mm)
B Height, fully raised (extended)	23 ft. 6 in. (7154 mm)	19 ft. 2 in. (5845 mm)
C Reach, fully raised (mid-position)	9 ft. 2 in. (2800 mm)	10 ft. 1 in. (3079 mm)
D Height, fully raised (mid-position)	21 ft. 8 in. (6603 mm)	21 ft. 7 in. (6576 mm)
E Reach, fully raised (retracted)	6 ft. 7 in. (2011 mm)	12 ft. 0 in. (3665 mm)
F Height, fully raised (retracted)	18 ft. 11 in. (5776 mm)	23 ft. 2 in. (7063 mm)
G Maximum reach (retracted)	11 ft. 10 in. (3599 mm)	12 ft. 2 in. (3709 mm)
H Height, maximum reach	6 ft. 5 in. (1946 mm)	6 ft. 9 in. (2061 mm)
I Maximum reach (mid-position)	15 ft. 7 in. (4742 mm)	15 ft. 11 in. (4852 mm)
J Maximum reach (extended)	18 ft. 1 in. (5504 mm)	18 ft. 5 in. (5614 mm)
K Reach, below ground (retracted)	7 ft. 4 in. (2237 mm)	8 ft. 2 in. (2488 mm)
L Depth, below ground (retracted)	– 5 ft. 0 in. (– 1531 mm)	– 4 ft. 7 in. (– 1405 mm)
M Reach, below ground (mid-position)	10 ft. 2 in. (3094 mm)	11 ft. 1 in. (3379 mm)
N Depth, below ground (mid-position)	– 7 ft. 6 in. (– 2288 mm)	– 7 ft. 0 in. (– 2121 mm)
O Reach, below ground (extended)	12 ft. 0 in. (3665 mm)	13 ft. 0 in. (3973 mm)
P Depth, below ground (extended)	– 9 ft. 2 in. (– 2793 mm)	– 8 ft. 6 in. (– 2598 mm)

*Allied attachments ordered through John Deere dealers.



624H/644H LOADER WITH TOOL CARRIER AND MATERIAL-HANDLING ARM*

624H TOOL CARRIER INFORMATION WITH BUCKET AND QUICK-COUPLER

Bucket Type/Size	*Stockpiling and General Purpose w//Bolt-on Edge*	*Stockpiling and General Purpose w/Teeth and Segments*	*Excavating w/Bolt-on Edge*	*Excavating w/Teeth and Segments*
Capacity, heaped SAE	3.5 cu. yd. (2.7 m^3)	3.5 cu. yd. (2.7 m^3)	3.0 cu. yd. (2.3 m^3)	3.0 cu. yd. (2.3 m^3)
Capacity, struck SAE	3.0 cu. yd. (2.3 m^3)	3.0 cu. yd. (2.3 m^3)	2.7 cu. yd. (2.1 m^3)	2.7 cu. yd. (2.1 m^3)
Bucket width	105.9 in. (2690 mm)	105.9 in. (2690 mm)	105.9 in. (2690 mm)	105.9 in. (2690 mm)
Breakout force, SAE J732C	26,894 lb. (12 199 kg)	26,894 lb. (12 199 kg)	27,576 lb. (12 508 kg)	27,576 lb. (12 508 kg)
Tipping load, straight	22,890 lb. (10 383 kg)	22,729 lb. (10 310 kg)	22,848 lb. (10 364 kg)	22,692 lb. (10 293 kg)
Tipping load, 40-degree full turn, SAE	19,281 lb. (8746 kg)	19,125 lb. (8675 kg)	19,270 lb. (8741 kg)	19,116 lb. (8671 kg)
Reach, 45-degree dump, 7-ft. (2.13 m) clearance	62.7 in. (1592 mm)	64.5 in. (1638 mm)	62.3 in. (1582 mm)	64.1 in. (1629 mm)
▲▲ Reach, 45-degree dump, full height	41.8 in. (1062 mm)	46.0 in. (1169 mm)	41.1 in. (1044 mm)	45.3 in. (1150 mm)
▲ Dump clearance, 45 degree, full height	111.6 in. (2834 mm)	107.4 in. (2729 mm)	112.4 in. (2854 mm)	108.1 in. (2745 mm)
▲▲▲ Overall length, bucket on ground	25 ft. 1 in. (7641 mm)	25 ft. 7 in. (7805 mm)	25 ft. 0 in. (7616 mm)	25 ft. 6 in. (7781 mm)
Loader clearance circle, bucket in carry position	39 ft. 9 in. (12 110 mm)	40 ft. 1 in. (12 210 mm)	39 ft. 8 in. (12 095 mm)	40 ft. 0 in. (12 195 mm)
Operating weight	30,492 lb. (13 831 kg)	30,620 lb. (13 889 kg)	30,249 lb. (13 721 kg)	30,377 lb. (13 779 kg)

Loader operating information is based on machine with all standard equipment; 20.5-25, 12 PR L2 tires; 1,045-lb. (474 kg) optional counterweight; ROPS cab; 175-lb. (79 kg) operator; and full fuel tank. This information is affected by tire size, ballast, and different attachments.

624H ADJUSTMENTS TO OPERATING WEIGHTS FOR TOOL CARRIER WITH BUCKET AND QUICK-COUPLER

Adjustments to operating weights and tipping loads for 3.0 cu. yd. (2.3 m³) material-handling bucket with bolt-on cutting edge

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	– 547 lb. (– 248 kg)	– 370 lb. (– 168 kg)	– 320 lb. (– 145 kg)
17.5-25, 12 PR L3 tires	– 392 lb. (– 178 kg)	– 229 lb. (– 104 kg)	– 265 lb. (– 120 kg)
17.5 R 25, GP-2B L2 Goodyear Radial	– 291 lb. (– 132 kg)	– 196 lb. (– 89 kg)	– 170 lb. (– 77 kg)
17.5 R 25, XTLA L2 Michelin Radial	– 454 lb. (– 206 kg)	– 306 lb. (– 139 kg)	– 265 lb. (– 120 kg)
17.5 R 25, XHAT L3 Michelin Radial	– 280 lb. (– 127 kg)	– 190 lb. (– 86 kg)	– 163 lb. (– 74 kg)
20.5-25 12 PR L3 tires	+ 384 lb. (+ 174 kg)	+ 260 lb. (+ 118 kg)	+ 225 lb. (+ 102 kg)
20.5 R 25, GP-2B L2 Goodyear Radial	+ 412 lb. (+ 187 kg)	+ 278 lb. (+ 126 kg)	+ 240 lb. (+ 109 kg)
20.5 R 25, XTLA L2 Michelin Radial	+ 152 lb. (+ 69 kg)	+ 104 lb. (+ 47 kg)	+ 88 lb. (+ 40 kg)
20.5 R 25, XHAT L3 Michelin Radial	+ 472 lb. (+ 214 kg)	+ 320 lb. (+ 145 kg)	+ 276 lb. (+ 125 kg)
$CaCl_2$ in 20.5-25 rear tires*	+ 1,821 lb. (+ 826 kg)	+ 2,460 lb. (+ 1116 kg)	+ 2,125 lb. (+ 964 kg)
Optional counterweight removed*	– 1,045 lb. (– 474 kg)	– 2,308 lb. (– 1047 kg)	– 1,892 lb. (– 858 kg)

*Optional counterweight not to be used when $CaCl_2$ or other ballast is used in rear tires.

624H TOOL CARRIER INFORMATION WITH PALLET FORK AND QUICK-COUPLER

▲ Tine Length	*48 in. (1220 mm)*	*54 in. (1370 mm)*	*60 in. (1525 mm)*
▲▲ Overall length	26 ft. 1 in. (7944 mm)	26 ft. 7 in. (8097 mm)	27 ft. 1 in. (8249 mm)
Tipping load, straight (fork level, load centered 24 in. [610 mm] forward on tine)	14,740 lb. (6686 kg)	14,068 lb. (6381 kg)	13,448 lb. (6100 kg)
Tipping load, 40-degree full turn (fork level, load centered 24 in. [610 mm] forward on tine)	12,498 lb. (5669 kg)	11,922 lb. (5408 kg)	11,393 lb. (5168 kg)
Operating weight	29,319 lb. (13 299 kg)	29,363 lb. (13 319 kg)	29,407 lb. (13 339 kg)

624H TOOL CARRIER INFORMATION WITH MATERIAL-HANDLING ARM AND QUICK-COUPLER

Boom Position	*Retracted*	*Mid-position*	*Extended*
Operating load	4,777 lb. (2167 kg)	3,732 lb. (1693 kg)	3,245 lb. (1472 kg)
Tipping load, straight	11,292 lb. (5122 kg)	8,836 lb. (4008 kg)	7,694 lb. (3490 kg)
Tipping load, 40-degree full turn	9,553 lb. (4333 kg)	7,463 lb. (3385 kg)	6,490 lb. (2944 kg)
Operating weight	29,035 lb. (13 170 kg)	29,035 lb. (13 170 kg)	29,035 lb. (13 170 kg)

644H TOOL CARRIER INFORMATION WITH BUCKET AND QUICK-COUPLER

Bucket Type/Size	*Stockpiling and General Purpose w//Bolt-on Edge*	*Stockpiling and General Purpose w/Teeth and Segments*	*Stockpiling and General Purpose w/IAGZ™*	*Excavating w/Bolt-on Edge*	*Excavating w/Teeth and Segments*
Capacity, heaped SAE	4.25 cu. yd. (3.2 m³)	4.25 cu. yd. (3.2 m³)	4.25 cu. yd. (3.2 m³)	3.5 cu. yd. (2.7 m³)	3.5 cu. yd. (2.7 m³)
Capacity, struck SAE	3.8 cu. yd. (2.9 m³)	3.8 cu. yd. (2.9 m³)	3.8 cu. yd. (2.9 m³)	3.1 cu. yd. (2.4 m³)	3.1 cu. yd. (2.4 m³)
Bucket width	114.2 in. (2900 mm)	114.2 in. (2900 mm)	114.2 in. (2900 mm)	114.2 in. (2900 mm)	114.2 in. (2900 mm)
Breakout force, SAE J732C	28,997 lb. (13 153 kg)	28,997 lb. (13 153 kg)	33,985 lb. (15 416 kg)	32,809 lb. (14 882 kg)	32,809 lb. (14 882 kg)
Tipping load, straight	28,768 lb. (13 049 kg)	27,476 lb. (12 463 kg)	30,783 lb. (13 963 kg)	29,462 lb. (13 364 kg)	29,151 lb. (13 223 kg)
Tipping load, 40-degree full turn, SAE	24,090 lb. (10 927 kg)	22,824 lb. (10 353 kg)	25,897 lb. (11 747 kg)	24,729 lb. (11 217 kg)	24,425 lb. (11 079 kg)
Reach, 45-degree dump, 7-ft. (2.13 m) clearance	62.5 in. (1588 mm)	64.1 in. (1628 mm)	65.8 in. (1671 mm)	66.6 in. (1691 mm)	68.5 in. (1740 mm)
▲▲ Reach, 45-degree dump, full height	43.9 in. (1114 mm)	47.5 in. (1206 mm)	42.2 in. (1073 mm)	43.6 in. (1108 mm)	47.7 in. (1211 mm)
▲ Dump clearance, 45 degree, full height	107.1 in. (2720 mm)	102.8 in. (2611 mm)	116.0 in. (2945 mm)	111.7 in. (2837 mm)	107.4 in. (2727 mm)
▲▲▲ Overall length, bucket on ground	27 ft. 1 in. (8266 mm)	27 ft. 7 in. (8418 mm)	26 ft. 5 in. (8055 mm)	25 ft. 8 in. (8101 mm)	26 ft. 4 in. (8253 mm)
Loader clearance circle, bucket in carry position	42 ft. 9 in. (13 012 mm)	43 ft. 0 in. (13 112 mm)	42 ft. 3 in. (12 880 mm)	41 ft. 11 in. (12 908 mm)	42 ft. 3 in. (13 005 mm)
Operating weight	39,692 lb. (18 004 kg)	39,817 lb. (18 061 kg)	38,439 lb. (17 436 kg)	39,260 lb. (17 808 kg)	39,557 lb. (17 943 kg)

Loader operating information is based on machine with all standard equipment; 23.5-25, 12 PR L2 tires; 1,737-lb. (788 kg) optional counterweight; ROPS cab; 175-lb. (79 kg) operator; and full fuel tank. This information is affected by tire size, ballast, and different attachments.

644H ADJUSTMENTS TO OPERATING WEIGHTS FOR TOOL CARRIER WITH BUCKET AND QUICK-COUPLER

Adjustments to operating weights and tipping loads for 4.25 cu. yd. (3.3 m³) material-handling bucket with bolt-on cutting edge

Add (+) or deduct (–) lb. (kg) as indicated for loaders with	*Operating Weight*	*Tipping Load, Straight*	*Tipping Load, 40-Degree Full Turn, SAE*
20.5-25, 12 PR L2 tires	– 1,693 lb. (– 768 kg)	– 1,127 lb. (– 511 kg)	– 974 lb. (– 442 kg)
20.5-25, 12 PR L3 tires	– 1,307 lb. (– 593 kg)	– 871 lb. (– 395 kg)	– 754 lb. (– 342 kg)
20.5-25, 16 PR L3 tires	– 1,193 lb. (– 541 kg)	– 794 lb. (– 360 kg)	– 686 lb. (– 311 kg)
20.5 R 25, XTLA L2 Michelin Radial	– 1,539 lb. (– 698 kg)	– 1,027 lb. (– 466 kg)	– 886 lb. (– 402 kg)
20.5 R 25, XHAT L3 Michelin Radial	– 1,221 lb. (– 554 kg)	– 813 lb. (– 369 kg)	– 703 lb. (– 319 kg)
23.5-25, 12 PR L3 tires	+ 384 lb. (+ 174 kg)	+ 256 lb. (+ 116 kg)	+ 220 lb. (+ 100 kg)
23.5 R 25, GP-2B L2 Goodyear Radial	+ 525 lb. (+ 238 kg)	+ 348 lb. (+ 158 kg)	+ 302 lb. (+ 137 kg)
23.5 R 25, XHAT L3 Michelin Radial	+ 747 lb. (+ 339 kg)	+ 498 lb. (+ 226 kg)	+ 430 lb. (+ 195 kg)
$CaCl_2$ in 20.5-25 rear tires*	+ 2,396 lb. (+ 1087 kg)	+ 3,194 lb. (+ 1449 kg)	+ 2,760 lb. (+ 1252 kg)
Optional counterweight removed*	– 1,737 lb. (– 788 kg)	– 3,724 lb. (– 1689 kg)	– 3,056 lb. (– 1386 kg)

*Optional counterweight not to be used when $CaCl_2$ or other ballast is used in rear tires.

644H TOOL CARRIER INFORMATION WITH PALLET FORK AND QUICK-COUPLER

▲ Tine Length	*60 in. (1525 mm)*	*72 in. (1829 mm)*
▲▲ Overall length	28 ft. 4 in. (8641 mm)	29 ft. 4 in. (8946 mm)
Tipping load, straight (fork level, load centered 24 in. [610 mm] forward on tine)	17,258 lb. (7828 kg)	15,851 lb. (7190 kg)
Tipping load, 40-degree full turn (fork level, load centered 24 in. [610 mm] forward on tine)	14,535 lb. (6593 kg)	13,327 lb. (6045 kg)
Operating weight	38,323 lb. (17 383 kg)	38,519 lb. (17 472 kg)

644H TOOL CARRIER INFORMATION WITH MATERIAL-HANDLING ARM AND QUICK-COUPLER

Boom Position	*Retracted*	*Mid-position*	*Extended*
Operating load	6,300 lb. (2858 kg)	4,970 lb. (2255 kg)	4,345 lb. (1971 kg)
Tipping load, straight	14,923 lb. (6769 kg)	11,795 lb. (5350 kg)	10,320 lb. (4681 kg)
Tipping load, 40-degree full turn	12,600 lb. (5715 kg)	9,940 lb. (4509 kg)	8,690 lb. (3941 kg)
Operating weight	37,155 lb. (16 854 kg)	37,155 lb. (16 854 kg)	37,155 lb. (16 854 kg)

ADDITIONAL EQUIPMENT

	624H	644H
ENGINE		
Antifreeze, –34°F (–37°C)	●	●
Coolant recovery tank	●	●
Fan safety guard	●	●
Muffler, under hood with large exhaust stack	●	●
Chrome exhaust stack	■	■
Environmentally friendly engine oil drain	●	●
Engine oil cooler	●	●
Quick-release fuel filter and water separator	●	●
Ether start aid (for cold starts)	■	■
Engine air heater (for cold starts)	■	■
Engine coolant heater, 1,000 watts, 110 volts	■	■
Heavy-duty trash-resistant cooling package	■	■
Desert and high-altitude cooling package	■	■
Special application trash screens, axle seal guards, etc.*	■	■
POWER TRAIN		
TC/PS transmission, computer-controlled electronic soft shift, automatic shift and quick-shift features included	●	●
Conventional-type differentials, front and rear	●	●
Front axle with hydraulic locking differential	■	■
Front and rear axles with hydraulic locking differentials	■	■
Front and rear axles with limited slip differentials	■	■
Front axle disconnect	■	■
HYDRAULIC SYSTEM		
Automatic bucket return-to-dig control	●	●
Automatic boom height kickout control	●	●
Automatic boom return-to-carry control	■	■
Reservoir sight gauge	●	●
Spin-on hydraulic filters, vertical mounting	●	●
Hydraulic lever lockout	●	●
Two-function hydraulic valve with joystick control	●	●
Two-function hydraulic valve with two levers and adjustable wristrest	■	■
Three-function hydraulic valve with joystick control and auxiliary lever for third function	■	■
Three-function hydraulic valve with two levers and adjustable wristrest and auxiliary lever for third function	■	■
Four-function hydraulic valve with dual joystick controls	■	■
Hydraulic conversion kits, two- to three-function valves and three- to four-function valves	■	■
Hydraulic system oil cooler (for continuous running attachments and extreme temperatures)	●	●
Ride control, automatic type	■	■
Hydraulic control system for quick-coupler locking pins	■	■
ELECTRICAL		
24-volt electrical system	●	●
Standard batteries (2), 12 volt with 625 CCA, 160-min. rated reserve	●	
Standard batteries (2), 12 volt with 750 CCA, 150-min. rated reserve		●
High-capacity batteries (2), 12 volt with 950 CCA, 200-min. rated reserve	■	■
Master electrical disconnect switch	■	■
Alternator, 55 amps and 24 volts	●	●
Alternator, high capacity, 80 amps and 24 volts	■	■
Alternator trash covers	■	■

	624H	644H
Lights	●	●
Driving with guards / Turn signals and flashers / Stop and taillights / Conform to SAE 99		
Work lights, front (2) and rear (2)	■	■
Horn, with push button in center of steering wheel	●	●
Conforms to SAE J994, J1446		
Reverse warning alarm	●	●
Conforms to SAE J994, J1446		
Deluxe monitor and alarm system, multi-function computerized electronic	●	●
Audible and visual warnings include		
Message center display: 12-character message board	●	●
Analog instruments: Engine coolant temperature / Transmission oil temperature / Fuel level / Speedometer / Engine oil pressure / Hydraulic oil temperature	●	●
Digital instruments: Engine rpm / Selectable battery voltage or odometer / Transmission gear indicator / Hourmeter	●	●
Operator warning lights: Coolant level / Engine oil pressure / Engine air filter / Battery voltage / Transmission filter restriction / Brake pressure / Hydraulic oil temperature / Hydraulic oil filter / Fasten seat belt / Park brake actuated	●	●
Indicator lights: Turn signals / Warning flashers / Work lights	●	●
Built-in diagnostics: Fault code retrieval / Message center	●	●
Push-button selection: Three clutch cut-off adjustments / Two automatic transmission sequences / Two quick-shift button sequences	●	●
Radio-ready cab, fused 24-volt radio electrical lead, and fused lead for optional Deere 5-amp and 10-amp voltage converters	●	●
24-volt to 12-volt radio converter, 5 amp with receptacle	■	■
24-volt to 12-volt radio converter, 10 amp with receptacle	■	■
24-volt AM/FM stereo radio with clock	■	■
Cab wired for rotating beacon	■	■
OPERATOR'S STATION		
Canopy	●	●
ROPS/FOPS / Multiplane isolation mounted for noise/vibration reduction / Conforms to SAE J1040 APR88		
Canopy rear window glass, for noise reduction	■	●
Cab	■	■
ROPS/FOPS / Heater/Defroster / Multiplane isolation mounted for noise/vibration reduction / Front and rear windshield washers and intermittent wipers / Tinted safety glass / Conforms to SAE J1040 APR88		
Sun visor for cab	■	■
Air conditioning (factory or dealer installed)	■	■
Seat belt, 3 in. (76 mm), with retractor	●	●
Seat, deluxe cloth covered with deep foam, high back, mechanical suspension, adjustable for weight-height, fore-aft position, backrest tilt, and armrest angle	●	●
Seat, air suspension, deluxe cloth covered	■	■
Seat backrest extension	■	■

	624H	644H
Cup holder, personal cooler holder	●	●
Storage compartment for operator's manual and other items	●	●
Rubber floormat	●	●
Tilt steering column	●	●
Steering wheel, textured with spinner knob	●	●
Rearview mirrors, outside (2) and inside (2) Conform to SAE J985	●	●
Handholds and steps, ergonomically located and slip resistant Conform to SAE J185	●	●
LOADER LINKAGE		
Loader boom service locking bar Conforms to SAE J38	●	●
Z-bar loader linkage provides "high bucket breakout"	●	●
High-lift boom*	■	■
BUCKETS AND ATTACHMENTS		
Full line of Deere pin-on buckets with selection of bolt-on cutting edges, JAGZ™ cutting edges, and teeth-segmented bolt-on cutting edges*	■	■
Quick coupler which accepts JRB attachments*	■	■
Quick coupler which accepts Caterpillar® tool carrier attachments*	■	■
Hydraulic control system for quick-coupler locking pins, includes all controls in the cab, lines, and valves	■	■
Full line of construction utility forks, pallet forks, extendible boom with hook, and other attachments for couplers*	■	■
Loadrite™ weighing system*	■	■
TIRES		
17.5-25, 12 PR L2	●	
17.5-25, 12 PR L3	■	
17.5 R 25, GP-2B Goodyear Radial (L2 type)	■	
17.5 R 25, XTLA Michelin Radial (L2 type)	■	
17.5 R 25, XHAT Michelin Radial (L3 type)	■	
20.5-25, 12 PR L2	■	●
20.5-25, 12 PR L3	■	■
20.5-25, 16 PR L3	■	■
20.5 R 25, XTLA Michelin Radial (L2 type)	■	■
20.5 R 25, XHAT Michelin Radial (L3 type)	■	■
23.5-25, 12 PR L2		■
23.5-25, 20 PR L3		■
23.5 R 25, GP-2B Goodyear Radial (L2 type)		■
23.5 R 25, XHAT Michelin Radial (L3 type)		■
28L-26, 14 PR LS-2, Steel-Ply Logger	■	■
Single-piece rims	●	
Multi-piece rims	■	■
Less wheels and tires	■	■
OTHER		
Fenders, front and rear	■	■
Articulation locking bar Conforms to SAE J276	●	●
Vandal protection, includes lockable engine enclosure, rear grille, and fuel fill	●	●
Counterweight, built-in	●	●
Counterweight, extra duty, 1,045 lb. (474 kg)	■	
Counterweight, extra duty, 1,740 lb. (788 kg)		■
Drawbar, with locking pin	●	●
Transmission side frame guards	■	■
Bottom guards, front frame and transmission	■	■
Lift and tie-down hooks	■	■
Fire extinguisher	■	■
License plate bracket	■	■
Secondary steering	■	■
Material weighing system*	■	■

KEY: ● Standard equipment ■ Optional or special equipment

*See your John Deere dealer for further information.

JOHN DEERE

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 10,000 feet (3050 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 units with all standard equipment; one optional rear counterweight each; ROPS cabs; full fuel tanks; and 175-lb. (79 kg) operators; 624H unit with 20.5-25, 12 PR L2 tires; and 644H unit with 23.5-25, 12 PR L2 tires.

DKA624H Litho in U.S.A. (99-08)