

L O G L O A D E R

744H





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



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 emissions-certified 12.5-L PowerTech™ engine's power bulge feature gives it a degree of torque rise that you have to feel to believe.



The right-hand control panel includes controls for windshield wiper, heater, air conditioner, lights, attachment pins, clutch cutoff, and ride control. The ride

control option acts as a shock absorber to the boom, helping you hang onto your logs 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.



ENGINE		740R
Type	John Deere PowerTech® 6125A dual horsepower, turbocharged and aftercooled; meets North American EPA and CARB non-road diesel engine emission regulations effective January 1, 1996; also is certifiable to proposed E.U. (European Union) regulations, which are not yet effective	
Rated power		
Gear 1	240 SAE net hp (179 kW), 263 SAE gross hp (196 kW) @ 2,000 rpm	
Gears 2-4	260 SAE net hp (194 kW), 283 SAE gross hp (211 kW) @ 2,000 rpm	
Cylinders	6	
Displacement	766 cu. in. (12.5 L)	
Maximum net torque		
Gear 1 (45% torque rise)	943 lb.-ft. (1280 Nm) @ 1,500 rpm	
Gears 2-4 (35% torque rise)	943 lb.-ft. (1280 Nm) @ 1,500 rpm	
Lubrication	pressure system with full-flow spin-on filter and cooler	
Fuel consumption, typical	4.0 to 10.0 gal./hr. (15 to 38 L/h)	
Cooling fan	blower type	
Electrical system	24 volt with 55-amp alternator	
Batteries (two 12 volt)	950 CCA; reserve capacity: 200 min.	
Air cleaner	dual safety element dry type; restriction indicator for service	

TRANSMISSION		
Type	single stage, single phase torque converter with freewheeling stator; countershaft, computer-controlled power shift	
Controls	smooth shifts under any power condition provided by computer-controlled electronic shift with individual electronic control over each clutch pack, 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*		
	<i>Forward</i>	<i>Reverse</i>
Gear 1	4.6 mph (7.4 km/h)	4.6 mph (7.4 km/h)
Gear 2	8.6 mph (13.9 km/h)	8.6 mph (13.9 km/h)
Gear 3	13.1 mph (21.2 km/h)	19.3 mph (31.0 km/h)
Gear 4	24.5 mph (39.5 km/h)	

*Equipped with 26.5-25 tires.

AXLES/BRAKES	
Final drives	heavy-duty planetary, mounted inboard
Differentials	conventional front and rear - standard; hydraulic locking front - optional; dual locking front and rear - optional
Rear axle oscillation, stop to stop	26 degrees
Maximum rise and fall, single wheel	19.5 in. (495 mm)
Brakes (conform to SAE J1473, ISO3450)	
Service brakes	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

HYDRAULIC SYSTEM/STEERING	
Pump (loader and steering)	two variable-displacement, load-sensing piston pumps; closed-center system
Maximum flow	104 gpm (393 L/min.) @ 1,000 psi (6900 kPa) and 2,250 rpm
Pressure	loader and steering relief 3,200 psi (22 000 kPa)
Loader controls	two-function valve; single or dual lever controls; control lever lockout feature; optional third-function valve with auxiliary lever
Hydraulic cycle times	
Rate	6.6 sec.
Dump	1.5 sec.
Lower	3.0 sec. (float down) / 3.0 sec. (power down)
Total	11.1 sec.
Maximum lift capacity	with 4.5 cu. yd. (3.4 m ³) excavating bucket
Lift at ground level	47,450 lb. (21 520 kg)
Lift at maximum height	25,665 lb. (11 640 kg)
Steering (conforms to SAE J1511)	
Type	power, fully hydraulic
Relief valve setting	3,200 psi (22 000 kPa)
Articulation angle	90-degree arc (40 degrees each direction)
Turning radius (measured to centerline of outside tire)	20 ft. 2 in. (6.14 m)

TIRES			
Choice of	Tread Width	Width Over Tires	Change In Vertical Height
23.5-25, XHAT L3 Michelin Radial	86.6 in. (2200 mm)	113.2 in. (2875 mm)	- 3.1 in. (- 78 mm)
26.5-25, 16 PR L2	86.6 in. (2200 mm)	115.8 in. (2940 mm)	- 1.1 in. (- 28 mm)
26.5-25, 20 PR L3	86.6 in. (2200 mm)	116.0 in. (2947 mm)	0
26.5-25, 20 PR L5*	86.6 in. (2200 mm)	115.8 in. (2940 mm)	+ 1.4 in. (+ 35 mm)
26.5-25, GP-2B Goodyear Radial (L2 type)	86.6 in. (2200 mm)	115.8 in. (2935 mm)	0
26.5-25, XHAT Michelin Radial (L3 type)	86.6 in. (2200 mm)	115.6 in. (2937 mm)	- 0.6 in. (- 15 mm)
26.5-25, X-MINE Michelin Radial*	86.6 in. (2200 mm)	116.2 in. (2952 mm)	+ 1.5 in. (+ 39 mm)

*Requires ± 8-degree rear axle stops.

CAPACITIES	
Fuel tank with ground level fueling	114 gal. (432 L)
Cooling system	45 qt. (43 L)
Engine lubrication, including full-flow spin-on filter	40 qt. (38 L)

CAPACITIES (continued)

740L

Power shift transmission, including vertical cartridge filter.....	30 qt. (28 L)
Differential (each axle).....	
Front and rear.....	49 qt. (46 L)
Loader hydraulic reservoir.....	38 gal. (144 L)
Park brake.....	0.53 qt. (0.5 L)

OPERATING WEIGHT

With all standard equipment, 26.5-25, 20 PR L3 tires, 1,050-lb. (477 kg) counterweight, RCPS cab, 175-lb. (79 kg) operator, and full fuel tank.....	49,790 lb. (22 585 kg)
Fork weight*	4,497 lb. (2040 kg)

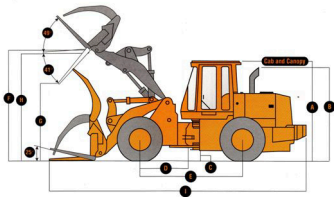
*Allied equipment log fork ordered through John Deere dealer.

OPERATING INFORMATION

Lift capacity maximum height	
Fork level.....	24,310 lb. (11 027 kg)
Fork rolled back.....	26,927 lb. (12 214 kg)
Lift capacity ground level	
Fork level.....	37,866 lb. (17 176 kg)
Fork rolled back.....	41,526 lb. (18 836 kg)
Tipping load, 40-degree full turn, SAE - maximum reach	
Fork level.....	22,247 lb. (10 091 kg)
Fork rolled back.....	28,424 lb. (12 893 kg)
Tipping load, straight - maximum reach	
Fork rolled back.....	34,077 lb. (15 457 kg)
Maximum rollback	
Ground level.....	25 degrees
Carry height.....	29.9 degrees
Length of tines.....	66 in. (1.68 m)
Tine spacing center to center.....	81 in. (2064 mm)
Minimum diameter clamp closing.....	12 in. (305 mm)

DIMENSIONS WITH LOG FORK

1 Height to top of cab and canopy.....	11 ft. 7 in. (3520 mm)
2 Height to top of exhaust.....	10 ft. 2 in. (3100 mm)
3 Ground clearance.....	18.3 in. (465 mm)
4 Length from centerline to front axle.....	5 ft. 7 in. (1700 mm)
5 Wheelbase.....	11 ft. 2 in. (3400 mm)
6 Height to hinge pin, fully raised.....	14 ft. 1 in. (4281 mm)
7 Dump height.....	9 ft. 8 in. (295 mm)
8 Ground to tine clearance, fully raised.....	13 ft. (3.96 m)
9 Overall length.....	29 ft. 1 in. (8.86 m)

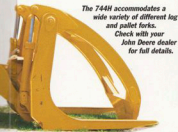




John Deere inboard-mounted hydraulic wet-disk brakes self-adjust for wear. Planetary final drives are also mounted inboard. Gear size isn't limited by wheel hub diameter – so the components used can be larger and more durable.



The 744H cab windows are larger and cut lower. You get a clear view all the way to the ground on both sides. The cab is wider, longer, and quieter than ever.



The 744H accommodates a wide variety of different log and pallet forks. Check with your John Deere dealer for full details.



Easy servicing is designed into every 744H. Four side-shield doors let you get into the engine compartment to change fuel, air, and oil filters, and check fluid reservoirs.

The rear grill swings out as shown to give you ample access to the radiator.

The oil cooler and the radiator can each be removed without disturbing the other.

The deluxe, computer-controlled dashboard monitor system keeps

tabs on vital machine functions, with audible and visible warnings. It

features a 12-character liquid crystal display for important messages.



The three-level programmable display provides operating information, runs diagnostics, and lets you customize machine functions to adapt to specific situations.

ADDITIONAL EQUIPMENT

	STANDARD	OPTIONAL	STANDARD	OPTIONAL
ENGINE				
Anti-dive, -34T (-37°C)	●		●	
Coolant recovery tank	●		●	
Engine oil cooler	●		●	
Environmentally friendly engine oil drain	●		●	
Fan safety guard	●		●	
Muffler, under hood with large vertical exhaust stack	●		●	
Chrome exhaust stack	●		●	
Quick-release fuel filter and water separator	●		●	
Ether starting aid (for cold starts)	●		●	
Engine air heater (for cold starts)	●		●	
Heavy-duty trash-resistant cooling package	●		●	
Desert and high-altitude-cooling package	●		●	
Special application trash screens and packages*	●		●	
Engine coolant heater, 1,800 watts, 110 volts	●		●	
POWER TRAIN				
TCTPS transmission, computer-controlled electronic shift	●		●	
Conventional-type differentials, front and rear	●		●	
Front and rear axles with hydraulic locking differential	●		●	
Rear axle with hydraulic locking differential	●		●	
HYDRAULIC SYSTEM				
Hydraulic system oil cooler	●		●	
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	●		●	
Hydraulic conversion kits, two-to-three function valves	●		●	
Hydraulic lever lockout	●		●	
Automatic boom height lockout control	●		●	
Automatic boom return-to-carry control	●		●	
Automatic bucket return-to-dig control	●		●	
Reservoir sight gauge	●		●	
Spool-on hydraulic filter, vertical mounting	●		●	
Ride control system (automatic type)	●		●	
ELECTRICAL				
24-volt electrical system	●		●	
Alternator, 55 amps and 24 volts	●		●	
Alternator, high capacity, 80 amps and 24 volts	●		●	
Alternator trash covers	●		●	
Batteries, standard (2), 12 volt with 950 CCA, 200-865, rated reserve	●		●	
Batteries, heavy duty (2), 12 volt with 1,000 CCA, 320-min. rated reserve	●		●	
Radio ready cab, 24 volt to 12 volt converter, rated at 5 amps, with 12-volt receptacle in operator's compartment, fused electrical lead	●		●	
	● Cab wired for rotating beacon		● Rearview mirrors, two outside and two inside	
	● 24-volt to 12-volt, 30-amp voltage converter		● Conform to SAE J985	
	● 24-volt AM/FM stereo radio with clock		● Rubber floor mats	
	● Horn, with push buttons in center of steering wheel		● Seat belt, 3 in. (75 mm), with tractor	
	● Conform to SAE J994, J1446		● Seat, deluxe cloth covered with deep foam, high back, mechanical suspension, adjustable for weight and height, foot-ath position, backrest tilt, and armrest angle	
	● Lights		● Seat, air suspension, deluxe cloth covered	
	● Driving with gaunds / Stop and tailights / Turn signals and flashes / Conform to SAE 99		● Seat backrest extension	
	● Work lights, front (2) and rear (2)		● Steering wheel, textured with spinner knob	
	● Monitor and gauges, computerized with audible and visual warnings		● Storage compartment for operator's manual and other items	
	● Analog instruments: Engine coolant temperature / Engine oil pressure / Fuel level / Hydraulic oil temperature / Transmission oil temperature / Speedometer		● Tilt steering column	
	● Built-in diagnostics: Fault code retrieval / Message center		● Air conditioning (factory or dealer installed)	
	● Digital instruments: Engine rpm / Hourmeter / Selectable battery voltage or odometer / Transmission gear indicator		LOADER LIFETIME	
	● Indicator lights: Turn signals / Warning flashes / Work lights		● Loader boom service locking bar	
	● Message center display: Accessory settings / Diagnostic fault code messages		● Conform to SAE J38	
	● Operator warning lights: Battery voltage / Brake pressure / Coolant level / Engine air filter / Engine oil pressure / Fasten seat belt / Hydraulic oil filter / Hydraulic oil temperature / Park brake actuated / Transmission filter restriction		● High-lift boom*	
	● Push-button selection: Three clutch coil adjustments / Two automatic transmission sequences / Two quick-shift button sequences		LOG PILES AND ATTACHMENTS	
	● Reverse warning alarm		● Full line of allied equipment log beds*	
	● Conform to SAE J994, J1446		● Hydraulic control system for quick coupler locking pins	
	● Master electrical disconnect switch		● Quick coupler and attachments*	
	OPERATOR'S STATION		● Loadright weighing system*	
	● Canopy		TIRES	
	● ROPS/POPS / Multipleplane isolation mounted for noise/vibration reduction / Conform to SAE J1040 AP888		● 23.5-25, XSTAT L3 Michelin Radial	
	● Cab		● 26.5-25, 16 PR L2	
	● ROPS/POPS / Heats/defroster / Multipleplane isolation mounted for noise/vibration reduction / Front and rear windshield wipers and turnmount wipers / Tinted safety glass / Conform to SAE J1040 AP888		● 26.5-25, 20 PR L3	
	● Cup holder, personal cooler holder, and storage space		● 26.5-25, GP-21.2 Goodyear Radial	
	● Handholds and steps, ergonomically located and slip resistant		● 26.5-25, XSTAT L3 Michelin Radial	
	● Conform to SAE J185		● 26.5-25, X-MDSE Michelin Radial	
			● Lens wheels and tires	
			OTHER	
			● Articulation locking bar	
			● Conform to SAE J276	
			● Bottom guard, rear	
			● Bottom guards, front frame and transmission	
			● Counterweight	
			● Counterweight, extra duty, 1,257 lb. (570 kg)	
			● Drainage, with locking pins	
			● Fenders, front and rear	
			● Vandal protection, includes lockable engine enclosure, rear grille, and fuel fill	
			● Fire extinguisher	
			● Lift and tie-down hooks	
			● Material weighing system*	
			● Secondary steering	
			● Transmission side frame guards	

KEY: ● Standard equipment ■ Optional or special equipment

*See your John Deere dealer for further information.

CONTROL OWNING AND OPERATING COSTS

Total Repair Cost Management (TRCM) is part of John Deere's proactive, fit-to-bed-of-fall strategy on machine maintenance that will help control costs, increase profits, and reduce stress. Included in this comprehensive lineup of ongoing programs and services are:

OilScan Plus™ program - tells you what's going on inside all of your machine's major components so you'll see a decline in performance before the system fails. OilScan Plus analysis is included in most Securo-Extended warranty and preventive-maintenance contracts.

MaintainIt™ program - flexible, easy-to-use MaintainIt software lets you start your own computerized maintenance program by putting complete machine histories at your fingertips. It features a library of John Deere equipment, a spare-parts inventory list, and a list of maintenance tasks. Compare costs, schedule maintenance procedures by hourmeter or date, or print, fax, or e-mail purchase and work orders with just a few quick keystrokes.

Component life-cycle data - gives you vital information on the projected life span of components and lets you make informed decisions on machine maintenance by telling you approximately how many hours of use you can expect from an engine, transmission,

or hydraulic pump. This information can be used to preempt catastrophic downtime by servicing major components at about 80 percent of their life cycle.

Preventive Maintenance (PM) contracts - give you a fixed cost for maintaining a machine for a given period of time. It also helps you avoid downtime by ensuring that critical maintenance work gets done right and on schedule. On-site preventive maintenance service performed where and when you need it helps protect you from the expense of catastrophic failures and lets you avoid walk-away disposal hassles.

Securo-Extended warranty - gives you a fixed cost for machine repairs for a given period of time so you can effectively manage costs. Whether you work in a severe-service setting or just want to spread the risk of doing business, this is a great way to custom-fit coverage for your operation. And a Securo-Extended contract also travels well because it's backed by John Deere and is honored by all Deere construction dealers.

Customer Support Advisors (CSAs) - Deere believes the CSA program lends a personal quality to Total Repair Cost Management. Certified Customer Support Advisors have the knowledge and skills for helping make important decisions on machine maintenance and repair. Their mission is to help you implement a plan that's right for your business and take the burden of machine maintenance off your shoulders.

Specifications and design subject to change without notice. Where applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on a full set of standard equipment: 23.5-25, 20 PR L3 tire, 1,250 lb. (568 kg) optional counterweight, ROPS cab, full fender, and 175-hp (129 kW) operator.



Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J294 and ISO 7243, using the 2.3 bar at 21.49° gravity. No derating is required up to 10,000 feet (3050-m) altitude. Gross power is without cooling fan.