

ENGINE	744H
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	
Raise.....	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	<i>with 4.5 cu. yd. (3.4 m³) excavating bucket</i>
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.....	80-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)	115.5 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)

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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, ROPS cab, 175-lb. (79 kg) operator, and full fuel tank.....	49,790 lb. (22 585 kg)
Fork weight*.....	4,497 lb. (2040 kg)

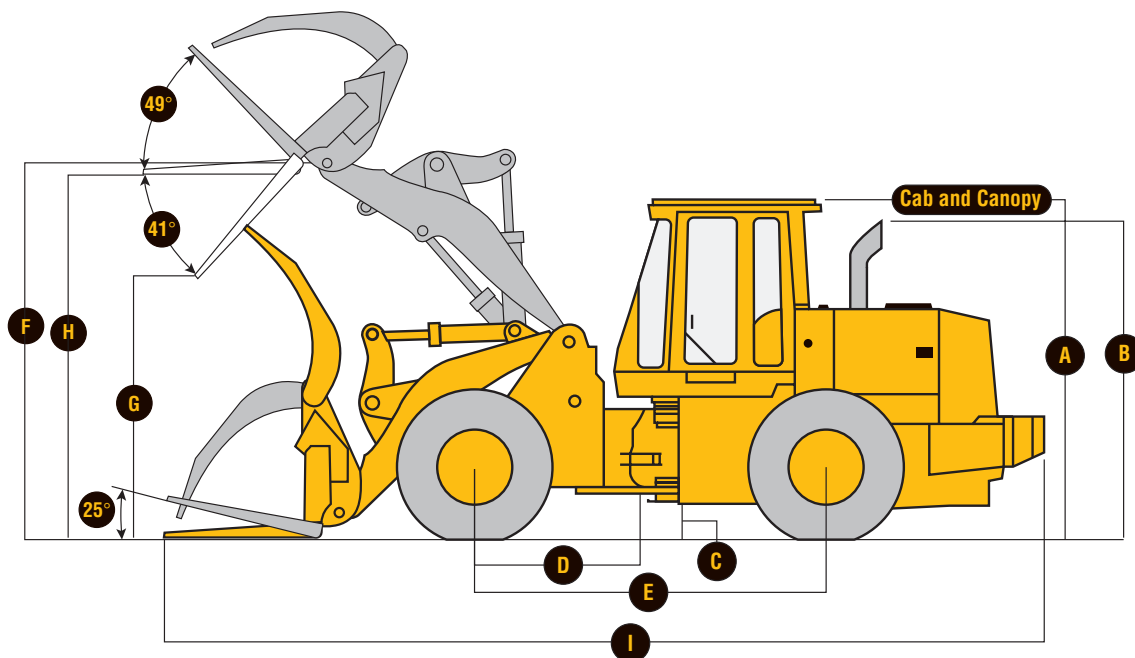
*Allied equipment log fork ordered through John Deere dealer.

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

- A** Height to top of cab and canopy.....11 ft. 7 in. (3520 mm)
- B** Height to top of exhaust.....10 ft. 2 in. (3100 mm)
- C** Ground clearance.....18.3 in. (465 mm)
- D** Length from centerline to front axle.....5 ft. 7 in. (1700 mm)
- E** Wheelbase.....11 ft. 2 in. (3400 mm)
- F** Height to hinge pin, fully raised.....14 ft. 1 in. (4281 mm)
- G** Dump height.....9 ft. 8 in. (2.95 m)
- H** Ground to tine clearance, fully raised.....13 ft. (3.96 m)
- I** Overall length.....29 ft. 1 in. (8.86 m)



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ENGINE					
Antifreeze, -34°F (-37°C)	●	Cab wired for rotating beacon	●	Rearview mirrors, two outside and two inside	●
Coolant recovery tank	●	24-volt to 12-volt, 10-amp voltage converter	■	Conform to SAE J985	●
Engine oil cooler	●	24-volt AM/FM stereo radio with clock	●	Rubber floor mat	●
Environmentally friendly engine oil drain	●	Horn, with push button in center of steering wheel	●	Seat belt, 3 in. (76 mm), with retractor	●
Fan safety guard	●	Conforms to SAE J994, J1446	●	Seat, deluxe cloth covered with deep foam, high back, mechanical suspension, adjustable for weight and height, fore-aft position, backrest tilt, and armrest angle	●
Muffler, under hood with large vertical exhaust stack	●	Lights	●	Seat, air suspension, deluxe cloth covered	■
Chrome exhaust stack	■	Driving with guards / Stop and taillights / Turn signals and flashers / Conform to SAE 99	●	Seat backrest extension	■
Quick-release fuel filter and water separator	●	Work lights, front (2) and rear (2)	●	Steering wheel, textured with spinner knob	●
Ether starting aid (for cold starts)	■	Monitor and gauges, computerized with audible and visual warnings	■	Storage compartment for operator's manual and other items	●
Engine air heater (for cold starts)	■	Analog instruments: Engine coolant temperature / Engine oil pressure / Fuel level / Hydraulic oil temperature / Transmission oil temperature / Speedometer	■	Tilt steering column	●
Heavy-duty trash-resistant cooling package	■	Built-in diagnostics: Fault code retrieval / Message center	■	Air conditioning (factory or dealer installed)	■
Desert and high-altitude cooling package	■	Digital instruments: Engine rpm / Hourmeter / Selectable battery voltage or odometer / Transmission gear indicator	●	LOADER LINKAGE	
Special application trash screens and packages*	■	Indicator lights: Turn signals / Warning flashers / Work lights	■	Loader boom service locking bar	●
Engine coolant heater, 1,000 watts, 110 volts	■	Message center display: Accessory settings / Diagnostic fault code messages	■	Conforms to SAE J38	■
POWER TRAIN		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*	■
TC/PS transmission, computer-controlled electronic soft shift	●	Push-button selection: Three clutch cutoff adjustments / Two automatic transmission sequences / Two quick-shift button sequences	■	LOG FORKS AND ATTACHMENTS	
Conventional-type differentials, front and rear	●	Reverse warning alarm	●	Full line of allied equipment log forks*	●
Front and rear axles with hydraulic locking differential	■	Conforms to SAE J994, J1446	■	Hydraulic control system for quick coupler locking pins	■
Front axle with hydraulic locking differential	■	Master electrical disconnect switch	■	Quick coupler and attachments*	■
HYDRAULIC SYSTEM		OPERATOR'S STATION		Loadright weighing system*	■
Hydraulic system oil cooler	●	Canopy		TIRES	
Two-function hydraulic valve with joystick control	●	ROPS/FOPS / Multiplane isolation mounted for noise/vibration reduction / Conforms to SAE J1040 APR88	■	23.5-25, XHAT L3 Michelin Radial	■
Two-function hydraulic valve with two levers and adjustable wristrest	■	Cab		26.5-25, 16 PR L2	■
Three-function hydraulic valve with joystick control and auxiliary lever for third function	■	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	■	26.5-25, 20 PR L3	●
Three-function hydraulic valve with two levers and adjustable wristrest and auxiliary lever for third function	■	Cup holder, personal cooler holder, and storage space	●	26.5-25, GP-2B L2 Goodyear Radial	■
Hydraulic conversion kits, two to three function valves	■	Handholds and steps, ergonomically located and slip resistant	●	26.5-25, XHAT L3 Michelin Radial	■
Hydraulic lever lockout	●	Conform to SAE J185	●	26.5-25, X-MINE Michelin Radial	■
Automatic boom height kickout control	●		■	Less wheels and tires	■
Automatic boom return-to-carry control	●			OTHER	
Automatic bucket return-to-dig control	●			Articulation locking bar	●
Reservoir sight gauge	●			Conforms to SAE J276	●
Spin-on hydraulic filters, vertical mounting	●			Bottom guard, rear	■
Ride control system (automatic type)	■			Bottom guards, front frame and transmission	■
ELECTRICAL				Counterweight	●
24-volt electrical system	●			Counterweight, extra duty, 1,257 lb. (570 kg)	■
Alternator, 55 amps and 24 volts	●			Drawbar, with locking pin	●
Alternator, high capacity, 80 amps and 24 volts	■			Fenders, front and rear	●
Alternator trash covers	■			Vandal protection, includes lockable engine enclosure, rear grille, and fuel fill	●
Batteries, standard (2), 12 volt with 950 CCA, 200-min. rated reserve	●			Fire extinguisher	■
Batteries, heavy duty (2), 12 volt with 1,000 CCA, 320-min. rated reserve	■			Lift and tie-down hooks	■
Radio ready cab, 24 volt to 12 volt converter, rated at 5 amps, with 12-volt receptacle in operator's compartment, fused electrical lead	●			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, fix-before-fail 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 oil analysis is included in most Secure®-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 waste-disposal hassles.

Secure-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 Secure-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.



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 a unit with all standard equipment; 26.5-25, 20 PR L3 tires; 1,226-lb. (566 kg) optional counterweight; ROPS cab; full fuel tank; and 175-lb. (79 kg) operator.

