

444D 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, 15.5-25, 8 PR loader-tread tires with 940 lb. (426 kg) CaCl₂ solution in rear tires, ROPS cab, full fuel tank, and 175 lb. (80 kg) operator.

Rated Power @ 2400 rpm:	SAE	DIN 70 020
Net	90 hp (67 kW)	68.5 kW
Gross	97 hp (72 kW)	

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 @ 35 API gravity. No derating is required up to 5000 feet (1500 m) altitude. Optional altitude-compensating turbocharger (ACT) recommended for no derating at altitudes of 5000 to 10,000 feet (1500 to 3050 m). Gross power is without cooling fan.

Engine: John Deere 6-359D

Type	4-stroke cycle, naturally aspirated diesel
Bore and stroke	4.19 x 4.33 in. (106.5 x 110 mm)
No. of cylinders	6
Displacement	359 cu. in. (5.884 L)
Maximum net torque @ 1300 rpm	247 lb-ft (335 Nm) (34.2 kg-m)
Cooling fan	Blower
Air cleaner w/restriction indicator	Dry
Electrical system	12 volt w/65-amp alternator
Batteries (one 12 volt)	
25 amps at 80°F (27°C)	Reserve capacity: 160 min. each
BCI group 31 cold cranking	
capacity at 0°F (-18°C)	625 amp

Torque Converter:

Type	Twin turbine
Torque multiplication	5.44 to 1

Transmission

Power Shift planetary

Forward Speeds:

	mph	km/h
1	0-2.9	0-4.7
2	2.9-6.5	4.7-10.5
3	0-11.0	0-17.7
4	11.0-24.6	17.7-39.6

Reverse Speeds:

1	0-3.9	0-6.3
2	3.9-8.8	6.3-14.2

Note: Shift from 1st to 2nd and 3rd to 4th is automatic

Differentials - choice of:

Front and rear conventional
Front hydraulic differential lock and rear conventional

Drive Axles

Inboard-mounted planetary gears to each wheel. Front axle fixed. Rear axle oscillates 22 degrees total (13.5 in. [343 mm] vertical travel at center of tire).

Steering:

Full power steering. Frame articulated 80 degrees by two hydraulic cylinders.
Turning radius (measured to centerline of outside tire)

13 ft. 10 in. (4.22 m)

Cylinder size: Stroke

15.75 in. (400 mm)

Rod diameter

1.5 in. (38 mm)

Bore

3 in. (76 mm)

Brakes:

Service

Power-actuated, 4-wheel inboard-mounted, wet disk. Foot-operated by either pedal.
Parking

10 x 1.5 in. (254 x 38 mm)

expanding shoe on transmission, output shaft, foot-operated.
Includes transmission disconnect with warning light.

Hydraulic Systems:

Steering and loader functions

An engine-driven gear-type pump delivers 40.8 gpm (2.57 L/s) at 600 psi (4137 kPa) (42.2 kg/cm²) and 2400 engine rpm. Loader function relief valve pressure setting is 2250 psi (15 514 kPa) (158.2 kg/cm²). Maximum steering pressure is 2400 psi (16 548 kPa) (168.8 kg/cm²).
Control

Single-lever, dual hydraulic valve.
Optional triple hydraulic valve with separate lever.
Brakes

Engine-driven, gear-type pump delivers 3.9 gpm (0.25 L/s) at 2400 engine rpm and 600 psi (4137 kPa) (42.2 kg/cm²). Maximum system pressure is 2350 psi (16 203 kPa) (165.2 kg/cm²).

Loader hydraulic operating cycle times at full throttle:

Raise	5.9 sec.
Dump	1.5 sec.
Lowering: float	3.6 sec.
power	3.4 sec.

Maximum lift capacity with 1 $\frac{3}{4}$ cu. yd. (1.34 m³) general purpose bucket:

Maximum height	7110 lb. (3225 kg)
Ground level	18,790 lb. (8525 kg)

Hydraulic Cylinders: Bore Stroke

Boom, two	5.25 in. (133 mm)	22.5 in. (571 mm)
Bucket, one	5.25 in. (133 mm)	25.3 in. (643 mm)
Cylinder rods		Ground, heat-treated,

chrome-nickel-plated, polished

Boom and bucket cylinder rods

2.25 in. (57 mm) dia.

Tires — choice of:

13.00-24, 8 PR, L2
15.5-25, 8 PR, L2 loader tread
15.5-25, 12 PR, L2 loader tread
15.5-25, XRAT
17.5-25, 12 PR, L2 loader tread w/valve stem protectors

Capacities:

	U.S.	Liters
Cooling system	22 qt.	21
Fuel tank	50 gal.	189
Crankcase	11 qt.	10.4
Crankcase, including filter	12 qt.	11.4
Transmission case and filters	40 qt.	38
Front and rear differential	17 qt.	16.1
Loader hydraulic sump	64 qt.	61

Additional Standard Equipment:

Adjustable, cushioned vinyl seat	Instrument panel warning lights:
Antifreeze	Hydraulic filter bypass
Articulation transport lock	Parking brake
Cigarette lighter	Key switch
Differential, conventional	Lights, driving w/o guard
Fuel filter	Lights, flashing and turn signal
Gauges:	Lights, stop and tail
Coolant temperature	Muffler
Electric hourmeter	Precleaner
Engine oil pressure	Pushbutton start
Fuel	Rear bottom guard
Transmission oil pressure	Reverse warning alarm
Transmission oil temperature	ROPS canopy w/seat belt
Voltmeter	Service step, left-hand, rear
Hand grips	Toolbox
Horn	Transistorized voltage regulator
	Transmission clutch disconnect

Optional or Special Equipment:

Additional battery	Floor mat
Adjustable deluxe vinyl seat	Front fenders
Adjustable deluxe suspension cloth seat for cab	Hydraulic front differential lock
Adjustable deluxe suspension vinyl seat	Hydraulic tube shield
Altitude-compensating turbocharger	License plate bracket
Automatic boom height control	Lights, driving w/guards
Automatic return-to-dig	Lights, front and rear work
Auxiliary front bottom guard	Lockable engine side shields w/front hood locks
Auxiliary cutting edges	Lockable instrument panel covers
Auxiliary spill guard	Rear axle disconnect
Bucket teeth	For ROPS cab:
Counterweight, rear	Mirrors
Drawbar, bolt-on	Radio—AM
Engine coolant heater	Rear wiper
Ether starting aid	Rear wiper cover
ROPS cab w/heater, pressurizer, dome light, front wiper and 90-amp alternator	Windshield washer
ROPS cab w/air conditioner, heater/defroster, pressurizer, dome light, front wiper and 90-amp alternator	
Secondary steering	
SMV emblem	
3-in. (76 mm) seat belt	
Triple hydraulic valve for loader	
Water separator, fuel	
Windows, opening (rear side)	

444D LOADER OPERATING INFORMATION

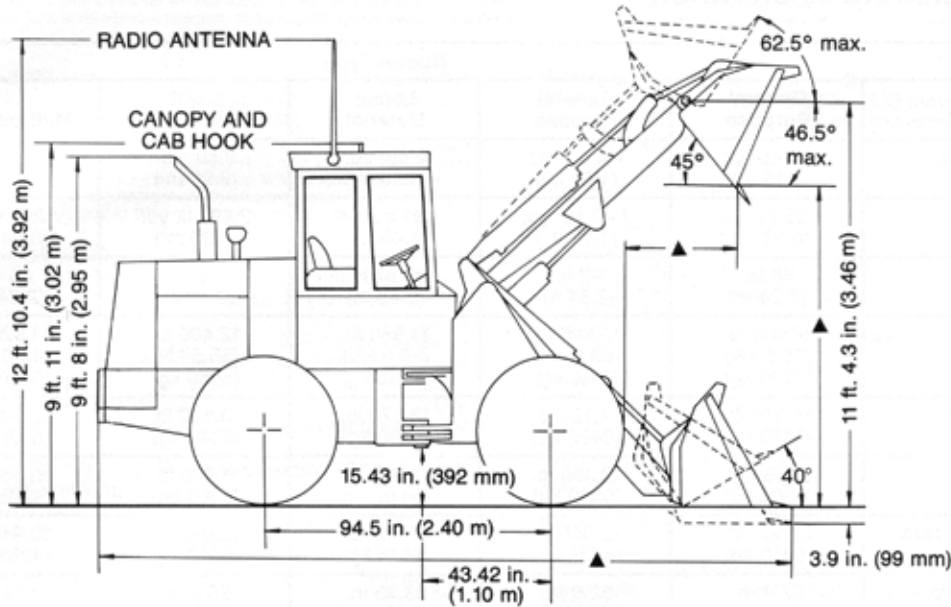
OPERATING INFORMATION	Bucket Type				
	General Purpose	General Purpose	Loose Material	Light Material	Multipurpose
Capacity, heaped, SAE	1½ cu. yd. (1.15 m ³)	1¾ cu. yd. (1.34 m ³)	2 cu. yd. (1.53 m ³)	3 cu. yd. (2.29 m ³)	1½ cu. yd. (1.15 m ³)
Capacity, struck, SAE	1.22 cu. yd. (0.93 m ³)	1.42 cu. yd. (1.09 m ³)	1.91 cu. yd. (1.46 m ³)	2.49 cu. yd. (1.90 m ³)	1.23 cu. yd. (0.94 m ³)
Bucket width	88 in. (2.24 m)	92 in. (2.34 m)	95.81 in. (2.43 m)	96 in. (2.44 m)	88 in. (2.24 m)
Breakout force, SAE J732C	17,000 lb. (75.6 kN) (7710 kg)	15,680 lb. (69.8 kN) (7110 kg)	14,960 lb. (66.6 kN) (6785 kg)	12,480 lb. (55.5 kN) (5660 kg)	14,620 lb. (65.0 kN) (6630 kg)
Tipping load, straight maximum reach	14,310 lb. (6490 kg)	14,150 lb. (6420 kg)	13,870 lb. (6290 kg)	13,530 lb. (6140 kg)	12,300 lb. (5580 kg)
Tipping load, 40-deg. full turn, SAE	12,360 lb. (5605 kg)	12,190 lb. (5530 kg)	11,940 lb. (5415 kg)	11,600 lb. (5260 kg)	10,550 lb. (4785 kg)
Tipping load, 35-deg. turn	12,800 lb. (5810 kg)	12,640 lb. (5735 kg)	12,380 lb. (5615 kg)	12,040 lb. (5460 kg)	10,940 lb. (4965 kg)
Reach at 45-deg. dump, 7 ft. (2.13 m) clearance	52.4 in. (1331 mm)	52.9 in. (1344 mm)	53.35 in. (1355 mm)	55.9 in. (1420 mm)	47.7 in. (1212 mm)
Reach at 45-deg. dump, full height	32.9 in. (836 mm)	34.33 in. (872 mm)	35.21 in. (894 mm)	41.83 in. (1062 mm)	33.35 in. (847 mm)
Dump clearance at 45-deg. dump, full height	109.2 in. (2774 mm)	107.6 in. (2733 mm)	106.7 in. (2710 mm)	100.1 in. (2543 mm)	101.7 in. (2583 mm)
Overall length	19 ft. 3.1 in. (5.87 m)	19 ft. 5.3 in. (5.93 m)	19 ft. 7.4 in. (5.98 m)	20 ft. 3.9 in. (6.20 m)	20 ft. 3.7 in. (6.19 m)
Loader clearance circle, bucket in carry position	32 ft. (9.75 m)	32 ft. 5.2 in. (9.89 m)	32 ft. 9.3 in. (9.99 m)	33 ft. 3 in. (10.13 m)	32 ft. 6 in. (9.91 m)
Operating weight	19,220 lb. (8720 kg)	19,930 lb. (9040 kg)	19,580 lb. (8880 kg)	19,950 lb. (9050 kg)	21,150 lb. (9595 kg)

Loader operating information is based on machine with all standard equipment, 15.5-25, 8 PR, L2 tires with 940 lb. (426 kg) of CaCl₂ solution in rear tires, ROPS cab, full fuel tank and 175 lb. (80 kg) operator. Operating information is affected by tire size, ballast and attachments. For selected items, add or subtract the following:

Adjustments to operating weights and tipping loads for 1¾ cu. yd. (1.34 m³) general purpose bucket

Add (+) or deduct (-) lb. (kg) as indicated for loaders with:	Loader Operating Weight	Tipping Load Straight	Tipping Load 35° Turn	Tipping Load 40° Full Turn, SAE
13-0-24, 8 PR, L2 without CaCl ₂	- 1320 lb. (600 kg)	- 1480 lb. (670 kg)	- 1335 lb. (605 kg)	- 1295 lb. (585 kg)
13.0-24, 8 PR, L2 with CaCl ₂	- 540 lb. (245 kg)	- 460 lb. (210 kg)	- 415 lb. (190 kg)	- 400 lb. (180 kg)
15.5-25, 8 PR, L2 without CaCl ₂	- 940 lb. (425 kg)	- 1230 lb. (555 kg)	- 1110 lb. (505 kg)	- 1075 lb. (490 kg)
15.5-25, 12 PR, L2 without CaCl ₂	- 815 lb. (370 kg)	- 1150 lb. (520 kg)	- 1040 lb. (470 kg)	- 1005 lb. (455 kg)
15.5-25, 12 PR, L2 with CaCl ₂	+ 125 lb. (56 kg)	+ 80 lb. (37 kg)	+ 75 lb. (34 kg)	+ 70 lb. (32 kg)
17.5-25, 12 PR, L2 without CaCl ₂	- 295 lb. (135 kg)	- 810 lb. (370 kg)	- 730 lb. (330 kg)	- 710 lb. (320 kg)
17.5-25, 12 PR, L2 with CaCl ₂	+ 885 lb. (400 kg)	+ 740 lb. (335 kg)	+ 665 lb. (300 kg)	+ 645 lb. (290 kg)
Less ROPS cab	- 790 lb. (360 kg)	- 665 lb. (300 kg)	- 630 lb. (285 kg)	- 620 lb. (280 kg)
ROPS canopy in lieu of ROPS cab	- 350 lb. (160 kg)	- 275 lb. (125 kg)	- 265 lb. (120 kg)	- 260 lb. (120 kg)
1st set counterweights	+ 495 lb. (225 kg)	+ 1080 lb. (490 kg)	+ 940 lb. (425 kg)	+ 900 lb. (410 kg)
2nd set counterweights	+ 495 lb. (225 kg)	+ 1090 lb. (495 kg)	+ 950 lb. (430 kg)	+ 905 lb. (410 kg)

444D LOADER DIMENSIONS

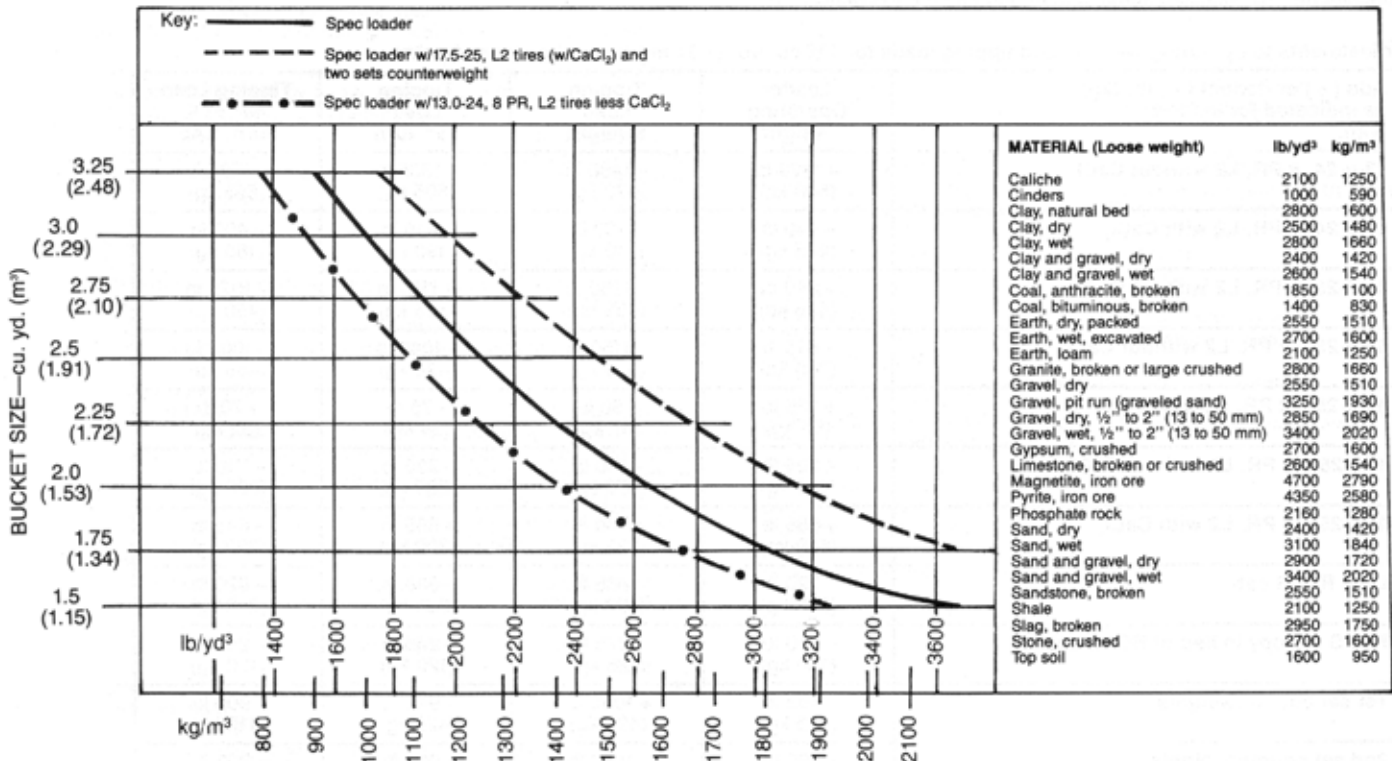


▲ SEE OPERATING INFORMATION

TIRES

	15.5-25	17.5-25
Tread width	70 in. (1780 mm)	67.7 in. (1720 mm)
Width over tires	87.1 in. (2210 mm)	88.9 in. (2260 mm)
Change in vertical height	0	1.6 in. (41 mm)

444D BUCKET SELECTION GUIDE*



*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.