

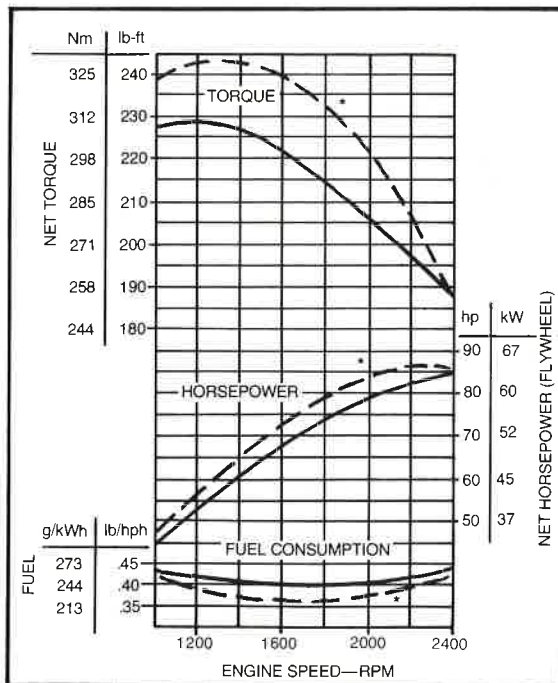


444C LOADER



WORLEY EQUIPMENT
 PARTS SERVICE SALES RENTALS
 RT. 83 EXIT 15-PH. 938-6568
 LEWISBERRY, PA. 17339

ENGINE PERFORMANCE



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

*With Altitude-Compensating Turbocharger (ACT) option
 Standard engine torque rise 22%; with ACT, 31%.

FEATURES

- 85 SAE net hp (63.4 kW)
- 4-wheel drive
- 1½ or 1¼ cu. yd. (1.15 or 1.34 m³) general purpose, 3 cu. yd. (2.29 m³) light materials, or 1½ cu. yd. (1.15 m³) multipurpose bucket
- Twin-turbine torque converter with Power Shift transmission, 4 speeds forward, 2 reverse
- Power steering. Articulated frame
- 4-wheel wet-disk power brakes and parking brake
- Inboard planetary final drives
- Single-lever loader control w/automatic return to dig
- Brake-actuated transmission disconnect
- Roll-over protective structure (ROPS) with cab
- Optional front-axle hydraulic differential lock
- Vandal protection

ADD VERSATILITY WITH:

- Backhoe
- Bucket teeth
- Bucket spill guard
- Auxiliary cutting edge
- General-purpose side-dump bucket
- Snow removal equipment

444C LOADER SPECIFICATIONS

(Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with ICED and SAE Standards. Except where otherwise noted, specifications are based on a machine equipped with all standard equipment, 15.5-25, 8-ply loader-tread tires, ROPS cab, full fuel tank, and 175 lb. (79 kg) operator.)

Power (@2400 engine rpm):	SAE	DIN
Gross	95 hp (71.0 kW)	
Net	85 hp (63.4 kW)	90.4 PS

Net engine flywheel power is for an engine equipped with fan, air cleaner, water pump, lubricating oil pump, fuel pump, alternator, and muffler. Gross engine power is without fan. Flywheel power ratings are under SAE standard conditions of 500-ft. altitude and 85° F. temperature and DIN 70 020 standard conditions of 760 mm Hg barometer (sea level) and 20° C. temperature. No derating is required up to 5000 ft. (1524 m) altitude. Optional altitude compensating turbocharger (ACT) recommended for no derating at altitudes of 5000 to 10,000 ft. (1500 to 3000 m).

Engine: John Deere diesel, 6-cylinder, 4-stroke cycle

Bore and stroke	4.02×4.33 in. (102×110 mm)
Piston displacement	329 cu. in. (5.392 L)
Compression ratio	16.2 to 1
Maximum torque @1200 rpm	228 lb-ft (309 Nm) (31.5 kg-m)
(ACT option)	244 lb-ft (331 Nm) (33.8 kg-m)
Torque rise	22 percent
(ACT option)	31 percent
NACC or AMA (U.S. Tax) horsepower	38.8
Lubrication	Pressure system w/full-flow filter
Cooling	Pressurized w/thermostat and controlled bypass
Fan: w/o air conditioner	Blower
w/air conditioner	Suction
Air cleaner w/restriction indicator	Dry
Electrical system	12-volt w/alternator
Batteries (two 12-volt) 25 amps at 80°F (27°C) ..	Reserve capacity: 170 min. each
Alternator	62 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

Front and rear	Standard
Front hydraulic differential lock	Optional

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].

Brakes

Service Power-actuated, 4-wheel inboard-mounted, wet disk. Foot-operated by either pedal. Left pedal also disconnects transmission.

Parking 10×1.5 in. (254×38 mm) expanding shoe on transmission output shaft, foot-operated. Includes transmission disconnect. Warning light on instrument panel. Warning buzzer.

Steering Full power steering. Frame articulated 80 degrees by two hydraulic cylinders.

Cylinder size: Stroke	15.75 in. (400 mm)
Bore	3 in. (76 mm)
Rod diameter	1.5 in. (38 mm)
Turning radius	Measured to center line of outside tire
	13 ft. 10 in. (4.22 m)

Hydraulic Systems:

Loader functions Independent engine-driven gear-type pump delivers 40.0 gpm (2.52 L/s) at 600 psi (4137 kPa) (42.2 kg/cm²) and 2400 engine rpm.

2250 psi (15 514 kPa) (158.2 kg/cm²) relief valve pressure setting.

Control Single-lever, dual hydraulic valve

Optional triple hydraulic valve with separate lever.

Steering and brakes Engine-driven, 8-piston, variable-displacement pump delivers 20.6 gpm (1.30 L/s) at 1800 engine rpm and 2000 psi (13 790 kPa) (140.6 kg/cm²). Maximum system pressure is 2400 psi (16 548 kPa) (168.7 kg/cm²). Loader hydraulic operating cycle times at full throttle:

Raise	5.8 sec.
Dump	1.6 sec.
Lowering: float	4.0 sec.
power	3.7 sec.
Maximum lift capacity w/standard operating equipment:	
Maximum height	7550 lb. (3425 kg)
Ground level	18,200 lb. (8255 kg)

Hydraulic Cylinders:

	Bore	Stroke
Boom, two	5.25 in. (133 mm)	22.5 in. (571 mm)
Bucket, one	5.25 in. (133 mm)	25.30 in. (643 mm)
Cylinder rods	Ground, heat-treated, chrome-nickel-plated, polished	
Boom and bucket cylinder rods	2.25 in. (57 mm) dia.	

Tires:

- 15.5-25, 8-ply-rating, L2 loader tread
- 15.5-25, 12-ply-rating, L2 loader tread
- 13.00-24, 8-ply-rating, G2 grader tread
- 17.50-25, 12-ply-rating, L2 loader tread

Wheel Treads:

Front and rear	70 in. (1.78 m)
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Capacities:

	U.S.	Imp.	Liters
Cooling system	25 qt.	20.8 qt.	23.7
Fuel tank	40 gal.	33.3 gal.	151.4
Crankcase	11 qt.	9.2 qt.	10.4
Crankcase, including filter	12 qt.	10.0 qt.	11.4
Transmission case and filters	40 qt.	33.3 qt.	37.9
Front and rear differential	17 qt.	14.2 qt.	16.1
Loader hydraulic sump	56 qt.	46.7 qt.	53.0

- Additional Standard Equipment:**
- Adjustable cushioned seat with belt
 - Front fenders
 - Gauges:
 - Transmission oil temperature
 - Transmission oil pressure
 - Fuel
 - Coolant temperature
 - Engine oil pressure
 - Electric hourmeter
 - Voltmeter
 - Instrument panel warning lights:
 - Parking brake
 - Hydraulic filter bypass
 - Loader hydraulic system indicator light
 - Key switch
 - Pushbutton safety start
 - Cigaret lighter
 - Transistorized voltage regulator
 - Engine side shields w/locks
 - Transmission disconnect
 - Work lights, front flood, rear combination tail and brake lights
- ROPS cab:**
- Heater/defroster or heater/defroster and pressurizer
 - Front and rear windshield wipers
 - Windshield washer
 - Dome light
 - Instrument panel cover w/lock
 - Horn
 - Fuel filter
 - Automatic return to dig
 - Rear bottom guard
 - Hand grips
 - Fixed drawbar
 - Antifreeze
 - Precleaner
 - Ether starting aid
 - Articulation transport lock
 - Low-maintenance batteries

- Special Equipment:**
- ROPS canopy
 - Adjustable suspension seat, vinyl or cloth
 - Heater for canopy
 - For ROPS cab:
 - Air conditioner
 - Radio—AM
 - Mirrors
 - Reverse warning alarm
 - Triple hydraulic valve for loader
 - Bucket teeth
 - Auxiliary bottom guard
 - License plate bracket
 - Automatic boom height control
 - SMV emblem
 - Auxiliary cutting edges
 - Flashing and turn signal lights
 - Rear-axle disconnect
 - Hydraulic front differential lock
 - Auxiliary spill guard
 - Altitude-compensating turbocharger
 - Emergency steering

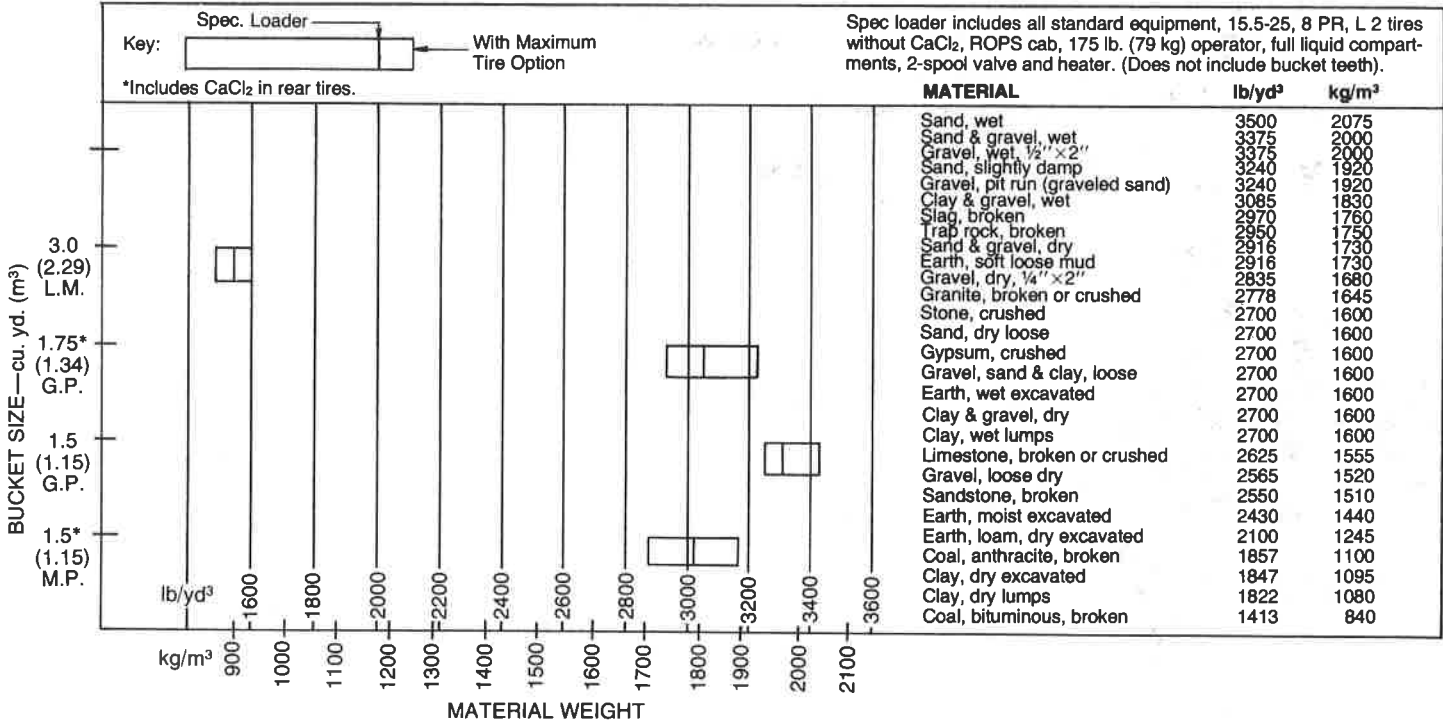
444C LOADER OPERATING INFORMATION

OPERATING INFORMATION	BUCKET			
	General Purpose	General Purpose	Light materials	Multipurpose
Capacity, heaped, SAE	1½ cu. yd. (1.15 m³)	1¾ cu. yd. (1.34 m³)	3 cu. yd. (2.29 m³)	1½ cu. yd. (1.15 m³)
Capacity, struck, SAE	1.22 cu. yd. (0.93 m³)	1.42 cu. yd. (1.09 m³)	2.49 cu. yd. (1.90 m³)	1.23 cu. yd. (0.94 m³)
Bucket width	88 in. (2.23 m)	92 in. (2.34 m)	96 in. (2.44 m)	88 in. (2.23 m)
Bucket weight	1190 lb. (540 kg)	1470 lb. (667 kg)	1920 lb. (871 kg)	2122 lb. (962 kg)
Breakout force, J732C SAE Standard using bucket hinge pin as pivot point	16,985 lb. (75.5 kN) (7704 kg)	15,680 lb.* (69.74 kN) (7112 kg)	11,245 lb. (52.02 kN) (5101 kg)	14,620 lb. (65.03 kN) (6632 kg)
Tipping load, straight, max. reach	12,985 lb. (5890 kg)	14,035 lb.* (6306 kg)	12,230 lb. (5547 kg)	10,840 lb. (4917 kg)
**Tipping load, 40-deg. full turn SAE	11,253 lb. (5105 kg)	12,135 lb.* (5504 kg)	10,500 lb. (4763 kg)	9270 lb. (4205 kg)
Tipping load, 35-deg. turn	11,650 lb. (5280 kg)	12,570 lb. (5700 kg)	10,890 lb. (4940 kg)	9630 lb. (4360 kg)
Circle diameter or turning clearance outside bucket	32 ft. (9.76 m)	32 ft. 2 in. (9.80 m)	33 ft. 3 in. (10.13 m)	32 ft. 6 in. (9.91 m)
Loader operating weight	18,315 lb. (8308 kg)	19,535 lb.* (8861 kg)	19,045 lb. (8639 kg)	19,251 lb. (8732 kg)

* Operating weight and specification with 1¾ cu. yd. (1.34 m³) bucket includes 75% fill of CaCl₂ solution in rear tires.

** SAE operating load specification for wheel loaders will not exceed 50% of the SAE full turn tipping load.

444C BUCKET SELECTION GUIDE



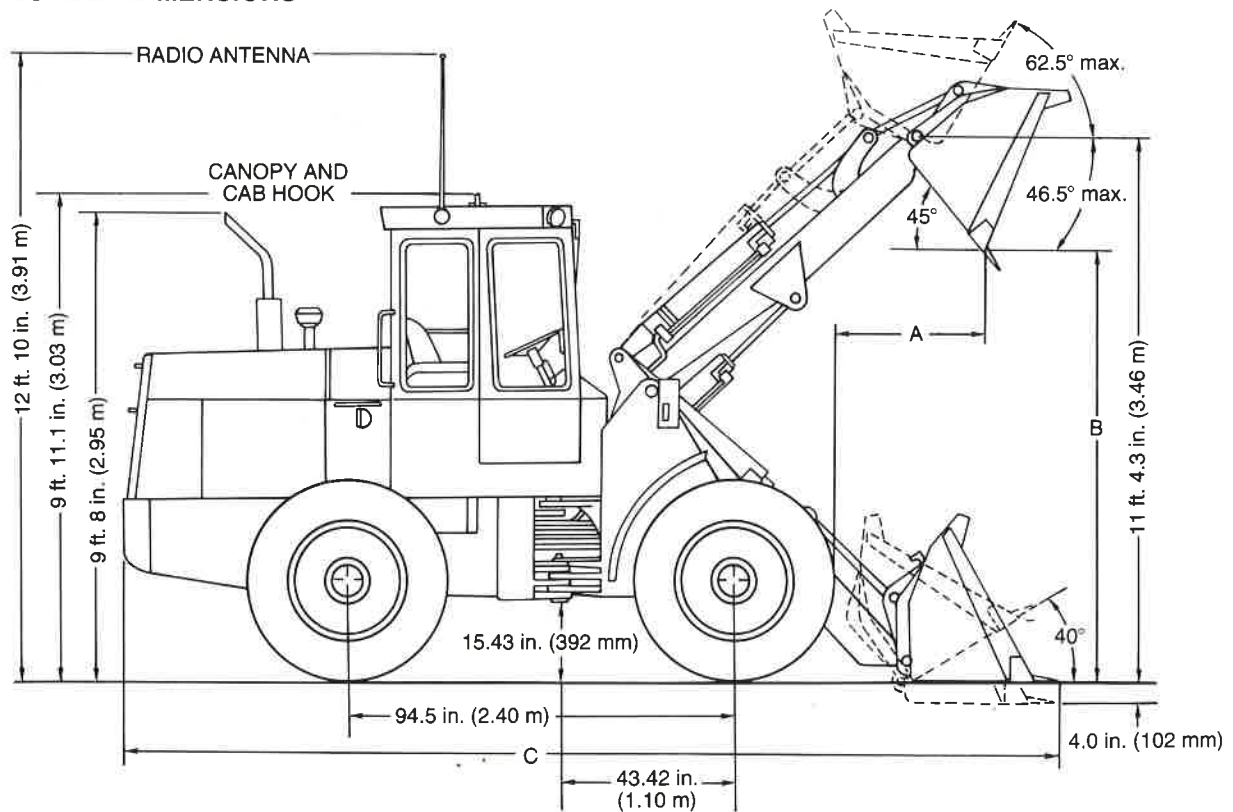
Maximum recommended material weight, lb. per cu. yd. (kg/m³)				
All standard equipment and 15.5-25, 8-ply-rating tires	1½ cu. yd. (1.15 m³) General purpose	1¾ cu. yd.* (1.34 m³) General purpose	3 cu. yd. (2.29 m³) Light materials	1½ cu. yd. (1.15 m³) Multipurpose
Loader less cab or canopy	3135 (1860)	2910 (1727)	1460 (866)	2570 (1525)
Loader with canopy	3240 (1922)	3000 (1780)	1510 (896)	2660 (1578)
Loader with cab	3300 (1958)	3050 (1810)	1540 (914)	2720 (1614)

* Standard operating weight plus 75% fill of CaCl₂ solution in rear tires.

444C LOADER OPERATING INFORMATION

Adjustments to operating weights and tipping loads for 1½ cu. yd. (1.15m³) General Purpose Bucket			
Add (+) or deduct (-) lb. (kg) as indicated for loader equipped with:	Loader Operating Weight	Tipping Load Straight	Tipping Load, 40-deg. Full Turn, SAE
Less ROPS cab	-715 lb. (324 kg)	-600 lb. (272 kg)	-560 lb. (254 kg)
ROPS canopy in lieu of ROPS cab	-275 lb. (125 kg)	-215 lb. (98 kg)	-205 lb. (93 kg)
13.00-24, 8-ply-rating, grader tread tires	-380 lb. (172 kg)	-250 lb. (113 kg)	-215 lb. (98 kg)
17.50-25, 12-ply-rating, loader tread tires	+645 lb. (292 kg)	+420 lb. (190 kg)	+365 lb. (166 kg)
Air conditioning	+70 lb. (32 kg)	+125 lb. (57 kg)	+105 lb. (48 kg)
Auxiliary cutting edge	+120 lb. (54 kg)	-155 lb. (70 kg)	-155 lb. (70 kg)
Auxiliary spill guard	+110 lb. (50 kg)	-75 lb. (34 kg)	-75 lb. (34 kg)

444C LOADER DIMENSIONS



BUCKETS	DIMENSIONS		
	A	B	C
1½ cu. yd. (1.15 m³)	32.9 in. (836 mm)	9 ft. 1.2 in. (2.77 m)	19 ft. (5.80 m)
1¾ cu. yd. (1.34 m³)	34.33 in. (872 mm)	8 ft. 11.6 in. (2.73 m)	19 ft. 2.4 in. (5.85 m)
3 cu. yd. (2.29 m³)	41.83 in. (1062 mm)	8 ft. 4.1 in. (2.54 m)	20 ft. 1 in. (6.12 m)
1½ cu. yd. multipurpose (1.15 m³)	33.35 in. (847 mm)	8 ft. 5.7 in. (2.58 m)	19 ft. 11.0 in. (6.07 m)

