

Specifications

ENGINE

Model John Deere 6076A
 Type 4-cycle water-cooled, direct injection
 Aspiration Turbocharged
 No. of cylinders 6
 Rated flywheel horsepower
 DIN 6 271, net ... 127 kW (172 PS) at 2 200 min⁻¹ (2 200 rpm)
 SAE J1349, net ... 127 kW (170 HP) at 2 200 min⁻¹ (2 200 rpm)
 Maximum torque 787 N·m (80.3 kgf·m, 580 lbf·ft)
 at 1 300 min⁻¹ (1 300 rpm)
 Bore and stroke 116 mm × 121 mm (4.6" × 4.8")
 Piston displacement 7.64 L (466 in³)
 Electrical system 12 volt with 95-amp alternator
 Starting system 12 V × 4.5 kW electric motor starting
 Battery 1 × 12 V
 25 amps at 80°F (27°C) reserve capacity
 160 min BCI group 27 cold cranking capacity
 at 0°F (-18°C) 925 amps
 Air cleaner Dual stage dry type with restriction indicator

TRANSMISSION

Torque converter Type: 3-element, single-stage, single phase
 Transmission Type: Full power shift, countershaft type
 transmission

Travel speed with 23.5-25-16PR (L-3) tires km/h (mph)

	Forward	Reverse
1st	7.0 (4.4)	7.0 (4.4)
2nd	11.2 (7.0)	11.2 (7.0)
3rd	22.0 (13.7)	22.0 (13.7)
4th	34.6 (21.5)	—

AXLE AND FINAL DRIVE

Drive system 4-Wheel drive
 Front axle Fixed, semi-floating type
 Rear axle Center-pin-supported, semi-floating
 26° total oscillation
 Reduction gear Spiral bevel gear
 Differential Conventional differential
 Final reduction gear Single-reduction planetary gear

BRAKES

Service brakes Hydraulically actuated, inboard-mounted, wet
 disc brakes actuate all 4 wheels. 2 pedals are
 provided: the right for service braking and the
 left for braking and neutralizing.
 Parking brake Spring-applied hydraulically released dry disc
 brake mounted on the transmission front output
 shaft.

STEERING SYSTEM

Type Center-pivot frame articulation.
 Full-hydraulic power steering.
 Articulation angle 40° each side
 Minimum turning radius at the
 centerline of outside tire 5.46 m (17'11")

HYDRAULIC SYSTEM

Pump For Loader And Steering

Pump 1 gear pump
 Max. oil flow 263 L/min (69.5 US gpm, 57.9 Imp gpm)

Relief Valve Setting

Loader operations 20.7 MPa (211 kgf/cm², 3 000 psi)
 Steering 18.3 MPa (186 kgf/cm², 2 650 psi)

Hydraulic Cylinders

Type Double-acting, piston type
 No. × Bore × Stroke Lift arm: 2 × 160 mm × 712 mm
 (6.3" × 28.0")
 Bucket: 1 × 180 mm × 621 mm
 (7.1" × 24.4")
 Steering: 2 × 90 mm × 494 mm
 (3.5" × 19.4")

Cycle Time with Rated Load in Bucket

Raise 6.2 sec
 Dump 1.8 sec
 Lower 3.5 sec (float)/3.9 sec (power)

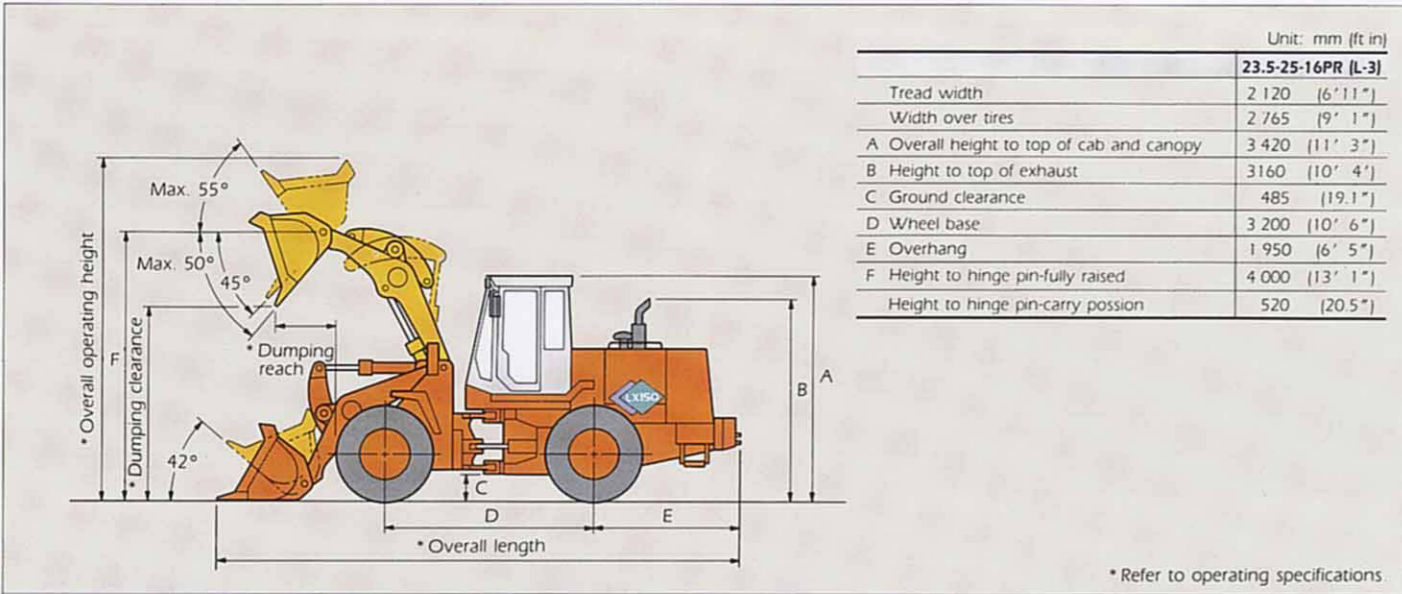
TIRES

23.5-25-12PR(L2) tubeless tires.
 23.5-25-16PR(L3) tubeless tires
 20.5-25-20PR(L3) tubeless tires
 23.5-25, Radial, One Star L3 equivalent

SERVICE REFILL CAPACITIES

Fuel tank 284 L, 75.0 US gal, 63.6 Imp gal
 Engine coolant 28.5 L, 7.5 US gal, 6.3 Imp gal
 Engine oil 22 L, 5.8 US gal, 4.8 Imp gal
 Each Axle (front & rear) 23 L, 6.1 US gal, 5.1 Imp gal
 Torque converter
 & Transmission 14 L, 3.7 US gal, 3.1 Imp gal
 Hydraulic system 115 L, 30.4 US gal, 25.3 Imp gal





Unit: mm (ft in)

	23.5-25-16PR (L-3)
Tread width	2 120 (6' 11")
Width over tires	2 765 (9' 1")
A Overall height to top of cab and canopy	3 420 (11' 3")
B Height to top of exhaust	3 160 (10' 4")
C Ground clearance	485 (19.1")
D Wheel base	3 200 (10' 6")
E Overhang	1 950 (6' 5")
F Height to hinge pin-fully raised	4 000 (13' 1")
Height to hinge pin-carry position	520 (20.5")

* Refer to operating specifications

Bucket type	Stockpiling		Stockpiling/Excavating		
	With teeth	With Bolt-on cutting edges	With teeth	With Bolt-on cutting edges	
Bucket capacity	SAE heaped m ³ (yd ³)	2.9 (3.75)	3.1 (4.00)	2.5 (3.25)	2.7 (3.50)
	SAE struck m ³ (yd ³)	2.45 (3.20)	2.60 (3.40)	2.10 (2.75)	2.20 (2.88)
Dumping clearance at max. height and 45° dump angle	mm (ft in)	2 780 (9' 1")	2 830 (9' 3")	2 855 (9' 4")	2 905 (9' 6")
Reach at 2 130 mm (7' 0") height and 45° dump angle	mm (ft in)	1 735 (5' 8")	1 635 (5' 4")	1 695 (5' 7")	1 595 (5' 3")
Reach at max. height and 45° dump angle	mm (ft in)	1 200 (3' 11")	1 140 (3' 9")	1 125 (3' 8")	1 070 (3' 6")
Reach with arm horizontal and bucket level	mm (ft in)	2 565 (8' 5")	2 490 (8' 2")	2 460 (8' 1")	2 385 (7' 10")
Digging depth	Bucket horizontal mm (ft in)	110 (4.3")	110 (4.3")	105 (4.1")	100 (3.9")
	10° digging angle mm (ft in)	370 (14.6")	355 (14.0")	345 (13.6")	330 (12.9")
Overall operating height	mm (ft in)	5 335 (17' 6")	5 335 (17' 6")	5 235 (17' 2")	5 235 (17' 2")
Overall length	Bucket on ground mm (ft in)	7 960 (26' 1")	7 880 (25' 10")	7 850 (25' 9")	7 770 (25' 6")
	Bucket in carry position mm (ft in)	7 860 (25' 9")	7 800 (25' 7")	7 770 (25' 6")	7 720 (25' 4")
Turning radius (outside corner of bucket carry position)	mm (ft in)	6 440 (21' 2")	6 405 (21' 0")	6 405 (21' 0")	6 370 (20' 11")
Static tipping load*	Straight kg (lb)	12 350 (27 230)	12 015 (26 495)	12 535 (27 640)	12 295 (27 110)
	35° turn kg (lb)	10 815 (23 845)	10 490 (23 130)	10 985 (24 220)	10 765 (23 735)
	Full 40° turn kg (lb)	10 445 (23 030)	10 120 (22 315)	10 615 (23 405)	10 400 (22 930)
Breakout force	kN (kgf, lbf)	166.5 (16 980, 37 440)	152.0 (15 500, 34 180)	182.8 (18 640, 41 100)	165.8 (16 905, 37 275)
Operating weight	kg (lb)	16 055 (35 400)	16 125 (35 555)	15 930 (35 125)	16 010 (35 300)

Notes: 1. All dimensions, weight and performance data based on SAE J732 FEB80 and J742 FEB85 Standard.
 2. Static tipping load and operating weight market with* include 23.5-25-16PR (L-3) tires (no ballast) with lubricants, coolant, full fuel tank, ROPS cab and operator.
 Machine stability and operating weight depend on counterweight, tire size and other attachments. Compensate operating weight and static tipping load with weight changes Listed below.

ADJUSTMENTS TO OPERATING WEIGHTS AND TIPPING LOAD FOR 2.5 m³ (3.25 yd³) BUCKET

Tires and options	Operating weight	Tipping load		
		Straight	35° turn	Full 40° turn
23.5-25-12PR (L-2) tubeless tires	- 145 (- 320)	- 105 (- 230)	- 90 (- 200)	- 90 (- 200)
23.5-25-20PR (L-3) tubeless tires	+ 80 (+ 175)	+ 60 (+ 130)	+ 55 (+ 120)	+ 50 (+ 110)
Rear tire ballast (23.5-25 tires)	+ 1 085 (+ 2 390)	+ 1 545 (+ 3 405)	+ 1 375 (+ 3 030)	+ 1 335 (+ 2 945)
ROPS canopy (in lieu of ROPS cab)	- 145 (- 320)	- 135 (- 300)	- 125 (- 275)	- 125 (- 275)
2nd counterweight*	+ 645 (+ 1 420)	+ 1 480 (+ 3 265)	+ 1 265 (+ 2 790)	+ 1 210 (+ 2 670)
Bucket teeth (removed)	- 120 (- 265)	+ 150 (+ 330)	+ 150 (+ 330)	+ 150 (+ 330)

* Not to be used with CaCl₂

ENGINE

- Air cleaner, dry type with dust valve
- Alternator, 95 amp
- Antifreeze, with level sensor in radiator
- Fan guard
- Blower-type cooling fan
- Fuel filter and water separator
- Muffler

POWER TRAIN

- Power shift-torque convertor-type transmission
- Single lever electric shift
- Automatic shift in 4th speed range
- 2-way shift (upshift/downshift button)
- Transmission oil cooler
- Transmission clutch disconnect
- Axles with conventional differentials
- Front and rear brakes hydraulically actuated, wet disk, inboard mounted
- Conforms to SAE J1473 OCT90, ISO3450
- Parking brake, spring-applied, hydraulically-released, disc and

caliper

- Conforms to J1473 OCT90, ISO3450

HYDRAULICS

- Hydraulic oil cooler
- Two spool hydraulic control valve with single lever control
- Return to dig control for bucket
- Automatic boom height control
- Power steering (two cylinders) and 40 degrees articulation each side

ELECTRICAL SYSTEM

- Lights: Driving with guards, Flashing and turn signals, Stop and tail
- Conforms to SAE J99
- Front and rear work
- Conforms to SAE J1029
- Horn: Conforms to SAE J994, J1446
- Reverse warning alarm: Conforms to SAE J994, J1146
- Battery terminal covers
- Bypass start cover at starter

OPERATOR'S STATION

- Canopy, ROPS/FOPS, isolation mount

Conforms to SAE J1040 APR88, SAE J231 JAN81, ISO3471 and ISO3449

- Tilt type steering wheel
- Adjustable deluxe suspension vinyl seat with armrests
- Two-inch (51 mm) seat belt with retractors
- Conforms to SAE J386
- Ashtray
- Storage compartment
- Floor mat
- Key switch, start and shutoff
- Mirrors, rearview, two inside, two outside
- Conforms to SAE J985

MULTIFUNCTION MONITOR

- Instruments: Engine coolant temp, Fuel gauge, Transmission oil temp
- Digital display (selectable): Engine rpm, Speedometer, Hourmeter, Alternator voltage
- Warning lights: Low radiator coolant level, Air restriction indicator, Low alternator voltage

- Low transmission oil press
- Hydraulic oil filter restriction
- Low brake pressure
- Park brake on
- Secondary steering activated (if equipped)
- Fasten seat belt
- Indicator: Turn signals and flashers
- Built-in diagnostics: Fault code retrieval, Onboard diagnostics for all monitor, wiring, gauges, sensors, etc.

OTHER

- Fenders, front and rear
- Lift/tie-down hooks
- License plate bracket
- Transmission side frame guards
- Articulation locking bar
- Conforms to SAE J276
- Rubber steering stops
- Drawbar
- Lockable engine side shields and rear grille
- Loader boom lock
- Rear bottom guard
- Service steps and hand-rails
- Conforms to SAE J185

BUCKETS

- Auxiliary spill guard
- Bolt-on cutting edges
- Bucket teeth

AXLES

- Front axle disconnect
- Front hydraulic differential lock

ENGINE

- Additional battery
- Battery disconnect

HYDRAULICS

- Two spool valve with two lever control
- Three spool valve, single lever main control with second

control lever for auxiliary function

- Three spool valve, two lever main control with third control lever for auxiliary function

ELECTRICAL SYSTEM

- Alternator 135 amp

OPERATOR'S STATION

- Cab, ROPS/FOPS
- Conforms to SAE J1040 APR88, SAE J231 JAN81, ISO3471 and ISO3449
- Heater, defroster, pressurizer
- Conforms to SAE J1503

Dome light/map light, Front and rear windshield wiper and washer

- Cab, ROPS/FOPS
- Conforms to SAE J1040 APR88, SAE J231 JAN81, ISO3471 and ISO3449
- Air conditioner, heater, defroster, pressurizer
- Conforms to SAE J1503
- Dome light/map light
- Front and rear windshield wiper and washer
- Three in. (76 mm) seat belt with retractors
- Conforms to SAE J386

- Adjustable deluxe suspension cloth seats with armrests
- Secondary steering
- Conforms to SAE J53
- Windows - cab rear opening
- Seat back rest extension

OVERALL VEHICLE

- Auxiliary bottom guards, transmission and front frame
- 2nd (Not applicable with ballasted tires) counterweights
- Ride control system
- Steps, frame mounted with access platform
- Conforms to SAE J185

WE WORKING EQUIPMENT

Bucket (with skid shoes)

Bucket type	Capacity m ³ (yd ³)	Width mm (in)	Weight kg (lb)
Stockpiling w/bolt-on teeth	2.9 (3.75)	2 850 (112.2)	1 520 (3 350)
Stockpiling w/bolt-on cutting edges	3.1 (4.00)	2 850 (112.2)	1 670 (3 680)
Stockpiling/Excavation w/bolt-on teeth	2.5 (3.25)	2 850 (112.2)	1 395 (3 075)
Stockpiling/Excavation w/bolt-on cutting edges	2.7 (3.50)	2 850 (112.2)	1 540 (3 395)

*SAE heaped

BUCKET SELECTION GUIDE

