

ENGINE

John Deere engineered and manufactured. Replaceable wet type cylinder liners provide superior heat dissipation, longer life. High strength alloy heads have replaceable valve seat inserts. The forged steel, 5-main-bearing crankshaft is statically and dynamically balanced for smooth operation. Cast aluminum pistons provide good heat transfer and pistons are sprayed with cooling oil for longer life.

Engine: John Deere 4039D
 Rated power @ 2200 rpm 67 SAE net hp (50 kW)
 71 SAE gross hp (53 kW)

Turbocharger optional
 Cylinders 4
 Displacement 239 cu in (3.917 L)
 Fuel consumption, typical 1.0 to 2 gal/hr (4.7 to 7.6 L/h)
 Torque rise, standard .. 20% at 1200 rpm ... 192 lb-ft (260 Nm)
 with optional turbocharger 25% at 1200 rpm 200 lb-ft
 (271 Nm)

Lubrication Pressure system w/full flow filter and cooler
 Air cleaner Dual stage dry type with safety element and
 precleaner

Electrical system 12 volt
 Alternator 65 amps

TRANSMISSION

John Deere designed and built 4-speed helical gear, synchronized, collar shift transmission with hydraulic reverser. Uses single stage, dual phase 11-inch (280 mm) torque converter with 2.83:1 stall ratio.

TRAVEL SPEEDS

	Gear	Forward		Reverse	
		mph	(km/h)	mph	(km/h)
Four-speed transmission with 16.9-28 rear and 9.00-16 front tyre	1	3.8	5.1	3.4	5.5
	2	6.5	10.4	5.8	9.4
	3	13.9	22.3	12.5	20.1
	4	25.3	40.7	22.8	36.6

FINAL DRIVES

Heavy-duty, inboard mounted planetary type. Evenly distributes axle shock loads over three gears that run in a cooling oil bath.

BRAKES

Hydraulic wet disk brakes are mounted inboard and are pressure cooled and lubricated. They're self-adjusting, self-equalizing, require no periodic service. Individual pedals allow them to be applied together or separately. Parking/emergency brake is an independent system that uses a mechanical V-groove band on differential ring gear.

STEERING

Hydrostatic power steering gives superior control at all speeds. Excellent steering torque allows easy maneuvering with heavy loads.

Non-powered axle
 Curb turning radius with brakes 9 ft 10 in (3 m)
 without brakes 13 ft 3 in (4.04 m)
 Bucket clearance circle with brakes 28 ft 11 in (8.80 m)
 without brakes 35 ft 9 in (10.90 m)

Steering wheel turns, stop to stop 2.2 to 2.9

Mechanical-front-wheel drive
 Curb turning radius with brakes 9 ft 10 in (3 m)
 without brakes 13 ft 3 in (4.04 m)
 Bucket clearance circle with brakes 28 ft 11 in (8.80 m)
 without brakes 35 ft 8 in (10.86 m)

Steering wheel turns, stop to stop 2.3 to 2.8
 Axle oscillation stop to stop, both axles 22 degrees

Axle ratings:	Static	Dynamic	SAEJ43
Front	56,000 lb (25 500 kg)	56,000 lb (25 500 kg)	11,250 lb (5100 kg)
Rear	43,500 lb (19 800 kg)	58,000 lb (26 400 kg)	13,300 lb (6030 kg)

HYDRAULICS

System open center
 Pressure, main relief 2700 psi (18 620 kPa)(190 kg/cm²)
 Pump gear type
 Flow at 2200 rpm 35 gpm (133 L/min)
 Filter, return oil 10 micron, spin-on replaceable element

TYRES

Front	Rear
9.00-16, 10 PR, F3	16.9-28, 10 PR, R1
7.50/8.00, 10 PR, F3	16.9-28, 10 PR, R4
11L-15, 8 PR, F3	
11L-16, 12 PR, F3	
12.5L-15, 8 PR, L1	
With mechanical-front-wheel drive	16.9-28, 10 PR, R1
10.5/-18, 8 PR, TG2	
10.5/-18, 8 PR, TG2	

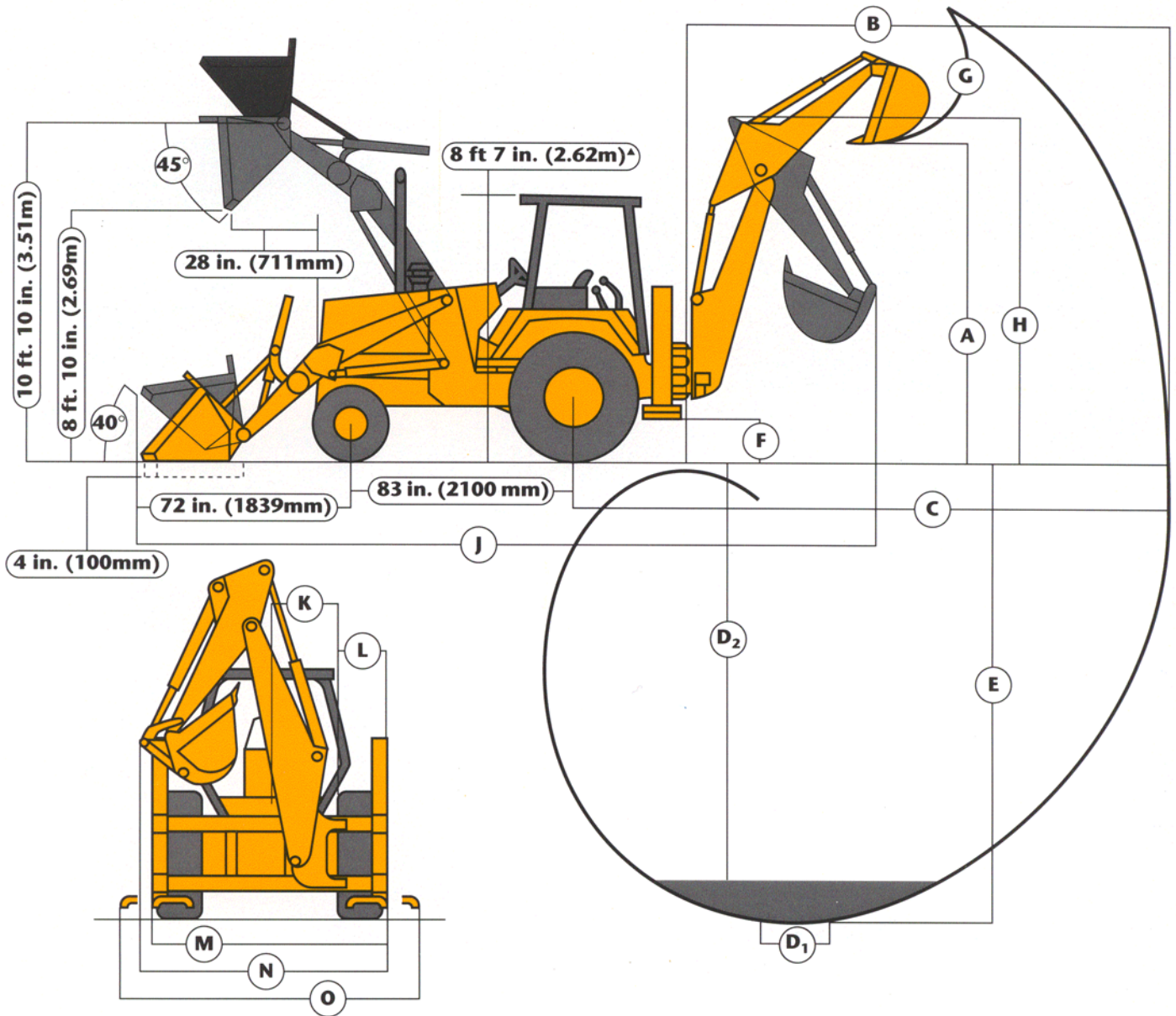
CAPACITIES

Fuel tank 26 gal (98 L)
 Engine coolant 17 qt (16 L)
 Engine oil including filter 9 qt (8.5 L)
 Torque converter and reverser system 8 qt (7 L)
 Hydraulic system 21 gal (79 L)
 Transaxle with MFWD 6 gal (23 L)

OPERATING WEIGHTS

315C 13,850 lb (6281 kg)
 cab adds 420 lb (190 kg)
 mechanical-front-wheel drive adds 190 lb (86 kg)
 extendable dipperstick with required
 counterweight adds 930 lb (422 kg)
 Optional heavier front counterweighting adds 435 lb (197 kg)
 See backhoe and loader performance data for bucket weights

DIMENSIONS



▲ ROPS and Cab

Key:	Backhoe*
A. Loading height, truck loading position	11 ft 6 in (3.51 m)
B. Reach from center of swing mast	17 ft 5.5 in (5.32 m)
C. Reach from center of rear axle	21 ft 7 in (6.59 m)
D. Digging depth (SAE):	
(1) 2-ft. (610 mm) flat bottom	13 ft 11.5 in (4.25 m)
(2) 8-ft. (2440 mm) flat bottom	12 ft 9 in (3.89 m)
E. Maximum digging depth	14 ft 1 in (4.29 m)
F. Ground clearance, minimum	13.8 in (350 mm)
G. Bucket rotation	160 or 180 degrees
H. Transport height	12 ft 2 in (3.70 m)
J. Overall length, transport	18 ft 1 in (5.51 m)
K. Side-shift from tractor centerline	23.5 in (597 mm)
L. Wall to swing centerline	20.6 in (523 mm)
M. Stabilizer width – pads turned in	88.2 in (2240 mm)
N. Overall width (less loader bucket)	92.5 in (2350 mm)
O. Stabilizer width – pads turned out	103.5 in (2630 mm)

*See backhoe performance

	Extendable Dipperstick	
	Retracted	Extended
	11 ft 9 in (3.58 m)	11 ft 9 in (3.58 m)
	17 ft 6.5 in (5.35 m)	21 ft 0.5 in (6.41 m)
	21 ft 8 in (6.60 m)	25 ft 3 in (7.70 m)
	13 ft 11.5 in (4.25 m)	17 ft 9.5 in (5.42 m)
	12 ft 9 in (3.89 m)	16 ft 10 in (5.13 m)
	14 ft 1 in (4.29 m)	18 ft 0 in (5.49 m)
	13.8 in (350 mm)	13.8 in (350 mm)
	160 or 180 degrees	160 or 180 degrees
	12 ft 4 in (3.76 m)	12 ft 4 in (3.76 m)
	18 ft 1 in (5.51 m)	18 ft 1 in (5.51 m)
	23.5 in (597 mm)	23.5 in (597 mm)
	20.6 in (523 mm)	20.6 in (523 mm)
	88.2 in (2240 mm)	88.2 in (2240 mm)
	92.5 in (2350 mm)	92.5 in (2350 mm)
	103.5 in (2630 mm)	103.5 in (2630 mm)

BACKHOE PERFORMANCE

Backhoe*

Digging force, bucket cylinder (power dig position).....	11,570 lb (51.5 kN)(5260 kg)
Digging force, crowd cylinder.....	6650 lb (29.6 kN)(3020 kg)
Swing arc.....	180 deg
Operator control.....	Two levers
Bucket positions.....	12 or 21 deg rollback
Departure angle.....	20.5 deg
Lifting capacity, maximum, boom at 65 deg.....	4000 lb (1820 kg)
Leveling angle.....	8 deg

*Backhoe specifications are with 24-in. x 7.5 cu. ft. (610 mm x 0.21 m³) bucket.

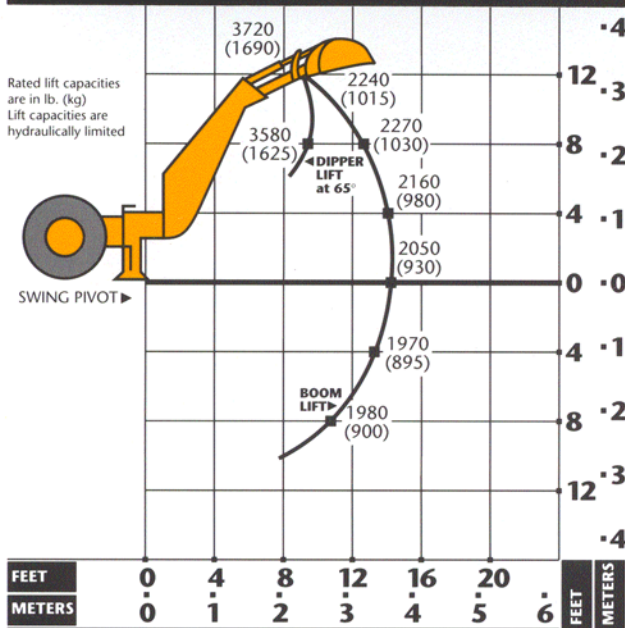
Extendable Dipperstick Retracted

11,400 lb (50.9 kN)(5200 kg)
6650 lb (29.6 kN)(3020 kg)
180 deg
Right foot treadle
8 or 17 deg rollback
20.5 deg
3700 lb (1680 kg)
8 deg

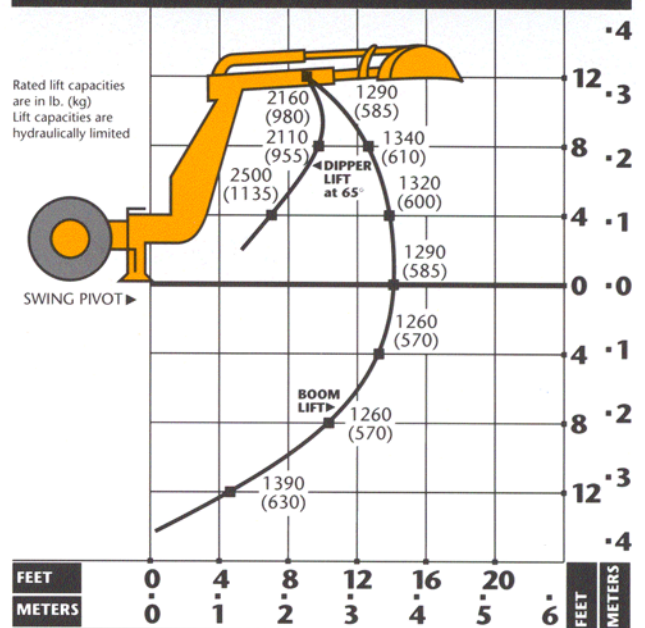
Extended

11,400 lb (50.9 kN)(5200 kg)
4540 lb (20.2 kN)(2060 kg)
180 deg
Right foot treadle
12 or 22 deg rollback
20.5 deg
2400 lb (1090 kg)
8 deg

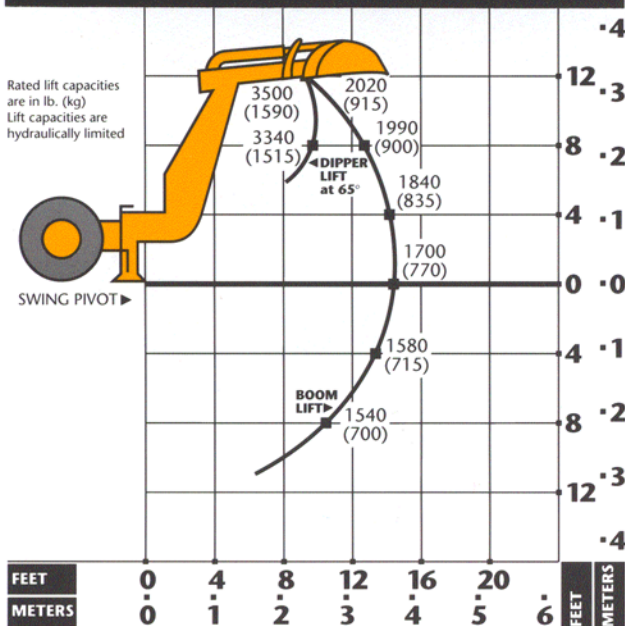
LIFT CAPACITY Backhoe with standard dipperstick. Based on SAE J31.



LIFT CAPACITY Backhoe with extendable dipperstick, extended. Based on SAE J31.



LIFT CAPACITY Backhoe with extendable dipperstick retracted. Based on SAE J31.



BACKHOE BUCKETS

	Width		Capacity		Weight	
	in	(mm)	cu ft	(m ³)	lb	(kg)
Standard-duty	12	(305)	2.5	(0.07)	247	(112)
	16	(406)	3.6	(0.10)	270	(122)
	18	(457)	5.1	(0.14)	338	(153)
	24	(610)	7.5	(0.21)	378	(171)
	30	(762)	10.0	(0.28)	428	(194)
	36	(914)	10.0	(0.28)	432	(196)
Heavy-duty	36	(914)	14.5	(0.41)	674	(306)
	18	(457)	5.1	(0.14)	348	(158)
	24	(610)	7.5	(0.21)	400	(181)
	24	(610)	8.8	(0.25)	460	(209)
	30	(762)	10.0	(0.28)	472	(214)

LOADER PERFORMANCE

Operator control.....	single lever
Breakout force.....	9350 lb (41.6 kN)(4241 kg)
Lifting capacity, full height.....	5700 lb (2585 kg)
Raising time to full height.....	3.3 sec.
Bucket dump time.....	1.1 sec.
Bucket lowering time (power down).....	2.3 sec.

LOADER BUCKETS

Loader:	Width		Heaped Capacity		Weight	
	in	(mm)	cu yd	(m ³)	lb	(kg)
General purpose	92	(2340)	1.0	(0.76)	706	(320)
	92	(2340)	1.3	(1.00)	796	(361)
Long lip	89	(2270)	1.25	(0.96)	750	(340)