

310G 310SG

BACKHOE LOADERS

SPECIFICATIONS



Engine	310G	310SG
Type.....	John Deere 4045D, naturally aspirated standard / John Deere 4045T, turbocharged optional; meets EPA Tier II non-road emissions regulations	John Deere 4045T, turbocharged; meets EPA Tier II non-road emissions regulations
Rated power.....	75 SAE gross hp (56 kW) / 70 SAE net hp (52 kW) @ 2,300 rpm	92.5 SAE gross hp (69 kW) / 86 SAE net hp (64 kW) @ 2,300 rpm
<i>John Deere 4045T with turbocharger</i>	84.5 SAE gross hp (63 kW) / 80 SAE net hp (60 kW) @ 2,200 rpm	N/A
Fuel consumption, typical.....	1.1 to 1.9 gal./hr. (4.2 to 7.2 L/h)	1.3 to 2.3 gal./hr. (4.9 to 8.7 L/h)
Torque rise.....	24 percent	38 percent
With turbocharger.....	30 percent	N/A
Maximum net torque.....	218 lb.-ft. (296 Nm)	277 lb.-ft. (376 Nm)
With turbocharger.....	256 lb.-ft. (347 Nm)	N/A

Transmission

Four-speed, helical cut gear, collar-shift transmission synchronized in all gears with hydraulic reverser (optional full-power-shifted transmission on 310SG)

Travel speeds with 19.5L-24 rear tires	Forward	Reverse	Forward	Reverse
Gear 1.....	3.6 mph (5.8 km/h)	4.0 mph (6.4 km/h)	3.6 mph (5.8 km/h)	4.0 mph (6.4 km/h)
Powershift.....			3.6 mph (5.8 km/h)	4.0 mph (6.4 km/h)
Gear 2.....	5.9 mph (9.5 km/h)	6.6 mph (10.6 km/h)	5.9 mph (9.5 km/h)	6.6 mph (10.6 km/h)
Powershift.....			5.8 mph (9.3 km/h)	6.7 mph (10.8 km/h)
Gear 3.....	13.9 mph (22.4 km/h)	13.9 mph (22.4 km/h)	13.9 mph (22.4 km/h)	13.9 mph (22.4 km/h)
Powershift.....			13.9 mph (22.4 km/h)	16.1 mph (25.9 km/h)
Gear 4.....	20.5 mph (33.0 km/h)	20.5 mph (33.0 km/h)	20.5 mph (33.0 km/h)	20.5 mph (33.0 km/h)
Powershift.....			20.5 mph (33.0 km/h)	N/A

Capacities

Fuel tank (with ground level fueling).....	36 gal. (136 L)	36 gal. (136 L)
Hydraulic system.....	24 gal. (91 L)	24 gal. (91 L)

Hydraulic System

System.....	open center	open center
Pressure		
Backhoe.....	3,625 psi (25 000 kPa)	3,625 psi (25 000 kPa)
Loader.....	2,750 psi (19 000 kPa)	3,625 psi (25 000 kPa)
Flow @ 2,200 rpm.....	28 gpm (106 L/min.)	
Backhoe.....		37 gpm (140 L/min.)
Loader.....		28 gpm (106 L/min.)

SAE Operating Weights

With 17.5L-24, 10 PR R4 rear tires; 11L-15, 8 PR F3 front tires; 1.00-cu. yd. (0.76 m ³) loader bucket; and 24-in. x 6.5-cu. ft. (610 mm x 0.18 m ³) backhoe bucket standard.....	12,800 lb. (5806 kg)	
With 19.5L-24, 8 PR R4 rear tires; 11L-16, 12 PR F3 front tires; 1.12-cu. yd. (0.86 m ³) loader bucket; and 24-in. x 7.5-cu. ft. (610 mm x 0.21 m ³) backhoe bucket standard.....		13,500 lb. (6124 kg)
Cab adds.....	580 lb. (263 kg)	580 lb. (263 kg)
Mechanical-front-wheel-drive with tires adds.....	370 lb. (168 kg)	485 lb. (220 kg)
Extendable dipperstick excluding required counterweight adds.....	440 lb. (200 kg)	490 lb. (222 kg)
Typical operating weight with cab, MFWD with tires, extendable dipperstick, and two counterweights equaling 900 lb. (408 kg).....	15,090 lb. (6845 kg)	15,955 lb. (7237 kg)
Backhoe bucket coupler adds.....	130 lb. (59 kg)	138 lb. (63 kg)

Backhoe Performance

Bucket range.....	12–30 in. (305–762 mm)	12–36 in. (305–914 mm)
With standard backhoe		
Digging force, bucket cylinder.....	11,106 lb. (49.4 kN)	11,990 lb. (53.3 kN)
With heavy-duty cylinder option.....		15,236 lb. (67.7 kN)
Digging force, crowd cylinder.....	7,006 lb. (31.2 kN)	8,090 lb. (36.0 kN)
Bucket rotation.....	190 degrees	190 degrees

Loader Performance

Bucket range.....	1.00–1.25 cu. yd. (0.76–0.96 m ³)	1.18–1.32 cu. yd. (0.91–1.01 m ³)
1.00-cu. yd. (0.76 m ³)		1.25-cu. yd. (0.96 m ³)
Heavy-Duty Long Lip		Heavy-Duty Long Lip
Breakout force.....	8,100 lb. (36.0 kN)	10,210 lb. (45.4 kN)
Lifting capacity, full height.....	5,800 lb. (2631 kg)	7,340 lb. (3332 kg)

410G 710G

BACKHOE LOADERS

SPECIFICATIONS

CONSTRUCTION EQUIPMENT

Engine

410G

Type.....	John Deere 4045T, turbocharged; meets EPA Tier II non-road emissions regulations
Rated power	98 SAE gross hp (73 kW) / 92 SAE net hp (69 kW) @ 2,200 rpm
Fuel consumption, typical	1.5 to 2.5 gal./hr. (5.7 to 9.5 L/h)
Torque rise.....	32 percent
Maximum net torque.....	293 lb.-ft. (397 Nm)

710G

John Deere 6068T, turbocharged; meets EPA Tier II non-road emissions regulations
129 SAE gross hp (96 kW) / 118 SAE net hp (88 kW) @ 2,200 rpm
2.0 to 3.3 gal./hr. (7.6 to 12.5 L/h)
26 percent
393 lb.-ft. (532 Nm)

Transmission

Four-speed, helical cut gear, full power-shifted transmission with hydraulic reverser

Travel speeds*	Forward	Reverse	Forward	Reverse
Gear 1.....	3.6 mph (5.8 km/h)	4.0 mph (6.4 km/h)	3.8 mph (6.2 km/h)	4.0 mph (6.4 km/h)
Gear 2.....	5.9 mph (9.5 km/h)	6.6 mph (10.6 km/h)	6.4 mph (10.3 km/h)	6.6 mph (10.6 km/h)
Gear 3.....	13.9 mph (22.4 km/h)	16.1 mph (25.9 km/h)	15.3 mph (24.7 km/h)	16.1 mph (25.9 km/h)
Gear 4.....	20.5 mph (33.0 km/h)		23.0 mph (37.1 km/h)	

*410G with 19.5L-24 rear tires; 710G with 21L-24 rear and 14.5/75-16.1 front tires.

Capacities

Fuel tank (with ground level fueling)	36 gal. (136 L)	69 gal. (261 L)
Hydraulic system	26 gal. (98 L)	42 gal. (159 L)

Hydraulic System

System	pressure compensated load sensing (PCLS)	pressure compensated load sensing (PCLS)
Pressure, main relief	3,625 psi (25 000 kPa)	3,625 psi (25 000 kPa)
Flow @ 2,200 rpm.....	43 gpm (163 L/min.)	52 gpm (197 L/min.)

SAE Operating Weights

Standard	15,000 lb. (6804 kg)	23,000 lb. (10 430 kg)
Cab adds	580 lb. (263 kg)	645 lb. (293 kg)
Mechanical-front-wheel-drive adds		
With tires	325 lb. (147 kg)	
Less tires.....		240 lb. (109 kg)
Extendable dipperstick adds		
Excluding required counterweight	638 lb. (289 kg)	
With required counterweight.....		890 lb. (404 kg)
Typical operating weight with cab, MFWD with tires, and extendable dipperstick		
Four counterweights equaling 1,262 lb. (572 kg)	18,500 lb. (8392 kg)	
Two counterweights equaling 1,628 lb. (738 kg).....		26,500 lb. (12 020 kg)
Optional counterweight adds		
400 lb.	400 lb. (181 kg)	
650 lb.	650 lb. (295 kg)	
250 lb. bolt-on	250 lb. (113 kg)	
Front.....		660 lb. (299 kg)
Backhoe bucket coupler adds	130 lb. (59 kg)	N/A

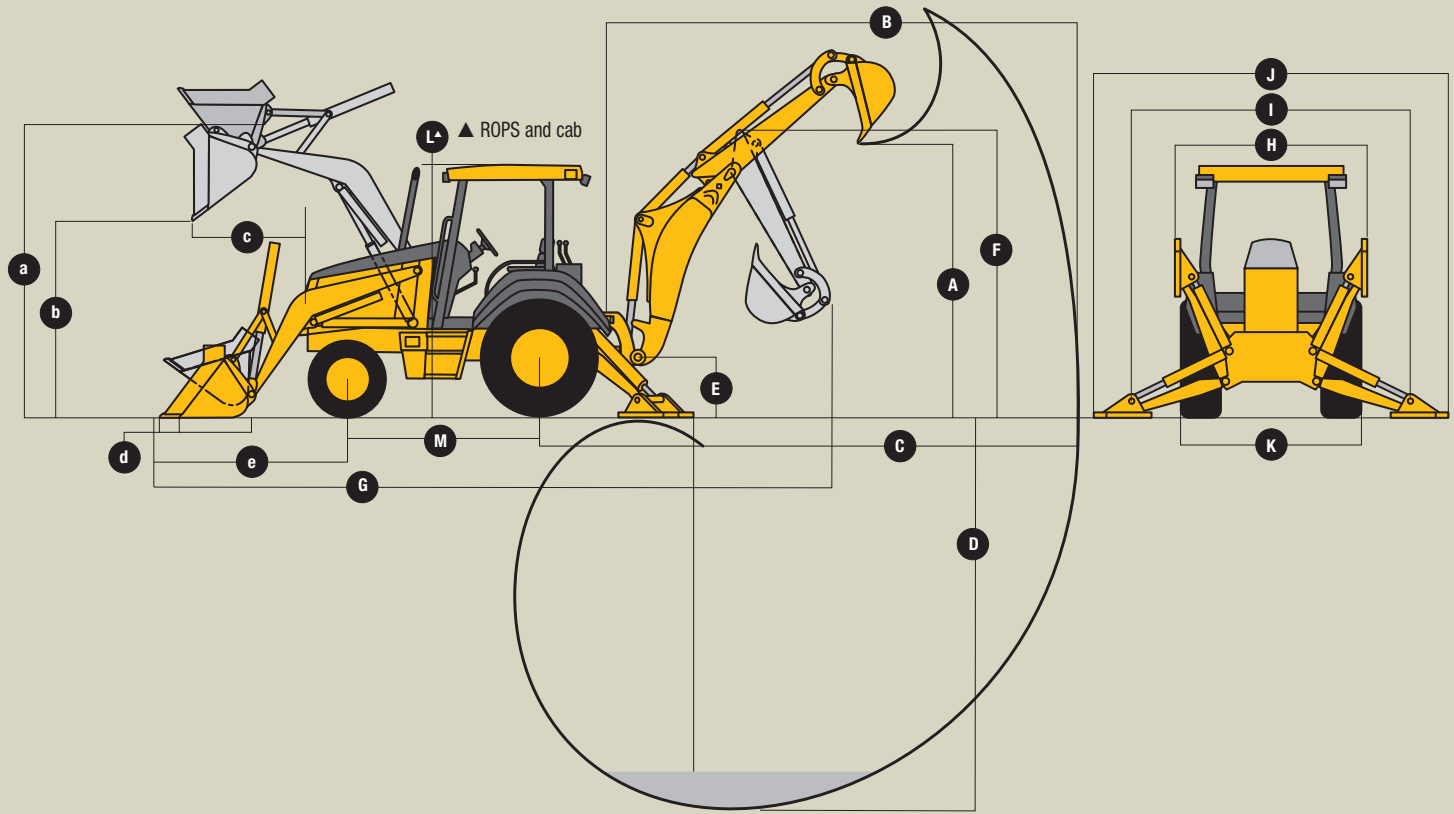
Backhoe Performance

Bucket range	12–36 in. (305–914 mm)	18–36 in. (457–914 mm)
With standard backhoe		
Digging force, bucket cylinder	14,801 lb. (65.8 kN)	17,000 lb. (75.6 kN)
Digging force, crowd cylinder.....	8,741 lb. (38.9 kN)	11,750 lb. (52.3 kN)
Bucket rotation	190 degrees	190 degrees

Loader Performance

Range	1.25–1.50 cu. yd. (0.96–1.15 m ³)	1.375–1.87 cu. yd. (1.00–1.43 m ³)
	1.25-cu. yd. (0.96 m ³)	1.87-cu. yd. (1.34 m ³)
	Heavy-Duty Long Lip	Standard-Duty and MFWD
Breakout force	10,210 lb. (45.4 kN)	14,800 lb. (66.0 kN)
Lifting capacity, full height	7,340 lb. (3332 kg)	8,693 lb. (3943 kg)

310G/310SG Backhoe Loaders



Backhoe Dimensions

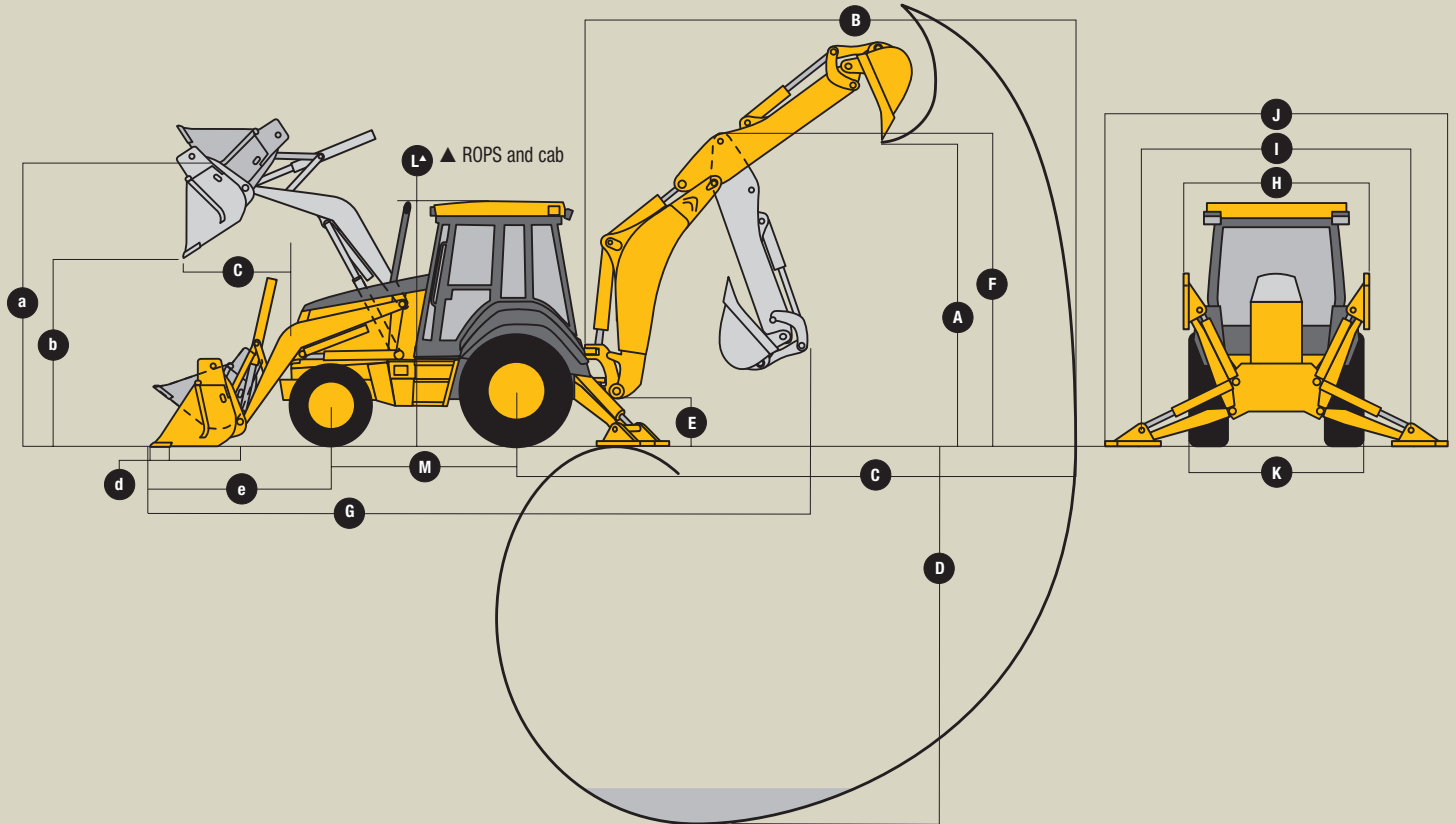
	310G	310SG
	<i>With Standard Backhoe*</i>	<i>With Extendable Dipperstick Extended*</i>
A Loading height, truck loading position.....	10 ft. 11 in. (3.33 m)	11 ft. 3 in. (3.43 m)
B Reach from center of swing pivot	17 ft. 10 in. (5.44 m)	18 ft. 3 in. (5.56 m)
C Reach from center of rear axle.....	21 ft. 4 in. (6.50 m)	21 ft. 9 in. (6.63 m)
D Maximum digging depth	14 ft. 3 in. (4.34 m)	14 ft. 6 in. (4.42 m)
E Ground clearance, minimum	12 in. (305 mm)	13 in. (330 mm)
F Transport height.....	11 ft. 3 in. (3.43 m)	11 ft. 6 in. (3.51 m)
G Overall length, transport.....	23 ft. 3 in. (7.09 m)	23 ft. 6 in. (7.16 m)
H Stabilizer width – transport with ROPS.....	7 ft. 2 in. (2.18 m)	7 ft. 2 in. (2.18 m)
I Stabilizer spread – operating	10 ft. 2 in. (3.10 m)	10 ft. 2 in. (3.10 m)
J Stabilizer overall width – operating	11 ft. 7 in. (3.53 m)	11 ft. 7 in. (3.53 m)
K Width over tires.....	81.7 in. (2.07 m)	86 in. (2.18 m)
L Height to tops of ROPS.....	9 ft. (2.74 m)	9 ft. 2 in. (2.79 m)
M Length from axle to axle	82.7 in. (2100 mm)	82.7 in. (2100 mm)

*Backhoe specifications are with 24-in. x 6.5-cu. ft. (610 mm x 0.18 m³) bucket for the 310G and with 24-in. x 7.5-cu. ft. (610 mm x 0.21 m³) bucket for the 310SG.

Loader Dimensions

a Height to bucket hinge pin, maximum.....	11 ft. 1 in. (3.38 m)	11 ft. 2 in. (3.40 m)
b Dump clearance, bucket at 45 degrees.....	8 ft. 10 in. (2.69 m)	8 ft. 2 in. (2.59 m)
c Reach at full height, bucket at 45 degrees.....	30.9 in. (785 mm)	36.0 in. (911 mm)
d Digging depth below ground, bucket level.....	6.3 in. (160 mm)	5.8 in. (147 mm)
e Length from front axle centerline to bucket cutting edge.....	80 in. (2030 mm)	80 in. (2030 mm)
Raising time to full height.....	5.2 sec.	4.9 sec.
Bucket dump time	1.1 sec.	1.1 sec.
Bucket lowering time (power down).....	1.9 sec.	1.9 sec.

410G/710G Backhoe Loaders



Backhoe Dimensions

	410G	710G
	With Standard Backhoe*	With Extendable Dipperstick Extended*
A Loading height, truck loading position.....	12 ft. 6 in. (3.81 m)	14 ft. 3 in. (4.34 m)
B Reach from center of swing pivot	19 ft. 8 in. (5.99 m)	22 ft. 6 in. (6.86 m)
C Reach from center of rear axle.....	23 ft. 4 in. (7.11 m)	26 ft. 8 in. (8.13 m)
D Maximum digging depth	15 ft. 10 in. (4.83 m)	17 ft. 10 in. (5.44 m)
E Ground clearance, minimum	14 in. (356 mm)	14 in. (356 mm)
F Transport height.....	12 ft. 11 in. (3.94 m)	13 ft. 8 in. (4.17 m)
G Overall length, transport.....	23 ft. 11 in. (7.29 m)	26 ft. 9 in. (8.15 m)
H Stabilizer width – transport with ROPS.....	7 ft. 6 in. (2.30 m)	7 ft. 11 in. (2.41 m)
I Stabilizer spread – operating	11 ft. 4 in. (3.45 m)	13 ft. 1 in. (3.99 m)
J Stabilizer overall width.....	13 ft. 3 in. (4.03 m)	15 ft. 3 in. (4.65 m)
K Width over tires.....	86 in. (2.18 m)	90.5 in. (2.29 m)
L Height to tops of ROPS.....	9 ft. 3 in. (2.82 m)	9 ft. 9 in. (2.97 m)
M Length from axle to axle	82.7 in. (2100 mm)	98.9 in. (2511 mm)

*Backhoe specifications are with 24-in. x 7.5-cu. ft. (610 mm x 0.21 m³) bucket for the 410G and with 24-in. x 11.0-cu. ft. (610 mm x 0.31 m³) bucket for the 710G.

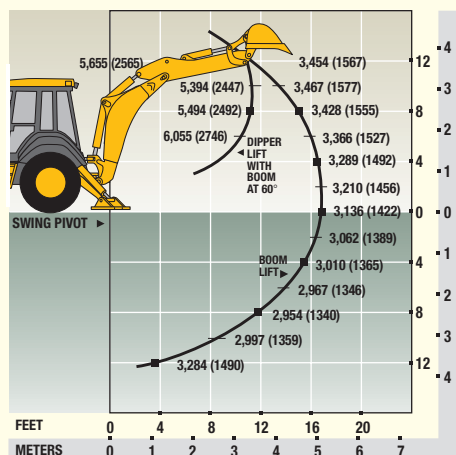
Loader Dimensions

a Height to bucket hinge pin, maximum.....	11 ft. (3.35 m)	12 ft. 5 in. (3.78 m)
b Dump clearance, bucket at 45 degrees.....	8 ft. 4 in. (2.49 m)	9 ft. 4 in. (2.84 m)
c Reach at full height, bucket at 45 degrees.....	35.5 in. (902 mm)	30.3 in. (770 mm)
d Digging depth below ground, bucket level.....	4.2 in. (107 mm)	4.1 in. (104 mm)
e Distance from front axle centerline to bucket cutting edge.....	82.6 in. (2097 mm)	86.5 in. (2198 mm)
Raising time to full height	4.8 sec.	4.3 sec.
Bucket dump time	2.0 sec.	1.3 sec.
Bucket lowering time (power down).....	2.3 sec.	3.2 sec.

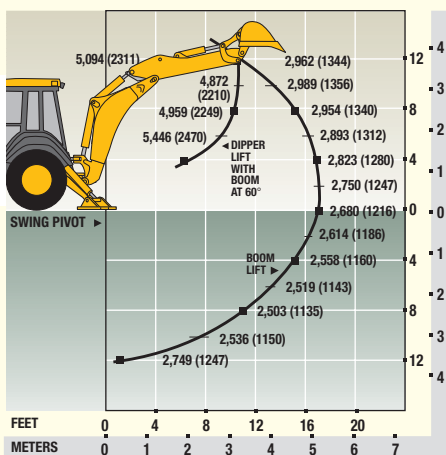
410G/710G Backhoe Loaders

Lift capacities are over-end values in lb. (kg) according to SAE J31. Figures listed are 87% of the maximum lift force available. Base vehicle includes counterweight.

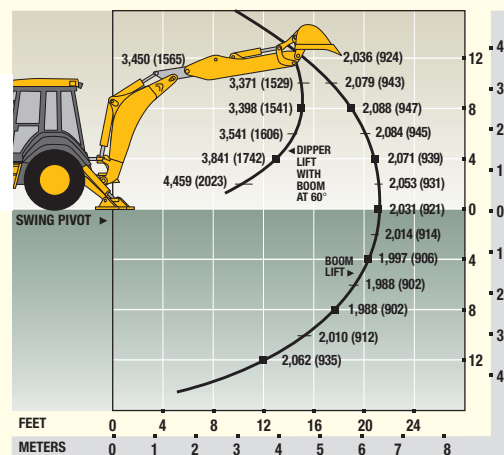
410G BACKHOE WITH
STANDARD DIPPERSTICK



410G BACKHOE WITH 4-FT. (1.22 M)
EXTENDABLE DIPPERSTICK, RETRACTED

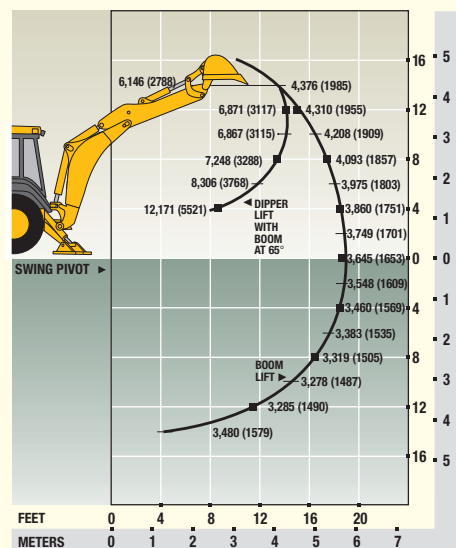


410G BACKHOE WITH 4-FT. (1.22 M)
EXTENDABLE DIPPERSTICK, EXTENDED

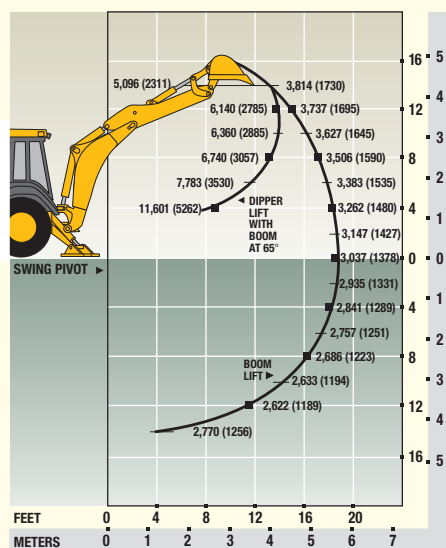


Lift capacities are over-end values in lb. (kg) according to SAE J31. Figures listed are 87% of the maximum lift force available. Base vehicle includes counterweight.

710G BACKHOE WITH
STANDARD DIPPERSTICK



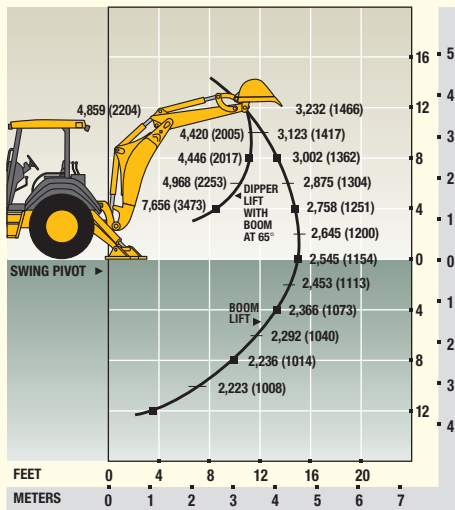
710G BACKHOE WITH 4-FT. 6-IN. (1.37 M)
EXTENDABLE DIPPERSTICK, RETRACTED



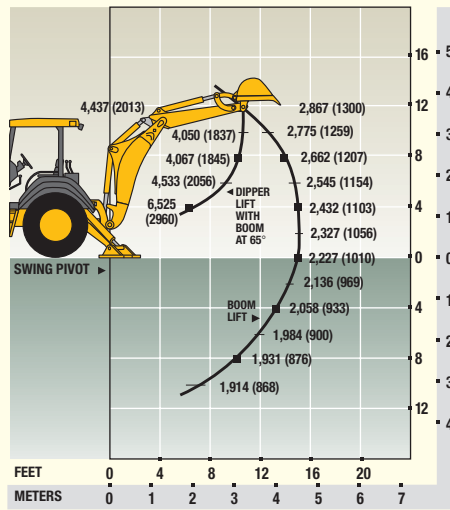
310G/310SG Backhoe Loaders

Lift capacities are over-end values in lb. (kg) according to SAE J31. Figures listed are 87% of the maximum lift force available. Base vehicle includes counterweight.

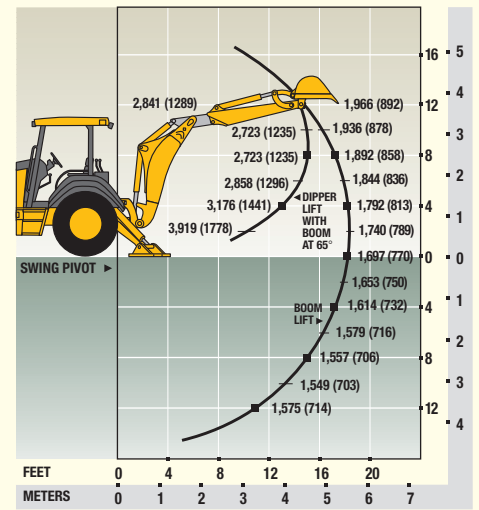
310G BACKHOE WITH
STANDARD DIPPERSTICK



310G BACKHOE WITH 3-FT. 6-IN. (1.07 M)
EXTENDABLE DIPPERSTICK, RETRACTED

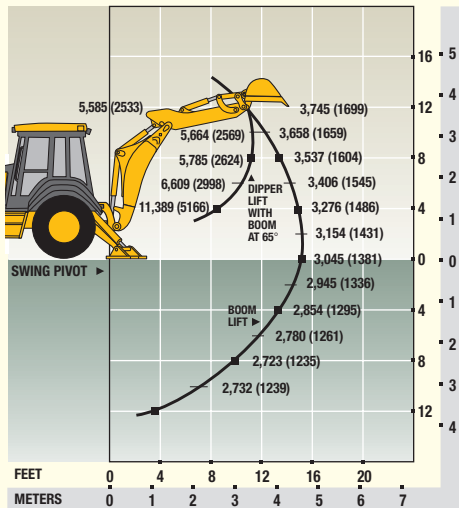


310G BACKHOE WITH 3-FT. 6-IN. (1.07 M)
EXTENDABLE DIPPERSTICK, EXTENDED

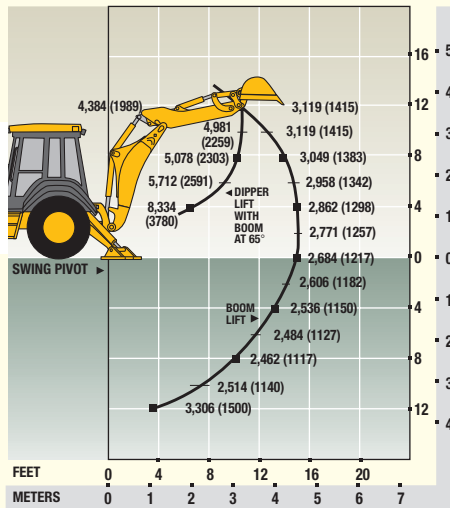


Lift capacities are over-end values in lb. (kg) according to SAE J31. Figures listed are 87% of the maximum lift force available. Base vehicle includes counterweight.

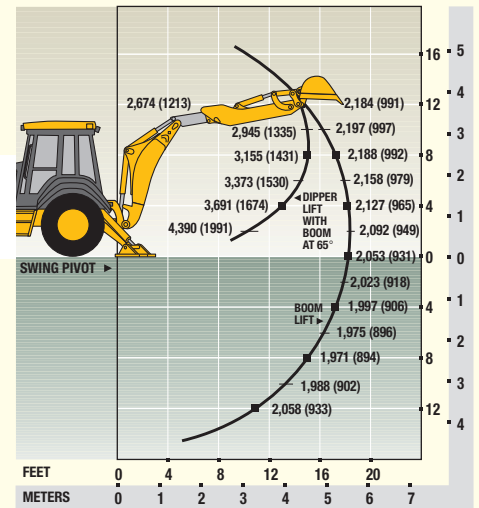
310SG BACKHOE WITH
STANDARD DIPPERSTICK



310SG BACKHOE WITH 3-FT. 6-IN. (1.07 M)
EXTENDABLE DIPPERSTICK, RETRACTED



310SG BACKHOE WITH 3-FT. 6-IN. (1.07 M)
EXTENDABLE DIPPERSTICK, EXTENDED



For more detailed spec information and available options, log on to www.deere.com.

310G / 310SG / 410G / 710G Backhoe Loaders

Key: ● Standard equipment ▲ Optional or special equipment

*See your John Deere dealer for further information.

310G	310SG	410G	710G	Engine
●	●	●	●	John Deere Model 4045D – 4.5 liter, 70 SAE net hp naturally aspirated, isolation mounted
▲	▲	▲	▲	John Deere Model 4045T – 4.5 liter, 80 SAE net hp turbocharged, isolation mounted
●	●	●	●	John Deere Model 4045T – 4.5 liter, 86 SAE net hp turbocharged, isolation mounted
●	●	●	●	John Deere Model 4045T – 4.5 liter, 92 SAE net hp turbocharged, isolation mounted
●	●	●	●	John Deere Model 6068T – 6.8 liter, 118 SAE net hp turbocharged, isolation mounted
●	●	●	●	Meets EPA Tier II non-road emissions regulations
●	●	●	●	Vertical spin-on engine oil filter
●	●	●	●	Vertical spin-on fuel filter with water separator
▲	▲	▲	▲	Vertical spin-on secondary fuel filter
●	●	●	●	Oil-to-water engine oil cooler
●	●	●	●	Antifreeze, -34°F (-37°C)
●	●	●	●	Coolant recovery tank
●	●	●	●	Serpentine belt with automatic belt tensioner
●	●	●	●	Suction-type cooling fan
●	●	●	●	Enclosed safety fan guard
▲	▲	▲	▲	High ambient temperature engine cooling
●	●	●	●	Dual-element dry-type air cleaner with evacuator valve and prescreener
●	●	●	●	Muffler, underhood with curved-end exhaust stack
▲	▲	▲	▲	Chrome exhaust extension
▲	▲	▲	▲	Electric ether starting aid
▲	▲	▲	▲	Engine coolant heater, 1,000 watts
Power Train				
●	▲	●	●	Collar-shift transmission with torque converter: Fully synchronized four forward, four reverse speeds / Isolation mounted to mainframe
●	●	●	●	Powershift transmission: Torque converter with electrically actuated twist grip F-N-R in 1st through 4th gears
●	●	●	●	Transmission oil cooler
●	●	●	●	Vertical spin-on transmission filter
●	●	●	●	Electric forward-neutral-reverse control lever with neutral start interlock
●	●	●	●	Electric clutch cutoff on gearshift and loader levers
●	●	●	●	Differential lock, electric foot-actuated
●	●	●	●	Planetary final drives
●	●	●	●	Power-assisted hydraulic service brakes (conform to SAE J1473): Inboard, wet multi-disc, self adjusting and self equalizing
●	●	●	●	Parking/emergency brake with electric switch control (conforms to SAE J1473): Spring applied, hydraulically released wet multi-disc / Independent of service brakes
●	●	●	●	Hydrostatic power steering with emergency manual mode
●	●	●	●	Non-powered front axle
▲	▲	▲	▲	Mechanical-front-wheel-drive: Electric on/off control / Drive-shaft guard / Sealed axle
▲	▲	▲	▲	Mechanical-front-wheel-drive with limited-slip differential: Electric on/off control / Drive-shaft guard / Sealed axle
●	●	●	●	11L-15 F3 front tires
▲	▲	▲	▲	11L-16 F3 front tires
▲	▲	▲	▲	12-16.5 traction front tires
▲	▲	▲	▲	12.5/80-18 traction front tires
▲	▲	▲	▲	14.5/75-16.1 F3 front tires
●	●	●	●	16.9-24 R4 rear tires
▲	▲	▲	▲	19.5L-24 R4 rear tires
▲	▲	▲	▲	21L-24 R4 rear tires
▲	▲	▲	▲	15-19.5 SS-1 front tires
▲	▲	▲	▲	16.5L-16.1 L-1 front tires
●	●	●	●	21L-28 R4 rear tires
▲	▲	▲	▲	20.5-25 L-2 rear tires
▲	▲	▲	▲	Rear wheel spacers for use with chains
Backhoe				
●	●	●	●	Backhoe with standard dipperstick, 14-ft. 3-in. digging depth
●	●	●	●	Backhoe with standard dipperstick, 14-ft. 6-in. digging depth
●	●	●	●	Backhoe with standard dipperstick, 15-ft. 10-in. digging depth
●	●	●	●	Backhoe with standard dipperstick, 18-ft. 2-in. digging depth

310G	310SG	410G	710G	Backhoe (continued)
●	●	●	●	Two-lever (Deere) backhoe controls
▲	▲	▲	▲	Two-lever pilot controls with pattern-selection feature
▲	▲	▲	▲	Three-lever (Case) backhoe controls
▲	▲	▲	▲	Four-lever (Ford) backhoe controls
▲	▲	▲	▲	SAE excavator two-lever backhoe controls
●	●	●	●	Backhoe transport lock lever
●	●	●	●	Swing lock pin stored in operator's station
●	●	●	●	Stabilizer valve with two-direction anti-drift valves
●	●	●	●	Pivoting stabilizers with reversible pads
▲	▲	▲	▲	Extended stabilizers*
▲	▲	▲	▲	Shortened stabilizers
▲	▲	▲	▲	Stabilizer cylinder guards
●	●	●	●	Less bucket, with bucket pins
▲	▲	▲	▲	Standard-duty backhoe bucket with lift loops
▲	▲	▲	▲	Heavy-duty backhoe bucket with lift loops
▲	▲	▲	▲	Severe-duty backhoe bucket with lift loops
▲	▲	▲	▲	Backhoe coupler for "C," "D," "E," and "G" Series
▲	▲	▲	▲	John Deere buckets, Case buckets, and Cat buckets
▲	▲	▲	▲	Extendable dipperstick, 3-ft. 6-in. extension
▲	▲	▲	▲	Extendable dipperstick, 4-ft. extension
▲	▲	▲	▲	Extendable dipperstick, 5-ft. extension
▲	▲	▲	▲	Auxiliary backhoe valve for swingers, thumbs, etc.
▲	▲	▲	▲	Auxiliary backhoe valve for hammers, compactors
▲	▲	▲	▲	Auxiliary backhoe plumbing for hammers, compactors
▲	▲	▲	▲	Auxiliary backhoe plumbing for swingers, thumbs, etc.
▲	▲	▲	▲	SAE-controlled load-lowering device valves
Loader				
●	●	●	●	Hydraulic self leveling
●	●	●	●	Return-to-dig feature
●	●	●	●	Single-lever control with electric clutch cutoff switch
●	●	●	●	Bucket-level indicator
●	●	●	●	Loader boom service lock
▲	▲	▲	▲	Ride control
▲	▲	▲	▲	Auxiliary loader hydraulics with two-lever control
▲	▲	▲	▲	Hydraulic coupler for buckets, forks, etc.
▲	▲	▲	▲	Loader front coupler*
●	●	●	●	Less bucket, with bucket pins
▲	▲	▲	▲	Heavy-duty loader bucket with lift loops, pre-punched for bolt-on cutting edge
▲	▲	▲	▲	Heavy-duty loader buckets with bolt-on cutting edges, skid plates, and lift loops
▲	▲	▲	▲	Multipurpose loader buckets with bolt-on cutting edges, skid plates, and lift loops
Hydraulic System				
●	●	●	●	28-gpm (106 L/min.) gear pump, open-center system
●	●	●	●	37-gpm (140 L/min.) tandem gear pump, open-center system
●	●	●	●	43-gpm (163 L/min.) axial piston pump, PCLS system
●	●	●	●	52-gpm (197 L/min.) axial piston pump, PCLS system
●	●	●	●	Independent hydraulic reservoir
●	●	●	●	Swing-down hydraulic oil cooler
●	●	●	●	"O"-ring face seal connectors
●	●	●	●	10-micron vertical spin-on filter
Electrical				
●	●	●	●	12-volt system
●	●	●	●	65-amp alternator
●	●	●	●	Single battery with 190-min. reserve capacity and 950 CCA
▲	▲	▲	▲	Dual batteries with 380-min. reserve capacity and 1,900 CCA
●	●	●	●	Positive terminal battery cover
●	●	●	●	Blade-type multi-fused circuits
●	●	●	●	By-pass start safety cover on starter
Lights				
●	●	●	●	Four halogen driving/work lights, 32,500 candlepower each (two front and two rear)
▲	▲	▲	▲	Six additional halogen work lights, 32,500 candlepower each (two front, two rear, and two side)
●	●	●	●	Two front and two rear turn signal/flashings
●	●	●	●	Two rear stop and tail
●	●	●	●	Two rear reflectors
▲	▲	▲	▲	Rotating beacon

310G	310SG	410G	710G	Operator's Station
●	●	●	●	Modular-design ROPS/FOPS canopy with molded roof (conforms to SAE J1040): Isolation mounted
●	●	●	●	Left and right access
●	●	●	●	Slip-resistant steps and ergonomically located handholds
●	●	●	●	Molded floor mat
●	●	●	●	Headliner
●	●	●	●	Coat hook
●	●	●	●	12-volt outlets (2)
●	●	●	●	Built-in beverage holders
●	●	●	●	Built-in Operator's Manual storage compartment with manual
●	●	●	●	Interior rearview mirror
▲	▲	▲	▲	Outside rearview mirrors
●	●	●	●	Hand throttle with fuel-economy setting at 2,100 rpm
●	●	●	●	Suspended foot throttle
▲	▲	▲	▲	Tilt steering
●	●	●	●	Horn
●	●	●	●	Key start switch with electric fuel shutoff
●	●	●	●	Engine coolant temperature gauge, illuminated electronic, with audible warning
●	●	●	●	Torque converter oil temperature gauge, illuminated electronic, with audible warning
●	●	●	●	Fuel gauge, illuminated electronic
●	●	●	●	Digital display of engine hours, engine rpm, and system voltage
●	●	●	●	Digital display of hydraulic oil temperature
●	●	●	●	Monitor system with audible and visual warnings: Engine air restriction indicator / Engine oil pressure indicator with audible warning / Hydraulic filter restriction indicator / Parking brake on/off indicator with audible warning / Seat belt indicator / Low brake pressure
●	●	●	●	Suspension vinyl swivel seat with armrests and lumbar support
▲	▲	▲	▲	Suspension fabric swivel seat with armrests and lumbar support
▲	▲	▲	▲	Air suspension fabric swivel seat with armrests and lumbar support
●	●	●	●	2-in. seat belt with retractors
▲	▲	▲	▲	3-in. seat belt with retractors
▲	▲	▲	▲	Cab: Headliner, dome light, left and right cab doors, tinted safety glass, one rear and one front windshield wiper, fresh air intake heater/defroster/pressurizer (40,000-Btu/hr. [11.7 kW] heater), and 65-amp alternator standard / Front windshield washer, air conditioning (26,000-Btu/hr. [7.6 kW] output and CFC-free R134a refrigerant), 95-amp alternator, and AM/FM/weatherband radio optional / 12-volt outlets (3)
Overall Vehicle				
●	●	●	●	One-piece unitized construction mainframe
●	●	●	●	Vehicle tie-downs, two front and two rear
●	●	●	●	Remote grease bank for front axle
●	●	●	●	Rigid-mounted front bumper
▲	▲	▲	▲	400-lb. (181 kg) front counterweight
▲	▲	▲	▲	600-lb. (272 kg) front counterweight
▲	▲	▲	▲	850-lb. (386 kg) front counterweight
●	●	●	●	930-lb. (419 kg) front counterweight
▲	▲	▲	▲	1,100-lb. (500 kg) front counterweight
▲	▲	▲	▲	1,350-lb. (614 kg) front counterweight
▲	▲	▲	▲	1,630-lb. (734 kg) front counterweight
●	●	●	●	Fuel tank, 36 gal. (136 L), ground-level fueling
●	●	●	●	Fuel tank, 69 gal. (261 L), ground-level fueling
▲	▲	▲	▲	Two-position easy-tilt hood
●	●	●	●	Front grille screen
●	●	●	●	Vandal protection for instrument panel, engine hood, toolbox, hydraulic reservoir, radiator, and fuel tank
●	●	●	●	Reverse warning alarm
●	●	●	●	Dent-resistant full-coverage rear fenders
▲	▲	▲	▲	Front fenders*
▲	▲	▲	▲	SMV emblem
▲	▲	▲	▲	Rental decal kit
▲	▲	▲	▲	Special color paint*



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 5,000-ft. (1,500 m) altitude for the 310G and up to 10,000-ft. (3,050 m) for the 310G with optional altitude-compensating turbocharger, the 310SG, the 410G, and the 710G. 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 310G unit with 17.5L-24, 10 PR R4 rear tires, 11L-15, 8 PR F3 front tires, 1.00-cu. yd. (0.76 m³) loader bucket, and 24-in. x 6.5-cu. ft. (610 mm x 0.18 m³) backhoe bucket; a 310SG unit with 19.5L-24, 8 PR R4 rear tires, 11L-16, 12 PR F3 front tires, 1.12-cu. yd. (0.86 m³) loader bucket, and 24-in. x 7.5-cu. ft. (610 mm x 0.21 m³) backhoe bucket; a 410G unit with 19.5L-24, 10 PR R4 rear tires, 11L16, 12 PR F3 front tires, 1.30-cu. yd. (1.00 m³) loader bucket, and 24-in. x 7.5-cu. ft. (610 mm x 0.21 m³) backhoe bucket; and a 710G unit with 21L-28, 14 PR rear tires, 14.5/75-16.1, 10 PR F3 front tires, 1.62-cu. yd. (1.24 m³) loader bucket, 24-in. x 11.1-cu. ft. (610 mm x 0.31 m³) backhoe bucket.

