



310G 310SG 410G 710G







MODEL NO.

310G

All the backhoe you may ever need.

Don't let its competitive price fool you. With many of the same features found on our bigger backhoes, the 310G comes equipped, not stripped — easily making it the value leader in the 14-foot class. And just right for fleet owners, rental yards, and moderate-duty applications.



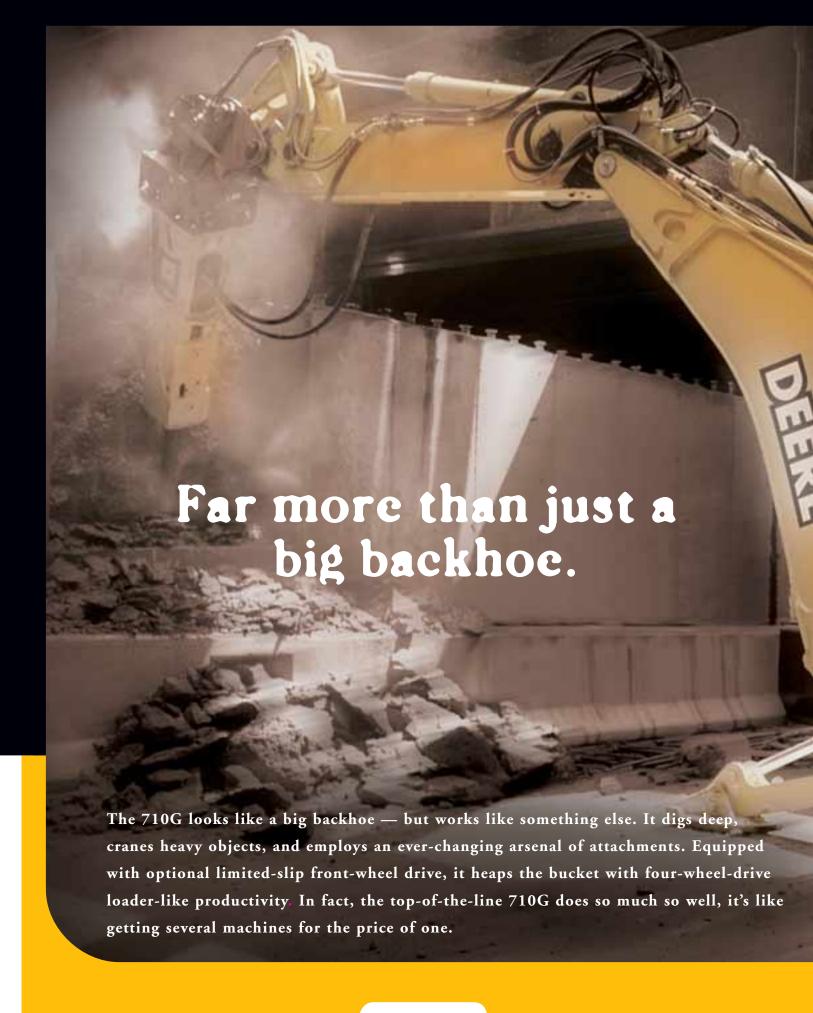


CONSTRUCTION EQUIPMENT









MODEL NO.

710G

>122 net hp
>17-ft. 10-in. backhoe digging depth
22-ft. 6-in. with extendable dipperstick
>14,800-lb. loader breakout force, 1.87-cu.-yd. bucket
>26,500-lb. typical operating weight





PRODUCTIVE

Wrap your eyes around a G-Series cab. Its spacious interior and unsurpassed visibility help an operator do his best.



Work circles around other backhoes.



Add a quick-coupler and attachments to either end and put more work within your grasp.

Curved knee provides exceptional reach, easily dumping to the center of most trucks.

Front-wheel drive delivers extra traction, letting you maneuver on marginal jobsites. Also helps heap the bucket.



Sure, most backhoes perform the same typical tasks. But when you want one that typically outperforms the others at most tasks, you'll choose a John Deere. To find out what a G-Series Backhoe can do for you, ask your dealer for a demo.





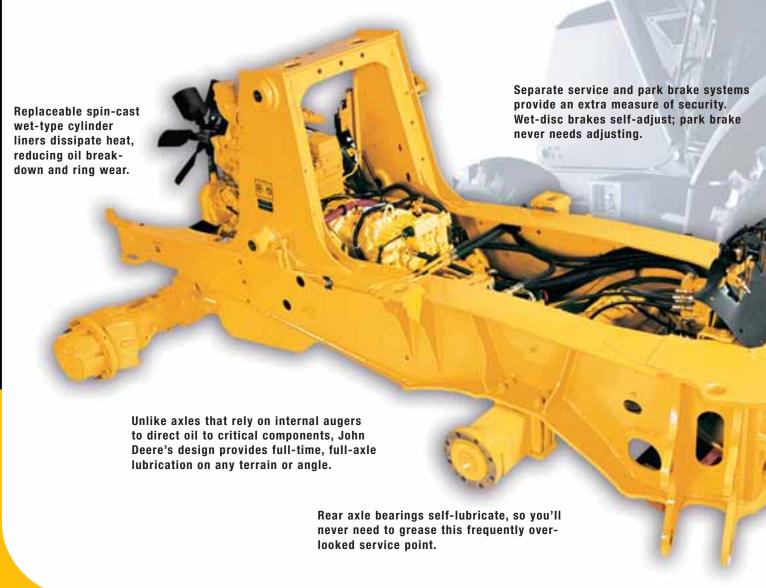


Extendable dipperstick adds digging depth, reach, and ability. Outer-box grasps objects between the bucket and exclusive gripper teeth, eliminating the need for an extra-cost thumb.

Your choice of pilot, two-lever, three-lever, four-lever, or SAE excavator-style controls delivers smooth, combined-function metering. For top productivity whether you're baling dirt or working around obstacles.

Craning heavy objects? These backhoes get it done with plenty of swing-torque and boom and dipperstick lift. Rearward-angled stabilizers and no-drift cylinders contribute rock-solid stability.







SUBJECT:

RELIABLE

Boom, dipperstick, stabilizers, and loader are box-constructed of low-alloy steel for maximum strength.

Planetary final drives distribute loads over three gears and are sealed in a cooling oil bath for long-life and trouble-free service.

Large pins and replaceable bushings help keep backhoe and loader structures tight and digging true.

Not all backhoes have what it takes to deliver a long-term commitment. Get to the heart of the matter and you'll discover the differences that keep the G-Series up and running — day after productive day.

When you know how they're built, you'll run with a Deere.



Easy tilt hood. Same-side ground-level daily servicing. Extended service intervals. John Deere engineers sweat the small stuff so you'll spend less time and effort getting your backhoe ready for work. And more time getting work done.

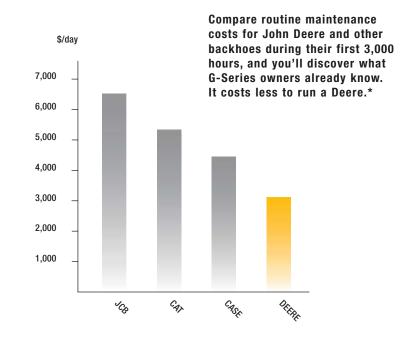


SUBJECT:

SERVICEABLE

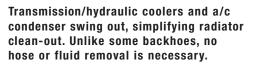
No maintenance beats low maintenance every time. The G-Series have that covered, too, with self-adjusting serpentine belts, park brakes, and wet-disc brakes that seldom, if ever, require attention.

- engine coolant reservoir
- air filter
- fuel filter
- engine oil fill
- transmission fluid dipstick/fill
 - engine oil dipstick
 - hydraulic fluid sight gauge
- remote front axle lube point
 - fuel tank fill



*310G and comparable models. Periodic maintenance costs over 3,000 hours. Service performed according to manufacturers' specs. Labor calculated @ \$50/hour.







Split floor mats and large removable floor panel allow top-side access to the park brake and other internal components.



Periodic maintenance chart helps ensure that nothing gets overlooked. Grease chart is also nearby under the battery box cover.

SPECIFICATION S

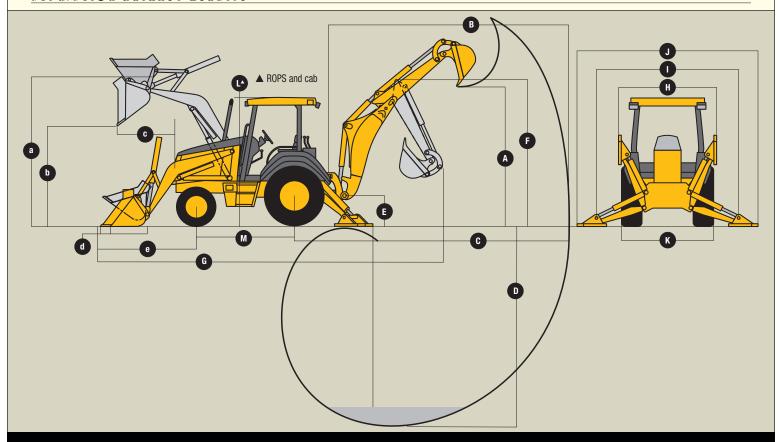
310G 310SG



ngine	310G			310SG		
Type		John Deere 4045D, naturally aspirated standard / John Deere 4045T,		John Deere 4045T, turb	ocharged; certified to EP	A Tier 2 emissions
	turbocharged optional;	certified to EPA Tier 2 e	emissions			
Net peak power (ISO9249)						
4045D	1 (/ /			N/A		
4045T	78 hp (58.2 kW) @ 2,00	00 rpm		91 hp (67.8 kW) @ 2,00	00 rpm	
Net peak torque (ISO9249)						
4045D				N/A		
4045T	250 lbft. (339 Nm) @	1,400 rpm		276 lbft. (374 Nm) @	1,400 rpm	
Torque rise						
4045D	28 percent			N/A		
4045T	30 percent			36 percent		
ransmission						
Four-speed, helical cut gear, collar-shift transmis	sion synchronized in all gear	s with hydraulic revers	er (optional full-power-s	hifted transmission on 3109	6G)	
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					4.0 mph (6.4 km/h)	
Gear 2				5.9 mph (9.5 km/h)	6.6 mph (10.6 km/h)	
Powershift					6.7 mph (10.8 km/h)	
Gear 3				13.9 mph (22.4 km/h)	13.9 mph (22.4 km/h)	
Powershift					16.1 mph (25.9 km/h)	
Gear 4				20.5 mph (33.0 km/h)	20.5 mph (33.0 km/h)	
Powershift					N/A	
Torque converter, single stage, dual phase with				20.0 mpn (00.0 km/n)	IN/A	
2.63:1 stall ratio	11 in /200 mm)			11 in. (280 mm)		
2.03.1 Stall Patio				11 III. (200 IIIII)		
apacities						
Fuel tank (with ground level fueling)	36 gal. (136 L)			36 gal. (136 L)		
Hydraulic system				24 gal. (91 L)		
Engine coolant	17 qt. (16 L)			17 gt. (16 L)		
Engine oil including filter	9 gt. (8.5 L) naturally as	spirated or 13.7 gt. (13	L) turbocharged	13.7 qt. (13 L)		
Torque converter and transmission			,	16 qt. (15 L)		
Rear axle				4.2 gal. (16 L)		
Mechanical-front-wheel-drive axle				2 gal. (7.6 L)		
teering						
Non-powered front axle (Carraro)						
Curb-turning radius with brakes	11 ft Q in (2.57 m)			11 ft. 9 in. (3.57 m)		
Without brakes				13 ft. 3 in. (4.04 m)		
Bucket clearance circle with brakes				31 ft. 6 in. (9.61 m)		
Without brakes	, ,			,		
Steering wheel turns, lock to lock	'			34 ft. 7 in. (10.55 m)		
Mechanical-front-wheel-drive axle				3.1		
				10 ft 11 :- (0.04)		
Curb-turning radius with brakes	, ,			10 ft. 11 in. (3.34 m)		
Without brakes	, ,			13 ft. 8 in. (4.17 m)		
Bucket clearance circle with brakes				29 ft. 9 in. (9.07 m)		
Without brakes				35 ft. 3 in. (10.74 m)		
Steering wheel turns, lock to lock				2.9		
Axle oscillations stop to stop, both axles	22 deg.			22 deg.		
xle Ratings						
	01 /	Mechanical-front-		0, ,	Mechanical-front-	
0	Standard	wheel drive	Rear	Standard	wheel drive	Rear
Static	*	24,250 lb.	28,660 lb.	31,530 lb.	24,250 lb.	28,660 lb.
	(14 300 kg)	(11 000 kg)	(13 000 kg)	(14 300 kg)	(11 000 kg)	(13 000 kg)
Dynamic	12,570 lb.	9,260 lb.	15,430 lb.	12,570 lb.	9,260 lb.	15,430 lb.
	(5700 kg)	(4200 kg)	(7000 kg)	(5700 kg)	(4200 kg)	(7000 kg)
						0= 100 !!
Ultimate	57,980 lb.	57,100 lb.	67,460 lb.	57,980 lb.	57,100 lb.	67,460 lb.

lydraulic System	310G			310SG		
System	open center			open center		
Pressure						
Backhoe	3,625 psi (25 000 kPa)			3,625 psi (25 000 kPa)		
Loader	2,900 psi (20 000 kPa)			3,625 psi (25 000 kPa)		
Flow @ 2,200 rpm	28 gpm (106 L/min.)			36.6 gpm (139 L/min.)		
Backhoe	28 gpm (106 L/min.)			36.6 gpm (139 L/min.)		
Loader	28 gpm (106 L/min.)			28 gpm (106 L/min.)		
SAE Operating Weights						
Standard	12,800 lb. (5806 kg)			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, mechanical-						
front-wheel drive with tires, and extendable dipperstick						
Counterweights (2) equaling 900 lb. (408 kg)	15.090 lb. (6845 kg)			15,955 lb. (7237 kg)		
Backhoe bucket coupler adds				138 lb. (63 kg)		
Front loader coupler adds	, •,			630 lb. (286 kg)		
·	, ,,,					
Cylinders						
	Bore	Stroke	Rod	Bore	Stroke	Rod
Loader boom (2)		31.1 in. (790 mm)	1.97 in. (50 mm)	3.15 in. (80 mm)	31.1 in. (790 mm)	1.97 in. (50 mm)
Loader bucket (1)	\ /	29.29 in. (744 mm)	1.97 in. (50 mm)	3.54 in. (90 mm)	29.29 in. (744 mm)	1.97 in. (50 mm)
Backhoe boom (1)		32.32 in. (821 mm)	2.20 in. (56 mm)	4.72 in. (120 mm)	31.3 in. (795 mm)	2.20 in. (56 mm)
Backhoe crowd (1)		21.77 in. (552.9 mm)	2.48 in. (63 mm)	4.53 in. (115 mm)	23.74 in. (603 mm)	2.48 in. (63 mm)
Backhoe bucket (1)		35.1 in. (891.5 mm)	1.97 in. (50 mm)	3.54 in. (90 mm)	31.9 in. (810 mm)	2.20 in. (56 mm)
Backhoe swing (2)	3.15 in. (80 mm)	12.2 in. (310 mm)	1.77 in. (45 mm)	3.54 in. (90 mm)	10.9 in. (278 mm)	1.97 in. (50 mm)
Backhoe extendable dipperstick (1)	2.48 in. (63 mm)	41.81 in. (1062 mm)	1.26 in. (32 mm)	2.76 in. (70 mm)	41.81 in. (1062 mm)	1.57 in. (40 mm)
Backhoe stabilizer (2)	3.15 in. (80 mm)	19.69 in. (500 mm)	1.97 in. (50 mm)	3.94 in. (100 mm)	19.69 in. (500 mm)	1.97 in. (50 mm)
Steering						
Non-powered axle (1)	2.56 in. (65 mm)	8.39 in. (213 mm)	1.42 in. (36 mm)	2.56 in. (65 mm)	8.39 in. (213 mm)	1.42 in. (36 mm)
Mechanical-front-wheel drive (1)	2.56 in. (65 mm)	8.27 in. (210 mm)	1.50 in. (38 mm)	2.56 in. (65 mm)	8.27 in. (210 mm)	1.50 in. (38 mm)
Backhoe Performance						
Bucket range	12-30 in. (305-762 mn	n)		12-36 in. (305-914 m	m)	
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				8,090 lb. (36.0 kN)		
Bucket rotation				190 degrees		
Loader Performance						
Bucket range	1.00–1.25 cu. vd. (0.76	-0.96 m³)		1.18–1.32 cu. yd. (0.91	I_1.01 m³)	
	1.00-cu. yd. (0.76 m³)	,		1.25-cu. yd. (0.96 m³)	,	
	Heavy-Duty Long Lip			Heavy-Duty Long Lip		
Progleout force	, , , , ,			, , , , ,		
Breakout force	, , ,			10,210 lb. (45.4 kN)		
Lifting capacity, full height	b,200 lb. (2812 kg)			7,340 lb. (3332 kg)		

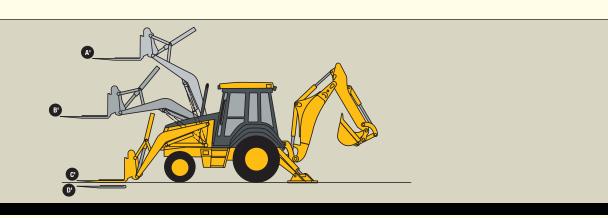
310G/310SG Backhoe Loaders



Backhoe Dimensions 310G		310SG	
With Standard	With Extendable	With Standard	With Extendable
Backhoe*	Dipperstick Extended*	Backhoe*	Dipperstick Extended*
A Loading height, truck loading position10 ft. 11 in. (3.33 m)	13 ft. 11 in. (4.24 m)	11 ft. 3 in. (3.43 m)	14 ft. 1 in. (4.29 m)
B Reach from center of swing pivot17 ft. 10 in. (5.44 m)	21 ft. 5 in. (6.53 m)	18 ft. 3 in. (5.56 m)	21 ft. 11 in. (6.68 m)
C Reach from center of rear axle21 ft. 4 in. (6.50 m)	24 ft. 11 in. (7.59 m)	21 ft. 9 in. (6.63 m)	25 ft. 4 in. (7.72 m)
D Maximum digging depth14 ft. 3 in. (4.34 m)	17 ft. 11 in. (5.46 m)	14 ft. 6 in. (4.42 m)	18 ft. 5 in. (5.61 m)
E Ground clearance, minimum12 in. (305 mm)	12 in. (305 mm)	13 in. (330 mm)	13 in. (330 mm)
F Transport height	11 ft. 2 in. (3.40 m)	11 ft. 6 in. (3.51 m)	11 ft. 5 in. (3.48 m)
G Overall length, transport23 ft. 3 in. (7.09 m)	23 ft. 3 in. (7.09 m)	23 ft. 6 in. (7.16 m)	23 ft. 6 in. (7.16 m)
H Stabilizer width – transport with ROPS7 ft. 2 in. (2.18 m)	7 ft. 2 in. (2.18 m)	7 ft. 2 in. (2.18 m)	7 ft. 2 in. (2.18 m)
Stabilizer spread – operating10 ft. 2 in. (3.10 m)	10 ft. 2 in. (3.10 m)	10 ft. 2 in. (3.10 m)	10 ft. 2 in. (3.10 m)
J Stabilizer overall width – operating11 ft. 7 in. (3.53 m)	11 ft. 7 in. (3.53 m)	11 ft. 7 in. (3.53 m)	11 ft. 7 in. (3.53 m)
K Width over tires82.9 in. (2.11 m)	82.9 in. (2.11 m)	84.6 in. (2.18 m)	84.6 in. (2.18 m)
L Height to tops of ROPS	9 ft. (2.74 m)	9 ft. 2 in. (2.79 m)	9 ft. 2 in. (2.79 m)
√ Length from axle to axle82.7 in. (2100 mm)	82.7 in. (2100 mm)	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) bucl	ket for the 310G and with 24-in. x 7.5-cu. ft. (6	10 mm x 0.21 m³) bucket f	or the 310SG.

Loader Dimensions

а	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)
е	Length from front axle centerline to bucket		
	cutting edge	80 in. (2030 mm)	80 in. (2030 mm)
	Raising time to full height	4.9 sec.	5.5 sec.
	Bucket dump time at maximum height	1.3 sec.	1.2 sec.
	Bucket lowering time (power down)	2.5 sec.	2.2 sec.



Lift Capacity with Quick-Coupler/Forks

A'	Maximum height	3,379 lb. (1532 kg)	4,570 lb. (2073 kg)
В	Maximum reach	5,235 lb. (2374 kg)	6,971 lb. (3162 kg)
Cı	At ground line	6,825 lb. (3095 kg)	9,138 lb. (4145 kg)
D'	Below ground line	10.3 in. (261.6 mm)	8.3 in. (210.8 mm)

12

- 3

- 2

• 0

• 2

- 3

3,232 (1466)

3,002 (1362)

2.875 (1304)

2,758 (1251)

2,645 (1200)

2,545 (1154)

,453 (1113)

2.366 (1073)

2.854 (1295

2.780 (1261)

16 5

2,723 (1235)

2.732 (1239)

2.292 (1040)

2,236 (1014)

2.223 (1008)

12 16 20

3.123 (1417)

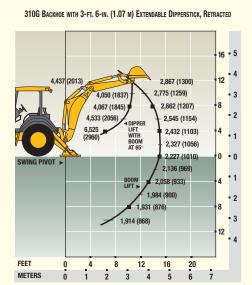
Lift capacities are over-end values in lb. (kg) according to SAE J31. Figures listed are 87% of the maximum lift force available. Base vehicle includes counterweight.

310G BACKHOE WITH STANDARD DIPPERSTICK

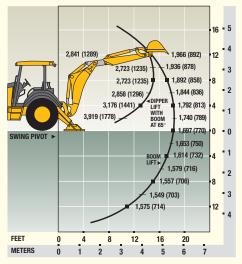
4,420 (2005

4,446 (2017)

4.968 (2253)



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

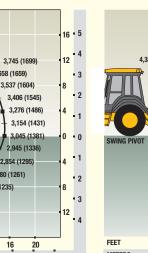
5,664 (2569

5.785 (2624)

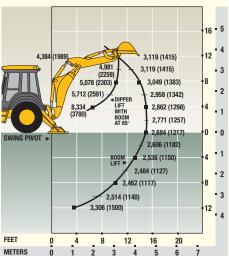
6,609 (2998)

METERS

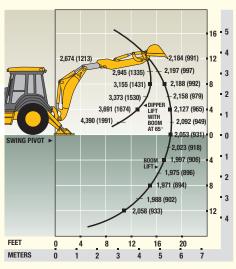
METERS



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.

BACKHOE LOADERS

SPECIFICATIONS

410G 710G



11 in. (280 mm)

Engine	410 G	710G
Type	John Deere 4045T, turbocharged; certified to EPA Tier 2 emissions	John Deere 6068T, turbocharged; certified to EPA Tier 2 emissions
Net peak power (ISO9249)	96 hp (71.3 kW) @ 2,100 rpm	122 hp (91 kW) @ 2,000 rpm
Net peak torque (ISO9249)	279 lbft. (378 Nm) @ 1,400 rpm	397 lbft. (538 Nm) @ 1,300 rpm
Torque rise	23 percent	33 percent

Transmission

ed transmission with hydraulic rev	verser		
Forward	Reverse	Forward	Reverse
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)
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)
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)
20.5 mph (33.0 km/h)		23.0 mph (37.1 km/h)	
rith			
		Forward Reverse 3.6 mph (5.8 km/h) 4.0 mph (6.4 km/h) 5.9 mph (9.5 km/h) 6.6 mph (10.6 km/h) 13.9 mph (22.4 km/h) 16.1 mph (25.9 km/h) 20.5 mph (33.0 km/h)	

2.63:1 stall ratio11 in. (280 mm) *410G with 19.5L-24 rear tires; 710G with 21L-28 rear and 14.5/75-16.1 front tires.

Capacities

 · F		
Fuel tank (with ground level fueling)	36 gal. (136 L)	69 gal. (261 L)
Hydraulic system	26 gal. (98 L)	42 gal. (159 L)
Engine coolant	17 qt. (16 L)	28.5 qt. (27 L)
Engine oil including filter	13.7 qt. (13 L)	20 qt. (19 L)
Torque converter and transmission	16 qt. (15 L)	16 qt. (15 L)
Rear axle	4.2 gal. (16 L)	4.2 gal. (16 L)
Mechanical-front-wheel-drive axle	2 gal. (7.6 L)	2.8 gal. (10.6 L)

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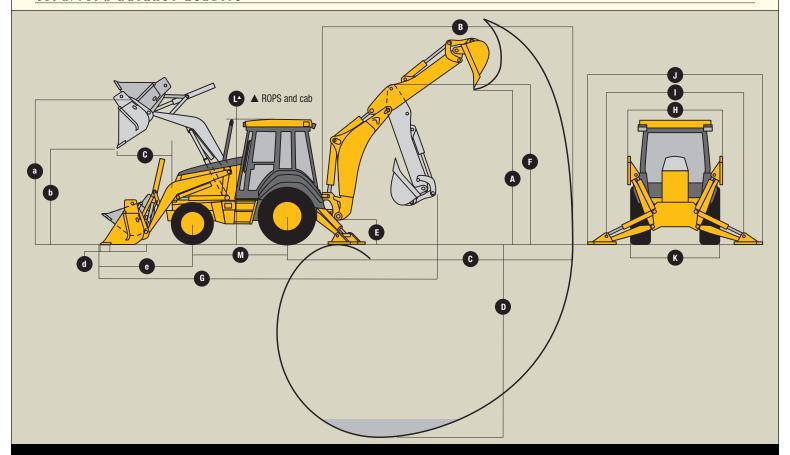
teering	
Non-powered front axle (Carraro)	
Curb-turning radius with brakes11 ft. 8 in. (3.56 m)	10 ft. 7 in. (3.23 m)
Without brakes13 ft. 3 in. (4.04 m)	14 ft. 11 in. (4.55 m)
Bucket clearance circle with brakes31 ft. 8 in. (9.65 m)	35 ft. 5 in. (10.8 m)
Without brakes	40 ft. 0 in. (12.2 m)
Steering wheel turns, lock to lock	2.8
Mechanical-front-wheel-drive axle	
Curb-turning radius with brakes11 ft. 5 in. (3.48 m)	13 ft. 0 in. (3.96 m)
Without brakes13 ft. 6 in. (4.11 m)	15 ft. 4 in. (4.67 m)
Bucket clearance circle with brakes29 ft. 7 in. (9.02 m)	35 ft. 5 in. (10.80 m)
Without brakes33 ft. 8 in. (10.26 m)	40 ft. 0 in. (12.20 m)
Steering wheel turns, lock to lock2.2	2.7
Axle oscillations stop to stop, both axles22 deg.	22 deg.

Axle Ratings

		Mechanical-front-			Mechanical-front-	
	Standard	wheel drive	Rear	Standard	wheel drive	Rear
Static	39,680 lb.	26,460 lb.	28,660 lb.	50,600 lb.	40,790 lb.	43,430 lb.
	(18 000 kg)	(12 000 kg)	(13 000 kg)	(22 950 kg)	(18 500 kg)	(19 700 kg)
Dynamic	15,870 lb.	12,790 lb.	15,430 lb.	20,280 lb.	16,980 lb.	21,610 lb.
	(7200 kg)	(5800 kg)	(7000 kg)	(9200 kg)	(7700 kg)	(9800 kg)
Ultimate	72,640 lb.	62,170 lb.	67,461 lb.	90,340 lb.	96,120 lb.	102,290 lb.
	(32 950 kg)	(28 200 kg)	(30 600 kg)	(41 000 kg)	(43 600 kg)	(46 400 kg)

lydraulic System	410G			710G		
System	pressure compensated	load sensing (PCLS)		pressure compensated	load sensing (PCLS)	
Pressure						
Backhoe	3,625 psi (25 000 kPa)			3,625 psi (25 000 kPa)		
Loader	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.)		
Backhoe	43 apm (163 L/min.)			52 gpm (197 L/min.)		
Loader				52 gpm (197 L/min.)		
AE 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 with tires adds	485 lb. (220 kg)			822 lb. (373 kg)		
Extendable dipperstick excluding required						
counterweight adds	638 lb. (289 kg)			700 lb. (318 kg)		
Typical operating weight with cab, mechanical-	(0,			(0,		
front-wheel drive with tires, and extendable dipperstick						
Counterweights (4) equaling 1,262 lb. (572 kg)	18.500 lb. (8392 kg)			N/A		
Counterweights (2) equaling 1,628 lb. (738 kg).						
Backhoe bucket coupler adds				660 lb. (299 kg)		
Front loader coupler adds	(0)			800 lb. (363 kg)		
Tront loador douplor addo	000 lb. (200 kg)			000 lb. (000 ltg)		
Cylinders						
	Bore	Stroke	Rod	Bore	Stroke	Rod
Loader boom (2)	3.15 in. (80 mm)	31.1 in. (790 mm)	1.97 in. (50 mm)	3.94 in. (100 mm)	31.99 in. (812.5 mm)	2.20 in. (56 mm)
Loader bucket (1)	3.54 in. (90 mm)	29.29 in. (744 mm)	1.97 in. (50 mm)	4.33 in. (110 mm)	26.44 in. (671.5 mm)	2.20 in. (56 mm)
Backhoe boom (1)		35.5 in. (901.8 mm)	2.48 in. (63 mm)	6.30 in. (160 mm)	37.15 in. (943.5 mm)	3.74 in. (95 mm)
Backhoe crowd (1)	4.53 in. (115 mm)	27.49 in. (698.2 mm)	2.48 in. (63 mm)	5.51 in. (140 mm)	31.16 in. (791.5 mm)	3.35 in. (85 mm)
Backhoe bucket (1)	, ,	31.89 in. (810 mm)	2.48 in. (63 mm)	4.33 in. (110 mm)	37.09 in. (942 mm)	2.76 in. (70 mm)
Backhoe swing (2)	, ,	10.94 in. (278 mm)	1.97 in. (50 mm)	4.33 in. (110 mm)	12.13 in. (308 mm)	2.20 in. (56 mm)
Backhoe extendable dipperstick (1)		47.78 in. (1213.5 mm)	1.57 in. (40 mm)	3.15 in. (80 mm)	54.00 in. (1371.5 mm)	1.77 in. (45 mm)
Backhoe stabilizer (2)	, ,	19.69 in. (500 mm)	1.97 in. (50 mm)	4.53 in. (115 mm)	23.15 in. (588 mm)	2.48 in. (63 mm)
Steering	0.54 III. (100 IIIII)	10.00 III. (000 IIIII)	1.07 III. (00 IIIII)	4.00 III. (110 IIIII)	20.10 iii. (000 iiiii)	2.40 III. (00 IIIII)
Non-powered axle (1)	2.76 in (70 mm)	8.39 in. (213 mm)	1.57 in. (40 mm)	2.95 in. (75 mm)	9.06 in. (230 mm)	1.77 in. (45 mm)
Mechanical-front-wheel drive (1)		8.27 in. (210 mm)	1.65 in. (42 mm)	2.95 in. (75 mm)	10.24 in. (260 mm)	1.97 in. (43 mm)
Mechanical-nont-wheel unive (1)	2.40 iii. (03 iiiiii)	0.27 III. (210 IIIIII)	1.03 III. (42 IIIIII)	2.95 III. (75 IIIIII)	10.24 III. (200 IIIIII)	1.97 III. (30 IIIII)
Backhoe Performance	40.00 in /005.04 i			40.00 in (457.04)	-1	
Bucket range	12–36 in. (305–914 mn	n)		18–36 in. (457–914 mr	n)	
With standard backhoe						
Digging force, bucket cylinder				17,000 lb. (75.6 kN)		
Digging force, crowd cylinder				11,750 lb. (52.3 kN)		
Bucket rotation	190 degrees			190 degrees		
oader Performance						
Range	1.25-1.50 cu. vd. (0.96	-1.15 m³)		1.375–1.87 cu. yd. (1.0	0-1.43 m³)	
	1.25-cu. yd. (0.96 m³)	÷ ,		1.87-cu. yd. (1.34 m³)	,	
	Heavy-Duty Long Lip			Standard-Duty and MFN	MD	
Dunal to the form					עע	
Breakout force				14,800 lb. (66.0 kN)		
Lifting capacity, full height	7,340 lb. (3332 kg)			8,693 lb. (3943 kg)		

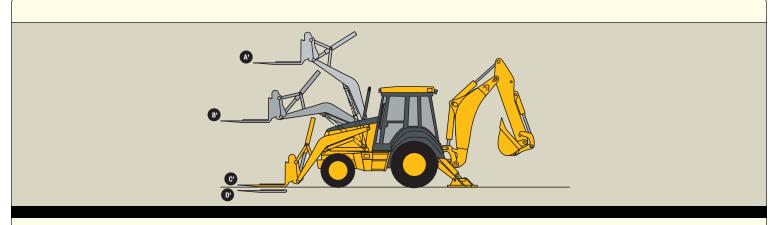
410G/710G Backhoe Loaders



Backhoe Dimensions 410 G		710G	
With Standard	With Extendable	With Standard	With Extendable
Backhoe*	Dipperstick Extended*	Backhoe*	Dipperstick Extended*
A Loading height, truck loading position12 ft. 6 in. (3.81 m)	15 ft. 6 in. (4.72 m)	14 ft. 3 in. (4.34 m)	16 ft. (4.88 m)
B Reach from center of swing pivot19 ft. 8 in. (5.99 m)	23 ft. 8 in. (7.21 m)	22 ft. 6 in. (6.86 m)	26 ft. 8 in. (8.13 m)
C Reach from center of rear axle23 ft. 4 in. (7.11 m)	27 ft. 4 in. (8.33 m)	26 ft. 8 in. (8.13 m)	30 ft. 10 in. (9.40 m)
D Maximum digging depth15 ft. 10 in. (4.83 m)	20 ft. (6.10 m)	17 ft. 10 in. (5.44 m)	22 ft. 6 in. (6.86 m)
E Ground clearance, minimum14 in. (356 mm)	14 in. (356 mm)	14 in. (356 mm)	14 in. (356 mm)
F Transport height	12 ft. 10 in. (3.91 m)	13 ft. 8 in. (4.17 m)	13 ft. 10 in. (4.22 m)
G Overall length, transport23 ft. 11 in. (7.29 m)	23 ft. 11 in. (7.29 m)	26 ft. 9 in. (8.15 m)	26 ft. 9 in. (8.15 m)
H Stabilizer width – transport with ROPS7 ft. 6 in. (2.30 m)	7 ft. 6 in. (2.30 m)	7 ft. 11 in. (2.41 m)	7 ft. 11 in. (2.41 m)
Stabilizer spread – operating11 ft. 4 in. (3.45 m)	11 ft. 4 in. (3.45 m)	13 ft. 1 in. (3.99 m)	13 ft. 1 in. (3.99 m)
J Stabilizer overall width13 ft. 3 in. (4.03 m)	13 ft. 3 in. (4.03 m)	15 ft. 3 in. (4.65 m)	15 ft. 3 in. (4.65 m)
K Width over tires84.6 in. (2.18 m)	84.6 in. (2.18 m)	93.8 in. (2.38 m)	93.8 in. (2.38 m)
L Height to tops of ROPS	9 ft. 3 in. (2.82 m)	9 ft. 9 in. (2.97 m)	9 ft. 9 in. (2.97 m)
M Length from axle to axle82.7 in. (2100 mm)	82.7 in. (2100 mm)	98.9 in. (2511 mm)	98.9 in. (2511 mm)
*Backhoe specifications are with 24-in. x 7.5-cu. ft. (610 mm x 0.21 m³) but	ket 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)
е	Distance from front axle centerline to bucket		
	cutting edge	82.6 in. (2097 mm)	86.5 in. (2198 mm)
	Raising time to full height	4.6 sec.	4.8 sec.
	Bucket dump time at maximum height	1.4 sec.	1.3 sec.
	Bucket lowering time (power down)	2.4 sec.	3.1 sec.



Lift Capacity with Quick-Coupler/Forks

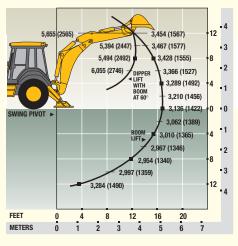
Α'	Maximum height4,570 lb. (2073 kg)	5,803 lb. (2632 kg)
B'	Maximum reach6,971 lb. (3162 kg)	9,651 lb. (4378 kg)
Cı	At ground line9,138 lb. (4145 kg)	13,353 lb. (6057 kg)
D'	Below ground line8.3 in. (210.8 mm)	5.5 in. (140 mm)

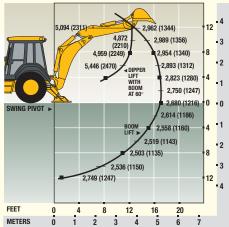
Lift capacities are over-end values in lb. (kg) according to SAE J31. Figures listed are 87% of the maximum lift force available. Base vehicle includes counterweight.

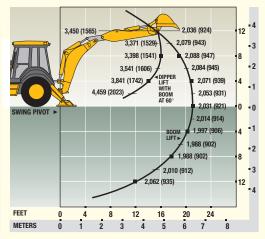
410G BACKHOE WITH STANDARD DIPPERSTICK

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

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





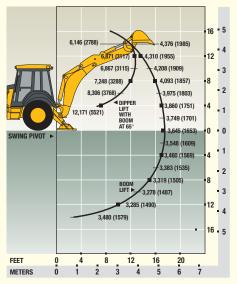


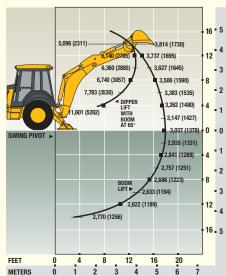
Lift capacities are over-end values in lb. (kg) according to SAE J31. Figures listed are 87% of the maximum lift force available. Base vehicle includes counterweight.

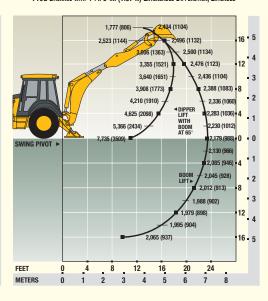
710G BACKHOE WITH STANDARD DIPPERSTICK

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

710G BACKHOE WITH 4-FT. 6-IN. (1.37 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 Backhoe (continued) 310G 310SG 410G 710G Operator's Station 310G 310SG 410G 710G Engine Certified to EPA Tier 2 emissions ▲ Two-lever (Deere) backhoe controls ● ● Modular-design ROPS/FOPS canopy with molded John Deere Model 4045D - 4.5 liter, 73 hp (54.5 kW) Two-lever pilot controls with pattern-selection roof (conforms to SAE J1040): Isolation mounted naturally aspirated, isolation mounted Left and right access John Deere Model 4045T - 4.5 liter, 78 hp (58.2 kW) **A** Three-lever (Case) backhoe controls Slip-resistant steps and ergonomically located turbocharged, isolation mounted Four-lever (Ford) backhoe controls handholds ▲ SAE excavator two-lever backhoe controls Molded floor mat John Deere Model 4045T - 4.5 liter, 91 hp (67.8 kW) turbocharged, isolation mounted Backhoe transport lock lever
 Swing lock pin stored in operator's station Headline Coat hook John Deere Model 4045T - 4.5 liter, 96 hp (71.3 kW) turbocharged, isolation mounted • Stabilizer valve with two-direction anti-drift valves 12-volt outlets (2) Pivoting stabilizers with reversible pads John Deere Model 6068T – 6.8 liter, 122 hp (91 kW) Built-in beverage holders turbocharged, isolation mounted Extended stabilizers* Built-in Operator's Manual storage compartment Vertical spin-on engine oil filter Shortened stabilizers with manual Vertical spin-on fuel filter with water separator ▲ Stabilizer cylinder guards Interior rearview mirror Outside rearview mirrors

Hand throttle with fuel-economy setting at Less bucket, with bucket pins Vertical spin-on secondary fuel filter • Oil-to-water engine oil cooler Standard-duty backhoe bucket with lift loops ● Antifreeze, -34°F (-37°C) Heavy-duty backhoe bucket with lift loops 2,100 rpm Coolant recovery tank Severe-duty backhoe bucket with lift loops • Suspended foot throttle Serpentine belt with automatic belt tensioner Backhoe coupler for "C," "D," "E," and "G" Series Tilt steering Suction-type cooling fanEnclosed safety fan guard John Deere buckets, Case buckets, and Cat buckets Horn Extendable dipperstick, 3-ft. 6-in. extension Extendable dipperstick, 4-ft. extension Key start switch with electric fuel shutoff High ambient temperature engine cooning
 Dual-element dry-type air cleaner with evacuator High ambient temperature engine cooling Engine coolant temperature gauge, illuminated ▲ Extendable dipperstick, 5-ft. extension electronic, with audible warning valve and prescreener Auxiliary backhoe valve for swingers, thumbs, etc. Torque converter oil temperature gauge, illuminated Muffler, underhood with curved-end exhaust stack ▲ Auxiliary backhoe valve for hammers, compactors electronic, with audible warning ▲ Chrome exhaust extension
▲ Electric ether starting aid
▲ Engine coolant heater, 1,000 watts Fuel gauge, illuminated electronic Auxiliary backhoe plumbing for hammers, com- Digital display of engine hours, engine rpm, and nactors Auxiliary backhoe plumbing for swingers. system voltage thumbs, etc. Digital display of hydraulic oil temperature **Powertrain** ▲ SAE-controlled load-lowering device valves Monitor system with audible and visual warnings: Collar-shift transmission with torque converter: Engine air restriction indicator / Engine oil pres-Loader Fully synchronized four forward, four reverse sure indicator with audible warning / Hydraulic speeds / Isolation mounted to mainframe Hydraulic self leveling filter restriction indicator / Parking brake on/off Powershift transmission: Torque converter with • Return-to-dig feature indicator with audible warning / Seat belt indica- Single-lever control with electric clutch cutoff switch electrically actuated twist grip F-N-R in 1st Bucket-level indicator
 Loader boom service lock tor / Low brake pressure through 4th gears Suspension vinyl swivel seat with armrests and Transmission oil cooler lumbar support A Ride control Vertical spin-on transmission filter A Suspension fabric swivel seat with armrests and ▲ Auxiliary loader hydraulics with two-lever control Electric forward-neutral-reverse control lever lumbar support with neutral start interlock Hydraulic coupler for buckets, forks, etc. Air suspension fabric swivel seat with armrests Electric clutch cutoff on gearshift and loader levers Loader front counter* and lumbar support Differential lock, electric foot-actuated Less bucket, with bucket pins Seat belt, 2-in., with retractors Planetary final drives Heavy-duty loader bucket with lift loops, pre-▲ ▲ Seat belt, 3-in., with retractors
▲ ▲ Cab: Headliner, dome light, left and right cab doors, Power-assisted hydraulic service brakes (conpunched for bolt-on cutting edge form to SAE J1473): Inboard, wet multi-disc, self ▲ ▲ Heavy-duty loader buckets with bolt-on cutting tinted safety glass, windshield wiper (one rear and adjusting and self equalizing edges, skid plates, and lift loops one front), fresh air intake heater/defroster/pres- Parking/emergency brake with electric switch ▲ ▲ Multipurpose loader buckets with bolt-on cutting surizer (40,000-Btu/hr. [11.7 kW] heater), and 65control (conforms to SAE J1473); Spring applied. edges, skid plates, and lift loops amp alternator standard / Front windshield washer, hydraulically released wet multi-disc / Indepen-**Hydraulic System** air conditioning (26,000-Btu/hr. [7.6 kW] output dent of service brakes 28-gpm (106 L/min.) gear pump, open-center system and CFC-free R134a refrigerant), 95-amp alternator, Hydrostatic power steering with emergency 37-gpm (140 L/min.) tandem gear pump, openand AM/FM/weatherband radio optional / 12-volt manual mode outlets (3) ▲ Non-powered front axle 43-gpm (163 L/min.) axial piston pump, PCLS system **Overall Vehicle** Mechanical-front-wheel-drive: Flectric on/off 52-gpm (197 L/min.) axial piston pump, PCLS system control / Drive-shaft guard / Sealed axle One-piece unitized construction mainframe Independent hydraulic reservoir Mechanical-front-wheel-drive with limited-slip Vehicle tie-downs (2 front and 2 rear) Swing-down hydraulic oil cooler differential: Electric on/off control / Drive-shaft Remote grease bank for front axle "0"-ring face seal connectors guard / Sealed axle • Rigid-mounted front bumper 6-micron vertical spin-on filter **A A A** 111-15 F3 front tires 400-lb. (181 kg) front counterweight **Electrical** 111-16 E3 front tires 600-lb. (272 kg) front counterweight ■ 12-volt system 12-16.5 traction front tires 850-lb. (386 kg) front counterweight 70-amp alternator 12.5/80-18 traction front tires 930-lb. (419 kg) front counterweight 90-amn alternator 14.5/75-16.1 F3 front tires 1,100-lb. (500 kg) front counterweight Single battery with 190-min. reserve capacity and 16.9-24 R4 rear tires 1,350-lb. (614 kg) front counterweight 19.5I -24 R4 rear tires 1,630-lb. (734 kg) front counterweight Dual batteries with 380-min. reserve capacity and 211-24 R4 rear tires Fuel tank, 36 gal. (136 L), ground-level fueling 1.900 CCA ● 15-19.5 SS-1 front tires Fuel tank, 69 gal, (261 L), ground-level fueling 16.5L-16.1 L-1 front tires Positive terminal battery cover Two-position easy-tilt hood Blade-type multi-fused circuits
 By-pass start safety cover on starter 21L-28 R4 rear tires Front trash screen ▲ 20.5-25 L-2 rear tires Extended grille frame Vandal protection for instrument panel, engine A Rear wheel spacers for use with chains Lights hood, toolbox, hydraulic reservoir, radiator, and **Backhoe** Halogen driving/work lights (4), 32,500 candlefuel tank power each (2 front and 2 rear) Backhoe with standard dipperstick, 14-ft, 3-in. Reverse warning alarm Additional halogen work lights (6), 32,500 candlediagina depth Dent-resistant full-coverage rear fenders

power each (2 front, 2 rear, and 2 side)

Turn signal/flashing (2 front and 2 rear)

Turn signal/flashing (2

Rear stop and tail (2)

Rear reflectors (2)

Rotating beacon



Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions specified per ISO9249. No derating is required up to 5,000-ft. (1500 m) altitude for the 310G and up to 10,000-ft. (3050 m) for the 310G with optional altitude-compensating turbocharger, the 310SG, the 410G, and the 710G

Backhoe with standard dipperstick, 14-ft. 6-in.

Backhoe with standard dipperstick, 15-ft. 10-in.

Backhoe with standard dipperstick, 18-ft. 2-in.

digging depth

digging depth

digging depth

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 16.9-24 R4 rear tires, 11L-15, 8 PR F3 front tires, 1.00-cu. yd. (0.76 m²) 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, vd. (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,

A A

▲ Front fenders*
▲ SMV emblem

A Rental decal kit

▲ Special color paint*

