BACKHOES









TO BUILD A BETTER BACKHOE,

WE WENT TO YOU, OUR CUSTOMER.

Through our Customer Advocate Group (CAG), we collected invaluable input from owners and operators — the ones who know best what customers really need.

You spoke. And we listened and responded by improving our product line with updates like pressure-compensated load-sensing (PCLS) hydraulics on the 410L, unsurpassed pilot controls, and a John Deere PowerShift™ transmission — and that's just the start. As always, we're boosting your productivity and maximizing uptime, while lowering daily operating costs. When it comes to delivering what you want, nobody responds like John Deere.

SIDE-SHIFT FOR TIGHT SPACES WITH THE 315SL.

Standard-equipped side-shift backhoes can be offset up to 542 mm right or left of center, making them ideal for work in crowded urban areas and around obstacles.

GET MORE DONE WITH ONE

MULTIFUNCTION VERSATILITY, UNRIVALED CAPABILITY.

Why run two machines when one will do? Whether you're loading trucks, busting up blacktop, placing pipe, digging trenches, or moving materials, an L-Series Backhoe is more than up to the task. Building upon our highly productive K-Series Backhoes, the L-Series features PCLS hydraulics (on the 410L), for superb multifunction performance. The result: our most versatile backhoes ever.

True four-wheel drive on command

Standard limited-slip mechanicalfront-wheel drive (MFWD) (optional on the 310L) delivers superior traction in any ground condition. Engage momentary MFWD "on the fly" with the touch of a button on the new loader control.

Powertrain performance

Responsive and productive standard five-speed transmission on the 310SL, 315SL, and 410L provides transport speeds up to 40 km/h. Add the

Control the ride and the load

With ride control activated, front loader hydraulic cylinders act as a shock absorber, smoothing travel over rough terrain, helping full loads reach their destination, and reducing operator fatique.

Smooth gear changes

PowerShift transmission provides on-the-go clutchless gear changes for the operator.

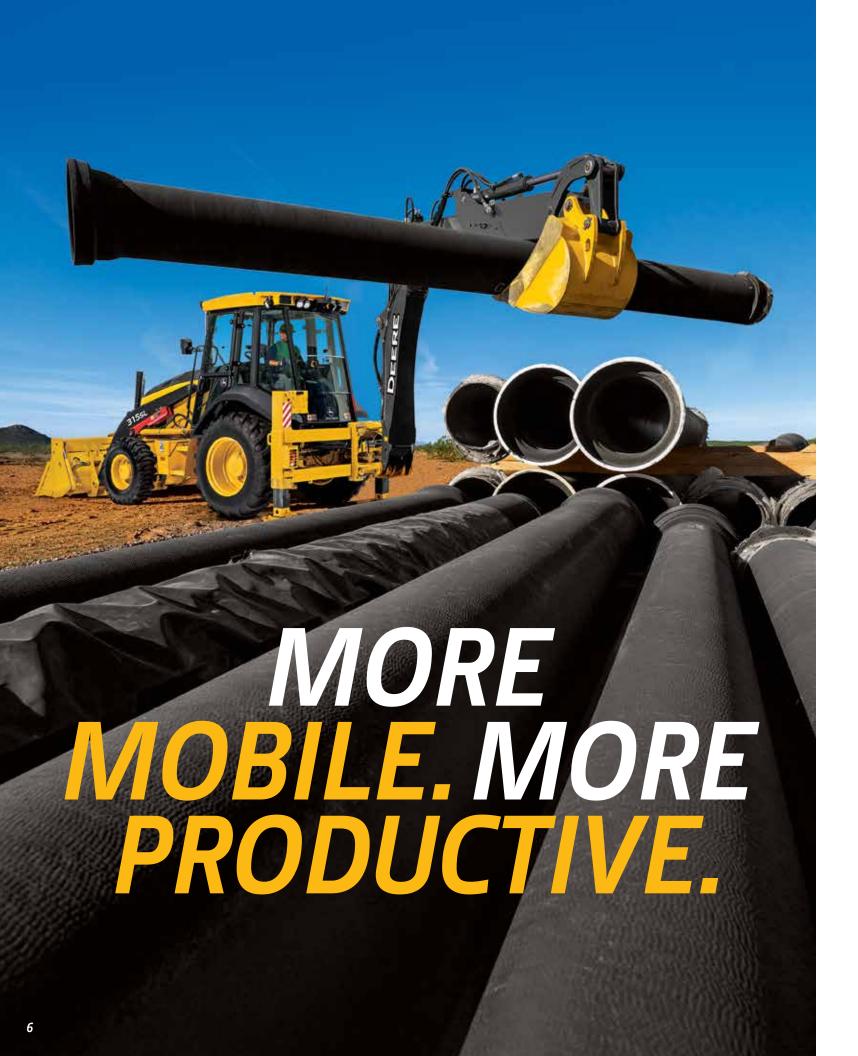
Powerful engines

Trust John Deere PowerTech 4.5L engines to provide emission solutions that are proven, integrated, simple, and supported, for the muscle needed to power through any workday.

Improved multipurpose bucket

Be more productive in more applications with our new standard multipurpose bucket.





SAY GOODBYF

TO BUMPS IN THE ROAD.

Beat operator fatigue and work faster across large jobsites with the L-Series Backhoe's optional ride control and exclusive PowerShift transmission. These standard features enable you to effortlessly traverse any terrain and reduce spillage from loaded buckets in the roughest of conditions.











WHAT THE EXPERTS ARE SAYING:

Thanks to Deere asking for my input, I get a better machine, and these improvements make all the difference in my day's productivity.

— Todd Heiderscheidt, Backhoe CAG Member

PowerShift transmission

Take advantage of smooth shifting and reliable performance under all load sizes and operating conditions with PowerShift's hydraulically actuated clutch packs.

Limited-slip differential

Limited-slip differential in the front axle provides best-in-class tractive effort and excellent 4x4 performance. Comes standard on all models.

Five-speed transmission (standard on 310SL, 315SL, and 410L)

Additional forward gearing enables top speeds of up to 40 km/h.

Optional AutoShift transmission*

The smoothest-shifting automatic transmission in the industry improves operator comfort by reducing the number of times the transmission-control lever needs to be actuated during operation.

*Not available on the 310L.





New easy-to-use loader-control grip

New "palm-on-top" loader-control grip is even more comfortable and easy to use. Control of clutch disconnect, transmission quick-shift, auxiliary proportional roller, and momentary mechanical-front-wheel drive is at your fingertips.

Easy, fingertip control of backhoe functions

Fingertip electrohydraulic (EH) control of redesigned pilot levers provides even easier operation of backhoe functions, including selective flow and the horn.

Extend your workday

LED lighting kit includes choice of LED spot- or floodlights. For enhanced visibility when your workday goes long.

More legroom and space to rotate

Redesigned pilot towers provide more legroom and additional space for transitioning between loader and backhoe operation.

Fatigue-beating comfort

L-Series Backhoes are loaded with creature comforts, including an efficient HVAC system and an adjustable mechanical or air-suspension seat.

Steering column controls

Exterior lights, wipers, and turn signals are now more conveniently located on the multifunction lever on the steering column — just like a regular vehicle — helping operators keep their eyes on the job at hand.



UNSURPASSED RELIABILITY

WON'T BACK DOWN. OR LET YOU DOWN.

Built with state-of-the-art tools and technology by a quality-conscious workforce at our world-class facility in Dubuque, Iowa, U.S.A., L-Series Backhoes deliver unmatched reliability and uptime. When you know how they're built, you'll run a Deere.







Onboard diagnostics center

The most advanced onboard-diagnostics technology in the industry is standard on all L-Series Backhoes. The exclusive John Deere WorkSight™ suite of telematic solutions includes JDLink™ Ultimate with real-time machine monitoring and remote diagnostics to help increase uptime while lowering operating costs.

Quick, clean filter changes

Vertical spin-on engine, transmission, and hydraulic filters and quick-release fuel filters allow fast, clean changes. Standard heavy-duty transmission oil filter increases reliability.

More durable multipurpose bucket

Our rugged multipurpose bucket has been reinforced with thicker plates and stronger cylinder mountings for longer life.

Bias and radial tire options

Choose from a variety of factoryinstalled tire options, for the traction, exceptional performance, and long service life your specific application requires.

Diff-lock protection

Enabled through the monitor, differential-lock protection prevents engagement at high travel speeds and the resulting wear and tear on axle components.

Maintenance-free batteries

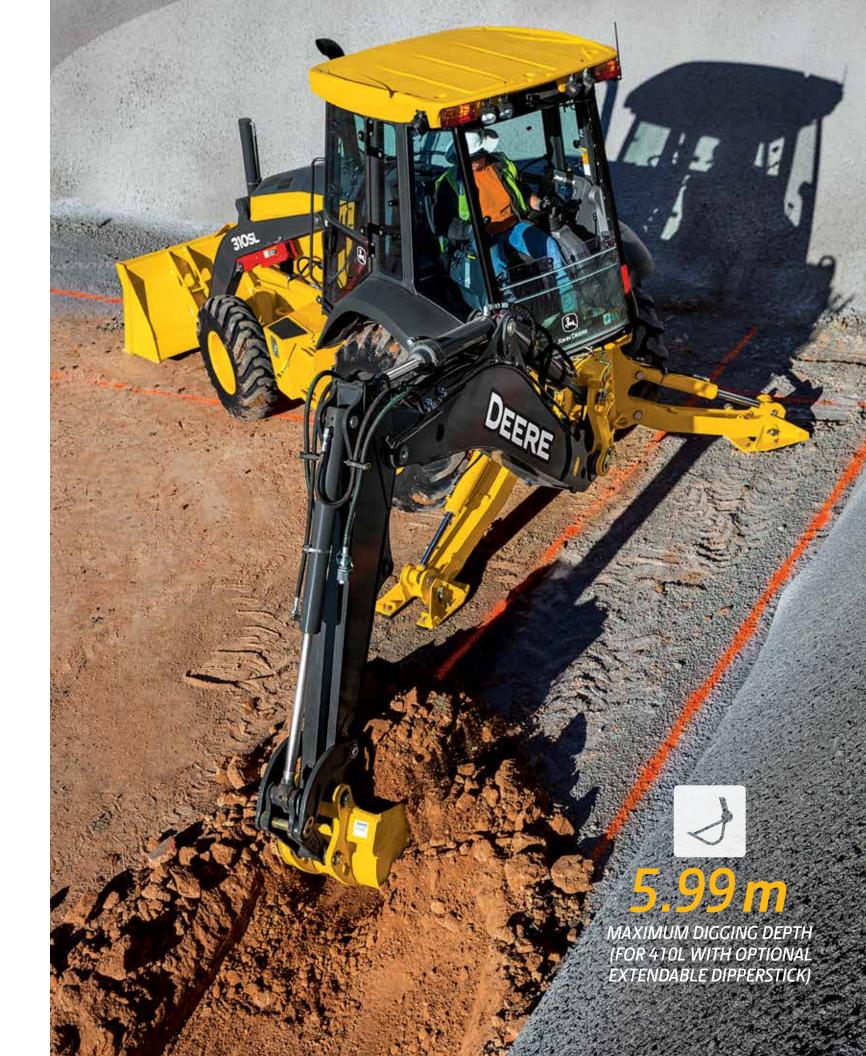
Standard maintenance-free batteries reduce periodic servicing, improve cold-starting reliability, and lengthen battery life.

Superior hydraulic oil

L-Series Backhoes come factoryfilled with Hydrau™ premium all-season, anti-wear hydraulic oil specifically designed for construction equipment. Or for cold weather, opt for Hydrau™ XR, which offers allseason protection from from −40 to 40 deg. C.

Protect your investment

Machine-security system with touchpad passcode helps prevent unauthorized operation.



EASY MAINTENANCE

KEEP THE PEACE. AND YOUR PEACE OF MIND.

Save fuel with economy mode

Standard economy mode can be configured separately between loader and backhoe functions. For example, activate economy mode for backhoe functions while retaining full power for loader functions — a Deere exclusive. This helps maximize fuel usage in lighter-work applications with minimal effect on machine performance.

Improved diagnostics

and easily.

State-of-the-art multi-language monitor clearly displays machine diagnostics. Operators can program a multitude of time-specific functions such as auto shutdown and auto-idle quickly



Minimize downtime and expense

Same-side ground-level service points help speed daily checks and fills. Other commonsense features such as quick-change filters, extended service intervals, simple-toread sight gauges, and easy-access grease zerks help increase uptime and lower daily operating costs.

Quick and easy A/C cleanout

Hinged air-conditioner condenser enables convenient cleaning of the unit, for maximum efficiency.

Quiet, fuel-efficient fan

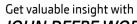
Standard suction-type direct-drive fan helps conserve power and fuel, while reducing noise. A temperaturecontrolled (viscous) variable-speed fan option is available for all models.

Durable engine technology

All L-Series models feature John Deere PowerTech 4.5L EPA Tier 3/EU Stage IIIA or Tier 2/Stage Il diesel engines, providing emission solutions that are proven, integrated, simple, and supported.

Save fuel and reduce noise

Auto-idle decreases engine speed when hydraulics aren't in use, to help maintain guiet working conditions and conserve precious fuel. Auto shutdown turns off the engine after an operator-selected period of inactivity, further keeping noise and fuel consumption down.



JOHN DEERE WORKSIGHT

John Deere WorkSight is an exclusive suite of telematic solutions that increases uptime while lowering operating costs. At its heart, JDLink Ultimate machine monitoring provides real-time utilization data and alerts to help you maximize productivity and efficiency while minimizing downtime. Remote diagnostics enable your dealer to read codes, record performance data, and even update software without a trip to the jobsite.

Keep downtime down with

ULTIMATE UPTIME

Ultimate Uptime, featuring John Deere WorkSight, is a customizable support solution available exclusively from your Deere dealer. This flexible offering maximizes equipment availability with standard John Deere WorkSight capabilities that can help prevent future downtime and speed repairs when needed. In addition to the base John Deere WorkSight features, our dealers work with you to build an uptime package that meets the specific needs of your machine, fleet, project, and business, including customized maintenance and repair agreements, onsite parts availability, extended warranties, fluid sampling, response-time guarantees, and more.



SIOL SPECIFICATIONS

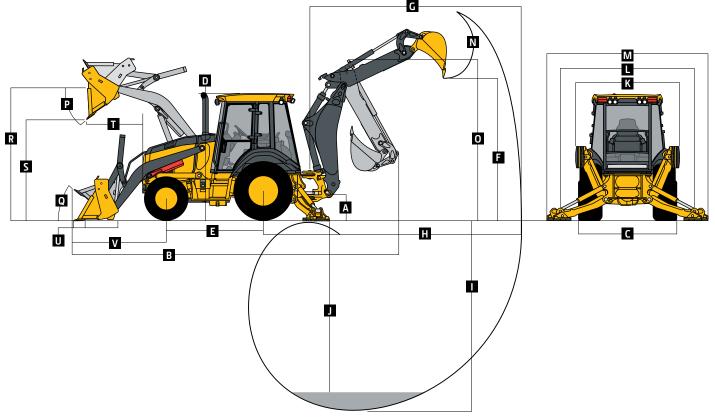




Engine	310L						
Manufacturer and Model			John Deere Powe 4045HT086 turbo		Plus 40 charge optima high al		
Non-Road Emission Standard	EPA Tier 2/EU St			EPA Tier 3/EU Sta	age IIIA		r 3/EU Stage IIIA+
Displacement	4.5 L (276 cu. in	.)		4.5 L (276 cu. in.)	4.5 L (2	?76 cu. in.)
Net Peak Power (ISO 9249)	60 kW (81 hp) at	t 2,000 rpm		65 kW (87 hp) at	1,966 rpr	n	
With Optional Viscous Fan, Cab, and 120-amp Alternator	63 kW (84 hp) at	t 2,006 rpm		67 kW (91 hp) at	2,000 rpr	n	
Net Peak Torque (ISO 9249)	344 Nm (254 lb.	-ft.) at 1,300 rpn	1	376 Nm (277 lb	ft.) at 1,3	00 rpm	
With Optional Viscous Fan, Cab, and 120-amp Alternator	349 Nm (257 lb.	-ft.) at 1,400 rpn	1	380 Nm (280 lb			
Net Torque Rise	35%			43%		43%	
With Optional Viscous Fan, Cab, and 120-amp Alternator	29%			37%		37%	
Lubrication	Pressure system	with spin-on filt	er and cooler	Pressure system	with spin-	on filter	and cooler
Air Cleaner			lement and evacua				
Cooling							
Fan Type	Suction-type cod	oling fan standar	d; temperature-cor	trolled (viscous) vari	able-rate	fan optio	onal
Engine Coolant Rating	-40 deg. C (-40		· '	· ·			
Engine Oil Cooler	Oil to water	<i>J</i> ,					
Powertrain							
Transmission	4-speed, helical- cutoff on loader		owerShift™ transmi:	ssion with hydraulic r	everser st	andard;	electric clutch
Torque Converter Maximum Travel Speeds with Standard Engine,	Single stage, du	al phase with 2.6	3:1 stall ratio, 280	mm (11 in.)			
Measured with 19.5L-24 Rear Tires	Forward	Reve	rse	Forward		Reverse	2
Gear 1	5.5 km/h (3.4 m)	ph) 7.0 k	m/h (4.3 mph)	5.6 km/h (3.5 mp	oh)	7.0 km	/h (4.3 mph)
Gear 2	10.1 km/h (6.3 r		km/h (7.9 mph)	10.2 km/h (6.3 mph) 12.8 km/h (8.0 m		n/h (8.0 mph)	
Gear 3	20.5 km/h (12.7			20.7 km/h (12.9		_	
Gear 4	34.2 km/h (21.3	mph) —		34.9 km/h (21.7	mph)	_	
Axles	,	, ,		,	' '		
Axle Oscillation, Stop to Stop, Front Axle	22 deg.			22 deg.			
Axle Ratings	Non-Powered	Mechanical- Front-Wheel	Dane	Non-Powered	MFWD		D
SAE J43	Front 4500 kg (9,921 lb.)	Drive (MFWD) 4000 kg (8,818 lb.)	<i>Rear</i> 6000 kg (13,228 lb.)	Front 4500 kg (9,921 lb.)	4500 kg (9,921 l		Rear 6500 kg (14,330 lb.)
Dynamic	7000 kg (15,432 lb.)	8500 kg (18,739 lb.)	9500 kg (20,944 lb.)	7000 kg (15,432 lb.)	8500 kg (18,739	l	9500 kg (20,944 lb.)
Static	20 500 kg (45,195 lb.)	23 500 kg (51,809 lb.)	26 000 kg (57,320 lb.)	20 500 kg (45,195 lb.)	23 500 (51,809	kg .	26 000 kg (57,320 lb.)
Ultimate	32 500 kg (71,650 lb.)	37 000 kg (81,571 lb.)	39 500 kg (87,083 lb.)	32 500 kg (71,650 lb.)	37 000 (81,571	kg	39 500 kg (87,083 lb.)
Differentials	(71,050 10.)	(01,57110.)	(07,005 10.)	(71,05010.)	(01,5/1		(07,005 10.)
MFWD Axle	Onen – standard	l·automatic limi	ted-slip traction co	ntrol – ontional			
Rear Axle			iged 100% mechani				
Steering (ISO 5010)			emergency steering	Hydrostatic powe	er steering	n and em	ernency steering
Axle	Non-Powered Fr		MFWD	riyurostatic powe	er steerill	g and cill	ergency steering
Curb-Turning Radius	. VOIL I OWEIEU II	J.,,t	IVII VVD				
With Brakes	3.49 m (11 ft. 5	in)	3.59 m (11 ft. 9	9 in 1			
With blakes Without Brakes	4.10 m (13 ft. 5		4.25 m (13 ft.				
Bucket-Clearance Circle	- 1 . 10 III (13 IL. 3	111. j	דו כון ווו כא.ד.	1 1 1(1.)			
With Brakes	10 1/1 m /22 ft 3	Rin N	10 22 ~ 122 &	7 in 1			
With Brakes Without Brakes	10.14 m (33 ft. 3		10.23 m (33 ft.				
Steering Wheel Turns (lock to lock)	11.01 m (36 ft. 1 3.2	1 111.]	11.19 m (36 ft. 2.7	m.,j			
MFWD and Rear Axle		noard planetary f		e shock loads over 3	gears		

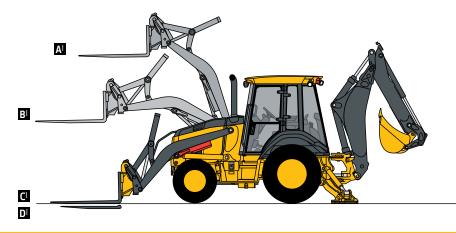
Powertrain (continued)	310L					
Brakes (ISO 3450)	0.02					
Service	Power assisted, hydraulic v	vet disc. mounted inboard. se	elf-adjusting and self-equalizing			
Parking			ependent of service brakes with electric switch control			
Hydraulics	sp 3 spp s s , y s s s	, ,				
Main Pump	Open center, single-gear p	ump				
Pump Flow at 2,200 rpm, Backhoe and Loader	106 L/m (28 gpm)	· F				
System Relief Pressure	(- 51-)					
Backhoe	24 993 kPa (3,625 psi)					
Loader	22 063 kPa (3,200 psi)					
Controls	, , ,					
Backhoe	optional; field kit available	2-lever manual standard; pilot controls with pattern select and manual and/or electric auxiliary functions optional; field kit available for 3-lever manual controls with foot swing				
Loader	Single-lever control with electric clutch cutoff switch standard; manual auxiliary function (2nd lever) and single-lever control with electric clutch cutoff optional					
Electrical						
Voltage	12 volt					
Alternator Rating	90 amp					
Lights	10 halogen: 4 front, 4 rear and 2 rear; stop and taillig		candlepower each); turn signals and flashers: 2 front			
Operator Station						
Type (SAE J1040)	Canopy, isolation mounted	I, ROPS/FOPS, left/right acces	ss, with molded roof			
Tires/Wheels						
	Front	Rear				
Non-Powered Front Axle	12.5/80-18 F3 (12)	19.5L-24 R-4 (12)				
With MFWD	12-16.5 NHS (12)	19.5L-24 R-4 (12)				
	12.5/80-18 3 (12)	19.5L-24 R-4 (10)				
	12.5/80-18 R4 (10)	19.5L-24 R-4 (12)				
	12.5/80-18 3 (12)	21L-24 R4 (12)				
	12.5/80-18 R4 (10)	21L-24 R4 (12)				
	340/80R18 XMCL	500/70R24 XMCL				
	340/80R18 550	500/70R24 550				
5 1 1W	340/80R18 580	500/70R24 580				
Serviceability P. S. Company of the service of the	EDAT: 2/EU Cross II		EDA T: 2/ELLCL IIIA			
Refill Capacities	EPA Tier 2/EU Stage II		EPA Tier 3/EU Stage IIIA			
Cooling System	21 L (22.2 qt.)		30 L (31.7 qt.)			
Rear Axle	18 L (19 qt.)		18 L (19 qt.)			
Engine Oil (including vertical spin-on filter)	13 L (13.7 qt.)		13 L (13.7 qt.)			
Torque Converter and Transmission	15.1 L (16 qt.)		15.1 L (16 qt.)			
Fuel Tank (with ground-level fueling)	140.1 L (37 gal.)		140.1 L (37 gal.)			
Hydraulic System	104.1 L (27.5 gal.)		104.1 L (27.5 gal.)			
Hydraulic Reservoir	45 L (11.9 gal.)		45 L (11.9 gal.)			
MFWD Housing Axle	6 E I /6 0 a+ \		6 E I (6 0 at)			
-	6.5 L (6.9 qt.)		6.5 L (6.9 qt.)			
Planetary (each)	0.9 L (1 qt.)		0.9 L (1 qt.)			
Hydrau [™] XR Hydraulic Oil Operating Weights	Optional		Optional			
With Full Fuel Tank, 79-kg (175 lb.) Operator, Standard	6545 kg (14,430 lb.)					
Equipment, and Bumper	3					
Typical with Cab, Extendable Dipperstick, and 204-kg (450 lb.) Counterweight	7203 kg (15,880 lb.)					
Optional Components (weight difference between base equipment and option)						
Cab	263 kg (580 lb.)					
MFWD with Tires	168 kg (370 lb.)					
Extendable Dipperstick	191 kg (420 lb.)					
Front Loader Coupler	257 kg (566 lb.)					
Backhoe Bucket Coupler	59 kg (130 lb.)					

Overall Dimensions	310L
A Ground Clearance, Minimum	293 mm (12 in.)
B Overall Length, Transport	7.24 m (23 ft. 9 in.)
C Width Over Tires	2.16 m (7 ft. 1 in.)
D Height to Top of ROPS/Cab	2.81 m (9 ft. 3 in.)
E Length from Axle to Axle	
Non-Powered Front Axle	2.16 m (7 ft. 1 in.)
MFWD Axle	2.19 m (7 ft. 2 in.)



Backhoe Dimensions and Performance	310L		
Backhoe specifications are with 610-mm x 0.18	-m3 (24 in. x 6.5 cu. ft.) bucket; dipp	oer lift specs are with a boom ang	le of 65 deg.
Bucket Range	305-762 mm (12-30 in.)		
Digging Force			
Bucket Cylinder	48.2 kN (10,844 lb.)		
Crowd Cylinder	30.8 kN (6,992 lb.)		
Swing Arc	180 deg.		
Operator Control	2 levers		
Leveling Angle	14 deg.		
Stabilizer Angle Rearward	18 deg.		
		With Optional Extendable D	Dipperstick
	With Standard Backhoe	Retracted	Extended
F Loading Height, Truck Loading Position	3.41 m (11 ft. 2 in.)	3.49 m (11 ft. 6 in.)	4.15 m (13 ft. 7 in.)
G Reach from Center of Swing Pivot	5.42 m (17 ft. 10 in.)	5.49 m (18 ft. 0 in.)	6.51 m (21 ft. 4 in.)
H Reach from Center of Rear Axle	6.49 m (21 ft. 3 in.)	6.55 m (21 ft. 6 in.)	7.57 m (24 ft. 10 in.)
I Digging Depth (SAE maximum)	4.27 m (14 ft. 0 in.)	4.33 m (14 ft. 2 in.)	5.39 m (17 ft. 8 in.)
J Digging Depth (SAE)			
610-mm (2 ft.) Flat Bottom	4.22 m (13 ft. 10 in.)	4.29 m (14 ft. 1 in.)	5.36 m (17 ft. 7 in.)
2440-mm (8 ft.) Flat Bottom	3.89 m (12 ft. 9 in.)	3.96 m (13 ft. 0 in.)	5.10 m (16 ft. 9 in.)
K Stabilizer Width, Transport	2.18 m (7 ft. 2 in.)	2.18 m (7 ft. 2 in.)	2.18 m (7 ft. 2 in.)
L Stabilizer Spread, Operating	3.10 m (10 ft. 2 in.)	3.10 m (10 ft. 2 in.)	3.10 m (10 ft. 2 in.)
M Stabilizer Overall Width, Operating	3.53 m (11 ft. 7 in.)	3.53 m (11 ft. 7 in.)	3.53 m (11 ft. 7 in.)
N Bucket Rotation	190 deg.	190 deg.	190 deg.
O Transport Height	3.42 m (11 ft. 2 in.)	3.42 m (11 ft. 2 in.)	3.42 m (11 ft. 2 in.)

Loader Dimensions and Performance	310L			
P Bucket Dump Angle, Maximum	45 deg.			
Q Rollback Angle at Ground Level	40 deg.			
	Heavy-duty	Heavy-duty	Heavy-duty long lip	Multipurpose
Bucket Capacity	0.77 m³ (1.00 cu. yd.)	0.86 m³ (1.12 cu. yd.)	0.96 m³ (1.25 cu. yd.)	0.96 m³ (1.25 cu. yd.)
Width	2184 mm (86 in.)			
Weight	363 kg (800 lb.)	390 kg (860 lb.)	405 kg (892 lb.)	794 kg (1,750 lb.)
Breakout Force	41.6 kN (9,353 lb.)	42.3 kN (9,504 lb.)	39.9 kN (8,978 lb.)	37.0 kN (8,311 lb.)
Lift Capacity, Full Height	3099 kg (6,833 lb.)	3179 kg (7,009 lb.)	2934 kg (6,469 lb.)	2605 kg (5,743 lb.)
R Height to Bucket Hinge Pin, Maximum	3.45 m (11 ft. 4 in.)			
S Dump Clearance, Bucket at 45 deg.	2.71 m (8 ft. 11 in.)	2.74 m (9 ft. 0 in.)	2.64 m (8 ft. 8 in.)	2.65 m (8 ft. 8 in.)
T Reach at Full Height, Bucket at 45 deg.	734 mm (28.9 in.)	699 mm (27.5 in.)	825 mm (32.5 in.)	737 mm (29.0 in.)
U Digging Depth Below Ground, Bucket Level	107 mm (4.2 in.)	107 mm (4.2 in.)	88 mm (3.5 in.)	147 mm (5.8 in.)
V Length from Front Axle Centerline to Bucket	2.02 m (6 ft. 8 in.)	1.97 m (6 ft. 6 in.)	2.12 m (6 ft. 11 in.)	2.09 m (6 ft. 10 in.)
Cutting Edge				
Lift Capacity with Quick-Coupler Forks				
Hydraulic Capacity	1219-mm (48 in.) Tines	1524-mm (60 in.) Tines		
A ^I Maximum Height	1695 kg (3,736 lb.)	1561 kg (3,442 lb.)		
B ^I Maximum Reach	2646 kg (5,833 lb.)	2629 kg (5,795 lb.)		
C ¹ At Ground Line	3583 kg (7,900 lb.)	3269 kg (7,207 lb.)		
D ^I Below Ground Line	262 mm (10.3 in.)	262 mm (10.3 in.)		



Lift Capacity with Bucket

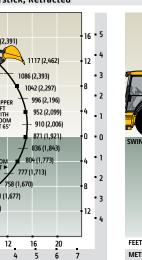
Lift capacities are over-end values in kg (lb.) according to SAE J31. Figures listed are 87% of the maximum lift force available. Calculated with 610-mm x 0.18-m³ (24 in. x 6.5 cu. ft.) bucket. Bucket impacts overall lift capacity.

With Standard Dipperstick

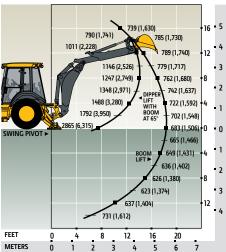
STANDARD LIFT

1243 (2,741) 1675 (3,694) 1279 (2,820) 12 4 12 9 12 4 12 4 13 1244 (2,742) 1309 (5,091) 1196 (2,637) 1196 (2,637) 1100 (2,426) 1057 (2,330) 1016 (2,241) 1057 (2,330) 1016 (2,241) 1057 (2,388) 1057 (2,388) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,088) 1057 (2,

STANDARD LIFT With 1.06-m (3 ft. 6 in.) Extendable Dipperstick, Retracted



STANDARD LIFT With 1.06-m (3 ft. 6 in.) Extendable Dipperstick, Extended





SIOSL SPECIFICATIONS

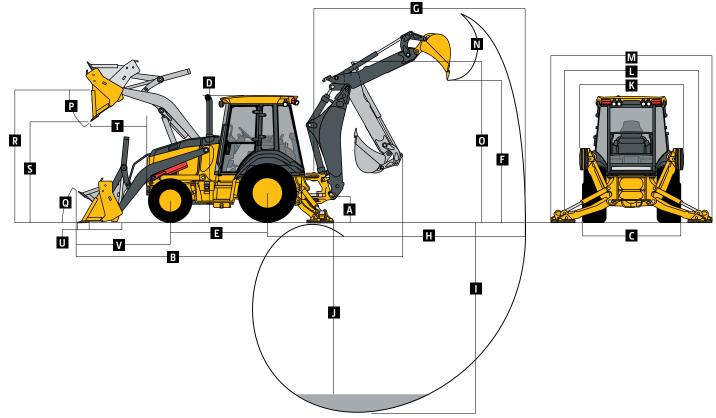
三	0	A	
			SPECIFICATIONS



Engine	310SL							
Manufacturer and Model	John Deere Pow 4045TT096 turb	ocharged			John Deere Powe 4045HT086 turb	ocharged	Plus 40 charge optima high al	
Non-Road Emission Standard	EPA Tier 2/EU St	age II			EPA Tier 3/EU St	age IIIA	EPA Ti	er 3/EU Stage IIIA+
Displacement	4.5 L (276 cu. in	_			4.5 L (276 cu. in.) 4.5 L (276 cu. in.)			
Net Peak Power (ISO 9249)	70 kW (94 hp) at	2,000 rp	m		71 kW (96 hp) at	1,900 rpi	n	·
With Optional Viscous Fan, Cab, and 120-amp Alternator	72 kW (97 hp) at					74 kW (99 hp) at 1,966 rpm		
Net Peak Torque (ISO 9249)	388 Nm (286 lb.	-ft.) at 1,3	300 rpm		397 Nm (293 lb.	-ft.) at 1,5	00 rpm	
With Optional Viscous Fan, Cab, and 120-amp Alternator	393 Nm (290 lb.	-ft.) at 1,4	+00 rpm		403 Nm (297 lb.	-ft.) at 1,5	00 rpm	
Net Torque Rise	46%				42%		42%	
With Optional Viscous Fan, Cab, and 120-amp Alternator	39%				37%		37%	
Lubrication	Pressure system	with spin	-on filter	and cooler	Pressure system	with spin-	on filter	and cooler
Air Cleaner	Dual-stage dry t	ype with s	afety elei	ment and evacuato	or valve			
Cooling								
Fan Type			tandard;	temperature-cont	rolled (viscous) var	iable-rate	fan opti	onal
Engine Coolant Rating	–40 deg. C (–40							
Engine Oil Cooler	Oil to water							
Powertrain								
Transmission	cutoff on loader	lever; Aut	toShift tra	ansmission option		reverser si	tandard;	electric clutch
Torque Converter	Single stage, du	al phase w	/ith 2.63:	1 stall ratio, 280 m	ım (II in.)			
Maximum Travel Speeds with Standard Engine,	- ,				- ,		-	
Measured with 19.5L-24 Rear Tires	Forward	1.	Reverse		Forward		Revers	
Gear 1	5.5 km/h (3.4 m)	,		/h (4.3 mph)	5.6 km/h (3.5 m)			ı/h (4.3 mph)
Gear 2	10.1 km/h (6.3 n			n/h (7.9 mph)	10.2 km/h (6.3 r			m/h (8.0 mph)
Gear 3	20.5 km/h (12.7			n/h (12.6 mph)	20.7 km/h (12.9			m/h (12.7 mph)
Gear 4	34.8 km/h (21.6		_		34.8 km/h (21.6		_	
Gear 5	40.0 km/h (25.0	mph)	_		40.0 km/h (25.0	mph)	_	
Axles								
Axle Oscillation, Stop to Stop, Front Axle	22 deg.				22 deg.			
Axle Ratings	Non-Powered Front	Mechai Front-V Drive (N	Vheel	Rear	Non-Powered Front	MFWD		Rear
SAE J43	4500 kg (9,921 lb.)	4500 kg (9,921	,	6500 kg (14,330 lb.)	5000 kg (11,023 lb.)	5000 kg (11,023	,	7000 kg (19,842 lb.)
Dynamic	8500 kg (18,739 lb.)	8500 kg (18,739	lb.)	9500 kg (20,944 lb.)	8500 kg (18,739 lb.)	8500 kg (18,739	lb.)	9500 kg (20,944 lb.)
Static	22 500 kg (49,604 lb.)	23 500 (51,809) lb.)	26 000 kg (57,320 lb.)	22 500 kg (49,604 lb.)	23 500 (51,809	lb.)	26 000 kg (57,320 lb.)
Ultimate	35 000 kg (77,162 lb.)	37 000 (81,571		39 500 kg (87,083 lb.)	35 000 kg (77,162 lb.)	37 000 (81,571		39 500 kg (87,083 lb.)
Differentials								
MFWD Axle	Automatic, limit							
Rear Axle				ed 100% mechanica	al lock			
Steering (ISO 5010) Axle	Hydrostatic pow Non-Powered Fr		g and em	ergency steering <i>MFWD</i>				
Curb-Turning Radius								
With Brakes	3.49 m (11 ft. 5	in.)		3.66 m (12 ft. 0	in.)			
Without Brakes	4.10 m (13 ft. 5			4.35 m (14 ft. 3				
Bucket-Clearance Circle				·				
With Brakes	10.14 m (33 ft. 3	3 in.)		10.27 m (33 ft. 8	3 in.)			
Without Brakes	11.01 m (36 ft. 1			11.27 m (37 ft. 0				
Steering Wheel Turns (lock to lock)	3.2			2.7				

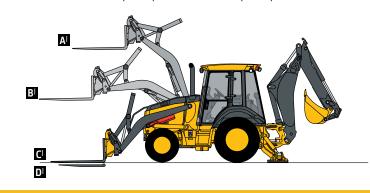
Powertrain (continued)	310SL	
MFWD and Rear Axle	Heavy duty, outboard planetary fina	l drives distribute shock loads over 3 gears
Brakes (ISO 3450)		
Service	Power assisted, hydraulic wet disc, r	nounted inboard, self-adjusting and self-equalizing
Parking		, wet, multi-disc, independent of service brakes with electric switch control
Hydraulics		
Main Pump	Open center, gear type, tandem wit	n unloader
Pump Flow at 2,200 rpm	, , , , , ,	
Backhoe	136 L/m (36 gpm)	
Loader	106 L/m (28 gpm)	
System Relief Pressure, Backhoe and Loader	24 993 kPa (3,625 psi)	
Controls	2 1 333 Ki u (3,023 p3i)	
Backhoe	2-lever manual standard; pilot controptional; field kit available for 3-lev	rols with pattern select and manual and/or electric auxiliary functions er manual controls with foot swing
Loader	Single-lever control with electric clu with electric clutch cutoff optional	tch cutoff switch and MFWD (momentary) standard; single-lever control
Electrical		
Voltage	12 volt	
Alternator Rating	90 amp	
Lights	10 halogen: 4 front, 4 rear, and 2 sident and 2 rear; stop and taillights; and 2	de docking (32,500 candlepower each); turn signals and flashers: 2 front Prear reflectors
Operator Station		
Type (SAE J1040)	Canopy, isolation mounted, ROPS/F	OPS, left/right access, with molded roof
Tires/Wheels		
	Front	Rear
Non-Powered Front Axle	12.5/80-18 F3 (12)	19.5L-24 R4 (12)
With MFWD	12.5/80-18 I3 (12)	19.5L-24 R4 (10)
	12.5/80-18 R4 (10)	19.5L-24 R4 (12)
	12.5/80-18 3 (12)	21L-24 R4 (12)
	12.5/80-18 R4 (10)	21L-24 R4 (12)
	340/80R18 XMCL	500/70R24 XMCL
	340/80R18 550	500/70R24 550
	340/80R18 580	500/70R24 580
Serviceability	3 10/ 001(10 300	300/7 GRZ 1 300
Refill Capacities	EPA Tier 2/EU Stage II	EPA Tier 3/EU Stage IIIA
Cooling System	21 L (22.2 qt.)	30 L (31.7 qt.)
Rear Axle	18 L (19 qt.)	18 L (19 qt.)
	•	
Engine Oil (including vertical spin-on filter)	13 L (13.7 qt.)	13 L (13.7 qt.)
Torque Converter and Transmission	15.1 L (16 qt.)	15.1 L (16 qt.)
Fuel Tank (with ground-level fueling)	140.1 L (37 gal.)	140.1 L (37 gal.)
Hydraulic System	104.1 L (27.5 gal.)	104.1 L (27.5 gal.)
Hydraulic Reservoir	45 L (11.9 gal.)	45 L (11.9 gal.)
MFWD Housing		
Axle	6.5 L (6.9 qt.)	6.5 L (6.9 qt.)
Planetary (each)	0.9 L (1 qt.)	0.9 L (1 qt.)
Hydrau™ XR Hydraulic Oil	Optional	Optional
Operating Weights		
With Full Fuel Tank, 79-kg (175 lb.) Operator, and Standard Equipment	7178 kg (15,825 lb.)	
Typical with Cab, Extendable Dipperstick, and 567-kg (1,250 lb.) Counterweight	8026 kg (17,695 lb.)	
Optional Components (weight difference between base equipment and option)		
Cab	263 kg (580 lb.)	
MFWD with Tires	220 kg (485 lb.)	
Extendable Dipperstick	222 kg (490 lb.)	
Front Loader Coupler	257 kg (566 lb.)	
Backhoe Bucket Coupler	63 kg (138 lb.)	
	3 (,	

Overall Dimensions	310SL
A Ground Clearance, Minimum	330 mm (13 in.)
B Overall Length, Transport	7.28 m (23 ft. 11 in.)
C Width Over Tires	2.18 m (7 ft. 2 in.)
D Height to Top of ROPS/Cab	2.79 m (9 ft. 2 in.)
E Length from Axle to Axle	
Non-Powered Front Axle	2.16 m (7 ft. 1 in.)
MFWD Axle	2.19 m (7 ft. 2 in.)



D 11 D: : 1D 6			
Backhoe Dimensions and Performance	21 2/2/: 75 6 1 1 . !:	1:6:	L CCT I
Backhoe specifications are with 610-mm x 0		per lift specs are with a boom angi	le of 65 deg.
Bucket Range	305–762 mm (12–30 in.)		
Digging Force	55 0 IN (12 256 II)		
Bucket Cylinder	55.0 kN (12,356 lb.)		
With Heavy-Duty Cylinder Option	67.8 kN (15,254 lb.)		
Crowd Cylinder	36.6 kN (8,229 lb.)		
Swing Arc	180 deg.		
Operator Control	2 levers		
		With Optional Extendable D	• •
	With Standard Backhoe	Retracted	Extended
F Loading Height, Truck Loading Position	3.43 m (11 ft. 3 in.)	3.55 m (11 ft. 8 in.)	4.17 m (13 ft. 8 in.)
G Reach from Center of Swing Pivot	5.52 m (18 ft. 1 in.)	5.62 m (18 ft. 5 in.)	6.62 m (21 ft. 9 in.)
H Reach from Center of Rear Axle	6.58 m (21 ft. 7 in.)	6.68 m (21 ft. 11 in.)	7.68 m (25 ft. 2 in.)
I Digging Depth (SAE maximum)	4.34 m (14 ft. 3 in.)	4.48 m (14 ft. 8 in.)	5.53 m (18 ft. 2 in.)
J Digging Depth (SAE)			
610-mm (2 ft.) Flat Bottom	4.31 m (14 ft. 2 in.)	4.44 m (14 ft. 7 in.)	5.49 m (18 ft. 0 in.)
2440-mm (8 ft.) Flat Bottom	3.97 m (13 ft. 0 in.)	4.11 m (13 ft. 6 in.)	5.24 m (17 ft. 2 in.)
K Stabilizer Width, Transport	2.18 m (7 ft. 2 in.)	2.18 m (7 ft. 2 in.)	2.18 m (7 ft. 2 in.)
L Stabilizer Spread, Operating	·	·	
Standard Stabilizers	3.10 m (10 ft. 2 in.)	3.10 m (10 ft. 2 in.)	3.10 m (10 ft. 2 in.)
Long Stabilizers	3.45 m (11 ft. 4 in.)	3.45 m (11 ft. 4 in.)	3.45 m (11 ft. 4 in.)
M Stabilizer Overall Width, Operating			
Standard Stabilizers	3.53 m (11 ft. 7 in.)	3.53 m (11 ft. 7 in.)	3.53 m (11 ft. 7 in.)
Long Stabilizers	4.03 m (13 ft. 3 in.)	4.03 m (13 ft. 3 in.)	4.03 m (13 ft. 3 in.)

Backhoe Dimensions and Performance (continued)	310SL			
		With Optional Ex	tendable Dipperstick	
	With Standard Backhoe	Retracted	Ext	tended
N Bucket Rotation	190 deg.	190 deg.	19	0 deg.
O Transport Height	3.49 m (11 ft. 6 in.)	3.50 m (11 ft. 6 ii	n.) 3.5	50 m (11 ft. 6 in.)
Loader Dimensions and Performance				
P Bucket Dump Angle, Maximum	45 deg.			
Q Rollback Angle at Ground Level	40 deg.			
	Heavy-duty	Heavy-duty long lip	Heavy-duty	Multipurpose
Bucket Capacity	0.86 m³ (1.12 cu. yd.)	0.96 m³ (1.25 cu. yd.)	1.00 m ³ (1.31 cu. yd.)	1.00 m³ (1.31 cu. yd.)
Width	2184 mm (86 in.)	2184 mm (86 in.)	2337 mm (92 in.)	2337 mm (92 in.)
Weight	390 kg (860 lb.)	405 kg (892 lb.)	521 kg (1,148 lb.)	863 kg (1,902 lb.)
Breakout Force	49.1 kN (11,045 lb.)	46.4 kN (10,438 lb.)	46.8 kN (10,532 lb.)	43.2 kN (9,714 lb.)
Lift Capacity, Full Height	3462 kg (7,632 lb.)	3198 kg (7,050 lb.)	3322 kg (7,324 lb.)	2834 kg (6,248 lb.)
R Height to Bucket Hinge Pin, Maximum	3.45 m (11 ft. 4 in.)	3.45 m (11 ft. 4 in.)	3.45 m (11 ft. 4 in.)	3.45 m (11 ft. 4 in.)
S Dump Clearance, Bucket at 45 deg.	2.62 m (8 ft. 7 in.)	2.64 m (8 ft. 8 in.)	2.68 m (8 ft. 10 in.)	2.65 m (8 ft. 8 in.)
T Reach at Full Height, Bucket at 45 deg.	699 mm (27.5 in.)	825 mm (32.5 in.)	695 mm (27.4 in.)	737 mm (29.0 in.)
U Digging Depth Below Ground, Bucket Level	106 mm (4.2 in.)	87 mm (3.4 in.)	151 mm (5.9 in.)	147 mm (5.8 in.)
V Length from Front Axle Centerline to Bucket	1.97 m (6 ft. 6 in.)	2.12 m (6 ft. 11 in.)	2.04 m (6 ft. 8 in.)	2.09 m (6 ft. 10 in.)
Cutting Edge				
Lift Capacity with Quick-Coupler Forks				
Hydraulic Capacity	1219-mm (48 in.) Tines	1524-mm (60 in.) Tines		
A ^I Maximum Height	2073 kg (4,570 lb.)	1891 kg (4,170 lb.)		
B ^I Maximum Reach	3162 kg (6,971 lb.)	3003 kg (6,621 lb.)		
C ¹ At Ground Line	4145 kg (9,138 lb.)	3883 kg (8,561 lb.)		
DI Below Ground Line	211 mm (8.3 in.)	211 mm (8.3 in.)		



Lift Capacity with Bucket

METERS

Lift capacities are over-end values in kg (lb.) according to SAE J31. Figures listed are 87% of the maximum lift force available. Calculated with 610-mm x 0.21-m³ (24 in. x 7.5 cu. ft.) bucket. Bucket impacts overall lift capacity.

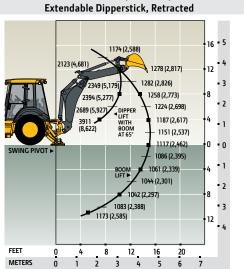
STANDARD LIFT

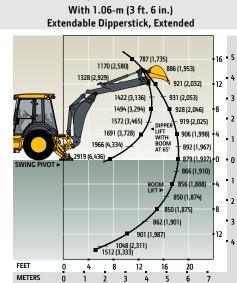
STANDARD LIFT

STANDARD LIFT

With 1.06-m (3 ft. 6 in.)

With Standard Dipperstick 16 • 5 2489 [5,487] 22620 [5,776] 1513 [3,336] 22676 [5,899] 3002 [6,706] Dipper WiTH WITH WITH BOOM AT 65' 1275 [2,810] 1285 [2,724] 1201 [2,649] 1175 [2,590] 127 [2,807] 128 [2,906] 127 [2,649] 129 [2,724] 1201 [2,649] 127 [2,807] 128 [2,906] 127 [2,810] 129 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,649] 1201 [2,







SIESE SPECIFICATIONS

SIESL SPECIFICATIONS

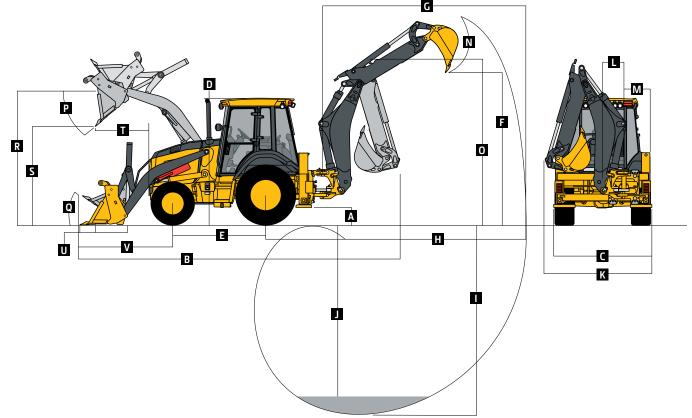
Hydraulics (continued)



Engine	315SL					
Manufacturer and Model	John Deere PowerTech™ 4	4045TT096 turbocharged	John Deere Power1	Γech™ E	4045HT086 turbocharged	
Non-Road Emission Standard	EPA Tier 2/EU Stage II		EPA Tier 3/EU Stag			
Displacement	4.5 L (276 cu. in.)		4.5 L (276 cu. in.)			
Net Peak Power (ISO 9249)	70 kW (94 hp) at 2,000 rp	om	71 kW (96 hp) at 1,	,900 rpr	n	
With Optional Viscous Fan, Cab, and 120-amp Alternator	72 kW (97 hp) at 2,000 rp			74 kW (99 hp) at 1,966 rpm		
Net Peak Torque (ISO 9249)	388 Nm (286 lbft.) at 1,	300 rpm	396 Nm (292 lbft	.) at 1,5	00 rpm	
With Optional Viscous Fan, Cab, and 120-amp		393 Nm (290 lbft.) at 1,400 rpm		.) at 1,5		
Alternator	, , , , , , , , , , , , , , , , , , , ,	1	, , , , ,	, , .		
Net Torque Rise	45%		42%			
With Optional Viscous Fan, Cab, and 120-amp	39%		37%			
Alternator						
Lubrication	Pressure system with spir	n-on filter and cooler	Pressure system wi	ith spin-	on filter and cooler	
Air Cleaner		safety element and evacuat				
Cooling	Budi stuge dry type with	sarety element and evacuat	or varve			
Fan Type	Suction-type cooling fan	standard; temperature-con	trolled (viscous) variab	le-rate	fan ontional	
Engine Coolant Rating	-40 deg. C (-40 deg. F)	standard, temperature-com	trolled (viscous) variab	ne-rate	ran optional	
Engine Oil Cooler	Oil to water					
Powertrain Powertrain	OII LU WALEI					
Transmission	5 speed believe surt war-	full DowerChift™ +	cion with hudeaulia	orco: ct	andard: clastric alutak	
	cutoff on loader lever; Au	s, full PowerShift™ transmis	al	verser st	andard; electric clutch	
Torque Converter	Single stage, dual phase v	with 2.63:1 stall ratio, 280 r	nm (i i i n .)			
Maximum Travel Speeds with Standard Engine,	.		<i>-</i>			
Measured with 16.9-28 Rear Tires	Forward	Reverse	Forward		Reverse	
Gear 1	5.8 km/h (3.6 mph)	7.3 km/h (4.5 mph)	5.8 km/h (3.6 mph)		7.3 km/h (4.5 mph)	
Gear 2	10.6 km/h (6.6 mph)	13.3 km/h (8.3 mph)	10.6 km/h (6.6 mp		13.4 km/h (8.3 mph)	
Gear 3	21.4 km/h (13.3 mph)	21.2 km/h (13.2 mph)	21.7 km/h (13.5 m		21.4 km/h (13.3 mph)	
Gear 4	35.2 km/h (21.9 mph)	_	35.1 km/h (21.8 m	ph)	_	
Gear 5	40.0 km/h (24.9 mph)	_	40.0 km/h (24.9 m	ph)	_	
Axles						
Axle Oscillation, Stop to Stop, Front Axle	22 deg.		22 deg.			
Axle Ratings		Mechanical-Fro	nt-Wheel Drive			
	Non-Powered Front	(MFWD)		Rear		
SAE J43	5500 kg (12,125 lb.)	5500 kg (12,12	5 lb.)	7000 kg	ı (15,432 lb.)	
Dynamic	8500 kg (18,739 lb.)	8500 kg (18,73	9 lb.)	10 500	kg (23,149 lb.)	
Static	22 500 kg (49,604 lb.)	23 500 kg (51,8			kg (57,320 lb.)	
Ultimate	35 000 kg (77,162 lb.)	37 000 kg (81,5			kg (87,083 lb.)	
Differentials	3, , ,	J	,		J. , ,	
MFWD Axle	Automatic, limited-slip tr	action control				
Rear Axle		illy engaged 100% mechanic	al lock			
Steering (ISO 5010)		ng and emergency steering				
Axle	Non-Powered Front	MFWD				
Curb-Turning Radius		,				
With Brakes	3.53 m (11 ft. 7 in.)	3.67 m (12 ft. 0	in)			
Without Brakes	4.13 m (13 ft. 7 in.)	4.35 m (14 ft. 3	•			
Bucket-Clearance Circle	(15 16. / 111.)	د .اا ۱۱ ا دد.۱	,			
With Brakes	10.36 m (34 ft. 0 in.)	10.48 m (34 ft.	5 in)			
With Brakes Without Brakes	11.23 m (36 ft. 10 in.)	11.47 m (37 ft.	•			
Steering Wheel Turns (lock to lock)	3.2	2.7	O III. J			
			school loads over 2 =	0256		
MFWD Axle Rear Axle		netary final drives distribute				
	neavy uuty, outboard pia	netary final drives distribute	s shock loads over 4 ge	ed12		
Brakes (ISO 3450)	Danish assist of the death		and administration of the	IE - '	lining.	
Service		wet disc, mounted inboard				
Parking	Spring applied, hydraulica	lly released, wet, multi-disc,	independent of service	e brakes	with electric switch contr	
Hydraulics						
Main Pump	Open center, gear type, to	andem with unloader				
Pump Flow at 2,200 rpm						
Backhoe	136 L/m (36 gpm)					
Loader	106 L/m (28 gpm)					

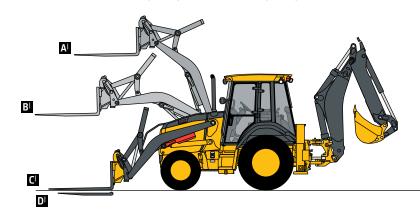
Hydraulics (continued)	315SL			
	EPA Tier 2/EU Stage II		EPA Tier 3/EU Stage IIIA	
System Relief Pressure, Backhoe and Loader Controls	24 993 kPa (3,625 psi)		24 993 kPa (3,625 psi)	
	2-lever mechanical standa	rd, pilot controls with	2-lever manual standard,	manual and/or electric
	pattern select and manual functions optional		auxiliary functions option	al
	lever control with electric	lectric clutch cutoff switch s clutch cutoff switch, electro		
	(momentary), and transmi	ssion quick-shift optional		
Electrical				
3	12 volt		12 volt	
3	120 amp	12 :1 1 1: (22 500	120 amp	12 :1 1 1: (22 500
			candlepower each); turn s and 2 rear; stop and taillig	, and 2 side docking (32,500 ignals and flashers: 2 front ghts; and 2 rear reflectors; 50-watt halogen, plate lamp, narker lamps
Operator Station	-p y		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
•	Cab, isolation mounted, R	OPS/FOPS, left/right access,	with molded roof	
Tires/Wheels				
	Front	Rear	Front	Rear
Non-Powered Front Axle	12.5/80-18 F3 (12)	19.5L-24 R4 (12)	12.5/80-18 F3 (12)	19.5L-24 R4 (12)
	12.5/80-18 F3 (12)	16.9L-28 R4 (12)	12.5/80-18 F3 (12)	16.9L-28 R4 (12)
With MFWD	12.5/80-18 3 (12)	19.5L-24 R4 (10)	12.5/80-18 3 (12)	19.5L-24 R4 (10)
	12.5/80-18 R4 (10)	19.5L-24 R4 (12)	12.5/80-18 R4 (10)	19.5L-24 R4 (12)
	12.5/80-18 3 (12)	21L-24 R4 (12)	12.5/80-18 3 (12)	21L-24 R4 (12)
	12.5/80-18 R4 (10)	21L-24 R4 (12)	12.5/80-18 R4 (10)	21L-24 R4 (12)
	12.5/80-18 R4 (10)	16.9L-28 R4 (12)	12.5/80-18 R4 (10)	16.9L-28 R4 (12)
	340/80R18 XMCL	500/70R24 XMCL	340/80R18 XMCL	500/70R24 XMCL
	_	_	340/80R18 550	500/70R24 550
	340/80R18 580	500/70R24 580	340/80R18 580	500/70R24 580
Serviceability	<u> </u>	_	340/80R18 550	440/80R28 550
Refill Capacities				
	21 L (22.2 qt.)		30 L (31.7 qt.)	
= -	18 L (19 qt.)		18 L (19 gt.)	
	13 L (13.7 qt.)		13 L (13.7 qt.)	
	15.1 L (16 qt.)		15.1 L (16 qt.)	
	140.1 L (37 gal.)		140.1 L (37 gal.)	
	104.1 L (27.5 gal.)		104.1 L (27.5 gal.)	
, ,	45 L (11.9 gal.)		45 L (11.9 gal.)	
MFWD Housing	, ,		, ,	
3	6.5 L (6.9 qt.)		6.5 L (6.9 qt.)	
	0.9 L (1 qt.)		0.9 L (1 qt.)	
Hydrau™ XR Hydraulic Oil	Optional		Optional	
Operating Weights				
Equipment, and Bumper	7962 kg (17,554 lb.)		_	
, , , , , , , , , , , , , , , , , , , ,	7962 kg (17,554 lb.) —		7849 kg (17,305 lb.)	
With Full Fuel Tank, 79-kg (175 lb.) Operator, and Standard Equipment	-		7849 kg (17,305 lb.) 8280 kg (18,255 lb.)	
With Full Fuel Tank, 79-kg (175 lb.) Operator, and Standard Equipment Typical with Extendable Dipperstick and 204-kg	_		_	
With Full Fuel Tank, 79-kg (175 lb.) Operator, and Standard Equipment Typical with Extendable Dipperstick and 204-kg (450 lb.) Counterweight Optional Components (weight difference between base equipment and option)	_		_	
With Full Fuel Tank, 79-kg (175 lb.) Operator, and Standard Equipment Typical with Extendable Dipperstick and 204-kg (450 lb.) Counterweight Optional Components (weight difference between base equipment and option) MFWD with Tires	_		_	

Overall Dimensions	315SL
A Ground Clearance, Minimum	351 mm (14 in.)
B Overall Length, Transport	5.96 m (19 ft. 7 in.)
C Stabilizer Spread	2.26 m (7 ft. 5 in.)
D Height to Top of ROPS/Cab	2.84 m (9 ft. 4 in.)
E Length from Axle to Axle	
Non-Powered Front Axle	2.16 m (7 ft. 1 in.)
MFWD Axle	2.19 m (7 ft. 2 in.)



Backhoe Dimensions and Performance			
Backhoe specifications are with 610-mm x 0.21	-m³ (24 in. x 7.5 cu. ft.) bucket; dip	per lift specs are with a boom ang	le of 65 deg.
Bucket Range	305-762 mm (12-30 in.)		
Digging Force			
Bucket Cylinder	55.0 kN (12,356 lb.)		
With Heavy-Duty Cylinder Option	67.8 kN (15,254 lb.)		
Crowd Cylinder	36.6 kN (8,231 lb.)		
Swing Arc	180 deg.		
Operator Control	2 levers		
		With Optional Extendable D	ipperstick
	With Standard Backhoe	Retracted	Extended
F Loading Height, Truck Loading Position	3.57 m (11 ft. 8 in.)	3.69 m (12 ft. 1 in.)	4.31 m (14 ft. 2 in.)
G Reach from Center of Swing Pivot	5.44 m (17 ft. 10 in.)	5.61 m (18 ft. 5 in.)	6.62 m (21 ft. 9 in.)
H Reach from Center of Rear Axle	6.80 m (22 ft. 4 in.)	6.98 m (22 ft. 11 in.)	7.98 m (26 ft. 2 in.)
I Digging Depth (SAE maximum)	4.17 m (13 ft. 8 in.)	4.34 m (14 ft. 3 in.)	5.39 m (17 ft. 8 in.)
J Digging Depth (SAE)			
610-mm (2 ft.) Flat Bottom	4.13 m (13 ft. 6 in.)	4.30 m (14 ft. 1 in.)	5.35 m (17 ft. 7 in.)
2440-mm (8 ft.) Flat Bottom	3.77 m (12 ft. 5 in.)	3.96 m (13 ft. 0 in.)	5.09 m (16 ft. 9 in.)
K Overall Width (less loader bucket)	2.43 m (8 ft. 0 in.)	2.41 m (7 ft. 11 in.)	_
L Side-Shift from Tractor Centerline	537 mm (21 in.)	537 mm (21 in.)	537 mm (21 in.)
M Wall to Swing Centerline	604 mm (24 in.)	604 mm (24 in.)	604 mm (24 in.)
N Bucket Rotation	190 deg.	190 deg.	190 deg.
O Transport Height	3.63 m (11 ft. 11 in.)	3.63 m (11 ft. 11 in.)	3.63 m (11 ft. 11 in.)

Loader Dimensions and Performance	315SL			
P Bucket Dump Angle, Maximum	45 deg.			
Q Rollback Angle at Ground Level	40 deg.			
	Heavy-duty	Heavy-duty	Multipurpose	Multipurpose
Bucket Capacity	0.77 m³ (1.00 cu. yd.)	1.00 m³ (1.31 cu. yd.)	0.96 m³ (1.25 cu. yd.)	1.00 m³ (1.31 cu. yd.)
Width	2184 mm (86 in.)	2337 mm (92 in.)	2184 mm (86 in.)	2337 mm (92 in.)
Weight	363 kg (800 lb.)	521 kg (1,148 lb.)	794 kg (1,750 lb.)	863 kg (1,902 lb.)
Breakout Force	48.3 kN (10,866 lb.)	46.8 kN (10,532 lb.)	43.5 kN (9,789 lb.)	43.2 kN (9,714 lb.)
Lift Capacity, Full Height	3375 kg (7,440 lb.)	3322 kg (7,324 lb.)	2875 kg (6,338 lb.)	2834 kg (6,248 lb.)
R Height to Bucket Hinge Pin, Maximum	3.45 m (11 ft. 4 in.)			
S Dump Clearance, Bucket at 45 deg.	2.71 m (8 ft. 11 in.)	2.68 m (8 ft. 10 in.)	2.65 m (8 ft. 8 in.)	2.65 m (8 ft. 8 in.)
T Reach at Full Height, Bucket at 45 deg.	734 mm (28.9 in.)	695 mm (27.4 in.)	737 mm (29.0 in.)	737 mm (29.0 in.)
U Digging Depth Below Ground, Bucket Level	106 mm (4.2 in.)	151 mm (5.9 in.)	147 mm (5.8 in.)	147 mm (5.8 in.)
V Length from Front Axle Centerline to Bucket	2.02 m (6 ft. 8 in.)	2.04 m (6 ft. 8 in.)	2.09 m (6 ft. 10 in.)	2.09 m (6 ft. 10 in.)
Cutting Edge				
Lift Capacity with Quick-Coupler Forks				
Hydraulic Capacity	1219-mm (48 in.) Tines	1524-mm (60 in.) Tines		
A ^I Maximum Height	2073 kg (4,570 lb.)	1891 kg (4,170 lb.)		
B ^I Maximum Reach	3162 kg (6,971 lb.)	3003 kg (6,621 lb.)		
C ¹ At Ground Line	4145 kg (9,138 lb.)	3883 kg (8,561 lb.)		
DI Below Ground Line	211 mm (8.3 in.)	211 mm (8.3 in.)		

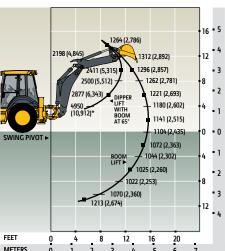


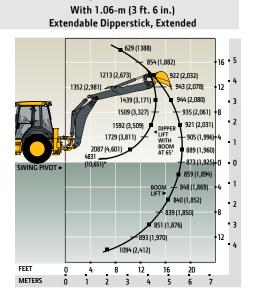
Lift Capacity with Bucket
Lift capacities are over-end values in kg (lb.) according to SAE J31. Figures listed are 87% of the maximum lift force available. Calculated with 610-mm x 0.21-m³ (24 in. x 7.5 cu. ft.) bucket. Bucket impacts overall lift capacity.

STANDARD LIFT

STANDARD LIFT

With 1.06-m (3 ft. 6 in.) Extendable Dipperstick, Retracted With Standard Dipperstick 1390 (3.064)





STANDARD LIFT

*Indicates capacity is stability limited. Lift capacities are over end with stabilizers down and tires tangent to ground.



SPECIFICATIONS

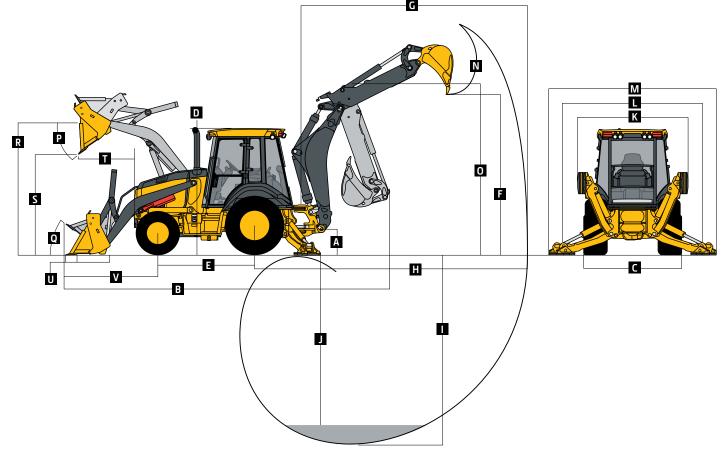
Engine	410L					
Manufacturer and Model	John Deere PowerTech™ 4	045TT096 turbocharged	John Deere PowerTech	John Deere PowerTech™ E 4045HT087 turbocharged		
Non-Road Emission Standard	EPA Tier 2/EU Stage II		EPA Tier 3/EU Stage IIIA			
Displacement	4.5 L (276 cu. in.)		4.5 L (276 cu. in.)			
Net Peak Power (ISO 9249)	72 kW (97 hp) at 2,100 rp	m	77 kW (103 hp) at 2,008 rpm			
With Optional Viscous Fan, Cab, and 120-amp	75 kW (101 hp) at 2,100 r		79 kW (107 hp) at 2,1	•		
Alternator			•	·		
Net Peak Torque (ISO 9249)	382 Nm (282 lbft.) at 1,5	500 rpm	423 Nm (312 lbft.) a	t 1,300 rpm		
With Optional Viscous Fan, Cab, and 120-amp	388 Nm (287 lbft.) at 1,5		428 Nm (316 lbft.) a			
Alternator		·				
Net Torque Rise	23%		36%			
With Optional Viscous Fan, Cab, and 120-amp	23%		31%			
Alternator						
Lubrication	Pressure system with spin	-on filter and cooler	Pressure system with:	spin-on filter and cooler		
Air Cleaner	Dual-stage dry type with s	safety element and evacuat	or valve			
Cooling						
Fan Type	Suction-type cooling fan s	standard; temperature-conf	trolled (viscous) variable-	rate fan optional		
Engine Coolant Rating	–40 deg. C (–40 deg. F)					
Engine Oil Cooler	Oil to water					
Powertrain						
Transmission	5-speed, helical-cut gears	, full PowerShift™ transmis	sion with hydraulic revers	er standard; electric clutch		
		toShift transmission option				
Torque Converter		vith 2.63:1 stall ratio, 280 n				
Maximum Travel Speeds with Standard Engine,	J J , ,		, ,			
Measured with 21L-24 Rear Tires	Forward	Reverse	Forward	Reverse		
Gear 1	5.6 km/h (3.5 mph)	7.1 km/h (4.6 mph)	5.7 km/h (3.5 mph)	7.2 km/h (4.5 mph)		
Gear 2	10.3 km/h (6.4 mph)	13.0 km/h (8.4 mph)	10.5 km/h (6.5 mph)	13.3 km/h (8.3 mph)		
Gear 3	20.7 km/h (12.9 mph)	20.5 km/h (13.6 mph)	21.4 km/h (13.3 mph)	21.2 km/h (13.2 mph)		
Gear 4	33.0 km/h (20.5 mph)	_	34.5 km/h (21.4 mph)			
Gear 5	40.0 km/h (24.9 mph)	_	40.0 km/h (24.9 mph)	_		
Axles	, ,		, ,			
Axle Oscillation, Stop to Stop, Front Axle	22 deg.		22 deg.			
Axle Ratings	J	Mechanical-Fro	nt-Wheel Drive			
,	Non-Powered Front	(MFWD)	Red	ır		
SAE J43	5500 kg (12,125 lb.)	5500 kg (12,12	5 lb.) 750	00 kg (16,535 lb.)		
Dynamic	8500 kg (18,739 lb.)	8500 kg (18,73)		500 kg (23,149 lb.)		
Static	22 500 kg (49,604 lb.)	23 500 kg (51,8		000 kg (57,320 lb.)		
Ultimate	35 000 kg (77,162 lb.)	37 000 kg (81,5		500 kg (87,083 lb.)		
Differentials	j (, ,	, , , , , , , , , , , , , , , , , , ,	,	, , , , , , , , , , , , , , , , , , ,		
MFWD Axle	Automatic, limited-slip tra	action control				
Rear Axle		lly engaged 100% mechanic	al lock			
Steering (ISO 5010)	Hydrostatic power steerin					
Axle	Non-Powered Front	MFWD				
Curb-Turning Radius	Tion I office a Trong	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
With Brakes	3.61 m (11 ft. 10 in.)	3.67 m (12 ft. 0	in.)			
Without Brakes	4.23 m (13 ft. 11 in.)	4.35 m (14 ft. 3	•			
Bucket-Clearance Circle			,			
With Brakes	10.27 m (33 ft. 8 in.)	10.37 m (34 ft.	0 in)			
Without Brakes	11.17 m (36 ft. 8 in.)	11.37 m (37 ft.				
Steering Wheel Turns (lock to lock, flow amplified)	3.1 to 4.3	2.6 to 3.6				
MFWD Axle		netary final drives distribute	shock loads over 3 gears			
IVII VVD AAIC			e shock loads over 4 gears			





	(10)	
Powertrain (continued)	410L	
Brakes (ISO 3450)	De control de la de la control	and declared a final set of a fit of the
Service		mounted inboard, self-adjusting and self-equalizing
Parking	Spring applied, nydraulically released	d, wet, multi-disc, independent of service brakes with electric switch control
Hydraulics	D d land a sain	(DCLC) a tall status as
Main Pump	Pressure compensated load sensing	g (PCLS), axiai-piston pump
Pump Flow at 2,200 rpm, Backhoe and Loader	159 L/m (42 gpm)	
System Relief Pressure, Backhoe and Loader	24 993 kPa (3,625 psi)	
Controls		
Backhoe	optional; field kit available for 3-le	rols with pattern select and manual and/or electric auxiliary functions ver manual controls with foot swing
Loader	electric clutch cutoff switch, electro	atch cutoff and MFWD (momentary) standard; single-lever control with ohydraulic (EH) proportional auxiliary roller, MWFD (momentary), and
Floresteel	transmission quick-shift optional	
Electrical	12 li	
Voltage	12 volt	
Alternator Rating	90 amp	1 1 1 22 500 11 25 2
Lights	10 halogen: 4 front, 4 rear, and 2 si and 2 rear; stop and taillights; and 2	de docking (32,500 candlepower each); turn signals and flashers: 2 front 2 rear reflectors
Operator Station		
Type (SAE J1040)	Canopy, isolation mounted, ROPS/F	OPS, left/right access, with molded roof
Tires/Wheels		
	Front	Rear
Non-Powered Front Axle	12.5/80-18 F3 (12)	21L-24 R-4 (12)
With MFWD	12.5/80-18 R4 (10)	21L-24 R-4 (12)
	12.5/80-18 I3 (12)	21L-24 R-4 (12)
	340/80R18 XMCL	500/70R24 XMCL
	340/80R18 550	500/70R24 550
	340/80R18 580	500/70R24 580
Serviceability		
Refill Capacities	EPA Tier 2/EU Stage II	EPA Tier 3/EU Stage IIIA
Cooling System	21 L (22.2 qt.)	30 L (31.7 qt.)
Rear Axle	18 L (19 qt.)	18 L (19 qt.)
Engine Oil (including vertical spin-on filter)	13 L (13.7 qt.)	13 L (13.7 qt.)
Torque Converter and Transmission	15.1 L (16 qt.)	15.1 L (16 qt.)
Fuel Tank (with ground-level fueling)	140.1 L (37 gal.)	140.1 L (37 gal.)
Hydraulic System	126.8 L (33.5 gal.)	126.8 L (33.5 gal.)
Hydraulic Reservoir	45 L (11.9 gal.)	45 L (11.9 gal.)
MFWD Housing	= (ga)	= (
Axle	6.5 L (6.9 qt.)	6.5 L (6.9 qt.)
Planetary (each)	0.9 L (1 qt.)	0.9 L (1 qt.)
Hydrau™ XR Hydraulic Oil	Optional	Optional
Operating Weights	Optional	Ориона
With Full Fuel Tank, 79-kg (175 lb.) Operator, Standard	7959 kg (17,547 lb.)	
Equipment, and 340-kg (750 lb.) Counterweight		
Typical with Cab, Extendable Dipperstick, and 567-kg (1,250 lb.) Counterweight	8/20 kg (19,224 lb.)	
Optional Components (weight difference between		
base equipment and option)		
Cab	263 kg (580 lb.)	
MFWD with Tires	110 kg (242 lb.)	
Extendable Dipperstick	271 kg (597 lb.)	
Front Loader Coupler	257 kg (566 lb.)	
Backhoe Bucket Coupler	64 kg (141 lb.)	
	J	

Overall Dimensions	410L
A Ground Clearance, Minimum	334 mm (13 in.)
B Overall Length, Transport	7.43 m (24 ft. 5 in.)
C Width Over Tires	2.18 m (7 ft. 2 in.)
D Height to Top of ROPS/Cab	2.87 m (9 ft. 5 in.)
E Length from Axle to Axle	
Non-Powered Front Axle	2.16 m (7 ft. 1 in.)
MFWD Axle	2.19 m (7 ft. 2 in.)



Backhoe Dimensions and Performance			
Backhoe specifications are with 610-mm x 0.21-m	3 (24 in x 7 5 cu ft) bucket: dinner	lift specs are with a hoom angle of 6	in dea
Bucket Range	305–762 mm (12–30 in.)	me speed are men a boom angle or a	o deg.
Digging Force	(55		
Bucket Cylinder	69.9 kN (15,723 lb.)		
Crowd Cylinder	44.1 kN (9,907 lb.)		
Swing Arc	180 deg.		
Operator Control	2 levers		
·		With Optional Extendable Dippers	stick
	With Standard Backhoe	Retracted	Extended
F Loading Height, Truck Loading Position	3.98 m (13 ft. 1 in.)	4.02 m (13 ft. 2 in.)	4.73 m (15 ft. 6 in.)
G Reach from Center of Swing Pivot	6.02 m (19 ft. 9 in.)	6.02 m (19 ft. 9 in.)	7.14 m (23 ft. 5 in.)
H Reach from Center of Rear Axle	7.14 m (23 ft. 5 in.)	7.14 m (23 ft. 5 in.)	8.26 m (27 ft. 1 in.)
I Digging Depth (SAE maximum)	4.83 m (15 ft. 10 in.)	4.83 m (15 ft. 10 in.)	5.99 m (19 ft. 8 in.)
J Digging Depth (SAE)			
610-mm (2 ft.) Flat Bottom	4.78 m (15 ft. 8 in.)	4.78 m (15 ft. 8 in.)	5.96 m (19 ft. 7 in.)
2440-mm (8 ft.) Flat Bottom	4.47 m (14 ft. 8 in.)	4.47 m (14 ft. 8 in.)	5.73 m (18 ft. 9 in.)
K Stabilizer Width, Transport	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)
L Stabilizer Spread, Operating	3.45 m (11 ft. 4 in.)	3.45 m (11 ft. 4 in.)	3.45 m (11 ft. 4 in.)
M Stabilizer Overall Width, Operating	4.03 m (13 ft. 3 in.)	4.03 m (13 ft. 3 in.)	4.03 m (13 ft. 3 in.)
N Bucket Rotation	190 deg.	190 deg.	190 deg.
O Transport Height	3.93 m (12 ft. 11 in.)	3.93 m (12 ft. 11 in.)	3.93 m (12 ft. 11 in.)

Loader Dimensions and Performance	410L		
P Bucket Dump Angle, Maximum	45 deg.		
Q Rollback Angle at Ground Level	40 deg.		
	Heavy-duty	Heavy-duty	Multipurpose
Bucket Capacity	1.00 m³ (1.31 cu. yd.)	1.15 m³ (1.50 cu. yd.)	1.00 m³ (1.31 cu. yd.)
Width	2346 mm (92 in.)	2394 mm (94 in.)	2346 mm (92 in.)
Weight	521 kg (1,148 lb.)	548 kg (1,208 lb.)	863 kg (1,902 lb.)
Breakout Force	47.3 kN (10,634 lb.)	46.0 kN (10,351 lb.)	43.6 kN (9,813 lb.)
Lift Capacity, Full Height	3243 kg (7,149 lb.)	3134 kg (6,909 lb.)	2761 kg (6,087 lb.)
R Height to Bucket Hinge Pin, Maximum	3.45 m (11 ft. 4 in.)	3.45 m (11 ft. 4 in.)	3.45 m (11 ft. 4 in.)
S Dump Clearance, Bucket at 45 deg.	2.68 m (8 ft. 10 in.)	2.64 m (8 ft. 8 in.)	2.65 m (8 ft. 8 in.)
T Reach at Full Height, Bucket at 45 deg.	750 mm (29.5 in.)	792 mm (31.2 in.)	792 mm (31.2 in.)
U Digging Depth Below Ground, Bucket Level	157 mm (6.2 in.)	157 mm (6.2 in.)	153 mm (6.0 in.)
V Length from Front Axle Centerline to Bucket	2.04 m (6 ft. 8 in.)	2.10 m (6 ft. 11 in.)	2.09 m (6 ft. 10 in.)
Cutting Edge			
Lift Capacity with Quick-Coupler Forks			
Hydraulic Capacity	1219-mm (48 in.) Tines	1524-mm (60 in.) Tines	
A ^I Maximum Height	2031 kg (4,478 lb.)	1880 kg (4,145 lb.)	
BI Maximum Reach	3177 kg (7,005 lb.)	3002 kg (6,618 lb.)	
C ¹ At Ground Line	4208 kg (9,278 lb.)	3613 kg (7,966 lb.)	
DI Below Ground Line	211 mm (8.3 in.)	211 mm (8.3 in.)	



Lift Capacity with Bucket

Lift capacities are over-end values in kg (lb.) according to SAE J31. Figures listed are 87% of the maximum lift force available. Calculated with 610-mm x 0.21-m³ (24 in. x 7.5 cu. ft.) bucket. Bucket impacts overall lift capacity.

STANDARD LIFT

STANDARD LIFT

STANDARD LIFT

STANDARD LIFT STANDARD LIFT With 1.21-m (4 ft. 0 in.) With 1.21-m (4 ft. 0 in.) With Standard Dipperstick Extendable Dipperstick, Retracted Extendable Dipperstick, Extended 1139 (2,511) 1813 (3,996) 1189 (2,621) 1662 (3,665) 1214 (2,676) 1225 (2,700) 1805 (3.980) - 1627 (3.587) 2010 (4,432) 1227 (2,706) 2193 (4,836) 1779 (3,923) 1598 (3,523) 1225 (2,701) 1752 (3,863) 1568 (3,457) 1221 (2,691) 1726 (3.805) 1539 (3,394) - 1514 (3,338) 1221 (2,692) 1243 (2,740) 1290 (2,844) METERS

*Indicates capacity is stability limited. Lift capacities are over end with stabilizers down and tires tangent to ground.

Additional equipment

Key: ● Standard ▲ Optional or special See your John Deere dealer for further information.

2101	21001 2100		
3 I UL	310SL 315S	L 41UL	Engine
•	• •	•	Coolant recovery tank with low-level indicator
•	•	•	Foldout, hinged cooling system
•	• •	•	Serpentine belt with automatic belt tensioner
	• •	•	Suction-type cooling fan
A	A A		Viscous variable-rate cooling fan
	• •	•	Self-cleaning exhaust aftertreatment system
A	A A	A	Chrome exhaust extension
	• •		Grid heat
		•	Glow plugs
	A A	A	1,000-watt electric engine coolant heater
			Powertrain
•	• •	•	PowerShift™ transmission: Torque converter with twist-grip TCL and neutral safety switch interlock (1st through 4th gears) PowerShift transmission: Torque converter with
			twist-grip TCL and neutral safety switch interlock (1st through 5th gears)
	• •	•	5th-gear overdrive
	A A	A	AutoShift transmission
•	• •	•	Transmission oil cooler
A	A A	A	Transmission remote oil-sampling port
•	•	•	Differential lock, electric foot actuated, protection on/off
	•		Differential lock, electric foot actuated
_	• •	•	Auto shutdown
•	• •	•	Planetary final drives
•	• •	•	Power-assisted hydraulic service brakes (conform to ISO 3450): Inboard, wet multi-disc, self-adjusting and self-equalizing
•	• •	•	Parking/emergency brake with electric switch control (conforms to ISO 3450): Spring applied, hydraulically released wet multi-disc / Independent of service brakes
•	• •	•	Hydrostatic power steering with emergency manual mode
	A A	A	Non-powered front axle
•			MFWD with open differential: Electric on/off control / Sealed axle
A	• •	•	MFWD with traction-control limited-slip differential: Electric on/off control / Sealed axle
•	• •	•	Automatic MFWD braking (4th and 5th gear overdrive only)
A	A A	A	MFWD driveshaft guard
			Backhoe
		•	Lift mode
•			Standard dipperstick, 4.27-m (14 ft. 0 in.) digging depth
	•		Standard dipperstick, 4.34-m (14 ft. 3 in.)

digging depth

2101	21001	1150	/-10°	Death and the second
31UL	310SL 3	3 15 SL	41UL	
		•		Standard dipperstick, 4.17-m (13 ft. 8 in.)
				digging depth Standard dipperstick, 4.83-m (15 ft. 10 in.)
				digging depth
•	•	•		Extendable dipperstick, 1.06-m (3 ft. 6 in.)
_	_	_		extension
			A	Extendable dipperstick, 1.21-m (4 ft. 0 in.)
				extension
	A	A		Heavy-duty backhoe bucket cylinder
•	•	•	•	ISO (Deere) 2-lever mechanical backhoe controls
	A	A		2-lever pilot controls with pattern-selection feature
				Backhoe transport lock lever
	•	•	•	Swing lock pin stored in operator's station
•	•	•	•	Stabilizers with 2-direction anti-drift valves
	_			Extended (long) stabilizers with reversible pads
	<u> </u>	A	A	Severe-duty backhoe bucket with lift loops
A	_	_	-	Backhoe couplers for John Deere, Case, and Cat
_	_		_	buckets
_	A	A	A	Auxiliary backhoe valve for swingers, thumbs,
				etc. with auxiliary plumbing
•	A	•	•	Auxiliary backhoe valve for hammers and com-
	A		A	pactors with auxiliary plumbing Hydraulic thumb
				Loader [†]
•	•	•	•	Loader bucket anti-spill (rollback)
•	•	•	•	Return-to-dig feature
•	•	•	•	Single-lever control with electric clutch disconnect
•	•	•	•	Bucket-level indicator
•	•	•	•	Loader boom service lock
A		A	-	Auxiliary loader hydraulics with 2-lever control
	A	_	•	Auxiliary loader hydraulics with single control
	_		_	lever with EH auxiliary control (MFWD and clutch
				disconnect)
	A	\blacktriangle	\blacktriangle	Hydraulic coupler for buckets, forks, etc.
	\blacktriangle	\blacktriangle	\blacktriangle	Ride control
				Hydraulic System
•				106-L/m (28 gpm) single-gear pump, open-
	_	_		center system
	•	•		136-L/m (36 gpm) tandem-gear pump, open-
				center system
			•	159-L/m (42 gpm) axial-piston pump, PCLS system
	•			Auto-idle
•	•	•	•	Economy mode
_	•		•	Dedicated hydraulic reservoir

[†]See dealer for range of heavy-duty, multipurpose, and coupler buckets

Actual machine configuration may differ from image. Not all models available in all countries.

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Additional equipment (continued)

Key: ● Standard ▲ Optional or special See your John Deere dealer for further information.

310L	310SL	315SL	410L	Electrical System
•	•	•	•	12-volt system
	•	•		90-amp alternator (with canopy and quarter cab)
•	•	•	•	120-amp alternator (with cab only)
•	•	•	•	Single battery with 190-min. reserve capacity and 925 CCA
•	A	A	•	Dual batteries with 380-min. reserve capacity and 1,850 CCA
	A	A	\blacktriangle	Remote jump posts and battery disconnect
				Lights
•	•	•	•	Halogen lights (10), 32,500 candlepower each (4 front driving/working, 4 rear working, and 2 side docking)
•	•	•		Turn signal/flashing (2 front and 2 rear)
	•	•		Rear stop and tail (2)
				Operator's Station
•	•	•	•	Modular-design ROPS/FOPS (Level 2) canopy with molded roof (meets ISO 3449 and ISO 3471/ SAE J1040): Isolation mounted
•	•	•	•	Molded floor mats (with pilot controls only)
•	•	•	•	12-volt outlet
•	•			Lockable right-side storage
A	A	A	A	Lockable left-hand storage with cup holders
	\blacktriangle			Interior front-view mirror
\blacktriangle	\blacktriangle	\blacktriangle	\blacktriangle	Outside rearview mirrors
•	•	•	•	Rotary-dial hand throttle
•	•			Suspended foot throttle
A		A		Air-suspension seat (with cab only)
•				Key start switch with electric fuel shutoff
•	•	•		Tilt steering, infinitely adjustable (with cab only)
A	A		A	Tilt steering, infinitely adjustable (with canopy and quarter cab)
	•	•	•	Keyless start
A	•	•	•	Machine security (enabled through monitor)
•	•	•	•	Digital display of engine hours, engine rpm, and system voltage
	•	•	•	Sealed-switch module
	•	•	•	Multi-function lever: Turn signals / Windshield wipers / Some light functionality
•	•	•	•	Monitor system with audible and visual warnings Engine air restriction / Low alternator voltage / Engine oil pressure / Hydraulic filter restriction / Parking brake on/off / Aftertreatment temperature / Transmission fluid temperature / Fuel / Hour meter / Machine diagnostic information via 4-push-button/LCD operator interface

• •	•	Canopy: Mechanical-suspension deluxe vinyl swivel seat with lumbar adjustment and armrests (fully adjustable)
A		Quarter Cab: Mechanical-suspension deluxe fabric swivel seat with lumbar adjustment and armrests (fully adjustable), front windshield, and windshield wiper (1 front)
A A	•	Cab with Dual Doors and A/C: Mechanical- suspension deluxe fabric swivel seat with lumbal adjustment / Headliner, dome light, left and right cab doors, tinted safety glass, windshield wipers (1 rear and 1 front), front windshield washer, fresh-air intake, and heater/defroster/ pressurizer (11.7-kW [40,000 Btu/h] heater) / A/C (7.6-kW [26,000 Btu/h] output and CFC- free R134a refrigerant
A A	\blacktriangle	AM/FM/weather-band radio (with cab only)
A A	•	Premium radio package with XM Satellite Radio capability (with cab only; includes additional 12-volt and USB outlets [XM subscription based
		upon availability in specific countries; see your dealer for details])
		dealer for details]) Overall Vehicle
• •	•	dealer for details]) Overall Vehicle 1-piece unitized construction mainframe
• •	•	dealer for details]) Overall Vehicle 1-piece unitized construction mainframe Vehicle tie-downs (2 front and 2 rear)
• •	•	dealer for details]) Overall Vehicle 1-piece unitized construction mainframe Vehicle tie-downs (2 front and 2 rear) Remote grease bank for front axle
• • •	•	dealer for details]) Overall Vehicle 1-piece unitized construction mainframe Vehicle tie-downs (2 front and 2 rear) Remote grease bank for front axle Front cover
• • • • • • • • • • • • • • • • • • •	•	dealer for details]) Overall Vehicle 1-piece unitized construction mainframe Vehicle tie-downs (2 front and 2 rear) Remote grease bank for front axle
	_	dealer for details]) Overall Vehicle 1-piece unitized construction mainframe Vehicle tie-downs (2 front and 2 rear) Remote grease bank for front axle Front cover Heavy-duty front bumper Front counterweight – 204 kg (450 lb.), 340 kg (750 lb.), 454 kg (1,000 lb.), or 567 kg (1,250 lb.) Rubber grille bumpers
A A	<u> </u>	dealer for details]) Overall Vehicle 1-piece unitized construction mainframe Vehicle tie-downs (2 front and 2 rear) Remote grease bank for front axle Front cover Heavy-duty front bumper Front counterweight – 204 kg (450 lb.), 340 kg (750 lb.), 454 kg (1,000 lb.), or 567 kg (1,250 lb.) Rubber grille bumpers Fuel tank, 140.1 L (37 gal.), ground-level fueling
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A A	A •	dealer for details]) Overall Vehicle 1-piece unitized construction mainframe Vehicle tie-downs (2 front and 2 rear) Remote grease bank for front axle Front cover Heavy-duty front bumper Front counterweight – 204 kg (450 lb.), 340 kg (750 lb.), 454 kg (1,000 lb.), or 567 kg (1,250 lb.) Rubber grille bumpers Fuel tank, 140.1 L (37 gal.), ground-level fueling 2-position easy-tilt hood Extended grille frame
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A A	A •	dealer for details]) Overall Vehicle 1-piece unitized construction mainframe Vehicle tie-downs (2 front and 2 rear) Remote grease bank for front axle Front cover Heavy-duty front bumper Front counterweight — 204 kg (450 lb.), 340 kg (750 lb.), 454 kg (1,000 lb.), or 567 kg (1,250 lb.) Rubber grille bumpers Fuel tank, 140.1 L (37 gal.), ground-level fueling 2-position easy-tilt hood Extended grille frame Removable toolbox with padlock hasp Vandal protection for locking monitor, engine hood, toolbox, hydraulic reservoir, and fuel tank
	•	dealer for details]) Overall Vehicle 1-piece unitized construction mainframe Vehicle tie-downs (2 front and 2 rear) Remote grease bank for front axle Front cover Heavy-duty front bumper Front counterweight — 204 kg (450 lb.), 340 kg (750 lb.), 454 kg (1,000 lb.), or 567 kg (1,250 lb.) Rubber grille bumpers Fuel tank, 140.1 L (37 gal.), ground-level fueling 2-position easy-tilt hood Extended grille frame Removable toolbox with padlock hasp Vandal protection for locking monitor, engine hood, toolbox, hydraulic reservoir, and fuel tank Reverse warning alarm
A A	A • • • • • • • • • • • • • • • • • • •	dealer for details]) Overall Vehicle 1-piece unitized construction mainframe Vehicle tie-downs (2 front and 2 rear) Remote grease bank for front axle Front cover Heavy-duty front bumper Front counterweight — 204 kg (450 lb.), 340 kg (750 lb.), 454 kg (1,000 lb.), or 567 kg (1,250 lb.) Rubber grille bumpers Fuel tank, 140.1 L (37 gal.), ground-level fueling 2-position easy-tilt hood Extended grille frame Removable toolbox with padlock hasp Vandal protection for locking monitor, engine hood, toolbox, hydraulic reservoir, and fuel tank

310L 310SL 315SL 410L Operator's Station (continued)

Actual machine configuration may differ from image. Not all models available in all countries.

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Every day brings new challenges — demanding jobsites, long hours, and an increasing importance for uptime. Our job is to bring you the opportunities to overcome them. Our experienced engineers, specialized service techs, and global network for parts and service support work around the clock.

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