



315SL SPECIFICATIONS

Engine	315SL		
Manufacturer and Model	John Deere PowerTech™ Plus 4045HT082 turbocharged		
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV		
Displacement	4.5 L (276 cu. in.)		
Net Peak Power (ISO 9249)	74 kW (99 hp) at 2,244 rpm		
Net Peak Torque (ISO 9249)	417 Nm (307 lb.-ft.) at 1,400 rpm		
Net Torque Rise	30%		
Lubrication	Pressure system with spin-on filter and cooler		
Air Cleaner	Dual-stage dry type with safety element and evacuator valve		
Cooling			
Fan Type	Electronically controlled, variable-rate, suction-type cooling fan		
Engine Coolant Rating	-40 deg. C (-40 deg. F)		
Engine Oil Cooler	Oil to water		
Powertrain			
Transmission	5-speed, helical-cut gears, full PowerShift™ transmission with hydraulic reverser standard; electric clutch cutoff on loader lever; AutoShift transmission optional		
Torque Converter	Single stage, dual phase with 2.63:1 stall ratio, 280 mm (11 in.)		
Maximum Travel Speeds with Standard Engine, Measured with 16.9-28 Rear Tires	<i>Forward</i>	<i>Reverse</i>	
Gear 1	5.9 km/h (3.7 mph)	7.5 km/h (4.7 mph)	
Gear 2	10.8 km/h (6.7 mph)	13.6 km/h (8.5 mph)	
Gear 3	22.0 km/h (13.7 mph)	21.8 km/h (13.5 mph)	
Gear 4	36.6 km/h (22.7 mph)	—	
Gear 5	40.0 km/h (24.9 mph)	—	
Axles			
Axle Oscillation, Stop to Stop, Front Axle	22 deg.		
Axle Ratings	<i>Mechanical-Front-Wheel Drive</i>		
	<i>Non-Powered Front</i>	<i>(MFWD)</i>	<i>Rear</i>
SAE J43	5500 kg (12,125 lb.)	5500 kg (12,125 lb.)	7500 kg (16,535 lb.)
Dynamic	8500 kg (18,739 lb.)	8500 kg (18,739 lb.)	10 000 kg (22,046 lb.)
Static	22 500 kg (49,604 lb.)	23 500 kg (51,809 lb.)	26 000 kg (57,320 lb.)
Ultimate	35 000 kg (77,162 lb.)	37 000 kg (81,571 lb.)	39 500 kg (87,083 lb.)
Differentials			
MFWD Axle	Automatic, limited-slip traction control		
Rear Axle	Foot actuated, hydraulically engaged 100% mechanical lock		
Steering (ISO 5010)	Hydrostatic power steering and emergency steering		
Axle	<i>Non-Powered Front</i> <i>MFWD</i>		
Curb-Turning Radius			
With Brakes	3.62 m (11 ft. 11 in.)	3.68 m (12 ft. 1 in.)	
Without Brakes	4.24 m (13 ft. 11 in.)	4.35 m (14 ft. 3 in.)	
Bucket-Clearance Circle			
With Brakes	10.40 m (34 ft. 1 in.)	10.48 m (34 ft. 5 in.)	
Without Brakes	11.30 m (37 ft. 1 in.)	11.47 m (37 ft. 8 in.)	
Steering Wheel Turns (lock to lock)	3.2	2.7	
MFWD Axle	Heavy duty, outboard planetary final drives distribute shock loads over 3 gears		
Rear Axle	Heavy duty, outboard planetary final drives distribute shock loads over 4 gears		
Brakes (ISO 3450)			
Service	Power assisted, hydraulic wet disc, mounted inboard, self-adjusting and self-equalizing		
Parking	Spring applied, hydraulically released, wet, multi-disc, independent of service brakes with electric switch control		

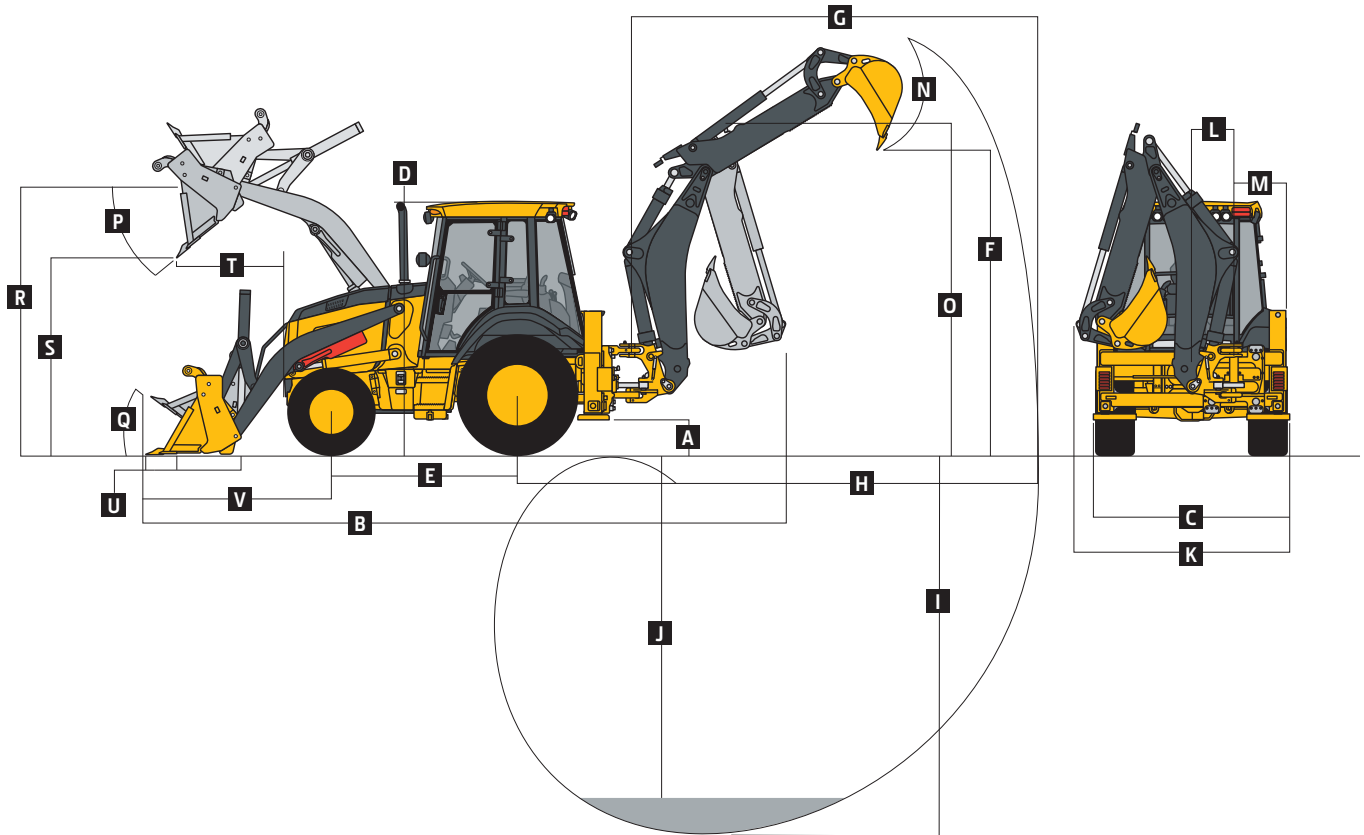
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Hydraulics		315SL	
Main Pump		Open center, gear type, tandem with unloader	
Pump Flow at 2,200 rpm			
Backhoe		136 L/m (36 gpm)	
Loader		106 L/m (28 gpm)	
System Relief Pressure, Backhoe and Loader		24 993 kPa (3,625 psi)	
Controls			
Backhoe		2-lever mechanical standard, pilot controls with pattern select and manual and/or electric auxiliary functions optional	
Loader		Single-lever control with electric clutch cutoff switch standard; manual auxiliary function (2nd lever), single-lever control with electric clutch cutoff switch, electrohydraulic (EH) proportional auxiliary roller, MWFD (momentary), and transmission quick-shift optional	
Electrical			
Voltage		12 volt	
Alternator Rating		150 amp	
Lights		10 halogen: 4 front, 4 rear, and 2 side docking (32,500 candlepower each); turn signals and flashers: 2 front and 2 rear; stop and taillights; and 2 rear reflectors; front drive lamps with 55/60-watt halogen, plate lamp, reverse lamp, and front marker lamps; LED light field kits available with both flood- and spotlights	
Operator Station			
Type (SAE J1040)		Cab, isolation mounted, ROPS/FOPS, left/right access, with molded roof	
Tires/Wheels			
		<i>Front</i>	<i>Rear</i>
Non-Powered Front Axle		12.5/80-18 F3 (12)	19.5L-24 R4 (12)
		12.5/80-18 F3 (12)	16.9L-28 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 I3 (12)	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)
		340/80R18 XMCL	500/70R24 XMCL
		340/80R18 580	500/70R24 580
Serviceability			
Refill Capacities			
Cooling System		35 L (37 qt.)	
Rear Axle		18 L (19 qt.)	
Engine Oil (including vertical spin-on filter)		13 L (13.7 qt.)	
Torque Converter and Transmission		15.1 L (16 qt.)	
Fuel Tank (with ground-level fueling)		140.1 L (37 gal.)	
Diesel Exhaust Fluid (DEF) Tank		16.3 L (4.3 gal.)	
Hydraulic System		104.1 L (27.5 gal.)	
Hydraulic Reservoir		45 L (11.9 gal.)	
MFWD Housing			
Axle		6.5 L (6.9 qt.)	
Planetary (each)		0.9 L (1 qt.)	
Hydrau™ XR Hydraulic Oil		Optional	
Operating Weights			
With Full Fuel Tank, 79-kg (175 lb.) Operator, Standard Equipment, and Bumper		7962 kg (17,554 lb.)	
Typical with Extendable Dipperstick and 204-kg (450 lb.) Counterweight		8389 kg (18,494 lb.)	
Optional Components (weight difference between base equipment and option)			
MFWD with Tires		220 kg (485 lb.)	
Extendable Dipperstick		222 kg (490 lb.)	

315SL

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; dipper lift specs are with a boom angle 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		

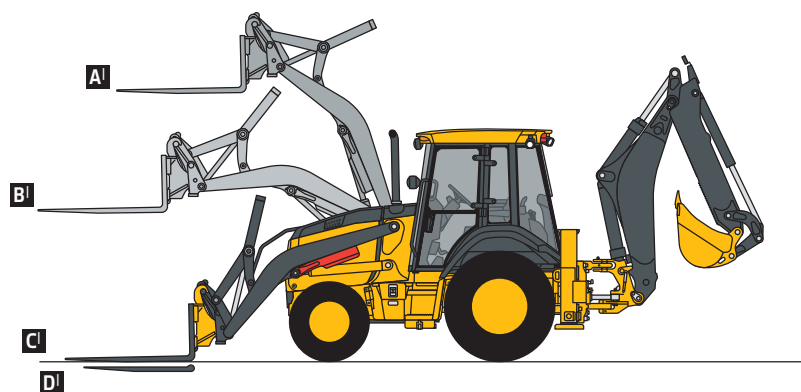
	With Optional Extendable Dipperstick		
	With Standard Backhoe	Retracted	Extended
F Loading Height, Truck Loading Position	3.57 m (11 ft. 8 in.)	3.69 m (12 ft. 1 in.)	4.31 m (14 ft. 2 in.)
G Reach from Center of Swing Pivot	5.44 m (17 ft. 10 in.)	5.61 m (18 ft. 5 in.)	6.62 m (21 ft. 9 in.)
H Reach from 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.			
	<i>Heavy-duty</i>	<i>Heavy-duty</i>	<i>Multipurpose</i>	<i>Multipurpose</i>
Bucket Capacity	0.77 m ³ (1.00 cu. yd.)	1.00 m ³ (1.31 cu. yd.)	0.96 m ³ (1.25 cu. yd.)	1.00 m ³ (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.)	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.	2.71 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 Cutting Edge	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.)

Lift Capacity with Quick-Coupler Forks

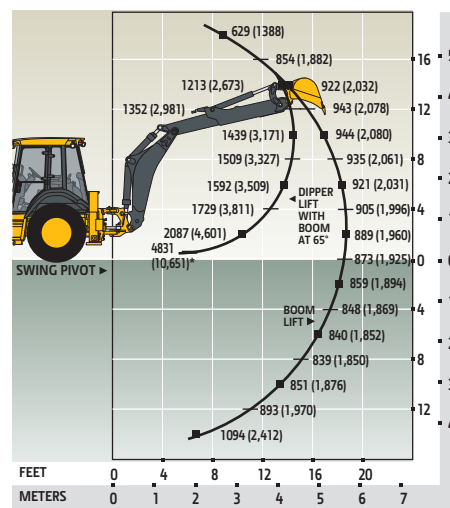
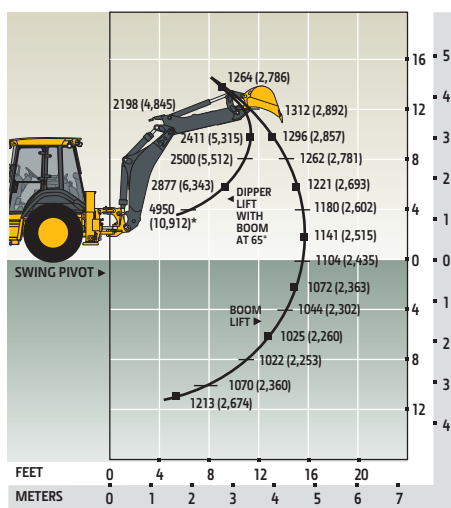
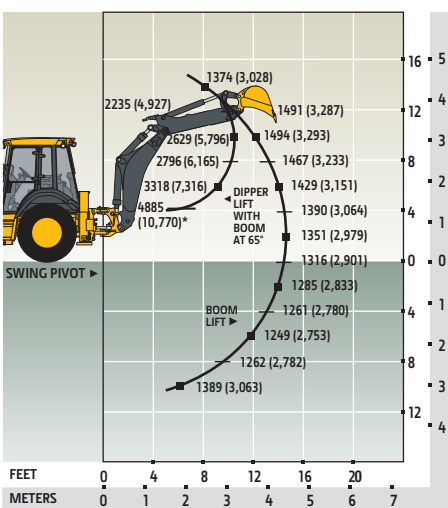
Hydraulic Capacity	<i>1219-mm (48 in.) Tines</i>	<i>1524-mm (60 in.) Tines</i>
A Maximum Height	2073 kg (4,570 lb.)	1891 kg (4,170 lb.)
B Maximum Reach	3162 kg (6,971 lb.)	3003 kg (6,621 lb.)
C At Ground Line	4145 kg (9,138 lb.)	3883 kg (8,561 lb.)
D Below Ground Line	211 mm (8.3 in.)	211 mm (8.3 in.)



Lift Capacity with Bucket

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



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