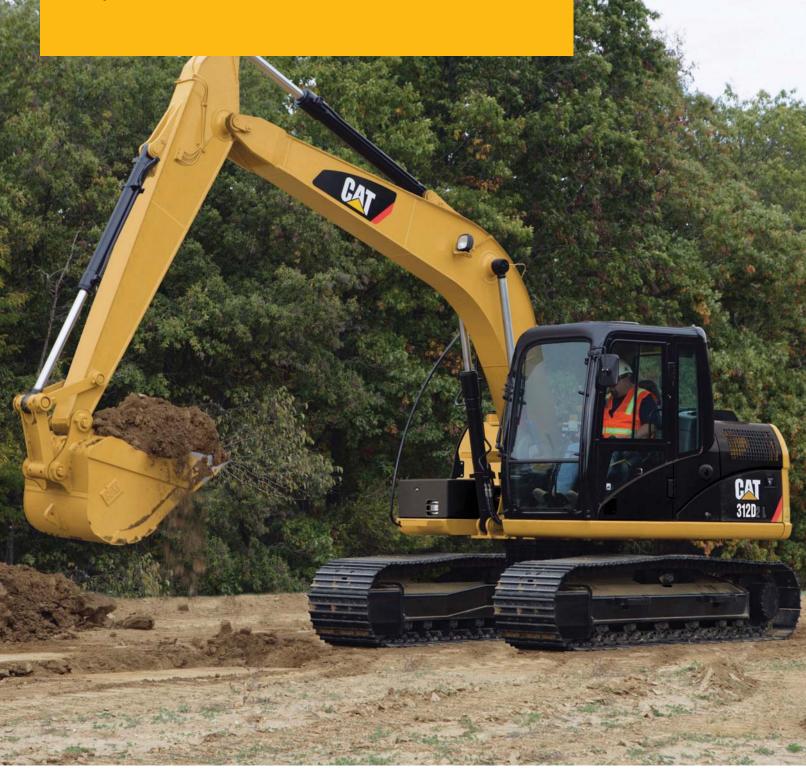
312D/D L Series 2



Hydraulic Excavators



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Engine Model Engine Power (ISO 14396) Net Power (SAE J1349/ISO 9249)

3054C 70 kW (94 hp) 67 kW (90 hp)

Operating Weight – Standard Undercarriage* Operating Weight – Long Undercarriage

12 900 kg-13 600 kg (28,440 lb-29,980 lb) 13 200 kg-13 900 kg (29,100 lb-30,640 lb)

*Offering varies for different regions

312D/D L Series 2 Features

Supporting your business through enhanced features

Engine and Hydraulics

A powerful 3054C engine meets U.S. EPA Tier 2 and EU Stage II regulations and is combined with a highly efficient hydraulics system providing excellent machine performance with low fuel consumption.

Structures

Caterpillar design and manufacturing techniques assure outstanding durability and service that life in the toughest applications.

Operator Station

The spacious cab features excellent visibility and easy-to-access switches. The monitor features a full-color graphical display that is user intuitive and highly visual with built-in pre-start machine checks. Overall, the new cab provides a comfortable working environment for efficient day-long operation.

Service and Maintenance

This machine has been designed so that routine service and maintenance can be completed quickly and easily to help reduce ownership costs. Convenient access points with extended intervals and advanced filtration keep downtime to a minimum.

Complete Customer Support

Your Cat® dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment.

Cat 312D/D L Series 2 Total Solutions

Caterpillar and its extensive dealer network offer a wide variety of solutions designed to meet the unique needs of your business.

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Achieve high productivity and lower operating costs with the Cat 312D/D L Series 2 hydraulic excavator. Unmatched versatility, improved controllability, easy operation, and a comfortable, redesigned operator station help make the 312D/D L Series 2 an industry-leading performer.

Operator Station

Enhance your comfort, operation and visibility.

Operator Station

The ergonomically designed operator station is spacious, quiet, and comfortable, assuring high productivity during a long work day. All switches are located on the right-hand console for convenient access.

Monitor

The monitor is a full-color Liquid Crystal Display (LCD) that can be adjusted to minimize sun glare and has the capability of displaying information in 27 languages.

Joystick Control

Low-effort pilot-operated joystick controls are designed to match the operator's natural wrist and arm position for maximum comfort and minimum fatigue.

Seat

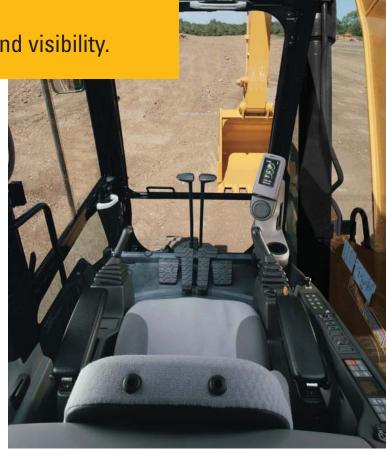
The standard suspension seat provides a variety of adjustments to suit the operator's size and weight including fore/aft, height and weight. Wide adjustable armrests and a static seat belt are also included.

Console

The consoles feature a simple functional design to reduce operator fatigue, ease of switch operation, and excellent visibility. Both consoles have attached armrests with height adjustments.

Cab Exterior

The cab shell features thick steel tubing along the bottom perimeter of the cab, improving resistance to fatigue and vibration.



Cab Mounts

The cab shell is attached to the frame with viscous rubber cab mounts, which dampen vibrations and sound levels while enhancing operator comfort.

Windows

To maximize visibility, all glass is affixed directly to the cab, eliminating window frames. The upper front windshield opens, closes, and stores on the roof above the operator with a one-touch action release system.

Wipers

Pillar-mounted wipers increase the operator's viewing area and offer continuous and intermittent modes.

Engine

A powerful engine with excellent reliability and low fuel consumption delivering more while boosting your bottom line.



The Cat 3054C engine has been designed to meet U.S. EPA Tier 2 and EU Stage II emission regulations. This engine incorporates a time-proven mechanical governor and a low-pressure fuel injection system that are major contributors to the improvement of fuel system robustness, high fuel efficiency, and ease of troubleshooting. High filtration performance from the primary filter incorporating a water separator and a secondary filter also help to improve fuel filtration system reliability.

Automatic Engine Control and Fuel Delivery

With a net power of 67 kW (90 hp) the 312D/D L Series 2 has been designed with fuel economy in mind and burns less fuel compared with the previous model depending on application.

Economy Mode

Available as standard, economy mode allows you to balance the demands of performance and fuel economy while maintaining the breakout forces and lift capacity enjoyed at standard power.



Outstanding Performance

The 312D/D L Series 2 hydraulic system is designed for high efficiency and performance. Auxiliary hydraulic and electrical lines are routed to the boom foot making installation of hydraulic circuits much easier. This compact design utilizes shorter tubes and lines to reduce friction and pressure drops, resulting in a more efficient use of power.

- Hydraulic snubbers at the rod end of the boom cylinders and both ends of the stick cylinders cushion shock, reduce sound, and increase cylinder life.
- A hydraulic cross-sensing system uses two hydraulic pumps under all operating conditions, improving productivity with faster implement speeds and quicker, stronger pivot turns.

Boom and Stick Regeneration Circuit

The boom and stick regeneration circuit saves energy during boom-down and stick-in operation, increasing efficiency and lowering operating costs.

Easy Operation

Work mode and power mode switches have been eliminated making full power available at all times. Operators do not need to learn different modes. An automatic boom and swing priority function automatically selects the best mode based on joystick movement.

Undercarriage and Structures

Strong and durable, all you expect from Cat Excavators.

Caterpillar uses advanced engineering and software to analyze all structures, creating a durable, reliable machine for robust applications. More than 70 percent of the structural welds are robotic and achieve additional penetration over manual welds. These structural components and undercarriage are the backbone of the machine's durability.

Carbody Design

X-shaped, box-section carbody provides excellent resistance to torsional bending. Robot-welded track roller frames are press-formed, pentagonal units that deliver exceptional strength and service life.

Grease Lubricated Track

Grease lubricated track seals protect the track link and deliver long track link pin and bushing inner wear.

Travel Motors

Travel motors with automatic speed selection let the 312D/D L Series 2 automatically change up and down from high and low speeds in a smooth, controlled manner.





Front Linkage

Reliable and durable meeting all your versatility needs.

Robust applications require robust machine designs. In order to meet your job site needs we use advanced engineering and software to analyze all structures, creating a durable, reliable machine.

Stick

The 2.5 m (8'2") and 3 m (9'10") reach sticks incorporate new forging and welding processes for increased durability, digging force, and lifting capacity.

Reach Boom

A 4.65 m (15'3") one-piece, reach boom features parts made from a new forging pattern. A light attached to the left side offers improved visibility in dark and low-light conditions.

Work Tools

Dig, hammer, rip, and cut with confidence.

Each Cat work tool is designed to optimize the versatility and performance of your machine. An extensive range which includes buckets, compactors, grapples, multi-processors, rippers, crushers, pulverizers, hammers and shears is available for your 312D/D L Series 2.

Couplers

Quick couplers allow one person to change work tools in seconds for maximum performance and flexibility on a job site. One machine can move rapidly from task to task, and a fleet of similarly equipped machines can share a common work tool inventory.

CW Dedicated Coupler

The CW quick coupler can pick up any work tool and is equipped with a wedge-style locking system that fits the quick coupler tight to the tool hinges. Due to the tapered wedge design, there won't be any play during its entire life. Also it is interchangeable with different machine classes. The CW is highly suitable for harsh applications, such as demolition and quarries.

Center-Lock™ Pin Grabber Coupler

Center-Lock is the pin grabber style coupler and features a patent-pending locking system. A highly visible secondary lock clearly shows the operator when the coupler is engaged or disengaged from the bucket or work tool.



Buckets

Cat Buckets and Cat Ground Engaging Tools (GET) are designed and matched to the machine ensuring optimal performance and fuel consumption.

General Duty Buckets (GD)

These buckets are designed for digging in low-impact, moderately abrasive materials such as dirt, loam, gravel and clay.

Heavy Duty Buckets (HD)

HD buckets are a good starting point when application conditions vary. Especially when conditions include mixed dirt, clay and sand and gravel.

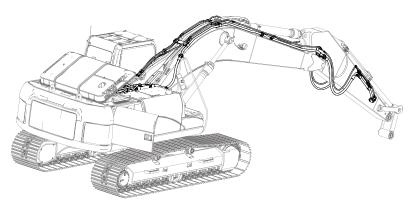
Severe Duty Buckets (SD)

These buckets are best suited to highly abrasive applications such as shot rock, sand stone and granite.









Hydraulic Kits*

Caterpillar offers field-installed hydraulic kits that are uniquely designed to integrate Cat Work Tools with Cat excavators. Hoses and tubes are pre-made, pre-shaped, and pre-painted to make installation quick and easy.

Comprehensive Product Support

All Cat work tools are backed up by a world-wide network of well-stocked spare parts depots and highly experienced after-sales service and support personnel.

*Offering varies for different regions

Work tools available vary by region. Contact your local Cat dealer for more information about the work tools available in your region.



Service and Maintenance

Simplified service and maintenance features save you time and money.

Ground Level Service

The design and layout of the 312D/D L Series 2 was made with the service technician in mind. Most service locations are easily accessible at ground level allowing service and maintenance to get completed quickly and efficiently.

Pump Compartment

A service door on the right side of the upper structure allows ground-level access to the pump, pilot filter, drain filter, the engine oil filter, $S \cdot O \cdot S^{SM}$ sampling port, and diagnostic pressure taps.

Radiator Compartment

The left service door allows easy access to the engine radiator, oil cooler, water separator and first and second fuel filter.

A reserve tank and drain cock are attached to the radiator for simplified maintenance.

The air filter features a double-element construction for superior cleaning efficiency. When the air cleaner plugs, a warning is displayed on the monitor screen inside the cab.

Hydraulic Return Filter

The hydraulic return filter is situated outside the hydraulic tank. This filter prevents contaminants from entering the system when hydraulic oil is changed and keeps the operation clean.

Greasing Points

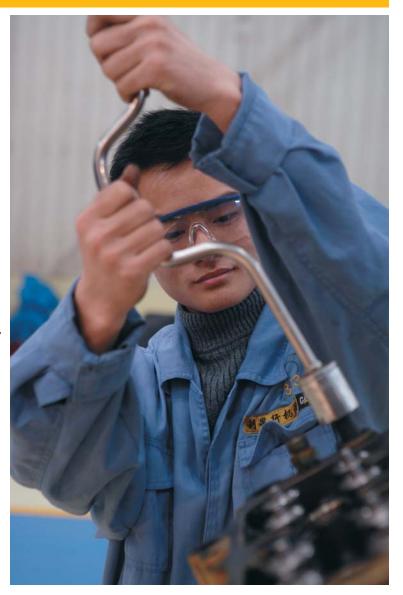
A concentrated remote greasing block on the boom delivers grease to hard-to-reach locations on the front.

Fan Guard

The engine radiator fan is 180 degree enclosed by heavy wire guard, reducing the risk of an accident.

Anti-Skid Plate

Anti-skid plate covers top of storage box and upper structure to prevent slipping during maintenance.



Diagnostics and Monitoring

The 312D/D L Series 2 is equipped with $S \cdot O \cdot S$ sampling ports and hydraulic test ports for the hydraulic system, engine oil, and for coolant. A test connection for the Cat Electronic Technician (Cat ET) service tool is located behind the cab.

Extended Service Interval

312D/D L Series 2 service and maintenance intervals have been extended to reduce machine service time and increase machine availability.



Product Support

You will find nearly all parts at our dealer parts counter. Cat dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime. A wide range of Cat remanufactured components are available for the 312D/D L Series 2, further lowering repair costs and supporting sustainable practices.

Machine Selection

Make detailed comparisons of the machines you are considering before you buy. What are the job requirements, machine attachments and operating hours? What production is needed? Your Cat dealer can provide recommendations.

Maintenance Services

Repair option programs guarantee the cost of repairs up front. Condition monitoring services and diagnostic programs such as scheduled oil sampling, coolant sampling, and technical analysis help you avoid unscheduled repairs.

Customer Support Agreements

Cat dealers offer a variety of product support agreements, and work with customers to develop a plan that best meets specific needs. These plans can cover the entire machine, including attachments, to help protect the customer's investment.

Replacement

Repair, rebuild, or replace? Your Cat dealer can help you evaluate the cost involved so you can make the right choice.

Engine		
Engine Model	3054C	
Net Power – ISO 14396	70 kW	94 hp
Net Power – SAE J1349/ISO 9249	67 kW	90 hp
Bore	105 mm	4.13 in
Stroke	127 mm	5.00 in
Displacement	4.4 L	269 in ³

- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- No engine derating required below 2300 m (7,545 ft) altitude.
- The 312D/D L Series 2 with a powerful 3054C engine meets the U.S. EPA Tier 2 and EU Stage II regulations.

Weights	
Operating Weight – Standard Undercarr	iage
Minimum Operating Weight*	12 900 kg 28,440 lb
Maximum Operating Weight**	13 600 kg 29,980 lb
*4.65 m (15'3") Reach Boom, R2.5 (8'2' Triple Grouser Track Shoes, GD 0.53 Bucket (500 kg/1,100 lb)	
**4.65 m (15'3") Reach Boom, R3.0 (9'10 Triple Grouser Track Shoes, GD 0.53	

Operating Weight – Long Undercarriage	
Minimum Operating Weight*	13 200 kg 29,100 lb
Maximum Operating Weight**	13 900 kg 30,640 lb
*4.65 m (15'3") Reach Boom, R2.5 (8'2" Triple Grouser Track Shoes, GD 0.53 r	

Bucket (500 kg/1,100 lb)

Bucket (500 kg/1,100 lb)

**4.65 m (15'3") Reach Boom, R3.0 (9'10") Stick, 770 mm (30")

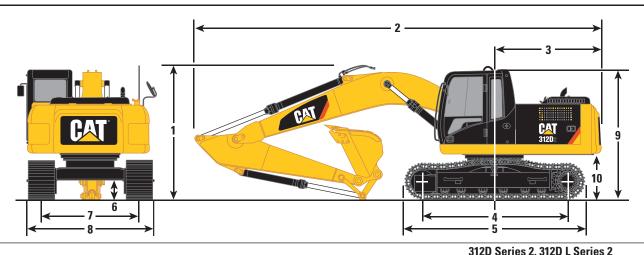
Triple Grouser Track Shoes, GD 0.53 m³ (0.69 yd³)

Bucket (500 kg/1,100 lb)

Swing Mechanism		
Swing Speed	12.2 rpm	
Swing Torque	30.9 kN·m	22,791 lb-ft
Drive		
Maximum Travel Speed	5.6 km/h	3.5 mph
Maximum Drawbar Pull	114 kN	25,630 lb
Hydraulic System		
Main System – Maximum Flow (Total)	254 L/min	67 gal
Swing System – Maximum Flow	127 L/min	34 gal
Maximum Pressure – Equipment	30 500 kPa	4,420 psi
Maximum Pressure – Travel	35 000 kPa	5,080 psi
Maximum Pressure – Swing	23 000 kPa	3,340 psi
Pilot System – Maximum Flow	21.9 L/min	1,340 in³/min
Pilot System – Maximum Pressure	4120 kPa	600 psi
Boom Cylinder – Bore	110 mm	4 in
Boom Cylinder – Stroke	1015 mm	40 in
Stick Cylinder – Bore	120 mm	5 in
Stick Cylinder – Stroke	1197 mm	47 in
Bucket Cylinder – Bore	100 mm	4 in
Bucket Cylinder – Stroke	939 mm	37 in
Service Refill Capacities		
Fuel Tank Capacity	250 L	66 gal
Cooling System	17.88 L	4.7 gal
Engine Oil (with filter)	16 L	4.2 gal
Swing Drive	3 L	0.8 gal
Final Drive (each)	3 L	0.8 gal
Hydraulic System (including tank)	104 L	27.5 gal
Hydraulic Tank	90.6 L	24 gal

Dimensions

All dimensions are approximate.



		312D Series 2,	312D L Series 2
Boom Option	ns		Boom (15'3")
Stick Option	ns	R3.0 (9'10")	R2.5 (8'2")
1 Shipping	g Height*	2830 mm (9'3")	2830 mm (9'3")
Shipping	g Height with Guard Rail	2830 mm (9'3")	2830 mm (9'3")
2 Shipping	g Length		
Standa	ard Undercarriage***	7620 mm (25'0")	7610 mm (25'0")
Long	Undercarriage	7620 mm (25'0")	7610 mm (25'0")
Standard Undercarriage with Blade***		7840 mm (25'9")	7830 mm (25'8")
Long Undercarriage with Blade		7970 mm (26'2")	7960 mm (26'1")
3 Tail Swin	ng Radius	2140 mm (7'0")	2140 mm (7'0")
4 Length t	to Center of Rollers		
Standa	ard Undercarriage***	2780 mm (9'1")	2780 mm (9'1")
Long Undercarriage		3040 mm (10'0")	3040 mm (10'0")
5 Track Le	ength		
Standa	ard Undercarriage***	3490 mm (11'5")	3490 mm (11'5")
Long	Undercarriage	3750 mm (12'4")	3750 mm (12'4")
6 Ground	Clearance	440 mm (1'5")	440 mm (1'5")
7 Track G	auge	1990 mm (6'6")	1990 mm (6'6")
8 Transpor	rt Width		
500 m	ım (20") Shoes	2490 mm (8'2")	2490 mm (8'2")
600 m	ım (24") Shoes	2590 mm (8'6")	2590 mm (8'6")
700 m	ım (28") Shoes	2690 mm (8'10")	2690 mm (8'10")
770 m	ım (30") Shoes	2760 mm (9'1")	2760 mm (9'1")
9 Cab Hei	ght	2760 mm (9'1")	2760 mm (9'1")
Cab Hei	ght with Top Guard	2900 mm (9'6")	2900 mm (9'6")
10 Counter	weight Clearance**	900 mm (2'11")	900 mm (2'11")
Bucket	Туре	GD	GD
	Capacity	0.53 m ³ (0.69 yd ³)	0.53 m ³ (0.69 yd ³)
	Tip Radius	1200 mm (3'11")	1200 mm (3'11")

All dimensions based on bucket A (see table).

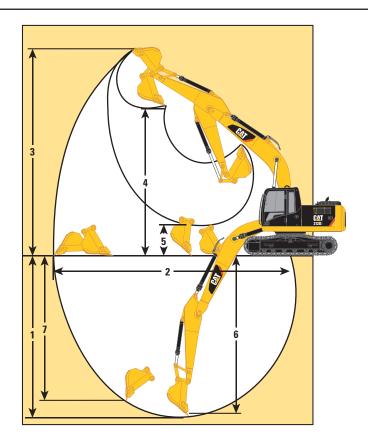
^{*}Including shoe lug height.

^{**}Without shoe lug height.

^{***}Offering varies for different regions.

Working Ranges

All dimensions are approximate.



	312D Series 2, 312D L Series 2					
Boom Options		n Boom (15'3")				
Stick Options	R3.0 (9'10")	R2.5 (8'2")				
1 Maximum Digging Depth	6040 mm (19'10")	5540 mm (18'2")				
2 Maximum Reach at Ground Level	8630 mm (28'4")	8180 mm (26'10")				
3 Maximum Cutting Height	8710 mm (28'7")	8490 mm (27'10")				
4 Maximum Loading Height	6330 mm (20'9")	6100 mm (20'0")				
5 Minimum Loading Height	1530 mm (5'0")	2010 mm (6'7")				
6 Maximum Depth Cut for 2440 mm Level Bottom	5860 mm (19'3")	5330 mm (17'6")				
7 Maximum Vertical Wall Digging Depth	4990 mm (16'4")	4640 mm (15'3")				
Bucket Type	GD	GD				
Capacity	0.53 m ³ (0.69 yd ³)	0.53 m ³ (0.69 yd ³)				
Tip Radius	1200 mm (3'11")	1200 mm (3'11")				

Operating Weight and Ground Pressure

	770 mr Triple Grou	n (30") ıser Shoes	700 mm (28") Triple Grouser Shoes		600 mm (24") Triple Grouser Shoes		500 mm (20") Triple Grouser Sho	
Standard Undercarriage	e without Blade*							
Reach Boom – 4.65 m	(15'3")							
R3.0 (9'10")	13 600 kg (29,980 lb)	28.6 kPa (4.15 psi)	13 500 kg (29,760 lb)	31.2 kPa (4.53 psi)	_	_	13 000 kg (28,660 lb)	42.1 kPa (6.11 psi)
R2.5 (8'2")	13 500 kg (29,760 lb)	28.4 kPa (4.12 psi)	13 400 kg 31.0 kP (29,540 lb) (4.50 ps		_	_	12 900 kg (28,440 lb)	41.7 kPa (6.05 psi)
Long Undercarriage wi	thout Blade							
Reach Boom – 4.65 m	(15'3")							
R3.0 (9'10")	13 900 kg (30,640 lb)	26.9 kPa (3.90 psi)	13 800 kg (30,420 lb)	29.4 kPa (4.26 psi)	13 500 kg (29,760 lb)	33.5 kPa (4.86 psi)	13 300 kg (29,320 lb)	39.7 kPa (5.76 psi)
R2.5 (8'2")	13 800 kg (30,420 lb)	26.7 kPa (3.87 psi)	13 700 kg (30,200 lb)	29.2 kPa (4.24 psi)	13 400 kg (29,540 lb)	33.3 kPa (4.83 psi)	13 200 kg (29,100 lb)	39.4 kPa (5.71 psi)

Weights are rounded up to nearest 100 kg and lb including GD 0.53 m³ (0.69 yd³) bucket (500 kg/1,100 lb).

Major Component Weights

Base Machine (with boom cylinder, without counterweight, front linkage and track)	4490 kg (9,900 lb)
Undercarriage	
Standard Undercarriage*	2400 kg (5,290 lb)
Long Undercarriage	2580 kg (5,690 lb)
Counterweight	
Standard Counterweight	2450 kg (5,400 lb)
Heavy Duty Counterweight	2650 kg (5,840 lb)
Boom (includes lines, pins and stick cylinder)	
Reach Boom – 4.65 m (15'3")	1030 kg (2,270 lb)
Stick (includes lines, pins and bucket cylinder)	
R3.0 (9'10")	650 kg (1,430 lb)
R2.5 (8'2")	570 kg (1,260 lb)
Track Shoe (Long/per two tracks)	
500 mm (20") Triple Grouser	1570 kg (3,460 lb)
600 mm (24") Triple Grouser	1820 kg (4,010 lb)
700 mm (28") Triple Grouser	2090 kg (4,610 lb)
770 mm (30") Triple Grouser	2230 kg (4,920 lb)
Track Shoe (Standard/per two tracks)	
500 mm (20") Triple Grouser	1460 kg (3,220 lb)
700 mm (28") Triple Grouser	1950 kg (4,300 lb)
770 mm (30") Triple Grouser	2090 kg (4,610 lb)
Quick Coupler – Center Lock with Pin	480 kg (1,060 lb)
Blade	
2500 mm (8'2")	800 kg (1,760 lb)
2600 mm (8'6")	800 kg (1,760 lb)

All weights are rounded up to nearest 10 kg and lb except for quick coupler and buckets. Kg and lb were rounded up separately so some of the kg and lb do not match. Base machine includes 75 kg (165 lb) operator weight and 90% fuel weight, and undercarriage with center guard.

^{*}Offering varies for different regions.

^{*}Offering varies for different regions.

Bucket and Stick Forces

	Reach Boom 4.65 m (15'3")						
Stick Options	R3.0 (9'10")	R2.5 (8'2")					
General Duty							
Bucket Digging Force (ISO)	95 kN (21,400 lb)	95 kN (21,400 lb)					
Stick Digging Force (ISO)	58 kN (13,100 lb)	65 kN (14,700 lb)					
Bucket Digging Force (SAE)	85 kN (19,200 lb)	85 kN (19,100 lb)					
Stick Digging Force (SAE)	57 kN (12,800 lb)	64 kN (14,300 lb)					
Severe Duty							
Bucket Digging Force (ISO)	95 kN (21,400 lb)	95 kN (21,400 lb)					
Stick Digging Force (ISO)	58 kN (13,100 lb)	65 kN (14,700 lb)					
Bucket Digging Force (SAE)	84 kN (18,900 lb)	83 kN (18,700 lb)					
Stick Digging Force (SAE)	57 kN (12,800 lb)	63 kN (14,200 lb)					

312D/D L Series 2 Bucket Specifications and Compatibility (Africa, Middle East & CIS)

Without Quick Coupler									312D L	Series 2					
	W	Width Capacity		We	ight	Fill	Reach Boom								
								3.0	2.5	3.0	2.5	3.0	2.5	3.0	2.5
	mm	in	m³	yd³	kg	lb	%	500 mm	(20") TG	600 mm	(24") TG	700 mm	(28") TG	770 mm	(30") TG
General Duty (GD)	600	24	0.31	0.40	315	694	100	•	•	•	•	•	•	•	•
	750	30	0.41	0.54	362	799	100	•	•		•	•	•	•	•
	900	36	0.53	0.69	411	905	100	•	•	•	•	•	•	•	•
	1000	39	0.60	0.78	436	960	100	•	•	•	•	•	•	•	•
	1100	43	0.68	0.89	470	1,036	100	•	•	•	•	•	•	•	•
	1200	48	0.76	1.00	499	1,100	100	Х	Х	Х	Х	Х	Χ	Х	Х
Heavy Duty (HD)	450	18	0.20	0.27	276	608	100	•	•	•	•	•	•	•	•
	1200	48	0.76	1.00	506	1,115	100	Х	Х	Х	Х	Х	Х	Х	Х
		Max	imum loa	d pin-on (payload +	bucket)	kg	1750	1970	1765	1980	1800	2025	1820	2045
							lb	3,857	4,342	3,890	4,364	3,967	4,463	4,011	4,507

With Center-Lock Quick	Coupler										312D L	Series 2			
	Wi	idth	Capa	acity	We	ight	Fill				Reach	Boom			
								3.0	2.5	3.0	2.5	3.0	2.5	3.0	2.5
	mm	in	m³	yd³	kg	lb	%	500 mm	(20") TG	600 mm	(24") TG	700 mm	(28") TG	770 mm	(30") TG
General Duty (GD)	600	24	0.31	0.40	315	694	100	•	•	•	•	•	•	•	•
	750	30	0.41	0.54	362	799	100	•	•	•	•	•	•	•	•
	900	36	0.53	0.69	411	905	100	•	•	•	•	•	•	•	•
	1000	39	0.60	0.78	436	960	100	•	•	•	•	•	•	•	•
	1100	43	0.68	0.89	470	1,036	100	Θ	•	Θ	•	Θ	•	Θ	•
	1200	48	0.76	1.00	499	1,100	100	0	Θ	0	Θ	0	Θ	0	Θ
Heavy Duty (HD)	450	18	0.20	0.27	276	608	100	•	•	•	•	•	•	•	•
	1200	48	0.76	1.00	506	1,115	100	0	Θ	0	Θ	0	θ	0	Θ
		Max	imum loa	d pin-on (payload +	bucket)	kg	1504	1724	1519	1734	1554	1779	1574	1799
							lb	3,315	3,800	3,348	3,822	3,425	3,921	3,470	3,965

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with Long tips

Maximum Material Density:

- 2100 kg/m³ (3,500 lb/yd³)
- 1800 kg/m³ (3,000 lb/yd³)
- → 1500 kg/m³ (2,500 lb/yd³)
- O 1200 kg/m³ (2,000 lb/yd³)
- X Not recommended

312D/D L Series 2 Bucket Specifications and Compatibility (Asia Pacific)

Without Quick C	oupler								_	312D S	eries 2						312D L	Series 2	2		
	Wi	dth	Capa	acity	We	ight	Fill			Reach	Boom						Reach	Boom			
								3.0	2.5	3.0	2.5	3.0	2.5	3.0	2.5	3.0	2.5	3.0	2.5	3.0	2.5
	mm	in	m³	yd³	kg	lb	%		mm) TG		mm) TG		mm) TG		mm) TG		mm) TG		mm) TG		mm) TG
General Duty	450	18	0.20	0.27	276	608	100	•	•	•	•	•	•	•	•	•	•	•	•	•	•
(GD)	600	24	0.31	0.40	326	719	100	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	900	36	0.53	0.69	423	932	100	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1050	42	0.65	0.84	476	1,049	100	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1200	48	0.76	1.00	510	1,125	100	Х	Х	Χ	Χ	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Х
Severe Duty	600	24	0.31	0.40	367	810	90	•	•	•	•	•	•	•	•	•	•	•	•	•	•
(SD)	900	36	0.53	0.69	466	1,027	90	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1050	42	0.65	0.84	529	1,166	90	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1050	42	0.65	0.84	542	1,195	90	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Maxin	num loa	ıd pin-o	n (payl	oad + b	ucket)	kg	1710	1925	1755	1975	1795	2020	1750	1970	1765	1980	1800	2025	1820	2045
							lb	3,769	4,243	3,868	4,353	3,956	4,452	3,857	4,342	3,890	4,364	3,967	4,463	4,011	4,507

With Center-Loc	k Quick	Coupl	er							312D S	eries 2					;	312D L S	Series 2	2		
	Wi	dth	Capa	acity	We	ight	Fill			Reach	Boom						Reach	Boom			
								3.0	2.5	3.0	2.5	3.0	2.5	3.0	2.5	3.0	2.5	3.0	2.5	3.0	2.5
	mm	in	m³	yd³	kg	lb	%		mm) TG		mm) TG	-	mm) TG		mm) TG	600 (24"	mm) TG	700 (28")		770 (30")	
General Duty	450	18	0.20	0.27	276	608	100	•	•	•	•	•	•	•	•	•	•	•		•	•
(GD)	600	24	0.31	0.40	326	719	100	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	900	36	0.53	0.69	423	932	100	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1050	42	0.65	0.84	476	1,049	100	Θ	•	Θ	•	\ominus	•	Θ	•	\ominus	•	\oplus	•	Θ	•
	1200	48	0.76	1.00	510	1,125	100	0	Θ	0	Θ	0	Θ	0	Θ	0	Θ	0	\oplus	0	Θ
Severe Duty	600	24	0.31	0.40	367	810	90	•	•	•	•	•	•	•	•	•	•	•	•	•	•
(SD)	900	36	0.53	0.69	466	1,027	90	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1050	42	0.65	0.84	529	1,166	90	Θ	•	Θ	•	•	•	Θ	•	\ominus	•	•	•	•	•
	1050	42	0.65	0.84	542	1,195	90	Θ	•	Θ	•	•	•	Θ	•	Θ	•	•	•	•	•
	Maxin	num loa	d pin-o	n (paylo	oad + b	ucket)	kg	1464	1679	1509	1729	1549	1774	1504	1724	1519	1734	1554	1779	1574	1799
							lb	3,227	3,701	3,326	3,811	3,414	3,910	3,315	3,800	3,348	3,822	3,425	3,921	3,470	3,965

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with Long tips

Maximum Material Density:

- 2100 kg/m³ (3,500 lb/yd³)
- 1800 kg/m³ (3,000 lb/yd³)
- → 1500 kg/m³ (2,500 lb/yd³)
- O 1200 kg/m³ (2,000 lb/yd³)
- X Not recommended

312D/D L Series 2 Bucket Specifications and Compatibility (South America)

Without Quick Coupler											312D L	Series 2			
	Wi	dth	Capa	acity	We	ight	Fill				Reach	Boom			
	mm in m³ vd³ ka II							3.0	2.5	3.0	2.5	3.0	2.5	3.0	2.5
	mm in m³ yd³ kg						%	500 mm	(20") TG	600 mm	(24") TG	700 mm	(28") TG	770 mm	(30") TG
General Duty (GD)	1200	48	0.76	1.00	510	1,125	100	 		0*	•*	⊖*	• *	• *	•*
Severe Duty (SD)	900	36	0.53	0.69	483	1,065	90	•	•	•	•	•	•	•	•
	1050	42	0.65	0.84	529	1,166	90	•	•	•	•	•	•	•	•
	Maximum load pin-on (payload + b							1750	1970	1765	1980	1800	2025	1820	2045
			lb	3,857	4,342	3,890	4,364	3,967	4,463	4,011	4,507				

With Center-Lock Quick	Coupler										312D L	Series 2			
	Wi	dth	Capa	acity	We	ight	Fill				Reach	Boom			
		mm in m³ vd³ ka Ib						3.0	2.5	3.0	2.5	3.0	2.5	3.0	2.5
	mm	in	m³	yd³	kg	lb	%	500 mm	(20") TG	600 mm	(24") TG	700 mm	(28") TG	770 mm	(30") TG
General Duty (GD)	1200	48	0.76	1.00	510	1,125	100	0	(20) 1G 6001		Θ	0	Θ	0	Θ
Severe Duty (SD)	900	36	0.53	0.69	483	1,065	90	•	•	•	•	•	•	•	•
	1050	42	0.65	0.84	529	1,166	90	Θ	•	Θ	•	•	•	•	•
		Max	imum loa	d pin-on (payload +	- bucket)	kg	1504	1724	1519	1734	1554	1779	1574	1799
							lb	3,315	3,800	3,348	3,822	3,425	3,921	3,470	3,965

^{*}Recommended for General Duty applications.

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with Long tips

Maximum Material Density:

- 2100 kg/m³ (3,500 lb/yd³)
- 1800 kg/m³ (3,000 lb/yd³)
- → 1500 kg/m³ (2,500 lb/yd³)
- O 1200 kg/m³ (2,000 lb/yd³)

Reach Boom Lift Capacities

Load Point Height



Load at Maximum Reach



Load Radius Over Front

Load Radius Over Side

Boom - 4.65 m (15'3")

Counterweight - 2.45 mt (5,400 lb)

Bucket - None

Stick - R3.0 (9'10")

Shoes - 770 mm (30") triple grouser with step

Undercarriage – Standard

		1.5 m/	5.0 ft	3.0 m/1	10.0 ft	4.5 m/	15.0 ft	6.0 m/2	20.0 ft	7.5 m/2	25.0 ft			
														m ft
7.5 m 25.0 ft	kg Ib											*2550	*2550	4.37
6.0 m 20.0 ft	kg Ib											*2100 *4,650	*2100 *4,650	5.95 19.26
4.5 m 15.0 ft	kg Ib							*3150 *6,900	2500 5,350			*2000 *4,350	*2000 *4,350	6.86 22.39
3.0 m 10.0 ft	kg Ib					*3850 *8,400	3750 8,100	3350 7,200	2450 5,200			*2000 *4,350	1750 3,850	7.35 24.09
1.5 m 5.0 ft	kg Ib			*7550 *16,250	6400 13,750	*4900 *10,650	3500 7,550	3250 6,950	2300 5,000	*2150	1650	*2050 *4,550	1650 3,600	7.52 24.67
Ground Line	kg Ib			*7850 *18,150	5950 12,750	4750 10,200	3300 7,100	3150 6,700	2200 4,750			*2300 *5,000	1650 3,650	7.38 24.20
−1.5 m −5.0 ft	kg Ib	*4500 *10,050	*4500 *10,050	9150 19,550	5800 12,500	4650 10,000	3200 6,900	3050 6,600	2150 4,650			2550 5,550	1800 3,950	6.91 22.63
−3.0 m −10.0 ft	kg Ib	*7500 *16,850	*7500 *16,850	*8550 *18,500	5850 12,600	4650 10,000	3200 6,900	3100	2200			3050 6,800	2200 4,800	6.04 19.69
−4.5 m −15.0 ft	kg Ib			*6450 *13,700	6050 13,050	*4050	3350					*4000 *8,800	3300 7,550	4.53 14.54

Boom - 4.65 m (15'3")

Stick - R2.5 (8'2")

Counterweight – 2.45 mt (5,400 lb)

Shoes - 770 mm (30") triple grouser with step

Bucket - None

Undercarriage – Standard

		1.5 m/	5.0 ft	3.0 m/	10.0 ft	4.5 m/1	15.0 ft	6.0 m/2	20.0 ft			
												m ft
6.0 m 20.0 ft	kg Ib					*3350 *7,450	*3350 *7,450			*2450 *5,400	*2450 *5,400	5.37 17.35
4.5 m 15.0 ft	kg Ib					*3550 *7,750	*3550 *7,750	3400 *7,100	2500 5,300	*2250 *4,950	2250 *4,950	6.37 20.77
3.0 m 10.0 ft	kg Ib			*5850 *12,500	*5850 *12,500	*4350 *9,400	3700 8,000	3350 7,150	2400 5,200	*2250 *4,900	1950 4,250	6.90 22.60
1.5 m 5.0 ft	kg Ib			*8450 *18,100	6250 13,450	4950 10,650	3500 7,500	3250 6,950	2350 5,000	*2350 *5,100	1850 4,000	7.08 23.22
Ground Line	kg Ib			*6900 *15,900	5950 12,750	4750 10,250	3300 7,150	3150 6,750	2250 4,850	*2600 *5,650	1850 4,050	6.93 22.72
−1.5 m −5.0 ft	kg Ib	*4850 *10,900	*4850 *10,900	*9200 19,750	5900 12,700	4700 10,100	3250 7,000	3100 6,700	2200 4,750	2850 6,250	2050 4,500	6.42 21.04
−3.0 m −10.0 ft	kg Ib	*8750 *19,750	*8750 *19,750	*8100 *17,400	6000 12,900	4750 10,200	3300 7,100			3600 8,000	2550 5,650	5.47 17.83

^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Reach Boom Lift Capacities





Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom - 4.65 m (15'3")

Counterweight - 2.45 mt (5,400 lb)

Bucket - None

Stick - R3.0 (9'10")

Shoes - 700 mm (28") triple grouser with step

Undercarriage – Standard

		1.5 m/	5.0 ft	3.0 m/1	10.0 ft	4.5 m/1	15.0 ft	6.0 m/2	20.0 ft	7.5 m/2	25.0 ft			
														m ft
7.5 m 25.0 ft	kg Ib											*2550	*2550	4.37
6.0 m 20.0 ft	kg Ib											*2100 *4,650	*2100 *4,650	5.95 19.26
4.5 m 15.0 ft	kg Ib							*3150 *6,900	2500 5,350			*2000 *4,350	2000 *4,350	6.86 22.39
3.0 m 10.0 ft	kg Ib					*3850 *8,400	3750 8,050	3300 7,150	2400 5,150			*2000 *4,350	1750 3,800	7.35 24.09
1.5 m 5.0 ft	kg Ib			*7550 *16,250	6350 13,600	*4900 10,600	3500 7,500	3200 6,850	2300 4,950	*2150	1650	*2050 *4,550	1650 3,600	7.52 24.67
Ground Line	kg Ib			*7850 *18,150	5900 12,650	4700 10,100	3250 7,050	3100 6,650	2200 4,700			*2300 *5,000	1650 3,600	7.38 24.20
−1.5 m −5.0 ft	kg Ib	*4500 *10,050	*4500 *10,050	9050 19,350	5750 12,350	4600 9,900	3150 6,800	3050 6,550	2150 4,600			2500 5,500	1800 3,900	6.91 22.63
−3.0 m −10.0 ft	kg Ib	*7500 *16,850	*7500 *16,850	*8550 *18,500	5800 12,450	4600 9,900	3150 6,800	3050	2150			3050 6,750	2150 4,750	6.04 19.69
−4.5 m −15.0 ft	kg Ib			*6450 *13,700	6000 12,950	*4050	3300					*4000 *8,800	3300 7,450	4.53 14.54

Boom - 4.65 m (15'3")

Stick - R2.5 (8'2")

Counterweight – 2.45 mt (5,400 lb)

Shoes - 700 mm (28") triple grouser with step

Bucket - None

Undercarriage – Standard

		1.5 m/	5.0 ft	3.0 m/	10.0 ft	4.5 m/1	15.0 ft	6.0 m/2	20.0 ft			
												m ft
6.0 m 20.0 ft	kg lb					*3350 *7,450	*3350 *7,450			*2450 *5,400	*2450 *5,400	5.37 17.35
4.5 m 15.0 ft	kg Ib					*3550 *7,750	*3550 *7,750	3350 *7,100	2450 5,250	*2250 *4,950	2200 4,900	6.37 20.77
3.0 m 10.0 ft	kg Ib			*5850 *12,500	*5850 *12,500	*4350 *9,400	3700 7,950	3300 7,100	2400 5,150	*2250 *4,900	1950 4,250	6.90 22.60
1.5 m 5.0 ft	kg Ib			*8450 *18,100	6200 13,350	4900 10,550	3450 7,450	3200 6,900	2300 4,950	*2350 *5,100	1800 3,950	7.08 23.22
Ground Line	kg Ib			*6900 *15,900	5900 12,650	4750 10,150	3300 7,050	3100 6,700	2250 4,800	2550 5,600	1850 4,000	6.93 22.72
−1.5 m −5.0 ft	kg lb	*4850 *10,900	*4850 *10,900	9150 19,550	5850 12,550	4650 10,000	3250 6,950	3100 6,650	2200 4,700	2800 6,200	2000 4,450	6.42 21.04
−3.0 m −10.0 ft	kg Ib	*8750 *19,750	*8750 *19,750	*8100 * 17,400	5950 12,750	4700 10,100	3250 7,000			3550 7,900	2550 5,600	5.47 17.83

^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Reach Boom Lift Capacities

Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom - 4.65 m (15'3")

Counterweight - 2.45 mt (5,400 lb)

Bucket - None

Stick - R3.0 (9'10")

Shoes - 500 mm (20") triple grouser

Undercarriage – Standard

		1.5 m/	5.0 ft	3.0 m/1	10.0 ft	4.5 m/	15.0 ft	6.0 m/2	20.0 ft	7.5 m/2	25.0 ft			
														m ft
7.5 m 25.0 ft	kg Ib											*2550	*2550	4.37
6.0 m 20.0 ft	kg Ib											*2100 *4,650	*2100 *4,650	5.95 19.26
4.5 m 15.0 ft	kg Ib							*3150 *6,900	2400 5,150			*2000 *4,350	1900 4,250	6.86 22.39
3.0 m 10.0 ft	kg Ib					*3850 *8,400	3650 7,800	3200 6,900	2350 5,000			*2000 *4,350	1700 3,700	7.35 24.09
1.5 m 5.0 ft	kg Ib			*7550 *16,250	6150 13,200	4800 10,250	3350 7,250	3100 6,650	2200 4,750	*2150	1600	*2050 *4,550	1600 3,450	7.52 24.67
Ground Line	kg Ib			*7850 *18,150	5700 12,200	4550 9,750	3150 6,800	3000 6,400	2100 4,550			2200 4,850	1600 3,450	7.38 24.20
−1.5 m −5.0 ft	kg Ib	*4500 *10,050	*4500 *10,050	8750 18,650	5550 11,950	4450 9,550	3050 6,550	2950 6,300	2050 4,450			2400 5,300	1700 3,750	6.91 22.63
−3.0 m −10.0 ft	kg Ib	*7500 *16,850	*7500 *16,850	*8550 *18,500	5600 12,050	4450 9,550	3050 6,600	2950	2100			2950 6,500	2100 4,600	6.04 19.69
−4.5 m −15.0 ft	kg Ib			*6450 *13,700	5800 12,500	*4050	3200					*4000 *8,800	3200 7,200	4.53 14.54

Boom - 4.65 m (15'3")

Stick - R2.5 (8'2")

Counterweight – 2.45 mt (5,400 lb)

Shoes - 500 mm (20") triple grouser

Bucket - None

Undercarriage – Standard

		1.5 m/	5.0 ft	3.0 m/	10.0 ft	4.5 m/1	15.0 ft	6.0 m/2	20.0 ft			
												m ft
6.0 m 20.0 ft	kg Ib					*3350 *7,450	*3350 *7,450			*2450 *5,400	*2450 *5,400	5.37 17.35
4.5 m 15.0 ft	kg Ib					*3550 *7,750	*3550 *7,750	3250 7,000	2400 5,100	*2250 *4,950	2150 4,750	6.37 20.77
3.0 m 10.0 ft	kg Ib			*5850 *12,500	*5850 *12,500	*4350 *9,400	3600 7,700	3200 6,850	2300 5,000	*2250 *4,900	1850 4,100	6.90 22.60
1.5 m 5.0 ft	kg Ib			*8450 *18,100	6000 12,900	4750 10,200	3350 7,200	3100 6,650	2250 4,800	*2350 *5,100	1750 3,850	7.08 23.22
Ground Line	kg Ib			*6900 *15,900	5700 12,200	4550 9,800	3200 6,850	3000 6,450	2150 4,600	2450 5,400	1750 3,850	6.93 22.72
−1.5 m −5.0 ft	kg Ib	*4850 *10,900	*4850 *10,900	8850 18,900	5650 12,150	4500 9,650	3100 6,700	3000 6,400	2100 4,550	2700 6,000	1950 4,250	6.42 21.04
−3.0 m −10.0 ft	kg Ib	*8750 *19,750	*8750 *19,750	*8100 *17,400	5750 12,350	4550 9,750	3150 6,750			3450 7,650	2450 5,400	5.47 17.83

^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Reach Boom Lift Capacities





Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom - 4.65 m (15'3") Stick - R3.0 (9'10")

Counterweight - 2.45 mt (5,400 lb)

Shoes - 770 mm (30") triple grouser with step

Bucket - None

Undercarriage - Long

		1.5 m/	5.0 ft	3.0 m/1	10.0 ft	4.5 m/	15.0 ft	6.0 m/2	20.0 ft	7.5 m/2	25.0 ft			
														m ft
7.5 m 25.0 ft	kg Ib											*2550	*2550	4.37
6.0 m 20.0 ft	kg Ib											*2100 *4,650	*2100 *4,650	5.95 19.26
4.5 m 15.0 ft	kg Ib							*3150 *6,900	2550 5,500			*2000 *4,350	*2000 *4,350	6.86 22.39
3.0 m 10.0 ft	kg Ib					*3850 *8,400	3850 8,250	*3450 *7,500	2500 5,350			*2000 *4,350	1800 3,950	7.35 24.09
1.5 m 5.0 ft	kg Ib			*7550 *16,250	6500 14,000	*4900 *10,650	3600 7,700	3700 7,950	2400 5,100	*2150	1700	*2050 *4,550	1700 3,700	7.52 24.67
Ground Line	kg Ib			*7850 *18,150	6050 13,050	5500 11,850	3400 7,250	3600 7,700	2300 4,900			*2300 *5,000	1700 3,750	7.38 24.20
−1.5 m −5.0 ft	kg Ib	*4500 *10,050	*4500 *10,050	*9350 *20,200	5950 12,750	5400 11,600	3300 7,050	3550 7,550	2200 4,750			*2700 *5,900	1850 4,050	6.91 22.63
−3.0 m −10.0 ft	kg Ib	*7500 *16,850	*7500 *16,850	*8550 *18,500	6000 12,850	5400 11,600	3300 7,050	3550	2250			3550 7,800	2250 4,950	6.04 19.69
−4.5 m −15.0 ft	kg Ib			*6450 *13,700	6200 13,350	*4050	3450					*4000 *8,800	3400 7,700	4.53 14.54

Boom - 4.65 m (15'3")

Stick - R2.5 (8'2")

Counterweight – 2.45 mt (5,400 lb)

Shoes - 770 mm (30") triple grouser with step

Bucket - None **Undercarriage** - Long

1.5 m/5.0 ft 3.0 m/10.0 ft 4.5 m/15.0 ft 6.0 m/20.0 ft

6.0 m 20.0 ft	kg Ib					*3350 *7,450	*3350 *7,450			*2450 *5,400	*2450 *5,400	5.37 17.35
4.5 m 15.0 ft	kg Ib					*3550 *7,750	*3550 *7,750	*3500 *7,100	2550 5,400	*2250 *4,950	*2250 *4,950	6.37 20.77
3.0 m 10.0 ft	kg Ib			*5850 *12,500	*5850 *12,500	*4350 *9,400	3800 8,150	*3750 8,150	2500 5,300	*2250 *4,900	2000 4,350	6.90 22.60
1.5 m 5.0 ft	kg Ib			*8450 *18,100	6400 13,750	*5300 *11,500	3550 7,650	3700 7,950	2400 5,100	*2350 *5,100	1850 4,100	7.08 23.22
Ground Line	kg Ib			*6900 *15,900	6100 13,050	5550 11,850	3400 7,300	3600 7,750	2300 4,950	*2600 *5,650	1900 4,150	6.93 22.72
−1.5 m −5.0 ft	kg Ib	*4850 *10,900	*4850 *10,900	*9200 *20,000	6050 12,950	5450 11,700	3350 7,150	3600 7,700	2250 4,900	*3100 *6,800	2100 4,600	6.42 21.04
−3.0 m −10.0 ft	kg lb	*8750 *19.750	*8750 *19.750	*8100 *17.400	6150 13.150	5500 11.800	3350 7.250			4150 9.200	2600 5.800	5.47 17.83

^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Reach Boom Lift Capacities

Load Point Height

Load at Maximum Reach

Load Radius Over Front

Load Radius Over Side

Boom – 4.65 m (15'3") **Stick** – R3.0 (9'10") Counterweight - 2.45 mt (5,400 lb)

Shoes - 700 mm (28") triple grouser with step

Bucket – None Undercarriage – Long

		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/2	20.0 ft	7.5 m/2	25.0 ft			
														m ft
7.5 m 25.0 ft	kg Ib											*2550	*2550	4.37
6.0 m 20.0 ft	kg Ib											*2100 *4,650	*2100 *4,650	5.95 19.26
4.5 m 15.0 ft	kg Ib							*3150 *6,900	2550 5,450			*2000 *4,350	*2000 *4,350	6.86 22.39
3.0 m 10.0 ft	kg Ib					*3850 *8,400	3800 8,200	*3450 *7,500	2450 5,300			*2000 *4,350	1800 3,900	7.35 24.09
1.5 m 5.0 ft	kg Ib			*7550 *16,250	6450 13,900	*4900 *10,650	3550 7,650	3650 7,850	2350 5,050	*2150	1700	*2050 *4,550	1700 3,650	7.52 24.67
Ground Line	kg Ib			*7850 *18,150	6000 12,900	5450 11,750	3350 7,200	3550 7,600	2250 4,850			*2300 *5,000	1700 3,700	7.38 24.20
−1.5 m −5.0 ft	kg Ib	*4500 *10,050	*4500 *10,050	*9350 *20,200	5900 12,650	5350 11,450	3250 6,950	3500 7,500	2200 4,700			*2700 *5,900	1850 4,000	6.91 22.63
−3.0 m −10.0 ft	kg Ib	*7500 *16,850	*7500 *16,850	*8550 *18,500	5950 12,750	5350 11,500	3250 7,000	3500	2200			3500 7,750	2200 4,900	6.04 19.69
−4.5 m −15.0 ft	kg Ib			*6450 *13,700	6150 13,200	*4050	3400					*4000 *8,800	3350 7,650	4.53 14.54

Boom - 4.65 m (15'3")

Stick - R2.5 (8'2")

Counterweight – 2.45 mt (5,400 lb)

Shoes - 700 mm (28") triple grouser with step

Bucket – None
Undercarriage – Long

		1.5 m/5.0 ft		3.0 m/	3.0 m/10.0 ft		4.5 m/15.0 ft		20.0 ft				
												m ft	
6.0 m 20.0 ft	kg Ib					*3350 *7,450	*3350 *7,450			*2450 *5,400	*2450 *5,400	5.37 17.35	
4.5 m 15.0 ft	kg Ib					*3550 *7,750	*3550 *7,750	*3500 *7,100	2500 5,350	*2250 *4,950	*2250 *4,950	6.37 20.77	
3.0 m 10.0 ft	kg Ib			*5850 *12,500	*5850 *12,500	*4350 *9,400	3750 8,100	*3750 8,050	2450 5,250	*2250 *4,900	1950 4,350	6.90 22.60	
1.5 m 5.0 ft	kg Ib			*8450 *18,100	6350 13,600	*5300 *11,500	3550 7,600	3650 7,850	2350 5,050	*2350 *5,100	1850 4,050	7.08 23.22	
Ground Line	kg Ib			*6900 *15,900	6000 12,950	5500 11,750	3350 7,250	3550 7,650	2300 4,900	*2600 *5,650	1900 4,100	6.93 22.72	
−1.5 m −5.0 ft	kg Ib	*4850 *10,900	*4850 *10,900	*9200 *20,000	6000 12,850	5400 11,600	3300 7,100	3550 7,600	2250 4,850	*3100 *6,800	2050 4,550	6.42 21.04	
−3.0 m −10.0 ft	kg Ib	*8750 *19,750	*8750 *19,750	*8100 * 17,400	6100 13,050	5450 11,700	3350 7,150			4100 9,100	2600 5,750	5.47 17.83	

^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Reach Boom Lift Capacities





Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom - 4.65 m (15'3") Stick - R3.0 (9'10")

Counterweight – 2.45 mt (5,400 lb)

Bucket - None

Shoes - 600 mm (24") triple grouser

Undercarriage – Long

→		1.5 m/5.0 ft		3.0 m/1	3.0 m/10.0 ft		15.0 ft	6.0 m/2	20.0 ft	7.5 m/2	25.0 ft			
														m ft
7.5 m 25.0 ft	kg Ib											*2550	*2550	4.37
6.0 m 20.0 ft	kg Ib											*2100 *4,650	*2100 *4,650	5.95 19.26
4.5 m 15.0 ft	kg Ib							*3150 *6,900	2500 5,350			*2000 *4,350	*2000 *4,350	6.86 22.39
3.0 m 10.0 ft	kg Ib					*3850 *8,400	3750 8,050	*3450 *7,500	2400 5,200			*2000 *4,350	1750 3,800	7.35 24.09
1.5 m 5.0 ft	kg Ib			*7550 *16,250	6350 13,650	*4900 *10,650	3500 7,500	3600 7,700	2300 4,950	*2150	1650	*2050 *4,550	1650 3,600	7.52 24.67
Ground Line	kg Ib			*7850 *18,150	5900 12,650	5350 11,500	3300 7,050	3500 7,450	2200 4,750			*2300 *5,000	1650 3,600	7.38 24.20
−1.5 m −5.0 ft	kg Ib	*4500 *10,050	*4500 *10,050	*9350 *20,200	5800 12,400	5250 11,250	3200 6,850	3400 7,350	2150 4,600			*2700 *5,900	1800 3,950	6.91 22.63
−3.0 m −10.0 ft	kg Ib	*7500 *16,850	*7500 *16,850	*8550 *18,500	5850 12,500	5250 11,250	3200 6,850	3450	2200			3400 7,600	2150 4,800	6.04 19.69
−4.5 m −15.0 ft	kg Ib			*6450 *13,700	6050 12,950	*4050	3350					*4000 *8,800	3300 7,500	4.53 14.54

Boom - 4.65 m (15'3")

Stick - R2.5 (8'2")

Counterweight – 2.45 mt (5,400 lb)

Shoes - 600 mm (24") triple grouser

Bucket - None **Undercarriage** – Long

		1.5 m/	1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft					
												m ft		
6.0 m 20.0 ft	kg Ib					*3350 *7,450	*3350 *7,450			*2450 *5,400	*2450 *5,400	5.37 17.35		
4.5 m 15.0 ft	kg Ib					*3550 *7,750	*3550 *7,750	*3500 *7,100	2450 5,250	*2250 *4,950	2250 4,950	6.37 20.77		
3.0 m 10.0 ft	kg Ib			*5850 *12,500	*5850 *12,500	*4350 *9,400	3700 7,950	3700 7,900	2400 5,150	*2250 *4,900	1950 4,250	6.90 22.60		
1.5 m 5.0 ft	kg Ib			*8450 *18,100	6200 13,350	*5300 *11,500	3450 7,450	3600 7,700	2300 4,950	*2350 *5,100	1800 4,000	7.08 23.22		
Ground Line	kg Ib			*6900 *15,900	5900 12,700	5350 11,550	3300 7,100	3500 7,500	2250 4,800	*2600 *5,650	1850 4,050	6.93 22.72		
−1.5 m −5.0 ft	kg Ib	*4850 *10,900	*4850 *10,900	*9200 *20,000	5850 12,600	5300 11,350	3250 6,950	3450 7,450	2200 4,750	*3100 *6,800	2000 4,450	6.42 21.04		
−3.0 m −10.0 ft	kg Ib	*8750 *19,750	*8750 *19,750	*8100 * 17,400	5950 12,800	5350 11,450	3250 7,050			4000 8,900	2550 5,600	5.47 17.83		

^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Reach Boom Lift Capacities

Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom - 4.65 m (15'3")

Counterweight - 2.45 mt (5,400 lb)

Bucket - None

Stick - R3.0 (9'10")

Shoes - 500 mm (20") triple grouser

Undercarriage - Long

		1.5 m/	/5.0 ft	3.0 m/	10.0 ft	4.5 m/	15.0 ft	6.0 m/z	20.0 ft	7.5 m/2	25.0 ft			
														m ft
7.5 m 25.0 ft	kg Ib											*2550	*2550	4.37
6.0 m 20.0 ft	kg Ib											*2100 *4,650	*2100 *4,650	5.95 19.26
4.5 m 15.0 ft	kg Ib							*3150 *6,900	2450 5,250			*2000 *4,350	1950 4,300	6.86 22.39
3.0 m 10.0 ft	kg Ib					*3850 *8,400	3700 7,950	*3450 *7,500	2400 5,100			*2000 *4,350	1700 3,750	7.35 24.09
1.5 m 5.0 ft	kg Ib			*7550 *16,250	6250 13,450	*4900 *10,650	3450 7,400	3550 7,550	2250 4,850	*2150	1600	*2050 *4,550	1600 3,550	7.52 24.67
Ground Line	kg Ib			*7850 *18,150	5800 12,450	5250 11,300	3250 6,950	3400 7,350	2150 4,650			*2300 *5,000	1600 3,550	7.38 24.20
−1.5 m −5.0 ft	kg Ib	*4500 *10,050	*4500 *10,050	*9350 *20,200	5700 12,150	5150 11,050	3100 6,700	3350 7,200	2100 4,550			*2700 *5,900	1750 3,850	6.91 22.63
−3.0 m −10.0 ft	kg Ib	*7500 *16,850	*7500 *16,850	*8550 *18,500	5750 12,300	5150 11,050	3150 6,700	3400	2150			3350 7,450	2100 4,700	6.04 19.69
−4.5 m −15.0 ft	kg Ib			*6450 *13,700	5950 12,750	*4050	3250					*4000 *8,800	3250 7,350	4.53 14.54

Boom - 4.65 m (15'3")

Stick - R2.5 (8'2")

Counterweight – 2.45 mt (5,400 lb)

Shoes - 500 mm (20") triple grouser

Bucket - None

Undercarriage - Long

		1.5 m/	1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft					
												m ft		
6.0 m 20.0 ft	kg lb					*3350 *7,450	*3350 *7,450			*2450 *5,400	*2450 *5,400	5.37 17.35		
4.5 m 15.0 ft	kg Ib					*3550 *7,750	*3550 *7,750	*3500 *7,100	2450 5,200	*2250 *4,950	2200 4,850	6.37 20.77		
3.0 m 10.0 ft	kg Ib			*5850 *12,500	*5850 *12,500	*4350 *9,400	3650 7,850	3650 7,800	2350 5,050	*2250 *4,900	1900 4,150	6.90 22.60		
1.5 m 5.0 ft	kg lb			*8450 *18,100	6100 13,150	*5300 *11,500	3400 7,350	3550 7,550	2250 4,900	*2350 *5,100	1800 3,900	7.08 23.22		
Ground Line	kg Ib			*6900 *15,900	5800 12,450	5300 11,300	3250 6,950	3450 7,400	2200 4,700	*2600 *5,650	1800 3,950	6.93 22.72		
−1.5 m −5.0 ft	kg lb	*4850 *10,900	*4850 *10,900	*9200 *20,000	5750 12,400	5200 11,150	3200 6,800	3400 7,300	2150 4,650	*3100 *6,800	2000 4,350	6.42 21.04		
−3.0 m −10.0 ft	kg Ib	*8750 *19,750	*8750 *19,750	*8100 *17,400	5850 12,600	5250 11,250	3200 6,900			3950 8,750	2500 5,500	5.47 17.83		

^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

312D/D L Series 2 Standard Equipment

Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

ENGINE

- Diesel engine Cat 3054C with mechanical governor
- -2300 m (7,545 ft) altitude capability
- 50 amp alternator, air intake heater
- Tier 2 emission package
- 10 micron fuel filter
- 4 micron fuel pre-filter
- One touch low idle with AEC
- Remote engine oil filter
- Radial seal air filter, double element
- Two speed travel
- Water separator in fuel line with indicator
- Waved fin radiator with side by side type oil cooler
- Fix type A/C condenser
- 43° C (109° F) High ambient cooling
- Meets the U.S. EPA Tier 2 and EU Stage II regulations
- · Economy mode

CAB

- · Bolt-on FOGS capability
- Openable front windshield with assist device
- Pillar mounted upper windshield wiper and washer
- Front windshield glass split by 70/30
- Cab sliding upper door window
- Rear window, emergency exit
- Removable lower windshield with in cab storage bracket
- · Openable skylight/metal hatch
- Interior lighting
- · Standard joystick
- · Laminated front upper windshield
- Seat high back, mechanical suspension with head rest

- Seat belt, retractable, 50 mm (2")
- Floor mat
- Bi-level air conditioner (auto) with defroster
- · Windshield washer
- · Coat hook
- · Ashtray and lighter
- · Beverage holder
- · Literature holder
- Utility space for magazine
- Radio mounting
- Mounting for two stereo speakers
- Antenna flexible type
- Storage compartment suitable for lunch box
- Monitor
- Language display
- -Full graphic and full color display
- Warning information
- Filter/fluid change information
- Machine condition
- Error code and tool mode setting information
- -Full time clock on monitor
- · Positive filtered ventilation
- Seat integrated control joystick
- · Adjustable armrest
- · Adjustable console
- Neutral lever (lock out) for all controls
- Travel control pedals with removable hand levers
- Capability of installing two additional pedals

ELECTRICAL

- · Circuit breaker
- · Cat battery

HYDRAULIC

- Hydraulic main pump
- High performance hydraulic return filter
- · Regeneration control for boom and stick
- Boom lowering device for back up
- Boom drift reducing valve
- · Stick drift reducing valve
- Reverse swing damping valve
- Automatic swing parking brake
- Auxiliary hydraulic valve
- Capability of stackable valves for main valve
- · Capability of auxiliary circuit

SECURITY

- Cat one key security system
- Signaling/warning horn
- Mirrors, rearview (frame right, cab left)
- Secondary engine shutoff switch
- Door locks
- Cap locks on fuel and hydraulic tanks
- Lockable external tool/storage box
- · Rearview camera-ready

LIGHTS

- Halogen boom light (left side)
- Exterior lights integrated into storage box

UNDERCARRIAGE

- Grease lubricated track (GLT2)
- Idler section track guiding guard
- Towing eye on base frame
- Standard idler tension spring
- Guard, standard bottom

312D/D L Series 2 Optional Equipment

Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

ENGINE

- Cold weather batteries, -25° C (-13° F)
- · Air precleaner
- 52° C (126° F) High ambient cooling

HYDRAULIC

- · Combined circuit
- Combined circuit with medium pressure
- Center-Lock quick coupler lines and control
- Joystick with modulation SW
- Boom and Stick high pressure, medium pressure and quick couple line options
- Control pattern quick-changer, four way

CAB

- Seat with seat heater, high back, air suspension with head rest
- Pull-down sunscreen
- 12V-10A power supply with two cigar lighter type sockets

UNDERCARRIAGE

- 500 mm (20") triple grouser shoes
- 600 mm (24") triple grouser shoes
- 700 mm (28") triple grouser shoes
- 770 mm (30") triple grouser shoes

COUNTERWEIGHT

- Counterweight without lifting eye (2450 kg/5,400 lb)
- Counterweight without lifting eye (2650 kg/5,840 lb)

FRONT LINKAGE

- Boom, 4.65 m (15'3")
- Stick, 2.5 m (8'2")
- Stick, 3.0 m (9'10")
- · Bucket linkage
- · Quick coupler

LIGHTS

- Cab lights
- Halogen boom light (right side)

SECURITY

- · Travel alarm
- Rearview camera and right side mirrors
- Cab mirror

TECHNOLOGY

• Product Link, Satellite or Cellular

GUARDS

- FOGS (bolt on)
- Guard, heavy duty bottom
- · Swivel guard

BLADES

- Blade, 2500 mm (8'2") with replaceable cutting edge
- Blade, 2600 mm (8'6") with replaceable cutting edge

Notes

312D/D L Series 2 Hydraulic Excavators

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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