

308D CR

Mini Hydraulic Excavator
with Swing Boom

CATERPILLAR[®]



Engine Power

Net power	41.5 kW/56.5 hp
Gross power	43.0 kW/58.5 hp

Weight

Operating weight	8440 kg
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Features 308D CR with Swing Boom

Controllability

Perfectly balanced front linkage geometry and hydraulics deliver a high level of control for landscaping and fine grading.

Performance

High digging forces and load sensing hydraulics provide high levels of productivity.

Compact Radius

The compact radius and swing boom design gives greater versatility and reduces the risk of damage when working in a tight space.

Comfort and Ease of Operation

The large spacious cab includes air conditioning as standard and an easy clean floor with joystick mounted auxiliary swing functions.

Work Tools

Wide selection of Cat Work Tools increase job site versatility.

Serviceability

Longer service intervals and easier maintenance result in reduced downtime and lower owning and operating costs.



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The Caterpillar® 308D CR SB machine is engineered to offer the versatility of a swing boom machine front linkage in a durable Compact Radius design. Attention to operator comfort and ease of maintenance ensures both productivity and lower operating costs.



Compact Radius

Greater machine versatility
in tight spaces.

The Compact Radius design of the 308D CR SB gives the machine greater versatility and capability to work within confined areas. The radius of the upper body stays close to the width of the undercarriage so the operator can concentrate on the work being done without having to worry about the back of the machine.

The cab door is shaped to follow the line of the cab. It slides open taking up less space than a hinged door which allows the operator to get in and out of the machine easily even when working in tight areas. This design maintains the machine's compact dimensions reducing the risk of damage.

Flexibility for different worksite applications with a reduced risk of damage and less stress for the operator add up to higher rates of productivity and lower operating costs.

Operator Station

A large, spacious cab provides operator comfort and improved visibility. The clear flat floor space gives the operator plenty of leg room. While an intuitive cab layout makes for ease of operation and reduces operator fatigue.

The 308D CR SB features:

- Air conditioning as standard.
- Pressurised cab reduces the amount of dust that enters the cab.
- A reclining suspension seat with adjustable wrist rests.
- Low effort joystick controls are designed to match the operator's natural wrist and arm positions.
- Overhead skylight, with integrated sun shade improves visibility and can be opened to create air flow.
- Front windshield opens easily and stores in roof space above the operator with an automatic latching mechanism.
- All hydraulic functions on the 308D are fully pilot operated lowering owning and operating costs and resulting in less down time.
- Flat clear floor is uncluttered and easy to sweep out.

Monitor Display

The LCD monitor is located to give a clear view of the machine's monitoring system, ensuring fuel level, water temperature and warning lights are easy to read and understand.



Performance and Controllability

Powerful digging combined with smooth responsive control.

High digging forces provide power through even the most compacted ground, coupled with direct, smooth control through responsive hydraulics ensuring that the Cat 308D CR SB delivers the high productivity that customers demand. Load sensing hydraulics optimise the flow of oil for smooth powerful performance and increased fuel economy.

Controllability

The new Cat 308D CR SB front linkage has been perfectly balanced with the hydraulics to deliver the high level of control required for fine grading and landscaping applications.

- Automatic two speed function improves jobsite manoeuvrability by balancing high speed travel requirements and control.
- Joystick mounted auxiliary control enhances machine controllability. The intuitive controls give fine modulation.
- The levers and dozer function ensure that “as new” levels of controllability are maintained throughout the machine life.
- Auxiliary lines including quick connectors are fitted as standard, meaning the Cat 308D CR SB comes ready to work.
- Dozer blade float function enables easy ground levelling for landscaping and finishing applications as well as more efficient site clean-up.
- Optional boom lowering check valve includes integral overload warning device.

Lift Capacity

The new Caterpillar 308D CR SB has high level lift capacity matched with outstanding stability all in a Compact Radius package to provide the on site versatility required to match the increasingly diverse needs of the customer.

Stick

A choice of standard or long stick enables the customer to match the machine choice to their requirements. The 308D CR SB features a swing boom design that allows the operator to trench parallel to the tracks against a wall or fence, meaning more versatility and flexibility.



Engine

Clean, quiet operation with superior power.

The new 308D CR Series Mini Hydraulic Excavator has a turbocharged engine providing increased power, fuel efficiency, altitude capability and overall performance while meeting EU Stage IIIA regulations.

Economy Mode

This standard feature allows the balance of performance and fuel economy while maintaining breakout forces and lift capacity. Operating in economy mode can help reduce your overall fuel consumption.

Electronic Control Module (ECM)

The ECM responds quickly to operating variables to maximize engine efficiency. Fully integrated with sensors in the engine's fuel, air, coolant and exhaust systems, the ECM stores and relays information on conditions such as rpm, fuel consumption and diagnostics.



Work Tools

Cat Work Tools are matched to meet your application needs.



A wide range of work tools is specifically designed to get the best out of the machine and deliver excellent value through high productivity and long life. Cat Work Tools include:

- Digging buckets
- Heavy duty buckets
- Swing ditch cleaning buckets
- Tilting ditch cleaning buckets
- Hydraulic hammers
- Augers
- Shears
- Compactors

To maximize performance, Caterpillar mechanical and hydraulic Quick Couplers are compatible with all standard work tools, enabling the operator to simply release one work tool and pick up another, maximizing productivity.



One-way flow (hammer) and two-way flow (auger) auxiliary lines with quick connectors are fitted as standard.

This feature allows the machine to adapt to a wide variety of applications without re-configuring the auxiliary lines. Here versatility is further enhanced with the option of a second auxiliary supply (for a rotating grapple).



Undercarriage

Excellent stability.

Depending on the customer's application, the Cat 308D CR SB has four different track options to choose from, allowing the correct machine configuration to suit the job.

Rubber Belt

The standard track offering is 450 mm width.

Steel Track

A triple grouser track is available in 2 width options: 450 mm and 600 mm.

Segmented Rubber Track

This option of track prevents damage to concrete and other road surfaces ideal in urban applications.

Rubber Pads

The 450 mm wide shoe has four holes to attach the rubber pads to the steel track shoes. This option prevents damage to paved road surfaces and minimises noise and vibration during travel.

Blade Widths

The dozer blade is an important and useful tool for the Hydraulic Mini Excavator used for backfilling trenches, levelling, landscaping and site clean up. There are two blade width options available to accommodate the differences in track widths. The blade comes standard with a replaceable weld-on dozer cutting edge constructed of hardened steel for longer life.

Tie Down Points

Large oval tie down points are located on the blade and undercarriage for easy and safe machine tie down for transportation.



Serviceability

Easy access and minimal maintenance requirements keep your machine on the job.



Robust, reliable and easily serviced are the key attributes of Caterpillar Mini Hydraulic Excavators. Full steel body work panels provide durable protection against damage. All daily service points are easily accessed through the rear hood and side cover and a 500 hour engine oil change interval lowers operating costs. The Cat S•O•S. points assist easy oil sampling for preventative maintenance checks.

Cat Product Link

The optional Product Link system simplifies equipment fleet tracking. Using satellite or cellular technology, the system automatically reports information such as location, machine hours, active and logged service codes and security alarms.

Cat Machine Security System

An optional Machine Security System (MSS) that utilizes a programmable key system that deters theft, vandalism and unauthorized usage. MSS uses electronically coded keys selected by the customer to limit usage by individuals or time parameters.

Customer Support

Unmatched support makes the difference

Your Cat dealer is ready to assist you with your purchase decision and everything after.

- Make comparisons of machines, with estimates of component life, preventative maintenance and cost of production.
- Financing packages are flexible to meet your needs.
- Your Cat dealer can evaluate the cost to repair, rebuild and replace your machine, so you can make the right choice.
- A worldwide computer network enables the dealer parts counter to locate nearly all parts.
- For more information on Cat products, dealer services and industry solutions, visit us at www.cat.com.



308D CR Specifications

Engine

Model	Mitsubishi 4M40-TL
Rated Net Power	41.5 kW/56.5 hp
Gross Power	43.0 kW/58.5 hp
Rated Speed	2000 rpm
Dimensions	
Bore	95 mm
Stroke	100 mm
Displacement	2835 cm ³

- All engine horsepower (hp) are metric including front page.
- Net power rating ISO 9249 and 80/1269/EEC
- Meets EU stage IIIA emission regulations

Weights

Operating weight with cab 8440 kg

- Weight with rubber tracks, bucket, operator (80 kg), full fuel and auxiliary lines.
- Weight varies depending on machine configuration

Swing System

Machine Swing Speed	10 rpm
Boom swing system with cast swing post	
Left	60°
Right	50°

- Automatic swing brake, spring applied, hydraulic release
- Centralized lubrication

Travel System

Travel speed	
high	5.0 km/h
low	3.1 km/h
Tractive effort	64 kN
Gradeability	35°
Ground pressure	0.37 bar

- Each track is driven by one independent 2-speed motor
- Drive modules are integrated into the roller frame for total protection.
- Straight line travel when tracking and operating the front linkage simultaneously

Service Refill Capacities

	liter
Fuel tank	125.0
Cooling system	15.7
Engine	12.5
Hydraulic tank	83.0
Hydraulic system	94.0

Hydraulic System

Operating pressures	280 bar
Travel	320 bar
Swing	240 bar
Auxiliary circuit	
Primary	128 l/min
Secondary	64 l/min
Digging forces	
Stick (standard)	39 kN
Stick (long)	35 kN
Digging forces – bucket	60 kN
Hydraulic pump	
Piston	150 l/min
Pilot	19 l/min
Variable displacement	77 l/min

Sound Levels

Operator Sound

- The operator sound pressure level measured according to the procedures specified in ISO 6396:1992 is 79 dB(A), for cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.

Exterior Sound*

- The European Union 2000/14/EC labeled exterior sound power level is 98 dB(A) for the machines certified to that requirement.

* The exterior sound power level for the high ambient temperature cooling package equipped non-European Union configured machine when measured according to the procedures specified in ISO 6395:1988 is 100 dB(A).

Electrical System

- 35 A alternator
- 24 V (12 V x 2), 750 CCA at 18°C, maintenance free battery
- Sealed electrical connectors

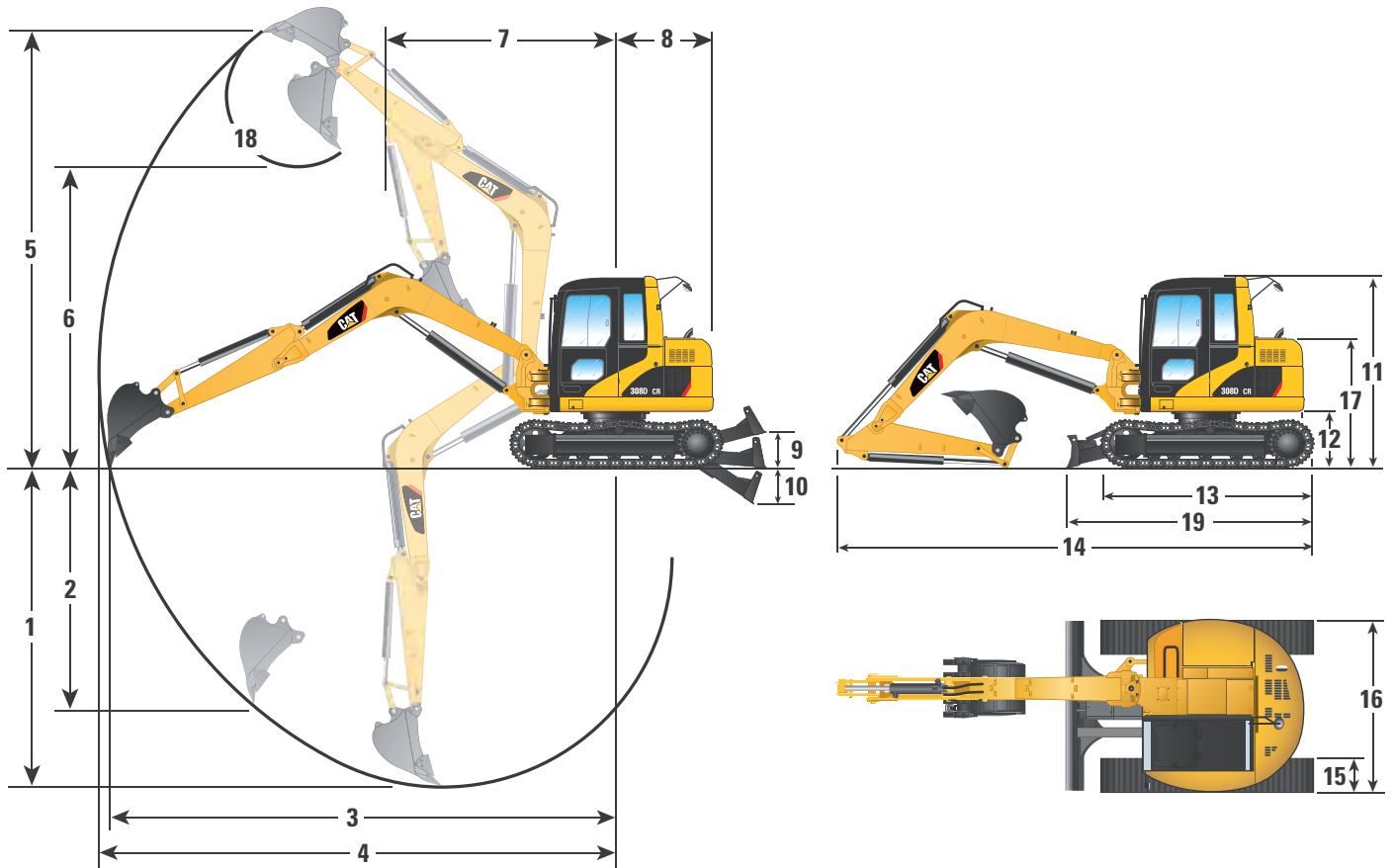
Blade

Width	2300 mm
Height	450 mm
Dig depth	350 mm
Lift height	390 mm

- Blade float function provides easier operation
- Replaceable, hardened, wear resistant cutting edge

Dimensions for Swing Boom

All dimensions are approximate.

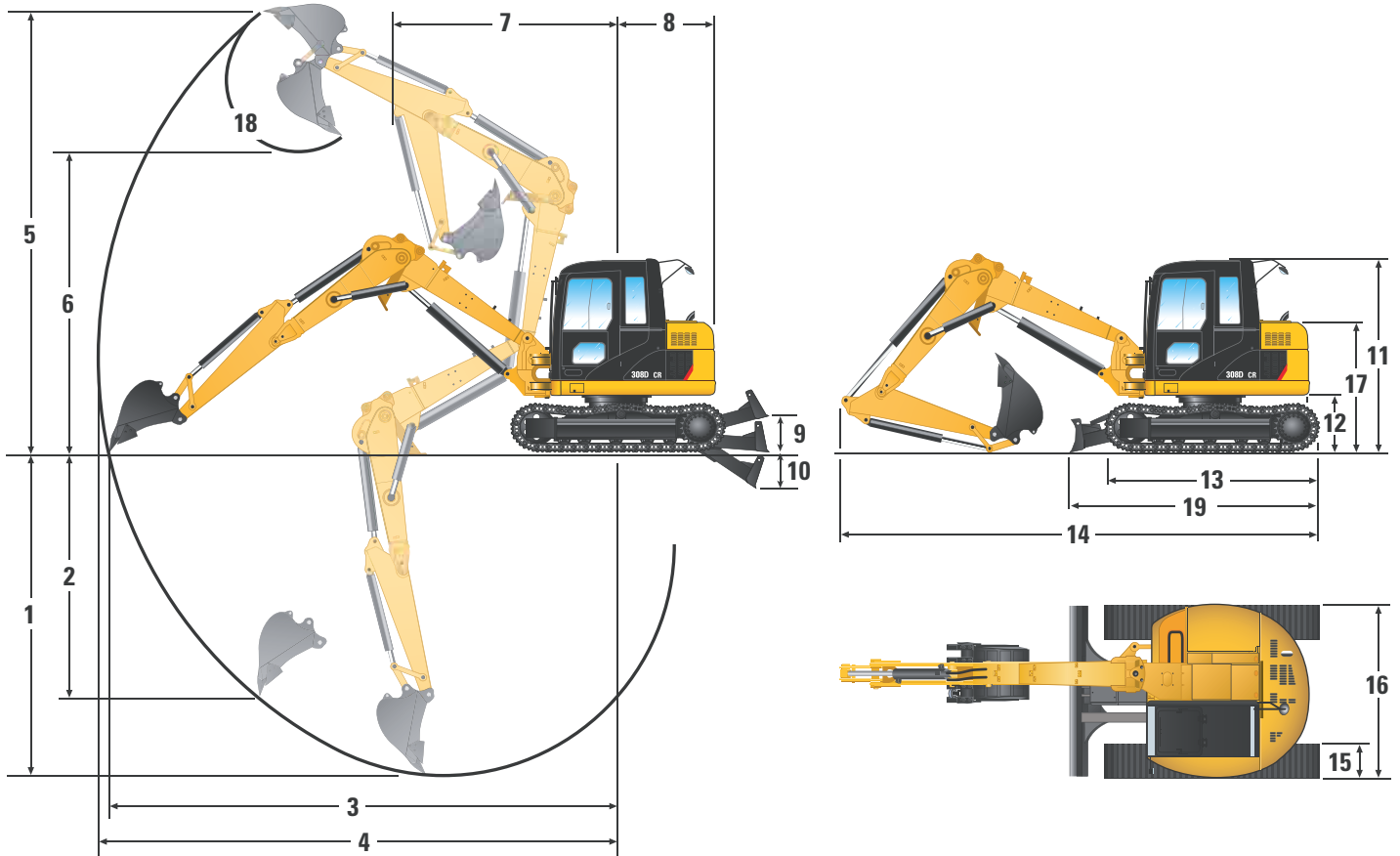


	Standard Stick	Long Stick		Standard Stick	Long Stick
	mm	mm		mm	mm
1	4180	4730	11	2590	2590
2	2990	3580	12	735	735
3	6900	7430	13	2910	2910
4	7100	7610	14	6450	6410
5	6610	6960	15	450	450
6	4640	4980	16	2320	2320
7	2880	3350	17	1760	1760
8	1310	1310	18	179°	179°
9	380	380	19	3375	3375
10	360	360	Boom Height Travel	2630	2740
			Tail Overhang	130	130

308D CR Specifications

Dimensions for VA Boom

All dimensions are approximate.



	Standard Stick mm	Long Stick mm		Standard Stick mm	Long Stick mm
1	4140	4680	11	2590	2590
2	2680	3270	12	735	735
3	6820	7520	13	2910	2910
4	7020	7340	14	6450	6410
5	6200	6470	15	450	450
6	4310	4570	16	2320	2320
7	3090	5080	17	1760	1760
8	1310	1310	18	179°	179°
9	380	380	19	3375	3375
10	360	360	Boom Height Travel	2270	2240

308D CR Specifications

Lift Capacities with 3700 mm Swing Boom

















All weights are in kg. Calculations are made with bucket full curled. Lift capacities described in the tables below are calculated with 450 mm shoes. 600 mm shoe configurations are not included as they do not impact significantly the following data.

Blade Up

Medium stick – 1670 mm

Bucket – 0.23 m³

Shoes – 450 mm

















	1.0m		2.0m		3.0m		4.0m		5.0m		6.0m						
															m		
5.0m															1150	1000	5.69
4.0m									1400	1200					900	800	6.37
3.0m							*1850	1650	1350	1150	950	800	800	700	800	700	6.73
2.0m							1850	1550	1300	1100	950	800	750	650	750	650	6.85
1.0m							1750	1450	1250	1050	900	800	750	650	750	650	6.76
0m					2650	2150	1650	1400	1200	1000	900	750	800	700	800	700	6.44
-1.0m	*3250	*3250	*3350	*3350	2650	2150	1650	1400	1200	1000					950	800	5.83
-2.0m	*10250	*10250	*5450	4750	2700	2200	1700	1400							1350	1150	4.79
-3.0m			6500	4950	2850	2350									2300	1900	3.40

Blade Up

Long stick – 2210 mm

Bucket – 0.23 m³

Shoes – 450 mm

















	1.0m		2.0m		3.0m		4.0m		5.0m		6.0m						
															m		
6.0m															*1050	*1050	5.37
5.0m									*2150	*2150					950	800	6.35
4.0m									*1100	*1100	1000	850	750	650	750	650	6.93
3.0m									1350	1150	950	800	700	600	700	600	7.25
2.0m							1850	1600	1300	1100	950	800	650	550	750	650	7.37
1.0m							1750	1450	1200	1050	900	750	650	550	750	650	7.28
0m					2600	2100	1650	1350	1150	1000	850	750	700	550	700	550	7.00
-1.0m	*2250	*2250	*2600	*2600	2600	2100	1600	1350	1150	950	850	700	800	650	800	650	6.47
-2.0m	*3450	*3450	*4200	4200	2600	2150	1600	1350	1150	950					1000	850	5.60
-3.0m	*5000	*5000	6200	4700	2700	2200	1650	1400							1700	1450	4.10

Blade Down

Medium stick – 1670 mm

Bucket – 0.23 m³

Shoes – 450 mm

















	1.0m		2.0m		3.0m		4.0m		5.0m		6.0m						
															m		
5.0m															*1200	1100	5.69
4.0m									*1450	1300					*1150	900	6.37
3.0m							*1850	*1850	*1700	1300	*1700	950	*1150	750	*1150	750	6.73
2.0m							*2600	1750	*2050	1250	*1850	900	*1200	750	*1200	750	6.85
1.0m							*3300	1650	*2400	1150	*2000	900	*1350	750	*1350	750	6.76
0m					*3350	2450	*3700	1600	*2650	1150	*2100	850	*1500	800	*1500	800	6.44
-1.0m	*3250	*3250	*3350	*3350	*5400	2500	*3800	1550	*2750	1150					*1850	900	5.83
-2.0m	*10250	*10250	*5450	*5450	*5250	2550	*3500	1600							*2200	1250	4.79
-3.0m			*6800	5750	*3700	2650									*3000	2150	3.40

Blade Down

Long stick – 2210 mm

Bucket – 0.23 m³

Shoes – 450 mm

	1.0m		2.0m		3.0m		4.0m		5.0m		6.0m						
															m		
6.0m															*1050	*1050	5.37
5.0m									*2150	*2150					*1150	900	6.35
4.0m									*1100	*1100	*1250	950	*1100	750	*1100	750	6.93
3.0m									*1350	1300	*1400	900	*1100	650	*1100	650	7.25
2.0m							*2100	1750	*1750	1250	*1600	900	*1150	600	*1150	600	7.37
1.0m							*2900	1650	*2150	1150	*1800	850	*1250	600	*1250	600	7.28
0m					*3200	2450	*3450	1550	*2500	1100	*2000	850	*1400	650	*1400	650	7.00
-1.0m	*2250	*2250	*2600	*2600	*4550	2400	*3700	1500	*2650	1100	*2050	800	*1650	750	*1650	750	6.47
-2.0m	*3450	*3450	*4200	*4200	*5660	2450	*3650	1550	*2600	1100					*2000	950	5.60
-3.0m	*5000	*5000	*6650	5500	*4700	2500	*3050	1600							*2100	1600	4.10



Load Point Height



Load Radius Over Front



Load Radius Over Side



Load at Maximum Reach

* Limited by hydraulic rather than tipping load.

The above loads are in compliance with hydraulic excavator lift capacity ratings standard ISO 10567, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

308D CR Specifications

Lift Capacities with 3970 mm VA Boom















All weights are in kg. Calculations are made with bucket full curled. Lift capacities described in the tables below are calculated with 450 mm shoes. 600 mm shoe configurations are not included as they do not impact significantly the following data.

Blade Up

Medium stick – 1670 mm

Bucket – 0.23 m³

Shoes – 450 mm















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4.5 m					1600	1350	900	750			700	600	6.87
3.0 m					1450	1200	850	700			600	450	7.43
1.5 m					1300	1050	800	650			550	450	7.53
0 m					1200	950	750	600			600	500	7.19
-1.5 m			2400	1900	1200	1000	800	650			750	600	6.32

Blade Up

Long stick – 2210 mm

Bucket – 0.23 m³

Shoes – 450 mm















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													m
7.5 m											*1550	*1550	4.04
6.0 m					*1400	*1400					650	700	6.42
4.5 m					*1600	1400	950	800			600	450	7.48
3.0 m					1500	1250	850	700			500	400	7.98
1.5 m					1300	1050	800	650			450	350	8.07
0 m					1150	950	750	600			500	400	7.76
-1.5 m			2250	1800	1150	900	700	600			600	500	7.00
-3.0 m			2400	1900	1200	1000					900	750	5.55

Blade Down

Medium stick – 1670 mm

Bucket – 0.23 m³

Shoes – 450 mm















	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
6.0 m					*1450	*1450					*1150	1050	5.63
4.5 m					*1900	1500	*1650	850			*1000	700	6.87
3.0 m					*2350	1400	*1750	850			*1000	550	7.43
1.5 m					*2850	1200	*1950	750			*1000	500	7.53
0 m					*2950	1100	*1950	750			*1150	550	7.19
-1.5 m			*3550	2200	*2550	1150	*1550	750			*1150	700	6.32

Blade Down

Long stick – 2210 mm

Bucket – 0.23 m³

Shoes – 450 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
7.5 m											*1550	1550	4.04
6.0 m					*1400	*1400					*1050	800	6.42
4.5 m					*1600	1550	*1450	900			*950	550	7.48
3.0 m					*2050	1400	*1600	850			*900	450	7.98
1.5 m					*2650	1200	*1800	750			*950	450	8.07
0 m					*2900	1100	*1900	700			*1050	450	7.76
-1.5 m			*2750	2100	*2700	1050	*1750	700			*1100	550	7.00
-3.0 m			*3000	2200	*1900	1150					*1100	850	5.55



Load Point Height



Load Radius Over Front



Load Radius Over Side



Load at Maximum Reach

* Limited by hydraulic rather than tipping load.

The above loads are in compliance with hydraulic excavator lift capacity ratings standard ISO 10567, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

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

Alternator – 35 A	Gauges and indicators for fuel level, engine coolant temperature, hour meter, engine pressure, air cleaner, alternator and glow plugs, service interval
Automatic low idle function	Horn
Auxiliary circuit valve, controls and	Hydraulic oil cooler
1 way hammer lines to stick	Joystick mounted auxiliary control
2 way (auger) auxiliary lines to the stick	Low maintenance linkage pin joints
Auxiliary line quick couplers	Maintenance-free battery (2)
Brake, automatic swing holding	Mirrors, cab left and rear
Boom, swing/one-piece	Power point, 12 V
Cab, fully glazed with FOPS per ISO 10262 (level I), TOPS per ISO 12117	Rubber track – 450 mm width
air conditioner with heater/defroster	Standard stick – 1670 mm
AM/FM Radio with CD player	Suspension seat, with retractable seat belt (50 mm wide)
interior light	Travel pedals
windshield wiper/washer	Two speed travel, automatic with removable levers
Cab mounted work light	Windows
Coat hook	– main windshield wiper and washer
Cup holder	– right and rear windows tempered glass
Dial type accelerator	– sliding door window, tempered glass
Dozer blade – 2300 mm with float function and replaceable weld-on cutting edge	– windshield, two-piece:
External storage area	upper, retractable laminated glass
Floor mat	lower, tempered glass
Cooling package, high ambient	– opening window in cab roof with one touch handle
Guards	
Falling object guard system	
Front windshield	
Travel pedals	

308D CR Optional Equipment

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

Alarm, travel

Blade: – 2400 mm * for 600 mm track width options

Boom mounted light

Buckets

Check valve, boom lowering

Check Valve, stick lowering

Coolant, extended life

Additional counterweight (1150 kg) – for use with VA Boom only

Ecology drain valve for hydraulic tank

Ecology drain valve for engine oil

Electric refuelling pump

Front screen guard for cab

Hydraulic arrangements, auxiliary:

- single function capability
- double function capability
- combined single and double function capability

Long stick – 2210 mm

MSS ready

Product Link ready

Seat belt, 75 mm wide

Tracks, Steel 450 mm triple grouser

Tracks, Steel 650 mm triple grouser

Tracks, 450 mm segmented rubber

Tracks, 450 mm with rubber pad

Seat options:

- Variable angle blade
- Seat without suspension, head rest
- Vinyl seat without suspension, head rest
- high back seat with suspension, head rest

Tool kit

Travel alarm

Work tools

308D CR Mini Hydraulic Excavator with Swing Boom

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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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Caterpillar dealer for available options.

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