

308D CR

Mini Hydraulic Excavator
with Fixed Boom

CATERPILLAR[®]



Engine Power

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

Weight

Operating weight	7850 kg
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Features 308D CR with Fixed 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 fixed 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 FB machine is engineered to offer the versatility 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 FB 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 FB 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 FB 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 FB 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 FB 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 FB 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.



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
- Heavy duty rock buckets
- Fixed 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 FB 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	7850 kg
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- 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
Bucket Rotation	179°

- 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	0.32 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

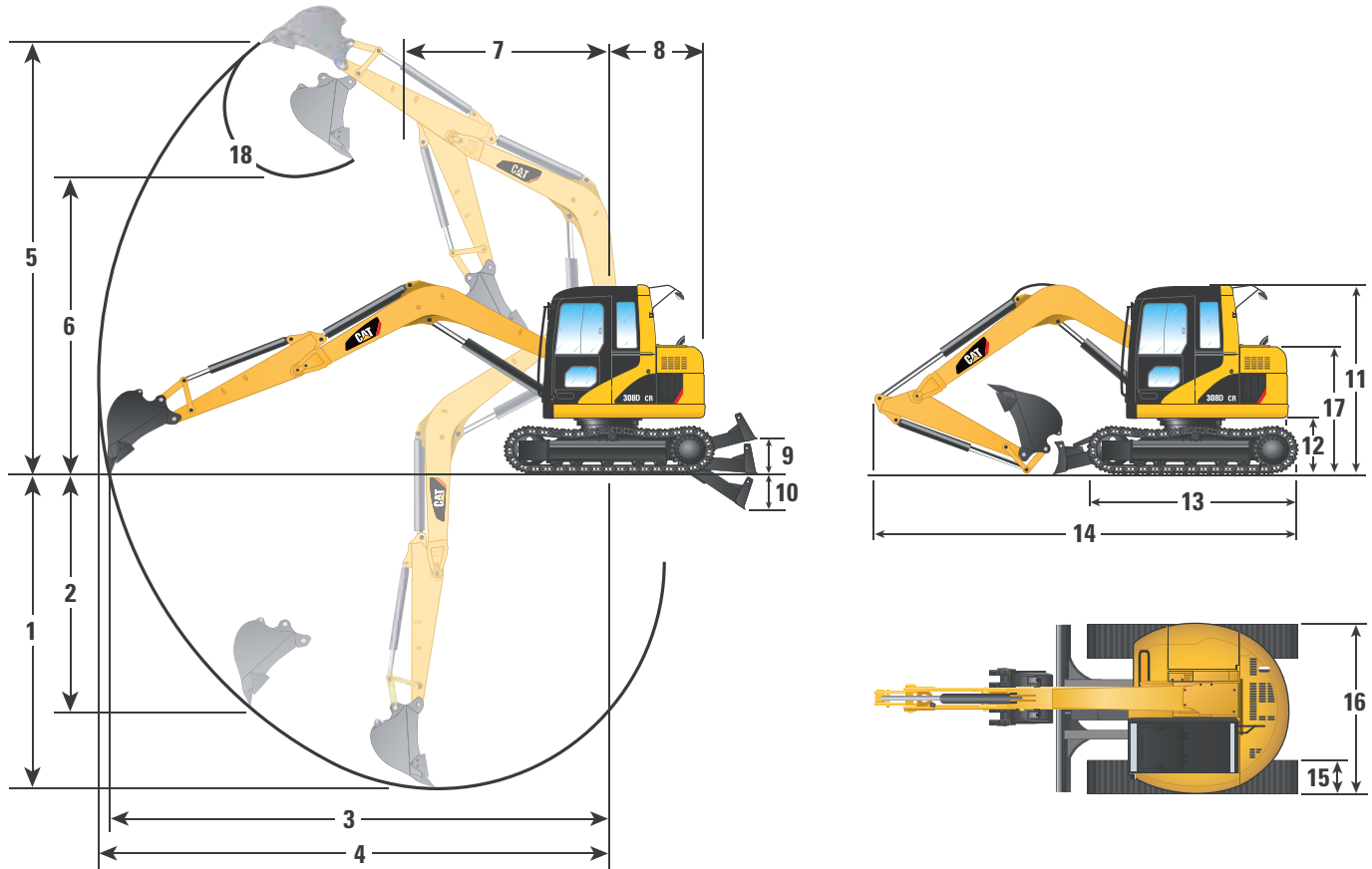
Blade

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

All dimensions are approximate.



	Standard Stick mm	Long Stick mm		Standard Stick mm	Long Stick mm
1	4090	4630	11	2590	2590
2	3650	4160	12	735	735
3	6190	6710	13	2910	2910
4	6340	6840	14	5810	5830
5	7340	7760	15	450	450
6	5310	5730	16	2320	2320
7	1670	2230	17	1760	1760
8	1290	1290	18	179°	179°
9	380	380	Boom Height Travel	2630	2740
10	360	360	Tail Overhang	130	130

308D CR Specifications

Lift Capacities with 3700 mm Fixed Boom

















All weights are in kg. Calculations are made without bucket, but with CW30 Quick Coupler. 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

Standard stick – 1670 mm

Bucket – 0.31 m³

Shoes – 450 mm

















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															m
6.0 m													*1050	*1050	3.76
5.0 m					*2000	*2000	*1700	*1700					*900	*900	4.90
4.0 m					*2250	*2250	*2050	1900					*850	*850	5.56
3.0 m			*3700	*3700	*2650	*2650	2150	1850	1450	1300			*850	*850	5.94
2.0 m					*3250	2800	2050	1800	1450	1250			*900	*900	6.09
1.0 m					3150	2650	2000	1700	1400	1200			*950	*900	6.03
0 m					3050	2550	1900	1650	1350	1200			*1050	*950	5.77
-1.0 m	*2700	*2700	*4300	*4300	3000	2550	1900	1650					*1200	*1100	5.27
-2.0 m	*4500	*4500	*3800	*3800	*2850	2550	1900	1650					*1250	*1250	4.43
-3.0 m			*2250	*2250	*1600	*1600							*1350	*1350	3.26

Blade Up

Long stick – 2210 mm

Bucket – 0.23 m³

Shoes – 450 mm

















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															m
6.0 m							*1250	*1250					*1050	*1050	4.61
5.0 m							*1650	*1650					*950	*950	5.55
4.0 m					*1850	*1850	*1750	*1750	1500	1350			*900	*900	6.12
3.0 m					*2250	*2250	*1950	1900	1500	1300			*900	*850	6.46
2.0 m					*2850	*2850	2100	1800	1450	1250			900	800	6.59
1.0 m					3200	2700	2000	1700	1400	1200			900	800	6.55
0 m					3050	2550	1900	1650	1350	1150			950	800	6.31
-1.0 m			*3700	*3700	2950	2500	1850	1600	1300	1150			1050	900	5.87
-2.0 m	*3500	*3500	*4500	*4500	2950	2500	1850	1600					*1300	1100	5.14
-3.0 m	*4800	*4800	*3250	*3250	*2350	*2350							*900	*900	3.96

Blade Down

Standard stick – 1670 mm

Bucket – 0.23 m³

Shoes – 450 mm

















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6.0 m							*1250	*1250					*1050	*1050	4.61
5.0 m							*1650	*1650					*950	*950	5.55
4.0 m					*1850	*1850	*1750	*1750	*1650	1450			*900	*900	6.12
3.0 m					*2250	*2250	*1950	*1950	*1750	1400			*900	*900	6.46
2.0 m					*2850	*2850	*2250	2000	*1900	1400			*950	850	6.59
1.0 m					3400	3000	*2500	1900	*2000	1350			*100	850	6.55
0 m					3650	2850	*2650	1800	*2050	1300			*1100	900	6.31
-1.0 m			*3700	*3700	3550	2800	2600	1750	*2000	1250			*1250	1000	5.87
-2.0 m	*3500	*3500	*4500	*4500	3150	2800	2350	1750					*1300	1250	5.14
-3.0 m	*4800	*4800	*3250	*3250	*2350	*2350							*900	*900	3.96

Blade Down

Long stick – 2210 mm

Bucket – 0.23 m³

Shoes – 600 mm

	1.0 m		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
															m
6.0 m							*1250	*1250					*1050	*1050	4.61
5.0 m							*1650	*1650					*950	*950	5.55
4.0 m					*1850	*1850	*1750	*1750	*1650	1550			*900	*900	6.12
3.0 m					*2250	*2250	*1950	*1950	*1750	1500			*900	*900	6.46
2.0 m					*2850	*2850	*2250	2100	*1900	1450			*950	950	6.56
1.0 m					*3400	3200	*2500	2050	*2000	1400			*1000	950	6.55
0 m					*3650	3050	*2650	1950	*2050	1400			*1100	950	6.31
-1.0 m			*3700	*3700	*3550	3000	*2600	1900	*2000	1350			*1250	1100	5.87
-2.0 m	*3500	*3500	*4500	*4500	*3150	3000	*2350	1900					*1300	*1300	5.14
-3.0 m	*4800	*4800	*3250	*3250	*2350	*2350							*900	*900	3.96



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 Standard Equipment

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

Alternator – 35 A
Automatic low idle function
Auxiliary circuit valve, controls and
 1 way hammer lines to stick
 2 way (auger) auxiliary lines to the stick
Auxiliary line quick couplers
Brake, automatic swing holding
Boom, fixed/one-piece
Cab, fully glazed with FOPS per ISO 10262 (level I), TOPS per
 ISO 12117
 air conditioner with heater/defroster
 AM/FM Radio with CD player
 interior light
 windshield wiper/washer
Cab mounted work light
Coat hook
Cup holder
Dial type accelerator
Dozer blade – 2300 mm with float function and replaceable
 weld-on cutting edge
External storage area
Floor mat
Cooling package, high ambient
Guards
 Falling object guard system
 Front windshield
 Travel pedals

Gauges and indicators for fuel level, engine coolant temperature,
 hour meter, engine pressure, air cleaner, alternator and glow plugs,
 service interval
Horn
Hydraulic oil cooler
Joystick mounted auxiliary control
Low maintenance linkage pin joints
Maintenance-free battery (2)
Mirrors, cab left and rear
Opening window in cab roof with one touch handle
Power point, 12 V
Rubber track – 450 mm width
Standard stick – 1670 mm
Suspension seat, with retractable seat belt (50 mm wide)
Travel pedals
Two speed travel, automatic with removable levers
Windows
– main windshield wiper and washer
– right and rear windows tempered glass
– sliding door window, tempered glass
– windshield, two-piece:
 upper, retractable laminated glass
 lower, tempered glass

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)
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:
– 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 Fixed 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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