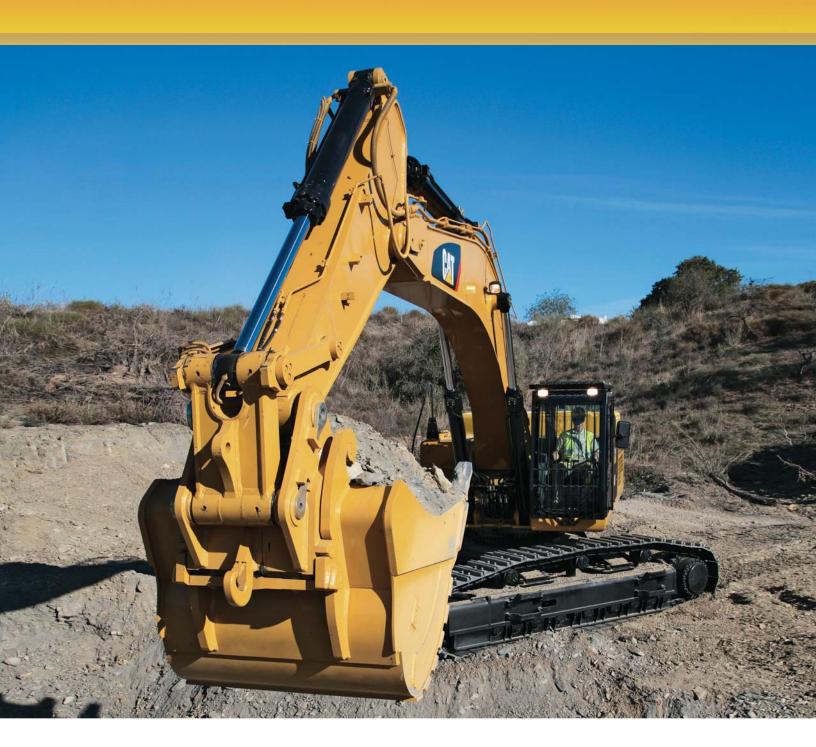
349D L Hydraulic Excavator





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Engine Model Power (ISO 14396) at 1,800 rpm (metric)

Cat[®] C13 ACERT™ 305 kW/415 hp

vveignis	
Operating Weight	45 052 to 50 483 kg
Drive	
Maximum Travel Speed	4.7 km/h
Maximum Drawbar Pull	338 kN

Features

Performance

High level of sustained production, improved performance, reliability and durability increase your productivity and lower your operating costs.

C13 Engine with ACERT Technology

ACERT Technology works at the point of combustion to optimize engine performance and provide low exhaust emissions, with exceptional performance capabilities and proven reliability.

Operator Station

Superior cab comfort and visibility provide an excellent working environment. The full-color monitor with graphic display features enhanced functionality to provide a simple, comprehensive machine interface.

Maximum Versatility

A variety of work tools, including buckets, are available for applications such as demolition, site clean-up, scrap processing, breaking up road surfaces and bedrock through Cat Work Tools.

Service and Maintenance

Fast, easy service has been designed in with long service intervals, advanced filtration, convenient filter access and user-friendly electronic diagnostics for increased productivity and reduced maintenance costs.

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The 349D L offers outstanding performance, excellent control, high stick and bucket forces, impressive lift capacity, simplified service and a comfortable operator station to increase your productivity and lower operating costs.



Hydraulics

Cat hydraulics deliver power and precise control to keep material moving.

Pilot System

The pilot pump is independent from the main pumps and controls the front linkage, swing and travel operations. The pilot control valve operation is proportional to control lever movement, delivering outstanding controllability.

Component Layout

The component location and hydraulic system design provide the highest level of system efficiency. The main pumps, control valve and hydraulic tank are located as close to each other as possible. This design makes it possible to use shorter tubes and lines between components, reducing friction losses and pressure drops.

Hydraulic Cross-Sensing System

The hydraulic cross sensing system utilizes each of two hydraulic pumps to 100 percent of engine power under all operating conditions. This improves productivity with faster implement speeds and quicker, stronger pivot turns.

Boom and Stick Regeneration Circuits

A hydraulically operated stick regeneration circuit saves energy and improves multi-function performance during the stick-in operation. New on the 349D L, the boom regeneration circuit is operated electrically, and this system is managed by the machine ECM. The system improves cycle times and fuel efficiency, increasing your productivity and reducing operating costs.

Boom and Swing Priority

The hydraulic system on the 349D L provides automatic priority function for boom-up and swing operations eliminating the need for work mode buttons. When the boom or swing lever is activated, the system automatically assigns priority based on operator demand.

Hydraulic Cylinder Snubbers

Snubbers are located at the rod-end of the boom cylinders and both ends of the stick cylinders to cushion shocks while reducing sound levels and extending component and structure life.

Operator Station

Designed for simple, easy operation, the 349D L allows the operator to focus on production.

The spacious, quiet and comfortable operator station assures high productivity during a long work day.

- Switches, dials and controls are conveniently located within easy reach of the operator.
- The monitor is easy to see and helps maximize visibility.
- The standard air suspension seats adjust to suit the operator's size and weight.
- The pressurized cab provides positive filtered ventilation and fresh or recirculated air can be selected.
- Visibility is maximized with the elimination of window frames for all glass except the rear window. A large, polycarbonate skylight offers excellent upward visibility.

Hydraulic Activation Control Lever

For added safety, the hydraulic activation control lever must be in the operate position to activate the machine control functions.

Controls

The 349D L uses pilot operated control levers positioned so the operator can operate with arms on the armrests. The vertical stroke is longer than the horizontal to reduce operator fatigue.

Joysticks with integrated buttons and sliding switches control all implement and swing functions. The sliding switches modulate control for hydro-mechanical tools and help increase operator comfort and reduce fatigue.

Prestart Check and Monitor Display

Prior to starting the machine, the system checks for low engine oil, hydraulic oil and engine coolant fluid levels and will warn the operator through a color Liquid Crystal Display (LCD) monitor. The LCD monitor displays vital operating and performance information in 27 different languages for operator convenience.

Cab Exterior

The exterior design uses thick steel tubing along the bottom perimeter of the cab, improving the resistance of fatigue and vibration. This design allows the FOGS to be bolted directly to the cab, at the factory or as an attachment later, enabling the machine to meet specifications and job site requirements.

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.





C13 Engine with ACERT Technology

Built for power, reliability, economy and low emissions.



Performance

The 349D L, equipped with the C13 with ACERT Technology provides 283 kW horsepower.

Emissions

ACERT Technology is a differentiated technology that reduces emissions at the point of combustion. The technology capitalizes on Caterpillar's proven leadership in three core engine systems: fuel, air and electronics.

Fuel System

The Cat C13 features electronic controls that govern the mechanically actuated unit fuel injection (MEUI) system. MEUI provides the high-pressure required to deliver better fuel economy through finer fuel atomization and more complete combustion.

ADEM™ A4 Engine Controller

The ADEM A4 electronic control module manages fuel delivery to get the best performance per liter of fuel used. The engine management system provides flexible fuel mapping, allowing the engine to respond quickly to varying application needs. It tracks engine and machine conditions while keeping the engine operating at peak efficiency.

Turbocharger

The Cat C13 uses a wastegate turbocharger for improved performance.

- The wastegate valve controls excessive engine boost pressure by allowing exhaust to bypass the exhaust-side turbine.
- The wastegate also reduces turbine wear in high RPM; low load conditions and optimizes air and fuel delivery for peak engine performance.
- The turbocharger increases the density of the air, enabling the engine to produce more power with few effects from altitude.

Low Sound and Vibration Levels

The engine mounts are rubber-isolating mounts matched with the engine package to provide optimum sound and vibration reduction. Further noise reduction has been achieved through design changes to the isolated top cover, oil pan, multiple injection strategy, insulated timing cover, sculpted crankcase.

Air Cleaner

The radial seal air filter features a double-layered filter core for more efficient filtration and is located in a compartment behind the cab. A warning is displayed on the monitor when dust accumulates above a preset level.



Structures

The 349D L structural components are the backbone of the machine's durability.

Carbody

The carbody utilizes a columnless design that allows the swing bearing to be directly mounted on the top plate for excellent rigidity and strength.

The advanced carbody design stands up to the toughest applications.

- Modified H-shaped, box-section carbody provides excellent resistance to torsional bending.
- Robot-welded track roller frames with fabricated U-section design.
- Robot welding ensures consistent, high-quality welds throughout the manufacturing process.

Upper Frame

The rugged main frame is designed for maximum durability. Robot welding is used for consistent, high-quality welds. The main channels are box sections connected by a large diameter tube in the boom foot area to improve rigidity and strength. The outer frame utilizes curved side rails for rigidity against bending and torsional loads.

Track Roller Frame

Uses a press-formed, pentagonal section for the track frame that is robot-welded for weld consistency and quality. The track frame has been designed so that the top of the track frame has a steep angle to help prevent accumulation of mud and debris.



Undercarriage

Durable undercarriage absorbs stresses and provides excellent stability.

Undercarriage Options*

The 349D L comes standard with a grease lubricated track called GLT4. The track links are assembled and sealed with grease to decrease internal bushing wear, reduce travel noise, and lower operating costs by extending service life. Track with Positive Pin Retention 2 (PPR2) and heavy duty idlers are available as attachments on the 349D L.

The PPR2 prevents loosening of the track pin from the track link and the heavy duty idler is designed for extended life. Both options are ideal for extreme applications such as working on blasted rock or those that require a large amount of travel.

Travel Motors

Two-speed axial piston hydraulic motors provide the 349D L drive power and speed selection. When the high-speed position is selected, the machine automatically changes between computer-controlled high and low speeds depending on drawbar-pull requirements.

Straight-line Travel Circuit

The straight-line travel circuit is incorporated into the hydraulic system, which maintains low-speed, straight-line travel, even when operating the front linkage.

Final Drive

The final drives are a three-stage planetary reduction. This design results in a complete drive/brake unit that is compact and delivers excellent performance and reliability.

Track Guards

The idler guard and bolt-on center guard are standard equipment. They help maintain track alignment while traveling or working on slopes. For applications that require additional track protection or alignment, optional full length guards are available.

^{*}Offering varies for different regions.

Booms, Sticks and Linkage

Designed for maximum flexibility to keep productivity and efficiency high on all jobs.

Front Linkage Attachments*

Three lengths of booms and five types of sticks are available, offering a range of configurations suitable for a wide variety of application conditions.

Boom Construction

The 349D L booms have large cross-sections and internal baffle plates to provide long life durability. Forged steel is used in critical high-load areas such as the boom-foot and boom cylinder connection.

6.9 m Reach Boom

The Reach boom is designed to balance reach, digging force bucket capacity, offering a wide range of applications as digging, loading and trenching.

6.55 m Mass Excavation Boom*

The Mass boom is designed to provide maximum digging forces, bucket capacity and truck loading productivity. The mass boom comes with two stick options for further job site versatility.

Stick Construction

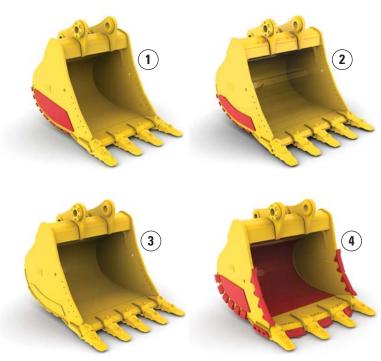
The 349D L sticks are made of high-tensile strength steel, use a large box section design, interior baffle plates and an additional bottom guard to provide years of service under the most demanding applications.

Power Link*

The 349D L power link improves durability, increases machine-lifting capability in key lifting positions, and is easier to use compared to the previous lift bar designs.







Buckets and Teeth

Designed and built for total system performance.

Optimized Package

Caterpillar offers a wide range of buckets, each designed and field tested to function as an integral part of your excavator. All Cat Buckets feature K SeriesTM GET (Ground Engaging Tools). Buckets are available in four levels of durability and are built to take full advantage of the machine's power.

General Duty (GD)

General Duty buckets are designed for use in low impact, lower abrasion materials such as dirt, loam and mixed compositions of dirt and fine gravel.

Heavy Duty (HD)

Heavy Duty buckets are the most popular and a good "centerline" choice. This bucket style is a good starting point when application conditions are not known. Heavy Duty buckets are designed for a wide range of impact and abrasion conditions including mixed dirt, clay and rock.

Severe Duty (SD)

Severe Duty buckets are designed for higher abrasion conditions such as shot granite. When compared to the Heavy Duty bucket, wear bars and wear plates are substantially thicker and larger for added protection.

Extreme Duty (XD)

Extreme Duty buckets are designed for very high abrasion conditions such as granite quarries. Corner shrouds have been added and side wear plates are larger for added protection.



Applications and Systems Match

The 349D L is designed for matched performance with Cat Articulated Trucks.

Wide Range of Front End Attachments

The ability to select different front-end attachments provides adaptability for a wide range of job conditions in a variety of applications such as construction, mining, or quarry. Depending on the front-end configuration, and material density, the 349D L can be matched with the 730 to 740 articulated trucks. Additionally, systems match offers versatility in job set-up whether top loading or same level truck loading.

Optimum Pass Match Design

Five to six passes under two minutes, matched to the Cat 735, gives you maximum system production at the lowest cost per ton of material moved.

Maximum Availability

New standards for durability and reliability help ensure that your loading system has more uptime, operates efficiently and provides lasting value and high resale.

Designed for Safety

Cat machines are designed to keep operators and job sites safe.

Visibility

An optional rear vision camera and work area vision system can be installed improving safety for the operator, as well as other machines and personnel working around the excavator.

Safe Access

Handrails and anti-slip surfaces are designed for safe access on and off Cat machines. Daily maintenance service checks are easily accessible at ground level. An emergency escape is accessed through the rear window.

Safety Alarm

If an abnormality occurs, the warning information window is displayed on the monitor. If the abnormality is urgent, the master light blinks and an alarm activates, alerting the operator to take immediate action.



Cleaner for the Environment

Caterpillar has long invested in technology, products and services that reduce the impact of earthmoving equipment on the environment.

Emissions

With ACERT Technology to lower emissions, the C13 engine improves maintenance costs through less engine wear and less oil consumption. This engine can use up to B30 biodiesel to further reduce emissions on the job site.

Fuel Management

A fuel consumption display allows the operator to monitor their fuel consumption. Three Power Management Modes allow the operator to select a mode for optimal performance with lower fuel consumption.

Fluids

Extended service and maintenance intervals increase machine availability and reduce the frequency of fluid handling. Cat HEESTM biodegradable hydraulic oil is fully decomposed by soil or water microorganisms for a cleaner job site.

Cat Reman Parts

We recycle used products into "like-new" Cat Reman products that offer the same performance and quality as new parts at a fraction-of-new price. Environmentally reconditioned reman parts are available for this machine.

Service and Maintenance

Simplified service and maintenance save you time and money.

Extended Service Intervals

Extended service and maintenance intervals increase machine availability. The maintenance intervals for engine oil and engine oil filter have been extended to 500 hours.

Capsule Filter

The hydraulic return filters are located in the hydraulic tank. The filter elements are removable without spilling hydraulic oil.

Pilot Hydraulic System Filter

Pilot hydraulic system filter keeps contaminants from the pilot system and is located in the pump compartment.

Radial Seal Main Air Cleaner

Radial seal main air cleaner with precleaner has a doublelayered filter element for more efficient filtration. No tools are required to change the element.

Fuel-Water Separator

The water separator has a primary fuel filter element and is located in the air cleaner compartment for easy access from the ground.

Service Points

Service points are centrally located with easy access to facilitate routine maintenance.

Oil Sample and Pressure Ports

Oil sample and pressure ports provide easy checking of machine condition and are standard on every machine.

Greasing Points

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







Complete Customer Support

Cat dealer services help you operate longer with lower costs.

The Right Machine for Your Business

Your Cat dealer will guide you through your machine selection process, helping you choose the right machine for your specific industry and applications.

The Most Attractive Finance Package from Cat Financial

Cat Financial specializes in equipment financing and has a reputation as a trusted partner. Whatever your business, your Cat dealer and Cat Financial offer a range of flexible, highly competitive financial solutions for new Cat machines, making it faster and easier to obtain the Cat equipment you need.

The Most Cost-Effective Cat Customer Support Agreement

Cat Customer Support Agreements are the most effective way of running your machine at peak performance and eliminating the risk, cost, disruption and loss of revenue caused by unscheduled downtime.

The Most Beneficial Cat Warranty

The warranty coverage from your Cat dealer is backed by the worldwide resources of Caterpillar and is specifically designed to provide the highest levels of repair cost protection for Cat machines. This comprehensive coverage will enhance and sustain your entire ownership experience and provide complete peace of mind.

Cat experts are always available to help you make the decisions that are best for your business.

Engine	
Engine Model	Cat C13 with ACERT Technology
Power – ISO 14396 (metric)	305 kW
Power – ISO 14396 (metric)	415 hp
Power – ISO 14396 (imperial)	409 hp
Power – ISO 9249 (metric)	283 kW
Power – ISO 9249 (metric)	385 hp
Power – ISO 9249 (imperial)	380 hp
Bore	130 mm
Stroke	157 mm
Displacement	12.5 L
Cylinders	6

• No engine derating required below 2300 m altitude.

Brakes

Meets the standard ISO 10265:1998.

Track	
Number of Shoes (each side)	52
Number of Track Rollers (each side)	9
Number of Carrier Rollers (each side)	3

Cab/FOGS

Cab/FOGS meets ISO 10262.

Drive	
Maximum Travel Speed	4.7 km/h
Maximum Drawbar Pull	338 kN
Maximum Gradeability	35°/70%

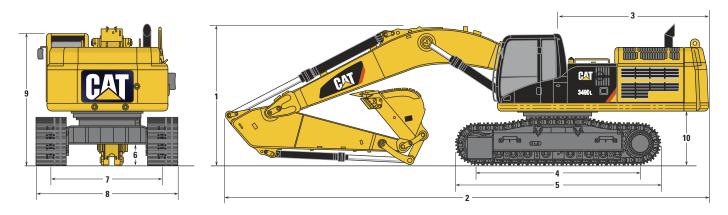
Swing Mechanism	
Swing Speed	8.7 rpm
Swing Torque	149 kN·m

Hydraulic System	
Main System	
Maximum Flow	734 L/min
Maximum Pressure – Normal	343 bar
Maximum Pressure – Travel	343 bar
Maximum Pressure – Swing	314 bar
Maximum – Heavy Lift	380 bar
Pilot System	
Maximum Flow	43 L/min
Maximum Pressure	41 bar
Boom Cylinder	
Bore	160 mm
Stroke	1575 mm
Stick Cylinder	
Bore	190 mm
Stroke for Reach Front	1778 mm
Stroke for ME Front	1758 mm
TB Family Bucket Cylinder	
Bore	160 mm
Stroke	1356 mm
UB Family Bucket Cylinder	
Bore	170 mm
Stroke	1396 mm

Service Refill Capacities		
Fuel Tank	705 L	
Cooling System	35.5 L	
Engine Oil	42 L	
Swing Drive (each)	10 L	
Final Drive (each)	15 L	
Hydraulic System Oil Capacity (including tank)	507 L	
Hydraulic Tank Oil	400 L	

Dimensions

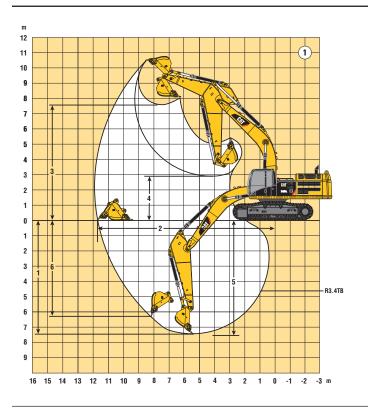
All dimensions are approximate.

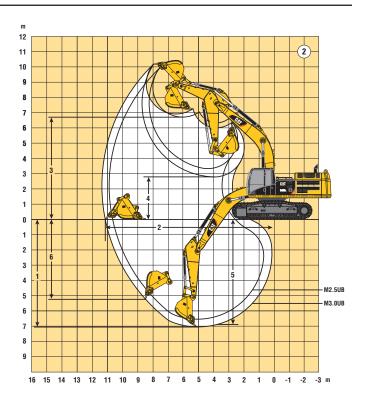


	Heavy Duty (HD) Reach Boom	Mass Excavati	on (ME) Boom
Boom	6900 mm		mm
Stick	3350 mm	2500 mm	3000 mm
1 Shipping Height			
Fixed Gauge Undercarriage	3550 mm	3970 mm	3990 mm
Variable Gauge Undercarriage	3520 mm	3990 mm	N/A
2 Shipping Length			
Fixed Gauge Undercarriage	11 840 mm	11 640 mm	11 550 mm
Variable Gauge Undercarriage	11 520 mm	11 600 mm	N/A
Bucket Capacity	2 m ³	2.4 m ³	2.2 m ³
Bucket Tip Radius	1630 mm	1730/1830 mm	1600 mm

Undercarriage	Fixed Gauge	Variable Gauge
3 Tail Swing Radius	3770 mm	3770 mm
4 Length to Center of Rollers	4340 mm	4340 mm
5 Track Length	5370 mm	5330 mm
6 Ground Clearance	510 mm	760 mm
7 Track Gauge	2740 mm	2390/2890 mm
8 Track Width		
600 mm Shoes	3340 mm	2990/3490 mm
750 mm Shoes	3490 mm	3140/3640 mm
9 Cab Height	3210 mm	3360 mm
10 Counterweight Clearance	1320 mm	1470 mm

Working Ranges

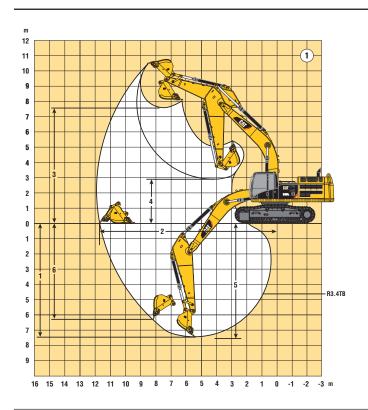


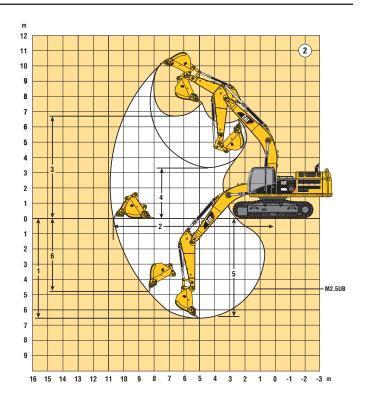


Fixed Gauge Undercarriage

	1		2
	Heavy Duty (HD) Reach Boom 6900 mm	Mass Excavation (ME) Boom 6550 mm	
	R3.4TB	M2.5UB	M3.0UB
Stick Length	3350 mm	2500 mm	3000 mm
1 Maximum Digging Depth	7600 mm	6720 mm	7220 mm
2 Maximum Reach at Ground Level	11 660 mm	10 710 mm	11 180 mm
3 Maximum Loading Height	7470 mm	6620 mm	6810 mm
4 Minimum Loading Height	2800 mm	3160 mm	2660 mm
5 Maximum Digging Depth 2440 mm Level Bottom	7460 mm	6550 mm	7070 mm
6 Maximum Vertical Wall Digging Depth	6300 mm	4920 mm	5380 mm
Bucket Capacity	1.9 m³	2.4 m ³	2.2 m ³
Bucket Digging Force (ISO)	266 kN	297 kN	297 kN
Stick Digging Force (ISO)	202 kN	240 kN	211 kN

Working Ranges





Variable	Gauge	Undercarriage
----------	-------	---------------

1

2

		\sim
	Heavy Duty (HD) Reach Boom 6900 mm	Mass Excavation (ME) Boom 6550 mm
	R3.4TB	M2.5UB
Stick Length	3350 mm	2500 mm
1 Maximum Digging Depth	7500 mm	6570 mm
2 Maximum Reach at Ground Level	11 680 mm	10 680 mm
3 Maximum Loading Height	7570 mm	6770 mm
4 Minimum Loading Height	2910 mm	3300 mm
5 Maximum Digging Depth 2440 mm Level Bottom	7350 mm	6400 mm
6 Maximum Vertical Wall Digging Depth	6310 mm	4780 mm
Bucket Capacity	2.1 m³	2.6 m ³
Bucket Digging Force (ISO)	263 kN	297 kN
Stick Digging Force (ISO)	201 kN	240 kN

349D L Bucket Specifications and Compatibility

							Fixed Ga	uge	Varia	able Gauge
		Width	Capacity	Weight	Fill	ME	Boom	HD Reach Boom	ME Boom	HD Reach Boom
	Linkage	mm	m³	kg	%	M2.5m	M3.0m	R3.4m	M2.5m	R3.4m
Without Quick Coupler										
General Duty (GD)	TB	1370	1.87	1755	100%			•		
	UB	1450	2.39	2324	100%	•	Θ		•	
	UB	1550	2.61	2418	100%	Θ	0		•	
	UB	2000	3.60	2900	100%	\Diamond	\Diamond		\Diamond	
Heavy Duty (HD)	TB	1500	2.14	2065	100%			•		•
	TB	1650	2.41	2210	100%			Θ		Θ
	TB	1800	2.69	2423	100%			0		0
	UB	1650	2.77	2581	100%	Θ	0		Θ	
	UB	1850	3.19	2741	100%	0	\Diamond		0	
	UB	1950	3.43	2898	100%	\Diamond	\Diamond		0	
Severe Duty (SD)	TB	1550	2.14	2340	90%			•		•
	TB	1700	2.41	2513	90%			Θ		Θ
	TB	1900	2.78	2716	90%			0		0
	UB	1450	2.39	2540	90%	•	Θ		•	
	UB	1550	2.61	2648	90%	•	θ		•	
	UB	1650	2.77	2729	90%	θ	0		θ	
	UB	1850	3.21	2987	90%	0	\Diamond		0	
	UB	1950	3.43	3058	90%	0	\Diamond		0	
Extreme Duty (XD)	UB	1550	2.61	3091	90%	Θ	0		Θ	
	UB	1650	2.77	3192	90%	Θ	0		Θ	
	Maxim	num load pir	n-on (payload	d + bucket)	kg	6785	6095	5905	6910	5985

							Fixed Gau	Varia	Variable Gauge		
		Width	Capacity	Weight	Fill	ME	Boom	om HD Reach Boom		HD Reach Boom	
	Linkage	mm	m³	kg	%	M2.5	M3.0	R3.35 HD	M2.5	R3.35 HD	
With Quick Coupler (CW55)											
Heavy Duty (HD)	TB	1650	2.41	2196	100%			0		0	
	UB	1650	2.77	2479	100%	0	\Diamond		0		
	UB	1850	3.19	2663	100%	\Diamond	Х		\Diamond		
Severe Duty (SD)	UB	1550	2.61	2570	90%	Θ	0		Θ		
	UB	1650	2.77	2655	90%	0	\Diamond		0		
Extreme Duty (XD)	UB	1550	2.61	3087	90%	0	\Diamond		0		
	Maximum lo	ad with cou	pler (payload	d + bucket)	kg	5945	5255	5145	6070	5225	

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 General Duty tips.

Maximum Material Density:

- 2100 kg/m³
- 1800 kg/m³
- $\ \, \bigoplus\ \, 1500\ kg/m^3$
- O 1200 kg/m³
- ♦ 900 kg/m³
- X Not Recommended

Machine and Major Component Weights

Actual weights and ground pressures will depend on final machine configuration.

			D) Reach Boom) mm	Mass) Boom	
Stick Type		R3.	4TB	M2.	M3.0UB	
Stick Length	mm	33	350	25	000	3000
Gauge		FG	VG	FG	VG	FG
Bucket Weight	kg	1810	1810	2330	2400	2240
Bucket Capacity	m^3	2.0	2.0	2.4	2.6	2.2
Bucket Width/Type	mm	1630	1630	1730	1830	1600
Operating Weight*						
600 mm Shoes	kg	46 650	49 340	46 870	49 700	46 970
750 mm Shoes	kg	46 800	50 120	47 620	50 480	47 720
Counterweight	kg	9000	9000	9000	9000	9000
Stick Weight (with bucket cylinder)	kg	1990	1990	2190	2190	2370
Boom Weight (with stick cylinder)	kg	45	590		4600	
Boom Cylinders (pair)	kg	80	00		800	
Upper structure*	kg	21 480		21 480		
Undercarriage						
600 mm Shoes	kg	15 040	17 790	15 040	17 790	15 040

FG Fixed Gauge, VG Variable Gauge

^{*}With counterweight, operator and full fuel

Reach (R) Boom Lift Capacities

Load Point Height



Load Radius Over Side



Load at Maximum Reach

Boom-6900~mm

Stick - 3.4 m

Bucket – None **Shoes** – 600 mm

Undercarriage – Long – Fixed Gauge

Heavy Lift - ON

		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				
														m
9.0 m	kg											*9050	*9050	7.3
7.5 m	kg							*10 950	10 750			*8500	*8500	8.48
6.0 m	kg							*11 450	10 500	*10 700	7750	*8350	7350	9.27
4.5 m	kg			*19 050	*19 050	*14 650	14 150	*12 350	10 100	*11 050	7600	*8450	6600	9.76
3.0 m	kg			*23 350	20 000	*16 700	13 250	*13 450	9650	*11 600	7350	*8800	6200	10.01
1.5 m	kg			*18 600	*18 600	*18 300	12 550	*14 400	9200	11 500	7100	*9400	6100	10.02
Ground Line	kg			*21 000	18 350	*19 000	12 100	14 800	8950	11 300	6950	10 050	6200	9.79
−1.5 m	kg	*14 950	*14 950	*24 700	18 300	*18 700	11 950	14 650	8800	11 250	6900	10 700	6600	9.32
−3.0 m	kg	*23 850	*23 850	*22 400	18 500	*17 400	12 000	*13 700	8800			*11 250	7450	8.56
−4.5 m	kg	*23 500	*23 500	*18 650	*18 650	*14 600	12 250					*10 950	9200	7.42

Boom - 6900 mm

Bucket - None

 $\textbf{Undercarriage}-\mathsf{Long}-\mathsf{Variable}\ \mathsf{Gauge}$

Stick - 3.4 m

Shoes -600 mm

Heavy Lift - ON

		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m					
														m	
9.0 m	kg											*8950	*8950	7.45	
7.5 m	kg							*10 950	*10 950			*8450	*8450	8.58	
6.0 m	kg							*11 500	11 000	*10 750	8150	*8350	7650	9.34	
4.5 m	kg			*19 500	*19 500	*14 850	*14 850	*12 500	10 600	*11 100	7950	*8500	6900	9.80	
3.0 m	kg			*23 750	21 150	*16 900	13 950	*13 550	10 150	*11 650	7750	*8850	6550	10.02	
1.5 m	kg			*18 500	*18 500	*18 400	13 250	*14 450	9700	11 400	7500	*9500	6450	10.00	
Ground Line	kg			*21 550	19 650	*19 000	12 850	14 700	9450	11 250	7350	10 000	6550	9.76	
−1.5 m	kg	*15 850	*15 850	*24 500	19 650	*18 650	12 700	14 550	9300	11 200	7300	10 750	7050	9.26	
−3.0 m	kg	*24 900	*24 900	*22 100	19 850	*17 200	12 800	*13 500	9350			*11 250	8000	8.46	
−4.5 m	kg	*22 750	*22 750	*18 100	*18 100	*14 200	13 100					*10 850	10 050	7.27	

^{*}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 105467:2007. 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.

Lift capacity stays with $\pm 5\%$ for all available track shoes.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Mass Excavation (ME) Boom Lift Capacities

Load Point Height

Load Radius Over Front

Load Radius Over Side

Load at Maximum Reach

Boom-6550~mm

Stick - 2.5 m

 $\pmb{\mathsf{Bucket}} - \mathsf{None}$

Undercarriage - Long - Fixed Gauge

Shoes -600 mm Heavy Lift -0 N

			3.0 m		4.5 m		6.0 m		7.5 m		m			
														m
7.5 m	kg											*12 850	11 800	7.10
6.0 m	kg					*14 100	*14 100	*12 650	10 650			*12 450	9500	8.03
4.5 m	kg			*20 850	*20 850	*15 750	14 450	*13 300	10 350			*12 300	8350	8.60
3.0 m	kg					*17 550	13 650	*14 150	9950			*12 350	7750	8.87
1.5 m	kg					*18 750	13 050	*14 800	9600			12 300	7550	8.88
Ground Line	kg			*24 100	19 350	*18 950	12 700	*14 900	9350			*12 600	7750	8.63
−1.5 m	kg	*18 150	*18 150	*23 300	19 400	*18 100	12 650	*14 150	9350			*12 650	8450	8.09
−3.0 m	kg	*24 100	*24 100	*20 100	19 700	*15 800	12 800					*12 400	10 050	7.20
−4.5 m	kg			*14 500	*14 500							*11 000	*11 000	5.79

Boom – 6550 mm

Bucket - None

Undercarriage – Long – Variable Gauge

Stick - 2.5 m

Shoes -600 mm

Heavy Lift - ON

		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				
														m
7.5 m	kg											*12 750	12 100	7.22
6.0 m	kg					*14 250	*14 250	*12 700	11 250			*12 400	9850	8.11
4.5 m	kg			*21 300	*21 300	*15 950	15 250	*13 400	10 900			*12 300	8700	8.64
3.0 m	kg					*17 700	14 400	*14 200	10 450			*12 350	8150	8.89
1.5 m	kg					*18 800	13 800	*14 850	10 150			12 250	8000	8.87
Ground Line	kg			*25 000	20 750	*18 950	13 500	*14 900	9900			*12 600	8250	8.59
−1.5 m	kg	*19 800	*19 800	*23 050	20 850	*17 950	13 450	*14 000	9900			*12 650	9100	8.02
−3.0 m	kg	*23 550	*23 550	*19 650	*19 650	*15 450	13 650					*12 350	10 950	7.08
−4.5 m	kg											*11 850	*11 850	5.23

Boom - 6550 mm

Stick - 3.0 m

Bucket - None

Undercarriage - Long - Fixed Gauge

Shoes – 600 mm

Heavy Lift - ON

		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				
														m
7.5 m	kg							*11 650	11 050			*10 050	*10 050	7.67
6.0 m	kg							*11 900	10 900			*9800	8750	8.53
4.5 m	kg			*19 200	*19 200	*14 850	14 850	*12 650	10 550	*10 850	7850	*9900	7750	9.07
3.0 m	kg			*23 350	21 100	*16 800	13 950	*13 600	10 100	*11 800	7650	*10 350	7250	9.33
1.5 m	kg			*23 000	19 900	*18 250	13 250	*14 400	9700	*12 100	7450	*11 100	7050	9.34
Ground Line	kg			*25 600	19 500	*18 850	12 800	*14 800	9400	*12 000	7350	*11 850	7250	9.10
−1.5 m	kg	*17 950	*17 950	*24 200	19 450	*18 350	12 650	*14 400	9300			*11 950	7800	8.59
−3.0 m	kg	*27 600	*27 600	*21 450	19 650	*16 600	12 750	*12 650	9400			*11 900	9050	7.76
−4.5 m	kg			*16 750	*16 750	*12 700	*12 700					*11 200	*11 200	6.47

^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load.

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Lift capacity stays with ±5% for all available track shoes.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Standard Equipment

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

POWER TRAIN

- 52° C cooling capability
- · Cat extended life coolant
- Automatic engine speed control
- Cat C13 diesel engine
- -2300 m altitude capability
- -24-volt electric starting
- · Variable speed fan
- Power management system
- · Economy mode
- Radial seal air filter with double element
- Electric priming pump
- Secondary engine shut-off switch
- Water separator in fuel line

UNDERCARRIAGE

- Idler and center section track guiding guards
- Towing eye on base frame
- · Grease lubricated track

ELECTRICAL

- 75 Amp alternator
- Horn, signal/warning
- Light, storage box mounted (Halogen, one)

OPERATOR ENVIRONMENT

- Cab
 - Bi-level automatic climate control with defroster
 - -Ashtray with lighter
- Beverage holder
- -Bolt-on FOGS capability
- -Coat hook
- -Interior lighting
- Literature holder
- -Openable skylight
- Pillar mounted upper windshield wiper and washer
- Radio mounting (meets DIN size)
- -Rear window, emergency exit
- Sliding upper door window
- -Storage compartment suitable for lunch box
- Utility space for magazines
- Monitor
- -Time clock on monitor
- Full graphic and full color display with language display
- Machine condition, error code and tool mode setting information
- -Start-up level check for engine oil, engine coolant and hydraulic oil
- Warning, filter/fluid change and working hour information
- Neutral lever for all controls
- Pedal
- Capability to install two additional pedals
- Travel control with removable hand levers
- Seat
 - Adjustable armrest
 - Electric provision for seat heater

GUARDS

· Bottom guard, includes swivel guard

OTHER STANDARD EQUIPMENT

- Automatic swing parking brake
- Cat data link with E/T use capability
- Cat one key security system
- Counterweight with lifting hook, without removal device
- · Door locks and cap locks
- · Heavy lift mode
- High performance hydraulic return filter
- Mirrors, rearview (frame-right, cab-left)
- · Product Link ready
- Regeneration circuit for boom and stick
- Reverse swing damping valve
- · Boom drift reducing valve
- Stick drift reducing valve
- Two speed auto-shift travel
- Steel firewall between engine and pump compartment

349D L Optional Equipment

Optional Equipment

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

ENGINE

- Precleaner
- Starting kit, cold weather, -32° C
- Terminal, jump start

FRONT LINKAGE

- Booms
- -HD Reach 6900 mm
- Mass excavation 6550 mm
- Buckets
- -Bucket linkage
- TB family for TB sticks
- UB family for UB sticks
- Bucket tips and sidecutters
- -Edge protectors
- · Sticks
- -R3.4TB Reach
- -M2.5UB Mass
- -M3.0UB Mass

GUARDS

- Falling Object, for cab
- Front Windshield
- Track guiding, full length

HYDRAULICS

- · Auxiliary boom lines
- Auxiliary stick lines
- Control, single action
- Circuit, cooling
- · Control, combined
- Control, medium pressure
- Pedal, tool modulation
- · Quick coupler universal circuit
- Tool selection (via monitor 10 tools)

OPERATOR STATION

- Joysticks
- Four button joystick for standard machine or single action auxiliary control
- Radio, AM/FM radio mounted in right hand console
- Radio ready mounting at rear location including 24V to 12V converter
- Sea
 - Adjustable high-back seat with mechanical suspension
- Sun Screen

UNDERCARRIAGE

- Fixed Gauge or Variable Gauge
- · Idler, heavy duty
- Track, 600 mm
- Track, 750 mm
- Track, GLT4
- Track, PPR2

OTHER OPTIONAL EQUIPMENT

- Converters, 7 amp-12V (one or two)
- Product Link
- · Rearview Camera
- Security System, Machine (MSS)
- · WAVS Camera ready

Notes

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