# 349D L Hydraulic Excavator







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**Engine Model** Net Flywheel Power **Gross Power** 

Weights

Cat® C13 ACERT™

283 kW

305 kW

Operating Weight

47 644 kg

• Reach Boom, R3.9 stick, 1219 mm GD Bucket and 750 mm shoes.

#### **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.

# **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<sup>TM</sup> 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.





# **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 – Roll Over Protective Structure (ROPS)

The 349D L ROPS cab design allows the Falling Object Guard System (FOGS) to be bolted directly to the cab, at the factory or as an attachment. This enables the machine to meet specifications and job site requirements. A ROPS cab is standard and provides 10 percent more glass area than the previous non-ROPS cab. The cab shell is attached to the frame with viscous rubber cab mounts that dampen vibrations and sound levels to enhance operator comfort. Also standard on the cab are working lights with time delay functionality. They have auto shut-off capability – programmable up to 90 seconds – to support safe egress out of the machine and easy departure from the job site.



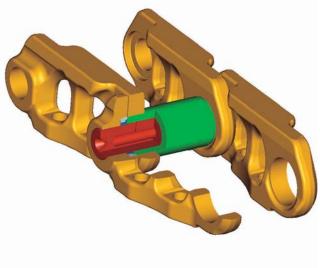




# **Undercarriage**

Durable undercarriage absorbs stresses and provides excellent stability.





### **Undercarriage Options**

Track with Positive Pin Retention 2 (PPR2) and cast idlers are available on the 349D L. The PPR2 prevents loosening of the track pin from the track link and the cast idler is designed for extended life. Both options are ideal for extreme applications or those that require a large amount of travel.

### **Travel Motors**

Two-speed axial piston hydraulic motors provide the 349D L drive power and automatic speed selection when the high-speed position is selected. This enables the machine to automatically change 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**

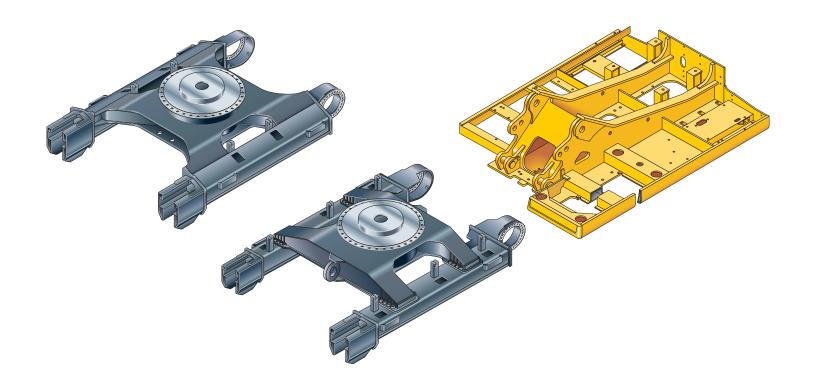
The three-stage planetary reduction final drives design results in a complete drive/brake unit that is compact and delivers excellent performance and reliability.

#### **Track**

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 extend service life lowering operating costs. The track link for the 349D L has been re-designed to avoid the concentration of stresses and improve durability 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 guarding is available.



### **Structures**

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

### Carbody

The 349D L undercarriage is designed to meet regional transportation requirements and application needs.

### **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.

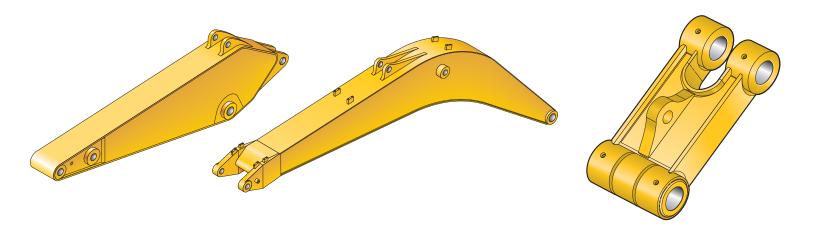
### **Counterweights**

The 349D L has a 9000 kg counterweight to best match the machine to your application.

### **Track Roller Frame**

Fixed Gauge Undercarriage

• 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.



# **Boom, Sticks and Attachments**

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

### **Front Linkage Attachments**

Two 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.

### **Work Tools**

### Solutions for your business

### **Increase Machine Versatility**

The Cat combination of machine and tool provides a total solution for just about any application. Work tools can be mounted directly to the machine or a quick coupler can be added, making it quick and easy to release one work tool and pick up another.

### **Couplers**

Caterpillar offers two quick coupler styles: dedicated and pin grabber. Each allows quick tool changes.

### Center-Lock™ Pin Grabber Coupler

Center-Lock is the Cat 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.

### **Work Tools**

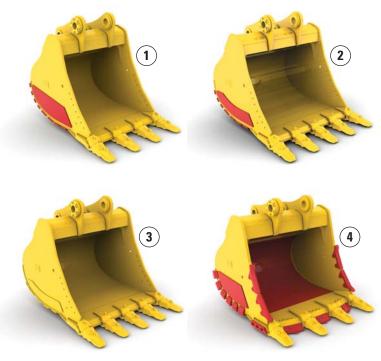
An extensive range of Cat Work Tools for the 349D L includes buckets, hammers, grapples, shears, multi-processors and rippers. Each are designed to optimize the versatility and performance of your machine. Cat Work Tools and couplers are ready to work in a variety of applications, such as site and structure demolition, debris clean-up, truck loading, scrap processing, breaking road surfaces and bed rock.

### **Hydraulic Kits**

Caterpillar offers field-installed hydraulic kits designed to simplify the process of ordering and installing the right kit. Modular kit designs integrate Cat Work Tools with Cat Hydraulic Excavators. Every kit is easy to install. Hoses are pre-made, tubes are pre-bent and pre-painted and there are comprehensive instructions.







### **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 Series<sup>TM</sup> 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.

1) Severe Duty 2) Heavy Duty 3) General Duty 4) Extreme Duty

# **Versatility**

A wide variety of optional and factory-installed attachments are available to enhance performance and improve job site management.

### **Tool Control System**

The optional tool control system maximizes work tool productivity by configuring hydraulic flow, pressure, and operator controls to match a specific work tool. System versatility enables a wide range of tools to be used.

### **Control Levers**

The operator's control lever preferences are diverse. Three types of tool controls are available:

- Foot Pedal The hydraulic modulated foot pedal is used in conjunction with the hydraulic controller.
- Foot Switch The electric on/off switch pedal is used in conjunction with either the hydraulic controller or attachment controller. The foot switch is located on cab floor.
- Tool controller joysticks Two types of the tool control joysticks are available. Joystick with modulation contains two on/off switches, one trigger switch and one modulation switch. Joystick without the modulation switch has three on/off switches and one trigger switch.

### **Auxiliary Hydraulic Valve**

A hydraulically controlled auxiliary valve is standard on the 349D L. Control circuits are available as attachments, allowing operation of high and medium pressure tools such as shears, grapples, hammers, pulverizers, multi-processors and vibratory plate compactors.

### **Product Link**

Product Link is available on the 349D L. The optional levels of service, including Asset Watch, Maintenance Watch, and Health Watch allow you to monitor and maintain your equipment for the lowest operating cost.









## **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 double-layered 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.

### **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. You can save money with Cat remanufactured components.

#### **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.

### **Purchase**

Look past initial price. Consider the financing options available as well as day-to-day operating costs. This is also the time to look at dealer services that can be included in the cost of the machine to yield lower equipment owning and operating costs over the long run.

### **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.

### **Operation**

Improving operating techniques can boost your profits. Your Cat dealer has videotapes, literature and other ideas to help you increase productivity, and Caterpillar offers certified operator training classes to help maximize the return on your investment.

#### **Maintenance Services**

Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as Scheduled Oil Sampling, Coolant Sampling and Technical Analysis help you avoid unscheduled repairs.

### Replacement

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

### SAFETY.CAT.COM™



### **349D L Hydraulic Excavator Specifications**

Engine	
Engine Model	Cat® C13
	ACERT™
Net Flywheel Power	283 kW
Net Power – ISO 9249	283 kW
Net Power – SAE J1349	283 kW
Net Power – EEC 80/1269	283 kW
Bore	130 mm
Stroke	157 mm
Displacement	12.5 L

- 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 needed up to 2300 m.

### Weights

Operating Weight	47 644 kg

• Reach Boom, R3.9 stick, 1219 mm GD Bucket and 750 mm shoes.

Track		
Long – Fixed		
Number of Shoes Each Side	52	
Number of Track Rollers Each Side	9	
Number of Carrier Rollers Each Side	2	

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

Drive	
Maximum Travel Speed	4.5 km/h
Maximum Drawbar Pull – Long Undercarriage	338 kN

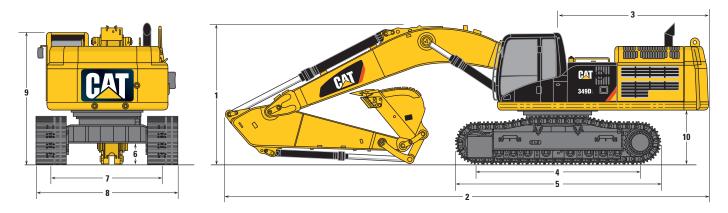
Standards	
Brakes	SAE J1026 APR90
Cab/FOGS	SAE J1356 FEB 88 and ISO 10262-1998
Cab/ROPS	ISO 12117-2:2008

Hydraulic System	
Main System – Maximum Flow (Total)	734 L/min
Maximum Pressure – Equipment – Normal	35 000 kPa
Maximum Pressure – Travel	35 000 kPa
Maximum Pressure – Swing	31 400 kPa
Pilot System – Maximum Flow	43 L/min
Pilot System – Maximum Pressure	4110 kPa
Boom Cylinder – Bore	160 mm
Boom Cylinder – Stroke	1575 mm
Stick Cylinder – Bore	190 mm
Stick Cylinder – Stroke (for Long Reach and Reach Fronts)	1778 mm
Stick Cylinder – Stroke (for Mass Excavation Fronts)	1758 mm
TB Family Bucket Cylinder – Bore	160 mm
TB Family Bucket Cylinder – Stroke	1356 mm
UB Family Bucket Cylinder – Bore	170 mm
UB Family Bucket Cylinder – Stroke	1396 mm

Service Refill Capacities		
Fuel Tank Capacity	705 L	
Cooling System	35.5 L	
Engine Oil	42 L	
Swing Drive (each)	10 L	
Final Drive (each)	15 L	
Hydraulic System (including tank)	570 L	
Hydraulic Tank	243 L	

### **Dimensions**

All dimensions are approximate.

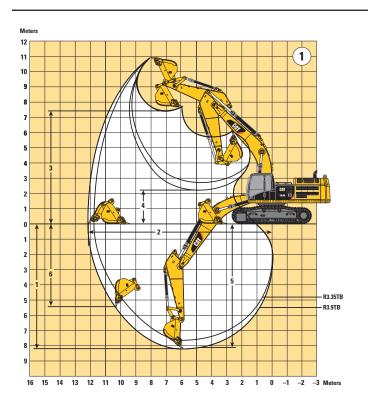


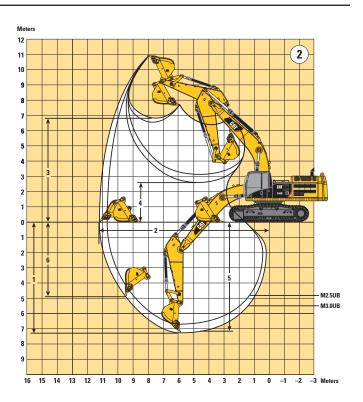
Boom	Reach Boom 6.9 m		Mass Boom 6.55 m	
Stick	R3.9TB	R3.35TB	M3.0UB	M2.5UB
1 Shipping Height				
Fixed Gauge Undercarriage	3660 mm	3690 mm	4020 mm	3960 mm
2 Shipping Length				
Fixed Gauge Undercarriage	11 950 mm	11 940 mm	11 640 mm	11 710 mm
3 Tail Swing Radius	3770 mm	3770 mm	3770 mm	3770 mm
Undercarriage	Long Fix	ed Gauge		
4 Length to Center of Idler and Sprocket	4360	) mm		
5 Track Length	5360 mm			
6 Ground Clearance	510	mm		
7 Track Gauge				
Retracted (Transport) Position	2740	) mm		
Extended (Working) Position	2740 mm			
8 Track Width*				
Retracted (Transport) Position	3640 mm			
Extended (Working) Position	3640 mm			
<b>9</b> Cab Height	3210 mm			
<b>10</b> Counterweight Height (to bottom)	1320 mm			

 $<sup>^{*}</sup>$  Track Width shown is for 900 mm track shoes. Subtract 150 mm for 750 mm track shoes and 300 mm for 600 mm track shoes.

### **349D L Hydraulic Excavator Specifications**

### **Working Ranges**





### 349D L Working Ranges – Long Fixed Gauge Undercarriage

(2)  $(\mathbf{1})$ **Reach Working Ranges Mass Working Ranges Reach Boom Mass Excavation Boom** 6.9 m 6.5 m **R3.9TB** R3.35TB M3.0UB **M2.5UB** Stick **Bucket** GD 1.8 m<sup>3</sup> GD 1.8 m<sup>3</sup> HD 3.11 m<sup>3</sup> HD 3.11 m<sup>3</sup> Maximum Digging Depth 8200 mm 7650 mm 7200 mm 6700 mm Maximum Reach at Ground Level 12 120 mm 11 710 mm 11 160 mm 10 700 mm Maximum Loading Height 7410 mm 7420 mm 6830 mm 6640 mm Minimum Loading Height 2200 mm 2750 mm 2670 mm 3170 mm **5** Maximum Depth Cut for 2440 mm Level Bottom 8070 mm 7500 mm 7050 mm 6530 mm Maximum Vertical Wall Digging Depth 5300 mm 5210 mm 4660 mm 4220 mm

### 349D L – Bucket and Stick Forces

Stick Forces			
		Sticks	
TB-Family Buckets	R4.3	R3.9	R3.35
	kN	kN	kN
GD, HD, SD			
Stick Digging Force (ISO)	171	183	199
Stick Digging Force (SAE)	167	179	194
GD, HD, SD with coupler			
Stick Digging Force (ISO)	161	171	186
Stick Digging Force (SAE)	157	169	181

	Sti	cks
UB-Family Buckets	M3.0	M2.5
	kN	kN
GD		
Stick Digging Force (ISO)	206	233
Stick Digging Force (SAE)	198	223
HD, SD with coupler		
Stick Digging Force (ISO)	213	242
Stick Digging Force (SAE)	205	231

### **Bucket Forces**

	TB-Family Buckets	UB-Family Buckets
	kN	kN
GD, HD, SD		
Bucket Digging Force (ISO)	268	240
Bucket Digging Force (SAE)	238	212
GD, HD, SD with coupler		
Bucket Digging Force (ISO)	219	
Bucket Digging Force (SAE)	200	

### **349D L Hydraulic Excavator Specifications**

### **Reach Boom Lift Capacities**

Jane Pa

Load Point Height

Load Radius Over Front

Load Radius Over Side

Load at

Load at Maximum Reach

 $\label{eq:boom-HD 6.9 m} \textbf{Stick} - \text{R3.9 m}$ 

Bucket - 1.6 m<sup>3</sup>

Shoes - 750 mm triple grouser

Undercarriage – Long – fixed gauge

Counterweight - 9000 kg

		3.0 m		4.5	m	6.0	m	7.5	m	9.0	m	10.5	i m			1		
																m		
9.0 m	kg													*4950	*4950	8.60		
7.5 m	kg									*7050	*7050			*4700	*4700	9.68		
6.0 m	kg									*7350	7150			*4650	*4650	10.41		
4.5 m	kg							*9000	*9000	*7900	6900	*6800	5100	*4750	4750	10.86		
3.0 m	kg					*13 200	12 750	*10 250	8950	*8600	6550	*7550	4900	*5000	4400	11.08		
1.5 m	kg					*15 050	11 850	*11 350	8450	*9250	6250	*7850	4750	*5400	4300	11.08		
Ground Line	kg			*14 700	*14 700	*15 850	11 350	*12 050	8100	*9650	6050	*7950	4600	*6000	4350	10.85		
−1.5 m	kg	*9650	*9650	*19 200	17 700	*15 750	11 150	*12 150	7900	*9650	5900			*6950	4650	10.39		
−3.0 m	kg	*18 650	*18 650	*19 100	17 850	*14 750	11 150	*11 500	7850	*8950	5900			*7850	5250	9.67		
−4.5 m	kg	*19 250	*19 250	*16 000	*16 000	*12 650	11 350	*9800	8000					*7700	6500	8.62		
−6.0 m	kg					*8750	*8750							*6800	*6800	7.03		

**Boom** – HD 6.9 m **Stick** – R2.9 m  $\textbf{Bucket}-2.2~\text{m}^3$ 

Shoes - 600 mm triple grouser

Undercarriage - Long - fixed gauge

Counterweight - 9000 kg

		4.5	m	6.0	m	7.5	7.5 m 9.0 m					
												m
9.0 m	kg									*6600	*6600	7.48
7.5 m	kg					*8350	*8350			*6150	*6150	8.71
6.0 m	kg					*8950	*8950	*8150	6650	*6050	5900	9.52
4.5 m	kg			*12 400	*12 400	*9900	8900	*8550	6450	*6150	5200	10.02
3.0 m	kg			*14 500	11 900	*11 000	8400	*9100	6150	*6450	4800	10.26
1.5 m	kg			*15 700	11 200	*11 800	8000	*9500	5950	*6950	4700	10.25
Ground Line	kg			*15 800	10 950	*12 100	7750	*9650	5750	*7700	4800	10.01
−1.5 m	kg	*19 000	17 700	*15 000	10 900	*11 750	7650	*9200	5700	*8300	5250	9.50
−3.0 m	kg	*16 300	*16 300	*13 300	11 050	*10 450	7750			*8100	6150	8.71
−4.5 m	kg	*12 350	*12 350	*10 250	*10 250					*7350	*7350	7.50

<sup>\*</sup>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.

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

### **Long Reach Boom Lift Capacities**



Load Point Height







Load at Maximum Reach

 $\begin{array}{l} \textbf{Boom} - \text{HD 6.9 m} \\ \textbf{Stick} - \text{R3.4 m} \end{array}$ 

Bucket - 2.0 m<sup>3</sup>

Shoes - 600 mm triple grouser

 $\textbf{Undercarriage} - \mathsf{Long} - \mathsf{fixed} \ \mathsf{gauge}$ 

Counterweight - 9000 kg

		3.0	m	4.5	m	6.0	m	7.5	m	9.0	m				
														m	
9.0 m	kg											*5550	*5550	8.05	
7.5 m	kg											*5200	*5200	9.20	
6.0 m	kg							*8500	*8500	*7800	6850	*5100	*5100	9.97	
4.5 m	kg			*16 350	*16 350	*11 750	*11 750	*9550	9150	*8300	6600	*5200	4900	10.44	
3.0 m	kg					*13 950	12 200	*10 700	8600	*8900	6300	*5400	4550	10.67	
1.5 m	kg					*15 500	11 450	*11 650	8150	*9450	6050	*5850	4450	10.67	
Ground Line	kg					*15 950	11 050	*12 150	7850	*9700	5850	*6500	4550	10.43	
−1.5 m	kg			*20 150	17 600	*15 450	10 950	*12 000	7700	*9450	5750	*7500	4900	9.95	
−3.0 m	kg	*19 200	*19 200	*17 700	*17 700	*14 050	11 000	*11 000	7750	*8350	5800	*7950	5650	9.19	
−4.5 m	kg			*14 150	*14 150	*11 500	11 300	*8750	7950			*7450	7150	8.07	

<sup>\*</sup>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.

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

### **349D L Hydraulic Excavator Specifications**

### **Mass Boom Lift Capacities**

Load Point Height







Load at Maximum Reach

 $\label{eq:model} \begin{array}{l} \textbf{Boom} - \text{M6.55 m} \\ \textbf{Stick} - \text{M2.5 m} \end{array}$ 

Bucket - 2.6 m<sup>3</sup>

Shoes - 750 mm triple grouser

 $\textbf{Undercarriage} - \mathsf{Long} - \mathsf{fixed} \ \mathsf{gauge}$ 

Counterweight - 9000 kg

		4.5	m	6.0	m	7.5	m	9.0	m			
												m
7.5 m	kg					*8550	*8550			*7550	*7550	7.98
6.0 m	kg					*8950	*8950			*7400	6350	8.86
4.5 m	kg			*12 350	*12 350	*9800	8500			*7500	5450	9.39
3.0 m	kg			*14 350	11 400	*10 800	8000	*8850	5750	*7850	5000	9.63
1.5 m	kg			*15 300	10 800	*11 450	7600	*9150	5500	*8400	4900	9.61
Ground Line	kg			*15 100	10 600	*11 550	7350			*8450	5100	9.32
−1.5 m	kg	*17 950	17 650	*13 950	10 600	*10 850	7300			*8450	5700	8.75
−3.0 m	kg	*14 550	*14 550	*11 650	10 800	*8800	7500			*7950	7000	7.84

**Boom** – M6.55 m

Bucket - 2.6 m<sup>3</sup>

Undercarriage - Long - fixed gauge

**Stick** - M2.5 m

Shoes - 600 mm triple grouser

Counterweight – 9000 kg

		4.5	m	6.0	m	7.5	m	9.0	m			
												m
7.5 m	kg					*8550	*8550			*7550	*7550	7.98
6.0 m	kg					*8950	8800			*7400	6250	8.86
4.5 m	kg			*12 350	12 250	*9800	8350			*7500	5350	9.39
3.0 m	kg			*14 350	11 250	*10 800	7850	*8850	5600	*7850	4900	9.63
1.5 m	kg			*15 300	10 600	*11 450	7450	*9150	5400	*8400	4800	9.61
Ground Line	kg			*15 100	10 400	*11 550	7200			*8450	4950	9.32
−1.5 m	kg	*17 950	17 400	*13 950	10 400	*10 850	7200			*8450	5600	8.75
−3.0 m	kg	*14 550	*14 550	*11 650	10 650	*8800	7350			*7950	6900	7.84

<sup>\*</sup>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.

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

### 349D L Standard Equipment

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

Auto-lube ready

Auxiliary hydraulic valve and auxiliary pump drive location

Cab

Air conditioner, heater, defroster with automatic climate control

Ashtray with lighter

Bolt-on FOGS capability

Coat hook Floor mat

Light, interior

Literature compartment Positive filtered ventilation Radio mounting (DIN size)

ROPS cab

Seat belt, retractable

Windshield wiper and washer (upper and lower)

Check valves

Boom lowering Stick lowering

Counterweight

 $8000~\mathrm{kg}$  for Standard Fixed and

Long Fixed Gauge

Engine

Cat® C13 with ACERT™ Technology

Speed control, automatic Fuel-Water separator

Hydraulic neutralizer lever for all controls

Lights, working
Frame mounted
Boom, both sides

Mirrors, frame and cab

Monitor, full graphic color display

Product Link

**ROPS** Cab

Seat, adjustable, high back, heated

with air suspension

Sliding upper door window

Stationary skylight (polycarbonate)

Storage compartment suitable for

a lunch box

Sunscreen for windshield and skylight

Travel control pedals with removable

hand levers

Windshield 70-30 split, sliding

S·O·S<sup>SM</sup> analysis, engine and hydraulic sampling ports

Start-up level checks

(engine oil and coolant, hydraulic oil)

Swing parking brake, automatic

Track

Grease lubricated

Guiding guards, idler and center sections

Travel alarm Undercarriage

Fixed

### **349D L Optional Equipment**

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

Auxiliary controls

Hammer (One-way), thumb (two-way), combined (Tool Control)

Auxiliary hydraulic lines for Booms

and Sticks

Auxiliary hydraulic valve and pump

attachments

Booms

Mass Excavation 6.55 m

Reach 6.9 m

Buckets

Bucket linkage:

TB family (with lift eye)
UB family (with lift eye)

Bucket sidecutters and tips

Counterweight

Counterweight 9000 kg for Fixed Gauge

Guards

Falling Object, for cab

Front window

Heavy-duty, under house

Swivel guard

Guiding, full length

Guiding, sprocket end

Coupler

Center lock quick coupler

Engine

Precleaner

Hand Control Pattern Changer

Lights, cab mounted, two

Radio, AM/FM with two speakers

Sticks

2.5 m M

2.9 m R

3.0 m M

3.35 m R 3.9 m LR/R

Track

600 mm double-grouser shoes

750 mm double-grouser shoes

750 mm triple-grouser shoes

900 mm triple-grouser shoes

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

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