

336D L

Heavy-Duty High Wide Hydraulic Excavator



Cat® C9 Diesel Engine with ACERT™ Technology

Net Power (ISO 9249) at 1800 rpm	200 kW/270 hp
Operating Weight	37 100 to 40 000 kg
Maximum Travel Speed	5 km/h
Maximum Reach at Ground Level	11 700 mm
Maximum Digging Depth	- 7 960 mm

336D L HDHW Hydraulic Excavator

The 336D Heavy-Duty High Wide (HDHW) incorporates all the technology of the 336D on a larger and heavier undercarriage.

Engine

The Cat® C9 engine with ACERT™ Technology offers better fuel efficiency and reduced wear. It works at the point of combustion to optimize engine performance and provide low exhaust emissions. By combining ACERT Technology with the new Economy Mode and Power Management, customers can balance the demands of performance and fuel economy to suit their requirements and application. **pg. 4**

Hydraulics

The hydraulic system has been designed to provide reliability and outstanding controllability with increased digging forces, lifting capacity and drawbar pull. The Cat Tool Control System provides enhanced flexibility. The Heavy Lift Mode maximizes lifting performance and maintains excellent stability. **pg. 5**

Operator Station

Provides maximum space, wider visibility and easy access to switches. The monitor is a full-color graphical display that allows the operator to understand the machine information easily. Overall, the new cab provides a comfortable environment for the operator. **pg. 6**

Environmentally Responsible Design

Quieter operation, lower engine emissions, less fluid disposal and cleaner service can help you meet or exceed worldwide regulations and protect the environment. **pg. 4**

SmartBoom™

More productive. Faster cycle times for truck loading and rock scraping. Maintains optimum hammering frequency for effective, steady productivity. **pg. 5**

With a HDHW undercarriage, the machine can take full advantage of its fast implements. This wider and heavier undercarriage also improves the general lift capacities.



Electronic Control System

The compact, full-color, graphical display monitor displays machine, maintenance, diagnostic and prognostic information in twenty different languages, as well as the rear view camera image. The Economy Mode and Power Management is selected from the monitor. To minimize sun glare, the monitor angle is adjustable. **pg. 7**

Booms, Sticks and Linkage

Caterpillar excavator booms and sticks are built for performance and long service life. Two types of booms and five sticks are available, offering a range of configurations suitable for a wide variety of applications. The 336D HDHW is also the ideal platform for the 18m Long Reach Excavation configuration. The bucket linkage pins have been enlarged to improve reliability and durability. All booms and sticks are stress relieved. **pg. 10**

Structures

Caterpillar design and manufacturing techniques assure outstanding durability and service life from these important components. The 336D HDHW comes standard with grease lubricated tracks. Cat designed excavator undercarriage is stable, durable and low maintenance for good machine stability and transportability. **pg. 8**

Work Tools

A variety of work tools, including buckets, couplers, hammers, crushers, pulverizers, multiprocessors, shears and grapples are available. **pg. 11**

Service and Maintenance

Fast, easy service has been designed with extended service intervals, advanced filtration, convenient filter access, auto-cleaning of cooling package, user-friendly electronic diagnostics for increased productivity and reduced maintenance costs. **pg. 9**

Complete Customer Support

Your Cat dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment. The dealer will help you choose a plan that can cover everything from machine and attachment selection to replacement. **pg. 9**



Engine

Built for power, reliability, economy and low emissions.

Meeting regulations... Exceeding expectations.



Performance. The Cat C9 engine with ACERT Technology offers more engine power, and runs at lower speeds for better fuel efficiency and reduced wear.

Power Management. Optimal machine performance for each type of application. The operator can change the engine power on the monitor from standard to high. The high power mode is recommended for extremely productive areas and for hard digging applications.

Automatic Engine Speed Control.

The two-stage, one-touch control maximizes fuel efficiency and reduces sound levels.

Engine Controller. ADEM A4™ (Advanced Diesel Engine Management) electronic control module manages fuel delivery to get the best performance per liter of fuel. The controller uses sensors in fuel, air intake, exhaust and cooling systems and 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.

Fuel Delivery. The Cat C9 features electronic controls that govern the mechanically actuated unit fuel injection system. Multiple injection fuel delivery involves a high degree of precision. Precisely shaping the

combustion cycle lowers combustion chamber temperatures, generating fewer emissions and optimizing fuel combustion. This translates into more work output for your fuel cost.

Cooling System. To reduce fan noise, the cooling fan is hydraulically driven with a variable speed control that manages fan speed to provide optimized cooling. A reversible fan is also offered as attachment to eject debris on demand or for programmed duration. The Cat C9 delivers a completely new layout that separates the cooling system from the engine compartment.

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.

Environmentally Responsible Design

Caterpillar machines not only help you build a better world, they help maintain and preserve the fragile environment.



Emissions. The Cat C9 with ACERT Technology introduces a series of evolutionary, incremental improvements that provide breakthrough engine technology built on systems and components developed by Caterpillar with proven reliability. The technology capitalizes on Cat expertise in four core engine systems: fuel, air, electronics and after treatment. By combining ACERT Technology with the new Economy Mode, customers can balance the demands of performance and fuel economy to suit their requirements and application. ACERT engines meet EC Stage IIIA emissions regulation.

Fewer Leaks and Spills. Engine oil and encapsulated hydraulic oil filters are positioned vertically and are easy to reach to minimize spillage. Service intervals are extended to reduce the times fluids are changed and handled. The hydraulic oil fine filtration system attachment extends the service interval from 2000 to 5000 hours. Compatible with Cat HEES hydraulic bio-oil for ecologically sensitive applications. Hydraulic oil service interval can be extended to 8000 hours with the S•O•S. program. Finally, the Cat Extended Life Coolant extends service up to 8000 h so there is less need for fluid disposal.

Hydraulics

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



Component Layout. The 336D HDHW hydraulic system and component locations have been designed to provide a high level of system efficiency. The main pumps, control valves and hydraulic tank are located close together to allow for shorter tubes and lines between components, which reduce friction loss, and pressure drops in the lines. The layout further provides greater operator comfort by placing the radiator on the cab side of the upper structure. This allows incoming air to enter the engine compartment from the operator side and hot air and corresponding engine sound to exit on the opposite side away from the operator. This reduces engine compartment heat and sound being transmitted to the operator.

Heavy Lift Mode. Maximizing lifting performance and boosting the lifting capability. Heavy loads can be easily moved in the full working range of the machine maintaining excellent stability.

Hydraulic Cross Sensing System. The hydraulic cross sensing system utilizes each of two hydraulic pumps to 100%, under all operating conditions. This improves productivity with faster implement speeds and quicker, stronger pivot turns.

Pilot System. The pilot pump is independent from the main pumps and controls the front linkage, swing and travel operations.

Boom and Stick Regeneration Circuit. Boom and stick regeneration circuit saves energy during boom-down and stick-in operation which increases efficiency, reduces cycle times and pressure loss for higher productivity, lower operating costs and increased fuel efficiency.



Electronic Control System.

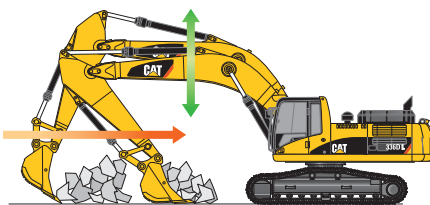
Ten hydraulic pump flow and pressure settings can be preset, eliminating the need to adjust the hydraulics each time a tool is changed.

Auxiliary Valve. The auxiliary valve is standard. Control circuits are optional, allowing for operation of high and medium pressure tools such as shears, grapples, hammers, pulverizers, etc.

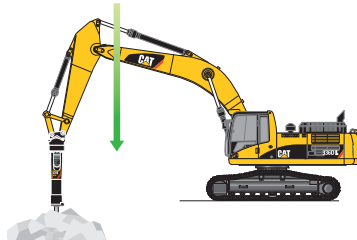
Hydraulic Cylinder Snubbers.

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 life.

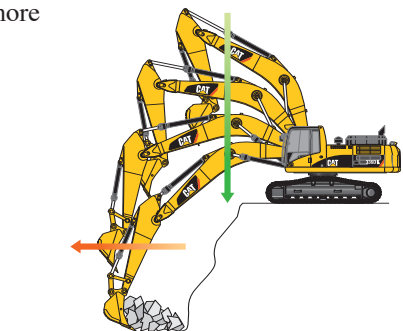
SmartBoom. Reduces stress and vibrations transmitted to the machine and provides a more comfortable environment.



Rock Scraping. Scraping rock and finishing work is easy and fast. SmartBoom simplifies the task and allows the operator to concentrate on stick and bucket, while boom freely goes up and down without using pump flow.



Hammer Work. The front parts automatically follow the hammer while penetrating the rock. Blank shots or excessive force on the hammer are avoided resulting in longer life for the hammer and the machine. Similar advantages with vibratory plates.



Truck Loading. Loading trucks from a bench is more productive and fuel efficient as the return cycle is reduced while the boom down function does not require pump flow.

Operator Station

Designed for simple, easy operation and comfort, the 336D HDHW allows the operator to focus on production.



Operator Station. Thanks to its higher position, the 336D HDHW cab gives the operator an enhanced view over the trench, the truck or the crusher. The workstation is spacious, quiet and comfortable, assuring high productivity during a long workday. The air conditioner and attachment switches are conveniently located on the right-hand wall, and the key switch and throttle dial are on the right-hand console. The monitor is easy to see and maximizes visibility.

Seat. An optional air suspension seat is available in the 336D HDHW. The standard and optional seats provide a variety of adjustments to suit the operator's size and weight including fore/aft, height and weight. Wide adjustable armrests and a retractable seat belt are also included.

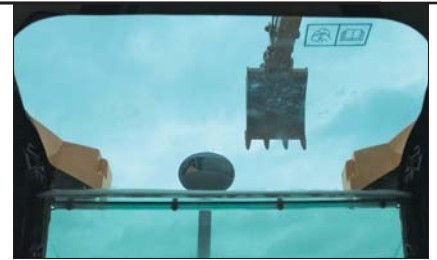
Climate Control. Positive filtered ventilation with a pressurized cab is standard. Fresh air or re-circulated air can be selected with a switch on the right console.

Hydraulic Activation Control Lever.

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

Controls. The 336D HDHW uses pilot operated control levers, positioned so the operator can operate with arms on the armrests. The vertical stroke is longer than the horizontal, reducing operator fatigue. The control lever grips are shaped to fit into the operator's hands. The horn switch and one-touch low idle switch are positioned on the left and right grip.

Implement Controls. Easy to handle joysticks with integrated push buttons and sliding switches control all implement and swing functions. The sliding switches provide modulated control for hydro-mechanical tools and are designed to increase operator comfort and reduce operator fatigue.



Skylight. A unique large polycarbonate skylight provides very good upward visibility, especially useful in above ground applications.

Windows. To maximize visibility, all glass is affixed directly to the cab eliminating the use of window frames. The Choice of a fixed or an easy-to-open split front windshield meets operator preference and application conditions.

- 70/30 split front windshield stores the upper portion above the operator. The lower front windshield features a rounded design to maximize downward visibility and improves wiper coverage.

Wiper. Designed to maximize visibility in poor weather conditions. The parallel wiper system covers almost the complete front window without leaving unwiped areas in the immediate line of sight of the operator.

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.

Electronic Control System

Manages the engine and hydraulics for maximum performance.



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

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

Standard Cab Equipment. To enhance operator comfort and productivity, the cab includes a lighter, drink holder, coat hook, service meter, literature holder, magazine rack and storage compartment.

Monitor Display Screen. The monitor is a full color 400x234 pixels Liquid Crystal Display (LCD) graphic display. The Master Caution Lamp blinks ON and OFF when one of the critical conditions below occurs:

- Engine oil pressure low
- Coolant temperature high
- Hydraulic oil temperature high

By default, the monitor displays the rear view camera image to assure a total control over the environment during operation. By pressing the "OK" button, the operator can toggle between this screen and the machine information display, divided in four different areas:

- **Clock and Throttle Dial Area.** The clock and the throttle dial position are in this area and the gas-station icon with green color is also displayed.
- **Gauge Area.** Three analog gauges, fuel level, hydraulic oil temperature and coolant temperature, are displayed in this area.
- **Event Display Area.** Machine information is displayed in this area with the icon and language.
- **Multi-information Display Area.** This area is reserved for displaying information that is convenient for the operator. The "CAT" logo mark is displayed when information to display does not exist.

Keypad. The keypad allows operator to select machine operation conditions and to set view preferences.



Structure

336D HDHW structural components and undercarriage are the backbone of the machine's durability.



Structures. Proven structural manufacturing techniques, assure outstanding durability and service life from these important components.

Robotic Welding. Up to 95% of the structural welds on a Caterpillar Excavator are completed by robots. Robotic welds achieve over three times the penetration of manual welds.

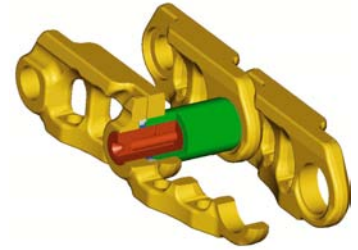
Heavy-duty High Wide Carbody Design and dedicated Track Roller Frames. X-shaped, box-section carbody provides excellent resistance to torsional bending. Robot-welded track roller frames are press-formed, pentagonal units to deliver exceptional strength and service life.



HDHW Undercarriage. The wide and durable Cat undercarriage absorbs stresses and provides excellent stability. Additionally, the high ground clearance is ideal in rocky environments, bringing the upper frame in a safer high position.

Rollers and Idlers. Sealed and lubricated track rollers, carrier rollers, and idlers provide excellent service life, to keep the machine in the field longer.

Long Undercarriage. The long undercarriage (L) maximizes stability and lift capacity. This long, wide and sturdy undercarriage offers a very stable work platform.



Tracks. The 336D HDHW comes standard with grease lubricated tracks. The track links are assembled and sealed with grease to decrease internal bushing wear, reduce travel noise and extend service life lowering operating costs.

Service and Maintenance

Simplified service and maintenance save you time and money.



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

Ground Level Service. The design and layout of the 336D HDHW was made with the service technician in mind. Many service locations are easily accessible at ground level allowing critical maintenance to get done quickly and efficiently.

Pump Compartment. A service door on the right side of the upper structure allows ground-level access to the pump and pilot filter.

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



Extended Service Intervals. 336D HDHW service and maintenance intervals have been extended to reduce machine service time and increase machine availability.

Diagnostics and Monitoring. Equipped with S•O•SSM sampling ports and hydraulic test ports for the hydraulic system, engine oil, and coolant. Electronic Technician (ET) tool is located behind the cab.

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

Fan Guard. Engine radiator fan is completely enclosed by fine wire mesh, reducing the risk of an accident.

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

Radiator Compartment. Easy access to radiator, oil cooler, air-to-air aftercooler. Reserve tank and drain cock are attached to the radiator for simplified maintenance.

Complete Customer Support

Cat dealer services help you operate longer with lower costs.



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. 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 the 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.

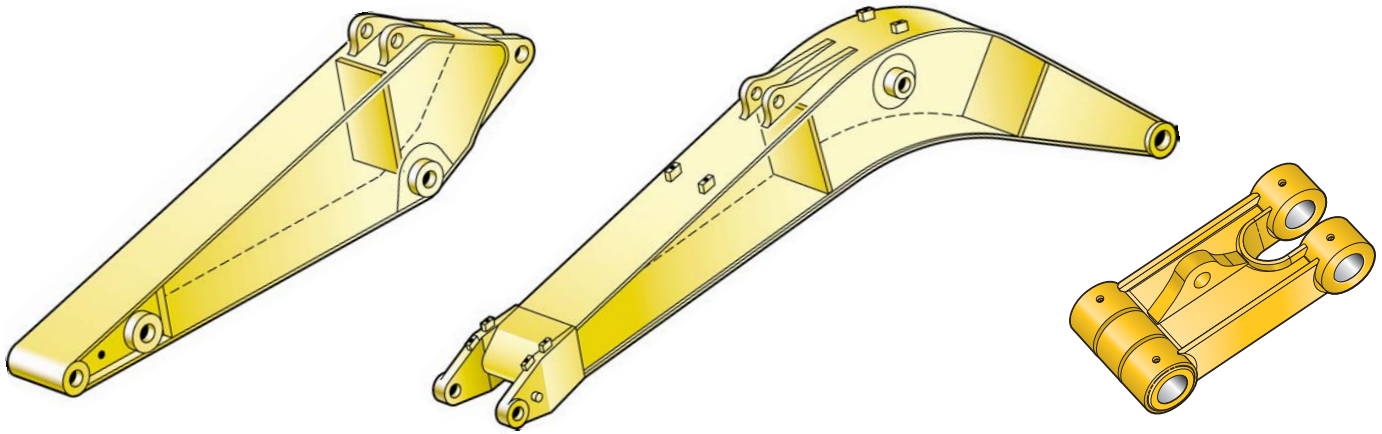
Product Support. You will find nearly all parts at our dealer parts counter. Cat dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime. You can save money with Cat remanufactured components.

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.

Booms, Sticks and Linkage

Designed for flexibility, high productivity, and efficiency in a variety of applications.



Front Linkage Attachments. Select the right combination of front linkage with your Cat dealer to ensure high productivity from the very start of your job. Two types of booms and five sticks are available, offering a range of configurations suitable for a wide variety of applications and offer a large combination of reach and digging forces for optimum versatility. All booms and sticks undergo a stress relieving process for greater durability.

Boom Construction. The booms have large cross-sections and internal baffle plates to provide long life durability.

HD Reach Boom. The heavy duty reach boom (6500 mm) is designed to balance reach, digging force and bucket capacity, offering a wide range of applications as digging, loading, trenching and working with hydraulic tools.

Mass Excavation Boom. The mass boom (6180 mm) is designed to provide maximum digging forces, bucket capacity and truck loading productivity.

Long Reach Excavation. The HD-HW undercarriage is the ideal platform to provide stability when working with longer front parts. Caterpillar offers 18m long reach front parts on the 336D HDHW. Please refer to the LRE specalog for more details about this configuration.

Stick Construction. Sticks are made of high-tensile strength steel using a large box section design with interior baffle plates and an additional bottom guard to protect against damage.

Reach Sticks. Three lengths of reach sticks are available to suit a variety of applications. Reach sticks use the DB linkage.

- R3.9DB. Designed for maximum reach and depth.
- R3.2DB. This stick provides the most versatile front linkage.
- R2.8DB. Suitable for the high-capacity buckets used in trenching, excavation and general construction work.

Mass Sticks. Two mass excavation sticks are available for higher digging forces and increased bucket capacity.

- M2.5TB1 and M2.1TB1. Designed for high volume earth moving, they deliver outstanding productivity.



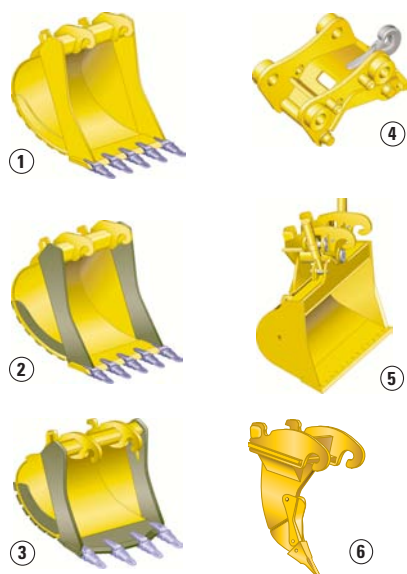
Bucket Linkage. Two bucket linkages (DB and TB) are available, with lifting eye on the power link.

Power Link. The new power link improves durability, increases machine-lifting capability in key lifting positions, and is easier to use compared to the previous lift bar design.

Linkage Pins. All pins used in front linkages have thick chrome plating, giving them high wear and corrosion resistance. The large diameter pins smoothly distribute the shear and bending loads to help ensure long pin, boom and stick life.

Work Tools

*A wide variety of Work Tools help optimize machine performance.
Purpose designed and built to Caterpillar's high durability standards.*



- 1 Excavation (X)
- 2 Extreme Excavation (EX)
- 3 Rock (R)
- 4 Quick Coupler
- 5 Ditch Cleaning
- 6 Ripper



Work Tools. Caterpillar work tools are designed to function as an integral part of your excavator and to provide the best possible performance in your particular application. All work tools are performance-matched to Cat machines.

Quick Couplers. Quick couplers enable the operator to simply release one work tool and connect to another, making your hydraulic excavator highly versatile. Productivity also increases, as a carrier no longer needs to be idle between jobs. Caterpillar offers hydraulic and spindle quick coupler versions.

Buckets. Caterpillar offers a wide range of specialized buckets, each designed and tested to function as an integral part of your excavator. Buckets feature the new Caterpillar K Series™ Ground Engaging Tools.

Ripper. The Caterpillar TR-series ripper provides a powerful single point of penetration force to break out rock and other difficult to excavate material.

Hammers. Cat hammer series deliver very high blow rates, increasing the productivity of your tool carriers in demolition and construction applications. Wide oil flow acceptance ranges make the Caterpillar hammers suitable for a wide range of carriers and provide a system solution from one safe source.

Orange Peel Grapples. The orange peel grapple is constructed of high-strength, wear-resistant steel, with a low and compact design that makes it ideal for dump clearance. There are several choices of tine and shell versions.

Multi-Grapples. The multi-grapple with unlimited left and right rotation is the ideal tool for stripping, sorting, handling and loading. The powerful closing force of the grab shells combined with fast opening/closing time ensures rapid cycle time which translates to more tons per hour.

Multi-Processors. Thanks to its single basic housing design, the multi-processor series of hydraulic demolition equipment makes it possible to use a range of jaw sets that can handle any demolition job. The multi-processor is the most versatile demolition tool on the market.

Vibratory Plate Compactors.

Cat compactors are performance-matched to Cat machines, and integrate perfectly with the Cat hammer line – brackets and hydraulic kits are fully interchangeable between hammers and compactors.

Shears. Cat shears provide superior and effective scrap processing, and are highly productive in demolition environments. Shears are compatible with a matching Cat excavator, and bolt-on brackets are available for either stick or boom-mounted options.

Bucket Specifications

Without Quick Coupler	Linkage	Width	Weight*	Capacity (ISO)	Fill Factor	HD Reach Boom 6500 mm			ME 6180 mm	
		mm	kg	m³	%	2800 mm	3200 mm	3900 mm	2150 mm	2550 mm
Excavation	DB	1000	1128	1.11	100				×	×
	DB	1350	1337	1.62	100				×	×
	DB	1500	1448	1.84	100				×	×
	DB	1600	1506	1.99	100				×	×
	DB	1650	1535	2.07	100				×	×
	DB	1700	1563	2.14	100				×	×
	DB	1800	1621	2.29	100			N	×	×
	TB	1500	1728	1.93	100	×	×	×		
Extreme Excavation	TB	1700	1906	2.24	100	×	×	×		
	DB	1350	1470	1.62	100				×	×
	DB	1500	1565	1.84	100				×	×
	DB	1600	1667	1.99	100				×	×
	DB	1650	1698	2.07	100				×	×
	DB	1700	1730	2.14	100			N	×	×
Rock	TB	1700	1933	2.24	100	×	×	×		
	DB	1000	1326	1.11	90				×	×
	DB	1650	1840	2.07	90				×	×
	TB	1500	1885	1.93	90	×	×	×		
Maximum load in kg (payload plus bucket)						5013	4723	4123	6052	5511
With Quick Coupler										
Excavation	DB	1000	1112	1.11	100				×	×
	DB	1350	1318	1.62	100				×	×
	DB	1500	1428	1.84	100				×	×
	DB	1600	1487	1.99	100			N	×	×
	DB	1650	1516	2.07	100			N	×	×
	DB	1700	1544	2.14	100			N	×	×
	DB	1800	1601	2.29	100		N	N	×	×
	TB	1500	1627	1.93	100	×	×	×		
Extreme Excavation	TB	1700	1801	2.24	100	×	×	×		
	DB	1350	1451	1.62	100				×	×
	DB	1500	1546	1.84	100			N	×	×
	DB	1600	1648	1.99	100			N	×	×
	DB	1650	1680	2.07	100			N	×	×
	DB	1700	1710	2.14	100			N	×	×
Rock	TB	1700	1822	2.24	100	×	×	×		
	DB	1000	1309	1.11	90				×	×
	DB	1650	1821	2.07	90			N	×	×
	TB	1500	1772	1.93	90	×	×	×		
Maximum load in kg (payload plus bucket)						4543	4253	4653	5552	5011

* Bucket weight including penetration plus tips



Max. Material Density
1200 kg/m³



Max. Material Density
1500 kg/m³



Max. Material Density
1800 kg/m³



Not recommended



Not compatible

Work Tools Matching Guide

Without quick coupler		mm	HD Reach Boom 6500 mm			ME 6180 mm	
			2800	3200	3900	2150	2550
Hammers		H130 S, H140D S, H160D S					
Multiprocessors		MP20 CC, CR, PP, PS, S, TS				N	N
		MP30 CC, CR, S			N		
		MP30 PP			N		
		MP30 PS			N		
		MP30 TS		N	N		
Crushers and Pulverizers		VHC-40				N	N
		VHC-50			N		
		VHP-40				N	N
		VHP-50			N		
Hydraulic Shears		S325				N	N
		S340	N	N	N		N
		S365B*					
Mechanical Grapples		G115				N	N
		G125			N		
Multi Grapples		G320				N	N
		G330			N		
Vibratory Plate Compactor		CVP110					
Clamshell Buckets (rehandling)		GOS-45 970					
		GOS-45 1120					
		GOS-45 1270					
		GOS-45 1580					
		GOS-45 1710					
		GOS-45 2020					
		GOS-45 2340			N		
		GOS-50 1200					
		GOS-50 1450					
		GOS-50 1700			N		
		GOS-50 1950		N	N		
		GOS-50 2200	N	N	N		
		GOS-50 2450	N	N	N		N
Orange Peel Grapples	5 tines	GSH22B 600					
		GSH22B 800					
		GSH22B 1000					
		GSH22B 1250					
	4 tines	GSH22H 600, 800					
		GSH22H 1000					
		GSH22H 1250					
* Boom mounted							
With quick coupler							
Quick Couplers		CW-45					
		CW-45S					
Hammers		H130 S, H140D S, H160D S					
Multiprocessors		MP20 CC, CR, S				N	N
		MP20 PP, PS, TS				N	N
		MP30 CC, CR, S		N	N		
		MP30 PP	N	N	N		
		MP30 PS	N	N	N		
		MP30 TS	N	N	N		N
Crushers and Pulverizers		VHC-40				N	N
		VHC-50		N	N		
		VHP-40				N	N
		VHP-50			N		
Hydraulic Shears		S325			N	N	N
Mechanical Grapples		G115				N	N
		G125		N	N		
Multi Grapples		G320			N	N	N
		G330			N		
Vibratory Plate Compactor		CVP110					

360° Working range

Over the front only

Quick coupler match

N Not recommended

Max. Material Density 1200 kg/m³

Max. Material Density 1800 kg/m³

Max. Material Density 3000 kg/m³

Engine

Cat C9 with ACERT Technology

Net Power at 1800 rpm

ISO 9249	200 kW/270 hp
80/1269/EEC	200 kW/270 hp

Bore 112 mm

Stroke 149 mm

Displacement 8.8 liters

- All engine horsepower (hp) are metric including front page.
- The C9 engine meets Stage IIIA emission requirements.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator.
- Full engine net power up to 2300 m altitude (engine derating required above 2300 m).

Sound

Operator Sound

- The operator sound level measured according to the procedures specified in ISO 6394:1998 is 78 dB(A), for cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environment.

Exterior Sound

- The labeled spectator sound power level measured according to the test procedures and conditions specified in 2005/88/EC is 105 dB(A).

Cab/FOGS

Cab/FOGS meets ISO 10262.

Hydraulic System

Main System

Maximum flow 2 x 280 l/min

Maximum pressure

Normal 350 bar

Heavy lift 360 bar

Travel 350 bar

Swing 280 bar

Pilot System

Maximum flow 43 l/min

Maximum pressure 39 bar

Boom Cylinder

Bore 150 mm

Stroke 1440 mm

Stick Cylinder

Bore 170 mm

Stroke 1738 mm

DB Family Bucket Cylinder

Bore 150 mm

Stroke 1151 mm

TB1 Family Bucket Cylinder

Bore 160 mm

Stroke 1356 mm

Machine and Major Component Weights

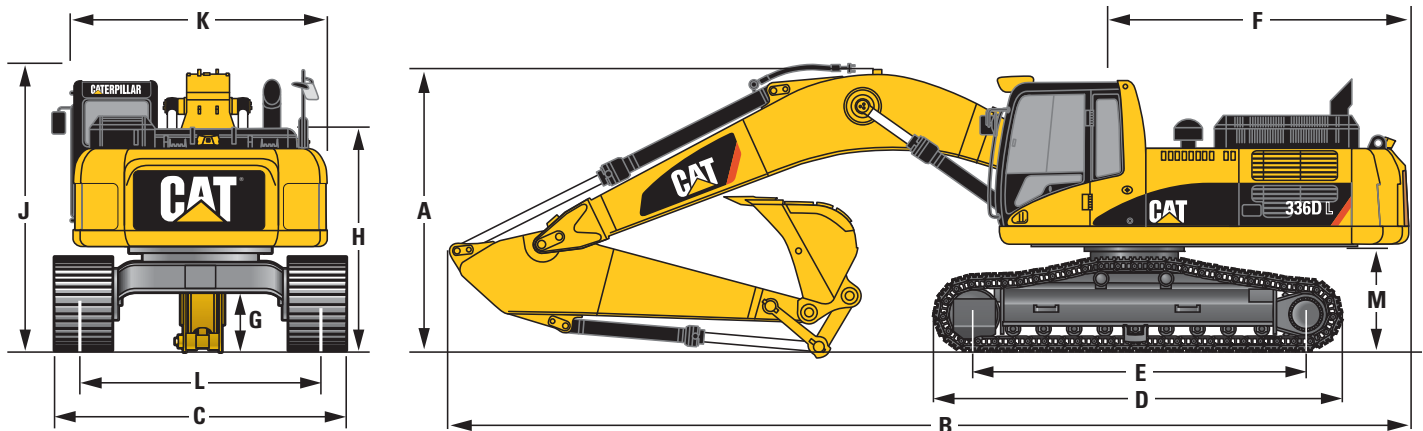
Actual weights and ground pressures will depend on final machine configuration.

		HD Reach Boom 6500 mm			ME boom 6180 mm	
		R2.8DB	R3.2DB	R3.9DB	M2.1TB	M2.5TB
Stick type						
Stick length	mm	2800	3200	3900	2150	2550
Bucket weight	kg	1560	1560	1560	188	1885
Bucket capacity	m ³	1.84	1.84	1.84	1.93	1.93
Bucket width/type	mm	1500	1500	1500	1500	1500
Operating weight*	kg	37 300	37 400	37 550	37 650	37 750
Ground pressure	bar	0.61	0.61	0.61	0.61	0.61
Stick weight (without bucket cylinder)	kg	1190	1260	1410	1240	1310
Boom weight (without stick cylinder)	kg	3020			2800	
Upperstructure (without counterweight)	kg	8710			8710	
Undercarriage	kg	14 790			14 790	
Counterweight	kg	6260			6260	

* With counterweight, bucket, operator and full fuel. The actual weight may vary between 37 100 and 40 000 kg depending on the kind and amount of attachments.

Dimensions

All dimensions are approximate.



	mm		mm		mm
A Shipping height (with bucket)		B Shipping length		C Track width	
Reach boom		Reach boom		700 mm shoes	3620
2800 mm stick	3640	2800 mm stick	11 190	D Track length	5020
3200 mm stick	3470	3200 mm stick	11 120	E Length to centers of rollers	4040
3900 mm stick	3610	3900 mm stick	11 160	F Tail swing radius	3500
Mass Excavation boom		Mass Excavation boom		G Ground clearance	720
2150 mm stick	3670	2150 mm stick	11 090	H Body height	2970
2550 mm stick	3640	2550 mm stick	10 850	J Cab height	
				Without FOGS	3510
				With FOGS	3680
				K Body width	2990
				L Track gauge	2920
				M Counterweight clearance	1480

Track Width

Undercarriage with triple grouser shoes	600 mm, 700 mm, 800 mm
	600 mm HD, 850 mm HD
Undercarriage with double grouser shoes	600 mm

Drive

Maximum Travel Speed	5.0 km/h
Maximum Drawbar Pull	300 kN

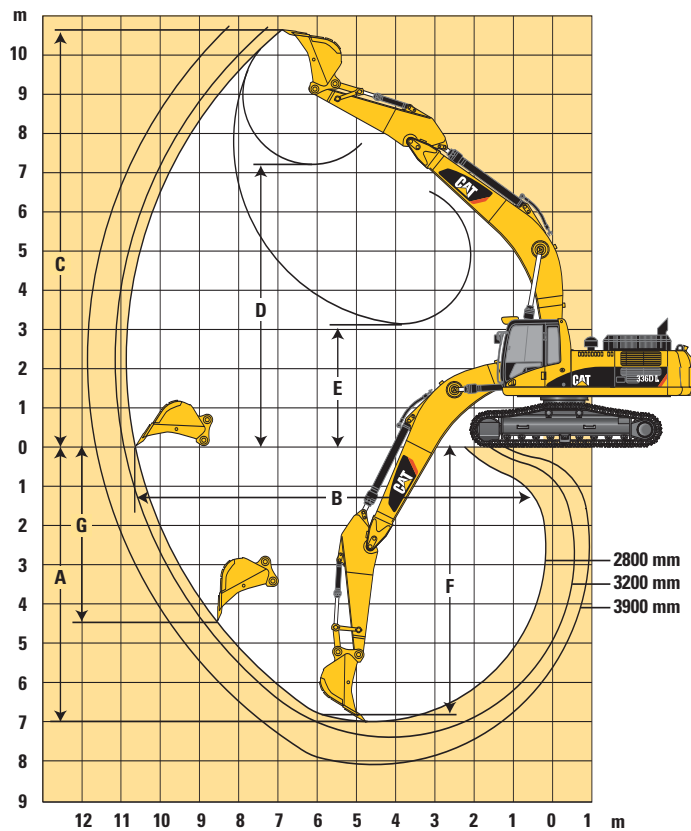
Swing Mechanism

Swing Speed	10 rpm
Swing Torque	108.6 kNm

Service Refill Capacities

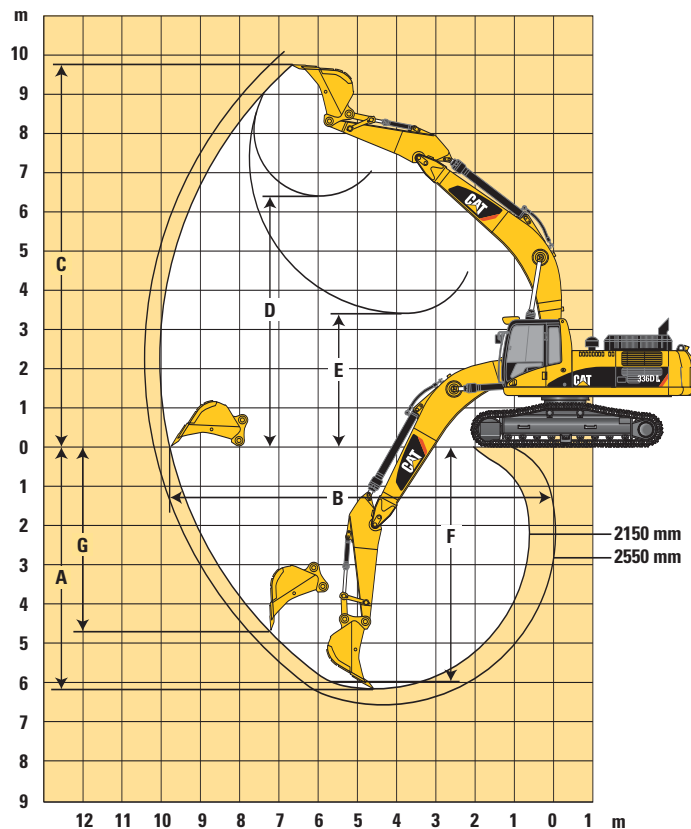
	Liters
Fuel Tank	620
Cooling System	40
Engine Oil	40
Swing Drive (each)	19
Final Drive (each)	8
Hydraulic system (including tank)	410
Hydraulic tank	310

Working Ranges – HD Reach Boom (6500 mm)



		R2.8DB	R3.2DB	R3.9DB
Stick Length	mm	2800	3200	3900
A Maximum Digging Depth	mm	-6865	-7265	-7965
B Maximum Reach at Ground Level	mm	10 680	10 980	11 700
C Maximum Cutting Height	mm	10 610	10 555	11 030
D Maximum Loading Height	mm	7330	7330	7765
E Minimum Loading Height	mm	3235	2830	2130
F Maximum Digging Depth 2500 mm Level Bottom	mm	-6695	-7100	-7830
G Maximum Vertical Wall Digging Depth	mm	-5340	-5380	-6255
Bucket Tip Radius	mm	1761	1761	1761
Bucket Forces (ISO 6015)	kN	191	186	178
Stick Forces (ISO 6015)	kN	186	171	154

Working Range – Mass Excavation Boom (6180 mm)



		M2.1TB	M2.5TB
Stick Length	mm	2150	2550
A Maximum Digging Depth	mm	-6020	-6420
B Maximum Reach at Ground Level	mm	9790	10215
C Maximum Cutting Height	mm	9965	10 305
D Maximum Loading Height	mm	6560	6840
E Minimum Loading Height	mm	3550	3150
F Maximum Digging Depth 2500 mm Level Bottom	mm	-5815	-6245
G Maximum Vertical Wall Digging Depth	mm	-4265	-4905
Bucket Tip Radius	mm	1897	1897
Bucket Forces (ISO 6015)	kN	232	221
Stick Forces (ISO 6015)	kN	222	199

Lift Capacities – HD Reach Boom (6500 mm)

All weights are in kg, without bucket, with quick coupler, heavy lift on.

















336D L

Medium Short Stick

2800 mm

Shoes

700 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				
															m
9.0 m													*7770	*7770	6.66
7.5 m									*7750	*7750			*7150	*7150	7.92
6.0 m									*7940	*7940			*6940	6110	8.74
4.5 m					*12 670	*12 670	*9960	*9960	*8590	7770	*7890	5720	*6980	5450	9.24
3.0 m					*15 930	*15 930	*11 530	10 460	*9410	7450	7900	5580	7240	5110	9.48
1.5 m					*18 070	15 210	*12 830	9930	*10 150	7160	7740	5430	7140	5010	9.48
0 m					*18 650	14 820	*13 540	9600	10 020	6950	7640	5340	7360	5140	9.23
-1.5 m			*13 370	*13 370	*18 130	14 770	*13 510	9470	9930	6870			7980	5570	8.72
-3.0 m			*18 860	*18 860	*16 630	14 930	*12 610	9540	*9620	6940			*8810	6490	7.9
-4.5 m			*18 230	*18 230	*13 730	*13 730	*10 240	9830					*8690	8560	6.63

















336D L

Medium Stick

3200 mm

Shoes

700 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				
															m
9.0 m													*6080	*6080	7.07
7.5 m									*7190	*7190			*5670	*5670	8.27
6.0 m									*7490	*7490	*5950	5870	*5550	*5550	9.05
4.5 m							*9400	*9400	*8190	7840	*7530	5770	*5630	5190	9.54
3.0 m					*15 030	*15 030	*11 030	10 570	*9070	7500	7920	5600	*5870	4860	9.78
1.5 m					*17 520	15 370	*12 470	9990	*9890	7180	7740	5430	*6320	4760	9.77
0 m			*8280	*8280	*18 520	14 830	*13 350	9600	10 010	6940	7610	5310	6980	4870	9.54
-1.5 m	*9640	*9640	*13 790	*13 790	*18 340	14 690	*13 530	9430	9880	6820	7570	5270	7520	5230	9.04
-3.0 m	*15 110	*15 110	*19 190	*19 190	*17 150	14 790	*12 890	9440	9900	6840			*8620	6020	8.25
-4.5 m			*20 020	*20 020	*14 680	*14 680	*11 040	9660					*8750	7710	7.04

















336D L

Long Stick

3900 mm

Shoes

700 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				
															m
9.0 m													*4710	*4710	8.04
7.5 m											*4930	*4930	*4410	*4410	9.1
6.0 m									*6680	*6680	*6550	5990	*4300	*4300	9.83
4.5 m									*7440	*7440	*6910	5840	*4330	*4330	10.28
3.0 m					*13 340	*13 340	*10 070	*10 070	*8400	7590	*7430	5640	*4480	4300	10.49
1.5 m					*16 330	15 700	*11 700	10 120	*9350	7220	7750	5430	*4760	4210	10.49
0 m			*8580	*8580	*18 000	14 910	*12 870	9630	10 000	6920	7560	5260	*5230	4280	10.27
-1.5 m	*8070	*8070	*12 340	*12 340	*18 410	14 580	*13 390	9360	9800	6740	7460	5160	*5970	4550	9.81
-3.0 m	*12 390	*12 390	*17 400	*17 400	*17 760	14 560	*13 169	9280	9750	6690	7480	5180	*7220	5110	9.09
-4.5 m	*17 560	*17 560	*21 800	*21 810	*15 970	14 780	*11 960	9400	*9030	6810			*8010	6240	8.01
-6.0 m			*17 130	*17 130	*12 420	*12 420	*8930	*8930					*7900	7900	6.42



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.

Lift Capacities – Mass Excavation Boom (6180 mm)

All weights are in kg, without bucket, with quick coupler, heavy lift on.
















336D L

Short Stick

2150 mm

Shoes

700 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				
														m	
7.5 m							*9080	*9080					*9050	*9050	6.72
6.0 m							*9560	*9560	*8890	7780			*8870	7470	7.67
4.5 m					*13 690	*13 690	10 720	*10 720	*9290	7590			*8910	6470	8.24
3.0 m					*16 690	15 830	*12 100	10 260	*9920	7310			8500	5980	8.51
1.5 m					*18 390	14 980	*13 180	9780	10 140	7060			8360	5850	8.51
0 m					*18 500	14 720	*13 600	9510	9970	6910			8690	6050	8.24
−1.5 m			*18 510	*18 510	*17 480	17 760	*13 170	9460	9970	6910			9690	6720	7.66
−3.0 m			*19 380	*19 380	*15 250	15 050	*11 520	9650					*9870	8290	6.72
−4.5 m					*10 770	*10 770							*9180	*9180	5.13














336D L

Medium Stick

2550 mm

Shoes

700 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m					
															m	
7.5 m														*6570	*6570	7.26
6.0 m							*8960	*8960	*8360	7860				*6350	*6350	8.15
4.5 m			*19 420	*19 420	*12 760	*12 760	*10 180	*10 180	*8870	7640				*6410	5930	8.69
3.0 m					*15 880	*15 880	*11 650	10 350	*9590	7340				*6700	5510	8.95
1.5 m					*18 000	15 140	*12 890	9830	10 140	7060				*7270	5390	8.94
0 m			*9850	*9850	*18 560	14 740	*13 510	9510	9940	6870				7990	5560	8.68
−1.5 m			*17 690	*17 700	*17 890	14 690	*12 320	9400	9880	6820				8790	6100	8.13
−3.0 m			*19 640	*19 640	*16 030	14 900	*12 070	9510						*9300	7310	7.24
−4.5 m			*16 290	*16 290	*12 310	*12 310								*8950	*8950	5.83



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

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

Electrical

Alternator – 80 amp
Heavy duty maintenance free batteries (2)
Lights working
Boom, both side
Cab interior
Cab mounted, two
Frame mounted
Rear view camera with display on monitor (EU countries only)
Signal/warning horn

Engine

Automatic engine speed control
Caterpillar C9 engine (200 kW)
Altitude capability to 2300 m
Fuel filter
High ambient cooling
Secondary engine shut-off switch

Side-by-side cooling system with separately mounted AC condenser
Water separator, with level indicator, for fuel line

Guards

6 mm swivel guard on undercarriage
Heavy duty bottom guards on upper frame
Heavy duty travel motor guards on undercarriage

Operator Station

Adjustable armrest
Air conditioner, heater and defroster with automatic climate control
Ashtray and 24 volt lighter
Beverage/cup holder
Bolt-on FOGS capability
Capability to install 2 additional pedals

Coat hook

EU sound criteria package

(EU countries only)

Floor mat, washable

Instrument panel and gauges with full color graphical display, start-up level checks

Laminated front windshield

Literature compartment

Mirrors – left and right

Neutral lever (lock out) for all controls

Positive filtered ventilation, pressurized cab

Rear window, emergency exit

Retractable seat belt

Sliding upper door window

Stationary skylight (polycarbonate)

Storage compartment suitable for a lunch box

Standard Equipment

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

Sunshade for windshield and skylight
Travel control pedals with removable hand levers
Windshield wiper and washer (upper and lower)

Undercarriage

Automatic swing parking brake
Automatic travel parking brakes
Grease lubricated track
Hydraulic track adjusters
Idler and center section track guards
Steps – four
Two speed travel

Other Standard Equipment

Auxiliary hydraulic valve for hydro-mechanical tools
Cat branded XT hoses and reusable couplings
Cat Datalink and capability to use ET
Caterpillar one key security system with locks for doors, cab and fuel cap
Cross-roller type swing bearing
Counterweight with lifting eyes
Drive for auxiliary pump

Heavy lift mode
Product Link (EU countries only)
Regeneration circuit for boom and stick
S•O•SSM quick sampling valves for engine oil, hydraulic oil and coolant
Steel firewall between engine and hydraulic pump compartment
Wiring provisions for Product Link

Optional Equipment

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

Front Linkage

Bucket linkages
 DB-family for DB sticks with lifting eye
 TB-family for TB sticks with lifting eye
Buckets and quick coupler (pg.11)
Booms (with two working lights)
 HD Reach
 – 6500 mm
 Mass excavation
 – 6180 mm
Sticks
 For reach boom
 – R2.8DB (2800 mm)
 – R3.2DB (3200 mm)
 – R3.9DB (3900 mm)
 For mass boom
 – M2.1TB1 (2150 mm)
 – M2.5TB1 (2550 mm)
Tips

Shoes

Triple grouser
 600 mm, 700 mm, 800 mm
 Heavy duty – 600 mm, 850 mm

Guards

FOGS, bolt-on
Full length track guiding guards (two piece)

Operator Compartment

Joysticks
 Four button joystick or single action auxiliary control
 Thumb wheel modulation joystick
Lunch box storage with lid
Machine security system with programmable keys
Radio
 AM/FM radio mounted in right hand console with antenna and speakers
 Radio ready mounting at rear location including 24V to 12V converter
Seat
 Adjustable high-back seat with mechanical suspension
 Adjustable high-back heated seat with air suspension
Straight travel pedal
Visor rain protection
Windshield
 1-piece
 70-30 split, sliding

Auxiliary Controls and Lines

Auxiliary boom lines (high pressure for reach and mass booms)
Auxiliary stick lines (high pressure for reach and mass booms)

Basic control arrangements:

- Single action (single action tool such as hammer, with direct return to tank)
- System, combined (single and double action tools, direct return to tank)
- System, Medium Pressure AHC (two directional flow attachment)
- Circuit, Cooling (circulating circuit for cooling hydraulic oil)

Universal control group for quick coupler

Miscellaneous Options

Bio hydraulic oil package
Boom lowering control device with SmartBoom
Cab front rain protector
Converters, 7 amp-12V
 – One
 – Two
Electric refueling pump with auto shut-off
Fine filtration filter
Jump start terminals
Rear view camera with display on monitor (standard for EU countries)
Starting aid for cold weather with ether
Stick lowering control device
Travel alarm with cut off switch

336D L Heavy-Duty High Wide Hydraulic Excavator

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

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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