340D L

Hydraulic Excavator

Engine	
Engine Model	Cat® C9 with ACERT™ Technology
Net Power at 1,800 rpm	
ISO 14396	209 kW (285 hp)
Gross Power (SAE J1995)	213 kW (290 hp)

Weights	
Operating Weight	38 080 to 39 160 kg
Drive	
Maximum Travel Speed	5 km/h
Working Ranges	
Maximum Reach at Ground Level	11 700 mm
Maximum Digging Depth	7960 mm

Performance by Design

The 340D L is powerful, reliable, durable with great productivity, making it the preferred hydraulic excavator for mining and quarry applications.

Contents

The 340D L is a highly productive machine configured with a heavy duty, high wide undercarriage which provides excellent stability characteristics. The 340D L can handle the toughest applications and is less resistant to damage because of this unique design. Improved visibility combined with world class comfort levels ensures reduced fatigue and optimized performance levels.

At the heart of the machines performance is a powerful Cat® C9 engine, which boasts 200 kW (272 hp) combined with a smooth, precise, hydraulic system. This highly efficient design minimizes losses and permits fast hydraulic cycle times.

Key Features

World class design with industry leading performance and reliability position the 340D L in a class of its own.

Undercarriage

With a heavy-duty high wide undercarriage, the machine can take full advantage of its fast implements. This wider and heavier undercarriage also improves lifting performance over the front and side of the machine.

Performance

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

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.

Engine

The Cat C9 engine with ACERT™ Technology provides 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 performance and fuel economy to suit their requirements and applications.

Maximum Versatility

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

Operation Station

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

Engine

Built for power, reliability and economy.

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

Flexible power modes allow an operator to balance productivity and fuel consumption needs to suite a wide range of 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. It tracks engine and machine conditions while keeping the engine operating at peak efficiency.

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.

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.

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; such high precision would translate into more work output for your fuel cost.

Component Layout

All hydraulic components are located in close proximity to maximize system efficiency.

Hydraulic Cross Sensing System

The hydraulic cross sensing system utilizes each of two hydraulic pumps to 100%, under all operating conditions.

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 increases efficiency, help to reduce cycle times and pressure loss for higher productivity, lower operating costs and increased fuel efficiency.

Hydraulics

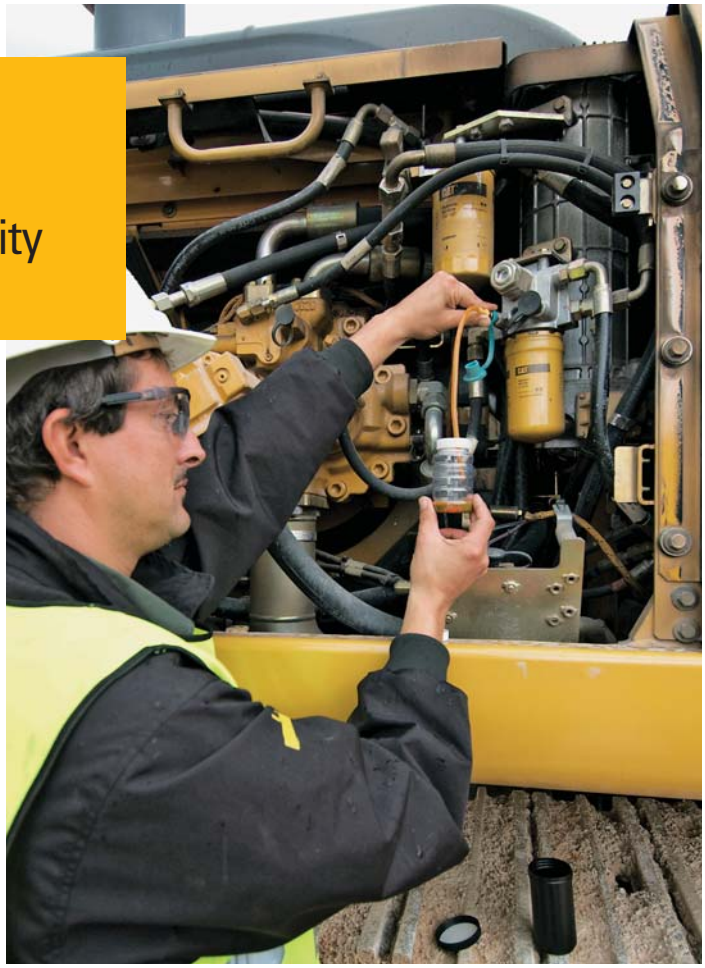
Cat hydraulics deliver power and precise control to keep material moving.

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.

Structures

Advanced design and manufacturing techniques enable outstanding durability whatever the application.



Robotic Welding

Up to 95% of the structural welds on a Cat 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 340D L track links are assembled and sealed with grease to decrease internal bushing wear, reduce travel noise and extend service life lowering operating costs.

Booms, Sticks and Linkage

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

The 340D L has been designed with multiple front linkage options to optimize your application from a productivity and fuel efficiency perspective.

Cat booms incorporate large cross sections and internal baffle plates to enable long life durability.

Cat sticks are made of high tensile steel and incorporate large cross sections and internal baffle plates and to enable long life durability.

Reach Front

Designed to balance digging force, bucket size and reach requirements making this suitable for a wide range of applications.

Mass Excavation Front

Designed for high productivity truck loading applications where larger size buckets and reduced cycle times are needed.

Cat Quality and Efficient Maintenance, Preserving High Performance

Fast Efficient Service with Extended Intervals

Ground level, easy access to most service points with extended intervals to increase machine availability.

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.

Main Hydraulic Filter

The hydraulic capsule filter is situated outside the tank preventing contaminants from entering the system during routine service making it more reliable.

Capsule Filter

The hydraulic filter is a capsule design and situated outside of the hydraulic tank. This prevents contaminants from entering the system when hydraulic oil is changed making the system more reliable.

Radial Seal Main Air Cleaner

Radial seal main air cleaner has a double-layered filter element for more efficient filtration. No tools are required to change the element.

Operator Station

Ergonomically designed and easy to operate with simple low effort controls allowing the operator to maximize performance.

- Ergonomically designed operator station with excellent visibility is designed to help reduce fatigue and maximize productivity.
- Low effort, pilot operated joystick controls are designed to match the operator's natural wrist and arm position for maximum comfort and minimum fatigue.
- The 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.
- Pillar-mounted wipers increase the operator's viewing area and offer continuous and intermittent modes.
- Full color 400 × 234 pixels Liquid Crystal Display (LCD) graphic display.
- Pressurized cab provides positive filtered ventilation and fresh or re-circulated air.
- Viscous rubber cab mounts are used to dampen vibrations and reduce sound levels.
- The standard Suspension Seat has multiple adjustment points to accommodate an operator's weight and size.
- Engine Emergency Stop Switch is located below the operator's seat.
- 12 V Power Outlets can be used to power external equipment.

340D L Hydraulic Excavator Specifications

Engine

Engine Model	Cat® C9 with ACERT™ Technology
Net Power at 1,800 rpm	
ISO 9249	200 kW (272 hp)
ISO 14396	209 kW (285 hp)
Gross Power (SAE J1995)	213 kW (290 hp)
Bore	112 mm
Stroke	149 mm
Displacement	8.8 L

- All engine horsepower (hp) are metric including front page.
- The C9 engine meets U.S. EPA Tier 2, Euro Stage II and China Stage II regulations.
- 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).

Weights

Operating Weight	38 080 to 39 160 kg

Track Width

Undercarriage with Double Grouser Shoes	600 mm

Swing Mechanism

Swing Speed	10 rpm
Swing Torque	108.6 kN·m

Drive

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

Service Refill Capacities

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

Hydraulic System

Main System	
Maximum Flow	2 × 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

Sound Performance

Performance	ANSI/SAE J1166 OCT98

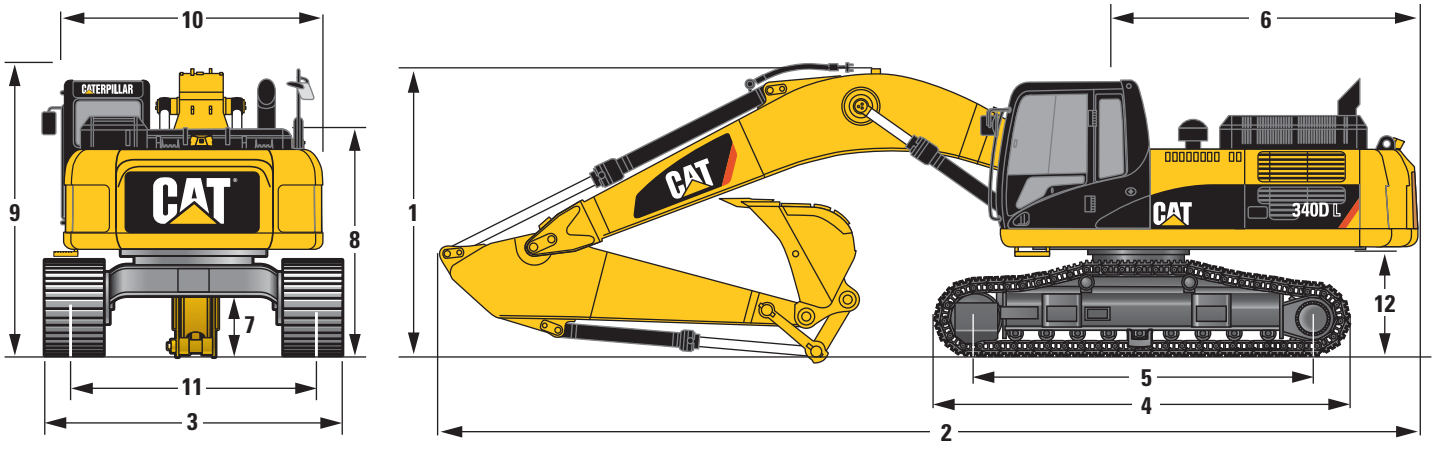
- When properly installed and maintained, the Cat cab, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environment.

Standards

Cab/FOGS	Meets ISO 10262

Dimensions

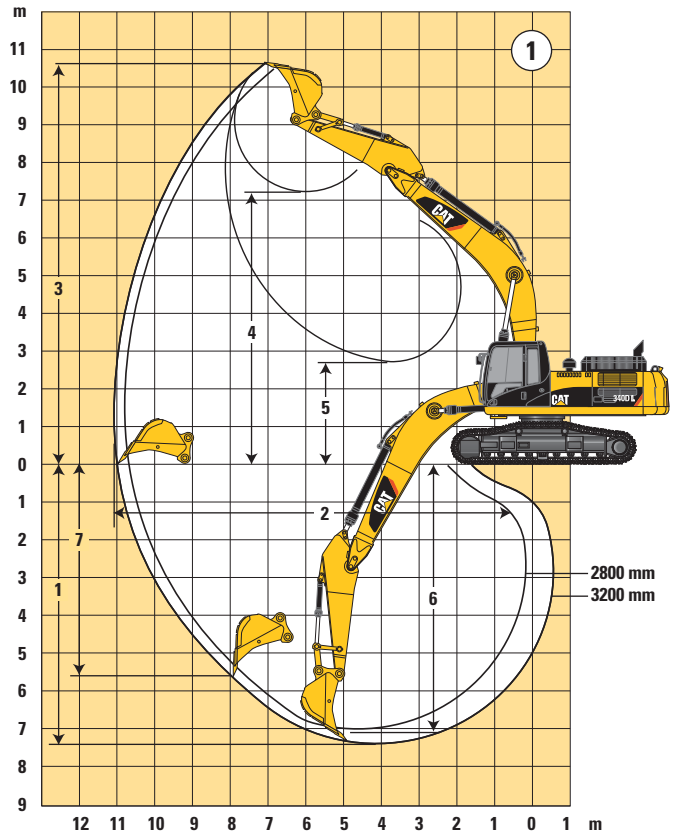
All dimensions are approximate.

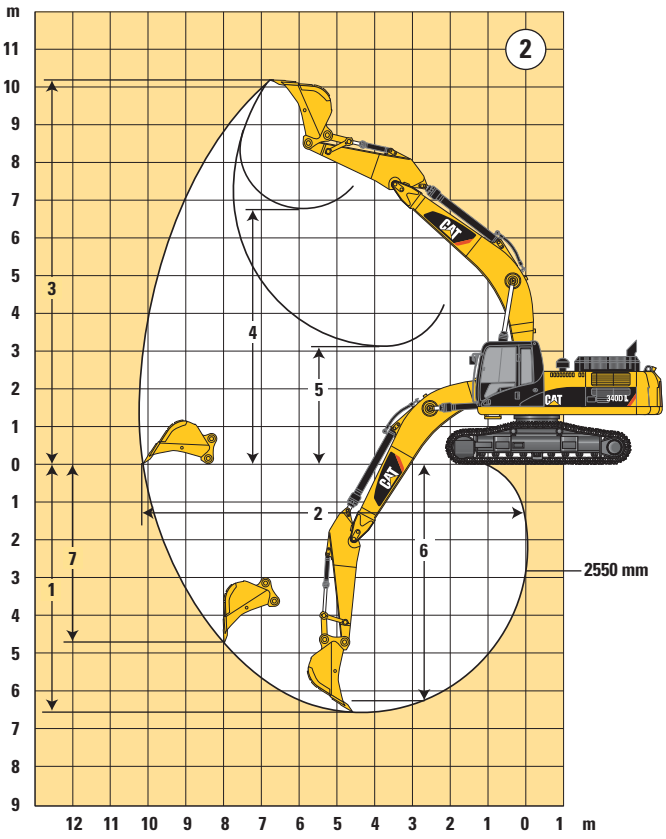


	mm
1 Shipping Height (with bucket)	
Reach Boom	
2800 mm Stick	3690
3200 mm Stick	3590
Mass Excavation Boom	
2550 mm Stick	3700
2 Shipping Length	
Reach Boom	
2800 mm Stick	11 200
3200 mm Stick	11 150
Mass Excavation Boom	
2550 mm Stick	10 860
3 Track Width	
600 mm Shoes	3520
4 Track Length	5066
5 Length to Centers of Rollers	4040
6 Tail Swing Radius	3500
7 Ground Clearance	743
8 Body Height	2993
9 Cab Height	
Without FOGS	3420
10 Body Width	2960
11 Track Gauge	2920
12 Counterweight Clearance	1500

340D L Hydraulic Excavator Specifications

Working Ranges





		1 HD Reach Boom (6500 mm)		2 Mass Excavation Boom (6180 mm)
Stick Type		**R2.8DB**	**R3.2DB**	**M2.5TB**
Stick Length	mm	2800	3200	2550
1 Maximum Digging Depth	mm	6922	7322	6434
2 Maximum Reach at Ground Level	mm	10 780	11 084	10 267
3 Maximum Cutting Height	mm	10 620	10 550	10 260
4 Maximum Loading Height	mm	7274	7277	6833
5 Minimum Loading Height	mm	3177	2771	3140
6 Maximum Digging Depth 2500 mm Level Bottom	mm	6645	7035	6255
7 Maximum Vertical Wall Digging Depth	mm	5650	5712	4820
Bucket Tip Radius	mm	1870	1870	1956
Bucket Forces (ISO 6015)	kN	176	176	218
Stick Forces (ISO 6015)	kN	175	158	180

Machine and Major Component Weights

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

		HD Reach Boom 6500 mm		Mass Excavation Boom 6180 mm
Stick Type		**R2.8DB**	**R3.2DB**	**M2.5TB**
Stick Length	mm	2800	3200	2550
Bucket Weight	kg	1910	1910	2290
Bucket Capacity	m^3	1.88	1.88	2.14
Bucket Width/Type	mm	1570	1570	1551
Operating Weight*	kg	38 080	38 230	38 585
Ground Pressure	bar	0.71	0.71	0.71
Stick Weight (without bucket cylinder)	kg	1190	1260	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

340D L Hydraulic Excavator Specifications

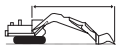
Lift Capacities – HD Reach Boom (6500 mm)**

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

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach

Medium Short Stick – 2800 mm

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				
																m
9.0 m	kg													*7770	*7770	6.66
7.5 m	kg									*7750	*7750			*7150	*7150	7.92
6.0 m	kg									*7940	*7940			*6940	6110	8.74
4.5 m	kg					*12 670	*12 670	*9960	*9960	*8590	7770	*7890	5720	*6980	5450	9.24
3.0 m	kg					*15 930	*15 930	*11 530	10 460	*9410	7450	7900	5580	7240	5110	9.48
1.5 m	kg					*18 070	15 210	*12 830	9930	*10 150	7160	7740	5430	7140	5010	9.48
0 m	kg					*18 650	14 820	*13 540	9600	10 020	6950	7640	5340	7360	5140	9.23
–1.5 m	kg			*13 370	*13 370	*18 130	14 770	*13 510	9470	9930	6870			7980	5570	8.72
–3.0 m	kg			*18 860	*18 860	*16 630	14 930	*12 610	9540	*9620	6940			*8810	6490	7.90
–4.5 m	kg			*18 230	*18 230	*13 730	*13 730	*10 240	9830					*8690	8560	6.63

Medium Stick – 3200 mm

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

*Limited by hydraulic rather than tipping load.

**Lifting capability increases about 3% when heavy lift mode on.

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. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

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

Lift Capacities – Mass Excavation Boom (6180 mm)**

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

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach

Medium Stick – 2550 mm

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

*Limited by hydraulic rather than tipping load.

**Increases about 3% when heavy lift mode on.

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. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

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

340D L Standard Equipment

Standard Equipment

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

ELECTRICAL

- Alternator – 80 amp
- Heavy duty maintenance free batteries (2)
- Lights working
  - Boom, both sides
  - Cab interior
  - Cab mounted, two
- Signal/warning horn

ENGINE

- Automatic engine speed control
- Cat C9 engine
  - Altitude capability to 2300 m
- Fuel filter
- High ambient cooling
- Prefilter, air
- Secondary engine shut-off switch
- Side-by-side cooling system with separately mounted AC condenser
- Water separator, with level indicator, for fuel line

GUARDS

- Full length track guiding guards (two piece)
- 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
- 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
- Sunshade for windshield and skylight
- Travel control pedals with removable hand levers
- Windshield wiper and washer

UNDERCARRIAGE

- Automatic swing parking brake
- Automatic travel parking brake
- Grease lubricated track
- Hydraulic track adjusters
- Idler and center section track guards
- Steps – four
- Two speed travel
- Shoes
  - Double grouser, 600 mm

OTHER STANDARD EQUIPMENT

- Auxiliary hydraulic valve for hydro-mechanical tools
- Cat XT™ hoses and reusable couplings
- Cat Datalink and capability to use ET
- Cat one key security system with locks for doors, cab and fuel cap
- Cross-roller type swing bearing
- Counterweight without lifting eyes*
- Drive for auxiliary pump
- Product Link*
- Regeneration circuit for boom and stick
- S·O·S℠ quick sampling valves for engine oil, hydraulic oil and coolant
- Steel firewall between engine and hydraulic pump compartment

**Offering varies for different regions*

Optional Equipment

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

FRONT LINKAGE

- Bucket linkages
  - DB-family for DB sticks
  - TB-family for TB sticks
- Buckets and quick coupler
- 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)
  - For mass boom
    - M2.5TB1 (2550 mm)

OPERATOR STATION

- Joysticks
  - Four button joystick or single action auxiliary control
- Lunch box storage with lid
- 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
- 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)

MISCELLANEOUS OPTIONS

- Converters, 10 amp-12V
  - One
- Starting aid for cold weather
- Travel alarm

**Offering varies for different regions*

340D L Hydraulic Excavator

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

AEHQ6632 (07-2012)