VOLVO WHEEL LOADER

L330E

VOLVO

L330E - HARNESS THE POWER OF 500 HORSES

Profitability is about moving as much material as possible – with speed and without downtime. A production loader has to work efficiently, hour after hour, shift after shift, with minimum impact on machine, operator and the environment. This is precisely what the Volvo L330E is designed for. You're looking at an extremely powerful 50-ton production machine, ready for even the toughest challenges.

The Volvo L330E responds immediately with its 502 hp, electronically-controlled low-emission engine, which delivers full power even at low rpm. What's more, the tried and tested Z-bar Linkage, load sensing hydraulics and a full range of buckets make the L330E a robust and productive loader. Indeed, it's ideal for loading shot rock, carrying blocks, handling timber, working in foundries or feeding cargo vessels.

A factory on wheels

The bigger the machine, the tougher the demands are on reliability. In fact, a big loader is a bit like a factory on wheels and, therefore, requires a business-like approach where revenues far outweigh costs. In light of this, you'll be glad to know that in most applications, the L330E is more fuel-efficient than other machines in its size class. Throw in reliability and you're looking at outstanding economy and productivity. The result? A significant increase in profitability.

Strongest in its class

Handling shot rock and other heavy materials efficiently requires more than high breakout force. The L330E's rapid engine response, coupled with the superior agility of its load-sensing hydraulics, helps to make the L330E a quick and efficient tool. In short, the L330E is one of the leanest and most powerful production machines on the market.

Maximum productivity 24 hours a day, every day

With big loaders, availability is everything. If the machine stops, work stops. That is why the L330E is designed to run around the clock. Thanks to the electronic monitoring system, the operator can keep a close eye on fluid levels, fuel consumption and running time. This keeps downtime to a minimum. Large service panels with readily accessible filters, highly trained service personnel and the rapid distribution of spare parts provide maximum availability. Add customized service contracts and spare parts warranties, and it's not hard to see why the L330E is the most productive and reliable machine in the business. Shift after shift, year after year.

Specifications L330E

Engine:	Volvo D16B LA E2	
Max. power at	30,0 r/s	**(1800 r/min)**
SAE J1995 gross:	370 kW	**(503 hp)**
ISO 9249, SAE J1349 net:	369 kW	**(502 hp)**
Breakout force:	453,6 kN*	**(101,970 lbf)**
Static tipping load at full turn:	31 490 kg*	**(69,420 lb)**
Buckets:	6,1-13,5 m^3	**(8.0-17.7 yd^3)**
Log grapples:	5,5-6,3 m^2	**(59.2-67.8 ft^2)**
Operating weight:	50,0-53,0 t	**(110,250-116,850 lb)**
Tires:	35/65 R33, 35/65-33 875/65 R33	

* Bucket: 6,9 m^3 **(9.0 yd^3)** straight edge teeth and segments, Tires: 35/65 R33, Standard boom


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THE ART OF MOVING MOUNTAINS AS CHEAPLY AND QUICKLY AS POSSIBLE

Load more tons per hour with the Volvo L330E. Its powerful engine and the fully Automatic Power Shift (APS) gearshifting system provide immediate response even in the toughest conditions. And the rugged axles are designed to ensure that the rimpull is there when needed. The result is high productivity and unparalleled economy.

Rapid response for high productivity and low operating costs
Even when idling, the 16 liter, high-performance engine delivers maximum torque. The machine responds quickly and forcefully with excellent rimpull, full hydraulic power, low fuel consumption and low-emissions. And thanks to the low rpm performance, the service life of the engine is extended. With the L330E, you've got an unbeatable combination of high-productivity and low operating costs – both now and in the years ahead.

Engine rpm and ground speed dependent automatic shifting
The automatic countershaft transmission provides smooth and effective gear shifting in all gears. All the operator has to do is select forward, reverse or Kick-down and APS automatically selects the right gear according to both engine rpm and ground speed, regardless of application.

Volvo axles keep you on the ground
Volvo's tried and tested axles and drivetrain are well matched and designed for top dependability. The rear axle is located in a cast iron cradle, while the front and rear limited slip differentials help improve traction in even the toughest terrain.

Give yourself a brake
The L330E features oil circulation-cooled wet disc brakes, designed for smooth, effective braking and a long service life. The external axle oil cooler* provides additional cooling for tough applications and furthermore the axle oil is filtered, which greatly increases the life cycle of the oil.

Engine
- Volvo D16B, a turbocharged, air-to-air intercooled, low-emission engine with electronically-controlled fuel injection, delivers high torque even at low rpm.
- To optimize performance, the engine's computer communicates with all other systems, ensuring quicker response, lower fuel consumption and faster work cycles.
- The electronically-controlled hydrostatic fan is only activated when necessary, thus saving fuel.

Transmission
- The rugged, enhanced countershaft transmission features intelligent automatic gearshifting for smoother, faster gear changes.
- With APS, the operator can select one of four modes for optimum performance and minimum fuel consumption.

Axles
- A two-stage axle oil temperature alert provides effective protection of components and a longer service life.
- Standard limited slip differentials on both axles for easy operation, even in tough underfoot conditions.

Brakes
- Oil circulation-cooled wet disc brakes ensure effective braking and a long service life.
- An electronic brake test in Contronic gives you instant access to the status of the brakes.
- A brake wear indicator on each wheel allows you to easily check the brake pad wear.

* Optional equipment


VOLVO
L330E

A SMART MACHINE DOESN'T WEAR OUT QUICKLY

A powerful loading unit, load sensing hydraulics, smooth steering and stable operation help make the L330E a precision performer. No unnecessary energy is wasted pumping excess oil around the hydraulic system, which ultimately means you can load more material per unit of fuel with a L330E than any competing machine in its class.

Z-bar Linkage – tried and tested in mines and quarries
Z-bar Linkage delivers high breakout torque at ground level, allowing the operator to handle heavy material with no loss of power at any point in the loading cycle. This helps make the L330E an exceptionally efficient production machine.

Hydraulics that make sense
The L330E features an intelligent load sensing hydraulic system. Two variable piston pumps provide the exact flow and pressure required at any given moment, distributing power when and where it's needed. When the hydraulic system isn't being used, the entire engine output is transferred to the drivetrain. In addition to rapid response, the system facilitates smoother operation, lower fuel consumption and precise control, even at low rpm.

Precision steering makes it easy to maneuver
Steering is easy, yet precise, even at low rpm. The load sensing hydrostatic steering system is only activated when the wheel is turned, which means that neither fuel nor power is wasted.

Smooth on rough surfaces
With a long wheelbase, the L330E is smooth and stable even on rough surfaces. Volvo's Boom Suspension System (BSS)* features gas/oil accumulators to help absorb shocks and smooth out rough roads.

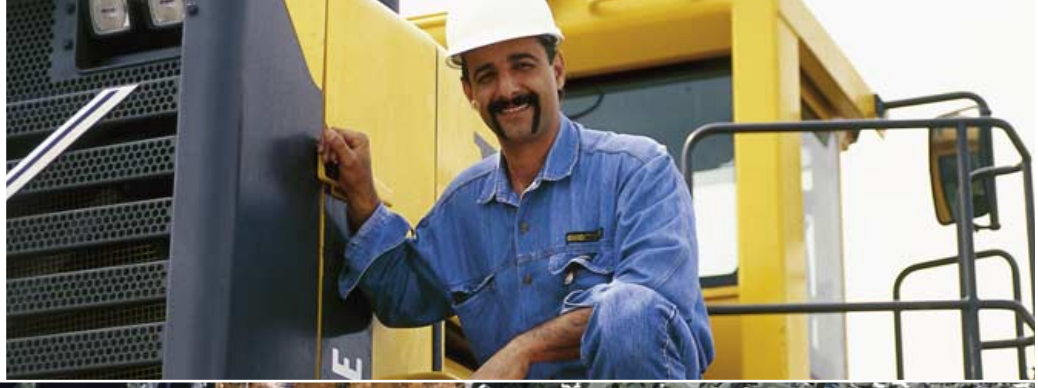
Z-bar Linkage
- Well proven lift-arm system with high breakout force and optimum lifting power throughout the work cycle.
- Compact geometry keeps the bucket close to the machine, providing stable load and carry work.

Load sensing hydraulics
- The load sensing hydraulic system ensures that hydraulic oil is pumped around the system only when and where it's needed. This guarantees greater efficiency and lower fuel consumption.
- Pilot-operated hydraulics allow precise control of the attachments, making life easier and safer for the operator.

Steering
- Load sensing steering only uses power when it's needed, thereby saving fuel.
- E-series loaders feature an accumulator system, providing stable, smooth steering and greater safety.

Frame
- Rugged frame design for secure mounting of components reduces vibrations and increases service life.
- Longer wheelbase increases stability for faster and more comfortable cycles.
- Volvo's frame joint bearing design is a well-proven concept that's easy to maintain and renowned for its long service life.

* Optional equipment




VOLVO
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AN ALERT OPERATOR IS A PRODUCTIVE OPERATOR

Volvo Care Cab reinforces Volvo's reputation as a leader in operator environments and cab comfort. We never forget the operator inside the machine. A comfortable, operator-friendly and safe environment makes the workday easier and more productive.

A clean and comfortable workplace
The right cab climate does wonders for efficiency, keeping operators sharp during long shifts. In fact, all incoming air is filtered in two stages, making this one of the cleanest cabs on the market. Even the recirculated air is filtered. Furthermore, Volvo's state-of-the-art air-conditioning* provides a pleasant temperature year-round, regardless of outdoor conditions. So even after a long work shift, the air in the cab is still fresh, and the operator's mind is still clear.

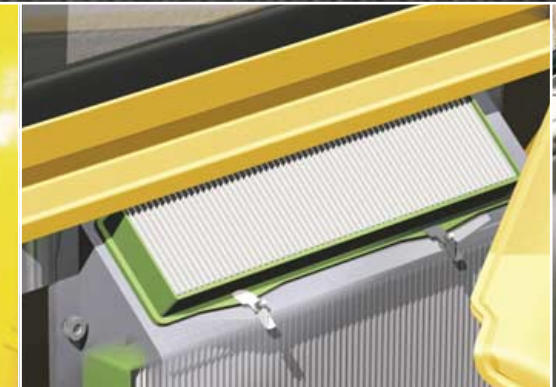
Comfort and productivity go hand-in-hand
There is a range of comfortable seats, all of them with multiple adjustment functions for optimal individual comfort. All instruments are visible at a glance, and all important information is right in front of the operator. The forward, reverse and Kick-down functions are situated both on the lever on the left-hand side of the steering wheel and on the hydraulic console to the right. And thanks to Comfort Drive Control (CDC)*, you can steer, change directions and Kick-down to first gear with easy-to-use controls integrated into the left-hand armrest – an excellent way to combat fatigue and static muscle strain. Furthermore, to avoid monotonous arm movements, you can shift at any time from CDC steering to using the steering wheel.

Low noise levels
Thanks to the ingenious cab mounts and heavy-duty insulation, the Care Cab is one of quietest cabs on the market. By reducing tiresome earfuls and annoying vibrations, the operator will stay sharp throughout the shift. In short, it's a great place to work.

Care Cab
- Unrivalled operator environment with one of the market's best cab filtration systems.
- Pleasant interior with superior finish makes it easy-to-maintain and keep clean.
- Adjustable seat, armrest, hydraulic lever console and steering wheel* for optimal operator comfort and high production.
- All service platforms and entry ladders boast improved anti-slip surfaces. Sloped entry ladder for easy cab access.
- Large windshield, narrow pillars and a sloped engine hood ensure good panoramic visibility, thus further increasing safety.
- Powerful halogen lighting to the front and rear provides good visibility over the entire work area.

* Optional equipment


TURBO
50 %
60 %
VOLVO



RAPID SERVICE FOR MAXIMUM AVAILABILITY

Few machines have to work in tougher environments than a wheel loader. And the machine has to keep running day in, day out – without downtime. Naturally, in the event that something occurs, we offer a wide range of service solutions specially adapted to the conditions you work in – the toughest imaginable. Our focus is to deliver what you expect – maximum productivity, year after year.

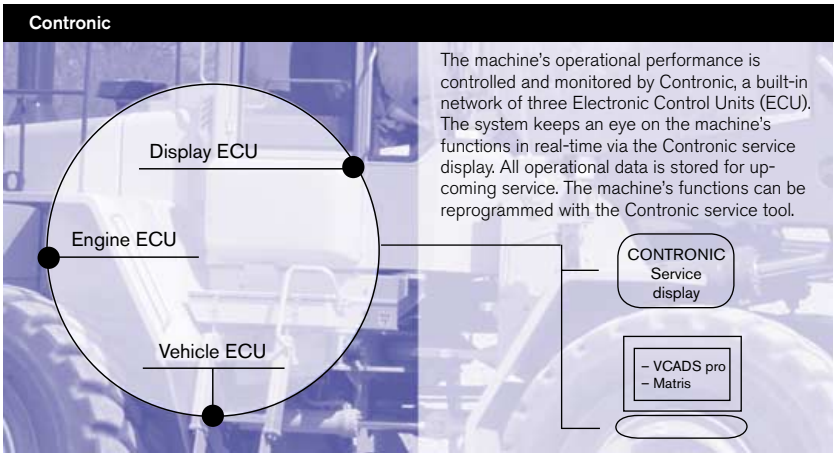
More time for productive work
Now that you can check your fluid levels electronically, daily maintenance is that much easier. Filters and service points are readily accessible from ground level. The service doors are large, easy-to-open and well supported with gas struts. The radiator grille and fan swing-out for easy cleaning and the pressure check ports and quick connect fittings are grouped together for quick and easy checks.

Contronic keeps an eye on everything
The machine's operation and performance are controlled and monitored by Volvo Contronic, a built-in electronic network made up of three computers. The system works on three levels.

Level 1: The system keeps an eye on the machine's functions in real-time. Should a potential problem occur, Contronic alerts the operator instantly. A service technician can then connect his Contronic service tool to the system and trace the fault on the spot.

Level 2: All operational data is stored and can be used to analyze the machine's performance and trace its history since the latest service. This information is then presented in the Machine Tracking Information System (MATRIS), providing valuable information for fault tracing and service measures.

Level 3: This allows the machine's functions to be optimized according to a change in working conditions via the Contronic service display. Thanks to the VCADS Pro analysis and programming tool, the machine's functions and performance can be monitored and adapted to changing conditions.



MATRIS (MAchine TRacking Information System) stores operational data regarding the machine's performance. This is valuable information for troubleshooting and service.

Contronic electronic monitoring system
- Engine and machine data are coordinated for optimum performance and safety.
- Display information in three categories: operational data, warning messages and error messages.
- Available in 13 languages and monitors fuel consumption data, cycle times and service intervals.
- Electronic level checks of key fluids make it easy for the operator to conduct daily checks from the comfort of his seat.
- Shutdown-to-idle safety function is automatically activated when a major problem occurs.

Maintenance and availability
- Electronic monitoring of fluid levels reduces time for daily checks.
- Long lubrication intervals allow more time for productive work.
- Well-designed platforms and well-positioned hand rails make daily maintenance and service safe and comfortable.

- Besides factory warranties, Volvo also offers extended warranties up to 8,000 hours. This Component Assurance Program (CAP) can be tailored to meet your needs.
- Readily accessible panels and service points simplify service.

VOLVO'S COMMITMENT TO NATURE AND MANKIND

Quality, safety and care for the environment are Volvo's core values. Indeed, we see our commitment as an integral part of our operation. Few machines have to work in tougher conditions. The ultimate goal is maximized productivity and efficiency for the lowest cost per hour, with minimized environmental impact. For instance, plants and manufacturing processes are certified in accordance with ISO 14001. This is but one example of our tangible commitments and high quality standards. And that's why Volvo customers get one of the most environmentally considerate and dependable wheel loaders on the market.

A winner for years to come
Your Volvo L330E has to be a winner – both in day-to-day and long-term operations, always operating economically with maximum consideration of the environment. The machinery has to be trusted in all aspects. It must deliver the anticipations of productivity and economy. High quality and easy maintenance are imperative for keeping up the work process. The high-performance, low-emission engine is both good for your business and for the environment.

Comfortable and quiet operator's environment
The operator inside deserves a comfortable, reliable and safe machine to work with. A good environment helps to spare operator, equipment and nature for years to come. The Volvo L330E is a super competitive wheel loader that puts the operator right in the middle, literally speaking. Tedious vibrations and noise have been heavily reduced. If the operator feels comfortable and secure, it's easier to stay attentive.

More than 95% recyclable
The L330E is almost completely recyclable. We see it as a natural step in our commitment. Components such as the engine, transmission and hydraulics are re-engineered and re-used in our Parts Exchange program. The equipment has to be as trustworthy, service-friendly, productive and as cost-effective as possible. Choose this wheel loader for maximum productivity and minimal impact on operator, machinery and environment. Feel free to feel secure in a Volvo L330E.

Quality
- The air is vented from all major components with easy-to-replace breather filters, used to prevent dirty air from entering the transmission, axles, fuel tank and hydraulic tank.
- All electrical wires are routed through sturdy conduits, protected from water, dust and abrasion with rubberized connectors and terminal caps.
- The L330E is designed from the beginning for easy service and maintenance. Easy-access to all components lays the foundation for shorter service and maintenance time and longer life.

Safety
- A dual-circuit service brake system that fulfills all requirements according to ISO 3450, electronic brake test in Contronic and easy-to-check brake wear indicators are all ways to ensure safe and effective braking.
- Volvo Care Cab is tested and approved according to ROPS ISO 3471 and FOPS ISO 3449 standards.
- Optimized panoramic visibility gives effective control over the entire work area.
- The L330E has steps and platforms that are equipped with anti-slip surfaces and well positioned hand rails.

Environment
- The low rpm, high-performance D16B engine meets all current emission requirements according to Tier 2/Stage 2 legislation in the US and Europe.
- The L330E is manufactured in environmentally certified factories according to ISO 14001.
- The L330E is more than 95% recyclable according to material weight.
- Low external and internal sound levels.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L330E


WARNING


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VOLVO L330E IN DETAIL

Engine

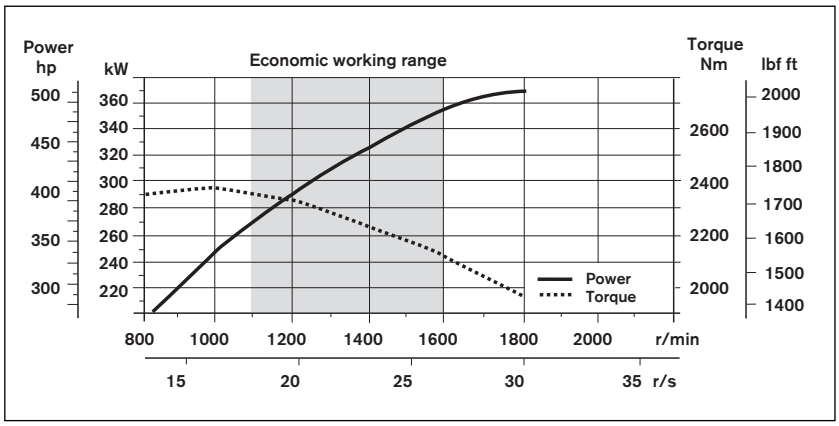
16 liter, 6-cylinder straight turbocharged diesel engine with electronically-controlled unit pumps and conventional injectors. The engine has wet replaceable cylinder liners and replaceable valve guides and valve seats. The throttle application is transmitted electrically from the throttle pedal or the optional hand throttle. Air cleaning: three-stage. Cooling system: Air-to-air intercooler and hydrostatic, electronically-controlled fan.

Engine	Volvo D16B LA E2
Max. power at	30,0 r/s **(1,800 rpm)**
SAE J1995 gross	370 kW **(503 hp)**
ISO 9249, SAE J1349	369 kW **(502 hp)**
Max. torque at	16,7 r/s **(1,000 rpm)**
SAE J1995 gross	2370 Nm **(1,748 lbf ft)**
ISO 9249, SAE J1349	2355 Nm **(1,737 lbf ft)**
Economic working range	1100–1600 rpm
Displacement	16,12 l **(984 in³)**

Electrical system

Central warning system: Central warning light for the following functions, (buzzer with gear engaged): Engine oil pressure, charge air temperature, transmission oil pressure, brake pressure, parking brake applied, hydraulic oil level, steering pressure, low coolant level, coolant temperature, transmission oil temperature, hydraulic oil temperature, overspeeding in engaged gear, brake charging, brake cooling oil temperature, expansion tank fluid level.

Voltage	24 V
Batteries	4x12 V
Battery capacity	238 Ah
Cold cranking capacity, approx	1250 A
Reserve capacity, approx	320 min
Alternator rating	2280 W/80 A
Starter motor output	7,0 kW **(9.5 hp)**



Drivetrain

Torque converter: single-stage. Transmission: Volvo countershaft transmission with single lever control. Fast and smooth gearshifting due to electronically-controlled shifting and overlapping gearshifts. Gearshifting system: Volvo Automatic Power Shift (APS) with mode selector and four different gearshifting programs. Axles: Fully floating axle shafts with planetary hub reductions and cast steel axle housings. Differential: Limited slip differentials on both front and rear axles.

Transmission	8421H-21
Torque multiplication	2,29:1
Maximum speed, forward/reverse	
1	6,5 km/h **(4.0 mph)**
2	11,3 km/h **(7.0 mph)**
3	19,0 km/h **(11.8 mph)**
4	31,8 km/h **(19.8 mph)**
Measured with tires	35/65 R33 XLDD1
Front axle/rear axle	53R312
Rear axle oscillation	±12°
Ground clearance at 12° osc. 564 mm **(22.2 in)**	

Brake system

Service brake: Volvo dual-circuit system with nitrogen charged accumulators. Outboard mounted hydraulically operated, fully sealed oil circulation-cooled wet disc brakes. The operator can select automatic declutch of the transmission when braking with a switch on the instrument panel. Parking brake: Dry disc brake mounted on the front axle input shaft. Applied by spring force and electrohydraulically released with a switch on the instrument panel. Secondary brake: Dual brake circuits with rechargeable accumulators. Either one circuit or the parking brake fulfills all safety requirements. Standard: The brake system complies with the requirements of ISO 3450.

Number of brake discs per wheel front/rear	6
Accumulators	2x4,0 l **(2x2.12 US gal)**
	1x1,0 l **(1x0.26 US gal)**
Accumulators for parking brake	1x1,0 l **(1x0.26 US gal)**

Steering system

Steering system: Load sensing hydrostatic articulated steering. System supply: The steering system has priority feed from a load sensing axial piston pump with variable displacement. Steering cylinders: Two double-acting cylinders.

Steering cylinders	2
Cylinder bore	125 mm **(4.92 in)**
Piston rod diameter	70 mm **(2.76 in)**
Stroke	493 mm **(19.4 in)**
Working pressure	21 MPa **(3,046 psi)**
Maximum flow	336 l/min **(88.77 US gpm)**
Maximum articulation	±35°

Cab

Instrumentation: All important information is centrally located in the operator's field of view on the Contronic monitoring system's display unit. Heater and defroster: Heater coil with filtered fresh air and fan with four speeds. Defroster vents for all window areas. Operator seat: Ergonomic seat with adjustable suspension and retractable seatbelt. The seat is mounted on a bracket, which is mounted on the rear cab wall. The forces from the retractable seat belt are absorbed by the seat rail. Standard: The cab structure is tested and approved according to ROPS (ISO 3471) and FOPS (ISO 3449). The cab meets all requirements according to ISO 6055 (Operator Overhead Protection - Industrial Trucks) and SAE J386 (Operator Restraint System).

Emergency exits	1
Sound level in cab according to ISO 6396	LpA 74 dB (A)
External sound level according to ISO 6395 (Directive 2000/14/EC)	LwA 112 dB (A)
Ventilation	9 m^3/min **(318 ft^3/min)**
Heating capacity	11 kW **(37,500 Btu/h)**
Air-conditioning (optional)	8 kW **(27,300 Btu/h)**

Hydraulic system

System supply: Two load sensing axial piston pumps with variable displacement. The steering system always has priority. Valves: Double-acting 2-spool valve. The main valve is controlled by a 2-spool pilot valve. Lift function: The valve has four positions including raise, hold, lower and float. Inductive/magnetic automatic boom kickout can be switched on and off and is adjustable to any position between maximum reach and full lifting height. Tilt function: The valve has three functions including rollback, hold and dump. Inductive/magnetic automatic tilt can be adjusted to the desired bucket angle. Cylinders: Double-acting cylinders for all functions. Filter: Full-flow filtration through 20 micron (absolute) filter cartridge.

Working pressure maximum, pump 1	26,0 MPa **(3,770 psi)**
Flow	342 l/min **(90 US gpm)**
at	10 MPa **(1,450 psi)**
and engine speed	30 r/s **(1,800 rpm)**
Working pressure, pump 2	26,0 MPa **(3,771 psi)**
Flow	252 l/min **(67 US gpm)**
at	10 MPa **(1,450 psi)**
and engine speed	30 r/s **(1,800 rpm)**
Pilot system	
Working pressure	3,5 MPa **(508 psi)**
Cycle times	
Raise*	8,3 s
Tilt*	1,9 s
Lower, empty	4,4 s
Total cycle time	14,6 s

* with load as per ISO 14397 and SAE J818

Lift-arm system

Z-bar Linkage system with high breakout forces. Well-suited for tough operations in mines and rock quarries.

Lift cylinders	2
Cylinder bore	200 mm **(7.9 in)**
Piston rod diameter	110 mm **(4.3 in)**
Stroke	1169 mm **(46.0 in)**
Tilt cylinder	2
Cylinder bore	170 mm **(6.7 in)**
Piston rod diameter	90 mm **(3.5 in)**
Stroke	808 mm **(31.8 in)**

Service

Service accessibility: Large, easy-to-open service doors with gas struts. Swing-out radiator grille and cooling fan. Possibility to log and analyze data to facilitate troubleshooting.

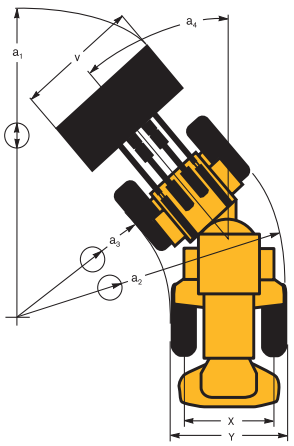
Refill capacities	
Fuel tank	680 l **(183.1 US gal)**
Engine coolant	66 l **(17.4 US gal)**
Hydraulic oil tank	326 l **(86.1 US gal)**
Transmission oil	63 l **(16.6 US gal)**
Engine oil	49 l **(12.9 US gal)**
Axles front/rear	106 l **(28.0 US gal)**

SPECIFICATIONS

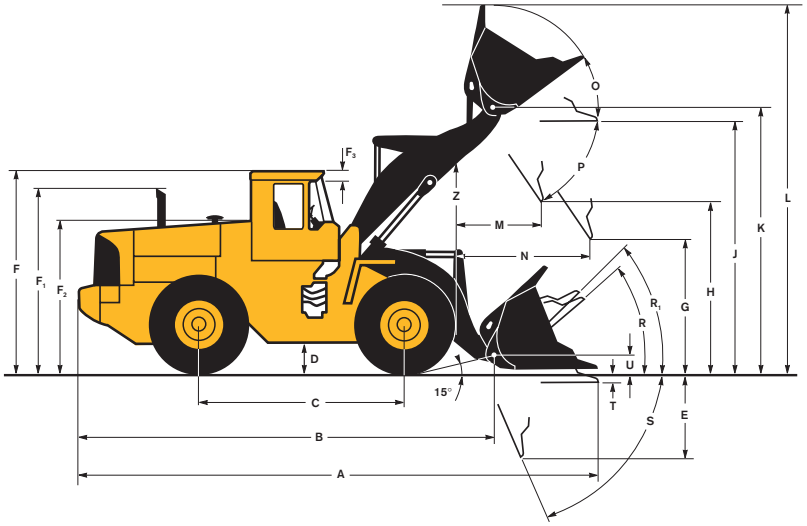
Tires: 35/65 R33 RL5K L5 Goodyear

	Standard boom	Long boom
B	8510 mm **27'11"**	7750 mm **25'5"**
C	4060 mm **13'4"**	———
D	570 mm **1'10"**	———
F	4200 mm **13'9"**	———
F_1	3850 mm **12'8"**	———
F_2	3160 mm **10'5"**	———
F_3	40 mm **0'2"**	———
G	2130 mm **7'0"**	———
J	4780 mm **15'8"**	5090 mm **15'2"**
K	5060 mm **16'7"**	5440 mm **16'7"**
O	66 °	———
P_{max}	49 °	47 °
R	46 °	47 °
R_1*	51 °	———
S	57 °	52 °
T	30 mm **0'1"**	97 mm **0'4"**
U	670 mm **2'2"**	770 mm **2'6"**
V	3970 mm **13'0"**	———
X	2710 mm **8'1"**	———
Y	3610 mm **11'10"**	———
Z	4150 mm **13'7"**	———
a_2	8240 mm **27'1"**	———
a_3	4630 mm **15'2"**	———
a_4	±35 °	———

* Carry position SAE



Where applicable, specifications and dimensions are in accordance with ISO 7131, SAE J732, ISO 7546, SAE J742, ISO 14397, SAE J818.



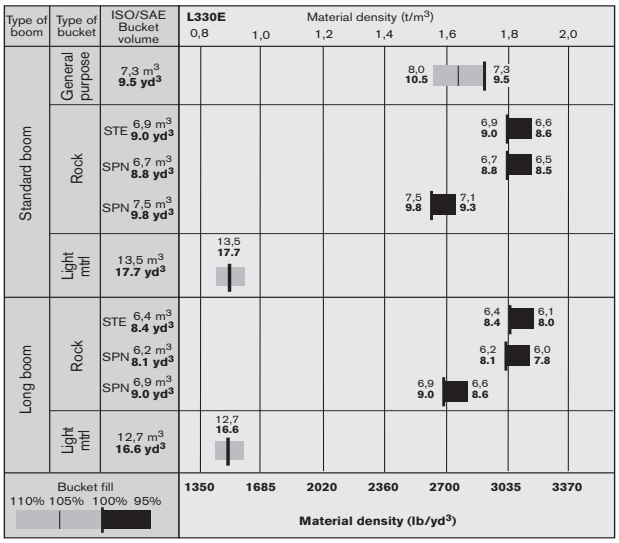
Supplemental Operating Data

35/65 R33 RL5K L5 Goodyear	Operating weight (lb)		Static tipping load, straight (lb)		Static tipping load, full turn (lb)		Ground clearance (in)		Width over tires (in)	
	Standard boom	Long boom	Standard boom	Long boom	Standard boom	Long boom	Standard boom	Long boom	Standard boom	Long boom
35/65-33/42 SRG L4 Firestone	**+176**	**+176**	**0**	**0**	**0**	**0**	**0**	**0**	**–1"**	**–1"**
35/65 R33 XLD D1 L4 Michelin	**–2227**	**–2227**	**–1543**	**–1433**	**–1389**	**–1235**	**–0.4"**	**–0.4"**	**0**	**0**
35/65 R33 XLD D2 L5 Michelin	**–805**	**–805**	**–573**	**–507**	**–507**	**–463**	**–0.4"**	**–0.4"**	**0**	**0**

Bucket Selection Chart

The volume handled varies with the bucket fill and is often greater than indicated by the bucket's ISO/SAE volume. The table shows optimum bucket choice with regard to the material density.

Material	Bucket fill, %	Material density, t/m³	Material density, lb/yd³
Earth	110 – 115	1,4 – 1,6	**2,360 – 2,700**
Clay	110 – 120	1,4 – 1,6	**2,360 – 2,700**
Sand	100 – 110	1,6 – 1,9	**2,700 – 3,200**
Gravel	100 – 110	1,7 – 1,9	**2,870 – 3,200**
Rock	75 – 100	1,5 – 1,9	**2,530 – 3,200**



STANDARD BOOM **Tires 35/65 R33 RL5K L5 GY** **Pin-on buckets**		**ROCK**								**GENERAL PURPOSE**	**LIGHT MATERIAL**
		 **Bolt-on edges**	 **Teeth**	 **Teeth & Segments**	 **Bolt-on edges**	 **Teeth**	 **Teeth & Segments**	 **Bolt-on edges**	 **Teeth & Segments**	 **Bolt-on edges**	 **Bolt-on edges**
Volume, heaped ISO/SAE	m^3	6,9	6,6	6,9	6,7	6,6	6,7	7,5	7,5	7,3	13,5
	yd^3	**9.0**	**8.6**	**9.0**	**8.8**	**8.6**	**8.8**	**9.8**	**9.8**	**9.5**	**17.7**
Static tipping load, straight	kg	35 790	36 510	35 570	35 320	35 440	34 890	34 380	33 940	35 450	35 290
	lb	**78,920**	**80,490**	**78,420**	**77,870**	**78,130**	**76,920**	**75,810**	**74,820**	**78,140**	**77,800**
at 35° turn	kg	31 720	32 410	31 490	31 220	31 340	30 790	30 350	29 900	31 430	31 120
	lb	**69,940**	**71,450**	**69,420**	**68,850**	**69,090**	**67,880**	**66,920**	**65,920**	**69,290**	**68,610**
**Operating Load	kg	12 090	12 350	12 000	11 900	11 940	11 730	11 570	11 390	11 970	11 860
	lb	**26,650**	**27,220**	**26,450**	**26,230**	**26,320**	**25,860**	**25,500**	**25,120**	**26,400**	**26,140**
Maximum Material Density (100% Fill Factor)	kg/cm	1760	1880	1740	1770	1820	1740	1540	1520	1650	880
	lb/cy	**2,960**	**3,170**	**2,940**	**2,980**	**3,060**	**2,940**	**2,600**	**2,560**	**2,780**	**1,480**
Breakout force	kN	464,4	500,1	453,6	369,4	387,9	362,1	344,0	337,6	456,3	354,8
	lbf	**104,400**	**112,400**	**101,970**	**83,040**	**87,200**	**81,380**	**77,330**	**75,900**	**102,580**	**79,760**
A	mm	10 230	10 250	10 530	10 620	10 900	10 930	10 770	11 080	10 260	10 700
	ft in	**33'7"**	**33'8"**	**34'7"**	**34'10"**	**35'9"**	**35'10"**	**35'4"**	**36'4"**	**33'8"**	**35'1"**
E	mm	1280	1280	1520	1600	1810	1840	1710	1960	1310	1660
	ft in	**4'2"**	**4'2"**	**5'0"**	**5'3"**	**5'11"**	**6'0"**	**5'7"**	**6'5"**	**4'4"**	**5'5"**
H*)	mm	3710	3710	3500	3450	3270	3240	3350	3140	3680	3340
	ft in	**12'2"**	**12'2"**	**11'6"**	**11'4"**	**10'9"**	**10'8"**	**11'10"**	**10'4"**	**12'1"**	**10'11"**
L	mm	7320	7320	7320	7200	7200	7200	7350	7350	7040	7770
	ft in	**24'0"**	**24'0"**	**24'0"**	**23'7"**	**23'7"**	**23'7"**	**24'1"**	**24'1"**	**23'1"**	**25'6"**
M*)	mm	1700	1820	1900	2010	2230	2220	2110	2300	1730	2000
	ft in	**5'7"**	**6'0"**	**6'3"**	**6'7"**	**7'4"**	**7'3"**	**6'11"**	**7'7"**	**5'8"**	**6'7"**
N*)	mm	2460	2590	2610	2700	2870	2830	2770	2890	2480	2660
	ft in	**8'1"**	**8'6"**	**8'7"**	**8'10"**	**9'5"**	**9'3"**	**9'1"**	**9'6"**	**8'2"**	**8'9"**
V	mm	3970	3970	3970	3970	3970	3970	3970	3970	3970	4500
	ft in	**13'0"**	**13'0"**	**13'0"**	**13'0"**	**13'0"**	**13'0"**	**13'0"**	**13'0"**	**13'0"**	**14'9"**
a_1 clearance circle	mm	17 920	17 960	18 050	18 100	18 230	18 230	18 160	18 300	17 930	18 630
	ft in	**58'10"**	**58'11"**	**59'3"**	**59'5"**	**59'10"**	**59'10"**	**59'7"**	**60'0"**	**58'10"**	**61'1"**
Operating weight	kg	49 990	49 650	50 160	50 600	50 380	50 710	50 910	51 020	48 660	51 070
	lb	**110,240**	**109,460**	**110,580**	**111,580**	**111,070**	**111,800**	**112,260**	**112,480**	**107,280**	**112,590**

*) Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge. Measured at 45° dump angle. (Spade nose buckets at 42°.)

Note: This only applies to Volvo original attachments.

**) Rated at Volvo's recommended maximum utilization for L330E.

LONG BOOM **Tires 35/65 R33 RL5K L5 GY** **Pin-on buckets**		**ROCK**							**LIGHT MATERIAL**
		 **Bolt-on edges**	 **Teeth**	 **Bolt-on edges**	 **Teeth**	 **Teeth & Segments**	 **Bolt-on edges**	 **Teeth & Segments**	 **Bolt-on edges**
Volume, heaped ISO/SAE	m^3	6,4	6,1	6,2	6,1	6,2	6,9	6,9	12,7
	yd^3	**8.4**	**8.0**	**8.1**	**8.0**	**8.1**	**9.0**	**9.0**	**16.6**
Static tipping load, straight	kg	34 820	35 310	33 130	33 260	32 730	32 820	32 410	32 410
	lb	**76,760**	**77,850**	**73,060**	**73,330**	**72,160**	**72,370**	**71,450**	**71,450**
at 35° full turn	kg	30 810	31 280	29 220	29 330	28 810	28 910	28 500	28 500
	lb	**67,920**	**68,960**	**64,430**	**64,660**	**63,520**	**63,750**	**62,830**	**62,830**
**Operating Load	kg	11 740	11 920	11 140	11 180	10 980	11 020	10 860	10 960
	lb	**25,880**	**26,270**	**24,550**	**24,640**	**24,200**	**24,290**	**23,940**	**23,940**
Maximum Material Density (100% Fill Factor)	kg/cm	1830	1950	1800	1830	1770	1600	1580	860
	lb/cy	**3,080**	**3,280**	**3,030**	**3,080**	**2,990**	**2,700**	**2,660**	**1,440**
Breakout force	kN	514,0	549,4	371,2	389,4	364,5	354,8	348,6	356,3
	lbf	**115,550**	**123,510**	**83,450**	**87,540**	**81,940**	**79,760**	**78,370**	**80,100**
A	mm	10 450	10 720	11 000	11 270	11 300	11 090	11 390	11 080
	ft in	**34'3"**	**35'2"**	**36'1"**	**37'0"**	**37'1"**	**36'5"**	**37'4"**	**36'4"**
E	mm	1100	1300	1510	1710	1730	1580	1800	1570
	ft in	**3'7"**	**4'3"**	**4'11"**	**5'7"**	**5'8"**	**5'2"**	**5'11"**	**5'2"**
H*)	mm	4190	4010	3820	3650	3620	3760	3560	3740
	ft in	**13'9"**	**13'2"**	**12'6"**	**12'0"**	**11'11"**	**12'4"**	**11'8"**	**12'3"**
L	mm	7550	7550	7600	7600	7590	7690	7690	7810
	ft in	**24'9"**	**24'9"**	**24'11"**	**24'11"**	**24'11"**	**25'2"**	**25'3"**	**25'7"**
M*)	mm	1680	1900	2080	2300	2280	2140	2340	2100
	ft in	**5'6"**	**6'3"**	**6'10"**	**7'7"**	**7'6"**	**7'0"**	**7'8"**	**6'11"**
N*)	mm	2690	2880	3020	3190	3150	3060	3190	2980
	ft in	**8'10"**	**9'5"**	**9'11"**	**10'6"**	**10'4"**	**10'0"**	**10'6"**	**9'9"**
V	mm	3970	3970	3970	3970	3970	3970	3970	4500
	ft in	**13'0"**	**13'0"**	**13'0"**	**13'0"**	**13'0"**	**13'0"**	**13'0"**	**14'9"**
a_1 clearance circle	mm	18 150	18 280	18 410	18 550	18 550	18 450	18 600	18 930
	ft in	**59'7"**	**60'0"**	**60'5"**	**60'10"**	**60'10"**	**60'6"**	**61'0"**	**62'1"**
Operating weight	kg	50 990	50 820	51 750	51 530	51 860	51 940	52 040	51 980
	lb	**112,410**	**112,040**	**114,110**	**113,600**	**114,330**	**114,520**	**114,730**	**114,600**

*) Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge. Measured at 45° dump angle. (Spade nose buckets at 42°.)

Note: This only applies to Volvo original attachments.

**) Rated at Volvo's recommended maximum utilization for L330E.

STANDARD EQUIPMENT

Service and maintenance
Engine oil remote drain and fill
Lubrication manifolds, ground accessible
Radiator remote drain and fill
Transmission remote drain and fill
Pressure test ports: transmission and hydraulic, quick connect, grouped on console for easy access
Fan, hydraulic driven, swing-out
Grille, rear, swing-out
Wheel nut wrench kit

Engine
Three-stage air cleaner with ejector and inner filter
Indicator glass for coolant level
Preheating of induction air
Coolant filter
Exhaust rain protection
Flat-round radiator
Fuel filter
Fuel filter extra with water trap
Oil trap
Fuel fill strainer

Electrical system
24 V, prewired for optional accessories
Alternator, 24 V/80 A
Air filter for alternator
Battery disconnect switch
Fuel gauge
Hour meter
Electric horn
Instrument panel with symbols
Lighting:
• Parking lights
• Double brake and tail lights
• Turn signals with flashing hazard light function
• Working lights (70 W)
• Working lights extra, front
• Halogen working lights (6 front and 4 rear)
• Instrument lighting
Reverse alarm

Contronic monitoring system
ECU with log and analysis system
Contronic display
Fuel consumption
Outdoor temperature
Engine shutdown to idle in case of malfunction indication:
• High engine coolant temperature
• Low engine oil pressure
• High transmission oil temperature
Start interlock when gear is engaged
Brake test
Test function for warning and indicator lights
Warning and indicator lights:
• Charging
• Oil pressure engine
• Oil pressure, transmission
• Brake pressure
• Parking brake
• Hydraulic oil level
• Brake cooling oil temperature
• Primary steering
• Secondary steering
• High beams
• Turn signals
• Rotating beacon
• Preheating coil
• Coolant temperature
• Transmission oil temperature
• Brake charging
Level warnings:
• Engine oil level
• Coolant level
• Transmission oil level
• Hydraulic oil level
• Washer fluid level

Drivetrain
Automatic Power Shift with operator-controlled declutch function for transmission cut-out when braking
Differentials: Limited slip front and rear

Tires
35/65 R33

Brake system
Parking brake, el.-hydraulic
Wet oil circulation-cooled disc brakes on all four wheels
Dual service brake pedals

Cab
ROPS Canopy (ROPS SAE J1040CC, ISO 3471), FOPS (SAE J231, ISO 3449)
Lock kit, one combination
Acoustic inner lining
Ashtray
Cigarette lighter
Lockable door
Air-conditioning
Cab ventilation with recirculation, heat and defroster
Fresh-air inlet with two filters
Floor mat
Interior lights
Interior rearview mirror
2 exterior rearview mirrors
Openable window right-hand side
Sliding window, right
Sliding window, door
Tinted safety glass
Hip retractable seatbelt (SAE J386)
Adjustable lever console
Operator seat air suspended with high back and electrical heating
Adjustable steering wheel
Storage compartment
Sun visor
Windshield washers front and rear
Windshield wipers front and rear
Interval function for front and rear windshield wipers
Cab access steps, hand rails
Service platforms with anti-slip surfaces on front and rear fenders

Hydraulic system
Main valve, 2-spool
Pilot valve, 2-spool
Variable displacement axial piston pumps (3) for:
• working hydraulics
• steering system, pilot hydraulics and brakes
• fan motor
Boom lowering system
Bucket positioner, automatic with position indicator, adjustable
Control lever safety latch
Hydraulic pressure test ports, quick connect
Hydraulic fluid level sight gauge
Hydraulic oil cooler

External equipment
Fenders, front
Lifting lugs
Tie-down locations
Easy-to-open side panels and engine hood
Frame steering, joint lock
Towing hitch

Other equipment
Decals, USA

OPTIONAL EQUIPMENT

(Standard in certain markets)

Service and maintenance
Toolbox, lockable
Tool kit
Automatic lubrication system
Automatic lubrication system for long boom
Refill pump for auto lub system
Oil sampling valve

Engine
Engine block heater, 230 V
Engine block heater, 120 V
Engine block heater, 240 V
Radiator, charge air cooler and AC-condenser, corrosion protected
Air pre-cleaner, oil-bath type
Air pre-cleaner, Sy-Klone type
Hand throttle control
Fast fuel fill system
Reversible cooling fan

Electrical system
Alternator, 100 A
Battery, high-capacity
Extra working lights rear
Working lights front, high intensity
Warning beacon, rotating, collapsible

Cab
Radio with tape recorder
Radio with CD-player
Installation kit for radio
Sunblinds, front and rear windows
Retractable hipbelt, longer and wider than standard
Ventilation air filter for work in asbestos environment
Instructor's seat
Armrest (left) for ISRI operator seat
Lunchbox holder
Steering wheel knob
Single key kit door/start
Noise reduction kit
Rearview camera incl. monitor
Rearview mirrors, el. heated
Automatic temp control (ATC)

Drivetrain
Speed limiter 20 km
Speed limiter 30 km

Brake system
Hydraulic oil cooler for front and rear axles

Hydraulic system
Single lever control
Single lever control for 3rd hydraulic function
3rd hydraulic function
3rd hydraulic function for long boom
Boom Suspension System
Biodegradable hydraulic fluid
Hydraulic attachment bracket, welded
Hydraulic oil cooler, corrosion protected
Hydraulic oil cooler, extra
Artic kit, pilot hoses and brake accumulators inclusive hydraulic oil
Separate attachment locking, standard boom
Separate attachment locking, long boom

External equipment
Long boom
Mudguards, fixed front and swing out rear
Sealed bucket bearing cartridge
Return-to-dig

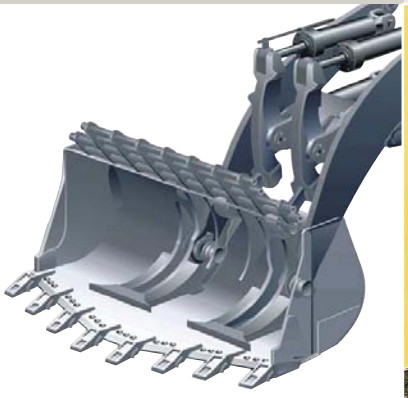
Protective equipment
Guards for front headlights
Guards for taillights
Guards for working lights rear
Guards for side windows and rear window
Guards for radiator grille, logger version
Windshield guard
Bellyguard front
Bellyguard rear
Bellyguard front and rear
Hose protection for boom cylinder hoses

Other equipment
Comfort Drive Control, CDC
Secondary steering
Logger version
Block handler kit
Block handler, heavy-duty
CE-marking

Tires
875/65 R33
35/65-33

Attachments
Buckets:
• Straight with/without teeth
• Spade nose with/without teeth
• General purpose
• Light materials
Equipment for block handling

Boom Suspension System (BSS)*
BSS utilizes gas/oil accumulators connected to the lift cylinders to absorb shocks and smooth out rough roads for faster cycle times, less spillage and increased operator comfort.



Volvo's Genuine Attachments

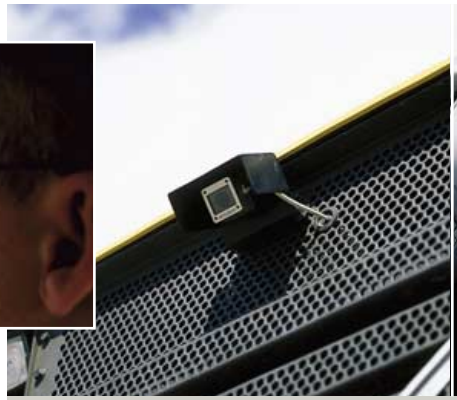
Volvo's Genuine Attachments are designed to match Z-bar Linkage, making the L330E quick and efficient in a wide range of applications.

Automatic Lubrication System*

Our factory-fitted Automatic Lubrication System takes care of greasing while the machine is in operation. This means less downtime for scheduled maintenance and more time for productive work.

Mudguards*

Swing-out rear mudguards.



Rearview camera system*

Rearview camera system reduces blind spots when reversing.

Comfort Drive Control (CDC)*

CDC significantly reduces repetitive and tiring steering wheel movements. The operator can shift and steer easily with the aid of controls integrated in the left armrest.

Volvo Construction Equipment is different. It's designed, built and supported in a different way. That difference comes from our 170-year engineering heritage. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo. And we're proud of what makes Volvo different – **More care. Built In.**

All products are not available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

VOLVO

Volvo Construction Equipment North America, Inc.
One Volvo Drive, Asheville, NC 28803-3447
www.volvoce.com

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