



Volvo Construction Equipment
Building Tomorrow

L350H

Volvo Wheel Loaders 50.0-56.3 t / 110,231-124,120 lb 532 hp



**THE BEST JUST
GOT EVEN BETTER**



Smarter, faster and tougher than the L350F, the L350H has been built on the success of its forerunner, first introduced to the market in 2007.

Upgraded with the latest innovative technology, the L350H is ready to tackle a range of applications, from mining and quarrying to heavy infrastructure.



*"It's been very, very dependable.
I've got no complaints.
I'd recommend it to anybody."
Larry Anderson, Manager,
Monteagle Sand LLC (USA)*

Lowering your total cost of ownership

As your trusted partner in production, Volvo is here to support you with the best equipment for the job. Boasting a comprehensive portfolio of attachments designed to complement your machines performance, as well as a range of services to boost your profitability, we'll help you tailor the perfect package to suit your business needs.

L350F across the world

A machine that's always in demand, over 700 L350F wheel loaders are being put to work in 50 countries across the world, and have so far accumulated 6 369 606 operating hours – ranging from 290 to 48 000.

L350F in action

*"We like their speed, their uptime and their fuel efficiency."
Dan Johnson, Vice president of equipment
for William Charles Purchasing Inc (USA)*



Stronger and smarter

Primed for productivity, the intelligent L350H combines the latest Volvo technology with power and comfort. To achieve ultimate performance, select from a range of tailor-made Volvo attachments.

Boost your productivity by up to 5%

Increase your productivity by up to 5%. Next generation load sensing hydraulics have been designed to enhance the responsiveness of the attachment and reduce cycle times, by improving the lifting and lowering speed of the boom.



Matched and attached

Get the most out of your L350H with our range of purpose-built attachments, perfect for applications such as block handling, logging and slag handling. Form one solid and reliable unit with attachments that are ideally matched by size and design to your machine's parameters – including link-arm geometry, and breakout and lifting forces.



Easy operation

Customize your machine with a choice of three hydraulic modes to suit your preferred responsiveness – soft, normal or active. To reduce operator fatigue and improve productivity, Comfort Drive Control gives you the opportunity to steer the machine from a small lever – particularly effective for fast-paced truck loading operations.



Designed to perform

Achieve unrivalled performance thanks to the drivetrain, specially developed by Volvo, to work in harmony with the hydraulic system on a range of demanding applications. Offering the perfect combination of power and control, the L350H has been designed to boost productivity.



Load Assist

Optimize your load cycles with Load Assist, powered by Volvo Co-Pilot – the revolutionary in-cab display. Gain access to a set of smart apps and boost the efficiency of your operation. The rear-view camera and optional radar detect system are now integrated into the Volvo Co-Pilot display.

On-Board Weighing

When it comes to loading the optimum amount of material, intuition can only get you so far. Are you moving enough material, or moving too much? Say goodbye to guess-work with the On-Board Weighing app. The dynamic load weighing system provides realtime insights into the bucket's load, so you can eliminate overloading, underloading, reweighing and waiting times.



Operator Coaching

Operator Coaching helps to ensure operators are using their Volvo machine to its full potential. The intuitive app provides real-time guidance to operators, helping them understand how their actions influence machine productivity and efficiency, as well as identify areas for improvement or changes in their technique.



Tire Pressure Monitoring System

With the tire pressure monitoring app, you can check the condition of your tires from the comfort of the cab. Providing real-time information on tire pressure and temperature, the system saves time during machine inspections and can prolong tire lifetime.



Map

Get accurate machine positioning with Map, a clever app that allows operators to monitor on-site traffic in real-time. Not only does this give operators an improved orientation of the site they are working on, but it allows them to proactively adjust their driving behavior according to traffic conditions.



Power up, fuel down

Engineered for efficiency, the L350H is fitted with a powerful Volvo engine and new generation hydraulics. Decrease cycle times and fuel consumption with intelligent machine monitoring and available operator training.

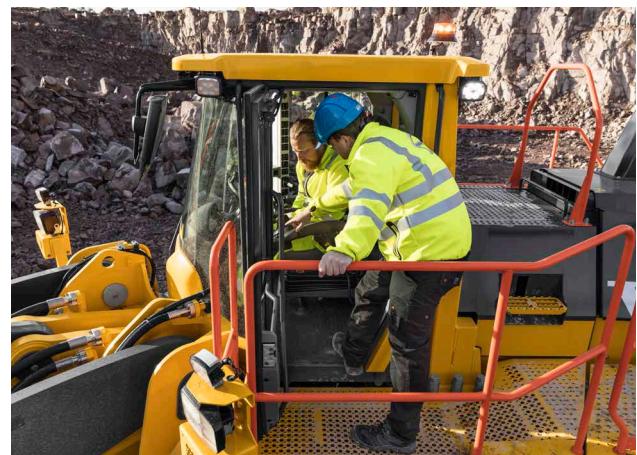
Eco pedal

Save on machine wear and increase fuel efficiency with the eco pedal. Uniquely designed by Volvo, the eco pedal encourages economical operation, by applying a mechanical push-back force in response to excess use of the accelerator.



Train for efficiency

Increase productivity and reduce fuel consumption by learning how to operate your wheel loader in the most efficient way. Volvo offers operator training, which encompasses the best practices in the industry.



Machine monitoring made easy

Keep on top of unscheduled downtime and check that your machine is being operated efficiently with CareTrack – Volvo's state-of-the-art telematics system. Stay informed and receive reports including fuel status, machine location and hours, so you can optimize your productivity and save money.



Volvo Site Simulation

Lower your cost per ton and gain valuable insight into your operations, with Volvo Site Simulation. Using detailed information about your machinery, fleet choices and site configuration, we'll devise a list of personalized recommendations to increase the efficiency and profitability of your operation.



UP TO 20% GREATER FUEL EFFICIENCY

Do more with less fuel, thanks to redesigned buckets, which are easier to fill. Save hydraulic pump power for other functions, by reducing fluid flow during lowering and dumping operations. Powered by a Tier 4 final engine, delivering high torque at low rpm, the L350H can also be fitted with the option of auto engine shut down, which turns off the machine during prolonged periods of idle.



L350F in action

A quarry in the UK used a Volvo L350F to load more than 500,000 tons of blasted limestone a year. The L350F replaced two older machines and was chosen for its excellent fuel economy and an outstanding performance.

BUILT FOR THE JOB

Unlock the full potential of your machine and take on demanding applications, with tailor-made attachments. You can even have your attachment custom built to suit your needs - just talk to your local dealer!



L350F in action

Working at one of the biggest wood production sites in Finland, L350F wheel loaders were used to help process over 100 trailers of timber a day. Featuring log grapple attachments for quick and easy log handling, these machines worked 24 hours a day in temperatures that often plummeted to -30°C.

For extreme production environments

Working around the clock, the L350H has been put to the test in extreme environments, carrying out operations such as face loading, heavy-duty block handling and log handling. The L350H can be fitted with a range of Volvo attachments, to ensure high reliability and safe operation.

Face-loading and tunneling

For easier filling and up to 15% more productivity, the new Volvo Rock bucket* boasts a longer floor and optimized radius. For tunneling applications, the L350H can also be equipped with a Side Dump Rock bucket. To increase your productivity, the long boom configuration enables the loading of a 65 tonne (70 ton) truck in no more than six passes.



Rehandling

Experience up to 5% greater productivity with the new 10.7 m³ (14 yd³) Volvo Rehandling bucket. The redesigned bucket is easier to fill and minimizes spillage, thanks to new convex sides and the improved spill guard. To enhance productivity and absorb shocks, opt for the Boom Suspension System, which automatically engages depending on gear and speed.



L350H in block handling

For high lifting force and maximum stability in block handling applications, choose from two kit variants – standard or heavy duty – and a range of robust Volvo attachments, including block forks, breaker tine and clearing rakes.



Made to move

Maintenance made easier

- 1000hr engine oil change interval
- Quicker hydraulic oil fill thanks to new mounted nipple
- Maintenance-free rear axle trunnion
- Passive and automatic regeneration
- Redesigned engine side hood panels
- Surrounding walkways

BOOST YOUR PRODUCTIVITY BY UP TO 5%

- Rimpull control
- Next generation load sensing hydraulics
- Comfort Drive Control
- Three hydraulic mode options
- Matched Volvo attachments

BUILT FOR THE JOB

- Redesigned Rock bucket – boost your productivity by 15%
- New Rehandling bucket – up to 5% more productivity
- Block handling attachments
- Custom built attachments

DURABLE BY DESIGN

- Z-bar lifting arm with double sealing on each pin
- Lifetime Frame and Structure Warranty



THE OPERATOR'S CHOICE

- Easy cab access , high visibility handrails and steps
- Remote-control door opener
- Adjustable seat
- Upgraded Human Machine Interface
- Rear-view camera

UP TO 20% GREATER FUEL EFFICIENCY

- Easier to fill redesigned buckets
- Saved hydraulic pump power
- Powerful D16 engine, with optional auto shut down
- Eco pedal

Volvo Services

- Load Assist, Powered by Volvo Co-Pilot
- Genuine Volvo Parts
- CareTrack
- ActiveCare Direct
- Volvo Site Simulation



DURABLE BY DESIGN

Designed with durability in mind, the L350H is built with a Lifetime Frame and Structure Warranty, including the front frame, rear frame, articulation joint and loader arm. The articulation joint offers strength in demanding applications, and the specially designed Z-bar lifting arm has double sealing on each of the pins, for sustained uptime and increased machine life.



L350F in action

As part of a fleet of 34 Volvo machines working at a marble mine in Turkey, an L350F proved that its durable components and easy serviceability made it the perfect addition to the team. The owner relied on the L350F to operate under high stress levels and in tough conditions, producing 170,000 tons of marble a year.

Full proof performance

Offering strength in demanding applications, the L350H is built to last.

Maintain the life of your machine with simple serviceability and proactive dealer support, as well as flexible maintenance and repair plans.

Minimize downtime

Minimize machine downtime and increase components life thanks to heavy-duty axles with fully floating shafts, planetary hub reduction and maintenance-free rear axle trunnion bearings.



Maintenance made easier

Keep your machine up and running with improved serviceability. Daily routine checks are made easier thanks to engine side hood panels, while essential maintenance points are safely accessed using the surrounding walkway. Passive and auto regeneration automatically cleans the diesel particulate filter (DPF), without compromising machine performance.



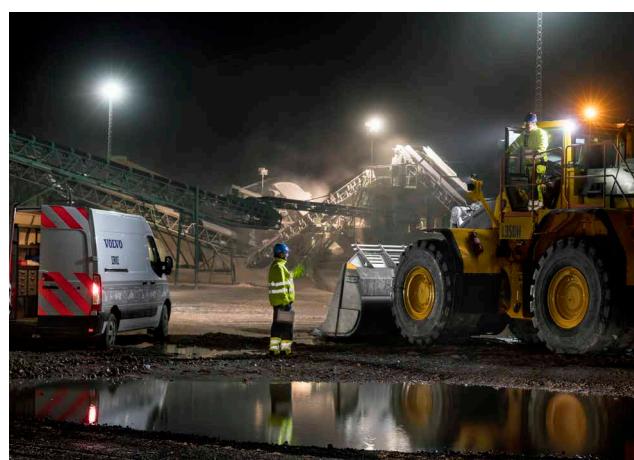
ActiveCare Direct

Maximize machine uptime and reduce repair costs with ActiveCare Direct. The intelligent service provides round the clock machine monitoring, as well as customer reports – to help take predictive and preventative maintenance actions.



Here to support you

Maintain productivity and machine uptime with our range of Genuine Volvo Parts – all backed by Volvo warranty, with 24-hour parts delivery guarantee.



Setting the standard

Built with the customer, for the customer, the L350H boasts a range of features to enhance your operating experience. As your partner in production, we'll help to make your business more profitable, whether it's through reducing fuel emissions or supporting you with our range of products and services.

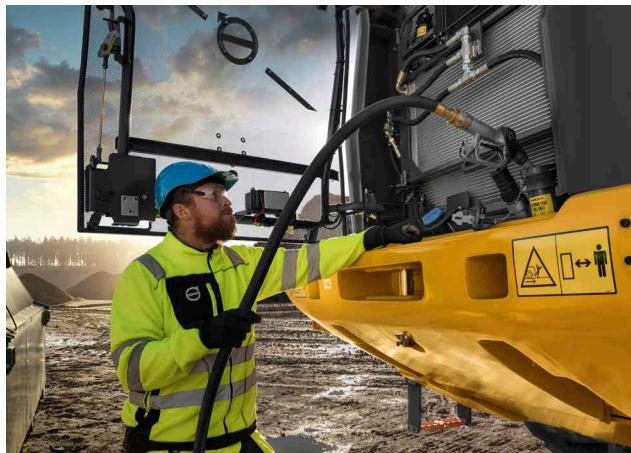
Safe and sound

To enhance visibility, the L350H Volvo cab has a rear-view camera and new rear view mirrors. Orange handrails and steps have also been placed on the machine, intended to stand out to the operators and maintenance staff.



Committed to the environment

Reduce your carbon footprint and fuel emissions between 30% to 90%, by switching to renewable fuels. Confirming its commitment to the environment, Volvo has designed its latest wheel loader to be compatible with HVO alternative fuel.



Volvo Services

To ensure your business runs smoothly, Volvo invests in the intelligent engineering of all our machines – but we don't stop there. As your partner, we support you in how you use the equipment, maintain it, pay for it and even how you sell it. Our portfolio of products and services is designed to complement your machine's performance and boost your profitability.



THE OPERATOR'S CHOICE

Operate in comfort from the best cab on the market. The Volvo cab is equipped with a new adjustable seat and upgraded Human Machine Interface, which comes as standard across all H-series Volvo wheel loaders. Access the cab safely and effortlessly using the steps, and open the door with ease thanks to the remote-control opener.



“ ”

“Basically, I move rock for 10 hours each day so I like the comfort of the Volvo wheel loader. My back doesn't hurt and it is easy to steer with the joystick controls. I really enjoy running it. We are picking up blocks weighing more than 50,000 pounds and the power is still there.”

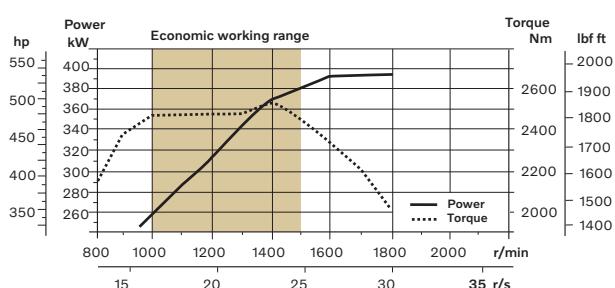
David Porter, loader operator, Colorado Stone Quarries (USA)

Volvo L350H in detail

Engine

V-ACT, 16 liter, 6-cylinder straight VGT (Variable Geometry Turbocharged) diesel engine with 4 valves per cylinder, overhead camshaft and electronically controlled unit injectors. The engine has wet replaceable cylinder liners and replaceable valve guides and valve seats. Cooled EGR (Exhaust Gas Recirculation) and exhaust after treatment with EATS-Muffler (Exhaust After Treatment System) including DOC (Diesel Oxidation Catalyst), DPF (Diesel Particulate Filter) and SCR (Selective Catalytic Reduction) with an electronically controlled UDS (Urea Dosing System). Stage IV/T4f after treatment system features passive DPF regeneration with an AHI (After treatment Hydro carbon Injection) device.

Engine	Volvo	D16J
Max. power at	r/min (r/s)	1,700 (28.3)
SAE J1995 gross	kW (hp)	397 (532)
ISO 9249, SAE J1349 net	kW (hp)	394 (528)
Max. torque at	r/min (r/s)	1,400 (23.3)
SAE J1995 gross	Nm (ft lbf)	2,550 (1,881)
ISO 9249, SAE J1349 net	Nm (ft lbf)	2,532 (1,868)
Economic working range	r/min (r/s)	1,000 - 1,500 (16.7 - 25)
Displacement	l (in³)	16.1 (982)



Electrical system

Central warning system:
Conventional electrical system with central warning light and buzzer for following functions: - Serious engine malfunction - Low steering system pressure - Overspeed warning engine - Interruption in communication (computer error)
Central warning light and buzzer with gear engaged for the following functions: - Low engine oil pressure - High engine oil temperature - High charge-air temperature - Low coolant level - High coolant temperature - High crankcase pressure - Low transmission oil pressure - High transmission oil temperature - Low brake pressure - Engaged parking brake - Brake charging failure - Low hydraulic oil level - High hydraulic oil temperature - Overspeeding in engaged gear - High brake cooling oil temperature front and rear axles.

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	2 x 170
Cold cranking capacity, approx	A	1,000
Alternator rating	W/A	2 280/80
Starter motor output	kW	7

Drivetrain

Torque converter: 3-element, 1-stage, 1-phase torque converter with Lock-Up function and free-wheel stator.

Transmission: Planetary Power Shift transmission with full modulated electronically controlled shifting of 4 gears forward and reverse. Volvo Automatic Power Shift (APS) gear shifting system with fully automatic shifting 1-4 (Lock-Up in 3-4) and mode selector with 4 different gear shifting programs, including AUTO mode. Also equipped with Rimpull control to avoid wheel spin and optimize bucket filling.

Axles: Fully floating axle shafts with planetary-type heavy-duty hub reductions. Fixed front axle and oscillating rear axle.

Transmission	Volvo	HTE 400
Torque multiplication, stall ratio		2.65
Maximum speed, forward/reverse		
1st gear	km/h (mi/h)	6.8/7.5 (4.2 / 4.7)
2nd gear	km/h (mi/h)	12.1 / 13.2 (7.5 / 8.2)
3rd gear	km/h (mi/h)	21 / 22.9 (13 / 14.2)
4th gear	km/h (mi/h)	35.7 / 38.2 (22.2 / 23.7)
Measured with tires		35/65 R33 L4
Front axle/rear axle		Volvo AHW 90/AHW 90
Rear axle oscillation	± °	12
Ground clearance	mm (in)	550 (21.7)
at oscillation	°	12

Steering System

Steering system: Load-sensing hydrostatic articulated steering with an accumulator system and a non-pressurized tank.

System supply: The steering system has priority feed from a load-sensing axial pump with variable displacement.

CDC: Speed-dependent electro-hydraulic power steering system with closed center hydrostatic back-up and end-stroke damping.

Steering cylinders		2
Cylinder bore	mm (in)	110 (4.3)
Rod diameter	mm (in)	70 (2.8)
Stroke	mm (in)	586 (23.1)
Working pressure	MPa (bar)	26 (260)
Maximum flow	l/min (gal/min)	340 (89.8)
Maximum articulation	± °	37

Service Refill

Service accessibility: Large, easy-to-open service doors with gas struts. Swing-out radiator grill. Fluid filters and component breather filters promote long service intervals. A quick-fit adapter on the hydraulic tank provides faster hydraulic oil fill. Possibility to monitor, log, and analyze data to facilitate troubleshooting.

Fuel tank	l (gal)	540 (142.6)
DEF/AdBlue® tank	l (gal)	53 (14)
Engine coolant	l (gal)	68 (18)
Hydraulic oil tank	l (gal)	365 (96.4)
Transmission oil	l (gal)	79 (20.9)
Engine oil	l (gal)	55 (14.5)
Axle oil front	l (gal)	155 (40.9)
Axle oil rear	l (gal)	155 (40.9)

Hydraulic system

System supply: Two load-sensing axial piston pumps with variable displacement. The steering function always has priority from one of the pumps. Valves: Double-acting 2-spool valve. The main valve is controlled by an electric pilot.

Lift function: The valve has four positions; lift, hold, lower, and float position. 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; rollback, hold, and dump. Inductive/magnetic automatic bucket positioner can be switched on and off.

Cylinders: Doubleacting cylinders for all functions.

Filter: Full-flow filtration through 20 micron (absolute) filter cartridge.

Hydraulic oil cooler: Aircooled oil cooler mounted on radiator.

Working pressure maximum, pump 1 for working hydraulic system

MPa (bar)

25 (250)

Flow	l/min (gal/min)	256 (67.2)
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at	MPa (bar)	10 (100)
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engine speed	r/min (r/s)	1,800 (30)
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Working pressure maximum, pump 2 for steering-, brake-, pilot- and working hydraulic system

MPa (bar)

26 (260)

Flow	l/min (gal/min)	354 (93.5)
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at	MPa (bar)	10 (100)
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engine speed	r/min (r/s)	1,800 (30)
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Working pressure maximum, pump 3 for brake- and cooling fan system

MPa (bar)

26 (260)

Flow	l/min (gal/min)	84 (22.2)
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at	MPa (bar)	10 (100)
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engine speed	r/min (r/s)	1,800 (30)
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Cycle times

Lift	s	8
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Tilt	s	1.9
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Lower, empty	s	4.7
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Total cycle time	s	14.6
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Raise and tilt cycle times with load according to ISO 14397 and SAE J818

Lift Arm System

Z-bar linkage system with high breakout forces. The lift arms are single plate construction with a high-strength steel cast cross tube. The single bell crank and bucket link are nodular iron castings.

Lift cylinders		2
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Cylinder bore	mm (in)	200 (7.9)
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Piston rod diameter	mm (in)	110 (4.3)
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Stroke	mm (in)	1,264 (49.8)
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Tilt cylinder		1
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Cylinder bore	mm (in)	260 (10.2)
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Piston rod diameter	mm (in)	120 (4.7)
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Stroke	mm (in)	728 (28.7)
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Brake system

Service brake: Service brakes are dual circuit all-hydraulic multidisc brakes with nitrogen-charged accumulators and automatic slack adjusters. Outboard-mounted oil-cooled, wet disc brakes at each wheel. Transmission disengagement during braking can be preselected in Contronic.

Parking brake: Wet multi-disc type in transmission housing. Spring-applied, electro-hydraulically released with a switch on instrument panel. Applies automatically when the key is turned off.

Secondary brake: Dual circuit axle-by-axle system. Actuated by service brake pedal. Low pressure alarm. Dead engine braking capability provided by three nitrogencharged accumulators.

Standard: The brake system complies with the requirements of ISO 3450:1996.

Number of brake discs per wheel front/rear

11/11

Accumulators	I (gal)	8x1 (8 x 0.26)
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Accumulators for parking brake	I (gal)	1x 0.5 (1 x 0.13)
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Cab

Instrumentation: All important information is centrally located in the operator's field of vision. Display for Contronic monitoring system.

Heater and defroster: Heater coil with filtered fresh air, fan with auto function and 11 manually selectable steps, defroster vents for all window areas.

Operator's seat: Operator's seat with adjustable suspension and retractable seatbelt. The seat is mounted on a bracket on the rear wall and floor. The forces from the retractable seatbelt are absorbed by the seat rails.

Standard: The cab is tested and approved according to ROPS (ISO 3471, SAE J1040), FOPS (ISO 3449). The cab meets with requirements according to ISO 6055 ("Operator overhead protection - Industrial trucks") and SAE J386 ("Operator Restraint System").

Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1.430 t CO₂-eq

Emergency exit: Use emergency hammer to break window

Ventilation	m ³ /min (yd ³ /min)	9 (11.8)
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Heating capacity	kW	13
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Air conditioning	kW	8
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Sound Level

Sound level in cab according to ISO 6396/SAE J2105

L _{pA}	dB	72
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External sound level according to ISO 6395/SAE J2104

L _{WA}	dB	111
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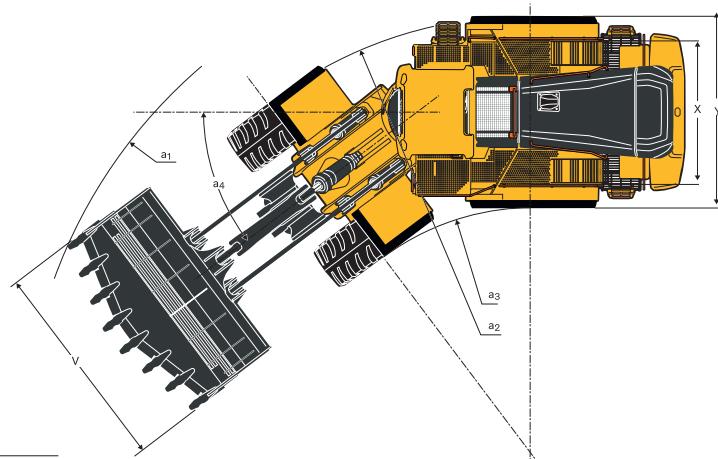
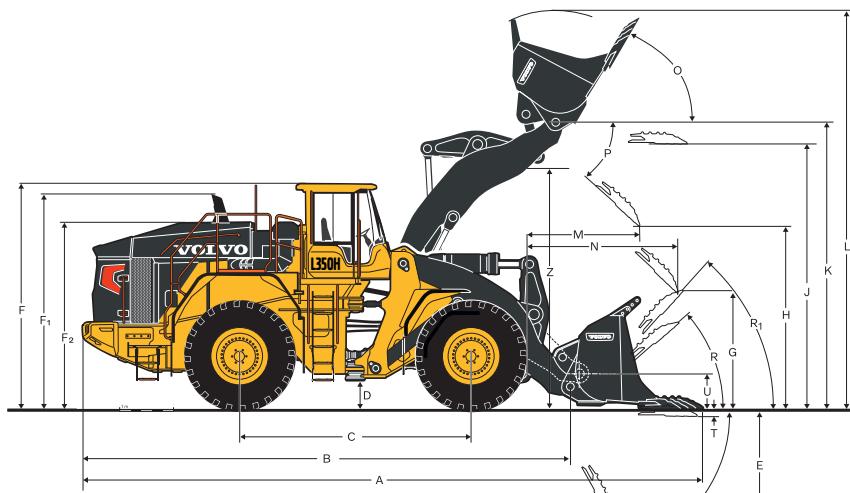
Specifications

Tires: 875/65 R33** RL-5K L5 Goodyear

	Standard boom		Long boom	
B mm ft in	9,130	30' 0"	9,560	31' 4"
C mm ft in	4,300	14' 1"	4,300	14' 1"
D mm ft in	540	1' 9"	540	1' 9"
F mm ft in	4,170	13' 8"	4,170	13' 8"
F ₁ mm ft in	3,990	13' 1"	3,990	13' 1"
F ₂ mm ft in	3,450	11' 4"	3,450	11' 4"
G mm ft in	2,134	7' 0"	2,134	7' 0"
J mm ft in	4,960	16' 3"	5,430	17' 10"
K mm ft in	5,320	17' 6"	5,798	19' 0"
O °	60		58	
P _{max} °	44		43	
R °	43		45	
R ₁ * °	49		51	
S °	63		69	
T mm ft in	87	0' 3.4"	91	0' 3.6"
U mm ft in	650	2' 2"	760	2' 6"
V mm in	4,500	177	4,500	177
X mm ft in	2,720	8' 11"	2,720	8' 11"
Y mm ft in	3,630	11' 11"	3,630	11' 11"
Z mm ft in	4,460	14' 8"	4,880	16' 0"
a ₂ mm ft in	8,240	27' 0"	8,240	27' 0"
a ₃ mm ft in	4,610	15' 2"	4,610	15' 2"
a ₄ ±°	37		37	

*Carry position SAE

Where applicable, specifications and dimensions are according to ISO 7131, SAE J732, ISO 7546, SAE J742, ISO 14397, SAE J818.



L350H BUCKETS	Material density: t/m ³ (lb/yd ³)							
	0.8 (1,349)	1.0 (1,686)	1.2 (2,024)	1.4 (2,361)	1.6 (2,698)	1.8 (3,035)	2.0 (3,373)	2.2 (3,708)
Rehandling								
8.8 m ³ (11.5 yd ³) STE P T SEG					■	■		
9.4 m ³ (12.3 yd ³) STE P BOE			■	■	■			
10.7 m ³ (14 yd ³) STE P BOE			■	■	■			
General purpose								
7.3 m ³ (9.5 yd ³) STE P BOE					■	■	■	
7.7 m ³ (10.1 yd ³) STE P T SEG					■	■	■	
8.4 m ³ (11 yd ³) STE P BOE				■	■	■		
Rock								
7.7 m ³ (10.1 yd ³) SPN P T SEG				■	■	■		
6.9 m ³ (9 yd ³) STE RO P T SEG				■	■	■		
Light material								
12.7 m ³ (16.6 yd ³) LM P			■	■				
Bucket fill		110%	105%	100%	95%			
Pin-on		■	■	■	■			

How to read bucket fill factor

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/m ³	lb/yd ³
Earth	110-115	1.4-1.6	2,360 - 2,697
Clay	110-120	1.4-1.6	2,360 - 2,697
Sand	100-110	1.6-1.9	2,360 - 2,697
Gravel	100-110	1.7-1.9	2,697 - 3,203
Rock	75-100	1.5-1.9	2,528 - 3,203

The size of rock buckets is optimized for optimal penetration and filling capability rather than the density of the material.

L350H

Standard boom			Rehandling						General purpose						Rock				Light material		
			WLA86884	WLA86885	WLA86896	WLA87151	WLA87152	WLA87153	WLA87491	WLA87489	WLA83019										
Tires 875/65 R33 RL5K L5 Pin-on buckets																					
			8.8 m ³ (11.5 yd ³) STE P BOE	9.4 m ³ (12.3 yd ³) STE P BOE	10.7 m ³ (14 yd ³) STE P BOE	7.3 m ³ (9.5 yd ³) STE P BOE	7.7 m ³ (10.1 yd ³) STE P SEG	8.4 m ³ (11 yd ³) STE P BOE	7.7 m ³ (10.1 yd ³) SPN P SEG	6.9 m ³ (9 yd ³) STE P SEG	12.7 m ³ (16.6 yd ³) LM P										
Volume heaped ISO/SAE	m ³	yd ³	8.8	11.5	9.4	12.3	10.7	14.0	7.3	9.5	7.7	10.1	8.4	11.0	7.7	10.1	6.9	9.0	12.7	16.6	
Volume at 110% fill factor	m ³	yd ³	9.7	12.7	10.3	13.5	11.8	15.4	8.0	10.5	8.5	11.1	9.2	12.1	8.5	11.1	7.6	9.9	14.0	18.3	
m _{T1}	Static tipping load, straight machine	kg	lb	37,380	82,430	37,390	82,450	36,790	81,110	39,060	86,130	38,570	85,050	38,520	84,930	37,470	82,620	38,830	85,620	37,500	82,690
m _{T2}	Static tipping load at 35°. Turn	kg	lb	33,180	73,160	33,200	73,210	32,620	71,920	34,820	76,780	34,340	75,710	34,300	75,630	33,270	73,360	34,600	76,290	33,290	73,420
m _{T3}	Static tipping load at full turn	kg	lb	32,700	72,110	32,720	72,150	32,140	70,870	34,340	75,720	33,860	74,650	33,820	74,570	32,790	72,310	34,120	75,230	32,820	72,360
F _{Br}	Breakout force	kN	lbf	391	87,800	378	85,050	352	79,220	449		434	97,620	416	93,440	342	76,940	450	101,130	376	84,540
A	Overall length	mm	ft in	11,430	37' 6"	11,180	36' 8"	11,330	37' 2"	10,850	35' 7"	11,220	36' 10"	10,990	36' 1"	11,700	38' 4"	11,160	36' 7"	11,170	36' 8"
E	Digging depth, max dump (S)	mm	ft in	1,980	6' 6"	1,770	5' 10"	1,900	6' 3"	1,490	4' 10"	1,810	5' 11"	1,610	5' 3"	2,220	7' 3"	1,750	5' 9"	1,770	5' 10"
H*)	Dump clearance	mm	ft in	3,470	11' 5"	3,640	11' 11"	3,540	11' 7"	3,860	12' 8"	3,610	11' 10"	3,770	12' 4"	3,300	10' 10"	3,650	12' 0"	3,630	11' 11"
L	Overall operating height	mm	ft in	7,300	23' 11"	7,380	24' 3"	7,540	24' 9"	7,110	23' 4"	7,170	23' 6"	7,270	23' 10"	7,400	24' 3"	7,300	23' 11"	7,680	25' 2"
M*)	Dump reach	mm	ft in	2,030	6' 8"	1,870	6' 2"	1,980	6' 6"	1,650	5' 5"	1,890	6' 2"	1,750	5' 9"	2,250	7' 4"	1,850	6' 1"	1,880	6' 2"
N*)	Reach at 45deg discharge, Pos. G	mm	ft in	2,840	9' 4"	2,740	9' 0"	2,810	9' 3"	2,570	8' 5"	2,740	9' 0"	2,650	8' 8"	2,990	9' 10"	2,720	8' 11"	2,700	8' 10"
V	Bucket width	mm	ft in	3,970	156"	3,970	156"	3,970	156"	3,970	156"	3,970	156"	4,110	161"	3,970	156"	4,500	177"		
a1	Outer clearance circle (diameter)	mm	ft in	18,530	60' 10"	18,390	60' 4"	18,480	60' 7"	18,210	59' 9"	18,420	60' 5"	18,290	60' 0"	18,800	61' 8"	18,370	60' 3"	18,860	61' 11"
Operating weight without load	kg	lb	51,460	113,470	51,410	113,350	51,730	114,060	50,720	111,830	51,040	112,530	51,010	112,480	51,690	113,980	50,930	112,290	51,890	114,410	

L350H

Long boom			Rehandling						General purpose						Rock				Light material		
			WLA86884	WLA86885	WLA86896	WLA87151	WLA87152	WLA87153	WLA87491	WLA87489	WLA83019										
Tires 875/65 R33 RL5K L5 Pin-on buckets																					
			8.8 m ³ 11.5 yd ³) STE P BOE	9.4 m ³ (12.3 yd ³) STE P BOE	10.7 m ³ (14 yd ³) STE P BOE	7.3 m ³ (9.5 yd ³) STE P BOE	7.7 m ³ (10.1 yd ³) STE P SEG	8.4 m ³ (11 yd ³) STE P BOE	7.7 m ³ (10.1 yd ³) SPN P SEG	6.9 m ³ (9 yd ³) STE P SEG	12.7 m ³ (16.6 yd ³) LM P										
Volume heaped ISO/SAE	m ³	yd ³	8.8	11.5	9.4	12.3	10.7	14.0	7.3	9.5	7.7	10.1	8.4	11.0	7.7	10.1	6.9	9.0	12.7	16.6	
Volume at 110% fill factor	m ³	yd ³	9.7	12.7	10.3	13.5	11.8	15.4	8.0	10.5	8.5	11.1	9.2	12.1	8.5	11.1	7.6	9.9	14.0	18.3	
m _{T1}	Static tipping load, straight machine	kg	lb	35,250	77,720	35,270	77,770	34,710	76,530	36,790	81,120	36,320	80,090	36,290	80,010	35,280	77,800	36,560	80,610	37,500	82,690
m _{T2}	Static tipping load at 35°. Turn	kg	lb	31,160	68,710	31,190	68,780	30,650	67,580	32,670	72,040	32,210	71,030	32,190	70,970	31,200	68,800	32,450	71,560	33,290	73,420
m _{T3}	Static tipping load at full turn	kg	lb	30,700	67,680	30,730	67,750	30,190	66,560	32,200	71,010	31,740	69,990	31,720	69,940	30,740	67,780	31,980	70,530	32,820	72,360
F _{Br}	Breakout force	kN	lbf	355	79,890	344	77,280	320	72,020	408	91,650	395	88,760	377	84,860	311	69,970	409	91,930	376	84,540
A	Overall length	mm	ft in	11,840	38' 10"	11,590	38' 0"	11,740	38' 6"	11,260	36' 11"	11,630	38' 2"	11,400	37' 5"	12,110	39' 9"	11,570	38' 0"	11,170	36' 8"
E	Digging depth, max dump (S)	mm	ft in	2,060	6' 9"	1,830	6' 0"	1,970	6' 6"	1,540	5' 1"	1,870	6' 2"	1,670	5' 6"	2,310	7' 7"	1,820	5' 11"	1,770	5' 10"
H*)	Dump clearance	mm	ft in	3,950	12' 11"	4,120	13' 6"	4,010	13' 2"	4,340	14' 3"	4,080	13' 5"	4,240	13' 11"	3,770	12' 5"	4,120	13' 6"	3,630	11' 11"
L	Overall operating height	mm	ft in	7,780	25' 6"	7,850	25' 9"	8,020	26' 4"	7,580	24' 10"	7,640	25' 1"	7,750	25' 5"	7,870	25' 10"	7,770	25' 6"	7,680	25' 2"
M*)	Dump reach	mm	ft in	2,040	6' 8"	1,880	6' 2"	1,980	6' 6"	1,660	5' 5"	1,900	6' 3"	1,750	5' 9"	2,250	7' 5"	1,860	6' 1"	1,880	6' 2"
N*)	Reach at 45deg discharge, Pos. G	mm	ft in	3,200	10' 6"	3,090	10' 2"	3,170	10' 5"	2,930	9' 7"	3,100	10' 2"	3,000	9' 10"	3,350	11' 0"	3,070	10' 1"	2,700	8' 10"
V	Bucket width	mm	ft in	3,970	156"	3,970	156"	3,970	156"	3,970	156"	3,970	156"	4,110	161"	3,970	156"	4,500	177"		
a1	Outer clearance circle (diameter)	mm	ft in	18,880	61' 11"	18,730	61' 6"	18,820	61' 9"	18,550	60' 10"	18,760	61' 7"	18,630	61' 1"	19,160	62' 10"	18,720	61' 5"	18,860	61' 11"
Operating weight without load	kg	lb	53,100	117,080	53,040	116,950	53,360	117,660	52,350	115,430	52,670	116,130	52,640	116,080	53,330	117,580	52,560	115,890	51,890	114,410	

*) Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge.

Note: This only applies to genuine Volvo attachments. Measured at 45° dump angle. (Spade nose buckets at 42°.)

Supplemental Operating Data

		Width over tires		Ground clearance		Operating weight		Static tipping load, full turn			
								Standard boom		Long boom	
		mm	in	mm	in	kg	lb	kg	lb	kg	lb
36/65 R33 XTXL L4 Michelin		10	0.4	-20	-0.8	-1,140	-2,513	-1,030	-2,271	-910	-2,006
35/65 R33 XLD D2 L5 Michelin		10	0.4	-20	-0.8	-440	-970	-580	-1,279	-510	-1,124
35/65 R33 X-Mine D2 L5 Michelin		20	0.8	-20	-0.8	260	573	-50	-110	-40	-88

Equipment

STANDARD EQUIPMENT

Engine

Three stage air cleaner, pre-cleaner, primary and secondary filter

Indicator glass for coolant level

Preheating of induction air

Fuel pre-filter with water trap

Fuel filter

Crankcase breather oil trap

Drivetrain

Automatic Power Shift (APS) with operator controlled transmission disengagement

when braking and mode selector with AUTO mode

Fully automatic gear shifting, 1-4

Pulse Width Modulation (PWM) controlled gear shifting

Torque converter with Lock-Up

Automatic Lock-Up shifting, 3-4 (gear selector in 4) and 2 (gear selector in 2)

Forward and reverse switch by hydraulic lever console

Rimpull control

Indicator glass for transmission oil level

Electrical system

24 V, pre-wired for optional accessories

Alternator 24V/ 80A

Battery disconnect switch with removable key

Fuel gauge

Hour meter

Electric horn

Instrument cluster:

Fuel level

Transmission temperature

Coolant temperature

Instrument lighting

Lighting:

- Twin halogen front headlights with high and low beams

- Parking lights

- Double brake and tail lights

- Turn signals with flashing hazard light function

- Work lamp, front on cab, 2 Halogen lamps, std

- Work lamp, rear in grille, 4 Halogen lamps, std

STANDARD EQUIPMENT

Contronic monitoring system

Monitoring and logging of machine data

Contronic display

Fuel consumption

Ambient temperature

Clock

Brake test

Test function for warning and indicator lights

Warning and indicator lights:

Battery charging

Parking brake

Warning and display message:

- Engine coolant temperature

- Charge-air temperature

- Engine oil temperature

- Engine oil pressure

- Transmission oil temperature

- Transmission oil pressure

- Hydraulic oil temperature

- Brake pressure

- Parking brake applied

- Parking brake NOT applied

- Brake charging

- Overspeed at direction change

- Axle oil temperature

- Steering pressure

- Crankcase pressure

Level warnings:

- Low fuel level

- Engine oil level

- Engine coolant level

- Transmission oil level

- Hydraulic oil level

- Washer fluid level

Engine torque reduction in case of malfunction indication:

- High engine coolant temperature

- High engine oil temperature

- Low engine oil pressure

- High crankcase pressure

- High charge-air temperature

Engine shutdown to idle in case of malfunction indication:

- High transmission oil temperature

- Slip in transmission clutches

Keypad, background lit

Start interlock when gear is engaged

STANDARD EQUIPMENT	STANDARD EQUIPMENT
Hydraulic system	Service and maintenance
Main valve, double-acting 2-spool with electric pilots	Engine oil remote drain and fill
Variable displacement axial piston pumps (3) for:	Transmission oil remote drain and fill
Steering system, working hydraulics	Grouped lubrication points, ground accessible
Working hydraulics, brakes	Pressure check connections: transmission and hydraulic, quick-connect, grouped on console for easy access
Cooling fan, brakes	Quick-fit hydraulic oil fill
Electric-hydraulic servo control	Tool box, lockable
Electric level lock	Wheel nut wrench kit
Boom kick-out, automatic, adjustable from cab	External equipment
Return-to-dig, automatic, adjustable from cab	Fenders, front with rubber extensions
Bucket positioner, automatic, adjustable from cab	Viscous cab mounts
Double-acting hydraulic cylinders with end-damping	Rubber engine and transmission mounts
Indicator glass for hydraulic oil level	Lifting eyes
Hydraulic oil cooler	Easy-to-open side panels with gas struts
Brake system	Frame, joint lock
Wet oil circulation-cooled disc brakes on all four wheels	Vandalism lock prepared for:
Dual brake circuits	- Batteries
Dual brake pedals	- Engine compartment
Secondary brake system	- Radiator
Parking brake, electric-hydraulic	Tie-down eyes
Brake wear indicators	Recovery eyes
Cab	Tow hitch
ROPS (ISO 3471), FOPS (ISO 3449)	
Acoustic inner lining	
Cigarette lighter, 24 V power outlet	
Lockable door	
Cab heating with fresh air inlet and defroster	
Fresh air inlet with two filters	
Automatic climate control (ACC)	
Floor mat	
Interior light	
Rear view mirror, interior	
Dual exterior rear-view mirrors	
Sliding window, right side	
Tinted safety glass	
Seat-mounted adjustable lever console, working hydraulics	
Adjustable steering wheel	
Storage compartment	
Document pocket	
Sun visor	
Beverage holder	
Windshield washer front and rear	
Windshield wipers front and rear	
Interval function for front and rear wipers	
Service platforms with slip protected surfaces on front and rear fenders	
Comfort Drive Control (CDC)	
Remote door opener	

Equipment

OPTIONAL EQUIPMENT

Engine

Air pre-cleaner, oil-bath type

Air pre-cleaner, cyclone type

Cooling package: Radiator and charge air cooler, corrosion-protected

Engine block heater, 230 V

Engine block heater, 120V, USA

Engine auto shutdown

Hand throttle control

Fuel fill strainer

Fast fill fuel system

Fuel heater

Reversible cooling fan

Max. fan speed, hot climate

Drivetrain

Limited Slip, rear axle

Speed limiter, 20 km/h

Speed limiter, 30 km/h

Electrical system

Travel lights:

Cab heater, power outlet 240V

Warning beacon LED

Warning beacon LED automatic

LED Head Light

LED tail light

LED working lights, attachments

LED working lights on cab, front and rear

LED working lights on cab, front, 2 alt. 4 LED lamps

LED working lights on cab, rear, 2 alt. 4 LED lamps

LED working lights, rear in grille, 2 LED lamps

LED working lights, front above head lamps, 2 LED lamps

LED work lights, side on cab, 4 LED lamps

LED light packages

Working lights halogen, attachments

Working lights on cab halogen, front and rear

Working lights on cab halogen, rear

Warning beacon(flasher), LED

Reverse warning light, Strobe

Reverse alarm, audible, multi-frequency (white noise)

Reverse alarm, audible

Seatbelt indicator, external

Jump start connector NATO

Emergency stop

Electrical distribution unit 24 volt

Alternator 120 amp, heavy-duty

Anti-theft device

Max Boom height

Can Bus Interface

Delayed Engine Shutdown

Co Pilot available

Rearview camera in Co pilot

OnBoard Weighing

Tire pressure monitoring

MAP

OPTIONAL EQUIPMENT

Hydraulic system

Boom suspension system with single-acting lift function

Arctic kit, pilot hoses, brake accumulators and hydraulic oil

Hydraulic 2 functions, Single lever control

Hydraulic 3 functions, Single lever control

3rd electro-hydraulic function

3rd electro-hydraulic function for long boom

Attachment bracket

Separate attachment locking

Biodegradable hydraulic fluid

Fire-resistant hydraulic fluid

Hot climate hydraulic fluid

Mineral oil for cold climate

Brake system

Oil coolers for front and rear axles

Cab

Radio with Bluetooth/USB/AUX

DAB Radio

Radio installation kit incl. 11 A, 12 V outlet, left side

Radio installation kit incl. 11 A, 12 V outlet, right side

Rear-view camera incl. monitor, colour

Forward camera, colour

Rear-view mirrors, electrically adjustable and heated

Asbestos dust protection filter

Carbon filter

Automatic climate control panel, with Fahrenheit scale

Lunchbox holder

Universal key EU

Universal key US

Steering wheel knob

Sun blind, rear window

Sun blind, side windows

Timer cab heating

Window sliding, door

Operator's seat, Volvo air susp, heavy-duty, high back, heat, for CDC

Parking brake alarm, audible for air susp seats

Operator's seat, Premium Comfort

Operator's seat, Premium Comfort ISRI 3-point seat belt

Operator's seat, (air seat std) 3-point seat belt and CDC

Ashtray

Anchorage for Operator's manual

Forward view mirror

Service and maintenance

Tool kit

Automatic lubrication system

Automatic lubrication system for long boom

Refill pump for automatic lubrication system

Oil sampling valve

OPTIONAL EQUIPMENT	
Protective equipment	
Guards for front headlights	
Tail light guards, heavy-duty	
Guards for tail lights, heavy-duty	
Guards for rear work lights	
Radiator grille guard	
Cab roof, heavy duty	
Windows, side and rear guards	
Windshield guard	
Belly guard, front	
Belly guard, rear	
Fire extinguisher	
Bracket for fire extinguisher	
Other equipment	
Secondary steering with automatic test function	
Counterweight, re-handling	
Counterweight, signal painted, chevrons	
Logger version	
Block handler kit	
Block handler kit, heavy-duty	
CE-marking	
Decals, USA	
Sound decal, EU	
Cleaner kit, with air blow gun (Stage V)	
Reflecting stickers (stripes), machine contour Cab	
Option for machines without dinitrol	
CareTrack	
External equipment	
Long boom	
Fire suppression system	

OPTIONAL EQUIPMENT	
Tires and Rims	
35/65 R33 (875/65 R33):	
- L4	
- L5	
Rims, 33-28.00/3,5:	
- Five piece, heavy-duty	
Attachments	
Buckets (pin-on):	
- Rock, straight edge	
- Rock, spade nose	
- Rock, side-dump, spade nose	
- General purpose, straight edge	
- Rehandling bucket, straight edge	
- Light material, straight edge	
Wear parts:	
- Adapters for teeth, weld-on	
- Teeth	
- Segments, bolt-on	
- Edge savers, bolt-on (reversible)	
Block handling equipment (hook-on):	
- Rock bucket, spade nose	
- Stone fork	
- Breaker tine	
- Rake	

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Boom suspension system



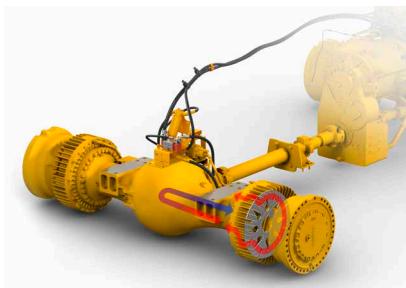
Long boom



Limited slip differentials



Axle oil cooler



Fast fill fueling system



Radar detect system



Not all products are 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
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