



Volvo Construction Equipment

# L180H HIGH-LIFT

Volvo Wheel Loaders 33–34 t 334 hp



# A passion for performance

At Volvo Construction Equipment, we're not just coming along for the ride. Developing products and services that raise productivity – we are confident we can lower costs and increase profits for industry experts. Part of the Volvo Group, we are passionate about innovative solutions to help you work smarter – not harder.

## Helping you to do more.

Doing more with less is a trademark of Volvo Construction Equipment. High productivity has long been married to low energy consumption, ease of use and durability. When it comes to lowering life-cycle costs, Volvo is in a class of its own.

## Designed to fit your needs.

There is a lot riding on creating solutions that are suited to the particular needs of different industry applications. Innovation often involves high technology – but it doesn't always have to. Some of our best ideas have been simple, based on a clear and deep understanding of our customers' working lives.



## You learn a lot in 180 years.

Over the years, Volvo has advanced solutions that have revolutionized the use of construction equipment. No other name speaks Safety louder than Volvo. Protecting operators, those around them and minimizing our environmental impact are traditional values that continue to shape our product design philosophy.

## We're on your side.

We back the Volvo brand with the best people. Volvo is truly a global enterprise, one that is on standby to support customers quickly and efficiently – wherever they are.

## We have a passion for performance.



Volvo Trucks



Renault Trucks



Mack Trucks



UD Trucks



Volvo Buses



Volvo Construction Equipment



Volvo Penta



Volvo Financial Services



#### **Volvo high-lift arm system**

Increase productivity and maximize your timber yard with Volvo's superior high-lift arm system – designed for high stacking and long reach. Benefits of the system include quick, safe loading and unloading as well as faster ground speeds when travelling with a load due to excellent stability.

# Sky-high productivity.

Lift higher and reach further with the L180H HL and Volvo's range of grapples. Designed for log handling, this purpose-built machine allows you to stack higher and load faster – increasing productivity and profitability. Get the job done with Volvo.

## Boom Suspension System

The standard Boom Suspension System (BSS) boosts productivity by absorbing shock and reducing the bounce that occurs when operating on rough ground. This enables faster and more comfortable work cycles and increases machine life.



## Log pusher

The log pusher helps to increase stack height by up to 30% (1-1.5 m) while increasing productivity and operating efficiency. Store more timber and push logs further onto the pile to increase space. For comfort and safety, the log pusher is operated by two push buttons in front of the hydraulic control levers.



## Grapple with rotator unit

For ease of use when placing and picking up logs from the middle of the stack, or when operating over uneven terrain, the grapple with rotator unit and built in shock absorbers can be rotated and tilted. The grapple-tilt cylinder has an integrated damping function which effectively counteracts swaying and provides better control of the load.

# Loaded with efficiency.

The new L180H HL is a purpose-built, high-lift wheel loader designed by Volvo Construction Equipment for log handling. Loaded with innovations and fuel-saving features, this machine works in the most efficient and productive way. One example of this is Volvo's unique OptiShift technology which reduces fuel consumption by up to 18% and increases machine performance.

## Reverse By Braking (RBB)

RBB is ideal for short cycle or truck loading applications. When the operator changes direction the Volvo patented RBB function senses the loader's direction and slows the machine by applying the service brakes automatically. This increases fuel efficiency, improves operator comfort and increases machine lifetime.

## Intelligent hydraulics

Volvo's load-sensing hydraulics supply power to the hydraulic functions according to demand, lowering fuel consumption. The powerful system ensures fast response for shorter cycle times while delivering smooth operation through superior control of both the load and the attachment.



## Eco pedal

Volvo's unique eco pedal applies mechanical push-back force when the accelerator is used excessively and engine rpm is about to exceed the economic operating range. This encourages the operator to ease off the throttle, reducing fuel consumption.



### OptiShift

Volvo's OptiShift technology combines the company's patented Reverse By Braking (RBB) technology and a torque converter with lock-up. Lock-up creates a direct drive between the engine and transmission – eliminating power losses in the torque converter and reducing fuel consumption by up to 18%.



#### **Powertrain**

The ideally-matched, all-Volvo powertrain has been built to work together in perfect harmony. The Volvo design has been rigorously tested to deliver optimized performance, high productivity, low fuel consumption and superior reliability. This long-established and proven technology has been built by Volvo for 40 years, including all in-house components and parts.



# New levels of reliability.

Experience top to bottom quality with the Volvo L180H HL. Featuring proven, advanced technology including the premium Volvo engine, this dependable machine has been built to last. With reliability you can count on, trust Volvo to help you reach new levels of uptime.

## Volvo engine

Featuring advanced technology and built on decades of experience, the powerful Volvo engine delivers high performance and low fuel consumption. The water cooled turbocharger increases engine life and performance.



## Cooling on demand

The hydraulically-driven, electronically controlled cooling fan regulates the temperature of vital components. It automatically activates only when it's needed – reducing fuel consumption and noise. The standard reversible functionality – which blows air in the opposite direction – allows self-cleaning of the cooling units.



## Contronic and electronic systems

The machine's electronics support preventive maintenance and diagnostics for maximum uptime. Waterproof sealed connectors protect your machine's reliability and increase its longevity.



## Axle oil cooling

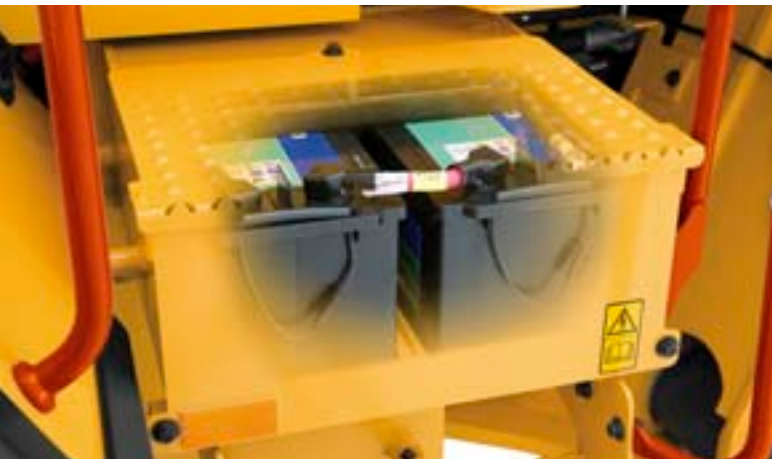
The standard axle oil cooling system cools down axles and reduces oil changing intervals for maximum uptime and less service downtime.

# Innovative access.

Access greater uptime and spend longer working with the L180H HL. With a tilting cab and an electrically activated, wide-opening engine hood, it's easy to see that this machine has been designed for quick and easy service and maintenance checks. Get the most out of each working day with Volvo.

## Maintenance-free batteries

Two heavy-duty, maintenance-free 12V batteries in series provide a 24V electrical system. The batteries are located in a well-sealed compartment on the right side of the machine.



## Lubrication system

The standard automatic lubrication system controls greasing when the machine is in operation, resulting in more uptime and reduced maintenance. The operator can alter the lubrication cycle to suit the application.



## Engine access

Electrically activated, the wide-opening engine hood allows quick and easy service access to the engine and components for maximum uptime.



## Maintaining a smooth operation

Enjoy peace-of-mind for maximum machine uptime with the rear axle design. The sealed oscillation pins cradle keeps the grease in and the dirt out, keeping components greased for up to 8,000 hours so you can rely on reduced overall service time and costs.



#### Tilting cab

The cab can be tilted in two positions – 35° and 70°. Tilting the cab greatly improves service and maintenance access which leads to more uptime and increased machine availability. The cab is tilted via a hydraulic pump.

### **High-lift arm system**

Volvo's high-lift arm system is designed for high stacking and long reach – allowing you to increase productivity and maximize your timber yard.

### **Grapple with rotator unit**

The grapple can be tilted and rotated for easy placement and pick-up of logs from anywhere in the stack.

### **Fire suppression system**

For added safety, the optional fire suppression system consists of up to 16 nozzles that are automatically activated inside the engine compartment when excessive heat is detected.

### **OptiShift**

Volvo's OptiShift technology reduces fuel consumption by up to 18%, increases operator comfort and reduces stress in the drivetrain.

### **Boom Suspension System (BSS)**

The BSS boosts productivity by up to 20% by absorbing shock and reducing the bouncing that occurs when operating at speed on rough terrain.

### **Powertrain**

The ideally-matched, all-Volvo powertrain has been built to work together in perfect harmony – ensuring optimized performance.



# Set your targets higher.

## **Volvo cab**

Volvo's industry-leading, certified ROPS/FOPS cab features ergonomically placed controls, low internal noise levels, vibration protection and ample storage space.

## **Tilting cab**

The cab can be tilted in two positions – 30° and 70° – for improved service and maintenance access. This leads to more uptime and increased machine availability.

## **Volvo engine**

The Volvo engine delivers high performance and low fuel consumption.

## **Easy service access**

Electrically activated, wide-opening engine hood allows quick and easy service access to the engine compartment.

## **Reversible cooling fan**

The cooling fan automatically activates only when it's needed to regulate the temperature of components. The reversible functionality allows for self-cleaning of the cooling units.

## **Intelligent hydraulics**

Volvo's load-sensing hydraulics supply power to the hydraulic functions according to demand, lowering fuel consumption.





#### **Volvo cab**

The spacious ROPS/FOPS certified cab provides a comfortable operating environment with ergonomically placed controls, ample storage space and a comfortable seat with three point seat belt and seat belt warning. With low internal noise levels and vibration protection, operators will experience a productive work shift.

# Unparalleled operator comfort.

Volvo's industry-leading cab provides operators with the most effective workplace in the business. Featuring ample leg room, easy to access controls and built in safety, it's clear to see that the cab has been designed with productivity in mind. But don't just take our word for it, step inside and take a look for yourself.

## Visibility

Volvo offers a variety of options to improve safety and visibility when working in the dark. This includes reflectors which follow the contour of the machine, LED entrance lights illuminating the cab for safe entry/exit and additional LED work lamps to increase visibility around the machine. All machine lights are available as LED through Volvo's light packages, which increases lifetime of the light and saves energy.



## Cab air filter

The cab air intake is located high on the machine, where air is cleanest. The easy-to-replace pre-filter separates coarser dust and particles before the air passes through the main filter and finally enters the cab. Volvo's industry-leading design allows 90% of the cab air to be recirculated through the main filter for continuous dust removal.

## Fire suppression system

For added safety, the optional fire suppression system consists of up to 16 nozzles that are automatically activated inside the engine compartment if excessive heat is detected. The system has been rigorously tested and is purpose built for Volvo wheel loaders. It is a semi-automatic system which also can be manually activated both inside and outside the cab.

# Adding value to your business.

Being a Volvo customer means having a complete set of services at your fingertips. Volvo can offer you a long-term partnership, protect your revenue and provide a full range of customer solutions using high quality parts, delivered by passionate people. Volvo is committed to increasing the positive return on your investment and maximising uptime.



## Complete Solutions

Volvo has the right solution for you. So why not let us provide all your needs throughout the whole life cycle of your machine? By listening to your requirements, we can reduce your total cost of ownership and increase your revenue.

## CareTrack

CareTrack gives you access to a wide range of machine monitoring information designed to save you time and money. Reduce fuel costs, optimize machine and operator performance and proactively manage service and maintenance to maximize uptime.



## Genuine Volvo Parts

Our attention to detail is what makes us stand out. This proven concept acts as a solid investment in your machine's future. Parts are extensively tested and approved because every part is vital for uptime and performance. Only by using Genuine Volvo Parts, can you be sure that your machine retains the renowned Volvo quality.



## Service Network

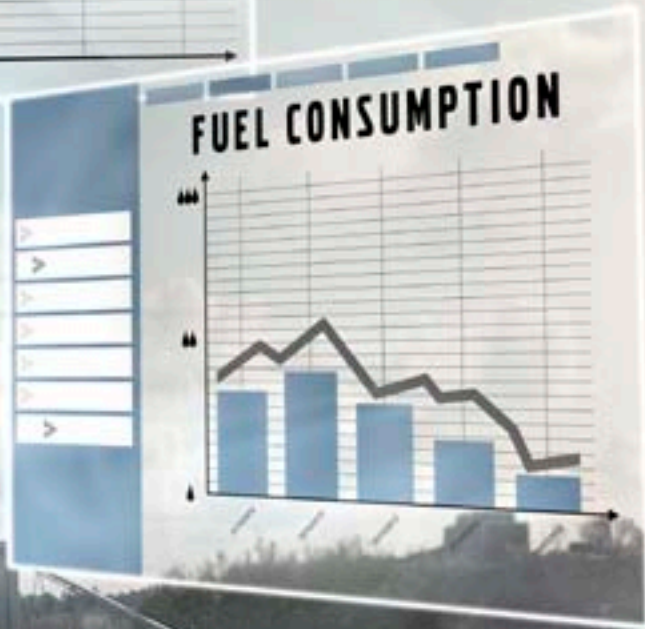
In order to respond to your needs faster, a Volvo expert is on their way to your job site from one of our Volvo facilities. With our extensive infrastructure of technicians, workshops and dealers, Volvo has a comprehensive network to fully support you using local knowledge and global experience.





### SERVICE PLAN

DAY01	DAY02	DAY03	DAY04	DAY05	DAY06	DAY07
						✓
			✓	✓		
	✓				✓	✓
		✓				
✓				✓		



#### Customer Support Agreements

The range of Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services. Volvo uses the latest technology to monitor machine operation and status, giving you advice to increase your profitability. By having a Customer Support Agreement you are in control of your service costs.

# Volvo L180H High-Lift in detail.

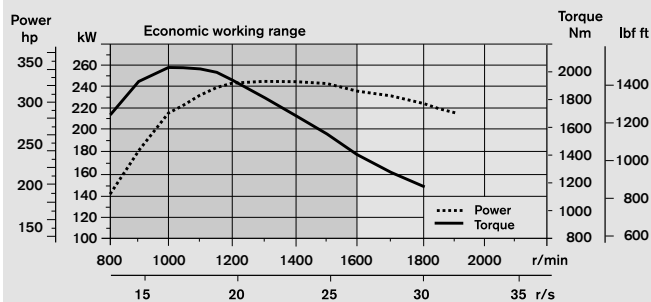
## Engine

V-ACT Stage IIIA 13 liter, 6-cylinder straight 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. The throttle applications is transmitted electrically from the throttle pedal or the optional hand throttle.

**Air cleaning:** Two-stage: - primary filter -secondary filter.

**Cooling system:** Hydraulically driven radiator cooling fan.

Engine		D13E
Max power at	r/s (r/min)	21.7 - 23.3 (1 300 - 1 400)
SAE J1995 gross	kW / hp	246 / 334
ISO 9249, SAE J1349 net	kW / hp	245 / 333
Max torque at	r/s (r/min)	16.7 (1 000)
SAE J1995 gross	Nm	2 030
ISO 9249, SAE J1349 net	Nm	2 024
Economic working range	r/min	800 - 1 600
Displacement	l	12.8



## Brake system

**Service brake:** Volvo dual-circuit system with nitrogen-charged accumulators. Outboard-mounted fully hydraulic operated, fully sealed oil circulation-cooled wet disc brakes. The operator can select automatic declutch of the transmission when braking by a switch on the instrument panel.

**Parking brake:** Fully sealed, wet multi-disc brake built into the transmission. Applied by spring force, electro-hydraulic release with a switch on the instrument panel.

**Secondary brake:** Dual brake circuits with rechargeable accumulators. 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)		1
Accumulators	l	2 x 1.0 + 1 x 0.5

## Electrical system

**Central warning system:** Contronic electrical system with central warning light and buzzer for following functions: - Serious engine fault - Low steering system pressure - Over speed warning engine - Interruption in communication (computer fault) Central warning light and buzzer with the 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 crank case pressure - Low transmission oil pressure - High transmission oil temperature - Low brake pressure - Engaged parking brake - Fault on brake charging - 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	7.0

## Drivetrain

**Torque converter:** Single-stage.

**Transmission:** Volvo countershaft transmission with single lever control. Fast and smooth shifting of gears with Pulse Width Modulation (PWM) valve. Torque converter with lockup.

**Transmission:** Volvo Automatic Power Shift (APS) with fully automatic shifting 1-4 and mode selector with 4 different gear shifting programs, including AUTO.

**Axles:** Volvo fully floating axle shafts with planetary hub reductions and nodular iron axle housing. Fixed front axle and oscillating rear axle. 100% differential lock on the front axle.

Transmission		Volvo HTL 221
Torque multiplication, stall ratio		1.856:1
	1st gear	km/h 6.5
Maximum speed,	2nd gear	km/h 12.5
forward/reverse	3rd gear	km/h 26.0
	4th gear*	km/h 38.0
Measured with tires		800/65R29
Front axle/rear axle		AWB 40B
Rear axle oscillation ±	°	13
Ground clearance at 13° osc.	mm	610

\*) limited by ECU

## Cab

**Instrumentation:** All important information is centrally located in the operator's field of vision. Display for Contronic 3.0 monitoring system.

**Heater and defroster:** Heater coil with filtered fresh air and fan with auto and 11 speeds. 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 cab wall. The forces from the retractable seatbelt are absorbed by the seat rails.

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

Sound level in cab according to ISO 6396/SAE J2105

LpA	dB(A)	70
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External sound level according to ISO 6395/SAE J2104

LwA	dB(A)	108
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Ventilation	m <sup>3</sup> /min	9
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Heating capacity	kW	16
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Air conditioning (optional)	kW	7.5
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## Steering system

**Steering system:** Load-sensing, hydrostatic articulated steering.

**System supply:** The steering system has priority feed from a load-sensing axial piston pump.

**Steering cylinders:** Two double-acting cylinders.

Cylinder bore	mm	100
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Piston rod diameter	mm	60
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Stroke	mm	525
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Working pressure	MPa	21 ± 0.35
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Maximum flow	l/min	252
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Maximum articulation	± °	37
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## Service

**Service accessibility:** Large, easy-to-open hood covering whole engine department, electrically operated. Fluid filters and component breather air filters promote long service intervals. Possibility to monitor, log and analyze data to facilitate troubleshooting.

Fuel Tank	l	366
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Engine coolant	l	55
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Hydraulic oil tank	l	156
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Transmission oil	l	48
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Engine oil	l	50
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Axle oil front/rear	l	46/55
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## Lift arm system

The Volvo high-lift arm system is a rugged and stable in-house design, with optimized visibility throughout the work cycle. The new lift arm design gives increased lift height and the possibility to rotate the grapple 360 degrees fully open at top position. The lift height is 5.8 meters under closed grapple.

Lift cylinders		2
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Cylinder bore	mm	140
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Piston rod diameter	mm	110
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Stroke	mm	2 220
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Tilt cylinder		2
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Cylinder bore	mm	140
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Piston rod diameter	mm	70
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Stroke	mm	691
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## 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:** Two main valves. Main valve 1: 2 spool control valve for lift- and tilt function. Main valve 2: 4 spool control valve for grapple, grapple tilt, rotator and log pusher (extra equipment).

**Filter:** Full flow filtration through 10 micron (absolute) filter cartridge.

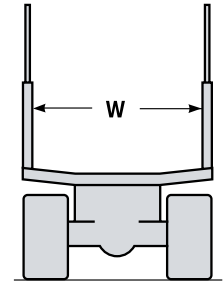
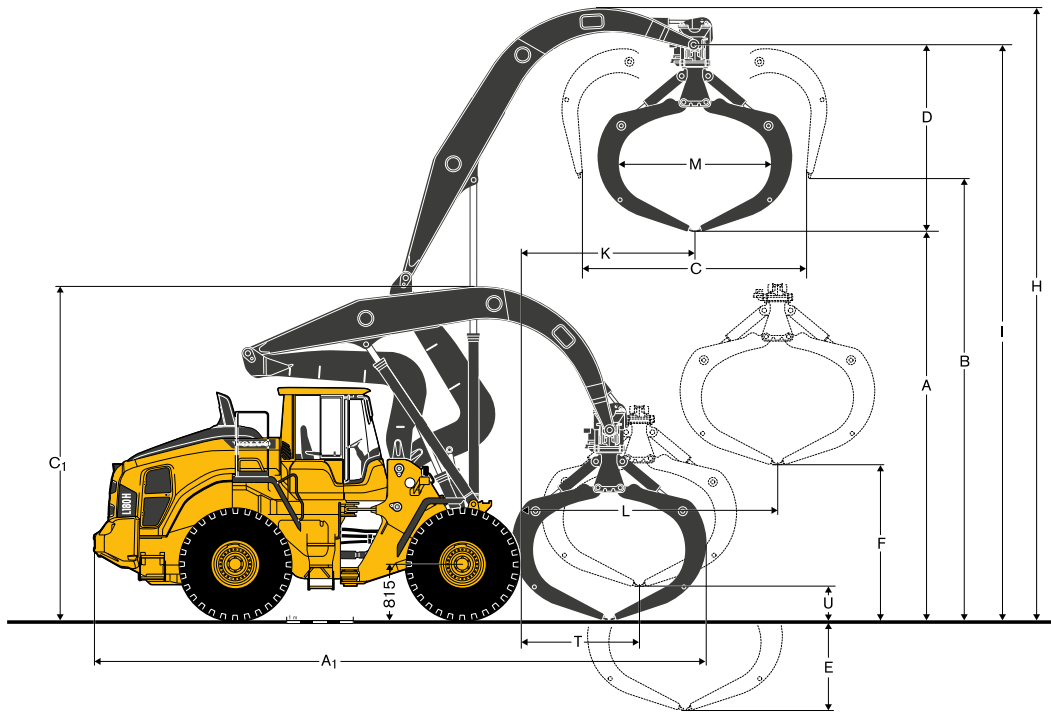
Working pressure maximum, pump 1	MPa	20
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Working pressure maximum, pump 2	MPa	21
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Pilot system	MPa	3.2 - 4.0
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Lower, empty (top to bottom)	s	6
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# Specifications.

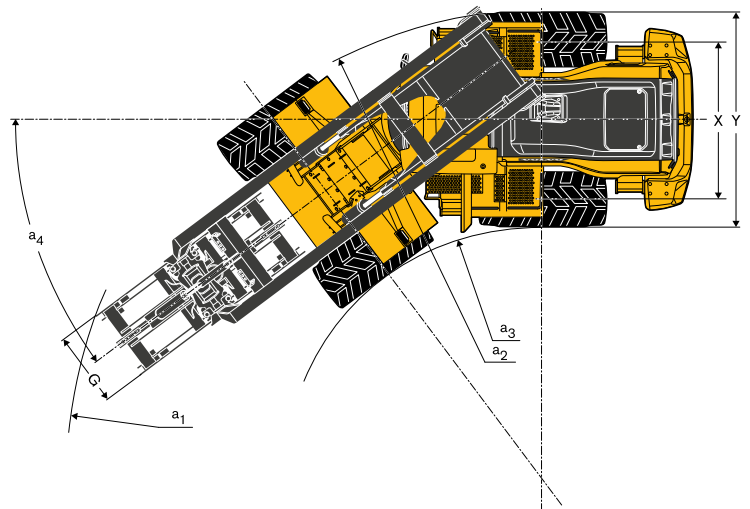







**Note:** When loading a vehicle, the log grapple's width (M-measure) should be 150 mm narrower compared to the distance between the "stakes" (W) on the vehicle.

Tires: 775/65 R29\*

Rotating grapple, 360°, 3.2 m<sup>2</sup>, 82127

A <sub>1</sub>	Grapple positioned lengthwise	mm	9 600
	- with log pusher	mm	9 916
A <sub>2</sub>	Grapple tilted forward	mm	10 590
C <sub>1</sub>	Grapple positioned lengthwise	mm	5 160
C <sub>2</sub>	Grapple tilted forward	mm	4 760
H		mm	9 132
I		mm	8 930
K		mm	2 760
L		mm	3 990
X		mm	2 280
Y		mm	3 080
a <sub>1</sub>		mm	7 630
a <sub>2</sub>		mm	6 840
a <sub>3</sub>		mm	3 830
a <sub>4</sub>		°	± 37



		Timber Length 5.0 m		Timber Length 4.0 m	Pulpwood Length 4.0 m	
						
<b>Tires 775/65 R29*</b>						
Grapple area	m <sup>2</sup>	3.2	3.2	3.5	3.8	3.8
Grapple weight	kg	1 880	2 050/1 960	2 150	2 020/1 940	2 210
Working load	kg	8 800	8 600/8 700	8 500	8 600/8 700	8 500
A	mm	5 800	5 800	5 700	5 350	5 350
B	mm	6 700	6 700	6 600	6 450	6 450
C	mm	3 630	3 630	3 750	4 500	4 500
D	mm	2 900	2 900	2 850	3 350	3 200
E	mm	1 330	1 330	1 430	1 780	1 780
F	mm	2 255	2 255	2 150	1 800	1 800
G	mm	1 100	1 100/900	11	1 100/900	900
M	mm	2 400	2 400	2 550	2 350	2 350
Operating weight*	kg	33 600	33 800/33 700	33 700	33 760/33 680	34 030
Shortwood (pulpwood)					x	x
Timber		x	x	x		
Terminal handling		x	x	x	x	x
Unloading/loading of vehicles		x	x	x	x/x	x/x
Unloading against wall					x	x
With hydraulic clamping arms			x	x		x
With triplex chain		x			x	
Order no.		91852	82127/82126	82128	94463/93607	82129

\* Including liquid in rear tires. Optional liquid in front tires increases the weight by 1830 kg.  
The log pusher increases operating weight by 800 kg. Log pusher, order no. 84184.

# Equipment.

## STANDARD EQUIPMENT

### Service and maintenance

Automatic lubrication system  
Engine oil remote drain and fill  
Transmission oil remote drain and fill  
Lubrication manifolds, ground accessible  
Pressure check connections: transmission and hydraulic, quick-connects  
Tool box, lockable

### Engine

Exhaust after-treatment system  
Two stage air cleaner, pre-cleaner, primary and secondary filter  
Indicator for coolant level  
Preheating of induction air  
Fuel pre-filter with water trap  
Fuel filter  
Crankcase breather oil trap  
Exterior radiator air intake protection

### Electrical system

24 V, pre-wired for optional accessories  
Alternator 24V/80A/2280W  
Battery disconnect switch  
Fuel gauge  
Hour meter  
Electric horn  
Instrument cluster:  
Fuel level  
Diesel Exhaust Fluid/AdBlue 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  
Halogen work lights (2 front and 2 rear)

### Contrinsic monitoring system

### Monitoring and logging of machine data

### Contrinsic display

### Fuel consumption

### Diesel Exhaust Fluid/AdBlue consumption

### Ambient temperature

### Clock

### Test function for warning and indicator lights

### Brake test

### Test function, sound level at max fan speed

### Warning and indicator lights:

Battery charging  
Parking brake

### Warning and display message:

Regeneration  
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  
Brake charging  
Overspeed at direction change  
Axle oil temperature  
Steering pressure  
Crankcase pressure  
Attachment lock open  
Safety Belt Warning

### Level warnings:

Fuel level  
Diesel Exhaust Fluid/AdBlue 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

### Drivetrain

### Automatic Power Shift

### Fully automatic gearshifting, 1-4

### PWM-controlled gearshifting

### Forward and reverse switch by hydraulic lever console

### Indicator glass for transmission oil level

### Differentials: Front, 100% hydraulic diff lock. Rear, conventional.

### OptiShift

### Lock-up first gear

### Brake system

Dual brake circuits  
Dual brake pedals  
Secondary brake system  
Parking brake, electro-hydraulic  
Brake wear indicators  
Oil cooler and filter front & rear axle

### Cab

ROPS (ISO 3471), FOPS (ISO 3449)  
Single key kit door/start  
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 heat control  
Floor mat  
Dual interior lights  
Interior rear-view mirrors  
Dual exterior rear-view mirrors  
Sliding window, right side  
Tinted windshield glass  
Retractable seatbelt (SAE J386)  
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

### Hydraulic system

Main valve, double acting 2-spool with hydraulic pilots  
Variable displacement axial piston pumps (3) for:  
1 Working hydraulics, Pilot hydraulics and Brake system  
2 Working hydraulics, Pilot hydraulics, Steering and Brake system  
3 Cooling fan and Brake system  
Electro-hydraulic servo controls  
Electronic hydraulic lever lock  
Automatic boom kick-out  
Automatic bucket positioner  
Double-acting hydraulic cylinders  
Indicator glass for hydraulic oil level  
Hydraulic oil cooler  
Boom suspension system

### External equipment

Orange hand rails  
Fenders, front and rear  
Viscous cab mounts  
Rubber engine and transmission mounts  
Frame, joint lock  
Vandalism lock prepared for  
Engine compartment  
Radiator grille  
Lifting eyes  
Tie-down eyes  
Fabricated counterweight  
Counterweight, pre-drilled for optional guards

### Other equipment

Counterweight, logging

## OPTIONAL EQUIPMENT

### Service and maintenance

Oil sampling valve  
Refill pump for grease to lube system  
Tool kit  
Wheel nut wrench kit  
CareTrack, GSM, GSM/Satellite  
Telematics, Subscription

### Engine

Air pre-cleaner, cyclone type  
Air pre-cleaner, oil-bath type  
Air pre-cleaner, turbo type  
Engine auto shutdown  
Engine block heater 230V/110V  
Fuel fill strainer  
Fuel heater  
Hand throttle control  
Max. fan speed, hot climate  
Radiator, corrosion-protected  
Reversible cooling fan  
Reversible cooling fan and axle oil cooler

## OPTIONAL EQUIPMENT

### Electrical system

Anti-theft device  
Emergency stop  
Locking device, Tag out Lock out  
Headlights, assym. left  
License plate holder, lighting  
Rear vision system, colour LCD monitor in the cab  
Reduced function working lights, reverse gear activated  
Reverse alarm, audible  
Reverse alarm, audible, multi-frequency  
Reverse warning light, strobe lighting  
Side marker lamps  
Warning beacon LED  
Working lights halogen, attachments  
Working lights LED, attachments  
Working lights on cab halogen, rear  
LED Head Light  
Working lights, on cab LED, rear  
Working lights, rear in grille, 2 LED lamps  
Working lights, front above head lamps, 2 LED lamps  
Taillight, LED lamp  
Electrical distribution unit 24 volt  
Radar detect system  
Jump start connector, NATO-Type

### Cab

Anchorage for Operator's manual  
Automatic Climate Control, ACC  
ACC control panel, with Fahrenheit scale  
Asbestos dust protection filter  
Ashtray  
Cab air pre-cleaner, cyclone type  
Carbon filter  
Cover plate, under cab  
Lunch box holder  
Volvo Armrest, operator's seat, left  
Operator's seat, Volvo air susp, heavy-duty, high back, heated  
Operator's seat, (air seat std) 2-point seat belt  
Operator's seat, (air seat std) 3-point seat belt  
Radio installation kit incl. 12 volt outlet, left side  
Radio installation kit incl. 12 volt outlet, right side  
Radio (with AUX, Bluetooth and USB connection)  
Subwoofer  
Steering wheel knob  
Sun blinds, rear windows  
Sun blinds, side windows  
Timer cab heating  
Window, sliding, door  
Universal door/ignition key  
Remote door opener  
Forward view mirror  
Cab heater power outlet 240V

### Drivetrain

Speed limiter

### Brake system

Stainless steel, brake lines

### Hydraulic system

Separate attachment locking  
Hydraulic fluid, biodegradable, Volvo  
Hydraulic fluid, fire-resistant  
Hydraulic fluid, for hot climate

### External equipment

Cab ladder, rubber-suspended  
Fire suppression system  
Mudguards, full cover wideners and prot. Included  
Tow hitch

### Protective equipment

Belly guard rear  
Cover plate, rear frame  
Cab roof, heavy-duty  
Guards for front headlights  
Guards for radiator grill  
Guards for tail lights  
Windows, side and rear guards  
Windshield guard  
Other equipment  
CE-marking  
Comfort Drive Control (CDC)  
Secondary steering with automatic test function  
Sound decal, EU  
Sound decal, USA  
Reflecting stickers (decals), machine contour  
Reflecting stickers (stripes), machine contour Cab  
Noise reduction kit, exterior  
Sign, slow moving vehicle  
Sign, 50 km/h

### Tires

775/65 R29

### Attachments

Log grapples

## SELECTION OF VOLVO OPTIONAL EQUIPMENT

Log pusher



LED lights package



Fire suppression system



Rotating beacon LED



3-point seat belt



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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