



Volvo Construction Equipment

# L60H, L70H, L90H **2.0**

Volvo Wheel Loaders 11.0-17.3 t / 24,250-38,140 lb 165-184 hp



# Multitude of talents

Say hello to the latest additions to the H-Series wheel loaders: the upgraded L60H, L70H and L90H. Built on the established H-Series design, the next-generation machines are the ultimate all-arounders, offering the high quality performance you'd expect from a Volvo wheel loader, plus a host of features that promote greater versatility and stability to handle your workload.

## Designed to do more

Knock heavy-duty jobs down to size with the H-Series wheel loaders. These robust workhorses offer unshakable stability thanks to the new, optimized loading unit weight and redesigned counterweight. Designed to do more, the well-balanced machines yield up to 3% higher tipping load, so you can tackle a variety of tasks – no matter how demanding.



## Adapt to any application

Get the most out of your machine with a range of purpose-built attachments, including grapples, sweepers, material handling arms, snow plows and more. Because different jobs require different attachments, we can custom build a Volvo attachment to match your specific needs. To unlock the use of multiple attachments, simply engage the third and fourth hydraulic functions.



## Fully loaded

Whatever the job, we have the tools to get it done. Volvo offers a full range of Volvo buckets, including general purpose, grading, refuse, light material, and more, to handle everything, from light material to heavy rocks. Built on decades of engineering excellence, Volvo buckets are optimized for Volvo wheel loaders and durably designed for all types of materials and tasks.



## Made to match

Lift your machine's versatility to the next level with pallet forks, offering high visibility and the advantage of TP linkage and parallel movement. Ideal for pallet and material handling, Volvo forks are heavy-duty in design, allowing the wheel loader to move effortlessly around different work sites, such as yards, warehouses and harbors.





# LOADED WITH VERSATILITY

Take on any application with the H-Series wheel loaders, equipped with the Torque Parallel (TP) linkage for ultimate versatility. Not only does the TP linkage offer high breakout, tilt in and lifting forces, it keeps the attachments parallel throughout the lifting range for exceptional load stability and easy bucket filling. Change tools in a matter of seconds with the Volvo attachment bracket.



## *L90H: tried and trusted*

*"You need height with your loader bucket to drop material and fluff so it moves smoother through the conveyors. This Volvo loader increases our ability to take in more market share and make our operation sustainable in terms of revenue."*

*Jason Yorks, Resource Recovery Manager and Recycling Coordinator, Lycoming County Resource Management Services, Pennsylvania (USA)*

# UP TO 20% MORE EFFICIENT

Achieve up to 20% greater fuel efficiency thanks to advanced features, such as Eco pedal and the new optional lock-up\* function. The lock-up feature eliminates losses in the torque converter by creating a direct drive between the engine and transmission, which work in harmony with the axles. To improve cycle times and fuel use, customize the lock-up engagement of your machine. (\*with gear selection engagement, ranging from gears 2-4, 3-4, 4)

*Lock-up is not available on L60H*





# Drive down your costs

Get the most out of your investment with a cost-effective solution. At Volvo, we're committed to driving your operating costs down. That's why we've refined the mid-sized H-Series wheel loaders to deliver up to 20% greater fuel efficiency and optimize productivity.

## Productivity up, fuel down

Cut operating costs and propel your machine's productivity with rimpull control. With the power to control the rimpull, the operator can reduce tire wear and prevent wheel spin for effective bucket filling. Select the optimum rimpull to match the application and ground conditions, and experience high productivity at low costs.

## Work smarter

For the best use of engine power in all applications, rely on Smart Control, designed to optimize fuel efficiency and performance. Standard on the mid-sized H-Series wheel loaders, Smart Control ensures the correct torque in all situations for perfect harmony between the engine and hydraulics.



## Do more on and off road

Do more on and off road with an increased top speed of 50km/h (31 mph). Not only is the machine faster, it is also a pleasure to operate thanks to the optional lock-up feature, which improves drive response and incline performance.

## Boost your profitability

Ensure a low total cost of ownership with a host of Productivity Services and Fuel Efficiency Services. From reports, training packages and consultancy solutions, Volvo has you covered – just speak to your dealer for more information.



# Comfortably in control

It's not just the machine that's ready for any challenge. From the comfort and security of the spacious Volvo cab, the operator is primed for a productive work shift.

## Safety as standard

Safe from the inside out, the latest loaders feature anti-slip steps and strategically placed handrails for ease of access, plus an array of seatbelt options, such as the orange three-point seatbelt. The attachment bracket uses a new visual indicator to let you know the attachment is locked and ready to use.



## See more, do more

Experience a clear view of the attachment and jobsite thanks to large expanses of glass, redesigned side mirrors, rear-view camera, as well as optional front camera and radar detect system. The machines also feature orange handrails and steps to stand out against the jobsite, and LED lights, available in various packages.



## Take command

Customize your Volvo and take command of hydraulic functions with electro servo controls\*. From the cab, adjust the detent third function, boom kick-out, return to dig and bucket leveling. Easily change between linear or single lever controls and select from three hydraulic settings to tailor the lever control according to your preferences.

*\*Not available on L60H*



## Bucket leveling function

Take your productivity to the next level with the bucket leveling function. The new function enhances operator performance by automatically returning the bucket from both dump and carry positions.

*Not available on L60H*





# NO COMPROMISE ON COMFORT

Hard work has never felt so easy from the spacious of the Volvo cab, featuring your choice of comfortable operator seat, as well as ergonomic controls. Perform basic configurations using the Contronic key pad panel, and keep an eye on the operation with the information display.



## ***L90H: tried and trusted***

*"As far as I am concerned Volvo has cornered the market on operator comfort. They do everything they can to make it comfortable for the operator working eight hours day or longer. The heated seats are a real bonus. And with the high tip bucket I can drive on the flat floor and still reach the metering bin."*

***Ron Snell, loader operator, Lycoming County Resource Management Services, Pennsylvania (USA)***

### Designed to do more

- Optimized loading unit weight, heavy-duty counterweight for greater stability
- Higher tipping load: 1.7% for L60H, 1.6% for L70H, 3.4% for L90H
- L90H: increased lifting height by 75 mm (3 in)
- Electro-servo controls (L70H, L90H)
- New bucket leveling function
- Choice of three hydraulic response modes: active, normal, soft.

### LOADED WITH VERSATILITY

- Torque Parallel linkage
- Volvo attachment bracket
- Range of purpose-built attachments
- Optional custom-built attachment
- 3rd and 4th hydraulic functions



### Volvo Services

- Operator training
- ActiveCare Direct
- Genuine Volvo Parts

### DURABLE BY DESIGN

- 50% larger hydraulic oil cooler
- Lifetime Frame and Structure Warranty
- Optional delayed engine shutdown
- Optional external axle cooling (L70H, L90H)



# Ultimate all-rounder



## Greater access

- New cooler installation now slides out for easier cleaning
- Newly repositioned fill spouts for transmission and engine oil
- Ground-level access to service points
- Electronically-operated engine hood

## Safety as standard

- Anti-slip steps and strategically placed handrails
- Orange three-point seatbelt
- Redesigned side mirrors
- Rear-view camera
- Optional radar detect system
- Optional external seatbelt indicator light

## UP TO 20% MORE EFFICIENT

- Optional lock-up converter with gear selection (L70H, L90H)
- Increased top speed of 50km/h (31 mph) with lock-up feature
- Rimpull control
- Smart Control
- Smooth Control
- Eco pedal

# Keep your machine moving

The latest generation Volvo L60H, L70H and L90H wheel loaders extends their already legendary status by offering an upgraded portfolio of uptime-enhancing features. From simplified serviceability to proactive dealer support, you have access to everything you need to keep your machine up and moving.

## Keep it cool

Count on Volvo to keep up. The improved hydraulic cooling capacity regulates the component temperature, for greater machine utilization when using attachments that are demanding on the hydraulics, and longer hydraulic component life. This, plus the external axle cooling option – ideal for tough applications – doubles the axle oil change intervals for higher uptime and lower maintenance costs.



## Greater access

To keep uptime high, the H-Series wheel loaders are equipped with an engine cover that opens electronically, allowing ground-level access to the service points, including the radiator. For swift and easy cleaning, the new cooler installation now slides out. Safely fill the transmission and engine oil thanks to newly repositioned fill spouts, and get back to work without delay.



## Delayed engine shutdown

Reduce the wear on your engine with the new delayed engine shutdown feature. The optional function shuts off the machine when the turbo has cooled down to the ideal temperature. Not only does the feature reduce component wear, it can also be scheduled by the operator to activate automatically for added convenience.



## Here to support you

Maintain productivity with our range of Genuine Volvo Parts – all backed by Volvo warranty – with 24-hour parts delivery guaranteed. Maximize machine uptime and reduce repair costs with ActiveCare Direct. The intelligent service from Volvo provides around the clock machine monitoring, as well as customer reports, which suggests ways to optimize efficient machine use and help you take preventative maintenance actions.





# DURABLE BY DESIGN

Built by Volvo, for Volvo, you can count on the proven design of the latest wheel loaders to meet the demands of tough job sites. Renowned for their reliability, the next-generation H-Series wheel loaders offer a Lifetime Frame and Structure Warranty, including the front frame, rear frame, articulation joint and loader arms.





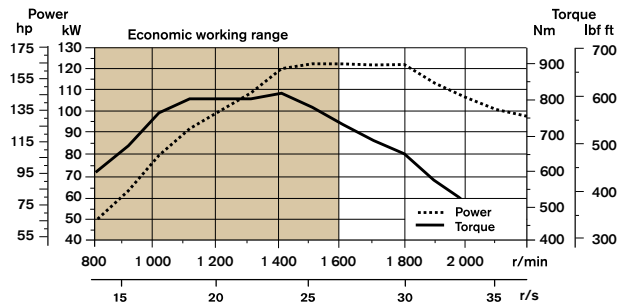
# Volvo L60H, L70H, L90H in detail

## Engine

6-cylinder, 6 liters inline turbocharged diesel engine with an advanced fuel injection system with the common rail. Fuel is distributed under high pressure from a high-pressure accumulator, the rail. One belt driven high pressure pump deliver the fuel to the rail and then further on via high-pressure pipes to the electronically operated fuel injectors. Engine meets Tier 4f / Stage IV emission legislation.

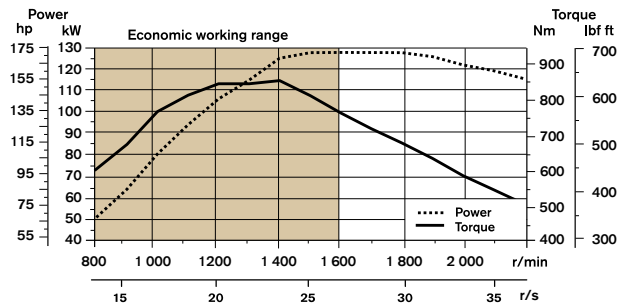
## L60H

Engine	Volvo	D6J
Max. power at	r/min (r/s)	1,500 - 1,800 (25 - 30)
SAE J1995 gross	kW (hp)	122 (164)
ISO 9249, SAE J1349 net	kW (hp)	122 (164)
Max. torque at	r/min (r/s)	1,400 (23)
SAE J1995 gross	Nm (ft lbf)	820 (605)
ISO 9249, SAE J1349 net	Nm (ft lbf)	820 (605)
Economic working range	r/min (r/s)	800 - 1,600 (13.3 - 26.7)
Displacement	l (in <sup>3</sup> )	5.7 (348)



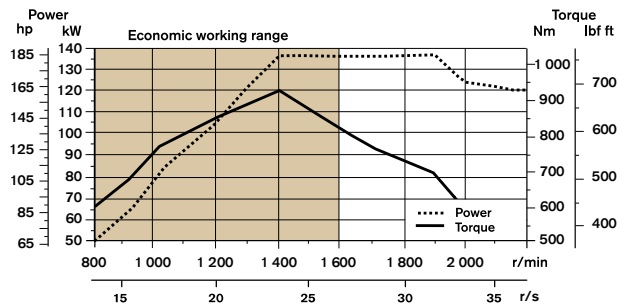
## L70H

Engine	Volvo	D6J
Max. power at	r/min (r/s)	1,500 - 1,800 (25 - 30)
SAE J1995 gross	kW (hp)	127 (170)
ISO 9249, SAE J1349 net	kW (hp)	127 (170)
Max. torque at	r/min (r/s)	1,400 (23.3)
SAE J1995 gross	Nm (ft lbf)	853 (629)
ISO 9249, SAE J1349 net	Nm (ft lbf)	853 (629)
Economic working range	r/min (r/s)	800 - 1,600 (13.3 - 26.8)
Displacement	l (in <sup>3</sup> )	5.7 (348)



## L90H

Engine	Volvo	D6J
Max. power at	r/min (r/s)	1,400 - 1,900 (23.3 - 31.7)
SAE J1995 gross	kW (hp)	137 (184)
ISO 9249, SAE J1349 net	kW (hp)	137 (184)
Max. torque at	r/min (r/s)	1,400 (23.3)
SAE J1995 gross	Nm (ft lbf)	934 (689)
ISO 9249, SAE J1349 net	Nm (ft lbf)	934 (689)
Economic working range	r/min (r/s)	800 - 1,600 (13.3 - 26.7)
Displacement	l (in <sup>3</sup> )	5.7 (348)



**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.  
 Transmission: Volvo Automatic Power Shift (APS) gear shifting system with fully automatic shifting 1-4 and mode selector with 4 different gear shifting programs, including AUTO mode.  
 Axles: Volvo fully floating axle shafts with planetary hub reductions and cast steel axle housing. Fixed front axle and oscillating rear axle. 100% differential lock on the front axle.

**L60H**

Transmission	Volvo	HTE 125C
Torque multiplication, stall ratio		2.5:1
<b>Maximum speed</b>		
1st gear	km/h (mi/h)	Converter 7.5 (Converter 4.6)
2nd gear	km/h (mi/h)	Converter 15 (Converter 9.3)
3rd gear	km/h (mi/h)	Converter 28 (Converter 17.4)
4th gear	km/h (mi/h)	Converter 46 (Converter 28.5)
4th gear: Shown in speedometer and limited by ECU		
Measured with tires		20.5R25
Front axle/rear axle		AWB 15/AWB 15
Rear axle oscillation	± °	13
Ground clearance	mm (in)	470 (18.5)
at oscillation	°	13

**L70H**

Transmission	Volvo	HTE 125C Non Lock-up / HTE 125 Lock-up
Torque multiplication, stall ratio		2.5:1 Non Lock-up / 2.59:1 Lock-up
<b>Maximum speed</b>		
1st gear	km/h (mi/h)	Converter 7.5 / Lock-up 7.5 (Converter 4.6 / Lock-up 4.6)
2nd gear	km/h (mi/h)	Converter 15 / Lock-up 15 (Converter 9.3 / Lock-up 9.3)
3rd gear	km/h (mi/h)	Converter 29 / Lock-up 30 (Converter 17.4 / Lock-up 18.0)
4th gear	km/h (mi/h)	Converter 46 / Lock-up 50 (Converter 28.5 / Lock-up 31.1)
4th gear: Shown in speedometer and limited by ECU		
Measured with tires		20.5R25
Front axle/rear axle		AWB 25/AWB 20
Rear axle oscillation	± °	13
Ground clearance	mm (in)	470 (18.5)
at oscillation	°	13

**L90H**

Transmission	Volvo	HTE 125C Non Lock-up / HTE 125 Lock-up
Torque multiplication, stall ratio		2.5:1 Non Lock-up / 2.59:1 Lock-up
<b>Maximum speed</b>		
1st gear	km/h (mi/h)	Converter 6.5 / Lock-up 6.5 (Converter 4.0 / Lock-up 4.0)
2nd gear	km/h (mi/h)	Converter 14 / Lock-up 14 (Converter 8.6 / Lock-up 8.6)
3rd gear	km/h (mi/h)	Converter 26 / Lock-up 27 (Converter 16.2 / Lock-up 16.8)
4th gear	km/h (mi/h)	Converter 46 / Lock-up 50 (Converter 28.5 / Lock-up 31.1)
4th gear: Shown in speedometer and limited by ECU		
Measured with tires		20.5R25
Front axle/rear axle		AWB 25/AWB 20
Rear axle oscillation	± °	13
Ground clearance	mm (in)	470 (18.5)
at oscillation	°	13

**Electrical 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, etc.

		L60H	L70H	L90H
Batteries	V	2 x 12	2 x 12	2 x 12
Battery capacity	Ah	2 x 110	2 x 110	2 x 110
Cold cranking capacity, approx	A	1,000	1,000	1,000
Alternator rating	W/A	3 135/80	3 135/80	3 135/80
Starter motor output	kW	5.5	5.5	5.5

**Brake system**

Service brake: Volvo dual-circuit system with outboard mounted, hydraulically operated, fully sealed and circulating oil cooled wet disc brakes. Four operator selectable transmission disengagement settings while braking.  
 Parking brake: Dry disc brake mounted on the transmission output shaft. Applied by spring force, electro-hydraulically released with a switch on the instrument panel.  
 Secondary brake: Dual brake circuits with rechargeable accumulators.  
 Standard: The brake system complies with the requirements of ISO 3450, 71/320/EEC

		L60H	L70H	L90H
Number of brake discs per wheel		1	1	1
Accumulators	l (gal)	3 x 0.5 (3 x 0.13)	2 x 0.5+1 x 1.0 (2 x 0.13 + 1 x 0.26)	2 x 0.5+1 x 1.0 (2 x 0.13 + 1 x 0.26)
Accumulators for parking brake	l (gal)	1 x 0.5 (1 x 0.13)	1 x 1.0 (1 x 0.26)	1 x 1.0 (1 x 0.26)

# Volvo L60H, L70H, L90H in detail

## 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 and fan with auto and 11 manual speed settings. Defroster vents for all window areas.  
 Operator's seat: Operator's seat with adjustable air suspension and retractable seatbelt. The seat is mounted on a bracket on the rear cab wall and floor. The forces from the retractable seatbelt are absorbed by the seat rails.  
 Standards: 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).

		L60H	L70H	L90H
<b>Emergency exit: Use emergency hammer to break window</b>				
Ventilation	m <sup>3</sup> /min (yd <sup>3</sup> /min)	9 (11.8)	9 (11.8)	9 (11.8)
Heating capacity	kW	16	16	16
Air conditioning (optional)	kW	7.5	7.5	7.5

## Sound Level

		L60H	L70H	L90H
<b>Sound level in cab according to ISO 6396/SAE J2105</b>				
LpA	dB(A)	68	68	68
<b>External sound level according to ISO 6395/SAE J2104</b>				
LwA	dB(A)	104	105	105

## Lift Arm System

Torque parallel linkage (TP-linkage) with high breakout torque and parallel lift-arm action.

		L60H	L70H	L90H
<b>Lift cylinders</b>				
		2	2	2
Cylinder bore	mm (in)	110 (4.3)	110 (4.3)	120 (4.7)
Piston rod diameter	mm (in)	70 (2.8)	70 (2.8)	70 (2.8)
Stroke	mm (in)	665 (26.2)	756 (29.8)	744 (28.9)
<b>Tilt cylinder</b>				
		1	1	1
Cylinder bore	mm (in)	150 (5.9)	160 (6.3)	180 (7.1)
Piston rod diameter	mm (in)	80 (3.1)	90 (3.5)	90 (3.5)
Stroke	mm (in)	444 (17.5)	432 (17)	430 (16.9)

## Steering System

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

		L60H	L70H	L90H
<b>Steering cylinders</b>				
		2	2	2
Cylinder bore	mm (in)	70 (2.8)	70 (2.8)	80 (3.1)
Rod diameter	mm (in)	45 (1.8)	45 (1.8)	50 (2)
Stroke	mm (in)	386 (15.2)	386 (15.2)	345 (13.6)
Working pressure	MPa (bar)	21 (210)	21 (210)	21 (210)
Maximum flow	l/min (gal/min)	60 (15.9)	60 (15.9)	60 (15.9)
Maximum articulation	± °	40	40	40

## Hydraulic system

Closed center load sensing hydraulic system with non pressurised hydraulic tank and pilot operated control valves.  
 System supply: Variable displacement axial piston pump supply the hydraulic system.  
 Valves: The central valve distributes pressure and flow out to the cooling fan, steering, brake, pilot and hydraulic system. Steering system gets priority over others.  
 Lift function: The valve has four positions; raise, hold, lower and float position. Automatic boom kickout position can be set to any position between maximum reach and full lifting height.  
 Tilt function: The valve has three functions; rollback, hold and dump. Automatic tilt out/tilt in can be adjusted to the desired bucket angle.  
 Cylinders: Double-acting cylinders for all functions.  
 Filter: Full flow filtration through 10 micron (absolute) filter cartridge.

		L60H	L70H	L90H
<b>Working pressure maximum, pump 2 for steering-, brake-, pilot- and working hydraulic system</b>				
	MPa (bar)	26 (260)	26 (260)	31 (310)
Flow	l/min (gal/min)	145 (38.3)	154 (40.7)	171 (45.2)
at	MPa (bar)	10 (100)	10 (100)	10 (100)
engine speed	r/min (r/s)	1,900 (31.7)	1,900 (31.7)	1,900 (31.7)
<b>Working pressure maximum, pump 3 for brake- and cooling fan system</b>				
	MPa (bar)	21 (210)	21 (210)	21 (210)
Flow	l/min (gal/min)	33 (8.7)	33 (8.7)	33 (8.7)
at	MPa (bar)	10 (100)	10 (100)	10 (100)
engine speed	r/min (r/s)	1,900 (31.7)	1,900 (31.7)	1,900 (31.7)
Pilot system, working pressure	MPa (bar)	3.5 (35)	3.5 (35)	3.5 (35)
<b>Cycle times</b>				
Lift	s	4.5	5.1	5.4
Tilt	s	2.3	1.3	1.9
Lower, empty	s	2.9	2.7	3.2
Total cycle time	s	9.7	9.1	10.5

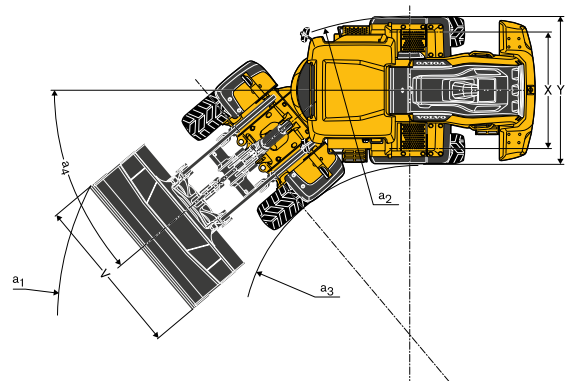
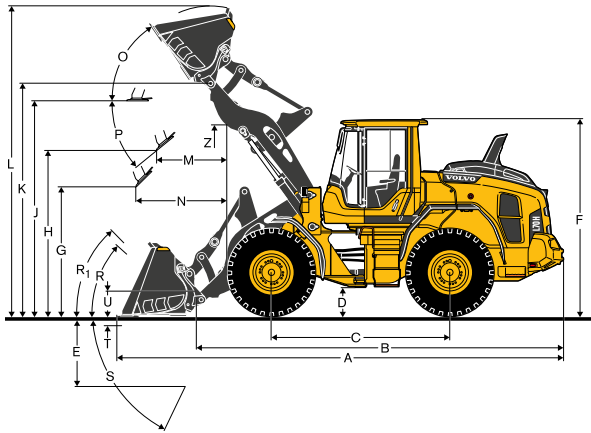
## Service Refill

Service accessibility: Large, electrically operated easy-to-open hood covering whole engine compartment. Fluid filters and component breather air filters are located from ground level access and promote long service intervals.  
 Machine contronics have possibility to monitor, log and analyze data to facilitate troubleshooting.

		L60H	L70H	L90H
Fuel tank	l (gal)	222 (58.6)	222 (58.6)	222 (58.6)
DEF/AdBlue® tank	l (gal)	20 (5.3)	20 (5.3)	20 (5.3)
Engine coolant	l (gal)	30 (7.9)	30 (7.9)	30 (7.9)
Hydraulic oil tank	l (gal)	90 (23.8)	90 (23.8)	90 (23.8)
Transmission oil (non lock-up)	l (gal)	21 (5.5)	21 (5.5)	21 (5.5)
Transmission oil (lock-up)	l (gal)	22 (5.8)	22 (5.8)	22 (5.8)
Engine oil	l (gal)	20 (5.2)	20 (5.2)	20 (5.2)
Axle oil front	l (gal)	25 (6.6)	35 (9.2)	35 (9.2)
Axle oil rear	l (gal)	25 (6.6)	27 (7.1)	27 (7.1)



# Specifications



## Tires 20.5 R25 L3

			L60H		L70H		L90H		L60H		L70H		L90H	
			Standard boom						Long boom					
B	mm	ft in	6,010	19'9"	6,080	19'11"	6,170	20'3"	6,520	21'5"	6,560	21'6"	6,600	21'8"
C	mm	ft in	3,000	9'10"	3,000	9'10"	3,050	10'0"	3,000	9'10"	3,000	9'10"	3,050	10'0"
D	mm	ft in	440	1'5"	450	1'6"	450	1'6"	430	1'5"	450	1'6"	440	1'5"
F	mm	ft in	3,270	10'9"	3,280	10'9"	3,280	10'9"	3,270	10'9"	3,280	10'9"	3,280	10'9"
G	mm	ft in	2,133	7'0"	2,134	7'0"	2,132	7'0"	2,134	7'0"	2,134	7'0"	2,132	7'0"
J	mm	ft in	3,550	11'8"	3,580	11'9"	3,730	12'3"	4,080	13'5"	4,050	13'3"	4,140	13'7"
K	mm	ft in	3,870	12'8"	3,870	12'8"	4,040	13'3"	4,380	14'4"	4,350	14'3"	4,460	14'8"
O	°		56		56		57		56		52		58	
Pmax	°		45		46		45		42		45		44	
R	°		43		43		44		45		44		47	
R1*	°		46		48		49		50		49		53	
S	°		79		68		67		79		73		65	
T	mm	ft in	123	0'5"	106	0'4"	112	0'4"	150	0'6"	112	0'4"	123	0'5"
U	mm	ft in	410	1'4"	450	1'6"	480	1'7"	590	1'11"	500	1'8"	570	1'10"
X	mm	ft in	1,900	6'3"	1,930	6'4"	1,960	6'5"	1,900	6'3"	1,930	6'4"	1,960	6'5"
Y	mm	ft in	2,430	7'12"	2,460	8'1"	2,490	8'2"	2,430	7'12"	2,460	8'1"	2,490	8'2"
Z	mm	ft in	3,210	10'6"	3,160	10'4"	3,460	11'4"	3,590	11'9"	3,500	11'6"	3,910	12'10"
a2	mm	ft in	5,340	17'6"	5,350	17'7"	5,430	17'10"	5,340	17'6"	5,350	17'7"	5,430	17'10"
a3	mm	ft in	2,900	9'6"	2,890	9'6"	2,940	9'8"	2,900	9'6"	2,890	9'6"	2,940	9'8"
a4	±°		40		40		40		40		40		40	

\* Carry position SAE

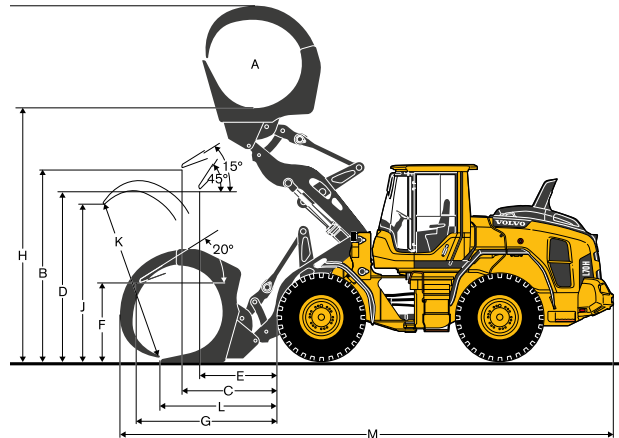
Calculated with additional protective guarding

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

## Tires: 20.5R25 L3

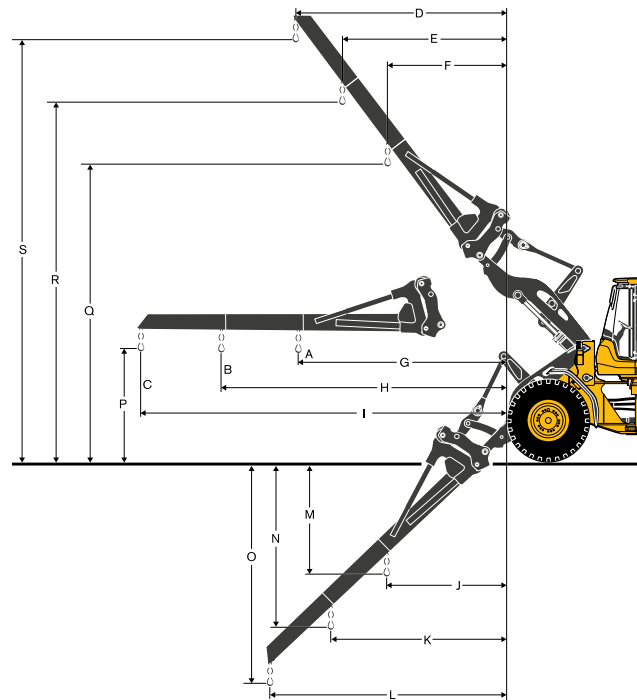
			L60H		L70H		L90H	
SAE-Load	kg	lb	3,450	7,606	3,990	8,796	4,600	10,141
Operating weight without load*	kg	lb	12,883	28,402	14,585	32,154	16,645	36,696
Grapple sales code			WLA82194		WLA80153		WLA80832	
A	m <sup>2</sup>	yd <sup>2</sup>	1.3	1.6	1.5	1.8	2.4	2.9
B	mm	ft in	3,412	11'2"	3,380	11'1"	3,487	11'5"
C	mm	ft in	1,483	4'10"	1,594	5'3"	1,703	5'7"
D	mm	ft in	2,929	9'7"	2,870	9'5"	2,865	9'5"
E	mm	ft in	1,175	3'10"	1,265	4'2"	1,319	4'4"
F	mm	ft in	1,532	5'0"	1,502	4'11"	1,441	4'9"
G	mm	ft in	2,350	7'9"	2,442	8'0"	2,740	8'12"
H	mm	ft in	4,333	14'3"	4,378	14'4"	4,613	15'2"
I	mm	ft in	5,878	19'3"	6,027	19'9"	6,664	21'10"
J	mm	ft in	1,997	6'7"	2,141	7'0"	2,786	9'2"
K	mm	ft in	2,080	6'10"	2,365	7'9"	2,990	9'10"
L	mm	ft in	1,709	5'7"	1,800	5'11"	2,131	6'12"
M	mm	ft in	7,861	25'9"	7,996	26'3"	8,469	27'9"

\* Calculated with additional protective guarding

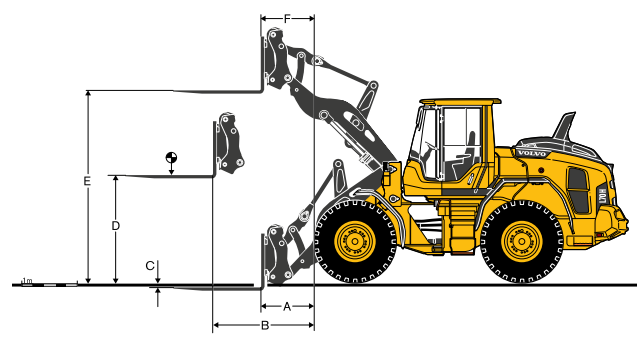


# Specifications

		Tires: 20.5R25 L3					
		L60H		L70H		L90H	
Material handling arm sales code		92007		92007		92008	
A*	kg lb	1,800 3,968	2,150 4,740	2,760 6,085			
B*	kg lb	1,400 3,086	1,710 3,770	2,130 4,696			
C*	kg lb	1,150 2,535	1,400 3,086	1,740 3,836			
Static tipping load, straight	kg lb	3,238 7,139	3,583 7,899	4,289 9,456			
35deg. Turn at full turn	kg lb	2,910 6,415	3,222 7,103	3,834 8,453			
D	mm ft in	2,592 8'6"	2,716 8'11"	2,486 8'2"			
E	mm ft in	2,002 6'7"	2,106 6'11"	1,894 6'3"			
F	mm ft in	1,465 4'10"	1,549 5'1"	1,301 4'3"			
G	mm ft in	3,270 10'9"	3,323 10'11"	3,253 10'8"			
H	mm ft in	4,305 14'1"	4,358 14'4"	4,387 14'5"			
I	mm ft in	5,439 17'10"	5,492 18'0"	5,520 18'1"			
J	mm ft in	905 2'12"	1,269 4'2"	1,339 4'5"			
K	mm ft in	1,227 4'0"	1,744 5'9"	1,889 6'2"			
L	mm ft in	1,580 5'2"	2,266 7'5"	2,439 8'0"			
M	mm ft in	2,258 7'5"	2,176 7'2"	2,051 6'9"			
N	mm ft in	3,241 10'8"	3,095 10'2"	3,043 9'12"			
O	mm ft in	4,319 14'2"	4,102 13'5"	4,034 13'3"			
P	mm ft in	1,512 5'0"	1,523 5'0"	1,520 5'0"			
Q	mm ft in	5,286 17'4"	5,302 17'5"	5,403 17'9"			
R	mm ft in	6,171 20'3"	6,174 20'3"	6,370 20'11"			
S	mm ft in	7,139 23'5"	7,129 23'5"	7,336 24'1"			
Operating weight without load	kg lb	11,885 26,202	13,451 29,654	14,833 32,701			
* Op. load at full turn + tipping position Tipping loads calculated for max. arm length							
**Calculated with additional protective guarding							



		Tires: 20.5R25 L3					
		L60H		L70H		L90H	
Fork frame sales code		83768		83768		83770	
Fork tines sales code (R/L)		80042/80043		80042/80044		80106/80107	
Static tipping load, straight	kg lb	6,930 15,278	7,576 16,702	8,904 19,630			
35deg. Turn at full turn	kg lb	6,230 13,735	6,809 15,011	7,947 17,520			
at load center distance*	mm ft in	600 2'0"	600 2'0"	600 2'0"			
A	mm ft in	798 2'7"	841 2'9"	932 3'1"			
B	mm ft in	1,567 5'2"	1,616 5'4"	1,679 5'6"			
C	mm ft in	-38 -1'11"	-52 -1'10"	-4 -1'12"			
D	mm ft in	1,831 6'0"	1,859 6'1"	1,800 5'11"			
E	mm ft in	3,713 12'2"	3,736 12'3"	3,841 12'7"			
F	mm ft in	700 2'4"	767 2'6"	641 2'1"			
Operating weight without load	kg lb	11,965 26,378	13,531 29,831	14,928 32,911			
* Firm and level ground							
**Calculated with additional protective guarding							



# Volvo L60H specifications

L60H* MICH 20.5R25 XHA2 L3		General purpose										Grading		Light material			LongBoom**				
		1.9 m³ (2.5 yd³) HD STE H BOE		2.0 m³ (2.6 yd³) STE H T		2.1 m³ (2.7 yd³) HD STE H BOE		2.3 m³ (3.0 yd³) HD STE H BOE		2.1 m³ (2.7 yd³) HD STE P BOE		2.3 m³ (3.0 yd³) HD STE P BOE		1.7 m³ (2.2 yd³) GRB H BOE		3.1 m³ (4.1 yd³) LM H BOE		5 m³ (6.5 yd³) LM H BOE		2.1 m³ (2.7 yd³) HD STE P BOE	
		WLA86398	WLA86423	WLA86401	WLA86405	WLA86410	WLA86411	WLA92476	WLA92564	WLA92565	WLA86410										
Volume, heaped ISO/SAE	m3 yd3	1.9	2.5	2.0	2.6	2.1	2.7	2.3	3.0	2.1	2.7	2.3	3.0	1.7	2.2	3.1	4.1	5.0	6.5	2.1	2.7
Volume at 110% fill factor	m3 yd3	2.0	2.7	2.2	2.9	2.3	3.0	2.5	3.3	2.3	3.0	2.5	3.3	1.9	2.4	3.4	4.5	5.5	7.2	2.3	3.0
Static tipping load, straight	kg lb	8,940	19,710	9,028	19,910	8,831	19,470	8,770	19,330	9,310	20,520	9,230	20,340	7,740	17,060	8,450	18,640	8,450	18,640	-1,640	-3,600
at 35° turn	kg lb	7,996	17,630	8,079	17,810	7,887	17,390	7,830	17,260	8,340	18,400	8,270	18,230	6,920	15,260	7,540	16,630	7,510	16,570	-1,500	-3,320
at full turn	kg lb	7,718	17,020	7,800	17,200	7,609	16,780	7,550	16,650	8,060	17,770	7,990	17,610	6,680	14,730	7,280	16,040	7,240	15,960	-1,470	-3,230
Breakout force	kN lbf	81.8	18,400	82.8	18,610	80.4	18,090	75.0	16,870	84.8	19,060	80.9	18,190	60.1	13,500	61.7	13,870	53.7	12,080	8.8	1,980
A	mm ft in	7,316	24'	7,520	24' 8"	7,338	24' 1"	7,430	24' 5"	7,270	23' 10"	7,330	24' 1"	7,650	25' 1"	7,680	25' 2"	7,900	25' 11"	520	1' 9"
E	mm ft in	1,116	3' 8"	1,302	4' 3"	1,136	3' 9"	1,220	4'	1,070	3' 6"	1,130	3' 8"	1,400	4' 7"	1,470	4' 10"	1,700	5' 7"	40	2"
H	mm ft in	2,836	9' 4"	2,705	8' 10"	2,811	9' 3"	2,760	9' 1"	2,850	9' 4"	2,810	9' 3"	2,520	8' 3"	2,580	8' 6"	2,440	8' 0"	530	1' 9"
L	mm ft in	5,032	16' 6"	5,084	16' 8"	5,069	16' 8"	5,180	17' 0"	5,060	16' 7"	5,120	16' 10"	4,530	14' 10"	5,290	17' 4"	5,490	18' 0"	510	1' 8"
M	mm ft in	1,054	3' 5"	1,192	3' 11"	1,056	3' 6"	1,130	3' 9"	1,000	3' 3"	1,040	3' 5"	1,130	3' 8"	1,320	4' 4"	1,500	4' 11"	10	0"
N	mm ft in	1,578	5' 2"	1,632	5' 4"	1,584	5' 2"	1,610	5' 3"	1,560	5' 2"	1,580	5' 2"	1,490	4' 11"	1,630	5' 4"	1,670	5' 6"	450	1' 5"
V	mm in	2,500	98"	2,500	98"	2,650	104"	2,500	98"	2,500	98"	2,500	98"	2,500	98"	2,550	100"	2,650	104"	2,500	98
a1 clearance circle	mm ft in	11,569	37' 11"	11,665	38' 3"	11,719	38' 5"	11,620	38' 2"	11,580	38'	11,600	38' 1"	11,970	39' 3"	11,840	38' 10"	12,060	39' 7"	430	1' 5"
Operating weight	kg lb	12,299	27,120	12,270	27,060	12,388	27,320	12,400	27,350	12,070	26,620	12,110	26,700	12,250	27,000	12,440	27,420	12,720	28,060	340	750

\*Calculated with additional protective guarding. (WL86009,WL86010)

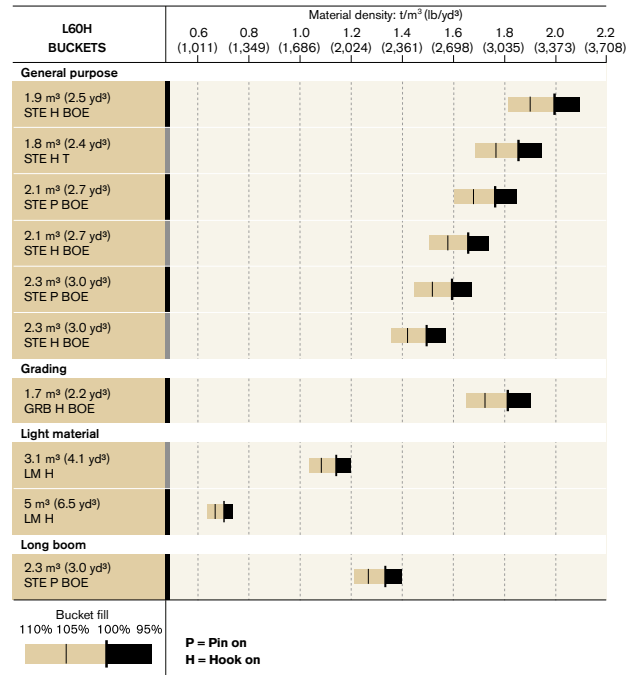
\*\*Calculated with logging counterweight.

Note: This only applies to genuine Volvo attachments.

## Bucket Selection Chart

The chosen bucket is determined by the density of the material and the expected bucket fill factor. The actual bucket volume is often larger than the rated capacity, due to the features of the TP linkage, including an open bucket design, good rollback angles in all positions and good bucket filling performance. The example represents a standard boom configuration. Example: Sand and gravel. Fill factor ~ 105%. Density 1.5 t/m3 (2,530 lb/yd3). Result: The 2.1 m3 (2.8 yd3) bucket carries 2.2 m3 (2.9 yd3). For optimum stability always consult the bucket selection chart.

Material	Bucket fill, %	Material density		ISO/SAE bucket volume		Actual volume	
		t/m³	lb/yd³	m³	yd³	m³	yd³
Earth/Clay	~ 110	~ 1.55	~ 2,610	1.9	2.5	2.1	2.8
		~ 1.40	~ 2,360	2.1	2.8	2.3	3.0
		~ 1.30	~ 2,190	2.3	3.0	2.5	3.3
Sand/Gravel	~ 105	~ 1.65	~ 2,780	1.9	2.5	2.0	2.6
		~ 1.50	~ 2,530	2.1	2.8	2.2	2.9
		~ 1.35	~ 2,280	2.3	3.0	2.1	2.8
Aggregate	~ 100	~ 1.75	~ 2,950	1.9	2.5	1.9	2.5
		~ 1.55	~ 2,610	2.1	2.8	2.1	2.8
		~ 1.55	~ 2,610	2.3	3.0	2.3	3.0
Rock	≤100	~ 1.70	~ 2,870	1.7	2.2	1.7	2.2



How to read bucket fill factor

## Supplemental Operating Data

Tires 20.5 R25 L3			20.5 R25 L2				600/65 R25 L3		Long boom 600/65 R25 L3	
Width over tires	mm in		+8	+0.3	+96	+3.8	+96	+3.8		
Ground clearance	mm in		-10	-0.4	-30	-1.2	-22	-0.9		
Tipping load, full turn	kg lb		-166	-366	-72	-159	0	0		
Operating weight	kg lb		-112	-247	+8	+18	+3	+7		

Calculated with 2.3 m³ (3.0 yd³) STE P BOE, additional protective guarding



# Volvo L70H specifications

L70H* MICH 20.5R25 XHA2 L3		General purpose										Grading		Light material		LongBoom**						
		2.3 m³ (3.0 yd³) STE H BOE		2.2 m³ (2.9 yd³) HD STE H T		2.0 m³ (2.7 yd³) HD STE H BOE		2.2 m³ (2.8 yd³) HD STE H BOE		2.3 m³ (3.0 yd³) HD STE H BOE		2.2 m³ (2.8 yd³) HD STE P BOE		2.2 m³ (2.9 yd³) GRB H BOE		3.4 m³ (4.4 yd³) LM H		6.4 m³ (8.4 yd³) LM H		2.2 m³ (2.9 yd³) HD STE P BOE		
		WLA87535	WLA86405	WLA86401	WLA86404	WLA86407	WLA86413	WLA92477	WLA80562	WLA80634	WLA86413											
Volume, heaped ISO/SAE	m3	yd3	2.4	3.1	2.2	2.9	2.1	2.7	2.3	3.0	2.4	3.1	2.3	3.0	2.2	2.9	3.4	4.4	6.4	8.4	2.3	3.0
Volume at 110% fill factor	m3	yd3	2.6	3.5	2.4	3.2	2.3	3.0	2.5	3.3	2.6	3.5	2.5	3.3	2.4	3.2	3.7	4.9	7.0	9.2	2.5	3.3
Static tipping load, straight	kg	lb	9,740	21,480	9,840	21,710	9,770	21,550	9,710	21,410	9,670	21,320	10,310	22,730	7,920	17,470	9,253	20,400	8,830	19,460	-1,550	-3,400
at 35° turn	kg	lb	8,710	19,200	8,810	19,420	8,740	19,270	8,680	19,130	8,640	19,050	9,240	20,370	7,040	15,530	8,246	18,180	7,790	17,180	-1,430	-3,140
at full turn	kg	lb	8,400	18,530	8,500	18,740	8,430	18,590	8,370	18,460	8,340	18,380	8,920	19,680	6,780	14,950	7,949	17,530	7,490	16,510	-1,390	-3,070
Breakout force	kN	lbf	87.8	19,740	91.3	20,520	92.8	20,860	88.5	20,110	87.6	19,690	98.7	22,200	62.7	14,090	71.7	16,130	53.9	12,110	-1.8	-410
A	mm	ft in	7,510	24' 8"	7,700	25' 3"	7,440	24' 5"	7,490	24' 7"	7,520	24' 7"	7,370	24' 2"	7,950	26' 1"	7,776	25' 6"	8,330	27' 4"	470	1' 7"
E	mm	ft in	1,210	4' 0"	1,360	4' 6"	1,140	3' 9"	1,190	3' 11"	1,210	4' 0"	1,080	3' 6"	1,670	5' 6"	1,466	4' 10"	1,960	6' 5"	20	0' 1"
H	mm	ft in	2,740	9' 0"	2,620	8' 7"	2,790	9' 2"	2,760	9' 0"	2,740	9' 0"	2,830	9' 3"	2,360	7' 9"	2,531	8' 4"	2,160	7' 1"	490	1' 8"
L	mm	ft in	5,170	16' 11"	5,220	17' 1"	5,110	16' 9"	5,170	17' 0"	5,200	17' 1"	5,100	16' 9"	4,720	15' 6"	5,455	17' 11"	5,790	19' 0"	470	1' 6"
M	mm	ft in	1,160	3' 10"	1,270	4' 2"	1,110	3' 8"	1,140	3' 9"	1,160	3' 10"	1,060	3' 6"	1,350	4' 5"	1,339	4' 5"	1,720	5' 8"	20	0' 1"
N	mm	ft in	1,660	5' 5"	1,690	5' 7"	1,640	5' 4"	1,650	5' 5"	1,660	5' 5"	1,610	5' 3"	1,570	5' 2"	1,680	5' 6"	1,720	5' 8"	390	1' 4"
V	mm	in	2,650	104"	2,500	98"	2,650	104"	2,650	104"	2,650	104"	2,650	104"	2,650	104"	2,650	104"	2,750	108"	2,650	104"
a1 clearance circle	mm	ft in	11,800	38' 8"	11,750	38' 7"	11,760	38' 7"	11,790	38' 8"	11,800	38' 9"	11,740	38' 6"	12,320	40' 5"	11,980	39' 4"	12,410	40' 9"	370	1' 3"
Operating weight	kg	lb	13,950	30,760	13,920	30,700	13,950	30,770	13,990	30,840	14,000	30,880	13,720	30,260	14,240	31,400	14,193	31,290	14,730	32,490	510	1,120

\*Calculated with additional protective guarding. (WL86009,WL86010)

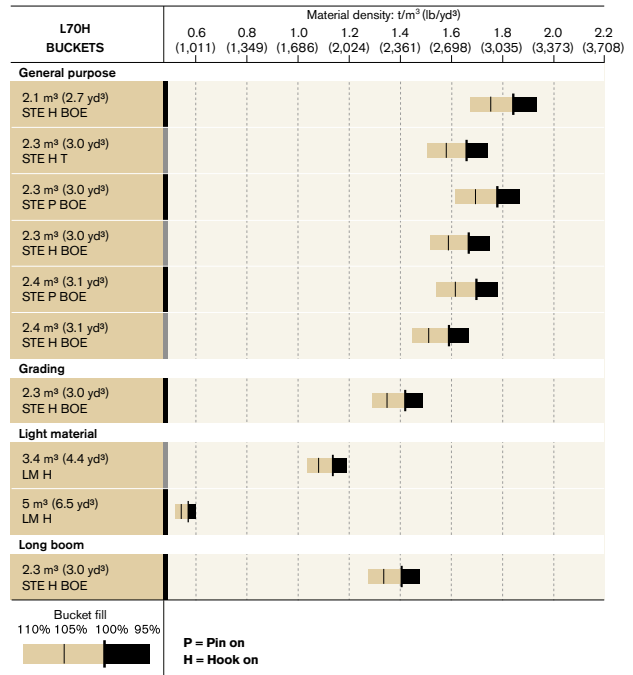
\*\*Calculated with logging counterweight.

Note: This only applies to genuine Volvo attachments.

## Bucket Selection Chart

The chosen bucket is determined by the density of the material and the expected bucket fill factor. The actual bucket volume is often larger than the rated capacity, due to the features of the TP linkage, including an open bucket design, good rollback angles in all positions and good bucket filling performance. The example represents a standard boom configuration. Example: Sand and gravel. Fill factor ~ 105%. Density 1.55 t/m3 (2,610 lb/yd3). Result: The 2.6 m3 (3.4 yd3) bucket carries 2.7m3 (3.5 yd3). For optimum stability always consult the bucket selection chart.

Material	Bucket fill, %	Material density		ISO/SAE bucket volume		Actual volume	
		t/m³	lb/yd³	m³	yd³	m³	yd³
Earth/Clay	~ 110	~ 1.55	~ 2,610	2.5	3.3	2.7	3.5
		~ 1.45	~ 2,440	2.6	3.4	2.9	3.8
		~ 1.40	~ 2,360	2.8	3.7	3.1	4.0
Sand/Gravel	~ 105	~ 1.65	~ 2,780	2.5	3.3	2.6	3.4
		~ 1.55	~ 2,610	2.6	3.4	2.7	3.5
		~ 1.50	~ 2,530	2.8	3.7	2.9	3.7
Aggregate	~ 100	~ 1.75	~ 2,950	2.5	3.3	2.5	3.3
		~ 1.65	~ 2,780	2.6	3.4	2.6	3.4
		~ 1.60	~ 2,700	2.8	3.4	2.8	3.7
Rock	≤100	~ 1.80	~ 3,030	2.2	2.9	2.2	2.9



How to read bucket fill factor

## Supplemental Operating Data

Tires 20.5 R25 L3			Standard boom				Long boom	
			20.5 R25 L2		600/65 R25 L3		600/65 R25 L3	
Width over tires	mm	ft in	+8	0.3	+96	3.8	+96	3.8
Ground clearance	mm	ft in	-8	-0.3	-32	-1.3	-24	-0.9
Tipping load, full turn	kg	lb	-62	-137	-39	-86	+9	+20
Operating weight	kg	lb	-113	-249	+7	+15	+4	+9

Calculated with 2.3 m³ (3.0 yd³) STE H BOE, additional protective guarding

# Volvo L90H specifications

L90H* MICH 20.5R25 XHA2 L3		General purpose										Grading		Light material		LongBoom**			
		2.3 m³ (3.0 yd³) HD STE H BOE		2.6 m³ (3.4 yd³) HD STE H T		2.7 m³ (3.5 yd³) HD STE P BOE		2.8 m³ (3.7 yd³) HD STE H BOE		2.8 m³ (3.7 yd³) HD STE P BOE		2.8 m³ (3.7 yd³) GRB H BOE		4.1 m³ (5.4 yd³) LM H		7.0 m³ (9.2 yd³) LM H		2.7 m³ (3.5 yd³) HD STE P BOE	
		WLA86299	WLA86303	WLA86319	WLA86304	WLA86320	WLA86331	WLA85404	WLA92687	WLA92683	WLA86319								
Volume, heaped ISO/SAE	m3 yd3	2.3 3.0	2.6 3.4	2.7 3.5	2.8 3.7	2.8 3.7	2.8 3.7	2.8 3.7	2.8 3.7	2.8 3.7	2.8 3.7	4.1 5.4	7.0 9.2	2.7 3.5					
Volume at 110% fill factor	m3 yd3	2.5 3.3	2.9 3.7	3.0 3.9	3.1 4.0	3.1 4.0	3.1 4.0	3.1 4.0	3.1 4.0	3.1 4.0	3.1 4.0	4.5 5.9	7.7 10.1	3.0 3.9					
Static tipping load, straight	kg lb	11,520 25,390	11,610 25,610	11,970 26,390	11,320 24,960	11,930 26,310	11,430 25,200	9,250 20,390	10,810 23,840	10,530 23,210	-1,110 -2,440								
at 35° turn	kg lb	10,220 22,540	10,310 22,740	10,640 23,450	10,030 22,120	10,600 23,380	10,140 22,360	8,170 18,020	9,550 21,060	9,250 20,390	-1,030 -2,260								
at full turn	kg lb	9,840 21,700	9,930 21,890	10,240 22,590	9,650 21,290	10,210 22,510	9,760 21,530	7,860 17,330	9,180 20,230	8,870 19,550	-1,000 -2,220								
Breakout force	kN lbf	138.8 31,030	135.9 30,560	140.1 31,510	126.4 28,430	137.6 30,940	126.4 28,430	92.2 20,730	100.6 22,610	87.0 19,560	1.8 410								
A	mm ft in	7,560 24' 10"	7,850 25' 9"	7,560 24' 10"	7,690 25' 3"	7,580 24' 11"	7,690 25' 3"	8,170 26' 10"	8,040 26' 5"	8,350 27' 5"	410 1' 4"								
E	mm ft in	1,170 3' 10"	1,410 4' 8"	1,160 3' 9"	1,280 4' 2"	1,180 3' 10"	1,280 4' 2"	1,760 5' 9"	1,590 5' 3"	1,860 6' 1"	-10 0"								
H	mm ft in	2,910 9' 7"	2,730 8' 11"	2,920 9' 7"	2,830 9' 4"	2,910 9' 7"	2,830 9' 4"	2,400 7' 11"	2,610 8' 7"	2,410 7' 11"	420 1' 4"								
L	mm ft in	5,310 17' 5"	5,420 17' 10"	5,360 17' 7"	5,450 17' 11"	5,390 17' 8"	5,420 17' 10"	4,900 16' 1"	5,640 18' 6"	5,840 19' 2"	420 1' 4"								
M	mm ft in	970 3' 2"	1,170 3' 10"	970 3' 2"	1,070 3' 6"	990 3' 3"	1,070 3' 6"	1,200 3' 11"	1,350 4' 5"	1,550 5' 1"	-70 -3"								
N	mm ft in	1,660 5' 5"	1,730 5' 8"	1,650 5' 5"	1,700 5' 7"	1,660 5' 5"	1,700 5' 7"	1,520 5' 0"	1,710 5' 7"	1,700 5' 7"	360 1' 2"								
V	mm in	2,650 108"	2,750 108"	2,750 108"	2,750 108"	2,750 108"	2,750 108"	2,750 108"	2,880 113"	2,750 108"	3,000 118"	2,750 108"							
a1 clearance circle	mm ft in	12,040 39' 6"	12,180 40"	12,040 39' 6"	12,100 39' 8"	12,050 39' 6"	12,100 39' 8"	12,770 41' 11"	12,300 40' 4"	12,700 41' 8"	300 1' 0"								
Operating weight	kg lb	15,470 34,110	15,460 34,080	15,330 33,810	15,580 34,350	15,350 33,850	15,490 34,160	15,680 34,620	15,840 34,920	16,270 35,870	790 1,730								

\*Calculated with additional protective guarding. (WL86009,WL86010)

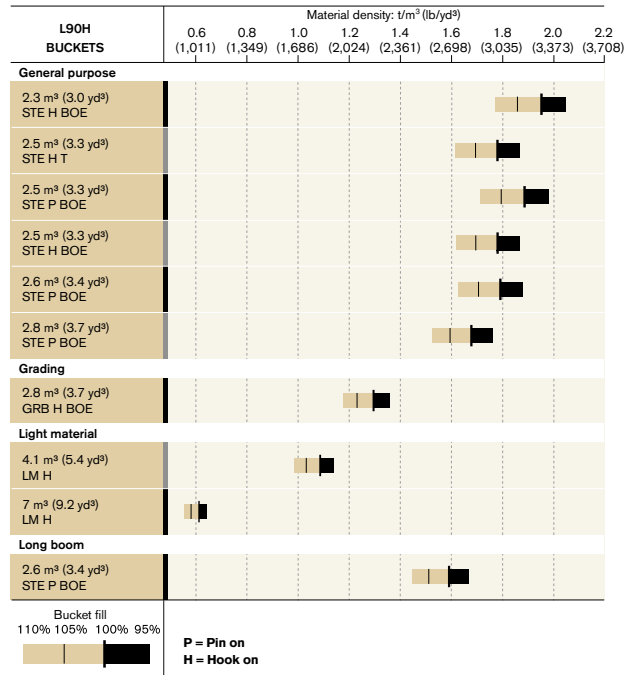
\*\*Calculated with logging counterweight.

Note: This only applies to genuine Volvo attachments.

## Bucket Selection Chart

The chosen bucket is determined by the density of the material and the expected bucket fill factor. The actual bucket volume is often larger than the rated capacity, due to the features of the TP linkage, including an open bucket design, good rollback angles in all positions and good bucket filling performance. The example represents a standard boom configuration. Example: Sand and gravel. Fill factor ~ 105%. Density 1.55 t/m3 (2,610 lb/yd3). Result: The 2.6m3 (3.4yd3) bucket carries 2.7m3 (3.5yd3). For optimum stability always consult the bucket selection chart.

Material	Bucket fill, %	Material density		ISO/SAE bucket volume		Actual volume	
		t/m³	lb/yd³	m³	yd³	m³	yd³
Earth/Clay	~ 110	~ 1.55	~ 2,610	2.5	3.3	2.7	3.5
		~ 1.45	~ 2,440	2.6	3.4	2.9	3.8
		~ 1.40	~ 2,360	2.8	3.7	3.1	4.0
Sand/Gravel	~ 105	~ 1.65	~ 2,780	2.5	3.3	2.6	3.4
		~ 1.55	~ 2,610	2.6	3.4	2.7	3.5
		~ 1.50	~ 2,530	2.8	3.7	2.9	3.7
Aggregate	~ 100	~ 1.75	~ 2,950	2.5	3.3	2.5	3.3
		~ 1.65	~ 2,780	2.6	3.4	2.6	3.4
		~ 1.60	~ 2,700	2.8	3.7	2.8	3.7
Rock	≤100	~ 1.80	~ 3,030	2.2	2.9	2.2	2.9



How to read bucket fill factor

## Supplemental Operating Data

Tires 20.5 R25 L3		Standard boom				Long boom	
		20.5 R25 L2		650/65 R25 L3		650/65 R25 L3	
Width over tires	mm ft in	+4	+0.2	+164	+6.5	+164	+6.5
Ground clearance	mm ft in	-8	-0.3	-4	-0.2	+12	+0.5
Tipping load, full turn	kg lb	-70	-154	+315	+694	+287	+633
Operating weight	kg lb	-111	-245	+545	+1,202	+543	+1,197

Calculated with 2.6 m³ (3.4 yd³) STE P BOE, additional protective guarding

# Equipment

STANDARD EQUIPMENT			
	L60H	L70H	L90H
<b>Engine</b>			
Exhaust after-treatment system	•	•	•
3-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	•	•	•
Crank case breather oil trap	•	•	•
Exhaust heat ventilation	•	•	•
<b>Tires</b>			
20.5R25	•	•	•
<b>Drivetrain</b>			
Automatic Power Shift	•	•	•
Fully automatic gear shifting, 1-4	•	•	•
PWM-controlled gear shifting	•	•	•
Forward and reverse switch by hydraulic lever console	•	•	•
Indicator glass for transmission oil level	•	•	•
Differentials: Front, 100% hydraulic diff lock. Rear, conventional	•	•	•
<b>Electrical system</b>			
24 V, pre-wired for optional accessories	•	•	•
Alternator 80A/3135W	•	•	•
Battery disconnect switch	•	•	•
Maintenance-free batteries	•	•	•
Battery box, steel	•	•	•
Fuel gauge	•	•	•
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)	•	•	•

STANDARD EQUIPMENT			
	L60H	L70H	L90H
<b>Contronic monitoring system</b>			
Contronic display	•	•	•
Fuel consumption	•	•	•
Diesel Exhaust Fluid/AdBlue consumption	•	•	•
Ambient temperature	•	•	•
Clock	•	•	•
Test function for warning and indicator lights	•	•	•
Brake test	•	•	•
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	•	•	•
Crank case pressure	•	•	•
Attachment lock open	•	•	•
Level warnings:			
Fuel level	•	•	•
Diesel Exhaust Fluid/AdBlue 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 crank case pressure	•	•	•
High charge air temperature	•	•	•
Engine shutdown to idle in case of malfunction indication:			
High transmission oil temperature	•	•	•
Slip in transmission clutches	•	•	•
Key pad, background lit	•	•	•
Start interlock when gear is engaged	•	•	•
<b>Hydraulic system</b>			
Main valve, double acting 2-spool with hydraulic pilots	•	•	•
Variable displacement axial piston pumps (2) for:			
Working hydraulics, pilot hydraulics, steering system, brakes	•	•	•
Cooling fan, brakes	•	•	•
Hydraulic control levers	•	•	•
Mechanical hydraulic lever lock	•	•	•
Automatic boom kick-out	•	•	•
Automatic bucket positioner	•	•	•
Double acting hydraulic cylinders	•	•	•
Indicator glass for hydraulic oil level	•	•	•
Hydraulic oil cooler	•	•	•



<b>STANDARD EQUIPMENT</b>			
	L60H	L70H	L90H
<b>Brake system</b>			
Dual brake circuits	•	•	•
Dual brake pedals	•	•	•
Secondary brake system	•	•	•
Parking brake, electrical-hydraulic	•	•	•
Brake wear indicators	•	•	•
Outboard mounted circulating oil cooled wet disc brakes on all four wheels	•	•	•
<b>Cab</b>			
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 rearview mirrors	•	•	•
Dual exterior rearview mirrors	•	•	•
Sliding window, right side	•	•	•
Tinted safety 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	•	•	•
Foot step, left side (toolbox lockable included)	•	•	•
<b>Service and maintenance</b>			
Engine oil remote drain and fill	•	•	•
Transmission oil remote drain and fill	•	•	•
Sliding hydraulic oil cooler and AC-condenser	•	•	•
Lubrication manifolds, ground accessible	•	•	•
Pressure test ports: transmission and hydraulic, quick connects	•	•	•
Service platforms with anti-slip surfaces	•	•	•
CareTrack	•	•	•
Telematics, 6 -year subscription	•	•	•
Toolbox, lockable	•	•	•
<b>External equipment</b>			
Basic fenders, front and rear	•	•	•
Viscous cab mounts	•	•	•
Rubber engine and transmission mounts	•	•	•
Engine hood, electronically openable	•	•	•
Frame, joint lock	•	•	•
Vandalism lock for engine compartment	•	•	•
Lifting eyes	•	•	•
Tie down eyes	•	•	•
Tow hitch	•	•	•
Counterweight, pre-drilled for optional guards	•	•	•

<b>OPTIONAL EQUIPMENT</b>			
	L60H	L70H	L90H
<b>Engine</b>			
Air pre-cleaner, cyclone type	•	•	•
Air pre-cleaner, oil-bath type	•	•	•
Air pre-cleaner, turbo type	•	•	•
Engine auto shut down	•	•	•
Engine block heater, 120V / 230V	•	•	•
Fuel heater	•	•	•
Fuel fill strainer	•	•	•
Hand throttle control	•	•	•
Max. fan speed, hot climate	•	•	•
Reversible cooling fan	•	•	•
<b>Drivetrain</b>			
Lock-up torque converter	–	•	•
Rear axle with limited slip	•	•	•
Speed limiter, 20 km/h	•	•	•
Speed limiter, 30 km/h	•	•	•
Speed limiter, 40 km/h	•	•	•
<b>Hydraulic system</b>			
Arctic kit: Attachment locking, pilot hoses and hydraulic oil	•	•	•
Attachment bracket, cast, visibility-optimized	•	•	•
Attachment bracket, side-tilting	•	•	•
Separate attachment locking, long boom	•	•	•
Separate attachment locking, standard boom	•	•	•
Single acting lifting function	•	•	•
Boom suspension system	•	•	•
HD load-sensing hydraulics, pump kit included	–	•	–
Mineral oil for cold climate	•	•	•
Hydraulic, 3 functions, standard/long boom	•	•	•
Hydraulic, 4 functions, standard/long boom	•	•	•
Detent for 3rd hydraulic function	•	•	•
Adjustable flow for 3rd hydraulic function	•	•	•
Single lever control, 2 functions	•	–	–
Single lever control, 3 functions	•	–	–
Hydraulic, 2 functions Electro-servo, std/long boom	–	•	•
Hydraulic, 3 functions Electro-servo, std/long boom	–	•	•
Hydraulic, 4 functions Electro-servo, std/long boom	–	•	•
Single lever control, 2 funct Electro-servo, std/long boom	–	•	•
Single lever control, 3 funct Electro-servo, std/long boom	–	•	•
Single lever control, 4 funct Electro-servo, std/long boom	–	•	•
<b>Brake system</b>			
Stainless steel, brake lines	–	•	•
Parking brake alarm, audible	•	•	•

# Equipment

OPTIONAL EQUIPMENT			
	L60H	L70H	L90H
<b>Cab</b>			
ACC control panel, with Fahrenheit scale	•	•	•
Anchorage for Operator's manual	•	•	•
Asbestos dust protection filter	•	•	•
Automatic Climate Control, ACC	•	•	•
Automatic Climate Control, ACC, corrosion protection condenser	•	•	•
Cab air pre-cleaner, cyclone type	•	•	•
Carbon filter - cab	•	•	•
Remote door opener	•	•	•
Lunch box holder	•	•	•
Operator's seat, Volvo air-suspended, heavy-duty, high back, heated	•	•	•
Operator's seat, Volvo air-susp, 3-point seatbelt	•	•	•
Operator's seat, ISRI, heated, high back	•	•	•
Operator's seat, ISRI, low back	•	•	•
Operator's seat, Premium Comfort ISRI	•	•	•
Armrest, operator's seat, ISRI, left only	•	•	•
Armrest, operator's seat, Volvo, left	•	•	•
Safety belt, 3" (75mm) width	•	•	•
Safety belt warning	•	•	•
Radio installation kit including 12 volt outlet, left-side	•	•	•
Radio installation kit including 12 volt outlet, right-side	•	•	•
Radio installation kit, 12V, for USA	•	•	•
Radio with AUX, Bluetooth and USB connection	•	•	•
Subwoofer	•	•	•
Forward view mirror	•	•	•
Rear view mirrors, el.adjusted and heated	•	•	•
Rear view mirrors, long arm right	•	•	•
Rear view mirrors, el.adjusted and heated, long arm right	•	•	•
Steering wheel knob	•	•	•
Sun blinds, rear windows	•	•	•
Sun blinds, side windows	•	•	•
Timer cab heating	•	•	•
Universal door/ignition key	•	•	•
Window, sliding, door	•	•	•
<b>Service and maintenance</b>			
Automatic lubrication system	•	•	•
Automatic lubrication system for long boom	•	•	•
Oil sampling valve	•	•	•
Refill pump for automatic lubrication system	•	•	•
Tool kit	•	•	•
Wheel nut wrench kit	•	•	•

OPTIONAL EQUIPMENT			
	L60H	L70H	L90H
<b>Electrical</b>			
Anti-theft device	•	•	•
Headlights, assym. left	•	•	•
Headlights, assym. right LED	•	•	•
Headlights, assym. left LED	•	•	•
Emergency stop	•	•	•
License plate holder, lighting	•	•	•
Reduced function working lights when reverse gear activated	•	•	•
Side marker lamps	•	•	•
Forward camera, colour	•	•	•
Rear view camera including monitor, colour	•	•	•
Reverse alarm	•	•	•
Reverse lights	•	•	•
Reversing warning light	•	•	•
Reverse warning light, strobe lightning	•	•	•
Seatbelt indicator light	•	•	•
Warning beacon (flasher), LED automatic	•	•	•
Warning beacon (flasher), LED	•	•	•
Working lights, attachments, 1 LED	•	•	•
Working lights, attachments	•	•	•
Economy LED-light package	•	•	•
Feature LED-light package	•	•	•
Power LED-light package	•	•	•
Working lights front, on cab, dual	•	•	•
Working lights rear, on cab	•	•	•
Working lights rear, on cab, dual	•	•	•
Working lights front, extra	•	•	•
Working lights, front on cab, 2 LED lamps	•	•	•
Working lights, rear on cab, 2 LED lamps	•	•	•
Working lights, front on cab, 4 LED lamps	•	•	•
Working lights, rear on cab, 4 LED lamps	•	•	•
Working lights, side on cab, 4 LED lamps	•	•	•
Working lights, rear in grille, 2 LED lamps	•	•	•
Working lights, front above head lamps, 2 LED lamps	•	•	•
Taillight, LED lamp	•	•	•
<b>Protective equipment</b>			
Anti-theft device	•	•	•
Bellyguard front	•	•	•
Bellyguard rear	•	•	•
Boom cylinder hose and tube guards	•	•	•
Cab roof, heavy duty	•	•	•
Center hinge and rear frame guard	•	•	•
Corrosion protection, painting of machine	•	•	•
Cover plate front frame, heavy-duty	•	•	•
Cover plate, under cab	•	•	•
Cover plates rear frame	•	•	•
Guards for front headlights	•	•	•
Grease nipple guards	-	•	•
Guards for radiator grill	•	•	•
Guards for tail lights, heavy-duty	•	•	•
Wheel/axle seal guards	•	•	•
Window guards, side and rear	•	•	•
Windshield guard	•	•	•

OPTIONAL EQUIPMENT			
	L60H	L70H	L90H
<b>External equipment</b>			
Deleted front mudguards	•	•	•
Fire extinguisher	•	•	•
Bracket for fire extinguisher	•	•	•
Fire suppression system	•	•	•
Mudguards, full cover, rear for 80-series tires	•	•	•
Mudflap kit for mudguards, full cover for 80-series tires	•	•	•
Mudguards, full cover, rear and front/rear for 65-series tires	•	•	•
Mudflap kit for mudguards, full cover for 65-series tires	•	•	•
Footsteps front frame	•	•	•
Footsteps, right-hand side	•	•	•
Flexible rear step	•	•	•
Cab ladder, rubber suspended	•	•	•
<b>Other equipment</b>			
CareTrack, GSM/Satellite	•	•	•
CE-marking	•	•	•
Comfort Drive Control (CDC)	•	•	•
Comfort Drive Control (CDC) Electro-servo	-	•	•
Secondary steering	•	•	•
Counterweight, logging	•	•	•
Sign, slow moving vehicle	•	•	•
<b>Tires and Rims</b>			
20.5R25	•	•	•
600/65R25	•	•	•
650/65R25	-	-	•

OPTIONAL EQUIPMENT			
	L60H	L70H	L90H
<b>Attachments</b>			
Buckets:			
Straight	•	•	•
Spade nose	•	•	•
High tipping	•	•	•
Light material	•	•	•
Grading	•	•	•
Wear parts:			
Bolt-on edge	•	•	•
Bolt-on or weld-on bucket teeth	•	•	•
Segments	•	•	•
Log grapples	•	•	•
Fork equipment	•	•	•
Material handling arm	•	•	•
Snow blade	•	•	•
Broom	•	•	•
Sand spreading bucket	•	•	•
Bale clamp	•	•	•
Drum rotator	•	•	•

## SELECTION OF VOLVO OPTIONAL EQUIPMENT

External axle cooling (L70H, L90H)



Reversing camera with radar detect



Premium seat



Comfort Drive Control



Light packages



Lock-up converter (L70H, L90H)



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.



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