

VOLVO WHEEL LOADERS

L60G, L70G, L90G

11.0-17.3 t 161-173 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 175 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

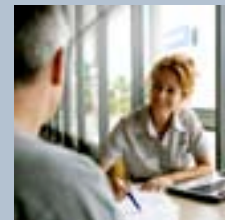


Renault Trucks



Mack Trucks





UD Trucks

Volvo Buses

Volvo Construction Equipment

Volvo Penta

Volvo Aero

Volvo Financial Services

TWO MACHINES IN ONE.

Handle your workload with Volvo's L60G, L70G and L90G: versatile wheel loaders that get the job done. Volvo's unique TP linkage delivers the benefits of two machines in one thanks to high breakout torque and parallel movement through the entire lifting range. Change attachments quickly with the attachment bracket for unbeatable flexibility on site.



Load-sensing hydraulics

Load-sensing hydraulics deliver power to hydraulic functions only when it's needed, without unnecessary oil pumping, for lower fuel consumption and more sensitivity in load handling.

Long reach and precision

Smooth and precise pilot-operated hydraulics enable the operator to easily control attachments with minimum effort and high precision in all applications.



Patented TP linkage

Volvo's unique Torque Parallel linkage combines the benefits of Z-Bar and parallel linkage in one to deliver high breakout torque and excellent parallel movement throughout the entire lifting range.

BUILT TO PERFORM.



Optimized driveline

The engine, transmission, axles are all designed and manufactured by Volvo to work in perfect harmony with the hydraulics and steering for superb quality, performance and reliability.

Looking for performance? Look no further than the L60G, 70G and 90G – built to perform with power and precision. Volvo quality from top to bottom means all components work in perfect harmony for the best operation. You can rely on Volvo.

Differential lock for traction

The operator can select the differential lock to transfer 100% power to the wheels to reduce tire slippage for maximum traction on soft and slippery ground.



Fully Automatic Power Shift (FAPS)

Volvo's FAPS system simplifies operation by automatically selecting the right gear so the operator doesn't have to. Operator efficiency is significantly improved by allowing more concentration on the work in hand.

Heavy-duty axles

Volvo's heavy-duty wet brake axles deliver rim pull to the operation. Axle housings absorb all loads from the machine weight to reduce working stress on the axle shafts for longer service life.

POWERED BY EFFICIENCY.

Volvo's powerful 6 litre, 6-cylinder turbocharged diesel engine meets Tier 4 Interim/ Stage IIIB engine emissions requirements and delivers high torque at low engine speeds for industry-leading performance and fuel economy.

Fuel efficient Volvo V-ACT

Volvo Combustion Technology, V-ACT, is tailored for use in demanding applications. Fuel injection is electronically controlled based on temperature, pressure, load and engine speed in order to achieve optimal combustion. The result: high performance and low emissions.



Reduce emissions on the move

Reduce emissions without interrupting machine operation with Volvo's regeneration process. The active-type Diesel Particulate Filter (DPF) includes a Diesel Oxidation catalyst function, which works as you operate.

Operate efficiently with the eco pedal

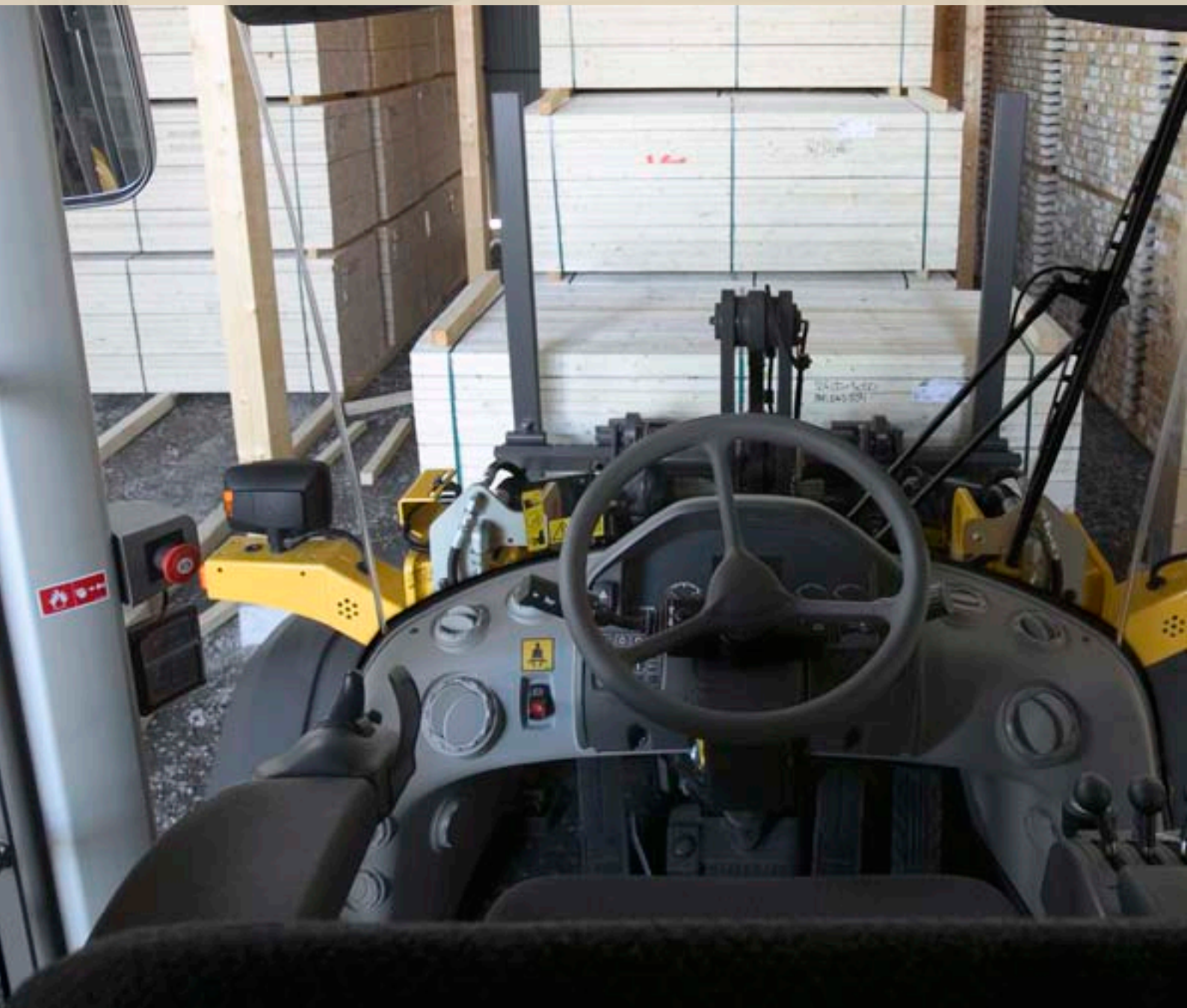
The eco pedal encourages the operator to engage the throttle pedal with ease to lower fuel consumption, by applying the appropriate amount of mechanical counter pressure (push-back) to avoid excessive fuel use.



Tier 4 Interim/Stage IIIB engine

Volvo's powerful 6 litre, 6-cylinder turbocharged diesel engine meets Tier 4 Interim/ Stage IIIB engine emissions requirements and delivers high torque at low engine speeds for industry-leading performance and fuel economy.

BE IN CONTROL.



Command and control in Volvo's industry-leading cab. Ample leg room, storage space and climate control help operators remain focused when the work gets tough. State-of-the-art Volvo Contronic system continuously monitors machine performance, leaving you to admire your work from all angles through the excellent cab visibility.



Industry-leading cab

All-round visibility is at the forefront of design for Volvo's ROPS/FOPS approved cab. The cab is spacious allowing ample room to stretch out your legs and still have space for storage.



Contronic system

State-of-the-art Volvo Contronic system continuously monitors machine performance. Diagnostics are communicated to the operator via a screen in the cab for reduced downtime.

Air filter

The cab air intake is placed in a prime location – high on the machine, where the air is cleaner. A pre-filter separates coarse dust before the main filter to give the operator the freshest air.



Load-sensing steering

The load-sensing hydraulic steering system is only activated when the steering wheel is turned for lower fuel consumption, quick response and exact movement – even at low engine speeds.

Control your climate

Regardless of the weather, operators stay at the ideal temperature with Volvo's in-cab climate control system – choose Automatic Heat Control (AHC) or Air Conditioning (AC) to stay focused and efficient.

EASY TO MAINTAIN.



New engine hood design

The engine hood with improved rear visibility electrically opens for easy access and fast maintenance. A wide opening angle provides a better overview of the full engine compartment.

Time means money on site. That's why the new, electrically opening, engine hood is even easier to access for fast maintenance and service checks. Volvo's high-tech MATRIS and VCADS Pro software offers more in-depth engine and machine operation analysis to increase your uptime.

Maintenance-free cradles

The rear axle cradles are maintenance free and includes two grease-lubricated-for-life roller bearings and two oil bath, pre-filled-for-life bushings to save service time.



Analysis software

Maintain uptime using Volvo's analysis software. MATRIS uses output from the Contronic system to analyze machine operation, while the VCADS Pro software allows analysis and adjustment of engine performance by plugging a PC into the engine.

Hydraulic cooling fan

Hydraulically driven, electronically controlled cooling fan, located between the engine and radiator, speeds-up only when necessary to lower fuel consumption and sound levels.

GET FLEXIBLE.

Volvo attachments give you more flexibility. Each attachment from the extensive range is perfectly matched to the machine's link-arm geometry and breakout, rim pull and lifting force. All attachments can be fastened and removed quickly thanks to Volvo's VAB-STD attachment bracket so you can 'connect and go'.



Hydraulic attachment bracket

Volvo's hydraulic attachment bracket, VAB-STD, has been internationally ISO standardized. The bracket allows quick interchange of attachments for increased flexibility on site. The strong, open bracket design enables the operator to clearly see each attachment from the cab.



FULLY LOADED.

Contronic system

The Volvo Contronic system monitors the machine's performance and displays diagnostics to the operator to minimize downtime.



Patented TP linkage

Volvo's unique Torque Parallel linkage delivers high breakout torque and excellent parallel movement throughout the entire lifting range.

Hydraulic attachment bracket

The hydraulic attachment bracket enables quick attachment changes giving you more versatility on site.

Load-sensing hydraulics

Load-sensing hydraulics delivers power to hydraulic functions only when it's needed, lowering fuel consumption.

Attachments

Volvo's wide range of high quality attachments are perfectly matched to the machine's linkage, hydraulics and driveline to work as one unit and increase productivity.



Optimized driveline

Volvo designed and manufactured engine and components work in perfect harmony for superb performance and reliability.





Industry-leading cab

All-round visibility is at the forefront of design for Volvo's ROPS/FOPS approved cab.

Analysis software

Maintain machine uptime by using Volvo's diagnostic computer-based analysis software: MATRIS and VCADS Pro.



CareTrack*

Volvo's telematics system guides machine owners towards optimized productivity and their next service – remotely.



New engine hood design

Engine hood electrically opens for easy access and fast maintenance. Wide opening angle gives a better engine overview.



Tier 4 Interim/Stage IIIB engine

Volvo's 6 litre, 6-cylinder turbocharged diesel engine is powerful, efficient and complies with Tier 4 Interim/Stage IIIB engine emissions requirements.

Fully Automatic Power Shift (FAPS)

Volvo's FAPS system simplifies operation by automatically selecting the right gear allowing the operator to concentrate on the work in hand.

* In markets where CareTrack is available

TOP PERFORMANCE DESERVES SUPPORT.

The day you receive your new Volvo Wheel Loader is just the start of your working relationship with Volvo. From service and maintenance to our CareTrack telematics system – Volvo has a comprehensive and sophisticated aftermarket portfolio to continuously add value to your business.

Volvo designed and built your machines, so no-one knows how to keep them working in top condition more than us. When it comes to your machine, our Volvo trained technicians are the experts.

Our technicians work with industry leading diagnostic tools and techniques, using only Genuine Volvo Parts to deliver the highest levels of quality and service. Talk to your Volvo dealer about how genuine Volvo services can best provide the service and maintenance plan that is the right fit for you and your business.



State-of-the-art machines require state-of-the-art support and your Volvo dealer can provide a catalogue of services designed to get the most out of your machine, helping you maximise uptime, productivity and residual value. Your Volvo dealer can provide a number of sophisticated support offers, including:

Service plans ranging from routine wear inspections, through to comprehensive maintenance and repair agreements.

Analysis and diagnostics to help you understand how your machine is running, highlight potential maintenance issues and identify where performance can be improved.

Eco Operator training courses can help your operators work towards a safer, more productive and fuel efficient performance.



CareTrack*

Each Volvo Wheel Loader comes standard equipped with CareTrack, the Volvo telematics system. CareTrack provides information for better planning and smarter working; including fuel consumption reports, location reports and service reminders. Save fuel. Reduce costs. Maximise profitability. You can with CareTrack.

* In markets where CareTrack is available

VOLVO L60G, L70G, L90G 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. Cooled exhaust gas recirculation and particle filter with active regeneration.

L60G

Engine		D6H (Tier 4i) D6H (Stage IIIB)
Max power at	r/s (r/min)	23.3 - 30.0 (1 400 - 1 800)
SAE J1995 gross	kW / hp	120 / 163
ISO 9249, SAE J1349 net	kW / hp	120 / 163
Max torque at	r/s (r/min)	23.3 (1 400)
SAE J1995 gross	Nm/lbf-ft	820/605
ISO 9249, SAE J1349	Nm/lbf-ft	820/605
Economic working range	r/s (r/min)	13.3 - 26.6 (800 - 1 600)
Displacement	l	5.7

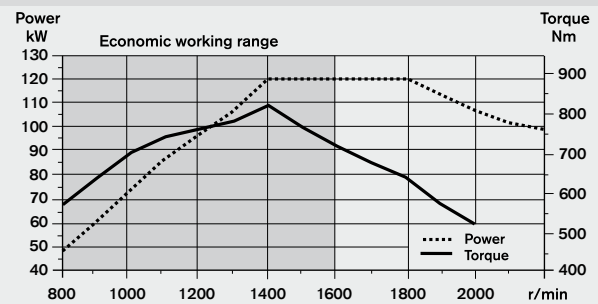
L70G

Engine		D6H (Tier 4i) D6H (Stage IIIB)
Max power at	r/s (r/min)	23.3 - 28.3 (1 400 - 1 700)
SAE J1995 gross	kW / hp	126 / 171
ISO 9249, SAE J1349 net	kW / hp	126 / 171
Max torque at	r/s (r/min)	23.3 (1 400)
SAE J1995 gross	Nm/lbf-ft	860/634
ISO 9249, SAE J1349 net	Nm/lbf-ft	860/634
Economic working range	r/s (r/min)	13.3 - 26.6 (800 - 1 600)
Displacement	l	5.7

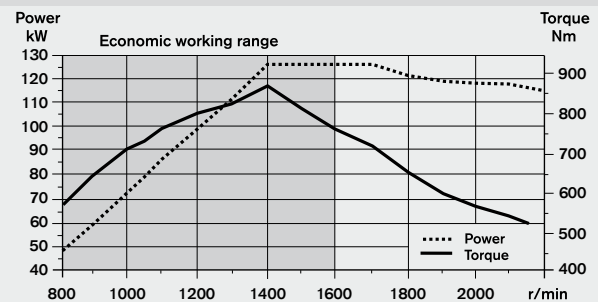
L90G

Engine		D6H (Tier 4i) D6H (Stage IIIB)
Max power at	r/s (r/min)	23.3 - 28.3 (1 400 - 1 700)
SAE J1995 gross	kW / hp	129 / 175
ISO 9249, SAE J1349 net	kW / hp	129 / 175
Max torque at	r/s (r/min)	23.3 (1 400)
SAE J1995 gross	Nm/lbf-ft	880/649
ISO 9249, SAE J1349 net	Nm/lbf-ft	880/649
Economic working range	r/s (r/min)	13.3 - 26.6 (800 - 1 600)
Displacement	l	5.7

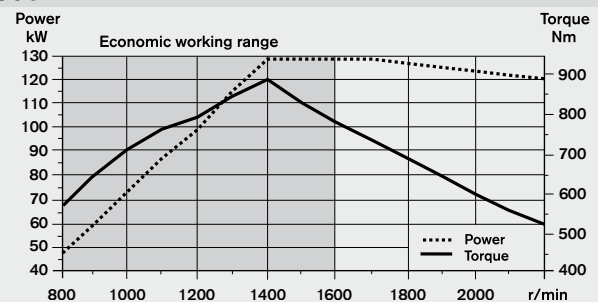
L60G



L70G



L90G





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.

L60G

Transmission	Volvo	HTE 125
Torque multiplication, stall ratio		2.45:1
Maximum speed, forward/reverse	1st gear	km/h 8
	2nd gear	km/h 16
	3rd gear	km/h 29
	4th gear*	km/h 46
Measured with tires		20.5R25
Front axle/rear axle		AWB 15/AWB 15
Rear axle oscillation ±	°	± 13
Ground clearance at 13° osc.	mm	470

L70G

Transmission	Volvo	HTE 125
Torque multiplication		2.45:1
Maximum speed, forward/reverse	1st gear	km/h 8
	2nd gear	km/h 15
	3rd gear	km/h 29
	4th gear*	km/h 46
Measured with tires		20.5R25
Front axle/rear axle		AWB 25/AWB 20
Rear axle oscillation ±	°	± 13
Ground clearance at 15° osc.	mm	470

L90G

Transmission	Volvo	HTE 125
Torque multiplication		2.45:1
Maximum speed, forward/reverse	1st gear	km/h 8
	2nd gear	km/h 15
	3rd gear	km/h 28
	4th gear*	km/h 46
Measured with tires		20.5R25
Front axle/rear axle		AWB 25/AWB 20
Rear axle oscillation ±	°	± 13
Ground clearance at 15° osc.	mm	470

* limited by ECU

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

L60G, L70G, L90G

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	2 x 110
Cold cranking capacity, approx	A	690
Batteries		
Alternator rating	W/A	3 135/120
Starter motor output	kW	5.5

Brake system

Service brake: Volvo dual-circuit system with nitrogen charged accumulators. Outboard mounted hydraulically operated, fully sealed oil circulation cooled wet disc brakes. The operator can select automatic declutch of the transmission when braking through Contronic.
 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. One circuit or the parking brake fulfills all safety requirements.
 Standard: The brake system complies with the requirements of ISO 3450, 71/320/EEC

L60G

Number of brake discs per wheel front		1
Accumulators	l	3 x 0.5

L70G

Number of brake discs per wheel front		1
Accumulators	l	2 x 0.5+1 x 1.0

L90G

Number of brake discs per wheel front		front 2
Accumulators	l	2 x 0.5+1 x 1.0

VOLVO L60G, L70G, L90G 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 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 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, FOPS (ISO 3449). The cab meets with requirements according to ISO 6055 (Operator overhead protection - Industrial trucks) and SAE J386 ("Operator Restraint System").

			L60G
Emergency exit:	Use emergency hammer to break window		
Sound level in cab according to ISO 6396/SAE J2105			
LpA	dB(A)		68
External sound level according to ISO 6395/SAE J2104			
LwA	dB(A)		104
Ventilation	m ³ /min		9
Heating capacity	kW		16
Air conditioning (optional)	kW		7.5
			L70G
Emergency exit:	Use emergency hammer to break window		
Sound level in cab according to ISO 6396/SAE J2105			
LpA	dB(A)		68
External sound level according to ISO 6395/SAE J2104			
LwA	dB(A)		105
Ventilation	m ³ /min		9
Heating capacity	kW		16
Air conditioning (optional)	kW		7.5
			L90G
Emergency exit:	Use emergency hammer to break window		
Sound level in cab according to ISO 6396/SAE J2105			
LpA	dB(A)		68
External sound level according to ISO 6395/SAE J2104			
LwA	dB(A)		105
Ventilation	m ³ /min		9
Heating capacity	kW		16
Air conditioning (optional)	kW		7.5

Lift arm system

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

			L60G
Lift cylinders			2
Cylinder bore	mm		110
Piston rod diameter	mm		70
Stroke	mm		665
Tilt cylinder			1
Cylinder bore	mm		150
Piston rod diameter	mm		80
Stroke	mm		444
			L70G
Lift cylinders			2
Cylinder bore	mm		110
Piston rod diameter	mm		70
Stroke	mm		756
Tilt cylinder			1
Cylinder bore	mm		160
Piston rod diameter	mm		90
Stroke	mm		432
			L90G
Lift cylinders			2
Cylinder bore	mm		120
Piston rod diameter	mm		70
Stroke	mm		733
Tilt cylinder			1
Cylinder bore	mm		180
Piston rod diameter	mm		90
Stroke	mm		430



Hydraulic system

System supply: One load-sensing axial piston pump with variable displacement. The steering function always has priority.
 Valves: Double-acting 2-spool valve. The main valve is controlled by a 2-spool pilot valve.
 Lift function: The valve has three positions; raise, hold and lower 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 tilt 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.
 Pilot system: 3.5 MPa

		L60G	L70G	L90G
Working pressure maximum, pump 2 for steering-, brake-, pilot- and working hydraulic system	MPa	26.0	26.0	31.0
Flow at engine speed	l/min MPa r/s(r/min)	145 10 32 (1 900)	154 10 32 (1 900)	162 10 32 (1 900)
Working pressure maximum, pump 3 for brake- and cooling fan system	MPa	21.0	21.0	21.0
Flow at engine speed	l/min MPa r/s(r/min)	32 10 32 (1 900)	32 10 32 (1 900)	32 10 32 (1 900)
Pilot system, working pressure	MPa	3.5	3.5	3.5
Cycle times				
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

Steering system

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

		L60G	L70G	L90G
Steering cylinders				
Cylinder bore	mm	70	70	80
Rod diameter	mm	45	45	50
Stroke	mm	386	386	345
Working pressure	MPa	21	21	21
Maximum flow	l/min	60	60	60
Maximum articulation	± °	40	40	40

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.

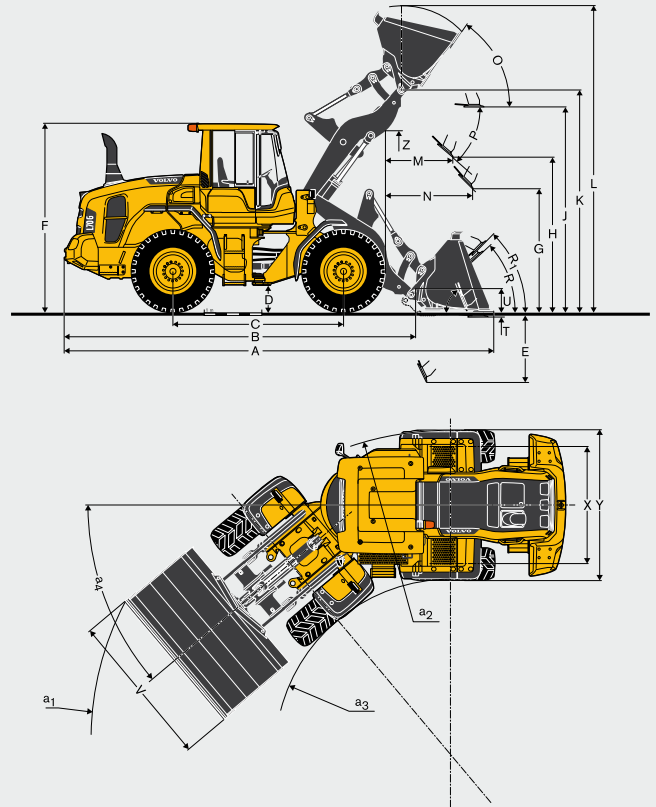
		L60G	L70G	L90G
Fuel Tank	l	219	219	219
Engine coolant	l	30	30	30
Hydraulic oil tank	l	90	90	90
Transmission oil	l	21	21	21
Engine oil	l	19.5	19.5	19.5
Axle oil front	l	24	35	35

SPECIFICATIONS.

Tires 20.5 R25 L3

		L60G	L70G	L90G	L60G	L70G	L90G
		Standard boom			Long boom		
B	mm	6 040	6 080	6 160	6 550	6 560	6 590
C	mm	3 000	3 000	3 000	3 000	3 000	3 000
D	mm	440	450	450	440	450	450
F	mm	3 270	3 280	3 280	3 270	3 280	3 280
G	mm	2 134	2 134	2 132	2 134	2 134	2 132
J	mm	3 570	3 580	3 660	4 090	4 100	4 080
K	mm	3 860	3 870	3 970	4 380	4 390	4 390
O	°	56	56	56	56	53	57
P _{max}	°	45	46	45	44	43	45
R	°	43	42	43	43	44	47
R1*	°	46	45	47	50	51	53
S	°	79	69	67	79	72	65
T	mm	104	102	105	141	111	111
U	mm	400	380	430	590	560	580
X	mm	1 900	1 930	1 960	1 900	1 930	1 960
Y	mm	2 430	2 460	2 490	2 430	2 460	2 490
Z	mm	3 200	3 210	3 300	3 590	3 500	3 660
a ₂	mm	5 340	5 350	5 370	5 340	5 350	5 370
a ₃	mm	2 900	2 890	2 880	2 900	2 890	2 880
a ₄	±°	40	40	40	40	40	40

* Carry position SAE



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

Tires: 20.5R25 L3

		L60G	L70G	L90G
SAE-Load	kg	3 450	3 990	4 600
Operating weight without load	kg	12 240	13 940	16 080
A	m ²	1.3	1.5	2.4
B	mm	3 410	3 390	3 420
C	mm	1 480	1 590	1 820
D	mm	2 930	2 870	2 800
E	mm	1 170	1 260	1 430
F	mm	1 530	1 510	1 440
G	mm	2 350	2 440	2 760
H	mm	4 330	4 380	4 540
I	mm	5 880	6 030	6 590
J	mm	2 000	2 140	2 790
K	mm	2 080	2 370	2 990
L	mm	1 710	1 790	2 150
M	mm	7 890	7 990	8 460

L60G

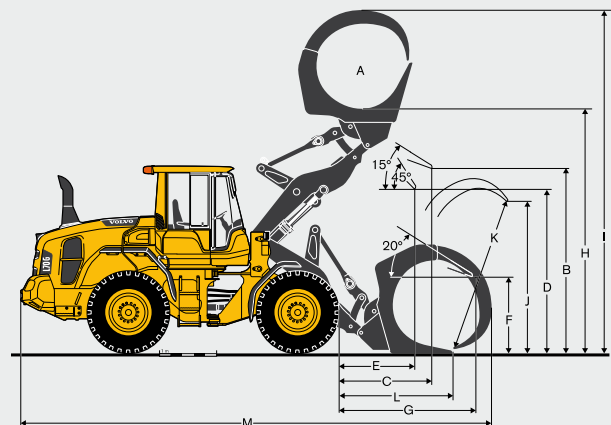
Sales code: WLA82194
Operating weight
(incl. logging cw 110 kg): 12 240 kg
Operating load: 3 450 kg

L70G

Sales code: WLA80153
Operating weight
(incl. logging cw 250 kg): 13 940 kg
Operating load: 3 990 kg

L90G

Sales code: WLA80832
Operating weight
(incl. logging cw 500 kg): 16 080 kg
Operating load: 4 600 kg



Tires: 20.5R25 L3

		L60G	L70G	L90G
A*	kg	1 800	2 150	2 760
B*	kg	1 400	1 710	2 130
C*	kg	1 150	1 400	1 740
D	mm	2 590	2 710	2 630
E	mm	2 000	2 100	2 030
F	mm	1 460	1 540	1 430
G	mm	3 270	3 320	3 270
H	mm	4 300	4 350	4 410
I	mm	5 430	5 490	5 540
J	mm	900	1 260	1 360
K	mm	1 220	1 740	1 910
L	mm	1 580	2 260	2 460
M	mm	2 260	2 170	2 040
N	mm	3 240	3 090	3 030
O	mm	4 320	4 100	4 020
P	mm	1 510	1 530	1 540
Q	mm	5 290	5 300	5 340
R	mm	6 170	6 180	6 300
S	mm	7 140	7 130	7 260

* Carry position SAE

L60G

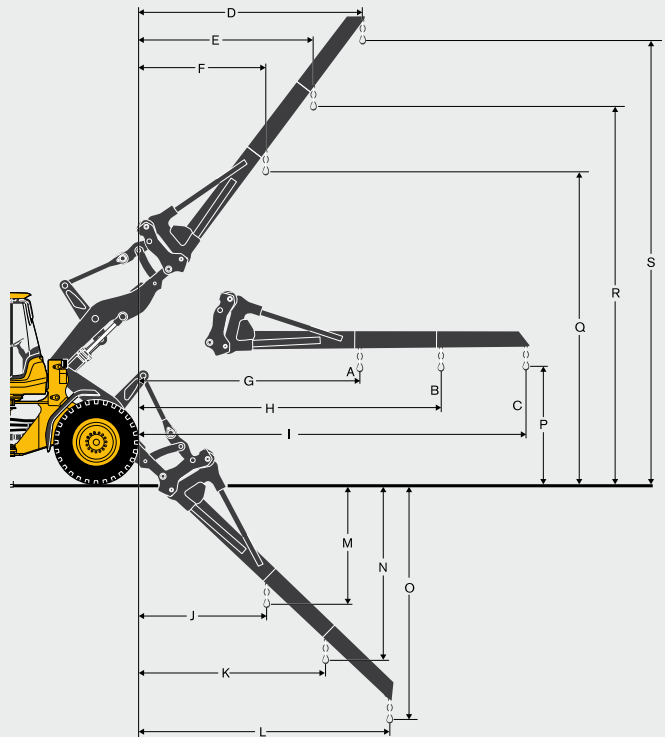
Sales code: WLA92007
Operating weight: 11 530 kg

L70G

Sales code: WLA92007
Operating weight: 12 990 kg

L90G

Sales code: WLA92007
Operating weight: 12 990 kg



Tires: 20.5R25 L3

		L60G	L70G	L90G
A	mm	790	840	940
B	mm	1 560	1 610	1 690
C	mm	-37	-55	42
D	mm	1 830	1 860	1 750
E	mm	3 710	3 740	3 730
F	mm	700	760	750
Operating load	kg	4 350	4 900	5 700
at load center distance*	mm	600	600	600
Operating weight	kg	11 610	13 070	14 650

* acc std EN474-3, firm and level ground

L60G

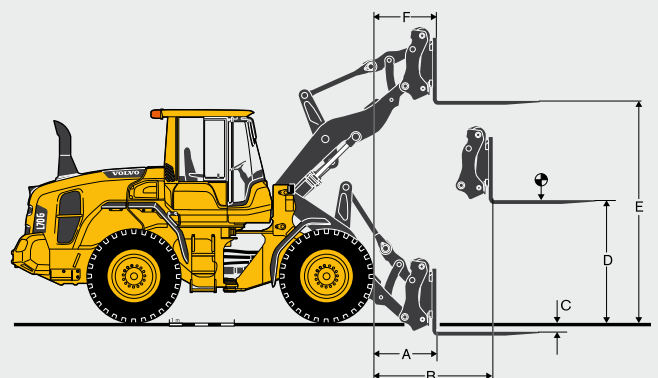
Fork tine sales code: (R/L) WLA80042 / WLA80043
Length: 1 200 mm
Fork frame sales code: WLA83768

L70G

Fork tine sales code: (R/L) WLA80042 / WLA80043
Length: 1 200 mm
Fork frame sales code: WLA83768










L90G

Fork tine sales code: (R/L) WLA80042 / WLA80043
Length: 1 200 mm
Fork frame sales code: WLA83768



L70G

Tires 20.5R25 XHA2 L3

		GENERAL PURPOSE						Grading	LIGHT MATERIAL		Long Boom
											
		2.1 m³ STE H BOE	2 m³ STE H T	2.3 m³ STE P BOE	2.3 m³ STE H BOE	2.4 m³ STE P BOE	2.4 m³ STE H BOE	2.2 m³ GRB H BOE	3.4 m³ LM H	6.4 m³ LM H	
Volume, heaped ISO/SAE	m³	2.1	2	2.3	2.3	2.4	2.4	2.2	3.4	6.4	
Volume at 110% fill factor	m³	2.3	2.2	2.5	2.5	2.6	2.6	2.4	3.7	7	
Static tipping load, straight	kg	9 210	9 380	9 720	9 130	9 680	9 100	7 470	8 740	8 300	-1 856
at 35° turn	kg	8 220	8 380	8 700	8 140	8 660	8 110	6 630	7 770	7 300	-1 699
at full turn	kg	7 920	8 090	8 400	7 850	8 360	7 820	6 380	7 480	7 000	-1 654
Breakout force	kN	90.3	94.6	95.3	86.6	93.4	85	62.7	71.8	53.9	-2
A	mm	7 470	7 590	7 420	7 530	7 440	7 560	7 950	7 780	8 330	464
E	mm	1 180	1 290	1 120	1 230	1 150	1 250	1 670	1 470	1 970	27
H	mm	2 760	2 690	2 800	2 720	2 780	2 700	2 360	2 530	2 150	484
L	mm	5 220	5 220	5 220	5 290	5 250	5 320	4 720	5 450	5 790	473
M	mm	1 130	1 240	1 090	1 170	1 100	1 190	1 340	1 340	1 720	-22
N	mm	1 650	1 710	1 620	1 660	1 630	1 670	1 570	1 680	1 720	397
V	mm	2 550	2 550	2 550	2 550	2 550	2 550	2 650	2 650	2 750	
a1 clearance circle	mm	11 690	11 760	11 660	11 720	11 680	11 730	1 2320	11 980	12 410	
Operating weight	kg	13 500	13 430	13 290	13 540	13 310	13 560	13 800	13 750	14 290	246

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 1.6 t/m³.

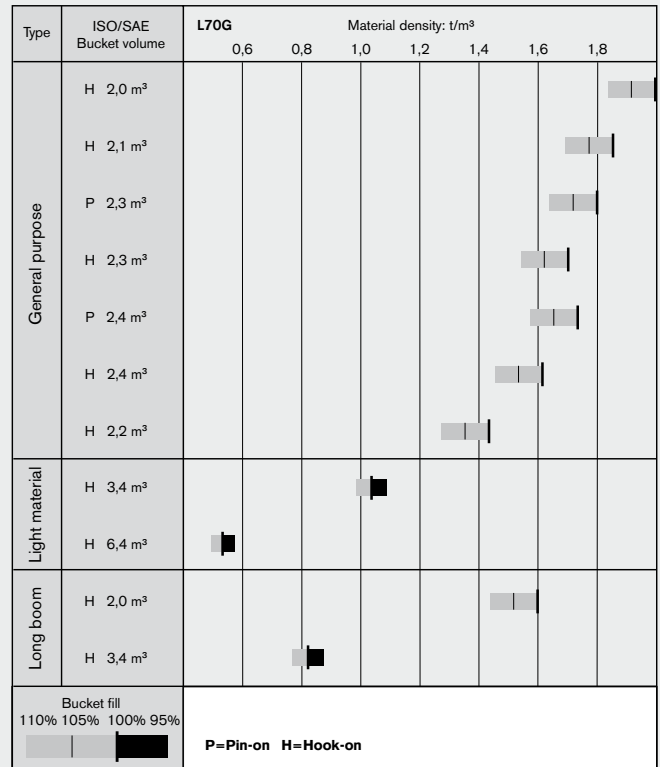
Result: The 2.1 m³ bucket carries 2.2 m³. For optimum stability always consult the bucket selection chart.

Material	Bucket fill, %	Material density, t/m³	ISO/SAE bucket volume, m³	Actual volume, m³
Earth/Clay	~ 110	~ 1.55	2.1	2.3
		~ 1.45	2.3	2.5
		~ 1.40	2.4	2.6
Sand/Gravel	~ 105	~ 1.60	2.1	2.2
		~ 1.50	2.3	2.4
		~ 1.45	2.4	2.5
Aggregate	~ 100	~ 1.80	2.1	2.1
		~ 1.70	2.3	2.3
		~ 1.60	2.4	2.4
Rock	≤100	~ 1.70	1.6	1.6

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

Supplemental Operating Data

Tires 20.5 R25 L2		Standard boom		Long boom
		600/65 R25	600/65 R25	600/65 R25
Width over tires	mm		+60	+60
Ground clearance	mm		-20	-20
Tipping load, full turn	kg		+150	+130
Operating weight	kg		+240	+240



How to read bucket fill factor

EQUIPMENT.

STANDARD EQUIPMENT

	L60G	L70G	L90G
Service and maintenance			
Engine oil remote drain and fill	•	•	•
Lubrication manifolds, ground accessible	•	•	•
Pressure test ports: transmission and hydraulic, quick connects	•	•	•
Service platforms with anti-slip surfaces	•	•	•
CareTrack, GSM	•	•	•
Toolbox, lockable	•	•	•
Engine			
Exhaust after-treatment system	•	•	•
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	•	•	•
Crank case breather oil trap	•	•	•
Muffler, spark-arresting	•	•	•
Exhaust heat ventilation	•	•	•
Electrical system			
24 V, pre-wired for optional accessories	•	•	•
Alternator 24V/ 120A	•	•	•
Battery disconnect switch with removable key	•	•	•
Batteries TA	•	•	•
Battery box, steel	•	•	•
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			
Halogen work lights (2 front and 2 rear)			
Contronic monitoring system			
Monitoring and logging of machine data	•	•	•
Contronic display	•	•	•
Fuel 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:			
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			
Engine coolant level	•	•	•
Transmission oil level			
Hydraulic oil 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	•	•	•

	L60G	L70G	L90G
Drivetrain			
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	•	•	•
Tires			
17.5R25	•	•	•
20.5R25	•	•	•
Brake system			
Dual brake circuits	•	•	•
Dual brake pedals	•	•	•
Secondary brake system	•	•	•
Parking brake, electrical-hydraulic	•	•	•
Brake wear indicators	•	•	•
Outboard mounted oil circulation-cooled wet disc brakes on all four wheels	•	•	•
Cab			
ROPS (ISO 3471), FOPS (ISO 3449)	•	•	•
Single key kit door/start	•	•	•
Acoustic inner lining	•	•	•
Ashtray	•	•	•
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	•	•	•
Dual 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)	•	•	•
Foot step, right side	•	•	•
Hydraulic system			
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 level lock	•	•	•
Boom kick-out, automatic, adjustable	•	•	•
Bucket positioner with position indicator, automatic, adjustable	•	•	•
Double acting hydraulic cylinders	•	•	•
Indicator glass for hydraulic oil level	•	•	•
Hydraulic oil cooler	•	•	•
External equipment			
Basic fenders, front and rear	•	•	•
Viscous cab mounts	•	•	•
Rubber engine and transmission mounts	•	•	•
Engine hood, electronically openable	•	•	•
Frame, joint lock	•	•	•
Vandalism lock prepared for:			
Batteries	•	•	•
Engine compartment			
Engine Hood	•	•	•
Lifting eyes	•	•	•
Tie down eyes	•	•	•
Tow hitch	•	•	•

EQUIPMENT.

OPTIONAL EQUIPMENT

	L60G	L70G	L90G
Service and maintenance			
Lubrication System	•	•	•
Oil sampling valve	•	•	•
Refill pump for automatic lubrication system	•	•	•
Tool kit	•	•	•
Wheel nut wrench kit	•	•	•
Engine			
Cooling package: Radiator, charge air cooler, hyd. oil cool, corr prot.	•	•	•
Air pre-cleaner, cyclone type	•	•	•
Air pre-cleaner, oil-bath type	•	•	•
Air pre-cleaner, turbo type	•	•	•
Engine auto shut down	•	•	•
Engine block heater, 120V / 550W	•	•	•
Engine block heater, 230V / 550W	•	•	•
ESW, Disabled engine protection	•	•	•
Exhaust heat insulation	•	•	•
Fan air intake protection, extra close-meshed	•	•	•
Fuel heater	•	•	•
Fuel fill strainer	•	•	•
Hand throttle control	•	•	•
Max. fan speed, hot climate	•	•	•
Reversible cooling fan	•	•	•
High altitude kit, 2 000m up	•	•	•
Electrical			
Battery disconnect switch	•	•	•
Headlights, assym. left	•	•	•
Front Camera with attaching parts	•	•	•
Reduced function working lights when reverse gear activated	•	•	•
Side marker lamps	•	•	•
License plate holder, lighting	•	•	•
Forward camera, colour	•	•	•
Rear view camera incl. Monitor, colour	•	•	•
Rearview mirrors, adjustable, el. heated	•	•	•
Reverse alarm	•	•	•
Reverse lights	•	•	•
Reversing warning light	•	•	•
Reverse warning light, strobe lightning	•	•	•
Warning, collapsible, rotating beacon	•	•	•
Warning beacon, flashing strobe light	•	•	•
Working lights, attachments	•	•	•
Working lights front, high intensity discharge (HID)	•	•	•
Working lights front, on cab, dual	•	•	•
Working lights rear, on cab	•	•	•
Working lights rear, on cab, dual	•	•	•
Working lights front, extra	•	•	•
Cab			
ACC control panel, with Fahrenheit scale	•	•	•
Anchorage for Operator's manual	•	•	•
Armrest, operator's seat, ISRI, left only	•	•	•
Armrest, operator's seat, KAB, left only	•	•	•
Asbestos dust protection filter	•	•	•
Automatic Climate Control, ACC	•	•	•
Automatic Climate Control, ACC, corr prot.	•	•	•
Condenser	•	•	•
Cab air pre-cleaner, cyclone type	•	•	•
Carbon filter - cab	•	•	•
Fan for AC condenser	•	•	•
Foot steps, front frame	•	•	•
Forward view mirror	•	•	•
Lunch box holder	•	•	•
Operator's seat, ISRI, air susp, heat, high back	•	•	•
Operator's seat, ISRI, heated, high back	•	•	•
Operator's seat, ISRI, low back	•	•	•
Operator's seat, KAB, air susp, heavy-duty	•	•	•
Radio installation kit incl. 11 amp 12 volt outlet, left-side	•	•	•
Radio installation kit incl. 11 amp 12 volt outlet, right-side	•	•	•
Radio installation kit, 20 amp, 12V	•	•	•
Radio with CD player	•	•	•
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	•	•	•

	L60G	L70G	L90G
Drivetrain			
Diff lock front 100%, limited slip rear	•	•	•
Speed limiter, 20 km/h	•	•	•
Speed limiter, 30 km/h	•	•	•
Speed limiter, 40 km/h	•	•	•
Brake system			
Stainless steel, brake lines	•	•	•
Parking brake alarm, audible	•	•	•
Hydraulic system			
Adjustable flow for 3rd hydraulic function	•	•	•
Arctic kit: Locking and pilot hoses, Accumulators and hydraulic oil	•	•	•
Attachment bracket, cast, visibility-optimized	•	•	•
Attachment bracket, side-tilting	•	•	•
Boom suspension system with single acting lifting function	•	•	•
Detent for 3rd hydraulic function	•	•	•
HD LS hydraulics, pump kit included	•	•	•
Hydraulic fluid, biodegradable, Volvo	•	•	•
Hydraulic fluid, fire resistant	•	•	•
Hydraulic fluid, for hot climate	•	•	•
Hydraulic function, 3rd	•	•	•
Hydraulic function, 3rd-4th	•	•	•
Separate attachment locking, long boom	•	•	•
Separate attachment locking, standard boom	•	•	•
Single acting lifting function	•	•	•
Single lever control	•	•	•
Single lever control for 3rd hydr. Function	•	•	•
External equipment			
Deleted front mudguards	•	•	•
Fire suppression system	•	•	•
Fire extinguisher	•	•	•
Bracket for fire extinguisher	•	•	•
Mudguards for 80-series tires			
Mudguards, full cover, rear for 80-series tires	•	•	•
Mudflap kit for mudguards, full cover for 80-series tires	•	•	•
Mudguards for 65-series tires			
Mudguards, basic, short, rear and front/rear for 65-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	•	•	std
Flexible rear step	•	•	•
Cab ladder, rubber suspended	•	•	•
Protective equipment			
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	•	•	•
Cover plate front fram, heavy-duty	•	•	•
Cover plate, under cab	•	•	•
Cover plates rear frame	•	•	•
Exterior radiator air intake protection	•	•	•
Guards for front head lights	•	•	•
Guards for grease nipples	•	•	•
Guards for radiator grill	•	•	•
Guards for tail lights	•	•	•
Guards for tail lights, heavy-duty	•	•	•
Wheel/axle seal guards	•	•	•
Windows, side and rear guards	•	•	•
Windshield guard	•	•	•
Other equipment			
CareTrack, GSM/Satellite	•	•	•
CE-marking	•	•	•
Comfort Drive Control (CDC)	•	•	•
Counterweight, logging	•	•	•
Noise reduction kit, Blauer Engel incl. Decal	•	•	•
Noise reduction kit, EU excl. Decal	•	•	•
Secondary steering	•	•	•
Sign, 50 km/h	•	•	•
Sign, slow moving vehicle	•	•	•
Year of manufacturing-plate	•	•	•
Tires and Rims			
17.5R25	•	•	•
20.5R25	•	•	•
600/65R25	•	•	•
650/65R25	•	•	•

OPTIONAL EQUIPMENT

	L60G	L70G	L90G
Attachments			
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

Boom Suspension System



Comfort Drive Control (CDC)



Hydraulic 3rd-4th function



Rear-view camera



Automatic Lubrication System



Single Hydraulic Lever



VOLVO CONSTRUCTION EQUIPMENT

Volvo Construction Equipment is different. Our machines are designed, built and supported in a different way. That difference comes from an engineering heritage of over 175 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo.

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