

V O L V O



Volvo Wheel Loader 14,5-17,3 t / 31.967-38.140 lb 182 hp(met) / 180 hp(imp)

# L90H

Volvo Construction Equipment

# L90H

Leave the heavy-duty work for the L90H, designed to do more, be more comfortable and help you increase your productivity.



# Designed to do more

Hard work has never felt so easy. H-Series wheel loaders are built with an industry-leading, strong frame, which, combined with the ideally-matched genuine Volvo drivetrain, achieves long-lasting performance. And with the help of a range of smart apps you can boost the efficiency of your operation from the comfort of the cab.



## Loaded with versatility

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



## Keep it moving

- Quick hydraulic oil fill thanks to new mounted nipple
- Improved cooling capacity
- Strong frame and central hinge
- Optional delayed engine shutdown
- Optional external axle cooling



## Safety as standard

- Anti-slip steps and strategically placed handrails
- Orange three-point seatbelt
- Redesigned side mirrors
- Rear-view camera



## Strong and stable

- Optimized loading unit weight, heavy-duty counterweight for greater stability
- 5,6% higher tipping load
- Standard electro-servo controls
- Bucket leveling function
- Increased lifting height by 72mm (2,83in)



## Increased productivity

- Optional lock-up converter
- Top speed of 50km/h (31mph) with lock-up feature
- Rimpull control
- Smart Control
- Smooth Control
- Eco pedal



## Greater access

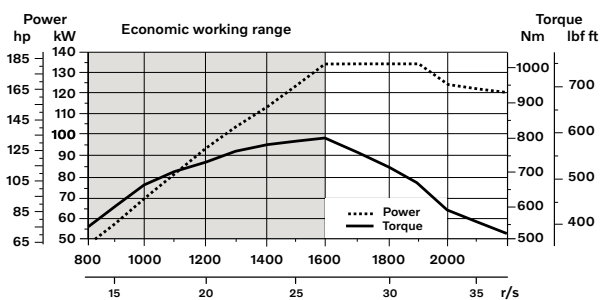
- Cooler installation slides out for easier cleaning
- Repositioned fill spouts for transmission and engine oil
- Ground-level access to service points
- Electronically-operated engine hood

# Volvo L90H in detail

## Engine

6-cylinder, 6 liters (1,6 gal) 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 3 /Stage IIIA emission legislation.

Engine	Volvo	D6E
Max. power at	r/min (r/s)	1.600 - 1.900 (26,6 - 31,7)
ISO 14396 gross	kW (hp)	134 (180)
ISO 9249, SAE J1349 net	kW (hp)	134 (180)
Max. torque at	r/min (r/s)	1.600 (26,6)
ISO 14396 gross	Nm (ft lbf)	800 (590)
ISO 9249, SAE J1349 net	Nm (ft lbf)	800 (590)
Economic working range	r/min (r/s)	1.100 - 1.600 (18,3 - 26,7)
Displacement	l (in <sup>3</sup> )	5,7 (348)



## 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.

Batteries	V	2 x 12
Battery capacity	Ah	2 x 110
Cold cranking capacity, approx	A	680
Alternator rating	W/A	3.135/80
Starter motor output	kW	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

Number of brake discs per wheel		1
Accumulators	l (gal)	2 x 0,5+1 x 1,0 (2 x 0,13 + 1 x 0,26)
Accumulators for parking brake	l (gal)	1 x 1,0 (1 x 0,26)

## Lift Arm System

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

Lift cylinders		2
Cylinder bore	mm (in)	120 (4,7)
Piston rod diameter	mm (in)	70 (2,8)
Stroke	mm (in)	744 (28,9)
Tilt cylinder		1
Cylinder bore	mm (in)	180 (7,1)
Piston rod diameter	mm (in)	90 (3,5)
Stroke	mm (in)	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.

Steering cylinders		2
Cylinder bore	mm (in)	80 (3,1)
Rod diameter	mm (in)	50 (2)
Stroke	mm (in)	345 (13,6)
Working pressure	MPa (bar)	21 (210)
Maximum flow	l/min (gal/min)	60 (15,9)
Maximum articulation	± °	40

## 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).

**Emergency exit:** Use emergency hammer to break window

Ventilation	m <sup>3</sup> /min (yd <sup>3</sup> /min)	9 (11,8)
Heating capacity	kW	16
Air conditioning (optional)	kW	7,5

## Sound Level

Sound pressure level in cab according to ISO 6396		
L <sub>pA</sub>	dB	68
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC		
L <sub>WA</sub>	dB	105

## 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. A quick-fit adapter on the hydraulic tank provides faster hydraulic oil fill.

Fuel tank	l (gal)	222 (58,6)
Engine coolant	l (gal)	30 (7,9)
Hydraulic oil tank	l (gal)	90 (23,8)
Transmission oil (non lock-up)	l (gal)	21 (5,5)
Transmission oil (lock-up)	l (gal)	22 (5,8)
Engine oil	l (gal)	20 (5,2)
Axle oil front	l (gal)	35 (9,2)
Axle oil rear	l (gal)	27 (7,1)

## 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.

Working pressure maximum, pump 2 for steering-, brake-, pilot- and working hydraulic system	MPa (bar)	31 (310)
Flow	l/min (gal/min)	171 (45,2)
at	MPa (bar)	10 (100)
engine speed	r/min (r/s)	1.900 (31,7)
Working pressure maximum, pump 3 for brake- and cooling fan system	MPa (bar)	21 (210)
Flow	l/min (gal/min)	33 (8,7)
at	MPa (bar)	10 (100)
engine speed	r/min (r/s)	1.900 (31,7)
Pilot system, working pressure	MPa (bar)	3,5 (35)
Lift	s	5,7
Tilt	s	2,3
Lower, empty	s	4
Total cycle time	s	12

## 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. Also equipped with Rimpull control to avoid wheel spin and optimize bucket filling.

**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.

Transmission	Volvo	HTE 125C Non Lock-up / HTL 125 Lock-up
Torque multiplication, stall ratio		2.42:1 Non Lock-up / 2.59:1 Lock-up
Maximum speed		
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



# Specifications

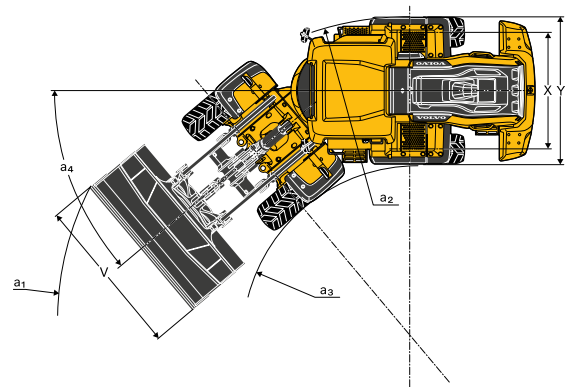
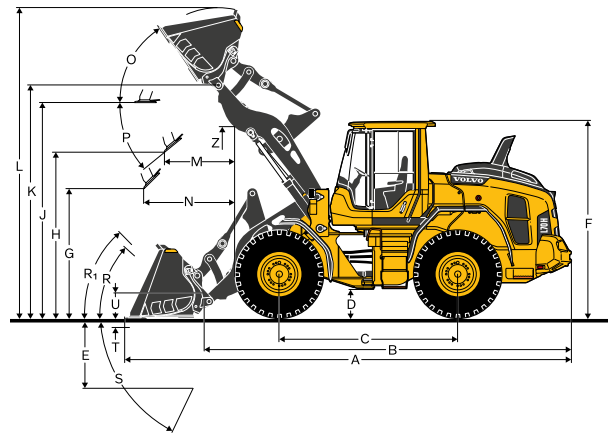
## Tires 20.5 R25 L3

			L90H		L90H	
			Standard boom		Long boom	
B	mm	ft in	6.170	20'3"	6 600	21'8"
C	mm	ft in	3.050	10'0"	3 050	10'0"
D	mm	in	450	17,3	440	17,3
F	mm	ft in	3.280	10'9"	3 280	10'9"
G	mm	ft in	2.132	7'0"	2 132	7'0"
J	mm	ft in	3.730	12'3"	4 140	13'7"
K	mm	ft in	4.040	13'3"	4 460	14'8"
O	°			57		58
P <sub>max</sub>	°			45		44
R	°			44		47
R <sub>1</sub> *	°			49		53
S	°			67		65
T	mm	ft in	112	4,41	123	4,84
U	mm	ft in	480	18,9	570	22,4
X	mm	in	1.960	6'5"	1 960	6'5"
Y	mm	ft in	2.490	8'2"	2 490	8'2"
Z	mm	ft in	3.460	11'4"	3 910	12'10"
a <sub>2</sub>	mm	ft in	5.430	17'10"	5 430	17'10"
a <sub>3</sub>	mm	ft in	2.940	9'8"	2 940	9'8"
a <sub>4</sub>		±°		40		40

\* Carry position SAE

\*\*Calculated with additional protective guarding

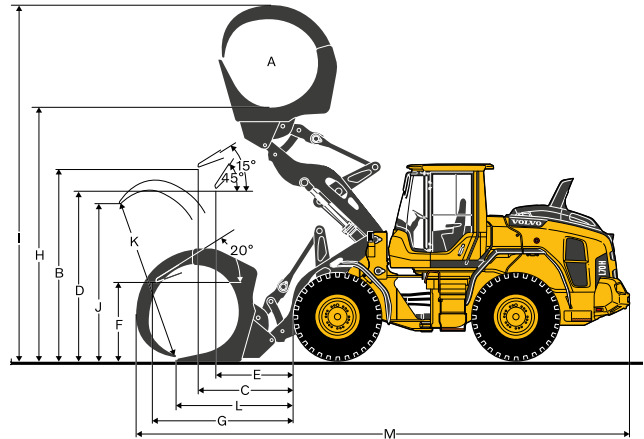
Where applicable, specifications and dimensions are according to ISO 7131, SAE J732, ISO 7546, SAE J742, ISO 14397, SAE J818



## Tires: 20.5R25 L3

			L90H	
SAE-Load	kg	lb	4.600	10.141
Operating weight without load*	kg	lb	16.645	36.696
Grapple sales code	80 832			
A	m <sup>2</sup>	yd <sup>2</sup>	2,4	2,87
B	mm	ft in	3.487	11'5"
C	mm	ft in	1.703	5'7"
D	mm	ft in	2.865	9'5"
E	mm	ft in	1.319	4'4"
F	mm	ft in	1.441	4'9"
G	mm	ft in	2.740	9'0"
H	mm	ft in	4.613	15'2"
I	mm	ft in	6.664	21'10"
J	mm	ft in	2.786	9'2"
K	mm	ft in	2.990	9'10"
L	mm	ft in	2.131	7'0"
M	mm	ft in	8.469	27'9"

\* Calculated with additional protective guarding

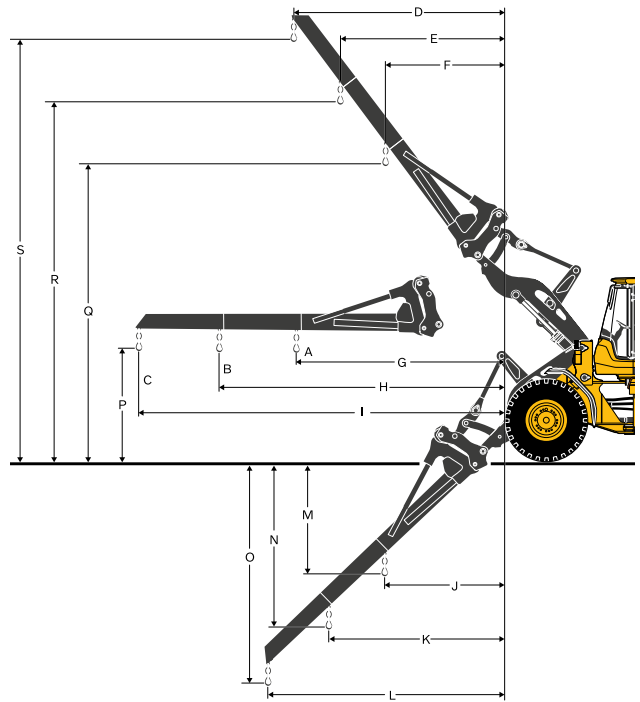


Tires: 20.5R25 L3				
			L90H	
Material handling arm sales code			92008	
A*	kg	lb	2.760	6.085
B*	kg	lb	2.130	4.696
C*	kg	lb	1.740	3.836
Static tipping load, straight	kg	lb	4.289	9.456
35deg. Turn at full turn	kg	lb	3.834	8.453
D	mm	ft in	2.486	8'2"
E	mm	ft in	1.894	6'3"
F	mm	ft in	1.301	4'3"
G	mm	ft in	3.253	10'8"
H	mm	ft in	4.387	14'5"
I	mm	ft in	5.520	18'1"
J	mm	ft in	1.339	4'5"
K	mm	ft in	1.889	6'2"
L	mm	ft in	2.439	8'0"
M	mm	ft in	2.051	6'9"
N	mm	ft in	3.043	10'0"
O	mm	ft in	4.034	13'3"
P	mm	ft in	1.520	5'0"
Q	mm	ft in	5.403	17'9"
R	mm	ft in	6.370	20'11"
S	mm	ft in	7.336	24'1"
Operating weight without load	kg	lb	14.833	32.701

\* Op. load at full turn + tipping position

Tipping loads calculated for max. arm length

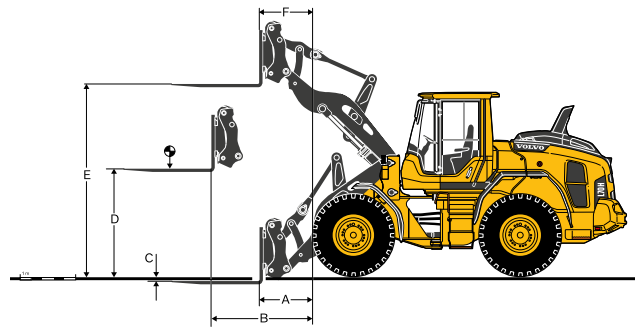
\*\*Calculated with additional protective guarding



Tires: 20.5R25 L3				
			L90H	
Fork frame sales code			83770	
Fork tines sales code (R/L)			80106/80107	
Static tipping load, straight	kg	lb	8.904	19.630
35deg. Turn at full turn	kg	lb	7.947	17.520
at load center distance*	mm	in	600	23,6
A	mm	in	932	36,7
B	mm	ft in	1.679	5'6"
C	mm	in	-4	-0,2
D	mm	ft in	1.800	5'11"
E	mm	ft in	3.841	12'7"
F	mm	in	641	25,2
Operating weight without load	kg	lb	14.928	32.911

\* Firm and level ground

\*\*Calculated with additional protective guarding



# Specifications

L90H\*

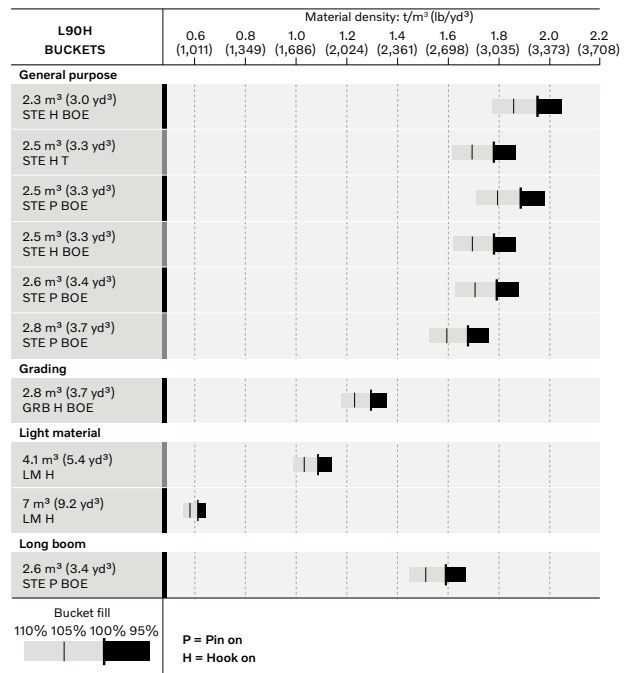
BR 20,5R25 VJT L3		GENERAL PURPOSE										GRADING		LIGHT MATERIAL		LONG BOOM					
		2,3 m <sup>3</sup> (3,0 yd <sup>3</sup> ) STE H BOE	2,5 m <sup>3</sup> (3,3 yd <sup>3</sup> ) STE H T	2,5 m <sup>3</sup> (3,3 yd <sup>3</sup> ) STE P BOE	2,5 m <sup>3</sup> (3,3 yd <sup>3</sup> ) STE H BOE	2,6 m <sup>3</sup> (3,4 yd <sup>3</sup> ) STE P BOE	2,8 m <sup>3</sup> (3,7 yd <sup>3</sup> ) STE P BOE	2,8 m <sup>3</sup> (3,7 yd <sup>3</sup> ) STE P BOE	2,8 m <sup>3</sup> (3,7 yd <sup>3</sup> ) GRB H BOE	4,1 m <sup>3</sup> (5,4 yd <sup>3</sup> ) LM H	7 m <sup>3</sup> (9,2 yd <sup>3</sup> ) LM H	2,6 m <sup>3</sup> (3,4 yd <sup>3</sup> ) STE P BOE									
Volume, heaped ISO/SAE	m <sup>3</sup>	2,3	3,0	2,5	3,3	2,5	3,3	2,5	3,3	2,6	3,4	2,8	3,7	2,8	3,7	4,1	5,4	7,0	9,2	2,6	3,4
Volume at 110% fill factor	m <sup>3</sup>	2,5	3,3	2,8	3,7	2,8	3,7	2,8	3,7	2,9	3,8	3,1	4,1	3,1	4,1	4,5	5,9	7,7	10,1	2,9	3,8
Static tipping load, straight	kg	11.410	25.155	11.330	24.978	11.940	26.323	11.320	24.956	11.820	26.059	11.910	26.257	9.260	20.415	10.820	23.854	10.530	23.215	-1.800	-3.968
at 35° turn	kg	10.120	22.311	10.030	22.112	10.620	23.413	10.030	22.112	10.500	23.149	10.580	23.325	8.190	18.056	9.550	21.054	9.250	20.393	-1.650	-3.638
at full turn	kg	9.730	21.451	9.650	21.275	10.220	22.531	9.650	21.275	10.110	22.289	10.190	22.465	7.870	17.350	9.180	20.238	8.870	19.555	-1.600	-3.527
Breakout force	kN	134,9	30.327	129,9	29.203	141,3	31.765	127,1	28.573	133,8	30.079	135,6	30.484	92,2	20.727	100,7	22.638	87,0	19.558	+1,7	+382
A	mm	7.600	24"11"	7.850	25"9"	7.550	24"9"	7.690	25"3"	7.630	25"0"	7.610	25"0"	8.170	26"10"	8.050	26"5"	8.350	27"5"	+410	+1"4"
E	mm	1.200	3"11"	1.410	4"8"	1.150	3"9"	1.280	4"2"	1.220	4"0"	1.200	3"11"	1.760	5"9"	1.600	5"3"	1.860	6"1"	-10	-1"12"
H	mm	2.890	9"6"	2.730	8"11"	2.920	9"7"	2.830	9"3"	2.870	9"5"	2.880	9"5"	2.400	7"10"	2.610	8"7"	2.410	7"11"	+430	+1"5"
L	mm	5.450	17"11"	5.510	18"1"	5.440	17"10"	5.530	18"2"	5.520	18"1"	5.500	18"1"	4.900	16"1"	5.630	18"6"	5.840	19"2"	+420	+1"5"
M	mm	1.010	3"4"	1.170	3"10"	960	3"2"	1.070	3"6"	1.020	3"4"	1.000	3"3"	1.210	3"12"	1.350	4"5"	1.560	5"1"	-50	-1"10"
N	mm	1.670	5"6"	1.720	5"8"	1.650	5"5"	1.700	5"7"	1.670	5"6"	1.660	5"5"	1.520	4"12"	1.710	5"7"	1.710	5"7"	+360	+1"2"
V	mm	2.650	8"8"	2.650	8"8"	2.650	8"8"	2.500	8"2"	2.500	8"2"	2.750	9"0"	2.880	9"5"	2.750	9"0"	3.000	9"10"	0	0"0"
a <sub>1</sub> clearance circle	mm	12.140	39"10"	12.290	40"4"	12.130	39"10"	12.060	39"7"	12.040	39"6"	12.250	40"2"	12.980	42"7"	12.500	41"0"	12.920	42"5"	+340	+1"1"
Operating weight	kg	15.560	34.304	15.630	34.458	15.380	33.907	15.600	34.392	15.390	33.929	15.360	33.863	15.700	34.613	15.850	34.943	16.280	35.891	+290	+639

\*Calculated with additional protective guarding.

## 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 1,65 t/m<sup>3</sup> (2.781 lb/yd<sup>3</sup>). Result: The 1,9 m<sup>3</sup> (2,5 yd<sup>3</sup>) bucket carries 2,0 m<sup>3</sup> (2,6 yd<sup>3</sup>). For optimal stability always consult the bucket selection chart.

Material	Bucket fill, %	Material density		ISO/SAE bucket volume		Actual volume	
		t/m <sup>3</sup>	lb/yd <sup>3</sup>	m <sup>3</sup>	yd <sup>3</sup>	m <sup>3</sup>	yd <sup>3</sup>
Earth/Clay	~ 110	~ 1,55	~ 2,613	2,1	2,8	2,3	3,0
		~ 1,45	~ 2,444	2,3	3,0	2,5	3,3
		~ 1,40	~ 2,360	2,4	3,1	2,6	3,4
Sand/Gravel	~ 105	~ 1,60	~ 2,697	2,1	2,8	2,2	2,9
		~ 1,50	~ 2,528	2,3	3,0	2,4	3,1
		~ 1,45	~ 2,444	2,4	3,1	2,5	3,3
Aggregate	~ 100	~ 1,80	~ 3,034	2,1	2,8	2,1	2,8
		~ 1,70	~ 2,865	2,3	3,0	2,3	3,0
		~ 1,60	~ 2,697	2,4	3,1	2,4	3,1
Rock	≤100	~ 1,70	~ 2,865	1,6	2,1	1,6	2,1



How to read bucket fill factor

## Supplemental Operating Data

		Standard boom				Long boom			
Tires 20.5 R25 L3		20.5 R25 L2		650/65 R25 L3		650/65 R25 L3			
Width over tires	mm in	+4	+0,16	+164	+6,46	+164	+6,46		
Ground clearance	mm in	-8	-0,31	-4	-0,16	+12	+0,47		
Tipping load, full turn	kg lb	-70	-154	+315	+695	+287	+633		
Operating weight	kg lb	-111	-245	+545	+1.202	+543	+1.199		

Calculated with 2.6 m<sup>3</sup> (3,4 yd<sup>3</sup>) STE P BOE, additional protective guarding



# Equipment

## STANDARD EQUIPMENT

### Engine

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

### Tires

20.5R25

### Drivetrain

Automatic Power Shift  
 Fully automatic gear shifting, 1-4  
 PWM-controlled gear shifting  
 Forward and reverse switch by hydraulic lever console  
 Rimpull control  
 Indicator glass for transmission oil level  
 Differentials: Front, 100% hydraulic diff lock. Rear, conventional

### Electrical system

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

### Contronic monitoring system

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

### Hydraulic system

Main valve, double acting 2-spool with hydraulic pilots  
 Quick hydraulic oil fill  
 Variable displacement axial piston pumps (2) for:  
 Working hydraulics, pilot hydraulics, steering system, brakes  
 Secondary steering with automatic test function  
 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

### Brake system

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

# Equipment

## STANDARD EQUIPMENT

### Cab

ROPS (ISO 3471), FOPS (ISO 3449)
Harness Anchor Points
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)

### Service and maintenance

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
Quick-fit hydraulic oil fill
CareTrack
Telematics, 6 -year subscription
Toolbox, lockable

### External equipment

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

## OPTIONAL EQUIPMENT

### Engine

Air pre-cleaner, cyclone type
Air pre-cleaner, oil-bath type
Air pre-cleaner, turbo type III
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

### Drivetrain

Lock-up torque converter
Rear axle with limited slip
Speed limiter, 20 km/h (12,5 mph)
Speed limiter, 30 km/h (18,6 mph)
Speed limiter, 40 km/h (24,9 mph)

## OPTIONAL EQUIPMENT

### Hydraulic system

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
Hydraulic fluid, biodegradable, Volvo
Hydraulic fluid, fire resistant
Hydraulic fluid, for hot 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

### Brake system

Stainless steel, brake lines
Axle oil cooler
Parking brake alarm, audible

### Cab

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
Operator's seat, Volvo air-susp, 2pt seat belt
Operator's seat, Volvo air-susp, 3pt seat belt
Operator's seat, ISRI, heated, high back
Operator's seat, ISRI, low back
Operator's seat, Premium Comfort ISRI, 2pt seat belt
Operator's seat, Premium Comfort ISRI, 3pt seat belt
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
DAB Radio
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
Cab, Hot applications. Roof, steel
Fire extinguisher cab
Outside steel protection cab
Rear view mirrors long arm, cab
Reinforced windshield, flat

### Service and maintenance

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**

---

**Electrical**

Battery disconnect switch, additional in cab
Anti-theft device
Halogen Economy package
Halogen Feature package
Halogen Power package
Headlights, assymetric left, halogen
Working lights, attachments, halogen
LED Economy package
LED Feature package
LED Power package
Headlights, assym. left
Headlights, assymmetric right, LED
Headlights, assymmetric left, LED
Working lights, attachments, 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
Rear view mirrors, long arm, right side
Rearview mirrors, adjustable, el. heated
Reverse alarm
Reverse lights
Reversing warning light
Reverse warning light, strobe lightning
Warning beacon (flasher), LED automatic
Warning beacon (flasher), LED
Seatbelt indicator, external
Working lights, attachments, 1 LED
Warning beacon LED
Warning beacon LED automatic
LED Head Light
LED tail light
LED working lights, attachments
LED working lights on cab, front and rear
LED working lights on cab, front, 2 alt. 4 LED lamps
LED working lights on cab, rear, 2 alt. 4 LED lamps
LED working lights, rear in grille, 2 LED lamps
LED working lights, front above head lamps, 2 LED lamps
LED work lights, side on cab, 4 LED lamps
LED light packages
Working lights halogen, attachments
Working lights on cab halogen, front and rear
Working lights on cab halogen, rear
Co Pilot available
Rearview camera in Co pilot
OnBoard Weighing
OnBoard Weighing Task Mode
Tire Pressure Monitoring System
Connected Map
Operator Coaching Start
Operator Coaching Advanced
Max Boom height
Can Bus Interface
Jump start connector, ISO-Type
Delayed Engine Shutdown

---

**OPTIONAL EQUIPMENT**

---

**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 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

**External equipment**

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

**Other equipment**

CareTrack, GSM/Satellite
CE-marking
Comfort Drive Control (CDC)
Comfort Drive Control (CDC) Electro-servo
Secondary steering
Counterweight, logging
Counterweight, signal painted, chevrons
Option for machines without dinitrol
Noise reduction kit, EU excluding decal
Sign, 50 km/h (31,1 mph)
Sign, slow moving vehicle
Agriculture package
Agri Powershift 1-4
Log Loader package
Waste Handler package
Scrap Handler package

**Tires and Rims**

20.5R25
600/65R25
650/65R25
620/75R26 Agriculture application only
750/65R26 Agriculture application only

**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

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.

**V O L V O**