

Volvo Wheel Loaders 15.6 t/34,350 lb 184 hp

L90H

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 industryleading, 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

(A)(A)

Keep it moving

- Quick hydraulic oil fill thanks to new mounted nipple
- Improved cooling capacity
- Strong frame and central hinge
- Standard delayed engine shutdown
- Optional external axle coolingn
- Optional Load Assist Tire Pressure monitoring

A

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, heavyduty counterweight for greater stability
- Standard electro-servo controls
- Auto Bucket leveling function
- Increased lifting height by 72mm
- Lifetime Frame warranty



Increased productivity

- Optional lock-up converter
- Rimpull control
- Smart Control
- Smooth Control
- Eco pedal
- Load Assist On-Board Weighing hardware- Standard
- Load Assist Operator Coaching Standard



Greater access

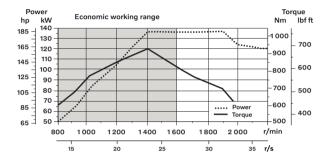
- Cooler installation slides out for easier cleaning
- Repositioned fill spouts for transmission and engine oil
- Ground-level access to service points
- Electronically-operated engine hood

Volvo L90H in detail

Engine

6-cylinder, 6 liters 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 / EU Stage V emission legislation.

| Engine | Volvo | D6J |
|-------------------------|----------------|--------------------------------|
| Max. power at | r/min (r/s) | 1 400 - 1 900 (23.3 - 31.7) |
| ISO 14396 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) |
| ISO 14396 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 (in³) | 57 (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 | А | 1000 |
| Alternator rating | W/A | 3 135/80 |
| Starter motor output | kW | 55 |

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 | I (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 (47) |
| Piston rod diameter | mm (in) | 70 (28) |
| Stroke | mm (in) | 744 (289) |
| Tilt cylinder | | 1 |
| Cylinder bore | mm (in) | 180 (71) |
| Piston rod diameter | mm (in) | 90 (35) |
| Stroke | mm (in) | 430 (169) |

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 (31) |
| Rod diameter | mm (in) | 50 (2) |
| Stroke | mm (in) | 345 (136) |
| Working pressure | MPa (bar) | 21 (210) |
| Maximum flow | l/min (gal/min) | 60 (159) |
| 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 | m³/min (yd³/min) | 9 (118) |
|-----------------------------|---------------------|------------|
| Heating capacity | kW | 16 |
| Air conditioning (optional) | kW | 75 |

Sound Level

| Sound Level | | |
|--|-----------------------|-----|
| Sound pressure level in cab according to ISO | 6396 | |
| L_pA | dB | 68 |
| External sound level according to ISO 6395 at 2000/14/EC | nd EU Noise Directive | |
| L _{WA} | 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) |
|--------------------------------|---------|------------|
| DEF/AdBlue® tank | l (gal) | 20 (5.3) |
| 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) |
| Cycle times | | |
| 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. 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.

| differential fook on the front axie. | | |
|--|-------------|--|
| 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 |
| 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 (185) |
| at oscillation | 0 | 13 |



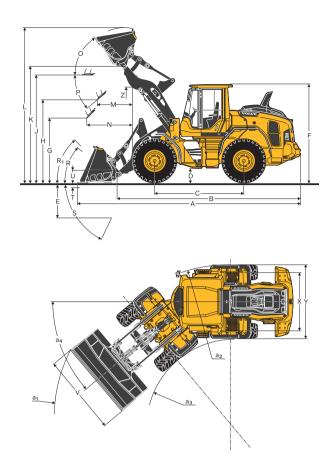
Specifications

| Tires 20.5 R25 | Tires 20.5 R25 L3 | | | | | |
|------------------|-------------------|---------|--------|-----------|--------|--|
| | | L90H | | | | |
| | | Standar | d boom | Long boom | | |
| В | mm ft in | 6,170 | 20'3" | 6,600 | 21'8" | |
| С | mm ft in | 3,050 | 10'0" | 3,050 | 10'0" | |
| D | mm ft in | 450 | 1'6" | 440 | 1'5" | |
| F | mm ft in | 3,280 | 10'9" | 3,270 | 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" | |
| 0 | 0 | 57 | | 5 | 58 | |
| P _{max} | 0 | 4 | 5 | 44 | | |
| R | • | 4 | 4 | 47 | | |
| R ₁ * | 0 | 4 | 9 | 53 | | |
| S | 0 | 6 | 7 | 65 | | |
| Т | mm ft in | 112 | 0'4" | 123 | 0'5" | |
| U | mm ft in | 480 | 1'7" | 570 | 1'10" | |
| Χ | mm ft in | 1,960 | 6'5" | 1,960 | 6'5" | |
| Υ | mm ft in | 2,490 | 8'2" | 2,490 | 8'2" | |
| Z | mm ft in | 3,460 | 11'4" | 3,910 | 12'10" | |
| a ₂ | mm ft in | 5,430 | 17'10" | 5,430 | 17'10" | |
| a ₃ | mm ft in | 2,940 | 9'8" | 2,940 | 9'8" | |
| a ₄ | ±° | 4 | 0 | 4 | 0 | |

^{*} Carry position SAE

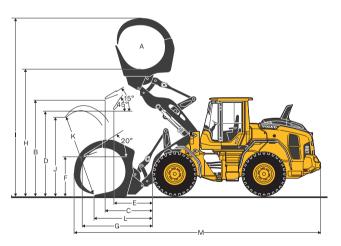
Calculated with additional protective guarding

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

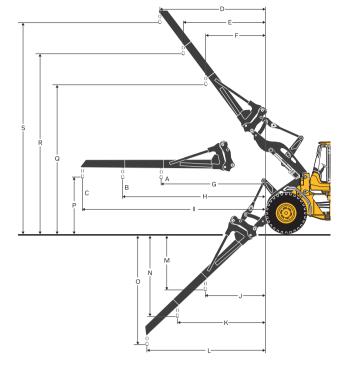


| Tires: 20.5R25 L3 | | | | | |
|--------------------------------|---------------------------|-------|-------------|--------|--|
| | | | L90H | | |
| SAE-Load | kg | lb | 4,600 10,14 | | |
| Operating weight without load* | eight without load* kg lb | | 16,645 | 36,696 | |
| Grapple sales code | | | WLAS | 30832 | |
| A | m² | yd² | 2.4 | 2.9 | |
| В | 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 | 8'12" | |
| Н | 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 | 6'12" | |
| M | mm | ft in | 8,469 | 27'9" | |

^{*} Calculated with additional protective guarding

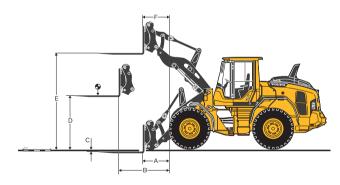


| Tires: 20.5R25 L3 | | | | | | | | | | |
|----------------------------------|------|-------|--------|--------|--|--|--|--|--|--|
| | L90H | | | | | | | | | |
| Material handling arm sales code | | | 92008 | | | | | | | |
| A* | kg | lb | 2,760 | 6,085 | | | | | | |
| B* | kg | lb | 2,130 | 4,696 | | | | | | |
| C* | kg | lb | 1,740 | 3,836 | | | | | | |
| Static tipping load, straight | kg | lb | 4,289 | 9,456 | | | | | | |
| 35deg. Turn | kg | lb | 3,834 | 8,453 | | | | | | |
| at full turn | kg | lb | 3,700 | 8,157 | | | | | | |
| 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" | | | | | | |
| Н | 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 | 9'12" | | | | | | |
| 0 | mm | ft in | 4,034 | 13'3" | | | | | | |
| Р | 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 | | | | | | |



| 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 | kg | lb | 7,947 | 17,520 | | | | | | | |
| at full turn | kg | lb | 7,664 | 16,896 | | | | | | | |
| at load center distance* | mm | ft in | 600 | 2'0" | | | | | | | |
| A | mm | ft in | 932 | 3'1" | | | | | | | |
| В | mm | ft in | 1,679 | 5'6" | | | | | | | |
| С | mm | ft in | -4 | -1'12" | | | | | | | |
| D | mm | ft in | 1,800 | 5'11" | | | | | | | |
| E | mm | ft in | 3,841 | 12'7" | | | | | | | |
| F | mm | ft in | 641 | 2'1" | | | | | | | |
| Operating weight without load | kg | lb | 14,928 | 32,911 | | | | | | | |

^{*} Firm and level ground



Operating weight without load

* Op. load at full turn + tipping position
Tipping loads calculated for max. arm length

^{**}Calculated with additional protective guarding

^{**}Calculated with additional protective guarding

Specifications

| | | | | GENERAL PURPOSE | | | | | | | | | | | GRADING | | LIGHT MATERIAL | | | LONG BOOM** | | |
|---------------------------------|----------------|-----------------|--------------|--|------------|------------------------|--------|------------|---------------------------|--------------|---------------------|--------------|------------|-------------------------|------------|--------|-------------------|--------|-------------------|----------------|---------------------------|--------------|
| L90H* MICH 20.5R25 XHA2 L3 | | | PE | | PÉ | | PE | | PÉ | | PE | | E | | 34 | | Ø | | 86 | | | A |
| WIICH 20.5K25 AHAZ LS | | | WLA8 | 36299 | WLA | 36303 | WLA | 36319 | WLA8 | 6304 | WLA | 6320 | WLA | 86331 | WLA | 35404 | WLAS | 92687 | WLAS | 2683 | WLAS | 36319 |
| | | | (3.0 HD S | m ³ yd ³) STE H OE | (3.4 HD | m³ yd³) STE T | HD S | yd³) | 2.8 (3.7 HD S BC | yd³) TE H | 2.8 (3.7 HD S | yd³) TE P | (3.7 ST | m³ yd³) E H OE | (3.7 GR | | 4.1 (5.4 LN | | 7.0 (9.2 LN | yd³) | 2.7 (3.5 HD S BC | yd³) TE P |
| Volume, heaped ISO/ SAE | m³ | yd ³ | 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 | 4.1 | 5.4 | 7.0 | 9.2 | 2.7 | 3.5 |
| Volume at 110% fill factor | m ³ | yd ³ | 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 | 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 |
| Α | 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" |
| Н | 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" | 2,880 | 113" | 2,750 | 108" | 3,000 | 118" | 0 | 0' |
| a ₁ 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 |

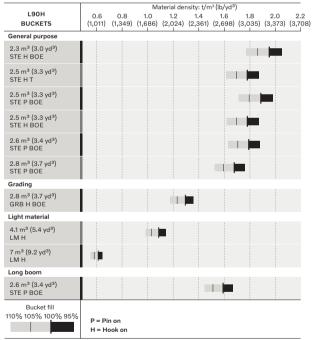
^{*}Calculated with additional protective guarding. (WL86009,WL86010)

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 $\sim 105\%$. Density 1.55 t/m^3 (2,610 lb/yd³). Result: The 2.6m³ (3.4yd³) bucket carries 2.7m³ (3.5 yd³). For optimum stability always consult the bucket selection chart.

| Material | Bucket | Material | density | | E bucket ıme | Actual volume | | | |
|-----------------|----------|----------|-------------------------------|-------------------|-------------------|-------------------|-------------------|--|--|
| | 1111, 70 | t/m³ | lb/yd ³ | m³ | yd ³ | m³ | yd ³ | | |
| Earth/ Clay | ~ 110 | | ~ 2,610 ~ 2,440 ~ 2,360 | 2.5 2.6 2.8 | 3.3 3.4 3.7 | 2.7 2.9 3.1 | 3.5 3.8 4.0 | | |
| Sand/ Gravel | ~ 105 | ~ 1.55 | ~ 2,780 ~ 2,610 ~ 2,530 | 2.5 2.6 2.8 | 3.3 3.4 3.7 | 2.6 2.7 2.9 | 3.4 3.5 3.7 | | |
| Aggregate | ~ 100 | | ~ 2,950 ~ 2,780 ~ 2,700 | 2.5 2.6 2.8 | 3.3 3.4 3.7 | 2.5 2.6 2.8 | 3.3 3.4 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 | | | | | | | | |
|-----------------------------|----|--------|-------------|------|--------|---------------|------|--------|
| | | Standa | Long boom | | | | | |
| Tires 20.5 R25 L3 | | 20.5 | 20.5 R25 L2 | | 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 $\mathrm{m^3}$ (3.4 $\mathrm{yd^3}$) STE P BOE, additional protective guarding

^{**}Calculated with logging counterweight.

Equipment

STANDARD EQUIPMENT

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

Liahtina:

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

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

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

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

Volvo Copilot with Rearview camera standard

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)

ACC control panel, with Fahrenheit scale

Anchorage for Operator's manual

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

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

Speed limiter, 30 km/h Speed limiter, 40 km/h

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, 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

Parking brake alarm, audible

Stainless steel, brake lines

Axle oil cooler

Cab

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, Premium Comfort ISRI

Operator's seat, Premium Comfort ISRI 3-point 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

Refill pu

Wheel nut wrench kit

OPTIONAL EQUIPMENT

Electrical

Battery disconnect switch, additional in cab

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 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

Max Boom height

Can Bus Interface

Delayed Engine Shutdown

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

OPTIONAL EQUIPMENT

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) 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

Sign, slow moving vehicle

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

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