

Volvo Wheel Loader 14.5-17.3 t 182 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 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

## (G)(G)

### 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 axel cooling

## 4

#### 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
- 5,6% higher tipping load
- Standard electro-servo controls
- Bucket leveling function
- Increased lifting height by 72mm



#### Increased productivity

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



#### **Greater access**

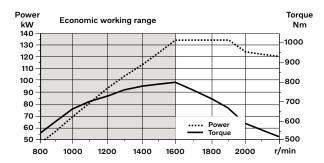
- Cooler installation slides out for easier cleaning
- Repositioned fill spouts for transmission and engine oil
- Ground-level access to service points
- Electronically-operated engine hood

### Volvo L90H in detail

#### **Engine**

6-cylinder, 6 liters 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	1600 - 1900
ISO 14396 gross	kW	134
	hp	182
ISO 9249, SAE J1349 net	kW	134
	hp	182
Max. torque at	r/min	1600
ISO 14396 gross	Nm	800
ISO 9249, SAE J1349 net	Nm	800
Economic working range	r/min	1 100 - 1 600
Displacement	1	5.7



#### 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	Α	680
Alternator rating	W/A	3 135/80
Starter motor output	kW	5.5

#### Brake system

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 2 x 0.5+1 x 1.0
Accumulators for parking brake	I 1 x 1.0

#### Lift Arm System

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

Lift cylinders		2
Cylinder bore	mm	120
Piston rod diameter	mm	70
Stroke	mm	744
Tilt cylinder		1
Cylinder bore	mm	180
Piston rod diameter	mm	90
Stroke	mm	430

#### 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	80
Rod diameter	mm	50
Stroke	mm	345
Working pressure	M Pa	21
Maximum flow	l/min	60
Maximum articulation	±°	40

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

**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 windo	w

Ventilation	m³/min	9
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 a 2000/14/EC	nd EU Noise Directive	
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	1	222
Engine coolant	- 1	30
Hydraulic oil tank	1	90
Transmission oil (non lock-up)	- 1	21
Transmission oil (lock-up)	1	22
Engine oil	- 1	20
Axle oil front	1	35
Axle oil rear	- 1	27

#### 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

fan, steering, brake, pilot and nydraulic 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	МРа	31
Flow	l/min	171
at	M Pa	10
engine speed	r/min	1900
Working pressure maximum, pump 3 for brake- and cooling fan system	MPa	21
Flow	l/min	33
at	MPa	10
engine speed	r/min	1900
Pilot system, working pressure	M Pa	3.5
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	Converter 6.5 / Lock-up 6.5
2nd gear	km/h	Converter 14 / Lock-up 14
3rd gear	km/h	Converter 26 / Lock-up 27
4th gear	km/h	Converter 46 / Lock-up 50
4th gear: Shown in speedometer and limited by E0	CU	
Measured with tires		20.5R25
Front axle/rear axle		AWB 25/AWB 20
Rear axle oscillation	±°	13
Ground clearance	mm	470
at oscillation	0	13

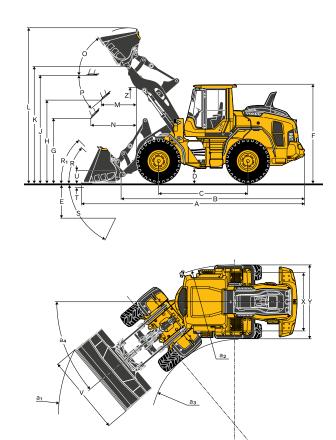


## **Specifications**

Tires 20.5 R25 L3				
		L90H		
		Standard boom	Long boom	
В	mm	6 170	6 600	
С	mm	3 050	3 050	
D	mm	450	440	
F	mm	3 280	3 280	
G	mm	2 132	2 132	
J	mm	3 730	4 140	
K	mm	4 040	4 460	
0	0	57	58	
P <sub>max</sub>	0	45	44	
R	0	44	47	
R <sub>1</sub> *	o	49	53	
S	0	67	65	
Т	mm	112	123	
U	mm	480	570	
X	mm	1 960	1960	
Υ	mm	2 490	2 490	
Z	mm	3 460	3 910	
a <sub>2</sub>	mm	5 430	5 430	
a <sub>3</sub>	mm	2 940	2 940	
a <sub>4</sub>	±°	40	40	

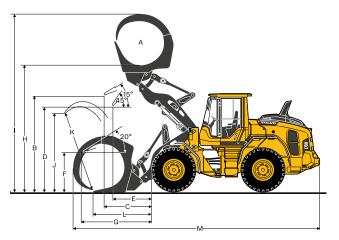
<sup>\*</sup> Carry position SAE

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



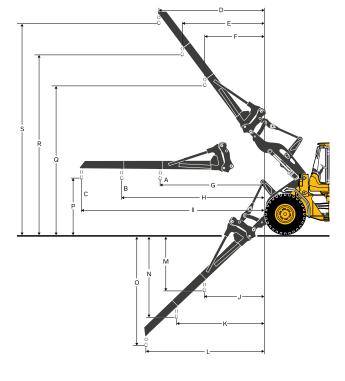
Tires: 20.5R25 L3					
		L90H			
SAE-Load	kg	4 600			
Operating weight without load*	kg	16 645			
Grapple sales code		80 832			
A	m2	2.4			
В	mm	3 487			
С	mm	1 703			
D	mm	2 865			
E	mm	1 319			
F	mm	1 441			
G	mm	2 740			
Н	mm	4 613			
I	mm	6 664			
J	mm	2 786			
К	mm	2 990			
L	mm	2 131			
M	mm	8 469			

<sup>\*</sup> Calculated with additional protective guarding



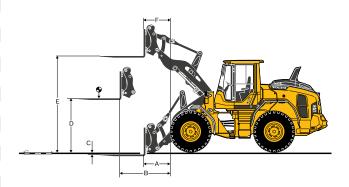
<sup>\*\*</sup>Calculated with additional protective guarding

Tires: 20.5R25 L3				
		L90H		
Material handling arm sales code		92008		
A*	kg	2 760		
B*	kg	2 130		
C*	kg	1 740		
Static tipping load, straight	kg	4 289		
35deg. Turn	kg	3 834		
at full turn	kg	3 700		
D	mm	2 486		
E	mm	1894		
F	mm	1 3 0 1		
G	mm	3 253		
Н	mm	4 387		
L	mm	5 520		
J	mm	1339		
K	mm	1 889		
L	mm	2 439		
M	mm	2 051		
N	mm	3 043		
0	mm	4 034		
P	mm	1 520		
Q	mm	5 403		
R	mm	6 370		
S	mm	7 336		
Operating weight without load	kg	14 833		



Tires: 20.5R25 L3				
		L90H		
Fork frame sales code		83770		
Fork tines sales code (R/L)		80106/80107		
Static tipping load, straight	kg	8 904		
35deg. Turn	kg	7 947		
at full turn	kg	7 664		
at load center distance*	mm	600		
A	mm	932		
В	mm	1 679		
C	mm	-4		
D	mm	1800		
E	mm	3 841		
F	mm	641		
Operating weight without load	kg	14 928		

<sup>\*</sup> Firm and level ground



<sup>\*</sup> Op. load at full turn + tipping position Tipping loads calculated for max. arm length

<sup>\*\*</sup>Calculated with additional protective guarding

<sup>\*\*</sup>Calculated with additional protective guarding

## **Specifications**

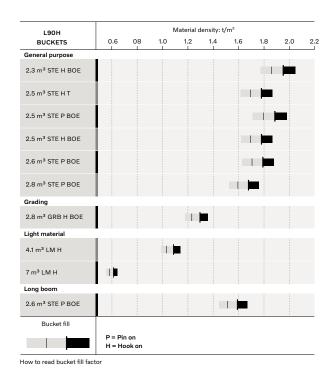
L90H*											
BR 20,5R25 VJT L3	GENERAL PURPOSE				GRADING	LIGHT MATERIAL		LONG BOOM			
					6						
		2.3 m <sup>3</sup> STE H BOE	2.5 m <sup>3</sup> STE H T	2.5 m <sup>3</sup> STE P BOE	2.5 m <sup>3</sup> STE H BOE	2.6 m <sup>3</sup> STE P BOE	2.8 m³ STE P BOE	2.8 m³ GRB H BOE	4.1 m <sup>3</sup> LM H	7 m³ LM H	2.6 m <sup>3</sup> STE P BOE
Volume, heaped ISO/SAE	m³	2.3	2.5	2.5	2.5	2.6	2.8	2.8	4.1	7.0	2.6
Volume at 110% fill factor	$m^3$	2.5	2.8	2.8	2.8	2.9	3.1	3.1	4.5	7.7	2.9
Static tipping load, straight	kg	11 410	11 330	11 940	11 320	11 820	11 910	9 260	10 820	10 530	-1800
at 35° turn	kg	10 120	10 030	10 620	10 030	10 500	10 580	8 190	9 550	9 250	-1 650
at full turn	kg	9 730	9 650	10 220	9 650	10 110	10 190	7 870	9 180	8 870	-1 600
Breakout force	kN	134.9	129.9	141.3	127.1	133.8	135.6	92.2	100.7	87.0	+1.7
A	mm	7 600	7 850	7 550	7 690	7 630	7 610	8 170	8 050	8 350	+410
E	mm	1200	1 410	1 150	1 280	1220	1200	1760	1600	1860	-10
Н	mm	2 890	2 730	2 920	2 830	2 870	2 880	2 400	2 610	2 410	+430
L	mm	5 450	5 510	5 440	5 530	5 520	5 500	4 900	5 630	5 840	+420
M	mm	1 010	1 170	960	1 070	1 020	1000	1 210	1350	1560	-50
N	mm	1 670	1720	1 650	1700	1 670	1 660	1 520	1 710	1 710	+360
V	mm	2 650	2 650	2 650	2 500	2 500	2 750	2 880	2 750	3 000	0
a <sub>1</sub> clearance circle	mm	12 140	12 290	12 130	12 060	12 040	12 250	12 980	12 500	12 920	+340
Operating weight	kg	15 560	15 630	15 380	15 600	15 390	15 360	15 700	15 850	16 280	+290

<sup>\*</sup>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/m³. Result: The 1.9 m³ bucket carries 2.0 m³. For optimal stability always consult the bucket selection chart.

Ducher Colocien Chart					
Material	Bucket fill, %	Material density, t/m³	ISO/SAE bucket volume, m³	Actual volume, m <sup>3</sup>	
Earth/Clay	~ 110	~ 1.55 ~ 1.45 ~ 1.40	2.1 2.3 2.4	2.3 2.5 2.6	
Sand/Gravel	~ 105	~ 1.60 ~ 1.50 ~ 1.45	2.1 2.3 2.4	2.2 2.4 2.5	
Aggregate	~ 100	~ 1.80 ~ 1.70 ~ 1.60	2.1 2.3 2.4	2.1 2.3 2.4	
Rock	≤100	~ 1.70	1.6	1.6	



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 +164 +164 mm Ground clearance mm Tipping load, full turn -70 +287 kg Operating weight kg -111 +545 +543

## 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

## Equipment

#### STANDARD EQUIPMENT

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

Speed limiter, 30 km/h

Speed limiter, 40 km/h

#### OPTIONAL FOUIPMENT

#### 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, assymetric right, LED Headlights, assymetric 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

_	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
	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

**OPTIONAL EQUIPMENT** 

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