

V O L V O



Volvo Wheel Loader 11.0-13.6 t 164 hp

**L60H**

Volvo Construction Equipment

# L60H

Leave the heavy-duty work for the L60H, 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



## 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
- 5,5% higher tipping load
- Standard electro-servo controls
- Bucket leveling function



## 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

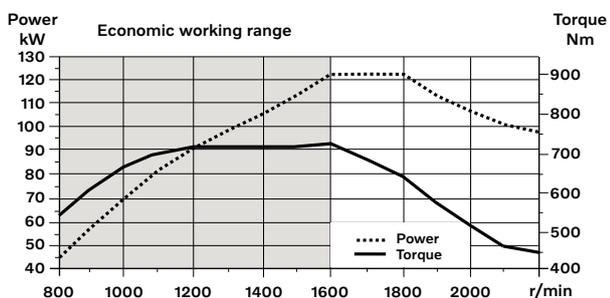
- Cooler installation slides out for easier cleaning
- Repositioned fill spouts for transmission and engine oil
- Ground-level access to service points
- Electronically-operated engine hood

# Volvo L60H 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	1 600 - 1 800
ISO 14396 gross	kW	122
	hp	164
ISO 9249, SAE J1349 net	kW	122
	hp	164
Max. torque at	r/min	1 600
ISO 14396 gross	Nm	730
ISO 9249, SAE J1349 net	Nm	730
Economic working range	r/min	800 - 1 600
Displacement	l	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	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	3 x 0.5
Accumulators for parking brake	l	1 x 0.5

## Lift Arm System

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

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

## 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	70
Rod diameter	mm	45
Stroke	mm	386
Working pressure	MPa	21
Maximum flow	l/min	60
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 manual settings (11 speeds). 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, SAE J1040), FOPS (ISO 3449). The cab meets with requirements according to SAE J386 ("Operator Restraint System"). Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1.430 t CO<sub>2</sub>-eq.

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

Ventilation	m <sup>3</sup> /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		
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	222
Engine coolant	l	30
Hydraulic oil tank	l	90
Transmission oil (non lock-up)	l	21
Transmission oil (lock-up)	l	22
Engine oil	l	20
Axle oil front	l	25
Axle oil rear	l	25

## 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	26
Flow	l/min	145
at	MPa	10
engine speed	r/min	1 900
Working pressure maximum, pump 3 for brake- and cooling fan system	MPa	21
Flow	l/min	33
at	MPa	10
engine speed	r/min	1 900
Pilot system, working pressure	MPa	3.5
Lift	s	5.4
Tilt	s	1.9
Lower, empty	s	2.7
Total cycle time	s	10

## 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
<b>Maximum speed</b>		
1st gear	km/h	Converter 7.5 / Lock-up 7.5
2nd gear	km/h	Converter 15 / Lock-up 15
3rd gear	km/h	Converter 28 / Lock-up 29
4th gear	km/h	Converter 46 / Lock-up 50
4th gear: Shown in speedometer and limited by ECU		
Measured with tires		20.5R25
Front axle/rear axle		AWB 15/AWB 15
Rear axle oscillation	± °	13
Ground clearance	mm	470
at oscillation	°	13



# Specifications

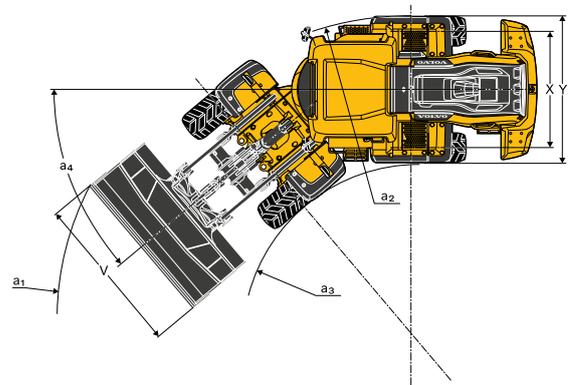
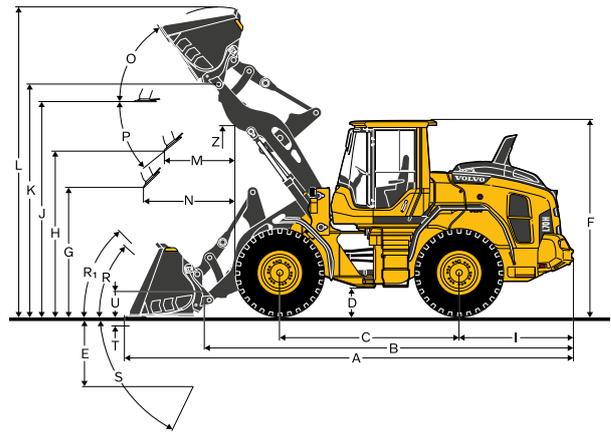
## Tires 20.5 R25 L3

		L60H	
		Standard boom	Long boom
B	mm	6 010	6 520
C	mm	3 000	3 000
D	mm	440	430
F	mm	3 270	3 270
G	mm	2 133	2 134
I	mm	1 855	1 855
J	mm	3 550	4 080
K	mm	3 870	4 380
O	°	56	56
P <sub>max</sub>	°	45	42
R	°	43	45
R <sub>1</sub> *	°	46	50
S	°	79	79
T	mm	123	150
U	mm	410	590
X	mm	1 900	1 900
Y	mm	2 430	2 430
Z	mm	3 210	3 590
a <sub>2</sub>	mm	5 340	5 340
a <sub>3</sub>	mm	2 900	2 900
a <sub>4</sub>	±°	40	40

\* Carry position SAE

\*\*Calculated with additional protective guarding

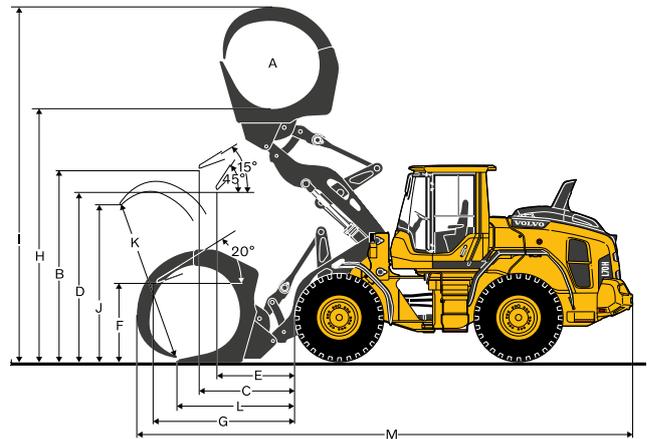
Where applicable, specifications and dimensions are according to ISO 7131, SAE J732, ISO 7546, SAE J742, ISO 14397, SAE J818



## Tires: 20.5R25 L3

		L60H
SAE-Load	kg	3 450
Operating weight without load*	kg	12 883
Grapple sales code		82 194
A	m <sup>2</sup>	1.3
B	mm	3 412
C	mm	1 483
D	mm	2 929
E	mm	1 175
F	mm	1 532
G	mm	2 350
H	mm	4 333
I	mm	5 878
J	mm	1 997
K	mm	2 080
L	mm	1 709
M	mm	7 861

\* Calculated with additional protective guarding



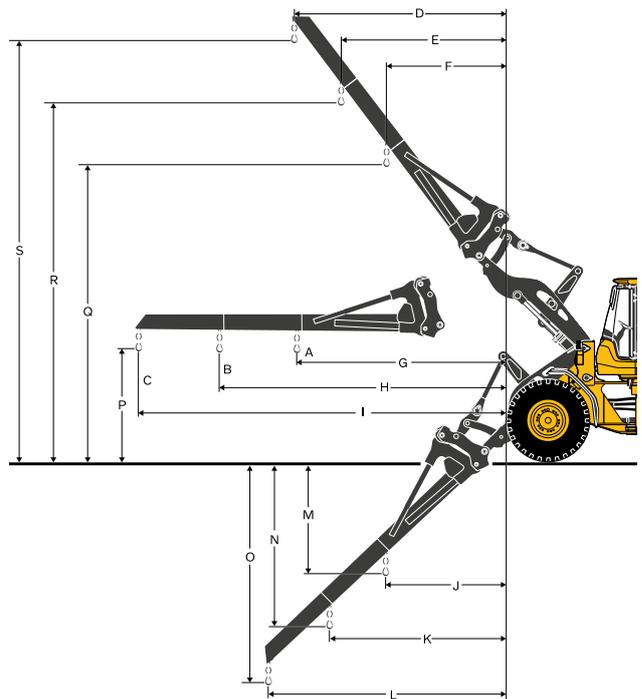
**Tires: 20.5R25 L3**

		<b>L60H</b>
Material handling arm sales code		92007
A*	kg	1 800
B*	kg	1 400
C*	kg	1 150
Static tipping load, straight		3 238
35deg. Turn		2 910
at full turn		2 814
D	mm	2 592
E	mm	2 002
F	mm	1 465
G	mm	3 270
H	mm	4 305
I	mm	5 439
J	mm	905
K	mm	1 227
L	mm	1 580
M	mm	2 258
N	mm	3 241
O	mm	4 319
P	mm	1 512
Q	mm	5 286
R	mm	6 171
S	mm	7 139
Operating weight without load		kg 11 885

\* Op. load at full turn + tipping position

Tipping loads calculated for max. arm length

\*\*Calculated with additional protective guarding

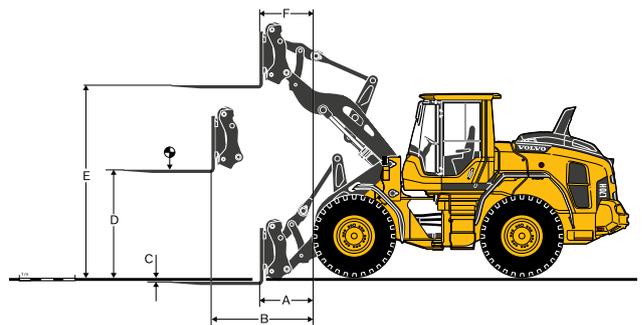


**Tires: 20.5R25 L3**

		<b>L60H</b>
Fork frame sales code		83768
Fork tines sales code (R/L)		80042/80043
Static tipping load, straight		kg 6 930
35deg. Turn		kg 6 230
at full turn		kg 6 024
at load center distance*		mm 600
A	mm	798
B	mm	1 567
C	mm	-38
D	mm	1 831
E	mm	3 713
F	mm	700
Operating weight without load		kg 11 965

\* Firm and level ground

\*\*Calculated with additional protective guarding



# Specifications

L60H\*

		REHANDLING <sup>(1)</sup>		GENERAL PURPOSE				GRADING	LIGHT MATERIAL		LONG BOOM <sup>(3)</sup>
Tires 20.5 R25 L3		WLA54427685	WLA54427682	WLA86398	WLA86402	WLA86411	WLA86405	WLA92476	WLA92564	WLA92565	-
		2.3 m <sup>3</sup> STE P BOE	2.3 m <sup>3</sup> STE H BOE	1.8 m <sup>3</sup> STE H T	2.1m <sup>3</sup> STE H BOE	2.3 m <sup>3</sup> STE P BOE	2.3 m <sup>3</sup> STE H BOE	1.7 m <sup>3</sup> GRB H BOE	3.1 m <sup>3</sup> LM H BOE	5 m <sup>3</sup> LM H BOE	2.3 m <sup>3</sup> STE P BOE
Volume, heaped ISO/SAE	m <sup>3</sup>	2.3	2.3	1.8	2.1	2.3	2.3	1.7	3.1	5	-
Volume at 110% fill factor	m <sup>3</sup>	2.5	2.5	2	2.3	2.5	2.5	1.9	3.4	5.5	-
Static tipping load, straight	kg	9 130	8 690	8 800	8 580	8 950	8 490	7 500	8 190	8 190	-1 790
at 35° turn	kg	8 170	7 740	7 870	7 660	8 020	7 580	6 710	7 300	7 270	-1 650
at full turn	kg	7 880	7 460	7 600	7 390	7 740	7 310	6 470	7 040	7 000	-1 600
Breakout force	kN	78.6	72.9	86.7	78.6	81.0	75.3	60.3	61.8	53.8	8.3
A Overall length	mm	7 380	7 490	7 440	7 380	7 340	7 440	7 660	7 690	7 910	520
E Digging depth, max dump (S)	mm	1 180	1 280	1 220	1 180	1 140	1 230	1 410	1 490	1 710	40
H <sup>(2)</sup> Dump clearance	mm	2 770	2 720	2 750	2 790	2 800	2 750	2 510	2 570	2 430	550
L Overall operating height	mm	5 230	5 340	5 020	5 100	5 110	5 170	4 520	5 280	5 480	520
M <sup>(2)</sup> Dump reach	mm	1 070	1 170	1 130	1 100	1 040	1 140	1 130	1 320	1 500	20
N <sup>(2)</sup> Reach at 45° discharge, pos. G	mm	1 590	1 620	1 600	1 590	1 580	1 610	1 480	1 620	1 670	450
V Bucket width	mm	2 500	2 500	2 500	2 500	2 500	2 500	2 500	2 550	2 650	0
a <sub>1</sub> Outer clearance circle (diameter)	mm	11 800	11 830	11 800	11 770	11 780	11 800	12 140	12 010	12 240	480
Operating weight without load	kg	12 100	12 380	12 020	12 120	11 870	12 170	12 010	12 200	12 490	230

(1) Measured with additional counterweight.

(2) Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge measured at 45° dump angle.

Note: This only applies to genuine Volvo attachments.

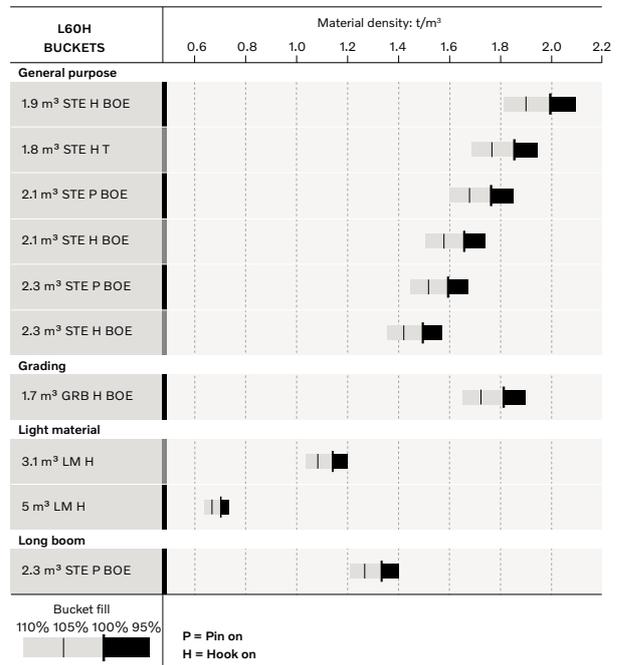
## Bucket Selection Chart

The chosen bucket is determined by the density of the material and the expected bucket fill factor. The actual bucket volume is often larger than the rated capacity, due to the features of the TP linkage, including an open bucket design, good rollback angles in all positions and good bucket filling performance. The example represents a standard boom configuration.

**Example:** Sand and gravel. Fill factor ~ 105%. Density 1.65 t/m<sup>3</sup>.

**Result:** The 1.9 m<sup>3</sup> bucket carries 2.0 m<sup>3</sup>. For optimal stability always consult the bucket selection chart.

Material	Bucket fill, %	Material density, t/m <sup>3</sup>	ISO/SAE bucket volume, m <sup>3</sup>	Actual volume, m <sup>3</sup>
Earth/Clay	~ 110	~ 1.55	1.9	2.1
		~ 1.40	2.1	2.3
		~ 1.30	2.3	2.5
Sand/Gravel	~ 105	~ 1.65	1.9	2.0
		~ 1.50	2.1	2.2
		~ 1.35	2.3	2.1
Aggregate	~ 100	~ 1.75	1.9	1.9
		~ 1.55	2.1	2.1
		~ 1.55	2.3	2.3
Rock	≤100	~ 1.70	1.7	1.7



How to read bucket fill factor

## Supplemental Operating Data

Tires 20.5 R25 L3		Standard boom			Long boom
		17.5 R25 L3	20.5 R25 L2 *	600/65 R25 L3	600/65 R25 L3
Width over tires	mm	-130	+10	+100	+100
Ground clearance	mm	-60	-10	-30	-20
Tipping load, full turn	kg	-270	+50	-60	-30
Operating weight	kg	-480	+90	+10	+10

\* Snow tires

# 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

### Wheels and tires

17.5R25  
 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  
 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

Warning and indicator lights:  
 Contronic display  
 Fuel consumption  
 Battery charging  
 Parking brake  
 Ambient temperature  
 Warning and display message:  
 Clock  
 Regeneration  
 Test function for warning and indicator lights  
 Engine coolant temperature  
 Brake test  
 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  
 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

# Equipment

## 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

### 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

Parking brake alarm, audible

## OPTIONAL EQUIPMENT

### 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

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**OPTIONAL EQUIPMENT**

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**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

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**OPTIONAL EQUIPMENT**

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**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
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**

17.5R25
20.5R25
600/65R25
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

**V O L V O**