

VOLVO WHEEL LOADER

L90E



VOLVO

When you need a real lift



With an easy hand movement, the Volvo L90E lifts gravel, logs, pipes or other materials. It is simple, fast and comfortable to work in the L90E. One day, it can be a flexible toolcarrier and the very next day it can be an important high-performance link in a production process. The L90E belongs in heavy and tough jobs.

L90E - the perfect partner to get the job done, any job.

It's easy with use of leading technology

Volvo has developed and manufactured loaders for nearly half a century. The goal has always been to create the optimal machine for maximum performance and productivity. Now, the latest experiences and leading technology have been used in designing the L90E – the machine that whets the appetite. With the machine's electronically controlled low-emission engine and gearshifting system, Automatic Power Shift (APS), the operator can choose between four

different shifting programs. The system gives optimal performance and low fuel consumption in all types of applications. The patented Torque parallel linkage (TP-linkage) combines excellent high breakout torque and parallel action throughout the entire lifting range. The hydraulic attachment bracket, together with Volvo's attachments range, increases the loader's versatility, giving a highly flexible material handling system. It is easy to own an L90E and that's because Volvo has invested in long service intervals and high availability.

A safe and comfortable workplace

Matching the visibility-optimized loader linkage, attachment bracket and attachments gives the operator excellent visibility of the load in any unloading, loading or transport application. The operator always has a very comfortable work environment in the cab, with an extremely low sound level and a unique air filtration system. The operator has view of the site around the machine as well as to controls inside the machine, which insures high productivity.

L90E – the obvious choice when you need a reliable loader with character.

Specifications L90E

● Engine:	Volvo D6D LAE2	● Buckets:	2,3 –7,0 m ³
Max power at	32.0 r/s (1900 rpm)	● Log grapples:	1,3–2,4 m ²
SAE J1995 gross	122 kW (166 hp)	● Operating weight:	15,1–16,8 t
ISO 9249,		● Tires:	20.5 R25, 650/65*
SAE J1349 net	121 kW (165 hp)		
● Breakout force:	115,6 kN*		
● Tipping load, fully turned:	9 760 kg		

* Bucket: 2,5 m³ straight edge with bolt-on edge.
Tires: 20.5 R25



Smart, fast and smooth

Volvo L90E is equipped with a turbocharged low-emission engine and air-cooled intercooler. The engine features electronically controlled fuel injection which, combined with load-sensing hydraulics and the intelligent automatic gearshifting (APS), gives fast response in all work phases. Volvo's unique lift arm system, Torque parallel linkage, gives constant high breakout torque throughout the entire lifting range. This results in high productivity, very low fuel consumption and superior flexibility.

Electronically controlled Volvo engine delivers rapid response and faster work cycles

L90E is equipped with Volvo's electronically controlled step 2 engine, correctly matched to Volvo's transmission, axles and hydraulic system. The 6-liter turbo gives high torque at low engine speeds. This makes the L90E a very fuel efficient machine with unbeatable productivity and economy.

Rev and speed dependent automatic powershifting

In 1981, Volvo introduced Automatic Power Shifting (APS) for wheel loaders and with the L90E, we advance the technology a few extra steps. Volvo's in-house developed Countershaft transmission offers the smoothest shifting possible. All the operator has to do is select forward, reverse or kick-down – then APS always selects the correct gear. This maximizes machine performance while minimizing fuel consumption and operator impact.

Intelligent load-sensing hydraulic system

Volvo L90E is equipped with an intelligent load-sensing hydraulic system, providing the required power when and where it's needed.

TP-Linkage – superior torque through the lifting range

TP-Linkage, Volvo's unique lift arm system, delivers high and constant breakout torque throughout the entire lifting range. The system is extremely user-friendly and the operator can easily and effectively handle heavy materials with full power in all positions. No other lift arm system on the market can provide such high, even breakout torque.

L90E – an ingenious and smart loader for tough and varied applications.

Engine

- Volvo D6D, turbocharged low-emission engine step 2 with air-cooled intercooler and electronically controlled fuel injection for lower fuel consumption and faster work cycles (According to EPA Tier2/ EU step II).
- Hydraulic driven electronically controlled fan only works when there's a cooling demand, which means fuel-savings.

Transmission

- Volvo's in-house, well-proven Countershaft transmission together with the gearshifting system Automatic Power Shift (APS) with four different shifting programs, gives optimal performance in all applications.

Axles

- Volvo's developed axles are integrated into the total drivetrain design to give effective rimpull.

Brakes

- Fully hydraulic dual-circuit system for high safety.
- Circulation-cooled wet disc brakes in oil-bath for high reliability and long service life.
- Electronic warning function and brake test in Contronic gives fast information on brake system's function.
- Brake wear indicator on each wheel for easy check of brake pad wear.

Steering

- Load-sensing steering only uses power when it is needed, which also saves fuel.
- The steering system's design provides smooth steering movements and higher operating safety.

Frame

- Rugged frame design of high-strength steel.

- The E-series' three-point suspension of engine and transmission reduces vibrations and noise.
- Volvo's articulation joint with hinge bearings is a well-proven and service-friendly design with renowned long service life.

TP-linkage (Torque Parallel)

- Unique patented lift arm system provides two solutions in one – Z-bar linkage and parallel linkage.

Working hydraulics (load-sensing hydraulic system, LS)

- The load-sensing hydraulic system delivers exact hydraulic oil flow to the functions for activation when needed. This is an energy-efficient system which lowers fuel consumption.
- Pilot-operated hydraulic controls – easy fingertip operation with short strokes allows precise control of movements, increasing the operator's efficiency and safety.



An alert operator is a productive operator

A comfortable and safe work environment in the cab makes work easier for the operator, and this means higher production. That's why we've worked hard to make the cab as operator-friendly as possible. The Care Cab reinforces Volvo's reputation as the leader in operator environment and cab comfort.

Care Cab

A clean and comfortable workplace

A good cab climate does wonders for efficiency, keeping operators sharp during long shifts, from early morning to late night. All incoming air is filtered in two stages, making this the cleanest cab on the market. The efficient air conditioning* provides a comfortable cab temperature all year round, regardless of cold or hot climate conditions. The air conditioning system also functions as an air dryer.

Good comfort means higher productivity

There is a range of comfortable seats, all of them with multiple adjustment functions for optimal individual comfort. All instruments are visible at a glance and all important information is right in front of the operator. The forward-reverse and kick-down functions are available both on the lever to the left of the steering

wheel and on the hydraulic console to the right. With CDC (Comfort Drive Control)*, the operator can operate steering, forward-reverse and kick-down function with controls in the left armrest. At any time, the operator can switch between steering with the steering wheel and CDC, which helps to minimize tiring and repetitive movements. This gives the operator the possibility to vary operating mode and reduce fatigue and static muscle strain.

Always an eye on operation and performance with Volvo Contronic

The Contronic monitoring system allows the operator to keep an eye on the machine in real-time. The information

display on the instrument panel provides continuous information on the machine's different functions.

No noise to shout about

With its ingenious rubber mounting system for the cab and drivetrain as well as effective noise insulation, the Care Cab is one of the quietest cabs on the market. The low sound level eliminates fatigue and allows the operator to stay alert throughout the shift.

Quiet, comfortable and operator-friendly - what more can you ask for?



Care Cab

- Comfortable cab climate with the market's most efficient cab filters.
- Pleasant interior, easy to keep clean.
- Adjustable steering wheel*, seat and lever console for optimal operator comfort and high production.

- Contronic, a superior control and monitoring system, designed for higher operating safety and productivity.
- Large windows and narrow pillars give good visibility which means increased safety.

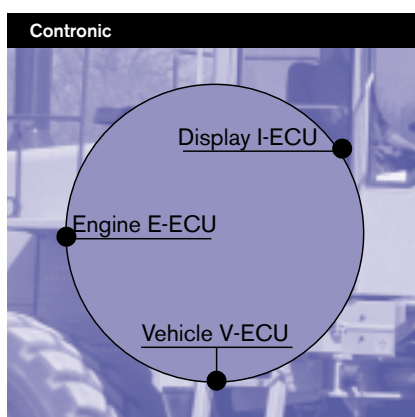
- Sloped engine hood for excellent visibility to the rear.
- All service platforms and steps feature new improved anti-slip surfaces. Sloped entry ladder for easy cab access.

*Optional equipment



Front-running production loader

Few machines have to work as hard and in such tough conditions as a loader. The machine has to keep running and doing the job – day in, day out – without breakdowns. The ultimate goal is maximum productivity and efficiency to the lowest cost, with minimized environmental impact.



Simple and service-friendly

Daily inspections are easy with simple and fast level checks of all oils and fluids. Service points, filters and quick-couplings are easily accessed from ground level. Access is improved with the swing-up radiator grill and swing-out fan, as well as large easily opened engine access doors raised by gas struts.

Contronic – the reliable monitoring system

The machine's operation and performance are monitored continuously by Contronic, the highly reliable control and monitoring system from Volvo. The system is an electronic network made up of three computers. Operating at three levels, the system keeps an eye on the machine's function's in real-time. If a potential problem should occur, the system generates an immediate warning, making the operator aware of the condition. All operating data is saved and can be used to analyze how the machine performs and to trace its history since the latest service. The machine's functions are updated for optimal adaptation to new and changed operating conditions via the Contronic service display. With the analysis software, it's also possible to check and adjust the machine's functions and performance.

Environmental commitment is a natural part of Volvo's core business

Volvo's engines are renowned for delivering high torque at low engine speeds, which means low fuel consumption as well as minimal exhaust and noise emissions. All our production units are certified according to ISO 14001.

Recycling – a natural choice

The materials used in the wheel loaders are carefully selected, which makes it possible to recycle more than 95% of the machine. Components such as the engine, transmission and hydraulics are reconditioned and reused in an exchange program, other materials are recycled. In addition, it's possible to use biodegradable oil* in the hydraulic system.

Simple and smart – L90E, the obvious choice.

Contronic (electrical system)

- Computerized electrical and monitoring system. Reliable and user-friendly for optimal performance.
- Display information in three categories; continuous operating data, warning messages and error messages.
- Safety function "engine shut-down to idle", lowers engine rpm to idle, thus reducing the risk of subsequent damage.

Maintenance and availability

- Lift arm system with double pin seals for long service life.
- Easy access service points facilitate service and daily inspections as well as increase operating safety.
- Service is facilitated with easily accessed and strategically placed breather filters for transmission, axles, fuel tank, hydraulic oil tank and oil filters.
- In addition to factory warranties, Volvo also offers different types of extended warranties. The warranty system is known as CAP (Component Assurance Program) and can be tailored to meet your exact needs.

Environment

- Low external and internal sound level.
- The high performance Volvo engine meets step 2 emission standards in Europe and the USA.
- More than 95% of all materials in the L90E can be recycled.
- All production units are certified according to the environmental standard ISO 14001.



The Volvo L90E in detail

Engine

Engine: 6 liter, 6-cylinder straight turbo-charged diesel engine with electronically controlled unit pumps and conventional injectors. The engine is of heavy-duty type with dry replaceable cylinder liners and replaceable valve guides and valve seats. The throttle application is transmitted electrically from the throttle pedal and eventual hand throttle. Air cleaning: three-stage. Cooling system: Hydrostatic, electronically controlled fan and intercooler of the air/air type.

Engine..... Volvo D6D LA E2
Max power at..... 32,0 r/s (1900 r/min)
SAE J1995 gross..... 122 kW (166 hp)
ISO 9249, SAE J1349..... 121 kW (165 hp)
Max torque at..... 23,3 r/s (1400 r/min)
SAE J1995 gross..... 739 Nm
ISO 9249, SAE J1349..... 732 Nm
Economic working range..... 1100–1600 r/min
Displacement..... 5,7 l

Drivetrain

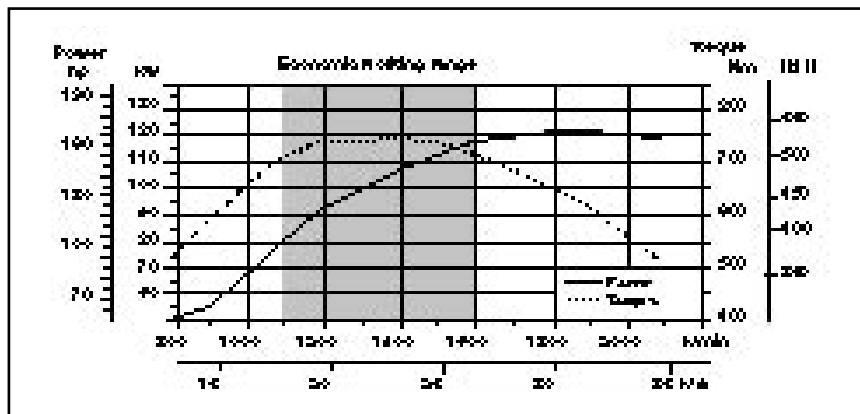
Torque converter: single-stage. Transmission: Volvo Countershaft-type transmission with single lever control. Fast and smooth shifting of gears between forward and reverse with PWM-valves (Pulse Width Modulated). Gearshifting system: Volvo Automatic Power Shift (APS) with mode selector. Axles: Volvo, fully floating axle shafts with planetary-type hub reductions. Cast steel axle housing. Fixed front axle and oscillating rear axle. 100% differential lock on the front axle.

Transmission..... Volvo HTE 202
Torque multiplication..... 2,45:1
Maximum speed, forward/reverse
1 6,8 km/h
2 12,7 km/h
3 25,6 km/h
4 37,1 km/h
Measured with tires..... 20.5 R25 L2
Front axle/rear axle..... Volvo/AWB 25/20
Rear axle oscillation..... $\pm 13^\circ$
Ground clearance at 13° oscillation..... 470 mm

Brake system

Service brake: Volvo dual-circuit system with nitrogen-charged accumulators. Outboard mounted fully hydraulic operated, fully sealed oil circulation cooled wet disc brakes. The operator can select automatic declutch of the transmission when braking by a switch on the instrument panel. Parking brake: Fully sealed, wet multi-disc brake built into the transmission. Applied by spring force, electro-hydraulic release with a switch on the instrument panel. Secondary brake: Dual brake circuits with rechargeable accumulators. One circuit or the parking brake fulfill all safety requirements. Standard: The brake system complies with the requirements of ISO 3450.

Number of brake discs per wheel front/rear..... 1/1
Accumulators..... 1x1,0 l and 2x0,5 l
Accumulator for parking brake..... 1x1,0 l



Steering system

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

Steering cylinders..... 2
Cylinder bore..... 80 mm
Piston rod diameter..... 50 mm
Stroke 345 mm
Relief pressure..... 21 MPa
Maximum flow..... 200 l/min
Maximum articulation..... $\pm 40^\circ$

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 four speeds. Defroster vents for all window areas. Operator's seat: Operator's seat with adjustable suspension and retractable seatbelt. The seat is mounted on a bracket on the rear cab wall. The forces from the retractable seatbelt are absorbed by the seat rails. Standard: The cab is tested and approved according to ROPS (ISO/CD 3471, SAE J1040), FOPS (ISO 3449). The cab meets with requirements according to ISO 6055 ("protective roof for high-lift vehicles") and SAE J386 ("Operator Restraint System").

Emergency exits 1
Sound level in cab
according to ISO 6396 LpA 70 dB (A)
External sound level
according to ISO 6395 LwA 105 dB (A)
(Directive 2000/14/EC)
Ventilation 9 m³/min
Heating capacity 11 kW
Air conditioning (optional) 8 kW

Hydraulic system

System supply: Two load-sensing axial piston pumps with variable displacement. The steering function always has priority from one of the pumps. Valves: Double-acting 2-spool valve. The main valve is controlled by a 2-spool pilot valve. Lift function: The valve has four positions; raise, hold, lower and float position. Inductive/magnetic automatic boom kickout can be switched on and off and is adjustable to any position between maximum reach and full lifting height. Tilt function: The valve has three functions; roll-back, hold and dump. Inductive/magnetic automatic tilt can be adjusted to the desired bucket angle. Cylinders: Double-acting cylinders for all functions. Filter: Full flow filtration through 20 micron (absolute) filter cartridge.

Working pressure, pump..... 26,0 MPa
Flow..... 175 l/min
at 10 MPa
and engine speed 32 r/s (1900 r/min)
Pilot system
Working pressure..... 3,5 MPa
Cycle times
Raise* 5,4 s
Tilt* 2,1 s
Lower, empty 2,5 s
Total cycle time 10,0 s

* with load as per ISO 5998 and SAE J818

Lift arm system

Torque parallel linkage with high breakout torque and exact parallel lift-arm action.

Lift cylinders 2
Cylinder bore..... 120 mm
Piston rod diameter 70 mm
Stroke 733 mm
Tilt cylinder..... 1
Cylinder bore..... 180 mm
Piston rod diameter 90 mm
Stroke 430 mm



Electrical system

Central warning system: Central warning light for the following functions, (buzzer with gear engaged): Engine oil pressure, transmission oil pressure, brake pressure, parking brake, hydraulic oil level, axle oil temperature, steering system pressure, low coolant level, coolant temperature, transmission oil temperature, hydraulic oil temperature, over-speeding in engaged gear, brake charging.

Voltage..... 24 V
Batteries.....2x12 V
Battery capacity.....2x110 Ah
Cold cranking capacity, approx..... 690 A
Reserve capacity, approx..... 206 min
Alternator rating..... 1540 W/55 A
Starter motor output..... 5,4 kW(7,3 hp)

Service

Service accessibility: Large, easy-to-open service doors with gas springs. Swing-out radiator grille and fan. Possibility to log and analyze data to facilitate troubleshooting.

Refill capacities
Fuel tank..... 205 l
Engine coolant.....36 l
Hydraulic oil tank..... 115 l
Transmission oil40 l
Engine oil20 l
Axles front/rear 30/25

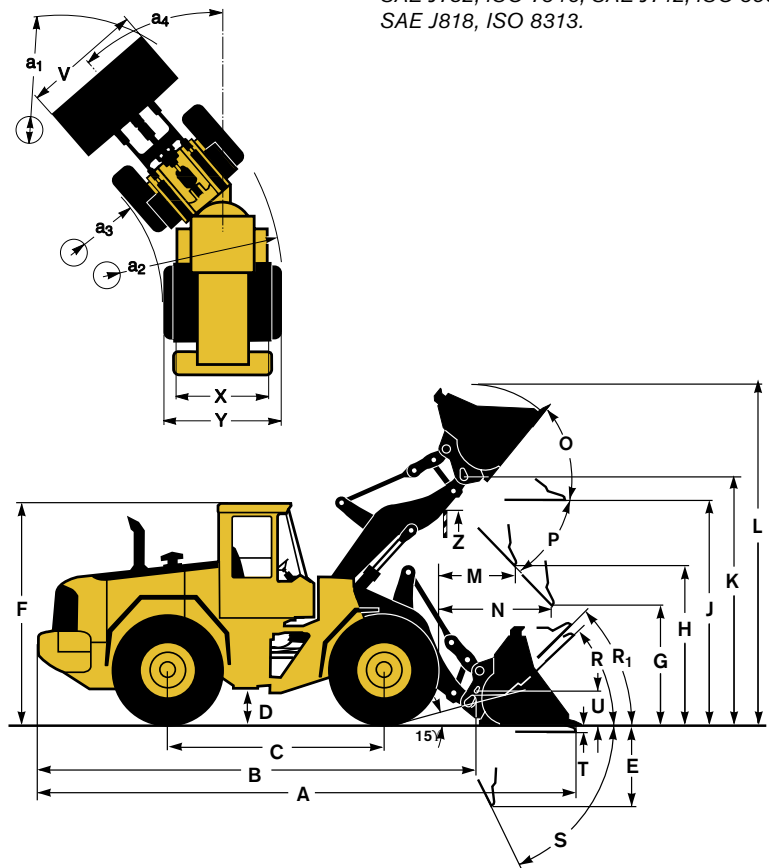
Specifications

Tires: 20.5 R25

Standard boom	
B	6 020 mm
C	3 000 mm
D	400 mm
F	3 260 mm
G	2 132 mm
J	3 650 mm
K	3 960 mm
O	56 °
P _{max}	45 °
R	44 °
R ₁ *	47 °
S	67 °
T	112 mm
U	430 mm
X	1 960 mm
Y	2 490 mm
Z	3 260 mm
a ₂	5 410 mm
a ₃	2 830 mm
a ₄	±40 °

* Carry position SAE

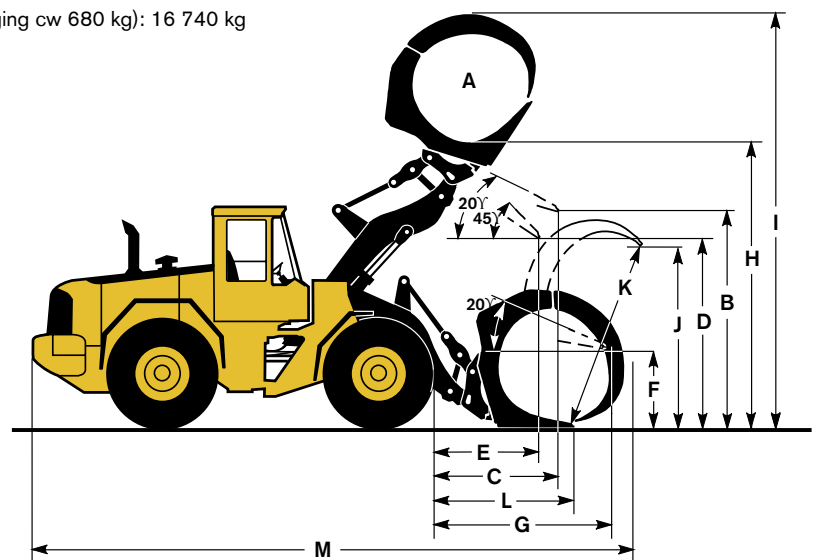
Where applicable, specifications and dimensions are in accordance with ISO 7131, SAE J732, ISO 7546, SAE J742, ISO 5998, SAE J818, ISO 8313.



Tires: 650/65 R25











A	2,4	m ²
B	3 420	mm
C	1 810	mm
D	2 800	mm
E	1 430	mm
F	1 450	mm
G	2 750	mm
H	4 530	mm
I	6 580	mm
J	2 790	mm
K	2 990	mm
L	2 130	mm
M	8 320	mm

Operating weight (incl. logging cw 680 kg): 16 740 kg
Operating load: 4 600 kg



SUPPLEMENTAL OPERATING DATA

Tires 20.5 R25		650/65 R25
Width over tires	mm	+200
Ground clearance	mm	+10
Tipping load, full turn	kg	+320
Operating weight	kg	+550





Tires 20.5 R25 L2	GENERAL PURPOSE								LIGHT MTRL		
											
Volume, heaped ISO/SAE	m³	2,3	2,4	2,5	2,5	2,6	2,5	2,7	2,7	4,1	7,0
Volume at 110% fill factor	m³	2,5	2,6	2,8	2,8	2,9	2,8	3,0	3,0	4,5	7,7
Static tipping load, straight	kg	10 830	11 460	10 650	11 400	10 680	10 850	10 560	11 230	10 260	9 970
at 35° turn	kg	9 600	10 190	9 430	10 140	9 450	9 610	9 340	9 970	9 060	8 750
at full turn	kg	9 240	9 810	9 070	9 760	9 090	9 250	8 980	9 600	8 700	8 390
Breakout force	kN	114,1	125,3	109,5	115,6	107,4	113,2	105,4	113,6	84,9	73,4
A	mm	7 440	7 530	7 500	7 640	7 530	7 690	7 560	7 470	7 890	8 190
E	mm	1 190	1 280	1 250	1 370	1 270	1 410	1 300	1 210	1 590	1 860
H***)	mm	2 820	2 770	2 780	2 700	2 770	2 670	2 750	2 810	2 540	2 340
L	mm	5 370	5 370	5 420	5 390	5 450	5 450	5 480	5 420	5 550	5 750
M***)	mm	1 130	1 220	1 170	1 290	1 190	1 310	1 210	1 130	1 470	1 680
N	mm	1 700	1 750	1 710	1 780	1 720	1 780	1 730	1 690	1 740	1 730
V	mm	2 650	2 650	2 650	2 650	2 650	2 650	2 750	2 750	2 750	3 000
a, clearance circle	mm	11 850	11 910	11 880	11 970	11 900	11 980	12 000	11 960	12 190	12 590
Operating weight	kg	15 340	15100	15 380	15 130	15 420	15 360	15 510	15 160	15 630	16 060

***))Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge (acc. SAE) + approx. 200mm. Measured at 45° dump angle.

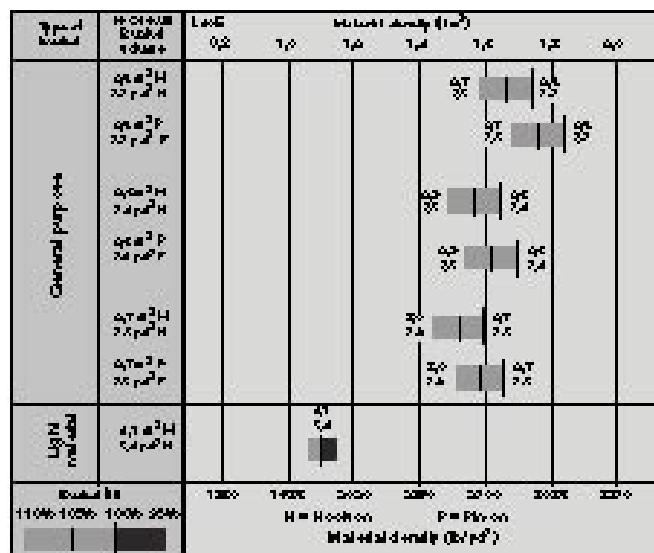
Note: This only applies to Volvo original attachments.

BUCKET SELECTION CHART

The choice of 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 TP Linkage features: • Open bucket design. • Very good roll back in all positions. • Good bucket fill performance. **Example: Sand and gravel.** Fill factor ~ 105%. Density 1,65 t/m³. Result: The 2,7 m³ bucket carries 2,8 m³. For optimum stability always consult the bucket selection chart.

Material	Bucket fill, %		Material density, t/m³	ISO/SAE bucket volume, m³	Actual volume, m³
Earth/Clay	~ 110		~ 1,80	2,5	~ 2,7
			~ 1,70	2,6	~ 2,9
			~ 1,65	2,7	~ 3,0
Sand/Gravel	~ 105		~ 1,80	2,5	~ 2,6
			~ 1,70	2,6	~ 2,7
			~ 1,65	2,7	~ 2,8
Aggregate	~ 100		~ 1,80	2,5	~ 2,5
			~ 1,70	2,6	~ 2,6
			~ 1,65	2,7	~ 2,7
Rock	≤100		~ 1,80	2,2	~ 2,2

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



STANDARD EQUIPMENT

Engine

Three stage air cleaner with ejector and inner filter
Indicator glass for coolant level
Preheating of induction air
Muffler, spark arresting
Fuel filter
Oil trap

Electrical system

24 V, prewired for optional accessories
Alternator, 24 V/55 A
Battery disconnect switch
Fuel gauge
Hour meter
Electric horn
Instrument panel with symbols
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 working lights (2 front and 2 rear)
• Instrument lighting

Contronic,

monitoring system, ECU with log and analysis system

Contronic display
Fuel consumption
Outdoor temperature
Engine shutdown to idle (selectable) for
• High engine coolant temperature
• Low engine oil pressure
• High transmission oil temperature
Start interlock when gear is engaged
Brake test
Test function for warning and indicator lights
Warning and indicator lights for:
• Charging
• Oil pressure engine

- Oil pressure, transmission
- Brake pressure
- Parking brake
- Hydraulic oil level
- Axle oil temperature
- Primary steering
- Secondary steering
- High beams
- Turn signals
- Rotating beacon
- Preheating coil
- Differential lock
- Coolant temperature
- Transmission oil temperature
- Brake charging
- Level warnings:
 - Coolant level
 - Hydraulic oil level
 - Washer fluid level

Drivetrain

Automatic Power Shift with operator-controlled clutch function for transmission cut-out when braking
PWM-control between different gear positions
Forward and reverse switch by lever console
Differentials:
front: 100% hydraulic diff lock
rear: conventional

Brake system

Wet oil circulation cooled disc brakes on all four wheels, outboard mounted
Dual brake circuits, front and rear
Dual service brake pedals
Secondary brake system
Parking brake, el-hydraulic
Brake wear indicator

Cab

ROPS (SAE J1040CC, ISO 3471), FOPS (SAE J231, ISO 3449)
Single key kit door/start
Acoustic inner lining
Ashtray

Cigarette lighter
Lockable door
Cab heating with filter, fresh-air inlet and defroster
Floor mat
Interior lights
Interior rear-view mirror
2 exterior rear-view mirrors
Window right-hand side, openable
Tinted safety glass
Hip retractable seatbelt (SAE J386)
Adjustable lever console
Ergonomically designed operator's seat with adjustable suspension
Storage compartment
Sun visor
Beverage holder
Windshield washers front and rear
Windshield wipers front and rear
Interval function for front and rear windshield wipers
Service platforms with anti-slip surfaces on front and rear fenders
Speedometer

Hydraulic system

Main valve, 2-spool
Pilot valve, 2-spool
Variable displacement axial piston pumps (2) for:
• working hydraulics
• steering system, pilot hydraulics and brakes
• fan motor
Boom lowering system (float)
Boom lever detent, adjustable
Boom kickout, automatic, adjustable
Bucket positioner, automatic with position indicator, adjustable
Hydraulic oil cooler

External equipment

Noise and vibration dampening suspension of cab, engine and transmission
Lifting lugs
Easy-to-open side panels and engine hood
Frame steering, joint lock
Vandalism lock prepared for batteries and engine oil
Towing hitch

OPTIONAL EQUIPMENT

(Standard on certain markets)

Service and maintenance

Tool box
Tool kit
Automatic lubrication
Automatic lubrication of attachment bracket
Refill pump for auto lub system
Wheel nut wrench kit

Engine equipment

Engine block heater
Oil bath pre-cleaner
Turbo air cleaner
Radiators and hydraulic oil cooler, corrosion prot.
Hand-operated throttle
Fuel fill strainer
Coolant filter
Sy-klone pre cleaner

Electrical system

Air filter for alternator
Alternator, 80 A
Attachment working lights
Extra working lights front
Extra working lights rear
Light, license plate
Assymetrical lights for left-hand traffic
Acoustic back-up signal
Rotating beacon, collapsible
Indicator lamps
Reverse light
Working lights, on cab, dual

Cab

Radio with tape recorder
Radio with CD
Installation kit for radio

14 (L90E)

Sunblinds, front and rear windows
Sunblinds, side windows
Sliding window, right
Sliding window, door
Retractable seatbelt, longer and wider than standard
Air conditioning
Ventilation air filter for work in asbestos environment
Operator's seat with low backrest
Operator's seat with low backrest, heated
Operator's seat with high backrest, heated
Operator's seat air suspended with high backrest and electrical heating
Instructor's seat
Armrest (left) for ISRI operator seat
Lunchbox holder
Steering knob
Noise reduction kit
Rear view camera
Adjustable steering wheel
Automatic temp control (ATC)
Corrosion protected condensor

Drivetrain

Diff lock front 100%, limited slip rear
Speed limiter 20 km/h, 30 km/h

Brake system

Audible parking brake alarm

Hydraulic system

Single lever control
Single lever control for 3rd hydraulic function
3rd hydraulic function
3rd-4th hydraulic function
Detent 3rd function
Boom Suspension System
Biodegradable hydraulic fluid
Attachment bracket, cast, visibility optimized
Arctic kit, attachment locking hoses
Arctic kit, pilot hoses and brake accum.
Separate attachment locking

External equipment

Mudguards, full coverage for 650/65 R25
Mudflap kit for mudguards
Logging counterweight

Protective equipment

Guards for front headlights
Guards for taillights
Guards for side windows and rear window
Windshield guard
Bellyguard front and rear
Cover plates, rear frame

Other equipment

Comfort Drive Control, CDC
Secondary steering
Sign, slow moving vehicle
Single acting lifting function
Sign 50 km/h
Noise reduction kit EU
CE-marking

Tires

20.5 R25
650/65 R25

Attachments

Buckets:
• Straight with/without teeth
• Spade nose with/without teeth
• High tipping
• Light materials
Bolt-on and weld-on bucket teeth
Cutting edge in three sections, bolt-on
Bucket spill guard
Fork equipment
Material handling arm
Log grapples



Boom Suspension System (BSS)*

Gas/oil accumulators connected to the lift cylinders effectively absorb shocks, reduce bouncing and rocking that often arise when running over rough ground. Boom Suspension System gives faster cycle times, less material spill and improved operator comfort.



Comfort Drive Control*

Significant reduction of repetitive and tiring steering wheel movements with CDC. Comfortable operation of steering and shifting with user-friendly controls in the left armrest.



Hydraulic function*

The hydraulic system in the L90E is prepared for installation of a third hydraulic function. The separate third hydraulic function with its control lever and additional lines can easily be installed to further increase the loader's flexibility.

L90E can also be equipped with a fourth hydraulic function which is operated with a fourth control lever. This function is necessary when there's a need for a third and fourth hydraulic function at the same time, such as when using a sweeper attachment, foldable snowplow and log grapple with heel kick-out.



Central lubrication*

Volvo's factory-mounted central lubrication system, for automatic lubrication of service points on the machine. This means less time for maintenance and more time for productive work.



Genuine Volvo attachments

Genuine Volvo attachments are designed and manufactured for optimal fit and use of the TP-linkage, which makes the L90E a fast and effective machine in a wide range of applications.

They can also be used with earlier models.

*Optional equipment



Technology on Human Terms

Volvo Construction Equipment is one of the world's leading manufacturers of construction machines, with a product range encompassing wheel loaders, excavators, articulated haulers, motor graders and more.

The tasks they face vary considerably, but they all share one vital feature: technology which helps man to perform better: safely, efficiently and with care of the environment. We refer to it as Technology on Human Terms.

The sheer width of the product range means it is always possible to choose exactly the right machine and attachment for the job. Each machine also comes with the quality, continuity and security which is represented by the Volvo

name. The strength of the service and parts organizations; the security of always having immediate access to leading-edge research and technical development are part of the Volvo name. A machine from Volvo meets the very highest demands in all kinds of jobs, under all conditions, the world over.

Volvo Construction Equipment develops, manufactures and markets construction equipment. We are a Volvo company with production facilities on four continents and a market presence in over 100 countries.

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