VOLVO WHEEL LOADER

L150E

VOLVO

25 tons of pure pleasure

When it comes to construction equipment, it's the bottom line that counts. Your loader has to move material as cheaply and quickly as possible – with minimum impact on machine, operator and environment. That's precisely what the new Volvo L150E is built for. In fact, you'd be hard pressed to find another machine in the 25-ton class that's as much fun to operate – and to own – as this brand new Volvo wheel loader.

The Volvo L150E is a lively machine. The high performance, low emission engine delivers close to maximum power even at low revs. Furthermore, our powerful patented TP-Linkage, with matching buckets and grapples, backed by a wide array of smart solutions, provides the flexibility needed to handle a variety of tasks. Jobs at which the L150E excels include loading trucks, feeding a crusher, earthmoving, and timber handling. Advanced technology helps to make this a singularly swift, versatile and fuel-efficient production machine. In fact, we're convinced you're looking at a champion in the 25-ton class.

More work, less haste

You'll find the new L150E a pleasure to operate. In this respect competing loaders simply can't compete. It's powerful, agile and easy to maneuver. Sitting comfortably in an ergonomically designed seat, you have total control over the machine. Engine and hydraulics respond immediately to your commands. Visibility is panoramic, and the air in the cab is always fresh. Which is why even the longest shifts will feel like a breeze. Both operator and machine get more done with a lot less haste, seven days a week if need be.

A great deal for your investment

Proven reliability, excellent financing, extremely low fuel-consumption and a high trade-in value provide the cornerstones of a sound investment. Add to that outstanding handling and productivity, a market-leading operator environment, quick and simple daily maintenance and modest service requirements. And what have you got? The most cost-efficient loader in its class, delivering unparalleled profitability – both now and in the years to come. The L150E is quite simply a great deal for your money.

Specifications L150E

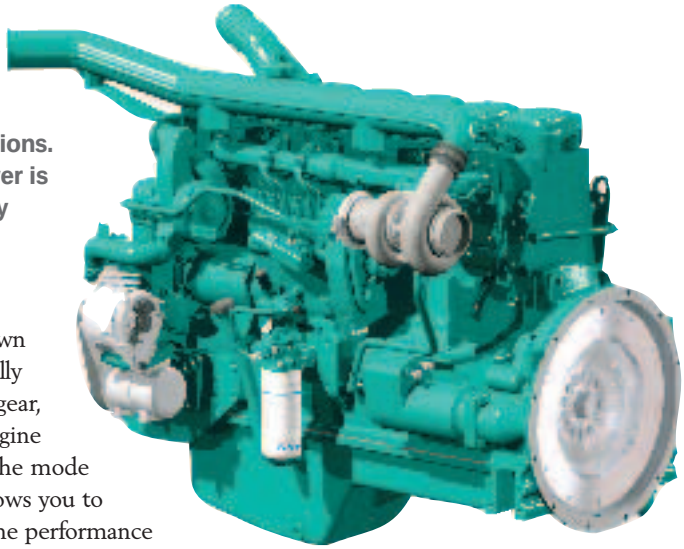
● Engine:	Volvo D10B LA E2	● Buckets:	3,1 m^3 - 12,0 m^3
Max power at	28,3 r/s (1700 r/min)		
SAE J1995 gross	200 kW (272 hp)	● Timber grapples:	1,6 - 3,5 m^2
ISO 9249,			
SAE J1349 net	198 kW (269 hp)	● Operating weight:	23,2 - 25,2 t
● Breakout force:	186,9 kN*	● Tires:	800/65 R29 or 26.5 R25
● Static tipping load:			
at full turn	15 680 kg*		

* Bucket: 3,8 m^3 straight edge w/teeth.
Tires: 26.5 R25, Standard boom


VOLVO

The art of loading as quickly and economically as possible

The Volvo L150E is a highly productive loader. Its powerful, low-rev engine and Automatic Powershift provide immediate response even in the toughest conditions. And the Volvo axles are designed to ensure that the power is there when it's needed. The result is superior productivity and unequaled operating economy.



The electronically controlled Volvo D10B engine offers rapid response and faster cycles

Even at low revs, the 10-liter high performance engine delivers almost maximum torque. The machine responds quickly and forcefully, with excellent rimpull and full hydraulic power, modest fuel consumption and very low emissions. And, thanks to the low r/min, the service life of the engine is extended. All in all, you're looking at unbeatable productivity and economy – both now and in the years ahead.

The L150E gives you revs and speed dependent automatic powershift

The Volvo countershaft transmission offers smooth gearshifting. All the operator has to do is select forward, reverse or kick-down – APS automatically selects the right gear, depending on engine revs, speed and the mode selected. This allows you to maximize machine performance while minimizing fuel consumption – regardless of application.

The Volvo axles keep you on the ground

Volvo's in-house engineered axles and drivetrain are well matched and designed for maximum dependability. The L150E can be equipped with a hydraulically operated front differential lock* and/or a rear Limited Slip differential* for optimum traction in the toughest terrain.

Give yourself a brake

The L150E features Volvo's fully sealed, oil circulation-cooled wet disc brakes, designed for smooth, effective braking – and, of course, a long service life.

The external* axle oil cooler cools the brakes efficiently. Furthermore, the axle oil is filtered, doubling service intervals to 2 000 hours.

Engine

- Volvo D10B, a new turbocharged, air-to-air intercooled low emission engine with electronically controlled fuel injection delivers high torque even at low revs.
- The E-Series' electronically controlled engine provides quicker response, lower fuel consumption and faster work cycles.
- Optimum fuel economy ensures both high output and emission levels low enough to meet the demands of Step 2 emission regulations.
- The electronically controlled hydrostatic fan is only activated when necessary, thus saving fuel.
- The engine filters are easily accessible, simplifying service and maintenance.

Transmission

- Volvo's refined countershaft transmission together with the electronically controlled engine mean excellent rimpull especially on steep gradients.
- In 1981, Volvo launched the world's first wheel loader with automatic transmission.
- Thanks to APS, the operator can select one of four modes for optimum performance and minimum fuel consumption.

Axles

- The Volvo axles are fully integrated with the drivetrain, delivering superior rimpull.

Brakes

- Hydraulic dual-circuit system for enhanced safety.
- Oil circulation cooled wet disc brakes ensure effective braking and a long service life.
- An electronic brake test in Contronic gives you instant access to the status of the brakes.
- A two-stage oil temperature alert provides effective protection of components and a longer service life.
- A brake wear indicator allows you to monitor wear and tear.

* Optional


60 80 90

A smart machine doesn't get worn out in a hurry

TP-Linkage, load-sensing hydraulics, smooth steering and stable operation help make the Volvo L150E a precision performer. No unnecessary energy is wasted pumping excess oil around the hydraulic system. Which ultimately means you can load more material per liter of fuel with the L150E than any competing machine in its class.

Hydraulics with sense

The Volvo L150E features an intelligent, load-sensing hydraulic system. Two variable piston pumps provide the exact flow and pressure required at any given moment, distributing power where and when it's needed. In combination with rapid response, this system facilitates smoother operation, lower fuel consumption, quicker hydraulics and shorter working cycles even at low revs.

TP-Linkage – superior breakout torque throughout the lifting range

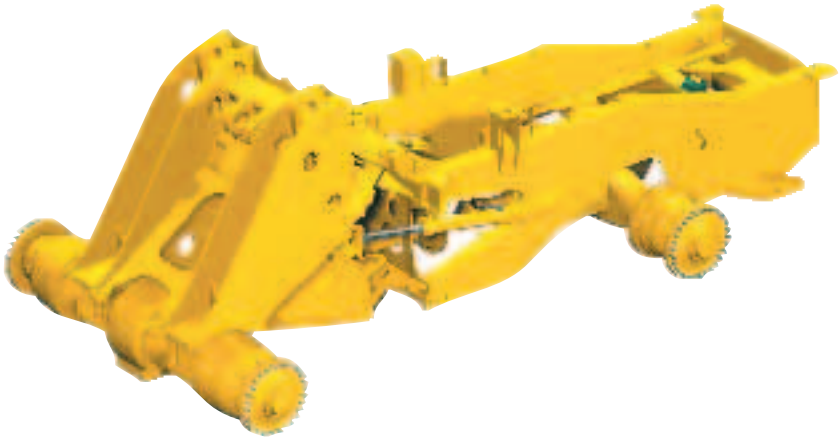
TP-Linkage, Volvo's patented lift-arm system, delivers a high and even breakout torque throughout the lifting range. The system is exceedingly user-friendly. The operator can easily handle heavy materials and maintain full control in all positions. No other lift-arm system can provide such a high, even breakout torque.

Uneven surfaces

Thanks to the compact design and ingenious geometry of TP-Linkage, the bucket is kept in a firm grip close to the front axle, resulting in a stable load and carries work with less spillage, quicker load and carry cycles and more tons moved per hour. An optional Boom Suspension System, featuring gas/oil accumulators, also helps to absorb shocks and smooth out rough roads.

Precise steering and easy maneuverability

Even at low r/min, steering is smooth and responsive. The load-sensing hydrostatic steering system is only activated when the wheel is turned, which means neither fuel nor power is wasted.



TP-Linkage

- Unique patented lift-arm system, which provides two solutions in one: Z-bar linkage and parallel action.
- Clever geometry ensures smooth operation and full control, boosting productivity and handling.

Load-sensing hydraulics

- The load-sensing hydraulic system ensures that hydraulic oil is pumped around the system only where and when it's needed. This means greater efficiency and lower fuel consumption.
- Pilot-operated hydraulics allows precise control of the attachments, making life easier – and safer – for the operator.
- The Boom Suspension System* enhances the machine's stability in all applications, facilitating faster and smoother cycles.

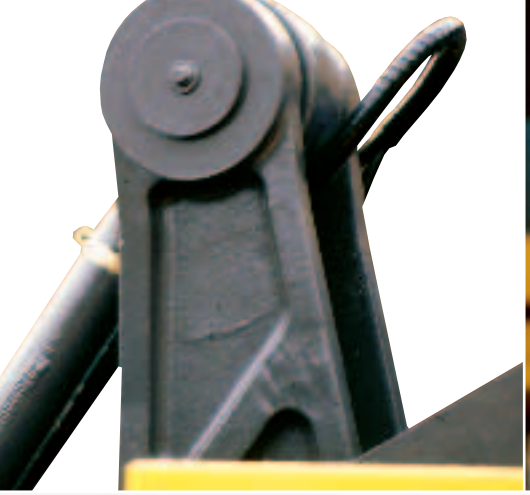
Steering

- Load-sensing steering only uses power when it's needed, thereby saving fuel.
- E-Series loaders feature an accumulator system, providing stable, smooth steering and greater safety.

Frame

- Rugged frame design for secure mounting of components increases the service life of the machine.
- E-Series loaders feature a three-point engine and transmission mounting, decreasing noise and vibrations.
- Volvo's frame joint bearing design is a well-proven concept that's easy to maintain and renowned for its long service life.

* Optional




VOLVO

An alert operator is a productive operator

A comfortable and safe environment makes life easier and more productive for the operator. That's why we've worked hard to make this cab as operator-friendly as possible. In fact, the new Care Cab reinforces Volvo's reputation as a leader in operator environments and cab comfort.

Care Cab.
A clean and comfortable workplace
The right cab climate does wonders for efficiency, keeping operators sharp during those long shifts. In fact, all incoming air is filtered in two stages, making this the cleanest cab on the market. How have we achieved this? Incoming air first passes through a pre-filter, and is then cleaned by repeated circulation through the main filter. Furthermore, Volvo's state-of-the-art air-conditioning* provides a pleasant temperature the year-round, regardless of outdoor conditions.

Comfort and productivity go hand-in-hand
Our wide range of comfortable seats, all of them adjustable, leave you spoilt for choice. What's more, the instrumentation and all key information is right in front of you.

The forward, reverse and kick-down functions are situated both on the lever on the left-hand side of the steering wheel and on the hydraulic console at right. And thanks to CDC (Comfort Drive Control)*, you can steer, change gear (forward/reverse and kick-down) at the flip of a switch in the armrest – an excellent way to combat fatigue and static muscle strain. Furthermore, to avoid monotony, you can shift at any time from lever steering to using the wheel.

Keeping a constant eye on operation and performance
The new Contronic monitoring system allows the operator to keep a constant eye on the machine in real-time. The information display on your control panel provides continuous updates on the machine's functions in a number of different languages, including outdoor temperature, fuel consumption and fluid levels.

No noise to shout about
Thanks to its ingenious rubber mounting system and heavy-duty insulation, the new Care Cab is one of the quietest cabs on the market. So, instead of getting tiresome earfuls, a low noise level ensures that the operator stays sharp throughout the shift.

Care Cab
- Unrivalled environment with the market's best cab filter.
- Pleasant interior with superior finish. Easy to keep clean.
- Adjustable seat, lever and steering wheel* ensure operator comfort and productive shifts.
- Contronic, a superior control and monitoring system designed to increase safety and productivity.
- All service platforms and entry ladders boast improved anti-skid surfaces. Easy access thanks to a tilted ladder.
- Large windscreens and narrow pillars ensure panoramic visibility, thus further increasing safety.
- A new tilting engine hood improves visibility to the rear.
- The visibility-optimized TP-Linkage provides a clear view of the attachments.

* Optional

Rapid service for maximum availability

Few machines have to work in a tougher environment than a wheel loader. And the machine has to keep running – day in, day out – without breaking down. Naturally, should something happen, we offer a wide range of warranties and service solutions specially adapted to the conditions you work in. The ultimate goal is maximum productivity, year after year.

More time for work. That's what we call service-friendly design

Now that you can check your levels electronically, daily service is that much easier. Filters and service points are readily accessible from ground level. The service doors are large, easy-to-open and supported by gas struts. The radiator grille and fan swing out, and the pressure check ports and quick connectors are grouped for quick and easy checks.

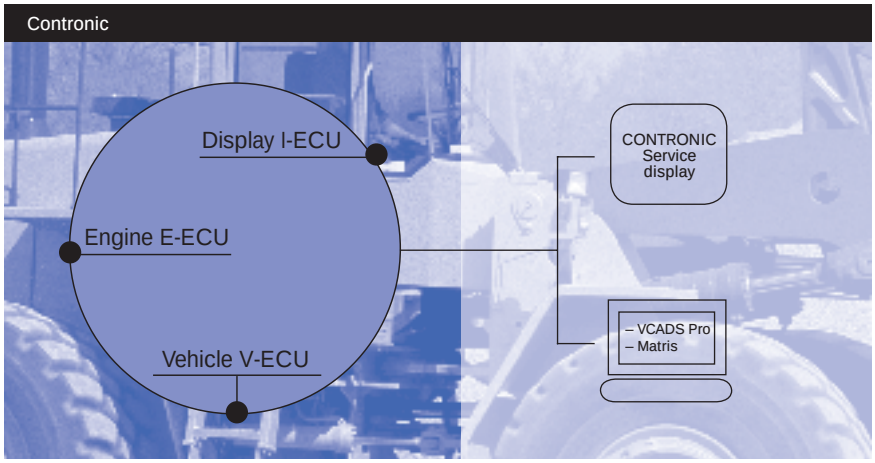
Contronic keeps an eye on everything

The machine's operation and performance are controlled and monitored by Volvo Contronic, a built-in electronic network made up of three computers (ECU). Operating on three levels, the system keeps an eye on the machine's functions in real-time.

Level 1: Should a potential problem occur, Contronic alerts the operator instantly. A service technician can then connect his Contronic service panel to the system, and trace the fault on the spot.

Level 2: All operational data is stored and can be used to analyze the machine's performance and trace its history since the latest service. This data is then presented in the machine tracking system, Matris, providing valuable information for fault tracing and service measures.

Level 3: This allows the machine's functions to be updated to optimize an adjustment to a change in working conditions – via the Contronic service display. Thanks to the new VCADS Pro analysis and programming tool, the engine's functions and performance can also be monitored and adapted to changing conditions.



Contronic (electrical system)

- Computerized power and monitoring system. Dependable and user-friendly for optimum performance.
- Display information in three categories: operational data, warning messages, error messages.
- Equipped with "shutdown to idle" safety function in the event of a problem, thereby minimizing potential damage.

Maintenance and availability

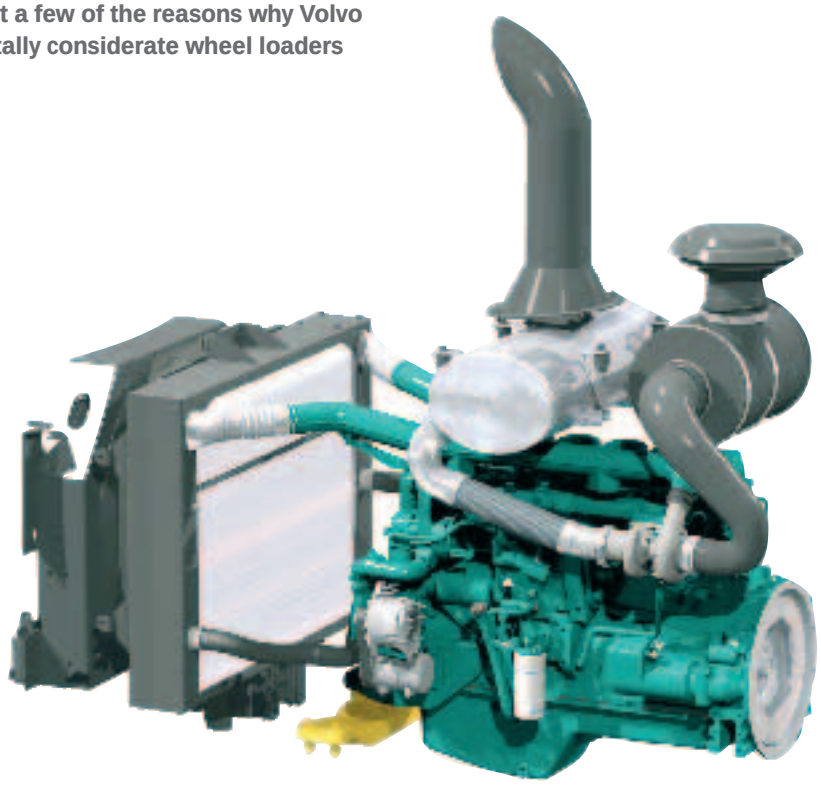
- Electronic level checks of oil and other key fluids, both making it easy for the operator as well as increasing dependability.
- Conveniently placed ventilation filters for transmission, axles, fuel and hydraulic tanks.
- An oil bath filter* more than doubles the service life of the standard filter in tough conditions.
- Volvo's factory fitted automatic lube system* keeps the machine lubricated, increasing availability.
- Readily accessible service points simplify maintenance.
- The lift arm system, with dual bushing seals, facilitates longer service life.
- Besides factory warranties, Volvo also offers extended warranties. These fall under our Component Assurance Program, CAP, and can be tailored to meet your needs.

* Optional


VOLVO

Environmental commitment is a natural part of Volvo

Care for the environment has always been one of Volvo's core values. Indeed, we see our commitment as an integral part of our operation. Not only our plants, but also our manufacturing processes are certified in accordance with ISO 14001. More than 95% of your Volvo L150E is fully recyclable. Fuel consumption is extremely modest, and the engine is low on both emissions and sound. These are but a few of the reasons why Volvo customers get one of the most environmentally considerate wheel loaders on the market.



Low revs mean low emissions and maximum power

The Volvo L150E is not only a winner in day-to-day and long-term operations, but also when it comes to operating economy and environmental consideration. The new, 10-liter turbo diesel engine delivers maximum torque already at low revs, which means low fuel consumption and extremely low emissions.

Comfortable and quiet operator environment

The low-rev engine and transmission's triple mounting minimizes vibrations. Both engine compartment and cab feature excellent sound insulation, which means operator and surroundings are spared needless noise.

More than 95% recyclable

The L150E is almost fully recyclable. Large components such as engine, transmission and hydraulics are re-engineered and re-used in our Parts Exchange program. Cast iron, steel and other metals are recyclable, as are glass, plastics and other synthetic materials. Biologically degradable oil* can be used in the hydraulic system. The coolant in the air-conditioner is CFC-free. Even the oil particles from the crankshaft ventilation are separated and redirected to the engine. All to ensure that the machine is as productive and economical as possible, while minimizing the impact on the environment.

The environment

- The electronically controlled Volvo diesel engine is specially designed for high performance and low emissions.
- The low r/min high performance engine meets all Step 2 emission requirements in Europe and the USA.
- Low external and internal noise levels.
- The L150E is more than 95% recyclable.
- Every Volvo loader is environmentally classified.
- All factories are certified in accordance with ISO 14001.

* Optional


L150E


VOLVO
L150E

The Volvo L150E in detail

Engine

Engine: 10 liter, 6-cylinder straight turbo-charged diesel engine with electronically controlled in-line diesel pump and conventional injectors. The engine is of heavy-duty type with wet 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 D10B LA E2
Max power at	28,3 r/s (1700 r/min)
SAE J1995 gross	200 kW (272 hp)
ISO 9249, SAE J1349	198 kW (269 hp)
Max torque at	20,0 r/s (1200 r/min)
SAE J1995 gross	1380 Nm
ISO 9249, SAE J1349	1370 Nm
Economic working range	1100–1600 r/min
Displacement	9,6 l

Drivetrain

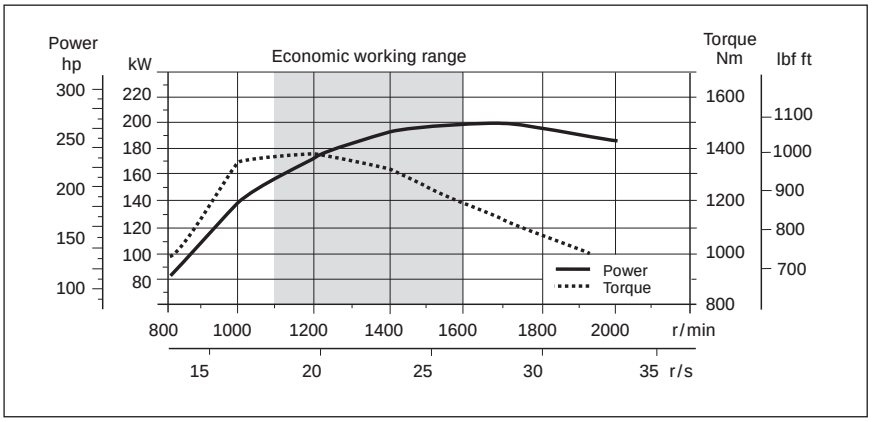
Torque converter: single-stage. Transmission: Volvo Countershaft-type transmission with single lever control. Fast and smooth shifting of gears between forward and reverse with PWM-valves (Pulse Width Modulated). Gearshifting system: Volvo Automatic Power Shift (APS) with mode selector. Axles: Volvo,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

Transmission	Volvo HTE 210
Torque multiplication	2,14:1
Maximum speed, forward/reverse	
1	6,8 km/h
2	2,6 km/h
3	25,1 km/h
4	37,3 km/h
Measured with tires	26.5 R25 L3
Front axle/rear axle	Volvo/AWB 40/40
Rear axle oscillation	±15°
Ground clearance at 15° oscillation	610 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 and SAE J1473.

Number of brake discs per wheel front/rear	1/1
Accumulators	2x1,0 and 1x0,5 l
Accumulator for parking brake	1x0,5 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	90 mm
Piston rod diameter	50 mm
Stroke	423 mm
Relief pressure	21 MPa
Maximum flow	190 l/min
Maximum articulation	±37°

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, SAE J231). 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 69 dB (A)
External sound level	
according to ISO 6395	LwA 107 dB (A)
(Directive 2000/14/EC)	
Ventilation	9 m^3/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; rollback, 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.

Relief pressure maximum, pump 1	25,0 MPa
Flow	180 l/min
at	10 MPa
and engine speed	31,7 r/s (1900 r/min)
Relief pressure, pump 2	26,0 MPa
Flow	180 l/min
at	10 MPa
and engine speed	31,7 r/s (1900 r/min)
Pilot system	
Relief pressure	3,5 MPa
Cycle times	
Raise*	5,9 s
Tilt*	2,0 s
Lower, empty	3,7 s
Total cycle time	11,6 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	160 mm
Piston rod diameter	90 mm
Stroke	784 mm
Tilt cylinder	1
Cylinder bore	230 mm
Piston rod diameter	110 mm
Stroke	452 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, overspeeding in engaged gear, brake charging.

Voltage	24 V
Batteries	2x12 V
Battery capacity	2x140 Ah
Cold cranking capacity, approx	1050 A
Reserve capacity, approx	350 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	370 l
Engine coolant	47 l
Hydraulic oil tank	156 l
Transmission oil	45 l
Engine oil	39,5 l
Axles front/rear	45/55 l

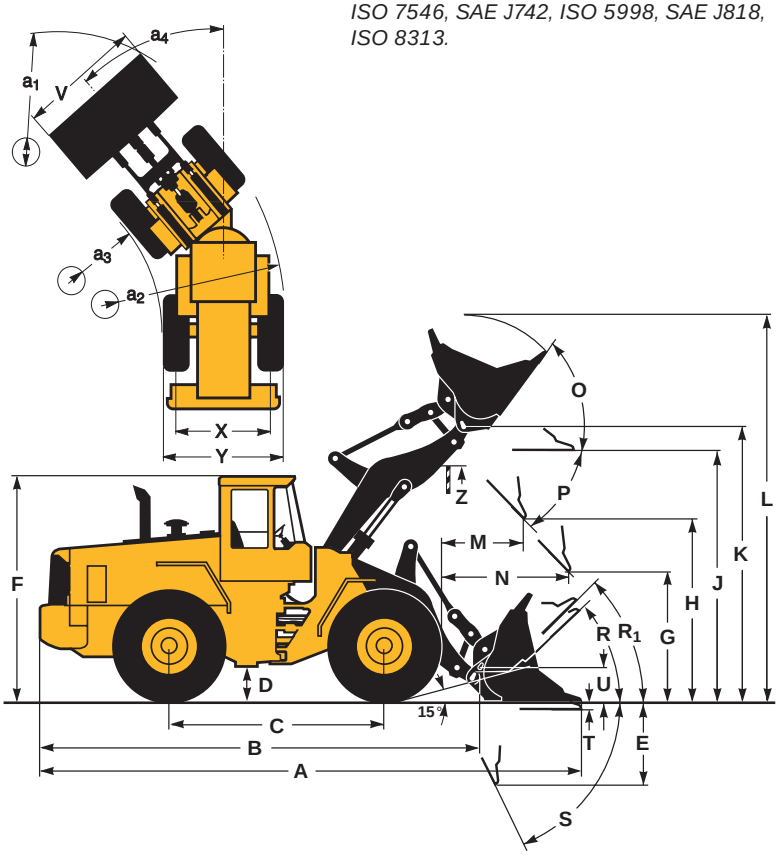
Specifications

Tires: 26.5 R25 L3

	Standard boom	Long boom
B	7 030 mm	7 550 mm
C	3 550 mm	———
D	450 mm	———
F	3 580 mm	———
G	2 130 mm	———
J	3 960 mm	4 530 mm
K	4 350 mm	4 920 mm
O	59 °	———
P_{max}	49 °	49 °
R	44 °	47 °
R_1*	48 °	———
S	66 °	61 °
T	54 mm	———
U	520 mm	———
X	2 280 mm	———
Y	2 950 mm	———
Z	3 500 mm	3 970 mm
a_2	6 780 mm	———
a_3	3 380 mm	———
a_4	±37 °	———

* Carry position SAE

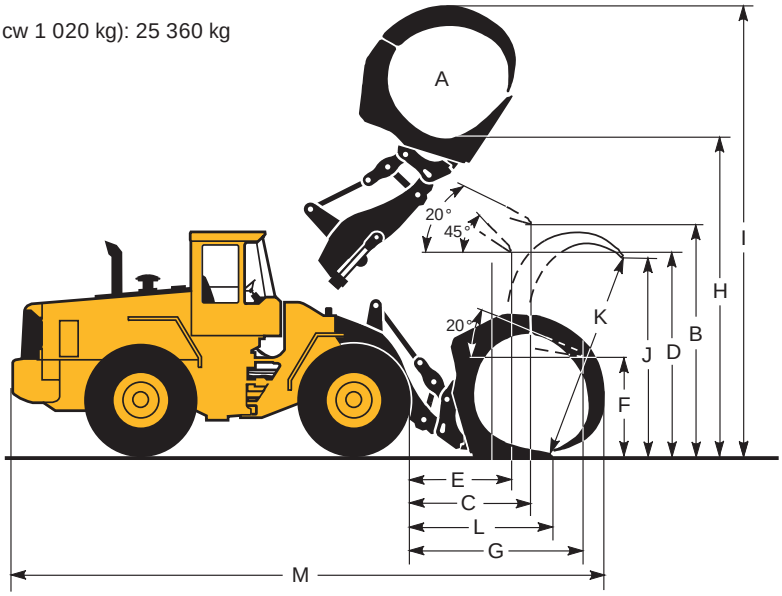
Where applicable, specifications and dimensions are in accordance with ISO 7131, SAE J732, ISO 7546, SAE J742, ISO 5998, SAE J818, ISO 8313.



Tires: 800/65 R29

A	3,1	m^2
B	3 670	mm
C	2 090	mm
D	2 970	mm
E	1 630	mm
F	1 630	mm
G	2 910	mm
H	4 990	mm
I	7 270	mm
J	3 080	mm
K	3 340	mm
L	2 290	mm
M	9 690	mm

Operating weight (incl. logging cw 1 020 kg): 25 360 kg
Operating load: 7 700 kg



SUPPLEMENTAL OPERATING DATA

Tires 26.5 R25 L3		Standard boom		Long boom	
		26.5 R25 L5	800/65 R29	26.5 R25 L5	800/65 R29
Width over tires	mm	+30	+110	+30	+110
Ground clearance	mm	+30	+25	+30	+25
Tipping load, full turn	kg	+770	+630	+650	+550
Operating weight	kg	+1050	+920	+1050	+920

Tires 26.5 R25 L3	GENERAL PURPOSE					ROCK*		LIGHT MTRL	LONG BOOM
	Teeth	Teeth & Segments	Teeth	Bolt-on edges	Teeth	Teeth & Segments	Teeth & Segments	Bolt-on edges	
Volume, heaped ISO/SAE m^3	3,8	4,0	4,3	4,0	4,2	3,5	3,8	6,8	———
Volume at 110% fill factor m^3	4,2	4,4	4,7	4,4	4,6	———	———	7,5	———
Static tipping load, straight kg	17 820	17 400	17 380	16 730	16 740	17 170	16 900	16 530	–3 500
at 35° turn kg	15 890	15 490	15 450	14 850	14 840	15 220	14 990	14 650	–3 210
at full turn kg	15 680	15 270	15 230	14 640	14 630	14 990	14 770	14 440	–3 170
Breakout force kN	186,9	177,4	176,1	172,1	172,7	171,3	187,0	133,2	———
A mm	8 790	8 820	8 890	8 680	8 900	8 910	8 790	9 140	+520
E mm	1 390	1 410	1 470	1 290	1 490	1 500	1 390	1 700	+6
H***) mm	2 910	2 890	2 850	2 990	2 850	2 830	2 900	2 630	+570
L mm	5 940	5 940	6 050	5 940	6 050	5 950	5 910	6 100	+570
M***) mm	1 360	1 350	1 430	1 270	1 470	1 440	1 340	1 540	–32
N mm	1 900	1 880	1 940	1 830	1 950	1 940	1 870	1 930	+450
V mm	3 000	3 000	3 000	3 200	3 230	3 230	3 230	3 200	———
a_1 clearance circle mm	14 540	14 540	14 580	14 670	14 810	14 810	14 750	14 890	———
Operating weight kg	23 020	23 210	23 340	23 510	23 670	23 690	23 630	23 660	+300

*) with L5 tires

***) Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge (acc. SAE) + approx. 200 mm. Measured at 45° dump angle. (Spade nose buckets at 42°.)

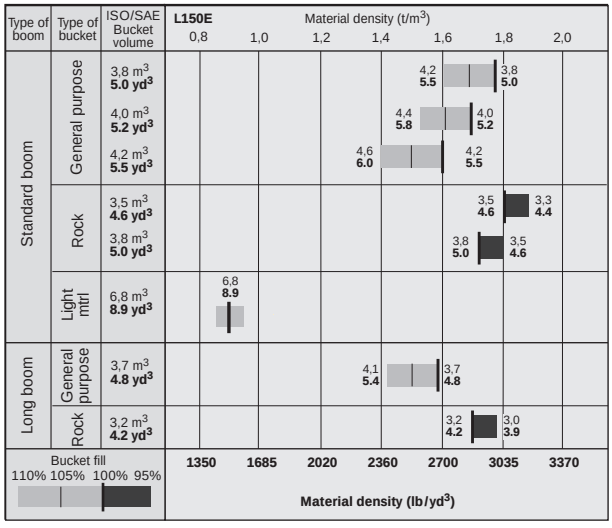
Note: This only applies to Volvo original attachments.

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. The below example and table are intended for Standard boom. Example: Sand and gravel. Fill factor ~ 105%. Density 1,65 t/m^3. Result: The 4,0 m^3 bucket carries 4,2 m^3. For optimum stability always consult the bucket selection chart.

Material	Bucket fill, %	Material density, t/m^3	ISO/SAE bucket volume, m^3	Actual volume, m^3
Earth/Clay	~ 110	~ 1,65	3,8	~ 4,2
		~ 1,60	4,0	~ 4,4
		~ 1,50	4,2	~ 4,6
Sand/Gravel	~ 105	~ 1,70	3,8	~ 4,0
		~ 1,65	4,0	~ 4,2
		~ 1,60	4,2	~ 4,4
Aggregate	~ 100	~ 1,80	3,8	~ 3,8
		~ 1,75	4,0	~ 4,0
		~ 1,65	4,2	~ 4,2
Rock	100	~ 1,70	3,5	~ 3,5

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
Two fuel filters
Coolant 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 in case of malfunction indication:
- 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:
- 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:
- Engine oil level
- Coolant level
- Transmission oil level
- Hydraulic oil level
- Washer fluid level

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

Brake system
Wet oil circulation cooled disc brakes on all four wheels
Dual brake circuits
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
Openable window right-hand side
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 vane pump
Variable displacement axial piston pumps (3) for:
- working hydraulics
- steering system, pilot hydraulics and brakes
- fan motor

Boom lowering system
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 hood
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 230 V
Fan air intake protection
Oil bath pre-cleaner
Cyclone pre-cleaner
Turbo air cleaner
Fuel filter, extra large with water trap
Radiator, corrosion protected
Hand-operated throttle
Fuel fill strainer
Reversible fan

Electrical system
Air filter for alternator
Alternator, 80 A
Attachment working lights
Dual working lights front, on cab
Extra working lights front
Extra working lights rear
Automatic reverse light
Light, licence plate
Assymetrical lights for left-hand traffic
Warning beacon, flashing strobe light
Rotating beacon, collapsible
Side marker lamps
Acoustic back-up signal

Cab
Radio with tape recorder
Radio with CD-player
Installation kit for radio, 12 V
Sunblinds, front and rear windows
Sunblinds, side windows
Sliding window, right
Sliding window, door
Retractable hipbelt, longer and wider than standard
Air conditioning with corrosion prot. condenser
Air conditioning with corrosion prot. condenser and automatic temp. control (ATC)
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
Steering knob
Noise reduction kit
Rear view camera
Adjustable steering wheel
Heated rear view mirrors
Cab ladder, rubber suspended
Cab mounting, viscouse mounting

Drivetrain
Diff lock front 100%
Diff lock front 100%, limited slip rear
Speed limiter 20 km/h, 30 km/h
Wheel/axle seal guards

Brake system
Oil cooler for front and rear axle
Oil cooler for front and rear axle in comb. with reversible fan

Hydraulic system
Single lever control
Single lever control for 3rd hydraulic function
3rd hydraulic function
3rd hydraulic function, long boom
3rd-4th hydraulic function
Boom Suspension System
Biodegradable hydraulic fluid
Attachment bracket
Arctic kit, attachment locking hoses and 3rd hydraulic function
Arctic kit, pilot hoses and brake accum. incl. hydraulic oil
Separate attachment locking, standard boom
Separate attachment locking, long boom

External equipment
Long boom
Mudguards widener
Mudguards, fixed front and swing out rear
Deleted front mudguards
Logging counterweight

Protective equipment
Guards for front headlights
Guards for taillights
Guards for side windows and rear window
Guards for radiator grill
Windshield guard
Bellyguard front
Bellyguard rear
Bellyguard, oil pan
Cover plate, heavy-duty, front frame
Guards for steer cylinder
Guards for boom cylinder hose and tube

Other equipment
Comfort Drive Control, CDC
Secondary steering
Sign, slow moving vehicle

Tires
800/65 R29
26.5 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)*

BSS utilizes gas/oil accumulators connected to the lift cylinders to absorb shocks and smooth out rough roads for faster cycle times and increased operator comfort. This Boom Suspension System provides quicker cycle times, less spillage and enhances operator comfort.

Automatic Lubrication System*

Our factory fitted Automatic Lubrication System takes care of greasing while the machine is in operation. This means less downtime for scheduled maintenance and more time for productive work.

Comfort Drive Control (CDC)*

Monotonous steering movements are decreased drastically thanks to CDC. The operator can shift and steer easily with the aid of controls mounted on the left armrest of the seat.

3rd & 4th hydraulic functions

The hydraulic system of the L150E can be fitted with a third hydraulic function. This separate function, including lever and cables, is readily installed and will further increase the machine's flexibility.

What's more, the L150E can be equipped with a fourth hydraulic function essential for applications employing timber forks with a clamping tine.

* Optional

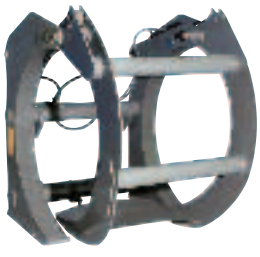
Volvo's Genuine Attachments

Volvo's Genuine Attachments are designed to match TP-Linkage, making the L150E quick and efficient in a wide range of applications. Can also be used with older models of the L150 and L180.

Standard bucket with edge savers

Standard bucket with teeth

Spade nose rock bucket with teeth



Timber grapple/Sorting grapple

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.

For more information please visit our website:
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