

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 quickly as possible – with less cost, and 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 (55,500 lb) 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, earth-moving and timber handling. Advanced technology helps to make this a singularly swift, versatile and fuel-efficient production machine. In fact, we're con-

vinced you're looking at a champion in the 25-ton (55,500 lb) class.

Higher productivity, greater efficiency

You'll find the new L150E is really a pleasure to operate. In this respect, competitive 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 can produce more, three shifts a day.

A great deal for your investment

Proven reliability, excellent financing, extremely low fuel consumption and a high trade-in value provide the basis for a sound investment. Add to the outstanding handling ability and productivity, a market-leading operator environment, quick and simple daily maintenance and easy service requirements, and the result is 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
● Max power at SAE J1995 gross ISO 9249, SAE J1349 net	26,7 r/s (1600 rpm) 200 kW (272 hp) 198 kW (269 hp)
● Breakout force:	170,7 kN* (38,370 lbf)
● Static tipping load: at full turn	15 320 kg* (33,780 lb)

● Buckets:	3,1 m ³ - 12,0 m ³ (4.1 - 15.7 yd ³)
● Timber grapples:	1,6 - 3,5 m ² (17.2 - 37.7 ft ²)
● Operating weight:	23,2 - 25,2 t (51,150 - 55,560 lb)
● Tires:	800/65 R29 or 26.5 R25

* Bucket: 4,0 m³ (5.2 yd³) straight with bolt-on edges
Tires: 26.5 R25, standard boom



The art of loading — quick and cost effective

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 with low rpm, 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 features a hydraulically operated front differential lock and can also be equipped with a rear limited slip* differential for optimum traction even in the toughest terrain.

Give yourself a brake

The L150E features Volvo's fully sealed, self-adjustable oil circulation-cooled wet disc brakes, designed for



smooth, effective braking – and 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 activated only 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



A smart machine has a long, long life

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. This means you can load more material per gallon of fuel with the L150E than any competitive machine in its class.

Hydraulics with sense

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, (faster) working cycles even at low revs.

TP Linkage – superior breakout torque throughout the lifting range

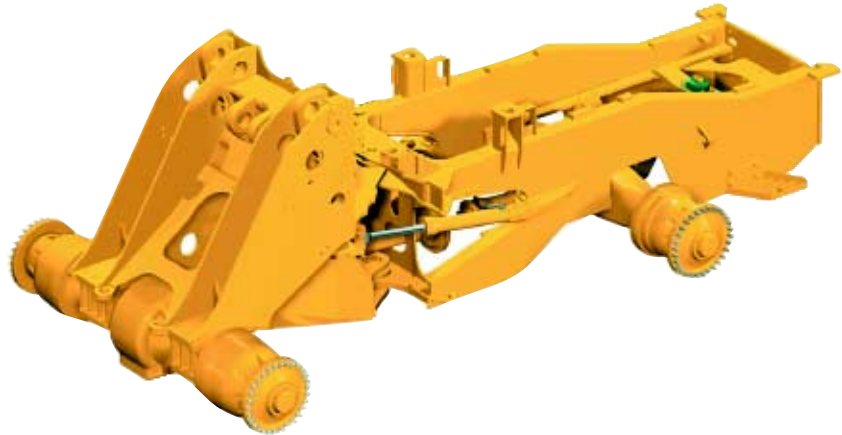
TP Linkage, Volvo's patented lift-arm system, delivers a high and even breakout torque throughout the lifting range. The system is exceedingly user-friendly. The operator can easily handle heavy materials and maintain full control in all positions. No other lift-arm system can provide such a high, even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

Uneven surfaces

With 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 rpm, steering is smooth and responsive. The load-sensing hydrostatic steering system is activated only 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 allow 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.

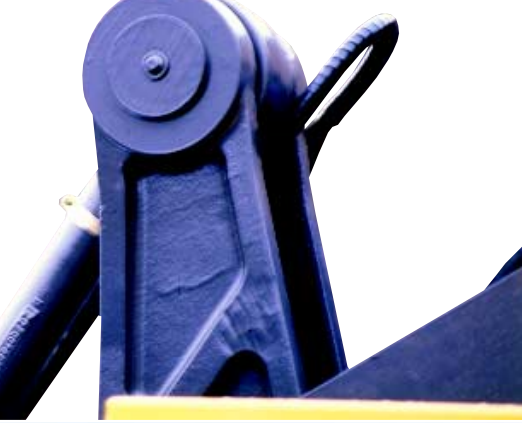
Steering

- 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 triple 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



An alert, comfortable 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.

– an excellent way to combat fatigue and static muscle strain. Furthermore, 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 the control panel provides continuous updates, in a number of different languages, on the machine's functions including outdoor temperature, fuel consumption and fluid levels.

Low noise level

An ingenious rubber mounting system and heavy-duty insulation make the new Care Cab one of the quietest cabs on the market. A low noise level adds to the comfort of the operator.

Care Cab

A clean and comfortable workplace

The right cab climate does wonders for efficiency, keeping operators alert 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 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 spoiled 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 gears (forward/reverse and kick-down) at the flip of a switch in the armrest

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 have improved anti-skid surfaces. A tilted ladder provides easy access.
- 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.





Fast 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. But, should that happen, we offer a wide range of warranty and service solutions specially adapted to the conditions you work in. The ultimate goal is maximum productivity, year after year.

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

Now that you can check your levels electronically, daily service is 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.

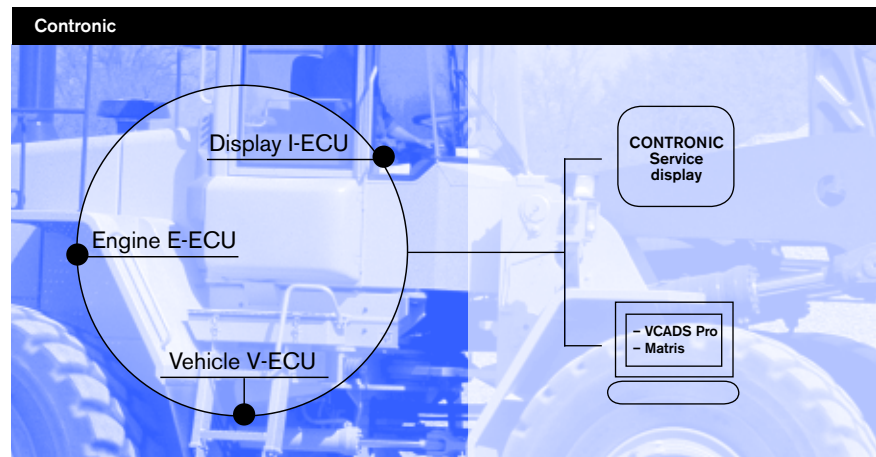
Contronic keeps an eye on everything

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 the 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 changes in working conditions – via the Contronic service display. The new VCADS Pro analysis and programming tool can monitor the engine's functions and performance and adapt to changing conditions.



Contronic (electrical system)

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

Maintenance and availability

- Electronic level checks of oil and other key fluids makes it easy for the operator, as well as increases 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



Environmental commitment is a natural for 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

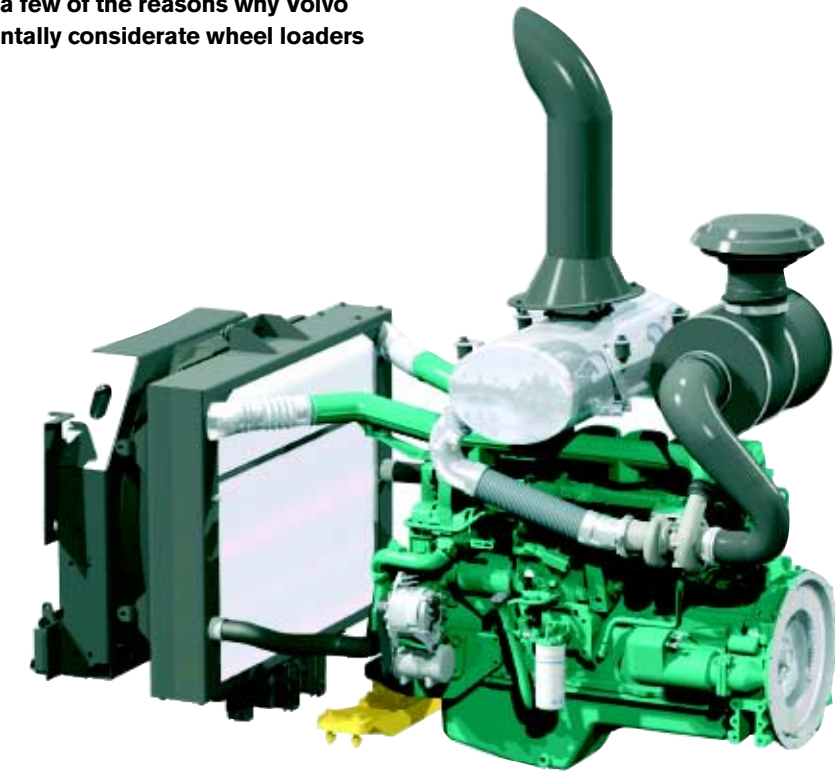
The Volvo L150E is not only a winner in day-to-day and long-term operations, but also when it comes to operating economy and environmental consideration. The new, 10-liter turbo diesel engine delivers maximum torque already at low revs, which means low fuel consumption and extremely low emissions.

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 rpm, 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



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..... 26,7 r/s (1600 rpm)
 SAE J1995 gross..... 200 kW (272 hp)
 ISO 9249, SAE J1349..... 198 kW (269 hp)
 Max torque at 20,0 r/s (1200 rpm)
 SAE J1995 gross..... 1380 Nm (1018 lbf ft)
 ISO 9249, SAE J1349..... 1370 Nm (1010 lbf ft)
 Economic working range..... 1100–1600 rpm
 Displacement 9,6 l (586 in³)

Drivetrain

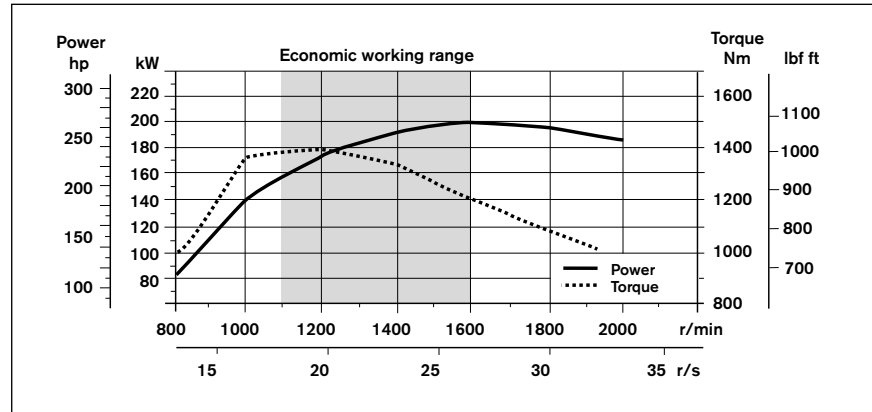
Torque converter: single-stage. Transmission: Volvo Countershaft-type transmission with single lever control. Fast and smooth shifting of gears between forward and reverse with PWM-valves (Pulse Width Modulated). Gearshifting system: Volvo Automatic Power Shift (APS) with mode selector. Axles: Volvo 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 210
 Torque multiplication 2,14:1
 Maximum speed, forward/reverse
 1 6,8 km/h (4.2 mph)
 2 12,6 km/h (7.8 mph)
 3 25,1 km/h (15.6 mph)
 4 37,3 km/h (23.2 mph)
 Measured with tires 26.5 R25 L3
 Front axle/rear axle..... Volvo/AWB 40/40
 Rear axle oscillation ±15°
 Ground clearance at 15° osc..... 610 mm (24.0 in)

Brake system

Service brake: Volvo dual-circuit system with nitrogen-charged accumulators. Out-board 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 (2x0.26 US gal) and (1x0.13 US gal)
 Accumulator for parking brake..... 1x0,5 l (1x0.13 US gal)



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..... 100 mm (3.94 in)
 Piston rod diameter 50 mm (1.97 in)
 Stroke 423 mm (16.6 in)
 Relief pressure..... 21 MPa (3046 psi)
 Maximum flow 190 l/min (50.2 US gpm)
 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: Seat with adjustable suspension and retractable seat belt. The seat is mounted on a bracket on the rear cab wall. The forces from the retractable seat belt 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 m³/min (318 ft³)
 Heating capacity 11 kW (37,500 Btu/h)
 Air-conditioning (optional)..... 8 kW (27,300 Btu/h)

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.

Relief pressure max, pump..... 125,0 MPa (3625 psi)
 Flow..... 180 l/min (47.6 US gpm)
 at 10 MPa (1450 psi) and engine speed 31,7 r/s (1900 rpm)
 Relief pressure, pump 2 26,0 MPa (3771 psi)
 Flow..... 180 l/min (47.6 US gpm)
 at 10 MPa (1450 psi) and engine speed 31,7 r/s (1900 rpm)
 Pilot system
 Relief pressure..... 3,5 MPa (508 psi)
 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 (6.3 in)
 Piston rod diameter 90 mm (3.5 in)
 Stroke 784 mm (30.9 in)
 Tilt cylinder..... 1
 Cylinder bore..... 230 mm (9.0 in)
 Piston rod diameter 110 mm (4.3 in)
 Stroke 452 mm (17.8 in)



Electrical system

Central warning system: 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, approx350 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 (97.7 US gal)
 Engine coolant..... 47 l (12.4 US gal)
 Hydraulic oil tank..... 156 l (41.2 US gal)
 Transmission oil 45 l (11.9 US gal)
 Engine oil 39,5 l (10.4 US gal)
 Axles front/rear 45/55 l (11.9/14.5 US gal)

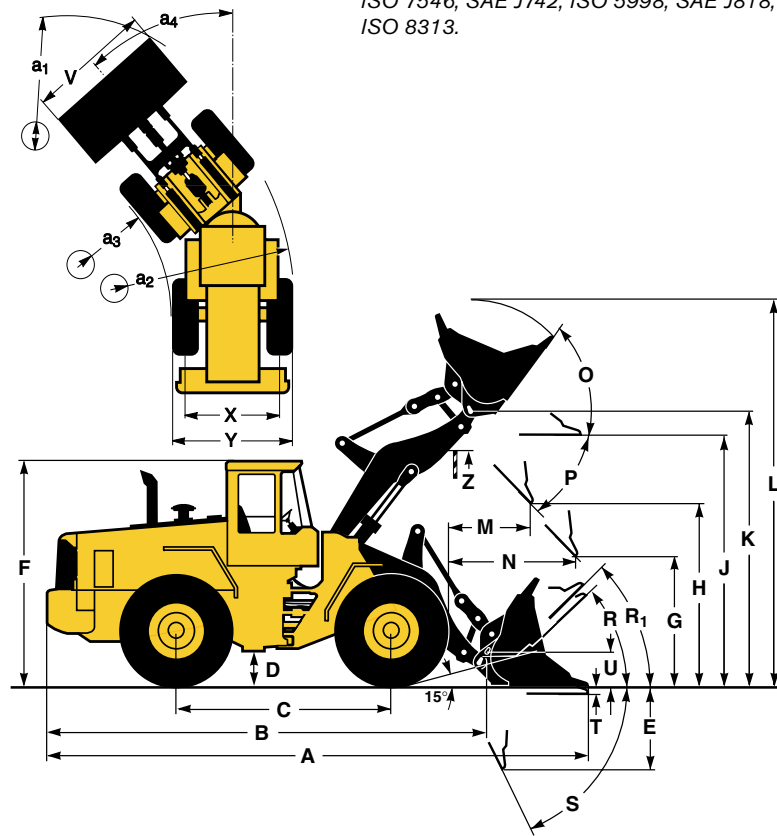
Specifications

Tires: 26.5 R25 L3

	Standard boom	Long boom
B	7 050 mm 23'2"	7 570 mm 24'10"
C	3 550 mm 11'8"	—
D	460 mm 1'6"	—
F	3 580 mm 11'9"	—
G	2 130 mm 7'0"	—
J	3 940 mm 12'11"	4 510 mm 14'10"
K	4 350 mm 14'3"	4 910 mm 16'1"
O	59 °	—
P _{max}	49 °	49 °
R	45 °	48 °
R ₁ *	48 °	—
S	66 °	61 °
T	78 mm 3'1"	—
U	520 mm 1'9"	—
X	2 280 mm 7'6"	—
Y	2 950 mm 9'8"	—
Z	3 510 mm 11'6"	3 970 mm 13'0"
a ₂	6 780 mm 22'3"	—
a ₃	3 830 mm 12'7"	—
a ₄	±37 °	—

* Carry position SAE

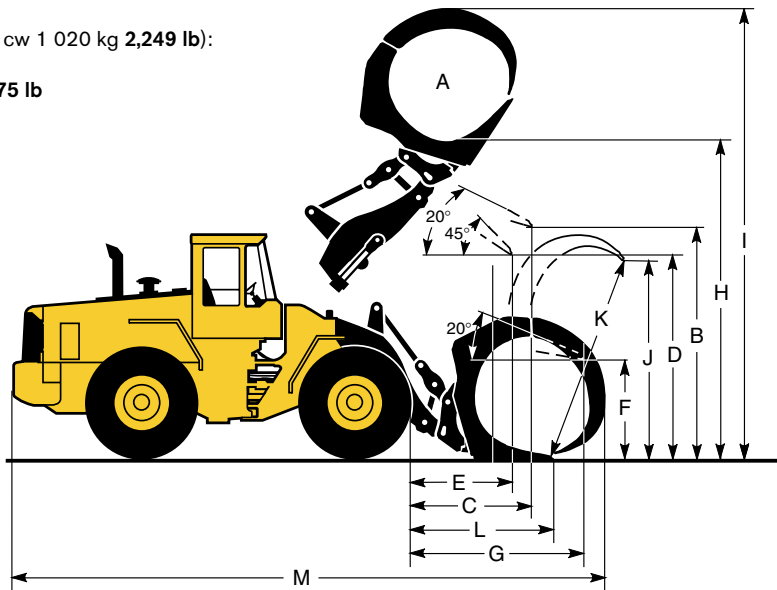
Where applicable, specifications and dimensions are in accordance with ISO 7131, SAE J732, ISO 7546, SAE J742, ISO 5998, SAE J818, ISO 8313.



Tires: 800/65 R29










A	3,1 m ²	33.3 ft ²
B	3 670 mm	12'0"
C	2 090 mm	6'10"
D	2 970 mm	9'9"
E	1 630 mm	5'4"
F	1 630 mm	5'4"
G	2 910 mm	9'7"
H	4 990 mm	16'4"
I	7 270 mm	23'10"
J	3 080 mm	10'1"
K	3 340 mm	10'11"
L	2 290 mm	7'6"
M	9 690 mm	34'9"

Operating weight (incl. logging cw 1 020 kg 2,249 lb):
25 360 kg 55,908 lb
Operating load: 7 700 kg 16,975 lb



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			
Y Width over tires	mm	in	+30	+1.2	+110	+4.3	+30	+1.2	+110	+4.3
D Ground clearance	mm	in	+30	+1.2	+25	+1.0	+30	+1.2	+25	+1.0
Tipping load, full turn	kg	lb	+770	+1697	+630	+1389	+650	+1433	+550	+1212
Operating weight	kg	lb	+1050	+2315	+920	+2029	+1050	+2315	+920	+2029

Tires 26.5 R25 L3	GENERAL PURPOSE				ROCK*		LIGHT MTRL	LONG BOOM	
									
	Bolt-on Edges	Bolt-on Edges	Bolt-on Edges	Bolt-on Edges	Teeth & Segments	Teeth & Segments	Bolt-on Edges	Bolt-on Edges	Bolt-on Edges
Volume, heaped ISO/SAE	m ³ 4,0	4,0	4,0	4,0	3,8	3,5	6,8	3,7	5,7
	yd ³ 5.2	5.2	5.2	5.2	5.0	4.6	8.9	4.8	7.5
Volume at 110% fill factor	m ³ 4,4	4,4	4,4	4,4	4,2	3,9	7,5	4,1	6,3
	yd ³ 5.8	5.8	5.8	5.8	5.5	5.0	9.8	5.3	8.2
Static tipping load, straight	kg 17 440	16 760	17 410	16 730	17 960	18 230	16 530	14 060	13 420
	lb 38,460	36,960	38,400	36,890	39,600	40,200	36,440	31,010	29,600
at 35° turn	kg 15 540	14 890	15 500	14 850	15 970	16 210	14 650	12 440	11 820
	lb 34,260	32,830	34,180	32,740	35,220	35,740	32,290	27,420	26,060
at full turn	kg 15 320	14 680	15 280	14 640	15 750	15 980	14 430	12 250	11 640
	lb 33,780	32,360	33,690	32,270	34,720	35,230	31,820	27,020	25,660
Breakout force	kN 170,7	160,6	176,1	165,5	179,2	164,7	128,1	190,8	147,1
	lbf 38,370	36,110	39,600	37,210	40,300	37,030	28,810	42,910	33,080
A	mm 8 640	8 730	8 590	8 680	8 730	8 870	9 140	9 060	9 470
	ft in 28'4"	28'8"	28'2"	28'6"	28'8"	29'1"	30'0"	29'9"	31'1"
E	mm 1 260	1 340	1 210	1 290	1 330	1 450	1 700	1 190	1 540
	ft in 4'1"	4'5"	4'0"	4'3"	4'4"	4'9"	5'7"	3'11"	5'1"
H***)	mm 3 000	2 960	3 040	2 990	2 960	2 870	2 630	3 640	3 320
	ft in 9'10"	9'9"	10'0"	9'10"	9'8"	9'5"	8'8"	11'11"	10'11"
L	mm 5 940	5 990	5 890	5 940	5 940	5 980	6 100	6 390	6 490
	ft in 19'6"	19'8"	19'4"	19'6"	19'6"	19'8"	20'0"	21'0"	21'4"
M***)	mm 1 220	1 310	1 190	1 270	1 280	1 380	1 540	1 140	1 410
	ft in 4'0"	4'3"	3'11"	4'2"	4'2"	4'6"	5'1"	3'9"	4'7"
N	mm 1 810	1 850	1 790	1 830	1 850	1 900	1 930	2 210	2 340
	ft in 5'11"	6'1"	5'10"	6'0"	6'1"	6'3"	6'4"	7'3"	7'8"
V	mm 3 000	3 000	3 200	3 200	3 230	3 230	3 200	3 200	3 200
	ft in 9'10"	9'10"	10'6"	10'6"	10'7"	10'7"	10'6"	10'6"	10'6"
a ₁ clearance circle	mm 14 460	14 500	14 630	14 670	14 730	14 790	14 890	14 950	15 150
	ft in 47'5"	47'7"	48'0"	48'1"	48'4"	48'6"	48'10"	49'0"	49'8"
Operating weight	kg 23 170	23 490	23 190	23 510	24 540	24 600	23 660	23 400	23 780
	lb 51,100	51,800	51,130	51,840	54,110	54,250	52,170	51,610	52,430






*) 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 (8"). Measured at 45° dump angle. (Spade nose buckets at 42°).

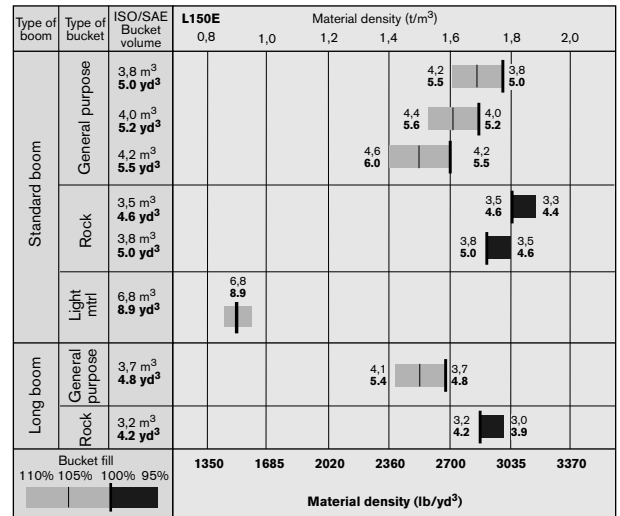
Note: This only applies to Volvo original attachments.

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 2780 lb/yd³. Result: The 5.2 yd³ bucket carries 5.5 yd³. For optimum stability always consult the bucket selection chart.**

Material	Bucket fill, %		Material density,		ISO/SAE bucket volume,		Actual volume,	
			t/m ³	lb/yd ³	m ³	yd ³	m ³	yd ³
Earth/Clay	~ 110		~ 1,65	~ 2780	3,8	5,0	~ 4,2	~ 5,5
			~ 1,60	~ 2700	4,0	5,2	~ 4,4	~ 5,8
			~ 1,50	~ 2530	4,2	5,5	~ 4,6	~ 6,0
Sand/Gravel	~ 105		~ 1,70	~ 2865	3,8	5,0	~ 4,0	~ 5,2
			~ 1,65	~ 2780	4,0	5,2	~ 4,2	~ 5,5
			~ 1,60	~ 2700	4,2	5,5	~ 4,4	~ 5,8
Aggregate	~ 100		~ 1,80	~ 3035	3,8	5,0	~ 3,8	~ 5,0
			~ 1,75	~ 2950	4,0	5,2	~ 4,0	~ 5,2
			~ 1,65	~ 2780	4,2	5,5	~ 4,2	~ 5,5
Rock	100		~ 1,70	~ 2865	3,5	4,6	~ 3,5	~ 4,6

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
Two fuel filters
Coolant filter
Fuel fill strainer

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
Acoustic back-up signal

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: 100% hydraulic diff lock
rear: conventional

Tires

26.5 R25

Brake system

Wet oil circulation-cooled disc brakes on all four wheels
Dual brake circuits
Dual service brake pedals
Secondary brake system
Parking brake, electro-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 rearview mirror
2 exterior rearview mirrors
Openable window right-hand side
Sliding window, right
Sliding window, door
Tinted safety glass
Hip retractable seatbelt (SAE J386)
Adjustable lever console
Operator's seat with high backrest, heated
Adjustable steering wheel
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 lever, 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
Oil bath pre-cleaner
Turbo air cleaner
Radiator and hydraulic oil cooler, corrosion prot.
Hand-operated throttle

Electrical system

Air filter for alternator
Attachment working lights
Extra working lights front
Extra working lights rear
Light, licence plate
Assymetrical lights for left-hand traffic
Rotating beacon, collapsible
Side marker lamps

Cab

Radio with tape player
Sunblinds, front and rear windows
Sunblinds, side windows
Installation kit for radio

Retractable hipbelt, 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 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
Automatic temp control (ATC)

Drivetrain

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

Brake system

Oil cooler for front and rear axle

Hydraulic system

3rd hydraulic function
3rd-4th hydraulic function
Boom Suspension System
Biodegradable hydraulic fluid
Attachment bracket
Arctic kit, attachment locking hoses
Arctic kit, pilot hoses and brake accum.
Separate attachment locking, standard boom
Separate attachment locking, long boom

External equipment

Long boom
Mudguards widener
Mudguards, fixed front and swing-out rear

Protective equipment

Guards for front headlights
Guards for taillights
Guards for side windows and rear window
Guards for radiator grill
Windshield guard
Bellyguard front and rear

Other equipment

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

Tires

800/65 R29

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)*

With CDC, monotonous steering movements are decreased drastically. 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.

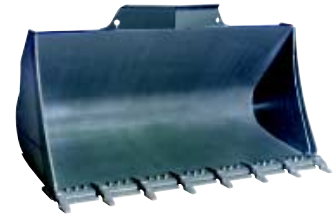


Volvo's Genuine Attachments

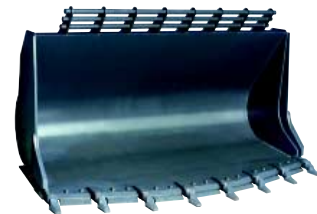
Volvo's Genuine Attachments are designed to match TP Linkage, making the L150E quick and efficient in a wide range of applications. Can also be used with older models of the L150 and L180.



Standard bucket with edge savers



Standard bucket with teeth



Spade nose rock bucket with teeth



Timber grapple/Sorting grapple

* Optional



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.

All products are not available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and designs without prior notice. The illustrations do not necessarily show the standard version of the machine.

VOLVO

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