VOLVO WHEEL LOADER

L50D

VOLVO

Volvo L50D – the all-rounder

Volvo L50D is an all-rounder based on years of experience with Volvo's basic concept for flexible, productive wheel loaders and tool carriers. Packed with advantageous features and a variety of equipment alternatives, the L50D is well suited for a wide range of applications. The L50D has the maneuverability required for jobs in tight spaces, as well as a complete and flexible material handling system. Municipalities, road authorities, harbors, saw mills, agricultural and especially construction sites are just a few examples of areas where the L50D is the obvious choice.

Smart solutions

Volvo's long experience has been used in designing the L50D, making it a highly reliable and true all-round loader. The machine's low-emission engine features good fuel economy, low sound levels and long life. The hydrostatic transmission gives fast acceleration and variable speed control. The load-sensing hydraulic system is only activated when needed. The L50D is equipped with Volvo's patented lift-arm system, TP Linkage. This unique system combines superior breakout torque and parallel action throughout the entire lifting range. Together with Volvo's wide range of attachments, you get flexibility and economy that's tough to beat.

Workplace with high comfort and excellent visibility

Matching of 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 has a very comfortable work environment in the cab, with an extremely low sound level and the unique air filtration system. The operator has an excellent view of the worksite around the machine, which ensures high productivity. The low, external sound level makes the L50D the obvious choice for applications in sensitive environments, such as urban and residential areas. Excellent operating economy, in combination with easy and quick maneuverability, makes the L50D a reliable winner in a wide range of applications.

L50D Specifications

● Engine:	Volvo TD 40 GJE	
Max power at	36,7 r/s	(2 200 rpm)
SAE J1995 gross	74,6 kW	(101,5 hp)
ISO 9249, SAE J1349 net	74 kW	(101 hp)
● Breakout force:	66,4 kN*	(14,930 lbf)
● Tipping load, fully turned:	5 150 kg*	(11,350 lb)*
● Buckets:	1,3-3,9 m^3	(1.7–5.1 yd^3)
● Log grapples:	0,7-1,3 m^2	(7.5–10.8 ft^2)
● Operating weight:	8,2-9,4 t	(18,080–20,720 lb)
● Tires:	17.5 R25	

*Bucket: 1,3 m^3 (1.7 yd^3) straight edge w/teeth
Tires: 17.5 R25 L2


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Smart, fast and smooth

Volvo L50D is equipped with a turbocharged high performance low-emission engine. The efficient engine combined with load-sensing hydraulics and the intelligent hydrostatic transmission, gives fast response in all work phases. Volvo's unique lift-arm system, Torque Parallel linkage (TP), gives constant high breakout torque and parallel lift throughout the entire lifting range. This results in high productivity and superior flexibility.

Fast response

The power from Volvo's high performance, low-emission engine gives the all-rounder high rimpull, excellent penetration capability, and quick acceleration. Volvo's engines give high torque already at low engine speeds – a highly appreciated feature that results in unbeatable fast response.

Shift with the application

The hydrostatic transmission gives the L50D fast acceleration and variable speed control. The system features a high/low transmission that allows shifting between two speed ranges.
With the inching function* engaged, the operator has exact control of machine speed when operating with hydraulically driven attachments.

Power – when and where it's needed

The L50D features a highly efficient load-sensing hydraulic system. In addition to superior high-precision maneuvering of the attachment and load, the system only provides hydraulic power when and where it's needed. The result is high efficiency and low fuel consumption. When no flow is required in the hydraulic system during the work cycle, all the engine power can be used by the drivetrain.

TP Linkage – superior torque throughout the entire 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 and control in the entire working range. No other lift-arm system on the market provides such high, even breakout torque. The linkage provides excellent parallel movement, making it possible for the L50D to perform well in applications for which others need two machine types. The high-breakout torque and the precision-performance hydraulics make the L50D extra suitable for operating with a bucket or other attachments.

In the L50D, technology, productivity and economy go hand in hand – all for your optimal profitability.

Engine
- Volvo TD 40 GJE, low-emission engine with high torque and fast response already at low engine speeds, even when fully loaded. The machine can work at low engine speeds, which contributes to good fuel economy, less noise, less wear, and longer life.
- Hydraulically driven electronically controlled fan only works when there's a cooling demand, saving fuel.

Transmission
- The hydrostatic transmission gives fast acceleration and variable speed control.

Axles
- Volvo's in-house 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 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, therefore saving fuel.
- The steering system's design provides smooth steering movements and higher operating safety.

Frame
- Rugged frame design with high-strength steel.
- Volvo's articulation joint with center hinge bearings is a well-proven and service-friendly concept with renowned long service life.

TP Linkage (Torque Parallel)
- Unique patented lift-arm system provides two solutions in one – high torque and parallel action.

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

* Optional equipment


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An alert operator is a productive operator

A comfortable and safe cab environment 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. All incoming air is filtered in two stages, making this the cleanest cab on the market. Even the recirculated air is filtered. 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. With Comfort Drive Control (CDC)*, the operator can operate steering, forward, reverse and kick-down with controls on 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 modes, thus combatting fatigue and static muscle strain.

Always an eye on operation and performance with Volvo Contronic
The new 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 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 levels counteract fatigue and allow the operator to stay alert throughout the shift. The Care Cab makes your daily work easier – a good place to work.

Care Cab

- Comfortable cab climate with the market's most efficient cab filtration system.
- Pleasant interior, easy to keep clean.
- Adjustable steering wheel*, seat, armrest and lever console for optimal operator comfort and high production.
- Contronic, a superior control and monitoring system, designed for higher safety and productivity.
- Large windows and narrow pillars give good all-round visibility, which means increased safety.
- Sloped engine hood for even better visibility to the rear.
- All service platforms and steps feature new improved anti-slip surfaces.
- Sloped entry ladder for easy cab access.

* Optional equipment

Service-friendliness and environmental care – built in from the beginning

Few machines have to work in tougher conditions than a wheel loader. The machine has to keep running – day in, day out – without breakdowns. The ultimate goal is maximized 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 pressure check points are easily accessed from ground level. The swing-out radiator grille and large engine access doors, raised by gas struts, give good access for simple service and cleaning.

Contronic keeps an eye on everything

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 two 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 can be updated for optimal adaptation to new and changing 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 emissions. All 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. In addition, it's possible to use biodegradable oil* in the hydraulic system.

L50D – for maximum productivity with minimal environmental impact.

Contronic (electrical system)

- Computerized electrical monitoring system. Reliable and user-friendly for optimal performance.
- Display information in three categories – continuous operating data, warning messages and error messages to avoid machine damage.
- Safety function "engine shut-down to idle", lowers engine rpm to idle, thus reducing 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 reliability.
- Service is facilitated with easy access and strategically placed breather filters for transmission, axles, fuel tank, and hydraulic oil tank.
- In addition to factory warranties, Volvo also offers different types of extended warranties. The Component Assurance Program (CAP) can be tailored to meet your exact needs.

Environment

- Low external and internal sound levels.
- The high performance Volvo engine meets all current emission standards in Europe and the USA.
- More than 95% of all materials in the L50D can be recycled.
- All production units are certified according to the environmental standard ISO 14001.

* Optional equipment


0 rpm
N
11:17 21°
0 km/h


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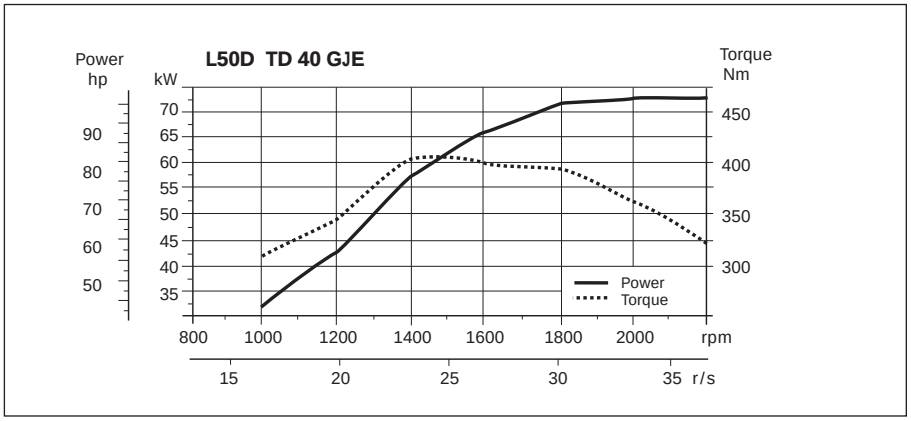
The Volvo L50D in detail

Engine
Engine: High performance, low-emission, 4-stroke, 4-cylinder, in-line diesel engine with direct injection and turbo charger. Dry replaceable cylinder liners. Air cleaning: three-stage. Cooling system: Hydrostatic fan.

Engine ..... Volvo TD 40 GJE
Max power at ..... 36,7 r/s **(2 200 rpm)**
SAE J1995 gross ..... 74,6 kW **(101.5 hp)**
ISO 9249, SAE J1349 net ..... 74,0 kW **(101 hp)**
Max torque at ..... 23,3 r/s **(1 400 rpm)**
SAE J1995 gross ..... 403 Nm **(297 lbf ft)**
ISO 9249, SAE J1349 net ..... 397 Nm **(292 lbf ft)**
Displacement ..... 4,0 l **(244 in³)**



Drivetrain
The transmission consists of a hydraulic pump, hydraulic motor (both with variable displacement) and a two-stage Volvo Power Shift gearbox, which is controlled by either the gear selector or the kick-down function. Axles: Volvo fully floating axle shafts with outboard mounted planetary type hub reductions. Cast steel axle housings. Fixed front axle and oscillating rear axle. 100% differential lock on the front axle (option).

Maximum speeds, forward/reverse
Low range ..... 19 km/h **(11.8 mph)**
High range ..... 41 km/h **(25.5 mph)**
Hydrostatic motor lock
Low range ..... 4,6 km/h **(2.9 mph)**
High range ..... 10,8 km/h **(6.7 mph)**
Measured with tires 17.5 R25
Front axle/rear axle ..... Volvo/AWB 10
Rear axle oscillation ..... ±12 °
Ground clearance at 12° oscillation
..... 365 mm **(14.4 mph)**

Brake system
Service brakes: Volvo dual-circuit system with nitrogen-charged accumulators. Outboard mounted, fully hydraulic operated, fully sealed, oil circulation, cooled wet disc brakes. Parking brake: Mechanically operated drum brake on front axle input shaft and electro-hydraulically operated (option). Secondary brake: Dual brake circuits with rechargeable accumulators. 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 ..... 3x0,5 l **(30.5 in³)**

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

Steering cylinders 2
Cylinder bore ..... 63 mm **(2.48 in)**
Piston rod diameter ..... 40 mm **(1.57 in)**
Stroke ..... 320 mm **(12.60 in)**
Relief pressure ..... 21 MPa **(3 046 psi)**
Maximum articulation ..... ± 40°

Cab
Instrumentation: All important information is centrally located in the operator's field of vision. Center console 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. Meets ISO/DSI 7096-1997. Standard: The cab is tested and approved according to ROPS (ISO/CD 3471, SAE J1040), FOPS (ISO 3449, SAE J231). The cab complies with requirements according to ISO 6055 ("protective roof for high-lift rider trucks") and SAE J386 ("Operator Restraint System").

Emergency exits 1
Sound level in cab
according to ISO 6396 ..... LpA 71 dB (A)
External sound level according to
ISO 6395
(Directive 2000/14/EC) ..... LwA 103 dB (A)
ISO 6395 ("Blauer Engel") ..... LwA 100 dB (A)
Ventilation ..... 9 m³/min **(318 ft³/min)**
Heating capacity ..... 11 kW **(37,500 Btu/h)**
Air conditioning (optional) ..... 8 kW **(27,300 Btu/h)**

Hydraulic system
System supply: One load-sensing axial piston pump with variable displacement. The steering function always has priority. 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. Automatic tilt can be adjusted to the desired bucket angle. Cylinders: Double-acting cylinders for all functions. Filter: Full-flow filtration through 10 micron filter cartridge.

Relief pressure, maximum ..... 26,0 MPa **(3 771 psi)**
Flow ..... 120 l/min **(31.7 US gpm)**
at ..... 10 MPa **(1 450 psi)**
and engine speed ..... 36,7 r/s **(2 200 rpm)**
Pilot system
relief pressure ..... 3,0 MPa **(435 psi)**

Cycle times
Raise* ..... 5.4 s
Tilt* ..... 1.1 s
Lower, empty ..... 3.0 s
Total cycle time ..... 9.5 s

* with load as per ISO 5998 and SAE J818

Lift-arm system
Torque parallel linkage with high-breakout torque and excellent parallel lift-arm action throughout the entire working range.

Lift cylinders 2
Cylinder bore ..... 100 mm **(3.9 in)**
Piston rod diameter ..... 70 mm **(2.8 in)**
Stroke ..... 669 mm **(26.3 in)**
Tilt cylinder 1
Cylinder bore ..... 125 mm **(4.9 in)**
Piston rod diameter ..... 70 mm **(2.8 in)**
Stroke ..... 434 mm **(17.1 in)**

Electrical system

Central warning system: Central warning light for the following functions (buzzer with gear engaged): Engine oil pressure, hydrostatic charge pressure, gear box oil pressure, brake pressure, parking brake applied, hydraulic oil level, steering pressure, coolant temperature, gear box temperature, engine overspeeding, transmission overspeeding, computer malfunction, and hydraulic oil temperature.

Voltage	24 V
Batteries	2x12 V
Battery capacity	2x105Ah
Cold cranking capacity, approx	690 A
Reserve capacity, approx	185 min
Alternator rating	1680W/60A
Starter motor output	4 kW (5.4 hp)

Service

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

Refill capacities

Fuel tank	150 l (48 US gal)
Engine coolant	27 l (7.1 US gal)
Hydraulic oil tank	65 l (17.2 US gal)
Transmission oil	7 l (1.8 US gal)
Engine oil	11 l (2.9 US gal)
Axles front/rear	22/22 l (5.8/5.8 US gal)

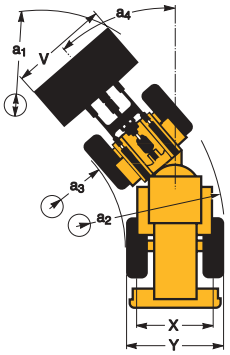
Specifications

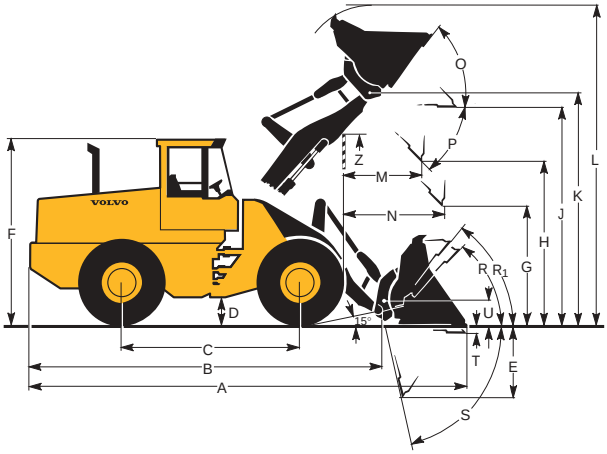
Tires: 17.5 R25 L2

B	5 410	mm	17'9"
C	2 750	mm	9'0"
D	400	mm	1'4"
F	3 030	mm	9'11"
G	2 133	mm	7'0"
J	3 470	mm	11'5"
K	3 740	mm	12'3"
O	52°		
P_{max}	45°		
R	43°		
R_1*	48°		
S	90°		
T	77	mm	0'3"
U	430	mm	1'5"
X	1 750	mm	5'9"
Y	2 200	mm	7'2"
Z	3 060	mm	10'0"
a_2	4 880	mm	16'0"
a_3	2 680	mm	8'10"
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.

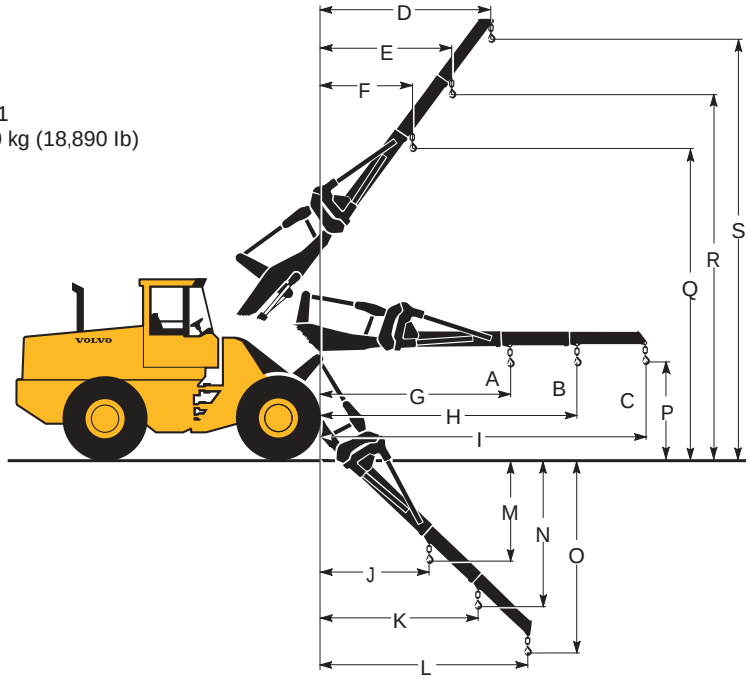




Tires: 17.5 R25 L2

A*	1 120	kg	2 470 lb
B*	890	kg	1 962 lb
C*	720	kg	1 588 lb
D	2 880	mm	9'5"
E	2 220	mm	7'4"
F	1 630	mm	5'4"
G	3 290	mm	10'9"
H	4 320	mm	14'2"
I	5 460	mm	17'11"
J	550	mm	1'10"
K	690	mm	2'3"
L	830	mm	2'9"
M	2 300	mm	7'7"
N	3 330	mm	10'11"
O	4 450	mm	14'7"
P	1 470	mm	4'10"
Q	5 060	mm	16'7"
R	5 910	mm	19'5"
S	6 840	mm	22'5"

Order no: 92001
Operating weight: 8 570 kg (18,890 lb)

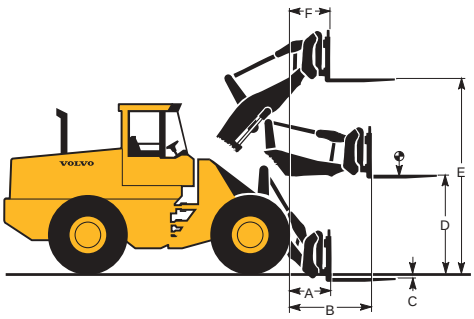


Tires: 17.5 R25 L2

A	820	mm	2'8"
B	1 580	mm	5'2"
C	31	mm	0'1.2"
D	1 710	mm	5'7"
E	3 520	mm	11'6"
F	750	mm	2'5"

Fork tine order no.(per tine): 93527

Length:	1200 mm	3'11"
Width:	1500 mm	4'11"
Rated operating load:	2 730 kg	6,010 lb
At load rated distance:	600 mm	2'0"
Operating weight:	8 630 kg	19,020 lb



Tires 17.5 R25 L2		GENERAL PURPOSE				FLAT FLOOR		GRADING	LIGHT MTRL		
		Bolt-on Edges	Bolt-on Edges	Bolt-on Edges	Bolt-on Edges	Bolt-on Edges	Bolt-on Edges		Bolt-on Edges	Bolt-on Edges	Bolt-on Edges
Volume, heaped ISO/SAE	m^3 yd^3	1,5 2.0	1,5 2.0	1,3 1.7	1,3 1.7	1,5 2.0	1,5 2.0	1,6 2.1	2,2 2.9	2,2 2.9	3,9 5.1
Volume at 110% fill factor	m^3 yd^3	1,7 2.2	1,7 2.2	1,4 1.9	1,4 1.9	1,7 2.2	1,7 2.2	1,8 2.3	2,4 3.1	2,4 3.1	4,3 5.6
Static tipping load, straight	kg lb	5 820 12 840	5 560 12 260	5 920 13 050	5 650 12 460	5 750 12 670	5 500 12 120	4 800 10 580	5 580 12 290	5 240 11 550	4 800 10 580
at 35° turn	kg lb	5 230 11 530	4 970 10 970	5 320 11 730	5 060 11 160	5 150 11 360	4 910 10 830	4 280 9 440	4 990 11 010	4 670 10 310	4 240 9 360
at full turn	kg lb	5 050 11 140	4 800 10 590	5 150 11 350	4 890 10 780	4 980 10 970	4 740 10 450	4 130 9 110	4 820 10 630	4 510 9 940	4 080 9 000
Breakout force	kN lbf	61,2 13 770	57,3 12 870	66,4 14 930	61,7 13 870	62,5 14 050	58,3 13 110	41,5 9 320	49,6 11 160	46,3 10 410	36,2 8 140
A	mm ft in	6 530 21'5"	6 590 21'8"	6 440 21'2"	6 510 21'4"	6 510 21'4"	6 580 21'7"	6 950 22'10"	6 760 22'2"	6 830 22'5"	7 230 23'9"
E	mm ft in	940 3'1"	1 000 3'4"	860 2'10"	920 3'0"	920 3'0"	990 3'3"	1 240 4'1"	1 170 3'10"	1 250 4'1"	1 630 5'4"
H***)	mm ft in	2 820 9'3"	2 770 9'1"	2 870 9'5"	2 830 9'3"	2 830 9'3"	2 790 9'2"	2 460 8'1"	2 670 8'9"	2 600 8'7"	2 340 7'8"
L	mm ft in	4 820 15'10"	4 860 15'11"	4 750 15'7"	4 790 15'8"	4 800 15'9"	4 840 15'11"	4 380 14'4"	4 900 16'1"	4 950 16'3"	5 410 17'9"
M***)	mm ft in	1 000 3'3"	1 050 3'5"	940 3'1"	990 3'3"	980 3'3"	1 030 3'5"	1 150 3'9"	1 180 3'11"	1 220 4'0"	1 490 4'11"
N	mm ft in	1 540 5'0"	1 560 5'2"	1 510 4'11"	1 540 5'1"	1 430 4'8"	1 450 4'9"	1 470 4'10"	1 560 5'2"	1 580 5'2"	1 630 5'4"
V	mm ft in	2 300 7'7"	2 300 7'7"	2 300 7'7"	2 300 7'7"	2 300 7'7"	2 300 7'7"	2 500 8'2"	2 380 7'10"	2 380 7'10"	2 500 8'2"
a_1 clearance circle	mm ft in	10 650 34'11"	10 670 35'0"	10 610 34'10"	10 630 34'11"	10 640 34'11"	10 660 35'0"	11 250 36'11"	10 850 35'7"	10 900 35'9"	11 240 36'10"
Operating weight	kg lb	8 640 19 050	8 800 19 400	8 590 18 940	8 750 19 290	8 710 1 9200	8 850 19 520	8 830 19 480	8 740 19 270	8 900 19 610	9 180 20 240

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

Note: This only applies to Volvo original attachments.

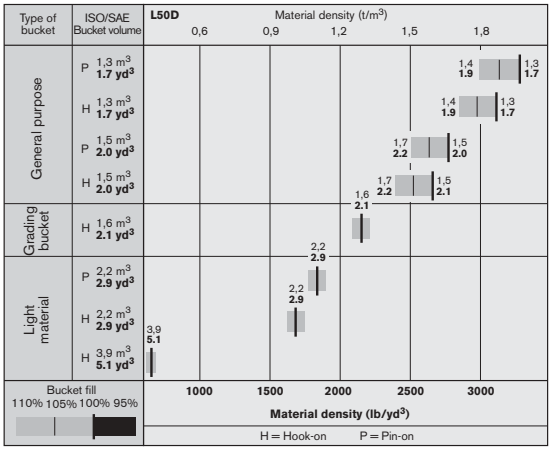
BUCKET SELECTION CHART

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 example and table below are intended for standard boom. Example: Sand and gravel. Fill factor ~ 105%. Density 1,6 t/m³. Result: The 1,4 m³ bucket carries 1,5 m³. For optimum stability, always consult the bucket selection chart.

			Tires 15,5 R25 L2		Logging Counterweight		Axle-mounted Fenders	
With over tires	mm	in	-60	-2			–	–
Ground clearance	mm	in	-30	-1			–	–
Tipping load, full turn	kg	lb	-190	-420	+450	+990	+170	+375
Operating weight	kg	lb	-320	-750	+300	+660	+150	+330

Material	Bucket fill, %	Material density, t/m³	Material density, lb/yd³	ISO/SAE bucket volume m³	ISO/SAE bucket volume yd³	Actual volume m³	Actual volume yd³
Earth/Clay	~ 110	~ 1,8	~3 030	1,3	1.7	~ 1,4	~ 1.9
		~ 1,5	~2 530	1,5	2.0	~ 1,7	~ 2.2
		~ 1,3	~2 190	1,7	2.2	~ 1,9	~ 2.4
Sand/Gravel	~ 105	~ 1,9	~3 200	1,3	1.7	~ 1,4	~ 1.8
		~ 1,6	~2 695	1,5	2.0	~ 1,6	~ 2.1
		~ 1,3	~2 190	1,7	2.2	~ 1,8	~ 2.3
Aggregate	~ 100	~ 1,9	~3 200	1,3	1.7	~ 1,3	~ 1.7
		~ 1,8	~3 030	1,5	2.0	~ 1,5	~ 2.0
		~ 1,5	~2 530	1,7	2.2	~ 1,7	~ 2.2
Rock	≤100	~ 1,7	~2 865	1,2	1.6	~ 1,2	~ 1.6

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



STANDARD EQUIPMENT

Engine
Air cleaner, dry type, dual element, exhaust aspirated precleaner
Water separator
Coolant level, sight gauge
Muffler, spark arresting
Preheater, thermostatic
Fan guard
Fuel fill strainer
Coolant filter

Electrical system
24V – prewired for optional accessories
Alternator, 24V, 60 A
Reverse alarm (SAE J994)
Battery disconnect switch
Fuel gauge
Temperature gauge, engine coolant
Temperature gauge, hydrostatic system
Hourmeter
Horn, electric
Instrument panel with symbols
Lights:
- driving (2-front), halogen with high/low beam
- parking lights
- stop/tail combination (2-rear)
- turn signals with hazard warning switch
- working lights, halogen (2-front and 2-rear)
- instrument lighting

Contronic, monitoring system, ECU with log and analysis system
Contronic ECU
Contronic display
Engine shut down to idle
- High engine coolant temperature
- Low engine oil pressure
- High oil temperature, hydrostatic transmission

Neutral start interlock
Test function for warning and monitoring lights
Warning and indicator lights
- Alternator malfunction
- Oil pressure, engine
- Oil pressure, hydrostatic transmission
- Brake pressure
- Parking brake applied
- Hydraulic oil level
- Primary steering
- High beams
- Turn signals
- Rotating beacon
- Preheating engine
- Coolant temperature, engine
- Oil temperature hydrostatic transmission
- Low fuel level

Drivetrain
Hydrostatic transmission
Forward/Reverse switch

Brake system
Wet, internal, oil circulation cooled disc brakes, 4-wheel, dual circuit brake system
Secondary brake system, accumulator supplied
Parking brake alarm
Dual service brake pedals

Cab
ROPS (SAE J1040CC) (ISO 3471), FOPS (SAE J 231) (ISO 3449).
Acoustical lining
Speedometer (in Contronic display)
Ashtray
Cigarette lighter
Door lockable (left side access)
Single key door/start
Heater/defroster with four-speed fan
Floor mat
Interior light
Exterior rearview mirrors (2)
Interior rearview mirrors (2)
Openable window, right-hand side
Safety glass, tinted
Sliding ventilation window, right
Sliding ventilation window, door
Retractable seat belt (SAE J386)
Seat, ergonomically designed, adjustable suspension, highback heated
Adjustable console for hydraulic controls
Adjustable steering wheel, telescopic and tiltable
Dual service brake pedals
Storage compartment
Beverage holder
Sun visor
Windshield wipers, front and rear
Windshield washers, front and rear
Intermittent wiper, front
Cab access steps and handrails

Hydraulic system
Main valve, 2-spool,
Pilot valve, 2-spool
Axial piston pump
Hydraulic control lever lock
Bucket leveler, automatic with position indicator, adjustable
Boom lever detent
Boom kickout, automatic, adjustable
Boom lowering system
Hydraulic pressure test ports, quick connect
Hydraulic fluid level, sight gauge
Hydraulic oil cooler
Hydraulic attachment bracket
Hydraulic attachment locking device

External equipment
Mudguards, small front+rear
Isolation mounts: cab, engine, gearbox
Lifting lugs
Side panels, engine hood
Steering frame lock
Vandalism lock, provison for: batteries, engine oil, fuel tank
Towing hitch with pin

Tires
17.5-25

OPTIONAL EQUIPMENT
(Standard on certain markets)

Service and maintenance
Tool box, lockable
Tool kit
Wheelnut wrench kit
Automatic Lubrication System
Refill pump for Automatic Lubrication System
Automatic Lubrication System for attachment bracket

Engine equipment
Cold starting aid, engine
coolant preheater (120V/750 W) or (220V/ 750 W)
Precleaner, oil bath
Precleaner, turbo type
Radiator, corrosion protected
Oiltrap for crankcase ventilation
Extra fuel filter

Electrical system
Assymetrical lights for left-hand traffic
Side marker lights
Working lights front, extra
Working lights rear, extra
Rotating beacon, amber with collapsible mount
Light, license plate
Dual work lights front, cab mounted

Drivetrain
100% differential lock, front axle
Speed control, inching pedal
Speed limiter, 12.4 mph or 18.6 mph

Cab
Installation kit for radio
AM/FM radio with tape deck
AM/FM radio with CD player
Hand throttle control
Sun blinds, front and rear windows
Air suspended operator's seat
Heated operator's seat
Armrest (left) for ISRI operator seat
3" seat belt
Cab filter for asbestos contaminated environment
Instructor's seat
Air conditioner 8 kW, 27 300 Btu/h
Spinner knob on steering wheel
Noise reduction kit
Rearview mirrors, electric heated
Automatic Temperature Control, ATC
Lunch box holder

Hydraulic system
Hydraulic control, 3rd function
Hydraulic control, 3rd function, adjustable flow
Detent 3rd function
Hydraulic control, 3rd and 4th function
Hydraulic control, 5th and 6th function
Single lever control
Single lever control including 3rd function
Single acting lifting function
Biodegradable hydraulic fluid
Hydraulic PTO, general purpose
Boom Suspension System (BSS)

External system
Mudguards, axle mounted
Logging counterweight, 660lbs

Other equipment
Comfort Drive Control (CDC)
Sign, slow moving vehicle
Hydraulic attachment bracket
Separate attachment locking system
Secondary steering
Electro-hydraulically operated park brake
Parking brake alarm, audible buzzer if brake not applied when operator leaves seat
Single acting lifting function

Tires
15.5–25
15.5 R25* 17.5 R25*

Protective equipment
Protective guards for front running lights, indicators and front working lights
Protective guards for rear working lights
Windshield guard
Guards for side and rear windows
Cover plate under cab
A/C, corrision protected condenser

Attachments
Buckets
Fork equipment
Material handling arm
Log grapples
Snow blades
Brooms
Cutting edge, 3 piece reversible, bolt-on
Bucket teeth, bolt-on
Bale clamp
Drum rotator

Boom Suspension System (BSS)*

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

Central lubrication*

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

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 L50D 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 machine's flexibility.

L50D can also be equipped with a fourth control lever. This function is necessary when there's a need for a third and fourth hydraulic function, such as when using a sweeper attachment, foldable snowplow or brush mower.

Genuine Volvo attachments

Genuine Volvo attachments are designed and manufactured for optimal fit and use of the TP Linkage, which makes the L50D 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

The 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 compact equipment.

The tasks they face vary considerably, but they all share one vital feature: technology that helps man 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 security of the service and parts organization; 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 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.

VOLVO

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