**VOLVO WHEEL LOADER** 

# 



**VOLVO** 

# Volvo L50D - the allrounder



Volvo L50D is an allrounder 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, harbours, 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 allround 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. The visibility-optimized

attachment bracket gives the operator an excellent view of the attachment and the load. 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 levels

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.

#### Specifications L50D

● Engine: Volvo TD 40 GJE ● Buckets:

Max power at 36,7 r/s (2200 rpm)

SAE J1995 gross 1SO 9249,

SAE J1349 net 74 kW (101 hp)

Breakout force: 70.9 kN\*

● Tipping load, fully turned: 5 220 kg\*

Buckets:
1,2 m³-3,9 m³

■ Log grapples: 0,7-1,3 m²

Operating weight: 8,2-9,4 t

• Tires: 17.5 R25

\*Bucket: 1,2 m<sup>3</sup> straight edge/w teeth Tires: 17.5 R25 L2



# Smart, fast and smooth

Volvo L50D is equipped with a turbocharged high performance lowemission 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 allrounder 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 servicefriendly 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 energyefficient 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



# 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.



#### 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. The forward-reverse and kick-down functions are available both on the lever to



the left of the steering wheel and on the hydraulic console to the right. With 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.

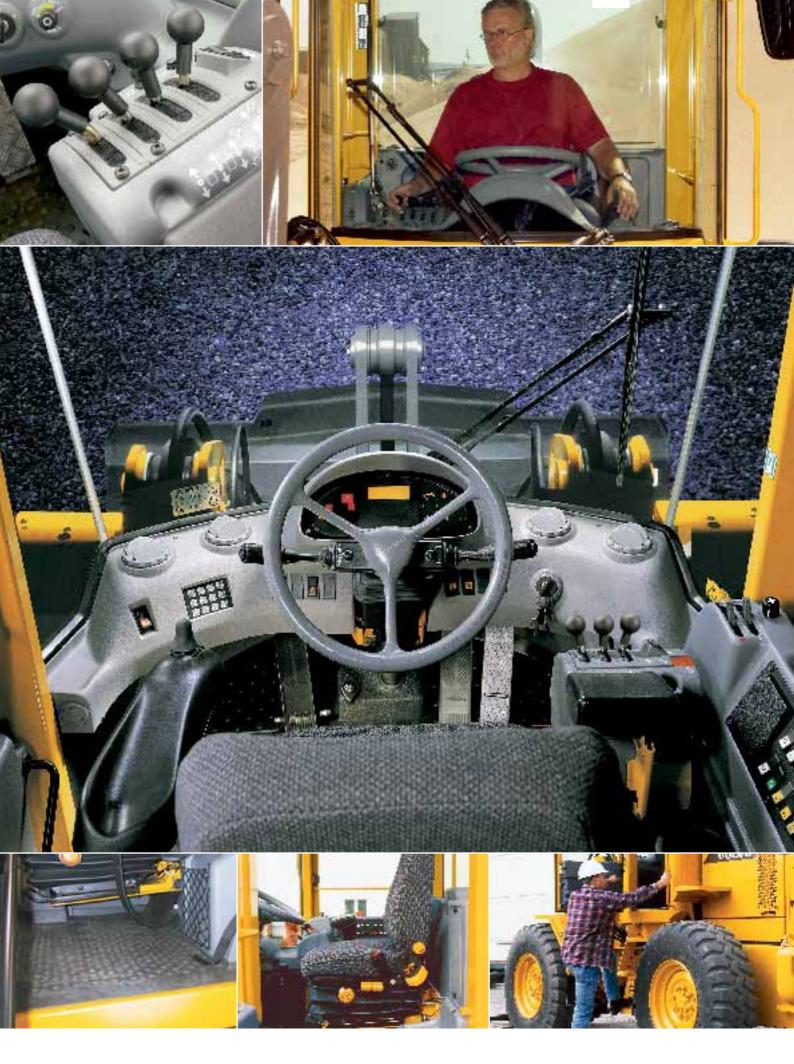
#### No noise to shout about

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 allround 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.

<sup>\*</sup> 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 immedi-

ate 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







# 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 r/min)
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 r/min)
SAE J1995 gross	403 Nm
ISO 9249, SAE J1349 net.	397 Nm
Displacement	4,0 I



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 temporarily via a kick down function. Axles: Volvo fully floating axle shafts with planetary-type hub reductions. Cast steel axle housings. Fixed front axle and oscillating rear axle. 100% differential lock on the front axle (option).

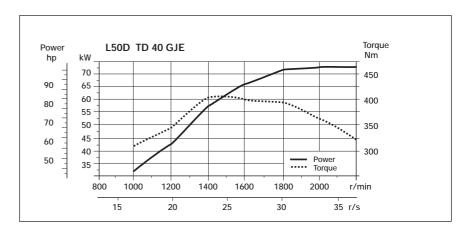
Maximum speeds, forward/reverse	
Low range	19 km/h
High range	
Hydrostatic motor lock	
Low range	4,6 km/h
High range	10,8 km/h
Measured with tires	17.5 R25
Front axle/rear axle	.Volvo/AWB 10
Rear axle oscillation	±12°
Ground clearance at 12° oscillation	365 mm

#### 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. Electro-hydraulically operated (option). Secondary brake: Dual brake circuits with rechargeable accumulators. Either of the circuits or the parking brake fulfill all safety requirements.

Standard: The brake system complies with the requirements of ISO 3450 and SAE J1473.

Nu	ımber	of brake	discs per	r wheel	front/rear	1/1
Ac	cumu	lators				3x0.5



#### 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	63 mm
Piston rod diameter	40 mm
Stroke	320 mm
Relief pressure	21 MPa
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 exits1
Sound level in cab
according to ISO 6396LpA 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
Heating capacity11 kW
Air conditioning (optional)8 kW

#### 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. Inductive/magnetic automatic tilt can be adjusted to the desired bucket angle. Cylinders: Double-acting cylinders for all functions. Filter: Full flow filtration through 10 micron (absolute) filter cartridge.

Relief pressure, maximum Flowatand engine speed	120 l/min 10 MPa
Pilot system	,
Relief pressure	3,0 MPa
Cycle times	
Raise*	5,4 s
Tilt*	1,1 s
Lower, empty	3,0 s
Total cycle time	9,5 s

<sup>\*</sup> 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
Piston rod diameter	70 mm
Stroke	669 mm
Tilt cylinder	1
Cylinder bore	125 mm
Piston rod diameter	70 mm
Stroke	434 mm



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

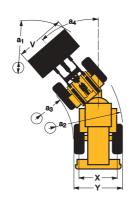
Dofill connection	
Refill capacities	
Fuel tank	150 l
Engine coolant	27 l
Hydraulic oil tank	65 I
Transmission oil	7 I
Engine oil	11
Axles front/rear	22/22 [

# **Specifications**

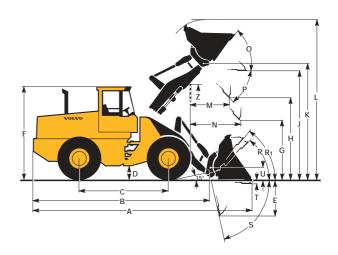
Tires: 17.5 R25 L2

В	5 410	mm
С	2 750	mm
D	400	mm
F	3 030	mm
G	2 133	mm
J	3 470	mm
K	3 740	mm
Ο	52	0
P <sub>max</sub>	45	0
R	43	0
R <sub>1</sub> *	48	0
S	90	0
Т	77	mm
U	430	mm
Χ	1 750	mm
Υ	2 200	mm
Z	3 060	mm
a <sub>2</sub>	4 880	mm
a <sub>3</sub>	2 680	mm
a <sub>4</sub>	±40	0





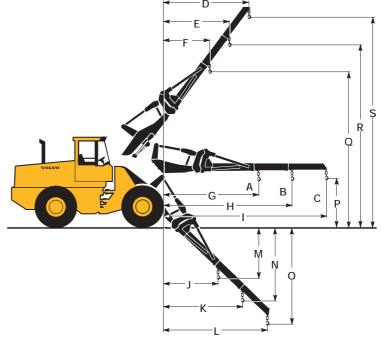
Where applicable, specifications and dimensions are in accordance with ISO 7131, SAE J732, ISO 7546, SAE J742, ISO 5998, SAE J818, ISO 8313.



#### Tires: 17.5 R25 L2

Α*	1 120	kg
B*	890	kg
C*	720	kg
D	2 880	mm
Ε	2 220	mm
F	1 630	mm
G	3 290	mm
Н	4 320	mm
1	5 460	mm
J	550	mm
K	690	mm
L	830	mm
М	2 300	mm
Ν	3 330	mm
0	4 450	mm
Р	1 470	mm
Q	5 060	mm
R	5 910	mm
S	6 840	mm

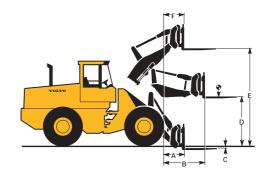
Order no: 92001 Operating weight: 8 570 kg



Tires: 17.5 R25 L2

Α	820	mm
В	1 580	mm
С	31	mm
D	1 710	mm
Ε	3 520	mm
F	750	mm

Fork tine order no.(per tine): 93527 Length: 1200 mm With: 1500 mm Rated operating load: 2 730 kg at load rated distance: 600 mm Operating weight: 8 630 kg



		GENERAL PURPOSE								LIGHT	LIGHT MTRL	
Tires 17.5 R25 L2		Teeth	Teeth	Bolt-on edges	Bolt-on edges	Teeth	Teeth	Bolt-on edges	Bolt-on edges	Bolt-on edges	Bolt-on edges	
Volume, heaped ISO/SAE	E m³	1,2	1,2	1,3	1,3	1,4	1,4	1,5	1,5	2,2	3,9	
Volume at 110% fill factor	r m³	1,3	1,3	1,4	1,4	1,5	1,5	1,7	1,7	2,4	4,3	
Static tipping load, straight	kg	6 000	5 720	5 920	5 650	5 900	5 630	5 820	5 560	5 240	4 800	
at 35° turn	kg	5 400	5 130	5 320	5 060	5 300	5 040	5 230	4 970	4 670	4 240	
at full turn	kg	5 220	4 960	5 150	4 890	5 120	4 870	5 050	4 800	4 510	4 080	
Breakout force	kN	70,9	65,6	66,4	61,7	65,1	60,6	61,2	57,3	46,3	36,2	
А	mm	6 600	6 670	6 440	6 510	6 690	6 750	6 530	6 590	6 830	7 230	
Е	mm	1 010	1 080	860	920	1 090	1 160	940	1 000	1 250	1 630	
H***)	mm	2 770	2 730	2 870	2 830	2 710	2 670	2 820	2 770	2 600	2 340	
L	mm	4 750	4 790	4 750	4 790	4 820	4 860	4 820	4 860	4 950	5 410	
M***)	mm	1 050	1 100	940	990	1 110	1 160	1 000	1 050	1 220	1 490	
N	mm	1 560	1 590	1 510	1 540	1 590	1 610	1 540	1 560	1 580	1 630	
V	mm	2 300	2 300	2 300	2 300	2 300	2 300	2 300	2 300	2 380	2 500	
a <sub>1</sub> clearance circle	mm	10 690	10 710	10 610	10 630	10 730	10 750	10 650	10 670	10 900	11 240	
Operating weight	kg	8 560	8 720	8 590	8 750	8 610	8 770	8 640	8 800	8 900	9 180	

<sup>\*\*\*)</sup>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. 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	Axle-mounted Fenders		
With over tires Ground clerance Tipping Load, full turn Operating weight	mm mm kg ka	-60 -30 -190 -320	- +170 +150	

Material	Bucket fill, %		Material density, t/m³	ISO/SAE bucket volume, m³	Actual volym, m <sup>3</sup>
Earth/Clay	~ 110	1	~ 1,8	1,2	~ 1,3
		0.55	~ 1,5	1,4	~ 1,55
			~ 1,3	1,6	~ 1,8
Sand/Gravel	~ 105	×	~ 1,9	1,2	~ 1,25
		13	~ 1,6	1,4	~ 1,5
		-	~ 1,3	1,6	~ 1,7
Aggregate	~ 100	-	~ 1,9	1,2	~ 1,2
		1000	~ 1,8	1,4	~ 1,4
			~ 1,5	1,6	~ 1,6
Rock	≤100	157 <del>(*)</del> N. 20	~ 1,7	1,2	~ 1,2

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

Type of bucket	ISO/SAE Bucket volume	<b>L50D</b> 0,4	0,6	0,8	Material 1,0	dens	ity (t/m <sup>3</sup> ) 2 1,		1,6	1,8	2,0
General purpose	P 1,2 m <sup>3</sup> 1.6 yd <sup>3</sup> H 1,4 m <sup>3</sup> 1.8 yd <sup>3</sup> P 1,4 m <sup>3</sup> P 1.8 yd <sup>3</sup> H 1,6 m <sup>3</sup> 2.1 yd <sup>3</sup>						1,5 2.0 1 1,8 2.3	1,5 2.0	1,3 1.7 1,4 1.8	1.3	2 6
Light	H <sup>2,2 m<sup>3</sup></sup> <b>2.9 yd<sup>3</sup></b>				2,2 <b>2.9</b>						
Bucket fill 110% 105% 100% 95%		674	1010	1350	1685 Materia I = Hook-			yd <sup>3</sup> )	700 3	035	3370

#### STANDARD EQUIPMENT

#### **Engine**

Air cleaner, dry type, dual element, exhaust aspirated precleaner

Water separator

Coolant level, sight gauge

Muffler, spark arresting

Pre-heater, thermostatic

Fan guard

#### Electrical system

24V – prewired for optional accessories Alternator, 24V, 60 A

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 lightsstop/tail combination (2 rear)
- turn signals with hazard warning switch
- working lights, halogen (2-front and 2 rear)
  instrument lightning

#### 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

Tires 15.5 R25\* L2

Forward/Reverse switch also on hydraulic console

#### Brake system

Wet, internal oil circulation cooled disc brakes, 4wheel, dual circuit brake system

Secondary brake system, accumulator supplied Parking brake alarm, brake applied and machine in gear (buzzer)

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/pressurizer with four speed blower fan

Floor mat

Interior light

Exterior rearview mirrors (2)

Interior rearview mirrors (2)

Openable window, right-hand side

Safety glass, tinted

Retractable seat belt (SAE J386)

Seat, ergonomically designed, adjustable

suspension

Adjustable console for hydraulic controls

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

#### External equipment

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

#### **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 pre-heater (120V/750 W) or (220V/ 750 W)

Coolant filter

Pre-cleaner, oil bath

Pre-cleaner, turbo type Radiator, corrosion protected

Oiltrap for crankcase ventilation Extra fuel filter

Fuel fill strainer

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

Reverse alarm (SAE J994) Reverse alarm (SAE J994)
High intensive gas discharge lamps
Warning beacon, flashing strobe light
Dual work lights front, cab mounted

### Drivetrain

100 % differential lock, front axle Speed control, inching pedal Speed limiter, 20 km/h or 30 km/h Cab

Installation kit for radio

AM/FM radio with tape deck AM/FM radio with CD player

Hand throttle control

Sliding ventilation window, right

Sliding ventilation window, door

Sun blinds, front and rear windows Sun blinds, side windows

Air suspended operator's seat

Heated operator's seat
Armrest (left) for ISRI operator seat

3 inch seat belt Cab filter for asbestos contaminated environment

Instructor's seat

Air conditioner 8 kW, 27 300 Btu/h Adjustable steering wheel, telescopic & tiltable Spinner knob on steering wheel

Noise reduction kit

Dual service brake pedals Rear view 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 incl. 3rd function

Single acting lifting function Biodegradable hydraulic fluid

Hydraulic PTO, general purpose Boom Suspension System(BSS)

Attachment bracket, cast, visibility optimized Separate attachment locking

External system Mudguards

Mudguards, axle mounted Logging counterweight

Other equipment
Comfort Drive Control (CDC)

Sign, slow moving vehicle Sign, 50 km/h

Hydraulic attachment bracket

Separate attachment locking system

Blauer Engel noise reduction kit 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 17.5–25

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

Protective guards for rear lights

Windshield guard Guards for side and rear windows

Cover plate under cab AC, corrision protected condenser

Attachments

Buckets

Fork equipment

Material handling arm Log grapples

Snow blades

Brooms Cutting edge, 3 pc reversible, bolt-on

Bucket teeth, bolt-on Bucket teeth, weld-on

Bale clamp

Drum rotator

14 (L50D)



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.



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.



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.

<sup>\*</sup> Optional equipment



#### **Technology on Human Terms**

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

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

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

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

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

For more information please visit our website: www.volvo.com

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.

