

Volvo Compact Wheel Loaders 5.7 t 75 hp

**L30** 

# **L30**

Tackle a variety of jobs with speed and ease thanks to the powerful and comfortable L30, compact in size for efficient loading cycles in confined areas.



# A compact loader with big potential

The versatile L30 operates reliably in tight spaces and uneven terrains. This compact wheel loader boasts fast simultaneous linkage movements and steering, as well as exceptional tractive, breakout and lifting forces, commonly found on larger machines. And the operator experience is second to none, with easy cab access, best-in-class visibility, intuitive controls and exclusive options. It all adds up to productive and more efficient loading cycles.

# 3

## Fast and maneuverable

- Unique portal axles design: industryleading ground clearance
- Unique electro-hydraulic flow sharing main control valve: fast simultaneous lifting/tilting and hydraulic attachment movements
- Independent hydraulic pumps: simultaneous lifting and steering
- Articulated & oscillating joint, 100% differential locks on both axles: outstanding traction



#### Versatile

- Compact design: easy operation in confined areas
- High lifting/breakout forces, superior roll-back/dump angles
- 100% parallel movements with forks
- Attachment brackets, with proportional 3rd hydraulic function as standard
- Range of regular & hydraulic attachments



### Comfortable

- Easy cab access
- Best in class all-round visibility
- Adjustable suspension seat and right armrest
- Adjustable steering column
- Inch/brake pedal combination



#### Intuitive control

- Multi-function joystick with integrated 3rd function as standard, optional 4th function
- 5" display navigated via jog wheel
- Exclusive options: automatic lift & tilt with boundary limits, lift & tilt speed limiter...
- Multiple customizable settings

## Designed for uptime

- Monitoring of machine conditions
- · Long service intervals
- Ground-level access to service points
- Telematics-based services and solutions

## Volvo L30H in detail

#### **Engine**

Volvo 4-cylinder, common rail, diesel engine compliant to EU Stage V environmental regulations.

Air cleaning:

1. Paper filter with indicator in cab

2. Secondary filter

Exhaust after treatment system:

Cooled Exhaust Gas Recirculation (EGR), diesel oxidation catalyst (DOC) and diesel particulate filter (DPF).

Engine	Volvo	D3.3H
Max power at	r/min	2 720
SAE J1995 gross	kW	55.4
	hp	75
	Nm	265
Economic working range	r/min	1 300 - 2 100
Displacement	I	3.3
Bore	mm	94
Stroke	mm	120

#### **Electrical System**

Contronic electrical system with central warning information and buzzer, providing clear and an easy-to-read information on the 5" TFT display mounted on the A-pillar. The jog wheel allows easy and self-explaining navigation on the display with main, sub information field, multiple settings, and customized adjustments. Indicators and activation lights are available for various control and monitoring functions.

monitoring functions.

An audible warning alarm will sound, and a central warning symbol will flash if abnormal operating values or error messages arise.

Gauges are available for coolant temperature and fuel level.

A fuse test port is available in the fuse box, allowing operators to perform initial investigations, reducing diagnostic time.

Voltage	V	12
Battery capacity	Ah	100
Alternator rating	W/A	1260/90
Starter motor output	kW	3

#### Drivetrain

The hydrostatic transmission allows for speed range change without any tractive power interruption.

Maximum tractive power is available in all speed ranges, regardless of the

driving direction.
Single "Inch/brake pedal" for variable machine speed control and easy power transfer to the wheels at constant engine rpm. Transmissions forward, neutral, reverse and differential locks buttons are

all easy to reach on the multifunctional right joystick. This allows excellent ergonomics and greater efficiency in all applications thanks to the single-handed operation of the machine.

Two rigid portal axles provides long durability and best in class ground clearance.

The central articulating-oscillating joint and all wheel drive allows excellent mobility in all ground conditions.

The 100% differential lock on both axles enable low tire wear on hard ground while maximizing traction force in soft terrain.

5		
Angle of oscillation	±°	10
Oscillation at wheel, max.	mm	250
Track	mm	1482
Travel speed, forward/reverse		
1st gear	km/h	6/8
2nd gear	km/h	20/30
Low-speed version		
1st gear	km/h	6
2nd gear	km/h	20
High-speed version		
1st gear	km/h	8
2nd gear	km/h	30
Service Refill		
Ground level access, fuel filler and hydraulic the rear engine hood.	oil filler well protec	cted under

Fuel tank	I	84
Engine oil	1	11.2
Engine coolant	I	11
Hydraulic tank	1	54
Front axle oil	I	12.2
Rear axle oil	l	13.5

#### Hydraulic system

Working hydraulic system with electro-hydraulic operated control valve. **System supply:** A gear pump provides flow to the working hydraulic. System control: Double-acting 3-spools electro- hydraulic main control

The lift function has four positions: lift, hold (neutral), lower and float

The tilt function has three positions: rollback, hold (neutral) and dump. The third hydraulic function has three positions: unlock attachment, neutral and lock attachment. It can power a hydraulic attachment such as sweeper, 4-in-1 bucket. Individually flow adjustments are made via jog wheel.

An optional independent fourth hydraulic function is available to power hydraulic implements (Hi-Tip bucket, angle sweeper etc...). Individually flow adjustments are made via jog wheel.

Filtration: Full-flow filtration through 10 micron (absolute) filter cartridge in a combined suction-return-filter.

**Cooling:** Thermostatically controlled oil flow to oil cooler (fast warm-up, optimized cooling). Electronically temperature controlled hydraulic driven cooling fan with fan speed monitoring.

Working pressure max	MPa	24
Flow	l/min	57
at engine speed	r/min	2 720
Pilot working pressure	MPa	2.2

#### Linkage

Z-bar linkage providing high breakout force to the bucket and also parallel movement to the fork frame thanks to Volvo's specific kinematics.

Linkage system	Z-bar
Lift cylinders	2
Tilt cylinders	1
Lift time (loaded)	6.5
Lowering time (empty)	3.5
Dump time	1.5

#### Steering System

Central articulating-oscillating joint with elastic end-stops. Hydrostatic steering powered via a gear pump allowing precise operation even at low engine revolutions. Steering the machine does not influence the working hydraulic speed e. g. when lifting loads.

Steering pressure is monitored by a dedicated sensor.

Steering cylinders		1
Working pressure	MPa	18.5
Maximum flow	l/min	33
Max articulation	±°	40

#### Brake system

**Service brake:** an Inching-brake pedal provides hydrostatic wear less braking in the first stage for precise approach; if applied further the central disc brake on the front axle takes over for final braking acting upon all four

wheels and machine immobilization. **Parking brake:** Mechanically activated central drum brake, located on the rear axle dropbox acting upon all four wheels.

#### Wheels and tires

Size	365 / 80 R20
Cino	26E / 90 D20

The cab is tested and approved according to ROPS (ISO 3471), FOPS (ISO 3449, Level 2) and ISO 6683 regarding Operator Restraint System. The operator's seat features an adjustable suspension with multiple setting options and a retractable orange seatbelt.

**Instrumentation:** All important information is shown in the 5" TFT display located in the operator's field of vision mounted on the right A-pillar. The jog wheel allows quick access to all main machine function, individually

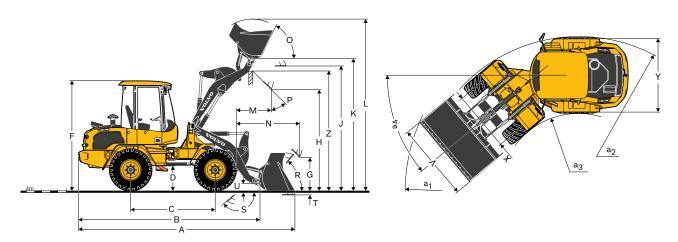
setting option and readout of machine data.

Heater and defroster: Engine coolant heated with filtered fresh air and fan with individually manual speed settings. Defroster vents for all window

Fresh air is filtered through a large elements prior entering, ensuring extremely clean air distribution in the cab.

Sound Level		
Sound pressure level at operator's po	sition according to ISO 6396:	
$L_pA$	dB	75
External sound power level according Directive 2000/14/EC:	to ISO 6395 and EU Noise	
Lwa	dB	101

# **Specifications**



Description	Unit	L30H Z-BAR		
Description	Offic	with 365/80 R20 tires		
В	mm	4 485		
С	mm	2 150		
D	mm	500		
F (incl. antenna)	mm	2 820		
G	mm	930		
J	mm	3 055		
K	mm	3 255		
0	0	70		
P	o	45		
R	0	42		
S	0	139		
U	mm	200		
X	mm	1 482		
Υ	mm	1 835		
Z	mm	2 960		
a <sub>2</sub>	mm	4 000		
a <sub>3</sub>	mm	2 110		
a <sub>4</sub>	0	±40		

Description	Unit	L30H Z-BAR		
With Loading Fork Centre of gravity 500 mm		ISO 2B	ISO 3B	
Payload according to EN 474-3, 60/80%	kg	1800/2400	1800/2400	

Description		Unit	L30H Z-BAR			
			GENERAL PURPOSE		Light material bucket	4-in-1
L30H with 365/80 R20 tires	std. boom, Z attachment bracket		Water Brief			
Option number			CL11391102	CL11391103	CL11391112	CL11391142
Capacity heaped		m³	1	1.1	1.5	0.9
Material density		kg/m³	2 000	1800	1200	2 000
Static tipping load, straight (IS	SO / DIS)	kg	4 700	4 650	4 450	4 350
Static tipping load, full turn 40	)° (ISO / DIS)	kg	4 200	4 100	3 950	3 850
Hydraulic lifting capacity, max		kN	60	61	59	60
Breakout force		kN	64.5	56	45.5	55.5
A	Total length	mm	5 280	5 380	5 550	5 550
L	Lift height, max.	mm	4 215	4 260	4 420	4 170
V	Bucket width	mm	1900	1900	2 000	1900
a <sub>1</sub>	Clearance circle	mm	8 705	8 760	8 865	8 865
Т	Digging depth	mm	50	50	50	50
Н	Dump height	mm	2 580	2 505	2 380	2 485
M	Reach at max. height	mm	675	740	855	705
N	Reach, max.	mm	1 460	1520	1 635	1 485
Operating weight		kg	5 750	5 775	5 850	5 950

## **Equipment**

#### STANDARD EQUIPMENT

#### Engine

Diesel engine, water cooled

Engine with diesel oxidation catalyst (DOC) and diesel particulate filter (DPF)

Extra fuel filter

Cold start aid

Dry-type air filter with secondary filter

#### Drivetrain

Hydrostatic drive

Operator-selected 100% differential locks for both axles

Tires 365/80 R20

#### Electrical System

Alternator 90 A, 1.26 kW

Main head lights (halogen)

full/dipped/asymmetrical

Working lights, halogen (2 front/2 rear)

Parking lights, front halogen/rear LED

Rear lights, LED

Brake lights, LED

Direction indicators, front halogen/rear LED

Hazard warning lights

Reversing lights, LED

Cab lighting, LED

#### Hydraulic system

Dedicated working hydraulic gear-type pump

Electro-hydraulic controlled main valve three-spool system with flow share function

Proportional 3rd hydraulic circuit with flow control including couplings

#### Instrumentation & controls

Multi-function single lever electro-hydraulic control with integrated 3rd function

Engine speed locking

12 Volt accessories socket

Horn

Hazard warning switch

Digital 5" display for:

Fuel level

Engine temperature

Engine speed

Vehicle speed

Colour-coded symbols for:

Direction (forward/reverse)

1st/2nd gear

Indicators (left/right)

Pre-heater

Main beam

Differential locks

Activated machine functions

Symbols (red) in 5" display with acoustic signal for:

Parking brake

Air filter restriction

Engine temperature

Engine oil pressure

Battery charging

Return hydraulic filter Hydraulic oil temperature

Steering pressure monitoring

Jog wheel for navigation within machine menus for:

Work modes with flow settings, Anti-theft function control, operator assist functions, machine data

including illuminated key pad for:

Cab heater (not in use)

Working lights (front/rear)

ESC button for navigation within machine menus

Menu button for direct access

#### STANDARD EQUIPMENT

#### Cab, Exterior

ROPS/FOPS-cab with flexible mountings

Walk-through cab

Lockable doors

All-round tinted safety glass

Windscreen wiper (front/rear)

Windscreen washer (front/rear)

Sliding window in the left door

Door stops/locks

Orange handrails

External rear view mirrors (right/left)

#### Cab, Interior

4-way adjustable operator's seat

Mounting brackets for additional equipment on A- and B-pillar right hand side

Adjustable steering column

Seat belt, orange

Sunvisor

Heater with air-filter and defroster (front/rear)

Cab ventilation

Lockable storage box in the cab

#### **Working Equipment**

Bucket & fork level indicator

Hydraulic quick-change attachment carrier

#### Carriage Body

Steel fenders front/rear

Lockable engine hood

Towing device

Lifting & tie-down eyes

#### Service and maintenance

Tool kit

Lockable steel toolbox right hand side

### Official approval

Quality: DIN/ISO 9001

Environment: DIN/ISO 14001

Safety: CE compliant acc. Machine Directive 2006/42/EC and EN474-series Electromagnetic compatibility (EMC) conforming to European directive

2014/30/EC

Noise emissions: Directive 2000/14/EC Tipping load / payload: ISO 14397-1 ROPS conforming to ISO 3471

FOPS conforming to ISO 3449 (Level 2)

#### **OPTIONAL EQUIPMENT**

#### **Engine**

Engine block heater

Fuel pre-heater

Pre cleaner air filter (Turbo II)

Auto Engine Shutdown

Reversible cooling fan

Tropical cooling

Engine start only with buckle on

#### Drivetrain

Hand inch valve

Driveline shutoff via parking brake

Driveline activated only with buckle on

Engine overspeeding protection

#### Hydraulic system

4th independent hydraulic circuit with flow control

Hyd oil mineral VG46 HV

Hyd oil mineral VG32 HV

Hvd oil mineral VG68 HV

Hyd oil bio synthetic VG46

Boom suspension system

Safety valves lift and tilt cylinders, electrically controlled

Combination boom suspension system & safety valves

Auxiliary hydraulic's return line (direct to tank or via filter)

Additional pump 42 I/min, single acting

Rear hydraulics, double acting

#### Cab

Airconditioner

Rear view camera incl. rear view mirror inside cab

Radio DAB preparation

Radio DAB, FM/AM, AUX/USB/Bluetooth

Air suspended/heated operator's seat

Cab pre-filter EU2 & EU6

Rearview mirrors inside cab

Enhanced rearview mirrors outside cab

Heated rearview mirrors

Auxiliary cab heater

Emergency hammer

#### Operator assist function

Loading unit assist function

Advanced tilt & lift limiter

Advanced tilt & lift speed limiter

#### Wheel/Tires

400/70R18

405/70R18

335/80R20 340/80R20

360/80R20

365/80R20

375/75R20 400/70R20

405/70R20

455/70R20

500/45-22.5

420/65R24

#### OPTIONAL EQUIPMENT

#### Electrical

Preparation for magnetic rotating beacon

Magnetic rotating beacon LED

Foldable rotating beacon LED

Audible reverse alarm (STD or "White noise"), Permament or can be switched off

Anti-theft system

Daytime running headlight

LED headlights

LED working lights

Socket 7 pin front (sweeper preparation)

Socket 8 pin attachment control

Socket 7 pin socket rear

Power outlet 12V 20A

#### Protective equipment

Windshield guard, front

Windshield guard, rear

Belly guards, front/rear

Engine hood protection

Front mudflaps

Protective guards for:

Main head lights

Working lights

Rear lights

#### Other

SMV warning triangle

Preparation for licence plate, 520x110 mm

Preparation for multiline licence plate, 340x245 mm

Trailer hitch bolt & ball joint with electrical connector 13 pin

Central Lubrication unit

Wheel chock

Salt spreader preparation

Long boom 2 250 mm

Safety brace for boom

#### Attachments

General Purpose bucket

Multi-Purpose bucket

Grading bucket

Light Material bucket

High-Tip bucket

Side-Tip bucket

Clamp bucket

Stone Sorting bucket

Material Handling Arm

Forks with tines, tine lenght from 1 000 mm up to 1 600 mm

Forks with hydraulic tines positioning, with 50 mm cranked tines

Forks with hydraulic tines positioning & side shift, with 50 mm cranked tines Log Grapple

**Custom-Built Attachments** 

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

## V O L V O