The Volvo L180E is ideal for tough tasks before and after the crusher. Typical applications include loading trucks, feeding the crusher, or just moving material. The key to its strength and agility lie in the electronically-controlled engine, smooth shifting transmission, smart load sensing hydraulics and the versatile TP Linkage. The result is high breakout torque, quick and precise movements, and low fuel consumption.

You'll find the L180E a pleasure to operate. In this respect, competing loaders simply can't compete. It's powerful, agile and easy to maneuver. Sitting comfortably in an ergonomically-designed seat, you have total control over the machine. Engine and hydraulics respond immediately to your commands. Visibility is panoramic and the air in the cab is always fresh. Both operator and machine get more done with a lot less effort.

The Volvo L180E is an outstandingly powerful machine. A high production loader with an impressive 300 hp under the hood. It's also dynamic, agile and easy to operate. Behind the wheel of the L180E, you'll be moving material both quicker and more cost efficiently than you would with any competitive machine. And you can be sure that impact on the machine, operator and environment are minimized. The result? Superior profitability, making the L180E as much fun to own as it is to operate.

A great deal for your investment
Proven reliability, excellent financing, extremely low fuel consumption and a high trade-in value provide the cornerstones of a safe investment. Add to that outstanding handling and productivity, a market-leading operator environment to protect the person in the machine, quick and simple daily maintenance and modest service requirements.

And what do you get? The most cost efficient loader in its class, delivering unparalleled profitability – both now and in years to come. With the L180E, everybody is a winner. Quite simply, a great deal for your money.

Specifications L180E

<table>
<thead>
<tr>
<th>Engine:</th>
<th>Volvo D12C LC E2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. power at 23,3 r/s</td>
<td>1400 rpm</td>
</tr>
<tr>
<td>SAE J1995 gross:</td>
<td>223 kW</td>
</tr>
<tr>
<td>ISO 9249, SAE J1349 net:</td>
<td>221 kW</td>
</tr>
<tr>
<td>Breakout force:</td>
<td>204,9 kN*</td>
</tr>
<tr>
<td>Static tipping load at full turn</td>
<td>18,070 kg*</td>
</tr>
<tr>
<td>Bucket:</td>
<td>4,6 m³ (6.0 yd³)</td>
</tr>
<tr>
<td>Log grapples:</td>
<td>3,7 - 14,0 m³ (5.9-18.3 yd³)</td>
</tr>
<tr>
<td>Operating weight:</td>
<td>26,0 - 29,0 t (57,320-63,930 lb)</td>
</tr>
<tr>
<td>Tires:</td>
<td>26.5 R25</td>
</tr>
<tr>
<td>775/65 R29</td>
<td></td>
</tr>
</tbody>
</table>

* Bucket: 4.6 m³ (6.0 yd³) with bolt-on edges,
  Tires: 26.5 R25 L3, Standard boom
Load more tons per hour with the Volvo L180E. Its powerful engine and the fully Automatic Power Shift (APS) gearshifting system provide immediate response even in the toughest conditions. And Volvo axles are designed to ensure that the rimpull is there when needed. Torque Parallel Linkage (TP Linkage), load sensing hydraulics, smooth steering and stable operation help make the L180E a precision performer.

The only thing modest about this machine is its fuel consumption
Even at low rpm, the 12 liter high-performance engine delivers full power and maximum torque. The machine responds quickly and forcefully with excellent rimpull, full hydraulic power, low fuel consumption and low-emissions. And thanks to the low rpm performance, the service life of the engine is extended.

Responds to your commands
The Volvo fully-automatic countershaft transmission provides smooth and effective gearshifting. All the operator has to do is select forward or reverse and APS automatically selects the right gear according to both engine rpm and ground speed. Volvo’s in-house engineered axles and drivetrain are well-matched and designed for top dependability. And Volvo’s oil circulation-cooled wet disc brakes provide smooth, effective braking – and, of course, a long service life.

Torque Parallel Linkage – a breakthrough in the industry
The reliable TP Linkage, Volvo’s patented lift-arm system, delivers high and even breakout torque throughout the entire lifting range. The system is exceedingly user-friendly. The operator can easily handle heavy materials and maintain full control in all positions.

Hydraulics that make sense
The Volvo L180E features an intelligent load sensing system for both the main and steering hydraulics. Two variable piston pumps provide the exact flow and pressure required at any given moment, distributing power when and where it’s needed. In addition to rapid response, this system facilitates smoother operation, lower fuel consumption and precise control, even at low rpm.

Engine
- Volvo D12C, a turbocharged, air-to-air intercooled, low-emission engine with electronically-controlled fuel injection, delivers high torque even at low rpm.
- The electronically-controlled hydrostatic fan is only activated when necessary, thus saving fuel.

Transmission
- With Volvo’s third generation of APS, the operator can select between four different operating modes, including the new AUTO function, which adaptively chooses the most convenient shifting program for the job at hand, equally weighing the operator’s driving habits together with the operating cycle.
- The third generation APS now has fully-automatic shifting 1-4, meaning all the operator has to do is choose forward or reverse.

Axles/Brakes
- The Volvo axles are fully-integrated with the drivetrain, delivering superior rimpull.
- 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 brake wear indicator on each wheel allows you to easily check the brake pad wear.

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.
- Volvo’s frame joint bearing design is a well-proven concept that’s easy to maintain and renowned for its long service life.
TP Linkage
- Unique patented lift-arm system, which provides two solutions in one: excellent breakout torque and parallel action throughout the entire lifting range.

Load sensing hydraulics
- The load sensing hydraulic system ensures that hydraulic oil is pumped around the system only when and where 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.
A clean and comfortable workplace
The right cab climate does wonders for efficiency, keeping operators sharp during long shifts. In fact, all incoming air is filtered in two stages, making this one of the cleanest cabs on the market. Even the recirculated air is filtered. Furthermore, Volvo's state-of-the-art air-conditioning* provides a pleasant temperature year-round, regardless of outdoor conditions. So even after a long work shift, the air in the cab is still fresh, and the operator's mind is still clear.

Comfort and productivity go hand-in-hand
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 situated both on the lever on the left-hand side of the steering wheel and on the hydraulic console to the right. And thanks to Comfort Drive Control (CDC)*, you can steer, change directions and Kick-down to first gear with easy-to-use controls integrated into the left-hand armrest — an excellent way to combat fatigue and static muscle strain. Furthermore, to avoid monotonous arm movements, you can shift at any time from lever steering to using the steering wheel.

Contronic keeps an eye on everything
Contronic, the highly reliable control and monitoring system from Volvo, continuously monitors the machine's operation and performance. The system is an electronic network made up of three computers. Operating at three levels, the system keeps an eye on the machine's various functions 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 also 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 tool. With VCADS Pro, it's also possible to check and adjust the machine's functions and performance characteristics.

Low noise levels
Thanks to the ingenious viscous cab mounts and heavy-duty insulation, the Care Cab is one of quietest cabs on the market. By reducing tiresome earfuls and annoying vibrations, the operator will stay sharp throughout the shift. In short, it's a great place to work.

AN ALERT OPERATOR IS A PRODUCTIVE OPERATOR

Volvo Care Cab with the Contronic monitoring system reinforces Volvo’s reputation as a leader in operator environments and cab comfort. We never forget the operator inside the machine. A comfortable, operator-friendly and safe environment makes the workday easier and more productive.

Care Cab
- Unrivalled operator environment with one of the market's best cab filtration systems.
- Pleasant interior with superior finish makes it easy-to-maintain and keep clean.
- Adjustable seat, armrest, hydraulic lever console and steering wheel* for optimal operator comfort and high production.
- Contronic, a superior control and monitoring system, designed to increase safety and productivity.
- All service platforms and entry ladders boast improved anti-slip surfaces. Sloped entry ladder for easy cab access.
- Standard viscous cab mounts feature a silicon fluid and rubber compound that work together to dampen cab vibrations and increase operator comfort.
- Large windscreens, narrow pillars and a sloped engine hood ensure good panoramic visibility, thus further increasing safety.
- Powerful halogen lighting to the front and rear provides good visibility over the entire work area.

* Optional equipment
Quality, safety and care for the environment are Volvo’s core values. Indeed, we see our commitment as an integral part of our operation. Few machines have to work in tougher conditions. The ultimate goal is maximized productivity and efficiency for the lowest cost per hour, with minimized environmental impact. For instance, plants and manufacturing processes are certified in accordance with ISO 14001. This is but one example of our tangible commitments and high quality standards. And that’s why Volvo customers get one of the most environmentally considerate and dependable wheel loaders on the market.

A winner for years to come
Your Volvo L180E has to be a winner – both in day-to-day and long-term operations, always operating economically with maximum consideration of the environment. The machinery has to be trusted in all aspects. It must deliver the anticipations of productivity and economy. High quality and easy maintenance are imperative for keeping up the work process. The high-performance, low-emission engine is both good for your business and for the environment.

Comfortable and quiet operator’s environment
The operator inside deserves a comfortable, reliable and safe machine to work with. A good environment helps to spare operator, equipment and nature for years to come. The Volvo L180E is a super competitive wheel loader that puts the operator right in the middle, literally speaking. Tedium vibrations and noise have been heavily reduced. If the operator feels comfortable and secure, it’s easier to stay attentive.

More than 95% recyclable
The L180E is almost completely recyclable. We see it as a natural step in our commitment. Components such as the engine, transmission and hydraulics are re-engineered and re-used in our Parts Exchange program. The equipment has to be as trustworthy, service-friendly, productive and as cost-effective as possible. Choose this wheel loader for maximum productivity and minimal impact on operator, machinery and environment. Feel free to feel secure in a Volvo L180E.

Quality
• The air is vented from all major components with easy-to-replace breather filters, used to prevent dirty air from entering the transmission, axles, fuel tank and hydraulic tank.
• All electrical wires are routed through sturdy conduits, protected from water, dust and abrasion with rubberized connectors and terminal caps.
• The L180E is designed from the beginning for easy service and maintenance. Easy access to all components lays the foundation for shorter service and maintenance time and longer life.

Safety
• A dual-circuit service brake system that fulfills all requirements according to ISO 3450, electronic brake test in Contronic and easy-to-check brake wear indicators are all ways to ensure safe and effective braking.
• Volvo Care Cab is tested and approved according to ROPS ISO 3471 and FOPS ISO 3449 standards.
• Optimized panoramic visibility gives effective control over the entire work area.
• The L180E has steps and platforms that are equipped with anti-slip surfaces and well positioned hand rails.

Environment
• The low rpm, high-performance D12C engine meets all current emission requirements according to Tier 2/Stage 2 legislation in the US and Europe.
• The L180E is manufactured in environmentally certified factories according to ISO 14001.
• The L180E is more than 95% recyclable according to material weight.
• Low external and internal sound levels.
VOLVO L180E IN DETAIL

Engine
12 liter, 6-cylinder straight turbocharged diesel engine with 4 valves per cylinder, overhead camshaft and electronically-controlled unit injectors. The engine has wet replaceable cylinder liners and replaceable valve guides and valve seats. The throttle application is transmitted electrically from the throttle pedal or the optional hand throttle. Air cleaning: three-stage. Cooling system: Air-to-air intercooler and hydrostatic, electronically-controlled fan.

Engine
Volvo D12C LC E2
Max power at 23.3 r/s (1,400 rpm)
SAE J1995 gross 223 kW (303 hp)
ISO 9249, SAE J1349 221 kW (300 hp)
Max torque at 20.0 r/s (1,200 rpm)
SAE J1995 gross 1700 Nm (1,254 lbf ft)
ISO 9249, SAE J1349 1690 Nm (1,247 lbf ft)
Economic working range 1100–1600 rpm
Displacement 12 l (732 in³)

Electrical system
Central warning system: Central warning light for the following functions (buzzer with gear engaged): Engine oil pressure, charge air temperature, transmission oil pressure, brake pressure, parking brake applied, hydraulic oil level, steering pressure, low coolant level, coolant temperature, transmission oil temperature, hydraulic oil temperature, overspeeding in engaged gear, brake charging, axle oil temperature.

Voltage 24 V
Batteries 2x12 V
Battery capacity 2x170 Ah
Cold cranking capacity, approx. 1150 A
Reserve capacity, approx. 350 mm
Alternator rating 1540 W/65 A
Starter motor output 7.0 kW (9.5 hp)

Transmission
Volvo HTE 220
Torque multiplication 2.04:1
Maximum speed, forward/reverse
1 6.6 km/h (4.1 mph)
2 12.4 km/h (7.7 mph)
3 24.9 km/h (15.5 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. Outboard-mounted, hydraulically-operated, fully sealed, oil circulation-cooled wet disc brakes. The operator can select automatic declutch of the transmission when braking through Contronic. Parking brake: Fully sealed, wet multi-disc brake built into the transmission. Applied by spring force and electro-hydraulically released with a switch on the instrument panel. Secondary brake: Dual brake circuits with rechargeable accumulators. Either one circuit or the parking brake fulfills all safety requirements. Standard: The brake system complies with the requirements of ISO 3450.

Number of brake discs per wheel
front/rear 1/1
Accumulators 2x1.0 l (2x0.26 US gal)
1x0.5 l (1x0.13 US gal)
Accumulators 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 with variable displacement.

Steering cylinders: Two double-acting cylinders.

<table>
<thead>
<tr>
<th>Steering cylinders</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder bore</td>
<td>100 mm (3.94 in)</td>
</tr>
<tr>
<td>Piston rod diameter</td>
<td>50 mm (1.97 in)</td>
</tr>
<tr>
<td>Stroke</td>
<td>418 mm (16.5 in)</td>
</tr>
<tr>
<td>Working pressure</td>
<td>21 MPa (3,046 psi)</td>
</tr>
<tr>
<td>Maximum flow</td>
<td>190 l/min (50.2 US gpm)</td>
</tr>
<tr>
<td>Maximum articulation</td>
<td>±37°</td>
</tr>
</tbody>
</table>

**Cab**

Instrumentation: All important information is centrally located in the operator’s field of view on the Contronic monitoring system’s display unit. Heater and defroster: Heater coil with filtered fresh air and fan with four speeds. Defroster vents for all window areas. Operator seat: Ergonomic seat with adjustable suspension and retractable seatbelt. The seat is mounted on a bracket, which is mounted on the rear cab wall. The forces from the retractable seat belt are absorbed by the seat rail. Standard: The cab structure is tested and approved according to ROPS (ISO 3471) and FOPS (ISO 3449). The cab meets all requirements according to ISO 6055 (Operator Overhead Protection - Industrial Trucks) and SAE J386 (Operator Restraint System).

**Emergency exits**

1

Sound level in cab according to ISO 6396: LpA 70 dB (A)

External sound level according to ISO 6395 (Directive 2000/14/EC): LwA 108 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: Two load sensing axial piston pumps with variable displacement. The steering system 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 including raise, hold, lower and float. 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 including rollback, hold and dump. Inductive/magnetic automatic tilt can be adjusted to the desired bucket angle. Cylinders: Double-acting cylinders for all functions. Filter: Full-flow filtration through 20 micron (absolute) filter cartridge.

**Lift-arm system**

Torque Parallel Linkage (TP Linkage) with high breakout torque and parallel action throughout the entire lifting range.

<table>
<thead>
<tr>
<th>Lift cylinders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder bore</td>
</tr>
<tr>
<td>Piston rod diameter</td>
</tr>
<tr>
<td>Stroke</td>
</tr>
<tr>
<td>Tilt cylinder</td>
</tr>
<tr>
<td>Cylinder bore</td>
</tr>
<tr>
<td>Piston rod diameter</td>
</tr>
<tr>
<td>Stroke</td>
</tr>
</tbody>
</table>

**Service**

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

**Refill capacities**

- Fuel tank: 335 l (88.5 US gal)
- Engine coolant: 44 l (11.6 US gal)
- Hydraulic oil tank: 156 l (41.2 US gal)
- Transmission oil: 45 l (11.9 US gal)
- Engine oil: 48 l (12.7 US gal)
- Axles front/rear: 45/55 l (11.9/14.5 US gal)

**Emergency exits**

1

**Sound level in cab**

Sound level in cab according to ISO 6396: LpA 70 dB (A)

**External sound level**

External sound level according to ISO 6395 (Directive 2000/14/EC): LwA 108 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)

**Working pressure maximum, pump 1**

<table>
<thead>
<tr>
<th>Flow</th>
<th>234 l/min (61.2 US gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>at 10 MPa (1,450 psi)</td>
<td>32 r/s (1,900 rpm)</td>
</tr>
<tr>
<td>Working pressure, pump 2</td>
<td>250 MPa (3,625 psi)</td>
</tr>
<tr>
<td>Flow</td>
<td>190 l/min (50.2 US gpm)</td>
</tr>
<tr>
<td>at 10 MPa (1,450 psi)</td>
<td>32 r/s (1,900 rpm)</td>
</tr>
<tr>
<td>Pilot system</td>
<td>Working pressure</td>
</tr>
</tbody>
</table>

**Cycle times**

- Raise*: 7.2 s
- Tilt*: 2.0 s
- Lower, empty: 3.7 s
- Total cycle time: 12.9 s

* with load as per ISO 14397 and SAE J818
SPECIFICATIONS

Tires: 26.5 R25 L3

<table>
<thead>
<tr>
<th></th>
<th>Standard boom</th>
<th>Long boom</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>7180 mm</td>
<td>23&quot;</td>
</tr>
<tr>
<td></td>
<td>7640 mm</td>
<td>24'9&quot;</td>
</tr>
<tr>
<td>C</td>
<td>3550 mm</td>
<td>11'8&quot;</td>
</tr>
<tr>
<td>D</td>
<td>440 mm</td>
<td>1'5&quot;</td>
</tr>
<tr>
<td>F</td>
<td>3580 mm</td>
<td>11'9&quot;</td>
</tr>
<tr>
<td>G</td>
<td>2130 mm</td>
<td>7'0&quot;</td>
</tr>
<tr>
<td>J</td>
<td>4070 mm</td>
<td>13'4&quot;</td>
</tr>
<tr>
<td></td>
<td>4580 mm</td>
<td>15'0&quot;</td>
</tr>
<tr>
<td>K</td>
<td>4480 mm</td>
<td>14'8&quot;</td>
</tr>
<tr>
<td></td>
<td>4980 mm</td>
<td>16'4&quot;</td>
</tr>
<tr>
<td>O</td>
<td>57 °</td>
<td></td>
</tr>
<tr>
<td>P&lt;sub&gt;max&lt;/sub&gt;</td>
<td>49 °</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>45 °</td>
<td>48 °</td>
</tr>
<tr>
<td>R&lt;sup&gt;1&lt;/sup&gt;</td>
<td>48 °</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>70 °</td>
<td>63 °</td>
</tr>
<tr>
<td>T</td>
<td>113 mm</td>
<td>0'4&quot;</td>
</tr>
<tr>
<td>U</td>
<td>560 mm</td>
<td>1'10&quot;</td>
</tr>
<tr>
<td>X</td>
<td>2280 mm</td>
<td>7'6&quot;</td>
</tr>
<tr>
<td>Y</td>
<td>2950 mm</td>
<td>9'8&quot;</td>
</tr>
<tr>
<td>Z</td>
<td>3810 mm</td>
<td>12'6&quot;</td>
</tr>
<tr>
<td></td>
<td>4170 mm</td>
<td>13'8&quot;</td>
</tr>
<tr>
<td>a&lt;sub&gt;2&lt;/sub&gt;</td>
<td>6780 mm</td>
<td>22'3&quot;</td>
</tr>
<tr>
<td>a&lt;sub&gt;3&lt;/sub&gt;</td>
<td>3830 mm</td>
<td>12'7&quot;</td>
</tr>
<tr>
<td>a&lt;sub&gt;4&lt;/sub&gt;</td>
<td>±37 °</td>
<td></td>
</tr>
</tbody>
</table>

* Carry position SAE

Tires: 26.5 R25 L5

<table>
<thead>
<tr>
<th></th>
<th>Standard Boom</th>
<th>Long Boom</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>7180 mm</td>
<td>23&quot;</td>
</tr>
<tr>
<td></td>
<td>7640 mm</td>
<td>24'9&quot;</td>
</tr>
<tr>
<td>C</td>
<td>3550 mm</td>
<td>11'8&quot;</td>
</tr>
<tr>
<td>D</td>
<td>440 mm</td>
<td>1'5&quot;</td>
</tr>
<tr>
<td>F</td>
<td>3580 mm</td>
<td>11'9&quot;</td>
</tr>
<tr>
<td>G</td>
<td>2130 mm</td>
<td>7'0&quot;</td>
</tr>
<tr>
<td>J</td>
<td>4070 mm</td>
<td>13'4&quot;</td>
</tr>
<tr>
<td></td>
<td>4580 mm</td>
<td>15'0&quot;</td>
</tr>
<tr>
<td>K</td>
<td>4480 mm</td>
<td>14'8&quot;</td>
</tr>
<tr>
<td></td>
<td>4980 mm</td>
<td>16'4&quot;</td>
</tr>
<tr>
<td>O</td>
<td>57 °</td>
<td></td>
</tr>
<tr>
<td>P&lt;sub&gt;max&lt;/sub&gt;</td>
<td>49 °</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>45 °</td>
<td>48 °</td>
</tr>
<tr>
<td>R&lt;sup&gt;1&lt;/sup&gt;</td>
<td>48 °</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>70 °</td>
<td>63 °</td>
</tr>
<tr>
<td>T</td>
<td>113 mm</td>
<td>0'4&quot;</td>
</tr>
<tr>
<td>U</td>
<td>560 mm</td>
<td>1'10&quot;</td>
</tr>
<tr>
<td>X</td>
<td>2280 mm</td>
<td>7'6&quot;</td>
</tr>
<tr>
<td>Y</td>
<td>2950 mm</td>
<td>9'8&quot;</td>
</tr>
<tr>
<td>Z</td>
<td>3810 mm</td>
<td>12'6&quot;</td>
</tr>
<tr>
<td></td>
<td>4170 mm</td>
<td>13'8&quot;</td>
</tr>
<tr>
<td>a&lt;sub&gt;2&lt;/sub&gt;</td>
<td>6780 mm</td>
<td>22'3&quot;</td>
</tr>
<tr>
<td>a&lt;sub&gt;3&lt;/sub&gt;</td>
<td>3830 mm</td>
<td>12'7&quot;</td>
</tr>
<tr>
<td>a&lt;sub&gt;4&lt;/sub&gt;</td>
<td>±37 °</td>
<td></td>
</tr>
</tbody>
</table>

* Carry position SAE

Tires: 26.5 R25 L5

<table>
<thead>
<tr>
<th></th>
<th>Standard Boom</th>
<th>Long Boom</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>7180 mm</td>
<td>23&quot;</td>
</tr>
<tr>
<td></td>
<td>7640 mm</td>
<td>24'9&quot;</td>
</tr>
<tr>
<td>C</td>
<td>3550 mm</td>
<td>11'8&quot;</td>
</tr>
<tr>
<td>D</td>
<td>440 mm</td>
<td>1'5&quot;</td>
</tr>
<tr>
<td>F</td>
<td>3580 mm</td>
<td>11'9&quot;</td>
</tr>
<tr>
<td>G</td>
<td>2130 mm</td>
<td>7'0&quot;</td>
</tr>
<tr>
<td>J</td>
<td>4070 mm</td>
<td>13'4&quot;</td>
</tr>
<tr>
<td></td>
<td>4580 mm</td>
<td>15'0&quot;</td>
</tr>
<tr>
<td>K</td>
<td>4480 mm</td>
<td>14'8&quot;</td>
</tr>
<tr>
<td></td>
<td>4980 mm</td>
<td>16'4&quot;</td>
</tr>
<tr>
<td>O</td>
<td>57 °</td>
<td></td>
</tr>
<tr>
<td>P&lt;sub&gt;max&lt;/sub&gt;</td>
<td>49 °</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>45 °</td>
<td>48 °</td>
</tr>
<tr>
<td>R&lt;sup&gt;1&lt;/sup&gt;</td>
<td>48 °</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>70 °</td>
<td>63 °</td>
</tr>
<tr>
<td>T</td>
<td>113 mm</td>
<td>0'4&quot;</td>
</tr>
<tr>
<td>U</td>
<td>560 mm</td>
<td>1'10&quot;</td>
</tr>
<tr>
<td>X</td>
<td>2280 mm</td>
<td>7'6&quot;</td>
</tr>
<tr>
<td>Y</td>
<td>2950 mm</td>
<td>9'8&quot;</td>
</tr>
<tr>
<td>Z</td>
<td>3810 mm</td>
<td>12'6&quot;</td>
</tr>
<tr>
<td></td>
<td>4170 mm</td>
<td>13'8&quot;</td>
</tr>
<tr>
<td>a&lt;sub&gt;2&lt;/sub&gt;</td>
<td>6780 mm</td>
<td>22'3&quot;</td>
</tr>
<tr>
<td>a&lt;sub&gt;3&lt;/sub&gt;</td>
<td>3830 mm</td>
<td>12'7&quot;</td>
</tr>
<tr>
<td>a&lt;sub&gt;4&lt;/sub&gt;</td>
<td>±37 °</td>
<td></td>
</tr>
</tbody>
</table>

* Carry position SAE

Where applicable, specifications and dimensions are in accordance with ISO 7131, SAE J732, ISO 7546, SAE J742, ISO 14397, SAE J818.

Operating weight (incl. logging cw 1020 kg (2,249 lb)):
28 210 kg (62,203 lb)
Operating load: 8800 kg (19,404 lb)

Supplemental Operating Data

<table>
<thead>
<tr>
<th>Tires 26.5 R25 L3</th>
<th>Standard Boom</th>
<th>Long Boom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width over tires</td>
<td>mm</td>
<td>in</td>
</tr>
<tr>
<td>Ground clearance</td>
<td>mm</td>
<td>in</td>
</tr>
<tr>
<td>Tipping load, full turn</td>
<td>kg</td>
<td>lb</td>
</tr>
<tr>
<td>Operating weight</td>
<td>kg</td>
<td>lb</td>
</tr>
</tbody>
</table>
**Bucket Selection Chart**

The chosen 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 features of the TP Linkage, including an open bucket design, good rollback angles in all positions and good bucket filling performance. The example represents a standard boom configuration. Example: Sand and gravel. Fill factor ~ 105%. Density 2,780 lb/yd³.

Result: The 6.0 yd³ bucket carries 6.3 yd³. For optimum stability, always consult the bucket selection chart.

---

**Material**

- Earth/Clay ~ 110
- Sand/Gravel ~ 105
- Aggregate ~ 100
- Rock ≤100

**Material density, lb/yd³**

- Earth/Clay ~ 4,4
- Sand/Gravel ~ 4.8
- Aggregate ~ 4.8
- Rock ≤6.3

**ISO/SAE bucket volume, m³**

- Earth/Clay ~ 0.8
- Sand/Gravel ~ 0.8
- Aggregate ~ 0.8
- Rock ≤0.8

**Actual bucket volume, m³**

- Earth/Clay ~ 0.7
- Sand/Gravel ~ 0.7
- Aggregate ~ 0.7
- Rock ≤0.7

---

**Notes:**

1) With L5 tires

2) Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge. Measured at 45° dump angle. (Spade nose buckets at 42°.)

3) Rated at Volvo's recommended maximum utilization for L180E.
**STANDARD EQUIPMENT**

- **Engine**
  - Three-stage air cleaner with ejector and inner filter
  - Indicator glass for coolant level
- **Preheating of induction air**
- **Coolant filter**
- **Oil trap**
- **Electrical system**
  - 24 V, prewired for optional accessories
  - Alternator, 24 V/55 A
  - Air filter for alternator
  - Battery disconnect switch
  - Fuel gauge
  - Hour meter
  - Electric horn
  - Reverse alarm
- **Instrument panel with symbols**
  - Lighting:
    - Twin halogen front headlight 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)
  - Front and rear instrument lighting
- **Contronic monitoring system**
  - ECU with log and analysis system
  - Contronic display
- **ECU with log and analysis system**
- **Oil trap**
- **Fuel filter, extra large with water trap**
- **Hand throttle control**
- **Air pre-cleaner, Sy-Klone type**
- **Air pre-cleaner, oil-bath type**
- **Engine block heater, 230 V**
- **Oil sampling valve**
- **Grease nipple guards**
- **Wheel nut wrench kit**
- **Automatic lubrication system for attachment bracket**
- **Automatic lubrication system inclusive long boom**
- **Automatic lubrication system**
- **Tool kit**
  - (Standard on certain markets)
- **Hydraulic system**
  - Main valve, 2-spool
  - Pilot valves, 2-spool
  - Variable displacement axial piston pumps (3) for:
    - Working hydraulics
    - Steering system, pilot hydraulics and brakes
    - Fan motor
  - Boom lowering system
  - Boom kickout, automatic, adjustable
  - Bucket positioner, automatic with position indicator, adjustable
  - Hydraulic oil cooler
- **External equipment**
  - Noise and vibration dampening suspension of cab, engine and transmission
  - Lifting lugs
  - Easy-to-open side panels
  - Frame steering, joint lock
  - Ventilation air filter for work in asbestos environment
  - Air-conditioning with corrosion protected condenser
  - Retractable hipbelt, longer and wider than standard
  - Ventilation for work in asbestos environment
  - Air-conditioning with corrosion protected condenser and automatic temperature control (ATC)
  - Ventilation air filter for work in asbestos environment
  - Operator’s seat with low backrest
  - Operator’s seat with low backrest and electrical heating
  - Operator’s seat air suspended with high backrest and electrical heating
  - Operator’s seat air suspended with high backrest and electrical heating
  - Instructor’s seat
  - Armrest (left) for operator seat
  - Steering wheel knob
  - Noise reduction kit
  - Rearview camera incl. monitor
  - Rearview mirrors, el. heated
  - Cab ladder, rubber suspended
  - Reinforced cab for waste handling
- **Drive train**
  - Limited slip rear
  - Speed limiter 20 km/h
  - Speed limiter 30 km/h
  - Wheel/axle seal guards
- **Brake system**
  - Oil cooler for front and rear axle
  - Oil cooler for front and rear axle in comb. with reversible fan
  - Single lever control
  - Single lever control for 3rd hydraulic function
  - 3rd hydraulic function
  - 3rd hydraulic function for long boom
  - 3rd-4th hydraulic function
  - Boom Suspension System
  - Biodegradable hydraulic fluid
  - Attachment bracket, welded
  - Artic kit, attachment locking hoses and 3rd hydraulic function
  - Artic kit, pilot hoses and brake accumulator, incl. hydraulic oil
  - Separate attachment locking, standard boom
  - Separate attachment locking, long boom
  - Return-to-dig mode
  - Hydraulic oil cooler, extra

**OPTIONAL EQUIPMENT**

(Standard on certain markets)

- **Service and maintenance**
  - Tool box, lockable
  - Tool kit
  - Automatic lubrication system
  - Automatic lubrication system inclusive long boom
  - Automatic lubrication system for attachment bracket, welded
  - Refill pump for automatic lubrication system
  - Wheel nut wrench kit
  - Grease nipple guards
  - Oil sampling valve
- **Engine equipment**
  - Engine block heater, 120 V
  - Engine block heater, 230 V
  - Air pre-cleaner, oil-bath type
  - Air pre-cleaner, Sy-Klone type
  - Hand throttle control
  - Fuel filter, extra large with water trap
  - Fuel filter, with water trap and heating radiator, corrosion protected
  - Fan air intake protection
  - Reversible cooling fan
  - Reversible cooling fan in combination with axle oil cooler
- **Electrical system**
  - Alternator, 80 A
  - Working light, attachments
  - Working lights front, extra
  - Working lights rear, extra
  - Working lights front, on cab, dual
  - Working lights front, high intensity
  - Asymmetrical lights for left-hand traffic
  - Reverse lights
  - Shortened headlight support brackets
  - Warning beacon, flashing strobe light
  - Warning beacon, rotating, collapsible
  - Battery disconnect switch, additional in cab
  - Side marker lamps
  - Fire suppression system
- **CAB**
  - Installation kit for radio
  - Radio with tape recorder
  - Radio with CD-player
  - Sun blinds, front and rear windows
  - Sun blinds, side windows
  - Retractable hipbelt, longer and wider than standard
  - Air-conditioning with corrosion protected condenser
  - Air-conditioning with corrosion protected condenser and automatic temperature control (ATC)
  - Ventilation air filter for work in asbestos environment
  - Operator’s seat with low backrest
  - Operator’s seat with low backrest and electrical heating
  - Operator’s seat air suspended with high backrest and electrical heating
  - Instructor’s seat
  - Armrest (left) for operator seat
  - Steering wheel knob
  - Noise reduction kit
  - Rearview camera incl. monitor
  - Rearview mirrors, el. heated
  - Cab ladder, rubber suspended
  - Reinforced cab for waste handling

**Tires**

- 26.5 R25
- External equipment
  - Radio, USA
  - Other equipment
    - decals, USA
  - Fork equipment
    - Cutting edge in three sections, bolt-on
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, less spillage and increased 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)*
CDC significantly reduces repetitive and tiring steering wheel movements. The operator can shift and steer easily with the aid of controls integrated in the left armrest.

3rd and 4th hydraulic functions*
Volvo wheel loaders can be equipped with third and fourth hydraulic functions, which are operated with additional control levers. These functions are necessary when there’s a need to operate a third and fourth hydraulic function at the same time, such as when using a timber grapple with hydraulic heel kick-out.

Volvo genuine attachments
Volvo offers a wide range of attachments and wear parts, including the new Volvo Tooth System. Volvo genuine attachments are designed for all types of applications, from handling timber to breaking out hard and rocky materials, such as shot rock.
Volvo Construction Equipment is different. It’s designed, built and supported in a different way. That difference comes from our 170-year engineering heritage. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo. And we’re proud of what makes Volvo different – More care. Built In.

All products are not 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.