With the L110E, we’ve combined the optimal production loader with the flexible all-rounder. Whatever the job, the L110E will get it done quickly and efficiently at the lowest cost. This machine has all the well thought-out features and details to give the results you demand. Volvo L110E – the loader that gives you more, way more.

Volvo has developed and manufactured wheel loaders for half a century. The goal has always been to create the optimal machine for maximum performance and productivity, high operator comfort and unmatched flexibility. Now, the latest experiences and leading technology have resulted in the Volvo L110E. The high-performance, low-emission engine delivers close to maximum power already at low rpm. Furthermore, the powerful patented TP Linkage, combined with Volvo’s purpose-built range of attachments, provides the flexibility needed to handle a variety of tasks. Jobs at which the L110E excels include loading trucks, earthmoving, pallet handling and timber handling. Advanced technology helps to make this a swift, versatile and fuel-efficient production machine in any application.

**Gets more done**
You’ll find the L110E 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 haste.

**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 L110E, everybody is a winner. Quite simply, a great deal for your money.

**Specifications L110E**

<table>
<thead>
<tr>
<th>Engine</th>
<th>Volvo D7D LB E2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. power at</td>
<td>28.3 r/s (1700 rpm)</td>
</tr>
<tr>
<td>SAE J1995 gross</td>
<td>155 kW (210 hp)</td>
</tr>
<tr>
<td>ISO 9249, SAE J1349 net</td>
<td>154 kW (209 hp)</td>
</tr>
<tr>
<td>Breakout force</td>
<td>156.3 kN* (35,140 lbf)</td>
</tr>
<tr>
<td>Static tipping load at full turn</td>
<td>11,160 kg* (24,600 lb)</td>
</tr>
<tr>
<td>Buckets</td>
<td>2.7-9.5 m³ (3.5–12.4 yd³)</td>
</tr>
<tr>
<td>Timber grapple</td>
<td>1.1-2.4 m² (11.8–25.8 ft²)</td>
</tr>
<tr>
<td>Operating weight</td>
<td>18.0-20.0 t (39,680–44,090 lb)</td>
</tr>
<tr>
<td>Tires</td>
<td>23.5 R25, 750/65 R25</td>
</tr>
</tbody>
</table>

* Bucket: 3.1 m³ (4.1 yd³) with bolt-on edges, Tires: 23.5 R25 L3, Standard boom
Power up your productivity

Load more tons per hour with the Volvo L110E. Its powerful engine and the 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 L110E a precision performer.

The only thing modest about this machine is its fuel consumption
Even at low rpm, the 7 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 L110E 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 D7D, 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.

* Optional equipment
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.

Conronic keeps an eye on everything
Conronic, 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 Conronic 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 its ingenious rubber mounting system 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.

Volvo Care Cab with the Conronic 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.
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 L110E 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 L110E is a super competitive wheel loader that puts the operator right in the middle, literally speaking. Tedious 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 L110E 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 L110E.

**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 L110E 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 L110E has steps and platforms that are equipped with anti-slip surfaces and well positioned hand rails.

**Environment**

- The low rpm, high-performance D7D engine meets all current emission requirements according to step 2 legislation in Europe and the US.
- The L110E is manufactured in environmentally certified factories according to ISO 14001.
- The L110E is more than 95% recyclable according to material weight.
- Low external and internal sound levels.
VOLVO L110E IN DETAIL

Engine
7 liter, 6-cylinder straight turbocharged diesel engine with electronically-controlled unit pumps and conventional 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.

<table>
<thead>
<tr>
<th>Engine</th>
<th>Volvo D7D LB E2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. power at</td>
<td>283 r/s (1,700 rpm)</td>
</tr>
<tr>
<td>SAE J1995 gross</td>
<td>155 kW (210 hp)</td>
</tr>
<tr>
<td>ISO 9249, SAE J1349</td>
<td>154 kW (209 hp)</td>
</tr>
<tr>
<td>Max. torque at</td>
<td>233 r/s (1,400 rpm)</td>
</tr>
<tr>
<td>SAE J1995 gross</td>
<td>1023 Nm (754 lbf ft)</td>
</tr>
<tr>
<td>ISO 9249, SAE J1349</td>
<td>1014 Nm (748 lbf ft)</td>
</tr>
<tr>
<td>Economic working range</td>
<td>1100–1600 rpm</td>
</tr>
<tr>
<td>Displacement</td>
<td>7.1 l (433 in³)</td>
</tr>
</tbody>
</table>

Electrical system
Central warning system: Central warning light for the following functions (buzzer with gear engaged): Engine oil pressure, charge air temperature, fuel 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.

<table>
<thead>
<tr>
<th>Voltage</th>
<th>24 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batteries</td>
<td>2x12 V</td>
</tr>
<tr>
<td>Battery capacity</td>
<td>2x140 Ah</td>
</tr>
<tr>
<td>Cold cranking capacity, approx.</td>
<td>1050 A</td>
</tr>
<tr>
<td>Reserve capacity, approx.</td>
<td>270 min</td>
</tr>
<tr>
<td>Alternator rating</td>
<td>1540 W/55 A</td>
</tr>
<tr>
<td>Starter motor output</td>
<td>5.4 kW (7.3 hp)</td>
</tr>
</tbody>
</table>

Drivetrain
Torque converter: single-stage.
Transmission: Volvo countershaft transmission with single lever control. Fast and smooth shifting of gears between forward and reverse with Pulse Width Modulation (PWM) valve. Gear-shifting system: Volvo Automatic Power Shift (APS) with fully automatic shifting 1-4 and mode selector with four different gear shifting programs, including AUTO.
Axles: Volvo fully-floating axle shafts with planetary hub reductions and cast steel axle housings. Fixed front axle and oscillating rear axle. 100% differential lock on the front axle.

Transmission
Volvo HTE 204
Torque multiplication 2,69:1
Maximum speed, forward/reverse

<table>
<thead>
<tr>
<th>Gear</th>
<th>Speed (km/h) (mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>71 km/h (44 mph)</td>
</tr>
<tr>
<td>2</td>
<td>132 km/h (82 mph)</td>
</tr>
<tr>
<td>3</td>
<td>253 km/h (157 mph)</td>
</tr>
<tr>
<td>4</td>
<td>362 km/h (225 mph)</td>
</tr>
</tbody>
</table>

Measured with tires 23.5 R25 L3
Front axle/rear axle Volvo/AMB 31/30
Rear axle oscillation ±19°
Ground clearance at 13° osc. 460 mm (18.1 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.

<table>
<thead>
<tr>
<th>Number of brake discs per wheel front/rear</th>
<th>1/1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulators</td>
<td>3x1.0 l (3x0.26 US gal)</td>
</tr>
<tr>
<td>Accumulators for parking brake</td>
<td>1x1.0 l (1x0.26 US gal)</td>
</tr>
</tbody>
</table>
**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>Cylinder bore</th>
<th>80 mm (3.15 in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piston rod diameter</td>
<td>50 mm (1.97 in)</td>
</tr>
<tr>
<td>Stroke</td>
<td>486 mm (19.1 in)</td>
</tr>
<tr>
<td>Working pressure</td>
<td>21 MPa (3,046 psi)</td>
</tr>
<tr>
<td>Maximum flow</td>
<td>120 l/min (31.7 US gpm)</td>
</tr>
<tr>
<td>Maximum articulation</td>
<td>±40°</td>
</tr>
</tbody>
</table>

**Cab**
Instrumentation: All important information is centrally located in the operator’s field of view on the Conronic 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).

**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 Kick-out 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.

| Working pressure maximum, pump 1 | 21.0 MPa (3,046 psi) |
| Flow | 145 l/min (38.3 US gpm) |
| at 10 MPa (1,450 psi) and engine speed 32 r/s (1,900 rpm) |
| Working pressure, pump 2 | 24.0 MPa (3,480 psi) |
| Flow | 110 l/min (31.7 US gpm) |
| at 10 MPa (1,450 psi) and engine speed 32 r/s (1,900 rpm) |
| Pilot system |
| Working pressure | 3.5 MPa (508 psi) |
| Cycle times |
| Raise* | 5.4 s |
| Tilt* | 2.1 s |
| Lower, empty | 2.8 s |
| Total cycle time | 10.0 s |

*L with load as per ISO 14397 and SAE J818

**Lift-arm system**
Torque Parallel Linkage (TP Linkage) with high breakout torque and parallel action throughout the entire lifting range.

| Lift cylinders | 2 |
| Cylinder bore | 150 mm (5.9 in) |
| Piston rod diameter | 80 mm (3.15 in) |
| Stroke | 676 mm (26.6 in) |
| Tilt cylinder | 1 |
| Cylinder bore | 220 mm (8.7 in) |
| Piston rod diameter | 110 mm (4.3 in) |
| Stroke | 412 mm (16.2 in) |

**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 | 215 l (56.9 US gal) |
| Engine coolant | 70 l (18.5 US gal) |
| Hydraulic oil tank | 143 l (37.8 US gal) |
| Transmission oil | 38 l (10.0 US gal) |
| Engine oil | 21 l (5.5 US gal) |
| Axles front/rear | 36/41 l (9.5/10.8 US gal) |

**Emergency exits**
1

**Sound level in cab according to ISO 6396**
LpA 68 dB (A)

**External sound level according to ISO 6395 (Directive 2000/14/EC)**
LwA 106 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)
SPECIFICATIONS

Tires: 23.5 R25 L3

| B | 6440 mm | 21'1" |
| C | 3200 mm | 10'6" |
| D | 440 mm  | 1'5"  |
| F | 3360 mm | 11'0" |
| G | 2130 mm | 7'0"  |
| J | 3710 mm | 12'2" |
| K | 4030 mm | 13'3" |
| O | 56 °    |       |
| P | 49 °    |       |
| R | 41 °    |       |
| R1 | 45 °   |       |
| S | 66 °    |       |
| T | 92 mm   | 0'3.6"|
| U | 480 mm  | 17"   |
| X | 2060 mm | 6'9"  |
| Y | 2680 mm | 8'9"  |
| Z | 3310 mm | 10'1" |
| a3 | 5730 mm | 18'1" |
| a4 | 3060 mm | 10'0" |
| a6 | ±40 °   |       |

* Carry position SAE

Tires: 750/65 R25

| A | 2.4 m² | 25.8 ft² |
| B | 3480 mm | 11'5" |
| C | 1850 mm | 6'1"  |
| D | 2860 mm | 9'5"  |
| E | 1460 mm | 4'9"  |
| F | 1530 mm | 5'0"  |
| G | 2720 mm | 8'11" |
| H | 4600 mm | 15'1" |
| I | 6640 mm | 21'9" |
| J | 2790 mm | 9'2"  |
| K | 2990 mm | 9'10" |
| L | 2050 mm | 6'9"  |
| M | 8720 mm | 28'7" |

Supplemental Operating Data

<table>
<thead>
<tr>
<th>Tires</th>
<th>23.5 R25 L3</th>
<th>23.5 R25 LS</th>
<th>750/65 R25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width over tires</td>
<td>mm</td>
<td>in</td>
<td>+30</td>
</tr>
<tr>
<td>Ground clearance</td>
<td>mm</td>
<td>in</td>
<td>+40</td>
</tr>
<tr>
<td>Tipping load, full turn</td>
<td>kg</td>
<td>lb</td>
<td>+470</td>
</tr>
<tr>
<td>Operating weight</td>
<td>kg</td>
<td>lb</td>
<td>+680</td>
</tr>
</tbody>
</table>

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 680 kg (1,500 lb)): 19 780 kg (43,610 lb)
Operating load: 6400 kg (14,110 lb)
### 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 a good rollback angle 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 4.1 yd³ bucket carries 4.3 yd³. For optimum stability, always consult the bucket selection chart.

<table>
<thead>
<tr>
<th>Material/Clay Bucket fill, %</th>
<th>Hand shovel</th>
<th>ISO/SAE bucket volume, m³</th>
<th>Actual volume, m³</th>
<th>lb/yd³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth/Clay ~ 110</td>
<td>1.80</td>
<td>3.035</td>
<td>2.9</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>1.70</td>
<td>2.865</td>
<td>3.1</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>1.50</td>
<td>2.530</td>
<td>3.4</td>
<td>4.5</td>
</tr>
</tbody>
</table>

| Sand/Gravel ~ 105 | 1.75 | 2.950 | 2.9 | 3.8 | -3.0 | 3.9 |
| | 1.65 | 2.780 | 3.1 | 4.1 | -3.3 | 4.3 |
| | 1.50 | 2.530 | 3.4 | 4.5 | -3.6 | 4.7 |

| Aggregate ~ 100 | 1.90 | 3.200 | 2.9 | 3.8 | -2.9 | 3.8 |
| | 1.70 | 2.865 | 3.1 | 4.1 | -3.1 | 4.1 |
| | 1.50 | 2.530 | 3.4 | 4.5 | -3.4 | 4.4 |

| Rock ≤100 | 1.80 | 3.035 | 2.7 | 3.5 | -2.7 | 3.5 |

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

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Note: This only applies to Volvo original attachments.

**) 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°.)

***) Rated at Volvo's recommended maximum utilization for L110E.
STANDARD EQUIPMENT

Engine
- Three-stage air cleaner with ejector and inner filter
- Indicator glass for coolant level
- Preheating of induction air
- Muffler, spark arresting
- Fuel filter, extra large with water trap
- Fuel fill strainer
- Coolant filter
- Oil trap

Electrical system
- 24 V, prewired for optional accessories
- Alternator, 24 V/SS A
- Air filter for alternator
- Exchange battery
- Battery disconnect switch
- Battery boxes, steel
- Fuel gauge
- Hour meter
- Electric horn
- Reverse alarm
- Instrument panel with symbols
- Lighting:
  - Halogen front headlights with high and low beams
  - Parking lights
  - Double brake and tail lights
  - Turn signals with flashing hazard light function
  - Halogen working lights (2 front and 2 rear)
  - Instrument lighting

Conntrol monitoring system
- ECU with log and analysis system
- Conntrol display
- Fuel consumption
- Outdoor temperature
- Engine shutdown to idle in case of malfunction indication:
  - High engine coolant temperature
  - Low engine oil pressure
  - High transmission oil temperature
- Start interlock when gear is engaged
- Brake test
- Test function for warning and indicator lights
- Warning and indicator lights:
  - Charging
  - Oil pressure engine
  - Oil pressure transmission
  - Brake pressure
  - Parking brake
  - Hydraulic oil level
  - Axle oil temperature
  - Primary steering
  - Secondary steering
  - High beams
  - Turn signals
  - Rotating beacon
  - Preheating coil
  - Differential lock
  - Coolant temperature
  - Transmission oil temperature
  - Brake charging
- Level warnings:
  - Engine oil level
  - Coolant level
  - Transmission oil level
  - Hydraulic oil level
  - Washer fluid level

Drivetrain
- Automatic Power Shift with operator-controlled declutch function for transmission cut-out when braking and mode selector with AUTO function
- Fully automatic shifting gears 1-4
- PWN-control between different gear positions
- Forward and reverse switch by lever console
- Differential front: 100% hydr. diff. lock, rear: conventional

Tires
- 23.5 R25

Brake system
- Wet oil circulation-cooled disc brakes on all four wheels, outboard mounted
- Dual brake circuits
- Dual service brake pedals
- Secondary brake system
- Parking brake, el-hydraulic
- Brake wear indicator

Cab
- ROPS (ISO 3471), FOPS (ISO 3449)
- Lockable door
- Cigarette lighter
- Ashtray
- Lock kit, one combination
- Acidic inner lining
- Ashtray
- Cigarette lighter
- Lockable door
- Cab heating with filter, fresh-air inlet and defroster
- Floor mat
- Cabat, rubber

Radio with CD-player
- Sun blinds, front and rear windows
- Sun blinds, side windows
- Retractable hibbelt, longer and wider than standard
- Air-conditioning
- Air-conditioning with corrosion protected condenser
- Air-conditioning with automatic temp. control (ATC)
- Air-conditioning with corrosion protected condenser and automatic temp. control (ATC)

Ventilator
- Air flow 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's seat
- Lunchbox holder
- Steering wheel knob
- Noise reduction kit
- Rearview camera incl. mirror
- Rearview mirrors, el. heated

Drivetrain
- Limited slip rear
- Speed limiter 20 km/h
- Speed limiter 30 km/h
- Wheel/axle seal guards

Brake system
- Parking brake alarm, audible
- Oil cooler for front and rear axles
- Oil cooler for front and rear axles in combination with reversible fan

Hydraulic system
- Single lever control
- Single lever control for 3rd hydraulic function
- 3rd hydraulic function
- 3rd-4th hydraulic function
- Detent for 3rd hydraulic function
- Boom Suspension System
- Single acting lifting function
- Biodegradable hydraulic fluid
- Attachment bracket, cast
- Attachment bracket, welded
- Artic kit, attachment locking hoses
- Artic kit, pilot hoses and brake accum.
- Separate attachment locking
- Return-to-dig

Interior light
- Interior rearview mirrors
- Two exterior rearview mirrors
- Operable window right-hand side
- Sliding window, right
- Sliding window, left
- Tinted safety glass
- Hip retractable seatbelt (SAE J368)
- Adjustable lever console
- Adjustable steering wheel
- Operator's seat with high backrest and electrical heating
- Storage compartment
- Sun visor
- Beverage holder
- Windshield wipers front and rear
- Windshield wipers front and rear
- Interval function for front and rear windshield wipers
- Service platforms with anti-slip surfaces on front and rear fenders
- Speedometer

Hydraulic system
- Main valve, 2-spool
- Pilot valve, 2-spool
- Variable displacement axial piston pumps (3) for:
  - working hydraulics
  - steering system, pilot hydraulics and brakes
  - fan motor
- Boom lowering system
- Boom kickout, automatic, adjustable
- Buckle 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
- Vandalism lock prepared for batteries and engine compartment
- Towing hitch
- Guardrails, on rear mudguards

Protective equipment
- Cover plates, rear frame

Other equipment
- Decals, USA

OPTIONAL EQUIPMENT

(Optional on certain markets)

Service and maintenance
- Tool box, lockable
- Tool kit
- Automatic lubrication system
- Automatic lubrication system for attachment bracket, cast
- Automatic lubrication system for attachment bracket, welded
- Refill pump for automatic lubrication system
- Wheel nut wrench kit
- Oil sampling valve

Engine equipment
- Engine block heater, 120 V
- Engine block heater, 230 V
- Air pre-cleaner, oil-bath type
- Air pre-cleaner, turbo type
- Air pre-cleaner, Sy-Klone type
- Hand throttle control
- Radiator, hydraulic oil cooler and fuel cooler, corrosion protected
- Fan air intake protection
- Reversible cooling fan
- Reversible cooling fan (in comb. with axle oil cooler)

Electrical system
- Alternator, 80 A
- Battery disconnect switch, additional in cab
- Working light, attachments
- Working lights front, extra
- Working lights side, extra
- Working lights front, on cab, dual
- Working lights front, high intensity
- License plate holder, lighting
- Asymmetrical lights for left-hand traffic
- Reverse lights
- Shortened headlight support brackets
- Warning beacon, flashing strobe light
- Warning beacon, rotating, collapsible
- Side marker lamps
- Fire suppression system

Cab
- Installation kit for radio
- Radio with tape recorder
- Radio with CD-player
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- Guardrails, on rear mudguards

Protective equipment
- Cover plates, rear frame

Other equipment
- Decals, USA

External equipment
- Mudguards
- Mudguards, full coverage rear
- Mudguards, full coverage front/rear
- Mudflap kit for mudguards
- Deleted front mudguards and rear wideners
- Logging counterweight

Protective equipment
- Guards for front headlights
- Guards for taillights
- Guards for taillights, heavy-duty
- Guards for side and rear windows
- Guard for radiator grille
- Windshield guard
- Bellguard front
- Bellguard rear
- Cover plate for front frame, heavy-duty
- Cover plate, under cab
- Guards for grease nipple
- Guards for center hinge and rear frame
- Guards for boom cylinder hose and tube
- Corrosion protection, painting of machine
- Corrosion protection, painting of attachment bracket
- Bucket teeth protection

Other equipment
- Comfort Drive Control, CDC
- Secondary steering
- Sign, slow moving vehicle
- Sign, 50 km/h
- CI-marking

Tires
- 750/65 R25

Attachments
- Buckets:
  - Straight with/without teeth
  - Spade nose with/without teeth
  - High tipping
  - Light materials
- Bolt-on and weld-on bucket teeth
- Cutting edge in three sections
- Bolt-on
- Bucket spill guard
- Fork equipment
- Material handling arm
- Log grapples
**Boom Suspension System (BSS)**

BSS utilizes gas/oil accumulators connected to the lift cylinders to absorb shocks and smooth out rough roads for faster cycle times, 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 sweeper attachment or a timber grapple with hydraulic heel kick-out.

**Genuine Volvo attachments**

Genuine Volvo attachments and wear parts, including the new Volvo Tooth System, are designed as an integral part of the loader, making the L110E a swift and versatile machine in a wide range of applications.

* Optional
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.