

**VOLVO WHEEL LOADERS**

**L90D  
L120D**



**VOLVO**

# No compromises with Volvo's renowned mid-size rehandlers



The new L90D and L120D have what it takes to be successful in a wide array of rehandling, construction, industrial and timber handling applications. As part of the new D-series, these two machines are packed with efficiency boosting solutions like the new Care Cab II, the industry's most advanced operator environment. But the real secret behind the performance of these two machines lies in their well matched drive-trains, which allow maximum utilization of power at the wheels and in the working hydraulics. Whether you're talking engine, transmission or operator comfort, second best never enters into our equation.



Visibility-optimized attachment bracket.

A lift-arm system for all applications Volvo is committed to innovation, and nowhere is this more evident than in the design of our patented lift-arm system, TP Linkage. Combining superior breakout torque throughout the lift cycle with parallel lift action, TP Linkage easily outperforms Z-bar and parallel linkage systems, allowing the same loader to provide excellent performance in a wide array of applications. Whether dumping a bucket load of material smoothly into a truck or hopper, or breaking out a full grapple of logs from a trailer, TP linkage gives your operator complete control over the load and attachment at all times during the work cycle. And if that cycle happens to include high sided hoppers or trucks, the L120D is available with an optional Long Boom for increased dump height.

**High torque – low rpm**  
Powered by fuel efficient Volvo high performance low emission engines with twin pump intercooling, the L90D and L120D have plenty of torque available at low engine speeds for high rimpull, quick acceleration and fast cycle times.

**A big step forwards – and backwards**  
Now featuring four gears in both the forward and reverse ranges, the Volvo countershaft transmissions in the L90D and L120D allow these machines to move with even more agility in tight applications. Even if your operation doesn't require higher reverse speeds, you can still utilize the fourth reverse gear to operate at lower engine rpm, saving fuel and conserving the environment at the same time.



TP linkage comes into its own in logging applications. No other system can provide such high breakout torque throughout the entire lift cycle.



The visibility-optimized attachment bracket and refined TP linkage provide a clear view of both attachment and load.



One of the rehandler's natural environments – feeding a hopper.

# A breath of fresh air for the operator



Over the years, the Volvo name has become synonymous with operator comfort and safety. The L90D and L120D, featuring the new Care Cab II, are sure to enhance that reputation even further. From floor to ceiling, this cab has been designed to provide maximum comfort, safety and ease of operation. Not even the air inside has been left untouched. Our new ventilation system allows all recirculated air to pass through the main filter, providing the cleanest operator environment in the industry.

Designed with the operator in mind  
 Once you've comfortably positioned yourself in the multi-adjustable operator's seat, you'll soon discover why Care Cab II provides the best operator environment that money can buy. To your right, the hydraulic lever console can be adjusted to suit any operator. On the console itself, you'll find pilot-operated fingertip hydraulic levers for easy and precise boom/bucket control as well as controls for the APS II shifting system. All instrumentation is right in front of you on the center console of the new wrap-around dashboard. The three piece, silicon bonded front windshield provides excellent visibility to the front, while a new, larger rear window gives you a clear rear view.



Care Cab II offers unparalleled all-round visibility.

**Custom shifting**

The unique APS II automatic shifting system monitors both engine speed and ground speed to provide precise control of gear shifting at all times. APS II also features a dashboard mounted mode selector, enabling you to select one of four different shifting programs to optimize performance in any application.

**Keep an eye on performance**

The new Contronic II monitoring system continuously monitors all vital



*Left:* Ten air outlets provide fresh filtered and climate-controlled air. Contronic II control panel allows direct access to all major monitoring functions.

*Middle/right:* Forward, reverse or kickdown – APS II shifting can be controlled with the shift lever, rocker switch on the hydraulic console or the CDC armrest\*\*.



Pilot operated fingertip hydraulic levers provide easy control of the hydraulic functions. The adjustable hydraulic lever console also features a rocker switch for forward/reverse shifting and 1<sup>st</sup> gear kickdown button.

machine systems and functions, instantly alerting you when a potential problem or fault occurs. All information is displayed in plain text in a language of your choice. The new display control panel now features direct access buttons for all major monitoring functions, making the industry's most advanced watchdog even more user-friendly. Service technicians can use the optional Contronic II service display tool or our new PC-based data tracking system, Matris, to access operating information stored in the machine's main computer.

**Increase comfort and productivity at the same time**

A full range of productivity boosting options, including Comfort Drive Control (CDC) lever steering, are available on the L90D and L120D. CDC is particularly effective in fast paced truck loading operations where continuous turning of the steering wheel can be trying over the course of a long day. Another productivity boosting option is the improved Boom Suspension System (BSS). BSS acts as a shock absorber for the loader linkage, smoothing out the bumps in rough terrain for faster travel speeds with both loaded and empty buckets.

**No noise to shout about**

The low emission engine, coupled with good sound insulation, help to further reduce internal and external noise levels. When equipped with an optional noise reduction kit\*, the L90D and L120D both comply with EU 2006 sound regulations.

\* Std on certain markets.

\*\* Optional.



# The D-series rehandlers in detail

## Attachment bracket

Volvo's visibility-optimized attachment bracket and attachments facilitate swifter tool changes, while offering the best possible visibility around the attachment

## TP Linkage

Unique patented linkage system combining parallel lift action with high breakout torque throughout the whole lifting cycle as well as optimal visibility around the attachment. Long boom version optional on the L120D.

## Boom Suspension System (BSS)\*

BSS\*\* utilizes gas/oil accumulators connected to the lift cylinders to absorb shocks and smooth out rough roads for faster times and increased operator comfort.

## Easier daily maintenance

Our factory mounted Automatic Lubrication System\* takes care of required greasing while the machine operates in its normal work cycle. This means less downtime for scheduled maintenance and more productive work time.

## Volvo axles

Volvo axles feature outboard mounted wet disc brakes with internal oil circulation cooling, fully floating axle shafts and a front axle differential lock.

## Volvo Genuine Attachments

Volvo Genuine buckets and attachments are designed and manufactured to match TP Linkage perfectly, making the L90D and L120D quick and efficient to operate.



General purpose bucket  
– teeth and segments



High-dump light materials  
bucket



Pallet Fork – visibility optimized



Grapple



Material handling arm



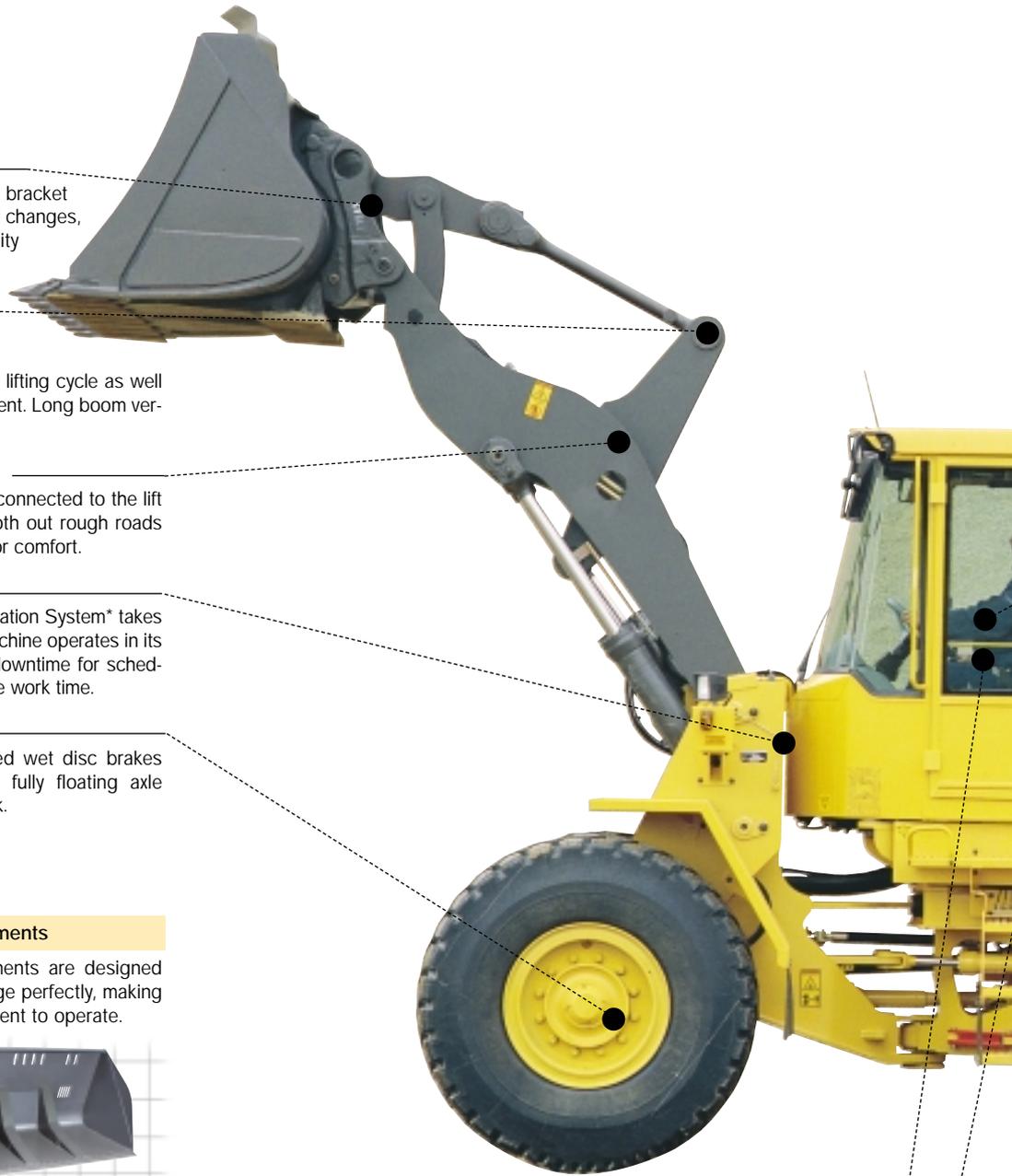
Snow plough

## Contronic II

The Contronic II monitoring system keeps an eye on all vital machine systems and functions in order to warn you of potential problems or faults before it's too late. Warning messages and operating information are shown in plain text on the dashboard mounted display screen. Service technicians can increase their diagnostic efficiency by using the Contronic II service display or Matris software to download operating information stored in the machine's computer.

## Care Cab II

A safe, comfortable, efficient and ROPS/FOPS certified operator environment featuring a new wraparound dashboard with central instrumentation, a larger rear window, and an adjustable hydraulic lever console with pilot-operated fingertip hydraulic levers.





**Load-sensing steering**

Low fuel consumption and easy steering at low rpm are two important benefits of the load-sensing steering system.

**Hydraulic System**

The open center hydraulic system with efficient high capacity vane pumps allows precision control and quick movements even at low rpm's.

**Comfort Drive Control (CDC)\***

Operator fatigue is reduced with the CDC lever steering system\*, which allows you to steer and shift with easily operated controls mounted on the left armrest of the seat.

**High Performance Low Emission Engine**

The Volvo engine generates high torque at low rpm, for quick response and low exhaust emissions that meet all existing requirements.

**Low external noise levels**

The Volvo low emission engine and insulated engine compartment help to keep external sound levels low. Optional EU 2006 noise reduction kits are available for both L90D and L120D.

**Excellent serviceability**

Easily accessible service panels and service points, a swing-out radiator for quick cleaning and the Contronic II watchdog are just a few of the service-friendly solutions.

\* Optional.

**APS II**

Volvo's unique automatic shifting system, APS II, monitors both engine speed and ground speed to provide optimum control of gear shifting in any application. A dashboard mounted mode selector allows you to choose one of four different shifting programs to customize machine performance to your job. A 1st gear kickdown button and forward/reverse rocker switch mounted on the hydraulic console allow you to operate the APS II system with your right hand while your left hand stays on the steering wheel at all times.

Specifications	L90D	L120D
Engine:	Volvo TD 63 KBE	Volvo TD 73 KDE
Max power at	35 r/s (2100 r/min)	35 r/s (2100 r/min)
SAE J 1995 gross	118 kW (160 hp)	153 kW (208 hp)
ISO 9249, SAE J 1349 net	113 kW (153 hp)	148 kW (201 hp)
Max. torque at	18,3 r/s (1100 r/min)	18,3 r/s (1100 r/min)
SAE J 1995 gross	695 Nm	925 Nm
ISO 9249, SAE J 1349 net	690 Nm	920 Nm
Breakout force:	114 kN*	159,1 kN**
Static tipping load: at full turn	8990 kg*	12 310 kg**
Buckets:	2,2 m <sup>3</sup> -7,0 m <sup>3</sup>	3,0 m <sup>3</sup> -9,5 m <sup>3</sup>
Operating weight:	14,9-16,7 t	18,4-20,6 t
Tires:	20.5 R25	23.5 R25

\* Bucket: 2,2 m<sup>3</sup> straight edge w/teeth. Tires: 20.5 R25. Standard boom.  
 \*\* Bucket: 3,0 m<sup>3</sup> straight edge w/teeth. Tires: 23.5 R25. Standard boom.



## 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 web site:  
[www.volvo.com](http://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.*

# **VOLVO**

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