

**VOLVO WHEEL LOADERS**

**L50D  
L70D**



**VOLVO**



# Volvo L50D & L70D – masters of all trades



With the Volvo D-series wheel loaders, we're ready to take the next step in loader development. We're confident that the L50D and L70D will become industry benchmarks when it comes to all-round performance. Are we being over-optimistic? We think not. Not only does Volvo offer the widest range of attachments on the market, these two machines come packed with improvements to increase the profitability of even the most efficient operations.





### Two for the price of one

The new all-rounders feature TP-linkage, Volvo's patented lift-arm system. This unique system delivers superior breakout torque throughout the lifting range, combined with parallel lift-arm action. TP-linkage is superior to Z-bar and parallel systems at handling both buckets and other attachments. And, thanks to the new visibility-optimized attachment bracket and refined TP-linkage, the operator now has an even clearer view of what's happening around the attachment and load.

### Productivity in heaps

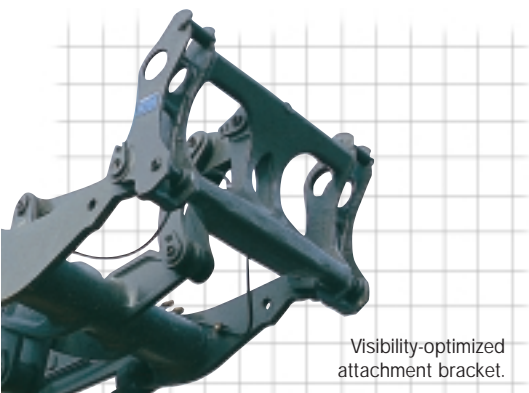
Powered by High Performance Low Emission engines, with twin-pump intercooling\*, the two all-rounders provide high rimpull, excellent penetration and fast acceleration. With its superb low rpm performance, the Volvo engine responds immediately to the operator's commands.

### Power when and where it's needed

One of the secrets behind the efficient performance of the L50D and L70D is load-sensing hydraulics. In addition to providing superior attachment control, this system pumps oil only when and where it's needed. Besides saving fuel, load-sensing hydraulics allow more engine power to be used by the drivetrain for fast work cycles.

Add to that the L50D's hydrostatic transmission, with quick acceleration and continuously variable speed control, as well as the L70D's countershaft transmission, with four forward and reverse speeds and you've got two cost-efficient, comfortable and reliable all-rounders. The Volvo L50D and L70D. Masters of all trades.

\* Only L70D. \*\* Optional.



Visibility-optimized attachment bracket.



The TP linkage system facilitates long reach and parallel action even at the top.



The Volvo material handling arm is perfectly matched to the superior breakout torque and precise control offered by TP-Linkage.



With their wide range of attachments, the L50D and L70D are true all-rounders.



Thanks to the hydrostatic transmission, with its inching function\*\*, the L50D can maximize power to the attachments while operating at very low speeds.



# A breath of fresh air for the operator



Over the years, the Volvo name has become synonymous with operator comfort and safety. The L50D and L70D, 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. Even the air inside the cab has been enhanced. 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.



Visibility around the new attachment bracket and refined TP linkage make pallet forks even easier to use.

#### 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 modes 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.

machine systems and functions, instantly alerting you when a potential problem or fault occurs. All information is displayed in plain text in one of several different languages. 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 L50D and L70D. 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. The L50D complies with EU 2006 sound regulations while the L70D requires an optional sound reduction kit\*. Furthermore, the Blauer Engel sound kit is available as an option when even lower noise levels are called for.

\* *Std on certain markets.*

\*\* *L70D only.*

\*\*\* *Optional.*





# The D-series all-rounders 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.

## Boom Suspension System (BSS)\*\*

BSS\*\* utilizes nitrogen/oil accumulators connected to the lift cylinders to absorb shocks and smooth out rough roads. Boom Suspension has two modes, gear dependent or speed dependent, to match any job condition.

## Easier daily maintenance

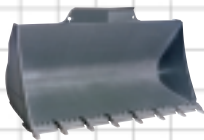
Our factory mounted Automatic Lubrication System\*\* takes care of required greasing while the machine operates in its normal work cycle. This means less downtime for scheduled maintenance and more productive work time.

## Volvo axles

Volvo axles feature outboard mounted wet disc brakes with internal oil circulation cooling, fully floating axle shafts and front axle differential lock (optional on L50D).

## Volvo Genuine Attachments

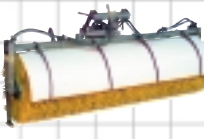
Volvo Genuine buckets and attachments are designed and manufactured to match TP Linkage perfectly, making the L50D and L70D quick and efficient to operate.



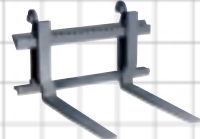
General purpose bucket  
- teeth and segments



Grading bucket



Sweeper



Pallet Fork - visibility optimized



Material handling arm



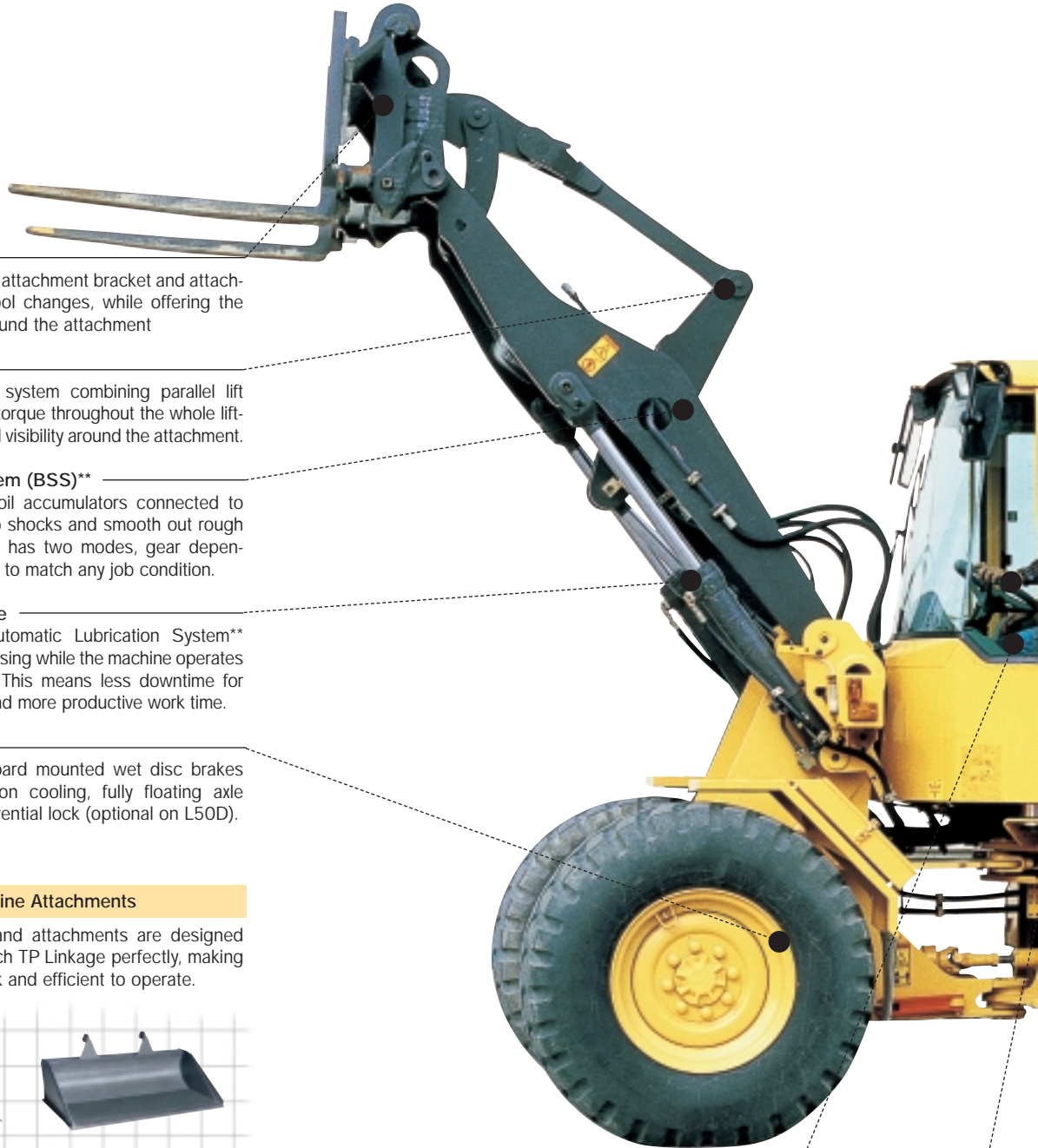
Grapple

## Contronic II

The Contronic II monitoring system keeps an eye on all vital machine systems and functions in order to warn the operator 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.

**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.

**Load-sensing hydraulics**

The load-sensing hydraulic system utilizes variable displacement piston pumps to circulate oil only when and where needed, saving fuel and conserving engine power for greater penetration when loading the bucket, and faster cycle times in load and carry operations.

**High Performance Low Emission Engine**

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

**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.

**Low external noise levels**

An insulated engine compartment with an external radiator and hydraulically driven cooling fan\*\*\* help to keep external noise levels below EU 2006 legal demands. A Blauer Engel kit is available for urban applications when even lower noise levels are called for.

\* L70D only.  
 \*\* Optional.  
 \*\*\* Optional L70D.

**APS II on the L70D**

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 modes 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.

**Hydrostatic transmission on L50D**

The L50D features a hydrostatic transmission with high and low speed range and an inching function\*\* for precise control of ground speed.

Specifications	L50D	L70D
Engine:	Volvo TD 40 GJE	Volvo TD 63 KGE
Max power at	36,7 r/s (2200 r/min)	35 r/s (2000 r/min)
SAE J 1995 gross	74,6 kW (101,5 hp)	96 kW (130 hp)
ISO 9249, SAE J 1349 net	74,0 kW (101,0 hp)	91 kW (124 hp)
Max. torque at	23,3 r/s (1400 r/min)	18,3 r/s (1100 r/min)
SAE J 1995 gross	403 Nm (297 lbf ft)	595 Nm (439 lbf ft)
ISO 9249, SAE J 1349 net	397 Nm (293 lbf ft)	590 Nm (435 lbf ft)
Breakout force:	69,8 kN* (15,695 lbf)*	97,6 kN** (21,940 lbf)**
Static tipping load:		
at full turn	5220 kg* (11,508 lb)*	7240 kg** (15,960 lb)**
Buckets:	1,2 m <sup>3</sup> –3,9 m <sup>3</sup> (1.6–5.1 yd <sup>3</sup> )	1,6 m <sup>3</sup> –5,0 m <sup>3</sup> (2.1–6.5 yd <sup>3</sup> )
Operating weight:	8,2–9,4 t (18,080–20,725 lb)	10,9–12,2 t (24,030–26,900 lb)
Tires:	17.5 R25	20.5 R25

\* Bucket: 1,2 m<sup>3</sup> straight edge, with teeth (pin-on) Tires: 17.5 R25\* L2  
 \*\* Bucket: 1,6 m<sup>3</sup> straight edge. Tires: 20.5 R25



## Technology on Human Terms

The Volvo Construction Equipment Group 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 security of the service and parts organisation. The security of always having immediate access to leading-edge research and technical development. A machine from Volvo meets the very highest demands in all kinds of jobs, under all conditions. The world over.

*The Volvo Construction Equipment Group develops, manufactures and markets Volvo, Champion and Samsung 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)

*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.*

# VOLVO

**Volvo Construction Equipment  
North America Inc.**

One Volvo Drive, Asheville, N.C. 28803-3447  
Tel: 828-650-2090, Fax: 828-650-2508

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